



Sun Ultra™ 20 Workstation

Breakthrough price/performance



Highlights

- Developer-ready with Sun's award-winning developer tools—Sun Java™ Studio Creator, Sun Java™ Studio Enterprise, Sun™ Studio software and NetBeans™ IDE software included standard
- Preloaded with Solaris 10 OS and certified to run Solaris OS, Linux®, and Windows
- One AMD Opteron™ processor
- Four professional graphics accelerators available: NVIDIA Quadro FX 3450, NVIDIA Quadro FX 1400, NVIDIA Quadro FX 540, NVIDIA Quadro NVS 280 PCI Express
- RAID 0 for high performance and RAID 1 for redundancy*
- Three PCI Express slots, including one x16 for graphics only, and four 32-bit PCI slots (33 MHz)
- Up to two SATA, 7,200 rpm hard drives, 500 GB maximum: 80, 250 GB
- Up to four GB of PC3200 memory, four unbuffered DIMM slots, ECC (1 GB DIMMs, 512 DIMM MBs) or non-ECC (256 MB DIMMs)

* RAID 0/1 has been tested on Windows XP Professional and Windows XP Professional x64 only.



The Sun Ultra™ 20 Workstation achieves breakthrough price/performance; the ability to run the Solaris™ Operating System, Linux, and Windows; binary compatibility for 32-bit and 64-bit applications; and developer-ready with Sun's award-winning, enterprise-class development tools—all at an attractive starting price.

Performance, power, and expandability

The Sun Ultra 20 Workstation is the only x64 workstation with Solaris 10 OS pre-installed, delivering the highest performance available on a one-processor system, with the ability to write and deploy Solaris OS-based and Java™-based applications. Created for electronic design automation (EDA), event-driven architecture, mechanical computer-aided design, software development, and academic research, the Sun Ultra 20 Workstation delivers more power and expandability for the demanding user. It offers the flexibility needed to run a wide range of applications within the same architecture, minimizing support and training costs.

The combination of competitive pricing and support delivered by our world-class services organization, from basic warranty to same business-day service, places the Sun Ultra 20

Workstation among the best for low total cost of ownership. Developed by Sun, the inventor of the workstation, the Sun Ultra 20 Workstation delivers high quality, reliability, and stability.

While offering the option to use error-correcting code (ECC) memory, the Sun Ultra 20 Workstation also offers cost-saving options such as non-ECC memory and unbuffered dual in-line memory modules (DIMMs). In addition, RAID 0 and 1 safeguard mission-critical data through data striping and disk mirroring.

Serial ATA makes it possible to locally store and quickly retrieve large amounts of data. These features, along with the choice of two excellent graphics accelerators, make this workstation ideal for software development, MCAD, education, financial trading, EDA, or any task that requires high performance and low cost from a workstation.

Sun Ultra 20 Workstation Specifications

Architecture

Processor

One AMD Opteron processor (dual-core up to 2.4 GHz, single-core up to 3.0 GHz)

Memory

4-GB PC3200 ECC (1 GB DIMMs, 512 DIMM MBs) or non-ECC (256 MB DIMMs) unbuffered DIMMs; four DIMM slots, unbuffered DIMMs only

Standard interfaces

Network

One Gigabit Ethernet Port

USB

Six USB 2.0 ports, two in front and four in back

FireWire™

Two IEEE 1394a FireWire ports in front

Audio

5 AC '97 ports, two in front and three in back

Expansion slots

- One PCI Express x16 slot (reserved for graphics accelerator)
- Two PCI Express x1 slots
- Four conventional PCI slots (32-bit, 33Mhz)

Mass storage and media

- Up to two SATA hard drives
- One optical drive: DVD-ROM or DVD+R/RW
- Ultra320 SCSI support via X-Option

Software

Operating System

- Solaris 10 OS (pre-loaded)
- Linux: Red Hat Enterprise Linux WS Version 3 (32-bit/64-bit), Red Hat Enterprise Linux WS Version 4 (32-bit/64-bit), and SUSE LINUX Enterprise Server 9 (32-bit/64-bit)

- Windows: Windows XP Professional, XP Professional x64 Edition

Preloaded developer tools

- Sun Java Studio Creator
- Sun Java Studio Enterprise
- Sun Studio
- NetBeans IDE

Graphics

Available with a choice of NVIDIA graphics accelerators

NVIDIA Quadro FX 3450 PCI Express Graphics Accelerator

- Dedicated 256 MB of DDR graphics memory
- High-end 3-D performance workstation graphics solution for intense CAD modeling

NVIDIA Quadro FX 1400 PCI Express Graphics Accelerator

- Dedicated 128 MB of DDR graphics memory
- Midrange 3-D performance workstation graphics solution for professional CAD, MCAD applications

NVIDIA Quadro FX 540 PCI Express Graphics Accelerator

- Dedicated 128 MB of DDR graphics memory
- Entry 3-D performance workstation graphics solution for basic CAD modeling and software development

NVIDIA Quadro NVS 280 PCI Express Graphics Accelerator

- Dedicated 64 MB of DDR graphics memory
- Cost-effective workstation-class 2-D graphics accelerator for EDA, software development, and education

Environment

- Power supply: 400 watts
- Operating temp./humidity: 5° C to 35° C (41° F to 95° F); 20 to 93 percent relative humidity, noncondensing

Learn More

Learn more about the Sun Ultra 20 Workstation by visiting sun.com/ultra20.

- Nonoperating temp./humidity: -40° C to 65° C (-40° F to 158° F); 93 percent relative humidity, noncondensing
- Operating acoustic noise: 4.7 Bels
- Idling acoustic noise: 4.3 Bels

Regulations (meets or exceeds the following requirements)

- 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
- RoHS-compliant

Dimensions and weights

- Width: 7.9 in. (200mm)
- Depth: 18.5 in. (470mm)
- Height: 17.1 in. (435mm)
- Weight: 34 lbs. (15.4 kg.)

Security features

- Chassis security features: Kensington lock support
- BIOS security features: Write protect for EEPROM, boot protection for USB flash drive, system and setup password