

# Intel® Server Chassis SR2400 SCSI and SATA Backplane Kit

## Installation Guide

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Order Number: C83539-002



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# Important Safety Instructions

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## Important Safety Instructions

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Read all caution and safety statements in this document before performing any of the instructions. See *Intel Server Boards and Server Chassis Safety Information* at <http://support.intel.com/support/motherboards/server/sb/cs-010770.htm>.

## Wichtige Sicherheitshinweise

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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/sb/cs-010770.htm>.

## 重要安全指导

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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/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

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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* rendez-vous sur le site <http://support.intel.com/support/motherboards/server/sb/cs-010770.htm>.

## Instrucciones de seguridad importantes

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

# Warnings and Cautions

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These warnings and cautions apply whenever you remove the Access Cover to access components inside the server. Only a technically qualified person should integrate and configure the server.

## WARNINGS

**The power button on the front panel DOES NOT turn off the AC power. To remove power from server, you must unplug the AC power cord from the wall outlet or the chassis.**

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

**Hazardous voltage, current, and energy levels are present inside the power supply. There are no user-serviceable parts inside it; servicing should be done by technically qualified personnel.**

## CAUTIONS

ESD can damage disk drives, boards, and other parts. Perform all procedures in this document only at an ESD workstation. If one is not available, provide ESD protection by wearing an anti-static wrist strap attached to chassis ground—any unpainted metal surface—on your server when handling parts.

Always handle boards carefully. They can be extremely sensitive to ESD. Hold boards only by their edges. Do not touch the connector contacts. 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.

For proper cooling and airflow, always install the Access Cover before turning on the server. Operating it without the cover in place can damage system parts.

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# About the SATA or SCSI Backplane Kit

This SR2400 SATA or SCSI Backplane can be installed in the Intel® Server Chassis SR2400. The SATA kit provides you with the ability to install up to six hot-swap SATA drives into your Server Chassis SR2400. The SCSI kit provides you with the ability to install up to six SCSI drives into your Server Chassis SR2400.

## ➡ NOTE

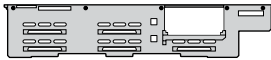


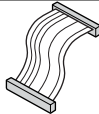

With each kit, the number of drives you can actually install depends on the server board capabilities and any SATA or SCSI add-in card that is installed.

## Kit Contents

### SCSI Backplane Kit


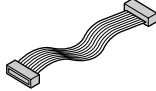
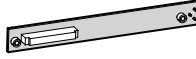
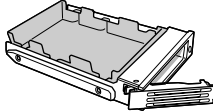
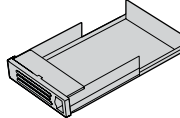
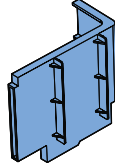
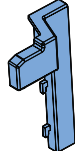
You should have received the following parts if you ordered the SCSI Backplane Kit, order number A2400SCSIKIT:

#### SCSI Backplane Parts List

Item	Picture (not to scale)	Quantity
SCSI backplane		1
Flex cable		1
26-pin floppy drive data cable		1
44-pin CD-ROM drive data cable		1
50-pin front panel cable		1

continued

### SCSI Backplane Parts List (continued)



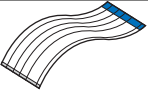
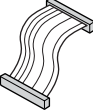


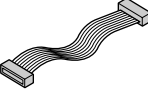
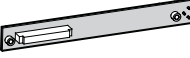
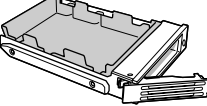
Item	Picture (not to scale)	Quantity
SCSI cable		1
10-pin fan distribution cable		1
44-pin CD-ROM drive interposer board with two screws		1
Hot-swap driver carrier		5
Drive bay blank		1
Large air baffle		1
Small air baffle		1



# SATA Backplane Kit

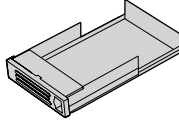
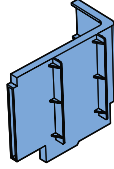
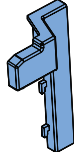
You should have received the following parts if you ordered the SATA Backplane Kit, order number A2400SATAKIT:

## SATA Backplane Parts List

Item	Picture (not to scale)	Quantity
SATA backplane		1
Flex cable		1
26-pin floppy drive data cable		1
44-pin CD-ROM drive data cable		1
50-pin front panel cable		1
SATA cable		5
10-pin fan distribution cable		1
CD-ROM drive interposer board with two screws		1
Hot-swap driver carrier		5

continued

### SATA Backplane Parts List (continued)

Drive bay blank		1
Large air baffle		1
Small air baffle		1

## Document Scope and Assumptions

This document provides instructions to guide you through installing the hot-swap SCSI or hot-swap SATA backplane into the Intel® Server Chassis SR2400.

The server board diagrams in this document are specific to the Intel® Server Board SE7520JR2 and Intel® Server Board SE7320VP2, although this kit may work with other Intel® Server Boards as well. For boards other than the Server Board SE7520JR2 or Server Board SE7320VP2, refer to the documentation that came with your server board to determine compatibility and cable routing.

This document assumes you are installing the backplane kit during an initial integration process, before your server system is up and running. Because the Quick Start User's Guide used for the initial integration is used for several implementations, this instruction guide will ask you to uninstall selected components that you may have just installed. For the best results, read through both the Quick Start User's Guide and this installation guide before beginning your installation.

