Latitude 5175

Service Manual

Regulatory Model: T04E Regulatory Type: T04E001 July 2022 Rev. A02



Notes, cautions, and warnings

(i) NOTE: A NOTE indicates important information that helps you make better use of your tablet.

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

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

© 2015-2022 Dell Inc. or its subsidiaries. All rights reserved. Dell Technologies, Dell, and other trademarks are trademarks of Dell Inc. or its subsidiaries. Other trademarks may be trademarks of their respective owners.

Contents

Chapter 1: Before working inside your tablet	
Before you begin	
Safety instructions	
Recommended tools	
Chapter 2: After working inside your tablet	9
Chapter 3: Removing the back cover	10
Procedure	
Chapter 4: Replacing the back cover	12
Procedure	
Chapter 5: Removing the battery	13
Prerequisites	13
Procedure	
Chapter 6: Replacing the battery	
Procedure	
Post-requisites	14
Chapter 7: Removing the solid-state drive	
Prerequisites	
Procedure	
Chapter 8: Replacing the solid-state drive	
Procedure	
Post-requisites	
Chapter 9: Removing the wireless card	
Prerequisites	
Procedure	
Chapter 10: Replacing the wireless card	
Procedure	
Post-requisites	21
Chapter 11: Removing the tablet bezel	
Prerequisites	
Procedure	
Chapter 12: Replacing the tablet bezel	
Procedure	

Post-requisites	24
Chanter 17: Demoving the dealing connector board	25
Chapter 13: Removing the docking connector board Prerequisites	
Procedure	
Chapter 14: Replacing the docking connector board	
Procedure	
Post-requisites	
Chapter 15: Removing the coin-cell battery	
Prerequisites	
Procedure	
Chapter 16: Replacing the coin-cell battery	28
Procedure	
Post-requisites	
	20
Chapter 17: Removing the speakers	
Prerequisites	
Procedure	
Chapter 18: Replacing the speakers	
Procedure	
Post-requisites	
Chapter 19: Removing the I/O board	
Prerequisites	
Procedure	
Chapter 20: Replacing the I/O board	32
Procedure	
Post-requisites	
Chapter 21: Removing the front camera	33
Prerequisites	
Procedure	
Chapter 22: Deplecing the front comore	7.4
Chapter 22: Replacing the front camera Procedure	
Post-requisites	
1.031-1640131163	
Chapter 23: Removing the back camera	
Prerequisites	
Procedure	
Chapter 24: Replacing the back camera	
Procedure	

Post-requisites	
Chapter 25: Removing the system board	38
Prerequisites	
Procedure	
Chapter 26: Replacing the system board	
Procedure	
Post-requisites	
Chapter 27: Removing the display assembly	
Prerequisites	43
Procedure	43
Chapter 28: Replacing the display assembly	44
Procedure	
Post-requisites	
Chapter 29: Flashing the BIOS	
Clearing CMOS	
Chapter 30: Technology and components	
Power adapter	46
Processors	
Identifying processors in Windows 10	
Identifying processors in Windows 8	
Verifying the processor usage in Task Manager	
Verifying the processor usage in Resource Monitor	
Chipsets	48
Downloading the chipset driver	
Identifying the chipset in Device Manager on Windows 10	
Identifying chipset in Device Manager on Windows 8	49
Graphic options	50
Downloading Driver	50
Identifying the display adapter	51
Changing the screen resolution	
Rotating the display	51
Display options	51
Adjusting brightness in Windows 10	52
Adjusting brightness in Windows 8	
Cleaning the display	
Using touch screen in Windows 10	
Using touch screen in Windows 8	
Connecting to external display devices	
Realtek ALC3266–CG Waves MaxxAudio Pro controller	
Downloading the audio driver	
Identifying the audio controller in Windows 10	
Identifying the audio controller in Windows 8	
Changing the audio settings	54

