



**AlphaServer 400**  
**V97-1.0—1 May 1997**  
DIGITAL Systems and Options Catalog

**Product Description**

The AlphaServer 400 Mini Tower System is an Alpha microprocessor 233 MHz CPU system. This highly reliable product offers many server specific features, including management and security, with remote management possible via a simple serial link. For investment protection, customers get a choice of three popular operating systems: DIGITAL UNIX, OpenVMS, and Microsoft Windows NT Server. The product also has been designed to allow for future, seamless upgrades to faster Alpha processors.

The server supports up to 384 MB of industry-standard SIMM memory and has an integrated Fast Narrow SCSI-2 controller. The system enclosure supports five storage devices including a floppy diskette drive, CD-ROM, and hard drives. Six industry standard I/O expansion slots (two PCI, three ISA, and one PCI/ISA slot) provide for options such as high-performance graphics, networking and SCSI adapters.

Advanced server management features are provided with all AlphaServer 400 shipments via the bundled ServerWORKS Manager kit. The kit provides remote management capability through Simple Network Management Protocol agents (SNMP) for Windows NT, DIGITAL UNIX, and OpenVMS. The management console software runs on any Windows NT or Windows 95 PC. The SNMP agents required to manage the server ship with the TCP/IP services of the operating system (with the exception of Windows NT which ships with the ServerWORKS kit). The SNMP agents collect critical server information including system status, I/O information, storage and disk information and network status information. Thresholds can be set to monitor key server events and alarms are forwarded to the ServerWORKS console. ServerWORKS Manager V2.0 includes remote pager support for alarm notification. In addition to ServerWORKS, DIGITAL includes key third party software applications including DIGITAL Power Management Software for Alpha provided by EXIDE, and application / database management software through BMC software's PATROL family of products.

All AlphaServer 400 systems come with a three year on-site warranty. DIGITAL's ADVANTAGE-UPGRADE Program provides a cost-effective upgrade path for investment protection.

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## Step 1—Systems

- DIGITAL UNIX and OpenVMS Packaged and Base systems ordered with a minimum of a 1.05 GB disk include factory installed software (FIS).
- Windows NT Packaged and Base systems include Windows NT Server 4.0 plus 10-client access license, media (CD-ROM) kit.
- Options ordered will be factory installed unless specified as **spares**.

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### AlphaServer 400 Systems include

- Alpha microprocessor 21064A 233-MHz CPU with 512-Kbyte onboard secondary cache
- Mini tower enclosure with:
  - Six expansion slots: 2 PCI, 3 ISA, and 1 PCI/ISA combination
  - 6 SIMM memory slots support 3 memory options
  - Five storage slots:
    - One dedicated diskette drive slot,
    - Three 5.25-inch removable media or hard disk drives slots
    - One internal 3.5-inch hard disk drive slot
  - Integrated PCI-based Fast Narrow SCSI-2 controller with DMA and external SCSI-2 connector
  - 300-Watt power supply
  - Two serial ports, support full duplex asynchronous modem control
  - One bi-directional enhanced parallel port
  - PS/2 style keyboard port and mouse port
- 1.44 MB diskette drive in dedicated slot
- High-performance Ethernet adapter—uses one PCI slot (included in Packaged systems only)
- 3-button mouse
- Hardware documentation (Americas and AP orders only)
- Hardware Warranty: Three-year on-site\*
- Software Warranty:
  - 90-day SPD conformance with advisory telephone support for DIGITAL UNIX and OpenVMS
  - Warranty on Microsoft's Windows NT Server 4.0 is conformance to the written material accompanying the software for a period of ninety days
- Windows NT Server 4.0 plus 10-client access license, media (CD-ROM) kit **or**
- DIGITAL UNIX unlimited user license and Server Extension License, **or**
- OpenVMS base license with System Manager license Enterprise Integrated Package (EIP)

\* Service upgrades are available; see Step 11, Hardware and Software Supplemental Services.

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### Packaged Systems

- Packaged systems ordered in the Americas and Asia Pacific (AP) include 120 V power cord packaged with keyboard, and English hardware documentation.
- Select country-specific power cord, keyboard and hardware documentation for all Packaged systems ordered in Europe.
- All Packaged systems include high-performance PCI-based Ethernet adapter—uses one PCI slot
- Windows NT Packaged systems include entry level graphics (PB2GA) 1280 x 1024 x 256 colors, 72 Hz—uses one PCI slot

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Order Number	Operating System	Memory	Graphics	Monitor	1.05 GB Hard Drive	600 MB CD-ROM	Ethernet
PB523-AC/AD	DIGITAL UNIX	32 MB	Recommended	Recommended	Included	Included	Included
PB524-AC/AD	OpenVMS	32 MB	Recommended	Recommended	Included	Included	Included
PB525-AA/AB	Windows NT	32 MB	Included	Required	Included	Included	Included

**Note:** xA = 120V and xB = 240V

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## Step 1—Systems (continued)

