Inspiron 11 3000 Service Manual



Notes, cautions, and warnings



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



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.

© 2016 Dell Inc. All rights reserved. This product is protected by U.S. and international copyright and intellectual property laws. Dell and the Dell logo are trademarks of Dell Inc. in the United States and/or other jurisdictions. All other marks and names mentioned herein may be trademarks of their respective companies.

2016 - 09

Rev. A02

Contents

Before working inside your computer	9
Before you begin	C
Safety instructions	
Recommended tools	
Screw list	
After working inside your computer	13
Removing the base cover	14
Procedure	14
Replacing the base cover	19
Procedure	19
Removing the battery	20
Prerequisites	
Procedure	20
Replacing the battery	24
Procedure	
Post-requisites	24
Removing the I/O board	25
Prerequisites	
Procedure	



Replacing the I/O board	28
Procedure	28
Post-requisites	28
Removing the memory module	29
Prerequisites	
Procedure	29
Replacing the memory module	31
Procedure	31
Post-requisites	32
Removing the hard drive	33
Prerequisites	33
Procedure	33
Replacing the hard drive	36
Procedure	36
Post-requisites	36
Removing the eMMC-card assembly	37
Prerequisites	37
Procedure	37
Replacing the eMMC-card assembly	39
Procedure	39
Post-requisites	39
Removing the power-adapter port	40
Prerequisites	40
Procedure	40



Replacing the power-adapter port.	
Procedure	42
Post-requisites	42
Removing the wireless card	43
Prerequisites	
Procedure	43
Replacing the wireless card	45
Procedure	
Post-requisites	
Removing the coin-cell battery	48
Prerequisites	
Procedure	48
Replacing the coin-cell battery	50
Procedure	
Post-requisites	50
Removing the speaker	51
Prerequisites	
Procedure	51
Replacing the speaker	53
Procedure	
Post-requisites	53
Removing the display assembly	54
Prerequisites	
Procedure	54



Replacing the display assembly	59
Procedure	59
Post-requisites	59
Removing the system board	60
Prerequisites	60
Procedure	60
Replacing the system board	64
Procedure	64
Post-requisites	65
Removing the palm rest and keyboard assembly	66
Prerequisites	66
Procedure	66
Replacing the palm rest and keyboard assembly	68
Procedure	68
Post-requisites	68
Removing the display bezel	69
Prerequisites	69
Procedure	69
Replacing the display bezel	72
Procedure	72
Post-requisites	72
Removing the display hinges	73
Prerequisites	73
Procedure	7.3



Replacing the display hinges	/b
Procedure	75
Post-requisites	75
Removing the display panel	76
Prerequisites	76
Procedure	76
Replacing the display panel	79
Procedure	
Post-requisites	79
Removing the camera	80
Prerequisites	
Procedure	80
Replacing the camera	83
Procedure	83
Post-requisites	83
Removing the display back-cover and antenna	
assembly	84
Prerequisites	84
Procedure	84
Replacing the display back-cover and antenna	
assembly	
Procedure	86
Post-requisites	86
Flashing the BIOS	87



Getting help and contacting	ng Dell8	8
•		
Contacting Dell		} <u>S</u>



Before working inside your computer



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.

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

- Windows 10: Click Start → U Power → Shut down.
- Windows 8.1: On the **Start** screen, Click the power icon \bigcirc \rightarrow **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 attached network devices and peripherals, such as keyboard, mouse, and monitor, from your computer.
- **5** Remove any media card and optical disc from your computer, if applicable.
- 6 Close the display and turn the computer over.

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 www.dell.com/regulatory_compliance.





MARNING: 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:

- Philips screwdriver
- Flat-head screwdriver
- Plastic scribe



Screw list

Component	Secured to	Screw type	Quantity	Screw image
Base cover assembly	Palm rest and keyboard assembly	M2.5x6	9	
Battery	Palm rest and keyboard assembly	M2x3	3	
I/O board	Base cover	M2x3	1	See James
Hard-drive assembly	Palm rest and keyboard assembly	M2x3	3	
Hard-drive bracket	Hard drive	M3x3	4	
eMMC-card assembly	Palm rest and keyboard assembly	M2x3	3	
Power-adapter port	Palm rest and keyboard assembly	M2x3	1	(-) pulls
Wireless card	Palm rest and keyboard assembly	M2x3	1	
Display-cable bracket	System board	M2x3	1	The same
Display assembly	Palm rest and keyboard assembly	M2.5x6	2	
System board	Palm rest and keyboard assembly	M2x2	1	Tr.



Component	Secured to	Screw type	Quantity	Screw image
Display hinges	Display back- cover and antenna assembly	M2.5x2.5	4	•
Display panel	Display back- cover and antenna assembly	M1.2x2	4	•



After working inside your computer

Λ

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.



Removing the base 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 www.dell.com/ regulatory_compliance.

