

Inspiron 3655

Service Manual

Notes, cautions, and warnings

 **NOTE:** A NOTE indicates important information that helps you make better use of your computer.

 **CAUTION:** A CAUTION indicates either potential damage to hardware or loss of data and tells you how to avoid the problem.

 **WARNING:** A WARNING indicates a potential for property damage, personal injury, or death.


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1 Before working inside your computer	6
Before you begin	6
Safety instructions.....	6
Recommended tools.....	7
2 After working inside your computer	8
3 Technical overview	9
System Board Components.....	9
4 Removing the computer cover	10
Procedure.....	10
5 Replacing the computer cover	11
Procedure.....	11
6 Removing the front bezel	12
Prerequisites.....	12
Procedure.....	12
7 Replacing the front bezel	14
Procedure.....	14
Post-requisites.....	14
8 Removing the memory modules	15
Prerequisites.....	15
Procedure.....	15
9 Replacing the memory modules	17
Procedure.....	17
Post-requisites.....	18
10 Removing the 3.5-inch hard drive	19
Prerequisites.....	19
Procedure.....	19
11 Replacing the 3.5-inch hard drive	22
Procedure.....	22
Post-requisites.....	22
12 Removing the 2.5-inch hard drives	23
Prerequisites.....	23
Procedure.....	23

13 Replacing the 2.5-inch hard drives.....	25
Procedure.....	25
Post-requisites.....	25
14 Replacing the optical drive.....	26
Prerequisites.....	26
Procedure.....	26
15 Removing the optical drive.....	29
Procedure.....	29
Post-requisites.....	29
16 Removing the processor fan.....	30
Prerequisites.....	30
Procedure.....	30
17 Replacing the processor fan.....	32
Procedure.....	32
Post-requisites.....	32
18 Removing the heat sink.....	33
Prerequisites.....	33
Procedure.....	33
19 Replacing the heat sink.....	34
Procedure.....	34
Post-requisites.....	34
20 Removing the coin-cell battery.....	35
Prerequisites.....	35
Procedure.....	35
21 Replacing the coin-cell battery.....	37
Procedure.....	37
Post-requisites.....	37
22 Removing the wireless card.....	38
Prerequisites.....	38
Procedure.....	38
23 Replacing the wireless card.....	40
Procedure.....	40
Post-requisites.....	40
24 Removing the antenna modules.....	41
Prerequisites.....	41
Procedure.....	41

25 Replacing the antenna modules.....	43
Procedure.....	43
Post-requisites.....	43
26 Removing the power-button module.....	44
Prerequisites.....	44
Procedure.....	44
27 Replacing the power-button module.....	46
Procedure.....	46
Post-requisites.....	46
28 Removing the chassis fan.....	47
Prerequisites.....	47
Procedure.....	47
29 Replacing the chassis fan.....	49
Procedure.....	49
Post-requisites.....	49
30 Removing the system board.....	50
Prerequisites.....	50
Procedure.....	50
31 Replacing the system board.....	52
Procedure.....	52
Post-requisites.....	52
32 BIOS setup program.....	53
Overview.....	53
Entering BIOS setup program.....	53
Clearing Forgotten Passwords.....	53
Prerequisites.....	53
Procedure.....	53
Post-requisites.....	54
Clearing CMOS Settings.....	54
Prerequisites.....	54
Procedure.....	54
Post-requisites.....	55
33 Flashing the BIOS.....	56
34 Getting help and contacting Dell.....	57

Before working inside your computer

 **NOTE:** The images in this document may differ from your computer depending on the configuration you ordered.



Topics:


- [Before you begin](#)
- [Safety instructions](#)
- [Recommended tools](#)

Before you begin

1. Save and close all open files and exit all open applications.
2. Shut down your computer.

The shut-down instruction varies depending on the operating system installed on your computer.


- Windows 10: Click **Start** >  **Power** > **Shut down**.
- Windows 8.1: On the **Start** screen, click the power icon  > **Shut down**.
- Windows 7: Click **Start** > **Shut down**.


 **NOTE:** If you are using a different operating system, see the documentation of your operating system for shut-down instructions.

3. Disconnect your computer and all attached devices from their electrical outlets.
4. Disconnect all cables such as telephone cables, network cables, and so on, from your computer.
5. Disconnect all attached devices and peripherals, such as keyboard, mouse, monitor, and so on, from your computer.
6. Remove any media card and optical disc from your computer, if applicable.
7. After the computer is unplugged, press and hold the power button for 5 seconds to ground the system board.


Safety instructions


Use the following safety guidelines to protect your computer from potential damage and ensure your personal safety.


 **NOTE:** Before working inside your computer, read the safety information that shipped with your computer. For more safety best practices, see the Regulatory Compliance home page at www.dell.com/regulatory_compliance.


 **NOTE:** Disconnect all power sources before opening the computer cover or panels. After you finish working inside the computer, replace all covers, panels, and screws before connecting to the electrical outlet.

 **CAUTION:** To avoid damaging the computer, ensure that the work surface is flat and clean.

 **CAUTION:** To avoid damaging the components and cards, handle them by their edges, and avoid touching pins and contacts.

 **CAUTION:** You should only perform troubleshooting and repairs as authorized or directed by the Dell technical assistance team. Damage due to servicing that is not authorized by Dell is not covered by your warranty. See the safety instructions that shipped with the product or at www.dell.com/regulatory_compliance.

 **CAUTION:** Before touching anything inside your computer, ground yourself by touching an unpainted metal surface, such as the metal at the back of the computer. While you work, periodically touch an unpainted metal surface to dissipate static electricity, which could harm internal components.

 **CAUTION:** When you disconnect a cable, pull on its connector or on its pull tab, not on the cable itself. Some cables have connectors with locking tabs or thumb-screws that you must disengage before disconnecting the cable. When

disconnecting cables, keep them evenly aligned to avoid bending any connector pins. When connecting cables, ensure that the ports and connectors are correctly oriented and aligned.


 **CAUTION:** Press and eject any installed card from the media-card reader.

Recommended tools

The procedures in this document may require the following tools:

- Phillips screwdriver
- Plastic scribe

After working inside your computer

 **CAUTION:** Leaving stray or loose screws inside your computer may severely damage your computer.

1. Replace all screws and ensure that no stray screws remain inside your computer.
2. Connect any external devices, peripherals, or cables you removed before working on your computer.
3. Replace any media cards, discs, or any other parts that you removed before working on your computer.
4. Connect your computer and all attached devices to their electrical outlets.
5. Turn on your computer.

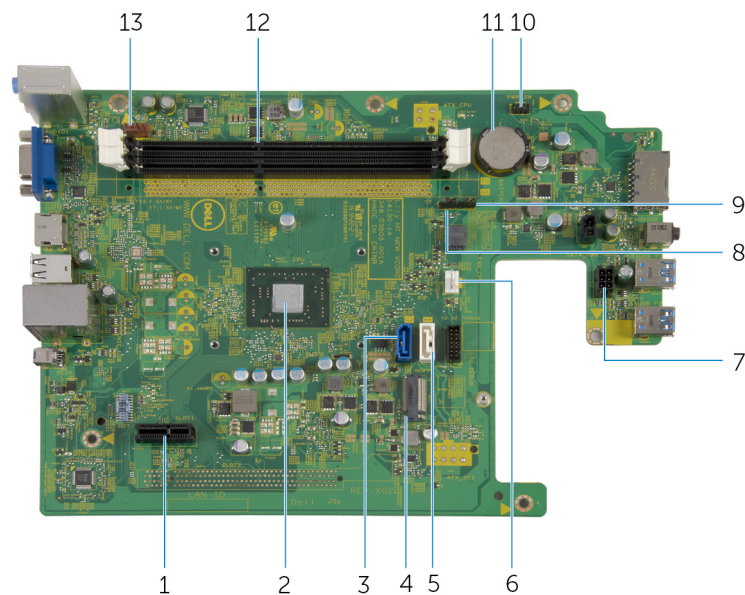
Technical overview

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Topics:

- [System Board Components](#)

System Board Components



- | | |
|---|----------------------------------|
| 1. PCI-e x1 slot | 2. processor |
| 3. hard-drive cable connector | 4. wireless-card connector |
| 5. optical-drive/hard-drive 2 cable connector | 6. processor-fan cable connector |
| 7. drive power-cable connector | 8. CMOS jumper |
| 9. Password jumper | 10. power-button cable connector |
| 11. coin-cell battery | 12. memory-module slots |
| 13. chassis-fan cable connector | |

Removing the computer cover

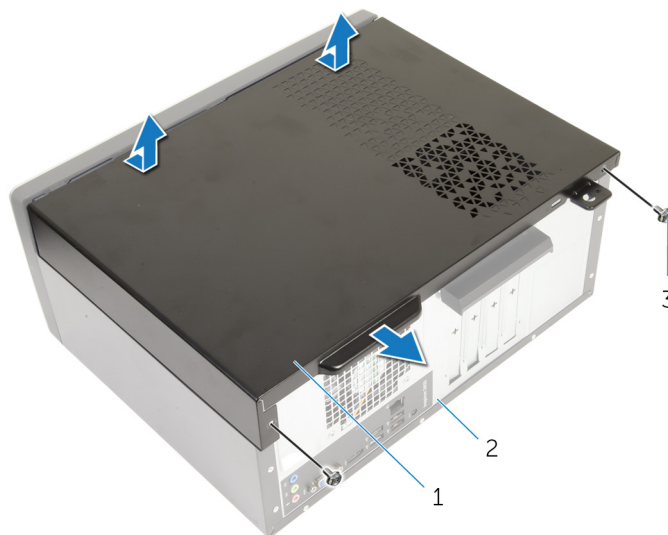
NOTE: Before working inside your computer, read the safety information that shipped with your computer and follow the steps in [Before working inside your computer](#). After working inside your computer, follow the instructions in [After working inside your computer](#). For more safety best practices, see the Regulatory Compliance home page at www.dell.com/regulatory_compliance.

Topics:

- [Procedure](#)

Procedure

1. Lay the computer on its side with the vents facing up.
2. Remove the screws that secure the cover to the chassis.
3. Slide the cover toward the back of the computer and lift the cover off the chassis.



- a. computer cover
- b. chassis
- c. screws (2)

Replacing the computer cover

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Topics:

- [Procedure](#)

Procedure

1. Align the cover over the chassis and slide it toward the front of the computer.
2. Replace the screws that secure the computer cover to the chassis.

Removing the front bezel

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Topics:

- [Prerequisites](#)
- [Procedure](#)

Prerequisites

Remove the [computer cover](#).

Procedure

1. Place the computer in an upright position.
2. Release the front-bezel tabs by moving them outward.
3. Gently rotate and pull the front bezel away from the chassis.