### Base Systems

#### .. DIGITAL UNIX and OpenVMS Base systems require:

- Minimum of 32 MB memory
- One hard disk drive
- Country-specific power cord
- Graphics option, monitor, and keyboard for DIGITAL UNIX and OpenVMS base systems are available as options if required

#### .. Windows NT base systems require:

- Minimum of 32 MB memory
- One hard 1.05 GB or 2.1 GB disk drive
- One CD-ROM Drive
- Graphics Option
- Monitor and keyboard
- Country-specific power cord

**Note:** Mandatory items **must** be on purchase order at initial order acceptance.

Order Number	Operating System	Memory	Graphics	Monitor	Hard Drive <sup>1</sup>	600 MB CD-ROM	Ethernet
PB51C-AB	DIGITAL UNIX	Mandatory	Recommended	Recommended	Mandatory	Recommended	Recommended
PB51C-BB	OpenVMS	Mandatory	Recommended	Recommended	Mandatory	Recommended	Optional
PB51C-CA	Windows NT	Mandatory	Required	Required	Mandatory	Mandatory	Optional

1. Base systems ordered with one hard disk include factory installed software (FIS). **Note:** 4.3 GB hard disk (PBXRZ-NA) is not supported as a system disk on Windows NT servers

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## Step 2—Memory

- .. Six SIMM slots support 3 memory options for maximum of 384 MB. Memory pairs can be mixed.
- .. Packaged systems include 32 MB memory, one MSP01-AC. Base systems require minimum of 32 MB
- .. System maximum of 384 MB can be obtained by selecting a Base system and 3 MSP01-AE 128 MB memory options.

MSP01-AA	8 MB (2 x 4 MB 70ns SIMMs)
MSP01-AB	16 MB (2 x 8 MB 70ns SIMMs)
MSP01-AC	32 MB (2 x 16 MB 70ns SIMMs)
MSP01-AD	64 MB (2 x 32 MB 70ns SIMMs)
MSP01-AE	128 MB (2 x 64 MB 70ns SIMMs)
DJ-ML200-AA	PCI-based 2-MB PrestoServe I/O performance enhancement option for DIGITAL UNIX systems only, maximum 1 per system

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## Step 3—Monitors

- .. Windows NT Packaged systems include video adapter that support 1024 x 768 and 1280 x 1024 resolution, 72 Hz monitors. Systems require a graphics monitor to run all functions.

SN-VRCX5-WA/W3/W4	15" (13.9" viewable image size) Corporate Series auto-scan color monitor, flat square invar CRT, 0.28 mm dot pitch, VGA to 1024 x 768 @ 85 Hz, TCO 92, MPRII, Energy Star, attached video cable. -WA = Northern Hemisphere with 120 V power cord, -W3 = Northern Hemisphere without power cord. Select country specific power cords for -W3 Northern Hemisphere, and -W4 Southern Hemisphere variants.
SN-VRTX7-WA/W3 SN-VRT17-W4	17" (16.0" viewable image size) Professional Series auto-scan color monitor, Trinitron CRT, 0.25 mm aperture grill pitch, VGA to 1280 x 1024 @ 75Hz, TCO 92, MPRII, Energy Star, HD15 male to male video cable. -WA = Northern Hemisphere with 120 V power cord, -W3 = Northern Hemisphere without power cord, SN-VRT17-W4 = Southern Hemisphere. Select country specific power cord for W3 and W4 variant.
SN-VRCX1-WA/W3/W4	21" (19.7" viewable image size) professional series auto-scan color monitor, Diamondtron CRT, 0.28 mm aperture grill pitch, VGA to 1600 x 1200 @ 75 Hz, TCO 92, MPRII, Energy Star, HD15 male to male video cable. -WA = Northern Hemisphere with 120 V power cord. -W3 = Northern Hemisphere without power cord. W4 = Southern Hemisphere without power cord. Select country specific power cord for W3 and W4 variants.

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## Step 4—Storage

- .. Integrated Fast Narrow SCSI-2 controller supports maximum of seven narrow devices, four of which may be internal.
  - .. Maximum Integrated SCSI bus length cannot exceed 3.0 meters.
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### Step 4a—Internal Storage

- .. System enclosure supports five narrow SCSI storage devices: One dedicated diskette drive slot, three front accessible 5.25-inch slots for removable media (tapes or CD-ROM) or hard drives, and one internal 3.5-inch hard drive slot. See system diagram.
- .. Packaged systems include: one 1.44 MB diskette drive, one 1.05 GB narrow SCSI hard drive, and one CD-ROM.
- .. Base systems include one 1.44 MB diskette drive.
- .. A hard disk drive is mandatory for base systems. **Note:** 4.3 GB hard disk (PBXRZ-NA) is not supported as a system disk on Windows NT servers
- .. CD-ROM drive is mandatory for Windows NT Base systems; software distribution is only available on CD-ROM.

