## FusionServer Server iBMC

# Alarm Handling

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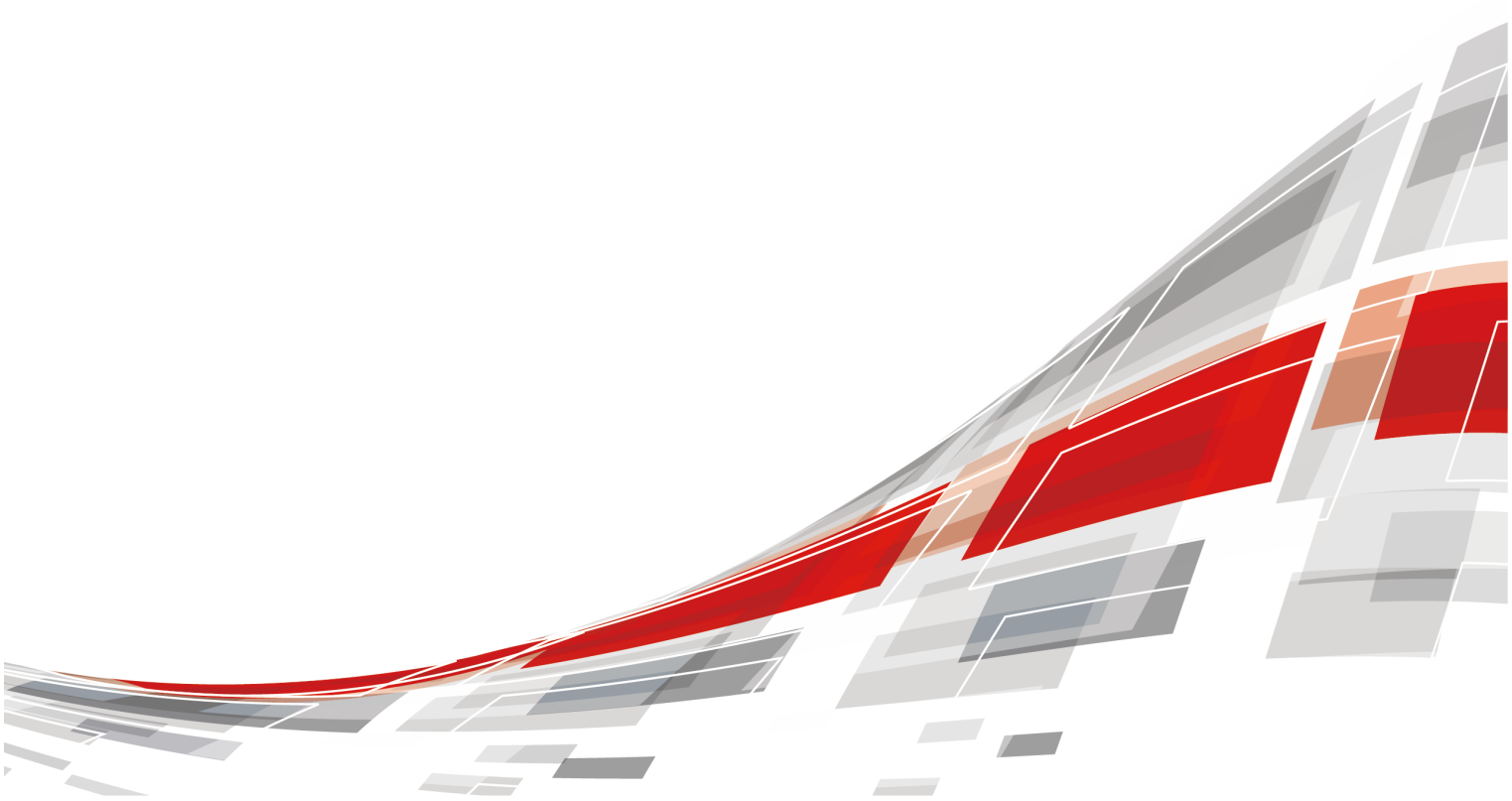
| **Issue** | 24 |
| **Date** | 2025-09-12 |



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# About This Document

## Purpose

This document describes Intelligent Baseboard Management Controller (iBMC) alarms in terms of the meaning, impact on the system, possible causes, and handling suggestions.

## Intended Audience

This document is intended for:

- Technical support engineers
- Maintenance engineers

## Symbol Conventions

The symbols that may be found in this document are defined as follows.

| Symbol | Description |
| --- | --- |
| DANGER | Indicates a hazard with a high level of risk which, if not avoided, will result in death or serious injury. |
| WARNING | Indicates a hazard with a medium level of risk which, if not avoided, could result in death or serious injury. |
| CAUTION | Indicates a hazard with a low level of risk which, if not avoided, could result in minor or moderate injury. |
| NOTICE | Indicates a potentially hazardous situation which, if not avoided, could result in equipment damage, data loss, performance deterioration, or unanticipated results.<br>NOTICE is used to address practices not related to personal injury. |
| NOTE | Supplements the important information in the main text.<br>NOTE is used to address information not related to personal injury, equipment damage, and environment deterioration. |

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# Change History

| Issue | Date | Description |
| --- | --- | --- |
| 24 | 2025-09-12 | Updated:<br>• **2.4.129 ALM-0x1000005F Soft-Start Circuit Fault (Mainboard, Major Alarm)**<br>• **2.10.271 ALM-0x40000011 Failed to Power On the GPU Carrier Board (xPU Carrier Board, Major Alarm)**<br>• **2.4.216 ALM-0x2300003B I/O Board Power Failure (I/O Board, Major Alarm)**<br>• **2.12.1.2.2 2288H V6-32DIMM**<br>Added:<br>• **2.3.64 ALM-0x0800011B PCIe Card Attestation fails (PCIe Card, Major Alarm)**<br>• **2.3.109 ALM-0x1A000065 Imported firmware integrity baseline metric detection anomaly (BMC, Major Alarm)**<br>• **2.10.294 ALM-0x53000029 OCP Card Attestation failed (OCP Card, Major Alarm)**<br>• **2.10.221 ALM-0x28000037 Abnormal link between CPUs (Cable, Major Alarm)** |
| 23 | 2025-07-01 | Added:<br>• **2.10.16 ALM-0x000000F5 Incompatibility error between mainboard and CPU type (CPU, Critical Alarm)**<br>• **2.10.293 ALM-0x53000027 OCP card enumeration failed (OCP Card, Major Alarm)**<br>• **2.10.148 ALM-0x10000165 The mainboard product serial number does not match the serial number in the backup database. (Mainboard, Minor Alarm)** |
| 22 | 2025-02-19 | Updated **2.3.105 ALM-0x1A000027 Abnormal heartbeat signal with the node BMC (BMC, Major Alarm)**. |

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| Issue | Date | Description |
| --- | --- | --- |
| 21 | 2024-09-29 | Updated **2.9.2 ALM-0x01000017 Memory MCE Error (Memory, Critical Alarm)**. |
| 20 | 2024-09-12 | Updated **2.9.22 ALM-0x01000071 Memory Isolated (Memory, Major Alarm)**. |
| 19 | 2024-06-26 | Updated **2.4.234 ALM-0x2C000007 Server Powered Off (System, Major Alarm)**. |
| 18 | 2024-05-28 | Updated **2.10.170 ALM-0x1A000023 Certificate Expired or About to Expire (BMC, Minor Alarm)**. |
| 17 | 2024-04-23 | Updated **2.10.54 ALM-0x08000067 PCIe Device Enumeration Failed (PCIe Card, Major Alarm)**. |
| 16 | 2024-04-01 | Updated **2.3.33 ALM-0x02000037 The Drive Group is Overheating (Disk, Minor Alarm)**. |
| 15 | 2023-11-29 | The alarm handling documents of other products are combined. |
| 14 | 2023-10-12 | Updated **2.4.48 ALM-0x03000013 Communication with PSU Failed (PSU, Minor Alarm)**. |
| 13 | 2023-09-20 | Updated **2.4.234 ALM-0x2C000007 Server Powered Off (System, Major Alarm)**. |
| 12 | 2023-08-03 | Updated **2.4.234 ALM-0x2C000007 Server Powered Off (System, Major Alarm)**. |
| 11 | 2023-06-30 | Updated **2.4.235 ALM-0x2C00002B Power-On Timed Out (System, Major Alarm)**. |
| 10 | 2023-04-26 | Updated **2.1 Error Code Handling**. |
| 09 | 2023-02-16 | Updated **2.1 Error Code Handling**. |
| 08 | 2023-01-05 | Updated **2.7.1 ALM-0x02000007 Hard Disk Fault (Disk, Major Alarm)**. |
| 07 | 2022-12-12 | Updated **2.9.22 ALM-0x01000071 Memory Isolated (Memory, Major Alarm)**. |
| 06 | 2022-11-15 | Updated **2.11 Event Alarms by Component**. |

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| Issue | Date | Description |
| --- | --- | --- |
| 05 | 2022-10-24 | Updated **2.4.235 ALM-0x2C00002B Power-On Timed Out (System, Major Alarm)**. |
| 04 | 2022-08-23 | Updated **2.7.14 ALM-0x0200003B Failed Authentication for the Drive Serial Number (Disk,Minor Alarm)** and **2.9.23 ALM-0x01000073 Failed Authentication for the Memory Serial Number (Memory,Minor Alarm)**. |
| 03 | 2022-06-06 | Updated **2.4.234 ALM-0x2C000007 Server Powered Off (System, Major Alarm)** and **2.4.235 ALM-0x2C00002B Power-On Timed Out (System, Major Alarm)**. |
| 02 | 2022-03-01 | Updated **2.11 Event Alarms by Component**. |
| 01 | 2021-12-30 | The issue is the first official release. |

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# 1 Before You Start

## Alarm Modes

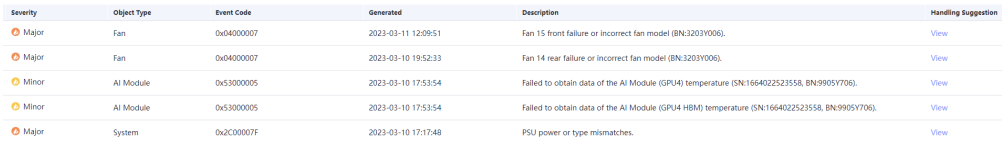
The iBMC provides the following alarm modes:

- Alarms by component

  The alarm contains **event code + event description**. The event description contains information about the faulty component. Users can locate the faulty component based on the alarm.

  **Figure 1-1** shows an example of the alarms generated in this mode on the iBMC WebUI.

  **Figure 1-1** Alarms by component (WebUI)

  | Severity | Object Type | Event Code | Generated | Description | Handling Suggestion |
  |---|---|---|---|---|---|
  | Major | Fan | 0x04000007 | 2023-03-11 12:09:51 | Fan 15 front failure or incorrect fan model (BN:3203Y006). | View |
  | Major | Fan | 0x04000007 | 2023-03-10 19:52:33 | Fan 14 rear failure or incorrect fan model (BN:3203Y006). | View |
  | Minor | AI Module | 0x53000005 | 2023-03-10 17:53:54 | Failed to obtain data of the AI Module (GPU4) temperature (SN:1664022523558, BN:9905Y706). | View |
  | Minor | AI Module | 0x53000005 | 2023-03-10 17:53:54 | Failed to obtain data of the AI Module (GPU4 HBM) temperature (SN:1664022523558, BN:9905Y706). | View |
  | Major | System | 0x2C00007F | 2023-03-10 17:17:48 | PSU power or type mismatches. | View |

  The component-based alarms displayed on the iBMC CLI are similar to the following:

  ```
  iBMC:/->ipmcget -d healthevents
  Event Num  | Event Time          | Alarm Level  | Event Code   | Event Description
  1          | 2023-03-11 06:27:14  | Minor        | 0x01000021   | Failed to obtain data of the CPU 1 DIMM VDDQ2
  voltage.
  2          | 2023-03-11 10:24:43  | Critical     | 0x01000015   |  DIMM020 DIMM  configuration error or training
  failed.
  3          | 2023-03-11 10:24:43  | Major        | 0x01000017   |  DIMM012 DIMM  triggered an uncorrectable error, .
  ```

- Alarms by sensor

  The alarm contains **sensor name + event description + alarm severity**. Users need to locate the faulty component based on the location of the sensor.

  **Figure 1-2** shows an example of the alarms generated in this mode on the iBMC WebUI.

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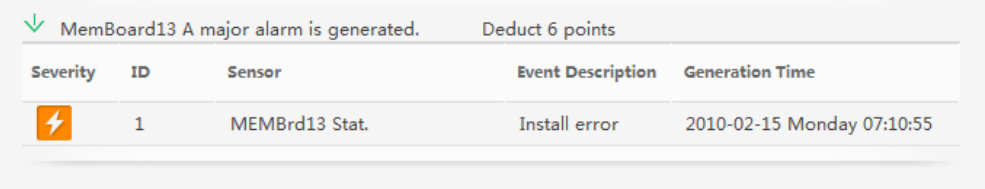
**Figure 1-2** Alarms by sensor (WebUI)




The sensor-based alarms displayed on the iBMC CLI are similar to the following:

```
iBMC:/->ipmcget -d healthevents
Event Num  | Event Time                | Entity Name       | Sensor Name        | Alarm level  | Event Desc
1          | 2013-11-11 Monday 16:53:11  | MainBoard         | HDD Backplane      | Major        | Incorrect cable
connected/Incorrect interconnection
2          | 2013-11-11 Monday 16:53:12  | MainBoard         | FAN1 F Presence    | Major        | Device Removed /
Device Absent
3          | 2013-11-11 Monday 16:53:12  | MainBoard         | FAN1 R Presence    | Major        | Device Removed /
Device Absent
```

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# 2 Alarms by Component

2.1 Error Code Handling
2.2 Alarm Overview
2.3 Temperature Alarms
2.4 Power Supply Alarms
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2.7 Storage Device Alarms
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## 2.1 Error Code Handling

The error code displayed on the fault diagnosis LED on the front panel of a server indicates a hardware fault of the server. This topic describes the error codes and the procedure of rectifying faults.

NOTE

Multiple error codes (if any) will be displayed repeatedly with each error code being displayed for 5 seconds.

### Context

When a key component is faulty, the server fault diagnosis LED displays an error code to facilitate fault locating.

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Generally, the fault diagnosis LED is located on the front panel of the server. For details about its position, see the user guide of the server you use.

## Procedure

**Step 1** View the error code on the fault diagnosis LED.

For details about the error codes, see the **Table 2-1**, **Table 2-2**, **Table 2-3**, or **Table 2-4**.

**Step 2** Log in to the iBMC WebUI of the server, and locate the alarm based on the error code.

**Step 3** Rectify the fault.

**Step 4** After the fault is rectified, check that the error code is no longer displayed on the fault diagnosis LED.

**----End**

## Error Code Reference

**Table 2-1** G2500 Error code reference

| Module | Error Code | Fault Description | Related Alarms |
|---|---|---|---|
| - | --- | The server is operating properly. | - |
| - | 888 | No output from the server. | 1. Power off and then power on the server.<br>2. Check whether the mounting ear cables are properly connected.<br>3. Perform a minimum system test (mainboard, single CPU, single memory) to rule out hardware installation issues that could result in the device failing to power on. |

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| Module | Error Code | Fault Description | Related Alarms |
| --- | --- | --- | --- |
| CPU | C0*N*<br>**NOTE**<br>*N* indicates the serial number of the CPU. | CPU *N* or a peripheral component is malfunctioning or faulty. | • **2.3.1 ALM-0x00000003 CPU Overtemperature Will Trigger CPU Underclocking (CPU, Major Alarm)**<br>• **2.3.5 ALM-0x0000000F System Shutdown Due to CPU Overtemperature (CPU, Critical Alarm)**<br>• **2.3.10 ALM-0x00000061 Failed to Read CPU VRD Temperature (CPU, Minor Alarm)**<br>• **2.6.1 ALM-0x00000023 Failed to Read CPU Core Temperature (CPU, Minor Alarm)**<br>• **2.6.2 ALM-0x00000025 Failed to Read CPU VDDQ Temperature (CPU, Minor Alarm)**<br>• **2.3.9 ALM-0x0000003B Failed to Read CPU DTS Temperature (CPU, Minor Alarm)**<br>• **2.10.1 ALM-0x00000011 CPU Self-Test Failed (CPU, Critical Alarm)**<br>• **2.10.2 ALM-0x00000013 Incorrect CPU Configuration (CPU, Critical Alarm)**<br>• **2.10.4 ALM-0x0000001D CPU MCE/AER Error (CPU, Critical Alarm)** |
| DIMM | *XYZ*<br>**NOTE**<br>*XYZ* indicates the serial number of the DIMM. | DIMM *XYZ* is malfunctioning or faulty. | • **2.9.1 ALM-0x01000015 Memory Configuration Error (Memory, Critical Alarm)**<br>• **2.9.2 ALM-0x01000017 Memory MCE Error (Memory, Critical Alarm)**<br>• **2.9.3 ALM-0x01000025 Memory Configuration Error (Memory, Critical Alarm)**<br>• **2.9.4 ALM-0x01000027 Memory Initialization Error (Memory, Critical Alarm)**<br>• **2.9.5 ALM-0x0100002F Fatal Error Detected in Memory Initialization (Memory, Critical Alarm)** |

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| Module | Error Code | Fault Description | Related Alarms |
| --- | --- | --- | --- |
| | *XY*F<br>**NOTE**<br>*X* indicates the serial number of the CPU, and *Y* indicates the serial number of the CPU channel. | The channel *Y* of CPU *X* is malfunctioning or faulty. | • **2.9.3 ALM-0x01000025 Memory Configuration Error (Memory, Critical Alarm)**<br>• **2.9.4 ALM-0x01000027 Memory Initialization Error (Memory, Critical Alarm)**<br>• **2.9.5 ALM-0x0100002F Fatal Error Detected in Memory Initialization (Memory, Critical Alarm)** |
| Temperature | A0*N*<br>**NOTE**<br>*N* indicates the serial number of the CPU. | The temperature of CPU *N* is out of its operating temperature range. | • **2.3.1 ALM-0x00000003 CPU Overtemperature Will Trigger CPU Underclocking (CPU, Major Alarm)**<br>• **2.3.2 ALM-0x00000005 CPU VDDQ Overtemperature (CPU, Minor Alarm)**<br>• **2.3.3 ALM-0x00000007 CPU VRD Overtemperature (CPU, Minor Alarm)**<br>• **2.3.6 ALM-0x00000019 CPU Temperature Is About to Reach the Maximum (CPU, Minor Alarm)** |
| Power supply unit (PSU) | P0*N*<br>**NOTE**<br>*N* indicates the serial number of the PSU. | PSU *N* is malfunctioning or faulty. | • **2.3.35 ALM-0x03000011 PSU Overtemperature (PSU, Major Alarm)**<br>• **2.4.44 ALM-0x03000009 PSU Fault (PSU, Major Alarm)**<br>• **2.4.46 ALM-0x0300000D Power Input Lost (PSU, Critical Alarm)**<br>• **2.4.47 ALM-0x0300000F PSU Fan Fault (PSU, Major Alarm)**<br>• **2.4.48 ALM-0x03000013 Communication with PSU Failed (PSU, Minor Alarm)**<br>• **2.4.49 ALM-0x03000015 Power Output Overvoltage (PSU, Major Alarm)**<br>• **2.4.50 ALM-0x03000017 Power Output Undervoltage or No Output (PSU, Major Alarm)**<br>• **2.4.51 ALM-0x03000019 Output Overcurrent (PSU, Major Alarm)**<br>• **2.4.52 ALM-0x0300001B Power Input Overvoltage (PSU, Major Alarm)** |

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| Module | Error Code | Fault Description | Related Alarms |
| --- | --- | --- | --- |
| Fan module | F0*N*<br>**NOTE**<br>*N* indicates the serial number of the fan module. | Fan module *N* is malfunctioning or faulty. | **2.8.2 ALM-0x04000007 Large Fan Speed Difference (Fan, Major Alarm)** |
| Mainboard | b01 | The power supply to the mainboard is abnormal. | • **2.4.103 ALM-0x10000001 System 3.3 V Undervoltage (Mainboard, Major Alarm)**<br>• **2.4.104 ALM-0x10000003 System 3.3 V Overvoltage (Mainboard, Major Alarm)**<br>• **2.4.148 ALM-0x100000A1 Mainboard Standby 1.8 V Undervoltage (Mainboard, Major Alarm)**<br>• **2.4.149 ALM-0x100000A3 Standby 1.8 V Overvoltage (Mainboard, Major Alarm)**<br>• **2.4.109 ALM-0x1000000F Standby 3.3 V Undervoltage (Mainboard, Major Alarm)**<br>• **2.4.110 ALM-0x10000011 Standby 3.3 V Overvoltage (Mainboard, Major Alarm)**<br>• **2.4.112 ALM-0x1000001F Mainboard Standby 1 V Undervoltage (Mainboard, Major Alarm)**<br>• **2.4.113 ALM-0x10000021 Mainboard Standby 1 V Overvoltage (Mainboard, Major Alarm)**<br>• **2.4.111 ALM-0x10000017 Mainboard Power Supply Failure (Mainboard, Major Alarm)**<br>• **2.4.118 ALM-0x1000002B Mainboard 1.5 V Undervoltage (Mainboard, Major Alarm)**<br>• **2.4.119 ALM-0x1000002D Mainboard 1.5 V Overvoltage (Mainboard, Major Alarm)** |

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| Module | Error Code | Fault Description | Related Alarms |
| --- | --- | --- | --- |
| | L01 | The cable is not securely or correctly connected. | • 2.10.202 ALM-0x28000001 Incorrect SAS Cable Connection (Cable, Major Alarm)<br>• 2.10.203 ALM-0x28000003 Incorrect Connection of CPLD Signal Cables (Cable, Major Alarm) |
| | E01 | The CMOS battery is abnormal. | 2.10.120 ALM-0x1000000D Low Voltage in Mainboard RTC Battery (Mainboard, Major Alarm) |
| Hard disk | H*XY*<br>**NOTE**<br>*XY* indicates the slot number of a front or built-in hard disk. | The hard disk in slot *XY* is malfunctioning or faulty. | • 2.7.1 ALM-0x02000007 Hard Disk Fault (Disk, Major Alarm)<br>• 2.7.2 ALM-0x02000009 Hard Disk Prewarning (Disk, Minor Alarm)<br>• 2.7.3 ALM-0x0200000B Hard Disk RAID Array Failed (Disk, Major Alarm) |
| | HA*N*<br>**NOTE**<br>*N* indicates the slot number of the rear hard disk. | The rear hard disk in slot A*N* is malfunctioning or faulty. | • 2.7.1 ALM-0x02000007 Hard Disk Fault (Disk, Major Alarm)<br>• 2.7.2 ALM-0x02000009 Hard Disk Prewarning (Disk, Minor Alarm)<br>• 2.7.3 ALM-0x0200000B Hard Disk RAID Array Failed (Disk, Major Alarm) |
| | Hb*N*<br>**NOTE**<br>*N* indicates the slot number of the rear hard disk. | The rear hard disk in slot B*N* is malfunctioning or faulty. | • 2.7.1 ALM-0x02000007 Hard Disk Fault (Disk, Major Alarm)<br>• 2.7.2 ALM-0x02000009 Hard Disk Prewarning (Disk, Minor Alarm)<br>• 2.7.3 ALM-0x0200000B Hard Disk RAID Array Failed (Disk, Major Alarm) |
| | d*XY*<br>**NOTE**<br>*XY* indicates the slot number of the rear hard disk. | The rear hard disk in slot *XY* is malfunctioning or faulty. | • 2.7.1 ALM-0x02000007 Hard Disk Fault (Disk, Major Alarm)<br>• 2.7.2 ALM-0x02000009 Hard Disk Prewarning (Disk, Minor Alarm)<br>• 2.7.3 ALM-0x0200000B Hard Disk RAID Array Failed (Disk, Major Alarm) |

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| Module | Error Code | Fault Description | Related Alarms |
|---|---|---|---|
| LOM | n01 | The LAN on motherboard (LOM) is malfunctioning or faulty. | **2.10.111 ALM-0x0D000001 NIC MCE/AER Error (NIC, Critical Alarm)** |
| PCIe card | q0*N*<br>**NOTE**<br>*N* indicates the serial number of the PCIe card. | The PCIe card in slot *N* is malfunctioning or faulty. | • **2.3.52 ALM-0x08000003 PCIe Card Overtemperature (PCIe Card, Minor Alarm)**<br>• **2.6.8 ALM-0x08000005 Failed to Read PCIe Card Temperature (PCIe Card, Minor Alarm)**<br>• **2.10.31 ALM-0x08000001 PCIe Card MCE/AER Fault (PCIe Card, Critical Alarm)** |
| Disk backplane | bP1 | The power supply to the front disk backplane is abnormal. | **2.4.71 ALM-0x05000001 Disk Backplane Power Failure (Disk Backplane, Major Alarm)** |
| | bP2 | The power supply to the built-in disk backplane is abnormal. | **2.4.71 ALM-0x05000001 Disk Backplane Power Failure (Disk Backplane, Major Alarm)** |
| | bP3 | The power supply to the rear disk backplane is abnormal. | **2.4.71 ALM-0x05000001 Disk Backplane Power Failure (Disk Backplane, Major Alarm)** |

**Table 2-2** Error code reference of V3 servers

| Module | Error Code | Fault Description | Related Alarms |
|---|---|---|---|
| - | --- | The server is operating properly. | - |

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| Module | Error Code | Fault Description | Related Alarms |
| --- | --- | --- | --- |
| - | 888 | No output from the server. | 1. Power off and then power on the server.<br>2. Check whether the mounting ear cables are properly connected.<br>3. Perform a minimum system test (mainboard, single CPU, single memory) to rule out hardware installation issues that could result in the device failing to power on. |

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| Module | Error Code | Fault Description | Related Alarms |
| --- | --- | --- | --- |
| CPU | C0*N*<br>**NOTE**<br>*N* indicates the serial number of the CPU. | CPU *N* or a peripheral component is malfunctioning or faulty. | • **2.3.5 ALM-0x0000000F System Shutdown Due to CPU Overtemperature (CPU, Critical Alarm)**<br>• **2.3.10 ALM-0x00000061 Failed to Read CPU VRD Temperature (CPU, Minor Alarm)**<br>• **2.6.1 ALM-0x00000023 Failed to Read CPU Core Temperature (CPU, Minor Alarm)**<br>• **2.6.2 ALM-0x00000025 Failed to Read CPU VDDQ Temperature (CPU, Minor Alarm)**<br>• **2.3.9 ALM-0x0000003B Failed to Read CPU DTS Temperature (CPU, Minor Alarm)**<br>• **2.4.1 ALM-0x0000000B CPU Undervoltage (CPU, Major Alarm)**<br>• **2.4.2 ALM-0x0000000D CPU Overvoltage (CPU, Major Alarm)**<br>• **2.4.3 ALM-0x0000003D CPU VCCP Overvoltage (CPU, Major Alarm)**<br>• **2.4.4 ALM-0x0000003F CPU VCCP Undervoltage (CPU, Major Alarm)**<br>• **2.4.5 ALM-0x00000041 Failed to Read CPU VCCP Voltage (CPU, Minor Alarm)**<br>• **2.4.6 ALM-0x0000004F CPU VSA Overvoltage (CPU, Major Alarm)**<br>• **2.4.7 ALM-0x00000051 CPU VSA Undervoltage (CPU, Major Alarm)**<br>• **2.4.12 ALM-0x0000005B CPU VMCP Overvoltage (CPU, Major Alarm)**<br>• **2.4.13 ALM-0x0000005D CPU VMCP Undervoltage (CPU, Major Alarm)**<br>• **2.4.14 ALM-0x0000005F Failed to Read CPU VMCP Voltage (CPU, Minor Alarm)**<br>• **2.4.8 ALM-0x00000053 Failed to Read CPU VSA Voltage (CPU, Minor Alarm)**<br>• **2.4.9 ALM-0x00000055 CPU VCCIO Overvoltage (CPU, Major Alarm)** |

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| Module | Error Code | Fault Description | Related Alarms |
| --- | --- | --- | --- |
| | | | • 2.4.10 ALM-0x00000057 CPU VCCIO Undervoltage (CPU, Major Alarm)<br>• 2.4.11 ALM-0x00000059 Failed to Read CPU VCCIO Voltage (CPU, Minor Alarm)<br>• 2.4.15 ALM-0x00000063 Failed to Read CPU Voltage (CPU, Minor Alarm)<br>• 2.10.1 ALM-0x00000011 CPU Self-Test Failed (CPU, Critical Alarm)<br>• 2.10.2 ALM-0x00000013 Incorrect CPU Configuration (CPU, Critical Alarm)<br>• 2.10.4 ALM-0x0000001D CPU MCE/AER Error (CPU, Critical Alarm) |
| DIMM | *XYZ*<br>**NOTE**<br>*XYZ* indicates the serial number of the DIMM. | DIMM *XYZ* is malfunctioning or faulty. | • 2.9.1 ALM-0x01000015 Memory Configuration Error (Memory, Critical Alarm)<br>• 2.9.2 ALM-0x01000017 Memory MCE Error (Memory, Critical Alarm)<br>• 2.9.3 ALM-0x01000025 Memory Configuration Error (Memory, Critical Alarm)<br>• 2.9.4 ALM-0x01000027 Memory Initialization Error (Memory, Critical Alarm)<br>• 2.9.5 ALM-0x0100002F Fatal Error Detected in Memory Initialization (Memory, Critical Alarm) |
| | *XY*F<br>**NOTE**<br>*X* indicates the serial number of the CPU, and *Y* indicates the serial number of the CPU channel. | The channel *Y* of CPU *X* is malfunctioning or faulty. | • 2.9.3 ALM-0x01000025 Memory Configuration Error (Memory, Critical Alarm)<br>• 2.9.4 ALM-0x01000027 Memory Initialization Error (Memory, Critical Alarm)<br>• 2.9.5 ALM-0x0100002F Fatal Error Detected in Memory Initialization (Memory, Critical Alarm) |

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| Module | Error Code | Fault Description | Related Alarms |
| --- | --- | --- | --- |
| Temperature | A00 | The air inlet temperature is out of the operating temperature range of the server. | • 2.3.89 ALM-0x12000001 Air Inlet Overtemperature (Chassis, Minor Alarm)<br>• 2.3.90 ALM-0x12000003 Air Inlet Overtemperature (Chassis, Major Alarm)<br>• 2.3.94 ALM-0x1200000F Air Inlet Overtemperature (Chassis, Critical Alarm)<br>• 2.3.96 ALM-0x12000015 Air Inlet Undertemperature (Chassis, Major Alarm) |
| | A0*N*<br>**NOTE**<br>*N* indicates the serial number of the CPU. | The temperature of CPU *N* is out of its operating temperature range. | • 2.3.1 ALM-0x00000003 CPU Overtemperature Will Trigger CPU Underclocking (CPU, Major Alarm)<br>• 2.3.2 ALM-0x00000005 CPU VDDQ Overtemperature (CPU, Minor Alarm)<br>• 2.3.3 ALM-0x00000007 CPU VRD Overtemperature (CPU, Minor Alarm)<br>• 2.3.6 ALM-0x00000019 CPU Temperature Is About to Reach the Maximum (CPU, Minor Alarm) |

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| Module | Error Code | Fault Description | Related Alarms |
| --- | --- | --- | --- |
| Power supply unit (PSU) | P0*N*<br>**NOTE**<br>*N* indicates the serial number of the PSU. | PSU *N* is malfunctioning or faulty. | • **2.3.35 ALM-0x03000011 PSU Overtemperature (PSU, Major Alarm)**<br>• **2.4.44 ALM-0x03000009 PSU Fault (PSU, Major Alarm)**<br>• **2.4.46 ALM-0x0300000D Power Input Lost (PSU, Critical Alarm)**<br>• **2.4.47 ALM-0x0300000F PSU Fan Fault (PSU, Major Alarm)**<br>• **2.4.48 ALM-0x03000013 Communication with PSU Failed (PSU, Minor Alarm)**<br>• **2.4.49 ALM-0x03000015 Power Output Overvoltage (PSU, Major Alarm)**<br>• **2.4.50 ALM-0x03000017 Power Output Undervoltage or No Output (PSU, Major Alarm)**<br>• **2.4.51 ALM-0x03000019 Output Overcurrent (PSU, Major Alarm)**<br>• **2.4.52 ALM-0x0300001B Power Input Overvoltage (PSU, Major Alarm)** |
| Fan module | F0*N*<br>**NOTE**<br>*N* indicates the serial number of the fan module. | Fan module *N* is malfunctioning or faulty. | **2.8.2 ALM-0x04000007 Large Fan Speed Difference (Fan, Major Alarm)** |

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| Module | Error Code | Fault Description | Related Alarms |
| --- | --- | --- | --- |
| Mainboard | b01 | The power supply to the mainboard is abnormal. | • 2.4.103 ALM-0x10000001 System 3.3 V Undervoltage (Mainboard, Major Alarm)<br>• 2.4.104 ALM-0x10000003 System 3.3 V Overvoltage (Mainboard, Major Alarm)<br>• 2.4.105 ALM-0x10000005 System 5 V Undervoltage (Mainboard, Major Alarm)<br>• 2.4.106 ALM-0x10000007 System 5 V Overvoltage (Mainboard, Major Alarm)<br>• 2.4.107 ALM-0x10000009 System 12 V Undervoltage (Mainboard, Major Alarm)<br>• 2.4.108 ALM-0x1000000B System 12 V Overvoltage (Mainboard, Major Alarm)<br>• 2.4.122 ALM-0x10000033 Standby 5 V Undervoltage (Mainboard, Major Alarm)<br>• 2.4.123 ALM-0x10000035 Standby 5 V Overvoltage (Mainboard, Major Alarm)<br>• 2.4.145 ALM-0x1000008F Standby 1.5 V Undervoltage (Mainboard, Major Alarm)<br>• 2.4.146 ALM-0x10000091 Standby 1.5 V Overvoltage (Mainboard, Major Alarm)<br>• 2.4.148 ALM-0x100000A1 Mainboard Standby 1.8 V Undervoltage (Mainboard, Major Alarm)<br>• 2.4.149 ALM-0x100000A3 Standby 1.8 V Overvoltage (Mainboard, Major Alarm)<br>• 2.4.109 ALM-0x1000000F Standby 3.3 V Undervoltage (Mainboard, Major Alarm)<br>• 2.4.110 ALM-0x10000011 Standby 3.3 V Overvoltage (Mainboard, Major Alarm)<br>• 2.4.112 ALM-0x1000001F Mainboard Standby 1 V |

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| Module | Error Code | Fault Description | Related Alarms |
| --- | --- | --- | --- |
| | | | **Undervoltage (Mainboard, Major Alarm)**<br>• **2.4.113 ALM-0x10000021 Mainboard Standby 1 V Overvoltage (Mainboard, Major Alarm)**<br>• **2.4.111 ALM-0x10000017 Mainboard Power Supply Failure (Mainboard, Major Alarm)** |
| | b02 | The RAID controller card is malfunctioning or faulty. | • **2.3.49 ALM-0x0600000B RAID Controller Card Overtemperature (RAID Controller Card, Minor Alarm)**<br>• **2.10.25 ALM-0x06000005 RAID Controller Card Fault (RAID Card, Major Alarm)**<br>• **2.10.26 ALM-0x06000007 RAID Controller Card MCE/AER Error (RAID Card, Critical Alarm)** |
| | b03 | Communication with the RAID controller card lost. | **2.10.27 ALM-0x06000025 Communication with the RAID Controller Card Lost (RAID Card, Major Alarm)** |
| | L01 | The cable is not securely or correctly connected. | **2.10.202 ALM-0x28000001 Incorrect SAS Cable Connection (Cable, Major Alarm)** |
| | E01 | The CMOS battery is abnormal. | **2.10.120 ALM-0x1000000D Low Voltage in Mainboard RTC Battery (Mainboard, Major Alarm)** |
| Hard disk | H*XY*<br>**NOTE**<br>*XY* indicates the slot number of a front or built-in hard disk. | The hard disk in slot *XY* is malfunctioning or faulty. | • **2.7.1 ALM-0x02000007 Hard Disk Fault (Disk, Major Alarm)**<br>• **2.7.2 ALM-0x02000009 Hard Disk Prewarning (Disk, Minor Alarm)**<br>• **2.7.3 ALM-0x0200000B Hard Disk RAID Array Failed (Disk, Major Alarm)**<br>• **2.7.4 ALM-0x02000013 Hard Disk MCE/AER Error (Disk, Critical Alarm)** |

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| Module | Error Code | Fault Description | Related Alarms |
| --- | --- | --- | --- |
| | HA*N*<br>**NOTE**<br>*N* indicates the slot number of the rear hard disk. | The rear hard disk in slot A*N* is malfunctioning or faulty. | • **2.7.1 ALM-0x02000007 Hard Disk Fault (Disk, Major Alarm)**<br>• **2.7.2 ALM-0x02000009 Hard Disk Prewarning (Disk, Minor Alarm)**<br>• **2.7.3 ALM-0x0200000B Hard Disk RAID Array Failed (Disk, Major Alarm)**<br>• **2.7.4 ALM-0x02000013 Hard Disk MCE/AER Error (Disk, Critical Alarm)** |
| | Hb*N*<br>**NOTE**<br>*N* indicates the slot number of the rear hard disk. | The rear hard disk in slot B*N* is malfunctioning or faulty. | • **2.7.1 ALM-0x02000007 Hard Disk Fault (Disk, Major Alarm)**<br>• **2.7.2 ALM-0x02000009 Hard Disk Prewarning (Disk, Minor Alarm)**<br>• **2.7.3 ALM-0x0200000B Hard Disk RAID Array Failed (Disk, Major Alarm)**<br>• **2.7.4 ALM-0x02000013 Hard Disk MCE/AER Error (Disk, Critical Alarm)** |
| | d*XY*<br>**NOTE**<br>*XY* indicates the slot number of the rear hard disk. | The rear hard disk in slot *XY* is malfunctioning or faulty. | • **2.7.1 ALM-0x02000007 Hard Disk Fault (Disk, Major Alarm)**<br>• **2.7.2 ALM-0x02000009 Hard Disk Prewarning (Disk, Minor Alarm)**<br>• **2.7.3 ALM-0x0200000B Hard Disk RAID Array Failed (Disk, Major Alarm)**<br>• **2.7.4 ALM-0x02000013 Hard Disk MCE/AER Error (Disk, Critical Alarm)** |
| LOM | n01 | The LAN on motherboard (LOM) is malfunctioning or faulty. | **2.10.132 ALM-0x100000B1 LOM MCE/AER Error (Mainboard, Critical Alarm)** |

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| Module | Error Code | Fault Description | Related Alarms |
| --- | --- | --- | --- |
| PCIe card | q0*N*<br>**NOTE**<br>*N* indicates the serial number of the PCIe card. | The PCIe card in slot *N* is malfunctioning or faulty. | • **2.3.52 ALM-0x08000003 PCIe Card Overtemperature (PCIe Card, Minor Alarm)**<br>• **2.3.53 ALM-0x08000009 PCIe Card DIMM Overtemperature (PCIe Card, Minor Alarm)**<br>• **2.4.74 ALM-0x08000011 PCIe Card Battery Undervoltage (PCIe Card, Minor Alarm)**<br>• **2.4.75 ALM-0x08000013 PCIe Card Undervoltage (PCIe Card, Major Alarm)**<br>• **2.4.76 ALM-0x08000015 PCIe Card Overvoltage (PCIe Card, Major Alarm)**<br>• **2.4.77 ALM-0x08000017 Failed to Read PCIe Card Voltage (PCIe Card, Minor Alarm)**<br>• **2.6.8 ALM-0x08000005 Failed to Read PCIe Card Temperature (PCIe Card, Minor Alarm)**<br>• **2.10.31 ALM-0x08000001 PCIe Card MCE/AER Fault (PCIe Card, Critical Alarm)**<br>• **2.10.33 ALM-0x0800001B PCIe Card Hardware Fault (PCIe Card, Major Alarm)**<br>• **2.10.34 ALM-0x0800001D PCIe Card Boot Drive Not Detected (PCIe Card, Major Alarm)**<br>• **2.10.35 ALM-0x0800001F PCIe Card DIMM Fault (PCIe Card, Major Alarm)**<br>• **2.10.36 ALM-0x08000021 PCIe Card Firmware Initialization Error (PCIe Card, Major Alarm)**<br>• **2.10.37 ALM-0x08000023 PCIe Card CPU Initialization Error (PCIe Card, Major Alarm)**<br>• **2.10.38 ALM-0x08000025 PCIe Card Watchdog Timed Out (PCIe Card, Major Alarm)**<br>• **2.10.73 ALM-0x08000095 Communication with the PCIe** |

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| Module | Error Code | Fault Description | Related Alarms |
|---|---|---|---|
| | | | Plug-in RAID Controller Card Lost (PCIe Card, Major Alarm) |
| Disk backplane | bP1 | The power supply to the front disk backplane is abnormal. | 2.4.71 ALM-0x05000001 Disk Backplane Power Failure (Disk Backplane, Major Alarm) |
| | bP2 | The power supply to the built-in disk backplane is abnormal. | 2.4.71 ALM-0x05000001 Disk Backplane Power Failure (Disk Backplane, Major Alarm) |
| | bP3 | The power supply to the rear disk backplane is abnormal. | 2.4.71 ALM-0x05000001 Disk Backplane Power Failure (Disk Backplane, Major Alarm) |

**Table 2-3** Error code reference of V5 servers

| Module | Error Code | Fault Description | Related Alarms |
|---|---|---|---|
| - | --- | The server is operating properly. | - |
| - | 888 | No output from the server. | 1. Power off and then power on the server.<br>2. Check whether the mounting ear cables are properly connected.<br>3. Perform a minimum system test (mainboard, single CPU, single memory) to rule out hardware installation issues that could result in the device failing to power on. |

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| Module | Error Code | Fault Description | Related Alarms |
| --- | --- | --- | --- |
| CPU | C0*N*<br>**NOTE**<br>*N* indicates the serial number of the CPU. | CPU *N* or a peripheral component is malfunctioning or faulty. | • **2.3.9 ALM-0x0000003B Failed to Read CPU DTS Temperature (CPU, Minor Alarm)**<br>• **2.3.5 ALM-0x0000000F System Shutdown Due to CPU Overtemperature (CPU, Critical Alarm)**<br>• **2.3.10 ALM-0x00000061 Failed to Read CPU VRD Temperature (CPU, Minor Alarm)**<br>• **2.4.1 ALM-0x0000000B CPU Undervoltage (CPU, Major Alarm)**<br>• **2.4.2 ALM-0x0000000D CPU Overvoltage (CPU, Major Alarm)**<br>• **2.4.3 ALM-0x0000003D CPU VCCP Overvoltage (CPU, Major Alarm)**<br>• **2.4.4 ALM-0x0000003F CPU VCCP Undervoltage (CPU, Major Alarm)**<br>• **2.4.5 ALM-0x00000041 Failed to Read CPU VCCP Voltage (CPU, Minor Alarm)**<br>• **2.4.6 ALM-0x0000004F CPU VSA Overvoltage (CPU, Major Alarm)**<br>• **2.4.7 ALM-0x00000051 CPU VSA Undervoltage (CPU, Major Alarm)**<br>• **2.4.12 ALM-0x0000005B CPU VMCP Overvoltage (CPU, Major Alarm)**<br>• **2.4.13 ALM-0x0000005D CPU VMCP Undervoltage (CPU, Major Alarm)**<br>• **2.4.14 ALM-0x0000005F Failed to Read CPU VMCP Voltage (CPU, Minor Alarm)**<br>• **2.4.8 ALM-0x00000053 Failed to Read CPU VSA Voltage (CPU, Minor Alarm)**<br>• **2.4.9 ALM-0x00000055 CPU VCCIO Overvoltage (CPU, Major Alarm)**<br>• **2.4.10 ALM-0x00000057 CPU VCCIO Undervoltage (CPU, Major Alarm)**<br>• **2.4.11 ALM-0x00000059 Failed to Read CPU VCCIO Voltage (CPU, Minor Alarm)** |

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| Module | Error Code | Fault Description | Related Alarms |
| --- | --- | --- | --- |
| | | | • 2.4.15 ALM-0x00000063 Failed to Read CPU Voltage (CPU, Minor Alarm)<br>• 2.6.1 ALM-0x00000023 Failed to Read CPU Core Temperature (CPU, Minor Alarm)<br>• 2.6.2 ALM-0x00000025 Failed to Read CPU VDDQ Temperature (CPU, Minor Alarm)<br>• 2.10.7 ALM-0x00000083 Insufficient PCIe MMIO Resources (CPU, Critical Alarm)<br>• 2.10.6 ALM-0x00000073 CPU Not Detected (CPU, Major Alarm)<br>• 2.10.1 ALM-0x00000011 CPU Self-Test Failed (CPU, Critical Alarm)<br>• 2.10.2 ALM-0x00000013 Incorrect CPU Configuration (CPU, Critical Alarm)<br>• 2.10.4 ALM-0x0000001D CPU MCE/AER Error (CPU, Critical Alarm)<br>• 2.10.3 ALM-0x0000001B CPU IERR Error (CPU, Critical Alarm)<br>• 2.3.12 ALM-0x0000006B Failed to Read CPU Margin (CPU, Minor Alarm) |

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| Module | Error Code | Fault Description | Related Alarms |
| --- | --- | --- | --- |
| DIMM | *XYZ*<br>**NOTE**<br>*XYZ* indicates the serial number of the DIMM. | DIMM *XYZ* is malfunctioning or faulty. | • **2.3.21 ALM-0x01000045 DCPMM Overtemperature (Memory, Minor Alarm)**<br>• **2.3.22 ALM-0x01000047 Failed to Obtain the DCPMM Temperature (Memory, Minor Alarm)**<br>• **2.3.24 ALM-0x01000053 OS Shutdown Due to DCPMM Overtemperature (Memory, Major Alarm)**<br>• **2.3.17 ALM-0x01000001 Memory Overtemperature (Memory, Major Alarm)**<br>• **2.3.18 ALM-0x0100003B Memory Overtemperature (Memory, Minor Alarm)**<br>• **2.3.20 ALM-0x0100003F Failed to Read Memory Temperature (Memory, Minor Alarm)**<br>• **2.3.19 ALM-0x0100003D Memory Overtemperature (Memory, Major Alarm)**<br>• **2.3.25 ALM-0x01000061 PMem Overtemperature (Memory, Minor Alarm)**<br>• **2.3.26 ALM-0x01000063 Failed to Obtain the PMem Temperature (Memory, Minor Alarm)**<br>• **2.3.27 ALM-0x01000069 Powered off Due to PMem Overheating (Memory, Major Alarm)**<br>• **2.4.35 ALM-0x01000003 Memory VDDQ1 Undervoltage (Memory, Major Alarm)**<br>• **2.4.36 ALM-0x01000005 Memory VDDQ1 Overvoltage (Memory, Major Alarm)**<br>• **2.4.37 ALM-0x01000007 Memory VDDQ2 Undervoltage (Memory, Major Alarm)**<br>• **2.4.38 ALM-0x01000009 Memory VDDQ2 Overvoltage (Memory, Major Alarm)** |

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| Module | Error Code | Fault Description | Related Alarms |
| --- | --- | --- | --- |
| | | | • 2.4.41 ALM-0x01000023 Failed to Read DIMM VPP1 Voltage (Memory, Minor Alarm)<br>• 2.4.40 ALM-0x0100001B DIMM VPP1 Overvoltage (Memory, Major Alarm)<br>• 2.4.39 ALM-0x01000019 DIMM VPP1 Undervoltage (Memory, Major Alarm)<br>• 2.6.3 ALM-0x0100001F Failed to Read VDDQ1 Voltage of the DIMM Connected to the CPU (Memory, Minor Alarm)<br>• 2.6.4 ALM-0x01000021 Failed to Read VDDQ2 Voltage of the DIMM Connected to the CPU (Memory, Minor Alarm)<br>• 2.9.6 ALM-0x01000033 DIMM VPP2 Overvoltage (Memory, Major Alarm)<br>• 2.9.7 ALM-0x01000035 DIMM VPP2 Undervoltage (Memory, Major Alarm)<br>• 2.9.8 ALM-0x01000037 Failed to Read DIMM VPP2 Voltage (Memory, Minor Alarm)<br>• 2.9.1 ALM-0x01000015 Memory Configuration Error (Memory, Critical Alarm)<br>• 2.9.2 ALM-0x01000017 Memory MCE Error (Memory, Critical Alarm)<br>• 2.9.3 ALM-0x01000025 Memory Configuration Error (Memory, Critical Alarm)<br>• 2.9.4 ALM-0x01000027 Memory Initialization Error (Memory, Critical Alarm)<br>• 2.9.5 ALM-0x0100002F Fatal Error Detected in Memory Initialization (Memory, Critical Alarm)<br>• 2.9.9 ALM-0x01000043 NVDIMM Supercapacitor Not Present (Memory, Major Alarm) |

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| Module | Error Code | Fault Description | Related Alarms |
| --- | --- | --- | --- |
| | | | • 2.9.10 ALM-0x01000049 NNDIMM slot error (Memory, Minor Alarm)<br>• 2.9.11 ALM-0x0100004B Failed to Restore NVDIMM Data (Memory, Major Alarm)<br>• 2.9.12 ALM-0x0100004D DCPMM Warning (Memory, Minor Alarm)<br>• 2.9.13 ALM-0x0100004F DCPMM Fault (Memory, Major Alarm)<br>• 2.9.15 ALM-0x0100005B Memory in Poor Contact Alarm (Memory, Major Alarm)<br>• 2.9.16 ALM-0x0100005D Memory Minor Prefailure Alarm (Memory, Minor Alarm)<br>• 2.9.17 ALM-0x0100005F Memory Major Prefailure Alarm (Memory, Major Alarm)<br>• 2.9.18 ALM-0x01000065 PMem Warning (Memory, Minor Alarm)<br>• 2.9.19 ALM-0x01000067 PMem Fault (Memory, Major Alarm) |
| | *X*Y*F*<br>**NOTE**<br>*X* indicates the serial number of the CPU, and *Y* indicates the serial number of the CPU channel. | The channel *Y* of CPU *X* is malfunctioning or faulty. | • 2.9.1 ALM-0x01000015 Memory Configuration Error (Memory, Critical Alarm)<br>• 2.9.3 ALM-0x01000025 Memory Configuration Error (Memory, Critical Alarm)<br>• 2.9.4 ALM-0x01000027 Memory Initialization Error (Memory, Critical Alarm)<br>• 2.9.5 ALM-0x0100002F Fatal Error Detected in Memory Initialization (Memory, Critical Alarm)<br>• 2.9.15 ALM-0x0100005B Memory in Poor Contact Alarm (Memory, Major Alarm)<br>• 2.9.16 ALM-0x0100005D Memory Minor Prefailure Alarm (Memory, Minor Alarm)<br>• 2.9.17 ALM-0x0100005F Memory Major Prefailure Alarm (Memory, Major Alarm) |

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| Module | Error Code | Fault Description | Related Alarms |
| --- | --- | --- | --- |
| Temperature | A00 | The air inlet temperature is out of the operating temperature range of the server. | • **2.3.89 ALM-0x12000001 Air Inlet Overtemperature (Chassis, Minor Alarm)**<br>• **2.3.90 ALM-0x12000003 Air Inlet Overtemperature (Chassis, Major Alarm)**<br>• **2.3.94 ALM-0x1200000F Air Inlet Overtemperature (Chassis, Critical Alarm)**<br>• **2.3.95 ALM-0x12000013 Failed to Read Air Inlet Temperature (Chassis, Minor Alarm)**<br>• **2.3.96 ALM-0x12000015 Air Inlet Undertemperature (Chassis, Major Alarm)**<br>• **2.3.101 ALM-0x12000039 Air Inlet Undertemperature (Chassis,Minor Alarm)**<br>• **2.6.14 ALM-0x12000017 Failed to Read Outlet Temperature (Chassis, Minor Alarm)**<br>• **2.10.150 ALM-0x12000019 Right Mounting Ear Not Detected (Chassis, Minor Alarm)** |

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| Module | Error Code | Fault Description | Related Alarms |
| --- | --- | --- | --- |
| | A0*N*<br>**NOTE**<br>*N* indicates the serial number of the CPU. | The temperature of CPU *N* is out of its operating temperature range. | • **2.3.1 ALM-0x00000003 CPU Overtemperature Will Trigger CPU Underclocking (CPU, Major Alarm)**<br>• **2.3.2 ALM-0x00000005 CPU VDDQ Overtemperature (CPU, Minor Alarm)**<br>• **2.3.3 ALM-0x00000007 CPU VRD Overtemperature (CPU, Minor Alarm)**<br>• **2.3.9 ALM-0x0000003B Failed to Read CPU DTS Temperature (CPU, Minor Alarm)**<br>• **2.3.5 ALM-0x0000000F System Shutdown Due to CPU Overtemperature (CPU, Critical Alarm)**<br>• **2.3.6 ALM-0x00000019 CPU Temperature Is About to Reach the Maximum (CPU, Minor Alarm)**<br>• **2.3.10 ALM-0x00000061 Failed to Read CPU VRD Temperature (CPU, Minor Alarm)** |
| Power supply unit (PSU) | U00 | The standby power supply is abnormal. | • **2.4.234 ALM-0x2C000007 Server Powered Off (System, Major Alarm)**<br>• **2.4.235 ALM-0x2C00002B Power-On Timed Out (System, Major Alarm)** |

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| Module | Error Code | Fault Description | Related Alarms |
| --- | --- | --- | --- |
| | U10 | The non-standby power supply is abnormal. | • 2.4.234 ALM-0x2C000007 Server Powered Off (System, Major Alarm)<br>• 2.4.237 ALM-0x2C00005F Failed to Identify the Product (System, Major Alarm)<br>• 2.4.235 ALM-0x2C00002B Power-On Timed Out (System, Major Alarm)<br>• 2.7.22 ALM-0x2C000071 File System Read-Only (System, Major Alarm)<br>• 2.7.23 ALM-0x2C000075 Failed RAID Array Detected (System, Major Alarm)<br>• 2.7.24 ALM-0x2C000079 System Certificate Expired (System, Minor Alarm)<br>• 2.10.232 ALM-0x2C000031 System Error (System, Critical Alarm)<br>• 2.10.234 ALM-0x2C000039 System Start Interrupt (System, Critical Alarm)<br>• 2.10.242 ALM-0x2C00006B Insufficient MMIO Resources (System, Major Alarm)<br>• 2.10.243 ALM-0x2C00006D Insufficient Legacy IO Resources (System, Major Alarm)<br>• 2.10.244 ALM-0x2C00006F Insufficient Legacy OPROM Resources (System, Major Alarm)<br>• 2.10.245 ALM-0x2C000073 High System Power Consumption (System, Minor Alarm) |

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| Module | Error Code | Fault Description | Related Alarms |
| --- | --- | --- | --- |
| | UC*N*<br>**NOTE**<br>*N* indicates the serial number of the CPU. | CPU *N* is malfunctioning or faulty. | • **2.4.234 ALM-0x2C000007 Server Powered Off (System, Major Alarm)**<br>• **2.4.236 ALM-0x2C00003F Insufficient CPUs (System, Major Alarm)**<br>• **2.4.235 ALM-0x2C00002B Power-On Timed Out (System, Major Alarm)**<br>• **2.4.111 ALM-0x10000017 Mainboard Power Supply Failure (Mainboard, Major Alarm)**<br>• **2.6.20 ALM-0x2C000067 CPU and Chassis Mismatch (System, Major Alarm)**<br>• **2.6.21 ALM-0x2C00007D BIOS and Memory Firmware Mismatch (System, Minor Alarm)**<br>• **2.9.30 ALM-0x2C00000D No Memory Detected During POST (System, Critical Alarm)**<br>• **2.9.31 ALM-0x2C00003B Memory Boards Mismatch (System, Major Alarm)**<br>• **2.9.32 ALM-0x2C00004B System Memory Configuration Error (System, Critical Alarm)**<br>• **2.9.33 ALM-0x2C00004D Critical Error Found in System-level Memory Initialization Check (System, Critical Alarm)**<br>• **2.9.34 ALM-0x2C00004F No Memory Available (System, Critical Alarm)**<br>• **2.9.35 ALM-0x2C000057 System Memory Initialization Error (System, Critical Alarm)**<br>• **2.10.239 ALM-0x2C00005B Mainboard and Disk Backplane Mismatch (System, Major Alarm)**<br>• **2.10.233 ALM-0x2C000037 CPUs Mismatch (System, Critical Alarm)**<br>• **2.10.235 ALM-0x2C00003D CPU Boards Mismatch (System, Major Alarm)** |

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| Module | Error Code | Fault Description | Related Alarms |
| --- | --- | --- | --- |
| | | | • 2.10.236 ALM-0x2C000041 Inconsistent CPU Types (System, Major Alarm)<br>• 2.10.237 ALM-0x2C000043 Inconsistent PBI Boards (System, Major Alarm)<br>• 2.10.238 ALM-0x2C000045 PBI Does Not Match CPU (System, Major Alarm) |
| | UP0 | The PCH power supply is abnormal. | 2.4.111 ALM-0x10000017 Mainboard Power Supply Failure (Mainboard, Major Alarm) |
| | P0*N*<br>**NOTE**<br>*N* indicates the serial number of the PSU. | PSU *N* is malfunctioning or faulty. | • 2.3.35 ALM-0x03000011 PSU Overtemperature (PSU, Major Alarm)<br>• 2.4.44 ALM-0x03000009 PSU Fault (PSU, Major Alarm)<br>• 2.4.46 ALM-0x0300000D Power Input Lost (PSU, Critical Alarm)<br>• 2.4.47 ALM-0x0300000F PSU Fan Fault (PSU, Major Alarm)<br>• 2.4.48 ALM-0x03000013 Communication with PSU Failed (PSU, Minor Alarm)<br>• 2.4.49 ALM-0x03000015 Power Output Overvoltage (PSU, Major Alarm)<br>• 2.4.50 ALM-0x03000017 Power Output Undervoltage or No Output (PSU, Major Alarm)<br>• 2.4.51 ALM-0x03000019 Output Overcurrent (PSU, Major Alarm)<br>• 2.4.52 ALM-0x0300001B Power Input Overvoltage (PSU, Major Alarm) |
| Fan module | F0*N*<br>**NOTE**<br>*N* indicates the serial number of the fan module. | Fan module *N* is malfunctioning or faulty. | 2.8.2 ALM-0x04000007 Large Fan Speed Difference (Fan, Major Alarm) |

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| Module | Error Code | Fault Description | Related Alarms |
| --- | --- | --- | --- |
| Mainboard | b01 | The power supply to the mainboard is abnormal. | • 2.3.84 ALM-0x100000C1 Soft-Start Circuit Overheating (Mainboard, Major Alarm)<br>• 2.4.103 ALM-0x10000001 System 3.3 V Undervoltage (Mainboard, Major Alarm)<br>• 2.4.104 ALM-0x10000003 System 3.3 V Overvoltage (Mainboard, Major Alarm)<br>• 2.4.105 ALM-0x10000005 System 5 V Undervoltage (Mainboard, Major Alarm)<br>• 2.4.106 ALM-0x10000007 System 5 V Overvoltage (Mainboard, Major Alarm)<br>• 2.4.107 ALM-0x10000009 System 12 V Undervoltage (Mainboard, Major Alarm)<br>• 2.4.108 ALM-0x1000000B System 12 V Overvoltage (Mainboard, Major Alarm)<br>• 2.4.130 ALM-0x10000063 Failed to Read System 3.3 V Voltage (Mainboard, Minor Alarm)<br>• 2.4.131 ALM-0x10000065 Failed to Read System 5 V Voltage (Mainboard, Minor Alarm)<br>• 2.4.132 ALM-0x10000067 Failed to Read System 12 V Voltage (Mainboard, Minor Alarm)<br>• 2.4.135 ALM-0x1000006D Failed to Read Standby 5 V Voltage (Mainboard, Minor Alarm)<br>• 2.4.136 ALM-0x1000006F Failed to Read Standby 3.3 V Voltage (Mainboard, Minor Alarm)<br>• 2.4.137 ALM-0x10000071 Failed to Read Standby 2.5 V Voltage (Mainboard, Minor Alarm)<br>• 2.4.138 ALM-0x10000073 Failed to Read Standby 1.5 V Voltage (Mainboard, Minor Alarm)<br>• 2.4.140 ALM-0x10000077 Failed to Read Standby 1.1 V Voltage (Mainboard, Minor Alarm) |

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| Module | Error Code | Fault Description | Related Alarms |
| --- | --- | --- | --- |
| | | | • 2.4.114 ALM-0x10000023 Mainboard Standby 2.5 V Undervoltage (Mainboard, Major Alarm)<br>• 2.4.115 ALM-0x10000025 Mainboard Standby 2.5 V Overvoltage (Mainboard, Major Alarm)<br>• 2.4.122 ALM-0x10000033 Standby 5 V Undervoltage (Mainboard, Major Alarm)<br>• 2.4.123 ALM-0x10000035 Standby 5 V Overvoltage (Mainboard, Major Alarm)<br>• 2.4.143 ALM-0x1000008B Standby 1.1 V Undervoltage (Mainboard, Major Alarm)<br>• 2.4.144 ALM-0x1000008D Standby 1.1 V Overvoltage (Mainboard, Major Alarm)<br>• 2.4.145 ALM-0x1000008F Standby 1.5 V Undervoltage (Mainboard, Major Alarm)<br>• 2.4.146 ALM-0x10000091 Standby 1.5 V Overvoltage (Mainboard, Major Alarm)<br>• 2.4.142 ALM-0x1000007B Failed to Read MOSFET Voltage Difference (Mainboard, Minor Alarm)<br>• 2.4.148 ALM-0x100000A1 Mainboard Standby 1.8 V Undervoltage (Mainboard, Major Alarm)<br>• 2.4.150 ALM-0x100000A5 Failed to Read Standby 1.8 V Voltage (Mainboard, Minor Alarm)<br>• 2.4.149 ALM-0x100000A3 Standby 1.8 V Overvoltage (Mainboard, Major Alarm)<br>• 2.4.109 ALM-0x1000000F Standby 3.3 V Undervoltage (Mainboard, Major Alarm)<br>• 2.4.110 ALM-0x10000011 Standby 3.3 V Overvoltage (Mainboard, Major Alarm) |

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| Module | Error Code | Fault Description | Related Alarms |
| --- | --- | --- | --- |
| | | | • 2.4.112 ALM-0x1000001F Mainboard Standby 1 V Undervoltage (Mainboard, Major Alarm)<br>• 2.4.113 ALM-0x10000021 Mainboard Standby 1 V Overvoltage (Mainboard, Major Alarm)<br>• 2.4.111 ALM-0x10000017 Mainboard Power Supply Failure (Mainboard, Major Alarm)<br>• 2.4.118 ALM-0x1000002B Mainboard 1.5 V Undervoltage (Mainboard, Major Alarm)<br>• 2.4.119 ALM-0x1000002D Mainboard 1.5 V Overvoltage (Mainboard, Major Alarm)<br>• 2.4.120 ALM-0x1000002F Large Voltage Difference on Mainboard MOSFET (Mainboard, Major Alarm)<br>• 2.4.121 ALM-0x10000031 Large Voltage Difference on Mainboard MOSFET (Mainboard, Critical Alarm)<br>• 2.4.147 ALM-0x1000009D Large Voltage Difference on Mainboard MOS2 (Mainboard, Major Alarm)<br>• 2.6.13 ALM-0x10000089 Failed to Read Mainboard Electronic Label Data (Mainboard, Minor Alarm)<br>• 2.10.129 ALM-0x100000AB Active iBMC Absent (Mainboard, Critical Alarm)<br>• 2.10.132 ALM-0x100000B1 LOM MCE/AER Error (Mainboard, Critical Alarm)<br>• 2.10.125 ALM-0x10000061 Video Controller Fault (Mainboard, Critical Alarm)<br>• 2.10.126 ALM-0x10000093 PS/2 or USB Keyboard Controller Fault (Mainboard, Critical Alarm)<br>• 2.10.127 ALM-0x1000009B Mainboard SMI2 Link Initialization Error (Mainboard, Critical Alarm) |

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| Module | Error Code | Fault Description | Related Alarms |
| --- | --- | --- | --- |
| | | | • 2.10.122 ALM-0x10000015 Mainboard CPLD Self-Check Failed (Mainboard, Major Alarm)<br>• 2.10.128 ALM-0x100000A9 Mainboard Fault (Mainboard, Major Alarm) |
| | b02 | The RAID controller card is malfunctioning or faulty. | • 2.3.49 ALM-0x0600000B RAID Controller Card Overtemperature (RAID Controller Card, Minor Alarm)<br>• 2.3.51 ALM-0x06000019 BBU Overtemperature (RAID Controller Card, Minor Alarm)<br>• 2.4.72 ALM-0x0600000F Screw-in RAID controller card BBU undervoltage (RAID Card, Major Alarm)<br>• 2.4.73 ALM-0x06000011 RAID Controller Card BBU Fault (RAID Controller Card, Major Alarm)<br>• 2.6.6 ALM-0x0600000D Failed to Read RAID Controller Card Temperature (RAID Card, Minor Alarm)<br>• 2.6.7 ALM-0x0600001B Failed to Read the RAID Card BBU Temperature (RAID Controller Card, Minor Alarm)<br>• 2.10.25 ALM-0x06000005 RAID Controller Card Fault (RAID Card, Major Alarm)<br>• 2.10.26 ALM-0x06000007 RAID Controller Card MCE/AER Error (RAID Card, Critical Alarm)<br>• 2.10.28 ALM-0x06000027 Initialization of the RAID Controller Card Abnormal (RAID Card, Major Alarm) |
| | b03 | Communication with the RAID controller card is lost. | 2.10.27 ALM-0x06000025 Communication with the RAID Controller Card Lost (RAID Card, Major Alarm) |

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| Module | Error Code | Fault Description | Related Alarms |
| --- | --- | --- | --- |
| | b06 | OCP card 1 is malfunctioning or faulty. | **2.10.285 ALM-0x53000001 OCP Hardware Component MCE/AER Error (OCP Card, Critical Alarm)**<br>**2.10.286 ALM-0x53000007 OCP Card Hardware Component Fault Minor Alarm (OCP Card, Minor Alarm)**<br>**2.3.157 ALM-0x53000003 OCP Hardware Component Overtemperature (OCP Card, Minor Alarm)**<br>**2.3.158 ALM-0x53000005 Failed to Read the OCP Hardware Component Temperature (OCP Card, Minor Alarm)**<br>**2.3.159 ALM-0x53000009 OCP Hardware Component Optical Module Overtemperature (OCP Card, Minor Alarm)** |
| | b07 | OCP card 2 is malfunctioning or faulty. | |
| | b08 | OCP card 3 is malfunctioning or faulty. | |
| | L01 | The cable is not securely or correctly connected. | • **2.10.136 ALM-0x100000C9 Failed to Access the I2C Device (Mainboard, Major Alarm)**<br>• **2.10.202 ALM-0x28000001 Incorrect SAS Cable Connection (Cable, Major Alarm)**<br>• **2.10.204 ALM-0x28000005 CPU QPI/UPI Connection Failed (Cable, Major Alarm)**<br>• **2.10.221 ALM-0x28000037 Abnormal link between CPUs (Cable, Major Alarm)** |
| | E01 | The CMOS battery is abnormal. | **2.10.120 ALM-0x1000000D Low Voltage in Mainboard RTC Battery (Mainboard, Major Alarm)** |

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| Module | Error Code | Fault Description | Related Alarms |
| --- | --- | --- | --- |
| Hard disk | H*XY*<br>**NOTE**<br>*XY* indicates the slot number of a front or built-in hard disk. | Hard disk *XY* is malfunctioning or faulty. | • **2.3.30 ALM-0x02000015 Hard Disk Overtemperature (Disk, Minor Alarm)**<br>• **2.6.5 ALM-0x02000017 Failed to Read Hard Disk Temperature (Disk, Minor Alarm)**<br>• **2.7.1 ALM-0x02000007 Hard Disk Fault (Disk, Major Alarm)**<br>• **2.7.7 ALM-0x02000025 Hard Disk Link Fault (Disk, Major Alarm)**<br>• **2.7.2 ALM-0x02000009 Hard Disk Prewarning (Disk, Minor Alarm)**<br>• **2.7.3 ALM-0x0200000B Hard Disk RAID Array Failed (Disk, Major Alarm)**<br>• **2.7.4 ALM-0x02000013 Hard Disk MCE/AER Error (Disk, Critical Alarm)**<br>• **2.7.5 ALM-0x0200001D Low Hard Disk Remnant Wearout (Disk, Major Alarm)**<br>• **2.7.11 ALM-0x0200002D Hard Disk Lost (Disk, Major Alarm)**<br>• **2.7.12 ALM-0x0200002F Rapid Increase of PHY Bit Errors on the Link Between the RAID Controller Card and Hard Disk (Disk, Major Alarm)**<br>• **2.7.13 ALM-0x02000031 Rapid Increase of PHY Bit Errors on the Link Between the Expander Controller and Hard Disk (Disk, Major Alarm)** |

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| Module | Error Code | Fault Description | Related Alarms |
| --- | --- | --- | --- |
| | HA*N*<br>**NOTE**<br>*N* indicates the slot number of the rear hard disk. | The rear hard disk in slot A*N* is malfunctioning or faulty. | • **2.7.1 ALM-0x02000007 Hard Disk Fault (Disk, Major Alarm)**<br>• **2.7.7 ALM-0x02000025 Hard Disk Link Fault (Disk, Major Alarm)**<br>• **2.7.2 ALM-0x02000009 Hard Disk Prewarning (Disk, Minor Alarm)**<br>• **2.7.3 ALM-0x0200000B Hard Disk RAID Array Failed (Disk, Major Alarm)**<br>• **2.7.4 ALM-0x02000013 Hard Disk MCE/AER Error (Disk, Critical Alarm)** |
| | Hb*N*<br>**NOTE**<br>*N* indicates the slot number of the rear hard disk. | The rear hard disk in slot B*N* is malfunctioning or faulty. | • **2.7.1 ALM-0x02000007 Hard Disk Fault (Disk, Major Alarm)**<br>• **2.7.8 ALM-0x02000027 Hard Disk Status Abnormal (Disk, Minor Alarm)**<br>• **2.7.9 ALM-0x02000029 Hard Disk Foreign Configuration (Disk, Minor Alarm)**<br>• **2.7.10 ALM-0x0200002B Hard Disk Link Fault (Disk, Minor Alarm)**<br>• **2.7.2 ALM-0x02000009 Hard Disk Prewarning (Disk, Minor Alarm)**<br>• **2.7.3 ALM-0x0200000B Hard Disk RAID Array Failed (Disk, Major Alarm)**<br>• **2.7.4 ALM-0x02000013 Hard Disk MCE/AER Error (Disk, Critical Alarm)** |
| | d*XY*<br>**NOTE**<br>*XY* indicates the slot number of the rear hard disk. | The rear hard disk in slot *XY* is malfunctioning or faulty. | • **2.7.1 ALM-0x02000007 Hard Disk Fault (Disk, Major Alarm)**<br>• **2.7.2 ALM-0x02000009 Hard Disk Prewarning (Disk, Minor Alarm)**<br>• **2.7.3 ALM-0x0200000B Hard Disk RAID Array Failed (Disk, Major Alarm)**<br>• **2.7.4 ALM-0x02000013 Hard Disk MCE/AER Error (Disk, Critical Alarm)**<br>• **2.7.6 ALM-0x02000021 Failed to Read Hard Disk VPD Information (Disk, Minor Alarm)** |

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| Module | Error Code | Fault Description | Related Alarms |
| --- | --- | --- | --- |
| LOM | n01 | The LOM is malfunctioning or faulty. | **2.10.132 ALM-0x100000B1 LOM MCE/AER Error (Mainboard, Critical Alarm)** |

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| Module | Error Code | Fault Description | Related Alarms |
| --- | --- | --- | --- |
| PCIe Card | q0*N*<br>**NOTE**<br>*N* indicates the serial number of the PCIe card. | PCIe card *N* is malfunctioning or faulty. | • **2.3.52 ALM-0x08000003 PCIe Card Overtemperature (PCIe Card, Minor Alarm)**<br>• **2.3.55 ALM-0x0800000D PCIe Card CPU Overtemperature (PCIe Card, Minor Alarm)**<br>• **2.3.54 ALM-0x0800000B PCIe Card Overtemperature (PCIe Card, Major Alarm)**<br>• **2.3.56 ALM-0x0800000F PCIe Card CPU Overtemperature (PCIe Card, Major Alarm)**<br>• **2.3.53 ALM-0x08000009 PCIe Card DIMM Overtemperature (PCIe Card, Minor Alarm)**<br>• **2.4.78 ALM-0x08000039 PCIe Card BBU Undervoltage (PCIe Card, Major Alarm)**<br>• **2.4.79 ALM-0x0800003B PCIe Card BBU Fault (PCIe Card, Major Alarm)**<br>• **2.4.74 ALM-0x08000011 PCIe Card Battery Undervoltage (PCIe Card, Minor Alarm)**<br>• **2.4.75 ALM-0x08000013 PCIe Card Undervoltage (PCIe Card, Major Alarm)**<br>• **2.4.76 ALM-0x08000015 PCIe Card Overvoltage (PCIe Card, Major Alarm)**<br>• **2.4.77 ALM-0x08000017 Failed to Read PCIe Card Voltage (PCIe Card, Minor Alarm)**<br>• **2.6.8 ALM-0x08000005 Failed to Read PCIe Card Temperature (PCIe Card, Minor Alarm)**<br>• **2.10.57 ALM-0x08000073 PCIe Card Component Absent (PCIe Card, Minor Alarm)**<br>• **2.10.51 ALM-0x0800005D PCIe Card Self-Test Failed (PCIe Card, Major Alarm)**<br>• **2.10.53 ALM-0x08000063 Optical Module on the PCIe Card** |

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| Module | Error Code | Fault Description | Related Alarms |
| --- | --- | --- | --- |
| | | | Overtemperature (PCIe Card, Minor Alarm)<br>• 2.10.59 ALM-0x08000077 Failed to Obtain the PCIe Card Power (PCIe Card, Minor Alarm)<br>• 2.10.61 ALM-0x0800007B PCIe Card High Voltage (PCIe Card, Major Alarm)<br>• 2.10.62 ALM-0x0800007D PCIe Card Low Voltage (PCIe Card, Major Alarm)<br>• 2.10.31 ALM-0x08000001 PCIe Card MCE/AER Fault (PCIe Card, Critical Alarm)<br>• 2.10.33 ALM-0x0800001B PCIe Card Hardware Fault (PCIe Card, Major Alarm)<br>• 2.10.34 ALM-0x0800001D PCIe Card Boot Drive Not Detected (PCIe Card, Major Alarm)<br>• 2.10.35 ALM-0x0800001F PCIe Card DIMM Fault (PCIe Card, Major Alarm)<br>• 2.10.36 ALM-0x08000021 PCIe Card Firmware Initialization Error (PCIe Card, Major Alarm)<br>• 2.10.37 ALM-0x08000023 PCIe Card CPU Initialization Error (PCIe Card, Major Alarm)<br>• 2.10.38 ALM-0x08000025 PCIe Card Watchdog Timed Out (PCIe Card, Major Alarm)<br>• 2.10.39 ALM-0x08000041 PCIe Card Power Fault (PCIe Card, Major Alarm)<br>• 2.10.42 ALM-0x0800004B PCIe Plug-in RAID Controller Card Fault (PCIe Card, Major Alarm)<br>• 2.10.73 ALM-0x08000095 Communication with the PCIe Plug-in RAID Controller Card Lost (PCIe Card, Major Alarm)<br>• 2.10.74 ALM-0x08000097 Initialization of the PCIe Plug-in |

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| Module | Error Code | Fault Description | Related Alarms |
| --- | --- | --- | --- |
| | | | **RAID Controller Card Abnormal (PCIe Card, Major Alarm)**<br>• **2.10.45 ALM-0x08000051 Clock Out-of-Lock (PCIe Card, Major Alarm)**<br>• **2.10.46 ALM-0x08000053 DDR Calibration Failed (PCIe Card, Major Alarm)**<br>• **2.10.47 ALM-0x08000055 DDR Abnormal (PCIe Card, Major Alarm)**<br>• **2.10.48 ALM-0x08000057 PCIe Link Fault (PCIe Card, Major Alarm)**<br>• **2.10.49 ALM-0x08000059 Services Interrupted (PCIe Card, Major Alarm)**<br>• **2.10.75 ALM-0x080000A1 PCIe Card Overcurrent (PCIe Card, Major Alarm)**<br>• **2.10.76 ALM-0x080000A3 PCIe Card Chip Abnormal (PCIe Card, Major Alarm)**<br>• **2.10.77 ALM-0x080000A5 PCIe Card Initialization Error (PCIe Card, Major Alarm)**<br>• **2.10.78 ALM-0x080000A7 PCIe Card Component Minor Fault (PCIe Card, Minor Alarm)**<br>• **2.10.79 ALM-0x080000A9 PCIe Card Component Major Fault (PCIe Card, Major Alarm)**<br>• **2.10.80 ALM-0x080000AB High Current on the PCIe Card (PCIe Card, Major Alarm)** |
| Disk backplane | bP1 | The power supply to the front disk backplane is abnormal. | **2.4.71 ALM-0x05000001 Disk Backplane Power Failure (Disk Backplane, Major Alarm)** |
| | bP2 | The power supply to the built-in disk backplane is abnormal. | **2.4.71 ALM-0x05000001 Disk Backplane Power Failure (Disk Backplane, Major Alarm)** |

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| Module | Error Code | Fault Description | Related Alarms |
| --- | --- | --- | --- |
| | bP3 | The power supply to the rear disk backplane is abnormal. | • 2.4.71 ALM-0x05000001 Disk Backplane Power Failure (Disk Backplane, Major Alarm)<br>• 2.3.44 ALM-0x0500000D Failed to Obtain Disk Backplane Detection Point Temperature (Disk Backplane, Minor Alarm) |

**Table 2-4** Error code reference of V6 or later servers

| Module | Error Code | Fault Description | Related Alarms |
| --- | --- | --- | --- |
| - | --- | The server is operating properly. | - |
| - | 888 | No output from the server. | 1. Power off and then power on the server.<br>2. Check whether the mounting ear cables are properly connected.<br>3. Perform a minimum system test (mainboard, single CPU, single memory) to rule out hardware installation issues that could result in the device failing to power on. |

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| Module | Error Code | Fault Description | Related Alarms |
| --- | --- | --- | --- |
| CPU | C0*N*<br>**NOTE**<br>*N* indicates the serial number of the CPU. | CPU *N* or a peripheral component is malfunctioning or faulty. | • **2.3.9 ALM-0x0000003B Failed to Read CPU DTS Temperature (CPU, Minor Alarm)**<br>• **2.3.4 ALM-0x00000009 The Overheated General CPU VRD (CPU,Minor Alarm)**<br>• **2.3.5 ALM-0x0000000F System Shutdown Due to CPU Overtemperature (CPU, Critical Alarm)**<br>• **2.3.10 ALM-0x00000061 Failed to Read CPU VRD Temperature (CPU, Minor Alarm)**<br>• **2.4.1 ALM-0x0000000B CPU Undervoltage (CPU, Major Alarm)**<br>• **2.4.2 ALM-0x0000000D CPU Overvoltage (CPU, Major Alarm)**<br>• **2.4.3 ALM-0x0000003D CPU VCCP Overvoltage (CPU, Major Alarm)**<br>• **2.4.4 ALM-0x0000003F CPU VCCP Undervoltage (CPU, Major Alarm)**<br>• **2.4.5 ALM-0x00000041 Failed to Read CPU VCCP Voltage (CPU, Minor Alarm)**<br>• **2.4.6 ALM-0x0000004F CPU VSA Overvoltage (CPU, Major Alarm)**<br>• **2.4.7 ALM-0x00000051 CPU VSA Undervoltage (CPU, Major Alarm)**<br>• **2.4.12 ALM-0x0000005B CPU VMCP Overvoltage (CPU, Major Alarm)**<br>• **2.4.13 ALM-0x0000005D CPU VMCP Undervoltage (CPU, Major Alarm)**<br>• **2.4.14 ALM-0x0000005F Failed to Read CPU VMCP Voltage (CPU, Minor Alarm)**<br>• **2.4.8 ALM-0x00000053 Failed to Read CPU VSA Voltage (CPU, Minor Alarm)**<br>• **2.4.9 ALM-0x00000055 CPU VCCIO Overvoltage (CPU, Major Alarm)**<br>• **2.4.10 ALM-0x00000057 CPU VCCIO Undervoltage (CPU, Major Alarm)** |

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| Module | Error Code | Fault Description | Related Alarms |
| --- | --- | --- | --- |
| | | | • 2.4.11 ALM-0x00000059 Failed to Read CPU VCCIO Voltage (CPU, Minor Alarm)<br>• 2.4.15 ALM-0x00000063 Failed to Read CPU Voltage (CPU, Minor Alarm)<br>• 2.6.2 ALM-0x00000025 Failed to Read CPU VDDQ Temperature (CPU, Minor Alarm)<br>• 2.10.7 ALM-0x00000083 Insufficient PCIe MMIO Resources (CPU, Critical Alarm)<br>• 2.10.6 ALM-0x00000073 CPU Not Detected (CPU, Major Alarm)<br>• 2.10.1 ALM-0x00000011 CPU Self-Test Failed (CPU, Critical Alarm)<br>• 2.10.2 ALM-0x00000013 Incorrect CPU Configuration (CPU, Critical Alarm)<br>• 2.10.4 ALM-0x0000001D CPU MCE/AER Error (CPU, Critical Alarm)<br>• 2.10.3 ALM-0x0000001B CPU IERR Error (CPU, Critical Alarm)<br>• 2.3.12 ALM-0x0000006B Failed to Read CPU Margin (CPU, Minor Alarm)<br>• 2.4.28 ALM-0x000000D5 General CPU VRD with Higher Voltage Than Specified (CPU, Major Alarm)<br>• 2.4.29 ALM-0x000000D7 General CPU VRD with Lower Voltage Than Specified (CPU, Major Alarm)<br>• 2.4.30 ALM-0x000000D9 General CPU VRD Voltage Information Access Failure (CPU, Minor Alarm)<br>• 2.10.11 ALM-0x000000DF MCA Configuration Error Occurs on the CPU (CPU, Critical Alarm)<br>• 2.10.14 ALM-0x000000E7 CPU is Down Cored (CPU, Minor Alarm) |

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| Module | Error Code | Fault Description | Related Alarms |
| --- | --- | --- | --- |
| DIMM | *XYZ*<br>**NOTE**<br>*XYZ* indicates the serial number of the DIMM. | DIMM *XYZ* is malfunctioning or faulty. | • **2.3.21 ALM-0x01000045 DCPMM Overtemperature (Memory, Minor Alarm)**<br>• **2.3.22 ALM-0x01000047 Failed to Obtain the DCPMM Temperature (Memory, Minor Alarm)**<br>• **2.3.24 ALM-0x01000053 OS Shutdown Due to DCPMM Overtemperature (Memory, Major Alarm)**<br>• **2.3.19 ALM-0x0100003D Memory Overtemperature (Memory, Major Alarm)**<br>• **2.3.25 ALM-0x01000061 PMem Overtemperature (Memory, Minor Alarm)**<br>• **2.3.26 ALM-0x01000063 Failed to Obtain the PMem Temperature (Memory, Minor Alarm)**<br>• **2.3.27 ALM-0x01000069 Powered off Due to PMem Overheating (Memory, Major Alarm)**<br>• **2.4.35 ALM-0x01000003 Memory VDDQ1 Undervoltage (Memory, Major Alarm)**<br>• **2.4.36 ALM-0x01000005 Memory VDDQ1 Overvoltage (Memory, Major Alarm)**<br>• **2.4.37 ALM-0x01000007 Memory VDDQ2 Undervoltage (Memory, Major Alarm)**<br>• **2.4.38 ALM-0x01000009 Memory VDDQ2 Overvoltage (Memory, Major Alarm)**<br>• **2.4.41 ALM-0x01000023 Failed to Read DIMM VPP1 Voltage (Memory, Minor Alarm)**<br>• **2.4.40 ALM-0x0100001B DIMM VPP1 Overvoltage (Memory, Major Alarm)**<br>• **2.4.39 ALM-0x01000019 DIMM VPP1 Undervoltage (Memory, Major Alarm)**<br>• **2.6.3 ALM-0x0100001F Failed to Read VDDQ1 Voltage of the DIMM** |

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| Module | Error Code | Fault Description | Related Alarms |
| --- | --- | --- | --- |
| | | | Connected to the CPU (Memory, Minor Alarm)<br>• 2.6.4 ALM-0x01000021 Failed to Read VDDQ2 Voltage of the DIMM Connected to the CPU (Memory, Minor Alarm)<br>• 2.9.6 ALM-0x01000033 DIMM VPP2 Overvoltage (Memory, Major Alarm)<br>• 2.9.7 ALM-0x01000035 DIMM VPP2 Undervoltage (Memory, Major Alarm)<br>• 2.9.8 ALM-0x01000037 Failed to Read DIMM VPP2 Voltage (Memory, Minor Alarm)<br>• 2.9.1 ALM-0x01000015 Memory Configuration Error (Memory, Critical Alarm)<br>• 2.9.2 ALM-0x01000017 Memory MCE Error (Memory, Critical Alarm)<br>• 2.9.3 ALM-0x01000025 Memory Configuration Error (Memory, Critical Alarm)<br>• 2.9.4 ALM-0x01000027 Memory Initialization Error (Memory, Critical Alarm)<br>• 2.9.5 ALM-0x0100002F Fatal Error Detected in Memory Initialization (Memory, Critical Alarm)<br>• 2.9.9 ALM-0x01000043 NVDIMM Supercapacitor Not Present (Memory, Major Alarm)<br>• 2.9.10 ALM-0x01000049 NNDIMM slot error (Memory, Minor Alarm)<br>• 2.9.11 ALM-0x0100004B Failed to Restore NVDIMM Data (Memory, Major Alarm)<br>• 2.9.12 ALM-0x0100004D DCPMM Warning (Memory, Minor Alarm)<br>• 2.9.13 ALM-0x0100004F DCPMM Fault (Memory, Major Alarm)<br>• 2.9.15 ALM-0x0100005B Memory in Poor Contact Alarm (Memory, Major Alarm) |

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| Module | Error Code | Fault Description | Related Alarms |
| --- | --- | --- | --- |
| | | | • 2.9.16 ALM-0x0100005D Memory Minor Prefailure Alarm (Memory, Minor Alarm)<br>• 2.9.17 ALM-0x0100005F Memory Major Prefailure Alarm (Memory, Major Alarm)<br>• 2.9.18 ALM-0x01000065 PMem Warning (Memory, Minor Alarm)<br>• 2.9.19 ALM-0x01000067 PMem Fault (Memory, Major Alarm)<br>• 2.9.22 ALM-0x01000071 Memory Isolated (Memory, Major Alarm)<br>• 2.9.21 ALM-0x0100006F Memory prefailure alarm (Memory, Minor Alarm) |
| | *X*Y*F*<br>**NOTE**<br>*X* indicates the serial number of the CPU, and *Y* indicates the serial number of the CPU channel. | The channel *Y* of CPU *X* is malfunctioning or faulty. | • 2.9.1 ALM-0x01000015 Memory Configuration Error (Memory, Critical Alarm)<br>• 2.9.3 ALM-0x01000025 Memory Configuration Error (Memory, Critical Alarm)<br>• 2.9.4 ALM-0x01000027 Memory Initialization Error (Memory, Critical Alarm)<br>• 2.9.5 ALM-0x0100002F Fatal Error Detected in Memory Initialization (Memory, Critical Alarm)<br>• 2.9.15 ALM-0x0100005B Memory in Poor Contact Alarm (Memory, Major Alarm)<br>• 2.9.16 ALM-0x0100005D Memory Minor Prefailure Alarm (Memory, Minor Alarm)<br>• 2.9.17 ALM-0x0100005F Memory Major Prefailure Alarm (Memory, Major Alarm) |

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| Module | Error Code | Fault Description | Related Alarms |
| --- | --- | --- | --- |
| Temperature | A00 | The air inlet temperature is out of the operating temperature range of the server. | • 2.3.89 ALM-0x12000001 Air Inlet Overtemperature (Chassis, Minor Alarm)<br>• 2.3.90 ALM-0x12000003 Air Inlet Overtemperature (Chassis, Major Alarm)<br>• 2.3.94 ALM-0x1200000F Air Inlet Overtemperature (Chassis, Critical Alarm)<br>• 2.3.96 ALM-0x12000015 Air Inlet Undertemperature (Chassis, Major Alarm) |
| | A0*N*<br>**NOTE**<br>*N* indicates the serial number of the CPU. | The temperature of CPU *N* is out of its operating temperature range. | • 2.3.1 ALM-0x00000003 CPU Overtemperature Will Trigger CPU Underclocking (CPU, Major Alarm)<br>• 2.3.2 ALM-0x00000005 CPU VDDQ Overtemperature (CPU, Minor Alarm)<br>• 2.3.3 ALM-0x00000007 CPU VRD Overtemperature (CPU, Minor Alarm)<br>• 2.3.9 ALM-0x0000003B Failed to Read CPU DTS Temperature (CPU, Minor Alarm)<br>• 2.3.5 ALM-0x0000000F System Shutdown Due to CPU Overtemperature (CPU, Critical Alarm)<br>• 2.3.6 ALM-0x00000019 CPU Temperature Is About to Reach the Maximum (CPU, Minor Alarm)<br>• 2.3.10 ALM-0x00000061 Failed to Read CPU VRD Temperature (CPU, Minor Alarm) |
| Power supply unit (PSU) | U00 | The standby power supply is abnormal. | • 2.4.234 ALM-0x2C000007 Server Powered Off (System, Major Alarm)<br>• 2.4.235 ALM-0x2C00002B Power-On Timed Out (System, Major Alarm) |

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| Module | Error Code | Fault Description | Related Alarms |
| --- | --- | --- | --- |
| | U10 | The non-standby power supply is abnormal. | • 2.4.234 ALM-0x2C000007 Server Powered Off (System, Major Alarm)<br>• 2.4.237 ALM-0x2C00005F Failed to Identify the Product (System, Major Alarm)<br>• 2.4.235 ALM-0x2C00002B Power-On Timed Out (System, Major Alarm)<br>• 2.7.22 ALM-0x2C000071 File System Read-Only (System, Major Alarm) |

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| Module | Error Code | Fault Description | Related Alarms |
| --- | --- | --- | --- |
| | UC*N*<br>**NOTE**<br>*N* indicates the serial number of the CPU. | CPU *N* is malfunctioning or faulty. | • **2.4.234 ALM-0x2C000007 Server Powered Off (System, Major Alarm)**<br>• **2.4.236 ALM-0x2C00003F Insufficient CPUs (System, Major Alarm)**<br>• **2.4.235 ALM-0x2C00002B Power-On Timed Out (System, Major Alarm)**<br>• **2.4.111 ALM-0x10000017 Mainboard Power Supply Failure (Mainboard, Major Alarm)**<br>• **2.6.20 ALM-0x2C000067 CPU and Chassis Mismatch (System, Major Alarm)**<br>• **2.6.21 ALM-0x2C00007D BIOS and Memory Firmware Mismatch (System, Minor Alarm)**<br>• **2.9.31 ALM-0x2C00003B Memory Boards Mismatch (System, Major Alarm)**<br>• **2.9.35 ALM-0x2C000057 System Memory Initialization Error (System, Critical Alarm)**<br>• **2.10.239 ALM-0x2C00005B Mainboard and Disk Backplane Mismatch (System, Major Alarm)**<br>• **2.10.235 ALM-0x2C00003D CPU Boards Mismatch (System, Major Alarm)**<br>• **2.10.236 ALM-0x2C000041 Inconsistent CPU Types (System, Major Alarm)**<br>• **2.10.237 ALM-0x2C000043 Inconsistent PBI Boards (System, Major Alarm)**<br>• **2.10.238 ALM-0x2C000045 PBI Does Not Match CPU (System, Major Alarm)** |
| | UP0 | The PCH power supply is abnormal. | **2.4.111 ALM-0x10000017 Mainboard Power Supply Failure (Mainboard, Major Alarm)** |

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| Module | Error Code | Fault Description | Related Alarms |
| --- | --- | --- | --- |
| | P0*N*<br>**NOTE**<br>*N* indicates the serial number of the PSU. | PSU *N* is malfunctioning or faulty. | • **2.3.35 ALM-0x03000011 PSU Overtemperature (PSU, Major Alarm)**<br>• **2.4.44 ALM-0x03000009 PSU Fault (PSU, Major Alarm)**<br>• **2.4.46 ALM-0x0300000D Power Input Lost (PSU, Critical Alarm)**<br>• **2.4.47 ALM-0x0300000F PSU Fan Fault (PSU, Major Alarm)**<br>• **2.4.55 ALM-0x03000037 PSU Voltage Abnormal (PSU, Critical Alarm)**<br>• **2.4.48 ALM-0x03000013 Communication with PSU Failed (PSU, Minor Alarm)**<br>• **2.4.49 ALM-0x03000015 Power Output Overvoltage (PSU, Major Alarm)**<br>• **2.4.50 ALM-0x03000017 Power Output Undervoltage or No Output (PSU, Major Alarm)**<br>• **2.4.51 ALM-0x03000019 Output Overcurrent (PSU, Major Alarm)**<br>• **2.4.52 ALM-0x0300001B Power Input Overvoltage (PSU, Major Alarm)** |
| Fan module | F0*N*<br>**NOTE**<br>*N* indicates the serial number of the fan module. | Fan module *N* is malfunctioning or faulty. | **2.8.2 ALM-0x04000007 Large Fan Speed Difference (Fan, Major Alarm)** |

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| Module | Error Code | Fault Description | Related Alarms |
| --- | --- | --- | --- |
| Mainboard | b01 | The power supply to the mainboard is abnormal. | • 2.4.103 ALM-0x10000001 System 3.3 V Undervoltage (Mainboard, Major Alarm)<br>• 2.4.104 ALM-0x10000003 System 3.3 V Overvoltage (Mainboard, Major Alarm)<br>• 2.4.105 ALM-0x10000005 System 5 V Undervoltage (Mainboard, Major Alarm)<br>• 2.4.106 ALM-0x10000007 System 5 V Overvoltage (Mainboard, Major Alarm)<br>• 2.4.107 ALM-0x10000009 System 12 V Undervoltage (Mainboard, Major Alarm)<br>• 2.4.108 ALM-0x1000000B System 12 V Overvoltage (Mainboard, Major Alarm)<br>• 2.4.130 ALM-0x10000063 Failed to Read System 3.3 V Voltage (Mainboard, Minor Alarm)<br>• 2.4.131 ALM-0x10000065 Failed to Read System 5 V Voltage (Mainboard, Minor Alarm)<br>• 2.4.132 ALM-0x10000067 Failed to Read System 12 V Voltage (Mainboard, Minor Alarm)<br>• 2.4.135 ALM-0x1000006D Failed to Read Standby 5 V Voltage (Mainboard, Minor Alarm)<br>• 2.4.136 ALM-0x1000006F Failed to Read Standby 3.3 V Voltage (Mainboard, Minor Alarm)<br>• 2.4.137 ALM-0x10000071 Failed to Read Standby 2.5 V Voltage (Mainboard, Minor Alarm)<br>• 2.4.138 ALM-0x10000073 Failed to Read Standby 1.5 V Voltage (Mainboard, Minor Alarm)<br>• 2.4.140 ALM-0x10000077 Failed to Read Standby 1.1 V Voltage (Mainboard, Minor Alarm)<br>• 2.4.114 ALM-0x10000023 Mainboard Standby 2.5 V |

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| Module | Error Code | Fault Description | Related Alarms |
| --- | --- | --- | --- |
| | | | Undervoltage (Mainboard, Major Alarm)<br>• 2.4.115 ALM-0x10000025 Mainboard Standby 2.5 V Overvoltage (Mainboard, Major Alarm)<br>• 2.4.122 ALM-0x10000033 Standby 5 V Undervoltage (Mainboard, Major Alarm)<br>• 2.4.123 ALM-0x10000035 Standby 5 V Overvoltage (Mainboard, Major Alarm)<br>• 2.4.143 ALM-0x1000008B Standby 1.1 V Undervoltage (Mainboard, Major Alarm)<br>• 2.4.144 ALM-0x1000008D Standby 1.1 V Overvoltage (Mainboard, Major Alarm)<br>• 2.4.145 ALM-0x1000008F Standby 1.5 V Undervoltage (Mainboard, Major Alarm)<br>• 2.4.146 ALM-0x10000091 Standby 1.5 V Overvoltage (Mainboard, Major Alarm)<br>• 2.4.142 ALM-0x1000007B Failed to Read MOSFET Voltage Difference (Mainboard, Minor Alarm)<br>• 2.4.148 ALM-0x100000A1 Mainboard Standby 1.8 V Undervoltage (Mainboard, Major Alarm)<br>• 2.4.150 ALM-0x100000A5 Failed to Read Standby 1.8 V Voltage (Mainboard, Minor Alarm)<br>• 2.4.149 ALM-0x100000A3 Standby 1.8 V Overvoltage (Mainboard, Major Alarm)<br>• 2.4.109 ALM-0x1000000F Standby 3.3 V Undervoltage (Mainboard, Major Alarm)<br>• 2.4.110 ALM-0x10000011 Standby 3.3 V Overvoltage (Mainboard, Major Alarm)<br>• 2.4.112 ALM-0x1000001F Mainboard Standby 1 V |

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| Module | Error Code | Fault Description | Related Alarms |
| --- | --- | --- | --- |
| | | | Undervoltage (Mainboard, Major Alarm)<br>• 2.4.113 ALM-0x10000021 Mainboard Standby 1 V Overvoltage (Mainboard, Major Alarm)<br>• 2.4.111 ALM-0x10000017 Mainboard Power Supply Failure (Mainboard, Major Alarm)<br>• 2.4.118 ALM-0x1000002B Mainboard 1.5 V Undervoltage (Mainboard, Major Alarm)<br>• 2.4.119 ALM-0x1000002D Mainboard 1.5 V Overvoltage (Mainboard, Major Alarm)<br>• 2.4.120 ALM-0x1000002F Large Voltage Difference on Mainboard MOSFET (Mainboard, Major Alarm)<br>• 2.4.121 ALM-0x10000031 Large Voltage Difference on Mainboard MOSFET (Mainboard, Critical Alarm)<br>• 2.4.147 ALM-0x1000009D Large Voltage Difference on Mainboard MOS2 (Mainboard, Major Alarm)<br>• 2.10.129 ALM-0x100000AB Active iBMC Absent (Mainboard, Critical Alarm)<br>• 2.10.132 ALM-0x100000B1 LOM MCE/AER Error (Mainboard, Critical Alarm)<br>• 2.10.127 ALM-0x1000009B Mainboard SMI2 Link Initialization Error (Mainboard, Critical Alarm)<br>• 2.10.128 ALM-0x100000A9 Mainboard Fault (Mainboard, Major Alarm) |

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| Module | Error Code | Fault Description | Related Alarms |
| --- | --- | --- | --- |
| | b02 | The RAID controller card is malfunctioning or faulty. | • 2.3.49 ALM-0x0600000B RAID Controller Card Overtemperature (RAID Controller Card, Minor Alarm)<br>• 2.3.51 ALM-0x06000019 BBU Overtemperature (RAID Controller Card, Minor Alarm)<br>• 2.4.72 ALM-0x0600000F Screw-in RAID controller card BBU undervoltage (RAID Card, Major Alarm)<br>• 2.4.73 ALM-0x06000011 RAID Controller Card BBU Fault (RAID Controller Card, Major Alarm)<br>• 2.6.6 ALM-0x0600000D Failed to Read RAID Controller Card Temperature (RAID Card, Minor Alarm)<br>• 2.6.7 ALM-0x0600001B Failed to Read the RAID Card BBU Temperature (RAID Controller Card, Minor Alarm)<br>• 2.10.25 ALM-0x06000005 RAID Controller Card Fault (RAID Card, Major Alarm)<br>• 2.10.26 ALM-0x06000007 RAID Controller Card MCE/AER Error (RAID Card, Critical Alarm)<br>• 2.10.28 ALM-0x06000027 Initialization of the RAID Controller Card Abnormal (RAID Card, Major Alarm)<br>• 2.10.30 ALM-0x0600002F Incompatible RAID Controller Card (RAID Card, Minor Alarm) |
| | b03 | Communication with the RAID controller card is lost. | 2.10.27 ALM-0x06000025 Communication with the RAID Controller Card Lost (RAID Card, Major Alarm) |
| | b04 | M.2 Transfer Card power supply abnormal | 2.10.256 ALM-0x2D000001 M.2 Transfer Card Power Supply Abnormal (M2 Transfer Card, Major Alarm) |

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| Module | Error Code | Fault Description | Related Alarms |
| --- | --- | --- | --- |
| | b06 | OCP card 1 is malfunctioning or faulty. | **2.10.285 ALM-0x53000001 OCP Hardware Component MCE/AER Error (OCP Card, Critical Alarm)**<br>**2.10.287 ALM-0x5300000D OCP Hardware Component BandWidth Decreased (OCP Card, Minor Alarm)**<br>**2.10.286 ALM-0x53000007 OCP Card Hardware Component Fault Minor Alarm (OCP Card, Minor Alarm)**<br>**2.10.288 ALM-0x53000015 OCP Hardware Component Speed Decreased (OCP Card, Minor Alarm)**<br>**2.3.157 ALM-0x53000003 OCP Hardware Component Overtemperature (OCP Card, Minor Alarm)**<br>**2.3.158 ALM-0x53000005 Failed to Read the OCP Hardware Component Temperature (OCP Card, Minor Alarm)**<br>**2.3.159 ALM-0x53000009 OCP Hardware Component Optical Module Overtemperature (OCP Card, Minor Alarm)**<br>**2.3.160 ALM-0x53000017 Major Alarm of OCP Card Overheating (OCP Card, Major Alarm)**<br>**2.3.162 ALM-0x5300001B The OCP Optical Module Temperature Exceeds the Major Overtemperature Threshold (OCP Card, Major Alarm)**<br>**2.10.294 ALM-0x53000029 OCP Card Attestation failed (OCP Card, Major Alarm)** |
| | b07 | OCP card 2 is malfunctioning or faulty. | |
| | b08 | OCP card 3 is malfunctioning or faulty. | |
| | b09 | BMC card is malfunctioning. | • **2.10.182 ALM-0x65000001 BMC Card CPLD Self-test Failed (BMC Card, Major Alarm)**<br>• **2.10.183 ALM-0x65000003 BMC Card USB Port is Overcurrent (BMC Card, Minor Alarm)** |

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| Module | Error Code | Fault Description | Related Alarms |
| --- | --- | --- | --- |
| | L01 | The cable is not securely or correctly connected. | • 2.10.202 ALM-0x28000001 Incorrect SAS Cable Connection (Cable, Major Alarm)<br>• 2.10.204 ALM-0x28000005 CPU QPI/UPI Connection Failed (Cable, Major Alarm)<br>• 2.10.219 ALM-0x28000033 PCIe Link Speed Decreased (Cable, Minor Alarm)<br>• 2.10.220 ALM-0x28000035 PCIe Link Bandwidth Decreased (Cable, Minor Alarm) |
| | E01 | The CMOS battery is abnormal. | 2.10.120 ALM-0x1000000D Low Voltage in Mainboard RTC Battery (Mainboard, Major Alarm) |

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| Module | Error Code | Fault Description | Related Alarms |
| --- | --- | --- | --- |
| Hard disk | H*XY*<br>**NOTE**<br>*XY* indicates the slot number of a front or built-in hard disk. | Hard disk *XY* is malfunctioning or faulty. | • **2.7.1 ALM-0x02000007 Hard Disk Fault (Disk, Major Alarm)**<br>• **2.7.7 ALM-0x02000025 Hard Disk Link Fault (Disk, Major Alarm)**<br>• **2.7.2 ALM-0x02000009 Hard Disk Prewarning (Disk, Minor Alarm)**<br>• **2.7.3 ALM-0x0200000B Hard Disk RAID Array Failed (Disk, Major Alarm)**<br>• **2.7.4 ALM-0x02000013 Hard Disk MCE/AER Error (Disk, Critical Alarm)**<br>• **2.7.11 ALM-0x0200002D Hard Disk Lost (Disk, Major Alarm)**<br>• **2.7.13 ALM-0x02000031 Rapid Increase of PHY Bit Errors on the Link Between the Expander Controller and Hard Disk (Disk, Major Alarm)**<br>• **2.7.12 ALM-0x0200002F Rapid Increase of PHY Bit Errors on the Link Between the RAID Controller Card and Hard Disk (Disk, Major Alarm)**<br>• **2.7.10 ALM-0x0200002B Hard Disk Link Fault (Disk, Minor Alarm)**<br>• **2.7.9 ALM-0x02000029 Hard Disk Foreign Configuration (Disk, Minor Alarm)**<br>• **2.7.8 ALM-0x02000027 Hard Disk Status Abnormal (Disk, Minor Alarm)**<br>• **2.7.5 ALM-0x0200001D Low Hard Disk Remnant Wearout (Disk, Major Alarm)**<br>• **2.6.5 ALM-0x02000017 Failed to Read Hard Disk Temperature (Disk, Minor Alarm)**<br>• **2.3.30 ALM-0x02000015 Hard Disk Overtemperature (Disk, Minor Alarm)** |

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| Module | Error Code | Fault Description | Related Alarms |
| --- | --- | --- | --- |
| | HA*N*<br>**NOTE**<br>*N* indicates the slot number of the rear hard disk. | The rear hard disk in slot A*N* is malfunctioning or faulty. | • **2.7.1 ALM-0x02000007 Hard Disk Fault (Disk, Major Alarm)**<br>• **2.7.7 ALM-0x02000025 Hard Disk Link Fault (Disk, Major Alarm)**<br>• **2.7.2 ALM-0x02000009 Hard Disk Prewarning (Disk, Minor Alarm)**<br>• **2.7.3 ALM-0x0200000B Hard Disk RAID Array Failed (Disk, Major Alarm)**<br>• **2.7.4 ALM-0x02000013 Hard Disk MCE/AER Error (Disk, Critical Alarm)**<br>• **2.3.30 ALM-0x02000015 Hard Disk Overtemperature (Disk, Minor Alarm)**<br>• **2.6.5 ALM-0x02000017 Failed to Read Hard Disk Temperature (Disk, Minor Alarm)** |
| | Hb*N*<br>**NOTE**<br>*N* indicates the slot number of the rear hard disk. | The rear hard disk in slot B*N* is malfunctioning or faulty. | • **2.7.1 ALM-0x02000007 Hard Disk Fault (Disk, Major Alarm)**<br>• **2.7.8 ALM-0x02000027 Hard Disk Status Abnormal (Disk, Minor Alarm)**<br>• **2.7.9 ALM-0x02000029 Hard Disk Foreign Configuration (Disk, Minor Alarm)**<br>• **2.7.10 ALM-0x0200002B Hard Disk Link Fault (Disk, Minor Alarm)**<br>• **2.7.2 ALM-0x02000009 Hard Disk Prewarning (Disk, Minor Alarm)**<br>• **2.7.3 ALM-0x0200000B Hard Disk RAID Array Failed (Disk, Major Alarm)**<br>• **2.7.4 ALM-0x02000013 Hard Disk MCE/AER Error (Disk, Critical Alarm)**<br>• **2.3.30 ALM-0x02000015 Hard Disk Overtemperature (Disk, Minor Alarm)**<br>• **2.6.5 ALM-0x02000017 Failed to Read Hard Disk Temperature (Disk, Minor Alarm)** |

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| Module | Error Code | Fault Description | Related Alarms |
| --- | --- | --- | --- |
| | d*XY*<br>**NOTE**<br>*XY* indicates the slot number of the rear hard disk. | The rear hard disk in slot *XY* is malfunctioning or faulty. | • **2.7.1 ALM-0x02000007 Hard Disk Fault (Disk, Major Alarm)**<br>• **2.7.2 ALM-0x02000009 Hard Disk Prewarning (Disk, Minor Alarm)**<br>• **2.7.3 ALM-0x0200000B Hard Disk RAID Array Failed (Disk, Major Alarm)**<br>• **2.7.4 ALM-0x02000013 Hard Disk MCE/AER Error (Disk, Critical Alarm)**<br>• **2.3.30 ALM-0x02000015 Hard Disk Overtemperature (Disk, Minor Alarm)**<br>• **2.6.5 ALM-0x02000017 Failed to Read Hard Disk Temperature (Disk, Minor Alarm)** |
| LOM | n01 | The LOM is malfunctioning or faulty. | - |

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| Module | Error Code | Fault Description | Related Alarms |
| --- | --- | --- | --- |
| PCIe Card | q0*N*<br>**NOTE**<br>*N* indicates the serial number of the PCIe card. | PCIe card *N* is malfunctioning or faulty. | • **2.3.52 ALM-0x08000003 PCIe Card Overtemperature (PCIe Card, Minor Alarm)**<br>• **2.3.55 ALM-0x0800000D PCIe Card CPU Overtemperature (PCIe Card, Minor Alarm)**<br>• **2.3.54 ALM-0x0800000B PCIe Card Overtemperature (PCIe Card, Major Alarm)**<br>• **2.3.56 ALM-0x0800000F PCIe Card CPU Overtemperature (PCIe Card, Major Alarm)**<br>• **2.3.53 ALM-0x08000009 PCIe Card DIMM Overtemperature (PCIe Card, Minor Alarm)**<br>• **2.4.78 ALM-0x08000039 PCIe Card BBU Undervoltage (PCIe Card, Major Alarm)**<br>• **2.4.79 ALM-0x0800003B PCIe Card BBU Fault (PCIe Card, Major Alarm)**<br>• **2.4.74 ALM-0x08000011 PCIe Card Battery Undervoltage (PCIe Card, Minor Alarm)**<br>• **2.4.75 ALM-0x08000013 PCIe Card Undervoltage (PCIe Card, Major Alarm)**<br>• **2.4.76 ALM-0x08000015 PCIe Card Overvoltage (PCIe Card, Major Alarm)**<br>• **2.4.77 ALM-0x08000017 Failed to Read PCIe Card Voltage (PCIe Card, Minor Alarm)**<br>• **2.10.57 ALM-0x08000073 PCIe Card Component Absent (PCIe Card, Minor Alarm)**<br>• **2.10.51 ALM-0x0800005D PCIe Card Self-Test Failed (PCIe Card, Major Alarm)**<br>• **2.10.53 ALM-0x08000063 Optical Module on the PCIe Card Overtemperature (PCIe Card, Minor Alarm)** |

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| Module | Error Code | Fault Description | Related Alarms |
| --- | --- | --- | --- |
| | | | • 2.10.59 ALM-0x08000077 Failed to Obtain the PCIe Card Power (PCIe Card, Minor Alarm)<br>• 2.10.61 ALM-0x0800007B PCIe Card High Voltage (PCIe Card, Major Alarm)<br>• 2.10.62 ALM-0x0800007D PCIe Card Low Voltage (PCIe Card, Major Alarm)<br>• 2.6.8 ALM-0x08000005 Failed to Read PCIe Card Temperature (PCIe Card, Minor Alarm)<br>• 2.10.31 ALM-0x08000001 PCIe Card MCE/AER Fault (PCIe Card, Critical Alarm)<br>• 2.10.33 ALM-0x0800001B PCIe Card Hardware Fault (PCIe Card, Major Alarm)<br>• 2.10.34 ALM-0x0800001D PCIe Card Boot Drive Not Detected (PCIe Card, Major Alarm)<br>• 2.10.35 ALM-0x0800001F PCIe Card DIMM Fault (PCIe Card, Major Alarm)<br>• 2.10.36 ALM-0x08000021 PCIe Card Firmware Initialization Error (PCIe Card, Major Alarm)<br>• 2.10.37 ALM-0x08000023 PCIe Card CPU Initialization Error (PCIe Card, Major Alarm)<br>• 2.10.38 ALM-0x08000025 PCIe Card Watchdog Timed Out (PCIe Card, Major Alarm)<br>• 2.10.39 ALM-0x08000041 PCIe Card Power Fault (PCIe Card, Major Alarm)<br>• 2.10.42 ALM-0x0800004B PCIe Plug-in RAID Controller Card Fault (PCIe Card, Major Alarm)<br>• 2.10.73 ALM-0x08000095 Communication with the PCIe Plug-in RAID Controller Card Lost (PCIe Card, Major Alarm)<br>• 2.10.74 ALM-0x08000097 Initialization of the PCIe Plug-in |

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| Module | Error Code | Fault Description | Related Alarms |
| --- | --- | --- | --- |
| | | | RAID Controller Card Abnormal (PCIe Card, Major Alarm)<br>• 2.10.45 ALM-0x08000051 Clock Out-of-Lock (PCIe Card, Major Alarm)<br>• 2.10.46 ALM-0x08000053 DDR Calibration Failed (PCIe Card, Major Alarm)<br>• 2.10.47 ALM-0x08000055 DDR Abnormal (PCIe Card, Major Alarm)<br>• 2.10.48 ALM-0x08000057 PCIe Link Fault (PCIe Card, Major Alarm)<br>• 2.10.49 ALM-0x08000059 Services Interrupted (PCIe Card, Major Alarm)<br>• 2.10.75 ALM-0x080000A1 PCIe Card Overcurrent (PCIe Card, Major Alarm)<br>• 2.10.76 ALM-0x080000A3 PCIe Card Chip Abnormal (PCIe Card, Major Alarm)<br>• 2.10.77 ALM-0x080000A5 PCIe Card Initialization Error (PCIe Card, Major Alarm)<br>• 2.10.78 ALM-0x080000A7 PCIe Card Component Minor Fault (PCIe Card, Minor Alarm)<br>• 2.10.79 ALM-0x080000A9 PCIe Card Component Major Fault (PCIe Card, Major Alarm)<br>• 2.10.80 ALM-0x080000AB High Current on the PCIe Card (PCIe Card, Major Alarm)<br>• 2.10.56 ALM-0x0800006F PCIe Card Bandwidth Decreased (PCIe Card, Minor Alarm)<br>• 2.10.96 ALM-0x080000EF PCIe Card Speed Decreased (PCIe Card, Minor Alarm)<br>• 2.3.61 ALM-0x080000F3 The Optical Module Temperature Exceeds the Major Overtemperature Threshold (PCIe Card, Major Alarm) |

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| Module | Error Code | Fault Description | Related Alarms |
|---|---|---|---|
| | | | • 2.3.64 ALM-0x0800011B PCIe Card Attestation fails (PCIe Card, Major Alarm) |
| Disk backplane | bP1 | The power supply to the front disk backplane is abnormal. | 2.4.71 ALM-0x05000001 Disk Backplane Power Failure (Disk Backplane, Major Alarm) |
| | bP2 | The power supply to the built-in disk backplane is abnormal. | 2.4.71 ALM-0x05000001 Disk Backplane Power Failure (Disk Backplane, Major Alarm) |
| | bP3 | The power supply to the rear disk backplane is abnormal. | 2.4.71 ALM-0x05000001 Disk Backplane Power Failure (Disk Backplane, Major Alarm) |

# 2.2 Alarm Overview

This section describes iBMC alarms and alarm format.

## 2.2.1 Alarm Information

When a fault occurs, the iBMC generates an alarm and log information based on the faulty component. If a universal server manager (USM) is configured, the alarm will be reported to the USM over the Simple Network Management Protocol (SNMP). The iBMC also monitors the operating environment and generates an alarm if the environmental conditions exceed the normal range.

### Events and Alarms

Based on the Impact on the System, alarms can be classified into the following types:

- Events

  An event is used to inform the user about the occurrence of the event. It has no Impact on the System.

- Alarms

  An alarm indicates a fault that may affect system operating.

NOTE

This document describes alarms only.

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### Viewing Alarm Information

You can use any of the following methods to view alarm information:

- Choose **Maintenance** > **Alarm & SEL** on the iBMC WebUI to view alarm information.
- Run the **ipmcget -d healthevents** command on the iBMC command-line interface (CLI).
- Use network management software.

### Alarm Severity

The alarms for servers are classified into the following severity levels:

- Minor

  A minor alarm has a minor Impact on the System, but you need to take corrective action as soon as possible to prevent a more severe alarm.
- Major

  A major alarm has a major Impact on the System. It affects the normal operating of the system or may cause service interruption.
- Critical

  A critical alarm may power off the server, and even interrupt system services. You must take corrective action immediately.

The alarms for servers include alarms for all components of servers. The alarm information helps you locate and rectify the fault.

### Event Status

The status of an alarm event can be Asserted or Deasserted. The two states are displayed in pairs. When handling alarms, pay attention to only the alarms whose event status is Asserted. When an alarm is cleared, the event description remains unchanged.

## 2.2.2 Alarm Description

### Alarm Syntax

- On the WebUI, the alarm information includes the following parameters:
  - Severity
  - Object type
  - Description
  - Generation time
  - Event code
  - Handling suggestions

    For details, see **Current Alarms** of the WebUI.
- On the CLI, the alarm information includes **Generation Time**, **Severity**, **Event Code**, **Status**, and **Event Description**.

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## Alarm Message Description

This document describes alarms from the following aspects:

- Description

  Provides the following information:

  – Alarm message.

  – Conditions for generating and clearing the alarm.

  – Object for which the alarm was generated.

  – BOM code and SN of the alarmed component.

    ▪ In versions earlier than iBMC V383, the component BOM code is presented as "PN" in the alarm description.

    ▪ In iBMC V383 or later, the component BOM code is changed from "PN" to "BN".

    ▪ In iBMC V3.01.00.00 or later, the component BOM code is presented as "BN" in the alarm description.

NOTE

In the iBMC, "disk" is also referred to as "drive".

- Attribute

  – **Alarm ID**: a hexadecimal code that uniquely identifies an alarm.

  – **Alarm severity**: level of the impact exerted by a fault corresponding to an alarm.

  – **Auto Clear**: indicates whether the alarm can be automatically cleared after the fault is rectified.

- Parameters

  Describes the parameters contained in the alarm information.

- Impact on the System

  Describes the Impact on the System.

- Possible Causes

  Provides possible causes of the alarm.

- Procedure

  Describes the procedure of rectifying the fault corresponding to the alarm.

NOTE

The handling procedure in the alarm handling suggestions is common for all server models. If a step cannot be performed, skip this step and go to the next step.

# 2.3 Temperature Alarms

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# 2.3.1 ALM-0x00000003 CPU Overtemperature Will Trigger CPU Underclocking (CPU, Major Alarm)

## Description

Alarm message:

CPU *arg1* temperature is too high and will be underclocked (SN: *arg2*, BN: *arg3*).

NOTE

From iBMC V316, the CPU and disk alarms will also include the SN and BOM code and the mainboard and memory alarms will also include the BOM code.

This alarm is generated when the iBMC detects a CPU overtemperature signal upon CPU underclocking triggered by high temperature. This alarm is cleared when the CPU temperature is within the normal range.

Alarm object: CPU

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x00000003 | Major | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Socket No. of the CPU. |
| *arg2* | CPU serial number. |
| *arg3* | BOM code. |

## Impact on the System

Overheating causes CPU underclocking, which will affect system performance.

## Possible Causes

- A fan module is faulty.
- The equipment room temperature exceeds the normal range.
- The air inlet or outlet is blocked.
- Idle slots or spaces are not installed with filler panels.
- The air duct is not installed.
- The heat sink is not properly connected to the CPU or the liquid cooling device is faulty.

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- The CPU is faulty.

## Procedure

**Step 1** Check whether both air inlet and outlet high temperature alarms are generated.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Rectify the fault according to troubleshooting suggestions. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Check whether there are fan module alarms.

- If yes, go to **Step 4**.
- If no, go to **Step 5**.

**Step 4** Replace the fan module. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Power off the server, and check whether the air duct is properly installed in the server.

- If yes, go to **Step 7**.
- If no, go to **Step 6**.

**Step 6** Install the air duct properly, and power on the server. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 7**.

**Step 7** Power off the server, and check whether the CPU heat sink or the liquid cooling device is properly installed.

- If yes, go to **Step 9**.
- If no, go to **Step 8**.

**Step 8** Install the CPU heat sink or the liquid cooling device properly, power on the server, and check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 9**.

**Step 9** Replace the faulty CPU. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 10**.

**Step 10** Replace the mainboard. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 11**.

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**Step 11** Contact technical support.

**----End**

# 2.3.2 ALM-0x00000005 CPU VDDQ Overtemperature (CPU, Minor Alarm)

## Description

Alarm message:

CPU *arg1* DIMMs VDDQ temperature (*arg2* degrees C) exceeds the overtemperature threshold (*arg3* degrees C) (SN: *arg4*, BN: *arg5*).

NOTE

From iBMC V316, the CPU and disk alarms will also include the SN and BOM code and the mainboard and memory alarms will also include the BOM code.

This alarm is generated when the VDDQ temperature of a CPU exceeds the overtemperature major threshold. This alarm is cleared when the temperature is within the normal range.

Alarm object: CPU

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x00000005 | Minor | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Socket No. of the CPU. |
| *arg2* | Current reading of the sensor. |
| *arg3* | Alarm threshold. |
| *arg4* | CPU serial number. |
| *arg5* | BOM code. |

## Impact on the System

Overheating powers off the server.

## Possible Causes

- A fan module is faulty.

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- The equipment room temperature exceeds the normal range.
- The air inlet or outlet is blocked.
- The air duct is not installed.
- The mainboard is faulty.

## Procedure

**Step 1** Check whether there are fan module alarms.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Replace the fan module. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Check whether the equipment room temperature exceeds the normal range.

- If yes, go to **Step 4**.
- If no, go to **Step 5**.

**Step 4** Reduce the equipment room temperature to the normal range. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Check whether the air inlet or outlet of the server is blocked.

- If yes, go to **Step 6**.
- If no, go to **Step 7**.

**Step 6** Clear the blockage. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 7**.

**Step 7** Check whether the server is installed with an air duct.

- If yes, go to **Step 9**.
- If no, go to **Step 8**.

**Step 8** Install an air duct. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 9**.

**Step 9** Replace the mainboard. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 10**.

**Step 10** Contact technical support engineer.

**----End**

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# 2.3.3 ALM-0x00000007 CPU VRD Overtemperature (CPU, Minor Alarm)

## Description

Alarm message:

The CPU *arg1* VRD temperature (*arg2* degrees C) exceeds the overtemperature threshold (*arg3* degrees C) (SN: *arg4*, BN: *arg5*).

NOTE

From iBMC V316, the CPU and disk alarms will also include the SN and BOM code and the mainboard and memory alarms will also include the BOM code.

This alarm is generated when the VDQ temperature of a CPU exceeds the overtemperature minor threshold. This alarm is cleared when the temperature is within the normal range.

Alarm object: CPU

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x00000007 | Minor | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Socket No. of the CPU. |
| *arg2* | Current reading of the sensor. |
| *arg3* | Alarm threshold. |
| *arg4* | CPU serial number. |
| *arg5* | BOM code. |

## Impact on the System

Overheating powers off the server.

## Possible Causes

- A fan module is faulty.
- The equipment room temperature exceeds the normal range.
- The air inlet or outlet is blocked.
- The air duct is not installed.

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- The mainboard is faulty.

## Procedure

**Step 1** Check whether there are fan module alarms.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Replace the fan module. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Check whether the equipment room temperature exceeds the normal range.

- If yes, go to **Step 4**.
- If no, go to **Step 5**.

**Step 4** Reduce the equipment room temperature to the normal range. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Check whether the air inlet or outlet of the server is blocked.

- If yes, go to **Step 6**.
- If no, go to **Step 7**.

**Step 6** Clear the blockage. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 7**.

**Step 7** Check whether the server is installed with an air duct.

- If yes, go to **Step 9**.
- If no, go to **Step 8**.

**Step 8** Install an air duct. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 9**.

**Step 9** Replace the mainboard. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 10**.

**Step 10** Contact technical support engineer.

**----End**

# 2.3.4 ALM-0x00000009 The Overheated General CPU VRD (CPU,Minor Alarm)

## Description

Alarm message:

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The CPU arg1 arg2 temperature (arg3 degrees C) exceeds the overtemperature threshold (arg4 degrees C).

This alarm is generated when the CPU PSU temperature is higher than the high-temperature threshold.

Alarm object: CPU

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x00000009 | Minor | Yes |

## Parameters

| Name | Meaning |
|---|---|
| *arg1* | Socket No. of the CPU. |
| *arg2* | Temperature detection point. For example, VCCD, FIVRA, INFAON or VCCFA. |
| *arg3* | Current reading of the sensor. |
| *arg4* | Alarm threshold. |

## Impact on the System

The temperature of the power supply for CPU on the motherboard is too high, which will trigger the server to automatically power off.

## Possible Causes

- A fan module is faulty.
- The equipment room temperature exceeds the normal range.
- The air inlet or outlet is blocked.
- The air duct is not installed.
- The mainboard is faulty.

## Procedure

**Step 1** Check whether there are fan module alarms.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Replace the fan module. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

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**Step 3** Check whether the equipment room temperature exceeds the normal range.

- If yes, go to **Step 4**.
- If no, go to **Step 5**.

**Step 4** Reduce the equipment room temperature to the normal range. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Check whether the air inlet or outlet of the server is blocked.

- If yes, go to **Step 6**.
- If no, go to **Step 7**.

**Step 6** Clear the blockage. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 7**.

**Step 7** Check whether the server is installed with an air duct.

- If yes, go to **Step 9**.
- If no, go to **Step 8**.

**Step 8** Install an air duct. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 9**.

**Step 9** Replace the mainboard. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 10**.

**Step 10** Contact technical support engineer.

**----End**

# 2.3.5 ALM-0x0000000F System Shutdown Due to CPU Overtemperature (CPU, Critical Alarm)

## Description

Alarm message (iBMC versions earlier than V296):

CPU *arg1* temperature is too high and the server will be powered off.

Alarm message (iBMC V296 and later versions):

The OS was shut down due to CPU *arg1* overheating (SN: *arg2*, BN: *arg3*).

NOTE

From iBMC V316, the CPU and disk alarms will also include the SN and BOM code and the mainboard and memory alarms will also include the BOM code.

This alarm is generated when the OS was shut down due to CPU overheating.

Alarm object: CPU

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## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x0000000F | Critical | Yes |

## Parameters

| Name | Meaning |
|---|---|
| *arg1* | Socket No. of the CPU. |
| *arg2* | CPU serial number. |
| *arg3* | BOM code. |

## Impact on the System

CPU overheating may result in abnormal power-off.

## Possible Causes

- A fan module is faulty.
- The equipment room temperature exceeds the normal range.
- The air inlet or outlet is blocked.
- Idle slots or spaces are not installed with filler panels.
- The air duct is not installed.
- The heat sink is not properly connected to the CPU or the liquid cooling device is faulty.
- The CPU is faulty.

## Procedure

**Step 1** Check whether both air inlet and outlet high temperature alarms are generated.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Rectify the fault according to troubleshooting suggestions. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Check whether there are fan module alarms.

- If yes, go to **Step 4**.
- If no, go to **Step 5**.

**Step 4** Replace the fan module. After 5 minutes, check whether the alarm is cleared.

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- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Power off the server, and check whether the air duct is properly installed in the server.

- If yes, go to **Step 7**.
- If no, go to **Step 6**.

**Step 6** Install the air duct properly, and power on the server. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 7**.

**Step 7** Power off the server, and check whether the CPU heat sink or the liquid cooling device is properly installed.

- If yes, go to **Step 9**.
- If no, go to **Step 8**.

**Step 8** Install the CPU heat sink or the liquid cooling device properly, power on the server, and check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 9**.

**Step 9** Replace the faulty CPU. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 10**.

**Step 10** Replace the mainboard. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 11**.

**Step 11** Contact technical support.

**----End**

# 2.3.6 ALM-0x00000019 CPU Temperature Is About to Reach the Maximum (CPU, Minor Alarm)

## Description

Alarm message:

Difference between CPU *arg1* temperature and underclocking temperature is *arg2* degrees C, lower than the threshold (*arg3* degrees C) (SN: *arg4*, BN: *arg5*).

NOTE

From iBMC V316, the CPU and disk alarms will also include the SN and BOM code and the mainboard and memory alarms will also include the BOM code.

This alarm is generated when the CPU temperature exceeds the threshold.

Alarm object: CPU

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## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x00000019 | Minor | Yes |

## Parameters

| Name | Meaning |
|---|---|
| *arg1* | Socket No. of the CPU. |
| *arg2* | Current reading of the sensor. |
| *arg3* | Alarm threshold. |
| *arg4* | CPU serial number. |
| *arg5* | BOM code. |

## Impact on the System

Overheating causes CPU underclocking, which will affect system performance.

## Possible Causes

- A fan module is faulty.
- The equipment room temperature exceeds the normal range.
- The air inlet or outlet is blocked.
- Idle slots or spaces are not installed with filler panels.
- The air duct is not installed.
- The heat sink is not properly connected to the CPU or the liquid cooling device is faulty.
- The CPU is faulty.

## Procedure

**Step 1** Check whether both air inlet and outlet high temperature alarms are generated.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Rectify the fault according to troubleshooting suggestions. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Check whether there are fan module alarms.

- If yes, go to **Step 4**.

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- If no, go to **Step 5**.

**Step 4** Replace the fan module. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Power off the server, and check whether the air duct is properly installed in the server.

- If yes, go to **Step 7**.
- If no, go to **Step 6**.

**Step 6** Install the air duct properly, and power on the server. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 7**.

**Step 7** Power off the server, and check whether the CPU heat sink or the liquid cooling device is properly installed.

- If yes, go to **Step 9**.
- If no, go to **Step 8**.

**Step 8** Install the CPU heat sink or the liquid cooling device properly, power on the server, and check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 9**.

**Step 9** Replace the faulty CPU. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 10**.

**Step 10** Replace the mainboard. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 11**.

**Step 11** Contact technical support.

**----End**

# 2.3.7 ALM-0x00000027 CPU VRD Overtemperature (CPU, Major Alarm)

## Description

Alarm message:

The CPU *arg1* VRD temperature (*arg2* degrees C) exceeds the overtemperature threshold (*arg3* degrees C) (SN: *arg4*, BN: *arg5*).

**NOTE**

From iBMC V316, the CPU and disk alarms will also include the SN and BOM code and the mainboard and memory alarms will also include the BOM code.

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This alarm is generated when the VRD temperature of a CPU exceeds the overtemperature major threshold. This alarm is cleared when the temperature is within the normal range.

Alarm object: CPU

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x00000027 | Major | Yes |

## Parameters

| Name | Meaning |
|---|---|
| *arg1* | Socket No. of the CPU. |
| *arg2* | Current reading of the sensor. |
| *arg3* | Alarm threshold. |
| *arg4* | CPU serial number. |
| *arg5* | BOM code. |

## Impact on the System

The system is powered off unexpectedly.

## Possible Causes

- A fan module is faulty.
- The equipment room temperature exceeds the normal range.
- The air inlet or outlet is blocked.
- Idle slots or spaces are not installed with filler panels.
- The air duct is not installed.
- The mainboard is faulty.

## Procedure

**Step 1** Check whether there are fan module alarms.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Replace the fan module. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

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**Step 3** Check whether the equipment room temperature exceeds the normal range.

- If yes, go to **Step 4**.
- If no, go to **Step 5**.

**Step 4** Reduce the equipment room temperature to the normal range. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Check whether the air inlet or outlet of the server is blocked.

- If yes, go to **Step 6**.
- If no, go to **Step 7**.

**Step 6** Clear the blockage. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 7**.

**Step 7** Check whether there are empty slots in the server.

- If yes, go to **Step 8**.
- If no, go to **Step 9**.

**Step 8** Install filler panels in empty slots. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 9**.

**Step 9** Check whether the server is installed with an air duct.

- If yes, go to **Step 11**.
- If no, go to **Step 10**.

**Step 10** Install an air duct. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 11**.

**Step 11** Replace the mainboard. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 12**.

**Step 12** Contact technical support engineer.

**----End**

# 2.3.8 ALM-0x00000029 CPU Temperature Is About to Reach the Limit (CPU, Major Alarm)

## Description

Alarm message:

Difference between CPU *arg1* temperature and underclocking temperature is *arg2*°C, lower than the threshold (*arg3*°C) (SN: *arg4*, BN: *arg5*).

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NOTE

From iBMC V316, the CPU and disk alarms will also include the SN and BOM code and the mainboard and memory alarms will also include the BOM code.

This alarm is generated when the CPU temperature is about to reach the limit, that is, the difference between the current CPU temperature and the CPU underclocking temperature is lower than the temperature difference threshold.

Alarm object: CPU

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x00000029 | Major | Yes |

## Parameters

| Name | Meaning |
|---|---|
| *arg1* | Socket No. of the CPU. |
| *arg2* | Difference between the current CPU temperature and the CPU underclocking temperature. |
| *arg3* | Temperature difference threshold. |
| *arg4* | CPU serial number. |
| *arg5* | BOM code. |

## Impact on the System

Overheating causes CPU underclocking, which will affect system performance.

## Possible Causes

- A fan module is faulty.
- The equipment room temperature exceeds the normal range.
- The air inlet or outlet is blocked.
- Idle slots or spaces are not installed with filler panels.
- The air duct is not installed.
- The heat sink is not properly connected to the CPU or the liquid cooling device is faulty.
- The CPU is faulty.

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## Procedure

**Step 1** Check whether both air inlet and outlet high temperature alarms are generated.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Rectify the fault according to troubleshooting suggestions. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Check whether there are fan module alarms.

- If yes, go to **Step 4**.
- If no, go to **Step 5**.

**Step 4** Replace the fan module. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Power off the server, and check whether the air duct is properly installed in the server.

- If yes, go to **Step 7**.
- If no, go to **Step 6**.

**Step 6** Install the air duct properly, and power on the server. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 7**.

**Step 7** Power off the server, and check whether the CPU heat sink or the liquid cooling device is properly installed.

- If yes, go to **Step 9**.
- If no, go to **Step 8**.

**Step 8** Install the CPU heat sink or the liquid cooling device properly, power on the server, and check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 9**.

**Step 9** Replace the faulty CPU. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 10**.

**Step 10** Replace the mainboard. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 11**.

**Step 11** Contact technical support.

**----End**

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# 2.3.9 ALM-0x0000003B Failed to Read CPU DTS Temperature (CPU, Minor Alarm)

## Description

Alarm message:

Failed to obtain data of the DTS temperature for CPU *arg1* (SN: *arg2*, BN: *arg3*).

NOTE

From iBMC V316, the CPU and disk alarms will also include the SN and BOM code and the mainboard and memory alarms will also include the BOM code.

This alarm is generated when the system failed to obtain the DTS temperature of a CPU.

Alarm object: CPU

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x0000003B | Minor | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Socket No. of the CPU. |
| *arg2* | CPU serial number. |
| *arg3* | BOM code. |

## Impact on the System

The temperature cannot be monitored. No alarm will be reported when the temperature is not in the normal range.

## Possible Causes

The CPU voltage detection circuit is abnormal.

## Procedure

**Step 1** Restart the iBMC. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

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**Step 2** Remove and reinstall the power cable or board. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Replace the mainboard. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Contact technical support engineer.

**----End**

# 2.3.10 ALM-0x00000061 Failed to Read CPU VRD Temperature (CPU, Minor Alarm)

## Description

Alarm message:

Failed to obtain data of the CPU *arg1* VRD temperature (SN: *arg2*, BN: *arg3*).

NOTE

From iBMC V316, the CPU and disk alarms will also include the SN and BOM code and the mainboard and memory alarms will also include the BOM code.

This alarm is generated when the system failed to obtain the VRD temperature of the CPU *arg1*.

Alarm object: CPU

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x00000061 | Minor | Yes |

## Parameters

| Name | Meaning |
|---|---|
| *arg1* | Socket No. of the CPU. |
| *arg2* | CPU serial number. |
| *arg3* | BOM code. |

## Impact on the System

The temperature cannot be monitored. No alarm will be reported when the temperature is not in the normal range.

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### Possible Causes

The CPU VRD power chip is faulty, or the access channel is unavailable.

### Procedure

**Step 1** Restart the iBMC. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Remove and reinstall the power cable or board. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Replace the mainboard. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Contact technical support.

**----End**

## 2.3.11 ALM-0x00000069 CPU VDDQ Overtemperature (CPU, Major Alarm)

### Description

Alarm message:

CPU *arg1* DIMMs VDDQ temperature (*arg2* degrees C) exceeds the overtemperature threshold (*arg3* degrees C) (SN: *arg4*, BN: *arg5*).

NOTE

From iBMC V316, the CPU and disk alarms will also include the SN and BOM code and the mainboard and memory alarms will also include the BOM code.

This alarm is generated when the VDDQ temperature of the memory connected to the specified CPU exceeds the alarm threshold.

Alarm object: CPU

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x00000069 | Major | Yes |

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## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Socket No. of the CPU. |
| *arg2* | Current reading of the sensor. |
| *arg3* | Alarm threshold. |
| *arg4* | CPU serial number. |
| *arg5* | BOM code. |

## Impact on the System

The overheating will cause automatic power-off of the server.

## Possible Causes

- The equipment room temperature exceeds the normal range.
- The fan module is faulty.
- The air inlet or outlet is blocked.
- There are unpopulated slots for blades.

## Procedure

**Step 1** Check whether there are fan module alarms.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Replace the fan module. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Check whether the equipment room temperature exceeds the normal range.

- If yes, go to **Step 4**.
- If no, go to **Step 5**.

**Step 4** Reduce the equipment room temperature to the normal range. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Check whether the air inlet or outlet of the server is blocked.

- If yes, go to **Step 6**.
- If no, go to **Step 7**.

**Step 6** Clear the blockage. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.

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- If no, go to **Step 7**.

**Step 7** Check whether there are empty slots in the server.

- If yes, go to **Step 8**.
- If no, go to **Step 9**.

**Step 8** Install filler panels in empty slots. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 9**.

**Step 9** Replace the mainboard. After the server is powered on, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 10**.

**Step 10** Contact technical support.

**----End**

# 2.3.12 ALM-0x0000006B Failed to Read CPU Margin (CPU, Minor Alarm)

## Description

Alarm message:

Failed to obtain data of the CPU *arg1* margin (SN: *arg2*, BN: *arg3*).

NOTE

From iBMC V316, the CPU and disk alarms will also include the SN and BOM code and the mainboard and memory alarms will also include the BOM code.

This alarm is generated when the system failed to obtain the CPU margin.

Alarm object: CPU

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x0000006B | Minor | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Socket No. of the CPU. |
| *arg2* | CPU serial number. |
| *arg3* | BOM code. |

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### Impact on the System

The temperature cannot be monitored. No alarm will be reported when the temperature is not in the normal range.

### Possible Causes

the I2C access channel is abnormal.

### Procedure

**Step 1** Restart the iBMC. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Remove and reinstall the power cable or board. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Contact technical support engineer.

**----End**

## 2.3.13 ALM-0x0000006D CPU Core Overtemperature (CPU, Minor Alarm)

### Description

Alarm message:

The CPU *arg1* core temperature (*arg2* degrees C) exceeds the temperature upper threshold (*arg3* degrees C) (SN: *arg4*, BN: *arg5*).

NOTE

From iBMC V316, the CPU and disk alarms will also include the SN and BOM code and the mainboard and memory alarms will also include the BOM code.

This alarm is generated when the CPU core temperature exceeds the minor threshold.

Alarm object: CPU

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x0000006D | Minor | Yes |

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## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Socket No. of the CPU. |
| *arg2* | Current reading of the sensor. |
| *arg3* | Alarm threshold. |
| *arg4* | CPU serial number. |
| *arg5* | BOM code. |

## Impact on the System

Overheating affects CPU performance and server operation.

## Possible Causes

- The fan module is faulty.
- The equipment room temperature exceeds the normal range.
- The air inlet or outlet is blocked.
- The air duct is not installed.
- The mainboard is faulty.

## Procedure

**Step 1** Check whether there are fan module alarms.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Replace the fan module. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Check whether the equipment room temperature exceeds the normal range.

- If yes, go to **Step 4**.
- If no, go to **Step 5**.

**Step 4** Reduce the equipment room temperature to the normal range. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Check whether the air inlet or outlet of the server is blocked.

- If yes, go to **Step 6**.
- If no, go to **Step 7**.

**Step 6** Clear the blockage. After 5 minutes, check whether the alarm is cleared.

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- If yes, no further action is required.
- If no, go to **Step 7**.

**Step 7** Check whether the server is installed with an air duct.

- If yes, go to **Step 9**.
- If no, go to **Step 8**.

**Step 8** Install an air duct. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 9**.

**Step 9** Replace the mainboard. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 10**.

**Step 10** Contact technical support engineer.

**----End**

# 2.3.14 ALM-0x000000C5 CPU Core Overtemperature (CPU, Critical Alarm)

## Description

Alarm message:

The CPU *arg1* core temperature (*arg2* degrees C) exceeds the temperature upper threshold (*arg3* degrees C) (SN: *arg4*, BN: *arg5*).

NOTE

From iBMC V316, the CPU and disk alarms will also include the SN and BOM code and the mainboard and memory alarms will also include the BOM code.

This alarm is generated when the CPU core temperature exceeds the minor threshold.

Alarm object: CPU

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x000000C5 | Critical | Yes |

## Parameters

| Name | Meaning |
|---|---|
| *arg1* | Socket No. of the CPU. |
| *arg2* | Current reading of the sensor. |

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| Name | Meaning |
| --- | --- |
| *arg3* | Alarm threshold. |
| *arg4* | CPU serial number. |
| *arg5* | BOM code. |

## Impact on the System

Overheating affects CPU performance and server operation.

## Possible Causes

- The ambient temperature is too high.
- The air inlet or outlet is blocked.
- The server has empty slots or spaces.
- The fan module is faulty.
- The air duct is not installed.
- The mainboard is faulty.

## Procedure

**Step 1** Check whether there are fan module alarms.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Replace the fan module. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Check whether the equipment room temperature exceeds the normal range.

- If yes, go to **Step 4**.
- If no, go to **Step 5**.

**Step 4** Reduce the equipment room temperature to the normal range. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Check whether the air inlet or outlet of the server is blocked.

- If yes, go to **Step 6**.
- If no, go to **Step 7**.

**Step 6** Clear the blockage. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 7**.

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**Step 7** Check whether the air duct is correctly installed in the server.

- If yes, go to **Step 9**.
- If no, go to **Step 8**.

**Step 8** Install an air duct. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 9**.

**Step 9** Replace the mainboard. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 10**.

**Step 10** Contact technical support engineer.

**----End**

# 2.3.15 ALM-0x000000DB CPU Temperature Exceeds the Overtemperature (CPU, Critical Alarm)

## Description

Alarm message:

The current temperature of CPU*arg1* reaches or exceeds the temperature that triggers CPU underlocking. The temperature difference is *arg2* degrees C, and the upper threshold of the temperature difference is *arg3* degrees C.

This alarm is generated when the CPU temperature exceeds the overtemperature.

Alarm object: CPU

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x000000DB | Critical | Yes |

## Parameters

| Name | Meaning |
|---|---|
| *arg1* | Socket No. of the CPU. |
| *arg2* | Difference between the current CPU temperature and the CPU underclocking temperature. |
| *arg3* | Temperature difference threshold. |

## Impact on the System

The system performance is affected.

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## Possible Causes

- The ambient temperature is too high.
- The air inlet or outlet is blocked.
- The server has empty slots or spaces.
- The fan module is faulty.
- The air duct is not installed.
- The heat sink is in poor contact, or the liquid cooling device is faulty.
- The CPU is faulty.

## Procedure

**Step 1** Check whether both air inlet or outlet high temperature alarms are generated.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Rectify the fault according to troubleshooting suggestions. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Check whether there are fan module alarms.

- If yes, go to **Step 4**.
- If no, go to **Step 5**.

**Step 4** Replace the faulty fan or fan module. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Power off the server, and check whether the air duct is properly installed in the server.

- If yes, go to **Step 7**.
- If no, go to **Step 6**.

**Step 6** Install the air duct properly, and power on the server. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 7**.

**Step 7** Power off the server, and check whether the CPU heat sink or the liquid cooling device is properly installed.

- If yes, go to **Step 9**.
- If no, go to **Step 8**.

**Step 8** Install the CPU heat sink or the liquid cooling device properly, power on the server, and check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 9**.

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**Step 9** Replace the faulty CPU. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 10**.

**Step 10** Contact technical support engineer.

**----End**

# 2.3.16 ALM-0x000000E5 CPU DIMMs VDDQ Temperature Exceeds the Overtemperature Critical Threshold (CPU, Critical Alarm)

## Description

Alarm message:

CPU *arg1* DIMMs VDDQ temperature (*arg2* degrees C) exceeds the overtemperature threshold (*arg3* degrees C).

This alarm is generated when the temperature of the CPU DIMMs VDDQ exceeds the overtemperature threshold.

Alarm object: CPU

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x000000E5 | Critical | Yes |

## Parameters

| Name | Meaning |
|---|---|
| *arg1* | Socket No. of the CPU. |
| *arg2* | Current reading of the sensor. |
| *arg3* | Alarm threshold. |

## Impact on the System

The system is powered off unexpectedly.

## Possible Causes

- The ambient temperature is too high.
- The air inlet or outlet is blocked.
- The fan module is faulty.
- The air duct is not installed.

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- The mainboard is faulty.

## Procedure

**Step 1** Check whether both air inlet or outlet high temperature alarms are generated.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Rectify the fault according to troubleshooting suggestions. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Check whether there are fan module alarms.

- If yes, go to **Step 4**.
- If no, go to **Step 5**.

**Step 4** Replace the faulty fan module. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Check whether the equipment room temperature exceeds the normal range.

- If yes, go to **Step 6**.
- If no, go to **Step 7**.

**Step 6** Reduce the equipment room temperature to the normal range. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 7**.

**Step 7** Check whether the server air inlet and outlet are blocked.

- If yes, go to **Step 8**.
- If no, go to **Step 9**.

**Step 8** Clear the blockage. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 9**.

**Step 9** Check whether air ducts are installed in the server.

- If yes, go to **Step 11**.
- If no, go to **Step 10**.

**Step 10** Install air ducts properly. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 11**.

**Step 11** Replace the mainboard. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 12**.

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**Step 12** Contact technical support engineer.

**----End**

# 2.3.17 ALM-0x01000001 Memory Overtemperature (Memory, Major Alarm)

## Description

Alarm message:

Temperature of the DIMMs connected to CPU *arg1* is too high.

NOTE

The alarm does not include the SN or BOM code of the component.

This alarm is generated when the temperature of the dual in-line memory module (DIMM) connected to a CPU exceeds the overtemperature major threshold. This alarm is cleared when the temperature is within the normal range.

Alarm object: Memory

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x01000001 | Major | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Socket No. of the CPU. |

## Impact on the System

Overheating affects memory and server performance.

## Possible Causes

- A fan module is faulty.
- The equipment room temperature exceeds the normal range.
- The air inlet or outlet is blocked.
- Idle slots or spaces are not installed with filler panels.
- The air duct is not installed.
- A DIMM is faulty.

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## Procedure

**Step 1** Check whether there are fan module alarms.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Replace the fan module. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Check whether the equipment room temperature exceeds the normal range.

- If yes, go to **Step 4**.
- If no, go to **Step 5**.

**Step 4** Reduce the equipment room temperature to the normal range. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Check whether the air inlet or outlet of the server is blocked.

- If yes, go to **Step 6**.
- If no, go to **Step 7**.

**Step 6** Clear the blockage. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 7**.

**Step 7** Check whether there are empty slots in the server.

- If yes, go to **Step 8**.
- If no, go to **Step 9**.

**Step 8** Install filler panels in empty slots. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 9**.

**Step 9** Check whether the server is installed with an air duct.

- If yes, go to **Step 11**.
- If no, go to **Step 10**.

**Step 10** Install an air duct. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 11**.

**Step 11** Replace the faulty DIMMs, and power on the server. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 12**.

**Step 12** Contact technical support.

**----End**

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# 2.3.18 ALM-0x0100003B Memory Overtemperature (Memory, Minor Alarm)

## Description

Alarm message:

The memory (*arg1 arg2*) temperature (*arg3* degrees C) exceeds the overtemperature threshold (*arg4* degrees C)(SN: *arg5*, BN: *arg6*).

NOTE

From iBMC V316, this alarm also includes the serial number and BOM code of the memory.

This alarm is generated when the memory temperature exceeds the overtemperature minor threshold.

This alarm is cleared when the temperature is within the normal range.

Alarm object: Memory

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x0100003B | Minor | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Socket No. of the CPU. |
| *arg2* | DIMM silkscreen, for example, **DIMM000**. |
| *arg3* | Current reading of the sensor. |
| *arg4* | Alarm threshold. |
| *arg5* | Disk serial number. |
| *arg6* | BOM code. |

## Impact on the System

Overheating affects memory and server performance.

## Possible Causes

- A fan module is faulty.
- The equipment room temperature exceeds the normal range.
- The air inlet or outlet is blocked.

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- Idle slots or spaces are not installed with filler panels.
- The air duct is not installed.
- A DIMM is faulty.

## Procedure

**Step 1** Check whether there are fan module alarms.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Replace the fan module. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Check whether the equipment room temperature exceeds the normal range.

- If yes, go to **Step 4**.
- If no, go to **Step 5**.

**Step 4** Reduce the equipment room temperature to the normal range. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Check whether the air inlet or outlet of the server is blocked.

- If yes, go to **Step 6**.
- If no, go to **Step 7**.

**Step 6** Clear the blockage. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 7**.

**Step 7** Check whether there are empty slots in the server.

- If yes, go to **Step 8**.
- If no, go to **Step 9**.

**Step 8** Install filler panels in empty slots. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 9**.

**Step 9** Check whether the server is installed with an air duct.

- If yes, go to **Step 11**.
- If no, go to **Step 10**.

**Step 10** Install an air duct. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 11**.

**Step 11** Replace the faulty DIMMs, and power on the server. Then, check whether the alarm is cleared.

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- If yes, no further action is required.
- If no, go to **Step 12**.

**Step 12** Contact technical support.

**----End**

# 2.3.19 ALM-0x0100003D Memory Overtemperature (Memory, Major Alarm)

## Description

Alarm message:

The memory (*arg1 arg2*) temperature (*arg3* degrees C) exceeds the overtemperature threshold (*arg4* degrees C)(SN: *arg5*, BN: *arg6*).

This alarm is generated when the memory temperature exceeds the overtemperature major threshold.

Alarm object: Memory

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x0100003D | Major | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Socket No. of the CPU. |
| *arg2* | DIMM silkscreen, for example, **DIMM000**. |
| *arg3* | Current reading of the sensor. |
| *arg4* | Alarm threshold. |
| *arg5* | Disk serial number. |
| *arg6* | BOM code. |

## Impact on the System

Overheating affects memory and server performance.

## Possible Causes

- A fan module is faulty.
- The equipment room temperature exceeds the normal range.

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- The air inlet or outlet is blocked.
- Idle slots or spaces are not installed with filler panels.
- The DIMM is faulty.

## Procedure

**Step 1** Check whether there is fan alarm generated.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Replace the fan module. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Check whether the equipment room temperature exceeds the normal range.

- If yes, go to **Step 4**.
- If no, go to **Step 5**.

**Step 4** Reduce the equipment room temperature to the normal range. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Check whether the server air inlet and outlet are blocked.

- If yes, go to **Step 6**.
- If no, go to **Step 7**.

**Step 6** Clear the blockage. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 7**.

**Step 7** Check whether there are empty slots in the server.

- If yes, go to **Step 8**.
- If no, go to **Step 9**.

**Step 8** Install filler panels in empty slots. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 9**.

**Step 9** Replace the DIMM. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 10**.

**Step 10** Contact technical support engineer.

**----End**

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# 2.3.20 ALM-0x0100003F Failed to Read Memory Temperature (Memory, Minor Alarm)

## Description

Alarm message:

Failed to obtain data of the memory (*arg1*) temperature.

NOTE

The alarm does not include the SN or BOM code of the component.

This alarm is generated when the system failed to obtain the memory temperature.

Alarm object: Memory

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x0100003F | Minor | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | DIMM silkscreen or CPU socket number and memory channel No.<br>● DIMM silkscreen, for example, **DIMM010(B)**.<br>● CPU socket number and channel number. For example, **CPU 1 channel 2** indicates memory channel C of CPU 1, that is, DIMM **DIMM020(C)**.<br>**NOTE**<br>The number of DIMMs corresponding to a memory channel varies depending on the server model. |

## Impact on the System

The memory temperature cannot be monitored. No alarm will be reported when the temperature is not in the normal range.

## Possible Causes

The ME is faulty, or the access channel is abnormal.

## Procedure

**Step 1** Restart the iBMC. Then, check whether the alarm is cleared.

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- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Remove and reinstall the power cable or board. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Contact technical support engineer.

**----End**

# 2.3.21 ALM-0x01000045 DCPMM Overtemperature (Memory, Minor Alarm)

## Description

Alarm message:

The DCPMM (*arg1 arg2*) temperature (*arg3* degrees C) exceeds the overtemperature threshold (*arg4* degrees C) (SN: *arg5*, BN: *arg6*).

NOTE

The alarm does not include the SN or BOM code of the component.

This alarm is generated when the DCPMM temperature exceeds the alarm threshold. This alarm is cleared when the DCPMM temperature is within the normal range.

Alarm object: Memory

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x01000045 | Minor | Yes |

## Parameters

| Name | Meaning |
|---|---|
| *arg1* | Socket number of the CPU, for example, **CPUn**. |
| *arg2* | DIMM silkscreen or CPU socket number and memory channel No.<br>• DIMM silkscreen, for example, **DIMM010(B)**.<br>• CPU socket number and channel number. For example, **CPU 1 channel 2** indicates memory channel C of CPU 1, that is, DIMM **DIMM020(C)**.<br>**NOTE**<br>The number of DIMMs corresponding to a memory channel varies depending on the server model. |

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| Name | Meaning |
| --- | --- |
| *arg3* | Current reading of the sensor. |
| *arg4* | Alarm threshold. |

## Impact on the System

The overheating affects DCPMM stability and server performance.

## Possible Causes

- The fan module is faulty.
- The equipment room temperature exceeds the normal range.
- The air inlet or outlet is blocked.
- The DCPMM is faulty.

## Procedure

**Step 1** Check whether there are fan module alarms.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Replace the fan module. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Check whether the equipment room temperature exceeds the normal range.

- If yes, go to **Step 4**.
- If no, go to **Step 5**.

**Step 4** Reduce the equipment room temperature to the normal range. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Check whether the air inlet or outlet of the server is blocked.

- If yes, go to **Step 6**.
- If no, go to **Step 7**.

**Step 6** Clear the blockage. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 7**.

**Step 7** Replace the DCPMM. After the server is powered on, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 8**.

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**Step 8** Contact technical support engineer.

**----End**

# 2.3.22 ALM-0x01000047 Failed to Obtain the DCPMM Temperature (Memory, Minor Alarm)

## Description

Alarm message:

Failed to obtain data of the DCPMM *arg1* temperature.

NOTE

The alarm does not include the SN or BOM code of the component.

This alarm is generated when the system failed to obtain the DCPMM temperature.

Alarm object: Memory

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x01000047 | Minor | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Socket number of the CPU, for example, **CPUn**. |

## Impact on the System

The DCPMM temperature cannot be monitored. No alarm will be reported when the temperature is not in the normal range.

## Possible Causes

The ME is faulty, or the access channel is unavailable.

## Procedure

**Step 1** Restart the iBMC. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Remove and reconnect the power cable or reseat the board. Then, check whether the alarm is cleared.

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- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Contact technical support engineer.

**----End**

# 2.3.23 ALM-0x01000055 Memory Overtemperature Critical Alarm (Memory, Critical Alarm)

## Description

Alarm message:

The memory (*arg1 arg2*) temperature (*arg3* degrees C) exceeds the overtemperature threshold (*arg4* degrees C)(SN: *arg5*, BN: *arg6*).

This alarm is generated when the memory temperature exceeds the overtemperature minor threshold.

Alarm object: Memory

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x01000055 | Critical | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Socket No. of the CPU. |
| *arg2* | DIMM silkscreen, for example, **DIMM000**. |
| *arg3* | Current reading of the sensor. |
| *arg4* | Alarm threshold. |
| *arg5* | Disk serial number. |
| *arg6* | BOM code. |

## Impact on the System

The memory may run unstably or become faulty, which affects the system performance.

## Possible Causes

- The ambient temperature is too high.

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- The air inlet or outlet is blocked.
- The server has empty slots or spaces.
- The fan module is faulty.
- The memory module is faulty.

## Procedure

**Step 1** Check whether the equipment room temperature exceeds the normal range.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Reduce the equipment room temperature to the normal range. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Check whether the server air inlet and outlet are blocked.

- If yes, go to **Step 4**.
- If no, go to **Step 5**.

**Step 4** Clear the blockage. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Check whether there are empty slots in the server.

- If yes, go to **Step 6**.
- If no, go to **Step 7**.

**Step 6** Install filler panels in empty slots. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 7**.

**Step 7** Check whether there is fan alarm generated.

- If yes, go to **Step 8**.
- If no, go to **Step 9**.

**Step 8** Replace the fan module. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 9**.

**Step 9** Replace the DIMM. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 10**.

**Step 10** Contact technical support engineer.

**----End**

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# 2.3.24 ALM-0x01000053 OS Shutdown Due to DCPMM Overtemperature (Memory, Major Alarm)

## Description

Alarm message:

The system is powered off due to *arg1* DCPMM overtemperature.

NOTE

The alarm does not include the SN or BOM code of the component.

This alarm is generated when the OS is shut down due to DCPMM overtemperature.

Alarm object: Memory

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x01000053 | Major | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Socket number of the CPU, for example, **CPUn**. |

## Impact on the System

Services will be interrupted after the OS is shut down.

## Possible Causes

- A fan module is faulty.
- The equipment room temperature exceeds the normal range.
- The air inlet or outlet is blocked.
- Idle slots or spaces are not installed with filler panels.
- The air duct is not installed.

## Procedure

**Step 1** Check whether there are fan module alarms.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Replace the fan module. After 5 minutes, check whether the alarm is cleared.

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- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Check whether the equipment room temperature exceeds the normal range.

- If yes, go to **Step 4**.
- If no, go to **Step 5**.

**Step 4** Reduce the equipment room temperature to the normal range. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Check whether the air inlet or outlet of the server is blocked.

- If yes, go to **Step 6**.
- If no, go to **Step 7**.

**Step 6** Clear the blockage. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 7**.

**Step 7** Check whether there are empty slots in the server.

- If yes, go to **Step 8**.
- If no, go to **Step 9**.

**Step 8** Install filler panels in empty slots. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 9**.

**Step 9** Check whether the server is installed with an air duct.

- If yes, go to **Step 11**.
- If no, go to **Step 10**.

**Step 10** Install an air duct. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 11**.

**Step 11** Contact technical support engineer.

**----End**

# 2.3.25 ALM-0x01000061 PMem Overtemperature (Memory, Minor Alarm)

## Description

Alarm message:

The *arg1* (*arg2 arg3*) temperature (*arg4* degrees C) exceeds the overtemperature threshold (*arg5* degrees C).

This alarm is generated when the PMem temperature exceeds the alarm threshold. This alarm is cleared when the PMem temperature is within the normal range.

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Alarm object: Memory

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x01000061 | Minor | Yes |

## Parameters

| Name | Meaning |
|---|---|
| *arg1* | No. of the PMem. |
| *arg2* | Socket No. of the CPU. |
| *arg3* | DIMM silkscreen, for example, **DIMM000**. |
| *arg4* | Current reading of the sensor. |
| *arg5* | Alarm threshold. |

## Impact on the System

Overheating affects memory and server performance.

## Possible Causes

- Check the equipment room temperature.
- A fan module is faulty.
- The air inlet or outlet is blocked.
- A PMem is faulty.

## Procedure

**Step 1** Check whether there are fan module alarms.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Replace the fan module. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Check whether the equipment room temperature exceeds the normal range.

- If yes, go to **Step 4**.
- If no, go to **Step 5**.

**Step 4** Reduce the equipment room temperature to the normal range. After 5 minutes, check whether the alarm is cleared.

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- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Check whether the air inlet or outlet of the server is blocked.

- If yes, go to **Step 6**.
- If no, go to **Step 7**.

**Step 6** Clear the blockage. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 7**.

**Step 7** Replace the PMem. After the server is powered on, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 8**.

**Step 8** Contact technical support engineer.

**----End**

# 2.3.26 ALM-0x01000063 Failed to Obtain the PMem Temperature (Memory, Minor Alarm)

## Description

Alarm message:

Failed to obtain data of the *arg1* (*arg2*) temperature.

This alarm is generated when the system failed to obtain the PMem temperature.

Alarm object: Memory

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x01000063 | Minor | Yes |

## Parameters

| Name | Meaning |
|---|---|
| *arg1* | No. of the PMem. |
| *arg2* | Socket No. of the CPU. |

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### Impact on the System

The PMem temperature cannot be monitored. No alarm will be reported when the temperature is not in the normal range.

### Possible Causes

The ME is faulty, or the access channel is abnormal.

### Procedure

**Step 1** Restart the iBMC. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Remove and reconnect the power cable or reseat the board. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Contact technical support engineer.

**----End**

## 2.3.27 ALM-0x01000069 Powered off Due to PMem Overheating (Memory, Major Alarm)

### Description

Alarm message:

The system is powered off due to *arg1 arg2* overtemperature.

This alarm is generated when the system is powered off due to PMem overtemperature.

Alarm object: Memory

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x01000069 | Major | Yes |

### Parameters

| Name | Meaning |
|---|---|
| *arg1* | Socket No. of the CPU. |
| *arg2* | No. of the PMem. |

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## Impact on the System

The system is powered off.

## Possible Causes

- A fan module is faulty.
- The equipment room temperature exceeds the normal range.
- The air inlet or outlet is blocked.
- Idle slots or spaces are not installed with filler panels.
- The air duct is not installed.

## Procedure

**Step 1** Check whether there are fan module alarms.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Replace the fan module. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 3** Check whether the equipment room temperature exceeds the normal range.

- If yes, go to **Step 4**.
- If no, go to **Step 5**.

**Step 4** Reduce the equipment room temperature to the normal range. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Check whether the air inlet or outlet of the server is blocked.

- If yes, go to **Step 6**.
- If no, go to **Step 7**.

**Step 6** Clear the blockage. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 7**.

**Step 7** Check whether there are empty slots in the server.

- If yes, no further action is required.
- If no, go to **Step 8**.

**Step 8** Install filler panels in empty slots. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 9**.

**Step 9** Check whether the server is installed with an air duct.

- If yes, go to **Step 11**.

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- If no, go to **Step 10**.

**Step 10** Install an air duct. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 11**.

**Step 11** Contact technical support engineer.

**----End**

# 2.3.28 ALM-0x0100007B PMem Temperature Exceeds the Major Overtemperature Threshold (Memory, Major Alarm)

## Description

Alarm message:

The *arg1* (*arg2 arg3*) temperature (*arg4* degrees C) exceeds the overtemperature threshold (*arg*5 degrees C).

This alarm is generated when the temperature of the PMem exceeds the overtemperature threshold.

Alarm object: Memory

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x0100007B | Major | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | No. of the PMem. |
| *arg2* | Socket No. of the CPU. |
| *arg3* | DIMM silkscreen, for example, **DIMM000**. |
| *arg4* | Current reading of the sensor. |
| *arg5* | Alarm threshold. |

## Impact on the System

The memory stability and system performance are affected.

## Possible Causes

- The ambient temperature is too high.

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- The fan module is faulty.
- The air inlet or outlet is blocked.
- The DIMM is faulty.
- The air duct is not installed.

## Procedure

**Step 1** Check whether there are fan module alarms.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Replace the faulty fan module. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Check whether the equipment room temperature exceeds the normal range.

- If yes, go to **Step 4**.
- If no, go to **Step 5**.

**Step 4** Reduce the equipment room temperature to the normal range. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Check whether the server air inlet and outlet are blocked.

- If yes, go to **Step 6**.
- If no, go to **Step 7**.

**Step 6** Clear the blockage. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 7**.

**Step 7** Check whether air ducts are installed in the server.

- If yes, go to **Step 9**.
- If no, go to **Step 8**.

**Step 8** Install air ducts properly. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 9**.

**Step 9** Replace the component where the PCIe switch is located. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 10**.

**Step 10** Contact technical support engineer.

**----End**

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# 2.3.29 ALM-0x0100007F PMem Temperature Exceeds the Critical Overtemperature Threshold (Memory, Critical Alarm)

## Description

Alarm message:

The *arg1* (*arg2 arg3*) temperature (*arg4* degrees C) exceeds the overtemperature threshold (*arg*5 degrees C).

This alarm is generated when the temperature of the PMem exceeds the overtemperature threshold.

Alarm object: Memory

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x0100007F | Critical | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | No. of the PMem. |
| *arg2* | Socket No. of the CPU. |
| *arg3* | DIMM silkscreen, for example, **DIMM000**. |
| *arg4* | Current reading of the sensor. |
| *arg5* | Alarm threshold. |

## Impact on the System

The memory stability and system performance are affected.

## Possible Causes

- The ambient temperature is too high.
- The fan module is faulty.
- The air inlet or outlet is blocked.
- The DIMM is faulty.
- The air duct is not installed.

## Procedure

**Step 1** Check whether there are fan module alarms.

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- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Replace the faulty fan module. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Check whether the equipment room temperature exceeds the normal range.

- If yes, go to **Step 4**.
- If no, go to **Step 5**.

**Step 4** Reduce the equipment room temperature to the normal range. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Check whether the server air inlet and outlet are blocked.

- If yes, go to **Step 6**.
- If no, go to **Step 7**.

**Step 6** Clear the blockage. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 7**.

**Step 7** Check whether air ducts are installed in the server.

- If yes, go to **Step 9**.
- If no, go to **Step 8**.

**Step 8** Install air ducts properly. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 9**.

**Step 9** Replace the component where the PCIe switch is located. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 10**.

**Step 10** Contact technical support engineer.

**----End**

# 2.3.30 ALM-0x02000015 Hard Disk Overtemperature (Disk, Minor Alarm)

## Description

Alarm message:

The [*arg1*] disk *arg2* temperature (*arg3* degrees C) exceeds the threshold (*arg4* degrees C) (SN: *arg5*).

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NOTE

From iBMC V316, the CPU and disk alarms will also include the SN and BOM code and the mainboard and memory alarms will also include the BOM code.

This alarm is generated when the hard disk temperature exceeds the overtemperature minor threshold.

Alarm object: Disk

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x02000015 | Minor | Yes |

## Parameters

| Name | Meaning |
|---|---|
| *arg1* | Location of the hard disk. For example, **front** or **rear**. |
| *arg2* | Slot number of the hard disk. |
| *arg3* | Current reading of the sensor. |
| *arg4* | Alarm threshold. |
| *arg5* | Disk serial number. |

## Impact on the System

Overtemperature may lead to unstable running or failures of drives.

## Possible Causes

- A fan module is faulty.
- The equipment room temperature exceeds the normal range.
- The air inlet or outlet is blocked.
- Idle slots or spaces are not installed with filler panels.
- The hard disk is faulty.

## Procedure

**Step 1** Check whether there are fan module alarms.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Replace the fan module. After 5 minutes, check whether the alarm is cleared.

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- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Check whether the equipment room temperature exceeds the normal range.

- If yes, go to **Step 4**.
- If no, go to **Step 5**.

**Step 4** Reduce the equipment room temperature to the normal range. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Check whether the air inlet or outlet of the server is blocked.

- If yes, go to **Step 6**.
- If no, go to **Step 7**.

**Step 6** Clear the blockage. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 7**.

**Step 7** Check whether there are empty slots in the server.

- If yes, go to **Step 8**.
- If no, go to **Step 9**.

**Step 8** Install filler panels in empty slots. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 9**

**Step 9** Replace the faulty hard disk. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 10**.

**Step 10** Contact technical support engineer.

**----End**

# 2.3.31 ALM-0x02000019 Hard Disk Overtemperature (Disk, Major Alarm)

## Description

Alarm message:

The [*arg1*] disk *arg2* temperature (*arg3* degrees C) exceeds the threshold (*arg4* degrees C) (SN: *arg5*).

NOTE

From iBMC V316, the CPU and disk alarms will also include the SN and BOM code and the mainboard and memory alarms will also include the BOM code.

This alarm is generated when the hard disk temperature exceeds the overtemperature major threshold. This alarm is cleared when the hard disk temperature is within the normal range.

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Alarm object: Disk

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x02000019 | Major | Yes |

## Parameters

| Name | Meaning |
|---|---|
| *arg1* | Location of the hard disk. For example, **front** or **rear**. |
| *arg2* | Slot number of the hard disk. |
| *arg3* | Current reading of the sensor. |
| *arg4* | Alarm threshold. |
| *arg5* | Disk serial number. |

## Impact on the System

Overtemperature may lead to unstable running or failures of drives.

## Possible Causes

- A fan module is faulty.
- The equipment room temperature exceeds the normal range.
- The air inlet or outlet is blocked.
- The hard disk is faulty.

## Procedure

**Step 1** Check whether there is fan alarm generated.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Replace the fan module. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Check whether the equipment room temperature exceeds the normal range.

- If yes, go to **Step 4**.
- If no, go to **Step 5**.

**Step 4** Reduce the equipment room temperature to the normal range. After 5 minutes, check whether the alarm is cleared.

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- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Check whether the server air inlet and outlet are blocked.

- If yes, go to **Step 6**.
- If no, go to **Step 7**.

**Step 6** Clear the blockage. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 7**.

**Step 7** Replace the hard disk. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 8**.

**Step 8** Contact technical support engineer.

**----End**

# 2.3.32 ALM-0x02000035 The Drive Group is Overheating (Disk, Major Alarm)

## Description

Alarm message:

The highest temperature (*arg1*°C) of drive group *arg2* exceeds the alarm threshold (*arg3*°C).

This alarm is generated when the drive group temperature exceeds the alarm threshold.

Alarm object: Disk

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x02000035 | Major | Yes |

## Parameters

| Name | Meaning |
|---|---|
| *arg1* | Current reading of the sensor. |

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| Name | Meaning |
| --- | --- |
| *arg2* | No. of the drive group.<br>● 1: HDD Group<br>● 2: SAS/SATA SSD Group<br>● 3: NVMe SSD Group<br>**NOTE**<br>The iBMC groups the drives installed on the server by drive type. |
| *arg3* | Alarm threshold. |

## Impact on the System

Overheating affects drive performance and related services.

## Possible Causes

- The fan module is faulty.
- The ambient temperature is overheating.
- The air inlet or outlet is blocked.
- The drive is faulty.

## Procedure

**Step 1** Check whether there are fan module alarms.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Replace the fan module. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Check whether the equipment room temperature exceeds the normal range.

- If yes, go to **Step 4**.
- If no, go to **Step 5**.

**Step 4** Reduce the equipment room temperature to the normal range. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Check whether the air inlet or outlet of the server is blocked.

- If yes, go to **Step 6**.
- If no, go to **Step 7**.

**Step 6** Clear the blockage. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.

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- If no, go to **Step 7**.

**Step 7** Replace the faulty hard disk. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 8**.

**Step 8** Contact technical support engineer.

**----End**

# 2.3.33 ALM-0x02000037 The Drive Group is Overheating (Disk, Minor Alarm)

## Description

Alarm message:

The highest temperature (*arg1*°C) of drive group *arg2* exceeds the alarm threshold (*arg3*°C).

This alarm is generated when the drive group temperature exceeds the alarm threshold.

Alarm object: Disk

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x02000037 | Minor | Yes |

## Parameters

| Name | Meaning |
|---|---|
| *arg1* | Current reading of the sensor. |
| *arg2* | No. of the drive group.<br>● 1: HDD Group<br>● 2: SAS/SATA SSD Group<br>● 3: NVMe SSD Group<br>**NOTE**<br>The iBMC groups the drives installed on the server by drive type. |
| *arg3* | Alarm threshold. |

## Impact on the System

Overheating affects drive performance and related services.

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### Possible Causes

- The fan module is faulty.
- The ambient temperature is overheating.
- The air inlet or outlet is blocked.
- The drive is faulty.

### Procedure

**Step 1** Check whether there are fan module alarms.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Replace the fan module. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Check whether the equipment room temperature exceeds the normal range.

- If yes, go to **Step 4**.
- If no, go to **Step 5**.

**Step 4** Reduce the equipment room temperature to the normal range. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Check whether the air inlet or outlet of the server is blocked.

- If yes, go to **Step 6**.
- If no, go to **Step 7**.

**Step 6** Clear the blockage. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 7**.

**Step 7** Replace the faulty hard disk. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 8**.

**Step 8** Contact technical support engineer.

**----End**

## 2.3.34 ALM-0x0200003F The Disk Temperature Exceeds the Critical Threshold (Disk, Critical Alarm)

### Description

Alarm message:

The *arg1* disk *arg2* temperature (*arg3* degrees C) exceeds the threshold (*arg4* degrees C).

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This alarm is generated when the temperature of the hard disk exceeds the overtemperature threshold.

Alarm object: Disk

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x0200003F | Critical | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Type of the hard disk, for example, **HDD** or **PCIe Card 1 (RAID)**. |
| *arg2* | Slot number of the hard disk. |
| *arg3* | Current reading of the sensor. |
| *arg4* | Alarm threshold. |

## Impact on the System

The disk may run unstably or become faulty, the system may stop responding, or data loss may occur.

## Possible Causes

- The ambient temperature is too high.
- The air inlet or outlet is blocked.
- The server has empty slots or spaces.
- The fan module is faulty.
- The disk is faulty.

## Procedure

**Step 1** Check whether both air inlet or outlet high temperature alarms are generated.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Rectify the fault according to troubleshooting suggestions. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Check whether there are fan module alarms.

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- If yes, go to **Step 4**.
- If no, go to **Step 5**.

**Step 4** Replace the faulty fan module. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Check whether the equipment room temperature exceeds the normal range.

- If yes, go to **Step 6**.
- If no, go to **Step 7**.

**Step 6** Reduce the equipment room temperature to the normal range. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 7**.

**Step 7** Check whether the server air inlet and outlet are blocked.

- If yes, go to **Step 8**.
- If no, go to **Step 9**.

**Step 8** Clear the blockage. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 9**.

**Step 9** Check whether there are empty slots in the server.

- If yes, go to **Step 10**.
- If no, go to **Step 11**.

**Step 10** Install filler panels in empty slots. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 11**.

**Step 11** Replace the faulty hard disk. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 12**.

**Step 12** Contact technical support engineer.

**----End**

# 2.3.35 ALM-0x03000011 PSU Overtemperature (PSU, Major Alarm)

## Description

Alarm message:

PSU *arg1* is overtemperature (SN: *arg2*, BN: *arg3*).

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NOTE

From iBMC V328, the RAID controller card and PSU alarms will also include the SN and BOM code, and the fan alarms will also include the BOM code.

This alarm is generated when the temperature of a power supply unit (PSU) exceeds the overtemperature major threshold. This alarm is cleared when the temperature is within the normal range.

Alarm object: PSU

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x03000011 | Major | Yes |

## Parameters

| Name | Meaning |
|---|---|
| *arg1* | No. of the PSU. |
| *arg2* | SN of the PSU. |
| *arg3* | BOM code. |

## Impact on the System

Overheating affects the PSU service time and power supply to the system, which causes power-off of the server and interrupts services running on the server.

## Possible Causes

- A fan module is faulty.
- The equipment room temperature exceeds the normal range.
- The air inlet or outlet is blocked.
- Idle slots or spaces are not installed with filler panels.
- A fan in the power module is faulty.

## Procedure

**Step 1** Check whether there are fan module alarms.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Replace the fan module. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

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**Step 3** Check whether the equipment room temperature exceeds the normal range.

- If yes, go to **Step 4**.
- If no, go to **Step 5**.

**Step 4** Reduce the equipment room temperature to the normal range. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Check whether the air inlet or outlet of the server is blocked.

- If yes, go to **Step 6**.
- If no, go to **Step 7**.

**Step 6** Clear the blockage. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 7**.

**Step 7** Check whether there are empty slots in the server.

- If yes, go to **Step 8**.
- If no, go to **Step 9**.

**Step 8** Install filler panels in empty slots. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 9**.

**Step 9** Replace the PSU. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 10**.

**Step 10** Contact technical support engineer.

**----End**

# 2.3.36 ALM-0x03000031 PSU Air Inlet Overtemperature (PSU, Minor Alarm)

## Description

Alarm message:

The psu *arg1* air inlet temperature (*arg2* degrees C) exceeds the overtemperature threshold (*arg3* degrees C) (SN: *arg4*, BN: *arg5*).

This alarm is generated when the air inlet temperature of the PSU exceeds the overtemperature threshold.

Alarm object: PSU

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## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x03000031 | Minor | Yes |

## Parameters

| Name | Meaning |
|---|---|
| *arg1* | Slot number of the PSU. |
| *arg2* | Current reading of the sensor. |
| *arg3* | Alarm threshold. |
| *arg4* | PSU serial number. |
| *arg5* | BOM code. |

## Impact on the System

The overheating reduces the PSU service life, which affects the power supply to the server.

## Possible Causes

- The equipment room temperature exceeds the normal range.
- The air inlet or outlet is blocked.
- Idle slots or spaces are not installed with filler panels.
- The fan module is faulty.
- The PSU fan is faulty.

## Procedure

**Step 1** Check whether both air inlet and outlet overtemperature alarms are generated.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Clear the air inlet and outlet overtemperature alarms according to their handling suggestions. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Check whether a fan alarm is generated.

- If yes, go to **Step 4**.
- If no, go to **Step 5**.

**Step 4** Clear the fan alarm according to its handling suggestions. Then, check whether the alarm is cleared.

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- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Check whether a PSU fan alarm is generated.

- If yes, go to **Step 6**.
- If no, go to **Step 7**.

**Step 6** Replace the PSU for which the alarm is generated. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 7**.

**Step 7** Contact the device vendor's technical support engineer.

**----End**

# 2.3.37 ALM-0x03000045 The PSU Temperature Exceeds the Minor Overtemperature Threshold (PSU, Minor Alarm)

## Description

Alarm message:

The *arg1* optical module temperature (*arg2* degrees C) exceeds the overtemperature threshold (*arg3* degrees C).

This alarm is generated when the temperature of the PSU exceeds the overtemperature threshold.

Alarm object: PSU

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x03000045 | Minor | Yes |

## Parameters

| Name | Meaning |
|---|---|
| *arg1* | No. of the PSU. |
| *arg2* | Current reading of the sensor. |
| *arg3* | Alarm threshold. |

## Impact on the System

The overheating reduces the PSU service life, which affects the power supply to the server.

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## Possible Causes

- The ambient temperature is too high.
- The air inlet or outlet is blocked.
- The server has empty slots or spaces.
- The fan module is faulty.
- The PSU fan is faulty.
- The air duct is not installed.

## Procedure

**Step 1** Check whether both air inlet or outlet high temperature alarms are generated.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Rectify the fault according to troubleshooting suggestions. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Check whether there are fan module alarms.

- If yes, go to **Step 4**.
- If no, go to **Step 5**.

**Step 4** Replace the faulty fan module. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Check whether the equipment room temperature exceeds the normal range.

- If yes, go to **Step 6**.
- If no, go to **Step 7**.

**Step 6** Reduce the equipment room temperature to the normal range. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 7**.

**Step 7** Check whether the server air inlet and outlet are blocked.

- If yes, go to **Step 8**.
- If no, go to **Step 9**.

**Step 8** Clear the blockage. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 9**.

**Step 9** Check whether there are empty slots in the server.

- If yes, go to **Step 10**.
- If no, go to **Step 11**.

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**Step 10** Install filler panels in empty slots. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 11**.

**Step 11** Check whether air ducts are installed in the server.

- If yes, go to **Step 13**.
- If no, go to **Step 12**.

**Step 12** Install air ducts properly. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 13**.

**Step 13** Replace the PSU. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 14**.

**Step 14** Contact technical support engineer.

**----End**

# 2.3.38 ALM-0x03000047 The PSU Temperature Exceeds the Major Overtemperature Threshold (PSU, Major Alarm)

## Description

Alarm message:

The *arg1* optical module temperature (*arg2* degrees C) exceeds the overtemperature threshold (*arg3* degrees C).

This alarm is generated when the temperature of the PSU exceeds the overtemperature threshold.

Alarm object: PSU

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x03000047 | Major | Yes |

## Parameters

| Name | Meaning |
|---|---|
| *arg1* | No. of the PSU. |
| *arg2* | Current reading of the sensor. |
| *arg3* | Alarm threshold. |

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## Impact on the System

The overheating reduces the PSU service life, which affects the power supply to the server.

## Possible Causes

- The ambient temperature is too high.
- The air inlet or outlet is blocked.
- The server has empty slots or spaces.
- The fan module is faulty.
- The PSU fan is faulty.
- The air duct is not installed.

## Procedure

**Step 1** Check whether both air inlet or outlet high temperature alarms are generated.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Rectify the fault according to troubleshooting suggestions. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Check whether there are fan module alarms.

- If yes, go to **Step 4**.
- If no, go to **Step 5**.

**Step 4** Replace the faulty fan module. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Check whether the equipment room temperature exceeds the normal range.

- If yes, go to **Step 6**.
- If no, go to **Step 7**.

**Step 6** Reduce the equipment room temperature to the normal range. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 7**.

**Step 7** Check whether the server air inlet and outlet are blocked.

- If yes, go to **Step 8**.
- If no, go to **Step 9**.

**Step 8** Clear the blockage. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 9**.

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**Step 9** Check whether there are empty slots in the server.

- If yes, go to **Step 11**.
- If no, go to **Step 10**.

**Step 10** Install filler panels in empty slots. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 11**.

**Step 11** Check whether air ducts are installed in the server.

- If yes, go to **Step 13**.
- If no, go to **Step 12**.

**Step 12** Install air ducts properly. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 13**.

**Step 13** Replace the PSU. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 14**.

**Step 14** Contact technical support engineer.

**----End**

# 2.3.39 ALM-0x03000049 The PSU Temperature Exceeds the Critical Overtemperature Threshold (PSU, Critical Alarm)

## Description

Alarm message:

The *arg1* optical module temperature (*arg2* degrees C) exceeds the overtemperature threshold (*arg3* degrees C).

This alarm is generated when the temperature of the PSU exceeds the overtemperature threshold.

Alarm object: PSU

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x03000049 | Critical | Yes |

## Parameters

| Name | Meaning |
|---|---|
| *arg1* | No. of the PSU. |
| *arg2* | Current reading of the sensor. |

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| Name | Meaning |
| --- | --- |
| *arg3* | Alarm threshold. |

## Impact on the System

The overheating reduces the PSU service life, which affects the power supply to the server.

## Possible Causes

- The ambient temperature is too high.
- The air inlet or outlet is blocked.
- The server has empty slots or spaces.
- The fan module is faulty.
- The PSU fan is faulty.
- The air duct is not installed.

## Procedure

**Step 1** Check whether both air inlet or outlet high temperature alarms are generated.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Rectify the fault according to troubleshooting suggestions. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Check whether there are fan module alarms.

- If yes, go to **Step 4**.
- If no, go to **Step 5**.

**Step 4** Replace the faulty fan module. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Check whether the equipment room temperature exceeds the normal range.

- If yes, go to **Step 6**.
- If no, go to **Step 7**.

**Step 6** Reduce the equipment room temperature to the normal range. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 7**.

**Step 7** Check whether the server air inlet and outlet are blocked.

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- If yes, go to **Step 8**.
- If no, go to **Step 9**.

**Step 8** Clear the blockage. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 9**.

**Step 9** Check whether there are empty slots in the server.

- If yes, go to **Step 11**.
- If no, go to **Step 10**.

**Step 10** Install filler panels in empty slots. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 11**.

**Step 11** Check whether air ducts are installed in the server.

- If yes, go to **Step 13**.
- If no, go to **Step 12**.

**Step 12** Install air ducts properly. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 13**.

**Step 13** Replace the PSU. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 14**.

**Step 14** Contact technical support engineer.

**----End**

# 2.3.40 ALM-0x03000065 Minor Alarm of PSU Primary Side Overheating (PSU, Minor Alarm)

## Description

Alarm message:

The PSU *arg1* primary side temperature (*arg2* degrees C) exceeds the overtemperature threshold (*arg3* degrees C).

This alarm is generated when the temperature of the PSU Primary Side exceeds the overtemperature threshold.

Alarm object: PSU

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x03000065 | Minor | Yes |

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## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | No. of the PSU. |
| *arg2* | Current reading of the sensor. |
| *arg3* | Alarm threshold. |

## Impact on the System

The overheating reduces the PSU service life, which affects the power supply to the server.

## Possible Causes

- The ambient temperature is too high.
- The air inlet or outlet is blocked.
- The server has empty slots or spaces.
- The fan module is faulty.
- The PSU fan is faulty.

## Procedure

**Step 1** Check whether both air inlet or outlet high temperature alarms are generated.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Rectify the fault according to troubleshooting suggestions. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Check whether there are fan module alarms.

- If yes, go to **Step 4**.
- If no, go to **Step 5**.

**Step 4** Replace the faulty fan module. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Check whether the equipment room temperature exceeds the normal range.

- If yes, go to **Step 6**.
- If no, go to **Step 7**.

**Step 6** Reduce the equipment room temperature to the normal range. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.

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- If no, go to **Step 7**.

**Step 7** Check whether the server air inlet and outlet are blocked.

- If yes, go to **Step 8**.
- If no, go to **Step 9**.

**Step 8** Clear the blockage. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 9**.

**Step 9** Check whether there are empty slots in the server.

- If yes, go to **Step 11**.
- If no, go to **Step 10**.

**Step 10** Install filler panels in empty slots. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 11**.

**Step 11** Replace the PSU. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 12**.

**Step 12** Contact technical support engineer.

**----End**

## 2.3.41 ALM-0x03000067 Major Alarm of PSU Primary Side Overheating (PSU, Major Alarm)

### Description

Alarm message:

The PSU *arg1* primary side temperature (*arg2* degrees C) exceeds the overtemperature threshold (*arg3* degrees C).

This alarm is generated when the temperature of the PSU primary side exceeds the overtemperature threshold.

Alarm object: PSU

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x03000067 | Major | Yes |

### Parameters

| Name | Meaning |
|---|---|
| *arg1* | No. of the PSU. |

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| Name | Meaning |
| --- | --- |
| *arg2* | Current reading of the sensor. |
| *arg3* | Alarm threshold. |

## Impact on the System

The overheating reduces the PSU service life, which affects the power supply to the server.

## Possible Causes

- The ambient temperature is too high.
- The air inlet or outlet is blocked.
- The server has empty slots or spaces.
- The fan module is faulty.
- The PSU fan is faulty.

## Procedure

**Step 1** Check whether both air inlet or outlet high temperature alarms are generated.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Rectify the fault according to troubleshooting suggestions. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Check whether there are fan module alarms.

- If yes, go to **Step 4**.
- If no, go to **Step 5**.

**Step 4** Replace the faulty fan module. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Check whether the equipment room temperature exceeds the normal range.

- If yes, go to **Step 6**.
- If no, go to **Step 7**.

**Step 6** Reduce the equipment room temperature to the normal range. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 7**.

**Step 7** Check whether the server air inlet and outlet are blocked.

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- If yes, go to **Step 8**.
- If no, go to **Step 9**.

**Step 8** Clear the blockage. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 9**.

**Step 9** Check whether there are empty slots in the server.

- If yes, go to **Step 11**.
- If no, go to **Step 10**.

**Step 10** Install filler panels in empty slots. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 11**.

**Step 11** Replace the PSU. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 12**.

**Step 12** Contact technical support engineer.

**----End**

# 2.3.42 ALM-0x03000069 Minor Alarm of PSU Secondary Side Overheating (PSU, Minor Alarm)

## Description

Alarm message:

The PSU *arg1* secondary side temperature (*arg2* degrees C) exceeds the overtemperature threshold (*arg3* degrees C).

This alarm is generated when the temperature of the PSU secondary side exceeds the overtemperature threshold.

Alarm object: PSU

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x03000069 | Minor | Yes |

## Parameters

| Name | Meaning |
|---|---|
| *arg1* | No. of the PSU. |
| *arg2* | Current reading of the sensor. |

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| Name | Meaning |
| --- | --- |
| *arg3* | Alarm threshold. |

## Impact on the System

The overheating reduces the PSU service life, which affects the power supply to the server.

## Possible Causes

- The ambient temperature is too high.
- The air inlet or outlet is blocked.
- The server has empty slots or spaces.
- The fan module is faulty.
- The PSU fan is faulty.

## Procedure

**Step 1** Check whether both air inlet or outlet high temperature alarms are generated.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Rectify the fault according to troubleshooting suggestions. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Check whether there are fan module alarms.

- If yes, go to **Step 4**.
- If no, go to **Step 5**.

**Step 4** Replace the faulty fan module. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Check whether the equipment room temperature exceeds the normal range.

- If yes, go to **Step 6**.
- If no, go to **Step 7**.

**Step 6** Reduce the equipment room temperature to the normal range. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 7**.

**Step 7** Check whether the server air inlet and outlet are blocked.

- If yes, go to **Step 8**.

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- If no, go to **Step 9**.

**Step 8** Clear the blockage. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 9**.

**Step 9** Check whether there are empty slots in the server.

- If yes, go to **Step 11**.
- If no, go to **Step 10**.

**Step 10** Install filler panels in empty slots. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 11**.

**Step 11** Replace the PSU. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 12**.

**Step 12** Contact technical support engineer.

**----End**

# 2.3.43 ALM-0x0300006B Major Alarm of PSU Secondary Side Overheating (PSU, Major Alarm)

## Description

Alarm message:

The PSU *arg1* secondary side temperature (*arg2* degrees C) exceeds the overtemperature threshold (*arg3* degrees C).

This alarm is generated when the temperature of the PSU secondary side exceeds the overtemperature threshold.

Alarm object: PSU

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x0300006B | Major | Yes |

## Parameters

| Name | Meaning |
|---|---|
| *arg1* | No. of the PSU. |
| *arg2* | Current reading of the sensor. |
| *arg3* | Alarm threshold. |

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## Impact on the System

The overheating reduces the PSU service life, which affects the power supply to the server.

