



AlphaStation 255/233 and 255/300 V2.2

Digital Systems and Options Catalog

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AlphaStation 255/233 and 255/300 Workstation

Product Description

The AlphaStation 255/233 and 255/300 Desktop Workstations comprise a family of entry to mid-range PCI-based Alpha Universal Client systems. The AlphaStation 255 family delivers premium performance while providing access to thousands of applications running on the Digital UNIX, OpenVMS or Windows NT Workstation operating systems.

The **AlphaStation 255/233** system uses the Alpha 21064A microprocessor running at 233 MHz with performance measuring 180 SPECint92 (3.80 SPECint95) and 210 SPECfp92 (5.09 SPECfp95). This entry level to low end system is ideal for running 2D CAD, CASE, Multimedia and Software Development applications.

The **AlphaStation 255/300** system also uses the Alpha 21064A microprocessor, but at a higher speed of 300 MHz and with performance measuring 215 SPECint92 (4.51 SPECint95) and 245 SPECfp92 (5.71 SPECfp95). This mid-range system is optimal for working with 2D CAD and 3D CAD applications.

All AlphaStation 255 systems come packaged in a compact enclosure, with capacity for up to 512 Mbytes of parity memory, 128-bit wide memory bus, four storage slots, four option slots (2 PCI, 1 PCI/ISA combination, 1 ISA) and a 1 Mbyte secondary cache. The high performance PCI I/O bus, running at 132 Mbytes/second, provides expansion for options such as high-performance graphics, networking, and SCSI adapters without the need for additional tabletop options or expansion boxes. All systems support a wide variety of industry-standard peripherals and PCI/ISA options. Other standard features include integrated Twisted Pair Ethernet (ThinWire is optional), stereo-quality audio, external ports for serial/parallel communications, and external SCSI.

The AlphaStation 255 Family workstations come in a new design and color enclosure. Only peripherals in the new color scheme and design can be ordered with the new systems. Customer-installable chip upgrades provide investment protection to all AlphaStation 255 users and Digital's TradeIn '96 program offers a cost-effective upgrade path for users of older workstations. All AlphaStation 255 systems come with the best hardware warranty in the industry—a three year warranty.

Systems

- Select country specific power cord and keyboard for **all** systems. All systems come configured at 240V and can be switched by the user. A U.S. country kit including a U.S. keyboard and power cord is available.
- Digital UNIX and OpenVMS systems include factory-installed software (FIS).
- Windows NT systems include Windows NT Workstation V3.51 media (CD-ROM), license, and documentation in shrink-wrapped package.
- All software updates are delivered on CD-ROM.
- Options ordered will be factory installed unless specified as **spares**.

AlphaStation 255 Desktop systems include

- Alpha dual issue microprocessor 21064A CPU with 1 Mbyte onboard secondary cache
- Deskside enclosure which includes:
 - Four expansion slots:
 - Two PCI slots
 - One PCI/ISA combination slot
 - One ISA slot
 - Two memory banks (Eight SIMM memory slots)
 - Integrated PCI-based Fast Narrow Single Ended SCSI-2 controller with Direct Memory Access and external SCSI-2 connector
 - Four storage slots:
 - One Floppy diskette drive slot
 - One 5.25" removable media slot
 - Two 3.5" hard disk drive slots
 - Integrated high-performance Twisted Pair Ethernet
 - 200-Watt power supply
 - Two serial ports, support full modem control
 - One bi-directional enhanced parallel port
 - Keyboard port and mouse port
- Memory*
- Hard Disk*
- Graphics*
- 600-Mbyte CD-ROM drive
- Monitor selection required for Advantage Packages
- Keyboard and power cord selection (OpenVMS keyboard available on OpenVMS systems)
- Integrated Audio
- Headphone and microphone
- 3-button mouse
- English Hardware Documentation
- Hardware Warranty: 1-year on-site, 2-year return to factory
- Software Warranty: 90-day SPD conformance with advisory telephone support
- Digital UNIX V 3.2D 2-user base license
Digital Open3D license
Multimedia Services license
Digital NAS Client 150 license
Communique! starter license, **or**
- OpenVMS V6.2-1H1 base license plus 1-user license
Digital Open3D license
Multimedia Services license
Digital NAS Client 150 license, **or**
- Windows NT Workstation V3.51 media kit,
Communique! starter license,
Digital Light & Sound license

* Included in Advantage Packages, selection required in Base Configurations

Ordering menus that follow include

- AlphaStation 255/233 Advantage and Base Configurations
- AlphaStation 255/300 Advantage and Base Configurations

Menus are streamlined for ease of ordering. Select Advantage Configurations to meet application and performance needs.

