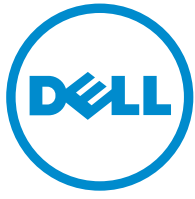
Inspiron 20
Service Manual

Computer Model: Inspiron 20 Model 3043
Regulatory Model: W13B
Regulatory Type: W13B001



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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Before Working Inside Your Computer

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

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

Before You Begin

1. Save and close all open files and exit all open applications.
2. Shut down your computer.
   - Windows 8.1: On the **Start** screen, click or tap the power icon → **Shut down**.
   - Windows 7: Click or tap **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.

WARNING: 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 dell.com/regulatory_compliance.

WARNING: 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 power source.

CAUTION: To avoid damaging the computer, make sure 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: Only a certified service technician is authorized to remove the computer cover and access any of the components inside the computer. See the safety instructions for complete information about safety precautions, working inside your computer, and protecting against electrostatic discharge.

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, make sure that the ports and connectors are correctly oriented and aligned.

CAUTION: To disconnect a network cable, first unplug the cable from your computer and then unplug the cable from the network device.

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

Recommended Tools

The procedures in this document may require the following tools:

- Philips screwdriver
- Flat-head screwdriver
- Plastic scribe

After Working Inside Your Computer

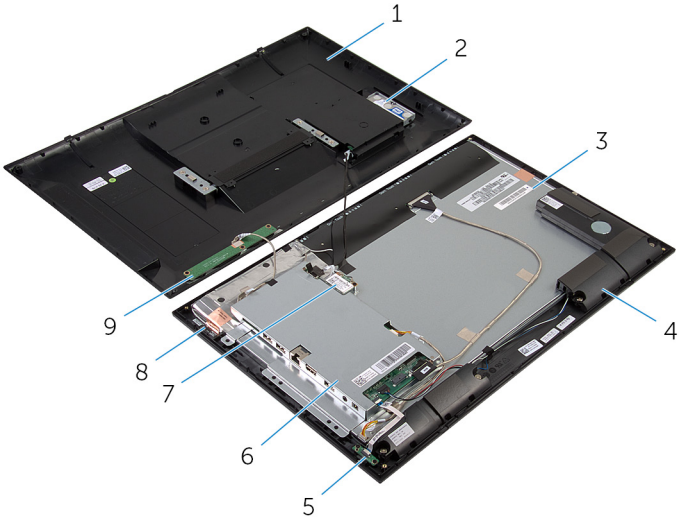
CAUTION: Leaving stray or loose screws inside your computer may severely damage your computer.

1. Replace all screws and make sure that no stray screws remain inside your computer.
2. Connect any external devices, peripherals, and cables you removed before working on your computer.
3. Replace any media cards, discs, and any other part(s) 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

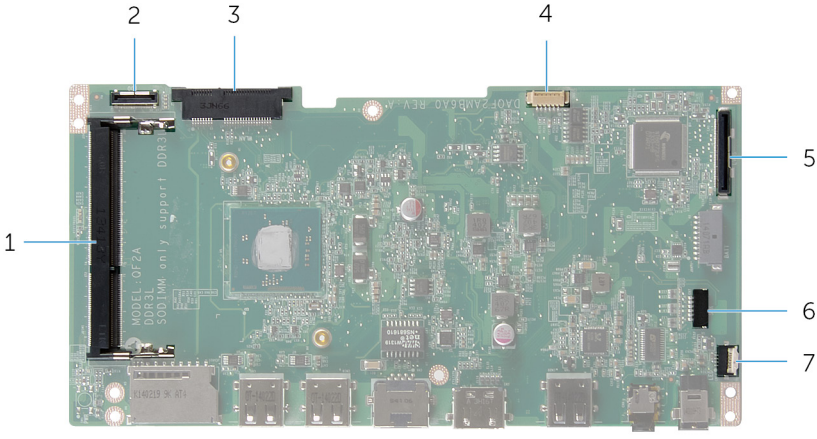
WARNING: Before working inside your computer, read the safety information that shipped with your computer and follow the steps in Before Working Inside Your Computer. After working inside your computer, follow the instructions in After Working Inside Your Computer. For more safety best practices, see the Regulatory Compliance home page at dell.com/regulatory_compliance.

Inside View of Your Computer

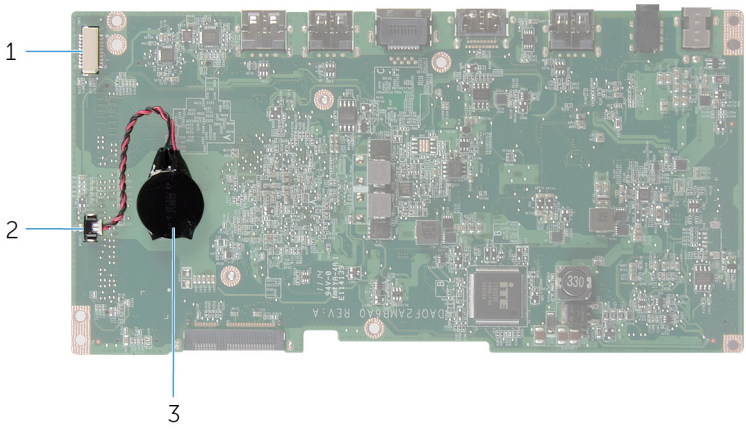


1	back cover	2	hard-drive assembly
3	display panel	4	speakers (2)
5	power-status light board	6	system-board bracket
7	wireless card	8	antenna modules (2)
9	control-buttons board		

System Board Components



1	memory-module slot (DDR3L)	2	hard-drive cable connector (HDD)
3	wireless-card slot (WLAN)	4	display-backlight cable connector
5	display-cable connector (LVDS)	6	speaker-cable connector (SPK)
7	power-status light board cable connector (LED)		



1	camera and control-buttons board cable connector	2	coin-cell battery cable connector
3	coin-cell battery		

Removing the Hard Drive

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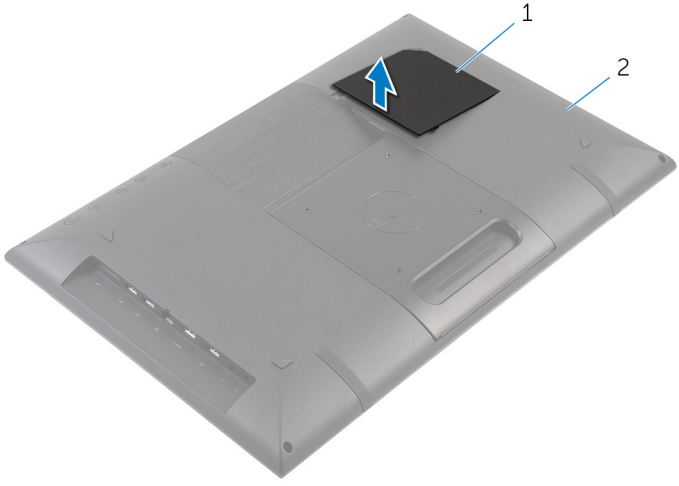
CAUTION: Hard drives are fragile. Exercise care when handling the hard drive.

CAUTION: To avoid data loss, do not remove the hard drive while the computer is in Sleep or On state.

