

SPARC T3-1 SERVER

MAXIMUM SECURITY, SPEED, AND SCALE FOR WEB INFRASTRUCTURE

KEY FEATURES AND BENEFITS

- World's first 128-thread, general-purpose 2RU server powered by the ground breaking SPARC T3 processor.
- Increase your application performance and tackle the most demanding workloads with a 2x throughput, 2x the memory and 4x the I/O bandwidth improvement of its record-breaking predecessor.
- Consolidate from one virtual machine per core all the way to 128 virtual machines on one single server with built-in, no cost, Oracle VM Server for SPARC and Oracle Solaris Containers.
- Integrated on-chip cryptographic acceleration and 10 Gigabit Ethernet (GbE) enable secure computing at wire speed.
- Sleek, compact, well integrated design with highly expandable internal storage and network connectivity.
- Upgrade from any other legacy UltraSPARC based system at minimal cost and effort thanks to the unique binary compatibility features of Solaris.

Oracle's SPARC T3-1 server is the platform of choice for Web infrastructure, Middleware workloads, and Application development. Delivering the world's first 16-core processor with unsurpassed throughput, the SPARC T3-1 server boasts speed, security, and unmatched availability to data in a sleek, compact design. Oracle's SPARC T3-1 server is a fully integrated system capable of running many virtual servers, helping drive up utilization, lower IT costs and keep server sprawl to a minimum.

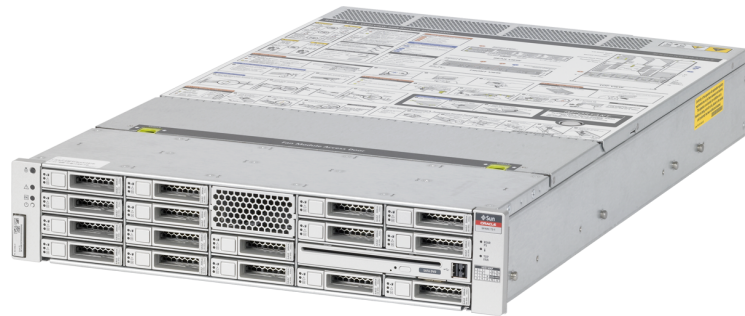


Figure 1: The SPARC T3-1 server offers maximum security, speed, and scale for your Web infrastructure.

Product Overview

The SPARC T3-1 server, powered by the industry's first 16-core SPARC T3 processor and running the industry leading Oracle Solaris operating system, is the first 128-thread, general-purpose server offered in a 2 RU enclosure. It packs up to 16 cores and up to 128 simultaneous threads onto a single piece of silicon, together with the key functions of an entire system on a single chip—computing, networking, security, and I/O.

Moreover, SPARC T3-1 delivers highly expandable internal storage and network connectivity: the server can be configured with up to 16 disk drives and six PCI Express cards including the optional Oracle Sun Flash Accelerator F20 PCIe card and many other I/O options.

The SPARC T3-1 server offers Oracle VM for SPARC 2.0 and Oracle Solaris Containers enabling ultimate server virtualization and consolidation at a fraction of the cost of other vendors.

Finally, with integrated on-chip 10 Gigabit Ethernet and cryptographic acceleration, as well as smart integrated design using fewer parts, the SPARC T3-1 server offers a very safe and reliable platform to help you deploy applications.

SPARC T3-1 Server Specifications

Key Applications	
• Web Infrastructure • Middleware • Application Development • Multithreaded Applications • Java Applications • Virtualization and consolidation	
Architecture	
Processor	
• One 16-core 1.65 GHz SPARC T3 processor, SPARC V9 architecture, ECC protected • 6 MB integrated Level 2 (L2) cache • Dual multithreaded 10 Gigabit Ethernet PCI integrated on the chip • On-board cryptography supporting embedded security industry-standard cryptographic algorithms: AES, CRC32c, DES, 3DES, DH, DSA, ECC, Kasumi, MD5, RSA, SHA-1, SHA-256, SHA-384, SHA-512, plus random number generation <i>(Note: CRC32c and Kasumi not currently supported by Solaris)</i>	
Main Memory	
• 16 DIMM slots • System maximum of 128 GB • Support for 2 GB, 4 GB, and 8 GB DDR3 DIMMs	
Interfaces	
• Four 10/100/1000 Mb/sec Ethernet ports • Up to 2x optional 10 GbE XAUI connections • Six PCI Express 2.0 slots • One RJ-45 serial management port and one RJ-45 network port for remote management • Four USB 2.0 ports • One HD15 VGA port • One optional front accessible slim line SATA DVD+/-RW drive	
Mass Storage	
Internal disk:	Up to eight or sixteen 2.5" SAS-2/SATA-2 front accessible hot pluggable disk drive bays, depending on selected backplane All bays can be populated with 300 GB or 600 GB SAS-2 hard disk drives. 32 GB SATA-2 Solid state drives are supported in the 8 disk backplane only. Optional Sun Flash Accelerator F20 PCIe adapter card
External storage	Oracle 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.