### Removable Media Devices

<b>PBXRZ-DA</b>	600 MB 5.25-inch half-height 12X CD-ROM drive (RRD46)
<b>PBXTZ-AA</b>	2.0 MB 5.25-inch half-height QIC tape drive (TZK11)
<b>PBXTL-DA</b>	8.0 MB 5.25-inch half-height 4-mm DAT drive (TLZ09)

### Internally Supported Hard Drives

<b>PBXRZ-EB</b>	1.05 GB 8-bit narrow 5400 RPM 3.5 x 1" SCSI hard disk drive (RZ26N-E)
<b>PBXRZ-HB</b>	2.1 GB 8-bit narrow 5400 RPM 3.5 x 1" SCSI hard disk drive (RZ28M-E)
<b>PBXRZ-JB</b>	2.1 GB 8-bit narrow 7200 RPM 3.5 x 1" SCSI disk drive (RZ28D-E)
<b>PBXRZ-NA*</b>	4.3 GB 8-bit narrow 7200 RPM 3.5 x 1.6" SCSI hard disk drive (RZ29B-E)

\* Not supported as a system disk on Windows NT servers.

**Sote:** Wide drives installed in system enclosure require a wide SCSI controller and BC25V-1A cable.

<b>PBXRW-EB</b>	1.05 GB 16-bit wide 5400 RPM 3.5 x 1" half-height disk drive (RZ26N-W)
<b>PBXRW-HB</b>	2.1 GB 16-bit wide 5400 RPM 3.5 x 1" SCSI disk drive (RZ28M-W)
<b>PBXRW-JB</b>	2.1 GB 16-bit wide 7200 RPM 3.5 x 1" SCSI disk drive (RZ28D-W)
<b>PBXRW-NA</b>	4.3 GB 16-bit wide 7200 RPM 3.5 X 1.6" SCSI disk drive (RZ29B-W)

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### Step 4b—External Expansion

- .. Systems support three external devices on integrated PCI-based Fast Narrow SCSI-2 controller when four devices are installed in system enclosure.
- .. Seven external narrow SCSI devices are supported on integrated Fast Narrow SCSI-2 controller if storage devices are not installed in system enclosure.
- .. Select additional PCI-based wide or narrow SCSI-2 controllers if additional external storage is required.
- .. System supports maximum of three PCI-based SCSI-2 controllers (**Note:** Packaged systems have two PCI slots available due to installed PCI-based Ethernet controller.)
- .. PCI-based SCSI-2 controllers supports 7 additional external devices.

### Controllers

<b>KZPAA-AA</b>	PCI-based one-port high-performance Fast Narrow Single Ended (FNSE) SCSI-2 controller
<b>BN21H-xx</b>	Connects from KZPAA-AA to BA353 narrow storage enclosure
<b>KZPSA-BB</b>	PCI-based one-port high-performance Fast Wide Differential (FWD) SCSI controller. Supports external disks only.
<b>BN21K-01</b>	Connects from KZPSA to DWZZA-VA in narrow BA353, or DWZZB-VW in wide BA356/BA346 storage enclosure

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**Step 4b—External Expansion (continued)****Controllers**

<b>KZPSC-AA*</b>	One-port PCI backplane RAID Fast Wide Single Ended (FWSE) controller; includes StorageWorks RAID Array 230 Subsystem family software and documentation kit. Supports external disks only.
<b>BN31S-1E</b>	Connects from KZPSC-AA to BA346/BA356 wide storage enclosure
<b>BN31L-1E</b>	Connects from KZPSC-AA to BA353 narrow storage enclosure
<b>KZPSC-BA*</b>	Three-port PCI backplane RAID (FWSE) controller; includes StorageWorks RAID Array 230 Subsystem family software and documentation kit. Supports external disks only.
<b>BN31K-0E</b>	SCSI cable/bulkhead assembly kit for KZPSC-BA; required for connection to third port; uses one PCI bulkhead slot
<b>BN31S-1E</b>	Connects from KZPSC-BA to BA346/BA356 wide storage enclosures
<b>BN31L-1E</b>	Connects from KZPSC-BA to BA353 narrow storage enclosure
<b>KFPSC-AA</b>	PCI-based single-DSSI controller (OpenVMS systems only). See Step 4d DSSI cables.

\* See Storage Devices for additional information on StorageWorks RAID Array 230 systems.

**External Tabletop Tape Expansion**

.. Tabletop expansion units include North American power cord; order country-specific power cord for 240 V use.

**TLZ09-DB\*** 8.0 GB 5.25-inch half-height 4 mm DAT tape drive, includes SCSI cable

\* Supported on DIGITAL UNIX, OpenVMS, and Windows NT 4.0. Systems running Windows NT 3.51 require upgrade kit, part number QC-00LAC-UC, which includes driver and installation instructions. Driver and instructions are also available at Web Site <http://www.storage.digital.com> under "Technomania" section.

**External Disk Expansion**

.. BA353 expansion units are supported on wide and narrow SCSI controllers. Devices operate in narrow mode when BA353 is connected to a Fast Wide SCSI controller.

