



SPARC T4-2 SERVER

IDEAL FOR BUSINESS CRITICAL APPLICATIONS AND DATABASE WORKLOADS

KEY FEATURES AND BENEFITS

- Outstanding performance and systems throughput in an affordable 2U rack enterprise class design
- Advanced integrated virtualization technology enables real-time scaling and optimal resource utilization with Oracle Solaris Containers and Oracle VM Server.
- Integrated on-chip cryptographic acceleration provides high levels of security without sacrificing application performance.
- Runs Oracle Solaris 10 and 11 with guaranteed binary compatibility and support for legacy applications
- Optional Flash-based storage devices enable accelerated application performance and greater business agility
- Smart, simple, and eco friendly designs offer greater energy and space optimization, increasing asset utilization while reducing operating costs.

A recognized, innovative leader in the development of cutting edge systems technology, Oracle's SPARC T4-2 server utilizes the SPARC T4 server processor, offering outstanding single-thread while maintaining impressive systems throughput. The SPARC T4-2 is an ideal server for large departmental deployments and for business-critical applications, middleware and database workloads. This system is the perfect choice to accelerate and consolidate business processes, improve operating efficiency and reduce data center overhead.



Figure 1: The SPARC T4-2 server delivers high performance along with maximum security, speed, and scale.

Product Overview

The SPARC T4-2 server, powered by the SPARC T4 processor, combines single-threaded performance along with high overall system throughput. The advanced SPARC T4 processor features integrated on-chip cryptographic support that provides wire speed encryption capabilities without any application performance penalties.

The SPARC T4-2 server is equipped with two SPARC T4 processors and 32 DIMM slots, which can support a total of 1 TB of memory when populated with 32 GB DIMMs. The SPARC T4-2 delivers highly expandable internal storage and network connectivity as the server has room for a combination of six hard disk drives or solid state drives and ten PCI Express card slots. It also supports large Flash storage configurations that accelerate I/O intensive application performance, improve business response times and increase productivity while reducing power and space.

The SPARC T4-2 server comes integrated at no additional cost with Oracle VM Server for SPARC and Oracle Solaris. The SPARC T4-2 supports both Solaris 10 and Solaris 11.

SPARC T4-2 Server Specifications

| Key Applications | |
|---|---|
| <ul style="list-style-type: none"> • Departmental business applications • Specialized application for billing, supply chain, engineering and manufacturing • Middleware and multi-tiered applications • Application consolidation and virtualization • Web serving and web services • Security applications • Database and analytics | |
| Architecture | |
| Processor | |
| <ul style="list-style-type: none"> • Eight-core 2.85GHz SPARC T4 processor • Two processors per system, maximum 128 threads • Eight floating-point units • Dual multithreaded 10 GbE PCI integrated onto chip • New on-chip Encryption Instruction Accelerators with direct non-privileged support for 16 industry-standard cryptographic algorithms plus random number generation in each of the eight cores: AES, Camellia, CRC32c, DES, 3DES, DH, DSA, ECC, Kasumi, MD5, RSA, SHA-1, SHA-224, SHA-256, SHA-384, SHA-512 | |
| Main Memory | |
| <ul style="list-style-type: none"> • 32 DDR3 DIMM slots, system maximum of 1 TB • Support for 4 GB, 8 GB, 16 GB and 32 GB DIMMs | |
| System Architecture | |
| <ul style="list-style-type: none"> • SPARC V9 architecture, ECC protected | |
| Cache per Processor | |
| <ul style="list-style-type: none"> • Dedicated 128K L2 cache per core, a shared 4MB L3 cache | |
| Interfaces | |
| <ul style="list-style-type: none"> • Network. 4x 1Gb (10/100/1000Mbps) integrated Ethernet ports. Option slot for 4x 10GbE XAUI ports. • Expansion bus. Ten total. Eight x8 PCIe Gen 2 slots, two x4 PCIe Gen2 slots • Ports. Four external USB 2.0 port. One VGA port | |
| Mass Storage | |
| Internal disk: | <p>Up to six 300 GB or 600 GB GB 2.5 in. SAS drives or 100GB or 300GB SSD drives.</p> <p>Internal DVD: One slim line SATA DVD+/-RW.</p> <p>Optional Sun Flash Accelerator F40 PCIe card</p> |
| External storage | <p>Oracle 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 oracle.com/storage.</p> |

