Fusion X, Digital Infinity

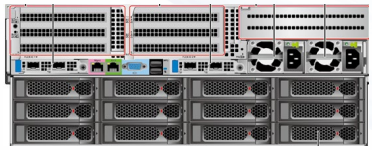
FusionServer
5288 V7 Rack Server

Ultra-large Storage, High Reliability and Security,
Efficient Energy Saving, Intelligent O&M

xFusion Digital Technologies Co., Ltd.

Introduction

Front backplane of the 5288 V7



Rear backplane of the 5288 V7 storage model

The 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, high-performance computing, 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.

Features

Ultra-large Storage

- Ultra-large Storage, 44 x 3.5-inch drives + 4 x NVMe U.2 SSDs
- Supreme Computing Power, Up to 350 W CPUs and 32 x DDR5 DIMMs provide strong computing power, based on Intel's latest Sapphire Rapids CPU.
- Flexible Configuration, Up to 10 x standard PCIe expansion slots

High Reliability and Security

- Heat pipe based remote heat dissipation technology ensures better temperature adaptation, providing 50% better heat dissipation capability than a single heat sink.
- The innovative 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

- Unique algorithm for the lowest power consumption of fans and CPUs: Ensures 5% to 10% lower server power consumption than 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: Dynamically adjusts the CPU working frequency 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.
- Takeover of all vendors' servers, automatic asset location identification, and real-time tracking are supported, achieving 100% stocktaking accuracy.

Technical Specifications

Form Factor	4U rack server
Processor	1 or 2 x 4rd Gen Intel® Xeon® Scalable processors (Sapphire Rapids) with TDP up to 350 W per processor
Chipset	Emmitsburg PCH
Memory	32 x DDR5 DIMMs, at 4800 MT/s
Local Storage	Hot-swappable drive configurations: • 8 to 48 x 2.5" SAS/SATA drives/SSDs • 24 to 44 x 3.5" SAS/SATA drives • 8 x NVMe SSDs • Support E1.s or E3.s SSDs* Flash storage: • 2 x M.2 SSDs
RAID	RAID 0, 1, 10, 1E, 5, 50, 6, or 60; optional supercapacitor for cache data power failure protection, RAID level migration, drive roaming, self-diagnosis, and remote web-based configuration
Network	Expansion capability for multiple types of networks OCP 3.0 NICs are supported. The two FlexIO card slots support two OCP 3.0 NICs, which can be configured as required. Hot swap and PCIe 5.0 is supported.
PCIe Expansion	Up to 10 x PCIe slots, including 2 x FlexIO slots dedicated for OCP 3.0 NICs and 10 x PCIe expansion slots, PCIe 5.0 is supported.
GPU Card	10 x single-width GPU accelerator cards
Fan Module	6 or 8 x hot-swappable counter-rotating fans in N+1 redundancy
Power Supply	2 x hot-swappable PSUs in 1+1 redundancy mode. Supported options include: • 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 1000 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) • 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 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)
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, and 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 and realizes intelligent, automated, 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	5ºC to 35ºC (41ºF to 95ºF), compliant with ASHRAE Classes A1, A2, A3, and 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 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.

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