

# XPS 13 Convertible Service Manual

**Computer Model:** XPS 9365  
**Regulatory Model:** P71G  
**Regulatory Type:** P71G001



# Notes, cautions, and warnings

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**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.

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2018 - 07

Rev. A02

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# Before working inside your computer

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 **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. Click **Start** →  **Power** → **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.

## 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](http://www.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 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](http://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 require the following tools:

- Phillips screwdriver
- Torx #5 (T5) screwdriver
- Plastic scribe

## Screw list

**Table 1. Screw List**

Component	Secured to	Screw type	Quantity
Base cover	Palm-rest assembly	M1.6x4	1
Base cover	Palm-rest assembly	M2x3	8

<b>Component</b>	<b>Secured to</b>	<b>Screw type</b>	<b>Quantity</b>
Battery	Palm-rest assembly	M1.6x4	2
Battery	Palm-rest assembly	M2x3	6
CPU plate	System board	M1.6x2.5	2
Display-cable bracket	System board	M1.6x2.5	2
Display hinges	Palm-rest assembly	M2.5x3.5	6
Fingerprint reader bracket	Palm-rest assembly	M1.6x1.5	1
Hard drive plate	System board	M1.6x2.5	2
Hard-drive (SSD) bracket	Palm-rest assembly	M1.6x3	2
Keyboard	Palm-rest assembly	M2x2	6
Keyboard	Palm-rest assembly	M1.6x1.5	23
Middle bezel	LCD cover	M1.6x3	6
Security-cable slot	Palm-rest assembly	M2x3	2
Speakers	Palm-rest assembly	M2x2	4
System board	Palm-rest assembly	M1.6x3	1
System board	Palm-rest assembly	M1.6x2.5	7
Touch pad	Palm rest	M2x2	2
Wireless card bracket	System board	M1.6x2.5	1

# After working inside your computer

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**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.

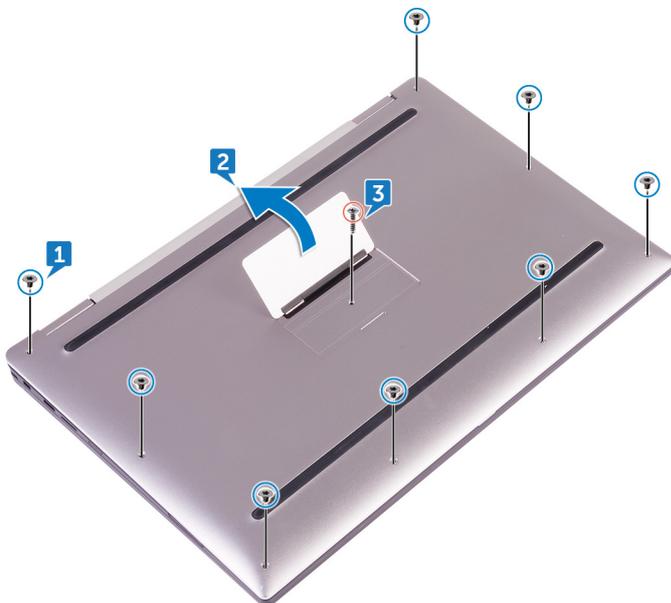
# Removing the base cover

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## Procedure

- 1 Remove the eight screws (M2x3) that secure the base cover to the palm-rest assembly.
- 2 Using your fingertips, open the system badge.
- 3 Remove the screw (M1.6x4) under the system badge that secures the base cover to the palm-rest assembly.



- 4 Starting from the front corner of the computer, pry up the base cover using a plastic scribe and lift the base cover off the palm-rest assembly.



# Replacing the base cover

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## Procedure

- 1 Align the screw holes on the base cover with the screw holes on the palm-rest assembly and snap the base cover into place.
- 2 Using your fingertips, open the system badge.
- 3 Replace the screw (M1.6x4) under the system badge that secures the base cover to the palm-rest assembly.
- 4 Replace the eight screws (M2x3, Torx) that secure the base cover to the palm-rest assembly.

# Removing the battery

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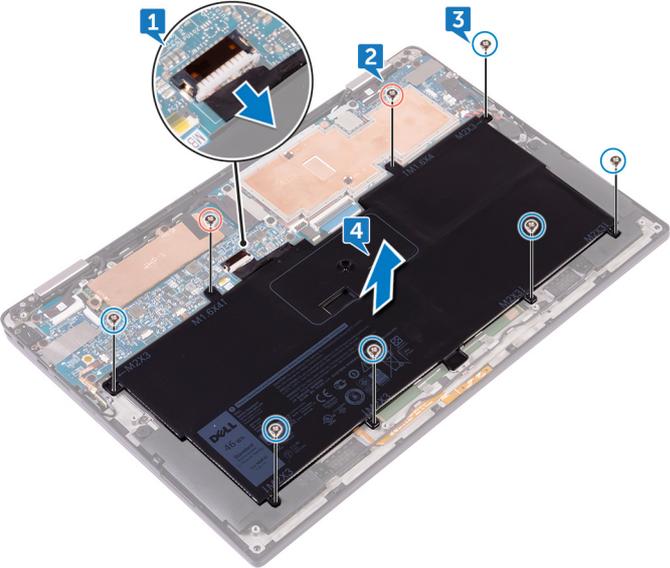
## Prerequisites

Remove the [base cover](#).