WLAN cards	54
Downloading the WLAN driver	54
Hard drive options	54
Identifying the hard drive in Windows 10	54
Identifying the hard drive in Windows 8	55
Entering BIOS setup	55
Camera features	55
Identifying the camera in Device Manager on Windows 10	55
Identifying the camera in Device Manager on Windows 8	56
Starting the camera	56
Starting the camera application	56
Memory features	57
Verifying system memory in Windows 10	
Verifying system memory in Windows 8	57
Verifying system memory in setup	57
Testing memory using ePSA	57
Intel chipset drivers	
Intel HD Graphics drivers	
Realtek HD audio drivers	58
Realtek RTS5242-GR Card Reader drivers	
Realtek LAN network drivers	
Intel Wireless 3165 WiFi and Bluetooth drivers	59
Chapter 31: System LED diagnostics	60
Chapter 32: Getting help and contacting Dell	61

1

Before working inside your tablet

(i) NOTE: The images in this document may differ from your tablet depending on the configuration you ordered.

Topics:

- Before you begin
- Safety instructions
- Recommended tools

Before you begin

- 1. Save and close all open files and exit all open applications.
- 2. Shut down your tablet.
 - Windows 10: Click or tap Start > O Power > Shut down.
 - Windows 8: Click or tap **U** 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 tablet and all attached devices from their electrical outlets.
- 4. Disconnect all cables such as telephone cables, network cables and so on, from your tablet.
- 5. Disconnect all attached devices and peripherals, such as keyboard, mouse, monitor, and so on, from your tablet.
- 6. Remove any media card and SIM card from your tablet, if applicable.

Safety instructions

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

- () NOTE: Before working inside your tablet, read the safety information that shipped with your tablet and follow the steps in Before working inside your tablet. After working inside your tablet, follow the instructions in After working inside your tablet. For more safety best practices, see the Regulatory Compliance home page at www.dell.com/regulatory_compliance.
- **NOTE:** Disconnect all power sources before opening the tablet cover or panels. After you finish working inside the tablet, replace all covers, panels, and screws before connecting to the power source.

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

- CAUTION: To avoid damaging the components and cards, handle them by their edges and avoid touching pins and contacts.
- CAUTION: You should only perform troubleshooting and repairs as authorized or directed by the Dell technical assistance team. Damage due to servicing that is not authorized by Dell is not covered by your warranty. See the safety instructions that shipped with the product or at www.dell.com/regulatory_compliance.
- CAUTION: Before touching anything inside your tablet, ground yourself by touching an unpainted metal surface. While you work, periodically touch an unpainted metal surface to dissipate static electricity, which could harm internal components.
- CAUTION: When you disconnect a cable, pull on its connector or on its pull tab, not on the cable itself. Some cables have connectors with locking tabs or thumb-screws that you must disengage before disconnecting

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

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

Recommended tools

The procedures in this document may require the following tools:

- Phillips screwdriver
 - #0 Phillips head screwdriver
 - #1 Phillips head screwdriver
- Plastic scribe

After working inside your tablet

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

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



Removing the back cover

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

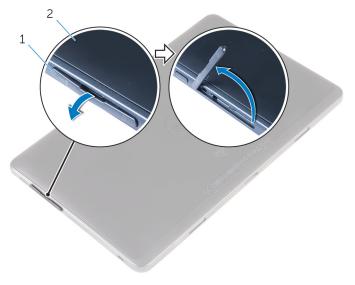
Topics:

Procedure

Procedure

CAUTION: Before opening your tablet, ensure that you place the tablet on a soft cloth or clean surface to avoid any scratches on the display.

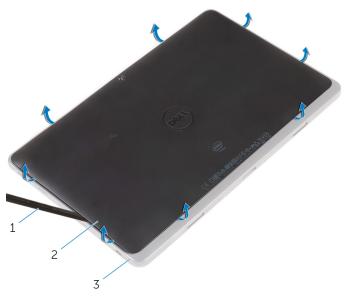
- 1. Place the tablet on a flat surface with the display facing down.
- 2. Open the slot cover and turn it at an angle.



