

HP

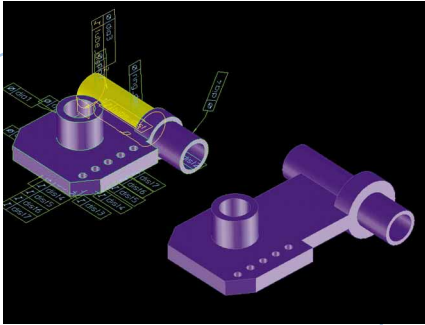
VISUALIZE B1000

UNIX Workstations



HP
VISUALIZE
WORKSTATIONS

Your Ultimate Design Machine - Ideal
Combination of Price and Power



Excellent Value for the Desktop Environment

The HP VISUALIZE B1000 Workstation delivers fast application performance, large disk and RAM capacity and a 64-bit CPU – all at a great price. This next-generation HP-UX system will transform your design and engineering work with affordable, category-leading performance.

The HP VISUALIZE B1000 provides the power of the new HP PA-8500 processor running at 300MHz, the enhanced performance of a 1.5MB on-chip cache and multiple new technologies, such as SDRAM and Ultra2 SCSI LVD disks. Add easy integration with Windows NT® systems and great investment-protection characteristics and you have excellent value in an engineering workstation.



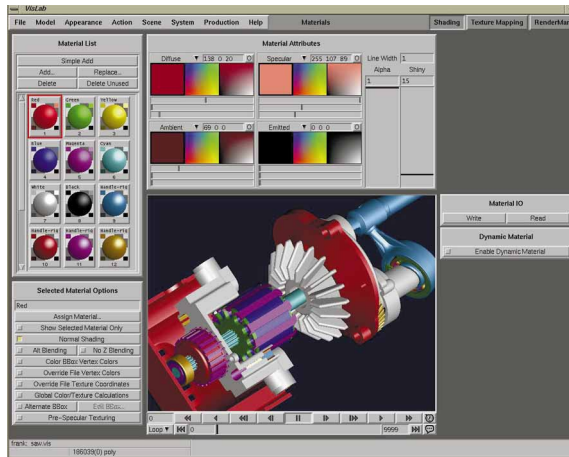
Designed for Performance

Regardless of whether you're an engineer, designer, scientist or technician, the HP VISUALIZE B1000 delivers great performance. It will help you work faster and achieve your time-to-market goals in today's competitive business environment.

For excellent 3D application performance, the HP VISUALIZE B1000 Workstation brings your work to life with the powerful HP VISUALIZE-*fx*² Pro graphics subsystem. Or step up to the higher-performing HP VISUALIZE-*fx*⁴ Pro subsystem.

Great Investment Protection

The HP VISUALIZE B1000 Workstation is open and expandable, accommodating more disk, RAM or I/O capability within the box. The B1000 is also binary compatible with your existing PA-RISC applications and data.



Looking ahead, today's HP-UX operating system puts you on the best path to tomorrow's IA-64 architecture, the future of technical computing. Working closely with Intel, HP is at the forefront of this effort to deliver this next-generation microprocessor architecture. With HP, you have the security of binary compatibility between your PA-8500 and IA-64-based applications. This level of compatibility is

available from only one workstations supplier, Hewlett-Packard. In short, the HP VISUALIZE B1000 Workstation represents a complete system package with outstanding performance and great investment protection – at a great price.

Either way, the HP VISUALIZE B1000 Workstation with OpenGL graphics provides an ideal solution for mechanical CAD design and solid modeling. It is ideal for work with components, as well as small and medium-sized assemblies. The B1000 delivers the power you need to work interactively with your models. You will feel the difference.

With the 2D VISUALIZE-EG graphics option, the HP VISUALIZE B1000 provides a powerful desktop environment for electrical engineers. It's a perfect solution for HDL text entry, small IC FPGA simulations and printed circuit board design.

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In short, the HP VISUALIZE B1000 Workstation represents a complete system package with outstanding performance and great investment protection – at a great price.

The Ultimate Design Machines

Like the other HP VISUALIZE systems, the B1000 workstation is built for people who need to solve the toughest design problems in reduced time. The HP VISUALIZE Workstation family has it all: powerful processors, the industry's fastest graphics subsystems, increased disk, RAM and I/O capabilities, and UNIX®-Windows NT® interoperability. In short, the HP VISUALIZE B1000 is the ultimate design machine.



1000

feature

advantage

benefit

Performance

PA-8500 processor running at 300MHz

Gives you the power of the chip that won the "Best RISC Processor" award (Microprocessor Report's Editor's Choice)

Puts more compute and visualization power behind EDA and MDA applications; runs 2X faster than earlier B-Class systems

1.5MB on-chip cache

Maximizes application performance

Speed and throughput

HP VISUALIZE *fx⁴ Pro* graphics subsystem with 4 HP PA-RISC geometry engines

Delivers great 3D graphics performance

Supports faster visualization of mid-size mechanical assemblies

Affordability

HP VISUALIZE *fx² Pro* graphics subsystem with 2 HP PA-RISC geometry engines

Delivers industry's best entry-level 3D graphics performance for MDA work

Supports fast visualization at an affordable price

HP VISUALIZE-EG graphics subsystem

Delivers leadership 2D graphics performance for EDA work, including HDL text entry, small IC FPGA simulation and printed circuit board design

Supports 2D visualization needs at an affordable price

Integration

Interoperability with Windows NT systems

Allows UNIX and Windows systems to share files and data across your network

Supports your evolving computing environment; enables collaboration with users on different platforms

Investment Protection

New expansive mini-tower with 6 industry-standard PCI slots

More options. Not I/O constrained

Gives you the flexibility to expand your system

Binary compatibility with future PA-RISC and IA-64 processors

Ensures smooth transition to HP's next-generation high-performance systems.

