N-2500 R5

Next Generation Carrier-Class Application Platform

UNICOM Engineering's N-2500 R5 Carrier Grade Server combines performance, ruggedness, reliability, and long life in a NEBS-3 and ETSI-compliant 2U chassis. This high-performing, rugged server is an excellent choice for the demanding environment and limited space of the Telco central office, as well as for network data centers. It enables OEMs and TEMs to create specialized, value-added solutions for a variety of telecom applications including unified messaging, SoIP, call control, streaming media and signaling gateways, and operational system support. In addition, the N-2500 R5 is ideal for other types of rugged applications, such as in the Military and Medical segments, where meeting tough environmental requirements is critical.

Features and Benefits

- Dual 8-core Intel Xeon E5-2600 (Sandy Bridge) processors enable significant performance improvement of multi-threaded applications.
- Scalable up to 16 DIMMs, up to six SAS/SATA drives and up to six PCIe cards for a customizable best-fit deployment and application solution.
- PCI Gen 3 doubles the effective bandwidth and adds protocol enhancements to increase end-system performance.
- Carrier-class hardware SAS drives and RAID for maximum reliability.
- Purpose-built for converging telecom application deployments.
- 20-inch deep form factor for limited space deployments.
- Advanced server management and Telco alarming ensure maximum uptime and support central office alarm systems.
- Redundant hot swap power and cooling and hot swap hard drives reduce Mean-Time-To-Repair (MTTR) and increase Mean-Time-Between-Failures (MTBF).
- Long lifecycle support to reduce customer risk with fewer platform transitions and greater lifecycle stability.

AT A GLANCE

Built-in Reliability

- Supports up to six hot swap 2.5" SAS/SATA HDDs with RAID levels 0/1/5/10 storage strategies
- Redundant hot swap 650W AC or DC power supplies
- Redundant cooling fans

Performance

- Two Intel Xeon E5-2600 Series (Sandy Bridge) 8-core / 6-core processors with the Intel C600 (Patsburg) chipset
- Up to 256GB DDR-1600 ECC registered memory
- 80 PLUS silver or better power supplies
- PCIe Gen3 expansion slots

Expansion

- Up to two CPUs
- Up to 16 DIMM slots
- Up to six HDDs
- Up to six PCIe slots

N-2500 R5 AC Power, Rear View

N-2500 R5 DC Power, Rear View

N-2500 R5 technical specifications

Chassis
- 2U, ruggedized, zinc plated hardened
- HxWxD: 3.45 inches (87.6 mm) x 17.14 inches (435.3 mm) x 20 inches (508 mm)

CPU
- 2 LGA 2011 (Socket R) processor sockets
- Intel Xeon E5-2600 Series (Sandy Bridge) Processors
- E5-2658 (8-cores, 2.1 GHz, 20 MB cache, 95W, Embedded)
- E5-2648L (8-cores, 1.8 GHz, 20 MB cache, 70W, Embedded)
- E5-2620 (6-cores, 2.0 GHz, 15 MB cache, 95W, Embedded)

Chipset
- Intel C600 (Patsburg) chipset with support for optional Storage Option Select keys

Memory
- 16 DIMM slots – 2 DIMM slots/channel – 4 memory channel per processor
- Memory DDR3 data transfer rate of 1600 MT/s
- 2 GB, 4 GB, 8 GB,16 GB DIMMs supported

Storage Options
- Up to six x 2.5" hot-swap Hard Disk Drives (HDD) / Solid State Drives (SSD)
- SAS: 146 GB, 300 15K RPM
- SAS: 300 GB, 600 GB, 900 GB 10K RPM
- SSD: 40 GB, 80 GB, 120 GB, 160 GB, 300 GB, 600 GB
- Flash Module:4 GB, 8 GB EUSB
- Secure Data (SD) flash media: 2 front accessible device ports

PCIe Expansion Options
Up to six Slots: Combination of FH/FL PCIe Gen2/3 x16, FH/FL PCIe Gen2/3 x 8, LP PCIe Gen3 x8, and LP PCIe Gen3 x16

SAS/SATA Controller
- Intel C600-A Chipset with embedded SW SATA RAID levels 0,1,5,10;
- Optional Storage Option Select keys to support SAS, ports count & RAID 5 combinations
- Optional H/W RAID SAS/SATA Controllers via PCIe cards

Management Controller
- Integrated BMC (iBMC), IPMI 2.0 compliant
- Optional Intel Remote Management Module 4 (RMM4) and dedicated network management port.

Telco Alarm Mgmt.
- Simple Network Management Protocol (SNMP) event indications of faults
- Dry-contact for frame level alarms (critical, major, minor, user defined) via Telco alarm connector - rear

Front Panel Display
Switches / button and LEDs:
- Power button / LED
- Reset button
- Chassis ID button / LED
- System status LED, NIC activity LED
- HDD activity LED, Fan status LED

Network I/F (LAN)
- Integrated Intel i350-AM4 4-port GbE controller
- 4 RJ-45 Ethernet connectors - rear

Network I/O Options
- Dual Port GbE Server Adapter, PCIe
- Dual Port 10 GbE Server Adapter Fiber, PCIe
- Quad port server adapter, PCIe
- Quad Port GbE Server Adapter Fiber, PCIe

External Storage I/O Options
- Dual Port 8 GB FC HBA, PCIe
- 8-Port SAS Expansion, PCIe

Power
- Two redundant hot swap Power Supply Units (PSU)
- 650W AC (100-240V AC) or DC (-48V DC or -60V DC)
- PSUs support high 80 plus efficiency and PMBus power management.

USB
5 External USB-2.0 ports; 4-rear, 1-front

Video
- Integrated Matrox G200 2D Video Graphics Controller
- 1 DB-15 video connector – rear

Cooling
Multiple redundant hot swap cooling fans

Environment
Temperature:
- Operating temperature range: 5 to 40°C (41 to 104°F)
- Non-operating temperature range: -40 to 70°C (-40 to 158°F)

Humidity:
- Non-operating humidity: 95%, non-condensing at temperatures of 23°C (73°F) to 40°C (104°F)

Regulatory / Compliance
Safety:
- UL 60950, CSA22.2 No 60950, EN60950

Emission:
- FCC Part 15 Class A, Canada ICES-003 Class A, Japan VCCI Class A, EN55022 Level A & EN55024 (Immunity), CISPR-22

Warranty
Covered by our standard two-year warranty with optional support and maintenance warranty Services

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.

sales@unicomengineering.com
unicomengineering.com
twitter.com/UNICOMEng
facebook.com/UNICOMEng
+1 800.977.1010
linkedin.com/company/unicomengineering

595-1165-00 R0C 073118