- a. chassis
- b. front-bezel tabs
- c. front bezel

Replacing the front bezel

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Topics:

- [Procedure](#)
- [Post-requisites](#)

Procedure

1. Align and insert the tabs on the front bezel into the slots on the front panel.
2. Rotate the front bezel towards the chassis until the front-bezel tabs snap into place.

Post-requisites

Replace the [computer cover](#).

Removing the memory modules

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Topics:

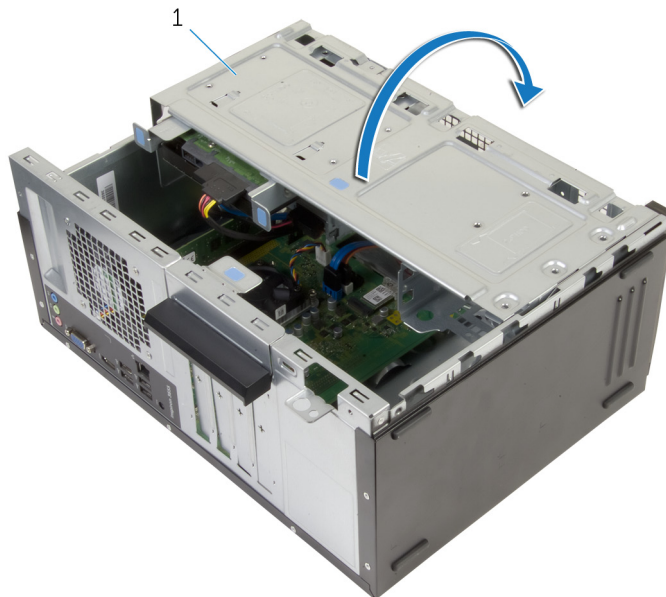
- [Prerequisites](#)
- [Procedure](#)

Prerequisites

1. Remove the [computer cover](#).
2. Remove the [front bezel](#).

Procedure

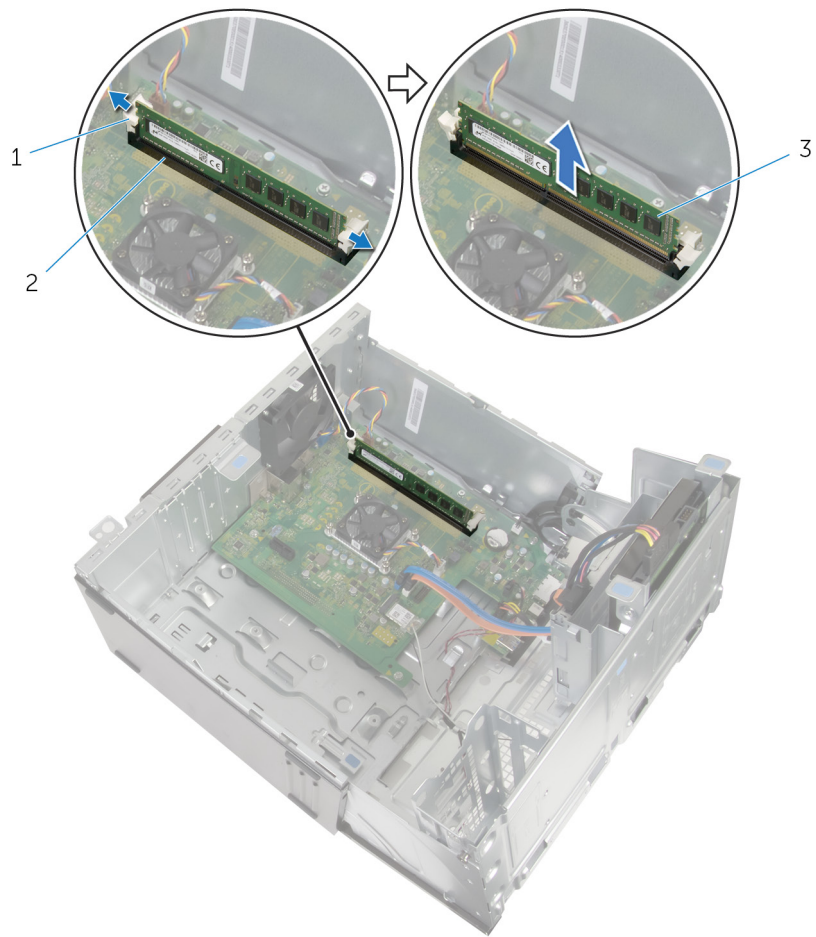
1. Open the side-chassis.



- a. side-chassis
2. Using the fingertips, spread apart the securing clip at each end of the memory-module slot until the memory module pops up.
 3. Lift the memory module out of the memory-module slot.

NOTE: If the memory module is difficult to remove, gently ease the memory module back and forth to remove it from the slot.

CAUTION: To prevent damage to the memory module, hold the memory module by the edges. Do not touch the components on the memory module.



- a. securing clip
- b. memory-module slot
- c. memory module

Replacing the memory modules

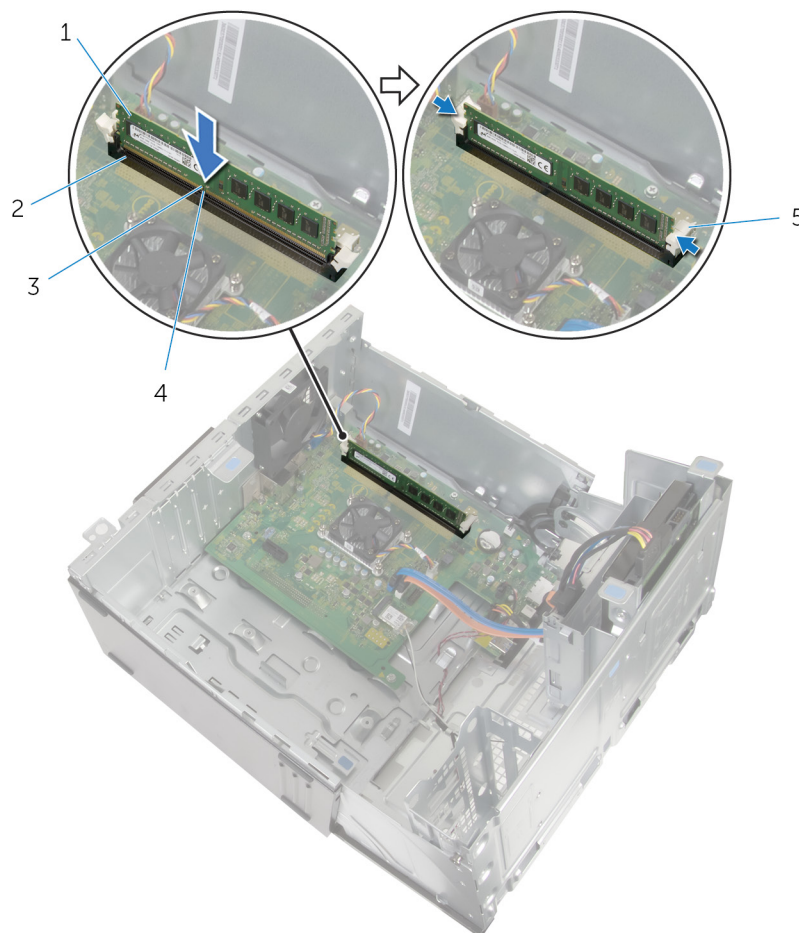
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Topics:

- [Procedure](#)
- [Post-requisites](#)

Procedure

1. Ensure that the securing clips are extended away from the memory-module slot.
2. Align the notch on the memory module with the tab on the memory-module slot.
3. Insert the memory module into the memory-module slot and press the memory module down until it snaps into position and the securing clips lock in place.



- | | |
|------------------|-----------------------|
| 1. memory module | 2. memory-module slot |
| 3. notch | 4. tab |
| 5. securing clip | |
4. Close the side-chassis.

Post-requisites

1. Replace the [front bezel](#).
2. Replace the [computer cover](#).

Removing the 3.5-inch hard drive

NOTE: Before working inside your computer, read the safety information that shipped with your computer and follow the steps in [Before working inside your computer](#). After working inside your computer, follow the instructions in [After working inside your computer](#). For more safety best practices, see the Regulatory Compliance home page at www.dell.com/regulatory_compliance.

Topics:

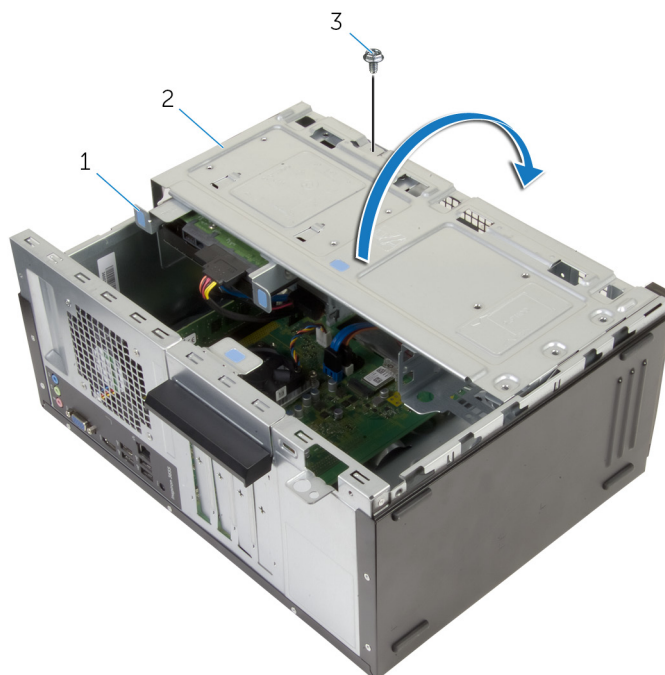
- [Prerequisites](#)
- [Procedure](#)

Prerequisites

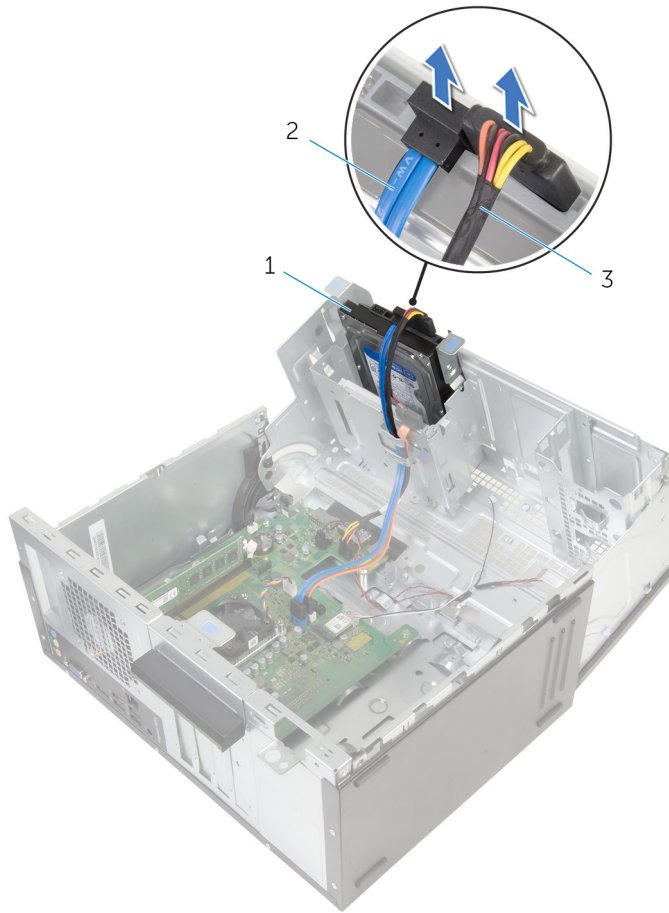
1. Remove the [computer cover](#).
2. Remove the [front bezel](#).