- Multimedia
- CASE
- 2D CAD
- 3D CAD

To configure a customized system, use Base Configuration menus. Additional system options are in the AlphaStation Option section.

Warranty Statement

AlphaStations are sold with specific warranty response times, hours of coverage, warranty duration, and a specific manner by which the warranty service will be delivered. Digital also makes available extended coverage offerings to uplift or extend the service coverage and/or response time: See Supplemental Services in AlphaStation Options section.

AlphaStation 255/233 ADVANTAGE CONFIGURATIONS

Y=in base configuration; M=mandatory option; O=option

AlphaStation 255/233	Resources Used		Digital UNIX	Digital UNIX/ OpenVMS	Digital UNIX	Digital UNIX
Application Profile			CASE	2D CAD	3D CAD	Multimedia
Operates at 120V / 240V			PB470-CA	PB470-AA/ PB471-AA	PB470-BA	PB470-DA
CPU Alpha dual issue microprocessor	21064A 233-MHz	Y	Y	Y	Y	Y
Floppy diskette drive 1.44 MB	Accessible bay					Y
CD-ROM 600 Mbyte	5.25" SCSI-2 bay	Y	Y	Y	Y	Y
Ethernet (10BaseT), audio, headphone, microphone, mouse		Y	Y	Y	Y	Y
Operating System		Y	Y	Y	Y	Y
Memory	1 bank	Y	32 Mbyte	32 Mbyte	64 Mbyte	32 Mbyte
Internal hard disk drive	3.5" x 1" SCSI-2 bay	Y	1 Gbyte	1 Gbyte	2 Gbyte	1 Gbyte
Graphics (a)	1 PCI slot	Y	PowerStorm 3D10	PowerStorm 3D30	ZLXp-L1	PowerStorm 3D30
MultiMedia kit						AVP20-AA
User Documentation-English		Y	Y	Y	Y	Y

Remaining available resources						
I/O slots PCI			1	1	1	1
PCI/ISA combo (b)			1	1 / 0	1	1
ISA (half size)			1	1	1	1
Memory banks			1	1	1	1
Internal hard drives (2 maximum)	1" or 1.6" SCSI-2 bay		1	1	1	1
SCSI-2 External storage (c,d)			5	5	5	5
1. Country Options	Select		1	1	1	1
Keyboards (e)		M	LK47W-xx or LK46W-xx	LK46W-xx or LK46W-xx	LK47W-xx or LK46W-xx	LK47W-xx or LK46W-xx
Power Cord (f)		M	BNxxx-xx	BNxxx-xx	BNxxx-xx	BNxxx-xx
Note: LK47W-AA and LK46W-AA, English keyboards, include U.S. power cord, power cord does not need to be ordered separately.						
2. Monitors	Select		1	1	1	
15" Color Monitor NH/NH/SH (g)		M	VRC15-WA/W3/W4	N/A	N/A	N/A
17" Color Monitor NH/NH/SH (g)		M	VRT17-WA/W3/W4	VRT17-WA/W3/W4	VRT17-WA/W3/W4	VRT17-WA/W3/W4
21" Color Monitor NH/NH/SH (g)		M	VRC21-WA/W3/W4	VRC21-WA/W3/W4	VRC21-WA/W3/W4	VRC21-WA/W3/W4
3. Additional Memory	Select		0 or 1	0 or 1	0 or 1	0 or 1
32 Mbyte	1 bank	O	MSP01-BA	MSP01-BA	MSP01-BA	MSP01-BA
64 Mbyte	1 bank	O	MSP01-BB	MSP01-BB	MSP01-BB	MSP01-BB
128 Mbyte	1 bank	O	MSP01-BC	MSP01-BC	MSP01-BC	MSP01-BC
256 Mbyte	1 bank	O	MSP01-BD	MSP01-BD	MSP01-BD	MSP01-BD
4. Second hard disk drive (h)	Select		0 or 1	0 or 1	0 or 1	0 or 1
1.05 Gbyte drive 1.0" (i)	1" or 1.6" SCSI-2 bay	O	PBXRZ-ED	PBXRZ-ED	PBXRZ-ED	PBXRZ-ED
1.05 Gbyte drive 1.0"	1" or 1.6" SCSI-2 bay	O	PBXRZ-EB	PBXRZ-EB	PBXRZ-EB	PBXRZ-EB
2.1 Gbyte drive 1.0"	1" or 1.6" SCSI-2 bay	O	PBXRZ-JB	PBXRZ-JB	PBXRW-JB	PBXRW-JB
4.3 Gbyte drive 1.6" (j)	1.6" SCSI-2 bay	O	PBXRZ-NA	PBXRZ-NA	PBXRZ-NA	PBXRZ-NA
5. Accessible bay 3.5 x 1"	Select		0 or 1	0 or 1	0 or 1	0
1.44 MB Floppy diskette drive	Accessible bay	O	PBXRX-AB	PBXRX-AB	PBXRX-AB	Included
6. Software Media and Documentation kits						
Digital UNIX		O	QA-MT4AA-H8	QA-MT4AA-H8	QA-MT4AA-H8	QA-MT4AA-H8
OpenVMS V6.2 (k)				QA-MT1AA-H8		
OpenVMS V6.2-1H1				QA-MT1AG-H8		
7. Additional Options: See AlphaStation Options for a comprehensive list of qualified options (m)						
ThinWire Ethernet MAU (10Base2)	Internal slot	O	PBXDC-DA	PBXDC-DA	PBXDC-DA	PBXDC-DA

