### **ZOOM Hard'Server**

# **V5 Rack Servers**

Bring Pervasive Intelligent Computing with Chip Innovation





## 2488/2488H V5 Server





# New Option for Distributed Deployment with Higher Computing Efficiency |

2488/2488H V5

- 4 Intel® Xeon® Scalable processors in 2U space, with 32/48 DDR4 DIMMs
- Up to 25 2.5-inch hard drives for local storage, or 8 NVMe SSDs
- 2 10GE and 2 GE LOM ports, and 9/11 PCIe expansion slots
- Delivers lower OPEX than 2U 2-socket servers; leverages intelligent energy saving to improve performance per watt by 15%; combines intelligent management features to enable up to 93% accuracy for fault locating

Unlocks high computing efficiency for scenarios such as virtualization, HPC, database, and SAP HANA in-memory computing.



#### **Superior Performance with Higher Efficiency**

- Supports 4 Intel® Xeon® Scalable Processors (Platinum or Gold series ) in a 2U space. Its Ultra Path Interconnect (UPI) bus supports rates of up to 10.4 GT/s, and a single processor supports up to 28 cores. The server supports 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 32/48¹ DDR4 DIMMs with a memory capacity of up to 4 TB / 6 TB (configured with 128 GB DIMMs) to meet large-capacity memory application requirements.
- The 2488 V5 supports 8 Intel® Optane™ persistent memory (Optane™ PMem) modules (100 series) as volatile or non-volatile storage, which can be used together with 24 DDR4 DIMMs, offering up to 7 TB memory capacity (configured with 512 GB Optane™ PMem and 128 GB DDR4 DIMMs) to meet various workload requirements.
- The 2488H V5 supports 24 Intel® Optane™ persistent memory (Optane™ PMem) modules (100 series) as volatile or non-volatile storage, which can be used together with 24 DDR4 DIMMs, offering up to 15 TB memory capacity (configured with 512 GB Optane™ PMem and 128 GB DDR4 DIMMs) to meet various workload requirements.
- Supports two GE and two 10GE LAN on motherboard (LOM) ports, meeting networking requirements of 98% scenarios with streamlined configuration.
- Supports up to 25 2.5-inch local hard drives (configurable with 8 NVMe SSDs).
- One 2488/2488H V5 saves up to 32%<sup>2</sup> OPEX in the virtualization scenario compared with two traditional 2U 2S servers.
  - <sup>1</sup> The 2488 V5 supports up to 32 DIMMs and 2488H V5 supports 48 DIMMs.

<sup>&</sup>lt;sup>2</sup> Data is derived from Huawei lab tests; actual improvement depends on the real-world scenario.



#### **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 2,000 W Platinum AC power supply unit (PSU), meeting ultra-high performance requirements; leverages the DC and high-voltage DC (HVDC) technologies to improve energy utilization.
- PSUs meet the requirement of China Energy Conservation Certification.



#### 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, driving a leap in 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 a touchscreen LCD panel for fault diagnosis, allowing O&M personnel to quickly locate faults (supported only by the 2488/2488H V5 8-drive models).
- 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.

## 2488/2488H V5 Server



	2488 V5	2488H V5
Form factor	2U rack server	
Processors	2 or 4 1st Generation Intel® Xeon® Scalable processors (5100/6100/8100 series), up to 205 W 2 or 4 2nd Generation Intel® Xeon® Scalable processors (5200/6200/8200 series), up to 205 W	
Chipset platform	Intel C622	
Memory	32 DDR4 DIMM slots, 2933 MT/s; up to 8 Intel® Optane™ PMem modules (100 series), 2666 MT/s	48 DDR4 DIMM slots, 2933MT/s; up to 24 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  25 x 2.5-inch SAS/SATA hard drives  8 x 2.5-inch NVMe SSDs and 16 x 2.5-inch SAS/SATA hard drives Flash storage:  2 M.2 SSDs	Supports hot-swappable hard drives with the following configuration options:  • 8 x 2.5-inch SAS/SATA hard drives  • 25 x 2.5-inch SAS/SATA hard drives  • 24 x 2.5-inch SAS/SATA hard drives  • 8 x 2.5-inch NVMe SSDs and 16 x 2.5-inch SAS/SATA hard drives  • 24 x 2.5-inch NVMe SSDs  Flash storage:  • 2 M.2 SSDs
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	
LOM network ports	2 x GE + 2 x 10GE ports	
PCIe expansion	Up to 9 PCIe 3.0 slots	Up to 11 PCle 3.0 slots
Fan modules	4 hot-swappable fan modules, providing protection against single-fan failures	
Power supply units	2 hot-swappable PSUs, with support for 1+1 redundancy. The following PSUs are supported:  • 2000 W AC Platinum PSUs  1800 W (input: 200 V to 220 V AC, or 192 V to 200 V DC)  2000 W (input: 200 V to 240 V AC, or 200 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)  • 900 W AC Platinum PSUs (input: 100 V to 240 V AC, or 192 V to 288 V DC)  • 1200 W DC PSUs (input: -38.4 V to -72 V DC)	
Management	<ul> <li>iBMC integrates one dedicated management GE network port to provide comprehensive management features such as fault diagnosis, automated O&amp;M, and hardware security hardening.</li> <li>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.</li> <li>(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.</li> </ul>	
Operating Systems	Microsoft Windows Server, Red Hat Enterprise Linux, SUSE Linux Enterprise Server, CentOS, Citrix XenServer, VMware ESXi For details, visit https://support.huawei.com/onlinetoolsweb/ftca/indexEn?serise=2.	
Security	Power-on password, administrator password, Trusted Platform Module (TPM) 2.0, secure startup, and security front panel	
Operating temperature	5°C to 45°C (41°F to 113°F), compliant with ASHRAE Classes A3 and A4	
Certification	CE, FCC, CCC, RoHS	
Installation suite	L-shaped guide rails, adjustable guide rails, and holding rails	
Dimensions (H x W x D)	86.1 mm x 447 mm x 748 mm (3.39 in. x 17.60 in. x 29.45 in.)	

#### ZOOM Hard'Server Ltda.

Edifício Office Green - 816 R. da Praça, 241 - Pedra Branca, Palhoça - SC, 88137-086 Tel: (48) 3279-0400 | 0800 643 5890 e-mail: contato@zoomtecnologia.com.br www.zoomtecnologia.com.br

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