## Possible Causes

- The ambient temperature is too high.
- The air inlet or outlet is blocked.
- The server has empty slots or spaces.
- The fan module is faulty.
- The PSU fan is faulty.

## Procedure

**Step 1** Check whether both air inlet or outlet high temperature alarms are generated.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Rectify the fault according to troubleshooting suggestions. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Check whether there are fan module alarms.

- If yes, go to **Step 4**.
- If no, go to **Step 5**.

**Step 4** Replace the faulty fan module. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Check whether the equipment room temperature exceeds the normal range.

- If yes, go to **Step 6**.
- If no, go to **Step 7**.

**Step 6** Reduce the equipment room temperature to the normal range. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 7**.

**Step 7** Check whether the server air inlet and outlet are blocked.

- If yes, go to **Step 8**.
- If no, go to **Step 9**.

**Step 8** Clear the blockage. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 9**.

**Step 9** Check whether there are empty slots in the server.

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- If yes, go to **Step 11**.
- If no, go to **Step 10**.

**Step 10** Install filler panels in empty slots. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 11**.

**Step 11** Replace the PSU. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 12**.

**Step 12** Contact technical support engineer.

**----End**

# 2.3.44 ALM-0x0500000D Failed to Obtain Disk Backplane Detection Point Temperature (Disk Backplane, Minor Alarm)

## Description

Alarm message:

Failed to obtain data of the *arg1* disk backplane *arg2* temperature detection point *arg3 arg4* temperature (SN: *arg5*, BN: *arg6*).

NOTE

From iBMC V370, this alarm also includes the serial number and BOM code of the disk backplane.

This alarm is generated when the system failed to obtain the temperature at the detection point of the disk backplane.

Alarm object: Disk Backplane

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x0500000D | Minor | Yes |

## Parameters

| Name | Meaning |
|---|---|
| *arg1* | Location of the disk backplane, for example, **Front**, **Inner**, or **Rear**. |
| *arg2* | Number of the disk backplane, for example, **1** or **2**. |
| *arg3* | Name of the temperature detection point, for example, **1** or **2**. |

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| Name | Meaning |
| --- | --- |
| *arg4* | Location of the temperature detection point, for example, **near disk0** or **near disk1**. |
| *arg5* | Disk backplane serial number. |
| *arg6* | BOM code. |

## Impact on the System

The temperature cannot be monitored. No alarm will be reported when the temperature is not in the normal range.

## Possible Causes

The sensor chip has failed or the sensor access channel is unavailable.

## Procedure

**Step 1** Restart the iBMC. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Remove and reinstall the power cable of the disk backplane or server node. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Contact technical support engineer.

**----End**

# 2.3.45 ALM-0x05000017 Disk Backplane Temperature Exceeds the Minor Overtemperature Threshold (Disk Backplane, Minor Alarm)

## Description

Alarm message:

The *arg1* disk backplane [*arg2*] temperature (*arg3* degrees C) exceeds the overtemperature threshold (*arg4* degrees C).

This alarm is generated when the disk backplane temperature exceeds the overtemperature threshold.

Alarm object: Disk Backplane

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## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x05000017 | Minor | Yes |

## Parameters

| Name | Meaning |
|---|---|
| *arg1* | Name of the alarmed disk backplane temperature, for example, **Disk BP1**. |
| *arg2* | temperature detection point, for example, **temperature detection point near disk0**. |
| *arg3* | Current reading of the sensor. |
| *arg4* | Alarm threshold. |

## Impact on the System

If the temperature is too high, the disk backplane functions unstably. If the alarm persists, the disk backplane may be faulty. As a result, the data transmission of drives may fail and services may be interrupted.

## Possible Causes

- The fan module is faulty.
- The ambient temperature is too high.
- The air inlet or outlet is blocked.
- The disk backplane is faulty.

## Procedure

**Step 1** Check whether there are fan module alarms.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Replace the faulty fan module. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Check whether the equipment room temperature exceeds the normal range.

- If yes, go to **Step 4**.
- If no, go to **Step 5**.

**Step 4** Reduce the equipment room temperature to the normal range. After 5 minutes, check whether the alarm is cleared.

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- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Check whether the server air inlet and outlet are blocked.

- If yes, go to **Step 6**.
- If no, go to **Step 7**.

**Step 6** Clear the blockage. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 7**.

**Step 7** Replace the disk backplane. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 8**.

**Step 8** Contact technical support engineer.

**----End**

# 2.3.46 ALM-0x05000019 Disk Backplane Temperature Exceeds the Major Overtemperature Threshold (Disk Backplane, Major Alarm)

## Description

Alarm message:

The *arg1* disk backplane [*arg2*] temperature (*arg3* degrees C) exceeds the overtemperature threshold (*arg4* degrees C).

This alarm is generated when the disk backplane temperature exceeds the overtemperature threshold.

Alarm object: Disk Backplane

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x05000019 | Major | Yes |

## Parameters

| Name | Meaning |
|---|---|
| *arg1* | Name of the alarmed disk backplane temperature, for example, **Disk BP1**. |
| *arg2* | temperature detection point, for example, **temperature detection point near disk0**. |
| *arg3* | Current reading of the sensor. |

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| Name | Meaning |
| --- | --- |
| *arg4* | Alarm threshold. |

## Impact on the System

If the temperature is too high, the disk backplane functions unstably. If the alarm persists, the disk backplane may be faulty. As a result, the data transmission of drives may fail and services may be interrupted.

## Possible Causes

- The fan module is faulty.
- The ambient temperature is too high.
- The air inlet or outlet is blocked.
- The disk backplane is faulty.

## Procedure

**Step 1** Check whether there are fan module alarms.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Replace the faulty fan module. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Check whether the equipment room temperature exceeds the normal range.

- If yes, go to **Step 4**.
- If no, go to **Step 5**.

**Step 4** Reduce the equipment room temperature to the normal range. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Check whether the server air inlet and outlet are blocked.

- If yes, go to **Step 6**.
- If no, go to **Step 7**.

**Step 6** Clear the blockage. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 7**.

**Step 7** Replace the disk backplane. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 8**.

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**Step 8** Contact technical support engineer.

**----End**

# 2.3.47 ALM-0x0500001B Disk Backplane Temperature Exceeds the Critical Overtemperature Threshold (Disk Backplane, Critical Alarm)

## Description

Alarm message:

The *arg1* disk backplane [*arg2*] temperature (*arg3* degrees C) exceeds the overtemperature threshold (*arg4* degrees C).

This alarm is generated when the disk backplane temperature exceeds the overtemperature threshold.

Alarm object: Disk Backplane

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x05000019 | Major | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Name of the alarmed disk backplane temperature, for example, **Disk BP1**. |
| *arg2* | temperature detection point, for example, **temperature detection point near disk0**. |
| *arg3* | Current reading of the sensor. |
| *arg4* | Alarm threshold. |

## Impact on the System

If the temperature is too high, the disk backplane functions unstably. If the alarm persists, the disk backplane may be faulty. As a result, the data transmission of drives may fail and services may be interrupted.

## Possible Causes

- The fan module is faulty.
- The ambient temperature is too high.
- The air inlet or outlet is blocked.

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- The disk backplane is faulty.

## Procedure

**Step 1** Check whether there are fan module alarms.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Replace the faulty fan module. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Check whether the equipment room temperature exceeds the normal range.

- If yes, go to **Step 4**.
- If no, go to **Step 5**.

**Step 4** Reduce the equipment room temperature to the normal range. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Check whether the server air inlet and outlet are blocked.

- If yes, go to **Step 6**.
- If no, go to **Step 7**.

**Step 6** Clear the blockage. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 7**.

**Step 7** Replace the disk backplane. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 8**.

**Step 8** Contact technical support engineer.

**----End**

# 2.3.48 ALM-0x0500001D High Temperature of Soft-start Circuit of the Disk Backplane (Disk Backplane, Critical Alarm)

## Description

Alarm message:

The temperature of the soft-start circuit *arg1* on the *arg2* disk backplane [*arg3*] is too high.

This alarm is generated when the temperature of the soft-start circuit of the disk backplane is too high.

Alarm object: Disk Backplane

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### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x0500001D | Critical | Yes |

### Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Voltage detection point. For example, **12V0_HD_OUT**. |
| *arg2* | Slot No. of the alarmed disk backplane. For example, **1**, **2** or **3**. |
| *arg3* | Location of the alarmed disk backplane. For example, **rear**, **inner**, or **front**. |

### Impact on the System

The system is powered off.

### Possible Causes

The disk backplane is faulty.

### Procedure

**Step 1** Replace the disk backplane and check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Contact technical support engineer.

**----End**

## 2.3.49 ALM-0x0600000B RAID Controller Card Overtemperature (RAID Controller Card, Minor Alarm)

### Description

Alarm message:

The *arg4* RAID controller card *arg1* temperature (*arg2* degrees C) exceeds the overtemperature threshold (*arg3* degrees C) (SN: *arg5*, BN: *arg6*).

NOTE

From iBMC V328, the RAID controller card and PSU alarms will also include the SN and BOM code, and the fan alarms will also include the BOM code.

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This alarm is generated when the temperature of the RAID controller card exceeds the overtemperature minor threshold.

Alarm object: RAID Controller Card

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x0600000B | Minor | Yes |

## Parameters

| Name | Meaning |
|---|---|
| *arg1* | Slot number of the RAID controller card. |
| *arg2* | Current reading of the sensor. |
| *arg3* | Alarm threshold. |
| *arg4* | Front I/O module or compute module and its slot number, for example, **FM** or **CMn**. |
| *arg5* | SN of the RAID controller card. |
| *arg6* | BOM code. |

## Impact on the System

Overheating causes RAID controller card faults and affects disk services.

## Possible Causes

- A fan module is faulty.
- The equipment room temperature exceeds the normal range.
- The air inlet or outlet is blocked.
- There are unpopulated slots for blades.
- A RAID controller card is faulty.

## Procedure

**Step 1** Check whether there are fan module alarms.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Replace the fan module. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

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**Step 3** Check whether the equipment room temperature exceeds the normal range.

- If yes, go to **Step 4**.
- If no, go to **Step 5**.

**Step 4** Reduce the equipment room temperature to the normal range. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Check whether the air inlet or outlet of the server is blocked.

- If yes, go to **Step 6**.
- If no, go to **Step 7**.

**Step 6** Clear the blockage. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 7**.

**Step 7** Check whether the server is installed with an air duct.

- If yes, go to **Step 8**.
- If no, go to **Step 9**.

**Step 8** Install an air duct. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 9**.

**Step 9** Replace the faulty RAID controller card. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 10**.

**Step 10** Contact technical support engineer.

**----End**

# 2.3.50 ALM-0x06000017 RAID Card Overtemperature (RAID Card, Major Alarm)

## Description

Alarm message:

The RAID controller card *arg1* temperature (*arg2* degrees C) exceeds the overtemperature threshold (*arg3* degrees C) (SN: *arg5*, BN: *arg6*).

NOTE

From iBMC V328, the RAID controller card and PSU alarms will also include the SN and BOM code, and the fan alarms will also include the BOM code.

This alarm is generated when the temperature of the RAID controller card exceeds the overtemperature minor threshold.

Alarm object: RAID Card

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## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x06000017 | Major | Yes |

## Parameters

| Name | Meaning |
|---|---|
| *arg1* | Slot number of the RAID controller card. |
| *arg2* | Current reading of the sensor. |
| *arg3* | Alarm threshold. |
| *arg4* | Front I/O module or compute module and its slot number, for example, **FM** or **CMn**. |
| *arg5* | SN of the RAID controller card. |
| *arg6* | BOM code. |

## Impact on the System

The RAID controller card may run unstably or be faulty. The system may even stop responding.

## Possible Causes

- The equipment room temperature exceeds the normal range.
- The fan module is faulty.
- The air inlet or outlet is blocked.
- There are unpopulated slots for blades.
- The RAID card is faulty.

## Procedure

**Step 1** Check whether there are fan module alarms.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Replace the fan module. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Check whether the equipment room temperature exceeds the normal range.

- If yes, go to **Step 4**.

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- If no, go to **Step 5**.

**Step 4** Reduce the equipment room temperature to the normal range. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Check whether the air inlet or outlet of the server is blocked.

- If yes, go to **Step 6**.
- If no, go to **Step 7**.

**Step 6** Clear the blockage. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 7**.

**Step 7** Check whether the server is installed with an air duct.

- If yes, go to **Step 8**.
- If no, go to **Step 9**.

**Step 8** Install an air duct. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 9**.

**Step 9** Replace the faulty RAID controller card. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 10**.

**Step 10** Contact technical support engineer.

**----End**

# 2.3.51 ALM-0x06000019 BBU Overtemperature (RAID Controller Card, Minor Alarm)

## Description

Alarm message:

The *arg4* RAID controller card *arg1* BBU temperature (*arg2* degrees C) exceeds the overtemperature threshold (*arg3* degrees C) (SN: *arg5*, BN: *arg6*).

NOTE

From iBMC V328, the RAID controller card and PSU alarms will also include the SN and BOM code, and the fan alarms will also include the BOM code.

This alarm is generated when the battery backup unit (BBU) temperature of the RAID controller card exceeds the alarm threshold.

This alarm is cleared when the BBU temperature is within the normal range.

Alarm object: RAID Controller Card

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## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x06000019 | Minor | Yes |

## Parameters

| Name | Meaning |
|---|---|
| *arg1* | Slot number of the RAID controller card. |
| *arg2* | Current reading of the sensor. |
| *arg3* | Alarm threshold. |
| *arg4* | Front I/O module or compute module and its slot number, for example, **FM** or **CMn**. |
| *arg5* | SN of the RAID controller card. |
| *arg6* | BOM code. |

## Impact on the System

Overheating causes RAID controller card faults and affects disk services.

## Possible Causes

- A fan module is faulty.
- The equipment room temperature exceeds the normal range.
- The air inlet or outlet is blocked.
- The BBU is faulty.
- The air duct is not installed.

## Procedure

**Step 1** Check whether there are fan module alarms.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Replace the fan module. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Check whether the equipment room temperature exceeds the normal range.

- If yes, go to **Step 4**.
- If no, go to **Step 5**.

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**Step 4** Reduce the equipment room temperature to the normal range. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Check whether the air inlet or outlet of the server is blocked.

- If yes, go to **Step 6**.
- If no, go to **Step 7**.

**Step 6** Clear the blockage. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 7**.

**Step 7** Check whether the server is installed with an air duct.

- If yes, go to **Step 9**.
- If no, go to **Step 8**.

**Step 8** Install an air duct. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 9**.

**Step 9** Replace the BBU. After the server is powered on, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 10**.

**Step 10** Contact technical support.

**----End**

# 2.3.52 ALM-0x08000003 PCIe Card Overtemperature (PCIe Card, Minor Alarm)

## Description

Alarm message:

The *arg1 arg2 arg3* temperature (*arg4* degrees C) exceeds the overtemperature threshold (*arg5* degrees C).

This alarm is generated when the PCIe card temperature exceeds the overtemperature minor threshold. This alarm is cleared when the temperature returns to the normal range.

Alarm object: PCIe Card

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x08000003 | Minor | Yes |

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## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Location of the PCIe card. For example, **front** or **rear**. |
| *arg2* | Slot number of the PCIe card, for example, **1** or **2**. |
| *arg3* | Type of the PCIe card, for example, **M60 GPU**. |
| *arg4* | Current reading of the sensor. |
| *arg5* | Alarm threshold. |

## Impact on the System

Overheating affects PCIe card performance. If this alarm is not cleared in time, services related to the PCIe card will be interrupted.

## Possible Causes

- A fan module is faulty.
- The equipment room temperature exceeds the normal range.
- The air inlet or outlet is blocked.
- A PCIe card is faulty.

## Procedure

**Step 1** Check whether there are fan module alarms.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Replace the fan module. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Check whether the equipment room temperature exceeds the normal range.

- If yes, go to **Step 4**.
- If no, go to **Step 5**.

**Step 4** Reduce the equipment room temperature to the normal range. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Check whether the air inlet or outlet of the server is blocked.

- If yes, go to **Step 6**.
- If no, go to **Step 7**.

**Step 6** Clear the blockage. After 5 minutes, check whether the alarm is cleared.

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- If yes, no further action is required.
- If no, go to **Step 7**.

**Step 7** Replace the PCIe card. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 8**.

**Step 8** Contact technical support engineer.

**----End**

# 2.3.53 ALM-0x08000009 PCIe Card DIMM Overtemperature (PCIe Card, Minor Alarm)

## Description

Alarm message:

The [*arg1*] PCIe card *arg2* (*arg3*) *arg4* exceeds the overtemperature threshold.

This alarm is generated when the DIMM temperature of the PCIe card exceeds the minor threshold.

Alarm object: PCIe Card

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x08000009 | Minor | Yes |

## Parameters

| Name | Meaning |
|---|---|
| *arg1* | Location of the PCIe card. For example, **front** or **rear**. |
| *arg2* | Slot number of the PCIe card, for example, **1** or **2**. |
| *arg3* | Type of the PCIe card, for example, **M60 GPU**. |
| *arg4* | Silkscreen of the DIMM on the PCIe card. For example, **DIMM00** or **DIMM10**. |

## Impact on the System

Overheating affects DIMM stability and PCIe performance.

## Possible Causes

- A fan module is faulty.

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- The equipment room temperature exceeds the normal range.
- The air inlet or outlet is blocked.
- A PCIe card is faulty.

## Procedure

**Step 1** Check whether there are fan module alarms.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Replace the fan module. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Check whether the equipment room temperature exceeds the normal range.

- If yes, go to **Step 4**.
- If no, go to **Step 5**.

**Step 4** Reduce the equipment room temperature to the normal range. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Check whether the air inlet or outlet of the server is blocked.

- If yes, go to **Step 6**.
- If no, go to **Step 7**.

**Step 6** Clear the blockage. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 7**.

**Step 7** Replace the PCIe card. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 8**.

**Step 8** Contact technical support engineer.

**----End**

# 2.3.54 ALM-0x0800000B PCIe Card Overtemperature (PCIe Card, Major Alarm)

## Description

Alarm message:

The [*arg1*] PCIe card *arg2* (*arg3*) temperature (*arg4* degrees C) exceeds the overtemperature threshold (*arg5* degrees C).

This alarm is generated when the PCIe card temperature exceeds the overtemperature minor threshold. This alarm is cleared when the temperature returns to the normal range.

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Alarm object: PCIe Card

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x0800000B | Major | Yes |

## Parameters

| Name | Meaning |
|---|---|
| *arg1* | Location of the PCIe card. For example, **front** or **rear**. |
| *arg2* | Slot number of the PCIe card, for example, **1** or **2**. |
| *arg3* | Type of the PCIe card, for example, **M60 GPU**. |
| *arg4* | Current reading of the sensor. |
| *arg5* | Alarm threshold. |

## Impact on the System

Overheating affects PCIe card performance. If this alarm is not cleared in time, services related to the PCIe card will be interrupted.

## Possible Causes

- The ambient temperature is too high.
- The air inlet or outlet is blocked.
- The server has empty slots or spaces.
- The fan module is faulty.
- The PCIe card is faulty.

## Procedure

**Step 1** Check whether there are fan module alarms.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Replace the fan module. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Check whether the equipment room temperature exceeds the normal range.

- If yes, go to **Step 4**.
- If no, go to **Step 5**.

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**Step 4** Reduce the equipment room temperature to the normal range. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Check whether the air inlet or outlet of the server is blocked.

- If yes, go to **Step 6**.
- If no, go to **Step 7**.

**Step 6** Clear the blockage. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 7**.

**Step 7** Replace the PCIe card. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 8**.

**Step 8** Contact technical support engineer.

**----End**

# 2.3.55 ALM-0x0800000D PCIe Card CPU Overtemperature (PCIe Card, Minor Alarm)

## Description

Alarm message:

The [*arg1*] PCIe card *arg2* (*arg3*) CPU core temperature (*arg4* degrees C) exceeds the overtemperature threshold (*arg5* degrees C).

This alarm is generated when the CPU kernel temperature of the PCIe card exceeds the minor threshold.

Alarm object: PCIe Card

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x0800000D | Minor | Yes |

## Parameters

| Name | Meaning |
|---|---|
| *arg1* | Location of the PCIe card. For example, **front** or **rear**. |
| *arg2* | Slot number of the PCIe card, for example, **1** or **2**. |
| *arg3* | Type of the PCIe card, for example, **M60 GPU**. |

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| Name | Meaning |
| --- | --- |
| *arg4* | Current reading of the sensor. |
| *arg5* | Alarm threshold. |

## Impact on the System

The PCIe card may run unstably or fail, and the system may run abnormally.

## Possible Causes

- A fan module is faulty.
- The equipment room temperature exceeds the normal range.
- The air inlet or outlet is blocked.
- A PCIe card is faulty.

## Procedure

**Step 1** Check whether there are fan module alarms.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Replace the fan module. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Check whether the equipment room temperature exceeds the normal range.

- If yes, go to **Step 4**.
- If no, go to **Step 5**.

**Step 4** Reduce the equipment room temperature to the normal range. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Check whether the air inlet or outlet of the server is blocked.

- If yes, go to **Step 6**.
- If no, go to **Step 7**.

**Step 6** Clear the blockage. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 7**.

**Step 7** Replace the PCIe card. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 8**.

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**Step 8** Contact technical support engineer.

**----End**

# 2.3.56 ALM-0x0800000F PCIe Card CPU Overtemperature (PCIe Card, Major Alarm)

## Description

Alarm message:

The [*arg1*] PCIe card *arg2* (*arg3*) CPU core temperature (*arg4* degrees C) exceeds the overtemperature threshold (*arg5* degrees C).

This alarm is generated when the CPU kernel temperature of the PCIe card exceeds the minor threshold.

Alarm object: PCIe Card

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x0800000F | Major | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Location of the PCIe card. For example, **front** or **rear**. |
| *arg2* | Slot number of the PCIe card, for example, **1** or **2**. |
| *arg3* | Type of the PCIe card, for example, **M60 GPU**. |
| *arg4* | Current reading of the sensor. |
| *arg5* | Alarm threshold. |

## Impact on the System

The PCIe card may run unstably or fail, and the system may run abnormally.

## Possible Causes

- A fan module is faulty.
- The equipment room temperature exceeds the normal range.
- The air inlet or outlet is blocked.
- A PCIe card is faulty.

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### Procedure

**Step 1** Check whether there are fan module alarms.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Replace the fan module. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Check whether the equipment room temperature exceeds the normal range.

- If yes, go to **Step 4**.
- If no, go to **Step 5**.

**Step 4** Reduce the equipment room temperature to the normal range. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Check whether the air inlet or outlet of the server is blocked.

- If yes, go to **Step 6**.
- If no, go to **Step 7**.

**Step 6** Clear the blockage. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 7**.

**Step 7** Replace the PCIe card. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 8**.

**Step 8** Contact technical support engineer.

**----End**

## 2.3.57 ALM-0x080000DD Temperature Major Fault Alarm on PCIe Card (PCIe card,Major Alarm)

### Description

Alarm message:

A major fault about the temperature of the PCIe card *arg1 arg2* was detected. *arg3*. *arg4*.

This alarm is generated when a major temperature error occurs on a PCIe device.

Alarm object: PCIe card

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## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x080000DD | Major | Yes |

## Parameters

| Name | Meaning |
|---|---|
| *arg1* | Slot number of the PCIe card, for example, **3**. |
| *arg2* | PCIe card name, for example, **SDI V5.1**. |
| *arg3* | Alarm description, for example, the temperature of optical module 1 abnormal. |
| *arg4* | Error code of the alarm, for example, **8252**. |

## Impact on the System

Board overheating may cause a power-off.

## Possible Causes

- The board power consumption is too high.
- The main chip of the board is abnormal.
- The server fans are abnormal.
- The air inlet or outlet of the server is blocked.
- The ambient temperature of the equipment room exceeds the normal range.
- For details about the causes, see the *SDI Error Codes Manual*.

## Procedure

**Step 1** Check whether the fan speed is normal.

- If yes, go to **Step 3**.
- If no, go to **Step 2**.

**Step 2** Replace the fan module for which the alarm is generated. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Check whether there is an alarm indicating that the board power consumption is too high.

- If yes, go to **Step 4**.
- If no, go to **Step 7**.

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**Step 4** After clearing the alarm indicating high power consumption, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Check whether the air inlet or outlet of the server is blocked.

- If yes, go to **Step 6**.
- If no, go to **Step 7**.

**Step 6** Clear the blockage. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 7**.

**Step 7** Check whether the equipment room temperature exceeds the normal range.

- If yes, go to **Step 8**.
- If no, go to **Step 9**.

**Step 8** Reduce the equipment room temperature to the normal range. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 9**.

**Step 9** Contact technical engineers of the original manufacturer to check whether the board components are faulty.

**----End**

# 2.3.58 ALM-0x080000EB PCIe Card BBU Overtemperature Minor Alarm (PCIe card, Minor Alarm)

## Description

Alarm message:

The *arg4 arg1* BBU temperature (*arg2* degrees C) exceeds the temperature threshold of the alarm (*arg3* degrees C).

This alarm is generated when the BBU temperature of the standard RAID controller card is too high.

Alarm object: PCIe card

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x080000EB | Minor | Yes |

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## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | PCIe card silkscreen.For example, **PCIe Card 7 (9460-16i)**. |
| *arg2* | PCIe card BBU temperature.For example,**25 or 30**. |
| *arg3* | Temperature threshold of the PCIe card BBU.For example, **65**. |
| *arg4* | Front I/O module or compute module and its slot number, for example, **FM** or **CMn**. |

## Impact on the System

High temperature causes the PCIe card to runs abnormally and affects drive services.

## Possible Causes

- A fan alarm is generated on the server.
- The ambient temperature in the equipment room exceeds the required ambient temperature of the server.
- The air intake vent or exhaust vent of the server is blocked.
- The BBU module of the PCIe card is faulty.
- The air duct is not installed.
- The PCIe card is faulty.

## Procedure

**Step 1** Check whether there is a fan alarm generated on the server.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Replace the fan module for which the alarm is generated. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Check whether the equipment room temperature exceeds the normal range.

- If yes, go to **Step 4**.
- If no, go to **Step 5**.

**Step 4** Reduce the equipment room temperature to the normal range. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

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**Step 5** Check whether the air inlet or outlet of the server is blocked.

- If yes, go to **Step 6**.
- If no, go to **Step 7**.

**Step 6** Clear the blockage. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 7**.

**Step 7** Replace the BBU module of the PCIe card, and check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 8**.

**Step 8** Check whether the air duct is installed.

- If yes, go to **Step 10**.
- If no, go to **Step 9**.

**Step 9** Reinstall the air duct, and check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 10**.

**Step 10** Replace the PCIe card, and check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 11**.

**Step 11** Contact technical support engineer.

**----End**

# 2.3.59 ALM-0x080000ED Failed to Obtain the PCIe Card BBU Temperature (PCIe card, Minor Alarm)

## Description

Alarm message:

Failed to obtain data of the *arg2 arg1* BBU temperature.

This alarm is generated when the BBU temperature of the standard RAID controller card fails to be read.

Alarm object: PCIe card

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x080000ED | Minor | Yes |

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## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | PCIe card silkscreen.For example, **PCIe Card 7 (9460-16i)**. |
| *arg2* | Front I/O module or compute module and its slot number, for example, **FM** or **CMn**. |

## Impact on the System

The temperature cannot be monitored normally. If the temperature is abnormal, alarms cannot be generated in time, and heat dissipation cannot be performed in time.

## Possible Causes

- The communication between the BMC and the PCIe card is faulty.
- The BBU is faulty.
- The PCIe card is faulty.

## Procedure

**Step 1** Restart the iBMC, and check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Remove and reinstall the power cable, and check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Remove and reinstall the PCIe card, and check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Replace the BBU module of the PCIe card, and check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Replace the PCIe card, and check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 6**.

**Step 6** Contact technical support engineer.

**----End**

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# 2.3.60 ALM-0x080000F1 The PCIe Temperature Exceeds the Overtemperature Threshold (PCIe Card, Critical Alarm)

## Description

Alarm message:

The *arg1 arg2 arg3* temperature (*arg4* degrees C) exceeds the overtemperature threshold (*arg5* degrees C).

This alarm is generated when the temperature of the PCIe card exceeds the overtemperature threshold.

Alarm object: PCIe Card

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x080000F1 | Critical | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | PCIe card location. |
| *arg2* | Name of the PCIe card, for example, **PCIe Card 1**. |
| *arg3* | Type of the PCIe card, for example, **GPU**. |
| *arg4* | Current reading of the sensor. |
| *arg5* | Alarm threshold. |

## Impact on the System

The PCIe card may run unstably or fail, and the system may run abnormally.

## Possible Causes

- The ambient temperature is too high.
- The air inlet or outlet is blocked.
- The server has empty slots or spaces.
- The fan module is faulty.
- The PCIe card is faulty.

## Procedure

**Step 1** Check whether both air inlet or outlet high temperature alarms are generated.

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- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Rectify the fault according to troubleshooting suggestions. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Check whether there are fan module alarms.

- If yes, go to **Step 4**.
- If no, go to **Step 5**.

**Step 4** Replace the faulty fan module. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Check whether the equipment room temperature exceeds the normal range.

- If yes, go to **Step 6**.
- If no, go to **Step 7**.

**Step 6** Reduce the equipment room temperature to the normal range. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 7**.

**Step 7** Check whether the server air inlet and outlet are blocked.

- If yes, go to **Step 8**.
- If no, go to **Step 9**.

**Step 8** Clear the blockage. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 9**.

**Step 9** Check whether there are empty slots in the server.

- If yes, go to **Step 11**.
- If no, go to **Step 10**.

**Step 10** Install filler panels in empty slots. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 11**.

**Step 11** Replace the faulty PCIe card. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 12**.

**Step 12** Contact technical support engineer.

**----End**

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# 2.3.61 ALM-0x080000F3 The Optical Module Temperature Exceeds the Major Overtemperature Threshold (PCIe Card, Major Alarm)

## Description

Alarm message:

The *arg1* optical module *arg2* temperature (*arg3* degrees C) exceeds the overtemperature threshold (*arg4* degrees C).

This alarm is generated when the temperature of the PCIe card optical module exceeds the overtemperature threshold.

Alarm object: PCIe Card

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x080000F3 | Major | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Slot No. of the alarmed PCIe card, for example, **PCIe Card 3**. |
| *arg2* | NIC Card. |
| *arg3* | Current reading of the sensor. |
| *arg4* | Alarm threshold. |

## Impact on the System

The optical module temperature is not within the normal range, which affects the operation of the optical module.

## Possible Causes

- A fan alarm is generated for the server.
- The ambient temperature of the equipment room exceeds the normal range.
- The air inlet or outlet of the server is blocked.
- The optical module is faulty.

## Procedure

**Step 1** Check whether there are fan module alarms.

- If yes, go to **Step 2**.

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- If no, go to **Step 3**.

**Step 2** Replace the faulty fan module. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Check whether the equipment room temperature exceeds the normal range.

- If yes, go to **Step 4**.
- If no, go to **Step 5**.

**Step 4** Reduce the equipment room temperature to the normal range. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Check whether the server air inlet and outlet are blocked.

- If yes, go to **Step 6**.
- If no, go to **Step 7**.

**Step 6** Clear the blockage. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 7**.

**Step 7** Replace the optical module. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 8**.

**Step 8** Contact technical support engineer.

**----End**

# 2.3.62 ALM-0x080000F5 The Optical Module Temperature Exceeds the Critical Overtemperature Threshold (PCIe Card, Critical Alarm)

## Description

Alarm message:

The *arg1* optical module *arg*2 temperature (*arg3* degrees C) exceeds the overtemperature threshold (*arg4* degrees C).

This alarm is generated when the temperature of the PCIe card optical module exceeds the overtemperature threshold.

Alarm object: PCIe Card

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x080000F5 | Critical | Yes |

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## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Slot No. of the alarmed PCIe card, for example, **PCIe Card 3**. |
| *arg2* | NIC Card. |
| *arg3* | Current reading of the sensor. |
| *arg4* | Alarm threshold. |

## Impact on the System

The optical module temperature is not within the normal range, which affects the operation of the optical module.

## Possible Causes

- A fan alarm is generated for the server.
- The ambient temperature of the equipment room exceeds the normal range.
- The air inlet or outlet of the server is blocked.
- The optical module is faulty.

## Procedure

**Step 1** Check whether there are fan module alarms.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Replace the faulty fan module. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Check whether the equipment room temperature exceeds the normal range.

- If yes, go to **Step 4**.
- If no, go to **Step 5**.

**Step 4** Reduce the equipment room temperature to the normal range. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Check whether the server air inlet and outlet are blocked.

- If yes, go to **Step 6**.
- If no, go to **Step 7**.

**Step 6** Clear the blockage. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.

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- If no, go to **Step 7**.

**Step 7** Replace the optical module. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 8**.

**Step 8** Contact technical support engineer.

**----End**

# 2.3.63 ALM-0x08000111 Temperature minor fault alarm on PCIe card (PCIe Card, Minor Alarm)

## Description

Alarm message:

A minor fault about the temperature of the PCIe card *arg1 arg2* was detected. *arg3*. *arg4*.

This alarm is generated when a minor temperature fault occurs on a PCIe card.

Alarm object: PCIe card

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x08000111 | Minor | Yes |

## Parameters

| Name | Meaning |
|---|---|
| *arg1* | Slot number of the PCIe card, for example, **3**. |
| *arg2* | PCIe card name, for example, **SDI V5.1**. |
| *arg3* | Alarm description, for example, the temperature of optical module 1 abnormal. |
| *arg4* | Error code of the alarm, for example, **8252**. |

## Impact on the System

The PCIe card may be overheated and powered off.

## Possible Causes

- An internal PCIe device error occurs.
- The internal temperature sensor of the PCIe device fails.

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### Procedure

**Step 1** Restart the system after collecting logs, and check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **2**.

**Step 2** Replace the PCIe device and check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **3**.

**Step 3** Contact technical support engineer.

**----End**

## 2.3.64 ALM-0x0800011B PCIe Card Attestation fails (PCIe Card, Major Alarm)

### Description

Alarm message:

The *arg1* component integrity verification failed.

This alarm is generated when the PCIe component authentication metrics fail.

Alarm object: PCIe card

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x0800011B | Major | Yes |

### Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | DeviceName. |

### Impact on the System

The system may operate abnormally or the system intrusion may occur.

### Possible Causes

- The imported metrics do not match the firmware itself.
- The firmware is corrupted.

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### Procedure

**Step 1** Verify whether the imported metrics are correct, import the correct metrics, re-trigger the measurement, and check if the alarm is cleared.

- If yes, no further action is required.
- If no, go to **2**.

**Step 2** Update the component firmware, re-trigger the measurement, and check if the alarm is cleared.

- If yes, no further action is required.
- If no, go to **3**.

**Step 3** Contact technical support engineer.

**----End**

## 2.3.65 ALM-0x0B000001 Mezzanine Card Overtemperature (Mezzanine Card, Minor Alarm)

### Description

Alarm message:

Mezzanine card *arg1* temperature (*arg2* degrees C) exceeds the overtemperature threshold (*arg3* degrees C) (SN: *arg4*, BN: *arg5*).

NOTE

From iBMC V370, this alarm also includes the serial number and BOM code of the mezzanine card.

This alarm is generated when the temperature of the mezzanine card exceeds the minor threshold.

Alarm object: Mezzanine Card

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x0B000001 | Minor | Yes |

### Parameters

| Name | Meaning |
|---|---|
| *arg1* | Slot number of the mezzanine card. |
| *arg2* | Current reading of the sensor. |
| *arg3* | Alarm threshold. |
| *arg4* | Mezzanine card serial number. |

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| Name | Meaning |
| --- | --- |
| *arg5* | BOM code. |

## Impact on the System

Overheating affects mezzanine card performance. The mezzanine card may run unstably or fail, and the system may run abnormally.

## Possible Causes

- The fans are faulty.
- The equipment room temperature exceeds the normal range.
- Idle slots or spaces are not installed with filler panels.
- The air inlet or outlet is blocked.
- The mezzanine card is faulty.

## Procedure

**Step 1** Check whether there is fan module alarm generated.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Locate and replace the fan module. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Check whether the equipment room temperature exceeds the normal range.

- If yes, go to **Step 4**.
- If no, go to **Step 5**.

**Step 4** Reduce the equipment room temperature to the normal range. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Check whether the server air inlet and outlet are blocked.

- If yes, go to **Step 6**.
- If no, go to **Step 7**.

**Step 6** Clear the blockage. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 7**.

**Step 7** Check whether there are empty slots in the server.

- If yes, go to **Step 8**.

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- If no, go to **Step 9**.

**Step 8** Install filler panels in empty slots. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 9**.

**Step 9** Replace the mezzanine card. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 10**.

**Step 10** Contact technical support engineer.

**----End**

# 2.3.66 ALM-0x0B000003 Mezzanine Card Overtemperature (Mezzanine Card, Major Alarm)

## Description

Alarm message:

Mezzanine card *arg1* temperature (*arg2* degrees C) exceeds the overtemperature threshold (*arg3* degrees C).

This alarm is generated when the temperature of the mezzanine card exceeds the minor threshold.

Alarm object: Mezzanine Card

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x0B000003 | Major | Yes |

## Parameters

| Name | Meaning |
|---|---|
| *arg1* | Slot number of the mezzanine card. |
| *arg2* | Current reading of the sensor. |
| *arg3* | Alarm threshold. |

## Impact on the System

Overheating affects mezzanine card performance. The mezzanine card may run unstably or fail, and the system may run abnormally.

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## Possible Causes

- The fans are faulty.
- The equipment room temperature exceeds the normal range.
- Idle slots or spaces are not installed with filler panels.
- The air inlet or outlet is blocked.
- The mezzanine card is faulty.

## Procedure

**Step 1** Check whether there is fan module alarm generated.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Locate and replace the fan module. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Check whether the equipment room temperature exceeds the normal range.

- If yes, go to **Step 4**.
- If no, go to **Step 5**.

**Step 4** Reduce the equipment room temperature to the normal range. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Check whether the server air inlet and outlet are blocked.

- If yes, go to **Step 6**.
- If no, go to **Step 7**.

**Step 6** Clear the blockage. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 7**.

**Step 7** Check whether there are empty slots in the server.

- If yes, go to **Step 8**.
- If no, go to **Step 9**.

**Step 8** Install filler panels in empty slots. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 9**.

**Step 9** Replace the mezzanine card. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 10**.

**Step 10** Contact technical support engineer.

**----End**

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# 2.3.67 ALM-0x0B000007 Failed to Read Mezzanine Card Temperature (Mezzanine Card, Minor Alarm)

## Description

Alarm message:

Failed to obtain data of the mezzanine card *arg1* temperature (SN: *arg2*, BN: *arg3*).

NOTE

From iBMC V370, this alarm also includes the serial number and BOM code of the mezzanine card.

This alarm is generated when the system failed to obtain the temperature of the mezzanine card.

Alarm object: Mezzanine Card

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x0B000007 | Minor | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Slot number of the mezzanine card. |
| *arg2* | Mezzanine card serial number. |
| *arg3* | BOM code. |

## Impact on the System

The temperature cannot be monitored. No alarm will be reported when the temperature is not in the normal range.

## Possible Causes

- The power cable or slot of the mezzanine card is in poor contact.
- The mezzanine card does not work normally.

## Procedure

**Step 1** Restart the iBMC. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

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**Step 2** Remove and reinstall the power cable or board. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Replace the mezzanine card. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Contact technical support engineer.

**----End**

# 2.3.68 ALM-0x0B000009 Failed to Read Mezzanine Card FRU Data (Mezzanine Card, Minor Alarm)

## Description

Alarm message:

Failed to obtain electronic label data of the mezzanine card *arg1* (SN: *arg2*, BN: *arg3*).

NOTE

From iBMC V370, this alarm also includes the serial number and BOM code of the mezzanine card.

This alarm is generated when the system failed to obtain the electronic label data of mezzanine card.

Alarm object: Mezzanine Card

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x0B000009 | Minor | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Serial number of the mezzanine card, for example, **1** or **2**. |
| *arg2* | Mezzanine card serial number. |
| *arg3* | BOM code. |

## Impact on the System

The system cannot obtain mezzanine card asset information.

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### Possible Causes

The asset information is damaged.

### Procedure

**Step 1** Restart the iBMC. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Replace the mezzanine card. Then, check whether the alarm is cleared.

For details about how to replace the mezzanine card, see the *SD100 User Guide*.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Contact technical support engineer.

**----End**

## 2.3.69 ALM-0x0D000003 NIC Overtemperature (NIC, Minor Alarm)

### Description

Alarm message:

The NIC *arg1* temperature (*arg2* degrees C) exceeds the overtemperature threshold (*arg3* degrees C).

This alarm is generated when the PCIe card temperature exceeds the overtemperature minor threshold.

Alarm object: NIC

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x0D000003 | Minor | Yes |

### Parameters

| Name | Meaning |
|---|---|
| *arg1* | Serial number of the NIC. |
| *arg2* | Current reading of the sensor. |
| *arg3* | Alarm threshold. |

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## Impact on the System

Overheating affects the NIC and network transmission.

## Possible Causes

- A fan module is faulty.
- The equipment room temperature exceeds the normal range.
- The air inlet or outlet is blocked.
- A NIC is faulty.

## Procedure

**Step 1** Check whether there are fan module alarms.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Replace the fan module. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Check whether the equipment room temperature exceeds the normal range.

- If yes, go to **Step 4**.
- If no, go to **Step 5**.

**Step 4** Reduce the equipment room temperature to the normal range. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Check whether the air inlet or outlet of the server is blocked.

- If yes, go to **Step 6**.
- If no, go to **Step 7**.

**Step 6** Clear the blockage. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 7**.

**Step 7** Replace the NIC. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 8**.

**Step 8** Contact technical support.

**----End**

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# 2.3.70 ALM-0x0E000003 Failed to Obtain the Memory Board Temperature (Memory Board, Minor Alarm)

## Description

Alarm message:

Failed to obtain data of the memory board *arg1* temperature.

This alarm is generated when the system failed to obtain the memory board temperature.

Alarm object: Memory Board

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x0E000003 | Minor | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Name of the memory board. |

## Impact on the System

The temperature cannot be monitored. No alarm will be reported when the temperature is not in the normal range.

## Possible Causes

The memory board temperature sensor is faulty, or the access channel is abnormal.

## Procedure

**Step 1** Restart the iBMC. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Remove and reconnect power cables or remove and reinstall the board in the chassis. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Replace the memory board. Then, check whether the alarm is cleared.

- If yes, no further action is required.

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- If no, go to **Step 4**.

**Step 4** Contact technical support.

**----End**

# 2.3.71 ALM-0x0E000009 The Memory Board Overtemperature Minor Alarm (Memory Board, Minor Alarm)

## Description

Alarm message:

The *arg1 arg2* temperature (*arg3* degrees C) exceeds the overtemperature threshold (*arg4* degrees C).

This alarm is generated when the memory board temperature exceeds the overtemperature threshold.

Alarm object: Memory Board

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x0E000009 | Minor | Yes |

## Parameters

| Name | Meaning |
|---|---|
| *arg1* | Name of the memory board. For example, **MemBoard1**. |
| *arg2* | Name of the MXC chip. For example, **MXC Chip**. |
| *arg3* | Current reading of the sensor. |
| *arg4* | Alarm threshold. |

## Impact on the System

High temperature affects the stability of the device and reduces the performance of the memory board.

## Possible Causes

- The fan module is faulty.
- The ambient temperature is too high.
- The air inlet or outlet is blocked.
- The memory board is faulty.

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### Procedure

**Step 1** Check whether there are fan module alarms.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Replace the fan module. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Check whether the equipment room temperature exceeds the normal range.

- If yes, go to **Step 4**.
- If no, go to **Step 5**.

**Step 4** Reduce the equipment room temperature to the normal range. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Check whether the air inlet or outlet of the server is blocked.

- If yes, go to **Step 6**.
- If no, go to **Step 7**.

**Step 6** Clear the blockage. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 7**.

**Step 7** Replace the memory board. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 8**.

**Step 8** Contact technical support.

**----End**

## 2.3.72 ALM-0x0E000017 The Memory Board Overtemperature Major Alarm (Memory Board, Major Alarm)

### Description

Alarm message:

The *arg1 arg2* temperature (*arg3* degrees C) exceeds the overtemperature threshold (*arg4* degrees C).

This alarm is generated when the temperature of the memory board exceeds the overtemperature threshold.

Alarm object: Memory Board

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## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x0E000017 | Major | Yes |

## Parameters

| Name | Meaning |
|---|---|
| *arg1* | Name of the memory board. For example, **MemBoard1**. |
| *arg2* | Name of the MXC chip. For example, **MXC1 chip**. |
| *arg3* | Current reading of the sensor. |
| *arg4* | Alarm threshold. |

## Impact on the System

High temperature affects the stability of the device and reduces the performance of the memory board.

## Possible Causes

- The fan module is faulty.
- The ambient temperature is too high.
- The air inlet or outlet is blocked.
- The memory board is faulty.

## Procedure

**Step 1** Check whether there are fan module alarms.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Replace the faulty fan module. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Check whether the equipment room temperature exceeds the normal range.

- If yes, go to **Step 4**.
- If no, go to **Step 5**.

**Step 4** Reduce the equipment room temperature to the normal range. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

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**Step 5** Check whether the server air inlet and outlet are blocked.

- If yes, go to **Step 6**.
- If no, go to **Step 7**.

**Step 6** Clear the blockage. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 7**.

**Step 7** Replace the memory board. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 8**.

**Step 8** Contact technical support engineer.

**----End**

# 2.3.73 ALM-0x0E000019 The Memory Board Overtemperature Critical Alarm (Memory Board, Critical Alarm)

## Description

Alarm message:

The *arg1 arg2* temperature (*arg3* degrees C) exceeds the overtemperature threshold (*arg4* degrees C).

This alarm is generated when the temperature of the memory board exceeds the overtemperature threshold.

Alarm object: Memory Board

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x0E000019 | Critical | Yes |

## Parameters

| Name | Meaning |
|---|---|
| *arg1* | Name of the memory board. For example, **MemBoard1**. |
| *arg2* | Name of the MXC chip. For example, **MXC1 chip**. |
| *arg3* | Current reading of the sensor. |
| *arg4* | Alarm threshold. |

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## Impact on the System

High temperature affects the stability of the device and reduces the performance of the memory board.

## Possible Causes

- The fan module is faulty.
- The ambient temperature is too high.
- The air inlet or outlet is blocked.
- The memory board is faulty.

## Procedure

**Step 1** Check whether there are fan module alarms.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Replace the faulty fan module. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Check whether the equipment room temperature exceeds the normal range.

- If yes, go to **Step 4**.
- If no, go to **Step 5**.

**Step 4** Reduce the equipment room temperature to the normal range. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Check whether the server air inlet and outlet are blocked.

- If yes, go to **Step 6**.
- If no, go to **Step 7**.

**Step 6** Clear the blockage. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 7**.

**Step 7** Replace the memory board. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 8**.

**Step 8** Contact technical support engineer.

**----End**

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# 2.3.74 ALM-0x0F000005 Riser Overtemperature (PCIe Riser, Minor Alarm)

## Description

Alarm message:

PCIe riser card *arg1* temperature (*arg2* degrees C) exceeds the overtemperature threshold (*arg3* degrees C).

This alarm is generated when the PCIe riser temperature exceeds the overtemperature minor threshold.

This alarm is cleared when the temperature is within the normal range.

Alarm object: PCIe Riser

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x0F000005 | Minor | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Serial number of the PCIe riser. |
| *arg2* | Current reading of the sensor. |
| *arg3* | Alarm threshold. |

## Impact on the System

Overheating affects component performance and server operations.

## Possible Causes

- A fan module is faulty.
- The ambient temperature exceeds the normal range.
- The air inlet or outlet is blocked.
- The PCIe riser is faulty.

## Procedure

**Step 1** Check whether there is fan alarm generated.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

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**Step 2** Replace the fan module. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Check whether the equipment room temperature exceeds the normal range.

- If yes, go to **Step 4**.
- If no, go to **Step 5**.

**Step 4** Reduce the equipment room temperature to the normal range. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Check whether the server air inlet and outlet are blocked.

- If yes, go to **Step 6**.
- If no, go to **Step 7**.

**Step 6** Clear the blockage. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 7**.

**Step 7** Replace the PCIe riser. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 8**.

**Step 8** Contact technical support engineer.

**----End**

# 2.3.75 ALM-0x0F000007 Failed to Read PCIe Riser Temperature (PCIe Riser, Minor Alarm)

## Description

Alarm message:

Failed to obtain data of the PCIe riser card *arg1* temperature.

This alarm is generated when the system failed to obtain the PCIe riser temperature.

Alarm object: PCIe Riser

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x0F000007 | Minor | Yes |

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### Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Serial number of the PCIe riser. |

### Impact on the System

The temperature cannot be monitored. No alarm will be reported when the temperature is not in the normal range.

### Possible Causes

The PCIe riser is faulty.

### Procedure

**Step 1** Power off the server and check whether there is damage or poor contact between the component and its slot.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Replace the PCIe riser. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Contact technical support engineer.

**----End**

## 2.3.76 ALM-0x0F000009 Riser Undervoltage (PCIe Riser, Major Alarm)

### Description

Alarm message:

PCIe riser *arg4* voltage (*arg1* V) at *arg3* detection point is lower than the undervoltage threshold (*arg2* V).

This alarm is generated when the detection point voltage of the PCIe riser is lower than the undervoltage major threshold.

Alarm object: PCIe Riser

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x0F000009 | Major | Yes |

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### Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Current reading of the sensor. |
| *arg2* | Alarm threshold. |
| *arg3* | Voltage detection point. For example, **GPU1 3.3V**, **Riser1 STB 3.3V**, or **Riser1 12V IN**. |
| *arg4* | Serial number of the PCIe riser. |

### Impact on the System

The PCIe cards on the riser card are affected, which further affects the system operation.

### Possible Causes

The PCIe riser is faulty.

### Procedure

**Step 1** Replace the PCIe riser. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If yes, go to **Step 2**.

**Step 2** Contact technical support engineer.

**----End**

## 2.3.77 ALM-0x0F00000F Riser Power Supply Overtemperature (PCIe Riser, Major Alarm)

### Description

Alarm message:

Pebpa*arg1* backplane *arg2* power supply over temperature.

This alarm is generated when the temperature of the power supply detection point on the riser card is higher than the alarm threshold.

Alarm object: PCIe Riser

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x0F00000F | Major | Yes |

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## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Slot number of the PCIe riser, for example, **Riser1**or **PCIe Slot1**. |
| *arg2* | Power supply detection point, for example, **12V**. |

## Impact on the System

The system stops responding.

## Possible Causes

- The fans are faulty.
- The equipment room temperature exceeds the normal range.
- The air inlet or outlet is blocked.
- Idle slots or spaces are not installed with filler panels.
- The riser card is faulty.
- The mainboard is faulty.

## Procedure

**Step 1** Check whether there is fan module alarm generated.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Locate and replace the fan module. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Check whether the equipment room temperature exceeds the normal range.

- If yes, go to **Step 4**.
- If no, go to **Step 5**.

**Step 4** Reduce the equipment room temperature to the normal range. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Check whether the server air inlet and outlet are blocked.

- If yes, go to **Step 6**.
- If no, go to **Step 7**.

**Step 6** Clear the blockage. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.

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- If no, go to **Step 7**.

**Step 7** Check whether there are empty slots in the server.

- If yes, go to **Step 8**.
- If no, go to **Step 9**.

**Step 8** Install filler panels in empty slots. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 9**.

**Step 9** Replace the riser card. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 10**.

**Step 10** Replace the mainboard. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 11**.

**Step 11** Contact technical support engineer.

**----End**

# 2.3.78 ALM-0x0F000017 Retimer Chip on Riser Card Overtemperature (PCIe Riser, Minor Alarm)

## Description

Alarm message:

Riser card *arg1* retimer *arg2* temperature (*arg3* degrees C) exceeds the overtemperature threshold (*arg4* degrees C).

This alarm is generated when the retimer chip on the riser card reaches the overtemperature threshold.

Alarm object: PCIe Riser

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x0F000017 | Minor | Yes |

## Parameters

| Name | Meaning |
|---|---|
| *arg1* | No. of the riser card. |
| *arg2* | No. of the retimer. |

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| Name | Meaning |
| --- | --- |
| *arg3* | Current reading of the sensor.<br>**NOTE**<br>Note on special values:<br>● -126: The retimer chip temperature cannot be obtained.<br>● -127: The obtained retimer chip temperature is invalid. |
| *arg4* | Alarm threshold. |

## Impact on the System

The overheating affects the operation and functions of the riser card.

## Possible Causes

- Check the equipment room temperature.
- A fan module is faulty.
- The air inlet or outlet is blocked.
- The retimer is faulty.

## Procedure

**Step 1** Check whether there are fan module alarms.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Replace the fan module. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Check whether the equipment room temperature exceeds the normal range.

- If yes, go to **Step 4**.
- If no, go to **Step 5**.

**Step 4** Reduce the equipment room temperature to the normal range. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Check whether the air inlet or outlet of the server is blocked.

- If yes, go to **Step 6**.
- If no, go to **Step 7**.

**Step 6** Clear the blockage. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 7**.

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**Step 7** Replace the PCIe riser card. After the server is powered on, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 8**.

**Step 8** Contact technical support engineer.

**----End**

# 2.3.79 ALM-0x0F00001D Riser Card Soft-Start Circuit Overtemperature (PCIe Riser, Critical Alarm)

## Description

Alarm message:

The temperature of soft-start circuit *arg1* on PCIe riser card *arg2* is too high.

This alarm is generated when the temperature of the riser card soft-start circuit is too high.

Alarm object: PCIe riser

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0F00001D | Critical | Yes |

## Parameters

| Name | Meaning |
|---|---|
| *arg1* | Name of the voltage monitoring point related to the alarm, for example, **12V0_HD_OUT**. |
| *arg2* | Number of the PCIe riser card related to the alarm. |

## Impact on the System

The PCIe devices on the riser card are affected, which further affects the system operation.

## Possible Causes

The riser card is faulty.

## Procedure

**Step 1** Replace the faulty PCIe riser card. Then, check whether the alarm is cleared.

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- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Contact technical support engineer.

**----End**

# 2.3.80 ALM-0x0F00001F Retimer Chip on Riser Card Overtemperature Major Alarm (PCIe Riser, Major Alarm)

## Description

Alarm message:

Riser card *arg1* retimer*arg2* temperature (*arg3* degrees C) exceeds the overtemperature threshold (*arg4* degrees C).

This alarm is generated when the temperature of the riser card retimer temperature exceeds the overtemperature threshold.

Alarm object: PCIe Riser

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x0F00001F | Major | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Slot No. of the alarmed PCIe riser card. |
| *arg2* | No. of the alarmed retimer chip. |
| *arg3* | Current reading of the sensor. |
| *arg4* | Alarm threshold. |

## Impact on the System

The overheating affects the operation and functions of the riser card.

## Possible Causes

- The fan module is faulty.
- The ambient temperature exceeds the normal range.
- The air inlet or outlet is blocked.
- The retimer is faulty.

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## Procedure

**Step 1** Check whether there are fan module alarms.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Replace the faulty fan module. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Check whether the equipment room temperature exceeds the normal range.

- If yes, go to **Step 4**.
- If no, go to **Step 5**.

**Step 4** Reduce the equipment room temperature to the normal range. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Check whether the server air inlet and outlet are blocked.

- If yes, go to **Step 6**.
- If no, go to **Step 7**.

**Step 6** Clear the blockage. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 7**.

**Step 7** Replace the PCIe riser card. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 8**.

**Step 8** Contact technical support engineer.

**----End**

# 2.3.81 ALM-0x0F000021 PCIe Riser Card Temperature Exceeds the Critical Overtemperature Threshold (PCIe Riser, Critical Alarm)

## Description

Alarm message:

PCIe riser card *arg1* temperature (*arg2* degrees C) exceeds the overtemperature threshold (*arg3* degrees C).

This alarm is generated when the temperature of the PCIe riser card exceeds the overtemperature threshold.

Alarm object: PCIe Riser

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## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x0F000021 | Critical | Yes |

## Parameters

| Name | Meaning |
|---|---|
| *arg1* | Slot No. of the alarmed PCIe riser card. |
| *arg2* | Current reading of the sensor. |
| *arg3* | Alarm threshold. |

## Impact on the System

If the temperature of the PCIe riser card is too high, the device performance is affected, causing the device to run unstably.

## Possible Causes

- The fan module is faulty.
- The ambient temperature is too high.
- The air inlet or outlet is blocked.
- The riser card is faulty.

## Procedure

**Step 1** Check whether there are fan module alarms.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Replace the faulty fan module. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Check whether the equipment room temperature exceeds the normal range.

- If yes, go to **Step 4**.
- If no, go to **Step 5**.

**Step 4** Reduce the equipment room temperature to the normal range. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Check whether the server air inlet and outlet are blocked.

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- If yes, go to **Step 6**.
- If no, go to **Step 7**.

**Step 6** Clear the blockage. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 7**.

**Step 7** Replace the PCIe riser card. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 8**.

**Step 8** Contact technical support engineer.

**----End**

# 2.3.82 ALM-0x0F000027 PCIe Riser Card Temperature Exceeds the Major Overtemperature Threshold (PCIe Riser, Major Alarm)

## Description

Alarm message:

PCIe riser card *arg1* temperature (*arg2* degrees C) exceeds the overtemperature threshold (*arg3* degrees C).

This alarm is generated when the temperature of the PCIe riser card exceeds the overtemperature threshold.

Alarm object: PCIe Riser

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x0F000027 | Major | Yes |

## Parameters

| Name | Meaning |
|---|---|
| *arg1* | Slot No. of the alarmed PCIe riser card. |
| *arg2* | Current reading of the sensor. |
| *arg3* | Alarm threshold. |

## Impact on the System

If the temperature of the PCIe riser card is too high, the device performance is affected, causing the device to run unstably.

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## Possible Causes

- The fan module is faulty.
- The ambient temperature is too high.
- The air inlet or outlet is blocked.
- The riser card is faulty.

## Procedure

**Step 1** Check whether there are fan module alarms.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Replace the faulty fan module. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Check whether the equipment room temperature exceeds the normal range.

- If yes, go to **Step 4**.
- If no, go to **Step 5**.

**Step 4** Reduce the equipment room temperature to the normal range. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Check whether the server air inlet and outlet are blocked.

- If yes, go to **Step 6**.
- If no, go to **Step 7**.

**Step 6** Clear the blockage. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 7**.

**Step 7** Replace the PCIe riser card. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 8**.

**Step 8** Contact technical support engineer.

**----End**

# 2.3.83 ALM-0x1000005B Soft-Start Circuit MOSFET Overtemperature (Mainboard, Minor Alarm)

## Description

Alarm message:

Soft-start circuit MOS FET temperature is too high at detection point *arg1*.

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This alarm is generated when the temperature of the metal-oxide-semiconductor field-effect transistor (MOSFET) of the soft-start circuit exceeds the minor threshold.

Alarm object: Mainboard

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x1000005B | Minor | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Number of the MOSFET temperature detection point. |

## Impact on the System

The system restarts.

## Possible Causes

Overtemperature of the mainboard soft-start circuit.

## Procedure

**Step 1** Replace the mainboard. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Contact technical support engineer.

**----End**

# 2.3.84 ALM-0x100000C1 Soft-Start Circuit Overheating (Mainboard, Major Alarm)

## Description

Alarm message:

System is forcibly shut down due to high temperature of the soft-start circuit *arg1* (BN: *arg2*).

NOTE

From iBMC V316, the CPU and disk alarms will also include the SN and BOM code and the mainboard and memory alarms will also include the BOM code.

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This alarm is generated when the temperature of the soft-start circuit exceeds 105°C. When the soft-start circuit exceeds 105°C, the CPLD protection mechanism is triggered, which forcibly shut down the server OS.

Alarm object: Mainboard

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x100000C1 | Major | Yes |

## Parameters

| Name | Meaning |
|---|---|
| *arg1* | If the server is 8100 V5 or 9008 V5, *arg1* can be **HFC Board1** or **HFC Board2**.<br>For other servers, *arg1* is **1**, which indicates the mainboard. |
| *arg2* | BOM code. |

## Impact on the System

Services will be interrupted.

## Possible Causes

- The equipment room temperature exceeds the normal range.
- The air inlet or outlet is blocked.
- The fans are faulty.
- Idle slots or spaces are not installed with filler panels.
- The mainboard or HFC is faulty.

## Procedure

**Step 1** Check whether there is fan module alarm generated.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Locate and replace the fan module. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Check whether the equipment room temperature exceeds the normal range.

- If yes, go to **Step 4**.

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- If no, go to **Step 5**.

**Step 4** Reduce the equipment room temperature to the normal range. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Check whether the air inlet and outlet of the server are blocked.

- If yes, go to **Step 6**.
- If no, go to **Step 7**.

**Step 6** Clear the blockage. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 7**.

**Step 7** Check whether the server has empty slots.

- If yes, go to **Step 8**.
- If no, go to **Step 9**.

**Step 8** Install filler panels in empty slots. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 9**.

**Step 9** Replace the mainboard or HFC. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 10**.

**Step 10** Contact technical support.

**----End**

# 2.3.85 ALM-0x10000141 Mainboard VRD Chip Overtemperature (Mainboard, Major Alarm)

## Description

Alarm message:

The VRD chip *arg1* on the mainboard is overtemperature.

This alarm is generated when the VRD chip on the mainboard is overtemperature.

Alarm object: Mainboard

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x10000141 | Major | Yes |

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## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Name of the VRD chip. For example, **VCORE_VRD(XDPE192C3B)**. |

## Impact on the System

The system may fail to start or run abnormally.

## Possible Causes

- The ambient temperature is too high.
- The air inlet or outlet is blocked.
- The fan module is faulty.
- The mainboard is faulty.

## Procedure

**Step 1** Check whether both air inlet and outlet overtemperature alarms are generated.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Clear the air inlet and outlet overtemperature alarms according to their handling suggestions. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Check whether a fan alarm is generated.

- If yes, go to **Step 4**.
- If no, go to **Step 5**.

**Step 4** Clear the fan alarm according to its handling suggestions. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Replace the mainboard. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 6**.

**Step 6** Contact technical support engineer.

**----End**

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# 2.3.86 ALM-0x10000147 Failed to Obtain the Mainboard VRD Temperature (Mainboard, Minor Alarm)

## Description

Alarm message:

Failed to obtain data of the mainboard VRD *arg1* temperature.

This alarm is generated when the system failed to obtain the mainboard VRD temperature.

Alarm object: Mainboard

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x10000147 | Minor | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Name of the VRD chip. For example, **VCORE_VRD(XDPE192C3B)**. |

## Impact on the System

The temperature cannot be monitored normally, and if the temperature is abnormal, the alarm cannot be given in time.

## Possible Causes

- VRD chip failure.
- The VRD access channel is faulty.

## Procedure

**Step 1** Restart the iBMC. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Remove and reconnect power cables or remove and reinstall the board in the chassis. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Replace the mainboard. Then, check whether the alarm is cleared.

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- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Contact technical support engineer.

**----End**

# 2.3.87 ALM-0x1000014D Mainboard Switch Chip Overtemperature Major Alarm (Mainboard, Major Alarm)

## Description

Alarm message:

The mainboard switch chip *arg1* temperature exceeds the overtemperature threshold.

This alarm is generated when the mainboard switch chip temperature exceeds the overtemperature threshold.

Alarm object: Mainboard

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x1000014D | Major | Yes |

## Parameters

| Name | Meaning |
|---|---|
| *arg1* | Name of the switch chip. For example, **SW1**. |

## Impact on the System

The performance of the switch chip is degraded.

## Possible Causes

- The air inlet or outlet is blocked.
- The fan module is faulty.
- The liquid cooling is abnormal.
- The mainboard is faulty.

## Procedure

**Step 1** Check whether both air inlet and outlet overtemperature alarms are generated.

- If yes, go to **Step 2**.

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- If no, go to **Step 3**.

**Step 2** Clear the air inlet and outlet overtemperature alarms according to their handling suggestions. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Check whether a fan alarm is generated.

- If yes, go to **Step 4**.
- If no, go to **Step 5**.

**Step 4** Clear the fan alarm according to its handling suggestions. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Check whether the liquid-cooled heat dissipation system works properly if the switch chip is in liquid cooling mode. Ensure that the liquid cooling system works properly and check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 6**.

**Step 6** Replace the mainboard. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 7**.

**Step 7** Contact technical support engineer.

**----End**

# 2.3.88 ALM-0x1000014F Mainboard Switch Chip Overtemperature Shutdown (Mainboard, Critical Alarm)

## Description

Alarm message:

The mainboard switch chip *arg1* temperature exceeds the overtemperature shutdown threshold.

This alarm is generated when the mainboard switch chip temperature exceeds the overtemperature shutdown threshold.

Alarm object: Mainboard

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x1000014F | Critical | Yes |

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## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Name of the switch chip. For example, **SW1**. |

## Impact on the System

The switch chip stops running and the service is terminated.

## Possible Causes

- The air inlet or outlet is blocked.
- The fan module is faulty.
- The liquid cooling is abnormal.
- The mainboard is faulty.

## Procedure

**Step 1** Check whether both air inlet and outlet overtemperature alarms are generated.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Clear the air inlet and outlet overtemperature alarms according to their handling suggestions. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Check whether a fan alarm is generated.

- If yes, go to **Step 4**.
- If no, go to **Step 5**.

**Step 4** Clear the fan alarm according to its handling suggestions. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Check whether the liquid-cooled heat dissipation system works properly if the switch chip is in liquid cooling mode. Ensure that the liquid cooling system works properly and check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 6**.

**Step 6** Replace the mainboard. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 7**.

**Step 7** Contact technical support engineer.

**----End**

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# 2.3.89 ALM-0x12000001 Air Inlet Overtemperature (Chassis, Minor Alarm)

## Description

Alarm message:

The air inlet temperature (*arg1* degrees C) exceeds the overtemperature threshold (*arg2* degrees C).

This alarm is generated when the air inlet temperature exceeds the overtemperature minor threshold.

This alarm is cleared when the temperature is within the normal range.

Alarm object: Chassis

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x12000001 | Minor | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Current reading of the sensor. |
| *arg2* | Alarm threshold. |

## Impact on the System

Overheating affects component performance and server operations.

## Possible Causes

- The ambient temperature exceeds the normal range.
- The air inlet is blocked.
- Idle slots or spaces are not installed with filler panels.
- The component holding the air inlet temperature sensor is faulty.

The location of the air inlet temperature sensor varies with the server model. For details, see the user guide of the server you use.

## Procedure

**Step 1** Check whether the equipment room temperature exceeds the normal range. The recommended temperature is less than 40°C (104°F).

- If yes, go to **Step 2**.

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- If no, go to **Step 3**.

**Step 2** Reduce the ambient temperature in the equipment room by using air conditioners and fans (for example, turn down the air conditioners and increase the fan speed. When the air conditioners cannot work properly, open doors and windows for ventilation). After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Check whether the temperature in the cabinet exceeds the normal range.

- If yes, go to **Step 4**.
- If no, go to **Step 5**.

**Step 4** Clear the blockage and ensure that the cabinet is well ventilated. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Check whether the server air inlet is blocked.

- If yes, go to **Step 6**.
- If no, go to **Step 7**.

**Step 6** Clear the blockage. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 7**.

**Step 7** Check whether there are empty slots in the server.

- If yes, go to **Step 9**.
- If no, go to **Step 8**.

**Step 8** Install filler panels in empty slots. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 9**.

**Step 9** Replace the component where the air inlet temperature sensor is located. Then, check whether the alarm is cleared.

The location of the air inlet temperature sensor varies with the server model. For details, see the sensor list in the server user guide.

Replace the component where the air inlet temperature sensor is located. For details, see the server maintenance and service guide.

- If yes, no further action is required.
- If no, go to **Step 10**.

**Step 10** Contact technical support.

**----End**

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# 2.3.90 ALM-0x12000003 Air Inlet Overtemperature (Chassis, Major Alarm)

## Description

Alarm message:

The air inlet temperature (*arg1* degrees C) exceeds the overtemperature threshold (*arg2* degrees C).

This alarm is generated when the air inlet temperature exceeds the overtemperature major threshold.

This alarm is cleared when the temperature is within the normal range.

Alarm object: Chassis

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x12000003 | Major | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Current reading of the sensor. |
| *arg2* | Alarm threshold. |

## Impact on the System

Overheating affects component performance and server operations.

## Possible Causes

- The ambient temperature exceeds the normal range.
- The air inlet is blocked.
- Idle slots or spaces are not installed with filler panels.
- The component holding the air inlet temperature sensor is faulty.

The location of the air inlet temperature sensor varies with the server model. For details, see the user guide of the server you use.

## Procedure

**Step 1** Check whether the equipment room temperature exceeds the normal range. The recommended temperature is less than 40°C (104°F).

- If yes, go to **Step 2**.

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- If no, go to **Step 3**.

**Step 2** Reduce the ambient temperature in the equipment room by using air conditioners and fans (for example, turn down the air conditioners and increase the fan speed. When the air conditioners cannot work properly, open doors and windows for ventilation). After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Check whether the temperature in the cabinet exceeds the normal range.

- If yes, go to **Step 4**.
- If no, go to **Step 5**.

**Step 4** Clear the blockage and ensure that the cabinet is well ventilated. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Check whether the server air inlet is blocked.

- If yes, go to **Step 6**.
- If no, go to **Step 7**.

**Step 6** Clear the blockage. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 7**.

**Step 7** Check whether there are empty slots in the server.

- If yes, go to **Step 9**.
- If no, go to **Step 8**.

**Step 8** Install filler panels in empty slots. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 9**.

**Step 9** Replace the component where the air inlet temperature sensor is located. Then, check whether the alarm is cleared.

The location of the air inlet temperature sensor varies with the server model. For details, see the sensor list in the server user guide.

Replace the component where the air inlet temperature sensor is located. For details, see the server maintenance and service guide.

- If yes, no further action is required.
- If no, go to **Step 10**.

**Step 10** Contact technical support.

**----End**

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# 2.3.91 ALM-0x12000009 Air Outlet Overtemperature (Chassis, Minor Alarm)

## Description

Alarm message:

The air outlet *arg1* temperature (*arg2* degrees C) exceeds the overtemperature threshold (*arg3* degrees C).

This alarm is generated when the air outlet temperature exceeds the overtemperature minor threshold.

This alarm is cleared when the temperature is within the normal range.

Alarm object: Chassis

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x12000009 | Minor | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Air outlet No. |
| *arg2* | Current reading of the sensor. |
| *arg3* | Alarm threshold. |

## Impact on the System

Overheating affects component performance and server operations.

## Possible Causes

- The ambient temperature exceeds the normal range.
- The air inlet or outlet is blocked.
- Idle slots or spaces are not installed with filler panels.
- The component holding the air outlet temperature sensor is faulty.

## Procedure

**Step 1** Check whether the equipment room temperature exceeds the normal range.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

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**Step 2** Reduce the equipment room temperature to the normal range. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Check whether the temperature in the cabinet exceeds the normal range.

- If yes, go to **Step 4**.
- If no, go to **Step 5**.

**Step 4** Clear the blockage and ensure that the cabinet is well ventilated. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Check whether the air inlet or outlet of the server is blocked.

- If yes, go to **Step 6**.
- If no, go to **Step 7**.

**Step 6** Clear the blockage. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 7**.

**Step 7** Check whether there are empty slots in the server.

- If yes, go to **Step 8**.
- If no, go to **Step 9**.

**Step 8** Install filler panels in empty slots. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 9**.

**Step 9** Replace the component where the air outlet temperature sensor is located. Then, check whether the alarm is cleared.

The air outlet temperature sensor is on the mainboard.

- If yes, no further action is required.
- If no, go to **Step 10**.

**Step 10** Contact technical support engineer.

**----End**

# 2.3.92 ALM-0x1200000B Air Outlet Overtemperature (Chassis, Major Alarm)

## Description

Alarm message:

The air outlet *arg1* temperature (*arg2* degrees C) exceeds the overtemperature threshold (*arg3* degrees C).

This alarm is generated when the air inlet temperature exceeds the overtemperature major threshold.

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This alarm is cleared when the temperature is within the normal range.

Alarm object: Chassis

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x1200000B | Major | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Air outlet No. |
| *arg2* | Current reading of the sensor. |
| *arg3* | Alarm threshold. |

## Impact on the System

Overheating affects component performance and server operations.

## Possible Causes

- The ambient temperature exceeds the normal range.
- The air inlet or outlet is blocked.
- Idle slots or spaces are not installed with filler panels.
- The component holding the air outlet temperature sensor is faulty.

## Procedure

**Step 1** Check whether the equipment room temperature exceeds the normal range.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Reduce the equipment room temperature to the normal range. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Check whether the temperature in the cabinet exceeds the normal range.

- If yes, go to **Step 4**.
- If no, go to **Step 5**.

**Step 4** Clear the blockage and ensure that the cabinet is well ventilated. After 5 minutes, check whether the alarm is cleared.

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- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Check whether the air inlet or outlet of the server is blocked.

- If yes, go to **Step 6**.
- If no, go to **Step 7**.

**Step 6** Clear the blockage. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 7**.

**Step 7** Check whether there are empty slots in the server.

- If yes, go to **Step 9**.
- If no, go to **Step 8**.

**Step 8** Install filler panels in empty slots. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 9**.

**Step 9** Replace the component where the air outlet temperature sensor is located. Then, check whether the alarm is cleared.

For details about the component where the sensor is located, see the server user guide.

- If yes, no further action is required.
- If no, go to **Step 10**.

**Step 10** Contact technical support engineer.

**----End**

# 2.3.93 ALM-0x1200000D Air Outlet Overtemperature (Chassis, Critical Alarm)

## Description

Alarm message:

The air outlet *arg1* temperature (*arg2* degrees C) exceeds the overtemperature threshold (*arg3* degrees C).

This alarm is generated when the air inlet temperature exceeds the overtemperature critical threshold.

This alarm is cleared when the temperature is within the normal range.

Alarm object: Chassis

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x1200000D | Critical | Yes |

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## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Air outlet No. |
| *arg2* | Current reading of the sensor. |
| *arg3* | Alarm threshold. |

## Impact on the System

Overheating affects component performance and server operations.

## Possible Causes

- The ambient temperature exceeds the normal range.
- The air inlet or outlet is blocked.
- Idle slots or spaces are not installed with filler panels.
- The component holding the air outlet temperature sensor is faulty.

## Procedure

**Step 1** Check whether the equipment room temperature exceeds the normal range.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Reduce the equipment room temperature to the normal range. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Check whether the temperature in the cabinet exceeds the normal range.

- If yes, go to **Step 4**.
- If no, go to **Step 5**.

**Step 4** Clear the blockage and ensure that the cabinet is well ventilated. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Check whether the air inlet or outlet of the server is blocked.

- If yes, go to **Step 6**.
- If no, go to **Step 7**.

**Step 6** Clear the blockage. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 7**.

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**Step 7** Check whether there are empty slots in the server.

- If yes, go to **Step 9**.
- If no, go to **Step 8**.

**Step 8** Install filler panels in empty slots. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 9**.

**Step 9** Replace the component where the air outlet temperature sensor is located. Then, check whether the alarm is cleared.

For details about the component where the sensor is located, see the server user guide.

- If yes, no further action is required.
- If no, go to **Step 10**.

**Step 10** Contact technical support engineer.

**----End**

# 2.3.94 ALM-0x1200000F Air Inlet Overtemperature (Chassis, Critical Alarm)

## Description

Alarm message:

The air inlet temperature (*arg1* degrees C) exceeds the overtemperature threshold (*arg2* degrees C).

This alarm is generated when the air inlet temperature exceeds the overtemperature critical threshold.

This alarm is cleared when the temperature is within the normal range.

Alarm object: Chassis

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x1200000F | Critical | Yes |

## Parameters

| Name | Meaning |
|---|---|
| *arg1* | Current reading of the sensor. |
| *arg2* | Alarm threshold. |

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## Impact on the System

Overheating affects component performance and server operations.

## Possible Causes

- The ambient temperature exceeds the normal range.
- The air inlet is blocked.
- Idle slots or spaces are not installed with filler panels.
- The component holding the air inlet temperature sensor is faulty.

The location of the air inlet temperature sensor varies with the server model. For details, see the user guide of the server you use.

## Procedure

**Step 1** Check whether the equipment room temperature exceeds the normal range. The recommended temperature is less than 40°C (104°F).

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Reduce the ambient temperature in the equipment room by using air conditioners and fans (for example, turn down the air conditioners and increase the fan speed. When the air conditioners cannot work properly, open doors and windows for ventilation). After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Check whether the temperature in the cabinet exceeds the normal range.

- If yes, go to **Step 4**.
- If no, go to **Step 5**.

**Step 4** Clear the blockage and ensure that the cabinet is well ventilated. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Check whether the server air inlet is blocked.

- If yes, go to **Step 6**.
- If no, go to **Step 7**.

**Step 6** Clear the blockage. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 7**.

**Step 7** Check whether there are empty slots in the server.

- If yes, go to **Step 9**.
- If no, go to **Step 8**.

**Step 8** Install filler panels in empty slots. Then, check whether the alarm is cleared.

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- If yes, no further action is required.
- If no, go to **Step 9**.

**Step 9** Replace the component where the air inlet temperature sensor is located. Then, check whether the alarm is cleared.

The location of the air inlet temperature sensor varies with the server model. For details, see the sensor list in the server user guide.

Replace the component where the air inlet temperature sensor is located. For details, see the server maintenance and service guide.

- If yes, no further action is required.
- If no, go to **Step 10**.

**Step 10** Contact technical support.

**----End**

# 2.3.95 ALM-0x12000013 Failed to Read Air Inlet Temperature (Chassis, Minor Alarm)

## Description

Alarm message:

```
Failed to obtain data of the air inlet temperature.
```

This alarm is generated when the system failed to obtain the air inlet temperature.

Alarm object: Chassis

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x12000013 | Minor | Yes |

## Parameters

| Name | Meaning |
|---|---|
| – | – |

## Impact on the System

The temperature cannot be monitored. No alarm will be reported when the temperature is not in the normal range.

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### Possible Causes

- the I2C access channel is abnormal.
- The cable is not properly connected to the component hosting the air inlet temperature sensor.
- The component holding the air inlet temperature sensor is faulty.

The location of the air inlet temperature sensor varies with the server model. For details, see the user guide of the server you use.

### Procedure

**Step 1** Log in to the iBMC WebUI or CLI.

For details, see the iBMC user guide of the server.

**Step 2** Restart the iBMC.

- To restart the iBMC on the WebUI, click **Restart iBMC** on the **Upgrade Firmware** page.
- To restart the iBMC on the CLI, run the **ipmcset -d reset** command.

**Step 3** After the iBMC starts, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Remove and reconnect the cable between the component holding the air inlet temperature sensor and the mainboard. Then, check whether the alarm is cleared.

For details about the air inlet temperature sensor, see the sensor list in the server user guide.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Replace the cable connected to the component hosting the sensor. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 6**.

**Step 6** Replace the component holding the sensor. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 7**.

**Step 7** Contact technical support engineer.

**----End**

## 2.3.96 ALM-0x12000015 Air Inlet Undertemperature (Chassis, Major Alarm)

### Description

Alarm message:

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The air inlet temperature (*arg1* degrees C) is lower than the undertemperature threshold (*arg2* degrees C).

This alarm is generated when the air inlet temperature is lower than the undertemperature major threshold.

This alarm is cleared when the temperature is within the normal range.

Alarm object: Chassis

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x12000015 | Major | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Current reading of the sensor. |
| *arg2* | Alarm threshold. |

## Impact on the System

Device performance and server operation are affected.

## Possible Causes

The equipment room temperature is lower than the temperature required for server operation.

## Procedure

**Step 1** Check whether the equipment room temperature is lower than the temperature required for server operation.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Increase the equipment room temperature to the required value. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Contact technical support.

**----End**

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# 2.3.97 ALM-0x1200001D Failed to Read the M.2 Slot Zone Temperature on the Mainboard (Chassis, Minor Alarm)

## Description

Alarm message:

```
Failed to obtain data of the M.2 slot zone temperature on the mainboard.
```

This alarm is generated when the system failed to obtain the temperature of the M.2 slot zone on the mainboard. This alarm is cleared when the temperature is within the normal range.

Alarm object: Chassis

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x1200001D | Minor | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| – | – |

## Impact on the System

The temperature at the M.2 slot zone cannot be monitored. No alarm will be reported when the temperature is not in the normal range.

## Possible Causes

The sensor chip has failed, or the access channel is unavailable.

## Procedure

**Step 1** Restart the iBMC. Then, check whether the alarm is cleared.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Remove and reinstall the power cable or board. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Contact technical support engineer.

**----End**

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# 2.3.98 ALM-0x1200001F M.2 Slot Zone Overtemperature (Chassis, Minor Alarm)

## Description

Alarm message:

The temperature (*arg1*degrees C) of the M.2 slot zone on the mainboard exceeds the overtemperature threshold (*arg2*degrees C).

This alarm is generated when the M.2 slot zone temperature on the mainboard exceeds the overtemperature threshold. This alarm is cleared when the temperature is within the normal range.

Alarm object: Chassis

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x1200001F | Minor | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Current reading of the sensor. |
| *arg2* | Alarm threshold. |

## Impact on the System

The overheating affects M.2 operation and related services.

## Possible Causes

- The equipment room temperature exceeds the normal range.
- The air inlet or outlet is blocked.
- Filler panels are not installed in empty slots.
- The device holding the air inlet sensor is faulty.

## Procedure

**Step 1** Check whether there is fan alarm generated.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Replace the fan module. After 5 minutes, check whether the alarm is cleared.

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- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Check whether the equipment room temperature exceeds the normal range.

- If yes, go to **Step 4**.
- If no, go to **Step 5**.

**Step 4** Reduce the equipment room temperature to the normal range. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Check whether the server air inlet and outlet are blocked.

- If yes, go to **Step 6**.
- If no, go to **Step 7**.

**Step 6** Clear the blockage. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 7**.

**Step 7** Replace the M.2 SSD card. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 8**

**Step 8** Contact technical support engineer.

**----End**

# 2.3.99 ALM-0x1200002B Left O&M Interface Module Absent (Chassis, Minor Alarm)

## Description

Alarm message:

```
Left O&M interface module is not present.
```

This alarm is generated when the iBMC cannot detect the left O&M interface module.

Alarm object: Chassis

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x1200002B | Minor | Yes |

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### Parameters

| Name | Meaning |
| --- | --- |
| - | - |

### Impact on the System

- The air inlet temperature cannot be obtained.
- The power button is unavailable.
- The UID button is unavailable.
- The local O&M port is unavailable.

### Possible Causes

- The left O&M interface module is not firmly seated.
- The cable of the O&M interface module is faulty.
- The left O&M interface module is faulty.

### Procedure

**Step 1** Check whether the cable to the left O&M interface module is disconnected or is connected improperly.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Connect the cable to the left O&M interface module securely. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Replace the cable. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Replace the left O&M interface module. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Contact technical support engineer.

**----End**

## 2.3.100 ALM-0x12000037 Failed to Obtain the Temperature on the Mounting Ear (Chassis, Minor Alarm)

### Description

Alarm message:

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Failed to obtain the temperature data on the *arg1* mounting ear.

This alarm is generated when the system fails to obtain the temperature data on the mounting ear.

Alarm object: Chassis

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x12000037 | Minor | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Mounting ear location.<br>● left: left mounting ear.<br>● right: right mounting ear. |

## Impact on the System

The inlet temperature cannot be properly monitored on the mounting ear, deteriorating the heat dissipation monitoring capability.

## Possible Causes

The chip of the temperature sensor on the mounting ear fails or the access channel is abnormal.

## Procedure

**Step 1** Restart the iBMC and check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Replace the cable of the mounting ear. Then, check whether the alarm is cleared.

For details about how to connect the cable, see the user guide of the server you use.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Replace the mounting ear. Then, check whether the alarm is cleared.

For details about how to replace the mounting ear, see the **Parts Replacement** in maintenance and service guide of the server you use.

- If yes, no further action is required.

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- If no, go to **Step 4**.

**Step 4** Contact technical support engineer.

**----End**

# 2.3.101 ALM-0x12000039 Air Inlet Undertemperature (Chassis,Minor Alarm)

## Description

Alarm message:

The current temperature of the air inlet (arg1°C) is lower than the alarm threshold temperature (arg2°C).

This alarm is generated when the air inlet temperature is lower than the temperature threshold.

Alarm object: Chassis

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x12000039 | Minor | Yes |

## Parameters

| Name | Meaning |
|---|---|
| *arg1* | Current reading of the sensor. |
| *arg2* | Alarm threshold. |

## Impact on the System

Causes device performance deterioration.

## Possible Causes

- The equipment room temperature is lower than the temperature required for server operation.
- Sensor abnormality.

## Procedure

**Step 1** Check whether the equipment room temperature is lower than the temperature required for server operation.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

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**Step 2** Increase the equipment room temperature to the required value. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Contact technical support engineer.

**----End**

# 2.3.102 ALM-0x17000001 Failed to Read HMM Temperature (HMM, Minor Alarm)

## Description

Alarm message:

```
Failed to obtain data of the HMM temperature.
```

This alarm is generated when the system failed to obtain the HMM temperature.

Alarm object: HMM

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x17000001 | Minor | Yes |

## Parameters

| Name | Meaning |
|---|---|
| – | – |

## Impact on the System

The temperature cannot be monitored. No alarm will be reported when the temperature is not in the normal range.

## Possible Causes

The ME is faulty, or the access channel is abnormal.

## Procedure

**Step 1** Restart the iBMC. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

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**Step 2** Remove and reinstall the power cable or board. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Contact technical support engineer.

**----End**

# 2.3.103 ALM-0x18000007 High Temperature of Soft-start Circuit of the Fan Backplane (Fan Backplane, Critical Alarm)

## Description

Alarm message:

High temperature of soft-start circuit *arg1* of the fan backplane.

This alarm is generated when the high temperature of soft-start circuit of the fan backplane.

Alarm object: Fan Backplane

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x18000007 | Critical | Yes |

## Parameters

| Name | Meaning |
|---|---|
| *arg1* | Voltage detection point. For example, **12V0_HD_OUT**. |

## Impact on the System

The power supply of server drives will be affected. As a result, the drives cannot function properly.

## Possible Causes

The fan backplane is faulty.

## Procedure

**Step 1** Replace the fan backplane and check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

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**Step 2** Contact technical support engineer.

**----End**

# 2.3.104 ALM-0x18000011 Failed to Obtain the Fan Backplane Temperature (Fan Backplane, Minor Alarm)

## Description

Alarm message:

Failed to obtain the fan backplane temperature.

This alarm is generated when failed to obtain the fan backplane temperature..

Alarm object: Fan Backplane

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x18000011 | Minor | Yes |

## Parameters

| Name | Meaning |
|---|---|
| - | - |

## Impact on the System

The temperature of the fan backplane cannot be properly monitored, deteriorating the heat dissipation monitoring capability.

## Possible Causes

- The fan backplane is not firmly seated.
- The connector between the fan backplane and the mainboard is faulty.
- The fan backplane is faulty.

## Procedure

**Step 1** Check whether the fan backplane is properly connected to the mainboard.

- If yes, go to **Step 3**.
- If no, go to **Step 2**.

**Step 2** Remove and reinstall the fan backplane and signal cable. Then check whether the alarm is cleared.

- If yes, no further action is required.

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- If no, go to **Step 3**.

**Step 3** Replace the signal cable connecting the fan backplane and the mainboard. Then check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Replace the fan backplane. Then check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Contact technical support engineer.

**----End**

# 2.3.105 ALM-0x1A000027 Abnormal heartbeat signal with the node BMC (BMC, Major Alarm)

## Description

Alarm message:

Abnormal heartbeat signal between the management board and node *arg1* iBMC.

This alarm is generated when the heartbeat between the management board and the node iBMC is abnormal.

Alarm object: BMC

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x1A000027 | Major | Yes |

## Parameters

| Name | Meaning |
|---|---|
| *arg1* | iBMC node. |

## Impact on the System

- The management module cannot manage the nodes in the chassis.
- The node may be powered off, affecting services.

## Possible Causes

- The management module or iBMC is faulty.
- The physical channels in the chassis are faulty.

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- The node is powered off abnormally.

## Procedure

**Step 1** Restart the management board and the node iBMC in sequence, and check whether the alarms are cleared after the server powers on.

- If yes, no further action is required.
- If no, go to **2**.

**Step 2** Replace the management board, and then check whether the alarm is cleared after the server is powered on.

- If yes, no further action is required.
- If no, go to **3**.

**Step 3** Replace the node, and then check whether the alarm is cleared after the server is powered on.

- If yes, no further action is required.
- If no, go to **4**.

**Step 4** Contact technical support engineer.

**----End**

# 2.3.106 ALM-0x1A000041 BMC Core Overtemperature Minor Alarm (BMC, Minor Alarm)

## Description

Alarm message:

The BMC core temperature (*arg1* degrees C) exceeds the overtemperature threshold (*arg2* degrees C).

This alarm is generated when the iBMC core temperature exceeds the minor alarm threshold.

Alarm object: BMC

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x1A000041 | Minor | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Current reading of the sensor. |
| *arg2* | Alarm threshold. |

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## Impact on the System

The iBMC performance and system stability are affected.

## Possible Causes

- The equipment room temperature exceeds the normal range.
- The air inlet or air outlet is blocked.
- The server has empty slots or spaces.
- The component holding the temperature sensor is faulty.

## Procedure

**Step 1** Check whether there are fan module alarms.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Replace the fan module. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Check whether the equipment room temperature exceeds the normal range.

- If yes, go to **Step 4**.
- If no, go to **Step 5**.

**Step 4** Reduce the equipment room temperature to the normal range. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Check whether the air inlet or outlet of the server is blocked.

- If yes, go to **Step 6**.
- If no, go to **Step 7**.

**Step 6** Clear the blockage. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 7**.

**Step 7** Replace the component holding the iBMC. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 8**.

**Step 8** Contact technical support engineer.

**----End**

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# 2.3.107 ALM-0x1A000059 BMC Core Overtemperature Major Alarm (BMC, Major Alarm)

## Description

Alarm message:

The BMC core temperature (*arg1* degrees C) exceeds the overtemperature threshold (*arg2* degrees C).

This alarm is generated when the iBMC core temperature exceeds the major alarm threshold.

Alarm object: BMC

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x1A000059 | Major | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Current reading of the sensor. |
| *arg2* | Alarm threshold. |

## Impact on the System

The iBMC performance and system stability are affected.

## Possible Causes

- The equipment room temperature exceeds the normal range.
- The air inlet is blocked.
- The server has empty slots or spaces.
- The component holding the temperature sensor is faulty.

## Procedure

**Step 1** Check whether there are fan module alarms.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Replace the fan module. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

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**Step 3** Check whether the equipment room temperature exceeds the normal range.

- If yes, go to **Step 4**.
- If no, go to **Step 5**.

**Step 4** Reduce the equipment room temperature to the normal range. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Check whether the air inlet or outlet of the server is blocked.

- If yes, go to **Step 6**.
- If no, go to **Step 7**.

**Step 6** Clear the blockage. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 7**.

**Step 7** Replace the component holding the iBMC. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 8**.

**Step 8** Contact technical support engineer.

**----End**

# 2.3.108 ALM-0x1A000063 BMC user password is about to expire (BMC, Minor Alarm)

## Description

Alarm message:

BMC user*arg1* password is about to expire.The ID of the BMC user *arg1* is *arg2*.

This alarm is generated when the iBMC user password is about to expire.

Alarm object: BMC

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x1A000063 | Minor | Yes |

## Parameters

| Name | Meaning |
|---|---|
| *arg1* | UserName. |
| *arg2* | UserId. |

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### Impact on the System

iBMC user will soon be unable to log in.

### Possible Causes

The user sets a password expiration date and the reminder date is reached.

### Procedure

**Step 1** Please change the password promptly, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **2**.

**Step 2** Contact technical support engineer.

**----End**

## 2.3.109 ALM-0x1A000065 Imported firmware integrity baseline metric detection anomaly (BMC, Major Alarm)

### Description

Alarm message:

```
Imported firmware integrity baseline metric detection anomaly.
```

This alarm is generated when the imported firmware integrity baseline metrics detect an anomaly.

Alarm object: BMC

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x1A000065 | Major | Yes |

### Parameters

| Name | Meaning |
|---|---|
| - | - |

### Impact on the System

The firmware integrity detection functionality may fail.

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### Possible Causes

The imported firmware integrity baseline metric file has been tampered with or corrupted.

### Procedure

**Step 1** Identify the abnormal hash value in the SPDM firmware hash file from the one-click logs.

- If yes, go to **2**.
- If no, go to **3**.

**Step 2** Re-import the SPDM metrics or root certificate for the abnormal firmware. Then, trigger the metrics again and check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **3**.

**Step 3** Contact technical support engineer.

**----End**

## 2.3.110 ALM-0x1D000013 LSW Overtemperature (Base Plane, Minor Alarm)

### Description

Alarm message:

Switch module Base plane LSW *arg3* temperature (*arg1* degrees C) exceeds the overtemperature threshold (*arg2* degrees C).

This alarm is generated when the temperature of the LSW on the Base plane of the switch module exceeds the minor threshold.

Alarm object: Base Plane

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x1D000013 | Minor | Yes |

### Parameters

| Name | Meaning |
|---|---|
| *arg1* | Current reading of the sensor. |
| *arg2* | Alarm threshold. |
| *arg3* | Location where the LSW chip temperature is obtained, for example, **Core** or **Zone**. |

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## Impact on the System

Overheating affects Base plane stability. Services on the Base plane may fail to start or run abnormally.

## Possible Causes

- The fans are faulty.
- The equipment room temperature exceeds the normal range.
- The air inlet or outlet is blocked.
- Idle slots or spaces are not installed with filler panels.
- The switch module is faulty.

## Procedure

**Step 1** Check whether there is fan module alarm generated.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Locate and replace the fan module. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Check whether the equipment room temperature exceeds the normal range.

- If yes, go to **Step 4**.
- If no, go to **Step 5**.

**Step 4** Reduce the equipment room temperature to the normal range. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Check whether the server air inlet and outlet are blocked.

- If yes, go to **Step 6**.
- If no, go to **Step 7**.

**Step 6** Clear the blockage. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 7**.

**Step 7** Check whether there are empty slots in the server.

- If yes, go to **Step 8**.
- If no, go to **Step 9**.

**Step 8** Install filler panels in empty slots. Then, check whether the alarm is cleared.

- If yes, no further action is required.

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- If no, go to **Step 9**.

**Step 9** Replace the switch module. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 10**.

**Step 10** Contact technical support engineer.

**----End**

# 2.3.111 ALM-0x1D000015 LSW Overtemperature (Base Plane, Major Alarm)

## Description

Alarm message:

Switch module Base plane LSW *arg3* temperature (xx degrees C) exceeds the overtemperature threshold (xx degrees C).

This alarm is generated when the temperature of the LSW on the Base plane of the switch module exceeds the major threshold.

Alarm object: Base Plane

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x1D000015 | Major | Yes |

## Parameters

| Name | Meaning |
|---|---|
| *arg1* | Current reading of the sensor. |
| *arg2* | Alarm threshold. |
| *arg3* | Location where the LSW chip temperature is obtained, for example, **Core** or **Zone**. |

## Impact on the System

Overheating affects Base plane stability. Services on the Base plane may fail to start or run abnormally.

## Possible Causes

- The fans are faulty.
- The equipment room temperature exceeds the normal range.

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- The air inlet or outlet is blocked.
- Idle slots or spaces are not installed with filler panels.
- The switch module is faulty.

## Procedure

**Step 1** Check whether there is fan module alarm generated.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Locate and replace the fan module. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Check whether the equipment room temperature exceeds the normal range.

- If yes, go to **Step 4**.
- If no, go to **Step 5**.

**Step 4** Reduce the equipment room temperature to the normal range. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Check whether the server air inlet and outlet are blocked.

- If yes, go to **Step 6**.
- If no, go to **Step 7**.

**Step 6** Clear the blockage. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 7**.

**Step 7** Check whether there are empty slots in the server.

- If yes, go to **Step 8**.
- If no, go to **Step 9**.

**Step 8** Install filler panels in empty slots. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 9**.

**Step 9** Replace the switch module. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 10**.

**Step 10** Contact technical support engineer.

**----End**

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# 2.3.112 ALM-0x1D000017 Failed to Read Base Plane LSW Temperature (Base Plane, Minor Alarm)

## Description

Alarm message:

Failed to obtain data of the LSW *arg1* temperature for base.

This alarm is generated when the system failed to obtain the LSW temperature of the switch module Base plane.

Alarm object: Base Plane

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x1D000017 | Minor | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Location where the LSW chip temperature is obtained, for example, **Core** or **Zone**. |

## Impact on the System

The temperature cannot be monitored. No alarm will be reported when the temperature is not in the normal range.

## Possible Causes

- The iBMC is faulty.
- The switch module is faulty.

## Procedure

**Step 1** Restart the iBMC. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Remove and reinstall the power cable or board. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Replace the switch module. Then, check whether the alarm is cleared.

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- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Contact technical support engineer.

**----End**

# 2.3.113 ALM-0x1D000025 Base Plane CPU Overtemperature (Base Plane, Minor Alarm)

## Description

Alarm message:

Switch module Base plane CPU temperature (*arg1* degrees C) exceeds the overtemperature threshold (*arg2* degrees C).

This alarm is generated when the CPU temperature of the Base plane is higher than the minor threshold. This alarm is cleared when the CPU temperature is within the normal range.

Alarm object: Base Plane

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x1D000025 | Minor | Yes |

## Parameters

| Name | Meaning |
|---|---|
| *arg1* | Current reading of the sensor. |
| *arg2* | Alarm threshold. |

## Impact on the System

Services on the Base plane may fail to start or run abnormally.

## Possible Causes

- The fans are faulty.
- The equipment room temperature exceeds the normal range.
- The air inlet or outlet is blocked.
- Idle slots or spaces are not installed with filler panels.
- The switch module is faulty.

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## Procedure

**Step 1** Check whether there is fan module alarm generated.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Locate and replace the fan module. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Check whether the equipment room temperature exceeds the normal range.

- If yes, go to **Step 4**.
- If no, go to **Step 5**.

**Step 4** Reduce the equipment room temperature to the normal range. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Check whether the air inlet and outlet of the server are blocked.

- If yes, go to **Step 6**.
- If no, go to **Step 7**.

**Step 6** Clear the blockage. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 7**.

**Step 7** Check whether the server has empty slots.

- If yes, go to **Step 8**.
- If no, go to **Step 9**.

**Step 8** Install filler panels in empty slots. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 9**.

**Step 9** Replace the switch module. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 10**.

**Step 10** Contact technical support.

**----End**

# 2.3.114 ALM-0x1D000027 Base Plane CPU Overtemperature (Base Plane, Major Alarm)

## Description

Alarm message:

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Switch module Base plane CPU temperature (*arg1* degrees C) exceeds the overtemperature threshold (*arg2* degrees C).

This alarm is generated when the CPU temperature of the Base plane is higher than the minor threshold. This alarm is cleared when the CPU temperature is within the normal range.

Alarm object: Base Plane

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x1D000027 | Major | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Current reading of the sensor. |
| *arg2* | Alarm threshold. |

## Impact on the System

Services on the Base plane may fail to start or run abnormally.

## Possible Causes

- The fans are faulty.
- The equipment room temperature exceeds the normal range.
- The air inlet or outlet is blocked.
- Idle slots or spaces are not installed with filler panels.
- The switch module is faulty.

## Procedure

**Step 1** Check whether there is fan module alarm generated.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Locate and replace the fan module. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Check whether the equipment room temperature exceeds the normal range.

- If yes, go to **Step 4**.
- If no, go to **Step 5**.

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**Step 4** Reduce the equipment room temperature to the normal range. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Check whether the air inlet and outlet of the server are blocked.

- If yes, go to **Step 6**.
- If no, go to **Step 7**.

**Step 6** Clear the blockage. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 7**.

**Step 7** Check whether the server has empty slots.

- If yes, go to **Step 8**.
- If no, go to **Step 9**.

**Step 8** Install filler panels in empty slots. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 9**.

**Step 9** Replace the switch module. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 10**.

**Step 10** Contact technical support.

**----End**

# 2.3.115 ALM-0x1D000029 Failed to Read Base Plane CPU Temperature (Base Plane, Minor Alarm)

## Description

Alarm message:

```
Failed to obtain Base plane CPU temperature.
```

This alarm is generated when the system failed to obtain the CPU temperature of the Base plane.

Alarm object: Base Plane

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x1D000029 | Minor | Yes |

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### Parameters

| Name | Meaning |
| --- | --- |
| – | – |

### Impact on the System

The temperature cannot be monitored. No alarm will be reported when the temperature is not in the normal range.

### Possible Causes

- The iBMC is faulty.
- The switch module is faulty.

### Procedure

**Step 1** Restart the iBMC. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Remove and reinstall the power cable or board. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Replace the switch module. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Contact technical support engineer.

**----End**

## 2.3.116 ALM-0x1D00002B Power Supply to Base Plane Abnormal (Base Plane, Major)

### Description

Alarm message:

Power supply to *arg1* failed or timed out.

This alarm is generated when the Base plane is powered off exceptionally or the power-on of the Base plane timed out.

Alarm object: Base Plane

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### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x1D00002B | Major | Yes |

### Parameters

| Name | Meaning |
|---|---|
| *arg1* | Name of the Base plane, for example, **Base Plane**. |

### Impact on the System

Services on the Base plane may fail to start or run abnormally.

### Possible Causes

The mainboard is faulty.

### Procedure

**Step 1** Replace the mainboard. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Contact technical support engineer.

**----End**

## 2.3.117 ALM-0x1E000009 Fabric Plane LSW Chip Overtemperature (Fabric Plane, Minor Alarm)

### Description

Alarm message:

Switch module Fabric plane LSW chip temperature *arg1* (*arg2* degrees C) exceeds the overtemperature threshold (*arg3* degrees C).

This alarm is generated when the temperature of LSW chip on the switch module Fabric plane exceeds the minor threshold.

Alarm object: Fabric Plane

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x1E000009 | Minor | Yes |

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## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Temperature detection point. |
| *arg2* | Current reading of the sensor. |
| *arg3* | Alarm threshold. |

## Impact on the System

Services on the Fabric plane may fail to start or run abnormally.

## Possible Causes

- The fans are faulty.
- The equipment room temperature exceeds the normal range.
- The air inlet or outlet is blocked.
- Idle slots or spaces are not installed with filler panels.
- The switch module is faulty.

## Procedure

**Step 1** Check whether there is fan module alarm generated.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Locate and replace the fan module. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Check whether the equipment room temperature exceeds the normal range.

- If yes, go to **Step 4**.
- If no, go to **Step 5**.

**Step 4** Reduce the equipment room temperature to the normal range. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Check whether the server air inlet and outlet are blocked.

- If yes, go to **Step 6**.
- If no, go to **Step 7**.

**Step 6** Clear the blockage. After 5 minutes, check whether the alarm is cleared.

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- If yes, no further action is required.
- If no, go to **Step 7**.

**Step 7** Check whether there are empty slots in the server.

- If yes, go to **Step 8**.
- If no, go to **Step 9**.

**Step 8** Install filler panels in empty slots. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 9**.

**Step 9** Replace the switch module. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 10**.

**Step 10** Contact technical support engineer.

**----End**

# 2.3.118 ALM-0x1E00000B Fabric Plane LSW Chip Overtemperature (Fabric Plane, Major Alarm)

## Description

Alarm message:

Switch module Fabric plane LSW chip temperature *arg1*(*arg2* degrees C) exceeds the overtemperature threshold (*arg3* degrees C).

This alarm is generated when the temperature of LSW chip on the switch module Fabric plane exceeds the minor threshold.

Alarm object: Fabric Plane

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x1E00000B | Major | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Temperature detection point. |
| *arg2* | Current reading of the sensor. |
| *arg3* | Alarm threshold. |

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## Impact on the System

Services on the Fabric plane may fail to start or run abnormally.

## Possible Causes

- The fans are faulty.
- The equipment room temperature exceeds the normal range.
- The air inlet or outlet is blocked.
- Idle slots or spaces are not installed with filler panels.
- The switch module is faulty.

## Procedure

**Step 1** Check whether there is fan module alarm generated.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Locate and replace the fan module. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Check whether the equipment room temperature exceeds the normal range.

- If yes, go to **Step 4**.
- If no, go to **Step 5**.

**Step 4** Reduce the equipment room temperature to the normal range. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Check whether the server air inlet and outlet are blocked.

- If yes, go to **Step 6**.
- If no, go to **Step 7**.

**Step 6** Clear the blockage. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 7**.

**Step 7** Check whether there are empty slots in the server.

- If yes, go to **Step 8**.
- If no, go to **Step 9**.

**Step 8** Install filler panels in empty slots. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 9**.

**Step 9** Replace the switch module. Then, check whether the alarm is cleared.

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- If yes, no further action is required.
- If no, go to **Step 10**.

**Step 10** Contact technical support engineer.

**----End**

# 2.3.119 ALM-0x1E00000D Fabric Plane LSW Chip Overtemperature (Fabric Plane, Critical Alarm)

## Description

Alarm message:

Switch module Fabric plane LSW chip temperature *arg1*(*arg2* degrees C) exceeds the overtemperature threshold (*arg3* degrees C).

This alarm is generated when the temperature of LSW chip on the switch module Fabric plane exceeds the minor threshold.

Alarm object: Fabric Plane

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x1E00000D | Critical | Yes |

## Parameters

| Name | Meaning |
|---|---|
| *arg1* | Temperature detection point. |
| *arg2* | Current reading of the sensor. |
| *arg3* | Alarm threshold. |

## Impact on the System

Services on the Fabric plane may fail to start or run abnormally.

## Possible Causes

- The fans are faulty.
- The equipment room temperature exceeds the normal range.
- The air inlet or outlet is blocked.
- Idle slots or spaces are not installed with filler panels.
- The switch module is faulty.

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## Procedure

**Step 1** Check whether there is fan module alarm generated.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Locate and replace the fan module. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Check whether the equipment room temperature exceeds the normal range.

- If yes, go to **Step 4**.
- If no, go to **Step 5**.

**Step 4** Reduce the equipment room temperature to the normal range. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Check whether the server air inlet and outlet are blocked.

- If yes, go to **Step 6**.
- If no, go to **Step 7**.

**Step 6** Clear the blockage. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 7**.

**Step 7** Check whether there are empty slots in the server.

- If yes, go to **Step 8**.
- If no, go to **Step 9**.

**Step 8** Install filler panels in empty slots. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 9**.

**Step 9** Replace the switch module. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 10**.

**Step 10** Contact technical support engineer.

**----End**

# 2.3.120 ALM-0x1E00000F Fabric Plane CPU Overtemperature (Fabric Plane, Minor Alarm)

## Description

Alarm message:

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Switch module Fabric plane CPU temperature (*arg1* degrees C) exceeds the overtemperature threshold (*arg2* degrees C).

This alarm is generated when the temperature of the CPU on the switch module Fabric plane exceeds the minor threshold.

Alarm object: Fabric Plane

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x1E00000F | Minor | Yes |

## Parameters

| Name | Meaning |
|---|---|
| *arg1* | Current reading of the sensor. |
| *arg2* | Alarm threshold. |

## Impact on the System

Overheating may cause CPU instability or errors. Services may not run properly.

## Possible Causes

- The fans are faulty.
- The equipment room temperature exceeds the normal range.
- The air inlet or outlet is blocked.
- Idle slots or spaces are not installed with filler panels.
- The switch module is faulty.

## Procedure

**Step 1** Check whether there is fan module alarm generated.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Locate and replace the fan module. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Check whether the equipment room temperature exceeds the normal range.

- If yes, go to **Step 4**.
- If no, go to **Step 5**.

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**Step 4** Reduce the equipment room temperature to the normal range. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Check whether the server air inlet and outlet are blocked.

- If yes, go to **Step 6**.
- If no, go to **Step 7**.

**Step 6** Clear the blockage. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 7**.

**Step 7** Check whether there are empty slots in the server.

- If yes, go to **Step 8**.
- If no, go to **Step 9**.

**Step 8** Install filler panels in empty slots. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 9**.

**Step 9** Replace the switch module. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 10**.

**Step 10** Contact technical support engineer.

**----End**

# 2.3.121 ALM-0x1E000011 Fabric Plane CPU Overtemperature (Fabric Plane, Major Alarm)

## Description

Alarm message:

Switch module Fabric plane CPU temperature (*arg1* degrees C) exceeds the overtemperature threshold (*arg2* degrees C).

This alarm is generated when the temperature of the CPU on the switch module Fabric plane exceeds the minor threshold.

Alarm object: Fabric Plane

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x1E000011 | Major | Yes |

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## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Current reading of the sensor. |
| *arg2* | Alarm threshold. |

## Impact on the System

Overheating may cause CPU instability or errors. Services may not run properly.

## Possible Causes

- The fans are faulty.
- The equipment room temperature exceeds the normal range.
- The air inlet or outlet is blocked.
- Idle slots or spaces are not installed with filler panels.
- The switch module is faulty.

## Procedure

**Step 1** Check whether there is fan module alarm generated.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Locate and replace the fan module. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Check whether the equipment room temperature exceeds the normal range.

- If yes, go to **Step 4**.
- If no, go to **Step 5**.

**Step 4** Reduce the equipment room temperature to the normal range. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Check whether the server air inlet and outlet are blocked.

- If yes, go to **Step 6**.
- If no, go to **Step 7**.

**Step 6** Clear the blockage. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 7**.

**Step 7** Check whether there are empty slots in the server.

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- If yes, go to **Step 8**.
- If no, go to **Step 9**.

**Step 8** Install filler panels in empty slots. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 9**.

**Step 9** Replace the switch module. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 10**.

**Step 10** Contact technical support engineer.

**----End**

# 2.3.122 ALM-0x1E00002B Failed to Read Fabric Plane LSW Temperature (Fabric Plane, Minor Alarm)

## Description

Alarm message:

```
Failed to obtain data of the LSW temperature for fabric plane.
```

This alarm is generated when the system failed to obtain the temperature of the LSW on the switch module Fabric plane.

Alarm object: Fabric Plane

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x1E00002B | Minor | Yes |

## Parameters

| Name | Meaning |
|---|---|
| – | – |

## Impact on the System

The temperature cannot be monitored. No alarm will be reported when the temperature is not in the normal range.

## Possible Causes

- The iBMC is faulty.

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- The switch module is faulty.

## Procedure

**Step 1** Restart the iBMC. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Remove and reinstall the power cable or board. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Replace the switch module. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Contact technical support engineer.

**----End**

# 2.3.123 ALM-0x1E00002D Failed to Read Fabric Plane CPU Temperature (Fabric Plane, Minor Alarm)

## Description

Alarm message:

```
Failed to obtain data of the CPU temperature for fabric plane.
```

This alarm is generated when the system failed to obtain the temperature of the CPU on the switch module Fabric plane.

Alarm object: Fabric Plane

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x1E00002D | Minor | Yes |

## Parameters

| Name | Meaning |
|---|---|
| – | – |

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### Impact on the System

The temperature cannot be monitored. No alarm will be reported when the temperature is not in the normal range.

### Possible Causes

- The iBMC is faulty.
- The switch module is faulty.

### Procedure

**Step 1** Restart the iBMC. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Remove and reinstall the power cable or board. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Replace the switch module. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Contact technical support engineer.

**----End**

## 2.3.124 ALM-0x1E000035 Fabric Plane Switch Chip Overtemperature (Fabric Plane, Minor Alarm)

### Description

Alarm message:

The switch chip temperature of the fabric plane on the switch module exceeds the minor alarm threshold.

This alarm is generated when the temperature of the switch chip on the switch module Fabric plane exceeds the minor threshold.

Alarm object: Fabric Plane

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x1E000035 | Minor | Yes |

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## Parameters

| Name | Meaning |
| --- | --- |
| – | – |

## Impact on the System

Services on the Fabric plane may fail to start or run abnormally.

## Possible Causes

- The fans are faulty.
- The equipment room temperature exceeds the normal range.
- The air inlet or outlet is blocked.
- Idle slots or spaces are not installed with filler panels.
- The switch module is faulty.

## Procedure

**Step 1** Check whether there is fan module alarm generated.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Locate and replace the fan module. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Check whether the equipment room temperature exceeds the normal range.

- If yes, go to **Step 4**.
- If no, go to **Step 5**.

**Step 4** Reduce the equipment room temperature to the normal range. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Check whether the server air inlet and outlet are blocked.

- If yes, go to **Step 6**.
- If no, go to **Step 7**.

**Step 6** Clear the blockage. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 7**.

**Step 7** Check whether there are empty slots in the server.

- If yes, go to **Step 8**.

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- If no, go to **Step 9**.

**Step 8** Install filler panels in empty slots. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 9**.

**Step 9** Replace the switch module. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 10**.

**Step 10** Contact technical support engineer.

**----End**

# 2.3.125 ALM-0x1E000037 Fabric Plane Switch Chip Overtemperature (Fabric Plane, Major Alarm)

## Description

Alarm message:

The switch chip temperature of the fabric plane on the switch module exceeds the major alarm threshold.

This alarm is generated when the temperature of the switch chip on the switch module Fabric plane exceeds the major threshold.

Alarm object: Fabric Plane

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x1E000037 | Major | Yes |

## Parameters

| Name | Meaning |
|---|---|
| – | – |

## Impact on the System

Services on the Fabric plane may fail to start or run abnormally.

## Possible Causes

- The fans are faulty.
- The equipment room temperature exceeds the normal range.
- The air inlet or outlet is blocked.

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- Idle slots or spaces are not installed with filler panels.
- The switch module is faulty.

## Procedure

**Step 1** Check whether there is fan module alarm generated.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Locate and replace the fan module. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Check whether the equipment room temperature exceeds the normal range.

- If yes, go to **Step 4**.
- If no, go to **Step 5**.

**Step 4** Reduce the equipment room temperature to the normal range. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Check whether the server air inlet and outlet are blocked.

- If yes, go to **Step 6**.
- If no, go to **Step 7**.

**Step 6** Clear the blockage. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 7**.

**Step 7** Check whether there are empty slots in the server.

- If yes, go to **Step 8**.
- If no, go to **Step 9**.

**Step 8** Install filler panels in empty slots. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 9**.

**Step 9** Replace the switch module. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 10**.

**Step 10** Contact technical support engineer.

**----End**

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# 2.3.126 ALM-0x1E000039 Fabric Plane Switch Chip Fault (Fabric Plane, Major Alarm)

## Description

Alarm message:

```
Switch module fabric plane switch chip is fault.
```

This alarm is generated when the switch chip on the switch module Fabric plane is faulty.

Alarm object: Fabric Plane

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x1E000039 | Major | Yes |

## Parameters

| Name | Meaning |
|---|---|
| – | – |

## Impact on the System

Services on the Fabric plane may fail to start or run abnormally.

## Possible Causes

The switch module is faulty.

## Procedure

**Step 1** Replace the switch module. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Contact technical support engineer.

**----End**

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# 2.3.127 ALM-0x23000001 Middle of the I/O Board Air Inlet Overtemperature (I/O Board, Minor Alarm)

## Description

Alarm message:

Middle of the I/O board(*arg1*) air inlet temperature (*arg2* degrees C) exceeds the overtemperature threshold (*arg3* degrees C) (SN: *arg4*, BN: *arg5*).

NOTE

From iBMC V370, this alarm also includes the serial number and BOM code of the I/O board.

This alarm is generated when the air inlet temperature exceeds the overtemperature minor threshold. This alarm is cleared when the temperature is within the normal range.

Alarm object: I/O Board

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x23000001 | Minor | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Location of the I/O board:<br>● BIO<br>● FIO |
| *arg2* | Current reading of the sensor. |
| *arg3* | Alarm threshold. |
| *arg4* | I/O board serial number. |
| *arg5* | BOM code. |

## Impact on the System

I/O board overheating affects the PCIe cards on the I/O board. If this alarm is not cleared in time, services related to the PCIe card will be interrupted.

## Possible Causes

- The equipment room temperature exceeds the normal range.
- The air inlet is blocked.

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- The I/O board is faulty.

## Procedure

**Step 1** Check whether there are fan module alarms.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Replace the fan module. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Check whether the equipment room temperature exceeds the normal range.

- If yes, go to **Step 4**.
- If no, go to **Step 5**.

**Step 4** Reduce the equipment room temperature to the normal range. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Check whether the air inlet or outlet of the server is blocked.

- If yes, go to **Step 6**.
- If no, go to **Step 7**.

**Step 6** Clear the blockage. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 7**.

**Step 7** Replace the I/O board. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 8**.

**Step 8** Contact technical support engineer.

**----End**

# 2.3.128 ALM-0x23000003 Right of the I/O Board Air Inlet Overtemperature (I/O Board, Minor Alarm)

## Description

Alarm message:

Right part of the I/O board(*arg1*) air inlet temperature (*arg2* degrees C) exceeds the overtemperature threshold (*arg3* degrees C).

This alarm is generated when the air inlet temperature exceeds the overtemperature minor threshold. This alarm is cleared when the temperature is within the normal range.

Alarm object: I/O Board

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## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x23000003 | Minor | Yes |

## Parameters

| Name | Meaning |
|---|---|
| *arg1* | Location of the I/O board:<br>● BIO<br>● FIO |
| *arg2* | Current reading of the sensor. |
| *arg3* | Alarm threshold. |

## Impact on the System

I/O board overheating affects the PCIe cards on the I/O board. If this alarm is not cleared in time, services related to the PCIe card will be interrupted.

## Possible Causes

- The equipment room temperature exceeds the normal range.
- The air inlet is blocked.
- The I/O board is faulty.

## Procedure

**Step 1** Check whether there are fan module alarms.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Replace the fan module. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Check whether the equipment room temperature exceeds the normal range.

- If yes, go to **Step 4**.
- If no, go to **Step 5**.

**Step 4** Reduce the equipment room temperature to the normal range. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

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**Step 5** Check whether the air inlet or outlet of the server is blocked.

- If yes, go to **Step 6**.
- If no, go to **Step 7**.

**Step 6** Clear the blockage. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 7**.

**Step 7** Replace the I/O board. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 8**.

**Step 8** Contact technical support engineer.

**----End**

# 2.3.129 ALM-0x23000005 Left of the I/O Board Air Inlet Overtemperature (I/O Board, Minor Alarm)

## Description

Alarm message:

Left part of the I/O board(*arg1*) air inlet temperature (*arg2* degrees C) exceeds the overtemperature threshold (*arg3* degrees C).

This alarm is generated when the air inlet temperature exceeds the overtemperature minor threshold. This alarm is cleared when the temperature is within the normal range.

Alarm object: I/O Board

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x23000005 | Minor | Yes |

## Parameters

| Name | Meaning |
|---|---|
| *arg1* | Location of the I/O board:<br>• BIO<br>• FIO |
| *arg2* | Current reading of the sensor. |
| *arg3* | Alarm threshold. |

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## Impact on the System

I/O board overheating affects the PCIe cards on the I/O board. If this alarm is not cleared in time, services related to the PCIe card will be interrupted.

## Possible Causes

- The equipment room temperature exceeds the normal range.
- The air inlet is blocked.
- The I/O board is faulty.

## Procedure

**Step 1** Check whether there are fan module alarms.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Replace the fan module. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Check whether the equipment room temperature exceeds the normal range.

- If yes, go to **Step 4**.
- If no, go to **Step 5**.

**Step 4** Reduce the equipment room temperature to the normal range. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Check whether the air inlet or outlet of the server is blocked.

- If yes, go to **Step 6**.
- If no, go to **Step 7**.

**Step 6** Clear the blockage. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 7**.

**Step 7** Replace the I/O board. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 8**.

**Step 8** Contact technical support engineer.

**----End**

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# 2.3.130 ALM-0x23000031 I/O Board Soft-Start Circuit Overheating (I/O Board, Major Alarm)

## Description

Alarm message

System is forcibly shut down due to high temperature of the soft-start circuit *arg1* (SN: *arg2*, BN: *arg3*).

This alarm is generated when the soft-start circuit on the rear I/O board of the server exceeds 105°C. When the soft-start circuit exceeds 105°C, the CPLD protection mechanism is triggered, which forcibly shut down the server OS.

Alarm object: I/O Board

NOTE

From iBMC V370, this alarm also includes the serial number and BOM code of the I/O board.

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x23000031 | Major | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | I/O board identifier, which can be **BIO Brd** only. |
| *arg2* | I/O board serial number. |
| *arg3* | BOM code. |

## Impact on the System

Services will be interrupted.

## Possible Causes

- The equipment room temperature exceeds the normal range.
- The air inlet or outlet is blocked.
- Idle slots or spaces are not installed with filler panels.
- A fan module is faulty.
- The I/O board is faulty.

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### Procedure

**Step 1** Check whether there is fan module alarm generated.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Locate and replace the fan module. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Check whether the equipment room temperature exceeds the normal range.

- If yes, go to **Step 4**.
- If no, go to **Step 5**.

**Step 4** Reduce the equipment room temperature to the normal range. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Check whether the air inlet and outlet of the server are blocked.

- If yes, go to **Step 6**.
- If no, go to **Step 7**.

**Step 6** Clear the blockage. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 7**.

**Step 7** Check whether the server has empty slots.

- If yes, go to **Step 8**.
- If no, go to **Step 9**.

**Step 8** Install filler panels in empty slots. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 9**.

**Step 9** Replace the I/O board. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 10**.

**Step 10** Contact technical support.

**----End**

## 2.3.131 ALM-0x23000033 Left Part of I/O Board Air Inlet Overheating (I/O Board, Major Alarm)

### Description

Alarm message:

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Left part of the I/O board(*arg1*) air inlet temperature (*arg2* degrees C) exceeds the overtemperature threshold (*arg3* degrees C).

This alarm is generated when the temperature of the left detection point on the I/O board air inlet exceeds the alarm threshold.

Alarm object: I/O Board

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x23000033 | Major | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Location of the I/O board:<br>● BIO<br>● FIO |
| *arg2* | Current reading of the sensor. |
| *arg3* | Alarm threshold. |

## Impact on the System

I/O board overheating affects the PCIe cards on the I/O board. If this alarm is not cleared in time, services related to the PCIe card will be interrupted.

## Possible Causes

- The equipment room temperature exceeds the normal range.
- The air inlet or outlet is blocked.
- Idle slots or spaces are not installed with filler panels.
- A fan module is faulty.
- The I/O board is faulty.

## Procedure

**Step 1** Check whether there are fan module alarms.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Replace the fan module. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

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**Step 3** Check whether the equipment room temperature exceeds the normal range.

- If yes, go to **Step 4**.
- If no, go to **Step 5**.

**Step 4** Reduce the equipment room temperature to the normal range. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Check whether the air inlet or outlet of the server is blocked.

- If yes, go to **Step 6**.
- If no, go to **Step 7**.

**Step 6** Clear the blockage. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 7**.

**Step 7** Check whether there are empty slots in the server.

- If yes, go to **Step 8**.
- If no, go to **Step 9**.

**Step 8** Install filler panels in empty slots. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 9**.

**Step 9** Replace the I/O board. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 10**.

**Step 10** Contact technical support engineer.

**----End**

# 2.3.132 ALM-0x23000039 I/O Board Temperature Fail(I/O Board, Minor Alarm)

## Description

Alarm message:

Failed to obtain temperature of *arg2* on I/O board *arg1*.

This alarm is generated when the system failed to obtain the I/O Board temperature.

Alarm object: I/O Board

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x23000039 | Minor | Yes |

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### Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Name of the I/O board. For example, **PCIe Switch Board**. |
| *arg2* | Name of the hardware component. |

### Impact on the System

The temperature cannot be monitored. No alarm will be reported when the temperature is not in the normal range. The fan adjustment is also affected.

### Possible Causes

The sensor access channel is abnormal, or the sensor chip has failed.

### Procedure

**Step 1** Shut down the OS and then restart it. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Remove and reinstall the power cable or board. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Replace the PCIe card. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Contact technical support engineer.

**----End**

## 2.3.133 ALM-0x23000049 I/O Board Soft-start Circuit Overtemperature (I/O Board, Major Alarm)

### Description

Alarm message:

I/O board *arg1* soft-start circuit MOS FET temperature is too high at detection point *arg2*.

This alarm is generated when the temperature of the I/O board soft-start circuit MOS FET detection point exceeds the alarm threshold.

Alarm object: I/O Board

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### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x23000049 | Major | Yes |

### Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Name of the I/O board. For example, **Pcie Switch Board**. |
| *arg2* | Name of the temperature detection point. For example, **1**. |

### Impact on the System

The power supply to the external components of the I/O board is abnormal.

### Possible Causes

The I/O board is faulty.

### Procedure

**Step 1** Replace the I/O board. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Contact technical support engineer.

**----End**

## 2.3.134 ALM-0x2300004B I/O Board VRD Chip Overtemperature (I/O Board, Major Alarm)

### Description

Alarm message:

The VRD chip *arg1* on the I/O board *arg2* is overtemperature.

This alarm is generated when the VRD chip on the I/O board is overtemperature.

Alarm object: I/O Board

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x2300004B | Major | Yes |

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## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Name of the I/O board. For example, **OSFP_BOARD**. |
| *arg2* | Name of the VRD chip. For example, **OSFP_VRD(XDPE12284C)**. |

## Impact on the System

The power supply to the external components of the I/O board is abnormal.

## Possible Causes

- The ambient temperature is too high.
- The air inlet or outlet is blocked.
- The fan module is faulty.
- The I/O board is faulty.

## Procedure

**Step 1** Check whether both air inlet and outlet overtemperature alarms are generated.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Clear the air inlet and outlet overtemperature alarms according to their handling suggestions. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Check whether a fan alarm is generated.

- If yes, go to **Step 4**.
- If no, go to **Step 5**.

**Step 4** Clear the fan alarm according to its handling suggestions. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Replace the I/O board. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 6**.

**Step 6** Contact technical support engineer.

**----End**

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# 2.3.135 ALM-0x23000051 Failed to Obtain the I/O board VRD Temperature (I/O Board, Minor Alarm)

## Description

Alarm message:

Failed to obtain data of the I/O board *arg1* VRD *arg2* temperature.

This alarm is generated when the system failed to obtain the I/O board VRD temperature.

Alarm object: I/O Board

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x23000051 | Major | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Name of the I/O board. For example, **OSFP_BOARD**. |
| *arg2* | Name of the VRD chip. For example, **OSFP_VRD(XDPE12284C)**. |

## Impact on the System

The temperature cannot be monitored normally, and if the temperature is abnormal, the alarm cannot be given in time.

## Possible Causes

- VRD chip failure.
- The VRD access channel is faulty.

## Procedure

**Step 1** Restart the iBMC. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Remove and reconnect power cables or remove and reinstall the board in the chassis. Then, check whether the alarm is cleared.

- If yes, no further action is required.

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- If no, go to **Step 3**.

**Step 3** Replace the I/O board. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Contact technical support engineer.

**----End**

# 2.3.136 ALM-0x24000001 CPU Board Overtemperature (CPU Board, Minor Alarm)

## Description

Alarm message:

CPU board *arg1* temperature (*arg2* degrees C) exceeds the overtemperature threshold (*arg3* degrees C).

This alarm is generated when the temperature of the CPU board exceeds the overtemperature major threshold. This alarm is cleared when the temperature is within the normal range.

Alarm object: CPU Board

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x24000001 | Minor | Yes |

## Parameters

| Name | Meaning |
|---|---|
| *arg1* | Slot number of the CPU board. |
| *arg2* | Current reading of the sensor. |
| *arg3* | Alarm threshold. |

## Impact on the System

Overheating affects CPU performance. If this alarm is not cleared in time, the server will automatically power off or restart, which causes service interruption and data loss.

## Possible Causes

- A fan module is faulty.

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- The equipment room temperature exceeds the normal range.
- The air inlet or outlet is blocked.
- The CPU board is faulty.

## Procedure

**Step 1** Check whether there are fan module alarms.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Replace the fan module. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Check whether the equipment room temperature exceeds the normal range.

- If yes, go to **Step 4**.
- If no, go to **Step 5**.

**Step 4** Reduce the equipment room temperature to the normal range. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Check whether the air inlet or outlet of the server is blocked.

- If yes, go to **Step 6**.
- If no, go to **Step 7**.

**Step 6** Clear the blockage. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 7**.

**Step 7** Replace the system compute module (SCM) holding the CPU. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 8**.

**Step 8** Contact technical support.

**----End**

# 2.3.137 ALM-0x24000009 CPU Board Soft-Start Circuit Overheating (CPU Board, Major Alarm)

## Description

Alarm message:

System is forcibly shut down due to high temperature of the soft-start circuit *arg1*.

This alarm is generated when the soft-start circuit on the CPU board of the server exceeds 105°C. When the soft-start circuit exceeds 105°C, the CPLD protection mechanism is triggered, which forcibly shut down the server OS.

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Alarm object: CPU Board

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x24000009 | Major | Yes |

## Parameters

| Name | Meaning |
|---|---|
| *arg1* | Number of the slot, in which the compute module holding the CPU board is located. |

## Impact on the System

Services will be interrupted.

## Possible Causes

- The equipment room temperature exceeds the normal range.
- The air inlet or outlet is blocked.
- Idle slots or spaces are not installed with filler panels.
- A fan module is faulty.
- The CPU board is faulty.

## Procedure

**Step 1** Check whether there is fan module alarm generated.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Locate and replace the fan module. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Check whether the equipment room temperature exceeds the normal range.

- If yes, go to **Step 4**.
- If no, go to **Step 5**.

**Step 4** Reduce the equipment room temperature to the normal range. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

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**Step 5** Check whether the air inlet and outlet of the server are blocked.

- If yes, go to **Step 6**.
- If no, go to **Step 7**.

**Step 6** Clear the blockage. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 7**.

**Step 7** Check whether the server has empty slots.

- If yes, go to **Step 8**.
- If no, go to **Step 9**.

**Step 8** Install filler panels in empty slots. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 9**.

**Step 9** Replace the CPU board. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 10**.

**Step 10** Contact technical support.

**----End**

# 2.3.138 ALM-0x27000001 PCH Overtemperature (PCH, Minor Alarm)

## Description

Alarm message:

PCH temperature (*arg1* degreess C) exceeds the overtemperature threshold (*arg2* degreess C).

This alarm is generated when the platform controller hub (PCH) temperature exceeds the overtemperature minor threshold. This alarm is cleared when the temperature is within the normal range.

Alarm object: PCH

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x27000001 | Minor | Yes |

## Parameters

| Name | Meaning |
|---|---|
| *arg1* | Current reading of the sensor. |

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| Name | Meaning |
| --- | --- |
| *arg2* | Alarm threshold. |

## Impact on the System

Overheating affects PCH performance. If the alarm persists, the server may power off or restart, which interrupts services and causes data loss.

## Possible Causes

- The equipment room temperature exceeds the normal range.
- The fan module is faulty.
- The air inlet or outlet is blocked.
- There are unpopulated slots for blades.
- The mainboard is faulty.

## Procedure

**Step 1** Check whether there are fan module alarms.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Replace the fan module. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Check whether the equipment room temperature exceeds the normal range.

- If yes, go to **Step 4**.
- If no, go to **Step 5**.

**Step 4** Reduce the equipment room temperature to the normal range. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Check whether the air inlet or outlet of the server is blocked.

- If yes, go to **Step 6**.
- If no, go to **Step 7**.

**Step 6** Clear the blockage. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 7**.

**Step 7** Check whether there are empty slots in the server.

- If yes, go to **Step 8**.
- If no, go to **Step 9**.

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**Step 8** Install filler panels in empty slots. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 9**.

**Step 9** Replace the mainboard. After the server is powered on, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 10**.

**Step 10** Contact technical support.

**----End**

# 2.3.139 ALM-0x27000025 PCH Overtemperature (PCH, Major Alarm)

## Description

Alarm message:

PCH temperature (*arg1* degreess C) exceeds the overtemperature threshold (*arg2* degreess C).

This alarm is generated when the temperature of the PCH exceeds the alarm threshold. This alarm is cleared when the temperature is within the normal range.

Alarm object: PCH

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x27000025 | Major | Yes |

## Parameters

| Name | Meaning |
|---|---|
| *arg1* | Current reading of the sensor. |
| *arg2* | Alarm threshold. |

## Impact on the System

Overheating affects PCH performance. If the alarm persists, the server may power off or restart, which interrupts services and causes data loss.

## Possible Causes

- The equipment room temperature exceeds the normal range.

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- The fan module is faulty.
- The air inlet or outlet is blocked.
- There are unpopulated slots for blades.
- The mainboard is faulty.

## Procedure

**Step 1** Check whether there are fan module alarms.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Replace the fan module. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Check whether the equipment room temperature exceeds the normal range.

- If yes, go to **Step 4**.
- If no, go to **Step 5**.

**Step 4** Reduce the equipment room temperature to the normal range. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Check whether the air inlet or outlet of the server is blocked.

- If yes, go to **Step 6**.
- If no, go to **Step 7**.

**Step 6** Clear the blockage. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 7**.

**Step 7** Check whether there are empty slots in the server.

- If yes, go to **Step 8**.
- If no, go to **Step 9**.

**Step 8** Install filler panels in empty slots. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 9**.

**Step 9** Replace the mainboard. After the server is powered on, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 10**.

**Step 10** Contact technical support.

**----End**

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# 2.3.140 ALM-0x27000039 PCH Temperature Exceeds the Critical Overtemperature Threshold (PCH, Critical Alarm)

## Description

Alarm message:

PCH temperature (*arg1* degrees C) exceeds the overtemperature threshold (*arg2* degrees C).

This alarm is generated when the temperature of the PCH exceeds the overtemperature threshold.

Alarm object: PCH

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x27000039 | Critical | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Current reading of the sensor. |
| *arg2* | Alarm threshold. |

## Impact on the System

The system is powered off or restarted unexpectedly.

## Possible Causes

- The ambient temperature is too high.
- The air inlet or outlet is blocked.
- The server has empty slots or spaces.
- The fan module is faulty.
- The air duct is not installed.
- The mainboard is faulty.

## Procedure

**Step 1** Check whether both air inlet or outlet high temperature alarms are generated.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Rectify the fault according to troubleshooting suggestions. Then, check whether the alarm is cleared.

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- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Check whether there are fan module alarms.

- If yes, go to **Step 4**.
- If no, go to **Step 5**.

**Step 4** Replace the faulty fan module. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Check whether the equipment room temperature exceeds the normal range.

- If yes, go to **Step 6**.
- If no, go to **Step 7**.

**Step 6** Reduce the equipment room temperature to the normal range. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 7**.

**Step 7** Check whether the server air inlet and outlet are blocked.

- If yes, go to **Step 8**.
- If no, go to **Step 9**.

**Step 8** Clear the blockage. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 9**.

**Step 9** Check whether there are empty slots in the server.

- If yes, go to **Step 11**.
- If no, go to **Step 10**.

**Step 10** Install filler panels in empty slots. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 11**.

**Step 11** Check whether air ducts are installed in the server.

- If yes, go to **Step 13**.
- If no, go to **Step 12**.

**Step 12** Install air ducts properly. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 13**.

**Step 13** Replace the mainboard. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 14**.

**Step 14** Contact technical support engineer.

**----End**

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# 2.3.141 ALM-0x30000011 PIC Card Overtemperature (PIC Card, Minor Alarm)

## Description

Alarm message:

The PIC card *arg1* temperature (*arg2* degrees C) exceeds the overtemperature threshold (*arg3* degrees C).

This alarm is generated when the temperature of the PIC card exceeds the minor threshold.

Alarm object: PIC Card

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x30000011 | Minor | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Slot number of the PIC card. |
| *arg2* | Current reading of the sensor. |
| *arg3* | Alarm threshold. |

## Impact on the System

The PIC card may run unstably, and the service network may be abnormal.

## Possible Causes

- The equipment room temperature exceeds the normal range.
- The fans are faulty.
- Idle slots or spaces are not installed with filler panels.
- The air inlet or air outlet is blocked.
- PIC card is faulty.

## Procedure

**Step 1** Check whether there is fan alarm generated.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

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**Step 2** Replace the fan module. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Check whether the equipment room temperature exceeds the normal range.

- If yes, go to **Step 4**.
- If no, go to **Step 5**.

**Step 4** Reduce the equipment room temperature to the normal range. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Check whether the server air inlet and outlet are blocked.

- If yes, go to **Step 6**.
- If no, go to **Step 7**.

**Step 6** Clear the blockage. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 7**.

**Step 7** Check whether there are empty slots in the server.

- If yes, go to **Step 8**.
- If no, go to **Step 9**.

**Step 8** Install filler panels in empty slots. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 9**.

**Step 9** Replace the PIC card. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 10**.

**Step 10** Contact technical support.

**----End**

# 2.3.142 ALM-0x30000013 PIC Card Overtemperature (PIC Card, Major Alarm)

## Description

Alarm message:

The PIC card *arg1* temperature (*arg2* degrees C) exceeds the overtemperature threshold (*arg3* degrees C).

This alarm is generated when the temperature of the PIC card exceeds the minor threshold.

Alarm object: PIC Card

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## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x30000013 | Major | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Slot number of the PIC card. |
| *arg2* | Current reading of the sensor. |
| *arg3* | Alarm threshold. |

## Impact on the System

The PIC card may run unstably, and the service network may be abnormal.

## Possible Causes

- The equipment room temperature exceeds the normal range.
- The fans are faulty.
- Idle slots or spaces are not installed with filler panels.
- The air inlet or air outlet is blocked.
- PIC card is faulty.

## Procedure

**Step 1** Check whether there is fan alarm generated.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Replace the fan module. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Check whether the equipment room temperature exceeds the normal range.

- If yes, go to **Step 4**.
- If no, go to **Step 5**.

**Step 4** Reduce the equipment room temperature to the normal range. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Check whether the server air inlet and outlet are blocked.

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- If yes, go to **Step 6**.
- If no, go to **Step 7**.

**Step 6** Clear the blockage. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 7**.

**Step 7** Check whether there are empty slots in the server.

- If yes, go to **Step 8**.
- If no, go to **Step 9**.

**Step 8** Install filler panels in empty slots. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 9**.

**Step 9** Replace the PIC card. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 10**.

**Step 10** Contact technical support.

**----End**

# 2.3.143 ALM-0x30000023 Failed to Read PIC Card Temperature (PIC Card, Minor Alarm)

## Description

Alarm message:

Failed to obtain data of the PIC card *arg1* temperature.

This alarm is generated when the system failed to obtain the temperature of the PIC card.

Alarm object: PIC Card

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x30000023 | Minor | Yes |

## Parameters

| Name | Meaning |
|---|---|
| *arg1* | Slot number of PIC card |

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### Impact on the System

The temperature cannot be monitored. No alarm will be reported when the temperature is not in the normal range.

### Possible Causes

- The iBMC does not work normally.
- The PIC card does not work normally.

### Procedure

**Step 1** Restart the iBMC. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Remove and reinstall the power cable or board. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Replace the PIC card. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Contact technical support.

**----End**

## 2.3.144 ALM-0x32000011 Disk Backplane Expander Chip Overtemperature (Expander,Minor Alarm)

### Description

Alarm message:

The current temperature of *arg1* disk backplane *arg2* expander chip (*agr3* °C) is higher than the overtemperature threshold (*arg4* °C).

This alarm is generated when the disk backplane expander chip overtemperature.

Alarm object: Expander

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x32000011 | Minor | Yes |

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## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Location of the disk backplane. |
| *arg2* | Name of the disk backplane. |
| *arg3* | Current reading of the sensor. |
| *arg4* | Alarm threshold. |

## Impact on the System

Hard disks cannot be accessed.

## Possible Causes

- The ambient temperature exceeds the normal range.
- The air inlet or outlet is blocked.
- Idle slots or spaces are not installed with filler panels.
- A fan module is faulty.
- The air duct is not installed.
- The disk backplane expander chip is faulty.

## Procedure

**Step 1** Check whether there are fan module alarms.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Replace the fan module. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Check whether the equipment room temperature exceeds the normal range.

- If yes, go to **Step 4**.
- If no, go to **Step 5**.

**Step 4** Reduce the equipment room temperature to the normal range. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Check whether the air inlet or outlet of the server is blocked.

- If yes, go to **Step 6**.
- If no, go to **Step 7**.

**Step 6** Clear the blockage. After 5 minutes, check whether the alarm is cleared.

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- If yes, no further action is required.
- If no, go to **Step 7**.

**Step 7** Check whether there are empty slots in the server.

- If yes, go to **Step 9**.
- If no, go to **Step 8**.

**Step 8** Install filler panels in empty slots. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 9**.

**Step 9** Power off the server, and check whether the air duct is properly installed in the server.

- If yes, no further action is required.
- If no, go to **Step 10**.

**Step 10** Install the air duct properly, and power on the server. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 11**.

**Step 11** Replace the disk backplane. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 12**.

**Step 12** Contact technical support engineer.

**----End**

# 2.3.145 ALM-0x38000003 CPU JC Overtemperature (JC Chip, Minor Alarm)

## Description

Alarm message:

The maximum CPU *arg1* JC chip temperature (*arg2* degrees C) exceeds the overtemperature threshold (*arg3* degrees C).

This alarm is generated when the JC temperature of the CPU exceeds the minor threshold.

Alarm object: JC Chip

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x38000003 | Minor | Yes |

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## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Socket No. of the CPU. |
| *arg2* | Current reading of the sensor. |
| *arg3* | Alarm threshold. |

## Impact on the System

The server stability is affected.

## Possible Causes

- A fan module is faulty.
- The equipment room temperature exceeds the normal range.
- The air inlet or outlet is blocked.
- Idle slots or spaces are not installed with filler panels.
- The air duct is not installed.
- The mainboard is faulty.

## Procedure

**Step 1** Check whether there are fan module alarms.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Replace the fan module. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Check whether the equipment room temperature exceeds the normal range.

- If yes, go to **Step 4**.
- If no, go to **Step 5**.

**Step 4** Reduce the equipment room temperature to the normal range. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Check whether the air inlet or outlet of the server is blocked.

- If yes, go to **Step 6**.
- If no, go to **Step 7**.

**Step 6** Clear the blockage. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.

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- If no, go to **Step 7**.

**Step 7** Check whether there are empty slots in the server.

- If yes, go to **Step 8**.
- If no, go to **Step 9**.

**Step 8** Install filler panels in empty slots. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 9**.

**Step 9** Check whether the server is installed with an air duct.

- If yes, go to **Step 11**.
- If no, go to **Step 10**.

**Step 10** Install an air duct. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 11**.

**Step 11** Replace the mainboard. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 12**.

**Step 12** Contact technical support engineer.

**----End**

# 2.3.146 ALM-0x38000005 CPU JC Overtemperature (JC Chip, Major Alarm)

## Description

Alarm message:

The maximum CPU *arg1* JC chip temperature (*arg2* degrees C) exceeds the overtemperature threshold (*arg3* degrees C).

This alarm is generated when the JC temperature of the CPU exceeds the minor threshold.

Alarm object: JC Chip

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x38000005 | Major | Yes |

## Parameters

| Name | Meaning |
|---|---|
| *arg1* | Socket No. of the CPU. |

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| Name | Meaning |
| --- | --- |
| *arg2* | Current reading of the sensor. |
| *arg3* | Alarm threshold. |

## Impact on the System

The server stability is affected.

## Possible Causes

- A fan module is faulty.
- The equipment room temperature exceeds the normal range.
- The air inlet or outlet is blocked.
- Idle slots or spaces are not installed with filler panels.
- The air duct is not installed.
- The mainboard is faulty.

## Procedure

**Step 1** Check whether there are fan module alarms.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Replace the fan module. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Check whether the equipment room temperature exceeds the normal range.

- If yes, go to **Step 4**.
- If no, go to **Step 5**.

**Step 4** Reduce the equipment room temperature to the normal range. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Check whether the air inlet or outlet of the server is blocked.

- If yes, go to **Step 6**.
- If no, go to **Step 7**.

**Step 6** Clear the blockage. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 7**.

**Step 7** Check whether there are empty slots in the server.

- If yes, go to **Step 8**.

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- If no, go to **Step 9**.

**Step 8** Install filler panels in empty slots. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 9**.

**Step 9** Check whether the server is installed with an air duct.

- If yes, go to **Step 11**.
- If no, go to **Step 10**.

**Step 10** Install an air duct. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 11**.

**Step 11** Replace the mainboard. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 12**.

**Step 12** Contact technical support engineer.

**----End**

# 2.3.147 ALM-0x38000007 Failed to Read CPU JC Temperature (JC Chip, Minor Alarm)

## Description

Alarm message:

Failed to obtain data of the JC chip temperature for CPU *arg1*.

This alarm is generated when the system failed to obtain the JC temperature of the CPU.

Alarm object: JC Chip

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x38000007 | Minor | Yes |

## Parameters

| Name | Meaning |
|---|---|
| *arg1* | Socket No. of the CPU. |

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### Impact on the System

The temperature cannot be monitored. No alarm will be reported when the temperature is not in the normal range.

### Possible Causes

- The iBMC does not work normally.
- The JC chip does not work normally.

### Procedure

**Step 1** Restart the iBMC. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Remove and reinstall the power cable or board. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Replace the mainboard. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Contact technical support.

**----End**

## 2.3.148 ALM-0x3E000013 PCIe Switch Overtemperature (PCIe Switch, Minor Alarm)

### Description

Alarm message:

The *arg1* PCIe switch *arg2* temperature (*arg3* degreess C) exceeds the overtemperature threshold (*arg4* degreess C).

This alarm is generated when the temperature of the PCIe switch exceeds the major threshold.

Alarm object: PCIe Switch

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x3E000013 | Minor | Yes |

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## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Component where the PCIe switch is located. For example, **mainboard** or **HDD backplane N**. |
| *arg2* | Slot number of the PCIe switch. |
| *arg3* | Current reading of the sensor. |
| *arg4* | Alarm threshold. |

## Impact on the System

The PCIe devices may run unstably, and the system may run abnormally.

## Possible Causes

- The fans are faulty.
- The equipment room temperature exceeds the normal range.
- The air inlet or outlet is blocked.
- Idle slots or spaces are not installed with filler panels.
- Air ducts are not installed.
- The mainboard is faulty.

## Procedure

**Step 1** Check whether there is fan module alarm generated.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Locate and replace the fan module. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Check whether the equipment room temperature exceeds the normal range.

- If yes, go to **Step 4**.
- If no, go to **Step 5**.

**Step 4** Reduce the equipment room temperature to the normal range. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Check whether the server air inlet and outlet are blocked.

- If yes, go to **Step 6**.
- If no, go to **Step 7**.

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**Step 6** Clear the blockage. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 7**.

**Step 7** Check whether there are empty slots in the server.

- If yes, go to **Step 8**.
- If no, go to **Step 9**.

**Step 8** Install filler panels in empty slots. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 9**.

**Step 9** Check whether air ducts are installed in the server.

- If yes, go to **Step 11**
- If no, go to **Step 10**.

**Step 10** Install air ducts properly. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 11**.

**Step 11** Replace the mainboard. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 12**.

**Step 12** Contact technical support engineer.

**----End**

# 2.3.149 ALM-0x3E000015 PCIe Switch Overtemperature (PCIe Switch, Major Alarm)

## Description

Alarm message:

The *arg1* PCIe switch *arg2* temperature (*arg3* degreess C) exceeds the overtemperature threshold (*arg4* degreess C).

This alarm is generated when the temperature of the PCIe switch exceeds the major threshold.

Alarm object: PCIe Switch

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x3E000015 | Major | Yes |

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## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Component where the PCIe switch is located. For example, **mainboard** or **HDD backplane N**. |
| *arg2* | Slot number of the PCIe switch. |
| *arg3* | Current reading of the sensor. |
| *arg4* | Alarm threshold. |

## Impact on the System

The PCIe devices may run unstably, and the system may run abnormally.

## Possible Causes

- The fans are faulty.
- The equipment room temperature exceeds the normal range.
- The air inlet or outlet is blocked.
- Idle slots or spaces are not installed with filler panels.
- Air ducts are not installed.
- The mainboard is faulty.

## Procedure

**Step 1** Check whether there is fan module alarm generated.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Locate and replace the fan module. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Check whether the equipment room temperature exceeds the normal range.

- If yes, go to **Step 4**.
- If no, go to **Step 5**.

**Step 4** Reduce the equipment room temperature to the normal range. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Check whether the server air inlet and outlet are blocked.

- If yes, go to **Step 6**.
- If no, go to **Step 7**.

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**Step 6** Clear the blockage. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 7**.

**Step 7** Check whether there are empty slots in the server.

- If yes, go to **Step 8**.
- If no, go to **Step 9**.

**Step 8** Install filler panels in empty slots. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 9**.

**Step 9** Check whether air ducts are installed in the server.

- If yes, go to **Step 11**
- If no, go to **Step 10**.

**Step 10** Install air ducts properly. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 11**.

**Step 11** Replace the mainboard. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 12**.

**Step 12** Contact technical support engineer.

**----End**

# 2.3.150 ALM-0x3E000017 Failed to Read PCIe Switch Temperature (PCIe Switch, Minor Alarm)

## Description

Alarm message:

Failed to obtain data of the *arg1* PCIe switch *arg2* temperature.

This alarm is generated when the system failed to obtain the temperature of the PCIe switch.

Alarm object: PCIe Switch

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x3E000017 | Minor | Yes |

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### Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Component where the PCIe switch is located. For example, **mainboard** or **HDD backplane N**. |
| *arg2* | Slot number of the PCIe switch. |

### Impact on the System

The temperature cannot be monitored. No alarm will be reported when the temperature is not in the normal range.

### Possible Causes

The PCIe switch chip does not work normally.

### Procedure

**Step 1** Restart the iBMC. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Remove and reinstall the power cable or board. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Contact technical support engineer.

**----End**

## 2.3.151 ALM-0x3E000023 PCIe Switch Temperature Exceeds the Critical Overtemperature Threshold (PCIe Switch, Critical Alarm)

### Description

Alarm message:

The *arg1* PCIe switch *arg2* temperature (*arg3* degrees C) exceeds the overtemperature threshold (*arg4* degrees C).

This alarm is generated when the temperature of the PCIe switch exceeds the overtemperature threshold.

Alarm object: PCIe Switch

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## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x3E000023 | Critical | Yes |

## Parameters

| Name | Meaning |
|---|---|
| *arg1* | Component where the PCIe switch is located. For example, **mainboard** or **HDD backplane *N***. |
| *arg2* | Slot number of the PCIe switch. |
| *arg3* | Current reading of the sensor. |
| *arg4* | Alarm threshold. |

## Impact on the System

The PCIe device may run unstably or become faulty, or the system may run abnormally.

## Possible Causes

- The ambient temperature is too high.
- The air inlet or outlet is blocked.
- The server has empty slots or spaces.
- The fan module is faulty.
- The air duct is not installed.
- The mainboard is faulty.

## Procedure

**Step 1** Check whether both air inlet or outlet high temperature alarms are generated.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Rectify the fault according to troubleshooting suggestions. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Check whether there are fan module alarms.

- If yes, go to **Step 4**.
- If no, go to **Step 5**.

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**Step 4** Replace the faulty fan module. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Check whether the equipment room temperature exceeds the normal range.

- If yes, go to **Step 6**.
- If no, go to **Step 7**.

**Step 6** Reduce the equipment room temperature to the normal range. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 7**.

**Step 7** Check whether the server air inlet and outlet are blocked.

- If yes, go to **Step 8**.
- If no, go to **Step 9**.

**Step 8** Clear the blockage. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 9**.

**Step 9** Check whether there are empty slots in the server.

- If yes, go to **Step 11**.
- If no, go to **Step 10**.

**Step 10** Install filler panels in empty slots. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 11**.

**Step 11** Check whether air ducts are installed in the server.

- If yes, go to **Step 13**.
- If no, go to **Step 12**.

**Step 12** Install air ducts properly. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 13**.

**Step 13** Replace the component where the PCIe switch is located. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 14**.

**Step 14** Contact technical support engineer.

**----End**

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# 2.3.152 ALM-0x40000017 Soft-Start Circuit Temperature of the GPU Carrier Board Too High (xPU Carrier Board, Major Alarm)

## Description

Alarm message:

The soft-start circuit MOS FET temperature at detection point *arg2* of xPU carrier board *arg1* is too high.

This alarm is generated when the soft-start circuit MOS FET temperature at detection point of the xPU carrier board is too high.

Alarm object: xPU Carrier Board

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x40000017 | Major | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Slot number of the PCIe riser, for example, **Riser1**or **PCIe Slot1**. |
| *arg2* | Temperature detection point. For example, **SLOT1~8**, **STB_12V0**, **HDDR_12V0**, **HDDL_12V0**, **SYS_12V0**, or **SDI_12V0**. |

## Impact on the System

The protection mechanism is triggered and the OS is forcibly shut down.

## Possible Causes

- The equipment room temperature exceeds the normal range.
- The air inlet or outlet is blocked.
- Idle slots or spaces are not installed with filler panels.
- The fan module is faulty.
- The power consumption of the GPU carrier board is too high.

## Procedure

**Step 1** Check whether both air inlet and outlet overtemperature alarms are generated.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

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**Step 2** Clear the air inlet and outlet overtemperature alarms according to their handling suggestions. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Check whether a fan alarm is generated.

- If yes, go to **Step 4**.
- If no, go to **Step 5**.

**Step 4** Clear the fan alarm according to its handling suggestions. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Replace the GPU carrier board for which the alarm is generated. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 6**.

**Step 6** Contact technical support engineer.

**----End**

# 2.3.153 ALM-0x4000001D Soft-Start Circuit Temperature of the GPU Carrier Board Too High (GPU Carrier Board, Major Alarm)

## Description

Alarm message:

MOS temperature of *arg2* on GPU carrier board *arg1* exceeds the protection point.

This alarm is generated when the soft-start circuit temperature at specified detection point of the GPU carrier board is too high.

Alarm object: GPU Carrier Board

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x4000001D | Major | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Slot number of the GPU carrier board. |
| *arg2* | Temperature detection point. |

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## Impact on the System

The GPU carrier board may run unstably or fail, and the system may be powered off unexpectedly.

## Possible Causes

- The equipment room temperature exceeds the normal range.
- The air inlet or outlet is blocked.
- Idle slots or spaces are not installed with filler panels.
- The fan module is faulty.
- The heat sink is not properly connected to the GPU card.
- The GPU carrier board is faulty.

## Procedure

**Step 1** Check whether both air inlet and outlet overtemperature alarms are generated.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Clear the air inlet and outlet overtemperature alarms according to their handling suggestions. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Check whether a fan alarm is generated.

- If yes, go to **Step 4**.
- If no, go to **Step 5**.

**Step 4** Clear the fan alarm according to its handling suggestions. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Check whether the GPU card heat sink is properly installed.

- If yes, go to **Step 7**.
- If no, go to **Step 6**.

**Step 6** Reinstall the GPU card heat sink. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 7**.

**Step 7** Replace the GPU carrier board for which the alarm is generated. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 8**.

**Step 8** Contact technical support engineer.

**----End**

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# 2.3.154 ALM-0x4000001F GPU Carrier Board Overtemperature (GPU Carrier Board, Major Alarm)

## Description

Alarm message:

GPU carrier board *arg1* temperature (*arg2* degrees C) at *arg3* detection point exceeds the overtemperature threshold (*arg4* degrees C).

This alarm is generated when the temperature at specified detection point of the GPU carrier board is too high.

Alarm object: GPU Carrier Board

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x4000001F | Major | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Slot number of the GPU carrier board. |
| *arg2* | Current reading of the sensor. |
| *arg3* | Temperature detection point. |
| *arg4* | Alarm threshold. |

## Impact on the System

The GPU carrier board may run unstably or fail, and the system may run abnormally.

## Possible Causes

- The equipment room temperature exceeds the normal range.
- The air inlet or outlet is blocked.
- Idle slots or spaces are not installed with filler panels.
- The fan module is faulty.
- The GPU carrier board is faulty.

## Procedure

**Step 1** Check whether both air inlet and outlet overtemperature alarms are generated.

- If yes, go to **Step 2**.

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- If no, go to **Step 3**.

**Step 2** Clear the air inlet and outlet overtemperature alarms according to their handling suggestions. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Check whether a fan alarm is generated.

- If yes, go to **Step 4**.
- If no, go to **Step 5**.

**Step 4** Clear the fan alarm according to its handling suggestions. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Replace the GPU carrier board for which the alarm is generated. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 6**.

**Step 6** Contact technical support engineer.

**----End**

# 2.3.155 ALM-0x45000007 Failed to Obtain the PCIe Retimer Temperature (PCIe Retimer, Minor Alarm)

## Description

Alarm message:

Failed to obtain the current temperature of *arg1* Retimer *arg2*.

This alarm is generated when Failed to obtain the pcie retimer temperature

Alarm object: PCIe Retimer

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x45000007 | Minor | Yes |

## Parameters

| Name | Meaning |
|---|---|
| *arg1* | Serial number of the PCIe riser,for example, **riser1** or **riser2**. |

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| Name | Meaning |
| --- | --- |
| *arg2* | ID of the component for which the alarm is generated, for example, **1** or **2**. |

## Impact on the System

The temperature cannot be monitored. No alarm will be reported when the temperature is not in the normal range. The fan adjustment is also affected.

## Possible Causes

- The PCIe riser card is incorrectly inserted or the slot is abnormal.
- The I2C link between the BMC and the retimer is disconnected or the processor is abnormal.
- The mainboard is faulty.

## Procedure

**Step 1** Power off the server and check whether there is damage or poor contact between the component and its slot.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Replace the component and check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Replace the mainboard and check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Contact technical support engineer.

**----End**

# 2.3.156 ALM-0x4500000D PCIe Card Retimer Temperature Exceeds the Overtemperature Threshold (PCIe Retimer, Minor Alarm)

## Description

Alarm message:

PCIe card *arg1* retimer*arg2* temperature (*arg3* degrees C) exceeds the overtemperature threshold (*arg4* degrees C).

This alarm is generated when the PCIe card retimer temperature exceeds the overtemperature threshold.

Alarm object: PCIe Retimer

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## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x4500000D | Minor | Yes |

## Parameters

| Name | Meaning |
|---|---|
| *arg1* | Slot No. of the alarmed PCIe card. |
| *arg2* | No. of the alarmed Retimer. |
| *arg3* | Current reading of the sensor. |
| *arg4* | Alarm threshold. |

## Impact on the System

The overheating affects the operation and functions of the PCIe card.

## Possible Causes

- The fan module is faulty.
- The ambient temperature exceeds the normal range.
- The air inlet or outlet is blocked.
- The retimer is faulty.

## Procedure

**Step 1** Check whether there are fan module alarms.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Replace the faulty fan module. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Check whether the equipment room temperature exceeds the normal range.

- If yes, go to **Step 4**.
- If no, go to **Step 5**.

**Step 4** Reduce the equipment room temperature to the normal range. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

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**Step 5** Check whether the server air inlet and outlet are blocked.

- If yes, go to **Step 6**.
- If no, go to **Step 7**.

**Step 6** Clear the blockage. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 7**.

**Step 7** Replace the PCIe card. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 8**.

**Step 8** Contact technical support engineer.

**----End**

# 2.3.157 ALM-0x53000003 OCP Hardware Component Overtemperature (OCP Card, Minor Alarm)

## Description

Alarm message:

The [*arg1*] *arg2* [*arg3*] temperature (*arg4* degrees C) exceeds the overtemperature threshold (*arg5* degrees C) (SN:*arg6*, BN:*arg7*).

NOTE

From iBMC V3.07.00.57, the OCP card alarms will also include the SN and BOM code.

This alarm is generated when the OCP hardware component overtemperature.

Alarm object: OCP Card

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x53000003 | Minor | Yes |

## Parameters

| Name | Meaning |
|---|---|
| *arg1* | OCP locatin, for example, **OCP Card 1(MCX565M-CDAB)**. |
| *arg2* | OCP locatin, for example, **OCP Card 2(MCX565M-CDAB)**. |
| *arg3* | OCP locatin, for example, **OCP Card 3(MCX565M-CDAB)**. |
| *arg4* | Current reading of the sensor. |
| *arg5* | Alarm threshold. |

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| Name | Meaning |
| --- | --- |
| *arg6* | Serial number of the OCP card. |
| *arg7* | BOM code of the OCP card. |

## Impact on the System

If the temperature is too high, the OCP device may run unstably. If the alarm persists, OCP services may fail to run properly.

## Possible Causes

- The fan is faulty.
- The ambient temperature is too high.
- The air intake vent or air exhaust vent of the server is blocked.
- The OCP card is faulty.

## Procedure

**Step 1** Check whether there is a fan alarm.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Replace the fan module. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Check whether the equipment room temperature exceeds the normal range.

- If yes, go to **Step 4**.
- If no, go to **Step 5**.

**Step 4** Reduce the equipment room temperature to the normal range. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Check whether the server air inlet or outlet is blocked.

- If yes, go to **Step 6**.
- If no, go to **Step 7**.

**Step 6** Clear the blockage. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 7**.

**Step 7** Replace the OCP card. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 8**.

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**Step 8** Contact technical support engineer.

**----End**

# 2.3.158 ALM-0x53000005 Failed to Read the OCP Hardware Component Temperature (OCP Card, Minor Alarm)

## Description

Alarm message:

Failed to obtain data of the [*arg1*] *arg2 arg3* temperature (SN:*arg4*, BN:*arg5*).

NOTE

From iBMC V3.07.00.57, the OCP card alarms will also include the SN and BOM code.

This alarm is generated when Failed to read the OCP hardware component temperature.

Alarm object: OCP Card

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x53000005 | Minor | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | OCP locatin, for example, **OCP Card 1(MCX565M-CDAB)**. |
| *arg2* | OCP locatin, for example, **OCP Card 2(MCX565M-CDAB)**. |
| *arg3* | Optical Module. |
| *arg4* | Serial number of the OCP card. |
| *arg5* | BOM code of the OCP card. |

## Impact on the System

The temperature cannot be monitored. No alarm will be reported when the temperature is not in the normal range. The fan adjustment is also affected.

## Possible Causes

The sensor access channel is abnormal, or the sensor chip has failed.

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## Procedure

**Step 1** Restart the iBMC.

**Step 2** Shut down and restart the OS. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Power off the device, remove and reinstall the device, and power on and check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Replace the component and check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Contact technical support engineer.

**----End**

# 2.3.159 ALM-0x53000009 OCP Hardware Component Optical Module Overtemperature (OCP Card, Minor Alarm)

## Description

Alarm message:

The [*arg1*] *arg2* [*arg3*] temperature (*arg4* degrees C) exceeds the overtemperature threshold (*arg5* degrees C) (SN:*arg6*, BN:*arg7*).

NOTE

From iBMC V3.07.00.57, the OCP card alarms will also include the SN and BOM code.

This alarm is generated when the OCP hardware component optical module overtemperature.

Alarm object: OCP Card

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x53000009 | Minor | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | OCP locatin, for example, **OCP Card 1(MCX565M-CDAB)**. |

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| Name | Meaning |
| --- | --- |
| *arg2* | OCP locatin, for example, **OCP Card 2(MCX565M-CDAB)**. |
| *arg4* | Current reading of the sensor. |
| *arg5* | Alarm threshold. |
| *arg6* | Serial number of the OCP card. |
| *arg7* | BOM code of the OCP card. |

## Impact on the System

The optical module temperature is not within the normal range, which affects the operation of the optical module and fan speed adjustment.

## Possible Causes

- A fan alarm is generated for the server.
- The ambient temperature of the equipment room exceeds the normal range.
- The air inlet or outlet of the server is blocked.
- The optical module is faulty.

## Procedure

**Step 1** Check whether there is a fan alarm.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Replace the fan module. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Check whether the equipment room temperature exceeds the normal range.

- If yes, go to **Step 4**.
- If no, go to **Step 5**.

**Step 4** Reduce the equipment room temperature to the normal range. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Check whether the server air inlet or outlet is blocked.

- If yes, go to **Step 6**.
- If no, go to **Step 7**.

**Step 6** Clear the blockage. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.

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- If no, go to **Step 7**.

**Step 7** Replace the optical module. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 8**.

**Step 8** Contact technical support engineer.

**----End**

# 2.3.160 ALM-0x53000017 Major Alarm of OCP Card Overheating (OCP Card, Major Alarm)

## Description

Alarm message:

The *arg1* [*arg2*] temperature (*arg3* degrees C) exceeds the overtemperature threshold (*arg4* degrees C) (SN:*arg5*, BN:*arg6*).

NOTE

From iBMC V3.07.00.57, the OCP card alarms will also include the SN and BOM code.

This alarm is generated when the temperature of the OCP card exceeds the overtemperature threshold.

Alarm object: OCP Card

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x53000017 | Major | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Location of the alarmed OCP card, for example, **OCP Card 1(MCX565M-CDAB)**. |
| *arg2* | NIC Card. |
| *arg3* | Current reading of the sensor. |
| *arg4* | Alarm threshold. |
| *arg5* | Serial number of the OCP card. |
| *arg6* | BOM code of the OCP card. |

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## Impact on the System

If the temperature is too high, the OCP device may run unstably. If the alarm persists, OCP services may fail to run properly.

## Possible Causes

- The fan is faulty.
- The ambient temperature is too high.
- The air intake vent or air exhaust vent of the server is blocked.
- The OCP card is faulty.

## Procedure

**Step 1** Check whether there are fan module alarms.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Replace the faulty fan module. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Check whether the equipment room temperature exceeds the normal range.

- If yes, go to **Step 4**.
- If no, go to **Step 5**.

**Step 4** Reduce the equipment room temperature to the normal range. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Check whether the server air inlet and outlet are blocked.

- If yes, go to **Step 6**.
- If no, go to **Step 7**.

**Step 6** Clear the blockage. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 7**.

**Step 7** Replace the OCP card. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 8**.

**Step 8** Contact technical support engineer.

**----End**

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# 2.3.161 ALM-0x53000019 The OCP Card Temperature Exceeds the Critical Overtemperature Threshold (OCP Card, Critical Alarm)

## Description

Alarm message:

The *arg1* arg*2* temperature (*arg3* degrees C) exceeds the overtemperature threshold (*arg4* degrees C) (SN:*arg5*, BN:*arg6*).

NOTE

From iBMC V3.07.00.57, the OCP card alarms will also include the SN and BOM code.

This alarm is generated when the temperature of the OCP card exceeds the overtemperature threshold.

Alarm object: OCP Card

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x53000019 | Critical | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Location of the alarmed OCP card, for example, **OCP Card 1(MCX565M-CDAB)**. |
| *arg2* | NIC Card. |
| *arg3* | Current reading of the sensor. |
| *arg4* | Alarm threshold. |
| *arg5* | Serial number of the OCP card. |
| *arg6* | BOM code of the OCP card. |

## Impact on the System

If the temperature is too high, the OCP device may run unstably. If the alarm persists, OCP services may fail to run properly.

## Possible Causes

- The fan is faulty.
- The ambient temperature is too high.

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- The air intake vent or air exhaust vent of the server is blocked.
- The OCP card is faulty.

## Procedure

**Step 1** Check whether there are fan module alarms.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Replace the faulty fan module. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Check whether the equipment room temperature exceeds the normal range.

- If yes, go to **Step 4**.
- If no, go to **Step 5**.

**Step 4** Reduce the equipment room temperature to the normal range. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Check whether the server air inlet and outlet are blocked.

- If yes, go to **Step 6**.
- If no, go to **Step 7**.

**Step 6** Clear the blockage. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 7**.

**Step 7** Replace the OCP card. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 8**.

**Step 8** Contact technical support engineer.

**----End**

# 2.3.162 ALM-0x5300001B The OCP Optical Module Temperature Exceeds the Major Overtemperature Threshold (OCP Card, Major Alarm)

## Description

Alarm message:

The *arg1 arg2* optical module *arg3* temperature (*arg4* degrees C) exceeds the overtemperature threshold (*arg5* degrees C) (SN:*arg4*, BN:*arg5*).

NOTE

From iBMC V3.07.00.57, the OCP card alarms will also include the SN and BOM code.

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This alarm is generated when the temperature of the OCP optical module exceeds the overtemperature threshold.

Alarm object: OCP Card

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x5300001B | Major | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Location of the alarmed OCP card, for example, **OCP Card 1(MCX565M-CDAB)**. |
| *arg2* | Current reading of the sensor. |
| *arg3* | Alarm threshold. |
| *arg4* | Serial number of the OCP card. |
| *arg5* | BOM code of the OCP card. |

## Impact on the System

The optical module temperature is not within the normal range, which affects the operation of the optical module.

## Possible Causes

- A fan alarm is generated for the server.
- The ambient temperature of the equipment room exceeds the normal range.
- The air inlet or outlet of the server is blocked.
- The optical module is faulty.

## Procedure

**Step 1** Check whether there are fan module alarms.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Replace the faulty fan module. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Check whether the equipment room temperature exceeds the normal range.

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- If yes, go to **Step 4**.
- If no, go to **Step 5**.

**Step 4** Reduce the equipment room temperature to the normal range. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Check whether the server air inlet and outlet are blocked.

- If yes, go to **Step 6**.
- If no, go to **Step 7**.

**Step 6** Clear the blockage. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 7**.

**Step 7** Replace the optical module. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 8**.

**Step 8** Contact technical support engineer.

**----End**

# 2.3.163 ALM-0x5300001D The OCP Optical Module Temperature Exceeds the Critical Overtemperature Threshold (OCP Card, Critical Alarm)

## Description

Alarm message:

The *arg1* optical module temperature (*arg2* degrees C) exceeds the overtemperature threshold (*arg3* degrees C) (SN:*arg4*, BN:*arg5*).

NOTE

From iBMC V3.07.00.57, the OCP card alarms will also include the SN and BOM code.

This alarm is generated when the temperature of the OCP optical module exceeds the overtemperature threshold.

Alarm object: OCP Card

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x5300001D | Critical | Yes |

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## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Location of the alarmed OCP card, for example, **OCP Card 1(MCX565M-CDAB)**. |
| *arg2* | Current reading of the sensor. |
| *arg3* | Alarm threshold. |
| *arg4* | Serial number of the OCP card. |
| *arg5* | BOM code of the OCP card. |

## Impact on the System

The optical module temperature is not within the normal range, which affects the operation of the optical module.

## Possible Causes

- A fan alarm is generated for the server.
- The ambient temperature of the equipment room exceeds the normal range.
- The air inlet or outlet of the server is blocked.
- The optical module is faulty.

## Procedure

**Step 1** Check whether there are fan module alarms.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Replace the faulty fan module. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Check whether the equipment room temperature exceeds the normal range.

- If yes, go to **Step 4**.
- If no, go to **Step 5**.

**Step 4** Reduce the equipment room temperature to the normal range. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Check whether the server air inlet and outlet are blocked.

- If yes, go to **Step 6**.
- If no, go to **Step 7**.

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**Step 6** Clear the blockage. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 7**.

**Step 7** Replace the optical module. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 8**.

**Step 8** Contact technical support engineer.

**----End**

# 2.3.164 ALM-0x5B000005 The GPU Reaches the Minor Maximum Operating Temperature Difference Threshold (GPU, Minor Alarm)

## Description

Alarm message:

The value of temperature difference between the current *arg1* temperature and the maximum operating temperature is *arg2* degrees C, which is lower than the temperature difference threshold (*arg3* degrees C).

This alarm is generated when the value of temperature difference between the current temperature and the maximum operating temperature is lower than the temperature difference threshold.

Alarm object: GPU

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x5B000005 | Minor | Yes |

## Parameters

| Name | Meaning |
|---|---|
| *arg1* | Name of the GPU. For example, **GPU Card 1 (NVIDIA L40)**. |
| *arg2* | Current reading of the sensor. |
| *arg3* | Alarm threshold. |

## Impact on the System

Overheating makes the GPU frequency decrease and the GPU performance deteriorate. If this alarm is not cleared in time, services related to the GPU may be interrupted.

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### Possible Causes

- The fan module is faulty.
- The ambient temperature is too high.
- The air inlet or outlet is blocked.
- The GPU card is faulty.

### Procedure

**Step 1** Check whether there are fan module alarms.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Replace the fan module. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Check whether the equipment room temperature exceeds the normal range.

- If yes, go to **Step 4**.
- If no, go to **Step 5**.

**Step 4** Reduce the equipment room temperature to the normal range. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Check whether the air inlet or outlet of the server is blocked.

- If yes, go to **Step 6**.
- If no, go to **Step 7**.

**Step 6** Clear the blockage. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 7**.

**Step 7** Replace the GPU card. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 8**.

**Step 8** Contact technical support engineer.

**----End**

## 2.3.165 ALM-0x5B00000B The GPU Reaches the Major Maximum Operating Temperature Difference Threshold (GPU, Major Alarm)

### Description

Alarm message:

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The value of temperature difference between the current *arg1* temperature and the maximum operating temperature is *arg2* degrees C, which is lower than the temperature difference threshold (*arg3* degrees C).

This alarm is generated when the GPU reaches the major maximum operating temperature difference threshold.

Alarm object: GPU

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x5B00000B | Major | Yes |

## Parameters

| Name | Meaning |
|---|---|
| *arg1* | Device name of the component. For example, **GPU Card $ (NVIDIA L40)**. |
| *arg2* | Current reading of the sensor. |
| *arg3* | Alarm threshold. |

## Impact on the System

Overheating makes the GPU frequency decrease and the GPU performance deteriorate. If this alarm is not cleared in time, services related to the GPU may be interrupted.

## Possible Causes

- The fan module is faulty.
- The ambient temperature is too high.
- The air inlet or outlet is blocked.
- The GPU card is faulty.

## Procedure

**Step 1** Check whether there are fan module alarms.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Replace the faulty fan module. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Check whether the equipment room temperature exceeds the normal range.

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- If yes, go to **Step 4**.
- If no, go to **Step 5**.

**Step 4** Reduce the equipment room temperature to the normal range. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Check whether the server air inlet and outlet are blocked.

- If yes, go to **Step 6**.
- If no, go to **Step 7**.

**Step 6** Clear the blockage. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 7**.

**Step 7** Replace the PCIe riser card. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 8**.

**Step 8** Contact technical support engineer.

**----End**

# 2.3.166 ALM-0x5D000005 The AI Module Temperature Exceeds the Minor Overtemperature Threshold (AI Module, Minor Alarm)

## Description

Alarm message:

The *arg1 arg2 arg3* temperature (*arg4* degrees C) exceeds the overtemperature threshold (*arg5* degrees C) (SN:*arg6*, BN:*arg7*).

NOTE

From iBMC V3.07.00.57, the AI module alarms will also include the SN and BOM code.

This alarm is generated when the AI module temperature exceeds the overtemperature threshold.

Alarm object: AI Module

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x5D000005 | Minor | Yes |

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## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Name of the alarmed AI module, for example, **AI module**. |
| *arg2* | AI module component, for example, **NP**. |
| *arg3* | Number of the AI module component. |
| *arg4* | Current reading of the sensor. |
| *arg5* | Alarm threshold. |
| *arg6* | Serial number of the AI module. |
| *arg7* | BOM code of the AI module. |

## Impact on the System

The overheating affects AI module performance and system stability.

## Possible Causes

1. The AI module is faulty.
2. The fan module is faulty.
3. The ambient temperature is too high.
4. The air inlet or outlet is blocked.

## Procedure

**Step 1** Check whether there are fan module alarms.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Replace the faulty fan module. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Check whether the equipment room temperature exceeds the normal range.

- If yes, go to **Step 4**.
- If no, go to **Step 5**.

**Step 4** Reduce the equipment room temperature to the normal range. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Check whether the server air inlet and outlet are blocked.

- If yes, go to **Step 6**.

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- If no, go to **Step 7**.

**Step 6** Clear the blockage. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 7**.

**Step 7** Replace the AI module. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 8**.

**Step 8** Contact technical support engineer.

**----End**

# 2.3.167 ALM-0x5D000007 Failed to Obtain the AI Module Temperature (AI Module, Minor Alarm)

## Description

Alarm message:

Failed to obtain data of the *arg1 arg2 arg3* temperature (SN:*arg4*, BN:*arg5*).

NOTE

From iBMC V3.07.00.57, the AI module alarms will also include the SN and BOM code.

This alarm is generated when failed to obtain data of the temperature.

Alarm object: AI Module

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x5D000007 | Minor | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Name of the alarmed AI module, for example, **AI module**. |
| *arg2* | AI module component, for example, **NP**. |
| *arg3* | Number of the AI module component. |
| *arg4* | Serial number of the AI module. |
| *arg5* | BOM code of the AI module. |

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### Impact on the System

The AI module temperature cannot be monitored. No alarm will be reported when the temperature is not in the normal range. The speed adjustment of fan modules is also affected.

### Possible Causes

The sensor access channel is abnormal, or the sensor chip has failed.

### Procedure

**Step 1** Restart the iBMC. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Shut down the OS and then restart it. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Remove and reinstall the power cable or board. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Replace the AI module. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Contact technical support engineer.

**----End**

## 2.3.168 ALM-0x5D000019 The AI Module NPU Core Overtemperature Minor Alarm (AI Module, Minor Alarm)

### Description

Alarm message:

On the AI module, NPU Board*arg1* NPU*arg2 arg3* temperature (*arg4* degrees C) exceeds the overtemperature threshold (*arg5* degrees C) (SN:*arg6*, BN:*arg7*).

NOTE

From iBMC V3.07.00.57, the AI module alarms will also include the SN and BOM code.

This alarm is generated when the NPU temperature of the AI module exceeds the overtemperature threshold.

Alarm object: AI Module

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## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x5D000019 | Minor | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | No. of NPU board of the AI module. For example, **1**. |
| *arg2* | No. of the NPU on the NPU board. For example, **1**. |
| *arg3* | Temperature detection point of the AI module. For example, **HBM**, **AICORE** or **NIMBUS**. |
| *arg4* | Current reading of the sensor. |
| *arg5* | Alarm threshold. |
| *arg6* | Serial number of the AI module. |
| *arg7* | BOM code of the AI module. |

## Impact on the System

The overheating affects NPU of the AI module performance and system stability.

## Possible Causes

- The equipment room temperature exceeds the normal range.
- The air inlet is blocked.
- The server has vacant slots or spaces.
- The component holding the air inlet sensor is faulty.

## Procedure

**Step 1** Check whether the equipment room temperature exceeds the normal range.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Reduce the equipment room temperature to the normal range. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Check whether the air inlet or outlet of the server is blocked.

- If yes, go to **Step 4**.

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- If no, go to **Step 5**.

**Step 4** Clear the blockage. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Check whether there are empty slots in the server.

- If yes, go to **Step 6**.
- If no, go to **Step 7**.

**Step 6** Install filler panels in empty slots. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 7**.

**Step 7** Replace the NPU of the AI module. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 8**.

**Step 8** Contact technical support engineer.

**----End**

# 2.3.169 ALM-0x5D00001B The AI Module System Powered Off due to NPU Overtemperature (AI Module, Critical Alarm)

## Description

Alarm message:

On the AI module, OS was shut down due to NPU Board*arg1* NPU*arg2* overheating (SN:*arg3*, BN:*arg4*).

NOTE

From iBMC V3.07.00.57, the AI module alarms will also include the SN and BOM code.

This alarm is generated when the OS was shut down due to NPU Board NPU overheating.

Alarm object: AI Module

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x5D00001B | Critical | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | No. of NPU board of the AI module. For example, **1**. |

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| Name | Meaning |
| --- | --- |
| *arg2* | No. of the NPU on the NPU board. For example, **1**. |
| *arg3* | Serial number of the AI module. |
| *arg4* | BOM code of the AI module. |

## Impact on the System

The system is powered off unexpectedly.

## Possible Causes

- The equipment room temperature exceeds the normal range.
- The air inlet or outlet is blocked.
- The server has empty slots or spaces.
- The fan module is faulty.
- The air duct is not installed.
- The heat sink is in poor contact, or the liquid cooled device is faulty.
- The NPU of the AI module is faulty.

## Procedure

**Step 1** Check whether both air inlet or outlet high temperature alarms are generated.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Rectify the fault according to troubleshooting suggestions. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Check whether there are fan module alarms.

- If yes, go to **Step 4**.
- If no, go to **Step 5**.

**Step 4** Replace the fan module. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Check whether the equipment room temperature exceeds the normal range.

- If yes, go to **Step 6**.
- If no, go to **Step 7**.

**Step 6** Reduce the equipment room temperature to the normal range. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.

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- If no, go to **Step 7**.

**Step 7** Check whether the air inlet or outlet of the server is blocked.

- If yes, go to **Step 8**.
- If no, go to **Step 9**.

**Step 8** Clear the blockage. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 9**.

**Step 9** Check whether there are empty slots in the server.

- If yes, go to **Step 10**.
- If no, go to **Step 11**.

**Step 10** Install filler panels in empty slots. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 11**.

**Step 11** Check whether the air duct is properly installed in the server.

- If yes, go to **Step 13**.
- If no, go to **Step 12**.

**Step 12** Install the air duct properly. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 13**.

**Step 13** Check whether the NPU heat sink or the liquid cooling device is properly installed.

- If yes, go to **Step 15**.
- If no, go to **Step 14**.

**Step 14** Install the NPU heat sink or the liquid cooling device properly, power on the server, and check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 15**.

**Step 15** Replace the NPU of the AI module. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 16**.

**Step 16** Contact technical support engineer.

**----End**

# 2.3.170 ALM-0x5D000039 The AI Module Temperature Exceeds the Major Overtemperature Threshold (AI module, Major Alarm)

## Description

Alarm message:

The *arg1 arg2 arg3* temperature (*arg4* degrees C) exceeds the overtemperature threshold (*arg5* degrees C) (SN:*arg6*, BN:*arg7*).

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NOTE

From iBMC V3.07.00.57, the AI module alarms will also include the SN and BOM code.

This alarm is generated when the AI module temperature exceeds the overtemperature threshold.

Alarm object: AI module

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x5D000039 | Major | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Name of the alarmed AI module, for example, **AI module**. |
| *arg2* | AI module component, for example, **NP**. |
| *arg3* | Number of the AI module component. |
| *arg4* | Current reading of the sensor. |
| *arg5* | Alarm threshold. |
| *arg6* | Serial number of the AI module. |
| *arg7* | BOM code of the AI module. |

## Impact on the System

The overheating affects AI module performance and system stability.

## Possible Causes

- The AI module is faulty.
- The fan module is faulty.
- The ambient temperature is too high.
- The air inlet or outlet is blocked.

## Procedure

**Step 1** Check whether there are fan module alarms.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Replace the faulty fan module. After 5 minutes, check whether the alarm is cleared.

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- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Check whether the equipment room temperature exceeds the normal range.

- If yes, go to **Step 4**.
- If no, go to **Step 5**.

**Step 4** Reduce the equipment room temperature to the normal range. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Check whether the server air inlet and outlet are blocked.

- If yes, go to **Step 6**.
- If no, go to **Step 7**.

**Step 6** Clear the blockage. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 7**.

**Step 7** Replace the AI module. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 8**.

**Step 8** Contact technical support engineer.

**----End**

# 2.3.171 ALM-0x5D00004B BMC Core Overtemperature (AI Module, Minor Alarm)

## Description

Alarm message:

[AI Module]The BMC core temperature (*arg1* degrees C) exceeds the overtemperature threshold (*arg2* degrees C) (SN:*arg3*, BN:*arg4*).

This alarm is generated when the AI module BMC core temperature exceeds the overtemperature threshold.

Alarm object: AI module

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x5D00004B | Minor | Yes |

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## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Current reading of the sensor. |
| *arg2* | Alarm threshold. |
| *arg3* | Serial number of the AI module. |
| *arg4* | BOM code of the AI module. |

## Impact on the System

The BMC performance and system stability are affected.

## Possible Causes

- The equipment room temperature exceeds the normal range.
- The air inlet is blocked.
- The server has empty slots or spaces.
- The component holding the temperature sensor is faulty.

## Procedure

**Step 1** Check whether there are fan module alarms.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Replace the fan module. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Check whether the equipment room temperature exceeds the normal range.

- If yes, go to **Step 4**.
- If no, go to **Step 5**.

**Step 4** Reduce the equipment room temperature to the normal range. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Check whether the air inlet or outlet of the server is blocked.

- If yes, go to **Step 6**.
- If no, go to **Step 7**.

**Step 6** Clear the blockage. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 7**.

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**Step 7** Replace the component holding the iBMC. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 8**.

**Step 8** Contact technical support engineer.

**----End**

# 2.3.172 ALM-0x5D00005D NIC Subboard Overtemperature Minor Alarm (AI Module, Minor Alarm)

## Description

Alarm message:

[AI Module]The NIC *arg1* temperature (*arg2* degrees C) exceeds the overtemperature threshold (*arg3* degrees C) (SN:*arg4*, BN:*arg5*).

This alarm is generated when the AI module NIC temperature exceeds the overtemperature threshold.

Alarm object: AI module

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x5D00005D | Minor | Yes |

## Parameters

| Name | Meaning |
|---|---|
| *arg1* | No. of the NIC. |
| *arg2* | Current reading of the sensor. |
| *arg3* | Alarm threshold. |
| *arg4* | Serial number of the AI module. |
| *arg5* | BOM code of the AI module. |

## Impact on the System

Overheating affects the NIC and network transmission.

## Possible Causes

- A fan module is faulty.
- The equipment room temperature exceeds the normal range.

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- The air inlet or outlet is blocked.
- A NIC is faulty.

## Procedure

**Step 1** Check whether there are fan module alarms.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Replace the fan module. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Check whether the equipment room temperature exceeds the normal range.

- If yes, go to **Step 4**.
- If no, go to **Step 5**.

**Step 4** Reduce the equipment room temperature to the normal range. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Check whether the air inlet or outlet of the server is blocked.

- If yes, go to **Step 6**.
- If no, go to **Step 7**.

**Step 6** Clear the blockage. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 7**.

**Step 7** Replace the NIC. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 8**.

**Step 8** Contact technical support.

**----End**

# 2.3.173 ALM-0x5D00005F Failed to Obtain the NIC Subboard Temperature (AI Module, Minor Alarm)

## Description

Alarm message:

[AI Module]Failed to obtain data of the NIC *arg1* temperature (SN:*arg2*, BN:*arg3*).

This alarm is generated when the system failed to obtain the AI module NIC temperature.

Alarm object: AI module

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## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x5D00005F | Minor | Yes |

## Parameters

| Name | Meaning |
|---|---|
| *arg1* | No. of the NIC. |
| *arg2* | Serial number of the AI module. |
| *arg3* | BOM code of the AI module. |

## Impact on the System

The temperature cannot be monitored. No alarm will be reported when the temperature is not in the normal range.

## Possible Causes

The NIC temperature sensor fails, or the access channel is unavailable.

## Procedure

**Step 1** Restart the iBMC. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Remove the power cable to power off the server, and then reconnect the power cable to power on the server. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Replace the NIC. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Contact technical support.

**----End**

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# 2.3.174 ALM-0x5D000065 GPU Carrier Board Overtemperature Minor Alarm (AI Module, Minor Alarm)

## Description

Alarm message:

[AI Module]xPU carrier board *arg1* temperature (*arg2* degrees C) at *arg3* detection point exceeds the overtemperature threshold (*arg4* degrees C) (SN:*arg5*, BN:*arg6*).

This alarm is generated when the xPU carrier board temperature exceeds the overtemperature threshold.

Alarm object: AI module

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x5D000065 | Minor | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Slot number of the PCIe riser, for example, **Riser1**or **PCIe Slot1**. |
| *arg2* | Current reading of the sensor. |
| *arg3* | Temperature detection point, for example, **STB_3V3**. |
| *arg4* | Alarm threshold. |
| *arg5* | Serial number of the AI module. |
| *arg6* | BOM code of the AI module. |

## Impact on the System

Overheating affects device performance and server operations.

## Possible Causes

- A fan module is faulty.
- The equipment room temperature exceeds the normal range.
- The air inlet or outlet is blocked.
- The xPU carrier board is faulty.

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### Procedure

**Step 1** Check whether there is fan alarm generated.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Replace the fan module. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Check whether the equipment room temperature exceeds the normal range.

- If yes, go to **Step 4**.
- If no, go to **Step 5**.

**Step 4** Reduce the equipment room temperature to the normal range. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Check whether the server air inlet and outlet are blocked.

- If yes, go to **Step 6**.
- If no, go to **Step 7**.

**Step 6** Clear the blockage. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 7**.

**Step 7** Replace the xPU carrier board. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 8**.

**Step 8** Contact technical support engineer.

**----End**

## 2.3.175 ALM-0x5D000067 Failed to Obtain the GPU Carrier Board Temperature (AI Module, Minor Alarm)

### Description

Alarm message:

[AI Module]Failed to obtain the temperature at *arg1* detection point on the xPU carrier board *arg2* (SN:*arg3*, BN:*arg4*).

This alarm is generated when the system failed to obtain the detection point temperature of the xPU carrier board.

Alarm object: AI module

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## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x5D000067 | Minor | Yes |

## Parameters

| Name | Meaning |
|---|---|
| *arg1* | Temperature detection point, for example, **8053_sas**. |
| *arg2* | Slot No. of the xPU carrier board, for example,**1**. |
| *arg3* | Serial number of the AI module. |
| *arg4* | BOM code of the AI module. |

## Impact on the System

The temperature cannot be monitored. No alarm will be reported when the temperature is not in the normal range.

## Possible Causes

The xPU carrier board temperature sensor fails or the I2C link communication is abnormal.

## Procedure

**Step 1** Power off the server and check whether there is damage or poor contact between the component and its slot.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Remove and reinstall the xPU carrier board. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Replace the xPU carrier board. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Contact technical support engineer.

**----End**

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# 2.3.176 ALM-0x5D0000BD AI Module Optical Module Temperature too Low (AI Module, Major Alarm)

## Description

Alarm message:

[AI Module]The *arg1* optical module [*arg2*] temperature (*arg3* degrees C) below threshold (*arg4* degrees C).

This alarm is generated when the AI module optical module temperature is too low.

Alarm object: AI module

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x5D0000BD | Major | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Position of optical module. For example, **NIC** or **LOM**. |
| *arg2* | Number of optical module. For example, **1**. |
| *arg3* | The current reading of the corresponding sensor. |
| *arg4* | Alarm threshold. |

## Impact on the System

The optical module temperature is out of the normal range, and the optical module may not work properly.