Note: See AlphaStation 255/233 notes on Page 5.

AlphaStation 255/233 BASE CONFIGURATIONS

Y=in base configuration; M=mandatory option; O=option

AlphaStation 255/233	Resources Used		Digital UNIX	Open VMS	Windows NT
Operates at 120V/240V			PB47A-AA	PB47A-BA	PB47A-CA
CPU Alpha dual issue microprocessor	21064A 233 MHz	Y	Y	Y	Y
Floppy diskette drive 1.44 MB	Accessible bay				Y
CD-ROM 600 Mbyte	5.25" SCSI-2 bay	Y	Y	Y	Y
Ethernet (10BaseT), audio, headphone, microphone, mouse		Y	Y	Y	Y
Integration Service		Y	Y	Y	Y
Operating system		Y	Y	Y	Y
User Documentation-English		Y	Y	Y	Y

Remaining available resources					
I/O slots PCI			2	2	2
PCI/ISA combo (b)			1	0	1
ISA (half size)			1	1	1
Memory banks			2	2	2
Internal disk drives (2 maximum)	1" or 1.6" SCSI-2 bays		2	2	2
SCSI-2 External (c,d)			6	6	6
1. Country Options	Select		1	1	1
Keyboards (e)		M	LK47W-xx or LK46W-xx	LK47W-xx or LK46W-xx	LK47W-xx or LK46W-xx
Power Cord (f)		M	BNxxx-xx	BNxxx-xx	BNxxx-xx
Note: LK47W-AA and LK46W-AA, English keyboards, include U.S. power cord, power cord does not need to be ordered separately.					
2. Memory			Minimum Required	Minimum Required	Minimum Required
Memory Required	1		32 Mbyte	32 Mbyte	32 Mbyte
Optional Available	1 Select		1 or 2	1 or 2	1 or 2
32 Mbyte	1 bank	M	MSP01-BA	MSP01-BA	MSP01-BA
64 Mbyte	1 bank	M	MSP01-BB	MSP01-BB	MSP01-BB
128 Mbyte	1 bank	M	MSP01-BC	MSP01-BC	MSP01-BC
256 Mbyte	1 bank	M	MSP01-BD	MSP01-BD	MSP01-BD
3. Disk drives 1 Required (h)	Select		1 or 2	1 or 2	1 or 2
1.05 Gbyte drive 1.0" (i)	1" or 1.6" SCSI-2 bay	M	PBXRZ-ED	PBXRZ-ED	PBXRZ-ED
1.05 Gbyte drive 1.0"	1" or 1.6" SCSI-2 bay	M	PBXRZ-EB	PBXRZ-EB	PBXRZ-EB
2.1 Gbyte drive 1.0"	1" or 1.6" SCSI-2 bay	M	PBXRZ-JB	PBXRZ-JB	PBXRZ-JB
4.3 Gbyte drive 1.6" (j)	1.6" SCSI-2 bay	M	PBXRZ-NA	PBXRZ-NA	PBXRZ-NA
4. Accessible bay 3.5 x 1"	Select		0 or 1	0 or 1	0
1.44 MB Floppy diskette drive	Accessible bay	O	PBXRZ-AB	PBXRZ-AB	Included
5. Graphics 1 Required	Select		1	1	1
PowerStorm 3D10 Entry 2D (a)	1 PCI slot	M	PB2GA-JA	PB2GA-JA	PB2GA-JA
PowerStorm 3D30 8-plane (a)	1 PCI slot	M	PBXGB-AA	PBXGB-AA	PBXGB-AA
PowerStorm 4D20 24-plane Z-buffer (a)	1 PCI slot	M	PBXGB-CA	PBXGB-CA	PBXGB-CA
ZLXp-L1 24-plane (a)	1 PCI slot	M	PBXGC-AA	PBXGC-AA	PBXGC-AN
ZLXp-L2 24-plane (a)	2 PCI slots	M	PBXGC-BA	PBXGC-BA	N/A
6. Monitors	Select		1	1	1
17" Color Monitor NH/NH/SH (g)		O	VRT17-WA/W3/W4	VRT17-WA/W3/W4	VRT17-WA/W3/W4
21" Color Monitor NH/NH/SH (g)		O	VRC21-WA/W3/W4	VRC21-WA/W3/W4	VRC21-WA/W3/W4
7. Software Media and Documentation kits					
Digital UNIX		O	QA-MT4AA-H8		
OpenVMS V6.2 (k)		O		QA-MT1AA-H8	
OpenVMS V6.2-1H1		O		QA-MT1AG-H8	
Windows NT Workstation		O			QB-0QRAA-SA
8. Additional Options: See AlphaStation Options for a comprehensive list of qualified options (m)					
ThinWire Ethernet MAU (10Base2)	Internal slot	O	PBXDC-DA	PBXDC-DA	PBXDC-DA

