Dell Latitude 7370
Owner's Manual

Notes, cautions, and warnings

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

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

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

Contents

Working on your computer

Safety instructions

Use the following safety guidelines to help protect your computer from potential damage and to help to ensure your personal safety. Unless otherwise noted, each procedure included in this document assumes that the following conditions exist:

- You have read the safety information that shipped with your computer.
- A component can be replaced or--if purchased separately--installed by performing the removal procedure in reverse order.

> ⚠ **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.**

> ⚠ **WARNING: Before working inside your computer, read the safety information that shipped with your computer. For additional safety best practices information, see the Regulatory Compliance Homepage at www.dell.com/regulatory_compliance**

> △ **CAUTION: Many repairs may only be done by a certified service technician. You should only perform troubleshooting and simple repairs as authorized in your product documentation, or as directed by the online or telephone service and support team. Damage due to servicing that is not authorized by Dell is not covered by your warranty. Read and follow the safety instructions that came with the product.**

> △ **CAUTION: To avoid electrostatic discharge, ground yourself by using a wrist grounding strap or by periodically touching an unpainted metal surface, such as a connector on the back of the computer.**

> △ **CAUTION: Handle components and cards with care. Do not touch the components or contacts on a card. Hold a card by its edges or by its metal mounting bracket. Hold a component such as a processor by its edges, not by its pins.**

> △ **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; if you are disconnecting this type of cable, press in on the locking tabs before you disconnect the cable. As you pull connectors apart, keep them evenly aligned to avoid bending any connector pins. Also, before you connect a cable, ensure that both connectors are correctly oriented and aligned.**

> 🖉 **NOTE:** The color of your computer and certain components may appear differently than shown in this document.

Before working inside your computer

To avoid damaging your computer, perform the following steps before you begin working inside the computer.

1. Ensure that you follow the Safety instructions.
2. Ensure that your work surface is flat and clean to prevent the computer cover from being scratched.
3. Turn off your computer, see Turning off your computer.

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

4. Disconnect all the network cables from the computer.
5. Disconnect your computer and all attached devices from the electrical outlets.
6. Press and hold the power button while the computer is unplugged to ground the system board.
7. Remove the cover.

   ⚠️ **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.**

Turning off your computer

⚠️ **CAUTION: To avoid losing data, save and close all open files and exit all open programs before you turn off your computer.**

1. Turning off your computer:
   - In Windows 10 (using a touch enabled device or mouse):

     1. Click or tap ⊞.

     2. Click or tap ⏻ and then click or touch **Shut down**.
   - In Windows 8 (using a touch enabled device):

     1. Swipe in from the right edge of the screen, opening the **Charms** menu and select **Settings**.

     2. Tap ⏻ and then tap **Shut down**
   - In Windows 8 (using a mouse):

     1. Point to upper-right corner of the screen and click **Settings**.

     2. Click ⏻ and then click **Shut down**.
   - In Windows 7:

     1. Click **Start**.
     2. Click **Shut Down**.
2. Ensure that the computer and all attached devices are turned off. If your computer and attached devices did not automatically turn off when you shut down your operating system, press and hold the power button for about 6 seconds to turn them off.

After working inside your computer

After you complete any replacement procedure, ensure you connect any external devices, cards, and cables before turning on your computer.

⚠️ **CAUTION: To avoid damage to the computer, use only the battery designed for this particular Dell computer. Do not use batteries designed for other Dell computers.**

1. Connect any external devices, such as a port replicator or media base, and replace any cards, such as an ExpressCard.
2. Connect any telephone or network cables to your computer.

    ⚠️ **CAUTION: To connect a network cable, first plug the cable into the network device and then plug it into the computer.**

3. Replace the battery.
4. Replace the base cover.
5. Connect your computer and all attached devices to their electrical outlets.
6. Turn on your computer.

Removing and installing components

This section provides detailed information on how to remove or install the components from your computer.

Recommended tools

The procedures in this document require the following tools:

- Small flat blade screwdriver
- Phillips screwdriver
- Small plastic scribe

Installing the micro Subscriber Identification Module (SIM) card

1. Follow the procedure in Before working inside your computer.
2. Insert a paperclip or a SIM card removal tool into the pinhole to remove the SIM card tray [1].
3. Place the micro SIM card on the SIM card tray [2].
4. Push the SIM card tray into the slot until it clicks into place.
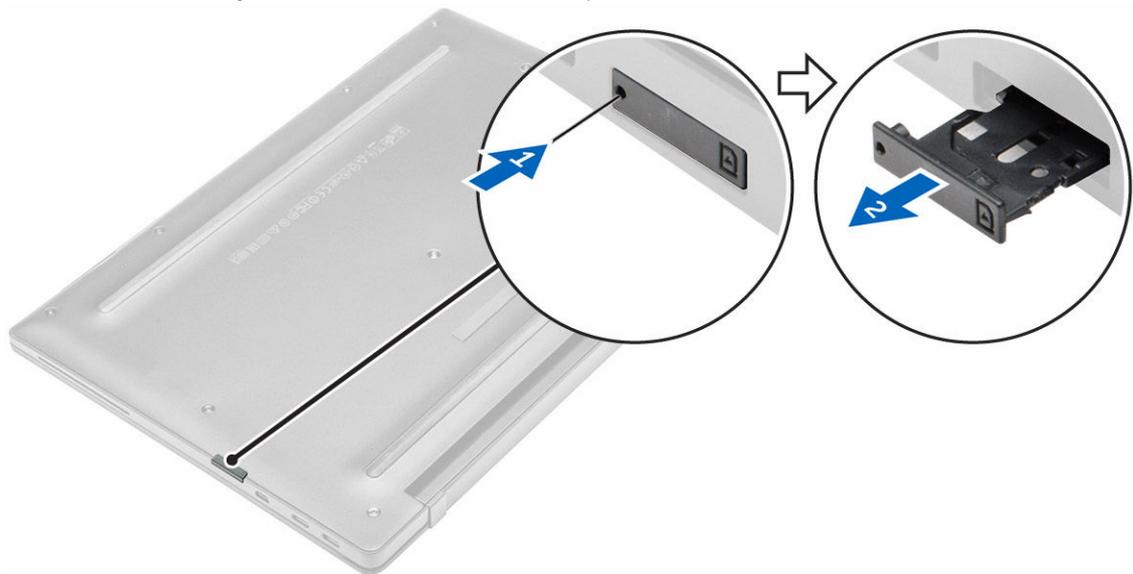
Removing the micro Subscriber Identification Module (SIM) card

⚠ CAUTION: Removing the micro SIM card when the computer is on may cause data loss or damage the card. Ensure that your computer is turned off or the network connections are disabled.

1. Insert a paperclip or a SIM card removal tool into the pinhole on the SIM card tray.
2. Remove the micro SIM card from the SIM card tray.
3. Push the SIM card tray into the slot until it clicks into place.

Removing the micro Secure Digital (SD) card

1. Follow the procedure in Before working inside your computer.
2. Press in the micro SD card to release it from the computer. Slide the micro SD card out of the computer.
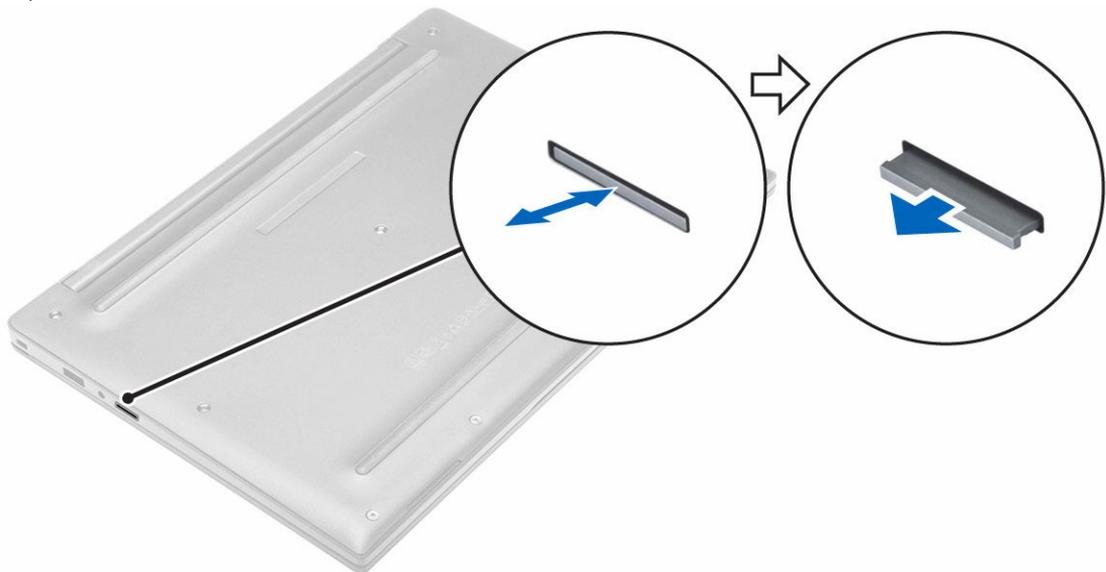
Installing the micro Secure Digital (SD) card

1. Push in the micro SD card into its slot until it clicks into place.
2. Follow the procedure in After working inside your computer.

Removing the base cover

1. Follow the procedure in Before working inside your computer.
2. To remove the base cover:
   a. Loosen the captive screws that secure the base cover to the computer [1].
   b. Lift the base cover from the edge and remove it from the computer [2].

Installing the base cover

1. Align the tabs on the base cover with the slots on the computer.
2. Tighten the screws to secure the base cover to the computer.
3. Press the edges of the cover until it clicks into place.
4. Follow the procedure in After working inside your computer.

Removing the battery

1. Follow the procedure in Before working inside your computer.
2. Remove the base cover.
3. Disconnect the battery cable from the connector on the system board [1].
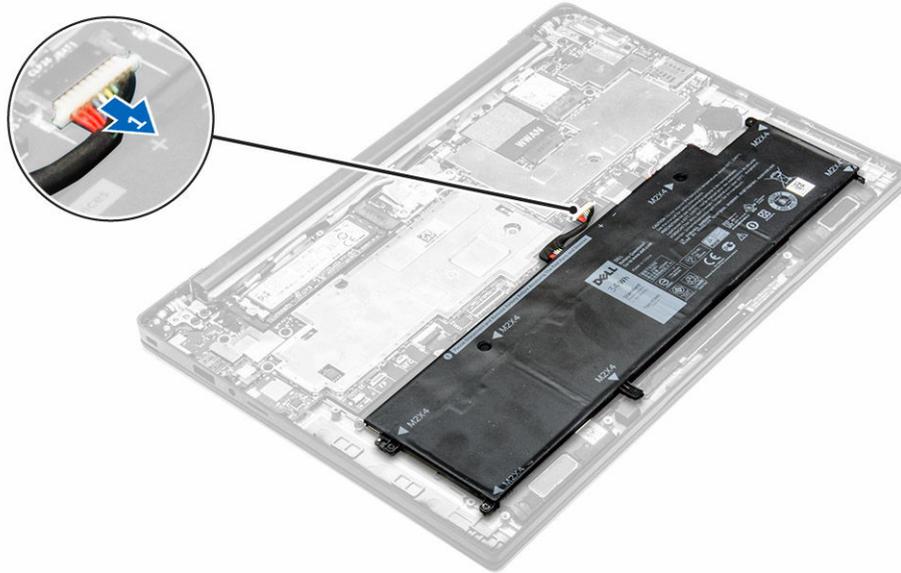
4. To remove the battery:
   a. Remove the screws that secure the battery to the computer [1].
   b. Lift the battery away from the computer [2].

Installing the battery

1. Align the tabs on the battery with the slots on the palmrest.
2. Tighten the screws to secure the battery to the computer.

   ![NOTE icon] **NOTE:** The number of screws vary depending on the type of battery.

3. Connect the battery cable to the connector on the system board.
4. Install the base cover.

5. Follow the procedure in <u>After working inside your computer</u>.

Removing the coin cell battery

1. Follow the procedure in <u>Before working inside your computer</u>.
2. Remove the:
   a. <u>base cover</u>
3. Disconnect the battery cable from the connector on the system board [1].
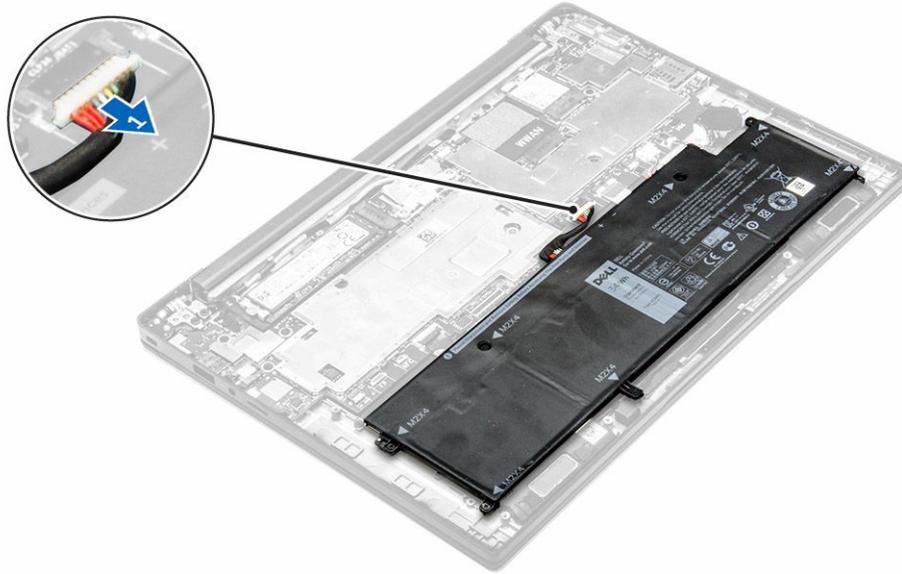
4. To remove the coin cell battery:
   a. Disconnect the coin cell battery cable from the connector on the system board [1].
   b. Lift the coin cell battery to release it from the adhesive and remove it from the system board [2].