Procedure

1 Place the computer face down on a flat and clean surface.

2 Using your fingertips, pry the hard-drive door off the back cover.

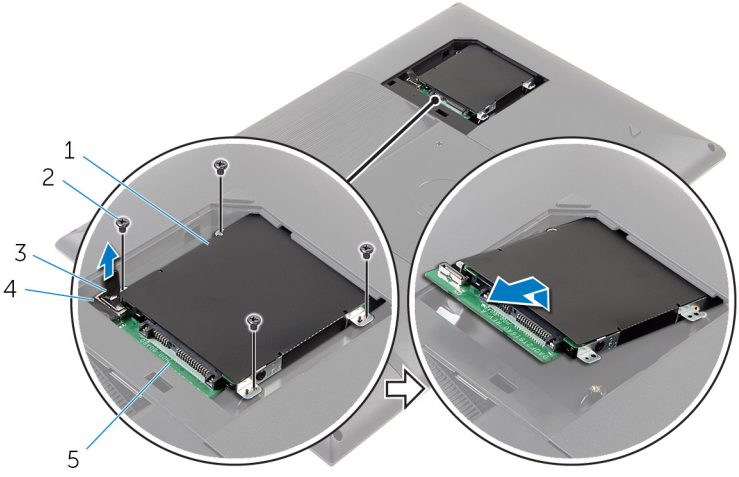


1 hard-drive door 2 back cover

3 Using the pull tab, disconnect the hard-drive cable from the interposer board.

4 Remove the screws that secure the hard-drive assembly to the back cover.

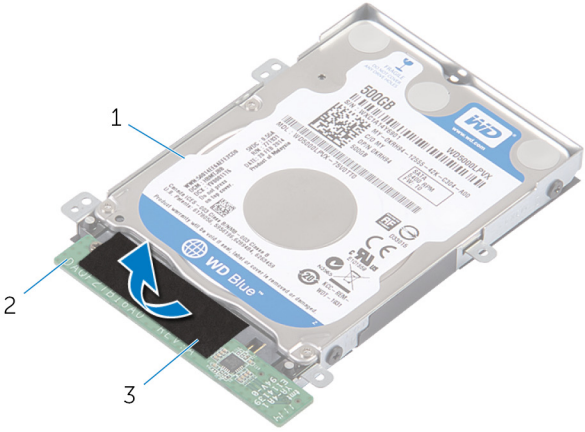
5 Lift and slide the hard-drive assembly out of the slot on the back cover.



1	hard-drive assembly	2	screws (4)
3	pull tab	4	hard-drive cable
5	interposer board		

6 Turn the hard-drive assembly over.

7 Peel off the tape that secures the interposer board to the hard-drive assembly.



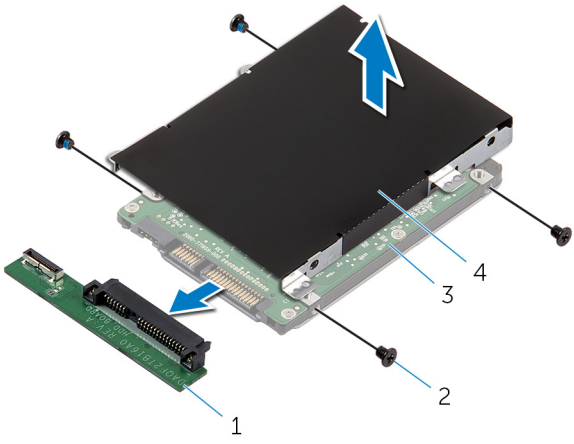
1	hard-drive assembly	2	interposer board
3	tape		

8 Turn the hard-drive assembly over.

9 Pull the interposer board to disconnect it from the hard-drive assembly.

10 Remove the screws that secure the hard-drive bracket to the hard drive.

11 Lift the hard-drive bracket off the hard drive.



1	interposer board	2	screws (4)
3	hard drive	4	hard-drive bracket

Replacing the Hard Drive

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CAUTION: Hard drives are fragile. Exercise care when handling the hard drive.

Procedure

1. Align the screw holes on the hard-drive bracket with the screw holes on the hard drive.
2. Replace the screws that secure the hard-drive bracket to the hard drive.
3. Connect the interposer board to the hard-drive assembly.
4. Turn the hard-drive assembly over.
5. Adhere the tape to the interposer board and hard-drive assembly.
6. Turn the hard-drive assembly over.
7. Slide the hard-drive assembly into the slot on the back cover.
8. Align the screw holes on the hard-drive assembly with the screw holes on the back cover.
9. Replace the screws that secure the hard-drive assembly to the back cover.
10. Connect the hard-drive cable to the interposer board.
11. Slide the tabs on the hard-drive door into the slots on the back cover and snap the hard-drive door into place.
12. Place the computer in an upright position.

Removing the Back Cover

WARNING: 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 dell.com/regulatory_compliance.

Prerequisites

Follow the procedure from step 1 to step 5 in "Removing the Hard Drive".

Procedure

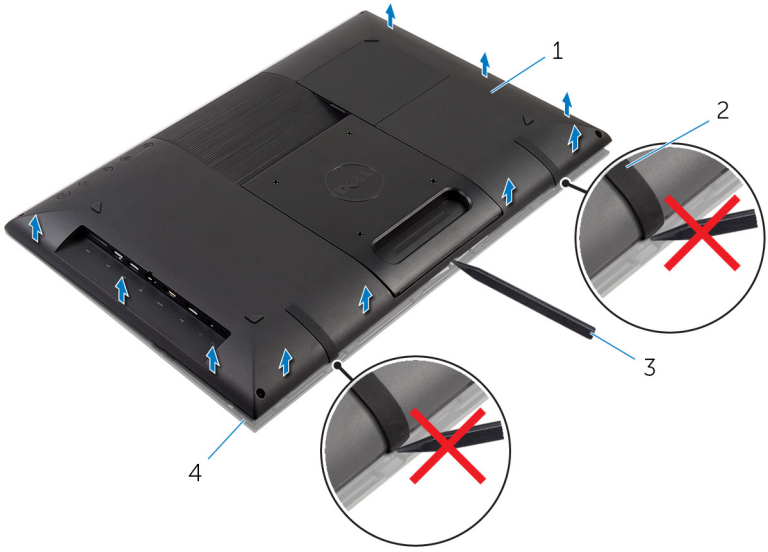
1. Slide the tabs on the hard-drive door into the slots on the back cover and snap the hard-drive door into place.
2. Remove the screws that secure the back cover to the display bezel.

1 screws (4) 2 back cover

3 notch

3 Using a plastic scribe, pry the back cover from the display bezel starting from the notch at the bottom of the back cover.

CAUTION: To avoid damaging the rubber foot, do not use the plastic scribe under the rubber-foot area.



