Intel® Server Chassis SC5300 PCI Hot Plug Upgrade Kit

Installation Guide

Order Number: C68072-002

Important Safety Instructions

Safety Cautions

Read all caution and safety statements in this document before performing any of the instructions. See also *Intel Server Boards and Server Chassis Safety Information* on the Resource CD and/or at http://support.intel.com/support/motherboards/server/safecert.htm.

Wichtige Sicherheitshinweise

Lesen Sie zunächst sämtliche Warn- und Sicherheitshinweise in diesem Dokument, bevor Sie eine der Anweisungen ausführen. Beachten Sie hierzu auch die Sicherheitshinweise zu Intel-Serverplatinen und -Servergehäusen unter http://support.intel.com/support/motherboards/server/safecert.htm.

重要安全指导

在执行任何指令之前，请阅读本文档中的所有注意事项及安全声明。和/或 http://support.intel.com/support/motherboards/server/safecert.htm 上的 *Intel Server Boards and Server Chassis Safety Information*（《Intel 服务器主板与服务器机箱安全信息》）。

Consignes de sécurité

Lisez attention toutes les consignes de sécurité et les mises en garde indiquées dans ce document avant de suivre toute instruction. Consultez *Intel Server Boards and Server Chassis Safety Information* sur le site http://support.intel.com/support/motherboards/server/safecert.htm.

Instrucciones de seguridad importantes

Lea todas las declaraciones de seguridad y precaución de este documento antes de realizar cualquiera de las instrucciones. Vea *Intel Server Boards and Server Chassis Safety Information* en en http://support.intel.com/support/motherboards/server/safecert.htm.

⚠ Warnings

System power on/off: The power button DOES NOT turn off the system AC power. To remove power from system, you must unplug the AC power cord from the wall outlet. Make sure the AC power cord is unplugged before you open the chassis, add, or remove any components.

Hazardous conditions, devices and cables: Hazardous electrical conditions may be present on power, telephone, and communication cables. Turn off the server and disconnect the power cord, telecommunications systems, networks, and modems attached to the server before opening it. Otherwise, personal injury or equipment damage can result.

Electrostatic discharge (ESD) and ESD protection: ESD can damage disk drives, boards, and other parts. We recommend that you perform all procedures in this chapter only at an ESD workstation. If one is not available, provide some ESD protection by wearing an antistatic wrist strap attached to chassis ground any unpainted metal surface on your server when handling parts.

ESD and handling boards: Always handle boards carefully. They can be extremely sensitive to ESD. Hold boards only by their edges. After removing a board from its protective wrapper or from the server, place the board component side up on a grounded, static free surface. Use a conductive foam pad if available but not the board wrapper. Do not slide board over any surface.

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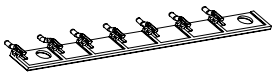
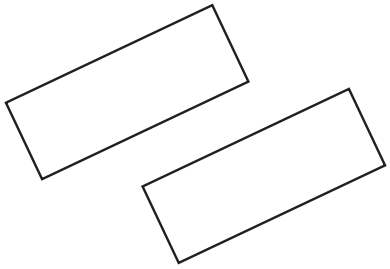
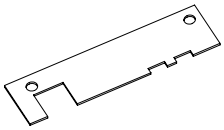
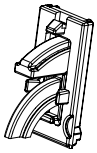
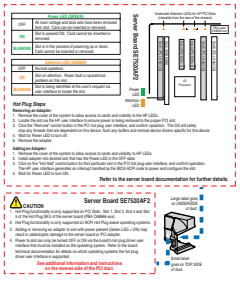
About the PCI Hot Plug Upgrade Kit

The PCI Hot Plug Upgrade Kit that is used in the Intel® Server Chassis SC5300 when the chassis is used with the hot plug version of the Intel® Server Board SE7520AF2. This kit is not a requirement for neither the server chassis nor the server board. It is an accessory that enhances the server system by providing external LEDs to indicate a failure has occurred with one of the hot plug PCI cards.

The LED Light Pipe clear plastic panel that is included with your kit must be installed beneath the server board. If your server system is already assembled, you must remove several components and the server board to install this kit. This document assumes the kit is being installed into a new server chassis as part of the initial integration steps. Therefore, this document does not provide instructions on removing the chassis cover, the server board, or other components.

Kit Contents

The PCI Hot Plug Upgrade Kit comes with the following:[1]

One light pipe	
Two insulating curtains	 TP00820
One insulating rug	
Four green rocker switches	
Two labels on one sheet	
These instructions	

[1] Drawings are not to scale.

Hot Plug PCI Upgrade Kit Installation Procedures

Before You Begin

Before working with your server product, pay close attention to the safety instructions at the beginning of this manual.