Installing the coin cell battery

1. Place the coin cell battery into the slot on the system board.
2. Connect the coin cell battery cable to the connector on the system board.
3. Connect the battery cable to the connector on the system board.
4. Install the:
   a. base cover
5. Follow the procedure in After working inside your computer.

Removing the smart card cage

1. Follow the procedure in Before working inside your computer.
2. Remove the:
   a. base cover
   b. battery
3. To remove the smart card cage:
   a. Disconnect the smart card FFC cable [1,2].
   b. Remove the screws that secure the smart card cage to the system board [3].
   c. Lift the smart card cage from the system board [4].
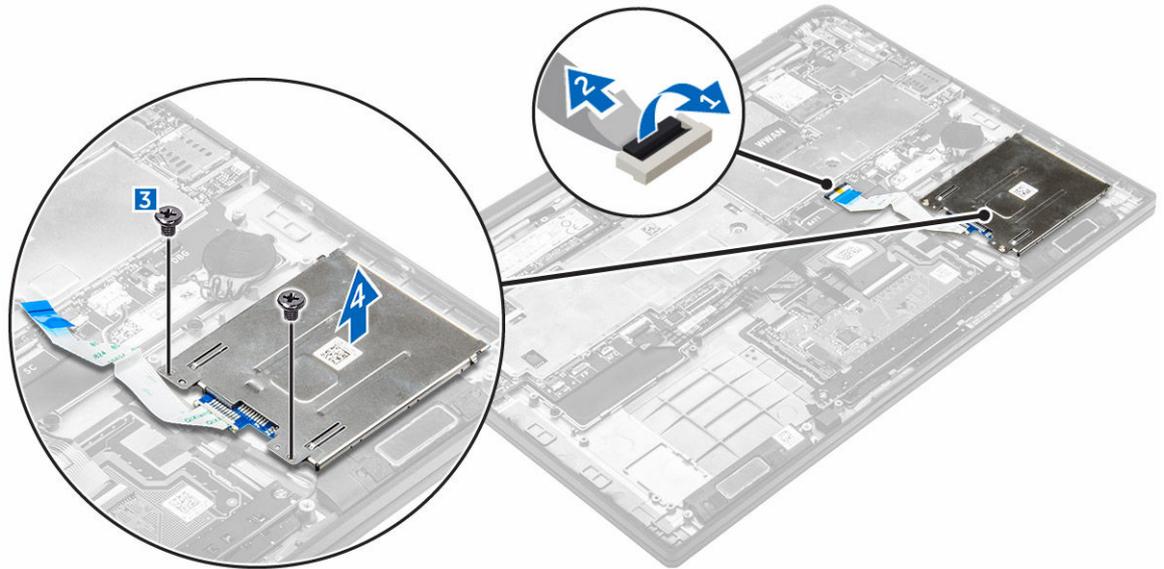
Installing the smart card cage

1. Place the smart card cage on the system board.
2. Tighten the screw to secure the smart card cage to the computer.
3. Connect the smart card FFC cable to the system board.
4. Install the:
   a. battery
   b. base cover

5. Follow the procedure in [After working inside your computer](#).

Removing the speakers

1. Follow the procedure in [Before working inside your computer](#).
2. Remove the:
   a. [base cover](#)
   b. [battery](#)
3. To remove the speakers:
   a. Disconnect the speaker cable [1].
   b. Unroute the speaker cable [2].
   c. Remove the speakers from the computer [3].

   ![NOTE icon] **NOTE:** Use a plastic scribe to detach the speakers from the adhesive pads.
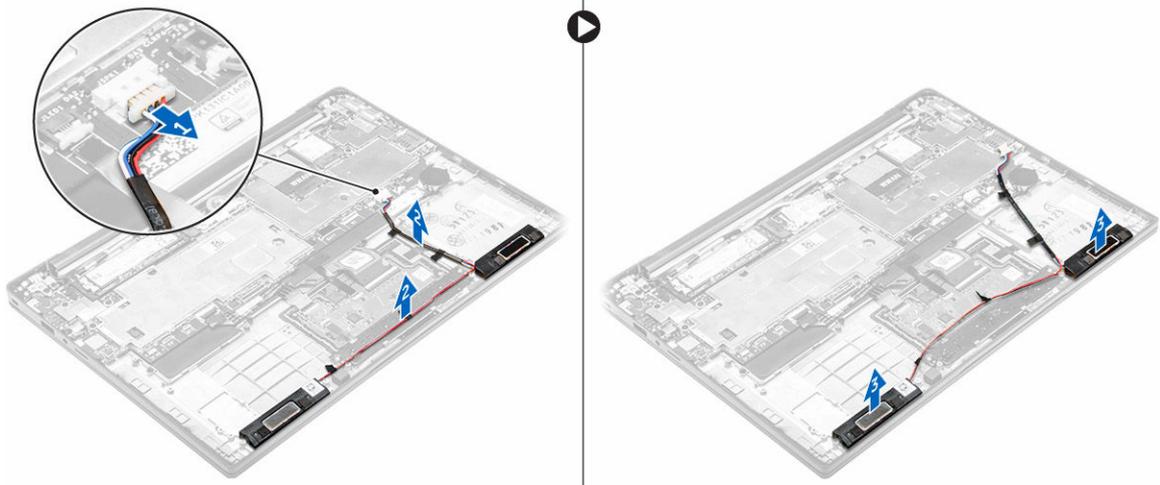
Installing the speakers

1. Place the speakers to align with the alignment lines on the computer.
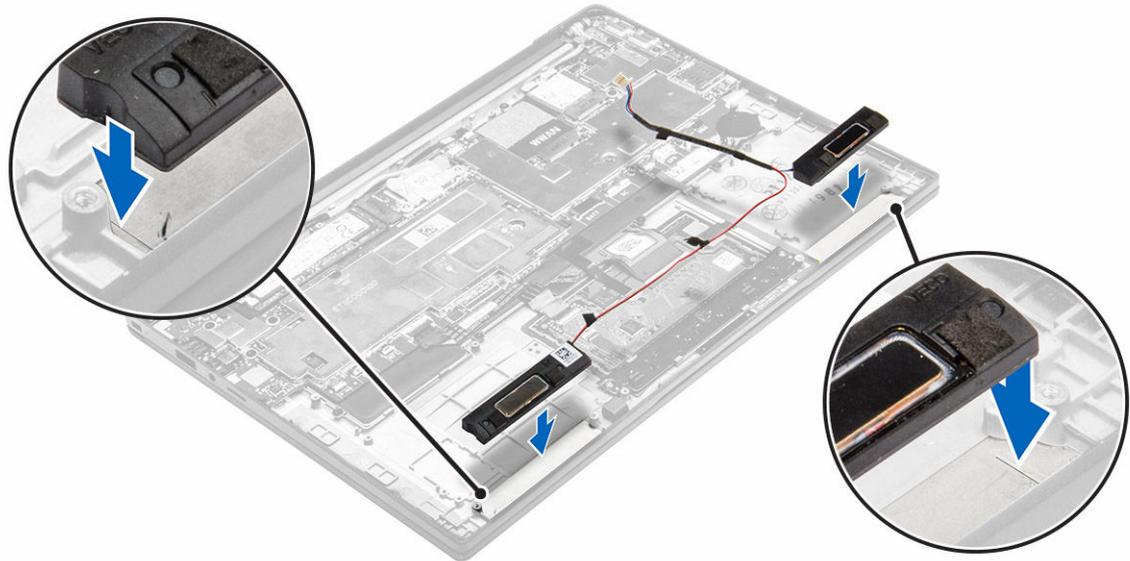
2. Route the speaker cable through the retention clips on the dock frame.
3. Connect the speaker cable to its connector on the system board.
4. Install the:
   a. [battery](#)
   b. [base cover](#)
5. Follow the procedure in [After working inside your computer](#).

Removing the WLAN card

1. Follow the procedure in [Before working inside your computer](#).
2. Remove the:
   a. [base cover](#)
3. Disconnect the battery cable from the connector on the system board [1].
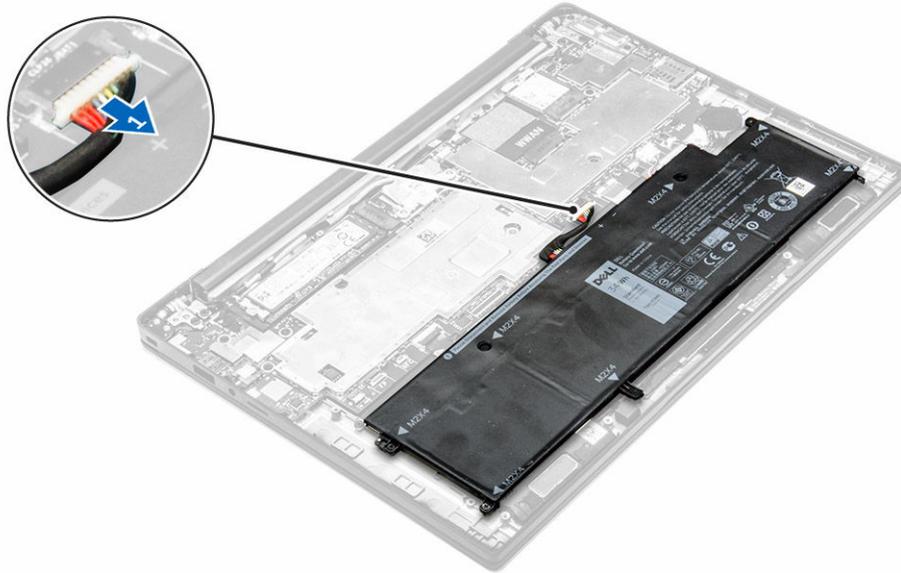
4. To remove the WLAN card:
   a. Remove the screw that secures the metal bracket to the WLAN card [1].
   b. Remove the metal bracket [2].
   c. Disconnect the WLAN cables from the connectors on the WLAN card [3].
   d. Remove the WLAN card from the computer [4].
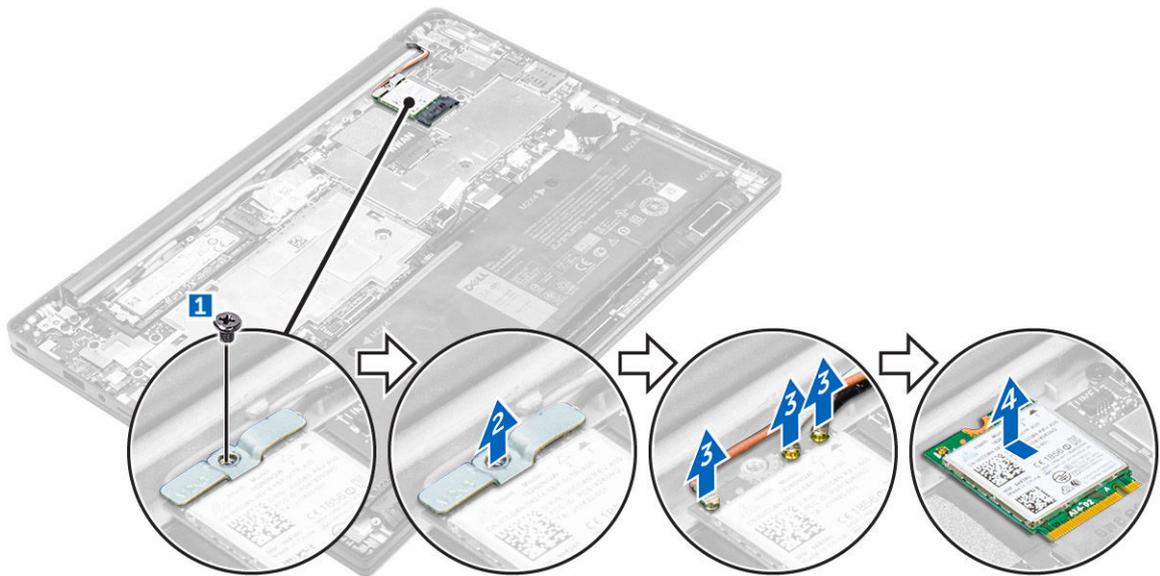
Installing the WLAN card

1. Insert the WLAN card into the slot on the computer.
2. Route the WLAN cables through the routing channel.
3. Connect the WLAN cables to the connectors on the WLAN Card.
4. Place the metal bracket and tighten the screw to secure it to the computer.

