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
146 Main St.
Maynard, MA 01754
USA

+1 (800) 332 4636 USA toll-free phone technical support
+1 (800) 722 9332 PC by DEC sales
+1 (508) 264 7111 international phone
+1 (800) 524 5694 fax
+1 (800) 388 3228 faxback
+1 (508) 496 8800 Bulletin Board System
WWW: http://www.dec.com/

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 (kbdmicedrivers-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 (kbdmicedrivers-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 above19,200 baud. A bug in this driver may cause your computer to crash when serial port activity goes above an undetermined threshhold.

·   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.