DIGITAL Server 7100 Pedestal
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DIGITAL Systems and Options Catalog

Product Description

DIGITAL Server 7100 is a high performance, high availability, highly expandable pedestal enterprise server. It features up to four 200 MHz Intel Pentium Pro processors, up to 4 GB memory for reliability and performance, hot swap drive bays, and Adaptec 3940UW two-port Ultra Wide SCSI adapter for I/O performance. It is packaged in a wide pedestal enclosure which can be rackmounted.

DIGITAL Server 7100 pedestal system supports up to eleven storage devices including floppy diskette drive, CD-ROM, two additional 5.25-inch or 3.5-inch removable media devices, and seven hot-swap Storage Building Blocks (SBB). It comes standard with two 450-watt power supplies.

DIGITAL Server 7100 is targeted at the enterprise server market supporting up to 200-400 concurrent users in database applications, SAP/R3, large internet/intranet deployments, running Windows NT Server, Netware, SCO UNIX, or OS/2.

ServerWORKS, Digital's server and network management software, is included with the DIGITAL Server 7100, lowering total cost of ownership and making it easier to install, deploy and manage Prioris server networks. ServerWORKS helps system administrators save valuable time through remote alarming, management and diagnosis. Administrators can take preventive measures before a problem occurs, or conduct a remote diagnosis of the problem and dispatch assistance, equipped with the right components or upgrades on the first trip.

The DIGITAL Server 7100 can be clustered under Windows NT and is built for quality and reliability in a highly networked enterprise.

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Step 1—DIGITAL Server 7100 Pedestal System

DIGITAL Server 7100 pedestal systems are available in two configurations

- **Base System**
  - Includes one memory kit (128 MB)
  - Disk drives and Windows NT operating system are not included
  - Windows NT license and media kit is **not** available from DIGITAL for DIGITAL Server 7100 systems, order directly from Microsoft, or from an authorized Microsoft reseller.
- **Kernals—not available in North America**
  - Memory, disk drives, and Windows NT operating system are not included
  - Order memory and disk drives separately
  - Windows NT license and media kit is **not** available from DIGITAL for DIGITAL Server 7100 systems, order directly from Microsoft, or from an authorized Microsoft reseller.
- Options ordered will be factory installed unless specified as spares**.**

DIGITAL Server 7100 Pedestal Systems include

- Intel Pentium Pro processor
  - 200 MHz CPU with 512 KB ECC L2 cache
    Upgradeable to four SMP processors
- Pedestal enclosure with:
  - 12 expansion slots
    Seven PCI slots, four EISA, and one PCI/EISA combination slot
  - Dual peer PCI buses, with PCI-EISA bridge chip
  - Eleven storage bays
    One diskette drive (included)
    One CD-ROM drive (included)
    Two additional 5.25-inch or 3.5-inch removable media drive bays
    Seven hot-swap Storage Building Block (SBB) drive bays
  - Two DIMM memory expansion modules support four DIMM memory options
  - S3 Trio64 SVGA with 1 MB DRAM integrated on motherboard
  - Two 450 Watt auto-sensing (120/240V, 60/50Hz) power supplies supporting automatic failover
  - Two serial ports
  - One bi-directional enhanced parallel port
  - PS/2 style keyboard port and mouse port
  - One video port
  - AC Power input
  - Six hot-swap cooling fans
  - Ten SCSI port knockouts on rear panel
- 1.44 MB diskette drive in dedicated slot
- 600 MB CD-ROM
- Adaptec 3940UW two-port Ultra Wide SCSI adapter—uses one PCI slot
- Integrated Advanced Server Management features, including ServerWorks Manager kit
- Hardware Warranty: Three-year on-site

DIGITAL Server 7100 Base Systems

Order Number	O/S Media	CPU Speed	Country kit	Memory	Disk	2-port Ultra Wide SCSI adapter	Graphics	Monitor
FR-932WW-CA	Optional	200 MHz	Optional	128 MB	Optional	Included	Included	Optional

DIGITAL Server 7100 Kernel

Order Number	O/S Media	CPU Speed	Country kit	Memory	Disk	2-port Ultra Wide SCSI adapter	Graphics	Monitor
FR-932WW-CX	Optional	200 MHz	Optional	Optional	Optional	Included	Included	Optional

Step 2—Additional CPU Modules (SMP Upgrades)

- DIGITAL Server 7100 systems support up to three additional CPUs for a maximum of four processors.
- Additional CPUs must be of the same type as initial processor, i.e. Pentium Pro 200 MHz with 512 KB cache.
- Two CPU modules are supported, each module supports two processors (maximum of four processors on the two CPU module cards).

