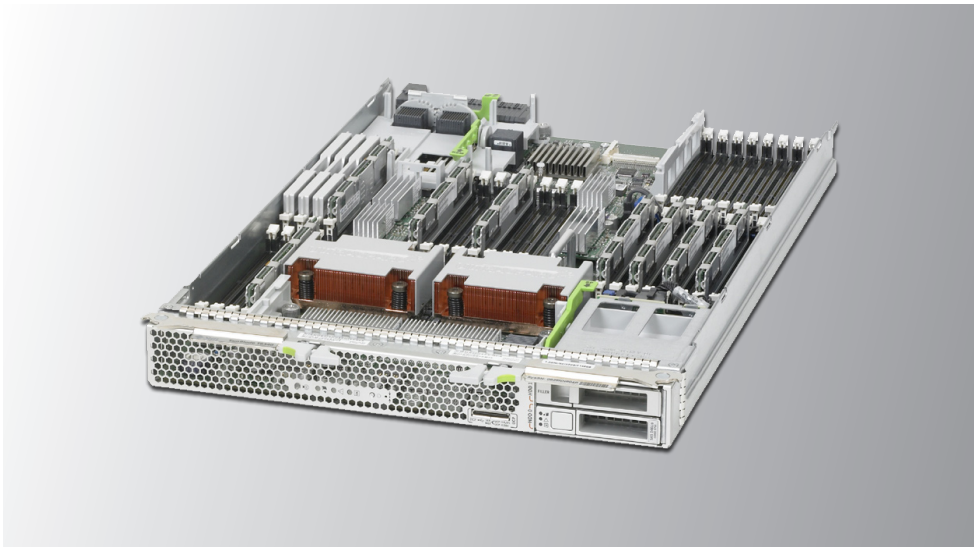
Sun Blade™ T6340 Server Module

Datacenter Sprawl Just Met its Match



Highlights

- World's first dual-socket, general-purpose server powered by the 3rd generation UltraSPARC® T2 Plus "System on a Chip" processor
- Up to 128 simultaneous execution threads per blade
- Highest memory capacity in the industry for blade servers; up to 256 GB max
- Extreme density with Sun Blade 6048 and 6000 Chassis; up to 768 cores and 6,144 threads
- Drive up utilization, drive down costs, and massively consolidate workloads with built-in, no-cost virtualization technology with Logical Domains (LDoms) and Solaris Containers
- Accelerate application response times and slash energy consumption with Flash SSDs

Ready to take on the most demanding workloads, including back-office applications and databases, the Sun Blade™ T6340 server module is the right choice for maximum consolidation of a datacenter splitting at the seams. As the highest-density chip multithreading (CMT) server available in a blade form factor, the T6340 system delivers massive throughput and built-in, no-cost virtualization.

The two-socket Sun Blade T6340 server module delivers compute power previously available only from midrange enterprise SMP servers, with up to 16 cores and 128 threads of Chip Multithreading (CMT) technology processing performance. It also offers the industry's best memory capacity for blade servers, with 32 DIMM slots and a maximum capacity of 256 GB, as well as two drive slots for hot-pluggable 2.5 in. SAS and SATA drives. The server module can hit the ground running quickly with an optional CompactFlash card for a fast boot. You can depend on the most advanced OS in the world, the Solaris 10 Operating System, which is preinstalled. Its shared I/O is blazing fast, with up to 144 Gb/sec to prevent bottlenecks, and it provides built-in encryption at wire speed without performance degradation. All of these benefits are packed into a blade form factor, for maximum compute density.

The system brings superior energy and cost efficiency to your datacenter with fast deployment. With ILOM and remote KVMS—available for the first time on a server leveraging CMT technology—management is streamlined and unified, making the Sun Blade T6340 server module extremely scalable as well. It also offers superior integrability, because the system is designed to coexist with Sun x64 and other CMT-based server modules in the same chassis. And the server comes ready with Solaris Containers and LDoms technology, to enable faster and more reliable consolidation and virtualization in your IT infrastructure at no extra cost.

Sun Blade T6340 Server Module Specifications

A virtualization services suite is available to optimize Sun Blade T6340 server module capabilities by helping you reduce costs, conserve data-center space, improve service levels, and increase server utilization.

Architecture

Processor

- Two six- or eight-core 1.2 GHz, or eightcore 1.4 GHz UltraSPARC T2 Plus processor
- Up to 128 simultaneous execution threads
- One floating processor per core, up to eight per processor
- On-board cryptography supporting 10 embedded security industry-standard ciphers: DES, 2DES, AES, RC4, SHA1, SHA256, RSA to 2048 key, ECC , CRC32
- SPARC® V9 architecture, ECC protected

Cache

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

Main memory

- Supports 1 GB, 2 GB, 4 GB, and 8 GB 1.5 V fully buffered ECC Registered DIMMs
- 32 DIMM slots, supporting a maximum of 256 GB

Interfaces

Network

- Two 10/100/1000 Base-T Ethernet ports using the Intel 82571EB GbE transceiver
- One dedicated 10/100 Base-T Ethernet port for the management network
- Two optional 10 GB XAUI Ethernet ports through the addition of a dual channel 10 GbE fabric expansion modules

Storage

- Six 3.0 Gb/sec SAS/SATA interfaces using the LSI SAS1068E Controller
  - One SAS interface to each of the small form factor (SFF) SAS/SATA drive bays with RAID 0, 1 support
  - Four SAS interfaces to the midplane
  - Support drive with 32 GB SSD, 73GB 15,000 rpm SAS, 146GB 10,000 rpm SAS, 300GB 10,000 rpm SAS

Midplane I/O

- Four x8 PCIe busses
  - Two dedicated to NEMs
  - Two dedicated to EMs
- Four 3.0 Gb/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
  - Two USB ports for keyboard, mouse, or storage
  - One HD-15 video out
  - Supporting SAS/SATA SFF disks and solid-state drives (SSD)

Software

Operating System

Solaris 10 10/08 and Solaris 10 5/09

Preloaded software

- Solaris 10 5/09 OS Preloaded
- 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 ETCSYS CFG
- Live Upgrade, ABE Pre-install

Networking

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

Learn More

To learn more about the Sun Blade T6340 server module, go to sun.com/t6340.

Management

- Built-in ILOM service processor delivers:
  - Direct manageability—same as Sun rackmounted servers
  - Full monitoring of blade by SNMP
  - Graphical user interface (GUI) and comprehensive command line interface (CLI) emulating Advanced Lights Out Manager (ALOM)
  - Secure access and control
  - Full-featured virtual console through remote KVMS feature
- Optional Sun xVM Ops Center—advanced hardware management enabling: discovery, grouping, bare metal provisioning, hardware and OS monitoring, and integrated LDoms management

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: 9.1 kg (20 lbs.) fully configured

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