If you are installing the backplane board into a fully integrated server system that is currently operational, you will need to uninstall several components. Refer to the Intel® Server Chassis SR2400 User Guide for instructions on removing and reinstalling components. The User's Guide is available at <http://support.intel.com/support/motherboards/server/chassis/SR2400/>

## Tools and Supplies Needed

- Phillips\* (cross head) screwdriver (#2 bit)
- Anti-static wrist strap (recommended)

# Intel® Server Chassis SR2400 SATA or SCSI Backplane Installation

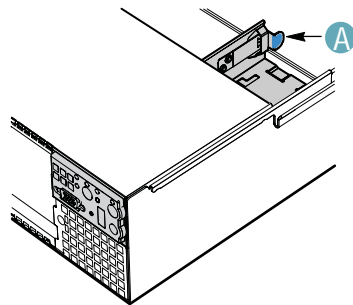
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## Follow Steps in Quick Start User's Guide

Remove the CD-ROM tray if it is installed in the chassis and follow the instructions in the Intel® Server Chassis SR2400 Quick Start User's Guide that came with your server chassis. The Quick Start User's Guide will direct you to this guide at the appropriate point during the integration process.

## Release Control Panel

Release lever (see letter "A" in the following figure) and move Control Panel forward about ½ inch (1 cm).

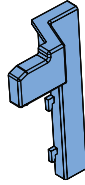


TP00531

Figure 1. Releasing Control Panel

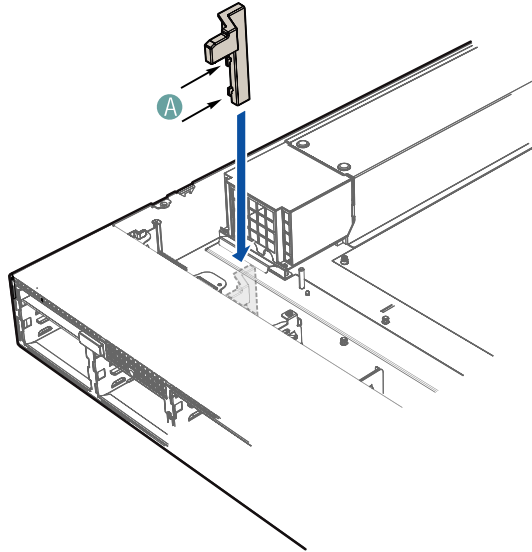
## Install Small Air Baffle

The small air baffle shown below must be attached to the drive bay cage for proper system cooling.



**Figure 2. Small Air Baffle**

1. Lower the small baffle into the chassis behind the drive bay cage area.
2. Insert the two hooks on the baffle (see letter “A” in the figure below) into the matching slots at the rear of the drive cage area.
3. Push down on the baffle to secure it to the chassis.



TP01182

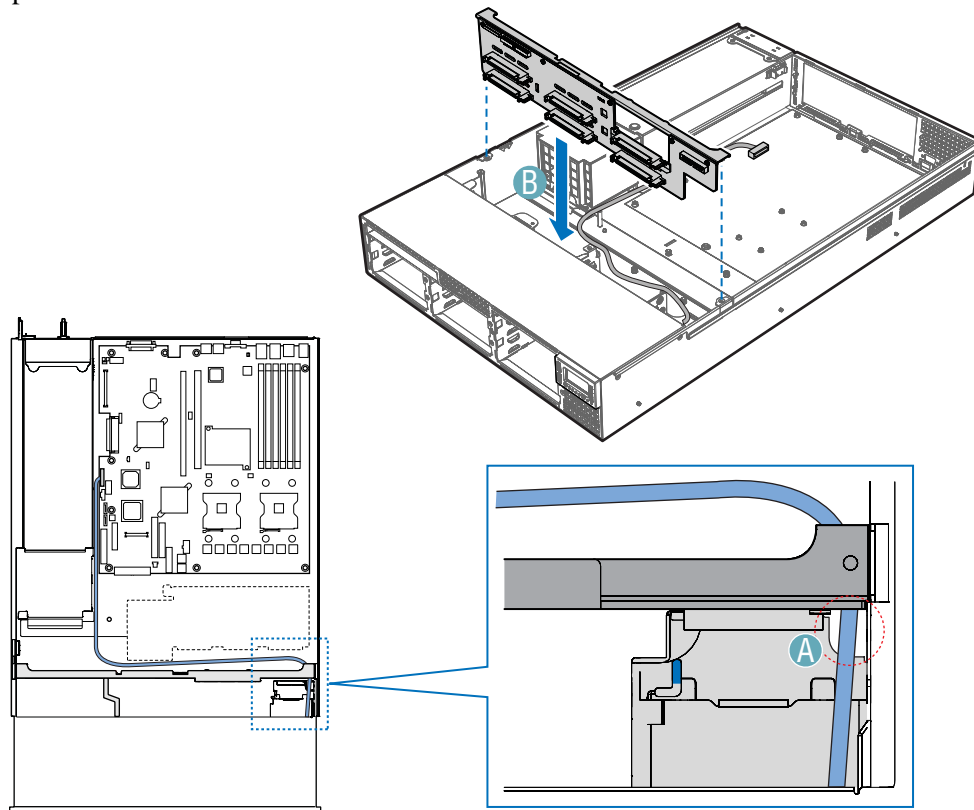
**Figure 3. Installing Small Air Baffle**

# Install the SATA or SCSI Backplane

## ➤ NOTE

Installing a SCSI backplane requires a SCSI connector on the server board. If your server board does not have a SCSI connector, a SCSI add-in card is required.

