



Sun Netra™ X4200 M2 Server

Experience extreme flexibility and performance for your next-generation networks



Highlights

- Telcordia Network Equipment Building Standard (NEBS) Level 3 certification and ETSI compliance, for reliable operation in severe environmental conditions
- Space-efficient, less-than-20 in.-deep, rack-optimized 2U design
- Enhanced system uptime supported by redundant AC or DC power supplies, hot-pluggable disk drives, and support for hardware RAID (0 + 1)
- Simplified, state-of-the-art maintenance with Integrated Lights Out Manager (ILOM)
- Exceptional expandability and I/O performance with four PCI slots, four Ethernet ports, and support for DDR2 memory
- Extreme storage flexibility with the option of supporting four internal disk drives and no DVD, or two internal disk drives with a DVD
- Choice of operating systems: the Solaris™ OS, Linux, and Windows Server 2003



The Sun Netra™ X4200 M2 server combines the proven ruggedness and reliability of Sun Netra products with the performance and efficiency of AMD Opteron™ processors to deliver dramatic application throughput while conserving energy and space. This compact, power-saving server also increases flexibility, with a choice of operating systems and storage capacity.

Power and efficiency

With up to two Dual-Core or Quad-Core AMD Opteron processors, the Sun Netra X4200 M2 server packs massive compute power into its less-than-20 in.-deep 2U enclosure. Its high compute density and energy-efficient processors can help relieve space, power, and cooling constraints in today's infrastructures and datacenters.

Flexibility and choice

The carrier-grade Sun Netra X4200 M2 server offers flexibility and choice. It runs both 32-bit and 64-bit applications on multiple operating systems, with either two or four internal hard drives to maximize storage capacity. In addition to running the Solaris Operating System, the server also provides support for Linux and Windows Server 2003, offering customers unmatched agility, efficiency, and investment protection.

The Sun Netra X4200 M2 server also integrates four Gigabit Ethernet ports to provide connectivity for high-speed, high-bandwidth networking.

Extreme reliability

As with other Sun Netra servers, the Sun Netra X4200 M2 server is a ruggedized NEBS Level 3-certified and ETSI-compliant server, making it ideal for the most demanding applications in the toughest environments. System uptime is also enhanced by redundant, hot-swappable AC/DC power supplies and hot-pluggable hard disk drives. Additionally, the Sun Netra X4200 M2 server comes with ILOM, enabling simple remote monitoring and management from anywhere on the network.

Sun Netra X4200 M2 Server Specifications

Processor

Up to two Dual-Core AMD Opteron processors Model 2214 HE (embedded class) or up to two Quad-Core AMD Opteron processors Model 23HF HE (embedded class)

Cache per processor

1 MB L2 cache per core

Main memory

Eight DIMM slots (four DIMM slots per CPU socket), DDR2-667 Registered ECC DIMMs (128-bit plus ECC data bus), system max. of 32 GB; support 2 GB and 4 GB DIMMs

System architecture

Three 8.0 GB/sec HyperTransport™ links per processor and 10.7 GB/sec access between each processor and memory

Standard/integration interfaces

Network: Four 10/100/1000 Mb/sec Ethernet

Network management: One 10/100 Mb/sec Ethernet port

Serial management: One TIA/EIA-232-F asynchronous RJ-45 port

USB: Two 2.0 USB ports (rear)

Expansion bus: Three full-height PCI-X slots for 64-bit, 133 MHz — 2x full-length, 1x-half-length; one PCI Express slot for MD2 low-profile cards (support x1, x4, and x8 width cards)

SAS: Four-channel SAS interface, internal access only

Video: One VGA video port — HD-15

Alarms: Four fail-safe dry contact alarms: critical, major, minor, and user — DB-15

Mass storage and media

Internal disk option 1: Up to two 146 GB, 2.5 in., 10,000 rpm SAS disks, providing max. capacity of 292 GB; internal hardware RAID 1 (mirroring) and RAID 0 (striping) supported, internal DVD RW drive

