



Sun Ultra™ 40 M2 Workstation

Enhanced graphics,
superior productivity



Highlights

- Maximize your desktop performance with a Sun Ultra™ 40 M2 Workstation — risk-free for 60 days. Sign up for a free trial at sun.com/tryandbuy
- Sun's fastest workstation to date, with full support for multiple AMD Opteron™ processors to deliver the best possible performance for the best possible price

"The Ultra 40 M2 is simply the most powerful workstation available from a mainstream vendor today."

— **InfoWorld, May 2007**

"This workstation is versatile enough for heavy-duty MCAD/MCAE, simulation, and rendering jobs, or it can be a server and Web development system."

— **Desktop Engineering, June 2006**

Superior power and flexibility



The Sun Ultra 40 M2 Workstation combines the fastest AMD Opteron processors, large memory capacity, multiple 8 GB/sec. HyperTransport™ interconnects, multiple x16 PCI-Express graphics interfaces, and the latest graphics technology from NVIDIA for optimal graphics performance. The Sun Ultra 40 M2 Workstation also includes a license for the 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 M2 Workstation is ideal for the computing needs of industries focused on visualizing data. Equipped with multiple PCI Express graphics, the best I/O implementation update in a decade — more than doubling the bandwidth of AGP 8x — this workstation features a choice of graphics solutions, ranging from professional 2D to ultra-high-performance 3D, and supports NVIDIA SLI technology, enabling users to visualize, analyze, and solve the most complex data sets.

The Sun Ultra 40 M2 Workstation provides new levels of high-density, reliable storage and it supports up to 6 TB of storage via eight

750-GB SATA II drives or up to 2.4 TB of storage via eight high-performance 300-GB SAS drives. Utilizing onboard RAID, increased performance and data protection are achieved using RAID 0, 1, 0+1, or 5.¹

With over 20 years of experience in workstations, Sun Microsystems maintains key partnerships with industry-leading ISVs to certify the Sun Ultra 40 M2 Workstation for compatibility. And with the Solaris 10 OS and Sun development tools preinstalled, developers can immediately start creating software projects on the Sun Ultra 40 M2 Workstation.

Sun Ultra 40 M2 Workstation

Architecture

Processor	Up to two dual-core AMD Opteron™ 2200 series processors with 1 MB Level 2 cache per core and three HyperTransport links per CPU (2210 — 1.8 GHz, 2214 — 2.2 GHz, 2218 — 2.6 GHz, 2220 — 2.8 GHz, 2222SE — 3.0 GHz, 2224SE — 3.2 GHz)
I/O chipset	NVIDIA nForce Professional 3600 MCP and 3050 I/O companion chip
Memory	Up to eight ECC buffered DDR2-667 DIMMs, supporting up to 32 GB (1 GB, 2 GB, and 4 GB DIMM capacities)

Standard interfaces

Network	Two 10/100/1000 Base-T Ethernet ports (rear panel)
USB	Eight USB 2.0 ports (two front, six rear)
FireWire™	Two IEEE 1394a ports (two front)
Audio	High-Definition Audio 1.0 (two ports front, eight ports rear) with support for S/PDIF optical and coaxial ports
Expansion bus	Two PCI-Express x16 slots, two PCI-Express x16 (x8 lanes electrical), and one PCI slot (32-bit/33 MHz, 5 V)
Mass storage	Up to eight 3.5-inch SATA 7,200-rpm drives; 6 TB maximum — 160 GB, 250 GB, 500 GB, and 750 GB capacities or up to eight 3.5-inch SAS 15,000-rpm drives; 2.4 TB 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 Java™ Studio Creator Sun Java™ Studio Enterprise NetBeans™ Sun N1 Grid Engine license

Graphics cards

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; NVIDIA SLI-ready
Ultra high-end 3D	NVIDIA Quadro FX 4600; NVIDIA SLI-ready NVIDIA Quadro FX 5500; NVIDIA SLI-ready NVIDIA Quadro FX 5600; NVIDIA SLI-ready

Input devices

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

Displays	Sun 24.1-inch LCD Sun 20.1-inch LCD Sun 19-inch LCD Sun 17-inch LCD
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Environment

Power supply	1,000 W
Operating temperature	5-35° C (41-95° F); 7-93 percent relative humidity, noncondensing
Nonoperating temperature	-40-68° C (-40-158° F); 93 percent 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 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 40 M2 Workstation, partial front view.



Sun Ultra 40 M2 Workstation, internal view.



Sun Ultra 40 M2 Workstation, rear view.

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