Front Panel Board Installation Guide for Intel[®] Server Chassis/System

Order Number: G29908-001



This document provides instructions for installing the following spare:

Disclaimer

Information in this document is provided in connection with Intel[®] products. No license, express or implied, by estoppel or otherwise, to any intellectual property rights is granted by this document. Except as provided in Intel's Terms and Conditions of Sale for such products, Intel assumes no liability whatsoever, and Intel disclaims any express or implied warranty, relating to sale and/or use of Intel® products including liability or warranties relating to fitness for a particular purpose, merchantability, or infringement of any patent, copyright or other intellectual property right. Intel products are not designed, intended or authorized for use in any medical, life saving, or life sustaining applications or for any other application in which the failure of the Intel product could create a situation where personal injury or death may occur. Intel may make changes to specifications and product descriptions at any time, without notice.

Intel® server boards contain a number of high-density VLSI and power delivery components that need adequate airflow for cooling. Intel's own chassis are designed and tested to meet the intended thermal requirements of these components when the fully integrated system is used together. It is the responsibility of the system integrator that chooses not to use Intel developed server building blocks to consult vendor datasheets and operating parameters to determine the amount of airflow required for their specific application and environmental conditions. Intel Corporation can not be held responsible if components fail or the server board does not operate correctly when used outside any of their published operating or non-operating limits.

Intel, Intel Pentium, and Intel Xeon are trademarks or registered trademarks of Intel Corporation or its subsidiaries in the United States and other countries.

* Other names and brands may be claimed as the property of others.

Copyright © 2011 Intel Corporation. All Rights Reserved

Important Safety Instructions

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 *Intel*[®] *Server Deployment Toolkit CD* and/or at http://www.intel.com/support/motherboards/server/sb/cs-010770.htm.

Wichtige Sicherheitshinweise

Lesen Sie zunächst sämtliche Warnund Sicherheitshinweise in diesem Dokument, bevor Sie eine der Anweisungen ausführen. Beachten Sie hierzu auch die Sicherheitshinweise zu Intel®-Serverplatinen und Servergehäusen auf der Intel® Server Deployment Toolkit CD oder unter http://www.intel.com/support/motherboards/server/sb/cs-010770.htm.

重要安全指导

在执行任何指令之前,请阅读本文件中的所有注意事项及安全声明。并参阅 http://www.intel.com/support/motherboards/server/sb/cs-010770.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 *Intel*® *Server Deployment Toolkit CD* ou bien rendezvous sur le site http://www.intel.com/support/motherboards/server/sb/cs-010770.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 el *Intel*[®] *Server Deployment Toolkit CD* y/o en http://www.intel.com/support/motherboards/server/sb/cs-010770.htm.

Warnings

Heed safety instructions: Before working with your server product, whether you are using this guide or any other resource as a reference, pay close attention to the safety instructions. You must adhere to the assembly instructions in this guide to ensure and maintain compliance with existing product certifications and approvals. Use only the described, regulated components specified in this guide. Use of other products / components will void the UL listing and other regulatory approvals of the product and will most likely result in noncompliance with product regulations in the region(s) in which the product is sold.

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.

Installing or removing jumpers: A jumper is a small plastic encased conductor that slips over two jumper pins. Some jumpers have a small tab on top that you can grip with your fingertips or with a pair of fine needle nosed pliers. If your jumpers do not have such a tab, take care when using needle nosed pliers to remove or install a jumper; grip the narrow sides of the jumper with the pliers, never the wide sides. Gripping the wide sides can damage the contacts inside the jumper, causing intermittent problems with the function controlled by that jumper. Take care to grip with, but not squeeze, the pliers or other tool you use to remove a jumper, or you may bend or break the pins on the board.

Table of Contents

Front Panel B	Board Installation Guide	1
About the Fro	ont Panel Board	1
	Begin	
	ipplies Needed	
Front Panel E	Board Replacement Instruction	2
1.	Power Down Chassis	2
2.	Remove the Chassis Cover	2
3.	Remove the Front Bezel Assembly	3
4.	Replace the Front Panel Board	2
5.	Reinstall the Front Bezel Assembly	7
6.	Reinstall the Chassis Cover	8
7.	Complete Setup	8

List of Figures

Figure 1. Removing the Chassis Cover	3
Figure 2. Removing the Front Bezel Assembly	
Figure 3. Disconnecting the Cables from the Server Board	
Figure 4. Sliding the Front Panel Tray out from the Chassis	
Figure 5. Disconnecting the Cables from Front Panel Board	
Figure 6. Removing the Front Panel Board	
Figure 7. Removing and Installing the Cap on Front Panel Board	
Figure 8. Installing the New Front Panel Board	
Figure 9. Connecting the Cables to the New Front Panel Board	
Figure 10. Installing the Front Panel Tray in Chassis	
Figure 11. Reconnecting the Cables to Server Board	
Figure 12. Installing the Front Bezel	
Figure 13. Installing the Chassis Cover	

Front Panel Board Installation Guide

About the Front Panel Board

Use the instructions in this Front Panel Board Installation Guide to replace front panel board for your Intel® server chassis and server system. Refer to web link below for compatible Intel® chassis and system list http://www.intel.com/support/motherboards/server/sb/CS-030726.htm.