Internal disk option 2: Up to four 146 GB, 2.5 in., 10,000 rpm SAS disks, providing max. capacity of 584 GB; internal hardware RAID 1 (mirroring) and RAID 0 (striping) supported, no DVD

Software

Operating systems: Supports the Solaris OS — beginning with the Solaris 10 OS 11/06 (64-bit), Red Hat Enterprise Linux, SUSE Linux Enterprise Server, Windows Server 2003

Remote management

Management: ILOM service processor providing: DMTF CLP-based CLI over SSH, Web-based GUI over HTTPS/HTTP, IPMI 2.0, SMP v1, v2c, and v3, remote graphical access over Ethernet and remote storage over Ethernet; Sun N1 System Manager support

Power supplies

- Two redundant DC or AC hot-swappable power supplies
- Maximum power supply rating: 550 W

Environment

DC power: -48 V DC or -60 V DC (12.7 A at -48 V DC, 10.2 A at -60 V DC)

AC power: 100–240 V AC, 50–60 Hz (6.5 A at 100–120 V AC, 3.2 A at 200–240 V AC)

Operating temperature: 5° C to 40° C (41° F to 104° F), short-term -5° C to 55° C (23° F to 131° F)

Operating relative humidity: 5–85%, noncondensing

Short-term relative humidity: 5–90%, noncondensing, but not to exceed 0.024 kg water/kg dry air (0.053 lb. water/2.205 lbs. dry air)

Operating altitude: Up to 3,000m (9,850 ft.) at 40° C

Nonoperating temperature: -40° C to 70° C (-40° F to 158° F)

Nonoperating relative humidity: Up to 93%, noncondensing, 38° C (100.4° F) max. wet bulb

Nonoperating altitude: Up to 12,000m (40,000 ft.)

Acoustic noise: Operating/idling 7.0 B (LwAd: 1 B = 10 dB)

ETSI: EN 300 019-2-1,2,3, Class 1.2, 2.3, 3.1E (except -5° C cold start, condensing humidity, and rain)

NEBS: NEBS Level 3 certified by Telcordia

Seismic: GR-63-CORE requirements for Earthquake Zone 4

Learn More

To learn more about the Sun Netra X4200 M2 server, go to: sun.com/netra/x4200.

Dimensions and weight

Height: 89mm (3.5 in.)

Width: 442mm (17.4 in.) including bezel

Depth: 508mm (20 in.) max.

Weight: 15.88 kg (35 lbs.) fully configured without PCI cards (two-disk option)

16.87 kg (37.2 lbs.) fully configured without PCI cards (four-disk option)

Enclosure: Fits into standard 19 in.-wide rack. Rack kit includes: 19 in. four-post. Additional rack kits available: 19 in. two-post; 23 in. two-post; 600mm x 600mm; and 19 in. four-post slide, adjustable

Regulations (meets or exceeds the following requirements)

Safety: UL/CSA 60950-1, EN 60950-1, IEC 60950-1 CB Scheme with all country deviations, IEC 825-1, 2, and CFR 21 part 1040

Ergonomics: EK1-ITB-2000

RFI/EMC: EN 55022/CISPR 22 Class A, FCC CFR 47 Part 15 Class A, EN 61000-3-2, EN 61000-3-3

Immunity: EN 55024/CISPR 24

Telecommunications: EN 300 386: Telcordia SR 3580 NEBS Level 3 regulatory markings, CE, FCC, ICES-003, C-Tick, VCCI, GOST-R, MIC, UL/cUL, UL/DEMKO/GS, UL/S-Mark, BSMI, CCC

Other: Restriction of Hazardous Substances (RoHS) labeled, per WEEE (Waste Electrical and Electronics Equipment) Directive (2002/95/EC)

Warranty

Duration: One year

Hardware coverage/response time: Business hours, next business day

Hardware phone coverage/response time: Business hours, within eight hours

Delivery method: Parts exchange or onsite

