

Netra SPARC T4-1B server module

Frequently Asked Questions

January 10, 2012

Overview

Designed to meet the most demanding telecommunication Web, media services and OSS/BSS workloads, the Netra SPARC T4-1B server module is the right choice for consolidating your telecommunications data center applications.

The Netra SPARC T4-1B is single socket, SPARC T4 processor based server module that handles high volume workloads with a compact, powerful, and efficient blade design. With extensive built-in, pre-integrated capabilities including virtualization, systems management and security included at no additional cost, the Netra SPARC T4-1B blade module shortens time to develop and deploy new services.

The Netra SPARC T4-1B installs in the Sun Netra 6000 Modular blade chassis, which supports up to 10 blade modules and integrated networking in a compact 10U (AC) or 11U (DC) chassis.

Customer Benefits

Workload Performance Optimized for a Full Range of Telecommunication Applications

The Netra SPARC T4-1B server module offers scalability and security and delivers industry leading multi-threaded and single-threaded performance making the blade ideal for a broad range of telecommunication network infrastructure workloads including 4G network infrastructure and cloud-based deployments.

The Netra SPARC T4-1B blade 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 existing Solaris applications to the most proven and feature-rich operating system.

Highly Efficient Sun Netra 6000 Modular Design

Designed for high reliability and efficiency, the Sun Netra 6000 chassis provides a flexible, modular network infrastructure.

Supported in the Sun Netra 6000 chassis, the Netra SPARC T4-1B blade module provides a 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 PCIe ExpressModules.

Each server module 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. In addition, centralized management using the built-in Sun Netra 6000 Chassis Management Module (CMM) enables management of blade configurations across different CPU architectures.

With the Sun Netra 6000 chassis and Netra SPARC T4-1B server module, customers will greatly reduce their time-to-revenue and virtually eliminate downtime for I/O upgrades

The NetraSPARC T4-1B can be installed along with Oracle x86 based blade server modules in the existing Sun Netra 6000 chassis offering scalability and protecting customer investments.

Netra SPARC T4-1B server module

Frequently Asked Questions

January 10, 2012

Carrier-Grade Reliability

The ruggedized NEBS Level 3 certified, Sun Netra 6000 modular system along with the Netra SPARC T4-1B blade module provides a high level of system reliability which helps ensure that the server continues to operate under the extreme of environmental conditions.

The Oracle Netra portfolio continues to be the broadest portfolio of SPARC and X86 rack server and bladed carrier grade systems being deployed globally in carrier networks.

Award Winning Oracle Solaris Operating System

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](#).

Virtualization

The Netra SPARC T4-1B server module offers built-in, no cost virtualization technologies that enable organizations to extract maximum value from IT assets

while creating an infrastructure capable of rapidly adapting to today's dynamic business environment.

[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.

Frequently Asked Questions

What is the Netra SPARC T4-1B server module?

The Netra SPARC T4-1B comes powered by one SPARC T4 2.85GHz processor with 8 cores and up to 64 simultaneous threads. This highly dense blade, offers 16 DIMM slots and two hot-pluggable 2.5 inch drives.

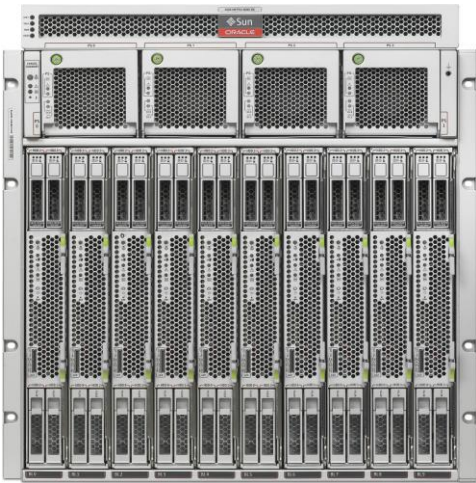
What kind of applications is the Netra SPARC T4-1B server module best suited to run?

The Netra SPARC T4-1B delivers industry leading multi-threaded performance and single-threaded performance making the blade ideal for a broad range of telecommunication network infrastructure workloads such as OSS/BSS, service delivery, and subscriber data.

What is the Sun Netra 6000 Modula System?

The Sun Netra 6000 chassis fits into a compact enclosure of only 10U (AC) and 11U (DC) while supporting up to 10 full-featured, top-performance blade server modules, and provides a massive 6.4 Terabit-per-second maximum I/O throughput.

