



Sun Ultra™ 20 M2 Workstation Breakthrough price/performance



Highlights

- Maximize your desktop performance with a Sun Ultra™ 20 M2 Workstation — risk-free for 60 days. Sign up for a free trial at sun.com/tryandbuy
- Preinstalled with the Solaris™ 10 OS and a complete suite of fully licensed Sun development tools, including Sun™ Studio, Sun Java™ Studio and Creator, and NetBeans™

“Sun has managed to produce a very good machine in the Ultra 20 M2. It’s fast and capable, and has a good range of hardware ports and support.”

— Free Software Magazine, June 2007

“An excellent entry-level machine in a market that has been dominated by Intel-based workstations for so long.”

— MCAD Online, August 2006

Performance and flexibility



The Sun Ultra 20 M2 Workstation achieves breakthrough price and performance. Having the flexibility to run the Solaris 10 Operating System, Linux, and Windows, and with binary compatibility for 32-bit and 64-bit applications, it is developer-ready — with Sun’s award-winning, enterprise-class development tools — all at an attractive starting price.

Sun workstations are the industry’s only x64 workstations with the Solaris 10 OS preinstalled. The Sun Ultra 20 M2 Workstation delivers the highest performance available on a single-socket system and provides the ability to write and deploy Solaris 10 OS-based and Java™-based applications. Created for electronic design automation (EDA), event-driven architecture, mechanical computer-aided design (MCAD), software development, and academic research, the Sun Ultra 20 M2 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

M2 Workstation among the best for low total cost of ownership. Developed by Sun, the inventor of the workstation, the Sun Ultra 20 M2 Workstation delivers high quality, reliability, and stability.

The Sun Ultra 20 M2 Workstation uses the latest industry-standard DDR2 unbuffered ECC dual in-line memory modules (DIMMs) for ultra-fast performance and increased cost savings. Using Serial ATA hard disk drives, the Sun Ultra 20 M2 Workstation provides a vast amount of internal data storage. And by offering RAID 0 and 1, increased performance and data protection can be easily achieved.¹

These features, along with the choice of NVIDIA professional graphics solutions, make this workstation ideal for software development, MCAD, education, EDA, or any task that requires high performance.

Sun Ultra 20 M2 Workstation

Architecture

Processor	One dual-core AMD Opteron™ 1200 series processor with 1 MB Level 2 cache per core and one 1.0-GHz HyperTransport™ link (1210 — 1.8 GHz, 1214 — 2.2 GHz, 1218 — 2.6 GHz, 1220 — 2.8 GHz, 1222SE — 3.0 GHz)
I/O chipset	NVIDIA nForce Professional 3600 MCP
Memory	Up to four ECC unbuffered DDR2-667 DIMMs, supporting up to 8 GB (512 MB, 1 GB, and 2 GB DIMM capacities)
Standard interfaces	
Network	Two 10/100/1000 Base-T Ethernet ports (rear panel)
USB	Six USB 2.0 ports (two front, four rear)
FireWire™	Two IEEE 1394a ports (two front)
Audio	High-Definition Audio 1.0 (two ports front, three ports rear)
Expansion bus	One PCI-Express x16 slot, one PCI-Express x16 (x8 lanes electrical), one PCI-Express x1 slot, and three PCI slots (32-bit/33 MHz, 5 V)
Mass storage	Up to two 3.5-inch SATA 7,200-rpm drives; 1.5 TB maximum — 160 GB, 250 GB, 500 GB, and 750 GB capacities or up to two 3.5-inch SAS 15,000-rpm drives; 600 MB maximum — 146 GB and 300 GB capacities
Optical drives	DVD-ROM or DVD-Dual (16x DVD +/- RW drive; supports read/write in dual +/- formats)
Software	
Operating systems	Solaris 10 OS preinstalled Red Hat Enterprise Linux WS 3 (32/64-bit) Red Hat Enterprise Linux WS 4 (32/64-bit) Red Hat Enterprise Linux WS 5 (32/64-bit) SUSE Linux Enterprise Desktop 10 (64-bit) SUSE Linux Enterprise Server 9 (64-bit) Windows XP Professional (32-bit) Windows XP Professional x64 Edition Microsoft Windows Server 2003 Microsoft Vista
Included software	Sun Studio Sun Java™ Studio Creator Sun Java™ Studio Enterprise NetBeans
Graphics	
Professional 2D	NVIDIA Quadro NVS 285 (128 MB DDR2, PCI Express x16)
Entry 3D	NVIDIA Quadro FX 560
Midrange 3D	NVIDIA Quadro FX 1500
High-end 3D	NVIDIA Quadro FX 3500
Input devices	Sun Type 7 USB keyboard (support for up to 22 language layouts) and two-button optical scroll mouse
Displays	Sun 24.1-inch LCD Sun 20.1-inch LCD Sun 19-inch LCD Sun 17-inch LCD
Environment	
Power supply	400 W
Operating temperature	5-35° C (41-95° F); 20-93 percent relative humidity, noncondensing
Nonoperating temperature	-40-65° C (-40-158° F); 93 percent relative humidity, noncondensing
Acoustic noise	
Operating systems	4.7 bels
Idle	4.3 bels
Dimensions and weight	
Height	433.6mm (17.07 in.)
Width	199.6mm (7.86 in.)
Depth	467.45mm (18.40 in.)
Weight	15.4 kg (34 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-Tick, VCCI, GOST-R, BSMI, CCC, S-Mark, MIC
Power management	Supports PowerNow. Standard ACPI power states (S0, S3, S4, S5) management

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



Sun Ultra 20 M2 Workstation, partial front view.



Sun Ultra 20 M2 Workstation, internal view.



Sun Ultra 20 M2 Workstation, rear view.