AlphaStation 255/233 Notes

- (a) Up to **3** PowerStorm graphics options and 3 monitors are supported on Digital UNIX and Windows NT systems. Up to **2** PowerStorm graphics options and 2 monitors are supported on OpenVMS systems. Graphics options require Digital Open3D media, included in factory installed software (FIS). Windows NT graphics options include Graphics Support Services Software license, media and documentation. Windows NT graphics options must be homogeneous, (three PowerStorm 3D30 options or three PowerStorm 4D20 options). 3D multi screen not hardware accelerated for Windows NT.
Graphics options are supported in the following combinations with a maximum of 3 on Digital UNIX and Windows NT systems and a maximum of 2 on OpenVMS systems:
 One PowerStorm 3D10 option, or
 Three PowerStorm 3D30 options (two for OpenVMS), or
 Three PowerStorm 4D20 options (two for OpenVMS), or
 Any combination of PowerStorm 3D30 and PowerStorm 4D20 options are supported on Digital UNIX and OpenVMS systems.
 Support for Windows NT must be homogeneous.
 One ZLXp-L1 on Digital UNIX, OpenVMS and Windows NT, or
 One ZLXp-L2 (uses two PCI slots) on Digital UNIX and OpenVMS systems **only**.
- (b) PCI/ISA combination slot is not supported for PCI options on systems running OpenVMS.
- (c) For more than 7 internal or external devices, a fast SCSI-2 controller, which supports 7 devices, is required.
- (d) Each external device requires a 3-foot SCSI cable
- (e) Select country-specific keyboard from AlphaStation Options section. LK47W-xx = 101/102 key PC style Frost White keyboard, LK46W-xx = 108 key LK201/LK401 style Frost White keyboard (preferred for OpenVMS users).
- (f) Select country-specific power cord from AlphaStation Options section.
- (g) -WA = NH (Northern Hemisphere) monitor with 120V power cord, -W3 = Northern Hemisphere monitor without power cord, -W4 = SH (Southern Hemisphere) monitor without power cord; select country specific power cord for -W3 and -W4 variants from AlphaStation Options section..
- (h) The system can support the following hard drive configurations:
 The system disk will be installed below the floppy if the drive size is 2.1GB or smaller.(The 1.0GB & 2.1GB drives are 1.0" high.)

(Maximum of two drives total including system disk)

HD bay beneath floppy	HD bay beneath CD-ROM
one 1.0" hard drive	one 1.0" hard drive or one 1.6" hard drive
nothing	one 1.6" hard drive

- (i) Does not support Tag Command Queuing, Seek Reordering Spindle Sync, or Variable Sector Size.
- (j) Maximum of one 1.6" SCSI-2 bay available.
- (k) OpenVMS V6.2-1H1 kit is required for AlphaStation 255. It must be installed over OpenVMS V6.2 media when reloading operating system
- (m) Check availability of slots (initially 2 PCI, 1 PCI/ISA combination, 1 ISA). PCI/ISA combination slot not supported for PCI options on OpenVMS systems. ISA slot is a 1/2 sized slot.

