# Sun Fire<sup>™</sup> V40z Server



High performance, attractively priced, 4P x86 server, featuring AMD Opteron 32-/64-bit processors

#### **Key feature highlights**

- Choice of operating systems: Solaris<sup>™</sup> 9 OS (x86 Platform Edition), Red Hat<sup>®</sup> Enterprise Linux, and SUSE Linux Enterprise Server. Also certified to run Microsoft Windows Server 2000 and 2003
- Up to 32 GB of DDR333 (PC2700) ECC memory
- Up to four AMD Opteron processors supporting the fastest Model CPU increases performance while providing investment protection. Supports Opteron 800 series processors
- HyperTransport technology and 128-bit wide DDR memory controller reduces latency by pooling memory resources onto a single coherent space
- Ultra320 SCSI (with RAID1 mirroring) interface to support up to six hard drives offering plenty of disk space for I/O-bound applications and redundancy for missioncritical data
- Lights Out Management (LOM) monitors and reports system and component status, meaning less need for on-site staff
- Integrated service processor with two dedicated 10/100 Ethernet ports provides for ease of cable management for dedicated management Ethernet, lowering support costs
- Seven PCI-X slots with four slots running at full 133-MHz speed
- Front and back LEDs provide ability to determine server status at a glance (power, fault, etc.) in large data center server clusters
- Standard 3 RU form factor fits into industrystandard racks to maximize expandability

#### Superior Performance Combined with Industry-leading Functionality

The Sun Fire<sup>™</sup> V40z server brings a new level of performance, scalability, and functionality to the multi-processor x86. In addition, these features enable the server to be easily deployed to provide customer solutions in Web services and database management. No matter how you stack it up, the Sun Fire V40z server addresses the customers' need to run their choice of applications using the same hardware architecture, minimizing hardware support costs and IT support training costs.

Using the state-of-the-art AMD Opteron processors with HyperTransport architecture, the Sun Fire V40z server achieves true 4-processor scalability where you get performance of all four processors. With its compatibility with existing 32-bit x86 operating systems, customers can protect their existing investment in 32-bit OS and applications, and be ready to run the emerging 64-bit OS and applications—yes, the Sun Fire V40z is ready to support 64-bit today. Able to truly utilize large physical memory, up to 32 GB, the Sun Fire V40z server offers high performance for compute-intensive applications, whether in a single server or in cluster configurations, be they in Oil & Gas, Electronic Design, Aircraft Design, Bio Sciences, or Financial Risk Management.



# Sun Fire V40z Server Specifications

# Architecture

| Architecture                 |   |
|------------------------------|---|
| Processor                    | Two or four AMD Opteron <sup>®</sup> 800<br>Series processors (models 844,<br>848, 850)   |
| Cache                        | One MB Level 2 per processor  |
| Memory (min./max.)           | 32 GB of DDR1/333 ECC<br>registered DIMMs, in 4 x (four<br>DIMM slots per CPU)  |
| System Architecture          | 3 x 3.2 GB/sec HyperTransport<br>Bi-directional Links per processor   |
| Disk Controllers             | Onboard Ultra320 SCSI<br>controller with built-in<br>mirroring (RAID 1) support   |
| Networking                   | Dual onboard Gigabit<br>Ethernet ports  |
| Networking<br>Management     | One dedicated 10/100Base-T<br>Ethernet port with integrated<br>two-port switch for daisy-<br>chaining ports   |
| Chipset                      | AMD 8000 Series   |
| Removable Media<br>I/O slots | DVD/floppy (sixth drive bay)<br>Seven internal PCI-X slots (four<br>full-length at 64-bit/133 MHz,<br>one full-length at 64-bit/100<br>MHz, one half-length at<br>64-bit/100 MHz, and one<br>half-length at 64-bit/66 MHz)  |
| I/O ports                    | <ul> <li>Two USB 1.1 ports, one in<br/>front, one in the back</li> <li>One TIA/EIA-232-F<br/>asynchronous RJ45 Port</li> <li>Single Ultra320 SCSI interface,<br/>internal access only. No<br/>external SCSI port</li> </ul> |

## **Operating Systems**

- Solaris<sup>™</sup> 9 4/04 OS, x86 Platform Edition (32-bit)
- Software Express for Solaris OS, x86 Platform Edition
- Red Hat<sup>®</sup> Enterprise Linux 3 for AMD Opteron (32-bit/64-bit)
- SUSE Linux Enterprise Server 8 for AMD Opteron (32-bit/64-bit)
- SUSE Linux 9 Professional\* 64-bit
- Microsoft Windows 2000\* (WHQL certified), (customer provided)
- Microsoft Windows Server 2003\* (WHQL certified) (customer provided)

#### \*3rd party support only

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### **Mass Storage and Media**

| •             |  |
|---------------|--|
| Internal Disk | Up to six hot-swappable<br>Ultra320 SCSI disks   |
| Internal DVD  | One Slim line ATAPI DVD-ROM  |
| External disk | Sun StorEdge" 3310 SCSI array<br>Sun StorEdge 3510 array and<br>other StorEdge storage and<br>tape devices |

#### **Additional Software**

In addition to providing Sun Java" Enterprise System software, Sun has integrated key enterprise-class and popular open source applications—including the Sun Java" System Directory Server, Sun Java System Application Server, Solaris Volume Manager, SunScreen" Firewall, UFS, Solaris 9 Resource Manager, IPQoS, SAMBA and Web server software—into the Solaris 9 Operating System. Additionally, 130 open source packages ship with the Solaris OS on the companion CD.

Third-party solutions running on Solaris 9 OS, x86 Platform Edition can be found in the iForce Partner Products Catalog at:

http://solutions.sun.com/catalog.html under Portfolios.

#### Environmental

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|---|---|--|
| <b>Unit-Level</b><br>Ambient<br>Temperature | 10° C to 35° C  |  |
| Operating Altitude                          | 0 m to 3000 m maximum,<br>maximum ambient temperature<br>is de-rated 1° C for every 300<br>meter                    |  |
| Acoustic Noise                              | Average sound pressure level is 65.6 dB   |  |
| <b>Rack-Level</b><br>Ambient<br>Temperature | 10° C to 30° C, de-rate maximum<br>ambient temperature 1° C for<br>every 300 m of elevation up to<br>3000 m maximum |  |

#### LEDs

| Front-panel LEDs and LCD |  |
|--------------------------|--|
| Rear-panel LEDs          |  |

#### Power

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

#### **Regulations** (Meets or exceeds the following requirements):

|                | 3 1 7   |
|----------------|---|
| Safety         | IEC60950, UL/CSA60950, EN60950  |
| RFI/EMI        | FCC Class A, Part 15 47 CFR,<br>EN55022, CISPR 22                         |
| Immunity       | EN55024   |
| Certifications |   |
| Safety         | cULus Mark, TUV GS Mark,<br>CE Mark                                       |
| EMC            | CE Mark (93/68/EEC), FCC<br>authorized Class A, VCCI,<br>BSMI, CTICK, CCC |
|                |   |

#### **Dimensions and Weight**

| -                  |                           |
|--------------------|---------------------------|
| Height             | 5.2 inches (132 mm)       |
| Width              | 17.5 inches (445 mm)      |
| Depth              | 29.5 inches (749 mm)      |
| Weight w/packaging | 75 pounds (16 kg) maximum |

#### **Mounting Options**

Slide rail kit option available and required for racking. A cable management arm option is also available.