

# Certified by NeXT

**Title:** Digital DECpc XL 560

**Entry Number:** 1559

**Expiration of Certification:** May 1 1995

**Last Updated:** <<Date July 21 1995>>

## **Product Vendor:**

Digital Equipment Corporation

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**Keywords:** DEC, XL, 560, Weitek, Diamond, Viper, ISA, PCI

## **Explanation of Certification**

In order to ensure the highest level of compatibility and support, NeXT has developed a process to comprehensively test specific PC-Compatible system configurations with NEXTSTEP for Intel Processors.

- Each specific system configuration has been subjected to a suite of compatibility tests by the NeXT Quality Assurance group.
- A detailed NeXTAnswer support document is available listing the specific configuration tested, and any setup information required to configure the system for NEXTSTEP.
- Because of the detailed information available to customers and NeXT's Support personnel, NeXT delivers the best technical support on certified configurations.
- A system platform is loosely referred to as "Certified" if it has one or more certified configurations, but all the benefits of certification are available only to users of the specific certified configurations.
- Only the manufacturing revisions of a system unit and its add-on cards listed in the NeXTAnswer are certified.
- NeXT certification does not necessarily mean "error free." Certified systems may contain detected or undetected compatibility problems.

## Certified Configurations:

NeXT has certified the following configuration:

- Digital DECpc XL 560
- 32MB RAM
- 406MB SCSI hard disk
- Diamond Viper PCI with 2MB VRAM
- Intel EtherExpress 16
- MediaVision Pro AudioSpectrum 16
- Digital VRC16 color monitor

## Setup and Installation:

NeXT used an Adaptec 1542CF SCSI adapter to certify this system. Because of a bug in NEXTSTEP, occasional kernel panics may occur under 3.2 while booting with this adapter. While repeated attempts should result in a successful boot, NeXT recommends obtaining a copy of the latest Adaptec driver (available through NeXTAnswers), which fixes this bug.

Because both Adaptec SCSI adapters and Pro AudioSpectrum 16 cards use IRQ level 11 by default, a conflict will occur in Configure.app. NeXT recommends changing the IRQ level of the Pro AudioSpectrum card to 15.

Since the display driver for the Diamond Viper video card does not ship with NEXTSTEP 3.2, it is necessary to use the "Default VGA Adapter" driver during the installation process, then install the "Weitek P9000-based Display Adapter" driver (available through NeXTAnswers) manually.

## Technical Specification of Certified System

The following information technically defines the specific configuration NeXT certifies.

**Tested under NEXTSTEP for Intel Processors Release 3.2**

### Hardware Configuration Information

System Name: Digital DECpc XL 560  
Processor: Intel Pentium  
Processor Speed: 60 MHz  
Type: Tower  
RAM: 32MB  
Model Number: XL 560  
Serial Number: NA

### Motherboard

BIOS Version: PhoenixBIOS  
BIOS Revision Number: 1.03  
Bus Slots: 3 PCI, 4 ISA  
Chip Identifiers: S82433LX, S82434LX, A10001, bq3287AMT, S823781B, 53C810, S9318AKC4, N82C42PE  
Board Identifiers: A01, 26593, 5022700-01 A01 5422701 01  
Jumper/Switch settings: J29 OFF, J32 OFF, J33 OFF, J34 OFF, J35 ON

### Connectivity

Number integrated serial ports: 2  
Number integrated parallel ports: 1

### Video

Model: Diamond Viper PCI  
Interface: PCI (slot 1)  
BIOS Revision Number: NA  
Chipset: Weitek Power 9000  
RAMDAC: Brooktree Bt485KPJ110  
VRAM: 2MB  
Chip Identifiers: T9328 OTI087X, 9000-033-PFP, 9001-033-PFP, M27C256B  
Board Identifiers: Rev A7, 9339, PTP MV-1, E89382, 22-0027A7  
Jumper/Switch settings: none