Tools and Supplies Needed

Phillips* (cross head) screwdriver

System References

All references to left, right, front, top, and bottom and are based on the reader facing the front of the chassis as it would be positioned for normal operation.

Inserting the Light Pipe

Place the light pipe so that the two holes fit over the two installed standoffs next to the PCI slots. The flat surface of the light pipe must be against the right side of the chassis, with the hooks extending into the slots at the rear of the chassis. See Figure 1, letter A for the position of the installed light pipe.

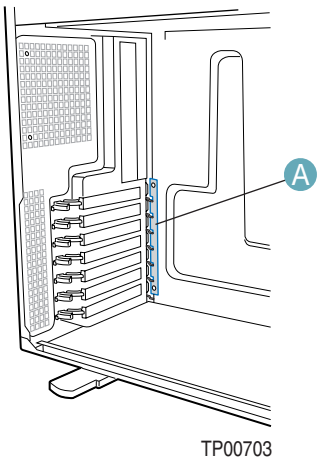


Figure 1. Installed Light Pipe

Inserting the Server Board

Install the Server Board SE7520AF2 into the chassis, according to the instructions provided with the server board. Position the server board on top of the light pipe, but do not insert the screws that attach the board to the chassis. See Figure 2.

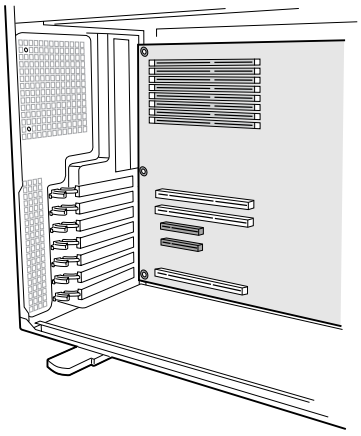


Figure 2. Server Board Positioned on Top of Light Pipe

Installing the PCI Hot Plug Rug and Curtains

1. Place the PCI hot plug rug on the top of the server board, over the two installed standoffs at the right, bottom edge of the chassis. The cut-out side of the rug fits around the PCI slots. See letter A in Figure 3 for the placement of the PCI Hot Plug Rug.
2. Install the screws that came with your chassis to secure the server board to the chassis, following the instructions in your server board documentation. Insert screws over the PCI hot plug rug to secure it to the server board. See letter B in the figure below.

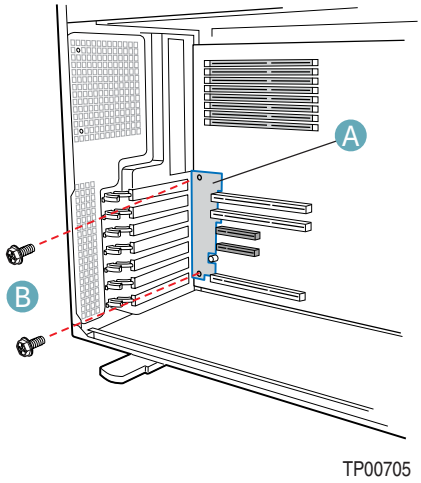


Figure 3. PCI Hot Plug Rug Placement

3. Place the PCI hot plug curtains along the side of the power supply, next to the chassis wall for easy access.

Installing the PCI Adapter Hot Plug Rocker Switches

Your server chassis includes seven blue rocker switches at the rear of the chassis. The top rocker switch is not used. The second rocker switch from the top is counted as PCI slot 6.

1. Open PCI rocker switches 1, 3, 4, and 5. To open the switches, press down on the latch on the inside of the chassis to pull the rocker switch open from the exterior.
2. Pry each opened switch from the chassis by pulling out on them near the hinged edge at the exterior of the chassis and by pressing in on the small tabs at the inside of the chassis. See Figure 4 to identify the rocker switches to replace.

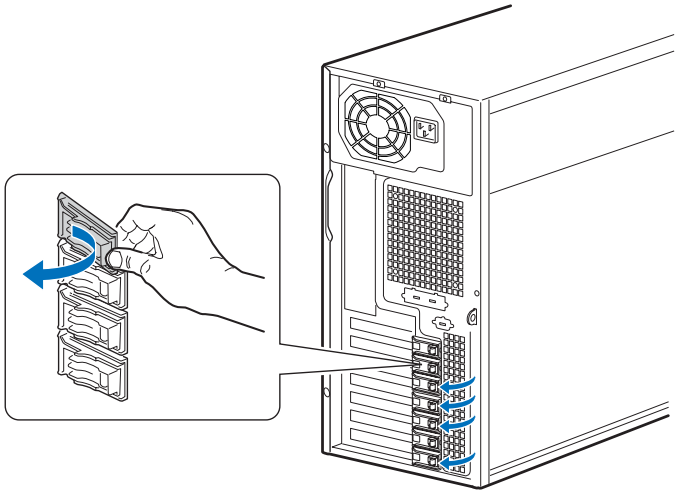


Figure 4. Replacing PCI Adapater Hot Plug Rocker Switches

NOTE

Do not remove the blue rocker switches from slots 2 or 6.

