Requirements

- The 2GB memory option (256MB DIMMS) require that the system flash PROM software be 3.2.24 or compatible versions *before* installing memory modules.
- Currently, for Solaris 2.5.1 operating environments, configurations are limited to a maximum total memory of 56GB, configurations that exceed 56GB for this version are not supported. Solaris 2.6 operating environments, together with patch 105181-19, support a maximum configuration of 60GB. There is no limitation for systems running Solaris 7 or 8 operating environments (maximum achievable configuration is 60GB).
- *Do not mix different densities* (8 or 32 or 128 or 256 Mbytes) in a bank.
- To install the Solaris 2.6 operating environment, use the "Operating Environment Installation CD (part number 704-7076-10) February 2000" that comes with your system (not required for installing Solaris 2.5.1, Solaris 7 or Solaris 8 operating environments).

For Solaris 2.5.1 operating environments the `/usr/platform/sun4u/ sbin/prtdiag` command displays erroneous memory capacity information. Use software patch 104595-09 (available at: `http:// sunsolve.sun.com)` to correct this problem.

Suggestions for Maximum Performance

- If there is more than one CPU/Memory board, install one bank of DIMMs on each board first. Then install the second bank on any board. It does not matter whether the first bank is bank 0 or bank 1.
- Begin with the largest density banks first (256 Mbyte DIMMs), continue with medium density banks (32 or 128 Mbyte DIMMs), and finish with the smallest density banks (8 Mbyte DIMMs). It may be necessary to move some banks to meet this guideline.
- If there are remaining banks, fill the second banks on the boards in the same order as the first banks.

Removing the CPU/Memory Board

! **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 while the system is powered on.

If your system supports the hot-plug feature, a board is in low-power mode and ready for removal if one of the following is true:

- All three status LEDs are off.

- If the Service ( ) LED is lit, and the Power ( ) LED and the Running ( ) LED are off.

! **Caution** – Use a padded ESD mat to prevent breakage of parts mounted on the bottom of the board. Use a grounding wrist strap to prevent static damage.

Start here if the board is already in the system.

1. **If the board is in low-power mode, skip this step and go to Step 2.**
   If the board is not in low-power mode, halt the system and turn off power before proceeding.

2. **With a Phillips #1 screwdriver, turn the two quarter-turn locking screws to the unlocked position ( ).**

Quarter-turn
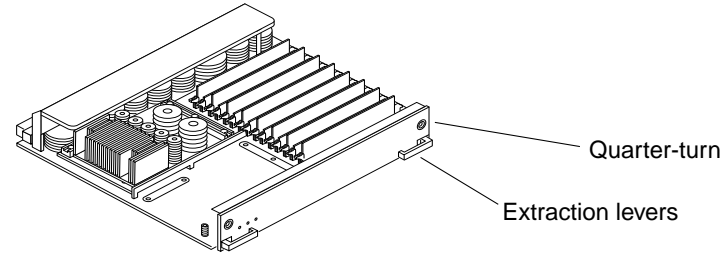
Extraction levers

3. **Pull the ends of both extraction levers toward you, then 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.
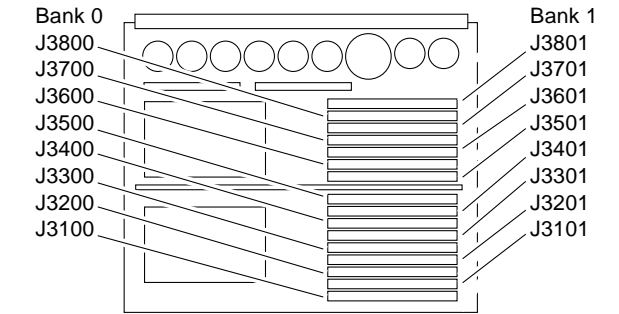
! **Caution** – The heatsinks on the board may be hot. Handle with care.

4. **Place the board on a padded ESD mat to prevent breakage of parts mounted on the bottom of the board.**

Installing DIMMs

Install a set of DIMMS as a complete bank of eight DIMMS. There are two banks, interleaved as shown in the following figure. The socket numbers (Jxx00 and Jxx01) are marked on the board.

