Local Control Panel Kit Install Guide: Intel® Entry Server Chassis SC5275-E UP/DP/WS/BRP Intel® Entry Server Chassis SC5299-E DP/WS/BRP Intel® Server Chassis SC5300 Intel® Server Chassis SC5400

A Guide for Technically Qualified Assemblers of Intel® Identified Subassemblies/Products

Intel Order Number: C77420-002



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Safety Information

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://support.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://support.intel.com/support/motherboards/server/sb/cs-010770.htm.

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://support.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://support.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》)。

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.

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1 Local Control Panel Kit Installation Instructions

Use the instructions in this installation guide to install a Local Control Panel display on an Intel® Server Chassis SC5300, Intel® Server Chassis SC5400, Intel® Entry Server Board SC5275-E or Intel® Entry Server Chassis SC5299-E.

Note: For the Local Control Panel to function properly on an Intel® server board, you will need to install an Intel® Management Module on the server board.

Note: The Local Control Panel is designed for use with a pedestal-configured chassis. It is not intended for use on chassis in a rack-mount configuration.

Before You Begin

Before converting your system to a rack mount configuration, observe these safety guidelines:

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

Kit Content List

Each Local Control Panel Kit contains the following:

- Local Control Panel (LCP)
- LCP cable, pre-installed on LCP board
- · EMI shield
- Grill work for Intel® Server Chassis SC5300/SC5400
- Screws:
 - Fastener "A"
 - Fastener "CD"
 - Fastener "FDU"

Tools and Supplies Needed

- Phillips* (cross head) screwdriver (#1 bit and #2 bit)
- Anti-static wrist strap and conductive foam pad (recommended)

System References

All references to left, right, front, top, and bottom assume the reader is facing the front of the chassis as it would be positioned for rack-mount operation.

Installation Instructions for Intel® Server Chassis SC5300/ SC5400

Note: This section only applies to Local Control Panel kit installations for the Intel® Server Chassis SC5300/SC5400. If you are installing a Local Control Panel kit into an Intel® Entry Server Chassis SC5275-E, follow the instructions under "Installation Instructions for Intel® Entry Server Chassis SC5275-E" on page 12. If you are installing a Local Control Panel kit into an Intel® Entry Server Chassis SC5299-E, follow the instructions under "Installation Instructions for Intel® Entry Server Chassis SC5299-E" on page 19.

Remove Access Cover

- 1. Unplug all power and peripheral cables from the chassis.
- 2. If necessary, remove shipping screw from the back of the chassis cover (see letter "A" in the following figure). Release latch (see letter "B") and remove access cover.

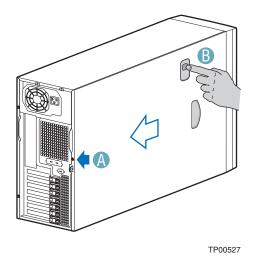


Figure 1. Removing Access Cover

Remove Bezel Assembly

Release the two plastic tabs (see letter "A" in the following figure) on the left side of the bezel assembly to disengage the tabs. Rotate the bezel assembly (see letter "B") no more than 40 degrees outward. At a 40-degree angle, push the bezel assembly away from the chassis (see letter "C"). If the bezel assembly does not immediately disconnect from the chassis then tap the left-hand side of the bezel assembly to disengage the bezel hooks on the right-hand side of the chassis.

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

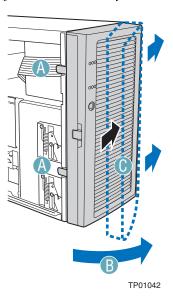


Figure 2. Removing Bezel Assembly

Remove Outer Bezel Door from Bezel Assembly

Note: The bezel assembly consists of two parts, an inner bezel door and an outer bezel door.

With one hand supporting the inner bezel door, use your other hand to push the outer bezel door away from the inner bezel door. The outer bezel door will disengage from the inner bezel door at the four hinges (see letter "A" in the following figure).

Caution: Only open the outer bezel door slightly (about 20 degrees) before removing it. Opening the outer bezel door all the way before removing may break the hinges.