- a. slot cover
- b. back cover
- 3. Remove the screw that secures the back cover to the display assembly.



- a. screw
- b. slot cover
- c. back cover
- 4. Using a plastic scribe, pry up along the edges of the back cover.
- 5. Lift the back cover off the display assembly.



- a. plastic scribe
- **b.** back cover
- c. display assembly

4

Replacing the back cover

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

Topics:

• Procedure

- 1. Align the tabs on the back cover with the slots on the display assembly and snap it into place.
- 2. Replace the screw that secures the back cover to the display assembly.
- 3. Align the slot cover with the display assembly and snap it into place.
- 4. Turn the tablet over.

Removing the battery

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

Topics:

- Prerequisites
- Procedure

Prerequisites

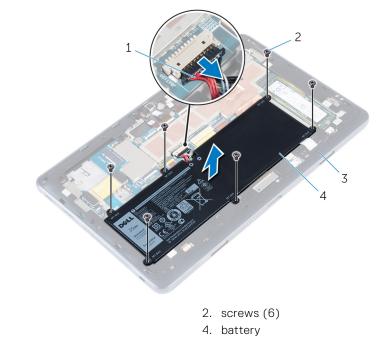
Remove the back cover.

Procedure

1. battery cable

3. display assembly

- 1. Remove the screws that secure the battery to the display assembly.
- **2.** Disconnect the battery cable from the system board.
- 3. Lift the battery, along with its cable, off the display assembly.



4. Press and hold the power button for 5 seconds, to ground the system board.

Replacing the battery

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

Topics:

- Procedure
- Post-requisites

Procedure

- 1. Align the screw holes on the battery with the screw holes on the display assembly.
- 2. Replace the screws that secure the battery to the display assembly.
- 3. Connect the battery cable to the system board.

Post-requisites

Replace the back cover.

Removing the solid-state drive

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

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

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

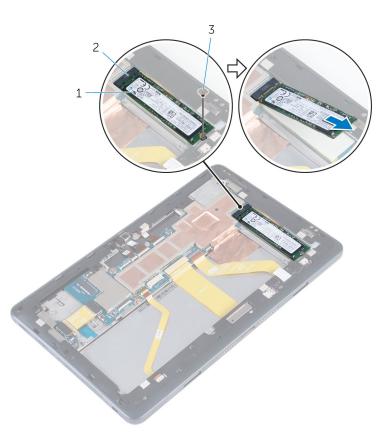
Topics:

- Prerequisites
- Procedure

Prerequisites

- **1.** Remove the back cover.
- 2. Remove the battery.

- 1. Remove the screw that secures the solid-state drive to the system board.
- 2. Lift and slide the solid-state drive out of the slot on the system board.



- a. solid-state drive
- **b.** solid-state drive slot
- c. screw

Replacing the solid-state drive

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

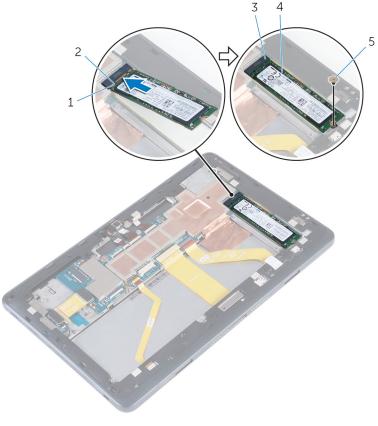
CAUTION: Solid-state drives are fragile. Exercise care when handling the hard drive.

Topics:

- Procedure
- Post-requisites

Procedure

- 1. Align the notch on the solid-state drive with the tab on the solid-state drive slot.
- 2. Slide the solid-state drive firmly into the slot at an angle and align the screw hole on the solid-state drive with the screw hole on the system board.
- **3.** Replace the screw that secures the solid-state drive to the system board.