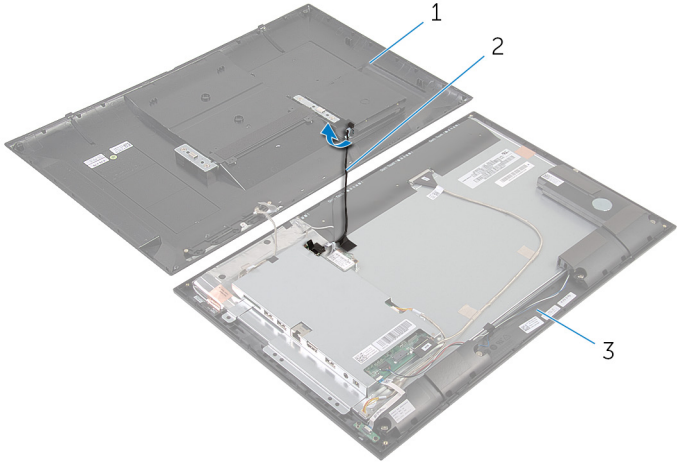
1	back cover	2	rubber foot (2)
3	plastic scribe	4	display bezel

4 Carefully lift the back cover and turn it over.

1 back cover 2 display bezel

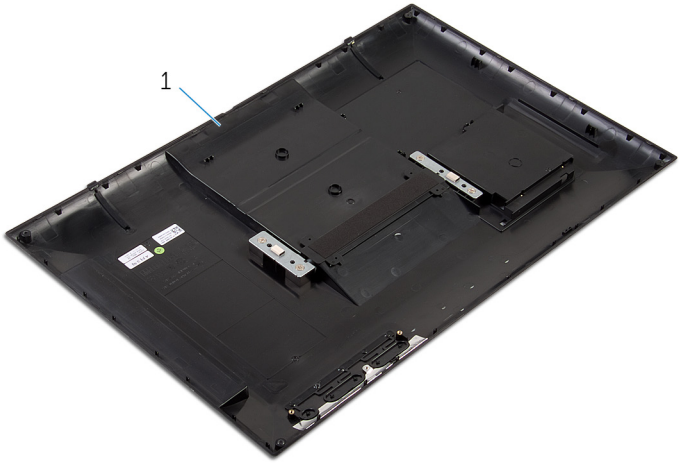
5 Follow the instructions from step 1 to step 4 in "Removing the Control-Buttons Board".

6 Remove the hard-drive cable from the slot on the back cover.



1 back cover 2 hard-drive cable
3 display bezel

7 Lift the back cover off the surface.



1 back cover

Replacing the Back Cover

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Procedure

1. Slide the hard-drive cable into the slot on the back cover.
2. Follow the instructions from step 1 to step 3 in "Replacing the Control-Buttons Board".
3. Carefully turn the back cover over and align the tabs on the back cover with the slots on the display bezel.
4. Snap the back cover into place.
5. Replace the screws that secure the back cover to the display bezel.
6. Using your fingertips, pry the hard-drive door off the back cover.

Post-requisites

Follow the procedure from step 7 to step 12 in "Replacing the Hard Drive".

Removing the Control-Buttons Board

WARNING: 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 dell.com/regulatory_compliance.

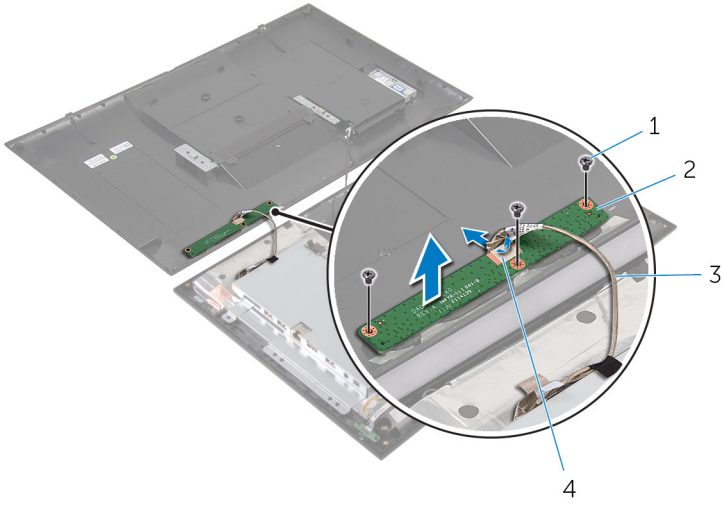
Prerequisites

Follow the instructions from step 2 to step 4 in "Removing the Back Cover".

Procedure

1. Remove the screws that secure the control-buttons board to the back cover.
2. Peel the tape that secures the control-buttons board cable to the control-buttons board.
3. Disconnect the control-buttons board cable from the control-buttons board.

4 Lift the control-buttons board off the back cover.



1	screws (3)	2	control-buttons board
3	control-buttons board cable	4	tape

Replacing the Control-Buttons Board

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Procedure

1. Align the screw holes on the control-buttons board with the screw holes on the back cover.
2. Replace the screws that secure the control-buttons board to the back cover.
3. Connect the control-buttons board cable to the control-buttons board and secure it with the tape.

Post-requisites

Follow the instructions from step 3 to step 5 in “Replacing the Back Cover”.

Removing the Wireless Card

WARNING: 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 dell.com/regulatory_compliance.

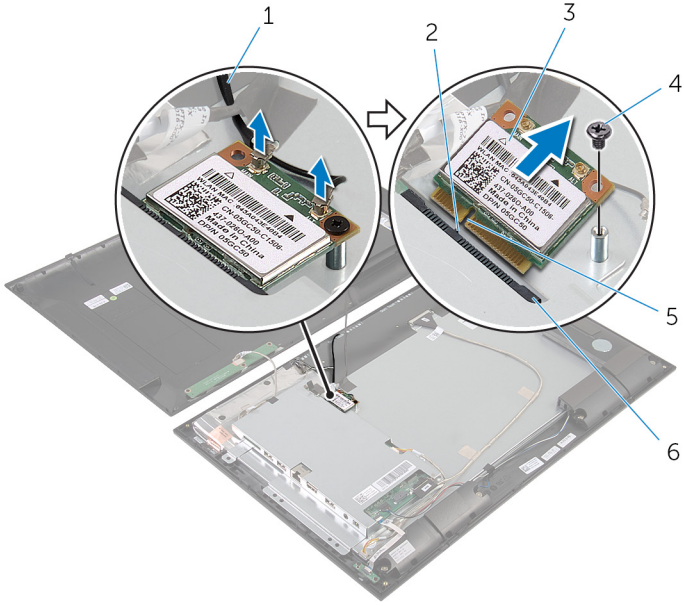
Prerequisites

Follow the instructions from step 2 to step 4 in "Removing the Back Cover".

Procedure

1. Disconnect the antenna cables from the wireless card.
2. Remove the screw that secures the wireless card to the system-board bracket.

3 Slide and remove the wireless card from the wireless-card slot.



1	antenna cables (2)	2	tab
3	wireless card	4	screw
5	notch	6	wireless-card slot

Replacing the Wireless Card

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Procedure

CAUTION: To avoid damaging the wireless card, do not place any cables under it.

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. Press the other end of the wireless card down and replace the screw that secures the wireless card to the system-board bracket.
4. Connect the antenna cables to the wireless card.

   The following table provides the antenna-cable color scheme for the wireless card supported by your computer.

Connectors on the wireless card	Antenna-cable color
Main (white triangle)	White
Auxiliary (black triangle)	Black

Post-requisites

Follow the instructions from step 3 to step 5 in "Replacing the Back Cover".

Removing the Power-Status Light Board

WARNING: 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 dell.com/regulatory_compliance.

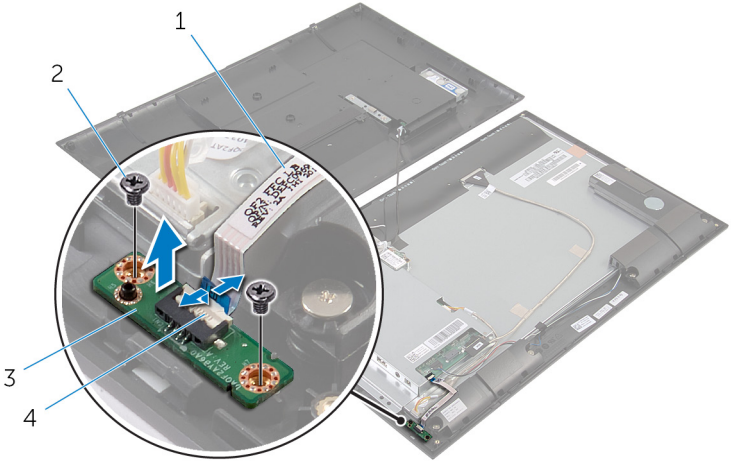
Prerequisites

Follow the instructions from step 2 to step 4 in "Removing the Back Cover".