## Possible Causes

- The equipment room temperature is under the lower limit of the normal range.
- The optical module is faulty.
- No optical fiber is connected to the optical module.

## Procedure

**Step 1** Check whether the equipment room temperature exceeds the normal range. The recommended temperature is less than 40°C (104°F).

- If yes, go to **2**.
- If no, go to **3**.

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**Step 2** Reduce the ambient temperature in the equipment room by using air conditioners and fans (for example, turn down the air conditioners and increase the fan speed. When the air conditioners cannot work properly, open doors and windows for ventilation). After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **3**.

**Step 3** Replace the optical module. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **4**.

**Step 4** Insert the optical module into the optical fiber. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **5**.

**Step 5** Contact technical support engineer.

**----End**

# 2.4 Power Supply Alarms

## 2.4.1 ALM-0x0000000B CPU Undervoltage (CPU, Major Alarm)

### Description

Alarm message:

CPU *arg1* core voltage (*arg2* V) is lower than the undervoltage threshold (*arg3* V).

NOTE

From iBMC V316, the CPU and disk alarms will also include the SN and BOM code and the mainboard and memory alarms will also include the BOM code.

This alarm is generated when the voltage of the CPU *arg1* Core on the mainboard is lower than the undervoltage major threshold.

Alarm object: CPU

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x0000000B | Major | Yes |

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### Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Socket No. of the CPU. |
| *arg2* | Current reading of the sensor. |
| *arg3* | Alarm threshold. |

### Impact on the System

The system may even stop responding.

### Possible Causes

- The CPU is faulty.
- The mainboard is faulty.

### Procedure

**Step 1** Switch the CPU with a functioning CPU in the same chassis, and check whether the alarm is still generated for this CPU.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Replace the CPU. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Replace the mainboard. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Contact technical support.

**----End**

## 2.4.2 ALM-0x0000000D CPU Overvoltage (CPU, Major Alarm)

### Description

Alarm message:

CPU *arg1* core voltage (*arg2* V) exceeds the overvoltage threshold (*arg3* V) (SN: *arg4*, BN: *arg5*).

NOTE

From iBMC V316, the CPU and disk alarms will also include the SN and BOM code and the mainboard and memory alarms will also include the BOM code.

This alarm is generated when the voltage of the CPU *arg1* Core on the mainboard exceeds the overvoltage major threshold.

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Alarm object: CPU

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x0000000D | Major | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Socket No. of the CPU. |
| *arg2* | Current reading of the sensor. |
| *arg3* | Alarm threshold. |
| *arg4* | CPU serial number. |
| *arg5* | BOM code. |

## Impact on the System

The system may even stop responding.

## Possible Causes

- The CPU is faulty.
- The mainboard is faulty.

## Procedure

**Step 1** Switch the CPU with a functioning CPU in the same chassis, and check whether the alarm is still generated for this CPU.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Replace the CPU. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 3** Replace the mainboard. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Contact technical support.

**----End**

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# 2.4.3 ALM-0x0000003D CPU VCCP Overvoltage (CPU, Major Alarm)

## Description

Alarm message:

CPU *arg1* VCCP voltage (*arg2* V) exceeds the overvoltage threshold (*arg3* V) (SN: *arg4*, BN: *arg5*).

NOTE

From iBMC V316, the CPU and disk alarms will also include the SN and BOM code and the mainboard and memory alarms will also include the BOM code.

This alarm is generated when the VCCP voltage of the CPU exceeds the overvoltage major threshold.

Alarm object: CPU

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x0000003D | Major | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Socket No. of the CPU. |
| *arg2* | Current reading of the sensor. |
| *arg3* | Alarm threshold. |

## Impact on the System

The system stops responding or cannot be started.

## Possible Causes

The mainboard is faulty.

## Procedure

**Step 1** Replace the mainboard. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Contact technical support engineer.

**----End**

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# 2.4.4 ALM-0x0000003F CPU VCCP Undervoltage (CPU, Major Alarm)

## Description

Alarm message:

CPU *arg1* VCCP voltage (*arg2* V) is lower than the undervoltage threshold (*arg3* V) (SN: *arg4*, BN: *arg5*).

NOTE

From iBMC V316, the CPU and disk alarms will also include the SN and BOM code and the mainboard and memory alarms will also include the BOM code.

This alarm is generated when the VCCP voltage of the CPU is lower than the undervoltage major threshold.

Alarm object: CPU

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x0000003F | Major | Yes |

## Parameters

| Name | Meaning |
|---|---|
| *arg1* | Socket No. of the CPU. |
| *arg2* | Current reading of the sensor. |
| *arg3* | Alarm threshold. |

## Impact on the System

The system stops responding or cannot be started.

## Possible Causes

The mainboard is faulty.

## Procedure

**Step 1** Replace the mainboard. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Contact technical support engineer.

**----End**

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# 2.4.5 ALM-0x00000041 Failed to Read CPU VCCP Voltage (CPU, Minor Alarm)

## Description

Alarm message:

Failed to obtain data of the CPU *arg1* VCCP voltage (SN: *arg2*, BN: *arg3*).

NOTE

From iBMC V316, the CPU and disk alarms will also include the SN and BOM code and the mainboard and memory alarms will also include the BOM code.

This alarm is generated when the system failed to obtain the VCCP voltage of the CPU.

Alarm object: CPU

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x00000041 | Minor | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Socket No. of the CPU. |
| *arg2* | CPU serial number. |
| *arg3* | BOM code. |

## Impact on the System

The voltage cannot be monitored. No alarm will be reported when the voltage is not in the normal range.

## Possible Causes

The CPU voltage detection circuit is abnormal.

## Procedure

**Step 1** Restart the iBMC. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

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**Step 2** Remove and reinstall the power cable or board. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Replace the mainboard. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Contact technical support engineer.

**----End**

# 2.4.6 ALM-0x0000004F CPU VSA Overvoltage (CPU, Major Alarm)

## Description

Alarm message:

CPU *arg1* VSA voltage (*arg2* V) exceeds the overvoltage threshold (*arg3* V) (SN: *arg4*, BN: *arg5*).

NOTE

From iBMC V316, the CPU and disk alarms will also include the SN and BOM code and the mainboard and memory alarms will also include the BOM code.

This alarm is generated when the VSA voltage of the CPU exceeds the overvoltage threshold.

Alarm object: CPU

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x0000004F | Major | Yes |

## Parameters

| Name | Meaning |
|---|---|
| *arg1* | Socket No. of the CPU. |
| *arg2* | Current reading of the sensor. |
| *arg3* | Alarm threshold. |

## Impact on the System

The system stops responding or cannot be started.

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### Possible Causes

The mainboard is faulty.

### Procedure

**Step 1** Replace the mainboard. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Contact technical support engineer.

**----End**

## 2.4.7 ALM-0x00000051 CPU VSA Undervoltage (CPU, Major Alarm)

### Description

Alarm message:

CPU *arg1* VSA voltage (*arg2* V) is lower than the undervoltage threshold (*arg3* V) (SN: *arg4*, BN: *arg5*).

NOTE

From iBMC V316, the CPU and disk alarms will also include the SN and BOM code and the mainboard and memory alarms will also include the BOM code.

This alarm is generated when the VSA voltage of the CPU is lower than the undervoltage threshold.

Alarm object: CPU

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x00000051 | Major | Yes |

### Parameters

| Name | Meaning |
|---|---|
| *arg1* | Socket No. of the CPU. |
| *arg2* | Current reading of the sensor. |
| *arg3* | Alarm threshold. |

### Impact on the System

The system stops responding or cannot be started.

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### Possible Causes

The mainboard is faulty.

### Procedure

**Step 1** Replace the mainboard. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Contact technical support engineer.

**----End**

## 2.4.8 ALM-0x00000053 Failed to Read CPU VSA Voltage (CPU, Minor Alarm)

### Description

Alarm message:

Failed to obtain data of the CPU *arg1* VSA voltage (SN: *arg2*, BN: *arg3*).

NOTE

From iBMC V316, the CPU and disk alarms will also include the SN and BOM code and the mainboard and memory alarms will also include the BOM code.

This alarm is generated when the system failed to obtain the VSA voltage of the CPU.

Alarm object: CPU

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x00000053 | Minor | Yes |

### Parameters

| Name | Meaning |
|---|---|
| *arg1* | Socket No. of the CPU. |
| *arg2* | CPU serial number. |
| *arg3* | BOM code. |

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### Impact on the System

The voltage cannot be monitored. No alarm will be reported when the voltage is not in the normal range.

### Possible Causes

The CPU voltage detection circuit is abnormal.

### Procedure

**Step 1** Restart the iBMC. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Remove and reinstall the power cable or board. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Replace the mainboard. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Contact technical support engineer.

**----End**

## 2.4.9 ALM-0x00000055 CPU VCCIO Overvoltage (CPU, Major Alarm)

### Description

Alarm message:

CPU *arg1* VCCIO voltage (*arg2* V) exceeds the overvoltage threshold (*arg3* V) (SN: *arg4*, BN: *arg5*).

**NOTE**

From iBMC V316, the CPU and disk alarms will also include the SN and BOM code and the mainboard and memory alarms will also include the BOM code.

This alarm is generated when the VCCIO voltage of the CPU exceeds the overvoltage threshold.

Alarm object: CPU

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x00000055 | Major | Yes |

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### Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Socket No. of the CPU. |
| *arg2* | Current reading of the sensor. |
| *arg3* | Alarm threshold. |

### Impact on the System

The system stops responding or cannot be started.

### Possible Causes

The mainboard is faulty.

### Procedure

**Step 1** Replace the mainboard. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Contact technical support engineer.

**----End**

## 2.4.10 ALM-0x00000057 CPU VCCIO Undervoltage (CPU, Major Alarm)

### Description

Alarm message:

CPU *arg1* VCCIO voltage (*arg2* V) is lower than the undervoltage threshold (*arg3* V) (SN: *arg4*, BN: *arg5*).

**NOTE**

From iBMC V316, the CPU and disk alarms will also include the SN and BOM code and the mainboard and memory alarms will also include the BOM code.

This alarm is generated when the VCCIO voltage of the CPU is lower than the undervoltage threshold.

Alarm object: CPU

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x00000057 | Major | Yes |

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### Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Socket No. of the CPU. |
| *arg2* | Current reading of the sensor. |
| *arg3* | Alarm threshold. |

### Impact on the System

The system stops responding or cannot be started.

### Possible Causes

The mainboard is faulty.

### Procedure

**Step 1** Replace the mainboard. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Contact technical support engineer.

**----End**

## 2.4.11 ALM-0x00000059 Failed to Read CPU VCCIO Voltage (CPU, Minor Alarm)

### Description

Alarm message:

Failed to obtain data of the CPU *arg1* VCCIO voltage (SN: *arg2*, BN: *arg3*).

NOTE

From iBMC V316, the CPU and disk alarms will also include the SN and BOM code and the mainboard and memory alarms will also include the BOM code.

This alarm is generated when the system failed to obtain the VCCIO voltage of the CPU.

Alarm object: CPU

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x00000059 | Minor | Yes |

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### Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Socket No. of the CPU. |
| *arg2* | CPU serial number. |
| *arg3* | BOM code. |

### Impact on the System

The voltage cannot be monitored. No alarm will be reported when the voltage is not in the normal range.

### Possible Causes

The CPU voltage detection circuit is abnormal.

### Procedure

**Step 1** Restart the iBMC. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Remove and reinstall the power cable or board. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Replace the mainboard. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Contact technical support engineer.

**----End**

## 2.4.12 ALM-0x0000005B CPU VMCP Overvoltage (CPU, Major Alarm)

### Description

Alarm message:

CPU *arg1* VMCP voltage (*arg2* V) exceeds the overvoltage threshold (*arg3* V) (SN: *arg4*, BN: *arg5*).

**NOTE**

From iBMC V316, the CPU and disk alarms will also include the SN and BOM code and the mainboard and memory alarms will also include the BOM code.

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This alarm is generated when the VMCP voltage of the CPU exceeds the overvoltage threshold.

Alarm object: CPU

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x0000005B | Major | Yes |

### Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Socket No. of the CPU. |
| *arg2* | Current reading of the sensor. |
| *arg3* | Alarm threshold. |

### Impact on the System

The system stops responding or cannot be started.

### Possible Causes

The mainboard is faulty.

### Procedure

**Step 1** Replace the mainboard. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Contact technical support engineer.

**----End**

## 2.4.13 ALM-0x0000005D CPU VMCP Undervoltage (CPU, Major Alarm)

### Description

Alarm message:

CPU *arg1* VMCP voltage (*arg2* V) is lower than the undervoltage threshold (*arg3* V) (SN: *arg4*, BN: *arg5*).

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NOTE

From iBMC V316, the CPU and disk alarms will also include the SN and BOM code and the mainboard and memory alarms will also include the BOM code.

This alarm is generated when the VMCP voltage of the CPU is lower than the undervoltage threshold.

Alarm object: CPU

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x0000005D | Major | Yes |

## Parameters

| Name | Meaning |
|---|---|
| *arg1* | Socket No. of the CPU. |
| *arg2* | Current reading of the sensor. |
| *arg3* | Alarm threshold. |

## Impact on the System

The system stops responding or cannot be started.

## Possible Causes

The mainboard is faulty.

## Procedure

**Step 1** Replace the mainboard. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Contact technical support engineer.

**----End**

# 2.4.14 ALM-0x0000005F Failed to Read CPU VMCP Voltage (CPU, Minor Alarm)

## Description

Alarm message:

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Failed to obtain data of the CPU *arg1* VMCP voltage (SN: *arg2*, BN: *arg3*).

NOTE

From iBMC V316, the CPU and disk alarms will also include the SN and BOM code and the mainboard and memory alarms will also include the BOM code.

This alarm is generated when the system failed to obtain the VMCP voltage of the CPU.

Alarm object: CPU

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x0000005F | Minor | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Socket No. of the CPU. |
| *arg2* | CPU serial number. |
| *arg3* | BOM code. |

## Impact on the System

The voltage cannot be monitored. No alarm will be reported when the voltage is not in the normal range.

## Possible Causes

The CPU voltage detection circuit is abnormal.

## Procedure

**Step 1** Restart the iBMC. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Remove and reinstall the power cable or board. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Replace the mainboard. Then, check whether the alarm is cleared.

- If yes, no further action is required.

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- If no, go to **Step 4**.

**Step 4** Contact technical support engineer.

**----End**

# 2.4.15 ALM-0x00000063 Failed to Read CPU Voltage (CPU, Minor Alarm)

## Description

Alarm message:

Failed to obtain data of the CPU *arg1* core voltage (SN: *arg2*, BN: *arg3*).

NOTE

From iBMC V316, the CPU and disk alarms will also include the SN and BOM code and the mainboard and memory alarms will also include the BOM code.

This alarm is generated when the system failed to obtain the voltage of the CPU core.

Alarm object: CPU

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x00000063 | Minor | Yes |

## Parameters

| Name | Meaning |
|---|---|
| *arg1* | Socket No. of the CPU. |
| *arg2* | CPU serial number. |
| *arg3* | BOM code. |

## Impact on the System

The voltage cannot be monitored. No alarm will be reported when the voltage is not in the normal range.

## Possible Causes

The CPU voltage detection circuit is abnormal.

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### Procedure

**Step 1** Restart the iBMC. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Remove and reinstall the power cable or board. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Replace the mainboard. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Contact technical support engineer.

**----End**

## 2.4.16 ALM-0x00000065 CPU Undervoltage (CPU, Minor Alarm)

### Description

Alarm message:

CPU *arg1 arg2* voltage (*arg3* V) is lower than the undervoltage threshold (*arg4* V).

This alarm is generated when the voltage of the CPU *arg1* Core on the mainboard is lower than the undervoltage major threshold.

Alarm object: CPU

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x00000065 | Minor | Yes |

### Parameters

| Name | Meaning |
|---|---|
| *arg1* | CPU No. |
| *arg2* | Sensor name, for example, VCCIO, VPP, VCCP, VSA, VMCP. |
| *arg3* | Current reading of the sensor. |
| *arg4* | Alarm threshold. |

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### Impact on the System

The undervoltage affects system stability. Services may not run properly.

### Possible Causes

- The CPU is faulty.
- The mainboard is faulty.

### Procedure

**Step 1** Switch the CPU with a functioning CPU in the same chassis, and check whether the alarm is still generated for this CPU.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Replace the CPU. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**

**Step 3** Replace the mainboard. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**

**Step 4** Contact technical support.

**----End**

## 2.4.17 ALM-0x00000067 CPU Overvoltage (CPU, Minor Alarm)

### Description

Alarm message:

CPU *arg1 arg2* voltage (*arg3* V) exceeds the overvoltage threshold (*arg4* V).

This alarm is generated when the voltage of the CPU *arg1* Core on the mainboard exceeds the overvoltage major threshold.

Alarm object: CPU

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x00000067 | Minor | Yes |

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### Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | CPU No. |
| *arg2* | Sensor name, for example, VCCIO, VPP, VCCP, VSA, VMCP. |
| *arg3* | Current reading of the sensor. |
| *arg4* | Alarm threshold. |

### Impact on the System

The undervoltage affects system stability. Services may not run properly.

### Possible Causes

- The CPU is faulty.
- The mainboard is faulty.

### Procedure

**Step 1** Switch the CPU with a functioning CPU in the same chassis, and check whether the alarm is still generated for this CPU.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Replace the CPU. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**

**Step 3** Replace the mainboard. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**

**Step 4** Contact technical support.

**----End**

## 2.4.18 ALM-0x0000006F CPU Nimbus Undervoltage (CPU, Major Alarm)

### Description

Alarm message:

CPU *arg1* Nimbus voltage (*arg2* V) is lower than the undervoltage threshold (*arg3* V) (SN: *arg4*, BN: *arg5*).

NOTE

From iBMC V316, the CPU and disk alarms will also include the SN and BOM code and the mainboard and memory alarms will also include the BOM code.

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This alarm is generated when the CPU Nimbus voltage is lower than the undervoltage major threshold.

Alarm object: CPU

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x0000006F | Major | Yes |

## Parameters

| Name | Meaning |
|---|---|
| *arg1* | Socket No. of the CPU. |
| *arg2* | Current reading of the sensor. |
| *arg3* | Alarm threshold. |
| *arg4* | CPU serial number. |
| *arg5* | BOM code. |

## Impact on the System

The system may stop responding.

## Possible Causes

- The power supplies in the equipment room are not sufficient for server operation.
- The mainboard is faulty.

## Procedure

**Step 1** Check whether the power supplies in the equipment room are sufficient for server operation.

- If yes, go to **Step 3**.
- If no, go to **Step 2**.

**Step 2** Ensure sufficient power supplies for server operation. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Power off the server (by removing the power cable or server node) and then power on the server (by reconnecting the power cable or reinstalling the server node). Then, check whether the alarm is cleared.

- If yes, no further action is required.

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- If no, go to **Step 4**.

**Step 4** Replace the power cable. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Replace the mainboard. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 6**.

**Step 6** Contact technical support.

**----End**

# 2.4.19 ALM-0x00000071 CPU Nimbus Overvoltage (CPU, Major Alarm)

## Description

Alarm message:

CPU *arg1* Nimbus voltage (*arg2* V) exceeds the overvoltage threshold (*arg3* V) (SN: *arg4*, BN: *arg5*).

NOTE

From iBMC V316, the CPU and disk alarms will also include the SN and BOM code and the mainboard and memory alarms will also include the BOM code.

This alarm is generated when the CPU Nimbus voltage exceeds the overvoltage major threshold.

Alarm object: CPU

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x00000071 | Major | Yes |

## Parameters

| Name | Meaning |
|---|---|
| *arg1* | Socket No. of the CPU. |
| *arg2* | Current reading of the sensor. |
| *arg3* | Alarm threshold. |
| *arg4* | CPU serial number. |
| *arg5* | BOM code. |

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### Impact on the System

The system may stop responding.

### Possible Causes

- The power supplies in the equipment room are not sufficient for server operation.
- The mainboard is faulty.

### Procedure

**Step 1** Check whether the power supplies in the equipment room are sufficient for server operation.

- If yes, go to **Step 3**.
- If no, go to **Step 2**.

**Step 2** Ensure sufficient power supplies for server operation. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Power off the server (by removing the power cable or server node) and then power on the server (by reconnecting the power cable or reinstalling the server node). Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Replace the power cable. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Replace the mainboard. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 6**.

**Step 6** Contact technical support.

**----End**

## 2.4.20 ALM-0x00000075 CPU Core Power Supply Overheating (CPU, Major Alarm)

### Description

Alarm message:

CPU *arg1* has a vr hot error (SN: *arg2*, BN: *arg3*).

NOTE

From iBMC V316, the CPU and disk alarms will also include the SN and BOM code and the mainboard and memory alarms will also include the BOM code.

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This alarm is generated when the CPU core power supply is overheating.

Alarm object: CPU

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x00000075 | Major | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Socket No. of the CPU. |

## Impact on the System

The system performance may deteriorate, or the system may be powered off unexpectedly.

## Possible Causes

- A fan module is faulty.
- The equipment room temperature exceeds the normal range.
- The air inlet or outlet is blocked.
- Idle slots or spaces are not installed with filler panels.
- The air duct is not installed.
- The mainboard is faulty.

## Procedure

**Step 1** Check whether there are fan module alarms.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Replace the fan module. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Check whether the equipment room temperature exceeds the normal range.

- If yes, go to **Step 4**.
- If no, go to **Step 5**.

**Step 4** Reduce the equipment room temperature to the normal range. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.

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- If no, go to **Step 5**.

**Step 5** Check whether the air inlet or outlet of the server is blocked.

- If yes, go to **Step 6**.
- If no, go to **Step 7**.

**Step 6** Clear the blockage. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 7**.

**Step 7** Check whether there are empty slots in the server.

- If yes, go to **Step 8**.
- If no, go to **Step 9**.

**Step 8** Install filler panels in empty slots. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 9**.

**Step 9** Check whether the server is installed with an air duct.

- If yes, go to **Step 11**.
- If no, go to **Step 10**.

**Step 10** Install an air duct. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 11**.

**Step 11** Replace the mainboard. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 12**.

**Step 12** Contact technical support engineer.

**----End**

# 2.4.21 ALM-0x00000077 CPU VDDQ Power Module Overheating (CPU, Major Alarm)

## Description

Alarm message:

CPU *arg1* has a vddq hot error (SN: *arg2*, BN: *arg3*).

NOTE

From iBMC V316, the CPU and disk alarms will also include the SN and BOM code and the mainboard and memory alarms will also include the BOM code.

This alarm is generated when the CPU VDDQ power module is overheating.

Alarm object: CPU

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## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x00000077 | Major | Yes |

## Parameters

| Name | Meaning |
|---|---|
| *arg1* | Socket No. of the CPU. |

## Impact on the System

The system performance may deteriorate, or the system may be powered off unexpectedly.

## Possible Causes

- A fan module is faulty.
- The equipment room temperature exceeds the normal range.
- The air inlet or outlet is blocked.
- Idle slots or spaces are not installed with filler panels.
- The air duct is not installed.
- The mainboard is faulty.

## Procedure

**Step 1** Check whether there are fan module alarms.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Replace the fan module. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Check whether the equipment room temperature exceeds the normal range.

- If yes, go to **Step 4**.
- If no, go to **Step 5**.

**Step 4** Reduce the equipment room temperature to the normal range. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Check whether the air inlet or outlet of the server is blocked.

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- If yes, go to **Step 6**.
- If no, go to **Step 7**.

**Step 6** Clear the blockage. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 7**.

**Step 7** Check whether there are empty slots in the server.

- If yes, go to **Step 8**.
- If no, go to **Step 9**.

**Step 8** Install filler panels in empty slots. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 9**.

**Step 9** Check whether the server is installed with an air duct.

- If yes, go to **Step 11**.
- If no, go to **Step 10**.

**Step 10** Install an air duct. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 11**.

**Step 11** Replace the mainboard. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 12**.

**Step 12** Contact technical support engineer.

**----End**

# 2.4.22 ALM-0x000000C7 CPU VCCANA voltage exceeds the overvoltage threshold (CPU, Major Alarm)

## Description

Alarm message:

CPU *arg1* VCCANA voltage (*arg2* V) exceeds the overvoltage threshold (*arg3* V).

This alarm is generated when the CPU VCCANA voltage exceeds the overvoltage threshold.

Alarm object: CPU

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x000000C7 | Major | Yes |

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### Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Socket No. of the CPU. |
| *arg2* | Current reading of the sensor. |
| *arg3* | Alarm threshold. |

### Impact on the System

The system may stop responding.

### Possible Causes

The mainboard is faulty.

### Procedure

**Step 1** Replace the mainboard and check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Contact technical support engineer.

**----End**

## 2.4.23 ALM-0x000000C9 CPU VCCANA voltage is lower than the undervoltage threshold (CPU, Major Alarm)

### Description

Alarm message:

CPU *arg1* VCCANA voltage (*arg2* V) is lower than the undervoltage threshold (*arg3* V).

This alarm is generated when the CPU VCCANA voltage is lower than the undervoltage threshold.

Alarm object: CPU

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x000000C9 | Major | Yes |

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### Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Socket No. of the CPU. |
| *arg2* | Current reading of the sensor. |
| *arg3* | Alarm threshold. |

### Impact on the System

The system may stop responding.

### Possible Causes

The mainboard is faulty.

### Procedure

**Step 1** Replace the mainboard and check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Contact technical support engineer.

**----End**

## 2.4.24 ALM-0x000000CB Failed to Obtain Data of the CPU VCCANA Voltage (CPU, Minor Alarm)

### Description

Alarm message:

Failed to obtain data of the CPU *arg1* VCCANA voltage.

This alarm is generated when Failed to obtain data of the CPU VCCANA voltage.

Alarm object: CPU

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x000000CB | Minor | Yes |

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### Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Socket No. of the CPU. |

### Impact on the System

The system may stop responding.

### Possible Causes

The VRD circuit is abnormal.

### Procedure

**Step 1** Restart the iBMC and check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Remove and reconnect power cables or remove and reinstall the board in the chassis and check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Contact technical support engineer.

**----End**

## 2.4.25 ALM-0x000000CD CPU P1V8 Voltage Exceeds the Overvoltage Threshold (CPU, Major Alarm)

### Description

Alarm message:

CPU *arg1* P1V8 voltage (*arg2* V) exceeds the overvoltage threshold (*arg3* V).

This alarm is generated when the CPU P1V8 voltage exceeds the overvoltage threshold.

Alarm object: CPU

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x000000CD | Major | Yes |

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### Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Socket No. of the CPU. |
| *arg2* | Current reading of the sensor. |
| *arg3* | Alarm threshold. |

### Impact on the System

The system may stop responding.

### Possible Causes

The mainboard is faulty.

### Procedure

**Step 1** Replace the mainboard and check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Contact technical support engineer.

**----End**

## 2.4.26 ALM-0x000000CF CPU P1V8 Voltage is Lower Than the Undervoltage Threshold (CPU, Major Alarm)

### Description

Alarm message:

CPU *arg1* P1V8 voltage (*arg2* V) is lower than the undervoltage threshold (*arg3* V).

This alarm is generated when the CPU P1V8 voltage is lower than the undervoltage threshold.

Alarm object: CPU

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x000000CF | Major | Yes |

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### Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Socket No. of the CPU. |
| *arg2* | Current reading of the sensor. |
| *arg3* | Alarm threshold. |

### Impact on the System

The system may stop responding.

### Possible Causes

The mainboard is faulty.

### Procedure

**Step 1** Replace the mainboard and check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Contact technical support engineer.

**----End**

## 2.4.27 ALM-0x000000D1 Failed to Obtain Data of the CPU P1V8 Voltage (CPU, Major Alarm)

### Description

Alarm message:

Failed to obtain data of the CPU *arg1* P1V8 voltage.

This alarm is generated when Failed to obtain data of the CPU P1V8 voltage.

Alarm object: CPU

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x000000D1 | Minor | Yes |

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### Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Socket No. of the CPU. |

### Impact on the System

The system may stop responding.

### Possible Causes

The VRD circuit is abnormal.

### Procedure

**Step 1** Restart the iBMC and check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Remove and reconnect power cables or remove and reinstall the board in the chassis and check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Contact technical support engineer.

**----End**

## 2.4.28 ALM-0x000000D5 General CPU VRD with Higher Voltage Than Specified (CPU, Major Alarm)

### Description

Alarm message:

```
CPU arg1 arg2 voltage (arg3 V) exceeds the overvoltage threshold (arg4 V).
```

This alarm is generated when the CPU voltage is higher than the high-voltage threshold.

Alarm object: CPU

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x000000D5 | Major | Yes |

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### Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Socket No. of the CPU. |
| *arg2* | Sensor name, for example, VCCIO, VPP, VCCP, VSA, VMCP. |
| *arg3* | Current reading of the sensor. |
| *arg4* | Alarm threshold. |

### Impact on the System

The system may stop responding or fail to start.

### Possible Causes

The mainboard is faulty.

### Procedure

**Step 1** Replace the mainboard. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Contact technical support.

**----End**

## 2.4.29 ALM-0x000000D7 General CPU VRD with Lower Voltage Than Specified (CPU, Major Alarm)

### Description

Alarm message:

CPU arg1 arg2 voltage (arg3 V) is lower than the undervoltage threshold (arg4 V).

This alarm is generated when the CPU voltage is lower than the low-voltage threshold.

Alarm object: CPU

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x000000D7 | Major | Yes |

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### Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Socket No. of the CPU. |
| *arg2* | Sensor name, for example, VCCIO, VPP, VCCP, VSA, VMCP. |
| *arg3* | Current reading of the sensor. |
| *arg4* | Alarm threshold. |

### Impact on the System

The system may stop responding or fail to start.

### Possible Causes

The mainboard is faulty.

### Procedure

**Step 1** Replace the mainboard. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Contact technical support.

**----End**

## 2.4.30 ALM-0x000000D9 General CPU VRD Voltage Information Access Failure (CPU, Minor Alarm)

### Description

Alarm message:

```
Failed to obtain data of the CPU arg1 arg2 voltage.
```

This alarm is generated when the general CPU VRD voltage information access is failed.

Alarm object: CPU

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x000000D9 | Major | Yes |

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### Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Socket No. of the CPU. |
| *arg2* | Sensor name, for example, VCCIO, VPP, VCCP, VSA, VMCP. |

### Impact on the System

The system may stop responding or fail to start.

### Possible Causes

VRD circuit abnormality.

### Procedure

**Step 1** Restart the iBMC. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Remove and reinstall the power cable. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Remove and reinstall the board. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Contact technical support.

**----End**

## 2.4.31 ALM-0x000000E9 CPU Undervoltage Minor Alarm (CPU, Minor Alarm)

### Description

Alarm message:

CPU *arg1* core voltage (*arg2* V) is lower than the slight undervoltage threshold (*arg3* V).

This alarm is generated when the CPU core voltage is lower than the slight undervoltage threshold.

Alarm object: CPU

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## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x000000E9 | Minor | Yes |

## Parameters

| Name | Meaning |
|---|---|
| *arg1* | Socket No. of the CPU. |
| *arg2* | Current reading of the sensor. |
| *arg3* | Alarm threshold. |

## Impact on the System

The system may stop responding.

## Possible Causes

- The CPU is faulty.
- The mainboard is faulty.

## Procedure

**Step 1** Switch the CPU with a functioning CPU in the same chassis, and check whether the alarm is still generated for this CPU.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Replace the CPU. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Replace the mainboard. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Contact technical support.

**----End**

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# 2.4.32 ALM-0x000000EB CPU Overvoltage Minor Alarm (CPU, Minor Alarm)

## Description

Alarm message:

CPU *arg1* core voltage (*arg2* V) exceeds the slight overvoltage threshold (*arg3* V).

This alarm is generated when the CPU core voltage exceeds the slight overvoltage threshold.

Alarm object: CPU

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x000000EB | Minor | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Socket No. of the CPU. |
| *arg2* | Current reading of the sensor. |
| *arg3* | Alarm threshold. |

## Impact on the System

The system may stop responding.

## Possible Causes

- The CPU is faulty.
- The mainboard is faulty.

## Procedure

**Step 1** Switch the CPU with a functioning CPU in the same chassis, and check whether the alarm is still generated for this CPU.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Replace the CPU. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

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**Step 3** Replace the mainboard. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Contact technical support.

**----End**

# 2.4.33 ALM-0x000000ED CPU Common VRD Overvoltage Minor Alarm (CPU, Minor Alarm)

## Description

Alarm message:

CPU *arg1 arg2* voltage (*arg3* V) exceeds the slight overvoltage threshold (*arg4* V).

This alarm is generated when the CPU voltage exceeds the slight overvoltage threshold.

Alarm object: CPU

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x000000ED | Minor | Yes |

## Parameters

| Name | Meaning |
|---|---|
| *arg1* | Socket No. of the CPU. |
| *arg2* | Sensor name, for example, VCCIO, VPP, VCCP, VSA, VMCP. |
| *arg3* | Current reading of the sensor. |
| *arg4* | Alarm threshold. |

## Impact on the System

The system may stop responding or fail to start.

## Possible Causes

The mainboard is faulty.

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### Procedure

**Step 1** Replace the mainboard. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Contact technical support.

**----End**

## 2.4.34 ALM-0x000000EF CPU Common VRD Lowervoltage Minor Alarm (CPU, Minor Alarm)

### Description

Alarm message:

CPU *arg1 arg2* voltage (*arg3* V) is lower than the slight undervoltage threshold (*arg4* V).

This alarm is generated when the CPU voltage is lower than the slight undervoltage threshold.

Alarm object: CPU

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x000000EF | Minor | Yes |

### Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Socket No. of the CPU. |
| *arg2* | Sensor name, for example, VCCIO, VPP, VCCP, VSA, VMCP. |
| *arg3* | Current reading of the sensor. |
| *arg4* | Alarm threshold. |

### Impact on the System

The system may stop responding or fail to start.

### Possible Causes

The mainboard is faulty.

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### Procedure

**Step 1** Replace the mainboard. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Contact technical support.

**----End**

## 2.4.35 ALM-0x01000003 Memory VDDQ1 Undervoltage (Memory, Major Alarm)

### Description

Alarm message:

CPU *arg1* DIMM VDDQ1 voltage (*arg2* V) is lower than the undervoltage threshold (*arg3* V).

**NOTE**

The alarm does not include the SN or BOM code of the component.

This alarm is generated when the voltage of the CPU*arg1* DIMM VDDQ1 on the mainboard is lower than the undervoltage major threshold.

Alarm object: Memory

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x01000003 | Major | Yes |

### Parameters

| Name | Meaning |
|---|---|
| *arg1* | Socket No. of the CPU. |
| *arg2* | Current reading of the sensor. |
| *arg3* | Alarm threshold. |

### Impact on the System

The system may even stop responding.

### Possible Causes

- A DIMM is faulty.

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- The mainboard is faulty.
- The CPU is faulty.

### Procedure

**Step 1** Remove the DIMMs connected to the CPU one by one, and check whether the alarm is cleared.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Replace the faulty DIMM. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 3** Replace the mainboard. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Replace the CPU. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Contact technical support.

**----End**

## 2.4.36 ALM-0x01000005 Memory VDDQ1 Overvoltage (Memory, Major Alarm)

### Description

Alarm message:

CPU *arg1* DIMM VDDQ1 voltage (*arg2* V) exceeds the overvoltage threshold (*arg3* V).

**NOTE**

The alarm does not include the SN or BOM code of the component.

This alarm is generated when the voltage of the CPU *arg1* DIMM VDDQ1 on the mainboard exceeds the overvoltage major threshold.

Alarm object: Memory

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x01000005 | Major | Yes |

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### Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Socket No. of the CPU. |
| *arg2* | Current reading of the sensor. |
| *arg3* | Alarm threshold. |

### Impact on the System

The system may even stop responding.

### Possible Causes

- A DIMM is faulty.
- The mainboard is faulty.
- The CPU is faulty.

### Procedure

**Step 1** Remove the DIMMs connected to the CPU one by one, and check whether the alarm is cleared.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Replace the faulty DIMM. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 3** Replace the mainboard. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Replace the CPU. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Contact technical support.

**----End**

## 2.4.37 ALM-0x01000007 Memory VDDQ2 Undervoltage (Memory, Major Alarm)

### Description

Alarm message:

CPU *arg1* DIMM VDDQ2 voltage (*arg2* V) is lower than the undervoltage threshold (*arg3* V).

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NOTE

The alarm does not include the SN or BOM code of the component.

This alarm is generated when the voltage of the CPU*arg1* DIMM VDDQ2 on the mainboard is lower than the undervoltage major threshold.

Alarm object: Memory

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x01000007 | Major | Yes |

## Parameters

| Name | Meaning |
|---|---|
| *arg1* | Socket No. of the CPU. |
| *arg2* | Current reading of the sensor. |
| *arg3* | Alarm threshold. |

## Impact on the System

The system may even stop responding.

## Possible Causes

- A DIMM is faulty.
- The mainboard is faulty.
- The CPU is faulty.

## Procedure

**Step 1** Remove the DIMMs connected to the CPU one by one, and check whether the alarm is cleared.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Replace the faulty DIMM. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 3** Replace the mainboard. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

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**Step 4** Replace the CPU. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Contact technical support.

**----End**

# 2.4.38 ALM-0x01000009 Memory VDDQ2 Overvoltage (Memory, Major Alarm)

## Description

Alarm message:

CPU *arg1* DIMM VDDQ2 voltage (*arg2* V) exceeds the overvoltage threshold (*arg3* V).

**NOTE**

The alarm does not include the SN or BOM code of the component.

This alarm is generated when the voltage of the CPU *arg1* DIMM VDDQ2 on the mainboard exceeds the overvoltage major threshold.

Alarm object: Memory

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x01000009 | Major | Yes |

## Parameters

| Name | Meaning |
|---|---|
| *arg1* | Socket No. of the CPU. |
| *arg2* | Current reading of the sensor. |
| *arg3* | Alarm threshold. |

## Impact on the System

The system may even stop responding.

## Possible Causes

- A DIMM is faulty.
- The mainboard is faulty.

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- The CPU is faulty.

## Procedure

**Step 1** Remove the DIMMs connected to the CPU one by one, and check whether the alarm is cleared.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Replace the faulty DIMM. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 3** Replace the mainboard. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Replace the CPU. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Contact technical support.

**----End**

# 2.4.39 ALM-0x01000019 DIMM VPP1 Undervoltage (Memory, Major Alarm)

## Description

Alarm message:

CPU *arg1* DIMM VPP 1 voltage (*arg2* V) is lower than the undervoltage threshold (*arg3* V).

**NOTE**

The alarm does not include the SN or BOM code of the component.

This alarm is generated when the VPP1 voltage of the DIMM connected to the specified CPU is lower than the undervoltage major threshold.

Alarm object: Memory

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x01000019 | Major | Yes |

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### Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Socket No. of the CPU. |
| *arg2* | Current reading of the sensor. |
| *arg3* | Alarm threshold. |

### Impact on the System

The server cannot be started or may run improperly.

### Possible Causes

The mainboard is faulty.

### Procedure

**Step 1** Replace the mainboard. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Contact technical support engineer.

**----End**

## 2.4.40 ALM-0x0100001B DIMM VPP1 Overvoltage (Memory, Major Alarm)

### Description

Alarm message:

CPU *arg1* DIMM VPP 1 voltage (*arg2* V) exceeds the overvoltage threshold (*arg3* V).

**NOTE**

The alarm does not include the SN or BOM code of the component.

This alarm is generated when the VPP1 voltage of the DIMM connected to the specified CPU exceeds the overvoltage major threshold.

Alarm object: Memory

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x0100001B | Major | Yes |

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### Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Socket No. of the CPU. |
| *arg2* | Current reading of the sensor. |
| *arg3* | Alarm threshold. |

### Impact on the System

The server cannot be started or may run improperly.

### Possible Causes

The mainboard is faulty.

### Procedure

**Step 1** Replace the mainboard. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Contact technical support engineer.

**----End**

## 2.4.41 ALM-0x01000023 Failed to Read DIMM VPP1 Voltage (Memory, Minor Alarm)

### Description

Alarm message:

Failed to obtain data of the CPU *arg1* DIMM VPP 1 voltage.

NOTE

The alarm does not include the SN or BOM code of the component.

This alarm is generated when the system failed to obtain the VPP1 voltage of the DIMM connected to the specified CPU.

Alarm object: Memory

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x01000023 | Minor | Yes |

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### Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Socket No. of the CPU. |

### Impact on the System

The system stops responding.

### Possible Causes

The CPU voltage detection circuit is abnormal.

### Procedure

**Step 1** Restart the iBMC. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Remove and reinstall the power cable or board. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Replace the mainboard. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Contact technical support engineer.

**----End**

## 2.4.42 ALM-0x0200001B Hard Disk Power Supply Abnormal (Disk, Major Alarm)

### Description

Alarm message:

The power signal of the *arg1* disk *arg2* is abnormal (SN: *arg3*).

NOTE

From iBMC V316, the CPU and disk alarms will also include the SN and BOM code and the mainboard and memory alarms will also include the BOM code.

This alarm is generated when the hard disk power supply signal is abnormal.

Alarm object: Disk

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### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x0200001B | Major | Yes |

### Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Location of the hard disk. |
| *arg2* | Slot number of the hard disk. |
| *arg3* | Disk serial number. |

### Impact on the System

Services related to the faulty hard disk are affected, and data is lost.

### Possible Causes

- The hard drive is faulty.
- The mainboard is faulty.

### Procedure

**Step 1** Replace the hard drive. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Replace the mainboard. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Contact technical support engineer.

**----End**

## 2.4.43 ALM-0x03000007 Power Supply Redundancy Lost (PSU, Major Alarm)

### Description

Alarm message:

```
Lost power supply redundancy.
```

NOTE

The alarm does not include the SN or BOM code of the component.

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This alarm is generated when the number of present PSUs is less than that detected upon the first power-on.

Alarm object: PSU

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x03000007 | Major | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| – | – |

## Impact on the System

Power supply redundancy is affected.

## Possible Causes

- The PSU is removed during the running of the server.
- The PSU is loose during the running of the server.
- The PSU is faulty.

## Procedure

**Step 1** Check whether the PSU is not installed.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Install a PSU. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Remove and reinstall the PSU. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Replace the PSU. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Contact technical support engineer.

**----End**

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# 2.4.44 ALM-0x03000009 PSU Fault (PSU, Major Alarm)

## Description

Alarm message:

PSU *arg1* failure (SN: *arg2*, BN: *arg3*).

NOTE

From iBMC V328, the RAID controller card and PSU alarms will also include the SN and BOM code, and the fan alarms will also include the BOM code.

This alarm is generated when the output voltage of a PSU is out of the normal range.

Alarm object: PSU

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x03000009 | Major | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | No. of the PSU. |
| *arg2* | SN of the PSU. |
| *arg3* | BOM code. |

## Impact on the System

System power supply is affected. The system may be powered off unexpectedly.

## Possible Causes

The PSU is faulty.

## Procedure

**Step 1** Replace the PSU. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Contact technical support engineer.

**----End**

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# 2.4.45 ALM-0x0300000B Power Supply Prewarning (PSU, Minor Alarm)

## Description

Alarm message:

PSU *arg1* predictive failure (SN: *arg2*, BN: *arg3*).

NOTE

iBMC V250 and later do not support this alarm.

This alarm is generated when the PSU is present but the voltage is abnormal.

Alarm object: PSU

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x0300000B | Minor | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | No. of the PSU. |
| *arg2* | SN of the PSU. |
| *arg3* | BOM code. |

## Impact on the System

The PSU is faulty, and the system power supply is affected.

## Possible Causes

The PSU is faulty.

## Procedure

**Step 1** Replace the PSU. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Contact technical support engineer.

**----End**

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# 2.4.46 ALM-0x0300000D Power Input Lost (PSU, Critical Alarm)

## Description

Alarm message:

The AC/DC input of PSU *arg1* is lost or out-of-range (SN: *arg2*, BN: *arg3*).

NOTE

From iBMC V328, the RAID controller card and PSU alarms will also include the SN and BOM code, and the fan alarms will also include the BOM code.

This alarm is generated when the power supply is interrupted while the power supply unit (PSU) is detected.

Alarm object: PSU

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x0300000D | Critical | Yes |

## Parameters

| Name | Meaning |
|---|---|
| *arg1* | No. of the PSU. |
| *arg2* | SN of the PSU. |
| *arg3* | BOM code. |

## Impact on the System

The server may be powered off unexpectedly.

## Possible Causes

- Power cables are loose or not connected.
- A PSU is faulty.

## Procedure

**Step 1** Remove and reconnect the power cable. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Replace the power cable. Then, check whether the alarm is cleared.

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- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Replace the PSU. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Contact technical support engineer.

**----End**

# 2.4.47 ALM-0x0300000F PSU Fan Fault (PSU, Major Alarm)

## Description

Alarm message:

The fan of PSU *arg1* is faulty (SN: *arg2*, BN: *arg3*)

**NOTE**

From iBMC V328, the RAID controller card and PSU alarms will also include the SN and BOM code, and the fan alarms will also include the BOM code.

This alarm is generated when a fan for a power supply unit (PSU) fails.

Alarm object: PSU

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x0300000F | Major | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | No. of the PSU. |
| *arg2* | SN of the PSU. |
| *arg3* | BOM code. |

## Impact on the System

PSU heat dissipation is affected, the PSU is faulty, and the system may be powered off unexpectedly.

## Possible Causes

The fan in the PSU is faulty.

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### Procedure

**Step 1** Replace the PSU. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Contact technical support engineer.

**----End**

## 2.4.48 ALM-0x03000013 Communication with PSU Failed (PSU, Minor Alarm)

### Description

Alarm message:

iBMC cannot communicate with PSU *arg1* (SN: *arg2*, BN: *arg3*).

**NOTE**

From iBMC V328, the RAID controller card and PSU alarms will also include the SN and BOM code, and the fan alarms will also include the BOM code.

This alarm is generated when the iBMC failed to communicate with a PSU.

Alarm object: PSU

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x03000013 | Minor | Yes |

### Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | No. of the PSU. |
| *arg2* | SN of the PSU. |
| *arg3* | BOM code. |

### Impact on the System

The PSU cannot be managed.

### Possible Causes

- The power module is abnormal.

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- The communication link is abnormal.

## Procedure

**Step 1** Restart the iBMC. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Check whether the power cables are disconnected or loose.

- If yes, go to **Step 3**.
- If no, go to **Step 4**.

**Step 3** Connect the power cables firmly. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** If there is a cable between the PSU backplane and the mainboard, check whether the cable is disconnected or loose.

- If yes, go to **Step 5**.
- If no, go to **Step 6**.

**Step 5** Connect the cable between the PSU backplane and the mainboard firmly. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 6**.

**Step 6** Remove and reinstall the PSU. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 7**.

**Step 7** Replace the PSU. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 8**.

**Step 8** Contact technical support engineer.

**----End**

# 2.4.49 ALM-0x03000015 Power Output Overvoltage (PSU, Major Alarm)

## Description

Alarm message:

Output overvoltage detected on PSU *arg1* (SN: *arg2*, BN: *arg3*).

NOTE

From iBMC V328, the RAID controller card and PSU alarms will also include the SN and BOM code, and the fan alarms will also include the BOM code.

This alarm is generated when the PSU output exceeds the overvoltage threshold.

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Alarm object: PSU

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x03000015 | Major | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | No. of the PSU. |
| *arg2* | SN of the PSU. |
| *arg3* | BOM code. |

## Impact on the System

The PSU cannot work effectively, and the server may be powered off unexpectedly.

## Possible Causes

The PSU is faulty.

## Procedure

**Step 1** Replace the PSU. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Contact technical support engineer.

**----End**

# 2.4.50 ALM-0x03000017 Power Output Undervoltage or No Output (PSU, Major Alarm)

## Description

Alarm message:

Output undervoltage or no output detected on PSU *arg1* (SN: *arg2*, BN: *arg3*).

NOTE

From iBMC V328, the RAID controller card and PSU alarms will also include the SN and BOM code, and the fan alarms will also include the BOM code.

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This alarm is generated when the PSU output is lower than the undervoltage threshold or no output is detected on the PSU.

Alarm object: PSU

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x03000017 | Major | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | No. of the PSU. |
| *arg2* | SN of the PSU. |
| *arg3* | BOM code. |

## Impact on the System

The PSU cannot work effectively, and the server may be powered off unexpectedly.

## Possible Causes

The PSU is faulty.

## Procedure

**Step 1** Replace the PSU. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Contact technical support engineer.

**----End**

# 2.4.51 ALM-0x03000019 Output Overcurrent (PSU, Major Alarm)

## Description

Alarm message:

Output overcurrent detected on PSU *arg1* (SN: *arg2*, BN: *arg3*).

NOTE

From iBMC V328, the RAID controller card and PSU alarms will also include the SN and BOM code, and the fan alarms will also include the BOM code.

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This alarm is generated when an output overcurrent fault is detected on the PSU.

Alarm object: PSU

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x03000019 | Major | Yes |

### Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | No. of the PSU. |
| *arg2* | SN of the PSU. |
| *arg3* | BOM code. |

### Impact on the System

The PSU cannot work effectively, and the server may be powered off unexpectedly.

### Possible Causes

- The power module output is short-circuited.
- The power backplane is short-circuited.

### Procedure

**Step 1** Replace the PSU. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Replace the power backplane. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Contact technical support.

**----End**

## 2.4.52 ALM-0x0300001B Power Input Overvoltage (PSU, Major Alarm)

### Description

Alarm message:

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Input overvoltage detected on PSU *arg1* (SN: *arg2*, BN: *arg3*).

NOTE

From iBMC V328, the RAID controller card and PSU alarms will also include the SN and BOM code, and the fan alarms will also include the BOM code.

This alarm is generated when the PSU input exceeds the overvoltage threshold.

Alarm object: PSU

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x0300001B | Major | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | No. of the PSU. |
| *arg2* | SN of the PSU. |
| *arg3* | BOM code. |

## Impact on the System

The PSU cannot work effectively, and the server may be powered off unexpectedly.

## Possible Causes

The mains supply is abnormal.

## Procedure

**Step 1** Check the input voltage of the device and ensure that the input voltage is within the allowable range of the device.

**Step 2** Remove and reconnect the power cable to the PSU. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Contact technical support.

**----End**

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# 2.4.53 ALM-0x0300001F Power Failure (PSU, Major Alarm)

## Description

Alarm message:

Server power failure occurred at *arg1*. The power has been already restored.

NOTE

The alarm does not include the SN or BOM code of the component.

This alarm is generated to report a power failure occurred on a server. The power has been already restored.

Alarm object: PSU

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x0300001F | Major | No |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Time when the power failure occurred.<br>Format: **YYYY-MM-DD HH:MM:SS** |

## Impact on the System

There is no power supply to the server.

## Possible Causes

The mains supply is abnormal.

## Procedure

**Step 1** Check the power supply in the equipment room and remove and reconnect the power cable to the server. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Contact technical support.

**----End**

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# 2.4.54 ALM-0x0300002F Failed to Identify PSUs (PSU, Major Alarm)

## Description

Alarm message:

Failed to identify PSU *arg1* (SN: *arg2*, BN: *arg3*).

NOTE

From iBMC V328, the RAID controller card and PSU alarms will also include the SN and BOM code, and the fan alarms will also include the BOM code.

This alarm is generated when the system failed to identify the PSUs.

Alarm object: PSU

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x0300002F | Major | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | No. of the PSU. |
| *arg2* | SN of the PSU. |
| *arg3* | BOM code. |

## Impact on the System

The iBMC cannot manage the PSUs.

## Possible Causes

- The PSU is faulty.
- The I2C link on the PSU is faulty.

## Procedure

**Step 1** Replace the PSU. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Contact technical support engineer.

**----End**

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# 2.4.55 ALM-0x03000037 PSU Voltage Abnormal (PSU, Critical Alarm)

## Description

Alarm message:

The input voltage of the PSU is abnormal, and the voltage of the standby PSU in N+R mode is not *arg1* higher than that of the active PSU.

This alarm is generated when the iBMC detects that the input voltage of the PSUs is abnormal and the voltage of the standby PSU in normal and redundancy (N+R) mode is not higher than the voltage of the active PSU.

Alarm object: PSU

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x03000037 | Critical | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Alarm threshold. |

## Impact on the System

The system power supply is affected, and the server may be powered off.

## Possible Causes

- The power input is abnormal.
- The power cable is incorrectly connected.

## Procedure

**Step 1** Check whether other power supply alarms are generated on the server.

- If no, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Clear other power supply alarms. Then, check whether this alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Check whether the power cable is correctly connected.

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- If yes, go to **Step 4**.
- If no, go to **Step 5**.

**Step 4** Replace the power cable. After the server is powered on, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Contact technical support engineer.

**----End**

# 2.4.56 ALM-0x0300003B PSU Count Incorrent (PSU, Major Alarm)

## Description

Alarm message:

The number of PSUs that are successfully detected does not meet configuration requirements, the expected PSUs configured is *arg1*.

This alarm is generated when the iBMC detects that the number of PSUs does not meet configuration requirements.

Alarm object: PSU

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x0300003B | Major | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Expected number of PSU configurations. |

## Impact on the System

The power supply to the cabinet is insufficient or the PSU cannot be managed.

## Possible Causes

- The actual or expected number of PSUs is incorrect.
- The CAN controller of the management module or PSU is suspended, causing a CAN bus communication failure. In this case, the number of PSUs detected on the iBMC WebUI is 0.

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- The PSU is faulty, causing a single-point communication failure.

## Procedure

**Step 1** Check and correctly configure the expected number of PSUs or configure the correct number of PSUs based on the expected quantity. Then, check whether this alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Remove and reinstall the management module, PSU, or cables. Then, check whether this alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Replace the management module, PSU, or cables. Then, check whether this alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Contact technical support engineer.

**----End**

# 2.4.57 ALM-0x0300003F PSU Single-Circuit Input Undervoltage (PSU, Major Alarm)

## Description

Alarm message:

The input of PSU *arg1arg2* is undervoltage.

This alarm is generated when the PSU single-circuit input is undervoltage.

Alarm object: PSU

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0300003F | Major | Yes |

## Parameters

| Name | Meaning |
|---|---|
| *arg1* | Number of a PSU. |
| *arg2* | PSU input circuit. |

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### Impact on the System

The power supply to the system is affected, and the system may be powered off abnormally.

### Possible Causes

The external power supply is abnormal.

### Procedure

**Step 1** Check whether the PSU single-circuit input is undervoltage.

- If yes, go to **Step 2**.
- If no, no further action is required.

**Step 2** Contact technical support.

**----End**

## 2.4.58 ALM-0x03000041 PSU Single-Circuit Input Lost (PSU, Major Alarm)

### Description

Alarm message:

The input of PSU *arg1arg2* is lost.

This alarm is generated when the PSU single-circuit input is lost.

Alarm object: PSU

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x03000041 | Major | Yes |

### Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Number of a PSU. |
| *arg2* | PSU input circuit. |

### Impact on the System

The power supply to the system is affected, and the system may be powered off abnormally.

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### Possible Causes

- The power cable is loose or faulty.
- The PSU is faulty.

### Procedure

**Step 1** Check whether the PSU single-circuit input is undervoltage.

- If yes, go to **Step 5**.
- If no, go to **Step 2**.

**Step 2** Check whether the power cable is disconnected or loose.

- If yes, go to **Step 3**.
- If no, go to **Step 4**.

**Step 3** Remove and reconnect the power cable, and check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Replace the power cable and check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Replace the PSU and check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 6**.

**Step 6** Contact technical support engineer.

**----End**

## 2.4.59 ALM-0x0300004B PSU Single-Circuit Input Overvoltage (PSU, Major Alarm)

### Description

Alarm message:

The input of PSU *arg1arg2* is overvoltage.

This alarm is generated when overvoltage occurs on the PSU single-circuit input.

Alarm object: PSU

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x0300004B | Major | Yes |

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### Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Number of a PSU. |
| *arg2* | PSU input circuit. |

### Impact on the System

If overvoltage occurs on the PSU single-circuit input, the power supply to the system is not affected. If overvoltage occurs on the PSU dual-circuit input, the power supply to the system is affected and the system may be powered off abnormally.

### Possible Causes

The external power supply is abnormal.

### Procedure

**Step 1** Check the input voltage and ensure that the input voltage is within the allowable range.

**Step 2** Reconnect the power supply and check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Contact technical support.

**----End**

## 2.4.60 ALM-0x0300006D PSUVOut 12V Undervoltage Minor Alarm (PSU, Minor Alarm)

### Description

Alarm message:

Power supply output voltage (*arg1* V) at PSU[*arg2*] is lower than the slight undervoltage threshold (*arg3* V).

This alarm is generated when the power supply output voltage is lower than the slight undervoltage threshold.

Alarm object: PSU

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x0300006D | Minor | Yes |

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### Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Current reading of the sensor. |
| *arg2* | No. of a PSU. |
| *arg3* | Alarm threshold. |

### Impact on the System

The power supply to the system is affected, and the system may be powered off unexpectedly.

### Possible Causes

The PSU is faulty.

### Procedure

**Step 1** Replace the PSU. Then check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Contact technical support.

**----End**

## 2.4.61 ALM-0x0300006F PSUVOut 12V Overvoltage Minor Alarm (PSU, Minor Alarm)

### Description

Alarm message:

Power supply output voltage (*arg1* V) at PSU[*arg2*] exceeds the slight overvoltage threshold (*arg3* V).

This alarm is generated when the power supply output voltage exceeds the slight overvoltage threshold.

Alarm object: PSU

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x0300006F | Minor | Yes |

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### Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Current reading of the sensor. |
| *arg2* | No. of a PSU. |
| *arg3* | Alarm threshold. |

### Impact on the System

The power supply to the system is affected, and the system may be powered off unexpectedly.

### Possible Causes

The PSU is faulty.

### Procedure

**Step 1** Replace the PSU. Then check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Contact technical support.

**----End**

## 2.4.62 ALM-0x03000071 PSUVOut 12V Undervoltage Major Alarm (PSU, Major Alarm)

### Description

Alarm message:

Power supply output voltage (*arg1* V) at PSU[*arg2*] is lower than the undervoltage threshold (*arg3* V).

This alarm is generated when the power supply output voltage is lower than the undervoltage threshold.

Alarm object: PSU

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x03000071 | Major | Yes |

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### Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Current reading of the sensor. |
| *arg2* | No. of a PSU. |
| *arg3* | Alarm threshold. |

### Impact on the System

The power supply to the system is affected, and the system may be powered off unexpectedly.

### Possible Causes

The PSU is faulty.

### Procedure

**Step 1** Replace the PSU. Then check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Contact technical support.

**----End**

## 2.4.63 ALM-0x03000073 PSUVOut 12V Overvoltage Major Alarm (PSU, Major Alarm)

### Description

Alarm message:

Power supply output voltage (*arg1* V) at PSU[*arg2*] exceeds the overvoltage threshold (*arg3* V).

This alarm is generated when the power supply output voltage exceeds the overvoltage threshold.

Alarm object: PSU

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x03000073 | Major | Yes |

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### Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Current reading of the sensor. |
| *arg2* | No. of a PSU. |
| *arg3* | Alarm threshold. |

### Impact on the System

The power supply to the system is affected, and the system may be powered off unexpectedly.

### Possible Causes

The PSU is faulty.

### Procedure

**Step 1** Replace the PSU. Then check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Contact technical support.

**----End**

## 2.4.64 ALM-0x03000075 PSUVIn Undervoltage Minor Alarm (PSU, Minor Alarm)

### Description

Alarm message:

Power supply input voltage (*arg1* V) at PSU[*arg3*] is lower than the slight undervoltage threshold (*arg2* V).

This alarm is generated when the PSU enter voltage is detected to be too low.

Alarm object: PSU

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x03000075 | Minor | Yes |

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### Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Current reading of the sensor. |
| *arg2* | Alarm threshold. |
| *arg3* | No. of the PSU. |

### Impact on the System

The power supply to the system is affected, and the system may be powered off unexpectedly.

### Possible Causes

- The input voltage is abnormal.
- An internal fault occurs in the PSU.

### Procedure

**Step 1** Check the input voltage of the device and ensure that the input voltage is within the allowable range of the device. And then check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **2**.

**Step 2** Replace the PSU and check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **3**.

**Step 3** Contact technical support engineer.

**----End**

## 2.4.65 ALM-0x03000077 PSUVIn Overvoltage Minor Alarm (PSU, Minor Alarm)

### Description

Alarm message:

Power supply input voltage (*arg1* V) at PSU[*arg3*] exceeds the slight overvoltage threshold (*arg2* V).

This alarm is generated when the PSU enter voltage is too high during detection.

Alarm object: PSU

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### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x03000077 | Minor | Yes |

### Parameters

| Name | Meaning |
|---|---|
| *arg1* | Current reading of the sensor. |
| *arg2* | Alarm threshold. |
| *arg3* | No. of the PSU. |

### Impact on the System

The power supply to the system is affected, and the system may be powered off unexpectedly.

### Possible Causes

- The input voltage is abnormal.
- An internal fault occurs in the PSU.

### Procedure

**Step 1** Check the input voltage of the device and ensure that the input voltage is within the allowable range of the device. And then check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **2**.

**Step 2** Replace the PSU and check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **3**.

**Step 3** Contact technical support engineer.

**----End**

## 2.4.66 ALM-0x03000079 PSUVIn Undervoltage Major Alarm (PSU, Major Alarm)

### Description

Alarm message:

Power supply input voltage (*arg1* V) at PSU[*arg3*] is lower than the undervoltage threshold (*arg2* V).

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This alarm is generated when the PSU enter voltage is detected to be too low.

Alarm object: PSU

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x03000079 | Major | Yes |

## Parameters

| Name | Meaning |
|---|---|
| *arg1* | Current reading of the sensor. |
| *arg2* | Alarm threshold. |
| *arg3* | No. of the PSU. |

## Impact on the System

The power supply to the system is affected, and the system may be powered off unexpectedly.

## Possible Causes

- The input voltage is abnormal.
- An internal fault occurs in the PSU.

## Procedure

**Step 1** Check the input voltage of the device and ensure that the input voltage is within the allowable range of the device. And then check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **2**.

**Step 2** Replace the PSU and check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **3**.

**Step 3** Contact technical support engineer.

**----End**

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# 2.4.67 ALM-0x0300007B PSUVIn Overvoltage Major Alarm (PSU, Major Alarm)

## Description

Alarm message:

Power supply input voltage (*arg1* V) at PSU[*arg3*] exceeds the overvoltage threshold (*arg2* V).

This alarm is generated when the PSU enter voltage is too high during detection.

Alarm object: PSU

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x0300007B | Major | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Current reading of the sensor. |
| *arg2* | Alarm threshold. |
| *arg3* | No. of the PSU. |

## Impact on the System

The power supply to the system is affected, and the system may be powered off unexpectedly.

## Possible Causes

- The input voltage is abnormal.
- An internal fault occurs in the PSU.

## Procedure

**Step 1** Check the input voltage of the device and ensure that the input voltage is within the allowable range of the device. And then check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **2**.

**Step 2** Replace the PSU and check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **3**.

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**Step 3** Contact technical support engineer.

**----End**

# 2.4.68 ALM-0x0300007D PSUIOut Overcurrent Minor Alarm (PSU, Minor Alarm)

## Description

Alarm message:

Power supply output current (*arg1* A) at PSU[*arg3*] exceeds the slight overcurrent threshold (*arg2* A).

This alarm is generated when the PSU output current exceeds the slight overcurrent threshold.

Alarm object: PSU

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x0300007D | Minor | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Current reading of the sensor. |
| *arg2* | Alarm threshold. |
| *arg3* | No. of the PSU. |

## Impact on the System

The power supply to the system is affected, and the system may be powered off unexpectedly.

## Possible Causes

- The output power supply is short-circuited.
- The PSU is faulty.

## Procedure

**Step 1** Check whether the output side of the PSU is short-circuited.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

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**Step 2** Ensure the PSU output side circuit is normal, and then check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Replace the PSU and check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Contact technical support engineer.

**----End**

# 2.4.69 ALM-0x0300007F PSUIOut Overcurrent Major Alarm (PSU, Major Alarm)

## Description

Alarm message:

Power supply output current (*arg1* A) at PSU[*arg3*] exceeds the overcurrent threshold (*arg2* A).

This alarm is generated when the PSU output current exceeds the slight overcurrent threshold.

Alarm object: PSU

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x0300007F | Major | Yes |

## Parameters

| Name | Meaning |
|---|---|
| *arg1* | Current reading of the sensor. |
| *arg2* | Alarm threshold. |
| *arg3* | No. of the PSU. |

## Impact on the System

The power supply to the system is affected, and the system may be powered off unexpectedly.

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### Possible Causes

- The output power supply is short-circuited.
- The PSU is faulty.

### Procedure

**Step 1** Check whether the output side of the PSU is short-circuited.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Ensure the PSU output side circuit is normal, and then check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Replace the PSU and check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Contact technical support engineer.

**----End**

## 2.4.70 ALM-0x03000081 The PSU Bus is Undervoltage Major Alarm (PSU, Major Alarm)

### Description

Alarm message:

The PSU*arg1* bus is undervoltage.

This alarm is generated when the PSU bus is undervoltage.

Alarm object: PSU

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x03000081 | Major | Yes |

### Parameters

| Name | Meaning |
|---|---|
| *arg1* | No. of the PSU. |

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### Impact on the System

The power supply to the system is affected, and the system may be powered off unexpectedly.

### Possible Causes

- The input power supply is unstable.
- An internal error occurs on the PSU.

### Procedure

**Step 1** Check whether the power supply is normal.

- If yes, go to **Step 3**.
- If no, go to **Step 2**.

**Step 2** Ensure the power supply is normal, and then check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Remove the PSU, wait for 10 minutes, and reinstall the PSU.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Replace the PSU and check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Contact technical support engineer.

**----End**

## 2.4.71 ALM-0x05000001 Disk Backplane Power Failure (Disk Backplane, Major Alarm)

### Description

Alarm message:

Power supply to [*arg1*] disk backplane [*arg2*] failed (SN: *arg3*, BN: *arg4*).

NOTE

From iBMC V370, this alarm also includes the serial number and BOM code of the disk backplane.

This alarm is generated when the power supply to the disk backplane is abnormal.

Alarm object: Disk Backplane

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## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x05000001 | Major | Yes |

## Parameters

| Name | Meaning |
|---|---|
| *arg1* | Location of the disk backplane. For example, **rear**, **inner**, or **front**.<br>**NOTE**<br>On the 2298 V5 server, this parameter is displayed as **front_1** or **front_2**.<br>● **front_1**: indicates the upper front drawer.<br>● **front_2**: indicates the lower front drawer. |
| *arg2* | Power supply type. For example, **5V** or **12V**. |
| *arg3* | Disk backplane serial number. |
| *arg4* | BOM code. |

## Impact on the System

The disk backplane cannot work properly. As a result, related services may run abnormally or data may be lost.

## Possible Causes

- The cable between the disk backplane and the mainboard is faulty.
- The disk backplane is faulty.
- The disk is faulty.

## Procedure

**Step 1** Completely power off the server by disconnecting the AC power cables, and remove and reconnect the cable of the disk backplane. After the server is powered on, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Completely power off the server, and replace the cable of the disk backplane. After the server is powered on, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Remove the disk, Then, check whether the alarm is cleared.

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- If yes, no further action is required.
- if no, go to **Step 4**

**Step 4** Completely power off the server, and replace the disk backplane. After the server is powered on, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Contact technical support engineer.

**----End**

# 2.4.72 ALM-0x0600000F Screw-in RAID controller card BBU undervoltage (RAID Card, Major Alarm)

## Description

Alarm message:

*arg2* RAID card *arg1* BBU voltage is low (SN: *arg3*, BN: *arg4*).

NOTE

From iBMC V328, the RAID controller card and PSU alarms will also include the SN and BOM code, and the fan alarms will also include the BOM code.

This alarm is generated when the BBU (iBBU or supercapacitor) voltage of the RAID controller card is low.

Alarm object: RAID Card

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x0600000F | Major | Yes |

## Parameters

| Name | Meaning |
|---|---|
| *arg1* | Slot number of the RAID controller card. |
| *arg2* | Front I/O module or compute module and its slot number, for example, **FM** or **CMn**. |
| *arg3* | SN of the RAID controller card. |
| *arg4* | BOM code. |

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### Impact on the System

Abnormal battery or supercapacitor voltage affects the protection of data against power failure, causing system performance to deteriorate.

### Possible Causes

The battery on the RAID controller card is low in power.

### Procedure

**Step 1** Replace the BBU or supercapacitor of the RAID controller card. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Contact technical support.

**----End**

## 2.4.73 ALM-0x06000011 RAID Controller Card BBU Fault (RAID Controller Card, Major Alarm)

### Description

Alarm message:

*arg2* RAID card *arg1* BBU is fault (SN: *arg3*, BN: *arg4*).

NOTE

From iBMC V328, the RAID controller card and PSU alarms will also include the SN and BOM code, and the fan alarms will also include the BOM code.

This alarm is generated when the BBU (iBBU or supercapacitor) of the RAID controller card is faulty.

Alarm object: RAID Controller Card

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x06000011 | Major | Yes |

### Parameters

| Name | Meaning |
|---|---|
| *arg1* | Slot number of the RAID controller card. |

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| Name | Meaning |
| --- | --- |
| *arg2* | Front I/O module or compute module and its slot number, for example, **FM** or **CMn**. |
| *arg3* | SN of the RAID controller card. |
| *arg4* | BOM code. |

## Impact on the System

Abnormal battery or supercapacitor voltage affects the protection of data against power failure, causing system performance to deteriorate.

## Possible Causes

The battery on the RAID controller card is low in power.

## Procedure

**Step 1** Replace the BBU or supercapacitor of the RAID controller card. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Contact technical support.

**----End**

# 2.4.74 ALM-0x08000011 PCIe Card Battery Undervoltage (PCIe Card, Minor Alarm)

## Description

Alarm message:

The [*arg1*] PCIe card *arg2* (*arg3*) voltage (*arg4* V) at 3 V detection point is lower than the undervoltage threshold (*arg5* V).

This alarm is generated when the PCIe card battery voltage is lower than the undervoltage threshold.

Alarm object: PCIe Card

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x08000011 | Minor | Yes |

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### Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Location of the PCIe card. For example, **front** or **rear**. |
| *arg2* | Slot number of the PCIe card, for example, **1** or **2**. |
| *arg3* | Type of the PCIe card, for example, **M60 GPU**. |
| *arg4* | Current reading of the sensor. |
| *arg5* | Alarm threshold. |

### Impact on the System

The PCIe card clock may be affected.

### Possible Causes

The voltage of the PCIe card battery is lower than the normal range.

### Procedure

**Step 1** Replace the PCIe card's battery. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Replace the PCIe card. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Contact technical support engineer.

**----End**

## 2.4.75 ALM-0x08000013 PCIe Card Undervoltage (PCIe Card, Major Alarm)

### Description

Alarm message:

The [*arg1*] PCIe card *arg2* (*arg3*) voltage (*arg4* V) at *arg5* detection point is lower than the undervoltage threshold (*arg6* V).

This alarm is generated when the voltage of a voltage detection point of the PCIe card is lower than the undervoltage threshold.

Alarm object: PCIe Card

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## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x08000013 | Major | Yes |

## Parameters

| Name | Meaning |
|---|---|
| *arg1* | Location of the PCIe card. For example, **front** or **rear**. |
| *arg2* | Slot number of the PCIe card, for example, **1** or **2**. |
| *arg3* | Type of the PCIe card, for example, **M60 GPU**. |
| *arg4* | Current reading of the sensor. |
| *arg5* | Voltage detection point. For example, **VCC 5V0** or **NBS 1V8**. |
| *arg6* | Alarm threshold. |

## Impact on the System

The PCIe card may run unstably, and the system may run abnormally.

## Possible Causes

- The PCIe card is faulty.
- The standard PCIe card slot is faulty.

## Procedure

**Step 1** Remove and reinstall the PCIe card to check whether the PCIe card is powered on normally. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Replace the PCIe card. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Replace the component where the PCIe card is located. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Contact technical support engineer.

**----End**

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# 2.4.76 ALM-0x08000015 PCIe Card Overvoltage (PCIe Card, Major Alarm)

## Description

Alarm message:

The [*arg1*] PCIe card *arg2* (*arg3*) voltage (*arg4* V) at *arg5* detection point exceeds the overvoltage threshold (*arg6* V).

This alarm is generated when the voltage of a voltage detection point of the PCIe card exceeds the overvoltage threshold.

Alarm object: PCIe Card

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x08000015 | Major | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Location of the PCIe card. For example, **front** or **rear**. |
| *arg2* | Slot number of the PCIe card, for example, **1** or **2**. |
| *arg3* | Type of the PCIe card, for example, **M60 GPU**. |
| *arg4* | Current reading of the sensor. |
| *arg5* | Voltage detection point. For example, **VCC 5V0** or **NBS 1V8**. |
| *arg6* | Alarm threshold. |

## Impact on the System

The PCIe card may run unstably, and the system may run abnormally.

## Possible Causes

- The PCIe card is faulty.
- The standard PCIe card slot is faulty.

## Procedure

**Step 1** Remove and reinstall the PCIe card to check whether the PCIe card is powered on normally. Then, check whether the alarm is cleared.

- If yes, no further action is required.

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- If no, go to **Step 2**.

**Step 2** Replace the PCIe card. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Replace the component where the PCIe card is located. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Contact technical support engineer.

**----End**

# 2.4.77 ALM-0x08000017 Failed to Read PCIe Card Voltage (PCIe Card, Minor Alarm)

## Description

Alarm message:

Failed to obtain voltage at the *arg4* detection point on the *arg1* PCIe card *arg2(arg3)*. [*arg5*] [*arg6*]

This alarm is generated when the system failed to obtain the voltage of the PCIe card.

Alarm object: PCIe Card

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x08000017 | Minor | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Location of the PCIe card. For example, **front** or **rear**. |
| *arg2* | Slot number of the PCIe card, for example, **1** or **2**. |
| *arg3* | Type of the PCIe card, for example, **M60 GPU**. |

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| Name | Meaning |
| --- | --- |
| *arg4* | Voltage detection point.<br>Example values:<br>● **3V3**, **0V95**<br>● **VCC 5V0**<br>● **NBS 1V8**, **NBS 0V9**, **AVS 0V9**<br>● **DIMMA 0V6**, **DIMMB 0V6**<br>● **FPGA 1V8**, **FPGA 1V2**, **FPGA 1V**<br>● **DDR 1V2**, **DDR 2V5** |
| *arg5* | Supplementary information about the alarm, for example, **Error Code**.<br>**NOTE**<br>This parameter is available only for iBMC V308 and later versions. |
| *arg6* | Error code of the alarm, for example, **(7176)**.<br>**NOTE**<br>This parameter is available only for iBMC V308 and later versions. |

## Impact on the System

The voltage cannot be monitored. No alarm will be reported when the voltage is not in the normal range. The hardware self-protection function fails.

## Possible Causes

The I2C channel is abnormal or the PCIe card is faulty.

## Procedure

**Step 1** Restart the iBMC. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Remove and reinstall the power cable or board. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Replace the PCIe card. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Contact technical support engineer.

**----End**

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# 2.4.78 ALM-0x08000039 PCIe Card BBU Undervoltage (PCIe Card, Major Alarm)

## Description

Alarm message:

The [*arg1*] PCIe card *arg2* (*arg3*) BBU voltage is low.

This alarm is generated when the BBU (iBBU or supercapacitor) voltage of the PCIe RAID card is low.

Alarm object: PCIe Card

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x08000039 | Major | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Location of the PCIe card. For example, **front** or **rear**. |
| *arg2* | Slot number of the PCIe card, for example, **1** or **2**. |
| *arg3* | Type of the PCIe card, for example, **M60 GPU**. |

## Impact on the System

Abnormal battery or supercapacitor voltage affects the protection of data against power failure, causing system performance to deteriorate.

## Possible Causes

The battery on the PCIe RAID card is low in power.

## Procedure

**Step 1** Replace the BBU or supercapacitor of the RAID controller card. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Contact technical support engineer.

**----End**

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# 2.4.79 ALM-0x0800003B PCIe Card BBU Fault (PCIe Card, Major Alarm)

## Description

Alarm message:

The [*arg1*] PCIe card *arg2* (*arg3*) BBU is fault.

This alarm is generated when the BBU (iBBU or supercapacitor) of the RAID controller card is faulty.

Alarm object: PCIe Card

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x0800003B | Major | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Location of the PCIe card. For example, **front** or **rear**. |
| *arg2* | Slot number of the PCIe card, for example, **1** or **2**. |
| *arg3* | Type of the PCIe card, for example, **M60 GPU**. |

## Impact on the System

Abnormal battery or supercapacitor voltage affects the protection of data against power failure, causing system performance to deteriorate.

## Possible Causes

The battery on the PCIe RAID card is low in power.

## Procedure

**Step 1** Replace the BBU or supercapacitor of the RAID controller card. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Contact technical support engineer.

**----End**

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# 2.4.80 ALM-0x080000E1 Voltage Major Fault Alarm on PCIe Card(PCIe card, Major Alarm)

## Description

Alarm message:

A major fault about the voltage of the PCIe card *arg1 arg2* was detected. *arg*3. *arg4*.

This alarm is generated when a major voltage error occurs on a PCIe device.

Alarm object: PCIe Card

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x080000E1 | Major | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Slot number of the PCIe card, for example, **3**. |
| *arg2* | PCIe card name, for example, **SDI V5.1**. |
| *arg3* | Alarm description, for example, voltage PVCCANA_CPU get fail abnormal. |
| *arg4* | Error code of the alarm, for example, **8268**. |

## Impact on the System

Operation of the SDI computing card is unstable, the device may power off, and the system runs abnormally.

## Possible Causes

- A power component is faulty.
- The MCU ADC module is faulty.
- For details about the causes, see the *SDI Error Codes Manual*.

## Procedure

**Step 1** Check whether the PCIe devices is correctly powered on.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

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**Step 2** Power off and then power on the server, and check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Power off and then power on the server by removing and inserting the power cable, and check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Replace PCIe devices, and check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Contact technical support engineer.

**----End**

# 2.4.81 ALM-0x080000E9 PCIe Card Overcurrent Minor Alarm(PCIe card, Minor Alarm)

## Description

Alarm message:

The current (*arg4* A) at the detection point *arg5* of the *arg1* PCIe card *arg2* (*arg3*) is higher than the overcurrent threshold (*arg6* A).

This alarm is generated when the current of a PCIe card is too high.

Alarm object: PCIe Card

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x080000E9 | Minor | Yes |

## Parameters

| Name | Meaning |
|---|---|
| *arg1* | location of the PCIe card. For example, **PCIe Riser**. |
| *arg2* | Slot number of the PCIe card, for example, **2 and 5**. |
| *arg3* | PCIe card name, for example, **SDI V3**. |
| *arg4* | Actual current at the detection point. For example,**15**. |
| *arg5* | Name of the current detection point. For example,**cable or gold**. |
| *arg6* | Alarm threshold at the detection point. For example,**10**. |

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### Impact on the System

The overcurrent affects PCIe device stability. If the alarm persists, services related to the PCIe card will fail.

### Possible Causes

- The input current of the PCIe card is high.
- The PCIe card is faulty.

### Procedure

**Step 1** Check for power supply alarms of the server.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Replace the PSU for which the alarm is generated. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Shut down and restart the OS, and check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** If the alarm is not cleared, replace the component.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Contact technical support engineer.

**----End**

## 2.4.82 ALM-0x08000113 Voltage minor fault alarm on PCIe card (PCIe Card, Minor Alarm)

### Description

Alarm message:

A minor fault about the voltage of the PCIe card *arg1 arg2* was detected. *arg*3. *arg*4.

This alarm is generated when a minor voltage error occurs on a PCIe device.

Alarm object: PCIe Card

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## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x08000113 | Minor | Yes |

## Parameters

| Name | Meaning |
|---|---|
| *arg1* | Slot number of the PCIe card, for example, **3**. |
| *arg2* | PCIe card name, for example, **SDI V5.1**. |
| *arg3* | Alarm description, for example, voltage PVCCANA_CPU get fail abnormal. |
| *arg4* | Error code of the alarm, for example, **8268**. |

## Impact on the System

The PCIe device operates unstably and may be powered off, and the system may run abnormally.

## Possible Causes

- An internal PCIe device error occurs.

## Procedure

**Step 1** Check whether the device is properly powered on.

- If yes, go to **2**.
- If no, go to **5**.

**Step 2** Power off and power on the server, and check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **3**.

**Step 3** Power off and power on the server by disconnecting and then reconnecting the power cable, and check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **4**.

**Step 4** Replace the PCIe device and check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **5**.

**Step 5** Contact technical support engineer.

**----End**

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# 2.4.83 ALM-0x0B000005 MCE/AER Error (Mezzanine Card, Critical Alarm)

## Description

Alarm message:

Mezzanine card *arg1* triggered an uncorrectable error, *arg2* (SN: *arg3*, BN: *arg4*).

NOTE

From iBMC V370, this alarm also includes the serial number and BOM code of the mezzanine card.

This alarm is generated when an uncorrectable error occurred on the mezzanine card.

Alarm object: Mezzanine card

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x0B000005 | Critical | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Serial number of the mezzanine card number. |
| *arg2* | Uncorrectable error code of the alarm. |
| *arg3* | Mezzanine card serial number. |
| *arg4* | BOM code. |

## Impact on the System

The mezzanine card may run unstably, and the OS may stop responding.

## Possible Causes

- The mezzanine card is faulty.
- The slot of the mezzanine card is damaged.

## Procedure

**Step 1** Remove and reinstall the mezzanine card securely. Then, check whether the alarm is cleared.

- If yes, no further action is required.

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- If no, go to **Step 2**.

**Step 2** Replace the mezzanine card. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Replace the mainboard. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Contact technical support engineer.

**----End**

# 2.4.84 ALM-0x0B00000B Mezzanine Card Overvoltage (Mezzanine Card, Major Alarm)

## Description

Alarm message:

Mezzanine card *arg1* voltage (*arg2* V) at (*arg3*V) detection point exceeds the overvoltage threshold (*arg4* V).

This alarm is generated when the voltage at the mezzanine card detection point exceeds the overvoltage threshold.

Alarm object: Mezzanine Card

NOTE

iBMC V290 and later support this alarm.

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x0B00000B | Major | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Slot number of the mezzanine card. |
| *arg2* | Current reading of the sensor. |
| *arg3* | Voltage detection point. For example, **0.9V**, **1.0V**, **1.8V**, **2.5V**, or **3.3V** |
| *arg4* | Alarm threshold. |

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### Impact on the System

The mezzanine card and system fail to work.

### Possible Causes

- The power cable or slot of the mezzanine card is in poor contact.
- The mezzanine card does not work normally.

### Procedure

**Step 1** Restart the iBMC. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Remove and reinstall the power cable or board. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Replace the mezzanine card. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Contact technical support engineer.

**----End**

## 2.4.85 ALM-0x0B00000B Mezzanine Card 0.9 V Overvoltage (Mezzanine Card, Major Alarm)

### Description

Alarm message:

Mezzanine card *arg1* voltage (*arg2* V) at 0.9 V detection point exceeds the overvoltage threshold (*arg3* V).

This alarm is generated when the voltage at the 0.9 V detection point of the mezzanine card exceeds the overvoltage major threshold.

Alarm object: Mezzanine Card

NOTE

Only the iBMC version earlier than V290 supports this alarm.

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x0B00000B | Major | Yes |

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### Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Slot number of the mezzanine card. |
| *arg2* | Current reading of the sensor. |
| *arg3* | Alarm threshold. |

### Impact on the System

The mezzanine card and system fail to work.

### Possible Causes

- The power cable or slot of the mezzanine card is in poor contact.
- The mezzanine card does not work normally.

### Procedure

**Step 1** Restart the iBMC. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Remove and reinstall the power cable or board. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Replace the mezzanine card. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Contact technical support engineer.

**----End**

## 2.4.86 ALM-0x0B00000D Mezzanine Card Undervoltage (Mezzanine Card, Major Alarm)

### Description

Alarm message:

Mezzanine card *arg1* voltage (*arg2* V) at (*arg3*V) detection point is lower than the undervoltage threshold (*arg4* V) (SN: *arg5*, BN: *arg6*).

This alarm is generated when the voltage at the mezzanine card detection point is lower than the undervoltage threshold.

Alarm object: Mezzanine Card

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NOTE

- Only iBMC V290 and later support this alarm.
- From iBMC V370, this alarm also include the serial number and BOM code of the mezzanine card.

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x0B00000D | Major | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Slot number of the mezzanine card. |
| *arg2* | Current reading of the sensor. |
| *arg3* | Voltage detection point. For example, **0.9V**, **1.0V**, **1.8V**, **2.5V**, or **3.3V** |
| *arg4* | Alarm threshold. |
| *arg5* | Mezzanine card serial number. |
| *arg6* | BOM code. |

## Impact on the System

The mezzanine card and system fail to work.

## Possible Causes

- The power cable or slot of the mezzanine card is in poor contact.
- The mezzanine card does not work normally.

## Procedure

**Step 1** Restart the iBMC. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Remove and reinstall the power cable or board. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Replace the mezzanine card. Then, check whether the alarm is cleared.

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- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Contact technical support engineer.

**----End**

# 2.4.87 ALM-0x0B00000D Mezzanine Card 0.9 V Undervoltage (Mezzanine Card, Major Alarm)

## Description

Alarm message:

Mezzanine card *arg1* voltage (*arg2* V) at 0.9 V detection point is lower than the undervoltage threshold (*arg3* V).

This alarm is generated when the voltage at the 0.9 V detection point of the mezzanine card is lower than the undervoltage major threshold.

Alarm object: Mezzanine Card

NOTE

Only the iBMC version earlier than V290 supports this alarm.

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x0B00000D | Major | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Slot number of the mezzanine card. |
| *arg2* | Current reading of the sensor. |
| *arg3* | Alarm threshold. |

## Impact on the System

The mezzanine card and system fail to work.

## Possible Causes

- The power cable or slot of the mezzanine card is in poor contact.
- The mezzanine card does not work normally.

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### Procedure

**Step 1** Restart the iBMC. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Remove and reinstall the power cable or board. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Replace the mezzanine card. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Contact technical support engineer.

**----End**

## 2.4.88 ALM-0x0B00000F Mezzanine Card 1.0 V Overvoltage (Mezzanine Card, Major Alarm)

### Description

Alarm message:

Mezzanine card *arg1* voltage (*arg2* V) at 1.0 V detection point exceeds the overvoltage threshold (*arg3* V).

This alarm is generated when the voltage at the 1.0 V detection point of the mezzanine card exceeds the overvoltage major threshold.

Alarm object: Mezzanine Card

NOTE

Only the iBMC version earlier than V290 supports this alarm.

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x0B00000F | Major | Yes |

### Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Slot number of the mezzanine card. |
| *arg2* | Current reading of the sensor. |
| *arg3* | Alarm threshold. |

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### Impact on the System

The mezzanine card and system fail to work.

### Possible Causes

- The power cable or slot of the mezzanine card is in poor contact.
- The mezzanine card does not work normally.

### Procedure

**Step 1** Restart the iBMC. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Remove and reinstall the power cable or board. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Replace the mezzanine card. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Contact technical support engineer.

**----End**

## 2.4.89 ALM-0x0B000011 Mezzanine Card 1.0 V Undervoltage (Mezzanine Card, Major Alarm)

### Description

Alarm message:

Mezzanine card *arg1* voltage (*arg2* V) at 1.0 V detection point is lower than the undervoltage threshold (*arg3* V).

This alarm is generated when the voltage at the 1.0 V detection point of the mezzanine card is lower than the undervoltage major threshold.

Alarm object: Mezzanine Card

NOTE

Only the iBMC version earlier than V290 supports this alarm.

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## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x0B000011 | Major | Yes |

## Parameters

| Name | Meaning |
|---|---|
| *arg1* | Slot number of the mezzanine card. |
| *arg2* | Current reading of the sensor. |
| *arg3* | Alarm threshold. |

## Impact on the System

The mezzanine card and system fail to work.

## Possible Causes

- The power cable or slot of the mezzanine card is in poor contact.
- The mezzanine card does not work normally.

## Procedure

**Step 1** Restart the iBMC. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Remove and reinstall the power cable or board. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Replace the mezzanine card. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Contact technical support engineer.

**----End**

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# 2.4.90 ALM-0x0B000013 Mezzanine Card 1.8 V Overvoltage (Mezzanine Card, Major Alarm)

## Description

Alarm message:

Mezzanine card *arg1* voltage (*arg2* V) at 1.8 V detection point exceeds the overvoltage threshold (*arg3* V).

This alarm is generated when the voltage at the 1.8 V detection point of the mezzanine card exceeds the overvoltage major threshold.

Alarm object: Mezzanine Card

NOTE

Only the iBMC version earlier than V290 supports this alarm.

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x0B000013 | Major | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Slot number of the mezzanine card. |
| *arg2* | Current reading of the sensor. |
| *arg3* | Alarm threshold. |

## Impact on the System

The mezzanine card and system fail to work.

## Possible Causes

- The power cable or slot of the mezzanine card is in poor contact.
- The mezzanine card does not work normally.

## Procedure

**Step 1** Restart the iBMC. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Remove and reinstall the power cable or board. Then, check whether the alarm is cleared.

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- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Replace the mezzanine card. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Contact technical support engineer.

**----End**

# 2.4.91 ALM-0x0B000015 Mezzanine Card 1.8 V Undervoltage (Mezzanine Card, Major Alarm)

## Description

Alarm message:

Mezzanine card *arg1* voltage (*arg2* V) at 1.8 V detection point is lower than the undervoltage threshold (*arg3* V).

This alarm is generated when the voltage at the 1.8 V detection point of the mezzanine card is lower than the undervoltage major threshold.

Alarm object: Mezzanine Card

NOTE

Only the iBMC version earlier than V290 supports this alarm.

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x0B000015 | Major | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Slot number of the mezzanine card. |
| *arg2* | Current reading of the sensor. |
| *arg3* | Alarm threshold. |

## Impact on the System

The mezzanine card and system fail to work.

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### Possible Causes

- The power cable or slot of the mezzanine card is in poor contact.
- The mezzanine card does not work normally.

### Procedure

**Step 1** Restart the iBMC. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Remove and reinstall the power cable or board. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Replace the mezzanine card. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Contact technical support engineer.

**----End**

## 2.4.92 ALM-0x0B000017 Mezzanine Card 2.5 V Overvoltage (Mezzanine Card, Major Alarm)

### Description

Alarm message:

Mezzanine card *arg1* voltage (*arg2* V) at 2.5 V detection point exceeds the overvoltage threshold (*arg3* V).

This alarm is generated when the voltage at the 2.5 V detection point of the mezzanine card exceeds the overvoltage major threshold.

Alarm object: Mezzanine Card

NOTE

Only the iBMC version earlier than V290 supports this alarm.

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x0B000017 | Major | Yes |

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### Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Slot number of the mezzanine card. |
| *arg2* | Current reading of the sensor. |
| *arg3* | Alarm threshold. |

### Impact on the System

The mezzanine card and system fail to work.

### Possible Causes

- The power cable or slot of the mezzanine card is in poor contact.
- The mezzanine card does not work normally.

### Procedure

**Step 1** Restart the iBMC. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Remove and reinstall the power cable or board. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Replace the mezzanine card. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Contact technical support engineer.

**----End**

## 2.4.93 ALM-0x0B000019 Mezzanine Card 2.5 V Undervoltage (Mezzanine Card, Major Alarm)

### Description

Alarm message:

Mezzanine card *arg1* voltage (*arg2* V) at 2.5 V detection point is lower than the undervoltage threshold (*arg3* V).

This alarm is generated when the voltage at the 2.5 V detection point of the mezzanine card is lower than the undervoltage major threshold.

Alarm object: Mezzanine Card

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NOTE

Only the iBMC version earlier than V290 supports this alarm.

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x0B000019 | Major | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Slot number of the mezzanine card. |
| *arg2* | Current reading of the sensor. |
| *arg3* | Alarm threshold. |

## Impact on the System

The mezzanine card and system fail to work.

## Possible Causes

- The power cable or slot of the mezzanine card is in poor contact.
- The mezzanine card does not work normally.

## Procedure

**Step 1** Restart the iBMC. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Remove and reinstall the power cable or board. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Replace the mezzanine card. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Contact technical support engineer.

**----End**

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# 2.4.94 ALM-0x0B00001B Mezzanine Card 3.3 V Overvoltage (Mezzanine Card, Major Alarm)

## Description

Alarm message:

Mezzanine card *arg1* voltage (*arg2* V) at 3.3 V detection point exceeds the overvoltage threshold (*arg3* V).

This alarm is generated when the voltage at the 3.3 V detection point of the mezzanine card exceeds the overvoltage major threshold.

Alarm object: Mezzanine Card

NOTE

Only the iBMC version earlier than V290 supports this alarm.

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x0B00001B | Major | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Slot number of the mezzanine card. |
| *arg2* | Current reading of the sensor. |
| *arg3* | Alarm threshold. |

## Impact on the System

The mezzanine card and system fail to work.

## Possible Causes

- The power cable or slot of the mezzanine card is in poor contact.
- The mezzanine card does not work normally.

## Procedure

**Step 1** Restart the iBMC. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Remove and reinstall the power cable or board. Then, check whether the alarm is cleared.

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- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Replace the mezzanine card. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Contact technical support engineer.

**----End**

# 2.4.95 ALM-0x0B00001D Mezzanine Card 3.3 V Undervoltage (Mezzanine Card, Major Alarm)

## Description

Alarm message:

Mezzanine card *arg1* voltage (*arg2* V) at 3.3 V detection point is lower than the undervoltage threshold (*arg3* V).

This alarm is generated when the voltage at the 3.3 V detection point of the mezzanine card is lower than the undervoltage major threshold.

Alarm object: Mezzanine Card

NOTE

Only the iBMC version earlier than V290 supports this alarm.

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x0B00001D | Major | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Slot number of the mezzanine card. |
| *arg2* | Current reading of the sensor. |
| *arg3* | Alarm threshold. |

## Impact on the System

The mezzanine card and system fail to work.

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### Possible Causes

- The power cable or slot of the mezzanine card is in poor contact.
- The mezzanine card does not work normally.

### Procedure

**Step 1** Restart the iBMC. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Remove and reinstall the power cable or board. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Replace the mezzanine card. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Contact technical support engineer.

**----End**

## 2.4.96 ALM-0x0B000021 Failed to Read Mezzanine Card Voltage (Mezzanine Card, Minor Alarm)

### Description

Alarm message:

Failed to obtain data of the voltage for Mezz card *arg1*.

This alarm is generated when the system failed to obtain the mezzanine card voltage.

Alarm object: Mezzanine Card

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x0B000021 | Minor | Yes |

### Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Slot number of the mezzanine card. |

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### Impact on the System

The mezzanine card fails to provide optimal performance.

### Possible Causes

- The power cable or slot of the mezzanine card is in poor contact.
- The mezzanine card does not work normally.

### Procedure

**Step 1** Restart the iBMC. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Remove and reinstall the power cable or board. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Replace the mezzanine card. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Contact technical support engineer.

**----End**

## 2.4.97 ALM-0x0D000009 NIC Subboard Power Supply Abnormal (NIC, Major Alarm)

### Description

Alarm message:

The power supply *arg1* of *arg2 arg3* is abnormal.

This alarm is generated when there is an NIC fault or power supply abnormality of the NIC. The alarm is cleared when the NIC power module is recovered to normal.

Alarm object: NIC

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x0D000009 | Major | Yes |

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### Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Power supply module on the LOM, for example, **(PG_3V3)** or **(PG_VCORE)**. |
| *arg2* | Slot No. of the LOM, for example **NIC1**. |
| *arg3* | Type of the LOM, for example **(SM380)**. |

### Impact on the System

NIC services are affected. The NIC may be unavailable and the service network may be abnormal.

### Possible Causes

- The mainboard is faulty.
- The NIC is faulty.

### Procedure

**Step 1** Restart the iBMC. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Replace the NIC. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Replace the mainboard. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Contact technical support engineer.

**----End**

## 2.4.98 ALM-0x0D00000B NIC Subboard Fault (NIC, Major Alarm)

### Description

Alarm message:

The *arg1 arg2* failure.

This alarm is generated when the NIC or mainboard is faulty.

Alarm object: NIC

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### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x0D00000B | Major | Yes |

### Parameters

| Name | Meaning |
|---|---|
| *arg1* | Slot No. of the LOM, for example **NIC1**. |
| *arg2* | Type of the LOM, for example **(SM380)**. |

### Impact on the System

NIC services are affected. The NIC may be unavailable and the service network may be abnormal.

### Possible Causes

- The mainboard is faulty.
- The NIC is faulty.

### Procedure

**Step 1** Restart the iBMC. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Replace the NIC. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Replace the mainboard. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Contact technical support engineer.

**----End**

## 2.4.99 ALM-0x0E000007 The Memory Board Power Supply Abnormal (Memory Board, Major Alarm)

### Description

Alarm message:

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The *arg1 arg2* power failure.

This alarm is generated when the memory board power supply abnormal.

Alarm object: Memory Board

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x0E000007 | Major | Yes |

### Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Name of the memory board. For example, **MemBoard1**. |
| *arg2* | Voltage detection point. For example, **PG_VCC_3V3**. |

### Impact on the System

The memory devices on the memory board are affected, which further affects the system operation.

### Possible Causes

The memory board is faulty.

### Procedure

**Step 1** Replace the memory board. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Contact technical support engineer.

**----End**

## 2.4.100 ALM-0x0F00000B Riser Overvoltage (PCIe Riser, Major Alarm)

### Description

Alarm message:

PCIe riser *arg4* voltage (*arg1* V) at *arg3* detection point exceeds the overvoltage threshold (*arg2* V).

This alarm is generated when the voltage of the detection point on the PCIe riser exceeds the overvoltage major threshold.

Alarm object: PCIe Riser

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### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x0F00000B | Major | Yes |

### Parameters

| Name | Meaning |
|---|---|
| *arg1* | Current reading of the sensor. |
| *arg2* | Alarm threshold. |
| *arg3* | Voltage detection point. For example, **GPU1 3.3V**, **GPU2 3.3V**, **Riser1 STB 3.3V**, or **Riser1 12V IN**. |
| *arg4* | Serial number of the PCIe riser. |

### Impact on the System

The PCIe cards on the riser card are affected, which further affects the system operation.

### Possible Causes

The PCIe riser is faulty.

### Procedure

**Step 1** Replace the PCIe riser. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Contact technical support engineer.

**----End**

## 2.4.101 ALM-0x0F00000D Failed to Read Riser Voltage (PCIe Riser, Minor Alarm)

### Description

Alarm message:

Failed to obtain the voltage at *arg1* detection point on the PCIe riser *arg2*.

This alarm is generated when the system failed to obtain the voltage at the detection point on the PCIe riser.

Alarm object: PCIe Riser

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## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x0F00000D | Minor | Yes |

## Parameters

| Name | Meaning |
|---|---|
| *arg1* | Voltage detection point. For example, **GPU1 3.3V**, **Riser1 STB 3.3V**, or **Riser1 12V IN**. |
| *arg2* | Serial number of the PCIe riser. |

## Impact on the System

The temperature cannot be monitored. No alarm will be reported when the temperature is not in the normal range.

## Possible Causes

- The IN circuit is abnormal.
- The PCIe riser is faulty.

## Procedure

**Step 1** Restart the iBMC. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Remove and reinstall the power cable or board. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Replace the PCIe riser. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Contact technical support engineer.

**----End**

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# 2.4.102 ALM-0x0F000011 Riser Card Power Supply Failed (PCIe Riser, Major Alarm)

## Description

Alarm message:

PCIe riser card *arg1 arg2* power failure (SN: *arg3*, BN: *arg4*).

NOTE

From iBMC V370, this alarm also includes the serial number and BOM code of the PCIe card.

This alarm is generated when the PCIe riser card power supply failed.

Alarm object: PCIe Riser

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x0F000011 | Major | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Slot number of the PCIe riser card. For example, **1** or **2**.<br>**NOTE**<br>This parameter is supported in iBMC V3.07.03.27 or later versions. |
| *arg2* | Voltage detection point. For example, **3V3** or **12V0** |
| *arg3* | PCIe card serial number. |
| *arg4* | BOM code. |

## Impact on the System

The PCIe cards on the riser card are affected, which further affects the system operation.

## Possible Causes

The PCIe riser card is faulty.

## Procedure

**Step 1** Replace the faulty riser card. Then, check whether the alarm is cleared.

- If yes, no further action is required.

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- If no, go to **Step 2**.

**Step 2** Contact technical support engineer.

**----End**

# 2.4.103 ALM-0x10000001 System 3.3 V Undervoltage (Mainboard, Major Alarm)

## Description

Alarm message:

Mainboard voltage (*arg1* V) at 3.3 V detection point is lower than the undervoltage threshold (*arg2* V) (BN: *arg3*).

NOTE

From iBMC V316, the CPU and disk alarms will also include the SN and BOM code and the mainboard and memory alarms will also include the BOM code.

This alarm is generated when the voltage of the 3.3 V detection point on the mainboard is lower than the undervoltage major threshold.

Alarm object: Mainboard

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x10000001 | Major | Yes |

## Parameters

| Name | Meaning |
|---|---|
| *arg1* | Current reading of the sensor. |
| *arg2* | Alarm threshold. |
| *arg3* | BOM code. |

## Impact on the System

The system stops responding.

## Possible Causes

The mainboard is faulty.

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### Procedure

**Step 1** Replace the mainboard. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Contact technical support engineer.

**----End**

## 2.4.104 ALM-0x10000003 System 3.3 V Overvoltage (Mainboard, Major Alarm)

### Description

Alarm message:

Mainboard voltage (*arg1* V) at 3.3 V detection point exceeds the overvoltage threshold (*arg2* V) (BN: *arg3*).

NOTE

From iBMC V316, the CPU and disk alarms will also include the SN and BOM code and the mainboard and memory alarms will also include the BOM code.

This alarm is generated when the voltage of the 3.3 V detection point on the mainboard exceeds the overvoltage major threshold.

Alarm object: Mainboard

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x10000003 | Major | Yes |

### Parameters

| Name | Meaning |
|---|---|
| *arg1* | Current reading of the sensor. |
| *arg2* | Alarm threshold. |
| *arg3* | BOM code. |

### Impact on the System

The system stops responding.

### Possible Causes

The mainboard is faulty.

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### Procedure

**Step 1** Replace the mainboard. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Contact technical support engineer.

**----End**

## 2.4.105 ALM-0x10000005 System 5 V Undervoltage (Mainboard, Major Alarm)

### Description

Alarm message:

Mainboard voltage (*arg1* V) at 5 V detection point is lower than the undervoltage threshold (*arg2* V) (BN: *arg3*).

NOTE

From iBMC V316, the CPU and disk alarms will also include the SN and BOM code and the mainboard and memory alarms will also include the BOM code.

This alarm is generated when the voltage of the 5 V detection point on the mainboard is lower than the undervoltage major threshold.

Alarm object: Mainboard

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x10000005 | Major | Yes |

### Parameters

| Name | Meaning |
|---|---|
| *arg1* | Current reading of the sensor. |
| *arg2* | Alarm threshold. |
| *arg3* | BOM code. |

### Impact on the System

The system stops responding.

### Possible Causes

The mainboard is faulty.

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### Procedure

**Step 1** Replace the mainboard. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Contact technical support engineer.

**----End**

## 2.4.106 ALM-0x10000007 System 5 V Overvoltage (Mainboard, Major Alarm)

### Description

Alarm message:

Mainboard voltage (*arg1* V) at 5 V detection point exceeds the overvoltage threshold (*arg2* V) (BN: *arg3*).

NOTE

From iBMC V316, the CPU and disk alarms will also include the SN and BOM code and the mainboard and memory alarms will also include the BOM code.

This alarm is generated when the voltage of the 5 V detection point on the mainboard exceeds the overvoltage major threshold.

Alarm object: Mainboard

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x10000007 | Major | Yes |

### Parameters

| Name | Meaning |
|---|---|
| *arg1* | Current reading of the sensor. |
| *arg2* | Alarm threshold. |
| *arg3* | BOM code. |

### Impact on the System

The system stops responding.

### Possible Causes

The mainboard is faulty.

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### Procedure

**Step 1** Replace the mainboard. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Contact technical support engineer.

**----End**

## 2.4.107 ALM-0x10000009 System 12 V Undervoltage (Mainboard, Major Alarm)

### Description

Alarm message:

Mainboard voltage (*arg1* V) at 12 V detection point [*arg3*] is lower than the undervoltage threshold (*arg2* V) (BN: *arg4*).

NOTE

From iBMC V316, the CPU and disk alarms will also include the SN and BOM code and the mainboard and memory alarms will also include the BOM code.

This alarm is generated when the voltage at the 12 V detection point on the mainboard is lower than the undervoltage major threshold.

Alarm object: Mainboard

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x10000009 | Major | Yes |

### Parameters

| Name | Meaning |
|---|---|
| *arg1* | Current reading of the sensor. |
| *arg2* | Alarm threshold. |
| *arg3* | 12 V detection point. For example, **1**, **2**, **3**, or **4**. |
| *arg4* | BOM code. |

### Impact on the System

The system stops responding.

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### Possible Causes

The mainboard is faulty.

### Procedure

**Step 1** Replace the mainboard. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Contact technical support engineer.

**----End**

## 2.4.108 ALM-0x1000000B System 12 V Overvoltage (Mainboard, Major Alarm)

### Description

Alarm message:

Mainboard voltage (*arg1* V) at 12 V detection point *arg3* exceeds the overvoltage threshold (*arg2* V) *arg4*.

This alarm is generated when the voltage of the 12 V detection point on the mainboard exceeds the overvoltage major threshold.

Alarm object: Mainboard

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x1000000B | Major | Yes |

### Parameters

| Name | Meaning |
|---|---|
| *arg1* | Current reading of the sensor. |
| *arg2* | Alarm threshold. |
| *arg3* | 12 V detection point. For example, **1**, **2**, **3**, or **4**. |
| *arg4* | BOM code. |

### Impact on the System

The system stops responding.

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### Possible Causes

The mainboard is faulty.

### Procedure

**Step 1** Replace the mainboard. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Contact technical support engineer.

**----End**

## 2.4.109 ALM-0x1000000F Standby 3.3 V Undervoltage (Mainboard, Major Alarm)

### Description

Alarm message:

Mainboard voltage (*arg1* V) at standby 3.3 V detection point is lower than the undervoltage threshold (*arg2* V) (BN: *arg3*).

NOTE

From iBMC V316, the CPU and disk alarms will also include the SN and BOM code and the mainboard and memory alarms will also include the BOM code.

This alarm is generated when the voltage of the mainboard standby 3.3 V detection point is lower than the undervoltage threshold.

Alarm object: Mainboard

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x1000000F | Major | Yes |

### Parameters

| Name | Meaning |
|---|---|
| *arg1* | Current reading of the sensor. |
| *arg2* | Alarm threshold. |
| *arg3* | BOM code. |

### Impact on the System

The iBMC is not stable.

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### Possible Causes

The mainboard is faulty.

### Procedure

**Step 1** Replace the mainboard. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Contact technical support engineer.

**----End**

## 2.4.110 ALM-0x10000011 Standby 3.3 V Overvoltage (Mainboard, Major Alarm)

### Description

Alarm message:

Mainboard voltage (*arg1* V) at standby 3.3 V detection point exceeds the overvoltage threshold (*arg2* V) (BN: *arg3*).

NOTE

From iBMC V316, the CPU and disk alarms will also include the SN and BOM code and the mainboard and memory alarms will also include the BOM code.

This alarm is generated when the voltage of the mainboard standby 3.3 V detection point exceeds the overvoltage threshold.

Alarm object: Mainboard

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x10000011 | Major | Yes |

### Parameters

| Name | Meaning |
|---|---|
| *arg1* | Current reading of the sensor. |
| *arg2* | Alarm threshold. |
| *arg3* | BOM code. |

### Impact on the System

The iBMC is not stable.

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### Possible Causes

The mainboard is faulty.

### Procedure

**Step 1** Replace the mainboard. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Contact technical support engineer.

**----End**

## 2.4.111 ALM-0x10000017 Mainboard Power Supply Failure (Mainboard, Major Alarm)

### Description

Alarm message:

The power supply *arg1* to the mainboard is abnormal (BN: *arg2*).

NOTE

From iBMC V316, the CPU and disk alarms will also include the SN and BOM code and the mainboard and memory alarms will also include the BOM code.

This alarm is generated when the power supply to the mainboard is abnormal.

Alarm object: Mainboard

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x10000017 | Major | Yes |

### Parameters

| Name | Meaning |
|---|---|
| *arg1* | Voltage detection point. |
| *arg2* | BOM code. |

### Impact on the System

The power supply to the server is affected and the system may be powered off unexpectedly.

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### Possible Causes

The power signal of the mainboard is abnormal.

### Procedure

**Step 1** Replace the mainboard. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Contact technical support engineer.

**----End**

## 2.4.112 ALM-0x1000001F Mainboard Standby 1 V Undervoltage (Mainboard, Major Alarm)

### Description

Alarm message:

Mainboard voltage (*arg1* V) at standby 1 V detection point is lower than the undervoltage threshold (*arg2* V) (BN: *arg3*).

NOTE

From iBMC V316, the CPU and disk alarms will also include the SN and BOM code and the mainboard and memory alarms will also include the BOM code.

This alarm is generated when the voltage of the standby 1 V detection point on the mainboard is lower than the undervoltage threshold.

Alarm object: Mainboard

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x1000001F | Major | Yes |

### Parameters

| Name | Meaning |
|---|---|
| *arg1* | Current reading of the sensor. |
| *arg2* | Alarm threshold. |
| *arg3* | BOM code. |

### Impact on the System

The iBMC is not stable.

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### Possible Causes

The mainboard is faulty.

### Procedure

**Step 1** Replace the mainboard. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Contact technical support engineer.

**----End**

## 2.4.113 ALM-0x10000021 Mainboard Standby 1 V Overvoltage (Mainboard, Major Alarm)

### Description

Alarm message:

Mainboard voltage (*arg1* V) at standby 1 V detection point exceeds the overvoltage threshold (*arg2* V) (BN: *arg3*).

NOTE

From iBMC V316, the CPU and disk alarms will also include the SN and BOM code and the mainboard and memory alarms will also include the BOM code.

This alarm is generated when the voltage of the mainboard standby 1 V detection point exceeds the overvoltage threshold.

Alarm object: Mainboard

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x10000021 | Major | Yes |

### Parameters

| Name | Meaning |
|---|---|
| *arg1* | Current reading of the sensor. |
| *arg2* | Alarm threshold. |
| *arg3* | BOM code. |

### Impact on the System

The iBMC is not stable.

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### Possible Causes

The mainboard is faulty.

### Procedure

**Step 1** Replace the mainboard. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Contact technical support engineer.

**----End**

## 2.4.114 ALM-0x10000023 Mainboard Standby 2.5 V Undervoltage (Mainboard, Major Alarm)

### Description

Alarm message:

Mainboard voltage (*arg1* V) at standby 2.5 V detection point is lower than the undervoltage threshold (*arg2* V) (BN: *arg3*).

NOTE

From iBMC V316, the CPU and disk alarms will also include the SN and BOM code and the mainboard and memory alarms will also include the BOM code.

This alarm is generated when the voltage of the standby 2.5 V detection point on the mainboard is lower than the undervoltage major threshold.

Alarm object: Mainboard

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x10000023 | Major | Yes |

### Parameters

| Name | Meaning |
|---|---|
| *arg1* | Current reading of the sensor. |
| *arg2* | Alarm threshold. |
| *arg3* | BOM code. |

### Impact on the System

The iBMC is not stable.

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### Possible Causes

The mainboard is faulty.

### Procedure

**Step 1** Replace the mainboard. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Contact technical support engineer.

**----End**

## 2.4.115 ALM-0x10000025 Mainboard Standby 2.5 V Overvoltage (Mainboard, Major Alarm)

### Description

Alarm message:

Mainboard voltage (*arg1* V) at standby 2.5 V detection point exceeds the overvoltage threshold (*arg2* V) (BN: *arg3*).

NOTE

From iBMC V316, the CPU and disk alarms will also include the SN and BOM code and the mainboard and memory alarms will also include the BOM code.

This alarm is generated when the voltage of the standby 2.5 V detection point on the mainboard exceeds the overvoltage major threshold.

Alarm object: Mainboard

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x10000025 | Major | Yes |

### Parameters

| Name | Meaning |
|---|---|
| *arg1* | Current reading of the sensor. |
| *arg2* | Alarm threshold. |
| *arg3* | BOM code. |

### Impact on the System

The iBMC is not stable.

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### Possible Causes

The mainboard is faulty.

### Procedure

**Step 1** Replace the mainboard. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Contact technical support engineer.

**----End**

## 2.4.116 ALM-0x10000027 Mainboard 1 V Undervoltage (Mainboard, Major Alarm)

### Description

Alarm message:

Mainboard voltage (*arg1* V) at 1 V detection point is lower than the undervoltage threshold (*arg2* V) (BN: *arg3*).

NOTE

From iBMC V316, the CPU and disk alarms will also include the SN and BOM code and the mainboard and memory alarms will also include the BOM code.

This alarm is generated when the voltage of the mainboard 1 V detection point is lower than the undervoltage threshold.

Alarm object: Mainboard

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x10000027 | Major | Yes |

### Parameters

| Name | Meaning |
|---|---|
| *arg1* | Current reading of the sensor. |
| *arg2* | Alarm threshold. |
| *arg3* | BOM code. |

### Impact on the System

The server cannot be started or may run improperly.

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### Possible Causes

The mainboard is faulty.

### Procedure

**Step 1** Replace the mainboard. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Contact technical support engineer.

**----End**

## 2.4.117 ALM-0x10000029 Mainboard 1 V Overvoltage (Mainboard, Major Alarm)

### Description

Alarm message:

Mainboard voltage (*arg1* V) at 1 V detection point exceeds the overvoltage threshold (*arg2* V) (BN: *arg3*).

NOTE

From iBMC V316, the CPU and disk alarms will also include the SN and BOM code and the mainboard and memory alarms will also include the BOM code.

This alarm is generated when the voltage of the mainboard 1 V detection point exceeds the overvoltage threshold.

Alarm object: Mainboard

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x10000029 | Major | Yes |

### Parameters

| Name | Meaning |
|---|---|
| *arg1* | Current reading of the sensor. |
| *arg2* | Alarm threshold. |
| *arg3* | BOM code. |

### Impact on the System

The server cannot be started or may run improperly.

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### Possible Causes

The mainboard is faulty.

### Procedure

**Step 1** Replace the mainboard. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Contact technical support engineer.

**----End**

## 2.4.118 ALM-0x1000002B Mainboard 1.5 V Undervoltage (Mainboard, Major Alarm)

### Description

Alarm message:

Mainboard voltage (*arg1* V) at 1.5 V detection point is lower than the undervoltage threshold (*arg2* V) (BN: *arg3*).

NOTE

From iBMC V316, the CPU and disk alarms will also include the SN and BOM code and the mainboard and memory alarms will also include the BOM code.

This alarm is generated when the voltage of the mainboard 1.5 V detection point is lower than the undervoltage threshold.

Alarm object: Mainboard

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x1000002B | Major | Yes |

### Parameters

| Name | Meaning |
|---|---|
| *arg1* | Current reading of the sensor. |
| *arg2* | Alarm threshold. |
| *arg3* | BOM code. |

### Impact on the System

The server cannot be started or may run improperly.

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### Possible Causes

The mainboard is faulty.

### Procedure

**Step 1** Replace the mainboard. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Contact technical support engineer.

**----End**

## 2.4.119 ALM-0x1000002D Mainboard 1.5 V Overvoltage (Mainboard, Major Alarm)

### Description

Alarm message:

Mainboard voltage (*arg1* V) at 1.5 V detection point exceeds the overvoltage threshold (*arg2* V) (BN: *arg3*).

NOTE

From iBMC V316, the CPU and disk alarms will also include the SN and BOM code and the mainboard and memory alarms will also include the BOM code.

This alarm is generated when the voltage of the mainboard 1.5 V detection point exceeds the overvoltage threshold.

Alarm object: Mainboard

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x1000002D | Major | Yes |

### Parameters

| Name | Meaning |
|---|---|
| *arg1* | Current reading of the sensor. |
| *arg2* | Alarm threshold. |
| *arg3* | BOM code. |

### Impact on the System

The server cannot be started or may run improperly.

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### Possible Causes

The mainboard is faulty.

### Procedure

**Step 1** Replace the mainboard. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Contact technical support engineer.

**----End**

## 2.4.120 ALM-0x1000002F Large Voltage Difference on Mainboard MOSFET (Mainboard, Major Alarm)

### Description

Alarm message:

The MOS FET voltage drop (*arg1* V) of the soft-start circuit on the mainboard exceeds the threshold (*arg2* V) (BN: *arg3*).

NOTE

From iBMC V316, the CPU and disk alarms will also include the SN and BOM code and the mainboard and memory alarms will also include the BOM code.

The voltage difference of the MOSFET on the mainboard exceeds the major threshold.

Alarm object: Mainboard

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x1000002F | Major | Yes |

### Parameters

| Name | Meaning |
|---|---|
| *arg1* | Current reading of the sensor. |
| *arg2* | Alarm threshold. |
| *arg3* | BOM code. |

### Impact on the System

The server cannot be started or may run improperly.

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### Possible Causes

The mainboard is faulty.

### Procedure

**Step 1** Replace the mainboard. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Contact technical support engineer.

**----End**

## 2.4.121 ALM-0x10000031 Large Voltage Difference on Mainboard MOSFET (Mainboard, Critical Alarm)

### Description

Alarm message:

The MOS FET voltage drop (*arg1* V) of the soft-start circuit on the mainboard exceeds the threshold (*arg2* V) (BN: *arg3*).

NOTE

From iBMC V316, the CPU and disk alarms will also include the SN and BOM code and the mainboard and memory alarms will also include the BOM code.

The voltage difference of the MOSFET on the mainboard exceeds the critical threshold.

Alarm object: Mainboard

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x10000031 | Critical | Yes |

### Parameters

| Name | Meaning |
|---|---|
| *arg1* | Current reading of the sensor. |
| *arg2* | Alarm threshold. |
| *arg3* | BOM code. |

### Impact on the System

The server cannot be started or may run improperly.

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### Possible Causes

The mainboard is faulty.

### Procedure

**Step 1** Replace the mainboard. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Contact technical support engineer.

**----End**

## 2.4.122 ALM-0x10000033 Standby 5 V Undervoltage (Mainboard, Major Alarm)

### Description

Alarm message:

Mainboard voltage (*arg1* V) at standby 5 V detection point is lower than the undervoltage threshold (*arg2* V) (BN: *arg3*).

NOTE

From iBMC V316, the CPU and disk alarms will also include the SN and BOM code and the mainboard and memory alarms will also include the BOM code.

This alarm is generated when the voltage of the standby 5 V detection point on the mainboard is lower than the undervoltage major threshold.

Alarm object: Mainboard

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x10000033 | Major | Yes |

### Parameters

| Name | Meaning |
|---|---|
| *arg1* | Current reading of the sensor. |
| *arg2* | Alarm threshold. |
| *arg3* | BOM code. |

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## Impact on the System

The system cannot be started or may generate errors. The iBMC is not running stably.

## Possible Causes

The mainboard is faulty.

## Procedure

**Step 1** Replace the mainboard. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Contact technical support engineer.

**----End**

# 2.4.123 ALM-0x10000035 Standby 5 V Overvoltage (Mainboard, Major Alarm)

## Description

Alarm message:

Mainboard voltage (*arg1* V) at standby 5 V detection point exceeds the overvoltage threshold (*arg2* V) (BN: *arg3*).

NOTE

From iBMC V316, the CPU and disk alarms will also include the SN and BOM code and the mainboard and memory alarms will also include the BOM code.

This alarm is generated when the voltage of the standby 5 V detection point on the mainboard exceeds the overvoltage major threshold.

Alarm object: Mainboard

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x10000035 | Major | Yes |

## Parameters

| Name | Meaning |
|---|---|
| *arg1* | Current reading of the sensor. |
| *arg2* | Alarm threshold. |
| *arg3* | BOM code. |

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### Impact on the System

The system cannot be started or may generate errors. The iBMC is not running stably.

### Possible Causes

The mainboard is faulty.

### Procedure

**Step 1** Replace the mainboard. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Contact technical support engineer.

**----End**

## 2.4.124 ALM-0x1000003B Mainboard 1.1 V Undervoltage (Mainboard, Major Alarm)

### Description

Alarm message:

Mainboard voltage (*arg1* V) at 1.1 V detection point is lower than the undervoltage threshold (*arg2* V) (BN: *arg3*).

NOTE

From iBMC V316, the CPU and disk alarms will also include the SN and BOM code and the mainboard and memory alarms will also include the BOM code.

This alarm is generated when the voltage of the mainboard 1.1 V detection point is lower than the undervoltage major threshold.

Alarm object: Mainboard

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x1000003B | Major | Yes |

### Parameters

| Name | Meaning |
|---|---|
| *arg1* | Current reading of the sensor. |

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| Name | Meaning |
| --- | --- |
| *arg2* | Alarm threshold. |
| *arg3* | BOM code. |

### Impact on the System

The server cannot be started or may run improperly.

### Possible Causes

The mainboard is faulty.

### Procedure

**Step 1** Replace the mainboard. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Contact technical support engineer.

**----End**

## 2.4.125 ALM-0x1000003D Mainboard 1.1 V Overvoltage (Mainboard, Major Alarm)

### Description

Alarm message:

Mainboard voltage (*arg1* V) at 1.1 V detection point exceeds the overvoltage threshold (*arg2* V) (BN: *arg3*).

NOTE

From iBMC V316, the CPU and disk alarms will also include the SN and BOM code and the mainboard and memory alarms will also include the BOM code.

This alarm is generated when the voltage of the mainboard 1.1 V detection point exceeds the overvoltage major threshold.

Alarm object: Mainboard

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x1000003D | Major | Yes |

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### Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Current reading of the sensor. |
| *arg2* | Alarm threshold. |
| *arg3* | BOM code. |

### Impact on the System

The server cannot be started or may run improperly.

### Possible Causes

The mainboard is faulty.

### Procedure

**Step 1** Replace the mainboard. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Contact technical support engineer.

**----End**

## 2.4.126 ALM-0x1000003F Standby 1.2 V Undervoltage (Mainboard, Major Alarm)

### Description

Alarm message:

Mainboard voltage (*arg1* V) at 1.2 V detection point is lower than the undervoltage threshold (*arg2* V) (BN: *arg3*).

NOTE

From iBMC V316, the CPU and disk alarms will also include the SN and BOM code and the mainboard and memory alarms will also include the BOM code.

This alarm is generated when the voltage of the mainboard standby 1.2 V detection point is lower than the undervoltage major threshold.

Alarm object: Mainboard

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x1000003F | Major | Yes |

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### Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Current reading of the sensor. |
| *arg2* | Alarm threshold. |
| *arg3* | BOM code. |

### Impact on the System

The server cannot be started or may run improperly.

### Possible Causes

The mainboard is faulty.

### Procedure

**Step 1** Replace the mainboard. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Contact technical support engineer.

**----End**

## 2.4.127 ALM-0x10000041 Standby 1.2 V Overvoltage (Mainboard, Major Alarm)

### Description

Alarm message:

Mainboard voltage (*arg1* V) at 1.2 V detection point exceeds the overvoltage threshold (*arg2* V) (BN: *arg3*).

NOTE

From iBMC V316, the CPU and disk alarms will also include the SN and BOM code and the mainboard and memory alarms will also include the BOM code.

This alarm is generated when the voltage of the mainboard standby 1.2 V detection point exceeds the overvoltage major threshold.

Alarm object: Mainboard

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x10000041 | Major | Yes |

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### Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Current reading of the sensor. |
| *arg2* | Alarm threshold. |
| *arg3* | BOM code. |

### Impact on the System

The server cannot be started or may run improperly.

### Possible Causes

The mainboard is faulty.

### Procedure

**Step 1** Replace the mainboard. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Contact technical support engineer.

**----End**

## 2.4.128 ALM-0x1000005D Soft-Start Circuit Overvoltage (Mainboard, Minor Alarm)

### Description

Alarm message:

Soft-start circuit power supply abnormal at detection point *arg1* (BN: *arg2*).

NOTE

From iBMC V316, the CPU and disk alarms will also include the SN and BOM code and the mainboard and memory alarms will also include the BOM code.

This alarm is generated when the soft-start circuit voltage exceeds the minor threshold.

Alarm object: Mainboard

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x1000005D | Minor | Yes |

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### Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Number of the monitoring point of the soft-start circuit. |
| *arg2* | BOM code. |

### Impact on the System

The system may stop responding.

### Possible Causes

The mainboard is faulty.

### Procedure

**Step 1** Replace the mainboard. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**

**Step 2** Contact technical support engineer.

**----End**

## 2.4.129 ALM-0x1000005F Soft-Start Circuit Fault (Mainboard, Major Alarm)

### Description

Alarm message:

Soft-start circuit critical fault (BN: *arg1*).

NOTE

From iBMC V316, the CPU and disk alarms will also include the SN and BOM code and the mainboard and memory alarms will also include the BOM code.

This alarm is generated when a critical fault occurred on the soft-start circuit.

Alarm object: Mainboard

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x1000005F | Major | Yes |

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### Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | BOM code. |

### Impact on the System

The server may restart.

### Possible Causes

- The mainboard is faulty.
- GPU card failure.
- GPU carrier board failure.

### Procedure

**Step 1** Replace the mainboard. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **2**

**Step 2** Replace the GPU card. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **3**

**Step 3** Replace the GPU carrier board. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **4**

**Step 4** Contact technical support engineer.

**----End**

## 2.4.130 ALM-0x10000063 Failed to Read System 3.3 V Voltage (Mainboard, Minor Alarm)

### Description

Alarm message:

Failed to obtain the voltage at 3.3 V detection point on the mainboard (BN: *arg1*).

NOTE

From iBMC V316, the CPU and disk alarms will also include the SN and BOM code and the mainboard and memory alarms will also include the BOM code.

This alarm is generated when the system failed to obtain the voltage at 3.3 V detection point.

Alarm object: Mainboard

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### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x10000063 | Minor | Yes |

### Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | BOM code. |

### Impact on the System

The voltage cannot be monitored. No alarm will be reported when the voltage is not in the normal range.

### Possible Causes

The CPU voltage detection circuit is abnormal.

### Procedure

**Step 1** Restart the iBMC. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Remove and reinstall the power cable or board. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Replace the mainboard. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Contact technical support engineer.

**----End**

## 2.4.131 ALM-0x10000065 Failed to Read System 5 V Voltage (Mainboard, Minor Alarm)

### Description

Alarm message:

Failed to obtain the voltage at 5 V detection point on the mainboard (BN: *arg1*).

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NOTE

From iBMC V316, the CPU and disk alarms will also include the SN and BOM code and the mainboard and memory alarms will also include the BOM code.

This alarm is generated when the system failed to obtain the voltage at 5 V detection point.

Alarm object: Mainboard

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x10000065 | Minor | Yes |

## Parameters

| Name | Meaning |
|---|---|
| *arg1* | BOM code. |

## Impact on the System

The voltage cannot be monitored. No alarm will be reported when the voltage is not in the normal range.

## Possible Causes

The CPU voltage detection circuit is abnormal.

## Procedure

**Step 1** Restart the iBMC. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Remove and reinstall the power cable or board. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Replace the mainboard. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Contact technical support engineer.

**----End**

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# 2.4.132 ALM-0x10000067 Failed to Read System 12 V Voltage (Mainboard, Minor Alarm)

## Description

Alarm message:

Failed to obtain the voltage at 12 V detection point [*arg1*] on the mainboard (BN: *arg2*).

NOTE

From iBMC V316, the CPU and disk alarms will also include the SN and BOM code and the mainboard and memory alarms will also include the BOM code.

This alarm is generated when the system failed to obtain the voltage at 12 V detection point.

Alarm object: Mainboard

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x10000067 | Minor | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | 12 V detection point. For example, **1**, **2**, **3**, or **4**. |
| *arg2* | BOM code. |

## Impact on the System

The voltage cannot be monitored. No alarm will be reported when the voltage is not in the normal range.

## Possible Causes

The CPU voltage detection circuit is abnormal.

## Procedure

**Step 1** Restart the iBMC. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Remove and reinstall the power cable or board. Then, check whether the alarm is cleared.

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- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Replace the mainboard. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Contact technical support engineer.

**----End**

# 2.4.133 ALM-0x10000069 Failed to Read Mainboard 1.1 V Voltage (Mainboard, Minor Alarm)

## Description

Alarm message:

Failed to obtain the voltage at 1.1 V detection point on the mainboard (BN: *arg1*).

NOTE

From iBMC V316, the CPU and disk alarms will also include the SN and BOM code and the mainboard and memory alarms will also include the BOM code.

This alarm is generated when the system failed to obtain the voltage of the mainboard 1.1 V detection point.

Alarm object: Mainboard

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x10000069 | Minor | Yes |

## Parameters

| Name | Meaning |
|---|---|
| *arg1* | BOM code. |

## Impact on the System

The voltage cannot be monitored. No alarm will be reported when the voltage is not in the normal range.

## Possible Causes

The CPU voltage detection circuit is abnormal.

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## Procedure

**Step 1** Restart the iBMC. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Remove and reinstall the power cable or board. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Replace the mainboard. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Contact technical support engineer.

**----End**

# 2.4.134 ALM-0x1000006B Failed to Read Mainboard 1.5 V Voltage (Mainboard, Minor Alarm)

## Description

Alarm message:

Failed to obtain the voltage at 1.5 V detection point on the mainboard (BN: *arg1*).

NOTE

From iBMC V316, the CPU and disk alarms will also include the SN and BOM code and the mainboard and memory alarms will also include the BOM code.

This alarm is generated when the system failed to obtain the voltage of the mainboard 1.5 V detection point.

Alarm object: Mainboard

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x1000006B | Minor | Yes |

## Parameters

| Name | Meaning |
|---|---|
| *arg1* | BOM code. |

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### Impact on the System

The voltage cannot be monitored. No alarm will be reported when the voltage is not in the normal range.

### Possible Causes

The CPU voltage detection circuit is abnormal.

### Procedure

**Step 1** Restart the iBMC. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Remove and reinstall the power cable or board. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Replace the mainboard. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Contact technical support engineer.

**----End**

## 2.4.135 ALM-0x1000006D Failed to Read Standby 5 V Voltage (Mainboard, Minor Alarm)

### Description

Alarm message:

Failed to obtain the voltage at standby 5 V detection point on the mainboard (BN: *arg1*).

NOTE

From iBMC V316, the CPU and disk alarms will also include the SN and BOM code and the mainboard and memory alarms will also include the BOM code.

This alarm is generated when the system failed to obtain the voltage at standby 5 V detection point.

Alarm object: Mainboard

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x1000006D | Minor | Yes |

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### Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | BOM code. |

### Impact on the System

The voltage cannot be monitored. No alarm will be reported when the voltage is not in the normal range.

### Possible Causes

The CPU voltage detection circuit is abnormal.

### Procedure

**Step 1** Restart the iBMC. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Remove and reinstall the power cable or board. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Replace the mainboard. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Contact technical support engineer.

**----End**

## 2.4.136 ALM-0x1000006F Failed to Read Standby 3.3 V Voltage (Mainboard, Minor Alarm)

### Description

Alarm message:

Failed to obtain the voltage at standby 3.3 V detection point on the mainboard (BN: *arg1*).

**NOTE**

From iBMC V316, the CPU and disk alarms will also include the SN and BOM code and the mainboard and memory alarms will also include the BOM code.

This alarm is generated when the system failed to obtain the voltage at standby 3.3 V detection point.

Alarm object: Mainboard

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### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x1000006F | Minor | Yes |

### Parameters

| Name | Meaning |
|---|---|
| *arg1* | BOM code. |

### Impact on the System

The voltage cannot be monitored. No alarm will be reported when the voltage is not in the normal range.

### Possible Causes

The CPU voltage detection circuit is abnormal.

### Procedure

**Step 1** Restart the iBMC. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Remove and reinstall the power cable or board. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Replace the mainboard. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Contact technical support engineer.

**----End**

## 2.4.137 ALM-0x10000071 Failed to Read Standby 2.5 V Voltage (Mainboard, Minor Alarm)

### Description

Alarm message:

Failed to obtain the voltage at standby 2.5 V detection point on the mainboard (BN: *arg1*).

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NOTE

From iBMC V316, the CPU and disk alarms will also include the SN and BOM code and the mainboard and memory alarms will also include the BOM code.

This alarm is generated when the system failed to obtain the voltage at standby 2.5 V detection point.

Alarm object: Mainboard

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x10000071 | Minor | Yes |

## Parameters

| Name | Meaning |
|---|---|
| *arg1* | BOM code. |

## Impact on the System

The voltage cannot be monitored. No alarm will be reported when the voltage is not in the normal range.

## Possible Causes

The CPU voltage detection circuit is abnormal.

## Procedure

**Step 1** Restart the iBMC. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Remove and reinstall the power cable or board. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Replace the mainboard. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Contact technical support engineer.

**----End**

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# 2.4.138 ALM-0x10000073 Failed to Read Standby 1.5 V Voltage (Mainboard, Minor Alarm)

## Description

Alarm message:

Failed to obtain the voltage at standby 1.5 V detection point on the mainboard (BN: *arg1*).

NOTE

From iBMC V316, the CPU and disk alarms will also include the SN and BOM code and the mainboard and memory alarms will also include the BOM code.

This alarm is generated when the system failed to obtain the voltage at standby 1.5 V detection point.

Alarm object: Mainboard

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x10000073 | Minor | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | BOM code. |

## Impact on the System

The voltage cannot be monitored. No alarm will be reported when the voltage is not in the normal range.

## Possible Causes

The CPU voltage detection circuit is abnormal.

## Procedure

**Step 1** Restart the iBMC. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Remove and reinstall the power cable or board. Then, check whether the alarm is cleared.

- If yes, no further action is required.

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- If no, go to **Step 3**.

**Step 3** Replace the mainboard. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Contact technical support engineer.

**----End**

# 2.4.139 ALM-0x10000075 Failed to Read Standby 1.2 V Voltage (Mainboard, Minor Alarm)

## Description

Alarm message:

Failed to obtain the voltage at standby 1.2 V detection point on the mainboard (BN: *arg1*).

NOTE

From iBMC V316, the CPU and disk alarms will also include the SN and BOM code and the mainboard and memory alarms will also include the BOM code.

This alarm is generated when the system failed to obtain the voltage of the standby 1.2 V detection point on the mainboard.

Alarm object: Mainboard

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x10000075 | Minor | Yes |

## Parameters

| Name | Meaning |
|---|---|
| *arg1* | BOM code. |

## Impact on the System

The voltage cannot be monitored. No alarm will be reported when the voltage is not in the normal range.

## Possible Causes

The CPU voltage detection circuit is abnormal.

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### Procedure

**Step 1** Restart the iBMC. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Remove and reinstall the power cable or board. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Replace the mainboard. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Contact technical support engineer.

**----End**

## 2.4.140 ALM-0x10000077 Failed to Read Standby 1.1 V Voltage (Mainboard, Minor Alarm)

### Description

Alarm message:

Failed to obtain the voltage at standby 1.1 V detection point on the mainboard (BN: *arg1*).

NOTE

From iBMC V316, the CPU and disk alarms will also include the SN and BOM code and the mainboard and memory alarms will also include the BOM code.

This alarm is generated when the system failed to obtain the voltage at standby 1.1 V detection point.

Alarm object: Mainboard

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x10000077 | Minor | Yes |

### Parameters

| Name | Meaning |
|---|---|
| *arg1* | BOM code. |

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### Impact on the System

The voltage cannot be monitored. No alarm will be reported when the voltage is not in the normal range.

### Possible Causes

The CPU voltage detection circuit is abnormal.

### Procedure

**Step 1** Restart the iBMC. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Remove and reinstall the power cable or board. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Replace the mainboard. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Contact technical support engineer.

**----End**

## 2.4.141 ALM-0x10000079 Failed to Read standby 1 V Voltage (Mainboard, Minor Alarm)

### Description

Alarm message:

Failed to obtain the voltage at standby 1 V detection point on the mainboard (BN: *arg1*).

**NOTE**

From iBMC V316, the CPU and disk alarms will also include the SN and BOM code and the mainboard and memory alarms will also include the BOM code.

This alarm is generated when the system failed to obtain the voltage of the standby 1 V detection point on the mainboard.

Alarm object: Mainboard

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x10000079 | Minor | Yes |

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### Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | BOM code. |

### Impact on the System

The voltage cannot be monitored. No alarm will be reported when the voltage is not in the normal range.

### Possible Causes

The CPU voltage detection circuit is abnormal.

### Procedure

**Step 1** Restart the iBMC. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Remove and reinstall the power cable or board. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Replace the mainboard. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Contact technical support engineer.

**----End**

## 2.4.142 ALM-0x1000007B Failed to Read MOSFET Voltage Difference (Mainboard, Minor Alarm)

### Description

Alarm message:

Failed to obtain the MOS [*arg1*] FET voltage drop of the soft-start circuit (BN: *arg2*).

**NOTE**

From iBMC V316, the CPU and disk alarms will also include the SN and BOM code and the mainboard and memory alarms will also include the BOM code.

This alarm is generated when the system failed to obtain the voltage difference of the MOSFET on the mainboard.

Alarm object: Mainboard

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### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x1000007B | Minor | Yes |

### Parameters

| Name | Meaning |
|---|---|
| *arg1* | Number of the monitoring point of the soft-start circuit. |
| *arg2* | BOM code. |

### Impact on the System

The voltage cannot be monitored. No alarm will be reported when the voltage is not in the normal range.

### Possible Causes

The CPU voltage detection circuit is abnormal.

### Procedure

**Step 1** Restart the iBMC. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Remove and reinstall the power cable or board. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Replace the mainboard. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Contact technical support engineer.

**----End**

## 2.4.143 ALM-0x1000008B Standby 1.1 V Undervoltage (Mainboard, Major Alarm)

### Description

Alarm message:

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Mainboard voltage (*arg1* V) at standby 1.1 V detection point is lower than the undervoltage threshold (*arg2* V) (BN: *arg3*).

NOTE

From iBMC V316, the CPU and disk alarms will also include the SN and BOM code and the mainboard and memory alarms will also include the BOM code.

This alarm is generated when the voltage of the standby 1.1 V detection point on the mainboard is lower than the undervoltage major threshold.

Alarm object: Mainboard

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x1000008B | Major | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Current reading of the sensor. |
| *arg2* | Alarm threshold. |
| *arg3* | BOM code. |

## Impact on the System

The system cannot be started or may generate errors. The iBMC is not running stably.

## Possible Causes

The mainboard is faulty.

## Procedure

**Step 1** Replace the mainboard. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Contact technical support engineer.

**----End**

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# 2.4.144 ALM-0x1000008D Standby 1.1 V Overvoltage (Mainboard, Major Alarm)

## Description

Alarm message:

Mainboard voltage (*arg1* V) at standby 1.1 V detection point exceeds the overvoltage threshold (*arg2* V) (BN: *arg3*).

NOTE

From iBMC V316, the CPU and disk alarms will also include the SN and BOM code and the mainboard and memory alarms will also include the BOM code.

This alarm is generated when the voltage of the standby 1.1 V detection point on the mainboard exceeds the overvoltage major threshold.

Alarm object: Mainboard

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x1000008D | Major | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Current reading of the sensor. |
| *arg2* | Alarm threshold. |
| *arg3* | BOM code. |

## Impact on the System

The system cannot be started or may generate errors. The iBMC is not running stably.

## Possible Causes

The mainboard is faulty.

## Procedure

**Step 1** Replace the mainboard. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

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**Step 2** Contact technical support engineer.

**----End**

# 2.4.145 ALM-0x1000008F Standby 1.5 V Undervoltage (Mainboard, Major Alarm)

## Description

Alarm message:

Mainboard voltage (*arg1* V) at standby 1.5 V detection point is lower than the undervoltage threshold (*arg2* V) (BN: *arg3*).

NOTE

From iBMC V316, the CPU and disk alarms will also include the SN and BOM code and the mainboard and memory alarms will also include the BOM code.

This alarm is generated when the voltage of the standby 1.5 V detection point on the mainboard is lower than the undervoltage major threshold.

Alarm object: Mainboard

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x1000008F | Major | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Current reading of the sensor. |
| *arg2* | Alarm threshold. |
| *arg3* | BOM code. |

## Impact on the System

The system cannot be started or may generate errors. The iBMC is not running stably.

## Possible Causes

The mainboard is faulty.

## Procedure

**Step 1** Replace the mainboard. Then, check whether the alarm is cleared.

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- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Contact technical support engineer.

**----End**

# 2.4.146 ALM-0x10000091 Standby 1.5 V Overvoltage (Mainboard, Major Alarm)

## Description

Alarm message:

Mainboard voltage (*arg1* V) at standby 1.5 V detection point exceeds the overvoltage threshold (*arg2* V) (BN: *arg3*).

NOTE

From iBMC V316, the CPU and disk alarms will also include the SN and BOM code and the mainboard and memory alarms will also include the BOM code.

This alarm is generated when the voltage of the standby 1.5 V detection point on the mainboard exceeds the overvoltage major threshold.

Alarm object: Mainboard

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x10000091 | Major | Yes |

## Parameters

| Name | Meaning |
|---|---|
| *arg1* | Current reading of the sensor. |
| *arg2* | Alarm threshold. |
| *arg3* | BOM code. |

## Impact on the System

The system cannot be started or may generate errors. The iBMC is not running stably.

## Possible Causes

The mainboard is faulty.

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### Procedure

**Step 1** Replace the mainboard. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Contact technical support engineer.

**----End**

## 2.4.147 ALM-0x1000009D Large Voltage Difference on Mainboard MOS2 (Mainboard, Major Alarm)

### Description

Alarm message:

The MOS 2 FET voltage drop (*arg1* V) of the soft-start circuit on the mainboard exceeds the threshold (*arg2* V) (BN: *arg3*).

NOTE

From iBMC V316, the CPU and disk alarms will also include the SN and BOM code and the mainboard and memory alarms will also include the BOM code.

This alarm is generated when the voltage different of the mainboard MOS2 exceeds the major threshold.

Alarm object: Mainboard

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x1000009D | Major | Yes |

### Parameters

| Name | Meaning |
|---|---|
| *arg1* | Current reading of the sensor. |
| *arg2* | Alarm threshold. |
| *arg3* | BOM code. |

### Impact on the System

The server cannot be started or may run improperly.

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### Possible Causes

The mainboard is faulty.

### Procedure

**Step 1** Replace the mainboard. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Contact technical support engineer.

**----End**

## 2.4.148 ALM-0x100000A1 Mainboard Standby 1.8 V Undervoltage (Mainboard, Major Alarm)

### Description

Alarm message:

Mainboard voltage (*arg1* V) at standby 1.8 V detection point is lower than the undervoltage threshold (*arg2* V) (BN: *arg3*).

NOTE

From iBMC V316, the CPU and disk alarms will also include the SN and BOM code and the mainboard and memory alarms will also include the BOM code.

This alarm is generated when the voltage of the mainboard standby 1.8 V detection point is lower than the undervoltage threshold.

Alarm object: Mainboard

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x100000A1 | Major | Yes |

### Parameters

| Name | Meaning |
|---|---|
| *arg1* | Current reading of the sensor. |
| *arg2* | Alarm threshold. |
| *arg3* | BOM code. |

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### Impact on the System

The system cannot be started or may generate errors. The iBMC is not running stably.

### Possible Causes

The mainboard is faulty.

### Procedure

**Step 1** Replace the mainboard. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Contact technical support engineer.

**----End**

## 2.4.149 ALM-0x100000A3 Standby 1.8 V Overvoltage (Mainboard, Major Alarm)

### Description

Alarm message:

Mainboard voltage (*arg1* V) at standby 1.8 V detection point exceeds the overvoltage threshold (*arg2* V) (BN: *arg3*).

NOTE

From iBMC V316, the CPU and disk alarms will also include the SN and BOM code and the mainboard and memory alarms will also include the BOM code.

This alarm is generated when the voltage of the mainboard standby 1.8 V detection point exceeds the overvoltage threshold.

Alarm object: Mainboard

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x100000A3 | Major | Yes |

### Parameters

| Name | Meaning |
|---|---|
| *arg1* | Current reading of the sensor. |
| *arg2* | Alarm threshold. |
| *arg3* | BOM code. |

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### Impact on the System

The system cannot be started or may generate errors. The iBMC is not running stably.

### Possible Causes

The mainboard is faulty.

### Procedure

**Step 1** Replace the mainboard. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Contact technical support engineer.

**----End**

## 2.4.150 ALM-0x100000A5 Failed to Read Standby 1.8 V Voltage (Mainboard, Minor Alarm)

### Description

Alarm message:

Failed to obtain the voltage at standby 1.8 V detection point on the mainboard (BN: *arg1*).

NOTE

From iBMC V316, the CPU and disk alarms will also include the SN and BOM code and the mainboard and memory alarms will also include the BOM code.

This alarm is generated when the system failed to obtain the voltage of the mainboard standby 1.8 V detection point.

Alarm object: Mainboard

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x100000A5 | Minor | Yes |

### Parameters

| Name | Meaning |
|---|---|
| *arg1* | BOM code. |

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### Impact on the System

The voltage cannot be monitored. No alarm will be reported when the voltage is not in the normal range.

### Possible Causes

The CPU voltage detection circuit is abnormal.

### Procedure

**Step 1** Restart the iBMC. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Remove and reinstall the power cable or board. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Replace the mainboard. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Contact technical support engineer.

**----End**

## 2.4.151 ALM-0x100000A7 Failed to Read Mainboard Voltage (Mainboard, Minor Alarm)

### Description

Alarm message:

Failed to obtain the voltage at *arg1* detection point on the mainboard (BN: *arg2*).

**NOTE**

From iBMC V316, the CPU and disk alarms will also include the SN and BOM code and the mainboard and memory alarms will also include the BOM code.

This alarm is generated when the system failed to obtain the voltage of the 1.1 V detection point of the mainboard.

Alarm object: Mainboard

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x100000A7 | Minor | Yes |

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### Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Voltage detection point. For example, **1.1 V**. |
| *arg2* | BOM code. |

### Impact on the System

The system may stop responding.

### Possible Causes

The CPU voltage detection circuit is abnormal.

### Procedure

**Step 1** Restart the iBMC. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Remove and reinstall the power cable or board. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Replace the mainboard. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Contact technical support engineer.

**----End**

## 2.4.152 ALM-0x100000B3 Mainboard Undervoltage (Mainboard, Major Alarm)

### Description

Alarm message:

Mainboard voltage (*arg1* V) at *arg3* detection point is lower than the undervoltage threshold (*arg2* V) (BN: *arg4*).

NOTE

From iBMC V316, the CPU and disk alarms will also include the SN and BOM code and the mainboard and memory alarms will also include the BOM code.

This alarm is generated when the voltage at the detection point on the mainboard is lower than the undervoltage threshold.

Alarm object: Mainboard

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### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x100000B3 | Major | Yes |

### Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Current voltage of the detection point. |
| *arg2* | Alarm threshold. |
| *arg3* | Voltage detection point. For example, **0.9V**, **1.2V**, **1.25V**, **1.8V**, **2.5V**, **Clock1 3.3V**, or **Clock2 3.3V**. |
| *arg4* | BOM code. |

### Impact on the System

The system stops responding.

### Possible Causes

The mainboard is faulty.

### Procedure

**Step 1** Replace the mainboard. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Contact technical support engineer.

**----End**

## 2.4.153 ALM-0x100000B5 Mainboard Overvoltage (Mainboard, Major Alarm)

### Description

Alarm message:

Mainboard voltage (*arg1* V) at *arg3* detection point exceeds the overvoltage threshold (*arg2* V) (BN: *arg4*).

NOTE

From iBMC V316, the CPU and disk alarms will also include the SN and BOM code and the mainboard and memory alarms will also include the BOM code.

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This alarm is generated when the voltage at the detection point on the mainboard exceeds the overvoltage threshold.

Alarm object: Mainboard

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x100000B5 | Major | Yes |

## Parameters

| Name | Meaning |
|---|---|
| *arg1* | Current voltage of the detection point. |
| *arg2* | Alarm threshold. |
| *arg3* | Voltage detection point. For example, **0.9V**, **1.2V**, **1.25V**, **1.8V**, **2.5V**, **Clock1 3.3V**, or **Clock2 3.3V**. |
| *arg4* | BOM code. |

## Impact on the System

The system stops responding.

## Possible Causes

The mainboard is faulty.

## Procedure

**Step 1** Replace the mainboard. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Contact technical support engineer.

**----End**

# 2.4.154 ALM-0x100000B7 Soft-Start Circuit Undervoltage (Mainboard, Major Alarm)

## Description

Alarm message:

Soft-start circuit voltage at *arg1* detection point is undervoltage (BN: *arg2*).

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NOTE

From iBMC V316, the CPU and disk alarms will also include the SN and BOM code and the mainboard and memory alarms will also include the BOM code.

This alarm is generated when the voltage at the detection point *arg1* of the soft-start circuit is lower than the minor threshold.

Alarm object: Mainboard

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x100000B7 | Major | Yes |

### Parameters

| Name | Meaning |
|---|---|
| *arg1* | Voltage detection point. For example, **12V**, **CPU1 VDDQ**, or **CPU2 VDDQ** |
| *arg2* | BOM code. |

### Impact on the System

The system may be powered off.

### Possible Causes

The mainboard is faulty.

### Procedure

**Step 1** Replace the mainboard. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Contact technical support engineer.

**----End**

## 2.4.155 ALM-0x100000BB Mainboard RAID Chip Undervoltage (Mainboard, Major Alarm)

### Description

Alarm message:

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Mainboard RAID chip voltage (*arg1* V) at *arg2* detection point is lower than the undervoltage threshold (*arg3* V) (BN: *arg4*).

NOTE

From iBMC V316, the CPU and disk alarms will also include the SN and BOM code and the mainboard and memory alarms will also include the BOM code.

This alarm is generated when the voltage of the RAID chip on the mainboard is lower than the undervoltage threshold.

Alarm object: Mainboard

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x100000BB | Major | Yes |

## Parameters

| Name | Meaning |
|---|---|
| *arg1* | Current reading of the sensor. |
| *arg2* | Voltage detection point. For example, **SYS Raid 1.8V**, **SYS Raid 1.0V**, or **SYS Raid 1.038V**. |
| *arg3* | Alarm threshold. |
| *arg4* | BOM code. |

## Impact on the System

The RAID chip on the mainboard may run unstably, the system may run abnormally, or data may be lost.

## Possible Causes

The mainboard is faulty.

## Procedure

**Step 1** Replace the mainboard. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Contact technical support.

**----End**

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# 2.4.156 ALM-0x100000BD RAID Chip Overvoltage (Mainboard, Major Alarm)

## Description

Alarm message:

Mainboard RAID chip voltage (*arg1* V) at *arg2* detection point exceeds the overvoltage threshold (*arg3* V) (BN: *arg4*).

NOTE

From iBMC V316, the CPU and disk alarms will also include the SN and BOM code and the mainboard and memory alarms will also include the BOM code.

This alarm is generated when the detection point voltage of the RAID chip on the mainboard exceeds the overvoltage threshold.

Alarm object: Mainboard

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x100000BD | Major | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Current reading of the sensor. |
| *arg2* | Voltage detection point. For example, **SYS Raid 1.8V**, **SYS Raid 1.0V**, or **SYS Raid 1.038V**. |
| *arg3* | Alarm threshold. |
| *arg4* | BOM code. |

## Impact on the System

The RAID chip on the mainboard may run unstably, the system may run abnormally, or data may be lost.

## Possible Causes

The voltage is too high.

## Procedure

**Step 1** Replace the mainboard. Then, check whether the alarm is cleared.

- If yes, no further action is required.

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- If no, go to **Step 2**.

**Step 2** Contact technical support.

**----End**

# 2.4.157 ALM-0x100000BF Failed to Read the RAID Chip Voltage (Mainboard, Minor Alarm)

## Description

Alarm message:

Failed to obtain the voltage at *arg1* detection point on the mainboard RAID chip (BN: *arg2*).

NOTE

From iBMC V316, the CPU and disk alarms will also include the SN and BOM code and the mainboard and memory alarms will also include the BOM code.

This alarm is generated when the system failed to obtain the detection point voltage of the RAID chip on the mainboard.

Alarm object: Mainboard

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x100000BF | Minor | Yes |

## Parameters

| Name | Meaning |
|---|---|
| *arg1* | Voltage detection point. For example, **SYS Raid 1.8V**, **SYS Raid 1.0V**, or **SYS Raid 1.038V**. |
| *arg2* | BOM code. |

## Impact on the System

The system stops responding.

## Possible Causes

The ADC circuit is abnormal.

## Procedure

**Step 1** Restart the iBMC. Then, check whether the alarm is cleared.

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- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Remove and reinstall the power cable or board. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Replace the mainboard. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Contact technical support engineer.

**----End**

# 2.4.158 ALM-0x100000CB Soft-Start Circuit Power Supply Abnormal (Mainboard, Critical Alarm)

## Description

Alarm message:

Soft-start circuit power supply on the mainboard abnormal (BN: *arg1*).

NOTE

From iBMC V316, the CPU and disk alarms will also include the SN and part umber and the mainboard and memory alarms will also include the BOM code.

This alarm is generated when the iBMC detects that the mainboard power supply is abnormal.

Alarm object: Mainboard

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x100000CB | Critical | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | BOM code. |

## Impact on the System

The system may fail to start.

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## Possible Causes

The mainboard is faulty.

## Procedure

**Step 1** Replace the mainboard. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Contact technical support engineer.

**----End**

# 2.4.159 ALM-0x100000D7 Soft-Start Circuit Chip Fault (Mainboard, Major Alarm)

## Description

Alarm message:

Soft-start circuit *arg1* chip critical fault (BN: *arg2*).

NOTE

From iBMC V316, the CPU and disk alarms will also include the SN and BOM code and the mainboard and memory alarms will also include the BOM code.

This alarm is generated when a major fault was detected on the chip of the soft-start circuit.

Alarm object: Mainboard

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x100000D7 | Major | Yes |

## Parameters

| Name | Meaning |
|---|---|
| *arg1* | Number of the monitoring point of the soft-start circuit. |
| *arg2* | BOM code. |

## Impact on the System

The chip fault causes system restart.

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### Possible Causes

The chip of the soft-start circuit on the mainboard is faulty.

### Procedure

**Step 1** Replace the mainboard. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Contact technical support engineer.

**----End**

## 2.4.160 ALM-0x10000117 Clock Power Supply Exception (Mainboard, Major Alarm)

### Description

Alarm message:

```
The clock power supply fault cause the exception.
```

This alarm is generated when the clock power supply is faulty.

Alarm object: Mainboard

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x10000117 | Major | Yes |

### Parameters

| Name | Meaning |
|---|---|
| - | - |

### Impact on the System

The server cannot be started and repeated restarts occur.

### Possible Causes

The clock power supply is abnormal.

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### Procedure

**Step 1** Replace the mainboard. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Contact technical support engineer.

**----End**

## 2.4.161 ALM-0x10000143 Mainboard VRD Overvoltage Alarm (Mainboard, Major Alarm)

### Description

Alarm message:

The VRD chip *arg1* voltage (*arg2*V) on the mainboard exceeds the overvoltage threshold (*arg3*V).

This alarm is generated when the VRD chip voltage on the mainboard exceeds the overvoltage threshold.

Alarm object: Mainboard

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x10000143 | Major | Yes |

### Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Name of the VRD chip. For example, **WEST_VRD**. |
| *arg2* | Current reading of the sensor. |
| *arg3* | Alarm threshold. |

### Impact on the System

The system may fail to start or run abnormally.

### Possible Causes

The mainboard is faulty.

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### Procedure

**Step 1** Replace the mainboard. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Contact technical support engineer.

**----End**

## 2.4.162 ALM-0x10000145 Mainboard VRD Undervoltage Alarm (Mainboard, Major Alarm)

### Description

Alarm message:

The VRD chip *arg1* voltage (*arg2*V) on the mainboard is lower than the undervoltage threshold (*arg3*V).

This alarm is generated when the VRD chip voltage on the mainboard is lower than the undervoltage threshold.

Alarm object: Mainboard

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x10000145 | Major | Yes |

### Parameters

| Name | Meaning |
|---|---|
| *arg1* | Name of the VRD chip. For example, **WEST_VRD**. |
| *arg2* | Current reading of the sensor. |
| *arg3* | Alarm threshold. |

### Impact on the System

The system may fail to start or run abnormally.

### Possible Causes

The mainboard is faulty.

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### Procedure

**Step 1** Replace the mainboard. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Contact technical support engineer.

**----End**

## 2.4.163 ALM-0x10000149 Failed to Obtain the Mainboard VRD Voltage (Mainboard, Major Alarm)

### Description

Alarm message:

Failed to obtain data of the mainboard VRD *arg1* voltage.

This alarm is generated when the system failed to obtain the mainboard VRD voltage.

Alarm object: Mainboard

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x10000149 | Major | Yes |

### Parameters

| Name | Meaning |
|---|---|
| *arg1* | Name of the VRD chip. For example, **VCORE_VRD(XDPE192C3B)**. |

### Impact on the System

The voltage cannot be monitored normally, and if the voltage is abnormal, the alarm cannot be given in time.

### Possible Causes

- VRD chip failure.
- The VRD access channel is faulty.

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### Procedure

**Step 1** Restart the iBMC. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Remove and reconnect power cables or remove and reinstall the board in the chassis. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Replace the mainboard. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Contact technical support engineer.

**----End**

## 2.4.164 ALM-0x1000014B Mainboard Soft-start Circuit Overcurren (Mainboard, Major Alarm)

### Description

Alarm message:

Soft-start circuit *arg1* generates overcurrent on the mainboard.

This alarm is generated when the soft-start circuit generates overcurrent on the mainboard.

Alarm object: Mainboard

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x1000014B | Major | Yes |

### Parameters

| Name | Meaning |
|---|---|
| *arg1* | No. of the monitoring point of the soft-start circuit. For example, **NCP0**. |

### Impact on the System

The system may fail to start or run abnormally.

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### Possible Causes

The mainboard is faulty.

### Procedure

**Step 1** Replace the mainboard. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Contact technical support engineer.

**----End**

## 2.4.165 ALM-0x10000151 Low Voltage of the Mainboard RTC Battery (Mainboard, Minor Alarm)

### Description

Alarm message:

The voltage of RTC battery (*arg1* V) is lower than the slight undervoltage threshold (*arg2* V).

NOTE

From iBMC V316, the CPU and disk alarms will also include the SN and BOM code and the mainboard and memory alarms will also include the BOM code.

This alarm is generated when the voltage of RTC battery is lower than the slight undervoltage threshold.

Alarm object: Mainboard

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x10000151 | Minor | Yes |

### Parameters

| Name | Meaning |
|---|---|
| *arg1* | Current reading of the sensor. |
| *arg2* | Alarm threshold. |

### Impact on the System

The server clock is affected.

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### Possible Causes

The RTC battery is faulty.

### Procedure

**Step 1** Replace the RTC battery. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Replace the mainboard. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Contact technical support engineer.

**----End**

## 2.4.166 ALM-0x10000153 System 12V Undervoltage Minor Alarm (Mainboard, Minor Alarm)

### Description

Alarm message:
Mainboard voltage (*arg1* V) at 12 V detection point [*arg2*] is lower than the slight undervoltage threshold (*arg3* V).

NOTE

From iBMC V316, the CPU and disk alarms will also include the SN and BOM code and the mainboard and memory alarms will also include the BOM code.

This alarm is generated when the mainboard voltage at 12 V detection point is lower than the slight undervoltage threshold.

Alarm object: Mainboard

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x10000153 | Minor | Yes |

### Parameters

| Name | Meaning |
|---|---|
| *arg1* | Current reading of the sensor. |
| *arg2* | No. of the 12 V voltage detection point related to the alarm.<br>This parameter is optional. The value can be 1, 2, 3, or 4 when multiple 12 V detection points are detected. |

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| Name | Meaning |
| --- | --- |
| *arg3* | Alarm threshold. |

### Impact on the System

The system may stop responding.

### Possible Causes

The mainboard is faulty.

### Procedure

**Step 1** Replace the mainboard. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Contact technical support engineer.

**----End**

## 2.4.167 ALM-0x10000155 System 12V Overvoltage Minor Alarm (Mainboard, Minor Alarm)

### Description

Alarm message:
Mainboard voltage (*arg1* V) at 12 V detection point [*arg2*] exceeds the slight overvoltage threshold (*arg3* V).

NOTE

From iBMC V316, the CPU and disk alarms will also include the SN and BOM code and the mainboard and memory alarms will also include the BOM code.

This alarm is generated when the mainboard voltage at 12 V detection point exceeds the slight overvoltage threshold.

Alarm object: Mainboard

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x10000155 | Minor | Yes |

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### Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Current reading of the sensor. |
| *arg2* | No. of the 12 V voltage detection point related to the alarm.<br>This parameter is optional. The value can be 1, 2, 3, or 4 when multiple 12 V detection points are detected. |
| *arg3* | Alarm threshold. |

### Impact on the System

The system may stop responding.

### Possible Causes

The mainboard is faulty.

### Procedure

**Step 1** Replace the mainboard. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Contact technical support engineer.

**----End**

## 2.4.168 ALM-0x1000015B System 3.3V Undervoltage Minor Alarm (Mainboard, Minor Alarm)

### Description

Alarm message:
Mainboard voltage (*arg1* V) at 3.3 V detection point [*arg3*] is lower than the undervoltage threshold (*arg2* V).

NOTE

From iBMC V316, the CPU and disk alarms will also include the SN and BOM code and the mainboard and memory alarms will also include the BOM code.

This alarm is generated when the 3.3V voltage on the mainboard is detected to be lower than the undervoltage threshold.

Alarm object: Mainboard

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### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x1000015B | Minor | Yes |

### Parameters

| Name | Meaning |
|---|---|
| *arg1* | Current reading of the sensor. |
| *arg2* | Alarm threshold. |
| *arg3* | No. of the 3.3 V voltage detection point related to the alarm.<br>This parameter is optional. The value can be 1, 2, 3, or 4 when multiple 3.3 V detection points are detected. |

### Impact on the System

The system may stop responding.

### Possible Causes

The mainboard is faulty.

### Procedure

**Step 1** Replace the mainboard. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **2**.

**Step 2** Contact technical support engineer.

**----End**

## 2.4.169 ALM-0x1000015D System 3.3V Overvoltage Minor Alarm (Mainboard, Minor Alarm)

### Description

Alarm message:
Mainboard voltage (*arg1* V) at 3.3 V detection point [*arg3*] exceeds the overvoltage threshold (*arg2* V).

NOTE

From iBMC V316, the CPU and disk alarms will also include the SN and BOM code and the mainboard and memory alarms will also include the BOM code.

This alarm is generated when the detection of the mainboard 3.3V voltage is higher than the high-voltage threshold.

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Alarm object: Mainboard

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x1000015D | Minor | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Current reading of the sensor. |
| *arg2* | Alarm threshold. |
| *arg3* | No. of the 3.3 V voltage detection point related to the alarm.<br>This parameter is optional. The value can be 1, 2, 3, or 4 when multiple 3.3 V detection points are detected. |

## Impact on the System

The system may stop responding.

## Possible Causes

The mainboard is faulty.

## Procedure

**Step 1** Replace the mainboard. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **2**.

**Step 2** Contact technical support engineer.

**----End**

# 2.4.170 ALM-0x1000015F Standby 5V Undervoltage Minor Alarm (Mainboard, Minor Alarm)

## Description

Alarm message:
Mainboard voltage (*arg1* V) at standby 5 V detection point is lower than the undervoltage threshold (*arg2* V).

NOTE

From iBMC V316, the CPU and disk alarms will also include the SN and BOM code and the mainboard and memory alarms will also include the BOM code.

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This alarm is generated when the detection finds that the standby 5V voltage on the mainboard is lower than the low-voltage threshold.

Alarm object: Mainboard

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x1000015F | Minor | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Current reading of the sensor. |
| *arg2* | Alarm threshold. |

## Impact on the System

It may result in the system failing to start up normally, running abnormally, or the iBMC operating unstably.

## Possible Causes

The mainboard is faulty.

## Procedure

**Step 1** Replace the mainboard. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **2**.

**Step 2** Contact technical support engineer.

**----End**

# 2.4.171 ALM-0x10000161 Standby 5V Overvoltage Minor Alarm (Mainboard, Minor Alarm)

## Description

Alarm message:
Mainboard voltage (*arg1* V) at standby 5 V detection point exceeds the overvoltage threshold (*arg2* V).

NOTE

From iBMC V316, the CPU and disk alarms will also include the SN and BOM code and the mainboard and memory alarms will also include the BOM code.

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This alarm is generated when the detection finds the standby 5V voltage on the mainboard is higher than the high-voltage threshold.

Alarm object: Mainboard

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x10000161 | Minor | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Current reading of the sensor. |
| *arg2* | Alarm threshold. |

## Impact on the System

It may result in the system failing to start up normally, running abnormally, or the iBMC operating unstably.

## Possible Causes

The mainboard is faulty.

## Procedure

**Step 1** Replace the mainboard. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **2**.

**Step 2** Contact technical support engineer.

**----End**

# 2.4.172 ALM-0x12000011 Insufficient Power Supply to Chassis (Chassis, Major Alarm)

## Description

Alarm message:

```
Insufficient power supply to the chassis.
```

This alarm is generated when the power supply to the chassis is insufficient.

Alarm object: Chassis

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### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x12000011 | Major | Yes |

### Parameters

| Name | Meaning |
|---|---|
| – | – |

### Impact on the System

The server cannot operate properly.

### Possible Causes

The configuration of power supply units (PSUs) is incorrect.

### Procedure

**Step 1** Add PSUs. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**

**Step 2** Contact technical support engineer.

**----End**

## 2.4.173 ALM-0x18000001 Fan Backplane 12V Power Supply Overheating (Fan Backplane, Major Alarm)

### Description

Alarm message:

Fan backplane *arg1* power supply over temperature.

This alarm is generated when the fan backplane power supply is overheating.

Alarm object: Fan Backplane

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x18000001 | Major | Yes |

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## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Voltage detection point. For example, **12V0** or **12V1** |

## Impact on the System

Server heat dissipation is affected.

## Possible Causes

- The equipment room temperature exceeds the normal range.
- The air inlet or outlet is blocked.
- Filler panels are not installed in empty slots.
- A fan module is faulty.
- The fan backplane is faulty.
- The mainboard is faulty.

## Procedure

**Step 1** Check whether there is fan alarm generated.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Replace the fan module. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Check whether the equipment room temperature exceeds the normal range.

- If yes, go to **Step 4**.
- If no, go to **Step 5**.

**Step 4** Reduce the equipment room temperature to the normal range. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Check whether the server air inlet and outlet are blocked.

- If yes, go to **Step 6**.
- If no, go to **Step 7**.

**Step 6** Clear the blockage. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 7**.

**Step 7** Check whether there are empty slots in the server.

- If yes, go to **Step 8**.

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- If no, go to **Step 9**.

**Step 8** Install filler panels in empty slots. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 9**.

**Step 9** Replace the fan backplane. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 10**.

**Step 10** Replace the mainboard. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 11**.

**Step 11** Contact technical support.

**----End**

# 2.4.174 ALM-0x18000003 Fan Backplane Power Supply Failed (Fan Backplane, Critical Alarm)

## Description

Alarm message:

Fan backplane *arg1* power failure.

This alarm is generated when the fan backplane power supply failed.

Alarm object: Fan Backplane

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x18000003 | Critical | Yes |

## Parameters

| Name | Meaning |
|---|---|
| *arg1* | Voltage detection point. For example, **12V0** or **12V1** |

## Impact on the System

Server heat dissipation is affected.

## Possible Causes

The fan backplane is faulty.

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### Procedure

**Step 1** Replace the fan backplane. Then, check whether the alarm is cleared.

NOTE

For the G8600 V7, check the 12 V fan board, upper 54 V fan board, and lower 54 V fan board.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Contact technical support.

**----End**

## 2.4.175 ALM-0x19000001 PSU Backplane 12V Overheating (PSU Backplane, Critical Alarm)

### Description

Alarm message:

PSU backplane *arg1* power supply over temperature.

This alarm is generated when the PSU backplane power supply is overheating.

Alarm object: PSU Backplane

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x19000001 | Critical | Yes |

### Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Voltage detection point. For example, **12V**. |

### Impact on the System

The power supply is affected. The system may power off or restart abnormally.

### Possible Causes

- The equipment room temperature exceeds the normal range.
- The air inlet or outlet is blocked.
- Filler panels are not installed in empty slots.
- A fan module is faulty.

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- The PSU backplane is faulty.

## Procedure

**Step 1** Check whether there is fan alarm generated.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Replace the fan module. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Check whether the equipment room temperature exceeds the normal range.

- If yes, go to **Step 4**.
- If no, go to **Step 5**.

**Step 4** Reduce the equipment room temperature to the normal range. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Check whether the server air inlet and outlet are blocked.

- If yes, go to **Step 6**.
- If no, go to **Step 7**.

**Step 6** Clear the blockage. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 7**.

**Step 7** Check whether there are empty slots in the server.

- If yes, go to **Step 8**.
- If no, go to **Step 9**.

**Step 8** Install filler panels in empty slots. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 9**.

**Step 9** Replace the PSU backplane. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 10**.

**Step 10** Contact technical support.

**----End**

# 2.4.176 ALM-0x19000003 PSU Backplane Power Supply Abnormal(PSU Backplane, Major Alarm)

## Description

Alarm message:

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Failed to obtain data of the CPU arg1 arg2 voltage.Power supply to PSU backplane(*arg1 arg2*)failed.

This alarm is generated when the PSU of the power supply backplane is abnormal.

Alarm object: PSU Backplane

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x19000003 | Major | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Slot id. |
| *arg2* | PSU voltage. For example, 12 V. |

## Impact on the System

The PSU backplane cannot supply power to other components.

## Possible Causes

The PSU backplane is faulty.

## Procedure

**Step 1** Replace the power backplane, and check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Contact technical support.

**----End**

# 2.4.177 ALM-0x1D000011 Base Plane Service LSW Fault (Base Plane, Major Alarm)

## Description

Alarm message:

Service LAN switch failed on the Base plane of the switch module.

This alarm is generated when the service LAN switch of the Base plane is faulty.

Alarm object: Base Plane

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### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x1D000011 | Major | Yes |

### Parameters

| Name | Meaning |
|---|---|
| – | – |

### Impact on the System

Overheating affects Base plane stability. Services on the Base plane may fail to start or run abnormally.

### Possible Causes

The switch module is faulty.

### Procedure

**Step 1** Back up the Base plane configuration, switch over services to the standby network

**Step 2** Replace the switch module. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Contact technical support engineer.

**----End**

## 2.4.178 ALM-0x1D000019 Base Plane Switch Undervoltage (Base Plane, Major Alarm)

### Description

Alarm message:

Switch module base plane switch voltage (*arg1* V) at *arg2* detection point is lower than the undervoltage threshold (*arg3* V).

This alarm is generated when the voltage of the switch chip on the switch module Base plane is lower than the undervoltage major threshold.

Alarm object: Base Plane

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### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x1D000019 | Major | Yes |

### Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Current reading of the sensor. |
| *arg2* | Voltage detection point. For example, **VDD**, **Vcore**, or **AVDD**. |
| *arg3* | Alarm threshold. |

### Impact on the System

Services on the Base plane may fail to start or run abnormally.

### Possible Causes

The switch module is faulty.

### Procedure

**Step 1** Replace the switch module. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Contact technical support engineer.

**----End**

## 2.4.179 ALM-0x1D00001B Base Plane Switch Overvoltage (Base Plane, Major Alarm)

### Description

Alarm message:

Switch module base plane switch voltage (*arg1* V) at *arg2* detection point exceeds the overvoltage threshold (*arg3* V).

This alarm is generated when the voltage of the switch chip on the switch module Base plane exceeds the overvoltage major threshold.

Alarm object: Base Plane

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### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x1D00001B | Major | Yes |

### Parameters

| Name | Meaning |
|---|---|
| *arg1* | Current reading of the sensor. |
| *arg2* | Voltage detection point. For example, **VDD**, **Vcore**, or **AVDD**. |
| *arg3* | Alarm threshold. |

### Impact on the System

Services on the Base plane may fail to start or run abnormally.

### Possible Causes

The switch module is faulty.

### Procedure

**Step 1** Replace the switch module. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Contact technical support engineer.

**----End**

## 2.4.180 ALM-0x1D00001D Failed to Read Base Plane Switch Voltage (Base Plane, Minor Alarm)

### Description

Alarm message:

Failed to obtain data of the switch *arg1* voltage for base.

This alarm is generated when the system failed to obtain the voltage of the switch chip on the switch module Base plane.

In the Alarm message:

Alarm object: Base Plane

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### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x1D00001D | Minor | Yes |

### Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Voltage detection point. For example, **VDD**, **Vcore**, or **AVDD**. |

### Impact on the System

The voltage cannot be monitored. No alarm will be reported when the voltage is not in the normal range.

### Possible Causes

- The iBMC is faulty.
- The switch module is faulty.

### Procedure

**Step 1** Restart the iBMC. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Remove and reinstall the power cable or board. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Replace the switch module. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Contact technical support engineer.

**----End**

## 2.4.181 ALM-0x1D00001F Base Plane CPU Undervoltage (Base Plane, Major Alarm)

### Description

Alarm message:

Switch module base plane CPU voltage (*arg1* V) at *arg2* detection point is lower than the undervoltage threshold (*arg3* V).

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This alarm is generated when the voltage of the CPU Vcore detection point on the switch module Base plane is lower than the undervoltage major threshold.

Alarm object: Base Plane

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x1D00001F | Major | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Current reading of the sensor. |
| *arg2* | Voltage detection point. For example, **VDD**, **Vcore**, or **AVDD**. |
| *arg3* | Alarm threshold. |

## Impact on the System

Services on the Base plane may fail to start or run abnormally.

## Possible Causes

The switch module is faulty.

## Procedure

**Step 1** Replace the switch module. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Contact technical support engineer.

**----End**

# 2.4.182 ALM-0x1D000021 Base Plane CPU Overvoltage (Base Plane, Major Alarm)

## Description

Alarm message:

Switch module base plane CPU voltage (*x* V) at Vcore detection point is lower than the overvoltage threshold (*y* V).

This alarm is generated when the voltage of the CPU Vcore detection point on the switch module Base plane exceeds the overvoltage major threshold.

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Alarm object: Base Plane

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x1D000021 | Major | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Current reading of the sensor. |
| *arg2* | Voltage detection point. For example, **VDD**, **Vcore**, or **AVDD**. |
| *arg3* | Alarm threshold. |

## Impact on the System

Services on the Base plane may fail to start or run abnormally.

## Possible Causes

The switch module is faulty.

## Procedure

**Step 1** Replace the switch module. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Contact technical support engineer.

**----End**

# 2.4.183 ALM-0x1D000023 Failed to Read Base Plane Switch Voltage (Base Plane, Minor Alarm)

## Description

Alarm message:

```
Failed to obtain data of the CPU Vcore voltage for base.
```

This alarm is generated when the system failed to obtain the voltage of the switch chip on the switch module Base plane.

Alarm object: Base Plane

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### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x1D000023 | Minor | Yes |

### Parameters

| Name | Meaning |
|---|---|
| *arg1* | Voltage detection point. For example, **VDD**, **Vcore**, or **AVDD**. |

### Impact on the System

The voltage cannot be monitored. No alarm will be reported when the voltage is not in the normal range.

### Possible Causes

- The iBMC is faulty.
- The switch module is faulty.

### Procedure

**Step 1** Restart the iBMC. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Remove and reinstall the power cable or board. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Replace the switch module. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Contact technical support engineer.

**----End**

## 2.4.184 ALM-0x1E000001 Fabric Plane LSW Chip VDD Undervoltage (Fabric Plane, Major Alarm)

### Description

Alarm message:

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Switch module Fabric plane LSW chip voltage (*arg1* V) at the *arg2* detection point is lower than the undervoltage threshold (*arg3* V).

This alarm is generated when the VDD voltage of the LSW chip on the Fabric plane is lower than the undervoltage threshold.

Alarm object: Fabric Plane

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x1E000001 | Major | Yes |

### Parameters

| Name | Meaning |
|---|---|
| *arg1* | Current reading of the sensor. |
| *arg2* | Voltage detection point. For example, **VDD**, **VCC 2.5V**, **VCC 1.8V**, **VCC 1V**, or **AVDD**. |
| *arg3* | Alarm threshold. |

### Impact on the System

The server cannot be started or may run improperly.

### Possible Causes

The switch module is faulty.

### Procedure

**Step 1** Back up the Fabric plane configuration, switch over services to the standby network.

**Step 2** Replace the switch module. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Contact technical support engineer.

**----End**

## 2.4.185 ALM-0x1E000003 Fabric Plane LSW Chip VDD Overvoltage (Fabric Plane, Major Alarm)

### Description

Alarm message:

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Switch module Fabric plane LSW chip voltage (*arg1* V) at the *arg2* detection point exceeds the overvoltage threshold (*arg3* V).

This alarm is generated when the VDD voltage of the LSW chip on the Fabric plane exceeds the overvoltage threshold.

Alarm object: Fabric Plane

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x1E000003 | Major | Yes |

### Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Current reading of the sensor. |
| *arg2* | Voltage detection point. For example, **VDD**, **VCC 2.5V**, **VCC 1.8V**, **VCC 1V**, or **AVDD**. |
| *arg3* | Alarm threshold. |

### Impact on the System

The server cannot be started or may run improperly.

### Possible Causes

The switch module is faulty.

### Procedure

**Step 1** Back up the Fabric plane configuration, switch over services to the standby network.

**Step 2** Replace the switch module. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Contact technical support engineer.

**----End**

## 2.4.186 ALM-0x1E000005 Fabric Plane LSW Chip Vcore Undervoltage (Fabric Plane, Major Alarm)

### Description

Alarm message:

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Switch module Fabric plane LSW chip voltage (*arg1* V) at the Vcore voltage detection point is lower than the undervoltage threshold (*arg2* V).

This alarm is generated when the Vcore voltage of the LSW chip on the Fabric plane is lower than the undervoltage threshold.

Alarm object: Fabric Plane

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x1E000005 | Major | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Current reading of the sensor. |
| *arg2* | Alarm threshold. |

## Impact on the System

The server cannot be started or may run improperly.

## Possible Causes

The switch module is faulty.

## Procedure

**Step 1** Back up the Fabric plane configuration, switch over services to the standby network.

**Step 2** Replace the switch module. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Contact technical support engineer.

**----End**

# 2.4.187 ALM-0x1E000007 Fabric Plane LSW Chip Vcore Overvoltage (Fabric Plane, Major Alarm)

## Description

Alarm message:

Switch module Fabric plane LSW chip voltage (*arg1* V) at the Vcore voltage detection point exceeds the overvoltage threshold (*arg2* V).

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This alarm is generated when the Vcore voltage of the LSW chip on the Fabric plane exceeds the overvoltage threshold.

Alarm object: Fabric Plane

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x1E000007 | Major | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Current reading of the sensor. |
| *arg2* | Alarm threshold. |

## Impact on the System

The server cannot be started or may run improperly.

## Possible Causes

The switch module is faulty.

## Procedure

**Step 1** Back up the Fabric plane configuration, switch over services to the standby network.

**Step 2** Replace the switch module. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Contact technical support engineer.

**----End**

# 2.4.188 ALM-0x1E000027 Failed to Read Fabric Plane LSW Chip VDD Voltage (Fabric Plane, Minor Alarm)

## Description

Alarm message:

Failed to obtain data of the LSW *arg1* voltage for fabric plane.

This alarm is generated when the system failed to obtain the VDD voltage of the LSW chip on the Fabric plane.

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Alarm object: Fabric Plane

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x1E000027 | Minor | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Voltage detection point. For example, **VDD**, **Vcore**, or **AVDD**. |

## Impact on the System

The voltage cannot be monitored. No alarm will be reported when the voltage is not in the normal range.

## Possible Causes

- The iBMC is faulty.
- The switch module is faulty.

## Procedure

**Step 1** Restart the iBMC. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Remove and reinstall the power cable or board. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Replace the switch module. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Contact technical support engineer.

**----End**

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# 2.4.189 ALM-0x1E000029 Failed to Read Fabric Plane LSW Chip Vcore Voltage (Fabric Plane, Minor Alarm)

## Description

Alarm message:

```
Failed to obtain data of the LSW Vcore voltage for fabric plane.
```

This alarm is generated when the system failed to obtain the Vcore voltage of the LSW chip on the switch module Fabric plane.

Alarm object: Fabric Plane

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x1E000029 | Minor | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| – | – |

## Impact on the System

The voltage cannot be monitored. No alarm will be reported when the voltage is not in the normal range.

## Possible Causes

- The iBMC is faulty.
- The switch module is faulty.

## Procedure

**Step 1** Restart the iBMC. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Remove and reinstall the power cable or board. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Replace the switch module. Then, check whether the alarm is cleared.

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- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Contact technical support engineer.

**----End**

# 2.4.190 ALM-0x1E00002F Fabric Plane Switch Undervoltage (Fabric Plane, Major Alarm)

## Description

Alarm message:

Switch module fabric plane switch voltage (*arg1* V) at *arg2* detection point is lower than the undervoltage threshold (*arg3* V).

This alarm is generated when the voltage of the switch chip on the switch module Fabric module is lower than the undervoltage major threshold.

Alarm object: Fabric Plane

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x1E00002F | Major | Yes |

## Parameters

| Name | Meaning |
|---|---|
| *arg1* | Current reading of the sensor. |
| *arg2* | Voltage detection point. For example, **3V3** or **1V8**. |
| *arg3* | Alarm threshold. |

## Impact on the System

Services on the Fabric plane may fail to start or run abnormally.

## Possible Causes

The switch module is faulty.

## Procedure

**Step 1** Replace the switch module. Then, check whether the alarm is cleared.

- If yes, no further action is required.

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- If no, go to **Step 2**.

**Step 2** Contact technical support engineer.

**----End**

# 2.4.191 ALM-0x1E000031 Fabric Plane Switch Overvoltage (Fabric Plane, Major Alarm)

## Description

Alarm message:

Switch module fabric plane switch voltage (*arg1* V) at *arg2* detection point exceeds the undervoltage threshold (*arg3* V).

This alarm is generated when the voltage of the switch chip on the switch module Fabric plane exceeds the overvoltage major threshold.

Alarm object: Fabric Plane

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x1E000031 | Major | Yes |

## Parameters

| Name | Meaning |
|---|---|
| *arg1* | Current reading of the sensor. |
| *arg2* | Voltage detection point. For example, **3V3** or **1V8**. |
| *arg3* | Alarm threshold. |

## Impact on the System

Services on the Fabric plane may fail to start or run abnormally.

## Possible Causes

The switch module is faulty.

## Procedure

**Step 1** Replace the switch module. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

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**Step 2** Contact technical support engineer.

**----End**

# 2.4.192 ALM-0x1E000033 Failed to Read Fabric Plane Switch Voltage (Fabric Plane, Minor Alarm)

## Description

Alarm message:

Failed to obtain data of the switch *arg1* voltage for base.

This alarm is generated when the system failed to obtain the voltage of the switch chip on the switch module Fabric plane.

Alarm object: Fabric Plane

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x1E000033 | Minor | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Voltage detection point. For example, **3V3** or **1V8**. |

## Impact on the System

The voltage cannot be monitored. No alarm will be reported when the voltage is not in the normal range.

## Possible Causes

- The iBMC is faulty.
- The switch module is faulty.

## Procedure

**Step 1** Restart the iBMC. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Remove and reinstall the power cable or board. Then, check whether the alarm is cleared.

- If yes, no further action is required.

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- If no, go to **Step 3**.

**Step 3** Replace the switch module. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Contact technical support engineer.

**----End**

# 2.4.193 ALM-0x1F000007 Switch Mezzanine Card 2.5 V Undervoltage (Switch Mezz, Major Alarm)

## Description

Alarm message:

Swtich mezzanine card *arg1* voltage (*arg2* V) at 2.5 V detection point is lower than the undervoltage threshold (*arg3* V).

This alarm is generated when the voltage of the mezzanine card 2.5 V detection point is lower than the undervoltage threshold.

Alarm object: Switch Mezz

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x1F000007 | Major | Yes |

## Parameters

| Name | Meaning |
|---|---|
| *arg1* | Slot number of the mezzanine card. |
| *arg2* | Current reading of the sensor. |
| *arg3* | Alarm threshold. |

## Impact on the System

The service network may be abnormal.

## Possible Causes

- The mezzanine card in the switch module is faulty.
- The switch module is faulty.

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### Procedure

**Step 1** Back up service data of the mezzanine card, switch over services to the standby network.

**Step 2** Replace the mezzanine card. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Replace the switch module. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Contact technical support engineer.

**----End**

## 2.4.194 ALM-0x1F000009 Mezzanine Card 2.5 V Overvoltage (Switch Mezz, Major Alarm)

### Description

Alarm message:

Swtich mezzanine card *arg1* voltage (*arg2* V) at 2.5 V detection point exceeds the overvoltage threshold (*arg3* V).

This alarm is generated when the voltage of the mezzanine card 2.5 V detection point exceeds the overvoltage threshold.

Alarm object: Switch Mezz

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x1F000009 | Major | Yes |

### Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Slot number of the mezzanine card. |
| *arg2* | Current reading of the sensor. |
| *arg3* | Alarm threshold. |

### Impact on the System

The service network may be abnormal.

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### Possible Causes

- The mezzanine card in the switch module is faulty.
- The switch module is faulty.

### Procedure

**Step 1** Back up service data of the mezzanine card, switch over services to the standby network.

**Step 2** Replace the mezzanine card. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Replace the switch module. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Contact technical support engineer.

**----End**

## 2.4.195 ALM-0x1F00000B Mezzanine Card 3.3 V Undervoltage (Switch Mezz, Major Alarm)

### Description

Alarm message:

Swtich mezzanine card *arg1* voltage (*arg2* V) at 3.3 V detection point is lower than the undervoltage threshold (*arg3* V).

This alarm is generated when the voltage of the mezzanine card 3.3 V detection point is lower than the undervoltage threshold.

Alarm object: Switch Mezz

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x1F00000B | Major | Yes |

### Parameters

| Name | Meaning |
|---|---|
| *arg1* | Slot number of the mezzanine card. |
| *arg2* | Current reading of the sensor. |
| *arg3* | Alarm threshold. |

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### Impact on the System

The service network may be abnormal.

### Possible Causes

- The mezzanine card in the switch module is faulty.
- The switch module is faulty.

### Procedure

**Step 1** Back up service data of the mezzanine card, switch over services to the standby network.

**Step 2** Replace the mezzanine card. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Replace the switch module. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Contact technical support engineer.

**----End**

## 2.4.196 ALM-0x1F00000D Mezzanine Card 3.3 V Overvoltage (Switch Mezz, Major Alarm)

### Description

Alarm message:

Swtich mezzanine card *arg1* voltage (*arg2* V) at 3.3 V detection point exceeds the overvoltage threshold (*arg3* V).

This alarm is generated when the voltage of the mezzanine card 3.3 V detection point exceeds the overvoltage threshold.

Alarm object: Switch Mezz

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x1F00000D | Major | Yes |

### Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Slot number of the mezzanine card. |

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| Name | Meaning |
| --- | --- |
| *arg2* | Current reading of the sensor. |
| *arg3* | Alarm threshold. |

## Impact on the System

The service network may be abnormal.

## Possible Causes

- The mezzanine card in the switch module is faulty.
- The switch module is faulty.

## Procedure

**Step 1** Back up service data of the mezzanine card, switch over services to the standby network.

**Step 2** Replace the mezzanine card. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Replace the switch module. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Contact technical support engineer.

**----End**

# 2.4.197 ALM-0x1F00000F Mezzanine Card 12 V Undervoltage (Switch Mezz, Major Alarm)

## Description

Alarm message:

Swtich mezzanine card *arg1* voltage (*arg2* V) at 12 V detection point is lower than the undervoltage threshold (*arg3* V).

This alarm is generated when the voltage of the mezzanine card 12 V detection point is lower than the undervoltage threshold.

Alarm object: Switch Mezz

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x1F00000F | Major | Yes |

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### Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Slot number of the mezzanine card. |
| *arg2* | Current reading of the sensor. |
| *arg3* | Alarm threshold. |

### Impact on the System

The service network may be abnormal.

### Possible Causes

- The mezzanine card in the switch module is faulty.
- The switch module is faulty.

### Procedure

**Step 1** Back up service data of the mezzanine card, switch over services to the standby network.

**Step 2** Replace the mezzanine card. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Replace the switch module. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Contact technical support engineer.

**----End**

## 2.4.198 ALM-0x1F000011 Mezzanine Card 12 V Overvoltage (Switch Mezz, Major Alarm)

### Description

Alarm message:

Swtich mezzanine card *arg1* voltage (*arg2* V) at 12 V detection point is lower than the undervoltage threshold (*arg3* V).

This alarm is generated when the voltage of the mezzanine card 12 V detection point exceeds the overvoltage threshold.

Alarm object: Switch Mezz

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## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x1F000011 | Major | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Slot number of the mezzanine card. |
| *arg2* | Current reading of the sensor. |
| *arg3* | Alarm threshold. |

## Impact on the System

The service network may be abnormal.

## Possible Causes

- The mezzanine card in the switch module is faulty.
- The switch module is faulty.

## Procedure

**Step 1** Back up service data of the mezzanine card, switch over services to the standby network.

**Step 2** Replace the mezzanine card. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Replace the switch module. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Contact technical support engineer.

**----End**

# 2.4.199 ALM-0x1F000013 Mezzanine Card 1 V Undervoltage (Switch Mezz, Major Alarm)

## Description

Alarm message:

Swtich mezzanine card *arg1* voltage (*arg2* V) at 1 V detection point is lower than the undervoltage threshold (*arg3* V).

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This alarm is generated when the voltage of the mezzanine card 1 V detection point is lower than the undervoltage threshold.