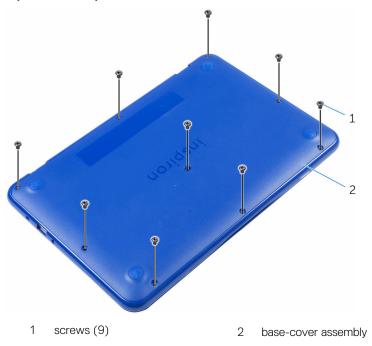
Procedure

- 1 Close the display and turn the computer over.
- 2 Using a plastic scribe, remove the screw cap from the base-cover assembly.





3 Remove the screws that secure the base-cover assembly to the palm-rest and keyboard assembly.





4 Pry loose the left side of the base-cover assembly from the palm rest and keyboard assembly.



1 palm-rest and keyboard assembly

2 base-cover assembly



Slide the base-cover assembly to the right and release it from the HDMI and USB ports.



3 HDMI port



6 Carefully turn over the base-cover assembly.



- 1 base-cover assembly
- 2 palm-rest and keyboard assembly

7 Remove the <u>I/O board</u>.



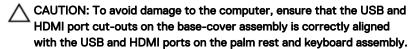
Replacing the base cover



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 www.dell.com/regulatory_compliance.

Procedure

1 Replace the <u>I/O board.</u>



- 2 Place the base-cover assembly on the palm rest and keyboard assembly while aligning the USB and HDMI port cut-out on the base-cover assembly with the USB and HDMI ports.
- **3** Slide the tabs on the base-cover assembly into the slots on the palm rest and keyboard assembly and snap the base-cover assembly into place.
- **4** Replace the screws that secure the base-cover assembly to the palm rest and keyboard assembly .
- **5** Replace the screw cap on the base-cover assembly.



Removing the 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 www.dell.com/regulatory_compliance.

Prerequisites

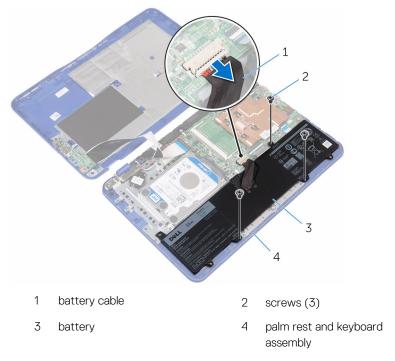
Follow the procedure from step 1 to step 6 in "Removing the base cover".

Procedure

1 Disconnect the battery cable from the system board.



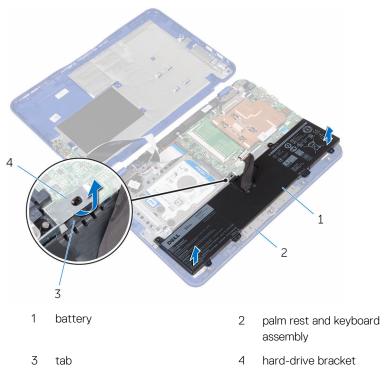
2 Remove the screws that secure the battery to the palm rest and keyboard assembly.



Tilt the battery (applicable for configuration with hard drive only) to release the tab on the battery from the hard-drive bracket.



Lift the battery off the palm rest and keyboard assembly.



Follow the step 1 procedure in "Removing the I/O board".



Turn the computer over, open the display, and press the power button for five seconds to ground the system board.





Replacing the 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 www.dell.com/regulatory_compliance.

Procedure

- 1 Follow the step 4 procedure in "Replacing the I/O board".
- 2 Slide the tab on the battery (applicable for configuration with hard drive only) under the hard-drive bracket and place the battery on the palm-rest and keyboard assembly.
- 3 Align the screw holes on the battery with the screw holes on the palm-rest and keyboard assembly.
- **4** Replace the screws that secure the battery to the palm-rest and keyboard assembly.
- **5** Connect the battery cable to the system board.

Post-requisites

Follow the procedure from step 2 to step 5 in "Replacing the base cover".



Removing the I/O 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 www.dell.com/regulatory_compliance.

Prerequisites

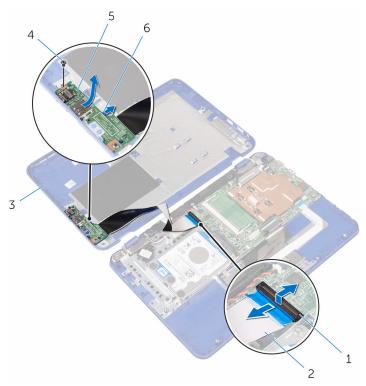
- 1 Follow the procedure from step 1 to step 6 in "Removing the base cover".
- **2** Remove the <u>battery</u>.

Procedure

- 1 Open the latch and disconnect the I/O-board cable from system board.
- 2 Remove the screw that secures the I/O board to the base cover.
- **3** Push the securing tab to release the I/O board from the base cover.