Procedure

1. Remove the screw that secures the hard-drive assembly to the side-chassis.
2. Open the side-chassis.

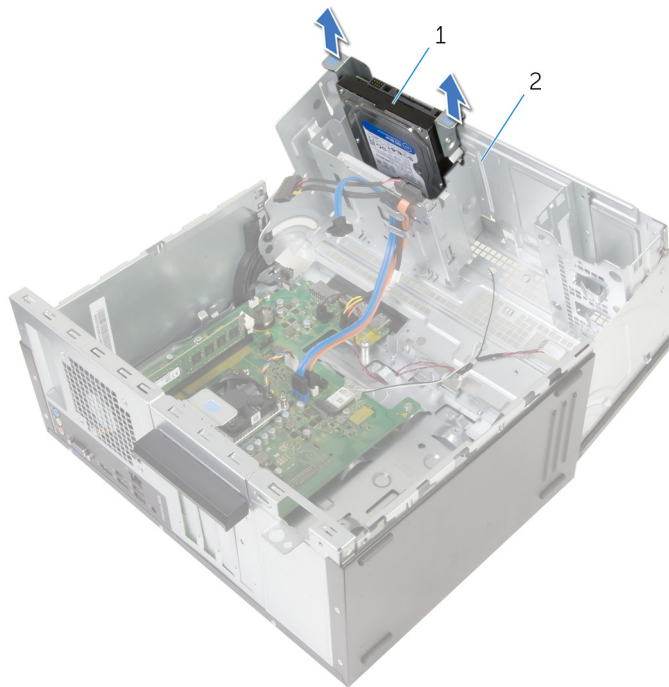


- a. hard-drive assembly
 - b. side-chassis
 - c. screw
3. Disconnect the hard-drive cable and the power cable from the hard drive.



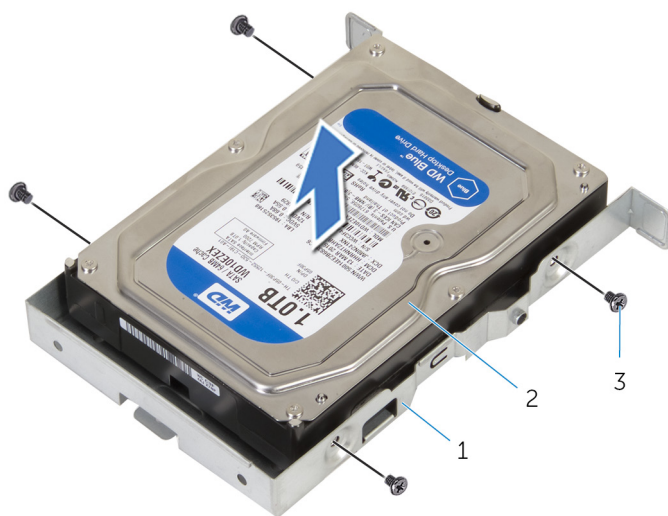
- a. hard-drive assembly
- b. hard-drive cable
- c. power cable

4. Slide the hard-drive assembly out of the side-chassis.



- a. hard-drive assembly
- b. side-chassis

5. Remove the screws that secure the hard-drive bracket to the hard drive.
6. Lift the hard drive off the hard-drive bracket.



- a. hard-drive bracket
- b. hard drive
- c. screws (4)

Replacing the 3.5-inch hard drive

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Topics:

- [Procedure](#)
- [Post-requisites](#)

Procedure

1. Place the hard drive in the hard-drive bracket.
2. Align the screw holes on the hard drive with the screw holes on the hard-drive bracket.
3. Replace the screws that secure the hard-drive bracket to the hard drive.
4. Slide the hard-drive assembly into the side-chassis.
5. Connect the hard-drive cable and power cable to the hard drive.
6. Close the side-chassis.
7. Replace the screw that secures the hard-drive assembly to the side-chassis.

Post-requisites

1. Replace the [front bezel](#).
2. Replace the [computer cover](#).

Removing the 2.5-inch hard drives

NOTE: Before working inside your computer, read the safety information that shipped with your computer and follow the steps in [Before working inside your computer](#). After working inside your computer, follow the instructions in [After working inside your computer](#). For more safety best practices, see the Regulatory Compliance home page at www.dell.com/regulatory_compliance.

Topics:

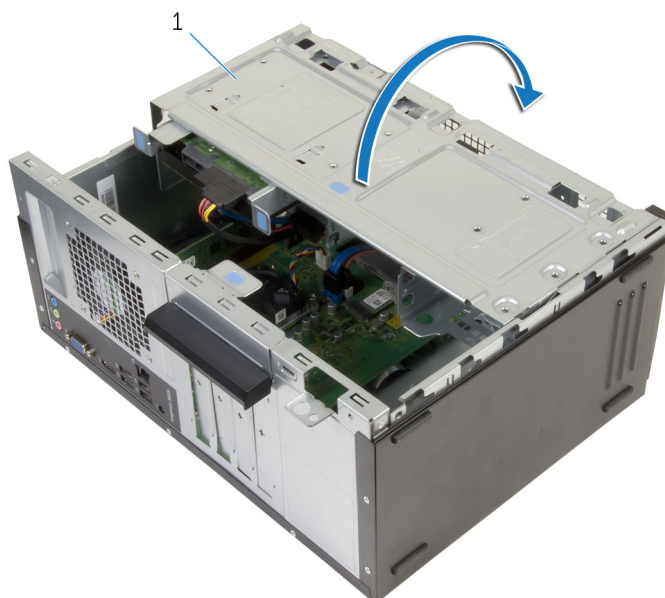
- [Prerequisites](#)
- [Procedure](#)

Prerequisites

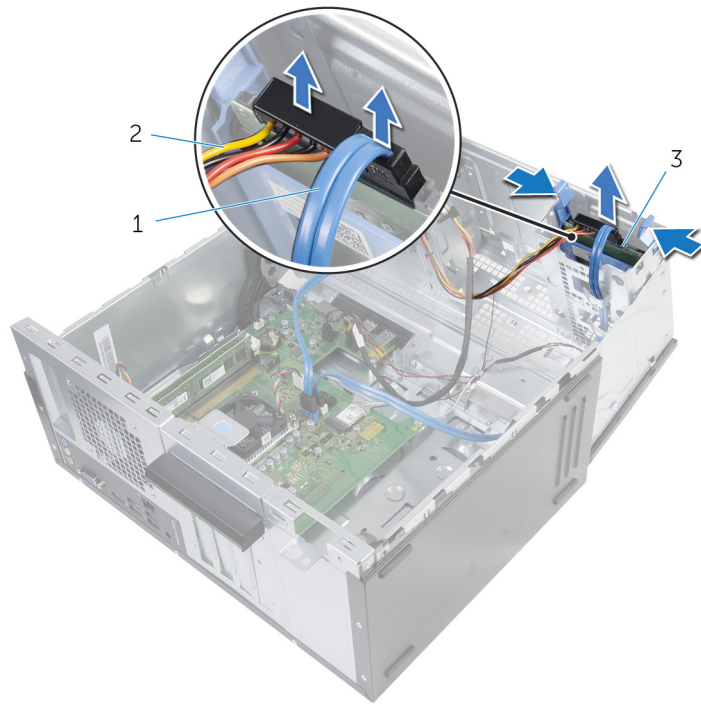
1. Remove the [computer cover](#).
2. Remove the [front bezel](#).

Procedure

1. Open the side-chassis.

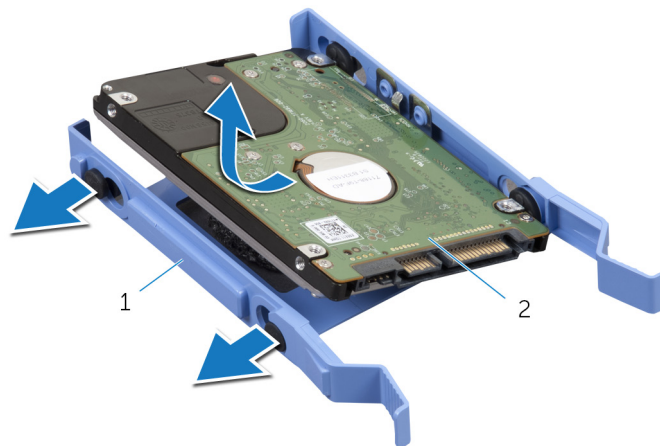


- a. side-chassis
2. Disconnect the hard-drive cable and the power cable from the hard drive.
 3. Press the tabs on the hard drive and slide the hard-drive assembly out of the side-chassis.



- a. hard-drive cable
 - b. power cable
 - c. hard-drive assembly
4. Spread apart the hard-drive bracket from one edge and lift the hard drive up.
 5. Slide and remove the hard drive from the hard-drive bracket.

i NOTE: Note the orientation of the hard drive so that you can replace it correctly.



- a. hard-drive bracket
- b. hard drive

Replacing the 2.5-inch hard drives

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Topics:

- [Procedure](#)
- [Post-requisites](#)

Procedure

1. Align the holes on the hard drive to the tabs on the hard-drive bracket.
2. Snap the hard drive into the hard-drive bracket.
3. Slide the hard-drive assembly into the side-chassis.
4. Connect the hard-drive cable and power cable to the hard-drive.
5. Close the side-chassis.

