

NETRA SPARC T4-2

EXTREME SCALABILITY AND DENSITY WITH CARRIER-GRADE AVAILABILITY

KEY FEATURES

- NEBS™ Level 3 certification and ETSI compliance
- SPARC T4 processor is the industry's first processor designed for application network infrastructure workloads
- Redundant hot-swappable AC or DC power supplies and hot-pluggable disk drives
- Massive I/O performance and expandability

KEY BENEFITS

- Reliable operation in severe environmental conditions
- Built in no-cost virtualization technology with Oracle VM Server for SPARC and Oracle Solaris Zone
- Integrated on-chip cryptographic acceleration offers security for telecommunications data centers
- Onboard 10 Gigabit Ethernet (GbE) for secure computing and high-speed networking
- Multidimensional efficiency with record breaking energy and space efficiency, and the industry's best performance per watt



Designed to meet the most demanding telecommunication applications, like OSS/BSS workloads, the Netra SPARC T4-2 server is the right

choice for consolidating your telecommunication datacenter applications. As the highest-density Netra SPARC T4 server available in a rack mount form factor, the Netra SPARC T4-2 delivers massive throughput, scalability, security, and built-in no-cost virtualization

Product Overview

The Netra SPARC T4-2 will help maximize the ROI and create new enhancement to complex datacenters. The re-emergence of the telecom industry provides a number of opportunities for growth on a foundation of open-standards-based technology.

The multi-socket Netra SPARC T4-2 is designed to support a multi-core, multithreaded server on a chip design that increase reliability and performance as it minimizes cost, power demand and components required- reducing overall operating costs.

The SPARC T4 processor delivers five times single-threaded performance improvement over the previous generation SPARC T3 processor, making the Netra SPARC T4-2 ideal for broad range of telecommunication network infrastructure workloads.

The Netra SPARC T4-2 comes powered by two SPARC T4 processors with 8 cores and up to 128 simultaneous threads. This highly dense rack mount server, offers 32 DIMM slots, up to eight hot-pluggable 2.5 inch drives, integrated 10GbE networking, and built-in PCI Express Generation 2 expansion. Oracle Solaris and virtualization software such as the Oracle Solaris Zone and Oracle VM Server for SPARC technology make the Netra SPARC T4-2 a cost effective platform for large-scale telecommunication data center consolidation.

The server supports hot swappable components such as high efficiency AC or DC power supply modules and disk drive. It is equipped with an Oracle Integrated Lights Out Manager (ILOM) service processor that offers industry-standard protocols for standalone system management as well as integration with many industry leading management systems.

Netra SPARC T4-2 Specifications

Architecture
Processor <ul style="list-style-type: none"> Two 8-core 64 thread 2.85GHz SPARC T4 processor Up to 64 simultaneous threads per processor Up to 8 floating point units Dual integrated multithreaded 10GbE XAUI channels per processor Dual integrated Gen 2 PCIe x8 lane channels per processor New chip Encryption Instruction Accelerators with direct non-privileged support for 16 industry-standard cryptographic algorithms plus random number generation in each of the eight-cores: AES, Camellia, CRC32c, DES, 3DES, DH, DSA, ECC, Kasumi, MD5, RSA, SHA-1, SHA-224, SHA-256, SHA-384, SHA-512 Oracle SPARC V9 architecture, ECC protected
Cache <ul style="list-style-type: none"> Dedicated 128KB level 2 cache per core Shared 4MB level 3 cache
Main Memory <ul style="list-style-type: none"> Supports 8 GB and 16 GB DDR3 DIMMs 32 DIMM slots, supporting a maximum of 512GB
Interfaces
Network <ul style="list-style-type: none"> Four 10/100/1000 Base-T Ethernet ports. Four (two per processor) XAUI 10Gb Ethernet ports through optional 10 GbE Network Module
USB <ul style="list-style-type: none"> Four 2.0 USB ports (rear and front)
Expansion Bus <ul style="list-style-type: none"> Ten PCIe Gen 2 x8 slots, 2x full-height/half-length, 8x low profile
Storage <ul style="list-style-type: none"> Support for up to eight optional internal 2.5-inch SAS disk drives, 10Krpm Internal DVD: one slim line SATA DVD+/-RW RAID level 0, 1
Alarms <ul style="list-style-type: none"> Four fail-safe, dry contact alarms—critical, major, minor, and user—DB-15
Software
Operating System <ul style="list-style-type: none"> Oracle Solaris 10 8/11 Oracle Solaris 11 Support for Solaris 10 9/10 and Solaris 10 10/09 with Oracle Solaris 10 8/11 Patch Bundle
Software Included <ul style="list-style-type: none"> Oracle Solaris 11 Oracle VM Server for SPARC
Virtualization

