## **SUN NETRA X4270 SERVER**



HIGHEST PERFORMING NETRA X86 CARRIER-GRADE RACK SERVER

- Intel Xeon processor 5500 series quad-core, two-socket, 20-inch-deep server in 2RU
- NEBS<sup>™</sup> Level 3 certification and ETSI compliance
- 18 memory DIMM slots
- · Six PCI slots
- · Four Ethernet interfaces
- Redundant AC or DC power supplies and hot-pluggable disk drives
- · ILOM management
- Operating systems choice: Oracle Solaris, Oracle Linux, Oracle VM, Enterprise Linux, or Windows

#### **BENEFITS**

- Cost efficiencies with reduced overall system power and cooling demands
- Reliable operation in severe environmental conditions
- Ideally suited for memoryintensive applications
- High expandability with multiple PCI slots and network interfaces
- High reliability with an enhanced system uptime
- Simplified management with monitoring and management from anywhere on the network
- Broad range of supported OSs offers flexibility and investment protection

Oracle's Sun Netra X4270 server is an Intel processor-based carrier-grade system designed for network infrastructure applications such as services over Telco IP networks. When compared with the previous generation server, Sun Netra X4270 doubles the performance and lowers the power consumption requirements while maintaining the same footprint. This reliable, scalable and easy to manage server is designed to meet today's increasing requirements of the Telco networks for more compute power, memory and I/O bandwidth.



The Sun Netra X4270 server doubles the compute performance while reducing overall system power and cooling requirements.

#### **Product Overview**

Based on the Intel Xeon processor 5500 series with Hyper-Threading and Turbo Boost Technologies, the carrier-grade, NEBS Level 3 certified and ETSI compliant Sun Netra X4270 server combines cutting-edge performance with the ruggedness and reliability of the Sun Netra server family. The system supports up to 8 CPU cores doubling the number of compute threads when compared with the previous generation Sun Netra X4250 in a compact 2RU enclosure.

The system offers a large memory footprint with 18 DIMM slots making it ideally suited for memory-intensive applications. Storage connectivity bandwidth is also doubled from the previous generation server with the upgrade to SAS-2 interfaces. For even more flexibility, the Sun Netra X4270 server supports four internal disk drives, six high-bandwidth PCIe 2.0 slots—some full-height and full-length—and integrates four GbE ports to provide connectivity for high-speed, high-bandwidth networking. Redundant hot-swappable AC or DC power supplies and hot-pluggable hard disk drives enhance the system's uptime.

In addition, the Sun Netra X4270 server is offered with the Sun Integrated Lights Out Manager (ILOM), which enables simple remote monitoring and management from anywhere on the network. Finally, the Sun Netra X4270 supports a range of Operating Systems offering flexibility and investment protection.



## Sun Netra X4270 Server Specifications

## **Architecture**

Processor

Intel Xeon processor L5518

Cache

Level 1: 32 KB instruction and 32 KB data L1 cache per core

Level 2: 256 KB unified (data and instruction) L2 cache per core

Level 3: 8 MB shared inclusive L3 cache per processor

Main Memory

18 DDR3 DIMM slots (nine DIMM slots per CPU socket): 4 GB and 8 GB DIMMs for a maximum of 144 GB per system.

## System Architecture

Based on Intel Xeon processor 5500 series and Intel 5520 Chipset

## **Standard Integration Interfaces**

Network

Four 10/100/1000 Mbps Ethernet

USB

Two 2.0 USB ports (rear)

**Expansion Bus** 

- Two PCIe slots for full-height, full- length cards (x8 electrical, x16 mechanical)
- Four PCIe slots for MD2 low-profile cards x8 electrical/x8 mechanical one of these slots is used for the internal SAS host bus adapter (HBA)

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

- Up to four SAS-2 disks with no DVD-R/W, or up to two SAS-2 disks with DVD-R/W
- ☐ Optional RAID levels: 0, 1, 1E, 5, 5EE, 6, 10 with optional Battery Backup Write Cache (BBWC) via optional HBA PCIe Card.