NOTE

This installation guide applies only to the front panel board installations of the Intel[®] Server Chassis P4000 family and their compatible systems.

Before You Begin

Before removing the access cover for any reason, observe these safety guidelines.

- 1. Turn off any peripheral devices connected to the server.
- 2. Turn off the server by pressing the power button on the front of the chassis.
- 3. Unplug the AC power cord from the chassis or wall outlet.
- 4. Label and disconnect all peripheral cables connected to I/O connectors or ports on the back of the chassis.
- 5. Label and disconnect all telecommunication lines connected to I/O connectors or ports on the back of the chassis.
- 6. Provide electrostatic discharge (ESD) protection by wearing an anti-static wrist strap attached to a chassis ground—any unpainted metal surface—when handling components.

Tools and Supplies Needed

- Phillips* (cross head) screwdriver
- Anti-static wrist strap (recommended)

Front Panel Board Replacement Instruction

Your server must be operated with a front panel board installed.



CAUTION

The front panel board is NOT hot-swappable. Before removing or replacing the front panel board, you must first take the server out of service, turn off all peripheral devices connected to the system, turn off the system by pressing the power button, and unplug the AC power cord from the system or wall outlet.

1. Power Down Chassis

- 1. Observe the safety and ESD precautions at the beginning of this manual.
- 2. Turn off all peripheral devices connected to the server. Turn off the server.
- 3. Disconnect the AC power cord.

2. Remove the Chassis Cover

To remove the chassis cover:

- 1. Remove the screws (see letter **A** in Figure 1).
- 2. Slide the side cover back (see letter **B** in Figure 1) and lift the cover outward to remove it.

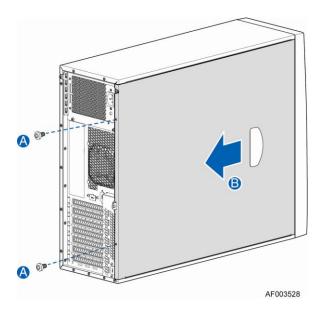


Figure 1. Removing the Chassis Cover

3. Remove the Front Bezel Assembly

NOTE

For a rack configuration or chassis on its side, position the chassis hanging over the edge of a table or workbench before removing the bezel.

To remove the front bezel assembly:

- 1. Release the two plastic tabs on the left side of the bezel assembly to disengage the tabs, and rotate the bezel assembly (see letter **A** in Figure 2) no more than 40 degrees outward.
- 2. At a 40-degree angle, push the bezel assembly away from the chassis (see letter **B** in Figure 2).
- 3. If the bezel assembly does not immediately disconnect from the chassis, tap the left-hand side of the bezel assembly to disengage the bezel hooks on the right-hand side of the chassis.



Do not rotate the bezel assembly more than 40 degrees or you will damage the bezel hooks on the right-hand side of the bezel assembly.

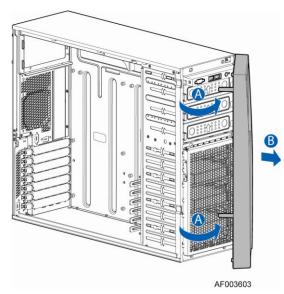


Figure 2. Removing the Front Bezel Assembly

4. Replace the Front Panel Board

1. Disconnect the front panel cable, USB cable from the server board.

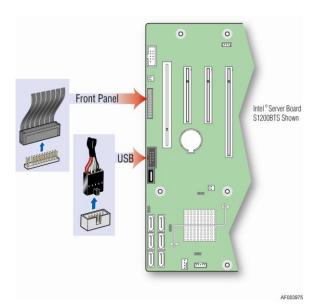


Figure 3. Disconnecting the Cables from the Server Board

- 2. Loose the front panel cable and USB cable from the wire clip on chassis.
- 3. Press the latch at the sides of the front panel (see letter **A** in Figure 4). And carefully slide the front panel (see letter **B** in Figure 4) out from the front of the chassis to the place (see letter **C** in Figure 5) so that you can reach the front panel and intrusion switch connectors at the rear of the front panel board. Then disconnect the front panel cable and intrusion switch cable from the front panel board (see letter **D** in Figure 5).