4 Slide and lift the I/O board off the base cover.

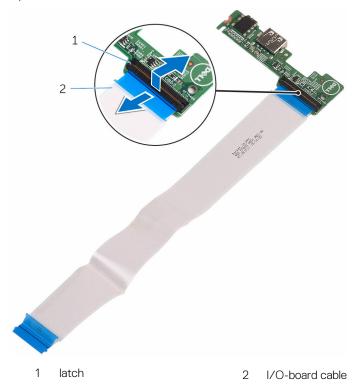


- 1 latch
- 3 base cover
- 5 I/O board

- 2 I/O-board cable
- 4 screw
- 6 securing tab



Open the latch and disconnect the I/O-board cable from the I/O board.





Replacing the I/O 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 www.dell.com/regulatory_compliance.

Procedure

- 1 Slide the I/O-board cable into the connector on the I/O board and close the latch to secure the cable.
- 2 Slide the ports on the I/O board into the slots on the base cover and snap the I/O board into place.
- **3** Align the screw hole on the I/O board with the screw hole on the base cover and replace the screw.
- 4 Slide the I/O-board cable into the connector on the system board and close the latch to secure the cable.

Post-requisites

- 1 Replace the battery.
- **2** Follow the procedure from step 2 to step 5 in "Replacing the base 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 www.dell.com/regulatory_compliance.

Prerequisites

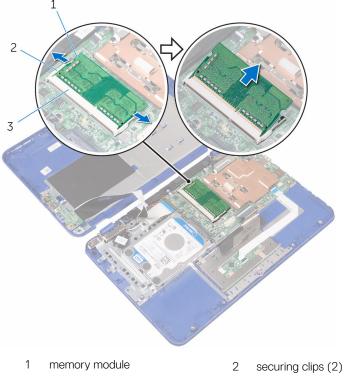
- 1 Follow the procedure from step 1 to step 6 in "Removing the base cover".
- 2 Remove the battery.

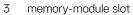
Procedure

1 Use your fingertips to carefully 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.







Replacing the memory module



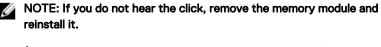
WARNING: Before working inside your computer, read the safety information that shipped with your computer and follow the steps in Before working inside your computer. After working inside your computer, follow the instructions in After working inside your computer. For more safety best practices, see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

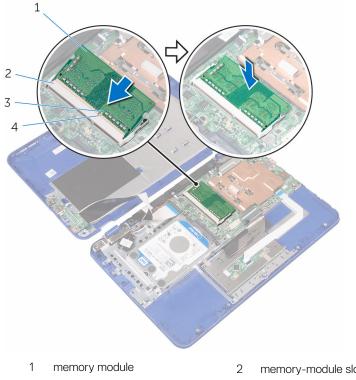
Procedure

1 Align the notch on the memory module with the tab on the memory-module slot.



Slide the memory module firmly into the memory-module slot at an angle and 2 press it down until it clicks into place.





3

memory-module slot

tab

notch 4

Post-requisites

- Replace the battery.
- 2 Follow the procedure from step 2 to step 5 in "Replacing the base cover".



Removing the hard drive



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 www.dell.com/regulatory_compliance.



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.

Prerequisites



NOTE: The computer is shipped with either hard-drive assembly or eMMC-card assembly depending on the configuration ordered.

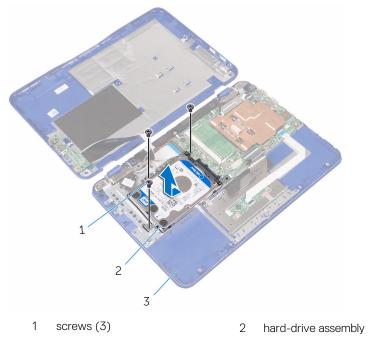
- 1 Follow the procedure from step 1 to step 6 in "Removing the base cover".
- 2 Remove the <u>battery</u>.

Procedure

1 Remove the screws that secure the hard-drive assembly to the palm rest and keyboard assembly.



2 Slide and lift the hard-drive assembly off the palm rest and keyboard assembly.



- 3 palm rest and keyboard assembly
- **3** Remove the screws that secure the hard-drive bracket to the hard drive.



Lift the hard drive from the hard-drive bracket.



2 screws (4)

3 hard drive



Replacing the hard drive



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 www.dell.com/regulatory_compliance.



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

Procedure

- 1 Align the screw holes on the hard drive with the screw holes on the hard-drive bracket.
- 2 Replace the screws that secure the hard-drive bracket to the hard drive.
- **3** Slide and connect the hard-drive assembly to the connector on the system board.
- **4** Align the screw holes on the hard-drive assembly with the screw holes on the palm rest and keyboard assembly.
- **5** Replace the screws that secure the hard-drive assembly to the palm rest and keyboard assembly.

Post-requisites

- 1 Replace the battery.
- **2** Follow the procedure from step 2 to step 5 in "Replacing the base cover".



Removing the eMMC-card 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 www.dell.com/regulatory_compliance.

Prerequisites



NOTE: The computer is shipped with either hard-drive assembly or eMMC-card assembly depending on the configuration ordered.

