

Certified by NeXT

Title: Digital DECpc LPx 466d2

Entry Number: 1581

Expiration of Certification: June 3 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 LPx 466d2
32MB RAM
405MB SCSI hard disk
Intel EtherExpress 16
MediaVision Pro AudioSpectrum 16
Digital PCXBV-PE 14" 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.

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 LPx 466d2
Processor: Intel 486DX2
Processor Speed: 66 MHz
Type: Desktop
RAM: 32 MB
Hard Disk: 405MB SCSI
Model Number: PC762
Serial Number: 324TS006

Motherboard

BIOS Version: Phoenix A486
BIOS Revision Number: 1.01.02
Bus Slots: 4 ISA, 6 ISA/VLB
Board Identifiers: 50-22686-01 B01, 54-22687
Jumper/Switch settings:
* J13: OFF factory use
* J14: OFF recovery mode DISABLED)
* J15: OFF monochrome video adapter (?)
* J16: OFF mfg test mode DISABLED
* J17: OFF flash ROM update DISABLED
* J24: ON clock speed = 33 MHz
* J25: OFF ""

* J26: ON ""
* J27: 1-2 VL-BUS o WS write
* J28: VLRDY -> CPURDY
J33: OFF reset switch DISABLED
* J35-38: OFF 256K ROM size

*factory setting

Connectivity

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

Video

Model: Digital PC76H-EB
Interface: VL-BUS
BIOS Revision Number: 1.02.01
Chipset: S3 86C928
RAMDAC: AT&T ATT20C491-11
VRAM: 2MB
Board Identifiers: 5022694-01 A01
Jumper/Switch settings:
* J4: OFF VGA IRQ9 DISABLED

*factory setting

Disk Controller

Type: SCSI
Model: Adaptec 1540C
Interface: ISA
Jumper/Switch settings:
S1:
* 1: OPEN termination software controlled
* 2: OPEN I/O port 330H
* 3: OPEN ""

* 4: OPEN ""
* 5: CLOSED disable floppy controller
* 6: OPEN BIOS address DC000H
* 7: OPEN ""
* 8: OPEN ""

*factory setting

Fixed Disk

Type: SCSI

Model: Digital RZ25-E

Size: 405 MB

Lot Number: K-04-9406-3

Serial Number: TN437010

SCSI ID: 0

Drive Identifiers: A02, SH33206017

Jumper/Switch settings:

All jumpers OFF, except second from right looking at front of drive.

CD-ROM Drive

Type: SCSI

Model: Toshiba XM-4101B

Version Number: 052 S

ROM Version Number: CA31016

Serial Number: 3X60D15396

SCSI ID: 6

Jumper/Switch settings:

-- Jumper installed

00 Jumper removed

I I I P P T T
D D D R R E E
1 2 4 T V S R
Y T M

0 | | 0 0 0 0
0 | | 0 --- 0

Floppy Disk

Model: Mitsubishi MF355F-258MG
Serial Number: M 085871

Mouse

Type: Three-button PS/2
Model: Digital
Model Number: PC7XS-CA
Serial Number: LT32900382

Keyboard

Model: Digital 101-key
Model Number: RT101
Part Number: 119690-001 REV.A
Serial Number: 71931799

Monitor

Model: Digital 14" SVGA
Model Number: PCXBV-PE
Serial Number: 2134625602

The above configuration ships with the DECpx LPx 466d2. In order to complete certification, NeXT added the following equipment:

Network

Model: Intel Etherexpress 16
Interface: ISA
Connectors: BNC, AUI
Board Identifiers: PB305898-002, 305896-004 03630331213, P01317745
Ethernet Address: 00AA0018573D
Jumper/Switch settings: N/A

Sound

Model: Media Vision Pro Audio Spectrum 16

Interface: ISA

Board Identifiers: 650-0044 01P

Jumper/Switch settings:

J2: All OFF

ROM BIOS Setup

Access keystroke during boot: F1

page 1

Date: (today's date)

Time: (the current time)

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: 640K

Extended Memory: 31744K

Video Card: VGA or EGA

Keyboard: Installed

NumLock at boot: On

ROM Base Setup: Enabled

Hard Disk Values

(all blank)

page 2

Password: Not Installed

Parallel Port: Enabled as LPT1: 378h-37ah, Bi-directional mode

Serial Port 1: Enabled as COM1: 3f8h-3ffh (IRQ4)

Serial Port 2: Enabled as COM2: 2f8h-2ffh (IRQ3)

Diskette Drives: Enabled
IDE Hard Drives: Disabled
Boot from diskette A: Enabled
Boot from Disk C: Enabled
User Definable Drives: 48 and 49
Exchange Diskette Drives: Disabled

page3

CPU speed: Fast
Primary Cache: Enabled
Secondary Cache: Enabled
E00000 Selection: Local Memory
Cache BIOS ROM: Enabled
Shadow Video ROM: Enabled
Shadow 32K at C8000h: Disabled
Shadow 32K at D0000h: Disabled
Shadow 32K at D8000h: Disabled

Configure Settings

Display

Driver Name: S3 Display Adapter
Project Revision: 1.0 (displayDrivers-27)
Settings: Port Address 0x3B4, Mapped Memory 0x3C00000, 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:

- The Media Vision Pro Audio Spectrum 16 is known to operate erratically in ISA-BUS systems. Typical problems encountered

include: dropouts, stuttering, failure to record or playback.

- The Pro Audio Spectrum is also known to cause a kernel panic under NS 3.2 when recording at 44.1 KHz in stereo in a system that also contains an Adaptec 1542 SCSI controller.

- In our tests, a chunk copy made from the system was unable to be read back on a NeXTstation (NeXT hardware).

- 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.