Datasheet

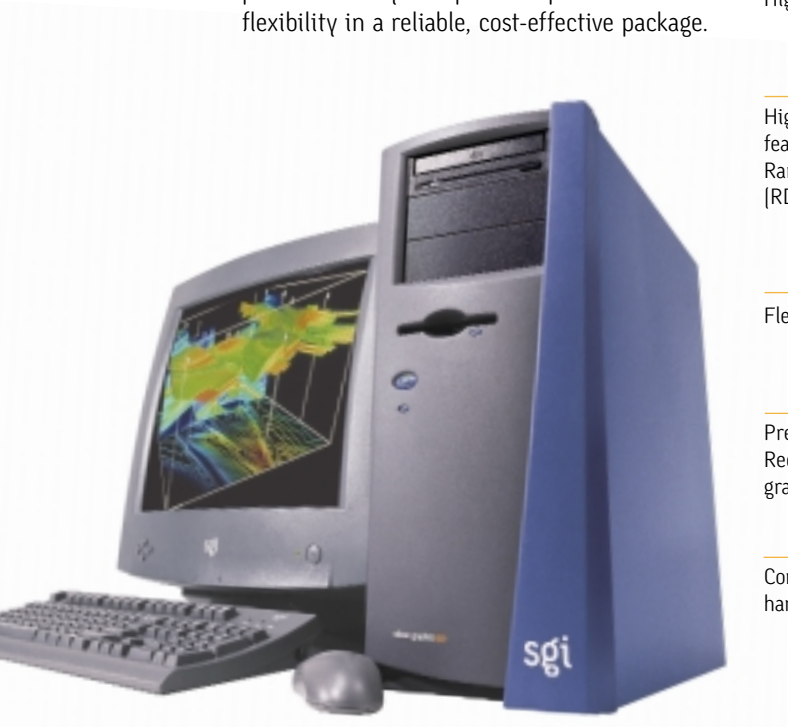
Silicon Graphics® 550 Visual Workstation with VPro™ Graphics

Silicon Graphics 550 Visual Workstation for Windows®

Silicon Graphics 550L Visual Workstation for Linux®

A Scalable Graphics Solution Designed for Maximum Performance

The Silicon Graphics 550 visual workstation is designed to accommodate the most demanding power users in the CAD, digital content creation, and scientific visualization markets. As the high end of the Silicon Graphics workstation family for Windows and Linux, the 550 features advanced graphics processing, lightning-quick processing power, and industry-leading expansion. Offering the ultimate in technical, creative, and scientific tools for visualization, Silicon Graphics 550 incorporates a state-of-the-art Intel® architecture with Silicon Graphics subsystems to set a new standard for graphics performance on Windows and Linux operating systems. With additional 32-bit and 64-bit expansion slots, complete AGP Pro 4X compliance, and the latest in large storage capacity and memory expansion, this high-performance system provides power and flexibility in a reliable, cost-effective package.



Features	Benefits
Silicon Graphics VPro graphics subsystem includes an OpenGL on a Chip™ implementation, accelerated geometry pipeline, and professional texture mapping capabilities	Provides unprecedented application and system performance: fully OpenGL® 1.2 conformant and accelerated.
Hardware-accelerated transform and lighting	Allows more realistic object behaviors and character animation, as well as significantly more complex 3D modeling. Frees up CPU for intensive computations.
Single or dual Intel® Pentium® III Xeon™ processor configuration (840 chipset)	The Intel Pentium III Xeon processors provide advanced cache, advanced system buffering, and multiprocessing capabilities that provide significant performance and productivity gains to the customer. The processor's large advanced transfer cache allows large amounts of data to be stored locally and accessed quickly. The Intel 840 chipset also delivers high memory bandwidth. Its split-transaction system bus allows multiple processors to effectively share the system bus, increasing bus utilization and minimizing bus contention.
High-bandwidth 64-bit PCI slots	Provide a flexible expansion platform to accommodate the need for more specialized throughput-intensive peripherals and processes.
High-performance memory subsystem featuring dual memory controllers and Rambus dynamic random access memory (RDRAM)	RDRAM offers faster memory speeds for applications that require high performance and powerful multitasking, as well as increased memory access and system performance. The dual memory controllers provide simultaneous access and increased bandwidth (3.2GB/sec).
Flexible, intelligently designed system	Easy toolless access for upgrade, customization, and expansion to meet growing needs for storage, memory, and graphics.
Preinstalled Windows NT® 4.0 or Red Hat® Linux 6.2 with OpenGL 1.2 graphics drivers	System is ready to power on with the operating system software professionally installed and tested for system compliance. It offers the industry's first fully hardware-accelerated OpenGL graphics for Linux.
Comprehensive one-stop support for both hardware and software	Leverages SGI's enterprise experience in global services: 90-day software and three-year hardware support including first-year on-site warranty service for Linux and Windows NT 4.0.

