

# SUN SPARC ENTERPRISE T5440 SERVER

## KEY FEATURES AND BENEFITS

### CHANGE YOUR MIDRANGE COMPUTING ECONOMICS

- Delivers high-throughput Chip Multithreading (CMT) with the scalability and reliability of a midrange system
- Delivers massive throughput of up to 256 simultaneous compute threads and 512 GB of memory
- Drives utilization, reduces costs, and consolidates workloads via built-in virtualization technology with Oracle VM Server for SPARC (previously called Sun Logical Domains) and Oracle Solaris Containers
- Delivers outstanding performance and availability for mission-critical, back-office applications
- First quad-socket, general-purpose server powered by UltraSPARC T2 Plus processor
- Integrated on-chip cryptographic acceleration
- Oracle's Flash SSDs improve application response times, slash energy consumption
- Oracle Solaris 8 and 9 OS applications run unchanged on Oracle Solaris 10 OS
- Massive I/O performance and expandability with Oracle's Sun External I/O Expansion Unit, supporting up to 24 additional PCI Express slots

*Ideal for data center consolidation—as well as databases, back-office applications, and other demanding tasks—Oracle's Sun SPARC Enterprise T5440 server offers built-in, no-cost virtualization and up to four times the performance of competitive midrange servers for as little as one-fifth of the cost.*



**Sun SPARC Enterprise T5440 server changes your midrange computing economics.**

### Scalable, Reliable, and Ready to Serve

The Sun SPARC Enterprise T5440 server is the first quad-socket, general-purpose server powered by the first true “system on a chip,” UltraSPARC T2 Plus processor—running the free and open source Oracle Solaris operating system. Each processor packs eight cores and 64 simultaneous threads onto a single piece of silicon, together with the key functions of an entire system. Built-in, flexible, and no-cost Oracle VM Server for SPARC (previously called Sun Logical Domains) virtualization technology provides up to 128 isolated domains per server.

The Sun SPARC Enterprise T5440 server offers massive I/O and memory expandability, enabling you to easily and cost-effectively add more capacity. With the Oracle's Sun External I/O Expansion Unit, the number of I/O slots available can be expanded to 28 PCIe slots. The innovative design and reliability features of the Sun SPARC Enterprise T5440 server significantly increase uptime and reduce unplanned service actions. System integration reduces component count by as much as 36 percent compared to x86 platforms and by as much as 900 percent compared to legacy midrange server platforms.

### Virtual and Eco-Friendly

You can maximize your investment in the Sun SPARC Enterprise T5440 server by



leveraging the Oracle's Virtualization Suite of Services to help architect and deploy consolidation and virtualization projects, and the Oracle's Eco Services Suite to optimize data center power, space, and cooling. In addition, Oracle offers a range of services to help you upgrade to the Oracle Solaris 10, as well as award-winning support services.