Post-requisites

1. Replace the [front bezel](#).
2. Replace the [computer cover](#).

Replacing the optical drive

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Topics:

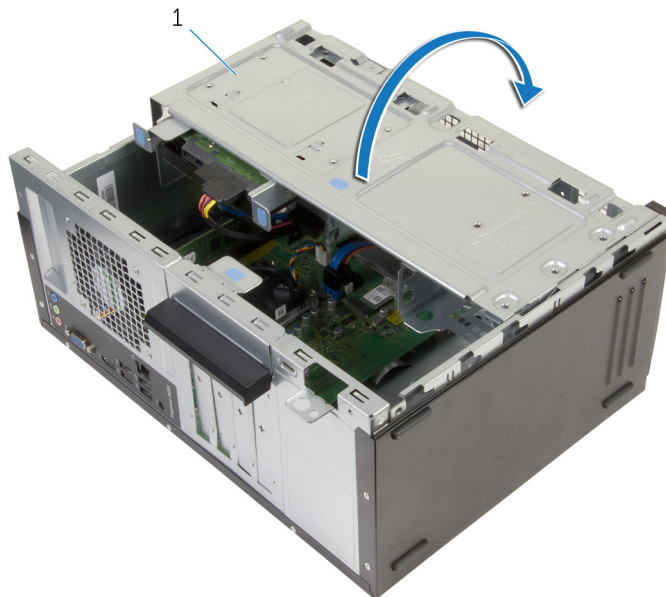
- [Prerequisites](#)
- [Procedure](#)

Prerequisites

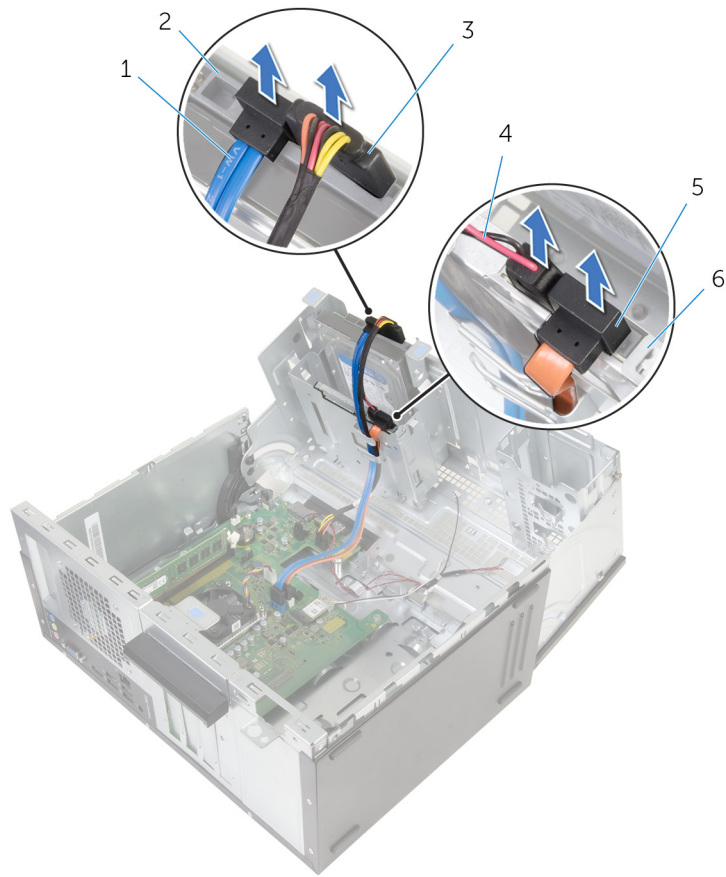
1. Remove the [computer cover](#).
2. Remove the [front bezel](#).

Procedure

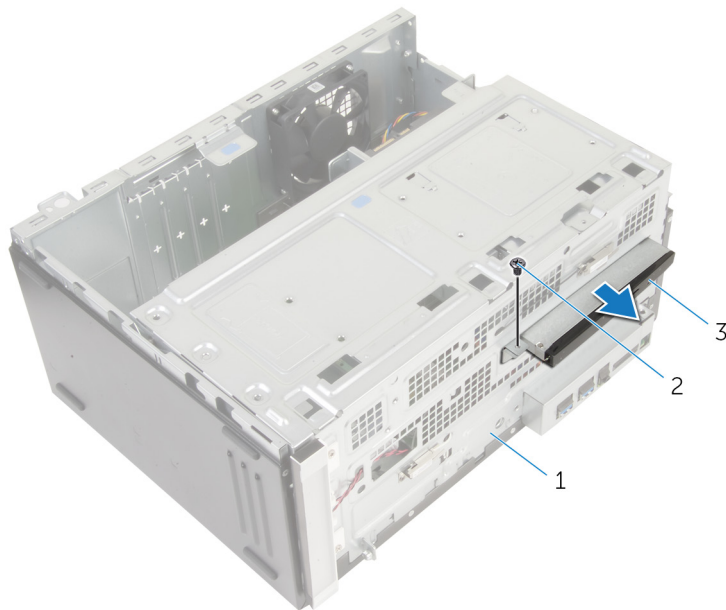
1. Open the side-chassis.



- a. side-chassis
2. Disconnect the hard-drive cable and power cable from the hard drive.
 3. Disconnect the optical-drive cable and the power cable from the optical drive.

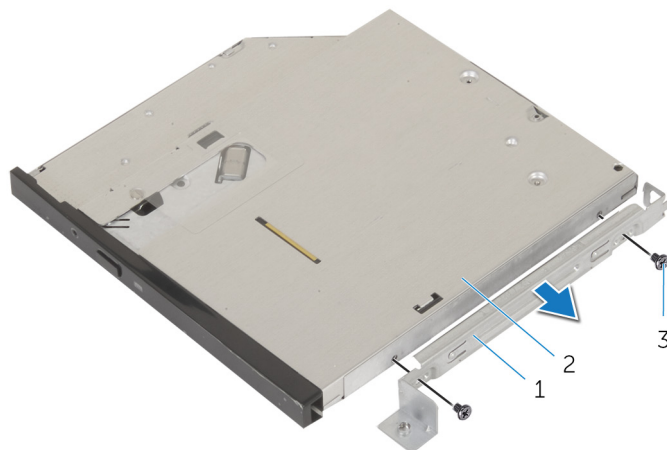


- | | |
|---------------------------|------------------------------|
| 1. hard-drive cable | 2. hard drive |
| 3. hard-drive power cable | 4. optical-drive power cable |
| 5. optical-drive cable | 6. optical drive |
4. Close the side-chassis.
 5. Remove the screw that secures the optical-drive assembly to the side-chassis.
 6. Gently slide the optical-drive module out of the optical-drive bay on the front of the chassis.

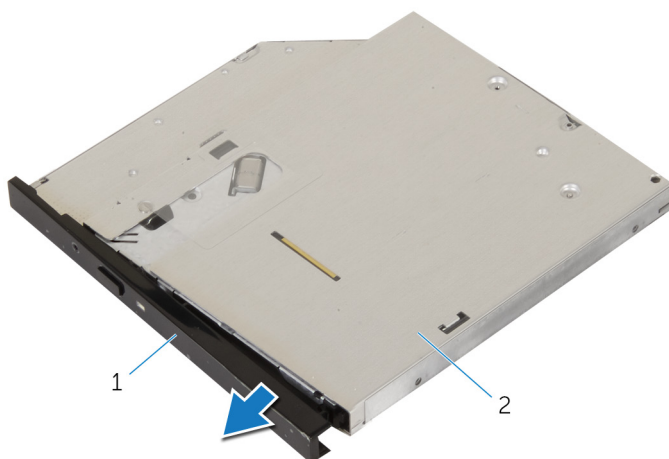


- a. side-chassis
- b. screw
- c. optical-drive assembly

7. Remove the screws that secure the optical-drive bracket to the optical drive.



- a. optical-drive bracket
 - b. optical drive
 - c. screws (2)
8. Gently pull and disconnect the optical-drive bezel from the optical drive.



- a. optical-drive bezel
- b. optical drive

Removing the optical drive

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Topics:

- [Procedure](#)
- [Post-requisites](#)

Procedure

1. Align and snap the optical-drive bezel to the optical drive.
2. Align the screw holes on the optical-drive bracket with the screw holes on the optical drive.
3. Replace the screws that secure the optical-drive bracket to the optical drive.
4. Slide the optical-drive module into the optical-drive bay through the front of the chassis.
5. Replace the screw that secures the optical-drive module to the chassis.
6. Open the side-chassis.
7. Connect the optical-drive cable and the power cable to the optical drive.
8. Connect the hard-drive cable and the power cable to the hard drive.
9. Close the side-chassis.

Post-requisites

1. Replace the [front bezel](#).
2. Replace the [computer cover](#).

Removing the processor fan

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Topics:

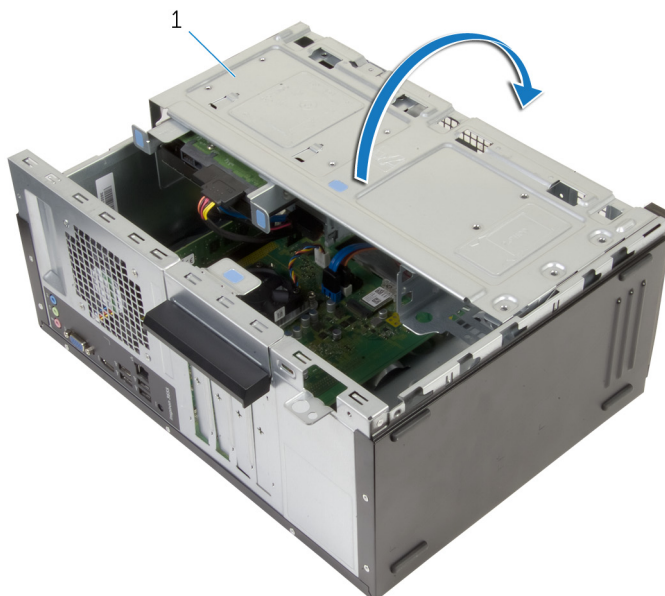
- [Prerequisites](#)
- [Procedure](#)

Prerequisites

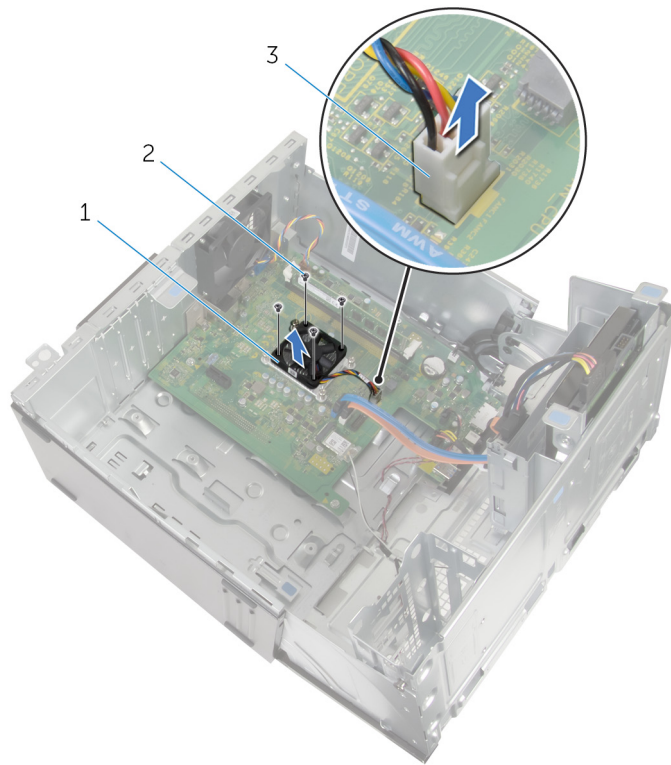
1. Remove the [computer cover](#).
2. Remove the [front bezel](#).