1. Lift any power cables out of the way.
2. Ensure the USB cable extends from the control panel board and lies inside of the cutout at the back of the control panel assembly. See letter “A” in the figure below.
3. Push the USB cable toward the fan module on the chassis floor. When the backplane board is installed, the USB cable will route beneath the backplane board at the right side of the chassis.
4. Use care to avoid pinching any cables. Slide the backplane into the chassis guides at the left and right sides of the chassis until the pins at the left and right sides of the backplane bracket are fully inserted into the matching holes in the chassis. See letter “B” for installing the backplane.



TP01074

Figure 4. Installing SATA or SCSI Backplane

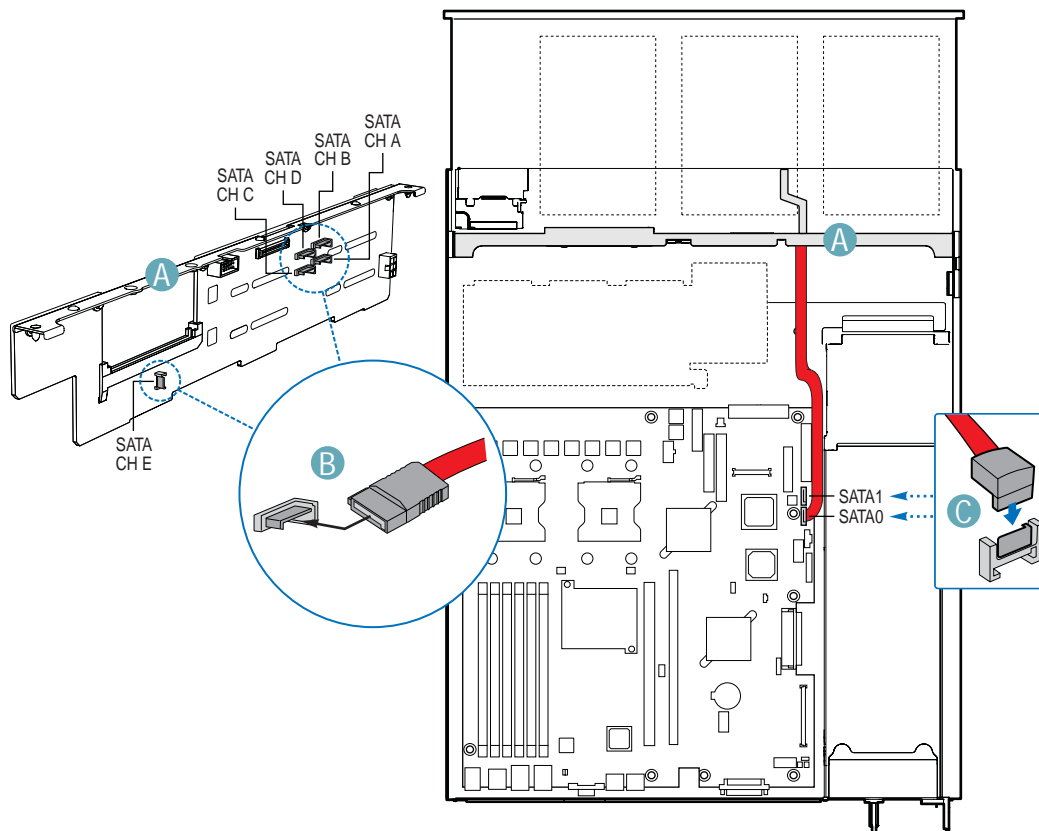
# Install the SATA Cable(s)

## NOTE

Disregard this step if you installed the SCSI backplane and instead follow the steps for [Install the SCSI Cable](#).

1. Connect the SATA Cable(s) labeled SATA CH A and SATA CH B to the backplane. See letter “A” in the figure below to locate the backplane. See letter “B” in the figure to identify the end of the SATA cable that is attached to the backplane.
2. If you will be using the SATA connections on the server board instead of an add-in SATA RAID Controller, connect the 90-degree end of the SATA cable(s) to the corresponding server board connection(s). The cable connected to SATA CH A should be connected to SATA 0. The cable connected to SATA CH B should be connected to SATA 1. See letter “C” in the figure below to identify the end of the SATA cable that is attached to the server board. See your server board documentation to locate the SATA connection points on the server board.

If you will be using an add-in SATA RAID Controller, you will need to connect SATA CH A through SATA CH E to the appropriate connectors on the add-in card after you install the add-in card. See your add-in card documentation for the appropriate SATA connections.



