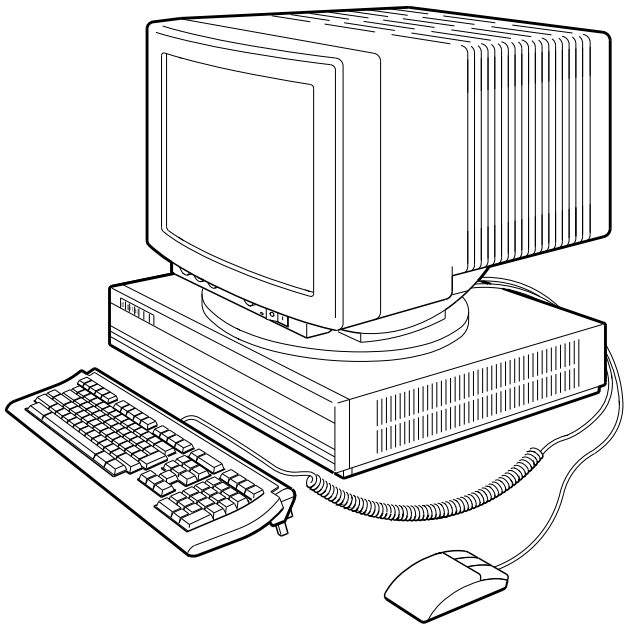
DECstation 5000/240 Workstation

Championship Performance That Gets the Job Done

digital™

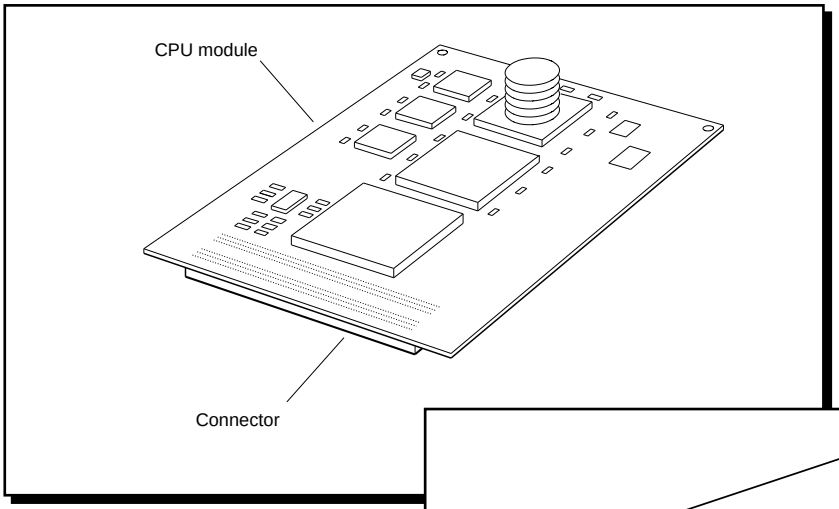


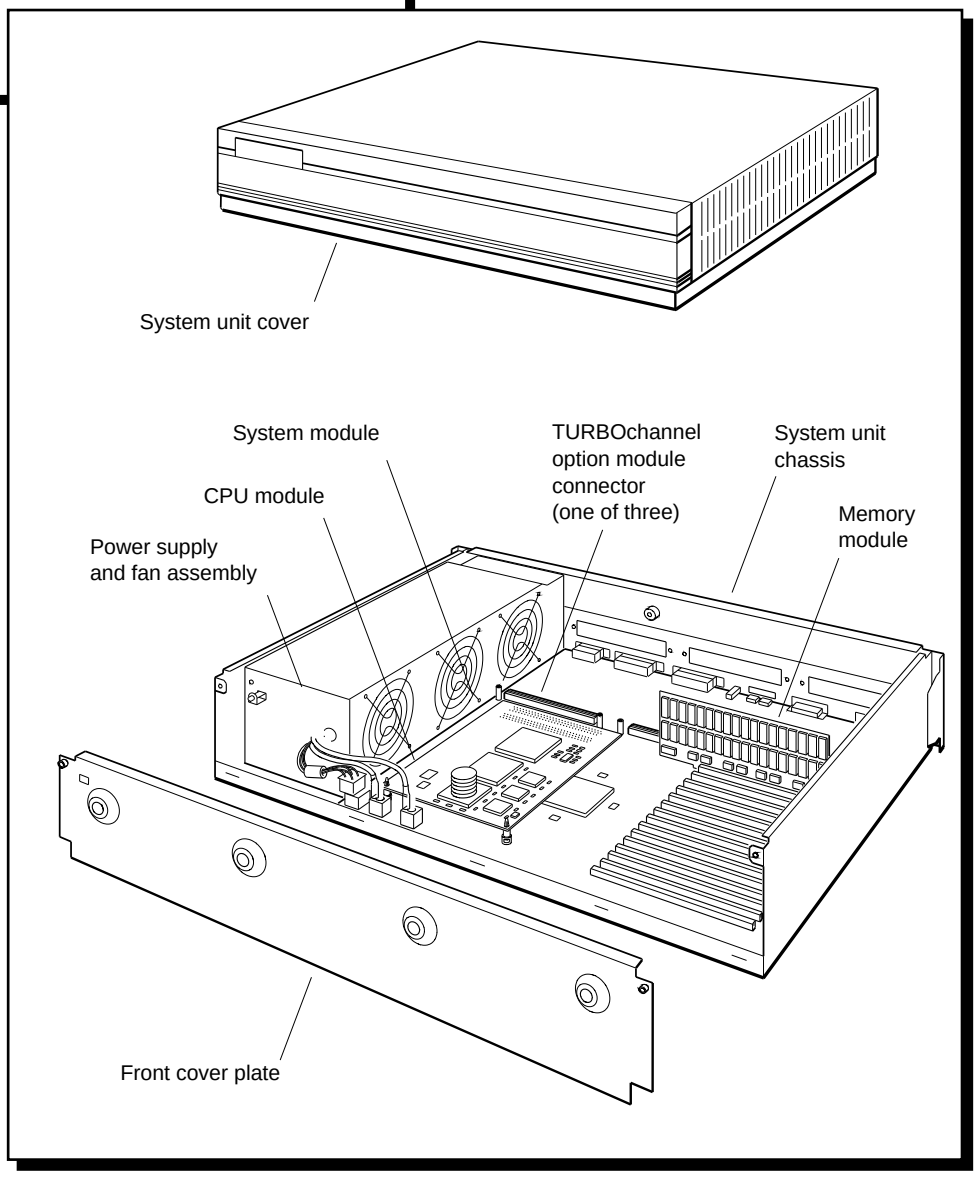
Applications demand a lot from a workstation. Like the Olympic Decathlon, being good in just one event isn't enough. While MIPS, Megaflops, and SPECmarks have long been thought of as the only event, they are only one metric for measuring what a workstation can really do for you.

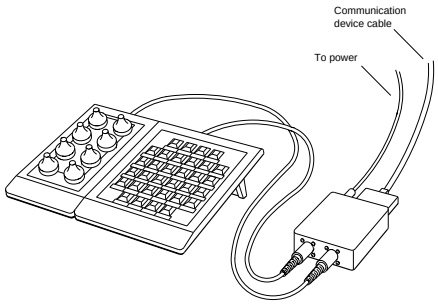
The DECstation 5000/240 workstation, Digital's highest performance, ACE-compatible, RISC workstation provides you with superb across-the-spectrum performance in all areas of workstation computing, such as:

- Graphics -the best graphics options, from 2D to complex, accelerated 3D
- Client-Server Networking - Prestoserve™ (accelerates NFS™ up to 300%); multiple full-bandwidth Ethernet and FDDI
- CPU Subsystem - removable R3000A CPU daughter card, a design that provides an upgrade path to future 64-bit R4000 processors
- Open Bus Architecture - the ACE-standard, open TURBOchannel interconnect provides fast I/O bandwidth plus a large storage capacity of over 28 Gbytes and exceptional system expansion in graphics, networking, and more
- Software Evironment - industry-standard UNIX® operating system with ACE networked graphics: X, PEX, PHIGS, GL (future)
- Memory - a 100 Mbyte/sec memory subsystem that supports up to 480 Mbytes, more than enough for the most demanding applications
- Disk I/O - fast, standard, synchronous DMA SCSI disk contoller; hyper-fast, optional IPI disks

By providing the winning combination of power and flexibility, your investment in the DECstation 5000/240 is an investment in the future.