5. Connect the battery cable to the connector on the system board.
6. Install the:
   a. [base cover](#)
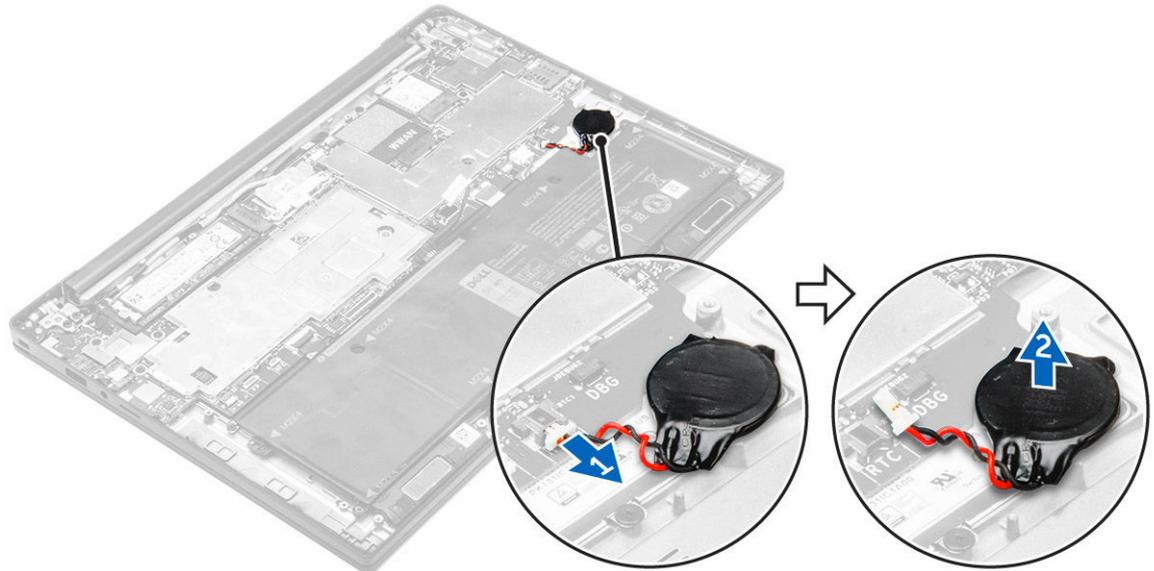7. Follow the procedure in [After working inside your system](#).

Removing the WWAN card

1. Follow the procedure in [Before working inside your computer](#).
2. Remove the:
   a. [base cover](#)
3. Disconnect the battery cable from the connector on the system board [1].
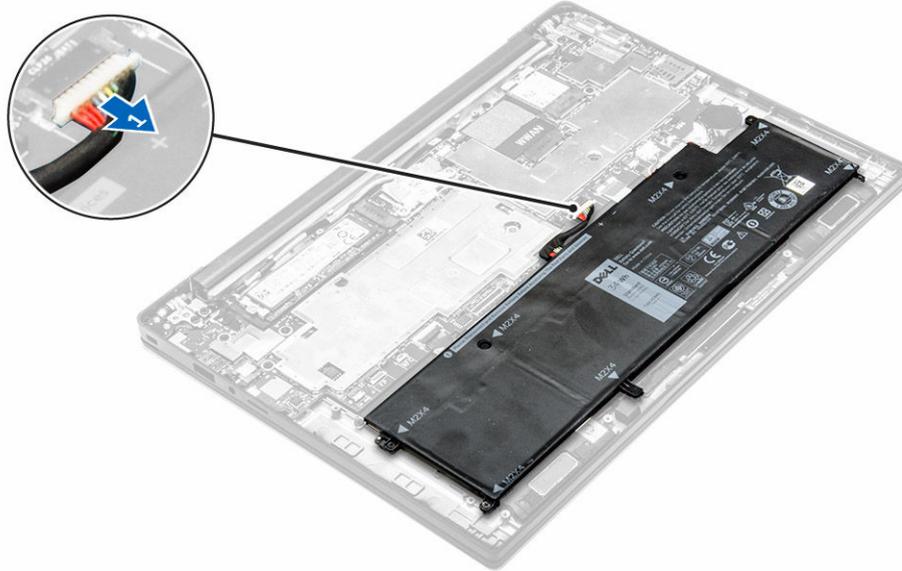
4. To remove the WWAN card:
   a. Peel the aluminum foil until the folding line.
   b. Remove the screw that secures the metal bracket to the WWAN card [1].
   c. Remove the metal bracket [2].
   d. Disconnect the WWAN cables from the connectors on the WWAN card [3].
   e. Remove the WWAN card from the computer [4].

Installing the WWAN card

1. Peel the aluminum foil until the folding line.
2. Insert the WWAN card into the slot on the computer.
3. Route the WWAN cables through the routing channel.
4. Connect the WWAN cables to the connectors on the WWAN Card.
5. Place the metal bracket and tighten the screw to secure it to the computer.
6. Stick the aluminum foil on the bracket and WWAN card.
7. Connect the battery cable to the connector on the system board.
8. Install the:
   a. base cover
9. Follow the procedure in After working inside your system.

Removing the Solid State Drive (SSD)

1. Follow the procedure in Before working inside your computer.
2. Remove the:
   a. base cover
3. Disconnect the battery cable from the connector on the system board [1].
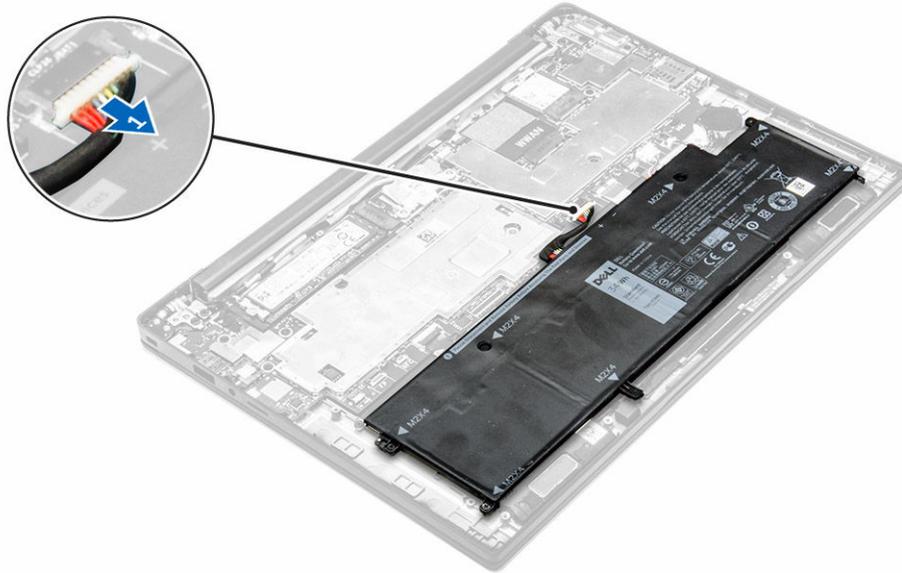
4. To remove the SSD:
   a. Peel the aluminum foil until the folding line.
   b. Remove the screw that secures the SSD to the computer [1].
   c. Remove the SSD bracket [2].
   d. Remove the copper thermal plate.
   e. Remove the SSD from the computer [3].
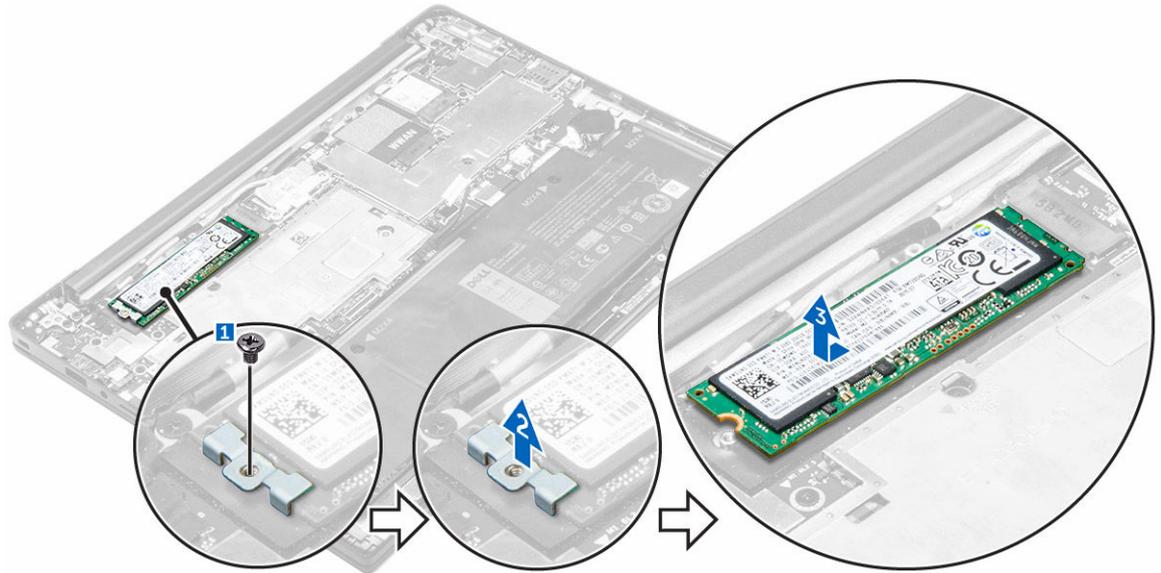
Installing the Solid State Drive(SSD)

1. Insert the SSD into the connector on the computer.
2. Install the thermal plate.
3. Install the metal bracket.

4. Tighten the screw to secure the SSD to the computer.
5. Stick the aluminum foil on the thermal plate.
6. Connect the battery cable to the connector on the system board.
7. Install the:
   a. base cover
8. Follow the procedure in After working inside your computer.

Removing the display assembly

1. Follow the procedure in Before working inside your computer.
2. Remove the base cover
3. Disconnect the battery cable from the connector on the system board [1].
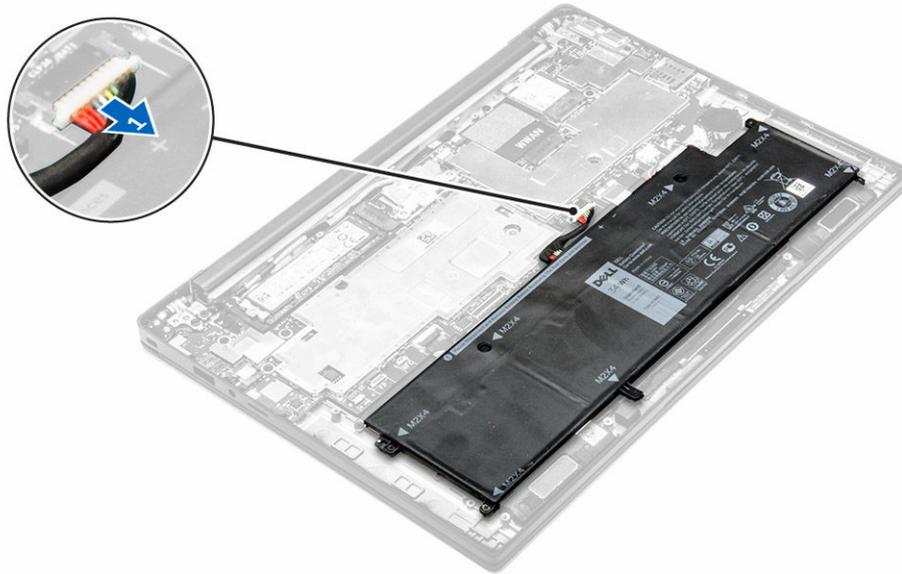
4. Remove the:
   a. WLAN card
   b. WWAN card
5. To remove the cables:
   a. Disconnect the camera and tune cable [1, 2].
   b. Peel the aluminum foil until the folding line.
   c. Remove the screws that secure the metal plate and lift it away from the computer [3, 4].
   d. Peel the adhesive to access the display cable and disconnect it from the connector [5].
   e. Disconnect the touch-panel cable from the computer [6].
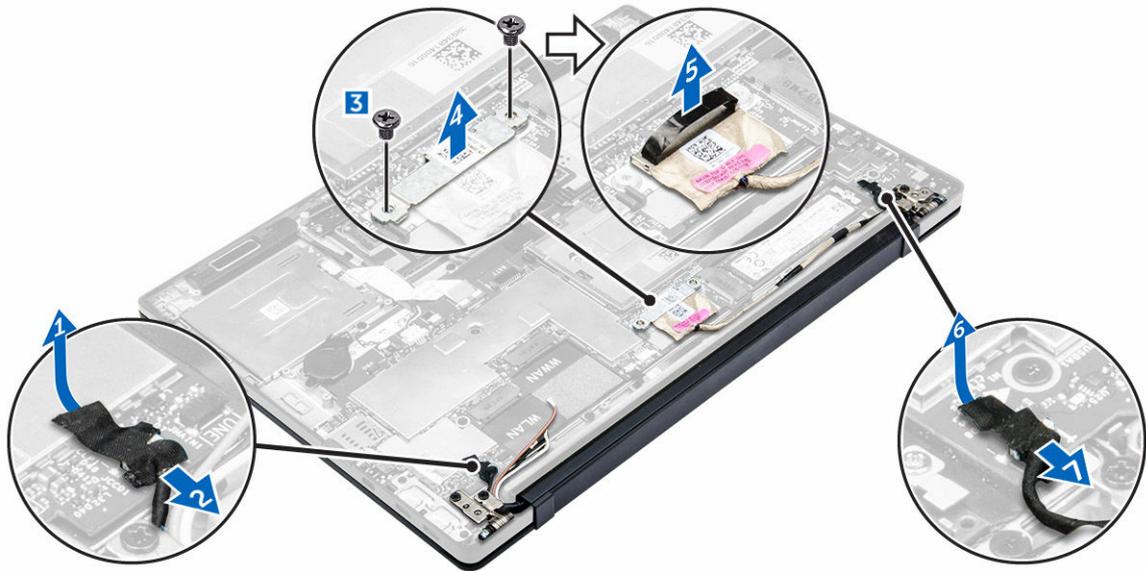
6. Lift to separate the palmrest assembly from the display assembly.

7. To remove the display assembly:
   a. Remove the screws that secure the display assembly to the computer [1].
   b. Slide the display assembly to release it from the computer [2].

