

Sun SPARC Enterprise® T2000 Server

Combining breakthrough throughput and high-end RAS features with dramatic energy and space savings



Highlights

- World's first eco-responsible server
- Up to 32 simultaneous execution threads using CoolThreads™ chip multithreading (CMT) technology
- Industry-leading server efficiency as defined by space, watts, and performance (SWaP)¹ metric
- Drive up utilization, drive down costs, and massively consolidate workloads with built-in, no-cost virtualization technology with Logical Domains (LDDoms) and Solaris™ Containers
- Investment protection with SPARC® V9 binary application compatibility
- Enhanced system uptime supported by high on-chip RAS, redundant power supplies and fans, hot-pluggable disk drives, hardware RAID (0+1), and low component count
- Exceptional expandability and I/O performance from five PCI slots and four Ethernet interfaces
- Increase consolidation/virtualization capabilities with Solaris Containers
- Preloaded with the Solaris 10 OS and Cool Tools for CoolThreads servers to enable fast application development and deployment



With the growing demand for network services, datacenter managers are caught between competing requirements: building server capacity and deploying applications quickly on the one hand, while managing complexity and server sprawl and coping with burgeoning energy costs and real estate limitations on the other. So companies are looking for systems that can deliver on all the requirements of the next-generation datacenter—for compute density, for price/performance, and for energy and space efficiency. That's the whole idea behind the Sun SPARC Enterprise® T2000 server.

Part of the Sun SPARC Enterprise family of servers, the Sun SPARC Enterprise T2000 server is powered by the UltraSPARC® T1 processor, which delivers four or eight cores for a maximum of 32 simultaneous software threads per chip. The result? Up to five times the throughput-optimized performance of competitors' systems—performance that's ideal not only for Web-tier applications, but for critical OLTP databases and ERP, CRM, and SCM applications as well.

For these types of applications, your systems have to be up, online, and available. And the Sun SPARC Enterprise T2000 server delivers enhanced uptime capabilities you can rely on: hot-pluggable disk drives, redundant and hot-swappable power supplies and fans,

environmental monitoring, RAID 0+1 monitoring, and much more. Plus the component count itself is extremely low—and fewer components mean better reliability and less system downtime.

Plus it comes preinstalled with the highly available, secure, reliable Solaris 10 OS. With the Solaris Application Guarantee, we ensure binary compatibility between Solaris OS releases. Plus, Logical Domains (LDDoms) and Solaris Containers enable you to safely consolidate dozens of applications onto a single system to virtualize your environment, increase utilization rates, and cut system and licensing costs.

Sun SPARC Enterprise T2000 Server Specifications

Processor

Processor: Four- or eight-core 1.0 GHz, or eight-core 1.2 GHz UltraSPARC T1 processor

Architecture: SPARC V9 architecture, ECC protected

Cache per processor:

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

Key applications

- Web serving
- Streaming media
- Security applications
- Java application servers and virtual machines
- OLTP databases
- ERP, CRM, SCM
- Network infrastructure
- SOA and business integration platforms
- Consolidated Web and application infrastructure

Main memory

16 DIMM slots, DDR2 with Extended ECC and DRAM sparing, ECC Registered DIMMs. System maximum of 64 GB; support for 1 GB, 2 GB, and 4 GB DIMMs

Standard/integration interfaces

Network: Four 10/100/1000 Mb/sec Ethernet

Serial: One DB-9 serial port

USB: Four 1.1 USB ports

Expansion bus: Three PCI Express (PCIe) slots for low-profile cards (support x1, x4 and x8 width cards); two PCI-X slots for 64-bit 133 MHz low-profile cards

Network management: Advanced Lights Out Manager (ALOM); Management system controller with RJ-45 serial and 10/100 Mb/sec Ethernet ports

Mass storage and media

Internal disk: Up to four 73 GB or 146 GB 2.5 in. 10,000 rpm SAS disks, providing a maximum capacity of 584 GB; internal hardware RAID 1 (mirroring) and RAID 0 (striping) supported

¹ SWaP = space, watts, and performance as defined by the formula performance/space/power.

Internal DVD: One slimline DVD-ROM/CD-RW

External storage: Sun offers a complete line of best-in-class, innovative storage hardware, software, and solutions—including tape drives, tape libraries, disk storage systems, data management software, and more—along with renowned world-class service and support. Our data management solutions help customers share information more effectively, manage data more efficiently to save money, and reduce risk by making sure that data is available, recoverable, and compliant. For more information, go to: sun.com/storageetek.

Software

Operating system: Solaris 10 OS 11/06

Preloaded software:

- Solaris 10
- Cool Tools for CoolThreads servers (includes CoolTuner, Sun Studio 11, GCC for SPARC systems)

Power supplies

Two redundant, 450 W hot-swappable power supplies

Typical operating input power: 275 W

Environment

AC power: 100-240 V AC, 50-60 Hz (4.5 A at 100-120 V AC, 2.25 A at 200-240 V AC)

- Operating temperature
 - Sea level to 900m (3,000 ft.): 5°C to 35°C
 - Above 900m (3,000 ft.): decrease maximum temperature as altitude increases, 1°C/300m (1.6°F/1,000 ft.)
- Operating relative humidity
 - 20-80%, noncondensing
- Operating altitude
 - Up to 3,000m (10,000 ft.)
- Nonoperating temperature
 - -40°C to 60°C
- Nonoperating relative humidity
 - 98% noncondensing
- Declared acoustics
 - Operating/idling acoustic noise: 7.7 B (LwAd: 1 B = 10 dB)
 - 62 dB (LpAm, bystander positions)

Learn More

To learn more about the Sun SPARC Enterprise T2000 server, go to: sun.com/se_t2000.

Regulations (meets or exceeds the following requirements)

Product safety: UL/CSA 60950-1, EN 60950-1, IEC 60950-1 CB Scheme with all country deviations, IEC 825-1, 2, CFR 21 part 1040, CNS 14336, GB 4943

RFI/EMI: EN 55022 Class A, 47 CFR 15B Class A, ICES Class A, VCCI Class A, AS/NZ 3548 Class A, CNS 13438 Class A, KSC 5858 Class A, GB 9254 Class A, EN 61000-3-2, GB 17625.1, EN 61000-3-3

Immunity: EN 55024, IEC 61000-4-2, IEC 61000-4-3, IEC 61000-4-4, IEC 61000-4-5, IEC 61000-4-6, IEC 61000-4-8, IEC 61000-4-11

Telecommunications: EN 300 386

Regulatory markings: CE, FCC, ICES-003, C-Tick, VCCI, GOST-R, BSMI, MIC, UL/cUL, UL/S-Mark, CCC

Ergonomics: EK1-ITB-2000

Key RAS features

Hot-pluggable disk drives
 Redundant, hot-swappable power supplies
 Redundant, hot-swappable fans
 Environmental monitoring
 Error correction and parity checking
 Easy component replacement
 Internal hardware drive mirroring (RAID 1)

Dimensions and weight

Height: 89 mm (3.5 in.) 2U
 Weight: 425 mm (16.7 in.)
 Depth: 621 mm (24.4 in.)
 Weight: 18.2 kg (40 lbs.)
 (approximate, includes two power supplies, two disk drives, one DVD)

Warranty

Hardware support: One year
 Software install: 90 days
 Call response: Eight hours
 Delivery: Next business day



Sun Microsystems, Inc. 4150 Network Circle, Santa Clara, CA 95054 USA Phone 1-650-960-1300 or 1-800-555-95UN Web sun.com

