FusionServer

G5200 V7 GPU Server

Robust Performance, High Reliability and Security, Efficient Energy Saving, Intelligent O&M
FusionServer G5200 V7 (G5200 V7) is a new-generation 4U 2-socket GPU server that meets the requirements of large-capacity storage. Featuring robust performance, high reliability and security, efficient energy saving, simplified management, and easy deployment, it can be used for training and inference workloads and is suitable for voice, image, and video analysis scenarios.

**Highlights**

**Robust Performance**
- Ultra-large storage: up to 32 x 3.5" SAS/SATA drives, 4 x NVMe SSDs, and 2 x M.2 SSDs
- Supreme computing power: Intel's latest Sapphire Rapids processors with up to 350 W TDP;
  4 x FHFL dual-width GPU cards; GPU pass-through design, eliminating the need of PCIe switches for communication between CPUs and GPUs
- Flexible expansion: up to 10 x standard PCIe slots and 2 x OCP 3.0 NICs

**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
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<th><strong>Technical Specifications</strong></th>
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**Form Factor**  
4U GPU server

**Processor**  
1 or 2 x 4th Gen Intel® Xeon® Scalable processors (Sapphire Rapids) with TDP up to 350 W per processor

**Chipset**  
Emmitsburg PCH

**Memory**  
32 x DDR5 DIMMs, with up to 4800 MT/s speed

**Local Storage**  
Hot-swappable drive configurations:  
- Up to 32 x 3.5" SAS/SATA drives  
- Up to 4 x NVMe SSDs  
- E1. S SSDs*  
Flash storage: 2 x M.2 SSDs

**RAID**  
RAID 0, 1, 10, 1E, 5, 50, 6, and 60; supercapacitors for cache data protection against power failures; RAID level migration, drive roaming, self-diagnosis, and remote web-based configuration

**GPU Card**  
4 x dual-width or 10 x single-width GPU cards

**Network**  
Multiple network expansion capabilities  
2 x OCP 3.0 NICs, which can be configured as required; supporting orderly hot swap and PCIe 5.0

**PCIe Expansion**  
Up to 10 x standard PCIe slots, supporting PCIe 5.0

**Fan Module**  
8 x hot-swappable counter-rotating fan modules in N+1 redundancy

**PSU**  
4 x hot-swappable PSUs, with PSU 1 and PSU 2 in 1+1 redundancy and PSU 3 and PSU 4 in 1+1 redundancy  
- 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 35°C (41°F to 95°F), compliant with ASHRAE Class 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)**  
175 mm x 447 mm x 798 mm (6.89 in. x 17.60 in. x 31.42 in.)

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