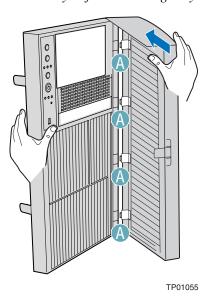


Figure 3. Removing Outer Bezel Door from Bezel Assembly

Remove Upper Third of Bezel Grill

Remove the upper one-third of the bezel grill by pushing grill forward.

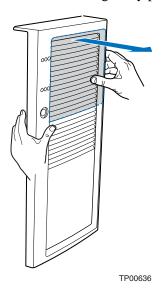


Figure 4. Removing Upper One-third of Bezel Grill

Install LCP Grill

Install new LCP grill into outer bezel door by pressing grill in from the front.

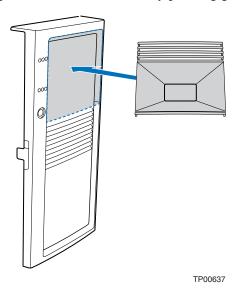
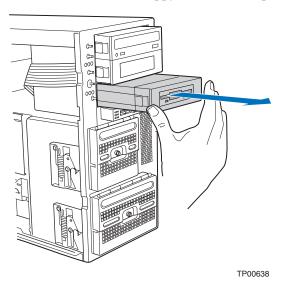


Figure 5. Installing LCP Grill

Remove Lowest CD-ROM/DVD Drive Filler Panel

Remove the lowest CD-ROM/DVD/Floppy drive or filler panel from chassis.



Note: Removal of CD-ROM drive shown.

Figure 6. Removing Lowest Floppy/CD-ROM/DVD Drives or Filler Panel

Install EMI Shield onto LCP Carrier

Your backplane board shipped with an EMI shield that has to be installed. Install the EMI shield by aligning the middle tooth (see letter "A" in the following figure) with the indentation in the side of the LCP carrier.

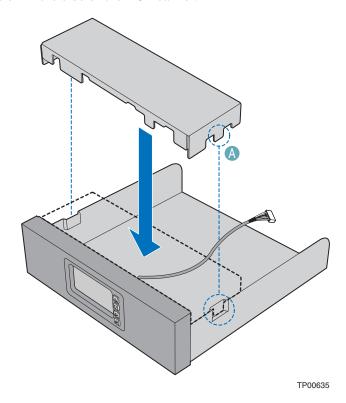


Figure 7. Installing EMI Shield on LCP Carrier

Inserting LCP Carrier into Drive Bay of Server Chassis

1. Attach drive rails to LCP carrier using the top set of holes.

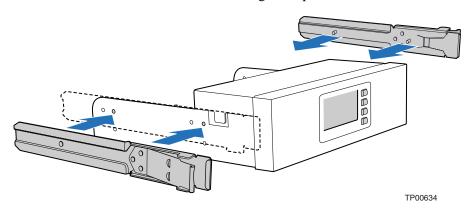


Figure 8. Attaching Drive Rails to LCP Carrier

2. Feed the LCP cable through the drive bay opening. Slide LCP carrier into server chassis. Make sure that the drive rails are using the correct slots in the chassis.

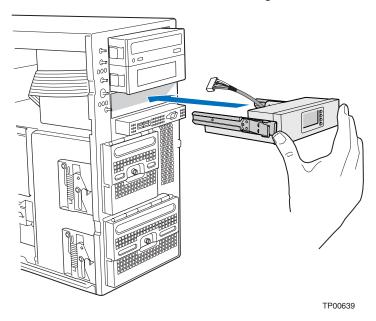
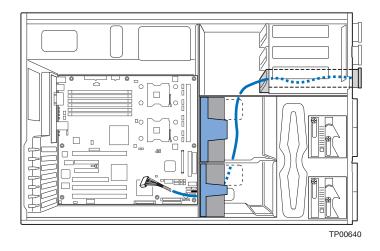


Figure 9. Installing LCP Carrier

Route LCP Cable

Route the LCP cable under the chassis fan area (along side the floppy and IDE cables) to the corner of the server board where the LCP header is located on your Intel® server board.



Note:Intel® Server Board SE7520BD2 is shown.

