

Sun Fire™ V20z Server

Enterprise two to four-way x64 server



Key feature highlights

- Extreme native 32-bit, 64-bit performance at competitive 32-bit prices, in a 1-RU server
- Up to two dual-core or single-core AMD Opteron™ processors embedded with a memory controller for up to four times the memory capacity and bandwidth of typical x86 servers
- AMD HyperTransport™ technology, setting the standards for next-generation, dual-processor server architecture
- Up to 16 GB of memory, enabling large dataset processing
- Lights Out Management, enabling multiple management frameworks, including in-band, out-of-band, serial or Ethernet access, IPMI, SNMP, CLI
- Up to two Ultra320 SCSI disks with RAID 1 mirroring support
- One full-speed, 133-MHz, 64-bit PCI-X slot and one 66-MHz, 64-bit PCI-X slot
- Choice of operating systems: Runs Solaris™ OS, Linux, VMware, and Windows
- Provision, monitor, and manage with the recommended Sun N1™ System Manager software



The Sun Fire V20z server offers high CPU density in a 1-RU form factor. Based on dual-core or single-core AMD Opteron processors, the Sun Fire V20z server outperforms most servers in its class and costs less. It also runs both 32-bit and 64-bit applications simultaneously, as well as multiple operating systems.

Protect your investment while making your business faster

It's a fast-moving world. That means your computing environment has to keep pace with technical innovations as well as with your changing business needs. With the Sun Fire™ V20z server, Sun offers customers next-generation server architecture running existing 32-bit and 64-bit operating systems and applications. By using the dual-core or single-core AMD Opteron processor and AMD's HyperTransport technology, the Sun Fire V20z server is built with a system architecture that has two compute engines, up to 16 GB of large memory support, and on ultra-fast I/O subsystem—all packaged in a compact, 1-RU rackmount server.

In addition, the Sun Fire V20z server natively runs Linux, Windows, the Solaris™ Operating System, and existing 32-bit applications. It also runs 64-bit versions of Linux and next-generation 64-bit x64 applications. With a very flexible in-band and out-of-band Lights Out Management capability and a fast I/O subsystem, the Sun Fire V20z server is designed for deployment in horizontally scaled architecture. It helps enable an easily expandable, highly available solution for deploying Web infrastructure applications, technical compute farms, Grid Computing implementations, database or development services, or other general-purpose Tier 1 and Tier 2 network applications.

Sun Fire V20z Server

Architecture

Processor

Up to two single-core/dual-core AMD Opteron 200 Series processors, 1 MB level 2 cache per core

Memory (min./max.)

Up to 16 GB of registered DDR1-333 SDRAM or DDR1-400⁽¹⁾ SDRAM (four DIMM slots per processor for a total of eight DIMM slots; 128-bit plus ECC databus)

System architecture

Up to 3 x 8 GB/sec. AMD HyperTransport bidirectional links per processor, up to 1000 MHz operation

Storage

One or two 73/146/300-GB Ultra320 SCSI disk drives

Disk controllers

Onboard UltraSCSI 320 controller with built-in mirroring (RAID 1) support

Networking

Dual onboard Gigabit Ethernet ports

Removable media

CD/floppy (standard), DVD/floppy (optional)

I/O slots

Two PCI-X expansion slots:

- One half-length 64-bit/66 MHz
- One full-length 64-bit/133 MHz

I/O ports

- One USB 1.1 port
- One RS-232 serial (DB9)
- One PS/2 port for keyboard
- One PS/2 port for mouse

Video ports

HD15 VGA video connector (rear)

Remote system

- LOM service processor
- In-band, out-of-band management
- CLI (SSH), IPMI v1.5, SNMP
- Dual 10/100 management Ethernet ports
- Remote power on/off, FRU status, software load

Recommended management software

Sun N1 System Manager—Discover, group, bare metal provisioning, hardware monitoring, OS monitoring

Operating systems

Operating systems sold and serviced by Sun

- Solaris 10 OS for x64
- Solaris 9 HW 4/04 OS or later for x86²
- Red Hat Enterprise Linux 3.0 (32-bit/64-bit)³
- SUSE LINUX Enterprise Server 8.0 (64-bit)⁴
- SUSE LINUX Enterprise Server 9.0 (64-bit)³

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

- Windows Server 2003, Enterprise/Standard/Web Editions (32-bit)³
- Windows 2000 Advanced Server/Server (32-bit)⁴
- VMware ESX Server 2.5 and 2.5.1

Optional additional software

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

Learn More

Get the details.

Learn more about the Sun Fire V20z server by visiting sun.com/v20z.

Environmental

Ambient temperature

Operating temperature: +10° C to +35° C
derate max. temperature by 1° C/300 meters

Operating altitude: 3000 meters max.

Nonoperating temperature: -40° C to +65° C

Vibration

Operating vibration: 0.20 G, 5 to 500 Hz sine

Shock

Operating shock: 5 G, 11 ms, half-sine

Power

100-240 V, 50/60 Hz, 7.0A

Regulations (meets or exceeds the following requirements)

FCC Class A, CISPR 22A, VCCI-A, UL, CE, Austel, BSMI, GOST R, MIC, Nemko GS, Canada ICES-003 Class A

Dimensions and Weight

- Height: 1.69 in. (43mm)
- Width: 16.9 in. (430mm)
- Depth: 28.5 in. (724mm)
- Weight: Up to 35 lb. (15.88 kg)

Mounting Options

Toolless slide rail kit option available and required for racking

1. DDR1/400 MHz only currently supported in systems with AMD Opteron processors, models 252, 270, or 275
2. Patches available for dual-core
3. Pending for dual-core
4. No support for dual-core