**Sound**

Model: MediaVision Pro AudioSpectrum 16  
Interface: ISA adapter (slot 6)  
Chip Identifiers: MVD101, MVA416, R742 547-0002, MVA508  
Board Identifiers: P9253, 650-022-01-F, 600-0022-01 REV F, 4092, 94V0  
Jumper/Switch settings: J9 (all four jumpers) ON, J10 on "220" setting, J11 DOWN, J12 (second jumper from bottom) ON, all other jumpers OFF

**Fixed Disk**

Type: SCSI  
Model: Seagate ST1480N (DEC Label)  
Size: 406MB  
Lot Number: K-04-9348-4  
Part Number: FR-PCXAR-AB

**Serial Number:**

SCSI ID: 0

**Chip Identifiers:**

**Drive Identifiers:**

**Jumper/Switch settings:**

**Floppy Disk**

**Model:**

**Part Number:**

**Serial Number:**

**Chip Identifiers:**

**Drive Identifiers:**

**Mouse**

Type: PS/2  
Model: Digital  
Model Number: PC7XS-CA  
Serial Number: LT33200134

**Keyboard**

Model: Fujitsu Limited  
Model Number: FKB4700 Series  
Serial Number: I9037886

**Monitor**

Model: Digital  
Model Number: VRC16-HA  
Serial Number: 2A32523917

**CD-ROM Drive**

Model: Toshiba (Internal)  
Model Number: XM-4101TA 2893  
**Serial Number:**

The above configuration ships with the XL 560. In order to complete certification, NeXT added the following equipment:

**Network**

Model: Intel EtherExpress 16  
Interface: ISA adapter (slot 7)  
Connectors: BNC, AUI  
Chip Identifiers: 303728-002, N82586-10  
Board Identifiers: 305896-004 03630331213, P01317745, EJMPCEDPCLA8110A, PB305898-002, 1892  
Ethernet Address: 15873D  
Jumper/Switch settings: none

**Disk Controller**

Type: SCSI  
Model: Adaptec 1542CF

Interface: ISA adapter (slot 5)  
BIOS Revision Number: 553601-00 C C38D  
Firmware Revision Number: 553801-00 C 563D  
Chip Identifiers: 552800-01 D 9338, AIC7970Q, Z84C0010VEC  
Board Identifiers: BC0D33804QF, FAB 545107-00 REV C, 3793  
Jumper/Switch settings: SW1 OFF (Termination software controlled), SW2-4 OFF (I/O port 330H), SW5 ON (Disable floppy), SW6-8 OFF (Bios address DC000H)  
Software settings: port 330, Interrupt (IRQ) channel 11, DMA channel 5, SCSI ID 7, SCSI parity checking enabled, DMA transfer rate 5.0 MB/sec, SCSI termination disabled

## ROM BIOS Setup

Access keystroke during boot: Esc

Language: English  
Diskette A: 3.5", 1.44 MB  
Diskette B: Not Installed  
Hard Disk 1: Not Installed  
Hard Disk 2: Not Installed  
Base Memory: 640 KB  
Extended Memory: 31744 KB  
Video Card: VGA or EGA  
Keyboard: Installed  
NumLock at boot: On  
Password: Not Installed  
ROM Base Setup: Enabled  
Mouse Port: Enabled  
Parallel Port: Enabled at 378h-37Ah (IRQ7), Compatible Mode  
Serial Port 1: Enabled at 3F8h-3FFh (IRQ4)  
Serial Port 2: Enabled at 2F8h-2FFh (IRQ3)  
Diskette Drives: Enabled  
Exchange Diskette Drives: Disabled  
Diskettes Write Protection: Disabled  
IDE Hard Disk Drives: Disabled  
HDD User Definable Types: 48 and 49  
HDD Data Transfer Method: Auto Optimum  
Boot from Diskette A: Enabled