A CAUTION

Do not slide the front panel out far from the front of the chassis before you disconnect the cables from the front panel board.

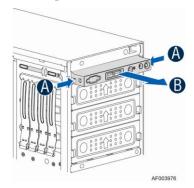


Figure 4. Sliding the Front Panel Tray out from the Chassis

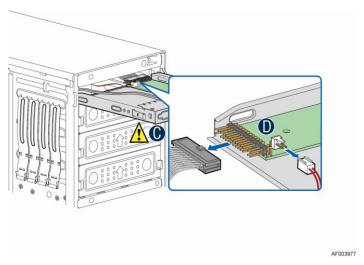


Figure 5. Disconnecting the Cables from Front Panel Board

4. Slide the front panel out far enough so that you can loosen the screw (see letter **A** in Figure 6) securing the front panel board and remove the front panel board (see letter **B** in Figure 6).

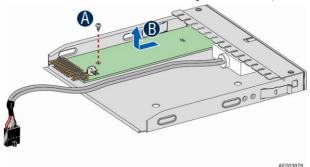


Figure 6. Removing the Front Panel Board

5. Remove the cap on the front panel board power LED and install the cap on the new front panel board.

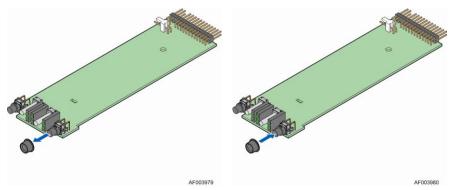


Figure 7. Removing and Installing the Cap on Front Panel Board

6. Attach the new front panel board in the front panel tray (see letter **A** in Figure 8) and secure the new front panel board with the screw (see letter **B** in Figure 8).

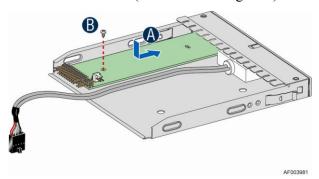


Figure 8. Installing the New Front Panel Board

7. Attach the front panel cable and the chassis intrusion cable (see letter **A** in figure 9) to the new front panel board. Slide the front panel tray in chassis (see letter **B** in figure 10).

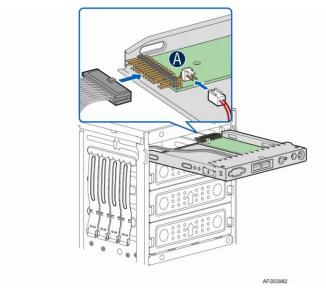


Figure 9. Connecting the Cables to the New Front Panel Board

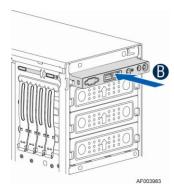


Figure 10. Installing the Front Panel Tray in Chassis

8. Reconnect the front panel and USB cables to server board.

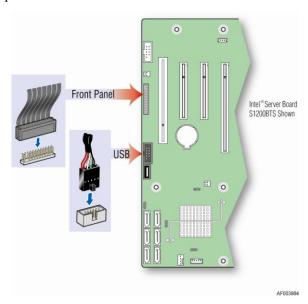


Figure 11. Reconnecting the Cables to Server Board

5. Reinstall the Front Bezel Assembly

- 1. Fit the right edge of the bezel assembly against the right side of the chassis.
- 2. Engage the plastic bezel hooks (see letter **A** in Figure 12) into the raised metal slots at the chassis edge.
- 3. Rotate the bezel assembly toward the chassis.
- 4. Latch the two plastic tabs (see letter **B** in Figure 12) on the left side of the bezel assembly to the chassis.

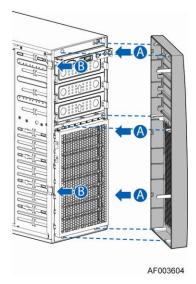


Figure 12. Installing the Front Bezel

6. Reinstall the Chassis Cover

- 1. Slide the chassis cover on the chassis (see letter **A** in Figure 13).
- 2. Latch the cover securely to the chassis.
- 3. Secure the chassis cover with the screws (see letter **B** in Figure 13).

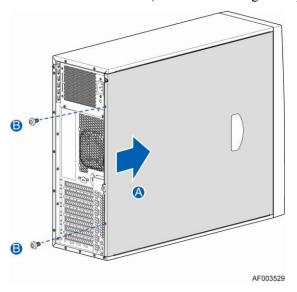


Figure 13. Installing the Chassis Cover

7. Complete Setup

- 1. Reconnect all peripheral devices and the AC power.
- 2. Power up the server.