Figure 10. Routing the LCP Cable

Connect LCP Cable to LCP Header of Server Board

- 1. Connect the LCP cable to the LCP header on the server board.
- 2. For an Intel Server Board SE7520AF2, use header J1J1 on the server board.

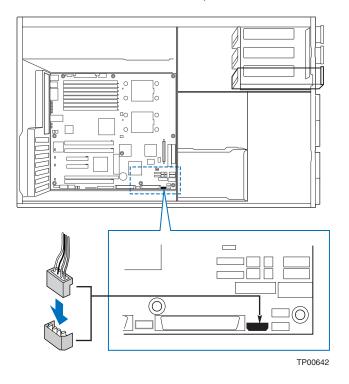
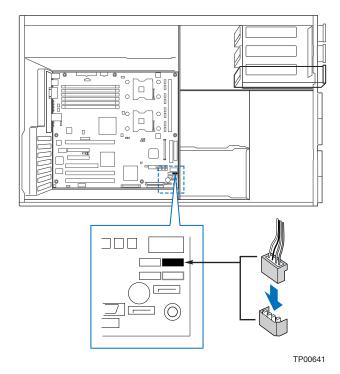


Figure 11. Attaching LCP Cable to Header on Intel® Server Board SE7520AF2



3. For an Intel Server Board SE7520BD2, use header J2K8 on the server board.

Figure 12. Attaching LCP Cable to Header on Intel® Server Board SE7520BD2

Replace Bezel Assembly

Fit the right-hand side of the inner bezel door against the right-hand side of chassis and engage plastic bezel hooks (see letter "A" in the following figure) into raised metal slots at chassis edge. Rotate inner bezel door inward (see letter "B") and latch the two plastic tabs (see letter "C") to left-hand side of chassis. Attach outer bezel door by aligning hinges with the right-hand side of inner bezel door and snapping into place.

Caution: Do not attach inner bezel door to chassis at more than a 40-degree angle or you may damage the bezel hooks at the right-hand side of the door.

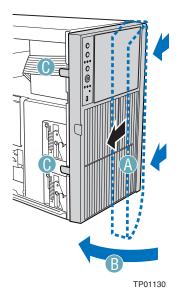
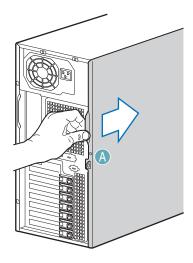


Figure 13. Installing Inner Bezel Door

Replace Access Cover

Replace access cover and slide forward to secure cover to chassis. Replace shipping screw (see letter "A" in the following figure) if desired.



TP01000

Figure 14. Replacing Access Cover

Installation Instructions for Intel® Entry Server Chassis SC5275-E

Note: This section only applies to Local Control Panel kit installations for the Intel® Entry Server Chassis SC5275-E. If you are installing a Local Control Panel kit into an Intel® Server Chassis SC5300/SC5400, follow the instructions under "Installation Instructions for Intel® Server Chassis SC5300/SC5400" on page 2. If you are installing a Local Control Panel kit into an Intel® Entry Server Chassis SC5299-E, follow the instructions under "Installation Instructions for Intel® Entry Server Chassis SC5299-E" on page 19.

Remove Access Cover

When your chassis is upright (in a tower/pedestal position), and you are facing the front of it, the access cover is on the left side.

To remove the Access Cover:

- 1. Power the system off and disconnect the power cord.
- 2. If the shipping screws are installed, remove both shipping screws (see letter "A" in the following figure).
- 3. Slide the two thumb latches (see letter "B") to the OPEN position.
- 4. Slide the access cover rearward and lift to remove (letter "C").

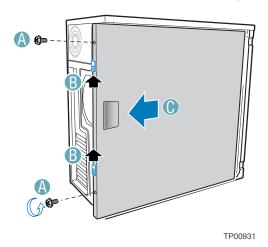


Figure 15. Removing Access Cover

Remove Bezel

To remove the bezel:

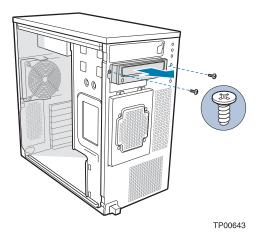
- 1. Disengage the two bezel tabs (see letter "A" in the following figure) from the chassis.
- 2. Rotate the left side of bezel outward slightly (see letter "B").
- 3. Disengage the latches that attach the right side of the bezel to the chassis and remove (see letter "C").