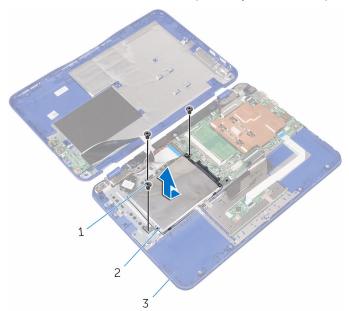
- 1 Follow the procedure from step 1 to step 6 in "Removing the base cover".
- 2 Remove the battery.

Procedure

1 Remove the screws that secure the eMMC-card assembly to the palm rest and keyboard assembly.



2 Slide and lift the eMMC-card assembly off the palm rest and keyboard assembly.



- 1 screws (3)
- 3 palm rest and keyboard assembly
- 2 eMMC-card assembly



Replacing the eMMC-card 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 www.dell.com/regulatory_compliance.

Procedure

- 1 Align the screw holes on the eMMC-card assembly with the screw holes on the palm rest and keyboard assembly.
- 2 Replace the screws that secure the eMMC-card assembly to the palm rest and keyboard assembly.

- 1 Replace the battery.
- **2** Follow the procedure from step 2 to step 5 in "Replacing the base cover".



Removing the power-adapter port



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 www.dell.com/ regulatory_compliance.

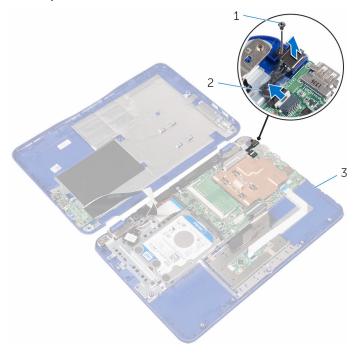
Prerequisites

- Follow the procedure from step 1 to step 6 in "Removing the base cover".
- 2 Remove the battery.

- Disconnect the power-adapter port cable from the system board.
- 2 Remove the screw that secures the power-adapter port to the palm rest and keyboard assembly.



3 Lift the power-adapter port with its cable, off the palm rest and keyboard assembly.



- 1 screw
- 3 palm rest and keyboard assembly
- 2 power-adapter port cable



Replacing the power-adapter port



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 www.dell.com/ regulatory_compliance.

Procedure

- Place the power-adapter port into the slot on the palm rest and keyboard assembly.
- 2 Align the screw hole on the power-adapter port with the screw hole on the palm rest and keyboard assembly.
- 3 Replace the screw that secures the power-adapter port to the palm rest and keyboard assembly.
- 4 Connect the power-adapter port cable to the system board.

- Replace the battery.
- 2 Follow the procedure from step 2 to step 5 in "Replacing the base 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 www.dell.com/regulatory_compliance.

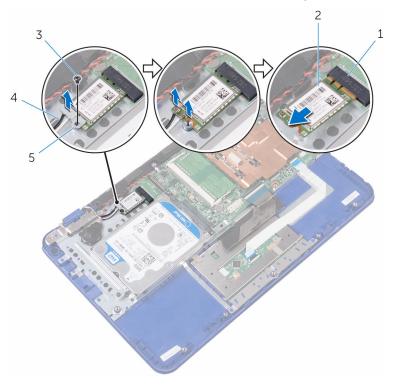
Prerequisites

- 1 Follow the procedure from step 1 to step 6 in "Removing the base cover".
- 2 Remove the <u>battery</u>.
- **3** Follow the step 1 procedure in "Removing the I/O board".

- 1 Remove the screw that secures the wireless card to the palm rest and keyboard assembly.
- **2** Lift the wireless-card bracket from the wireless card.
- **3** Disconnect the antenna cables from the wireless card.



4 Slide the wireless card from the wireless-card slot on the system board.



- 1 wireless-card slot
- 3 screw
- 5 wireless-card bracket
- 2 wireless card
- 4 antenna cables (2)



Replacing 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 www.dell.com/regulatory_compliance.

Procedure



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

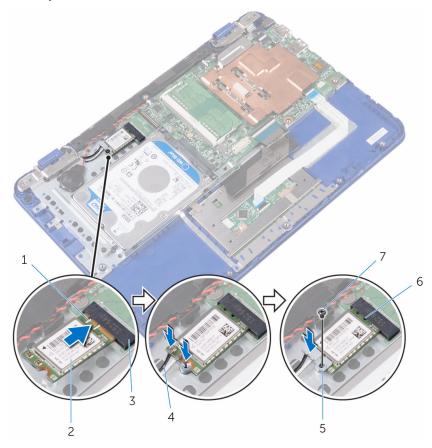
- 1 Align the notch on the wireless card with the tab on the wireless-card slot on the system board.
- 2 Slide the wireless card into the wireless-card slot on the system board.
- 3 Connect the antenna cables to the wireless card.
 The following table provides the antenna-cable color scheme for the wireless card supported by your computer.

Connectors on the wireless card	Antenna-cable colour
Main (white triangle)	white
Auxiliary (black triangle)	black

4 Align the screw hole on the wireless card and the wireless-card bracket with the screw hole on the palm rest and keyboard assembly.