Installing the display assembly

1. Connect the display cable to the connector and fix the adhesive tape.
2. Stick the aluminum foil on the thermal plate and display cable.
3. Connect the camera, touch-panel, and tune cable.
4. Align the display assembly with the screw holders on the computer.
5. Tighten the screws to secure the display assembly.
6. Install the:
   a. WWAN card
   b. WLAN card
7. Connect the battery cable to the connector on the system board.
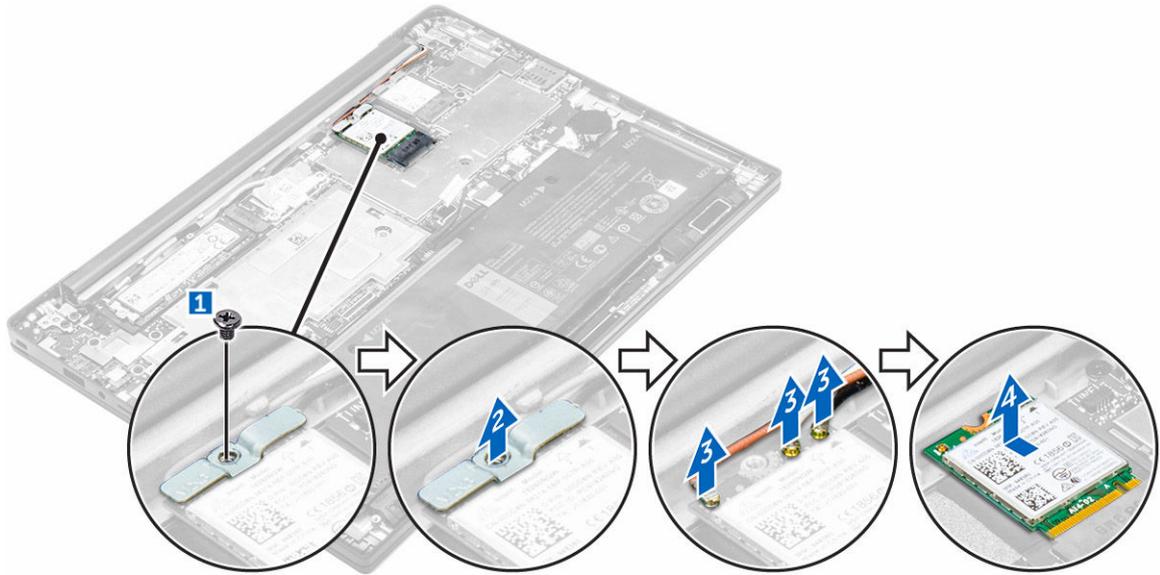8. Install the base cover.
9. Follow the procedure in After working inside your system.

Removing the system board

1. Follow the procedure in Before working inside your computer.
2. Remove the:
   a. base cover
   b. battery
   c. SSD
   d. WLAN card

e. WWAN card
f. coin cell
g. display

3. Disconnect the following cables from the system board:
   a. speaker cable
   b. touch pad cable
   c. smart card cable
   d. LED cable
   e. array mic cable
   f. finger print cable
   g. WWAN AUX antenna cable
   h. NFC cable
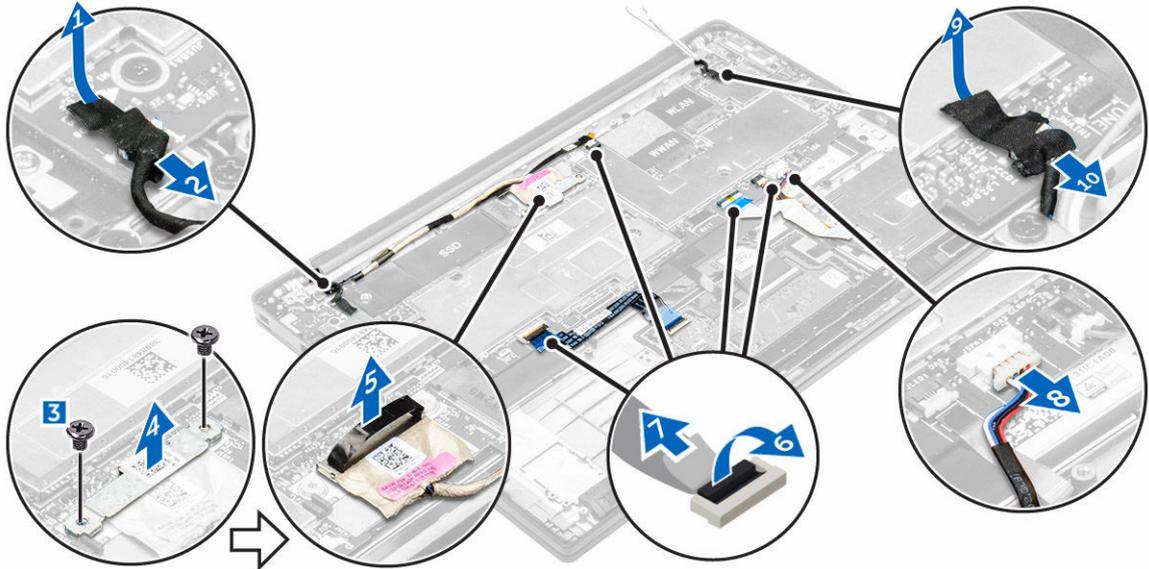
4. To remove the system board:
   a. Remove the screws that secure the system board to the computer [1].
   b. Remove the screws that secure the metal tab and remove it from the computer [2, 3].
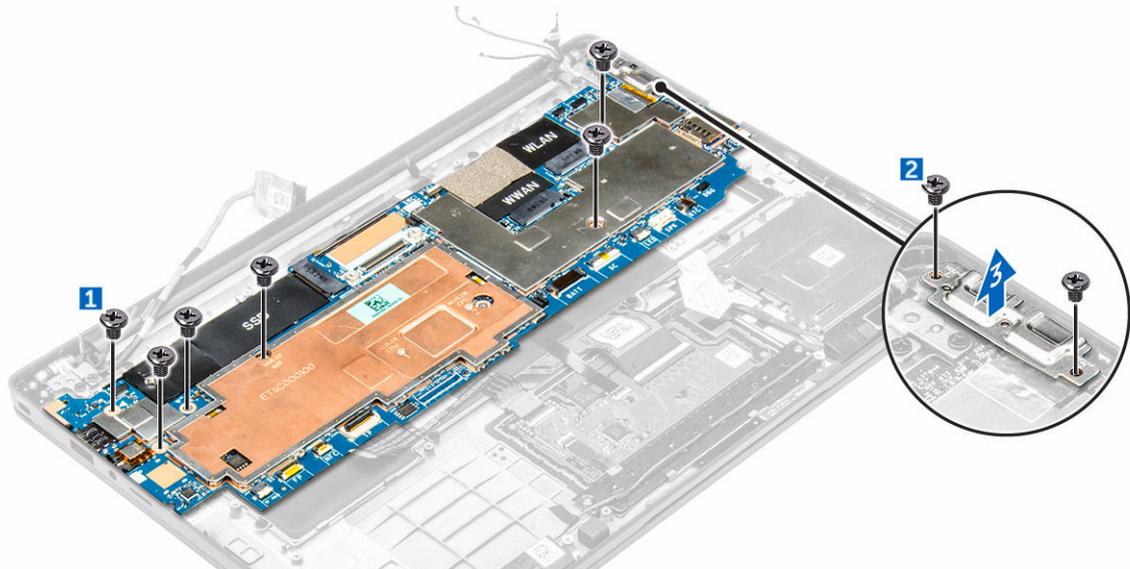
5. Lift the system board from the computer.
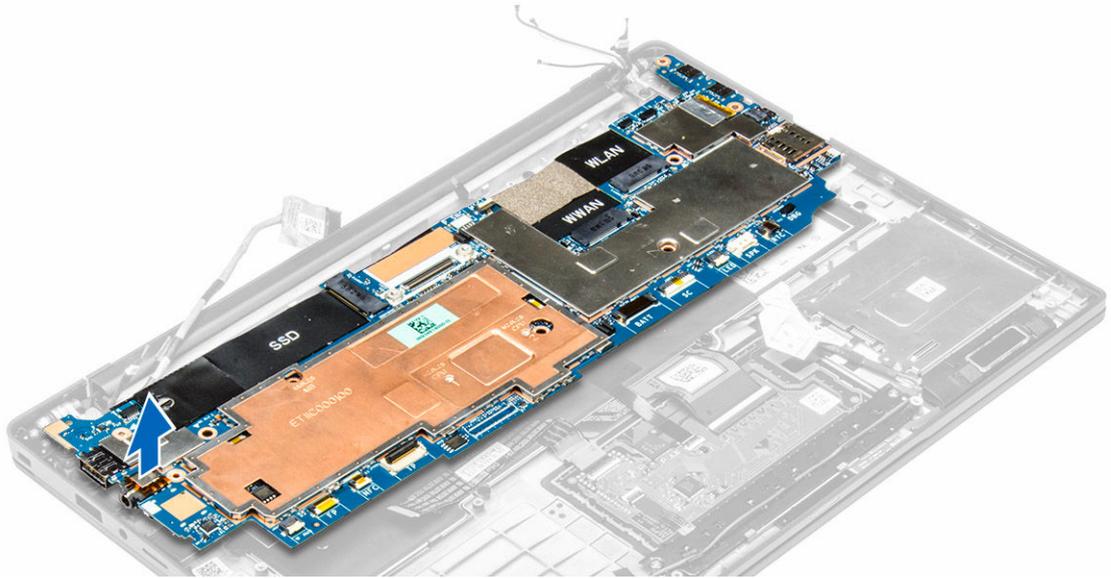
Installing the system board

1. Align the system board with the screw holders on the computer.
2. Tighten the screws to secure the system board to the computer.
3. Tighten the screws to secure the metal tab over the USB type C port.
4. Connect the following cables to the connectors on the system board:
   a. speaker cable
   b. smart card cable
   c. LED cable
   d. array mic cable
   e. touch pad cable
   f. finger print cable
   g. WWAN AUX antenna cable
   h. NFC cable
5. Install the:
   a. display
   b. coin cell
   c. WWAN card
   d. WLAN card
   e. SSD
   f. battery
   g. base cover
6. Follow the procedure in After working inside your computer.

Removing the keyboard

1. Follow the procedure in Before working inside your computer.
2. Remove the:

a. base cover
   b. battery
   c. SSD
   d. WLAN card
   e. WWAN card
   f. coin-cell
   g. display
   h. system board
3. To remove the keyboard:
   a. Disconnect the keyboard cables from the connectors on the system board [1, 2].
   b. Remove the screws that secure the keyboard to the computer [3].
   c. Lift the metal tab away from the computer [4].
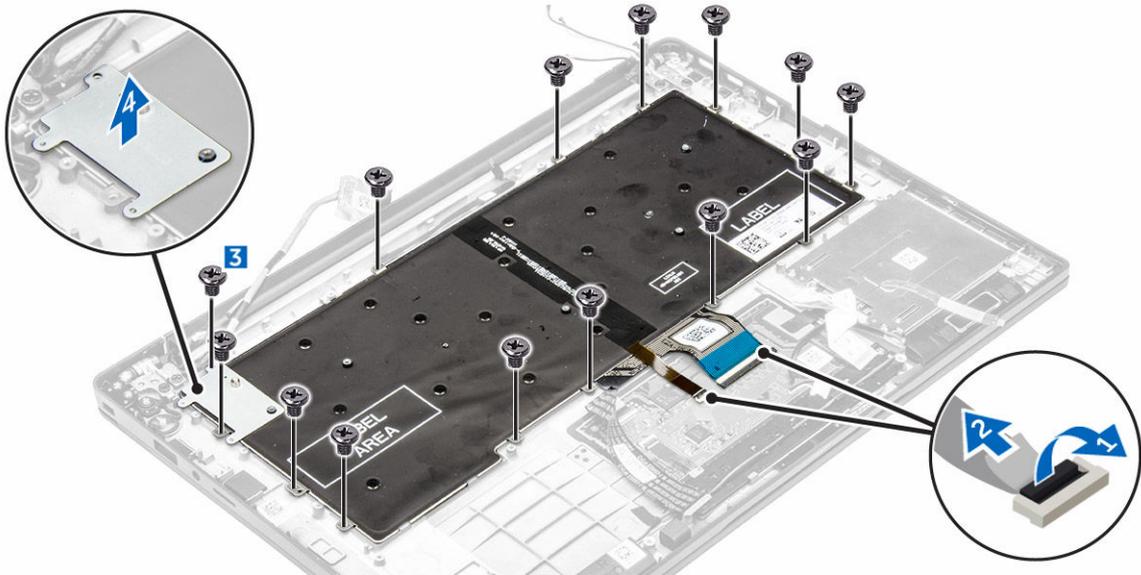
4. To remove the keyboard:
   a. Remove the screws that secure the keyboard to the computer [1].
   b. Lift the keyboard from the computer [2].
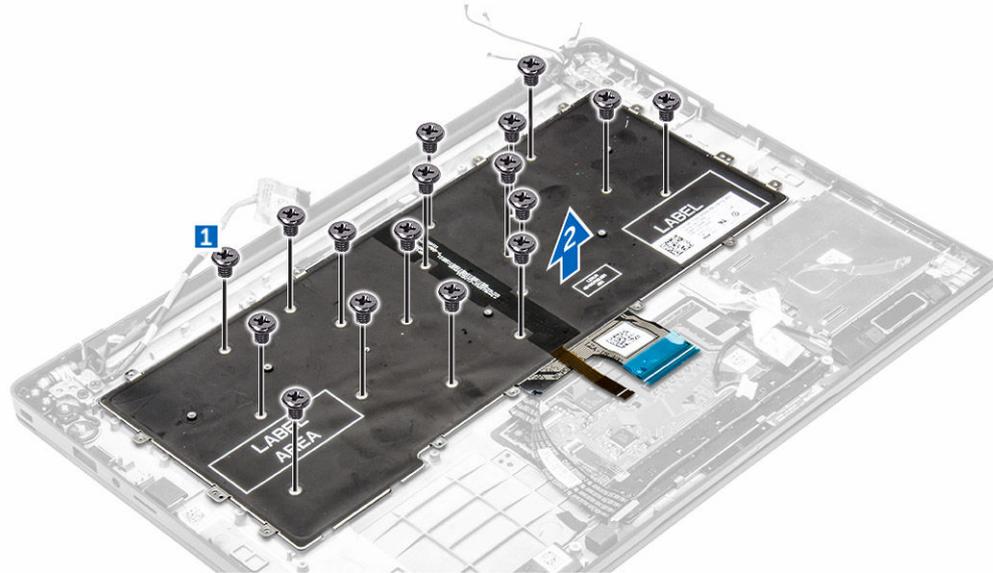
Installing the keyboard

1. Align the keyboard with the screw holders on the computer.
2. Tighten the screws to secure the keyboard to the computer.
3. Tighten the screw that secures the metal tab on the system board.
4. Connect the keyboard cables to the connectors on the system board.
5. Install the:
   a. system board
   b. display
   c. SSD
   d. WWAN
   e. WLAN
   f. coin cell
   g. battery
   h. base cover
6. Follow the procedure in After working inside your system.