- 1. notch
- 3. solid-state drive slot
- 5. screw

tab
 solid-state drive

- **1.** Replace the battery.
- 2. Replace the back cover.

Removing the wireless card

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

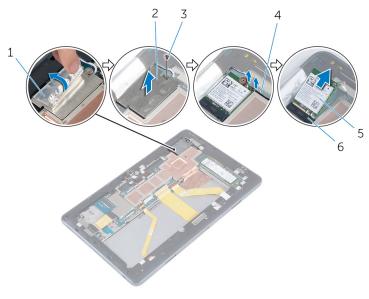
Topics:

- Prerequisites
- Procedure

Prerequisites

Remove the back cover.

- 1. Peel off the foil that secures the wireless-card bracket and wireless card to the system board.
- 2. Remove the screw that secures the wireless-card bracket to the system board.
- 3. Lift the wireless-card bracket off the wireless card.
- **4.** Disconnect the antenna cables from the wireless card.
- 5. Slide and remove the wireless card from the wireless-card slot.



- 1. foil
- 3. screw
- 5. wireless card

- 2. wireless-card bracket
- 4. antenna cables (2)
- 6. wireless-card slot

Replacing the wireless card

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

Topics:

- Procedure
- Post-requisites

Procedure

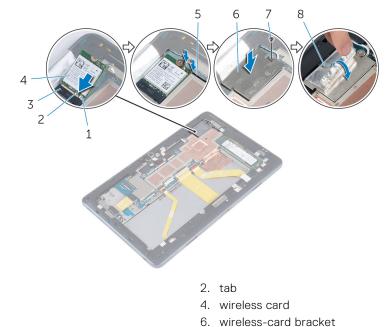
CAUTION: To avoid damage to the wireless card, do not place any cables under it.

1. Align the notch on the wireless card with the tab on the wireless-card slot and slide the card into the wireless-card slot.

Connect the antenna cables to the wireless card.
 The following table provides the antenna-cable color scheme for the wireless card supported by your tablet:

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

- 3. Place the wireless-card bracket on the wireless card.
- 4. Align the screw hole on the wireless-card bracket with the screw hole on the system board.
- 5. Replace the screw that secures the wireless-card bracket and the wireless card to the system board.
- 6. Adhere the foil that secures the wireless-card bracket and wireless card to the system board.



8. foil

- 1. notch
- 3. wireless-card slot
- 5. antenna cables (2)
- 7. screw



Replace the back cover.

Removing the tablet bezel

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

Topics:

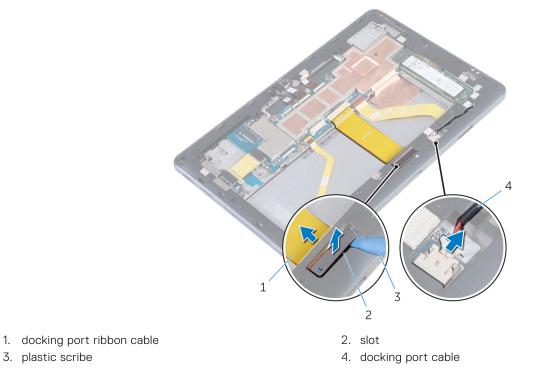
- Prerequisites
- Procedure

Prerequisites

Remove the back cover.

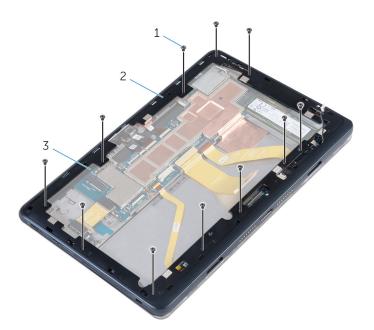
Procedure

- 1. Using a plastic scribe, disconnect the docking port ribbon cable and slide it out through the slot on the tablet bezel.
- 2. Disconnect the docking port cable from the docking connector board on the tablet bezel.

