Installing the PCI I/O Assembly

1. **Remove the filler panel from the front of the I/O assembly location and store it for possible future use.**

   ⚠ **Caution –** DO NOT FORCE any assembly into a slot; this can cause damage to the assembly and system. The assembly should insert and seat smoothly. If it binds, remove the assembly and inspect the card cage slot for any obvious obstructions.

2. **Line up the I/O assembly with the ejector levers in the open position and insert the assembly into the card cage opening.**

3. **Simultaneously press the two ejector levers inward.**

4. **Tighten the four captive Phillips screws.**

Note – The PCI I/O assembly can be inserted into a powered-on system. The assembly will not be recognized by the system until the domain has been re-initialized and rebooted or dynamically reconfigured into the domain.

5. **Reconfigure the I/O assembly back into the system by either of these two procedures:**

   ■ Dynamically reconfigure the I/O assembly back into the domain.

   Refer to the *Sun Fire 6800, 4810, 4800, and 3800 Systems Dynamic Reconfiguration User Guide.*

   ■ Power on the I/O assembly and initialize the domain.

   Refer to the *Sun Fire 6800/4810/4800/3800 Systems Platform Administration Manual* for complete system procedures for powering on the assembly.

Note – The Activated LED should be on (lit).

6. **Connect cables to the video port, External Video synchronization port, and stereo ports on the Sun Expert3D card.**

7. **Install the Sun Expert3D software with the instructions in Chapter 3 of the *Sun Expert3D Graphics Card Installation Guide*.**

Note – Sun Fire 6800 systems require IFB patch 108576-25 (or later). The patch is available from `http://sunsolve.sun.com`

Accessing Sun Documentation Online

A broad selection of Sun system documentation is located at:

`http://www.sun.com/products-n-solutions/hardware/docs`

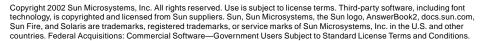A complete set of Solaris documentation and many other titles are located at:

`http://docs.sun.com`

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Sun™ Expert3D Graphics Card Installation for Sun Fire™ 6800 Systems

Configuration Rules

When installing a Sun Expert3D card in Sun Fire 6800 systems, the following rules apply:

- Sun Fire 6800 system requires IFB patch 108576-25 (or later). The patch is available from `http://sunsolve.sun.com`
- All standard Sun Fire 6800 system requirements still apply (system must have at least one SCSI, Ethernet card, for example).
- See TABLE 1 for the Sun Expert3D card location options.

TABLE 1   Sun Expert3D Configuration for Sun Fire 6800 Systems

Number of Expert3Ds	Sun Expert3D and Fan Card Locations
One Sun Expert3D card	I/O assembly IB6
Two Sun Expert3D cards	I/O assemblies IB6 and IB7
Three Sun Expert3D cards	I/O assemblies IB6, IB7 and IB8
Four Sun Expert3D cards	I/O assemblies IB6, IB7, IB8, and IB9

Cautions

⚠ **Caution –** The PCI I/O assemblies, their modules, and cards have surface-mount components that can be broken by flexing the assemblies.

To minimize the amount of board flexing, observe the following precautions:

- Hold the board only by the edges near the middle of the board, where the board stiffener is located. Do not hold the board *only* at the ends.
- When removing the board from an antistatic bag, keep the board vertical until you place it on the electrostatic discharge (ESD) antistatic mat.
- Do not place the board on a hard surface. Use a cushioned antistatic mat. The board connectors and components have very thin pins that bend easily.
- Be careful of small parts located on the component side of the board.
- Do not use an oscilloscope probe on the components. The soldered pins are easily damaged or shorted by the probe point.
- Transport the board in an antistatic bag.

Removing the PCI I/O Assembly

1. **Prepare the system for removal of the PCI I/O assembly.**

- If the assembly is in a domain running the Solaris Operating Environment, identify the assembly to be removed and dynamically reconfigure the assembly out of the domain. Refer to the *Sun Fire 6800, 4810, 4800, and 3800 Systems Dynamic Reconfiguration User Guide* for complete procedures before removing the I/O assembly.
- Refer to the *Sun Fire 6800/4810/4800/3800 Systems Platform Administration Manual* for complete procedures for powering off the assembly.

Note – In order to safely remove the I/O assembly from the system, the green Activated LED on the board must be off (not lit) and the amber OK to Remove LED must be on (lit).

2. **Attach a wrist strap or foot strap. Connect the ESD strap to the system. Place a grounded ESD mat close to the system.**

3. **Loosen the four captive screws.**

4. **Simultaneously pull the two ejector levers outward to unseat the assembly.** This action releases the I/O assembly from the connectors.

5. **Remove the assembly from the card cage and place the assembly on the ESD mat on a work surface.**

6. **Install a filler panel into the open I/O assembly bay.**

Installing the PCI Cards

When installing a Sun Expert3D card in a Sun Fire 6800 I/O assembly slots are filled as follows:

- Sun Expert3D card in Slot 6
- Fan board in Slot 5
- PCI cards (or filler boards) in Slot 3 and Slot 2.
  USB I/O bus PCI cards (if any) should be installed in PCI I/O assembly IB6 for keyboard connectivity.
- Filler boards in Slot 7, Slot 4, Slot 1 and Slot 0.

Note – All standard Sun Fire 6800 system requirements apply for the domain (system must have at least one SCSI, Ethernet card, for example).

1. **Insert PCI cards into the I/O assembly slots as shown in the figure.**

   a. **Insert the faceplate end of each card into appropriate opening in the system back panel.**

   b. **Guide the opposite end of each card into the card slot.**

   c. **Secure the faceplate to the I/O assembly with the Phillips screw.**

2. **Insert filler boards into any open slots.**

Slot 7 – Filler board only
Slot 6 – Sun Expert3D
Slot 5 – Fan board
Slot 4 – Filler board only
Slot 3 – Available
Slot 2 – Available
Slot 1 – Filler board only
Slot 0 – Filler board only