## Procedure

- 1 Disconnect the battery cable from the system board.
- 2 Remove the two screws (M1.6x4) that secure the battery to the palm-rest assembly.
- 3 Remove the six screws (M2x3) that secure the battery to the palm-rest assembly.

4 Lift the battery off the palm-rest assembly.



# Replacing the battery

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## Procedure

- 1 Align the screw holes on the battery with the screw holes on the palm-rest assembly.
- 2 Replace the six screws (M2x3) that secure the battery to the palm-rest assembly.
- 3 Replace the two screws (M1.6x4) that secure the battery to the palm-rest assembly.
- 4 Connect the battery cable to the system board.

## Post-requisites

Replace the [base cover](#).

# Removing the solid-state drive

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 **CAUTION:** Solid-state drives are fragile. Exercise care when handling the solid-state drive.

 **CAUTION:** To avoid data loss, do not remove the solid-state drive while the computer is in sleep or on state.

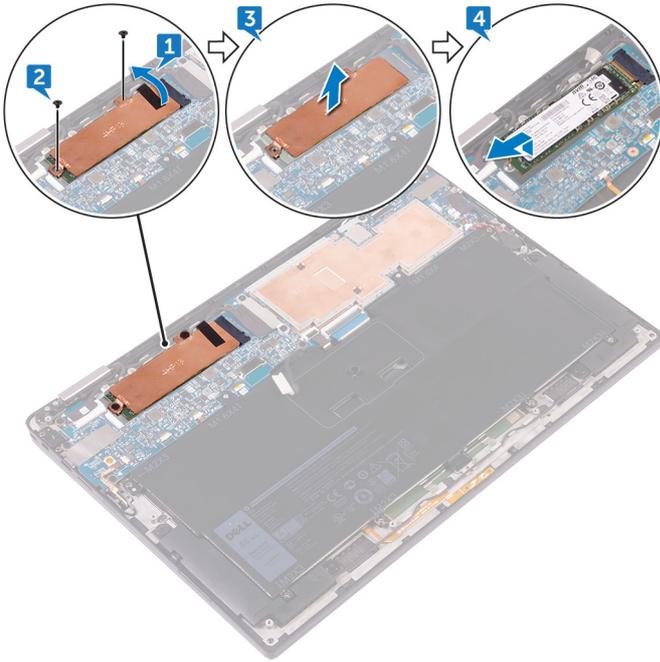
## Prerequisites

- 1 Remove the [base cover](#).
- 2 Remove the [battery](#).

## Procedure

- 1 Peel off the display cable tape from the hard-drive plate.
- 2 Remove the two screws (M1.6x2.5) that secure the hard-drive plate to the system board.
- 3 Remove the hard-drive plate.

- 4 Slide and remove the solid-state drive from the solid-state drive slot.



# Replacing the solid-state drive

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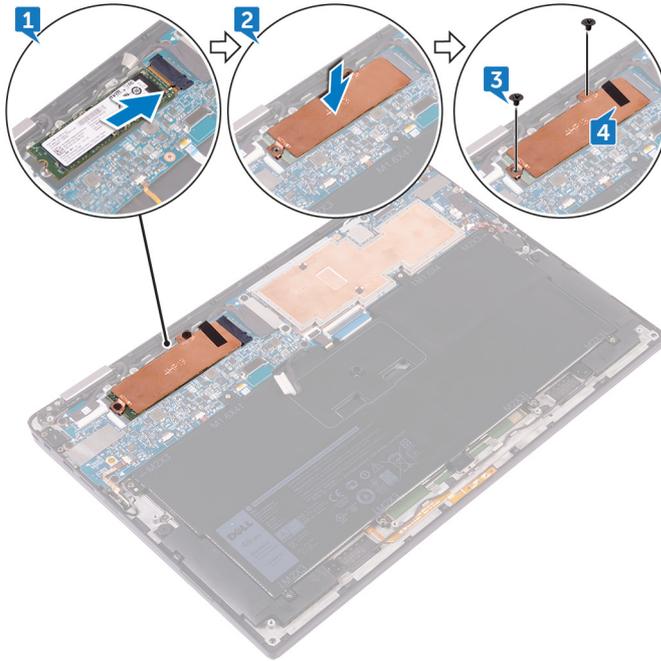


**CAUTION:** Solid-state drives are fragile. Exercise care when handling the solid-state drive.

## Procedure

- 1 Align the notches on the solid-state drive with the tabs in the solid-state drive slot, slide the solid-state drive at an angle into the solid-state drive slot, then press the other end of the solid-state drive down.
- 2 Align the screw holes on the hard disk plate with the screw holes on the system board.
- 3 Replace the two screws (M1.6x2.5) that secure the hard-disk plate to the system board.

- 4 Adhere the display-cable tape to the hard-disk plate.



## Post-requisites

- 1 Replace the [battery](#).
- 2 Replace the [base cover](#).