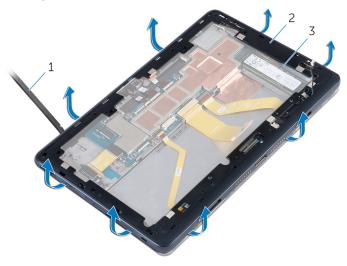


3. Remove the screws that secure the tablet bezel to the display assembly.

3. plastic scribe



- **a.** screws (11)
- b. tablet bezel
- c. display assembly
- **4.** Using a plastic scribe, pry up along the edges of the tablet bezel.
- 5. Lift the tablet bezel away from the display assembly.



- a. plastic scribe
- b. tablet bezel
- c. display assembly
- 6. Remove the docking connector board from the tablet bezel.

Replacing the tablet bezel

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

Topics:

- Procedure
- Post-requisites

Procedure

- 1. Replace the docking connector board.
- 2. Place the tablet bezel on the display assembly and snap the tablet bezel into place.
- 3. Replace the screws that secure the tablet bezel to the display assembly.
- 4. Connect the docking port cable to the docking connector board on the tablet bezel.
- 5. Slide the docking port ribbon cable through the slot on the tablet bezel.
- 6. Adhere the docking port ribbon cable on the docking connector board.

Post-requisites

Replace the back cover.

Removing the docking connector board

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

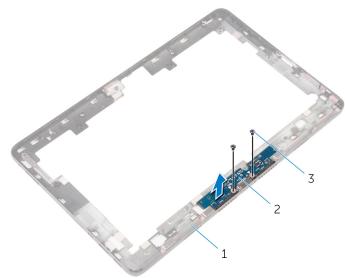
Topics:

- Prerequisites
- Procedure

Prerequisites

- 1. Remove the back cover.
- 2. Remove the battery.
- **3.** Remove the tablet bezel.

- 1. Turn the tablet bezel over.
- 2. Remove the screws that secure the docking connector board to the tablet bezel.
- 3. Lift the docking connector board off the tablet bezel.



- a. tablet bezel
- **b.** docking connector board
- c. screws (2)

Replacing the docking connector board

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

Topics:

- Procedure
- Post-requisites

Procedure

- 1. Place the docking connector board on the tablet bezel.
- 2. Align the screw holes on the docking connector board with the screw holes on the tablet bezel.
- 3. Replace the screws that secure the docking connector board to the tablet bezel.

- **1.** Replace the tablet bezel.
- 2. Replace the battery.
- **3.** Replace the back cover.

Removing the coin-cell battery

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

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

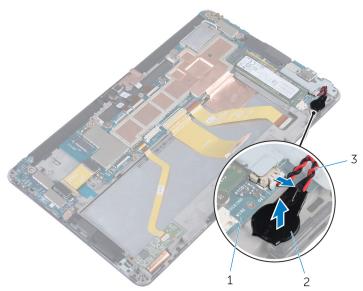
Topics:

- Prerequisites
- Procedure

Prerequisites

- 1. Remove the back cover.
- 2. Remove the battery.
- **3.** Remove the tablet bezel.

- 1. Disconnect the coin-cell battery cable from the system board.
- 2. Peel the coin-cell battery off the display assembly.



- a. system board
- b. coin-cell battery
- c. coin-cell battery cable

Replacing the coin-cell battery

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

Topics:

- Procedure
- Post-requisites

Procedure

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

- **1.** Replace the tablet bezel.
- 2. Replace the battery.
- 3. Replace the back cover.

Removing the speakers

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

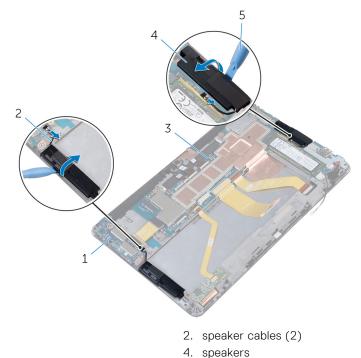
Topics:

- Prerequisites
- Procedure

Prerequisites

- 1. Remove the back cover.
- 2. Remove the battery.
- **3.** Remove the tablet bezel.