TP01078

Figure 5. Installing SATA Cables to Server Board

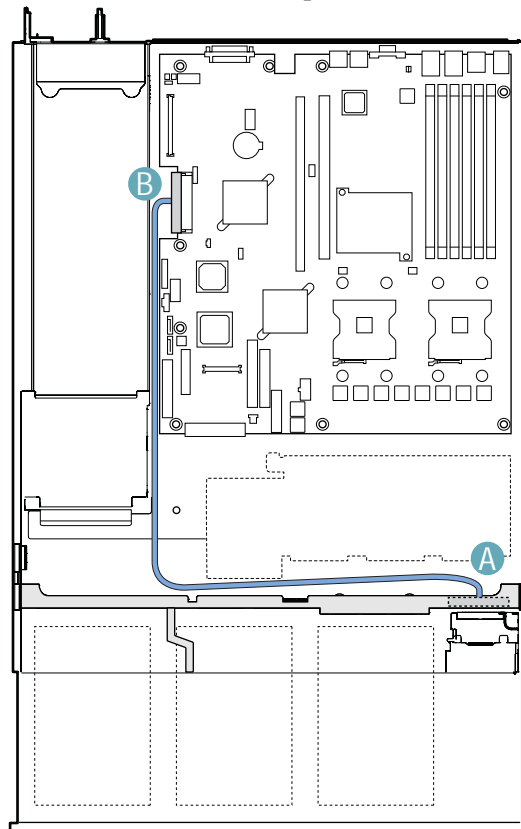
# Install the SCSI Cable

## ➡ NOTE

Disregard this step if you installed the SATA backplane and instead follow the steps for [Install the SATA Cable](#).

This step may require a SCSI add-in card if your server board does not have a SCSI connector. See the documentation included with your SCSI card for the proper cable connections.

1. Connect the end of the SCSI cable that is labeled “Backplane” to the backplane SCSI Connector. See letter “A” in the figure below.
2. Connect the end of the SCSI cable that is labeled “Server Board” to the SCSI connection on the server board if not already connected. See letter “B” in the figure below. See your server board documentation to locate the SCSI connection point on the server board



TP01075

**Figure 6. Installing SCSI Cable**

## Connect Flex Cable, 50-pin Front Panel Cable, and Backplane Power Cable

1. Attach the flex cable from the backplane to the server board as shown by letter “A” in the figure below. Each cable end is labeled “backplane” or “server board” for proper installation.
2. Attach the 2x3 power cable from the power supply to the backplane as shown by letter “B” in the figure.
3. Connect the 50-pin front panel cable to the backplane as shown by letter “C” in the figure.

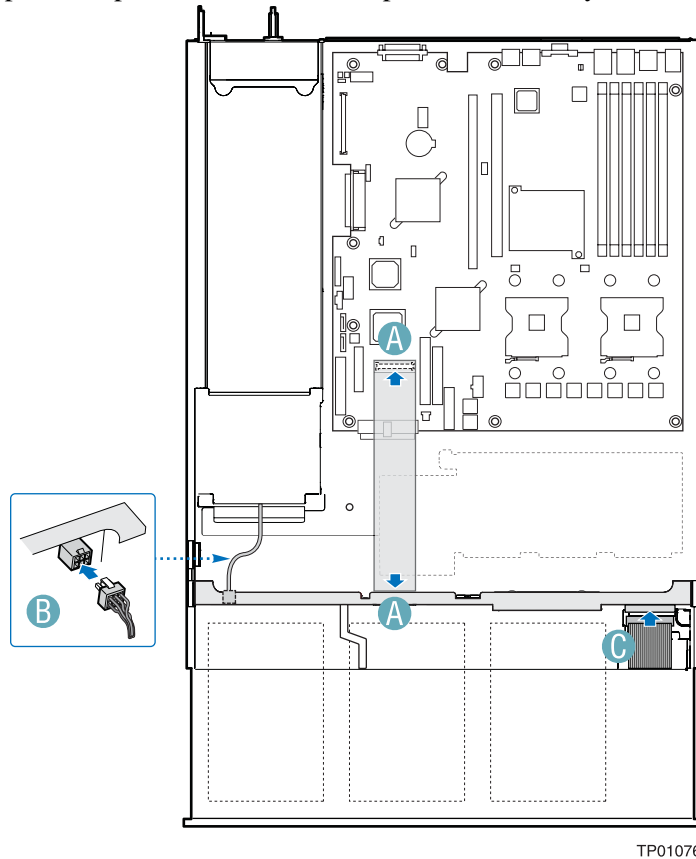


Figure 7. Connecting Flex Cable, 50-pin Front Panel Cable, and Backplane Power Cable

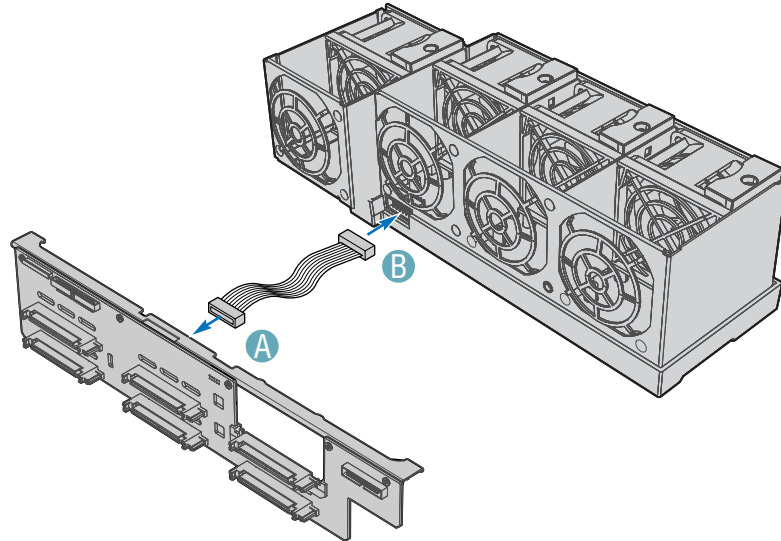


## Connect 10-pin Fan Distribution Cable

### ➡ NOTE

This step must be completed before installing the fan module into the chassis.