| |
|--|
| Power |
| <ul style="list-style-type: none"> • Two hot-swappable AC 2,060W redundant (N+1) power supplies • Maximum operating input current: 7.6A @ 200 V AC • Maximum operating input power at 200 V AC: 1451.7W |
| Key RAS Features |
| <ul style="list-style-type: none"> • Hot-pluggable disk drives • Redundant, hot-swappable power supplies and fans • Environmental monitoring • Extended ECC, error correction and parity checking memory • Easy component replacement • Integrated disk controller with RAID 0, 1 and 1E • Electronic Prognostics |
| Software |
| Operating System |
| <ul style="list-style-type: none"> • Oracle Solaris 11.1 or later • Oracle Solaris 11 11/11 • Oracle Solaris 10 1/13 • Oracle Solaris 10 8/11 • Support for Solaris 10 9/10 or Solaris 10 10/09 with Oracle Solaris 10 8/11 Patch set |
| Software Included |
| <ul style="list-style-type: none"> • Oracle Solaris 11, including Oracle VM Server for SPARC |
| Virtualization |
| <ul style="list-style-type: none"> • Built-in, no-cost Oracle VM Server for SPARC and Oracle Solaris Containers provide the flexibility and power of up to 128 virtual systems in a single SPARC T4-2 server |
| Environment |
| Temperature |
| <ul style="list-style-type: none"> • Operating temperature: 5°C to 35°C (41°F to 95°F) • Nonoperating temperature: -40°C to 65°C (-40°F to 149°F) |
| Relative Humidity |
| <ul style="list-style-type: none"> • Operating relative humidity: 10% to 90%, noncondensing, 27°C wet bulb • Nonoperating relative humidity: 93%, noncondensing, 38°C (100.4°F) wet bulb |
| Altitude |
| <ul style="list-style-type: none"> • Operating altitude: 0 m to 3,000 m * (0 ft. to 10,000 ft.) • <i>* Except in China markets where regulations may limit installations to a maximum altitude of 2km</i> • Nonoperating altitude: 0 m to 12,000 m (0 ft. to 40,000 ft.) |
| Acoustic Noise |
| <ul style="list-style-type: none"> • 7.7 B operating and 7.6 B idle (LwAd: 1 B = 10 dB) • 61.5 dB operating and 61.2 idle (LpAm: bystander positions) |
| Cooling |
| <ul style="list-style-type: none"> • 4953 Btu/hr, 230 cfm max |

Regulations

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

EMI/EMC: 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

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

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

Ergonomics: EK1-ITB-2000

European Union Directive: Restriction of Hazardous Substances (RoHS) Directive

Dimensions and Weight

Height: 129.85mm (5.11 in); 3RU

Width: 436.5 mm (17.185 in.)

Depth: 732 mm (28.82 in.)

Weight: Approx. 36.28kg (80 lbs.) max., without rackmount kit.

Warranty

The SPARC T4-2 comes with a one-year warranty. Visit oracle.com/us/support/policies/ for more information about Oracle's hardware warranty.

Complete Support

With Oracle Premier Support, you'll get the services you need to maximize the return on your Oracle SPARC server investment—our complete system support includes 24/7 hardware service, expert technical support, proactive tools, and updates to Oracle Solaris, Oracle VM, and integrated software (such as firmware) – all for a single price. Learn more at oracle.com/support.

Contact Us

For more information about Oracle SPARC T4-2 server, visit oracle.com or call +1.800.ORACLE1 to speak to an Oracle representative.



Oracle is committed to developing practices and products that help protect the environment

Copyright © 2013, Oracle and/or its affiliates. All rights reserved.

This document is provided for information purposes only and the contents hereof are subject to change without notice. This document is not warranted to be error-free, nor subject to any other warranties or conditions, whether expressed orally or implied in law, including implied warranties and conditions of merchantability or fitness for a particular purpose. We specifically disclaim any liability with respect to this document and no contractual obligations are formed either directly or indirectly by this document. This document may not be reproduced or transmitted in any form or by any means, electronic or mechanical, for any purpose, without our prior written permission.

Oracle and Java are registered trademarks of Oracle and/or its affiliates. Other names may be trademarks of their respective owners.

Intel and Intel Xeon are trademarks or registered trademarks of Intel Corporation. All SPARC trademarks are used under license and are trademarks or registered trademarks of SPARC International, Inc. AMD, Opteron, the AMD logo, and the AMD Opteron logo are trademarks or registered trademarks of Advanced Micro Devices. UNIX is a registered trademark licensed through X/Open Company, Ltd. 0611

Hardware and Software, Engineered to Work Together