Procedure

1. Lift the connector latch and disconnect the power-status light cable from the power-status light board.
2. Remove the screws that secure the power status-light board to the display bezel.

3 Lift the power status-light board off the display bezel.



1	power status-light cable	2	screws (2)
3	power status-light board	4	connector latch

Replacing the Power-Status Light Board

WARNING: 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 dell.com/regulatory_compliance.

Procedure

1. Slide the power status-light board into the alignment post on the display bezel.
2. Align the screw holes on the power status-light board with the screw holes on the display bezel.
3. Replace the screws that secure the power status-light board to the display bezel.
4. Slide the power-status light cable into the power-status light board connector and press down on the connector latch to secure the cable.

Post-requisites

Follow the instructions from step 3 to step 5 in “Replacing the Back Cover”.

Removing the Speakers

WARNING: 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 dell.com/regulatory_compliance.

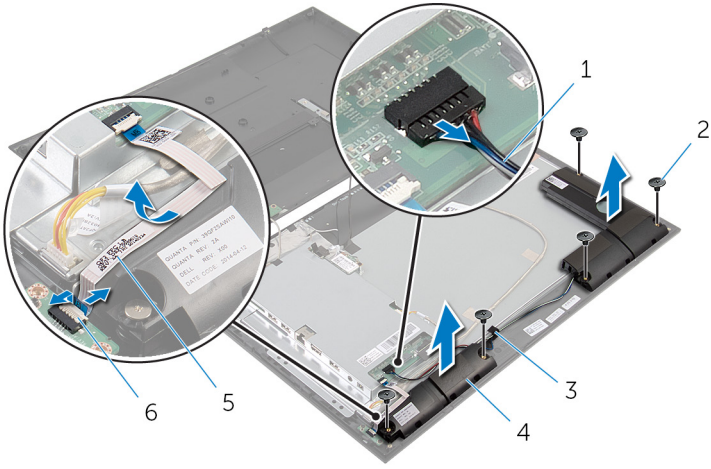
Prerequisites

Follow the instructions from step 2 to step 4 in "Removing the Back Cover".

Procedure

1. Lift the connector latch and disconnect the power-status light cable from the power-status light board.
2. Peel off the power-status light cable from the speaker.
3. Note the speaker cable routing and peel off the tape that secures the speaker cable to the display bezel.
4. Disconnect the speaker cable from the system board.
5. Remove the screws that secure the speakers to the display bezel.

6 Lift the speakers along with the cable off the display bezel.



1	speaker cable	2	screws (5)
3	tape	4	speakers (2)
5	power-status light cable	6	connector latch

Replacing the Speakers

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Procedure

1. Align the screw holes on the speakers with the screw holes on the display bezel.
2. Replace the screws that secure the speakers to the display bezel.
3. Route the speaker cable on the display bezel and secure it with the tape.
4. Connect the speaker cable to the system board.
5. Slide the power-status light cable into the power-status light board connector and press down on the connector latch to secure the cable.
6. Adhere the power-status light cable to the speaker.

Post-requisites

Follow the instructions from step 3 to step 5 in “Replacing the Back Cover”.

Removing the System Board

WARNING: 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 dell.com/regulatory_compliance.

NOTE: Your computer's Service Tag is stored in the system board. You must enter the Service Tag in the System Setup after you replace the system board.

NOTE: Replacing the system board removes any changes you have made to the BIOS using System Setup. You must make the desired 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 them correctly after you replace the system board.

Prerequisites

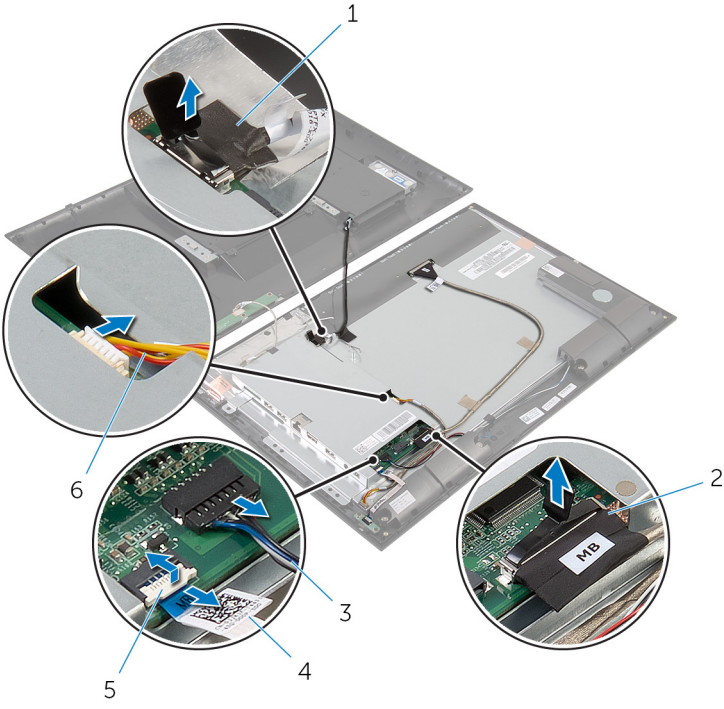
1 Follow the instructions from step 2 to step 4 in "Removing the Back Cover".

2 Remove the wireless card.

Procedure

1. Lift the connector latch and disconnect the power-status light cable from the system board.
2. Disconnect the hard-drive cable, speaker cable, display cable, and display-backlight cable from the system board.

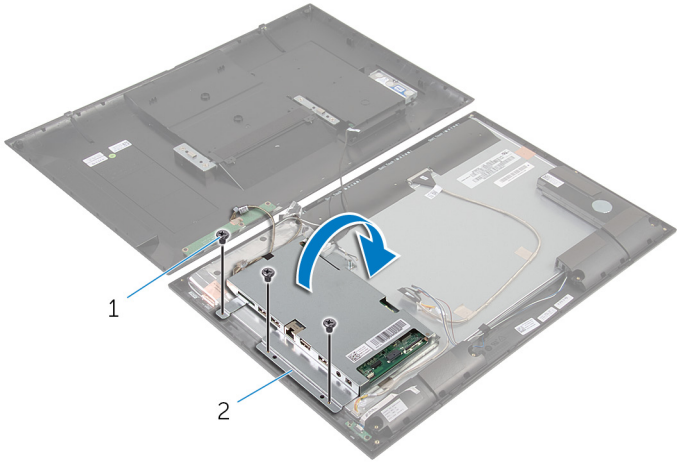
   For more information, see "System Board Components".



