



Sun Fire™ T1000 Server

The low-cost, high-density, energy-efficient solution for the next-generation datacenter



Highlights

- World's first eco responsible server
- Up to 32 simultaneous execution threads using CoolThreads™ chip multithreading technology (CMT)
- Industry-leading server efficiency and price/performance as defined by space, watts, and performance (SWaP*) metric
- Draws less than 220 watts of power
- Drive up utilization, drive down costs, and massively consolidate workloads with built-in, no-cost virtualization technology with Logical Domains (LDoms) and Solaris Containers
- Investment protection with SPARC® V9 binary application compatibility
- Support for internal hardware RAID 0 (striping) and RAID 1 (mirroring) at no extra cost
- Significant price advantages on preintegrated Solaris support service options
- Preloaded with the Solaris™ 10 OS and Cool Tools for CoolThreads servers to enable fast application development and deployment

> Fueled by Web 2.0 technologies, the demand for network services is growing—and so is the need for server capacity. But today's datacenters face very real challenges to rapidly deploy applications, manage complexity and server sprawl, and cope with power and cooling costs and real-estate limitations. The answer? Sun Fire™ T1000 servers—systems that deliver unparalleled compute density, energy efficiency, and price/performance for the next-generation datacenter build-out.

The Sun Fire T1000 server is powered by the UltraSPARC® T1 processor, which packs from six to eight cores delivering up to 32 simultaneous software threads on a single chip. As a result, the system provides up to five times the throughput-optimized performance of competitors' systems, making it an ideal platform for Web serving, Java Application Server hosting, network infrastructure, and much more.

All that performance comes to you in a low-profile, space-saving 1RU form factor that slides easily into any standard rack and draws about one-fifth the energy consumption of similarly performing systems. This concept—a high-performance system designed for running advanced network services, but with a minimal space and power footprint—is so innovative, we developed the space, watts, and performance (SWaP) metric to give a truer picture of its cost and environmental impact on the next-generation datacenter.

What's more, the Sun Fire T1000 server comes preinstalled with the most highly available, secure, reliable UNIX® operating system on the planet—the Solaris 10 OS. With the Solaris Application Guarantee, we ensure Solaris binary compatibility from release to release and source compatibility between UltraSPARC and x64/x86 processors. Plus, Logical Domains (LDoms) 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. And the Sun Fire T1000 server is certified to run multiple Linux distributions, giving you real choice in determining the best operating system for your environment.

The Sun Fire T1000 server: Proving once again that faster can be cooler, better can be cleaner, and cheaper can be greener.

Sun Fire T1000 Server Specifications

Key applications

- Web serving
- Streaming media
- Security applications
- Java Application Servers
- Java Virtual Machines
- Network infrastructure
- SOA and business integration platforms
- Compute and network node

Architecture

Processor

- 6- or 8-core, 1.0 GHz UltraSPARC T1 processor

Cache

- 16 KB data, 8 KB instruction and 3 MB integrated L2

Main memory

- Eight DIMM slots, DDR2 with Chipkill and DRAM Sparing, ECC registered DIMMs, system maximum of 16 GB; support for 1 GB, 2 GB and 4 GB DIMMs

System architecture

- SPARC® V9 architecture, ECC protected

Standard integrated interfaces

- Network: Four 10/100/1000 Mb/sec Ethernet
- Network management: Advanced Lights Out Management, Management system controller with RJ45 serial and 10/100 Mb/sec Ethernet ports
- Serial management: One DB9 serial port
- Expansion bus: One PCI-Express (PCI-E) slot compliant with PCI-E specification Revision 1.0a (supports x1, x4, and x8 cards)

Software

Operating systems

- Solaris 10 OS 11/06

Preloaded software

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

Mass storage and media

- Internal disk option: One 250 GB 3.5 in., 7K RPM SATA drive or two 73 GB 2.5 in., 10K RPM SAS drives, Internal hardware RAID 0 (striping) and RAID 1 (mirroring) supported
- External disk option: Sun StorageTek™ 3510 and 3511 arrays, Sun StorageTek 6120, 6130, 6140, and 6920 arrays, Sun StorageTek 9910, 9960, 9970, 9980, 9985, and 9990 arrays
- External tape: Sun StorageTek C2 autoloader, Sun StorageTek C4 tape library, Sun StorageTek L25, L180, and L500 tape libraries

Environment

- Operating temperature: 5°C to 35°C (41°F to 95°F) sea level to 900m (3,000 ft.), above 900m (3,000 ft) decrease maximum temperature as altitude increases, 1°C/300m (1.6°F/1,000 ft.)
- Nonoperating temperature: -40°C to 70°C (-40°F to 158°F), 93% relative humidity noncondensing
- Operating relative humidity: 10 to 90%, noncondensing
- Operating altitude: Up to 3,048m (10,000 ft)
- Acoustic noise: 7.7B operating (LwAd, 1B=10 dB), 66 dB (LpAm, bystander positions)

Power

- One 300W power supply
- Maximum operating input power: 220W
- Typical operating input power: 180W
- AC power: 100 to 240 V AC, 50 to 60 Hz (2.2A @ 100 to 120 V AC, 1.1A @ 200 to 240 V AC)

Regulations

- Safety: UL/CSA-60950-1, EN60950-1, IEC60950-1 CB Scheme with all country deviations, IEC825-1, 2, CFR21 part 1040, CNS14336, GB4943
- RFI/EMI: EN55022 Class A, 47 CFR 15B Class A, ICES-003 Class A, VCCI Class A, AS/NZ 3548 Class A, CNS 13438 Class A, KSC 5858 Class A, GB 9254 Class A, EN61000-3-2, GB 17625.1, EN61000-3-3
- Immunity: EN55024, 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: EN300-386
- Regulatory: CE, FCC, ICES-003, C-tick, Markings VCCI, GOST-R, BSMI, MIC, UL/cUL, UL/S-mark, CCC, UL/DEMKO/GS
- Ergonomics: EK1-ITB-2000

Get the details.

Learn more about the Sun Fire T1000 Server by visiting sun.com/T1000

To try the Sun Fire T1000 server risk-free for 60 days, go to sun.com/tryandbuy

Dimensions and weight

- Height: 43 mm (1.75 in.); 1 Rack Unit
- Width: 425 mm (16.7 in.)
- Depth: 467 mm (18.4 in.)
- Weight: 9.3 kg (20.5 lbs.); without PCI-E card and rackmounts; 10.9 kg (24 lbs.) with slide rails

Warranty

- Hardware support: 1 year
- Software install: 90 days
- Call response: 8 hours
- Delivery: Next business day

Upgrades

Sun Fire T1000 servers are eligible for the Sun Upgrade Advantage program. Customers can trade-in their old Sun or non-Sun servers and receive a discount toward the price of their new Sun Fire T1000 server. For more details on the Upgrade Advantage Program, visit sun.com/ibb/coolthreads

Customer Ready program

Take advantage of the Sun Customer Ready program and have your system tailored to your specific requirements by our factory experts. Learn more at sun.com/crs

* SWaP = Space, watts and performance as defined by the formula Performance/Space /Power



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