Alarm object: Switch Mezz

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x1F000013 | Major | Yes |

## Parameters

| Name | Meaning |
|---|---|
| *arg1* | Slot number of the mezzanine card. |
| *arg2* | Current reading of the sensor. |
| *arg3* | Alarm threshold. |

## Impact on the System

The service network may be abnormal.

## Possible Causes

- The mezzanine card in the switch module is faulty.
- The switch module is faulty.

## Procedure

**Step 1** Back up service data of the mezzanine card, switch over services to the standby network.

**Step 2** Replace the mezzanine card. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Replace the switch module. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Contact technical support engineer.

**----End**

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# 2.4.200 ALM-0x1F000015 Mezzanine Card 1 V Overvoltage (Switch Mezz, Major Alarm)

## Description

Alarm message:

Swtich mezzanine card *arg1* voltage (*arg2* V) at 1 V detection point exceeds the overvoltage threshold (*arg3* V).

This alarm is generated when the voltage of the mezzanine card 1 V detection point exceeds the overvoltage threshold.

Alarm object: Switch Mezz

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x1F000015 | Major | Yes |

## Parameters

| Name | Meaning |
|---|---|
| *arg1* | Slot number of the mezzanine card. |
| *arg2* | Current reading of the sensor. |
| *arg3* | Alarm threshold. |

## Impact on the System

The service network may be abnormal.

## Possible Causes

- The mezzanine card in the switch module is faulty.
- The switch module is faulty.

## Procedure

**Step 1** Back up service data of the mezzanine card, switch over services to the standby network.

**Step 2** Replace the mezzanine card. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Replace the switch module. Then, check whether the alarm is cleared.

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- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Contact technical support engineer.

**----End**

# 2.4.201 ALM-0x1F000017 Mezzanine Card 1.8 V Undervoltage (Switch Mezz, Major Alarm)

## Description

Alarm message:

Swtich mezzanine card *arg1* voltage (*arg2* V) at 1.8 V detection point is lower than the undervoltage threshold (*arg3* V).

This alarm is generated when the voltage of the mezzanine card 1.8 V detection point is lower than the undervoltage threshold.

Alarm object: Switch Mezz

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x1F000017 | Major | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Slot number of the mezzanine card. |
| *arg2* | Current reading of the sensor. |
| *arg3* | Alarm threshold. |

## Impact on the System

The service network may be abnormal.

## Possible Causes

- The mezzanine card in the switch module is faulty.
- The switch module is faulty.

## Procedure

**Step 1** Back up service data of the mezzanine card, switch over services to the standby network.

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**Step 2** Replace the mezzanine card. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Replace the switch module. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Contact technical support engineer.

**----End**

# 2.4.202 ALM-0x1F000019 Mezzanine Card 1.8 V Overvoltage (Switch Mezz, Major Alarm)

## Description

Alarm message:

Swtich mezzanine card *arg1* voltage (*arg2* V) at 1.8 V detection point exceeds the overvoltage threshold (*arg3* V).

This alarm is generated when the voltage of the mezzanine card 1.8 V detection point exceeds the overvoltage threshold.

Alarm object: Switch Mezz

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x1F000019 | Major | Yes |

## Parameters

| Name | Meaning |
|---|---|
| *arg1* | Slot number of the mezzanine card. |
| *arg2* | Current reading of the sensor. |
| *arg3* | Alarm threshold. |

## Impact on the System

The service network may be abnormal.

## Possible Causes

- The mezzanine card in the switch module is faulty.
- The switch module is faulty.

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### Procedure

**Step 1** Back up service data of the mezzanine card, switch over services to the standby network.

**Step 2** Replace the mezzanine card. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Replace the switch module. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Contact technical support engineer.

**----End**

## 2.4.203 ALM-0x1F00001B Mezzanine Card 1.5 V Undervoltage (Switch Mezz, Major Alarm)

### Description

Alarm message:

Swtich mezzanine card *arg1* voltage (*arg2* V) at 1.5 V detection point is lower than the undervoltage threshold (*arg3* V).

This alarm is generated when the voltage of the mezzanine card 1.5 V detection point is lower than the undervoltage threshold.

Alarm object: Switch Mezz

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x1F00001B | Major | Yes |

### Parameters

| Name | Meaning |
|---|---|
| *arg1* | Slot number of the mezzanine card. |
| *arg2* | Current reading of the sensor. |
| *arg3* | Alarm threshold. |

### Impact on the System

The service network may be abnormal.

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### Possible Causes

- The mezzanine card in the switch module is faulty.
- The switch module is faulty.

### Procedure

**Step 1** Back up service data of the mezzanine card, switch over services to the standby network.

**Step 2** Replace the mezzanine card. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Replace the switch module. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Contact technical support engineer.

**----End**

## 2.4.204 ALM-0x1F00001D Mezzanine Card 1.5 V Overvoltage (Switch Mezz, Major Alarm)

### Description

Alarm message:

Swtich mezzanine card *arg1* voltage (*arg2* V) at 1.5 V detection point exceeds the overvoltage threshold (*arg3* V).

This alarm is generated when the voltage of the mezzanine card 1.5 V detection point exceeds the overvoltage threshold.

Alarm object: Switch Mezz

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x1F00001D | Major | Yes |

### Parameters

| Name | Meaning |
|---|---|
| *arg1* | Slot number of the mezzanine card. |
| *arg2* | Current reading of the sensor. |
| *arg3* | Alarm threshold. |

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### Impact on the System

The service network may be abnormal.

### Possible Causes

- The mezzanine card in the switch module is faulty.
- The switch module is faulty.

### Procedure

**Step 1** Back up service data of the mezzanine card, switch over services to the standby network.

**Step 2** Replace the mezzanine card. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Replace the switch module. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Contact technical support engineer.

**----End**

## 2.4.205 ALM-0x1F00001F Mezzanine Card Standby 3.3 V Undervoltage (Switch Mezz, Major Alarm)

### Description

Alarm message:

Swtich mezzanine card *arg1* voltage (*arg2* V) at standby 3.3 V detection point is lower than the undervoltage threshold (*arg3* V).

This alarm is generated when the voltage of the mezzanine card standby 3.3 V detection point is lower than the undervoltage threshold.

Alarm object: Switch Mezz

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x1F00001F | Major | Yes |

### Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Slot number of the mezzanine card. |

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| Name | Meaning |
| --- | --- |
| *arg2* | Current reading of the sensor. |
| *arg3* | Alarm threshold. |

## Impact on the System

The service network may be abnormal.

## Possible Causes

- The mezzanine card in the switch module is faulty.
- The switch module is faulty.

## Procedure

**Step 1** Back up service data of the mezzanine card, switch over services to the standby network.

**Step 2** Replace the mezzanine card. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Replace the switch module. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Contact technical support engineer.

**----End**

# 2.4.206 ALM-0x1F000021 Mezzanine Card Standby 3.3 V Overvoltage (Switch Mezz, Major Alarm)

## Description

Alarm message:

Swtich mezzanine card *arg1* voltage (*arg2* V) at standby 3.3 V detection point exceeds the overvoltage threshold (*arg3* V).

This alarm is generated when the voltage of the mezzanine card standby 3.3 V detection point exceeds the overvoltage threshold.

Alarm object: Switch Mezz

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x1F000021 | Major | Yes |

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### Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Slot number of the mezzanine card. |
| *arg2* | Current reading of the sensor. |
| *arg3* | Alarm threshold. |

### Impact on the System

The service network may be abnormal.

### Possible Causes

- The mezzanine card in the switch module is faulty.
- The switch module is faulty.

### Procedure

**Step 1** Back up service data of the mezzanine card, switch over services to the standby network.

**Step 2** Replace the mezzanine card. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Replace the switch module. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Contact technical support engineer.

**----End**

## 2.4.207 ALM-0x1F000033 Failed to Read Mezzanine Card 2.5 V Voltage (Switch Mezz, Minor Alarm)

### Description

Alarm message:

Failed to obtain data of the 2.5V voltage for switch mezzanine card *arg1*.

This alarm is generated when the system failed to obtain the voltage of the 2.5 V detection point on the mezzanine card.

Alarm object: Switch Mezz

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### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x1F000033 | Minor | Yes |

### Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Slot number of the mezzanine card. |

### Impact on the System

The voltage cannot be monitored. No alarm will be reported when the voltage is not in the normal range.

### Possible Causes

- The iBMC does not work normally.
- The mezzanine card is faulty.

### Procedure

**Step 1** Restart the iBMC. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Remove and reinstall the power cable or board. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Replace the mezzanine card. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Contact technical support engineer.

**----End**

## 2.4.208 ALM-0x1F000035 Failed to Read Mezzanine Card 3.3 V Voltage (Switch Mezz, Minor Alarm)

### Description

Alarm message:

Failed to obtain data of the 3.3V voltage for switch mezzanine card *arg1*.

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This alarm is generated when the system failed to obtain the voltage of the 3.3 V detection point on the mezzanine card.

Alarm object: Switch Mezz

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x1F000035 | Minor | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Slot number of the mezzanine card. |

## Impact on the System

The voltage cannot be monitored. No alarm will be reported when the voltage is not in the normal range.

## Possible Causes

- The iBMC does not work normally.
- The mezzanine card is faulty.

## Procedure

**Step 1** Restart the iBMC. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Remove and reinstall the power cable or board. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Replace the mezzanine card. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Contact technical support engineer.

**----End**

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# 2.4.209 ALM-0x1F000037 Failed to Read Mezzanine Card 12 V Voltage (Switch Mezz, Minor Alarm)

## Description

Alarm message:

Failed to obtain data of the 12 V voltage for switch mezzanine card *arg1*.

This alarm is generated when the system failed to obtain the voltage of the 12 V detection point on the mezzanine card.

Alarm object: Switch Mezz

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x1F000037 | Minor | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Slot number of the mezzanine card. |

## Impact on the System

The voltage cannot be monitored. No alarm will be reported when the voltage is not in the normal range.

## Possible Causes

- The iBMC does not work normally.
- The mezzanine card is faulty.

## Procedure

**Step 1** Restart the iBMC. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Remove and reinstall the power cable or board. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Replace the mezzanine card. Then, check whether the alarm is cleared.

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- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Contact technical support engineer.

**----End**

# 2.4.210 ALM-0x1F000039 Failed to Read Mezzanine Card 1.5 V Voltage (Switch Mezz, Minor Alarm)

## Description

Alarm message:

Failed to obtain data of the 1.5 V voltage for switch mezzanine card *arg1*.

This alarm is generated when the system failed to obtain the voltage of the 1.5 V detection point on the mezzanine card.

Alarm object: Switch Mezz

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x1F000039 | Minor | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Slot number of the mezzanine card. |

## Impact on the System

The voltage cannot be monitored. No alarm will be reported when the voltage is not in the normal range.

## Possible Causes

- The iBMC does not work normally.
- The mezzanine card is faulty.

## Procedure

**Step 1** Restart the iBMC. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

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**Step 2** Remove and reinstall the power cable or board. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Replace the mezzanine card. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Contact technical support engineer.

**----End**

# 2.4.211 ALM-0x1F00003B Failed to Read Mezzanine Card 1 V Voltage (Switch Mezz, Minor Alarm)

## Description

Alarm message:

Failed to obtain data of the 1 V voltage for switch mezzanine card *arg1*.

This alarm is generated when the system failed to obtain the voltage of the 1 V detection point on the mezzanine card.

Alarm object: Switch Mezz

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x1F00003B | Minor | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Slot number of the mezzanine card. |

## Impact on the System

The voltage cannot be monitored. No alarm will be reported when the voltage is not in the normal range.

## Possible Causes

- The iBMC does not work normally.
- The mezzanine card is faulty.

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### Procedure

**Step 1** Restart the iBMC. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Remove and reinstall the power cable or board. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Replace the mezzanine card. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Contact technical support engineer.

**----End**

## 2.4.212 ALM-0x1F00003D Failed to Read Mezzanine Card Standby 3.3 V Voltage (Switch Mezz, Minor Alarm)

### Description

Alarm message:

Failed to obtain data of the standby 3.3V voltage for switch mezzanine card *arg1*.

This alarm is generated when the system failed to obtain the voltage of the standby 3.3 V detection point on the mezzanine card.

Alarm object: Switch Mezz

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x1F00003D | Minor | Yes |

### Parameters

| Name | Meaning |
|---|---|
| *arg1* | Slot number of the mezzanine card. |

### Impact on the System

The voltage cannot be monitored. No alarm will be reported when the voltage is not in the normal range.

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## Possible Causes

- The iBMC does not work normally.
- The mezzanine card is faulty.

## Procedure

**Step 1** Restart the iBMC. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Remove and reinstall the power cable or board. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Replace the mezzanine card. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Contact technical support engineer.

**----End**

# 2.4.213 ALM-0x1F00003F Failed to Read Mezzanine Card 1.8 V Voltage (Switch Mezz, Minor Alarm)

## Description

Alarm message:

Failed to obtain data of the 1.8V voltage for switch mezzanine card *arg1*.

This alarm is generated when the system failed to obtain the voltage of the 1.8 V detection point on the mezzanine card.

Alarm object: Switch Mezz

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x1F00003F | Minor | Yes |

## Parameters

| Name | Meaning |
|---|---|
| *arg1* | Slot number of the mezzanine card. |

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### Impact on the System

The voltage cannot be monitored. No alarm will be reported when the voltage is not in the normal range.

### Possible Causes

- The iBMC does not work normally.
- The mezzanine card is faulty.

### Procedure

**Step 1** Restart the iBMC. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Remove and reinstall the power cable or board. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Replace the mezzanine card. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Contact technical support engineer.

**----End**

## 2.4.214 ALM-0x23000013 Failed to Read I/O Board 12 V Voltage (I/O Board, Minor Alarm)

### Description

Alarm message:

Failed to obtain data of the 12V [*arg2*] voltage for I/O board (*arg1*).

This alarm is generated when the system failed to obtain the voltage of the 12 V detection point of the I/O board.

Alarm object: I/O Board

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x23000013 | Minor | Yes |

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### Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Location of the I/O board, for example, **BIO** or **FIO**. |
| *arg2* | I/O board input or output voltage, for example, **input** or **output**. |

### Impact on the System

The voltage cannot be monitored. No alarm will be reported when the voltage is not in the normal range.

### Possible Causes

The iBMC does not work normally.

### Procedure

**Step 1** Restart the iBMC. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Remove and reinstall the power cable or board. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Contact technical support engineer.

**----End**

## 2.4.215 ALM-0x23000021 Abnormal Power Supply Signal on the I/O Board (I/O Board, Major Alarm)

### Description

Alarm message:

The power signal *arg1* of the I/O board (*arg2*) is abnormal.

This alarm is generated when the system detects abnormal power supply signal on the I/O board.

Alarm object: I/O Board

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### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x23000021 | Major | Yes |

### Parameters

| Name | Meaning |
|---|---|
| *arg1* | Power signal. For example, **5V**. |
| *arg2* | I/O board name, for example **CH80OIUA**. |

### Impact on the System

The system may stop responding.

### Possible Causes

- The power cable connection of the I/O board is abnormal.
- The I/O board is faulty.

### Procedure

**Step 1** Check whether the power cable of the I/O board is connected properly.

- If yes, go to **Step 3**.
- If no, go to **Step 2**.

**Step 2** Connect the power cable of the I/O board properly. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Replace the I/O board. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Contact technical support.

**----End**

## 2.4.216 ALM-0x2300003B I/O Board Power Failure (I/O Board, Major Alarm)

### Description

Alarm message:

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The power supply *arg1* of the I/O board (*arg2*) is abnormal.

This alarm is generated when the system detects abnormal power supply signal on the I/O board.

Alarm object: I/O Board

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x2300003B | Major | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Current reading of the sensor. |
| *arg2* | Location of the I/O board. |

## Impact on the System

The I/O board and the back-end board cannot be used.

## Possible Causes

- The power supply of the mainboard is abnormal.
- The power supply of the I/O board is abnormal.
- The GPU card is abnormal.

## Procedure

**Step 1** Check whether there are power alarms generated for the server.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Clear the power alarms. Then, check whether the overcurrent alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Replace the I/O board. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **4**.

**Step 4** Replace the GPU card. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

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**Step 5** Contact technical support.

**----End**

# 2.4.217 ALM-0x23000045 I/O Board Power-on Timed Out (I/O Board, Major Alarm)

## Description

Alarm message:

The power *arg1* failure causes the power-on timeout of I/O board *arg2*.

This alarm is generated when the I/O board power-on timed out.

Alarm object: I/O Board

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 23000045 | Major | Yes |

## Parameters

| Name | Meaning |
|---|---|
| *arg1* | Power supply subsystem name. For example, **V_STBY_1V8** or **V_STBY_3V3_VRD**. |
| *arg2* | Name of the I/O board. For example, **Pcie Switch Board**. |

## Impact on the System

The I/O board cannot be powered on.

## Possible Causes

- The power supply to the mainboard is abnormal.
- The power supply to the I/O board is faulty.

## Procedure

**Step 1** Check whether the power supply to the mainboard is normal.

**Step 2** Replace the I/O board. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

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**Step 3** Contact technical support.

**----End**

# 2.4.218 ALM-0x23000047 I/O Board Soft-start Circuit Overcurrent (I/O Board, Major Alarm)

## Description

Alarm message:

Soft-start circuit overcurrent on the I/O board *arg1*.

This alarm is generated when the soft-start circuit overcurrent on the I/O board.

Alarm object: I/O Board

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x23000047 | Major | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | I/O board name, for example 5**4V Power Board**. |

## Impact on the System

The I/O board may run unstablely or malfunction, and external components may not be used properly.

## Possible Causes

The I/O board is faulty.

## Procedure

**Step 1** Replace the I/O board. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Contact technical support.

**----End**

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# 2.4.219 ALM-0x2300004D I/O Board VRD Overvoltage Alarm (I/O Board, Major Alarm)

## Description

Alarm message:

The VRD chip *arg1* voltage (*arg2*V) on the I/O board *arg3* exceeds the overvoltage threshold (*arg4*V).

This alarm is generated when the VRD chip voltage on the I/O boar exceeds the overvoltage threshold.

Alarm object: I/O Board

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x2300004D | Major | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Name of the VRD chip. For example, **WEST_VRD**. |
| *arg2* | Current reading of the sensor. |
| *arg3* | Name of the I/O board. For example, **OSFP_BOARD**. |
| *arg4* | Alarm threshold. |

## Impact on the System

The power supply to the external components of the I/O board is abnormal.

## Possible Causes

The I/O board is faulty.

## Procedure

**Step 1** Replace the I/O board. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Contact technical support engineer.

**----End**

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# 2.4.220 ALM-0x2300004F I/O board VRD Undervoltage Alarm (I/O Board, Major Alarm)

## Description

Alarm message:

The VRD chip *arg1* voltage (*arg2*V) on the I/O board *arg3* is lower than the undervoltage threshold (*arg4*V).

This alarm is generated when the VRD chip voltage on the I/O boar is lower than the undervoltage threshold.

Alarm object: I/O Board

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x2300004F | Major | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Name of the VRD chip. For example, **WEST_VRD**. |
| *arg2* | Current reading of the sensor. |
| *arg3* | Name of the I/O board. For example, **OSFP_BOARD**. |
| *arg4* | Alarm threshold. |

## Impact on the System

The power supply to the external components of the I/O board is abnormal.

## Possible Causes

The I/O board is faulty.

## Procedure

**Step 1** Replace the I/O board. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Contact technical support engineer.

**----End**

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# 2.4.221 ALM-0x23000053 Failed to Obtain the I/O Board VRD Voltage (I/O Board, Major Alarm)

## Description

Alarm message:

Failed to obtain data of the I/O board *arg1* VRD *arg2* voltage.

This alarm is generated when the system failed to obtain the I/O board VRD voltage.

Alarm object: I/O Board

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x23000053 | Major | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Name of the I/O board. For example, **OSFP_BOARD**. |
| *arg2* | Name of the VRD chip. For example, **OSFP_VRD(XDPE12284C)**. |

## Impact on the System

The voltage cannot be monitored normally, and if the voltage is abnormal, the alarm cannot be given in time.

## Possible Causes

- VRD chip failure.
- The VRD access channel is faulty.

## Procedure

**Step 1** Restart the iBMC. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Remove and reconnect power cables or remove and reinstall the board in the chassis. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

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**Step 3** Replace the I/O board. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Contact technical support engineer.

**----End**

# 2.4.222 ALM-0x23000055 I/O board 12V Undervoltage Minor Alarm (I/O Board, Minor Alarm)

## Description

Alarm message:

The voltage (*arg1* V) of (*arg2* V) on I/O board (*arg3*) is lower than the undervoltage threshold (*arg4* V).

This alarm is generated when the 12V voltage of the I/O board is read to be lower than the low threshold voltage.

Alarm object: I/O Board

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x23000055 | Minor | Yes |

## Parameters

| Name | Meaning |
|---|---|
| *arg1* | Current reading of the sensor. |
| *arg2* | I/O board input or output voltage, for example, **input** or **output**. |
| *arg3* | Name of the I/O board. For example, **OSFP_BOARD**. |
| *arg4* | Alarm threshold. |

## Impact on the System

The system may stop responding.

## Possible Causes

The I/O board is faulty.

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### Procedure

**Step 1** Replace the I/O board. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **2**.

**Step 2** Contact technical support engineer.

**----End**

## 2.4.223 ALM-0x23000057 I/O board 12V Overvoltage Minor Alarm (I/O Board, Minor Alarm)

### Description

Alarm message:

The voltage (*arg1* V) of (*arg2* V) on I/O board (*arg3*) exceeds the overvoltage threshold (*arg4* V).

This alarm is generated when the 12V voltage of the I/O board is read to be lower than the low threshold voltage.

Alarm object: I/O Board

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x23000057 | Minor | Yes |

### Parameters

| Name | Meaning |
|---|---|
| *arg1* | Current reading of the sensor. |
| *arg2* | I/O board input or output voltage, for example, **input** or **output**. |
| *arg3* | Name of the I/O board. For example, **OSFP_BOARD**. |
| *arg4* | Alarm threshold. |

### Impact on the System

The system may stop responding.

### Possible Causes

The I/O board is faulty.

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### Procedure

**Step 1** Replace the I/O board. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **2**.

**Step 2** Contact technical support engineer.

**----End**

## 2.4.224 ALM-0x27000005 PCH Undervoltage (PCH, Major Alarm)

### Description

Alarm message:

The PCH voltage (*arg1* V) is lower than the undervoltage threshold (*arg2* V).

This alarm is generated when the PCH voltage is lower than the undervoltage threshold.

Alarm object: PCH

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x27000005 | Major | Yes |

### Parameters

| Name | Meaning |
|---|---|
| *arg1* | Current reading of the sensor. |
| *arg2* | Alarm threshold. |

### Impact on the System

The system is not stable.

### Possible Causes

The mainboard is faulty.

### Procedure

**Step 1** Replace the mainboard. Then, check whether the alarm is cleared.

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- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Contact technical support engineer.

**----End**

# 2.4.225 ALM-0x27000007 PCH Overvoltage (PCH, Major Alarm)

## Description

Alarm message:

The PCH voltage (*arg1* V) exceeds the overvoltage threshold (*arg2* V).

This alarm is generated when the PCH voltage exceeds the overvoltage threshold.

Alarm object: PCH

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x27000007 | Major | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Current reading of the sensor. |
| *arg2* | Alarm threshold. |

## Impact on the System

The system is not stable.

## Possible Causes

The mainboard is faulty.

## Procedure

**Step 1** Replace the mainboard. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Contact technical support engineer.

**----End**

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# 2.4.226 ALM-0x2700000D Failed to Read PCH Voltage (PCH, Minor Alarm)

## Description

Alarm message:

```
Failed to obtain data of the PCH voltage.
```

This alarm is generated when the system failed to obtain the PCH voltage.

Alarm object: PCH

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x2700000D | Minor | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| – | – |

## Impact on the System

The voltage cannot be monitored. No alarm will be reported when the voltage is not in the normal range.

## Possible Causes

The CPU voltage detection circuit is abnormal.

## Procedure

**Step 1** Restart the iBMC. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Remove and reinstall the power cable or board. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Replace the mainboard. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

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**Step 4** Contact technical support engineer.

**----End**

# 2.4.227 ALM-0x2700000F PCH VPVNN Overvoltage (PCH, Major Alarm)

## Description

Alarm message:

The PCH VPVNN voltage (*arg1* V) exceeds the overvoltage threshold (*arg2* V).

This alarm is generated when the PCH VPVNN voltage exceeds the overvoltage threshold.

Alarm object: PCH

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x2700000F | Major | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Current reading of the sensor. |
| *arg2* | Alarm threshold. |

## Impact on the System

The system stops responding or cannot be started.

## Possible Causes

The mainboard is faulty.

## Procedure

**Step 1** Replace the mainboard. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Contact technical support engineer.

**----End**

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# 2.4.228 ALM-0x27000011 PCH VPVNN Undervoltage (PCH, Major Alarm)

## Description

Alarm message:

The PCH VPVNN voltage (*arg1* V) is lower than the undervoltage threshold (*arg2* V).

This alarm is generated when the PCH VPVNN voltage is lower than the undervoltage threshold.

Alarm object: PCH

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x27000011 | Major | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Current reading of the sensor. |
| *arg2* | Alarm threshold. |

## Impact on the System

The system stops responding or cannot be started.

## Possible Causes

The mainboard is faulty.

## Procedure

**Step 1** Replace the mainboard. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Contact technical support engineer.

**----End**

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# 2.4.229 ALM-0x27000013 Failed to Read PCH VPVNN Voltage (PCH, Minor Alarm)

## Description

Alarm message:

```
Failed to obtain data of the PCH VPVNN voltage.
```

This alarm is generated when the system failed to obtain the PCH VPVNN voltage.

Alarm object: PCH

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x27000013 | Minor | Yes |

## Parameters

| Name | Meaning |
|---|---|
| – | – |

## Impact on the System

The voltage cannot be monitored. No alarm will be reported when the voltage is not in the normal range.

## Possible Causes

The CPU voltage detection circuit is abnormal.

## Procedure

**Step 1** Restart the iBMC. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Remove and reinstall the power cable or board. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Replace the mainboard. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

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**Step 4** Contact technical support engineer.

**----End**

# 2.4.230 ALM-0x27000015 PCH PRIM 1.05 V Overvoltage (PCH, Major Alarm)

## Description

Alarm message:

The PCH PRIM 1V05 voltage (*arg1* V) exceeds the overvoltage threshold (*arg2* V).

This alarm is generated when the PCH PRIM 1 V05 voltage exceeds the overvoltage threshold.

Alarm object: PCH

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x27000015 | Major | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Current reading of the sensor. |
| *arg2* | Alarm threshold. |

## Impact on the System

The system stops responding or cannot be started.

## Possible Causes

The mainboard is faulty.

## Procedure

**Step 1** Replace the mainboard. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Contact technical support engineer.

**----End**

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# 2.4.231 ALM-0x27000017 PCH PRIM 1.05 V Undervoltage (PCH, Major Alarm)

## Description

Alarm message:

The PCH PRIM 1V05 voltage (*arg1* V) is lower than the undervoltage threshold (*arg2* V).

This alarm is generated when the PCH PRIM 1 V05 voltage is lower than the undervoltage threshold.

Alarm object: PCH

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x27000017 | Major | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Current reading of the sensor. |
| *arg2* | Alarm threshold. |

## Impact on the System

The system stops responding or cannot be started.

## Possible Causes

The mainboard is faulty.

## Procedure

**Step 1** Replace the mainboard. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Contact technical support engineer.

**----End**

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# 2.4.232 ALM-0x27000019 Failed to Read PCH PRIM 1.05 V Voltage (PCH, Minor Alarm)

## Description

Alarm message:

```
Failed to obtain data of the PCH PRIM 1 V05 voltage.
```

This alarm is generated when the system failed to obtain the PCH PRIM 1 V05 voltage.

Alarm object: PCH

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x27000019 | Minor | Yes |

## Impact on the System

The voltage cannot be monitored. No alarm will be reported when the voltage is not in the normal range.

## Possible Causes

The CPU voltage detection circuit is abnormal.

## Procedure

**Step 1** Restart the iBMC. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Remove and reinstall the power cable or board. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Replace the mainboard. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Contact technical support engineer.

**----End**

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# 2.4.233 ALM-0x2900000F Optical Module Voltage Abnormal (Port, Major Alarm)

## Description

Alarm message:

Abnormal voltage (*arg4*V) of optical module was detected on [*arg2*] *arg3* on *arg1*.

This alarm is generated when abnormal voltage was detected on the optical module connected to the network interface card (NIC).

Alarm object: Port

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x2900000F | Major | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | NIC name, for example, **NIC 1**, **PCIe Card 5**, or **LOM**. |
| *arg2* | Type of the NIC, for example, **(NIC)** or **(FC).** |
| *arg3* | Network port number, for example, **port 1**. |
| *arg4* | Current reading of the sensor. |

## Impact on the System

The NIC may run unstably, which affects the service network communication.

## Possible Causes

The optical module is faulty.

## Procedure

**Step 1** Replace the optical module. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Contact technical support engineer.

**----End**

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# 2.4.234 ALM-0x2C000007 Server Powered Off (System, Major Alarm)

## Description

Alarm message:

The [*arg1*] power *arg2* failure results abnormal power-off.

This alarm is generated when the abnormal voltage leads to system power-off abnormally.

Alarm object: System

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x2C000007 | Major | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Serial number of the power supply, for example, **LPM1**. |
| *arg2* | Power supply subsystem name. For example, **STBY_5V0** or **STBY_1V8_PCH**.<br>For details about the involved components, see **2.12.1 Reference Information for Server Power-On Timeout or Abnormal Power Off**. |

## Impact on the System

The server shuts down, and OS services are interrupted.

## Possible Causes

- The mainboard voltage has dropped.
- The mainboard is faulty.

## Procedure

**Step 1** Check whether the power supplies in the equipment room are sufficient for server operation.

- If yes, go to **Step 3**.
- If no, go to **Step 2**.

**Step 2** Ensure sufficient power supplies for server operation. Then, check whether the alarm is cleared.

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- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Power off the server (by removing the power cable or server node) and then power on the server (by reconnecting the power cable or reinstalling the server node). Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Replace the power cable. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Replace the power supply unit (PSU). Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 6**.

**Step 6** Replace the power supply backplane. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 7**.

**Step 7** Replace the faulty components based on **2.12.1 Reference Information for Server Power-On Timeout or Abnormal Power Off**. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 8**.

**Step 8** Contact technical support engineer.

**----End**

# 2.4.235 ALM-0x2C00002B Power-On Timed Out (System, Major Alarm)

## Description

Alarm message:

The [*arg1*] power [*arg2*] failure results host power-on timed out.

This alarm is generated when the system failed to power on within the specified time due to a abnormal voltage.

Alarm object: System

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x2C00002B | Major | Yes |

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### Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Serial number of the power supply, for example, **LPM1**. |
| *arg2* | Power supply subsystem name. For example, **STBY_5V0** or **STBY_1V8_PCH**.<br>For details about the involved components, see **2.12.1 Reference Information for Server Power-On Timeout or Abnormal Power Off**. |

### Impact on the System

The server cannot start.

### Possible Causes

- The external power supply does not meet power consumption requirements of the server.
- The mainboard is faulty.

### Procedure

**Step 1** Check whether the external power supply meets power consumption requirements of the server.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Remove the power cable to power off the server, and then reconnect the power cable to power on the server. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 3** Replace the faulty components based on **2.12.1 Reference Information for Server Power-On Timeout or Abnormal Power Off**. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Contact technical support.

**----End**

## 2.4.236 ALM-0x2C00003F Insufficient CPUs (System, Major Alarm)

### Description

Alarm message:

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Insufficient CPUs or the number of CPUs is incorrect.

This alarm is generated when the number of CPUs is incorrect or does not meet service requirements.

Alarm object: System

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x2C00003F | Major | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| – | – |

## Impact on the System

Server performance is affected.

## Possible Causes

- The CPUs are not properly installed.
- The number of CPUs does not meet service requirements.

## Procedure

**Step 1** Check whether the number of CPUs complies with the hardware configuration.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Power off the server, and remove and reinstall the CPUs. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 3** Install CPUs properly. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Contact technical support.

**----End**

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# 2.4.237 ALM-0x2C00005F Failed to Identify the Product (System, Major Alarm)

## Description

Alarm message:

```
Failed to identify the product.
```

This alarm is generated when the system failed to identify the product.

Alarm object: System

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x2C00005F | Major | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| – | – |

## Impact on the System

Servers cannot be managed properly.

## Possible Causes

- The front disk backplane is not installed properly.
- The iBMC version, mainboard CPLD version, and backplane CPLD version do not match.

## Procedure

**Step 1** Check whether the front disk backplane is installed properly.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Upgrade the front disk backplane CPLD version. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 3** Remove and reinstall the front disk backplane. Then, check whether the alarm is cleared.

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- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 4** Upgrade the mainboard CPLD version. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Upgrade the iBMC version. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 6**.

**Step 6** Contact technical support.

**----End**

# 2.4.238 ALM-0x2C00007F PSUs Power Supply Invalidly Mixed Insertion (System, Major Alarm)

## Description

Alarm message:

```
PSU power or type mismatches.
```

This alarm is generated when the PSUs have different power or there is a mixed use of 48 V DC PSU and another PSU type.

Alarm object: System

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x2C00007F | Major | Yes |

## Parameters

| Name | Meaning |
|---|---|
| - | - |

## Impact on the System

The power supply may be abnormal,causing unexpected power-off of the system.

## Possible Causes

- A server cannot be installed with the PSUs of different rated power.
- The 48 V DC PSU cannot be installed with and other types of PSUs together.

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### Procedure

**Step 1** Replace with the PSUs of same model and check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Contact technical support engineer.

**----End**

## 2.4.239 ALM-0x30000001 PIC Card 3.3 V Undervoltage (PIC Card, Major Alarm)

### Description

Alarm message:

PIC card *arg1* voltage (*arg2* V) at 3.3 V detection point is lower than the undervoltage threshold (*arg3* V).

This alarm is generated when the voltage of the 3.3 V detection point of the PIC card is lower than the undervoltage major threshold.

Alarm object: PIC Card

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x30000001 | Major | Yes |

### Parameters

| Name | Meaning |
|---|---|
| *arg1* | Slot number of the PIC card. |
| *arg2* | Current reading of the sensor. |
| *arg3* | Alarm threshold. |

### Impact on the System

The service network of the PIC card may be abnormal.

### Possible Causes

- The PIC card is faulty.
- The switch module is faulty.

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### Procedure

**Step 1** Replace the PIC card. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Replace the switch module. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**

**Step 3** Contact technical support engineer.

**----End**

## 2.4.240 ALM-0x30000003 PIC Card 3.3 V Overvoltage (PIC Card, Major Alarm)

### Description

Alarm message:

PIC card *arg1* voltage (*arg2* V) at 3.3 V detection point exceeds the overvoltage threshold (*arg3* V).

This alarm is generated when the voltage of the 3.3 V detection point of the PIC card exceeds the overvoltage major threshold.

Alarm object: PIC Card

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x30000003 | Major | Yes |

### Parameters

| Name | Meaning |
|---|---|
| *arg1* | Slot number of the PIC card. |
| *arg2* | Current reading of the sensor. |
| *arg3* | Alarm threshold. |

### Impact on the System

The service network of the PIC card may be abnormal.

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### Possible Causes

- The PIC card is faulty.
- The switch module is faulty.

### Procedure

**Step 1** Replace the PIC card. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Replace the switch module. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**

**Step 3** Contact technical support engineer.

**----End**

## 2.4.241 ALM-0x30000005 PIC Card 1.2 V Undervoltage (PIC Card, Major Alarm)

### Description

Alarm message:

PIC card *arg1* voltage (*arg2* V) at 1.2 V detection point is lower than the undervoltage threshold (*arg3* V).

This alarm is generated when the voltage of the 1.2 V detection point of the PIC card is lower than the undervoltage major threshold.

Alarm object: PIC Card

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x30000005 | Major | Yes |

### Parameters

| Name | Meaning |
|---|---|
| *arg1* | Slot number of the PIC card. |
| *arg2* | Current reading of the sensor. |
| *arg3* | Alarm threshold. |

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### Impact on the System

The service network of the PIC card may be abnormal.

### Possible Causes

- The PIC card is faulty.
- The switch module is faulty.

### Procedure

**Step 1** Replace the PIC card. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Replace the switch module. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**

**Step 3** Contact technical support engineer.

**----End**

## 2.4.242 ALM-0x30000007 PIC Card 1.2 V Overvoltage (PIC Card, Major Alarm)

### Description

Alarm message:

PIC card *arg1* voltage (*arg2* V) at 1.2 V detection point exceeds the overvoltage threshold (*arg3* V).

This alarm is generated when the voltage of the 1.2 V detection point of the PIC card exceeds the overvoltage major threshold.

Alarm object: PIC Card

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x30000007 | Major | Yes |

### Parameters

| Name | Meaning |
|---|---|
| *arg1* | Slot number of the PIC card. |
| *arg2* | Current reading of the sensor. |
| *arg3* | Alarm threshold. |

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### Impact on the System

The service network of the PIC card may be abnormal.

### Possible Causes

- The PIC card is faulty.
- The switch module is faulty.

### Procedure

**Step 1** Replace the PIC card. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Replace the switch module. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**

**Step 3** Contact technical support engineer.

**----End**

## 2.4.243 ALM-0x30000009 PIC Card 1 V Undervoltage (PIC Card, Major Alarm)

### Description

Alarm message:

PIC card *arg1* voltage (*arg2* V) at 1 V detection point is lower than the undervoltage threshold (*arg3* V).

This alarm is generated when the voltage of the 1 V detection point of the PIC card is lower than the undervoltage major threshold.

Alarm object: PIC Card

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x30000009 | Major | Yes |

### Parameters

| Name | Meaning |
|---|---|
| *arg1* | Slot number of the PIC card. |

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| Name | Meaning |
| --- | --- |
| *arg2* | Current reading of the sensor. |
| *arg3* | Alarm threshold. |

## Impact on the System

The service network of the PIC card may be abnormal.

## Possible Causes

- The PIC card is faulty.
- The switch module is faulty.

## Procedure

**Step 1** Replace the PIC card. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Replace the switch module. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**

**Step 3** Contact technical support engineer.

**----End**

# 2.4.244 ALM-0x3000000B PIC Card 1 V Overvoltage (PIC Card, Major Alarm)

## Description

Alarm message:

PIC card *arg1* voltage (*arg2* V) at 1 V detection point exceeds the overvoltage threshold (*arg3* V).

This alarm is generated when the voltage of the 1 V detection point of the PIC card exceeds the overvoltage major threshold.

Alarm object: PIC Card

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x3000000B | Major | Yes |

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### Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Slot number of the PIC card. |
| *arg2* | Current reading of the sensor. |
| *arg3* | Alarm threshold. |

### Impact on the System

The service network of the PIC card may be abnormal.

### Possible Causes

- The PIC card is faulty.
- The switch module is faulty.

### Procedure

**Step 1** Replace the PIC card. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Replace the switch module. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**

**Step 3** Contact technical support engineer.

**----End**

## 2.4.245 ALM-0x3000000D PIC Card 12 V Undervoltage (PIC Card, Major Alarm)

### Description

Alarm message:

PIC card *arg1* voltage (*arg2* V) at 12 V detection point is lower than the undervoltage threshold (*arg3* V).

This alarm is generated when the voltage of the 12 V detection point of the PIC card is lower than the undervoltage major threshold.

Alarm object: PIC Card

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x3000000D | Major | Yes |

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### Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Slot number of the PIC card. |
| *arg2* | Current reading of the sensor. |
| *arg3* | Alarm threshold. |

### Impact on the System

The service network of the PIC card may be abnormal.

### Possible Causes

- The PIC card is faulty.
- The switch module is faulty.

### Procedure

**Step 1** Replace the PIC card. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Replace the switch module. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**

**Step 3** Contact technical support engineer.

**----End**

## 2.4.246 ALM-0x3000000F PIC Card 12 V Overvoltage (PIC Card, Major Alarm)

### Description

Alarm message:

PIC card *arg1* voltage (*arg2* V) at 12 V detection point exceeds the overvoltage threshold (*arg3* V).

This alarm is generated when the voltage of the 12 V detection point of the PIC card exceeds the overvoltage major threshold.

Alarm object: PIC Card

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### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x3000000F | Major | Yes |

### Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Slot number of the PIC card. |
| *arg2* | Current reading of the sensor. |
| *arg3* | Alarm threshold. |

### Impact on the System

The service network of the PIC card may be abnormal.

### Possible Causes

- The PIC card is faulty.
- The switch module is faulty.

### Procedure

**Step 1** Replace the PIC card. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Replace the switch module. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**

**Step 3** Contact technical support engineer.

**----End**

## 2.4.247 ALM-0x3000001D Failed to Read PIC Card 3.3 V Voltage (PIC Card, Minor Alarm)

### Description

Alarm message:

Failed to obtain data of the 3.3V voltage for PIC card *arg1*.

This alarm is generated when the system failed to obtain the voltage of the 3.3 V detection point of the PIC card.

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Alarm object: PIC Card

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x3000001D | Minor | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Slot number of PIC card |

## Impact on the System

The voltage cannot be monitored. No alarm will be reported when the voltage is not in the normal range.

## Possible Causes

- The iBMC does not work normally.
- The PIC card does not work normally.

## Procedure

**Step 1** Restart the iBMC. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Remove and reinstall the power cable or board. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Replace the PIC card. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Contact technical support.

**----End**

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# 2.4.248 ALM-0x3000001F Failed to Read PIC Card 1.2 V Voltage (PIC Card, Minor Alarm)

## Description

Alarm message:

Failed to obtain data of the 1.2V voltage for PIC card *arg1*.

This alarm is generated when the system failed to obtain the voltage of the 1.2 V detection point of the PIC card.

Alarm object: PIC Card

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x3000001F | Minor | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Slot number of PIC card |

## Impact on the System

The voltage cannot be monitored. No alarm will be reported when the voltage is not in the normal range.

## Possible Causes

- The iBMC does not work normally.
- The PIC card does not work normally.

## Procedure

**Step 1** Restart the iBMC. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Remove and reinstall the power cable or board. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Replace the PIC card. Then, check whether the alarm is cleared.

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- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Contact technical support.

**----End**

# 2.4.249 ALM-0x30000021 Failed to Read PIC Card 1 V Voltage (PIC Card, Minor Alarm)

## Description

Alarm message:

Failed to obtain data of the 1V voltage for PIC card *arg1*.

This alarm is generated when the system failed to obtain the voltage of the 1 V detection point of the PIC card.

Alarm object: PIC Card

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x30000021 | Minor | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Slot number of PIC card |

## Impact on the System

The voltage cannot be monitored. No alarm will be reported when the voltage is not in the normal range.

## Possible Causes

- The iBMC does not work normally.
- The PIC card does not work normally.

## Procedure

**Step 1** Restart the iBMC. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

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**Step 2** Remove and reinstall the power cable or board. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Replace the PIC card. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Contact technical support.

**----End**

# 2.4.250 ALM-0x30000025 Failed to Read PIC Card 12 V Voltage (PIC Card, Minor Alarm)

## Description

Alarm message:

Failed to obtain data of the 12V voltage for PIC card *arg1*.

This alarm is generated when the system failed to obtain the voltage of the 12 V detection point of the PIC card.

Alarm object: PIC Card

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x30000025 | Minor | Yes |

## Parameters

| Name | Meaning |
|---|---|
| *arg1* | Slot number of PIC card |

## Impact on the System

The voltage cannot be monitored. No alarm will be reported when the voltage is not in the normal range.

## Possible Causes

- The iBMC does not work normally.
- The PIC card does not work normally.

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### Procedure

**Step 1** Restart the iBMC. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Remove and reinstall the power cable or board. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Replace the PIC card. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Contact technical support.

**----End**

## 2.4.251 ALM-0x30000027 PIC 1.8 V or 1.25 V Undervoltage (PIC Card, Major Alarm)

### Description

Alarm message:

PIC card *arg1* voltage (*arg2* V) at *arg3* detection point is lower than the undervoltage threshold (*arg4* V).

This alarm is generated when the voltage of the 1.8 V or 1.25 V detection point on the PIC card is lower than the undervoltage threshold.

Alarm object: PIC Card

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x30000027 | Major | Yes |

### Parameters

| Name | Meaning |
|---|---|
| *arg1* | The PIC card number |
| *arg2* | Current reading of the sensor. |
| *arg3* | Voltage detection point. For example, **SYS 1V8** or **SYS 1V25**. |
| *arg4* | Alarm threshold. |

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### Impact on the System

The service network of the PIC card may be abnormal.

### Possible Causes

- The PIC card is faulty.
- The switch module is faulty.

### Procedure

**Step 1** Replace the PIC card. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Replace the switch module. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**

**Step 3** Contact technical support engineer.

**----End**

## 2.4.252 ALM-0x30000029 PIC 1.8 V or 1.25 V Overvoltage (PIC Card, Major Alarm)

### Description

Alarm message:

PIC card *arg1* voltage (*arg2* V) at *arg3* detection point exceeds the overvoltage threshold (*arg4* V).

This alarm is generated when the voltage of the 1.8 V or 1.25 V detection point on the PIC card exceeds the overvoltage threshold.

Alarm object: PIC Card

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x30000029 | Major | Yes |

### Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | The PIC card number |
| *arg2* | Current reading of the sensor. |
| *arg3* | Voltage detection point. For example, **SYS 1V8** or **SYS 1V25**. |

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| Name | Meaning |
| --- | --- |
| *arg4* | Alarm threshold. |

## Impact on the System

The service network of the PIC card may be abnormal.

## Possible Causes

- The PIC card is faulty.
- The switch module is faulty.

## Procedure

**Step 1** Replace the PIC card. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Replace the switch module. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**

**Step 3** Contact technical support engineer.

**----End**

# 2.4.253 ALM-0x3000002B Failed to Read PIC Card Voltage (PIC Card, Minor Alarm)

## Description

Alarm message:

Failed to obtain data of the *arg1* voltage for PIC card *arg2*.

This alarm is generated when the system failed to obtain the PIC card voltage.

Alarm object: PIC Card

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x3000002B | Minor | Yes |

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### Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Voltage detection point. For example, **SYS 1V8** or **SYS 1V25**. |
| *arg2* | Serial number of the PIC card. |

### Impact on the System

The voltage cannot be monitored. No alarm will be reported when the voltage is not in the normal range.

### Possible Causes

- The iBMC does not work normally.
- The PIC card does not work normally.

### Procedure

**Step 1** Restart the iBMC. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Remove and reinstall the power cable or board. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Replace the PIC card. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Contact technical support.

**----End**

## 2.4.254 ALM-0x3000002D PIC Card Clock Lost (PIC Card, Major Alarm)

### Description

Alarm message:

PIC card *arg1* clock signals lost.

This alarm is generated when the clock of the PIC card is lost.

Alarm object: PIC Card

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### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x3000002D | Major | Yes |

### Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Slot number of PIC card |

### Impact on the System

The PIC card cannot be used, and the service network is abnormal.

### Possible Causes

The PIC card is faulty.

### Procedure

**Step 1** Replace the PIC card. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Contact technical support engineer.

**----End**

## 2.4.255 ALM-0x3E000001 PCIe Switch Core Undervoltage (PCIe Switch, Major Alarm)

### Description

Alarm message:

The *arg1* PCIe switch *arg2* core voltage (*arg3* V) is lower than the undervoltage threshold (*arg4* V).

This alarm is generated when the core voltage of the PCIe switch is lower than the undervoltage threshold.

Alarm object: PCIe Switch

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x3E000001 | Major | Yes |

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### Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Component where the PCIe switch is located. For example, **mainboard** or **HDD backplane N**. |
| *arg2* | Slot number of the PCIe switch. |
| *arg3* | Current reading of the sensor. |
| *arg4* | Alarm threshold. |

### Impact on the System

The PCIe devices may run unstably, and the system may run abnormally.

### Possible Causes

The PCIe switch chip is faulty.

### Procedure

**Step 1** Replace the device holding the faulty PCIe switch chip. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Contact technical support engineer.

**----End**

## 2.4.256 ALM-0x3E000003 PCIe Switch Core Overvoltage (PCIe Switch, Major Alarm)

### Description

Alarm message:

The *arg1* PCIe switch *arg2* core voltage (*arg3* V) exceeds the overvoltage threshold (*arg4* V).

This alarm is generated when the core voltage of the PCIe switch chip exceeds the overvoltage threshold.

Alarm object: PCIe Switch

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x3E000003 | Major | Yes |

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### Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Component where the PCIe switch is located. For example, **mainboard** or **HDD backplane N**. |
| *arg2* | Slot number of the PCIe switch. |
| *arg3* | Current reading of the sensor. |
| *arg4* | Alarm threshold. |

### Impact on the System

The PCIe devices may run unstably, and the system may run abnormally.

### Possible Causes

The PCIe switch chip is faulty.

### Procedure

**Step 1** Replace the device holding the faulty PCIe switch chip. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Contact technical support engineer.

**----End**

## 2.4.257 ALM-0x3E000005 Failed to Read PCIe Switch Core Voltage (PCIe Switch, Minor Alarm)

### Description

Alarm message:

Failed to obtain data of the *arg1* PCIe switch *arg2* core voltage.

This alarm is generated when the system failed to obtain the core voltage of the PCIe switch chip.

Alarm object: PCIe Switch

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x3E000005 | Minor | Yes |

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### Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Component where the PCIe switch is located. For example, **mainboard** or **HDD backplane N**. |
| *arg2* | Slot number of the PCIe switch. |

### Impact on the System

The voltage cannot be monitored. No alarm will be reported when the voltage is not in the normal range.

### Possible Causes

The PCIe switch chip does not work normally.

### Procedure

**Step 1** Restart the iBMC. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Remove and reinstall the power cable or board. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Contact technical support engineer.

**----End**

## 2.4.258 ALM-0x3E000007 PCIe Switch VDD Undervoltage (PCIe Switch, Major Alarm)

### Description

Alarm message:

The *arg1* PCIe switch *arg2* VDD voltage (*arg3* V) is lower than the undervoltage threshold (*arg4* V).

This alarm is generated when the VDD voltage of the PCIe switch chip is lower than the undervoltage threshold.

Alarm object: PCIe Switch

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### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x3E000007 | Major | Yes |

### Parameters

| Name | Meaning |
|---|---|
| *arg1* | Component where the PCIe switch is located. For example, **mainboard** or **HDD backplane N**. |
| *arg2* | Slot number of the PCIe switch. |
| *arg3* | Current reading of the sensor. |
| *arg4* | Alarm threshold. |

### Impact on the System

The PCIe devices may run unstably, and the system may run abnormally.

### Possible Causes

The PCIe switch chip is faulty.

### Procedure

**Step 1** Replace the device holding the faulty PCIe switch chip. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Contact technical support engineer.

**----End**

## 2.4.259 ALM-0x3E000009 PCIe Switch VDD Overvoltage (PCIe Switch, Major Alarm)

### Description

Alarm message:

The *arg1* PCIe switch *arg2* VDD voltage (*arg3* V) exceeds the overvoltage threshold (*arg4* V).

This alarm is generated when the VDD voltage of the PCIe switch chip exceeds the overvoltage threshold.

Alarm object: PCIe Switch

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### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x3E000009 | Major | Yes |

### Parameters

| Name | Meaning |
|---|---|
| *arg1* | Component where the PCIe switch is located. For example, **mainboard** or **HDD backplane N**. |
| *arg2* | Slot number of the PCIe switch. |
| *arg3* | Current reading of the sensor. |
| *arg4* | Alarm threshold. |

### Impact on the System

The PCIe devices may run unstably, and the system may run abnormally.

### Possible Causes

The PCIe switch chip is faulty.

### Procedure

**Step 1** Replace the device holding the faulty PCIe switch chip. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Contact technical support engineer.

**----End**

## 2.4.260 ALM-0x3E00000B Failed to Read PCIe Switch VDD Voltage (PCIe Switch, Minor Alarm)

### Description

Alarm message:

Failed to obtain data of the *arg1* PCIe switch *arg2* VDD voltage.

This alarm is generated when the system failed to obtain the VDD voltage of the PCIe switch.

Alarm object: PCIe Switch

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### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x3E00000B | Minor | Yes |

### Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Component where the PCIe switch is located. For example, **mainboard** or **HDD backplane N**. |
| *arg2* | Slot number of the PCIe switch. |

### Impact on the System

The voltage cannot be monitored. No alarm will be reported when the voltage is not in the normal range.

### Possible Causes

The PCIe switch chip does not work normally.

### Procedure

**Step 1** Restart the iBMC. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Remove and reinstall the power cable or board. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Contact technical support engineer.

**----End**

## 2.4.261 ALM-0x40000001 GPU Carrier Board Undervoltage (GPU Carrier Board, Major Alarm)

### Description

Alarm message:

GPU carrier board *arg1* voltage (*arg2* V) at *arg3* detection point is lower than the undervoltage threshold (*arg4* V).

This alarm is generated when voltage of the detection point on the GPU carrier board is lower than the undervoltage threshold.

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Alarm object: GPU Carrier Board

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x40000001 | Major | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Slot number of the GPU carrier board, for example, **1** or **2**. |
| *arg2* | Current reading of the sensor. |
| *arg3* | Voltage detection point. For example, **PEBPA 12.0V**, **PEBPA 12.0V 1**, **PEBPA 3.3V**, **PEBPA 0.9V**, **PEBPA 0.9V 1**, **PEBPA 1.8V** or **PEBPA 1.8V 1**. |
| *arg4* | Alarm threshold. |

## Impact on the System

System stability is affected.

## Possible Causes

The GPU carrier board is faulty.

## Procedure

**Step 1** Replace the GPU carrier board. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Contact technical support engineer.

**----End**

# 2.4.262 ALM-0x40000003 GPU Carrier Board Overvoltage (GPU Carrier Board, Major Alarm)

## Description

Alarm message:

GPU carrier board *arg1* voltage (*arg2* V) at *arg3* detection point exceeds the overvoltage threshold (*arg4* V).

This alarm is generated when voltage of the detection point on the GPU carrier board exceeds the overvoltage threshold.

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Alarm object: GPU Carrier Board

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x40000003 | Major | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Slot number of the GPU carrier board, for example, **1** or **2**. |
| *arg2* | Current reading of the sensor. |
| *arg3* | Voltage detection point. For example, **PEBPA 12.0V**, **PEBPA 12.0V 1**, **PEBPA 3.3V**, **PEBPA 0.9V**, **PEBPA 0.9V 1**, **PEBPA 1.8V** or **PEBPA 1.8V 1**. |
| *arg4* | Alarm threshold. |

## Impact on the System

System stability is affected.

## Possible Causes

The GPU carrier board is faulty.

## Procedure

**Step 1** Replace the GPU carrier board. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Contact technical support engineer.

**----End**

# 2.4.263 ALM-0x40000005 Failed to Obtain GPU Carrier Board Voltage (GPU Carrier Board, Minor Alarm)

## Description

Alarm message:

Failed to obtain the voltage at *arg1* detection point on the GPU carrier board.

This alarm is generated when the system failed to obtain the voltage of the detection point on the GPU carrier board.

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Alarm object: GPU Carrier Board

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x40000005 | Minor | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Voltage detection point. For example, **PEBPA 12.0V**, **PEBPA 12.0V 1**, **PEBPA 3.3V**, **PEBPA 0.9V**, **PEBPA 0.9V 1**, **PEBPA 1.8V** or **PEBPA 1.8V 1**. |

## Impact on the System

The voltage cannot be monitored. No alarm will be reported when the voltage is not in the normal range.

## Possible Causes

The IN circuit is faulty.

## Procedure

**Step 1** Restart the iBMC. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**

**Step 2** Remove and reinstall the power cable or board. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**

**Step 3** Replace the GPU carrier board. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**

**Step 4** Contact technical support engineer.

**----End**

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# 2.4.264 ALM-0x40000007 GPU Carrier Board Overtemperature (GPU Carrier Board, Minor Alarm)

## Description

Alarm message:

GPU carrier board *arg4* temperature (*arg1* degrees C) at *arg3* detection point exceeds the overtemperature threshold (*arg2* degrees C).

This alarm is generated when the detection point temperature of the GPU carrier board exceeds the overtemperature minor threshold.

Alarm object: PCIe Riser

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x40000007 | Minor | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Current reading of the sensor. |
| *arg2* | Alarm threshold. |
| *arg3* | Temperature detection point, for example, **STB_3V3**. |
| *arg4* | Slot number of the PCIe riser, for example, **Riser1**or **PCIe Slot1**. |

## Impact on the System

Overheating affects GPU carrier board performance and server operations.

## Possible Causes

- A fan module is faulty.
- The equipment room temperature exceeds the normal range.
- The air inlet or outlet is blocked.
- The GPU carrier board is faulty.

## Procedure

**Step 1** Check whether there is fan alarm generated.

- If yes, go to **Step 2**.

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- If no, go to **Step 3**.

**Step 2** Replace the fan module. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Check whether the equipment room temperature exceeds the normal range.

- If yes, go to **Step 4**.
- If no, go to **Step 5**.

**Step 4** Reduce the equipment room temperature to the normal range. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Check whether the server air inlet and outlet are blocked.

- If yes, go to **Step 6**.
- If no, go to **Step 7**.

**Step 6** Clear the blockage. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 7**.

**Step 7** Replace the GPU carrier board. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 8**.

**Step 8** Contact technical support engineer.

**----End**

# 2.4.265 ALM-0x40000009 Failed to Read GPU Carrier Board Temperature (GPU Carrier Board, Minor Alarm)

## Description

Alarm message:

Failed to obtain the temperature at *arg1* detection point on the GPU carrier board *arg2*.

This alarm is generated when the system failed to obtain the detection point temperature of the GPU carrier board.

Alarm object: PCIe Riser

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x40000009 | Minor | Yes |

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### Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Temperature detection point, for example, **STB_3V3**. |
| *arg2* | Slot number of the PCIe riser, for example, **Riser1**or **PCIe Slot1**. |

### Impact on the System

The temperature cannot be monitored. No alarm will be reported when the temperature is not in the normal range.

### Possible Causes

The GPU carrier board is faulty.

### Procedure

**Step 1** Power off the server and check whether there is damage or poor contact between the component and its slot.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Replace the GPU carrier board. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Contact technical support engineer.

**----End**

## 2.4.266 ALM-0x40000019 Abnormal Soft-Start Circuit Power Supply of the xPU Carrier Board (xPU Carrier Board, Major Alarm)

### Description

Alarm message:

The soft-start circuit power supply at detection point [*arg2*] of xPU carrier board [*arg1*] is abnormal.

This alarm is generated when the soft-start circuit power supply at detection point of the xPU carrier board is abnormal.

Alarm object: xPU Carrier Board

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### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x40000019 | Major | Yes |

### Parameters

| Name | Meaning |
|---|---|
| *arg1* | Slot number of the PCIe riser, for example, **Riser1**or **PCIe Slot1**. |
| *arg2* | Voltage detection point. For example, **RISER1_12V**, **SW_A_12V**, or **12V0_GPU1**. |

### Impact on the System

The protection mechanism is triggered and the OS is forcibly shut down.

### Possible Causes

The xPU or the xPU carrier board is faulty.

### Procedure

**Step 1** Switch the xPU with a functioning xPU in the same chassis, and check whether the alarm is still generated for this xPU.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Replace the xPU. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Replace the xPU carrier board. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Contact technical support engineer.

**----End**

## 2.4.267 ALM-0x42000001 EIUA Board Undervoltage (EIUA Board, Major Alarm)

### Description

Alarm message:

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EIUA board voltage (*arg1* V) at *arg2* detection point is lower than the undervoltage threshold (*arg3* V).

This alarm is generated when the voltage of the detection point on the EIUA board is lower than the undervoltage threshold.

Alarm object: EIUA Board

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x42000001 | Major | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Current reading of the sensor. |
| *arg2* | Voltage detection point. For example, **EIUA 1.8V**, **EIUA 5.0V**, **EIUA 3.3V** or **EIUA 1.0V**. |
| *arg3* | Alarm threshold. |

## Impact on the System

System stability is affected.

## Possible Causes

The EIUA board is faulty.

## Procedure

**Step 1** Replace the EIUA board. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Contact technical support engineer.

**----End**

# 2.4.268 ALM-0x42000003 EIUA Board Overvoltage (EIUA Board, Major Alarm)

## Description

Alarm message:

EIUA board voltage (*arg1* V) at *arg2* detection point exceeds the overvoltage threshold (*arg3* V).

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This alarm is generated when the voltage of the detection point on the EIUA board exceeds the overvoltage threshold.

Alarm object: EIUA Board

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x42000003 | Major | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Current reading of the sensor. |
| *arg2* | Voltage detection point. For example, **EIUA 1.8V**, **EIUA 5.0V**, **EIUA 3.3V** or **EIUA 1.0V**. |
| *arg3* | Alarm threshold. |

## Impact on the System

System stability is affected.

## Possible Causes

The EIUA board is faulty.

## Procedure

**Step 1** Replace the EIUA board. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Contact technical support engineer.

**----End**

# 2.4.269 ALM-0x42000005 EIUA Board Overvoltage (EIUA Board, Major Alarm)

## Description

Alarm message:

EIUA board voltage (*arg1* V) at *arg2* detection point exceeds the overvoltage threshold (*arg3* V).

This alarm is generated when the voltage of the detection point on the EIUA board exceeds the overvoltage threshold.

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Alarm object: EIUA Board

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x42000005 | Major | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Current reading of the sensor. |
| *arg2* | Voltage detection point. For example, **EIUA 1.8V**, **EIUA 5.0V**, **EIUA 3.3V** or **EIUA 1.0V**. |
| *arg3* | Alarm threshold. |

## Impact on the System

System stability is affected.

## Possible Causes

- The voltage is too high.
- The EIUA board is faulty.

## Procedure

**Step 1** Restart the iBMC. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Remove and reinstall the power cable or board. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Replace the EIUA board. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Contact technical support engineer.

**----End**

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# 2.4.270 ALM-0x5D00001D The AI Module Power-On Timed Out (AI Module, Major Alarm)

## Description

Alarm message:

On the AI module, *arg1* power *arg2* failure results host power-on timed out (SN:*arg3*, BN:*arg4*).

NOTE

From iBMC V3.07.00.57, the AI module alarms will also include the SN and BOM code.

This alarm is generated when the system failed to power on within the specified time due to an AI module power supply fault.

Alarm object: AI Module

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x5D00001D | Major | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Component name of the AI module. For example, **LPM#**. |
| *arg2* | Power supply name of the AI module. For example, **STBY_5V02** or **STBY_1V8_PCH3**. |
| *arg3* | Serial number of the AI module. |
| *arg4* | BOM code of the AI module. |

## Impact on the System

The system of the AI module cannot start.

## Possible Causes

- The mains supply does not meet the power consumption requirements of the entire server.
- The mainboard of the AI module is faulty.

## Procedure

**Step 1** Check whether the external power supply meets power consumption requirements of the server.

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- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Remove and reconnect power cables or remove and reinstall the AI module. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Replace the faulty components. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Contact technical support engineer.

**----End**

# 2.4.271 ALM-0x5D00001F The AI Module System Powered Off Unexpectedly (AI Module, Major Alarm)

## Description

Alarm message:

On the AI module, *arg1* power *arg2* failure results abnormal power-off (SN:*arg3*, BN:*arg4*).

NOTE

From iBMC V3.07.00.57, the AI module alarms will also include the SN and BOM code.

This alarm is generated when the AI module has a power failure that leads to system power-off abnormally.

Alarm object: AI Module

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x5D00001F | Major | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Component name of the AI module. For example, **LPM#**. |
| *arg2* | Power supply name of the AI module. For example, **STBY_5V02** or **STBY_1V8_PCH3**. |
| *arg3* | Serial number of the AI module. |
| *arg4* | BOM code of the AI module. |

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### Impact on the System

The system is powered off unexpectedly.

### Possible Causes

- The AI module's mainboard has a voltage dip or is faulty.
- The power supply is abnormal.
- The PSU is abnormal.

### Procedure

**Step 1** Check whether the power supplies in the equipment room are sufficient for server operation.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Ensure sufficient power supplies for server operation. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Remove and reconnect power cables or remove and reinstall the AI module. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Replace the power supply unit (PSU). Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Replace the AI module. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 6**.

**Step 6** Contact technical support engineer.

**----End**

## 2.4.272 ALM-0x5D00002D The AI Module xPU Carrier Board Undervoltage Major Alarm (AI Module, Major Alarm)

### Description

Alarm message:

On the AI module, xPU carrier board *arg1* voltage (*arg2* V) at *arg3* detection point is lower than the undervoltage threshold (*arg4* V) (SN:*arg5*, BN:*arg6*).

NOTE

From iBMC V3.07.00.57, the AI module alarms will also include the SN and BOM code.

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This alarm is generated when the xPU carrier board voltage is lower than the undervoltage threshold.

Alarm object: AI Module

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x5D00002D | Major | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | No. of the xPU carrier board of the AI module. For example, **2**. |
| *arg2* | Current reading of the sensor. For example, **1.8V**. |
| *arg3* | Voltage detection point of the AI module. For example, **PEBPA 3.3V**. |
| *arg4* | Alarm threshold. For example, **12.0**. |
| *arg5* | Serial number of the AI module. |
| *arg6* | BOM code of the AI module. |

## Impact on the System

System stability is affected.

## Possible Causes

The xPU carrier of the AI module is faulty.

## Procedure

**Step 1** Restart the iBMC. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Check whether the input of the PSU is abnormal.

**Step 3** Power off and then power on the OS. After the server is powered on, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

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**Step 4** Contact technical support engineer.

**----End**

# 2.4.273 ALM-0x5D00002F The AI Module xPU Carrier Board Overvoltage Major Alarm (AI Module, Major Alarm)

## Description

Alarm message:

On the AI module, xPU carrier board *arg1* voltage (*arg2* V) at *arg3* detection point exceeds the overvoltage threshold (*arg4* V) (SN:*arg5*, BN:*arg6*).

NOTE

From iBMC V3.07.00.57, the AI module alarms will also include the SN and BOM code.

This alarm is generated when the xPU carrier board voltage exceeds the overvoltage threshold.

Alarm object: AI Module

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x5D00002F | Major | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | No. of the xPU carrier board of the AI module. For example, **2**. |
| *arg2* | Current reading of the sensor. For example, **1.8V**. |
| *arg3* | Voltage detection point of the AI module. For example, **PEBPA 3.3V**. |
| *arg4* | Alarm threshold. For example, **12.0**. |
| *arg5* | Serial number of the AI module. |
| *arg6* | BOM code of the AI module. |

## Impact on the System

System stability is affected.

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## Possible Causes

The xPU carrier of the AI module is faulty.

## Procedure

**Step 1** Restart the iBMC. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Check whether the input of the PSU is abnormal.

**Step 3** Power off and then power on the OS. After the server is powered on, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Contact technical support engineer.

**----End**

# 2.4.274 ALM-0x5D000031 The AI Module Failed to Obtain the xPU Carrier Board Voltage (AI Module, Minor Alarm)

## Description

Alarm message:

On the AI module, failed to obtain the voltage at *arg1* detection point on xPU carrier board *arg2* (SN:*arg3*, BN:*arg4*).

NOTE

From iBMC V3.07.00.57, the AI module alarms will also include the SN and BOM code.

This alarm is generated when the system failed to obtain the voltage of the xPU carrier board of the AI module.

Alarm object: AI Module

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x5D000031 | Minor | Yes |

## Parameters

| Name | Meaning |
|---|---|
| *arg1* | Voltage detection point of the AI module. For example, **PEBPA 3.3V**. |

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| Name | Meaning |
| --- | --- |
| *arg2* | No. of the xPU carrier board of the AI module. For example, **2**. |
| *arg3* | Serial number of the AI module. |
| *arg4* | BOM code of the AI module. |

## Impact on the System

The voltage of the AI module cannot be monitored. No alarm will be reported when the voltage of the AI module is not in the normal range.

## Possible Causes

The IN circuit of the AI module is abnormal.

## Procedure

**Step 1** Restart the iBMC. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Check whether the input of the PSU is abnormal.

**Step 3** Power off and then power on the OS. After the server is powered on, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Contact technical support engineer.

**----End**

# 2.4.275 ALM-0x5D000035 The AI module HiAM Undervoltage (AI Module, Major Alarm)

## Description

Alarm message:

On the AI module, *arg1* HiAM *arg2* (*arg3*) voltage is too low. [*arg4*] [*arg5*] (SN:*arg6*, BN:*arg7*)

NOTE

From iBMC V3.07.00.57, the AI module alarms will also include the SN and BOM code.

This alarm is generated when the HiAM voltage of the AI module is too low.

Alarm object: AI Module

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## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x5D000035 | Major | Yes |

## Parameters

| Name | Meaning |
|---|---|
| *arg1* | Location of the AI module. |
| *arg2* | Slot No. of the AI module. |
| *arg3* | Name of the AI module. |
| *arg4* | Supplementary information about the alarm. |
| *arg5* | Error code of the alarm. |
| *arg6* | Serial number of the AI module. |
| *arg7* | BOM code of the AI module. |

## Impact on the System

The AI module may run unstably, and the system may run abnormally.

## Possible Causes

The AI module is faulty.

## Procedure

**Step 1** Power off and then power on the OS. After the server is powered on, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Replace the AI module. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Contact technical support engineer.

**----End**

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# 2.4.276 ALM-0x5D000045 Soft-start Circuit Undervoltage Major Alarm (AI Module, Major Alarm)

## Description

Alarm message:

[AI Module]Soft-start circuit voltage at *arg1* detection point is undervoltage (SN:*arg2*, BN:*arg3*).

NOTE

From iBMC V3.07.00.57, the AI module alarms will also include the SN and BOM code.

This alarm is generated when the soft-start circuit voltage is undervoltage.

Alarm object: AI Module

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x5D000045 | Major | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Voltage detection point. For example, **CPU1 VDDQ**, or **CPU2 VDDQ** |
| *arg2* | Serial number of the AI module. |
| *arg3* | BOM code of the AI module. |

## Impact on the System

TThe system is powered off.

## Possible Causes

The mainboard is faulty.

## Procedure

**Step 1** Replace the mainboard. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Contact technical support engineer.

**----End**

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# 2.4.277 ALM-0x5D00004F Server Powered Off (AI Module, Major Alarm)

## Description

Alarm message:

[AI Module]Server power failure occurred at *arg1*, The power has been already restored (SN:*arg2*, BN:*arg3*).

NOTE

From iBMC V3.07.00.57, the AI module alarms will also include the SN and BOM code.

This alarm is generated to report a power failure occurred on a server. The power has been already restored.

Alarm object: AI Module

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x5D00004F | Major | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Time when the power failure occurred.<br>Format: **YYYY-MM-DD HH:MM:SS** |
| *arg2* | Serial number of the AI module. |
| *arg3* | BOM code of the AI module. |

## Impact on the System

The server is powered off.

## Possible Causes

The mains supply is abnormal.

## Procedure

**Step 1** Check the power supply in the equipment room and remove and reconnect the power cable to the server. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

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**Step 2** Contact technical support.

**----End**

# 2.4.278 ALM-0x5D000055 Irregular Voltage at NIC Optical Module Major Alarm (AI Module, Major Alarm)

## Description

Alarm message:

[AI Module]Abnormal voltage (*arg1*V) of optical module was detected on [*arg2*] *arg3* on *arg4* (SN:*arg5*, BN:*arg6*).

NOTE

From iBMC V3.07.00.57, the AI module alarms will also include the SN and BOM code.

This alarm is generated when abnormal voltage was detected on the optical module connected to the network interface card (NIC).

Alarm object: AI Module

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x5D000055 | Major | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Current reading of the sensor. |
| *arg2* | Type of the NIC, for example, **(NIC)** or **(FC).** |
| *arg3* | Network port number, for example, **port 1**. |
| *arg4* | NIC name, for example, **NIC 1**, **PCIe Card 5**, or **LOM**. |
| *arg5* | Serial number of the AI module. |
| *arg6* | BOM code of the AI module. |

## Impact on the System

The NIC may run unstably, which affects the service network communication.

## Possible Causes

The optical module is faulty.

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### Procedure

**Step 1** Replace the optical module. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Contact technical support.

**----End**

## 2.4.279 ALM-0x5D000079 PSU Communication Failed (AI Module, Minor Alarm)

### Description

Alarm message:

[AI Module]iBMC cannot communicate with PSU *arg1* (SN:*arg2*, BN:*arg3*).

NOTE

From iBMC V3.07.00.57, the AI module alarms will also include the SN and BOM code.

This alarm is generated when the iBMC failed to communicate with a PSU.

Alarm object: AI module

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x5D000079 | Minor | Yes |

### Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | No. of the PSU. |
| *arg2* | Serial number of the AI module. |
| *arg3* | BOM code of the AI module. |

### Impact on the System

The PSU cannot be managed.

### Possible Causes

The power module is abnormal, or the communication link is abnormal.

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## Procedure

**Step 1** If there is a cable between the PSU backplane and the mainboard, check whether the cable is disconnected or loose.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Connect the cable between the PSU backplane and the mainboard firmly. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Remove and reinstall the PSU. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Replace the PSU. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Contact technical support engineer.

**----End**

# 2.4.280 ALM-0x5D00007F AI Module Service Power-on Failure (AI Module, Major Alarm)

## Description

Alarm message:
[AI module] Failed to power on the service (SN:*arg1*, BN:*arg2*).

This alarm is generated when the AI module service power-on failure.

Alarm object: AI module

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x5D00007F | Major | Yes |

## Parameters

| Name | Meaning |
|---|---|
| *arg1* | Serial number of the AI module. |
| *arg2* | BOM code of the AI module. |

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### Impact on the System

Failed to power on.

### Possible Causes

The service power supply is abnormal.

### Procedure

**Step 1** Power off and then power on the server. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Power off the server by removing and inserting the power cable, and remove and insert the component. Ensure that the component is securely inserted. Then, power on the server and check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Replace the component. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Contact technical support engineer.

**----End**

## 2.4.281 ALM-0x5D000081 AI Module Standby Power-on Failure (AI Module, Major Alarm)

### Description

Alarm message:

[AI module] Standby power-on failed (SN:*arg1*, BN:*arg2*).

This alarm is generated when the AI module standby power-on failure.

Alarm object: AI module

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x5D000081 | Major | Yes |

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### Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Serial number of the AI module. |
| *arg2* | BOM code of the AI module. |

### Impact on the System

Failed to power on.

### Possible Causes

The standby power supply is abnormal.

### Procedure

**Step 1** Power off and then power on the server. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Power off the server by removing and inserting the power cable, and remove and insert the component. Ensure that the component is securely inserted. Then, power on the server and check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Replace the component. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Contact technical support engineer.

**----End**

## 2.4.282 ALM-0x5D0000BF The current of the AI Module's Optical Module is abnormal (AI Module, Major Alarm)

### Description

Alarm message:

[AI Module]Abnormal current (*arg4*mA) of optical module is detected on [*arg2*] *arg3* on *arg1*.

This alarm is generated when the current in the AI module's optical module is abnormal.

Alarm object: AI module

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### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x5D0000BF | Major | Yes |

### Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | The position of the optical module. |
| *arg2* | The name of the optical module |
| *arg3* | Port Name. |
| *arg4* | Current value of the current. |

### Impact on the System

The NIC may run unstably, which affects the service network communication.

### Possible Causes

- No optical fiber is connected to the optical module.
- The optical module is faulty.

### Procedure

**Step 1** Insert the optical module into the optical fiber. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **2**.

**Step 2** Replace the optical module. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **3**.

**Step 3** Contact technical support engineer.

**----End**

## 2.4.283 ALM-0x5D0000C3 The AI module switch domain Power-on timed out (AI module, Major Alarm)

### Description

Alarm message:

```
On the AI module, switch domain power-on time out.
```

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This alarm is generated when the AI module switch domain Power-on timed out.

Alarm object: AI Module

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x5D0000C3 | Major | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| - | - |

## Impact on the System

- The system of the AI module may fail to start.
- The compute domain may fail to power on.

## Possible Causes

- The HCCS switch boards may not properly connected.
- The NPU drawers may not properly connected.
- The HCCS switch boards may exceeds the overtemperature threshold.
- The HCCS switch boards may had a software failure.
- The HCCS switch boards may had a hardware failure.
- The AI Module BMC board may had a failure.

## Procedure

**Step 1** Remove and then reinstall the HCCS switch boards. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **2**.

**Step 2** Remove and then reinstall the NPU drawers. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **3**.

**Step 3** Check whether the HCCS switch boards are overtemperature.

- If yes, go to **5**.
- If no, go to **4**.

**Step 4** Upgrade the switch firmware. Then, check whether the alarm is cleared.

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- If yes, no further action is required.
- If no, go to **6**.

**Step 5** Replace the HCCS switch boards. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **6**.

**Step 6** Replace the AI Module BMC board. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **7**.

**Step 7** Contact technical support engineer.

**----End**

# 2.4.284 ALM-0x5D0000C5 The AI module switch domain powered off unexpectedly (AI module, Major Alarm)

## Description

Alarm message:

```
On the AI module, switch domain power-off abnormally.
```

This alarm is generated when the AI module switch domain powered off unexpectedly.

Alarm object: AI Module

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x5D0000C5 | Major | Yes |

## Parameters

| Name | Meaning |
|---|---|
| - | - |

## Impact on the System

- The system of the AI module may fail to start or run abnormally.
- The compute domain may fail to power on.

## Possible Causes

- The HCCS switch boards may not properly connected.

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- The NPU drawers may not properly connected.
- The HCCS switch boards may exceeds the overtemperature threshold.
- The HCCS switch boards may had a software failure.
- The HCCS switch boards may had a hardware failure.
- The AI Module BMC board may had a failure.

### Procedure

**Step 1** Remove and then reinstall the HCCS switch boards. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **2**.

**Step 2** Remove and then reinstall the NPU drawers. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **3**.

**Step 3** Check whether the HCCS switch boards are overtemperature.

- If yes, go to **5**.
- If no, go to **4**.

**Step 4** Upgrade the switch firmware. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **6**.

**Step 5** Replace the HCCS switch boards. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **6**.

**Step 6** Replace the AI Module BMC board. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **7**.

**Step 7** Contact technical support engineer.

**----End**

# 2.5 Watchdog Alarms

This topic describes the watchdog alarms for servers.

## 2.5.1 ALM-0x2C000025 Forced System Restart Due to Watchdog Timeout (System, Major Alarm)

### Description

Alarm message:

The OS is forcibly reset due to the watchdog (*arg1*) timeout.

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This alarm is generated when the OS was forcibly restarted as the watchdog timed out during the BIOS/power on self-test (POST), OS load, or SMS/OS start process.

NOTE

This alarm can be generated only after the watchdog is enabled and the timeout action is set to **hard reset**.

Alarm object: System

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x2C000025 | Major | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | System boot process. For example, **BIOS FRB 2**, **BIOS/POST**, **OS Load**, **SMS/OS** or **OEM**. |

## Impact on the System

The OS restart interrupts services running on the server.

## Possible Causes

- If the alarm is generated during the BIOS/POST process, the hardware is faulty, or a fault occurs during basic input/output system (BIOS) startup.
- If the alarm is generated during the OS load process, a fault occurs during OS startup.
- If the alarm is generated during the SMS/OS process, a fault occurs in the OS.

## Procedure

**Step 1** Disable the watchdog and restart the server.

**Step 2** Use the remote keyboard, video, and mouse (KVM) to check displayed information during system startup. Determine the handling method based on the phases in which the alarm is generated.

1. If the alarm is generated in the **BIOS/POST** phase, log in to the iBMC CLI, and run the **ipmcget -d port80** command to check information about the port 80.
2. If the alarm is generated in the **OS Load** phase, use the remote KVM to view error messages in the OS for fault locating.
3. If the alarm is generated in the **SMS/OS** phase, log in to the OS, and check whether faults occur in the software where the watchdog is enabled, or the software is hung.

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**Step 3** Contact technical support.

**----End**

## 2.5.2 ALM-0x2C000027 OS Shutdown Due to Watchdog Timeout (System, Major Alarm)

### Description

Alarm message:

The OS is forcibly powered off due to the watchdog (*arg1*) timeout.

This alarm is generated when the OS is forcibly shut down as the watchdog timed out during the BIOS/power on self-test (POST), OS load, or SMS/OS start process. This alarm can be generated only after the watchdog is enabled and the timeout action is set to **power down**.

Alarm object: System

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x2C000027 | Major | Yes |

### Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | System boot process. For example, **BIOS FRB 2**, **BIOS/POST**, **OS Load**, **SMS/OS** or **OEM**. |

### Impact on the System

The OS shuts down, which interrupts services running on the server.

### Possible Causes

- If the alarm is generated during the BIOS/POST process, the hardware is faulty, or a fault occurs during basic input/output system (BIOS) startup.
- If the alarm is generated during the OS load process, a fault occurs during OS startup.
- If the alarm is generated during the SMS/OS process, a fault occurs in the OS.

### Procedure

**Step 1** Disable the watchdog and restart the server.

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**Step 2** Use the remote keyboard, video, and mouse (KVM) to check displayed information during system startup. Determine the handling method based on the phases in which the alarm is generated.

1. If the alarm is generated in the **BIOS/POST** phase, log in to the iBMC CLI, and run the **ipmcget -d port80** command to check information about the port 80.
2. If the alarm is generated in the **OS Load** phase, use the remote KVM to view error messages in the OS for fault locating.
3. If the alarm is generated in the **SMS/OS** phase, log in to the OS, and check whether faults occur in the software where the watchdog is enabled, or the software is hung.

**Step 3** Contact technical support.

**----End**

# 2.5.3 ALM-0x2C000029 Forced System Power Cycle Due to Watchdog Timeout (System, Major Alarm)

## Description

Alarm message:

The OS is forcibly powered off and then on due to the watchdog (*arg1*) timeout.

This alarm is generated when the OS is forcibly shut down and restarted as the watchdog timed out during the BIOS/power on self-test (POST), OS load, or SMS/OS start process. This alarm can be generated only after the watchdog is enabled and the timeout action is set to **power cycle**.

Alarm object: System

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x2C000029 | Major | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | System boot process. For example, **BIOS FRB 2**, **BIOS/POST**, **OS Load**, **SMS/OS** or **OEM**. |

## Impact on the System

The OS shutdown and restart interrupt services running on the server.

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### Possible Causes

- If the alarm is generated during the BIOS/POST process, the hardware is faulty, or a fault occurs during basic input/output system (BIOS) startup.
- If the alarm is generated during the OS load process, a fault occurs during OS startup.
- If the alarm is generated during the SMS/OS process, a fault occurs in the OS.

### Procedure

**Step 1** Disable the watchdog and restart the server.

**Step 2** Use the remote keyboard, video, and mouse (KVM) to check displayed information during system startup. Determine the handling method based on the phases in which the alarm is generated.

1. If the alarm is generated in the **BIOS/POST** phase, log in to the iBMC CLI, and run the **ipmcget -d port80** command to check information about the port 80.
2. If the alarm is generated in the **OS Load** phase, use the remote KVM to view error messages in the OS for fault locating.
3. If the alarm is generated in the **SMS/OS** phase, log in to the OS, and check whether faults occur in the software where the watchdog is enabled, or the software is hung.

**Step 3** Contact technical support.

**----End**

## 2.5.4 ALM-0x2C00008D Watchdog Pre-timeout Generates an Interrupt (System, Major Alarm)

### Description

Alarm message:

Watchdog pre-timeout generates an interrupt (interrupt type: *arg1*, timer use: *arg2*).

This alarm is generated when the watchdog pre-timeout generates an interrupt.

Alarm object: System

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x2C00008D | Major | Yes |

### Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Interrupt type. |

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| Name | Meaning |
| --- | --- |
| *arg2* | Timer use. |

### Impact on the System

An interrupt is generated according to the interrupt type set by the user. If a timeout occurs, OS services may be interrupted.

### Possible Causes

The watchdog function of the BMC is enabled, but the BIOS or system software does not feed the watchdog within the pre-timeout period.

### Procedure

**Step 1** Disable the watchdog and restart the server.

**Step 2** Use the remote keyboard, video, and mouse (KVM) to check displayed information during system startup. Determine the handling method based on the phases in which the alarm is generated.

1. If the alarm is generated in the **BIOS/POST** phase, log in to the iBMC CLI, and run the **ipmcget -d port80** command to check information about the port 80.
2. If the alarm is generated in the **OS Load** phase, use the remote KVM to view error messages in the OS for fault locating.
3. If the alarm is generated in the **SMS/OS** phase, log in to the OS, and check whether faults occur in the software where the watchdog is enabled, or the software is hung.

**Step 3** Contact technical support.

**----End**

# 2.6 Management Subsystem Alarms

This topic describes the management subsystem alarms for servers.

## 2.6.1 ALM-0x00000023 Failed to Read CPU Core Temperature (CPU, Minor Alarm)

### Description

Alarm message:

Failed to obtain data of the CPU *arg1* core temperature (SN: *arg2*, BN: *arg3*).

NOTE

From iBMC V316, the CPU and disk alarms will also include the SN and BOM code and the mainboard and memory alarms will also include the BOM code.

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This alarm is generated when the system failed to obtain the CPU core temperature.

Alarm object: CPU

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x00000023 | Minor | Yes |

## Parameters

| Name | Meaning |
|---|---|
| *arg1* | Socket No. of the CPU. |
| *arg2* | CPU serial number. |
| *arg3* | BOM code. |

## Impact on the System

The temperature cannot be monitored. No alarm will be reported when the temperature is not in the normal range.

## Possible Causes

The CPU voltage detection circuit is abnormal.

## Procedure

**Step 1** Restart the iBMC. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Remove and reinstall the power cable or board. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Replace the mainboard. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Contact technical support engineer.

**----End**

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# 2.6.2 ALM-0x00000025 Failed to Read CPU VDDQ Temperature (CPU, Minor Alarm)

## Description

Alarm message:

Failed to obtain data of the CPU *arg1* VDDQ temperature (SN: *arg2*, BN: *arg3*).

NOTE

From iBMC V316, the CPU and disk alarms will also include the SN and BOM code and the mainboard and memory alarms will also include the BOM code.

This alarm is generated when the system failed to obtain the CPU VDDQ temperature.

Alarm object: CPU

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x00000025 | Minor | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Socket No. of the CPU. |
| *arg2* | CPU serial number. |
| *arg3* | BOM code. |

## Impact on the System

The temperature cannot be monitored. No alarm will be reported when the temperature is not in the normal range.

## Possible Causes

The CPU voltage detection circuit is abnormal.

## Procedure

**Step 1** Restart the iBMC. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

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**Step 2** Remove and reinstall the power cable or board. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Replace the mainboard. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Contact technical support engineer.

**----End**

## 2.6.3 ALM-0x0100001F Failed to Read VDDQ1 Voltage of the DIMM Connected to the CPU (Memory, Minor Alarm)

### Description

Alarm message:

Failed to obtain data of the CPU *arg1* DIMM VDDQ1 voltage.

NOTE

The alarm does not include the SN or BOM code of the component.

This alarm is generated when the sensor access channel is abnormal, or the sensor chip has failed.

Alarm object: Memory

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x0100001F | Minor | Yes |

### Parameters

| Name | Meaning |
|---|---|
| *arg1* | Socket No. of the CPU. |

### Impact on the System

The voltage cannot be monitored. No alarm will be reported when the voltage is not in the normal range.

### Possible Causes

The sensor access channel is abnormal, or the sensor chip has failed.

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### Procedure

**Step 1** Restart the iBMC. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Remove and reinstall the power cable or board. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Contact technical support engineer.

**----End**

## 2.6.4 ALM-0x01000021 Failed to Read VDDQ2 Voltage of the DIMM Connected to the CPU (Memory, Minor Alarm)

### Description

Alarm message:

Failed to obtain data of the CPU *arg1* DIMM VDDQ2 voltage.

NOTE

The alarm does not include the SN or BOM code of the component.

This alarm is generated when the system failed to obtain the CPU DIMM VDDQ2 voltage.

Alarm object: Memory

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x01000021 | Minor | Yes |

### Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Socket No. of the CPU. |

### Impact on the System

The voltage cannot be monitored. No alarm will be reported when the voltage is not in the normal range.

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### Possible Causes

The sensor access channel is abnormal, or the sensor chip has failed.

### Procedure

**Step 1** Restart the iBMC. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Remove and reinstall the power cable or board. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Contact technical support engineer.

**----End**

## 2.6.5 ALM-0x02000017 Failed to Read Hard Disk Temperature (Disk, Minor Alarm)

### Description

Alarm message:

Failed to obtain data of the [*arg1*] disk *arg2* temperature (SN: *arg3*, BN: *arg4*).

NOTE

From iBMC V316, the CPU and disk alarms will also include the SN and BOM code and the mainboard and memory alarms will also include the BOM code.

This alarm is generated when the system failed to obtain the disk temperature.

Alarm object: Disk

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x02000017 | Minor | Yes |

### Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Location of the hard disk. For example, **front** or **rear**. |
| *arg2* | Slot number of the hard disk. |
| *arg3* | Disk serial number. |

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| Name | Meaning |
| --- | --- |
| *arg4* | BOM code. |

## Impact on the System

The temperature cannot be monitored. No alarm will be reported when the temperature is not in the normal range.

## Possible Causes

- The channel in which the iBMC accesses the drive is abnormal.
- The hard drive is faulty.
- The disk backplane is faulty.

## Procedure

**Step 1** Restart the iBMC. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Remove the power cable to power off the server, and then reconnect the power cable to power on the server. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Reconnect the cable to the disk backplane holding the sensor. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Replace the hard disk. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Replace the disk backplane holding the sensor. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 6**.

**Step 6** Contact technical support.

**----End**

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# 2.6.6 ALM-0x0600000D Failed to Read RAID Controller Card Temperature (RAID Card, Minor Alarm)

## Description

Alarm message:

Failed to obtain data of the *arg2* RAID controller card *arg1* temperature (SN: *arg3*, BN: *arg4*).

NOTE

From iBMC V328, the RAID controller card and PSU alarms will also include the SN and BOM code, and the fan alarms will also include the BOM code.

This alarm is generated when the system failed to obtain the RAID controller card temperature.

Alarm object: RAID Card

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x0600000D | Minor | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Slot number of the RAID controller card. |
| *arg2* | Front I/O module or compute module and its slot number, for example, **FM** or **CMn**. |
| *arg3* | SN of the RAID controller card. |
| *arg4* | BOM code. |

## Impact on the System

The temperature cannot be monitored. No alarm will be reported when the temperature is not in the normal range.

## Possible Causes

- The iBMC is abnormal.
- The RAID controller card is faulty.

## Procedure

**Step 1** Restart the iBMC. Then, check whether the alarm is cleared.

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- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Remove the power cable to power off the server, and then reconnect the power cable to power on the server. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Replace the RAID controller card. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Contact technical support.

**----End**

# 2.6.7 ALM-0x0600001B Failed to Read the RAID Card BBU Temperature (RAID Controller Card, Minor Alarm)

## Description

Alarm message:

Failed to obtain data of the *arg2* RAID controller card *arg1* BBU temperature (SN: *arg3*, BN: *arg4*).

NOTE

From iBMC V328, the RAID controller card and PSU alarms will also include the SN and BOM code, and the fan alarms will also include the BOM code.

This alarm is generated when the system failed to obtain the temperature of the battery backup unit (BBU) of the RAID controller card.

Alarm object: RAID Controller Card

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x0600001B | Minor | Yes |

## Parameters

| Name | Meaning |
|---|---|
| *arg1* | Slot number of the RAID controller card. |
| *arg2* | Front I/O module or compute module and its slot number, for example, **FM** or **CMn**. |
| *arg3* | SN of the RAID controller card. |
| *arg4* | BOM code. |

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### Impact on the System

The temperature cannot be monitored. No alarm will be reported when the temperature is not in the normal range.

### Possible Causes

- Communication between the iBMC and the RAID controller card is abnormal.
- The BBU is faulty.

### Procedure

**Step 1** Restart the iBMC. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Remove the power cable to power off the server, and then reconnect the power cable to power on the server. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Replace the BBU. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Contact technical support.

**----End**

## 2.6.8 ALM-0x08000005 Failed to Read PCIe Card Temperature (PCIe Card, Minor Alarm)

### Description

Alarm message:

Failed to obtain data of the *arg1 arg2 arg3* temperature. [*arg4*] [*arg5*]

This alarm is generated when the system failed to obtain the PCIe card temperature.

Alarm object: PCIe Card

NOTE

Obtaining temperature of the VA1V, VA1A, VA1, and Sophon SC5 GPU cards requires installation of the GPU drivers on the OS.

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## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x08000005 | Minor | Yes |

## Parameters

| Name | Meaning |
|---|---|
| *arg1* | Location of the PCIe card. For example, **GpuBoard** or **Riser**. |
| *arg2* | Slot number of the PCIe card, for example, **1** or **2**. |
| *arg3* | Additional information of the temperature, for example, **FPGA Chip** or **Hi1822 Optical Module**. |
| *arg4* | Supplementary information about the alarm, for example, **Error Code**.<br>**NOTE**<br>This parameter is available only for iBMC V308 and later versions. |
| *arg5* | Error code of the alarm, for example, **(7001)**.<br>**NOTE**<br>This parameter is available only for iBMC V308 and later versions. |

## Impact on the System

The temperature cannot be monitored. No alarm will be reported when the temperature is not in the normal range. Fan adjustment is affected.

## Possible Causes

The sensor chip has failed or the sensor access channel is unavailable.

## Procedure

**Step 1** Restart the iBMC. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Shut down the OS and then restart it. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Remove and reinstall the power cable or board. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

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**Step 4** If the alarm is generated by an optical module, replace the optical module. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Replace the PCIe card. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 6**.

**Step 6** The driver installation on the OS is required for temperature obtaining of some GPU cards, including VA1V, VA1A, VA1, and Sophon SC5. After installing the GPU card driver, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 7**.

**Step 7** Contact technical support engineer.

**----End**

# 2.6.9 ALM-0x08000069 PCIe Card Preventive Maintenance Inspection Failed (PCIe Card, Major Alarm)

## Description

Alarm message:

The *arg1* PCIe card *arg2* (*arg3*) inspection failed.

This alarm is generated when the preventive maintenance inspection of the PCIe card failed.

Alarm object: PCIe Card

NOTE

iBMC V296 and later support this alarm.

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x08000069 | Major | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Location of the PCIe card, for example, **GpuBoard** or **Riser**. |
| *arg2* | Slot number of the PCIe card, for example, **1** or **2**. |
| *arg3* | PCIe card name, for example, **FPGA** or **NIC**. |

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### Impact on the System

The iBMC cannot obtain PCIe card information.

### Possible Causes

- The I2C or I2C over LAN channel is faulty.
- The PCIe card is faulty.

### Procedure

**Step 1** Restart the PCIe card or the service system. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Power off the server and check whether the PCIe card has poor contact with its slot or whether the card or slot is damaged.

- If yes, go to **Step 3**.
- If no, go to **Step 4**.

**Step 3** Remove and reinstall the card. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Replace the card. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Contact technical support engineer.

**----End**

## 2.6.10 ALM-0x0800006B Failed to Read the PCIe Card Memory Temperature (PCIe Card, Minor Alarm)

### Description

Alarm message:

Failed to obtain the DIMM temperature of *arg1* PCIe card *arg2* (*arg3*).

This alarm is generated when the system failed to obtain the PCIe card memory temperature.

Alarm object: PCIe Card

NOTE

iBMC V296 and later support this alarm.

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## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x0800006B | Minor | Yes |

## Parameters

| Name | Meaning |
|---|---|
| *arg1* | Location of the PCIe card, for example, **GpuBoard** or **Riser**. |
| *arg2* | Slot number of the PCIe card, for example, **1** or **2**. |
| *arg3* | PCIe card name, for example, **FPGA** or **NIC**. |

## Impact on the System

The fan speed adjustment is affected.

## Possible Causes

- The I2C or I2C over LAN channel is faulty.
- The PCIe card is faulty.

## Procedure

**Step 1** Restart the PCIe card or the service system. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Power off the server and check whether the PCIe card has poor contact with its slot or whether the card or slot is damaged.

- If yes, go to **Step 3**.
- If no, go to **Step 4**.

**Step 3** Remove and reinstall the card. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Replace the card. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Contact technical support engineer.

**----End**

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# 2.6.11 ALM-0x0D000005 Failed to Read NIC Temperature (NIC, Minor Alarm)

## Description

Alarm message:

Failed to obtain data of the NIC *arg1* temperature.

This alarm is generated when the system failed to obtain the NIC temperature.

Alarm object: NIC

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x0D000005 | Minor | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Serial number of the NIC. |

## Impact on the System

The temperature cannot be monitored. No alarm will be reported when the temperature is not in the normal range.

## Possible Causes

- The iBMC is abnormal.
- The NIC is faulty.

## Procedure

**Step 1** Restart the iBMC. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Remove the power cable to power off the server, and then reconnect the power cable to power on the server. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Replace the NIC. Then, check whether the alarm is cleared.

- If yes, no further action is required.

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- If no, go to **Step 4**.

**Step 4** Contact technical support.

**----End**

# 2.6.12 ALM-0x1000001D Board ID Error (Mainboard, Major Alarm)

## Description

Alarm message:

The board ID cannot be obtained or is incorrect (BN: *arg1*).

NOTE

From iBMC V316, the CPU and disk alarms will also include the SN and BOM code and the mainboard and memory alarms will also include the BOM code.

This alarm is generated when the system failed to obtain the board ID or the obtained board ID is incorrect.

Alarm object: Mainboard

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x1000001D | Major | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | BOM code. |

## Impact on the System

The iBMC cannot manage the server.

## Possible Causes

- The mainboard is faulty.
- The server is not installed securely.

## Procedure

**Step 1** Remove and reinstall the board. Then, check whether the alarm is cleared.

- If yes, no further action is required.

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- If no, go to **Step 2**.

**Step 2** Replace the mainboard. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Contact technical support engineer.

**----End**

# 2.6.13 ALM-0x10000089 Failed to Read Mainboard Electronic Label Data (Mainboard, Minor Alarm)

## Description

Alarm message:

Failed to obtain electronic label data of mainboard (BN: *arg1*).

NOTE

From iBMC V316, the CPU and disk alarms will also include the SN and BOM code and the mainboard and memory alarms will also include the BOM code.

This alarm is generated when the system failed to obtain the electronic label data.

Alarm object: Mainboard

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x10000089 | Minor | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | BOM code. |

## Impact on the System

The system cannot obtain asset information.

## Possible Causes

- The iBMC is abnormal.
- The mainboard is abnormal.

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### Procedure

**Step 1** Restart the iBMC. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Replace the mainboard. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Contact technical support engineer.

**----End**

## 2.6.14 ALM-0x12000017 Failed to Read Outlet Temperature (Chassis, Minor Alarm)

### Description

Alarm message:

Failed to obtain data of the air outlet *arg1* temperature.

This alarm is generated when the system failed to obtain the outlet temperature.

Alarm object: Chassis

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x12000017 | Minor | Yes |

### Parameters

| Name | Meaning |
|---|---|
| *arg1* | Serial number of the outlet. |

### Impact on the System

The temperature at the air outlet cannot be monitored, and the fan speed adjustment is affected.

### Possible Causes

- The iBMC is faulty.
- The component holding the outlet sensor is faulty.

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## Procedure

**Step 1** Log in to the iBMC WebUI or CLI.

For details, see the iBMC user guide of the server you use.

**Step 2** Restart the iBMC.

- On the WebUI, choose **System** > **Firmware Upgrade** and click **Restart iBMC**.
- On the CLI, run the **ipmcset -d reset** command.

**Step 3** After the iBMC restarts, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Remove and reconnect power cables or remove and reinstall the board in the chassis. Check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Replace the component holding the outlet sensor. Then, check whether the alarm is cleared.

For details, see "Replacing Parts" in the maintenance and service guide.

For details about the air outlet temperature sensor, see the sensor list in the server user guide.

- If yes, no further action is required.
- If no, go to **Step 6**.

**Step 6** Remove and reinstall the signal cable of the fan backplane. Then, check whether the alarm is cleared.

NOTE

Perform this operation only for the 5298 V7.

- If yes, no further action is required.
- If no, go to **Step 7**.

**Step 7** Contact technical support engineer.

**----End**

# 2.6.15 ALM-0x23000007 Failed to Read the Temperature of the Middle of the Air Inlet of the I/O Board (I/O Board, Minor Alarm)

## Description

Alarm message:

Failed to obtain data of the middle part of the I/O board(*arg1*) air inlet temperature.

This alarm is generated when the system failed to obtain the air inlet temperature in the middle part of the I/O board.

Alarm object: I/O Board

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### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x23000007 | Minor | Yes |

### Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Location of the I/O board. For example, **BIO** or **FIO**. |

### Impact on the System

The temperature cannot be monitored. No alarm will be reported when the temperature is not in the normal range.

### Possible Causes

- The iBMC is abnormal.
- The I/O board is faulty.

### Procedure

**Step 1** Restart the iBMC. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Remove the power cable to power off the server, and then reconnect the power cable to power on the server. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Replace the I/O board. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Contact technical support.

**----End**

## 2.6.16 ALM-0x23000009 Failed to Read the Temperature of the Right of the Air Inlet of the I/O Board (I/O Board, Minor Alarm)

### Description

Alarm message:

Failed to obtain data of the right part of the I/O board(*arg1*) air inlet temperature.

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This alarm is generated when the system failed to obtain the air inlet temperature in the right part of the I/O board.

Alarm object: I/O Board

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x23000009 | Minor | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Location of the I/O board. For example, **BIO** or **FIO**. |

## Impact on the System

The temperature cannot be monitored. No alarm will be reported when the temperature is not in the normal range.

## Possible Causes

- The iBMC is abnormal.
- The I/O board is faulty.

## Procedure

**Step 1** Restart the iBMC. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Remove the power cable to power off the server, and then reconnect the power cable to power on the server. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Replace the I/O board. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Contact technical support.

**----End**

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# 2.6.17 ALM-0x2300000B Failed to Read the Temperature of the Left of the Air Inlet of the I/O Board (I/O Board, Minor Alarm)

## Description

Alarm message:

Failed to obtain data of the left part of the I/O board(*arg1*) air inlet temperature.

This alarm is generated when the system failed to obtain the air inlet temperature in the left part of the I/O board.

Alarm object: I/O Board

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x2300000B | Minor | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Location of the I/O board:<br>● BIO<br>● FIO |

## Impact on the System

The temperature cannot be monitored. No alarm will be reported when the temperature is not in the normal range.

## Possible Causes

- The iBMC is abnormal.
- The I/O board is faulty.

## Procedure

**Step 1** Restart the iBMC. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Remove the power cable to power off the server, and then reconnect the power cable to power on the server. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

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**Step 3** Replace the I/O board. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Contact technical support.

**----End**

# 2.6.18 ALM-0x24000003 Failed to Read CPU Board Temperature (CPU Board, Minor Alarm)

## Description

Alarm message:

Failed to obtain data of the CPU board *arg1* temperature.

This alarm is generated when the system failed to obtain the CPU board temperature.

Alarm object: CPU Board

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x24000003 | Minor | Yes |

## Parameters

| Name | Meaning |
|---|---|
| *arg1* | Slot number of the CPU board. |

## Impact on the System

The temperature cannot be monitored. No alarm will be reported when the temperature is not in the normal range.

## Possible Causes

- The iBMC is abnormal.
- The CPU board is faulty.

## Procedure

**Step 1** Restart the iBMC. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

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**Step 2** Remove the power cable to power off the server, and then reconnect the power cable to power on the server. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Replace the CPU board. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Contact technical support.

**----End**

# 2.6.19 ALM-0x2700000B Failed to Read PCH Temperature (PCH, Minor Alarm)

## Description

Alarm message:

```
Failed to obtain data of the PCH temperature.
```

This alarm is generated when the system failed to obtain the PCH temperature.

Alarm object: PCH

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x2700000B | Minor | Yes |

## Parameters

| Name | Meaning |
|---|---|
| – | – |

## Impact on the System

The temperature cannot be monitored. No alarm will be reported when the temperature is not in the normal range.

## Possible Causes

The CPU voltage detection circuit is abnormal.

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### Procedure

**Step 1** Restart the iBMC. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Remove and reinstall the power cable or board. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Replace the mainboard. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Contact technical support engineer.

**----End**

## 2.6.20 ALM-0x2C000067 CPU and Chassis Mismatch (System, Major Alarm)

### Description

Alarm message:

```
The chassis does not support high-power CPUs.
```

This alarm is generated when the system detects high-power CPUs, which are not supported by the server chassis.

Alarm object: System

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x2C000067 | Major | Yes |

### Parameters

| Name | Meaning |
|---|---|
| – | – |

### Impact on the System

High-power CPUs may damage the chassis.

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### Possible Causes

The CPU rated power is larger than the power supported by the server chassis.

### Procedure

**Step 1** Use low-power CPUs. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Contact technical support engineer.

**----End**

## 2.6.21 ALM-0x2C00007D BIOS and Memory Firmware Mismatch (System, Minor Alarm)

### Description

Alarm message:

The BIOS version does not match the *arg1* firmware version.

This alarm is generated when the system detects that the BIOS version does not match the memory firmware version.

Alarm object: System

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x2C00007D | Minor | Yes |

### Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Memory type, for example, **DCPMM**. |

### Impact on the System

The system stability may be affected.

### Possible Causes

The BIOS version does not match the memory firmware version.

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### Procedure

**Step 1** Obtain information about the mapping between the BIOS version and the memory firmware version from the *BIOS Release Notes*.

**Step 2** Upgrade the BIOS version or the memory firmware version to ensure compatibility.

**----End**

## 2.6.22 ALM-0x49000001 BMA Failed to Create the Transfer Mapping Table (BMA, Minor Alarm)

### Description

Alarm message:

iBMA failed to establish forward mapping table (*arg1*).

This alarm is generated when the iBMA failed to create the transfer mapping table.

Alarm object: BMA

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x49000001 | Minor | Yes |

### Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Cause of the alarm. Example:<br>● **Failed to bind port 1.**<br>● **Failed to bind port 1 and the port(s) is/are occupied.** |

### Impact on the System

Trap messages cannot be transferred through the in-band channel.

### Possible Causes

The port is in use or is not bound successfully.

### Procedure

**Step 1** Check whether the port is in use.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

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**Step 2** Use another port that is available. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Check whether the virtual network port on the service side is normal. Check whether the connection status is **Linkup** and whether the IP address is valid.

- If yes, go to **Step 5**.
- If no, go to **Step 4**.

**Step 4** Reset the virtual network port to ensure that the IP address is valid and the connection status is **Linkup**. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Contact technical support engineer.

**----End**

# 2.7 Storage Device Alarms

This section describes the alarms for the storage devices (such as hard disks and SD cards) of a server.

## 2.7.1 ALM-0x02000007 Hard Disk Fault (Disk, Major Alarm)

### Description

Alarm message:

The [*arg1*] disk *arg2* failure (SN: *arg3*, BN: *arg4*).

**NOTE**

From iBMC V316, the CPU and disk alarms will also include the SN and BOM code and the mainboard and memory alarms will also include the BOM code.

This alarm is generated when a hard disk or hard disk backplane is faulty.

**NOTE**

If *arg2* is DISKA, DISKB, DISKC, or DISKD, this alarm is generated for the rear hard disk of a V2 or V3 server. For details about the slot information of the hard disks on a V3 server, see "Removing a Hard Disk" in the user guide of the server you use.

Alarm object: Disk

**NOTE**

This alarm also applies to SATADOM and M.2 disks.

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### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x02000007 | Major | Yes |

### Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Location of the hard disk. For example, **front** or **rear**. |
| *arg2* | Slot number of the hard disk. |
| *arg3* | Disk serial number. |
| *arg4* | BOM code. |

### Impact on the System

The system may stop responding and data may be lost.

### Possible Causes

The hard drive or the hard disk backplane is faulty.

### Procedure

**Step 1** Replace the hard disk. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Replace the hard disk backplane. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Contact technical support engineer.

**----End**

## 2.7.2 ALM-0x02000009 Hard Disk Prewarning (Disk, Minor Alarm)

### Description

Alarm message:

The [*arg1*] disk *arg2* predictive failure (SN: *arg3*, BN: *arg4*).

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NOTE

From iBMC V316, the CPU and disk alarms will also include the SN and BOM code and the mainboard and memory alarms will also include the BOM code.

This alarm is generated when the number of hard disk errors reached the prewarning threshold.

NOTE

If *arg2* is DISKA, DISKB, DISKC, or DISKD, this alarm is generated for the rear hard disk of a V2 or V3 server. For details about the slot information of the hard disks on a V3 server, see "Removing a Hard Disk" in the user guide of the server you use.

Alarm object: Disk

NOTE

This alarm also applies to SATADOM and M.2 disks.

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x02000009 | Minor | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Location of the hard disk. For example, **front** or **rear**. |
| *arg2* | Slot number of the hard disk. |
| *arg3* | Disk serial number. |
| *arg4* | BOM code. |

## Impact on the System

The hard disk reliability decreases, affecting the OS storage performance and services.

## Possible Causes

- The hard disk is in read-only mode.
- The number of hard disk SMART errors detected exceeds the threshold.
- The NVMe remaining service life is about to expire.

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## Procedure

**Step 1** When this alarm is generated, server operation remains unaffected. Replace the faulty hard disk when convenient. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Contact technical support engineer.

**----End**

# 2.7.3 ALM-0x0200000B Hard Disk RAID Array Failed (Disk, Major Alarm)

## Description

Alarm message:

The [*arg1*] disk *arg2* RAID array is invalid (SN: *arg3*, BN: *arg4*).

NOTE

From iBMC V316, the CPU and disk alarms will also include the SN and BOM code and the mainboard and memory alarms will also include the BOM code.

This alarm is generated when a RAID group exception occurs due to removal or loss of member disks.

NOTE

If *arg2* is DISKA, DISKB, DISKC, or DISKD, this alarm is generated for the rear hard disk of a V2 or V3 server. For details about the slot information of the hard disks on a V3 server, see "Removing a Hard Disk" in the user guide of the server you use.

Alarm object: Disk

NOTE

This alarm also applies to SATADOM and M.2 disks.

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x0200000B | Major | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Location of the hard disk. For example, **front** or **rear**. |
| *arg2* | Slot number of the hard disk. |

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| Name | Meaning |
| --- | --- |
| *arg3* | Disk serial number. |
| *arg4* | BOM code. |

## Impact on the System

An invalid RAID array may reduce disk redundancy or cause data loss. The system may even stop responding.

## Possible Causes

- A disk of this RAID array is removed.
- A disk of this RAID array is faulty.

## Procedure

**Step 1** Check whether the drive is removed.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Install the drive properly. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Replace the drive. Then, check whether the alarm is cleared.

For details about how to replace the drive, see the **Parts Replacement** in maintenance and service guide of the server you use.

After replacing the drive, restore the drive data. For details, see "Drive Faults" in the user guide of the RAID controller card you use.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Contact technical support engineer.

**----End**

# 2.7.4 ALM-0x02000013 Hard Disk MCE/AER Error (Disk, Critical Alarm)

## Description

Alarm message:

The [*arg1*] [*arg6*][*arg7*] disk *arg2* triggered an uncorrectable error, *arg3* (SN: *arg4*, BN: *arg5*).

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NOTE

From iBMC V316, the CPU and disk alarms will also include the SN and BOM code and the mainboard and memory alarms will also include the BOM code.

This alarm is generated when a hard disk triggered an uncorrectable error.

NOTE

If *arg2* is DISKA, DISKB, DISKC, or DISKD, this alarm is generated for the rear hard disk of a V2 or V3 server. For details about the slot information of the hard disks on a V3 server, see "Removing a Hard Disk" in the user guide of the server you use.

Alarm object: Disk

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x02000013 | Critical | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Location of the hard disk. For example, **front** or **rear**. |
| *arg2* | Slot number of the hard disk. |
| *arg3* | Error code of the alarm. |
| *arg4* | Disk serial number. |
| *arg5* | BOM code. |
| *arg6* | SN of the component where the alarm-related drive is located. |
| *arg7* | Additional information about the alarm. |

## Impact on the System

Services related to the faulty hard disk are affected, and data is lost.

## Possible Causes

- The hard drive is faulty.
- The hard drive is in poor contact with the backplane.

## Procedure

**Step 1** Remove and reinstall the hard disk. Then, check whether the alarm is cleared.

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- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Replace the faulty hard disk. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Replace the disk backplane. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Contact technical support.

**----End**

# 2.7.5 ALM-0x0200001D Low Hard Disk Remnant Wearout (Disk, Major Alarm)

## Description

Alarm message:

The *arg1* disk *arg2* remnant media wearout (*arg3*) is lower than the threshold (*arg4*) (SN: *arg5*, BN: *arg6*).

NOTE

From iBMC V316, the CPU and disk alarms will also include the SN and BOM code and the mainboard and memory alarms will also include the BOM code.

This alarm is generated when the remnant media wearout value is lower than the threshold.

NOTE

If *arg2* is DISKA, DISKB, DISKC, or DISKD, this alarm is generated for the rear hard disk of a V2 or V3 server. For details about the slot information of the hard disks on a V3 server, see "Removing a Hard Disk" in the user guide of the server you use.

Alarm object: Disk

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x0200001D | Major | Yes |

## Parameters

| Name | Meaning |
|---|---|
| *arg1* | Location of the hard disk, for example, **front** or **rear**. |
| *arg2* | Hard disk name. |

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| Name | Meaning |
| --- | --- |
| *arg3* | Current reading of the sensor. |
| *arg4* | Alarm threshold. |
| *arg5* | Disk serial number. |
| *arg6* | BOM code. |

### Impact on the System

Continuing to use a drive with a small remnant wearout value may cause the system to stop responding or data loss.

### Possible Causes

The average number of erase times of the drive storage medium reaches the threshold.

### Procedure

**Step 1** Replace the faulty hard disk. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Contact technical support engineer.

**----End**

## 2.7.6 ALM-0x02000021 Failed to Read Hard Disk VPD Information (Disk, Minor Alarm)

### Description

Alarm message:

Failed to obtain data of the *arg1* disk *arg2* VPD information (SN: *arg3, BN: arg4*).

NOTE

From iBMC V316, the CPU and disk alarms will also include the SN and BOM code and the mainboard and memory alarms will also include the BOM code.

This alarm is generated when the system failed to read the hard disk VPD information.

Alarm object: Disk

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## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x02000021 | Minor | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Hard disk location, for example, **rear**. |
| *arg2* | Hard disk name, for example, **disk0**, **disk1**, **diskA1**, or **diskB1**. |
| *arg3* | Disk serial number. |
| *arg4* | BOM code. |

## Impact on the System

The iBMC cannot identify NVMe disks.

## Possible Causes

- The hard disk is damaged or has poor contact with its slot.
- The hard disk is faulty.
- The disk backplane is faulty.

## Procedure

**Step 1** Restart the iBMC. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Remove and reinstall the power cable or board. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Replace the hard disk. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Replace the disk backplane. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

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**Step 5** Contact technical support engineer.

**----End**

# 2.7.7 ALM-0x02000025 Hard Disk Link Fault (Disk, Major Alarm)

## Description

Alarm message:

The *arg1 arg2 arg3* link is faulty (SN: *arg4*, BN: *arg5*).

NOTE

From iBMC V316, the CPU and disk alarms will also include the SN and BOM code and the mainboard and memory alarms will also include the BOM code.

This alarm is generated when a hard disk link fault is detected.

Alarm object: Disk

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x02000025 | Major | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Hard disk location, for example **FIO**. |
| *arg2* | Hard disk slot No., for example **DISK1**. |
| *arg3* | Type of the hard disk link, for example **PCIe**. |
| *arg4* | Disk serial number. |
| *arg5* | BOM code. |

## Impact on the System

The system may stop responding and data may be lost.

## Possible Causes

- The drive is loose.
- The cable is not correctly or securely connected, or is faulty.
- The disk backplane or transfer card is faulty.

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## Procedure

**Step 1** Check whether the hard disk is properly installed.

- If yes, go to **Step 3**.
- If no, go to **Step 2**.

**Step 2** Remove and reinstall the hard disk. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Check whether the NVMe or SAS cables are correctly connected.

For details about the cable connection sequence, see the maintenance and service guide of the server you use.

- If yes, go to **Step 5**.
- If no, go to **Step 4**.

**Step 4** Connect the NVMe or SAS cables correctly. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Replace the NVMe or SAS cable. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 6**.

**Step 6** Replace the disk backplane or adapter card. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 7**.

**Step 7** Replace the CPU. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 8**.

**Step 8** Replace the mainboard. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 9**.

**Step 9** Contact technical support engineer.

**----End**

# 2.7.8 ALM-0x02000027 Hard Disk Status Abnormal (Disk, Minor Alarm)

## Description

Alarm message:

The [*arg1*] disk *arg2* state is abnormal (SN: *arg3*, BN: *arg4*).

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NOTE

From iBMC V316, the CPU and disk alarms will also include the SN and BOM code and the mainboard and memory alarms will also include the BOM code.

This alarm is generated when an abnormal hard disk status is detected.

NOTE

If *arg2* is DISKA, DISKB, DISKC, or DISKD, this alarm is generated for the rear hard disk of a V2 or V3 server. For details about the slot information of the hard disks on a V3 server, see "Removing a Hard Disk" in the user guide of the server you use.

Alarm object: Disk

NOTE

This alarm also applies to SATADOM and M.2 disks.

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x02000027 | Minor | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Location of the hard disk. For example, **front** or **rear**. |
| *arg2* | Slot number of the hard disk. |
| *arg3* | Disk serial number. |
| *arg4* | BOM code. |

## Impact on the System

The system may stop responding and data may be lost.

## Possible Causes

- Improper operation was performed on the hard disk or RAID controller card.
- The hard disk is faulty.
- The CPU is faulty.

## Procedure

**Step 1** Check for and clear the drive fault alarm.

**Step 2** Change the drive firmware status to **UNCONFIGURED GOOD** or **ONLINE**. Then, check whether the alarm is cleared.

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To check the drive status, log in to the iBMC WebUI, choose **Information** > **System Info** > **Storage**, select the **Configure** tab, and change the hard disk firmware status.

- If yes, go to **Step 3**.
- If no, go to **Step 5**.

**Step 3** Replace the drive. Then, check whether the alarm is cleared.

For details about how to replace the drive, see the **Parts Replacement** in maintenance and service guide of the server you use.

After replacing the drive, restore the drive data. For details, see "Drive Faults" in the user guide of the RAID controller card you use.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Replace the CPU. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Contact technical support engineer.

**----End**

# 2.7.9 ALM-0x02000029 Hard Disk Foreign Configuration (Disk, Minor Alarm)

## Description

Alarm message:

The [*arg1*] disk *arg2* has foreign configuration (SN: *arg3*, BN: *arg4*).

NOTE

From iBMC V316, the CPU and disk alarms will also include the SN and BOM code and the mainboard and memory alarms will also include the BOM code.

This alarm is generated when foreign configuration is detected for a hard disk.

NOTE

If *arg2* is DISKA, DISKB, DISKC, or DISKD, this alarm is generated for the rear hard disk of a V2 or V3 server. For details about the slot information of the hard disks on a V3 server, see "Removing a Hard Disk" in the user guide of the server you use.

Alarm object: Disk

NOTE

This alarm also applies to SATADOM and M.2 disks.

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### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x02000029 | Minor | Yes |

### Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Location of the hard disk. For example, **front** or **rear**. |
| *arg2* | Slot number of the hard disk. |
| *arg3* | Disk serial number. |
| *arg4* | BOM code. |

### Impact on the System

The system may stop responding and data may be lost.

### Possible Causes

The newly installed hard disk contains foreign configuration.

### Procedure

**Step 1** Clear or import the RAID configuration. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Contact technical support engineer.

**----End**

## 2.7.10 ALM-0x0200002B Hard Disk Link Fault (Disk, Minor Alarm)

### Description

Alarm message:

The [*arg1*] disk *arg2* link is abnormal (SN: *arg3*, BN: *arg4*).

NOTE

From iBMC V316, the CPU and disk alarms will also include the SN and BOM code and the mainboard and memory alarms will also include the BOM code.

This alarm is generated when a hard disk link fault is detected.

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NOTE

If *arg2* is DISKA, DISKB, DISKC, or DISKD, this alarm is generated for the rear hard disk of a V2 or V3 server. For details about the slot information of the hard disks on a V3 server, see "Removing a Hard Disk" in the user guide of the server you use.

Alarm object: Disk

NOTE

This alarm also applies to SATADOM and M.2 disks.

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x0200002B | Minor | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Location of the hard disk. For example, **front** or **rear**. |
| *arg2* | Slot number of the hard disk. |
| *arg3* | Disk serial number. |
| *arg4* | BOM code. |

## Impact on the System

The system may stop responding and data may be lost.

## Possible Causes

- The SAS or NVMe cable is incorrectly connected or is faulty.
- The hard disk is faulty.
- The disk backplane or adapter is faulty.

## Procedure

**Step 1** Check whether the hard disk can be identified.

- If no, replace the hard disk.
- If the hard disk can be identified but the locate indicator cannot be lit, replace the hard disk, SAS/NVMe cable, or low-speed cable of the RAID cable card.

**Step 2** If there are SAS or NVMe cable alarms, clear the alarms.

**Step 3** Replace the disk backplane or adapter. Then, check whether the alarm is cleared.

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- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Contact technical support engineer.

**----End**

# 2.7.11 ALM-0x0200002D Hard Disk Lost (Disk, Major Alarm)

## Description

Alarm message:

The [*arg1*] disk *arg2* is missing (SN: *arg3*, BN: *arg4*).

NOTE

From iBMC V316, the CPU and disk alarms will also include the SN and BOM code and the mainboard and memory alarms will also include the BOM code.

This alarm is generated when a hard disk was lost.

NOTE

If *arg2* is DISKA, DISKB, DISKC, or DISKD, this alarm is generated for the rear hard disk of a V2 or V3 server. For details about the slot information of the hard disks on a V3 server, see "Removing a Hard Disk" in the user guide of the server you use.

Alarm object: Disk

NOTE

This alarm also applies to SATADOM and M.2 disks.

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x0200002D | Major | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Location of the hard disk. For example, **front** or **rear**. |
| *arg2* | Slot number of the hard disk. |
| *arg3* | Disk serial number. |
| *arg4* | BOM code. |

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### Impact on the System

The system may stop responding and data may be lost.

### Possible Causes

- The SAS cable is not connected securely.
- The hard disk is faulty.

### Procedure

**Step 1** If this alarm is generated for more than two or more hard disks, check whether the SAS cables are loose.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Connect the SAS cables firmly. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Replace the hard disk. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Replace the disk backplane. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Contact technical support engineer.

**----End**

## 2.7.12 ALM-0x0200002F Rapid Increase of PHY Bit Errors on the Link Between the RAID Controller Card and Hard Disk (Disk, Major Alarm)

### Description

Alarm message:

The PHY bit errors of the link between *arg1* and *arg2* increased too fast (SN: *arg3*, BN: *arg4*).

NOTE

From iBMC V316, the CPU and disk alarms will also include the SN and BOM code and the mainboard and memory alarms will also include the BOM code.

This alarm is generated when the system detects sharply increased PHY bit errors on the links between the hard disks and the RAID controller card.

NOTE

Expander controllers of different servers are located on different components, such as disk backplanes, mainboards, and GPU boards. For details, see the user manual of each server.

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Alarm object: Disk

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x0200002F | Major | Yes |

## Parameters

| Name | Meaning |
|---|---|
| *arg1* | RAID controller card, for example, **RAID Card1**. |
| *arg2* | Hard disk, for example, **Disk0**. |
| *arg3* | Disk serial number. |
| *arg4* | BOM code. |

## Impact on the System

The devices (such as the RAID controller card, expander controller, and hard drives) connected to the links are affected. The system may stop responding and data may be lost.

## Possible Causes

- The cables are not connected correctly or firmly.
- The cables are faulty.
- The disk backplane is faulty.
- The hard disk is faulty.
- The RAID controller card is faulty.

## Procedure

**Step 1** Connect the cables between the RAID controller card and the disk backplane. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Replace the cables. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Replace the hard disks. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

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**Step 4** Replace the disk backplane. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Replace the RAID controller card. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 6**.

**Step 6** Contact technical support.

**----End**

# 2.7.13 ALM-0x02000031 Rapid Increase of PHY Bit Errors on the Link Between the Expander Controller and Hard Disk (Disk, Major Alarm)

## Description

Alarm message:

The PHY bit errors of the link between *arg1* (*arg2arg3*) and *arg4* increased too fast (SN: *arg5*, BN: *arg6*).

NOTE

From iBMC V316, the CPU and disk alarms will also include the SN and BOM code and the mainboard and memory alarms will also include the BOM code.

This alarm is generated when the system detects sharply increased PHY bit errors on the links between the hard disks and the expander controller.

NOTE

Expander controllers of different servers are located on different components, such as disk backplanes, mainboards, and GPU boards. For details, see the user manual of each server.

Alarm object: Disk

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x02000031 | Major | Yes |

## Parameters

| Name | Meaning |
|---|---|
| *arg1* | Component holding the expander controller, for example, **Disk BP1**. |
| *arg2* | Type of the expander controller, for example, **SAS Expander**. |

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| Name | Meaning |
| --- | --- |
| *arg3* | No. of the expander controller. |
| *arg4* | Hard disk, for example, **Disk0**. |
| *arg5* | Disk serial number. |
| *arg6* | BOM code. |

## Impact on the System

The devices (such as the RAID controller card, expander controller, and hard drives) connected to the links are affected. The system may stop responding and data may be lost.

## Possible Causes

- The cables are not connected correctly or firmly.
- The cables are faulty.
- The component holding the expander is faulty.
- The hard disk is faulty.

## Procedure

**Step 1** Connect the cables between the component holding the expander and the hard disks. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Replace the cables. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Replace the hard disks. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Replace the component holding the expander controller. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Contact technical support.

**----End**

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# 2.7.14 ALM-0x0200003B Failed Authentication for the Drive Serial Number (Disk,Minor Alarm)

## Description

Alarm message:

The disk *arg1* authentication failed (SN:*arg2*).

This alarm is generated when the authentication for the drive serial number is failed.

Alarm object: Disk

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x0200003B | Minor | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | The drive number that failed the authentication. |
| *arg2* | The drive serial number that failed the authentication. |

## Impact on the System

Only parts of the original manufacturer are covered by the warranty offered by the original manufacturer.

## Possible Causes

The spare part has been replaced or modified at factory.

## Procedure

**Step 1** Check whether the part has been replaced.

- If yes, go to **Step 2**
- If no, go to **Step 5**

**Step 2** Check whether the replaced part is from the original manufacturer.

- If yes, go to **Step 4**
- If no, go to **Step 3**

**Step 3** Replace with the original part and check whether the alarm is cleared.

- If yes, no further action is required.

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- If no, go to **Step 4**

**Step 4** Contact technical support engineers.

For details, log in to the Technical Support website, search and view the *Server Parts Proactive Authentication Guide*.

**Step 5** Contact engineers of the sales channel.

**----End**

# 2.7.15 ALM-0x080000CB Disk Minor Fault Alarm on PCIe Card (PCIe card, Minor Alarm)

## Description

Alarm message:

A major fault about the drive of the PCIe card *arg1 arg2* was detected. *arg3*. *arg4*.

This alarm is generated when a minor error occurs on the drives of a PCIe device.

Alarm object: PCIe Card

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x080000CB | Minor | Yes |

## Parameters

| Name | Meaning |
|---|---|
| *arg1* | Slot number of the PCIe card, for example, **3**. |
| *arg2* | PCIe card name, for example, **SDI V5.1**. |
| *arg3* | Alarm description, for example, M.2 Smart Status Error |
| *arg4* | Error code of the alarm, for example, **8226**. |

## Impact on the System

- There is a risk of failure in writing data to the local drive of the SDI card. The failure will cause the logging function to fail.
- Operation of the SDI services becomes less reliable.

## Possible Causes

- The drive is damaged.
- The drive has reached its end of service.

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- Other unknown causes.

### Procedure

**Step 1** Collect logs, restart the system, and check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Replace the PCIe device compute card, and check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Contact technical support engineer.

**----End**

## 2.7.16 ALM-0x080000CD Disk Major Fault Alarm on PCIe Card (PCIe card, Major Alarm)

### Description

Alarm message:

A major fault about the drive of the PCIe card *arg1 arg2* was detected. *arg3*. *arg4*.

This alarm is generated when a major error occurs on the drives of a PCIe device.

Alarm object: PCIe Card

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x080000CD | Major | Yes |

### Parameters

| Name | Meaning |
|---|---|
| *arg1* | Slot number of the PCIe card, for example, **3**. |
| *arg2* | PCIe card name, for example, **SDI V5.1**. |
| *arg3* | Alarm description, for example, M.2 B Not present |
| *arg4* | Error code of the alarm, for example, **8217**. |

### Impact on the System

- There is a risk of failure in writing data to the local drive of the SDI card. The failure will cause the logging function to fail.

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- Operation of the SDI services becomes less reliable.

## Possible Causes

- The drive is damaged.
- Other unknown causes.

## Procedure

**Step 1** Collect logs, restart the system, and check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Replace the PCIe device compute card, and check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Contact technical support engineer.

**----End**

# 2.7.17 ALM-0x21000005 SD Card RAID Failed (SD Card, Major Alarm)

## Description

Alarm message:

The RAID array of SD cards is invalid.

This alarm is generated when the RAID array of SD cards is invalid.

Alarm object: SD Card

NOTE

- This alarm also applies to SATADOM and M.2 disks.
- For details about the SD card slot information, see the user guide of the server you use.

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x21000005 | Major | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| – | – |

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### Impact on the System

The system may stop responding and data may be lost.

### Possible Causes

- The SD card is not installed.
- The SD card is in poor contact.
- The SD card is faulty.

### Procedure

**Step 1** Check whether the SD card is installed.

- If yes, go to **Step 3**.
- If no, go to **Step 2**.

**Step 2** Install an SD card. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 3** Remove and reinstall the SD card. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Replace the SD card. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Contact technical support.

**----End**

## 2.7.18 ALM-0x2100000B SD Card RAID Rebuild Failed (SD Card, Major Alarm)

### Description

Alarm message:

Data rebuild failed at SD card *arg1*.

This alarm is generated when the data rebuild failed on the RAID array of SD cards.

Alarm object: SD Card

NOTE

This alarm also applies to SATADOM and M.2 disks.

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### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x2100000B | Major | Yes |

### Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Slot number of the SD card.<br>**NOTE**<br>For details about the SD card slot information, see the user guide of the server you use. |

### Impact on the System

The system may stop responding and data may be lost.

### Possible Causes

The SD card is faulty.

### Procedure

**Step 1** Replace the SD card. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Contact technical support.

**----End**

## 2.7.19 ALM-0x2100000D SD Card Fault (SD Card, Major Alarm)

### Description

Alarm message:

SD card *arg1* failure.

This alarm is generated when an SD card is malfunctioning or faulty.

Alarm object: SD Card

NOTE

This alarm also applies to SATADOM and M.2 disks.

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### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x2100000D | Major | Yes |

### Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Slot number of the SD card.<br>**NOTE**<br>For details about the SD card slot information, see the user guide of the server you use. |

### Impact on the System

The SD card cannot be used, which affects SD card services and may cause the system to stop responding or data loss.

### Possible Causes

The SD card is faulty.

### Procedure

**Step 1** Replace the SD card. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Contact technical support.

**----End**

## 2.7.20 ALM-0x2100000F No SD Card Detected (SD Card, Major Alarm)

### Description

Alarm message:

```
The SD card controller cannot detect two SD cards.
```

This alarm is generated when the SD card controller cannot detect either of the SD cards.

Alarm object: SD Card

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NOTE

- This alarm also applies to SATADOM and M.2 disks.
- For details about the SD card slot information, see the user guide of the server you use.

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x2100000F | Major | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| – | – |

## Impact on the System

The SD card cannot be used, which affects SD card services and may cause the system to stop responding or data loss.

## Possible Causes

- The SD cards are removed.
- The SD cards are not installed properly.
- The SD card controller is faulty.

## Procedure

**Step 1** Check whether all the SD cards are installed.

- If yes, go to **Step 3**.
- If no, go to **Step 2**.

**Step 2** Install all SD cards required. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Remove and reinstall the SD card. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Replace the SD card. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Replace the mainboard. Then, check whether the alarm is cleared.

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- If yes, no further action is required.
- If no, go to **Step 6**.

**Step 6** Contact technical support.

**----End**

# 2.7.21 ALM-0x21000011 SD Card Failed to Start RAID Rebuild (SD Card, Major Alarm)

## Description

Alarm message:

Failed to start data rebuild at SD card *arg1*.

This alarm is generated when the SD card failed to start RAID rebuild.

Alarm object: SD Card

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x21000011 | Major | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Slot number of the SD card.<br>**NOTE**<br>For details about the SD card slot information, see the user guide of the server you use. |

## Impact on the System

The system may stop responding and data may be lost.

## Possible Causes

- The metadata on the two SD cards is inconsistent.
- The SD card is faulty.

## Procedure

**Step 1** Clear the metadata from the SD card on which the alarm is generated. Then, check whether the alarm is cleared.

- If yes, no further action is required.

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- If no, go to **Step 2**.

**Step 2** Replace the SD card with one that has no metadata. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Contact technical support.

**----End**

# 2.7.22 ALM-0x2C000071 File System Read-Only (System, Major Alarm)

## Description

Alarm message:

File system (*arg1*) is read only.

This alarm is generated when the system detects that the file system of the server OS is read-only.

Alarm object: System

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x2C000071 | Major | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | File system name, for example, **/dev/mapper/cl-root**. |

## Impact on the System

Services are affected.

## Possible Causes

The file system is abnormal.

## Procedure

**Step 1** Contact technical support.

**----End**

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# 2.7.23 ALM-0x2C000075 Failed RAID Array Detected (System, Major Alarm)

## Description

Alarm message:

```
Failed RAID array detected.
```

This alarm is generated when a failed or abnormal RAID array is detected in the system.

Alarm object: System

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x2C000075 | Major | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| - | - |

## Impact on the System

The system may stop responding and data may be lost.

## Possible Causes

- The RAID array has missing drives.
- A faulty drive exists.

## Procedure

**Step 1** Check all the RAID arrays. If there is any RAID array in abnormal status, do as follows:

If the RAID array has a member drive removed, install a drive in the empty slot. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

If there is faulty drive, replace the faulty drive. Then, check whether the alarm is cleared.

For details about how to replace the drive, see the **Parts Replacement** in maintenance and service guide of the server you use.

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After replacing the drive, restore the drive data. For details, see "Drive Faults" in the user guide of the RAID controller card you use.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Contact technical support engineer.

**----End**

# 2.7.24 ALM-0x2C000079 System Certificate Expired (System, Minor Alarm)

## Description

Alarm message:

*arg1* certificate is about to expire or has expired, please check security logs for details.

This alarm is generated when a certificate has expired or is about to expire. Check the security log for details.

Alarm object: System

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x2C000079 | Minor | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Object in system, such as **BIOS**. |

## Impact on the System

Related certificate verification will failed.

## Possible Causes

The certificate of the relevant object system is expired or about to expire. The related objects include but are not limited to the following subjects:

BIOS

## Procedure

**Step 1** Import the new certificate, and check whether the alarm is cleared.

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- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Contact technical support.

**----End**

# 2.7.25 ALM-0x32000001 Hard Disk Backplane Expander Fault (Expander, Minor Alarm)

## Description

Alarm message:

The *arg1* disk backplane *arg2* expander *arg3* is faulty.

The alarm is generated when the disk backplane expander is faulty.

Alarm object: Expander

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x32000001 | Minor | Yes |

## Parameters

| Name | Meaning |
|---|---|
| *arg1* | Location of the power supply backplane, for example, **rear**, **inner**, or **front**. |
| *arg2* | Number of the disk backplane related to the alarm. |
| *arg3* | Location of the expander controller related to the alarm. |

## Impact on the System

Hard disks cannot be accessed.

## Possible Causes

- The disk backplane expander is faulty.

## Procedure

**Step 1** Replace the disk backplane expander. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

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**Step 2** Contact technical support.

**----End**

# 2.7.26 ALM-0x32000003 Communication Failure Between Expander Controller and RAID Controller Card (Expander, Major Alarm)

## Description

Alarm message:

Communication between *arg1* and *arg2* (*arg3arg4*) failed.

This alarm is generated when the expander controller fails to communicate with the RAID controller card.

NOTE

Expander controllers of different servers are located on different components, such as disk backplanes, mainboards, and GPU boards. For details, see the user manual of each server.

Alarm object: Expander

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x32000003 | Major | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | RAID controller card that communicates with the expander controller, for example, **RAID Card1**. |
| *arg2* | Component where the expander controller related to the alarm is located, for example, **Disk BP1**. |
| *arg3* | Type of the expander controller related to the alarm, for example, **SAS Expander**. |
| *arg4* | ID of the expander controller related to the alarm. |

## Impact on the System

The system may stop responding and data may be lost.

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### Possible Causes

- The cable is not correctly or firmly connected, or is faulty.
- The component where the expander controller is located is faulty.
- The RAID controller card is faulty.

### Procedure

**Step 1** Reconnect the cable between the RAID controller card and the component where the expander controller is located, and check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Replace the cable, and check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Replace the component where the expander controller is located, and check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Replace the RAID controller card related to the alarm, and check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Contact technical support engineer.

**----End**

## 2.7.27 ALM-0x32000005 Rapid Increase of PHY Bit Errors on the Link Between the Expander Controller and the RAID Controller Card (Expander, Major Alarm)

### Description

Alarm message:

The PHY bit errors of the link between *arg1arg2* and *arg3 (arg4arg5*) increased too fast.

This alarm is generated when the data is transmitted on the link between the RAID controller card and the expander controller and the PHY bit errors increase rapidly.

NOTE

Expander controllers of different servers are located on different components, such as disk backplanes, mainboards, and GPU boards. For details, see the user manual of each server.

Alarm object: Expander

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## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x32000005 | Major | Yes |

## Parameters

| Name | Meaning |
|---|---|
| *arg1* | RAID controller card that communicates with the expander controller, for example, **RAID Card1**. |
| *arg2* | Reserved. |
| *arg3* | Component where the expander controller related to the alarm is located, for example, **Disk BP0**. |
| *arg4* | Type of the expander controller related to the alarm, for example, **SAS Expander**. |
| *arg5* | ID of the expander controller related to the alarm. |

## Impact on the System

The devices (such as the RAID controller card, expander controller, and hard drives) connected to the links are affected. The system may stop responding and data may be lost.

## Possible Causes

- The cable is not correctly or firmly connected, or is faulty.
- The component where the expander controller is located is faulty.
- The RAID controller card is faulty.

## Procedure

**Step 1** Reconnect the cable between the RAID controller card and the component where the expander controller is located, and check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Replace the cable, and check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Replace the component where the expander controller is located, and check whether the alarm is cleared.

- If yes, no further action is required.

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- If no, go to **Step 4**.

**Step 4** Replace the RAID controller card related to the alarm, and check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Contact technical support engineer.

**----End**

# 2.7.28 ALM-0x32000007 Rapid Increase of PHY Bit Errors on the Link Between Expander Controllers (Expander, Major Alarm)

## Description

Alarm message:

The PHY bit errors of the link between *arg1* (*arg2arg3*) and *arg4* (*arg5arg6*) increased too fast.

This alarm is generated when data is transmitted on the link between two expander controllers and the detected PHY bit errors increase rapidly.

NOTE

Expander controllers of different servers are located on different components, such as disk backplanes, mainboards, and GPU boards. For details, see the user manual of each server.

Alarm object: Expander

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x32000007 | Major | Yes |

## Parameters

| Name | Meaning |
|---|---|
| *arg1, arg4* | Component where the expander controller related to the alarm is located, for example, **Mainboard** or **GpuBoard**. |
| *arg2, arg5* | Type of the expander controller related to the alarm, for example, **SAS Expander**. |
| *arg3, arg6* | ID of the expander controller related to the alarm. |

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### Impact on the System

The devices (such as the RAID controller card, expander controller, and hard drives) connected to the links are affected. The system may stop responding and data may be lost.

### Possible Causes

- The cable is not securely connected or the cable connection is incorrect.
- The cable is faulty.
- The components where the expander controllers are located are faulty.

### Procedure

**Step 1** Reconnect the cable between the components where the expander controllers are located, and check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Replace the cable, and check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Replace the components where the expander controllers are located, and check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Contact technical support.

**----End**

# 2.8 Fan Module Alarms

This section describes the alarms for fan and fan modules of a server.

## 2.8.1 ALM-0x04000005 Fan Redundancy Lost (Fan, Major Alarm)

### Description

Alarm message:

Lost fan redundancy*arg1*.

NOTE

The alarm does not include the SN or BOM code of the component.

This alarm is generated when fan modules are absent.

Alarm object: Fan

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## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x04000005 | Major | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Location of the fan backplane. For example, **(compute system fan backplane)** or **(storage system fan backplane)**.<br>**NOTE**<br>iBMC V3.07.05.01 and later support this parameter. |

## Impact on the System

Heat dissipation of the server is affected.

## Possible Causes

- The fan module is removed.
- The fan module is of poor contact with the mainboard.

## Procedure

**Step 1** Check whether there are empty fan slots in the chassis.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Install fan modules in empty slots. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 3** Remove and reinstall the fan modules. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Replace the fan modules. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Contact technical support engineer.

**----End**

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# 2.8.2 ALM-0x04000007 Large Fan Speed Difference (Fan, Major Alarm)

## Description

Alarm message:

Fan *arg1* [*arg2*] failure or incorrect fan model (BN: *arg3*).

NOTE

From iBMC V328, the RAID controller card and PSU alarms will also include the SN and BOM code, and the fan alarms will also include the BOM code.

This alarm is generated when:

- A fan module is faulty.
- The fan model does not match the models of other fans in the server.

Alarm object: Fan

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x04000007 | Major | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Location of the fan module. For example, **front** or **rear**. |
| *arg2* | No. of the fan module. |
| *arg3* | BOM code. |

## Impact on the System

Heat dissipation of the server is affected.

## Possible Causes

- A fan module is faulty.
- A fan module of incorrect model is used.
- The fan backplane is faulty if any.

NOTE

The installation positions (fan backplane, mainboard, or drive backplane) of the fan modules vary for different servers. Please refer to the actual installation position of the fan module.

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## Procedure

**Step 1** Log in to the Technical Support website and check whether the CPU or GPU power is greater than 135 W using the Compatibility List.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

NOTE

Perform this operation only for the RH2288H V3.

**Step 2** Replace the fan module with a model of higher power or replace the processor with a model of lower power consumption. Ensure that the new component is compatible with the server and is installed in the correct position. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

NOTE

Perform this operation only for the RH2288H V3.

**Step 3** Switch the fan module with a functioning fan module in the same chassis, and check whether the alarm is still generated for this fan module.

- If yes, go to **Step 4**.
- If no, go to **Step 5**.

**Step 4** Replace the fan module. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Replace the fan backplane if any. Then, check whether the alarm is cleared.

NOTE

The installation positions (fan backplane, mainboard, or drive backplane) of the fan modules vary for different servers. Please refer to the actual installation position of the fan module.

- If yes, no further action is required.
- If no, go to **Step 6**.

**Step 6** Remove and reinstall the power cable of the fan backplane. Then, check whether the alarm is cleared.

NOTE

Perform this operation only for the 5298 V7.

- If yes, no further action is required.
- If no, go to **Step 7**.

**Step 7** Contact technical support.

**----End**

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# 2.8.3 ALM-0x0400000B The Fan Speed is Low (Fan, Major Alarm)

## Description

Alarm message:

The actual speed (*arg1*) of fan *arg2* is over *arg3* lower than the expected value *arg4*.

This alarm is generated when the detected fan speed is lower than the major alarm threshold.

Alarm object: Fan

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x0400000B | Major | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Current reading of the sensor. |
| *arg2* | No. of the fan module. |
| *arg3* | Fan speed deviation percentage. |
| *arg4* | Alarm threshold. |

## Impact on the System

Heat dissipation of the server is affected.

## Possible Causes

- The fan module is faulty.
- The fan modules are not of the same type.
- The fan backplane is faulty if any.

## Procedure

**Step 1** Switch the fan module with a functioning fan module in the same chassis, and check whether the alarm is still generated for this fan module.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

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**Step 2** Replace the fan module. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Replace the fan backplane if any. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Contact technical support engineer.

**----End**

## 2.8.4 ALM-0x0400000D The Fan Speed is Low (Fan, Minor Alarm)

### Description

Alarm message:

The actual speed (*arg1*) of fan *arg2* is over *arg3* lower than the expected value *arg4*.

This alarm is generated when the detected fan speed is lower than the minor alarm threshold.

Alarm object: Fan

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x0400000D | Minor | Yes |

### Parameters

| Name | Meaning |
|---|---|
| *arg1* | Current reading of the sensor. |
| *arg2* | No. of the fan module. |
| *arg3* | Fan speed deviation percentage. |
| *arg4* | Alarm threshold. |

### Impact on the System

Heat dissipation of the server is affected.

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### Possible Causes

- The fan module is faulty.
- The fan modules are not of the same type.
- The fan backplane is faulty if any.

### Procedure

**Step 1** Switch the fan module with a functioning fan module in the same chassis, and check whether the alarm is still generated for this fan module.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Replace the fan module. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Replace the fan backplane if any. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Contact technical support engineer.

**----End**

## 2.8.5 ALM-0x0400000F The Fan Speed is High (Fan, Major Alarm)

### Description

Alarm message:

The actual speed (*arg1*) of fan *arg2* is over *arg3* higher than the expected value *arg4*.

This alarm is generated when the detected fan speed is higher than the critical alarm threshold.

Alarm object: Fan

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x0400000F | Major | Yes |

### Parameters

| Name | Meaning |
|---|---|
| *arg1* | Current reading of the sensor. |

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| Name | Meaning |
| --- | --- |
| *arg2* | No. of the fan module. |
| *arg3* | Fan speed deviation percentage. |
| *arg4* | Alarm threshold. |

### Impact on the System

The power consumption is affected.

### Possible Causes

- The fan module is faulty.
- The fan modules are not of the same type.
- The fan backplane is faulty if any.

### Procedure

**Step 1** Switch the fan module with a functioning fan module in the same chassis, and check whether the alarm is still generated for this fan module.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Replace the fan module. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Replace the fan backplane if any. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Contact technical support engineer.

**----End**

## 2.8.6 ALM-0x04000011 The Fan Speed is High (Fan, Minor Alarm)

### Description

Alarm message:

The actual speed (*arg1*) of fan *arg2* is over *arg3* higher than the expected value *arg4*.

This alarm is generated when the detected fan speed is higher than the minor alarm threshold.

Alarm object: Fan

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## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x04000011 | Minor | Yes |

## Parameters

| Name | Meaning |
|---|---|
| *arg1* | Current reading of the sensor. |
| *arg2* | No. of the fan module. |
| *arg3* | Fan speed deviation percentage. |
| *arg4* | Alarm threshold. |

## Impact on the System

The power consumption is affected.

## Possible Causes

- The fan module is faulty.
- The fan modules are not of the same type.
- The fan backplane is faulty if any.

## Procedure

**Step 1** Switch the fan module with a functioning fan module in the same chassis, and check whether the alarm is still generated for this fan module.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Replace the fan module. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Replace the fan backplane if any. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Contact technical support engineer.

**----End**

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# 2.8.7 ALM-0x04000013 Communication Between the BMC and Fan Failed (Fan, Major Alarm)

## Description

Alarm message:

Communication between the BMC and fan*arg1* failed.

This alarm is generated when the communication between the iBMC and fan failed.

Alarm object: Fan

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x04000013 | Major | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | No. of the fan module. |

## Impact on the System

Heat dissipation of the server is affected.

## Possible Causes

- The fan module is in poor contact.
- The fan module is faulty.
- The fan backplane is faulty if any.

## Procedure

**Step 1** Remove and reinstall the fan module. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Switch the fan module with a functioning fan module in the same chassis, and check whether the alarm is still generated for this fan module.

- If yes, go to **Step 3**.
- If no, go to **Step 4**.

**Step 3** Replace the fan module. Then, check whether the alarm is cleared.

- If yes, no further action is required.

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- If no, go to **Step 4**.

**Step 4** Replace the fan backplane if any. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Contact technical support engineer.

**----End**

# 2.8.8 ALM-0x04000015 Fan Lower Speed Major Alarm (Fan, Major Alarm)

## Description

Alarm message:

The fan *arg1* [*arg2*] speed (*arg3* RPM) lower than the threshold (*arg4* RPM).

This alarm is generated when the detected fan speed is lower than the major alarm threshold.

Alarm object: Fan

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x04000015 | Major | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Slot No. of the fan module. |
| *arg2* | Fan module location, for example, **rear** or **front**. |
| *arg3* | Current reading of the sensor. |
| *arg4* | Alarm threshold. |

## Impact on the System

Heat dissipation of the server is affected.

## Possible Causes

- The fan module is faulty.
- The fan modules are not of the same type.

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- The fan backplane is faulty if any.

### Procedure

**Step 1** Switch the fan module with a functioning fan module in the same chassis, and check whether the alarm is still generated for this fan module.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Replace the fan module. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Replace the fan backplane if any. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Contact technical support engineer.

**----End**

## 2.8.9 ALM-0x04000017 Fan Lower Speed Minor Alarm (Fan, Minor Alarm)

### Description

Alarm message:

The fan *arg1* [*arg2*] speed (*arg3* RPM) lower than the threshold (*arg4* RPM).

This alarm is generated when the detected fan speed is lower than the minor alarm threshold.

Alarm object: Fan

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x04000017 | Minor | Yes |

### Parameters

| Name | Meaning |
|---|---|
| *arg1* | Slot No. of the fan module. |
| *arg2* | Fan module location, for example, **rear** or **front**. |
| *arg3* | Current reading of the sensor. |
| *arg4* | Alarm threshold. |

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### Impact on the System

Heat dissipation of the server is affected.

### Possible Causes

- The fan module is faulty.
- The fan modules are not of the same type.
- The fan backplane is faulty if any.

### Procedure

**Step 1** Switch the fan module with a functioning fan module in the same chassis, and check whether the alarm is still generated for this fan module.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Replace the fan module. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Replace the fan backplane if any. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Contact technical support engineer.

**----End**

# 2.9 Memory Alarms

This section describes the alarms for the memory of a server.

## 2.9.1 ALM-0x01000015 Memory Configuration Error (Memory, Critical Alarm)

### Description

Alarm message:

*arg1 arg2 arg3* configuration error or training failed (SN: *arg4*, BN: *arg5*).

NOTE

From iBMC V316, this alarm also includes the DIMM BOM code. From iBMC V561, this alarm also includes the DIMM SN.

This alarm is generated when a DIMM installation error or fault is detected during the BIOS startup process.

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NOTE

For details about DIMM layout, see "Installing DIMMs" in the troubleshooting manual of the server you use.

Alarm object: Memory

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x01000015 | Critical | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Slot number of the memory board. |
| *arg2* | DIMM silkscreen or CPU socket number and memory channel No.<br>● DIMM silkscreen, for example, **DIMM010(B)**.<br>● CPU socket number and channel number. For example, **CPU 1 channel 2** indicates memory channel C of CPU 1, that is, DIMM **DIMM020(C)**.<br>**NOTE**<br>The number of DIMMs corresponding to a memory channel varies depending on the server model. |
| *arg3* | Memory number. |
| *arg4* | Memory serial number. |
| *arg5* | BOM code. |

## Impact on the System

The system performance is affected, or the system fails to start.

## Possible Causes

- The DIMMs installed are not compatible with the CPU.
- The DIMM is not installed in the correct slot.
- The DIMM is faulty.

## Procedure

**Step 1** Power off the server and check the models of the DIMMs for which the alarm is generated. Then log in to the Technical Support website and use the Compatibility List to check whether the DIMM models are compatible with the server.

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- If yes, go to **Step 3**.
- If no, go to **Step 2**.

**Step 2** Replace the DIMMs with compatible ones and power on the server. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Power off the server and check whether the DIMMs are installed in correct positions. For details about the DIMM installation rules, see the product user guide.

- If yes, go to **Step 5**.
- If no, go to **Step 4**.

For details about the DIMM configuration guidelines, see the user guide of the server you use.

**Step 4** Install the DIMMs according to the DIMM configuration guidelines. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Replace the DIMMs. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 6**.

**Step 6** Contact technical support engineer.

**----End**

# 2.9.2 ALM-0x01000017 Memory MCE Error (Memory, Critical Alarm)

## Description

Alarm message:

*arg1 arg2 arg3* triggered an uncorrectable error, *arg4* (SN: *arg5*, BN: *arg6*).

NOTE

From iBMC V316, this alarm also includes the DIMM BOM code. From iBMC V561, this alarm also includes the DIMM SN.

This alarm is generated when an uncorrectable error occurred on a DIMM.

Alarm object: Memory

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x01000017 | Critical | Yes |

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## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Slot number of the memory board. |
| *arg2* | DIMM silkscreen or CPU socket number and memory channel No.<br>● DIMM silkscreen, for example, **DIMM010(B)**.<br>● CPU socket number and channel number. For example, **CPU 1 channel 2** indicates memory channel C of CPU 1, that is, DIMM **DIMM020(C)**.<br>**NOTE**<br>The number of DIMMs corresponding to a memory channel varies depending on the server model. |
| *arg3* | Memory number. |
| *arg4* | Error code of the alarm. |
| *arg5* | Memory serial number. |
| *arg6* | BOM code. |

## Impact on the System

The system may stop responding or restart.

## Possible Causes

- The DIMM is faulty.
- The mainboard or memory board is faulty.
- The CPU is faulty.

## Procedure

**Step 1** Remove and reinstall the DIMM. Then, check whether the alarm is cleared.

- Yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Switch the DIMM with a functioning DIMM in the same chassis. Then, check whether the alarm is still generated for this DIMM.

- If yes, go to **Step 3**.
- If no, go to **Step 4**.

**Step 3** Replace the DIMM. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Replace the mainboard or memory board. Then, check whether the alarm is cleared.

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- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Replace the CPU to which the alarmed memory belongs. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 6**.

**Step 6** Contact technical support engineer.

**----End**

# 2.9.3 ALM-0x01000025 Memory Configuration Error (Memory, Critical Alarm)

## Description

Alarm message:

[*arg1*] *arg2* memory configuration error. Error code: *arg3* (SN: *arg4*, BN: *arg5*).

This alarm is generated when an incompatible DIMM is installed or when a DIMM is installed in an incorrect slot.

NOTE

For details about DIMM layout, see "Installing DIMMs" in the troubleshooting manual of the server you use.

Alarm object: Memory

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x01000025 | Critical | Yes |

## Parameters

| Name | Meaning |
|---|---|
| *arg1* | Slot number of the memory board. |
| *arg2* | DIMM silkscreen or CPU socket number and memory channel No.<br>● DIMM silkscreen, for example, **DIMM010(B)**.<br>● CPU socket number and channel number. For example, **CPU 1 channel 2** indicates memory channel C of CPU 1, that is, DIMM **DIMM020(C)**.<br>**NOTE**<br>The number of DIMMs corresponding to a memory channel varies depending on the server model. |

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| Name | Meaning |
| --- | --- |
| *arg3* | Error code of the alarm. |

## Impact on the System

The system performance is affected, or the system fails to start.

## Possible Causes

- The server is configured with incompatible DIMMs.
- The DIMMs are not installed properly on the server.

## Procedure

**Step 1** Check whether other memory alarms are present.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Clear other memory alarms. Then, check whether this alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Power off the server and check the models of the DIMMs for which the alarm is generated.

**Step 4** Log in to the Technical Support website and check whether the DIMM models are compatible with the server using the Compatibility List.

- If yes, go to **Step 5**.
- If no, go to **Step 7**.

**Step 5** Check whether the DIMMs are installed in correct slots.

- If yes, go to **Step 8**.
- If no, go to **Step 6**.

For details about DIMM installation positions, see the user guide of the server you use.

**Step 6** Install the DIMMs in correct slots. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 8**.

**Step 7** Replace the DIMMs with compatible ones and power on the server. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 8**.

For details about how to replace a DIMM, see the user guide of the server you use.

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**Step 8** Contact technical support engineer.

**----End**

# 2.9.4 ALM-0x01000027 Memory Initialization Error (Memory, Critical Alarm)

## Description

Alarm message:

[*arg1*] *arg2* memory initialization error. Error code: *arg3*.

NOTE

From iBMC V316, this alarm also includes the DIMM BOM code. From iBMC V561, this alarm also includes the DIMM SN.

This alarm is generated when a DIMM initialization error is detected during the server startup process.

NOTE

If this alarm is generated, the server stops using the DIMM and the other DIMMs in the same channel. For details about the DIMM positions, see the server user guide.

Alarm object: Memory

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x01000027 | Critical | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Slot number of the memory board. |
| *arg2* | DIMM silkscreen or CPU socket number and memory channel No.<br>● DIMM silkscreen, for example, **DIMM010(B)**.<br>● CPU socket number and channel number. For example, **CPU 1 channel 2** indicates memory channel C of CPU 1, that is, DIMM **DIMM020(C)**.<br>**NOTE**<br>The number of DIMMs corresponding to a memory channel varies depending on the server model. |
| *arg3* | Error code of the alarm. |

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## Impact on the System

The OS cannot start.

## Possible Causes

- The server is configured with incompatible DIMMs.
- The DIMMs are not installed properly on the server.

## Procedure

If the alarm description contains the silkscreen of the faulty DIMM:

**Step 1** Check whether the DIMM slot has foreign objects or dirt.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Clean the DIMM slot, reinstall the DIMM, and power on the server. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Replace the DIMM for which the alarm is generated, power on the server, and check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Replace the mainboard or memory board that holds the DIMM, power on the server, and check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Contact technical support engineer.

**----End**

If the alarm description does not contain the silkscreen of the faulty DIMM but contains only the channel number:

**Step 1** Replace the mainboard or memory board that holds the DIMM, power on the server, and check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Contact technical support engineer.

**----End**

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# 2.9.5 ALM-0x0100002F Fatal Error Detected in Memory Initialization (Memory, Critical Alarm)

## Description

Alarm message:

[*arg1*] *arg2* memory MRC fatal error detected. Error code: *arg3*.

NOTE

From iBMC V316, this alarm also includes the DIMM BOM code. From iBMC V561, this alarm also includes the DIMM SN.

This alarm is generated when a DIMM initialization error is detected during the server startup process.

NOTE

For details about DIMM layout, see "Installing DIMMs" in the troubleshooting manual of the server you use.

Alarm object: Memory

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x0100002F | Critical | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Slot number of the memory board. |
| *arg2* | DIMM silkscreen or CPU socket number and memory channel No.<br>● DIMM silkscreen, for example, **DIMM010(B)**.<br>● CPU socket number and channel number. For example, **CPU 1 channel 2** indicates memory channel C of CPU 1, that is, DIMM **DIMM020(C)**.<br>**NOTE**<br>The number of DIMMs corresponding to a memory channel varies depending on the server model. |
| *arg3* | Error code of the alarm. |

## Impact on the System

The OS cannot start.

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### Possible Causes

- The server is configured with incompatible DIMMs.
- The DIMMs are not installed properly on the server.

### Procedure

**Step 1** Check whether other memory alarms are present.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Clear other memory alarms. Then, check whether this alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Power off the server and check the models of the DIMMs for which the alarm is generated.

**Step 4** Log in to the Technical Support website and check whether the DIMM models are compatible with the server using the Compatibility List.

- If yes, go to **Step 5**.
- If no, go to **Step 7**.

**Step 5** Check whether the DIMMs are installed in correct slots.

- If yes, go to **Step 8**.
- If no, go to **Step 6**.

For details about DIMM installation positions, see the user guide of the server you use.

**Step 6** Install the DIMMs in correct slots. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 8**.

**Step 7** Replace the DIMMs with compatible ones and power on the server. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 8**.

For details about how to replace a DIMM, see the user guide of the server you use.

**Step 8** Contact technical support engineer.

**----End**

## 2.9.6 ALM-0x01000033 DIMM VPP2 Overvoltage (Memory, Major Alarm)

### Description

Alarm message:

CPU *arg1* DIMM VPP 2 voltage (*arg2* V) exceeds the overvoltage threshold (*arg3* V).

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NOTE

The alarm does not include the SN or BOM code of the component.

This alarm is generated when the VPP2 voltage of the DIMM connected to the CPU exceeds the overvoltage threshold.

Alarm object: Memory

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x01000033 | Major | Yes |

## Parameters

| Name | Meaning |
|---|---|
| *arg1* | Socket No. of the CPU. |
| *arg2* | Current reading of the sensor. |
| *arg3* | Alarm threshold. |

## Impact on the System

The system stops responding or cannot be started.

## Possible Causes

The mainboard is faulty.

## Procedure

**Step 1** Replace the mainboard. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Contact technical support engineer.

**----End**

# 2.9.7 ALM-0x01000035 DIMM VPP2 Undervoltage (Memory, Major Alarm)

## Description

Alarm message:

CPU *arg1* DIMM VPP 2 voltage (*arg2* V) is lower than the undervoltage threshold (*arg3* V).

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NOTE

The alarm does not include the SN or BOM code of the component.

This alarm is generated when the VPP2 voltage of the DIMM connected to the CPU is lower than the undervoltage threshold.

Alarm object: Memory

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x01000035 | Major | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Socket No. of the CPU. |
| *arg2* | Current reading of the sensor. |
| *arg3* | Alarm threshold. |

## Impact on the System

The system stops responding or cannot be started.

## Possible Causes

The mainboard is faulty.

## Procedure

**Step 1** Replace the mainboard. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Contact technical support engineer.

**----End**

# 2.9.8 ALM-0x01000037 Failed to Read DIMM VPP2 Voltage (Memory, Minor Alarm)

## Description

Alarm message:

Failed to obtain data of the CPU *arg1* DIMM VPP 2 voltage.

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NOTE

The alarm does not include the SN or BOM code of the component.

This alarm is generated when the system failed to obtain the VPP2 voltage of the DIMM connected to the CPU.

Alarm object: Memory

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x01000037 | Minor | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Socket No. of the CPU. |

## Impact on the System

The system stops responding.

## Possible Causes

The ADC circuit is abnormal.

## Procedure

**Step 1** Restart the iBMC. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Remove and reinstall the power cable. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Remove and reinstall the board. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Contact technical support.

**----End**

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# 2.9.9 ALM-0x01000043 NVDIMM Supercapacitor Not Present (Memory, Major Alarm)

## Description

Alarm message:

NVDIMM (*arg1*) supercapacitor is not present.

NOTE

The alarm does not include the SN or BOM code of the component.

This alarm is generated when the supercapacitor of the NVDIMM is not detected.

Alarm object: Memory

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x01000043 | Major | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | DIMM silkscreen, for example, **DIMM000** or **DIMMA1**. |

## Impact on the System

The power-off protection is unavailable for the NVDIMM.

## Possible Causes

- The supercapacitor is not installed.
- The supercapacitor is faulty.

## Procedure

**Step 1** Check whether the supercapacitor is installed.

- If yes, go to **Step 3**.
- If no, go to **Step 2**.

**Step 2** Install a supercapacitor. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Replace the supercapacitor. Then, check whether the alarm is cleared.

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- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Contact technical support engineer.

**----End**

# 2.9.10 ALM-0x01000049 NNDIMM slot error (Memory, Minor Alarm)

## Description

Alarm message:

The NVDIMM is installed in a slot that does not support NVDIMM.

NOTE

The alarm does not include the SN or BOM code of the component.

This alarm is generated when the NVDIMM is installed in a slot that does not support NVDIMM.

Alarm object: Memory

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x01000049 | Minor | Yes |

## Parameters

| Name | Meaning |
|---|---|
| - | - |

## Impact on the System

The memory function is unavailable.

## Possible Causes

The NVDIMM is installed in an incorrect slot.

## Procedure

**Step 1** Power off the server and check whether there is damage or poor contact between the component and its slot.

- If yes, no further action is required.

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- If no, go to **Step 2**.

**Step 2** Contact technical support engineer.

**----End**

# 2.9.11 ALM-0x0100004B Failed to Restore NVDIMM Data (Memory, Major Alarm)

## Description

Alarm message:

NVDIMM (*arg1*) data restoration failed. error code:*arg2*.

**NOTE**

The alarm does not include the SN or BOM code of the component.

This alarm is generated when the NVDIMM data restoration failed.

Alarm object: Memory

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x0100004B | Major | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | DIMM silkscreen, for example, **DIMM000** or **DIMMA1**. |
| *arg2* | Error code of the alarm. |

## Impact on the System

The NVDIMM non-volatile function has failed, and the system does not run properly.

## Possible Causes

The NVDIMM is faulty.

## Procedure

**Step 1** Power off the server and check whether there is damage or poor contact between the component and its slot.

- If yes, go to **Step 2**.

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- If no, go to **Step 3**.

**Step 2** Remove and install the NVDIMM. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Replace the NVDIMM. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Contact technical support engineer.

**----End**

# 2.9.12 ALM-0x0100004D DCPMM Warning (Memory, Minor Alarm)

## Description

Alarm message:

DCPMM (*arg1 arg2*) has a noncritical fault. error code: 0x*arg3* (SN: *arg4*, BN: *arg5*).

NOTE

From iBMC V316, this alarm also includes the DIMM BOM code. From iBMC V561, this alarm also includes the DIMM SN.

This alarm is generated when a minor fault was detected on the DCPMM.

Alarm object: Memory

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x0100004D | Minor | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | CPU socket number and channel number. For example, **CPU 1 channel 2** indicates the number 2 memory channel of CPU 1, that is, DIMMs **DIMM020** and **DIMM021**.<br>**NOTE**<br>The number of DIMMs corresponding to a memory channel varies depending on the server model. |
| *arg2* | CPU socket number and DIMM silkscreen, for example, **CPU1 DIMM020(A)** or **CPU2 DIMM110(B)**. |
| *arg3* | Error code of the alarm. |

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| Name | Meaning |
| --- | --- |
| *arg4* | Memory serial number. |
| *arg5* | BOM code. |

## Impact on the System

The DCPMM will be damaged or cannot be used.

## Possible Causes

- The memory endurance is about to reach the limit.
- The memory space is about to be used up.
- A warning is returned in CAP self-check.

## Procedure

**Step 1** Migrate data from the DCPMM to other storage media, and replace the DCPMM. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Contact technical support engineer.

**----End**

# 2.9.13 ALM-0x0100004F DCPMM Fault (Memory, Major Alarm)

## Description

Alarm message:

DCPMM (*arg1 arg2*) has a critical fault. error code: 0x*arg3* (SN: *arg4*, BN: *arg5*).

NOTE

From iBMC V316, this alarm also includes the DIMM BOM code. From iBMC V561, this alarm also includes the DIMM SN.

This alarm is generated when a critical fault was detected on the DCPMM.

Alarm object: Memory

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x0100004F | Major | Yes |

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### Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | CPU socket number and channel number. For example, **CPU 1 channel 2** indicates the number 2 memory channel of CPU 1, that is, DIMMs **DIMM020** and **DIMM021**.<br>**NOTE**<br>The number of DIMMs corresponding to a memory channel varies depending on the server model. |
| *arg2* | CPU socket number and DIMM silkscreen, for example, **CPU1 DIMM020(A)** or **CPU2 DIMM110(B)**. |
| *arg3* | Error code of the alarm. |
| *arg4* | Memory serial number. |
| *arg5* | BOM code. |

### Impact on the System

The memory is unavailable, the system performance deteriorates, or the system cannot start.

### Possible Causes

- The memory endurance has reached the limit.
- The memory space is used up.
- The AIT DRAM is disabled.
- The CAP self-check failed.
- A serious internal fault occurred on the memory.

### Procedure

**Step 1** Migrate data from the DCPMM to other storage media, and replace the DCPMM. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Contact technical support engineer.

**----End**

## 2.9.14 ALM-0x01000057 Memory Initialization Error (Memory, Major Alarm)

### Description

Alarm message:

*arg1arg2* memory initialization error. Error code: *arg3*.

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This alarm is generated when a memory initialization error occurs.

Alarm object: Memory

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x01000057 | Major | Yes |

## Parameters

| Name | Meaning |
|---|---|
| *arg1* | Slot number of the memory board. |
| *arg2* | DIMM silkscreen or CPU socket number and memory channel No.<br>● DIMM silkscreen, for example, **DIMM010(B)**.<br>● CPU socket number and channel number. For example, **CPU 1 channel 2** indicates memory channel C of CPU 1, that is, DIMM **DIMM020(C)**.<br>**NOTE**<br>The number of DIMMs corresponding to a memory channel varies depending on the server model. |
| *arg3* | Error code of the alarm. |
| *arg4* | BOM code. |
| *arg5* | Memory serial number. |

## Impact on the System

The system performance is affected.

## Possible Causes

- The memory module is faulty.
- The memory slot has foreign objects.

## Procedure

**If the alarm description contains the silkscreen of the faulty DIMM**:

**Step 1** Check whether the DIMM slot has foreign objects or dirt.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Clean the DIMM slot, reinstall the DIMM, and power on the server. Then, check whether the alarm is cleared.

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- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Replace the DIMM for which the alarm is generated, power on the server, and check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Replace the mainboard or memory board that holds the DIMM, power on the server, and check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Contact the device vendor's technical support engineer.

**----End**

**If the alarm description does not contain the silkscreen of the faulty DIMM but contains only the channel number**:

**Step 1** Replace the mainboard or memory board that holds the DIMM, power on the server, and check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Contact the device vendor's technical support engineer.

**----End**

# 2.9.15 ALM-0x0100005B Memory in Poor Contact Alarm (Memory, Major Alarm)

## Description

Alarm message:

The memory (*arg1*) is in poor contact (SN: *arg2*, BN: *arg3*).

NOTE

From iBMC V316, this alarm also includes the DIMM BOM code. From iBMC V561, this alarm also includes the DIMM SN.

This alarm is generated when a DIMM is in poor contact.

Alarm object: Memory

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x0100005B | Major | Yes |

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## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | DIMM silkscreen or CPU socket number and memory channel No.<br>● DIMM silkscreen, for example, **DIMM010(B)**.<br>● CPU socket number and channel number. For example, **CPU 1 channel 2** indicates memory channel C of CPU 1, that is, DIMM **DIMM020(C)**.<br>**NOTE**<br>The number of DIMMs corresponding to a memory channel varies depending on the server model. |
| *arg2* | Memory serial number. |
| *arg3* | BOM code. |

## Impact on the System

The system may stop responding or restart.

## Possible Causes

- The DIMM has poor contact with its slot.
- The solder joints between the DIMM chip and the DIMM PCB are aged.
- The signal quality of the mainboard PCB board does not meet the requirements.
- The CPU may be damaged or poorly connected to the socket.

## Procedure

**Step 1** Power off the server, and remove and reinstall the DIMM. Then check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Replace the DIMMs with the ones of the same model, and ensure that the new DIMMs are installed in the correct position. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Replace the CPU. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Replace the mainboard. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

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**Step 5** Contact technical support engineer.

**----End**

# 2.9.16 ALM-0x0100005D Memory Minor Prefailure Alarm (Memory, Minor Alarm)

## Description

Alarm message:

A minor prefailure is generated for memory (*arg1*) (SN: *arg2*, BN: *arg3*).

NOTE

From iBMC V316, this alarm also includes the DIMM BOM code. From iBMC V561, this alarm also includes the DIMM SN.

This alarm is generated when a minor prefailure is detected on a DIMM.

Alarm object: Memory

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x0100005D | minor | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | DIMM silkscreen or CPU socket number and memory channel No.<br>● DIMM silkscreen, for example, **DIMM010(B)**.<br>● CPU socket number and channel number. For example, **CPU 1 channel 2** indicates memory channel C of CPU 1, that is, DIMM **DIMM020(C)**.<br>**NOTE**<br>The number of DIMMs corresponding to a memory channel varies depending on the server model. |
| *arg2* | Memory serial number. |
| *arg3* | BOM code. |

## Impact on the System

The system may stop responding or restart.

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### Possible Causes

- ADDDC is not enabled on the BIOS.
- The DIMM is faulty.

### Procedure

**Step 1** Restart the server and access the BIOS Device Manager in UEFI mode. On the configuration screen, enable ADDDC. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Replace the DIMMs with the ones of the same model, and ensure that the new DIMMs are installed in the correct position. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Contact technical support engineer.

**----End**

## 2.9.17 ALM-0x0100005F Memory Major Prefailure Alarm (Memory, Major Alarm)

### Description

Alarm message:

A minor prefailure is generated for memory (*arg1*) (SN: *arg2*, BN: *arg3*).

NOTE

From iBMC V316, this alarm also includes the DIMM BOM code. From iBMC V561, this alarm also includes the DIMM SN.

This alarm is generated when a major prefailure is detected on a DIMM.

Alarm object: Memory

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x0100005D | Major | Yes |

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### Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | DIMM silkscreen or CPU socket number and memory channel No.<br>● DIMM silkscreen, for example, **DIMM010(B)**.<br>● CPU socket number and channel number. For example, **CPU 1 channel 2** indicates memory channel C of CPU 1, that is, DIMM **DIMM020(C)**.<br>**NOTE**<br>The number of DIMMs corresponding to a memory channel varies depending on the server model. |
| *arg2* | Memory serial number. |
| *arg3* | BOM code. |

### Impact on the System

The system may stop responding or restart.

### Possible Causes

- For x8 DIMMs, the ADDDC function cannot be enabled on the BIOS.
- For x4 DIMMs, the ADDDC function has been enabled on the BIOS, but the BIOS cannot isolate the fault.
- The DIMM is faulty.

### Procedure

**Step 1** Replace the DIMMs with the ones of the same model, and ensure that the new DIMMs are installed in the correct position. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Contact technical support engineer.

**----End**

## 2.9.18 ALM-0x01000065 PMem Warning (Memory, Minor Alarm)

### Description

Alarm message:

*arg1* (*arg2 arg3*) has a noncritical fault. error code: 0x*arg4*.

This alarm is generated when a minor fault was detected on the PMem.

Alarm object: Memory

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### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x01000065 | Minor | Yes |

### Parameters

| Name | Meaning |
|---|---|
| *arg1* | No. of the PMem. |
| *arg2* | Socket No. of the CPU. |
| *arg3* | DIMM silkscreen, for example, **DIMM000**. |
| *arg4* | Error code of the alarm. |

### Impact on the System

The PMem will be damaged or cannot be used.

### Possible Causes

- The memory endurance is about to reach the limit.
- The memory space is about to be used up.
- A warning is returned in CAP self-check.

### Procedure

**Step 1** Migrate data from the PMem to other storage media, and replace the PMem. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**

**Step 2** Contact technical support engineer.

**----End**

## 2.9.19 ALM-0x01000067 PMem Fault (Memory, Major Alarm)

### Description

Alarm message:

*arg1* (*arg2 arg3*) has a critical fault. error code: 0x*arg4*.

This alarm is generated when a critical fault was detected on the PMem.

Alarm object: Memory

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### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x01000067 | Major | Yes |

### Parameters

| Name | Meaning |
|---|---|
| *arg1* | No. of the PMem. |
| *arg2* | Socket No. of the CPU. |
| *arg3* | DIMM silkscreen, for example, **DIMM000**. |
| *arg4* | Error code of the alarm. |

### Impact on the System

The memory is unavailable, the system performance deteriorates, or the system cannot start.

### Possible Causes

- The memory endurance has reached the limit.
- The memory space is used up.
- The AIT DRAM is disabled.
- The CAP self-check failed.
- A serious internal fault occurred on the memory.

### Procedure

**Step 1** Migrate data from the PMem to other storage media, and replace the PMem. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**

**Step 2** Contact technical support engineer.

**----End**

## 2.9.20 ALM-0x0100006B Number of Correctable ECC Errors Exceeds the Limit (Memory, Minor Alarm)

### Description

Alarm message:

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*arg1 arg2* memory correctable ECC (*arg3*).

This alarm is generated when the system detects that the number of ECC errors exceeds the threshold after power-on.

Alarm object: Memory

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x0100006B | Minor | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Slot number of the CPU board. |
| *arg2* | Slot number of the DIMM. |
| *arg3* | SN number of the DIMM. |

## Impact on the System

Server performance will be affected.

## Possible Causes

The DIMM is faulty.

## Procedure

**Step 1** Remove and reinstall the DIMM. Then check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Replace the DIMM. Then check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Contact technical support.

**----End**

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# 2.9.21 ALM-0x0100006F Memory prefailure alarm (Memory, Minor Alarm)

## Description

Alarm message:

A prefailure is generated for memory (*arg1 arg2 arg3*).

This alarm is generated when a prefailure occurs on the memory.

Alarm object: Memory

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x0100006F | Minor | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Serial number of the CPU. |
| *arg2* | Memory Channel. |
| *arg3* | Memory Slot. |

## Impact on the System

The system may stop responding or restart.

## Possible Causes

The DIMM is in high UCE(Uncorrectable Error) risk.

## Procedure

**Step 1** Replace the DIMM and check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Contact technical support engineer.

**----End**

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# 2.9.22 ALM-0x01000071 Memory Isolated (Memory, Major Alarm)

## Description

Alarm message:

[*arg1*] arg2 memory isolated.

This alarm is generated when the DIMM is isolated.

Alarm object: Memory

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x01000071 | Major | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | DIMM slot number. |
| *arg2* | DIMM silkscreen or CPU socket number and memory channel No.<br>● DIMM silkscreen, for example, **DIMM010(B)**.<br>● CPU socket number and channel number. For example, **CPU 1 channel 2** indicates memory channel C of CPU 1, that is, DIMM **DIMM020(C)**.<br>**NOTE**<br>The number of DIMMs corresponding to a memory channel varies depending on the server model. |

## Impact on the System

The available memory decreases and the system performance is affected, the system cannot be started when all the DIMMs are isolated.

## Possible Causes

The DIMM is isolated:

- The DIMM is incompatible or faulty.
- The DIMM slot is faulty.

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### Procedure

**Step 1** Replace the DIMM and check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Replace the mainboard and check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Contact technical support engineer.

**----End**

## 2.9.23 ALM-0x01000073 Failed Authentication for the Memory Serial Number (Memory,Minor Alarm)

### Description

Alarm message:

The memory *arg1* authentication failed (SN:*arg2*).

This alarm is generated when the authentication for the memory serial number is failed.

Alarm object: Memory

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x01000073 | Minor | Yes |

### Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | The memory number that failed the authentication. |
| *arg2* | The memory serial number that failed the authentication. |

### Impact on the System

Only parts of the original manufacturer are covered by the warranty offered by the original manufacturer.

### Possible Causes

The spare part has been replaced or modified at factory.

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### Procedure

**Step 1** Check whether the part has been replaced.

- If yes, go to **Step 2**
- If no, go to **Step 5**

**Step 2** Check whether the replaced part is from the original manufacturer.

- If yes, go to **Step 4**
- If no, go to **Step 3**

**Step 3** Replace with the original part and check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**

**Step 4** Contact technical support engineers.

For details, log in to the Technical Support website, search and view the *Server Parts Proactive Authentication Guide*.

**Step 5** Contact engineers of the sales channel.

**----End**

## 2.9.24 ALM-0x01000077 Memory ADDDC separate (Memory,Minor Alarm)

### Description

Alarm message:

A pre-failure occurs in memory (*arg1*), and ADDDC Sparing is executed for isolation.

This alarm is generated when a memory failure is about to occur and ADDDC Sparing isolation is performed.

Alarm object: Memory

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x01000077 | Minor | Yes |

### Parameters

| Name | Meaning |
|---|---|
| *arg1* | Memory number. For example, DIMM000. |

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### Impact on the System

DIMM performance may degrade.

### Possible Causes

The DIMM is in high UCE risk.

### Procedure

**Step 1** Replace the memory module, and check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Contact technical support engineer.

**----End**

## 2.9.25 ALM-0x01000079 Memory Isolation Due to Incompliance with the POR Rule (Memory, Minor Alarm)

### Description

Alarm message:

The memory (*arg1*) is isolated because it does not meet the POR rule.

This alarm is generated when the DIMM is isolated because it does not meet the POR rule.

Alarm object: memory

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 01000079 | Minor | Yes |

### Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | DIMM number, for example, **DIMM000**. |

### Impact on the System

- The DIMM is isolated.
- DIMM performance may degrade.

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### Possible Causes

- The failures of other DIMMs cause this DIMM not to meet the POR insertion rule.
- The DIMM installation mode on the server does not comply with the POR insertion rule.

### Procedure

**Step 1** Check whether there are alarms generated on other DIMMs of the server.

- If yes, go to **2**.
- If no, go to **3**.

**Step 2** Clear other memory alarms according to the alarm handling suggestions. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **3**.

**Step 3** Check whether the DIMM installation mode complies with the POR rule.

- If yes, go to **5**.
- If no, go to **4**.

**Step 4** Remove and insert the DIMM according to the POR rule. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **5**.

**Step 5** Contact technical support of the .

**----End**

## 2.9.26 ALM-0x0100007D Memory Disabled (Memory, Major Alarm)

### Description

Alarm message:

*arg1* memory disabled.

This alarm is generated when the socket channel of the DIMM is disabled.

Alarm object: Memory

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x0100007D | Major | Yes |

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### Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Memory Slot. |

### Impact on the System

The available memory decreases and the system performance is affected, the system cannot be started when all the memory is disabled.

### Possible Causes

The socket channel of the DIMM is disabled.

### Procedure

**Step 1** On the BIOS, check whether the memory channel is disabled.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Enable the memory channel on the BIOS, save the settings, and restart the server. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Replace the DIMM with one of the same specifications and enable the memory channel, and check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Contact technical support engineer.

**----End**

## 2.9.27 ALM-0x01000085 DIMM UCNA Error (Memory, Minor Alarm)

### Description

Alarm message:

*arg1 arg2 arg3* triggered an uncorrectable error, *arg4*.

This alarm is generated when the memory triggers an uncorrectable error.

NOTE

- This alarm takes effect only when the custom switch **BMCSet_MemUCNAFaultEnable** is enabled.
- The alarm will be cleared when the system is powered off or restarted.

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Alarm object: Memory

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x01000085 | Minor | Yes |

## Parameters

| Name | Meaning |
|---|---|
| *arg1* | Slot number of the memory board. |
| *arg2* | DIMM silkscreen or CPU socket number and memory channel No.<br>● DIMM silkscreen, for example, **DIMM010(B)**.<br>● CPU socket number and channel number. For example, **CPU 1 channel 2** indicates memory channel C of CPU 1, that is, DIMM **DIMM020(C)**.<br>**NOTE**<br>The number of DIMMs corresponding to a memory channel varies depending on the server model. |
| *arg3* | Memory number. |
| *arg4* | Error code of the alarm. For example, **Error code: 0x0001(Memory Read Error)**. |

## Impact on the System

The system is still running properly, but the reliability is reduced.

## Possible Causes

- The memory module is faulty.
- The slot of the memory module on the mainboard is faulty.

## Procedure

**Step 1** Power off the server and check whether there is damage or poor contact between the component and its slot.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Remove and reinstall the memory. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

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**Step 3** Replace the memory. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Replace the mainboard. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Contact technical support.

**----End**

# 2.9.28 ALM-0x080000C7 Memory Minor Fault Alarm on PCIe Card (PCIe Card, Minor Alarm)

## Description

Alarm message:

A minor fault about the memory of the PCIe card *arg1 arg2* was detected. *arg3*. *arg4*.

This alarm is generated when a minor error occurs on the memory of a PCIe device.

Alarm object: PCIe Card

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x080000C7 | Minor | Yes |

## Parameters

| Name | Meaning |
|---|---|
| *arg1* | Slot number of the PCIe card, for example, **3**. |
| *arg2* | PCIe card name, for example, **SDI V5.1**. |
| *arg3* | Alarm description, for example, memory self-check failure. |
| *arg4* | Error code of the alarm, for example, **8203**. |

## Impact on the System

- The system RAM capacity decreases.
- The performance degrades.
- Some services cannot work.

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### Possible Causes

There is a memory fault.

### Procedure

**Step 1** Collect logs, restart the system, and check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Replace PCIe device compute cards, and check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Contact technical support engineer.

**----End**

## 2.9.29 ALM-0x080000C9 Memory Major Fault Alarm on PCIe Card (PCIe Card, Major Alarm)

### Description

Alarm message:

A major fault about the memory of the PCIe card *arg1 arg2* was detected. *arg3*. *arg4*.

This alarm is generated when a major error occurs on the memory of a PCIe device.

Alarm object: PCIe Card

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x080000C9 | Major | Yes |

### Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Slot number of the PCIe card, for example, **3**. |
| *arg2* | PCIe card name, for example, **SDI V5.1**. |
| *arg3* | Alarm description, for example, Memory UCE. |
| *arg4* | Error code of the alarm, for example, **8204**. |

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### Impact on the System

- The system RAM capacity decreases.
- The performance degrades.
- Some services cannot work.

### Possible Causes

There is a memory fault.

### Procedure

**Step 1** Collect logs, restart the system, and check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Replace PCIe device compute cards, and check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Contact technical support engineer.

**----End**

## 2.9.30 ALM-0x2C00000D No Memory Detected During POST (System, Critical Alarm)

### Description

Alarm message:

```
No memory detected.
```

This alarm is generated during BIOS startup when any of the following occurs:

- No DIMM is detected.
- The only DIMM is faulty.
- The only DIMM is installed in an incorrect position.

Alarm object: System

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x2C00000D | Critical | Yes |

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## Parameters

| Name | Meaning |
| --- | --- |
| – | – |

## Impact on the System

The OS cannot start.

## Possible Causes

- A DIMM is incompatible with the server.
- The only DIMM is faulty and therefore isolated by the BIOS.
- The only DIMM is installed in an incorrect position.
- Signals are abnormal because the memory slot is faulty or has foreign objects.

## Procedure

**Step 1** Check whether other alarms are present.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Clear other memory alarms. Then, check whether this alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Check the CPU and DIMM models.

**Step 4** Log in to the Technical Support website and check whether the CPUs and DIMMs are compatible with the server using the Compatibility List.

- If yes, go to **Step 6**.
- If no, go to **Step 5**.

**Step 5** Replace the DIMMs with the ones that are compatible with the server and CPUs, and ensure that the DIMMs are installed in the correct position. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 7**.

**Step 6** Replace the DIMMs with the ones of the same model, and ensure that the new DIMMs are installed in the correct position. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 7**.

**Step 7** Replace the mainboard. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 8**.

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**Step 8** Contact technical support engineer.

**----End**

# 2.9.31 ALM-0x2C00003B Memory Boards Mismatch (System, Major Alarm)

## Description

Alarm message:

```
Inconsistent models of memory boards.
```

This alarm is generated when different types of memory boards are detected in a server.

Alarm object: System

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x2C00003B | Major | Yes |

## Parameters

| Name | Meaning |
|---|---|
| – | – |

## Impact on the System

Some DIMMs cannot be used, and system performance is affected.

## Possible Causes

Different types of memory boards are used in a server.

## Procedure

**Step 1** Check whether the server is configured with the same model of memory boards.

- If yes, go to **Step 3**.
- If no, go to **Step 2**.

**Step 2** Use the same model of memory boards. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Check whether the DIMMs in the memory boards are of the same model.

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- If yes, go to **Step 5**.
- If no, go to **Step 4**.

**Step 4** Use the same model of DIMMs for each memory board. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Contact technical support.

**----End**

# 2.9.32 ALM-0x2C00004B System Memory Configuration Error (System, Critical Alarm)

## Description

Alarm message:

System memory configuration error. Error code: 0x*arg1*.

This alarm is generated in any of the following cases:

- The DIMMs installed in the server are not compatible with the CPU.
- The DIMM layout does not comply with the configuration rules.

NOTE

For details about DIMM layout, see "Installing DIMMs" in the troubleshooting manual of the server you use.

Alarm object: System

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x2C00004B | Critical | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Error code of the alarm. |

## Impact on the System

The system performance is affected, or the system may fail to start.

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### Possible Causes

- The server is configured with incompatible DIMMs.
- The DIMMs are not installed properly on the server.

### Procedure

**Step 1** Check whether other memory alarms are present.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Clear other memory alarms. Then, check whether this alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Power off the server and check the models of the DIMMs for which the alarm is generated.

**Step 4** Log in to the Technical Support website and check whether the DIMM models are compatible with the server using the Compatibility List.

- If yes, go to **Step 5**.
- If no, go to **Step 7**.

**Step 5** Check whether the DIMMs are installed in correct slots.

- If yes, go to **Step 8**.
- If no, go to **Step 6**.

For details about DIMM installation positions, see the user guide of the server you use.

**Step 6** Install the DIMMs in correct slots. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 8**.

**Step 7** Replace the DIMMs with compatible ones and power on the server. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 8**.

For details about how to replace a DIMM, see the user guide of the server you use.

**Step 8** Contact technical support engineer.

**----End**

## 2.9.33 ALM-0x2C00004D Critical Error Found in System-level Memory Initialization Check (System, Critical Alarm)

### Description

Alarm message:

System memory MRC fatal error detected. Error code: 0x*arg1*.

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This alarm is generated when a fatal error is detected on the DIMMs during the memory initialization process.

Alarm object: System

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x2C00004D | Critical | Yes |

## Parameters

| Name | Meaning |
|---|---|
| *arg1* | Error code of the alarm. |

## Impact on the System

The system may fail to start.

## Possible Causes

- The server is configured with incompatible DIMMs.
- The DIMMs are not installed properly on the server.

## Procedure

**Step 1** Check whether other memory alarms are present.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Clear other memory alarms. Then, check whether this alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Power off the server and check the models of the DIMMs for which the alarm is generated.

**Step 4** Log in to the Technical Support website and check whether the DIMM models are compatible with the server using the Compatibility List.

- If yes, go to **Step 5**.
- If no, go to **Step 7**.

**Step 5** Check whether the memory insertion method complies with the memory configuration rules.

- If yes, go to **Step 8**.
- If no, go to **Step 6**.

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For details about DIMM installation positions, see the user guide of the server you use.

**Step 6** Check the NUMA nodes per socket parameter in the BIOS and reinstall the memory in the correct manner.Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 8**.

**Step 7** Replace the DIMMs with compatible ones and power on the server. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 8**.

For details about how to replace a DIMM, see the user guide of the server you use.

**Step 8** Contact technical support engineer.

**----End**

# 2.9.34 ALM-0x2C00004F No Memory Available (System, Critical Alarm)

## Description

Alarm message:

System has no available memory. Error code: *arg1*.