1	hard-drive cable	2	display cable
3	speaker cable	4	power-status light cable
5	connector latch	6	display-backlight cable

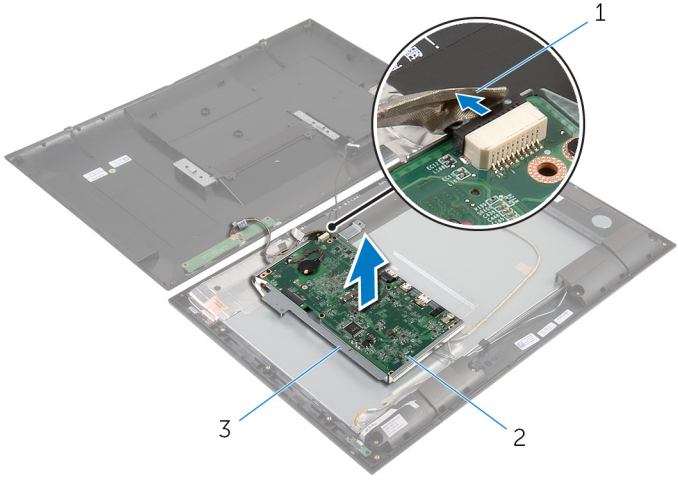
3. Remove the screws that secure the system-board bracket to the display bezel.

4 Carefully lift the system-board bracket and turn it over.



1	screws (3)	2	system-board bracket

5 Disconnect the camera and control-buttons board cable from the system board.

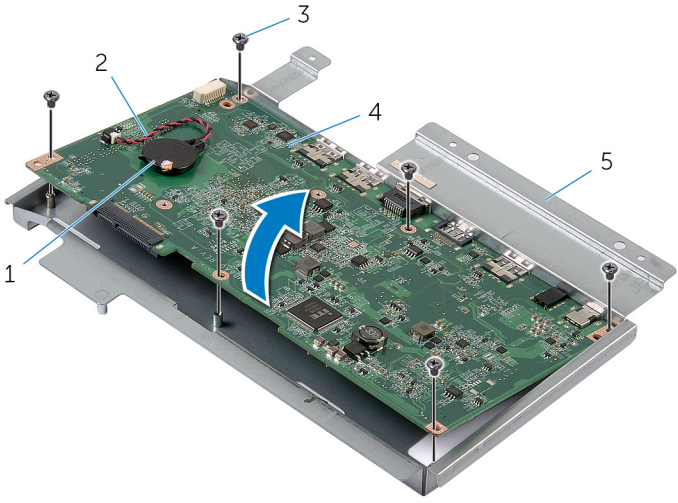


1	camera and control-buttons board cable	2	system board
3	system-board bracket		

6 Remove the screws that secure the system-board to the system-board bracket.

7 Lift the system board at an angle and release the ports on the system board from the slots on the system-board bracket.

8 Turn the system board over and place it on a clean and flat surface.

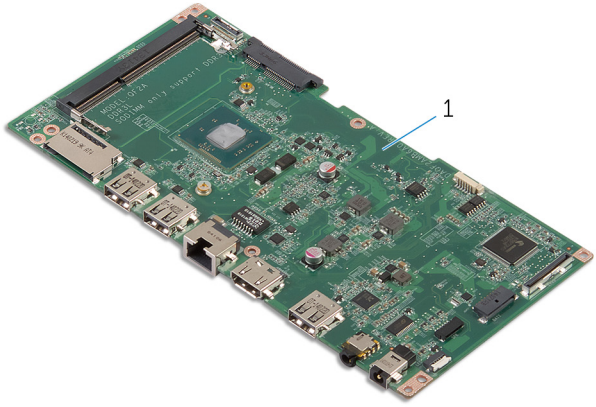


1	coin-cell battery	2	coin-cell battery cable
3	screws (6)	4	system board
5	system-board bracket		

9 Follow the instructions from step 1 to step 2 in "Removing the Memory Module".

10 Follow the instructions from step 1 to step 2 in "Removing the Heat Sink".

11 Remove the system board off the surface.



1 system board

Replacing the System Board

WARNING: 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 dell.com/regulatory_compliance.

NOTE: Your computer's Service Tag is stored in the system board. You must enter the Service Tag in the System Setup after you replace the system board.

Procedure

1. Place the system board on a clean and flat surface with memory-module slot facing upwards.
2. Follow the instructions from step 1 to step 2 in "Replacing the Heat Sink".
3. Follow the instructions from step 1 to step 2 in "Replacing the Memory Module".
4. Turn the system board over.
5. Slide the ports on the system board into the slots on the system-board bracket.
6. Align the screw holes on the system board with the screw holes on the system-board bracket.
7. Replace the screws that secure the system board to the system-board bracket.
8. Connect the camera and control-buttons board cable to the system board.
9. Carefully turn the system-board bracket over.
10. Align the screw holes on the system-board bracket with the screw holes on the display bezel.
11. Replace the screws that secure the system-board bracket to the display bezel.
12. Connect the hard-drive cable, speaker cable, display cable, and display-backlight cable to the system board.

    For more information, see "System Board Components".
13. Slide the power-status light cable into the system-board connector and press down on the connector latch to secure the cable.

Post-requisites

1. Replace the wireless card.
2. Follow the instructions from step 3 to step 5 in "Replacing the Back Cover".

Entering the Service Tag in the BIOS

1. Turn on the computer.
2. Enter System Setup:
   - during POST, when the DELL logo is displayed, watch for the F2 prompt to appear, press `F2` key on your keyboard immediately.
   - press the power and volume-down button simultaneously to enter System Setup.
   - press the power and volume-up button to launch the **One Time Boot Menu** and select **Enter Setup** .
3. Navigate to the **Main** tab and enter the Service Tag in the **Service Tag Input** field.

Removing the Coin-Cell Battery

WARNING: 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 dell.com/regulatory_compliance.

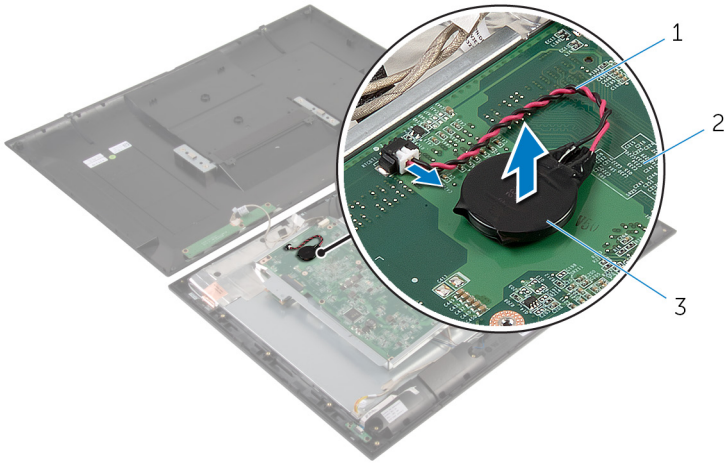
CAUTION: Removing the coin-cell battery resets the BIOS settings to default. It is recommended that you note the BIOS settings before removing the coin-cell battery.

Prerequisites

1. Follow the instructions from step 2 to step 4 in "Removing the Back Cover".
2. Remove the wireless card.
3. Follow the instructions from step 1 to step 4 in "Removing the System Board".

Procedure

1. Disconnect the coin-cell battery cable from the system board.
2. Pry the coin-cell battery off the system board.



1	coin-cell battery cable	2	system board
3	coin-cell battery		

Replacing the Coin-Cell Battery

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Procedure

1. Adhere the coin-cell battery to the system board.
2. Connect the coin-cell battery cable to the system board.

Post-requisites

1. Follow the instructions from step 9 to step 13 in "Replacing the System Board".
2. Replace the wireless card.
3. Follow the instructions from step 3 to step 5 in "Replacing the Back Cover".

