The Disk board kit contains:

- One Disk board
- One 80-cm SCSI cable
- One Fast/Wide SCSI terminator

To install the Disk board you will need:

- Phillips #1 screwdriver
- Grounding wrist strap

A padded ESD mat is also required if you perform any work on the board. The padding prevents breakage of parts on the bottom of the board.

#### **Disk Board SCSI ID Numbers**

The Disk board is ready for installation, and it is not necessary for you to manually set SCSI drive ID numbers. The default SCSI ID numbers for Disk drives, which are located on the Disk boards, are based on the board slot number.

Each Disk has an ID\_ENABLE jumper and four ID jumpers.

- If the ID\_ENABLE jumper is not installed, the disk drive uses the default SCSI ID.
- If the ID\_ENABLE jumper is installed, the disk drive uses the ID specified by the four ID jumpers located on the Disk board.

For details, refer to Appendix C, "SCSI Devices" in the Enterprise server system reference manual that came with your system.

#### **Hot-Plug Features**

Sun<sup>TM</sup> Enterprise<sup>TM</sup> servers have an Automatic System Reconfiguration (ASR) feature that reboots the system in a configuration that omits failed components (such as CPUs, memory, or I/O bus). In this configuration the board containing the failed components is placed in low-power mode and is no longer accessible.



Caution – If the message: NOTICE: Hot Plug not supported in this system is displayed during boot, do NOT attempt to remove or install a board in a powered-on system or hardware damage will occur.

The hot-plug feature enables you to insert a new board into a powered-on system while the system is supplied with electrical power.



**Caution** – Do not attempt hot-plug if the peripheral power supply is missing or inoperative. The peripheral power supply provides the precharge voltages required for hot-plug. Use prtdiag(1M) to determine the peripheral power supply status.

When a working board is added to a powered-on system with the hot-plug feature, the system cannot use the new board until the system is rebooted.

### Removing a Board

**Note** – All empty board slots must have filler panels (Enterprise 5x00/4x00) or load boards (Enterprise 6x00) to ensure proper cooling. For information on filler panels and load boards, refer to Chapter 5 in the Enterprise server systems reference manual that came with your server.

- Ensure that the board is in low-power mode and ready for removal.
   If the board is not in low-power mode, halt the system and turn off the power before proceeding. The board is in low-power mode if one of the following is true:
- The three LEDs on the board are not lit (board has no power).
- The outer two green LEDs are not lit and the middle yellow LED is lit (board in low-power mode).



Caution - Use a grounding wrist strap to prevent static damage.

- 2. With a Phillips #1 screwdriver, turn the two quarter-turn access slots to the unlocked position ( ).
- 3. Unfasten any cable connectors from the front panel and set them aside.

Label the cables to identify them for reconnection later.

4. Pull the ends of both extraction levers toward you, then gently pull the board out of the card cage.

Do not let the components on the board catch on any surrounding surfaces as you pull the board.

5. Place the board on a padded ESD mat for servicing, or store the board in an antistatic bag.

#### **Installing a Disk Board**

- In Enterprise 5x00/4x00 systems, four Disk boards can be installed.
- In Enterprise 6x00 systems a maximum of two Disk boards can be installed.

**Note** – Disk boards can be installed *only* in slots 14 and 15 in Enterprise 6x00 systems, and *slot 15 must be used* when installing only one Disk board.

1. Select a board slot.

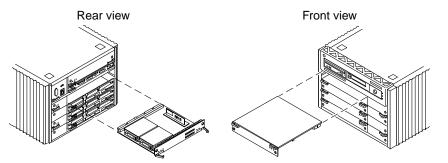
Refer to your server systems reference manual for rules for selecting a board slot.

2. Open the extraction levers by pulling the ends of both levers toward you.



Caution - Use a grounding wrist strap to prevent static damage.

- 3. Insert the board into the card cage slot.
- For a front slot, orient the board component-side down.
- For a rear slot, orient the board component-side up.



4. Use the extraction levers to seat the board on the centerplane.



**Caution** – Do not press on the board front panel to seat it—doing so will damage the connector pins.

- 5. With a Phillips #1 screwdriver, turn the two quarter-turn access slots to the locked position ( ).
- 6. Connect the Disk board to a SCSI Host Adapter (onboard or SBus card).

The Disk board kit includes an 80-cm Fast/Wide SCSI cable. If the Disk board is installed on the opposite side of the card cage from the SCSI host adapter, you must use a 2-meter cable, part number 530-1885 (sold separately).

7. If the Disk board is the last or only board in the SCSI chain, terminate the SCSI out connector on the Disk board.
The Disk board kit includes a Fast/Wide SCSI terminator, part number 150-2267.

- 8. Connect all necessary cables to the board fronts.
- 9. If the system is running, look for a system message similar to the following example. This example is for slot 6:

NOTICE: Disk Board Hotplugged into Slot 6 NOTICE: Board 6 is ready to remove

10. Reboot the system now or schedule a later time to reboot when system disruption will be minimized.

The system cannot use the new board until the system is rebooted.

#### **Cabling Issues in Enterprise 6x00 Systems**

 ${f Note}$  – Do not use the onboard SCSI host adapter on the I/O board in slot 1.

For slot 15 installation:

- 1. Use an 80-cm SCSI cable to connect the Disk board to the SCSI Host Adapter (onboard or SBus card).
- 2. Install a SCSI terminator on the Disk board if it is the last (or only) board in the SCSI chain.

For slot 14 installation:

1. Connect the Disk board to the SCSI Host Adapter (onboard or SBus card):

- If an I/O+ board is installed in the front, use an 80-cm SCSI cable to connect the Disk board to the SCSI Host Adapter.
- If all I/O+ boards are installed in the rear, use a 2-meter SCSI cable (sold separately) to connect the Disk board to the SCSI Host Adapter. Route the cable down the side of the card cage, through the cable pass in the cabinet.
- 2. Install a SCSI terminator on the Disk board if it is the last (or only) board in the SCSI chain.

If all I/O Boards are installed in the rear, use a 2-meter SCSI cable (sold separately) to connect the Disk board to the SCSI host adapter. Route the cable down the side of the card cage, through the cable pass in the cabinet.

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SunDocs<sup>SM</sup> is a distribution program for technical documentation and is available from SunExpress. You can find a full listing of available documentation on the World Wide Web:

http://www.sun.com/sunexpress/

To order or for more information:

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#### **Reader Comments**

Your comments and suggestions are important to us. Please let us know what you think about the *Sun Enterprise 6x00/5x00/4x00 Systems Disk Board Installation Guide*, part number 802-6740-11.

You can send detailed comments via email to smcc-docs@sun.com, or send a fax to SMCC Doc Feedback at (650) 786-6443.

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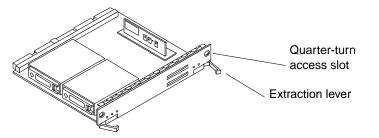
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# Sun<sup>™</sup> Enterprise<sup>™</sup> 6x00/5x00/4x00 Systems Disk Board Installation Guide





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