FusionServer

5288 V7 Rack Server

Ultra-large Storage, High Reliability and Security, Efficient Energy Saving, and Intelligent O&M
FusionServer 5288 V7 (5288 V7) is a new-generation 4U 2-socket rack server designed for the Internet, Internet Data Center (IDC), cloud computing, enterprise business, and telecom. It is also ideal for IT core services, virtualization, distributed storage, big data processing, and other complex workloads. The 5288 V7 features low power consumption, high scalability and reliability, easy deployment, and simplified management.

**Highlights**

**Introduction**

- Heat pipe remote heat dissipation technology ensures reliable heat dissipation and stronger temperature adaptation, providing 50% better heat dissipation capability than a single heat sink
- Unique AI memory fault self-healing ensures stable system running and reduces system downtime by 66%
- RoT-based secure boot ensures security everywhere

**Ultra-large Storage**

- Ultra-large storage: 44 x 3.5" drives and 4 x NVMe U.2 SSDs
- Supreme computing power: Intel's latest Sapphire Rapids processors with up to 350 W TDP; 32 x DDR5 DIMMs
- Flexible expansion: up to 12 x standard PCIe slots

**High Reliability and Security**

- Heat pipe remote heat dissipation technology ensures reliable heat dissipation and stronger temperature adaptation, providing 50% better heat dissipation capability than a single heat sink
- 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>1 or 2 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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<td><strong>Memory</strong></td>
<td>32 x DDR5 DIMMs, with up to 4800 MT/s speed</td>
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| **Local Storage** | Hot-swappable drives configurations:  
- 4 x 2.5” SAS/SATA drives/SSDs  
- 24 to 44 x 3.5” SAS/SATA drives  
- 8 x NVMe SSDs  
- E1.S or E3.S drives*  
Flash storage: dual M.2 SSDs |
| **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; 2 x FlexIO slots dedicated for 2 x OCP 3.0 NICs, which can be configured as required; supporting hot swap and PCIe 5.0 |
| **PCle Expansion** | Up to 12 x PCIe slots, including 2 x FlexIO slots dedicated for OCP 3.0 NICs and 10 x PCIe slots, and supporting PCIe 5.0 |
| **GPU Card**   | 10 x single-width GPU cards |
| **Fan Module** | 6 or 8 x hot-swappable counter-rotating fan modules in N+1 redundancy |
| **PSU**        | 2 x hot-swappable Platinum/Titanium PSUs in 1+1 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 Platinum 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 35°C (41°F to 95°F), compliant with ASHRAE Classes A1/A2 |
| **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 3.5” drives: 175 mm × 447 mm × 798 mm (6.89 in. x 17.60 in. x 31.42 in.) |

*According to the plan, it will be realized within 2023.*