



Sun Blade™ T6300 Server Module

Maximum power efficiency for thread-intensive workloads



Highlights

- Most energy-efficient blade for thread-intensive applications
- Sun Blade™ transparent management — direct management of each server module for seamless integration into existing management infrastructure
- Supports the open and free Solaris Operating System, including LDOM and Solaris Containers
- Engineered for superior availability, with hot-swappable disks and no fans or power supply units on the blade
- Equal or better capability than rackmount servers



Now CoolThreads technology gets even cooler, as the Sun Blade™ T6300 server module reaches a new level of multithreaded density and performance. Delivering radical power efficiency in half the form factor of the previous generation of rackmounted CoolThreads servers, the Sun Blade T6300 server module is one of the most effective servers on the market for multithreaded workloads.

The Sun Blade T6300 server module is equipped with an UltraSPARC® T1 CMT processor with clock speeds from 1.0 to 1.4 GHz, and has up to 32 GB of memory, support of up to four 2.5-inch SAS or SATA hard disk drives, and immense I/O throughput and memory density. As a result, the Sun Blade T6300 server module excels at Web services, Java™, and database applications. The system delivers first-rate performance that challenges competing two-socket, quad-core x64 rackmount servers while consuming only a fraction of the power.

The Sun Blade T6300 server module also delivers maximum reliability: its superior energy-efficient design helps prolong the lifespan of heat-sensitive components, and its advanced modular design helps minimize repair time, thereby greatly improving serviceability. It packs considerably more

performance into a compact footprint than competing systems, protecting IT investments by helping ensure scalability today and into the future.

The Solaris 10 OS, the most advanced operating system on the planet, takes full advantage of the multicore and multithread threading technology of the UltraSPARC T1 CMT processor to deliver outstanding performance and high reliability. Solaris 10 OS features such as Solaris Trusted Extension for strong security control, DTrace for real-time application debugging, Solaris Containers for efficient enterprise consolidation, and the open and free LDOMs for resource virtualization make the Sun Blade T6300 server module the best choice for enterprise applications. In addition, the Sun Blade T6300 server module runs several Linux distributions for the customer to choose from.

Sun Blade T6300 Server Module Specifications

Architecture

Processor

- Six- or eight-core 1.0 GHz, or eight-core 1.2 GHz, or eight-core 1.4 GHz chip multithreading technology (CMT) UltraSPARC T1 processor
- Up to 32 simultaneous execution threads
- Typical processor power consumption of 72 W
- SPARC V9 architecture, ECC protected

Cache per processor

- 16 KB instruction
- 8 KB primary data cache
- 3 MB integrated L2

Main memory

- Support for 1 GB, 2 GB, and 4 GB PC-4200 ECC registered DDR2 DIMMs at 533 MHz
- Eight DIMM slots with Chipkill technology and DRAM sparing supporting a maximum of 32 GB

Interfaces

Network

- Two 10/100/1000 Base-T Ethernet ports using the Intel 82571EB Gigabit Ethernet transceiver
- One dedicated 10/100 Base-T Ethernet port for the management network

Storage

- Eight 3 Gbps SAS/SATA interfaces using the LSI SAS1068E controller
 - Four SAS interfaces, one to each of the SFF (small form factor) SAS/SATA disk drive bays with RAID 0, 1 support
 - Four SAS interfaces to the midplane, two to each Network Express Module (NEM)

Midplane I/O

- Four x8 PCI-Express buses
 - One per Network Express Module
 - One per ExpressModule (EM)
- Four 3 Gbps SAS interfaces, two per NEM
- Two 10/100/1000 Gigabit Ethernet interfaces, one per NEM
- 10/100 Ethernet management port to Chassis Monitoring Module (CMM)

Front panel I/O

- Available via dongle cable
 - Serial console to server module Advanced Lights Out Management (ALOM)
 - Dual USB ports for keyboard, mouse, or storage
- Four SFF disk drive bays
 - Supporting SAS/SATA SFF disk drives

Software

Operating systems

- Solaris 10 Operating System, 64-bit
- Ubuntu Linux

Networking

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

Learn More

For more information on the Sun Blade 6000 Modular System, visit sun.com/blades, or talk to a local Sun sales representative.

Management

- Built-in Advanced Lights Out Management (ALOM) service processor delivers:
 - Direct manageability — looks and feels like a rackmount system
 - Full monitoring of blade by SNMP
 - Comprehensive command line interface (CLI)
 - Secure access and control
- Optional Sun N1™ System Manager — advanced hardware management enabling: discovery, grouping, bare metal provisioning, hardware monitoring, and OS monitoring

Dimensions and weight

- Height: 1.75 in. (44.45mm)
- Width: 12.88 in. (327.15mm)
- Depth: 19.56 in. (496.82mm)
- Weight (empty — no disks or memory): 12.75 lbs. (5.78 kg)
- Weight (fully configured): 14.95 lbs. (6.78 kg)



Sun Microsystems, Inc. 4150 Network Circle, Santa Clara, CA 95054 USA **Phone** 1-650-960-1300 or 1-800-555-9SUN **Web** sun.com

©2007, Sun Microsystems, Inc. All rights reserved. Sun, Sun Microsystems, the Sun logo, IPX, Java, ONC, ONC+, Solaris, Sun Blade, Sun N1, SunLink, and WebNFS are trademarks, registered trademarks, or service marks of Sun Microsystems, Inc. in the United States and other countries. All SPARC trademarks are used under license and are trademarks or registered trademarks of SPARC International, Inc. in the U.S. and other countries. Products bearing SPARC trademarks are based upon an architecture developed by Sun Microsystems, Inc. Information subject to change without notice. SunWIN# 494860 06/07