AlphaStation 255/300 ADVANTAGE CONFIGURATIONS

Y=in base configuration; M=mandatory option; O=option

AlphaStation 255/300	Resources Used		Digital UNIX / OpenVMS	Digital UNIX
Application Profile			2D CAD	3D CAD
Operates at 120V / 240V			PB480-AA / PB481-AA	PB480-BA
CPU Alpha dual issue microprocessor	21064A 300 MHz	Y	Y	Y
CD-ROM 600 Mbyte	5.25" SCSI-2 bay	Y	Y	Y
Ethernet (10BaseT), audio, headphone, microphone, mouse		Y	Y	Y
Operating System		Y	Y	Y
Memory	1 bank	Y	64 Mbyte	64 Mbyte
Internal hard disk drive	1" SCSI-2 bay	Y	1 Gbyte	2 Gbyte
Graphics (a)	1 PCI slot	Y	PowerStorm 3D30	ZLXp-L1
User Documentation-English		Y	Y	Y

Remaining available resources				
I/O slots PCI			1	1
PCI/ISA combo (b)			1 / 0	1
ISA (half size)			1	1
Memory banks			1	1
Internal disk drives (2 maximum)	1" or 1.6" SCSI-2 bays		1	1
SCSI-2 External storage (c,d)			5	5
1. Country Options	Select		1	1
Keyboards (e)		M	LK47W-xx or LK46W-xx	LK47W-xx or LK46W-xx
Power Cord (f)		M	BNxxx-xx	BNxxx-xx
Note: LK47W-AA and LK46W-AA, English keyboards, include U.S. power cord, power cord does not need to be ordered separately.				
2. Monitors	Select		1	1
17" Color Monitor NH/NH/SH (g)		M	VRT17-WA/W3/W4	VRT17-WA/W3/W4
21" Color Monitor NH/NH/SH (g)		M	VRC21-WA/W3/W4	VRC21-WA/W3/W4
3. Additional Memory	Select		0 or 1	0 or 1
32 Mbyte	1 bank	O	MSP01-BA	MSP01-BA
64 Mbyte	1 bank	O	MSP01-BB	MSP01-BB
128 Mbyte	1 bank	O	MSP01-BC	MSP01-BC
256 Mbyte	1 bank	O	MSP01-BD	MSP01-BD
4. Second hard disk drive (h)	Select		0 or 1	0 or 1
1.05 Gbyte drive 1.0" (i)	1" or 1.6" SCSI-2 bay	O	PBXRZ-ED	PBXRZ-ED
1.05 Gbyte drive 1.0"	1" or 1.6" SCSI-2 bay	O	PBXRZ-EB	PBXRZ-EB
2.1 Gbyte drive 1.0"	1" or 1.6" SCSI-2 bay	O	PBXRZ-JB	PBXRW-JB
4.3 Gbyte drive 1.6" (j)	1.6" SCSI-2 bay	O	PBXRZ-NA	PBXRZ-NA
5. Accessible bay 3.5 x 1"	Select		1	1
1.44 MB Floppy diskette drive	Accessible bay	O	PBXRX-AB	PBXRX-AB
6. Software Media and Documentation kits				
Digital UNIX		O	QA-MT4AA-H8	QA-MT4AA-H8
OpenVMS V6.2 (k)		O	QA-MT1AA-H8	
OpenVMS V6.2-1H1		O	QA-MT1AG-H8	
7. Additional Options: See AlphaStation Options for a comprehensive list of qualified options (m)				
ThinWire Ethernet MAU (10Base2)	Internal slot	O	PBXDC-DA	PBXDC-DA

Note: See AlphaStation 255/300 notes on Page 8.