Procedure

1. Open the side-chassis.



- a. side-chassis
2. Disconnect the processor-fan cable from the system board.
 3. Remove the screws that secure the processor fan to the heat sink.
 4. Lift the processor fan off the heat sink.



- a. processor fan
- b. screws (4)
- c. processor-fan cable

Replacing the processor fan

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Topics:

- [Procedure](#)
- [Post-requisites](#)

Procedure

1. Align the screw holes on the processor fan with the screw holes on the heat sink.
2. Replace the screws that secure the processor fan to the heat sink.
3. Connect the processor-fan cable to the heat sink.
4. Close the side-chassis.

Post-requisites

1. Replace the [front bezel](#).
2. Replace the [computer cover](#).

Removing the heat sink

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NOTE: The heat sink may become hot during normal operation. Allow sufficient time for the heat sink to cool before you touch it.

CAUTION: For maximum cooling of the processor, do not touch the heat transfer areas on the heat sink. The oils in your skin can reduce the heat transfer capability of the thermal grease.

Topics:

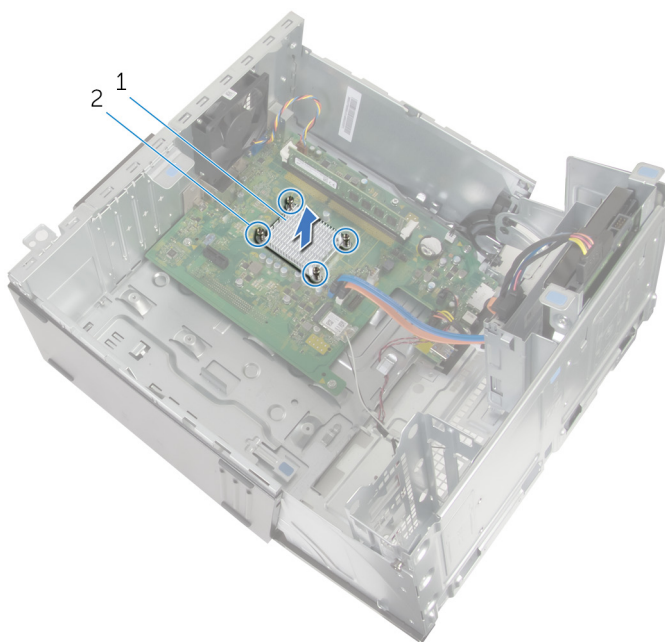
- [Prerequisites](#)
- [Procedure](#)

Prerequisites

1. Remove the [computer cover](#).
2. Remove the [front bezel](#).
3. Remove the [processor fan](#).

Procedure

1. Loosen the captive screws that secure the heat sink to the system board.
2. Lift the heat sink off the system board.



- a. heat sink
- b. captive screws (4)

Replacing the heat sink

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CAUTION: Incorrect alignment of the heat sink can damage the system board and processor.

NOTE: The original thermal grease can be reused if the original system board and heat sink are reinstalled together. If either the system board or the heat sink is replaced, use the thermal pad provided in the kit to ensure that thermal conductivity is achieved.

Topics:

- [Procedure](#)
- [Post-requisites](#)

Procedure

1. Align the captive screws on the heat sink with the screw holes on the system board.
2. Tighten the captive screws to secure the heat sink to the system board.

Post-requisites

1. Replace the [processor fan](#).
2. Replace the [front bezel](#).
3. Replace the [computer cover](#).

Removing the coin-cell battery

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CAUTION: Removing the coin-cell battery resets the BIOS setup program's settings to default. It is recommended that you note the BIOS setup program's settings before removing the coin-cell battery.

Topics:

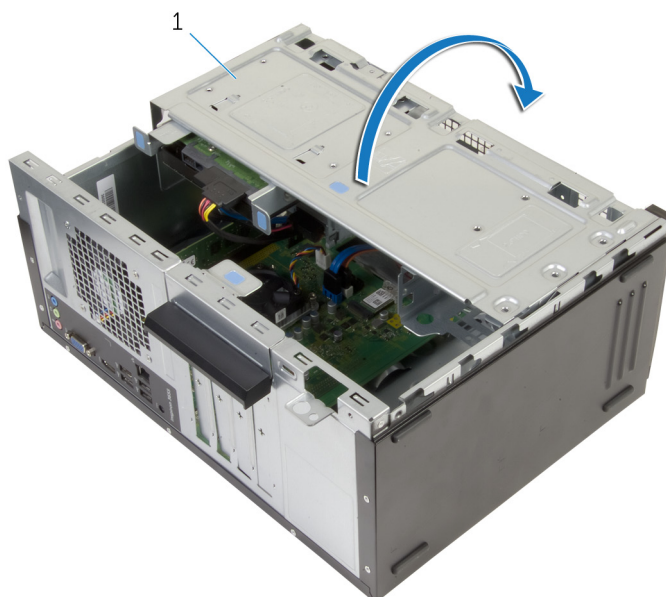
- [Prerequisites](#)
- [Procedure](#)

Prerequisites

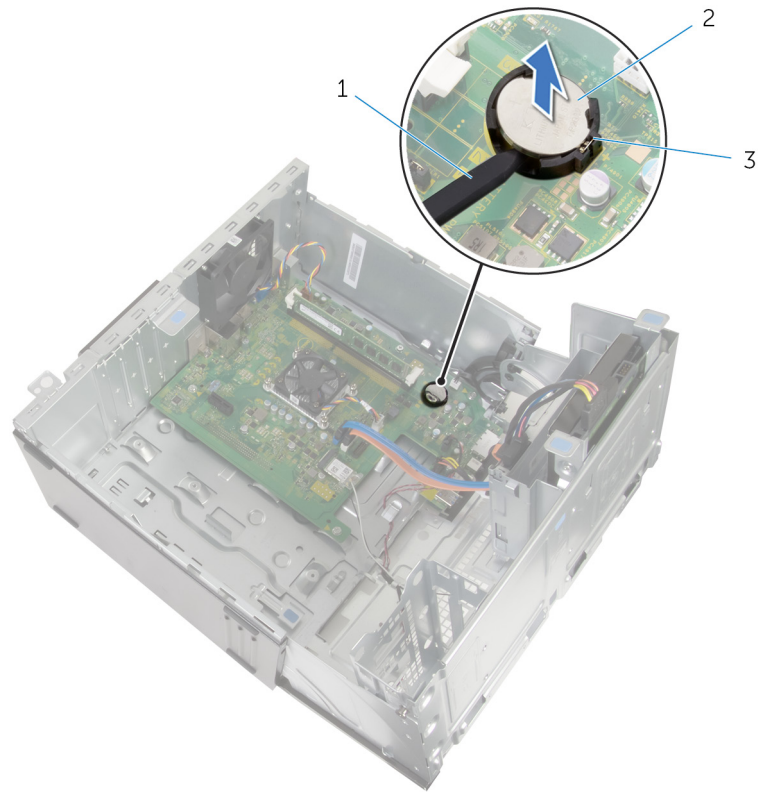
1. Remove the [computer cover](#).
2. Remove the [front bezel](#).

Procedure

1. Open the side-chassis.



- a. side-chassis
2. Using a plastic scribe, pry the coin-cell battery out of its socket.



- a. plastic scribe
- b. coin-cell battery
- c. coin-cell battery socket

Replacing the coin-cell battery

NOTE: Before working inside your computer, read the safety information that shipped with your computer and follow the steps in [Before working inside your computer](#). After working inside your computer, follow the instructions in [After working inside your computer](#). For more safety best practices, see the Regulatory Compliance home page at www.dell.com/regulatory_compliance.

Topics:

- [Procedure](#)
- [Post-requisites](#)

Procedure

1. With the positive-side facing up, insert the coin-cell battery into the coin-cell battery socket and snap the battery into place.
2. Close the side-chassis.

Post-requisites

1. Replace the [front bezel](#).
2. Replace the [computer cover](#).

Removing the wireless card

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Topics:

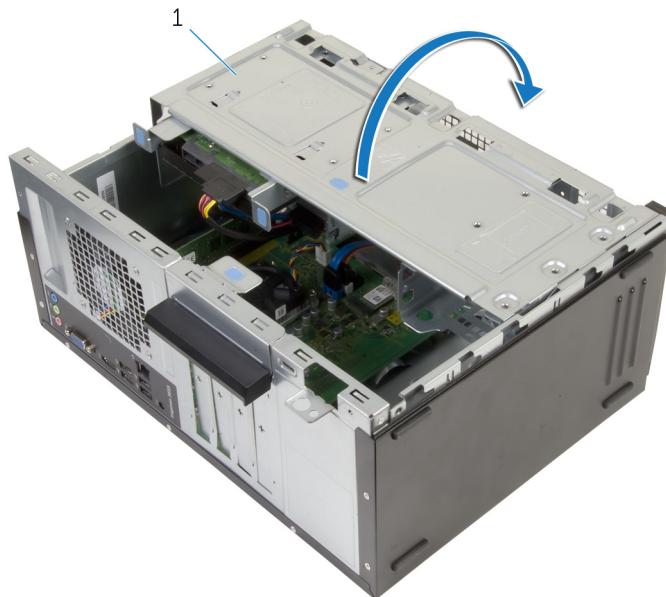
- [Prerequisites](#)
- [Procedure](#)

Prerequisites

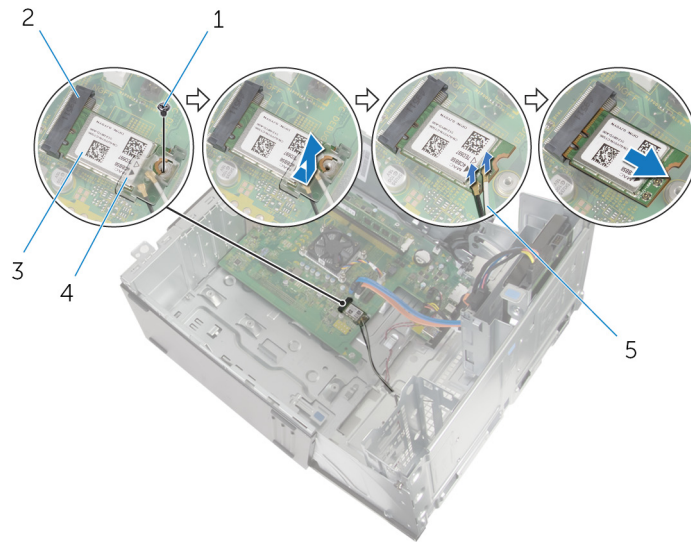
1. Remove the [computer cover](#).
2. Remove the [front bezel](#).