Removing the Memory Module

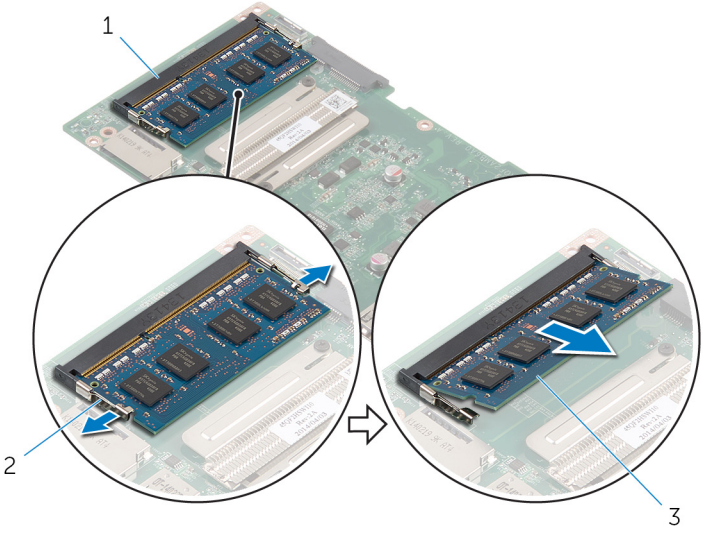
WARNING: Before working inside your computer, read the safety information that shipped with your computer and follow the steps in Before Working Inside Your Computer. After working inside your computer, follow the instructions in After Working Inside Your Computer. For more safety best practices, see the Regulatory Compliance home page at dell.com/regulatory_compliance.

Prerequisites

1. Follow the instructions from step 2 to step 4 in "Removing the Back Cover".
2. Remove the wireless card.
3. Follow the instructions from step 1 to step 8 in "Removing the System Board".

Procedure

1. Use your fingertips to spread apart the securing clips on each end of the memory-module slot until the memory module pops up.
2. Remove the memory module from the memory-module slot on the system board.



1 memory-module slot
2 securing clips (2)
3 memory module

Replacing the Memory Module

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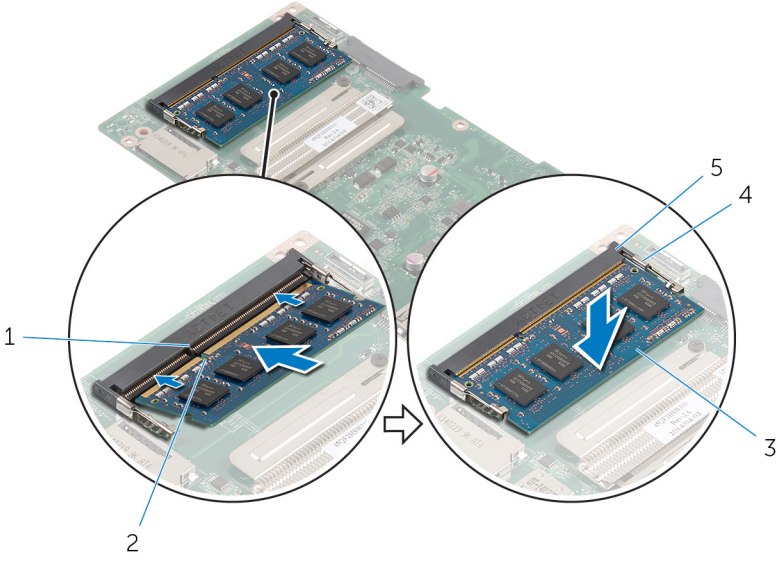
Procedure

1. Align the notch on the memory module with the tab on the memory-module slot.
2. Insert the memory module into the memory-module slot, and press the memory module down until it clicks into place.

   NOTE: If you do not hear the click, remove the memory module and reinstall it.



1	tab	2	notch
3	memory module	4	securing clips (2)
5	memory-module slot		

Post-requisites

1. Follow the instructions from step 4 to step 13 in "Replacing the System Board".
2. Replace the wireless card.
3. Follow the instructions from step 3 to step 5 in "Replacing the Back Cover".

Removing the Heat Sink

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

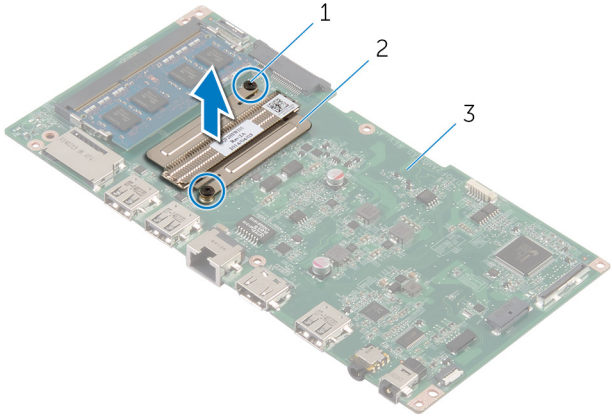
CAUTION: To ensure maximum cooling for the processor, do not touch the heat transfer areas on the heat sink. The oils in your skin can reduce the heat transfer capability of the thermal grease.

Prerequisites

1. Follow the instructions from step 2 to step 4 in "Removing the Back Cover".
2. Remove the wireless card.
3. Follow the instructions from step 1 to step 8 in "Removing the System Board".

Procedure

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



1	captive screws (2)	2	heat sink
3	system board		

Replacing the Heat Sink

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

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

Procedure

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

Post-requisites

1. Follow the instructions from step 4 to step 13 in "Replacing the System Board".
2. Replace the wireless card.
3. Follow the instructions from step 3 to step 5 in "Replacing the Back Cover".

Removing the Display Assembly

WARNING: 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 dell.com/regulatory_compliance.

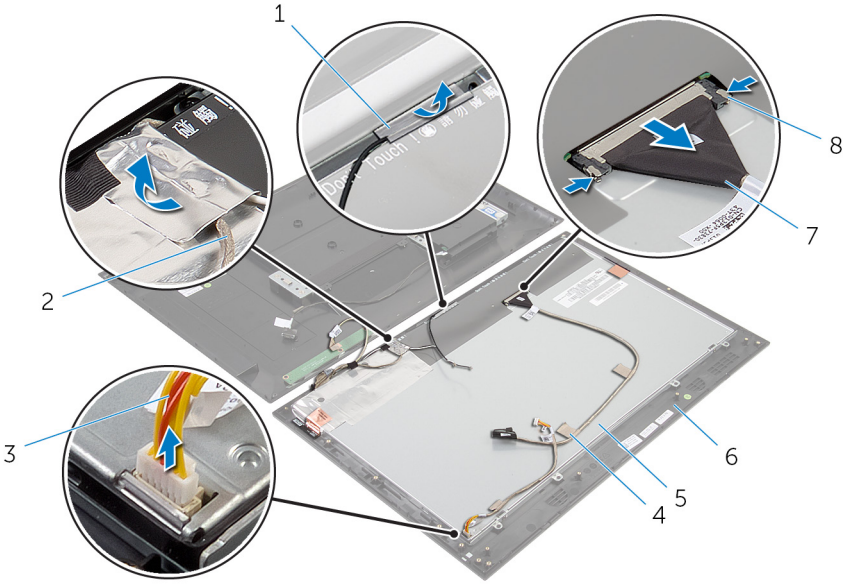
Prerequisites

1. Follow the instructions from step 2 to step 4 in "Removing the Back Cover".
2. Remove the speakers.
3. Follow the instructions from step 1 to step 5 in "Removing the System Board".

Procedure

1. Peel off the Aluminium foil tape that secures the antenna cable and camera and control-buttons board cable to the display panel.
2. Peel off the Aluminium foil tape that secures the antenna cable to the display panel.
3. Press the connector latches and disconnect the display cable from the display panel.
4. Disconnect the display-backlight cable from the display panel.