This alarm is generated when there is no available memory during the server startup process.

Alarm object: System

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x2C00004F | Critical | Yes |

## Parameters

| Name | Meaning |
|---|---|
| *arg1* | Error code of the alarm. |

## Impact on the System

The OS cannot start.

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## Possible Causes

- An incompatible DIMM is installed.
- A DIMM is incorrectly installed.
- A DIMM is faulty.
- Signals are abnormal because the memory slot is faulty or has foreign objects.

## Procedure

**Step 1** Check whether other memory alarms are present.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Clear other memory alarms. Then, check whether this alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Power off the server and check the models of the DIMMs for which the alarm is generated.

**Step 4** Log in to the Technical Support website and check whether the DIMM models are compatible with the server using the Compatibility List.

- If yes, go to **Step 5**.
- If no, go to **Step 7**.

**Step 5** Check whether the DIMMs are installed in correct slots.

- If yes, go to **Step 8**.
- If no, go to **Step 6**.

For details about DIMM installation positions, see the user guide of the server you use.

**Step 6** Install the DIMMs in correct slots. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 8**.

**Step 7** Replace the DIMMs with compatible ones and power on the server. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 10**.

For details about how to replace a DIMM, see the user guide of the server you use.

**Step 8** Replace the DIMMs and power on the server. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 9**.

**Step 9** Replace the mainboard and power on the server. Then, check whether the alarm is cleared.

- If yes, no further action is required.

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- If no, go to **Step 10**.

**Step 10** Contact technical support engineer.

**----End**

# 2.9.35 ALM-0x2C000057 System Memory Initialization Error (System, Critical Alarm)

## Description

Alarm message:

System memory initialization error. Error code: *arg1*.

This alarm is generated when an error is detected during the system memory initialization. The error code is *arg1*.

Alarm object: System

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x2C000057 | Critical | Yes |

## Parameters

| Name | Meaning |
|---|---|
| *arg1* | Error code of the alarm. |

## Impact on the System

The server performance is affected.

## Possible Causes

- The server is configured with incompatible DIMMs.
- The DIMMs are not installed properly on the server.

## Procedure

If the alarm description contains the silkscreen of the faulty DIMM:

**Step 1** Check whether the DIMM slot has foreign objects or dirt.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Clean the DIMM slot, reinstall the DIMM, and power on the server. Then, check whether the alarm is cleared.

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- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Replace the DIMM for which the alarm is generated, power on the server, and check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Replace the mainboard or memory board that holds the DIMM, power on the server, and check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Contact technical support engineer.

**----End**

If the alarm description does not contain the silkscreen of the faulty DIMM but contains only the channel number:

**Step 1** Replace the mainboard or memory board that holds the DIMM, power on the server, and check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Contact technical support engineer.

**----End**

# 2.10 Other Alarms

## 2.10.1 ALM-0x00000011 CPU Self-Test Failed (CPU, Critical Alarm)

### Description

Alarm message:

CPU *arg1* self-test failed (SN: *arg2*, BN: *arg3*).

NOTE

From iBMC V316, the CPU and disk alarms will also include the SN and BOM code and the mainboard and memory alarms will also include the BOM code.

This alarm is generated when an error occurs in the CPU self-test during startup.

Alarm object: CPU

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## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x00000011 | Critical | Yes |

## Parameters

| Name | Meaning |
|---|---|
| *arg1* | Socket No. of the CPU. |
| *arg2* | CPU serial number. |
| *arg3* | BOM code. |

## Impact on the System

The OS cannot start.

## Possible Causes

- A CPU is faulty.
- The mainboard is faulty.

## Procedure

**Step 1** Switch the CPU with a functioning CPU in the same chassis, and check whether the alarm is still generated for this CPU.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Replace the CPU. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 3** Replace the mainboard. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Contact technical support engineer.

**----End**

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# 2.10.2 ALM-0x00000013 Incorrect CPU Configuration (CPU, Critical Alarm)

## Description

Alarm message:

CPU *arg1* configuration error (SN: *arg2*, BN: *arg3*).

NOTE

From iBMC V316, the CPU and disk alarms will also include the SN and BOM code and the mainboard and memory alarms will also include the BOM code.

This alarm is generated when a fatal error is detected on the Integrated I/O (IIO) unit of the CPU.

Alarm object: CPU

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x00000013 | Critical | Yes |

## Parameters

| Name | Meaning |
|---|---|
| *arg1* | Socket No. of the CPU. |
| *arg2* | CPU serial number. |
| *arg3* | BOM code. |

## Impact on the System

The OS cannot start.

## Possible Causes

- The server is configured with different models of CPUs.
- A CPU is faulty.
- The mainboard is faulty.

## Procedure

**Step 1** Check whether the server is configured with different models of CPUs.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

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**Step 2** Use the same model of CPUs. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Switch the CPU with a functioning CPU in the same chassis, and check whether the alarm is still generated for this CPU.

- If yes, go to **Step 4**.
- If no, go to **Step 5**.

**Step 4** Replace the CPU. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Replace the mainboard. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 6**.

**Step 6** Contact technical support engineer.

**----End**

## 2.10.3 ALM-0x0000001B CPU IERR Error (CPU, Critical Alarm)

### Description

Alarm message:

CPU *arg1* has an uncorrectable error (SN: *arg2*, BN: *arg3*).

NOTE

From iBMC V316, the CPU and disk alarms will also include the SN and BOM code and the mainboard and memory alarms will also include the BOM code.

This alarm is generated when an uncorrectable error is detected on the CPU.

Alarm object: CPU

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x0000001B | Critical | No |

### Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Socket No. of the CPU. |
| *arg2* | CPU serial number. |

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| Name | Meaning |
| --- | --- |
| *arg3* | BOM code. |

## Impact on the System

The server OS may stop responding or restart.

## Possible Causes

- The CPU is faulty.
- The mainboard is faulty.

## Procedure

**Step 1** Switch the CPU with a functioning CPU to identify the faulty CPU. Replace the faulty CPU, and then check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Replace the mainboard. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Contact technical support engineer.

**----End**

# 2.10.4 ALM-0x0000001D CPU MCE/AER Error (CPU, Critical Alarm)

## Description

Alarm message:

CPU *arg1* triggered an uncorrectable error, *arg2* (SN: *arg3*, BN: *arg4*).

NOTE

From iBMC V316, the CPU and disk alarms will also include the SN and BOM code and the mainboard and memory alarms will also include the BOM code.

This alarm is generated when one of the following errors occurs:

- The SMI2 link fails in non-memory mirroring mode.
- The CPU runs an error program.
- A parity error occurs on the voltage mode single ended (VMSE) link.
- The memory controller receives data marked with the poison tag.

Alarm object: CPU

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## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x0000001D | Critical | Yes |

## Parameters

| Name | Meaning |
|---|---|
| *arg1* | Socket No. of the CPU. |
| *arg2* | Error code of the alarm. |
| *arg3* | CPU serial number. |
| *arg4* | BOM code. |

## Impact on the System

The system may even stop responding.

## Possible Causes

- The CPU runs an error program.
- The mainboard is faulty.

## Procedure

**Step 1** Remove and reinstall the CPU. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Switch the CPU with a functioning CPU in the same chassis, and check whether the alarm is still generated for this CPU.

- If yes, go to **Step 3**.
- If no, go to **Step 4**.

**Step 3** Replace the CPU. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 4** Replace the mainboard. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Contact technical support engineer.

**----End**

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# 2.10.5 ALM-0x00000037 CPU iMC 1 Channel 2 Mirroring Failed (CPU, Minor Alarm)

## Description

Alarm message:

CPU *arg1* iMC 1 channel 2 mirroring failed.

This alarm is generated when the CPU iMC 1 channel 2 mirroring failed.

Alarm object: CPU

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x00000037 | Minor | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Socket No. of the CPU. |

## Impact on the System

System reliability will be affected.

## Possible Causes

- The DIMM is installed in an incorrect slot.
- The DIMM is faulty.

## Procedure

**Step 1** Power off the server, and check whether the DIMM is installed in an incorrect slot.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Install the DIMM in the correct slot. Then check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Replace the DIMM on the standby channel. Then check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

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**Step 4** Contact technical support engineer.

**----End**

# 2.10.6 ALM-0x00000073 CPU Not Detected (CPU, Major Alarm)

## Description

Alarm message:

Failed to start the system. CPU *arg1* was not detected (SN: *arg2*, BN: *arg3*).

NOTE

From iBMC V316, the CPU and disk alarms will also include the SN and BOM code and the mainboard and memory alarms will also include the BOM code.

This alarm is generated when the system failed to start and the specified CPU was not detected.

Alarm object: CPU

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x00000073 | Major | No |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Socket No. of the CPU. |
| *arg2* | CPU serial number. |
| *arg3* | BOM code. |

## Impact on the System

The system cannot start.

## Possible Causes

- The CPU is not installed.
- The CPU is in poor contact with its socket.
- The mainboard is faulty.

## Procedure

**Step 1** Check whether the CPU is installed properly.

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- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Check whether the CPU socket is intact.

- If yes, go to **Step 4**.
- If no, go to **Step 6**.

**Step 3** Power off the server, and install the CPU. Then, power on the server and check whether the alarm is cleared.

- If yes, go to **Step 5**.
- If no, go to **Step 4**.

**Step 4** Power off the server, and switch the CPU with a functioning CPU in the same chassis. Then, power on the server and check whether the alarm is cleared.

- If yes, go to **Step 5**.
- If no, go to **Step 6**.

**Step 5** Check whether the system can start normally.

- If yes, no further action is required.
- If no, go to **Step 6**

**Step 6** Replace the mainboard. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 7**.

**Step 7** Contact technical support engineer.

**----End**

# 2.10.7 ALM-0x00000083 Insufficient PCIe MMIO Resources (CPU, Critical Alarm)

## Description

Alarm message:

The PCIe MMIO configuration space in CPU *arg1* is insufficient (SN: *arg2*, BN: *arg3*).

NOTE

From iBMC V316, the CPU and disk alarms will also include the SN and BOM code and the mainboard and memory alarms will also include the BOM code.

This alarm is generated when insufficient PCIe memory-mapped I/O (MMIO) resources are detected for the CPU.

Alarm object: CPU

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x00000083 | Critical | Yes |

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### Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Socket No. of the CPU. |
| *arg2* | CPU serial number. |
| *arg3* | BOM code. |

### Impact on the System

Some PCIe cards cannot run properly and the system runs abnormally.

### Possible Causes

The total I/O resources required by the PCIe cards connected to the CPU exceed the maximum I/O resources provided by the CPU.

### Procedure

**Step 1** Check whether the PCIe cards comply with the server installation guidelines.

For details about the PCIe card installation guidelines, see the user guide of the server you use.

- If yes, go to **Step 3**.
- If no, go to **Step 2**.

**Step 2** Power off the server and install the PCIe cards according to the installation guidelines. After the server is powered on, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Contact technical support engineer.

**----End**

## 2.10.8 ALM-0x000000BD The CPU Fails to Suspend the POST Operation (CPU, Critical Alarm)

### Description

Alarm message:

CPU *arg1* FRB2/Hang in POST failure.

This alarm is generated when the CPU fails to suspend the POST operation.

Alarm object: CPU

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### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x000000BD | Critical | Yes |

### Parameters

| Name | Meaning |
|---|---|
| *arg1* | No. of the CPU. |

### Impact on the System

The system cannot start.

### Possible Causes

- The server hardware is faulty.
- The operating system is abnormal.
- Different modules of CPUs are used.

### Procedure

**Step 1** View the alarm list, check for component alarms, and rectify the fault according to troubleshooting suggestions

**Step 2** Determine the boot interrupt time according to the KVM screenshot and system serial port log.

**Step 3** Replace certain CPUs so that the CPU models are the same. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Contact technical support engineer.

**----End**

## 2.10.9 ALM-0x000000D3 CPU CacheWay isolated (CPU, Minor Alarm)

### Description

Alarm message:

The CPU *arg1 arg2* CacheWay isolation.

This alarm is generated when the BIOS power-on self-check detects that the CacheWay is abnormal.

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Alarm object: CPU

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x000000D3 | Minor | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Socket No. of the CPU. |
| *arg2* | CPU serial number. |

## Impact on the System

The CPU performance are affected.

## Possible Causes

When the BIOS power-on self-check detects that the CacheWay is abnormal, isolates the corresponding CacheWay.

## Procedure

**Step 1** Replace the mainboard. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Contact technical support engineer.

**----End**

# 2.10.10 ALM-0x000000DD IIO Configuration Error Occurs on the CPU (CPU, Critical Alarm)

## Description

Alarm message:

IIO configuration error occurs on CPU*arg1*.

This alarm is generated when IIO configuration error occurs on CPU.

Alarm object: CPU

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### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x000000DD | Critical | Yes |

### Parameters

| Name | Meaning |
|---|---|
| *arg1* | CPU socket number. |

### Impact on the System

The system cannot be started properly.

### Possible Causes

- A CPU is faulty.
- The mainboard is faulty.

### Procedure

**Step 1** Switch the CPU with a functioning CPU in the same chassis, and check whether the alarm is still generated for this CPU.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Replace the CPU, and check whether the fault is rectified.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Replace the mainboard, and check whether the fault is rectified.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Contact technical support.

**----End**

## 2.10.11 ALM-0x000000DF MCA Configuration Error Occurs on the CPU (CPU, Critical Alarm)

### Description

Alarm message:

MCA configuration error occurs on CPU*arg1*.

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This alarm is generated when MCA (Machine Check Architecture) configuration error occurs on CPU.

Alarm object: CPU

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x000000DF | Critical | Yes |

## Parameters

| Name | Meaning |
|---|---|
| *arg1* | CPU socket number. |

## Impact on the System

The system cannot be started properly.

## Possible Causes

- A CPU is faulty.
- The mainboard is faulty.

## Procedure

**Step 1** Switch the CPU with a functioning CPU in the same chassis, and check whether the alarm is still generated for this CPU.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Replace the CPU, and check whether the fault is rectified.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Replace the mainboard, and check whether the fault is rectified.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Contact technical support.

**----End**

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# 2.10.12 ALM-0x000000E1 CPU Disabled (CPU, Major Alarm)

## Description

Alarm message:

CPU *arg1* disabled.

This alarm is generated when a CPU is disabled.

Alarm object: CPU

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x000000E1 | Major | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | CPU socket number. |

## Impact on the System

The number of available CPUs is reduced.

## Possible Causes

- The CPU core is manually disabled.
- The CPU is faulty.

## Procedure

**Step 1** Check the BIOS settings to check whether the CPU core is activated.

- If yes, go to **Step 3**.
- If no, go to **Step 2**.

**Step 2** Enable the CPU core on the BIOS, save the settings, and restart the server. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Replace the alarmed CPU, and check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

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**Step 4** Contact technical support.

**----End**

# 2.10.13 ALM-0x000000E3 CPU has an Correctable Error (CPU, Minor Alarm)

## Description

Alarm message:

CPU *arg1* disabled.

This alarm is generated when a CPU has an correctable error.

Alarm object: CPU

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x000000E3 | Minor | Yes |

## Parameters

| Name | Meaning |
|---|---|
| *arg1* | CPU socket number. |

## Impact on the System

The system is still running properly, but the reliability is reduced.

## Possible Causes

There may be damage or poor contact between the CPU and its slot.

## Procedure

**Step 1** Perform maintenance according to the maintenance plan as soon as possible. Power off the server, and check whether the component and its slot are damaged or of poor contact.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Reseat the CPU. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

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**Step 3** Replace the CPU, and check whether the fault is rectified.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Replace the mainboard, and check whether the fault is rectified.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Contact technical support.

**----End**

# 2.10.14 ALM-0x000000E7 CPU is Down Cored (CPU, Minor Alarm)

## Description

Alarm message:

CPU *arg1* is down cored. Error code: *arg2*.

This alarm is generated when a CPU is down cored.

Alarm object: CPU

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x000000E7 | Minor | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | CPU socket number. |
| *arg2* | Error code of the alarm. |

## Impact on the System

The adjustment may cause system performance degradation.

## Possible Causes

- BIOS configuration error.
- CPU failure.

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### Procedure

**Step 1** Restart the server and enter the BIOS. Check whether **Local APIC Mode** is set to **xAPIC**.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Set **Local APIC Mode** to **x2APIC** or **Auto**. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Replace the CPU. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Contact technical support.

**----End**

## 2.10.15 ALM-0x000000F1 CPU Attestation Fails (CPU, Major Alarm)

### Description

Alarm message:

CPU *arg1* Attestation failed.

This alarm is generated when a CPU attestation failed.

Alarm object: CPU

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x000000F1 | Major | Yes |

### Parameters

| Name | Meaning |
|---|---|
| *arg1* | CPU socket number. |

### Impact on the System

The system may operate abnormally or the system intrusion may occur.

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### Possible Causes

The BIOS firmware is damaged or maliciously tampered.

### Procedure

**Step 1** Upgrade the BIOS firmware. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Contact technical support.

**----End**

## 2.10.16 ALM-0x000000F5 Incompatibility error between mainboard and CPU type (CPU, Critical Alarm)

### Description

Alarm message:

The *arg1* mainboard is incompatible with *arg2* CPU.

This alarm is generated when incompatibility between the mainboard and CPU type is detected.

Alarm object: CPU

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x000000F5 | Critical | Yes |

### Parameters

| Name | Meaning |
|---|---|
| *arg1* | Turin or Genoa (mainboard type). |
| *arg2* | Turin or Genoa (CPU type). |

### Impact on the System

The system cannot start.

### Possible Causes

The mainboard is incompatible with the CPU type.

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### Procedure

**Step 1** Replace with a CPU compatible with the mainboard. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **2**.

**Step 2** Contact technical support.

**----End**

## 2.10.17 ALM-0x02000039 Slow Disk Alarm (Disk, Major Alarm)

### Description

Alarm message:

The disk *arg1* is slow.

This alarm is generated when the disk responds slowly.

Alarm object: Disk

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x02000039 | Major | Yes |

### Parameters

| Name | Meaning |
|---|---|
| *arg1* | Disk number related to the alarm. For example, Disk0, and Disk5. |

### Impact on the System

The system performance may be affected.

### Possible Causes

The hard disk is faulty.

### Procedure

**Step 1** Replace the disk and check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

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**Step 2** Contact technical support engineer.

**----End**

# 2.10.18 ALM-0x0200003D Disk IO abnormal (Disk, Major Alarm)

## Description

Alarm message:

The IO status of disk *arg1* is abnormal or timeout.

This alarm is generated when the disk I/O is abnormal.

Alarm object: Disk

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x0200003D | Major | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Disk name related to the alarm. |

## Impact on the System

The system performance may be affected.

## Possible Causes

The IO of the disk is abnormal or timeout.

## Procedure

**Step 1** Replace the disk and check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Contact technical support engineer.

**----End**

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# 2.10.19 ALM-0x05000003 Hard Disk Backplane CPLD Self-Check Failed (Disk Backplane, Major Alarm)

## Description

Alarm message:

The disk backplane (*arg1*) CPLD self-check fails (SN: *arg2*, BN: *arg3*).

This alarm is generated when the disk backplane CPLD self-check failed.

Alarm object: Disk Backplane

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x05000003 | Major | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Disk backplane number. |
| *arg2* | Disk backplane serial number. |
| *arg3* | BOM code. |

## Impact on the System

Disk backplane fails to work, system stability is affected.

## Possible Causes

Disk backplane is faulty.

## Procedure

**Step 1** Replace the disk backplane. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Contact technical support engineer.

**----End**

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# 2.10.20 ALM-0x05000005 Disk Backplane Undervoltage (Disk Backplane, Major Alarm)

## Description

Alarm message:

The [*arg1*] disk backplane voltage (*arg2* V) at *arg3* detection point is lower than the undervoltage threshold (*arg4* V) (SN: *arg5*, BN: *arg6*).

NOTE

From iBMC V370, this alarm also includes the serial number and BOM code of the disk backplane.

This alarm is generated when the voltage of the detection point on the disk backplane is lower than the undervoltage threshold.

Alarm object: Disk Backplane

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x05000005 | Major | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Location of the disk backplane. |
| *arg2* | Current voltage of the detection point. |
| *arg3* | Voltage detection point. For example, **5V** or **12V**. |
| *arg4* | Undervoltage alarm threshold. |
| *arg5* | Disk backplane serial number. |
| *arg6* | BOM code. |

## Impact on the System

The disk backplane may run unstably, the system may run abnormally, or data may be lost.

## Possible Causes

- The iBMC is faulty.
- The disk backplane is faulty.

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### Procedure

**Step 1** Restart the iBMC. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Remove and reinstall the power cable or board. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Replace the disk backplane. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Contact technical support engineer.

**----End**

## 2.10.21 ALM-0x05000007 Disk Backplane Overvoltage (Disk Backplane, Major Alarm)

### Description

Alarm message:

The [*arg1*] disk backplane voltage (*arg2* V) at *arg3* detection point is lower than the undervoltage threshold *arg4* V) (SN: *arg5*, BN: *arg6*).

NOTE

From iBMC V370, this alarm also includes the serial number and BOM code of the disk backplane.

This alarm is generated when the disk backplane voltage exceeds the overvoltage major threshold.

Alarm object: Disk Backplane

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x05000007 | Major | Yes |

### Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Location of the disk backplane. |
| *arg2* | Current voltage of the detection point. |

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| Name | Meaning |
| --- | --- |
| *arg3* | Voltage detection point. For example, **5V** or **12V**. |
| *arg4* | Overvoltage alarm threshold. |
| *arg5* | Disk backplane serial number. |
| *arg6* | BOM code. |

### Impact on the System

The disk backplane may run unstably, the system may run abnormally, or data may be lost.

### Possible Causes

- The iBMC is faulty.
- The disk backplane is faulty.

### Procedure

**Step 1** Restart the iBMC. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Remove and reinstall the power cable or board. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Replace the disk backplane. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Contact technical support engineer.

**----End**

## 2.10.22 ALM-0x05000009 Failed to Read Disk Backplane Voltage (Disk Backplane, Minor Alarm)

### Description

Alarm message:

Failed to obtain the voltage at *arg1* detection point on the [*arg2*] disk backplane (SN: *arg3*, BN: *arg4*).

NOTE

From iBMC V370, this alarm also includes the serial number and BOM code of the disk backplane.

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This alarm is generated when the system failed to obtain the disk backplane voltage.

Alarm object: Disk Backplane

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x05000009 | Minor | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Voltage detection point. For example, **5V** or **12V**. |
| *arg2* | Location of the disk backplane. |
| *arg3* | Disk backplane serial number. |
| *arg4* | BOM code. |

## Impact on the System

The disk backplane may run unstably, the system may run abnormally, or data may be lost.

## Possible Causes

- The iBMC is faulty.
- The disk backplane is faulty.

## Procedure

**Step 1** Restart the iBMC. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Remove and reinstall the power cable or board. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Replace the disk backplane. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Contact technical support engineer.

**----End**

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# 2.10.23 ALM-0x0500000B Disk Backplane Power Failure (Disk Backplane, Critical Alarm)

## Description

Alarm message:

Power supply to [*arg1*] disk backplane [*arg2*] failed (SN: *arg3*, BN: *arg4*).

NOTE

From iBMC V370, this alarm also includes the serial number and BOM code of the disk backplane.

This alarm is generated when the power supply to the disk backplane is abnormal.

Alarm object: Disk Backplane

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x0500000B | Critical | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Location of the disk backplane. |
| *arg2* | Voltage detection point. For example, **5V** or **12V**. |
| *arg3* | Disk backplane serial number. |
| *arg4* | BOM code. |

## Impact on the System

The related services are affected, or data may be lost.

## Possible Causes

- The cable is not securely connected to the disk backplane or is faulty.
- The disk backplane is faulty.

## Procedure

**Step 1** Reinstall the cables on the disk backplane. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

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**Step 2** Replace the cables on the disk backplane. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Replace the disk backplane. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Contact technical support engineer.

**----End**

# 2.10.24 ALM-0x05000011 Disk Backplane Clock Lost (Disk Backplane, Major Alarm)

## Description

Alarm message:

[*arg1*] disk backplane [*arg2*] [*arg3*] clock signals lost.

This alarm is generated when the clock signal of the disk backplane is lost.

Alarm object: Disk Backplane

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x05000011 | Major | Yes |

## Parameters

| Name | Meaning |
|---|---|
| *arg1* | Location of the disk backplane. For example, **Rear**, **Inner**, or **Front**. |
| *arg2* | Slot number of the disk backplane, for example, **1**, **2**, or **3**. |
| *arg3* | Clock type, for example, **100MHz**. |

## Impact on the System

The system may stop responding, or data may be lost.

## Possible Causes

The disk backplane is faulty.

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### Procedure

**Step 1** Reinstall the cables on the disk backplane. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Replace the cables on the disk backplane. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Replace the disk backplane. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Contact technical support engineer.

**----End**

## 2.10.25 ALM-0x06000005 RAID Controller Card Fault (RAID Card, Major Alarm)

### Description

Alarm message:

*arg2* RAID controller card *arg1* failure (SN: *arg3*, BN: *arg4*).

NOTE

From iBMC V328, the RAID controller card and PSU alarms will also include the SN and BOM code, and the fan alarms will also include the BOM code.

This alarm is generated when the RAID controller card is faulty.

Alarm object: RAID Card

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x06000005 | Major | Yes |

### Parameters

| Name | Meaning |
|---|---|
| *arg1* | Slot number of the RAID controller card. |
| *arg2* | Front I/O module or compute module and its slot number, for example, **FM** or **CMn**. |
| *arg3* | SN of the RAID controller card. |

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| Name | Meaning |
| --- | --- |
| *arg4* | BOM code. |

## Impact on the System

Services related to the RAID controller card are affected, and the system may even stop responding.

## Possible Causes

- The RAID controller card is faulty.
- The BBU of the RAID controller card is faulty.

## Procedure

If the RAID card supports out-of-band management and the iBMC version is V328 or later, perform the following steps:

**Step 1** Replace the RAID controller card. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Replace the BBU of the RAID controller card. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Contact technical support engineer.

**----End**

If the RAID card does not support out-of-band management and the iBMC version is earlier than V328, perform the following steps:

**Step 1** Restart the server and open the BIOS Device Manager in UEFI mode. On the **Driver Health** screen, select **Repair the whole platform**, and press **Enter**. Then, check whether the alarm is cleared.

For details, see **Troubleshooting** of the corresponding RAID controller card model in the *RAID Controller Card User Guide*.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Remove and reinstall the RAID controller card. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Replace the RAID controller card and connect the power cable. After the server is powered on, check whether the alarm is cleared.

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- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Replace the BBU of the RAID controller card. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Contact technical support engineer.

**----End**

# 2.10.26 ALM-0x06000007 RAID Controller Card MCE/AER Error (RAID Card, Critical Alarm)

## Description

Alarm message:

The *arg3* RAID controller card *arg1* triggered an uncorrectable error, *arg2* (SN: *arg4*, BN: *arg5*).

NOTE

From iBMC V328, the RAID controller card and PSU alarms will also include the SN and BOM code, and the fan alarms will also include the BOM code.

This alarm is generated when an uncorrectable error occurs on a RAID controller card.

Alarm object: RAID Card

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x06000007 | Critical | Yes |

## Parameters

| Name | Meaning |
|---|---|
| *arg1* | Slot number of the RAID controller card. |
| *arg2* | Error code of the alarm. |
| *arg3* | Front I/O module or compute module and its slot number, for example, **FM** or **CMn**. |
| *arg4* | SN of the RAID controller card. |
| *arg5* | BOM code. |

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### Impact on the System

The RAID controller card may run unstably or be faulty. The system may even stop responding.

### Possible Causes

- The RAID controller card is faulty.
- The BBU of the RAID controller card is faulty.
- The mainboard is faulty.

### Procedure

**Step 1** Remove and reinstall the RAID controller card. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Replace the RAID controller card. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Replace the BBU of the RAID controller card. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Replace the mainboard. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Contact technical support.

**----End**

## 2.10.27 ALM-0x06000025 Communication with the RAID Controller Card Lost (RAID Card, Major Alarm)

### Description

Alarm message:

Communication between the iBMC and *arg2* RAID controller card *arg1* failed (SN: *arg3*, BN: *arg4*).

NOTE

From iBMC V328, the RAID controller card and PSU alarms will also include the SN and BOM code, and the fan alarms will also include the BOM code.

This alarm is generated when the communication with the RAID controller card was lost.

Alarm object: RAID Card

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## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x06000025 | Major | Yes |

## Parameters

| Name | Meaning |
|---|---|
| *arg1* | Slot number of the RAID controller card. |
| *arg2* | Front I/O module or compute module and its slot number, for example, **FM** or **CMn**. |
| *arg3* | SN of the RAID controller card. |
| *arg4* | BOM code. |

## Impact on the System

The RAID controller card may run unstably or be faulty. The system may even stop responding.

## Possible Causes

- The initialization of the RAID controller card failed.
- The RAID controller card is faulty.
- The BBU of the RAID controller card is faulty.
- The PCIe port corresponding to the RAID controller card is disabled.

## Procedure

**Step 1** Check whether the server has the alarm 0x28000001, 0x06000005, or 0x06000027. If yes, clear the alarm.

**Step 2** Restart the server and open the **Device Manager** page on BIOS in UEFI mode.

**Step 3** On the **Device Manager** page, select **Some drivers are not healthy** and then click **Repair the whole platform**. Check whether the alarm is cleared.

For details, see **Troubleshooting** of the corresponding RAID controller card model in the *RAID Controller Card User Guide*.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** On the BIOS, check whether the PCIe port corresponding to the RAID controller card is disabled.

The BIOS configuration screen varies depending on the platform and version. For details, see the BIOS user guide of the server you use.

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- If yes, go to **Step 5**.
- If no, go to **Step 6**.

**Step 5** Enable the PCIe port of the RAID controller card on the BIOS, save the settings, and restart the OS. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 6**.

**Step 6** On the OS, check whether the RAID controller card driver version matches the RAID controller card firmware version. Upgrade the RAID controller card firmware or driver to the latest version. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 7**.

**Step 7** Replace the RAID controller card. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 8**.

**Step 8** Replace the BBU of the RAID controller card. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 9**.

**Step 9** Contact technical support engineer.

**----End**

# 2.10.28 ALM-0x06000027 Initialization of the RAID Controller Card Abnormal (RAID Card, Major Alarm)

## Description

Alarm message:

Initialization of *arg2* RAID controller card *arg1* is abnormal (SN: *arg3*, BN: *arg4*).

NOTE

From iBMC V328, the RAID controller card and PSU alarms will also include the SN and BOM code, and the fan alarms will also include the BOM code.

This alarm is generated when the initialization of the RAID controller card is abnormal.

Alarm object: RAID Card

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x06000027 | Major | Yes |

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## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Slot number of the RAID controller card. |
| *arg2* | Front I/O module or compute module and its slot number, for example, **FM** or **CMn**. |
| *arg3* | SN of the RAID controller card. |
| *arg4* | BOM code. |

## Impact on the System

The system may fail to start.

## Possible Causes

- The RAID controller card is faulty.
- The BBU of the RAID controller card is faulty.
- The mainboard is faulty.

## Procedure

**Step 1** Reseat the RAID controller card. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Replace the RAID controller card. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3** .

**Step 3** Replace the BBU of the RAID controller card. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 4** Replace the mainboard. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Contact technical support engineer.

**----End**

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# 2.10.29 ALM-0x0600002D RAID Card Enumeration Failed (RAID Card, Major Alarm)

## Description

Alarm message:

Enumeration of the RAID controller card (*arg1*) Failed (SN: *arg2*, BN: *arg3*).

NOTE

From iBMC V328, the RAID controller card and PSU alarms will also include the SN and BOM code, and the fan alarms will also include the BOM code.

This alarm is generated when the RAID controller card enumeration failed.

Alarm object: RAID Card

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x0600002D | Major | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Slot number of the RAID controller card. For example, **RAID Card 1**. |
| *arg2* | SN of the RAID controller card. |
| *arg3* | BOM code. |

## Impact on the System

The RAID controller card cannot be identified by the system.

## Possible Causes

- The RAID controller card is in poor contact.
- The RAID controller card is faulty.

## Procedure

**Step 1** Power off the server and check whether there is damage or poor contact between the component and its slot.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

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**Step 2** Remove and reinstall the RAID controller card. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Replace the RAID controller card. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Contact technical support engineer.

**----End**

# 2.10.30 ALM-0x0600002F Incompatible RAID Controller Card (RAID Card, Minor Alarm)

## Description

Alarm message:

RAID controller card *arg1*) is incompatible (SN: *arg2*, BN: *arg3*).

NOTE

From iBMC V328, the RAID controller card and PSU alarms will also include the SN and BOM code, and the fan alarms will also include the BOM code.

This alarm is generated when the RAID controller card is incompatible.

Alarm object: RAID Card

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x0600002F | Minor | Yes |

## Parameters

| Name | Meaning |
|---|---|
| *arg1* | Slot number of the RAID controller card. For example, **RAID Card 1**. |
| *arg2* | SN of the RAID controller card. |
| *arg3* | BOM code. |

## Impact on the System

The out-of-band management function of the RAID controller card is unavailable.

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### Possible Causes

An incompatible RAID controller card is used.

### Procedure

**Step 1** Replace the RAID controller card with a RAID controller card that is supported in the compatibility list. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Contact technical support engineer.

**----End**

## 2.10.31 ALM-0x08000001 PCIe Card MCE/AER Fault (PCIe Card, Critical Alarm)

### Description

Alarm message:

The [*arg1*] PCIe card *arg2* (*arg3*) triggered an uncorrectable error, *arg4*.

This alarm is generated when an uncorrectable error occurs on a PCIe card.

Alarm object: PCIe Card

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x08000001 | Critical | Yes |

### Parameters

| Name | Meaning |
|---|---|
| *arg1* | Location of the PCIe card. For example, **front** or **rear**. |
| *arg2* | Slot number of the PCIe card, for example, **1** or **2**. |
| *arg3* | Type of the PCIe card, for example, **M60 GPU**. |
| *arg4* | Error code of the alarm. |

### Impact on the System

Services related to the PCIe card are affected, and the system may even stop responding.

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### Possible Causes

- The PCIe card is faulty.
- The mainboard or PCIe riser card holding the PCIe card is faulty.

### Procedure

**Step 1** Remove and reinstall the PCIe card. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Replace the PCIe card. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Replace the mainboard or PCIe riser card holding the PCIe card. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Contact technical support engineer.

**----End**

## 2.10.32 ALM-0x08000007 Failed to Obtain PCIe Card Electronic Label Data (PCIe Card, Minor Alarm)

### Description

Alarm message:

Failed to obtain electronic label data of the [*arg1*] PCIe card *arg2* (*arg3*).

This alarm is generated when the system failed to obtain the electronic label data of the PCIe card.

Alarm object: PCIe Card

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x08000007 | Minor | Yes |

### Parameters

| Name | Meaning |
|---|---|
| *arg1* | Location of the PCIe card. For example, **front** or **rear**. |
| *arg2* | Slot number of the PCIe card, for example, **1** or **2**. |

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| Name | Meaning |
| --- | --- |
| *arg3* | Type of the PCIe card, for example, **M60 GPU**. |

## Impact on the System

The system cannot properly read the PCIe card asset information.

## Possible Causes

The asset information is damaged.

## Procedure

**Step 1** Restart the iBMC. Then, check whether the alarm is cleared.

For details, see the iBMC user guide of the server you use.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Replace the PCIe card. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Contact technical support engineer.

**----End**

# 2.10.33 ALM-0x0800001B PCIe Card Hardware Fault (PCIe Card, Major Alarm)

## Description

Alarm message:

A hardware fault (*arg1*) occurs in [*arg2*] PCIe card *arg3* (*arg4*).

This alarm is generated when a hardware fault is detected on the PCIe card.

Alarm object: PCIe Card

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x0800001B | Major | Yes |

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### Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Description of the hardware fault. For example, **system power loss** or **core clock signal loss**. |
| *arg2* | Location of the PCIe card. For example, **front** or **rear**. |
| *arg3* | Slot number of the PCIe card, for example, **1** or **2**. |
| *arg4* | Type of the PCIe card, for example, **M60 GPU**. |

### Impact on the System

The PCIe card may work abnormally or stop responding, which causes the system to run abnormally.

### Possible Causes

The PCIe card is faulty.

### Procedure

**Step 1** Replace the PCIe card. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Contact technical support engineer.

**----End**

## 2.10.34 ALM-0x0800001D PCIe Card Boot Drive Not Detected (PCIe Card, Major Alarm)

### Description

Alarm message:

The [*arg1*] PCIe card *arg2* (*arg3*) boot disk *arg4* does not exist.

This alarm is generated when the boot drive of the PCIe card is not detected.

Alarm object: PCIe Card

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x0800001D | Major | Yes |

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## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Location of the PCIe card. For example, **front** or **rear**. |
| *arg2* | Slot number of the PCIe card, for example, **1** or **2**. |
| *arg3* | Type of the PCIe card, for example, **M60 GPU**. |
| *arg4* | Boot drive of the PCIe card. For example, **M.2_1** or **M.2_2**. |

## Impact on the System

The PCIe card cannot start properly.

## Possible Causes

- The boot drive of the PCIe card is not installed.
- The PCIe card is faulty.

## Procedure

**Step 1** Power off the server, remove the PCIe card, and check whether boot drives are fully configured.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Reinstall the boot drives, insert the PCIe card into the server, and power on the server. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 3** Fully configure boot drives, insert the PCIe card into the server, and power on the server. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Replace the PCIe card for which the alarm is generated with a PCIe card with fully configured boot drives. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Contact technical support engineer.

**----End**

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# 2.10.35 ALM-0x0800001F PCIe Card DIMM Fault (PCIe Card, Major Alarm)

## Description

Alarm message (iBMC versions earlier than V312):

The [*arg1*] PCIe card *arg2* (*arg3*) *arg4* is *arg5*.

Alarm message (iBMC V312 or later):

The [*arg1*] PCIe card *arg2* (*arg3*) *arg4* is *arg5*. [*arg6*] [*arg7*]

This alarm is generated when a DIMM fault is detected on the PCIe card.

Alarm object: PCIe Card

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x0800001F | Major | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Location of the PCIe card. For example, **front** or **rear**. |
| *arg2* | Slot number of the PCIe card, for example, **1** or **2**. |
| *arg3* | Type of the PCIe card, for example, **M60 GPU**. |
| *arg4* | Silkscreen of the DIMM on the PCIe card. For example, **DIMM00** or **DIMM10**. |
| *arg5* | Description of the DIMM fault. For example, **not detected** or **isolated**. |
| *arg6* | Supplementary information about the alarm, for example, **Error Code**.<br>**NOTE**<br>This parameter is available only for iBMC V312 and later versions. |
| *arg7* | Error code of the alarm, for example, **(7168)**.<br>**NOTE**<br>This parameter is available only for iBMC V312 and later versions. |

## Impact on the System

The performance of the system installed on the PCIe card is affected, or the system may fail to start.

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### Possible Causes

- The memory of the PCIe card is not installed or is isolated.
- The PCIe card is faulty.

### Procedure

**Step 1** Replace the PCIe card. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **2**.

**Step 2** Contact technical support engineer.

**----End**

## 2.10.36 ALM-0x08000021 PCIe Card Firmware Initialization Error (PCIe Card, Major Alarm)

### Description

Alarm message (iBMC versions earlier than V312):

The [*arg1*] PCIe card *arg2* (*arg3*) *arg4* has a firmware initialization alarm [*arg5*].

Alarm message (iBMC V312 or later):

The [*arg1*] PCIe card *arg2* (*arg3*) *arg4* has a firmware initialization alarm [*arg5*]. [*arg6*] [*arg7*]

This alarm is generated when an error is detected during the firmware initialization of the PCIe card.

Alarm object: PCIe Card

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x08000021 | Major | Yes |

### Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Location of the PCIe card. For example, **front** or **rear**. |
| *arg2* | Slot number of the PCIe card, for example, **1** or **2**. |
| *arg3* | Type of the PCIe card, for example, **M60 GPU**. |
| *arg4* | Module of the PCIe card. For example, **CDR** or **MAC address**. |

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| Name | Meaning |
| --- | --- |
| *arg5* | Object where the error occurred. For example, **CDR0** or **Eth1**. |
| *arg6* | Supplementary information about the alarm, for example, **Error Code**.<br>**NOTE**<br>This parameter is available only for iBMC V312 and later versions. |
| *arg7* | Error code of the alarm, for example, **(7168)**.<br>**NOTE**<br>This parameter is available only for iBMC V312 and later versions. |

## Impact on the System

The system installed on the PCIe card may fail to start.

## Possible Causes

An exception occurs during the PCIe card firmware initialization, such as the BIOS CRC/CDR/black box memory module/MAC address initialization.

## Procedure

**Step 1** Upgrade the PCIe card firmware to the latest version. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Replace the PCIe card. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Contact technical support engineer.

**----End**

# 2.10.37 ALM-0x08000023 PCIe Card CPU Initialization Error (PCIe Card, Major Alarm)

## Description

Alarm message:

The [*arg1*] PCIe card *arg2* (*arg3*) CPU *arg4* has an initialization alarm.

This alarm is generated when an error is detected during the initialization of the CPU modules of the PCIe card.

Alarm object: PCIe Card

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### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x08000023 | Major | Yes |

### Parameters

| Name | Meaning |
|---|---|
| *arg1* | Location of the PCIe card. For example, **front** or **rear**. |
| *arg2* | Slot number of the PCIe card, for example, **1** or **2**. |
| *arg3* | Type of the PCIe card, for example, **M60 GPU**. |
| *arg4* | Module where the error occurred. For example, **PCIe EP** or **L3 cache**. |

### Impact on the System

The system installed on the PCIe card may fail to start.

### Possible Causes

The CPU module initialization of the PCIe is abnormal.

### Procedure

**Step 1** Replace the PCIe card. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Contact technical support engineer.

**----End**

## 2.10.38 ALM-0x08000025 PCIe Card Watchdog Timed Out (PCIe Card, Major Alarm)

### Description

Alarm message:

The [*arg1*] PCIe card *arg2* (*arg3*) has a watchdog timeout alarm during *arg4*.

This alarm is generated when the watchdog timer expired during certain process of the PCIe card.

Alarm object: PCIe Card

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## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x08000025 | Major | Yes |

## Parameters

| Name | Meaning |
|---|---|
| *arg1* | Location of the PCIe card. For example, **front** or **rear**. |
| *arg2* | Slot number of the PCIe card, for example, **1** or **2**. |
| *arg3* | Type of the PCIe card, for example, **M60 GPU**. |
| *arg4* | System status. For example, **BIOS loading**, **OS loading**, or **OS running**. |

## Impact on the System

The system installed on the PCIe card may restart.

## Possible Causes

The BIOS or system software of the PCIe card does not clear the watchdog counter within the timeout period.

## Procedure

**Step 1** Power off and then power on the OS of the standard PCIe card. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Upgrade the PCIe card software to the latest version. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Replace the PCIe card. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Contact technical support engineer.

**----End**

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# 2.10.39 ALM-0x08000041 PCIe Card Power Fault (PCIe Card, Major Alarm)

## Description

Alarm message:

The [*arg1*] PCIe card *arg2* (*arg3*) power failure. [*arg4*] [*arg5*]

This alarm is generated when a power failure occurs on the PCIe card.

Alarm object: PCIe Card

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x08000041 | Major | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Location of the PCIe card. For example, **front** or **rear**. |
| *arg2* | Slot number of the PCIe card, for example, **1** or **2**. |
| *arg3* | Type of the PCIe card, for example, **M60 GPU**. |
| *arg4* | Supplementary information about the alarm, for example, **Error Code**.<br>**NOTE**<br>This parameter is available only for iBMC V308 and later versions. |
| *arg5* | Error code of the alarm, for example, **(7001)**.<br>**NOTE**<br>This parameter is available only for iBMC V308 and later versions. |

## Impact on the System

Services related to the PCIe card are affected, and the system may run abnormally.

## Possible Causes

- The PCIe card is faulty.
- The PCIe card slot is faulty.

## Procedure

**Step 1** Reinstall the PCIe card so that it is in good contact with its slot. Then, check whether the alarm is cleared.

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- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Replace the PCIe card. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**

**Step 3** Replace the component where the PCIe card slot is located. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Contact technical support engineer.

**----End**

# 2.10.40 ALM-0x08000043 PCIe Card FPGA Loading Failed (PCIe Card, Major Alarm)

## Description

Alarm message:

FPGA load failed on [*arg1*] PCIe card *arg2* (*arg3*).

This alarm is generated when the FPGA loading failed on the PCIe card.

Alarm object: PCIe Card

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x08000043 | Major | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Location of the PCIe card. For example, **front** or **rear**. |
| *arg2* | Slot number of the PCIe card, for example, **1** or **2**. |
| *arg3* | Type of the PCIe card, for example, **M60 GPU**. |

## Impact on the System

Services related to the PCIe card are affected, and the system may run abnormally.

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### Possible Causes

The PCIe card is faulty.

### Procedure

**Step 1** Replace the PCIe card. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Contact technical support engineer.

**----End**

## 2.10.41 ALM-0x08000045 PCIe Card EEPROM Fault (PCIe Card, Major Alarm)

### Description

Alarm message:

The [*arg1*] PCIe card *arg2* (*arg3*) EEPROM is fault.

This alarm is generated when the EEPROM on the PCIe card is faulty.

Alarm object: PCIe Card

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x08000045 | Major | Yes |

### Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Location of the PCIe card. For example, **front** or **rear**. |
| *arg2* | Slot number of the PCIe card, for example, **1** or **2**. |
| *arg3* | Type of the PCIe card, for example, **M60 GPU**. |

### Impact on the System

Services related to the PCIe card are affected, and the system may run abnormally.

### Possible Causes

The PCIe card is faulty.

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### Procedure

**Step 1** Replace the PCIe card. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Contact technical support engineer.

**----End**

## 2.10.42 ALM-0x0800004B PCIe Plug-in RAID Controller Card Fault (PCIe Card, Major Alarm)

### Description

Alarm message:

The [*arg1*] PCIe card *arg2* (*arg3*) is fault.

This alarm is generated when the PCIe Plug-in RAID controller card is faulty.

Alarm object: PCIe Card

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x0800004B | Major | Yes |

### Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Location of the PCIe card. For example, **front**, **inner**, or **rear**. |
| *arg2* | Slot number of the PCIe card. |
| *arg3* | It is **RAID**. |

### Impact on the System

Services related to the RAID controller card are affected, and the system may even stop responding.

### Possible Causes

The RAID controller card is faulty.

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## Procedure

If the RAID card supports out-of-band management and the iBMC version is V328 or later, perform the following steps:

**Step 1** Replace the RAID controller card. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Replace the BBU of the RAID controller card. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Contact technical support engineer.

**----End**

If the RAID card does not support out-of-band management and the iBMC version is earlier than V328, perform the following steps:

**Step 1** Restart the server and open the BIOS Device Manager in UEFI mode. On the **Driver Health** screen, select **Repair the whole platform**, and press **Enter**. Then, check whether the alarm is cleared.

For details, see **Troubleshooting** of the corresponding RAID controller card model in the *RAID Controller Card User Guide*.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Remove and reinstall the RAID controller card. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Replace the RAID controller card and connect the power cable. After the server is powered on, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Replace the BBU of the RAID controller card. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Contact technical support engineer.

**----End**

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# 2.10.43 ALM-0x0800004D PCIe Card Installed Without Stopping Services (PCIe Card, Major Alarm)

## Description

Alarm message:

The *arg1* PCIe card *arg2 arg3* pluged in.

This alarm is generated when a PCIe card is installed while the server is not powered off.

Alarm object: PCIe Card

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x0800004D | Major | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Serial number of the PCIe card, for example, **1** or **2**. |
| *arg2* | Slot number of the PCIe card, for example, **1** or **2**. |
| *arg3* | Type of the card, for example, **PCIe Card** or **SDI Card**. |

## Impact on the System

The PCIe card cannot be identified by the system or the system cannot respond.

## Possible Causes

The PCIe card is installed while the server is not powered off.

## Procedure

**Step 1** Power off the server and check whether there is damage or poor contact between the component and its slot.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Remove and reinstall the PCIe card. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

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**Step 3** Power on the server. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Contact technical support engineer.

**----End**

# 2.10.44 ALM-0x0800004F PCIe Card Removed Without Stopping Services (PCIe Card, Major Alarm)

## Description

Alarm message:

The *arg1* PCIe card *arg2 arg3* pluged out.

This alarm is generated when a PCIe card is removed while the server is not powered off.

Alarm object: PCIe Card

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x0800004F | Major | Yes |

## Parameters

| Name | Meaning |
|---|---|
| *arg1* | Serial number of the PCIe card, for example, **1** or **2**. |
| *arg2* | Slot number of the PCIe card, for example, **1** or **2**. |
| *arg3* | Type of the card, for example, **PCIe Card** or **SDI Card**. |

## Impact on the System

Services related to the PCIe card are interrupted, or the system stops responding.

## Possible Causes

The PCIe card is removed while the server is powered on.

## Procedure

**Step 1** Power off the server and check whether there is damage or poor contact between the component and its slot.

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- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Remove and reinstall the PCIe card. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Power on the server. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Contact technical support engineer.

**----End**

# 2.10.45 ALM-0x08000051 Clock Out-of-Lock (PCIe Card, Major Alarm)

## Description

Alarm message:

The clock is out of lock on *arg1* PCIe card *arg2* (*arg3*). Error code: *arg4*

This alarm is generated when the clock on the PCIe card is out-of-lock.

Alarm object: PCIe Card

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x08000051 | Major | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Location of the PCIe card, for example, **front** or **rear**. |
| *arg2* | Slot number of the PCIe card, for example, **1** or **2**. |
| *arg3* | Type of the PCIe card. It is **FPGA**. |
| *arg4* | Error code. |

## Impact on the System

The PCIe card may run unstably, and the system may run abnormally.

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### Possible Causes

The DA200 card is faulty.

### Procedure

**Step 1** Replace the DA200 card, and then check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Contact technical support engineer.

**----End**

## 2.10.46 ALM-0x08000053 DDR Calibration Failed (PCIe Card, Major Alarm)

### Description

Alarm message:

The DDR calibration failed on *arg1* PCIe card *arg2* (*arg3*). Error code: *arg4*

This alarm is generated when the DDR calibration on the PCIe card failed.

Alarm object: PCIe Card

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x08000053 | Major | Yes |

### Parameters

| Name | Meaning |
|---|---|
| *arg1* | Location of the PCIe card, for example, **front** or **rear**. |
| *arg2* | Slot number of the PCIe card, for example, **1** or **2**. |
| *arg3* | Type of the PCIe card. It is **FPGA**. |
| *arg4* | Error code. |

### Impact on the System

The PCIe card may run unstably, and the system may run abnormally.

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### Possible Causes

The DA200 card is faulty.

### Procedure

**Step 1** Replace the DA200 card, and then check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Contact technical support engineer.

**----End**

## 2.10.47 ALM-0x08000055 DDR Abnormal (PCIe Card, Major Alarm)

### Description

Alarm message:

The DDR on *arg1* PCIe card *arg2* (*arg3*) is malfunctioning. Error code: *arg4*

This alarm is generated when the DDR on the PCIe card is malfunctioning.

Alarm object: PCIe Card

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x08000055 | Major | Yes |

### Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Location of the PCIe card, for example, **front** or **rear**. |
| *arg2* | Slot number of the PCIe card, for example, **1** or **2**. |
| *arg3* | Type of the PCIe card. It is **FPGA**. |
| *arg4* | Error code. |

### Impact on the System

The PCIe card may run unstably, and the system may run abnormally.

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### Possible Causes

The DA200 card is faulty.

### Procedure

**Step 1** Replace the DA200 card, and then check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Contact technical support engineer.

**----End**

## 2.10.48 ALM-0x08000057 PCIe Link Fault (PCIe Card, Major Alarm)

### Description

Alarm message:

The link on *arg1* PCIe card *arg2* (*arg3*) is faulty. Error code: *arg4*

This alarm is generated when the PCIe link on the PCIe card is faulty.

Alarm object: PCIe Card

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x08000057 | Major | Yes |

### Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Location of the PCIe card, for example, **front** or **rear**. |
| *arg2* | Slot number of the PCIe card, for example, **1** or **2**. |
| *arg3* | Type of the PCIe card. It is **FPGA**. |
| *arg4* | Error code. |

### Impact on the System

The PCIe card may run unstably, and the system may run abnormally.

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### Possible Causes

The DA200 card is faulty.

### Procedure

**Step 1** Replace the DA200 card, and then check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Contact technical support engineer.

**----End**

## 2.10.49 ALM-0x08000059 Services Interrupted (PCIe Card, Major Alarm)

### Description

Alarm message:

Services on *arg1* PCIe card *arg2* (*arg3*) are interrupted. Error code: *arg4*

This alarm is generated when the PCIe card services are interrupted.

Alarm object: PCIe Card

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x08000059 | Major | Yes |

### Parameters

| Name | Meaning |
|---|---|
| *arg1* | Location of the PCIe card, for example, **front** or **rear**. |
| *arg2* | Slot number of the PCIe card, for example, **1** or **2**. |
| *arg3* | Type of the PCIe card. It is **FPGA**. |
| *arg4* | Error code. |

### Impact on the System

The PCIe card may run unstably, and the system may run abnormally.

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### Possible Causes

The DA200 card is faulty.

### Procedure

**Step 1** Replace the DA200 card, and then check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Contact technical support engineer.

**----End**

## 2.10.50 ALM-0x0800005B Failed to Obtain the PCIe Card Power (PCIe Card, Minor Alarm)

### Description

Alarm message:

```
Failed to obtain the power of PCIe card (arg3) arg1 in slot arg2.
```

This alarm is generated when failed to obtain the PCIe card power.

Alarm object: PCIe Card

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x0800005B | Minor | Yes |

### Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Serial number of the PCIe card, for example, 1 or 2. |
| *arg2* | Slot number of the PCIe card, for example, 1 or 2. |
| *arg3* | PCIe card name, for example, PCIe Card, or SDI card. |

### Impact on the System

The power cannot be monitored.

### Possible Causes

- The i2c channel is faulty.

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- The PCIe Card is faulty.

### Procedure

**Step 1** Power off the server and check whether the PCIe card is damaged or is not firmly seated in the slot.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Replace the PCIe card and power on the server.Then check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Contact technical support engineer.

**----End**

## 2.10.51 ALM-0x0800005D PCIe Card Self-Test Failed (PCIe Card, Major Alarm)

### Description

Alarm message:

Self-test failed on *arg1* PCIe card *arg2* (*arg3*). Error code: *arg4*

This alarm is generated when the PCIe card self-test failed.

Alarm object: PCIe Card

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x0800005D | Major | Yes |

### Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Location of the PCIe card. For example, **FIO1**. |
| *arg2* | Slot number of the PCIe card, for example, **1** or **2**. |
| *arg3* | PCIe card name, for example, **FPGA**, or **SDI card**. |
| *arg4* | Error code of the alarm. |

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### Impact on the System

The PCIe card is malfunctioning, and related services are affected.

### Possible Causes

The PCIe card is faulty.

### Procedure

**Step 1** Replace the PCIe card. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Contact technical support engineer.

**----End**

## 2.10.52 ALM-0x08000061 UEs on PCIe Card (PCIe Card, Critical Alarm)

### Description

Alarm message:

Unrecoverable errors are detected on *arg1* PCIe card *arg2* (*arg3*). Error code: *arg4*

This alarm is generated when unrecoverable errors (UEs) are detected on a PCIe card.

Alarm object: PCIe Card

NOTE

iBMC V550 and later versions do not support this alarm.

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x08000061 | Critical | Yes |

### Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Location of the PCIe card. For example, **FIO1**. |
| *arg2* | Slot number of the PCIe card, for example, **1** or **2**. |
| *arg3* | PCIe card name, for example, **FPGA**, or **SDI card**. |
| *arg4* | Error code of the alarm. |

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### Impact on the System

The PCIe card runs unstably, and the system runs abnormally.

### Possible Causes

The PCIe card is faulty.

### Procedure

**Step 1** Restart the server, and check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Replace the PCIe card. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Contact technical support engineer.

**----End**

## 2.10.53 ALM-0x08000063 Optical Module on the PCIe Card Overtemperature (PCIe Card, Minor Alarm)

### Description

Alarm message:

The [*arg1*] *arg2* optical module [*arg3*] temperature (*arg4* degrees C) exceeds the overtemperature threshold (*arg5* degrees C).

This alarm is generated when the optical module temperature on a PCIe card exceeds the overtemperature threshold. This alarm is cleared when the optical module temperature is within the normal range.

Alarm object: PCIe Card

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x08000063 | Minor | Yes |

### Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | PCIe card holding the optical module, for example, **FIO**. |

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| Name | Meaning |
| --- | --- |
| *arg2* | Name and slot No. of the PCIe card, for example, **PCIe Card 3**. |
| *arg3* | Port No. of the optical module, for example, **1** or **2**. |
| *arg4* | Current reading of the sensor. |
| *arg5* | Alarm threshold. |

## Impact on the System

Services related to the optical module are affected.

## Possible Causes

- A fan module is faulty.
- The ambient temperature exceeds the normal range.
- The air inlet or outlet is blocked.
- The optical module is faulty.

## Procedure

**Step 1** Check whether there is a fan alarm.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Replace the fan module. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Check whether the equipment room temperature exceeds the normal range.

- If yes, go to **Step 4**.
- If no, go to **Step 5**.

**Step 4** Reduce the equipment room temperature to the normal range. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Check whether the server air inlet or outlet is blocked.

- If yes, go to **Step 6**.
- If no, go to **Step 7**.

**Step 6** Clear the blockage. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 7**.

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**Step 7** Replace the optical module. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 8**.

**Step 8** Contact technical support engineer.

**----End**

# 2.10.54 ALM-0x08000067 PCIe Device Enumeration Failed (PCIe Card, Major Alarm)

## Description

Alarm message:

Enumeration of the PCIe device (*arg3*) *arg2* on *arg1* failed.

This alarm is generated when the PCIe card enumeration failed.

Alarm object: PCIe Card

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x08000067 | Major | Yes |

## Parameters

| Name | Meaning |
|---|---|
| *arg1* | Location of the PCIe card, for example, **GpuBoard** or **Riser**. |
| *arg2* | Slot number of the PCIe card, for example, **1** or **2**. |
| *arg3* | PCIe card name, for example, **PCIe Card** or **SDI Card**. |

## Impact on the System

The PCIe card cannot be identified.

## Possible Causes

- The power cable of the PCIe card is not properly connected.
- The PCIe card is faulty.

## Procedure

**Step 1** If the PCIe card has independent power supply, check whether the power cable of the PCIe card is properly connected.

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- If yes, go to **Step 3**.
- If no, go to **Step 2**.

**Step 2** Connect the power cable of the PCIe card properly and check whether the alarm has been cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Remove and reinstall the PCIe card. Then check whether the alarm has been cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Replace the PCIe card and check whether the alarm has been cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Contact technical support engineer.

**----End**

# 2.10.55 ALM-0x0800006D PCIe Memory Error Count Exceeds the Threshold (PCIe Card, Major Alarm)

## Description

Alarm message:

The *arg1* PCIe card *arg2* (*arg3*) memory *arg4* count(*arg5*) exceeds the threshold(*arg6*).

This alarm is generated when the iBMC detects that the number of memory errors of the PCIe card exceeds the threshold.

Alarm object: PCIe Card

iBMC V296 and later support this alarm.

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x0800006D | Major | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Location of the PCIe card, for example, **GpuBoard** or **Riser**. |
| *arg2* | Slot number of the PCIe card, for example, **1** or **2**. |
| *arg3* | PCIe card name, for example, **FPGA** or **P40 GPU**. |

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| Name | Meaning |
| --- | --- |
| *arg4* | Type of the error count, for example, **Retired Page**. |
| *arg5* | Current value of the error count. |
| *arg6* | Threshold of the error count, for example, **60**. |

## Impact on the System

The PCIe card may run unstably or fail, and the system may run abnormally.

## Possible Causes

The PCIe card is faulty.

## Procedure

**Step 1** Restart the PCIe card or the service system. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Replace the PCIe card. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Contact technical support engineer.

**----End**

# 2.10.56 ALM-0x0800006F PCIe Card Bandwidth Decreased (PCIe Card, Minor Alarm)

## Description

Alarm message:

The *arg1* PCIe card *arg2 arg3* bandwidth decreased.

This alarm is generated when the PCIe card bandwidth decreased.

Alarm object: PCIe Card

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x0800006F | Minor | Yes |

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### Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Location of the PCIe card, for example, **GpuBoard**. |
| *arg2* | Slot number of the PCIe card, for example, **1** or **2**. |
| *arg3* | PCIe card name, for example, **SDI Card**. |

### Impact on the System

The system performance is affected.

### Possible Causes

The PCIe card or its slot is damaged, or the PCIe card has poor contact with its slot.

### Procedure

**Step 1** Power off the server, and check whether the PCIe card or its slot is damaged, or whether the PCIe card has poor contact with its slot.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Reseat the PCIe card. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Replace the PCIe card. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Replace the board holding the PCIe card. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Contact technical support engineer.

**----End**

## 2.10.57 ALM-0x08000073 PCIe Card Component Absent (PCIe Card, Minor Alarm)

### Description

Alarm message:

The *arg1* PCIe card *arg2* (*arg3*) *arg4* is absent.

This alarm is generated when the PCIe card cannot be detected.

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Alarm object: PCIe Card

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x08000073 | Minor | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Location of the PCIe card, for example, **GpuBoard** or **Riser**. |
| *arg2* | Slot number of the PCIe card, for example, **1** or **2**. |
| *arg3* | PCIe card name, for example, **SDI** or **NIC**. |
| *arg4* | PCIe card component name, for example, **NetCard** or **TransformCard**. |

## Impact on the System

The PCIe card is malfunctioning.

## Possible Causes

- The PCIe card component is not installed.
- The power cable is not properly connected.

## Procedure

**Step 1** Check whether the PCIe card component is installed.

- If yes, go to **Step 3**.
- If no, go to **Step 2**.

**Step 2** Install the PCIe card component. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Check whether the power cable is properly connected.

- If yes, go to **Step 5**.
- If no, go to **Step 4**.

**Step 4** Connect the power cable properly and check whether the alarm has been cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Replace the component. Then, check whether the alarm is cleared.

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- If yes, no further action is required.
- If no, go to **Step 6**.

**Step 6** Contact technical support engineer.

**----End**

# 2.10.58 ALM-0x08000075 Failed to Obtain PCIe Card Hardware Information (PCIe Card, Minor Alarm)

## Description

Alarm message:

Failed to obtain the hardware information about *arg1* PCIe card *arg2* (*arg3*). [*arg4*] [*arg5*]

This alarm is generated when the system failed to obtain the PCIe card hardware information.

Alarm object: PCIe Card

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x08000075 | Minor | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Location of the PCIe card. For example, **GpuBoard** or **Riser**. |
| *arg2* | Slot number of the PCIe card, for example, **1** or **2**. |
| *arg3* | PCIe card name, for example, **FPGA** or **NIC**. |
| *arg4* | Supplementary information about the alarm, for example, **Error Code**. |
| *arg5* | Error code of the alarm, for example, **(7168)** or **(7177)**. |

## Impact on the System

The board PCB version and BOM code cannot be obtained.

## Possible Causes

The PCIe card is faulty.

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### Procedure

**Step 1** Shut down the OS and then restart it. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Replace the PCIe card. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Contact technical support engineer.

**----End**

## 2.10.59 ALM-0x08000077 Failed to Obtain the PCIe Card Power (PCIe Card, Minor Alarm)

### Description

Alarm message:

Failed to obtain data of the *arg1* PCIe card *arg2* (*arg3*) power. [*arg4*] [*arg5*]

This alarm is generated when the system failed to obtain the PCIe card power.

Alarm object: PCIe Card

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x08000077 | Minor | Yes |

### Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Location of the PCIe card. For example, **GpuBoard** or **Riser**. |
| *arg2* | Slot number of the PCIe card, for example, **1** or **2**. |
| *arg3* | PCIe card name, for example, **FPGA** or **NIC**. |
| *arg4* | Supplementary information about the alarm, for example, **Error Code**. |
| *arg5* | Error code of the alarm, for example, **(7168)** or **(7177)**. |

### Impact on the System

The power cannot be monitored normally, which affects the overcurrent protection.

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### Possible Causes

The PCIe card is faulty.

### Procedure

**Step 1** Shut down the OS and then restart it. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Replace the PCIe card. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Contact technical support engineer.

**----End**

## 2.10.60 ALM-0x08000079 PCIe Card Firmware Self-heal Failed (PCIe Card, Minor Alarm)

### Description

Alarm message:

Firmware self-heal failed on *arg1* PCIe card *arg2* (*arg3*). [*arg4*] [*arg5*]

This alarm is generated when the PCIe card is faulty.

Alarm object: PCIe Card

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x08000079 | Minor | Yes |

### Parameters

| Name | Meaning |
|---|---|
| *arg1* | Board holding the PCIe card, for example **GpuBoard** or **Riser**. |
| *arg2* | Slot No. of the PCIe card, for example **1** or **2**. |
| *arg3* | PCIe card type, for example, **NIC** or **FPGA**. |
| *arg4* | Fault description information, for example **Error Code: 7168** or **Error Code: 7169**. |
| *arg5* | Other fault description information. |

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### Impact on the System

PCIe firmware cannot self heali, affecting PCIe card-related service functions.

### Possible Causes

The PCIe card is faulty.

### Procedure

**Step 1** The PCIe card is faulty. Replace the component and check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Contact technical support engineer.

**----End**

## 2.10.61 ALM-0x0800007B PCIe Card High Voltage (PCIe Card, Major Alarm)

### Description

Alarm message:

The *arg1* PCIe card *arg2* (*arg3*) voltage is too high. [*arg4*] [*arg5*]

This alarm is generated when the PCIe card voltage is too high.

Alarm object: PCIe Card

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x0800007B | Major | Yes |

### Parameters

| Name | Meaning |
|---|---|
| *arg1* | Location of the PCIe card. For example, **GpuBoard** or **Riser**. |
| *arg2* | Slot number of the PCIe card, for example, **1** or **2**. |
| *arg3* | PCIe card name, for example, **FPGA** or **NIC**. |
| *arg4* | Supplementary information about the alarm, for example, **Error Code**. |
| *arg5* | Error code of the alarm, for example, **(7168)** or **(7177)**. |

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### Impact on the System

The PCIe card may run unstably or fail, and the system may run abnormally.

### Possible Causes

The PCIe card is faulty.

### Procedure

**Step 1** Remove and reinstall the PCIe card to check whether the PCIe card is powered on normally. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Replace the PCIe card. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Replace the component where the PCIe card is located. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Contact technical support engineer.

**----End**

## 2.10.62 ALM-0x0800007D PCIe Card Low Voltage (PCIe Card, Major Alarm)

### Description

Alarm message:

The *arg1* PCIe card *arg2* (*arg3*) voltage is too low. [*arg4*] [*arg5*]

This alarm is generated when the PCIe card voltage is too low.

Alarm object: PCIe Card

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x0800007D | Major | Yes |

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### Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Location of the PCIe card. For example, **GpuBoard** or **Riser**. |
| *arg2* | Slot number of the PCIe card, for example, **1** or **2**. |
| *arg3* | PCIe card name, for example, **FPGA** or **NIC**. |
| *arg4* | Supplementary information about the alarm, for example, **Error Code**. |
| *arg5* | Error code of the alarm, for example, **(7168)** or **(7177)**. |

### Impact on the System

The PCIe card may run unstably or fail, and the system may run abnormally.

### Possible Causes

The PCIe card is faulty.

### Procedure

**Step 1** Remove and reinstall the PCIe card to check whether the PCIe card is powered on normally. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Replace the PCIe card. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Replace the component where the PCIe card is located. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Contact technical support engineer.

**----End**

## 2.10.63 ALM-0x0800007F High Power of PCIe Card (PCIe Card, Minor Alarm)

### Description

Alarm message:

The *arg1* PCIe card *arg2* (*arg3*) power (*arg4*W) is higher than the alarm upper threshold (*arg5*W).

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This alarm is generated when the power of the PCIe card is higher than the alarm upper threshold.

Alarm object: PCIe Card

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x0800007F | Minor | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Board holding the PCIe card, for example **GpuBoard** or **Riser**. |
| *arg2* | Slot No. of the PCIe card, for example **1** or **2**. |
| *arg3* | PCIe card type, for example, **NIC** or **FPGA**. |
| *arg4* | Current power of the PCIe card. |
| *arg5* | Power alarm threshold. |

## Impact on the System

If the power is too high, the PCIe device may run unstable. If the alarm persists, PCIe card-related services may fail.

## Possible Causes

The current of the PCIe card is overloaded.

## Procedure

**Step 1** Shut down and restart the OS. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Contact technical support engineer.

**----End**

# 2.10.64 ALM-0x08000081 PCIe Card Overcurrent Protection (PCIe Card, Major Alarm)

## Description

Alarm message:

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The *arg1* PCIe card *arg2* (*arg3*) current exceeds the protection point. [*arg4*] [*arg5*]

This alarm is generated when the PCIe card current exceeds the overcurrent protection point.

Alarm object: PCIe Card

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x08000081 | Major | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Location of the PCIe card. For example, **GpuBoard** or **Riser**. |
| *arg2* | Slot number of the PCIe card, for example, **1** or **2**. |
| *arg3* | PCIe card name, for example, **FPGA** or **NIC**. |
| *arg4* | Supplementary information about the alarm, for example, **Error Code**. |
| *arg5* | Error code of the alarm, for example, **(7168)** or **(7177)**. |

## Impact on the System

The PCIe card may run unstably or fail, and the system may run abnormally.

## Possible Causes

The PCIe card current exceeds the overcurrent protection point.

## Procedure

**Step 1** Shut down the OS and then restart it. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Rectify the overcurrent fault by referring to the technical white paper of the PCIe card. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Contact technical support engineer.

**----End**

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# 2.10.65 ALM-0x08000083 PCIe Card Overtemperature Protection (PCIe Card, Major Alarm)

## Description

Alarm message:

The *arg1* PCIe card *arg2 arg3* temperature exceeds the protection point. [*arg4*] [*arg5*]

This alarm is generated when the PCIe card temperature exceeds the overtemperature protection point.

Alarm object: PCIe Card

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x08000083 | Major | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Location of the PCIe card. For example, **GpuBoard** or **Riser**. |
| *arg2* | Slot number of the PCIe card, for example, **1** or **2**. |
| *arg3* | PCIe card name, for example, **FPGA** or **NIC**. |
| *arg4* | Supplementary information about the alarm, for example, **Error Code**. |
| *arg5* | Error code of the alarm, for example, **(7168)** or **(7177)**. |

## Impact on the System

The PCIe card may run unstably or fail, and the system may run abnormally.

## Possible Causes

- The equipment room temperature exceeds the normal range.
- The fan module is faulty.
- The air inlet or outlet is blocked.
- Idle slots or spaces are not installed with filler panels.

## Procedure

**Step 1** Check whether there is a fan alarm generated.

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- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Replace the fan module. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Check whether the equipment room temperature exceeds the normal range.

- If yes, go to **Step 4**.
- If no, go to **Step 5**.

**Step 4** Reduce the equipment room temperature to the normal range. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Check whether the server air inlet and outlet are blocked.

- If yes, go to **Step 6**.
- If no, go to **Step 7**.

**Step 6** Clear the blockage. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 7**.

**Step 7** Check whether there are empty slots in the server.

- If yes, go to **Step 8**.
- If no, go to **Step 9**.

**Step 8** Install filler panels in empty slots. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 9**.

**Step 9** Shut down the OS and then restart it. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 10**.

**Step 10** Replace the PCIe card. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 11**.

**Step 11** Contact technical support engineer.

**----End**

# 2.10.66 ALM-0x08000085 PCIe Switch Module Fault on the PCIe Card (PCIe Card, Major Alarm)

## Description

Alarm message:

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The PCIe switch module of the *arg1* PCIe card *arg2* (*arg3*) is faulty. [*arg4*] [*arg5*]

This alarm is generated when the PCIe Switch module on the PCIe card is faulty.

Alarm object: PCIe Card

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x08000085 | Major | Yes |

## Parameters

| Name | Meaning |
|---|---|
| *arg1* | Location of the PCIe card. For example, **GpuBoard** or **Riser**. |
| *arg2* | Slot number of the PCIe card, for example, **1** or **2**. |
| *arg3* | PCIe card name, for example, **FPGA** or **NIC**. |
| *arg4* | Supplementary information about the alarm, for example, **Error Code**. |
| *arg5* | Error code of the alarm, for example, **(7168)** or **(7177)**. |

## Impact on the System

The PCIe card runs unstably, and the system runs abnormally.

## Possible Causes

The PCIe card is faulty.

## Procedure

**Step 1** Shut down the OS and then restart it. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Replace the PCIe card. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Contact technical support engineer.

**----End**

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# 2.10.67 ALM-0x08000087 PCIe Card MINI Module Fault (PCIe Card, Major Alarm)

## Description

Alarm message:

The MINI module of the *arg1* PCIe card *arg2* (*arg3*) is faulty. [*arg4*] [*arg5*]

This alarm is generated when the MINI module on a PCIe card is faulty.

Alarm object: PCIe Card

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x08000087 | Major | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Board holding the PCIe card, for example **GpuBoard** or **Riser**. |
| *arg2* | Slot No. of the PCIe card, for example **1** or **2**. |
| *arg3* | PCIe card name, for example **DMINI**. |
| *arg4* | Fault description information, for example **Error Code: 7168**. |
| *arg5* | Other fault description information. |

## Impact on the System

The PCIe card runs unstably, and the system runs abnormally.

## Possible Causes

The PCIe card is faulty.

## Procedure

**Step 1** Power off and then on the server OS. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Replace the PCIe card. Then, check whether the alarm is cleared.

- If yes, no further action is required.

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- If no, go to **Step 3**.

**Step 3** Contact technical support engineer.

**----End**

# 2.10.68 ALM-0x08000089 Failed to Obtain the Health Status of the MINI Module of the PCIe Card (PCIe Card, Minor Alarm)

## Description

Alarm message:

Failed to obtain the health status of the *arg1* PCIe card *arg2* (*arg3*) MINI module. [*arg4*] [*arg5*]

This alarm is generated when the system failed to obtain the health status of the MINI module of the PCIe card.

Alarm object: PCIe Card

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x08000089 | Minor | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Location of the PCIe card. For example, **GpuBoard** or **Riser**. |
| *arg2* | Slot number of the PCIe card, for example, **1** or **2**. |
| *arg3* | PCIe card name, for example, **FPGA** or **NIC**. |
| *arg4* | Supplementary information about the alarm, for example, **Error Code**. |
| *arg5* | Error code of the alarm, for example, **(7168)** or **(7177)**. |

## Impact on the System

The status of the MINI module of the PCIe card is unknown.

## Possible Causes

The PCIe card failed to obtain the health status of the MINI module.

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### Procedure

**Step 1** Shut down the OS and then restart it. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Replace the PCIe card. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Contact technical support engineer.

**----End**

## 2.10.69 ALM-0x0800008B PCIe Card Underclocking (PCIe Card, Minor Alarm)

### Description

Alarm message:

The *arg1* PCIe card *arg2* (*arg3*) underclocking. [*arg4*] [*arg5*]

This alarm is generated when underclocking occurred on the specified PCIe card.

Alarm object: PCIe Card

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x0800008B | Minor | Yes |

### Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Location of the PCIe card. For example, **GpuBoard** or **Riser**. |
| *arg2* | Slot number of the PCIe card, for example, **1** or **2**. |
| *arg3* | PCIe card name, for example, **FPGA** or **NIC**. |
| *arg4* | Supplementary information about the alarm, for example, **Error Code**. |
| *arg5* | Error code of the alarm, for example, **(7168)** or **(7177)**. |

### Impact on the System

The PCIe card performance is affected.

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## Possible Causes

- A fan module is faulty.
- The equipment room temperature exceeds the normal range.
- The air inlet or outlet is blocked.
- The air duct is not installed.
- The heat sink is not properly connected to the CPU.
- The PCIe card is under heavy load.
- The PCIe card is faulty.

## Procedure

**Step 1** Check whether both air inlet and outlet high temperature alarms are generated.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Rectify the fault according to troubleshooting suggestions. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Power off the server, and check whether the air duct is properly installed in the server.

- If yes, go to **Step 5**.
- If no, go to **Step 4**.

**Step 4** Install the air duct properly, and power on the server. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Power off the server, and check whether the PCIe card heat sink is properly installed.

- If yes, go to **Step 7**.
- If no, go to **Step 6**.

**Step 6** Install the PCIe card heat sink properly, and power on the server. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 7**.

**Step 7** Reduce the system load. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 8**.

**Step 8** Replace the faulty PCIe card. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 9**.

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**Step 9** Contact technical support engineer.

**----End**

# 2.10.70 ALM-0x0800008D PCIe Card Powered Off (PCIe Card, Major Alarm)

## Description

Alarm message:

The *arg1* PCIe card *arg2* (*arg3*) was powered off. [*arg4*] [*arg5*]

This alarm is generated when the PCIe card is powered off.

Alarm object: PCIe Card

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x0800008D | Major | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Location of the PCIe card. For example, **GpuBoard** or **Riser**. |
| *arg2* | Slot number of the PCIe card, for example, **1** or **2**. |
| *arg3* | PCIe card name, for example, **FPGA** or **NIC**. |
| *arg4* | Supplementary information about the alarm, for example, **Error Code**. |
| *arg5* | Error code of the alarm, for example, **(7168)** or **(7177)**. |

## Impact on the System

Services related to the PCIe card are interrupted, or the system does not respond.

## Possible Causes

- A fan module is faulty.
- The equipment room temperature exceeds the normal range.
- The air inlet or outlet is blocked.
- Idle slots or spaces are not installed with filler panels.
- The air duct is not installed.
- The heat sink is not properly connected to the CPU.

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- The PCIe card is faulty.

## Procedure

**Step 1** Check whether both air inlet and outlet high temperature alarms are generated.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Rectify the fault according to troubleshooting suggestions. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Power off the server, and check whether the air duct is properly installed in the server.

- If yes, go to **Step 5**.
- If no, go to **Step 4**.

**Step 4** Install the air duct properly, and power on the server. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Power off the server, and check whether the PCIe card heat sink is properly installed.

- If yes, go to **Step 7**.
- If no, go to **Step 6**.

**Step 6** Install the PCIe card heat sink properly, and power on the server. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 7**.

**Step 7** Replace the faulty PCIe card. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 8**.

**Step 8** Contact technical support engineer.

**----End**

# 2.10.71 ALM-0x08000091 PCIe Card Undervoltage (PCIe Card, Minor Alarm)

## Description

Alarm message:

PCIe card arg4 voltage (arg1 V) at arg3 detection point is lower than the undervoltage threshold (arg2 V).

This alarm is generated when PCIe Card undervoltage.

Alarm object: PCIe Card

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## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x08000091 | Minor | Yes |

## Parameters

| Name | Meaning |
|---|---|
| *arg1* | Current reading of the sensor. |
| *arg2* | Alarm threshold. |
| *arg3* | Voltage detection point. |
| *arg4* | Slot number of the PCIe card. |

## Impact on the System

Impedance too high may cause PCIe card and device faults, response off, and affect the device's service life.

## Possible Causes

- The PCIe card is faulty.
- The standard PCIe card slot is faulty.

## Procedure

**Step 1** Check that the PCIe card is powered on properly.

- If yes, go to **Step 4**.
- If no, go to **Step 2**.

**Step 2** Replace the PCIe card.Then check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Replace the component where the PCIe card is located.Then check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Contact technical support engineer.

**----End**

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# 2.10.72 ALM-0x08000093 PCIe Card Overvoltage (PCIe Card, Minor Alarm)

## Description

Alarm message:

PCIe card arg4 voltage (arg1 V) at arg3 detection point exceeds the undervoltage threshold (arg2 V).

This alarm is generated when PCIe Card undervoltage.

Alarm object: PCIe Card

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x08000093 | Minor | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Current reading of the sensor. |
| *arg2* | Alarm threshold. |
| *arg3* | Voltage detection point. |
| *arg4* | Slot number of the PCIe card. |

## Impact on the System

Impedance too high may cause PCIe card and device faults, response off, and affect the device's service life.

## Possible Causes

- The PCIe card is faulty.
- The standard PCIe card slot is faulty.

## Procedure

**Step 1** Replace the PCIe card.Then check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Replace the component where the PCIe card is located.Then check whether the alarm is cleared.

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- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Contact technical support engineer.

**----End**

# 2.10.73 ALM-0x08000095 Communication with the PCIe Plug-in RAID Controller Card Lost (PCIe Card, Major Alarm)

## Description

Alarm message:

Communication between the iBMC and [*arg1*] PCIe card *arg2* (*arg3*) failed.

This alarm is generated when the communication with the PCIe plug-in RAID controller card was lost.

Alarm object: PCIe Card

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x08000095 | Major | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Location of the PCIe card. For example, **front**, **inner**, or **rear**. |
| *arg2* | Slot number of the PCIe card. |
| *arg3* | It is **RAID**. |

## Impact on the System

The RAID controller card may run unstably or be faulty. The system may even stop responding.

## Possible Causes

- The initialization of the RAID controller card failed.
- The RAID controller card is faulty.
- The BBU of the RAID controller card is faulty.
- The PCIe port corresponding to the RAID controller card is disabled.

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## Procedure

**Step 1** Check whether the server has the alarm 0x28000001, 0x06000005, or 0x06000027. If yes, clear the alarm.

**Step 2** Restart the server and open the **Device Manager** page on BIOS in UEFI mode.

**Step 3** On the **Device Manager** page, select **Some drivers are not healthy** and then click **Repair the whole platform**. Check whether the alarm is cleared.

For details, see **Troubleshooting** of the corresponding RAID controller card model in the *RAID Controller Card User Guide*.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** On the BIOS, check whether the PCIe port corresponding to the RAID controller card is disabled.

The BIOS configuration screen varies depending on the platform and version. For details, see the BIOS user guide of the server you use.

- If yes, go to **Step 5**.
- If no, go to **Step 6**.

**Step 5** Enable the PCIe port of the RAID controller card on the BIOS, save the settings, and restart the OS. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 6**.

**Step 6** On the OS, check whether the RAID controller card driver version matches the RAID controller card firmware version. Upgrade the RAID controller card firmware or driver to the latest version. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 7**.

**Step 7** Replace the RAID controller card. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 8**.

**Step 8** Replace the BBU of the RAID controller card. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 9**.

**Step 9** Contact technical support engineer.

**----End**

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# 2.10.74 ALM-0x08000097 Initialization of the PCIe Plug-in RAID Controller Card Abnormal (PCIe Card, Major Alarm)

## Description

Alarm message:

Initialization of the [*arg1*] PCIe card *arg2* (*arg3*) is abnormal.

This alarm is generated when the controller initialization of the PCIe plug-in RAID controller card was abnormal.

Alarm object: PCIe Card

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x08000097 | Major | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Location of the PCIe card. For example, **front**, **inner**, or **rear**. |
| *arg2* | Slot number of the PCIe card. |
| *arg3* | It is **RAID**. |

## Impact on the System

The system may fail to start.

## Possible Causes

- The RAID controller card is faulty.
- The mainboard is faulty.

## Procedure

**Step 1** Reseat the RAID controller card. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Replace the RAID controller card. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

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**Step 3** Replace the server mainboard. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Contact technical support engineer.

**----End**

# 2.10.75 ALM-0x080000A1 PCIe Card Overcurrent (PCIe Card, Major Alarm)

## Description

Alarm message:

The current (*arg5* A) at the detection point *arg4* of the [*arg1*] PCIe card *arg2* (*arg3*) is higher than the overcurrent threshold (*arg6* A).

This alarm is generated when the current at the detection point on the PCIe card exceeds the overcurrent threshold.

Alarm object: PCIe Card

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x080000A1 | Major | Yes |

## Parameters

| Name | Meaning |
|---|---|
| *arg1* | Location of the PCIe card, for example, **Riser**. |
| *arg2* | Slot No. of the PCIe card, for example, **2** or **5**. |
| *arg3* | Name of the PCIe card, for example, **SDI V3**. |
| *arg4* | Current detection point, for example, **cable** or **gold**. |
| *arg5* | Current reading of the detection point, for example, **15**. |
| *arg6* | Overcurrent threshold, for example, **10**. |

## Impact on the System

The overcurrent affects PCIe device stability. If the alarm persists, services related to the PCIe card will fail.

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### Possible Causes

- The input current of the PCIe card is high.
- The PCIe card is faulty.

### Procedure

**Step 1** Check whether there are power alarms generated for the server.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Clear the power alarms. Then, check whether the overcurrent alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Shut down the OS and then restart the OS. After the server is powered on, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Replace the PCIe card. After the server is powered on, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Contact technical support engineer.

**----End**

## 2.10.76 ALM-0x080000A3 PCIe Card Chip Abnormal (PCIe Card, Major Alarm)

### Description

Alarm message:

The *arg4* chip of the [*arg1*] PCIe card *arg2* (*arg3*) is abnormal. *arg5 arg6.*

This alarm is generated when the PCIe card chip status is abnormal.

Alarm object: PCIe Card

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x080000A3 | Major | Yes |

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### Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Location of the PCIe card, for example, **Riser**. |
| *arg2* | Slot No. of the PCIe card, for example, **2** or **5**. |
| *arg3* | Name of the PCIe card, for example, **SDI V3**. |
| *arg4* | Current detection point, for example, **cable** or **gold**. |
| *arg5* | Fixed value, **Error Code:**. |
| *arg6* | Error Code, for example, **0x1370**. |

### Impact on the System

The services related to the PCIe card cannot be processed normally.

### Possible Causes

The hardware component on the PCIe card has failed.

### Procedure

**Step 1** Replace the PCIe card. After the server is powered on, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Contact technical support engineer.

**----End**

## 2.10.77 ALM-0x080000A5 PCIe Card Initialization Error (PCIe Card, Major Alarm)

### Description

Alarm message:

*arg4* occurred during the initialization of the [*arg1*] PCIe card *arg2* (*arg3*).

This alarm is generated when the PCIe card initialization is abnormal.

Alarm object: PCIe Card

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x080000A5 | Major | Yes |

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### Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Location of the PCIe card, for example, **Riser**. |
| *arg2* | Slot No. of the PCIe card, for example, **2** or **5**. |
| *arg3* | Name of the PCIe card, for example, **SDI V3**. |
| *arg4* | Type of the PCIe card chip, for example, **Drop Speed**, **Drop Lane**, or **Unable Link**. |

### Impact on the System

The PCIe card performance is affected, or the PCIe card cannot run properly.

### Possible Causes

- The slimline cable is not securely connected.
- The expansion card of the PCIe card is faulty.

### Procedure

**Step 1** Check whether the PCIe card cable is in poor contact.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Remove and reconnect the cable. After the server is powered on, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Replace the PCIe card. After the server is powered on, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Contact technical support engineer.

**----End**

## 2.10.78 ALM-0x080000A7 PCIe Card Component Minor Fault (PCIe Card, Minor Alarm)

### Description

Alarm message:

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The *arg4* of the [*arg1*] PCIe card *arg2* (*arg3*) is faulty.

This alarm is generated when a minor fault is detected on a hardware component on the PCIe card.

Alarm object: PCIe Card

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x080000A7 | Minor | Yes |

## Parameters

| Name | Meaning |
|---|---|
| *arg1* | Location of the PCIe card, for example, **Riser**. |
| *arg2* | Slot No. of the PCIe card, for example, **2** or **5**. |
| *arg3* | Name of the PCIe card, for example, **SDI V3**. |
| *arg4* | Name of the hardware component, for example, **Memory**, **CPU**, **Disk**, **Board Device**, or **Network Hardware**. |

## Impact on the System

Service performance of the PCIe card is affected.

## Possible Causes

The hardware component on the PCIe card has failed.

## Procedure

**Step 1** Shut down the OS and then restart the OS. After the server is powered on, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Replace the PCIe card. After the server is powered on, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Contact technical support engineer.

**----End**

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# 2.10.79 ALM-0x080000A9 PCIe Card Component Major Fault (PCIe Card, Major Alarm)

## Description

Alarm message:

The *arg4* of the [*arg1*] PCIe card *arg2* (*arg3*) is faulty.

This alarm is generated when a major fault is detected on a hardware component on the PCIe card.

Alarm object: PCIe Card

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x080000A9 | Major | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Location of the PCIe card, for example, **Riser**. |
| *arg2* | Slot No. of the PCIe card, for example, **2** or **5**. |
| *arg3* | Name of the PCIe card, for example, **SDI V3**. |
| *arg4* | Name of the hardware component, for example, **Memory**, **CPU**, **Disk**, **Board Device**, or **Network Hardware**. |

## Impact on the System

The services related to the PCIe card cannot be processed normally.

## Possible Causes

The hardware component on the PCIe card has failed.

## Procedure

**Step 1** Replace the PCIe card. After the server is powered on, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Contact technical support engineer.

**----End**

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# 2.10.80 ALM-0x080000AB High Current on the PCIe Card (PCIe Card, Major Alarm)

## Description

Alarm message:

[*arg1*] PCIe card *arg2* (*arg3*) is overcurrent. [*arg4*][*arg5*].

This alarm is generated when the current detected of a PCIe card exceeds the normal range.

Alarm object: PCIe Card

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x080000AB | Major | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Location of the PCIe card, for example, **Riser**. |
| *arg2* | Slot No. of the PCIe card, for example, **1** or **2**. |
| *arg3* | Name of the PCIe card, for example, **SDI V3**. |
| *arg4* | Error code of the alarm, for example, **Error code: 7596**. |
| *arg5* | Supplementary information about the alarm. |

## Impact on the System

The overcurrent affects PCIe device stability. If the alarm persists, services related to the PCIe card will fail.

## Possible Causes

The power supply of the PCIe card has failed.

## Procedure

**Step 1** Shut down the OS and then restart it. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Replace the PCIe card. Then, check whether the alarm is cleared.

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- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Contact technical support engineer.

**----End**

# 2.10.81 ALM-0x080000BF Abnormal Heartbeat Signal Between the BMC and PCIe Device (PCIe Card, Major Alarm)

## Description

Alarm message:

*arg4* occurred during the initialization of the [*arg1*] PCIe card *arg2* (*arg3*).

This alarm is generated when the heartbeat between the PCIe device and the BMC is abnormal.

Alarm object: PCIe Card

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x080000BF | Major | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Module name (chip name, system name). For example, **SDI V5.1**. |

## Impact on the System

The BMC cannot manage the PCIe device.

## Possible Causes

The PCIe device is loose or faulty.

## Procedure

**Step 1** Check whether the PCIe card cable is in poor contact.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Remove and reconnect the cable. After the server is powered on, check whether the alarm is cleared.

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- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Replace PCIe device. After the server is powered on, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Contact technical support engineer.

**----End**

# 2.10.82 ALM-0x080000C1 CPU Major Fault Alarm on PCIe Card (PCIe Card, Major Alarm)

## Description

Alarm message:

A major fault about the CPU of the PCIe card *arg1 arg2* was detected. *arg3*. *arg4*.

This alarm is generated when a major error occurs on the CPU of a PCIe device.

Alarm object: PCIe Card

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x080000C1 | Major | Yes |

## Parameters

| Name | Meaning |
|---|---|
| *arg1* | Slot number of the PCIe card, for example, **3**. |
| *arg2* | PCIe card name, for example, **SDI V5.1**. |
| *arg3* | Alarm description, for example, CPU Core Isolation. |
| *arg4* | Error code of the alarm, for example, **8268**. |

## Impact on the System

The SDI system may be running abnormally.

## Possible Causes

There is a CPU fault or a memory fault.

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### Procedure

**Step 1** Collect logs, restart the system, and check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Replace PCIe device compute cards, and check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Contact technical support engineer.

**----End**

## 2.10.83 ALM-0x080000C3 CPU Minor Fault Alarm on PCIe Card (PCIe Card, Minor Alarm)

### Description

Alarm message:

A major fault about the CPU of the PCIe card *arg1 arg2* was detected. *arg3*. *arg4*.

This alarm is generated when a minor error occurs on the CPU of a PCIe device.

Alarm object: PCIe Card

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x080000C3 | Minor | Yes |

### Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Slot number of the PCIe card, for example, **3**. |
| *arg2* | PCIe card name, for example, **SDI V5.1**. |
| *arg3* | Alarm description, for example, CPU Frequency Reduction. |
| *arg4* | Error code of the alarm, for example, **8199**. |

### Impact on the System

The SDI system may be running abnormally.

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### Possible Causes

There is a CPU fault or a memory fault.

### Procedure

**Step 1** Power off and then power on the server, and check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Replace the PCIe device compute card, and check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Contact technical support engineer.

**----End**

## 2.10.84 ALM-0x080000C5 CPU Critical Fault Alarm on PCIe Card (PCIe Card,Critical Alarm)

### Description

Alarm message:

A critical fault about the CPU of the PCIe card *arg1 arg2* was detected. *arg3*. *arg4*.

This alarm is generated when a critical error occurs on the CPU of a PCIe device.

Alarm object: PCIe Card

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x080000C5 | Critical | Yes |

### Parameters

| Name | Meaning |
|---|---|
| *arg1* | Slot number of the PCIe card, for example, **3**. |
| *arg2* | PCIe card name, for example, **SDI V5.1**. |
| *arg3* | Alarm description, for example, CPU Fatal Error. |
| *arg4* | Error code of the alarm, for example, **8196**. |

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### Impact on the System

The SDI system may be running abnormally.

### Possible Causes

There is a CPU fault or a memory fault or temperature anomaly.

### Procedure

**Step 1** Power off and then power on the server, and check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Replace PCIe device compute cards, and check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Contact technical support engineer.

**----End**

## 2.10.85 ALM-0x080000CF NetCard Minor Fault Alarm on PCIe Card (PCIe Card,Minor Alarm)

### Description

Alarm message:

A critical fault about the CPU of the PCIe card *arg1 arg2* was detected. *arg3*. *arg4*.

This alarm is generated when a minor error occurs on the NIC of a PCIe device.

Alarm object: PCIe Card

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x080000CF | Minor | Yes |

### Parameters

| Name | Meaning |
|---|---|
| *arg1* | Slot number of the PCIe card, for example, **3**. |
| *arg2* | PCIe card name, for example, **SDI V5.1**. |
| *arg3* | Alarm description, for example, abnormal optical power. |
| *arg4* | Error code of the alarm, for example, **8223**. |

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### Impact on the System

The SDI NIC may function abnormally.

### Possible Causes

- The optical module or copper cable is abnormal.
- The port on the peer switch is abnormal.
- The network port driver in the system is not loaded correctly.
- The SDI NIC firmware version is not compatible with the SDI NIC driver version.
- Other unknown causes.

### Procedure

**Step 1** Check whether the optical module and the peer port on the switch are normal.

- If yes, go to **Step 3**.
- If no, go to **Step 2**.

**Step 2** Check whether the NIC firmware matches the driver version.

- If yes, go to **Step 3**.
- If no, go to **Step 4**.

**Step 3** Replace the optical module, copper cable, or PCIe device network card. And check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Contact technical support engineer.

**----End**

## 2.10.86 ALM-0x080000D1 NetCard Major Fault Alarm on PCIe Card (PCIe Card, Major Alarm)

### Description

Alarm message:

A major fault about the network adapter of the PCIe card *arg1 arg2* was detected. *arg3*. *arg4*.

This alarm is generated when a major error occurs on the NIC of a PCIe device.

Alarm object: PCIe Card

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x080000D1 | Major | Yes |

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### Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Slot number of the PCIe card, for example, **3**. |
| *arg2* | PCIe card name, for example, **SDI V5.1**. |
| *arg3* | Alarm description, for example, MPU heartbeat lost. |
| *arg4* | Error code of the alarm, for example, **8235**. |

### Impact on the System

The SDI NIC may function abnormally.

### Possible Causes

- The SDI NIC or the optical module is abnormal.
- For details about the causes, see the *SDI Error Codes Manual*.

### Procedure

**Step 1** Check whether the optical module and the peer port on the switch are normal.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Replace the optical module, copper cable, or PCIe device network card. And check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Contact technical support engineer.

**----End**

## 2.10.87 ALM-0x080000D3 NetCard Critical Fault Alarm on PCIe Card (PCIe Card, Critical Alarm)

### Description

Alarm message:

A critical fault about the network adapter of the PCIe card *arg1 arg2* was detected. *arg3*. *arg4*.

This alarm is generated when a critical error occurs on the NIC of a PCIe device.

Alarm object: PCIe Card

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### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x080000D3 | Critical | Yes |

### Parameters

| Name | Meaning |
|---|---|
| *arg1* | Slot number of the PCIe card, for example, **3**. |
| *arg2* | PCIe card name, for example, **SDI V5.1**. |
| *arg3* | Alarm description, for example, NIC chip Error. |
| *arg4* | Error code of the alarm, for example, **8354**. |

### Impact on the System

The SDI NIC may function abnormally.

### Possible Causes

- The SDI NIC is abnormal.
- The MCU is abnormal.
- Other unknown causes.

### Procedure

**Step 1** Replace the PCIe device network card, and check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Contact technical support engineer.

**----End**

## 2.10.88 ALM-0x080000D5 Starting Minor Fault Alarm on PCIe Card (PCIe Card, Minor Alarm)

### Description

Alarm message:

A critical fault about the network adapter of the PCIe card *arg1 arg2* was detected. *arg3*. *arg4*.

This alarm is generated when a minor error occurs upon startup of a PCIe device.

Alarm object: PCIe Card

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## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x080000D5 | Minor | Yes |

## Parameters

| Name | Meaning |
|---|---|
| *arg1* | Slot number of the PCIe card, for example, **3**. |
| *arg2* | PCIe card name, for example, **SDI V5.1**. |
| *arg3* | Alarm description, for example, watchdog timeout alarm during OS loading. |
| *arg4* | Error code of the alarm, for example, **8243**. |

## Impact on the System

The SDI firmware becomes less reliable.

## Possible Causes

- The drive or the flash memory is damaged.
- The drive has reached its end of service.
- The OS files on the drive are damaged.
- The SDI software package is not deployed.
- The Certificate has expired.
- Other unknown causes.

## Procedure

**Step 1** Check whether the software package is correctly installed.

- If yes, go to **Step 3**.
- If no, go to **Step 2**.

**Step 2** After the software package is correctly installed, and check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Collect logs, restart the system, and check whether the alarm is cleared.

- If yes, go to **Step 6**.
- If no, go to **Step 4**.

**Step 4** Replace the drive of the PCIe device compute card, and check whether the alarm is cleared.

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- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Replace the PCIe device compute card, and check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 6**.

**Step 6** Contact technical support engineer.

**----End**

# 2.10.89 ALM-0x080000D7 Starting Major Fault Alarm on PCIe Card (PCIe Card, Major Alarm)

## Description

Alarm message:

A major fault about the system startup of the PCIe card *arg1 arg2* was detected. *arg3*. *arg4*.

This alarm is generated when a major error occurs upon startup of a PCIe device.

Alarm object: PCIe Card

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x080000D7 | Major | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Slot number of the PCIe card, for example, **3**. |
| *arg2* | PCIe card name, for example, **SDI V5.1**. |
| *arg3* | Alarm description, for example, OS Startup Fail. |
| *arg4* | Error code of the alarm, for example, **8244**. |

## Impact on the System

The SDI card cannot be started.

## Possible Causes

- The drive or the flash memory is damaged.
- The drive has reached its end of service.

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- The OS files on the drive are damaged.
- The SDI software package is not deployed.
- The BIOS preset certificate has expired.
- For details about the causes, see the *SDI Error Codes Manual*.

## Procedure

**Step 1** Check whether the alarm is cleared after the fault is rectified.

- If the PXE boot fails, check the network.
- If the OS fails to be started, check whether the OS files are normal.
- If the BIOS fails to be booted, check whether the fault persists after the restart.
- If the BIOS upgrade fails, upgrade the BIOS firmware again. If the BIOS upgrade still fails, replace the PCIe device compute card.
- If the certificate is about to expire, upgrade the BIOS firmware again.

**Step 2** If the fault persists, contact technical support engineer.

**----End**

# 2.10.90 ALM-0x080000D9 Mcu Minor Fault Alarm on PCIe Card (PCIe Card, Minor Alarm)

## Description

Alarm message:

A major fault about the system startup of the PCIe card *arg1 arg2* was detected. *arg3*. *arg4*.

This alarm is generated when a minor error occurs on the MCU of a PCIe device.

Alarm object: PCIe Card

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x080000D9 | Minor | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Slot number of the PCIe card, for example, **3**. |
| *arg2* | PCIe card name, for example, **SDI V5.1**. |
| *arg3* | Alarm description, for example, MCU Firmware integrity check fail. |
| *arg4* | Error code of the alarm, for example, **8245**. |

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### Impact on the System

- The SDI computing card may not function properly.
- The SDI monitoring and management functions are impaired.

### Possible Causes

- The MCU firmware is damaged.
- Other unknown causes.

### Procedure

**Step 1** Upgrade the PCIe device compute card MCU firmware again, and check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Replace the PCIe device compute card, and check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Contact technical support engineer.

**----End**

## 2.10.91 ALM-0x080000DB Mcu Major Fault Alarm on PCIe Card (PCIe Card, Major Alarm)

### Description

Alarm message:

A major fault about the MCU of the PCIe card *arg1 arg2* was detected. *arg3*. *arg4*.

This alarm is generated when a major error occurs on the MCU of a PCIe device.

Alarm object: PCIe Card

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x080000DB | Major | Yes |

### Parameters

| Name | Meaning |
|---|---|
| *arg1* | Slot number of the PCIe card, for example, **3**. |
| *arg2* | PCIe card name, for example, **SDI V5.1**. |

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| Name | Meaning |
| --- | --- |
| *arg3* | Alarm description, for example, MCU SRAM abnormal. |
| *arg4* | Error code of the alarm, for example, **8246**. |

## Impact on the System

- The SDI computing card may not function properly.
- The SDI monitoring and management functions are impaired.

## Possible Causes

- The MCU is damaged.
- For details about the causes, see the *SDI Error Codes Manual*.

## Procedure

**Step 1** If the MCU runs abnormally, replace the PCIe device compute card, and check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 2** If the VRD runs abnormally, power off the server and power it on, and check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Remove the power cable to power off the server, and then reconnect the power cable to power on the server. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Replace the compute board of the SDI, and check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Contact technical support engineer.

**----End**

# 2.10.92 ALM-0x080000DF Cable Minor Fault Alarm on PCIe Card (PCIe Card, Major Alarm)

## Description

Alarm message:

A major fault about the system startup of the PCIe card *arg1 arg2* was detected. *arg3*. *arg4*.

This alarm is generated when the NCSI cable of a PCIe device is not detected.

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Alarm object: PCIe Card

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x080000DF | Major | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Slot number of the PCIe card, for example, **3**. |
| *arg2* | PCIe card name, for example, **SDI V5.1**. |
| *arg3* | Alarm description, for example, NCSI cable Not Present. |
| *arg4* | Error code of the alarm, for example, **8264**. |

## Impact on the System

The NIC NCSI function is not available.

## Possible Causes

The cable is not securely connected or not in position.

## Procedure

**Step 1** Check whether the cable is connected properly.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Contact technical support engineer.

**----End**

# 2.10.93 ALM-0x080000E3 Power Consumption Major Fault Alarm on PCIe Card (PCIe Card, Major Alarm)

## Description

Alarm message:

A major fault about the power consumption of the PCIe card *arg1 arg2* was detected. *arg3*. *arg4*.

This alarm is generated when a major power error occurs on a PCIe device.

Alarm object: PCIe Card

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## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x080000E3 | Major | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Slot number of the PCIe card, for example, **3**. |
| *arg2* | PCIe card name, for example, **SDI V5.1**. |
| *arg3* | Alarm description, for example, The power consumption of SmartNIC exceeds threshold. |
| *arg4* | Error code of the alarm, for example, **8341**. |

## Impact on the System

- The SDI card may overheat and power off.
- The SDI card may be burnt out.

## Possible Causes

- There is a short circuit and overcurrent on the SDI card.
- The SDI card fails during power consumption detection.
- Other unknown causes.

## Procedure

**Step 1** Check whether PSU related alarms are generated on the server and PCIe devices.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Clear the related power alarms,and check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Power off and then power on the device, and check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Replace the PCIe device. And check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

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**Step 5** Contact technical support engineer.

**----End**

# 2.10.94 ALM-0x080000E5 Network Card Minor Fault Alarm on PCIe Card (PCIe Card, Minor Alarm)

## Description

Alarm message:

A major fault about the power consumption of the PCIe card *arg1 arg2* was detected. *arg3*. *arg4*.

This alarm is generated when a minor error occurs on the network card of a PCIe device.

Alarm object: PCIe Card

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x080000E5 | Minor | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Slot number of the PCIe card, for example, **3**. |
| *arg2* | PCIe card name, for example, **SDI V5.1**. |
| *arg3* | Alarm description, for example, NIC PCIe speed abnormal. |
| *arg4* | Error code of the alarm, for example, **8349**. |

## Impact on the System

- The SDI card may overheat and power off.
- The SDI card may be burnt out.

## Possible Causes

- There is a short circuit and overcurrent on the SDI card.
- The SDI card fails during power consumption detection.
- Other unknown causes.

## Procedure

**Step 1** Check whether the cable between the PCIe device network card and the PCIe device compute card is properly connected.

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- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Remove and insert the cable, and check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Replace the PCIe device network card, and check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Contact technical support engineer.

**----End**

# 2.10.95 ALM-0x080000E7 Network Card Major Fault Alarm on PCIe Card (PCIe Card, Major Alarm)

## Description

Alarm message:

A major fault about the NIC of the PCIe card *arg1 arg2* was detected. *arg3*. *arg4*.

This alarm is generated when a major error occurs on the network card of a PCIe device.

Alarm object: PCIe Card

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x080000E7 | Major | Yes |

## Parameters

| Name | Meaning |
|---|---|
| *arg1* | Slot number of the PCIe card, for example, **3**. |
| *arg2* | PCIe card name, for example, **SDI V5.1**. |
| *arg3* | Alarm description, for example, NIC Not Present. |
| *arg4* | Error code of the alarm, for example, **8347**. |

## Impact on the System

Services cannot work.

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### Possible Causes

- The cable between the SDI NIC and the SDI computing card is not securely connected.
- The link between the cards is faulty.
- Other unknown causes.

### Procedure

**Step 1** Check whether the cable between the PCIe device network card and the PCIe device compute card is properly connected.

- If yes, go to **Step 3**.
- If no, go to **Step 2**.

**Step 2** Remove and insert the cable, and check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Replace the PCIe device network card, and check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Replace the PCIe device compute card, and check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Contact technical support engineer.

**----End**

## 2.10.96 ALM-0x080000EF PCIe Card Speed Decreased (PCIe Card, Minor Alarm)

### Description

Alarm message:

The *arg1* PCIe card *arg2 arg3* speed decreased.

This alarm is generated when there may be damage or poor contact between the PCIe card and its slot.

Alarm object: PCIe Card

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x080000EF | Minor | Yes |

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## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Location of the PCIe card, for example, **GpuBoard**. |
| *arg2* | Slot number of the PCIe card, for example, **1** or **2**. |
| *arg3* | PCIe card name, for example, **SDI Card**. |

## Impact on the System

The system can work properly, but the performance is degraded.

## Possible Causes

There may be damage or poor contact between the PCIe card and its slot.

## Procedure

**Step 1** Restart the server, and check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Power off the device, remove and reinstall the device, and power on the device. Then check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Power off the server, and check whether the PCIe card or its slot is damaged, or whether the PCIe card has poor contact with its slot.

- If yes, go to **Step 4**.
- If no, go to **Step 5**.

**Step 4** Reseat the PCIe card. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Replace the PCIe card. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 6**.

**Step 6** Replace the board holding the PCIe card. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 7**.

**Step 7** Contact technical support engineer.

**----End**

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# 2.10.97 ALM-0x080000F7 An Unrecoverable Error Occurs on the Bus (PCIe Card, Major Alarm)

## Description

Alarm message:

The PCIe bus link generates an unrecoverable error (*arg1*).

This alarm is generated when the PCIe bus link generates an unrecoverable error.

Alarm object: PCIe Card

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x080000F7 | Major | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Indicates the name, location, and SN of the device related to the alarm.<br>Format: Device:*DeviceName*,location:*CPUn_DeviceTypeDevice-SLot*,SN:*SerialNumber*<br>*DeviceName*: device name<br>*CPUn*: CPU slot number<br>*DeviceType*: device type (PCIe card, OCP card, or HDD)<br>*DeviceSLot*: device slot number or device ID<br>*SerialNumber*: device serial number |

## Impact on the System

The PCIe bus may run unstably and the system stops responding.

## Possible Causes

- The PCIe device may be damaged or in poor contact with the slot.
- The PCIe card is faulty.
- The mainboard is faulty.

## Procedure

**Step 1** Power off the server and check whether there is damage or poor contact between the component and its slot.

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- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Remove and reinstall the component, and check whether the fault is rectified.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Replace the component, and check whether the fault is rectified.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Replace the mainboard, and check whether the fault is rectified.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Contact technical support.

**----End**

# 2.10.98 ALM-0x080000F9 A Fatal Error Occurs on the Bus (PCIe Card, Major Alarm)

## Description

Alarm message:

The PCIe bus link generates a fatal error (*arg1*).

This alarm is generated when the PCIe bus link generates a fatal error.

Alarm object: PCIe Card

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x080000F9 | Major | Yes |

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## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Indicates the name, location, and SN of the device related to the alarm.<br>Format: Device:*DeviceName*,location:*CPUn_DeviceTypeDevice-SLot*,SN:*SerialNumber*<br>*DeviceName*: device name<br>*CPUn*: CPU slot number<br>*DeviceType*: device type (PCIe card, OCP card, or HDD)<br>*DeviceSLot*: device slot number or device ID<br>*SerialNumber*: device serial number |

## Impact on the System

The PCIe bus may run unstably and the system stops responding.

## Possible Causes

- The PCIe device may be damaged or in poor contact with the slot.
- The PCIe card is faulty.
- The mainboard is faulty.

## Procedure

**Step 1** Power off the server and check whether there is damage or poor contact between the component and its slot.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Remove and reinstall the component, and check whether the fault is rectified.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Replace the component, and check whether the fault is rectified.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Replace the mainboard, and check whether the fault is rectified.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Contact technical support.

**----End**

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# 2.10.99 ALM-0x080000FB The Bus is Degraded (PCIe Card, Major Alarm)

## Description

Alarm message:

The PCIe bus link generates a fatal error (*arg1*).

This alarm is generated when the PCIe bus is degraded.

Alarm object: PCIe Card

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x080000FB | Major | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Indicates the name, location, and SN of the device related to the alarm.<br>Format: Device:*DeviceName*,location:*CPUn_DeviceTypeDevice-SLot*,SN:*SerialNumber*<br>*DeviceName*: device name<br>*CPUn*: CPU slot number<br>*DeviceType*: device type (PCIe card, OCP card, or HDD)<br>*DeviceSLot*: device slot number or device ID<br>*SerialNumber*: device serial number |

## Impact on the System

The system can work properly, but the performance is degraded.

## Possible Causes

There may be damage or poor contact between the PCIe device and its slot.

## Procedure

**Step 1** Power off the server and check whether there is damage or poor contact between the component and its slot.

- If yes, go to **Step 2**.

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- If no, go to **Step 3**.

**Step 2** Remove and reinstall the component, and check whether the fault is rectified.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Replace the component, and check whether the fault is rectified.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Contact technical support.

**----End**

# 2.10.100 ALM-0x080000FD A Last Boot Error Occurred on the PCIe Bus Link (PCIe Card, Major Alarm)

## Description

Alarm message:

The PCIe bus link generates a last boot error (*arg1*).

This alarm is generated when the PCIe bus link generates a last boot error.

Alarm object: PCIe Card

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x080000FD | Major | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Indicates the name, location, and SN of the device related to the alarm.<br>Format: Device:*DeviceName*,location:*CPUn_DeviceTypeDevice-SLot*,SN:*SerialNumber*<br>*DeviceName*: device name<br>*CPUn*: CPU slot number<br>*DeviceType*: device type (PCIe card, OCP card, or HDD)<br>*DeviceSLot*: device slot number or device ID<br>*SerialNumber*: device serial number |

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### Impact on the System

The PCIe bus may run unstably and the system stops responding.

### Possible Causes

- The PCIe device may be damaged or in poor contact with the slot.
- The PCIe card is faulty.
- The mainboard is faulty.

### Procedure

**Step 1** Power off the server and check whether there is damage or poor contact between the component and its slot.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Remove and reinstall the component, and check whether the fault is rectified.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Replace the component, and check whether the fault is rectified.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Replace the mainboard, and check whether the fault is rectified.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Contact technical support.

**----End**

## 2.10.101 ALM-0x080000FF DPU BIOS POST (02h) Timeout (PCIe Card, Critical Alarm)

### Description

Alarm message:

The BIOS times out while waiting for the PCIe card *arg1 arg2 arg3* to complete.

This alarm is generated when DPU BIOS POST (02h) timeout.

Alarm object: PCIe Card

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x080000FF | Critical | Yes |

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### Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Slot No. of the alarmed device. |
| *arg2* | Name of the alarmed device. |
| *arg3* | BIOS POST. |

### Impact on the System

The PCIe device is unavailable.

### Possible Causes

The PCIe device is faulty.

### Procedure

**Step 1** Replace the faulty component. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Contact technical support engineer.

**----End**

## 2.10.102 ALM-0x08000101 DPU SOC POST (03h) Timeout (PCIe Card, Minor Alarm)

### Description

Alarm message:

The BIOS times out while waiting for the PCIe card *arg1 arg2 arg3* to complete.

NOTE

For iBMC versions below V3.08.05.21, this alarm level is normal.

This alarm is generated when a timeout is detected while acquiring the DPU SOC POST (03h) status.

Alarm object: PCIe Card

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x08000101 | Minor | Yes |

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### Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Slot No. of the alarmed device. |
| *arg2* | Name of the alarmed device. |
| *arg3* | BIOS POST. |

### Impact on the System

The PCIe device is unavailable.

### Possible Causes

The PCIe device is faulty.

### Procedure

**Step 1** Contact technical support engineer.

**----End**

## 2.10.103 ALM-0x08000105 The PCIe Device is Missing in the OS (PCIe Card, Critical Alarm)

### Description

Alarm message:

The *arg1 arg2* device is missing in the OS.

This alarm is generated when the PCIe device is missing in the OS.

Alarm object: PCIe Card

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x08000105 | Critical | Yes |

### Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Slot No. of the alarmed device. For example, **PCIe card 1**. |
| *arg2* | Name of the alarmed device. For example, **GPU1**. |

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### Impact on the System

Services carried on the PCIe card may be interrupted and the system stops responding.

### Possible Causes

There is poor contact between the PCIe device and its slot or the PCIe device is faulty.

### Procedure

**Step 1** Power off the server and check whether there is damage or poor contact between the component and its slot.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Reseat the component. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Replace the faulty component. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Contact technical support engineer.

**----End**

## 2.10.104 ALM-0x08000107 DPU OS Startup Timeout (PCIe Card, Minor Alarm)

### Description

Alarm message:

The BIOS times out while waiting for the PCIe card *arg1 arg2 arg3* to complete.

This alarm is generated when the DPU (Data Processing Unit) OS startup timeout.

Alarm object: PCIe Card

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x08000107 | Minor | Yes |

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### Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Slot No. of the alarmed device. |
| *arg2* | Name of the alarmed device. |
| *arg3* | Description of the alarm. For example, **OS Startup**. |

### Impact on the System

The PCIe device is unavailable.

### Possible Causes

The PCIe device is faulty.

### Procedure

**Step 1** Restart the server. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Replace the faulty component. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Contact technical support engineer.

**----End**

## 2.10.105 ALM-0x08000109 PCIe card Hardware Fault (PCIe Card, Major Alarm)

### Description

Alarm message:

A SMART warning occurs in *arg1* of *arg2*. (SN:*arg3*)

This alarm is generated when a SMART warning occurs in the PCIe card.

Alarm object: PCIe Card

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x08000109 | Major | Yes |

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### Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Name of the alarmed device. |
| *arg2* | PCIe core No. of the alarmed device. |
| *arg3* | Serial number of the alarmed device. |

### Impact on the System

The system is abnormal.

### Possible Causes

The PCIe card is faulty.

### Procedure

**Step 1** Replace the PCIe card. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Contact technical support engineer.

**----End**

## 2.10.106 ALM-0x0800010B Standard PCIe Card Minor Hardware Fault (PCIe Card, Minor Alarm)

### Description

Alarm message:

A hardware fault (*arg1*) occurs in [*arg*2] PCIe card *arg3* (*arg4*).

This alarm is generated when a hardware fault occurs in the PCIe card.

Alarm object: PCIe Card

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x0800010B | Minor | Yes |

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### Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | The error description of the alarm. For example: **system power loss**, **core clock signal loss**, **port clock signal loss**, or **Error code: 7101**. |
| *arg2* | The location of the PCIe card. |
| *arg3* | No. of the PCIe card. |
| *arg4* | Name of the PCIe card. For example: **SD100** or **FGPA**. |

### Impact on the System

The system is abnormal.

### Possible Causes

The PCIe card is faulty.

### Procedure

**Step 1** Restart OS and check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Power off the server, remove and insert the component. Power on the server and check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Replace the component. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Contact technical support engineer.

**----End**

## 2.10.107 ALM-0x0800010F Firmware upgrade minor fault alarm on PCIe card (PCIe Card, Minor Alarm)

### Description

Alarm message:

A minor fault about the firmware upgrade of the PCIe card *arg1 arg2* was detected. *arg3 arg4*.

This alarm is generated when a firmware upgrade minor fault occurs in the PCIe card.

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Alarm object: PCIe Card

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x0800010F | Minor | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Slot Num of the PCIe card, for example: **3**. |
| *arg2* | Name of the PCIe card, for example: **SDI V5.1**. |
| *arg3* | Alarm description, for example: **The temperature of optical module 1 abnormal**. |
| *arg4* | Error code, for example value: **Error code: 8252**. |

## Impact on the System

The PCIe card firmware version is abnormal, and service functions may be affected.

## Possible Causes

- The upgrade file is damaged.
- An internal PCIe device error occurs.

## Procedure

**Step 1** Check whether the upgrade file is damaged.

- If yes, go to **Step 2**.
- If no, go to **3**

**Step 2** Upgrade again with a correct upgrade file and check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **3**.

**Step 3** Power off and power on the server, and check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **4**.

**Step 4** Replace the PCIe device and check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **5**.

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**Step 5** Contact technical support engineer.

**----End**

# 2.10.108 ALM-0x08000115 Power minor fault alarm on PCIe card (PCIe Card, Minor Alarm)

## Description

Alarm message:

A minor fault about the power consumption of the PCIe card *arg1 arg2* was detected. *arg3 arg*4.

This alarm is generated when a minor power error occurs on a PCIe device.

Alarm object: PCIe Card

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x08000115 | Minor | Yes |

## Parameters

| Name | Meaning |
|---|---|
| *arg1* | Slot number of the PCIe card, for example, **3**. |
| *arg2* | PCIe card name, for example, **SDI V5.1**. |
| *arg3* | Alarm description, for example, Voltage PVCCANA_CPU get fail abnormal. |
| *arg4* | Error code, for example, **8268**. |

## Impact on the System

The PCIe device operates unstably and may be powered off.

## Possible Causes

- An internal PCIe device error occurs.

## Procedure

**Step 1** Check whether power-related alarms are generated on the server and the PCIe device.

- If yes, go to **2**.
- If no, go to **3**.

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**Step 2** Clear the power alarms, and check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **3**.

**Step 3** Power off and power on the server, and check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **4**.

**Step 4** Power off and power on the server by disconnecting and then reconnecting the power cable, and check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **5**.

**Step 5** Replace the PCIe device and check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **6**.

**Step 6** Contact technical support engineer.

**----End**

# 2.10.109 ALM-0x08000117 Core component minor fault alarm on PCIe card (PCIe Card, Minor Alarm)

## Description

Alarm message:

A minor fault about the hardware of the PCIe card *arg1 arg2* was detected. *arg3 arg4*.

This alarm is generated when a minor core component error occurs on a PCIe device.

Alarm object: PCIe Card

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x08000117 | Minor | Yes |

## Parameters

| Name | Meaning |
|---|---|
| *arg1* | Slot number of the PCIe card, for example, **3**. |
| *arg2* | PCIe card name, for example, **SDI V5.1**. |
| *arg3* | Alarm description, for example: The core component of the PCIe card is abnormal. |

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| Name | Meaning |
| --- | --- |
| *arg4* | Error code, for example, **8252**. |

## Impact on the System

The system may run abnormally.

## Possible Causes

- The PCIe card core components are faulty.

## Procedure

**Step 1** Power off and power on the server, and check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **2**.

**Step 2** Replace the PCIe device and check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **3**.

**Step 3** Contact technical support engineer.

**----End**

# 2.10.110 ALM-0x08000119 Hardware major fault alarm on PCIe card (PCIe Card, Major Alarm)

## Description

Alarm message:

A minor fault about the hardware of the PCIe card *arg1 arg2* was detected. *arg3 arg4*.

This alarm is generated when a major hardware component error occurs on a PCIe device.

Alarm object: PCIe Card

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x08000119 | Major | Yes |

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### Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Slot number of the PCIe card, for example, **3**. |
| *arg2* | PCIe card name, for example, **SP925D**. |
| *arg3* | Alarm description, for example: The core component of the PCIe card is abnormal. |
| *arg4* | Error code, for example, **8252**. |

### Impact on the System

The system may run abnormally.

### Possible Causes

- The PCIe card core components are faulty.

### Procedure

**Step 1** Replace the PCIe device and check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **2**.

**Step 2** Contact technical support engineer.

**----End**

## 2.10.111 ALM-0x0D000001 NIC MCE/AER Error (NIC, Critical Alarm)

### Description

Alarm message:

The NIC *arg1* triggered an uncorrectable error, *arg2*.

This alarm is generated when an uncorrectable error occurred on a NIC.

Alarm object: NIC

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x0D000001 | Critical | Yes |

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### Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Slot No. of the LOM. |
| *arg2* | Error code of the alarm. |

### Impact on the System

The system may stop responding.

### Possible Causes

- The NIC is faulty.
- The NIC slot is faulty.

### Procedure

**Step 1** Power off the server and check whether there is damage or poor contact between the component and its slot.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Remove and reinstall the NIC. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Replace the NIC. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Replace the mainboard. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Contact technical support engineer.

**----End**

## 2.10.112 ALM-0x0E000005 Memory Board SMI2 Link Initialization Error (Memory Board, Critical Alarm)

### Description

Alarm message:

Memory board *arg1* [VMSECH *arg2*] SMI2 training error. Error code: *arg3*.

This alarm is generated when SMI2 link signals are abnormal.

Alarm object: Memory Board

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### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x0E000005 | Critical | Yes |

### Parameters

| Name | Meaning |
|---|---|
| *arg1* | Socket No. of the CPU. |
| *arg2* | The SMI2 link number. |
| *arg3* | Error code of the alarm. |

### Impact on the System

The system performance is affected, or the system may fail to start.

### Possible Causes

The memory board is faulty.

### Procedure

**Step 1** Reinstall the memory board and ensure that no foreign matter exists in the memory board slot. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Replace the memory board. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Replace the mainboard. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Contact technical support engineer.

**----End**

## 2.10.113 ALM-0x0E00000D The MXC Chip Firmware is Abnormal (Memory Board, Major Alarm)

### Description

Alarm message:

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The *arg1 arg2* firmware is abnormal.

This alarm is generated when the MXC chip firmware is abnormal.

Alarm object: Memory Board

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x0E00000D | Major | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Name of the memory board. For example, **MemBoard1**. |
| *arg2* | Name of the MXC chip. For example, **MXC1 chip**. |

## Impact on the System

- The MXC chip works abnormally. Memory cannot be identified.
- The MXC chip and memory information cannot be obtained.

## Possible Causes

- The MXC chip upgrade process terminates abnormally.
- The memory board or other hardware is faulty.

## Procedure

**Step 1** Restart the OS. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Upgrade the MXC firmware again and activate it. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Replace the memory board. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Contact technical support engineer.

**----End**

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# 2.10.114 ALM-0x0E00000F The Memory Board Memory Training Failed (Memory Board, Major Alarm)

## Description

Alarm message:

The *arg1 arg2 arg3* ddr training failed. Error code: *arg4*.

This alarm is generated when the memory board memory training failed.

Alarm object: Memory Board

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x0E00000F | Major | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Name of the memory board. For example, **MemBoard1**. |
| *arg2* | Name of the MXC chip. For example, **MXC1 chip**. |
| *arg3* | No. of the DIMM. For example, **DIMM00**. |
| *arg4* | Error code. For example, **00030007**. |

## Impact on the System

- The MXC chip is affected.
- The OS is suspended.

## Possible Causes

- The DIMM is in poor contact with its slot.
- A DIMM is faulty.
- The memory board is faulty.

## Procedure

**Step 1** Remove and reinstall the DIMM. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Replace the faulty DIMM with the DIMM of the same specification. Then, check whether the alarm is cleared.

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- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Replace the memory board. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Contact technical support engineer.

**----End**

# 2.10.115 ALM-0x0E000011 The Memory Board Memory is Missing (Memory Board, Major Alarm)

## Description

Alarm message:

The *arg1 arg2* memory is missing.

This alarm is generated when the memory board memory is missing.

Alarm object: Memory Board

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x0E000011 | Major | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Name of the memory board. For example, **MemBoard1**. |
| *arg2* | Name of the MXC chip. For example, **MXC1 chip**. |

## Impact on the System

Services carried on the memory may be interrupted and the system stops responding.

## Possible Causes

- The DIMM is in poor contact with its slot.
- A DIMM is faulty.
- The memory board is faulty.

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## Procedure

**Step 1** Remove and reinstall the DIMM. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Replace the faulty DIMM with the DIMM of the same specification. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Replace the memory board. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Contact technical support engineer.

**----End**

# 2.10.116 ALM-0x0E000013 The Memory Board Controller Chip Triggered an Uncorrectable Error (Memory Board, Critical Alarm)

## Description

Alarm message:

The memory board *arg1* controller chip *arg2* triggered an uncorrectable error.

This alarm is generated when the memory board memory controller chip triggered an uncorrectable error.

Alarm object: Memory Board

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x0E000013 | Critical | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Name of the memory board. For example, **MemBoard1**. |
| *arg2* | Name of the MXC chip. For example, **MXC1 chip**. |

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### Impact on the System

The memory devices on the memory board are affected, which further affects the system operation.

### Possible Causes

- The DIMM is in poor contact with its slot.
- A DIMM is faulty.
- The memory board is faulty.

### Procedure

**Step 1** Power off the server and check whether there is damage or poor contact between the component and its slot.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Replace the component and check for alarms.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Contact technical support engineer.

**----End**

## 2.10.117 ALM-0x0F00001B Riser Card Mismatch (PCIe Riser, Critical Alarm)

### Description

Alarm message:

Mismatch between *arg1* and *arg2*.

This alarm is generated when the riser card is not compatible with the inserted component.

Alarm object: PCIe Riser

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x0F00001B | Critical | Yes |

### Parameters

| Name | Meaning |
|---|---|
| *arg1* | PCIe riser card number. For example, **PCIe Riser1**. |

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| Name | Meaning |
| --- | --- |
| *arg2* | Module name (chip name, system name). For example, **SDI V5.1**. |

### Impact on the System

The component inserted on the PCIe riser card has functional abnormalities.

### Possible Causes

The PCIe riser card is incompatible with the inserted component.

### Procedure

**Step 1** Replace the PCIe riser card. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Contact technical support engineer.

**----End**

## 2.10.118 ALM-0x0F000023 PCIe Riser Card Absent Alarm (PCIe Riser, Minor Alarm)

### Description

Alarm message:

PCIe riser card (*arg1*) is absent.

This alarm is generated when the PCIe riser card is absent.

Alarm object: PCIe Riser

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x0F000023 | Minor | Yes |

### Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | PCIe riser card number. |

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### Impact on the System

Pcie riser card is absent, which affects the function.

### Possible Causes

- The PCIe riser card is not firmly connected.
- The PCIe riser card is faulty.

### Procedure

**Step 1** Check whether the PCIe riser card is not connected or properly connected.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Reconnect the PCIe riser card to the mainboard. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Replace or install the PCIe riser card. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Contact technical support engineer.

**----End**

## 2.10.119 ALM-0x0F000025 Riser Card CPLD Self-test Failed (PCIe Riser, Major Alarm)

### Description

Alarm message:

Abnormal PCIe riser card *arg1* CPLD self-check result.

This alarm is generated when the riser card CPLD self-test failed.

Alarm object: PCIe Riser

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x0F000025 | Major | Yes |

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### Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | PCIe riser card number. |

### Impact on the System

The PCIe riser card fails to work.

### Possible Causes

The PCIe riser card is faulty.

### Procedure

**Step 1** Restart the iBMC. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Replace the PCIe riser card. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Contact technical support engineer.

**----End**

## 2.10.120 ALM-0x1000000D Low Voltage in Mainboard RTC Battery (Mainboard, Major Alarm)

### Description

Alarm message:

Low voltage of RTC battery on the mainboard (BN: *arg1*).

NOTE

From iBMC V316, the CPU and disk alarms will also include the SN and BOM code and the mainboard and memory alarms will also include the BOM code.

This alarm is generated when the real-time clock (RTC) battery on the mainboard fails or the RTC battery voltage is low.

Alarm object: Mainboard

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x1000000D | Major | Yes |

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### Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | BOM code. |

### Impact on the System

The server clock is affected.

### Possible Causes

- The battery on the mainboard is not installed or is low in power.
- The voltage detection link is faulty.

### Procedure

**Step 1** Replace the RTC battery. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Replace the mainboard. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Contact technical support engineer.

**----End**

## 2.10.121 ALM-0x10000013 Incorrect Hardware Address (Mainboard, Major Alarm)

### Description

Alarm message:

Incorrect hardware address (*arg1* address) of the board (BN: *arg2*).

NOTE

From iBMC V316, the CPU and disk alarms will also include the SN and BOM code and the mainboard and memory alarms will also include the BOM code.

This alarm is generated when the hardware address obtained is incorrect.

Alarm object: Mainboard

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### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x10000013 | Major | Yes |

### Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Hardware address of the mainboard. |
| *arg2* | BOM code. |

### Impact on the System

The management system internal communication is affected, and the server cannot be managed effectively.

### Possible Causes

- The board is not firmly seated.
- The mainboard is faulty.

### Procedure

**Step 1** Restart the iBMC. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Replace the mainboard. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Contact technical support engineer.

**----End**

## 2.10.122 ALM-0x10000015 Mainboard CPLD Self-Check Failed (Mainboard, Major Alarm)

### Description

Alarm message:

Abnormal mainboard CPLD [*arg1*] self-check result (BN: *arg2*).

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NOTE

From iBMC V316, the CPU and disk alarms will also include the SN and BOM code and the mainboard and memory alarms will also include the BOM code.

This alarm is generated when an error is detected during the mainboard CPLD self-check.

Alarm object: Mainboard

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x10000015 | Major | Yes |

## Parameters

| Name | Meaning |
|---|---|
| *arg1* | Mainboard CPLD serial number. |
| *arg2* | BOM code. |

## Impact on the System

The server cannot start normally.

## Possible Causes

The mainboard is faulty.

## Procedure

**Step 1** Restart the iBMC. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Replace the mainboard. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Contact technical support engineer.

**----End**

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# 2.10.123 ALM-0x10000019 Incorrect Slot Number (Mainboard, Major Alarm)

## Description

Alarm message:

The board slot number cannot be obtained or is incorrect (BN: *arg1*).

NOTE

From iBMC V316, the CPU and disk alarms will also include the SN and BOM code and the mainboard and memory alarms will also include the BOM code.

This alarm is generated when the system failed to obtain the board slot number or the obtained slot number is incorrect.

Alarm object: Mainboard

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x10000019 | Major | Yes |

## Parameters

| Name | Meaning |
|---|---|
| *arg1* | BOM code. |

## Impact on the System

The management system may encounter an internal communication error and cannot manage the server effectively.

## Possible Causes

- The mainboard is faulty.
- The chassis is abnormal.

## Procedure

**Step 1** Remove and reinstall the board. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Switch the board with a functioning board in the same chassis, and check whether the alarm is still generated for this board.

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- If yes, go to **Step 3**.
- If no, go to **Step 4**.

**Step 3** Replace the mainboard. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 4** Replace the chassis. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Contact technical support engineer.

**----End**

# 2.10.124 ALM-0x1000001B Board Not Firmly Seated (Mainboard, Major Alarm)

## Description

Alarm message:

The board is not properly installed (BN: *arg1*).

NOTE

From iBMC V316, the CPU and disk alarms will also include the SN and BOM code and the mainboard and memory alarms will also include the BOM code.

This alarm is generated when the board is not properly installed.

Alarm object: Mainboard

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x1000001B | Major | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | BOM code. |

## Impact on the System

The management system internal communication is affected, and the server cannot be managed effectively.

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## Possible Causes

- The mainboard is faulty.
- The server chassis is abnormal.

## Procedure

**Step 1** Remove and reinstall the board. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Switch the board with a functioning board in the same chassis, and check whether the alarm is still generated for this board.

- If yes, go to **Step 3**.
- If no, go to **Step 4**.

**Step 3** Replace the mainboard. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 4** Replace the chassis. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Contact technical support engineer.

**----End**

# 2.10.125 ALM-0x10000061 Video Controller Fault (Mainboard, Critical Alarm)

## Description

Alarm message:

A video controller error is detected during system startup (BN: *arg1*).

NOTE

From iBMC V316, the CPU and disk alarms will also include the SN and BOM code and the mainboard and memory alarms will also include the BOM code.

This alarm is generated when the BIOS cannot detect the display device.

Alarm object: Mainboard

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x10000061 | Critical | Yes |

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### Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | BOM code. |

### Impact on the System

The video device connected to the server does not work.

### Possible Causes

The display adapter is faulty.

### Procedure

**Step 1** Check whether the server is configured with an external display adapter.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Replace the display adapter. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Replace the mainboard. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Contact technical support engineer.

**----End**

## 2.10.126 ALM-0x10000093 PS/2 or USB Keyboard Controller Fault (Mainboard, Critical Alarm)

### Description

Alarm message:

A PS/2 or USB keyboard controller error is detected during system startup (BN: *arg1*).

NOTE

From iBMC V316, the CPU and disk alarms will also include the SN and BOM code and the mainboard and memory alarms will also include the BOM code.

This alarm is generated when the PS/2 or USB device is unavailable or faulty.

Alarm object: Mainboard

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## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x10000093 | Critical | Yes |

## Parameters

| Name | Meaning |
|---|---|
| *arg1* | BOM code. |

## Impact on the System

The PS/2 or USB device is unavailable.

## Possible Causes

- The PS/2 or USB device is damaged.
- The mainboard is faulty.

## Procedure

**Step 1** Check whether an external keyboard is installed.

- If yes, go to **Step 2**.
- If no, go to **Step 4**.

**Step 2** Check whether the external keyboard is damaged.

- If yes, go to **Step 3**.
- If no, go to **Step 4**.

**Step 3** Replace the external keyboard. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Replace the mainboard . Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Contact technical support engineer.

**----End**

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# 2.10.127 ALM-0x1000009B Mainboard SMI2 Link Initialization Error (Mainboard, Critical Alarm)

## Description

Alarm message:

CPU *arg1* [VMSECH *arg2*] SMI2 training error. Error code: *arg3* (BN: *arg4*).

NOTE

From iBMC V316, the CPU and disk alarms will also include the SN and BOM code and the mainboard and memory alarms will also include the BOM code.

This alarm is generated when SMI2 link signals are abnormal.

Alarm object: Mainboard

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x1000009B | Critical | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Socket No. of the CPU. |
| *arg2* | The SMI2 link number |
| *arg3* | Error code of the alarm. |
| *arg4* | BOM code. |

## Impact on the System

The system performance is affected, or the system may fail to start.

## Possible Causes

- A DIMM is faulty.
- A CPU is faulty.
- The mainboard is faulty.

## Procedure

**Step 1** Check whether other memory alarms are present.

- If yes, go to **Step 2**.

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- If no, go to **Step 3**.

**Step 2** Clear other memory alarms. Then, check whether this alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Switch the CPU with a functioning CPU in the same chassis, and check whether the alarm is still generated for this CPU.

- If yes, go to **Step 4**.
- If no, go to **Step 5**.

**Step 4** Replace the CPU. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 6**.

**Step 5** Replace the mainboard. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 6**.

**Step 6** Contact technical support engineer.

**----End**

# 2.10.128 ALM-0x100000A9 Mainboard Fault (Mainboard, Major Alarm)

## Description

Alarm message:

Mainboard *arg1* clock *arg2* signals lost (BN: *arg3*).

NOTE

From iBMC V316, the CPU and disk alarms will also include the SN and BOM code and the mainboard and memory alarms will also include the BOM code.

This alarm is generated when the mainboard clock circuit is faulty.

Alarm object: Mainboard

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x100000A9 | Major | Yes |

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### Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Type of the mainboard clock. For example, **100MHz** or **156.25MHz**. |
| *arg2* | Mainboard clock number. |
| *arg3* | BOM code. |

### Impact on the System

System signals are affected, and the server may fail to start or run abnormally.

### Possible Causes

The mainboard is faulty.

### Procedure

**Step 1** Replace the mainboard. After the server is powered on, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Contact technical support engineer.

**----End**

## 2.10.129 ALM-0x100000AB Active iBMC Absent (Mainboard, Critical Alarm)

### Description

Alarm message:

Master iBMC board is not exist (BN: *arg1*).

NOTE

From iBMC V316, the CPU and disk alarms will also include the SN and BOM code and the mainboard and memory alarms will also include the BOM code.

This alarm is generated when the system cannot detect the active iBMC.

Alarm object: Mainboard

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x100000AB | Critical | Yes |

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### Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | BOM code. |

### Impact on the System

The BMC cannot manage the server.

### Possible Causes

The active iBMC module is not installed or is faulty.

### Procedure

**Step 1** Check whether the active iBMC module is installed.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Install the active iBMC module. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Replace the active iBMC module. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Contact technical support engineer.

**----End**

## 2.10.130 ALM-0x100000AD SPI Flash State Changeover Error (Mainboard, Minor Alarm)

### Description

Alarm message:

The BIOS SPI flash switch is abnormal (BN: *arg1*).

NOTE

From iBMC V316, the CPU and disk alarms will also include the SN and BOM code and the mainboard and memory alarms will also include the BOM code.

This alarm is generated when the BIOS flash circuit used for upgrade is faulty.

Alarm object: Mainboard

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### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x100000AD | Minor | Yes |

### Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | BOM code. |

### Impact on the System

- The BIOS upgrade cannot be performed successfully.
- The system cannot start after being powered off.

### Possible Causes

The mainboard is faulty.

### Procedure

**Step 1** Replace the mainboard. After the server is powered on, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Contact technical support engineer.

**----End**

## 2.10.131 ALM-0x100000AF Mainboard Fault (Mainboard, Minor Alarm)

### Description

Alarm message:

Mainboard 100M clock signals lost (BN: *arg1*).

NOTE

From iBMC V316, the CPU and disk alarms will also include the SN and BOM code and the mainboard and memory alarms will also include the BOM code.

This alarm is generated when a circuit fault is detected during power capping.

Alarm object: Mainboard

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### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x100000AF | Minor | Yes |

### Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | BOM code. |

### Impact on the System

Power capping failed.

### Possible Causes

The hardware device is faulty.

### Procedure

**Step 1** Replace the mainboard. After the server is powered on, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Contact technical support engineer.

**----End**

## 2.10.132 ALM-0x100000B1 LOM MCE/AER Error (Mainboard, Critical Alarm)

### Description

Alarm message:

The LOM *arg1* triggered an uncorrectable error,*arg2* (BN: *arg3*).

NOTE

From iBMC V316, the CPU and disk alarms will also include the SN and BOM code and the mainboard and memory alarms will also include the BOM code.

This alarm is generated when an uncorrectable error is detected on the LOM.

Alarm object: Mainboard

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### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x100000B1 | Critical | Yes |

### Parameters

| Name | Meaning |
|---|---|
| *arg1* | Serial number of the LOM. |
| *arg2* | Error code of the alarm. |
| *arg3* | BOM code. |

### Impact on the System

The NIC may run unstably and the system may run abnormally.

### Possible Causes

The mainboard is faulty.

### Procedure

**Step 1** Replace the mainboard. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Contact technical support engineer.

**----End**

## 2.10.133 ALM-0x100000B9 WOL Signal Abnormal (Mainboard, Major Alarm)

### Description

Alarm message:

The WOL signal triggered by the Mezzanine card is abnormal (BN: *arg1*).

NOTE

From iBMC V316, the CPU and disk alarms will also include the SN and BOM code and the mainboard and memory alarms will also include the BOM code.

This alarm is generated when low level is continuously detected from the Wake-on LAN (WOL) signal.

Alarm object: Mainboard

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### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x100000B9 | Major | Yes |

### Parameters

| Name | Meaning |
|---|---|
| *arg1* | BOM code. |

### Impact on the System

The OS cannot be shut down, or the OS in shutdown status can be awakened by a network message.

### Possible Causes

The mezzanine card is faulty.

The mainboard is faulty.

### Procedure

**Step 1** Replace the mezzanine card. After the server is powered on, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Replace the mainboard. After the server is powered on, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Contact technical support engineer.

**----End**

## 2.10.134 ALM-0x100000C5 Failed to Obtain the System RTC Clock (Mainboard, Major Alarm)

### Description

Alarm message

Failed to obtain the RTC clock on the mainboard (BN: *arg1*).

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NOTE

From iBMC V316, the CPU and disk alarms will also include the SN and BOM code and the mainboard and memory alarms will also include the BOM code.

This alarm is generated when the system failed to obtain the mainboard RTC clock signal.

Alarm object: Mainboard

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x100000C5 | Major | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | BOM code. |

## Impact on the System

The RTC time cannot be obtained. As a result, the iBMC time is inaccurate.

## Possible Causes

- The RTC battery is faulty or the battery level is low.
- The mainboard is faulty.

## Procedure

**Step 1** Restart the iBMC. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Replace the RTC clock battery. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Replace the mainboard. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Contact technical support engineer.

**----End**

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# 2.10.135 ALM-0x100000C7 Failed to Obtain System 10GE_PHY Clock (Mainboard, Major Alarm)

## Description

Alarm message:

Failed to obtain the 10GE_PHY clock on the mainboard (BN: *arg1*).

NOTE

From iBMC V316, the CPU and disk alarms will also include the SN and BOM code and the mainboard and memory alarms will also include the BOM code.

This alarm is generated when the system failed to obtain the mainboard 10GE_PHY clock signal.

Alarm object: Mainboard

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x100000C7 | Major | Yes |

## Parameters

| Name | Meaning |
|---|---|
| *arg1* | BOM code. |

## Impact on the System

The service network ports on the SMU are affected, causing the system network to be abnormal.

## Possible Causes

The mainboard is faulty.

## Procedure

**Step 1** Replace the mainboard. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Contact technical support engineer.

**----End**

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# 2.10.136 ALM-0x100000C9 Failed to Access the I2C Device (Mainboard, Major Alarm)

## Description

Alarm message:

Failed to access I2C *arg1* on *arg2* (BN: *arg3*).

NOTE

From iBMC V316, the CPU and disk alarms will also include the SN and BOM code and the mainboard and memory alarms will also include the BOM code.

This alarm is generated when the access to the I2C device failed.

Alarm object: Mainboard

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x100000C9 | Major | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Location of the I2C device, for example, **PCA9555** or **EEPROM**. |
| *arg2* | Board holding the I2C device, for example, **EIUA** or **OIUA**. |
| *arg3* | BOM code. |

## Impact on the System

The iBMC cannot read the information about the I2C device, which may cause board exceptions and failure to monitor component status.

## Possible Causes

The I2C link or device is faulty.

## Procedure

**Step 1** Check whether the component holding the I2C device is connected with a signal cable.

- If yes, go to **Step 2**.
- If no, go to **Step 4**.

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**Step 2** Reconnect the signal cable. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Replace the signal cable. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Replace the component holding the I2C device. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Contact technical support engineer.

**----End**

# 2.10.137 ALM-0x100000D3 Large Voltage Difference on MOS Transistor (Mainboard, Minor Alarm)

## Description

Alarm message:

```
Large Voltage Difference on Mainboard MOSarg1.
```

This alarm is generated when large voltage difference on MOS transistor.

Alarm object: Mainboard

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x100000D3 | Minor | Yes |

## Parameters

| Name | Meaning |
|---|---|
| *arg1* | *Indicates the MOS slot No.* |

## Impact on the System

Excessive voltage difference leads to the risk of overheated MOS.

## Possible Causes

Impedance too high.

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### Procedure

Contact technical support engineer.

## 2.10.138 ALM-0x100000D9 USB Port Overcurrent (Mainboard, Major Alarm)

### Description

Alarm message:

The USB port*arg1* on the mainboard is overcurrent (BN: *arg2*).

NOTE

From iBMC V316, the CPU and disk alarms will also include the SN and BOM code and the mainboard and memory alarms will also include the BOM code.

This alarm is generated when the USB port overcurrent is detected.

Alarm object: Mainboard

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x100000D9 | Major | Yes |

### Parameters

| Name | Meaning |
|---|---|
| *arg1* | USB port No. |
| *arg2* | BOM code. |

### Impact on the System

The USB device on the port cannot be used.

### Possible Causes

The USB port is short-circuited.

### Procedure

**Step 1** Replace the USB device on the port. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

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**Step 2** Replace the component that provides the USB port. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Contact technical support engineer.

**----End**

# 2.10.139 ALM-0x100000F1 Unrecoverable Faults Occur on the Mainboard (Mainboard, Critical Alarm)

## Description

Alarm message:

```
Unrecoverable faults occur on the mainboard.
```

This alarm is generated when unrecoverable faults occur on the mainboard.

Alarm object: Mainboard

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x100000F1 | Critical | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| - | - |

## Impact on the System

The system running is affected.

## Possible Causes

A critical alarm is generated on the mainboard.

## Procedure

**Step 1** Clear other critical alarms generated on the mainboard.

- If yes, no further action is required.
- If no, go to **Step 2**.

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**Step 2** Contact technical support engineer.

**----End**

# 2.10.140 ALM-0x1000011B Failed to Obtain Data About the Node Power (Mainboard, Minor Alarm)

## Description

Alarm message:

```
Failed to obtain data of the node power.
```

This alarm is generated when failed to obtain data of the node power.

Alarm object: Mainboard

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x1000011B | Minor | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| - | - |

## Impact on the System

The power capping function may be affected, which affects the normal running of the node.

## Possible Causes

The mainboard is abnormal.

## Procedure

**Step 1** Disable insecure protocols according to the Redfish API Description or User Guide.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Contact technical support engineer.

**----End**

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# 2.10.141 ALM-0x10000135 High Voltage of the Mainboard RTC Battery (Mainboard, Major Alarm)

## Description

Alarm message:

The voltage of RTC battery (*arg1* V) exceeds the overvoltage threshold (*arg2* V).

This alarm is generated when the voltage of RTC battery exceeds the overvoltage threshold.

Alarm object: Mainboard

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x10000135 | Major | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Current reading of the sensor. |
| *arg2* | Alarm threshold. |

## Impact on the System

The server clock is affected.

## Possible Causes

The RTC battery is faulty.

## Procedure

**Step 1** Replace the RTC battery, and check whether the fault is rectified.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Replace the CPU, and check whether the fault is rectified.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Contact technical support.

**----End**

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# 2.10.142 ALM-0x10000137 Low Voltage of the Mainboard RTC Battery (Mainboard, Major Alarm)

## Description

Alarm message:

The voltage of RTC battery (*arg1* V) is lower than the undervoltage threshold (*arg2* V).

This alarm is generated when the voltage of RTC battery is lower than the overvoltage threshold.

Alarm object: Mainboard

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x10000137 | Major | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Current reading of the sensor. |
| *arg2* | Alarm threshold. |

## Impact on the System

The server clock is affected.

## Possible Causes

The RTC battery is faulty.

## Procedure

**Step 1** Replace the RTC battery, and check whether the fault is rectified.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Replace the CPU, and check whether the fault is rectified.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Contact technical support.

**----End**

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# 2.10.143 ALM-0x1000013F The ME Heartbeat is Abnormal (Mainboard, Minor Alarm)

## Description

Alarm message:

The heartbeat between iBMC and *arg1* is abnormal.

This alarm is generated when the heartbeat between iBMC and ME is abnormal.

Alarm object: Mainboard

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x1000013F | Minor | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | ME |

## Impact on the System

ME-related services are interrupted.

## Possible Causes

The ME is faulty.

## Procedure

**Step 1** Power off the OS. Then check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Forcibly upgrade the BIOS. Then check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Contact technical support engineer.

**----End**

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# 2.10.144 ALM-0x10000157 Failed to Parse the Mainboard FRU Data (Mainboard, Minor Alarm)

## Description

Alarm message:

```
Failed to parse electronic label data of mainboard.
```

This alarm is generated when the iBMC failes to parse electronic label data of mainboard.

Alarm object: Mainboard

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x10000157 | Minor | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| - | - |

## Impact on the System

The system asset information cannot be displayed normally.

## Possible Causes

Mainboard FRU data exception.

## Procedure

**Step 1** Reprogram mainboard FRU information again. Then check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Replace the mainboard. Then check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Contact technical support engineer.

**----End**

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# 2.10.145 ALM-0x10000159 High Voltage of the Mainboard RTC Battery (Mainboard, Minor Alarm)

## Description

Alarm message:

The voltage of RTC battery (*arg1* V) exceeds the overvoltage threshold (*arg2* V).

This alarm is generated when the voltage of RTC battery exceeds the overvoltage threshold.

Alarm object: Mainboard

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x10000159 | Minor | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Current reading of the sensor. |
| *arg2* | Alarm threshold. |

## Impact on the System

The server clock is affected.

## Possible Causes

The RTC battery is faulty.

## Procedure

**Step 1** Replace the RTC battery, and check whether the fault is rectified.

- If yes, no further action is required.
- If no, go to **2**.

**Step 2** Contact technical support engineer.

**----End**

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# 2.10.146 ALM-0x100F0021 The Retimer Chip of the Motherboard is Faulty (Mainboard, Major Alarm)

## Description

Alarm message:

The retimer *arg1* chip on the motherboard is faulty.

This alarm is generated when the retimer chip on the motherboard is faulty.

Alarm object: Mainboard

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x100F0021 | Major | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | No. of the retimer. |

## Impact on the System

Service network communication is affected.

## Possible Causes

An internal error occurs on the retimer chip.

## Procedure

**Step 1** Replace the mainboard. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Contact technical support engineer.

**----End**

# 2.10.147 ALM-0x10000163 BIOS Parameter Configuration Abnormal (Mainboard, Major Alarm)

## Description

Alarm message:

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The BIOS failed to obtain the *arg1* through *arg2*.

This alarm is generated when an abnormal BIOS parameter configuration is detected.

Alarm object: Mainboard

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x10000163 | Major | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Model configuration. |
| *arg2* | CPU No. |

## Impact on the System

BIOS parameter configuration error.

## Possible Causes

- Mainboard CPLD version is incorrect
- The CPU is faulty.
- The mainboard is faulty.

## Procedure

**Step 1** Upgrade mainboard CPLD. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Exchange the positions of the CPU1 and CPU2 to determine the faulty component. If the fault disappears, replace the original CPU1. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Replace the mainboard. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Contact technical support engineer.

**----End**

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# 2.10.148 ALM-0x10000165 The mainboard product serial number does not match the serial number in the backup database. (Mainboard, Minor Alarm)

## Description

Alarm message:

The mainboard product serialnumber (*arg1*) does not match the serialnumber in the backup database (*arg2*).

This alarm is generated when the detection finds that the mainboard product serial number does not match the serial number in the backup database.

Alarm object: Mainboard

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x10000165 | Minor | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Mainboard Product Serial Number. |
| *arg2* | Backup Library Serial Number. |

## Impact on the System

Unable to automatically backup and restore the configuration.

## Possible Causes

The replacement or modification of the product serial number leads to a mismatch between the mainboard product serial number and the backup library serial number.

## Procedure

**Step 1** Perform backup or restore configuration according to the actual situation, ensuring that the motherboard product serial number is consistent with the backup library serial number. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **2**.

**Step 2** Modify the motherboard product serial number to match the backup library serial number. Then, check whether the alarm is cleared.

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- If yes, no further action is required.
- If no, go to **3**.

**Step 3** Contact technical support engineer.

**----End**

# 2.10.149 ALM-0x11000005 LCD Fault (LCD, Minor Alarm)

## Description

Alarm message:

LCD fault, or LCD-iBMC communication failure.

This alarm is generated when the LCD is faulty or the communication between the LCD and iBMC is abnormal.

Alarm object: LCD

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x11000005 | Minor | Yes |

## Parameters

| Name | Meaning |
|---|---|
| – | – |

## Impact on the System

The LCD cannot be used.

## Possible Causes

- The serial cable to the LCD is faulty.
- The LCD is faulty.

## Procedure

**Step 1** Remove and reconnect the LCD cable. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Replace the LCD cable. Then, check whether the alarm is cleared.

- If yes, no further action is required.

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- If no, go to **Step 3**.

**Step 3** Replace the LCD. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Contact technical support.

**----End**

# 2.10.150 ALM-0x12000019 Right Mounting Ear Not Detected (Chassis, Minor Alarm)

## Description

Alarm message:

```
Right mounting ear is not present.
```

This alarm is generated when the right mounting ear of the server cannot be detected.

Alarm object: Chassis

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x12000019 | Minor | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| - | - |

## Impact on the System

- The inlet temperature cannot be obtained.
- The power button on the mounting ear is unavailable.
- The UID button on the mounting ear is unavailable.

## Possible Causes

- The cable of the right mounting ear is not securely connected.
- The cable of the right mounting ear is faulty.
- The right mounting ear is faulty.

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## Procedure

**Step 1** Remove and reconnect the cable to the right mounting ear. Then, check whether the alarm is cleared.

For details about how to connect the cable, see the maintenance and service guide of the server you use.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Replace the cable of the right mounting ear. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Replace the mounting ear. Then, check whether the alarm is cleared.

For details about how to replace the mounting ear, see the **Parts Replacement** in maintenance and service guide of the server you use.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Contact technical support engineer.

**----End**

# 2.10.151 ALM-0x12000021 Left Mounting Ear Absent (Chassis, Minor Alarm)

## Description

Alarm message:

```
Left mounting ear is not present.
```

This alarm is generated when the left mounting ear of the server is not detected.

Alarm object: Chassis

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x12000021 | Minor | Yes |

## Parameters

| Name | Meaning |
|---|---|
| - | - |

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### Impact on the System

- The inlet temperature cannot be obtained.
- The power button on the mounting ear is unavailable.
- The UID button on the mounting ear is unavailable.

### Possible Causes

- The cable of the left mounting ear is not securely connected.
- The cable of the left mounting ear is faulty.
- The left mounting ear is faulty.

### Procedure

**Step 1** Remove and reconnect the cable to the left mounting ear. Then, check whether the alarm is cleared.

For details about how to connect the cable, see the maintenance and service guide of the server you use.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Replace the cable of the left mounting ear. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Replace the mounting ear. Then, check whether the alarm is cleared.

For details about how to replace the mounting ear, see the **Parts Replacement** in maintenance and service guide of the server you use.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Contact technical support engineer.

**----End**

## 2.10.152 ALM-0x12000023 Liquid-Cooled Device Leakage (Chassis, Critical Alarm)

### Description

Alarm message:

Leakage occurred on the *arg1* liquid cooling device.

This alarm is generated when the liquid leakage detection module detects liquid leakage in a liquid-cooled device.

Alarm object: Chassis

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### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x12000023 | Critical | Yes |

### Parameters

| Name | Meaning |
|---|---|
| *arg1* | Location where liquid leakage occurs. |

### Impact on the System

The server may break down.

### Possible Causes

- The liquid cooled device is damaged.
- The leakage detection card is faulty.

### Procedure

**Step 1** Power off the server.

**Step 2** Check whether the liquid cooled device is damaged.

- If yes, go to **Step 3**.
- If no, go to **Step 4**.

**Step 3** Replace the liquid-cooled device. After the server is powered on, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Replace the leakage detection module. After the server is powered on, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Contact technical support engineer.

**----End**

## 2.10.153 ALM-0x12000027 The Water Detection Cable is not Detected (Chassis, Major Alarm)

### Description

Alarm message:

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The water detection cable *arg1* is not detected.

This alarm is generated when the water detection cable is not detected.

Alarm object: Chassis

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x12000027 | Major | Yes |

### Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Location of the leakage detection card. |

### Impact on the System

The liquid cooling device cannot report alarms when leakage occurs.

### Possible Causes

- Water leakage rope not configured
- Leakage detection card or water leakage rope malfunction

### Procedure

**Step 1** Check if the water sensor cable is unplugged or loose.

- If yes, go to **2**.
- If no, go to **3**.

**Step 2** Replace the Water Detection Cable. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **3**.

**Step 3** Contact technical support engineer.

**----End**

## 2.10.154 ALM-0x1200002F The Front Disk Backplane is not Detected (Chassis, Minor Alarm)

### Description

Alarm message:

The front disk backplane is absent.

This alarm is generated when the front disk backplane is absent.

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Alarm object: Chassis

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x1200002F | Minor | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| - | - |

## Impact on the System

The front drives cannot be installed or the front drives cannot work properly.

## Possible Causes

- The front-disk backplane is not installed.
- The signal cable of the front-disk backplane is not properly connected.
- The power cable of the front-disk backplane is not properly connected.
- The CPLD of the front-disk backplane is faulty.
- The mainboard CPLD is faulty.
- The front-disk backplane is faulty.

## Procedure

**Step 1** Check whether the front disk backplane is installed.

- If yes, go to **Step 3**.
- If no, go to **Step 2**.

**Step 2** Install the the front disk backplane properly, and power on the server. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Check whether the signal cable of the front disk backplane is not connected or properly connected.

- If yes, go to **Step 4**.
- If no, go to **Step 5**.

**Step 4** Connect the signal cable of the front disk backplane firmly. Then, check whether the alarm is cleared.

- If yes, no further action is required.

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- If no, go to **Step 5**.

**Step 5** Check whether the power cable of the front disk backplane is not connected or properly connected.

- If yes, go to **Step 6**.
- If no, go to **Step 7**.

**Step 6** Connect the power cable of the front disk backplane firmly. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 7**.

**Step 7** Upgrade the CPLD of the front disk backplane. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 8**.

**Step 8** Upgrade the mainboard CPLD. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 9**.

**Step 9** Replace the front disk backplane. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 10**.

**Step 10** Contact technical support engineer.

**----End**

# 2.10.155 ALM-0x12000031 The Leakage Detection Card is Absent (Chassis, Major Alarm)

## Description

Alarm message:

The leakage detection card *arg1* is absent.

This alarm is generated when the leakage detection card is absent.

Alarm object: Chassis

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x12000031 | Major | Yes |

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### Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Card location. |

### Impact on the System

The liquid cooling device cannot report alarms when leakage occurs.

### Possible Causes

- The leakage detection card is absent.
- The leakage detection card is faulty.

### Procedure

**Step 1** Check whether leakage detection card is absent

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Install the leakage detection card properly and check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Check whether the leakage detection card is faulty.

- If yes, go to **Step 4**.
- If no, go to **Step 5**.

**Step 4** Replace the faulty leakage detection card and check whether the alarm has been cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Contact technical support engineer.

**----End**

## 2.10.156 ALM-0x1200003B Failed to Identify the Component (Chassis, Major Alarm)

### Description

Alarm message:

Failed to identify the *arg1*. Error details: *arg2*.

This alarm is generated when the component type fails to be identified.

Alarm object: Chassis

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## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x1200003B | Major | Yes |

## Parameters

| Name | Meaning |
|---|---|
| *arg1* | Component type, such as front disk backplane, disk backplane of rear I/O module 3, fan board, or EXP board. |
| *arg2* | Fault details, such as CRC Failure or Invalid Product ID. |

## Impact on the System

- The component asset information cannot be obtained.
- The iBMC cannot manage the component properly.

## Possible Causes

- The I2C link to EEPROM is faulty.
- The EEPROM data of the component is incorrect.

## Procedure

**Step 1** Restart the iBMC, and check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Replace the faulty component, and check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Remove and reinstall the power cable of the EXP backplane, and check whether the alarm is cleared.

NOTE

Perform this operation only for the 5298 V7.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Contact technical support engineer.

**----End**

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# 2.10.157 ALM-0x1200003D Right O&M Interface Module is not Present (Chassis, Minor Alarm)

## Description

Alarm message:

Right O&M interface module *arg1* is not present.

This alarm is generated when the right O&M interface module of the server cannot be detected.

Alarm object: Chassis

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x1200003D | Minor | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Name of the alarmed device. For example, **Led**, **Local O&M port**, **USB**, or **VGA**. |

## Impact on the System

- The air inlet temperature cannot be obtained.
- The power button is unavailable.
- The UID button is unavailable.
- The local O&M port is unavailable.
- The USB interface is unavailable.
- The VGA interface is unavailable.

## Possible Causes

- The right O&M interface module is not installed.
- The cable of right O&M interface module is not firmly seated.
- The cable of the O&M interface module is faulty.
- The right O&M interface module is faulty.

## Procedure

**Step 1** Check whether the right O&M interface module is installed.

- If yes, go to **Step 3**.

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- If no, go to **Step 2**.

**Step 2** Install the right O&M interface module properly. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Check whether the cable to the right O&M interface module is not connected or securely connected.

- If yes, go to **Step 4**.
- If no, go to **Step 5**.

**Step 4** Remove and reconnect the cable to the right O&M interface module. Then, check whether the alarm is cleared.

For details about how to connect the cable, see the maintenance and service guide of the server you use.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Replace the cable of the right O&M interface module. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 6**.

**Step 6** Replace the right O&M interface module. Then, check whether the alarm is cleared.

For details about how to replace the right O&M interface module, see the **Parts Replacement** in maintenance and service guide of the server you use.

- If yes, no further action is required.
- If no, go to **Step 7**.

**Step 7** Contact technical support engineer.

**----End**

# 2.10.158 ALM-0x1200003F Mismatch Between the Node and the Chassis (Chassis, Major Alarm)

## Description

Alarm message:

```
The server node does not match the chassis.
```

This alarm is generated when the model of the server node does not match that of the chassis.

Alarm object: Chassis

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### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x1200003F | Major | Yes |

### Parameters

| Name | Meaning |
|---|---|
| - | - |

### Impact on the System

The node is not working properly.

### Possible Causes

- The mainboard CPLD/fan board CPLD version mismatch error.
- The model of the server node does not match that of the chassis.

### Procedure

**Step 1** Upgrade the mainboard CPLD, then check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Upgrade the CPLD of the fan tray, and then check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Replace the corresponding node or chassis. Then, check whether the alarm is cleared.

For details about how to replace the node or chassis, see the **Parts Replacement** in maintenance and service guide of the server you use.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Contact technical support engineer.

**----End**

## 2.10.159 ALM-0x17000003 Earlier HMM Version (HMM, Major Alarm)

### Description

Alarm message:

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An earlier version of HMM is used.

This alarm is generated when the system detects that an earlier version of the HMM is used.

Alarm object: HMM

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x17000003 | Major | Yes |

### Parameters

| Name | Meaning |
| --- | --- |
| – | – |

### Impact on the System

The HMM cannot manage the node board properly.

### Possible Causes

The HMM version is not the latest version.

### Procedure

**Step 1** Upgrade the HMM to the latest version. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Contact technical support.

**----End**

## 2.10.160 ALM-0x1700000B Active/Standby HMM Communication Failure (HMM, Major Alarm)

### Description

Alarm message:

The communication between the *arg1* and the peer board is abnormal.

This alarm is generated when the communication between the active and standby HMMs is abnormal.

Alarm object: HMM

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## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x1700000B | Major | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Name and No. of the HMM, for example, **HMM1** or **HMM2**. |

## Impact on the System

The data synchronization between the active and standby management modules is affected, which reduces the reliability.

## Possible Causes

The communication between the active and standby management modules has failed.

## Procedure

**Step 1** Restart the standby management module. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Restart the active management module. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Replace the standby management module. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Replace the active management module. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Contact technical support engineer.

**----End**

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# 2.10.161 ALM-0x1700000D Inconsistent HMM Versions (HMM, Minor Alarm)

## Description

Alarm message:

The version of the *arg1* is inconsistent with that of the peer board.

This alarm is generated when the system detects that the software versions of the two HMMs are inconsistent.

Alarm object: HMM

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x1700000D | Major | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Name and No. of the HMM, for example, **HMM1** or **HMM2**. |

## Impact on the System

The data synchronization between the active and standby management modules is affected, which reduces the reliability.

## Possible Causes

The versions of the active and standby management modules are inconsistent.

## Procedure

**Step 1** Upgrade the HMM software to the target version and ensure that the versions of the two HMMs are the same. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Contact technical support engineer.

**----End**

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# 2.10.162 ALM-0x18000009 Fan Backplane CPLD Self-test Failed (Fan Backplane, Major Alarm)

## Description

Alarm message:

Abnormal fan backplane CPLD *arg1* self-check result.

This alarm is generated when the fan backplane is faulty.

Alarm object: Fan Backplane

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x18000009 | Major | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Fan backplane serial number. |

## Impact on the System

The fan backplane fails to work.

## Possible Causes

The fan backplane is faulty.

## Procedure

**Step 1** Replace the fan backplane. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Contact technical support engineer.

**----End**

# 2.10.163 ALM-0x1800000B Fan Backplane Out of Place (Fan Backplane, Minor Alarm)

## Description

Alarm message:

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Fan backplane *arg1* is absent.

This alarm is generated when the fan backplane is out of place.

Alarm object: Fan Backplane

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x1800000B | Minor | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Location of the fan backplane. For example, **(compute system fan backplane)** or **(storage system fan backplane)**.<br>**NOTE**<br>iBMC V3.07.05.01 and later support this parameter. |

## Impact on the System

The heat dissipation of the server is affected.

## Possible Causes

- The fan backplane is loosen.
- The connector from the fan backplane to the mainboard is faulty.
- The fan backplane is faulty.

## Procedure

**Step 1** Check whether the fan backplane is connected to the mainboard properly.

- If yes, go to **Step 3**.
- If no, go to **Step 2**.

**Step 2** Reconnect the fan backplane to the mainboard. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Replace the fan backplane. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Replace the mainboard. Then, check whether the alarm is cleared.

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- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Remove and reinstall the signal cable of the fan backplane. Then, check whether the alarm is cleared.

NOTE

Perform this operation only for the 5298 V7.

- If yes, no further action is required.
- If no, go to **Step 6**.

**Step 6** Contact technical support engineer.

**----End**

# 2.10.164 ALM-0x1A000007 BMC EEPROM Self-Check Failed (BMC, Major Alarm)

## Description

Alarm message:

```
iBMC EEPROM self-check failed.
```

This alarm is generated when the iBMC EEPROM self-check failed.

Alarm object: BMC

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x1A000007 | Major | Yes |

## Parameters

| Name | Meaning |
|---|---|
| – | – |

## Impact on the System

The iBMC cannot read or write the mainboard electronic label (E-Label) information.

## Possible Causes

- The EEPROM chip fails.
- The mainboard is faulty.

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### Procedure

**Step 1** Restart the iBMC. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Replace the mainboard. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Contact technical support engineer.

**----End**

## 2.10.165 ALM-0x1A000013 Abnormal Heartbeat Between iBMC and MM (BMC, Major Alarm)

### Description

Alarm message:

```
Abnormal heartbeat signal between the iBMC and management module.
```

This alarm is generated when the heartbeat signal between the iBMC and the management module (MM) is abnormal.

Alarm object: BMC

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x1A000013 | Major | Yes |

### Parameters

| Name | Meaning |
|---|---|
| – | – |

### Impact on the System

The management board may fail to manage the server.

### Possible Causes

- The MM is faulty.
- The LAN Switch on the backplane of the chassis is malfunctioning.

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### Procedure

**Step 1** Run the **ifconfig** command to check whether eth2 of the MM exists.

- If yes, go to **Step 3**.
- If no, go to **Step 2**.

**Step 2** Run the **ifconfig eth2 up** command. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Restart the MM. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Remove and reinstall the board that generated the alarm. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Contact technical support engineer.

**----End**

## 2.10.166 ALM-0x1A000015 Abnormal Heartbeat Between iBMC and Base Plane (BMC, Major Alarm)

### Description

Alarm message:

```
Abnormal heartbeat signal between the iBMC and Base plane.
```

This alarm is generated when the heartbeat signal between the iBMC and the Base plane is abnormal.

Alarm object: BMC

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x1A000015 | Major | Yes |

### Parameters

| Name | Meaning |
| --- | --- |
| – | – |

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### Impact on the System

The iBMC cannot manage the Base plane.

### Possible Causes

The switch module is faulty.

### Procedure

**Step 1** Back up the service data of the switch module, switch over services to the standby switch module, and replace the switch module. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Contact technical support engineer.

**----End**

## 2.10.167 ALM-0x1A000017 Abnormal Heartbeat Between iBMC and Fabric Plane (BMC, Major Alarm)

### Description

Alarm message:

Abnormal heartbeat signal between the iBMC and switch module Fabric plane.

This alarm is generated when the heartbeat signal between the iBMC and the Fabric plane is abnormal.

Alarm object: BMC

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x1A000017 | Major | Yes |

### Parameters

| Name | Meaning |
|---|---|
| – | – |

### Impact on the System

The iBMC cannot manage the Fabric plane.

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### Possible Causes

The switch module is faulty.

### Procedure

**Step 1** Back up the service data of the switch module, switch over services to the standby switch module, and replace the switch module. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Contact technical support engineer.

**----End**

## 2.10.168 ALM-0x1A000019 BMC Heartbeat Abnormal (BMC, Major Alarm)

### Description

Alarm message:

```
Abnormal heartbeat signal between the active and standby iBMCs.
```

This alarm is generated when the communication between the active and standby iBMCs failed.

Alarm object: BMC

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x1A000019 | Major | Yes |

### Parameters

| Name | Meaning |
| --- | --- |
| – | – |

### Impact on the System

Configuration synchronization between the active and standby iBMCs will be affected.

### Possible Causes

The iBMC is faulty, or the internal network is faulty.

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## Procedure

**Step 1** Restart the active iBMC and then the standby iBMC. Then, check whether the alarm is cleared.

For details about how to restart the active and standby iBMCs, see section "Restarting the iBMC (reset)" in the iBMC User Guide.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Replace the active HFC. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Replace the standby HFC. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Contact technical support.

**----End**

# 2.10.169 ALM-0x1A00001F Management LSW Chip Fault (BMC, Major Alarm)

## Description

Alarm message:

The management LSW chip on the iBMC of the switch module is faulty.

This alarm is generated when the management LSW chip on the iBMC of the switch module is faulty.

Alarm object: BMC

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x1A00001F | Major | Yes |

## Parameters

| Name | Meaning |
|---|---|
| – | – |

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### Impact on the System

The switch module configuration cannot be synchronized to the MM, and users cannot log in to the iBMC of the switch module using SSH or SOL.

### Possible Causes

The switch module is faulty.

### Procedure

**Step 1** Log in to the Base plane and Fabric plane respectively through the serial port, run the **display current** to query the configuration, and back up the configuration. Switch over services to the standby switch module, and remove and reinstall the switch module. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Replace the switch module. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Contact technical support engineer.

**----End**

## 2.10.170 ALM-0x1A000023 Certificate Expired or About to Expire (BMC, Minor Alarm)

### Description

Alarm message:

*arg1* certificate is about to expire or has expired.

This alarm is generated when the iBMC certificate is about to expire or has expired.

Alarm object: BMC

NOTE

In iBMC V370 and later versions, the alarm severity is **Minor**. In other versions, the alarm severity is **Normal**.

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x1A000023 | Minor | Yes |

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### Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Type of the certificate. |

### Impact on the System

The functions controlled by the certificate cannot be used.

### Possible Causes

The certificate has expired or is about to expire (iBMC current time + Certificate Expiry Notification > Certificate expiry date).

NOTE

The default **Certificate Expiry Notification** is 90 days. You can set the **Certificate Expiry Notification** on the iBMC WebUI on **User & Security** > **Security Management**.

### Procedure

**Step 1** Apply for a new certificate.

**Step 2** Import the new certificate. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Contact technical support engineer.

**----End**

## 2.10.171 ALM-0x1A00002B Failed to Synchronize Time with the NTP Server (BMC, Minor Alarm)

### Description

Alarm message:

```
iBMC failed to synchronize time with the NTP server.
```

This alarm is generated when the iBMC failed to synchronize time with the NTP server.

Alarm object: BMC

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x1A00002B | Minor | Yes |

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### Parameters

| Name | Meaning |
| --- | --- |
| – | – |

### Impact on the System

The iBMC time is incorrect.

### Possible Causes

- The NTP server configuration is incorrect.
- Communication between the iBMC and the NTP server fails.
- The NTP module of the iBMC is faulty.

### Procedure

**Step 1** Check whether the NTP server configuration is correct.

- If yes, go to **Step 3**.
- If no, go to **Step 2**.

**Step 2** Configure the NTP server correctly. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Check whether the communication between the iBMC and the NTP server is normal.

- If yes, go to **Step 5**.
- If no, go to **Step 4**.

**Step 4** Configure the network data to ensure communication between the iBMC and the NTP server. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Restart the NTP service of the iBMC. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 6**.

**Step 6** Contact technical support.

**----End**

## 2.10.172 ALM-0x1A00002D Abnormal Heartbeat Signal Between the iBMC and the Standby MM (BMC, Minor Alarm)

### Description

Alarm message:

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Abnormal heartbeat signal between the iBMC and standby management module.

This alarm is generated when the heartbeat signal between the iBMC and the standby management module (MM) is abnormal.

Alarm object: BMC

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x1A00002D | Minor | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| – | – |

## Impact on the System

Information synchronization of the standby MM is affected.

## Possible Causes

The standby MM, node iBMC software, or physical channel in the chassis is faulty.

## Procedure

**Step 1** Restart the standby MM. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Replace the standby MM. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Contact technical support.

**----End**

# 2.10.173 ALM-0x1A00002F NAND Flash Service Life Lower Than Threshold (BMC, Major Alarm)

## Description

Alarm message:

The service life of the NAND flash is less than *arg1*.

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This alarm is generated when the system detects that the remaining service life of the iBMC Nand flash is lower than the threshold.

Alarm object: BMC

NOTE

iBMC V296 and later support this alarm.

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x1A00002F | Major | No |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | NAND flash service life threshold, for example, **95** or **90**. |

## Impact on the System

The iBMC cannot operate properly.

## Possible Causes

The remaining service life of the iBMC NAND flash reaches the threshold.

## Procedure

**Step 1** Replace the mainboard. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Contact technical support.

**----End**

# 2.10.174 ALM-0x1A000031 Insufficient NAND Flash Reserved Blocks (BMC, Minor Alarm)

## Description

Alarm message:

The remaining reserved blocks of the NAND flash are less than *arg1*.

This alarm is generated when the number of reserved blocks available for the NAND flash is less than the threshold.

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Alarm object: BMC

NOTE

Only iBMC V296 to V369 support this alarm.

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x1A000031 | Minor | No |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Percentage of reserved NAND flash blocks available, for example, **13%**. |

## Impact on the System

The iBMC cannot operate properly.

## Possible Causes

The number of reserved NAND flash blocks available is less than the threshold.

## Procedure

**Step 1** Upgrade the iBMC to V381 or later. Then, check whether the upgrade is successful.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Replace the mainboard. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Contact technical support.

**----End**

# 2.10.175 ALM-0x1A00003D License File Error (BMC, Major)

## Description

Alarm message:

```
The iBMC license is incorrect.
```

This alarm is generated when the system detects that the current license file is incorrect during iBMC initialization.

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Alarm object: BMC

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x1A00003D | Major | Yes |

## Impact on the System

The advanced iBMC features (SP feature and intelligent diagnosis data collection feature) cannot be used properly.

## Possible Causes

The license file is incorrect.

## Procedure

Import the correct license file.

Perform the following operations if the advanced iBMC functions are required.

**Step 1** Apply for the iBMC license corresponding to the server ESN from the device vendor.

**Step 2** Import the obtained license file to the iBMC. Check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Contact technical support engineer.

**----End**

Delete the incorrect license file.

Perform the following operations if the advanced iBMC functions are not required.

**Step 1** Delete the current license file. Check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Contact technical support engineer.

**----End**

# 2.10.176 ALM-0x1A00003F SSL Certificate with Insecure Signature Algorithm (BMC, Minor Alarm)

## Description

Alarm message:

The SSL certificate uses an insecure signature algorithm, and the default certificate is used.

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This alarm is generated when the iBMC detects that the SSL certificate uses an insecure signature algorithm.

Alarm object: BMC

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x1A00003F | Minor | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| - | - |

## Impact on the System

The iBMC detects that the SSL certificate uses an insecure signature algorithm and uses the default certificate.

## Possible Causes

The iBMC does not support MD5 from V360.

If an SSL certificate using MD5 has been uploaded to the iBMC earlier than V360, this alarm will be generated after the iBMC is upgraded to V360 or later.

## Procedure

**Step 1** Import a certificate that uses a secure signature algorithm (algorithm not MD5). Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Contact technical support engineer.

**----End**

# 2.10.177 ALM-0x1A000043 Data Written into NAND Flash Exceeds Threshold (BMC, Minor Alarm)

## Description

Alarm message:

The data written to the NAND flash in last 15 days exceeds *arg1*G.

This alarm is generated when the data written to the NAND flash in last 15 days exceeds the threshold.

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Alarm object: BMC

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x1A000043 | Minor | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Indicates the threshold, for example, "12". |

## Impact on the System

The service life of the NAND flash is affected.

## Possible Causes

The amount of data written to the NAND flash in last 15 days exceeds the threshold.

## Procedure

**Step 1** Restart the iBMC.

**Step 2** Perform one-click collection of the iBMC log, and check the log information for error.

**Step 3** Contact technical support engineer.

**----End**

# 2.10.178 ALM-0x1A000045 CRL Expired or About to Expire(BMC, Minor Alarm)

## Description

Alarm message:

*arg1* is about to expire or has expired.

This alarm is generated when the iBMC certificate revocation list (CRL) has expired or is about to expire.

Alarm object: BMC

NOTE

iBMC V663 and later versions support this alarm.

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### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x1A000045 | Minor | Yes |

### Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Type of the CRL. |

### Impact on the System

The certificate verification may fail.

### Possible Causes

The iBMC certificate revocation list (CRL) has expired or is about to expire.

### Procedure

**Step 1** Apply for a new CRL.

**Step 2** Import the new CRL. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**

**Step 3** Contact technical support engineer.

**----End**

## 2.10.179 ALM-0x1A000047 Insecure Cryptographic Algorithm Alarm (BMC,Minor Alarm)

### Description

Alarm message:

The *arg1* configuration in the system enables insecure cryptographic algorithm *arg2*.

This alarm is generated when insecure algorithms are enabled in the system.

Alarm object: BMC

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x1A000047 | Minor | Yes |

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### Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | configuration items of insecure cryptographic algorithm.<br>Example: **SSHCiphers**,**User name** |
| *arg2* | list of insecure cryptographic algorithm separated by commas (,).<br>Example: **arcfour,arcfour128** |

### Impact on the System

Insecure algorithms bring security risks to the system.

### Possible Causes

Insecure algorithms are enabled in the system.

### Procedure

**Step 1** Disable insecure cryptographic algorithm according to the Redfish API Description or User Guide.

**----End**

## 2.10.180 ALM-0x1A00004D The ME Heartbeat is Abnormal (BMC, Minor Alarm)

### Description

Alarm message:

```
The heartbeat between iBMC and arg1 is abnormal.
```

This alarm is generated when the ME heartbeat is abnormal.

Alarm object: BMC

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x1A00004D | Minor | Yes |

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### Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | ME |

### Impact on the System

ME-related services are interrupted.

### Possible Causes

The ME is faulty.

### Procedure

**Step 1** Power off the OS.Then check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Forcibly upgrade the BIOS.Then check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Contact technical support engineer.

**----End**

## 2.10.181 ALM-0x1A000051 Abnormal Heartbeat Between BMCs (BMC, Major Alarm)

### Description

Alarm message:

Abnormal heartbeat between the node *arg1* BMC and the node *arg2* BMC.

This alarm is generated when abnormal heartbeat between BMCs.

Alarm object: BMC

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x1A000051 | Major | Yes |

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### Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Server node1 where the iBMC is located. |
| *arg2* | Server node2 where the iBMC is located. |

### Impact on the System

- The power management function may be abnormal.
- The power capping is not accurately performed.
- The node board may be powered off, affecting the service.

### Possible Causes

- The iBMC software failed in the node.
- The node was abnormally powered off.
- The physical channel in the chassis failed.

### Procedure

**Step 1** Restart the node's iBMC. After the server is powered on, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Replace the server node. After the server is powered on, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Replace the fan backplane.After the server is powered on, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Contact technical support engineer.

**----End**

## 2.10.182 ALM-0x65000001 BMC Card CPLD Self-test Failed (BMC Card, Major Alarm)

### Description

Alarm message:

Abnormal BMC card CPLD *arg1* self-check result.

This alarm is generated when the BMC card CPLD self-check result is abnormal.

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Alarm object: BMC Card

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x65000001 | Major | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Number of BMC card CPLD. |

## Impact on the System

The BMC card CPLD functions abnormally.

## Possible Causes

BMC card failure.

## Procedure

**Step 1** Restart the iBMC. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Replace the BMC card. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Contact technical support engineer.

**----End**

# 2.10.183 ALM-0x65000003 BMC Card USB Port is Overcurrent (BMC Card, Minor Alarm)

## Description

Alarm message:

BMC card USB port *arg1* is overcurrent.

This alarm is generated when the iBMC add-in card USB port experiences an overcurrent.

Alarm object: BMC Card

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### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x65000003 | Minor | Yes |

### Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Numbering of USB port. |

### Impact on the System

The USB device is unavailable.

### Possible Causes

Short circuit in the USB port.

### Procedure

**Step 1** Replace the USB device on the port. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Replace the device that provides the USB port. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Contact technical support engineer.

**----End**

## 2.10.184 ALM-0x65000005 The 5V Standby Voltage of the BMC Card is Abnormal (BMC Card, Major Alarm)

### Description

Alarm message:

```
The 5V standby voltage of the BMC card is abnormal.
```

This alarm is generated when the 5V standby voltage of the BMC card is abnormal.

Alarm object: BMC Card

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### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x65000005 | Major | Yes |

### Parameters

| Name | Meaning |
| --- | --- |
| - | - |

### Impact on the System

The BMC card is not functioning properly.

### Possible Causes

The BMC card is malfunctioning.

### Procedure

**Step 1** Replace the mainboard and the BMC card. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Contact technical support engineer.

**----End**

## 2.10.185 ALM-0x1E000015 Fabric Plane LSW Chip Fault (Fabric Plane, Major Alarm)

### Description

Alarm message:

The LSW chip on the Fabric plane of the switch module is faulty.

This alarm is generated when the LSW chip on the Fabric Plane is faulty.

Alarm object: Fabric Plane

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x1E000015 | Major | Yes |

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### Parameters

| Name | Meaning |
| --- | --- |
| – | – |

### Impact on the System

Services on the Fabric plane may fail to start or run abnormally.

### Possible Causes

The switch module is faulty.

### Procedure

**Step 1** Check whether there are alarms for fans 13 and 14.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Replace the fans. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Remove and reinstall the switch module. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Back up the switch module configuration, and replace the switch module. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Contact technical support engineer.

**----End**

## 2.10.186 ALM-0x1E00003B Fabric Plane Switch Chip EEPROM Fault (Fabric Plane, Major Alarm)

### Description

Alarm message:

Switch module fabric plane switch chip *arg1* EEPROM *arg2* is fault.

This alarm is generated with the electrically erasable programmable read-only memory (EEPROM) of the switch chip on the Fabric plane of the switch module is faulty.

Alarm object: Fabric Plane

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### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x1E00003B | Major | Yes |

### Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Working state of the EEPROM, for example, **main** or **backup**. |
| *arg2* | Slot number of the EEPROM. |

### Impact on the System

Services may fail to start or run abnormally.

### Possible Causes

The switch module is faulty.

### Procedure

**Step 1** Replace the switch module. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Contact technical support engineer.

**----End**

## 2.10.187 ALM-0x1E00003D Fabric Plane Switch Chip Clock Abnormal (Fabric Plane, Major Alarm)

### Description

Alarm message:

```
The clock of fabric plane switch chip are abnormal.
```

This alarm is generated when the clock on the switch chip of the switch module Fabric plane is abnormal.

Alarm object: Fabric Plane

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### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x1E00003D | Major | Yes |

### Parameters

| Name | Meaning |
| --- | --- |
| – | – |

### Impact on the System

Services may fail to start or run abnormally.

### Possible Causes

The switch module is faulty.

### Procedure

**Step 1** Replace the switch module. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Contact technical support engineer.

**----End**

## 2.10.188 ALM-0x1F000005 Mezzanine Card Fault (Switch Mezz, Major Alarm)

### Description

Alarm message:

Switch mezzanine card *arg1* error.

This alarm is generated when the mezzanine card is faulty.

Alarm object: Switch Mezz

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x1F000005 | Major | Yes |

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### Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Slot number of the mezzanine card. |

### Impact on the System

The mezzanine card cannot work normally.

### Possible Causes

The mezzanine card in the switch module is faulty.

### Procedure

**Step 1** Back up service data of the mezzanine card, switch over services to the standby switch module, and replace the mezzanine card. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Contact technical support engineer.

**----End**

## 2.10.189 ALM-0x22000001 TPM Self-Test Failed (Security Module, Minor Alarm)

### Description

Alarm message:

Trusted platform module (*arg1*) self-test failed.

This alarm is generated when the self-test of the security module failed.

Alarm object: Security Module

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x22000001 | Minor | Yes |

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### Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | A security module, which can be a **TPM** or **TCM**. |

### Impact on the System

The security module cannot work properly.

### Possible Causes

The security module is faulty.

### Procedure

**Step 1** Replace the security module. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Contact technical support.

**----End**

## 2.10.190 ALM-0x23000015 I/O Board Clock Lost (I/O Board, Major Alarm)

### Description

Alarm message:

I/O board (*arg1*) *arg2* clock [*arg3*] signals lost.

This alarm is generated when the clock of the I/O board is lost.

Alarm object: I/O Board

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x23000015 | Major | Yes |

### Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Location and serial number of the I/O board. For example, **FIO1** or **BIO1**. |

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| Name | Meaning |
| --- | --- |
| *arg2* | Type of the mainboard clock. For example, **100MHz** or **156.25MHz**. |
| *arg3* | Clock number. |

## Impact on the System

The system may even stop responding.

## Possible Causes

The I/O board is abnormal.

## Procedure

**Step 1** Replace the I/O board. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Contact technical support engineer.

**----End**

# 2.10.191 ALM-0x23000029 Failed to Obtain the I/O Board ID (I/O Board, Major Alarm)

## Description

Alarm message:

Failed to obtain data of the board id for (*arg1*).

This alarm is generated when the system failed to obtain the I/O board ID.

Alarm object: I/O Board

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x23000029 | Major | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | I/O board name and number, for example, **BIO1** or **BIO2**. |

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### Impact on the System

The iBMC cannot manage the I/O board.

### Possible Causes

- The I/O board is faulty.
- The mainboard is faulty.

### Procedure

**Step 1** Replace the I/O board. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Replace the mainboard. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Contact technical support engineer.

**----End**

## 2.10.192 ALM-0x2300003F IO Board CPLD Self-test Failed (I/O Board, Major Alarm)

### Description

Alarm message:

Abnormal I/O board *arg1* CPLD self-check result.

This alarm is generated when the IO board CPLD self-test failed.

Alarm object: I/O Board

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x2300003F | Major | Yes |

### Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Name of the IO board. For example, **PCIe Switch Board**. |

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### Impact on the System

I/O board fails to work.

### Possible Causes

The I/O board is faulty.

### Procedure

**Step 1** Restart the iBMC. Then check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Replace the I/O board. Then check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Contact technical support engineer.

**----End**

## 2.10.193 ALM-0x23000041 I/O Board is Absent (I/O Board, Minor Alarm)

### Description

Alarm message:

I/O board *arg1* is absent.

This alarm is generated when the I/O board is absent.

Alarm object: I/O Board

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x23000041 | Minor | Yes |

### Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Name of the IO board. For example, **PCIe Switch Board**. |

### Impact on the System

The component connected to the I/O board fails to work.

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### Possible Causes

- The I/O board is not securely connected.
- The connector between the I/O board and the mainboard is faulty.
- The I/O board is faulty.

### Procedure

**Step 1** Check whether the I/O board is properly connected to the mainboard.

- If yes, go to **Step 3**.
- If no, go to **Step 2**.

**Step 2** Reconnect the I/O board to the mainboard. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Replace the I/O board. Then check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Replace the mainboard. Then check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Contact technical support engineer.

**----End**

## 2.10.194 ALM-0x23000043 The Power Reading of the External Component Connected to the I/O Board is Abnormal (I/O Board, Minor Alarm)

### Description

Alarm message:

Fail to read the power of the external component *arg1* connected to the I/O board *arg2*.

This alarm is generated when the power reading of the external component connected to the I/O board is abnormal.

Alarm object: I/O Board

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x23000043 | Minor | Yes |

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### Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Name of external component connected to the I/O board. For example, **AI module**. |
| *arg2* | Name of the IO board. For example, **54V power board**. |

### Impact on the System

The power of external components connected to the I/O board cannot be monitored.

### Possible Causes

The I/O board is faulty or the power component on the I/O board is faulty.

### Procedure

**Step 1** Replace the I/O board. Then check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Contact technical support engineer.

**----End**

## 2.10.195 ALM-0x24000007 CPU Board Clock Lost (CPU Board, Major Alarm)

### Description

Alarm message:

CPU board *arg1 arg2* clock signals lost.

This alarm is generated when the clock of the CPU board is lost.