Procedure

1. Open the side-chassis.



- a. side-chassis
2. Remove the screw that secures the wireless card to the system board.
 3. Slide the wireless-card bracket off the wireless card.
 4. Disconnect the antenna cables from the wireless card.
 5. Slide and remove the wireless card from the wireless-card slot.



1. screw
3. wireless card
5. antenna cables

2. wireless-card slot
4. wireless-card bracket

Replacing the wireless card

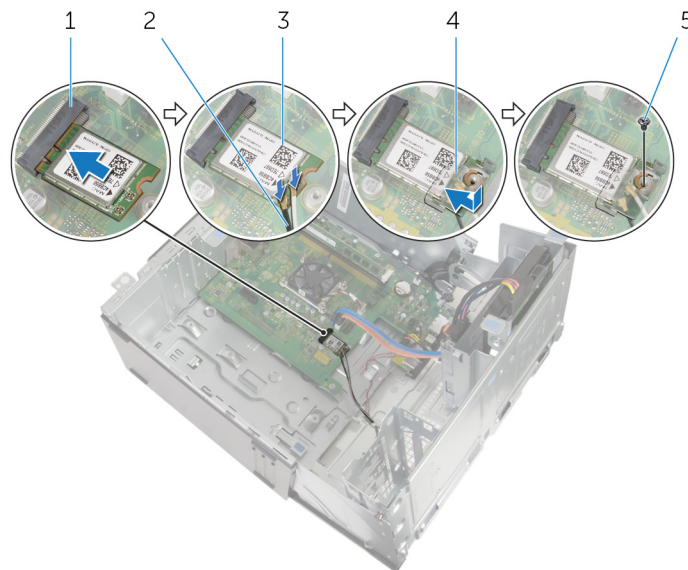
NOTE: Before working inside your computer, read the safety information that shipped with your computer and follow the steps in [Before working inside your computer](#). After working inside your computer, follow the instructions in [After working inside your computer](#). For more safety best practices, see the Regulatory Compliance home page at www.dell.com/regulatory_compliance.

Topics:

- [Procedure](#)
- [Post-requisites](#)

Procedure

1. Align the notch on the wireless card with the tab on the wireless-card slot.
2. Slide the wireless card at an angle into the wireless-card slot.
3. Connect the antenna cables to the wireless card.
4. Slide the wireless-card bracket over the wireless card.
5. Replace the screw that secures the wireless card to the system board.



- | | |
|-----------------------|--------------------------|
| 1. wireless-card slot | 2. antenna cables |
| 3. wireless card | 4. wireless-card bracket |
| 5. screw | |
6. Close the side-chassis.

Post-requisites

1. Replace the [front bezel](#).
2. Replace the [computer cover](#).

Removing the antenna modules

NOTE: Before working inside your computer, read the safety information that shipped with your computer and follow the steps in [Before working inside your computer](#). After working inside your computer, follow the instructions in [After working inside your computer](#). For more safety best practices, see the Regulatory Compliance home page at www.dell.com/regulatory_compliance.

Topics:

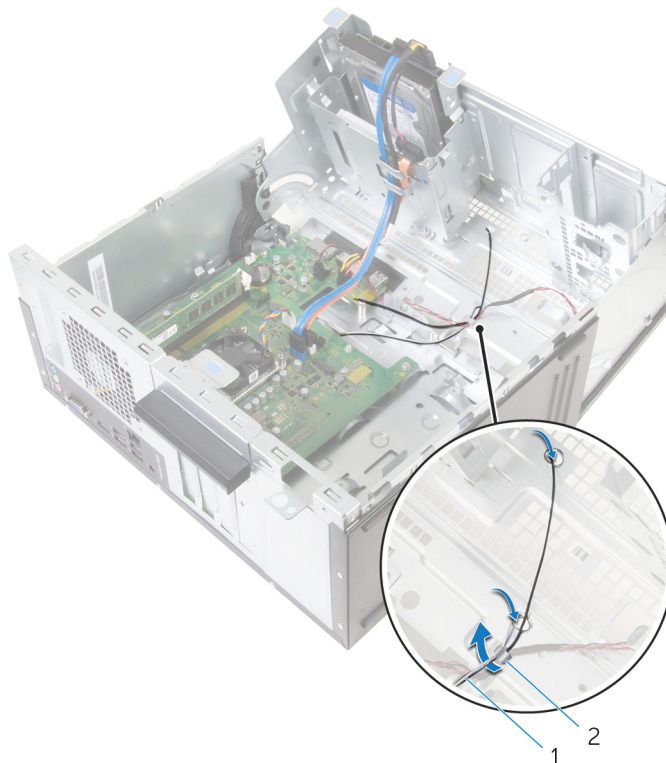
- [Prerequisites](#)
- [Procedure](#)

Prerequisites

1. Remove the [computer cover](#).
2. Remove the [front bezel](#).
3. Remove the [wireless card](#).

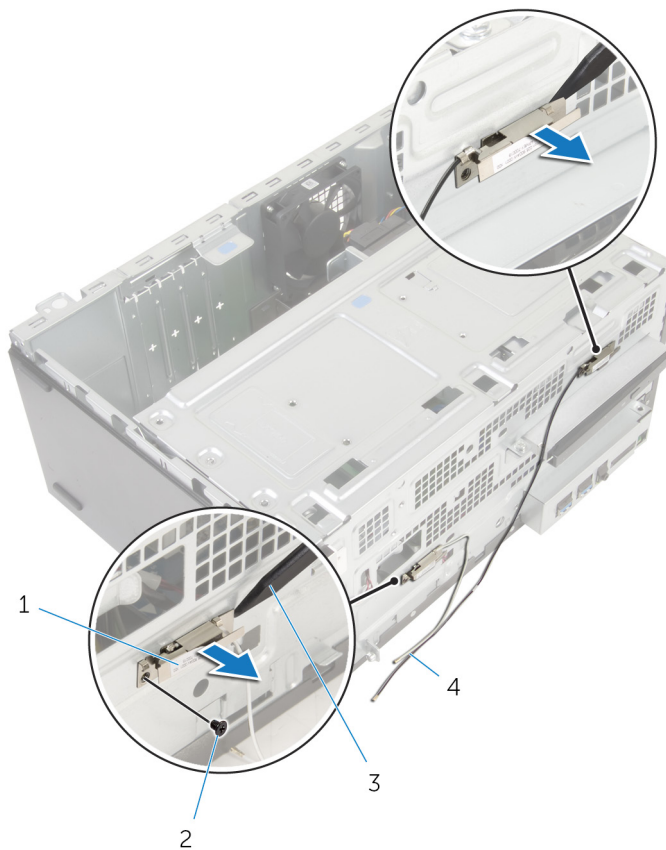
Procedure

1. Remove the antenna cables from the routing guides on the chassis.
2. Gently slide the antenna cables through the routing holes on the side-chassis.



- a. antenna cables
 - b. routing guides
3. Close the side-chassis.
 4. Remove the screws that secure the antenna modules to the side-chassis.

5. Using a plastic scribe, gently pry the antenna modules off the side-chassis.



- 1. antenna modules (2)
- 3. plastic scribe

- 2. screws (2)
- 4. antenna cables

Replacing the antenna modules

NOTE: Before working inside your computer, read the safety information that shipped with your computer and follow the steps in [Before working inside your computer](#). After working inside your computer, follow the instructions in [After working inside your computer](#). For more safety best practices, see the Regulatory Compliance home page at www.dell.com/regulatory_compliance.

Topics:

- [Procedure](#)
- [Post-requisites](#)

Procedure

1. Align the screw holes on the antenna modules with the screw holes on the side-chassis.
2. Replace the screws that secure the antenna modules to the side-chassis.
3. Slide the antenna cables through the routing holes on the side-chassis.
4. Open the side-chassis and route the antenna cables through the routing guides.

Post-requisites

1. Replace the [wireless card](#).
2. Replace the [front bezel](#).
3. Replace the [computer cover](#).

Removing the power-button module

NOTE: Before working inside your computer, read the safety information that shipped with your computer and follow the steps in [Before working inside your computer](#). After working inside your computer, follow the instructions in [After working inside your computer](#). For more safety best practices, see the Regulatory Compliance home page at www.dell.com/regulatory_compliance.