## Software

**Operating Systems** 

- · Oracle Solaris
- · Oracle Linux
- · Oracle VM
- Red Hat Enterprise Linux
- SUSE Enterprise Linux
- · Microsoft Windows Server



## **Remote Management**

## Management

Oracle Integrated Lights Out Manager (ILOM)

- One dedicated 10/100Base-T Ethernet network management port
- In-Band, Out-of-band and Sideband Network Management access via any one of the 4 main Ethernet ports of the server
- One RJ-45 serial management port

Features and facilities

- DMTF-style Command-Line Interface
- Support for access via SSH 2.0, HTTPS, RADIUS, LDAP, and Microsoft Active Directory
- Browser-based GUI for control of the system through a graphical interface
- IPMI 2.0; SNMP v1, v2c, and v3
- Remote management with full keyboard, video, mouse, storage (KVMS) redirection and remote media capability (floppy, DVD, CD, and more)
- Monitor and report system and component status on all FRUs

#### **Power Supplies**

- Two 1+1 redundant AC or DC hot-swappable power supplies
- Maximum DC power supply rating of 660 W
- Maximum AC power supply rating of 760W

#### **Environment**

- DC Power: -48 V DC or -60 V DC
- AC Power: 100-240 V AC, 50-60 Hz
- 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% to 85%, noncondensing
- Short-Term Relative Humidity: 5% to 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 3,000 m (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, 40°C (104°F)
- Nonoperating Altitude: Up to 12,000 m (40,000 ft.)
- Acoustic Noise: Operating/idling 7.2 B (LwAd: 1 B = 10 dB)
- ETSI: EN 300019-2-1, 2, 3, Class 1.2, 2.3, 3.1E (except condensing humidity and rain)
- · NEBS: NEBS Level 3 certified by Telcordia
- Seismic: GR-63-CORE requirements for Earthquake Zone 4

## **Dimensions and Weight**

- Height: 87.1 mm (3.43 in.)
- Width: 445 mm (17.52 in.) including bezel
- Depth: 526 mm (20.71 in.) max., to PSU handles
- Depth: 501 mm (19.72 in.) max., to rear I/O
- Weight: 17.5 kg (38.5 lb.) fully configured without PCI cards

#### Regulations

• Safety: UL/CSA C22.2 60950-1, 2nd Edition EN 60950-1, 2nd Edition, IEC 60950-



# RELATED PRODUCTS AND SERVICES

This highest performing X86
Netra rack server in a 2RU
carrier-grade package
doubles the compute
performance while reducing
overall system power and
cooling demands. This
reliable, scalable and easy
to maintain server is
designed to meet today's
increasing requirements of
the telco networks for more
compute power, memory
and I/O bandwidth.

#### **RELATED PRODUCTS**

Sun Netra X4250 server is the previous generation Intel processor-based server.

#### RELATED SERVICES

The following services are available from Oracle Support Services:

- Installation
- Maintenance

 $1\ :\! 2005\ 2nd$  Edition CB Scheme with all national differences, IEC 825-1, 2, and CFR 21 Part 1040

- RFI/EMC: EN55022:2006+A1:2007/CISPR22:2005+A1:2005+A2:2006 EN300 386 V1.4.1 Class A, FCC CFR 47 Part 15 Class A
- Immunity: EN 55024/CISPR 24, EN 61000-3-2, EN 61000-3-3
- Telecommunications: EN 300 386
- Regulatory markings: CE, FCC, ICES-003, C-Tick, VCCI, GOST-R, MIC, UL/cUL, S-Mark, BSMI, CCC
- Other: Restriction of Hazardous Substances (RoHS) labeled, per WEEE (Waste Electrical and Electronics Equipment) Directive (2002/95/EC)

#### Warranty

The Sun Netra X4270 server comes with a one-year warranty. For more information visit oracle.com/sun/warranty for Oracle's global warranty support.

#### **Contact Us**

For more information about the Sun Netra X4270 please visit oracle.com or call +1.800.ORACLE1 to speak to an Oracle representative.



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