

# Sun Fire™ V40z Server

Enterprise four to eight-way x64 server



## Highlights

- Reliability and availability: Redundant power and cooling, RAID storage, and ECC memory protection. High availability when used with Sun™ Cluster
- Serviceability and management: Lights Out Management (LOM) service processor monitors and reports system and component status, and enables remote system power on/off and firmware updates. Front/back LED and switch
- Flexibility of standard platform: Choice of operating systems, including Solaris™ 10 OS, Solaris 9 OS, Red Hat Enterprise Linux, and SUSE LINUX Enterprise Server. Certified to run Microsoft Windows 2000 and Microsoft Windows Server 2003
- Performance: Up to four single-core or plug-compatible dual-core 800 series AMD Opteron™ processors. Up to 32 GB of ECC memory with AMD HyperTransport™ technology
- Seven PCI-X slots. Up to 1.8 TB of internal Ultra320 storage with RAID option
- Provision, monitor, and manage with the recommended Sun N1™ System Manager software



The Sun Fire™ V40z server brings the next jump in performance and return on enterprise computing investment with near-linear processor scalability and enterprise-class reliability. And with four- to eight-way performance in four sockets at the operating costs of traditional four-way systems, the Sun Fire V40z server provides a new level of advancement in delivering results for product creation, service delivery, business intelligence, and enterprise applications.

### Quantum leap in price/performance for enterprise data centers

The Sun Fire V40z server comes standard with power and cooling redundancy, I/O bandwidth, and RAID storage capacity. Secure Lights Out Management enables remote monitoring, control, and update of Sun Fire V40z servers anywhere on the Internet—giving flexibility to data center management. When managed by Sun Cluster, a pair of Sun Fire V40z servers has high availability. These capabilities are ideal for branch office deployment. The Sun Fire V40z server can consolidate many smaller servers, increasing IT asset efficiency and utilization. In a grid, connected by Ethernet or InfiniBand, each Sun Fire V40z server operates as a member of an efficient,

scalable system that can balance risk-return portfolios on Wall Street, find deposits quicker in oil exploration, discover the next drug sooner in biosciences, get designs out faster than the competition in product development, deliver new telecom services like Voice over IP, process millions to billions of Web transactions for e-commerce or supply chain operations, and solve complex ERP/CRM problems faster. With a large choice of applications and operating systems, the Sun Fire V40z server is truly versatile, simplifying the job for IT managers while delivering business results quicker and more effectively.

# Sun Fire V40z Server Specifications

## Architecture

### Processor

Up to four single-core/dual-core AMD Opteron 800 series processors (Models 850, 852, 854, 856, 880, 885), 1 MB Level 2 cache per core

### Memory (min./max.)

Up to 32 GB of DDR1/400 ECC registered DIMMs

### System architecture

Up to 3 x 8 GB/sec. AMD HyperTransport bidirectional links per processor, up to 1,000 MHz operation

### Disk controllers

Onboard Ultra320 SCSI controller with built-in mirroring (RAID-1) support

### Networking

Dual onboard Gigabit Ethernet ports

### I/O expansion

Seven internal PCI-X slots (four full-length at 64-bit/133 MHz, one full-length at 64-bit/100 MHz, one half-length at 64-bit/100 MHz, and one half-length at 64-bit/66 MHz)

- Two USB 1.1 ports; one in front, one in back
- One TIA/EIA-232F asynchronous RJ45 port

## Operating systems

### Operating systems sold and serviced by Sun

- Solaris 10 3/05 OS for x64
- Solaris 9 HW 4/05 OS or later for x86
- Red Hat Enterprise Linux 3.0 (32-bit/64-bit)<sup>1</sup>
- Red Hat Enterprise Linux 4.0 (32-bit/64-bit)
- SUSE LINUX Enterprise Server 8.0 (64-bit)<sup>2</sup>
- SUSE LINUX Enterprise Server 9.0 (64-bit)

### Operating systems certified by Sun (third-party support) on Windows Server Catalog

- Windows Server 2003, Enterprise/Standard/Web Editions (32-bit)
- Windows Server 2003, Enterprise/Standard Editions (64-bit)
- Windows 2000 Advanced Server/Server (32-bit)
- VMware ESX Server 2.5, 2.5.1, and 2.5.2

## Mass storage and media

### Internal disk

Up to six hot-swappable Ultra320 SCSI disks (73 GB/10K RPM, 146 GB/10K RPM, 73 GB/15K RPM, 300 GB/10K RPM)

- Internal DVD/Slimline

### External disk

Sun StorEdge™ 3310 SCSI array, Sun StorEdge 3510 array, and other StorEdge storage and tape devices

### Systems management

- Separately powered Lights-Out Management Service Processor for remote control/status of server, access via either dedicated 10/100Base-T Ethernet port or serial port
- Front/back LED, system ID switch
- Front LCD with control panel
- Sun N1 Systems Manager—discovering, grouping, bare metal provisioning, hardware monitoring, OS monitoring

## Optional additional software

- Sun Cluster
- Sun Java™ Enterprise System software
- Sun Java™ System Directory Server
- Sun Java™ Application System Server
- Solaris™ Volume Manager
- SunScreen™ firewall
- Solaris™ 9 Resource Manager

## Environment

### Unit-level ambient temperature

10° C. to 35° C.

### Operating altitude

0 to 3,000m max. Max. ambient temperature is derated 1° C. for every 300 meters

### Acoustic noise

Less than 6.7 Bels sound power in ambient temperature of up to 24° C.

## Learn More

Get the details about the Sun Fire V40z server by visiting [sun.com/v40z](http://sun.com/v40z).

### Rack-level ambient temperature

10° C. to 30° C., derate max. ambient temperature 1° C. for every 300m of elevation, up to 3,000m max.

## Power

760 W (with hot-swap redundant N+1 power)

## Regulations (meets or exceeds the following requirements)

- Safety: IEC60950, UL/CSA60950, EN60950, RFI/EMI FCC Class A, Part 15 47 CFR, EN55022, CISPR 22
- Immunity: EN55024

## Certifications

- Safety: cULus Mark, TUV GS Mark, CE Mark
- EMC: CE Mark (93/68/EEC), FCC-authorized Class A, VCCI, BSMI, CTICK, CCC

## Dimensions and weight

- Height: 5.2 in. (132mm)
- Width: 17.5 in. (445mm)
- Depth: 29.5 in. (749mm)
- Weight w/packaging: 75 lb. (34 kg) max.

## Mounting options

Slide rail kit option available and required for racking. Cable management arm option also available

1. No support for dual-core on RHEL 3 U1-4
2. No support for dual-core