

Visualization markets: The ideal visualization solution for demanding high-end visualization applications for Design, Styling and Virtual Prototyping, Oil and Gas Exploration, Simulation and Training, and Scientific Research.

Complete visualization solution: Featuring exceptional performance, visual quality, and functionality, the Sun Fire™ V880z Visualization Server provides a cost-effective solution for small or large workgroup visualization environments.

Immersive environments: Imagine visualization environments with use of stereo glasses, 6 degrees-of-freedom trackers, haptic devices, and collaborative visualization environments such as 2-4 channel large screen environments— flat or curved.

World-class Sun support: A single, highly responsive source for the same service experience and industry best practices you've grown to trust for all of your Sun products.

On the Web | www.sun.com/servers/entry/v880z

Sun Fire™ V880z Visualization Server

Features exceptional performance, visual quality and advanced functionality in a powerful, affordable platform, ideal for high-end visualization applications



Visualize the Future!

Visualization has always been an essential tool for scientists, engineers, and product designers. In fact, tomorrow's designs and scientific breakthroughs often depend on the perspective and insight brought by the capabilities of high-end visualization systems, allowing technical professionals to literally immerse themselves in their data.

Whether visualizing entire synthetic worlds, exploring volumes of seismic data, or evaluating the design of a complex product, technical and scientific professionals need fast graphical performance and the highest attainable visual quality.

The Sun Fire™ V880z Visualization Server is powered by Sun's most advanced graphics architecture, the Sun™ XVR-4000 graphics accelerator, and is ideal for demanding high-end visualization applications.



Sun Fire V880z Visualization Server

Specifications

Processor Options

Processor	1.2-GHz UltraSPARC® III Cu
Architecture	Superscalar SPARC® 9
Processor modules	One to three dual-processor/memory modules
Memory management	128 (16-KB pages, two-way associative) plus 16 fully associative entries 512 (16-KB pages, two-way associative) plus 16 fully associative entries
Cache (on chip)	64-KB data and 32-KB instruction
Secondary (L2)	8-MB external

Main Memory

- Up to 48 GB with six UltraSPARC processors and a single Sun[tm] XVR-4000 graphics accelerator installed
- Up to 32 GB with four UltraSPARC processors and dual Sun XVR-4000 graphics accelerators installed

Standard/Integrated Interfaces

Network I/O	1-Gb Ethernet and 10-/100-BasE-T Ethernet FC-AL disk controller
Serial	Two EIA-232D or EIA-423 serial ports (DB25) via splitter cable
Expansion capability	Nine full-sized, hot-swap, PCI slots compliant with PCI specification Revision 2.1: two at 66 MHz, 64 bits wide, 3.3 volts; seven at 33 MHz, 64 bits wide, 5 volts

Software

Operating environment	Solaris™ 8 (10/01 or later) and Solaris 9 (4/03 or later) plus patches and packages for the Sun XVR-4000 Graphics Accelerator
Languages	C, C++, Java®, OpenGL
Networking	ONC, NFS, TCP/IP, SunLink® OSI, MHS, IPX/SPX,
System and network management	Sun™ Management Center, Sun Remote System Control, Sun™ Cluster, Solaris PC NetLink, Solstice JumpStart®, Solaris WebStart, Solstice AdminSuite®, Solstice DiskSuite®, Solstice Backup®, and other Solstice™ products

Mass Storage and Media

Host adapters	Internal SCSI to support the internal DVD and two optional, removable media device(s)
Internal tape	Optional 12-GB DDS-3 or 20-GB DDS-4 single drive(s)
Internal disk	Up to 12 3.5" x 1.0" 10,000 RPM FC-AL disks, 73-GB, providing a maximum total capacity of 876 GB
External disk	Sun StorEdge® MultiPack Systems Sun StorEdge A1000 Sun StorEdge D1000 Sun StorEdge A3500 Sun StorEdge A5100/A5200 Sun StorEdge T3 Sun StorEdge S1 Sun StorEdge 9900 series
External tape	SCSI tape devices via a SCSI host bus adapter: Sun StorEdge 12 GB DDS-3 Unipack Sun StorEdge DDS-3 Flexipack Sun StorEdge DDS-3 Autoloader Flexipack Sun StorEdge 20 GB DDS-4 Unipack Sun StorEdge DLT8000 Flexipack Sun StorEdge L9 tape autoloader Sun StorEdge L20 tape library family Sun StorEdge L180 tape library Sun StorEdge L700 tape library (Utilization of the Sun StorEdge L180 and L700 tape libraries may be limited by the number of SCSI host bus adapters & buses available for connection to the server.)
Host adapters	Up to nine PCI-to-dual FC-AL adapters or PCI-to-Ultra™ SCSI adapters

