

H-4248

High-Reliability, High-Density Hyper-Converged Server



UNICOM Engineering's H-4248 enterprise hyper-converged appliance delivers the industry's best combination of high-performance and high-reliability for high density applications. This system provides a scalable 4U rack mount solution, able to support up to 2 Intel Xeon Scalable processors, up to 6 PCIe expansion cards and up to 48 3.5" hot swap drives. The H-4248 allows software vendors to customize the system solution to match high-density storage and I/O requirements. Featuring RAID options, hot swap drives and redundant hot swap power supplies to ensure maximum reliability and uptime, customers can build a greater variety of enterprise mission-critical, mixed workloads, security, communications, call center, video server, storage solutions and energy-efficient general purpose data center building blocks.

Features and Benefits

Built for Performance

- Supports up to two 8-to-24-core Intel Xeon Scalable Cascade Lake Microarchitecture processors for maximum performance and density
- Supports the Intel C628 chipset with Intel Quick Assist technology for security and compression acceleration capabilities
- Supports up to 16 DDR4-2933 MT/s ECC DIMMs including optional Intel Optane NVDIMMs for faster application execution and greater overall stability
- Support up to 2 M.2 PCIe drives for faster operating system boot
- Supports up to 48 3.5" SAS/SATA hot swap drives allow ideal customization to meet the storage needs of various applications

Built for High-Reliability Applications

- Enterprise class SAS / SSD drives and RAID ensure maximum reliability
- Hot swap hard drives and power supplies ensure low Mean-Time-To-Repair (MTTR)
- Redundant hot swap power supplies ensure high reliability in case of a failure

AT A GLANCE

- 2x 8-to-24 Core Intel Xeon 6200 Series Cascade Lake processors
- Intel C628 chipset with Intel Quick Assist technology
- 16x DIMM slots, 8 per processor
- 48x 3.5" top-load SAS/SATA hot swap drives with embedded SATA Software RAID technology
- 2x M.2 connectors (x2 & x4 PCIe & SATA)
- 6x PCIe Gen3 slots
- 2x RJ45 10 GbE LAN ports
- 2x external USB 3.0 ports & 4x external USB 2.0 port
- 1x external DB15 video port
- 1x external RJ45 serial port
- Integrated Baseboard Management Controller (BMC) with dedicated RJ45 remote management port
- 2x 1100W 80 Plus Gold hot swap power supply units

H-4248

technical specifications



H-4248 Rear View

Form Factor

- 4U rack mount

Rack Dimensions (HxWxD)

- 6.9" (176mm) x 17.6" (447mm) x 32.2" (818mm)

Processor Support

- Support for one or two Intel Xeon Scalable 6200/5200/4200 series Cascade Lake Processors
- LGA3647-0, Socket P
- Maximum supported Thermal Design Power (TDP) of up to 150W

Chipset

- Intel C628 chipset with Intel Quick Assist technology

Memory

- 16x DIMMs slots, 8 DIMM slots per processor
- 6x memory channels per processor
- Support up to 4x Intel Optane Non-Volatile DIMM (NVDIMM)
- DDR4-2933 MT/s ECC Registered

Storage Bay Options

- 48x 3.5" SAS/SATA hot swap drive bays
- 2x 2.5" SATA SSD back of chassis hot swap drive bays
- 2x M.2 connectors, M-Key, x2 & x4 PCIe & SATA, 2280 form factor

Storage Options

- 2.5"/3.5" SAS/SATA HDD up to 12 Gb/s, 7.2K RPM – top load
- 2.5" SATA SSD, 6 Gb/s – rear drive bays
- M.2 SATA/NVMe SSD
- Support up to 4x Intel Optane Non-Volatile DIMM (NVDIMM)

Integrated LAN

- 2x RJ45 10 GbE LAN ports

PCIe Cards and Add-in Options

- 1 GbE, 10 GbE, 25 GbE, 50 GbE NICs, Copper, Fiber
- Enterprise RAID Controllers
- SAS/SATA Host Bus Adapters, internal & external
- 16 Gb Fibre Channel

External I/O

- 1x Video ports (DB15) – rear
- 2x 10 GbE NIC ports (RJ45) – rear
- 2x USB 3.0 ports – rear
- 2x USB 2.0 port – rear
- 2x USB 2.0 port – front
- 1x Serial port (RJ45) – rear
- 1x Dedicated server management NIC port (RJ45) – rear

Server Management

- Integrated Baseboard Management Controller (BMC), IPMI 2.0 Compliant
- Intel Remote Management Module 4 Management NIC for dedicated network interface
- Optional Intel Remote Management Module 4 Lite for Remote Keyboard, Video, Mouse (KVM) support

Security

- Optional Intel Trusted Platform Module (TPM)

Front Control Panel

- 48x drive activity LEDs, 8x Fan failure LEDs
- System Reset Button, Power On/Off Button and Status LED
- Global Failure Indicator, Unit ID Switch/LED

System Fans

- 8x hot swap system fans
- 1x power supply fan for each power supply module

Power Supply Options

- 2x hot swap, 1+1 redundant capable power supply
- 1100W 80 Plus Gold power supply units

OS Support

- Microsoft Windows Server
- Red Hat Enterprise Linux
- SuSE Enterprise Linux
- Ubuntu Linux

Regulatory Approval

Expected Certifications:

- National Recognized Testing Laboratory (NRTL), Conforming European (CE) Mark / Safety, Certification Body (CB)
- Federal Communications Commission (FCC) Parts 15 Class A, Voluntary Control Council for Interference (VCCI), Australia & New Zealand Regulatory Compliance Mark (RCM)
- Restriction of the use of certain Hazardous Substances (RoHS) Compliant

Environment

- Operating Temperature: 10°C to 35°C (50 to 95°F)
- Non-Operating Temperature: -40°C to 70°C (-40 to 158°F)
- Operating Humidity: 8%-90%, non-condensing
- Non-Operating Humidity: 5%-95%, non-condensing

Warranty

- Standard two-year warranty, return-to-factory
- Optional extended warranty and advance replacement service

NOTE: These specifications should be viewed as preliminary and final specifications may vary.

Support and Maintenance Services

UNICOM Engineering offers a variety of support and maintenance service programs to ensure high availability, rapid response, effective troubleshooting, fast parts replacement and 24-hour support.

Please visit www.unicomengineering.com/supportservices for more information.

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