Figure 16. Removing Bezel

Remove Lowest CD-ROM/DVD Drive Filler Panel

Remove the lowest CD-ROM/DVD/floppy drive or filler panel from chassis.



Note: Removal of CD-ROM drive shown.

Figure 17. Removing Lowest Floppy/CD-ROM/DVD Drives or Filler Panel

Install EMI Shield onto LCP Carrier

Your backplane board shipped with an EMI shield that has to be installed. Install the EMI shield by aligning the middle tooth (see letter "A" in the following figure) with the indentation in the side of the LCP carrier.

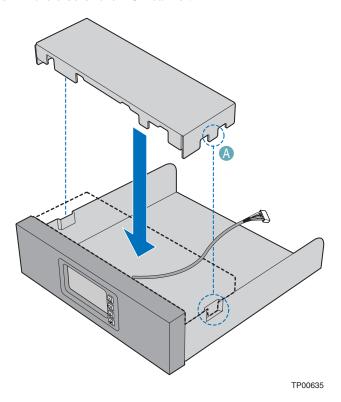


Figure 18. Installing EMI Shield on LCP Carrier

Inserting LCP Carrier into Drive Bay of Server Chassis

1. Install the drive rails by attaching each rail with two screws to the two lower holes on each side of the LCP carrier. Use the F holes on the drive rails.

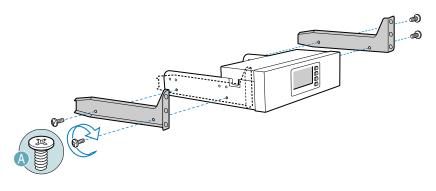


Figure 19. Installing Drive Rails to LCP Carrier

2. Feed the cable in first. Slide the LCP carrier into desired 5.25-in drive bay and secure with two screws to the front of chassis.

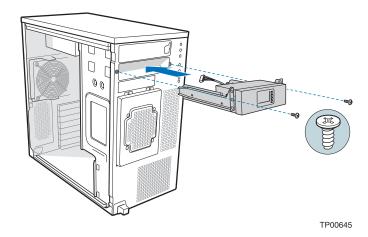


Figure 20. Inserting LCP Carrier into Drive Bay

Route LCP Cable

Route the LCP cable to the corner of the server board where the LCP header is located on your Intel® Server Board SE7520AF2 or Intel® Server Board SE7520BD2.

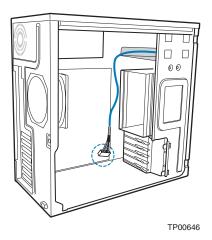


Figure 21. Routing LCP Cable in Intel® Entry Server Chassis SC5275-E

Connect LCP Cable to LCP Header on Server Board

- 1. Connect the LCP cable to the LCP header on the server board.
- 2. For an Intel® Server Board SE7520AF2, use header J1J1 on the server board.

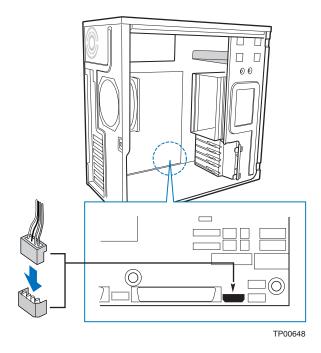
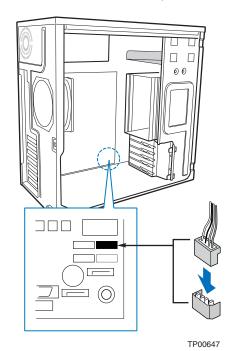


Figure 22. Attaching LCP Cable to Header on Intel® Server Board SE7520AF2



3. For an Intel® Server Board SE7520BD2, use header J2K8 on the server board.

Figure 23. Attaching LCP Cable to Header on Intel® Server Board SE7520BD2

Replace Bezel

- 1. If necessary, remove filler panel from bezel that corresponds to the position of the LCP carrier.
- 2. Engage the three clips (see letter "A" in the following figure) at the right edge of the bezel with the corresponding latches on the right side of the chassis.
- 3. Rotate the left side of bezel towards the chassis (see letter "B").

