

# **NEXTSTEP for Intel Processors Tested Compatible System**

**Title:** Celebris GL/ST and GL/SL  
**Last Updated:** September 20 1995  
**Effective Date:** September 20th 1995  
**Tested With:** 3.3

**Product Vendor:**  
Digital Equipment Corp.

**Explanation of Compatibility Testing**

NEXTSTEP Compatible systems are tested by third parties using a test procedure developed by NeXT. NeXT approves the use of the "NEXTSTEP Compatible" designation for these systems based on the completeness of the test results submitted by these NeXT-trained 3rd parties.

For more detailed information on the NICE program, please refer to NeXTanswers document [1903\\_Compatible\\_Systems\\_Testing\\_With\\_NEXTSTEP.rtf](#)

**Note:** NeXT accepts no support responsibilities or liability whatsoever for any system authorized to use the "NEXTSTEP Compatible" designation, nor does NeXT represent that their test procedures or training--even if followed exactly by the 3rd party performing the test work--are in any way complete or exhaustive. Known or unknown errors may be present in configurations which are designated as "NEXTSTEP Compatible" which could adversely affect the operation of these systems. Support for compatible systems may be provided by the PC vendor or System integrator.

# Tested Components:

Digital reports testing a system configuration consisting of the following components:

## System CPU Board(s)

953WW (SL, 100) 954WW (SL, 120) 963WW (ST, 100) 964WW (ST, 120)

CPU: Intel Pentium, 100 120 MHz MHz

RAM: 32 MBMB maximum tested

ISA slots: 01 (SL) 3 (ST)

PCI slots: 01

VLB slots: 00

Combo slots: 1

PCMCIA slots: 00

BIOS name: Phoenix

BIOS version: 4.04 (Phoenix) 1.00.01

Jumper/Switch Settings:

All jumpers in factory default position, EXCEPT the following:

Parallel port set to compatible mode. The ST has an embedded Adaptec 7850 controller. This should be disabled if you are not using SCSI devices.

## **IDE Controller(s)**

on-board

## **SCSI Controller(s)**

Manufacturer: ADAPTEC

Model name: N/A

Model number: 7850

Revision: Embedded on riser card of ST

BIOS Rev. #: v1.11.01

Interface Type: PCI

### Jumper/Switch Settings:

All default settings. Can be enabled/disabled in BIOS.

An option, FR-PCCAZ-AA, is needed for external SCSI.

### **CD-ROM Drive(s)**

Manufacturer: MITSUMI

Model name: CD-ROM (4X)

Model number: CRMC-FX400

Revision: B03

Interface Type: ATAPI

### **Hard Drive(s)**

Manufacturer: Western Digital

Model name: Caviar 2850

Model number: WDAC2850-10F

Revision: Digital RE45B-E A01  
Interface Type: EIDE  
Size: 850  
SCSI ID: n/a

Manufacturer: QUANTUM  
Model name: FIREBALL  
Model number: 1280AT  
Revision: 01-Z  
Interface Type: EIDE  
Size: 1280  
SCSI ID: n/a  
Jumper/Switch Settings:  
CS off  
DS on

SP off

### **Floppy Drive(s)**

Manufacturer: TEAC

Model name: 1.44 MB FDD

Model number: FD-235HF

### **Graphics Adaptor(s)**

Manufacturer: MATROX

Model name: Millenium

Video RAM: 2MB

RAM Type: WRAM 60

Interface: Custom LB (integrated)

BIOS Rev. #: 1.4

## **Serial Port(s)**

Ports: 2  
UART: 16550

## **Parallel Port(s)**

on-board, LPT1

## **Keyboard(s)**

Manufacturer: Digital  
Model name: Windows95 Keyboard  
Interface: PS/2  
# of keys: 104

## **Mice and Other Pointing Devices**

Manufacturer: Digital



Model name: 3 Button Mouse  
Interface: PS/2

### **LAN Adaptor(s)**

Manufacturer: Xircom  
Model name: CreditCard Ethernet Adapter IIps  
Interface: PCMCIA

Manufacturer: Digital  
Model name: Tulip  
Interface: PCI  
Connectors: BNC\*, AUI, TP.

Jumper/Switch Settings:

All default settings, Can be enabled/disabled in BIOS.

An adapter, FR-PCXAN-VG, is needed to convert AUI to BNC.

## **Sound Card(s)**

Manufacturer: ESS

Model name: ES1688

Interface: ISA

Jumper/Switch Settings:

IRQ 5, DMA 1 Port 220 (Default settings)

## **Monitor(s)**

Manufacturer: Digital

Model name: 17"

Size: 17"

Max resolution: 1024 x 1280 x 60Hz

Manufacturer: Digital

Model name: 17"  
Size: 17"  
Max resolution: 1024 x 1280 x 75Hz

Manufacturer: Digital  
Model name: 21"  
Size: 21"  
Max resolution: 1024 x 1280 x 75Hz

Note that only the specific components listed were tested.

## **Setup and Installation**

### **Hardware Setup:**

See above for individual setup instructions for each adaptor.