1. Attach one end of the 10-pin fan distribution cable to the backplane. See letter “A” in the figure below.
2. Attach the other end of the fan distribution cable to the fan module. See letter “B” in the figure.



TP01080

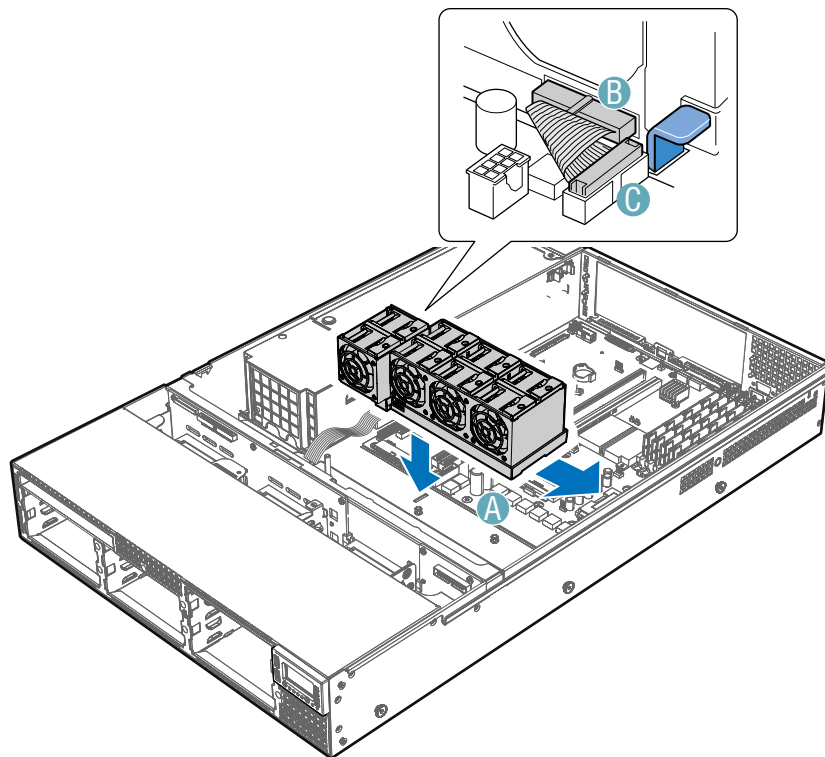
**Figure 8. Connecting 10-pin Fan Distribution Cable to Backplane**

# Install Fan Module

## ➡ NOTE

The fan module is secured to the chassis by matching slots and standoffs. Make sure module engages in the chassis standoffs.

1. Place the fan module over the chassis standoffs and slide the module to the right until the blue tab clicks into place. See letter “A” in the figure below.
2. Connect one end of the folded ribbon cable to fan module if not already connected. See letter “B” in the figure below.
3. Connect other end of the ribbon cable to the server board. See letter “C” in the figure.



TP01081

**Figure 9. Installing Fan Module**

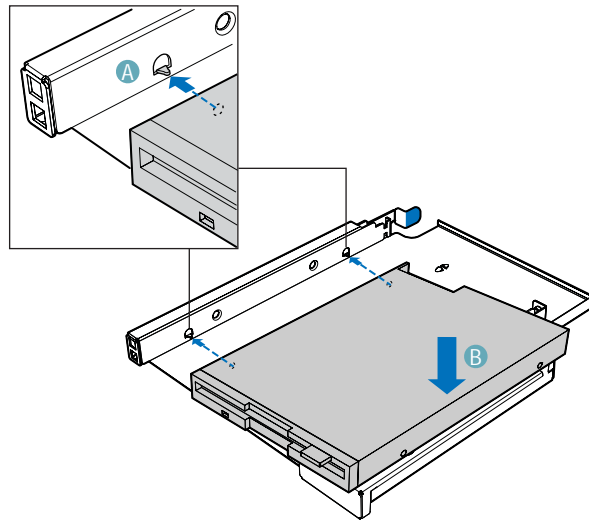
## Install Slimline Floppy Drive (optional)

### ➡ NOTE

The carrier for the slimline floppy drive was sent to you in the hardware kit that came with your Server Chassis SR2400.

The carrier for the slimline DVD-ROM drive/CD-ROM drive was pre-installed in the slimline drive bay of your Server Chassis SR2400. You will need to remove it from the chassis before beginning.