4. Snap the two bezel tabs (see letter "C") into their corresponding recesses at left edge of chassis.

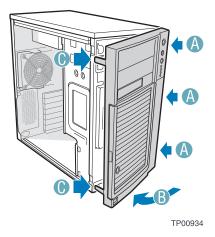


Figure 24. Installing Bezel

Replace Access Cover

To replace the access cover:

- 1. Position access cover on chassis (see letter "A" in the following figure).
- 2. Slide the two thumb latches (see letter "B") to the CLOSED position.
- 3. (optional) Replace shipping screws (see letter "C").

Caution: This chassis must be operated with the access cover installed to ensure proper cooling.

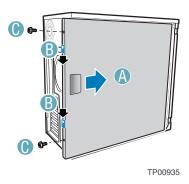


Figure 25. Replacing Access Cover

Installation Instructions for Intel® Entry Server Chassis SC5299-E

Note: This section only applies to Local Control Panel kit installations for the Intel® Entry Server Chassis SC5299-E. If you are installing a Local Control Panel kit into an Intel® Server Chassis SC5300/SC5400, follow the instructions in "Installation Instructions for Intel® Server Chassis SC5300/SC5400" on page 2. If you are installing a Local Control Panel kit into an Intel® Entry Server Board SC5275-E, follow the instructions in "Installation Instructions for Intel® Entry Server Chassis SC5275-E" on page 12.

Remove Access Cover

When your chassis is upright (in a tower/pedestal position), and you are facing the front of it, the access cover is on the left side.

To remove the Access Cover:

- 1. Power the system off and disconnect the power cord.
- 2. If the shipping screws are installed, remove both shipping screws (see letter "A" in the following figure).
- 3. Slide the two thumb latches (see letter "B") to the OPEN position.
- 4. Slide the access cover rearward and lift to remove (letter "C").

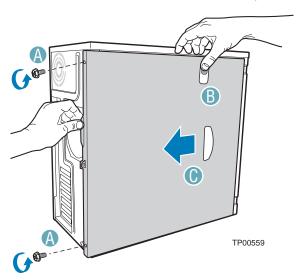


Figure 26. Removing Access Cover

Remove Bezel

To remove the bezel:

1. Disengage the two bezel tabs (see letter "A" in the following figure) from the chassis.

- 2. Rotate the left side of bezel outward slightly (see letter "B").
- 3. Disengage the latches that attach the right side of the bezel to the chassis and remove (see letter "C").

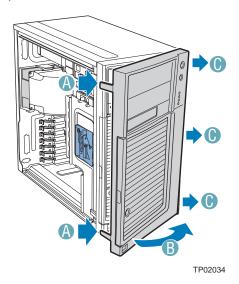
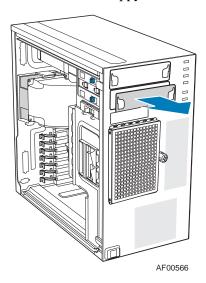


Figure 27. Removing Bezel

Remove Lowest CD-ROM/DVD Drive Filler Panel

Remove the lowest CD-ROM/DVD/floppy drive or filler panel from chassis.



Note: Removal of CD-ROM drive shown.

Figure 28. Removing Lowest Floppy/CD-ROM/DVD Drives or Filler Panel

Install EMI Shield onto LCP Carrier

Your backplane board shipped with an EMI shield that has to be installed. Install the EMI shield by aligning the middle tooth (see letter "A" in the following figure) with the indentation in the side of the LCP carrier.

