

# 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 SPDIF
- 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 solutions, 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.<sup>1</sup> 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.

<sup>1</sup> RAID 0/1 has been tested on Windows XP Professional and Windows XP Professional x64 only.

# 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 2200 and 2050

## Memory

32 GB maximum; up to eight registered DIMMs (four per CPU); DDR1-400 ECC in 512 MB, 1 GB, 2 GB and 4 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

DVD dual (DVD-RW and CD-RW combo)

## 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

## Included software

Sun Studio

Sun Java Studio Creator

Sun Java Studio Enterprise

NetBeans

Sun N1™ Grid Engine

## Graphics cards

### Professional 2-D

NVIDIA Quadro NVS 285 (DDR) (PCIe)

### Entry 3-D

NVIDIA Quadro FX 560 (PCIe)

### Midrange 3-D

NVIDIA Quadro FX 1500 (PCIe) SLI-ready

### High-end 3-D

NVIDIA Quadro FX 3500 (PCIe) SLI-ready

NVIDIA Quadro FX 5500 (PCIe) SLI-ready

## 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

## Learn More

Learn more about the Sun Ultra 40 Workstation by visiting [sun.com/ultra40](http://sun.com/ultra40)

Sun 19-inch LCD

Sun 17-inch CRT

Sun 20-inch LCD

## 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: 4.9 Bels

Idle: 4.7 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 61000-3-2, 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

RoHS-compliant