IEEE-1394b PCI Express Card installation

Introduction

This document describes how to install an IEEE-1394b PCI Express (PCIe) card in HP Z series workstations.

Kit contents

- IEEE-1394b PCIe card
- Low profile (small) and standard size PCIe card brackets
- External 1394b cable
- SATA power extension cable
- 1394b Unibrain drivers CD
- Warranty information
- Installation instructions

Before you begin

To view QuickSpecs and determine the compatibility of this product with your HP workstation, see http://www.hp.com/go/productbulletin.
Warnings and cautions

⚠️ **WARNING!** Any surface or area of the equipment marked with this symbol indicates the presence of a hot surface or hot component. If this surface is contacted, the potential for injury exists. To reduce the risk of injury from a hot component, enable the surface to cool before touching.

⚠️ **WARNING!** Any surface or area of the equipment marked with this symbol indicates the presence of an electrical shock hazard. To reduce the risk of injury from electrical shock, do not open any enclosed area marked with this symbol.

⚠️ **WARNING!** To reduce the risk of electric shock or damage to your equipment:
- Do not disable the power cord grounding plug. The grounding plug is an important safety feature.
- Plug the power cord in a grounded (earthed) outlet that is easily accessible at all times.
- Disconnect power from the equipment by unplugging the power cord from the electrical outlet.

⚠️ **WARNING!** To reduce the risk of serious injury, read the Safety & Comfort Guide. It describes proper computer setup, posture, health, and work habits for computer users, and provides important electrical and mechanical safety information. This guide is located at [http://www.hp.com/ergo](http://www.hp.com/ergo) and on the documentation CD (if one is included with the product).

⚠️ **WARNING!** If a product is shipped in packaging marked with this symbol, the product must always be lifted by two persons to avoid personal injury due to product weight.

⚠️ **CAUTION:** Static electricity can damage the electronic components of the computer. Before beginning these procedures, be sure you discharge static electricity by briefly touching a grounded metal object.

⚠️ **CAUTION:** To prevent damage to the computer, observe the following Electrostatic Discharge (ESD) precautions while performing the system parts removal and replacement procedures:
- Work on a static-free mat.
- Wear a static strap to ensure that any accumulated electrostatic charge is discharged from your body to the ground.
- Create a common ground for the equipment you are working on by connecting the static-free mat, static strap, and peripheral units to that piece of equipment.

⚠️ **NOTE:** HP accessories are for use in HP computer products. They have been extensively tested for reliability and are manufactured to high quality standards.
Step 1—Preparing for component installation

NOTE: Workstation models vary. All illustrations are examples only.

Download and install updates

1. Check for available system BIOS updates specified for your HP workstation model and operating system at http://www.hp.com/go/workstationsupport.
2. Install the system BIOS updates, if available.

Accessing the internal components of the computer

1. If you need help preparing the computer for this installation, consult the removal and replacement procedures in the service guide for your computer at http://www.hp.com/support/manuals.
2. Power down the computer, and then disconnect the power cord.
3. Power down all external devices, and then disconnect them from the computer.
4. Remove the side access panel.

Removing components

1. Some workstations may have card hold-down supports installed. If any card support is present, remove it for access to the expansion slots and system board connectors.
2. Select an appropriate PCIe expansion slot and remove the slot cover. The IEEE-1394b card may be installed in any unused PCIe expansion slot.

IMPORTANT: For the HP Z210 CMT Workstation, only use PCIe slots 3, 4, or 5 for your 1394b card installation.

For the HP Z210 SFF Workstation, only use PCIe slots 1 or 2 for this installation.

NOTE: To identify PCIe expansion slots, see the service label on the side access panel.

Figure 1 Removing the expansion slot cover
Step 2—Installing the IEEE-1394b card

Small form factor (SFF) platforms such as the HP Z210 SFF Workstation require connection of the low profile bracket onto the 1394b card before installing the card into the PCIe expansion slot. The following illustration shows steps for detaching the standard bracket from the 1394b card and replacing it with the low profile (shorter) bracket.

1. Install the IEEE-1394b card (1) in the selected PCIe expansion slot.
2. Lower the expansion slot retention clamp and close the retention clamp lever (2).

Figure 2 Installing the IEEE-1394b card

Step 3—Configuring the cabling

1. Connect the male end (labeled P1) of the SATA power extension cable to the workstation optical drive power supply, according to the following workstation series:
   - For the HP Z210 CMT Workstation, use the connector labeled P13.
   - For the HP Z210 SFF Workstation, use the connector labeled P5.
   - For the HP Z400 Workstation, use the connector labeled P8.
   - For the HP Z600 and Z800 Workstations, use the connector labeled P5.
2. If the P5 or P8 connectors were used by another optical drive device, connect the center connector (labeled P2) of the SATA power extension cable to the optical disk drive needing power. Route or tie excess cable to ensure it does not interfere with system fans.
3. Connect the other end (labeled P3) of the SATA power extension cable to the power connector on the IEEE-1394b card.

   **Figure 3** Connecting the SATA power extension cable

4. If the 1394 header is not present on the system board, plug the 1394 I/O cable located on the side of the workstation chassis into the 1394b card (1).

   **IMPORTANT:** Do not unplug the front I/O connector from the system board.

   **Figure 4** Connecting the 1394 I/O cable to the 1394b card

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**Step 4—Reassembling the workstation**

1. Reinstall the card support, if applicable.
2. Reinstall the side access panel.
3. Reconnect power to the workstation and all external devices.
4. Restore power to the workstation and all external devices.
This document is available in Japanese. See http://www.hp.com/support/workstation_manuals, then select your workstation product and select Japanese from the drop down Manual Language menu.