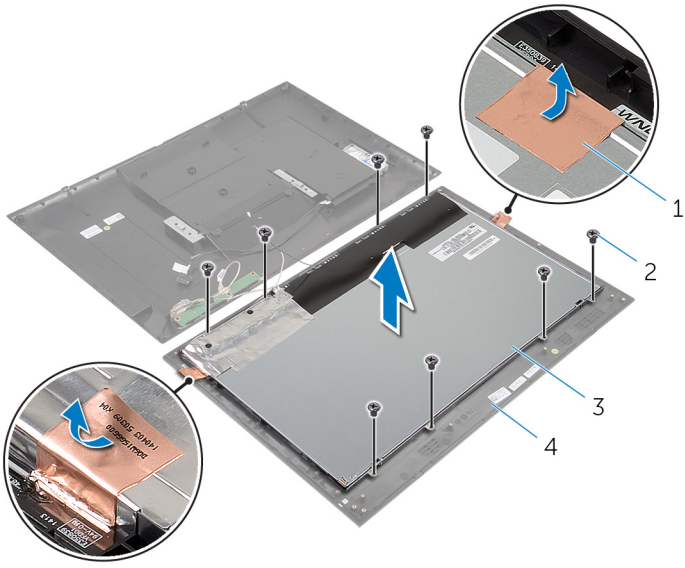
5 Peel off the tapes that secure the display cable to the display panel.



1	Aluminium foil tapes (2)	2	camera and control-buttons board cable
3	display-backlight cable	4	tapes (2)
5	display panel	6	display bezel
7	display cable	8	connector latches (2)

6 Peel off the Aluminium foil tapes that secure the antenna modules to the display panel.

7 Remove the screws that secure the display panel to the display bezel.

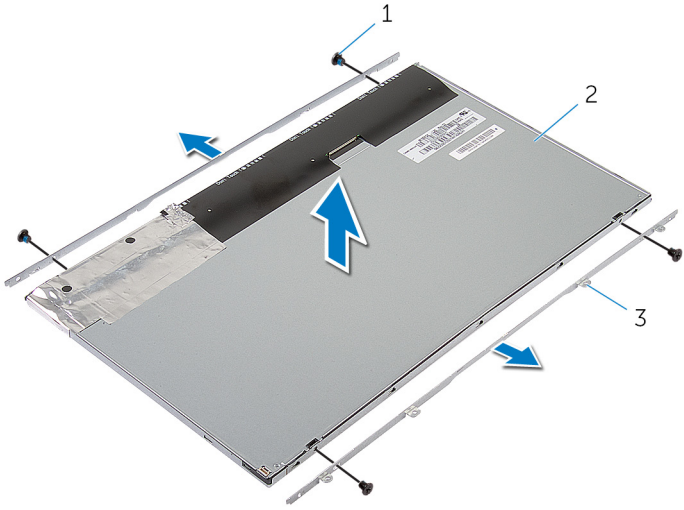


1	Aluminium foil tapes (2)	2	screws (8)
3	display panel	4	display bezel

8 Pry the display panel off the display bezel and place it on a flat and clean surface.

9 Remove the screws that secure the display-panel brackets to the display panel.

10 Lift the display panel off the surface.



1	screws (4)	2	display panel
3	display-panel brackets (2)		

Replacing the Display Assembly

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Procedure

1. Place the display panel on a flat and clean surface.
2. Align the screw holes on the display-panel brackets with the screw holes on the display panel.
3. Replace the screws that secure display-panel brackets to the display panel.
4. Align the screw holes on the display-panel brackets with the screw holes on the display bezel and adhere the display panel to the display bezel.

   NOTE: Make sure that no cables are under the display panel.
5. Replace the screws that secure the display-panel brackets to the display bezel.
6. Connect the display cable and secure the cable with the tapes.
7. Connect the display-backlight cable to the display panel.
8. Adhere the Aluminium foil tapes to the antenna modules.
9. Adhere the Aluminium foil tape to the antenna cable.
10. Adhere the Aluminium foil tape to the antenna cable and camera and control-buttons board cable.

Post-requisites

1. Follow the instructions from step 8 to step 13 in "Replacing the System Board".
2. Replace the speakers.
3. Follow the instructions from step 3 to step 5 in "Replacing the Back Cover".

Removing the Antenna

WARNING: 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 dell.com/regulatory_compliance.

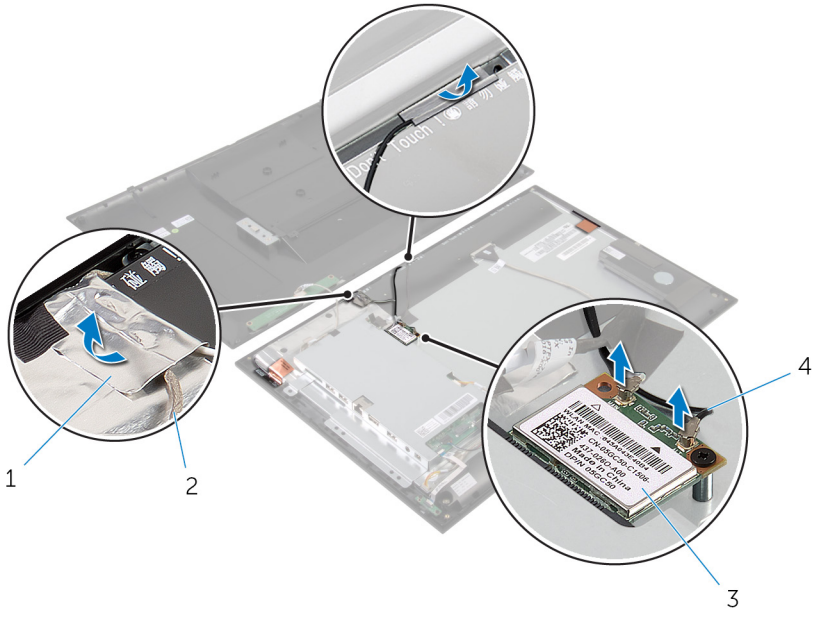
Prerequisites

Follow the instructions from step 2 to step 4 in "Removing the Back Cover".

Procedure

1. Note the antenna cables routing and disconnect the antenna cables from the wireless card.
2. Peel off the Aluminium foil tapes that secure the antenna cables and camera and control-buttons board cable to the display panel.

3 Remove the antenna cables from routing guides on the display bezel.

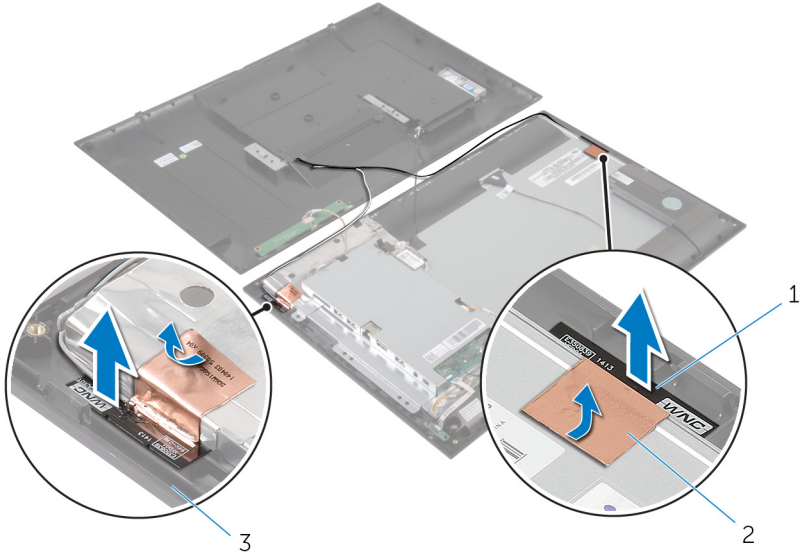


1	Aluminium foil tapes (2)	2	camera and control-buttons board cable
3	wireless card	4	antenna cables (2)

4 Note the location of the antenna modules and peel off the Aluminium foil tapes that secure the antenna modules to the display panel.