.. BA356 and BA346 expansion units are supported on Fast Wide SCSI controllers.

**StorageWorks Modular Storage Options**

<b>BA353-AA</b>	StorageWorks 8-bit <b>Narrow</b> Desktop expansion unit, supports up to three 3.5" narrow hard disk drives, includes 120 V power cord. Not supported with RAID controllers.
<b>BA356-KC</b>	StorageWorks 16-bit <b>Wide</b> Pedestal expansion unit includes BA356 basic shelf, BA35X-HF 150-W universal ac power supply, pedestal mounting kit, and 120 V power cord. Supports up to seven 3.5" wide or narrow drives; narrow drives operate in narrow mode.
<b>BA346-KB</b>	StorageWorks 16-bit <b>Wide</b> Pedestal expansion unit includes BA356 basic shelf, BA35X-HA universal ac power supply, pedestal mounting kit, and 120 V power cord. Supports up to nine devices, two 5.25" narrow and seven 3.5" wide or narrow drives; narrow drives operate in narrow mode.
<b>DWZZA-VA</b>	Bi-directional SCSI signal converter and bus extender kit. 16 bit Fast Wide Differential SCSI-2 on one end and 8 bit Fast Narrow Single-Ended SCSI-2 on other end.
<b>DWZZB-VW</b>	Bi-directional SCSI signal converter and bus extender kit. 16 bit Fast Wide Differential SCSI-2 on one end and 8 or 16 bit Fast Wide or Fast Narrow Single-Ended SCSI-2 on other end.

**Externally supported SCSI devices**

<b>RZ26N-VA</b>	1.05 GB 8-bit narrow 5400 RPM 3.5 x 1" SCSI hard disk drive
<b>RZ28M-VA</b>	2.1 GB 8-bit narrow 5400 RPM 3.5 x 1" SCSI hard disk drive
<b>RZ28D-VA</b>	2.1 GB 8-bit narrow 7200 RPM 3.5 x 1" SCSI disk drive
<b>RZ29B-VA</b>	4.3 GB 8-bit narrow 7200 RPM 3.5 x 1.6" SCSI hard disk drive

**Step 4b—External Expansion** (*continued*)**Externally supported SCSI devices**

<b>DS-RZ26N-VZ</b>	1.05 GB 16-bit wide 5400 RPM 3.5 x 1" half-height disk drive
<b>DS-RZ28M-VZ</b>	2.1 GB 16-bit wide 5400 RPM 3.5 x 1" SCSI disk drive
<b>RZ28D-VW</b>	2.1 GB 16-bit wide 7200 RPM 3.5 x 1" SCSI disk drive
<b>RZ29B-VW</b>	4.3 GB 16-bit wide 7200 RPM 3.5 X 1.6" SCSI disk drive

**Step 5—Graphics Adapters and Multimedia Options**

Windows NT systems include entry-level (PB2GA) graphics adapter.

<b>PB2GA-JC</b>	PCI based 1MB DRAM graphics adapter 1024 x 768
<b>PB2GA-JD</b>	PCI based 2MB DRAM graphics adapter 1024 x 768
<b>PBXGB-AA</b>	PCI based 8-plane 1280 x 1024 graphics adapter
<b>PBXGB-CA</b>	PCI based 24-plane 1280 x 1024 graphics adapter

**Multimedia Options**

<b>AVA01-AA</b>	Window sound system; compatible sound card, headset and microphone	DIGITAL UNIX OpenVMS Windows NT	One PCI/1, 2, 3a
<b>AVH01-AA</b>	Headset and microphone for AVA01 sound card	DIGITAL UNIX OpenVMS Windows NT	One PCI/1, 2, 3a
<b>AV301-AA</b>	FullVideo Supreme for all systems	DIGITAL UNIX OpenVMS Windows NT	
<b>AV321-AA</b>	FullVideo Supreme JPEG for all systems	DIGITAL UNIX OpenVMS Windows NT	
<b>AVC00-AA</b>	Toshiba camera, North America	DIGITAL UNIX OpenVMS Windows NT	

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**Step 7—Communications and Miscellaneous Adapters**

.. Packaged systems include high-performance Ethernet—Thick wire, Twisted Pair, ThinWire)