**CMOS settings:**

**To Access:**

F2

**Settings:**

Main Screen:

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System Time:

System Date:

Language: English

Diskette A: [1.44MB, 3.5"]

Diskette B: [Not Installed]

IDE Adapter 0 Master: (C: 1286 Mb)

Type: [USER]

\*\*\*\*\* 1200 MB \*\*\*\*\* 850 MB \*\*\*\*\*

Cylinders: [ 2492] [ 1654]

Heads: [ 16] [ 16]

Sectors: [ 63] [ 63]

Write Precomp: [None]

Multi-Sector Transfers: [8 Sectors] [16 Sectors]

LBA Mode Control: [Enabled] [Enabled]

Transfer Mode: [Fast PIO 3] [Fast PIO 3]

IDE Adapter 0 Slave: (None)

IDE Adapter 1 Master: (None)

IDE Adapter 1 Slave: (None)

Video System: [EGA/VGA]

Memory and Cache:

Internal Cache: [Enabled]

External Cache: [Enabled]

Cache System BIOS: [Enabled]

Cache Video BIOS: [Enabled]

Video BIOS Shadow: [Enabled]

Shadow 16K at C8000h: [Disabled]

Shadow 16K at CC000h: [Disabled]

Shadow 16K at D0000h: [Disabled]

Shadow 16K at D4000h: [Disabled]

Shadow 16K at D8000h: [Disabled]

Shadow 16K at DC000h: [Disabled]

AT bus Space: [Disabled]

Extended Memory Support:[Compatibility]

Boot Options:

Boot Sequence: [A: then C:]

SETUP Prompt: [Enabled]

POST Errors: [Disabled]

Quick Boot: [Disabled]

Quiet Boot: [Disabled]

Summary Screen: [Enabled]

Keyboard Features:

Numlock: [Auto]

Key Click: [Disabled]

Keyboard autorepeat rate [30/sec]

Keyboard autorepeat delay [1/2 sec]

System Memory: 640 KB  
Extended Memory: 31 MB

Advanced Screen:  
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Integrated Peripherals:

Mouse Port: [Enabled]

Parallel Port: [378, IRQ 7]  
Parallel port mode: [Compatibility]  
Serial port 1: [3F8, IRQ 4]  
Sreial port 2: [2F8, IRQ 3]



Integrated Audio: [Enabled]  
Audio DMA: [DMA 1]  
Audio IRQ: [IRQ 5]  
System Speaker Volume: [Medium]

Diskette Controller: [Enabled]  
Exchange diskette drives: [Disabled]  
Diskette write protection: [Disabled]  
Local Bus IDE Adapter: [Both]

Integrated SCSI: [Enabled]  
Integrated SCSI Terminator: [Enabled]

Integrated Ethernet: [Enabled]

Plug & Play O/S [No]  
Reset Configuration Data [No]

Large Disk Access Mode: [DOS]

Security Screen:  
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Supervisor Password is Disabled  
User Password is Disabled  
Set Supervisor Password: [Press Enter]  
Set User Password: Press Enter

Password on Boot: [Disabled]

Custom Sign-on Banner is Disabled  
Custom Sign-on Banner [Press Enter]

Diskette Access: [Supervisor]  
Fixed disk boot sector: [Normal]  
Network server: [Disabled]

Power Screen  
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Power Management: [Enabled]  
System standby timer: [Disabled]  
System suspend timer: [Disabled]  
Suspend Lock System: [No]  
Quick suspend: [Ctrl-Alt-Esc]

Exit Screen

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- Save Changes & Exit
- Discard Changes & Exit
- Get Default Values
- Load Previous Values
- Save Changes

**ECU settings (EISA-bus systems only):**

N/A

**Special installation instructions:**

In order to use the optional PCMCIA ethernet adapter, you will need to have a PCMCIA

adapter installed.

PCMCIA Adapter:

Manufacturer: SCM Microsystems

Model name: SwapBox Classic X2

Model number: 01-90-0514

Interface: ISA

PCMCIA Slots: 2 Type II / 1 Type III

Jumper/Switch settings:

n/a

And the following BIOS settings:

Disabled onboard Ethernet adapter

Disabled 2nd IDE controller

## **Driver settings:**

Use Configure.app to load and configure the following drivers:

Display

MatroxMGA2064WDisplayDriver

Pointing Device

PS2Mouse

SCSI

Adaptec2940SCSIDriver

Network

DECchip21040NetworkDriver

or

XircomIpsNetworkDriver

Audio

SoundBlaster8

## Other

SerialPorts

ParallelPort

Floppy Disk

PS2Keyboard

PCIBus

EISABus

EIDE

EIDE #2

PCIC (only if using Xircom Ethernet)

PCMCIABus (only if using Xircom Ethernet)

## Known Problems

1) The system ships with the CD-ROM attached to the secondary IDE

controller. The drive has to be reconnected to the primary IDE controller before installing NEXTSTEP.

After installation, the drive can be reconfigured as the master device and reconnected to the secondary IDE controller.

2) The onboard SCSI controller has a PCI ID that is not recognized by the Adaptec2940SCSIDriver, version 3.32. The ID 0x50789004 had to be added manually. NeXT intends to release an updated version of the driver.

3) The onboard ESS audio chip operates natively in 16 bit mode and in SoundBlaster Pro compatibility mode. The chip, when used with the SoundBlaster 8 (v3.30) driver plays back both 8 bit samples and 16 bit samples recorded up to 22KHz in both mono and stereo modes. At 44KHz 8 bit mono samples can be played. The driver has a bug which prevents it from recording sounds correctly. The problem is being investigated at NeXT.



- 4) There is a noise problem on the output stage of the onboard video subsystem which manifests itself as vertical bands appearing on the screen. The bands vary in width according to the refresh rate and resolution. The problem was corrected by shorting out a ferrite bead (L65) on the MLB. An ECO to fix the problem is being written.
- 5) Insignia's SoftPC cannot be launched in full window mode. NeXT is investigating the problem.

**See Also: (None)**