

Sun Blade™ T6320 Server Module

Maximum security, speed, and scale
in efficient Blade design



Highlights

- Datacenter workhorse delivering superior performance and power efficiency
- Integrated on-chip cryptographic acceleration and 10 Gigabit Ethernet enables secure computing at wire speed
- Up to 8-core and 64 simultaneous execution threads per blade
- Sun Blade Transparent Management, direct management of each server module for seamless integration into existing management infrastructure
- Drive up utilization, drive down costs, and massively consolidate workloads with built-in, no-cost virtualization technology with Logical Domains (LDoms) and Solaris Containers
- Engineered for superior availability, with hot-swappable disks and no fans or power supply units on the blade
- Accelerate application response times and slash energy consumption with Flash SSDs



Powerful enough to run everything from back-office applications to web services, the Sun Blade™ T6320 server module is designed for fast deployment and maximum eco-efficiency, making it highly adaptable to changing datacenter needs.

The Sun Blade T6320 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. Its management features streamline and simplify administration and maintenance, further reducing costs.

Powered by Chip Multithreading (CMT) technology in the UltraSPARC® T2 processor, the server module can execute up to 64

application threads—the best in industry. Dual, multithreaded 10 Gigabit Ethernet, integrated on the UltraSPARC T2 processor, delivers up to 4x the performance of current network interface cards, without the cost of the cards.

The Sun Blade T6320 server module supports both Solaris™ Operating System and OpenSolaris OS. The free and open Solaris OS is a proven, industry leading operating systems with features designed to save your business time and money.

Sun Blade T6320 Server Module Specifications

Architecture

Processor
Four-core 1.2 GHz, eight-core 1.4 GHz, or eight-core 1.6 GHz UltraSPARC T2 processors; one processor per system, maximum 64 threads
Threads
Up to 64 simultaneous execution threads
Power consumption
Nominal 95 W
Additional features
<ul style="list-style-type: none"> Up to eight floating-point units On-board cryptography supporting 10 embedded security industry-standard ciphers including: DES, 3DES, AES, RC4, SHA1, SHA256, MD5, RSA to 2048 key, ECC, CRC32
Processor architecture
SPARC® V9, ECC-protected
Cache per processor
16 KB instruction, 8 KB primary data cache, 4 MB integrated L2
Main memory
Support for 1, 2, 4, and 8 GB fully buffered ECC-registered DDR2 DIMMs at 667 MHz; 16 DIMM slots with extended ECC and DRAM supporting a maximum of 128 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, two optional 10 GB XAUI Ethernet ports
Storage
Eight 3.0 Gb/sec SAS/SATA interfaces using the LSI SAS1068E controller
<ul style="list-style-type: none"> Four SAS interfaces to each of the small form factor (SFF) SAS/SATA drive bays with RAID 0, 1 support Four SAS interfaces to the midplane Supported drive with 32-GB SATA SSD, 73GB 10,000 rpm SAS, 73GB 15,000 rpm SAS, 146GB 10,000 rpm SAS, 300GB 10,000 rpm SAS

Midplane I/O

One 10/100 Ethernet management port to Chassis Monitoring Module (CMM). Two x8 PCIe links to 2 ExpressModules. Two Gigabit Ethernet, two 10Gigabit XAUI and four 3.0Gb SAS links to 2 Sun Blade 6000 Multi-Fabric Network Express Modules. 10GbE XAUI requires optional T6320 XAUI Pass-Through Fabric Expansion Module X4822A Support two Network Express Modules (X4250A, X4212A, X4236A or X4238A)

Front panel I/O

Expansion bus: Eight eight-lane PCIe slots, two shared with 10 Gb/sec Ethernet slots
USB: Four USB 2.0 ports

Drive bays

Supporting up to 4 SAS/SATA SFF disks and solidstate drives (SSD)

Software

Operating System

Solaris 10 8/07, Solaris 10 10/08, and Solaris 10 5/09

Software Included

- Solaris 10 5/09 Preloaded
- Sun LDOMs Manager and MIB 1.2 Pre-install
- ILOM 3.0
- CMT Tools 1.0 Pre-install
- GCC 4 for SPARC Systems 4.0.4 Pre-install
- Sun Studio™ 12 Pre-install
- SYS, FW, Download UTIL Pre-install
- MAI, 10 GBE ETCYSY CFG
- Live Upgrade, ABE Pre-install

Networking

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

Management

Built-in Integrated Lights Out Manager (ILOM) with remote Keyboard/Video/Mouse/Storage, consistent with Sun x64 servers, delivering direct manageability, full monitoring of blade by SNMP, secure access and control, and graphical user interface and comprehensive command line interface (CLI) emulating ALOM

Learn More

To learn more about the Sun Blade T6320 server module, go to sun.com/blades.

Sun Connection Management Suite

Advanced hardware management enabling discovery, grouping, bare metal provisioning, and hardware and OS monitoring

Dimensions and weight

Height
44.45 mm (1.75 in.)
Width
327.15 mm (12.88 in.)
Depth
496.82 mm (19.56 in.)
Weight (without disks and memory)
7 kg (15.4 lbs.)
Weight (fully configures)
7.77 kg (17.1 lbs.)

Virtualization

Integrated, open-source, no-cost virtualization technology providing the flexibility and power of 64 virtual systems in a single server

Pre-install software: Logical Domains Manager 1.2 and Logical Domains MIB 1.2