- 1. Disconnect the right speaker cable from the I/O board and the left speaker cable from the system board.
- 2. Using a plastic scribe, pry the speakers out of the display assembly.
- 3. Lift the speakers along with the cables off the display assembly.



- 1. I/O board
- 3. system board
- 5. plastic scribe

Replacing the speakers

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

Topics:

- Procedure
- Post-requisites

Procedure

- 1. Adhere the speakers to the display assembly.
- 2. Connect the right speaker cable to the I/O board and the left speaker cable to the system board.

- **1.** Replace the tablet bezel.
- **2.** Replace the battery.
- 3. Replace the back cover.

Removing the I/O board

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

Topics:

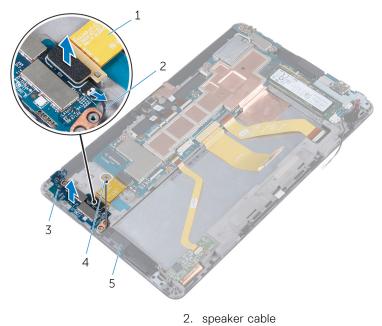
- Prerequisites
- Procedure

Prerequisites

- 1. Remove the back cover.
- 2. Remove the battery.
- **3.** Remove the tablet bezel.

Procedure

- 1. Disconnect the speaker cable from the I/O board.
- 2. Disconnect the I/O-board cable from the I/O board.
- 3. Remove the screw that secures the I/O board to the display assembly.



4. screw

- 1. I/O-board cable
- 3. I/O board
- 5. display assembly

Replacing the I/O board

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

Topics:

- Procedure
- Post-requisites

Procedure

- 1. Align the screw hole on the I/O board with the screw hole on the display assembly.
- 2. Replace the screw that secures the I/O board to the display assembly.
- 3. Connect the I/O-board cable to the I/O board.
- 4. Connect the speaker cable to the I/O board.

- **1.** Replace the tablet bezel.
- 2. Replace the battery.
- 3. Replace the back cover.

Removing the front camera

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

Topics:

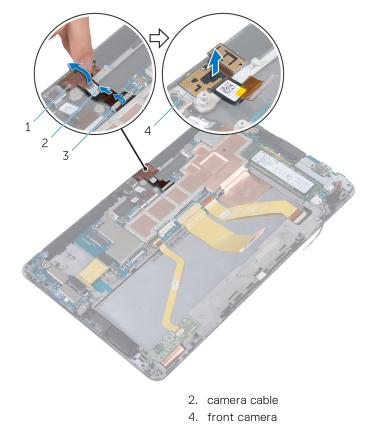
- Prerequisites
- Procedure

Prerequisites

- 1. Remove the back cover.
- 2. Remove the battery.
- **3.** Remove the tablet bezel.

Procedure

- 1. Open the latch and disconnect the camera cable from the system board.
- 2. Peel off the tape that secures the front camera to the display assembly.
- 3. Lift the front camera, along with its cable, off the display assembly.



1. tape

3. latch

Removing the front camera

33

Replacing the front camera

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

Topics:

- Procedure
- Post-requisites

Procedure

- 1. Align and place the front camera on the display assembly.
- 2. Slide the camera cable into the connector on the system board and close the latch.
- 3. Adhere the tape that secures the front camera to the display assembly.

- **1.** Replace the tablet bezel.
- 2. Replace the battery.
- 3. Replace the back cover.

