

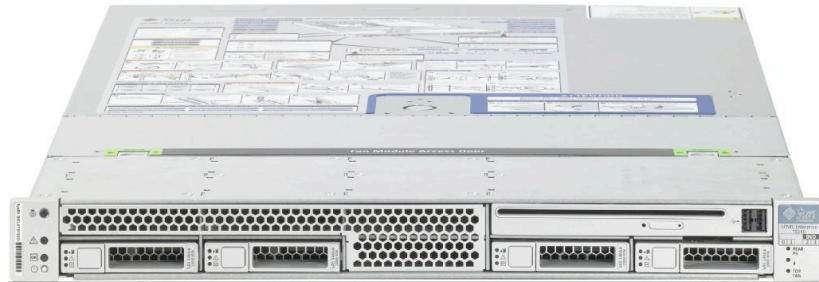
SUN SPARC ENTERPRISE T5140 SERVER

KEY FEATURES

SCALE MORE WITH LESS

- World's first dual-socket general-purpose server powered by the third-generation UltraSPARC T2 Plus processor
- Highest compute density available with up to 128 simultaneous compute threads per server and 5,120 threads per rack
- Built-in, no-cost virtualization technology with Oracle VM Server for SPARC (previously called Sun Logical Domains) and Oracle Solaris Containers
- Integrated on-chip cryptographic acceleration
- Onboard 10 Gigabit Ethernet (GbE) for secure computing and high-speed networking
- Oracle's Flash SSDs accelerate application response times and slash energy consumption
- Massive I/O performance and expandability with Oracle's Sun External I/O Expansion Unit, supporting up to 12 additional PCI Express slots

Increase the eco-efficiency of your data center without sacrificing performance with Oracle's Sun SPARC Enterprise T5140 server, which offers the highest compute density available—128 threads in only one rack unit.



The Sun SPARC Enterprise T5140 server provides the highest compute density so you can scale more with less.

Increase Server Uptime and Reduce Unplanned Service Actions

The Sun SPARC Enterprise T5140 server is the first dual-socket, general-purpose server powered by UltraSPARC T2 Plus third-generation “system on a chip” processor. It features up to 128 compute threads running on the free and open source Oracle Solaris operating system. Each processor packs up to eight cores and up to 64 simultaneous threads onto a single piece of silicon, together with the key functions of an entire system on a single chip—computing, security, and I/O.

The innovative design and reliability features of the Sun SPARC Enterprise T5140 server significantly increase uptime and reduce unplanned service actions. Extreme integration at both the processor and system levels deliver a part count reduction of up to 20 percent compared to competitive 2-socket x86 platforms and 13x compared to legacy midrange server platforms, directly reducing service interruptions due to component failure.

Maximize your server capacity, utilization, and infrastructure agility while minimizing energy, space, and cooling requirements, as well as reducing administrative overhead. The Sun SPARC Enterprise T5140 server offers the industry's only built-in, no-cost virtualization technologies, with a choice of Oracle Solaris Containers and Oracle VM Server for SPARC (previously called Sun Logical Domains). By enabling up to 128 isolated domains per server, you can deploy up to 5,120 isolated domains per rack, for ultimate server virtualization and consolidation.

The Sun SPARC Enterprise T5140 server is the industry's most open platform, built



on open source technologies and open standards, packaging the only mainstream processor and virtualization hypervisor offered under the GPL, and pre-loaded with Oracle Solaris Operating System and pre-installed software tools. The Oracle Solaris Operating System is free, open, and the only open source UNIX-based OS to run on more than 900 platforms on multiple x86 and SPARC processors.

Sun SPARC T5140 Server Specifications

Key Applications
<ul style="list-style-type: none"> • Virtualization and consolidation • Data-intensive applications • Security applications • Web, middleware, and application tier workloads, especially Java environments • OLTP databases • Multithreaded HPC workloads with large instruction and data sets • New Web services deployments • SOA infrastructure implementations
Architecture
<ul style="list-style-type: none"> • Processor. Four-, six-, and eight-core 1.2 GHz or eight-core 1.4 GHz UltraSPARC T2 Plus processors. • Cache. 4 MB integrated L2. • Main memory. 16 FB DIMM slots, system maximum of 128 GB; support for 2 GB, 4 GB, and 8 GB low-voltage (1.55 V) DIMMs; minimum of 16 GB (8 x 2 GB).
System Architecture
SPARC V9 architecture, ECC protected
Other Processor Key Features
<ul style="list-style-type: none"> • One floating-point unit per core, up to eight per processor • Onboard cryptography supporting 10 embedded security industry-standard ciphers: DES, 3DES, AES, RC4, SHA1, SHA256, MD5, RSA to 2048 key, ECC, CRC32
Key RAS Features
<ul style="list-style-type: none"> • Hot-pluggable disk drives • Redundant hot-swappable fans • Redundant hot-swappable AC and DC power supplies • Environmental monitoring • Error correction and parity checking • Easy component replacement • Internal hardware drive mirroring (RAID 1) • RAID 0 and 1 support • Ultra-low part count with 20 percent fewer parts than competitive 2-socket x86 systems
Standard Integrated Interfaces
<ul style="list-style-type: none"> • Network. Four 10/100/1000 Mb/sec Ethernet ports; Up to 2x optional 10 GbE XAUI connections. • Expansion bus. One dedicated eight-lane PCIe expansion slot, two eight-lane PCIe or XAUI expansion slots. • Ports. Four USB 2.0 ports, one RJ-45 serial management port, one 10/100 Mb/sec Ethernet network management port, one DB-9 serial port.

