Building an Infinite Digital World

FusionServer G5500 V6 GPU Server

Excellent Performance, Flexible Configuration, and Efficient O&M

xFusion Digital Technologies Co., Ltd.

Introduction

G5500 V6

FusionServer G5500 V6 (G5500 V6) is a 4U 2-socket GPU server that supports GPU cards of various specifications and features excellent computing performance, flexible and balanced configuration, and efficient deployment and O&M. It is suitable for acceleration of AI inference, AI training, HPC, video analysis, and database applications, and supports enterprise and public cloud deployment. It is optimized for deep learning training, inference, and HPC services.

Features

Leading Architecture and Ultimate Performance

- 2 x 3rd Gen Intel® Xeon® processors (Ice Lake), up to 270 W TDP per processor
- 8 x FHFL double-width GPU cards
- 32 x DDR4 DIMM slots, up to 3200 MT/s, and up to 8 TB total capacity
- 24 x 3.5-inch drives, including a maximum of 8 x NVMe drives and 2 x M.2 SSDs, improving storage density and I/O performance
- 16 x PCIe slots, including 12 x PCIe 4.0 x16 standard slots, 3 x OCP slots, and 1 x daughter card slot, providing excellent scalability

Flexible Configuration and High Stability and Reliability

- One-click topology switchover between Single-root cascaded topology and Double-root balanced topology, flexibly adapting to multiple scenarios
- Multiple types of GPU cards, including FHFL double-width, FHFL single-width, and HHHL single-width GPU cards
- 4 x 3000 W Titanium PSUs in N+N/N+M redundancy
- 6 x customized fans in N+1 redundancy

Intelligent Management, Openness, and Integration

- Configured with FusionDirector for intelligent full-lifecycle O&M, improving O&M efficiency by 30% with the following intelligent technologies:
  - ✓ Intelligent maintenance: Integrates pre-diagnosis and recovery, and accurately manages key components, achieving the fault diagnosis accuracy of 96% and reducing the breakdown rate by 66%.
  - ✓ Intelligent upgrade: Enables one-click automation, cloud-edge coordination for quick policy formulation, and automatic firmware version matching and upgrades in batches, improving efficiency by 20 times.
  - ✓ Intelligent discovery: Supports component-level visualization, automatic asset stocktaking in seconds, and real-time tracking, enabling 100% stocktaking accuracy.
  - ✓ Intelligent energy saving: Enables refined dynamic energy management with DEMT 2.0 integrated, helping save 8% of the system energy.
  - ✓ Intelligent deployment: Enables streamlined deployment and one-click working mode switchover, improving deployment efficiency by 10 times.
- Provides standardized open interfaces and development guides, facilitating seamless integration with third-party management software.

Technical Specifications

Form Factor	4U GPU server
Processor	2 x 3rd Generation Intel® Xeon® Scalable processors (Ice Lake), up to 270 W TDP per processor
Chipset	Intel® C621A
Memory	32 x DDR4 DIMM slots, up to 3200 MT/s
Local Storage	Supports hot-swappable drives in the following configurations: • Up to 24 x 3.5-inch SAS/SATA drives; • Up to 8 x NVMe SSDs; • 2 x M.2 SSDs
RAID	RAID 0, 1, 10, 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
GPU Card	8 x FHFL double-width GPU cards
Network	Multiple network expansion capabilities; 3 x OCP 3.0 NICs, which can be configured as required and supports orderly hot swap
PCIe Expansion	Up to 16 x PCIe expansion slots, including 12 x PCIe 4.0 x16 standard slots, 3 x OCP slots, and 1 x built-in RAID card slot
Fan Module	6 x hot-swappable counter-rotating fans in N+1 redundancy
PSU	4 x hot-swappable PSUs in N+N/N+M redundancy • 3000 W AC Titanium PSUs 2500 W (input: 200 V to 220 V AC) 2900 W (input: 220 V to 230 V AC) 3000 W (input: 230 V to 240 V AC) • 2000 W AC Platinum 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) • 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)
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 interface based on HTML5/VNC KVM; supports out-of-band management functions such as monitoring, diagnosis, configuration, Agentless, and remote control for simplified management. • Can be configured with the FusionDirector management software to provide advanced management features such as five intelligent technologies, enabling intelligent, automatic, visualized, and refined management through the lifecycle.
OS	Microsoft Windows Server, SUSE Linux Enterprise Server, Red Hat Enterprise Linux, Ubuntu, openEuler, etc
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)
Certification	CCC
Installation Suite	L-shaped guide rails, adjustable guide rails, and holding rails
Dimensions (H x W x D)	175 mm x 447 mm x 898 mm (6.89 in. x 17.60 in. x 35.35 in.)

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