Alarm object: CPU Board

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x24000007 | Major | Yes |

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### Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Serial number of the CPU board. |
| *arg2* | Type of the CPU board clock. For example, **100MHz**. |

### Impact on the System

The system stops responding or cannot be started.

### Possible Causes

The CPU board is faulty.

### Procedure

**Step 1** Replace the CPU board. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Contact technical support.

**----End**

## 2.10.196 ALM-0x26000001 PCIe Adapter PSU Faults (PCIe Adapter, Major Alarm)

### Description

Alarm message:

The PCIe Adapter *arg2* on *arg1* power failure. [*arg3*]

This alarm is generated when a PCIe adapter PSU is faulty.

Alarm object: PCIe Adapter

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x26000001 | Major | Yes |

### Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Location of the PCIe adapter that generates the alarm. |

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| Name | Meaning |
| --- | --- |
| *arg2* | Slot of the PCIe adapter that generates the alarm. |
| *arg3* | Additional fault description related to the alarm. |

### Impact on the System

The system may not identify the connected PCIe devices.

### Possible Causes

- The PCIe adapter is faulty.
- The PCIe adapter slot is abnormal.

### Procedure

**Step 1** Remove and insert the PCIe adapter again, and check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **2**.

**Step 2** Replace the PCIe adapter and check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **3**.

**Step 3** Replace the riser card and check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **4**.

**Step 4** Contact technical support engineer.

**----End**

## 2.10.197 ALM-0x27000003 PCH MCE/AER Error (PCH, Critical Alarm)

### Description

Alarm message:

The PCH triggered an uncorrectable error, *arg1*.

The alarm is generated when a PCH uncorrectable error is detected.

Alarm object: PCH

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x27000003 | Critical | Yes |

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### Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Error code of the PCH alarm. |

### Impact on the System

The system may stop responding.

### Possible Causes

The PCH chip is faulty.

### Procedure

**Step 1** Gracefully power off the server and check whether the PCH chip or mainboard has any damage.

- If yes, go to **Step 4**.
- If no, go to **Step 2**.

**Step 2** Power on the server to start the power-on self-test (POST) and then run test software. Check whether the POST succeeds and the test software finds no fault.

- If yes, go to **Step 3**.
- If no, go to **Step 4**.

**Step 3** Check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Replace the mainboard. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Contact technical support.

**----End**

## 2.10.198 ALM-0x27000009 PCH Clock Lost (PCH, Major Alarm)

### Description

Alarm message:

PCH *arg1* clock signals lost.

This alarm is generated when the PCH clock is lost.

Alarm object: PCH

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### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x27000009 | Major | Yes |

### Parameters

| Name | Meaning |
|---|---|
| *arg1* | Clock frequency, for example, **32kHz** or **32MHz**. |

### Impact on the System

The mainboard signals and server operation are affected.

### Possible Causes

The mainboard is faulty.

### Procedure

**Step 1** Replace the mainboard. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Contact technical support.

**----End**

## 2.10.199 ALM-0x2700001B PCH I/O Undervoltage (PCH, Major Alarm)

### Description

Alarm message:

PCH I/O voltage (*arg1* V) is lower than the undervoltage threshold (*arg2* V).

This alarm is generated when the PCH I/O voltage is lower than the undervoltage threshold.

Alarm object: PCH

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x2700001B | Major | Yes |

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### Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Current reading of the sensor. |
| *arg2* | Alarm threshold. |

### Impact on the System

The system stops responding.

### Possible Causes

The mainboard is faulty.

### Procedure

**Step 1** Replace the mainboard. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Contact technical support engineer.

**----End**

## 2.10.200 ALM-0x2700001D PCH I/O Overvoltage (PCH, Major Alarm)

### Description

Alarm message:

PCH I/O voltage (*arg1* V) exceeds the overvoltage threshold (*arg2* V).

This alarm is generated when the PCH I/O voltage exceeds the overvoltage threshold.

Alarm object: PCH

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x2700001D | Major | Yes |

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### Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Current reading of the sensor. |
| *arg2* | Alarm threshold. |

### Impact on the System

The system stops responding.

### Possible Causes

The mainboard is faulty.

### Procedure

**Step 1** Replace the mainboard. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Contact technical support engineer.

**----End**

## 2.10.201 ALM-0x2700001F Failed to Read PCH I/O Voltage (PCH, Minor Alarm)

### Description

Alarm message:

```
Failed to obtain data of the PCH I/O voltage.
```

This alarm is generated when the system failed to obtain the PCH I/O voltage.

Alarm object: PCH

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x2700001F | Minor | Yes |

### Parameters

| Name | Meaning |
| --- | --- |
| – | – |

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### Impact on the System

The voltage cannot be monitored. No alarm will be reported when the voltage is not in the normal range.

### Possible Causes

The iBMC does not work normally.

### Procedure

**Step 1** Restart the iBMC. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**

**Step 2** Remove and reinstall the power cable or board. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Contact technical support engineer.

**----End**

## 2.10.202 ALM-0x28000001 Incorrect SAS Cable Connection (Cable, Major Alarm)

### Description

Alarm message:

The SAS or PCIe cable to [*arg1*] disk backplane *arg2* is incorrectly connected.

This alarm is generated when the SAS or PCIe cable is connected incorrectly.

Alarm object: Cable

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x28000001 | Major | Yes |

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## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Location of the disk backplane. For example, **front**, **rear**, or **inner**. |
| *arg2* | Silkscreen of the signal port on the hard disk. For example, **portA** or **portB**. |

## Impact on the System

The drive slot may be incorrectly identified.

## Possible Causes

- The SAS cables are connected incorrectly.
- The SAS cables are faulty.
- The RAID controller card is faulty.
- The disk backplane is faulty.

## Procedure

**Step 1** Check whether the SAS cables are correctly connected.

For details about the cable connection sequence, see the maintenance and service guide of the server you use.

- If yes, go to **Step 3**.
- If no, go to **Step 2**.

**Step 2** Connect the SAS cables in correct sequence. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Remove and reconnect the SAS cables. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Replace the SAS cables. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Replace the RAID controller card or the riser card holding the PCIe RAID card. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 6**.

**Step 6** Replace the disk backplane. Then, check whether the alarm is cleared.

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- If yes, no further action is required.
- If no, go to **Step 7**.

**Step 7** Contact technical support engineer.

**----End**

# 2.10.203 ALM-0x28000003 Incorrect Connection of CPLD Signal Cables (Cable, Major Alarm)

## Description

Alarm message:

Incorrect connection (signal cable *arg1*) between the mainboard and the *arg2*.

This alarm is generated when the connection between the mainboard and the disk backplane or PCIe riser cardis incorrect.

Alarm object: Cable

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x28000003 | Major | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Serial number of the signal cable. |
| *arg2* | Component to which the signal cable connects. For example, **disk backplane** or **PCIe riser card**. |

## Impact on the System

The iBMC cannot obtain information from the disk backplane or PCIe riser card. As a result, information about the hard disks and PCIe cards in the server, disk backplane CPLD version, and PCIe riser card version cannot be displayed normally.

## Possible Causes

- The connection between the mainboard and the disk backplane is abnormal.
- The connection between the mainboard and the PCIe riser card is abnormal.

## Procedure

**Step 1** Check whether the disk backplane or PCIe riser card cables are connected correctly.

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For details about the cable connection sequence, see the maintenance and service guide of the server you use.

- If yes, go to **Step 3**.
- If no, go to **Step 2**.

**Step 2** Connect the disk backplane or PCIe riser card cables in correct sequence. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 3** Remove and reconnect the disk backplane or PCIe riser card cables. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Replace the disk backplane or PCIe riser card cables. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Replace the mainboard. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 6**.

**Step 6** Contact technical support engineer.

**----End**

# 2.10.204 ALM-0x28000005 CPU QPI/UPI Connection Failed (Cable, Major Alarm)

## Description

Alarm message:

CPU *arg1* QPI/UPI *arg2* link failed.

This alarm is generated when the QuickPath Interconnect (QPI/UPI) bus is faulty.

Alarm object: Cable

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x28000005 | Major | Yes |

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## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Socket No. of the CPU. |
| *arg2* | Location of QuickPath. |

## Impact on the System

The system performance is affected, or the system may fail to start.

## Possible Causes

- The CPU is in poor contact with its socket.
- The mainboard is faulty.
- The CPU is faulty.

## Procedure

**Step 1** Gracefully power off the server.

**Step 2** Remove the CPU indicated in the alarm message, and check whether the CPU socket has twisted pins.

- If yes, go to **Step 5**.
- No, go to **Step 3**.

**Step 3** Check whether the CPU is faulty.

- If yes, go to **Step 4**.
- If no, go to **Step 5**.

The following is an example of clearing the alarm:

```
Cable / Interconnect (CPU1 QPI/UPI Link)
```

1. Switch CPU 1 with a functioning CPU.
2. Power on the server. If the alarm is still generated for this CPU, the CPU is faulty. Otherwise, the QPI/UPI link on the mainboard is faulty.

**Step 4** Gracefully power off the server, replace the faulty CPU, and power on the server again. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 6**.

**Step 5** Gracefully power off the server, replace the mainboard, and power on the server again. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 6**.

**Step 6** Contact technical support.

**----End**

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# 2.10.205 ALM-0x2800000D Signal Cable to Power Supply Backplane Connected Improperly (Cable, Major Alarm)

## Description

Alarm message:

```
Incorrect connection of the signal cable of the PS backplane.
```

This alarm is generated when the signal cable to the power supply backplane is not connected properly.

Alarm object: Cable

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x2800000D | Major | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| - | - |

## Impact on the System

The power supply cannot be managed effectively.

## Possible Causes

- The cable is incorrectly connected.
- The cable is faulty.

## Procedure

**Step 1** Reconnect the signal cable to the power supply backplane. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Replace the signal cable. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Contact technical support engineer.

**----End**

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# 2.10.206 ALM-0x2800000F Signal Cable to Fan Backplane Connected Improperly (Cable, Major Alarm)

## Description

Alarm message:

```
Incorrect connection of the signal cable of the fan backplane.
```

This alarm is generated when the signal cable to the fan backplane is not connected properly.

Alarm object: Cable

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x2800000F | Major | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| – | – |

## Impact on the System

The fans cannot be managed effectively.

## Possible Causes

- The cable is incorrectly connected.
- The cable is faulty.

## Procedure

**Step 1** Reconnect the cable to the fan backplane. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Replace the signal cable. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Contact technical support engineer.

**----End**

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# 2.10.207 ALM-0x28000011 Signal Cable to the Aggregation Port Connected Improperly (Cable, Major Alarm)

## Description

Alarm message:

Incorrect connection (signal cable) between the aggregation port and the management board.

This alarm is generated when the signal cable between the aggregation port on the front panel and the management module is not connected properly.

Alarm object: Cable

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x28000011 | Major | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| – | – |

## Impact on the System

The iBMC cannot be accessed through the aggregation network port.

## Possible Causes

- The cable is incorrectly connected.
- The cable is faulty.

## Procedure

**Step 1** Remove and reconnect the cable. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Replace the cable. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Contact technical support engineer.

**----End**

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# 2.10.208 ALM-0x28000013 Incorrect Connection of the SLIM Cable (Cable, Major Alarm)

## Description

Alarm message:

The SLIM cable to *arg1* on *arg2* is not properly connected.

This alarm is generated when the SLIM cable between the mainboard and the PCIe device is not properly connected.

Alarm object: Cable

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x28000013 | Major | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Device to which the SLIM cable is connected. |
| *arg2* | Serial number of the port on the device connected by the SLIM cable. |

## Impact on the System

The PCIe device connected by the SLIM cable cannot be identified.

## Possible Causes

- The SLIM cable is not properly connected.
- The SLIM cable is faulty.

## Procedure

**Step 1** Check whether the SLIM cable is properly connected.

For details about the connection of the SLIM cable, see the maintenance and service guide of the server you use.

- If yes, go to **Step 3**.
- If no, go to **Step 2**.

**Step 2** Connect the SLIM cable securely. Then, check whether the alarm is cleared.

- If yes, no further action is required.

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- If no, go to **Step 3**.

**Step 3** Replace the SLIM cable. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Contact technical support.

**----End**

# 2.10.209 ALM-0x28000017 Incorrect Power Cable Connection (Cable, Major Alarm)

## Description

Alarm message:

Power cable [*arg2*] of the [*arg1*] is connected incorrectly.

This alarm is generated when the power cable is not connected correctly.

Alarm object: Cable

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x28000017 | Major | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Component connected with the cable, for example, **disk backplane** or **fan backplane**. |
| *arg2* | Silkscreen on the power cable port, for example, **POWER1** or **POWER2**. |

## Impact on the System

System power supply is affected. The system may be powered off unexpectedly.

## Possible Causes

- The power cable is not connected properly.
- The power cable is faulty.

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### Procedure

**Step 1** Check whether the power cable is connected correctly.

- If yes, go to **Step 3**.
- If no, go to **Step 2**.

**Step 2** Connect the power cables in correct sequence. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Remove and reconnect the power cables. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Replace the power cables. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Contact technical support.

**----End**

## 2.10.210 ALM-0x28000019 SAS Configuration Failure (Cable, Minor Alarm)

### Description

Alarm message:

Failed to configure the *arg1arg2* SAS.

This alarm is generated when the SAS redriver configuration fails.

Alarm object: Cable

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x28000019 | Minor | Yes |

### Parameters

| Name | Meaning |
|---|---|
| *arg1* | Location of the SAS redriver, for example, **Mezz** or **IOM**. |
| *arg2* | Slot number of the card where the SAS redriver is located, for example, **1** or **2**. |

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### Impact on the System

The SAS redriver configuration fails, and the SAS redriver cannot work properly.

### Possible Causes

- The iBMC version is too early.
- The component where the SAS redriver is located is faulty.

### Procedure

**Step 1** Update the iBMC to the latest version. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Replace the component where the SAS driver is located. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Contact technical support engineer.

**----End**

## 2.10.211 ALM-0x2800001B SLIM Cable Not Detected (Cable, Major Alarm)

### Description

Alarm message:

The SLIM cable to *arg1* on *arg2* is not present.

This alarm is generated when the SLIM cable between the mainboard and the PCIe device is not detected.

Alarm object: Cable

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x2800001B | Major | Yes |

### Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Device to which the SLIM cable is connected, for example, **RiserCard**. |

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| Name | Meaning |
| --- | --- |
| *arg2* | Serial number of the port on the device connected by the SLIM cable. For example, **PORTA**, **PORTB**, **PORTC**, or **PORTD**. |

## Impact on the System

The PCIe device cannot be identified.

## Possible Causes

- The SLIM cable is not securely connected to the PCIe device.
- The SLIM cable is faulty.

## Procedure

**Step 1** Connect the SLIM cable securely. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Replace the SLIM cable. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Contact technical support.

**----End**

# 2.10.212 ALM-0x2800001D SAS or PCIe Cable Connection Error (Cable, Major Alarm)

## Description

Alarm message:

The SAS or PCIe cable to *arg1 arg2 arg3* is incorrectly connected.

This alarm is generated when incorrect SAS or PCIe cable connection is detected.

Alarm object: Cable

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x2800001D | Major | Yes |

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## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Location of the device for which the alarm is generated. For example, **front**, **rear**, or **inner**. |
| *arg2* | Name of the alarmed device. For example, **disk backplane** or **PCIe Riser**. |
| *arg3* | Silkscreen of the port. For example, **portA** or **portB.** |

## Impact on the System

The system may stop responding, or data may be lost.

## Possible Causes

- The RAID controller card is faulty.
- The SAS or PCIe cable is not correctly connection.
- The SAS or PCIe cable is faulty.
- The disk backplane or PCIe riser card is faulty.

## Procedure

**Step 1** Check whether the SAS or PCIe cables are connected in the correct sequence.

For details about the cable connection sequence, see the maintenance and service guide of the server you use.

- If yes, go to **Step 3**.
- If no, go to **Step 2**.

**Step 2** Connect the SAS or PCIe cable in correct sequence. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Remove and reconnect the SAS or PCIe cable. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Replace the SAS or PCIe cable. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Replace the RAID controller card or the riser card holding the PCIe RAID card. Then, check whether the alarm is cleared.

- If yes, no further action is required.

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- If no, go to **Step 6**.

**Step 6** Replace the disk backplane or the PCIe riser card. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 7**.

**Step 7** Contact technical support engineer.

**----End**

# 2.10.213 ALM-0x28000025 PCIe Card Serial Port Cable not in Position (Cable, Minor Alarm)

## Description

Alarm message:

The *arg1* card port *arg2* cable is not present.

This alarm is generated when the serial cable of the PCIe card is not detected.

Alarm object: Cable

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x28000025 | Minor | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Name of the standard card for which the alarm is generated, for example, **SDI Card**. |
| *arg2* | Slot number of the standard card for which the alarm is generated. |

## Impact on the System

The data configuration and fault locating of the PCIe card cannot be performed by redirecting the BMC to the serial port of the PCIe card.

## Possible Causes

- The PCIe or SDI card serial cable is not connected.
- The PCIe or SDI card serial cable is incorrectly connected.
- The PCIe or SDI card serial cable is faulty.

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### Procedure

**Step 1** Check whether the power cable is properly connected.

- If yes, go to **Step 3**.
- If no, go to **Step 2**.

**Step 2** Connect the power cable properly and check whether the alarm has been cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Replace the PCIe or SDI card serial cable and check whether the alarm has been cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Contact technical support engineer.

**----End**

## 2.10.214 ALM-0x28000029 SAS/PCIe Cable Absent (Cable, Minor Alarm)

### Description

Alarm message:

The SAS or PCIe cable *arg1* is absent.

This alarm is generated when SAS/PCIe cable absent.

Alarm object: Cable

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x28000029 | Minor | Yes |

### Parameters

| Name | Meaning |
|---|---|
| *arg1* | Location of the SAS or PCIe cable. |

### Impact on the System

- If the cable is connected to the drive backplane, drives are not be recognized by the system.
- If the OCP cable is not connected, the OCP 1 slot does not support the multi-host function and the OCP 2 slot does not support the OCP card.

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## Possible Causes

- The SAS or PCIe cable is not securely connected.
- If the cable is connected to the drive backplane, the backplane connector module is faulty.

## Procedure

**Step 1** Check whether the SAS or PCIe cable is correctly connected.

- If yes, go to **Step 3**.
- If no, go to **Step 2**.

**Step 2** Connect the SAS or PCIe cable in correct sequence. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Remove and reconnect the SAS or PCIe cable. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** If the cable is connected to the drive backplane, replace the backplane connector module. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Contact technical support engineer.

**----End**

# 2.10.215 ALM-0x2800002B Low-Speed Cable to Disk Backplane Connected Improperly (Cable,Minor Alarm)

## Description

Alarm message:

The *arg1* between *arg2* and disk backplane *arg3* is not connected properly.

This alarm is generated when the low-speed cable to disk backplane is connected improperly.

Alarm object: Cable

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x2800002B | Minor | Yes |

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## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Low-speed cable. |
| *arg2* | Hardware component name. |
| *arg3* | Disk backplane name. |

## Impact on the System

The iBMC cannot monitor disk status.

## Possible Causes

- The cable to the disk backplane is unconnected or loosen.
- The low-speed cable on the disk backplane is faulty.
- The connector on the disk backplane is faulty.
- The connector on the fan backplane is faulty.

## Procedure

**Step 1** Check whether the cable on the disk backplane is unconnected or loosen.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Reconnect the cable to the disk backplane. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Replace the low-speed cable. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Replace the disk backplane. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Replace the fan backplane. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 6**.

**Step 6** Contact technical support engineer.

**----End**

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# 2.10.216 ALM-0x2800002D SGMII Cable is not Present (Cable, Major Alarm)

## Description

Alarm message:

The SGMII cable between *arg1* and *arg2* is not present.

This alarm is generated when the SGMII cable is not present.

Alarm object: Cable

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x2800002D | Major | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Name of the alarmed device, for example, **BMC**. |
| *arg2* | Name of the alarmed device, for example, **High speed backplane connector module**. |

## Impact on the System

The management network disconnect.

## Possible Causes

- The SGMII cable is not properly connected or is in poor contact.
- The SGMII cable is faulty.

## Procedure

**Step 1** Check whether the SGMII cable is not connected or properly connected.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Connect the SGMII cable firmly. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Replace the SGMII cable. Then, check whether the alarm is cleared.

- If yes, no further action is required.

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- If no, go to **Step 4**.

**Step 4** Contact technical support engineer.

**----End**

# 2.10.217 ALM-0x2800002F Incorrect Connect of the Water Detection Cable (Cable, Minor Alarm)

## Description

Alarm message:

The water detection cable *arg1* is not properly connected.

This alarm is generated when the water detection cable is not properly connected.

Alarm object: Cable

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x2800002F | Minor | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | No. of the water detection cable. For example, **1**. |

## Impact on the System

The liquid cooling device cannot correctly report alarms when leakage occurs.

## Possible Causes

- The water detection cable is not properly installed.
- The leakage detection card or water detection cable is faulty.

## Procedure

**Step 1** Check whether the water detection cable is not properly installed.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Reconnect the water detection cable. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

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**Step 3** Replace the leakage detection card or water detection cable. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Contact the device vendor's technical support engineer.

**----End**

# 2.10.218 ALM-0x28000031 PCIe Cable Incorrectly Connected (Cable, Major Alarm)

## Description

Alarm message:

The PCIe cable(*arg1*) of *arg2* is incorrectly connected.

This alarm is generated when the PCIe cable is not properly connected.

Alarm object: Cable

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x28000031 | Major | Yes |

## Parameters

| Name | Meaning |
|---|---|
| *arg1* | Name of the PCIe cable. For example, **UBC1**. |
| *arg2* | Name of the PCIe device connected to the PCIe cable. For example, **IO Board**. |

## Impact on the System

The PCIe device connected to the PCIe cable may not be available.

## Possible Causes

- The PCIe cable is incorrectly connected.
- The PCIe cable is faulty.
- The PCIe device connected to the PCIe cables is faulty.

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### Procedure

**Step 1** Check whether the PCIe cables are connected in correct order.

- If yes, go to **Step 3**.
- If no, go to **Step 2**.

**Step 2** Reconnect the PCIe cables. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Replace the PCIe Cables. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Replace the PCIe device connected to the PCIe cables. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Contact the device vendor's technical support engineer.

**----End**

## 2.10.219 ALM-0x28000033 PCIe Link Speed Decreased (Cable, Minor Alarm)

### Description

Alarm message:

The PCIe link between *arg1* and *arg2* speed decreased.

This alarm is generated when the PCIe link speed decreased.

Alarm object: Cable

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x28000033 | Minor | Yes |

### Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | LinkInfo of RootPort or DownstreamPort. For example, **mainboard CPU1(BDF 0000:3d:01.0)**.<br>The format of LinkInfo is <ComponentLocation> <ComponentName>(BDF xxxx:xx:xx.x). |

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| Name | Meaning |
| --- | --- |
| *arg2* | LinkInfo of UpstreamPort or Endpoint. For example, **PCIe Riser4 PCIe Switch(BDF 0000:bf:00.0)**.<br>The format of LinkInfo is <ComponentLocation> <ComponentName>(BDF xxxx:xx:xx.x). |

## Impact on the System

The system can work properly, but the performance is degraded.

## Possible Causes

There may be damage or poor contact between the PCIe component and its slot.

## Procedure

**Step 1** Power on and off the server. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** After powering off the server, remove and insert components at both ends. Ensure that the components are securely inserted and then power on the server. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** After powering off the server, check whether components at both ends and their slot are damaged. Then, check whether the alarm is cleared.

- If yes, go to **Step 4**.
- If no, go to **Step 5**.

**Step 4** Replace the component. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Contact the device vendor's technical support engineer.

**----End**

# 2.10.220 ALM-0x28000035 PCIe Link Bandwidth Decreased (Cable, Minor Alarm)

## Description

Alarm message:

The PCIe link between *arg1* and *arg2* bandwidth decreased.

This alarm is generated when the PCIe link bandwidth decreased.

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Alarm object: Cable

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x28000035 | Minor | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | LinkInfo of RootPort or DownstreamPort. For example, **mainboard CPU1(BDF 0000:3d:01.0)**.<br>The format of LinkInfo is <ComponentLocation> <ComponentName>(BDF xxxx:xx:xx.x). |
| *arg2* | LinkInfo of UpstreamPort or Endpoint. For example, **PCIe Riser4 PCIe Switch(BDF 0000:bf:00.0)**.<br>The format of LinkInfo is <ComponentLocation> <ComponentName>(BDF xxxx:xx:xx.x). |

## Impact on the System

The system can work properly, but the performance is degraded.

## Possible Causes

There may be damage or poor contact between the PCIe component and its slot.

## Procedure

**Step 1** Power on and off the server. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** After powering off the server, remove and insert components at both ends. Ensure that the components are securely inserted and then power on the server. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** After powering off the server, check whether components at both ends and their slot are damaged. Then, check whether the alarm is cleared.

- If yes, go to **Step 4**.
- If no, go to **Step 5**.

**Step 4** Replace the component. Then, check whether the alarm is cleared.

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- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Contact the device vendor's technical support engineer.

**----End**

# 2.10.221 ALM-0x28000037 Abnormal link between CPUs (Cable, Major Alarm)

## Description

Alarm message:

CPU*arg1 arg2arg3* link failed.

This alarm is generated when a connection anomaly is detected between CPUs.

Alarm object: Cable

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x28000037 | Major | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | No. of the CPU. For example, **1**. |
| *arg2* | Connection Type, for example, **xGMI** (eXtended Global Memory Interconnect) or **WAFL** (Wide Area Fabric Link). |
| *arg3* | Connection Instance ID. |

## Impact on the System

The system performance is affected, or the system may fail to start.

## Possible Causes

- The CPU socket is in poor contact.
- The CPU is faulty.
- The mainboard is faulty.

## Procedure

**Step 1** Power off the server and check whether there is damage or poor contact between the component and its slot.

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- If yes, go to **2**.
- If no, go to **4**.

**Step 2** Exchange the positions of the alarmed CPU and a normal CPU to determine the faulty component.

- If yes, go to **3**.
- If no, go to **4**.

**Step 3** Replace the CPU or the mainboard. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **4**.

**Step 4** Contact the device vendor's technical support engineer.

**----End**

# 2.10.222 ALM-0x29000009 Port Fault (Port, Major Alarm)

## Description

Alarm message:

*arg1* error.

This alarm is generated when a port is faulty.

Alarm object: Port

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x29000009 | Major | Yes |

## Parameters

| Name | Meaning |
|---|---|
| *arg1* | Port name. For example, **Port0** or **Port1**, **Port1-1 optical module**, **Port1 on front panel**, or **Port1 on backplane**. |

## Impact on the System

Data cannot be transmitted through the port, which may cause the system network to be abnormal.

## Possible Causes

The interface device, switch module, or mainboard is faulty.

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### Procedure

**Step 1** Replace the interface device. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Replace the switch module or mainboard. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Contact technical support engineer.

**----End**

## 2.10.223 ALM-0x29000017 Optical Module Power Abnormal (Port, Major Alarm)

### Description

Alarm message:

Abnormal Rx or Tx powers of optical module were detected on [*arg2*] *arg3* on *arg1*.

This alarm is generated when abnormal receive or transmit power was detected on the optical module.

Alarm object: Port

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x29000017 | Major | Yes |

### Parameters

| Name | Meaning |
|---|---|
| *arg1* | NIC name, for example, **NIC 1**, **PCIe Card 5**, or **LOM**. |
| *arg2* | Type of the NIC, for example, **(NIC)** or **(FC).** |
| *arg3* | Network port number, for example, **port 1**. |

### Impact on the System

The NIC may run unstably, which affects the service network communication.

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### Possible Causes

- The optical module is not connected to the optical fiber.
- The optical module is faulty.

### Procedure

**Step 1** Check whether the optical module is connected to the optical fiber.

- If yes, go to **Step 3**.
- If no, go to **Step 2**.

**Step 2** Connect the optical fiber to the optical module, and check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Replace the optical module. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Contact technical support engineer.

**----End**

## 2.10.224 ALM-0x29000027 Optical Module Speed Mismatches NIC Speed (Port, Major Alarm)

### Description

Alarm message:

Network *arg1* [*arg2*] *arg3* optical module transmission speed does not match the speed supported by the NIC.

This alarm is generated when the optical module speed does not match the speeds supported by the network interface card.

Alarm object: Port

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x29000027 | Major | Yes |

### Parameters

| Name | Meaning |
|---|---|
| *arg1* | NIC name, for example, **NIC 1**, **PCIe Card 5**, or **LOM**. |
| *arg2* | Type of the NIC, for example, **(NIC)** or **(FC).** |

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| Name | Meaning |
| --- | --- |
| *arg3* | Network port number, for example, **port 1**. |

### Impact on the System

The related services will be interrupted.

### Possible Causes

The optical module is faulty.

### Procedure

**Step 1** Replace the optical module. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Contact technical support engineer.

**----End**

## 2.10.225 ALM-0x29000029 Connection Failure Detected in OAM Link Fault Management (Port, Major Alarm)

### Description

Alarm message:

OAM detected disconnection of the link to *arg1* [*arg2*] *arg3*.

This alarm is generated when a connection issue was detected in OAM link fault management (LFM).

Alarm object: Port

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x29000029 | Major | Yes |

### Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | NIC name, for example, **NIC 1**, **PCIe Card 5**, or **LOM**. |
| *arg2* | Type of the NIC, for example, **(NIC)** or **(FC).** |

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| Name | Meaning |
| --- | --- |
| *arg3* | Network port number, for example, **port 1**. |

### Impact on the System

The related services will be interrupted.

### Possible Causes

The NIC is faulty.

### Procedure

**Step 1** Replace the NIC. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Contact technical support engineer.

**----End**

## 2.10.226 ALM-0x2900002B Error Packets Detected in OAM Link Fault Management (Port, Major Alarm)

### Description

Alarm message:

Error packets detected in the OAM check of the link to *arg1* [*arg2*] *arg3*.

This alarm is generated when error packets were detected during the Operation, Administration, and Management (OAM) link fault management (LFM).

Alarm object: Port

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x2900002B | Major | Yes |

### Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | NIC name, for example, **NIC 1**, **PCIe Card 5**, or **LOM**. |
| *arg2* | Type of the NIC, for example, **(NIC)** or **(FC).** |

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| Name | Meaning |
| --- | --- |
| *arg3* | Network port number, for example, **port 1**. |

### Impact on the System

The related services will be interrupted.

### Possible Causes

The NIC is faulty.

### Procedure

**Step 1** Replace the NIC. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Contact technical support engineer.

**----End**

## 2.10.227 ALM-0x2900002D PHY Port Configuration Failure (Port, Major Alarm)

### Description

Alarm message:

Failed to configure the *arg1 arg2* SAS.

This alarm is generated when the PHY port configuration fails.

Alarm object: Port

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x2900002D | Major | Yes |

### Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | PHY type, for example, **10GE**. |
| *arg2* | PHY ID, for example, **0** to **3**. |
| *arg3* | Port number, for example, **0** or **1**. |

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### Impact on the System

The system network is abnormal.

### Possible Causes

- The iBMC version is too early.
- The component where the PHY is located is faulty.

### Procedure

**Step 1** Update the iBMC to the latest version. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Replace the component holding the PHY. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Contact technical support engineer.

**----End**

## 2.10.228 ALM-0x2900002F NIC Port Linkdown (Port, Major Alarm)

### Description

Alarm message:

*arg1* [*arg2*] *arg3* disconnected.

This alarm is generated when the NIC port linkdown occurs.

Alarm object: Port

NOTE

iBMC V3.01.12.21 and later support this alarm.

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x2900002F | Major | Yes |

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## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | NIC name, for example, "NIC", "PCIe Card", "LOM", or "iBMC dedicated port". |
| *arg2* | Type of the NIC, for example, **(NIC)** or **(FC).** |
| *arg3* | Network port number, for example, "port 1". |

## Impact on the System

The network port services will be interrupted.

## Possible Causes

The network cable is not connected or the port of the peer device is not connected.

## Procedure

**Step 1** Remove and reconnect the network cable. Then check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Check whether the network cable is connected to the peer device.

- If yes, go to **Step 4**.
- If no, go to **Step 3**.

**Step 3** Connect the network cable to the peer device port correctly. Then check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Check whether the peer device works properly.

- If yes, go to **Step 6**.
- If no, go to **Step 5**.

**Step 5** Replace the faulty peer device. Then check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 6**.

**Step 6** Contact technical support engineer.

**----End**

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# 2.10.229 ALM-0x29000031 All NIC Ports are in Link Down State (Port, Critical Alarm)

## Description

Alarm message:

```
All NIC ports are in link down state.
```

This alarm is generated when the all NIC ports are in link down state.

Alarm object: Port

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x29000031 | Critical | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| - | - |

## Impact on the System

NIC-related services are interrupted.

## Possible Causes

- The network cable is not connected
- The port of the peer device is not connected.
- The peer device is not working properly.

## Procedure

**Step 1** Remove and reconnect the network cable. Then check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Check whether the network cable is connected to the peer device.

- If yes, go to **Step 4**.
- If no, go to **Step 3**.

**Step 3** Connect the network cable to the peer device port correctly. Then check whether the alarm is cleared.

- If yes, no further action is required.

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- If no, go to **Step 4**.

**Step 4** Check whether the peer device works properly.

- If yes, go to **Step 6**.
- If no, go to **Step 5**.

**Step 5** Replace the faulty peer device. Then check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 6**.

**Step 6** Contact technical support engineer.

**----End**

# 2.10.230 ALM-0x2900003B Reduced negotiated rate of the network port minor alarm (Port, Minor Alarm)

## Description

Alarm message:

The negotiated rate of [*arg1*] *arg2* is reduced.

This alarm is generated when the negotiated rate of the network port reduce.

Alarm object: Port

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x2900003B | Minor | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Board where the network port is located. Value example: 1. **NIC**, 2. **PCIe Card**. |
| *arg2* | Network port name, for example: **Port1**. |

## Impact on the System

The decrease in network bandwidth affects network service access.

## Possible Causes

- Replace the network cable or RJ45 connector.
- Check the connected network device.

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- Check the device status.

## Procedure

**Step 1** Check whether the network cable is connected to the peer device.

- If yes, go to **3**.
- If no, go to **2**.

**Step 2** Connect the network cable to the peer device port correctly. Then check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **3**.

**Step 3** Replace the network cable or RJ45 connector. Then check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **4**.

**Step 4** Contact technical support engineer.

**----End**

# 2.10.231 ALM-0x2B000001 PHY Fault (PHY, Major Alarm)

## Description

Alarm message:

PHY *arg1* MDIO error.

This alarm is generated when the MDIO channel of the PHY is faulty.

Alarm object: PHY

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x2B000001 | Major | Yes |

## Parameters

| Name | Meaning |
|---|---|
| *arg1* | Slot number of the PHY. |

## Impact on the System

The system network may be abnormal.

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### Possible Causes

The mainboard is faulty.

### Procedure

**Step 1** Replace the mainboard. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Contact technical support engineer.

**----End**

## 2.10.232 ALM-0x2C000031 System Error (System, Critical Alarm)

### Description

Alarm message:

```
Critical system error. Analyze the alarm based on other events.
```

This alarm is generated when a critical error occurred on the OS.

Alarm object: System

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x2C000031 | Critical | Yes |

### Parameters

| Name | Meaning |
| --- | --- |
| - | - |

### Impact on the System

The OS is abnormal, and OS services are interrupted.

### Possible Causes

The OS is abnormal.

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### Procedure

**Step 1** Collect iBMC and OS logs.

**Step 2** Send the iBMC log to technical support engineer for further analysis.

**Step 3** Send the OS log to the OS vendor for further analysis.

**----End**

## 2.10.233 ALM-0x2C000037 CPUs Mismatch (System, Critical Alarm)

### Description

Alarm message:

```
Different CPU models detected during system startup.
```

This alarm is generated when CPUs of different models are installed in the server.

Alarm object: System

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x2C000037 | Critical | Yes |

### Parameters

| Name | Meaning |
| --- | --- |
| – | – |

### Impact on the System

The operating system cannot start.

### Possible Causes

CPUs of different models are installed on the server.

### Procedure

**Step 1** Check whether the server is configured with different models of CPUs.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Use the same model of CPUs. Then, check whether the alarm is cleared.

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- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Switch the CPU with a functioning CPU in the same chassis, and check whether the alarm is still generated for this CPU.

- If yes, go to **Step 4**
- If no, go to **Step 5**

**Step 4** Replace the CPU. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Replace the mainboard. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 6**.

**Step 6** Contact technical support engineer.

**----End**

# 2.10.234 ALM-0x2C000039 System Start Interrupt (System, Critical Alarm)

## Description

Alarm message:

```
System suspended during startup.
```

This alarm is generated when the system suspended during startup.

Alarm object: System

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x2C000039 | Critical | Yes |

## Parameters

| Name | Meaning |
|---|---|
| – | – |

## Impact on the System

The operating system cannot start.

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### Possible Causes

- The server is faulty.
- The OS is abnormal.

### Procedure

**Step 1** View the alarm list, check for component alarms, and rectify the fault according to troubleshooting suggestions.

**Step 2** Determine the boot interrupt time according to the KVM screenshot and system serial port log.

**Step 3** Contact technical support engineer.

**----End**

## 2.10.235 ALM-0x2C00003D CPU Boards Mismatch (System, Major Alarm)

### Description

Alarm message:

```
Inconsistent models of CPU boards.
```

This alarm is generated when different types of CPU boards are detected in a server.

Alarm object: System

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x2C00003D | Major | Yes |

### Parameters

| Name | Meaning |
| --- | --- |
| – | – |

### Impact on the System

The system may fail to start.

### Possible Causes

Different types of compute nodes are used together.

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### Procedure

**Step 1** Check whether the server is configured with the same model of SCMs, which hold the CPUs.

- If yes, go to **Step 3**.
- If no, go to **Step 2**.

**Step 2** Use the same model of SCMs. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Contact technical support.

**----End**

## 2.10.236 ALM-0x2C000041 Inconsistent CPU Types (System, Major Alarm)

### Description

Alarm message:

```
Different types of CPUs are used.
```

This alarm is generated when an unsupported CPU model or multiple CPU models are installed in the same server.

Alarm object: System

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x2C000041 | Major | Yes |

### Parameters

| Name | Meaning |
| --- | --- |
| – | – |

### Impact on the System

The system may fail to start.

### Possible Causes

- An incompatible CPU is installed.
- The CPUs installed in the server are not of the same model.

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## Procedure

**Step 1** Power off the server, and remove the power cables from the server.

**Step 2** Check the number of CPUs installed in the server.

- If only one CPU is installed, go to **Step 4**.
- If multiple CPUs are installed, go to **Step 3**.

**Step 3** Check whether the models of the installed CPUs are the same.

- If yes, go to **Step 4**.
- If no, go to **Step 6**.

**Step 4** Check whether the CPUs are compatible with the server.

You can log in to the Technical Support website and check the CPU compatibility by using the Compatibility List.

- If yes, go to **Step 9**.
- If no, go to **Step 5**.

**Step 5** Replace the incompatible CPUs. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 9**.

**Step 6** Check whether any CPU is incompatible with the server.

- If yes, go to **Step 8**.
- If no, go to **Step 7**.

**Step 7** Replace certain CPUs so that the CPU models are the same. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 9**.

**Step 8** Replace the incompatible CPUs so that all CPUs are of the same model and compatible with the server. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 9**.

**Step 9** Contact technical support.

**----End**

# 2.10.237 ALM-0x2C000043 Inconsistent PBI Boards (System, Major Alarm)

## Description

Alarm message:

```
Different types of HPC boards are used.
```

This alarm is generated when HFCs of different models are installed in the same server.

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Alarm object: System

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x2C000043 | Major | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| – | – |

## Impact on the System

The system may fail to start.

## Possible Causes

- The HFCs installed in the server are of different models.

## Procedure

**Step 1** Power off the server, and remove the power cables from the server.

**Step 2** Check whether the models of the two HFCs are the same.

- If yes, go to **Step 4**.
- If no, go to **Step 3**.

**Step 3** Replace the improper HFC. Then, power on the server and check whether the alarm is cleared.

For details about how to replace an HFC, see the user guide of the server you use.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Contact technical support.

**----End**

# 2.10.238 ALM-0x2C000045 PBI Does Not Match CPU (System, Major Alarm)

## Description

Alarm message:

```
The HPC type does not match the CPU board or CPU.
```

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This alarm is generated when a compute module is incompatible with an HFC.

Alarm object: System

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x2C000045 | Major | Yes |

## Parameters

| Name | Meaning |
|---|---|
| – | – |

## Impact on the System

The system may fail to start.

## Possible Causes

- The compute module is incompatible with the HFC.

## Procedure

**Step 1** Power off the server, and remove the power cables from the server.

**Step 2** Check whether the HFC is compatible with the compute module.

For details about the relationship between them, see the server user guide.

- If yes, go to **Step 4**.
- If no, go to **Step 3**.

**Step 3** Replace the HFC or compute module with a compatible one. Then, power on the server and check whether the alarm is cleared.

For details about how to replace an HFC or compute module, see the server user guide.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Contact technical support.

**----End**

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# 2.10.239 ALM-0x2C00005B Mainboard and Disk Backplane Mismatch (System, Major Alarm)

## Description

Alarm message:

```
The mainboard does not match the disk backplane.
```

This alarm is generated when the mainboard does not match the disk backplane.

Alarm object: System

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x2C00005B | Major | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| – | – |

## Impact on the System

The system performance is affected, or the system may fail to start.

## Possible Causes

The mainboard does not match the disk backplane.

## Procedure

**Step 1** Use a mainboard matching the disk backplane to replace the mainboard. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Contact technical support.

**----End**

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# 2.10.240 ALM-0x2C00005D Failed to Read Total System Power (System, Minor Alarm)

## Description

Alarm message:

```
Failed to obtain data of the total system power.
```

This alarm is generated when the system failed to obtain the total system power.

Alarm object: System

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x2C00005D | Minor | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| – | – |

## Impact on the System

The power capping function and server operation will be affected.

## Possible Causes

The ME is faulty, or the access channel is abnormal.

## Procedure

**Step 1** Restart the iBMC. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**

**Step 2** Remove and reinstall the power cable or board. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Contact technical support engineer.

**----End**

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# 2.10.241 ALM-0x2C000069 System Exception Due to a Hardware Fault (System, Major Alarm)

## Description

Alarm message:

```
System is abnormal due to hardware fault.
```

This alarm is generated when a system exception caused by a hardware fault is detected.

Alarm object: System

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x2C000069 | Major | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| – | – |

## Impact on the System

The system may stop responding or restart, which interrupts services.

## Possible Causes

A hardware fault occurs. For example, the PCIe card overheating triggers the protection mechanism.

## Procedure

**Step 1** Check for and clear component alarms. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Shut down the OS and then restart it. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Contact technical support engineer.

**----End**

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# 2.10.242 ALM-0x2C00006B Insufficient MMIO Resources (System, Major Alarm)

## Description

Alarm message:

```
MMIO resources not enough.
```

This alarm is generated when the MMIO resources provided by the server cannot meet the PCIe card requirements.

Alarm object: System

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x2C00006B | Major | Yes |

## Impact on the System

The PCIe card fails to work, and the system runs abnormally.

## Possible Causes

The MMIO resources required by the PCIe cards of the server exceed the MMIO resources that can be provided by the server.

## Procedure

**Step 1** Contact technical support engineer.

**----End**

# 2.10.243 ALM-0x2C00006D Insufficient Legacy IO Resources (System, Major Alarm)

## Description

Alarm message:

```
Legacy IO resources not enough.
```

This alarm is generated when the legacy I/O resources provided by the server cannot meet the PCIe card requirements.

Alarm object: System

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### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x2C00006D | Major | Yes |

### Impact on the System

The PCIe card fails to work, and the system runs abnormally.

### Possible Causes

The legacy I/O resources required by the PCIe cards of the server exceed the I/O resources that can be provided by the server.

### Procedure

**Step 1** Contact technical support engineer.

**----End**

## 2.10.244 ALM-0x2C00006F Insufficient Legacy OPROM Resources (System, Major Alarm)

### Description

Alarm message:

```
Legacy OPROM resources not enough.
```

This alarm is generated when the legacy option ROM (OPROM) resources provided by the server cannot meet the PCIe card requirements.

Alarm object: System

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x2C00006F | Major | Yes |

### Impact on the System

The PCIe card fails to work, and the system runs abnormally.

### Possible Causes

The legacy OPROM resources required by the PCIe cards of the server exceed the legacy OPROM resources that can be provided by the server.

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### Procedure

**Step 1** Contact technical support engineer.

**----End**

## 2.10.245 ALM-0x2C000073 High System Power Consumption (System, Minor Alarm)

### Description

Alarm message:

The total power consumption (*arg1* W) of the system exceeds the alarm threshold (*arg2* W).

This alarm is generated when the total power consumption of the system exceeds the alarm threshold.

Alarm object: System

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x2C000073 | Minor | Yes |

### Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Current reading of the sensor. |
| *arg2* | Alarm threshold. |

### Impact on the System

The power consumption of the server is higher than expected.

### Possible Causes

- The alarm threshold for high power consumption is set too low.
- The service on the OS is too busy.

### Procedure

**Step 1** Check whether the alarm threshold for high power consumption is set too low.

**Step 2** Stop unnecessary services on the OS to release CPU and memory resources.

**----End**

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# 2.10.246 ALM-0x2C000087 Secure Boot Failed (System, Critical Alarm)

## Description

Alarm message:

*arg1* secure boot failed.

This alarm is generated when the firmware content is tampered with or the component where the firmware is located cannot be accessed.

Alarm object: System

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x2C000087 | Critical | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg2* | Component where the firmware is located, for example, **BIOS**. |

## Impact on the System

The corresponding firmware cannot start.

## Possible Causes

- The firmware content is tampered with.
- The component where the firmware resides cannot be accessed.

## Procedure

**Step 1** Upgrade the firmware and check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Replace the component where the firmware is located and check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Contact technical support engineer.

**----End**

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# 2.10.247 ALM-0x2C000089 Failed to Identify the Server Model (System, Major Alarm)

## Description

Alarm message:

Failed to identify the server model from the *arg1*. Error details: *arg2*.

This alarm is generated when the server model fails to be identified.

Alarm object: System

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x2C000089 | Major | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Component, such as the right mounting ear plate or mainboard. |
| *arg2* | Fault details, such as CRC Failure or Invalid Product ID. |

## Impact on the System

Server management is affected.

## Possible Causes

- The component (right mounting ear plate, mainboard, or fan board) that stores product model information is not installed correctly.
- The mainboard is faulty.

## Procedure

**Step 1** Check whether the corresponding component is correctly installed.

- If yes, go to **Step 3**.
- If no, go to **Step 2**.

**Step 2** Reinstall the corresponding component, and check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Restart the iBMC, and check whether the alarm is cleared.

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- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Replace the mainboard, and check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Contact technical support engineer.

**----End**

# 2.10.248 ALM-0x2C00008B The System Bus Number is Insufficient (System, Minor Alarm)

## Description

Alarm message:

```
The system bus number is insufficient.
```

This alarm is generated when the system bus numbers are insufficient due to too many connected PCIe devices.

Alarm object: System

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x2C00008B | Minor | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| - | - |

## Impact on the System

Some cards cannot be recognized.

## Possible Causes

Too many PCIe devices are connected.

## Procedure

Contact technical support engineer.

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# 2.10.249 ALM-0x2C00009B A Correctable Error Occurs on the Bus (System, Minor Alarm)

## Description

Alarm message:

The PCIe bus link generates a correctable error (*arg1*).

This alarm is generated when there may be damage or poor contact between the PCIe device and its slot.

Alarm object: System

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x2C00009B | Minor | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Indicates the name, location, and SN of the device related to the alarm.<br>Format: Device:*DeviceName*,location:*CPUn_DeviceTypeDevice-SLot*,SN:*SerialNumber*<br>*DeviceName*: device name<br>*CPUn*: CPU slot number<br>*DeviceType*: device type (PCIe card, OCP card, or HDD)<br>*DeviceSLot*: device slot number or device ID<br>*SerialNumber*: device serial number |

## Impact on the System

The system can work properly, but the performance is degraded.

## Possible Causes

There may be damage or poor contact between the PCIe device and its slot.

## Procedure

**Step 1** Power off the server and check whether there is damage or poor contact between the component and its slot.

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- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Remove and reinstall the component, and check whether the fault is rectified.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Replace the component, and check whether the fault is rectified.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Contact technical support.

**----End**

# 2.10.250 ALM-0x2C00009D An Uncorrectable Error Occurs on the Bus (System, Major Alarm)

## Description

Alarm message:

The PCIe bus link generates an uncorrectable error (*arg1*).

This alarm is generated when the PCIe bus link generates an unrecoverable error.

Alarm object: System

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x2C00009D | Major | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Indicates the name, location, and SN of the device related to the alarm.<br>Format: Device:*DeviceName*,location:*CPUn_DeviceTypeDevice-SLot*,SN:*SerialNumber*<br>*DeviceName*: device name<br>*CPUn*: CPU slot number<br>*DeviceType*: device type (PCIe card, OCP card, or HDD)<br>*DeviceSLot*: device slot number or device ID<br>*SerialNumber*: device serial number |

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### Impact on the System

The PCIe bus may run unstably and the system stops responding.

### Possible Causes

- The PCIe device may be damaged or in poor contact with the slot.
- The PCIe card is faulty.
- The mainboard is faulty.

### Procedure

**Step 1** Power off the server and check whether there is damage or poor contact between the component and its slot.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Remove and reinstall the component, and check whether the fault is rectified.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Replace the component, and check whether the fault is rectified.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Replace the mainboard, and check whether the fault is rectified.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Contact technical support.

**----End**

## 2.10.251 ALM-0x2C00009F A Fatal Error Occurs on the Bus (System, Critical Alarm)

### Description

Alarm message:

The PCIe bus link generates a fatal error (*arg1*).

This alarm is generated when the PCIe bus link generates a fatal error.

Alarm object: System

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x2C00009F | Critical | Yes |

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## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Indicates the name, location, and SN of the device related to the alarm.<br>Format: Device:*DeviceName*,location:*CPUn_DeviceTypeDevice-SLot*,SN:*SerialNumber*<br>*DeviceName*: device name<br>*CPUn*: CPU slot number<br>*DeviceType*: device type (PCIe card, OCP card, or HDD)<br>*DeviceSLot*: device slot number or device ID<br>*SerialNumber*: device serial number |

## Impact on the System

The PCIe bus may run unstably and the system stops responding.

## Possible Causes

- The PCIe device may be damaged or in poor contact with the slot.
- The PCIe card is faulty.
- The mainboard is faulty.

## Procedure

**Step 1** Power off the server and check whether there is damage or poor contact between the component and its slot.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Remove and reinstall the component, and check whether the fault is rectified.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Replace the component, and check whether the fault is rectified.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Replace the mainboard, and check whether the fault is rectified.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Contact technical support.

**----End**

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# 2.10.252 ALM-0x2C0000A1 The Bus is Degraded (System, Minor Alarm)

## Description

Alarm message:

The PCIe bus is degraded (*arg1*).

This alarm is generated when the PCIe bus link is degraded.

Alarm object: System

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x2C0000A1 | Minor | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Indicates the name, location, and SN of the device related to the alarm.<br>Format: Device:*DeviceName*,location:*CPUn_DeviceTypeDevice-SLot*,SN:*SerialNumber*<br>*DeviceName*: device name<br>*CPUn*: CPU slot number<br>*DeviceType*: device type (PCIe card, OCP card, or HDD)<br>*DeviceSLot*: device slot number or device ID<br>*SerialNumber*: device serial number |

## Impact on the System

The system can work properly, but the performance is degraded.

## Possible Causes

There may be damage or poor contact between the PCIe device and its slot.

## Procedure

**Step 1** Power off the server and check whether there is damage or poor contact between the component and its slot.

- If yes, go to **Step 2**.

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- If no, go to **Step 3**.

**Step 2** Remove and reinstall the component, and check whether the fault is rectified.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Replace the component, and check whether the fault is rectified.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Contact technical support.

**----End**

# 2.10.253 ALM-0x2C0000A5 A Last Boot Error Occurred on the PCIe Bus Link (System, Major Alarm)

## Description

Alarm message:

The PCIe bus link generates a last boot error (*arg1*).

This alarm is generated when the PCIe bus link generates a last boot error.

Alarm object: System

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x2C0000A5 | Major | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Indicates the name, location, and SN of the device related to the alarm.<br>Format: Device:*DeviceName*,location:*CPUn_DeviceTypeDevice-SLot*,SN:*SerialNumber*<br>*DeviceName*: device name<br>*CPUn*: CPU slot number<br>*DeviceType*: device type (PCIe card, OCP card, or HDD)<br>*DeviceSLot*: device slot number or device ID<br>*SerialNumber*: device serial number |

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### Impact on the System

The PCIe bus may run unstably and the system stops responding.

### Possible Causes

- The PCIe device may be damaged or in poor contact with the slot.
- The PCIe card is faulty.
- The mainboard is faulty.

### Procedure

**Step 1** Power off the server and check whether there is damage or poor contact between the component and its slot.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Remove and reinstall the component, and check whether the fault is rectified.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Replace the component, and check whether the fault is rectified.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Replace the mainboard, and check whether the fault is rectified.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Contact technical support.

**----End**

## 2.10.254 ALM-0x2C0000A9 The System Generates an IERR Fault, Please Analyze it in Combination with Other Events (System, Critical Alarm)

### Description

Alarm message:

```
The system generates an IERR fault, please analyze it in combination with other events.
```

This alarm is generated when the system generates an IERR fault.

Alarm object: System

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### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x2C0000A9 | Critical | Yes |

### Parameters

| Name | Meaning |
| --- | --- |
| - | - |

### Impact on the System

Cause the system to stop responding or reboot.

### Possible Causes

A hardware fault exists.

### Procedure

Combining with other event descriptions to troubleshoot components.

## 2.10.255 ALM-0x2C0000AB Failed to Start the OS Because Removable Boot Media not Found (System, Major Alarm)

### Description

Alarm message:

```
The OS cannot start because removable boot media not found.
```

This alarm is generated when the OS cannot start because removable boot media not found.

Alarm object: System

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x2C0000AB | Major | Yes |

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## Parameters

| Name | Meaning |
| --- | --- |
| - | - |

## Impact on the System

The OS cannot start.

## Possible Causes

- The boot device or drive is faulty.
- The boot partition is damaged.
- The PXE service is faulty.

## Procedure

**Step 1** Check whether the boot device or drive is installed correctly.

- If yes, go to **Step 3**
- If no, go to **Step 2**

**Step 2** Remove and reinstall the boot device or drive. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**

**Step 3** Check whether the boot partition is valid.

- If yes, go to **Step 5**
- If no, go to **Step 4**

**Step 4** Reinstall the system boot partition. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**

**Step 5** Replace the boot device or drive. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 6**

**Step 6** If the OS is started from the PXE service, check whether the PXE service is normal.

- If yes, go to **Step 8**
- If no, go to **Step 7**

**Step 7** Check the network. And check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 8**

**Step 8** Contact technical support engineer.

**----End**

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# 2.10.256 ALM-0x2D000001 M.2 Transfer Card Power Supply Abnormal (M2 Transfer Card, Major Alarm)

## Description

Alarm message:

Power supply to M.2 transfer card *arg1 arg2* failed.

This alarm is generated when the power supply of the M.2 riser card is abnormal.

Alarm object: M2 Transfer Card

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x2D000001 | Major | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | The ID of the M.2 riser card related to the alarm. |
| *arg2* | Power supply type related to the alarm, such as 5V, 12V, and more. |

## Impact on the System

It may cause related business unable to operate properly or data loss.

## Possible Causes

- The power cable of the M.2 riser card is in poor contact.
- The M.2 riser card is faulty.
- The mainboard is faulty.

## Procedure

**Step 1** Remove and then reconnect the cable on the M.2 riser card and check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Replace the cable on the M.2 riser card and check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

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**Step 3** Replace the M.2 riser card and check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Replace the mainboard and check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Contact technical support engineer.

**----End**

# 2.10.257 ALM-0x30000019 PIC Card Power Fault (PIC Card, Major Alarm)

## Description

Alarm message:

Power supply to PIC card *arg1* failed or timed out.

This alarm is generated when the PIC card is power off unexpectedly or the power-on of the PIC card timed out.

Alarm object: PIC Card

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x30000019 | Major | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Serial number of the PIC card. |

## Impact on the System

The PIC card may fail to work, and the service network may be abnormal.

## Possible Causes

The PIC card is faulty.

## Procedure

**Step 1** Replace the PIC card. Then, check whether the alarm is cleared.

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- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Contact technical support engineer.

**----End**

# 2.10.258 ALM-0x3000001B PIC Card Fault (PIC Card, Major Alarm)

## Description

Alarm message:

PIC card *arg1* is fault.

This alarm is generated when the PIC card is faulty.

Alarm object: PIC Card

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x3000001B | Major | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Serial number of the PIC card. |

## Impact on the System

The PIC card may fail to work, and the service network may be abnormal.

## Possible Causes

The PIC card is faulty.

## Procedure

**Step 1** Replace the PIC card. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Contact technical support engineer.

**----End**

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# 2.10.259 ALM-0x3200000F Disk Backplane Expander Heartbeat Abnormal (Expander, Major Alarm)

## Description

Alarm message:

The *arg1* disk backplane expander heartbeat signal is abnormal.

This alarm is generated when the system detects abnormal heartbeat signals of the disk backplane expander.

Alarm object: Expander

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x3200000F | Major | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Name of the disk backplane. |

## Impact on the System

- The related services are affected, or data loss may occur.
- The SAS or SATA disks may be unrecognizable.

## Possible Causes

The expander board chip is faulty.

## Procedure

**Step 1** Check whether there are alarms generated for the mainboard, mezzanine cards, or disk backplane.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Clear the alarms of the mainboard, mezzanine cards, or disk backplane. Then, check whether this alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Remove and reconnect power cables. Then, check whether this alarm is cleared.

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- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Replace the expander board. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Contact technical support engineer.

**----End**

# 2.10.260 ALM-0x38000001 CPU-to-JC VMSE Error (JC Chip, Minor Alarm)

## Description

Alarm message:

The CPU*arg1* connected to [*arg2*] JC chip *arg3* has VMSE error.

This alarm is generated when a VMSE fault is detected from the CPU and the JC chip.

Alarm object: JC Chip

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x38000001 | Minor | Yes |

## Parameters

| Name | Meaning |
|---|---|
| *arg1* | Socket No. of the CPU. |
| *arg2* | Location of the JC chip. |
| *arg3* | Serial number of the JC chip. |

## Impact on the System

The server performance is affected.

## Possible Causes

- The CPU board is faulty.
- The memory board is faulty.
- The mainboard is faulty.

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### Procedure

**Step 1** Check whether there is an alarm generated for the memory board corresponding to the CPU.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Replace the memory board. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Replace the mainboard or CPU board. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Contact technical support engineer.

**----End**

## 2.10.261 ALM-0x3E00000D PCIe Switch Input Undervoltage (PCIe Switch, Major Alarm)

### Description

Alarm message:

The *arg1* PCIe switch *arg2* input voltage (*arg3* V) is lower than the undervoltage threshold (*arg4* V).

This alarm is generated when the input voltage of the PCIe switch chip is lower than the undervoltage threshold.

Alarm object: PCIe Switch

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x3E00000D | Major | Yes |

### Parameters

| Name | Meaning |
|---|---|
| *arg1* | Component where the PCIe switch is located. For example, **mainboard** or **HDD backplane N**. |
| *arg2* | Slot number of the PCIe switch. |
| *arg3* | Current reading of the sensor. |
| *arg4* | Alarm threshold. |

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### Impact on the System

The PCIe devices may run unstably, and the system may run abnormally.

### Possible Causes

The PCIe switch chip is faulty.

### Procedure

**Step 1** Replace the device holding the faulty PCIe switch chip. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Contact technical support engineer.

**----End**

## 2.10.262 ALM-0x3E00000F PCIe Switch Input Overvoltage (PCIe Switch, Major Alarm)

### Description

Alarm message:

The *arg1* PCIe switch *arg2* input voltage (*arg3* V) exceeds the overvoltage threshold (*arg4* V).

This alarm is generated when the input voltage of the PCIe switch chip exceeds the overvoltage threshold.

Alarm object: PCIe Switch

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x3E00000F | Major | Yes |

### Parameters

| Name | Meaning |
|---|---|
| *arg1* | Component where the PCIe switch is located. For example, **mainboard** or **HDD backplane N**. |
| *arg2* | Slot number of the PCIe switch. |
| *arg3* | Current reading of the sensor. |
| *arg4* | Alarm threshold. |

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### Impact on the System

The PCIe devices may run unstably, and the system may run abnormally.

### Possible Causes

The PCIe switch chip is faulty.

### Procedure

**Step 1** Replace the device holding the faulty PCIe switch chip. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Contact technical support engineer.

**----End**

## 2.10.263 ALM-0x3E000011 Failed to Read PCIe Switch Input Voltage (PCIe Switch, Minor Alarm)

### Description

Alarm message:

Failed to obtain data of the *arg1* PCIe switch *arg2* input voltage.

This alarm is generated when the system failed to obtain the input voltage of the PCIe switch chip.

Alarm object: PCIe Switch

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x3E000011 | Minor | Yes |

### Parameters

| Name | Meaning |
|---|---|
| *arg1* | Component where the PCIe switch is located. For example, **mainboard** or **HDD backplane N**. |
| *arg2* | Slot number of the PCIe switch. |

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### Impact on the System

The voltage cannot be monitored. No alarm will be reported when the voltage is not in the normal range.

### Possible Causes

The PCIe switch chip does not work normally.

### Procedure

**Step 1** Restart the iBMC. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Remove and reinstall the power cable or board. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Contact technical support engineer.

**----End**

## 2.10.264 ALM-0x3E000019 Failed to Read the PCIe Switch Upgrade File (PCIe Switch, Major Alarm)

### Description

Alarm message:

Failed to obtain the *arg1* PCIe switch *arg2* update file.

This alarm is generated when the system failed to read the PCIe switch upgrade file.

Alarm object: PCIe Switch

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x3E000019 | Major | Yes |

### Parameters

| Name | Meaning |
|---|---|
| *arg1* | Component where the PCIe switch is located. For example, **mainboard** or **HDD backplane N**. |
| *arg2* | Slot number of the PCIe switch. |

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### Impact on the System

The PCIe switch software cannot be updated.

### Possible Causes

- The iBMC of an earlier version is used.
- The upgrade file is incorrect.

### Procedure

**Step 1** Upgrade the iBMC to the latest version. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Replace the board holding the iBMC. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Contact technical support engineer.

**----End**

## 2.10.265 ALM-0x3E00001B Failed to Upgrade the PCIe Switch (PCIe Switch, Major Alarm)

### Description

Alarm message:

Failed to update the *arg1* PCIe switch *arg2* eeprom.

This alarm is generated when the upgrade of the PCIe switch EEPROM failed.

Alarm object: PCIe Switch

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x3E00001B | Major | Yes |

### Parameters

| Name | Meaning |
|---|---|
| *arg1* | Component where the PCIe switch is located. For example, **mainboard** or **HDD backplane N**. |
| *arg2* | Slot number of the PCIe switch. |

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### Impact on the System

The PCIe switch software cannot be updated.

### Possible Causes

The PCIe switch is faulty.

### Procedure

**Step 1** Replace the component holding the PCIe switch chip. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Contact technical support engineer.

**----End**

## 2.10.266 ALM-0x3E00001D Uncorrectable Error on the PCIe Switch (PCIe Switch, Major Alarm)

### Description

Alarm message:

*arg1* PCIe Switch *arg2 arg3arg4* occurs uncorrectable error :*arg5*.

This alarm is generated when an uncorrectable error on the PCIe Switch is detected.

Alarm object: PCIe Switch

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x3E00001D | Major | Yes |

### Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | GPU board No., for example, **GpuBoard1.** |
| *arg2* | PCIe Switch No., for example, **PCIeSw1** or **PCIeSw2**. |
| *arg3* | - |
| *arg4* | - |
| *arg5* | Error code, for example, **EEPROM CRC Error** or **EEPROM Absent**. |

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### Impact on the System

The PCIe device is affected, which affects the system operation.

### Possible Causes

- The PCIe link is faulty.
- The component holding the PCIe Switch is faulty.

### Procedure

**Step 1** If "No PCIe Link" is displayed, check the PCIe links. For example, check for bent pins on the FIOG and FPC boards.

- If no, go to **Step 3**
- If no, go to **Step 2**.

**Step 2** Replace the component where the PCIe switch is located. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Contact technical support engineer.

**----End**

## 2.10.267 ALM-0x3E00001F PCIe Switch MCE/AER Error (PCIe Switch, Critical Alarm)

### Description

Alarm message:

The *arg1 arg2 agr3* triggered an uncorrectable error.

This alarm is generated when PCIe Switch MCE/AER error.

Alarm object: PCIe Switch

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x3E00001F | Critical | Yes |

### Parameters

| Name | Meaning |
|---|---|
| *arg1* | Location of the PCIe Switch. |
| *arg2* | Silkscreen of the PCIe Switch. |

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| Name | Meaning |
| --- | --- |
| *arg3* | Models of the PCIe Switch. |

### Impact on the System

The PCIe Switch may run unstably, and the system may stop responding.

### Possible Causes

- The PCIeSwitch is faulty.
- The mainboard is faulty.

### Procedure

**Step 1** Power off the server and check whether there is damage.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Replace the component and check for alarms.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Contact technical support engineer.

**----End**

## 2.10.268 ALM-0x4000000B GPU Carrier Board Clock Lost (GPU Carrier Board, Major Alarm)

### Description

Alarm message:

GPU carrier board *arg1 arg2* clock signals lost.

This alarm is generated when the GPU carrier board clock was lost.

Alarm object: GPU Carrier Board

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x4000000B | Major | Yes |

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### Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Slot number of the PCIe riser, for example, **Riser1**or **PCIe Slot1**. |
| *arg2* | Clock name and signal, for example, **DB1901_1 100MHz**, **DB1901_2 100MHz**, or **CK420 100MHz**. |

### Impact on the System

System signals are affected, and the server may fail to start or run abnormally.

### Possible Causes

The GPU carrier board is faulty.

### Procedure

**Step 1** Replace the GPU carrier board. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Contact technical support engineer.

**----End**

## 2.10.269 ALM-0x4000000D GPU Carrier Board CPLD Self-Check Error (GPU Carrier Board, Major Alarm)

### Description

Alarm message:

GPU carrier board *arg1* CPLD self-check error.

This alarm is generated when an error was detected during the CPLD self-check on the GPU carrier board.

Alarm object: PCIe Riser

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x4000000D | Major | Yes |

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### Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Slot number of the PCIe riser, for example, **Riser1**or **PCIe Slot1**. |

### Impact on the System

The server fails to start.

### Possible Causes

The GPU carrier board is faulty.

### Procedure

**Step 1** Restart the iBMC. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Replace the GPU carrier board. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Contact technical support engineer.

**----End**

## 2.10.270 ALM-0x4000000F Failed to Read the GPU Carrier Board Power (GPU Carrier Board, Minor Alarm)

### Description

Alarm message:

Failed to obtain the power of GPU carrier board *arg1*.

This alarm is generated when the system failed to obtain the power of the GPU carrier board.

Alarm object: PCIe Riser

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x4000000F | Minor | Yes |

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### Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Slot number of the PCIe riser, for example, **Riser1**or **PCIe Slot1**. |

### Impact on the System

The power cannot be monitored.

### Possible Causes

The INA220 is faulty.

### Procedure

**Step 1** Replace the GPU carrier board. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Contact technical support engineer.

**----End**

## 2.10.271 ALM-0x40000011 Failed to Power On the GPU Carrier Board (xPU Carrier Board, Major Alarm)

### Description

Alarm message:

Failed to power on xPU carrier board *arg1*.

This alarm is generated when the xPU carrier board failed to power on.

Alarm object: xPU Carrier Board

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x40000011 | Major | Yes |

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### Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Slot number of the PCIe riser, for example, **Riser1**or **PCIe Slot1**. |

### Impact on the System

The system may run abnormally.

### Possible Causes

- GPU card failure.
- The GPU carrier board is faulty.

### Procedure

**Step 1** Power off the server and check whether there is damage or poor contact between the GPU card or GPU carrier board and its slot.

- If yes, go to **2**.
- If no, go to **4**.

**Step 2** Replace the faulty GPU card. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **3**.

**Step 3** Replace the GPU carrier board. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **4**.

**Step 4** Contact technical support engineer.

**----End**

## 2.10.272 ALM-0x44000001 Logical Drive Degraded, Partially Degraded, Offline or Failed(Logical Drive, Major Alarm)

### Description

Alarm message:

The logical drive *arg2* under RAID card *arg1* is *arg3*.

This alarm is generated when the logical drive of the RAID controller card is degraded, partially degraded, offline or failed.

Alarm object: Logical Drive

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## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x44000001 | Major | Yes |

## Parameters

| Name | Meaning |
|---|---|
| *arg1* | Slot number and location of the RAID controller card, for example, **1** and **PCIe Card 3 (RAID)**. |
| *arg2* | ID of the logical drive, for example, **1** or **2**. |
| *arg3* | Local drive status, for example, **degraded**, **partially degraded**, **offline** or **failed**. |

## Impact on the System

The system may stop responding, or data may be lost.

## Possible Causes

- Member drives of the RAID are removed.
- A member drive is faulty.

## Procedure

**Step 1** Check whether the RAID array has member drives removed.

- If no, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Reinstall the hard disk and check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Replace the drive. Then, check whether the alarm is cleared.

For details about how to replace the drive, see the **Parts Replacement** in maintenance and service guide of the server you use.

After replacing the drive, restore the drive data. For details, see "Drive Faults" in the user guide of the RAID controller card you use.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Contact technical support engineer.

**----End**

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# 2.10.273 ALM-0x44000003 Logical Drive Slow (Logical Drive, Major Alarm)

## Description

Alarm message:

Logical Drive *arg1* under RAID card *arg2* is slow.

This alarm is generated when the logical disk responds slowly.

Alarm object: Logical Drive

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x44000003 | Major | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Logical drive number related to the alarm. |
| *arg2* | Indicates the PCIe card type, for example, **PCIe Card 3.** |

## Impact on the System

The system performance may be affected.

## Possible Causes

The IO performance of the logical drive is degraded.

## Procedure

**Step 1** Check the physical disks under the logical drive.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Replace the disk and check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Contact technical support engineer.

**----End**

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# 2.10.274 ALM-0x44000005 Logical Drive IO Abnormal (Logical Drive, Major Alarm)

## Description

Alarm message:

The IO status of logical drive *arg1* under RAID card (*arg2*) is abnormal or timeout.

This alarm is generated when the logical disk I/O is abnormal.

Alarm object: Logical Drive

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x44000005 | Major | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Logical drive number related to the alarm. |
| *arg2* | Indicates the PCIe card type, for example, **PCIe Card 3.** |

## Impact on the System

The system performance may be affected.

## Possible Causes

The IO of the logical drive is abnormal or timeout.

## Procedure

**Step 1** Check the physical disks under the logical drive.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Replace the disk and check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Contact technical support engineer.

**----End**

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# 2.10.275 ALM-0x45000001 PCIe Retimer Upgrade Failed (PCIe Retimer, Major Alarm)

## Description

Alarm message:

Failed to update the *arg1* PCIe Retimer eeprom.

This alarm is generated when the iBMC detects that the PCIe Retimer upgrade status is abnormal.

Alarm object: PCIe Retimer

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x45000001 | Major | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Location of the retimer. |

## Impact on the System

The PCIe Retimer configuration fails.

## Possible Causes

The PCIe retimer chip is faulty.

## Procedure

**Step 1** Replace the component holding the retimer. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Contact technical support engineer.

**----End**

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# 2.10.276 ALM-0x45000003 PCIe Retimer Configuration Failed (PCIe Retimer, Major Alarm)

## Description

Alarm message:

Failed to configure the *arg1* Retimer *arg2*.

This alarm is generated when the PCIe retimer configuration fails.

Alarm object: PCIe Retimer

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x45000003 | Major | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Location of the retimer, for example, **GpuBoard1**. |
| *arg2* | ID of the component for which the alarm is generated, for example, **1** or **2**. |

## Impact on the System

The PCIe card runs unstably, and the system runs abnormally.

## Possible Causes

- The iBMC version is too early.
- The PCIe retimer chip is faulty.

## Procedure

**Step 1** Update the iBMC to the latest version. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Replace the component holding the retimer. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

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**Step 3** Contact technical support engineer.

**----End**

# 2.10.277 ALM-0x45000005 Failed to Load the PCIe Retimer (PCIe Retimer, Minor Alarm)

## Description

Alarm message:

Failed to load the *arg1* Retimer*arg2* EEPROM.

This alarm is generated when the retimer EEPROM fails to be loaded.

Alarm object: PCIe Retimer

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x45000005 | Minor | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Location of the retimer, for example, **GpuBoard1**. |
| *arg2* | ID of the component for which the alarm is generated, for example, **1** or **2**. |

## Impact on the System

The iBMC cannot write retimer configuration file parameters into retimer EEPROM.

## Possible Causes

- The iBMC version is too early.
- The component where the retimer is located is faulty.
- The retimer EEPROM is faulty or the configuration file cannot be read.

## Procedure

**Step 1** Update the iBMC to the latest version. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Replace the component holding the retimer. Then, check whether the alarm is cleared.

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- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Contact technical support engineer.

**----End**

# 2.10.278 ALM-0x45000009 Inconsistent Retimer Firmware Versions (PCIe Retimer, Minor Alarm)

## Description

Alarm message:

The Retimer firmware versions of *arg2 arg1* are inconsistent.

This alarm is generated when the retimer firmware upgrade is interrupted or the component where the retimer chip is located is faulty.

Alarm object: PCIe Retimer

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x45000009 | Minor | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Mainboard |
| *arg2* | Component where the retimer chip is located, for example, **Riser card1**. |

## Impact on the System

System stability is affected.

## Possible Causes

- The upgrade of the Retimer firmware is interrupted.
- The component where the Retimer resides is faulty.

## Procedure

**Step 1** Upgrade the Retimer firmware and check whether the alarm is cleared.

- If yes, no further action is required.

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- If no, go to **Step 2**.

**Step 2** Replace the component where the Retimer is located and check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Contact technical support engineer.

**----End**

# 2.10.279 ALM-0x46000001 Repeater Configuration Failure (Repeater, Major Alarm)

## Description

Alarm message:

Failed to configure the *arg1arg2* Repeater.

This alarm is generated when the repeater configuration fails.

Alarm object: Repeater

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x46000001 | Major | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Location of the repeater, for example, **Mezz Card** or **BioBoard**. The BioBoard is the rear I/O board of the G5500 server. |
| *arg2* | Slot number of the card where the SAS redriver is located, for example, **1** or **2**. |

## Impact on the System

The PCIe card may run abnormally.

## Possible Causes

- The iBMC version is too early.
- The repeater chip is faulty.

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### Procedure

**Step 1** Update the iBMC to the latest version and check whether the alarm has been cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Replace the component where the repeater is located and check whether the alarm has been cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Contact technical support engineer.

**----End**

## 2.10.280 ALM-0x52000001 BBU Fault (BBU, Major Alarm)

### Description

Alarm message:

The *arg1* BBU module (*arg2*) is faulty *arg3*.

This alarm is generated when the iBMC detects a BBU fault.

Alarm object: BBU

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x52000001 | Major | Yes |

### Parameters

| Name | Meaning |
|---|---|
| *arg1* | Location of the BBU, for example, **rear**. |
| *arg2* | BBU No., for example, **BBU0** or **BBU1**. |
| *arg3* | Error code, for example, **7002**. |

### Impact on the System

The power supply to the server is affected.

### Possible Causes

The BBU is faulty.

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### Procedure

**Step 1** Replace the BBU. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Contact technical support engineer.

**----End**

## 2.10.281 ALM-0x52000003 BBU Communication Failure (BBU, Major Alarm)

### Description

Alarm message:

Communication between the iBMC and *arg1* BBU module (*arg2*) failed.

This alarm is generated when the communication between the iBMC and the BBU fails.

Alarm object: BBU

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x52000003 | Major | Yes |

### Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Location of the BBU, for example, **rear**. |
| *arg2* | BBU No., for example, **BBU0** or **BBU1**. |

### Impact on the System

The power supply to the server is affected.

### Possible Causes

- The BBU is faulty.
- The BBU cable is faulty or is not firmly connected.
- The BBU cable port on the mainboard is faulty.

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### Procedure

**Step 1** Reconnect the BBU cable. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Replace the BBU cable. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Replace the BBU. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Replace the mainboard. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Contact technical support engineer.

**----End**

## 2.10.282 ALM-0x52000005 Low BBU Battery (BBU, Major Alarm)

### Description

Alarm message:

The battery capacity (*arg1*) of *arg2* BBU module (*arg3*) is lower than the threshold (*arg4*).

This alarm is generated when the BBU battery power is lower than the threshold.

Alarm object: BBU

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x52000005 | Major | Yes |

### Parameters

| Name | Meaning |
|---|---|
| *arg1* | Current power of the BBU. |
| *arg2* | Location of the BBU, for example, **rear**. |
| *arg3* | BBU No., for example, **BBU0** or **BBU1**. |

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| Name | Meaning |
| --- | --- |
| *arg4* | BBU power threshold. |

## Impact on the System

The power supply to the server is affected.

## Possible Causes

- The BBU is faulty.
- The BBU cable is faulty or is not firmly connected.
- The BBU cable port on the mainboard is faulty.

## Procedure

**Step 1** Reconnect the BBU cable. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Replace the BBU cable. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Replace the BBU. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Replace the mainboard. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Contact technical support engineer.

**----End**

# 2.10.283 ALM-0x52000007 BBU Battery Overtemperature (BBU, Minor Alarm)

## Description

Alarm message:

The BBU module (*arg1*) battery temperature (*arg2* degrees C) exceeds the overtemperature threshold (*arg3* degrees C).

This alarm is generated when the iBMC detects that the BBU battery temperature exceeds the alarm threshold.

Alarm object: BBU

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## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x52000007 | Minor | Yes |

## Parameters

| Name | Meaning |
|---|---|
| *arg1* | BBU No., for example, **BBU0** or **BBU1**. |
| *arg2* | Current temperature of the BBU. |
| *arg3* | BBU temperature threshold. |

## Impact on the System

The power supply to the server is affected.

## Possible Causes

- There is a fan alarm generated for the server.
- The equipment room temperature exceeds the normal range.
- The air inlet or outlet is blocked.
- The air duct is not installed.
- The BBU is faulty.

## Procedure

**Step 1** Check whether there is fan alarm generated.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Replace the fan module. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Check whether the equipment room temperature exceeds the normal range.

- If yes, go to **Step 4**.
- If no, go to **Step 5**.

**Step 4** Reduce the equipment room temperature to the normal range. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Check whether the server air inlet and outlet are blocked.

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- If yes, go to **Step 6**.
- If no, go to **Step 7**.

**Step 6** Clear the blockage. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 7**.

**Step 7** Power off the server, and check whether the air duct is properly installed in the server.

- If yes, go to **Step 9**.
- If no, go to **Step 8**.

**Step 8** Install the air duct properly, and power on the server. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 9**.

**Step 9** Replace the BBU. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 10**.

**Step 10** Contact technical support engineer.

**----End**

# 2.10.284 ALM-0x5200003B BBU Capacity Low (BBU, Major Alarm)

## Description

Alarm message:

The BBU module (*arg1*) does not meet the requirements of backup power. The transient capability is *arg2*, and the stable capability is *arg3*.

This alarm is generated when the BBU Capacity Low.

Alarm object: BBU

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x5200003B | Major | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | BBU module number. |

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| Name | Meaning |
| --- | --- |
| *arg2* | BBU transient capability. |
| *arg3* | BBU stable capability. |

## Impact on the System

The power supply to the server is affected.

## Possible Causes

- The BBU module is under self-checking and to be powered on.
- The BBU cable is faulty or is not firmly connected.
- The BBU is faulty.

## Procedure

**Step 1** Check whether the BBU power is insufficient.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** After the BBU is charged to full, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Reconnect the BBU cable. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Replace the BBU cable. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Replace the BBU. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 6**.

**Step 6** Contact technical support engineer.

**----End**

# 2.10.285 ALM-0x53000001 OCP Hardware Component MCE/AER Error (OCP Card, Critical Alarm)

## Description

Alarm message:

The [*arg1*] *arg2 arg3* triggered an uncorrectable error, *arg4* (SN:*arg5*, BN:*arg6*).

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NOTE

From iBMC V3.07.00.57, the OCP card alarms will also include the SN and BOM code.

This alarm is generated when the OCP card may run unstably or the system may stop responding.

Alarm object: OCP Card

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x53000001 | Critical | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Location of the alarmed OCP card, for example, **OCP Card 1(MCX565M-CDAB)**. |
| *arg2* | OCP card location, for example, **OCP Card 2(MCX565M-CDAB)**. |
| *arg3* | NIC Card. |
| *arg4* | error code. |
| *arg5* | Serial number of the OCP card. |
| *arg6* | BOM code of the OCP card. |

## Impact on the System

The OCP card may run unstably, and the system may stop responding.

## Possible Causes

- The OCP card is faulty.
- The mainboard is faulty.

## Procedure

**Step 1** Power off the component, check whether the component is damaged or in poor contact with its slot. Remove and then reinstall the component. Then, power on the component and check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Replace the component and check whether the alarm is cleared.

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- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Contact technical support engineer.

**----End**

# 2.10.286 ALM-0x53000007 OCP Card Hardware Component Fault Minor Alarm (OCP Card, Minor Alarm)

## Description

Alarm message:

The *arg4* of the [*arg1*] OCP card *arg2* (*arg3*) is faulty (SN:*arg5*, BN:*arg6*).

**NOTE**

From iBMC V3.07.00.57, the OCP card alarms will also include the SN and BOM code.

This alarm is generated when the hardware component of the OCP card is faulty.

Alarm object: OCP Card

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x53000007 | Minor | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | OCP card location. |
| *arg2* | OCP card slot number. |
| *arg3* | OCP card name. |
| *arg4* | Hardware component name. |
| *arg5* | Serial number of the OCP card. |
| *arg6* | BOM code of the OCP card. |

## Impact on the System

Service performance of the OCP card is affected.

## Possible Causes

The hardware component on the OCP card has failed.

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### Procedure

**Step 1** Shut down the OS and then restart it. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Replace the OCP card. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Contact technical support engineer.

**----End**

## 2.10.287 ALM-0x5300000D OCP Hardware Component BandWidth Decreased (OCP Card, Minor Alarm)

### Description

Alarm message:

The [*arg1*] OCP card *arg2* [*arg3*] bandwidth decreased (SN:*arg4*, BN:*arg5*).

NOTE

From iBMC V3.07.00.57, the OCP card alarms will also include the SN and BOM code.

This alarm is generated when the OCP card may be damaged or in poor contact with the slot.

Alarm object: OCP Card

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x5300000D | Minor | Yes |

### Parameters

| Name | Meaning |
| --- | --- |
| *arg2* | Location of the alarmed OCP card, for example, **OCP Card 2(MCX565M-CDAB)**. |
| *arg4* | Serial number of the OCP card. |
| *arg5* | BOM code of the OCP card. |

### Impact on the System

The system is still running properly, but the reliability is reduced.

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## Possible Causes

The OCP card may be damaged or in poor contact with the slot.

## Procedure

**Step 1** Perform maintenance according to the maintenance plan as soon as possible. Power off the server, and check whether the component and its slot are damaged or of poor contact.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Power off the device, remove and reinstall the device, and power on and observing.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Replace the component and check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Contact technical support engineer.

**----End**

# 2.10.288 ALM-0x53000015 OCP Hardware Component Speed Decreased (OCP Card, Minor Alarm)

## Description

Alarm message:

The *arg1* OCP card *arg2 arg3* speed decreased (SN:*arg4*, BN:*arg5*).

**NOTE**

From iBMC V3.07.00.57, the OCP card alarms will also include the SN and BOM code.

This alarm is generated when there may be damage or poor contact between the OCP card and its slot.

Alarm object: OCP Card

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x53000015 | Minor | Yes |

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## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Location of the OCP card. |
| *arg2* | Slot number of the OCP card, for example, **1** or **2**. |
| *arg3* | OCP card name. |
| *arg4* | Serial number of the OCP card. |
| *arg5* | BOM code of the OCP card. |

## Impact on the System

The system can work properly, but the performance is degraded.

## Possible Causes

There may be damage or poor contact between the OCP card and its slot.

## Procedure

**Step 1** Restart the server, and check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Hot swap the device, then check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Remove the device, and check whether the OCP card or its slot is damaged, or whether the OCP card has poor contact with its slot.

- If yes, go to **Step 4**.
- If no, go to **Step 5**.

**Step 4** Reseat the OCP card. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Replace the OCP card. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 6**.

**Step 6** Replace the board holding the OCP card. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 7**.

**Step 7** Contact technical support engineer.

**----End**

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# 2.10.289 ALM-0x5300001F An Unrecoverable Error Occurs on the Bus (OCP Card, Major Alarm)

## Description

Alarm message:

The PCIe bus link generates an unrecoverable error (*arg1*) (SN:*arg2*, BN:*arg3*).

NOTE

From iBMC V3.07.00.57, the OCP card alarms will also include the SN and BOM code.

This alarm is generated when the PCIe bus link generates an unrecoverable error.

Alarm object: OCP Card

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x5300001F | Major | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Indicates the name, location, and SN of the device related to the alarm.<br>Format: Device:*DeviceName*,location:*CPUn_DeviceTypeDevice-SLot*,SN:*SerialNumber*<br>*DeviceName*: device name<br>*CPUn*: CPU slot number<br>*DeviceType*: device type (PCIe card, OCP card, or HDD)<br>*DeviceSLot*: device slot number or device ID<br>*SerialNumber*: device serial number |
| *arg2* | Serial number of the OCP card. |
| *arg3* | BOM code of the OCP card. |

## Impact on the System

The PCIe bus may run unstably and the system stops responding.

## Possible Causes

- The PCIe device may be damaged or in poor contact with the slot.

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- The PCIe card is faulty.
- The mainboard is faulty.

## Procedure

**Step 1** Power off the server and check whether there is damage or poor contact between the component and its slot.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Remove and reinstall the component, and check whether the fault is rectified.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Replace the component, and check whether the fault is rectified.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Replace the mainboard, and check whether the fault is rectified.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Contact technical support.

**----End**

# 2.10.290 ALM-0x53000021 A Fatal Error Occurs on the Bus (OCP Card, Major Alarm)

## Description

Alarm message:

The PCIe bus link generates a fatal error (*arg1*) (SN:*arg2*, BN:*arg3*).

NOTE

From iBMC V3.07.00.57, the OCP card alarms will also include the SN and BOM code.

This alarm is generated when the PCIe bus link generates a fatal error.

Alarm object: OCP Card

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x53000021 | Major | Yes |

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## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Indicates the name, location, and SN of the device related to the alarm.<br>Format: Device:*DeviceName*,location:*CPUn_DeviceTypeDevice-SLot*,SN:*SerialNumber*<br>*DeviceName*: device name<br>*CPUn*: CPU slot number<br>*DeviceType*: device type (PCIe card, OCP card, or HDD)<br>*DeviceSLot*: device slot number or device ID<br>*SerialNumber*: device serial number |
| *arg2* | Serial number of the OCP card. |
| *arg3* | BOM code of the OCP card. |

## Impact on the System

The PCIe bus may run unstably and the system stops responding.

## Possible Causes

- The PCIe device may be damaged or in poor contact with the slot.
- The PCIe card is faulty.
- The mainboard is faulty.

## Procedure

**Step 1** Power off the server and check whether there is damage or poor contact between the component and its slot.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Remove and reinstall the component, and check whether the fault is rectified.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Replace the component, and check whether the fault is rectified.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Replace the mainboard, and check whether the fault is rectified.

- If yes, no further action is required.
- If no, go to **Step 5**.

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**Step 5** Contact technical support.

**----End**

# 2.10.291 ALM-0x53000023 The Bus is Degraded (OCP Card, Major Alarm)

## Description

Alarm message:

The PCIe bus is degraded *(arg1)* (SN:*arg2*, BN:*arg3*).

NOTE

From iBMC V3.07.00.57, the OCP card alarms will also include the SN and BOM code.

This alarm is generated when the PCIe bus is degraded.

Alarm object: OCP Card

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x53000023 | Major | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Indicates the name, location, and SN of the device related to the alarm.<br>Format: Device:*DeviceName*,location:*CPUn_DeviceTypeDevice-SLot*,SN:*SerialNumber*<br>*DeviceName*: device name<br>*CPUn*: CPU slot number<br>*DeviceType*: device type (PCIe card, OCP card, or HDD)<br>*DeviceSLot*: device slot number or device ID<br>*SerialNumber*: device serial number |
| *arg2* | Serial number of the OCP card. |
| *arg3* | BOM code of the OCP card. |

## Impact on the System

The system can work properly, but the performance is degraded.

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### Possible Causes

There may be damage or poor contact between the PCIe device and its slot.

### Procedure

**Step 1** Power off the server and check whether there is damage or poor contact between the component and its slot.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Remove and reinstall the component, and check whether the fault is rectified.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Replace the component, and check whether the fault is rectified.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Contact technical support.

**----End**

## 2.10.292 ALM-0x53000025 A Last Boot Error Occurred on the PCIe Bus Link (OCP Card, Major Alarm)

### Description

Alarm message:

The PCIe bus link generates a last boot error (*arg1*) (SN:*arg2*, BN:*arg3*).

NOTE

From iBMC V3.07.00.57, the OCP card alarms will also include the SN and BOM code.

This alarm is generated when the PCIe bus link generates a last boot error.

Alarm object: OCP Card

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x53000025 | Major | Yes |

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## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Indicates the name, location, and SN of the device related to the alarm.<br>Format: Device:*DeviceName*,location:*CPUn_DeviceTypeDevice-SLot*,SN:*SerialNumber*<br>*DeviceName*: device name<br>*CPUn*: CPU slot number<br>*DeviceType*: device type (PCIe card, OCP card, or HDD)<br>*DeviceSLot*: device slot number or device ID<br>*SerialNumber*: device serial number |
| *arg2* | Serial number of the OCP card. |
| *arg3* | BOM code of the OCP card. |

## Impact on the System

The PCIe bus may run unstably and the system stops responding.

## Possible Causes

- The PCIe device may be damaged or in poor contact with the slot.
- The PCIe card is faulty.
- The mainboard is faulty.

## Procedure

**Step 1** Power off the server and check whether there is damage or poor contact between the component and its slot.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Remove and reinstall the component, and check whether the fault is rectified.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Replace the component, and check whether the fault is rectified.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Replace the mainboard, and check whether the fault is rectified.

- If yes, no further action is required.
- If no, go to **Step 5**.

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**Step 5** Contact technical support.

**----End**

# 2.10.293 ALM-0x53000027 OCP card enumeration failed (OCP Card, Major Alarm)

## Description

Alarm message:

Enumeration of the OCP card *arg1* Failed.

NOTE

From iBMC V3.07.00.57, the OCP card alarms will also include the SN and BOM code.

This alarm is generated when the detection of an OCP card enumeration failure occurs.

Alarm object: OCP Card

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x53000027 | Major | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Slot Num, example:<br>● 1<br>● 2 |

## Impact on the System

The OCP card cannot be identified by the BIOS and iBMC.

## Possible Causes

- The OCP card may be damaged or in poor contact with the slot.
- The OCP card is faulty.
- The mainboard is faulty.

## Procedure

**Step 1** Power off the server and check whether there is damage or poor contact between the component and its slot.

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- If yes, go to **2**.
- If no, go to **3**.

**Step 2** Remove and reinstall the component, and check whether the fault is rectified.

- If yes, no further action is required.
- If no, go to **3**.

**Step 3** Replace the component, and check whether the fault is rectified.

- If yes, no further action is required.
- If no, go to **4**.

**Step 4** Contact technical support.

**----End**

# 2.10.294 ALM-0x53000029 OCP Card Attestation failed (OCP Card, Major Alarm)

## Description

Alarm message:

Enumeration of the OCP card *arg1* Failed.
The *arg1* component integrity verification failed.

NOTE

From iBMC V3.07.00.57, the OCP card alarms will also include the SN and BOM code.

This alarm is generated when the OCP component authentication metrics fail.

Alarm object: OCP Card

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x53000029 | Major | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | DeviceName |

## Impact on the System

The system may operate abnormally or the system intrusion may occur.

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## Possible Causes

- The imported metrics do not match the firmware itself.
- The firmware is corrupted.

## Procedure

**Step 1** Verify whether the imported metrics are correct, import the correct metrics, re-trigger the measurement, and check if the alarm is cleared.

- If yes, no further action is required.
- If no, go to **2**.

**Step 2** Update the component firmware, re-trigger the measurement, and check if the alarm is cleared.

- If yes, no further action is required.
- If no, go to **3**.

**Step 3** Contact technical support engineer.

**----End**

# 2.10.295 ALM-0x5B000001 GPU MCE/AER Error (GPU, Critical Alarm)

## Description

Alarm message:

```
The arg1 arg2 arg3 triggered an uncorrectable error.
```

This alarm is generated when GPU MCE/AER error.

Alarm object: GPU

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x5B000001 | Critical | Yes |

## Parameters

| Name | Meaning |
|---|---|
| *arg1* | Location of the GPU. |
| *arg2* | Silkscreen of the GPU. |
| *arg3* | Models of the GPU. |

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### Impact on the System

The GPU may run unstably, and the system may stop responding.

### Possible Causes

- The GPU is faulty.
- The mainboard is faulty.

### Procedure

**Step 1** Power off the server and check whether there is damage.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Replace the component and check for alarms.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Contact technical support engineer.

**----End**

## 2.10.296 ALM-0x5B000009 Uncorrectable Errors Occur in GPU Memory (GPU, Major Alarm)

### Description

Alarm message:

*arg1 arg2 arg3* has triggered an uncorrectable error.

This alarm is generated when an uncorrectable errors occur in GPU memory.

Alarm object: GPU

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x5B000009 | Major | Yes |

### Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Type of the component. For example, **PCIe card** or **AI module**. |
| *arg2* | Silkscreen name. For example, **GPU1**. |
| *arg3* | Type of the memory. For example, **SRAM** or **DRAM**. |

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### Impact on the System

The GPU may run abnormally.

### Possible Causes

- The GPU is faulty.
- The GPU slot is faulty.

### Procedure

**Step 1** Power off and then power on the OS. Then check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Replace the GPU. Then check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Contact technical support engineer.

**----End**

## 2.10.297 ALM-0x5B00000F GPU Memory row-remapping Failure (GPU, Major Alarm)

### Description

Alarm message:

*arg1 arg2* DRAM row-remapping failure.

This alarm is generated when an row-remapping failure occur in GPU memory.

NOTE

This alarm is supported on H series AI modules and the firmware package version is 1.4.0 or later.

Alarm object: GPU

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x5B00000F | Major | Yes |

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### Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Type of the component. For example, **AI module**. |
| *arg2* | Silkscreen name. For example, **GPU1**. |

### Impact on the System

The GPU may be unavailable.

### Possible Causes

- The GPU memory is faulty.
- The GPU module is faulty.

### Procedure

**Step 1** Power off and then power on the OS. Then check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Replace the GPU module. Then check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Contact technical support engineer.

**----End**

## 2.10.298 ALM-0x5C000001 NVSwitch MCE/AER Error (NVSwitch, Critical Alarm)

### Description

Alarm message:

The *arg1 arg2 arg3* triggered an uncorrectable error.

This alarm is generated when NVSwitch MCE/AER error.

Alarm object: NVSwitch

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x5C000001 | Critical | Yes |

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### Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Location of the NVSwitch. |
| *arg2* | Silkscreen of the NVSwitch. |
| *arg3* | Models of the NVSwitch. |

### Impact on the System

The NVSwitch may run unstably, and the system may stop responding.

### Possible Causes

- The NVSiwtch is faulty.
- The mainboard is faulty.

### Procedure

**Step 1** Power off the server and check whether there is damage.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Replace the component and check for alarms.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Contact technical support engineer.

**----End**

## 2.10.299 ALM-0x5D000001 The AI Module Health Problem Triggers a Critical Alarm (AI Module, Critical Alarm)

### Description

Alarm message:

*arg1 arg2* has a critical problem (SN:*arg3*, BN:*arg4*).

NOTE

From iBMC V3.07.00.57, the AI module alarms will also include the SN and BOM code.

This alarm is generated when the AI module is abnormal.

Alarm object: AI Module

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## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x5D000001 | Critical | Yes |

## Parameters

| Name | Meaning |
|---|---|
| *arg1* | Component silkscreen, for example, **AI Module**. |
| *arg2* | Name of the module, for example, **(Atlas 200T Box A2, NVIDIA HGX A800 8 GPU 80GB)**. |
| *arg3* | Serial number of the AI module. |
| *arg4* | BOM code of the AI module. |

## Impact on the System

The AI module may run abnormally.

## Possible Causes

The AI module is abnormal.

## Procedure

**Step 1** Check whether the software package is correctly installed.

- If yes, go to **Step 3**.
- If no, go to **Step 2**.

**Step 2** After the software package is correctly installed, and check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Collect logs, restart the system, and check whether the alarm is cleared.

- If yes, go to **Step 4**.
- If no, go to **Step 4**.

**Step 4** Contact technical support.

**----End**

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# 2.10.300 ALM-0x5D000003 The AI Module Health Problem triggers a Major Alarm (AI Module, Major Alarm)

## Description

Alarm message:

*arg1 arg2* has a major problem (SN:*arg3*, BN:*arg4*).

NOTE

From iBMC V3.07.00.57, the AI module alarms will also include the SN and BOM code.

This alarm is generated when the AI module is abnormal.

Alarm object: AI Module

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x5D000003 | Major | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Component silkscreen, for example, **AI Module**. |
| *arg2* | Name of the module, for example, **(Atlas 200T Box A2, NVIDIA HGX A800 8 GPU 80GB)**. |
| *arg3* | Serial number of the AI module. |
| *arg4* | BOM code of the AI module. |

## Impact on the System

The AI module may run abnormally.

## Possible Causes

The AI module is abnormal.

## Procedure

**Step 1** Check whether the software package is correctly installed.

- If yes, go to **Step 3**.
- If no, go to **Step 2**.

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**Step 2** After the software package is correctly installed, and check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Collect logs, restart the system, and check whether the alarm is cleared.

- If yes, go to **Step 4**.
- If no, go to **Step 4**.

**Step 4** Contact technical support.

**----End**

# 2.10.301 ALM-0x5D000009 The AI Module Sideband Signal Problem Triggers a Critical Alarm (AI Module, Critical Alarm)

## Description

Alarm message:

*arg1* sideband signal *arg2* critical alarm (SN:*arg3*, BN:*arg4*).

NOTE

From iBMC V3.07.00.57, the AI module alarms will also include the SN and BOM code.

This alarm is generated when failed to obtain sideband signal.

Alarm object: AI Module

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x5D000009 | Critical | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Name of the alarmed AI module, for example, **AI module**. |
| *arg2* | Sideband signal name, for example, **I2C1_ALERT_N**. |
| *arg3* | Serial number of the AI module. |
| *arg4* | BOM code of the AI module. |

## Impact on the System

The AI module may run unstably, and the system may stop responding.

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### Possible Causes

- The GPU is faulty.
- NVSwitch or other LOM devices are faulty.

### Procedure

**Step 1** Perform maintenance as planned as soon as possible. Power off the server and check whether the component is faulty.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Replace the faulty component. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Contact technical support engineer.

**----End**

## 2.10.302 ALM-0x5D00000B The AI Module Sideband Signal Problem Triggers a Critical Alarm (AI Module, Minor Alarm)

### Description

Alarm message:

*arg1* sideband signal *arg2* critical alarm, Error code: 0x*arg3*-0x*arg4*-0x*arg5*-0x*arg6*-0x*arg7* (SN:*arg8*, BN:*arg9*).

NOTE

From iBMC V3.07.00.57, the AI module alarms will also include the SN and BOM code.

This alarm is generated when failed to obtain sideband signal.

Alarm object: AI Module

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x5D00000B | Minor | Yes |

### Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Name of the alarmed AI module, for example, **AI module**. |
| *arg2* | Sideband signal name, for example, **I2C1_ALERT_N**. |
| *arg3* | Opcode. |

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| Name | Meaning |
| --- | --- |
| *arg4* | Arg1. |
| *arg5* | Arg2. |
| *arg6* | Data-in. |
| *arg7* | Data-out. |
| *arg8* | Serial number of the AI module. |
| *arg9* | BOM code of the AI module. |

## Impact on the System

The AI module may run unstably, and the system may stop responding.

## Possible Causes

- The GPU is faulty.
- NVSwitch or other LOM devices are faulty.

## Procedure

**Step 1** Perform maintenance as planned as soon as possible. Power off the server and check whether the component is faulty.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Replace the faulty component. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Contact technical support engineer.

**----End**

# 2.10.303 ALM-0x5D00000F The AI Module Mainboard Clock Lost (AI Module, Major Alarm)

## Description

Alarm message:

On the AI module, mainboard *arg1* clock *arg2* signals lost (SN:*arg3*, BN:*arg4*).

NOTE

From iBMC V3.07.00.57, the AI module alarms will also include the SN and BOM code.

This alarm is generated when the mainboard clock of the AI module signals lost.

Alarm object: AI Module

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## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x5D00000F | Major | Yes |

## Parameters

| Name | Meaning |
|---|---|
| *arg1* | Type of the mainboard clock of the AI module. For example, **100MHz** or **156.25MHz**. |
| *arg2* | No. of the the mainboard clock of the AI module. For example, **1** or **2**. |
| *arg3* | Serial number of the AI module. |
| *arg4* | BOM code of the AI module. |

## Impact on the System

The system may fail to start or run abnormally.

## Possible Causes

Mainboard of the AI module is faulty.

## Procedure

**Step 1** Power off and then power on the OS. After the server is powered on, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Check whether the AI module is properly installed.

- If yes, go to **Step 4**.
- If no, go to **Step 3**.

**Step 3** Remove and reinstall the AI module. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Replace the mainboard of the AI module. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Contact technical support engineer.

**----End**

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# 2.10.304 ALM-0x5D000011 The AI Module Mainboard CPLD Self-Test Failed (AI Module, Major Alarm)

## Description

Alarm message:

On the AI module, mainboard CPLD *arg1* self-check result is abnormal (SN:*arg2*, BN:*arg3*).

NOTE

From iBMC V3.07.00.57, the AI module alarms will also include the SN and BOM code.

This alarm is generated when an error is detected during the AI module mainboard CPLD self-test.

Alarm object: AI Module

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x5D000011 | Major | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | No. of the CPLD of the AI module. For example, **1** or **2**. |
| arg*2* | Serial number of the AI module. |
| *arg3* | BOM code of the AI module. |

## Impact on the System

The server cannot start.

## Possible Causes

Mainboard of the AI module is faulty.

## Procedure

**Step 1** Restart the iBMC. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Power off and then power on the OS. After the server is powered on, check whether the alarm is cleared.

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- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Upgrade the CPLD firmware of the AI module, and check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Replace the mainboard of the AI Module. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Contact technical support engineer.

**----End**

# 2.10.305 ALM-0x5D000013 The AI Module NPU Chip Health Critical Alarm (AI Module, Critical Alarm)

## Description

Alarm message:

On the AI module, NPU Board*arg1* NPU*arg2* has a critical problem.*arg3* (SN:*arg4*, BN:*arg5*).

NOTE

From iBMC V3.07.00.57, the AI module alarms will also include the SN and BOM code.

This alarm is generated when the NPU chip of the AI module has a critical problem.

Alarm object: AI Module

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x5D000013 | Critical | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | No. of NPU board of the AI module. For example, **1**. |
| *arg2* | No. of the NPU on the NPU board. For example, **1**. |
| *arg3* | Error code of the alarm. For example, **0x0002**. |
| *arg4* | Serial number of the AI module. |
| *arg5* | BOM code of the AI module. |

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## Impact on the System

Abnormal DDR access of the AI Module, or NPU of the AI Module reset upon undertemperature or overtemperature may occur.

## Possible Causes

- The AI module chip has poor heat dissipation, the ambient temperature exceeds the normal range, or the air inlet is blocked.
- A software error such as incorrect address or memory leakage occurs.

## Procedure

**Step 1** Check whether both air inlet and outlet high temperature alarms are generated.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Rectify the fault according to troubleshooting suggestions. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Check whether there are fan module alarms.

- If yes, go to **Step 4**.
- If no, go to **Step 5**.

**Step 4** Replace the fan module. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Check whether the equipment room temperature exceeds the normal range.

- If yes, go to **Step 6**.
- If no, go to **Step 7**.

**Step 6** Reduce the equipment room temperature to the normal range. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 7**.

**Step 7** Check whether the air inlet or outlet of the server is blocked.

- If yes, go to **Step 8**.
- If no, go to **Step 9**.

**Step 8** Clear the blockage. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 9**.

**Step 9** Restart the OS and check the black box log information.

**Step 10** Contact technical support engineer.

**----End**

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# 2.10.306 ALM-0x5D000015 The AI Module NPU Chip Health Major Alarm (AI Module, Major Alarm)

## Description

Alarm message:

On the AI module, NPU Board*arg1* NPU*arg2* has a major problem.*arg3* (SN:*arg4*, BN:*arg5*).

NOTE

From iBMC V3.07.00.57, the AI module alarms will also include the SN and BOM code.

This alarm is generated when the NPU chip of the AI module has a major problem.

Alarm object: AI Module

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x5D000015 | Major | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | No. of NPU board of the AI module. For example, **1**. |
| *arg2* | No. of the NPU on the NPU board. For example, **1**. |
| *arg3* | Error code of the alarm. For example, **0x0002**. |
| *arg4* | Serial number of the AI module. |
| *arg5* | BOM code of the AI module. |

## Impact on the System

An OS exception of the AI module may occur, resulting in a system overtemperature reset.

## Possible Causes

- The initialization of AICORE, HBM and other devices of the AI module has failed.
- The NPU heartbeat signal of the AI module is not obtained.

## Procedure

**Step 1** Restart the NPU of the AI module, and check whether the alarm is cleared.

- If yes, no further action is required.

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- If no, go to **Step 2**.

**Step 2** Contact technical support engineer.

**----End**

# 2.10.307 ALM-0x5D000017 The AI Module NPU Chip Health Degraded (AI Module, Minor Alarm)

## Description

Alarm message:

On the AI module, NPU Board*arg1* NPU*arg2* health state is degraded.*arg3* (SN:*arg4*, BN:*arg5*).

NOTE

From iBMC V3.07.00.57, the AI module alarms will also include the SN and BOM code.

This alarm is generated when the NPU health state of the AI module is degraded.

Alarm object: AI Module

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x5D000017 | Minor | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | No. of NPU board of the AI module. For example, **1**. |
| *arg2* | No. of the NPU on the NPU board. For example, **1**. |
| *arg3* | Error code of the alarm. For example, **0x0002**. |
| *arg4* | Serial number of the AI module. |
| *arg5* | BOM code of the AI module. |

## Impact on the System

Services may fail to start or run abnormally.

## Possible Causes

- Compute deadlock of the AI module occurs.
- The memory of the AI module is used up.

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### Procedure

No action is required. The system automatically recovers when the chip load of the AI module decreases.

## 2.10.308 ALM-0x5D000021 The AI Module xPU Carrier Board Clock Lost (AI Module, Major Alarm)

### Description

Alarm message:

On the AI module, xPU carrier board*arg1 arg2 arg3* clock signals lost (SN:*arg4*, BN:*arg5*).

NOTE

From iBMC V3.07.00.57, the AI module alarms will also include the SN and BOM code.

This alarm is generated when the xPU carrier board clock signals lost.

Alarm object: AI Module

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x5D000021 | Major | Yes |

### Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Name of the card of the AI module. For example, **Riser Board**. |
| *arg2* | Slot No. of the card of the AI module. For example, **1**. |
| *arg3* | Type of the clock of the AI module. For example, **DB1901_1 100MHz**. |
| *arg4* | Serial number of the AI module. |
| *arg5* | BOM code of the AI module. |

### Impact on the System

The system is abnormal.

### Possible Causes

The xPU carrier of the AI module is faulty.

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### Procedure

**Step 1** Power off and then power on the OS. After the server is powered on, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Check whether the AI module is properly installed.

- If yes, go to **Step 4**.
- If no, go to **Step 3**.

**Step 3** Remove and reinstall the AI module. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Replace the mainboard of the AI module. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Contact technical support engineer.

**----End**

## 2.10.309 ALM-0x5D000027 The AI Module Liquid Cooling Device Leakage Critical Alarm (AI Module, Critical Alarm)

### Description

Alarm message:

On the AI module, Leakage occurred on the *arg1* liquid cooling device, and the module is powered off (SN:*arg2*, BN:*arg3*).

NOTE

From iBMC V3.07.00.57, the AI module alarms will also include the SN and BOM code.

This alarm is generated when the leakage occurred on the liquid cooling device.

Alarm object: AI Module

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x5D000027 | Critical | Yes |

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### Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Location of the leakage detection point of the AI module. For example, **mainboard** or **NPU Board1**. |
| *arg2* | Serial number of the AI module. |
| *arg3* | BOM code of the AI module. |

### Impact on the System

The server of the AI module may break down.

### Possible Causes

- The liquid cooling device is damaged.
- The leakage detection card is faulty.

### Procedure

**Step 1** Power off the server.

**Step 2** Check whether the liquid cooling device is damaged.

- If yes, go to **Step 3**.
- If no, go to **Step 4**.

**Step 3** Replace the liquid cooling device. After the server is powered on, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Replace the leakage detection card. After the server is powered on, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Contact technical support engineer.

**----End**

## 2.10.310 ALM-0x5D000029 The AI Module Water Detection Cable is not Detected. (AI Module, Major Alarm)

### Description

Alarm message:

On the AI module, water detection cable *arg1* is not detected (SN:*arg2*, BN:*arg3*).

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NOTE

From iBMC V3.07.00.57, the AI module alarms will also include the SN and BOM code.

This alarm is generated when the water detection cable of the AI module is not detected

Alarm object: AI Module

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x5D000029 | Major | Yes |

## Parameters

| Name | Meaning |
|---|---|
| *arg1* | No. of the water detection cable of the AI module. For example, **1**. |
| *arg2* | Serial number of the AI module. |
| *arg3* | BOM code of the AI module. |

## Impact on the System

The liquid cooling device cannot report alarms when leakage occurs.

## Possible Causes

- The water detection cable is not connected.
- The leakage detection card or water detection cable is faulty.

## Procedure

**Step 1** Check whether the water detection cable of the AI module is not connected or properly connected.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Connect the water detection cable of the AI module firmly. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Replace the water detection cable of the AI module. Then, check whether the alarm is cleared.

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- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Contact technical support engineer.

**----End**

# 2.10.311 ALM-0x5D00002B The AI Module NPU MCE/AER Error (AI Module, Critical Alarm)

## Description

Alarm message:

On the AI module, NPU *arg1* on NPU Board *arg2* has triggered an uncorrectable error (SN:*arg3*, BN:*arg4*).

NOTE

From iBMC V3.07.00.57, the AI module alarms will also include the SN and BOM code.

This alarm is generated when the NPU of the AI module has triggered an uncorrectable error.

Alarm object: AI Module

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x5D00002B | Critical | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | No. of the NPU on the NPU board. For example, **1**. |
| *arg2* | No. of the NPU board of the AI module. For example, **1**. |
| *arg3* | Serial number of the AI module. |
| *arg4* | BOM code of the AI module. |

## Impact on the System

The system may stop responding.

## Possible Causes

- The NPU of the AI module is faulty.
- The NPU of the AI module board is faulty.

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### Procedure

**Step 1** Power off the server and replace the AI module. Then check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Contact technical support engineer.

**----End**

## 2.10.312 ALM-0x5D00003B The PCIe Device of the AI Module is Missing in the OS (AI module, Critical Alarm)

### Description

Alarm message:

The *arg1 arg2* device of the AI module is missing in the OS (SN:*arg3*, BN:*arg4*).

NOTE

From iBMC V3.07.00.57, the AI module alarms will also include the SN and BOM code.

This alarm is generated when the PCIe device of the AI module is missing in the OS.

Alarm object: AI module

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x5D00003B | Critical | Yes |

### Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Slot No. of the alarmed device. For example, **PCIe card 1**. |
| *arg2* | Name of the alarmed device. For example, **GPU1**. |
| *arg3* | Serial number of the AI module. |
| *arg4* | BOM code of the AI module. |

### Impact on the System

All services carried on the PCIe device may be interrupted, affecting service functions.

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## Possible Causes

There is poor contact between the PCIe device and its slot or the PCIe device is faulty.

## Procedure

**Step 1** Power off the server and check whether there is damage or poor contact between the component and its slot.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Reseat the component. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Replace the faulty component. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Contact technical support engineer.

**----End**

# 2.10.313 ALM-0x5D00003D The PCIe Device of AI Module Bandwidth Decreased (AI Module, Minor Alarm)

## Description

Alarm message:

The *arg1 arg2 arg3* bandwidth decreased (SN:*arg4*, BN:*arg5*).

**NOTE**

From iBMC V3.07.00.57, the AI module alarms will also include the SN and BOM code.

This alarm is generated when the PCIe device of AI module bandwidth decreased.

Alarm object: AI module

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x5D00003D | Minor | Yes |

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## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Name of the alarmed AI module, example, **AI Module**. |
| *arg2* | Name of the alarmed device. For example, **GPU**. |
| *arg3* | Slot No. of the alarmed device. For example, **1**. |
| *arg4* | Serial number of the AI module. |
| *arg5* | BOM code of the AI module. |

## Impact on the System

The system can work properly, but the performance is degraded.

## Possible Causes

There may be damage or poor contact between the component and its slot.

## Procedure

**Step 1** Restart the server, and check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** After powering off the server, remove and insert the component. Ensure that the component is securely inserted and then power on the server. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** After powering off the server, check whether the component and its slot are damaged.

- If yes, go to **Step 4**.
- If no, go to **Step 5**.

**Step 4** Replace the faulty component. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Contact technical support engineer.

**----End**

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# 2.10.314 ALM-0x5D00003F The PCIe Device of AI Module Speed Decreased (AI Module, Minor Alarm)

## Description

Alarm message:

The *arg1 arg2 arg3* speed decreased (SN:*arg4*, BN:*arg5*).

NOTE

From iBMC V3.07.00.57, the AI module alarms will also include the SN and BOM code.

This alarm is generated when the PCIe device of AI module speed decreased.

Alarm object: AI module

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x5D00003F | Minor | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Name of the alarmed AI module, example, **AI Module**. |
| *arg2* | Name of the alarmed device. For example, **GPU**. |
| *arg3* | Slot No. of the alarmed device. For example, **1**. |
| *arg4* | Serial number of the AI module. |
| *arg5* | BOM code of the AI module. |

## Impact on the System

The system can work properly, but the performance is degraded.

## Possible Causes

There may be damage or poor contact between the component and its slot.

## Procedure

**Step 1** Restart the server, and check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

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**Step 2** After powering off the server, remove and insert the component. Ensure that the component is securely inserted and then power on the server. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** After powering off the server, check whether the component and its slot are damaged.

- If yes, go to **Step 4**.
- If no, go to **Step 5**.

**Step 4** Replace the faulty component. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Contact technical support engineer.

**----End**

# 2.10.315 ALM-0x5D000041 SLIM Cable Absent (AI Module, Major Alarm)

## Description

Alarm message:

[AI Module]The SLIM cable to *arg1* on *arg2* is not present (SN:*arg3*, BN:*arg4*).

NOTE

From iBMC V3.07.00.57, the AI module alarms will also include the SN and BOM code.

This alarm is generated when the SLIM cable is not present.

Alarm object: AI module

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x5D000041 | Major | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Device to which the SLIM cable is connected, for example, **RiserCard**. |
| *arg2* | Serial number of the port on the device connected by the SLIM cable. For example, **PORTA**. |

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| Name | Meaning |
| --- | --- |
| *arg3* | Serial number of the AI module. |
| *arg4* | BOM code of the AI module. |

## Impact on the System

The PCIe card cannot be identified by the system.

## Possible Causes

- The SLIM cable is not properly connected or is in poor contact.
- The SLIM cable is faulty.

## Procedure

**Step 1** Check whether the SLIM cable is not connected or properly connected.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Connect the SLIM cable firmly. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Replace the SLIM cable. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Contact technical support engineer.

**----End**

# 2.10.316 ALM-0x5D000043 Irregular Power at NIC Optical Module Major Alarm (AI Module, Major Alarm)

## Description

Alarm message:

[AI Module]Abnormal Rx or Tx powers of optical module were detected on [*arg1*] *arg2* on *arg3* (SN:*arg4*, BN:*arg5*).

**NOTE**

From iBMC V3.07.00.57, the AI module alarms will also include the SN and BOM code.

This alarm is generated when the abnormal Rx or Tx powers of optical module were detected.

Alarm object: AI module

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## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x5D000043 | Major | Yes |

## Parameters

| Name | Meaning |
|---|---|
| *arg1* | Type of the NIC, for example, **(NIC).** |
| *arg2* | Network port number, for example, **port 1**. |
| *arg3* | NIC name, for example, **NIC 1**. |
| *arg4* | Serial number of the AI module. |
| *arg5* | BOM code of the AI module. |

## Impact on the System

The NIC may run unstably, which affects the service network communication.

## Possible Causes

- If the optical module is not connected to the optical fiber, connect the optical fiber.
- Replace the optical module.

## Procedure

**Step 1** Check whether the optical module is connected to the optical fiber.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Connect the optical fiber to the optical module, and check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Replace the optical module. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Contact technical support engineer.

**----End**

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# 2.10.317 ALM-0x5D000047 NAND Flash Endurance Lower Than Threshold (AI Module, Major Alarm)

## Description

Alarm message:

[AI Module]The service life of the NAND flash is less than *arg1* (SN:*arg2*, BN:*arg3*).

NOTE

From iBMC V3.07.00.57, the AI module alarms will also include the SN and BOM code.

This alarm is generated when the service life of the NAND flash is less than the threshold.

Alarm object: AI module

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x5D000047 | Major | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | NAND flash service life threshold, for example, **95** or **90**. |
| *arg2* | Serial number of the AI module. |
| *arg3* | BOM code of the AI module. |

## Impact on the System

The iBMC stability is affected.

## Possible Causes

The NAND flash service life exceeds the threshold.

## Procedure

**Step 1** Replace the mainboard. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Contact technical support engineer.

**----End**

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# 2.10.318 ALM-0x5D000049 Data Written into NAND Flash Memory Exceeds Threshold (AI Module, Minor Alarm)

## Description

Alarm message:

[AI Module]The data written to the NAND flash in last 15 days exceeds *arg1*G (SN:*arg2*, BN:*arg3*).

NOTE

From iBMC V3.07.00.57, the AI module alarms will also include the SN and BOM code.

This alarm is generated when the data written to the NAND flash in last 15 days exceeds the threshold.

Alarm object: AI module

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x5D000049 | Minor | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Indicates the threshold, for example, **12**. |
| *arg2* | Serial number of the AI module. |
| *arg3* | BOM code of the AI module. |

## Impact on the System

The service life of the NAND flash memory is affected.

## Possible Causes

The amount of data written to the NAND flash in last 15 days exceeds the threshold.

## Procedure

**Step 1** Restart the iBMC. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Perform one-click collection of the iBMC log, and check the log information for error.

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**Step 3** Contact technical support engineer.

**----End**

# 2.10.319 ALM-0x5D00004D NPU ECC Count Exceeds Threshold (AI Module, Major Alarm)

## Description

Alarm message:

[AI Module]The historical ECC count of NPU Board*arg1* NPU*arg2* reaches the threshold (SN:*arg3*, BN:*arg4*).

NOTE

From iBMC V3.07.00.57, the AI module alarms will also include the SN and BOM code.

This alarm is generated when the historical ECC count of NPU reaches the threshold.

Alarm object: AI module

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x5D00004D | Major | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Slot No. of the alarmed NPU board. |
| *arg2* | Slot No. of the alarmed NPU. |
| *arg3* | Serial number of the AI module. |
| *arg4* | BOM code of the AI module. |

## Impact on the System

The NPU function may be affected.

## Possible Causes

- A fault is caused by software.
- The NPU is damaged.

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### Procedure

**Step 1** Run the **npu-smi clear -t ecc-info -i** *dev_id* **-c 0** command on the host OS to restart the OS. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Replace the NPU board. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Contact technical support engineer.

**----End**

## 2.10.320 ALM-0x5D000051 System Error (AI Module, Critical Alarm)

### Description

Alarm message:

[AI Module]Critical system error. Analyze the alarm based on other events (SN:*arg1*, BN:*arg2*).

NOTE

From iBMC V3.07.00.57, the AI module alarms will also include the SN and BOM code.

This alarm is generated when a critical error occurred on the AI module.

Alarm object: AI module

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x5D000051 | Critical | Yes |

### Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Serial number of the AI module. |
| *arg2* | BOM code of the AI module. |

### Impact on the System

The system is not running properly, and related services are interrupted.

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### Possible Causes

A hardware fault exists.

### Procedure

**Step 1** Check for and clear component alarms according to the event description. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Contact technical support engineer.

**----End**

## 2.10.321 ALM-0x5D000053 Failed to Obtain the Mainboard FRU Data (AI Module, Minor Alarm)

### Description

Alarm message:

[AI Module]Failed to obtain electronic label data of mainboard (SN:*arg1*, BN:*arg2*).

NOTE

From iBMC V3.07.00.57, the AI module alarms will also include the SN and BOM code.

This alarm is generated when the system failed to obtain electronic label data of mainboard.

Alarm object: AI module

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x5D000053 | Minor | Yes |

### Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Serial number of the AI module. |
| *arg2* | BOM code of the AI module. |

### Impact on the System

The system cannot properly read the mainboard asset information.

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### Possible Causes

The EEPROM is faulty, or the access channel is unavailable.

### Procedure

**Step 1** Restart the iBMC. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Replace the mainboard. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Contact technical support engineer.

**----End**

## 2.10.322 ALM-0x5D00005B Irregular I2C Device Access (AI Module, Major Alarm)

### Description

Alarm message:

[AI Module]Failed to access I2C *arg1* on *arg2* (SN:*arg3*, BN:*arg4*).

NOTE

From iBMC V3.07.00.57, the AI module alarms will also include the SN and BOM code.

This alarm is generated when the system failed to access I2C.

Alarm object: AI module

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x5D00005B | Major | Yes |

### Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Location of the I2C device, for example, **PCA9555** or **EEPROM**. |
| *arg2* | Board holding the I2C device, for example, **EIUA** or **OIUA**. |
| *arg3* | Serial number of the AI module. |
| *arg4* | BOM code of the AI module. |

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### Impact on the System

The iBMC cannot monitor component status.

### Possible Causes

The I2C link is faulty, or the I2C component is damaged.

### Procedure

**Step 1** Check whether the component holding the I2C device is connected with a power cable.

- If yes, go to **Step 2**.
- If no, go to **Step 4**.

**Step 2** Reconnect the power cable. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Replace the power cable. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Replace the component holding the I2C device. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Contact technical support engineer.

**----End**

## 2.10.323 ALM-0x5D000063 NIC Subboard MCE/AER Error (AI Module, Critical Alarm)

### Description

Alarm message:

[AI Module]The NIC *arg1* triggered an uncorrectable error, *arg2* (SN:*arg3*, BN:*arg4*).

NOTE

From iBMC V3.07.00.57, the AI module alarms will also include the SN and BOM code.

This alarm is generated when the NIC triggered an uncorrectable error.

Alarm object: AI module

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## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x5D000063 | Critical | Yes |

## Parameters

| Name | Meaning |
|---|---|
| *arg1* | No. of the NIC card. |
| *arg2* | Uncorrectable error code of the alarm. |
| *arg3* | Serial number of the AI module. |
| *arg4* | BOM code of the AI module. |

## Impact on the System

The system may stop responding.

## Possible Causes

- The PCIe link of the NIC is unavailable.
- The NIC chip is faulty.

## Procedure

**Step 1** Power off the server and check whether there is damage or poor contact between the component and its slot.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Remove and reinstall the NIC. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Replace the NIC. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Contact technical support engineer.

**----End**

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# 2.10.324 ALM-0x5D00006B Insecure Cryptographic Algorithm Alarm (AI Module, Minor Alarm)

## Description

Alarm message:

[AI Module]The *arg1* configuration in the system enables insecure cryptographic algorithm *arg2* (SN:*arg3*, BN:*arg4*).

NOTE

From iBMC V3.07.00.57, the AI module alarms will also include the SN and BOM code.

This alarm is generated when insecure algorithms are enabled in the system.

Alarm object: AI module

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x5D00006B | Minor | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | configuration items of insecure cryptographic algorithm.<br>Example: **SSHCiphers**,**User name** |
| *arg2* | list of insecure cryptographic algorithm separated by commas (,).<br>Example: **arcfour,arcfour128** |
| *arg3* | Serial number of the AI module. |
| *arg4* | BOM code of the AI module. |

## Impact on the System

Insecure algorithms bring security risks to the system.

## Possible Causes

Insecure algorithms are enabled in earlier versions.

## Procedure

**Step 1** Disable insecure cryptographic algorithm according to the documentation. Then, check whether the alarm is cleared.

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- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Contact technical support engineer.

**----End**

# 2.10.325 ALM-0x5D00006D Insecure Protocol Alarm (AI Module, Minor Alarm)

## Description

Alarm message:

[AI Module]Insecure protocol *arg1* is enabled in the system (SN:*arg2*, BN:*arg3*).

NOTE

From iBMC V3.07.00.57, the AI module alarms will also include the SN and BOM code.

This alarm is generated when insecure protocol are enabled in the system.

Alarm object: AI module

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x5D00006D | Minor | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Protocol description. For example: **TLS1.0**. |
| *arg2* | Serial number of the AI module. |
| *arg3* | BOM code of the AI module. |

## Impact on the System

Insecure protocols bring security risks to the system.

## Possible Causes

Insecure protocols are enabled in earlier versions or operations.

## Procedure

**Step 1** Disable insecure protocols according to the documentation. Then, check whether the alarm is cleared.

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- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Contact technical support engineer.

**----End**

# 2.10.326 ALM-0x5D00006F Certificate Expiration Check (AI Module, Minor Alarm)

## Description

Alarm message:

[AI Module]*arg1* certificate is about to expire or has expired (SN:*arg2*, BN:*arg3*).

NOTE

From iBMC V3.07.00.57, the AI module alarms will also include the SN and BOM code.

This alarm is generated when the certificate is about to expire or has expired.

Alarm object: AI module

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x5D00006F | Minor | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Type of the certificate. |
| *arg2* | Serial number of the AI module. |
| *arg3* | BOM code of the AI module. |

## Impact on the System

None.

## Possible Causes

The certificate has expired or is about to expire (iBMC current time + 30 days > Certificate expiry date).

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### Procedure

**Step 1** Apply for a new certificate.

**Step 2** Import the new certificate. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Contact technical support engineer.

**----End**

## 2.10.327 ALM-0x5D000071 High System Power Consumption (AI Module, Minor Alarm)

### Description

Alarm message:

[AI Module]The total power consumption (*arg1* W) of the system exceeds the alarm threshold (*arg2* W) (SN:*arg3*, BN:*arg4*).

NOTE

From iBMC V3.07.00.57, the AI module alarms will also include the SN and BOM code.

This alarm is generated when the total power consumption of the system exceeds the alarm threshold.

Alarm object: AI module

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x5D000071 | Minor | Yes |

### Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Current reading of the sensor. |
| *arg2* | Alarm threshold. |
| *arg3* | Serial number of the AI module. |
| *arg4* | BOM code of the AI module. |

### Impact on the System

The power consumption of the server is higher than expected.

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## Possible Causes

- The alarm threshold for high power consumption is set too low.
- The service on the OS is too busy.

## Procedure

**Step 1** Check whether the alarm threshold for high power consumption is set too low.

**Step 2** Stop unnecessary services on the OS to release CPU and memory resources.

**----End**

# 2.10.328 ALM-0x5D000073 CRL Overdue (AI Module, Minor Alarm)

## Description

Alarm message:

[AI Module]*arg1* is about to expire or has expired (SN:*arg2*, BN:*arg3*).

NOTE

From iBMC V3.07.00.57, the AI module alarms will also include the SN and BOM code.

This alarm is generated when the certificate revocation list (CRL) has expired or is about to expire.

Alarm object: AI module

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x5D000073 | Minor | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Type of the CRL. |
| *arg2* | Serial number of the AI module. |
| *arg3* | BOM code of the AI module. |

## Impact on the System

The certificate verification may fail.

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### Possible Causes

The CRL of iBMC is about to expire or has expired.

### Procedure

**Step 1** Apply for a new CRL.

**Step 2** Import the new CRL. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Contact technical support engineer.

**----End**

## 2.10.329 ALM-0x5D000075 The Leakage Detection Card is Absent (AI Module, Major Alarm)

### Description

Alarm message:

[AI Module]The leakage detection card *arg1* is absent (SN:*arg2*, BN:*arg3*).

NOTE

From iBMC V3.07.00.57, the AI module alarms will also include the SN and BOM code.

This alarm is generated when the leakage detection card is absent.

Alarm object: AI module

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x5D000075 | Major | Yes |

### Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Card location. |
| *arg2* | Serial number of the AI module. |
| *arg3* | BOM code of the AI module. |

### Impact on the System

The liquid cooling device cannot report alarms when leakage occurs.

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## Possible Causes

- The leakage detection card is absent.
- The leakage detection card is faulty.

## Procedure

**Step 1** Check whether leakage detection card is absent

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Install the leakage detection card properly and check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Check whether the leakage detection card is faulty.

- If yes, go to **Step 4**.
- If no, go to **Step 5**.

**Step 4** Replace the faulty leakage detection card and check whether the alarm has been cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Contact technical support engineer.

**----End**

# 2.10.330 ALM-0x5D000077 Ethernet Optical Module Transmission Rate Mismatch (AI Module, Major Alarm)

## Description

Alarm message:

[AI Module]Network *arg1* [*arg2*] *arg3* optical module transmission speed does not match the speed supported by the NIC (SN:*arg4*, BN:*arg5*).

**NOTE**

From iBMC V3.07.00.57, the AI module alarms will also include the SN and BOM code.

This alarm is generated when the optical module speed does not match the speeds supported by the NIC.

Alarm object: AI module

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x5D000077 | Major | Yes |

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### Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | NIC name, for example, **NIC 1**, **PCIe Card 5**, or **LOM**. |
| *arg2* | Type of the NIC, for example, **(NIC)** or **(FC).** |
| *arg3* | Network port number, for example, **port 1**. |
| *arg4* | Serial number of the AI module. |
| *arg5* | BOM code of the AI module. |

### Impact on the System

The service network is abnormal.

### Possible Causes

The optical module is faulty.

### Procedure

**Step 1** Replace the optical module. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Contact technical support engineer.

**----End**

## 2.10.331 ALM-0x5D00007B The Liquid Cooling Pump is Absent (AI Module, Major Alarm)

### Description

Alarm message:

[AI Module]The liquid cooling pump*arg1arg2* is not detected (SN:*arg3*, BN:*arg4*).

This alarm is generated when the liquid cooling pump is absent.

Alarm object: AI module

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x5D00007B | Major | Yes |

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### Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Description of the liqucid cooling pump**.** For example, **(liquid assisted air cooling)**. |
| *arg2* | No. of the liquid cooling pump**.** |
| *arg3* | Serial number of the AI module. |
| *arg4* | BOM code of the AI module. |

### Impact on the System

The liquid cooling pump device cannot report alarm.

### Possible Causes

- No liquid cooling pump is installed.
- The liquid cooling pump is faulty.

### Procedure

**Step 1** Check whether the liquid cooling pump is not connected or properly connected.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Connect the liquid cooling pump firmly. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Replace the liquid cooling pump. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Contact technical support engineer.

**----End**

## 2.10.332 ALM-0x5D00007D The Rotational Speed of the Liquid Cooling Pump is Abnormal (AI Module, Major Alarm)

### Description

Alarm message:

[AI Module]The rotational speed of the liquid cooling pump*arg1arg2* is abnormal*arg3* (SN:*arg4*, BN:*arg5*).

This alarm is generated when the rotational speed of the liquid cooling pump is abnormal.

Alarm object: AI module

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### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x5D00007D | Major | Yes |

### Parameters

| Name | Meaning |
|---|---|
| *arg1* | Description of the liqucid cooling pump**.** For example, **(liquid assisted air cooling)**. |
| *arg2* | No. of the liquid cooling pump**.** |
| *arg3* | Description of the liqucid cooling pump fault. For example, **current rotational speed 10% is lower than the expected speed 20%**. |
| *arg4* | Serial number of the AI module. |
| *arg5* | BOM code of the AI module. |

### Impact on the System

Heat dissipation of the server is affected.

### Possible Causes

- No liquid cooling pump is installed.
- The liquid cooling pump is faulty.

### Procedure

**Step 1** Replace the liquid cooling pump. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Contact technical support engineer.

**----End**

## 2.10.333 ALM-0x5D000083 Abnormal FPGA or BMC Status of the AI Module (AI Module, Major Alarm)

### Description

Alarm message:

[AI module] The FPGA or BMC status is abnormal. The service cannot be powered on (SN:*arg1*, BN:*arg2*).

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This alarm is generated when the FPGA or BMC status is abnormal.

Alarm object: AI module

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x5D000083 | Major | Yes |

## Parameters

| Name | Meaning |
|---|---|
| *arg1* | Serial number of the AI module. |
| *arg2* | BOM code of the AI module. |

## Impact on the System

Failed to power on.

## Possible Causes

The FPGA or BMC status is abnormal.

## Procedure

**Step 1** Power off and then power on the server. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Power off the server by removing and inserting the power cable, and remove and insert the component. Ensure that the component is securely inserted. Then, power on the server and check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Replace the component. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Contact technical support engineer.

**----End**

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# 2.10.334 ALM-0x5D000085 Optical Module Overtemperature (AI Module, Minor Alarm)

## Description

Alarm message:

[AI module] The *arg1* optical module *arg2* temperature (*arg3* degrees C) exceeds the overtemperature threshold (*arg4* degrees C).

This alarm is generated when the AI module optical module temperature exceeds the high temperature threshold.

Alarm object: AI module

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x5D000085 | Minor | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Position of optical module. For example, **NIC** or **LOM**. |
| *arg2* | Number of optical module. For example **1** or **2**. |
| *arg3* | The current reading of the corresponding sensor. |
| *arg4* | Alarm threshold. |

## Impact on the System

The optical module temperature is not within the normal range, which affects the operation of the optical module and fan speed adjustment.

## Possible Causes

- A fan alarm is generated for the server.
- The ambient temperature of the equipment room exceeds the normal range.
- The air inlet or outlet of the server is blocked.
- The optical module is faulty.

## Procedure

**Step 1** Check whether there are fan module alarms.

- If yes, go to **2**.

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- If no, go to **3**.

**Step 2** Replace the fan module. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **3**.

**Step 3** Check whether the equipment room temperature exceeds the normal range.

- If yes, go to **4**.
- If no, go to **5**.

**Step 4** Reduce the equipment room temperature to the normal range. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **5**.

**Step 5** Check whether the air inlet or outlet of the server is blocked.

- If yes, go to **6**.
- If no, go to **7**.

**Step 6** Clear the blockage. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **7**.

**Step 7** Check whether there are empty slots in the server.

- If yes, go to **9**.
- If no, go to **8**.

**Step 8** Install filler panels in empty slots. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **9**.

**Step 9** Replace the mainboard. After the server is powered on, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **10**.

**Step 10** Contact technical support.

**----End**

# 2.10.335 ALM-0x5D000087 Failed To Obtain The Temperature of the Optical Module (AI Module, Minor Alarm)

## Description

Alarm message:

[AI module] Failed to obtain data of the *arg1* optical module *arg2* temperature. *arg3 arg4*.

This alarm is generated when the reading of the AI module optical module temperature fails during detection.

Alarm object: AI module

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## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x5D000087 | Minor | Yes |

## Parameters

| Name | Meaning |
|---|---|
| *arg1* | Position of optical module. For example, **NIC** or **LOM**. |
| *arg2* | Number of optical module. For example, **1** or **2**. |
| *arg3* | Error code. |
| *arg4* | Additional Description. |

## Impact on the System

The optical module temperature cannot be monitored, and fan speed adjustment is affected.

## Possible Causes

M7 fails to obtain the optical module temperature, or the I2C channel for obtaining the optical module temperature is unavailable.

## Procedure

**Step 1** Restart the iBMC. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **2**.

**Step 2** Shut down and restart the OS. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **3**.

**Step 3** Remove and reconnect power cables or remove and reinstall the board in the chassis. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **4**.

**Step 4** Replace the component. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **5**.

**Step 5** Contact technical support.

**----End**

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# 2.10.336 ALM-0x5D000089 Switch Module Component Overtemperature Minor Alarm (AI Module, Minor Alarm)

## Description

Alarm message:

[AI module] The *arg1arg2* temperature (*arg3* degrees C) of Switch Module exceeds the overtemperature threshold (*arg4* degrees C).

This alarm is generated when the temperature of the AI module's switching system components exceeds the high temperature threshold.

Alarm object: AI module

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x5D000089 | Minor | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Component Name. |
| *arg2* | Componen Slot or Maximum Temperature. |
| *arg3* | Current Temperature. |
| *arg4* | Over Temperature Threshold. |

## Impact on the System

If a component in the switch module experiences abnormal temperatures, it may fail to function properly, affecting speed adjustment.

## Possible Causes

- A fan alarm is generated on the server.
- The ambient temperature in the equipment room exceeds the required range.
- The heat dissipation device of the server is faulty.
- The component is faulty.

## Procedure

**Step 1** Check whether there are fan module alarms.

- If yes, go to **2**.

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- If no, go to **3**.

**Step 2** Replace the fan module. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **3**.

**Step 3** Check whether the equipment room temperature exceeds the normal range.

- If yes, go to **4**.
- If no, go to **5**.

**Step 4** Reduce the equipment room temperature to the normal range. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **5**.

**Step 5** Check whether the heat dissipation device of the server is faulty.

- If yes, go to **6**.
- If no, go to **7**.

**Step 6** Replace the component. After the server is powered on, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **7**.

**Step 7** Contact technical support.

**----End**

# 2.10.337 ALM-0x5D00008B Failed To Obtain The Component Temperature of the Switch Module (AI Module, Minor Alarm)

## Description

Alarm message:

[AI module] Failed to obtain data of the *arg1arg2* temperature of Switch Module.

This alarm is generated when the system fails to read the temperature of the AI module exchange system components.

Alarm object: AI module

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x5D00008B | Minor | Yes |

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### Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Component Name. |
| *arg2* | Componen Slot or Maximum Temperature. |

### Impact on the System

The temperature cannot be properly monitored and alarms cannot be sent promptly if any temperature exceptions occur.

### Possible Causes

- The communication between the BMC and CPLD is abnormal.
- The component is faulty.

### Procedure

**Step 1** Restart the iBMC. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **2**.

**Step 2** Replace the component. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **3**.

**Step 3** Contact technical support.

**----End**

## 2.10.338 ALM-0x5D00008D NPU VRD Overtemperature Minor Alarm (AI Module, Minor Alarm)

### Description

Alarm message:

[AI module] NPU Board *arg1* VRD temperature (*arg2* degrees C) exceeds the overtemperature threshold (*arg3* degrees C).

This alarm is generated when the AI module NPU VRD temperature exceeds the overtemperature threshold.

Alarm object: AI module

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x5D00008D | Minor | Yes |

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## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | The number of the NPU board. |
| *arg2* | Current Temperature. |
| *arg3* | Over Temperature Threshold. |

## Impact on the System

The overheating affects NPU performance and system stability.

## Possible Causes

- The equipment room temperature exceeds the normal range.
- The air inlet is blocked.
- The server has vacant slots or spaces.
- The component holding the air inlet sensor is faulty.

## Procedure

**Step 1** Check whether there are fan module alarms.

- If yes, go to **2**.
- If no, go to **3**.

**Step 2** Replace the fan module. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **3**.

**Step 3** Check whether the equipment room temperature exceeds the normal range.

- If yes, go to **4**.
- If no, go to **5**.

**Step 4** Reduce the equipment room temperature to the normal range. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **5**.

**Step 5** Check whether the server air inlet is blocked.

- If yes, go to **6**.
- If no, go to **7**.

**Step 6** Clear the blockage. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **7**.

**Step 7** Replace the NPU board. After the server is powered on, check whether the alarm is cleared.

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- If yes, no further action is required.
- If no, go to **8**.

**Step 8** Contact technical support.

**----End**

# 2.10.339 ALM-0x5D00008F NPU VRD Access Temperature Failure (AI Module, Minor Alarm)

## Description

Alarm message:

[AI module] Failed to obtain the temperature on the NPU Board *arg1* VRD.

This alarm is generated when the system fails to read the AI module NPU VRD temperature.

Alarm object: AI module

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x5D00008F | Minor | Yes |

## Parameters

| Name | Meaning |
|---|---|
| *arg1* | The number of the NPU board. |

## Impact on the System

The VRD temperature cannot be monitored nomallyIf the temperature is abnormalthe alarm cannot be given in time

## Possible Causes

- IMU function abnormal.
- Communication failure Between iBMC and IMU.

## Procedure

**Step 1** Restart the iBMC. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **2**.

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**Step 2** Remove and reinstall the power cable or board. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **3**.

**Step 3** Contact technical support.

**----End**

# 2.10.340 ALM-0x5D000091 Expand Board Soft-start Circuit Overtemperature Major Alarm (AI Module, Major Alarm)

## Description

Alarm message:

[AI module] System is forcibly shut down due to high temperature of the soft-start circuit *arg1*.

This alarm is generated when the temperature of the AI module expansion board soft-start circuit exceeds the high temperature threshold.

Alarm object: AI module

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x5D000091 | Major | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Names of voltage monitoring points, e.g. "V_VCC_12V1", "V_VCC_12V2". |

## Impact on the System

The system is powered off.

## Possible Causes

- The ambient temperature is too high.
- The air inlet or outlet is blocked.
- The server has empty slots or spaces.
- The fan module is faulty.
- The expansion board is faulty.

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## Procedure

**Step 1** Check whether the equipment room temperature exceeds the normal range.

- If yes, go to **2**.
- If no, go to **3**.

**Step 2** Reduce the equipment room temperature to the normal range. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **3**.

**Step 3** Check whether there are low-speed fan module alarms.

- If yes, go to **4**.
- If no, go to **5**.

**Step 4** Replace the fan module that generates the alarm. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **5**.

**Step 5** Replace the expansion board, and check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **6**.

**Step 6** Contact technical support.

**----End**

# 2.10.341 ALM-0x5D000093 Expand Board Access Temperature Failure (AI Module, Minor Alarm)

## Description

Alarm message:

[AI module] Failed to obtain temperature of the *arg1* expansion board *arg2 arg3*. *arg4 arg5*

This alarm is generated when the system fails to read the temperature of the AI module expansion board.

Alarm object: AI module

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x5D000093 | Minor | Yes |

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### Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | The name of the expansion board. |
| *arg2* | The slot number of the expansion board. |
| *arg3* | Name of temperature point. |
| *arg4* | Additional description related to the alarm. Example value: "Error code:". |
| *arg5* | Alarm related fault codes. Example value: (7176). |

### Impact on the System

The temperature cannot be monitored,and no alarm will be reported when the temperature is abnormal.

### Possible Causes

The sensor access channel is abnormal, or the sensor chip has failed.

### Procedure

**Step 1** Restart the iBMC. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **2**.

**Step 2** Remove and reinstall the power cable or board. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **3**.

**Step 3** Replace the component and check for alarms.

- If yes, no further action is required.
- If no, go to **4**.

**Step 4** Contact technical support.

**----End**

## 2.10.342 ALM-0x5D000095 Expand Board Temperature Exceeds the Major Overtemperature Threshold (AI Module, Major Alarm)

### Description

Alarm message:

[AI module] The *arg1* expansion board *arg2 arg3* temperature (*arg4* degrees C) exceeds the overtemperature threshold (*arg5* degrees C).

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This alarm is generated when the AI module expansion board temperature exceeds the high temperature threshold.

Alarm object: AI module

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x5D000095 | Major | Yes |

## Parameters

| Name | Meaning |
|---|---|
| *arg1* | The name of the expansion board. |
| *arg2* | The slot number of the expansion board. |
| *arg3* | Name of temperature point. |
| *arg4* | Current temperature. |
| *arg5* | Threshold temperature. |

## Impact on the System

Affects the device performance and system stability.

## Possible Causes

- The ambient temperature is too high.
- The heat dissipation component is abnormal.
- The component on the expansion board is faulty.

## Procedure

**Step 1** Check whether the equipment room temperature exceeds the normal range.

- If yes, go to **2**.
- If no, go to **3**.

**Step 2** Reduce the equipment room temperature to the normal range. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **3**.

**Step 3** Check if the heat sink component is running abnormally.

- If yes, go to **4**.
- If no, go to **5**.

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**Step 4** Replace the abnormal heat sink component. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **5**.

**Step 5** Replace the expansion board, and check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **6**.

**Step 6** Contact technical support.

**----End**

# 2.10.343 ALM-0x5D000097 NPU Over Voltage (AI Module, Major Alarm)

## Description

Alarm message:

[AI module] NPU Board *arg1* NPU *arg2 arg4* voltage (*arg5* V) at *arg3* detection point exceeds the overvoltage threshold (*arg6* V).

This alarm is generated when the AI module NPU voltage exceeds the high threshold.

Alarm object: AI module

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x5D000097 | Major | Yes |

## Parameters

| Name | Meaning |
|---|---|
| *arg1* | The number of the NPU board. |
| *arg2* | The ID number of the NPU chip. |
| *arg3* | Voltage type, such as "0.8V". |
| *arg4* | The name of the voltage monitoring point, such as "VDDAVS-NPU1". |
| *arg5* | The current reading of the corresponding sensor. |
| *arg6* | Alarm threshold. |

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### Impact on the System

The system may stop responding.

### Possible Causes

The NPU board is faulty.

### Procedure

**Step 1** Replace the NPU board. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **2**.

**Step 2** Contact technical support.

**----End**

## 2.10.344 ALM-0x5D000099 NPU Under Voltage (AI Module, Major Alarm)

### Description

Alarm message:

[AI module] NPU Board *arg1* NPU *arg2 arg4* voltage (*arg5* V) at *arg3* detection point is lower than the undervoltage threshold (*arg6* V).

This alarm is generated when the AI module NPU voltage is too low.

Alarm object: AI module

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x5D000099 | Major | Yes |

### Parameters

| Name | Meaning |
|---|---|
| *arg1* | The number of the NPU board. |
| *arg2* | The ID number of the NPU chip. |
| *arg3* | Voltage type, such as "0.8V". |
| *arg4* | The name of the voltage monitoring point, such as "VDDAVS-NPU1". |
| *arg5* | The current reading of the corresponding sensor. |

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| Name | Meaning |
| --- | --- |
| *arg6* | Alarm threshold. |

### Impact on the System

The system may stop responding.

### Possible Causes

The NPU board is faulty.

### Procedure

**Step 1** Replace the NPU board. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **2**.

**Step 2** Contact technical support.

**----End**

## 2.10.345 ALM-0x5D00009B NPU Access Volt Failure (AI Module, Minor Alarm)

### Description

Alarm message:

[AI module] Failed to obtain the *arg4* voltage at *arg3* detection point on the NPU Board *arg1* NPU *arg2*.

This alarm is generated when the system failed to obtain the voltage of the AI module NPU.

Alarm object: AI module

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x5D00009B | Minor | Yes |

### Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | The number of the NPU board. |
| *arg2* | The ID number of the NPU chip. |

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| Name | Meaning |
| --- | --- |
| *arg3* | Voltage type, such as "0.8V". |
| *arg4* | The name of the voltage monitoring point, such as "VDDAVS-NPU1". |

## Impact on the System

The system may stop responding.

## Possible Causes

The NPU board is faulty.

## Procedure

**Step 1** Replace the NPU board. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **2**.

**Step 2** Contact technical support.

**----End**

# 2.10.346 ALM-0x5D00009D Expand Board Under Voltage (AI Module, Major Alarm)

## Description

Alarm message:

[AI module] Expansion board voltage (*arg1* V) at *arg2* detection point *arg3* is lower than the undervoltage threshold (*arg4* V).

This alarm is generated when the AI module expansion board voltage is too low.

Alarm object: AI module

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x5D00009D | Major | Yes |

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### Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | The current voltage at the monitoring point. |
| *arg2* | Voltage types, such as "3.3V", "5V", "12V". |
| *arg3* | Monitoring point voltage names, such as "EXU_12V0_1" and "EXU_VCC_5V0". |
| *arg4* | Alarm threshold. |

### Impact on the System

The system may stop responding.

### Possible Causes

The expansion board is faulty.

### Procedure

**Step 1** Replace the expansion board. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **2**.

**Step 2** Contact technical support.

**----End**

## 2.10.347 ALM-0x5D00009F Expand board over voltage (AI Module, Major Alarm)

### Description

Alarm message:

[AI module] Expansion board voltage (*arg1* V) at *arg2* detection point *arg3* exceeds the overvoltage threshold(*arg4* V).

This alarm is generated when the AI module expansion board voltage exceeds the high threshold.

Alarm object: AI module

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x5D00009F | Major | Yes |

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### Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | The current voltage at the monitoring point. |
| *arg2* | Voltage types, such as "3.3V", "5V", "12V". |
| *arg3* | Monitoring point voltage names, such as "EXU_12V0_1" and "EXU_VCC_5V0". |
| *arg4* | Alarm threshold. |

### Impact on the System

The system may stop responding.

### Possible Causes

The expansion board is faulty.

### Procedure

**Step 1** Replace the expansion board. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **2**.

**Step 2** Contact technical support.

**----End**

## 2.10.348 ALM-0x5D0000A1 Self-description Record Access Failure (AI Module, Minor Alarm)

### Description

Alarm message:

[AI module] Failed to access the Self-description Record of *arg1 arg2*.

This alarm is generated when the AI module fails to access the Self-description Record.

Alarm object: AI module

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x5D0000A1 | Minor | Yes |

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### Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Faulty components. |
| *arg2* | Slot number. |

### Impact on the System

Affects the system's management of the faulty component and its underlying components.

### Possible Causes

The Self-description Record data is corrupted or the access channel is abnormal.

### Procedure

**Step 1** Restart the iBMC. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **2**.

**Step 2** Upgrade the Self-description Record firmware. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **3**.

**Step 3** Replace the faulty component. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **4**.

**Step 4** Contact technical support.

**----End**

## 2.10.349 ALM-0x5D0000A3 DDR Self-check Failed (AI Module, Minor Alarm)

### Description

Alarm message:

```
[AI module] The DDR self-check of the BMC fails.
```

This alarm is generated when the AI module's DDR self-test fails.

Alarm object: AI module

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### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x5D0000A3 | Minor | Yes |

### Parameters

| Name | Meaning |
| --- | --- |
| - | - |

### Impact on the System

System performance deteriorates.

### Possible Causes

The DDR self-check of the BMC fails.

### Procedure

**Step 1** Remove and then insert the board or card where the BMC is installed. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **2**.

**Step 2** Replace the board or card where the BMC is installed. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **3**.

**Step 3** Contact technical support.

**----End**

## 2.10.350 ALM-0x5D0000A5 Failed To Obtain the Expand Board FRU Data (AI Module, Minor Alarm)

### Description

Alarm message:

```
[AI module] Failed to obtain electronic label data of expansion board.
```

This alarm is generated when the FRU data read of the AI module expansion board fails.

Alarm object: AI module

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### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x5D0000A5 | Minor | Yes |

### Parameters

| Name | Meaning |
| --- | --- |
| - | - |

### Impact on the System

The system cannot read asset information.

### Possible Causes

The EEPROM or access channel is faulty.

### Procedure

**Step 1** Restart the iBMC. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **2**.

**Step 2** Replace the expansion board. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **3**.

**Step 3** Contact technical support.

**----End**

## 2.10.351 ALM-0x5D0000A7 Fan Redundancy Lost (AI Module, Major Alarm)

### Description

Alarm message:

```
[AI module] Lost fan redundancy.
```

This alarm is generated when the AI module fan redundancy becomes inactive.

Alarm object: AI module

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### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x5D0000A7 | Major | Yes |

### Parameters

| Name | Meaning |
| --- | --- |
| - | - |

### Impact on the System

Heat dissipation of the server is affected.

### Possible Causes

- The fan module is removed.
- The fan module is in poor contact with the mainboard.

### Procedure

**Step 1** Install fan modules in vacant slots. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **2**.

**Step 2** Remove and reinstall the fan module. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **3**.

**Step 3** Replace the fan module. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **4**.

**Step 4** Contact technical support.

**----End**

## 2.10.352 ALM-0x5D0000A9 Large Fan Speed Difference (AI Module, Major Alarm)

### Description

Alarm message:

[AI module] Fan *arg1* [*arg2*] failure or incorrect fan model (BN: *arg3*).

This alarm is generated when the deviation of the AI module fan speed is large.

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Alarm object: AI module

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x5D0000A9 | Major | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | The location of the alarm related fan module, such as "front", "rear", etc. |
| *arg2* | Number of the fan module related to the alarm. |
| *arg3* | BOM code. |

## Impact on the System

Heat dissipation of the server is affected.

## Possible Causes

- The fan module is faulty.
- The fan module is of an incorrect type.
- The fan backplane is faulty.

## Procedure

**Step 1** Replace the fan module. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **2**.

**Step 2** If the server has a fan backplane, replace it. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **3**.

**Step 3** Contact technical support.

**----End**

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# 2.10.353 ALM-0x5D0000AB Component Absent (AI Module, Major Alarm)

## Description

Alarm message:

[AI module] *arg1* is not detected.

This alarm is generated when the AI module component is not in place.

Alarm object: AI module

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x5D0000AB | Major | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Components. Examples of values: "EXU2", "Riser1". |

## Impact on the System

It may affect basic hardware management and BMC functions.

## Possible Causes

- The component is not securely installed.
- The signal cable of the component is faulty.
- The component is faulty.

## Procedure

**Step 1** Check whether the component connections are correct.

- If yes, go to **3**.
- If no, go to **2**.

**Step 2** Connect the component cables correctly. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **3**.

**Step 3** Replace the signal cable of the component. Then, check whether the alarm is cleared.

- If yes, no further action is required.

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- If no, go to **4**.

**Step 4** Replace the AI module component. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **5**.

**Step 5** Contact technical support.

**----End**

# 2.10.354 ALM-0x5D0000AD Data Written into NAND Flash Memory Exceeds Threshold (AI Module, Minor Alarm)

## Description

Alarm message:

[AI module] The data written to the NAND flash in last 15 days exceeds *arg1*G.

This alarm is generated when the write volume of the AI module's NAND Flash exceeds the threshold.

Alarm object: AI module

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x5D0000AD | Minor | Yes |

## Parameters

| Name | Meaning |
|---|---|
| *arg1* | 15 day write threshold, such as "12". |

## Impact on the System

The service life of the NAND flash memory is affected.

## Possible Causes

- The amount of data written to the NAND flash in last 15 days exceeds the threshold.

## Procedure

**Step 1** Restart the iBMC. Then, check whether the alarm is cleared.

- If yes, no further action is required.

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- If no, go to **2**.

**Step 2** Perform one-click collection of the iBMC log, and check the log information for error. Contact device vendor's technical support engineer.

- If yes, go to **3**.
- If no, go to **4**.

**Step 3** Modify abnormalities based on log records. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **4**.

**Step 4** Contact technical support.

**----End**

# 2.10.355 ALM-0x5D0000AF CPU Board MCU Self-check is Abnormal (AI Module, Major Alarm)

## Description

Alarm message:

[AI module] Self-check result of MCU [*arg2*] on CPU board [*arg1*] is abnormal.

This alarm is generated when the self-check of the MCU on the AI module's CPU board is abnormal.

Alarm object: AI module

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x5D0000AF | Major | Yes |

## Parameters

| Name | Meaning |
|---|---|
| *arg1* | The number of the CPU board, such as "1" and "2". |
| *arg2* | The MCU number, such as "1" and "2". |

## Impact on the System

The server may not work properly.

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### Possible Causes

- Remove and plug in the power cable, and check whether the fault is rectified.
- Replace the CPU board.

### Procedure

**Step 1** Plug and unplug the full kit power cable. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **2**.

**Step 2** Replace the CPU board. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **3**.

**Step 3** Contact technical support.

**----End**

## 2.10.356 ALM-0x5D0000B1 Incorrect Connection of the Signal Cable to The Fan Board (AI Module, Major Alarm)

### Description

Alarm message:

[AI module] Incorrect connection of the signal cable of the fan backplane *arg1*.

This alarm is generated when there is an abnormal connection of the fan backplane signal cable in the AI module.

Alarm object: AI module

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x5D0000B1 | Major | Yes |

### Parameters

| Name | Meaning |
|---|---|
| *arg1* | Slot number. |

### Impact on the System

The fan module cannot be managed.

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### Possible Causes

- The signal cable of the fan backplane is incorrectly connected.
- The cable is damaged.

### Procedure

**Step 1** Check whether the signal cable of the fan backplane is connected correctly.

- If yes, go to **3**.
- If no, go to **2**.

**Step 2** Remove and insert the cable. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **3**.

**Step 3** Replace the signal cable of the fan backplane. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **4**.

**Step 4** Contact technical support.

**----End**

## 2.10.357 ALM-0x5D0000B3 Expand Board CPLD Self-check is Abnormal (AI Module, Major Alarm)

### Description

Alarm message:

[AI module] Expansion board CPLD *arg1* self-check result is abnormal.

This alarm is generated when the AI module's CPLD self-check on the expansion board is abnormal.

Alarm object: AI module

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x5D0000B3 | Major | Yes |

### Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | CPLD numbers, such as "1" and "2". |

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### Impact on the System

The server cannot start.

### Possible Causes

- The expansion board is faulty.

### Procedure

**Step 1** Restart the iBMC. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **2**.

**Step 2** Remove and reconnect power cables. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **3**.

**Step 3** Replace the expansion board. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **4**.

**Step 4** Contact technical support.

**----End**

## 2.10.358 ALM-0x5D0000B5 Expand Board Clock Lost (AI Module, Major Alarm)

### Description

Alarm message:

[AI module] Expansion board *arg1 arg2* clock signals lost.

This alarm is generated when the clock of the AI module expansion board is lost.

Alarm object: AI module

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x5D0000B5 | Major | Yes |

### Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Clock frequency, examples of values: "50M", "100M". |

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| Name | Meaning |
| --- | --- |
| *arg2* | Clock signal, with an example value of "buffer 1". |

### Impact on the System

The system may stop responding or fail to start.

### Possible Causes

- The expansion board is faulty.

### Procedure

**Step 1** Replace the expansion board. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **2**.

**Step 2** Contact technical support.

**----End**

## 2.10.359 ALM-0x5D0000B7 Failed to Obtain the HiAM Voltage (AI Module, Major Alarm)

### Description

Alarm message:

[AI module] Failed to obtain voltage on the HiAM*arg1* (*arg2*). *arg3*

This alarm is generated when the system failed to obtain the voltage of the AI module.

Alarm object: AI module

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x5D0000B7 | Major | Yes |

### Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | The slot number of the module. |
| *arg2* | Additional description related to the alarm. |

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| Name | Meaning |
| --- | --- |
| *arg3* | Alarm related fault codes. |

## Impact on the System

The related services are affected, or data loss may occur.

## Possible Causes

- The I2C channel is abnormal or the HiAM is faulty.

## Procedure

**Step 1** Restart the iBMC. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **2**.

**Step 2** Remove and reconnect power cables. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **3**.

**Step 3** Replace the HiAM. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **4**.

**Step 4** Contact technical support.

**----End**

# 2.10.360 ALM-0x5D0000B9 HiAM CPLD Self-check Fails (AI Module, Major Alarm)

## Description

Alarm message:

[AI module] The HiAM*arg1* CPLD self-check fails.

This alarm is generated when the AI module's CPLD self-check is abnormal.

Alarm object: AI module

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x5D0000B9 | Major | Yes |

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### Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | The position of the module. |

### Impact on the System

The HiAM fails to work.

### Possible Causes

- The HiAM is faulty.

### Procedure

**Step 1** Replace the HiAM. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **2**.

**Step 2** Contact technical support.

**----End**

## 2.10.361 ALM-0x5D0000BB HiAM Over Voltage (AI Module, Major Alarm)

### Description

Alarm message:

[AI module] The *arg1* HiAM *arg2* (*arg3*) voltage is too high. [*arg4*] [*arg5*]

This alarm is generated when the AI module voltage exceeds the high threshold.

Alarm object: AI module

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x5D0000BB | Major | Yes |

### Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | The position of the module. |
| *arg2* | The slot number of the module. |

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| Name | Meaning |
| --- | --- |
| *arg3* | The name of the module. |
| *arg4* | Additional description related to the alarm. |
| *arg5* | Alarm related fault codes. |

## Impact on the System

The HiAM may run unstably, and the system may run abnormally.

## Possible Causes

- The HiAM is faulty.

## Procedure

**Step 1** Check whether the HiAM is powered normally. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **2**.

**Step 2** Replace the component and check for alarms. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **3**.

**Step 3** Contact technical support.

**----End**

# 2.10.362 ALM-0x5D0000C1 AI Module Optical Module Transmit and Receive Signal Major Alarm (AI Module, Major Alarm)

## Description

Alarm message:

[AI Module]Abnormal *arg4* signal of optical module is detected on [*arg2*] *arg3* on *arg1*.

This alarm is generated when there is an abnormal optical module signal transmission in the AI module.

Alarm object: AI module

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x5D0000C1 | Major | Yes |

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### Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | The position of the optical module. |
| *arg2* | The name of the optical module |
| *arg3* | Port Name. |
| *arg4* | Receives and sends signals. |

### Impact on the System

The NIC may run unstably, which affects the service network communication.

### Possible Causes

- No optical fiber is connected to the optical module.
- The optical module is faulty.

### Procedure

**Step 1** Insert the optical module into the optical fiber. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **2**.

**Step 2** Replace the optical module. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **3**.

**Step 3** Contact technical support engineer.

**----End**

## 2.10.363 ALM-0x5D0000C7 The AI module switch domain reset unexpectedly (AI module, Major Alarm)

### Description

Alarm message:

On the AI module, switch domain reset abnormally.

This alarm is generated when switch domain reset unexpectedly in the AI module.

Alarm object: AI module

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### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x5D0000C7 | Major | Yes |

### Parameters

| Name | Meaning |
|---|---|
| - | - |

### Impact on the System

- The system of the AI module may fail to start or run abnormally.
- The compute domain may fail to power on.

### Possible Causes

- The HCCS switch boards may not properly connected.
- The HCCS switch boards may exceeds the overtemperature threshold.
- The HCCS switch boards may had a software failure.

### Procedure

**Step 1** Remove and then reinstall the HCCS switch boards. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **2**.

**Step 2** Check whether the HCCS switch boards are overtemperature.

- If yes, go to **3**.
- If no, go to **4**.

**Step 3** Upgrade the switch firmware. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **4**.

**Step 4** Contact technical support engineer.

**----End**

## 2.10.364 ALM-0x5D0000C9 LCN Health Degraded (AI Module, Minor Alarm)

### Description

Alarm message:

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The LCN*arg1* health state is degraded. *arg2*

This alarm is generated when the LCN health state is degraded.

Alarm object: AI module

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x5D0000C9 | Minor | Yes |

### Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | No. of the LCN. |
| *arg2* | Alarm description, for example, (AlarmId=*xxx*, Description=The interface status changes.). |

### Impact on the System

The LCN health state is degraded. Maintenance personnel need to promptly identify the cause of the alarm and eliminate potential faults.

### Possible Causes

Collect LCN logs via iBMC, then contact technical support engineer.

### Procedure

Collect LCN logs via iBMC, then contact technical support engineer.

## 2.10.365 ALM-0x5D0000CB LCN Health Major Alarm (AI Module, Major Alarm)

### Description

Alarm message:

The LCN*arg1* has major alarm. *arg2*

This alarm is generated when the LCN has major alarm.

Alarm object: AI module

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### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x5D0000CB | Major | Yes |

### Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | No. of the LCN. |
| *arg2* | Alarm description, for example, (AlarmId=*xxx*, Description=The interface status changes.). |

### Impact on the System

The LCN has major alarm and impacting system service quality. Immediate resolution is required.

### Possible Causes

Collect LCN logs via iBMC, then contact technical support engineer.

### Procedure

Collect LCN logs via iBMC, then contact technical support engineer.

## 2.10.366 ALM-0x5D0000CD LCN Health Critical Alarm (AI Module, Critical Alarm)

### Description

Alarm message:

The LCN*arg1* health state is degraded. *arg2*

This alarm is generated when the LCN has critical alarm.

Alarm object: AI module

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x5D0000CD | Critical | Yes |

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### Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | No. of the LCN. |
| *arg2* | Alarm description, for example, (AlarmId=*xxx*, Description=The interface status changes.). |

### Impact on the System

The LCN has critical alarm. Risks disrupting system operations. Emergency action required.

### Possible Causes

Collect LCN logs via iBMC, then contact technical support engineer.

### Procedure

Collect LCN logs via iBMC, then contact technical support engineer.

## 2.10.367 ALM-0x5D0000CF LCN Network Communication Failure (AI Module, Minor Alarm)

### Description

Alarm message:

Network communication between the BMC and LCN*arg1* failed.

This alarm is generated when the network communication between the BMC and LCN failed.

Alarm object: AI module

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x5D0000CF | Minor | Yes |

### Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | No. of the LCN. |

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## Impact on the System

The BMC cannot manage the LCN, which affects the health status monitoring of the LCN.

## Possible Causes

- The LCN firmware version is obsolete.
- The LCN is improperly connected or configured.
- The BMC is inactive or functioning abnormally.
- The LCN is inactive or functioning abnormally.
- Hardware failure detected. Perform hardware diagnostics or replace the faulty component.

## Procedure

**Step 1** Upgrade the firmware of the LCN. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **2**.

**Step 2** Check whether the network configuration settings between the BMC and LCN is normal.

- If yes, go to **Step 4**.
- If no, go to **Step 3**.

**Step 3** Reconfigure the network configuration settings between the BMC and LCN. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Restart the BMC. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Restart the LCN. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 6**.

**Step 6** Replace the board where the LCN is located. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 7**.

**Step 7** Contact technical support engineer.

**----End**

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# 2.10.368 ALM-0x5D0000D1 LCN Authentication Failure (AI Module, Minor Alarm)

## Description

Alarm message:

Authentication failure caused communication loss between the BMC and LCN*arg1*.

This alarm is generated when the authentication failure caused communication loss between the BMC and LCN.

Alarm object: AI module

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x5D0000D1 | Minor | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | No. of the LCN. |

## Impact on the System

The BMC cannot manage the LCN, which affects the health status monitoring of the LCN.

## Possible Causes

- The LCN is improperly configured.
- The local password is abnormal.
- The LCN firmware version is obsolete.
- The LCN is inactive or functioning abnormally.

## Procedure

**Step 1** Check whether the account configuration settings between the BMC and the LCN is normal.

- If yes, go to **Step 3**.
- If no, go to **Step 2**.

**Step 2** Reconfigure the network configuration settings between the BMC and LCN. Then, check whether the alarm is cleared.

- If yes, no further action is required.

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- If no, go to **Step 3**.

**Step 3** Update the local password via BMC. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Upgrade the firmware of the LCN. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Restart the LCN. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 6**.

**Step 6** Contact technical support engineer.

**----End**

# 2.10.369 ALM-0x5F000001 Flow Valve Failure (Flow Valve, Major Alarm)

## Description

Alarm message:

Flow valve *arg1* failed.

This alarm is generated when the flow valve failed.

Alarm object: Flow Valve

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x5F000001 | Major | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Location of the flow valve. For example, **inlet** or **outlet**. |

## Impact on the System

- The flow valve remains in its current status and cannot control the on/off status.
- The heat dissipation of server liquid-cooling components is affected.

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### Possible Causes

The flow valve itself is faulty.

### Procedure

**Step 1** Replace the floating module. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Contact technical support engineer.

**----End**

## 2.10.370 ALM-0x5F000003 Flow Valve in Self-protection Status (Flow Valve, Major Alarm)

### Description

Alarm message:

Flow valve *arg1* enters the self-protection status.

This alarm is generated when the flow valve enters the self-protection status.

Alarm object: Flow Valve

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x5F000003 | Major | Yes |

### Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Location of the flow valve. For example, **inlet** or **outlet**. |

### Impact on the System

- The flow valve remains in its current status and cannot control the on/off status.
- The heat dissipation of server liquid-cooling components is affected.

### Possible Causes

- Supply voltage is abnormal.
- Overtemperature of the internal chip of the flow valve is detected.
- The flow valve itself is faulty.

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- Flow valve cable is loose.

## Procedure

**Step 1** Check whether the cable of the flow valve is loose.

- If yes, go to .**Step 2**
- If no, go to **Step 3**.

**Step 2** Connect the cable of the flow valve firmly and power on the flow valve. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Check whether the power supply of the board at the front stage is normal.

- If yes, go to **Step 5**.
- If no, go to **Step 4**.

**Step 4** Adjust the input voltage to the normal range. Then check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Replace the board at the front stage. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 6**.

**Step 6** Replace the floating module. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 7**.

**Step 7** Contact technical support engineer.

**----End**

# 2.10.371 ALM-0x5F000005 The Control Status of the Flow Valve is Abnormal (Flow Valve, Major Alarm)

## Description

Alarm message:

The flow valve *arg1* cannot control the *arg2* status.

This alarm is generated when the control status of the flow valve is abnormal.

Alarm object: Flow Valve

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x5F000005 | Major | Yes |

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### Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Location of the flow valve. For example, **inlet** or **outlet**. |
| *arg2* | Control status of the flow valve. For example, **On** or **Off**. |

### Impact on the System

- The flow valve cannot control the on/off status.
- The heat dissipation of server liquid-cooling components is affected.

### Possible Causes

- Flow valve control and detection link are abnormal.
- The flow valve itself is faulty.

### Procedure

**Step 1** Check whether the CPLD register value of the board at the front stage is the same as the delivered value in the logs. Replace the related cables. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Replace the floating module. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Contact technical support engineer.

**----End**

## 2.10.372 ALM-0x5F000007 Flow Valve Control Cable not Present (Flow Valve, Major Alarm)

### Description

Alarm message:

The control cable of the flow valve *arg1* is not present.

This alarm is generated when the control cable of the flow valve is not present.

Alarm object: Flow Valve

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### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x5F000007 | Major | Yes |

### Parameters

| Name | Meaning |
| --- | --- |
| *arg1* | Location of the flow valve. For example, **inlet** or **outlet**. |

### Impact on the System

- The flow valve cannot control the on/off status.
- The heat dissipation of server liquid-cooling components is affected.

### Possible Causes

The cable is loose.

### Procedure

**Step 1** Check whether the cable connection of the flow valve is normal.

- If yes, go to **Step 3**.
- If no, go to **Step 2**.

**Step 2** Remove and reinstall the cable connection of the flow valve. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Contact technical support engineer.

**----End**

## 2.10.373 ALM-0x5F000009 The Policy of Powering Off System and Shutting Off Flow Valve Takes Effect (Flow Valve, Major Alarm)

### Description

Alarm message:

After liquid leakage is detected, the policy of powering off system and shutting off flow valve is executed.

This alarm is generated when the liquid leakage is detected and the policy of powering off system and shutting off flow valve is executed.

Alarm object: Flow Valve

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### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x5F000009 | Major | Yes |

### Parameters

| Name | Meaning |
|---|---|
| - | - |

### Impact on the System

System power-on is disabled after the flow valve is shut off.

### Possible Causes

Liquid leakage is detected and the policy of powering off system and shutting off flow valve is executed.

### Procedure

**Step 1** Check whether the liquid cooling device is damaged.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Replace the liquid cooling device. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Replace the leakage detection component. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Contact technical support engineer.

**----End**

## 2.11 Event Alarms by Component

An event alarm indicates an event occurred during the running of a server. Generally, this type of alarms does not affect services and need to be handled immediately. Users can handle event alarms in off-peak hours. **Table 2-5** lists the events of servers.