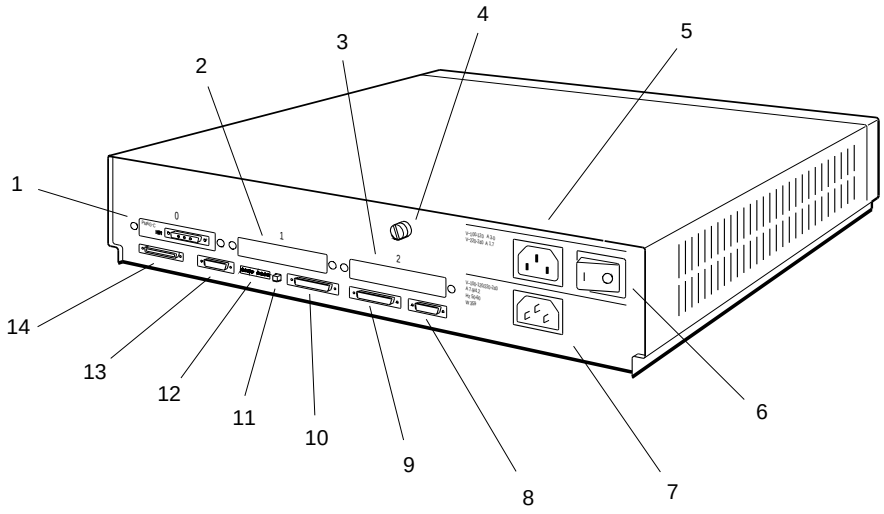

CPU module
Connector


System unit cover
System module
CPU module
Power supply
and fan assembly
TURBOchannel
option module
connector
(one of three)
System unit
chassis
Memory
module
Front cover plate



Outstanding Service From an Industry Leader

Digital delivers services for networking, training, and software support, offering greater system availability to provide greater user productivity. Digital's full-year product warranties let you choose the service level best suited to your unique needs and environments. Plus, you can tailor the support according to your needs. Whatever the service solution, you benefit from a single point of contact.



1. TURBOchannel option slot 0 with graphics module installed
2. TURBOchannel option slot 1
3. TURBOchannel option slot 2
4. Cover-release screw
5. Monitor-to-system-unit power connector
6. On/off switch
7. System unit power connector
8. Keyboard-mouse connector
9. Communications connector 2
10. Communications connector 3
11. Halt button
12. Diagnostic LED display
13. Base system ThickWire Ethernet connector
14. Base system SCSI connector

For More Information

For more information on the DECstation 5000/240 workstation, the ACE initiative, or Digital's service offerings, contact your local Digital sales representative, or, in the United States only, call the Technical Consulting Center for pre-purchase assistance (800-343-4040).

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Graphics Options

	MX	HX	TX	PXG+/8	PXG+/24	PXG Turbo+
Graphics Planes						
1, Mono	X					
8, Greyscale		X				
8, Color		X		X		
24, True Color			X		X	X
Multiscreen	X	X	X			
Full-page Double Buffering				X	X	X
PixelStamp Rendering Processor				X	X	X[1]
Intel™ i860 (44 MHz) Geometry Accelerator				X	X	X
24-bit Z Buffer				X[2]	X	X
24-planes Image Memory						X
1280 x 1024 Resolution	X	X	X	X	X	X
Total Planes	1	8	24	16/40[3]	72	96

[1] The PXG Turbo+ contains an additional scan-converter chip.
[2] The 24-bit Z buffer is optional on the PXG+/8-plane model.
[3] 40 planes achieved with the optional 24-bit Z buffer.

Graphics Performance

	MX	HX	PXG+	PXG Turbo+
3D polygons/sec	n/a	n/a	70,000	106,000
3D vectors/sec	n/a	n/a	401,000	436,000
2D area fill, Mpixels/sec	20.3	30.5	18.5	12.3
2D vectors/sec	248,000	621,000	345,000	445,000

* All graphics performance numbers are through X or PHIGS/PEX.
2D and 3D vectors are 10 pixel segment polylines.
3D polygons are 100 pixel, Gouraud-shaded, Z-buffered triangle strips.
3D performance numbers are not applicable for 2D (MX and HX) options.