FR-PC93U-AD 200 MHz Pentium Pro CPU chip upgrade with 512 KB cache

FR-PC93U-AB CPU upgrade module with two 200 MHz Pentium Pro CPUs, each with 512 KB cache

Step 3—Memory

DIGITAL Server 7100 Kernals do **not** included memory, order separately (optional).

- DIGITAL Server 7100 Base Systems include 128 MB memory (4 x 32 MB DIMMs).
- Systems includes two installed memory expansion boards.
- System supports up to four memory option kits.
- Four-way interleaved memory system, with 128 MB (4 x 32 MB) minimum, and up to maximum of 4 GB with (16 x 256 MB).
- Different capacity DIMMs are supported. Memory kits must be installed in banks (4 DIMMs per bank), each bank must contain same capacity, type and speed, e.g. 4 x 32 MB DIMMs.
- Supported DIMMs supplied by DIGITAL are 168-pin, 72-bit EDO/ECC DIMMs operating at 60 ns.

FR-PCSMA-AG	128 MB (4 x 32 MB DIMMs) EDO memory kit
FR-PCSMA-AH	256 MB (4 x 64 MB DIMMs) EDO memory kit
FR-PCSMA-AJ	512 MB (4 x 128 MB DIMMs) EDO memory kit
FR-PCSMA-AK	1 GB (4 x 256 MB DIMMs) EDO memory kit

Step 4—Storage

- Systems include Adaptec 3940UW two-port Ultra Wide SCSI adapter
- Pedestal enclosure supports eleven storage devices
  - One dedicated diskette drive bay
  - One CD-ROM drive bay
  - Two additional 5.25” or 3.5” removable media drive bays
  - Seven hot-swap Storage Building Block (SBB) drive bays

Step 4a—Internal Storage

All systems include

- One SCSI CD-ROM drive
- One 1.44 MB diskette drive

Disk Drive Storage Building Blocks (SBBs)

FR-CDCBA-CA	2.1 GB UltraSCSI 7200 RPM hard disk drive
FR-CECBA-CA	4.3 GB UltraSCSI 7200 RPM hard disk drive
FR-CFCBA-CA	9.0 GB UltraSCSI 7200 RPM hard disk drive
FR-CGCBA-CA	18.0 GB UltraSCSI 7200 RPM hard disk drive

Removable Media—Internal Tape Drive and additional CD-ROM

FR-PCXCR-AR	600 MB 5.25 inch half-height 12X CD-ROM drive
FR-PCXAT-AJ	4/8 GB 5.25 inch half-height SCSI DDS3 DAT tape drive
FR-PCXAT-AK	12/24 GB 5.25 inch half-height SCSI DDS3 DAT tape drive
FR-PCXLT-AB	15/30 GB 5.25 inch half-height DLT tape drive
FR-PCXLT-AD	35/70 GB 5.25 inch half-height DLT tape drive

Step 4b—Storage Controllers

- Systems include Adaptec 3940UW two-port Ultra Wide SCSI adapter
- The following adapters and controllers can be configured in DIGITAL Server 7100 Systems.
- RAID support for 0, 1, 5, 0+1)

FR-PCTAZ-DE	One-port PCI Adaptec 2940 Ultra Wide SCSI adapter, maximum three per system
FR-PCTAZ-EC	Two-port PCI Adaptec 3940 Ultra Wide SCSI adapter, maximum four per system
FR-PCTAR-GA	One-port PCI UltraSCSI RAID controller, maximum three per system
FR-PCTAR-GB	Two-port PCI UltraSCSI RAID controller, maximum three per system
FR-PCTAR-GC	Three-port PCI UltraSCSI RAID controller, maximum three per system
FR-PCTAR-UB	PCI RAID cache battery backup