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**Table 2-5** Event list

| Event Code | Event Description | Impact/Suggestions |
| --- | --- | --- |
| 0x00000015 | CPU *arg1* installed.<br>*arg1* indicates the CPU No. | - |
| 0x00000017 | CPU *arg1* removed.<br>*arg1* indicates the CPU No. | Impact: The server may break down.<br>Handling suggestions:<br>1. Install a CPU in the slot of the alarmed CPU.<br>2. Exchange the positions of the alarmed CPU and a normal CPU to determine the faulty component.<br>3. Replace the CPU or the mainboard. |
| 0x0000001F | CPU *arg1* Core *arg2* isolated.<br>● *arg1* indicates the CPU No.<br>● *arg2* indicates the CPU core No. | Impact: The CPU performance deteriorates.<br>Handling suggestions: Replace the CPU or the mainboard at the appropriate time. |
| 0x00000021 | Faulty CPU *arg1* isolated.<br>*arg1* indicates the CPU No. | Impact: The available CPUs are reduced.<br>Handling suggestions: Replace the CPU at the appropriate time. |
| 0x00000079 | CPU *arg1* health status degradation detected by PFAE.<br>*arg1* indicates the CPU No. | Impact: The system reliability is affected.<br>Handling suggestions:<br>1. Arrange planned maintenance. After the server is powered off, check whether the CPU or its socket is damaged or whether the CPU has poor contact with its socket.<br>2. Replace the faulty part and check whether the alarm is cleared.<br>3. Replace the mainboard. |

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| Event Code | Event Description | Impact/Suggestions |
| --- | --- | --- |
| 0x00000081 | *arg1* CPU *arg2* is replaced from SN(*arg3*) to SN(*arg4*).<br>● *arg1* indicates the slot No. of the CPU board.<br>● *arg2* indicates the CPU socket number.<br>● *arg3* indicates the SN of the CPU to be replaced.<br>● *arg4* indicates the SN of the new CPU. | - |
| 0x0100000D | [Memory board *arg1*] *arg2* memory correctable ECC.<br>● *arg1* indicates the slot No. of the memory board.<br>● *arg2* indicates the DIMM silkscreen or CPU socket number and memory channel No.<br>– DIMM silkscreen, for example, **DIMM020(A)** or **DIMM010(B)**.<br>– CPU socket number and memory channel No. For example, **CPU 1 channel 2** indicates memory channel No.2 of CPU 1, that is, the DIMMs corresponding to **DIMM020** and **DIMM021**.<br>The number of DIMMs corresponding to a channel varies depending on the server model. | Impact: The system performance is affected.<br>Handling suggestions:<br>1. Remove and reinstall the alarmed DIMM.<br>2. Replace the DIMM. |

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| Event Code | Event Description | Impact/Suggestions |
| --- | --- | --- |
| 0x0100000F | [Memory board *arg1*] *arg2* installed.<br>● *arg1* indicates the slot No. of the memory board.<br>● *arg2* indicates the DIMM silkscreen or CPU socket number and memory channel No.<br>– DIMM silkscreen, for example, **DIMM020(A)** or **DIMM010(B)**.<br>– CPU socket number and memory channel No. For example, **CPU 1 channel 2** indicates memory channel No.2 of CPU 1, that is, the DIMMs corresponding to **DIMM020** and **DIMM021**.<br>The number of DIMMs corresponding to a channel varies depending on the server model. | - |

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| Event Code | Event Description | Impact/Suggestions |
| --- | --- | --- |
| 0x01000011 | [Memory board *arg1*] *arg2* removed.<br>● *arg1* indicates the slot No. of the memory board.<br>● *arg2* indicates the DIMM silkscreen or CPU socket number and memory channel No.<br>– DIMM silkscreen, for example, **DIMM020(A)** or **DIMM010(B)**.<br>– CPU socket number and memory channel No. For example, **CPU 1 channel 2** indicates memory channel No.2 of CPU 1, that is, the DIMMs corresponding to **DIMM020** and **DIMM021**. The number of DIMMs corresponding to a channel varies depending on the server model. | Impact: The system performance is affected.<br>Handling suggestions:<br>1. Install a DIMM in the slot indicated by the alarm.<br>2. Reseat the DIMM.<br>3. Replace the DIMM.<br>4. Replace the mainboard or memory board. |
| 0x0100001D | All DIMMs on memory board *arg1* have been switched to the standby board.<br>*arg1* indicates the slot No. of the memory board. | - |
| 0x01000029 | [*arg1*] *arg2* memory initialization error. Error code: *arg3*.<br>● *arg1* indicates the Slot number of the memory board.<br>● *arg2* indicates the DIMM silkscreen or CPU socket number and memory channel No.<br>● *arg3* indicates the error code of the alarm. | Impact: The server performance is affected, or the server fails to start. |

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| Event Code | Event Description | Impact/Suggestions |
| --- | --- | --- |
| 0x0100002B | [*arg1*]*arg2* memory initialization error. Error code: *arg3*.<br>● *arg1* indicates the Slot number of the memory board.<br>● *arg2* indicates the DIMM silkscreen or CPU socket number and memory channel No.<br>● *arg3* indicates the error code of the alarm. | Impact: The server performance is affected, or the server fails to start. |
| 0x0100002D | [*arg1*] *arg2* health status degradation detected by PFAE.<br>● *arg1* indicates the slot No. of the memory board.<br>● *arg2* indicates the DIMM silkscreen or CPU socket number and memory channel No.<br>– DIMM silkscreen, for example, **DIMM020(A)** or **DIMM010(B)**.<br>– CPU socket number and memory channel No. For example, **CPU 1 channel 2** indicates memory channel No.2 of CPU 1, that is, the DIMMs corresponding to **DIMM020** and **DIMM021**.<br>The number of DIMMs corresponding to a channel varies depending on the server model. | Impact: The system reliability is affected.<br>Handling suggestions:<br>1. Arrange planned maintenance. After the server is powered off, check whether the CPU or its socket is damaged or whether the CPU has poor contact with its socket.<br>2. Replace the faulty part and check whether the alarm is cleared.<br>3. Replace the mainboard. |

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| Event Code | Event Description | Impact/Suggestions |
| --- | --- | --- |
| 0x01000041 | *arg1 arg2* is replaced from SN(*arg3*) to SN(*arg4*).<br>● *arg1* indicates the slot No. of the memory board.<br>● *arg2* indicates the DIMM silkscreen or CPU socket number and memory channel No.<br>– DIMM silkscreen, for example, **DIMM020(A)** or **DIMM010(B)**.<br>– CPU socket number and memory channel No. For example, **CPU 1 channel 2** indicates memory channel No.2 of CPU 1, that is, the DIMMs corresponding to **DIMM020** and **DIMM021**. The number of DIMMs corresponding to a channel varies depending on the server model.<br>● *arg3* indicates the SN of the DIMM to be replaced.<br>● *arg4* indicates the SN of the new DIMM. | - |
| 0x01000075 | A pre-failure occurs in memory (*arg1*), and ADDDC Sparing is executed for isolation.<br>*arg1:* Memory number. For example, DIMM000. | Impact: DIMM performance may degrade.<br>Suggestion: If the system performance is affected, replace the corresponding DIMM. |
| 0x01000081 | Memory *arg1* meets the PPR condition.<br>*arg1*: Slot No. of the alarmed DIMM. | Impact: The memory PPR is triggered, which has no adverse impact on the system. |

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| Event Code | Event Description | Impact/Suggestions |
| --- | --- | --- |
| 0x01000083 | A single DQ link exception occurred between *arg1* and memory module (*arg2 arg3 arg4*).<br>● *arg1:* CPU socket number.<br>● *arg2:* CPU socket number.<br>● *arg3:* CPU memory channel No.<br>● *arg4:* Memory number. | Impact:<br>The system is still running properly, but the reliability is reduced.<br>Suggestion:<br>1. Perform maintenance as planned as soon as possible. Power off the server and check whether the component is faulty.<br>2. Replace the component and check whether the fault is rectified. |
| 0x02000003 | The [*arg1*] disk *arg2* installed.<br>● *arg1* indicates the disk location, for example, **rear** or **front**.<br>● *arg2* indicates the disk slot No. | - |
| 0x02000005 | The [*arg1*] disk *arg2* removed.<br>● *arg1* indicates the disk location, for example, **rear** or **front**.<br>● *arg2* indicates the disk slot No. | Impact:<br>● The system cannot start.<br>● Logical drive degraded, partially degraded, offline, or failed.<br>● The number of available disks is reduced.<br>Handling suggestions:<br>1. Install a disk into the alarmed disk slot.<br>2. Remove and reinstall the alarmed disk.<br>3. Replace the disk, or the disk backplane, RAID controller card, or M.2 adapter card where the disk is located. |
| 0x0200000D | RAID rebuild starts at the [*arg1*] disk *arg2*.<br>● *arg1* indicates the disk location, for example, **rear** or **front**.<br>● *arg2* indicates the disk slot No. | - |

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| Event Code | Event Description | Impact/Suggestions |
| --- | --- | --- |
| 0x0200000F | RAID rebuild at the [*arg1*] disk *arg2* stopped.<br>● *arg1* indicates the disk location, for example, **rear** or **front**.<br>● *arg2* indicates the disk slot No. | The stop of the rebuild does not mean a success of the rebuild. You still need to check for alarms related to the drives and RAID controller card.<br>● If there is no alarm generated for the RAID controller card or drives, the RAID rebuild is successful.<br>● If there are alarms generated for the RAID controller card or drives, the RAID rebuild has failed. |
| 0x0200001F | The *arg1 arg3arg4* disk *arg2* health status degradation detected by PFAE.<br>● *arg1* indicates the disk location, for example, **rear** or **front**.<br>● *arg2* indicates the disk slot No.<br>● *arg3* indicates the SN of the component where the alarm-related drive is located.<br>● *arg4* indicates the additional information about the alarm. | Impact: The system reliability is affected.<br>Handling suggestions:<br>1. Arrange planned maintenance. After the server is powered off, check whether the CPU or its socket is damaged or whether the CPU has poor contact with its socket.<br>2. Replace the faulty part and check whether the alarm is cleared.<br>3. Replace the mainboard. |
| 0x02000023 | The *arg1* disk *arg2* is replaced from SN(*arg3*) to SN(*arg4*).<br>● *arg1* indicates the disk location, for example, **rear** or **front**.<br>● *arg2* indicates the disk slot No.<br>● *arg3* indicates the SN of the disk to be replaced.<br>● *arg4* indicates the SN of the new disk. | - |

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| Event Code | Event Description | Impact/Suggestions |
| --- | --- | --- |
| 0x02000033 | The [*arg1*] disk *arg2* disconnected temporarily.<br>● *arg1* indicates the disk location, for example, **rear** or **front**.<br>● *arg2* indicates the disk slot No. | - |
| 0x03000003 | PSU *arg1* installed.<br>*arg1* indicates the PSU slot No. | - |
| 0x03000005 | PSU *arg1* removed.<br>*arg1* indicates the PSU slot No. | Impact: The power supply redundancy is affected. |
| 0x0300001D | Low input voltage detected on PSU *arg1*.<br>*arg1* indicates the PSU slot No. | Impact: The input voltage is too low, and the PSU is about to fail. |
| 0x03000021 | High output voltage detected on PSU *arg1*.<br>*arg1* indicates the PSU slot No. | Impact: The output power voltage is high. |
| 0x03000023 | Low output voltage detected on PSU *arg1*.<br>*arg1* indicates the PSU slot No. | Impact: The output power voltage is low. |
| 0x03000025 | High output current detected on PSU *arg1*.<br>*arg1* indicates the PSU slot No. | Impact: The PSU is about to fail because it is overloaded. |
| 0x03000027 | High input voltage detected on PSU *arg1*.<br>*arg1* indicates the PSU slot No. | Impact: The input voltage is too high, and the PSU is about to fail. |
| 0x03000029 | High temperature detected on PSU *arg1*.<br>*arg1* indicates the PSU slot No. | Impact: The PSU internal temperature is too high, and the PSU is about to fail. |
| 0x0300002B | Fan alarm detected on PSU *arg1*.<br>*arg1* indicates the PSU slot No. | Impact: A PSU fan alarm is generated, and the PSU is about to fail. |

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| Event Code | Event Description | Impact/Suggestions |
| --- | --- | --- |
| 0x03000043 | PSU *arg1* is replaced from SN(*arg2*) to SN(*arg3*).<br>● *arg1* indicates the slot number of the PSU.<br>● *arg2* indicates the SN of the PSU before replacement.<br>● *arg3* indicates the SN of the PSU after replacement. | - |
| 0x04000001 | Fan *arg1* [*arg2*] installed.<br>● *arg1* indicates the slot No. of the fan module.<br>● *arg2* indicates the fan module location, for example, **rear** or **front**. | - |
| 0x04000003 | Fan *arg1* [*arg2*] removed.<br>● *arg1* indicates the slot No. of the fan module.<br>● *arg2* indicates the fan module location, for example, **rear** or **front**. | Impact: The fan redundancy is affected. |
| 0x05000015 | The disk backplane *arg1* is replaced from SN(*arg2*) to SN(*arg3*).<br>● *arg1* indicates the slot number of the disk backplane related to the alarm.<br>● *arg2* indicates the SN of the disk backplane before replacement.<br>● *arg3* indicates the SN of the disk backplane after replacement. | - |
| 0x0500001F | Failed to read the power of the *arg1* disk backplane.<br>*arg1* indicates the slot number of the disk backplane related to the alarm. | Impact: Failed to monitor the disk backplane power. |
| 0x06000001 | The RAID controller card *arg1* installed.<br>*arg1* indicates the slot No. of the RAID controller card. | - |

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| Event Code | Event Description | Impact/Suggestions |
| --- | --- | --- |
| 0x06000003 | The RAID controller card *arg1* removed.<br>*arg1* indicates the slot No. of the RAID controller card. | Impact: The services related to the RAID controller card will be interrupted. |
| 0x06000013 | *arg1* RAID card *arg2* BBU is absent.<br>● *arg1* indicates the slot No. of the RAID controller card.<br>● *arg2* indicates the location of the RAID controller card.<br>– FM: The RAID controller card is located in the front I/O module.<br>– CMN: The RAID controller card is located in the compute node in slot N. | Impact: The cache function of the RAID controller card fails.<br>Handling suggestions: Replace the BBU. |
| 0x06000015 | *arg2* RAID card *arg1* BBU is present.<br>● *arg1* indicates the slot No. of the RAID controller card.<br>● *arg2* indicates the location of the RAID controller card.<br>– FM: The RAID controller card is located in the front I/O module.<br>– CMN: The RAID controller card is located in the compute node in slot N. | - |

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| Event Code | Event Description | Impact/Suggestions |
| --- | --- | --- |
| 0x06000023 | The *arg1* RAID controller card *arg2* health status degradation detected by PFAE.<br>● *arg1* indicates the slot No. of the RAID controller card.<br>● *arg2* indicates the location of the RAID controller card.<br>– FM: The RAID controller card is located in the front I/O module.<br>– CMN: The RAID controller card is located in the compute node in slot N. | Impact: The system is still running properly, but the reliability is affected.<br>Handling suggestions:<br>1. Arrange planned maintenance. After the server is powered off, check whether the CPU or its socket is damaged or whether the CPU has poor contact with its socket.<br>2. Replace the faulty part and check whether the alarm is cleared.<br>3. Replace the mainboard. |
| 0x0600002B | RAID controller card *arg1* is replaced from SN(*arg2*) to SN(*arg3*).<br>● *arg1* indicates the slot number of the RAID controller card.<br>● *arg2* indicates the SN of the RAID controller card before replacement.<br>● *arg3* indicates the SN of the RAID controller card after replacement. | - |
| 0x06000031 | Faults are detected on the RAID controller card *arg1* and are rectified.<br>*arg1* indicates the slot number of the RAID controller card. | - |

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| Event Code | Event Description | Impact/Suggestions |
| --- | --- | --- |
| 0x08000019 | The [*arg1*] PCIe card *arg2* (*arg3*) starting *arg4*.<br>● *arg1* indicates the PCIe card location, for example, **front**, **inner**, or **rear**.<br>● *arg2* indicates the PCIe card slot No.<br>● *arg3* indicates the PCIe card type, for example, **M60 GPU**.<br>● *arg4* indicates the system startup phase, for example, **BIOS POST successful** or **OS load successful**. | - |
| 0x0800003D | The [*arg1*] PCIe card *arg2* (RAID) BBU is absent.<br>● *arg1* indicates the PCIe card location, for example, **front**, **inner**, or **rear**.<br>● *arg2* indicates the PCIe card slot No. | Impact: The cache function of the PCIe card fails.<br>Handling suggestions: Replace the BBU. |
| 0x0800003F | The [*arg1*] PCIe card *arg2* (RAID) BBU is present.<br>● *arg1* indicates the PCIe card location, for example, **front**, **inner**, or **rear**.<br>● *arg2* indicates the PCIe card slot No. | - |
| 0x08000047 | The [*arg1*] PCIe card *arg2* installed.<br>● *arg1* indicates the PCIe card location, for example, **front**, **inner**, or **rear**.<br>● *arg2* indicates the PCIe card slot No. | - |
| 0x08000049 | The [*arg1*] PCIe card *arg2* removed.<br>● *arg1* indicates the PCIe card location, for example, **front**, **inner**, or **rear**.<br>● *arg2* indicates the PCIe card slot No. | - |

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| Event Code | Event Description | Impact/Suggestions |
| --- | --- | --- |
| 0x0800005F | Recoverable errors are detected on *arg1* PCIe card *arg2* (*arg3*). Error code: *arg4*<br>● *arg1* indicates the PCIe card location, for example, **front**, **inner**, or **rear**.<br>● *arg2* indicates the PCIe card slot No.<br>● *arg3* indicates the PCIe card type, for example, **M60 GPU**.<br>● *arg4* indicates the error code. | - |
| 0x08000065 | *arg1 arg2* [*arg3*] health status degradation detected by PFAE.<br>● *arg1* indicates the PCIe card location, for example, **front**, **inner**, or **rear**.<br>● *arg2* indicates the PCIe card slot No.<br>● *arg3* indicates the PCIe card type, for example, **PCIe Card** or **SDI Card**. | Impact: The system reliability is affected.<br>Handling suggestions:<br>1. Arrange planned maintenance. After the server is powered off, check whether the CPU or its socket is damaged or whether the CPU has poor contact with its socket.<br>2. Replace the faulty part and check whether the alarm is cleared.<br>3. Replace the mainboard. |
| 0x08000071 | The *arg1* PCIe card *arg2* (*arg3*) *arg4* is absent.<br>● *arg1* indicates the device holding the PCIe card, for example, **GpuBoard** or **Riser**.<br>● *arg2* indicates the PCIe card slot No.<br>● *arg3* indicates the PCIe card type, for example, **NIC** or **SDI**.<br>● *arg4* indicates the device name, for example, **NetCard** or **TransformCard**. | - |

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| Event Code | Event Description | Impact/Suggestions |
| --- | --- | --- |
| 0x0800008F | The *arg1* PCIe card *arg2* (*arg3*) *arg4* chip was reset. [*arg5*] [*arg6*]<br>● *arg1* indicates the device holding the PCIe card, for example, **GpuBoard** or **Riser**.<br>● *arg2* indicates the PCIe card slot No.<br>● *arg3* indicates the PCIe card type, for example, **NIC** or **SDI**.<br>● *arg4* indicates the device name, for example, **NetCard** or **TransformCard**.<br>● *arg5* indicates the supplementary information about the alarm, for example, **Error Code**.<br>● *arg6* indicates the error code of the alarm, for example, **(7168)** or **(7177)**. | - |
| 0x08000099 | The *arg1* PCIe card *arg2* (*arg3*) link disconnected. [*arg4*]<br>● arg1 indicates the device holding the PCIe card, for example, **GpuBoard** or **Riser**.<br>● arg2 indicates the slot No. of the PCIe card.<br>● arg3 indicates the PCIe card type, for example,**NIC** or **FPGA**.<br>● arg4 indicates the fault description information, for example **Error Code.** | Impact: Affecting PCIe card-related service functions. |

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| Event Code | Event Description | Impact/Suggestions |
| --- | --- | --- |
| 0x080000BD | *arg1* is replaced from SN(*arg2*) to SN(*arg3*).<br>● *arg1* indicates the name of the PCIe card related to the alarm, for example, FPGA or NIC.<br>● *arg2* indicates the SN of the PCIe card before replacement.<br>● *arg3* indicates the SN of the PCIe card after replacement. | - |
| 0x0800010D | Faults are detected on the [*arg1*] PCIe card *arg2* (*arg3*) and are rectified.<br>● *arg1* indicates the location of the alarmed device.<br>● *arg2* indicates the slot No. of the alarmed device.<br>● *arg3* indicates the RAID. | - |
| 0x0B00001F | Mezzanine card *arg1* failed to obtain the WFR chip SVID value.<br>*arg1* indicates the mezzanine card slot No. | Impact: The mezzanine card performance deteriorates.<br>Handling suggestions:<br>1. Restart the iBMC.<br>2. Reseat the mezzanine card.<br>3. Replace the mezzanine card. |
| 0x0B000023 | Mezzanine card *arg1* health status degradation detected by PFAE (SN: *arg2*, BN: *arg3*).<br>● *arg1* indicates the mezzanine card slot No.<br>● *arg2* indicates the mezzanine card serial number.<br>● *arg3* indicates the BOM code.<br>**NOTE**<br>From iBMC V370, this alarm also includes the serial number and BOM code of the mezzanine card. | Impact: The system reliability is affected.<br>Handling suggestions:<br>1. Arrange planned maintenance. After the server is powered off, check whether the CPU or its socket is damaged or whether the CPU has poor contact with its socket.<br>2. Replace the faulty part and check whether the alarm is cleared.<br>3. Replace the mainboard. |

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| Event Code | Event Description | Impact/Suggestions |
| --- | --- | --- |
| 0x0B000025 | The mezzanine card *arg1* is not installed.<br>*arg1* indicates the mezzanine card slot No. | - |
| 0x0B000027 | Mezzanine card *arg1* is replaced from SN(*arg2*) to SN(*arg3*).<br>● *arg1* indicates the slot number of the mezzanine card related to the alarm.<br>● *arg2* indicates the SN of the mezzanine card before replacement.<br>● *arg3* indicates the SN of the mezzanine card after replacement. | - |
| 0x0D000007 | The NIC *arg1* health status degradation detected by PFAE.<br>*arg1* indicates the NIC slot No. | Impact: The system reliability is affected.<br>Handling suggestions:<br>1. Arrange planned maintenance. After the server is powered off, check whether the CPU or its socket is damaged or whether the CPU has poor contact with its socket.<br>2. Replace the faulty part and check whether the alarm is cleared.<br>3. Replace the mainboard. |
| 0x0D000015 | The NIC *arg1* is replaced from SN(*arg2*) to SN(*arg3*).<br>● *arg1* indicates the slot number of the NIC.<br>● *arg2* indicates the SN of the NIC before replacement.<br>● *arg3* indicates the SN of the NIC after replacement. | - |

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| Event Code | Event Description | Impact/Suggestions |
| --- | --- | --- |
| 0x0E000015 | The memory board *arg1* controller chip *arg2* triggered a correctable error.<br>● *arg1* indicates the name of the memory board. For example, **MemBoard1**.<br>● *arg2* indicates the name of the MXC chip. For example, **MXC1 chip**. | Suggestions:<br>1. Perform maintenance according to the maintenance plan as soon as possible. Power off the server, and check whether the component and its slot are damaged or of poor contact.<br>2. Replace the component and check whether the fault is rectified. |
| 0x0E00000B | Failed to obtain the *arg1* power.<br>*arg1* indicates the name of the memory board. For example, **MemBoard1**. | Impact: The memory board power cannot be monitored. |
| 0x0F000001 | PCIe riser card *arg1* installed.<br>*arg1* indicates the slot No. of the PCIe riser card. | - |
| 0x0F000003 | PCIe riser card *arg1* removed.<br>*arg1* indicates the slot No. of the PCIe riser card. | Impact: The services related to the PCIe card will be interrupted. |
| 0x0F000019 | Riser Card *arg1* is replaced from SN(*arg2*) to SN(*arg3*).<br>● *arg1* indicates the slot number of the riser card related to the alarm.<br>● *arg2* indicates the SN of the riser card before replacement.<br>● *arg3* indicates the SN of the riser card after replacement. | - |
| 0x1000004B | The mainboard is not installed. | - |
| 0x1000004D | The mainboard is installed but not powered on. | - |
| 0x1000004F | The mainboard requests power-on. | - |
| 0x10000051 | The mainboard is being powered on. | - |
| 0x10000053 | The mainboard is powered on. | - |

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| Event Code | Event Description | Impact/Suggestions |
| --- | --- | --- |
| 0x10000055 | The mainboard requests power-off. | - |
| 0x10000057 | The mainboard is being powered off. | - |
| 0x100000C3 | Failed to obtain the RTC Time on the mainboard. | Impact: The log time on the iBMC is inaccurate.<br>Suggestions:<br>1. Restart the iBMC.<br>2. Replace the RTC battery.<br>3. If the problem persists, replace the mainboard. |
| 0x100000CD | The LOM [*arg1*] health status degradation detected by PFAE.<br>*arg1* indicates the LOM slot No. | Impact: The system reliability is affected.<br>Handling suggestions:<br>1. Arrange planned maintenance. After the server is powered off, check whether the CPU or its socket is damaged or whether the CPU has poor contact with its socket.<br>2. Replace the faulty part and check whether the alarm is cleared. |
| 0x11000001 | LCD installed. | - |
| 0x11000003 | LCD removed. | - |
| 0x12000005 | Chassis cover opened. | Impact: If the cover is open, the heat dissipation of the chassis is affected, which will trigger the fans running at full speed and generating loud noise, and the server components cannot be properly protected.<br>Handling suggestions: Close the chassis cover. |
| 0x12000007 | Chassis cover closed. | - |

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| Event Code | Event Description | Impact/Suggestions |
| --- | --- | --- |
| 0x1200001B | The system operating temperature exceeds the short-term temperature range. | Impact: If this alarm is not handled in time, the server stability and service life will be affected.<br>Handling suggestions:<br>1. Check whether the equipment room temperature exceeds the normal range.<br>2. Check whether the server air inlet is blocked. |
| 0x12000025 | The leakage detection card *arg1* is present.<br>*arg1* indicates the location of the leakage detection card. | - |
| 0x12000029 | The leakage detection card *arg1* is absent.<br>*arg1* indicates the location of the leakage detection card. | Impact: The liquid cooling device cannot report alarms when leakage occurs. |
| 0x1200002D | The chassis cover is open while the AC power is off. | Impact: Components may have been replaced. |
| 0x17000009 | *arg1* changes to the active state.<br>*arg1* indicates the HMM name and No., for example, **HMM1** or **HMM2**. | Impact: The active/standby status of the HMM changes.<br>Handling suggestions:<br>1. Check whether the user performed a switchover. If yes, no further action is required.<br>2. Check whether the user restarted the active management module. If yes, no further action is required.<br>3. Check for critical alarm of the management module, and clear the alarm. |

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| Event Code | Event Description | Impact/Suggestions |
| --- | --- | --- |
| 0x18000005 | Fan backplane *arg1* is replaced from SN(*arg2*) to SN(*arg3*).<br>● *arg1* indicates the slot number of the fan backplane related to the alarm.<br>● *arg2* indicates the SN of the fan backplane before replacement.<br>● *arg3* indicates the SN of the fan backplane after replacement. | - |
| 0x1800000D | Failed to obtain the fan total power. | Impact: Unable to monitor the overall fan power.<br>Suggestion: Replace the fan backplane. |
| 0x1A000009 | The board port configuration has changed, or the BIOS fails to obtain the stateless computing configuration. Restart the server. | Impact: The stateless computing profile cannot take effect.<br>Handling suggestions: Restart the server. |
| 0x1A00000B | *arg1* changed.<br>*arg1* indicates the SDR or FR information, iBMC or BIOS version. | - |
| 0x1A00000D | iBMC is restarted after AC power supply is restored. | After the AC power supply is restored and the iBMC is started, existing alarms are cleared and no clearing event will be generated. |
| 0x1A00000F | iBMC event records are cleared. | - |
| 0x1A000011 | iBMC event record has reached 90% space capacity. | Impact: If this alarm is not handled in time, the event records will overflow.<br>Handling suggestions: Clear event records. |

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| Event Code | Event Description | Impact/Suggestions |
| --- | --- | --- |
| 0x1A00001B | iBMC operation log has reached 90% space capacity. | Impact: If this alarm is not handled in time, the operation logs will overflow and some historical operation logs may be lost.<br>Handling suggestions:<br>1. Export the operation logs.<br>2. Enable the remote syslog dumping function. |
| 0x1A00001D | iBMC security log has reached 90% space capacity. | Impact: If this alarm is not handled in time, the security logs will overflow and some historical security logs may be lost.<br>Handling suggestions:<br>1. Export the security logs.<br>2. Enable the remote syslog dumping function. |
| 0x1A000021 | iBMC is reset and started. | - |
| 0x1A000023 | *arg1* certificate is about to expire or has expired.<br>*arg1* indicates the certificate type.<br>**NOTE**<br>In iBMC V370 and later versions, the alarm severity is **Minor**. In other versions, the alarm severity is **Normal**. | Handling suggestions: Import a new certificate. |
| 0x1A000025 | Heartbeat signals between the iBMC and the system management software (iBMA) are lost. | Impact: The in-band management and monitoring information cannot be obtained or updated on a realtime basis.<br>Handling suggestions: Reinstall the iBMA. |
| 0x1A000029 | iBMC time is stepped by more than *arg1* minutes.<br>*arg1* indicates the time stepped. | Impact: The iBMC log time is inaccurate.<br>Handling suggestions: Restart the iBMC. |

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| Event Code | Event Description | Impact/Suggestions |
| --- | --- | --- |
| 0x1A00002B | iBMC failed to synchronize time with the NTP server.<br>**NOTE**<br>The event code of this alarm is 0x1A000031 in versions earlier than iBMC V256 and 0x1A00002B in iBMC V256 or later. | Impact: The iBMC system time is inaccurate.<br>Handling suggestions:<br>1. Check whether the NTP server is configured correctly.<br>2. Check whether the communication between the iBMC and the NTP server is normal.<br>3. Restart the NTP service of the iBMC. |
| 0x1A000039 | The iBMC license enters the grace period and can still be used. It will expire in *arg1* days.<br>*arg1* indicates the remaining days in the grace period. | Impact: Advanced features of the iBMC cannot be implemented.<br>Handling suggestions:<br>1. Install a valid license.<br>2. Delete the current license. |
| 0x1A00003B | The iBMC license has expired. | Impact: Advanced features of the iBMC cannot be implemented.<br>Handling suggestions:<br>1. Install a valid license.<br>2. Delete the current license. |
| 0x1A000049 | Insecure protocol *arg1* is enabled in the system.<br>*arg1* indicates the protocol description. Example: **TLS1.0**<br>**NOTE**<br>For iBMC versions earlier than V3.07.00.31, the severity of this alarm is **minor**. | Impact: Insecure protocols bring security risks to the system.<br>Suggestion: Disable insecure cryptographic algorithm according to the Redfish API Description or User Guide. |
| 0x1A00004B | iBMC event record space usage has reached 100%. | - |
| 0x1A00004F | The active and standby partitions of the BMC are upgraded synchronously. | - |
| 0x1A000055 | *arg1* upgrade started.<br>*arg1* indicates the firmware name and version. | - |

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| Event Code | Event Description | Impact/Suggestions |
| --- | --- | --- |
| 0x1A000057 | *arg1* upgrade failed.<br>*arg1* indicates the firmware name and version. | - |
| 0x1A000061 | The account of BMC user *arg1* is locked. The ID of the BMC user *arg1* is *arg2*.<br>*arg1* indicates the user name.<br>*arg2* indicates the user id. | Impact: The BMC user cannot log in to BMC.<br>Handling suggestions: Try again after the account is unlocked. |
| 0x1D000001 | The Base plane of the switch module is not installed. | - |
| 0x1D000003 | The Base plane of the switch module is installed but powered off. | - |
| 0x1D000005 | The Base plane of the switch module requests power-on. | - |
| 0x1D000007 | The Base plane of the switch module is being powered on. | - |
| 0x1D000009 | The Base plane of the switch module is powered on. | - |
| 0x1D00000B | The Base plane of the switch module requests power-off. | - |
| 0x1D00000D | The Base plane of the switch module is being powered off. | - |
| 0x1D00002D | The Base plane of the switch module restarted. | Impact: The switching services will be interrupted. |
| 0x1E000017 | The Fabric plane of the switch module is not installed. | - |
| 0x1E000019 | The Fabric plane of the switch module is installed but powered off. | - |
| 0x1E00001B | The Fabric plane of the switch module requests power-on. | - |
| 0x1E00001D | The Fabric plane of the switch module is being powered on. | - |
| 0x1E00001F | The Fabric plane of the switch module is powered on. | - |
| 0x1E000021 | The Fabric plane of the switch module requests power-off. | - |

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| Event Code | Event Description | Impact/Suggestions |
| --- | --- | --- |
| 0x1E000023 | The Fabric plane of the switch module is being powered off. | - |
| 0x1E00003F | The Fabric plane of the switch module restarted. | Impact: The switching services will be interrupted. |
| 0x1E000041 | Failed to obtain the switch chip SVID value for the Fabric plane. | Impact: The Fabric plane performance is affected.<br>Handling suggestions:<br>1. Restart the iBMC.<br>2. Reseat the switch module.<br>3. Replace the switch module. |
| 0x1F000023 | The switch mezzanine card *arg1* is not installed.<br>*arg1* indicates the mezzanine card slot No. | - |
| 0x1F000025 | The switch mezzanine card *arg1* is installed but not powered on.<br>*arg1* indicates the mezzanine card slot No. | - |
| 0x1F000027 | The switch mezzanine card *arg1* requests power-on.<br>*arg1* indicates the mezzanine card slot No. | - |
| 0x1F000029 | The switch mezzanine card *arg1* is being powered on.<br>*arg1* indicates the mezzanine card slot No. | - |
| 0x1F00002B | The switch mezzanine card *arg1* is powered on.<br>*arg1* indicates the mezzanine card slot No. | - |
| 0x1F00002D | The switch mezzanine card *arg1* requests power-off.<br>*arg1* indicates the mezzanine card slot No. | - |
| 0x1F00002F | The switch mezzanine card *arg1* is being powered off.<br>*arg1* indicates the mezzanine card slot No. | - |

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| Event Code | Event Description | Impact/Suggestions |
| --- | --- | --- |
| 0x21000001 | SD card *arg1* installed.<br>*arg1* indicates the SD card slot No. | - |
| 0x21000003 | SD card *arg1* removed.<br>*arg1* indicates the SD card slot No. | Impact: The server storage capacity is reduced. |
| 0x21000007 | Data rebuild starts at SD card *arg1*.<br>*arg1* indicates the SD card slot No. | - |
| 0x21000009 | Data rebuild at SD card *arg1* is complete.<br>*arg1* indicates the SD card slot No. | - |
| 0x2300002B | IO board (BIO*arg1*) installed.<br>*arg1* indicates the I/O board slot No. | - |
| 0x2300002D | IO board (BIO*arg1*) removed.<br>*arg1* indicates the I/O board slot No. | - |
| 0x2300003D | IO Board *arg1* is replaced from SN(*arg2*) to SN(*arg3*).<br>● *arg1* indicates the slot number of the IO Board related to the alarm.<br>● *arg2* indicates the SN of the IO Board before replacement.<br>● *arg3* indicates the SN of the IO Board after replacement. | - |
| 0x2400000B | CPU Board *arg1* is replaced from SN(*arg2*) to SN(*arg3*).<br>● *arg1* indicates the slot number of the CPU board related to the alarm.<br>● *arg2* indicates the SN of the CPU board before replacement.<br>● *arg3* indicates the SN of the CPU board after replacement. | - |

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| Event Code | Event Description | Impact/Suggestions |
| --- | --- | --- |
| 0x27000021 | The PCH PVNN voltage (*arg1* V) is lower than the undervoltage threshold (*arg2* V).<br>● *arg1* indicates the Current reading of the sensor.<br>● *arg2* indicates the Alarm threshold. | Impact: The system reliability is affected. |
| 0x27000023 | The PCH PVNN voltage (*arg1* V) exceeds the overvoltage threshold (*arg2* V).<br>● *arg1* indicates the Current reading of the sensor.<br>● *arg2* indicates the Alarm threshold. | Impact: The system reliability is affected. |
| 0x27000033 | PCH health status degradation detected by PFAE. | Impact: The system reliability is affected.<br>Handling suggestions:<br>1. Arrange planned maintenance. After the server is powered off, check whether the mainboard is damaged.<br>2. Replace the mainboard and check whether the alarm is cleared. |
| 0x28000015 | CPU *arg1* QPI/UPI *arg2* link health status degradation detected by PFAE.<br>● *arg1* indicates the CPU No.<br>● arg2 indicates the QPI/UPI channel No. | Impact: The system reliability is affected.<br>Handling suggestions:<br>1. Arrange planned maintenance. After the server is powered off, check whether the CPU or its socket is damaged or whether the CPU has poor contact with its socket.<br>2. Replace the faulty part and check whether the alarm is cleared.<br>3. Replace the mainboard. |

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| Event Code | Event Description | Impact/Suggestions |
| --- | --- | --- |
| 0x29000001 | *arg1* [*arg2*] port*arg3* disconnected.<br>● *arg1* indicates the NIC status.<br>– NIC *N*: Ethernet NIC *N* (*N* indicates the slot No.)<br>– PCIe Card *N*: standard PCIe NIC *N* (*N* indicates the slot No.)<br>– LOM: LAN on motherboard.<br>● *arg2* indicates the NIC type, for example, **(NIC)** or **(FC)**.<br>● *arg3* indicates the network port No. | Impact: The network port services will be interrupted.<br>Handling suggestions:<br>1. Remove and reconnect the network cable.<br>2. Check whether the network cable is properly connected to the peer device.<br>3. Check whether the peer device is operating properly. |
| 0x29000005 | *arg1* installed.<br>*arg1* indicates the port in which the optical module or cable is installed. | - |
| 0x29000007 | *arg1* removed.<br>*arg1* indicates the port in which the optical module or cable is installed. | - |
| 0x2B000003 | *arg1*<br>*arg1* indicates Alarm message:<br>● RAID card (RAID Card1) PHY0 bit error increased too fast.<br>● RAID card (RAID Card1) expander 1 PHY0 bit error increased too fast. | Impact: The performance of the drive connected to the corresponding slot may deteriorate, or the drive may even become offline.<br>Handling suggestions:<br>1. If an expander backplane is used, replace the cables, RAID controller card, and backplane in sequence.<br>2. If a pass-through backplane is used, replace the cables, drives, RAID controller card, and backplane in sequence. |

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| Event Code | Event Description | Impact/Suggestions |
| --- | --- | --- |
| 0x2C000001 | The CPU usage (*arg1*) exceeds the threshold (*arg2*).<br>● *arg1* indicates the current CPU usage.<br>● *arg2* indicates the CPU usage threshold. | Impact: The system performance is affected.<br>Handling suggestions:<br>1. Check whether the CPU usage threshold is set improperly (too low).<br>2. Stop services to release CPU resources. |
| 0x2C000003 | The memory usage (*arg1*) exceeds the threshold (*arg2*).<br>● *arg1* indicates the current memory usage.<br>● *arg2* indicates the memory usage threshold. | Impact: The system performance is affected.<br>Handling suggestions:<br>1. Check whether the memory usage threshold is set improperly (too low).<br>2. Stop services to release memory resources. |
| 0x2C000009 | ACPI is in the working state. | - |
| 0x2C00000B | ACPI is in the soft-off state. | Impact: The server fails to power on. |
| 0x2C00000F | The host was restarted due to unrecognized reason. | Impact: Services running on the server will be interrupted. |
| 0x2C000011 | The host was restarted by command. | Impact: Services running on the server will be interrupted. |
| 0x2C000013 | The host was restarted by power button. | Impact: Services running on the server will be interrupted. |
| 0x2C000015 | The host was restarted due to watchdog timeout. | Impact: Services running on the server will be interrupted. |
| 0x2C000017 | The host is restarted after being powered on (Power strategy is "Turn On"). | Impact: Services running on the server will be interrupted. |
| 0x2C000019 | The host is restarted after being powered on (Power strategy is "Restore Previous State"). | Impact: Services running on the server will be interrupted. |
| 0x2C00001B | The OS cannot start without a boot device. | Impact: The server OS fails to start. |
| 0x2C00001D | The OS cannot start without a bootable disk. | Impact: The server OS fails to start. |

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| Event Code | Event Description | Impact/Suggestions |
| --- | --- | --- |
| 0x2C00001F | The OS cannot start because the PXE service is unavailable. | Impact: The server OS fails to start. |
| 0x2C000021 | The OS cannot start due to the invalid boot partition. | Impact: The server OS fails to start. |
| 0x2C000023 | The watchdog(*arg1*) timed out.<br>*arg1* indicates the watch dog type, which can be **BIOS FRB2**, **BIOS/POST**, **OS Load**, **SMS/OS**, or **OEM**. | - |
| 0x2C00002D | Power capping failed. | Impact: The server automatically powers off, which interrupts services.<br>Handling suggestions:<br>1. Check whether the mains supply meets power consumption requirements of the server. If no, adjust the power supply.<br>2. Increase the power cap value. |
| 0x2C00002F | The server system crashes or is abnormally reset. | Impact: The server OS is abnormal, and related services are interrupted.<br>Handling suggestions:<br>1. Collect iBMC and OS logs.<br>2. Contact technical support engineer. |
| 0x2C000033 | The OS cannot start due to the boot file not found. | Impact: The OS cannot start.<br>Suggestion: Try to reinstall the OS. |
| 0x2C000035 | The boot file is available but invalid. As a result, the OS cannot start. | Impact: The OS cannot start.<br>Suggestion: Try to reinstall the OS. |

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| Event Code | Event Description | Impact/Suggestions |
| --- | --- | --- |
| 0x2C000051 | *arg1 arg2 arg3 arg4* memory initialization error. Error code: 0x*arg5*.<br>● *arg1* indicates the Slot number of the memory board.<br>● *arg2* indicates the DIMM silkscreen or CPU socket number and memory channel No.<br>● *arg3* indicates the error code of the alarm.<br>● *arg4* indicates the Memory serial number.<br>● *arg5* indicates the BOM code. | Impact: The server performance is affected, or the server fails to start. |
| 0x2C000053 | The hard disk partition (*arg1*) usage (*arg2*) exceeds the threshold (*arg3*).<br>● *arg1* indicates the disk partition No.<br>● *arg2* indicates the current disk partition usage.<br>● *arg3* indicates the disk partition usage threshold. | Impact: The system performance is affected.<br>Handling suggestions:<br>1. Check whether the disk partition usage threshold is set improperly (too low).<br>2. Clear disk partition to release resources. |
| 0x2C000059 | System power is abnormal, reading value:*arg1*,threshold value:*arg2*.<br>● *arg1* indicates the Current reading of the sensor.<br>● *arg2* indicates the Alarm threshold. | Impact: The management software cannot correctly report the total system power consumption in real time.<br>Handling suggestions:<br>1.Restart the iBMC.<br>2.Replace the PSU. |

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| Event Code | Event Description | Impact/Suggestions |
| --- | --- | --- |
| 0x2C000061 | Network *arg1* [*arg2*] *arg3* bandwidth usage (*arg4*) exceeds the threshold (*arg5*).<br>● *arg1* indicates the NIC status.<br>– NIC *N*: Ethernet NIC *N* (*N* indicates the slot No.)<br>– PCIe Card *N*: standard PCIe NIC *N* (*N* indicates the slot No.)<br>– LOM: LAN on motherboard.<br>● *arg2* indicates the NIC type, for example, **(NIC)** or **(FC)**.<br>● *arg3* indicates the network port No.<br>● *arg4* indicates the current bandwidth.<br>● *arg5* indicates the bandwidth threshold. | Impact: The packet loss rate of the NIC port increases, and the communication quality deteriorates.<br>Handling suggestions:<br>1. Check for and stop the services that cause abnormal packet transmission.<br>2. Replace the NIC with a NIC that provides higher bandwidth.<br>3. Check for network storm. |
| 0x2C000063 | The host was restarted by BMC *arg1*.<br>*arg1* indicates the cause of the restart, for example, "due to an IERR diagnosis failure" or "due to PCIe switch or retimer upgrade". | Impact: Services will be interrupted.<br>Handling suggestions: Restart the iBMC as soon as possible. |
| 0x2C000077 | The intelligent energy saving configuration is canceled because the maximum CPU usage of the logical cores exceeds the threshold(*arg1*).<br>*arg1* indicates the alarm threshold. | Impact: The power consumption cannot be reduced if the server running normally is not working in energy-saving mode. |
| 0x2C000085 | After the AC is powered on, the host is restarted because the SP information collection is completed. | - |
| 0x2C00008F | The mainboard is powered on. | - |
| 0x2C000091 | The system starts from a cold reset. | The OS restarts, which may interrupt the server services. |
| 0x2C000093 | The system starts from a warm reset. | The OS restarts, which may interrupt the server services. |

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| Event Code | Event Description | Impact/Suggestions |
| --- | --- | --- |
| 0x2C000095 | The user requests a PXE boot. | - |
| 0x2C000097 | The OS is shut down normally. | - |
| 0x2C0000A3 | BIOS boot up. | - |
| 0x2C0000A7 | BIOS boot completed, boot device not specified. | - |
| 0x2C0000AD | Power capping was triggered. | Impact: The system can work properly, but the performance is degraded. |
| 0x2D00002F | Expand board *arg1* is replaced from SN(*arg2*) to SN(*arg3*).<br>● *arg1* indicates the slot number of the expand board related to the alarm.<br>● *arg2* indicates the SN of the expand board before replacement.<br>● *arg3* indicates the SN of the expand board after replacement. | - |
| 0x30000015 | PIC card *arg1* installed.<br>*arg1* indicates the flexible NIC No. | - |
| 0x30000017 | PIC card *arg1* removed.<br>*arg1* indicates the flexible NIC No. | - |
| 0x31000001 | The power button on the panel is pressed. | Impact: The server will be powered off. |
| 0x31000003 | The UID button on the panel is pressed. | - |
| 0x31000005 | The PCIe card *arg1* hot swap button is pressed.<br>*arg1* indicates PCIe card No. | - |
| 0x31000007 | BMC was reset after the UID button on the panel was pressed and held down. | - |
| 0x31000009 | *arg1* was reset after the RST button was pressed and held down.<br>*arg1* indicates the name of the system. | Impact: The system was reset. |

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| Event Code | Event Description | Impact/Suggestions |
| --- | --- | --- |
| 0x3E000021 | *arg1 arg2 arg3* health status degradation detected by PFAE.<br>● *arg1* indicates the location of the PCIe Switch.<br>● *arg2* indicates the silkscreen of the PCIe Switch.<br>● *arg3* indicates the models of the PCIe Switch. | Impact: The PCIe Switch may run unstably, and the system may stop responding.<br>Suggestion:<br>1. Perform maintenance according to the maintenance plan as soon as possible. Power off the server, and check whether the component is damaged.<br>2. Replace the component and check whether the fault is rectified. |
| 0x40000013 | GPU carrier board*arg1* installed.<br>*arg1* indicates the slot No. of the GPU carrier board. | - |
| 0x40000015 | GPU carrier board*arg1* removed.<br>*arg1* indicates the slot No. of the GPU carrier board. | - |
| 0x4000001B | Frequency offset detected on *arg1* of GPU carrier board *arg2*<br>● *arg1* indicates the clock type, for example, **DB1901_1 100MHz**.<br>● *arg2* indicates the GPU card slot No. | - |
| 0x40000027 | GPU board *arg1* is replaced from SN(*arg2*) to SN(*arg3*).<br>● *arg1* indicates the slot number of the GPU Board related to the alarm.<br>● *arg2* indicates the SN of the GPU Board before replacement.<br>● *arg3* indicates the SN of the GPU Board after replacement. | - |
| 0x41000001 | Hard disk drawer closed. | - |
| 0x41000003 | Hard disk drawer opened. | - |

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| Event Code | Event Description | Impact/Suggestions |
| --- | --- | --- |
| 0x43000001 | The pass-through card *arg1* installed.<br>*arg1* indicates the pass-through module No. | - |
| 0x43000003 | The pass-through card *arg1* removed.<br>*arg1* indicates the pass-through module No. | - |
| 0x4500000B | Failed to access I2C *arg2* on *arg1arg3*.<br>● *arg1* indicates the board holding the I2C device related to the alarm, for example, EIUA and OIUA.<br>● *arg2* indicates the location of the I2C device related to the alarm, for example, PCA9555 and Eeprom.<br>● *arg3* indicates the slot where the I2C device related to the alarm is located, for example, 1 or 3. | Impact: The iBMC may fail to monitor the component status.<br>Suggestion:<br>1. If a cable needs to be connected with the component holding the I2C device, check whether the cable is connected or faulty.<br>2. Replace the component holding the I2C device or the component connected with the cable. |

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| Event Code | Event Description | Impact/Suggestions |
| --- | --- | --- |
| 0x5300000B | The [*arg1*] *arg2* [*arg3*] health status degradation detected by PFAE (SN:*arg4*, BN:*arg5*).<br>● *arg1* indicates the location of the alarmed OCP card, for example, **OCP Card 1(MCX565M-CDAB)**.<br>● *arg2* indicates the location of the alarmed OCP card, for example, **OCP Card 2(MCX565M-CDAB)**.<br>● *arg3* indicates the OCP card location, for example, **OCP Card 3(MCX565M-CDAB)**.<br>● *arg4* indicates the serial number of the OCP card.<br>● *arg5* indicates the BOM code of the OCP card.<br>**NOTE**<br>From iBMC V3.07.00.57, the OCP card alarms will also include the SN and BOM code. | OCP hardware component CE hard failure.<br>Impact: The system is still running properly, but the reliability is reduced.<br>Suggestion:<br>1. Perform maintenance according to the maintenance plan as soon as possible. Power off the server, and check whether the component and its slot are damaged or of poor contact.<br>2. Power off the device, remove and reinstall the device, and power on and observing.<br>3. Replace the component and check whether the alarm is cleared. |
| 0x5300000F | The *arg1* OCP card *arg2*(*arg3*) is powered on (SN:*arg4*, BN:*arg5*).<br>● *arg1* indicates the location of the alarmed OCP card, for example, **Riser**.<br>● *arg2* indicates the slot No. of the alarmed OCP card, for example, **1**.<br>● *arg3* indicates the name of the alarmed OCP card, for example, **SC382**.<br>● *arg4* indicates the serial number of the OCP card.<br>● *arg5* indicates the BOM code of the OCP card.<br>**NOTE**<br>From iBMC V3.07.00.57, the OCP card alarms will also include the SN and BOM code. | - |

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| Event Code | Event Description | Impact/Suggestions |
| --- | --- | --- |
| 0x53000011 | The *arg1* OCP card *arg2*(*arg3*) is powered off (SN:*arg4*, BN:*arg5*).<br>● *arg1* indicates the location of the alarmed OCP card, for example, **Riser**.<br>● *arg2* indicates the slot No. of the alarmed OCP card, for example, **1**.<br>● *arg3* indicates the name of the alarmed OCP card, for example, **SC382**.<br>● *arg4* indicates the serial number of the OCP card.<br>● *arg5* indicates the BOM code of the OCP card.<br>**NOTE**<br>From iBMC V3.07.00.57, the OCP card alarms will also include the SN and BOM code. | - |
| 0x53000013 | The OCP card *arg1* is replaced from SN(*arg2*) to SN(*arg3*) (SN:*arg4*, BN:*arg5*).<br>● *arg1* indicates the slot number of the OCP card related to the alarm.<br>● *arg2* indicates the SN of the OCP card before replacement.<br>● *arg3* indicates the SN of the OCP card after replacement.<br>● *arg4* indicates the serial number of the OCP card.<br>● *arg5* indicates the BOM code of the OCP card.<br>**NOTE**<br>From iBMC V3.07.00.57, the OCP card alarms will also include the SN and BOM code. | - |

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| Event Code | Event Description | Impact/Suggestions |
| --- | --- | --- |
| 0x5B000003 | *arg1 arg2 arg3* health status degradation detected by PFAE.<br>● *arg1* indicates the location of the GPU.<br>● *arg2* indicates the silkscreen of the GPU.<br>● *arg3* indicates the models of the GPU. | Impact: The GPU may run unstably, and the system may stop responding.<br>Suggestion:<br>1. Perform maintenance according to the maintenance plan as soon as possible. Power off the server, and check whether the component is damaged.<br>2. Replace the component and check whether the fault is rectified. |
| 0x5B000007 | *arg1 arg2 arg3* memory correctable ECC.<br>● *arg1* indicates the type of the component. For example, **PCIe card** or **AI module**.<br>● *arg2* indicates the silkscreen name. For example, **GPU1**.<br>● *arg3* indicates the type of the memory. For example, **SRAM** or **DRAM**. | Impact: The GPU may run unstably.<br>Suggestion:<br>1. Power off and then power on the OS. Then check whether the alarm is cleared.<br>2. Replace the GPU. Then check whether the alarm is cleared. |
| 0x5B00000D | *arg1 arg2* DRAM row-remapping pending.<br>● *arg1* indicates the type of the component. For example, **AI module**.<br>● *arg2* indicates the silkscreen name. For example, **GPU1**.<br>**NOTE**<br>This alarm is supported on H series AI modules and the firmware package version is 1.4.0 or later. | Impact: The GPU is in a sub-healthy state and performance may be affected.<br>Suggestion: Power off and then power on the OS. Then check whether the alarm is cleared. |

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| Event Code | Event Description | Impact/Suggestions |
| --- | --- | --- |
| 0x5B000011 | *arg1 arg2* DRAM has row-remapping redundant rows of banks exhausted.<br>● *arg1* indicates the type of the component. For example, **AI module**.<br>● *arg2* indicates the silkscreen name. For example, **GPU1**.<br>**NOTE**<br>This alarm is supported on H series AI modules and the firmware package version is 1.4.0 or later. | Impact: Does not affect GPU usage. After row-remapping is triggered again on this bank, the GPU may be unavailable.<br>Suggestion: Observe the node. |
| 0x5C000003 | *arg1 arg2 arg3* health status degradation detected by PFAE.<br>● *arg1* indicates the location of the NVSwitch.<br>● *arg2* indicates the silkscreen of the NVSwitch.<br>● *arg3* indicates the models of the NVSwitch. | Impact: The NVSwitch may run unstably, and the system may stop responding.<br>Suggestion:<br>1. Perform maintenance according to the maintenance plan as soon as possible. Power off the server, and check whether the component is damaged.<br>2. Replace the component and check whether the fault is rectified. |
| 0x5D00000D | *arg1* generates sideband signal *arg2*.<br>● *arg1* indicates the name of the module.<br>● *arg2* indicates the name of the sideband signal. | Impact: The AI module may run unstably, and the system may stop responding. |
| 0x5D000057 | [AI Module]NPU*arg1* on *arg2arg3* health status degradation detected by PFAE. | Impact: Services may fail to start or run abnormally.<br>Suggestion:<br>1. Schedule maintenance as soon as possible. After powering off the server, check whether the component and its slot are damaged or in poor contact.<br>2. Replace the alarmed NPU board. |

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| Event Code | Event Description | Impact/Suggestions |
| --- | --- | --- |
| 0x5D000059 | [AI Module]*arg1* Board *arg2* health status degradation detected by PFAE.<br>● *arg1* indicates the name of the alarmed board. For example, **NPU**.<br>● *arg2* indicates the slot No. of the alarmed board. For example, **1**. | Impact: Services may fail to start or run abnormally.<br>Suggestion:<br>1. Schedule maintenance as soon as possible. After powering off the server, check whether the component and its slot are damaged or in poor contact.<br>2. Replace the alarmed board. |
| 0x5D000061 | [AI Module]The NIC *arg1* health status degradation detected by PFAE.<br>*arg1* indicates the slot No. of the alarmed NIC. | Impact: Services may fail to start or run abnormally.<br>Suggestion:<br>1. Perform maintenance according to the maintenance plan as soon as possible. Power off the server, and check whether the component and its slot are damaged or of poor contact.<br>2. Replace the component and check whether the fault is rectified. |
| 0x5D000069 | [AI Module]The historical ECC count of NPU Board*arg1* NPU*arg2* reaches the threshold.<br>● *arg1* indicates the slot No. of the alarmed NPU board.<br>● *arg2* indicates the slot No. of the alarmed NPU. | Impact: The NPU function may be affected. |

# 2.12 Appendix

## 2.12.1 Reference Information for Server Power-On Timeout or Abnormal Power Off

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### 2.12.1.1 V5 servers

**Table 2-6** Reference information

| Power supply subsystem name | Possible Component |
| --- | --- |
| STBY_5V0 | ● Mainboard<br>● LCD |
| STBY_1V8_PCH | Mainboard |
| STBY_1V05_PCH | Mainboard |
| STBY_0V83_X557 | Mainboard |
| STBY_1V2_X557 | Mainboard |
| STBY_2V1_X557 | Mainboard |
| STBY_2V5_X557 | Mainboard |
| V_VCC_12V0_0 | Mainboard |
| V_VCC_12V0_1 | ● Mainboard<br>● Fan<br>● CPU<br>● DIMM |
| V_VCC_12V0_2 | ● Mainboard/CPU daughter board<br>● CPU<br>● Disk backplane<br>● RAID controller card<br>● Riser card<br>● Drive |
| V_VCC_12V0_3 | ● Mainboard<br>● Disk backplane<br>● RAID controller card<br>● Riser card |
| V_VCC_12V0_4 | FAN |
| V_VCC_12V0_5 | Mainboard |
| V_VCC_12V0_6 | Mainboard |
| V_VCC_12V0_7 | Mainboard |
| V_VCC_12V0_8 | Mainboard |
| V_VCC_5V0 | ● Mainboard<br>● USB device |

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| Power supply subsystem name | Possible Component |
| --- | --- |
| V_VCC_3V3 | • Mainboard<br>• RAID controller card<br>• Riser card<br>• DIMM |
| V_VCCIN_CPU*N*<br>**NOTE**<br>*N* indicates the Socket No. of the CPU. | • Mainboard/CPU daughter board<br>**NOTE**<br>When *N* is set to **3** or **4**, the object of this alarm is the CPU daughter board. For other servers, the alarm object is the mainboard.<br>• CPU |
| V_VSA_CPU*N*<br>**NOTE**<br>*N* indicates the Socket No. of the CPU. | • Mainboard/CPU daughter board<br>**NOTE**<br>When *N* is set to **3** or **4**, the object of this alarm is the CPU daughter board. For other servers, the alarm object is the mainboard.<br>• CPU |
| V_VCCIO_CPU*N*<br>**NOTE**<br>*N* indicates the Socket No. of the CPU. | • Mainboard/CPU daughter board<br>**NOTE**<br>When *N* is set to **3** or **4**, the object of this alarm is the CPU daughter board. For other servers, the alarm object is the mainboard.<br>• CPU |
| V_VMCP_CPU*N*<br>**NOTE**<br>*N* indicates the Socket No. of the CPU. | • Mainboard/CPU daughter board<br>**NOTE**<br>When *N* is set to **3** or **4**, the object of this alarm is the CPU daughter board. For other servers, the alarm object is the mainboard.<br>• CPU |
| V_VPP_ABC | • Mainboard<br>• DIMM000-021<br>• CPU1<br>• Riser card |
| V_VPP_DEF | • Mainboard<br>• DIMM030-051<br>• CPU1 |
| V_VPP_GHJ | • Mainboard<br>• DIMM100-121<br>• CPU2 |

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| Power supply subsystem name | Possible Component |
| --- | --- |
| V_VPP_KLM | ● Mainboard<br>● DIMM130-151<br>● CPU2 |
| V_VPP_NPQ | ● Mainboard/CPU daughter board<br>**NOTE**<br>For the 2488H V5 and 5885H V5 servers, the object of this alarm is the CPU daughter board. For other servers, the alarm object is the mainboard.<br>● DIMM200-221<br>● CPU3 |
| V_VPP_RST | ● Mainboard/CPU daughter board<br>**NOTE**<br>For the 2488H V5 and 5885H V5 servers, the object of this alarm is the CPU daughter board. For other servers, the alarm object is the mainboard.<br>● DIMM230-251<br>● CPU3 |
| V_VPP_UVW | ● Mainboard/CPU daughter board<br>**NOTE**<br>For the 2488H V5 and 5885H V5 servers, the object of this alarm is the CPU daughter board. For other servers, the alarm object is the mainboard.<br>● DIMM300-321<br>● CPU4 |
| V_VPP_XYZ | ● Mainboard/CPU daughter board<br>**NOTE**<br>For the 2488H V5 and 5885H V5 servers, the object of this alarm is the CPU daughter board. For other servers, the alarm object is the mainboard.<br>● DIMM330-351<br>● CPU4 |
| V_VDDQ_ABC | ● Mainboard<br>● DIMM000-021<br>● CPU1 |
| V_VDDQ_DEF | ● Mainboard<br>● DIMM030-051<br>● CPU1 |
| V_VDDQ_GHJ | ● Mainboard<br>● DIMM100-121<br>● CPU2 |

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| Power supply subsystem name | Possible Component |
| --- | --- |
| V_VDDQ_KLM | ● Mainboard<br>● DIMM130-151<br>● CPU2 |
| V_VDDQ_NPQ | ● Mainboard/CPU daughter board<br>**NOTE**<br>For the 2488H V5 and 5885H V5 servers, the object of this alarm is the CPU daughter board. For other servers, the alarm object is the mainboard.<br>● DIMM200-221<br>● CPU3 |
| V_VDDQ_RST | ● Mainboard/CPU daughter board<br>**NOTE**<br>For the 2488H V5 and 5885H V5 servers, the object of this alarm is the CPU daughter board. For other servers, the alarm object is the mainboard.<br>● DIMM230-251<br>● CPU3 |
| V_VDDQ_UVW | ● Mainboard/CPU daughter board<br>**NOTE**<br>For the 2488H V5 and 5885H V5 servers, the object of this alarm is the CPU daughter board. For other servers, the alarm object is the mainboard.<br>● DIMM300-321<br>● CPU4 |
| V_VDDQ_XYZ | ● Mainboard/CPU daughter board<br>**NOTE**<br>For the 2488H V5 and 5885H V5 servers, the object of this alarm is the CPU daughter board. For other servers, the alarm object is the mainboard.<br>● DIMM330-351<br>● CPU4 |
| V_VTT_ABC | ● Mainboard<br>● DIMM000-021<br>● CPU1 |
| V_VTT_DEF | ● Mainboard<br>● DIMM030-051<br>● CPU1 |
| V_VTT_GHJ | ● Mainboard<br>● DIMM100-121<br>● CPU2 |

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| Power supply subsystem name | Possible Component |
| --- | --- |
| V_VTT_KLM | ● Mainboard<br>● DIMM130-151<br>● CPU2 |
| V_VTT_NPQ | ● Mainboard/CPU daughter board<br>**NOTE**<br>For the 2488H V5 and 5885H V5 servers, the object of this alarm is the CPU daughter board. For other servers, the alarm object is the mainboard.<br>● DIMM200-221<br>● CPU3 |
| V_VTT_RST | ● Mainboard/CPU daughter board<br>**NOTE**<br>For the 2488H V5 and 5885H V5 servers, the object of this alarm is the CPU daughter board. For other servers, the alarm object is the mainboard.<br>● DIMM230-251<br>● CPU3 |
| V_VTT_UVW | ● Mainboard/CPU daughter board<br>**NOTE**<br>For the 2488H V5 and 5885H V5 servers, the object of this alarm is the CPU daughter board. For other servers, the alarm object is the mainboard.<br>● DIMM300-321<br>● CPU4 |
| V_VTT_XYZ | ● Mainboard/CPU daughter board<br>**NOTE**<br>For the 2488H V5 and 5885H V5 servers, the object of this alarm is the CPU daughter board. For other servers, the alarm object is the mainboard.<br>● DIMM330-351<br>● CPU4 |
| V_1V0_CPU*N*<br>**NOTE**<br>*N* indicates the Socket No. of the CPU. | ● Mainboard/CPU daughter board<br>**NOTE**<br>When *N* is set to **3** or **4**, the object of this alarm is the CPU daughter board. For other servers, the alarm object is the mainboard.<br>● CPU |
| STBY_2V5_BMC | Mainboard |
| STBY_PCH_PVNN | Mainboard |

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| Power supply subsystem name | Possible Component |
| --- | --- |
| MZH_VCC_3V3 | Mainboard/CPU daughter board<br>**NOTE**<br>For the 2488H V5 and 5885H V5 servers, the object of this alarm is the CPU daughter board. For other servers, the alarm object is the mainboard. |
| MZH_VCC_5V0 | Mainboard/CPU daughter board<br>**NOTE**<br>For the 2488H V5 and 5885H V5 servers, the object of this alarm is the CPU daughter board. For other servers, the alarm object is the mainboard. |
| MZH_VCC_12V0_1 | Mainboard/CPU daughter board<br>**NOTE**<br>For the 2488H V5 and 5885H V5 servers, the object of this alarm is the CPU daughter board. For other servers, the alarm object is the mainboard. |
| MZH_VCC_12V0_2 | Mainboard/CPU daughter board<br>**NOTE**<br>For the 2488H V5 and 5885H V5 servers, the object of this alarm is the CPU daughter board. For other servers, the alarm object is the mainboard. |
| v_vcc_5v0_1 | ● Mainboard<br>● Disk backplane<br>● CPU<br>● Drive |
| v_vdda_0v9 | Mainboard |
| v_1v8 | Mainboard |
| v_vdd_0v9 | Mainboard |
| v_vdd_0v925 | Mainboard |
| mzh_pg_tps24770_1 | CPU daughter board |
| mzh_pg_tps24770_2 | CPU daughter board |
| mzh_pg_vcc_5v0 | CPU daughter board |
| mzh_pg_vcc_3v3 | CPU daughter board |
| V_VCC_3V3_2 | ● Mainboard<br>● PCIe card<br>● Riser card |
| V_P1V8_CPU12 | Mainboard |
| V_P1V8_CPU34 | Mainboard |

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| Power supply subsystem name | Possible Component |
| --- | --- |
| VCC_5V0_REAR_HDD | ● Mainboard<br>● Rear disk backplane |
| VCC_3V3_RISER | ● Mainboard<br>● PCIe card |
| BP_12V0 | ● Disk backplane<br>● Drive |
| HDDBP_5V0 | ● Disk backplane<br>● Drive |
| HDDIN_12V0 | ● Disk backplane<br>● Drive |
| HDDIN_5V0 | ● Disk backplane<br>● Drive |
| PSUHDD_12V0 | ● Disk backplane<br>● Drive |
| PPSUHDD_5V0 | ● Disk backplane<br>● Drive |
| V_STBY_2V5 | Mainboard |
| V_PVNN_PCH | Mainboard |
| V_VCC_3V3_3 | ● Mainboard<br>● PCIe card<br>● Riser card |
| V_VCC_3V3_4 | ● Mainboard<br>● Riser card |
| PSU IPOK | PSU |

## 2.12.1.2 V6 servers

### 2.12.1.2.1 1288H V6

**Table 2-7** Reference information

| Power supply subsystem name | Possible Component | Troubleshooting Suggestions |
| --- | --- | --- |
| STBY_5V0 | Mainboard | Replace the mainboard. |

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| Power supply subsystem name | Possible Component | Troubleshooting Suggestions |
| --- | --- | --- |
| STBY_1V8_PCH | Mainboard | Replace the mainboard. |
| STBY_1V05_PCH | Mainboard | Replace the mainboard. |
| STBY_PCH_PVNN | Mainboard | Replace the mainboard. |
| V_VCC_12V0_FHDD | • Mainboard<br>• Front drive backplane<br>• Drive | 1. Remove the signal and power cables connected to the mainboard for the front drive backplane, and check whether the host is abnormal power on.<br>  • If yes, the abnormal component is the mainboard.<br>  • If no, go to **2**.<br>2. Reinsert the cables for the front drive backplane and remove all drives, and check whether the host is abnormal power on.<br>  • If yes, the abnormal component is the front drive backplane or the corresponding cables.<br>  • If no, go to **3**.<br>3. If multiple drives are involved, install the drives one by one in sequence, and check whether the host is abnormal power on to identify the faulty drive. |

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| Power supply subsystem name | Possible Component | Troubleshooting Suggestions |
| --- | --- | --- |
| V_VCC_12V0_RISER | • Mainboard<br>• Screw-in RAID controller card<br>• PCIe riser card<br>• I/O module 1 (Rear drive backplane)<br>• PCIe card<br>• Drive<br>**NOTE**<br>If multiple PCIe cards are configured, ensure that the total power of the PCIe cards does not exceed 1200 W. | 1. Remove the signal and power cables connected to the mainboard for the rear drive backplane, and remove the PCIe riser cards and screw-in RAID controller card. Check whether the host is abnormal power on.<br>• If yes, the abnormal component is the mainboard.<br>• If no, go to **2**.<br>2. Remove all drives and PCIe cards from the involved components. Reinsert the cables for the rear drive backplane one by one, reinstall the PCIe riser cards and screw-in RAID controller card, and check whether the host is abnormal power on.<br>• If yes, the abnormal component is the rear drive backplane or the corresponding cables, PCIe riser cards, or the screw-in RAID controller card.<br>• If no, go to **3**.<br>3. If multiple drives or PCIe cards are involved, install the drives or PCIe cards one by one in sequence, and check whether the host is abnormal power on to identify the faulty drive or PCIe card. |
| V_OCP1_MAIN | • Mainboard<br>• OCP1 card | Remove the OCP1 card, and check whether the host is abnormal power on.<br>• If yes, the abnormal component is the mainboard.<br>• If no, the abnormal component is the OCP1 card. |

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| Power supply subsystem name | Possible Component | Troubleshooting Suggestions |
| --- | --- | --- |
| V_OCP2_MAIN | • Mainboard<br>• OCP2 card | Remove the OCP2 card, and check whether the host is abnormal power on.<br>• If yes, the abnormal component is the mainboard.<br>• If no, the abnormal component is the OCP2 card. |
| V_VCC_12V0_CPU1 | • Mainboard<br>• Fan: FAN4/FAN5/FAN6/FAN7<br>• CPU1<br>• DIMM000-071 | 1. Remove the FAN4/FAN5/FAN6/FAN7, and check whether the host is abnormal power on.<br>• If yes, go to **2**.<br>• If no, the abnormal component is the FAN4/FAN5/FAN6/FAN7. Install the fans one by one in sequence, check whether the host is abnormal power on to identify the faulty fan.<br>2. Remove CPU1, CPU2 and DIMM000-071, install the CPU2 into the CPU1 slot, and install one memory from under CPU2 into DIMM000, and perform a minimum system verification. Check whether the host is abnormal power on.<br>• If yes, the abnormal component is the mainboard.<br>• If no, go to **3**.<br>3. Remove the original CPU2 from the CPU1 slot, and reinstall the original CPU1 back into the CPU1 slot, and check whether the host is abnormal power on.<br>• If yes, the abnormal component is the original CPU1.<br>• If no, go to **4**.<br>4. Using the binary method, install the DIMM000-071 separately, and check whether the host is abnormal power on to identify the faulty memory. |

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| Power supply subsystem name | Possible Component | Troubleshooting Suggestions |
| --- | --- | --- |
| V_VCC_12V0_CPU2 | • Mainboard<br>• Fan: FAN1/FAN2/FAN3<br>• CPU2<br>• DIMM100-171 | 1. Remove the FAN1/FAN2/FAN3, and check whether the host is abnormal power on.<br>• If yes, go to **2**.<br>• If no, the abnormal component is the FAN1/FAN2/FAN3. Install the fans one by one in sequence, check whether the host is abnormal power on to identify the faulty fan.<br>2. Remove CPU2 and DIMM100-171, and check whether the host is abnormal power on.<br>• If yes, the abnormal component is the mainboard.<br>• If no, go to **3**.<br>3. Remove CPU1, and install the original CPU2 into the CPU1 slot, and check whether the host is abnormal power on.<br>• If yes, the abnormal component is the original CPU2.<br>• If no, go to **4**.<br>4. Using the binary method, install the DIMM100-171 separately, and check whether the host is abnormal power on to identify the faulty memory. |

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| Power supply subsystem name | Possible Component | Troubleshooting Suggestions |
| --- | --- | --- |
| V_VCC_5V0 | • Mainboard<br>• Rear drive backplane (I/O module 1)<br>• Drive<br>• Right mounting ear<br>• USB device | 1. Remove the USB device, and check whether the host is abnormal power on.<br>• If yes, go to **2**.<br>• If no, the abnormal component is the USB device. If multiple USB components are involved, install the USB components one by one in sequence, and check whether the host is abnormal power on to identify the faulty USB device.<br>2. Remove the signal and power cables connected to the mainboard for the rear drive backplane, and the cables connected to the mainboard for the right mounting ear. Check whether the host is abnormal power on.<br>• If yes, the abnormal component is the mainboard.<br>• If no, go to **3**.<br>3. Remove all drives from the involved components. Reinsert the cables for the rear drive backplane and right mounting ear one by one, and check whether the host is abnormal power on.<br>• If yes, the abnormal component is the rear drive backplane, right mounting ear or the corresponding cables.<br>• If no, go to **4**.<br>4. If multiple drives are involved, install the drives one by one in sequence, and check whether the host is abnormal power on to identify the faulty drive. |

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| Power supply subsystem name | Possible Component | Troubleshooting Suggestions |
| --- | --- | --- |
| V_VCC_3V3 | • Mainboard<br>• Screw-in RAID controller card<br>• Front drive backplane<br>• Drive | 1. Remove the signal and power cables connected to the mainboard for the front drive backplane, and remove the screw-in RAID controller card. Check whether the host is abnormal power on.<br>• If yes, the abnormal component is the mainboard.<br>• If no, go to **2**.<br>2. Remove all drives from the involved components. Reinsert the cables for the front drive backplane one by one, reinstall the screw-in RAID controller card, and check whether the host is abnormal power on.<br>• If yes, the abnormal component is the front drive backplane or the corresponding LP Slimline high-speed cables, or the screw-in RAID controller card.<br>• If no, go to **3**.<br>3. If multiple drives are involved, install the drives one by one in sequence, and check whether the host is abnormal power on to identify the faulty drive. |
| V_VCCIN_CPU1<br>V_VSA_CPU1<br>V_VCCIO_CPU1<br>V_PANA_CPU1<br>V_1V8_CPU1 | • Mainboard<br>• CPU1 | Remove CPU1 and CPU2, and install CPU2 into the CPU1 slot, check whether the host is abnormal power on.<br>• If yes, the abnormal component is the mainboard.<br>• If no, the abnormal component is the original CPU1. |
| V_VCCIN_CPU2<br>V_VSA_CPU2<br>V_VCCIO_CPU2<br>V_PANA_CPU2<br>V_1V8_CPU2 | • Mainboard<br>• CPU2 | Remove CPU2, and check whether the host is abnormal power on.<br>• If yes, the abnormal component is the mainboard.<br>• If no, the abnormal component is the CPU2. |

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| Power supply subsystem name | Possible Component | Troubleshooting Suggestions |
| --- | --- | --- |
| V_VPP_ABCD<br>V_VDDQ_ABCD<br>V_VTT_ABCD | • Mainboard<br>• CPU1<br>• DIMM000-031 | 1. Remove CPU1, CPU2 and DIMM000-031. Install CPU2 into the CPU1 slot, and install the memory from DIMM100 to DIMM000, and check whether the host is abnormal power on.<br>• If yes, the abnormal component is the mainboard.<br>• If no, go to **2**.<br>2. Remove the original CPU2 from the CPU1 slot, and reinstall the original CPU1 back into the CPU1 slot, and check whether the host is abnormal power on.<br>• If yes, the abnormal component is the original CPU1.<br>• If no, **3**<br>3. Using the binary method, install the DIMM000-031 separately, and check whether the host is abnormal power on to identify the faulty memory. |
| V_VPP_EFGH<br>V_VDDQ_EFGH<br>V_VTT_EFGH | • Mainboard<br>• CPU1<br>• DIMM040-071 | 1. Remove CPU1, CPU2 and DIMM040-071. Install CPU2 into the CPU1 slot, and check whether the host is abnormal power on.<br>• If yes, the abnormal component is the mainboard.<br>• If no, **2**<br>2. Remove the original CPU2 from the CPU1 slot, and reinstall the original CPU1 back into the CPU1 slot, and check whether the host is abnormal power on.<br>• If yes, the abnormal component is the original CPU1.<br>• If no, **3**<br>3. Using the binary method, install the DIMM040-071 separately, and check whether the host is abnormal power on to identify the faulty memory. |

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| Power supply subsystem name | Possible Component | Troubleshooting Suggestions |
| --- | --- | --- |
| V_VPP_JKLM<br>V_VDDQ_JKLM<br>V_VTT_JKLM | • Mainboard<br>• DIMM100-131<br>• CPU2 | 1. Remove CPU2 and DIMM100-131, and check whether the host is abnormal power on.<br>• If yes, the abnormal component is the mainboard.<br>• If no, go to **2**.<br>2. Remove CPU1, and install the original CPU2 into the CPU1 slot, and check whether the host is abnormal power on.<br>• If yes, the abnormal component is the original CPU2.<br>• If no, go to **3**.<br>3. Using the binary method, install the DIMM100-131 separately, and check whether the host is abnormal power on to identify the faulty memory. |
| V_VPP_NPQR<br>V_VDDQ_NPQR<br>V_VTT_NPQR | • Mainboard<br>• DIMM140-171<br>• CPU2 | 1. Remove CPU2 and DIMM140-171, check whether the host is abnormal power on.<br>• If yes, the abnormal component is the mainboard.<br>• If no, go to **2**.<br>2. Remove CPU1, and install the original CPU2 into the CPU1 slot, and check whether the host is abnormal power on.<br>• If yes, the abnormal component is the original CPU2.<br>• If no, go to **3**.<br>3. Using the binary method, install the DIMM140-171 separately, and check whether the host is abnormal power on to identify the faulty memory. |

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### 2.12.1.2.2 2288H V6-32DIMM

**Table 2-8** Reference information

| Power supply subsystem name | Possible Component | Troubleshooting Suggestions |
| --- | --- | --- |
| STBY_5V0 | ● Mainboard<br>● LCD | Remove the signal cable connected to the mainboard for the LCD, and check whether the host is abnormal power on.<br>● If yes, the abnormal component is the mainboard.<br>● If no, the abnormal component is LCD or the corresponding cable. |
| STBY_1V8_PCH | Mainboard | Replace the mainboard. |
| STBY_1V05_PCH | Mainboard | Replace the mainboard. |
| STBY_PCH_PVNN | Mainboard | Replace the mainboard. |

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| Power supply subsystem name | Possible Component | Troubleshooting Suggestions |
| --- | --- | --- |
| V_VCC_12V0_FHDD | • Mainboard<br>• Front drive backplane<br>• Built-in drive backplane<br>• I/O module 3 (PCIe riser card / Rear drive backplane)<br>• Drive<br>• PCIe card | 1. Remove the signal and power cables connected to the mainboard for the front drive backplane, built-in drive backplane, and I/O module 3 (PCIe riser card / rear drive backplane). Check whether the host is abnormal power on.<br>• If yes, the abnormal component is the mainboard.<br>• If no, go to **2**.<br>2. Remove all drives and PCIe cards from the involved components. Reinsert the cables for the front drive backplane, built-in drive backplane, and I/O module 3 (PCIe riser card / rear drive backplane) one by one, and check whether the host is abnormal power on.<br>• If yes, the abnormal component is the front drive backplane, built-in drive backplane, and I/O module 3 (PCIe riser card / rear drive backplane) or the corresponding cables.<br>• If no, go to **3**.<br>3. If multiple drives or PCIe cards are involved, install the drives or PCIe cards one by one in sequence, and check whether the host is abnormal power on to identify the faulty drive or PCIe card. |

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| Power supply subsystem name | Possible Component | Troubleshooting Suggestions |
| --- | --- | --- |
| V_VCC_12V0_RISER | • Mainboard<br>• Screw-in RAID controller card<br>• PCIe riser card<br>• Front drive backplane<br>• I/O module 1 (Rear drive backplane)<br>• I/O module 2 (Rear drive backplane)<br>• Drive<br>**NOTE**<br>• If the GPU configuration is modified, check whether the GPU power cable is matched. For details, log in to the Technical Support website, search and view the section GPU Configuration Rule in Server GPU Card Operation Guide.<br>• If multiple PCIe cards are configured, ensure that the total power of the PCIe cards does not exceed 1200 W. | 1. Remove the signal and power cables connected to the mainboard for the rear drive backplanes, and remove the PCIe riser cards, and screw-in RAID controller card. Check whether the host is abnormal power on.<br>• If yes, the abnormal component is the mainboard.<br>• If no, go to **2**.<br>2. Remove all drives and PCIe cards from the involved components. Reinsert the cables for the rear drive backplanes one by one, reinstall the PCIe riser cards and screw-in RAID controller card, and check whether the host is abnormal power on.<br>• If yes, the abnormal component is the rear drive backplanes or the corresponding cables, PCIe riser cards, or the screw-in RAID controller card.<br>• If no, go to **3**.<br>3. If multiple drives or PCIe cards are involved, install the drives or PCIe cards one by one in sequence, and check whether the host is abnormal power on to identify the faulty drive or PCIe card. |
| V_OCP1_MAIN | • Mainboard<br>• OCP1 card | Remove the OCP1 card, and check whether the host is abnormal power on.<br>• If yes, the abnormal component is the mainboard.<br>• If no, the abnormal component is the OCP1 card. |

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| Power supply subsystem name | Possible Component | Troubleshooting Suggestions |
| --- | --- | --- |
| V_OCP2_MAIN | • Mainboard<br>• OCP2 card | Remove the OCP2 card, and check whether the host is abnormal power on.<br>• If yes, the abnormal component is the mainboard.<br>• If no, the abnormal component is the OCP2 card. |
| V_VCC_12V0_CPU1 | • Mainboard<br>• Fan: FAN3/FAN4<br>• CPU1<br>• DIMM000-071 | 1. Remove the FAN3/FAN4, and check whether the host is abnormal power on.<br>• If yes, go to **2**.<br>• If no, the abnormal component is the FAN3/FAN4. Install the fans one by one in sequence, check whether the host is abnormal power on to identify the faulty fan.<br>2. Remove CPU1, CPU2 and DIMM000-071, install the CPU2 into the CPU1 slot, and install one memory from under CPU2 into DIMM000, and perform a minimum system verification. Check whether the host is abnormal power on.<br>• If yes, the abnormal component is the mainboard.<br>• If no, go to **3**.<br>3. Remove the original CPU2 from the CPU1 slot, and reinstall the original CPU1 back into the CPU1 slot, and check whether the host is abnormal power on.<br>• If yes, the abnormal component is the original CPU1.<br>• If no, go to **4**.<br>4. Using the binary method, install the DIMM000-071 separately, and check whether the host is abnormal power on to identify the faulty memory. |

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| Power supply subsystem name | Possible Component | Troubleshooting Suggestions |
| --- | --- | --- |
| V_VCC_12V0_CPU2 | • Mainboard<br>• Fan: FAN1/FAN2<br>• CPU2<br>• DIMM100-171 | 1. Remove the FAN1/FAN2, and check whether the host is abnormal power on.<br>• If yes, go to **2**.<br>• If no, the abnormal component is the FAN1/FAN2. Install the fans one by one in sequence, check whether the host is abnormal power on to identify the faulty fan.<br>2. Remove CPU2 and DIMM100-171, and check whether the host is abnormal power on.<br>• If yes, the abnormal component is the mainboard.<br>• If no, go to **3**.<br>3. Remove CPU1, and install the original CPU2 into the CPU1 slot, and check whether the host is abnormal power on.<br>• If yes, the abnormal component is the original CPU2.<br>• If no, go to **4**.<br>4. Using the binary method, install the DIMM100-171 separately, and check whether the host is abnormal power on to identify the faulty memory. |

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| Power supply subsystem name | Possible Component | Troubleshooting Suggestions |
| --- | --- | --- |
| V_VCC_5V0 | • Mainboard<br>• I/O module 1 (Rear drive backplane)<br>• I/O module 2 (Rear drive backplane)<br>• Drive<br>• PCIe riser card<br>• PCIe card<br>• Right mounting ear<br>• USB device | 1. Remove the USB device, and check whether the host is abnormal power on.<br>• If yes, go to **2**.<br>• If no, the abnormal component is the USB device. If multiple USB components are involved, install the USB components one by one in sequence, and check whether the host is abnormal power on to identify the faulty USB device.<br>2. Remove the signal and power cables connected to the mainboard for the I/O module 1 (rear drive backplane) and I/O module 2 (rear drive backplane), and the cables connected to the mainboard for the right mounting ear, and remove the PCIe riser cards. Check whether the host is abnormal power on.<br>• If yes, the abnormal component is the mainboard.<br>• If no, go to **3**.<br>3. Remove all drives and PCIe cards from the involved components. Reinsert the cables for the I/O module 1 (rear drive backplane), I/O module 2 (rear drive backplane), and right mounting ear one by one, reinstall the PCIe riser cards, and check whether the host is abnormal power on.<br>• If yes, the abnormal component is the I/O module 1 (rear drive backplane), I/O module 2 (rear drive backplane), right mounting ear or the corresponding cables, or the PCIe riser cards.<br>• If no, go to **4**.<br>4. If multiple drives or PCIe cards are involved, install the drives or |

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| Power supply subsystem name | Possible Component | Troubleshooting Suggestions |
| --- | --- | --- |
| | | PCIe cards one by one in sequence, and check whether the host is abnormal power on to identify the faulty drive or PCIe card. |
| V_VCC_3V3 | • Mainboard<br>• Screw-in RAID controller card<br>• PCIe riser card<br>• Front drive backplane<br>• Rear drive backplane<br>• Drive<br>• PCIe card | 1. Remove the signal and power cables connected to the mainboard for the front and rear drive backplanes, and remove the PCIe Riser cards and screw-in RAID controller card. Check whether the host is abnormal power on.<br>• If yes, the abnormal component is the mainboard.<br>• If no, go to **2**.<br>2. Remove all drives and PCIe cards from the involved components. Reinsert the cables for the front and rear drive backplanes one by one, reinstall the PCIe riser cards and screw-in RAID controller card, and check whether the host is abnormal power on.<br>• If yes, the abnormal component is the front or rear drive backplane or the corresponding cables, the PCIe riser cards, or the screw-in RAID controller card.<br>• If no, go to **3**.<br>3. If multiple drives or PCIe cards are involved, install the drives or PCIe cards one by one in sequence, and check whether the host is abnormal power on to identify the faulty drive or PCIe card. |
| V_VCCIN_CPU1 | • Mainboard<br>• CPU1 | Remove CPU1 and CPU2, and install CPU2 into the CPU1 slot, check whether the host is abnormal power on.<br>• If yes, the abnormal component is the mainboard. |
| V_VSA_CPU1 | | |
| V_VCCIO_CPU1 | | |
| V_PANA_CPU1 | | |

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| Power supply subsystem name | Possible Component | Troubleshooting Suggestions |
| --- | --- | --- |
| V_1V8_CPU1 | | • If no, the abnormal component is the original CPU1. |
| V_VCCIN_CPU2<br>V_VSA_CPU2<br>V_VCCIO_CPU2<br>V_PANA_CPU2<br>V_1V8_CPU2 | • Mainboard<br>• CPU2 | Remove CPU2, and check whether the host is abnormal power on.<br>• If yes, the abnormal component is the mainboard.<br>• If no, the abnormal component is the CPU2. |
| V_VPP_ABCD<br>V_VDDQ_ABCD<br>V_VTT_ABCD | • Mainboard<br>• CPU1<br>• DIMM000-031 | 1. Remove CPU1, CPU2 and DIMM000-031. Install CPU2 into the CPU1 slot, and install the memory from DIMM100 to DIMM000, and check whether the host is abnormal power on.<br>• If yes, the abnormal component is the mainboard.<br>• If no, go to **2**.<br>2. Remove the original CPU2 from the CPU1 slot, and reinstall the original CPU1 back into the CPU1 slot, and check whether the host is abnormal power on.<br>• If yes, the abnormal component is the original CPU1.<br>• If no, **3**<br>3. Using the binary method, install the DIMM000-031 separately, and check whether the host is abnormal power on to identify the faulty memory. |
| V_VPP_EFGH<br>V_VDDQ_EFGH | • Mainboard<br>• CPU1<br>• DIMM040-071 | 1. Remove CPU1, CPU2 and DIMM040-071. Install CPU2 into the CPU1 slot, and check whether the host is abnormal power on.<br>• If yes, the abnormal component is the mainboard.<br>• If no, **2**<br>2. Remove the original CPU2 from the CPU1 slot, and reinstall the original CPU1 back into the |

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| Power supply subsystem name | Possible Component | Troubleshooting Suggestions |
| --- | --- | --- |
| V_VTT_EFGH | | CPU1 slot, and check whether the host is abnormal power on.<br>● If yes, the abnormal component is the original CPU1.<br>● If no, **3**<br>3. Using the binary method, install the DIMM040-071 separately, and check whether the host is abnormal power on to identify the faulty memory. |
| V_VPP_JKLM<br>V_VDDQ_JKLM<br>V_VTT_JKLM | ● Mainboard<br>● DIMM100-131<br>● CPU2 | 1. Remove CPU2 and DIMM100-131, and check whether the host is abnormal power on.<br>● If yes, the abnormal component is the mainboard.<br>● If no, go to **2**.<br>2. Remove CPU1, and install the original CPU2 into the CPU1 slot, and check whether the host is abnormal power on.<br>● If yes, the abnormal component is the original CPU2.<br>● If no, go to **3**.<br>3. Using the binary method, install the DIMM100-131 separately, and check whether the host is abnormal power on to identify the faulty memory. |
| V_VPP_NPQR<br>V_VDDQ_NPQR | ● Mainboard<br>● DIMM140-171<br>● CPU2 | 1. Remove CPU2 and DIMM140-171, check whether the host is abnormal power on.<br>● If yes, the abnormal component is the mainboard.<br>● If no, go to **2**.<br>2. Remove CPU1, and install the original CPU2 into the CPU1 slot, and check whether the host is abnormal power on.<br>● If yes, the abnormal component is the original CPU2. |

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| Power supply subsystem name | Possible Component | Troubleshooting Suggestions |
| --- | --- | --- |
| V_VTT_NPQR | | ● If no, go to **3**.<br>3. Using the binary method, install the DIMM140-171 separately, and check whether the host is abnormal power on to identify the faulty memory. |

### 2.12.1.2.3 2288H V6-16DIMM

**Table 2-9** Reference information

| Power supply subsystem name | Possible Component | Troubleshooting Suggestions |
| --- | --- | --- |
| STBY_5V0 | ● Mainboard<br>● LCD | Remove the signal cable connected to the mainboard for the LCD, and check whether the host is abnormal power on.<br>● If yes, the abnormal component is the mainboard.<br>● If no, the abnormal component is LCD or the corresponding cable. |
| STBY_1V8_PCH | Mainboard | Replace the mainboard. |
| STBY_1V05_PCH | Mainboard | Replace the mainboard. |
| STBY_PCH_PVNN | Mainboard | Replace the mainboard. |

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| Power supply subsystem name | Possible Component | Troubleshooting Suggestions |
| --- | --- | --- |
| V_VCC_12V0_RISER | • Mainboard<br>• Screw-in RAID controller card<br>• PCIe riser card<br>• PCIe RAID controller card<br>• Front drive backplane<br>• Built-in drive backplane<br>• I/O module 1 (Rear drive backplane)<br>• Drive<br>• PCIe card<br>**NOTE**<br>If multiple PCIe cards are configured, ensure that the total power of the PCIe cards does not exceed 1200 W. | 1. Remove the signal and power cables connected to the mainboard for the front drive backplanes, I/O module 1 (rear drive backplane), and built-in drive backplane, and remove the PCIe riser cards, screw-in RAID controller card, and PCIe RAID controller card. Check whether the host is abnormal power on.<br>• If yes, the abnormal component is the mainboard.<br>• If no, go to **2**.<br>2. Remove all drives and PCIe cards from the involved components. Reinsert the cables for the front drive backplanes, I/O module 1 (rear drive backplane), and built-in drive backplane one by one, reinstall the PCIe riser cards, screw-in RAID controller card, and PCIe RAID controller card, and check whether the host is abnormal power on.<br>• If yes, the abnormal component is the front drive backplanes, I/O module 1 (rear drive backplane), or built-in drive backplane or the corresponding cables, or the PCIe riser cards, screw-in RAID controller card, or PCIe RAID controller card.<br>• If no, go to **3**.<br>3. If multiple drives or PCIe cards are involved, install the drives or PCIe cards one by one in sequence, and check whether the host is abnormal power on to identify the faulty drive or PCIe card. |

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| Power supply subsystem name | Possible Component | Troubleshooting Suggestions |
| --- | --- | --- |
| V_OCP1_MAIN | • Mainboard<br>• OCP1 card | Remove the OCP1 card, and check whether the host is abnormal power on.<br>• If yes, the abnormal component is the mainboard.<br>• If no, the abnormal component is the OCP1 card. |
| V_VCC_12V0_CPU1 | • Mainboard<br>• Fan: FAN3/FAN4<br>• CPU1<br>• DIMM000-070 | 1. Remove the FAN3/FAN4, and check whether the host is abnormal power on.<br>• If yes, go to **2**.<br>• If no, the abnormal component is the FAN3/FAN4. Install the fans one by one in sequence, check whether the host is abnormal power on to identify the faulty fan.<br>2. Remove CPU1, CPU2 and DIMM000-070, install the CPU2 into the CPU1 slot, and install one memory from under CPU2 into DIMM000, and perform a minimum system verification. Check whether the host is abnormal power on.<br>• If yes, the abnormal component is the mainboard.<br>• If no, go to **3**.<br>3. Remove the original CPU2 from the CPU1 slot, and reinstall the original CPU1 back into the CPU1 slot, and check whether the host is abnormal power on.<br>• If yes, the abnormal component is the original CPU1.<br>• If no, go to **4**.<br>4. Using the binary method, install the DIMM000-070 separately, and check whether the host is abnormal power on to identify the faulty memory. |

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| Power supply subsystem name | Possible Component | Troubleshooting Suggestions |
| --- | --- | --- |
| V_VCC_12V0_CPU2 | • Mainboard<br>• Fan: FAN1/FAN2<br>• CPU2<br>• DIMM100-170 | 1. Remove the FAN1/FAN2, and check whether the host is abnormal power on.<br>• If yes, go to **2**.<br>• If no, the abnormal component is the FAN1/FAN2. Install the fans one by one in sequence, check whether the host is abnormal power on to identify the faulty fan.<br>2. Remove CPU2 and DIMM100-170, and check whether the host is abnormal power on.<br>• If yes, the abnormal component is the mainboard.<br>• If no, go to **3**.<br>3. Remove CPU1, and install the original CPU2 into the CPU1 slot, and check whether the host is abnormal power on.<br>• If yes, the abnormal component is the original CPU2.<br>• If no, go to **4**.<br>4. Using the binary method, install the DIMM100-170 separately, and check whether the host is abnormal power on to identify the faulty memory. |
| V_VCC_5V0 | Mainboard | Replace the mainboard. |

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| Power supply subsystem name | Possible Component | Troubleshooting Suggestions |
| --- | --- | --- |
| V_VCC_3V3 | • Mainboard<br>• Screw-in RAID controller card<br>• PCIe riser card<br>• Front drive backplane<br>• Rear drive backplane<br>• PCIe RAID controller card<br>• Drive<br>• PCIe card | 1. Remove the signal and power cables connected to the mainboard for the front and rear drive backplanes, and remove the PCIe riser cards, screw-in RAID controller card and PCIe RAID controller card. Check whether the host is abnormal power on.<br>• If yes, the abnormal component is the mainboard.<br>• If no, go to **2**.<br>2. Remove all drives and PCIe cards from the involved components. Reinsert the cables for the front and rear drive backplanes one by one, reinstall the PCIe riser cards, screw-in RAID controller card and PCIe RAID controller card, and check whether the host is abnormal power on.<br>• If yes, the abnormal component is the front or rear drive backplane or the corresponding LP Slimline high-speed cables, PCIe riser cards, screw-in RAID controller card or PCIe RAID controller card.<br>• If no, go to **3**.<br>3. If multiple drives or PCIe cards are involved, install the drives or PCIe cards one by one in sequence, and check whether the host is abnormal power on to identify the faulty drive or PCIe card. |
| V_VCCIN_CPU1<br>V_VSA_CPU1<br>V_VCCIO_CPU1<br>V_PANA_CPU1<br>V_1V8_CPU1 | • Mainboard<br>• CPU1 | Remove CPU1 and CPU2, and install CPU2 into the CPU1 slot, check whether the host is abnormal power on.<br>• If yes, the abnormal component is the mainboard.<br>• If no, the abnormal component is the original CPU1. |

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| Power supply subsystem name | Possible Component | Troubleshooting Suggestions |
| --- | --- | --- |
| V_VCCIN_CPU2<br>V_VSA_CPU2<br>V_VCCIO_CPU2<br>V_PANA_CPU2<br>V_1V8_CPU2 | • Mainboard<br>• CPU2 | Remove CPU2, and check whether the host is abnormal power on.<br>• If yes, the abnormal component is the mainboard.<br>• If no, the abnormal component is the CPU2. |
| V_VPP_ABCD<br>V_VDDQ_ABCD<br>V_VTT_ABCD | • Mainboard<br>• CPU1<br>• DIMM000-030 | 1. Remove CPU1, CPU2 and DIMM000-030. Install CPU2 into the CPU1 slot, and install the memory from DIMM100 to DIMM000, and check whether the host is abnormal power on.<br>• If yes, the abnormal component is the mainboard.<br>• If no, go to **2**.<br>2. Remove the original CPU2 from the CPU1 slot, and reinstall the original CPU1 back into the CPU1 slot, and check whether the host is abnormal power on.<br>• If yes, the abnormal component is the original CPU1.<br>• If no, **3**<br>3. Using the binary method, install the DIMM000-030 separately, and check whether the host is abnormal power on to identify the faulty memory. |
| V_VPP_EFGH<br>V_VDDQ_EFGH | • Mainboard<br>• CPU1<br>• DIMM040-070 | 1. Remove CPU1, CPU2 and DIMM040-070. Install CPU2 into the CPU1 slot, and check whether the host is abnormal power on.<br>• If yes, the abnormal component is the mainboard.<br>• If no, **2**<br>2. Remove the original CPU2 from the CPU1 slot, and reinstall the original CPU1 back into the CPU1 slot, and check whether the host is abnormal power on. |

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| Power supply subsystem name | Possible Component | Troubleshooting Suggestions |
| --- | --- | --- |
| V_VTT_EFGH | | ● If yes, the abnormal component is the original CPU1.<br>● If no, **3**<br>3. Using the binary method, install the DIMM040-070 separately, and check whether the host is abnormal power on to identify the faulty memory. |
| V_VPP_JKLM<br>V_VDDQ_JKLM<br>V_VTT_JKLM | ● Mainboard<br>● DIMM100-130<br>● CPU2 | 1. Remove CPU2 and DIMM100-130, and check whether the host is abnormal power on.<br>● If yes, the abnormal component is the mainboard.<br>● If no, go to **2**.<br>2. Remove CPU1, and install the original CPU2 into the CPU1 slot, and check whether the host is abnormal power on.<br>● If yes, the abnormal component is the original CPU2.<br>● If no, go to **3**.<br>3. Using the binary method, install the DIMM100-130 separately, and check whether the host is abnormal power on to identify the faulty memory. |
| V_VPP_NPQR<br>V_VDDQ_NPQR | ● Mainboard<br>● DIMM140-170<br>● CPU2 | 1. Remove CPU2 and DIMM140-170, check whether the host is abnormal power on.<br>● If yes, the abnormal component is the mainboard.<br>● If no, go to **2**.<br>2. Remove CPU1, and install the original CPU2 into the CPU1 slot, and check whether the host is abnormal power on.<br>● If yes, the abnormal component is the original CPU2.<br>● If no, go to **3**. |

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| Power supply subsystem name | Possible Component | Troubleshooting Suggestions |
| --- | --- | --- |
| V_VTT_NPQR | | 3. Using the binary method, install the DIMM140-170 separately, and check whether the host is abnormal power on to identify the faulty memory. |
| PSU IPOK | PSU | Replace the PSU. |

### 2.12.1.2.4 5288 V6

**Table 2-10** Reference information

| Power supply subsystem name | Possible Component | Troubleshooting Suggestions |
| --- | --- | --- |
| STBY_5V0 | ● Mainboard<br>● LCD | Remove the signal cable connected to the mainboard for the LCD, and check whether the host is abnormal power on.<br>● If yes, the abnormal component is the mainboard.<br>● If no, the abnormal component is LCD or the corresponding cable. |
| STBY_1V8_PCH | Mainboard | Replace the mainboard. |
| STBY_1V05_PCH | Mainboard | Replace the mainboard. |
| STBY_PCH_PVNN | Mainboard | Replace the mainboard. |

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| Power supply subsystem name | Possible Component | Troubleshooting Suggestions |
| --- | --- | --- |
| V_VCC_12V0_FHDD | • Mainboard<br>• Front drive backplane<br>• Built-in drive backplane<br>• I/O module 3 (PCIe riser card / Rear drive backplane)<br>• Drive<br>• PCIe card | 1. Remove the signal and power cables connected to the mainboard for the front drive backplane, built-in drive backplane, and I/O module 3 (PCIe riser card / rear drive backplane). Check whether the host is abnormal power on.<br>• If yes, the abnormal component is the mainboard.<br>• If no, go to **2**.<br>2. Remove all drives and PCIe cards from the involved components. Reinsert the cables for the front drive backplane, built-in drive backplane, and I/O module 3 (PCIe riser card / rear drive backplane) one by one, and check whether the host is abnormal power on.<br>• If yes, the abnormal component is the front drive backplane, built-in drive backplane, and I/O module 3 (PCIe riser card / rear drive backplane) or the corresponding cables.<br>• If no, go to **3**.<br>3. If multiple drives or PCIe cards are involved, install the drives or PCIe cards one by one in sequence, and check whether the host is abnormal power on to identify the faulty drive or PCIe card. |

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| Power supply subsystem name | Possible Component | Troubleshooting Suggestions |
| --- | --- | --- |
| V_VCC_12V0_RISER | • Mainboard<br>• Screw-in RAID controller card<br>• PCIe riser card<br>• I/O module 1 (Rear drive backplane)<br>• I/O module 2 (Rear drive backplane)<br>• 12 x 3.5" rear drive backplane<br>• Drive<br>• PCIe card<br>**NOTE**<br>If multiple PCIe cards are configured, ensure that the total power of the PCIe cards does not exceed 1200 W. | 1. Remove the signal and power cables connected to the mainboard for the rear drive backplanes, and remove the PCIe riser cards, and screw-in RAID controller card. Check whether the host is abnormal power on.<br>• If yes, the abnormal component is the mainboard.<br>• If no, go to **2**.<br>2. Remove all drives and PCIe cards from the involved components. Reinsert the cables for the rear drive backplanes one by one, reinstall the PCIe riser cards and screw-in RAID controller card, and check whether the host is abnormal power on.<br>• If yes, the abnormal component is the rear drive backplanes or the corresponding cables, PCIe riser cards, or the screw-in RAID controller card.<br>• If no, go to **3**.<br>3. If multiple drives or PCIe cards are involved, install the drives or PCIe cards one by one in sequence, and check whether the host is abnormal power on to identify the faulty drive or PCIe card. |
| V_OCP1_MAIN | • Mainboard<br>• OCP1 card | Remove the OCP1 card, and check whether the host is abnormal power on.<br>• If yes, the abnormal component is the mainboard.<br>• If no, the abnormal component is the OCP1 card. |

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| Power supply subsystem name | Possible Component | Troubleshooting Suggestions |
| --- | --- | --- |
| V_OCP2_MAIN | • Mainboard<br>• OCP2 card | Remove the OCP2 card, and check whether the host is abnormal power on.<br>• If yes, the abnormal component is the mainboard.<br>• If no, the abnormal component is the OCP2 card. |
| V_VCC_12V0_CPU1 | • Mainboard<br>• Fan: FAN3/FAN4<br>• CPU1<br>• DIMM000-071 | 1. Remove the FAN3/FAN4, and check whether the host is abnormal power on.<br>• If yes, go to **2**.<br>• If no, the abnormal component is the FAN3/FAN4. Install the fans one by one in sequence, check whether the host is abnormal power on to identify the faulty fan.<br>2. Remove CPU1, CPU2 and DIMM000-071, install the CPU2 into the CPU1 slot, and install one memory from under CPU2 into DIMM000, and perform a minimum system verification. Check whether the host is abnormal power on.<br>• If yes, the abnormal component is the mainboard.<br>• If no, go to **3**.<br>3. Remove the original CPU2 from the CPU1 slot, and reinstall the original CPU1 back into the CPU1 slot, and check whether the host is abnormal power on.<br>• If yes, the abnormal component is the original CPU1.<br>• If no, go to **4**.<br>4. Using the binary method, install the DIMM000-071 separately, and check whether the host is abnormal power on to identify the faulty memory. |

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| Power supply subsystem name | Possible Component | Troubleshooting Suggestions |
| --- | --- | --- |
| V_VCC_12V0_CPU2 | • Mainboard<br>• Fan: FAN1/FAN2<br>• CPU2<br>• DIMM100-171 | 1. Remove the FAN1/FAN2, and check whether the host is abnormal power on.<br>• If yes, go to **2**.<br>• If no, the abnormal component is the FAN1/FAN2. Install the fans one by one in sequence, check whether the host is abnormal power on to identify the faulty fan.<br>2. Remove CPU2 and DIMM100-171, and check whether the host is abnormal power on.<br>• If yes, the abnormal component is the mainboard.<br>• If no, go to **3**.<br>3. Remove CPU1, and install the original CPU2 into the CPU1 slot, and check whether the host is abnormal power on.<br>• If yes, the abnormal component is the original CPU2.<br>• If no, go to **4**.<br>4. Using the binary method, install the DIMM100-171 separately, and check whether the host is abnormal power on to identify the faulty memory. |

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| Power supply subsystem name | Possible Component | Troubleshooting Suggestions |
| --- | --- | --- |
| V_VCC_5V0 | • Mainboard<br>• I/O module 1 (Rear drive backplane)<br>• I/O module 2 (Rear drive backplane)<br>• Drive<br>• Right mounting ear<br>• USB device | 1. Remove the USB device, and check whether the host is abnormal power on.<br>• If yes, go to **2**.<br>• If no, the abnormal component is the USB device. If multiple USB components are involved, install the USB components one by one in sequence, and check whether the host is abnormal power on to identify the faulty USB device.<br>2. Remove the signal and power cables connected to the mainboard for the I/O module 1 (rear drive backplane) and I/O module 2 (rear drive backplane), and the cables connected to the mainboard for the right mounting ear. Check whether the host is abnormal power on.<br>• If yes, the abnormal component is the mainboard.<br>• If no, go to **3**.<br>3. Remove all drives from the involved components. Reinsert the cables for the I/O module 1 (rear drive backplane), I/O module 2 (rear drive backplane), and right mounting ear one by one, and check whether the host is abnormal power on.<br>• If yes, the abnormal component is the I/O module 1 (rear drive backplane), I/O module 2 (rear drive backplane), right mounting ear or the corresponding cables.<br>• If no, go to **4**.<br>4. If multiple drives are involved, install the drives one by one in sequence, and check whether the host is abnormal power on to identify the faulty drive. |

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| Power supply subsystem name | Possible Component | Troubleshooting Suggestions |
| --- | --- | --- |
| V_VCC_3V3 | • Mainboard<br>• Screw-in RAID controller card<br>• PCIe riser card<br>• Rear drive backplane<br>• Drive<br>• PCIe card | 1. Remove the signal and power cables connected to the mainboard for the rear drive backplanes, and remove the PCIe riser cards and screw-in RAID controller card. Check whether the host is abnormal power on.<br>• If yes, the abnormal component is the mainboard.<br>• If no, go to **2**.<br>2. Remove all drives and PCIe cards from the involved components. Reinsert the cables for the rear drive backplanes one by one, reinstall the PCIe riser cards and screw-in RAID controller card, and check whether the host is abnormal power on.<br>• If yes, the abnormal component is the rear drive backplane or the corresponding cables, PCIe riser cards, or screw-in RAID controller card.<br>• If no, go to **3**.<br>3. If multiple drives or PCIe cards are involved, install the drives or PCIe cards one by one in sequence, and check whether the host is abnormal power on to identify the faulty drive or PCIe card. |
| V_VCCIN_CPU1<br>V_VSA_CPU1<br>V_VCCIO_CPU1<br>V_PANA_CPU1<br>V_1V8_CPU1 | • Mainboard<br>• CPU1 | Remove CPU1 and CPU2, and install CPU2 into the CPU1 slot, check whether the host is abnormal power on.<br>• If yes, the abnormal component is the mainboard.<br>• If no, the abnormal component is the original CPU1. |
| V_VCCIN_CPU2<br>V_VSA_CPU2 | • Mainboard<br>• CPU2 | Remove CPU2, and check whether the host is abnormal power on. |

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| Power supply subsystem name | Possible Component | Troubleshooting Suggestions |
| --- | --- | --- |
| V_VCCIO_CPU2<br>V_PANA_CPU2<br>V_1V8_CPU2 | | • If yes, the abnormal component is the mainboard.<br>• If no, the abnormal component is the CPU2. |
| V_VPP_ABCD<br>V_VDDQ_ABCD<br>V_VTT_ABCD | • Mainboard<br>• CPU1<br>• DIMM000-031 | 1. Remove CPU1, CPU2 and DIMM000-031. Install CPU2 into the CPU1 slot, and install the memory from DIMM100 to DIMM000, and check whether the host is abnormal power on.<br>• If yes, the abnormal component is the mainboard.<br>• If no, go to **2**.<br>2. Remove the original CPU2 from the CPU1 slot, and reinstall the original CPU1 back into the CPU1 slot, and check whether the host is abnormal power on.<br>• If yes, the abnormal component is the original CPU1.<br>• If no, **3**<br>3. Using the binary method, install the DIMM000-031 separately, and check whether the host is abnormal power on to identify the faulty memory. |
| V_VPP_EFGH<br>V_VDDQ_EFGH | • Mainboard<br>• CPU1<br>• DIMM040-071 | 1. Remove CPU1, CPU2 and DIMM040-071. Install CPU2 into the CPU1 slot, and check whether the host is abnormal power on.<br>• If yes, the abnormal component is the mainboard.<br>• If no, **2**<br>2. Remove the original CPU2 from the CPU1 slot, and reinstall the original CPU1 back into the CPU1 slot, and check whether the host is abnormal power on.<br>• If yes, the abnormal component is the original CPU1.<br>• If no, **3** |

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| Power supply subsystem name | Possible Component | Troubleshooting Suggestions |
| --- | --- | --- |
| V_VTT_EFGH | | 3. Using the binary method, install the DIMM040-071 separately, and check whether the host is abnormal power on to identify the faulty memory. |
| V_VPP_JKLM<br>V_VDDQ_JKLM<br>V_VTT_JKLM | • Mainboard<br>• DIMM100-131<br>• CPU2 | 1. Remove CPU2 and DIMM100-131, and check whether the host is abnormal power on.<br>• If yes, the abnormal component is the mainboard.<br>• If no, go to **2**.<br>2. Remove CPU1, and install the original CPU2 into the CPU1 slot, and check whether the host is abnormal power on.<br>• If yes, the abnormal component is the original CPU2.<br>• If no, go to **3**.<br>3. Using the binary method, install the DIMM100-131 separately, and check whether the host is abnormal power on to identify the faulty memory. |
| V_VPP_NPQR<br>V_VDDQ_NPQR<br>V_VTT_NPQR | • Mainboard<br>• DIMM140-171<br>• CPU2 | 1. Remove CPU2 and DIMM140-171, check whether the host is abnormal power on.<br>• If yes, the abnormal component is the mainboard.<br>• If no, go to **2**.<br>2. Remove CPU1, and install the original CPU2 into the CPU1 slot, and check whether the host is abnormal power on.<br>• If yes, the abnormal component is the original CPU2.<br>• If no, go to **3**.<br>3. Using the binary method, install the DIMM140-171 separately, and check whether the host is abnormal power on to identify the faulty memory. |

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**Table 2-11** Reference information

| Power supply subsystem name | Possible Component | Troubleshooting Suggestions |
| --- | --- | --- |
| STBY_5V0 | • Mainboard<br>• LCD | Remove the signal cable connected to the mainboard for the LCD, and check whether the host is abnormal power on.<br>• If yes, the abnormal component is the mainboard.<br>• If no, the abnormal component is LCD or the corresponding cable. |
| STBY_1V8_PCH | Mainboard | Replace the mainboard. |
| STBY_1V05_PCH | Mainboard | Replace the mainboard. |
| STBY_PCH_PVNN | Mainboard | Replace the mainboard. |
| V_VCC_12V0_1 | • Mainboard<br>• CPU1<br>• DIMM000-051 | 1. Remove CPU1, CPU2 and DIMM000-051, install the CPU2 into the CPU1 slot, and install one memory from under CPU2 into DIMM000, and perform a minimum system verification. Check whether the host is abnormal power on.<br>• If yes, the abnormal component is the mainboard.<br>• If no, go to **2**.<br>2. Remove the original CPU2 from the CPU1 slot, and reinstall the original CPU1 back into the CPU1 slot, and check whether the host is abnormal power on.<br>• If yes, the abnormal component is the original CPU1.<br>• If no, go to **3**.<br>3. Using the binary method, install the DIMM000-051 separately, and check whether the host is abnormal power on to identify the faulty memory. |

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| Power supply subsystem name | Possible Component | Troubleshooting Suggestions |
| --- | --- | --- |
| V_VCC_12V0_2 | • Mainboard<br>• CPU2<br>• DIMM100-151 | 1. Remove CPU2 and DIMM100-151, and check whether the host is abnormal power on.<br>• If yes, the abnormal component is the mainboard.<br>• If no, go to **2**.<br>2. Remove CPU1, and install the original CPU2 into the CPU1 slot, and check whether the host is abnormal power on.<br>• If yes, the abnormal component is the original CPU2.<br>• If no, go to **3**.<br>3. Using the binary method, install the DIMM100-151 separately, and check whether the host is abnormal power on to identify the faulty memory. |
| V_VCC_12V0_3 | • Mainboard<br>• CPU3<br>• DIMM200-251 | 1. Remove CPU3 and DIMM200-251, and check whether the host is abnormal power on.<br>• If yes, the abnormal component is the mainboard.<br>• If no, go to **2**.<br>2. Remove CPU1, and install the original CPU3 into the CPU1 slot, and check whether the host is abnormal power on.<br>• If yes, the abnormal component is the original CPU3.<br>• If no, go to **3**.<br>3. Using the binary method, install the DIMM200-251 separately, and check whether the host is abnormal power on to identify the faulty memory. |

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| Power supply subsystem name | Possible Component | Troubleshooting Suggestions |
| --- | --- | --- |
| V_VCC_12V0_4 | • Mainboard<br>• CPU4<br>• DIMM300-351 | 1. Remove CPU4 and DIMM300-351, and check whether the host is abnormal power on.<br>• If yes, the abnormal component is the mainboard.<br>• If no, go to **2**.<br>2. Remove CPU1, and install the original CPU4 into the CPU1 slot, and check whether the host is abnormal power on.<br>• If yes, the abnormal component is the original CPU4.<br>• If no, go to **3**.<br>3. Using the binary method, install the DIMM300-351 separately, and check whether the host is abnormal power on to identify the faulty memory. |

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| Power supply subsystem name | Possible Component | Troubleshooting Suggestions |
| --- | --- | --- |
| V_VCC_12V0_5 | • Mainboard<br>• M.2 SSD adapter card<br>• Front drive backplane<br>• Drive | 1. Remove the signal and power cables connected to the mainboard for the front drive backplane, and remove the M.2 SSD adapter card. Check whether the host is abnormal power on.<br>• If yes, the abnormal component is the mainboard.<br>• If no, go to **2**.<br>2. Remove all drives from the involved components. Reinsert the cables for the front drive backplane one by one, reinstall the M.2 SSD adapter card, and check whether the host is abnormal power on.<br>• If yes, the abnormal component is the front drive backplane or the corresponding cables, or M.2 SSD adapter card.<br>• If no, go to **3**.<br>3. If multiple drives are involved, install the drives one by one in sequence, and check whether the host is abnormal power on to identify the faulty drive. |

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| Power supply subsystem name | Possible Component | Troubleshooting Suggestions |
| --- | --- | --- |
| V_VCC_12V0_6 | • Mainboard<br>• PCIe riser card<br>• PCIe RAID controller card<br>• PCIe card | 1. Remove the PCIe riser cards and PCIe RAID controller card. Check whether the host is abnormal power on.<br>• If yes, the abnormal component is the mainboard.<br>• If no, go to **2**.<br>2. Remove all PCIe cards from the involved components. Reinstall the PCIe riser cards and PCIe RAID controller card one by one, and check whether the host is abnormal power on.<br>• If yes, the abnormal component is the PCIe riser cards or PCIe RAID controller card.<br>• If no, go to **3**.<br>3. If multiple PCIe cards are involved, install the PCIe cards one by one in sequence, and check whether the host is abnormal power on to identify the faulty PCIe card. |
| V_VCC_12V0_7 | • Mainboard<br>• PCIe riser card<br>• PCIe card | 1. Remove the PCIe riser cards. Check whether the host is abnormal power on.<br>• If yes, the abnormal component is the mainboard.<br>• If no, go to **2**.<br>2. Remove all PCIe cards from the involved components. Reinstall the PCIe riser cards one by one, and check whether the host is abnormal power on.<br>• If yes, the abnormal component is the PCIe riser card.<br>• If no, go to **3**.<br>3. If multiple PCIe cards are involved, install the PCIe cards one by one in sequence, and check whether the host is abnormal power on to identify the faulty PCIe card. |

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| Power supply subsystem name | Possible Component | Troubleshooting Suggestions |
| --- | --- | --- |
| V_VCC_12V0_8 | ● Mainboard<br>● Fan: FAN1/FAN2/FAN3/FAN4/FAN5/FAN6 | Remove the FAN1/FAN2/FAN3/FAN4/FAN5/FAN6, and check whether the host is abnormal power on.<br>● If yes, the abnormal component is the mainboard.<br>● If no, the abnormal component is the FAN1/FAN2/FAN3/FAN4/FAN5/FAN6. Install the fans one by one in sequence, check whether the host is abnormal power on to identify the faulty fan. |
| V_OCP_MAIN | ● Mainboard<br>● OCP card | Remove the OCP card, and check whether the host is abnormal power on.<br>● If yes, the abnormal component is the mainboard.<br>● If no, the abnormal component is the OCP card. |
| V_VCC_5V0 | ● Mainboard<br>● Right mounting ear<br>● USB device | 1. Remove the USB device, and check whether the host is abnormal power on.<br>● If yes, go to **2**.<br>● If no, the abnormal component is the USB device. If multiple USB components are involved, install the USB components one by one, and check whether the host is abnormal power on to identify the faulty USB device.<br>2. Remove the cable connected to the mainboard for the right mounting ear,<br>● If yes, the abnormal component is the mainboard.<br>● If no, the abnormal component is the right mounting ear or the corresponding cable. |

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| Power supply subsystem name | Possible Component | Troubleshooting Suggestions |
| --- | --- | --- |
| V_VCC_3V3 | ● Mainboard<br>● M.2 SSD adapter card<br>● PCIe riser card<br>● Front drive backplane<br>● Drive<br>● PCIe card | 1. Remove the signal and power cables connected to the mainboard for the front drive backplane, and remove the PCIe riser cards and M.2 SSD adapter card. Check whether the host is abnormal power on.<br>● If yes, the abnormal component is the mainboard.<br>● If no, go to **2**.<br>2. Remove all drives and PCIe cards from the involved components. Reinsert the cables for the front drive backplane one by one, reinstall the PCIe riser cards and M.2 SSD adapter card, and check whether the host is abnormal power on.<br>● If yes, the abnormal component is the front drive backplane or the corresponding LP Slimline high-speed cables, PCIe riser cards or the corresponding cables, or the M.2 SSD adapter card.<br>● If no, go to **3**.<br>3. If multiple drives or PCIe cards are involved, install the drives or PCIe cards one by one in sequence, and check whether the host is abnormal power on to identify the faulty drive or PCIe card. |

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| Power supply subsystem name | Possible Component | Troubleshooting Suggestions |
| --- | --- | --- |
| V_VCC_3V3_2 | • Mainboard<br>• PCIe riser card<br>• PCIe RAID controller card<br>• PCIe card | 1. Remove the PCIe riser cards and PCIe RAID controller card from the PCIe slots Slot4, Slot5, and Slot6, and check whether the host is abnormal power on.<br>• If yes, the abnormal component is the mainboard.<br>• If no, go to **2**.<br>2. Remove all PCIe cards from the involved components. Reinstall the PCIe riser cards and PCIe RAID controller card one by one, and check whether the host is abnormal power on.<br>• If yes, the abnormal component is the PCIe riser cards or the PCIe RAID controller card.<br>• If no, go to **3**.<br>3. If multiple PCIe cards are involved, install the PCIe cards one by one in sequence, and check whether the host is abnormal power on to identify the faulty PCIe card. |
| V_P1V8_CPU12 | • Mainboard<br>• CPU1, CPU2 | 1. Remove the CPU1, CPU2, and CPU3, and install CPU3 into the CPU1 slot. Check whether the host is abnormal power on.<br>• If yes, the abnormal component is the mainboard.<br>• If no, go to **2**.<br>2. Remove the original CPU3 from the CPU1 slot, and reinstall the original CPU1 and CPU2 into the CPU1 slot one by one, and check whether the host is abnormal power on to identify the faulty CPU. |

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| Power supply subsystem name | Possible Component | Troubleshooting Suggestions |
| --- | --- | --- |
| V_P1V8_CPU34 | • Mainboard<br>• CPU3, CPU4 | 1. Remove the CPU3 and CPU4, and check whether the host is abnormal power on.<br>• If yes, the abnormal component is the mainboard.<br>• If no, go to **2**.<br>2. Install the CPU3 and CPU4 one by one, and check whether the host is abnormal power on to identify the faulty CPU. |
| V_VCCIN_CPU1<br>V_VSA_CPU1<br>V_VCCIO_CPU1 | • Mainboard<br>• CPU1 | Remove CPU1 and CPU2, and install CPU2 into the CPU1 slot. Check whether the host is abnormal power on.<br>• If yes, the abnormal component is the mainboard.<br>• If no, the abnormal component is the original CPU1. |
| V_VCCIN_CPU2<br>V_VSA_CPU2<br>V_VCCIO_CPU2 | • Mainboard<br>• CPU2 | Remove CPU2 and check whether the host is abnormal power on.<br>• If yes, the abnormal component is the mainboard.<br>• If no, the abnormal component is the CPU2. |
| V_VCCIN_CPU3<br>V_VSA_CPU3<br>V_VCCIO_CPU3 | • Mainboard<br>• CPU3 | Remove CPU3 and check whether the host is abnormal power on.<br>• If yes, the abnormal component is the mainboard.<br>• If no, the abnormal component is the CPU3. |
| V_VCCIN_CPU4<br>V_VSA_CPU4<br>V_VCCIO_CPU4 | • Mainboard<br>• CPU4 | Remove CPU4 and check whether the host is abnormal power on.<br>• If yes, the abnormal component is the mainboard.<br>• If no, the abnormal component is the CPU4. |
| V_VPP_ABC<br>V_VDDQ_ABC | • Mainboard<br>• CPU1<br>• DIMM000-021 | 1. Remove CPU1, CPU2 and DIMM000-021. Install CPU2 into the CPU1 slot, and install the DIMM100 into the DIMM000 slot. Check whether the host is abnormal power on. |

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| Power supply subsystem name | Possible Component | Troubleshooting Suggestions |
| --- | --- | --- |
| V_VTT_ABC | | ● If yes, the abnormal component is the mainboard.<br>● If no, go to **2**.<br>2. Remove the original CPU2 from the CPU1 slot, and reinstall the original CPU1 back into the CPU1 slot, and check whether the host is abnormal power on.<br>● If yes, the abnormal component is the original CPU1.<br>● If no, go to **3**.<br>3. Using the binary method, install the DIMM000-021 separately, and check whether the host is abnormal power on to identify the faulty memory. |
| V_VPP_DEF<br>V_VDDQ_DEF<br>V_VTT_DEF | ● Mainboard<br>● CPU1<br>● DIMM030-051 | 1. Remove CPU1, CPU2 and DIMM030-051. Install CPU2 into the CPU1 slot, and check whether the host is abnormal power on.<br>● If yes, the abnormal component is the mainboard.<br>● If no, go to **2**.<br>2. Remove the original CPU2 from the CPU1 slot, and reinstall the original CPU1 back into the CPU1 slot, and check whether the host is abnormal power on.<br>● If yes, the abnormal component is the original CPU1.<br>● If no, go to **3**.<br>3. Using the binary method, install the DIMM030-051 separately, and check whether the host is abnormal power on to identify the faulty memory. |
| V_VPP_GHJ<br>V_VDDQ_GHJ | ● Mainboard<br>● CPU2<br>● DIMM100-121 | 1. Remove CPU2 and DIMM100-121, and check whether the host is abnormal power on. |

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| Power supply subsystem name | Possible Component | Troubleshooting Suggestions |
| --- | --- | --- |
| V_VTT_GHJ | | ● If yes, the abnormal component is the mainboard.<br>● If no, go to **2**.<br>2. Remove CPU1, and install the original CPU2 into the CPU1 slot, and check whether the host is abnormal power on.<br>● If yes, the abnormal component is the original CPU2.<br>● If no, go to **3**.<br>3. Using the binary method, install the DIMM100-121 separately, and check whether the host is abnormal power on to identify the faulty memory. |
| V_VPP_KLM<br>V_VDDQ_KLM<br>V_VTT_KLM | ● Mainboard<br>● CPU2<br>● DIMM130-151 | 1. Remove CPU2 and DIMM130-151, and check whether the host is abnormal power on.<br>● If yes, the abnormal component is the mainboard.<br>● If no, go to **2**.<br>2. Remove CPU1, and install the original CPU2 into the CPU1 slot, and check whether the host is abnormal power on.<br>● If yes, the abnormal component is the original CPU2.<br>● If no, go to **3**.<br>3. Using the binary method, install the DIMM130-151 separately, and check whether the host is abnormal power on to identify the faulty memory. |
| V_VPP_NPQ<br>V_VDDQ_NPQ | ● Mainboard<br>● CPU3<br>● DIMM200-221 | 1. Remove CPU3 and DIMM200-221, and check whether the host is abnormal power on.<br>● If yes, the abnormal component is the mainboard.<br>● If no, go to **2**. |

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| Power supply subsystem name | Possible Component | Troubleshooting Suggestions |
| --- | --- | --- |
| V_VTT_NPQ | | 2. Remove CPU1, and install the original CPU3 into the CPU1 slot, and check whether the host is abnormal power on.<br>● If yes, the abnormal component is the original CPU3.<br>● If no, go to **3**.<br>3. Using the binary method, install the DIMM200-221 separately, and check whether the host is abnormal power on to identify the faulty memory. |
| V_VPP_RST<br>V_VDDQ_RST<br>V_VTT_RST | ● Mainboard<br>● CPU3<br>● DIMM230-251 | 1. Remove CPU3 and DIMM230-251, and check whether the host is abnormal power on.<br>● If yes, the abnormal component is the mainboard.<br>● If no, go to **2**.<br>2. Remove CPU1, and install the original CPU3 into the CPU1 slot, and check whether the host is abnormal power on.<br>● If yes, the abnormal component is the original CPU3.<br>● If no, go to **3**.<br>3. Using the binary method, install the DIMM230-251 separately, and check whether the host is abnormal power on to identify the faulty memory. |
| V_VPP_UVW<br>V_VDDQ_UVW | ● Mainboard<br>● CPU4<br>● DIMM300-321 | 1. Remove CPU4 and DIMM300-321, and check whether the host is abnormal power on.<br>● If yes, the abnormal component is the mainboard.<br>● If no, go to **2**.<br>2. Remove CPU1, and install the original CPU4 into the CPU1 slot, and check whether the host is abnormal power on. |

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| Power supply subsystem name | Possible Component | Troubleshooting Suggestions |
| --- | --- | --- |
| V_VTT_UVW | | ● If yes, the abnormal component is the original CPU4.<br>● If no, go to **3**.<br>3. Using the binary method, install the DIMM300-321 separately, and check whether the host is abnormal power on to identify the faulty memory. |
| V_VPP_XYZ<br>V_VDDQ_XYZ<br>V_VTT_XYZ | ● Mainboard<br>● CPU4<br>● DIMM330-351 | 1. Remove CPU4 and DIMM330-351, and check whether the host is abnormal power on.<br>● If yes, the abnormal component is the mainboard.<br>● If no, go to **2**.<br>2. Remove CPU1, and install the original CPU4 into the CPU1 slot, and check whether the host is abnormal power on.<br>● If yes, the abnormal component is the original CPU4.<br>● If no, go to **3**.<br>3. Using the binary method, install the DIMM330-351 separately, and check whether the host is abnormal power on to identify the faulty memory. |

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### 2.12.1.2.6 5885H V6

**Table 2-12** Reference information

| Power supply subsystem name | Possible Component | Troubleshooting Suggestions |
| --- | --- | --- |
| STBY_5V0 | • Mainboard<br>• LCD | Remove the signal cable connected to the mainboard for the LCD, and check whether the host is abnormal power on.<br>• If yes, the abnormal component is the mainboard.<br>• If no, the abnormal component is LCD or the corresponding cable. |
| STBY_1V8_PCH | Mainboard | Replace the mainboard. |
| STBY_1V05_PCH | Mainboard | Replace the mainboard. |
| STBY_PCH_PVNN | Mainboard | Replace the mainboard. |
| V_VCC_12V0_1 | • Mainboard<br>• CPU1<br>• DIMM000-051 | 1. Remove CPU1, CPU2 and DIMM000-051, install the CPU2 into the CPU1 slot, and install one memory from under CPU2 into DIMM000, and perform a minimum system verification. Check whether the host is abnormal power on.<br>• If yes, the abnormal component is the mainboard.<br>• If no, go to **2**.<br>2. Remove the original CPU2 from the CPU1 slot, and reinstall the original CPU1 back into the CPU1 slot, and check whether the host is abnormal power on.<br>• If yes, the abnormal component is the original CPU1.<br>• If no, go to **3**.<br>3. Using the binary method, install the DIMM000-051 separately, and check whether the host is abnormal power on to identify the faulty memory. |

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| Power supply subsystem name | Possible Component | Troubleshooting Suggestions |
| --- | --- | --- |
| V_VCC_12V0_2 | • Mainboard<br>• CPU2<br>• DIMM100-151 | 1. Remove CPU2 and DIMM100-151, and check whether the host is abnormal power on.<br>• If yes, the abnormal component is the mainboard.<br>• If no, go to **2**.<br>2. Remove CPU1, and install the original CPU2 into the CPU1 slot, and check whether the host is abnormal power on.<br>• If yes, the abnormal component is the original CPU2.<br>• If no, go to **3**.<br>3. Using the binary method, install the DIMM100-151 separately, and check whether the host is abnormal power on to identify the faulty memory. |
| V_VCC_12V0_3 | • Mainboard<br>• CPU3<br>• DIMM200-251 | 1. Remove CPU3 and DIMM200-251, and check whether the host is abnormal power on.<br>• If yes, the abnormal component is the mainboard.<br>• If no, go to **2**.<br>2. Remove CPU1, and install the original CPU3 into the CPU1 slot, and check whether the host is abnormal power on.<br>• If yes, the abnormal component is the original CPU3.<br>• If no, go to **3**.<br>3. Using the binary method, install the DIMM200-251 separately, and check whether the host is abnormal power on to identify the faulty memory. |

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| Power supply subsystem name | Possible Component | Troubleshooting Suggestions |
| --- | --- | --- |
| V_VCC_12V0_4 | • Mainboard<br>• CPU4<br>• DIMM300-351 | 1. Remove CPU4 and DIMM300-351, and check whether the host is abnormal power on.<br>• If yes, the abnormal component is the mainboard.<br>• If no, go to **2**.<br>2. Remove CPU1, and install the original CPU4 into the CPU1 slot, and check whether the host is abnormal power on.<br>• If yes, the abnormal component is the original CPU4.<br>• If no, go to **3**.<br>3. Using the binary method, install the DIMM300-351 separately, and check whether the host is abnormal power on to identify the faulty memory. |

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| Power supply subsystem name | Possible Component | Troubleshooting Suggestions |
| --- | --- | --- |
| V_VCC_12V0_5 | • Mainboard<br>• M.2 SSD adapter card<br>• Front drive backplane<br>• Drive | 1. Remove the signal and power cables connected to the mainboard for the front drive backplane, and remove the M.2 SSD adapter card. Check whether the host is abnormal power on.<br>• If yes, the abnormal component is the mainboard.<br>• If no, go to **2**.<br>2. Remove all drives from the involved components. Reinsert the cables for the front drive backplane one by one, reinstall the M.2 SSD adapter card, and check whether the host is abnormal power on.<br>• If yes, the abnormal component is the front drive backplane or the corresponding cables, or M.2 SSD adapter card.<br>• If no, go to **3**.<br>3. If multiple drives are involved, install the drives one by one in sequence, and check whether the host is abnormal power on to identify the faulty drive. |

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| Power supply subsystem name | Possible Component | Troubleshooting Suggestions |
| --- | --- | --- |
| V_VCC_12V0_6 | • Mainboard<br>• PCIe riser card<br>• PCIe RAID controller card<br>• PCIe card | 1. Remove the PCIe riser cards and PCIe RAID controller card. Check whether the host is abnormal power on.<br>• If yes, the abnormal component is the mainboard.<br>• If no, go to **2**.<br>2. Remove all PCIe cards from the involved components. Reinstall the PCIe riser cards and PCIe RAID controller card one by one, and check whether the host is abnormal power on.<br>• If yes, the abnormal component is the PCIe riser cards or PCIe RAID controller card.<br>• If no, go to **3**.<br>3. If multiple PCIe cards are involved, install the PCIe cards one by one in sequence, and check whether the host is abnormal power on to identify the faulty PCIe card. |
| V_VCC_12V0_7 | • Mainboard<br>• PCIe riser card<br>• PCIe card | 1. Remove the PCIe riser cards. Check whether the host is abnormal power on.<br>• If yes, the abnormal component is the mainboard.<br>• If no, go to **2**.<br>2. Remove all PCIe cards from the involved components. Reinstall the PCIe riser cards one by one, and check whether the host is abnormal power on.<br>• If yes, the abnormal component is the PCIe riser card.<br>• If no, go to **3**.<br>3. If multiple PCIe cards are involved, install the PCIe cards one by one in sequence, and check whether the host is abnormal power on to identify the faulty PCIe card. |

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| Power supply subsystem name | Possible Component | Troubleshooting Suggestions |
| --- | --- | --- |
| V_VCC_12V0_8 | Mainboard | Replace the mainboard. |
| V_OCP_MAIN | ● Mainboard<br>● OCP card | Remove the OCP card, and check whether the host is abnormal power on.<br>● If yes, the abnormal component is the mainboard.<br>● If no, the abnormal component is the OCP card. |
| V_VCC_5V0 | ● Mainboard<br>● Right mounting ear<br>● USB device | 1. Remove the USB device, and check whether the host is abnormal power on.<br>● If yes, go to **2**.<br>● If no, the abnormal component is the USB device. If multiple USB components are involved, install the USB components one by one, and check whether the host is abnormal power on to identify the faulty USB device.<br>2. Remove the cable connected to the mainboard for the right mounting ear,<br>● If yes, the abnormal component is the mainboard.<br>● If no, the abnormal component is the right mounting ear or the corresponding cable. |

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| Power supply subsystem name | Possible Component | Troubleshooting Suggestions |
| --- | --- | --- |
| V_VCC_3V3 | ● Mainboard<br>● M.2 SSD adapter card<br>● PCIe riser card<br>● PCIe card | 1. Remove the PCIe riser cards and M.2 SSD adapter card, and check whether the host is abnormal power on.<br>● If yes, the abnormal component is the mainboard.<br>● If no, go to **2**.<br>2. Remove all PCIe cards from the involved components. Reinstall the PCIe riser cards and corresponding cables one by one, reinstall the M.2 SSD adapter card, and check whether the host is abnormal power on.<br>● If yes, the abnormal component is the PCIe riser cards or the corresponding LP Slimline high-speed cables, or M.2 SSD adapter card.<br>● If no, go to **3**.<br>3. If multiple PCIe cards are involved, install the PCIe cards one by one in sequence, and check whether the host is abnormal power on to identify the faulty PCIe card. |

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| Power supply subsystem name | Possible Component | Troubleshooting Suggestions |
| --- | --- | --- |
| V_VCC_3V3_2 | • Mainboard<br>• PCIe riser card<br>• PCIe RAID controller card<br>• PCIe card | 1. Remove the PCIe riser cards and PCIe RAID controller card from the PCIe slots Slot4, Slot5, and Slot6, and check whether the host is abnormal power on.<br>• If yes, the abnormal component is the mainboard.<br>• If no, go to **2**.<br>2. Remove all PCIe cards from the involved components. Reinstall the PCIe riser cards and PCIe RAID controller card one by one, and check whether the host is abnormal power on.<br>• If yes, the abnormal component is the PCIe riser cards or the PCIe RAID controller card.<br>• If no, go to **3**.<br>3. If multiple PCIe cards are involved, install the PCIe cards one by one in sequence, and check whether the host is abnormal power on to identify the faulty PCIe card. |
| V_P1V8_CPU12 | • Mainboard<br>• CPU1, CPU2 | 1. Remove the CPU1, CPU2, and CPU3, and install CPU3 into the CPU1 slot. Check whether the host is abnormal power on.<br>• If yes, the abnormal component is the mainboard.<br>• If no, go to **2**.<br>2. Remove the original CPU3 from the CPU1 slot, and reinstall the original CPU1 and CPU2 into the CPU1 slot one by one, and check whether the host is abnormal power on to identify the faulty CPU. |

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| Power supply subsystem name | Possible Component | Troubleshooting Suggestions |
| --- | --- | --- |
| V_P1V8_CPU34 | • Mainboard<br>• CPU3, CPU4 | 1. Remove the CPU3 and CPU4, and check whether the host is abnormal power on.<br>• If yes, the abnormal component is the mainboard.<br>• If no, go to **2**.<br>2. Install the CPU3 and CPU4 one by one, and check whether the host is abnormal power on to identify the faulty CPU. |
| V_VCCIN_CPU1<br>V_VSA_CPU1<br>V_VCCIO_CPU1 | • Mainboard<br>• CPU1 | Remove CPU1 and CPU2, and install CPU2 into the CPU1 slot. Check whether the host is abnormal power on.<br>• If yes, the abnormal component is the mainboard.<br>• If no, the abnormal component is the original CPU1. |
| V_VCCIN_CPU2<br>V_VSA_CPU2<br>V_VCCIO_CPU2 | • Mainboard<br>• CPU2 | Remove CPU2 and check whether the host is abnormal power on.<br>• If yes, the abnormal component is the mainboard.<br>• If no, the abnormal component is the CPU2. |
| V_VCCIN_CPU3<br>V_VSA_CPU3<br>V_VCCIO_CPU3 | • Mainboard<br>• CPU3 | Remove CPU3 and check whether the host is abnormal power on.<br>• If yes, the abnormal component is the mainboard.<br>• If no, the abnormal component is the CPU3. |
| V_VCCIN_CPU4<br>V_VSA_CPU4<br>V_VCCIO_CPU4 | • Mainboard<br>• CPU4 | Remove CPU4 and check whether the host is abnormal power on.<br>• If yes, the abnormal component is the mainboard.<br>• If no, the abnormal component is the CPU4. |
| V_VPP_ABC<br>V_VDDQ_ABC | • Mainboard<br>• CPU1<br>• DIMM000-021 | 1. Remove CPU1, CPU2 and DIMM000-021. Install CPU2 into the CPU1 slot, and install the DIMM100 into the DIMM000 slot. Check whether the host is abnormal power on. |

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| Power supply subsystem name | Possible Component | Troubleshooting Suggestions |
| --- | --- | --- |
| V_VTT_ABC | | ● If yes, the abnormal component is the mainboard.<br>● If no, go to **2**.<br>2. Remove the original CPU2 from the CPU1 slot, and reinstall the original CPU1 back into the CPU1 slot, and check whether the host is abnormal power on.<br>● If yes, the abnormal component is the original CPU1.<br>● If no, go to **3**.<br>3. Using the binary method, install the DIMM000-021 separately, and check whether the host is abnormal power on to identify the faulty memory. |
| V_VPP_DEF<br>V_VDDQ_DEF<br>V_VTT_DEF | ● Mainboard<br>● CPU1<br>● DIMM030-051 | 1. Remove CPU1, CPU2 and DIMM030-051. Install CPU2 into the CPU1 slot, and check whether the host is abnormal power on.<br>● If yes, the abnormal component is the mainboard.<br>● If no, go to **2**.<br>2. Remove the original CPU2 from the CPU1 slot, and reinstall the original CPU1 back into the CPU1 slot, and check whether the host is abnormal power on.<br>● If yes, the abnormal component is the original CPU1.<br>● If no, go to **3**.<br>3. Using the binary method, install the DIMM030-051 separately, and check whether the host is abnormal power on to identify the faulty memory. |
| V_VPP_GHJ<br>V_VDDQ_GHJ | ● Mainboard<br>● CPU2<br>● DIMM100-121 | 1. Remove CPU2 and DIMM100-121, and check whether the host is abnormal power on. |

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| Power supply subsystem name | Possible Component | Troubleshooting Suggestions |
| --- | --- | --- |
| V_VTT_GHJ | | ● If yes, the abnormal component is the mainboard.<br>● If no, go to **2**.<br>2. Remove CPU1, and install the original CPU2 into the CPU1 slot, and check whether the host is abnormal power on.<br>● If yes, the abnormal component is the original CPU2.<br>● If no, go to **3**.<br>3. Using the binary method, install the DIMM100-121 separately, and check whether the host is abnormal power on to identify the faulty memory. |
| V_VPP_KLM<br>V_VDDQ_KLM<br>V_VTT_KLM | ● Mainboard<br>● CPU2<br>● DIMM130-151 | 1. Remove CPU2 and DIMM130-151, and check whether the host is abnormal power on.<br>● If yes, the abnormal component is the mainboard.<br>● If no, go to **2**.<br>2. Remove CPU1, and install the original CPU2 into the CPU1 slot, and check whether the host is abnormal power on.<br>● If yes, the abnormal component is the original CPU2.<br>● If no, go to **3**.<br>3. Using the binary method, install the DIMM130-151 separately, and check whether the host is abnormal power on to identify the faulty memory. |
| V_VPP_NPQ<br>V_VDDQ_NPQ | ● Mainboard<br>● CPU3<br>● DIMM200-221 | 1. Remove CPU3 and DIMM200-221, and check whether the host is abnormal power on.<br>● If yes, the abnormal component is the mainboard.<br>● If no, go to **2**. |

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| Power supply subsystem name | Possible Component | Troubleshooting Suggestions |
| --- | --- | --- |
| V_VTT_NPQ | | 2. Remove CPU1, and install the original CPU3 into the CPU1 slot, and check whether the host is abnormal power on.<br>● If yes, the abnormal component is the original CPU3.<br>● If no, go to **3**.<br>3. Using the binary method, install the DIMM200-221 separately, and check whether the host is abnormal power on to identify the faulty memory. |
| V_VPP_RST<br>V_VDDQ_RST<br>V_VTT_RST | ● Mainboard<br>● CPU3<br>● DIMM230-251 | 1. Remove CPU3 and DIMM230-251, and check whether the host is abnormal power on.<br>● If yes, the abnormal component is the mainboard.<br>● If no, go to **2**.<br>2. Remove CPU1, and install the original CPU3 into the CPU1 slot, and check whether the host is abnormal power on.<br>● If yes, the abnormal component is the original CPU3.<br>● If no, go to **3**.<br>3. Using the binary method, install the DIMM230-251 separately, and check whether the host is abnormal power on to identify the faulty memory. |
| V_VPP_UVW<br>V_VDDQ_UVW | ● Mainboard<br>● CPU4<br>● DIMM300-321 | 1. Remove CPU4 and DIMM300-321, and check whether the host is abnormal power on.<br>● If yes, the abnormal component is the mainboard.<br>● If no, go to **2**.<br>2. Remove CPU1, and install the original CPU4 into the CPU1 slot, and check whether the host is abnormal power on. |

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| Power supply subsystem name | Possible Component | Troubleshooting Suggestions |
| --- | --- | --- |
| V_VTT_UVW | | ● If yes, the abnormal component is the original CPU4.<br>● If no, go to **3**.<br>3. Using the binary method, install the DIMM300-321 separately, and check whether the host is abnormal power on to identify the faulty memory. |
| V_VPP_XYZ<br>V_VDDQ_XYZ<br>V_VTT_XYZ | ● Mainboard<br>● CPU4<br>● DIMM330-351 | 1. Remove CPU4 and DIMM330-351, and check whether the host is abnormal power on.<br>● If yes, the abnormal component is the mainboard.<br>● If no, go to **2**.<br>2. Remove CPU1, and install the original CPU4 into the CPU1 slot, and check whether the host is abnormal power on.<br>● If yes, the abnormal component is the original CPU4.<br>● If no, go to **3**.<br>3. Using the binary method, install the DIMM330-351 separately, and check whether the host is abnormal power on to identify the faulty memory. |

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### 2.12.1.2.7 G5500 V6

**Table 2-13** Reference information

| Power supply subsystem name | Possible Component | Troubleshooting Suggestions |
| --- | --- | --- |
| STBY_5V0 | ● Mainboard<br>● Fan board<br>● LCD | 1. Remove the signal cable connected to the mainboard for the LCD, and check whether the host is abnormal power on.<br>● If yes, go to **2**<br>● If no, the abnormal component is LCD or the corresponding cable.<br>2. Remove the signal cable connected to the mainboard for the fan board, and check whether the host is abnormal power on.<br>● If yes, the abnormal component is the mainboard.<br>● If no, the abnormal component is fan board or the corresponding cable. |

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| Power supply subsystem name | Possible Component | Troubleshooting Suggestions |
| --- | --- | --- |
| STBY_1V8_PCH | • Mainboard<br>• M.2 SSD dapter card<br>• Riser card of a PCIe RAID controller card<br>• PCIe RAID controller card | 1. Remove the low-speed signal cables connected to the mainboard for the M.2 SSD dapter card and riser card of a PCIe RAID controller card, and check whether the host is abnormal power on.<br>• If yes, the abnormal component is the mainboard.<br>• If no, go to **2**.<br>2. Remove all PCIe cards from the involved components. Reinsert the low-speed signal cables for the M.2 SSD dapter card or riser card of a PCIe RAID controller card one by one, and check whether the host is abnormal power on.<br>• If yes, the abnormal component is the M.2 SSD dapter card or riser card of a PCIe RAID controller card or the corresponding cables.<br>• If no, go to **3**.<br>3. If multiple PCIe cards are involved, install the PCIe cards one by one in sequence, and check whether the host is abnormal power on to identify the faulty PCIe card. |
| STBY_1V05_PCH | Mainboard | Replace the mainboard. |
| PVNN_PCH | Mainboard | Replace the mainboard. |

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| Power supply subsystem name | Possible Component | Troubleshooting Suggestions |
| --- | --- | --- |
| V_VCC_12V0_MB_CPU0 | • Mainboard<br>• CPU1<br>• DIMM000-071<br>• PCIe switch board | 1. Remove the high-speed cables connected to the mainboard for the PCIe switch board UBC DD connectors, and check whether the host is abnormal power on.<br>• If yes, go to **2**.<br>• If no, the abnormal component is the PCIe switch board or the corresponding cables.<br>2. Remove CPU1, CPU2 and DIMM000-071, install the CPU2 into the CPU1 slot, and install one memory from under CPU2 into DIMM000, and perform a minimum system verification. Check whether the host is abnormal power on.<br>• If yes, the abnormal component is the mainboard.<br>• If no, go to **3**.<br>3. Remove the original CPU2 from the CPU1 slot, and reinstall the original CPU1 back into the CPU1 slot, and check whether the host is abnormal power on.<br>• If yes, the abnormal component is the original CPU1.<br>• If no, go to **4**.<br>4. Using the binary method, install the DIMM000-071separately, and check whether the host is abnormal power on to identify the faulty memory. |

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| Power supply subsystem name | Possible Component | Troubleshooting Suggestions |
| --- | --- | --- |
| V_VCC_12V0_MB_CPU1 | • Mainboard<br>• CPU2<br>• DIMM100-171<br>• PCIe riser card<br>• PCIe switch board | 1. Remove the high-speed cables connected to the mainboard for the PCIe switch board UBC DD connectors, and PCIe riser card one bye one. Check whether the host is abnormal power on.<br>• If yes, go to **2**.<br>• If yes, the abnormal component is the PCIe switch board, PCIe riser cards or the corresponding cables.<br>2. Remove CPU2 and DIMM100-171, and check whether the host is abnormal power on.<br>• If yes, the abnormal component is the mainboard.<br>• If no, go to **3**.<br>3. Remove CPU1, and install the original CPU2 into the CPU1 slot, and check whether the host is abnormal power on.<br>• If yes, the abnormal component is the original CPU2.<br>• If no, go to **4**.<br>4. Using the binary method, install the DIMM100-171separately, and check whether the host is abnormal power on to identify the faulty memory. |

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| Power supply subsystem name | Possible Component | Troubleshooting Suggestions |
| --- | --- | --- |
| V_VCC_12V0_MB_3 | • Mainboard<br>• PCIe riser card<br>• PCIe switch board<br>• Front drive backplane<br>• Riser card of a PCIe RAID controller card<br>• M.2 SSD adapter card<br>• Drive<br>• PCIe card | 1. Remove the signal and power cables connected to the mainboard for the front drive backplane, PCIe riser cards, PCIe switch board, riser card of a PCIe RAID controller card, and the M.2 SSD adapter card. Check whether the host is abnormal power on.<br>• If yes, the abnormal component is the mainboard.<br>• If no, go to **2**.<br>2. Remove all drives and PCIe cards from the involved components. Reinsert the signal and power cables for the front drive backplane, PCIe riser cards, PCIe switch board, riser card of a PCIe RAID controller card, or the M.2 SSD adapter card one by one, and check whether the host is abnormal power on.<br>• If yes, the abnormal component is the front drive backplane, PCIe riser cards, PCIe switch board, riser card of a PCIe RAID controller card, or the M.2 SSD adapter card or the corresponding signal and power cables.<br>• If no, go to **3**.<br>3. If multiple drives or PCIe cards are involved, install the drives or PCIe cards one by one in sequence, and check whether the host is abnormal power on to identify the faulty drive or PCIe card. |

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| Power supply subsystem name | Possible Component | Troubleshooting Suggestions |
| --- | --- | --- |
| V_VCC_5V0 | ● Mainboard<br>● Right mounting ear | Remove the cables connected to the mainboard for the right mounting ear, and check whether the host is abnormal power on.<br>● If yes, the abnormal component is the mainboard.<br>● If no, the abnormal component is the right mounting ear or the corresponding cables. |
| V_VCC_5V0_VRD_MOS | Mainboard | Replace the mainboard. |
| V_VCC_3V3 | ● Mainboard<br>● PCIe riser card | Remove the UBC DD high-speed signal cables connected to the mainboard for the PCIe riser cards, and check whether the host is abnormal power on.<br>● If yes, the abnormal component is the mainboard.<br>● If no, the abnormal component is the PCIe riser cards or the corresponding cables. |
| V_VCC_3V3_1 | ● Mainboard<br>● PCIe switch board | Remove the UBC DD high-speed signal cables connected to the mainboard for the PCIe switch board, and check whether the host is abnormal power on.<br>● If yes, the abnormal component is the mainboard.<br>● If no, the abnormal component is the PCIe switch board or the corresponding cables. |

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| Power supply subsystem name | Possible Component | Troubleshooting Suggestions |
| --- | --- | --- |
| V_VCC_3V3_2 | • Mainboard<br>• PCIe riser card<br>• PCIe switch board<br>• Front drive backplane<br>• Drive<br>• PCIe card | 1. Remove the signal and power cables connected to the mainboard for the PCIe riser cards, PCIe switch board, or the front drive backplane. Check whether the host is abnormal power on.<br>• If yes, the abnormal component is the mainboard.<br>• If no, go to **2**.<br>2. Remove all drives and PCIe cards from the involved components. Reinsert the signal and power cables for the PCIe riser cards, PCIe switch board, or the front drive backplane one by one, and check whether the host is abnormal power on.<br>• If yes, the abnormal component is the PCIe riser cards, PCIe switch board, front drive backplane or the corresponding cables.<br>• If no, go to **3**.<br>3. If multiple drives or PCIe cards are involved, install the drives or PCIe cards one by one in sequence, and check whether the host is abnormal power on to identify the faulty drive or PCIe card. |
| V_VCCIN_CPU1<br>V_VSA_CPU1<br>V_VCCIO_CPU1<br>V_PANA_CPU1<br>V_P1V8_CPU1 | • Mainboard<br>• CPU1 | Remove CPU1 and CPU2. Install CPU2 into the CPU1 slot, and check whether the host is abnormal power on.<br>• If yes, the abnormal component is the mainboard.<br>• If no, the abnormal component is the original CPU1. |
| V_VCCIN_CPU2<br>V_VSA_CPU2<br>V_VCCIO_CPU2<br>V_PANA_CPU2 | • Mainboard<br>• CPU2 | Remove CPU2 and check whether the host is abnormal power on.<br>• If yes, the abnormal component is the mainboard.<br>• If no, the abnormal component is the CPU2. |

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| Power supply subsystem name | Possible Component | Troubleshooting Suggestions |
| --- | --- | --- |
| V_P1V8_CPU2 | | |
| V_VPP_ABCD<br>V_VDDQ_ABCD<br>V_VTT_ABCD | • Mainboard<br>• CPU1<br>• DIMM000-031 | 1. Remove CPU1, CPU2 and DIMM000-031. Install CPU2 into the CPU1 slot, and install the DIMM100 into the DIMM000 slot. Check whether the host is abnormal power on.<br>• If yes, the abnormal component is the mainboard.<br>• If no, go to **2**.<br>2. Remove the original CPU2 from the CPU1 slot, and reinstall the original CPU1 back into the CPU1 slot, and check whether the host is abnormal power on.<br>• If yes, the abnormal component is the original CPU1.<br>• If no, go to **3**.<br>3. Using the binary method, install the DIMM000-031, and check whether the host is abnormal power on to identify the faulty memory. |
| V_VPP_EFGH<br>V_VDDQ_EFGH | • Mainboard<br>• CPU1<br>• DIMM040-071 | 1. Remove CPU1, CPU2 and DIMM040-071. Install CPU2 into the CPU1 slot, and check whether the host is abnormal power on.<br>• If yes, the abnormal component is the mainboard.<br>• If no, go to **2**.<br>2. Remove the original CPU2 from the CPU1 slot, and reinstall the original CPU1 back into the CPU1 slot, and check whether the host is abnormal power on.<br>• If yes, the abnormal component is the original CPU1.<br>• If no, go to **3**.<br>3. Using the binary method, install the DIMM040-071, and check whether the host is abnormal |

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| Power supply subsystem name | Possible Component | Troubleshooting Suggestions |
| --- | --- | --- |
| V_VTT_EFGH | | power on to identify the faulty memory. |
| V_VPP_JKLM<br>V_VDDQ_JKLM<br>V_VTT_JKLM | • Mainboard<br>• CPU2<br>• DIMM100-131 | 1. Remove CPU2 and DIMM100-131, and check whether the host is abnormal power on.<br>• If yes, the abnormal component is the mainboard.<br>• If no, go to **2**.<br>2. Remove CPU1, and install the original CPU2 into the CPU1 slot, and check whether the host is abnormal power on.<br>• If yes, the abnormal component is the original CPU2.<br>• If no, go to **3**.<br>3. Using the binary method, install the DIMM100-131 separately, and check whether the host is abnormal power on to identify the faulty memory. |
| V_VPP_NPQR<br>V_VDDQ_NPQR<br>V_VTT_NPQR | • Mainboard<br>• CPU2<br>• DIMM140-171 | 1. Remove CPU2 and DIMM140-171, and check whether the host is abnormal power on.<br>• If yes, the abnormal component is the mainboard.<br>• If no, go to **2**.<br>2. Remove CPU1, and install the original CPU2 into the CPU1 slot, and check whether the host is abnormal power on.<br>• If yes, the abnormal component is the original CPU2.<br>• If no, go to **3**.<br>3. Using the binary method, install the DIMM140-171 separately, and check whether the host is abnormal power on to identify the faulty memory. |

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### 2.12.1.2.8 XH321 V6/XH321C V6

**Table 2-14** Reference information

| Power supply subsystem name | Possible Component | Troubleshooting Suggestions |
| --- | --- | --- |
| STBY_5V0 | • Mainboard<br>• M.2 riser card | Remove the M.2 riser card, and check whether the host is abnormal power on.<br>• If yes, the abnormal component is the mainboard, replace the node.<br>• If no, the abnormal component is the M.2 riser card. |
| STBY_1V8_PCH | Mainboard | Replace the node. |
| STBY_1V05_PCH | Mainboard | Replace the node. |
| STBY_PCH_PVNN | Mainboard | Replace the node. |
| V_VCC_12V0_RISER | • Mainboard<br>• PCIe riser card<br>• PCIe card | 1. Remove the PCIe riser card, and check whether the host is abnormal power on.<br>• If yes, the abnormal component is the mainboard, replace the node.<br>• If no, go to **2**.<br>2. Remove all PCIe cards from the PCIe riser card, and check whether the host is abnormal power on.<br>• If yes, the abnormal component is the PCIe riser card.<br>• If no, go to **3**.<br>3. Install the PCIe cards one by one in sequence, and check whether the host is abnormal power on to identify the faulty PCIe card. |

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| Power supply subsystem name | Possible Component | Troubleshooting Suggestions |
| --- | --- | --- |
| V_OCP1_MAIN | • Mainboard<br>• OCP card | Remove the OCP card, and check whether the host is abnormal power on.<br>• If yes, the abnormal component is the mainboard, replace the node.<br>• If no, the abnormal component is the OCP card. |
| V_VCC_12V0_CPU1 | • Mainboard<br>• CPU1<br>• DIMM000-070 | 1. Remove CPU1, CPU2 and DIMM000-070, install the CPU2 into the CPU1 slot, and install one memory from under CPU2 into DIMM000, and perform a minimum system verification. Check whether the host is abnormal power on.<br>• If yes, the abnormal component is the mainboard, replace the node.<br>• If no, go to **2**.<br>2. Remove the original CPU2 from the CPU1 slot, and reinstall the original CPU1 back into the CPU1 slot, and check whether the host is abnormal power on.<br>• If yes, the abnormal component is the original CPU1.<br>• If no, go to **3**.<br>3. Using the binary method, install the DIMM000-070 separately, and check whether the host is abnormal power on to identify the faulty memory. |

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| Power supply subsystem name | Possible Component | Troubleshooting Suggestions |
| --- | --- | --- |
| V_VCC_12V0_CPU2 | • Mainboard<br>• CPU2<br>• DIMM100-170<br>• Screw-in RAID controller card / Pass-through card | 1. Remove the screw-in RAID controller card / pass-through card, and check whether the host is abnormal power on.<br>• If yes, go to **2**.<br>• If no, the abnormal component is the screw-in RAID controller card / pass-through card.<br>2. Remove CPU2 and DIMM100-170, and check whether the host is abnormal power on.<br>• If yes, the abnormal component is the mainboard, replace the node.<br>• If no, go to **3**.<br>3. Remove CPU1, and install the original CPU2 into the CPU1 slot, and check whether the host is abnormal power on.<br>• If yes, the abnormal component is the original CPU2.<br>• If no, go to **4**.<br>4. Using the binary method, install the DIMM100-170 separately, and check whether the host is abnormal power on to identify the faulty memory. |
| V_VCC_5V0 | Mainboard | Replace the node. |
| V_VCC_3V3 | • Mainboard<br>• Screw-in RAID controller card / Pass-through card | Remove the screw-in RAID controller card / pass-through card, and check whether the host is abnormal power on.<br>• If yes, the abnormal component is the mainboard, replace the node.<br>• If no, the abnormal component is the screw-in RAID controller card / pass-through card. |
| V_VCCIN_CPU1 | • Mainboard<br>• CPU1 | Remove CPU1 and CPU2, and install CPU2 into the CPU1 slot, |
| V_VSA_CPU1 | | |

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| Power supply subsystem name | Possible Component | Troubleshooting Suggestions |
| --- | --- | --- |
| V_VCCIO_CPU1<br>V_PANA_CPU1<br>V_1V8_CPU1 | | check whether the host is abnormal power on.<br>● If yes, the abnormal component is the mainboard, replace the node.<br>● If no, the abnormal component is the original CPU1. |
| V_VCCIN_CPU2<br>V_VSA_CPU2<br>V_VCCIO_CPU2<br>V_PANA_CPU2<br>V_1V8_CPU2 | ● Mainboard<br>● CPU2 | Remove CPU2, and check whether the host is abnormal power on.<br>● If yes, the abnormal component is the mainboard, replace the node.<br>● If no, the abnormal component is the CPU2. |
| V_VPP_ABCD<br>V_VDDQ_ABCD<br>V_VTT_ABCD | ● Mainboard<br>● CPU1<br>● DIMM000-030 | 1. Remove CPU1, CPU2 and DIMM000-030. Install CPU2 into the CPU1 slot, and install the memory from DIMM100 to DIMM000, and check whether the host is abnormal power on.<br>● If yes, the abnormal component is the mainboard, replace the node.<br>● If no, go to **2**.<br>2. Remove the original CPU2 from the CPU1 slot, and reinstall the original CPU1 back into the CPU1 slot, and check whether the host is abnormal power on.<br>● If yes, the abnormal component is the original CPU1.<br>● If no, go to **3**.<br>3. Using the binary method, install the DIMM000-030 separately, and check whether the host is abnormal power on to identify the faulty memory. |
| V_VPP_EFGH<br>V_VDDQ_EFGH | ● Mainboard<br>● CPU1<br>● DIMM040-070 | 1. Remove CPU1, CPU2 and DIMM040-070. Install CPU2 into the CPU1 slot, and check whether the host is abnormal power on. |

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| Power supply subsystem name | Possible Component | Troubleshooting Suggestions |
| --- | --- | --- |
| V_VTT_EFGH | | • If yes, the abnormal component is the mainboard, replace the node.<br>• If no, go to **2**.<br>2. Remove the original CPU2 from the CPU1 slot, and reinstall the original CPU1 back into the CPU1 slot, and check whether the host is abnormal power on.<br>• If yes, the abnormal component is the original CPU1.<br>• If no, go to **3**.<br>3. Using the binary method, install the DIMM040-070 separately, and check whether the host is abnormal power on to identify the faulty memory. |
| V_VPP_JKLM<br>V_VDDQ_JKLM<br>V_VTT_JKLM | • Mainboard<br>• DIMM100-130<br>• CPU2 | 1. Remove CPU2 and DIMM100-130, and check whether the host is abnormal power on.<br>• If yes, the abnormal component is the mainboard, replace the node.<br>• If no, go to **2**.<br>2. Remove CPU1, and install the original CPU2 into the CPU1 slot, and check whether the host is abnormal power on.<br>• If yes, the abnormal component is the original CPU2.<br>• If no, go to **3**.<br>3. Using the binary method, install the DIMM100-130 separately, and check whether the host is abnormal power on to identify the faulty memory. |
| V_VPP_NPQR<br>V_VDDQ_NPQR | • Mainboard<br>• DIMM140-170<br>• CPU2 | 1. Remove CPU2 and DIMM140-170, and check whether the host is abnormal power on. |

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| Power supply subsystem name | Possible Component | Troubleshooting Suggestions |
| --- | --- | --- |
| V_VTT_NPQR | | • If yes, the abnormal component is the mainboard, replace the node.<br>• If no, go to **2**.<br>2. Remove CPU1, and install the original CPU2 into the CPU1 slot, and check whether the host is abnormal power on.<br>• If yes, the abnormal component is the original CPU2.<br>• If no, go to **3**.<br>3. Using the binary method, install the DIMM140-170 separately, and check whether the host is abnormal power on to identify the faulty memory. |

### 2.12.1.3 V7 servers

**Table 2-15** Reference information

| Power supply subsystem name | Possible Component |
| --- | --- |
| STBY_5V0 | • Mainboard<br>• LCD |
| STBY_1V8_PCH | Mainboard |
| STBY_1V05_PCH | Mainboard |
| V_VCC_12V0_1 | • Mainboard<br>• Fan<br>• CPU<br>• DIMM |
| V_VCC_12V0_2 | • Mainboard<br>• CPU<br>• Disk backplane<br>• RAID controller card<br>• Riser card<br>• Drive |

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| Power supply subsystem name | Possible Component |
| --- | --- |
| V_VCC_5V0 | ● Mainboard<br>● USB device |
| V_VCC_3V3 | ● Mainboard<br>● RAID controller card<br>● Riser card<br>● DIMM |
| V_VCCIN_CPU*N*<br>**NOTE**<br>*N* indicates the Socket No. of the CPU. | ● Mainboard<br>● CPU |
| V_VCC_12V0_3 | ● Mainboard<br>● Disk backplane<br>● RAID controller card<br>● Riser card |
| V_VCC_12V0_4 | FAN |
| V_VCC_12V0_5 | Mainboard |
| V_VCC_12V0_7 | Mainboard |
| V_VCC_12V0_8 | Mainboard |
| V_VCC_12V0_RISER | ● Mainboard<br>● PCIe card<br>● Riser card<br>● Rear disk backplane<br>**NOTE**<br>If the GPU configuration is modified, check whether the GPU power cable is matched. For details, log in to the Technical Support website, search and view the section **GPU Configuration Rule** in *Server GPU Card Operation Guide*. |
| STBY_PCH_PVNN | Mainboard |
| V_VCC_12V0_CPU*N*<br>**NOTE**<br>*N* indicates the Socket No. of the CPU. | ● Mainboard<br>● Fan<br>● CPU*N*<br>● DIMM |
| STBY_2V5_BMC | Mainboard |

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| Power supply subsystem name | Possible Component |
| --- | --- |
| V_STBY_5V0 | ● Mainboard<br>● LCD<br>● Fan board/Fan board low-speed signal cable<br>● Type-C/Right mounting ear cable |
| V_STBY_1V8_PCH | Mainboard |
| V_STBY_1V05_PCH | Mainboard |
| V_STBY_1V8_CLK | Mainboard |
| V_VCC_12V0_MB_CPU0 | ● Mainboard<br>● DIMM000-071 |
| V_VCC_12V0_MB_CPU1 | ● Mainboard<br>● DIMM100-171 |
| V_VCC_12V0_MB_3 | ● Mainboard<br>● PCIe card<br>● Riser card<br>● PSU rear/built-in/front backplane |
| V_VCC_12V0_MB_4 | ● Mainboard<br>● PCIe card<br>● Riser card<br>● I/O 1 or I/O 2 rear backplane |
| V_VCC_12V0_MB_FAN | ● Mainboard<br>● Fan board/Fan |
| V_VCC_12V0_MB_FHDD | Mainboard |
| VCC_VRD_5V0 | Mainboard |
| V_VCC_3V3_1 | ● Mainboard<br>● PCIe card<br>● Riser card |
| V_VCC_3V3_2 | ● Mainboard<br>● PCIe card<br>● Riser card |
| V_PVPP_CPU*N*<br>**NOTE**<br>*N* indicates the Socket No. of the CPU. | ● Mainboard<br>● CPU |

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| Power supply subsystem name | Possible Component |
| --- | --- |
| V_PVNN_CPU*N*<br>**NOTE**<br>*N* indicates the Socket No. of the CPU. | ● Mainboard<br>● CPU |
| V_INFAON_CPU*N*<br>**NOTE**<br>*N* indicates the Socket No. of the CPU. | ● Mainboard<br>● CPU |
| V_FIVRA_CPU*N*<br>**NOTE**<br>*N* indicates the Socket No. of the CPU. | ● Mainboard<br>● CPU |
| V_PVCCFA_CPU*N*<br>**NOTE**<br>*N* indicates the Socket No. of the CPU. | ● Mainboard<br>● CPU |
| V_PVCCD_CPU*N*<br>**NOTE**<br>*N* indicates the Socket No. of the CPU. | ● Mainboard<br>● CPU |
| M_A/B_CPU0_DIMM | ● Mainboard<br>● DIMM000-011<br>● CPU1 |
| M_A/B_CPU1_DIMM | ● Mainboard<br>● DIMM100-111<br>● CPU2 |
| M_C/D_CPU0_DIMM | ● Mainboard<br>● DIMM020-031<br>● CPU1 |
| M_C/D_CPU1_DIMM | ● Mainboard<br>● DIMM120-131<br>● CPU2 |
| M_E/F_CPU0_DIMM | ● Mainboard<br>● DIMM040-051<br>● CPU1 |
| M_E/F_CPU1_DIMM | ● Mainboard<br>● DIMM140-151<br>● CPU2 |

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| Power supply subsystem name | Possible Component |
| --- | --- |
| M_G/H_CPU0_DIMM | ● Mainboard<br>● DIMM060-071<br>● CPU1 |
| M_G/H_CPU1_DIMM | ● Mainboard<br>● DIMM160-171<br>● CPU2 |
| V_VCC_3V3_VRD_MOS | Mainboard |
| PVNN_PCH | Mainboard |
| V_VCC_5V0_VRD_MOS | Mainboard |
| V_VCC_3V3_RISER | Mainboard |
| STBY_3V3_1 | ● Mainboard<br>● PCIe card<br>● Disk backplane |
| VCC_5V0_REAR_HDD | ● Mainboard<br>● Rear disk backplane |
| VCC_3V3_RISER | ● Mainboard<br>● PCIe card |
| V_VCC_VRD | Mainboard |
| PVDD18_S5_P0 | ● Mainboard<br>● CPU0 |
| PVDD18_S5_P1 | ● Mainboard<br>● CPU1 |
| V_P12V_SDI_SNIC | ● Mainboard<br>● Smart NIC |
| V_P3V3_SDI_SNIC | ● Mainboard<br>● Smart NIC |
| V_PVDD11_S3_P*N* | ● Mainboard<br>● CPU*N* |
| V_PVDDIO_P*N* | ● Mainboard<br>● CPU*N* |
| V_PVDDCR_SOC_P*N* | ● Mainboard<br>● CPU*N* |

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| Power supply subsystem name | Possible Component |
| --- | --- |
| V_PVDDCR_CPU0_P*N* | ● Mainboard<br>● CPU*N* |
| V_PVDDCR_CPU1_P*N* | ● Mainboard<br>● CPU*N* |
| DIMM_PWRGD_CHAF_CPU0 | DIMM000-050 |
| DIMM_PWRGD_CHGL_CPU0 | DIMM060-0B0 |
| DIMM_PWRGD_CHAF_CPU1 | DIMM100-150 |
| DIMM_PWRGD_CHGL_CPU1 | DIMM160-1B0 |
| HDDBP_VCC_5V0_1 | ● Drive backplane<br>● Drive |
| HDDBP_VCC_5V0_2 | ● Drive backplane<br>● Drive |
| HDDBP_VCC_5V0_3 | ● Drive backplane<br>● Drive |
| HDDBP_VCC_5V0_4 | ● Drive backplane<br>● Drive |
| HDDBP_VCC_3V3 | Drive backplane |
| HDDBP_VCC_1V8 | Drive backplane |
| HDDBP_VCC_1V0 | Drive backplane |
| HDDBP_VCC_0V8 | Drive backplane |
| PCIe riser card 4 power | PCIe Riser card 4 power abnormal |
| PCIe riser card 5 power | PCIe Riser card 5 power abnormal |
| V_VCC_12V0_FAN | ● Mainboard<br>● Fan board |
| V_PANA_CPU*N* | ● Mainboard<br>● CPU*N* |
| BP_12V0 | Front drive backplane |
| V_VCC_3V3_M2 | M.2 adapter board |
| PDB_12V0_PG | PSU backplane |

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| Power supply subsystem name | Possible Component |
| --- | --- |
| V_STBY_3V3 | ● Mainboard<br>● DIMM<br>● M.2<br>● PCIe slot1<br>● PCIe slot2<br>● PCIe slot3<br>● PCIe slot4 |
| DIMM_PWRGD_FAIL_CPU0_AB_CPLD (M_A/B_CPU0_DIMM) | DIMM000/010 |
| DIMM_PWRGD_FAIL_CPU0_CD_CPLD (M_C/D_CPU0_DIMM) | DIMM020/030 |
| DIMM_PWRGD_FAIL_CPU0_EF_CPLD (M_E/F_CPU0_DIMM) | DIMM040/050 |
| DIMM_PWRGD_FAIL_CPU0_GH_CPLD (M_G/H_CPU0_DIMM) | DIMM060/070 |
| DIMM_PWRGD_FAIL_CPU1_AB_CPLD (M_A/B_CPU1_DIMM) | DIMM100/110 |
| DIMM_PWRGD_FAIL_CPU1_CD_CPLD (M_C/D_CPU1_DIMM) | DIMM120/130 |
| DIMM_PWRGD_FAIL_CPU1_EF_CPLD (M_E/F_CPU1_DIMM) | DIMM140/150 |
| DIMM_PWRGD_FAIL_CPU1_GH_CPLD (M_G/H_CPU1_DIMM) | DIMM160/170 |
| V_VCC_3V3_riser | ● Mainboard<br>● I/O module 5<br>● I/O module 4<br>● I/O module 3<br>● I/O module 2<br>● I/O module 1<br>● PCIe riser2<br>● PCIe riser1 |

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| Power supply subsystem name | Possible Component |
|---|---|
| VCC_3V3_RISER1 | Riser1 |
| VCC_3V3_RISER2 | Riser2 |
| VCC_3V3_BOARD | Expansion board |
| V_12V0_FAN_SFST | Fan board |
| V_12V0_HDD1 | Upper 2U drive backplane |
| V_12V0_HDD2 | Lower 2U drive backplane |
| DIMM_PWRGD_FAIL_CPU0_AB_CPLD | DIMM000-011 |
| DIMM_PWRGD_FAIL_CPU0_CD_CPLD | DIMM020-031 |
| DIMM_PWRGD_FAIL_CPU0_EF_CPLD | DIMM040-051 |
| DIMM_PWRGD_FAIL_CPU0_GH_CPLD | DIMM060-071 |
| DIMM_PWRGD_FAIL_CPU1_AB_CPLD | DIMM100-111 |
| DIMM_PWRGD_FAIL_CPU1_CD_CPLD | DIMM120-131 |
| DIMM_PWRGD_FAIL_CPU1_EF_CPLD | DIMM140-151 |
| DIMM_PWRGD_FAIL_CPU1_GH_CPLD | DIMM160-171 |
| DIMM_PWRGD_FAIL_CPU2_AB_CPLD | DIMM200-211 |
| DIMM_PWRGD_FAIL_CPU2_CD_CPLD | DIMM220-231 |
| DIMM_PWRGD_FAIL_CPU2_EF_CPLD | DIMM240-251 |
| DIMM_PWRGD_FAIL_CPU2_GH_CPLD | DIMM260-271 |
| DIMM_PWRGD_FAIL_CPU3_AB_CPLD | DIMM300-311 |
| DIMM_PWRGD_FAIL_CPU3_CD_CPLD | DIMM320-331 |
| DIMM_PWRGD_FAIL_CPU3_EF_CPLD | DIMM340-351 |

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| Power supply subsystem name | Possible Component |
| --- | --- |
| DIMM_PWRGD_FAIL_CPU3_GH_CPLD | DIMM360-371 |

### 2.12.1.4 V8 servers

**Table 2-16** Reference information

| Power supply subsystem name | Possible Component |
| --- | --- |
| P5V_AUX | ● Mainboard<br>● Right mounting ear/Right mounting ear cable<br>● Fan board |
| P1V8_STBY | ● Mainboard<br>● M.2 card/cable/RAID controller card |
| V_VCC_12V0_MB_3 | ● Mainboard<br>● IO module 2 (Riser card)<br>● IO module 2 (GPU) |
| V_VCC_12V0_MB_4 | ● Mainboard<br>● IO module 1 (Riser card)<br>● IO module 1 (GPU)<br>● M2 |
| P12V_SDI_NIC | ● Mainboard<br>● SDI card |
| P3V3_SDI_NIC | ● Mainboard<br>● SDI card |
| VCC_5V0 | ● Mainboard<br>● Right mounting ear/Right mounting ear cable |
| VCC_3V3_R | ● Mainboard<br>● PCIe card (including DPU, GPU, and so on)<br>● Riser card |
| V_VCC_5V0 | ● Mainboard<br>● USB device |
| DIM_CHAF_CPU0 | ● Mainboard<br>● DIMM000-050 |

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| Power supply subsystem name | Possible Component |
| --- | --- |
| DIM_CHGL_CPU0 | ● Mainboard<br>● DIMM060-0B0 |
| DIM_CHAF_CPU1 | ● Mainboard<br>● DIMM100-150 |
| DIM_CHGL_CPU0 | ● Mainboard<br>● DIMM160-1B0 |
| V_STBY_1V8 | ● Mainboard<br>● TPM card<br>● M.2 card/cable/RAID controller card |
| PVDD18_S5_P0 | ● Mainboard<br>● CPU0 |
| PVDD18_S5_P1 | ● Mainboard<br>● CPU1 |
| V_VCC_12V0_MB_CPU1 | ● Mainboard<br>● CPU<br>● DIMM |
| V_VCC_12V0_MB_FAN | ● Mainboard<br>● Fan board/Fan |
| V_VCC_12V0_MB_DPU | ● Mainboard<br>● DPU |
| V_VCC_12V0_MB_IO1 | ● Mainboard<br>● I/O module 1 (GPU) |
| DRMOS_VCC | Mainboard |
| V_VCC_3V3 | ● Mainboard<br>● DIMM<br>● Riser card |
| V_VCC_3V3_RISER | ● Mainboard<br>● PCIe card<br>● Riser card |
| V_PVDD11_S3_P0 | ● Mainboard<br>● CPU |
| V_PVDD11_S3_P1 | ● Mainboard<br>● CPU |

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| Power supply subsystem name | Possible Component |
| --- | --- |
| V_PVDDIO_P0 | ● Mainboard<br>● CPU |
| V_PVDDIO_P1 | ● Mainboard<br>● CPU |
| V_PVDDCR_SOC_P0 | ● Mainboard<br>● CPU |
| V_PVDDCR_SOC_P1 | ● Mainboard<br>● CPU |
| V_PVDDCR_CPU0_P0 | ● Mainboard<br>● CPU |
| V_PVDDCR_CPU0_P1 | ● Mainboard<br>● CPU |
| V_PVDDCR_CPU1_P0 | ● Mainboard<br>● CPU |
| V_PVDDCR_CPU1_P1 | ● Mainboard<br>● CPU |
| HDD_BP_12V0 | Mainboard |
| V_STBY_5V0 | ● Mainboard<br>● LCD<br>● Power Supply for IO Board<br>● Fan board/Fan<br>● Right mounting ear/Right mounting ear cable |
| V_VCC_12V0_MB_CPU0 | ● Mainboard<br>● CPU<br>● DIMM000-070 |
| V_VCC_12V0_MB_5 | ● Mainboard<br>● PCIe card<br>● Riser card<br>● RAID card<br>● NIC<br>● I/O module 1/I/O module 2 (PCIe card/Riser card)<br>● OCP 3.0 |

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| Power supply subsystem name | Possible Component |
| --- | --- |
| V_P3V3_DPU | ● Mainboard<br>● Intelligent NIC |
| DIMM_PWRGD_CHAB_CPU0 | ● Mainboard<br>● DIMMA0/DIMMB0<br>● CPU |
| DIMM_PWRGD_CHCD_CPU0 | ● Mainboard<br>● DIMMC0/DIMMD0<br>● CPU |
| DIMM_PWRGD_CHEF_CPU0 | ● Mainboard<br>● DIMME0/DIMMF0<br>● CPU |
| DIMM_PWRGD_CHGH_CPU0 | ● Mainboard<br>● DIMMG0/DIMMH0<br>● CPU |
| DIMM_PWRGD_CHIJ_CPU0 | ● Mainboard<br>● DIMMI0/DIMMJ0<br>● CPU |
| DIMM_PWRGD_CHKL_CPU0 | ● Mainboard<br>● DIMMK0/DIMML0<br>● CPU |
| V_VCC_12V0_OCP1 | ● Mainboard<br>● OCP1 |
| V_VCC_12V0_OCP2 | ● Mainboard<br>● OCP2 |

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# 3 Alarms by Sensor

This section applies to FusionServer rack servers.

3.1 Error Code Handling

3.2 Alarm Overview

3.3 Temperature Alarms

3.4 Power Supply Alarms

3.5 Watchdog Alarms

3.6 Management Subsystem Alarms

3.7 Storage Device Alarms

3.8 Fan Module Alarms

3.9 Memory Alarms

3.10 Other Alarms

3.11 Event Alarms by Sensor

## 3.1 Error Code Handling

If a fault occurs in server hardware, an error code is displayed on the fault diagnosis LED on the front panel of a server. This topic describes how to rectify faults if error codes are displayed.

### Context

When a key component is faulty, the server fault diagnosis LED displays an error code to facilitate fault locating.

Generally, the fault diagnosis LED is located on the front panel of the server. For details about its position, see the user guide of the server you use.

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## Procedure

**Step 1** View the error code on the fault diagnosis LED. For details, see the **Error Code** column in **Table 3-1**.

**Step 2** Log in to the iBMC WebUI of the server, and locate the alarm corresponding to the error code. For details, see the **Solution** in **Table 3-1**.

**Step 3** Rectify the fault based on the alarm information.

**Step 4** After the fault is rectified, check that the error code is no longer displayed on the fault diagnosis LED.

**----End**

## Error Code Reference

**Table 3-1** Error code reference

| Module | Error Code | Fault Description | Solution |
|---|---|---|---|
| - | --- | The serv4r is operating properly. | - |
| CPU | C0*N*<br>**NOTE**<br>*N* indicates the serial number of the CPU. | CPU *N* or a peripheral component is malfunctioning or faulty. | • **3.3.25 ALM-0x0701FFFF Critical Alarm for CPU Temperature (Thermal Trip) (CPUN Status)**<br>• **3.10.4 ALM-0x0702FFFF CPU Initialization Failed (FRB1/BIST) (CPUN Status)**<br>• **3.10.6 ALM-0x0705FFFF Configuration Error (CPUN Status)** |
| DIMM | *XYZ*<br>**NOTE**<br>*XYZ* indicates the serial number of the DIMM. | DIMM *XYZ* is malfunctioning or faulty. | **3.9.4 ALM-0x0C07FFFF Configuration Error (DIMMN)** |
| Temperature | A00 | The air inlet temperature is out of the operating temperature range of the server. | • **3.3.1 ALM-0x0147FFFF Above Upper Minor Threshold (Inlet Temp)**<br>• **3.3.2 ALM-0x0149FFFF Above Upper Major Threshold (Inlet Temp)** |

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| Module | Error Code | Fault Description | Solution |
| --- | --- | --- | --- |
| | A0*N*<br>**NOTE**<br>*N* indicates the serial number of the CPU. | The temperature of CPU *N* is out of its operating temperature range. | • **3.3.17 ALM-0x0147FFFF Above Upper Minor Threshold (CPUN DTS)**<br>• **3.3.18 ALM-0x0341FFFF State Asserted (CPUN Prochot)** |
| Power supply unit (PSU) | P0*N*<br>**NOTE**<br>*N* indicates the serial number of the PSU. | PSU *N* is malfunctioning or faulty. | • **3.3.26 ALM-0x0802FFFF Predictive Failure (PSN Status)**<br>• **3.4.3 ALM-0x0801FFFF Power Supply Failure (PSN Status)**<br>• **3.4.4 ALM-0x0803FFFF Power Supply Input Lost (AC/DC) (PSN Status)**<br>• **3.8.4 ALM-0x2100FFFF Fault Status (PSN Fan Status)** |
| Fan module | F0*N*<br>**NOTE**<br>*N* indicates the serial number of the fan module. | Fan module *N* is malfunctioning or faulty. | • **3.8.1 ALM-0x0840FFFF Device Removed / Device Absent (FANN F Presence/FANN R Presence)**<br>• **3.8.2 ALM-0x2100FFFF Fault Status (FANN F Status/FANN R Status)** |
| Mainboard | b01 | The power supply to the mainboard is abnormal. | • **3.4.7 ALM-0x0142FFFF Below Lower Major Threshold (SYS 3.3V)**<br>• **3.4.8 ALM-0x0149FFFF Above Upper Major Threshold (SYS 3.3V)**<br>• **3.4.9 ALM-0x0142FFFF Below Lower Major Threshold (SYS 5V)**<br>• **3.4.10 ALM-0x0149FFFF Above Upper Major Threshold (SYS 5V)**<br>• **3.4.11 ALM-0x0142FFFF Below Lower Major Threshold (SYS 12V)**<br>• **3.4.12 ALM-0x0149FFFF Above Upper Major Threshold (SYS 12V)** |
| | b02 | The RAID controller card is abnormal or faulty. | **3.10.18 ALM-0x0441FFFF Predictive Failure Detected (RAID Status)** |
| | L01 | The cable is not securely or correctly connected. | **3.10.15 ALM-0x1B01FFFF Incorrect Cable Connected/Incorrect Interconnection (SAS Cable)** |

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| Module | Error Code | Fault Description | Solution |
|---|---|---|---|
| | E01 | The CMOS battery is abnormal. | **3.10.1 ALM-0x2900FFFF Battery Low (RTC Battery/RAID controller card BBU/PCIeN Card BBU)** |
| Hard disk | H*XY*<br>**NOTE**<br>*XY* indicates the slot number of the front hard disk. | The hard disk in slot *XY* is malfunctioning or faulty. | • **3.7.1 ALM-0x0D01FFFF Storage Device Drive Fault (DISKN/SDN CARD)**<br>• **3.7.2 ALM-0x0D06FFFF In Failed Array (DISKN/SDN CARD)** |
| | HA*N*<br>**NOTE**<br>*N* indicates the slot number of the rear hard disk. | The rear hard disk in slot A*N* is malfunctioning or faulty. | • **3.7.1 ALM-0x0D01FFFF Storage Device Drive Fault (DISKN/SDN CARD)**<br>• **3.7.2 ALM-0x0D06FFFF In Failed Array (DISKN/SDN CARD)** |
| | Hb*N*<br>**NOTE**<br>*N* indicates the slot number of the rear hard disk. | The rear hard disk in slot B*N* is malfunctioning or faulty. | • **3.7.1 ALM-0x0D01FFFF Storage Device Drive Fault (DISKN/SDN CARD)**<br>• **3.7.2 ALM-0x0D06FFFF In Failed Array (DISKN/SDN CARD)** |
| | d*XY*<br>**NOTE**<br>*XY* indicates the slot number of the rear hard disk. | The rear hard disk in slot *XY* is malfunctioning or faulty. | • **3.7.1 ALM-0x0D01FFFF Storage Device Drive Fault (DISKN/SDN CARD)**<br>• **3.7.2 ALM-0x0D06FFFF In Failed Array (DISKN/SDN CARD)** |
| LOM | n01 | The LAN on motherboard (LOM) is malfunctioning or faulty. | **3.10.32 ALM-0x0341FFFF PCIe Error (RAIDN PCIE ERR/NICN Status/ MezzN Status)** |
| PCIe Card | q0*N*<br>**NOTE**<br>*N* indicates the serial number of the PCIe card. | The PCIe card in slot *N* is malfunctioning or faulty. | **3.10.19 ALM-0x2100FFFF PCIe Error (PCIE Status)** |
| Hard disk backplane | bP1 | The power supply to the front hard disk backplane is abnormal. | **3.10.17 ALM-0x0742FFFF Transition to Critical From Less Severe (HDD BP status)** |

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| Module | Error Code | Fault Description | Solution |
|---|---|---|---|
| | bP2 | The power supply to the built-in hard disk backplane is abnormal. | 3.10.17 ALM-0x0742FFFF Transition to Critical From Less Severe (HDD BP status) |
| | bP3 | The power supply to the rear hard disk backplane is abnormal. | 3.10.17 ALM-0x0742FFFF Transition to Critical From Less Severe (HDD BP status) |

# 3.2 Alarm Overview

The topic describes the information about alarm.

## 3.2.1 Alarm Information

This topic describes alarm information.

When a fault occurs, the system generates logs and an alarm based on the faulty module. If the universal server manager (USM) is configured, the alarm is reported to the USM over the Simple Network Management Protocol (SNMP). The sensors on the device monitor the operating environment and generate alarms if the environmental conditions do not meet device operating requirements.

### Event Alarms and Fault Alarms

Based on the impact on the system, alarms are classified into the following types:

- Event alarm

  Event alarms record the events that occur during normal system operating. Event alarms do not affect system operating.
- Fault alarm

  Fault alarms are generated for faults that affect normal system operating.

NOTE

This document describes fault alarms only.

### Viewing Alarms

You can use the following methods to view alarms:

- Use a terminal to log in to the iBMC command-line interface (CLI), and run the **ipmcget -d healthevents** command to view all alarms.
- Use the network management software.
- Use the iBMC web user interface (WebUI for short).

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NOTE

- For sensors with alarm thresholds, log in to the iBMC CLI, and run the **ipmcget -t sensor -d list** command to view all threshold information.
- For details about commands for the iBMC CLI, see the iBMC *User Guide*.

### Alarm Severity

Alarms are classified into the following types by severity:

- Minor

  Minor alarms are generated for the faults that do not have major impact on the system; however, you need to take measures immediately before the faults get worse.
- Major

  Major alarms are generated for the faults that may affect normal system operating or interrupt services.
- Critical

  Critical alarms are generated for the faults that may power off the server and even interrupt services. You need to take measures immediately to rectify the faults.

Alarms of the server system contain the alarms generated for all components in the system. You can identify a fault by using the alarm information.

## 3.2.2 Alarm Description

This topic describes the alarm syntax.

### Alarm Syntax

A iBMC alarm consists the following parameters:

- Generation Time
- Event Source
- Sensor
- Severity
- Event Description

For example: 2016-05-03 Tuesday 15:08:50 | Fan3 | FAN3 F Status | Major | Fault status

### Alarm Message Description

- Alarm Explanation

  The explanation provides the message and meaning of an alarm.
- Alarm Attributes
  - Alarm ID: indicates the event code of an alarm.
  - Alarm severity: indicates the level of the impact exerted by a fault corresponding to an alarm.

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  - Auto Clear: indicates whether the alarm is automatically cleared after the fault is rectified.
- Parameters

  The information describes the meanings of the parameters.
- Impacts on the System

  The information describes the impact on the system exerted by the fault corresponding to an alarm.
- Possible Causes

  The information describes the possible causes of an alarm.
- Handling Procedure

  The information describes the recommended solution for rectifying the fault corresponding to an alarm.

# 3.3 Temperature Alarms

This topic describes the temperature alarms for servers.

## 3.3.1 ALM-0x0147FFFF Above Upper Minor Threshold (Inlet Temp)

### Description

Alarm message:

```
Above upper minor threshold
```

This alarm is generated when the sensor detects that the air inlet temperature is higher than the minor alarm upper threshold. This alarm is cleared when the system detects that the temperature falls below the threshold.

Sensor triggering the alarm: **Inlet Temp**

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x0147FFFF | Minor | Yes |

### Impact on the System

The components on the server cannot operate stably.

### Possible Causes

- The ambient temperature exceeds the normal range.
- The air inlet is blocked.
- Idle slots or spaces are not installed with filler panels.

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- The component holding the sensor is faulty.

The location of the **Inlet Temp** sensor varies depending on the server model. For details, see the user guide of the server you use.

## Procedure

**Step 1** Check whether the equipment room temperature exceeds the normal range.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Reduce the equipment room temperature to the normal range. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Check whether the air inlet is blocked.

- If yes, go to **Step 4**.
- If no, go to **Step 5**.

**Step 4** Remove the blockage from the air inlet. Five minutes later, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Check whether filler panels or baffles are installed in the idle slots or spaces between servers.

- If yes, go to **Step 7**.
- If no, go to **Step 6**.

**Step 6** Install filler panels in idle slots or baffles in spaces between servers. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 7**.

**Step 7** Replace the component where the air inlet temperature sensor is located. Then, check whether the alarm is cleared.

The location of the air inlet temperature sensor varies with the server model. For details, see the sensor list in the server user guide.

- If yes, no further action is required.
- If no, go to **Step 8**.

**Step 8** Contact technical support.

**----End**

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# 3.3.2 ALM-0x0149FFFF Above Upper Major Threshold (Inlet Temp)

## Description

Alarm message:

```
Above upper major threshold
```

This alarm is generated when the sensor detects that the air intake vent temperature is higher than the major alarm upper threshold. This alarm is cleared when the system detects that the temperature is restored to the acceptable range.

Sensor triggering the alarm: Inlet Temp

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x0149FFFF | Major | Yes |

## Impact on the System

The components on the server cannot operate stably.

## Possible Causes

- The ambient temperature exceeds the normal range.
- The air inlet is blocked.
- Idle slots or spaces are not installed with filler panels.
- The component holding the sensor is faulty.

The location of the **Inlet Temp** sensor varies depending on the server model. For details, see the user guide of the server you use.

## Procedure

**Step 1** Check whether the equipment room temperature exceeds the normal range.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Reduce the equipment room temperature to the normal range. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Check whether the air inlet is blocked.

- If yes, go to **Step 4**.
- If no, go to **Step 5**.

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**Step 4** Remove the blockage from the air inlet. Five minutes later, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Check whether filler panels or baffles are installed in the idle slots or spaces between servers.

- If yes, go to **Step 7**.
- If no, go to **Step 6**.

**Step 6** Install filler panels in idle slots or baffles in spaces between servers. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 7**.

**Step 7** Replace the component where the air inlet temperature sensor is located. Then, check whether the alarm is cleared.

The location of the air inlet temperature sensor varies with the server model. For details, see the sensor list in the server user guide.

- If yes, no further action is required.
- If no, go to **Step 8**.

**Step 8** Contact technical support.

**----End**

## 3.3.3 ALM-0x014BFFFF Above Upper Critical Threshold (Inlet Temp)

### Description

Alarm message:

```
Above upper critical threshold
```

This alarm is generated when the temperature sensor detects that the air intake temperature is higher than the critical alarm upper threshold. This alarm is cleared when the system detects that the temperature is restored to the acceptable range.

This alarm applies only to the RH5885 V3, RH5885H V3, and RH8100 V3.

Sensor triggering the alarm: Inlet Temp

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x014BFFFF | Critical | Yes |

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## Impact on the System

The components on the server cannot operate stably.

## Possible Causes

- The ambient temperature exceeds the normal range.
- The air inlet is blocked.
- Idle slots or spaces are not installed with filler panels.
- The component holding the sensor is faulty.

The location of the **Inlet Temp** sensor varies with the server model. For details, see the user guide of the server you use.

The RH8100 V3 server is used as an example to describe how to clear the alarm. The **Inlet Temp** sensor is located on the left mounting ear of the RH8100 V3 server. For details, see the *RH8100 V3 User Guide*.

## Procedure

**Step 1** Check whether the temperature room temperature exceeds the normal range.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Lower the ambient temperature to the normal range. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Check whether the air inlet is blocked.

- If yes, go to **Step 4**.
- If no, go to **Step 5**.

**Step 4** Clear the blockage. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Check whether filler panels or baffles are installed in the idle slots or spaces between servers.

- If yes, go to **Step 7**.
- If no, go to **Step 6**.

**Step 6** Install filler panels in idle slots or baffles in spaces between servers. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 7**.

**Step 7** Replace the component where the air inlet temperature sensor is located. Then, check whether the alarm is cleared.

The location of the air inlet temperature sensor varies with the server model:

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- RH5885 V3 or RH5885H V3: The air inlet temperature sensor is located on the right mounting ear.
- RH8100 V3: The air inlet temperature sensor is on the left mounting ear.

For details, see the sensor list in the server user guide.

In this example, replace the left mounting ear. For details, see "Replacing Parts" in the user guide.

- If yes, no further action is required.
- If no, go to **Step 8**.

**Step 8** Contact technical support.

**----End**

# 3.3.4 ALM-0x0147FFFF Above Upper Minor Threshold (LedBoard Temp)

## Description

Alarm message:

```
Above upper minor threshold
```

This alarm is generated when the temperature sensor detects that the temperature of the indicator board is higher than the minor alarm upper threshold. This alarm is cleared when the system detects that the temperature is restored to the acceptable range.

This alarm applies only to the RH8100 V3 only.

Sensor triggering the alarm: LedBoard Temp

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x0147FFFF | Minor | Yes |

## Impact on the System

The components on the server cannot operate stably.

## Possible Causes

- The ambient temperature exceeds the normal range.
- The air inlet is blocked.
- The indicator board is faulty.

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## Procedure

**Step 1** Check whether the temperature room temperature exceeds the normal range.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Lower the ambient temperature to the normal range. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Check whether the air inlet is blocked.

- If yes, go to **Step 4**.
- If no, go to **Step 5**.

**Step 4** Clear the blockage. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Replace the indicator board, then check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 6**.

**Step 6** Contact technical support.

**----End**

# 3.3.5 ALM-0x0149FFFF Above Upper Major Threshold (LedBoard Temp)

## Description

Alarm message:

```
Above upper major threshold
```

This alarm is generated when the temperature sensor detects that the temperature of the indicator board is higher than the major alarm upper threshold. This alarm is cleared when the system detects that the temperature is restored to the acceptable range.

This alarm applies only to the RH8100 V3 only.

Sensor triggering the alarm: LedBoard Temp

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x0149FFFF | Major | Yes |

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### Impact on the System

The components on the server cannot operate stably.

### Possible Causes

- The ambient temperature exceeds the normal range.
- The air inlet is blocked.
- The indicator board is faulty.

### Procedure

**Step 1** Check whether the temperature room temperature exceeds the normal range.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Lower the ambient temperature to the normal range. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Check whether the air inlet is blocked.

- If yes, go to **Step 4**.
- If no, go to **Step 5**.

**Step 4** Clear the blockage. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Replace the indicator board, then check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 6**.

**Step 6** Contact technical support.

**----End**

## 3.3.6 ALM-0x014BFFFF Above Upper Critical Threshold (LedBoard Temp)

### Description

Alarm message:

```
Above upper critical threshold
```

This alarm is generated when the temperature sensor detects that the temperature of the indicator board is higher than the critical alarm upper threshold. This alarm is cleared when the system detects that the temperature is restored to the acceptable range.

This alarm applies only to the RH8100 V3 only.

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Sensor triggering the alarm: LedBoard Temp

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x014BFFFF | Critical | Yes |

## Impact on the System

The components on the server cannot operate stably.

## Possible Causes

- The ambient temperature exceeds the normal range.
- The air inlet is blocked.
- The indicator board is faulty.

## Procedure

**Step 1** Check whether the temperature room temperature exceeds the normal range.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Lower the ambient temperature to the normal range. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Check whether the air inlet is blocked.

- If yes, go to **Step 4**.
- If no, go to **Step 5**.

**Step 4** Clear the blockage. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Replace the indicator board, then check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 6**.

**Step 6** Contact technical support.

**----End**

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# 3.3.7 ALM-0x0147FFFF Above Upper Minor Threshold (BioInlet L Temp)

## Description

Alarm message:

```
Above upper minor threshold
```

This alarm is generated when the temperature sensor detects that the air intake temperature of the rear I/O board is higher than the minor alarm upper threshold. This alarm is cleared when the system detects that the temperature is restored to the acceptable range.

This alarm applies only to the RH8100 V3 only.

Sensor triggering the alarm: BioInlet L Temp

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x0147FFFF | Minor | Yes |

## Impact on the System

The components on the server cannot operate stably.

If this alarm persists, the system temperature further increases, which will trigger another alarm of a higher severity. To avoid problem escalation, clear the high-temperature alarm as soon as possible.

## Possible Causes

- The ambient temperature exceeds the normal range.
- The air inlet is blocked.
- Idle PCIe slots in rear I/O chassis are not installed with filler panels.
- The rear I/O board is faulty.

## Procedure

**Step 1** Check whether a low fan speed alarm is generated for the fan module.

You can obtain alarm information in either of the following ways:

- View alarm information on the **Current Alarms** page of the iBMC WebUI.
- Run the **ipmcget -d healthevents** command on the iBMC CLI.
- If yes, go to **Step 2**.
- If no, go to **Step 5**.

**Step 2** Remove and then reinstall the fan module. After 5 minutes, check whether the fan module alarm is cleared.

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- If yes, go to **Step 4**.
- If no, go to **Step 3**.

**Step 3** Replace the fan module. After 5 minutes, check whether the fan module alarm is cleared.

For details about how to replace the fan module, see "Replacing Parts" in the server user guide.

- If yes, go to **Step 4**.
- If no, go to **Step 12**.

**Step 4** Check whether the rear I/O board high temperature alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Check whether the temperature room temperature exceeds the normal range.

- If yes, go to **Step 6**.
- If no, go to **Step 7**.

**Step 6** Lower the ambient temperature to the normal range. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 7**.

**Step 7** Check whether the air inlet or outlet is blocked.

- If yes, go to **Step 8**.
- If no, go to **Step 9**.

**Step 8** Clear the blockage. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 9**.

**Step 9** Check whether the idle PCIe slots exist in rear I/O chassis.

- If yes, go to **Step 10**.
- If no, go to **Step 11**.

**Step 10** Install hard disk fillers in idle disk bays. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 11**.

**Step 11** Replace the rear I/O board, then check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 12**.

**Step 12** Contact technical support.

**----End**

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# 3.3.8 ALM-0x0147FFFF Above Upper Minor Threshold (BioInlet M Temp)

## Description

Alarm message:

```
Above upper minor threshold
```

This alarm is generated when the temperature sensor detects that the air intake temperature of the rear I/O board is higher than the minor alarm upper threshold. This alarm is cleared when the system detects that the temperature is restored to the acceptable range.

This alarm applies only to the RH8100 V3 only.

Sensor triggering the alarm: BioInlet M Temp

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x0147FFFF | Minor | Yes |

## Impact on the System

The components on the server cannot operate stably.

If this alarm persists, the system temperature further increases, which will trigger another alarm of a higher severity. To avoid problem escalation, clear the high-temperature alarm as soon as possible.

## Possible Causes

- The ambient temperature exceeds the normal range.
- The air inlet is blocked.
- Idle PCIe slots in rear I/O chassis are not installed with filler panels.
- The rear I/O board is faulty.

## Procedure

**Step 1** Check whether a low fan speed alarm is generated for the fan module.

You can obtain alarm information in either of the following ways:

- View alarm information on the **Current Alarms** page of the iBMC WebUI.
- Run the **ipmcget -d healthevents** command on the iBMC CLI.
- If yes, go to **Step 2**.
- If no, go to **Step 5**.

**Step 2** Remove and then reinstall the fan module. After 5 minutes, check whether the fan module alarm is cleared.

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- If yes, go to **Step 4**.
- If no, go to **Step 3**.

**Step 3** Replace the fan module. After 5 minutes, check whether the fan module alarm is cleared.

For details about how to replace the fan module, see "Replacing Parts" in the server user guide.

- If yes, go to **Step 4**.
- If no, go to **Step 12**.

**Step 4** Check whether the rear I/O board high temperature alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Check whether the temperature room temperature exceeds the normal range.

- If yes, go to **Step 6**.
- If no, go to **Step 7**.

**Step 6** Lower the ambient temperature to the normal range. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 7**.

**Step 7** Check whether the air inlet or outlet is blocked.

- If yes, go to **Step 8**.
- If no, go to **Step 9**.

**Step 8** Clear the blockage. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 9**.

**Step 9** Check whether the idle PCIe slots exist in rear I/O chassis.

- If yes, go to **Step 10**.
- If no, go to **Step 11**.

**Step 10** Install hard disk fillers in idle disk bays. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 11**.

**Step 11** Replace the rear I/O board, then check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 12**.

**Step 12** Contact technical support.

**----End**

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# 3.3.9 ALM-0x0147FFFF Above Upper Minor Threshold (BioInlet R Temp)

## Description

Alarm message:

```
Above upper minor threshold
```

This alarm is generated when the temperature sensor detects that the air intake temperature of the rear I/O board is higher than the minor alarm upper threshold. This alarm is cleared when the system detects that the temperature is restored to the acceptable range.

This alarm applies only to the RH8100 V3 only.

Sensor triggering the alarm: BioInlet R Temp

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x0147FFFF | Minor | Yes |

## Impact on the System

The components on the server cannot operate stably.

If this alarm persists, the system temperature further increases, which will trigger another alarm of a higher severity. To avoid problem escalation, clear the high-temperature alarm as soon as possible.

## Possible Causes

- The ambient temperature exceeds the normal range.
- The air inlet is blocked.
- Idle PCIe slots in rear I/O chassis are not installed with filler panels.
- The rear I/O board is faulty.

## Procedure

**Step 1** Check whether a low fan speed alarm is generated for the fan module.

You can obtain alarm information in either of the following ways:

- View alarm information on the **Current Alarms** page of the iBMC WebUI.
- Run the **ipmcget -d healthevents** command on the iBMC CLI.
- If yes, go to **Step 2**.
- If no, go to **Step 5**.

**Step 2** Remove and then reinstall the fan module. After 5 minutes, check whether the fan module alarm is cleared.

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- If yes, go to **Step 4**.
- If no, go to **Step 3**.

**Step 3** Replace the fan module. After 5 minutes, check whether the fan module alarm is cleared.

For details about how to replace the fan module, see "Replacing Parts" in the server user guide.

- If yes, go to **Step 4**.
- If no, go to **Step 12**.

**Step 4** Check whether the rear I/O board high temperature alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Check whether the temperature room temperature exceeds the normal range.

- If yes, go to **Step 6**.
- If no, go to **Step 7**.

**Step 6** Lower the ambient temperature to the normal range. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 7**.

**Step 7** Check whether the air inlet or outlet is blocked.

- If yes, go to **Step 8**.
- If no, go to **Step 9**.

**Step 8** Clear the blockage. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 9**.

**Step 9** Check whether the idle PCIe slots exist in rear I/O chassis.

- If yes, go to **Step 10**.
- If no, go to **Step 11**.

**Step 10** Install hard disk fillers in idle disk bays. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 11**.

**Step 11** Replace the rear I/O board, then check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 12**.

**Step 12** Contact technical support.

**----End**

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# 3.3.10 ALM-0x0147FFFF Above Upper Minor Threshold (FioInlet L Temp)

## Description

Alarm message:

```
Above upper minor threshold
```

This alarm is generated when the temperature sensor detects that the air intake temperature of the front I/O board is higher than the minor alarm upper threshold. This alarm is cleared when the system detects that the temperature is restored to the acceptable range.

This alarm applies only to the RH8100 V3 only.

Sensor triggering the alarm: FioInlet L Temp

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x0147FFFF | Minor | Yes |

## Impact on the System

The components on the server cannot operate stably.

If this alarm persists, the system temperature further increases, which will trigger another alarm of a higher severity. To avoid problem escalation, clear the high-temperature alarm as soon as possible.

## Possible Causes

- The ambient temperature exceeds the normal range.
- The air inlet is blocked.
- The front I/O board is faulty.

## Procedure

**Step 1** Check whether the temperature room temperature exceeds the normal range.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Lower the ambient temperature to the normal range. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Check whether the air inlet is blocked.

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- If yes, go to **Step 4**.
- If no, go to **Step 5**.

**Step 4** Clear the blockage. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Replace the front I/O board, then check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 6**.

**Step 6** Contact technical support.

**----End**

# 3.3.11 ALM-0x0147FFFF Above Upper Minor Threshold (FioInlet M Temp)

## Description

Alarm message:

```
Above upper minor threshold
```

This alarm is generated when the temperature sensor detects that the air intake temperature of the front I/O board is higher than the minor alarm upper threshold. This alarm is cleared when the system detects that the temperature is restored to the acceptable range.