AlphaStation 255/300 BASE CONFIGURATIONS

Y=in base configuration; M=mandatory option; O=option

AlphaStation 255/300	Resources Used		Digital UNIX	Open VMS	Windows NT
Operates at 120V/240V			PB48A-AA	PB48A-BA	PB48A-CA
CPU Alpha dual issue microprocessor	21064A 300 MHz	Y	Y	Y	Y
Floppy diskette drive 1.44 MB	Accessible bay				Y
CD-ROM 600 Mbyte	5.25" SCSI-2 bay	Y	Y	Y	Y
Ethernet (10BaseT), audio, headphone, microphone, mouse		Y	Y	Y	Y
Integration Service		Y	Y	Y	Y
Operating system		Y	Y	Y	Y
User Documentation-English		Y	Y	Y	Y
Remaining available resources					
I/O slots PCI			2	2	2
PCI/ISA combo (b)			1	0	1
ISA (half size)			1	1	1
Memory banks			2	2	2
Internal disk drives (2 maximum)	1" or 1.6" SCSI-2 bays		2	2	2
SCSI-2 External (c,d)			6	6	6
1. Country Options	Select		1	1	1
Keyboards (e)		M	LK47W-xx or LK46W-xx	LK47W-xx or LK46W-xx	LK47W-xx or LK46W-xx
Power Cord (f)		M	BNxxx-xx	BNxxx-xx	BNxxx-xx
Note: LK47W-AA and LK46W-AA, English keyboards, include U.S. power cord, power cord does not need to be ordered separately.					
2. Memory			Minimum Required	Minimum Required	Minimum Required
Memory Required	1		32 Mbyte	32 Mbyte	32 Mbyte
Optional Available	1	Select	1 or 2	1 or 2	1 or 2
32 Mbyte	1 bank	M	MSP01-BA	MSP01-BA	MSP01-BA
64 Mbyte	1 bank	M	MSP01-BB	MSP01-BB	MSP01-BB
128 Mbyte	1 bank	M	MSP01-BC	MSP01-BC	MSP01-BC
256 Mbyte	1 bank	M	MSP01-BD	MSP01-BD	MSP01-BD
3. Disk drives 1 Required (h)	Select		1 or 2	1 or 2	1 or 2
1.05 Gbyte drive 1.0" (i)	1" or 1.6" SCSI-2 bay	M	PBXRZ-ED	PBXRZ-ED	PBXRZ-ED
1.05 Gbyte drive 1.0"	1" or 1.6" SCSI-2 bay	M	PBXRZ-EB	PBXRZ-EB	PBXRZ-EB
2.1 Gbyte drive 1.0"	1" or 1.6" SCSI-2 bay	M	PBXRZ-JB	PBXRZ-JB	PBXRZ-JB
4.3 Gbyte drive 1.6" (j)	1.6" SCSI-2 bay	M	PBXRZ-NA	PBXRZ-NA	PBXRZ-NA
4. Accessible bay 3.5 x 1"	Select		0 or 1	0 or 1	0
1.44 MB Floppy diskette drive	Accessible bay	O	PBXRZ-AB	PBXRZ-AB	Included
5. Graphics 1 Required	Select		1	1	1
PowerStorm 3D30 8-plane (a)	1 PCI slot	M	PBXGB-AA	PBXGB-AA	PBXGB-AA
PowerStorm 4D20 24-plane Z-buffer (a)	1 PCI slot	M	PBXGB-CA	PBXGB-CA	PBXGB-CA
ZLXp-L1 24-plane (a)	1 PCI slot	M	PBXGC-AA	PBXGC-AA	PBXGC-AN
ZLXp-L2 24-plane (a)	2 PCI slots	M	PBXGC-BA	PBXGC-BA	N/A
6 Monitors	Select		1	1	1
17" Color Monitor NH/NH/SH (g)		O	VRT17-WA/W3/W4	VRT17-WA/W3/W4	VRT17-WA/W3/W4
21" Color Monitor NH/NH/SH (g)		O	VRC21-WA/W3/W4	VRC21-WA/W3/W4	VRC21-WA/W3/W4
7 Software Media and Documentation kits					
Digital UNIX		O	QA-MT4AA-H8		
OpenVMS V6.2 (k)		O		QA-MT1AA-H8	
OpenVMS V6.2-1H1		O		QA-MT1AG-H8	
Windows NT Workstation		O			QB-0QRAA-SA
8 Additional Options: See AlphaStation Options for a comprehensive list of qualified options (m)					
ThinWire Ethernet MAU (10Base2)	Internal slot	O	PBXDC-DA	PBXDC-DA	PBXDC-DA