<b>Order Number</b>	<b>Description</b>	<b>Supported Operating Systems</b>	<b>Bus Slots Required / Recommended Slot</b>
<b>DE205-AC</b>	ISA-based EtherWORKS 3 Network Interface Card	DIGITAL UNIX OpenVMS Windows NT	One ISA/3a, 4, 5, 6
<b>DE435-AA</b>	PCI based High-performance Ethernet. Select AUI (Thick wire), 10BaseT (Twisted Pair) or ThinWire networking cable BNE4G-02 for AUI BN26K-xx for 10BaseT (twisted pair) BC16M-xx for ThinWire	DIGITAL UNIX OpenVMS Windows NT	One PCI/1, 2, 3a
<b>DE500-XA</b>	PCI-based Fast Ethernet network interface card	DIGITAL UNIX OpenVMS Windows NT	One PCI/1, 2, 3a
<b>DEFPA-AB<sup>1</sup></b>	PCI-based DEC FDDI controller, Single Attachment	DIGITAL UNIX OpenVMS Windows NT	One PCI/1, 2, 3a
<b>DEFPA-DB<sup>1</sup></b>	PCI-based DEC FDDI controller, Dual Attachment	DIGITAL UNIX OpenVMS Windows NT	One PCI/1, 2, 3a
<b>DEFPA-UB<sup>1</sup></b>	PCI-based DEC FDDI (UTP) controller	DIGITAL UNIX OpenVMS Windows NT	One PCI/1, 2, 3a
<b>DGLPB-AB</b>	PCI-based ATMworks 350 adapter	DIGITAL UNIX V3.2D-1 Windows NT 3.51/4.0	One PCI/1, 2, 3a
<b>PBXNP-AA<sup>1</sup></b>	PCI-based Token Ring adapter, no boot support.	DIGITAL UNIX OpenVMS	One PCI/1, 2, 3a
<b>CXI01-AA</b>	ISA Asynchronous MUX Adapter, 16 lines. Expandable to 64 lines.	DIGITAL UNIX Windows NT	One ISA/3b, 4, 5, 6
<b>CXI01-AD</b>	ISA Asynchronous MUX Adapter, 16 lines. Expandable to 224 lines.	DIGITAL UNIX Windows NT	One ISA/3b, 4, 5, 6
<b>PBXDI-AA</b>	ISA-based Two Port Synchronous Communications controller with interface support for EIA-232/V.24/V.28,	Windows NT	One ISA/3b, 4, 5, 6
<b>PBXDI-AB</b>	ISA-based Two Port Synchronous Communications controller with interface support for V.35	Windows NT	One ISA/3b, 4, 5, 6
<b>PBXDI-AC</b>	ISA-based Two Port Synchronous Communications controller with interface support for X.21 and EIA-530	Windows NT	One ISA/3b, 4, 5, 6
<b>DI1AA-AA</b>	ISA-based ISDN terminal adapter (U.S.)	Windows NT	One ISA/3b, 4, 5, 6
<b>DI1AA-AB</b>	ISA-based ISDN terminal adapter (non-U.S.)	Windows NT	One ISA/3b, 4, 5, 6
<b>PBXDF-AA</b>	Modem 14.4K	Windows NT	One ISA/3b, 4, 5, 6

<sup>1</sup> DIGITAL UNIX and OpenVMS systems require driver floppy.

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**Step 8—Printers**

The AlphaServer 400 includes two serial ports and one bi-directional parallel port on rear of system enclosure. Either port may be used as a printer port depending on printer type.

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## Step 9—Software

### Windows NT Servers

Windows NT Packaged and Base systems include Windows NT Server 4.0 plus 10-client access license, media (CD-ROM) kit.

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### DIGITAL UNIX Concurrent Use Licenses

#### Software Processor Code = E

Select user licenses and additional software as required. Media and documentation is recommended for first system on site. DIGITAL UNIX Concurrent Use licenses are not specific to a single system and can be moved from one system to another at user discretion.

<b>QL-MT7AM-3B</b>	DIGITAL UNIX Concurrent Use 1-user license
<b>QL-MT7AM-3C</b>	DIGITAL UNIX Concurrent Use 2-user license
<b>QL-MT7AM-3D</b>	DIGITAL UNIX Concurrent Use 4-user license
<b>QL-MT7AM-3E</b>	DIGITAL UNIX Concurrent Use 8-user license
<b>QL-MT7AM-3F</b>	DIGITAL UNIX Concurrent Use 16-user license
<b>QL-MT7AE-AA</b>	DIGITAL UNIX Traditional unlimited user license
<b>QL-MT6AE-AA</b>	DIGITAL UNIX server extension license
<b>QL-MT5AE-AA</b>	DIGITAL UNIX C developer's extension license

#### DIGITAL UNIX Media and Documentation

<b>QA-MT4AA-H8</b>	DIGITAL UNIX media and documentation (end user, developer, server) on CD-ROM
<b>QA-MT4AA-GZ</b>	DIGITAL UNIX full hardcopy documentation
<b>QA-MT4AB-GZ</b>	DIGITAL UNIX end user documentation
<b>QA-MT5AA-GZ</b>	DIGITAL UNIX developer's documentation
<b>QA-MT6AA-GZ</b>	DIGITAL UNIX server extension documentation

#### DIGITAL UNIX Layered Products (CD-ROM)

DIGITAL UNIX systems include Multimedia Services License, order media and documentation separately. Media and documentation for Multimedia Services is included in DIGITAL UNIX Layered Products CD-ROM.

