Dell[™] Systems

Installing the 1 x 2 SCSI Module

www.dell.com | support.dell.com

Notes, Notices, and Cautions

NOTE: A NOTE indicates important information that helps you make better use of your computer.

NOTICE: A NOTICE indicates either potential damage to hardware or loss of data and tells you how to avoid the problem.

A CAUTION: A CAUTION indicates a potential for property damage, personal injury, or death.

Information in this document is subject to change without notice. © 2004 Dell Inc. All rights reserved.

Trademarks used in this text: Dell and the DELL logo are trademarks of Dell Inc.

July 2004 P/N F6590 Rev. A00

Reproduction in any manner whatsoever without the written permission of Dell Inc. is strictly forbidden.

Other trademarks and trade names may be used in this document to refer to either the entities claiming the marks and names or their products. Dell Inc. disclaims any proprietary interest in trademarks and trade names other than its own.

This document provides instructions for installing a 1 x 2 module kit to add support for up to two additional 1-inch SCSI hard drives in your system's peripheral bay. This kit contains the following items:

- 1 x 2 SCSI module and backplane
- Power cable harness
- SCSI cable(s)
- Guide rails (2)
- 4 x 6-32 screws

CAUTION: Before you perform this procedure, read the safety instructions in your *Product Information Guide*.

CAUTION: Only trained service technicians are authorized to remove the system cover and access any of the components inside the system. See your *Product Information Guide* for complete information about safety precautions, working inside the computer, and protecting against electrostatic discharge.

NOTICE: To avoid data loss, back up all data on the hard drives before installing the backplanes and changing the drive configuration.



NOTE: See your *Installation and Troubleshooting Guide* for detailed instructions on removing or replacing components.

Before You Begin

NOTICE: Before you install the backplane, update the BIOS to the latest version.

Before you shut down the system to install the backplane:

1 Record the system configuration settings.

View the system configuration screens in the System Setup program and make a record of these settings. See your User's Guide for instructions on using the System Setup program.

2 Update the BIOS.

See the Dell Support website at support.dell.com for the latest BIOS version for your system.

Installing the 1 x 2 Module

- **1** Remove the front bezel (if applicable).
- **2** Turn off the system, including any attached peripherals, and disconnect the system from the electrical outlet.
- **3** If your system is installed in a rack, go to step 4.

If you have a standalone system, locate a flat, nonconductive surface, remove the stabilizers, and lay the system on its side, as shown in Figure 1-1.

4 Open the system.

Installing the 1 x 2 SCSI Module | 1-3

- **5** Slide the drive tray to the maintenance position.
 - **a** Use a #2 Phillips screwdriver to loosen the captive screw that secures the drive tray release handle to the chassis.
 - **b** Rotate the drive tray release lever toward the front of the system.
 - **c** Grasp both sides of the front panel and slide the drive tray towards the front of the system until the tray is in the maintenance position.

Installing the Drive Cage

- **1** Locate the insert tab above the center filler plate. See Figure 1-1.
- 2 Press the insert tab and remove the center filler plate from the peripheral bay. See Figure 1-1.
- **NOTE:** If a tape drive is not installed in your system, do not remove the top filler plate.

Figure 1-1. Peripheral Bay Filler Plates



- **3** Locate the black square on the lower filler plate. See Figure 1-1.
- **4** Place your right thumb on the black square, reach behind the lower filler plate, squeeze the lower filler plate release lever, and remove the filler plate from the peripheral bay.

- **5** Attach the drive rails to the drive cage.
 - **a** Align the screw holes on the drive rails with the screw holes located near slot 1 on the drive cage.
 - **b** Insert the 6 x 32 screws (4) into the drive rails and drive cage. See Figure 1-2.
 - **c** Use a #2 Phillips screwdriver to tighten the screws on each rail. See Figure 1-2.
- **6** With the power connector pointing towards the top of the system, insert the drive cage into the peripheral drive bay until it snaps into place. See Figure 1-3.

Figure 1-2. Installing the Drive Cage Rails





Figure 1-3. Installing the 1 x 2 Module Into the Peripheral Bay

Connecting the SCSI and Backplane Power Cables

NOTE: The 1 x 2 drive 0 functions as the boot drive.

- NOTE: If your kit contains more than one SCSI cable, use the appropriate cable to connect the 1 x 2 backplane to the riser card or RAID controller. Depending on your particular configuration, the cable length may vary.
- **1** Connect the power cable harness connectors to the 1 x 2 backplane.

If your system is not configured with a tape backup unit:

- Connect the 14-pin connector on the power cable to the peripheral bay power connector а on the SCSI backplane. See Figure 1-4.
- Connect one of the 4-pin connectors on the power cable to the power connector b on the 1 x 2 backplane. See Figure 1-4.
- Connect the 6-pin connector on the power cable to the 6-pin connector C on the 1 x 2 backplane. See Figure 1-4.

If your system is already configured with a tape backup unit, use the existing power cable and complete step b and step c.

2 Connect the SCSI connector on the 1 x 2 backplane to the riser card or the optional RAID controller card.

If your 1 x 2 module connects to the onboard riser card:

- **a** Connect the SCSI connector on the 1 x 2 backplane to SCSI channel A on the riser card. See Figure 1-4.
- **b** Insert the SCSI cable harness into cable routing slot 1. See Figure 1-4.

If your 1 x 2 module connects to the optional RAID controller card:

- **a** Connect the SCSI connector on the 1 x 2 backplane to SCSI channel A (channel 0) on the optional RAID controller card. See Figure 1-4.
- **b** Insert the SCSI cable into cable routing slot 2 and the cable routing slots located at the bottom of cooling fan 8. See Figure 1-3.
- **3** Install the hard drives into the 1 x 2 module.

Figure 1-4. 1 x 2 Module and SCSI Backplane Connectors



Completing the Installation

- 1 Check all cable connections that may have been loosened during the procedure.
- **2** Arrange the cables so that they do not catch on the system cover or block the airflow of the fans or the cooling vents.
- **3** Slide the drive tray to the operating position.
 - **a** Grasp both sides of the front panel and slide the drive tray towards the back of the system until the tray is in the operating position.
 - **b** Rotate the drive tray release lever toward the back of the system.
 - **c** Use a #2 Phillips screwdriver to tighten the captive screw that secures the drive tray release handle to the chassis.
- 4 Close the system.
- **5** If you have a standalone system, reinstall the stabilizers and place the system in the upright position (if applicable).
- **6** Reconnect the system to its electrical outlet and turn the system on, including any attached peripherals.
- 7 Enter System Setup to ensure that the RAID or SCSI controller card is configured correctly. You may also need to verify the correct boot order.

See your system User's Guide for more information.

8 Update the system firmware.

See the Dell Support website at support.dell.com for the latest firmware updates.

9 Replace the bezel (if applicable).