Specifications

CPU/FPU	R3000A instruction set on a removable daughter card
Clock speed	40 MHz
SPECmark/SPECint/SPECfp	32.4/27.9/35.8
MIPS (Dhrystone V1.1)	42.9
FPU performance	10.8 Linpack (MFLOPS), 6.0 double-precision
TURBOchannel	100 Mbytes/sec burst speed
Memory	Expandable to 480 Mbytes of memory
Cache	128 Kbytes of system cache: 64 Kbytes of data cache and 64 Kbytes of instruction cache
SCSI bus (up to 3)	5 Mbytes/sec transfer rate
Ethernet (up to 3)	10 Mbits/sec
FDDI (up to 2)	100 Mbits/sec
Data types	Little-endian byte ordering (ACE compatible) IEEE-compatible floating point format
Software Environment	ULTRIX operating system (compatible with future OSF/1®-based ACE UNIX) DECwindows and OSF/Motif® graphical user interfaces
Networking (thick wire)	TCP/IP, NFS, SNMP (standard) DECnet-ULTRIX (optional)

Power Requirements

Line voltage	120 V/240 V
Voltage tolerance-RMS	88-132 V/194-264 V
Frequency/single phase	60 Hz/50 Hz
Frequency tolerance	47-63 Hz
Max. running current	9.5 A/5.3 A
Max. power consumption	359 W

Operating Environment

Temperature	10^{o}-40^{o} C (50^{o}-104^{o} F)
Relative humidity	20-80% noncondensing
Max. operating altitude	2.4 km (8000 feet)

Physical Characteristics

Height	9.2 cm (3.6 in)
Width	51.0 cm (20.1 in)
Depth	43.5 cm (17.1 in)
Weight	12.7 to 22.7 kg (28.0 to 50.0 lb)

Display Monitors

19-inch color Trinitron™ (VRT19)	Height: 47.5 cm (18.7 in); Width: 49.9 cm (19.6 in) Depth: 47.0 cm (18.5 in); Weight: 34.0 kg (75.0 lb)
16-inch color Trinitron (VRT16)	Height: 40.9 cm (16.1 in); Width: 40.6 cm (16.0 in) Depth: 45.3 cm (17.8 in); Weight: 25 kg (56.0 lb)
19-inch monochrome (VR319)	Height: 45.7 cm (18.0 in); Width: 49.5 cm (19.5 in) Depth: 40.1 cm (15.8 in); Weight: 22.7 kg (50.0 lb)
Resolution	1280 x 1024
Refresh (noninterlaced)	72 Hz

Input Devices

LK401 keyboard	105 sculptured keys, 20 special-function keys, built-in angle adjustment, customer-selectable routing
Mouse	Three button, 200 pulses per inch
Graphics tablet	27.9 cm x 27.9 cm (11 in x 11 in) active area
Programmable Function Dial Box	8 individually programmable function dials with 360-degree rotation (256-bit resolution) arranged in 2 vertical rows of 4 dials
Lighted Programmable Function Keyboard	32 individually programmable function keys in 4-6-6-6-6-4 array

Storage Devices

Disk	RZ58: 1.38-Gbyte hard disk drive RZ57: 1-Gbyte hard disk drive RZ56: 665-Mbyte hard disk drive RZ25: 426-Mbyte hard disk drive
Tape	TZ30: 95-Mbyte streaming tape drive TLZ04: 1.2-Gbyte 4mm digital audio tape (DAT) TKZ08: 2.2-Gbyte 8mm helical scan tape TSZ05: 1600 BPI 9-track tape TSZ07: 40/140-Mbyte 9-track tape at 1600/6250 bits/inch TZK10: 525-Mbyte Quarter-Inch Cartridge tape
Diskette	RX23: 1.44-Mbyte 3.5-inch diskette drive RX33: 1.2-Mbyte 5.25-inch diskette drive
CD-ROM	RRD42: 600-Mbyte compact disc drive

Note: The DECstation 5000/240 comes with one SCSI controller (standard), supporting up to 7 devices; up to two more SCSI controllers may be added via TURBOchannel, for a maximum of 21 devices.