# Disconnecting the wireless antenna cables

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**NOTE:** The wireless card is integrated into the system board and can not be removed.

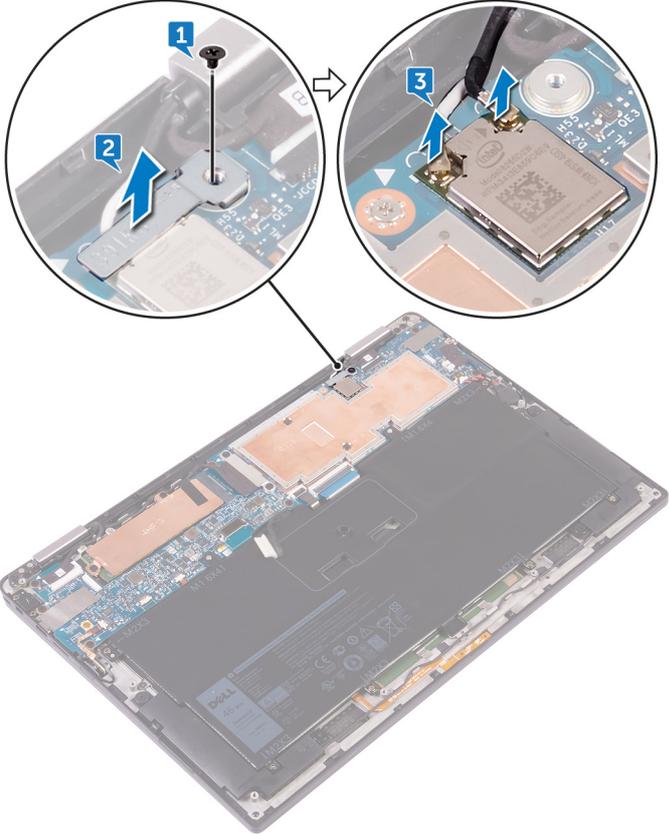
## Prerequisites

- 1 Remove the [base cover](#).
- 2 Remove the [battery](#).

## Procedure

- 1 Remove the screw (M1.6x2.5) that secures the wireless-card bracket to the system board.
- 2 Lift the wireless-card bracket off the wireless card.

**3** Disconnect the antenna cables from the wireless card.



# Reconnecting the wireless antenna cables

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## Procedure

- 1 Connect the antenna cables to the wireless card.

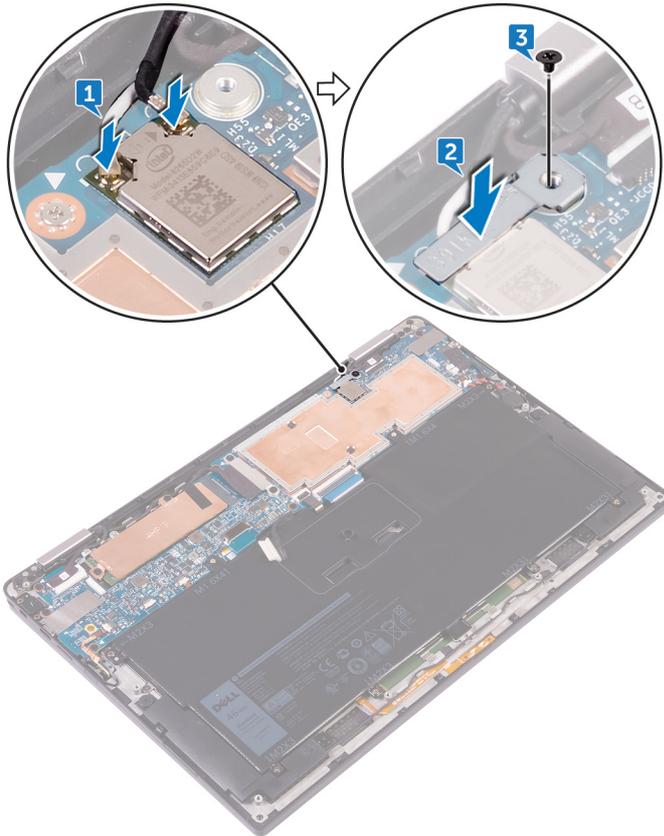
The following table provides the antenna cable color schemes for the wireless card supported by your computer.

**Table 2. Antenna color codes for wireless card connection**

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

- 2 Place the wireless-card bracket on the wireless card.

- 3 Replace the screw (M1.6x2.5) that secures the wireless-card bracket to the system board.



## Post-requisites

- 1 Replace the [battery](#).
- 2 Replace the [base cover](#).

