



S-1600 R4

High-Reliability, Medium-Density Enterprise Computing Systems



UNICOM Engineering's S-1600 R4 offers high-reliability in a single CPU package. Combining the performance of a single Intel Xeon E5-2600/1600 v4 series Haswell Microarchitecture processor with redundant power and up to ten hot swap hard drives with integrated RAID, this platform offers the maximum reliability and uptime required for business critical applications. With three available expansion slots, the S-1600 R4 is designed to meet various expansion demands while maintaining a 1U form factor.

Features and Benefits

Built for Performance

- Supports a single Multi-core Intel Xeon E5-2600/1600 v4 Series Haswell Microarchitecture processor series for maximum performance and density
- Supports up to 8 DDR4-2400 MT/s ECC DIMMs for faster application execution and greater overall stability
- Supports up to 10 SATA/SAS HDD/SSD allow ideal customization to meet the storage needs of various applications

Built for High Reliability Applications

- Enterprise class SAS HDD/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

- Single 4-to-22 Core Intel Xeon E5-2600/1600 v4 Series Haswell processors
- Intel C612 chipset
- Up to 8 Dual In-Line Memory Modules (DIMMs) Double Data Rate 4 (DDR4) – 2400 MT/s
- Up to ten 2.5" or up to four 3.5" SATA/SAS HDD/SSD
- Embedded SW-RAID technology for SATA RAID levels 0/1/5/10
- 3 PCIe Gen3 slots
- Two 1 GbE LAN ports
- One Dedicated IPMI LAN Port
- Four USB 3.0/2.0 ports
- Redundant 750W / 500W AC power supply units



◀ 1U Four x 3.5" Hot Swap HDD Server Chassis

◀ 1U Ten x 2.5" Hot Swap HDD Server Chassis

S-1600 R4

technical specifications



S-1600 R4 Rear View

Form Factor

1U rack mount

Rack Dimensions (HxWxD)

- 2.5" Chassis: 1.70" (43 mm) x 17.2" (437 mm) x 23.5" (597 mm)
- 3.5" Chassis: 1.70" (43 mm) x 17.2" (437 mm) x 25.6" (650 mm)

Processor Support

- Support for one Intel Xeon E5-2600/1600 v4 series Haswell Processors
- LGA 2011-3, Socket R3
- Maximum supported Thermal Design Power (TDP) of up to 145W

Chipset

Intel C612 chipset

Memory

- 8 DIMMs slots
- DDR4-2400 MT/s ECC Registered
- DIMM Sizes: 4 GB, 8 GB, 16 GB, 32 GB

Storage Bay Options

- Four x 3.5" SATA3/SAS3 hot swap drive bays
- Eight x 2.5" SATA3/SAS3 + 2 x 2.5" SATA3 hot swap drive bays (total 10)

Storage Options

- 2.5"/3.5" SAS/SATA HDD/SSD up to 12 Gb/s
- eUSB Solid State Device (SSD)
- SATA Disk-On-Module (DOM)
- PCIe Non-Volatile Memory Express (NVMe) SSD

Riser Cards

- Support for two riser card slots, max three PCIe
- Riser #1: 2 x PCIe Gen3 x16 Full-Height Full-Length (FHFL)
- Riser #2: 1 x PCIe Gen3 x8 Half-Height Half-Length (HHHL)

Add-in PCIe Card Options

- 1 GbE, 10 GbE, 40 GbE NICs, Copper, Fiber, Bypass
- Entry / Enterprise RAID, battery backup
- SAS Host Bus Adapter (HBA), Internal, External

Integrated RAID Support

- Intel Embedded SATA SW-RAID support with RAID levels 0/1/5/10

External I/O

- One x DB-15 VGA port
- Two x RJ45 1 GbE LAN ports - rear
- One x RJ45 1 GbE Dedicated IPMI LAN port - rear
- Four x USB 2.0/3.0 ports - rear
- One x RS232 Serial Com port - rear

Server Management

- Support for Intelligent Platform Management Interface v.2.0
- IPMI 2.0 with virtual media over LAN and KVM-over-LAN support
- ASPEED AST2400 BMC with 10/100/1000 Mbps

Security

Chassis intrusion detection

System Fans

- 2.5" Chassis: 4 x 40x28 mm 4-pin PWM Cooling Fans + one x Additional fan to cool add-on cards
- 2.3" Chassis: 4 x 40x28 mm 4-pin PWM Cooling Fans

Power Supply Options

- Two x hot swap redundant high-efficiency power supply
- 2.5" Chassis: 750W AC Platinum
- 3.5" Chassis: 500W AC Platinum

OS Support

Windows Server 2008 / 2012

Regulatory Approval

- 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)
- Restriction of the use of certain Hazardous Substances (RoHS) Compliant

Environment

- Operating Temperature: 10°C to 35°C (50 to 95°F) with the maximum rate of change not to exceed 10°C per hour.
- Non-Operating Temperature: -40°C to 70°C (-40 to 158°F)
- Operating Relative Humidity: 8%-95%, non-condensing
- Non-Operating Humidity: 5%-90%, non-condensing

Warranty

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

NOTE: specifications subject to change without notice.

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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