5 Pry off the antenna modules from the display bezel.

6 Lift the antenna modules along with the antenna cables off the display bezel.



1 antenna modules (2)

2 Aluminium foil tapes (2)

3 display bezel

Replacing the Antenna

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Procedure

1. Adhere the antenna modules to the display bezel and secure the antenna modules with the Aluminium foil tapes.
2. Route the antenna cables through the routing guides on the display bezel.
3. Adhere the Aluminium foil tapes to the antenna cables and camera and control-buttons board cable.
4. Connect the antenna cables to the wireless card. See "Replacing the Wireless Card".

Post-requisites

Follow the instructions from step 3 to step 5 in "Replacing the Back Cover".

Removing the Camera

WARNING: 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 dell.com/regulatory_compliance.

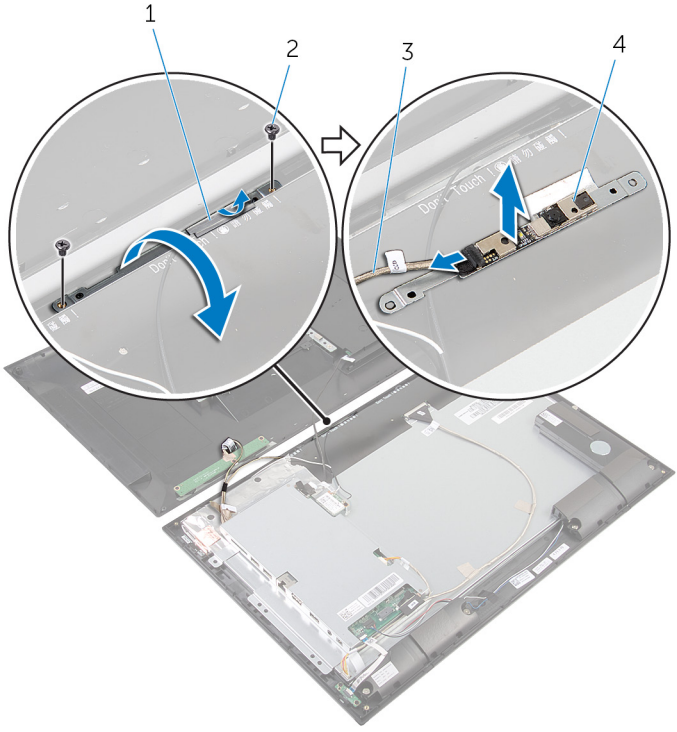
Prerequisites

Follow the instructions from step 2 to step 4 in "Removing the Back Cover".

Procedure

1. Remove the screws that secure the camera module to the display bezel.
2. Peel off the Aluminium foil tape that secures the camera module and the antenna cable to the display panel.
3. Carefully lift the camera module and turn it over.

4 Disconnect the camera cable from the camera module.



1	Aluminium foil tape	2	screws (2)
3	camera cable	4	camera module

Replacing the Camera

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Procedure

1. Connect the camera cable to the camera module.
2. Turn the camera module over.
3. Align the screw holes on the camera module with the screw holes on the display bezel.
4. Replace the screws that secure the camera module to the display bezel.
5. Adhere the Aluminium foil tape to the camera module and antenna cable.

Post-requisites

Follow the instructions from step 3 to step 5 in “Replacing the Back Cover”.

Removing the Display Bezel

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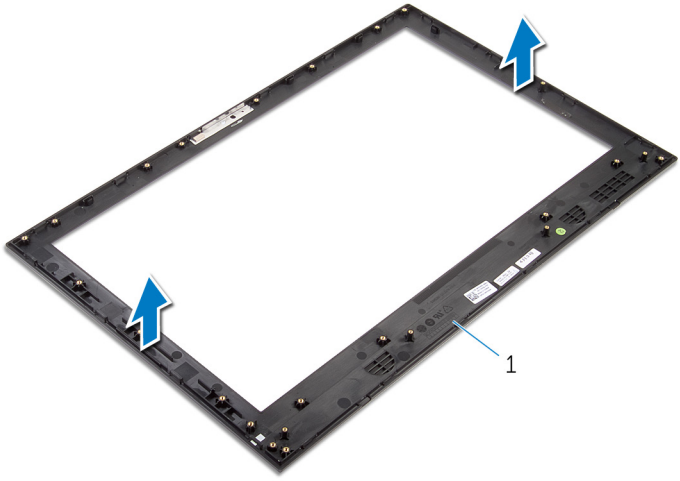
Prerequisites

1. Follow the instructions from step 2 to step 4 in "Removing the Back Cover".
2. Remove the power-status light board.
3. Remove the speakers.
4. Remove the wireless card.
5. Follow the instructions from step 1 to step 5 in "Removing the System Board".
6. Remove the display assembly.
7. Remove the camera.
8. Remove the antenna.

Procedure

Lift the display bezel off the surface.



1 display bezel

Replacing the Display Bezel

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Procedure

Place the display bezel on a flat and clean surface.

Post-requisites

1. Replace the antenna.
2. Replace the camera.
3. Replace the display assembly.
4. Follow the instructions from step 8 to step 13 in "Replacing the System Board".
5. Replace the wireless card.
6. Replace the speakers.
7. Replace the power-status light board.
8. Follow the instructions from step 3 to step 5 in "Replacing the Back 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 the computer.
2. Go to **dell.com/support**.
3. If you have your computer's Service Tag, type your computer's Service Tag and click **Submit**.

   If you do not have your computer's Service Tag, click **Detect My Product** to allow automatic detection of the Service Tag.

   NOTE: If the Service Tag cannot be detected automatically, select your product under the product categories.
4. Click **Get Drivers and Downloads**.
5. Click **View All Drivers**.
6. In the **Operating System** drop-down, select the operating system installed on your computer.
7. Click **BIOS**.
8. Click **Download File** to download the latest version of the BIOS for your computer.
9. On the next page, select **Single-file download** and click **Continue**.
10. Save the file and once the download is complete, navigate to the folder where you saved the BIOS update file.
11. 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 online self-help resources:

Self-Help Information	Self-Help Options
Accessing Windows Help	**Windows 8.1** — Open the Search charm, type `Help and Support` in the search box and press `Enter`. **Windows 7** — Click **Start** → **Help and Support**.
Information about Dell products and services	See **dell.com**.
Troubleshooting information, user manuals, setup instructions, product specifications, technical help blogs, drivers, software updates, and so on	See **dell.com/support**.
Information about Microsoft Windows 8/8.1	See **dell.com/windows8**.
Information about Microsoft Windows 7	Click **Start** → **All Programs** → **Dell Help Documentation**.
Learn about your operating system, setting up and using your computer, data backup, diagnostics, and so on.	See *Me and My Dell* at **dell.com/support/manuals**.

Contacting Dell

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

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

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.