

Netra SPARC T4-2 rack mount server

Frequently Asked Questions

January 10, 2012

Overview

The Netra SPARC T4-2 is the latest two-sockets system in the Oracle Netra SPARC T-series line of servers designed for telecommunications applications (OSS/BSS, media services) and database workload. The Netra SPARC T4-2 server is the right choice for consolidating your telecommunication data center applications.

The Netra SPARC T4-2 employs the next generation SPARC T4 processor, which has been optimized for single-thread performance while maintaining the high throughput inherent in Oracle's Chip Multithreading technology.

The Netra SPARC T4-2 is a fully integrated system with the ability to run many virtual servers through built-in, no-cost virtualization technologies and high-bandwidth I/O.

The Netra SPARC T4-2 will handle high volume workloads with a compact, powerful, and efficient rack mount design. Combined with Oracle enterprise software, the Netra SPARC T4-2 is the ideal platform for running mission critical applications and consolidating datacenter.

Customer Benefits

5x Single-Thread Performance Increase

Oracle's SPARC T4-2 server utilizes the SPARC T4 processor, offering five times increase in single-thread performance over its predecessor, the SPARC T3, while maintaining world class throughput performance of the previous generation's chip.

The SPARC T4 processor has eight complex cores, deeper pipelines, dedicated 128K L2 cache per core, a shared 4MB L3 cache and frequency 2.85GHz clock.

Built-In Virtualization

The Netra SPARC T4-2 with Oracle Solaris and built-in no-cost virtualization technology make it a cost effective platform for large-scale telecommunication data center

consolidation. Oracle Solaris offers continuing binary compatibility to migrate legacy Solaris application to the most proven and feature-rich operating system.

[Oracle VM Server](#) for SPARC provides highly efficient, virtualization capabilities by creating partitions called logical (or virtual) domains. Each logical domain can run an independent operating system, and the live migration feature of the release 2.1 allows customers to quickly and easily migrate running domains (Oracle Solaris 10 or 11) from one physical server to another, eliminating application outages and server downtime.

Highly Efficient Design and Security Feature

The Sun Netra SPARC T4-2 provides an expansive network infrastructure solution with carrier-grade reliability leveraging the chassis based redundant, hot swappable components such as fan modules, high efficiency AC or DC power supply modules and PCI Express.

The server supports 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.

The SPARC T4 processor supports industry standard security ciphers via cryptographic stream processing units integrated directly into the processor core.

These accelerators provide wire speed encryption capabilities directly inside the instruction pipeline, enabling secure datacenter operations and allowing customers to encrypt large amounts of data without losing performance.

Carrier-Grade Reliability

The ruggedized NEBS Level 3 certified, Netra SPARC T4-2 system provides a high level of system reliability which helps ensure that the server continues to operate under the extreme of environmental conditions.

Award Winning Oracle Solaris Operating System

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Oracle Solaris is the #1 Enterprise operating system, with proven results running mission-critical databases to high performance network infrastructure applications. Oracle Solaris innovative, built-in features deliver breakthrough virtualization, high availability, advanced security, and industry- leading performance.

The proven reliability of Oracle Solaris gives customers built-in fault tolerance through features such as ZFS, DTrace and Predictive Self Healing. Oracle Solaris delivers the highest levels of security with Common Criteria Certification.

Oracle Solaris 11 contains many new features that enable secure and lightening fast deployment of services in a large- scale cloud environment, including new automated provisioning tools, rapid deployment of virtualized environments from test to production including full virtualized networking, simplified software lifecycle with new package management tools, and scalable management of big data. A complete list of features, can be found [here](#).

Frequently Asked Questions

What is the Netra SPARC T4-2 server ?

The Netra SPARC T4-2 comes powered by two SPARC T4 2.85GHz processor with 8 cores and up to 64 simultaneous threads (per processor). This highly dense server, offers 32 DIMM slots and eight hot-pluggable 2.5 inch drives.

How does the new Netra SPARC T4-2 compare with the Sun Netra T5440?

The Netra SPARC T4-2 has a higher frequency 2.85GHz SPARC T4 processor compared to the SPARC T2+ 1.2GHz processor found in the Sun Netra T5440.

Additionally the SPARC T4 processor has eight complex cores and other enhancements, such as private 128K L2

cache per core; 4MB shared L3 cache, and an out of order execution pipeline.

What kind of applications is the Netra SPARC T4-2 server best suited to run?

The Netra SPARC T4-2 delivers multi-threaded performance and single-threaded performance making the ideal platform for a broad range of telecommunication network infrastructure workloads such as OSS/BSS, Web, and media services.

What Virtualization technologies are available for the SPARC T4-2 server?

Oracle offers the most complete portfolio of end-to-end virtualization solutions, like Oracle Solaris Zone and Oracle VM server for SPARC.

What are the memory, storage and expansion options supported on the Netra SPARC T4-2 server?

The Netra SPARC T4-2 server supports thirty-two DDR3 memory DIMM slots, which can be populated with 4GB, 8GB, or 16GB DIMMs.

Why would I use a rack mount server instead of a blade server?

Rack mount server leverages a compact and sleek 20-inch deep form factor, that allow scalability and datacenter consolidations, which allow a higher ROI and reduce costs.

In addition, rack mount architecture offers a low-cost solution with the ability to expand systems architecture based on future requirements.

How is the Netra SPARC T4-2 managed?

The Netra SPARC T4-2 server include the Oracle Integrated Lights Out Manager (ILOM), which is driven by an integrated system service processor that also has power management and power capping capability to help reduce energy cost.

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ILOM provides full remote KVMs (Keyboard, Video, Mouse, Storage) support together with remote media functionality.

ILOM is an integral part of the [Oracle Enterprise Manager Ops Center](#), which provides the most comprehensive management across Oracle servers, operating systems, and Oracle Solaris virtualization technologies, and dramatically improves the efficiency of network operations with its integrated lifecycle management and built-in automation.

What are the power and cooling requirements for the Netra SPARC T4-2?

The online [power calculator](#) provides guidance for estimating the electrical and heat loads for typical operating conditions.

What support is available for Oracle hardware products?

Oracle offers complete system support including 24/7 hardware service, rapid on site expert technical support, and proactive tools. Oracle Support includes updates to Oracle Solaris, Oracle VM Server for SPARC, and integrated software, such as firmware. More information on Oracle Premier Support is available [here](#).

Where can I find more information about Oracle Hardware Warranty?

For more information on Oracle technical support policies warranty is available [here](#).

Is there a choice in Netra SPARC T4-2 configurations?

Yes, the Netra SPARC T4-2 server can be customized to the configuration required through the Oracle Assemble

to Order process. Options are available to select memory, drive types, and PCIe I/O cards for the Netra SPARC T4-2.

Can I order the Netra SPARC T4-2 server today?

Yes, the Netra SPARC T4-2 can be ordered now, 1/10/2012.

Contact your Oracle Sales representative or call 1-800-Oracle1.

Additional information about the SPARC T4-2 server is available **here:** <http://www.oracle.com/goto/netra-t4>

Netra SPARC T4-2 server module
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