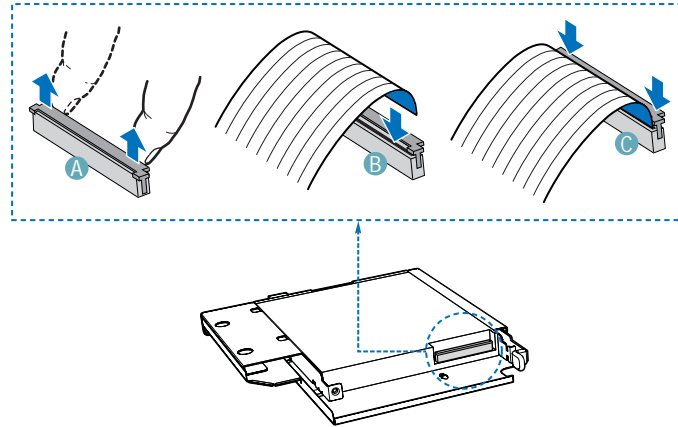
1. Align the two holes at the left side of the floppy drive with the two cutouts in the floppy drive carrier. See letter “A” in the figure below.
2. Lower the right side of the floppy drive into the carrier until it clicks into place.



TP01082

**Figure 10. Installing Slimline Floppy Drive into Carrier**

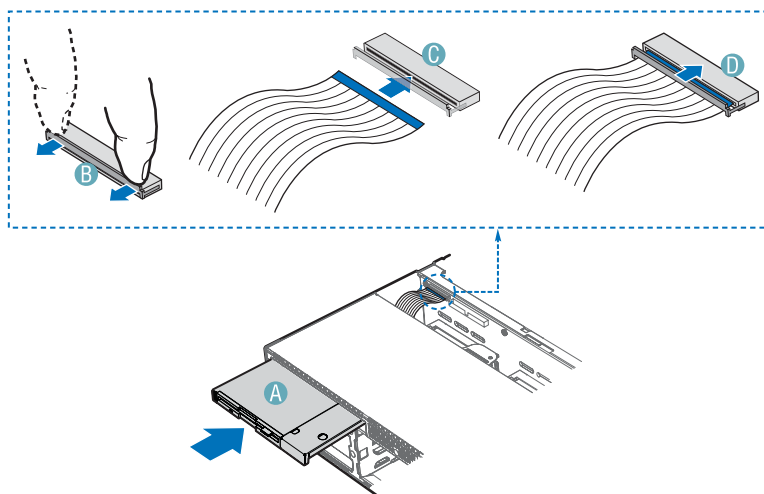
3. Open the connector on the rear of the floppy drive by pulling up on the connector cover. See letter “A” in the figure below.
4. Insert one end of the 26-pin floppy drive data cable end into the connector.
5. Push down on the connector cover to lock the cable into place.



TP01144

**Figure 11. Installing 26-pin Floppy Drive Data Cable to Slimline Floppy Drive**

6. Slide the floppy drive assembly into the chassis until it clicks into place. See letter “A” in the figure below.
7. Open the connector on the backplane by pulling out on the connector cover. See letter “B” in the figure below.
8. Insert the loose end of the floppy cable into the backplane connector. See letter “C” in the figure.
9. Push in on the connector cover to lock the cable into place. See letter “D” in the figure.



TP01083

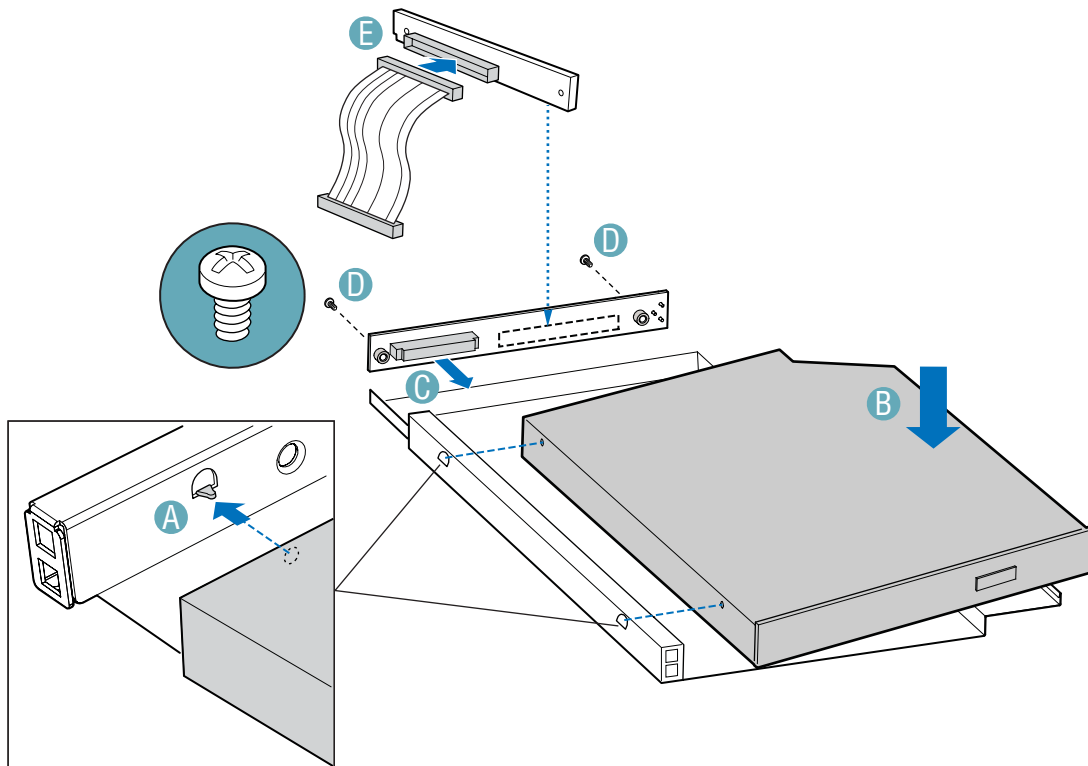
**Figure 12. Installing Slimline Floppy Drive into Chassis**