Removing the palmrest

1. Follow the procedure in Before working inside your computer.
2. Remove the:
   a. base cover
   b. battery
   c. SSD
   d. WWAN card
   e. WLAN card
   f. coin-cell
   g. smart-card cage
   h. speakers

i. [display assembly](#)
j. [system board](#)
k. [keyboard](#)

3. Remove the palmrest assembly away from the computer.

Installing the palmrest

1. Place the palmrest on the computer.
2. Install the:
    a. [keyboard](#)
    b. [system board](#)
    c. [display assembly](#)
    d. [speakers](#)
    e. [smart-card cage](#)
    f. [coin cell](#)
    g. [WLAN card](#)
    h. [WWAN card](#)
    i. [SSD](#)
    j. [battery](#)
    k. [base cover](#)
3. Follow the procedure in [After working inside your system](#).

Technology and Components

Power adapter

This laptop is offered with the 45 W power adapter. This adapter uses a USB C connector.

⚠ **WARNING: When you disconnect the power adapter cable from the laptop, grasp the connector, not the cable itself, and then pull firmly but gently to avoid damaging the cable.**

⚠ **WARNING: The power adapter works with electrical outlets worldwide. However, power connectors and power strips vary among countries. Using an incompatible cable or improperly connecting the cable to the power strip or electrical outlet may cause fire or equipment damage.**

Processors

This laptop is shipped with the following processors:

- Intel Core M3-6Y30
- Intel Core M5-6Y57
- Intel Core M7-6Y75

📝 **NOTE:** The clock speed and performance varies depending on the workload and other variables.

Identifying processors in Windows 10

1. Tap **Search the Web and Windows**.
2. Type `Device Manager`.
3. Tap **Processor**.

   The basic information of the processor is displayed.

Identifying processors in Windows 8

1. Tap **Search the Web and Windows**.
2. Type `Device Manager`.
3. Tap **Processor**.

The basic information of the processor is displayed.

Verifying the processor usage in Task Manager

1. Press and hold the taskbar.
2. Select **Start Task Manager**.
   The **Windows Task Manager** window is displayed.
3. Click the **Performance** tab in the **Windows Task Manager** window.
   The processor performance details are displayed.
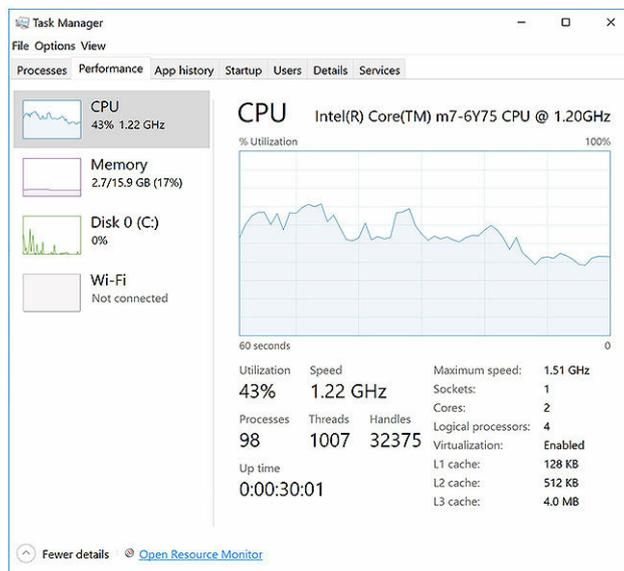
Verifying the processor usage in Resource Monitor

1. Press and hold the taskbar.
2. Select **Start Task Manager**.
   The **Windows Task Manager** window is displayed.
3. Click the **Performance** tab in the **Windows Task Manager** window.
   The processor performance details are displayed.
4. Click **Open Resource Monitor**.
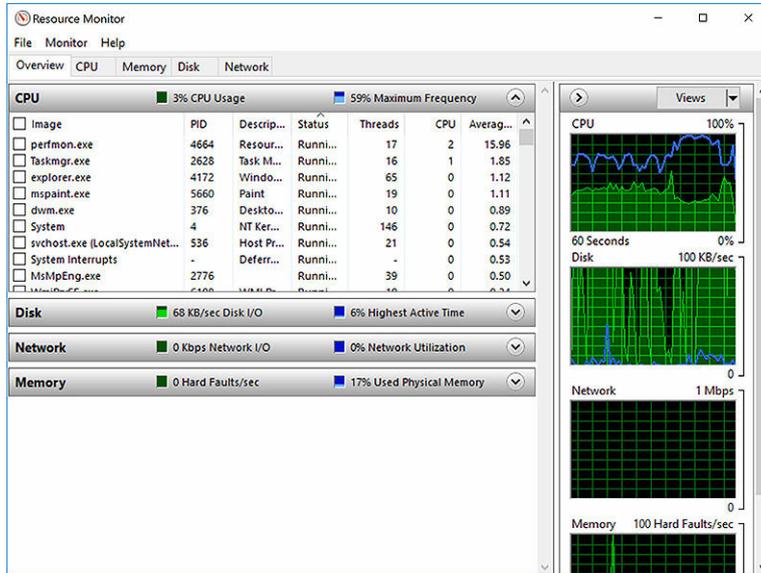
Chipsets

All laptop communicate with the CPU through the chipset. This laptop is shipped with the Intel 100 Series chipset.

Downloading the chipset driver

1. Turn on the laptop.
2. Go to **www.dell.com/support**.
3. Click **Product Support**, enter the Service Tag of your laptop, and then click **Submit**.

   NOTE: If you do not have the Service Tag, use the autodetect feature or manually browse for your laptop model.

4. Click **Drivers and Downloads**.
5. Select the operating system installed on your laptop.
6. Scroll down the page, expand **Chipset**, and select your chipset driver.
7. Click **Download File** to download the latest version of the chipset driver for your laptop.
8. After the download is complete, navigate to the folder where you saved the driver file.
9. Double-click the chipset driver file icon and follow the instructions on the screen.

Identifying the chipset in Device Manager on Windows 10

1. Click **All Settings** ⚙ on the Windows 10 Charms Bar.
2. From the **Control Panel**, select **Device Manager**.
3. Expand **System Devices** and search for the chipset.
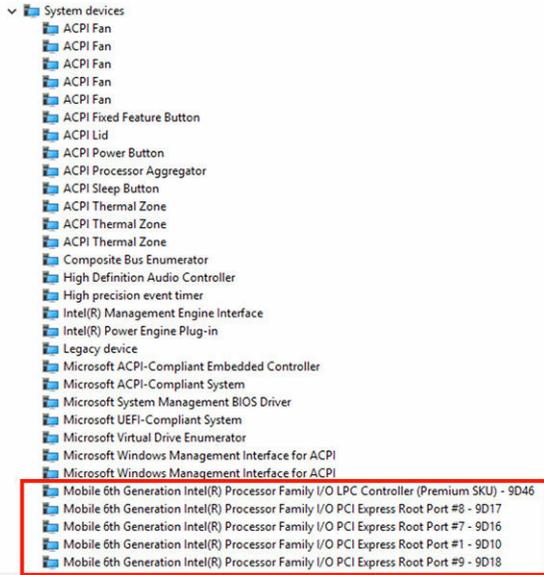
Identifying chipset in Device Manager on Windows 8

1. Click **Settings** ⚙ on the Windows 8.1 Charms Bar.
2. From the **Control Panel**, select **Device Manager**.
3. Expand **System Devices** and search for the chipset.
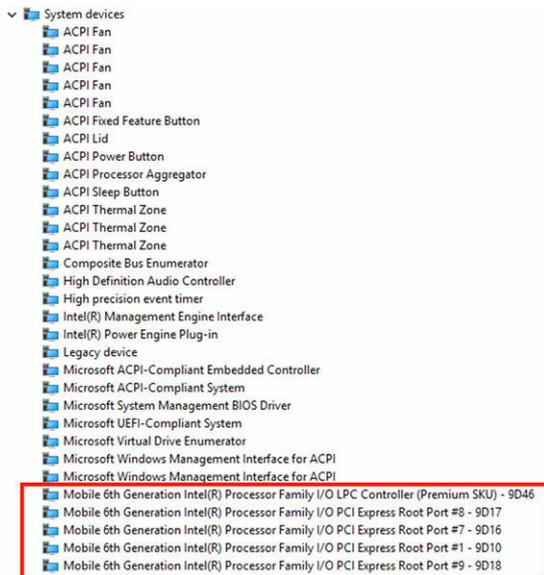
Graphic options

This laptop is shipped with the Intel HD Graphics 515 graphics chipset.

Downloading Drivers

1. Turn on the laptop.
2. Go to **www.dell.com/support**.
3. Click **Product Support**, enter the Service Tag of your laptop, and then click**Submit**.

    ✎ **NOTE:** If you do not have the Service Tag, use the auto detect feature or manually browse for your laptop model.

4. Click **Drivers and Downloads**.
5. Select the operating system installed on your laptop.
6. Scroll down the page and select the graphic driver to install.
7. Click **Download File** to download the graphic driver for your laptop.
8. After the download is complete, navigate to the folder where you saved the graphic driver file.
9. Double-click the graphic driver file icon and follow the instructions on the screen.

Identifying the display adapter

1. Start the **Search Charm** and select **Settings**.
2. Type `Device Manager` in the search box and tap **Device Manager** from the left pane.
3. Expand **Display adapters**.
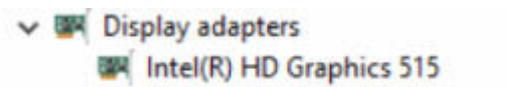
The display adapters are displayed.

Changing the screen resolution

1. Press and hold the desktop screen and select **Display Settings**.
2. Tap or click **Advanced display settings**.
3. Select the required resolution from the drop-down list and tap **Apply**.
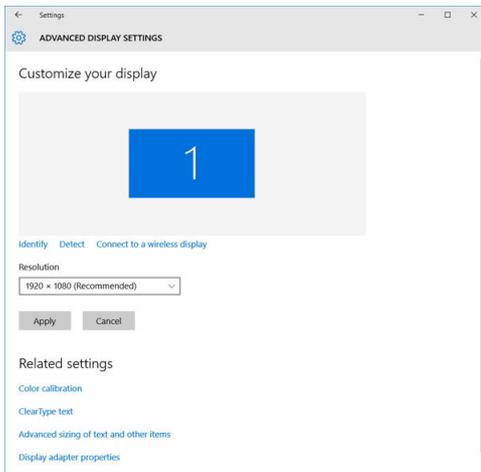
Rotating the display

1. Press and hold on the desktop screen.
   A sub menu is displayed.
2. Select **Graphic Options** → **Rotation** and choose on of the following:
   - Rotate to Normal
   - Rotate to 90 Degrees
   - Rotate to 180 Degrees
   - Rotate to 270 Degrees

   📝 **NOTE:** The Display can also be rotated using the following key combinations:

   - Ctrl + Alt + Up arrow key (Rotate to normal)
   - Right arrow key (Rotate 90 degrees)
   - Down arrow key (Rotate 180 degrees)
   - Left arrow key (Rotate 270 degrees)

Display options

This laptop has 11.57– inch FHD with 1920 x 1080 resolution (maximum) and QHD with 3200 x 1800 resolution (maximum).

Adjusting brightness in Windows 10

To enable or disable automatic screen brightness adjustment:

1. Swipe-in from the right edge of the display to access the Action Center.
2. Tap or click **All Settings** ⚙ → **System** → **Display**.
3. Use the **Adjust my screen brightness automatically** slider to enable or disable automatic-brightness adjustment.

   📝 **NOTE:** You can also use the **Brightness level** slider to adjust the brightness manually.

Adjusting brightness in Windows 8

To enable or disable automatic screen brightness adjustment:

1. Swipe-in from the right edge of the display to access the Charms menu.
2. Tap or click **Settings** ⚙ → **Change PC Settings** → **PC and devices**→ **Power and sleep**.
3. Use the **Adjust my screen brightness automatically** slider to enable or disable automatic-brightness adjustment.

Cleaning the display

1. Check for any smudges or areas that has to be cleaned.
2. Use a microfiber cloth to remove any obvious dust and gently brush off any dirt particles.

3. Proper cleaning kits should be used to clean and keep your display in a crisp clear pristine condition.

   NOTE: Never spray any cleaning solutions directly on the screen; spray it to the cleaning cloth.