# Removing the speakers

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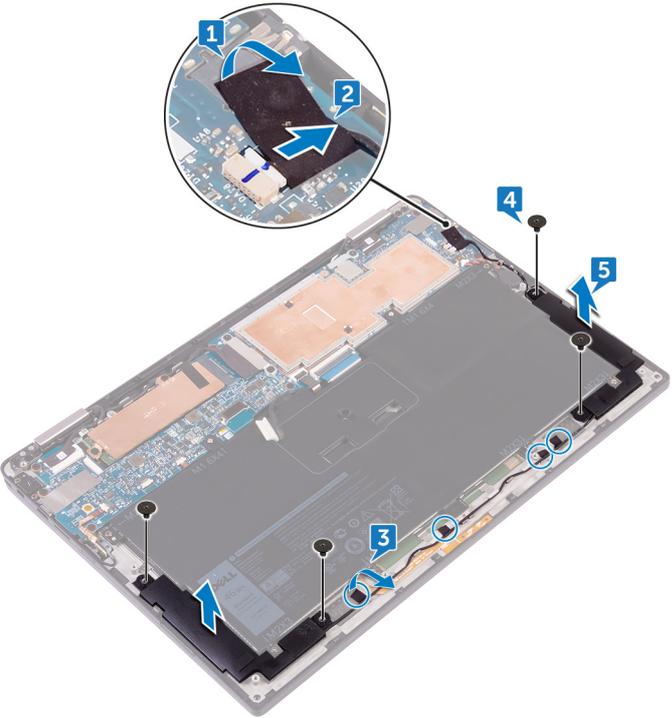
## Prerequisites

- 1 Remove the [base cover](#).
- 2 Remove the [battery](#).

## Procedure

- 1 Peel off the tape securing the speaker cable to the system board.
- 2 Disconnect the speaker cable from the system board.
- 3 Note the speaker-cable routing and peel off the tape that secures the speaker cable to the system board.
- 4 Remove the four screws (M2x2) that secure the speakers to the palm-rest assembly.

5 Lift the speakers, along with its cables, off the palm-rest assembly.



# Replacing the speakers

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## Procedure

- 1 Using the alignment posts on the palm-rest assembly, place the speakers on the palm-rest assembly.
- 2 Replace the four screws (M2x2) that secure the speakers to the palm-rest assembly.
- 3 Route the speaker cable on the system board and adhere the tape to the system board.
- 4 Connect the speaker cable to the system board.
- 5 Adhere the tape securing the speaker cable to the system board.

## Post-requisites

- 1 Replace the [battery](#).
- 2 Replace the [base cover](#).

# Removing the coin-cell battery

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

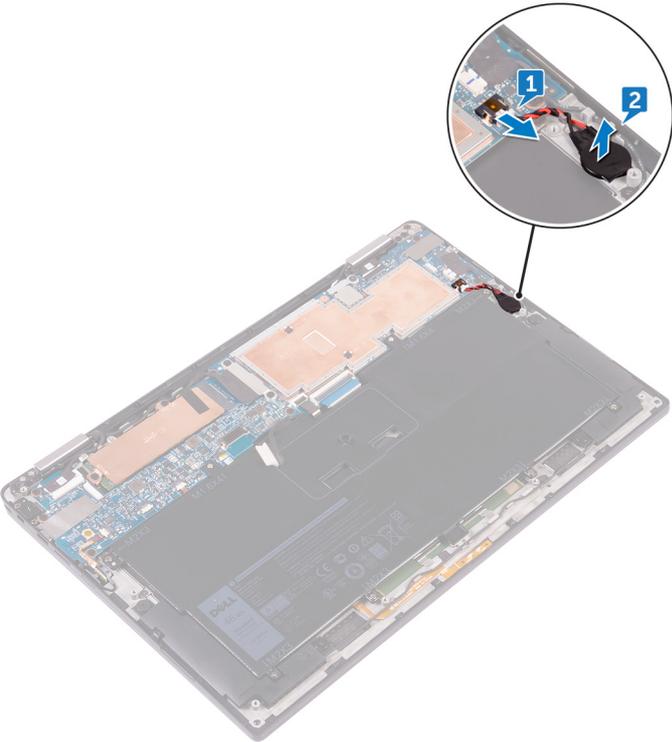
## Prerequisites

- 1 Remove the [base cover](#).
- 2 Remove the [battery](#).

## Procedure

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

2 Note the location of the coin-cell battery and pry it off the palm-rest assembly.



# Replacing the coin-cell battery

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## Procedure

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

## Post-requisites

- 1 Replace the [battery](#).
- 2 Replace the [base cover](#).

# Removing the touchpad

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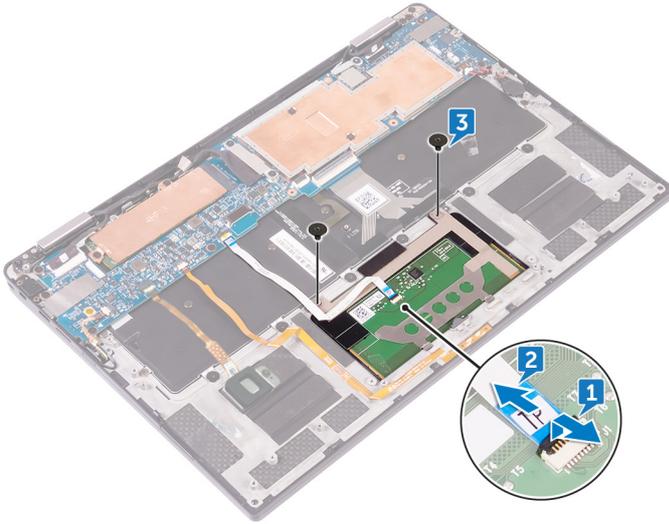
## Prerequisites

- 1 Remove the [base cover](#).
- 2 Remove the [battery](#).

