SUN™ ULTRA™ 60 WORKSTATION
THE NEXT LEVEL IN MULTIPROCESSING WORKSTATIONS.

It's the perfect combination of raw multiprocessing performance and sophisticated next-generation technologies—a high-powered, flexible system that's ready for today's compute-intensive challenges. And for whatever's next. The Sun™ Ultra™ 60 workstation accommodates two powerful, upgradable 360-MHz UltraSPARC™-II modules, with horsepower to drive demanding applications. And the combination of fast Ultra SCSI disk, 66-MHz PCI technology, and the 120-MHz, 1.9 GB/sec., crossbar-switch UPA interconnect delivers exceptionally fast processing and throughput. • Graphics are no less advanced, with Creator and Elite able to handle applications like geotechnical, simulation, seismic analysis, and medical imaging. Plus, dual-head and 24-inch monitor support means more visible display area—and more productivity. The Sun Ultra 60 workstation.

HIGHLIGHTS

• Up to two 360-MHz UltraSPARC-II modules and 4-MB cache for exceptional application performance.
• 100% binary compatible with entire product line—which protects your investment.
• Modular design and 120-MHz, 1.9 GB/sec. UPA interconnect allows easy upgrade to next-generation processors, graphics cards, and peripherals.
• Rigorous testing ensures a robust, well-engineered system and years of uptime.
• Two Creator, Creator3D, or Elite3D m3 graphics cards, or one Elite3D m6 card, provide outstanding performance for demanding graphics applications.
• Supports previous-generation memory, disk, and graphics cards, protecting hardware investments.
• Dual-bus 66-MHz PCI technology, 10-/100-BaseT Ethernet, and Ultra SCSI disk provide the industry’s best I/O and networking capabilities.
SUN ULTRA 60 SPECIFICATIONS

PROCESSOR OPTIONS
Architecture
360 or 300 MHz, superscalar SPARC™
Version 9, UltraSPARC II
Memory management
MMU with 64 TLB entries and 64 D-TLB entries. 32x32 hardware-supported contexts
16-KB data and 16-KB instruction on chip
Secondary: 6-MB external on 360 MHz, 2-MB external on 300 MHz

MAIN MEMORY
Total of 16 SIMM memory slots available
Note: Install SIMM's in sets of four.
32-, 64-, and 128-MB SIMM expansion
256 MB maximum (with 16-MB SIMMs, in pairs)
512 MB maximum (with 32-MB SIMMs, in pairs)
1 GB maximum (with 64-MB SIMMs, in pairs)
2 GB maximum (with 128-MB SIMMs, in pairs)

STANDARD INTERFACES
Network
Ethernet/Fast Ethernet, twisted pair standard (10-Baset and 100-Baset) or fiber for external transceiver
Parallel
Centronics compatible parallel port (DB25)
Serial
40-MB/sec Ultra SCSI (SISC-3) (synchronous)
Audio
Two RS-232C/RS-422 serial ports (DB25)
Internal clock
time-out, headroom, line in, line output, headroom output
Expansion bus
Four full-size PCI slots compliant with PCI specification version 2.1; three slots operating at 33 MHz, 32- or 64-bit data bus width, 5 volt; one slot operating at 66 MHz, 32- or 64-bit data bus width, 3.3 volt

Graphics and Imaging
Creator
Accelerated 24-bit 2-D graphics and imaging with 8-bit overlay plane, high-speed convolution, rotation, panning, zooming, color space conversion, four 256-entry colormaps for dynamic colormap segment allocation and adjustable gamma correction; NTSC/PAL video timing support, up to 1280 x 1024 at 76 Hz, stereo 960 x 680 at 112 Hz supported with 21-in. monitor. Two Elite3D m6 frame buffers and an additional Elite3D m3 or Creator frame buffer are supported.

Creator3D
All the imaging features of Creator plus accelerated 24-bit double-buffered 3-D graphics with 28-bit 2-D and 8-bit overlay plane. Gouraud shading, alpha-blending and screen-door transparency, line and dot antialiasing, per-pixel depth-cueing, per-pixel alpha interpolation, 4-bit stencil support with hardware acceleration of OpenGL stencil functions, compressed geometry decomposition, four 256-entry colormaps for dynamic colormap segment allocation and adjustable gamma correction. NTSC/PAL video timing support. 1280 x 1024 at 76 Hz resolution standard, stereo 960 x 680 at 112 Hz supported with 21-in. monitor. One Elite3D m6 frame buffer and an additional Elite3D m3 or Creator frame buffer are supported.

Elite3D m6
Alpha-blending and screen-door transparency, line and dot antialiasing, per-pixel depth-cueing, per-pixel alpha interpolation, 4-bit stencil support with hardware acceleration of OpenGL stencil functions, compressed geometry decomposition, four 256-entry colormaps for dynamic colormap segment allocation and adjustable gamma correction. NTSC/PAL video timing support. 1280 x 1024 resolution, 76- or 66-Hz refresh rate, 89 dots per inch
1152 x 900 resolution, 76- or 66-Hz refresh rate, 77 dots per inch
1024 x 768 resolution, 76- or 66-Hz refresh rate, 67 dots per inch
960 x 800 resolution, 322-Hz refresh rate, 70 dots per inch
320 x 200 resolution, 76- or 66-Hz refresh rate, 103 dots per inch
1600 x 1000 resolution, 76- or 66-Hz refresh rate, 86 dots per inch
1440 x 900 resolution, 76- or 66-Hz refresh rate, 77 dots per inch
1280 x 800 resolution, 76- or 66-Hz refresh rate, 84 dots per inch

UPGRADE OPTIONS
Upgrades are available for SPARCStation Ultra and Ultra systems.

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