<b>QA-054AA-H8</b>	Layered products media and documentation for DIGITAL UNIX on CD-ROM
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#### Internet for AlphaServers

<b>QB-4GQAA-KA</b>	Internet AlphaServer Software (USA and Canada Only)
<b>QB-4GQAA-KB</b>	Internet AlphaServer Software (International)

#### DIGITAL UNIX Logical Storage Manger

<b>QL-2GVAE-AA</b>	DIGITAL UNIX Logical Storage Manager License
<b>QT-2GVAE-AA</b>	DIGITAL UNIX Logical Storage Manger Product Support Services

#### POLYCENTER NetWorker Save and Restore Licenses

<b>QL-2ALAE-AA</b>	POLYCENTER NetWorker Save and Restore Server License
<b>QL-3P2AE-AA</b>	POLYCENTER NetWorker Save and Restore Archive Server Add-on License. <b>Note:</b> NetWorker Server License is a requirement for Archive License.

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**Step 9—Software (continued)****DECsafe Available Server for DIGITAL UNIX**

QL-05SAE-AA	DECsafe ASE U/A Traditional license
QB-05SAE-AA	DECsafe ASE U/A Traditional license and configuration guide

**Server Extension License**

QL-MT6AE-AA	DIGITAL UNIX server extension license
QL-MT5AE-AA	DIGITAL UNIX C developer's extension license

**DIGITAL NAS Base Server 200 for DIGITAL UNIX**

QL-36MAE-RA	DIGITAL NAS Base Server 200 for DIGITAL UNIX Update license
QT-36MAE-L9	DIGITAL NAS Base Server 200 for DIGITAL UNIX Layered Product Support Service

**DECnet for DIGITAL UNIX**

QL-MTJAE-AA	DECnet/OSI end-system license for DIGITAL UNIX
QL-MTKAE-AA	DECnet/OSI extended function license for DIGITAL UNIX

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**OpenVMS Concurrent Use Licenses**

OpenVMS Concurrent Use license provide the right to interactively use the operating system by the specified number of concurrent users on a designated OpenVMS system. OpenVMS Concurrent Use licenses can be moved from one system to another at user discretion and can be shared in a mixed OpenVMS VAX and OpenVMS Alpha cluster.

QL-MT3AA-3B	OpenVMS Concurrent Use 1-user license
QL-MT3AA-3C	OpenVMS Concurrent Use 2-user license
QL-MT3AA-3D	OpenVMS Concurrent Use 4-user license
QL-MT3AA-3E	OpenVMS Concurrent Use 8-user license
QL-MT3AA-3F	OpenVMS Concurrent Use 16-user license
QL-MT3AA-3G	OpenVMS Concurrent Use 32-user license
QL-MT3AA-3H	OpenVMS Concurrent Use 64-user license
QL-MT3AA-3J	OpenVMS Concurrent Use 128-user license
QL-MT3AA-3K	OpenVMS Concurrent Use 256-user license
QL-MT2AE-AA	OpenVMS Traditional unlimited user license

**OpenVMS Media and Documentation—required for first system on site**

QA-MT1AA-H8	OpenVMS V6.2 media and documentation on CD-ROM
QA-MT1AP-H8	OpenVMS V6.1-1H2 media and documentation on CD-ROM
QA-MT1AH-GZ	OpenVMS hardcopy documentation

**OpenVMS Layered Products (CD-ROM)**

QA-03XAA-H8	Layered products media and documentation for OpenVMS on CD-ROM
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**DIGITAL NAS Base Server 200 for OpenVMS**

QL-23EAE-RA	DIGITAL NAS Base Server 200 for OpenVMS upgrade license
QT-23EAE-L9	DIGITAL NAS Base Server 200 for OpenVMS Layered Product Support Service

**DECnet for OpenVMS**

QL-MTGAE-AA	DECnet extended function license for OpenVMS
QL-MTHAE-AA	DECnet end-system to extended function upgrade license for OpenVMS

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**Step 9—Software (*continued*)**
**Support Services Software for Microsoft Windows NT**

ZLXp-Ex graphics options for Windows NT servers include the following license, media and documentation.

<b>QM-356AA-AA</b>	License for ZLXp-Ex Support Services Software for Microsoft Windows NT
<b>QB-356AA-SA</b>	ZLXp-Ex Support Services Software for Microsoft Windows NT—license, media (diskette) and documentation
<b>QA-356AA-GZ</b>	ZLXp-Ex Support Services Software for Microsoft Windows NT (documentation only)

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**Step 10—Power Cords, Keyboards, and Documentation**

- .. Packaged systems ordered in the Americas and Asia Pacific (AP) include 120 V U.S. power cord packaged with keyboard, and English hardware documentation. Select country-specific power cord, keyboard and documentation for all Packaged systems ordered in Europe.
- .. Base systems **require** country-specific power cord
- .. Windows NT Base systems **require** a keyboard. Selection of keyboard is optional for DIGITAL UNIX and OpenVMS Base systems.
- .. Packaged and Base systems include mouse.
- .. LK471-xx are 101/102 key PC style keyboards. LK461-xx are 108 key VT style keyboards.