## Procedure

- 1 Open the cable latch on the touch pad.
- 2 Disconnect and remove the cable from the touch pad.

- 3 Remove the two screws (M2x2) that secure the touch pad to the palm-rest assembly, then lift the touch pad from the inner edge and remove it from the palm-rest assembly.



# Replacing the touchpad

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## Procedure

- 1 Align the screw holes on the touch pad with the screw holes on the palm-rest assembly, then slide the touch pad into the palm-rest assembly at an angle.
- 2 Replace the two screws (M2x2) that secure the touch pad to the palm-rest assembly.
- 3 Insert the touch pad cable into the connector on the touch pad, then close the latch to secure the cable.

## Post-requisites

- 1 Replace the [battery](#).
- 2 Replace the [base cover](#).

# Removing the display assembly

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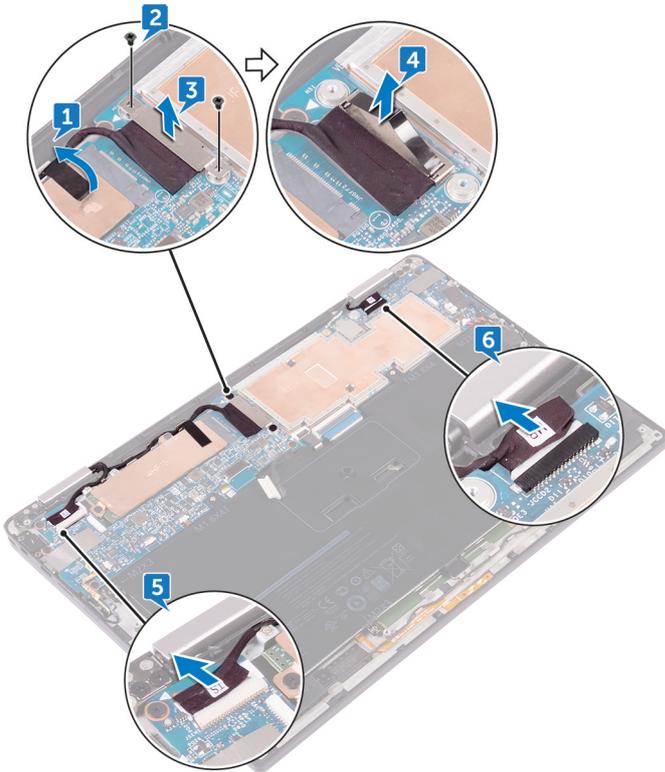
## Prerequisites

- 1 Remove the [base cover](#).
- 2 Remove the [battery](#).
- 3 Disconnect the [wireless card](#).

## Procedure

- 1 Peel off the tape that secures the display cable to the hard-disk plate.
- 2 Remove the two screws (M1.6x2.5) securing the display cable bracket to the system board
- 3 Lift the display cable bracket off the display cable.
- 4 Using the pull tab, disconnect the display cable from the system board.
- 5 Disconnect the touch-screen cable from the system board.

- 6 Disconnect the camera cable from the system board.

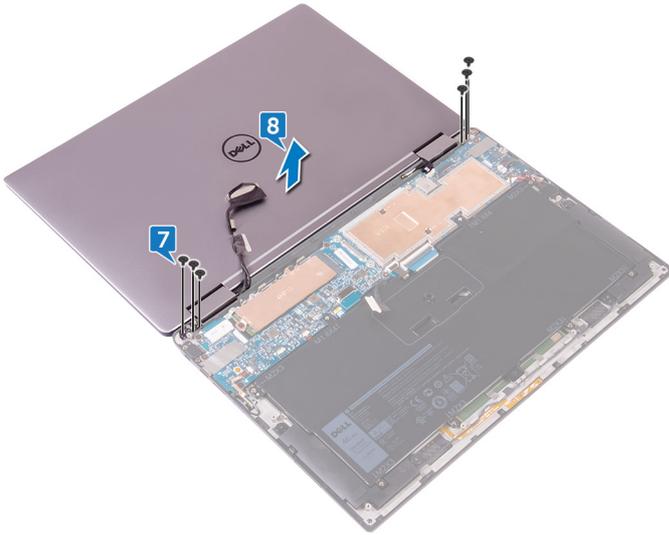


- 7 Open the palm-rest assembly fully and place the display assembly and palm-rest assembly face down and then remove the six screws (M2.5x3.5) that secure the display hinges to the palm-rest assembly.



**NOTE:** Ensure the surface is flat and free of objects when placing the display assembly face down.

- 8 Lift the display assembly off the palm-rest assembly.



# Replacing the display assembly

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## Procedure

- 1 Slide the palm-rest assembly under the display hinges and align the screw holes on the palm-rest assembly with the screw holes on the display hinges.
- 2 Replace the six screws (M2.5x3.5) that secure the palm-rest assembly to the display hinges.
- 3 Close the palm-rest assembly.
- 4 Connect the display cable to the system board.
- 5 Align the screw holes on the display-cable bracket with the screw holes on the system board.
- 6 Replace the two screws (M1.6x2.5) that secure the display-cable bracket to the system board.
- 7 Adhere the display cable tape to the system board.
- 8 Connect the touch-screen cable and camera cable to the system board.