Topics:

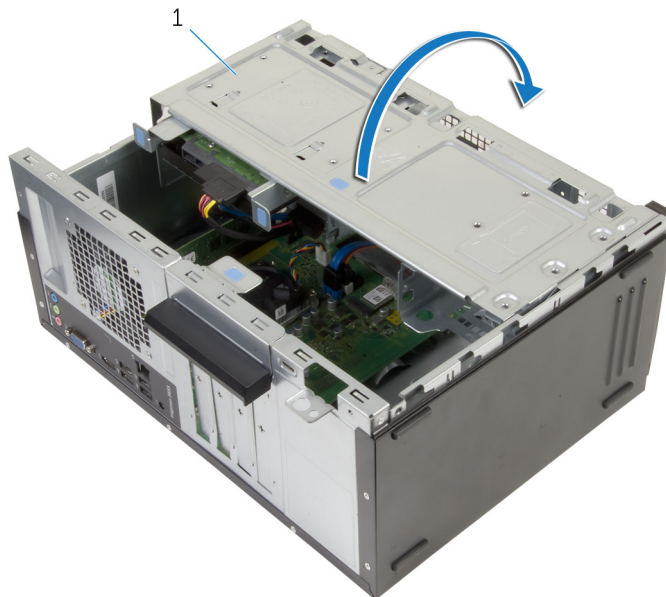
- [Prerequisites](#)
- [Procedure](#)

Prerequisites

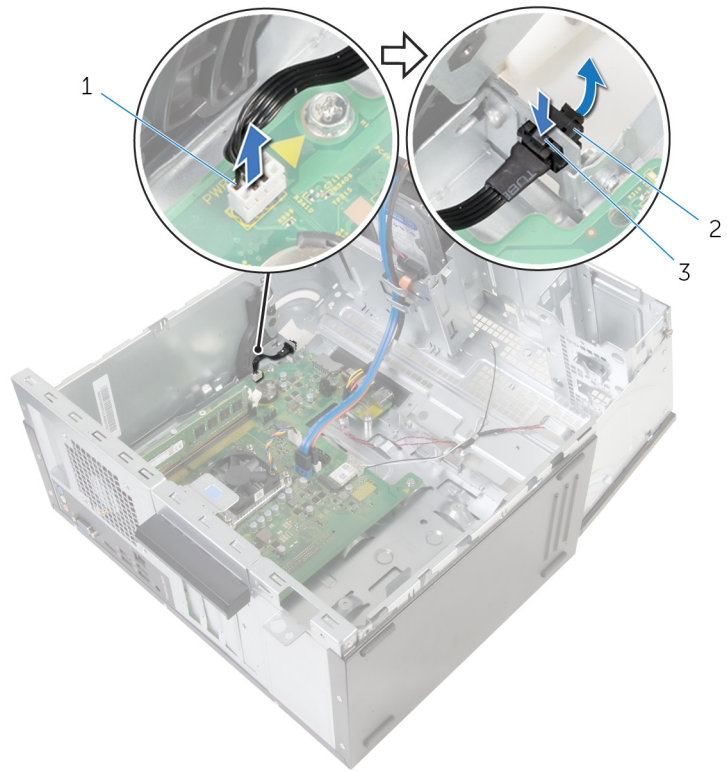
1. Remove the [computer cover](#).
2. Remove the [front bezel](#).

Procedure

1. Open the side-chassis.



- a. side-chassis
2. Disconnect the power-button cable from the system board.
 3. Press down the tab on the power button and slide it out of the chassis.



- a. power-button cable
- b. tab
- c. power button

Replacing the power-button module

NOTE: Before working inside your computer, read the safety information that shipped with your computer and follow the steps in [Before working inside your computer](#). After working inside your computer, follow the instructions in [After working inside your computer](#). For more safety best practices, see the Regulatory Compliance home page at www.dell.com/regulatory_compliance.

Topics:

- [Procedure](#)
- [Post-requisites](#)

Procedure

1. Slide the power button into its socket.
2. Connect the power-button cable to the system board.
3. Close the side-chassis.

Post-requisites

1. Replace the [front bezel](#).
2. Replace the [computer cover](#).

Removing the chassis fan

NOTE: Before working inside your computer, read the safety information that shipped with your computer and follow the steps in [Before working inside your computer](#). After working inside your computer, follow the instructions in [After working inside your computer](#). For more safety best practices, see the Regulatory Compliance home page at www.dell.com/regulatory_compliance.

Topics:

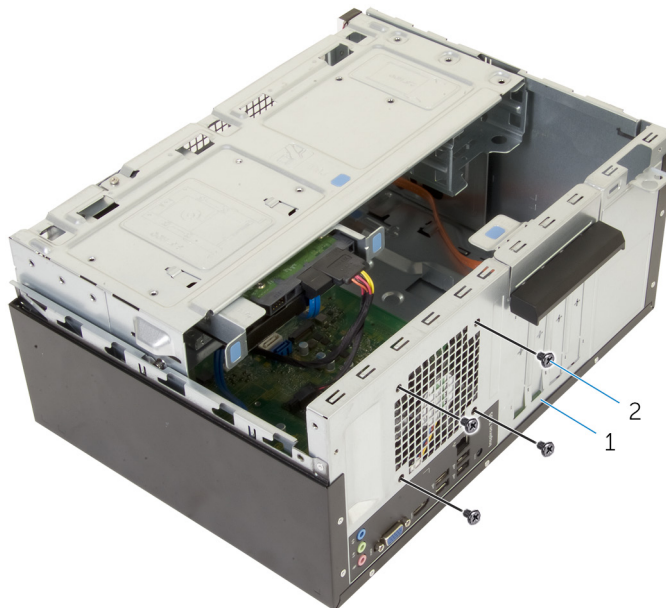
- [Prerequisites](#)
- [Procedure](#)

Prerequisites

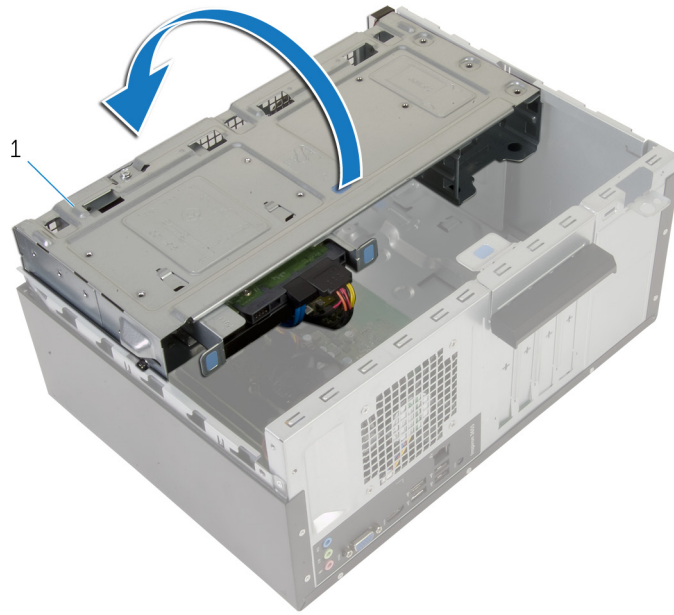
1. Remove the [computer cover](#).
2. Remove the [front bezel](#).

Procedure

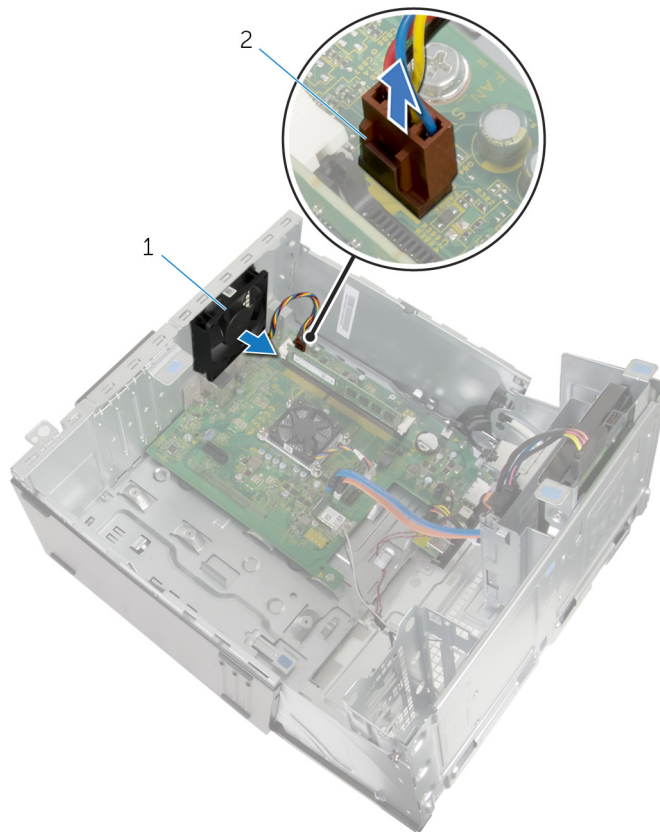
1. Remove the screws that secure the chassis fan to the chassis.



- a. chassis
 - b. screws (4)
2. Open the side-chassis.



- a. side-chassis
- 3. Disconnect the chassis-fan cable from the system board.
- 4. Remove the chassis fan from the chassis.



- a. chassis fan
- b. chassis-fan cable

Replacing the chassis fan

NOTE: Before working inside your computer, read the safety information that shipped with your computer and follow the steps in [Before working inside your computer](#). After working inside your computer, follow the instructions in [After working inside your computer](#). For more safety best practices, see the Regulatory Compliance home page at www.dell.com/regulatory_compliance.

Topics:

- [Procedure](#)
- [Post-requisites](#)

Procedure

1. Align the screw holes on the chassis fan with the screw holes on the chassis.
2. Replace the screws that secure the chassis fan to the chassis.
3. Connect the chassis fan cable to the system board.
4. Close the side-chassis.

Post-requisites

1. Replace the [front bezel](#).
2. Replace the [computer cover](#).

Removing the system board

- NOTE:** Before working inside your computer, read the safety information that shipped with your computer and follow the steps in [Before working inside your computer](#). After working inside your computer, follow the instructions in [After working inside your computer](#). For more safety best practices, see the Regulatory Compliance home page at www.dell.com/regulatory_compliance.
- NOTE:** Your computer's Service Tag is stored in the system board. You must enter the Service Tag in the BIOS setup program after you replace the system board.
- NOTE:** Replacing the system board removes any changes you have made to the BIOS using the BIOS setup program. You must make the appropriate changes again after you replace the system board.
- NOTE:** Before disconnecting the cables from the system board, note the location of the connectors so that you can reconnect the cables correctly after you replace the system board.

Topics:

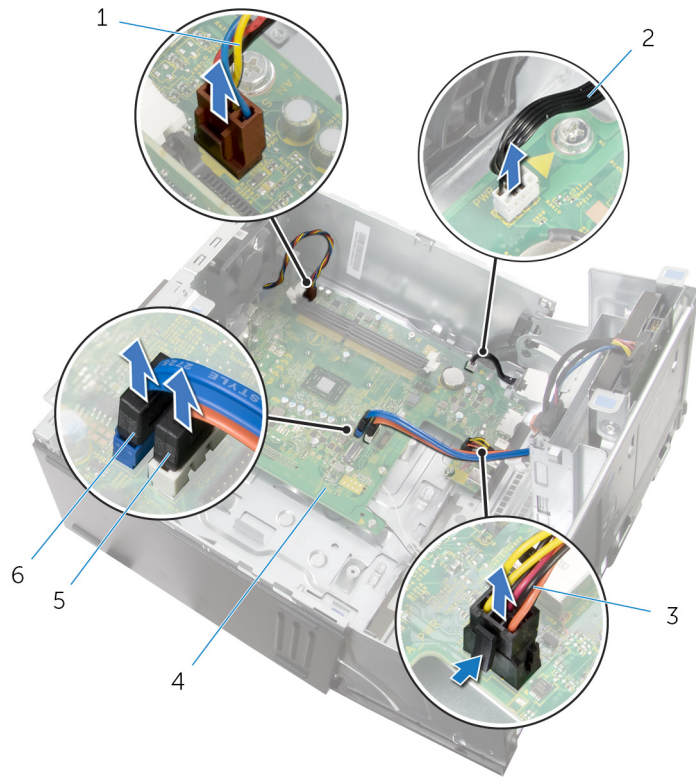
- [Prerequisites](#)
- [Procedure](#)

Prerequisites

1. Remove the [computer cover](#).
2. Remove the [front bezel](#).
3. Remove the [wireless card](#).
4. Remove the [heat sink](#).
5. Remove the [processor fan](#).
6. Remove the [memory modules](#).