Removing the back camera

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

Topics:

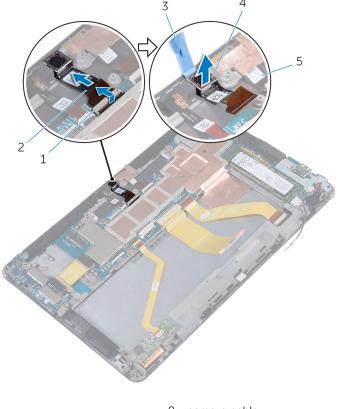
- Prerequisites
- Procedure

Prerequisites

- 1. Remove the back cover.
- 2. Remove the battery.
- **3.** Remove the tablet bezel.

Procedure

- 1. Open the latch and disconnect the camera cable from the system board.
- 2. Using a plastic scribe, lift the back camera along with its cable off the display assembly.



1. latch

3. plastic scribe

- 2. camera cable
- 4. camera

5. display assembly

Replacing the back camera

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

Topics:

- Procedure
- Post-requisites

Procedure

- 1. Align and place the back camera on the display assembly.
- 2. Slide the camera cable into the connector on the system board and close the latch to secure the cable.

Post-requisites

- **1.** Replace the tablet bezel.
- **2.** Replace the battery.
- 3. Replace the back cover.

Removing the system board

- () NOTE: Before working inside your tablet, read the safety information that shipped with your tablet and follow the steps in Before working inside your tablet. After working inside your tablet, follow the instructions in After working inside your tablet. For more safety best practices, see the Regulatory Compliance home page at www.dell.com/regulatory_compliance.
- **NOTE:** Your tablet'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 desired changes again after you replace the system board.
- **NOTE:** Before disconnecting the cables from the system board, note the location of the connectors so that you can reconnect the cables correctly after you replace the system board.

Topics:

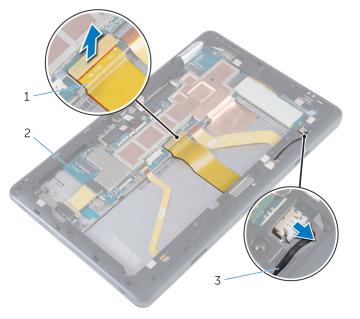
- Prerequisites
- Procedure

Prerequisites

- 1. Remove the back cover.
- 2. Remove the battery.
- **3.** Remove the solid-state drive.
- 4. Remove the wireless card.

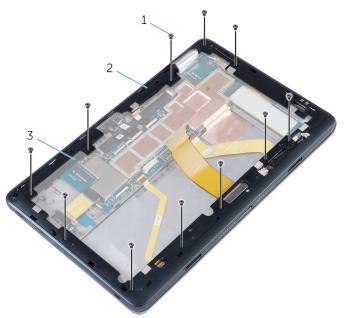
Procedure

1. Disconnect the docking port ribbon cable and docking port cable from the system board.



a. docking port ribbon cable

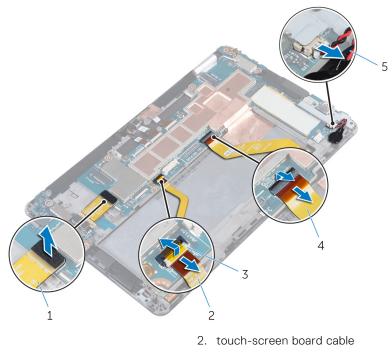
- **b.** system board
- c. docking port cable
- 2. Remove the screws that secure the tablet bezel to the display assembly.



- **a.** screws (11)
- b. tablet bezel
- c. display assembly
- 3. Using a plastic scribe, pry up along the edges of the tablet bezel.
- 4. Lift the tablet-bezel assembly off the display assembly.