- Built-in, no-cost Oracle VM Server for SPARC and Oracle Solaris Zones provide the flexibility and power of 128 virtual systems in a single Netra SPARC T4-2 server

Remote Management

- Oracle Integrated Lights Out Manager (ILOM)
- Dedicated 10/100Base-T Ethernet network management port
- In-band, out-of-band and sideband network management access via any one of the four main Ethernet ports of the server
- One RJ-45 serial management port
- DTMF-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)
- Ability to monitor and report system and component status on all FRUs

Power Supplies

- Four 2N redundant AC or DC hot-swappable power supplies
- Maximum DC power supply rating of 1200 W
- Maximum AC power supply rating of 1200 W

Environment

- DC Power: -48V DC or -60 V DC
- AC Power: 100-240 V AC, 50-60 Hz
- Operating Temperature: 5°C to 45°C (41°F to 113°F), short term -5°C to 55°C (23°F to 131°F)
- Operating Relative Humidity: 5%- 85% RH, non condensing, but not to exceed 0.024 kg water/kg dry air (0.053 lb. water/2.205 lbs. dry air)
- Short-Term Relative Humidity: 5%- 90% RH, non condensing, but not to exceed 0.024 kg water/kg dry air (0.053 lb. water/2.205 lbs. dry air)
- Operating Altitude: Meets NEBS 4,000 m (13,123 ft.) requirement
- Non-Operating Temperature: -40°C to 70°C (-40°F to 158°F)
- Non-Operating Relative Humidity: 93%, non condensing, 40°C (104°F)
- Non-Operating altitude: Up to 12,000 m (39,370 ft)
- Acoustic Noise: Operating/idling less than 7.2 B @ 23°C (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 Telecordia
- Seismic: GR-63-CORE requirements for earthquake Zone 4

Dimensions and Weight

- Height: 172.2 mm (6.86 in)
- Width: 445 mm (17.52 in) including mounting ears
- Depth: 530 mm (20.87 in) maximum to PSU handles
- Depth: 505 mm (19.88 in) maximum to rear I/O
- Weight: 36 kg (79.3 lbs) fully configured without PCI cards

Regulations

- Safety: EN 60950-1, IEC 60950-1 (Evaluated to all CB countries), UL 60950-1, CSA C22.2 No. 60950-1-07, IEC 825-1, 2 and CFR21 Part 1040
- EMI: EN55022 Class A, 47CFR15 Subpart B (FCC) Class A, ICES-003 Class A, AS/NZS CISPR22 Class A, CISPR22 Class A, EN300386 for Telecommunications Centers and for Other Than Telecommunications Centers
- EMC (immunity): EN55024, EN61000-3-2, EN61000-3-3, EN300386:2010 for Telecommunications Centers and for Other Than Telecommunications Centers
- Regulatory markings: CE, FCC, ICES-003, C-Tick, VCCI, GOST-R, KCC, UL/cUL, S-Mark, BSMI
- Other: Restriction of Hazardous Substances (RoHS) Directive and Waste Electrical and Electronics Equipment (WEEE) Directive

Warranty

The Netra SPARC T4-2 comes with a one-year warranty. For more information visit oracle.com/sun/warranty for Oracle's global warranty support.

Services

Only Oracle offers single point of accountability and complete, integrated support for the entire Oracle stack including 24/7 hardware service, expert technical support, proactive tools, and software updates. In addition to award-winning system support, Oracle also offers a portfolio of services that help install, configure, monitor and support your new Oracle Sun Netra servers utilizing Oracle best practices for higher availability and optimized system performance.

Visit oracle.com/support for information on Oracle's service program offerings for Sun products.

Contact Us

For more information about Netra SPARC T4-2, visit oracle.com or call +1.800.ORACLE1 to speak to an Oracle representative.



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