Console Options

Monitor	Optional, Sun monitors from 1995 onward (17, 18FP, 19, 20, 21 and 24")
Frame buffer	Up to two Sun XVR-4000 graphics accelerators
Keyboard and mouse	USB keyboard and mouse
PCI I/O options	1-Gb Ethernet, 10/100-MB/sec. Ethernet, FC-AL, Sun Quad FastEthernet®, Token Ring, ATM-155, ATM-622, SONET network interface, high-speed serial, Ultra SCSI with 10/100-MB/sec. Ethernet, dual-channel single-ended Ultra SCSI, dual-channel differential Ultra SCSI, combination dual Fast Ethernet and dual SCSI

Power Supplies

Two required, three for redundancy, each with independent power cord	
Maximum AC input	1500 W per power supply
Maximum DC output	1100 W per power supply

Environment

AC power	100–240 V AC, 47–63 Hz, 1.48 KVA
Operating temperature	5° C to 35° C (41° F to 95° F), 20% to 80% relative humidity, noncondensing, 27° C max. wet bulb
Nonoperating temperature	-20° C to 60° C (-4° F to 140° F), 5% to 93% relative humidity, noncondensing

Regulations

Meets or exceeds the following requirements:	
Safety	UL/CSA-60950, EN 60950, IEC950 CB Scheme with all country deviations, IEC825-1, 2, and CFR21 part 1040 EK1-ITB-2000
Ergonomics	EN55022/CISPR22 Class A, FCC CFR47 Part 15 Class A, EN61000-3-2, EN61000-3-3
RFI/EMI	EN55024
Immunity	DHHS 21 Subchapter J; PTB German X-ray Decree
X-ray (for monitors)	CE, FCC, ICES-003, Ctick, VCCI, GOST-R, BSMI, EK, UL/cUL, TUV-G5
Regulatory markings	

Dimensions and Weight

Height	714 mm (28.1 in.) with casters. Rack-mounting does not require the removal of casters.
Width	480 mm (18.9 in.)
Depth	836 mm (32.9 in.)
Weight	88.1 kg (194.0 lb.) (minimum, approximate) 130.9 kg (288.0 lb.) (maximum, approximate)
Rack	Fits into a standard 19-inch-wide rack that complies with EIA-310-D-1992 Standard, 34-inch depth rail-to-rail, or third-party commercial racks with depths of 39 inches or greater. To facilitate rack mounting, heavier components such as power supplies may be removed.

Warranty

Hardware support	3 years
Software install	90 days
Call response	8 hours
Delivery	Second business day, on-site

Get the details.

Find out more about the Sun Fire V880z server & the Sun XVR-4000 Graphics Accelerator by visiting:
www.sun.com/servers/entry/v880z/index.html
www.sun.com/solutions/hpc/visualization.html

Graphics Options



Sun XVR-4000 High-level Features

Sun Fire V880z Support	Up to two Sun XVR-4000 graphics cards per server
Frame Buffer Memory	144 MB
Texture Memory	1 GB (4 x 256 MB)
Anti-aliasing	Dedicated, 5 x 5 programmable radial filter chips which compute a weighted average of stochastically jittered samples (maximum of 16 samples/pixel)
Max. 3D Resolution (30-bit color)	1920 x 1200 @ 75 Hz with 4 samples/pixel, or 1280 x 1024 @ 75 Hz with 8 samples/pixel
Max. 3D Stereo Resolution	1280 x 1024 @ 112 Hz with 4 samples/pixel
Multi-Display Capability	Dual 1280 x 1024 @ 75 Hz with 4 samples/pixel, or Dual 1280 x 1024 @ 112 Hz (non-anti-aliased stereo)
Dynamic Video Resizing	Yes (Results in guaranteed frame rate)
S-Video Output	Yes (can record entire screen in NTSC/PAL for mat)
FrameLock Genlock	Synchronize multiple graphics displays Pixel-level synchronization to external video source, or to ensure synchronized buffer swaps between multiple graphics frame-buffers

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