## Post-requisites

- 1 Reconnect the [wireless card](#).
- 2 Replace the [battery](#).
- 3 Replace the [base cover](#).

# Removing the system board

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**NOTE:** Your computer's Service Tag is stored in the system board. You must enter the Service Tag in the BIOS setup program after you replace the system board.



**NOTE:** Replacing the system board removes any changes you have made to the BIOS using the BIOS setup program. You must make the appropriate changes again after you replace the system board.



**NOTE:** Before disconnecting the cables from the system board, note the location of the connectors so that you can reconnect the cables correctly after you replace the system board.

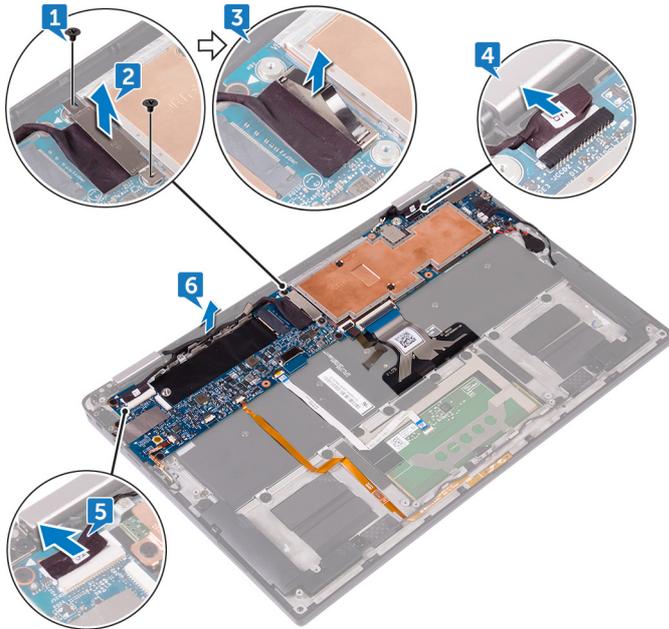
## Prerequisites

- 1 Remove the [base cover](#).
- 2 Remove the [battery](#).
- 3 Remove the [solid-state drive](#).
- 4 Disconnect the [wireless card](#).

## Procedure

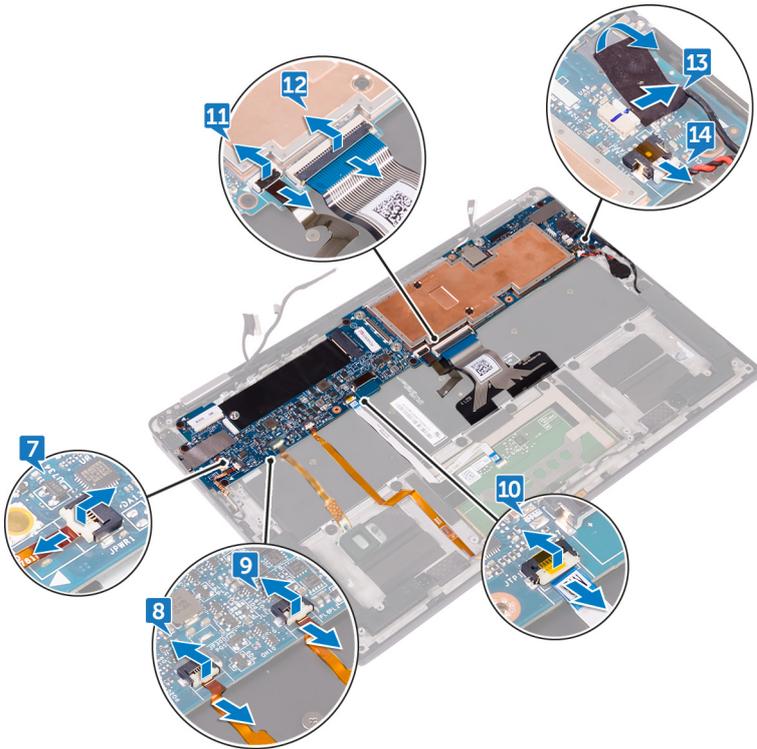
- 1 Remove the two screws (M1.6x2.5) that secure the display-cable bracket to the system board.
- 2 Lift the display-cable bracket off the display cable.
- 3 Using the pull tab, disconnect the display cable from the system board.
- 4 Disconnect the camera cable from the system board.
- 5 Disconnect the touch-screen cable from the system board.

- 6 Move the display cable to the side to facilitate system board removal.