AlphaStation 255/300 Notes

- (a) Up to **3** PowerStorm graphics options and 3 monitors are supported on Digital UNIX and Windows NT systems. Up to **2** PowerStorm graphics options and 2 monitors are supported on OpenVMS systems. Graphics options require Digital Open3D media, included in factory installed software (FIS). Windows NT graphics options include Graphics Support Services Software license, media and documentation. Windows NT graphics options must be homogeneous, (three PowerStorm 3D30 options or three PowerStorm 4D20 options). 3D multi screen not hardware accelerated for Windows NT.
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 Three PowerStorm 4D20 options (two for OpenVMS), or
 Any combination of PowerStorm 3D30 and PowerStorm 4D20 options are supported on Digital UNIX and OpenVMS systems. Support for Windows NT must be homogeneous.
 One ZLXp-L1 on Digital UNIX, OpenVMS and Windows NT, or
 One ZLXp-L2 (uses two PCI slots) on Digital UNIX and OpenVMS systems **only**.
- (b) PCI/ISA combination slot is not supported for PCI options on systems running OpenVMS.
- (c) For more than 7 internal or external devices, a fast SCSI-2 controller, which supports 7 devices, is required.
- (d) Each external device requires a 3-foot SCSI cable
- (e) Select country-specific keyboard from AlphaStation Options section. LK47W-xx = 101/102 key PC style Frost White keyboard, LK46W-xx = 108 key LK201/LK401 style Frost White keyboard (preferred for OpenVMS users).
- (f) Select country-specific power cord from AlphaStation Options section.
- (g) -WA = NH (Northern Hemisphere) monitor with 120V power cord, -W3 = Northern Hemisphere monitor without power cord, -W4 = SH (Southern Hemisphere) monitor without power cord; select country specific power cord for -W3 and -W4 variants from AlphaStation Options section..
- (h) The system can support the following hard drive configurations:
 The system disk will be installed below the floppy if the drive size is 2.1GB or smaller.(The 1.0GB & 2.1GB drives are 1.0" high.)

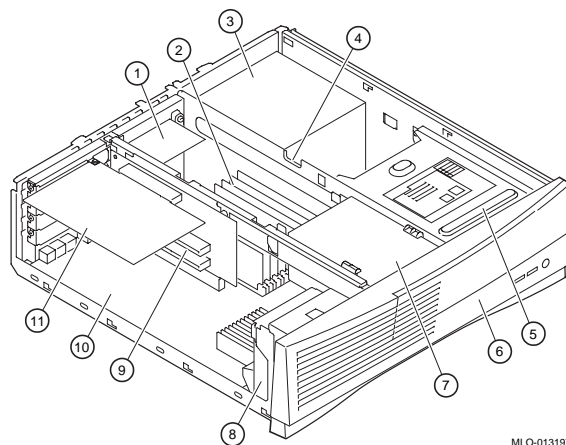
(Maximum of two drives total including system disk)

HD bay beneath floppy	HD bay beneath CD-ROM
one 1.0" hard drive	one 1.0" hard drive or one 1.6" hard drive
nothing	one 1.6" hard drive

- (i) Does not support Tag Command Queuing, Seek Reordering Spindle Sync, or Variable Sector Size.
- (j) Maximum of one 1.6" SCSI-2 bay available.
- (k) OpenVMS V6.2-1H1 kit is required for AlphaStation 255. It must be installed over OpenVMS V6.2 media when reloading operating system
- (m) Check availability of slots (initially 2 PCI, 1 PCI/ISA combination, 1 ISA). PCI/ISA combination slot not supported for PCI options on OpenVMS systems. ISA slot is a 1/2 sized slot.