Cables

FR-BN37A-02	VHDCI male to VHDCI male, 2.0 meter
FR-BN37A-05	VHDCI male to VHDCI male, 5.0 meter
FR-BN21H-02	50-pin to 50-pin external SCSI cable, 2.0 meter
FR-BN21K-02	68-pin to 68-pin external SCSI cable, 2.0 meter
FR-BN38C-02	68HD to VHDCI external SCSI cable, 2.0 meter
FR-PCXAR-WF	Internal SCSI cable, 580mm, SCSI-3, 68-pin HDIDC to 68-pin HDIDC
FR-PCXAR-WG	Internal SCSI cable, 580mm, SCSI-3, 68-pin HDIDC to 68-pin panel mount
FR-PCXAR-WJ	SCSI terminator, 68-pin/68-pin single-ended active terminator
FR-BN31S-1E	1.5 meter SCSI cable, connects between PCI RAID controller and BA356 pedestal shelf

Step 4c—Windows NT Cluster Kits

Cluster Kits

- Cluster Kits includes all necessary hardware and cluster software required to create a 2-node Windows NT cluster environment.
- Systems, disk drives, and Windows NT server license are not included.

FR-CK356-UP	BA356U Cluster Kit—Pedestal version

Step 4d—External Storage

FR-BA356-PA	UltraSCSI expansion pedestal, supports 7 UltraSCSI SBB disk drives
FR-BA35X-HK	180 Watts universal AC input power supply; maximum two per FR-BA365-Px shelf
FR-SWXRA-Z1	RAID Array 310 subsystem

RAID Storage Building Blocks (SBBs) for BA356 shelf and BA310 subsystem

FR-RZ1BB-VW	2.1 GB UltraSCSI SSB, 7200 RPM
FR-RZ1CB-VW	4.3 GB UltraSCSI SSB, 7200 RPM
FR-RZ1DB-VW	9.0 GB UltraSCSI SSB, 7200 RPM

Step 5—Monitors

- Windows NT systems require a graphics monitor to run all functions.
- Monitor part numbers do not include power cord. Order power cord from Step 8
- Graphics monitors other than those listed below can be used if compatible with SVGA graphics included with system.

FR-PCXCV-DW	15” (13.9” viewable) Value monitor, Northern Hemisphere
FR-PCXCV-DX	15” (13.9” viewable) Value monitor, Equatorial

Step 5—Monitors *(continued)*

FR-PCXBV-FZ	17” (16.0” viewable) Corporate monitor, Northern Hemisphere
FR-PCXBV-FX	17” (16.0” viewable) Corporate monitor, Southern Hemisphere
FR-PCXBV-FY	17” (16.0” viewable) Corporate monitor, Equatorial
FR-PCXAV-CZ	19” (18.0” viewable) Professional monitor, Northern Hemisphere
FR-PCXAV-CY	19” (18.0” viewable) Professional monitor, Southern Hemisphere
FR-PCXAV-WZ	21” (19.6” viewable) Professional monitor, Northern Hemisphere
FR-PCXAV-WY	21” (19.6” viewable) Professional monitor, Southern Hemisphere

Step 6—Graphics Adapters

- Systems include S3 Trio64 SVGA with 1 MB DRAM embedded on the motherboard. Maximum of one graphics subsystem supported per system.
- Select graphics adapter **only** if a spare PCI graphics card is required.

FR-PCXAG-BD	PCI-based Matrox Millennium graphics adapter, 4 MB DRAM
FR-PCCAM-CC	4 MB DRAM upgrade for Matrox Millennium graphics adapter

Step 7—Networks and Communications

- Systems do not include an Ethernet controller, selection of a network interface is optional.
- Networking cable for Ethernet controller
  - BN25G-03/04/07 or BN24Q-xx for 10BaseT (Twisted Pair)