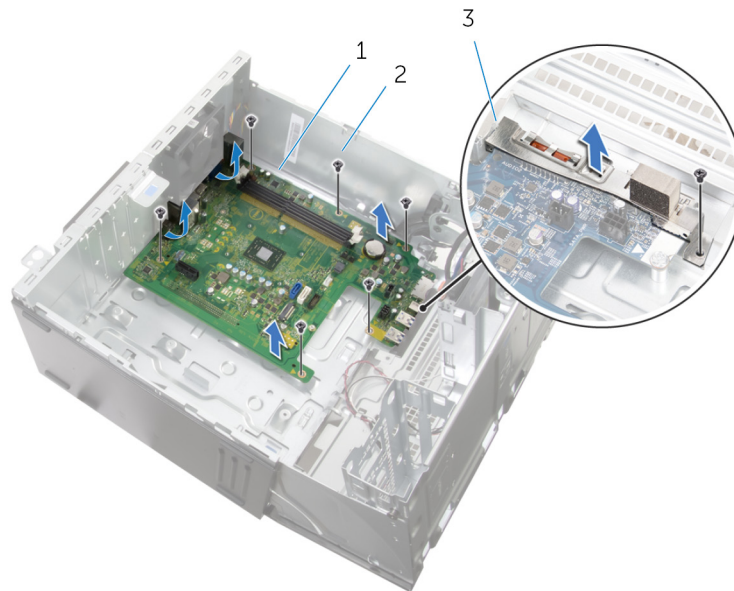
Procedure

1. Disconnect all the cables connected to the system board.
2. Note the routing and move the cables away from the system board.



- 1. chassis-fan cable
- 2. power-button cable
- 3. drive-power cable
- 4. system board
- 5. optical-drive cable
- 6. hard-drive cable

3. Remove the screw that secures the I/O cover to the chassis and lift the cover off the system board.
4. Remove the screws that secure the system board to the chassis.
5. Starting from the edge near the memory-module slots, gently lift the system board off the chassis.



- a. system board
- b. screws (7)
- c. I/O cover

Replacing the system board

- NOTE:** Before working inside your computer, read the safety information that shipped with your computer and follow the steps in [Before working inside your computer](#). After working inside your computer, follow the instructions in [After working inside your computer](#). For more safety best practices, see the Regulatory Compliance home page at www.dell.com/regulatory_compliance.
- NOTE:** Your computer's Service Tag is stored in the system board. You must enter the Service Tag in the BIOS setup program after you replace the system board.
- NOTE:** Replacing the system board removes any changes you have made to the BIOS using the BIOS setup program. You must make the appropriate changes again after you replace the system board.

Topics:

- [Procedure](#)
- [Post-requisites](#)

Procedure

1. Align the screw holes on the system board with the screw holes on the chassis.
2. Gently place the system board onto the chassis.
3. Replace the screws that secure the system board to the chassis.
4. Align the screw hole on the I/O cover with the screw hole on the chassis.
5. Replace the screw that secures the I/O cover to the chassis.
6. Route the cables through their routing guides and connect the cables to their respective connectors on the system board.

Post-requisites

1. Replace the [memory modules](#).
2. Replace the [heat sink](#).
3. Replace the [processor fan](#).
4. Replace the [wireless card](#).
5. Replace the [front bezel](#).
6. Replace the [computer cover](#).

BIOS setup program

Overview

CAUTION: Unless you are an expert computer user, do not change the settings in the BIOS setup program. Certain changes can make your computer work incorrectly.

NOTE: Before you change BIOS setup program, it is recommended that you write down the BIOS setup program screen information for future reference.

Use BIOS setup program to:

- Get information about the hardware installed in your computer, such as the amount of RAM, the size of the hard drive, and so on.
- Change the system configuration information.
- Set or change a user-selectable option, such as the user password, type of hard drive installed, enabling or disabling base devices, and so on.

Entering BIOS setup program

1. Turn on (or restart) your computer.
2. During POST, when the DELL logo is displayed, watch for the F2 prompt to appear, and then press F2 immediately.

NOTE: The F2 prompt indicates that the keyboard is initialized. This prompt can appear very quickly, so you must watch for it, and then press F2. If you press F2 before the F2 prompt, this keystroke is lost. If you wait too long and the operating system logo appears, continue to wait until you see the desktop. Then, turn off your computer and try again.

Clearing Forgotten Passwords

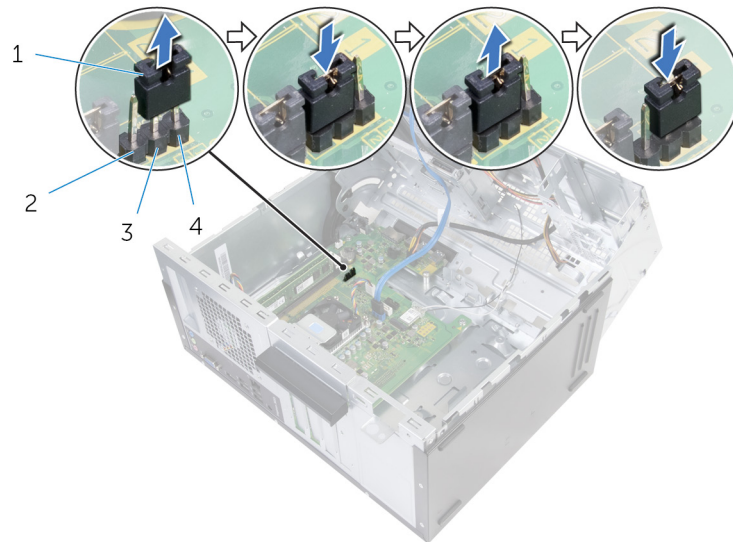
NOTE: Before working inside your computer, read the safety information that shipped with your computer and follow the steps in [Before working inside your computer](#). After working inside your computer, follow the instructions in [After working inside your computer](#). For more safety best practices, see the Regulatory Compliance home page at www.dell.com/regulatory_compliance.

Prerequisites

1. Remove the [computer cover](#).
2. Remove the [front bezel](#).

Procedure

1. Open the side-chassis.
2. Remove the jumper plug from pins 2 and 3 and replace it on pins 1 and 2.
3. Wait for approximately 5 seconds.
4. Remove the jumper plug from pins 1 and 2 and replace it on pins 2 and 3.



1. jumper plug
2. pin 1
3. pin 2
4. pin 3
5. Close the side-chassis.

Post-requisites

1. Replace the [front bezel](#).
2. Replace the [computer cover](#).

Clearing CMOS Settings

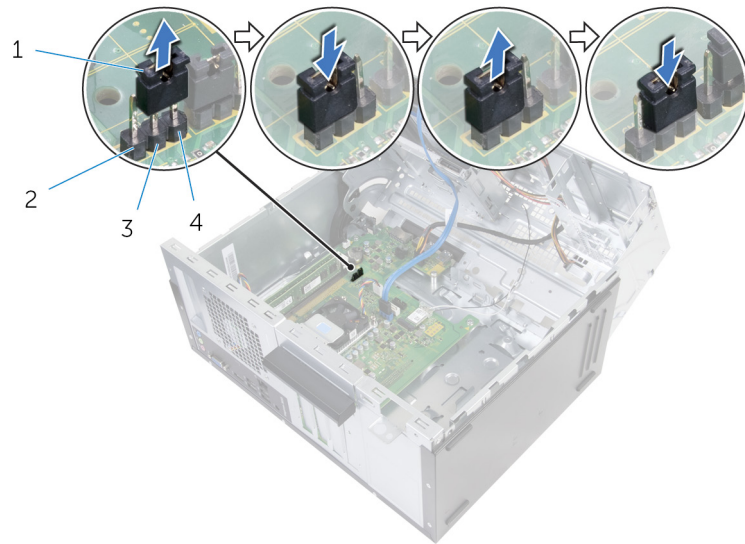
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Prerequisites

1. Remove the [computer cover](#).
2. Remove the [front bezel](#).

Procedure

1. Open the side-chassis.
2. Remove the jumper plug from pins 2 and 3 and replace it on pins 1 and 2.
3. Wait for approximately 5 seconds.
4. Remove the jumper plug from pins 1 and 2 and replace it on pins 2 and 3.




1. jumper plug
 2. pin 1
 3. pin 2
 4. pin 3
5. Close the side-chassis.

Post-requisites

1. Replace the [front bezel](#).
2. Replace the [computer cover](#).

Flashing the BIOS

You may need to flash (update) the BIOS when an update is available or when you replace the system board. To flash the BIOS:

1. Turn on your computer.
2. Go to www.dell.com/support.
3. Click **Product support**, enter the Service Tag of your computer, and then click **Submit**.
 **NOTE: If you do not have the Service Tag, use the auto-detect feature or manually browse for your computer model.**
4. Click **Drivers & downloads > Find it myself**.
5. Select the operating system installed on your computer.
6. Scroll down the page and expand **BIOS**.
7. Click **Download** to download the latest version of the BIOS for your computer.
8. After the download is complete, navigate to the folder where you saved the BIOS update file.
9. Double-click the BIOS update file icon and follow the instructions on the screen.

Getting help and contacting Dell

Self-help resources

You can get information and help on Dell products and services using these self-help resources:

Information about Dell products and services
Windows 8.1 and Windows 10

www.dell.com

Dell Help & Support app



Windows 10

Get started app



Windows 8.1

Help + Tips app



Accessing help in Windows 8, Windows 8.1, and Windows 10

Accessing help in Windows 7

Online help for operating system

Troubleshooting information, user manuals, setup instructions, product specifications, technical help blogs, drivers, software updates, and so on.

Learn about your operating system, setting up and using your computer, data backup, diagnostics, and so on.

In Windows search, type **Help** and **Support**, and press Enter.

Click **Start > Help and Support**.

www.dell.com/support/windows

www.dell.com/support/linux

www.dell.com/support

See *Me and My Dell* at www.dell.com/support/manuals.

Contacting Dell

To contact Dell for sales, technical support, or customer service issues, see www.dell.com/contactdell.

(i) NOTE: Availability varies by country and product, and some services may not be available in your country.

(i) NOTE: If you do not have an active internet connection, you can find contact information on your purchase invoice, packing slip, bill, or Dell product catalog.