FusionServer

5885H V7 Rack Server

Key Applications, High Reliability and Security, Efficient Energy Saving, and Intelligent O&M
FusionServer 5885H V7 (5885H V7) is a 4U 4-socket rack server designed for the Internet Data Center (IDC), cloud computing, enterprise business, and telecom. It is also ideal for various applications, such as databases, virtualization, and in-memory computing. The 5885H V7 features high-performance computing, large-capacity storage, low power consumption, high scalability and reliability, easy deployment, and simplified management.

**Introduction**

**Highlights**

- **High Efficiency, Stability, and Scalability**
  - 4 x new-generation Intel® Xeon® Scalable processors (Sapphire Rapids) in 4U space, up to 60 x cores and 120 x threads per processor, with TDP up to 350 W
  - Up to 64 x DDR5 DIMMs, delivering up to 16 TB total memory capacity (calculated based on a maximum of 256 GB capacity per DDR5 memory module) and featuring high speed and availability
  - Up to 52 x 2.5" drives
  - Up to 24 x 2.5" NVMe SSDs, improving storage density and I/O performance
  - Up to 21 x standard expansion slots
  - 1 x GE/10GE/25GE/100GE OCP 3.0 NIC that supports orderly hot swap

- **Reliability and Security**
  - Unique AI memory fault self-healing ensures stable system running and reduces system downtime by 66%
  - RoT-based secure boot ensures security everywhere

- **Efficient Energy Saving**
  - The unique algorithm is provided for the lowest power consumption of fans and CPUs, saving energy by up to 8% compared with the industry average
  - Industry-leading power supply technology for higher efficiency: Three core technologies improve power and efficiency, enabling the industry-leading power conversion rate and the power loss 12.5% lower than the industry average
  - Intelligent service awareness and dynamic load adjustment: The CPU working frequency is dynamically adjusted based on the actual service load

- **Intelligent O&M**
  - Automatic version push and upgrades can be completed without onsite attendance, improving upgrade efficiency by 20 times
  - 75% streamlined deployment steps are performed by tools, improving deployment efficiency by 10 times
  - Supports takeover of all vendors' servers, automatic asset location identification, and real-time tracking, 100% accuracy for asset stocktaking
<table>
<thead>
<tr>
<th><strong>Form Factor</strong></th>
<th>4U rack server</th>
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<tbody>
<tr>
<td><strong>Processor</strong></td>
<td>2 or 4 x 4th Gen Intel® Xeon® Scalable processors (Sapphire Rapids) with TDP up to 350 W per processor</td>
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<tr>
<td><strong>Chipset</strong></td>
<td>Emmitsburg PCH</td>
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<tr>
<td><strong>Memory</strong></td>
<td>64 x DDR5 DIMMs</td>
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| **Local Storage** | Hot-swappable drives configurations:  
- 8, 24, 25, or 50 x front 2.5” SAS/SATA drives  
- 4 x front 2.5” SAS/SATA drives and 8 x NVMe SSDs  
- 24 x front NVMe SSDs  
- 25 x front 2.5” SAS/SATA drives and 24 x front NVMe SSDs  
- 36 x front E1.S SSDs  
- Up to 52 x 2.5” drives  
Flash storage: Flash storage:2 x M.2 SSDs, supporting hardware RAID |
| **RAID**        | RAID 0, 1, 10, 1E, 5, 50, 6, or 60; supercapacitors for cache data protection from power failures; RAID level migration, drive roaming, self-diagnosis, and remote web-based configuration |
| **Network**     | Multiple network expansion capabilities: 1 x OCP 3.0 NIC, supporting hot swap |
| **PCIe Expansion** | Up to 22 x PCIe slots, including 1 x FlexIO slot dedicated for the OCP 3.0 NIC and 21 x standard PCIe slots |
| **GPU Card**    | 4 x dual-width GPU cards; 14 x single-width GPU cards |
| **Fan Module**  | 8 x hot-swappable counter-rotating fan modules in N+1 redundancy |
| **PSU**         | 4 x hot-swappable Platinum/Titanium PSUs in 2+2 redundancy  
- 900 W AC Platinum/Titanium PSUs (input: 100 V to 240 V AC, or 192 V to 288 V DC)  
- 1500 W AC Platinum PSUs  
850 W (input: 100 V to 127 V AC)  
1500 W (input: 200 V to 240 V AC, or 192 V to 288 V DC)  
- 1500 W 380 V HVDC PSUs (input: 260 V to 400 V DC)  
- 1200 W -48 V to -60 V DC PSUs (input: -38.4 V to -72 V DC)  
- 2000 W AC Platinum/Titanium PSUs  
1800 W (input: 200 V to 220 V AC, or 192 V to 200 V DC)  
2000 W (input: 220 V to 240 V AC, or 200 V to 288 V DC)  
- 2150 W Titanium PSUs (input: 230 V to 240 V AC, or 230 V to 288 V DC)  
- 3000 W AC Titanium PSUs  
2500 W (input: 200 V to 220 V AC, or 192 V to 200 V DC)  
2900 W (input: 220 V to 230 V AC, or 200 V to 230 V DC)  
- 3000 W (input: 230 to 240 V AC, or 230 to 288 V DC) |
| **Management**  | The iBMC chip integrates one dedicated management GE network port, providing comprehensive management features such as fault diagnosis, automatic O&M, and hardware security hardening.  
- The iBMC supports standard interfaces such as Redfish, SNMP, and IPMI 2.0, provides a remote management user interface based on HTML5/VNC KVM; supports out-of-band management functions such as monitoring, diagnosis, configuration, Agentless, and remote control for simplified management  
- It is optional to configure the FusionDirector management software that provides advanced management features such as five intelligent technologies, enabling intelligent, automatic, visualized, and refined management throughout the lifecycle |
| **OS**          | FusionOS, Microsoft Windows Server, SUSE Linux Enterprise Server, VMware ESXi, Red Hat Enterprise Linux, CentOS, Oracle, Ubuntu, Debian, and openEuler |
| **Security**    | Power-on password, administrator password, Trusted Platform Module (TPM) 2.0, security panel, secure boot, and chassis cover opening detection |
| **Operating Temperature** | 5°C to 45°C (41°F to 113°F), compliant with ASHRAE Classes A1/A2/A3/A4 |
| **Certification** | CE, UL, CCC, FCC, VCCI, and RoHS |
| **Installation Suite** | L-shaped guide rails, adjustable guide rails, and holding rails |
| **Dimensions (H x W x D)** | Chassis with 2.5” drives: 175 mm x 447 mm x 898 mm (6.89 in. x 17.60 in. x 35.35 in.) |