FR-DE500-BA	PCI-based Fast Ethernet network interface card, maximum four per system
FR-DE450-CA	PCI-based DIGITAL Etherworks 32-bit network interface card (Twisted Pair, Thickwire, ThinWire), maximum four per system
FR-PCXDN-BB	PCI-based SMC 10Mbps Ethernet network interface card
FR-PCXDN-BC	PCI-based SMC 9432TX Fast Ethernet network interface card
FR-PCXTN-AD	PCI-based Token Ring card
FR-DEFPA-AB	PCI-based DEC FDDI controller, single attachment (SAS), maximum four per system
FR-DEFPA-DB	PCI-based DEC FDDI controller, dual attachment (DAS), maximum four per system
FR-DEFPA-UB	PCI-based DEC FDDI controller (UTP), maximum four per system
FR-PCXFA-AA	PCI-based 56Kbps modem, maximum four per system

Step 8—Country Kits and Power Cords

- Selection of Country Kit is optional.
- Country kits include a 105-key, PC-style keyboard. two-button mouse and user documentation.

Country Kit

FR-PCA6K-AA	North America
FR-PCA6K-AB	Belgium
FR-PCA6K-AC	Canada (French)
FR-PCA6K-AE	United Kingdom
FR-PCA6K-AF	Finland
FR-PCA6K-AG	Germany
FR-PCA6K-AI	Italy
FR-PCA6K-AJ	Japan
FR-PCA6K-AK	Switzerland (French)

Step 8—Country Kits and Power Cords *(continued)*

Country Kit

FR-PCA6K-AM	Sweden
FR-PCA6K-AP	France
FR-PCA6K-AS	Spain
FR-PCA6K-AT	Israel
FR-PCA6K-AV	Portugal
FR-PCA6K-AZ	Australia
FR-PCA6K-BG	Hungary
FR-PCA6K-BH	Greece
FR-PCA6K-BI	Taiwan
FR-PCA6K-BK	S Korea
FR-PCA6K-BR	Arabia
FR-PCA6K-BT	Russia
FR-PCA6K-BU	Turkey
FR-PCA6K-CE	Philippines
FR-PCA6K-CG	Vietnam
FR-PCA6K-CP	Thailand
FR-PCA6K-CQ	Iceland
FR-PCA6K-CS	Latin America
FR-PCA6K-CV	Peoples Republic China
FR-PCA6K-CZ	Czech Republic
FR-PCA6K-EC	Europe
FR-PCA6K-TA	TAA/US Government

Power Cords

FR-PCTXH-JA	North America, Japan
FR-BN19A-2E	United Kingdom/Ireland
FR-BN19C-2E	Central Europe
FR-BN19K-2E	Denmark
FR-BN24T-2E	Switzerland

Step 9—Operating System Support

DIGITAL Server 7100 supports the following operating systems

- Microsoft Windows NT Server 4.0
- Microsoft Windows NT Server Enterprise Edition 4.0
- Novell IntranetWare (NetWare 4.11 included)
- SCO UNIXWare 2.1.2
- SCO OpenServer 5.0.4
- Banyan VINES 7.0
- IBM OS/2 Warp 4.0

Step 10—Remote Server Management System

System Package

System Package includes hardware kit and software kit (see below).

FR-PCDSM-AA	Remote Server Management Station System Package, includes Server Manager hardware kit, English user documentation, Server Management software kit, Americas
FR-PCDSM-AC	Remote Server Management Station System Package, includes Server Manager hardware kit, User documentation, Server Management software kit, Americas French/Spanish
FR-PCDSM-AE	Remote Server Management Station System Package, includes Server Manager hardware kit, English user documentation, Server Management software kit, United Kingdom/Ireland
FR-PCDSM-AG	Remote Server Management Station System Package, includes Server Manager hardware kit, User documentation, Server Management software kit, German/Dutch/Italian
FR-PCDSM-AK	Remote Server Management Station System Package, includes Server Manager hardware kit, User documentation, Server Management software kit, Swiss
FR-PCDSM-AP	Remote Server Management Station System Package, includes Server Manager hardware kit, User documentation, Server Management software kit, European French/Spanish
FR-PCDSM-AX	Remote Server Management Station System Package, includes Server Manager hardware kit, English user documentation, Server Management software kit, no power cord
FR-PCDSM-CM	Remote Server Management Station System Package, includes Server Manager hardware kit, User documentation, Server Management software kit, Kanji

Hardware Kit

Hardware kit includes EISA serial interface board configuration diskette, keyboard jumper cable, data cable, power supply, power cord, and breakout box/cable.