5 Replace the screw that secures the wireless card to the palm rest and keyboard assembly.



- 1 notch
- 3 wireless-card slot
- 5 wireless-card bracket
- 7 screw

- 2 wireless card
- 4 antenna cables (2)
- 6 tab



- **1** Replace the <u>battery</u>.
- **2** Follow the procedure from step 2 to step 5 in "Replacing the base cover".
- **3** Follow the step 4 procedure in "Replacing the I/O board".



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 www.dell.com/regulatory_compliance.



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.

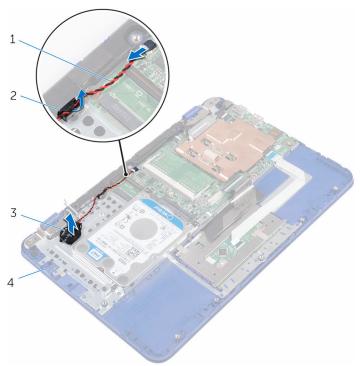
Prerequisites

- 1 Follow the procedure from step 1 to step 6 in "Removing the base cover".
- 2 Remove the battery.
- **3** Follow the step 1 procedure in "Removing the I/O board".
- 4 Remove the wireless card.

- 1 Disconnect the coin-cell battery cable from the system board.
- 2 Remove the coin-cell battery cable from the routing guide on the speaker.



3 Carefully peel off and lift the coin-cell battery from the palm rest and keyboard assembly.



- 1 coin-cell battery cable
- 3 coin-cell battery

- 2 routing guide
- 4 palm rest and keyboard assembly



Replacing 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 www.dell.com/regulatory_compliance.

Procedure

- 1 Adhere the coin-cell battery to the palm rest and keyboard assembly.
- 2 Route the coin-cell battery cable through the routing guide on the speaker.
- **3** Connect the coin-cell battery cable to the system board.

- 1 Replace the wireless card.
- 2 Follow the step 4 procedure in "Replacing the I/O board".
- **3** Replace the <u>battery</u>.
- **4** Follow the procedure from step 2 to step 5 in "Replacing the base cover".



Removing the speaker



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 www.dell.com/regulatory_compliance.

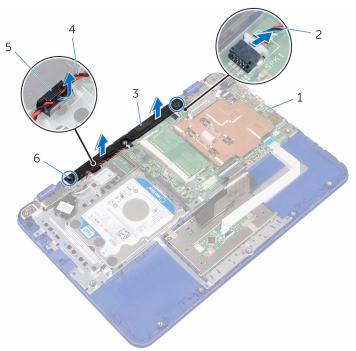
Prerequisites

- 1 Follow the procedure from step 1 to step 6 in "Removing the base cover".
- 2 Remove the battery.
- **3** Follow the step 1 procedure in "Removing the I/O board".

- 1 Disconnect the speaker cable from the system board.
- **2** Remove the coin-cell battery cable from the routing guide on the speaker.



3 Release the rubber stubs on the speaker and lift the speaker from the palm rest and keyboard assembly.



- 1 system board
- 3 speaker
- 5 routing guide

- 2 speaker cable
- 4 coin-cell battery cable
- 6 rubber stubs (2)



Replacing the speaker



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 www.dell.com/regulatory_compliance.

Procedure

- 1 Insert the rubber stubs on the speaker into the slots on the palm rest and keyboard assembly and snap the speaker into place.
- 2 Route the coin-cell battery cable through the routing guide on the speaker.
- **3** Connect the speaker cable to the system board.

- 1 Follow the step 4 procedure in "Replacing the I/O board".
- 2 Replace the <u>battery</u>.
- **3** Follow the procedure from step 2 to step 5 in "Replacing the base 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 www.dell.com/regulatory_compliance.

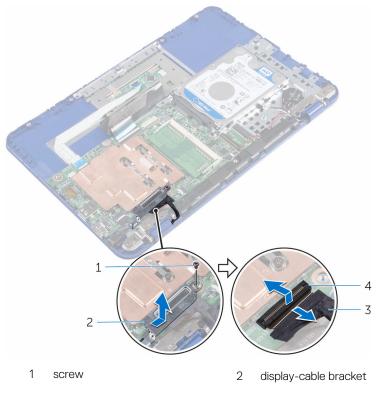
Prerequisites

- 1 Follow the procedure from step 1 to step 6 in "Removing the base cover".
- 2 Remove the <u>battery</u>.
- **3** Follow the step 1 procedure in "Removing the I/O board".
- 4 Remove the wireless card.

- 1 Remove the screw that secures the display-cable bracket to the system board.
- 2 Slide and lift the display-cable bracket off the system board.



3 Open the latch and disconnect the display cable from the system board.



3 display cable

4 latch



4 Open the palm rest and keyboard assembly at an angle.

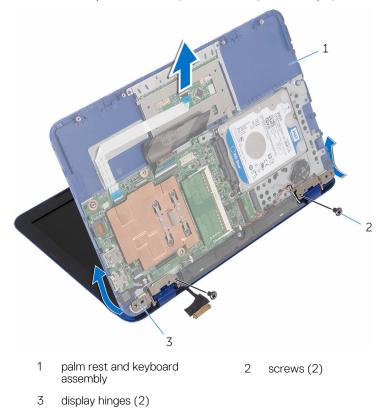


palm rest and keyboard assembly

5 Remove the screws that secure the display assembly to the palm rest and keyboard assembly.



6 Slide and lift the palm rest and keyboard assembly off the display assembly.



After performing all the steps, we are left with display assembly.





