

CONSOLIDATE LIKE NEVER BEFORE. VIRTUALIZATION COMES FREE.

#### **KEY FEATURES**

- Up to 256 simultaneous compute threads per server.
- Increased throughput over previous T-series
- Built-in, no-cost virtualization technology with Oracle VM Server for SPARC (previously called Sun Logical Domains)
- Up to 4x I/O performance vs. prior generation of system
- Massive I/O performance supporting up to 10 PCIe low-profile slots
- Integrated on-chip cryptographic acceleration
- Oracle Sun Flash Accelerator F20 PCIe cards improve application response times, slash energy consumption
- Oracle Solaris 9 OS applications run unchanged on Oracle Solaris 10 OS

# SPARC T3-2 SERVER

Among the biggest problems facing businesses today are poor space utilization, high energy and cooling costs and overcrowded data centers. It doesn't matter the size of the company, all are feeling the pinch when it comes to data center consolidation. Oracle's SPARC T3-2 server is the answer for consolidation of legacy servers, saving valuable data center real estate, and significantly cutting operational costs.



# **Product Overview**

As the newest two-socket, three-rack unit (3U) server, the SPARC T3-2 is powered by the industry's first 16-core SPARC T3 processor and is the first 256-thread general-purpose server. It packs 16 cores and 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 IO.

The SPARC T3-2 features 6 hard disk drives, 32 DDR3 DIMM slots, and 10 PCIe Gen2 slots. When fully populated with 8GB DDR3 DIMMs, the system provides a total of 256 GB memory.

# **Built-in Virtualization**

The SPARC T3-2 server offers virtualization technologies that enable organizations to extract maximum value from IT assets while creating an infrastructure capable of rapidly adapting to today's dynamic business environment. Oracle VM Server for SPARC provides highly efficient, enterprise-class virtualization capabilities by creating partitions called logical (or virtual) domains. Each logical domain can run an independent operating system. While customers may achieve the optimal results with 32 logical domains, the SPARC T3-2 server supports a maximum of 128 logical domains, allowing organizations to consolidate workloads and maximize their use of compute platforms, simplifying their IT infrastructure and bringing new levels of efficiency, manageability, and agility to the data center.



## **SPARC T3-2 Server Specifications**

## **Key Applications**

- Consolidation and Virtualization
- Web, middleware, and application tier workloads, especially Java environments
- OLTP databases
- Specialized application for billing, supply chain, engineering and manufacturing
- · Security applications
- · Streaming media

## **Processor**

- Two 16-core 1.65 GHz SPARC T3 processors, SPARC V9 architecture, ECC protected
- 6 MB integrated Level 2 (L2) cache
- Dual multithreaded 10 Gigabit Ethernet PCI integrated onto 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 (Note: CRC32c and Kasumi not currently supported by Solaris)

## **Main Memory**

- 32 DIMM slots, (16 DIMMs per processor)
- System maximum of 256 GB
- Support for 4 GB and 8 GB DDR3 DIMMs

## Interfaces

- Four 1Gb (10/100/1000 Mbps) integrated Ethernet ports
- One specialized option slot for use with the SPARC T3-2 server 10 Gb Network Module card
- Ten PCI Express 2.0 slots (six x8-lane electrical, two x4-lane electrical and two x8-lane electrical with x16-lane physical connectors)
- One RJ-45 serial management port and one RJ-45 network port for remote management
- Four USB 2.0 ports
- Front and rear HD15 VGA port
- One optional front accessible slim line SATA DVD+/-RW drive

Mass Storage	
	Six 2.5" SAS-2/SATA-2 front accessible hot swappable disk bays
Internal disk	All bays can be populated with 300 GB or 600 GB SAS-2 hard disk drives or 32 GB SATA-2 Solid state drives
	Optional Sun Flash Accelerator F20 PCle adapter card
External storage	Sun 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.
Software	
Operating system	<ul><li>Oracle Solaris 10 9/10</li><li>Support for Solaris 10 10/09 + Oracle Solaris 10 9/10</li></ul>



	Patch Bundle
Virtualization	Oracle VM Server for SPARC 2.0

#### **Power Supplies**

- Two hot-swappable AC 2060W redundant (N+1) power supplies
- Maximum operating input current: 12A @ 200 V AC
- Maximum operating input power at 200 V AC: 1325W

Use the online power calculator to determine the power consumption of a server with a specific configuration. To locate the appropriate power calculator, go to the following web site and navigate to the SPARC T3-2 server page:

## http://www.oracle.com/goto/powercalculators/

Environment		
Operating temperature	• 5°C to 35°C (41°F to 95°F)	
Nonoperating temperature	• -40°C to 65°C (-40°F to 149°F)	
Operating relative humidity	• 10% to 90%, noncondensing, 27°C wet bulb	
Nonoperating relative humidity	• 93%, noncondensing, 38°C (100.4°F) wet bulb	
Operating altitude	• 0 m to 3,000 m (0 ft. to 10,000 ft.)	
Nonoperating altitude	• 0 m to 12,000 m (0 ft. to 40,000 ft.)	
Acoustic noise	• 61.2 dBA (LwAd: 1 B = 10 dB)	
	61.5 dBA operating max (LpAm: bystander positions)	
Cooling	4361.9 Btu/hr, 230 cfm max	

## **Dimensions and Weight**

- Height: 129.85mm (5.11 in); 3RU
- Width: 436.5 mm (17.185 in.)
- Depth: 732 mm (28.81 in.)
- Weight: Approx. 36.28kg (80 lbs.) max., without rackmount kit.

## Regulations (Meets or Exceeds the Following Requirements)

- 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

## **Key RAS Features**

- Hot-pluggable disk drives
- · Redundant, hot-swappable power supplies and fans
- Environmental monitoring
- Error correction and parity checking memory
- Easy component replacement
- Integrated disk controller with RAID 0 and 1
- Electronic Prognostics 1.1



## 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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Hardware and Software, Engineered to Work Together