Power Cord	PC style keyboards	VT style keyboards	Country
<b>BN19P-1K</b>	<b>LK471-A2</b>	<b>LK461-A2</b>	North America, Japan (English)
<b>BN19C-2E</b>	<b>LK471-AB</b>	<b>LK461-AB</b>	Belgium (French)
<b>BN19K-2E</b>	<b>LK471-AD</b>	<b>LK461-AD</b>	Denmark
<b>BN19C-2E</b>	<b>LK471-AP</b>	<b>LK461-AP</b>	France
<b>BN19C-2E</b>	<b>LK471-AF</b>	<b>LK461-AM</b>	Sweden (Finnish)
<b>BN19C-2E</b>	<b>LK471-AG</b>	<b>LK461-AG</b>	Germany
<b>BN19Z-2E</b>	<b>LK471-AI</b>	<b>LK461-AI</b>	Italy
<b>BN19C-2E</b>	<b>LK471-AN</b>	<b>LK461-AN</b>	Norway
<b>BN19C-2E</b>	<b>LK471-AV</b>	<b>LK461-AV</b>	Portugal
<b>BN19C-2E</b>	<b>LK471-AS</b>	<b>LK461-AS</b>	Spain
<b>BN19E-2E</b>	<b>LK471-AK</b>	<b>LK461-AK</b>	Switzerland (French)
<b>BN19A-2E</b>	<b>LK471-AE</b>	<b>LK461-AA</b>	UK, Ireland
<b>BN18L-2E</b>	<b>LK471-AT</b>	<b>LK461-AT</b>	Israel (Hebrew)
<b>BN19S-2E</b>	<b>LK471-AA</b>	<b>LK461-AA</b>	Africa, India (English)
<b>BN19H-2E</b>	<b>LK471-AA</b>	<b>LK461-AA</b>	Australia, New Zealand (English)

**Mouse—included in all Packaged and Base systems**

**PCXWS-AA** PS/2 compatible 3-button Mouse

**User Documentation—select for 240 V systems****User Documentation**

<b>EK-PCSVA-UI</b>	User Documentation—English
<b>EK-PCSVJ-UI</b>	User Documentation—Japanese

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## Step 11—Hardware and Software Supplemental Support Services

### Hardware—Americas and Asia Pacific only

- .. Systems include three-year, on-site, 24 hr. response hardware warranty.
- .. Select optional Hardware Supplemental Support Services if required.

<b>FM-CH4HR-36</b>	Years 1-3, 5 x 9, 4 hour response
<b>FM-CH4HR-48</b>	Years 1-4, 5 x 9, 4 hour response
<b>FM-CH4HR-60</b>	Years 1-5, 5 x 9, 4 hour response
<b>FM-CH512-36</b>	Years 1-3, 5 x 12, 4 hour response
<b>FM-CH512-48</b>	Years 1-4, 5 x 12, 4 hour response
<b>FM-CH512-60</b>	Years 1-5, 5 x 12, 4 hour response
<b>FM-CH616-36</b>	Years 1-3, 6 x 16, 4 hour response
<b>FM-CH616-48</b>	Years 1-4, 6 x 16, 4 hour response
<b>FM-CH616-60</b>	Years 1-5, 6 x 16, 4 hour response
<b>FM-CH724-36</b>	Years 1-3, 7 x 24, 4 hour response
<b>FM-CH724-48</b>	Years 1-4, 7 x 24, 4 hour response
<b>FM-CH724-60</b>	Years 1-5, 7 x 24, 4 hour response
<b>FM-CHXHW-48</b>	Year 4, 5 x 9, next day response, on-site
<b>FM-CHXHW-60</b>	Years 4&5, 5 x 9 next day response, on-site

### Software—Americas and Asia Pacific only

- .. Software Warranty:
  - 90-day SPD conformance with advisory telephone support for DIGITAL UNIX and OpenVMS
  - Warranty on Microsoft's Windows NT Server 4.0 is conformance to the written material accompanying the software for a period of ninety days
- .. Software service upgrades for DIGITAL UNIX and OpenVMS include advisory and remedial software support with new version license rights for operating system and DIGITAL NAS 200 for the time period indicated.
- .. Software Supplemental Support Service options upgrade 90-day service to time period indicated below.

<b>FM-MKOSF-12</b>	1 year Software Supplemental Support Services for DIGITAL UNIX systems
<b>FM-MKOSF-36</b>	3 year Software Supplemental Support Services for DIGITAL UNIX systems
<b>FM-MKOSF-60</b>	5 year Software Supplemental Support Services for DIGITAL UNIX systems
<b>FM-MKVMS-12</b>	1 year Software Supplemental Support Services for OpenVMS systems
<b>FM-MKVMS-36</b>	3 year Software Supplemental Support Services for OpenVMS systems
<b>FM-MKVMS-60</b>	5 year Software Supplemental Support Services for OpenVMS systems
<b>FM-WNTN3-12</b>	1 year Software Supplemental Support Services for Windows NT systems
<b>FM-WNTN3-36</b>	3 year Software Supplemental Support Services for Windows NT systems
<b>FM-WNTN3-60</b>	5 year Software Supplemental Support Services for Windows NT systems