AlphaStation 255 System Diagrams

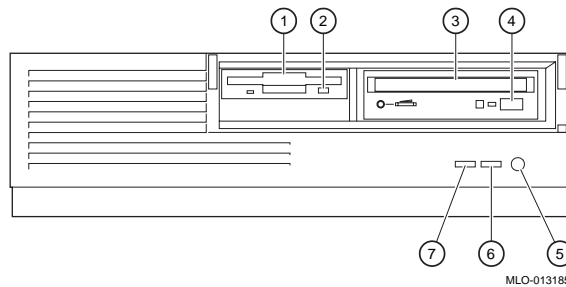
Internal



MLO-013197

- 1 Media adapter unit (MAU) (optional). Provides ThinWire Ethernet connections.
- 2 Memory SIMMs (two banks of 4 SIMMs each).
- 3 Power supply with internal fan.
- 4 Cable routing areas.
- 5 CD-ROM drive. Located below the CD-ROM drive is storage for one 1.6-inch-high 3.5-inch hard drive or one 1-inch-high 3.5-inch drive or two 1-inch-high 3.5-inch hard drives.
- 6 Speaker.
- 7 3.5-inch, 1.44-MB floppy disk drive. Located below the floppy is storage for one 1.0-inch 3.5-inch hard drive. If this bay is used, only ONE hard drive can be located below the CD-ROM. See disk drive installation rules footnote (h) under Base Configurations on previous page.
- 8 Cooling fan.
- 9 Riser card for ISA and PCI option cards which provides 2 PCI slots, 1 PCI/ISA combo slot, and 1 ISA slot. OpenVMS users cannot use the combo slot for PCI options.
- 10 Motherboard.
- 11 Typical PCI option card (size varies with option).

System Front

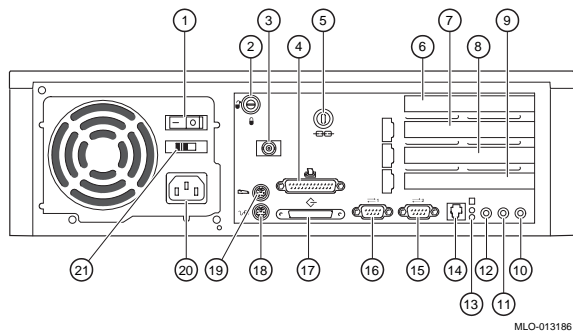


MLO-013185

- 1 Floppy drive
- 2 Floppy eject button
- 3 CD-ROM drive
- 4 CD-ROM eject button
- 5 Reset button (button resets system and causes self-test to run)
- 6 Power indicator (lights when system is on)
- 7 Disk activity indicator (lights when hard disk drive on embedded SCSI controller bus is in use)

AlphaStation 255 System Diagram and Specifications

System Rear



- 1 Power on/off button
- 2 Key lock (locking mechanism for system)
- 3 MAU (Media adapter unit (optional ThinWire Ethernet connection))
- 4 Enhanced bi-directional parallel port (Connects an industry-standard parallel printer or other parallel device)
- 5 Kensington lock (optional), (Point for attaching system to another point for security)
- 6 Expansion slot (PCI slot)
- 7 Expansion slot (PCI slot)
- 8 Expansion slot (Combination slot: PCI or ISA. OpenVMS users cannot use this slot for PCI options)
- 9 Expansion slot (Used for ISA expansion options)
- 10 Headphone jack (Connector for headphones or customer-supplied external speakers)
- 11 Microphone jack (Connector for microphone)
- 12 Line-in connector (Brings audio signals into system)
- 13 Network LEDs (Green indicates system is linked to network. Yellow indicates network activity)
- 14 Twisted pair connector (Connector to embedded Ethernet controller)
- 15 COM port 2 (Connector for communications port 2)
- 16 COM port 1 (Connector for communications port 1)
- 17 SCSI port (Provides interface between system unit and external SCSI devices. Terminator required if no SCSI devices are present)
- 18 Mouse connector (Connects PS/2-compatible mouse)
- 19 Keyboard connector (Use to connect a 101-, 102-, or 108-key keyboard)
- 20 AC power connector (Connects system to AC power)
- 21 Voltage selector switch (Allows you to set your system to work with 115 or 230 Volts AC power)

Specifications

PCI	132-Mbyte/second
Fast SCSI-2 bus	10-Mbyte/s transfer rate
Ethernet	10-Mbit/s Twisted Pair standard
Power Requirements	
Line voltage	120/240 V
Voltage tolerance	90-128/190-256 V
Frequency single phase	50/60 Hz
Frequency tolerance	47-63 Hz
Maximum running current	7.0A/3.3A with monitor 5.0A/2.3A without monitor
Maximum power consumption	200 W
Operating Environment	
Operating temperature	10° to 40° C (50° to 104° F)
Operating humidity	10% to 90% relative humidity
Maximum wet bulb	28° C (82° F)
Storage temperature	-40° C to 66° C (-40° F to 149° F)
Storage humidity	10% to 90% relative humidity
Maximum wet bulb	46° C (114° F)
Maximum altitude	
Operating	3,048 m (10,000 ft) maximum
Nonoperating	12,190 m (40,000 ft) maximum
Nonoperating shock	30G, 25ms halfsine
Physical Characteristics	
Height	13.0 cm (5.12 inches)
Width	44.6 cm (17.56 inches)
Depth	48.4 cm (19.06 inches)
Weight	16 kg (35 lb)