Software
<p>Operating System</p> <ul style="list-style-type: none"> • Oracle Solaris 10 8/07 • Oracle Solaris 10 5/08 • Oracle Solaris 10 10/08 • Oracle Solaris 10 5/09 • Oracle Solaris 10 10/09
<p>Preloaded Software</p> <ul style="list-style-type: none"> • Oracle Solaris 10 10/09 OS preloaded • Oracle VM Server for SPARC 1.3, including MIB pre-install • Oracle Sun Studio 12 U1 pre-install • GCC for SPARC Systems Version 4.3.2 pre-install • CMT Developer Tools Version 1.2 pre-install • Live Upgrade, Alternate Boot Environment (ABE) pre-install •
<p>Mass Storage and Media</p> <ul style="list-style-type: none"> • Internal disk. Up to four or eight 146 GB/300 GB 2.5 in. SAS drives, depending on selected backplane; or up to four 32 GB 2.5 in. SATA solid-state drives (SSD). • Internal DVD. One slimline CD-RW/DVD-RW. • 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.
Virtualization
<ul style="list-style-type: none"> • Built-in, no-cost Oracle VM Server for SPARC (previously called Sun Logical Domains) and Oracle Solaris Containers provide the flexibility and power of 128 virtual systems in a single server
Environment
<ul style="list-style-type: none"> • Operating temperature. Sea level to 900 m (3,000 ft.), 5°C to 35°C (41°F to 95°F), above 900 m (3,000 ft.), decrease maximum temperature as altitude increases by 1°C/300 m (1.6°F/1,000 ft.). • Nonoperating temperature. Sea level to 900 m (3,000 ft.) -40°C to 65°C (-40°F to 149°F), above 900 m (3,000 ft.) -40°C to 60°C (-40°F to 140°F) (maximum altitude 40,000 ft.). • Operating relative humidity. 10% to 90% RH, 27°C maximum wet bulb, noncondensing. • Nonoperating relative humidity. 93% RH, 35°C maximum wet bulb, noncondensing. • Operating altitude. 3,000 m (10,000 ft.). • Nonoperating altitude. 12,000 m (40,000 ft.). • Acoustic noise. Operating/idling sound power level, 7.3 B (LwAd, 1 B = 10 dB), operating/idling sound pressure level 62 dB (LpAm, bystander positions).
Power
<ul style="list-style-type: none"> • The Sun SPARC Enterprise T5140 server supports two hot swap power supplies providing N + 1 redundancy. Also available are DC 660 W power supply units.

Regulations
<ul style="list-style-type: none"> • Safety. UL/CSA-60950-1, EN60950-1, IEC60950-1 CB Scheme with all country deviations, IEC825-1, 2, CFR 21 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. • Ergonomics. EK1-ITB-2000.
Dimensions and Weight
<ul style="list-style-type: none"> • Height. 44 mm (1.746 in.); 1RU. • Width. 425 mm (16.75 in.). • Depth. 714 mm (28.125 in.). • Weight. Approximately 16.78 kg (37 lb.).

Warranty

Visit oracle.com/sun/warranty for Oracle's global warranty support information on Sun products.

Services

You can maximize your investment in the Sun SPARC Enterprise T5140 server by leveraging Oracle's professional services for Sun products. These services optimize data center power, space, and cooling, or help you architect and deploy consolidation and virtualization projects. In addition, Oracle offers comprehensive support options. Visit oracle.com/sun/services for information on Oracle's service program offerings for Sun products.

Contact Us

For more information about Oracle's Sun SPARC Enterprise T5140 server, please visit oracle.com/sun or call +1.800.786.0404 to speak to an Oracle representative.



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