# Install Slimline DVD-ROM or CD-ROM Drive (optional)

## ➡ NOTE

The carrier for the slimline DVD-ROM drive/CD-ROM drive was pre-installed in the slimline drive bay of your Server Chassis SR2400. You will need to remove it from the chassis before beginning.

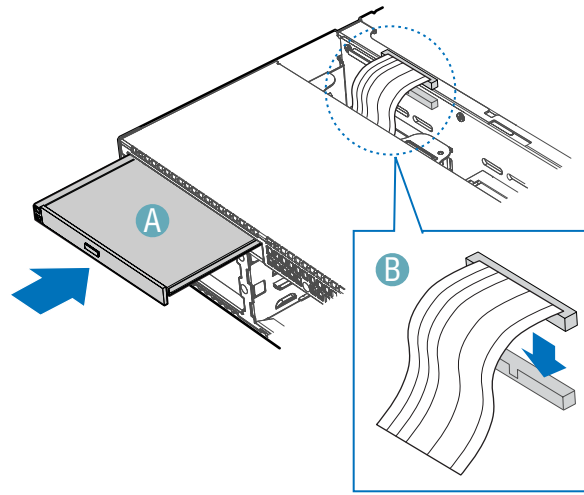
1. Align the two holes at left edge of DVD-ROM /CD-ROM drive with the cutouts in drive carrier. See letter “A” in the figure below.
2. Lower the right side of the DVD-ROM / CD-ROM drive into the carrier until it clicks into place. See letter “B” in the figure below.
3. Use the two screws indicated in the figure to attach the interpose board to the DVD-ROM / CD-ROM drive. See letters “C” and “D” in the figure.
4. Attach the 44-pin CD-ROM drive cable to the exposed side / back of the interposer board. See letter “E” in the figure.



TP01085

Figure 13. Installing Slimline DVD-ROM / CD-ROM Drive into Carrier

5. Insert the DVD-ROM / CD-ROM drive into the chassis. See letter “A” in the figure below.
6. Connect the loose end of the CD-ROM drive cable to the backplane connector. See letter “B” in the figure.



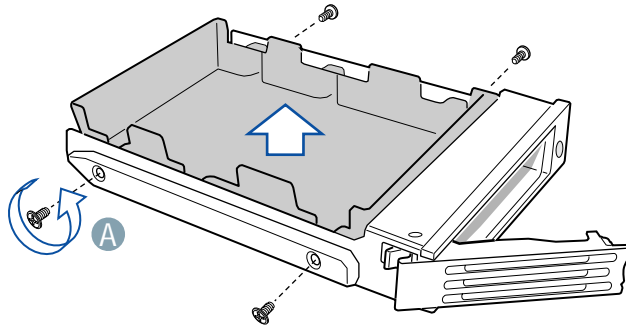
TP01086

**Figure 14. Installing Slim Line DVD/CDROM Drive**

# Install Hot-swap Hard Drives

Repeat the steps below for each hard drive to be installed. When installing your drive(s) into the chassis, the primary drive must be inserted into the lower left drive bay.

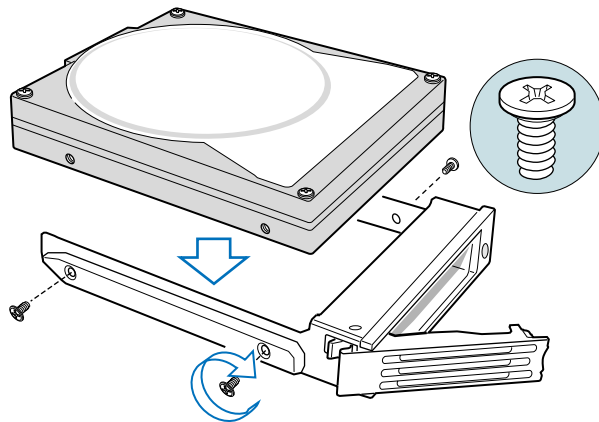
1. Set any jumpers and / or switches on the hard drive(s) according to the instructions that came with your hard drive(s).
2. Remove the four screws that hold the plastic baffle to the drive carrier. See letter “A” in the figure below. Store the plastic drive baffle for future use.



TP01184

**Figure 15. Installing Hot-swap Hard Drives into Drive Carrier**

3. Position with the drive with circuit side facing down and the connector end of the drive facing the rear of the drive carrier.
4. Align the holes in the drive to the holes in the drive carrier and attach it to the carrier with the screws that were attached to the plastic retention device.