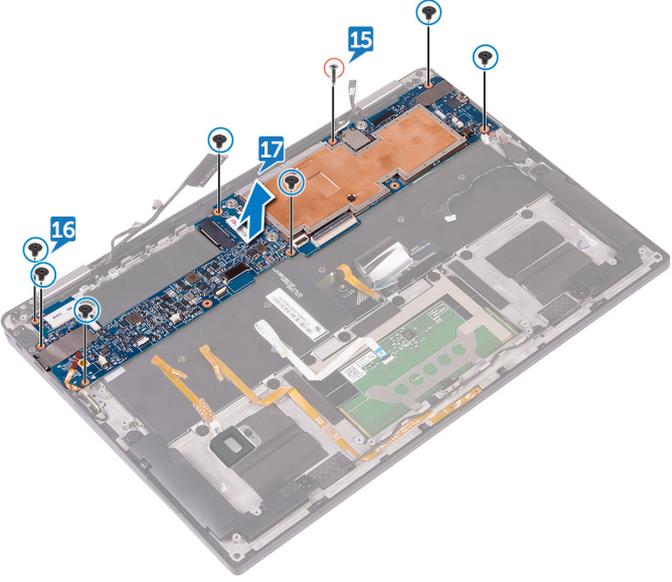
- 7 Open the latch and disconnect the power-button cable from the system board.
- 8 Open the latch and disconnect the fingerprint-reader cable from the system board.
- 9 Open the latch and disconnect the battery-status light cable from the system board.
- 10 Open the latch and disconnect the touch-pad cable from the system board.
- 11 Open the latch and disconnect the keyboard-backlight cable from the system board.
- 12 Open the latch and disconnect the keyboard-controls board cable from the system board.
- 13 Peel off the tape that secures the speaker cable to the system board., then disconnect the speaker cable from the system board.

- 14** Disconnect the coin-cell battery from the system board.



- 15** Remove the screw (M1.6x3) that secures the system board to the palm-rest assembly.
- 16** Remove the seven screws (M1.6x2.5) that secure the system board to the palm-rest assembly.

**17** Starting from the outer edge, lift the system board at an angle and remove it from under the tabs on the palm-rest assembly.



# Replacing the system board

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**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.

## Procedure

- 1 Slide the system board under the tabs on the palm-rest assembly and align the screw holes on the system board with the screw holes on the palm-rest assembly.
- 2 Replace the seven screws (M1.6x2.5) that secure the system board to the palm-rest assembly.
- 3 Replace the screw (M1.6x3) that secures the system board to the palm-rest assembly.
- 4 Slide the power-button cable, fingerprint-reader cable, battery-status light cable, the touch-pad cable, the keyboard-backlight cable, and the keyboard-controls board cable into the system board and close the latches to secure the cables.
- 5 Connect the camera cable, the touch-screen cable, the coin-cell battery cable, the speaker cable, and the display cable to the system board.
- 6 Adhere the tape that secure the speaker cable to the system board.
- 7 Align the screw holes on the display-cable bracket with the screw holes on the system board.
- 8 Replace the two screws (M1.6x2.5) that secure the display-cable bracket to the system board.

## Post-requisites

- 1 Reconnect the [wireless card](#).
- 2 Replace the [solid-state drive](#).
- 3 Replace the [battery](#).
- 4 Replace the [base cover](#).

## Entering the Service Tag in the BIOS setup program

- 1 Turn on or restart your computer.
- 2 Press F2 when the Dell logo is displayed to enter the BIOS setup program.
- 3 Navigate to the **Main** tab and enter the Service Tag in the **Service Tag Input** field.



**NOTE: Service tag is the alphanumeric identifier located at the back side of your computer.**

# Removing the keyboard

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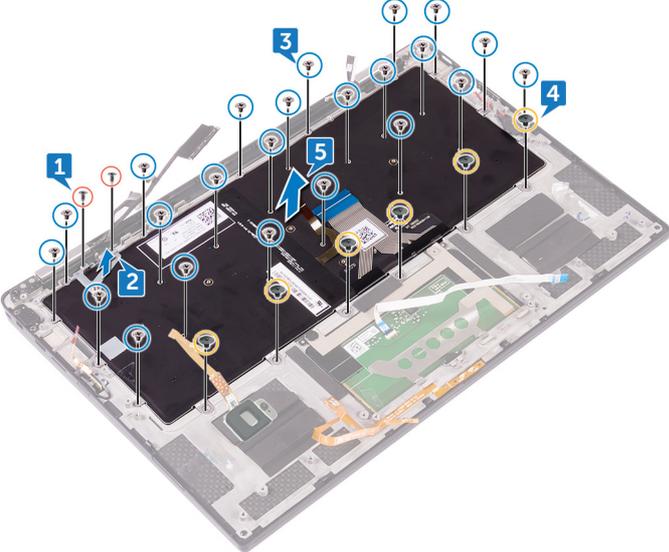
## Prerequisites

- 1 Remove the [base cover](#).
- 2 Remove the [battery](#).
- 3 Remove the [solid-state drive](#).
- 4 Disconnect the [wireless card](#).
- 5 Remove the [speakers](#).
- 6 Remove the [coin-cell battery](#).
- 7 Remove the [system board](#).

## Procedure

- 1 Remove the two screws (M1.6x3) that secure the SSD bracket to the palm-rest assembly.
- 2 Lift the SSD bracket off the keyboard and the palm-rest assembly.
- 3 Remove the 23 screws (M1.6x1.5) that secure the keyboard to the palm-rest assembly.
- 4 Remove the six (M2x2) screws that secure the keyboard to the palm-rest assembly.

