



Sun Fire™ E2900/V1280 PCI-X I/O Assembly Installation Guide

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PCI-X I/O Assembly Installation Guide

This document details installation of PCI-X compatible I/O Assemblies for Sun Fire E2900/V1280 systems.

Firmware and Solaris Operating System (Solaris OS) Requirements

The following details requirements for adding PCI-X support for Sun Fire E2900/V1280 systems.

- Sun Fire E2900/V1280 systems require the following SCAPP firmware:
 - SCAPP firmware version 5.20.0 or subsequent compatible versions
- Sun Fire E2900/V1280 systems require one of the following Solaris OS versions:
 - Solaris 9 9/05, Solaris 10 3/05 or subsequent compatible versions

If your system requires that both the Solaris OS and SCAPP firmware be upgraded, install the hardware first, upgrade the firmware second and then upgrade the Solaris OS last.

If your system requires a firmware upgrade only, install the hardware first and then upgrade the firmware.

Note – Refer to the SunSolveSM patch portal at www.sun.com for latest patch information relating to the following firmware and Solaris OS dependencies.

Note – For customers running Solaris 9 OS, if you have not previously upgraded the IB_SSC assembly to PCI+, you must use an applicable version of DVD0 prior to installing PCI-X with the DVD that comes with your hardware. If you are running Solaris 9 and have previously upgraded the IB_SSC assembly to PCI+, you do not have to use the DVD0.

Note – For systems running Solaris 9 OS, if you are installing PCI-X with a method other than the DVD/DVD0 that came with the hardware use the following section: Solaris 9 OS Installation Options.

Solaris 9 OS Installation Options

To get a system to recognize the new hardware when not installing the OS using DVD/DVD0, perform a network based, Jumpstart install, and then patch the system using one of the following options.

- Add the patch manually
- Modify the Jumpstart process to add the patch automatically
- Create a Flash Archive of a patched system.

Add Patches Manually

1. Create a network installation image from the customer's Solaris 9 9/05 OS Media. Refer to the "Preparing to Install From the Network" chapters of the *Solaris 9 Installation Guide* for instructions.
2. Install Solaris 9 9/05 OS via Jumpstart from this image.
3. After the system boots, install patch 112954-13 or later, and do a reconfiguration reboot.

Create a Jumpstart Finish Script to Add Patch 112954-13 or Later as Part of the Installation Process

1. Create a network installation image from the customer's Solaris 9 9/05 OS Media. Refer to the "Preparing to Install From the Network" chapters of the *Solaris 9 Installation Guide* for instructions.
2. Create a finish script to install patch 112954-13 or later. Refer to the "Adding Packages or Patches With a Finish Script" section of the "Using Optional Custom JumpStart Features" chapter of the *Solaris 9 Installation Guide*.
3. Install Solaris 9 9/05 OS via Jumpstart image which will use the finish script to install patch 112954-13.

Create a Flash Archive of a Patched System

1. Set up a system as described in ["Add Patches Manually" on page 3](#)
2. Use this patched system to create a Flash archive.
3. Use this archive to install Solaris 9 OS on the remaining systems as discussed in the "Solaris Flash (Overview and Planning) chapter of the *Solaris 9 Installation Guide*.

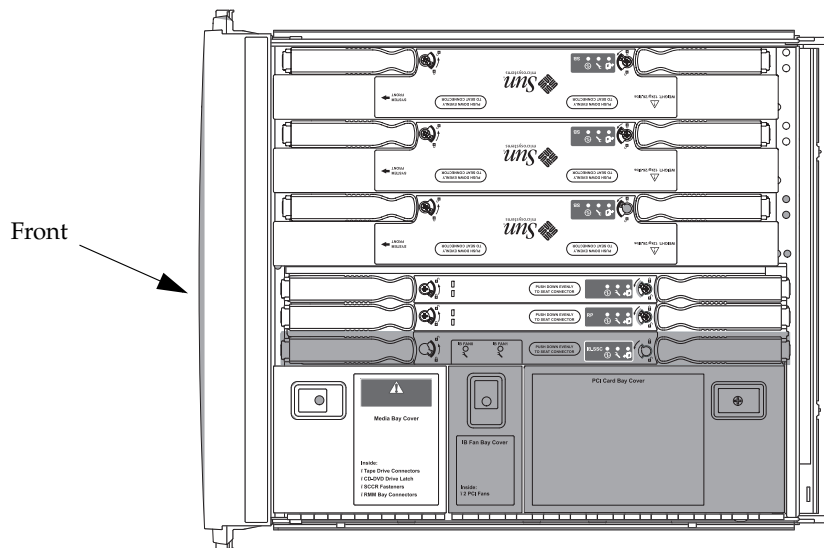
Processor Requirements

PCI-X I/O assemblies are supported in domains with the following processors:

- UltraSPARC III
- UltraSPARC III+
- UltraSPARC IV
- UltraSPARC IV+

Location of I/O Assembly

The I/O assembly (IB6) for these systems is a part of the IB-SSC assembly, as shown in the following illustration.



Removing and Replacing the I/O Assembly

The I/O assembly for these systems (IB6) is part of the IB_SSC assembly. To replace IB6, the IB_SSC assembly must be replaced. Refer to the system service manual for the removal and replacement of the IB_SSC assembly as well as the removal and replacement of any I/O cards you want to retain from the old assembly. Once you have replaced the assembly and re-installed the I/O cards, restart your system.



Caution – Ensure that you remove the plastic covering protecting the connectors on the replacement IB_SSC assembly before installing or damage to the backplane can occur.

Note – Mixing frequencies within an IB6 leaf (two slots) is not recommended because leaf slots run at the lowest speed and the lowest mode for a given set of cards within a leaf. For example, if a 33 MHz PCI card is in slot 0 and a 100 MHz PCI-X card is in slot 1, then both leaf slots will run at the lower 33 MHz PCI speed. IB6 leafs are comprised of paired slots 0 and 1, 2 and 3, and 4 and 5. Refer to the *Sun System Handbook* for PCI card slot layouts.