Silicon Graphics 550 Visual Workstation
Technical Specifications

Core Logic Chipset
- Intel 840

Processor Support (Single or Dual)
- 733 MHz Pentium III Xeon 256K on-chip cache
- 800 MHz Pentium III Xeon 256K on-chip cache

Memory Capacity
- 128MB–2.0GB PC800 RDRAM

System Graphics
- 1280x1024 at 75 Hz
- Up to 2048x1536 at 60 Hz

Graphics Features
Integrated transform and lighting, independent pipelined QuadEngine, 256-bit QuadPipe Rendering Engine, AGP 4X with Fast Writes, 350 MHz RAMDAC, high-speed memory interface, 256-bit 2D Rendering Engine, complete support for Microsoft® DirectX 7 and OpenGL features

Storage and I/O
- Two external 5.25" drive bays
- One external 5.25" 48X CD-ROM (preinstalled)
- Three internal 3.5" hard drive bays
- One external 3.5" floppy drive (preinstalled)
- Integrated ATA66 controller

Communication
- Two 9-pin serial ports (16550 UART)
- One 25-pin parallel port
- Two Universal Serial Bus (USB) ports
- One PS/2 mouse port
- One PS/2 keyboard port
- On-board audio: Analog Devices AD1881 chip

Display Options
- 19" color monitor
- 21" color monitor
- Silicon Graphics® 1600SW flat panel display

Expansion Options

PCI
- Four 32-bit PCI slots
- Two 64-bit PCI slots
- Dual channel SCSI controller

Networking
- On-board NIC 10/100Base-T: Intel 82559

Storage Options

Internal
- 9.1GB Ultra160 SCSI drive (7,200 RPM)
- 18.2GB Ultra160 SCSI drive (7,200 RPM)

External
- 8X/40X DVD (available fall 2000)
- 8X4X32X CD-RW

Bundled Software (Windows)
- Windows NT 4.0
- Windows 2000 Professional
- PC Doctor (diagnostic software)
- McAfee VirusScan
- Internet Explorer
- Adobe® Acrobat Reader®

Bundled Software (Linux)
- Red Hat Linux 6.2
- SGI ProPack for Linux™ 1.3 Visual Workstation

Physical Environment

System
- 8.25" W x 19.25" H x 19.25" D
- 32 lb
- 19" monitor: 18.4" H x 18" W x 18.8" D
- 21" monitor: 19.3" H x 19.6" W x 18.6" D

Voltage and Frequency
- Japan: 100 VAC 6.10 A
- North America: 120 VAC 5.10 A
- Europe: 230 VAC 2.66 A

Heat Dissipation
- 1,460.7 BTUs/hour

Ambient Temperature
- +10 to +35°C (operating)
- -20 to + 60°C (nonoperating)

Relative Humidity

Operating
- 40°C, 20%
- 40°C, 90%
- 10°C, 10%

Nonoperating
- 10% to 90% relative humidity

Altitude
- 10,000 ft operating
- 40,000 ft nonoperating

Vibration

Operating
- 5–16.2 Hz 0.38 mm (peak to peak)
- 16.2–250 Hz 0.2G
- X, Y, Z axis

Nonoperating (packed)
- 5–27.1 Hz 0.6G
- 27.1–50 Hz 0.4 mm (peak to peak)
- 50–500 Hz 2.0G
- X, Y, Z axis

Regulatory Agency
- USA: UL, FCC (CFR 47 Part 15 Subpart B), FCC Telecomm. CFR 47 Part 68
- Canada: CSA, CSA/NRTL, DOC
- Japan: VCCI
- Europe: CE Mark, CB, TUV
- Australia: C-Tick
- Korea: EMC
- Mexico: NOM
- Taiwan: BCIQ

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