ZOOM Hard´Server

V5 Rack Servers

Bring Pervasive Intelligent Computing with
Chip Innovation

ZOOM
industry

| High-Density Deployment with Lower OPEX |

1288H V5 (8-drive)

- 2 Intel® Xeon® Scalable processors in 1U space, with 24 DDR4 DIMMs
- Up to 8 2.5-inch hard drives for local storage.
- 2 10GE and 2 GE LAN on motherboard (LOM) ports, and 5 PCIe expansion slots
- Leverages intelligent energy saving to improve performance per watt by 15%; combines intelligent management features to enable up to 93% accuracy for fault locating

Delivers high computing density, which is especially suitable for scenarios such as virtualization, high-performance computing (HPC), and big data analytics.
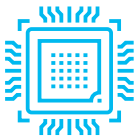
Superior Performance, Ultra-high Density

- Supports 2 Intel® Xeon® Scalable Processors in a 1U space. Its Ultra Path Interconnect (UPI) bus supports rates of up to 10.4 GT/s, and a single CPU supports up to 28 cores. The server supports the Intel® Turbo Boost, hyper-threading, and Advanced Vector Extensions (AVX-512). A single processor delivers up to 40% higher compute power than the previous-generation processor.
- Supports 24 DDR4 DIMMs with a memory capacity of up to 3 TB (configured with 128 GB DIMMs) to meet large-capacity memory application requirements.
- Supports 12 Intel® Optane™ persistent memory (Optane™ PMem) modules (100 series) as volatile or non-volatile storage, which can be used together with 12 DDR4 DIMMs, offering up to 7.5 TB memory capacity (configured with 512 GB Optane™ PMem and 128 GB DDR4 DIMMs) to meet various workload requirements.
- Supports heterogeneous computing acceleration, configurable with 2 single-slot half-height half-length (HHHL) GPU accelerator cards.
- Supports two GE and two 10GE LAN on motherboard (LOM) ports, meeting networking requirements of 98% scenarios with streamlined configuration.

Smart Power Saving and Better Energy Efficiency

- Leverages patented Dynamic Energy Management Technology (DEMT), and multiple power-saving measures such as component hibernation, proportional-integral-derivative (PID) algorithm based fan speed tuning, and active-standby power supplies, driving down overall equipment power consumption by up to 15% without compromising workload performance.
- Supports 80 Plus® Titanium power supply units (PSUs), with up to 96% conversion efficiency and compliant with China Energy Conservation Certification.
- Supports 550 W, 900 W, 1,200 W, and 1,500 W PSU options, flexibly adapting to different power requirements. The 1,200 W and 1,500 W PSUs support DC and high-voltage DC (HVDC) technologies, enabling better energy utilization.
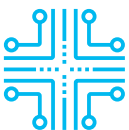
Unmatched Intelligent Manageability, Integration, and Openness

- Uses patented intelligent Fault Diagnosis & Management (FDM) technology, delivering up to 93% accuracy in diagnosing core component faults.
- Integrates FusionDirector for smart entire-lifecycle O&M, boosting deployment and O&M efficiency.
  - » Supports batch OS installation, slashing the average OS installation time of each server from hours to minutes.
  - » Supports automated firmware upgrade, with flexible and configurable upgrade policies for different components and drivers.
  - » Supports stateless computing, allowing for rapid replication of live-network configuration and swift failover.
- Integrates fault diagnosis LEDs on the front panel to display error codes in real time, enabling maintenance personnel to rapidly locate a fault.
- Provides standardized open interfaces and development guides, facilitating seamless integration with third-party management software.

Form factor	1U rack server
Processors	1 or 2 1st Generation Intel® Xeon® Scalable processors (3100/4100/5100/6100/8100 series), up to 205 W 1 or 2 2nd Generation Intel® Xeon® Scalable processors (3200/4200/5200/6200/8200 series), up to 205 W
Chipset platform	Intel C622
Memory	24 DDR4 DIMM slots, 2933 MT/s; up to 12 Intel® Optane™ PMem modules (100 series), 2666 MT/s
Internal storage	Supports hot-swappable hard drives with the following configuration options: • 8 x 2.5-inch SAS/SATA hard drives
RAID support	RAID 0, 1, 1E, 5, 50, 6, or 60; optional supercapacitor for cache power-off protection; RAID-level migration, drive roaming, self-diagnosis, and web-based remote configuration
Network ports	LOM: 2 x 10GE + 2 x GE ports Flexible NIC: 2 x GE, 4 x GE, 2 x 10GE, 2 x 25GE, or 1/2 x 56G FDR IB ports
PCIe expansion	Up to 5 PCIe 3.0 slots, including 1 for a RAID controller card and 1 for a flexible NIC
Heterogeneous accelerator cards	2 single-slot HHHL GPU heterogeneous accelerator cards
Fan modules	7 hot-swappable counter-rotating fan modules with support for N+1 redundancy

Power supply units	2 hot-swappable PSUs with support for 1+1 redundancy and the following configuration options:
	• 550 W AC Platinum PSUs (input: 100 V to 240 V AC, or 192 V to 288 V DC)
	• 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)

Management	• iBMC integrates one dedicated management GE network port to provide comprehensive management features such as fault diagnosis, automated O&M, and hardware security hardening. • iBMC supports standard interfaces such as Redfish, SNMP, and IPMI 2.0; provides a remote management interface based on HTML5/ VNC KVM; supports CD-free deployment and the Agentless feature, simplifying management. • (Optional) Configured with the FusionDirector management software to provide advanced management features such as stateless computing, batch OS deployment, and automated firmware upgrade, enabling smart and automatic entire-lifecycle management.
Operating Systems	Microsoft Windows Server, Red Hat Enterprise Linux, SUSE Linux Enterprise Server, CentOS, Citrix XenServer, VMware ESXi
Security	Power-on password, administrator password, Trusted Platform Module (TPM) 2.0, and security front panel
Operating temperature	5ºC to 45ºC (41ºF to 113ºF), compliant with ASHRAE A3 and A4
Certification	CE, UL, FCC, CCC, and RoHS
Installation suite	L-shaped guide rails, adjustable guide rails, and holding rails
Dimensions (H x W x D)	Chassis with 3.5-inch hard drives: 43 mm x 447 mm x 748 mm (1.70 in. x 17.60 in. x 29.45 in.) Chassis with 2.5-inch hard drives: 43 mm x 447 mm x 708 mm (1.70 in. x 17.60 in. x 27.87 in.)