

NEXTSTEP for Intel Processors Release 3.3

System Driver Overview

Driver: EIDE

Driver Overview: NeXTanswer #1839

Last Update: February 18, 1998

Availability Information

Newer Released Driver in NeXTanswers*: Yes, Version 3.31, as NeXTanswer #1838

Newer Beta Driver in NeXTanswers*: Yes, Version 3.37, as NeXTanswer #1977

Driver Name / Installer .pkg: EIDE

Driver Type: System

Driver Scope: Generic-System

Supported Components: PC Tech RZ1000

PC Bus / Interface Supported by Driver:** Integrated, ISA, PCI

Supported Connectors: 40-pin Header (Internal IDE)

Access Mode: PIO

Adapter Memory:

General Overview notes: This drivers supports IDE disks and IDE ATAPI rev. 1.2 compliant CD-ROMs. It supports primary and secondary IDE controllers with up to 2 drives per controller. Please refer to 1933_EIDE_and_ATAPI_CDROM_Support_in_NEXTSTEP_3.3.rtf for more information on configuring your EIDE drives for NEXTSTEP.

This driver replaces the IDE driver distributed on the NEXTSTEP 3.3 CD.

Supported Products / Add-on Adapters:

The following ATAPI CD-ROM drives are supported:

Chinon CD-ROM CDS-525 (2X), firmware rev. W09

Matsushita CD-ROM CR-571 (2X), firmware rev. 1.0e -- Panasonic

Mitsumi CD-ROM 1B (4X), firmware rev. B02 -- model FX400

Sony CD-ROM CDU55E (2X), firmware rev. 1.0u

Sony CD-ROM CDU76E-S (4X), firmware rev. 1.0c
Toshiba CD-ROM XM-5302TA (4X), firmware rev. 0305

The beta driver adds support for the following ATAPI CD-ROM drives:

Philips CM207, firmware rev 1.10 (??) -- reported to work
SONY CD-ROM CDU76E-Q, firmware rev 1.0c (4X)
SONY CD-ROM CDU55D, firmware rev 1.0v (2X)
SONY CD-ROM CDU77E, firmware rev 1.0e (4X)
TORiSAN CD-ROM CDR-S1, firmware rev 1.70 (4X) -- SANYO
Chinon CD-ROM CDS-545, firmware rev ERc A1.0 (4X)
GoldStar CD-ROM GCD-R540, firmware rev 1.17 (4X)
GoldStar CD-ROM GCD-540C, firmware rev 1.01 (4X)
SANYO CRD-254P, firmware rev 1.02 (4X)
MATSHITA CD-ROM CR-574, firmware rev 1.06 (4X) -- Panasonic
Pioneer CD-ROM DR-UA124X, firmware rev 1.02 (4X) -- force detection
MITSUMI CD-ROM !B, firmware rev K02 (4X) -- DRM FX400B
TEAC CD-55E, firmware rev ?? (4X) -- Thinkpad 760CD
ATAPI CD-ROM SPEED-6X, firmware rev 6.2D (6X) -- ACER 665A
VERTOS 600ESD CD-ROM X6-IDE, firmware rev 1.20 (6X)
TEAC CD-56E, firmware rev 1.0D (6X)
MATSHITA UJDCD4700, firmware rev 1.11 (??)
TEAC CD-58E, firmware rev 1.1B (8X)
Toshiba CD-ROM XM-5602B, firmware rev 1426 (8X)
Sony CD-ROM CDU311, firmware rev 3.0i (8X)
EPSON CMD-2240 SPEED-6X, firmware rev R100 -- reported to work
Hitachi CDR-7730, firmware 1.1a (4X)
TEAC CD-524E, firmware 4.0D (24X)

Supported Products / Systems (ie integrated into PC System):

Other ATAPI 1.2 compliant CD-ROM drives should work with NEXTSTEP even if they are not in the supported list. If a CD-ROM drive does not work with NEXTSTEP (or even if it does) we would like to know about it. Please send an email message to nextanswers-request@next.com including the model number of the CD-ROM drive and also whether this drive is connected as a master or a slave.

Special Features of Driver / Driver Notes:

Also see the NextAnswer 1933_EIDE_and_ATAPI_CDROM_Support_in_NEXTSTEP_3.3

NeXT's EIDE driver is not affected by the RZ1000 hardware bug.

This device driver provides information in the Configure application's help panel. Choose Info>Help from the Configure menu and scroll down to find this device driver's help topic.

Known Problems

These devices are not supported.

- 1. NEC CDR-260 (2X)
- 2. NEC CDR-273

To get the Pioneer DR-UA124X 1.02 CD-ROM to work you must force detection. You can do this by going in Expert mode and adding the key "Slave"="ATAPI" (or "Master" as the case may be) to the table.

Driver versions 3.33 and below can cause certain systems to hang under very heavy load.

Due to ongoing development and testing of OPENSTEP 4.0, the beta version (v3.34) of this driver will neither be tested on NEXTSTEP 3.3 nor upgraded to "Released" status.

Driver Version Notes

- 3.33: This version adds support for several new ATAPI CD-ROM drives and fixes some bugs.
- 3.34: Fixed a bug which could cause machines to hang under very heavy load.
- 3.36: Added device overrides and modified the inspector. The new overrides are documented in the driver help.
- 3.37: Improved ATAPI support. Added support for Intel PIIX PCI IDE controllers. Added Bus Master support. Revised the driver Inspector.

Future Planning

Future / Update Planning:

Reason for New Driver / Update:**New Driver / Update Timeframe:****New Driver / Update Description:**

Use the following installation instructions when installing from a CD-ROM drive connected to the secondary EIDE controller:

1. Select Primary/Secondary(Dual) EIDE and ATAPI Device Controllers as the hard disk driver.
2. After the install program has finished reading from the CD-ROM, the Configure panel will appear. Double-click the Other icon. If the Primary/Secondary(Dual) EIDE and ATAPI Device Controllers driver is listed, remove it from the list. It is no longer necessary since the installation from the CD-ROM is complete. Add the appropriate EIDE driver to match your EIDE hardware configuration. You will need to add it twice to get a second instance of the EIDE driver to support the secondary EIDE controller. You will need to set the IRQ to 15, and I/O port address range to 0x170-0x177 in the second instance of the driver, in order to avoid conflicts with the first instance. Add any other necessary drivers while in Configure, and then click on the Save button.

Note: Information contained in the "Future Planning" section of this document does not constitute a commitment on the part of NeXT to complete the planned development work.

* - Any NeXTanswer number that is blank indicates that a driver will not be released for this version of NEXTSTEP.

** - Indicates information that is inclusive of the entire capability of this driver. Not all devices supported by this driver may include all features listed. Check any available NeXTanswers and the hardware manual for the device for additional information.

Product Vendor