3. Install the green rocker switches to replace the blue switches you removed from slots 1, 3, 4, and 5. Place each rocker switch into an opening and press it firmly into place.

Installing the PCI Hot Plug PCI Air Duct Labels

1. See your server chassis documentation for instructions on removing the PCI air duct from the chassis.
2. Install the smaller of the two labels on the TOP of the PCI air duct.
3. Install the larger label on the underside of the PCI air duct.

Replacing a PCI Card in a Hot Plug Slot

Use the PCI hot plug curtains when removing or adding a PCI card from a hot-plug slot in a live (powered on) system. The curtains shield the card being removed / replaced from adjoining cards to prevent shorting out a PCI card or your server board.

WARNING

Only PCI slots 1, 3, 4, and 5 are hot pluggable. These slots are indicated by the green rocker switches at the rear of the chassis. Do not attempt to insert or remove a PCI card from slot 6 without first powering down the server system and removing the AC power cord.

You must first remove the Hot Plug PCI slot from service before attempting to remove or insert a card from/into the slot. Failure to remove the slot from service before removing or installing the card may result in irreversible damage to the PCI card and / or to your server board. Use the Hot Plug Driver utility available from your operating system to remove the slot from service.

When removing or installing a PCI card into a live system, do not allow the PCI card to touch any other board or component in the system. Contact with another board or component may cause an electrical shortage.

1. If the server is powered on, use the Hot Plug Driver utility available from your operating system to remove the slot from service. Failure to remove the slot from service may result in irreversible damage to the PCI card and / or to your server board.
2. Open the server chassis and remove the PCI air duct. See your server chassis documentation for instructions on opening the server and removing the PCI air duct.
3. Place the PCI hot plug curtains on each side of the PCI card to be removed. In Figure 5, letter A is the card to be removed and letter B indicates the two curtains.

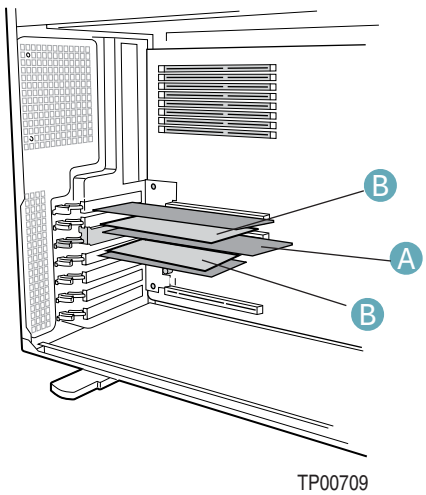


Figure 5. Handling PCI Card with Curtains

4. If you are removing or installing a full-length card, remove the PCI Add-in Card Retainer. See letter A in Figure 6 to identify the latches to press to remove the retainer.
5. On the inside of the chassis, push down on the latch on the green PCI hot plug rocker switch to release the PCI card from the slot. See letter B in Figure 6.

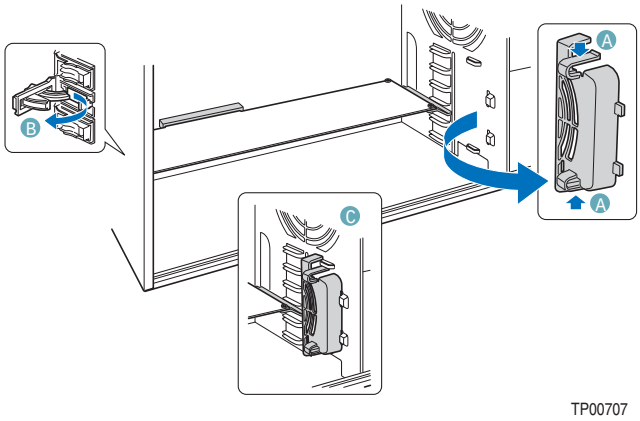


Figure 6. Removing PCI Add-in Card Retainer

6. With the curtains preventing the PCI card from contacting cards on either side of it, remove the PCI card from the server system.
7. Insert the new or replacement PCI card between the curtains. Insert the edge connector of the PCI card in the slot on the PCI riser.
8. Press down firmly on the PCI card until it is fully seated.
9. Push the rocker switch up, locking the PCI card into place.
10. If you needed to remove the PCI Add-in card retainer to remove or install a full-length card, reinstall it. See letter C in Figure 6 to see what the installed retainer looks like.
11. Store the PCI Curtains inside the chassis, along the side of the power supply for easy access.
12. Install the PCI air duct and close the server chassis. See your server chassis documentation for instructions on installing the air duct and closing the chassis.