SPARC T-SERIES

SPARC T3-1B

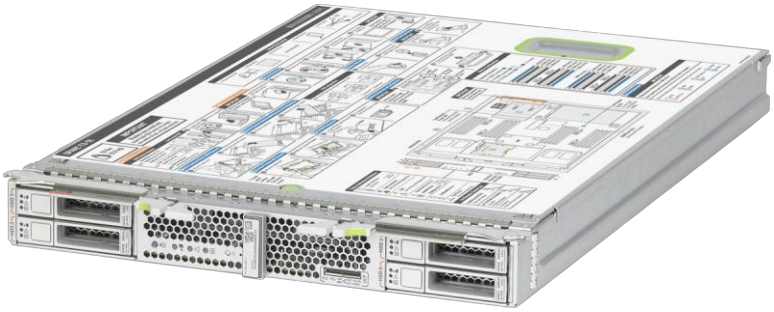
EXTREME SCALABILITY AND DENSITY IN EFFICENT BLADE FORM FACTOR

KEY FEATURES AND BENEFITS

- SPARC T3-1B base server available with either an 8-core, 64 thread, or 16-core, 128 thread T3 processor
- Extreme density with up to 10 T3-1B blades in a network integrated, highly efficient Sun Blade 6000 infrastructure
- SPARC T3 processor is the industry's first 16 core, 128 thread processor designed for application infrastructure workloads
- Built-in, no-cost virtualization technology with Oracle VM Server for SPARC and Oracle Solaris Containers
- Unique T3 processor enterprise datacenter security with integrated on-chip cryptographic acceleration
- Onboard 10 Gigabit Ethernet (GbE) for secure computing and high-speed networking
- Massive I/O performance and expandability with the Sun Blade 6000 with up to 6.4 Terabit-per-second I/O throughput

Oracle's SPARC T3-1B and Oracle's Sun Blade 6000 chassis deliver an integrated platform with a high degree of scalability, density, deployment flexibility, and energy efficiency to meet the high demands of secure, enterprise datacenter applications.

As the highest-density SPARC T3 server available in a compact blade form factor, the SPARC T3-1B delivers massive throughput, and no-cost virtualization running the proven, enterprise-ready Oracle Solaris operating system.



SPARC T3-1B

Product Overview

The single-socket SPARC T3-1B server module delivers massive compute density with up to 16 cores and up to 128 simultaneous threads.

With the world's first 16 core, 128 thread SPARC T3 processor, 16 DIMM slots for up to 128GB memory, and four drive slots for hot-pluggable 2.5 inch SAS drives, the SPARC T3-1B blade is both compact and powerful. With integrated 10 GbE networking and built-in PCI Express Generation 2 expansion, the SPARC T3-1B has the power required to drive computing requirements for web services and middleware applications.

The SPARC T3-1B, Oracle Solaris, and Oracle VM Server for SPARC are optimized for the enterprise to meet the demands of enterprise infrastructure workloads in a highly cost-efficient blade infrastructure. The SPARC T3-1B comes ready with Oracle Solaris Containers and Oracle VM technology, for faster and more-reliable consolidation and virtualization in your IT infrastructure at no extra cost.

The Sun Blade 6000 and SPARC T3-1B are enterprise ready. Combining the chassis-based RAS features with Oracle Integrated Lights Out Management (ILOM), the Sun Blade 6000 and SPARC T3-1B are designed to maximize uptime, simplify system management, and reduce administration costs.

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Sun Blade 6000 Modular Architecture – Optimized Efficiency

The SPARC T3-1B installs in the highly efficient Sun Blade 6000 chassis supporting up to 10 full-featured, top-performance Oracle blade server modules, and PCIe Gen2, in a compact 10U form factor, with I/O throughput up to 144Gb/sec. The Sun Blade 6000 provides up to 6.4 terabit-per-second headroom for future CPU and I/O architectures.

Designed for high reliability and efficiency, the Sun Blade 6000 provides a flexible, modular network infrastructure. With the Sun Blade 6000 chassis and SPARC T3-1B blade server, customers are able to greatly reduce their time-to-revenue and virtually eliminate downtime for I/O upgrades.