5 Lift the keyboard off the palm-rest assembly.



# Replacing the keyboard

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## Procedure

- 1 Align the screw holes on the keyboard with the screw holes on the palm-rest assembly.
- 2 Replace the six (M2x2) screws that secure the keyboard to the palm-rest assembly.
- 3 Replace the 23 screws (M1.6x1.5) that secure the keyboard to the palm-rest assembly.
- 4 Align the screw holes on the SSD bracket to the screw holes on the keyboard and the palm-rest assembly.
- 5 Replace the two screws (M1.6x3) that secure the SSD bracket to the palm-rest assembly.

## Post-requisites

- 1 Replace the [system board](#).
- 2 Replace the [coin-cell battery](#).
- 3 Replace the [speakers](#).
- 4 Reconnect the [wireless card](#).
- 5 Replace the [solid-state drive](#).
- 6 Replace the [battery](#).
- 7 Replace the [base cover](#).

# Removing the palm-rest assembly

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## Prerequisites

- 1 Remove the [base cover](#).
- 2 Remove the [battery](#).
- 3 Remove the [solid-state drive](#).
- 4 Disconnect the [wireless card](#).
- 5 Remove the [speakers](#).
- 6 Remove the [coin-cell battery](#).
- 7 Remove the [touch pad](#).
- 8 Remove the [display assembly](#).
- 9 Remove the [system board](#).
- 10 Remove the [keyboard](#).

# Procedure

After performing all the prerequisites, we are left with the palm-rest assembly.



# Replacing the palm-rest assembly

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## Procedure

Place the palm-rest assembly on a flat surface.

## Post-requisites

- 1 Replace the [keyboard](#).
- 2 Replace the [system board](#).
- 3 Replace the [display assembly](#).
- 4 Replace the [touch pad](#).
- 5 Replace the [coin-cell battery](#).
- 6 Replace the [speakers](#).
- 7 Reconnect the [wireless card](#).
- 8 Replace the [solid-state drive](#).
- 9 Replace the [battery](#).
- 10 Replace the [base cover](#).

# Flashing the BIOS

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

Follow these steps to flash the BIOS:

- 1 Turn on your computer.
- 2 Go to [www.dell.com/support](http://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.

# System diagnostic lights

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## Battery-status light

Indicates the power and battery-charge status.

**Solid white** — Power adapter is connected and the battery has more than 5 percent charge.

**Amber** — Computer is running on battery and the battery has less than 5 percent charge.

### Off

- Power adapter is connected and the battery is fully charged.
- Computer is running on battery and the battery has more than 5 percent charge.
- Computer is in sleep state, hibernation, or turned off.

The power and battery-status light blinks amber along with beep codes indicating failures.

For example, the power and battery-status light blinks amber two times followed by a pause, and then blinks white three times followed by a pause. This 2,3 pattern continues until the computer is turned off indicating no memory or RAM is detected.

The following table shows different power and battery-status light patterns and associated problems.

**Table 3. LED codes**

Light pattern	Problem description
2,1	CPU failure
2,2	System board: BIOS and ROM failure
2,3	No memory or RAM detected
2,4	Memory or RAM failure
2,5	Invalid memory installed
2,6	System board or chipset error
2,7	LCD failure
3,1	CMOS battery failure
3,2	PCI or video card or chip failure

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<b>Light pattern</b>	<b>Problem description</b>
<b>3,3</b>	Recovery image not found
<b>3,4</b>	Recovery image found but invalid

**Camera status light:** Indicates whether the camera is in use.

- Solid white — Camera is in use.
- Off — Camera is not in use.

**Caps Lock status light:** Indicates whether Caps Lock is enabled or disabled.

- Solid white — Caps Lock enabled.
- Off — Caps Lock disabled.

# Getting help and contacting Dell

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## Self-help resources

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

### Table 4. Self-help resources

Information about Dell products and services

[www.dell.com](http://www.dell.com)

Dell Help & Support app



Accessing help

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

Online help for operating system

[www.dell.com/support/windows](http://www.dell.com/support/windows)

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

[www.dell.com/support](http://www.dell.com/support)

Dell knowledge base articles for a variety of computer concerns.

- 1 Go to [www.dell.com/support](http://www.dell.com/support).
- 2 Type the subject or keyword in the **Search** box.
- 3 Click **Search** to retrieve the related articles.

Learn and know the following information about your product:

- Product specifications
- Operating system
- Setting up and using your product
- Data backup
- Troubleshooting and diagnostics
- Factory and system restore

See *Me and My Dell* at [www.dell.com/support/manuals](http://www.dell.com/support/manuals).

To locate the *Me and My Dell* relevant to your product, identify your product through one of the following:

- Select **Detect Product**.
- Locate your product through the drop-down menu under **View Products**.

- BIOS information
- Enter the **Service Tag number** or **Product ID** in the search bar.

## Contacting Dell

To contact Dell for sales, technical support, or customer service issues, see [www.dell.com/contactdell](http://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.**