4. Gently wipe the screen in a circular motion. Do not press hard on the cloth.

   NOTE: Do not press hard or touch the screen with your fingers or you may leave oily prints and smears.

   NOTE: Do not leave any liquid on the screen.

5. Remove all excess moisture as it may damage your screen.
6. Let the display dry thoroughly before you turn it on.
7. For stains that are hard to remove, repeat this procedure till the display is clean.

Using touch screen in Windows 10

Follow these steps to enable or disable the touch screen:

1. Go to the Charms Bar and tap **All Settings** ⚙.
2. Tap **Control Panel**.
3. Tap **Pen and Input Devices** in the **Control Panel**.
4. Tap the **Touch** tab.
5. Select **Use your finger as an input device** to enable the touch screen. Clear the box to disable the touch screen.

Using touch screen in Windows 8

Follow these steps to enable or disable the touch screen:

1. Go to the Charms Bar and tap **Settings** ⚙.
2. Tap **Control Panel**.
3. Tap **Pen and Input Devices** in the **Control Panel**.
4. Tap the **Touch** tab.
5. Select **Use your finger as an input device** to enable the touch screen. Clear the box to disable the touch screen.

Connecting to external display devices

Follow these steps to connect your laptop to an external display device:

1. Ensure that the projector is turned on and plug the projector cable into a video port on your laptop.
2. Press the Windows logo+P key.
3. Select one of the following modes:
   - PC screen only
   - Duplicate
   - Extend
   - Second Screen only

   NOTE: For more information, see the document that shipped with your display device.

Realtek ALC3266–CG Waves MaxxAudio Pro controller

This laptop ships with integrated Realtek ALC3266–CG Waves MaxxAudio Pro controller. It is a High Definition audio codec designed for Windows desktop and laptops.

Downloading the audio driver

1. Turn on the laptop.
2. Go to **www.dell.com/support**.
3. Click **Product Support**, enter the Service Tag of your laptop and click **Submit**.

   > **NOTE:** If you do not have the Service Tag, use the autodetect feature or manually browse for your laptop model.

4. Click **Drivers and Downloads**.
5. Select the operating system installed on your laptop.
6. Scroll down the page and expand **Audio**.
7. Select the audio driver.
8. Click **Download File** to download the latest version of the audio driver for your laptop.
9. After the download is complete, navigate to the folder where you saved the audio driver file.
10. Double-click the audio driver file icon and follow the instructions on the screen.

## Identifying the audio controller in Windows 10

1. Start the **Search Charm** and select **All Settings** ⚙.
2. Type `Device Manager` in the search box and select **Device Manager** from the left pane.
3. Expand **Sound, video and game controllers**.
   The audio controller is displayed.
   Table 1. Identifying the audio controller in Windows 10

Before installation	After installation
Sound, video and game controllers 　High Definition Audio Device 　High Definition Audio Device	Sound, video and game controllers 　Intel(R) AVStream Camera 2500 　Intel(R) Display Audio 　Realtek High Definition Audio(SST)
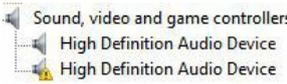
Identifying the audio controller in Windows 8

1. Start the **Search Charm** and select **Settings** ⚙.
2. Type `Device Manager` in the search box and select **Device Manager** from the left pane.
3. Expand **Sound, video and game controllers**.
   The audio controller is displayed.

Table 2. Identifying the audio controller in Windows 8

Before installation	After installation
Sound, video and game controllers High Definition Audio Device High Definition Audio Device	Sound, video and game controllers Intel(R) AVStream Camera 2500 Intel(R) Display Audio Realtek High Definition Audio(SST)
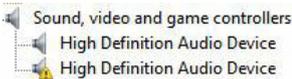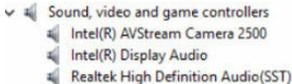
Changing the audio settings

1. Start the **Search Charm** and type `Dell Audio` in the search box.
2. Start the Dell Audio utility from the left pane.

WLAN cards

This laptop supports the Intel Dual Band Wireless AC 8260 WLAN card.

Secure Boot screen options

Option	Description
Secure Boot Enable	This option enables or disables the **Secure Boot** feature. • Disabled • Enabled Default setting: Enabled.
Expert Key Management	Allows you to manipulate the security key databases only if the system is in Custom Mode. The **Enable Custom Mode** option is disabled by default. The options are: • PK • KEK • db • dbx If you enable the **Custom Mode**, the relevant options for **PK, KEK, db, and dbx** appear. The options are: • **Save to File**—Saves the key to a user-selected file • **Replace from File**—Replaces the current key with a key from a user-selected file • **Append from File**—Adds a key to the current database from a user-selected file • **Delete**—Deletes the selected key • **Reset All Keys**—Resets to default setting • **Delete All Keys**—Deletes all the keys NOTE: If you disable the **Custom Mode**, all the changes made will be erased and the keys will restore to default settings.

Hard drive options

This laptop supports M.2 SATA drive and M.2 NVMe drive.

Identifying the hard drive in Windows 10

1. Tap or click **All Settings** ⚙ on the Windows 10 Charms Bar.
2. Tap or click **Control Panel**, select **Device Manager** , and expand **Disk drives**.

> ✓ 🖴 Disk drives
>   🖴 LITEON L8H-128V2G-11 M.2 2280 128GB

The hard drive is listed under **Disk drives**.

Identifying the hard drive in Windows 8

1. Tap or click **Settings** ⚙ on the Windows 8 Charms Bar.
2. Tap or click **Control Panel**, select **Device Manager**, and expand **Disk drives**.

> ✓ 🖴 Disk drives
>   🖴 LITEON L8H-128V2G-11 M.2 2280 128GB

The hard drive is listed under Disk drives.

Entering BIOS setup

1. Turn on or restart your laptop.
2. When the Dell logo appears, perform one of the following actions to enter the BIOS setup program:
   - With keyboard — Tap F2 until the Entering BIOS setup message appears. To enter the Boot selection menu, tap F12.
   - Without keyboard — When the **F12 boot selection** menu is displayed, press the Volume Down button to enter BIOS setup. To enter the Boot selection menu, press the Volume Up button.

   Hard drive is listed under the **System Information** under the **General** group.
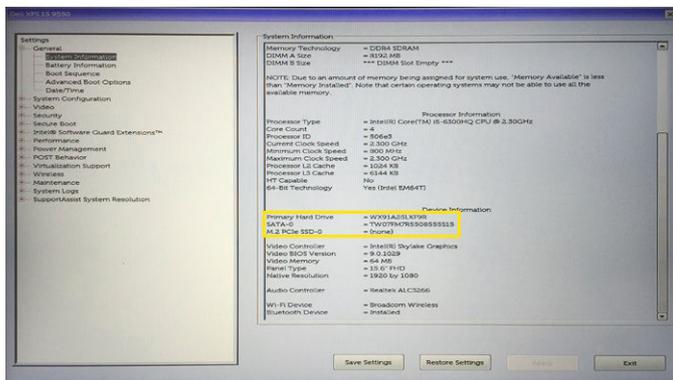
Camera features

This laptop comes with front-facing camera with the image resolution of 1280 x 720 (maximum).

NOTE: The camera is located at the bottom left corner of the LCD.

Identifying the camera in Device Manager on Windows 10

1. In the **Search** box, type `device manager`, and tap to start it.
2. Under **Device Manager**, expand **Imaging devices**.
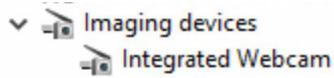
Identifying the camera in Device Manager on Windows 8

1. Start the Charms Bar from the desktop interface.
2. Select **Control Panel**.
3. Select **Device Manager** and expand **Imaging devices**.
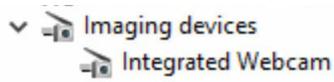
Starting the camera

To start the camera, open an application that uses the camera. For instance, if you tap the Dell webcam central software or the Skype software that is shipped with the laptop, the camera turns on. Similarly, if you are chatting on the internet and the application requests to access the webcam, the webcam turns on.

Starting the Camera App

1. Tap or click the **Windows** button and select **All apps**.
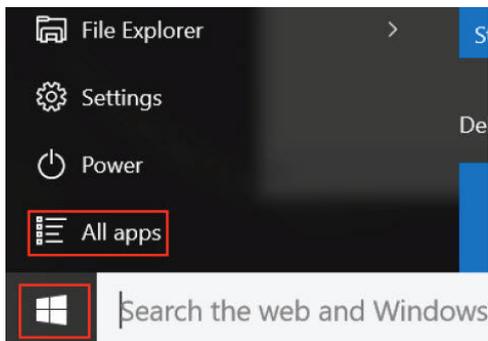
2. Select **Camera** from the apps list.
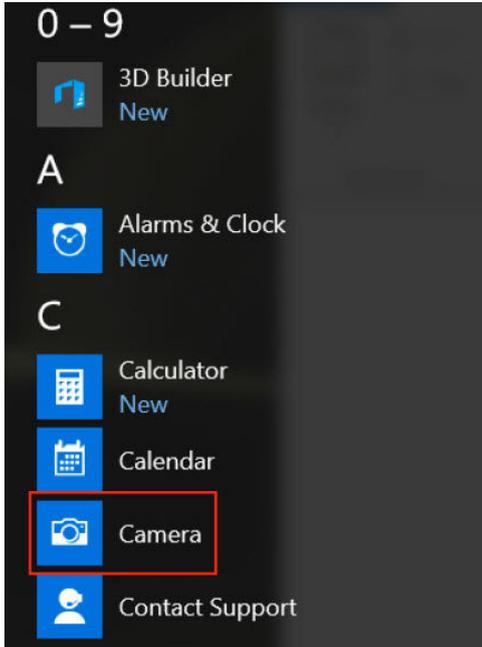
3. If the **Camera** App is not available in the apps list, search for it.
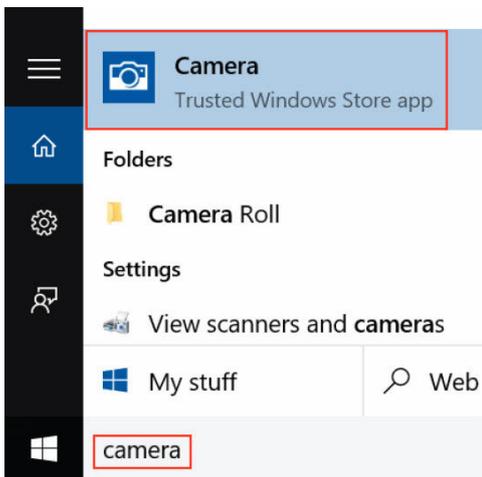
Memory features

In this laptop, the memory (RAM) is a part of the system board. This laptop supports 4–16 GB LPDDR3 memory, up to 1600 MHz.

> **NOTE:** Since memory is part of the system board, it cannot be upgraded as a separate module. If the technical support determines that the memory is the cause of an issue, replace the system board.

Verifying system memory in Windows 10

1. Tap the **Windows** button and select **All Settings** ⚙ → **System** .
2. Under **System**, tap **About**.

Verifying system memory in Windows 8

1. From your desktop, start the **Charms Bar**.
2. Select **Control Panel** and then select **System**.

Verifying system memory in setup

1. Turn on or restart your laptop.
2. Perform one of the following actions after the Dell logo is displayed:
   - With keyboard — Tap F2 until the Entering BIOS setup message appears. To enter the Boot selection menu, tap F12.
   - Without keyboard — When the **F12 boot selection** menu is displayed, press the Volume Down button to enter BIOS setup. To enter the Boot selection menu, press the Volume Up button.
3. On the left pane, select **Settings** → **General** → **System Information**,

   The memory information is displayed on the right pane.

Testing memory using ePSA

1. Turn on or restart your laptop.
2. Perform one of the following actions after the Dell logo is displayed:
   - With keyboard — Press F2.
   - Without keyboard — Press and hold the **Volume Up** button when the Dell logo is displayed on the screen. When the F12 boot selection menu is displayed, select **Diagnostics** from the boot menu, and press Enter.

   The PreBoot System Assessment (PSA) starts on your laptop.

   > **NOTE:** If you wait too long and the operating system logo appears, continue to wait until you see the desktop. Turn off the laptop and try again.

Intel chipset drivers

Verify if the Intel chipset drivers are already installed in the laptop.

Table 3. Intel chipset drivers

Before installation	After installation

Intel HD Graphics drivers

Verify if the Intel HD Graphics drivers are already installed in the laptop.

Table 4. Intel HD Graphics drivers

Before installation	After installation

Realtek HD audio drivers

Verify if the Realtek audio drivers are already installed in the laptop.

Table 5. Realtek HD audio drivers

Before installation	After installation

4

System Setup

Boot Sequence

Boot Sequence allows you to bypass the System Setup-defined boot device order and boot directly to a specific device (for example: optical drive or hard drive). During the Power-on Self Test (POST), when the Dell logo appears, you can:

- Access System Setup by pressing F2 key
- Bring up the one-time boot menu by pressing F12 key

The one-time boot menu displays the devices that you can boot from including the diagnostic option. The boot menu options are:

- Removable Drive (if available)
- STXXXX Drive

    NOTE: XXX denotes the SATA drive number.

- Optical Drive
- Diagnostics

    NOTE: Choosing **Diagnostics**, will display the **ePSA diagnostics** screen.

The boot sequence screen also displays the option to access the System Setup screen.

Navigation keys

The following table displays the system setup navigation keys.

NOTE: For most of the System Setup options, changes that you make are recorded but do not take effect until you restart the system.

Table 6. Navigation keys

Keys	Navigation
Up arrow	Moves to the previous field.
Down arrow	Moves to the next field.
Enter	Allows you to select a value in the selected field (if applicable) or follow the link in the field.
Spacebar	Expands or collapses a drop-down list, if applicable.
Tab	Moves to the next focus area.