FR-PCDSC-AA	Remote Server Management Station Hardware Kit, Americas
FR-PCDSC-AC	Remote Server Management Station Hardware Kit, Americas French/Spanish
FR-PCDSC-AE	Remote Server Management Station Hardware Kit, United Kingdom/Ireland
FR-PCDSC-AG	Remote Server Management Station Hardware Kit, Central Europe power German/Dutch/Italian
FR-PCDSC-AK	Remote Server Management Station Hardware Kit, Swiss power French/German/Dutch/Italian
FR-PCDSC-AP	Remote Server Management Station Hardware Kit, Central Europe power, French/Spanish
FR-PCDSC-AX	Remote Server Management Station Hardware Kit, no power, English
FR-PCDSC-CM	Remote Server Management Station Hardware Kit, Kanji

Software Kit

QB-38EAA-SA	Remote Server Management Station Software Kit

Step 11—Uninterruptable Power Supplies

- DIGITAL Server 7100 pedestal system includes two 450-Watt Power Supplies
- Pedestal UPS may be added

4N-APACH-AF	APC Smart-UPS 2200 VA, 120V, 3U pedestal
4N-APACH-AG	APC Smart-UPS 3000 VA, 120V, 3U pedestal

DIGITAL Server 7100 Pedestal System Diagram

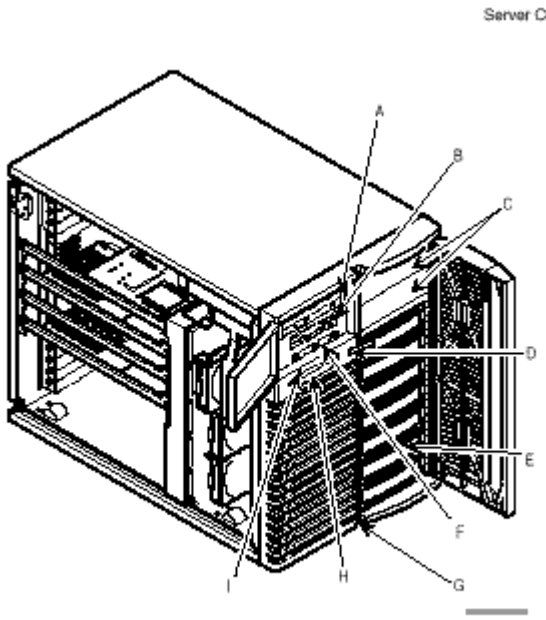

Figure 3-4. Server Front View

A. CD-ROM drive bay
B. 3.5-inch diskette drive bay
C. Front access 5.25-inch or 3.5-inch half-height removable media drive bays
D. 3-way security lock
E. Integrated hot-swap drive bay for Storage Building Blocks (SBBs)
F. Power, Operator Control Panel (OCP) and Reset buttons
G. Brake
H. Operator Control Panel (OCP)
I. Power indicator

DIGITAL Server 7100 Pedestal System Specifications

Dimensions		
Height	512 mm (20.16 in.)	
Width	372 mm (14.64 in.)	
Depth	592 mm (23.31 in.)	
Weight	27 kg (60 lb) typical	
Environmental		
Temperature	Operating*	10–35° C (50–95° F)
	Storage (60 days)	-20–65° C (-4–149° F)
	Rate of change	20° C/hr (36F/hr)
Relative humidity	Operating	20–80%
	Storage (60 days)	10–90%
	Rate of change	20%/hr
Maximum wet bulb temperature	Operating	35° C (95° F)
	Storage (60 days)	65° C (149°F)
Altitude	Operating	2438 m (8,000 ft)
	Nonoperating	4876 m (16,000 ft)
Mechanical shock	Nonoperating	30 G peak 25 ms
Electrical—Power Supplies are universal 120/240 Vac		
Nominal ac voltage	100-120 Vac	220-240 Vac
Operating Voltage range	90-135 Vac	180-265 Vac
Nominal frequency	60 Hz	50 Hz
Frequency range	47-63 Hz	47-63 Hz
Maximum inrush current	50 Amps	50 Amps
Rated input current	9.5 Amps	5 Amps