

Sun Ultra™ 40 Workstation

Enhanced graphics, superior productivity



Highlights

- Sun's fastest workstation to date, with full support for single and dual-core AMD Opteron™ processors to deliver the best possible performance for the best possible price
- A wide range of NVIDIA Quadro series graphics options provides unbeatable power and flexibility for deploying multi-display-capable 2-D and 3-D systems
- Dual PCI-Express x16 graphics slots and dual PCI-Express x4 slots deliver superior graphics and I/O
- Comes preinstalled with the Solaris™ OS and a complete suite of permanently licensed Sun software development tools, including Java™ Studio, Sun Studio™, and Java™ Enterprise System
- Operating system flexibility enables the widest choice of 32- and 64-bit computing options: Solaris OS, Red Hat Linux, SUSE LINUX, or Microsoft Windows XP Professional
- Five-channel audio support, with front and rear panel input and output, including SPDF
- Whisper-quiet system performance



The Sun Ultra™ 40 workstation is the industry's first workstation to include a grid software license and enable businesses to put unused compute cycles to work, enabling faster overall time to market, while providing world-record setting performance and industry-leading visualization capabilities—all with a whisper-quiet desktop environment.

Power and flexibility to meet new challenges

The Sun Ultra 40 Workstation combines the fastest single- or multi-core AMD Opteron™ 200-series processors, large memory capacity, multiple 8-GB/sec. HyperTransport™ interconnects, dual PCI-Express x16 graphics interfaces and the latest graphics technology from NVIDIA for optimal graphics performance. The Sun Ultra 40 Workstation also includes a license for Sun N1™ Grid Engine software, in addition to preloaded developer tools and the Solaris 10 OS—the industry's first workstation to bundle all this additional software at no additional cost.

The Sun Ultra 40 Workstation is also ideal for the needs of industries focused on visualizing data. Equipped with dual PCI-Express graphics, the best I/O implementation update in a decade—doubling the bandwidth of AGP 8x—the workstation features a choice of graphics accelerators, ranging from 2-D to

high-performance 3-D, and supports NVIDIA SLI technology, enabling users to visualize, analyze, and solve the most complex datasets. The system also provides new levels of high-density, reliable storage. The Sun Ultra 40 Workstation supports up to two terabytes of internal storage—the system can accommodate up to four internal 500-GB drives with Serial ATA for density. It utilizes RAID 0 for high performance and a very high transfer rate, as well as RAID 1 for redundancy, to safeguard data for mission-critical applications. With over 20 years' experience in workstations, Sun Microsystems maintains key partnerships with industry-leading ISVs to certify the Sun Ultra 40 Workstation for compatibility. And with the Solaris OS and development tools preinstalled, developers can conveniently and immediately start a software project on the Sun Ultra 40 Workstation.

Sun Ultra 40 Workstation Specifications

Architecture

Processor

Up to two single-core or dual-core AMD Opteron processors, 940-pin, 200-series, one MB Level 2 cache per core, three AMD HyperTransport links per CPU

I/O Chipset

NVIDIA nForce Professional (CK804)

Memory

16 GB maximum; up to eight registered DIMMs (four per CPU); DDR1-400 ECC in 512 MB, 1 GB and 2 GB capacities

Standard interfaces

Network

Two 10/100/1000 Base-T Gigabit Ethernet ports (two rear panel)

USB

Eight USB ports (two front, six back)

FireWire™

Two IEEE 1394a ports (two front)

Audio

Integrated AC '97 (two front, eight rear panel) Channel full stereo audio, with line in, line out, and SPDIF support

Expansion bus

Two PCI-Express x16 graphics slots, two PCI-Express x4 expansion slots, two PCI 33 MHz, 32-bit slots

Mass storage

Up to four SATA hard drives, 2 TB maximum in 80 GB, 250 GB, and 500 GB capacities (7,200 rpm)

Optical drives

Dual layer DVD-RW

Software

Operating systems

- Solaris 10 01/06 Operating System (preinstalled)
- Red Hat Enterprise Linux 3.0 WS Update 6 (32-bit and 64-bit)
- Red Hat Enterprise Linux 4.0 WS Update 2 (32-bit and 64-bit)
- SUSE LINUX Enterprise Server 9 w/SP3 (32-bit and 64-bit)
- Windows XP Professional
- Windows XP Professional x64 Edition

Preloaded software

Sun™ Studio 11

Sun Java™ Studio Creator 2004Q2

Sun Java™ Studio Enterprise 8

NetBeans™ 4.1

N1™ Grid Engine 6

Graphics cards

Professional 2-D: NVIDIA Quadro NVS285 (PCIe)

Entry 3-D: NVIDIA Quadro FX540 (PCIe)

Midrange 3-D: NVIDIA Quadro FX1400 (PCIe)

NVIDIA SLI technology-capable

High-end 3-D: NVIDIA Quadro FX3450 (PCIe)

NVIDIA SLI technology-capable

NVIDIA Quadro FX4500 (PCIe) NVIDIA SLI

technology-capable

Input devices

Sun Type 7 USB keyboard (support for up to 22 language layouts) and two-button optical scroll mouse

Monitors

Sun 24-inch LCD

Sun 21-inch CRT

Sun 19-inch LCD

Sun 17-inch CRT

Sun 20-inch LCD

Learn More

Learn more about the Sun Ultra 40 Workstation by visiting sun.com/ultra40

Environment

Power supply

1,000 watts

Operating temperature

2° C to 35° C (41° F to 95° F); 7% to 93% relative humidity, noncondensing

Nonoperating temperature

-40° C to 68° C (-40° F to 158° F); 93% relative humidity, noncondensing

Acoustic noise

Operating: 5.1 Bels

Idle: 4.8 Bels

Dimensions and weight

Height: 445mm (17.5 inches)

Width: 205mm (8.1 inches)

Depth: 569mm (22.4 inches)

Weight; 26.31 kg (58 lbs.) fully configured

Regulations

Safety: UL/CSA-60950, EN 60950, IEC 60950 CB

Ergonomics: EK1-1TB-2000, RFI/EMC, EN

55022/CISPR22 Class B, FCC CFR47

Part 15 Class B; EN 6100-3-2, EN 61000-3-3

Immunity: EN 55024

Regulatory Markings: UL/cUL, TUV-GS, CE FCC,

ICES-003, C-Tiek, VCCI, GOST-R, BSMI CCC, S-Mark

Power Management: Supports PowerNow

standard ACPI power states