Boot from Hard Disk C: Enabled  
CPU Speed: Fast  
Primary Cache: Enabled  
Secondary Cache: Enabled WT  
Cache BIOS ROM: Enabled  
Shadow Video ROM: Enabled  
Cache Video ROM: Enabled  
Shadow 32K at C8000h: Disabled  
Shadow 32K at D0000h: Disabled  
Shadow 32K at D8000h: Disabled  
AT Bus Space: Disabled  
512-640 KB Mapping: Main Memory  
On-board PCI SCSI: Disabled  
External SCSI Device: Disabled  
PCI Device: PCI Slot 1  
    Enable Device: Enabled  
    Device IRQ: None  
    Enable Master: Disabled  
    Latency Timer: Default  
PCI Device: PCI Slot 2  
    Enable Device: Disabled  
    Device IRQ: None  
    Enable Master: Disabled  
    Latency Timer: Default  
PCI Device: PCI Slot 3  
    Enable Device: Disabled  
    Device IRQ: None  
    Enable Master: Disabled  
    Latency Timer: Default

**Configure Settings**

**Display**

Driver Name: Weitek P9000-based Display Adapter  
Project Revision: 1.0  
Settings: Port Address 0x102, Mapped Memory 0x80000000, Display Mode varied

**Mouse**

Driver Name: PS/2-Style Mouse  
Project Revision: 1.0 (kdbmicedrivers-7)  
Settings: IRQ Level 12, 100 dots per inch, Invert directional axes Off

**Network**

Driver Name: Intel EtherExpress Ethernet Adapter  
Project Revision: 1.0 (enetdrivers-6.1)  
Settings: Port Address 0x300, IRQ Level 10, Connector Type BNC

**SCSI/IDE**

Driver Name: Adaptec 1542B SCSI Adapter  
Project Revision: 1.0 (scsidrivers-6)  
Settings: DMA Channel 5, Port Address 0x330, IRQ Level 11

**Audio**

Driver Name: ProAudioSpectrum 16  
Project Revision: 1.0 (audiodrivers-31)  
Settings: DMA Channel 7, Port Address 0x388, IRQ Level 15

**Floppy**

Driver Name: Floppy Disk Drive  
Project Revision: 1.0 (floppyDriver-5)  
Settings: DMA Channel 2, Port Address 0x3F2, IRQ Level 6

**Keyboard**

Driver Name: PS/2-Style Keyboard  
Project Revision: 1.0 (kdbmicedrivers-7)  
Settings: Port Address 0x60, IRQ Level 1, 101 Key PC Keyboard

**Parallel**

Driver Name: On-Board Parallel Port  
Project Revision: 1.0 (paralleldrivers-8)  
Settings: Port Address 0x378, IRQ Level 7

**Serial**



Driver Name: On-Board Serial Ports  
Project Revision: 1.0 (serialdriver-3.2)  
Settings: Port Address 0x3F8, IRQ Level 3/4

**Known Problems:**

- When switching from Full-Screen to In-a-Window mode with SoftPC, the SoftPC window may appear corrupted. This problem will go away with the first screen update. To force it to make its first screen update, press the Return key two or three times to cause the corrupted screen to scroll up.
- In certain video modes, the mouse cursor may leave behind tiny colored dots. These will disappear with the first screen update.
- The 44KHz stereo tests are known to cause system panics under NEXTSTEP 3.2 when an Adaptec 154x SCSI card and a Pro AudioSpectrum Sound card are present.
- The Release 3.2 serial port driver may become unreliable at speeds above 19,200 baud. A bug in this driver may cause your computer to crash when serial port activity goes above an undetermined threshold.
- Make sure that all unused or disabled PCI slots have their IRQ set to "None" as shown in the BIOS settings listed above. In particular, if any of these slots has IRQ 11 assigned to it, the Adaptec SCSI controller (which uses IRQ 11 by default) will fail with "AHA Timeout" errors.