1 display assembly



Replacing 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 www.dell.com/regulatory_compliance.

Procedure



CAUTION: Place the computer on a soft and clean surface to avoid scratching the display back-cover and antenna assembly.

- 1 Place the display assembly on a flat and clean surface.
- 2 Align the screw holes on the display hinges with the screw holes on the palm rest and keyboard assembly.
- **3** Replace the screws that secure the display assembly to the palm rest and keyboard assembly.
- 4 Slide the display cable into the connector on the system board and close the latch to secure the cable.
- 5 Slide the display-cable bracket into the slot on the palm rest and keyboard assembly.
- 6 Align the screw hole on the display-cable bracket with the screw hole on the system board.
- **7** Replace the screw that secures the display-cable bracket to the system board.

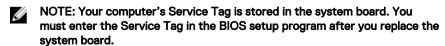
- 1 Replace the wireless card.
- 2 Follow the step 4 procedure in "Replacing the I/O board".
- **3** Replace the battery.
- **4** Follow the procedure from step 2 to step 5 in "Replacing the base cover".



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 www.dell.com/regulatory_compliance.



- 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.

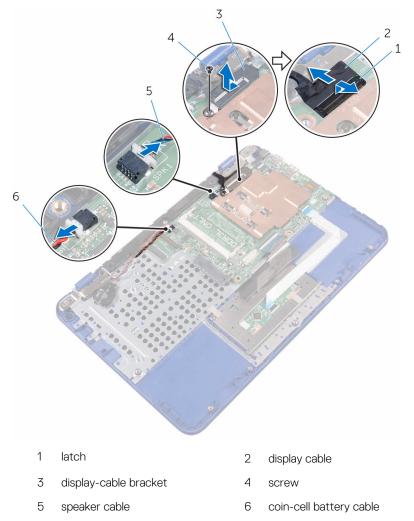
Prerequisites

- 1 Follow the procedure from step 1 to step 6 in "Removing the base cover".
- 2 Follow the step 1 procedure in "Removing the I/O board".
- **3** Remove the battery.
- **4** Remove the memory module.
- **5** Remove the wireless card.
- **6** Remove the hard drive or eMMC-card assembly.

- 1 Remove the screw that secures the display-cable bracket to the system board and lift the display-cable bracket off the system board.
- **2** Open the latch and disconnect the display cable from the system board.
- **3** Disconnect the speaker cable from the system board.



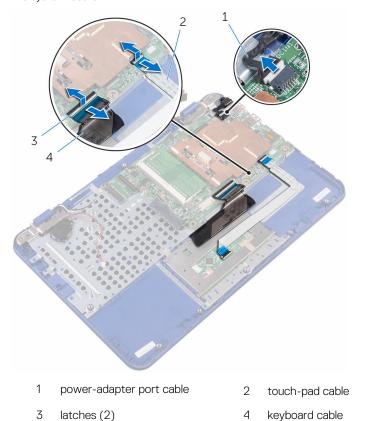
Disconnect the coin-cell battery cable from the system board.



5 Disconnect the power-adapter port cable from the system board.



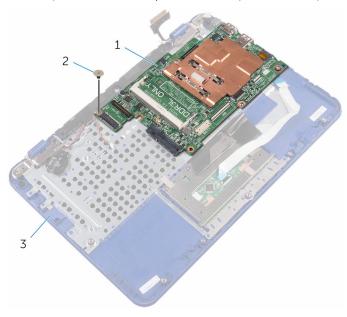
6 Open the latches and disconnect the touch-pad cable and keyboard cable from the system board.



Remove the screw that secures the system board to the palm rest and keyboard assembly.



8 Lift the system board off the palm rest and keyboard assembly.



1 system board

- 2 screw
- 3 palm rest and keyboard assembly



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 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.

- 1 Align the screw holes on the system board with the screw holes on the palm rest and keyboard assembly.
- 2 Replace the screw that secures the system board to the palm rest and keyboard assembly.
- 3 Slide the touch-pad cable and keyboard cable into their connectors and close the latches to secure the cables.
- 4 Connect the power-adapter port cable, speaker cable, and coin-cell battery cable to their connectors on the system board.
- 5 Slide the display cable into the connector on the system board and close the latch to secure the cable.
- **6** Slide the display-cable bracket into the slot on the palm rest and keyboard assembly.
- 7 Align the screw hole on the display-cable bracket with the screw hole on the system board.
- **8** Replace the screw that secures the display-cable bracket to the system board.