Bank 0	Bank 1
J3800	J3801
J3700	J3701
J3600	J3601
J3500	J3501
J3400	J3401
J3300	J3301
J3200	J3201
J3100	J3101

1. **Open the DIMM socket by pressing down on the ejector levers at both ends of the socket.**

2. **Align the two notches at the bottom of the DIMM with the two tabs in the socket.**
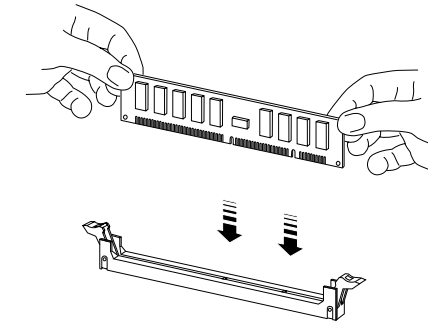
3. **Push the DIMM firmly down into the socket.**

4. **Lock the DIMM in place by pushing both ejector levers into the upright position.**

Installing the CPU/Memory Board

1. **If you are installing a new board, refer to the Sun Enterprise server system reference manual that came with your system for rules for selecting a board slot.**

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

3. **Insert the board in the card cage slot.**

- For a 4-slot or 5-slot card cage, orient the board with the component side to the right.

- For a 16-slot or 8-slot card cage (diagram follows):
  Front slot installation, orient the board with the component side down.
  Rear slot installation, orient the board with the component side up.

4. Push the board into the card cage, then simultaneously press both extraction levers to seat the board on the centerplane.

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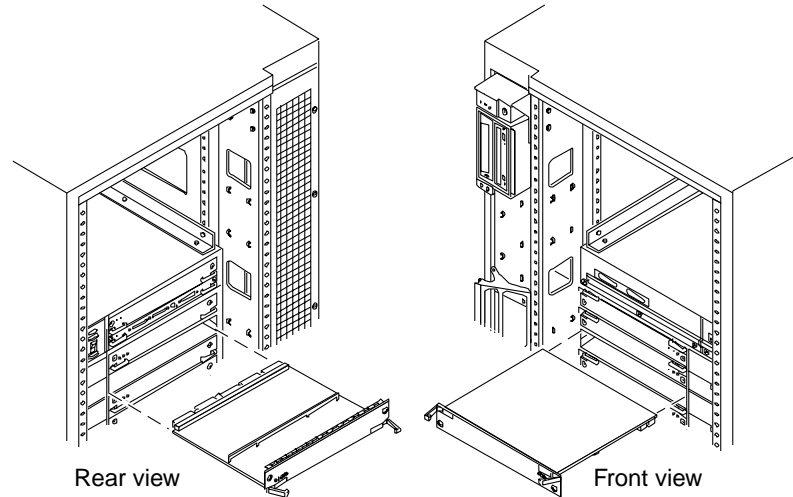
⚠ **Caution** – Do not press on the board front panel to seat it— doing so will damage the connector pins.

⚠ **Caution** – When inserting a board into slot 4 or slot 10 of a 16-slot card cage, lift the board slightly to avoid damage to the centerplane connectors.

Pushing both levers simultaneously avoids twisting the board and bending the connector pins.

5. With a Phillips #1 screwdriver, turn the two quarter-turn locking screws to the locked position (🔒).

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6. 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.

7. If the system is running, look for a system message similar to the following example.
This example is for a CPU/Memory board in slot 5:

```
NOTICE: CPU Board Hotplugged into Slot 5
NOTICE: Board 5 is ready to remove
```

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Sun™ Enterprise™ 6x00/5x00/4x00/3x00 Systems DIMM Installation Guide

⚠ **Caution** – The heatsinks on the board can be damaged by incorrect handling. Do not touch the heatsinks while installing or moving the board. Hold the board only by the edges. If a heatsink is loose or broken, obtain a replacement board.

⚠ **Caution** – The heatsinks on the board can be damaged by improper packaging. When storing or shipping the board, ensure that the heatsinks have sufficient protection.

Note – Make sure the DIMM and connector are free of dust and debris. If necessary, gently clean them using the dry, stiff brush supplied.