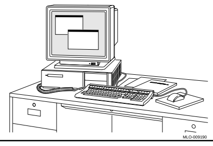
Alpha AXP™ Workstation and Server Specification Summary

	DEC 3000 Model 500/500S AXP™ Deskside Workstation/Server 	DEC 3000 Model 400/400S AXP™ Desktop Workstation/Server 
OPERATING SYSTEMS	OpenVMS AXP™, DEC OSF/1 AXP™	
SYSTEM CHARACTERISTICS		
MIPS/MFLOPS(100x100)	150.97/30.1	134.23/26.4
SPECmark	121.5	108.1
SPECfp92/SPECint92	126.0/74.3	112.2/65.3
TPC-A Tps		
CPU	DECchip™ 21064 RISC Microprocessor	
Clock Speed	6.6nS (150 MHz)	7.5nS (133 MHz)
Instruction Issue	Up to 2 Instructions Issued per Clock Cycle	
Word Size	64 Bits	
Address Size	34 Bits Physical Address/43 Bits Virtual Address	
Floating Point Format	VAX (F and G) and IEEE	
Minimum Memory	32 MB	
Maximum Memory (Initial) (Future)	256 MB (4Mbit) 1 GB (16Mbit)	128 MB (4Mbit) 512 MB (16Mbit)
On-chip I-Cache	8 KB, Direct Mapped	
On-chip D-Cache	8 KB, Write Through, Direct Mapped	
External Cache	512 KB, Write Back, Direct Mapped	
Memory Latency	160nS for first 128 bits 40nS for second 128 bits	180nS for first 128 bits, 45nS for second 128 bits
Memory Bus Speed (sustained)	114 MB/S	106 MB/S
Memory Bus Width	256 bits + ECC	
LOAD/STORAGE MEDIA		
Internal Storage (Fixed)	Four 3½" Half-Height	Two 3½" Half Height
(Removable)	Two 5¼" Half-Height	One 5¼" Half-Height
Internal Storage Options	Fixed 3½" HH RZ25 (426 MB), RZ26(1.05 GB) Removable 5¼" HH RX26 (Floppy),TLZ06(DAT), TZK10(QIC), RRD42 (CD), TZ30 (Tape, Model 400/400S Only)	
External Expansion	Storage Modular Enclosure (BA350-SA)	Storage Modular Enclosure (BA350-SA), PMTCE
External Storage Options	BA350 RZ25, RZ26, TLZ06 (seven devices, any combination) PMTCE RZ25, RZ26 (two devices, any combination), RRD42, TLZ06, TZK10 (one device) *Note: PMTCE also expands a "one-wide" TURBOchannel slot into a "three-wide" slot,* ***Model 400 Only***	
Maximum Storage: internal external total	4.2 GB (4xRZ26) 7.35 GB (BA350, 7xRZ26) 11.55 GB	2.1 GB (2xRZ26) 7.35 GB (BA350, 7xRZ26) 9.45 GB
GRAPHICS		
Base Graphics	Integral HX 2D acceleration	HX 2D acceleration (TURBOchannel)
Graphics Options	HX (8-Plane), PXG+(8/24-Plane), PXG Turbo+ (24-Plane)	
2D KV/sec (X11perf, line10)	636	564
2D Mpix/sec (X11perf, copywinpix500)	31	27.4
Resolution/Refresh	1280x1024, 66/72 Hz	
Multi-graphic screen support	Integral plus (5) HX	(3) HX

Alpha AXP™ Workstation and Server Specification Summary (continued)

	DEC 3000 Model 500/500S AXP™ - Deskside		DEC 3000 Model 400/400S AXP™ - Desktop	
INPUT/OUTPUT				
Input Devices	Mouse, Tablet, Button Box, Dial Box			
Networks	Ethernet: Twisted pair (IEEE 10baseT), Thick wire (IEEE 10base5), FDDI			
Communications	ISDN, Sync/Async, Printer/Console			
Audio	Voice Quality Input/Output Mic In, Speaker Out, MJ, Line In		Voice Quality Input/Output MJ	
Buses: Type	SCSI-II	TURBOchannel	SCSI-II	TURBOchannel
Number	2 Channels	6 Slots	2 Channels	3 Slots
Speed	5 MB/Sec	100 MB/Sec	5 MB/Sec	90 MB/Sec
PHYSICAL CHARACTERISTICS				
Height/Width/Depth/Weight	Pedestal: 24.7"/8.8"/29.7"/77lbs (diskless) Rack: 8.4"/17.5"/27"/65lbs (diskless)		Desktop: 5"/20"/17.5"/45lbs (diskless) Optional Pedestal: 23"/9"/18.25"/48lbs (diskless)	
Power (Voltage, Phase, Watts)	120/240V, Single Phase, 686 AC Watts		120/240V, Single Phase, 420 AC Watts	
Form Factor	Deskside/Rackmount		Desktop/Optional Pedestal	
ENVIRONMENTAL CHARACTERISTICS (operational)				
Temperature	No tape or diskette:10°-40°C(50°-104°F With tape or diskette: 15°-32°C (59°-90°F)		10°-35°C (50°-95°F)	
Temperature Change Rate (max)	11°C/hr (20°F/hr)			
Relative Humidity	Notape or diskette: 10-90% non-condensing With tape or diskette: 20-80% non-condensing			
Maximum Wet Bulb	28°C (82°F)		25°C (77°F)	
Minimum Dew Point	2°C (36°F)			
Physical Shock	7.5G peak (+/-1G), 10ms (+/-3ms) duration, three axes		10G peak (+/-1G), 10ms (+/-3ms) duration, three axes	
Vibration	5-10Hz 0.02 in(0.5mm) (Double Amplitude); 10-500-10 Hz 0.1G peak (1.0m/s²); 10-5 Hz 0.02 in(0.5mm) (DA) sweep rate: 1 octave/minute			
Acoustic Declared Values (per ISO 9296: LwAd, B; LpAm, dB) (per ISO 7779; LwA (mean), B)	see tables below		see tables below	
Maximum Altitude	2400 meters (8000 ft) @ 36°C (97°F)			
Electromagnetic Emissions (approvals pending)	Digital Class A which includes: FCC part 15 class A (1989) (USA); CSA 108.8; EEC Dir 89/336 EN55022 (UK, Netherlands, Germany); AS 3548-1988 (Australia); VCCI level 0 (Japan)			
REGULATORY APPROVALS (approvals pending)	UL-STD-1950 CSA STD C22.2 NO 220/1986; IEC950 VDE-0871 (RF) ;VDE-0806 (office machines)			

Acoustic Declared Values — DEC 3000 Model 500/500S:

	Diskless & Idle	w/(4) RZ26 Idle	w/(4) RZ26 Oper
LwAd, B	5.2	5.3	5.4
LpAm, dB	34	35	37
LwA(mean),B	4.9	5.0	5.1

Acoustic Declared Values — DEC 3000 Model 400/400S:

	Diskless & Idle	w/(2) RZ26 Idle	w/(2) RZ26 Oper
LwAd, B	4.7	4.8	5.2
LpAm, dB	39	40	40
LwA(mean),B	4.4	4.5	4.9