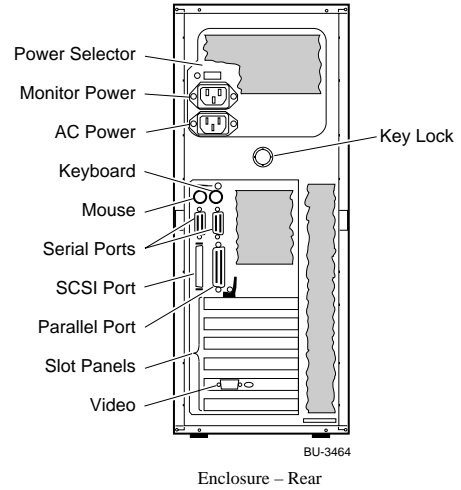
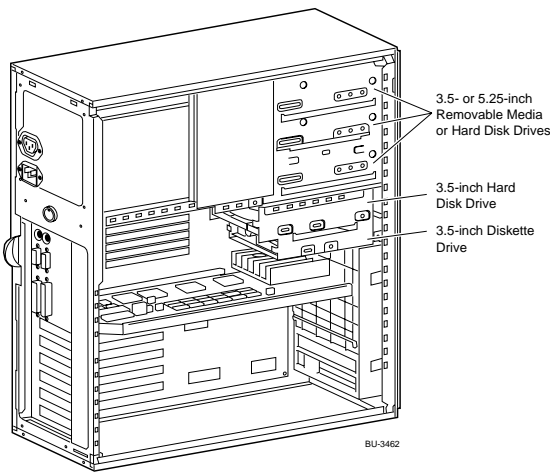
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### Step 11a—Hardware and Software Supplemental Support Services (Europe only)

Europe does **not** have specific part numbers for Hardware and Software Supplemental Support Services. Prices can be quoted using the Excelerator tool; contact MCS Sales in your country for information on Hardware and Software Supplemental Support Services.

# AlphaServer 400

## AlphaServer 400 System Diagram



## Specifications Specifications

PCI	132 MB/second
ISA	16 MB/second
Fast SCSI-2 bus	10 MB/s transfer rate
Ethernet	DE435-xx 10-Mbit/s Twisted Pair/Thin Wire and AUI thick wire

### Power Requirements

Line voltage	120/240 V
Voltage tolerance	88-132/176-264 V
Frequency single phase	50/60 Hz
Frequency tolerance	47-63 Hz
Maximum running current	8.0A/4.0A
Maximum power consumption	300 W

### Operating Environment

Operating temperature	10° to 40° C (50° to 104° F)
Operating humidity	20% to 80% relative humidity
Maximum wet bulb	40° C (104° F)
Storage temperature	-20° C to 65° C (-4° F to 149° F)
Storage Humidity	10% to 90% relative humidity
Maximum wet bulb	65° C (149° F)
Maximum altitude	
Operating	2,438 m (8,000 ft) maximum
Nonoperating	4,876 m (16,000 ft) maximum

Nonoperating shock	30G, 25 ms halfsine
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### Physical Characteristics

Height	43 cm (17 inches)
Width	18 cm (7 inches)
Depth	43 cm (17 inches)
Weight	12+ kg (28+ lb)

## Prestige Model 800 “On-line” UPS

For complete protection, UPS products should be used with data line surge protectors.

<b>4N-AEABD-AF</b>	For 120 Vac, 50 or 60 Hz systems Includes detachable 6-foot input power cord with 5-15P plug and four NEMA 5-15R output receptacles.
<b>4N-AEABD-BF</b>	For 240 Vac, 50 or 60 Hz systems Selectable 220, 230 or 240V ac output. Uses system power cord for detachable IEC 320 input connection at UPS. Unit has 3 IEC 320 receptacles and includes two output jumpers with IEC 320 connectors to connect to system.
<b>4N-GA249-AB</b>	Surge Protectors for 2 wire modem
<b>4N-GA249-CA</b>	Surge Protectors for 10BaseT
<b>4N-GA510-BF</b>	Surge Protectors for ThinWire
<b>4N-AEAEO-PA/PB</b>	Optional hot-swap power pass with built in surge protected outlets including one extra off-line for laser printer. -PA for 120 V, -PB for 220 V models.
<b>4N-AEWAR-G1</b>	5 year vendor on-site exchange warranty upgrade (available in Intercontinental U.S. only at time of purchase).

## Monitoring and Unattended Shutdown Software for above UPS systems only

- .. Include cables, media and documentation.
- .. SNMP Network connectivity adapters (4N-AEAEO-DA/DC) Twisted Pair/ThinWire are available.

<b>4N-AEAES-AA/AB</b>	Windows NT for Alpha and Intel x86
<b>4N-AEAES-AK</b>	DIGITAL UNIX
<b>4N-AEAES-EM</b>	OpenVMS