Protects your investment in applications, data and systems



B1000 technical specifications

Central Processor	
Type	PA-8500
Clock frequency	300MHz
Number of processors	1
Primary Cache (On Chip)	
Instruction cache	0.5MB
Data cache	1.0MB
Performance	
SPECint95	22.4
SPECfp95	38.8
SPECint_rate95	201.6
SPECfp_rate95	349.2
Main Memory	
Bus bandwidth	2GB/s
RAM type	120MHz SDRAM
Capacity	128MB-4GB
Memory slots	8 slots
PCI Slots (6 total)	
PCI 1X (half card)	2 slots
PCI 2X (full size)	3 slots
PCI 4X (full size)	1 slot
Internal Storage Devices	
Ultra2 SCSI LVD (80-pin SCA connector)	
2 drives maximum	
Hard disk drive	9GB (7200 rpm)
Hard disk drive	9GB (10K rpm)
Hard disk drive	18GB (10K rpm)
Removable Media	
CD-ROM ATAPI interface	32X (internal)
3.5 in. PC floppy drive	1.44MB (internal)
DDS-3 tape drive	12-24GB (external)
External Storage	
NSE SCSI	
50-pin high-density	1 port - up to 7 devices
Ultra2 SCSI LVD	
68-pin in high-density	1 port - up to 13 devices
Networking	
RJ45	10/100 Base-Tx Ethernet
LAN Data Rate	10/100 Mbits/sec
Other I/O	
Serial interface 9-pin DIN	2 ports
Parallel interface 25-pin DIN	1 port
USB (Universal Serial Bus) Series A	2 ports (keyboard and mouse only)
Audio	
Type	Integrated, CD-quality stereo
Inputs	Stereo line-in, MIC-in
Outputs	Stereo line-out, internal speaker, head phone

Environmental Specifications			
Altitude			
Operating	0-3000m (0-10,000 ft)		
Non-operating	0-4500m (0-15,000 ft)		
Temperature			
Operating	5 to +40 degrees C		
Non-operating	-40 to +70 degrees C		
Humidity			
Operating	15 to 80% (non condensing)		
Vibration			
Operating random	0.21 G rms, 5-500Hz		
Swept sine survival	0.5 G pear, 5-500Hz		
Random survival	2.09 G rms, 5-500Hz		
Safety			
UL 1950, CUL to CSA C22.2#950, and TUV GS Mark to EN60950/IEC950			
Emissions			
FCC and CISPR Class B And VCCI Class B			
Physical Dimensions			
Height	44.5cm (17.5 in)		
Height with rack kit*	48.2cm (18.98 in)		
Width	22.9cm (9.0 in)		
Width with rack kit*	26.2cm (10.3in)		
Depth	49.5cm (19.5 in)		
Depth with rack kit*	78.1cm (30.74in)		
*system racks on its side			
Net Weight			
Minimum configuration	20.9Kg (45.9lbs)		
Fully loaded	25.4Kg (55.8lbs)		
Power Requirements			
Input current	7.4 Amps RMS max @ 100-120V 3.8 Amps RMS max @ 220-240V		
Line frequency	50-60Hz		
Maximum power input	805 Watts max @ 120 VAC, 60Hz		
VISUALIZE Graphics			
VISUALIZE-EG	VISUALIZE-fx² Pro	VISUALIZE-fx⁴ Pro	
Graphics Boards	4 Max	1 Max	1 Max
Max Resolution	1600x1200	1280x1024	1600x1200
Image Planes/Overlay	8/8DB Image	24 Image	24/24DB* Image
Planes	8 Overlay	8 Overlay	8 Overlay
Z-Buffer	SW	24 bit HW	24 bit HW
Stencil Planes	SW	4 bit HW	4 bit HW
Alpha Planes	SW	SW	SW
Texture Memory	SW	SW	Optional 16MB HW +32 x 32K virtual texture cache
Color Maps			
Image Planes	2 x 256	4 x 256	2 x 4096, 2 x 256
Overlay Planes	2 x 256	2 x 256	2 x 256, 2 x 256
*24/24DB assumes 1280 x 1024 resolution			
VISUALIZE Graphics Performance			
VISUALIZE-EG	VISUALIZE-fx² Pro	VISUALIZE-fx⁴ Pro	
Xmark93	32.0	53.2	54 (Preliminary)
PLBwire93		354	550
PLBsur93		596	685
Pro CDRS-01		7.2	19.1
Design Review		6.5	14.4
Data Explorer		14.6	25.1
Advanced Visualizer		6.5	37.2
Lightscape		3.1	3.4

The latest information about HP VISUALIZE Workstation products is available on the World Wide Web at <http://www.hp.com/visualize>.

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