SPARC T3-1B Specifications

Key Applications

- Virtualization and consolidation
- Data-intensive applications
- Security applications
- Web, middleware, and application tier workloads, especially Java environments
- Multithreaded workloads with large instruction and data sets
- New Web services deployments

Architecture

Processor

- One eight-core 64 thread, or one sixteen-core 128 thread 1.65GHz SPARC T3 processor
- Up to 128 simultaneous threads
- Up to sixteen floating point units
- Dual multithreaded 10 GbE PCIe integrated onto chip
- On-board cryptography with new Kasumi Bulk algorithm, supporting 12 embedded security industry-standard ciphers: DES, 3DES, AES, RC4, SHA1, SHA256, SHA384, SHA512, MD5, RSA to 2048 key, ECC, CRC32
- Oracle SPARC V9 architecture, ECC protected

Cache

6MB integrated L2

Main Memory

- Supports 2GB, 4GB, and 8GB DDR3 DIMMs
- 16 DIMM slots, supporting a maximum of 128 GB

Interfaces

Network

- Two 10/100/1000 Base-T Ethernet ports using the Intel 82571ED GbE transceiver
- One dedicated 10/100 Base-T Ethernet port for the management network which can be optionally shared with the main network ports if desired
- Two optional 10GB XAUI Ethernet ports through the addition of either a pass-through fabric expansion module or dual channel 10 GbE fabric expansion module

Storage

- Eight SAS2.0 interfaces using LSI SAS2008 Controller
  - One SAS2.0 interface to each of the four small form factor (SFF) SAS drive bays with RAID 0,1 support
- Up to 4 optional internal 300GB 10,000 rpm SAS drives

Midplane I/O

- Four x8 PCIe busses: Two dedicated to NEMs, two dedicated to EMs
- Four 3.0Gb/sec SAS interfaces, two per NEM
- Two 10/100/1000 GbE interfaces, one per NEM
- 10/100 Ethernet management port to Chassis Monitoring Module (CMM)

Front Panel I/O

Exposed via dongle cable:

- One RJ-45 serial console to server module ILOM
- Three USB 2.0 ports (2 external via dongle and 1 internal accepting USB drive)
- One VGA port

Software

- Oracle Solaris 10 9/10 (U9) preloaded
- Support for Solaris 10 10/09 (U8) + Oracle Solaris Patch Bundle
- Oracle VM Server for SPARC 2.0
- Electronic Prognostics 1.1

Networking

ONC, ONC+, NFS, WebNFS, TCP/IP, SunLink, OSI, MHS, IPX/SPX, SMB technologies, and XML

Management

Built-in Integrated Lights Out Manager (ILOM) service processor delivers

- Direct manageability—same as Oracle rack-mounted SPARC T3 servers
- Full monitoring of blade by SNMP
- Graphical user interface (GUI) and comprehensive command-line interface (CLI)
- Secure access and control
- Full-featured virtual console through remote KVMS feature
- (Optional Oracle Enterprise Manager, an advanced hardware management enabling discovery, grouping, bare metal provisioning, hardware and OS monitoring, and integrated LDoms management)

Dimensons and Weight

- Height: 44.45 mm (1.75 in.)
- Width: 327.15 mm (12.88 in.)
- Depth: 496.82 mm (19.56 in.)
- Weight: 8.3 kg (18 lb.) fully configured

Power and Cooling

SunBlade 6000 chassis power and cooling:

http://www.oracle.com/us/products/servers-storage/servers/blades/033613.pdf

Warranty

Visit oracle.com/sun/warranty for Oracle's global support warranty information on Sun products.

Services

Visit oracle.com/sun/services for Oracle's service program offerings on Sun products.

Contact Us

For more information about SPARC T3-1B, visit oracle.com or call +1.800.ORACLE1 to speak to an Oracle representative.

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

SOFTWARE. HARDWARE. COMPLETE.

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