- 1 Replace the <u>hard drive</u> or <u>eMMC-card assembly</u>.
- 2 Replace the <u>wireless card</u>.
- **3** Replace the <u>memory module</u>.
- 4 Replace the <u>battery</u>.
- **5** Follow step 4 in "Replacing the I/O board".
- **6** Follow step 2 to step 5 in "Replacing the base cover".



Removing the palm rest and keyboard 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 www.dell.com/regulatory_compliance.

Prerequisites

- 1 Follow the procedure from step 1 to step 6 in "Removing the base cover".
- 2 Remove the battery.
- **3** Remove the <u>memory module</u>.
- **4** Follow the procedure from step 1 to step 2 in "Removing the hard drive".
- **5** Remove the power-adapter port.
- 6 Remove the wireless card.
- 7 Remove the coin-cell battery.
- **8** Remove the speaker.
- **9** Remove the display assembly.
- **10** Remove the <u>system board</u>.

Procedure

After performing the steps in prerequisites we are left with the palm rest and keyboard assembly.





1 palm rest and keyboard assembly



Replacing the palm rest and keyboard 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 www.dell.com/ regulatory_compliance.

Procedure

Place the palm rest and keyboard assembly on a flat surface with the keyboard facing down.

- 1 Replace the system board.
- 2 Replace the <u>display assembly</u>.
- **3** Replace the speaker.
- 4 Replace the coin-cell battery.
- **5** Replace the wireless card.
- 6 Replace the power-adapter port.
- **7** Follow the procedure from step 3 to step 5 in "Replacing the hard drive".
- **8** Replace the <u>memory module</u>.
- **9** Replace the battery.
- 10 Follow the procedure from step 2 to step 5 in "Replacing the base cover".



Removing the display bezel



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 www.dell.com/regulatory_compliance.

Prerequisites

- 1 Follow the procedure from step 1 to step 6 in "Removing the base cover".
- 2 Remove the battery.
- **3** Remove the wireless card.
- 4 Remove the display assembly.

Procedure

1 Press the hinge caps to release them from the display hinges.



2 Lift the hinge caps from the display hinges.





3 Using your finger tips gently pry and lift the display bezel off the display back-cover and antenna assembly.



1 display bezel

2 display back-cover and antenna assembly



Replacing the display bezel



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 www.dell.com/regulatory_compliance.

Procedure

- 1 Align the display bezel with the display back-cover and antenna assembly, and gently snap the display bezel into place.
- 2 Replace hinge caps on the display hinges and snap them into place.

- 1 Replace the display assembly.
- 2 Replace the wireless card.
- **3** Replace the <u>battery</u>.
- **4** Follow the procedure from step 2 to step 5 in "Replacing the base cover".



Removing the display hinges



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 www.dell.com/regulatory_compliance.

Prerequisites

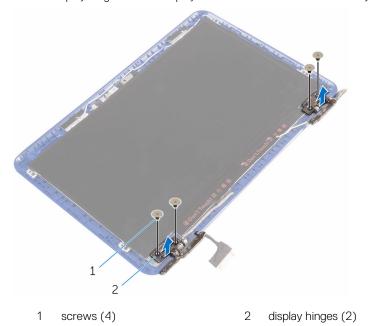
- 1 Follow the procedure from step 1 to step 6 in "Removing the base cover".
- 2 Remove the battery.
- **3** Remove the wireless card.
- 4 Remove the display assembly.
- **5** Remove the display bezel.

Procedure

1 Remove the screws that secure the display hinges to the display back-cover and antenna assembly.



2 Lift the display hinges off the display back-cover and antenna assembly.





Replacing the display hinges



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 www.dell.com/regulatory_compliance.

Procedure

- 1 Align the screw holes on the display hinges with the screw holes on the display back-cover and antenna assembly.
- 2 Replace the screws that secure the display hinges to the display back-cover and antenna assembly.

- 1 Replace the display bezel.
- 2 Replace the <u>display assembly</u>.
- **3** Replace the wireless card.
- 4 Replace the battery.
- **5** Follow the procedure from step 2 to step 5 in "Replacing the base cover".



Removing the display panel



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 www.dell.com/regulatory_compliance.

Prerequisites

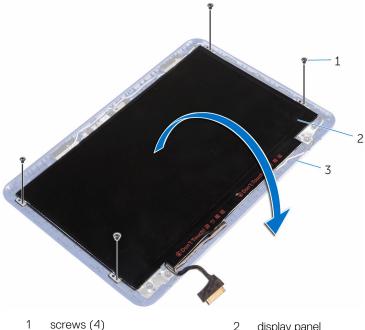
- 1 Follow the procedure from step 1 to step 6 in "Removing the base cover".
- 2 Remove the battery.
- **3** Remove the <u>wireless card</u>.
- 4 Remove the display assembly.
- **5** Remove the display bezel.