Netra SPARC T4-1B server module Frequently Asked Questions January 10, 2012



Sun Netra 6000 DC Chassis

The Sun Netra 6000 also supports two Network Expansion Modules, and up to 20 PCIe Express Modules with workload specific I/O available for each blade.

The Sun Netra 6000 AC and DC chassis are a versatile solution for your Telecommunication datacenter needs. The modular architecture and hot-swappable components of the Sun Netra 6000 chassis allow customers to consolidate a broader range of applications than is possible with traditional blade computing.

The Sun Netra 6000 integrated design dramatically improves virtualization and network applications while also facilitating accelerated deployment of production systems and high availability.

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

Blade servers leverage the highly efficient, shared infrastructure and networking provided by the chassis within which the blades reside.

The server modules rely on the Sun Netra 6000 chassis,

in which they reside, for power and cooling support. This greatly reduces the number of moving parts located in the server module. This leads to higher reliability and better power and cooling efficiency.

In addition, blade architecture offers a low-cost solution with the ability to install additional blade systems based on future requirements. Both Oracle SPARC and x86 based blades can be installed and centrally managed in the Sun Netra 6000.

How is the Netra SPARC T4-1B blade module managed?

The Netra SPARC T4-1B 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.

ILOM provides full remote KVM (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 virtualization technologies are available for the Netra SPARC T4-1B server module?

Oracle VM Server for Oracle SPARC provides highly efficient, virtualization capabilities for SPARC servers.

Unlike other virtualization technologies, Oracle VM Server for SPARC allows you to create up to 64 virtual servers on one Netra T4-1B server module to take advantage of the massive thread scale offered by the T4 processor architecture.

Netra SPARC T4-1B server module

Frequently Asked Questions

January 10, 2012

What are the I/O features for the Sun Netra 6000 Modular System?

The Sun Netra 6000 Modular System was designed from the ground up with I/O flexibility in mind. Each blade server has access to two PCIe modules slots for blade and workload specific I/O requirements.

PCIe Express Modules enable each individual blade server module (up to 10) to be configured to satisfy the specific workload requirements by application. All I/O modules are externally accessible and support redundant configurations.

The Netra SPARC T4-1B server module leverages multiple PCIe links for an unmatched total I/O bandwidth of 302Gb/s.

What are the power and cooling requirements for the Netra SPARC T4-1B and Sun Netra 6000?

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 T4-1B configurations?

Yes, the Netra SPARC T4-1B server module can be customized to the configuration required through the Oracle Assemble to Order process. Options are available to select memory, drive types, Raid Expansion Modules, Fabric Expansion Modules, and PCIe I/O cards for the Netra SPARC T4-1B.

Can I order the Netra SPARC T4-1B server module today?

Yes, the Netra SPARC T4-1B can be ordered now. Contact your Oracle Sales representative or call 1-800-Oracle1.

Additional information about the SPARC T4-1B server module is available [here](#).



Oracle is committed to developing practices and products that help protect the environment

Oracle Corporation

Worldwide Headquarters

500 Oracle Parkway
Redwood Shores, CA
94065
U.S.A.

Worldwide Inquiries

Phone
+1.650.506.7000
+1.800.ORACLE1

Fax
+1.650.506.7200

oracle.com

Copyright © 2010, Oracle and/or its affiliates. All rights reserved. This document is provided for information purposes only and the contents hereof are subject to change without notice. This document is not warranted to be error-free, nor subject to any other warranties or conditions, whether expressed orally or implied in law, including implied warranties and conditions of merchantability or fitness for a particular purpose. We specifically disclaim any liability with respect to this document and no contractual obligations are formed either directly or indirectly by this document. This document may not be reproduced or transmitted in any form or by any means, electronic or mechanical, for any purpose, without our prior written permission.

Oracle and Java are registered trademarks of Oracle and/or its affiliates. Other names may be trademarks of their respective owners.

AMD, Opteron, the AMD logo, and the AMD Opteron logo are trademarks or registered trademarks of Advanced Micro Devices. Intel and Intel Xeon are trademarks or registered trademarks of Intel Corporation. All SPARC trademarks are used under license and are trademarks or registered trademarks of SPARC International, Inc. UNIX is a registered trademark licensed through X/Open Company, Ltd. 0110