Power
• Two hot-swappable AC 1200W redundant (N+1) power supplies • Maximum operating input current at 100 VAC: 9.4 A • Maximum operating input current at 200 VAC: 4.7 A • Maximum operating input power at 100 VAC: 896W • Maximum operating input power at 200 V AC: 888W
Key RAS Features
• Hot pluggable disk drives • Redundant, hot swappable power supplies and fans • Environmental monitoring • Error correction and parity checking • Easy component replacement • Electronic Prognostics • Internal hardware drive mirroring (RAID 1) • RAID 0 and RAID 1 support
Software
Operating System
• Oracle Solaris 10 9/10 • Support for Solaris 10 10/09 + Oracle Solaris 10 9/10 Patch Bundle
Virtualization
• Oracle VM Server for SPARC 2.0
Environment
Temperature
• Operating temperature: Sea level to 900 m (3,000 ft.): 5°C to 35°C (41°F to 95°F); above 900 m (2,953 ft.): decrease the maximum allowable temperature by 1°C/300 m (1.6°F/1,000 ft.); IEC 60068-2-1 Test Ad and 60068-2-2 Test Bd • Nonoperating temperature: -40°C to 65°C (-40°F to 149°F); IEC 60068-2-1 Test Ab and 60068-2-2 Test Bb
Relative Humidity
• Operating relative humidity: 10% to 90% RH, 27°C maximum wet bulb (noncondensing); IEC 60068-2-56 Test Cb • Nonoperating relative humidity: 93% RH, 35°C maximum wet bulb (noncondensing); IEC 60068-2-56 Test Cb
Altitude
• Operating altitude: 3,000 m (10,000 ft.); IEC 60068-2-13 Test M, and 60068-2-41 Test Z/BM • Nonoperating altitude: 12,000 m (40,000 ft.); IEC 60068-2-13 Test M
Acoustic Noise
• Operating/idling acoustic noise 7.1 B (LwAd, 1 B = 10 dB), operating/idling acoustic noise 63 dB (LpAm, bystander positions)
Cooling
• Maximum heat dissipation at 100 VAC: 3057 BTU/hr • Maximum heat dissipation at 200 VAC: 3030 BTU/hr • 140 cfm maximum
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/EMC: EN55022 Class A, 47 CFR 15B Class A, ICES-003 Class A, VCCI Class A, AS/NZ3548 Class A, CNS 13438 Class A, KSC 5858 Class A, GB9254 Class A, EN61000-3-2, GB17625.1, 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
Regulatory: CE, FCC, ICES-003, C-tick, VCCI, GOST-R, BSMI, MIC, UL/cUL, UL/DEMKOLVD, UL/S-mark, CCC
European Union Directives: 2006/95/EC (73/23/EEC) Low Voltage Directive, 2004/108/EC (89/336/EEC) EMC Directive, 2002/96/EC Waste Electrical and Electronic Equipment (WEEE) Directive, 2002/95/EC Restriction of Hazardous Substances (RoHS) Directive
Dimensions and Weight
Height: 88.65 mm (3.49 in.); 2 RU
Width: 447 mm (17.6 in.)
Depth: 673.1 mm (26.5 in.)
Weight: Approximately 27.2 kg (60 lb.)

Warranty

Visit <http://www.oracle.com/us/support/policies/index.html> for Oracle's global warranty support information for the SPARC T3-2 server.

Services

Visit <http://www.oracle.com/us/support/index.html> for Oracle's service program offerings for the SPARC T3-2 server.

Contact Us

For more information about the Oracle SPARC T3-2 server, visit oracle.com or call +1.800.ORACLE1 to speak to an Oracle representative.



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