Procedure

1 Remove the screws that secure the display panel to the display back-cover and antenna assembly.



2 Carefully turn the display panel over.

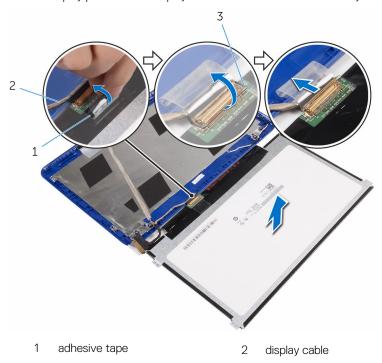


screws (4)

- 2 display panel
- 3 display back-cover and antenna assembly
- 3 Peel off the adhesive tape from the display cable.
- Open the latch and disconnect the display cable. 4



Lift the display panel off the display back-cover and antenna assembly.





Replacing the display panel



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 www.dell.com/regulatory_compliance.

Procedure

- Slide the display cable into the connector on the display panel and close the latch to secure the cable.
- **2** Adhere the adhesive tape to the display cable.
- **3** Align the screw holes on the display panel with the screw holes on the display back-cover and antenna assembly.
- 4 Replace the screws that secure the display panel to the display back-cover and antenna assembly.

- 1 Replace the display bezel.
- 2 Replace the display assembly.
- **3** Replace the wireless card.
- 4 Replace the battery.
- **5** Follow the procedure from step 2 to step 5 in "Replacing the base 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 www.dell.com/regulatory_compliance.

Prerequisites

- 1 Follow the procedure from step 1 to step 6 in "Removing the base cover".
- 2 Remove the battery.
- **3** Remove the wireless card.
- 4 Remove the display hinges.
- **5** Remove the display bezel.
- 6 Remove the display panel.

Procedure

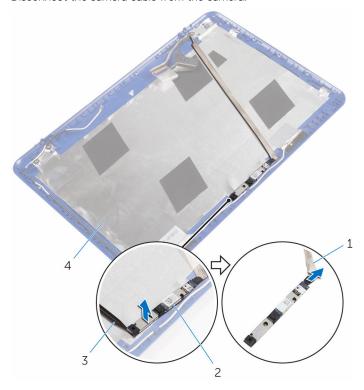


CAUTION: Place the display-panel assembly on a soft and clean surface to avoid scratching the display.

1 Using a plastic scribe, gently pry the camera from the display back-cover and antenna assembly.



2 Disconnect the camera cable from the camera.

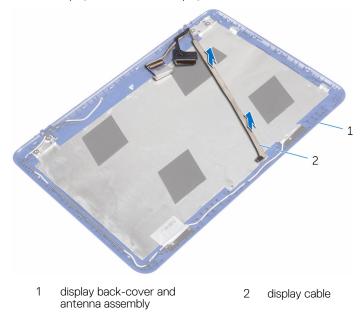


- 1 camera cable
- 3 plastic scribe

- 2 camera
- 4 display back-cover and antenna assembly



Peel the display cable from the display back-cover and antenna assembly.





Replacing 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 www.dell.com/regulatory_compliance.

Procedure

- 1 Adhere the display cable to the display back-cover and antenna assembly.
- 2 Connect the camera cable to the camera.
- 3 Using the alignment post place the camera module on the display back-cover and antenna assembly.
- **4** Adhere the camera to the display back-cover and antenna assembly and snap the camera into place.

- 1 Replace the <u>display panel</u>.
- 2 Replace the display bezel.
- **3** Replace the display hinges.
- 4 Replace the wireless card.
- **5** Replace the battery.
- **6** Follow the procedure from step 2 to step 5 in "Replacing the base cover".



Removing the display back-cover and antenna 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 www.dell.com/ regulatory_compliance.

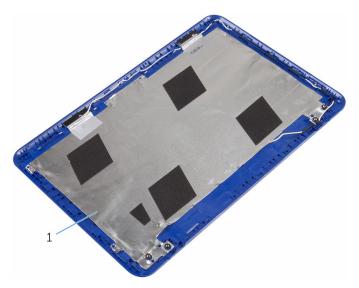
Prerequisites

- 1 Follow the procedure from step 1 to step 6 in "Removing the base cover".
- **2** Remove the <u>battery</u>.
- **3** Remove the wireless card.
- 4 Remove the display hinges.
- **5** Remove the display bezel.
- **6** Remove the display panel.
- **7** Remove the camera.

Procedure

After performing the steps in prerequisites we are left with the display back-cover and antenna assembly.





1 display back-cover and antenna assembly



Replacing the display back-cover and antenna 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 www.dell.com/ regulatory_compliance.

Procedure

Place the display back-cover and antenna assembly on a clean and flat surface.

- 1 Replace the camera.
- 2 Replace the display panel.
- **3** Replace the display bezel.
- 4 Replace the display hinges.
- **5** Replace the wireless card.
- 6 Replace the battery.
- 7 Follow the procedure from step 2 to step 5 in "Replacing the base 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

www.dell.com

Windows 8.1 and Windows 10

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

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

Accessing help in Windows 7

Click Start \rightarrow Help and Support.

Online help for operating system

www.dell.com/support/windows www.dell.com/support/linux

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

www.dell.com/support

Learn about your operating system, See *Me and My D* setting up and using your computer, data support/manuals. backup, diagnostics, and so on.

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.



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.