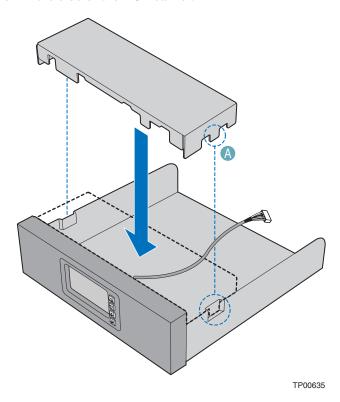


Figure 29. Installing EMI Shield on LCP Carrier

Inserting LCP Carrier into Drive Bay of Server Chassis

Slide the LCP carrier into the desired 5.25-in drive bay. Feed the cable in first.

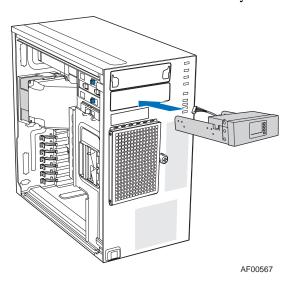


Figure 30. Inserting LCP Carrier into Drive Bay

Route LCP Cable

Route the LCP cable to the corner of the server board where the LCP header is located on your Intel® Server Board S5000VSA, Intel® Server Board S5000PSL or Intel® Server Board S5000XVN.

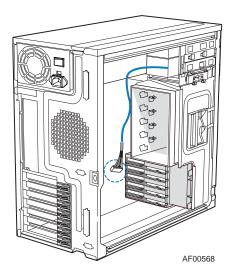


Figure 31. Routing LCP Cable

Connect LCP Cable to LCP Header on Server Board

- 1. Connect the LCP cable to the LCP header on the server board.
- 2. For an Intel® Server Board S5000VSA, use header J1J6 on the server board.

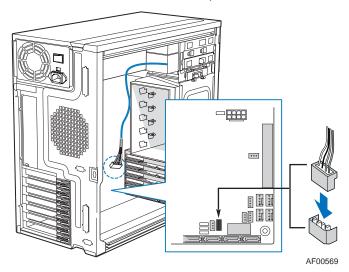


Figure 32. Attaching LCP Cable to Header on Intel® Server Board S5000VSA

3. For an Intel® Server Board S5000PSL or Intel® Server Board S5000XVN, use header J2J1 on the server board.

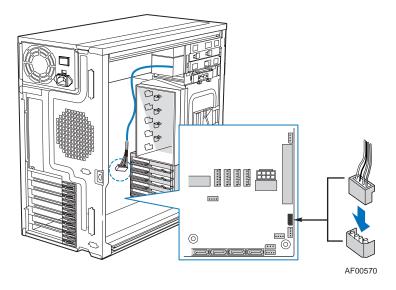


Figure 33. Attaching LCP Cable to Header on Intel® Server Board S5000PSL or Intel® Server Board XVN

Replace Bezel

- 1. If necessary, remove filler panel from bezel that corresponds to the position of the LCP carrier.
- 2. Line up the three clips (see letter "A" in the following figure) at the right edge of the bezel with the corresponding latches on the right side of the chassis.
- 3. Engage the clips with the slots (see letter "B").
- 4. Rotate the left side of bezel towards the chassis (see letter "C").
- 5. Snap the two bezel tabs (see letter "D") into their corresponding recesses at the left edge of chassis front panel.

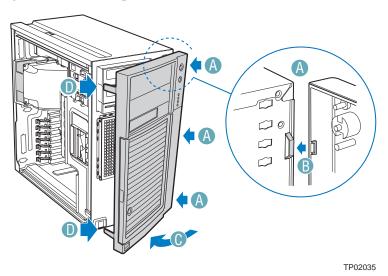


Figure 34. Installing Bezel

Replace Access Cover

To replace the access cover:

- 1. Slide the access cover on the chassis and latch securely (see letter "A" in the following figure).
- 2. (optional) Replace shipping screws (see letter "B").

Caution: This chassis must be operated with the access cover installed to ensure proper cooling.

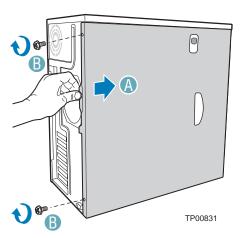


Figure 35. Replacing Access Cover

Local Control Panel Kit Installation Instructions