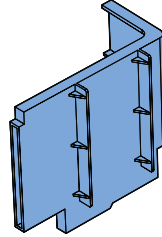


TP01140

**Figure 16. Installing Hot-swap Hard Drives into Drive Carrier**

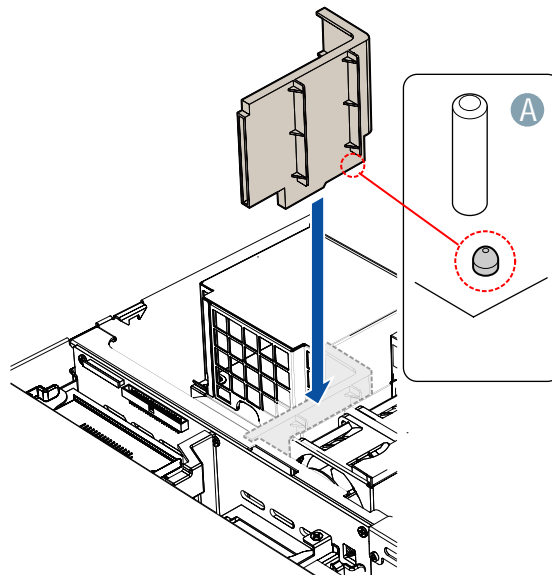
# Install Large Baffle

The large baffle has two notches for routing cables between the baffle and the chassis floor. See the figure below.



**Figure 17. Large Baffle**

1. Lower the large baffle into the chassis between the power supply and the back side of the backplane.
2. While setting the baffle into place, route the cables as follows:
  - Route these cables through both openings under the baffle:
    - USB
    - SCSI or SATA cables
  - Route these cables through the larger opening:
    - Main power cable
    - CPU power cable
    - Power supply signal cable
3. Line up the guide pin on the chassis floor with the matching hole in the baffle. See letter “A” in the figure below.
4. Push down on the baffle to secure it to the chassis.



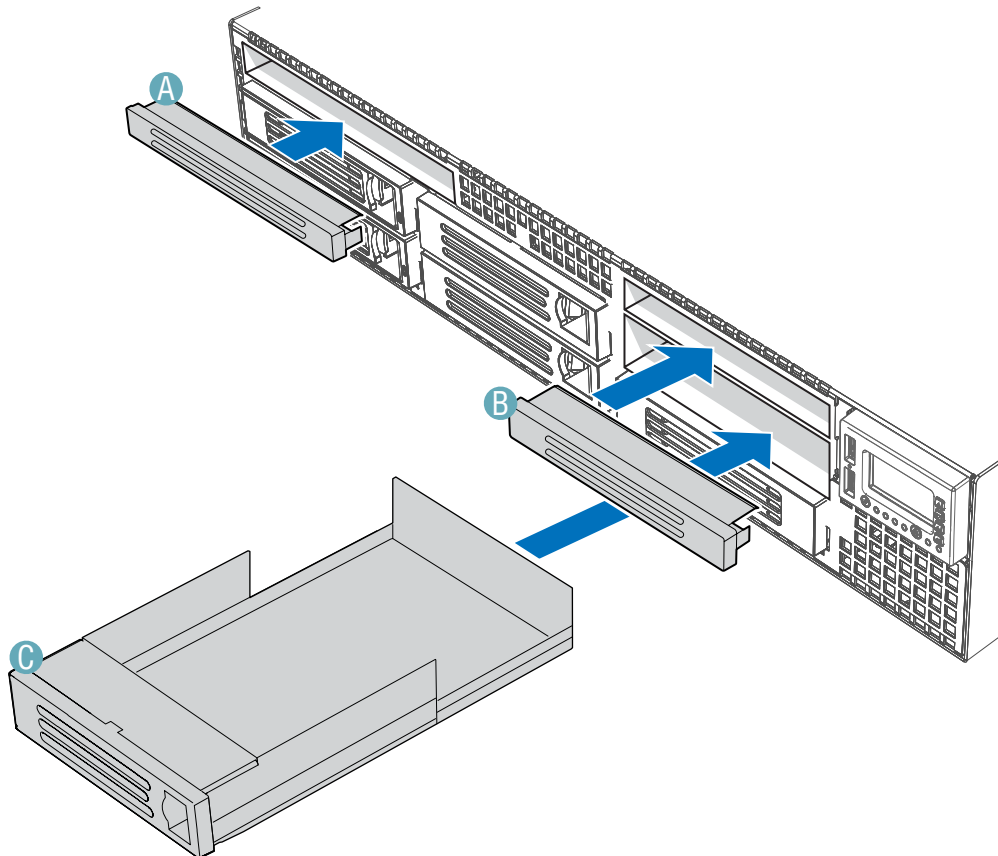
TP01185

**Figure 18. Installing Power Supply Air Baffle**



## Install Filler Panels (if required)

1. Install the slimline filler panel if you did not install a CD-ROM drive, DVD-ROM drive or floppy drive. See letter “A” in the figure below.
2. Install the flex bay filler panel. See letter “B” in the figure below.
3. Install the drive bay blank into the sixth drive bay if no drive is installed in this bay. You will need to order a sixth drive kit (ADRSIXDRIVE or ADRSIXDSATA) in order to install a drive into this slot. See letter “C” in the following figure.



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Figure 19. Installing Filler Panels

## Reposition Front Panel

Push front panel back into chassis until it clicks into place.

## Complete Server System Integration

Return to the Intel® Server Chassis SR2400 Quick Start User’s Guide, continuing with Step 12.