Keys	Navigation
	![note icon] **NOTE:** For the standard graphics browser only.
Esc	Moves to the previous page till you view the main screen. Pressing Esc in the main screen displays a message that prompts you to save any unsaved changes and restarts the system.
F1	Displays the System Setup help file.

System setup options

NOTE: Depending on the computer and its installed devices, the items listed in this section may or may not appear.

General screen options

This section lists the primary hardware features of your computer.

Option	Description
System Information	This section lists the primary hardware features of your computer. • System Information: Displays BIOS Version, Service Tag, Asset Tag, Ownership Tag, Ownership Date, Manufacture Date, and the Express Service Code. • Memory Information: Displays Memory Installed, Memory Available, Memory Speed, Memory Channels Mode, Memory technology • Processor Information: Displays Processor Type, Core Count, Processor ID, Current Clock Speed, Minimum Clock Speed, Maximum Clock Speed, Processor L2 Cache, Processor L3 Cache, HT Capable, and 64-bit technology. • Device Information: SATA-0, M.2 PCIe SSD-0, Video Controller, Video BIOS Version, Video Memory, Panel Type, Native Resolution, Audio Controller, WiFi Device, WiGig Device, Cellular Device, Bluetooth Device.
Battery Information	Displays the battery status and the type of AC adapter connected to the computer.
Boot Sequence	Allows you to change the order in which the computer attempts to find an operating system. • Windows Boot Manager or UEFI • Legacy or UEFI
Boot Options	This option allows you the legacy option ROMs to load. By default, the **Enable UEFI Network Stack** is disabled.
Date/Time	Allows you to change the date and time.

System Configuration screen options

Option	Description
SATA Operation	Allows you to configure the internal SATA hard-drive controller. The options are: • Disabled • AHCI • RAID On: This option is enabled by default.
Drives	Allows you to configure the SATA drives on board. All drives are enabled by default. The options are: • SATA-1 • M.2 PCI-e SSD-0
SMART Reporting	This field controls whether hard drive errors for integrated drives are reported during system startup. This technology is part of the SMART (Self Monitoring Analysis and Reporting Technology) specification. This option is disabled by default. • Enable SMART Reporting
USB/Thunderbolt Configuration	This is an optional feature. This field configures the integrated USB controller. If Boot Support is enabled, the system is allowed to boot any type of USB Mass Storage Devices (HDD, memory key, floppy). If USB port is enabled, device attached to this port is enabled and available for OS. If USB port is disabled, the OS cannot see any device attached to this port. The options are: • Enable USB Boot Support (by default enable) • Enable External USB Port (by default enable) • Enable Thunderbolt Port (by default enable). • Enable Thunderbolt Boot Support. This is an optional feature. • Always Allows Dell Docks. This is an optional feature. • Enables Thunderbolt (and PCIe behind TBT) Pre-boot NOTE: USB keyboard and mouse always work in the BIOS setup irrespective of these settings.
USB PowerShare	This field configures the USB PowerShare feature behavior. This option allows you to charge external devices using the stored system battery power through the USB PowerShare port. By default, the **Enable USB PowerShare** is disabled.
Audio	This field enables or disables the integrated audio controller. By default, the **Enable Audio** option is selected. The options are:

Option	Description
	• Enable Microphone (by default enabled) • Enable Internal Speaker (by default enabled)
Keyboard Illumination	This field lets you choose the operating mode of the keyboard illumination feature. The keyboard brightness level can be set from 0% to 100%. The options are: • Disabled • Dim • Bright (enabled by default)
Keyboard Backlight Timeout on AC	This feature defines the time-out value for the keyboard backlight when an AC adapter is plugged into the system. The main keyboard illumination feature is not affected. Keyboard Illumination will continue to support the various illumination levels. This field has an effect when the backlight is enabled. Options are: • 5 seconds • 10 seconds — this option is selected by default • 15 seconds • 30 seconds • 1 minute • 5 minute • 15 minute • never
Keyboard Backlight Time-out on Battery	The Keyboard Backlight Time-out dims out with Battery option. The main keyboard illumination feature is not affected. Keyboard Illumination will continue to support the various illumination levels. This field has an effect when the backlight is enabled. Options are: • 5 seconds • 10 seconds — this option is selected by default • 15 seconds • 30 seconds • 1 minute • 5 minute • 15 minute • never
Touchscreen	This field controls whether the touchscreen is enabled or disabled. By default, the option is enabled.
Unobtrusive Mode	This option, when enabled, pressing Fn+F7 turns off all light and sound emissions in the system. To resume normal operation, press Fn+F7 again. This option is disabled by default.
Miscellaneous Devices	Allows you to enable or disable various on board devices: • Enable Camera —enabled by default

Option	Description
	• Enable Secure Digital(SD) Card
	• Secure Digital(SD) Card read only mode

Video screen options

Option	Description
LCD Brightness	Allows you to set the display brightness depending up on the power source (On Battery and On AC).

📝 **NOTE:** The video setting will be visible only when a video card is installed into the system.

Security screen options

Option	Description
Admin Password	Allows you to set, change, or delete the administrator (admin) password.
	📝 **NOTE:** You must set the admin password before you set the system or hard drive password. Deleting the admin password automatically deletes the system password and the hard drive password.
	📝 **NOTE:** Successful password changes take effect immediately.
	Default setting: Not set
System Password	Allows you to set, change, or delete the system password.
	📝 **NOTE:** Successful password changes take effect immediately.
	Default setting: Not set
Mini Card SSD-0 Password	Allows you to set, change or delete the password on the mini card Solid State Drive (SSD).
	📝 **NOTE:** Successful password changes take effect immediately.
	Default setting: Not set
Strong Password	Allows you to enforce the option to always set strong passwords.
	Default Setting: Enable Strong Password is not selected.
	📝 **NOTE:** If Strong Password is enabled, Admin and System passwords must contain at least one uppercase character, one lowercase character and be at least 8 characters long.
Password Configuration	Allows you to determine the minimum and maximum length of Administrator and System passwords.

Option	Description
Password Bypass	Allows you to enable or disable the permission to bypass the System and the Internal HDD password, when they are set. The options are: • Disabled • Reboot bypass Default setting: Disabled
Password Change	Allows you to enable the disable permission to the System and Hard Drive passwords when the admin password is set. Default setting: **Allow Non-Admin Password Changes** is selected.
Non-Admin Setup Changes	Allows you to determine whether changes to the setup options are allowed when an Administrator Password is set. If disabled the setup options are locked by the admin password.
UEFI Capsule Firmware Updates	Allows to control whether this system allows BIOS updates via UEFI capsule update packages. Default setting: **Enable UEFI Capsule Firmware Updates** is selected.
TPM 1.2/2.0 Security	Allows you to enable the Trusted Platform Module (TPM) during POST. The options are: • TPM On (enabled by default) • Clear • PPI Bypass for Enabled Commands • PPI Bypass for Disabled Commands • Activate • Deactivate ✎ NOTE: To upgrade or downgrade TPM1.2/2.0, download the TPM wrapper tool (software).
Computrace	Allows you to activate or disable the optional Computrace software The options are: • Deactivate • Disable • Activate ✎ NOTE: The Activate and Disable options will permanently activate or disable the feature and no further changes will be allowed Default setting: Deactivate
CPU XD Support	Allows you to enable the Execute Disable mode of the processor. Enable CPU XD Support (default)

Option	Description
OROM Keyboard Access	Allows you to set an option to enter the Option ROM Configuration screens using hotkeys during boot. The options are: • Enabled • One Time Enable • Disabled Default setting: Enabled
Admin Setup Lockout	Allows you to prevent users from entering Setup when an Administrator password is set. Default Setting: **Disabled**

Secure Boot screen options

Option	Description
Secure Boot Enable	This option enables or disables the **Secure Boot** feature. • Disabled • Enabled Default setting: Enabled.
Expert Key Management	Allows you to manipulate the security key databases only if the system is in Custom Mode. The **Enable Custom Mode** option is disabled by default. The options are: • PK • KEK • db • dbx If you enable the **Custom Mode**, the relevant options for **PK, KEK, db, and dbx** appear. The options are: • **Save to File**—Saves the key to a user-selected file • **Replace from File**—Replaces the current key with a key from a user-selected file • **Append from File**—Adds a key to the current database from a user-selected file • **Delete**—Deletes the selected key • **Reset All Keys**—Resets to default setting • **Delete All Keys**—Deletes all the keys NOTE: If you disable the **Custom Mode**, all the changes made will be erased and the keys will restore to default settings.

Intel Software Guard Extensions screen options

Option	Description
Intel SGX Enable	This field specifies you to provide a secured environment for running code/storing sensitive information in the context of the main OS. The options are: • Disabled • Enabled Default setting: Disabled
Enclave Memory Size	This option sets **SGX Enclave Reserve Memory Size**. The options are: • 32 MB • 64 MB • 128 MB

Performance screen options

Option	Description
Multi Core Support	This field specifies whether the process has one or all cores enabled. The performance of some applications improves with the additional cores. This option is enabled by default. Allows you to enable or disable multi-core support for the processor. The installed processor supports twofour cores. If you enable Multi Core Support, twofour cores are enabled. If you disable Multi Core Support, one core is enabled. • Enable Multi Core Support Default setting: The option is enabled.
Intel SpeedStep	Allows you to enable or disable the Intel SpeedStep feature. • Enable Intel SpeedStep Default setting: The option is enabled.
C-States Control	Allows you to enable or disable the additional processor sleep states. • C states Default setting: The option is enabled.
Intel TurboBoost	Allows you to enable or disable the Intel TurboBoost mode of the processor. • Enable Intel TurboBoost

Option	Description
	Default setting: The option is enabled.
Hyper-Thread Control	Allows you to enable or disable the Hyper-Threading in the processor. • Disabled • Enabled Default setting: Enabled.
DDR Frequency	This option changes DDR frequency to 1600 or 1866 MHz. By default, 1600 is selected.

Power Management screen options

Option	Description
AC Behavior	Allows you to enable or disable the computer from turning on automatically when an AC adapter is connected. Default setting: Wake on AC is not selected.
Auto On Time	Allows you to set the time at which the computer must turn on automatically. The options are: • Disabled • Every Day • Weekdays • Select Days Default setting: Disabled
USB Wake Support	Allows you to enable USB devices to wake the system from Standby. NOTE: This feature is only functional when the AC power adapter is connected. If the AC power adapter is removed during Standby, the system setup removes power from all the USB ports to conserve battery power. • Enable USB Wake Support • Wake on Trinity Dock - The option is selected by default.
Wake on LAN/ WLAN	Allows you to enable or disable the feature that powers on the computer from the Off state when triggered by a LAN signal. • Disabled • WLAN Only Default setting: Disabled

Option	Description
Peak Shift	This option enables you to minimize the AC power consumption during the peak power times of day. After you enable this option, your system runs only in battery even if the AC is attached. • Enable Peak Shift Default setting: Disabled
Advanced Battery Charge Configuration	This option enables you to maximize the battery health. By enabling this option, your system uses the standard charging algorithm and other techniques, during the non-work hours to improve the battery health. • Enabled Advanced Battery Charge Mode Default setting: Disabled
Primary Battery Charge Configuration	Allows you to select the charging mode for the battery. The options are: • Adaptive • Standard — Fully charges your battery at a standard rate. • ExpressCharge — The battery charges over a shorter period of time using Dell's fast charging technology. This option is enabled by default. • Primarily AC use • Custom If Custom Charge is selected, you can also configure Custom Charge Start and Custom Charge Stop. NOTE: All charging mode may not be available for all the batteries. To enable this option, disable the **Advanced Battery Charge Configuration** option.

POST Behavior screen options

Option	Description
Adapter Warnings	Allows you to enable or disable the system setup (BIOS) warning messages when you use certain power adapters. Default setting: Enable Adapter Warnings
Keypad (Embedded)	Allows you to choose one of two methods to enable the keypad that is embedded in the internal keyboard. • Fn Key Only: This option is enabled by default. • By Numlock NOTE: When setup is running, this option has no effect. Setup works in Fn Key Only mode.
Numlock Enable	Allows you to enable the Numlock option when the computer boots.

Option	Description
	Enable Network. This option is enabled by default.
Fn Key Emulation	Allows you to set the option where the Scroll Lock key is used to simulate the Fn key feature. Enable Fn Key Emulation (default)
Fn Lock Options	Allows you to let hot key combinations Fn + Esc toggle the primary behavior of F1–F12, between their standard and secondary functions. If you disable this option, you cannot toggle dynamically the primary behavior of these keys. The available options are: • Fn Lock. This option is selected by default. • Lock Mode Disable/Standard • Lock Mode Enable/Secondary
MEBx Hotkey	Allows you to specify whether the MEBx Hotkey function should enable, during the system boot. Default Setting: Enable MEBx Hotkey
Fastboot	Allows you to speed up the boot process by bypassing some of the compatibility steps. The options are: • Minimal • Thorough (default) • Auto
Extended BIOS POST Time	Allows you to create an additional preboot delay. The options are: • 0 seconds. This option is enabled by default. • 5 seconds • 10 seconds

Virtualization support screen options

Option	Description
Virtualization	Allows you to enable or disable the Intel Virtualization Technology. Enable Intel Virtualization Technology (default).
VT for Direct I/O	Enables or disables the Virtual Machine Monitor (VMM) from utilizing the additional hardware capabilities provided by Intel® Virtualization technology for direct I/O. Enable VT for Direct I/O - enabled by default.
Trusted Execution	This option specifies whether a Measured Virtual Machine Monitor (MVMM) can utilize the additional hardware capabilities provided by Intel Trusted Execution

Option	Description
	Technology. The TPM Virtualization Technology, and Virtualization technology for direct I/O must be enabled to use this feature. Trusted Execution - disabled by default.