This alarm applies only to the RH8100 V3 only.

Sensor triggering the alarm: FioInlet M Temp

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x0147FFFF | Minor | Yes |

## Impact on the System

The components on the server cannot operate stably.

If this alarm persists, the system temperature further increases, which will trigger another alarm of a higher severity. To avoid problem escalation, clear the high-temperature alarm as soon as possible.

## Possible Causes

- The ambient temperature exceeds the normal range.
- The air inlet is blocked.

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- The front I/O board is faulty.

## Procedure

**Step 1** Check whether the temperature room temperature exceeds the normal range.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Lower the ambient temperature to the normal range. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Check whether the air inlet is blocked.

- If yes, go to **Step 4**.
- If no, go to **Step 5**.

**Step 4** Clear the blockage. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Replace the front I/O board, then check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 6**.

**Step 6** Contact technical support.

**----End**

# 3.3.12 ALM-0x0147FFFF Above Upper Minor Threshold (FioInlet R Temp)

## Description

Alarm message:

```
Above upper minor threshold
```

This alarm is generated when the temperature sensor detects that the air intake temperature of the front I/O board is higher than the minor alarm upper threshold. This alarm is cleared when the system detects that the temperature is restored to the acceptable range.

This alarm applies only to the RH8100 V3 only.

Sensor triggering the alarm: FioInlet R Temp

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x0147FFFF | Minor | Yes |

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## Impact on the System

The components on the server cannot operate stably.

If this alarm persists, the system temperature further increases, which will trigger another alarm of a higher severity. To avoid problem escalation, clear the high-temperature alarm as soon as possible.

## Possible Causes

- The ambient temperature exceeds the normal range.
- The air inlet is blocked.
- The front I/O board is faulty.

## Procedure

**Step 1** Check whether the temperature room temperature exceeds the normal range.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Lower the ambient temperature to the normal range. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Check whether the air inlet is blocked.

- If yes, go to **Step 4**.
- If no, go to **Step 5**.

**Step 4** Clear the blockage. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Replace the front I/O board, then check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 6**.

**Step 6** Contact technical support.

**----End**

# 3.3.13 ALM-0x0147FFFF Above Upper Minor Threshold (HDDBkpN Temp)

## Description

Alarm message:

```
Above upper minor threshold
```

This alarm is generated when the temperature sensor detects that the temperature of the hard disk backplane is higher than the minor alarm upper threshold. This alarm is

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cleared when the system detects that the temperature is restored to the acceptable range.

This alarm applies only to the RH8100 V3 only.

Sensor triggering the alarm:

- HDDBkp Temp
- HDDBkp*N* Temp

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x0147FFFF | Minor | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *N* | indicates the number of a temperature monitoring point for the hard disk backplane. The value of *N* can be **0**, **2**, or **9**. |

## Impact on the System

The hard disk backplane and components on the mainboard cannot operate stably, which shortens the service life of the server and increases power consumption. If the alarm persists, the server powers off or restarts, which interrupts services and causes data loss.

## Possible Causes

- The fan module is faulty.
- The ambient temperature exceeds the normal range.
- The air inlet or outlet is blocked.
- Air ducts are not installed properly.
- The disk backplane is faulty.

## Procedure

**Step 1** Log in to the iBMC WebUI or CLI.

For details, see the iBMC user guide of the server.

**Step 2** Check whether a low fan speed alarm is generated for the fan module.

You can obtain alarm information in either of the following ways:

- View alarm information on the **Current Alarms** page of the iBMC WebUI.
- Run the **ipmcget -d healthevents** command on the iBMC CLI.

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- If yes, go to **Step 3**.
- If no, go to **Step 6**.

**Step 3** Remove and then install the fan module. 5 minutes later, check whether the fan module alarm is cleared.

- If yes, go to **Step 5**.
- If no, go to **Step 4**.

**Step 4** Replace the fan module. After 5 minutes, check whether the fan module alarm is cleared.

For details about how to replace the fan module, see "Replacing Parts" in the user guide.

- If yes, go to **Step 5**.
- If no, go to **Step 15**.

**Step 5** Check whether the disk backplane overheating alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 6**.

**Step 6** Check whether the ambient temperature is extremely high.

- If yes, go to **Step 7**.
- If no, go to **Step 8**.

**Step 7** Lower the ambient temperature to the normal range. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 8**.

**Step 8** Check whether the air inlet or outlet is blocked.

- If yes, go to **Step 9**.
- If no, go to **Step 10**.

**Step 9** Remove barriers. Then check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 10**.

**Step 10** Check whether idle disk bays are not installed with hard disk fillers.

- If yes, go to **Step 11**.
- If no, go to **Step 12**.

**Step 11** Install hard disk fillers in idle disk bays. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 12**.

**Step 12** Check whether air ducts are installed properly.

- If yes, go to **Step 14**.
- If no, go to **Step 13**.

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**Step 13** Install air ducts properly. After 5 minutes, check whether the alarm is cleared.

For details about how to install air ducts, see "Replacing Parts" in the user guide.

- If yes, no further action is required.
- If no, go to **Step 14**.

**Step 14** Replace the disk backplane, then check whether the alarm is cleared.

For details about the location of the disk backplane, see server user guide.

For details about how to replace the disk backplane, see "Replacing Parts" in the user guide.

- If yes, no further action is required.
- If no, go to **Step 15**.

**Step 15** Contacttechnical support.

**----End**

# 3.3.14 ALM-0x0147FFFF Above Upper Minor Threshold (CPUBrdN Temp)

## Description

Alarm message:

```
Above upper minor threshold
```

This alarm is generated when the temperature sensor detects that the temperature of a computer module is higher than the minor alarm upper threshold. This alarm is cleared when the system detects that the temperature is restored to the acceptable range.

This alarm applies only to the RH8100 V3 only.

Sensor triggering the alarm: CPUBrd*N* Temp

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x0147FFFF | Minor | Yes |

## Parameters

| Name | Meaning |
|---|---|
| *N* | indicates a computer module number. |

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## Impact on the System

The CPU cannot operate stably. If the alarm persists, the server powers off or restarts, which interrupts services and causes data loss.

## Possible Causes

- The fan module is faulty.
- The ambient temperature exceeds the normal range.
- The air inlet or outlet is blocked.
- The heat sink is in poor contact with the mainboard.
- The computer module is faulty.

## Procedure

**Step 1** Check whether a low fan speed alarm is generated for the fan module.

You can obtain alarm information in either of the following ways:

- View alarm information on the **Current Alarms** page of the iBMC WebUI.
- Run the **ipmcget -d healthevents** command on the iBMC CLI.
- If yes, go to **Step 2**.
- If no, go to **Step 4**.

**Step 2** Remove and then reinstall the fan module. After 5 minutes, check whether the fan module alarm is cleared.

- If yes, go to **Step 4**.
- If no, go to **Step 3**.

**Step 3** Replace the fan module. After 5 minutes, check whether the fan module alarm is cleared.

For details about how to replace the fan module, see "Replacing Parts" in the server user guide.

- If yes, go to **Step 4**.
- If no, go to **Step 11**.

**Step 4** Check whether the computer module high temperature alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Check whether the temperature room temperature exceeds the normal range.

- If yes, go to **Step 6**.
- If no, go to **Step 7**.

**Step 6** Lower the ambient temperature to the normal range. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 7**.

**Step 7** Check whether the air inlet is blocked.

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- If yes, go to **Step 8**.
- If no, go to **Step 9**.

**Step 8** Clear the blockage. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 9**.

**Step 9** Remove and then install the heat sink, and poweron the server. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 10**.

**Step 10** Replace the computer module, then check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 11**.

**Step 11** Contact technical support.

**----End**

# 3.3.15 ALM-0x0147FFFF Above Upper Minor Threshold (SSDN Temp)

## Description

Alarm message:

```
Above upper minor threshold
```

This alarm is generated when the sensor detects that the SSD hard disk temperature or SSD card temperature is higher than the minor alarm upper threshold. This alarm is cleared when the system detects that the temperature falls below the threshold.

Sensor triggering the alarm: SSD*N* Temp

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x0147FFFF | Minor | Yes |

## Parameters

| Name | Meaning |
|---|---|
| *N* | Indicates an SSD card number. |

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## Impact on the System

The components cannot operate stably, which shortens the service life of the server and increases power consumption. If the alarm persists, the server powers off or restarts, which interrupts services and causes data loss.

## Possible Causes

- The fan module is faulty.
- The ambient temperature exceeds the normal range.
- The air inlet or outlet is blocked.
- Idle disk bays are not installed with hard disk fillers.
- Air ducts are not installed properly.
- The SSD card is faulty.

## Procedure

**Step 1** Check whether a low fan speed alarm is generated for the fan module.

You can obtain alarm information in either of the following ways:

- View alarm information on the **Current Alarms** page of the iBMC WebUI.
- Run the **ipmcget -d healthevents** command on the iBMC CLI.
- If yes, go to **Step 2**.
- If no, go to **Step 5**.

**Step 2** Remove and then install the fan module. Five minutes later, check whether the fan module alarm is cleared.

- If yes, go to **Step 4**.
- If no, go to **Step 3**.

**Step 3** Replace the fan module. After 5 minutes, check whether the fan module alarm is cleared.

For details about how to replace the fan module, see "Replacing Parts" in the user guide.

- If yes, go to **Step 4**.
- If no, go to **Step 14**.

**Step 4** Check whether the SSD card overheating alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Check whether the ambient temperature exceeds the normal range.

- If yes, go to **Step 7**.
- If no, go to **Step 6**.

**Step 6** Lower the ambient temperature to the normal range. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.

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- If no, go to **Step 7**.

**Step 7** Check whether the air inlet or outlet is blocked.

- If yes, go to **Step 8**.
- If no, go to **Step 9**.

**Step 8** Remove the blockage from the air inlet or outlet. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 9**.

**Step 9** Check whether idle disk bays are not installed with hard disk fillers.

- If yes, go to **Step 10**.
- If no, go to **Step 11**.

**Step 10** Install hard disk fillers in idle disk bays. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 11**.

**Step 11** Check whether air ducts are installed properly.

- If yes, go to **Step 13**.
- If no, go to **Step 12**.

**Step 12** Install air ducts properly. After 5 minutes, check whether the alarm is cleared.

For details about how to install air ducts, see "Replacing Parts" in the server user guide.

- If yes, no further action is required.
- If no, go to **Step 13**

**Step 13** Replace the SSD card, then check whether the alarm is cleared.

For details about the SSD card slot information, see the server user guide.

For details about how to replace the SSD card, see "Replacing Parts" in the server user guide.

- If yes, no further action is required.
- If no, go to **Step 14**.

**Step 14** Contact technical support.

**----End**

# 3.3.16 ALM-0x0147FFFF Above Upper Minor Threshold (SSD DiskN Temp)

## Description

Alarm message:

```
Above upper minor threshold
```

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This alarm is generated when the sensor detects that the temperature of the solid-state disk (SSD) is higher than the minor threshold. This alarm is cleared when the sensor detects that the SSD temperature falls below the threshold.

Sensor triggering the alarm: SSD Disk*N* Temp

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x0147FFFF | Minor | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *N* | Indicates the serial number of the bay in which the SSD is installed. |

## Impact on the System

The components cannot operate stably, which shortens the service life of the server and increases power consumption. If the alarm persists, the server powers off or restarts, which interrupts services and causes data loss.

## Possible Causes

- The fan module is faulty.
- The ambient temperature exceeds the normal range.
- The air inlet or outlet is blocked.
- Idle disk bays are not installed with hard disk fillers.
- Air ducts are not installed properly.
- The hard disk backplane of the SSD is faulty.
- The SSD is faulty.

The location of the hard disk backplane varies with the server model. For details, see the user guide of the server you use.

The RH2288H V3 server is used as an example to describe how to clear the alarm. In an RH2288H V3 server, the front hard disk backplane is the hard disk backplane of the SSDs. For details, see the *RH2288H V3 Server User Guide*.

## Procedure

**Step 1** Check whether an alarm indicating low fan speed is generated for a fan module.

You can obtain alarm information in either of the following ways:

- View alarm information on the **Current Alarms** page of the iBMC WebUI.

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- Run the **ipmcget -d healthevents** command on the iBMC CLI.
- If yes, go to **Step 2**.
- If no, go to **Step 5**.

**Step 2** Remove and reinstall the fan module. Five minutes later, check whether the fan module alarm is cleared.

- If yes, go to **Step 4**.
- If no, go to **Step 3**.

**Step 3** Replace the fan module. After 5 minutes, check whether the fan module alarm is cleared.

For details about how to replace the fan module, see the server user guide.

- If yes, go to **Step 4**.
- If no, go to **Step 15**.

**Step 4** Check whether the SSD overheating alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Check whether the ambient temperature exceeds the normal range.

- If yes, go to **Step 6**.
- If no, go to **Step 7**.

**Step 6** Lower the ambient temperature to the normal range. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 7**.

**Step 7** Check whether the air inlet or outlet is blocked.

- If yes, go to **Step 8**.
- If no, go to **Step 9**.

**Step 8** Remove the blockage from the air inlet or outlet. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 9**.

**Step 9** Check whether there are empty disk bays.

- If yes, go to **Step 10**.
- If no, go to **Step 11**.

**Step 10** Install hard disk fillers in all empty bays. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 11**.

**Step 11** Check whether air ducts are installed properly.

- If yes, go to **Step 13**.
- If no, go to **Step 12**.

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**Step 12** Install air ducts properly. After 5 minutes, check whether the alarm is cleared.

For details about how to install air ducts, see the server user guide.

- If yes, no further action is required.
- If no, go to **Step 13**

**Step 13** Replace the hard disk backplane of the SSD. Then, check whether the alarm is cleared.

For details about how to replace the hard disk backplane, see "Replacing Parts" in the user guide.

In this example, replace the front hard disk backplane, and then check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 14**.

**Step 14** Replace the SSD. Then, check whether the alarm is cleared.

For details, see "Replacing Parts" in the server user guide.

- If yes, no further action is required.
- If no, go to **Step 15**.

**Step 15** Contact technical support.

**----End**

# 3.3.17 ALM-0x0147FFFF Above Upper Minor Threshold (CPUN DTS)

## Description

Alarm message:

```
Above upper minor threshold
```

This alarm is generated when the sensor detects that the CPU core temperature is higher than the major alarm upper threshold. This alarm is cleared when the system detects that the temperature falls below the threshold.

Sensor triggering the alarm: CPU*N* DTS

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x0147FFFF | Minor | Yes |

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## Parameters

| Name | Meaning |
| --- | --- |
| *N* | Indicates a CPU number. |

## Impact on the System

The components cannot operate stably, which shortens the service life of the server and increases power consumption. If the alarm persists, the server powers off or restarts, which interrupts services and causes data loss.

## Possible Causes

- The fan module is faulty.
- The ambient temperature exceeds the normal range.
- The air inlet or outlet is blocked.
- Idle disk bays are not installed with hard disk fillers.
- Air ducts are not installed properly.
- The heat sink is in poor contact with the mainboard.
- The mainboard is faulty.
- The CPU is faulty.

## Procedure

**Step 1** Check whether a low fan speed alarm is generated for the fan module.

You can obtain alarm information in either of the following ways:

- View alarm information on the **Current Alarms** page of the iBMC WebUI.
- Run the **ipmcget -d healthevents** command on the iBMC CLI.
- If yes, go to **Step 2**.
- If no, go to **Step 5**.

**Step 2** Remove and then install the fan module. Five minutes later, check whether the fan module alarm is cleared.

- If yes, go to **Step 4**.
- If no, go to **Step 3**.

**Step 3** Replace the fan module. After 5 minutes, check whether the fan module alarm is cleared.

For details about how to replace the fan module, see the server user guide.

- If yes, go to **Step 4**.
- If no, go to **Step 17**.

**Step 4** Check whether the CPU overheating alarm is cleared.

- If yes, no further action is required.

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- If no, go to **Step 5**.

**Step 5** Check whether the ambient temperature exceeds the normal range.

- If yes, go to **Step 6**.
- If no, go to **Step 7**.

**Step 6** Lower the ambient temperature to the normal range. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 7**.

**Step 7** Check whether the air inlet or outlet is blocked.

- If yes, go to **Step 8**.
- If no, go to **Step 9**.

**Step 8** Remove the blockage. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 9**.

**Step 9** Check whether idle slots are not installed with filler panels.

- If yes, go to **Step 10**.
- If no, go to **Step 11**.

**Step 10** Install filler panels in idle slots. Five minutes later, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 11**.

**Step 11** Check whether air ducts are installed properly.

- If yes, go to **Step 13**.
- If no, go to **Step 12**.

**Step 12** Install air ducts properly. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 13**.

**Step 13** Power off the server and open the chassis. Check whether the heat sink is in poor contact with the mainboard.

- If yes, go to **Step 14**.
- If no, go to **Step 15**.

**Step 14** Remove and install the heat sink, and power on the server. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 15**

**Step 15** Replace the mainboard and check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 16**.

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**Step 16** Replace the CPU and check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 17**.

**Step 17** Contact technical support.

**----End**

# 3.3.18 ALM-0x0341FFFF State Asserted (CPUN Prochot)

## Description

Alarm message:

```
State Asserted
```

This alarm is generated when the iBMC detects a signal sent from the CPU that the CPU temperature is excessively high. This alarm is cleared when the system detects that the temperature is restored to the acceptable range.

Sensor triggering the alarm: CPU*N* Prochot

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x0341FFFF | Major | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *N* | Serial number of the CPU. |

## Impact on the System

The components cannot operate stably, which shortens the service life of the server and increases power consumption. If the alarm persists, the server powers off or restarts, which interrupts services and causes data loss.

## Possible Causes

- The fan module is faulty.
- The ambient temperature exceeds the normal range.
- The air inlet or outlet is blocked.
- Idle disk bays are not installed with hard disk fillers.
- Air ducts are not installed properly.
- The heat sink is in poor contact with the mainboard.

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- The mainboard is faulty.
- The CPU is faulty.

## Procedure

**Step 1** Check whether a low fan speed alarm is generated for the fan module.

You can obtain alarm information in either of the following ways:

- View alarm information on the **Current Alarms** page of the iBMC WebUI.
- Run the **ipmcget -d healthevents** command on the iBMC CLI.
- If yes, go to **Step 2**.
- If no, go to **Step 5**.

**Step 2** Remove and then install the fan module. After 5 minutes, check whether the fan module alarm is cleared.

- If yes, go to **Step 4**.
- If no, go to **Step 3**.

**Step 3** Replace the fan module. After 5 minutes, check whether the fan module alarm is cleared.

For details about how to replace the fan module, see the server user guide.

- If yes, go to **Step 4**.
- If no, go to **Step 17**.

**Step 4** Check whether the CPU overheating alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Check whether the ambient temperature exceeds the normal range.

- If yes, go to **Step 6**.
- If no, go to **Step 7**.

**Step 6** Lower the ambient temperature to the normal range. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 7**.

**Step 7** Check whether the air inlet or outlet is blocked.

- If yes, go to **Step 8**.
- If no, go to **Step 9**.

**Step 8** Remove the blockage. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 9**.

**Step 9** Check whether idle slots are not installed with filler panels.

- If yes, go to **Step 10**.
- If no, go to **Step 11**.

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**Step 10** Install filler panels in idle slots. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 11**.

**Step 11** Check whether air ducts are installed properly.

- If yes, go to **Step 13**.
- If no, go to **Step 12**.

**Step 12** Install air ducts properly. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 13**.

**Step 13** Power off the server and open the chassis. Check whether the heat sink is in poor contact with the mainboard.

- If yes, go to **Step 14**.
- If no, go to **Step 15**.

**Step 14** Remove and install the heat sink, and power on the server. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 15**

**Step 15** Replace the mainboard and check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 16**.

**Step 16** Replace the CPU and check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 17**.

**Step 17** Contact technical support.

**----End**

# 3.3.19 ALM-0x0147FFFF Above Upper Minor Threshold (PCH Temp)

## Description

Alarm message:

```
Above upper minor threshold
```

This alarm is generated when the sensor detects the (platform controller hub) PCH temperature that is higher than the major alarm upper threshold. This alarm is cleared when the system detects that the temperature is restored to the acceptable range.

Sensor triggering the alarm: PCH Temp

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## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x0147FFFF | Minor | Yes |

## Impact on the System

The components cannot operate stably, which shortens the service life of the server and increases power consumption. If the alarm persists, the server powers off or restarts, which interrupts services and causes data loss.

## Possible Causes

- The fan module is faulty.
- The ambient temperature exceeds the normal range.
- The air inlet or outlet is blocked.
- Idle disk bays are not installed with hard disk fillers.
- Air ducts are not installed properly.
- The mainboard is faulty.

## Procedure

**Step 1** Check whether a low fan speed alarm is generated for the fan module.

You can obtain alarm information in either of the following ways:

- View alarm information on the **Current Alarms** page of the iBMC WebUI.
- Run the **ipmcget -d healthevents** command on the iBMC CLI.
- If yes, go to **Step 2**.
- If no, go to **Step 5**.

**Step 2** Remove and then reinstall the fan module. After 5 minutes, check whether the fan module alarm is cleared.

- If yes, go to **Step 4**.
- If no, go to **Step 3**.

**Step 3** Replace the fan module. After 5 minutes, check whether the fan module alarm is cleared.

For details about how to replace the fan module, see "Replacing Parts" in the server user guide.

- If yes, go to **Step 4**.
- If no, go to **Step 14**.

**Step 4** whether the PCH overheating alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

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**Step 5** Check whether the temperature room temperature exceeds the normal range.

- If yes, go to **Step 6**.
- If no, go to **Step 7**.

**Step 6** Lower the ambient temperature to the normal range. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 7**.

**Step 7** Check whether the air inlet or outlet is blocked.

- If yes, go to **Step 8**.
- If no, go to **Step 9**.

**Step 8** Clear the blockage. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 9**.

**Step 9** Check whether idle disk bays are not installed with hard disk fillers.

- If yes, go to **Step 10**.
- If no, go to **Step 11**.

**Step 10** Install hard disk fillers in idle disk bays. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 11**.

**Step 11** Check whether air ducts are installed properly.

- If yes, go to **Step 13**.
- If no, go to **Step 12**.

**Step 12** Install air ducts properly. After 5 minutes, check whether the alarm is cleared.

For details about how to install air ducts, see "Replacing Parts" in the server user guide.

- If yes, no further action is required.
- If no, go to **Step 13**.

**Step 13** Replace the mainboard. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 14**.

**Step 14** Contact technical support.

**----End**

## 3.3.20 ALM-0x0147FFFF Above Upper Minor Threshold (Rear DiskN Temp)

### Description

Alarm message:

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Above upper minor threshold

This alarm is generated when the sensor detects the rear disk backplane temperature is higher than the minor alarm upper threshold. This alarm is cleared when the system detects that the temperature falls below the threshold.

Sensor triggering the alarm: RearDisk*N* Temp

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x0147FFFF | Minor | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *N* | Serial number of the built-in disk backplane. |

## Impact on the System

The components cannot operate stably, which shortens the service life of the server and increases power consumption. If the alarm persists, the server powers off or restarts, which interrupts services and causes data loss.

## Possible Causes

- The fan module is faulty.
- The ambient temperature exceeds the normal range.
- The air inlet or outlet is blocked.
- Idle disk bays are not installed with hard disk fillers.
- Air ducts are not installed properly.
- The rear disk backplane is faulty.

The RH2288H V3 server is used as an example to describe how to clear the alarm. **Figure 3-1** shows the location of the rear hard disk backplane of the RH2288H V3.

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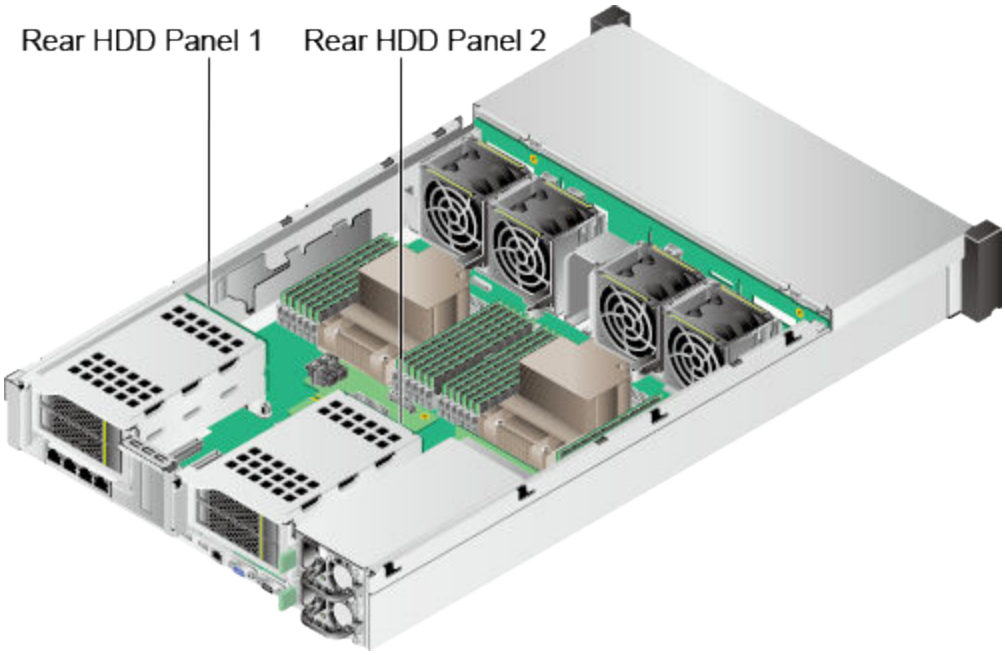
**Figure 3-1** Location of the rear hard disk backplane of the RH2288H V3




## Procedure

**Step 1** Check whether a low fan speed alarm is generated for the fan module.

You can obtain alarm information in either of the following ways:

- View alarm information on the **Current Alarms** page of the iBMC WebUI.
- Run the **ipmcget -d healthevents** command on the iBMC CLI.
- If yes, go to **Step 2**.
- If no, go to **Step 5**.

**Step 2** Remove and then reinstall the fan module. After 5 minutes, check whether the fan module alarm is cleared.

- If yes, go to **Step 4**.
- If no, go to **Step 3**.

**Step 3** Replace the fan module. After 5 minutes, check whether the fan module alarm is cleared.

For details about how to replace the fan module, see "Replacing Parts" in the server user guide.

- If yes, go to **Step 4**.
- If no, go to **Step 14**.

**Step 4** Check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Check whether the temperature room temperature exceeds the normal range.

- If yes, go to **Step 6**.

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- If no, go to **Step 7**.

**Step 6** Lower the ambient temperature to the normal range. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 7**.

**Step 7** Check whether the air inlet or outlet is blocked.

- If yes, go to **Step 8**.
- If no, go to **Step 9**.

**Step 8** Clear the blockage. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 9**.

**Step 9** Check whether idle disk bays are not installed with hard disk fillers.

- If yes, go to **Step 10**.
- If no, go to **Step 11**.

**Step 10** Install hard disk fillers in idle disk bays. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 11**.

**Step 11** Check whether air ducts are installed properly.

- If yes, go to **Step 13**.
- If no, go to **Step 12**.

**Step 12** Install air ducts properly. After 5 minutes, check whether the alarm is cleared.

For details about how to install air ducts, see "Replacing Parts" in the server user guide.

- If yes, no further action is required.
- If no, go to **Step 13**.

**Step 13** Replace the hard disk backplane. Then, check whether the alarm is cleared.

For details about how to replace the hard disk backplane, see "Replacing Parts" in the user guide.

- If yes, no further action is required.
- If no, go to **Step 14**.

**Step 14** Contact technical support.

**----End**

# 3.3.21 ALM-0x0147FFFF Above Upper Minor Threshold (RAIDN Temp)

## Description

Alarm message:

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Above upper minor threshold

This alarm is generated when the sensor detects the RAID temperature is higher than the minor alarm upper threshold. This alarm is cleared when the system detects that the temperature falls below the threshold.

Sensor triggering the alarm: RAID*N* Temp

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x0147FFFF | Minor | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *N* | Serial number of the RAID controller card.<br>No number is displayed if the server has only one RAID controller card. |

## Impact on the System

The components cannot operate stably, which shortens the service life of the server and increases power consumption. If the alarm persists, the server powers off or restarts, which interrupts services and causes data loss.

## Possible Causes

- The fan module is faulty.
- The ambient temperature exceeds the normal range.
- The air inlet or outlet is blocked.
- Idle disk bays are not installed with hard disk fillers.
- Air ducts are not installed properly.
- The RAID card is faulty.

## Procedure

**Step 1** Check whether a low fan speed alarm is generated for the fan module.

You can obtain alarm information in either of the following ways:

- View alarm information on the **Current Alarms** page of the iBMC WebUI.
- Run the **ipmcget -d healthevents** command on the iBMC CLI.
- If yes, go to **Step 2**.
- If no, go to **Step 5**.

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**Step 2** Remove and then reinstall the fan module. After 5 minutes, check whether the fan module alarm is cleared.

- If yes, go to **Step 4**.
- If no, go to **Step 3**.

**Step 3** Replace the fan module. After 5 minutes, check whether the fan module alarm is cleared.

For details about how to replace the fan module, see "Replacing Parts" in the server user guide.

- If yes, go to **Step 4**.
- If no, go to **Step 14**.

**Step 4** Check whether the RAID controller card overheating alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Check whether the temperature room temperature exceeds the normal range.

- If yes, go to **Step 6**.
- If no, go to **Step 7**.

**Step 6** Lower the ambient temperature to the normal range. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 7**.

**Step 7** Check whether the air inlet or outlet is blocked.

- If yes, go to **Step 8**.
- If no, go to **Step 9**.

**Step 8** Clear the blockage. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 9**.

**Step 9** Check whether idle disk bays are not installed with hard disk fillers.

- If yes, go to **Step 10**.
- If no, go to **Step 11**.

**Step 10** Install hard disk fillers in idle disk bays. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 11**.

**Step 11** Check whether air ducts are installed properly.

- If yes, go to **Step 13**.
- If no, go to **Step 12**.

**Step 12** Install air ducts properly. After 5 minutes, check whether the alarm is cleared.

For details about how to install air ducts, see "Replacing Parts" in the server user guide.

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- If yes, no further action is required.
- If no, go to **Step 13**.

**Step 13** Replace the RAID controller card. Then, check whether the alarm is cleared.

For details about how to replace the RAID controller card, see "Replacing Parts" in the user guide.

- If yes, no further action is required.
- If no, go to **Step 14**.

**Step 14** Contact technical support.

**----End**

# 3.3.22 ALM-0x0147FFFF Above Upper Minor Threshold (CPUN MEM Temp)

## Description

Alarm message:

```
Above upper minor threshold
```

This alarm is generated when the sensor detects that the temperature of the dual in-line memory module (DIMM) connected to a CPU is higher than the minor alarm upper threshold. This alarm is cleared when the system detects that the temperature falls below the threshold.

Sensor triggering the alarm: CPU*N* MEM Temp

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x0147FFFF | Minor | Yes |

## Parameters

| Name | Meaning |
|---|---|
| *N* | Serial number of the CPU. |

## Impact on the System

When the DIMM temperature is too high, the DIMM cannot work properly. If the alarm persists, the server powers off or restarts, which interrupts services and causes data loss.

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## Possible Causes

- The fan module is faulty.
- The ambient temperature exceeds the normal range.
- The air inlet or outlet is blocked.
- Idle disk bays are not installed with hard disk fillers.
- Air ducts are not installed properly.
- The DIMM is faulty.
- The mainboard is faulty.

## Procedure

**Step 1** Check whether a low fan speed alarm is generated for the fan module.

You can obtain alarm information in either of the following ways:

- View alarm information on the **Current Alarms** page of the iBMC WebUI.
- Run the **ipmcget -d healthevents** command on the iBMC CLI.
- If yes, go to **Step 2**.
- If yes, go to **Step 5**.

**Step 2** Remove and then reinstall the fan module. After 5 minutes, check whether the fan module alarm is cleared.

- If yes, go to **Step 4**.
- If no, go to **Step 3**.

**Step 3** Replace the fan module. After 5 minutes, check whether the fan module alarm is cleared.

For details about how to replace the fan module, see "Replacing Parts" in the server user guide.

- If yes, go to **Step 4**.
- If no, go to **Step 16**.

**Step 4** Check whether the higher temperature alarm for memory is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Check whether the temperature room temperature exceeds the normal range.

- If yes, go to **Step 6**.
- If no, go to **Step 7**.

**Step 6** Lower the ambient temperature to the normal range. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 7**.

**Step 7** Check whether the air inlet or outlet is blocked.

- If yes, go to **Step 8**.

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- If no, go to **Step 9**.

**Step 8** Clear the blockage. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 9**.

**Step 9** Check whether idle disk bays are not installed with hard disk fillers.

- If yes, go to **Step 10**.
- If no, go to **Step 11**.

**Step 10** Install hard disk fillers in idle disk bays. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 11**.

**Step 11** Check whether air ducts are installed properly.

- If yes, go to **Step 13**.
- If no, go to **Step 12**.

**Step 12** Install air ducts properly. After 5 minutes, check whether the alarm is cleared.

For details about how to install air ducts, see "Replacing Parts" in the server user guide.

- If yes, no further action is required.
- If no, go to **Step 13**.

**Step 13** Switch the DIMMs connected to the alarmed CPU to a CPU that is working normally. Then, check whether the alarm is generated for the new CPU.

For details about the DIMM layout, see the server user guide.

- If yes, go to **Step 14**.
- If no, go to **Step 15**.

**Step 14** Replace the DIMM. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 15**.

**Step 15** Replace the mainboard. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 16**.

**Step 16** Contact technical support.

**----End**

# 3.3.23 ALM-0x0147FFFF Above Upper Minor Threshold (CPUN VDDQ Temp)

## Description

Alarm message:

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Above upper minor threshold

This alarm is generated when the sensor detects the CPU VDDQ temperature that is higher than the major alarm upper threshold. This alarm is cleared when the system detects that the temperature is restored to the acceptable range.

Sensor triggering the alarm: CPU*N* VDDQ Temp

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x0147FFFF | Minor | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *N* | Serial number of the CPU. |

## Impact on the System

When the VDDQ temperature is too high, the VDDQ cannot work stably, and the CPU cannot be powered on. If the alarm persists, the server automatically powers off or restarts, which interrupts services and causes data loss.

## Possible Causes

- The fan module is faulty.
- The ambient temperature exceeds the normal range.
- The air inlet or outlet is blocked.
- Idle disk bays are not installed with hard disk fillers.
- Air ducts are not installed properly.
- The heat sink is in poor contact with the mainboard.
- The mainboard is faulty.
- The CPU is faulty.

## Procedure

**Step 1** Check whether a low fan speed alarm is generated for the fan module.

You can obtain alarm information in either of the following ways:

- View alarm information on the **Current Alarms** page of the iBMC WebUI.
- Run the **ipmcget -d healthevents** command on the iBMC CLI.
- If yes, go to **Step 2**.
- If no, go to **Step 5**.

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**Step 2** Remove and then install the fan module. Five minutes later, check whether the fan module alarm is cleared.

- If yes, go to **Step 4**.
- If no, go to **Step 3**.

**Step 3** Replace the fan module. After 5 minutes, check whether the fan module alarm is cleared.

For details about how to replace the fan module, see the server user guide.

- If yes, go to **Step 4**.
- If no, go to **Step 17**.

**Step 4** Check whether the CPU overheating alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Check whether the ambient temperature exceeds the normal range.

- If yes, go to **Step 6**.
- If no, go to **Step 7**.

**Step 6** Lower the ambient temperature to the normal range. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 7**.

**Step 7** Check whether the air inlet or outlet is blocked.

- If yes, go to **Step 8**.
- If no, go to **Step 9**.

**Step 8** Remove the blockage. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 9**.

**Step 9** Check whether idle slots are not installed with filler panels.

- If yes, go to **Step 10**.
- If no, go to **Step 11**.

**Step 10** Install filler panels in idle slots. Five minutes later, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 11**.

**Step 11** Check whether air ducts are installed properly.

- If yes, go to **Step 13**.
- If no, go to **Step 12**.

**Step 12** Install air ducts properly. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 13**.

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**Step 13** Power off the server and open the chassis. Check whether the heat sink is in poor contact with the mainboard.

- If yes, go to **Step 14**.
- If no, go to **Step 15**.

**Step 14** Remove and install the heat sink, and power on the server. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 15**

**Step 15** Replace the mainboard and check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 16**.

**Step 16** Replace the CPU and check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 17**.

**Step 17** Contact technical support.

**----End**

# 3.3.24 ALM-0x0147FFFF Above Upper Minor Threshold (CPUN VRD Temp)

## Description

Alarm message:

```
Above upper minor threshold
```

This alarm is generated when the sensor detects the CPU VRD temperature that is higher than the major alarm upper threshold. This alarm is cleared when the system detects that the temperature is restored to the acceptable range.

Sensor triggering the alarm: CPU*N* VRD Temp

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x0147FFFF | Minor | Yes |

## Parameters

| Name | Meaning |
|---|---|
| *N* | Serial number of the CPU. |

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## Impact on the System

When the VRD temperature is too high, the VRD cannot work stably, and the CPUs cannot be powered on. If the alarm persists, the server automatically powers off or restarts, which interrupts services and causes data loss.

## Possible Causes

- The fan module is faulty.
- The ambient temperature exceeds the normal range.
- The air inlet or outlet is blocked.
- Idle disk bays are not installed with hard disk fillers.
- Air ducts are not installed properly.
- The heat sink is in poor contact with the mainboard.
- The mainboard is faulty.
- The CPU is faulty.

## Procedure

**Step 1** Check whether a low fan speed alarm is generated for the fan module.

You can obtain alarm information in either of the following ways:

- View alarm information on the **Current Alarms** page of the iBMC WebUI.
- Run the **ipmcget -d healthevents** command on the iBMC CLI.
- If yes, go to **Step 2**.
- If no, go to **Step 5**.

**Step 2** Remove and then install the fan module. Five minutes later, check whether the fan module alarm is cleared.

- If yes, go to **Step 4**.
- If no, go to **Step 3**.

**Step 3** Replace the fan module. After 5 minutes, check whether the fan module alarm is cleared.

For details about how to replace the fan module, see the server user guide.

- If yes, go to **Step 4**.
- If no, go to **Step 17**.

**Step 4** Check whether the CPU overheating alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Check whether the ambient temperature exceeds the normal range.

- If yes, go to **Step 6**.
- If no, go to **Step 7**.

**Step 6** Lower the ambient temperature to the normal range. After 5 minutes, check whether the alarm is cleared.

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- If yes, no further action is required.
- If no, go to **Step 7**.

**Step 7** Check whether the air inlet or outlet is blocked.

- If yes, go to **Step 8**.
- If no, go to **Step 9**.

**Step 8** Remove the blockage. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 9**.

**Step 9** Check whether idle slots are not installed with filler panels.

- If yes, go to **Step 10**.
- If no, go to **Step 11**.

**Step 10** Install filler panels in idle slots. Five minutes later, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 11**.

**Step 11** Check whether air ducts are installed properly.

- If yes, go to **Step 13**.
- If no, go to **Step 12**.

**Step 12** Install air ducts properly. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 13**.

**Step 13** Power off the server and open the chassis. Check whether the heat sink is in poor contact with the mainboard.

- If yes, go to **Step 14**.
- If no, go to **Step 15**.

**Step 14** Remove and install the heat sink, and power on the server. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 15**

**Step 15** Replace the mainboard and check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 16**.

**Step 16** Replace the CPU and check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 17**.

**Step 17** Contact technical support.

**----End**

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# 3.3.25 ALM-0x0701FFFF Critical Alarm for CPU Temperature (Thermal Trip) (CPUN Status)

## Description

Alarm message:

```
Critical alarm for CPU temperature (thermal trip)
```

This alarm is generated when the iBMC detects a signal sent from the CPU that the CPU core temperature is excessively high. This alarm is cleared when the system detects that the temperature is restored to the acceptable range.

Sensor triggering the alarm: CPU*N* Status

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x0701FFFF | Critical | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *N* | Serial number of the CPU. |

## Impact on the System

When the CPU core temperature is excessively high, the system powers off the mainboard forcibly for self-protection purpose. As a result, the services on the mainboard are interrupted, and data is lost.

NOTE

Alarms are generated by the CPU*N* Prochot and CPU*N* DTS sensors before this alarm. Cool down the server before the increased temperature triggers this alarm.

## Possible Causes

- The fan module is faulty.
- The ambient temperature exceeds the normal range.
- The air inlet or outlet is blocked.
- Idle disk bays are not installed with hard disk fillers.
- Air ducts are not installed properly.
- The heat sink is in poor contact with the mainboard.
- The mainboard is faulty.
- The CPU is faulty.

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## Procedure

**Step 1** Check whether a low fan speed alarm is generated for the fan module.

You can obtain alarm information in either of the following ways:

- View alarm information on the **Current Alarms** page of the iBMC WebUI.
- Run the **ipmcget -d healthevents** command on the iBMC CLI.
- If yes, go to **Step 2**.
- If no, go to **Step 5**.

**Step 2** Remove and then install the fan module. Five minutes later, check whether the fan module alarm is cleared.

- If yes, go to **Step 4**.
- If no, go to **Step 3**.

**Step 3** Replace the fan module. After 5 minutes, check whether the fan module alarm is cleared.

For details about how to replace the fan module, see the server user guide.

- If yes, go to **Step 4**.
- If no, go to **Step 17**.

**Step 4** Check whether the CPU overheating alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Check whether the ambient temperature exceeds the normal range.

- If yes, go to **Step 6**.
- If no, go to **Step 7**.

**Step 6** Lower the ambient temperature to the normal range. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 7**.

**Step 7** Check whether the air inlet or outlet is blocked.

- If yes, go to **Step 8**.
- If no, go to **Step 9**.

**Step 8** Remove the blockage. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 9**.

**Step 9** Check whether idle slots are not installed with filler panels.

- If yes, go to **Step 10**.
- If no, go to **Step 11**.

**Step 10** Install filler panels in idle slots. Five minutes later, check whether the alarm is cleared.

- If yes, no further action is required.

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- If no, go to **Step 11**.

**Step 11** Check whether air ducts are installed properly.

- If yes, go to **Step 13**.
- If no, go to **Step 12**.

**Step 12** Install air ducts properly. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 13**.

**Step 13** Power off the server and open the chassis. Check whether the heat sink is in poor contact with the mainboard.

- If yes, go to **Step 14**.
- If no, go to **Step 15**.

**Step 14** Remove and install the heat sink, and power on the server. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 15**

**Step 15** Replace the mainboard and check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 16**.

**Step 16** Replace the CPU and check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 17**.

**Step 17** Contact technical support.

**----End**

# 3.3.26 ALM-0x0802FFFF Predictive Failure (PSN Status)

## Description

Alarm message:

```
Predictive failure
```

This alarm is generated when the power supply unit (PSU) temperature is excessively high. This alarm is cleared when the system detects that the temperature falls below the threshold.

Sensor triggering the alarm: PS*N* Status

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x0802FFFF | Minor | Yes |

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## Parameters

| Name | Meaning |
| --- | --- |
| *N* | Serial number of the PSU. |

## Impact on the System

When the PSU temperature is excessively high, its service life shortens, and the power cannot be supplied to the server properly or the server powers off. Services will be interrupted.

## Possible Causes

- The ambient temperature exceeds the normal range.
- The PSU is faulty.

## Procedure

**Step 1** Check whether the temperature room temperature exceeds the normal range.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Lower the ambient temperature to the normal range. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Check whether the fan for the PSU works properly.

- If yes, go to **Step 4**.
- If no, go to **Step 5**.

**Step 4** If the PSUs are in redundancy mode and the other PSUs are working properly, remove and then install the faulty PSU. Check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Replace the PSU. Check whether the alarm is cleared.

For details about how to replace the PSU, see "Replacing Parts" in the server user guide.

- If yes, no further action is required.
- If no, go to **Step 6**.

**Step 6** Contact technical support.

**----End**

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# 3.3.27 ALM-0x2100FFFF Fault Status (PSN Temp Status)

## Description

Alarm message:

```
Fault status
```

This alarm is generated when the sensor detects that the temperature of a power supply unit (PSU) is higher than the critical alarm upper threshold. This alarm is cleared when the system detects that the temperature is restored to the acceptable range.

Sensor triggering the alarm: PS*N* Temp Status

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x2100FFFF | Major | Yes |

## Parameters

| Name | Meaning |
|---|---|
| *N* | Serial number of the PSU. |

## Impact on the System

The components on the server cannot operate stably.

## Possible Causes

- The ambient temperature exceeds the normal range.
- The air inlet or outlet is blocked.
- The PSU is faulty.

## Procedure

**Step 1** Lower the ambient temperature to the normal range. Five minutes later, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Check whether the fan module for the PSU is working properly.

- If yes, go to **Step 3**.
- If no, go to **Step 4**.

**Step 3** When PSUs are in redundancy mode and the other PSUs are working properly, remove and then install the faulty PSU. Check whether the alarm is cleared.

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- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Replace the faulty PSU. Then check whether the alarm is cleared.

For details about how to replace a PSU, see the server user guide.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Contact technical support.

**----End**

# 3.3.28 ALM-0x0147FFFF Above Upper Minor Threshold (XXGPUN Temp/GPUN Temp)

## Description

Alarm message:

```
Above upper minor threshold
```

This alarm is generated when a temperature sensor detects that the temperature of a graphics processing unit (GPU) is higher than the minor alarm upper threshold. This alarm is cleared when the system detects that the temperature is restored to the acceptable range.

This alarm is generated by the following sensors:

- *XX*GPU*N* Temp
- GPU*N* Temp

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x0147FFFF | Minor | Yes |

## Parameters

| Name | Meaning |
|---|---|
| *N* | indicates a GPU slot number. |
| *XX* | indicates type of the GPU card, for example, **K1**, **K2**, **K10**, **K20X**, **K20C**, **K20M**, **K40M**, **M40**, **P100**, **P4**, and **P40**. |

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## Impact on the System

The GPU and components on the mainboard cannot operate stably, which shortens the service life of the server and increases power consumption. If the alarm persists, the server powers off or restarts, which interrupts services and causes data loss.

## Possible Causes

- A fan module is faulty.
- The service volume is massive.
- The ambient temperature is excessively high.
- The air intake is blocked.
- The air exhaust vent is blocked.
- The heat sink is not properly connected to the mainboard.
- The GPU is faulty.

## Procedure

**Step 1** Log in to the iBMC command-line interface (CLI) or WebUI, and check whether an alarm is generated for the fan module. If a critical alarm is generated for a low fan speed, power off the server, and remove and then install the fan module. Then check whether the critical alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Replace the fan module. Then check whether the alarm is cleared. For details about how to replace a fan module, see the server user guide.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Check whether the services running on the server are in massive volume.

- If yes, go to **Step 4**.
- If no, go to **Step 5**.

**Step 4** Stop non-critical services to reduce the service load on the server. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Check whether the ambient temperature is extremely high.

- If yes, go to **Step 6**.
- If no, go to **Step 7**.

**Step 6** Reduce the ambient temperature. Then check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 7**.

**Step 7** Ensure that the air inlet or outlet is not blocked. Then, check whether the alarm is cleared.

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- If yes, no further action is required.
- If no, go to **Step 8**.

**Step 8** Power off the server and open the chassis.Then check whether the heat sink is not properly connected to the mainboard.

- If yes, go to **Step 9**
- If no, go to **Step 10**.

**Step 9** Remove and then install the heat sink, andpower on the server. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 10**.

**Step 10** Replace the GPU, then check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 11**.

**Step 11** Contact technical support.

**----End**

# 3.3.29 ALM-0x0147FFFF Above Upper Minor Threshold (NIC Temp)

## Description

Alarm message:

```
Above upper minor threshold
```

This alarm is generated when a temperature sensor detects that the temperature of a network interface card (NIC) is higher than the minor alarm upper threshold. This alarm is cleared when the system detects that the temperature is restored to the acceptable range.

Sensor triggering the alarm: NIC Temp

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x0147FFFF | Minor | Yes |

## Impact on the System

The components cannot operate stably, which shortens the service life of the server and increases power consumption. If the alarm persists, the server powers off or restarts, which interrupts services and causes data loss.

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## Possible Causes

- The fan module is faulty.
- The ambient temperature exceeds the normal range.
- The air inlet or outlet is blocked.
- Air ducts are not installed properly.
- The NIC is faulty.

## Procedure

**Step 1** Check whether a low fan speed alarm is generated for the fan module.

You can obtain alarm information in either of the following ways:

- View alarm information on the **Current Alarms** page of the iBMC WebUI.
- Run the **ipmcget -d healthevents** command on the iBMC CLI.
- If yes, go to **Step 2**.
- If no, go to **Step 5**.

**Step 2** Remove and then reinstall the fan module. After 5 minutes, check whether the fan module alarm is cleared.

- If yes, go to **Step 4**.
- If no, go to **Step 3**.

**Step 3** Replace the fan module. After 5 minutes, check whether the fan module alarm is cleared.

For details about how to replace the fan module, see "Replacing Parts" in the server user guide.

- If yes, go to **Step 4**.
- If no, go to **Step 14**.

**Step 4** Check whether the NIC card overheating alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Check whether the temperature room temperature exceeds the normal range.

- If yes, go to **Step 6**.
- If no, go to **Step 7**.

**Step 6** Lower the ambient temperature to the normal range. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 7**.

**Step 7** Check whether the air inlet or outlet is blocked.

- If yes, go to **Step 8**.
- If no, go to **Step 9**.

**Step 8** Clear the blockage. Then, check whether the alarm is cleared.

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- If yes, no further action is required.
- If no, go to **Step 9**.

**Step 9** Check whether idle disk bays are not installed with hard disk fillers.

- If yes, go to **Step 10**.
- If no, go to **Step 11**.

**Step 10** Install hard disk fillers in idle disk bays. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 11**.

**Step 11** Check whether air ducts are installed properly.

- If yes, go to **Step 13**.
- If no, go to **Step 12**.

**Step 12** Install air ducts properly. After 5 minutes, check whether the alarm is cleared.

For details about how to install air ducts, see "Replacing Parts" in the server user guide.

- If yes, no further action is required.
- If no, go to **Step 13**.

**Step 13** Replace the NIC card. Then, check whether the alarm is cleared.

For details about how to replace the NIC card, see "Replacing Parts" in the user guide.

- If yes, no further action is required.
- If no, go to **Step 14**.

**Step 14** Contact technical support.

**----End**

# 3.4 Power Supply Alarms

This topic describes the power alarms for servers.

## 3.4.1 ALM-0x0801FFFF Power Supply Failure (PwrOk Sig. Drop)

### Description

Alarm message:

```
Power supply failure
```

This alarm is generated when a voltage sag or an unexpected power failure occurs on the mainboard.

Sensor triggering the alarm: PwrOk Sig.Drop

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### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x0801FFFF | Major | Yes |

### Impact on the System

The server shuts down, and OS services are interrupted.

### Possible Causes

- Power cables are not connected or not connected securely.
- The mainboard is faulty.

### Procedure

**Step 1** Power off the server, remove and reconnect the power cables, and power on the server. Check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Replace the power cables. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Replace the mainboard. Check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Contact technical support.

**----End**

## 3.4.2 ALM-0x0801FFFF Power Supply Failure (PwrOn TimeOut)

### Description

Alarm message:

```
Power supply failure
```

This alarm is generated when the power-on timeout is detected for the service system.

Sensor triggering the alarm: PwrOn TimeOut

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### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x0801FFFF | Major | Yes |

### Impact on the System

When this alarm is generated, the system cannot be properly powered on.

### Possible Causes

- Power cables are not connected or not connected securely.
- The mainboard is faulty.

### Procedure

**Step 1** Power off the server, remove and reconnect the power cables, and power on the server. Check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Replace the power cables. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Replace the mainboard. Check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Contact technical support.

**----End**

## 3.4.3 ALM-0x0801FFFF Power Supply Failure (PSN Status)

### Description

Alarm message:

```
Power supply failure
```

This alarm is generated when the output voltage of a server power supply unit (PSU) is out of the normal range.

Sensor triggering the alarm: PS*N* Status

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### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x0801FFFF | Major | Yes |

### Parameters

| Name | Meaning |
| --- | --- |
| *N* | Serial number of the PSU. |

### Impact on the System

System power supply is affected.

### Possible Causes

The PSU is faulty.

### Procedure

**Step 1** If the PSUs are in redundancy mode and the other PSUs are working properly, remove and then install the faulty PSU. Check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Replace the PSU. Check whether the alarm is cleared.

For details about how to replace the PSU, see "Replacing Parts" in the server user guide.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Contact technical support.

**----End**

## 3.4.4 ALM-0x0803FFFF Power Supply Input Lost (AC/DC) (PSN Status)

### Description

Alarm message:

```
Power Supply input lost(AC/DC)
```

This alarm is generated when the power supply is interrupted while the power supply unit (PSU) is detected.

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Sensor triggering the alarm: PS*N* Status

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x0803FFFF | Critical | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *N* | Serial number of the PSU. |

## Impact on the System

The power cannot be properly supplied to the server.

## Possible Causes

- Power cables are not connected or not connected securely.
- The PSU is faulty.

## Procedure

**Step 1** Reinstall the power cables, and check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Replace the power cables. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Replace the PSU. Check whether the alarm is cleared.

For details about how to replace the PSU, see "Replacing Parts" in the server user guide.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Contact technical support.

**----End**

# 3.4.5 ALM-0x0804FFFF AC Lost or Out-of-Range (PSN Status)

## Description

Alarm message:

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AC lost or out-of-range

This alarm is generated when the sensor detects that a PSU is installed but the power supply is interrupted or the input voltage is out of range.

Sensor triggering the alarm: PS*N* Status

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x0804FFFF | Critical | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *N* | Serial number of the PSU. |

## Impact on the System

The power supply to the server is abnormal.

## Possible Causes

- Power cables are not connected to the PSU.
- The input voltage of the PSU is unstable.
- The PSU is faulty.

## Procedure

**Step 1** Check whether the power cables are disconnected from the PSU.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Connect the power cables properly and adjust the input voltage to the normal range. Then check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Remove and then install the PSU. Check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Replace the PSU. Then check whether the alarm is cleared.

For details about how to replace a PSU, see the server user guide.

- If yes, no further action is required.

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- If no, go to **Step 5**.

**Step 5** Contact technical support.

**----End**

# 3.4.6 ALM-0x0B41FFFF Redundancy Lost (PS Redundancy)

## Description

Alarm message:

```
Redundancy lost
```

This alarm is generated when the number of present PSUs is less than that detected upon the first power-on.

Sensor triggering the alarm: PS Redundancy

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x0B41FFFF | Major | Yes |

## Impact on the System

The loss of power redundancy reduces power supply reliability.

## Possible Causes

- A PSU is removed.
- The PSU is faulty.

## Procedure

**Step 1** Check whether a PSU is installed.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Insert PSUs into vacant PSU slots and check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Reinstall the PSU and check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Replace the PSU. Check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

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**Step 5** Contact technical support.

**----End**

## 3.4.7 ALM-0x0142FFFF Below Lower Major Threshold (SYS 3.3V)

### Description

Alarm message:

```
Below lower major threshold
```

This alarm is generated when the voltage of the SYS 3.3V sensor on the mainboard is lower than the major alarm lower threshold.

Sensor triggering the alarm: SYS 3.3V

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x0142FFFF | Major | Yes |

### Impact on the System

The system cannot be properly powered on.

### Possible Causes

The mainboard is faulty.

### Procedure

**Step 1** Replace the mainboard. Check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Contact technical support.

**----End**

## 3.4.8 ALM-0x0149FFFF Above Upper Major Threshold (SYS 3.3V)

### Description

Alarm message:

```
Above upper major threshold
```

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This alarm is generated when the voltage of the SYS 3.3V sensor on the mainboard is higher than the major alarm upper threshold.

Sensor triggering the alarm: SYS 3.3V

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x0149FFFF | Major | Yes |

### Impact on the System

The system cannot be properly powered on.

### Possible Causes

The mainboard is faulty.

### Procedure

**Step 1** Replace the mainboard. Check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Contact technical support.

**----End**

## 3.4.9 ALM-0x0142FFFF Below Lower Major Threshold (SYS 5V)

### Description

Alarm message:

```
Below lower major threshold
```

This alarm is generated when the voltage of the SYS 5V sensor on the mainboard is lower than the major alarm lower threshold.

Sensor triggering the alarm: SYS 5V

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x0142FFFF | Major | Yes |

### Impact on the System

The system cannot be properly powered on.

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### Possible Causes

The mainboard is faulty.

### Procedure

**Step 1** Replace the mainboard. Check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Contact technical support.

**----End**

## 3.4.10 ALM-0x0149FFFF Above Upper Major Threshold (SYS 5V)

### Description

Alarm message:

```
Above upper major threshold
```

This alarm is generated when the voltage of the SYS 5V sensor on the mainboard is higher than the major alarm upper threshold.

Sensor triggering the alarm: SYS 5V

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0149FFFF | Major | Yes |

### Impact on the System

The system cannot be properly powered on.

### Possible Causes

The mainboard is faulty.

### Procedure

**Step 1** Replace the mainboard. Check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Contact technical support.

**----End**

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# 3.4.11 ALM-0x0142FFFF Below Lower Major Threshold (SYS 12V)

## Description

Alarm message:

```
Below lower major threshold
```

This alarm is generated when the voltage of the SYS 12V sensor on the mainboard is lower than the major alarm lower threshold.

Sensor triggering the alarm: SYS 12V

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x0142FFFF | Major | Yes |

## Impact on the System

The system cannot be properly powered on.

## Possible Causes

The mainboard is faulty.

## Procedure

**Step 1** Replace the mainboard. Check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Contact technical support.

**----End**

# 3.4.12 ALM-0x0149FFFF Above Upper Major Threshold (SYS 12V)

## Description

Alarm message:

```
Above upper major threshold
```

This alarm is generated when the voltage of the SYS 12V sensor on the mainboard is higher than the major alarm upper threshold.

Sensor triggering the alarm: SYS 12V

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### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0149FFFF | Major | Yes |

### Impact on the System

The system cannot be properly powered on.

### Possible Causes

The mainboard is faulty.

### Procedure

**Step 1** Replace the mainboard. Check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Contact technical support.

**----End**

## 3.4.13 ALM-0x0142FFFF Below Lower Major Threshold (SYS 3.3V)

### Description

Alarm message:

```
Below lower major threshold
```

This alarm is generated when the **SYS 3.3V** voltage detected by the HFC of the RH8100 V3 is lower than the major threshold.

Sensor triggering the alarm: SYS 3.3V

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x0142FFFF | Major | Yes |

### Impact on the System

The server may be powered off abnormally.

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### Possible Causes

The HFC is faulty.

### Procedure

**Step 1** Remove and reinstall the HFC. Then check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Replace the HFC. Then check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Contact technical support.

**----End**

## 3.4.14 ALM-0x0149FFFF Above Upper Major Threshold (SYS 3.3V)

### Description

Alarm message:

```
Above upper major threshold
```

This alarm is generated when the **SYS 3.3V** voltage detected by the HFC of the RH8100 V3 is higher than the major threshold.

Sensor triggering the alarm: SYS 3.3V

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0149FFFF | Major | Yes |

### Impact on the System

The server may be powered off abnormally.

### Possible Causes

The HFC is faulty.

### Procedure

**Step 1** Remove and reinstall the HFC. Then check whether the alarm is cleared.

- If yes, no further action is required.

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- If no, go to **Step 2**.

**Step 2** Replace the HFC. Then check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Contact technical support.

**----End**

# 3.4.15 ALM-0x0142FFFF Below Lower Major Threshold (SYS 5V)

## Description

Alarm message:

```
Below lower major threshold
```

This alarm is generated when the **SYS 5V** voltage detected by the HFC of the RH8100 V3 is lower than the major threshold.

Sensor triggering the alarm: SYS 5V

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x0142FFFF | Major | Yes |

## Impact on the System

The server may be powered off abnormally.

## Possible Causes

The HFC is faulty.

## Procedure

**Step 1** Remove and reinstall the HFC. Then check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Replace the HFC. Then check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Contact technical support.

**----End**

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# 3.4.16 ALM-0x0149FFFF Above Upper Major Threshold (SYS 5V)

## Description

Alarm message:

```
Above upper major threshold
```

This alarm is generated when the **SYS 5V** voltage detected by the HFC of the RH8100 V3 is higher than the major threshold.

Sensor triggering the alarm: SYS 5V

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0149FFFF | Major | Yes |

## Impact on the System

The server may be powered off abnormally.

## Possible Causes

The HFC is faulty.

## Procedure

**Step 1** Remove and reinstall the HFC. Then check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Replace the HFC. Then check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Contact technical support.

**----End**

# 3.4.17 ALM-0x0142FFFF Below Lower Major Threshold (SYS 12V)

## Description

Alarm message:

```
Below lower major threshold
```

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This alarm is generated when the **SYS 12V** voltage detected by the HFC of the RH8100 V3 is lower than the major threshold.

Sensor triggering the alarm: SYS 12V

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x0142FFFF | Major | Yes |

## Impact on the System

The server may be powered off abnormally.

## Possible Causes

- The HFC is faulty.
- A power supply unit (PSU) is faulty.

## Procedure

**Step 1** Check whether a PSU fault alarm exists.

- If yes, go to **Step 4**.
- If no, go to **Step 2**.

**Step 2** Remove and reinstall the HFC. Then check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Replace the HFC. Then check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 4** Replace the faulty PSU. Then check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Contact technical support.

**----End**

# 3.4.18 ALM-0x0149FFFF Above Upper Major Threshold (SYS 12V)

## Description

Alarm message:

```
Above upper major threshold
```

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This alarm is generated when the **SYS 12V** voltage detected by the HFC of the RH8100 V3 is higher than the major threshold.

Sensor triggering the alarm: SYS 12V

- SYS 12V

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0149FFFF | Major | Yes |

## Impact on the System

The server may be powered off abnormally.

## Possible Causes

- The HFC is faulty.
- A power supply unit (PSU) is faulty.

## Procedure

**Step 1** Check whether a PSU fault alarm exists.

- If yes, go to **Step 4**.
- If no, go to **Step 2**.

**Step 2** Remove and reinstall the HFC. Then check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Replace the HFC. Then check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 4** Replace the faulty PSU. Then check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Contact technical support.

**----End**

# 3.4.19 ALM-0x0142FFFF Below Lower Major Threshold (CPUN VCore)

## Description

Alarm message:

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Below lower major threshold

This alarm is generated when the voltage of the CPU*N* VCore on the mainboard is lower than the major alarm lower threshold.

Sensor triggering the alarm: CPU*N* VCore

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x0142FFFF | Major | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *N* | Serial number of the CPU. |

## Impact on the System

The server system cannot work properly.

## Possible Causes

The mainboard is faulty.

## Procedure

**Step 1** Log in to the iBMC WebUI or CLI.

For details, see the iBMC user guide of the server.

**Step 2** Restart the iBMC.

- To restart the iBMC on the WebUI, click **Restart iBMC** on the **Upgrade Firmware** page.
- To restart the iBMC on the CLI, run the **ipmcset -d reset** command.

**Step 3** After the iBMC starts, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Replace the mainboard. Check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Contact technical support.

**----End**

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# 3.4.20 ALM-0x0149FFFF Above Upper Major Threshold (CPUN VCore)

## Description

Alarm message:

```
Above upper major threshold
```

This alarm is generated when the voltage of the CPU*N* VCore on the mainboard is higher than the major alarm upper threshold.

Sensor triggering the alarm: CPU*N* VCore

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0149FFFF | Major | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *N* | Indicates a CPU number. |

## Impact on the System

The server system cannot work properly.

## Possible Causes

The mainboard is faulty.

## Procedure

**Step 1** Log in to the iBMC WebUI or CLI.

For details, see the iBMC user guide of the server.

**Step 2** Restart the iBMC.

- To restart the iBMC on the WebUI, click **Restart iBMC** on the **Upgrade Firmware** page.
- To restart the iBMC on the CLI, run the **ipmcset -d reset** command.

**Step 3** After the iBMC starts, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

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**Step 4** Replace the mainboard. Check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Contact technical support.

**----End**

# 3.4.21 ALM-0x0142FFFF Below Lower Major Threshold (CPUN DDR VDDQ/CPUN DDR VDDQ2)

## Description

Alarm message:

```
Below lower major threshold
```

This alarm is generated when the voltage of the CPU*N* DDR VDDQ on the mainboard is lower than the major alarm lower threshold.

Sensor triggering the alarm:

- CPU*N* DDR VDDQ
- CPU*N* DDR VDDQ2

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x0142FFFF | Major | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *N* | Serial number of the CPU. |

## Impact on the System

The server system cannot work properly.

## Possible Causes

- The DIMM is faulty.
- The mainboard is faulty.
- The CPU is faulty.

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## Procedure

**Step 1** Remove the DIMMs connected to the CPU one by one and check whether the alarm is cleared.

For details about the DIMM layout, see the server user guide.

Log in to the Technical Support website and use the Compatibility List to obtain information about the mapping between CPUs and DIMMs.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Replace the faulty DIMM. Then, check whether the alarm is cleared.

For details about how to replace the DIMM, see the server user guide.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 3** Replace the mainboard. Check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Replace the CPU. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Contact technical support.

**----End**

# 3.4.22 ALM-0x0149FFFF Above Upper Major Threshold (CPUN DDR VDDQ/CPUN DDR VDDQ2)

## Description

Alarm message:

```
Above upper major threshold
```

This alarm is generated when the voltage of the CPU*N* DDR VDDQ*M* on the mainboard is higher than the major alarm upper threshold.

Sensor triggering the alarm:

- CPU*N* DDR VDDQ
- CPU*N* DDR VDDQ2

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x0149FFFF | Major | Yes |

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## Parameters

| Name | Meaning |
| --- | --- |
| *N* | Serial number of the CPU. |

## Impact on the System

The server system cannot work properly.

## Possible Causes

- The DIMM is faulty.
- The mainboard is faulty.
- The CPU is faulty.

## Procedure

**Step 1** Remove the DIMMs connected to the CPU one by one and check whether the alarm is cleared.

For details about the DIMM layout, see the server user guide.

Log in to the Technical Support website and use the Compatibility List to obtain information about the mapping between CPUs and DIMMs.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Replace the faulty DIMM. Then, check whether the alarm is cleared.

For details about how to replace the DIMM, see the server user guide.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 3** Replace the mainboard. Check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Replace the CPU. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Contact technical support.

**----End**

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# 3.4.23 ALM-0x0149FFFF Above Upper Major Threshold (MOS N Volt Drop)

## Description

Alarm message:

```
Above upper major threshold
```

This alarm is generated when the voltage drop of the 12 V MOS-FET on the mainboard is higher than the major alarm upper threshold.

Sensor triggering the alarm: MOS *N* Volt Drop

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x0149FFFF | Major | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *N* | Serial number of the MOS-FET. |

## Impact on the System

The power supply to the mainboard may be abnormal, which may cause the system to operate abnormally.

## Possible Causes

The mainboard is faulty.

## Procedure

**Step 1** Power off the server, remove and reconnect the power cables, and power on the server. Check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Replace the mainboard. Check whether the alarm is cleared.

For details about how to replace the mainboard, see "Replacing Parts" in the server user guide.

- If yes, no further action is required.
- If no, go to **Step 3**.

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**Step 3** Contact technical support.

**----End**

# 3.4.24 ALM-0x0142FFFF Below Lower Major Threshold (Standby 5V)

## Description

Alarm message:

```
Below lower major threshold
```

This alarm is generated when the voltage of the Standby 5V sensor on the mainboard is lower than the major alarm lower threshold.

Sensor triggering the alarm: Standby 5V

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x0142FFFF | Major | Yes |

## Impact on the System

System power supply is affected.

## Possible Causes

The mainboard is faulty.

## Procedure

**Step 1** Power off the server, remove and reconnect the power cables, and power on the server. Check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Replace the mainboard. Check whether the alarm is cleared.

For details about how to replace the mainboard, see "Replacing Parts" in the server user guide.

For details, see the server user guide.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Contact technical support.

**----End**

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# 3.4.25 ALM-0x0149FFFF Above Upper Major Threshold (Standby 5V)

## Description

Alarm message:

```
Above upper major threshold
```

This alarm is generated when the voltage of the Standby 5V sensor on the mainboard is higher than the major alarm upper threshold.

Sensor triggering the alarm: Standby 5V

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x0149FFFF | Major | Yes |

## Impact on the System

System power supply is affected.

## Possible Causes

The mainboard is faulty.

## Procedure

**Step 1** Power off the server, remove and reconnect the power cables, and power on the server. Check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 2** Replace the mainboard. Check whether the alarm is cleared.

For details about how to replace the mainboard, see "Replacing Parts" in the server user guide.

For details, see the server user guide.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Contact technical support.

**----End**

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# 3.4.26 ALM-0x0142FFFF Below Lower Major Threshold (Standby 3.3V)

## Description

Alarm message:

```
Below lower major threshold
```

This alarm is generated when the voltage of the Standby 3.3V sensor on the mainboard is lower than the major alarm lower threshold.

Sensor triggering the alarm: Standby 3.3V

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x0142FFFF | Major | Yes |

## Impact on the System

System power supply is affected.

## Possible Causes

The mainboard is faulty.

## Procedure

**Step 1** Power off the server, remove and reconnect the power cables, and power on the server. Check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Replace the mainboard. Check whether the alarm is cleared.

For details about how to replace the mainboard, see "Replacing Parts" in the server user guide.

For details, see the server user guide.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Contact technical support.

**----End**

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# 3.4.27 ALM-0x0149FFFF Above Upper Major Threshold (Standby 3.3V)

## Description

Alarm message:

```
Above upper major threshold
```

This alarm is generated when the voltage of the Standby 3.3V sensor on the mainboard is higher than the major alarm upper threshold.

Sensor triggering the alarm: Standby 3.3V

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x0149FFFF | Major | Yes |

## Impact on the System

System power supply is affected.

## Possible Causes

The mainboard is faulty.

## Procedure

**Step 1** Power off the server, remove and reconnect the power cables, and power on the server. Check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Replace the mainboard. Check whether the alarm is cleared.

For details about how to replace the mainboard, see "Replacing Parts" in the server user guide.

For details, see the server user guide.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Contact technical support.

**----End**

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# 3.4.28 ALM-0x0142FFFF Below Lower Major Threshold (Standby 2.5V)

## Description

Alarm message:

```
Below lower major threshold
```

This alarm is generated when the voltage of the Standby 2.5V sensor on the mainboard is lower than the major alarm lower threshold.

Sensor triggering the alarm: Standby 2.5V

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x0142FFFF | Major | Yes |

## Impact on the System

System power supply is affected.

## Possible Causes

The mainboard is faulty.

## Procedure

**Step 1** Power off the server, remove and reconnect the power cables, and power on the server. Check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Replace the mainboard. Check whether the alarm is cleared.

For details about how to replace the mainboard, see "Replacing Parts" in the server user guide.

For details, see the server user guide.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Contact technical support.

**----End**

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# 3.4.29 ALM-0x0149FFFF Above Upper Major Threshold (Standby 2.5V)

## Description

Alarm message:

```
Above upper major threshold
```

This alarm is generated when the voltage of the Standby 2.5V sensor on the mainboard is higher than the major alarm upper threshold.

Sensor triggering the alarm: Standby 2.5V

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x0149FFFF | Major | Yes |

## Impact on the System

System power supply is affected.

## Possible Causes

The mainboard is faulty.

## Procedure

**Step 1** Power off the server, remove and reconnect the power cables, and power on the server. Check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Replace the mainboard. Check whether the alarm is cleared.

For details about how to replace the mainboard, see "Replacing Parts" in the server user guide.

For details, see the server user guide.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Contact technical support.

**----End**

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# 3.4.30 ALM-0x0142FFFF Below Lower Major Threshold (Standby 1.5V)

## Description

Alarm message:

```
Below lower major threshold
```

This alarm is generated when the voltage of the Standby 1.5V sensor on the mainboard is lower than the major alarm lower threshold.

Sensor triggering the alarm: Standby 1.5V

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x0142FFFF | Major | Yes |

## Impact on the System

System power supply is affected.

## Possible Causes

The mainboard is faulty.

## Procedure

**Step 1** Power off the server, remove and reconnect the power cables, and power on the server. Check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Replace the mainboard. Check whether the alarm is cleared.

For details about how to replace the mainboard, see "Replacing Parts" in the server user guide.

For details, see the server user guide.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Contact technical support.

**----End**

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# 3.4.31 ALM-0x0149FFFF Above Upper Major Threshold (Standby 1.5V)

## Description

Alarm message:

```
Above upper major threshold
```

This alarm is generated when the voltage of the Standby 1.5V sensor on the mainboard is higher than the major alarm upper threshold.

Sensor triggering the alarm: Standby 1.5V

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x0149FFFF | Major | Yes |

## Impact on the System

System power supply is affected.

## Possible Causes

The mainboard is faulty.

## Procedure

**Step 1** Power off the server, remove and reconnect the power cables, and power on the server. Check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Replace the mainboard. Check whether the alarm is cleared.

For details about how to replace the mainboard, see "Replacing Parts" in the server user guide.

For details, see the server user guide.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Contact technical support.

**----End**

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# 3.4.32 ALM-0x0142FFFF Below Lower Major Threshold (Standby 1.1V)

## Description

Alarm message:

```
Below lower major threshold
```

This alarm is generated when the voltage of the Standby 1.1V sensor on the mainboard is lower than the major alarm lower threshold.

Sensor triggering the alarm: Standby 1.1V

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x0147FFFF | Minor | Yes |

## Impact on the System

System power supply is affected.

## Possible Causes

The mainboard is faulty.

## Procedure

**Step 1** Power off the server, remove and reconnect the power cables, and power on the server. Check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Replace the mainboard. Check whether the alarm is cleared.

For details about how to replace the mainboard, see "Replacing Parts" in the server user guide.

For details, see the server user guide.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Contact technical support.

**----End**

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## 3.4.33 ALM-0x0149FFFF Above Upper Major Threshold (Standby 1.1V)

### Description

Alarm message:

```
Above upper major threshold
```

This alarm is generated when the voltage of the Standby 1.1V sensor on the mainboard is higher than the major alarm upper threshold.

Sensor triggering the alarm: Standby 1.1V

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x0149FFFF | Major | Yes |

### Impact on the System

System power supply is affected.

### Possible Causes

The mainboard is faulty.

### Procedure

**Step 1** Power off the server, remove and reconnect the power cables, and power on the server. Check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Replace the mainboard. Check whether the alarm is cleared.

For details about how to replace the mainboard, see "Replacing Parts" in the server user guide.

For details, see the server user guide.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Contact technical support.

**----End**

# 3.5 Watchdog Alarms

This topic describes the watchdog alarms for servers.

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# 3.5.1 ALM-0x2301FFFF Watchdog Overflow, Hard Reset (Watchdog2)

## Description

Alarm message:

```
Watchdog overflow,hard reset
```

This alarm is generated when the watchdog times out during a phase (**BIOS POST**, **OS Load**, or **SMS/OS** displayed in the **timer user** field), and the timeout action is set to **hard reset** after the watchdog is enabled.

NOTE

This alarm can be generated only after the watchdog is enabled.

Sensor triggering the alarm: Watchdog2

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x2301FFFF | Major | Yes |

## Impact on the System

The system performs hard reset when the watchdog times out. Then services are interrupted, and unsaved data is lost.

## Possible Causes

- If this alarm is generated in the **BIOS/POST** process, the hardware is faulty or the basic input/output system (BIOS) fails to start.
- If this alarm is generated in the **OS Load** process, the OS fails to start.
- If this alarm is generated in the **SMS/OS** process, a service software is faulty.

## Procedure

**Step 1** Disable the watchdog and restart the server.

**Step 2** Use the remote keyboard, video, and mouse (KVM) to check displayed information during system startup. Choose handling methods based on the process in which the alarm is generated.

- If the alarm is generated in the **BIOS/POST** process, log in to the iBMC CLI, and run the **ipmcget -d port80** command to check information about port 80.
- If the alarm is generated in the **OS Load** process, use the remote KVM to view error messages in the OS for fault locating.
- If the alarm is generated in the **SMS/OS** process, log in to the OS, and check whether faults occur in the software where the watchdog is enabled, or the software is suspended.

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**Step 3** Contact technical support.

**----End**

## 3.5.2 ALM-0x2302FFFF Watchdog Overflow, Power Down (Watchdog2)

### Description

Alarm message:

```
Watchdog overflow,power down
```

This alarm is generated when the watchdog times out during a phase (**BIOS POST**, **OS Load**, or **SMS/OS** displayed in the timer user field), and the timeout action is set to **power down** after the watchdog is enabled.

Sensor triggering the alarm: Watchdog2

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x2302FFFF | Major | Yes |

### Impact on the System

The system powers off when the watchdog times out. Then services are interrupted, and unsaved data is lost.

### Possible Causes

- If this alarm is generated in the **BIOS/POST** process, the hardware is faulty or the basic input/output system (BIOS) fails to start.
- If this alarm is generated in the **OS Load** process, the OS fails to start.
- If this alarm is generated in the **SMS/OS** process, a service software is faulty.

### Procedure

**Step 1** Disable the watchdog and restart the server.

**Step 2** Use the remote keyboard, video, and mouse (KVM) to check displayed information during system startup. Choose handling methods based on the process in which the alarm is generated.

- If the alarm is generated in the **BIOS/POST** process, log in to the iBMC CLI, and run the **ipmcget -d port80** command to check information about port 80.
- If the alarm is generated in the **OS Load** process, use the remote KVM to view error messages in the OS for fault locating.
- If the alarm is generated in the **SMS/OS** process, log in to the OS, and check whether faults occur in the software where the watchdog is enabled, or the software is suspended.

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**Step 3** Contact technical support.

**----End**

# 3.5.3 ALM-0x2303FFFF Watchdog Overflow, Power Cycle (Watchdog2)

## Description

Alarm message:

```
Watchdog overflow, power cycle
```

This alarm is generated when the watchdog times out during a phase (**BIOS/POST**, **OS Load**, or **SMS/OS** displayed in the timer user field), and the timeout action is set to **power cycle** after the watchdog is enabled.

Sensor triggering the alarm: Watchdog2

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x2303FFFF | Major | Yes |

## Impact on the System

The system powers off and then powers on repeatedly after the watchdog times out. Then services are interrupted, and unsaved data is lost.

## Possible Causes

- If this alarm is generated in the **BIOS/POST** process, the hardware is faulty or the basic input/output system (BIOS) fails to start.
- If this alarm is generated in the **OS Load** process, the OS fails to start.
- If this alarm is generated in the **SMS/OS** process, a service software is faulty.

## Procedure

**Step 1** Disable the watchdog and restart the server.

**Step 2** Use the remote keyboard, video, and mouse (KVM) to check displayed information during system startup. Choose handling methods based on the process in which the alarm is generated.

- If the alarm is generated in the **BIOS/POST** process, log in to the iBMC CLI, and run the **ipmcget -d port80** command to check information about port 80.
- If the alarm is generated in the **OS Load** process, use the remote KVM to view error messages in the OS for fault locating.
- If the alarm is generated in the **SMS/OS** process, log in to the OS, and check whether faults occur in the software where the watchdog is enabled, or the software is suspended.

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**Step 3** Contact technical support.

**----End**

# 3.6 Management Subsystem Alarms

This topic describes the management subsystem alarms for servers.

Table 3-2 provides the values of *sensorname* when the **Mngmnt Health** sensor triggers an alarm.

Sensor access degraded or unavailable, Sensor is *sensorname*.

**Table 3-2** Sensor list

| Category | Sensorname Value | Description |
|---|---|---|
| Temperature sensor | **Inlet Temp** | - |
| | **Outlet Temp** | |
| | **PCH Temp** | |
| | **CPUN DTS** | *N* indicates the serial number of the CPU. |
| | **CPUN Core Rem** | |
| | **CPUN VDDQ Temp** | |
| | **CPUN VRD Temp** | |
| | **CPUN MEM Temp** | |
| | **RearDiskN Temp** | *N* indicates the serial number of the rear hard disk backplane. |
| | **RAID Temp** | - |
| | **SSDN Temp** | *N* indicates the serial number of the SSD card. |
| | **SSD DiskN Temp** | *N* indicates the serial number of the SSD. |
| | **NIC Temp** | - |
| Voltage sensor | **SYS NV** | *N* indicates the detection point voltage, for example, 3.3, 5, or 12. |
| | **CPUN VCore** | *N* indicates the serial number of the CPU. |
| | **CPUN DDR VDDQ** | |
| | **CPUN DDR VDDQ2** | |

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| Category | Sensorname Value | Description |
| --- | --- | --- |
| Fan speed sensor | **FANN F Speed** | *N* indicates the serial number of the fan module. |
| | **FANN R Speed** | |
| Power sensor | **Power** | - |
| | **PowerN** | *N* indicates the serial number of the PSU. |

## 3.6.1 ALM-0x2800FFFF Sensor Access Degraded or Unavailable (Mngmnt Health, Inlet Temp)

### Description

Alarm message:

```
Sensor access degraded or unavailable, Sensor is Inlet Temp.
```

This alarm is generated when the server failed to obtain data from the **Inlet Temp** sensor.

Sensor triggering the alarm: Mngmnt Health

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x2800FFFF | Minor | Yes |

### Parameters

| Name | Meaning |
| --- | --- |
| Inlet Temp | Air inlet temperature sensor. |

### Impact on the System

The air inlet temperature cannot be properly monitored, and an alarm cannot be reported in a timely manner when the temperature is not within the normal range.

### Possible Causes

- The ME is faulty, or the access channel is abnormal.
- The cable is not properly connected to the component holding the sensor.
- The component holding the sensor is faulty.

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The location of the **Inlet Temp** sensor varies depending on the server model. For details, see the user guide of the server you use.

## Procedure

**Step 1** Log in to the iBMC WebUI or CLI.

For details, see the iBMC user guide of the server.

**Step 2** Restart the iBMC.

- To restart the iBMC on the WebUI, click **Restart iBMC** on the **Upgrade Firmware** page.
- To restart the iBMC on the CLI, run the **ipmcset -d reset** command.

**Step 3** After the iBMC starts, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Remove and reconnect the cable between the component holding the air inlet temperature sensor and the mainboard. Then, check whether the alarm is cleared.

The location of the air inlet temperature sensor varies with the server model. For details, see the sensor list in the server user guide.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Replace the cable connected to the component holding the sensor. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 6**.

**Step 6** Replace the component holding the sensor. Then, check whether the alarm is cleared.

For details, see "Replacing Parts" in the server user guide.

- If yes, no further action is required.
- If no, go to **Step 7**.

**Step 7** Contact technical support.

**----End**

# 3.6.2 ALM-0x2800FFFF Sensor Access Degraded or Unavailable (Mngmnt Health, PCH Temp)

## Description

Alarm message:

```
Sensor access degraded or unavailable, Sensor is PCH Temp.
```

This alarm is generated when the server failed to obtain data from the **PCH Temp** sensor.

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Sensor triggering the alarm: Mngmnt Health

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x2800FFFF | Minor | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| PCH Temp | PCH temperature sensor |

## Impact on the System

The PCH chip temperature cannot be properly monitored, and an alarm cannot be reported in a timely manner when the temperature is not within the normal range.

## Possible Causes

- The iBMC is not functioning.
- The mainboard is faulty.

The **PCH Temp** sensor is located on the server mainboard. The RH2288H V3 server is used as an example to describe how to clear the alarm.

## Procedure

**Step 1** Log in to the iBMC WebUI or CLI.

For details, see the iBMC user guide of the server.

**Step 2** Restart the iBMC.

- To restart the iBMC on the WebUI, click **Restart iBMC** on the **Upgrade Firmware** page.
- To restart the iBMC on the CLI, run the **ipmcset -d reset** command.

**Step 3** After the iBMC starts, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Power off the server, remove and reconnect the power cables, and power on the server. Check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Replace the mainboard. Check whether the alarm is cleared.

For details about how to replace the mainboard, see "Replacing Parts" in the server user guide.

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- If yes, no further action is required.
- If no, go to **Step 6**.

**Step 6** Contact technical support.

**----End**

# 3.6.3 ALM-0x2800FFFF Sensor Access Degraded or Unavailable (Mngmnt Health, CPUN Core Rem)

## Description

Alarm message:

Sensor access degraded or unavailable, Sensor is CPU*N* Core Rem.

This alarm is generated when the server failed to obtain data from the CPU*N* Core Rem sensor.

Sensor triggering the alarm: Mngmnt Health

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x2800FFFF | Minor | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| CPU*N* Core Rem | Name of the temperature sensor.<br>*N* indicates the CPU number. |

## Impact on the System

The CPU core temperature cannot be properly monitored, and an alarm cannot be reported in a timely manner when the temperature is not within the normal range.

## Possible Causes

- The iBMC is not functioning.
- The mainboard is faulty.

## Procedure

**Step 1** Log in to the iBMC WebUI or CLI.

For details, see the iBMC user guide of the server.

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**Step 2** Restart the iBMC.

- To restart the iBMC on the WebUI, click **Restart iBMC** on the **Upgrade Firmware** page.
- To restart the iBMC on the CLI, run the **ipmcset -d reset** command.

**Step 3** After the iBMC starts, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Power off the server, remove and reconnect the power cables, and power on the server. Check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Replace the mainboard. Check whether the alarm is cleared.

For details about how to replace the mainboard, see "Replacing Parts" in the server user guide.

- If yes, no further action is required.
- If no, go to **Step 6**.

**Step 6** Contact technical support.

**----End**

# 3.6.4 ALM-0x2800FFFF Sensor Access Degraded or Unavailable (Mngmnt Health, CPUN DTS)

## Description

Alarm message:

Sensor access degraded or unavailable, Sensor is CPU*N* DTS.

This alarm is generated when the server failed to obtain data from the CPU*N* DTS sensor.

Sensor triggering the alarm: Mngmnt Health

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x2800FFFF | Minor | Yes |

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## Parameters

| Name | Meaning |
| --- | --- |
| CPU*N* DTS | Name of the temperature sensor.<br>*N* indicates the CPU number. |

## Impact on the System

The DTS detection point temperature of the specified CPU cannot be properly monitored, and an alarm cannot be reported in a timely manner when the temperature is not within the normal range.

## Possible Causes

- The iBMC is not functioning.
- The mainboard is faulty.

## Procedure

**Step 1** Log in to the iBMC WebUI or CLI.

For details, see the iBMC user guide of the server.

**Step 2** Restart the iBMC.

- To restart the iBMC on the WebUI, click **Restart iBMC** on the **Upgrade Firmware** page.
- To restart the iBMC on the CLI, run the **ipmcset -d reset** command.

**Step 3** After the iBMC starts, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Power off the server, remove and reconnect the power cables, and power on the server. Check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Replace the mainboard. Check whether the alarm is cleared.

For details about how to replace the mainboard, see "Replacing Parts" in the server user guide.

- If yes, no further action is required.
- If no, go to **Step 6**.

**Step 6** Contact technical support.

**----End**

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# 3.6.5 ALM-0x2800FFFF Sensor Access Degraded or Unavailable (Mngmnt Health, CPUN VDDQ Temp)

## Description

Alarm message:

```
Sensor access degraded or unavailable, Sensor is CPUN VDDQ Temp.
```

This alarm is generated when the server failed to obtain data from the CPU*N* VDDQ Temp sensor.

Sensor triggering the alarm: Mngmnt Health

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x2800FFFF | Minor | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| CPU*N* VDDQ Temp | Name of the temperature sensor.<br>*N* indicates the CPU number. |

## Impact on the System

The VDDQ Temp detection point temperature of the specified CPU cannot be properly monitored, and an alarm cannot be reported in a timely manner when the temperature is not within the normal range.

## Possible Causes

- The iBMC is not functioning.
- The mainboard is faulty.

## Procedure

**Step 1** Log in to the iBMC WebUI or CLI.

For details, see the iBMC user guide of the server.

**Step 2** Restart the iBMC.

- To restart the iBMC on the WebUI, click **Restart iBMC** on the **Upgrade Firmware** page.
- To restart the iBMC on the CLI, run the **ipmcset -d reset** command.

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**Step 3** After the iBMC starts, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Power off the server, remove and reconnect the power cables, and power on the server. Check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Replace the mainboard. Check whether the alarm is cleared.

For details about how to replace the mainboard, see "Replacing Parts" in the server user guide.

- If yes, no further action is required.
- If no, go to **Step 6**.

**Step 6** Contact technical support.

**----End**

# 3.6.6 ALM-0x2800FFFF Sensor Access Degraded or Unavailable (Mngmnt Health, CPUN VRD Temp)

## Description

Alarm message:

```
Sensor access degraded or unavailable, Sensor is CPUN VRD Temp.
```

This alarm is generated when the server failed to obtain data from the CPU*N* VRD Temp sensor.

Sensor triggering the alarm: Mngmnt Health

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x2800FFFF | Minor | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| CPU*N* VRD Temp | Name of the temperature sensor.<br>*N* indicates the CPU number. |

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### Impact on the System

The VRD Temp detection point temperature of the specified CPU cannot be properly monitored, and an alarm cannot be reported in a timely manner when the temperature is not within the normal range.

### Possible Causes

- The iBMC is not functioning.
- The mainboard is faulty.

### Procedure

**Step 1** Log in to the iBMC WebUI or CLI.

For details, see the iBMC user guide of the server.

**Step 2** Restart the iBMC.

- To restart the iBMC on the WebUI, click **Restart iBMC** on the **Upgrade Firmware** page.
- To restart the iBMC on the CLI, run the **ipmcset -d reset** command.

**Step 3** After the iBMC starts, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Power off the server, remove and reconnect the power cables, and power on the server. Check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Replace the mainboard. Check whether the alarm is cleared.

For details about how to replace the mainboard, see "Replacing Parts" in the server user guide.

- If yes, no further action is required.
- If no, go to **Step 6**.

**Step 6** Contact technical support.

**----End**

## 3.6.7 ALM-0x2800FFFF Sensor Access Degraded or Unavailable (Mngmnt Health, CPUN MEM Temp)

### Description

Alarm message:

Sensor access degraded or unavailable, Sensor is CPU*N* MEM Temp.

This alarm is generated when the server failed to obtain data from the CPU*N* MEM Temp sensor.

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Sensor triggering the alarm: Mngmnt Health

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x2800FFFF | Minor | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| CPU*N* MEM Temp | Temperature sensor of the DIMM connected to the specified CPU.<br>*N* indicates the CPU number. |

## Impact on the System

The DIMM temperature cannot be properly monitored, and an alarm cannot be reported in a timely manner when the temperature is not within the normal range.

## Possible Causes

- The iBMC is not functioning.
- The DIMM is faulty.
- The mainboard is faulty.

## Procedure

**Step 1** Log in to the iBMC WebUI or CLI.

For details, see the iBMC user guide of the server.

**Step 2** Restart the iBMC.

- To restart the iBMC on the WebUI, click **Restart iBMC** on the **Upgrade Firmware** page.
- To restart the iBMC on the CLI, run the **ipmcset -d reset** command.

**Step 3** After the iBMC starts, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Power off the server, remove and reconnect the power cables, and power on the server. Check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Replace the DIMM. Then, check whether the alarm is cleared.

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For details about the DIMM layout, see the server user guide. For details about how to replace the DIMM, see "Replacing Parts" in the user guide.

- If yes, no further action is required.
- If no, go to **Step 6**.

**Step 6** Replace the mainboard. Check whether the alarm is cleared.

For details about how to replace the mainboard, see "Replacing Parts" in the server user guide.

- If yes, no further action is required.
- If no, go to **Step 7**.

**Step 7** Contact technical support.

**----End**

# 3.6.8 ALM-0x2800FFFF Sensor Access Degraded or Unavailable (Mngmnt Health, SYS NV)

## Description

Alarm message:

```
Sensor access degraded or unavailable, Sensor is SYS NV.
```

This alarm is generated when the server failed to obtain data from the SYS *N*V sensor.

Sensor triggering the alarm: Mngmnt Health

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x2800FFFF | Minor | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| SYS *N*V | Mainboard voltage sensor.<br>*N* indicates the detection point voltage, for example, **3.3**, **5**, or **12**. |

## Impact on the System

The voltage of the SYS *N*V detection point on the mainboard cannot be properly monitored, and an alarm cannot be reported in a timely manner when the voltage is not within the normal range.

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### Possible Causes

- The iBMC is not functioning.
- The mainboard is faulty.

### Procedure

**Step 1** Log in to the iBMC WebUI or CLI.

For details, see the iBMC user guide of the server.

**Step 2** Restart the iBMC.

- To restart the iBMC on the WebUI, click **Restart iBMC** on the **Upgrade Firmware** page.
- To restart the iBMC on the CLI, run the **ipmcset -d reset** command.

**Step 3** After the iBMC starts, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Power off the server, remove and reconnect the power cables, and power on the server. Check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Replace the mainboard. Check whether the alarm is cleared.

For details about how to replace the mainboard, see "Replacing Parts" in the server user guide.

- If yes, no further action is required.
- If no, go to **Step 6**.

**Step 6** Contact technical support.

**----End**

## 3.6.9 ALM-0x2800FFFF Sensor Access Degraded or Unavailable (Mngmnt Health, CPUN VCore)

### Description

Alarm message:

```
Sensor access degraded or unavailable, Sensor is CPUN VCore.
```

This alarm is generated when the server failed to obtain data from the CPU*N* VCore sensor.

Sensor triggering the alarm: Mngmnt Health

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## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x2800FFFF | Minor | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| CPU*N* VCore | CPU voltage sensor.<br>*N* indicates the CPU number. |

## Impact on the System

The voltage of the CPU VCore detection point on the mainboard cannot be properly monitored, and an alarm cannot be reported in a timely manner when the voltage is not within the normal range.

## Possible Causes

- The iBMC is not functioning.
- The mainboard is faulty.

## Procedure

**Step 1** Log in to the iBMC WebUI or CLI.

For details, see the iBMC user guide of the server.

**Step 2** Restart the iBMC.

- To restart the iBMC on the WebUI, click **Restart iBMC** on the **Upgrade Firmware** page.
- To restart the iBMC on the CLI, run the **ipmcset -d reset** command.

**Step 3** After the iBMC starts, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Power off the server, remove and reconnect the power cables, and power on the server. Check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Replace the mainboard. Check whether the alarm is cleared.

For details about how to replace the mainboard, see "Replacing Parts" in the server user guide.

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- If yes, no further action is required.
- If no, go to **Step 6**.

**Step 6** Contact technical support.

**----End**

# 3.6.10 ALM-0x2800FFFF Sensor Access Degraded or Unavailable (Mngmnt Health, CPUN DDR VDDQ/VDDQ2)

## Description

Alarm message:

```
Sensor access degraded or unavailable, Sensor is CPUN DDR VDDQ.
```

or

```
Sensor access degraded or unavailable, Sensor is CPUN DDR VDDQ2.
```

This alarm is generated when the server failed to obtain data from the CPU*N* DDR VDDQ or CPU*N* DDR VDDQ2 sensor.

Sensor triggering the alarm: Mngmnt Health

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x2800FFFF | Minor | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| CPU*N* DDR VDDQ<br>CPU*N* DDR VDDQ2 | Voltage sensor of the DIMM connected to the specified CPU.<br>*N* indicates the CPU number. |

## Impact on the System

The DIMM voltage cannot be properly monitored, and an alarm cannot be reported in a timely manner when the voltage is not within the normal range.

## Possible Causes

- The iBMC is not functioning.
- The DIMM is faulty.
- The mainboard is faulty.

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## Procedure

**Step 1** Log in to the iBMC WebUI or CLI.

For details, see the iBMC user guide of the server.

**Step 2** Restart the iBMC.

- To restart the iBMC on the WebUI, click **Restart iBMC** on the **Upgrade Firmware** page.
- To restart the iBMC on the CLI, run the **ipmcset -d reset** command.

**Step 3** After the iBMC starts, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Power off the server, remove and reconnect the power cables, and power on the server. Check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Replace the DIMM. Then, check whether the alarm is cleared.

For details about the DIMM layout, see the server user guide. For details about how to replace the DIMM, see "Replacing Parts" in the user guide.

- If yes, no further action is required.
- If no, go to **Step 6**.

**Step 6** Replace the mainboard. Check whether the alarm is cleared.

For details about how to replace the mainboard, see "Replacing Parts" in the server user guide.

- If yes, no further action is required.
- If no, go to **Step 7**.

**Step 7** Contact technical support.

**----End**

# 3.6.11 ALM-0x2800FFFF Sensor Access Degraded or Unavailable (Mngmnt Health, RAID Temp)

## Description

Alarm message:

```
Sensor access degraded or unavailable, Sensor is RAID Temp.
```

This alarm is generated when the server failed to obtain data from the **RAID Temp** sensor.

Sensor triggering the alarm: Mngmnt Health

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## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x2800FFFF | Minor | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| RAID Temp | RAID controller card temperature sensor. |

## Impact on the System

The RAID controller card temperature cannot be properly monitored, and an alarm cannot be reported in a timely manner when the temperature is not within the normal range.

## Possible Causes

- The iBMC is not functioning.
- The RAID controller card is faulty.
- The mainboard is faulty.

## Procedure

**Step 1** Log in to the iBMC WebUI or CLI.

For details, see the iBMC user guide of the server.

**Step 2** Restart the iBMC.

- To restart the iBMC on the WebUI, click **Restart iBMC** on the **Upgrade Firmware** page.
- To restart the iBMC on the CLI, run the **ipmcset -d reset** command.

**Step 3** After the iBMC starts, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Power off the server, remove and reconnect the power cables, and power on the server. Check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Replace the RAID controller card. Then check whether the alarm is cleared.

For details about how to replace the RAID controller card, see "Replacing Parts" in the user guide.

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- If yes, no further action is required.
- If no, go to **Step 6**.

**Step 6** Replace the mainboard. Check whether the alarm is cleared.

For details about how to replace the mainboard, see "Replacing Parts" in the server user guide.

- If yes, no further action is required.
- If no, go to **Step 7**.

**Step 7** Contact technical support.

**----End**

# 3.6.12 ALM-0x2800FFFF Sensor Access Degraded or Unavailable (Mngmnt Health, FANN F/R Speed)

## Description

Alarm message:

```
Sensor access degraded or unavailable, Sensor is FANN F Speed.
```

or

```
Sensor access degraded or unavailable, Sensor is FANN R Speed.
```

This alarm is generated when the server failed to obtain data from the FAN*N* F Speed or FAN*N* R Speed sensor.

Sensor triggering the alarm: Mngmnt Health

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x2800FFFF | Minor | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| FAN*N* F Speed<br>FAN*N* R Speed | Fan speed sensors.<br>*N* indicates the fan module number. |

## Impact on the System

The fan module speed cannot be monitored properly, and the fan adjustment function is affected.

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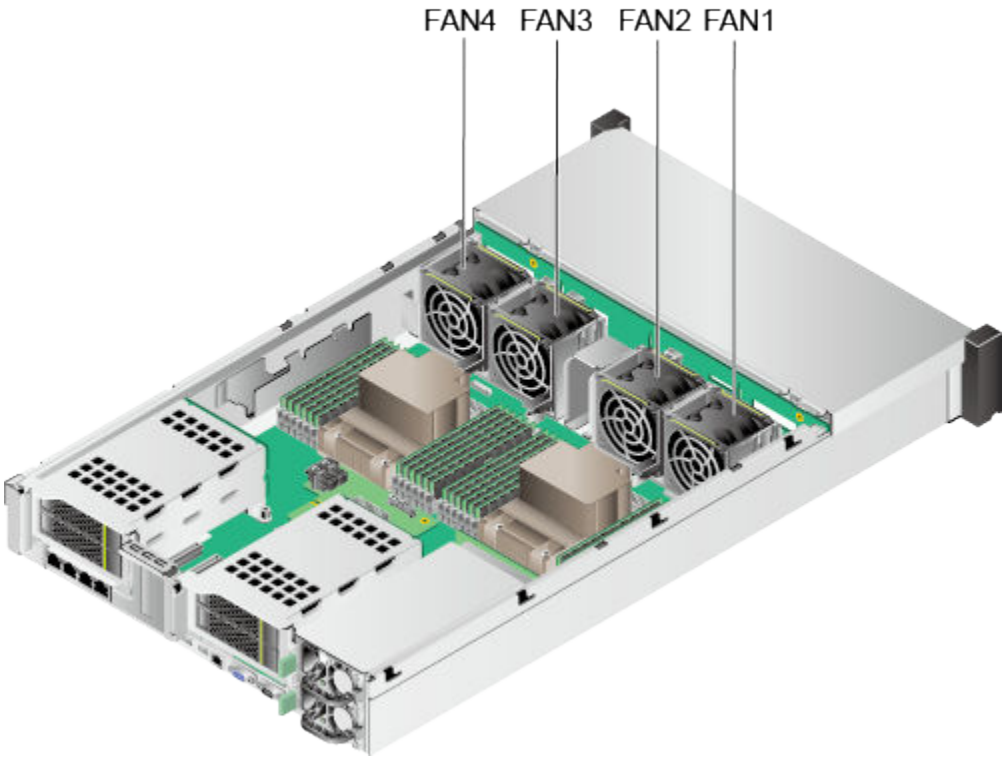
## Possible Causes

- The iBMC is not functioning.
- The fan module is faulty.
- The mainboard is faulty.

The RH2288H V3 server is used as an example to describe how to clear the alarm.

**Figure 3-2** shows the location of the fan modules of the RH2288H V3 server.

**Figure 3-2** Location of RH2288H V3 fan modules




## Procedure

**Step 1** Log in to the iBMC WebUI or CLI.

For details, see the iBMC user guide of the server.

**Step 2** Restart the iBMC.

- To restart the iBMC on the WebUI, click **Restart iBMC** on the **Upgrade Firmware** page.
- To restart the iBMC on the CLI, run the **ipmcset -d reset** command.

**Step 3** After the iBMC starts, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Power off the server, remove and reconnect the power cables, and power on the server. Check whether the alarm is cleared.

- If yes, no further action is required.

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- If no, go to **Step 5**.

**Step 5** Switch the fan module with a functioning fan module in the chassis, and check whether the alarm is still generated for this fan module.

- If yes, go to **Step 6**.
- If no, go to **Step 7**.

**Step 6** Replace the fan module. Check whether the alarm is cleared.

For details about how to replace the fan module, see "Replacing Parts" in the server user guide.

- If yes, no further action is required.
- If no, go to **Step 7**.

**Step 7** Replace the mainboard. Check whether the alarm is cleared.

For details about how to replace the mainboard, see "Replacing Parts" in the server user guide.

- If yes, no further action is required.
- NIf no, go to **Step 8**.

**Step 8** Contact technical support.

**----End**

# 3.6.13 ALM-0x2800FFFF Sensor Access Degraded or Unavailable (Mngmnt Health, RearDiskN Temp)

## Description

Alarm message:

```
Sensor access degraded or unavailable, Sensor is RearDisk N Temp.
```

This alarm is generated when the server failed to obtain data from the RearDisk*N* Temp sensor.

Sensor triggering the alarm: Mngmnt Health

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x2800FFFF | Minor | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| RearDisk*N* Temp | Temperature sensor of the backplane of rear hard disks.<br>*N* indicates the serial number of the rear hard disk backplane. |

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## Impact on the System

The detection point temperature of the specified rear hard disk backplane cannot be properly monitored, and an alarm cannot be reported in a timely manner when the temperature is not within the normal range.

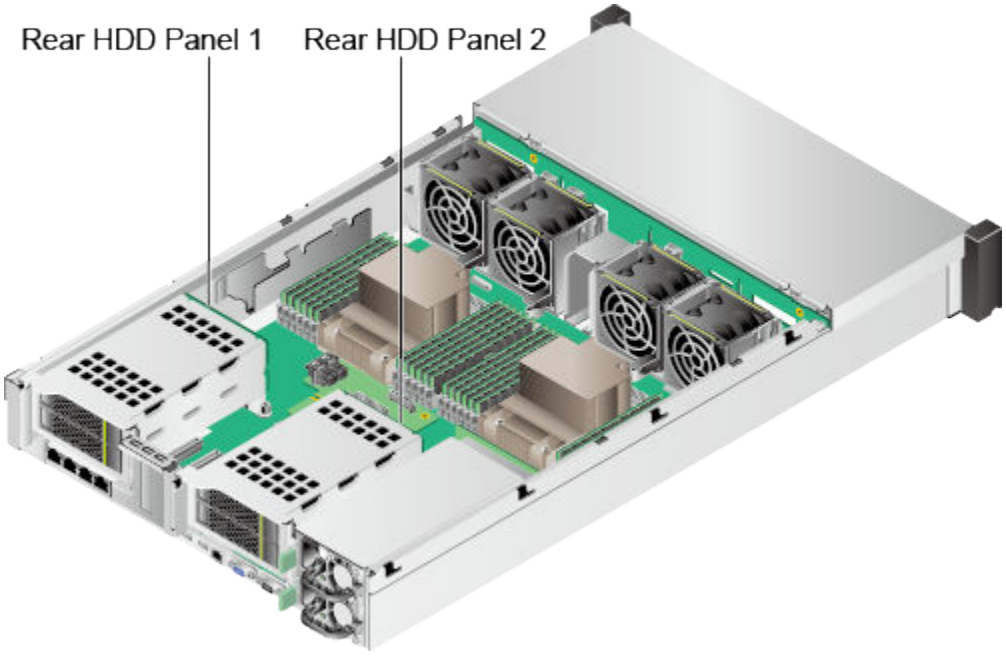
## Possible Causes

- The iBMC is not functioning.
- The cable connecting the mainboard and the component holding the sensor is faulty.
- The component holding the sensor is faulty.
- The mainboard is faulty.

The location of the RearDisk*N* Temp sensor varies depending on the server model. For details, see the user guide of the server you use.

The RH2288H V3 server is used as an example to describe how to clear the alarm. The **RearDisk1 Temp** is located on rear hard disk backplane 1, and the **RearDisk2 Temp** sensor is on rear hard disk backplane 2 of the RH2288H V3 server. **Figure 3-3** shows the location of the rear hard disk backplanes.

**Figure 3-3** Location of rear hard disk backplanes on the RH2288H V3




## Procedure

**Step 1** Log in to the iBMC WebUI or CLI.

For details, see the iBMC user guide of the server.

**Step 2** Restart the iBMC.

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- To restart the iBMC on the WebUI, click **Restart iBMC** on the **Upgrade Firmware** page.
- To restart the iBMC on the CLI, run the **ipmcset -d reset** command.

**Step 3** After the iBMC starts, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Power off the server, remove and reconnect the power cables, and power on the server. Check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Remove and reconnect the cable between the component holding the sensor and the mainboard. Then, check whether the alarm is cleared.

For details about the location of the sensor, see the sensor list in the server user guide.

In this example, remove and reconnect the signal cable between the mainboard and the rear hard disk backplane, and the signal cable between the front and rear hard disk backplanes. For details, see "Internal Cabling" in the user guide.

- If yes, no further action is required.
- If no, go to **Step 6**.

**Step 6** Replace the cable between the component hosting the sensor and the mainboard. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 7**.

**Step 7** Replace the component holding the sensor. Then, check whether the alarm is cleared.

For details, see "Replacing Parts" in the server user guide.

In this example, replace the rear hard disk backplane.

- If yes, no further action is required.
- If no, go to **Step 8**.

**Step 8** Replace the mainboard. Check whether the alarm is cleared.

For details about how to replace the mainboard, see "Replacing Parts" in the server user guide.

- If yes, no further action is required.
- If no, go to **Step 9**.

**Step 9** Contact technical support.

**----End**

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# 3.6.14 ALM-0x2800FFFF Sensor Access Degraded or Unavailable (Mngmnt Health, SSDN Temp)

## Description

Alarm message:

Sensor access degraded or unavailable, Sensor is SSD*N* Temp.

This alarm is generated when the server failed to obtain data from the SSD*N* Temp sensor.

Sensor triggering the alarm: Mngmnt Health

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x2800FFFF | Minor | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| SSD*N* Temp | SSD card temperature sensor.<br>*N* indicates the SSD card number. |

## Impact on the System

The detection point temperature of the specified SSD card cannot be properly monitored, and an alarm cannot be reported in a timely manner when the temperature is not within the normal range.

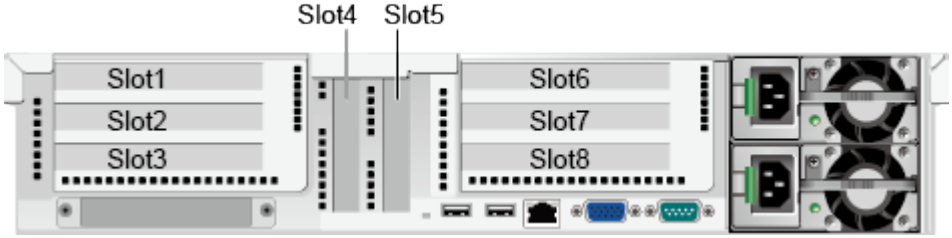
## Possible Causes

- The iBMC is not functioning.
- The SSD card is faulty.
- The mainboard is faulty.

The ES3000 V2 configured in an RH2288H V3 server is used as an example to describe how to clear the alarm.

**Figure 3-4** shows the location of the ES3000 V2 in the RH2288H V3 server.

**Figure 3-4** Location of the SSD card in the RH2288H V3

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## Procedure

**Step 1** Log in to the iBMC WebUI or CLI.

For details, see the iBMC user guide of the server.

**Step 2** Restart the iBMC.

- To restart the iBMC on the WebUI, click **Restart iBMC** on the **Upgrade Firmware** page.
- To restart the iBMC on the CLI, run the **ipmcset -d reset** command.

**Step 3** After the iBMC starts, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Replace the SSD card. Then, check whether the alarm is cleared.

For details about how to replace the SSD card, see "Replacing Parts" in the server user guide.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Replace the mainboard. Check whether the alarm is cleared.

For details about how to replace the mainboard, see "Replacing Parts" in the server user guide.

- If yes, no further action is required.
- If no, go to **Step 6**.

**Step 6** Contact technical support.

**----End**

# 3.6.15 ALM-0x2800FFFF Sensor Access Degraded or Unavailable (Mngmnt Health, SSD DiskN Temp)

## Description

Alarm message:

Sensor access degraded or unavailable, Sensor is SSD Disk*N* Temp.

This alarm is generated when the server failed to obtain data from the SSD Disk*N* Temp sensor.

Sensor triggering the alarm: Mngmnt Health

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x2800FFFF | Minor | Yes |

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## Parameters

| Name | Meaning |
| --- | --- |
| SSD Disk*N* Temp | SSD temperature sensor.<br>*N* indicates the SSD number. |

## Impact on the System

The detection point temperature of the specified SSD cannot be properly monitored, and an alarm cannot be reported in a timely manner when the temperature is not within the normal range.

## Possible Causes

- The iBMC is not functioning.
- The cable connecting the mainboard and the component holding the sensor is faulty.
- The component holding the sensor is faulty.
- The mainboard is faulty.

The location of the SSD Disk*N* Temp sensor varies with the server model. For details, see the user guide of the server you use.

The RH2288H V3 server is used as an example to describe how to clear the alarm. The SSD Disk*N* Temp sensor is located on the front hard disk backplane of the RH2288H V3 server. For details, see the *RH2288H V3 Server User Guide*.

## Procedure

**Step 1** Log in to the iBMC WebUI or CLI.

For details, see the iBMC user guide of the server.

**Step 2** Restart the iBMC.

- To restart the iBMC on the WebUI, click **Restart iBMC** on the **Upgrade Firmware** page.
- To restart the iBMC on the CLI, run the **ipmcset -d reset** command.

**Step 3** After the iBMC starts, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Power off the server, remove and reconnect the power cables, and power on the server. Check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Remove and reconnect the cable between the component holding the sensor and the mainboard. Then, check whether the alarm is cleared.

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For details about the location of the sensor, see the sensor list in the server user guide. For details, see "Internal Cabling" in the user guide.

In this example, remove and reconnect the cable between the front hard disk backplane and the mainboard. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 6**.

**Step 6** Replace the cable between the component hosting the sensor and the mainboard. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 7**.

**Step 7** Replace the component holding the sensor. Then, check whether the alarm is cleared.

For details, see "Replacing Parts" in the server user guide.

In this example, replace the front hard disk backplane, and then check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 8**.

**Step 8** Replace the mainboard. Check whether the alarm is cleared.

For details about how to replace the mainboard, see "Replacing Parts" in the server user guide.

- If yes, no further action is required.
- NIf no, go to **Step 9**.

**Step 9** Contact technical support.

**----End**

# 3.6.16 ALM-0x2800FFFF Sensor Access Degraded or Unavailable (Mngmnt Health, NIC Temp)

## Description

Alarm message:

```
Sensor access degraded or unavailable, Sensor is NIC Temp.
```

This alarm is generated when the server failed to obtain data from the NIC Temp sensor.

Sensor triggering the alarm: Mngmnt Health

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x2800FFFF | Minor | Yes |

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## Parameters

| Name | Meaning |
| --- | --- |
| NIC Temp | Temperature sensor of the LAN on motherboard (LOM). |

## Impact on the System

The detection point temperature of the specified LOM cannot be properly monitored, and an alarm cannot be reported in a timely manner when the temperature is not within the normal range.

## Possible Causes

- The iBMC is not functioning.
- The LOM is faulty.
- The mainboard is faulty.

## Procedure

**Step 1** Log in to the iBMC WebUI or CLI.

For details, see the iBMC user guide of the server.

**Step 2** Restart the iBMC.

- To restart the iBMC on the WebUI, click **Restart iBMC** on the **Upgrade Firmware** page.
- To restart the iBMC on the CLI, run the **ipmcset -d reset** command.

**Step 3** After the iBMC starts, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Replace the LOM. Then, check whether the alarm is cleared.

For details about how to replace the LOM, see "Replacing Parts" in the user guide.

- If yes, no further action is required.
- No If no, go to **Step 5**.

**Step 5** Replace the mainboard. Check whether the alarm is cleared.

For details about how to replace the mainboard, see "Replacing Parts" in the server user guide.

- If yes, no further action is required.
- If no, go to **Step 6**.

**Step 6** Contact technical support.

**----End**

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# 3.6.17 ALM-0x2800FFFF Sensor Access Degraded or Unavailable (Mngmnt Health, Outlet Temp)

## Description

Alarm message:

```
Sensor access degraded or unavailable, Sensor is Outlet Temp.
```

This alarm is generated when the server failed to obtain data from the Outlet Temp sensor.

Sensor triggering the alarm: Mngmnt Health

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x2800FFFF | Minor | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| Outlet Temp | Air outlet temperature sensor. |

## Impact on the System

The temperature at the air outlet cannot be monitored, and the fan speed adjustment is affected.

## Possible Causes

- The iBMC is not functioning.
- The component holding the outlet sensor is faulty.

## Procedure

**Step 1** Log in to the iBMC WebUI or CLI.

For details, see the iBMC user guide of the server.

**Step 2** Restart the iBMC.

- To restart the iBMC on the WebUI, click **Restart iBMC** on the **Upgrade Firmware** page.
- To restart the iBMC on the CLI, run the **ipmcset -d reset** command.

**Step 3** After the iBMC starts, check whether the alarm is cleared.

- If yes, no further action is required.

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- If no, go to **Step 4**.

**Step 4** Power off the server, remove and reconnect the power cables, and power on the server. Check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Replace the component holding the outlet sensor.Then, check whether the alarm is cleared.

For details see "Replacing Parts" in the user guide.

- If yes, no further action is required.
- If no, go to **Step 6**.

**Step 6** Contact technical support.

**----End**

# 3.6.18 ALM-0x2800FFFF Sensor Access Degraded or Unavailable (Mngmnt Health, Power)

## Description

Alarm message:

```
Sensor access degraded or unavailable, Sensor is Power.
```

This alarm is generated when the server failed to obtain data from the Power sensor.

Sensor triggering the alarm: Mngmnt Health

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x2800FFFF | Minor | Yes |

## Parameters

| Name | Meaning |
|---|---|
| Power | Server input power sensor. |

## Impact on the System

The input power of the server cannot be monitored properly, and the power capping function is affected.

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### Possible Causes

- The iBMC is not functioning.
- The mainboard is faulty.

### Procedure

**Step 1** Log in to the iBMC WebUI or CLI.

For details, see the iBMC user guide of the server.

**Step 2** Restart the iBMC.

- To restart the iBMC on the WebUI, click **Restart iBMC** on the **Upgrade Firmware** page.
- To restart the iBMC on the CLI, run the **ipmcset -d reset** command.

**Step 3** After the iBMC starts, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Power off the server, remove and reconnect the power cables, and power on the server. Check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Replace the mainboard. Check whether the alarm is cleared.

For details about how to replace the mainboard, see "Replacing Parts" in the server user guide.

- If yes, no further action is required.
- If no, go to **Step 6**.

**Step 6** Contact technical support.

**----End**

## 3.6.19 ALM-0x2800FFFF Sensor Access Degraded or Unavailable (Mngmnt Health, PowerN)

### Description

Alarm message:

```
Sensor access degraded or unavailable, Sensor is PowerN.
```

This alarm is generated when the server failed to obtain data from the Power*N* sensor.

Sensor triggering the alarm: Mngmnt Health

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## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x2800FFFF | Minor | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| Power*N* | Power module input power sensor.<br>*N* indicates the power module number. |

## Impact on the System

The input power of the power module cannot be monitored properly, and the power capping function is affected.

## Possible Causes

- The iBMC is not functioning.
- The PSU is faulty.
- The mainboard is faulty.
- The power supply backplane is faulty.

## Procedure

**Step 1** Log in to the iBMC WebUI or CLI.

For details, see the iBMC user guide of the server.

**Step 2** Restart the iBMC.

- To restart the iBMC on the WebUI, click **Restart iBMC** on the **Upgrade Firmware** page.
- To restart the iBMC on the CLI, run the **ipmcset -d reset** command.

**Step 3** After the iBMC starts, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Replace the PSU. Check whether the alarm is cleared.

For details about how to replace the PSU, see "Replacing Parts" in the server user guide.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Replace the mainboard. Check whether the alarm is cleared.

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- If yes, no further action is required.
- If no, go to **Step 6**.

**Step 6** Replace the power supply backplane. Then, check whether the alarm is cleared.

For details, see "Replacing Parts" in the server user guide.

- If yes, no further action is required.
- If no, go to **Step 7**.

**Step 7** Contact technical support.

**----End**

# 3.6.20 ALM-0x2805FFFF FRU Failure (Mngmnt Health)

## Description

Alarm message:

```
FRU failure, Logical device, fruid:1
```

This alarm is generated when iBMC detects a field replaceable unit (FRU) error during startup self-check.

Sensor triggering the alarm: Mngmnt Health

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x2805FFFF | Minor | Yes |

## Impact on the System

An FRU data error occurs, and the system cannot read the asset information.

## Possible Causes

The asset information is corrupted.

## Procedure

**Step 1** Log in to the iBMC WebUI or CLI.

For details, see the iBMC user guide of the server.

**Step 2** Restart the iBMC.

- To restart the iBMC on the WebUI, click **Restart iBMC** on the **Upgrade Firmware** page.
- To restart the iBMC on the CLI, run the **ipmcset -d reset** command.

**Step 3** After the iBMC starts, check whether the alarm is cleared.

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- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Replace the mainboard. Check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**

**Step 5** Contact technical support.

**----End**

# 3.7 Storage Device Alarms

This topic describes the storage device (such as disk, or SD card) alarms for servers.

## 3.7.1 ALM-0x0D01FFFF Storage Device Drive Fault (DISKN/SDN CARD)

### Description

Alarm message:

```
Storage device drive fault
```

This alarm is generated when a disk or SD card is abnormal or fails.

Sensor triggering the alarm:

- DISK*N*
- SD*N* CARD

NOTE

If the sensor is DISKA, DISKB, DISKC, or DISKD, this alarm is generated for the rear hard disk of a V2 or V3 server. For details about the slot information of the hard disks on a V3 server, see "Removing a Hard Disk" in the user guide of the server you use.

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x0D01FFFF | Major | Yes |

### Parameters

| Name | Meaning |
| --- | --- |
| *N* | Slot number of the hard disk or SD card.<br>**NOTE**<br>For details about the SD slot information, see the user guide of the server you use. |

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### Impact on the System

Data on a faulty disk or SD card cannot be accessed, and the system operates abnormally.

### Possible Causes

The disk or SD card is faulty.

### Procedure

**Step 1** Replace the storage device. Check whether the alarm is cleared.

For details about how to replace the storage device, see "Replacing Parts" in the server user guide.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Contact technical support.

**----End**

## 3.7.2 ALM-0x0D06FFFF In Failed Array (DISKN/SDN CARD)

### Description

Alarm message:

```
In Failed Array
```

This alarm is generated when the disk or SD card configured with RAID properties is removed or fails.

Sensor triggering the alarm:

- DISK*N*
- SD*N* CARD

NOTE

If the sensor is DISKA, DISKB, DISKC, or DISKD, this alarm is generated for the rear hard disk of a V2 or V3 server. For details about the slot information of the hard disks on a V3 server, see "Removing a Hard Disk" in the user guide of the server you use.

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x0D06FFFF | Major | Yes |

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## Parameters

| Name | Meaning |
| --- | --- |
| *N* | Slot number of the hard disk or SD card.<br>**NOTE**<br>For details about the SD slot information, see the user guide of the server you use. |

## Impact on the System

The disks or SD cards of the RAID level cannot be accessed, and the system reliability deteriorates.

## Possible Causes

- A disk or SD card of this RAID level is removed.
- A disk or SD card of this RAID level fails.

## Procedure

- If the alarmed storage device is a hard disk, perform the following steps:
  a. Check whether the member disk of the RAID array is removed.
     - If yes, go to **b**.
     - If no, go to **c**.
  b. Install the member disk and rebuild the RAID array. Then, check whether the alarm is cleared.
     - If yes, no further action is required.
     - If no, go to **d**.
  c. Replace the member disk, and restart the server. After the server restarts, check whether the alarm is cleared.
     - If yes, no further action is required.
     - If no, go to **d**.
  d. Contact technical support.
- If the alarmed storage device is an SD card, perform the following steps:
  a. Check whether the SD card is removed.
     - If yes, go to **b**.
     - If no, go to **c**.
  b. Install the SD card, and restart the server. After the server restarts, check whether the alarm is cleared.
     - If yes, no further action is required.

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- If no, go to **d**.

c. Replace the SD card, and restart the server. After the server restarts, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **d**.

d. Contact technical support.

## 3.7.3 ALM-0x0D08FFFF RAID Rebuild Aborted (SDN CARD)

### Description

Alarm message:

```
RAID rebuild Aborted
```

The SD card controller integrated on the mainboard forms a RAID 1 array for the two SD cards to improve SD card data security.

This alarm is generated when a single SD card is faulty and the SD card controller detects a RAID rebuild failure.

Sensor triggering the alarm: SD*N* CARD

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x0D08FFFF | Major | Yes |

### Parameters

| Name | Meaning |
| --- | --- |
| *N* | Indicates an SD card number.<br>**NOTE**<br>For details about the SD slot information, see the user guide of the server you use. |

### Impact on the System

The RAID array formed by SD cards fails and the system fault tolerance capability is reduced.

### Possible Causes

The SD card is faulty.

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### Procedure

**Step 1** Replace the SD card indicated in the alarm. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Contact technical support.

**----End**

## 3.7.4 ALM-0x0341FFFF State Asserted (No SD Card)

### Description

Alarm message:

```
State Asserted
```

This alarm is generated when the SD card controller cannot detect either of the SD cards.

Sensor triggering the alarm: No SD Card

NOTE

For details about the SD slot information, see the user guide of the server you use.

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x0341FFFF | Major | Yes |

### Impact on the System

No SD card is available and the system storage performance is reduced.

### Possible Causes

- The SD cards are removed.
- The SD cards are not installed properly.
- The SD card controller is faulty.

### Procedure

**Step 1** Check whether the SD cards are present.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Remove and reinstall the SD cards. Then, check whether the alarm is cleared.

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- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 3** Install SD cards. Then, check whether the alarm is cleared.

- If yes, the procedure ends.
- If no, go to **Step 4**.

**Step 4** Replace the mainboard. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Contact technical support.

**----End**

# 3.7.5 ALM-0x0D02FFFF Storage Device Predictive Failure (DISKN)

## Description

Alarm message:

```
Storage device predictive failure
```

This alarm is generated when the hard disk reliability is reduced.

NOTE

If the sensor is DISKA, DISKB, DISKC, or DISKD, this alarm is generated for the rear hard disk of a V2 or V3 server. For details about the slot information of the hard disks on a V3 server, see "Removing a Hard Disk" in the user guide of the server you use.

Sensor triggering the alarm: DISK*N*

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x0D02FFFF | Minor | Yes |

## Parameters

| Name | Meaning |
|---|---|
| *N* | Indicates a hard disk number. |

## Impact on the System

The hard disk reliability decreases, affecting the OS storage performance and services.

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### Possible Causes

- The hard disk is in read-only mode.
- The number of hard disk SMART errors detected exceeds the threshold.
- The NVMe remaining service life is about to expire.

### Procedure

**Step 1** When this alarm is generated, server operation remains unaffected. Replace the faulty hard disk when convenient. Then, check whether the alarm is cleared.

NOTE

If a drive cannot be replaced immediately or no hot spare drive is available on the current server, set the faulty drive to the offline state.

- If the drive is a member drive of the RAID array, set the drive to the offline state according to section "Setting the Hard Disk Status" in the *RAID Controller Card User Guide*.
- This operation degrades the redundancy capability of the RAID array, so do not perform this operation if the RAID array does not have the redundancy capability.
- This operation will trigger the alarm 0x02000027, indicating abnormal drive status. No handling is required.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Contact technical support.

**----End**

# 3.8 Fan Module Alarms

This topic describes the fan alarms for servers.

## 3.8.1 ALM-0x0840FFFF Device Removed / Device Absent (FANN F Presence/FANN R Presence)

### Description

Alarm message:

```
Device Removed / Device Absent
```

This alarm is generated when a specified fan module is not detected.

Sensor triggering the alarm:

- FAN*N* F Presence
- FAN*N* R Presence

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x0840FFFF | Major | Yes |

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### Parameters

| Name | Meaning |
| --- | --- |
| *N* | Serial number of the fan. |

### Impact on the System

The system heat dissipation is affected, and the performance of the components on the mainboard deteriorates.

### Possible Causes

- The fan module is removed.
- The fan module is not properly installed.

### Procedure

**Step 1** Check whether the alarmed fan module is removed.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Install the fan module properly. Check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Remove and reinstall the fan module. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Replace the fan module. Check whether the alarm is cleared.

For details about how to replace the fan module, see "Replacing Parts" in the server user guide.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Contact technical support.

**----End**

## 3.8.2 ALM-0x2100FFFF Fault Status (FANN F Status/FANN R Status)

### Description

Alarm message:

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Fault status

This alarm is generated when a faulty fan module is detected.

Sensor triggering the alarm:

- FAN*N* F Presence
- FAN*N* R Presence

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x2100FFFF | Major | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *N* | Serial number of the fan. |

## Impact on the System

The system heat dissipation is affected, and the performance of the components on the mainboard deteriorates.

## Possible Causes

- The fan module is faulty.
- The fan backplane is faulty.

## Procedure

**Step 1** Remove and reinstall the fan module. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Replace the fan module. Check whether the alarm is cleared.

For details about how to replace the fan module, see "Replacing Parts" in the server user guide.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Replace the fan backplane. Then check whether the alarm is cleared.

For details about how to replace the fan backplane, see "Replacing Parts" in the user guide.

- If yes, no further action is required.

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- If no, go to **Step 4**

**Step 4** Contact technical support.

**----End**

## 3.8.3 ALM-0x210008FF Fault Status (FANN F/R Status)

### Description

Alarm message:

```
Fault status
```

This alarm is generated when a faulty fan module is detected.

Sensor triggering the alarm:

- FAN*N* F Presence
- FAN*N* R Presence

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x210008FF | Major | Yes |

### Parameters

| Name | Meaning |
| --- | --- |
| *N* | Serial number of the fan. |

### Impact on the System

The system heat dissipation is affected, and the performance of the components on the mainboard deteriorates.

### Possible Causes

The fan module is faulty.

### Procedure

**Step 1** Remove and reinstall the fan module. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Replace the fan module. Check whether the alarm is cleared.

For details about how to replace the fan module, see "Replacing Parts" in the server user guide.

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- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Contact technical support.

**----End**

# 3.8.4 ALM-0x2100FFFF Fault Status (PSN Fan Status)

## Description

Alarm message:

```
Fault status
```

This alarm is generated when a fan for a power supply unit (PSU) fails.

Sensor triggering the alarm: PS*N* Fan Status

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x2100FFFF | Major | Yes |

## Parameters

| Name | Meaning |
|---|---|
| *N* | Serial number of the PSU. |

## Impact on the System

The heat dissipation failure may cause a high temperature in the PSUs, which may affect the system power supply.

## Possible Causes

The fan for a PSU is faulty.

## Procedure

**Step 1** Remove and install the PSU. Check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Replace the PSU. Check whether the alarm is cleared.

For details about how to replace the PSU, see "Replacing Parts" in the server user guide.

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- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Contact technical support.

**----End**

# 3.8.5 ALM-0x210008FF Fault Status (PSN Fan Status)

## Description

Alarm message:

```
Fault status
```

This alarm is generated when a fan for a power supply unit (PSU) fails.

Sensor triggering the alarm: PS*N* Fan Status

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x210008FF | Major | Yes |

## Parameters

| Name | Meaning |
|---|---|
| *N* | Serial number of the PSU. |

## Impact on the System

The heat dissipation failure may cause a high temperature in the PSUs, which may affect the system power supply.

## Possible Causes

The fan for a PSU is faulty.

## Procedure

**Step 1** Remove and install the PSU. Check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Replace the PSU. Check whether the alarm is cleared.

For details about how to replace the PSU, see "Replacing Parts" in the server user guide.

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- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Contact technical support.

**----End**

# 3.9 Memory Alarms

This topic describes the memory alarms for servers.

## 3.9.1 ALM-0x0C01FFFF Uncorrectable Memory Error (DIMMN)

### Description

Alarm message:

Uncorrectable memory error, dimm is *N*

This alarm is generated when an uncorrectable error occurred on a DIMM.

Sensor triggering the alarm: DIMM*N*

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x0C01FFFF | Critical | Yes |

### Parameters

| Name | Meaning |
| --- | --- |
| *N* | Indicates the silkscreen of a DIMM. |

### Impact on the System

The DIMM cannot work properly, which affects the server performance.

### Possible Causes

- The DIMM is faulty.
- The mainboard is faulty.

### Procedure

**Step 1** Remove and reinstall the DIMM. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

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**Step 2** Switch the DIMM with a functioning DIMM, and check whether the alarm is still generated for this DIMM.

- If yes, go to **Step 3**.
- If no, go to **Step 4**.

**Step 3** Replace the DIMM. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Replace the mainboard or memory board. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Contact technical support.

**----End**

# 3.9.2 ALM-0x0C01FFFF Uncorrectable Memory Error (MEMBrdN DIMM)

## Description

Alarm message:

Uncorrectable memory error, dimm is *M*

This alarm is generated when an uncorrectable error occurred on a DIMM.

This alarm applies only to the RH8100 V3 only.

Sensor triggering the alarm: MEMBrd*N* DIMM

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x0C01FFFF | Critical | Yes |

## Parameters

| Name | Meaning |
|---|---|
| *M* | Indicates the silkscreen of a DIMM. |
| *N* | Indicates a memory riser number. |

## Impact on the System

Services may be interrupted, and the system may stop responding or restart.

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### Possible Causes

The DIMM is faulty.

### Procedure

**Step 1** Remove and reinstall the DIMM. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Replace the DIMM. Then, check whether the alarm is cleared.

For details about how to replace the DIMM, see "Replacing Parts" in the server user guide.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Contact technical support.

**----End**

## 3.9.3 ALM-0x0C01FFFF Uncorrectable Memory Error (MEMRiserN DIMM)

### Description

Alarm message:

```
Uncorrectable memory error, dimm is M
```

This alarm is generated when an uncorrectable error occurred on a DIMM.

This alarm can only be generated by the RH5885H V3.

This alarm is generated by the following sensor:

- MEMRiser*N* DIMM (*N* indicates a memory riser number.)

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x0C01FFFF | Critical | Yes |

### Parameters

| Name | Meaning |
| --- | --- |
| *M* | Indicates the silkscreen of a DIMM. |
| *N* | Indicates a memory riser number. |

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### Impact on the System

Services may be interrupted and the system may stop responding or restart.

### Possible Causes

The DIMM is faulty.

### Procedure

**Step 1** Remove and then install the DIMM. Then check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Replace the DIMM. Then check whether the alarm is cleared.

For details about how to replace a DIMM, see the server user guide.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Contact technical support.

**----End**

## 3.9.4 ALM-0x0C07FFFF Configuration Error (DIMMN)

### Description

Alarm message:

```
Configuration error, dimm is N
```

This alarm is generated during startup of the basic input/output system (BIOS) when a DIMM is not installed properly or is faulty.

NOTE

For details about DIMM layout, see the server user guide.

Sensor triggering the alarm: DIMM*N*

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x0C07FFFF | Critical | Yes |

### Parameters

| Name | Meaning |
| --- | --- |
| *N* | Indicates the silkscreen of a DIMM. |

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## Impact on the System

If the alarm is generated for the DIMM in slot 1, the system cannot start. If the alarm is generated for a DIMM in another slot, the system starts properly but the DIMM is unavailable.

## Possible Causes

- The DIMM is not installed in the correct slot.
- The DIMM is faulty.

## Procedure

**Step 1** Power off the server, and check whether the DIMM is installed in the correct slot.

For details, see the troubleshooting manual.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Remove and reinstall the DIMM, and check whether the alarm is cleared.

- If yes, no further operation is required.
- If no, go to **Step 3**.

**Step 3** Replace the DIMM. Then, check whether the alarm is cleared.

For details about how to replace the DIMM, see "Replacing Parts" in the server user guide.

- If yes, no further operation is required.
- If no, go to **Step 4**.

**Step 4** Contact technical support.

**----End**

# 3.9.5 ALM-0x0C07FFFF Configuration Error (MEMBrdN DIMM)

## Description

Alarm message:

Configuration error, dimm is *M*

This alarm is generated when the sensor detects, during basic input/output system (BIOS) startup, that a DIMM on a memory riser is installed in the incorrect slot or is faulty.

This alarm can only be generated by the RH8100 V3.

NOTE

For details about DIMM installation positions, see "Installing DIMMs" in the server user guide.

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Sensor triggering the alarm: EMBrd*N* DIMM

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x0C07FFFF | Critical | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *M* | Indicates the silkscreen of a DIMM. |
| *N* | Indicates a memory riser number. |

## Impact on the System

If the error occurs in the DIMM in the first slot corresponding to a CPU, the system cannot start. If the error occurs in the DIMM in another slot, the system can start but the DIMM cannot be used.

## Possible Causes

- The DIMM is installed in an incorrect slot.
- The DIMM is faulty.

## Procedure

**Step 1** Power off the server, and check whether the DIMM is installed in an incorrect slot.

For details about DIMM installation positions, see the server user guide.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Install the DIMM in the correct slot. Then check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Replace the DIMM. Then check whether the alarm is cleared.

For details about how to replace a DIMM, see the server user guide.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Contact technical support.

**----End**

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# 3.9.6 ALM-0x0C07FFFF Configuration Error (MEMRiserN DIMM)

## Description

Alarm message:

```
Configuration error, dimm is M
```

This alarm is generated when the sensor detects, during basic input/output system (BIOS) startup, that a DIMM on a memory riser is installed in the incorrect slot or is faulty.

NOTE

For details about DIMM installation positions, see "Installing DIMMs" in the server user guide.

This alarm is for the RH5885H V3 only.

Sensor triggering the alarm: MEMRiser*N* DIMM

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x0C07FFFF | Critical | Yes |

## Parameters

| Name | Meaning |
|---|---|
| *M* | Indicates the silkscreen of a DIMM. |
| *N* | Indicates a memory riser number. |

## Impact on the System

If the error occurs in the DIMM in the first slot corresponding to a CPU, the system cannot start. If the error occurs in the DIMM in another slot, the system can start but the DIMM cannot be used.

## Possible Causes

- The DIMM is installed in an incorrect slot.
- The DIMM is faulty.

## Procedure

**Step 1** Power off the server, and check whether the DIMM is installed in an incorrect slot.

For details about DIMM installation positions, see the server user guide.

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- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Install the DIMM in the correct slot. Then check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Replace the DIMM. Then check whether the alarm is cleared.

For details about how to replace a DIMM, see the server user guide.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Contact technical support.

**----End**

# 3.9.7 ALM-0x0C0AFFFF Critical Overtemperature (CPUN Memory)

## Description

Alarm message:

```
Critical overtemperature
```

This alarm is generated when the sensor detects the state of a dual in-line memory module (DIMM) is abnormal.

Sensor triggering the alarm: CPU*N* Memory

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x0C0AFFFF | Major | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *N* | Serial number of the CPU. |

## Impact on the System

When the alarm appeared, the operating system (OS) fails, and the mainboard restarts or stops responding.

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## Possible Causes

- The fan module is faulty.
- The ambient temperature exceeds the normal range.
- The air inlet or outlet is blocked.
- Idle disk bays are not installed with hard disk fillers.
- Air ducts are not installed properly.
- The DIMM is faulty.

## Procedure

**Step 1** Check whether a low fan speed alarm is generated for the fan module.

You can obtain alarm information in either of the following ways:

- View alarm information on the **Current Alarms** page of the iBMC WebUI.
- Run the **ipmcget -d healthevents** command on the iBMC CLI.
- If yes, go to **Step 2**.
- If no, go to **Step 5**.

**Step 2** Remove and then reinstall the fan module. After 5 minutes, check whether the fan module alarm is cleared.

- If yes, go to **Step 4**.
- If no, go to **Step 3**.

**Step 3** Replace the fan module. After 5 minutes, check whether the fan module alarm is cleared.

For details about how to replace the fan module, see "Replacing Parts" in the server user guide.

- If yes, go to **Step 4**.
- If no, go to **Step 14**.

**Step 4** Check whether the DIMM overheating alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Check whether the temperature room temperature exceeds the normal range.

- If yes, go to **Step 6**.
- If no, go to **Step 7**.

**Step 6** Lower the ambient temperature to the normal range. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 7**.

**Step 7** Check whether the air inlet or outlet is blocked.

- If yes, go to **Step 8**.
- If no, go to **Step 9**.

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**Step 8** Clear the blockage. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 9**.

**Step 9** Check whether idle disk bays are not installed with hard disk fillers.

- If yes, go to **Step 10**.
- If no, go to **Step 11**.

**Step 10** Install hard disk fillers in idle disk bays. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 11**.

**Step 11** Check whether air ducts are installed properly.

- If yes, go to **Step 13**.
- If no, go to **Step 12**.

**Step 12** Install air ducts properly. After 5 minutes, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 13**.

**Step 13** Replace the DIMMs connected to the CPU. Then, check whether the alarm is cleared.

For details about DIMM layout, see the server user guide.

- If yes, no further action is required.
- If no, go to **Step 14**.

**Step 14** Contact technical support.

**----End**

# 3.10 Other Alarms

This topic describes other alarms for servers.

## 3.10.1 ALM-0x2900FFFF Battery Low (RTC Battery/RAID controller card BBU/PCIeN Card BBU)

### Description

Alarm message:

```
Battery low
```

This alarm is generated when the following faults occur:

- The real-time clock (RTC) battery on the mainboard fails or the RTC battery voltage is low.
- The BBU (iBBU or supercapacitor) of the RAID controller card is faulty or the BBU voltage is low.

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Sensor triggering the alarm:

- RTC Battery
- RAID controller card BBU
- PCIe*N* Card BBU

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x2900FFFF | Major | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *N* | Indicates a PCIe slot number. |

## Impact on the System

- The real-time clock (RTC) battery failure causes incorrect system time, data loss on the complementary metal-oxide-semiconductor (CMOS), and system configuration errors.
- If the BBU of the RAID controller card is faulty, the power-off protection for cache data is affected.

## Possible Causes

- The battery is not installed on the mainboard or is low in power.
- The BBU of the RAID controller card is faulty.

## Procedure

**Step 1** Replace the battery or the BBU of the RAID controller card and check whether the alarm is cleared.

- Replace the iBBU or supercapacitor of the RAID controller card when the BBU is faulty.
- Replace the mainboard when the RTC battery is faulty.

For details, see the server user guide.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Contact technical support.

**----End**

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# 3.10.2 ALM-0x2901FFFF Battery Failed (RAID Card BBU/PCIeN Card BBU)

## Description

Alarm message:

```
Battery Failed
```

This alarm is generated when the BBU (iBBU or supercapacitor) of the RAID controller card is faulty.

Sensor triggering the alarm:

- RAID Card BBU
- PCIe*N* Card BBU

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x2901FFFF | Major | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *N* | Indicates a PCIe slot number. |

## Impact on the System

If the iBBU or supercapacitor of the RAID controller card is faulty, the power-off protection for cache data is affected.

## Possible Causes

- The BBU triggers the replacement alarm.
- The BBU learn cycle fails.
- The BBU learn cycle times out.
- The BBU triggers an pre-alarm.
- The capacity of the BBU (supercapacitor only) is low.
- The BBU has no capacity for cache-offload.

## Procedure

**Step 1** Power off the server, and remove the power cables from the server.

**Step 2** Replace the BBU for the RAID controller card.

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**Step 3** After the server is powered on again and the OS startup is complete, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Contact technical support.

**----End**

## 3.10.3 ALM-0x0700FFFF CAT Error Detected in the x86 OS (CPUN Status)

### Description

Alarm message:

```
CAT error detected in the x86 OS
```

This alarm is generated when a CPU internal error is detected.

Sensor triggering the alarm: CPU*N* Status

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x0700FFFF | Critical | Yes |

### Parameters

| Name | Meaning |
| --- | --- |
| *N* | Serial number of the CPU. |

### Impact on the System

The CPU internal error affects the mainboard performance and OS operation, and the mainboard may restart or stop responding.

### Possible Causes

- A hardware fault, such as the CPU, DIMM, or mainboard fault, occurs.
- A software fault, such as the OS incompatibility or abnormal logical status, occurs.

### Procedure

**Step 1** Log in to the Technical Support website and use the Compatibility List to check whether the OS type and version are supported by the server.

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- If yes, go to **Step 3**.
- If no, go to **Step 2**.

**Step 2** Install the correct OS version. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** On the iBMC, check whether there is a hardware fault alarm generated for the CPU, DIMM, or mainboard.

- If yes, go to **Step 4**.
- If no, go to **Step 5**.

**Step 4** Rectify the hardware fault. Then, check whether the CAT ERROR alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** On the **FDM** page of the iBMC WebUI, collect fault diagnosis information and rectify the fault. Then, check whether the CAT ERROR alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 6**.

**Step 6** Collect the iBMC and OS log information, and contacttechnical support.

**----End**

# 3.10.4 ALM-0x0702FFFF CPU Initialization Failed (FRB1/BIST) (CPUN Status)

## Description

Alarm message:

```
CPU initialization failed (FRB1/BIST)
```

This alarm is generated when an error occurs in the CPU self-check during startup.

Sensor triggering the alarm: CPU*N* Status

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x0702FFFF | Critical | Yes |

## Parameters

| Name | Meaning |
|---|---|
| *N* | Serial number of the CPU. |

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### Impact on the System

When a CPU self-check error occurs, the system cannot be started properly, or services are not properly running on the system.

### Possible Causes

- The CPU is faulty.
- The mainboard is faulty.

### Procedure

**Step 1** Power off the server, remove and reconnect the power cables, and power on the server. Check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Replace the mainboard. Check whether the alarm is cleared.

For details about how to replace the mainboard, see "Replacing Parts" in the server user guide.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Replace the faulty CPU. Then, check whether the alarm is cleared.

For details about how to replace the CPU, see "Replacing Parts" in the server user guide.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Contact technical support.

**----End**

## 3.10.5 ALM-0x0705FFFF Configuration Error (CPUN Status)

### Description

Alarm message:

```
Configuration error
```

This alarm applies only to the RH8100 V3 only.

This alarm is generated if any of the following is detected during system startup.

- A PCIe card that requires I/O resources is installed in an incorrect slot.
- An unsupported CPU is installed.

NOTE

For details about the CPUs supported by the server, log in to the Technical Support website and see the Compatibility List.

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This alarm is generated by the following sensor:

- CPU*N* Status

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x0705FFFF | Critical | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *N* | Serial number of the CPU. |

## Impact on the System

The system fails to start.

## Possible Causes

- A PCIe card that requires I/O resources is installed in an incorrect slot.
- An unsupported CPU is installed.

## Procedure

**Step 1** Check whether a PCIe card requiring I/O resources is installed in an incorrect slot.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Install the PCIe card in a correct slot to conform to I/O resource allocation rules. Then check whether the alarm is cleared.

For details about I/O resource allocation rules, see the server user guide.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Check whether an unsupported CPU is installed.

- If yes, go to **Step 4**.
- If no, go to **Step 5**.

**Step 4** Replace the unsupported CPU with a compatible one. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

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**Step 5** Contact technical support.

**----End**

# 3.10.6 ALM-0x0705FFFF Configuration Error (CPUN Status)

## Description

Alarm message:

```
Configuration error
```

The RH8100 V3 does not generate this alarm.

This alarm is generated when different types of CPUs or CPU incompatible with the server are detected during the server startup process.

Sensor triggering the alarm: CPU*N* Status

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x0705FFFF | Critical | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *N* | Serial number of the CPU. |

## Impact on the System

The system cannot operate properly, and services are interrupted.

## Possible Causes

- The server is configured with different models of CPUs.
- The CPU is faulty.
- The mainboard is faulty.

## Procedure

**Step 1** Check whether the server is configured with different models of CPUs.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Use the same model of CPUs. Then, check whether the alarm is cleared.

For details about the CPUs supported by the server, log in to the Technical Support website and see the Compatibility List.

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- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Switch the CPU with a functioning CPU in the same chassis, and check whether the alarm is still generated for this CPU.

- If yes, go to **Step 4**.
- If no, go to **Step 5**.

**Step 4** Replace the faulty CPU. Then, check whether the alarm is cleared.

For details about how to replace the CPU, see "Replacing Parts" in the server user guide.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Replace the mainboard. Check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 6**.

**Step 6** Contact technical support.

**----End**

# 3.10.7 ALM-0x070BFFFF Uncorrectable CPU Error (CPUN Status)

## Description

Alarm message:

```
Uncorrectable CPU error
```

This alarm is generated when one of the following errors occurs:

- The SMI2 link fails in non-memory mirroring mode.
- The CPU runs an error program.
- A parity error occurs on the voltage mode single ended (VMSE) link.
- The memory controller receives data marked with the poison tag.

Sensor triggering the alarm: CPU*N* Status

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x070BFFFF | Critical | Yes |

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## Parameters

| Name | Meaning |
| --- | --- |
| *N* | indicates a CPU number. |

## Impact on the System

Services are interrupted, or the system restarts.

## Possible Causes

- The CPU is faulty.
- The mainboard is faulty.

## Procedure

**Step 1** Power off the server, remove and reconnect the power cables, and power on the server. Check whether the alarm is cleared.

- If yes, no further operation is required.
- If no, go to **Step 2**.

**Step 2** Remove and reinstall the CPU. Then, check whether the alarm is cleared.

- If yes, no further operation is required.
- If no, go to **Step 3**.

**Step 3** Switch the CPU with a functioning CPU in the same chassis, and check whether the alarm is still generated for this CPU.

- If yes, go to **Step 4**.
- If no, go to **Step 5**.

**Step 4** Replace the faulty CPU. Then, check whether the alarm is cleared.

For details about how to replace the CPU, see "Replacing Parts" in the server user guide.

- If yes, no further operation is required.
- If no, go to **Step 6**.

**Step 5** Replace the mainboard. Check whether the alarm is cleared.

For details about how to replace the mainboard, see "Replacing Parts" in the server user guide.

- If yes, no further operation is required.
- If no, go to **Step 6**.

**Step 6** Contact technical support.

**----End**

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# 3.10.8 ALM-0x070CFFFF Correctable Machine Check Error (CPUN Status)

## Description

Alarm message:

```
Correctable Machine Check Error
```

This alarm is generated when the sensor detects that a self-check exception has occurred in a CPU.

This alarm applies only to the RH5885 V3, RH5885H V3, and RH8100 V3.

Sensor triggering the alarm: CPU*N* Status

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x070CFFFF | Minor | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *N* | Serial number of the CPU. |

## Impact on the System

The DIMMs corresponding to the CPU cannot be used. As a result, server performance may deteriorate.

## Possible Causes

- The SMI2 link has failed in memory mirroring mode.
- An internal error has occurred in Jordan Creek.
- The number of errors that occur during data transmission between Jordan Creek and the memory controller has reached the alarm threshold.

## Procedure

**Step 1** Check whether there is any alarm generated for the memory board or DIMM corresponding to the CPU.

- For RH5885 V3, check the DIMMs corresponding the CPU.
- For RH5885H V3 and RH8100 V3, check the memory boards corresponding the CPU.
- If yes, go to **Step 2**.

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- If no, go to **Step 3**.

**Step 2** Replace the memory board or DIMM. Then, check whether the alarm is cleared.

- For RH5885 V3, replace the DIMM.
- For RH5885H V3 and RH8100 V3, replace the memory board.
- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Replace the mainboard or the system compute module (SCM). Then, check whether the alarm is cleared.

- For RH5885 V3 and RH5885H V3, replace the mainboard.
- For RH8100 V3, replace the SCM.
- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Contact technical support.

**----End**

# 3.10.9 ALM-0x1B01FFFF Incorrect Cable Connected/Incorrect Interconnection (CPUN QPI Link)

## Description

Alarm message:

```
Incorrect cable connected/Incorrect interconnection
```

This alarm is generated when the QuickPath Interconnect (QPI) bus is faulty.

Sensor triggering the alarm: CPU*N* QPI Link

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x1B01FFFF | Major | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *N* | Indicates a CPU number. |

## Impact on the System

Services may be interrupted, and the system may crash or restart.

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## Possible Causes

- The QPI link is faulty.
- The CPU is faulty.

## Procedure

**Step 1** Gracefully power off the server.

**Step 2** Remove the CPU indicated in the alarm message and check whether the CPU socket has twisted pins.

- If yes, go to **Step 5**.
- If no, go to **Step 3**.

**Step 3** Check whether the CPU is faulty.

- If yes, go to **Step 4**.
- If no, go to **Step 5**.

The following is an example of clearing the alarm.

```
Incorrect cable connected/Incorrect interconnection (CPU1 QPI Link)
```

1. Switch positions of CPU1 and a normal CPU.
2. Power on the server. If the CPU indicated in the alarm message is changed, CPU1 is faulty. Otherwise, the QPI link on the mainboard is faulty.

**Step 4** Gracefully power off the server, replace the faulty CPU, and power on the server again. Then check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 6**.

**Step 5** Gracefully power off the server, replace the mainboard, and power on the server again. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 6**.

**Step 6** Contact technical support.

**----End**

# 3.10.10 ALM-0x0F0001FF System Error (SysFWProgress)

## Description

Alarm message:

```
System error. Please check the SEL for root cause
```

During BIOS startup, this alarm is generated if any of the following situation occurs: No DIMM is detected; the only DIMM is faulty; the only DIMM is installed in an correct position.

NOTE

For details about DIMM layout, see the server user guide.

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Sensor triggering the alarm: SysFWProgress

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x0F0001FF | Major | Yes |

## Impact on the System

The system fails to start because no DIMM is available.

## Possible Causes

- No DIMM is installed.
- The only DIMM is faulty and therefore isolated by BIOS.
- The only DIMM is installed in an incorrect position.

## Procedure

**Step 1** Power off the server and check whether DIMMs are installed.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Check whether the DIMMs are installed in correct positions.

- If yes, go to **Step 4**.
- If no, go to **Step 3**.

**Step 3** Install the required DIMMs in the correct positions. Power on the server. Check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Replace the DIMMs. Then check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Contact technical support.

**----End**

# 3.10.11 ALM-0x0F0007FF Unrecoverable PS/2 or USB Keyboard Failure (SysFWProgress)

## Description

Alarm message:

```
Unrecoverable PS/2 or USB keyboard failure
```

This alarm is generated when the PS/2 or USB device is unavailable or fails.

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Sensor triggering the alarm: SysFWProgress

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x0F0007FF | Major | Yes |

## Impact on the System

The PS/2 or USB device is unavailable.

## Possible Causes

- The PS/2 or USB device is not connected.
- The PS/2 or USB device is faulty.
- The mainboard is faulty.

## Procedure

**Step 1** Power off the server, remove and reconnect the power cables, and power on the server. Check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Replace the PS/2 or USB device. Check whether the alarm is cleared.

For details about how to replace the PS/2 or USB device, see "Replacing Parts" in the server user guide.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Replace the mainboard. Check whether the alarm is cleared.

For details about how to replace the mainboard, see "Replacing Parts" in the server user guide.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Contact technical support.

**----End**

# 3.10.12 ALM-0x0F0009FF Unrecoverable Video Controller Failure (SysFWProgress)

## Description

Alarm message:

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Unrecoverable video controller failure

This alarm is generated when the BIOS cannot detect the display device.

This alarm is generated by the following sensor:

- SysFWProgress

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x0F0009FF | Major | Yes |

### Impact on the System

The video device connected to the server does not work.

### Possible Causes

The display adapter is faulty.

### Procedure

**Step 1** Check whether the server is configured with an external display adapter.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Replace the display adapter. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Replace the mainboard. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Contact technical support.

**----End**

## 3.10.13 ALM-0x0F000CFF CPU Voltage Mismatch (SysFwProgress)

### Description

Alarm message:

CPU voltage mismatch

This alarm is generated when the sensor detects that CPUs of different models are installed on the server.

Sensor triggering the alarm: SysFWProgress

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### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x0F000CFF | Major | Yes |

### Impact on the System

The server may not be used properly.

### Possible Causes

CPUs of different models are installed on the server.

### Procedure

**Step 1** Contact technical support.

**----End**

## 3.10.14 ALM-0x0F01FFFF System Firmware Hang (SysFWProgress)

### Description

Alarm message:

```
System firmware hang
```

This alarm is generated if the CPU does not match the BIOS version, or if the CPU matches the BIOS version but the CPU microcode fails to be loaded.

Sensor triggering the alarm: SysFWProgress

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x0F01FFFF | Critical | Yes |

### Impact on the System

The system cannot be started, or the CPU cannot operate normally.

### Possible Causes

- The CPU does not match with the BIOS version.
- The CPU microcode fails to be loaded.

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### Procedure

**Step 1** Log in to the iBMC WebUI or CLI.

For details, see the iBMC user guide of the server.

**Step 2** Upgrade the iBMC or BIOS to the latest version. Then, check whether the alarm is cleared.

- To upgrade the iBMC or BIOS on the WebUI, go to the **Upgrade Firmware** page.
- To upgrade the iBMC or BIOS on the CLI, run the **ipmcset -d upgrade** command.
- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Contact technical support.

**----End**

## 3.10.15 ALM-0x1B01FFFF Incorrect Cable Connected/Incorrect Interconnection (SAS Cable)

### Description

Alarm message:

```
Incorrect cable connected/Incorrect interconnection
```

This alarm is generated when the SAS cable connection is incorrect.

Sensor triggering the alarm: SAS Cable

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x1B01FFFF | Major | Yes |

### Impact on the System

If the SAS cables are incorrectly connected, the system cannot detect all disks.

### Possible Causes

- The SAS cables are connected incorrectly.
- The SAS cables are faulty.
- The component connected to the SAS cable is faulty.

### Procedure

**Step 1** Check whether the SAS cables are connected correctly.

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For details about the SAS cable connection sequence, see "Internal Cabling" in the server user guide.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Remove and reinstall the SAS cables. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Replace the SAS cables. Then, check whether the alarm is cleared.

For details about how to replace the SAS cables, see "Replacing Parts" in the server user guide.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Replace the RAID card or the RAID riser card. Then, check whether the alarm is cleared.

For details, see "Replacing Parts" in the server user guide.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Replace the hard disk backplane. Then, check whether the alarm is cleared.

For details about how to replace the hard disk backplane, see "Replacing Parts" in the server user guide.

- If yes, no further action is required.
- f no, go to **Step 6**.

**Step 6** Contact technical support.

**----End**

# 3.10.16 ALM-0x1B01FFFF Incorrect Cable Connected/Incorrect Interconnection (HDD Backplane)

## Description

Alarm message:

```
Incorrect cable connected/Incorrect interconnection
```

This alarm is generated when the hard disk drive (HDD) backplane cable is loose or disconnected.

Sensor triggering the alarm: HDD Backplane

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## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x1B01FFFF | Major | Yes |

## Impact on the System

The hard disk cannot work properly if the backplane fails.

## Possible Causes

- The hard disk backplane cables are connected incorrectly.
- The hard disk backplane cables are faulty.
- The hard disk backplane is faulty.

## Procedure

**Step 1** Check whether the hard disk backplane cables are connected correctly.

For details about the cable connection sequence, see "Internal Cabling" in the server user guide.

- If yes, go to **Step 3**.
- If no, go to **Step 2**.

**Step 2** Connect the hard disk backplane cables in correct sequence. Then, check whether the alarm is cleared.

- If yes, no further operation is required.
- If no, go to **Step 3**.

**Step 3** Replace the hard disk backplane cables. Then, check whether the alarm is cleared.

For details about how to replace the hard disk backplane cables, see "Internal Cabling" in the server user guide.

- If yes, no further operation is required.
- If no, go to **Step 4**.

**Step 4** Replace the hard disk backplane. Then, check whether the alarm is cleared.

- If yes, no further operation is required.
- If no, go to **Step 5**.

**Step 5** Contact technical support.

**----End**

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# 3.10.17 ALM-0x0742FFFF Transition to Critical From Less Severe (HDD BP status)

## Description

Alarm message:

```
Transition to critical from less severe.
```

This alarm is generated when the 12-disk backplane is abnormal or fails.

Sensor triggering the alarm: HDD BP status

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x0742FFFF | Major | Yes |

## Impact on the System

The hard disk cannot work properly if the backplane fails.

## Possible Causes

The hard disk backplane is faulty.

## Procedure

**Step 1** Connect the hard disk backplane cables in correct sequence. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Replace the hard disk backplane. Then, check whether the alarm is cleared.

For details about how to replace the hard disk backplane, see "Replacing Parts" in the server user guide.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Contact technical support.

**----End**

# 3.10.18 ALM-0x0441FFFF Predictive Failure Detected (RAID Status)

## Description

Alarm message:

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Predictive failure detected

This alarm is generated when the RAID controller card is faulty.

Sensor triggering the alarm: RAID Status

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x0441FFFF | Minor | Yes |

## Impact on the System

If the RAID controller card is faulty, data in the disk cannot be accessed, which affects the system startup.

## Possible Causes

- The chip of the RAID controller card is faulty.
- The RAID controller card supports out-of-band management, but the communication fails.
- The RAID controller card has an uncorrectable error.
- The number of memory ECC errors of the RAID controller card reaches the maximum.
- The nonvolatile random access memory (NVRAM) of the RAID controller card is faulty.

## Procedure

**Step 1** Remove and install the RAID controller card. Check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Replace the RAID controller card. Then check whether the alarm is cleared.

For details, see the server user guide.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Contact technical support.

**----End**

# 3.10.19 ALM-0x2100FFFF PCIe Error (PCIE Status)

## Description

Alarm message:

PCIe Error, PCIe Slot *N*

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This alarm is generated when a standard PCIe device error is detected.

Sensor triggering the alarm: PCIE Status

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x2100FFFF | Major | Yes |

## Parameters

| Name | Meaning |
|---|---|
| *N* | PCIe device slot number. |

## Impact on the System

The standard PCIe device cannot be used.

## Possible Causes

The standard PCIe device is faulty.

## Procedure

**Step 1** Gracefully power off the server and check whether the standard PCIe device or slot is faulty or poorly connected.

- If yes, go to **Step 4**.
- If no, go to **Step 2**.

**Step 2** Power on the server to start the power-on self-test (POST) and then run test software (just as **FusionServer Toolkit**). Check whether the POST succeeds and the test software finds no fault.

For details about the download address and the operation methods about **FusionServer Toolkit**, see *FusionServer Tools Toolkit User Guide*.

- If yes, go to **Step 3**.
- If no, go to **Step 4**.

**Step 3** Check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Replace the part that may be faulty. Then check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

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**Step 5** Contact technical support.

**----End**

# 3.10.20 ALM-0x2100FFFF Fault Status (CPU Brd Config)

## Description

Alarm message:

```
Fault status
```

This alarm is generated if different types of compute nodes are detected.

This alarm applies only to the RH8100 V3 only.

Sensor triggering the alarm: CPU Brd Config

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x2100FFFF | Major | Yes |

## Impact on the System

The system performance deteriorates.

## Possible Causes

Different types of compute nodes are used together.

## Procedure

**Step 1** Power off the server and disconnect power cables from the server.

**Step 2** Check whether different types of compute nodes are used together.

- If yes, go to **Step 3**.
- If no, go to **Step 4**.

**Step 3** Replace the inconsistent compute nodes so that all compute nodes are of the same model. Then connect the power cables and power on the server, and check whether the alarm is cleared.

For details about how to replace a compute node, see the server user guide.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Contact technical support.

**----End**

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# 3.10.21 ALM-0x2100FFFF Fault Status (MEM Brd Config)

## Description

Alarm message:

```
Fault status
```

This alarm can only be generated by the RH8100 V3.

This alarm is generated if different types of memory risers are detected.

Sensor triggering the alarm: MEM Brd Config

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x2100FFFF | Major | Yes |

## Impact on the System

The system performance deteriorates.

## Possible Causes

Different types of memory risers are used together.

## Procedure

**Step 1** Power off the server and disconnect power cables from the server.

**Step 2** Check whether different types of memory risers are used together.

- If yes, go to **Step 3**.
- If no, go to **Step 4**.

**Step 3** Replace the inconsistent memory risers so that all memory risers are of the same model. Then connect the power cables and power on the server, and check whether the alarm is cleared.

For details about how to replace a memory riser, see the server user guide.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Contact technical support.

**----End**

# 3.10.22 ALM-0x2100FFFF Fault Status (MEMRiser Config)

## Description

Alarm message:

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Fault status

This alarm can only be generated by the RH5885H V3.

This alarm is generated if different types of memory risers are detected.

Sensor triggering the alarm: MEMRiser Config

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x2100FFFF | Major | Yes |

## Impact on the System

The system performance deteriorates.

## Possible Causes

Different types of memory risers are used together.

## Procedure

**Step 1** Power off the server and disconnect power cables from the server.

**Step 2** Check whether different types of memory risers are used together.

- If yes, go to **Step 3**.
- If no, go to **Step 4**.

**Step 3** Replace the inconsistent memory risers so that all memory risers are of the same model. Then connect the power cables and power on the server, and check whether the alarm is cleared.

For details about how to replace a memory riser, see the server user guide.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Contact technical support.

**----End**

# 3.10.23 ALM-0x0541FFFF Limit Exceeded (CPU Usage)

## Description

Alarm message:

Limit Exceeded

This alarm is generated when the CPU usage is higher than the upper limit. This alarm is cleared when the system detects that the CPU usage is restored to the acceptable range.

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Sensor triggering the alarm: CPU Usage

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x0541FFFF | Minor | Yes |

### Impact on the System

The system cannot call some processes, and system performance is affected.

### Possible Causes

- The number of ongoing processes in the system is large.
- The CPU usage of a process is high.

### Procedure

**Step 1** Start the task manager on the server, and check whether any processes can be stopped.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Stop the processes as required, and check whether the alarm is cleared.

- If yes, no further operation is required.
- If no, go to **Step 3**.

**Step 3** Contact technical support.

**----End**

## 3.10.24 ALM-0x0541FFFF Limit Exceeded (MEM Bandwidth)

### Description

Alarm message:

```
Limit Exceeded
```

This alarm is generated when the MEM Bandwidth is higher than the upper limit. This alarm is cleared when the system detects that the MEM Bandwidth is restored to the acceptable range.

Sensor triggering the alarm: MEM Bandwidth

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x0541FFFF | Minor | Yes |

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## Impact on the System

Some processes are blocked, the system cannot run new processes, or the system performance deteriorates.

## Possible Causes

- The number of ongoing processes in the system is large.
- The MEM Bandwidth of a process is high.

## Procedure

**Step 1** Start the task manager on the server, and check whether any processes can be stopped.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Stop the processes as required, and check whether the alarm is cleared.

- If yes, no further operation is required.
- If no, go to **Step 3**.

**Step 3** Contact technical support.

**----End**

# 3.10.25 ALM-0x0441FFFF Predictive Failure Detected (LCD Status)

## Description

Alarm message:

```
Predictive Failure Detected
```

This alarm is generated when the communication between the LCD and the PME is abnormal.

Sensor triggering the alarm: LCD Status

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x0441FFFF | Minor | Yes |

## Impact on the System

The login from the LCD fails. As a result, information query and simple configuration cannot be performed using the LCD.

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### Possible Causes

The serial cable to the LCD is faulty or the LCD is removed.

### Procedure

**Step 1** Check whether the LCD is removed.

- If yes, go to **Step 2**.
- If no, go to **Step 3**.

**Step 2** Install the LCD. Then check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Contact technical support.

**----End**

## 3.10.26 ALM-0x2100FFFF Fault Status (Heartbeat)

### Description

Alarm message:

```
Fault status
```

This alarm is generated when the sensor detects that High-performance Fusion Consoles (HFCs) fail to communicate with each other.

This alarm applies only to the RH8100 V3 only.

Sensor triggering the alarm: Heartbeat

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x2100FFFF | Major | Yes |

### Impact on the System

The HFCs cannot obtain all server information, which reduces system management capability.

### Possible Causes

- The network is faulty.
- The iBMC board is faulty.

### Procedure

**Step 1** Restart the server. Then check whether the alarm is cleared.

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- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Replace the HFCs and check whether the alarm is cleared.

For details about how to replace an HFC, see the server user guide.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Contact technical support.

**----End**

# 3.10.27 ALM-0x2100FFFF Fault Status (BkpB MISC Cable)

## Description

Alarm message:

```
Fault status
```

This alarm is generated when the sensor detects that the MISC signal cable to hard disk backplane B on the server with 24 hard disks is faulty.

This alarm applies only to the RH8100 V3 only.

Sensor triggering the alarm: BkpB MISC Cable

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x2100FFFF | Major | Yes |

## Impact on the System

The hard disks cannot be used properly.

## Possible Causes

- The connection is abnormal between the hard disk backplane and the mainboard.
- The hard disk backplane fails.

## Procedure

**Step 1** Restart the server. Then check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Remove the cables from the hard disk backplane, and then reconnect the cables. Check whether the alarm is cleared.

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- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Contact technical support.

**----End**

# 3.10.28 ALM-0x2100FFFF Fault Status (BkpC MISC Cable)

## Description

Alarm message:

```
Fault status
```

This alarm is generated when the sensor detects that the MISC signal cable to hard disk backplane C on the server with 24 hard disks is faulty.

This alarm applies only to the RH8100 V3 only.

Sensor triggering the alarm: BkpC MISC Cable

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x2100FFFF | Major | Yes |

## Impact on the System

The hard disks cannot be used properly.

## Possible Causes

- The connection is abnormal between the hard disk backplane and the mainboard.
- The hard disk backplane fails.

## Procedure

**Step 1** Restart the server. Then check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Remove the cables from the hard disk backplane, and then reconnect the cables. Check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Contact technical support.

**----End**

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# 3.10.29 ALM-0x2100FFFF Fault Status (Bkp MISC Cable)

## Description

Alarm message:

```
Fault status
```

This alarm is generated when the sensor detects that the MISC signal cable to hard disk backplane on the server with 8 hard disks is faulty.

This alarm applies only to the RH8100 V3 only.

Sensor triggering the alarm: Bkp MISC Cable

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x2100FFFF | Major | Yes |

## Impact on the System

The hard disks cannot be used properly.

## Possible Causes

- The connection is abnormal between the hard disk backplane and the mainboard.
- The hard disk backplane fails.

## Procedure

**Step 1** Restart the server. Then check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Remove the cables from the hard disk backplane, and then reconnect the cables. Check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Contact technical support.

**----End**

# 3.10.30 ALM-0x2100FFFF Fault Status (ExpN Status)

## Description

Alarm message:

```
Fault status
```

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This alarm is generated when the sensor detects that the Expander heartbeat is lost on a server with 12 or 24 hard disks.

This alarm applies only to the RH8100 V3 only.

Sensor triggering the alarm: Exp*N* Status

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x2100FFFF | Major | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *N* | Indicates the number of the Expander board. |

## Impact on the System

The hard disk cannot be used properly.

## Possible Causes

- The front I/O board fails.
- The hard disk backplanes fail.

## Procedure

**Step 1** Restart the server and check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 2**.

**Step 2** Remove and reinstall the front I/O board. Check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 3**.

**Step 3** Remove and reinstall the hard disk backplane. Check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Contact technical support.

**----End**

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# 3.10.31 ALM-0x1202FFFF System Error (System Error)

## Description

Alarm message:

System error. Please check the SEL for root cause.

This alarm is generated when the management software detects an error that may cause the system to restart or stop responding.

Sensor triggering the alarm: System Error

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x1202FFFF | Critical | Yes |

## Impact on the System

The system may restart or stop responding, which reduces system stability.

## Possible Causes

A hardware fault occurs.

## Procedure

**Step 1** Collect iBMC and OS logs.

**Step 2** Send the iBMC log to technical support for further analysis.

**Step 3** Send the OS log to the OS vendor for further analysis.

**----End**

# 3.10.32 ALM-0x0341FFFF PCIe Error (RAIDN PCIE ERR/NICN Status/MezzN Status)

## Description

Alarm message:

PCIe Error

This alarm is generated when the management software detects a critical alarm of a RAID controller card, LOM (LAN on Motherboard), or mezzanine card.

Sensor triggering the alarm:

- RAID*N* PCIE ERR
- NIC*N* Status

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- Mezz*N* Status

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x0341FFFF | Critical | Yes |

## Parameters

| Name | Meaning |
| --- | --- |
| *N* | indicates the slot number of a RAID card, a LOM, or a mezzanine card.<br>If the server supports only one RAID controller card or mezzanine card, the corresponding sensor names do not include N. |

## Impact on the System

The system may restart or stop responding.

## Possible Causes

The PCIe device is faulty.

## Procedure

**Step 1** Gracefully power off the server and check whether the PCIe device or slot is faulty or poorly connected.

- If yes, go to **Step 4**.
- If no, go to **Step 2**.

**Step 2** Power on the server to start the power-on self-test (POST) and then run test software (just as **FusionServer Toolkit**). Check whether the POST succeeds and the test software finds no fault.

For details about the download address and the operation methods about **FusionServer Toolkit**, see *FusionServer Tools Toolkit User Guide*.

- If yes, go to **Step 3**.
- If no, go to **Step 4**.

**Step 3** Check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Replace the part that may be faulty. Then check whether the alarm is cleared.

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- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Contact technical support.

**----End**

# 3.10.33 ALM-0x0341FFFF Uncorrectable PCH Error (PCH Status)

## Description

Alarm message:

```
Uncorrectable PCH error
```

The alarm is generated when a PCH chip error is detected.

Sensor triggering the alarm: PCH Status

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x0341FFFF | Critical | Yes |

## Impact on the System

The system may restart or stop responding.

## Possible Causes

The PCH chip is faulty.

## Procedure

**Step 1** Gracefully power off the server and check whether the PCH chip or mainboard has any damage.

- If yes, go to **Step 4**.
- If no, go to **Step 2**.

**Step 2** Power on the server to start the power-on self-test (POST) and then run test software (just as **FusionServer Toolkit**). Check whether the POST succeeds and the test software finds no fault.

For details about the download address and the operation methods about **FusionServer Toolkit**, see *FusionServer Tools Toolkit User Guide*.

- If yes, go to **Step 3**.
- If no, go to **Step 4**.

**Step 3** Check whether the alarm is cleared.

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- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Replace the mainboard. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 5**.

**Step 5** Contact technical support.

**----End**

# 3.10.34 ALM-0x2100FFFF Fault Status (CPU NUM Config)

## Description

Alarm message:

```
Fault status
```

This alarm is generated when the CPU installation positions are incorrect.

This alarm applies only to the RH5885 V3, RH5885H V3, and RH8100 V3.

Sensor triggering the alarm: CPU NUM Config

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x2100FFFF | Major | Yes |

## Impact on the System

The system may fail to power on.

## Possible Causes

- The CPU quantity is incorrect.
- The CPU installation positions are incorrect.

## Procedure

**Step 1** Check whether the CPU quantity is correct.

For the details about the CPU quantity of a server, see the user guide.

- If yes, go to **Step 3**.
- If no, go to **Step 2**.

**Step 2** Install CPUs of a specific quantity. Then check whether the alarm is cleared.

For details, see "Replacing Parts" in the user guide.

- If yes, no further action is required.

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- If no, go to **Step 3**.

**Step 3** Reinstall CPUs in the correct positions. Then check whether the alarm is cleared.

For details about the CPU position, see the user guide.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Contact technical support.

**----End**

# 3.10.35 ALM-0x2100FFFF Fault Status (CPU Match)

## Description

Alarm message:

```
Fault status
```

This alarm is generated when an unsupported CPU model or multiple CPU models are installed in the same server.

This alarm applies only to the RH5885 V3, RH5885H V3, and RH8100 V3.

Sensor triggering the alarm: CPU Match

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x2100FFFF | Major | Yes |

## Impact on the System

The system may fail to power on.

## Possible Causes

- An incompatible CPU is installed.
- The CPUs installed in the server are not of the same model.

## Procedure

**Step 1** Power off the server, and remove the power cables from the server.

**Step 2** Check the number of CPUs installed in the server.

- If only one CPU is installed, go to **Step 4**.
- If multiple CPUs are installed, go to **Step 3**.

**Step 3** Check whether the models of the installed CPUs are the same.

- If yes, go to **Step 4**.

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- If no, go to **Step 6**.

**Step 4** Check whether the CPU(s) are compatible with the server.

You can log in to the Technical Support website and use the Compatibility List to check the CPU compatibility.

- If yes, go to **Step 9**.
- If no, go to **Step 5**.

**Step 5** Replace the incompatible CPU(s). Then check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 9**.

**Step 6** Check whether any CPU is incompatible with the server.

- If yes, go to **Step 8**.
- If no, go to **Step 7**.

**Step 7** Replace certain CPUs so that the CPU models are the same. Then, check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 9**.

**Step 8** Replace the incompatible CPUs so that all CPUs are of the same model and compatible with the server. Then check whether the alarm is cleared.

- If yes, no further action is required.
- If no, go to **Step 9**.

**Step 9** Contact technical support.

**----End**

# 3.10.36 ALM-0x2100FFFF Fault Status (HPC Match)

## Description

Alarm message:

```
Fault status
```

This alarm applies only to the RH8100 V3 only.

This alarm is generated when HFCs of different models are installed in the same server.

Sensor triggering the alarm: HPC Match

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x2100FFFF | Major | Yes |

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### Impact on the System

The system may fail to power on.

### Possible Causes

The HFCs installed in the server are of different models.

### Procedure

**Step 1** Power off the server, and remove the power cables from the server.

**Step 2** Check whether the models of the two HFCs are the same.

- If yes, go to **Step 4**.
- If no, go to **Step 3**.

**Step 3** Replace the improper HFC. Then, power on the server and check whether the alarm is cleared.

For details about how to replace an HFC, see the server user guide.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Contact technical support.

**----End**

## 3.10.37 ALM-0x2100FFFF Fault status (HPCN Type)

### Description

Alarm message:

```
Fault status
```

This alarm applies only to the RH8100 V3 only.

This alarm is generated when a compute module is incompatible with an HFC.

Sensor triggering the alarm: HPC*N* Type

### Attribute

| Alarm ID | Alarm Severity | Auto Clear |
|---|---|---|
| 0x2100FFFF | Major | Yes |

### Parameters

| Name | Meaning |
|---|---|
| *N* | indicates an HFC number. |

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## Impact on the System

The system may fail to power on.

## Possible Causes

The compute module is incompatible with the HFC.

## Procedure

**Step 1** Power off the server, and remove the power cables from the server.

**Step 2** Check whether the HFC is compatible with the compute module.

For details about the relationship between them, see the server user guide.

- If yes, go to **Step 4**.
- If no, go to **Step 3**.

**Step 3** Replace the HFC or compute module with a compatible one. Then, power on the server and check whether the alarm is cleared.

For details about how to replace an HFC or compute module,see the server user guide.

- If yes, no further action is required.
- If no, go to **Step 4**.

**Step 4** Contact technical support.

**----End**

# 3.10.38 ALM-0x0341FFFF State Asserted (Board Mismatch)

## Description

Alarm message:

```
State Asserted
```

This alarm is generated when the current mainboard does not match the 12/24-bay NVMe PCIe SSD backplane.

Sensor triggering the alarm: Board Mismatch

## Attribute

| Alarm ID | Alarm Severity | Auto Clear |
| --- | --- | --- |
| 0x0341FFFF | Major | Yes |

## Impact on the System

NVMe PCIe SSDs cannot be identified.

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### Possible Causes

The mainboard does not support the NVMe PCIe SSD backplane.

### Procedure

**Step 1** Contact technical support.

**----End**

## 3.11 Event Alarms by Sensor

An event alarm indicates an event occurred during the running of a server. Generally, this type of alarms does not affect services and need to be handled immediately. Users can handle event alarms in off-peak hours. **Table 3-3** lists the events of servers.

**Table 3-3** Event list

| Event Code | Event Description | Impact/Suggestions |
|---|---|---|
| 0x0341FFFF | The UID button on the panel is pressed. | – |
| 0x0341FFFF | *arg1*certificate is about to expire or has expired.<br>**NOTE**<br>*arg1* indicates the certificate type. | Impact: None.<br>Handling suggestions: Import a new certificate. |
| 0x0441FFFF | Power capping failed. | Impact: The server automatically shuts down or fails to power on, which interrupts services<br>Handling suggestions:<br>1. Check whether the mains supply meets power consumption requirements of the server.<br>2. If no, perform rectification to enable the mains supply to meet requirements.<br>3. If the alarm still persists, increase the power cap value for the server. |

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| Event Code | Event Description | Impact/Suggestions |
| --- | --- | --- |
| 0x0500FFFF | Chassis cover opened. | Impact: If the cover is open, the heat dissipation of the chassis is affected, which will trigger the fans running at full speed and generating loud noise, and the server components cannot be properly protected.<br>Handling suggestions: Close the chassis cover. |
| 0x0541FFFF | The CPU usage (*arg1*) exceeds the threshold (*arg2*).<br>**NOTE**<br>● *arg1* indicates the current reading of the sensor.<br>● *arg2* indicates the alarm threshold. | Impact: The system performance is affected.<br>Handling suggestions:<br>1. Check whether the CPU usage threshold is set to a value that is too low within the value range.<br>2. Stop unnecessary services to release CPU resources. |
| 0x0541FFFF | The memory usage (*arg1*) exceeds the threshold (*arg2*).<br>**NOTE**<br>● *arg1* indicates the current reading of the sensor.<br>● *arg2* indicates the alarm threshold. | Impact: The system performance is affected.<br>Handling suggestions:<br>1. Check whether the memory usage threshold is set to a value that is too low within the value range.<br>2. Stop unnecessary services to release memory resources. |
| 0x0580FFFF | Chassis cover closed. | – |
| 0x0707FFFF | CPU *arg1* installed.<br>**NOTE**<br>*arg1* indicates the CPU No. | – |
| 0x0748FFFF | The server system crashes or is abnormally reset. | Impact: Services will be interrupted.<br>Handling suggestions:<br>1. Collect the iBMC and OS logs.<br>2. Contact technical support. |

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| Event Code | Event Description | Impact/Suggestions |
| --- | --- | --- |
| 0x0748FFFF | iBMC operation log has reached 90% space capacity. | Impact: Some historical operations logs will be lost.<br>Handling suggestions:<br>1. Export the operation logs.<br>2. Enable remote syslog dump for operation logs. |
| 0x0748FFFF | iBMC security log has reached 90% space capacity. | Impact: Some historical security logs will be lost.<br>Handling suggestions:<br>1. Export the security logs.<br>2. Enable remote syslog dump for security logs. |
| 0x0787FFFF | CPU *arg1* removed.<br>**NOTE**<br>*arg1* indicates the CPU No. | Impact: The server OS crashes.<br>Handling suggestions: None. |
| 0x0840FFFF | Fan *arg1* [*arg2*] removed.<br>**NOTE**<br>● *arg1* indicates the fan module location, for example **front**, **inner**, or **rear**.<br>● *arg2* indicates the fan module No. | Impact: The fan redundancy is affected.<br>Handling suggestions: None. |
| 0x0840FFFF | LCD removed. | – |
| 0x0841FFFF | PSU *arg1* installed.<br>**NOTE**<br>*arg1* indicates the PSU No. | – |
| 0x0841FFFF | The RAID controller card *arg1* installed.<br>**NOTE**<br>*arg1* indicates the slot No. of the RAID controller card. | – |
| 0x0880FFFF | LCD installed. | – |
| 0x08C0FFFF | Fan *arg1* [*arg2*] installed.<br>**NOTE**<br>● *arg1* indicates the fan module location, for example **front**, **inner**, or **rear**.<br>● *arg2* indicates the fan module No. | – |
| 0x08C1FFFF | PSU *arg1* removed.<br>**NOTE**<br>*arg1* indicates the PSU No. | Impact: The PSU redundancy is affected.<br>Handling suggestions: None. |

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| Event Code | Event Description | Impact/Suggestions |
| --- | --- | --- |
| 0x08C1FFFF | The RAID controller card *arg1* removed.<br>**NOTE**<br>*arg1* indicates the slot No. of the RAID controller card. | Impact: Services related to the RAID controller card are interrupted.<br>Handling suggestions: None. |
| 0x0941FFFF | iBMC is restarted after AC power supply is restored. | – |
| 0x0941FFFF | iBMC is reset and started. | – |
| 0x0C05FFFF | [*arg1*] *arg2* memory correctable ECC.<br>**NOTE**<br>● *arg1* indicates the slot No. of the memory board.<br>● *arg2* indicates the DIMM silkscreen. | Impact: The system performance is affected.<br>Handling suggestions: None. |
| 0x0C06FFFF | [*arg1*] *arg2* installed.<br>**NOTE**<br>● *arg1* indicates the slot No. of the memory board.<br>● *arg2* indicates the DIMM silkscreen. | – |
| 0x0C86FFFF | [*arg1*] *arg2* removed.<br>**NOTE**<br>● *arg1* indicates the slot No. of the memory board.<br>● *arg2* indicates the DIMM silkscreen. | Impact: The system performance is affected.<br>Handling suggestions: None. |
| 0x0C06FFFF | [*arg1*] *arg2* installed.<br>**NOTE**<br>● *arg1* indicates the slot No. of the memory board.<br>● *arg2* indicates the DIMM silkscreen. | – |
| 0x0C86FFFF | [*arg1*] *arg2* removed.<br>**NOTE**<br>● *arg1* indicates the slot No. of the memory board.<br>● *arg2* indicates the DIMM silkscreen. | Impact: The system performance is affected.<br>Handling suggestions:<br>1. Install a DIMM in the slot.<br>2. Remove and reinstall the DIMM.<br>3. Replace the DIMM.<br>4. Replace the mainboard or the board holding the DIMM. |

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| Event Code | Event Description | Impact/Suggestions |
| --- | --- | --- |
| 0x0D00FFFF | The [*arg1*] disk *arg2* installed.<br>**NOTE**<br>● *arg1* indicates hard disk location, for example **rear**.<br>● *arg2* indicates the slot No. of the hard disk, for example **diskA1** or **diskB1**. | – |
| 0x0D00FFFF | SD card *arg1* installed.<br>**NOTE**<br>*arg1* indicates slot No. of the SD card. | – |
| 0x0D07FFFF | RAID rebuild starts at the [*arg1*] disk *arg2*.<br>**NOTE**<br>● *arg1* indicates hard disk location, for example **rear**.<br>● *arg2* indicates the slot No. of the hard disk, for example **diskA1** or **diskB1**. | – |
| 0x0D07FFFF | Data rebuild starts at SD card *arg1*.<br>**NOTE**<br>*arg1* indicates slot No. of the SD card. | – |
| 0x0D80FFFF | The [*arg1*] disk *arg2* removed.<br>**NOTE**<br>● *arg1* indicates hard disk location, for example **rear**.<br>● *arg2* indicates the slot No. of the hard disk, for example **diskA1** or **diskB1**. | – |
| 0x0D80FFFF | SD card *arg1* removed.<br>**NOTE**<br>*arg1* indicates slot No. of the SD card. | Impact: The storage capacity of the server is reduced.<br>Handling suggestions: None. |
| 0x0D87FFFF | RAID rebuild at the [*arg1*] disk *arg2* is complete.<br>**NOTE**<br>● *arg1* indicates hard disk location, for example **rear**.<br>● *arg2* indicates the slot No. of the hard disk, for example **diskA1** or **diskB1**. | – |

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| Event Code | Event Description | Impact/Suggestions |
| --- | --- | --- |
| 0x0D87FFFF | Data rebuild at SD card *arg1* is complete.<br>**NOTE**<br>*arg1* indicates slot No. of the SD card. | – |
| 0x1002FFFF | iBMC event records are cleared. | – |
| 0x1005FFFF | iBMC event record has reached 90% space capacity. | Impact: If the event records keep increasing, an alarm will be generated indicating that the event logs are about to full.<br>Handling suggestions: None. |
| 0x1400FFFF | The power button on the panel is pressed. | Impact: The server is powered off.<br>Handling suggestions: None. |
| 0x1D0700FF | The host was restarted due to unrecognized reason. | Impact: The OS restarts, which interrupts services.<br>Handling suggestions: None. |
| 0x1D0701FF | The host was restarted by command. | Impact: The OS restarts, which interrupts services.<br>Handling suggestions: None. |
| 0x1D0703FF | The host was restarted by power button. | Impact: The OS restarts, which interrupts services.<br>Handling suggestions: None. |
| 0x1D0704FF | The host was restarted due to watchdog timeout. | Impact: The OS restarts, which interrupts services.<br>Handling suggestions: None. |
| 0x1D0705FF | The host was restarted by BMC. | Impact: The OS restarts, which interrupts services.<br>Handling suggestions: None. |
| 0x1D0706FF | The host is restarted after being powered on. (Power strategy is "Turn On".) | Impact: The OS restarts, which interrupts services.<br>Handling suggestions: None. |
| 0x1D0707FF | The host is restarted after being powered on. (Power strategy is "Restore Previous State".) | Impact: The OS restarts, which interrupts services.<br>Handling suggestions: None. |
| 0x1E00FFFF | The OS cannot start without a boot device. | Impact: The OS fails to start.<br>Handling suggestions: None. |

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| Event Code | Event Description | Impact/Suggestions |
| --- | --- | --- |
| 0x1E01FFFF | The OS cannot start without a bootable disk. | Impact: The OS fails to start.<br>Handling suggestions: None. |
| 0x1E02FFFF | The OS cannot start because the PXE service is unavailable. | Impact: The OS fails to start.<br>Handling suggestions: None. |
| 0x1E03FFFF | The OS cannot start due to the invalid boot partition. | Impact: The OS fails to start.<br>Handling suggestions: None. |
| 0x2101FFFF | Heartbeat signals between the iBMC and the system management software (iBMA) are lost. | Impact: The inband management and monitoring information cannot be obtained or updated in real time.<br>Handling suggestions: Reinstall the iBMA. |
| 0x2108FFFF | *arg1* [*arg2*] *arg3* disconnected.<br>**NOTE**<br>● *arg1* indicates the network adapter name, for example **NIC 1**, **PCIe Card 1**, or **LOM**.<br>● *arg2* indicates the network adapter type, for example **(NIC)** or **(FC)**.<br>● *arg3* indicates the network port, for example **port 1**. | Impact: Services over the network port are interrupted.<br>Handling suggestions:<br>1. Remove and reconnect the network cable.<br>2. Check whether the network cable is connected to the switch.<br>3. Check whether the peer switch is working properly. |
| 0x2200FFFF | ACPI is in the working state. | – |
| 0x2206FFFF | ACPI is in the soft-off state. | Impact: The server fails to power on.<br>Handling suggestions: None. |
| 0x2300FFFF | The watchdog (*arg1*) timed out.<br>**NOTE**<br>*arg1* indicates the system boot process, for example **BIOS FRB 2**, **BIOS/POST**, **OS Load**, **SMS/OS** or **OEM**. | – |

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| Event Code | Event Description | Impact/Suggestions |
| --- | --- | --- |
| 0x2902FFFF | *arg1* RAID card *arg2* BBU is absent.<br>**NOTE**<br>● *arg1* indicates the front I/O module (for example **FM**) or the compute node and its slot No. (for example **CMn**).<br>● *arg2* indicates the slot No. of the RAID controller card. | Impact: The cache of the RAID controller card fails.<br>Handling suggestions: Install the BBU. |
| 0x2902FFFF | The [*arg1*] PCIe card *arg2* (*arg3*) BBU is present.<br>**NOTE**<br>● *arg1* indicates the PCIe card location, for example **front** or **rear**.<br>● *arg2* indicates the PCIe card slot No.<br>● *arg3* indicates the PCIe card type. | – |
| 0x2982FFFF | The [*arg1*] PCIe card *arg2* (*arg3*) BBU is absent.<br>**NOTE**<br>● *arg1* indicates the PCIe card location, for example **front** or **rear**.<br>● *arg2* indicates the PCIe card slot No.<br>● *arg3* indicates the PCIe card type. | Impact: The cache of the PCIe card fails.<br>Handling suggestions: Install the BBU. |
| 0x2982FFFF | *arg1* RAID card *arg2* BBU is present.<br>**NOTE**<br>● *arg1* indicates the front I/O module (for example **FM**) or the compute node and its slot No. (for example **CMn**).<br>● *arg2* indicates the slot No. of the RAID controller card. | – |

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