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Entry Number:

Title: **The Adaptec 1542B and 1540B ISA SCSI Cards**

Entry Date: **10 June 1993**

Product Vendor: **Adaptec Inc.**

Vendor Contact Information:

Hardware Platform: **Intel Processor Family**

Reported in Software Version: **NEXTSTEP Release 3.1**

Keywords: **Adaptec, SCSI, 1542, 1540**

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Usage Commentary:

The Adaptec 1542B provides a standard SCSI interface for NEXTSTEP for Intel Processors. The card requires minimal setup and has proven to be reliable.

The driver for the Adaptec1542B also supports the Adaptec 1540B which provides identical SCSI functionality without an integrated floppy controller. NEXTSTEP Release 3.1 does not officially support the floppy controller on the Adaptec1542B, so the lack of this feature on the Adaptec 1540 is a minor concern for NEXTSTEP users.

Setup and Installation:

Follow the instructions provided with the card to disable the floppy controller. This involves removing a row of jumpers in the middle of the board. This change is not necessary on the 1540B.

Adaptec 1542B cards must have the boot SCSI disk set to SCSI ID 0.

Synchronous SCSI support is provided in the card's firmware. Note that the NeXT recommended configuration for the host adaptor board currently disables the initiation of synchronous negotiation. This is the conservative approach since some devices have problems with this process.

Known Problems:

- NEXTSTEP does not officially support the floppy controller integrated into the 1542B. Use the floppy controller integrated into your system's motherboard or purchase a separate floppy controller to complete software installation.
- Some users have reported problems during the installation process if the CD-ROM drive's SCSI ID is set to zero. The error message will be "rootdev 608." Changing the SCSI ID has frequently fixed the problem. Setting the CD-ROM drive's SCSI ID to six has fixed the problem when nothing else seemed to work.
- Improper SCSI termination can cause strange, unreproducible errors. For maximum reliability be certain that the first and last devices on the SCSI bus are terminated. For more information on this topic see Intel Configuration entry SCSI Setup.

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- BIOS revision 3.20 is necessary to support hard drives greater than a gigabyte. Contact Adaptec for assistance with this problem.
- Adaptec has discontinued production of the 1542B in favor of the newer 1542C.
- When installing NEXTSTEP Release 3.1 onto IDE hard disk drives the CD-ROM drive's SCSI ID number should be zero.
- The Adaptec 1542B does not support 2.88MB floppy drives attached as SCSI devices.