Wireless screen options

Option	Description
Wireless Switch	Allows to set the wireless devices that can be controlled by the wireless switch. The options are: • WWAN • GPS (on WWAN Module) • WLAN/WiGig • Bluetooth All the options are enabled by default. ![note] **NOTE:** For WLAN and WiGig enable or disable controls are tied together and they cannot be enabled or disabled independently.
Wireless Device Enable	Allows you to enable or disable the internal wireless devices. • WWAN/GPS • WLAN/WiGig • Bluetooth All the options are enabled by default.

Maintenance screen options

Option	Description
Service Tag	Displays the Service Tag of your computer.
Asset Tag	Allows you to create a system asset tag if an asset tag is not already set. This option is not set by default.
BIOS Downgrade	This controls flashing of the system firmware to previous revisions.
Data Wipe	This field allows users to erase the data securely from all internal storage devices. The following is the device affected: • Internal M.2 SDD
BIOS Recovery	This field allows you to recover from certain corrupted BIOS conditions from a recover file on the user primary hard drive or an external USB key.

Option	Description
	• BIOS Recovery from Hard Drive (enabled by default)

System Log screen options

Option	Description
BIOS Events	Allows you to view and clear the System Setup (BIOS) POST events.
Thermal Events	Allows you to view and clear the System Setup (Thermal) events.
Power Events	Allows you to view and clear the System Setup (Power) events.

Updating the BIOS

It is recommended to update your BIOS (System Setup), on replacing the system board or if an update is available. For laptops, ensure that your computer battery is fully charged and connected to a power outlet

1. Restart the computer.
2. Go to **Dell.com/support**.
3. Enter the **Service Tag** or **Express Service Code** and click **Submit**.

   📝 NOTE: To locate the Service Tag, click **Where is my Service Tag?**

   📝 NOTE: If you cannot find your Service Tag, click **Detect My Product**. Proceed with the instructions on screen.

4. If you are unable to locate or find the Service Tag, click the Product Category of your computer.
5. Choose the **Product Type** from the list.
6. Select your computer model and the **Product Support** page of your computer appears.
7. Click **Get drivers** and click **View All Drivers**.

   The Drivers and Downloads page opens.
8. On the Drivers and Downloads screen, under the **Operating System** drop-down list, select **BIOS**.
9. Identify the latest BIOS file and click **Download File**.

   You can also analyze which drivers need an update. To do this for your product, click **Analyze System for Updates** and follow the instructions on the screen.
10. Select your preferred download method in the **Please select your download method below** window, click **Download File**.

    The **File Download** window appears.
11. Click **Save** to save the file on your computer.
12. Click **Run** to install the updated BIOS settings on your computer.

    Follow the instructions on the screen.

📝 NOTE: It is recommended not to update the BIOS version for more than 3 revisions. For example: If you want to update the BIOS from 1.0 to 7.0, then install version 4.0 first and then install version 7.0.

System and setup password

You can create a system password and a setup password to secure your computer.

Password type	Description
System password	Password that you must enter to log on to your system.
Setup password	Password that you must enter to access and make changes to the BIOS settings of your computer.

⚠ **CAUTION: The password features provide a basic level of security for the data on your computer.**

⚠ **CAUTION: Anyone can access the data stored on your computer if it is not locked and left unattended.**

📝 NOTE: Your computer is shipped with the system and setup password feature disabled.

Assigning a system password and setup password

You can assign a new **System Password** and/or **Setup Password** or change an existing **System Password** and/or **Setup Password** only when **Password Status** is **Unlocked**. If the Password Status is **Locked**, you cannot change the System Password.

📝 NOTE: If the password jumper is disabled, the existing System Password and Setup Password are deleted and you need not provide the system password to log on to the computer.

To enter the system setup, press F2 immediately after a power-on or re-boot.

1. In the **System BIOS** or **System Setup** screen, select **System Security** and press Enter.
   The **System Security** screen appears.
2. In the **System Security** screen, verify that **Password Status** is **Unlocked**.
3. Select **System Password** , enter your system password, and press Enter or Tab.
   Use the following guidelines to assign the system password:
   - A password can have up to 32 characters.
   - The password can contain the numbers 0 through 9.
   - Only lower case letters are valid, upper case letters are not allowed.
   - Only the following special characters are allowed: space, (”), (+), (,), (-), (.), (/), (;), ([), (\), (]), (`).

   Re-enter the system password when prompted.
4. Type the system password that you entered earlier and click **OK**.
5. Select **Setup Password**, type your system password and press Enter or Tab.
   A message prompts you to re-type the setup password.
6. Type the setup password that you entered earlier and click **OK**.
7. Press Esc and a message prompts you to save the changes.
8. Press Y to save the changes.
   The computer reboots.

Deleting or changing an existing system and/or setup password

Ensure that the **Password Status** is Unlocked (in the System Setup) before attempting to delete or change the existing System and/or Setup password. You cannot delete or change an existing System or Setup password, if the **Password Status** is Locked.
To enter the System Setup, press F2 immediately after a power-on or reboot.

1. In the **System BIOS** or **System Setup** screen, select **System Security** and press Enter.
   The **System Security** screen is displayed.
2. In the **System Security** screen, verify that **Password Status** is **Unlocked**.
3. Select **System Password**, alter or delete the existing system password and press Enter or Tab.
4. Select **Setup Password**, alter or delete the existing setup password and press Enter or Tab.

   NOTE: If you change the System and/or Setup password, re-enter the new password when promoted. If you delete the System and/or Setup password, confirm the deletion when promoted.

5. Press Esc and a message prompts you to save the changes.
6. Press Y to save the changes and exit from System Setup.
   The computer reboots.

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Diagnostics

If you experience a problem with your computer, run the ePSA diagnostics before contacting Dell for technical assistance. The purpose of running diagnostics is to test your computer's hardware without requiring additional equipment or risking data loss. If you are unable to fix the problem yourself, service and support personnel can use the diagnostics results to help you solve the problem.

Enhanced Pre-Boot System Assessment (ePSA) diagnostics

The ePSA diagnostics (also known as system diagnostics) performs a complete check of your hardware. The ePSA is embedded with the BIOS and is launched by the BIOS internally. The embedded system diagnostics provides a set of options for particular devices or device groups allowing you to:

- Run tests automatically or in an interactive mode
- Repeat tests
- Display or save test results
- Run thorough tests to introduce additional test options to provide extra information about the failed device(s)
- View status messages that inform you if tests are completed successfully
- View error messages that inform you of problems encountered during testing

⚠ CAUTION: Use the system diagnostics to test only your computer. Using this program with other computers may cause invalid results or error messages.

✎ NOTE: Some tests for specific devices require user interaction. Always ensure that you are present at the computer terminal when the diagnostic tests are performed.

1. Power-on the computer.
2. As the computer boots, press the F12 key as the Dell logo appears.
3. On the boot menu screen, select the **Diagnostics** option.

   The **Enhanced Pre-boot System Assessment** window is displayed, listing all devices detected in the computer. The diagnostics starts running the tests on all the detected devices.
4. To run a diagnostic test on a specific device, press Esc and click **Yes** to stop the diagnostic test.
5. Select the device from the left pane and click **Run Tests**.
6. If there are any issues, error codes are displayed.

   Note the error code and contact Dell.

Device status lights

Table 7. Device status lights

Icon	Name	Description
⏻	Power status light	Turns on when you turn on the computer and blinks when the computer is in a power management mode.

This can be useful as a diagnostic tool when there's a possible failure to the system.

> **NOTE:** The position of the power status light may vary depending on the system.

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Technical specifications

📝 NOTE: Offerings may vary by region. For more information regarding the configuration of your computer in:

- Windows 10, click or tap **Start** ⊞ → **Settings** → **System** → **About**.

- Windows 8.1 and Windows 8, click or tap **Start** ⊞ → **PC Settings** → **PC and devices** → **PC Info**.

- Windows 7, click **Start** 🪟, right-click **My Computer**, and then select **Properties**.

System specifications

Feature	Specification
Chipset	Skylake
DRAM bus width	64-bit
Flash EPROM	SPI 128 Mbits
PCIe bus	100 MHz
External Bus Frequency	DMI 3.0 (8GT/s)

Processor specifications

Feature	Specification
Types	Intel Core m3 / m5 / m7
Intel Smart Cache	3 MB and 4 MB

Memory specifications

Feature	Specification
Memory type	LPDDR3
Minimum memory	4 GB
Maximum memory	16 GB

Audio specifications

Feature	Specification
Types	Four-channel high-definition audio
Controller	Realtek ALC3246
Stereo conversion	24-bit (analog-to-digital and digital-to-analog)
Internal interface	High-definition audio
External interface	Microphone-in, stereo headphones, and headset combo connector
Speakers	Two
Internal speaker amplifier	2 W (RMS) per channel
Volume controls	Hot keys

Video specifications

Feature	Specification
Type	Integrated on system board
UMA controller	Intel HD Graphics 515
External display support	One micro-HDMI

Camera specifications

Feature	Specification
HD Panel Resolution	1280 x 720 pixels (Non Touch)
Video Resolution (maximum)	1280 x 720 pixels
Diagonal viewing angle	74°

Communication specifications

Features	Specification
Wireless	Internal wireless local area network (WLAN) and wireless wide area network (WWAN)

Features	Specification
	• Bluetooth 4.1 LE

Port and connector specifications

Feature	Specification
Audio	One microphone/stereo headphone/speakers connector
Video	Micro HDMI
USB	• one USB3.0 with PowerShare • two type C ports with thunderbolt 3 support
Memory card reader (Micro SD)	One
Micro Subscriber Identity Module (uSIM) card	One
Smart Card	Optional
RFID	Optional
Finger print reader	Optional

Display specifications

Feature	Specification
FHD anti-glare:	
Height	293.76 mm (11.57 inches)
Width	165.24 mm (6.51 inches)
Diagonal	337.82 (13.3 inches)
Maximum resolution	1920 x 1080
Refresh rate	60 Hz
Maximum viewing angles (horizontal)	+/-80°
Maximum viewing angles (vertical)	+/-80°
Pixel pitch	0.153 mm
QHD anti-glare:	
Height	293.76 mm (11.57 inches)

Feature	Specification
Width	165.24 mm (6.51 inches)
Diagonal	337.82 (13.3 inches)
Maximum resolution	3200 x 1800
Refresh rate	60 Hz
Maximum viewing angles (horizontal)	+/-80°
Maximum viewing angles (vertical)	+/-80°
Pixel pitch	0.092 mm

Keyboard specifications

Feature	Specification
Number of keys	• United States: 82 keys • United Kingdom: 83 keys • Brazil: 84 keys • Japan: 86 keys

Touchpad specifications

Feature	Specification
Active Area:	
X-axis	99.50 mm
Y-axis	51.00 mm53.00 mm

Battery specifications

Feature	Specification
Type	• 34 WHr (4 cell) Entry • 43 WHr (4 cell) Upsell
34 WHr (4 cell) Entry:	
Length	267 mm (10.5 inches)
Height	4.35 mm (0.17 inch)

Feature	Specification
Width	58.5 mm (2.3 inches)
Weight	165.0 g (0.43 lb)
Voltage	7.6 VDC
43 WHr (4 cell) Upsell:	
Length	267 mm (10.5 inches)
Height	6.25 mm (0.24 inch)
Width	58.5 mm (2.3 inches)
Weight	200 g (0.66 lb)
Voltage	7.6 VDC
Temperature range:	
Operating	• Charge: 0°C to 50°C (32°F to 122°F) • Discharge: 0°C to 70°C (32°F to 158°F)
Non-operating	- 20°C to 65°C (- 4°F to 149°F)
Coin cell battery	3 V CR2032 lithium coin cell

AC Adapter specifications

Feature	Specification
Type	45 W (Type C)
Input voltage	100 VAC to 240 VAC
Input current (maximum)	1.3A
Input frequency	50 Hz to 60 Hz
Output power	45 W
Output current	2.25 A
Rated output voltage	20 VDC
Weight	0.17 kg (.37 lb)
Dimensions	0.87 x 2.17 x 3.42
Temperature range (Operating)	0°C to 40°C (32°F to 104°F)

Feature	Specification
Temperature range (Non-Operating)	−40°C to 70°C (−40°F to 158°F)

Physical specifications

Feature	Specification
Front height	9.86 mm (0.39 inches)
Back height	14.32 mm (0.56 inches)
Width	304.8 mm (12 inches)
Depth	210.5 mm (8.29 inches)
Minimum Weight (Non-touch with 34Whr battery)	1.12 kg (2.48 lb)

Environmental specifications

Temperature	Specifications
Operating	0 °C to 60 °C (32 °F to 140 °F)
Storage	−51 °C to 71 °C (−59 °F to 159 °F)

Relative humidity (maximum)	Specifications
Operating	10 % to 90 % (non condensing)
Storage	5 % to 95 % (non condensing)

Altitude (maximum)	Specifications
Operating	−15.2 m to 3048 m (−50 to 10,000 ft)
	0° to 35°C
Non-operating	−15.24 m to 10,668 m (−50 ft to 35,000 ft)
Airborne contaminant level	G2 or lower as defined by ISA S71.04−1985

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Contacting Dell

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.

Dell provides several online and telephone-based support and service options. Availability varies by country and product, and some services may not be available in your area. To contact Dell for sales, technical support, or customer service issues:

1. Go to **Dell.com/support.**
2. Select your support category.
3. Verify your country or region in the **Choose a Country/Region** drop-down list at the bottom of the page.
4. Select the appropriate service or support link based on your need.