### Sun SPARC Enterprise T5440 Server Specifications

Processor	
One to four UltraSPARC T2 Plus processors at 1.2 GHz, 1.4 GHz or 1.6 GHz, eight cores per processor. Other key processor features include the following: <ul style="list-style-type: none"> <li>• Eight floating-point units per processor, one per core</li> <li>• On-board cryptography supporting 10 embedded security industry-standard ciphers: DES, 3DES, AES, RC4, SHA1, SHA256, MD5, RSA to 2048 key, ECC, CRC32</li> </ul>	
Main Memory	
System maximum of 512 GB; support for 2 GB, 4 GB, and 8 GB FB-DIMMs.	
System Architecture	
SPARC V9 architecture, ECC protected	
Cache Per Processor	
4 MB integrated L2	
Standard/Integration Interfaces	
<ul style="list-style-type: none"> <li>• <b>Network.</b> Four 10/100/1000 Mb/sec Ethernet; two optional 10 Gb/sec Ethernet connections.</li> <li>• <b>Expansion bus.</b> Eight eight-lane PCIe slots, two shared with 10 Gb/sec Ethernet slots.</li> <li>• <b>Ports.</b> Four USB 2.0 ports, one RJ45 serial management port, one 10/100 Mb/sec Ethernet network management port, one DB9 serial port.</li> </ul>	
Mass Storage and Media	
Internal disk	Up to four 146 GB/300 GB 2.5 in. SAS drives or up to four 32 GB 2.5 in. SATA solid-state drives (SSD)
Internal DVD	One slimline CD-RW/DVD-RW
External storage	Sun offers a complete line of best-in-class, innovative storage, hardware, and software solutions, along with renowned world-class service and support. For more information, please refer to <a href="http://oracle.com/storage">oracle.com/storage</a> .
Software	
Operating system	Oracle Solaris 10 OS 8/07 plus patches or later
Software included	<ul style="list-style-type: none"> <li>• Oracle Solaris 10 10/09 Preloaded</li> <li>• Oracle VM Server for SPARC 1.3, including MIB pre-install</li> <li>• Oracle Sun Studio 12 U1 pre-install</li> <li>• GCC for SPARC Systems Version 4.3.2 pre-install</li> <li>• CMT Developer Tools Version 1.2 pre-install</li> <li>• Live Upgrade, Alternate Boot Environment (ABE) pre-install</li> <li>• Electronic Prognostics V1.0</li> </ul>
Virtualization	
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
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Power Supplies	
<ul style="list-style-type: none"> <li>Four hot-swappable AC 1,120 W redundant (2 + 2) power supplies</li> <li>Maximum operating input current: 27.0 A @ 100–120 V AC; 13.25A @ 200 V AC</li> <li>Maximum operating input power at 100 V AC: 27.0 A</li> </ul>	
Environment	
Operating temperature	<ul style="list-style-type: none"> <li>5°C to 35°C (41°F to 95°F)</li> <li>Decrease in maximum temperature: 1°C/300m (1.6°F/1,000 ft.)</li> </ul>
Nonoperating temperature	<ul style="list-style-type: none"> <li>40°C to 65°C (-40°F to 149°F), maximum altitude 40,000 ft.</li> </ul>
Operating relative humidity	<ul style="list-style-type: none"> <li>10% to 90%, noncondensing, 27°C wet bulb</li> </ul>
Nonoperating relative humidity	<ul style="list-style-type: none"> <li>93%, noncondensing, 35°C (95°F)</li> </ul>
Operating altitude	<ul style="list-style-type: none"> <li>0 m to 3,000 m (0 ft. to 10,000 ft.)</li> </ul>
Nonoperating altitude	<ul style="list-style-type: none"> <li>0 m to 12,000 m (0 ft. to 40,000 ft.)</li> </ul>
Acoustic noise	<ul style="list-style-type: none"> <li>7.4 B idle, 8.9 B operating maximum (LwAd: 1 B = 10 dB)</li> <li>6.3 B idle, 8.0 B operating max (LpAm: bystander positions)</li> </ul>
Power and cooling	Maximum heat dissipation: 9,212.8 BTU/hour or 9,720 KJ/hour
Dimensions and Weight	
<ul style="list-style-type: none"> <li><b>Height:</b> 176 mm (6.92 in.); 4 RU</li> <li><b>Width:</b> 445 mm (17.5 in.)</li> <li><b>Depth:</b> 633 mm (24.9 in.)</li> <li><b>Weight:</b> Approx. 40 kg (88 lbs.) max., without</li> <li>PCI adapters, rackmount kit, etc.</li> </ul>	
Regulations (Meets or Exceeds the Following Requirements)	
<ul style="list-style-type: none"> <li><b>Safety:</b> 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</li> <li><b>EMI/EMC:</b> EN 55022 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, EN 61000-3-2, EN 61000-3-3</li> <li><b>Immunity:</b> 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</li> <li><b>Regulatory markings:</b> CE, FCC, ICES-003, C-Tick, VCCI, GOST-R, BSMI, MIC, UL/cUL, UL/S-Mark</li> </ul>	
Key RAS Features	
<ul style="list-style-type: none"> <li>Hot-pluggable disk drives</li> <li>Redundant, hot-swappable power supplies and fans</li> <li>Environmental monitoring</li> <li>Error correction and parity checking memory</li> <li>Easy component replacement</li> <li>Integrated disk controller with RAID 0 and 1</li> </ul>	

### Warranty

Visit [oracle.com/sun/warranty](http://oracle.com/sun/warranty) for Oracle's global warranty support information on Sun products.

### Services

Visit [oracle.com/sun/services](http://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 T5440 server, please visit [oracle.com/sun](http://oracle.com/sun) or call +1.800.ORACLE1 to speak to an Oracle representative.



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