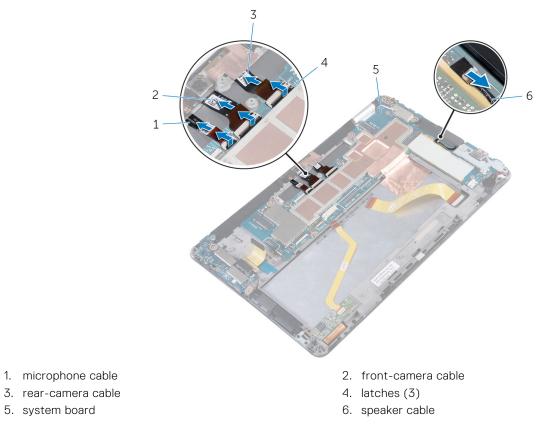


- a. plastic scribe
- b. tablet bezel
- c. display assembly
- 5. Open the latches and disconnect the touch-screen board cable and display cable from the system board.
- 6. Disconnect the I/O-board cable and coin-cell battery cable from the system board.

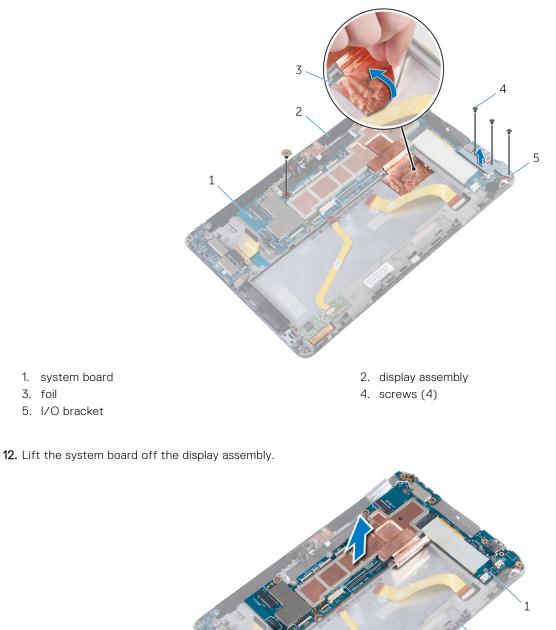


- I/O-board cable
 latches (2)
- 5. coin-cell battery cable

- 4. display cable
- 7. Disconnect the speaker cable from the system board.
- 8. Open the latches and disconnect the microphone cable, front-camera cable, and rear-camera cable from the system board.



- ${\bf 9.}\$ Remove the screws that secure the system board to the display assembly.
- **10.** Peel off the foil that secures the system board to the display assembly.



a. system board

3. foil

5. I/O bracket

b. display assembly

2

Replacing the system board

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

NOTE: Your tablet'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 desired changes again after you replace the system board.

Topics:

- Procedure
- Post-requisites

Procedure

- 1. Align the screw holes on the system board with the screw holes on the display assembly.
- 2. Replace the screws that secure the system board to the display assembly.
- 3. Place the I/O bracket on the system board.
- 4. Adhere the foil that secures the system board to the display assembly.
- 5. Slide the microphone cable, front-camera cable, and rear-camera cable into the connectors on the system board and close the latches.
- 6. Connect the speaker cable, I/O-board cable, and coin-cell battery cable to the system board.
- 7. Slide the touch-screen board cable and display cable into the connectors on the system board and close the latches.
- 8. Place the tablet bezel on the display assembly and snap the tablet bezel into place.
- 9. Replace the screws that secure the tablet bezel to the display assembly.
- 10. Connect the docking port ribbon cable and docking port cable to the system board.

Post-requisites

- 1. Replace the wireless card.
- 2. Replace the solid-state drive.
- **3.** Replace the battery.
- 4. Replace the back cover.

Removing the display assembly

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

Topics:

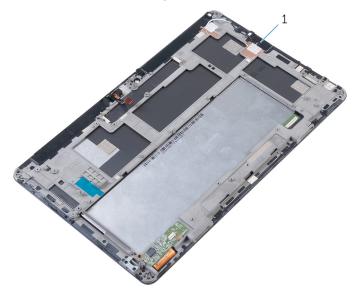
- Prerequisites
- Procedure

Prerequisites

- 1. Remove the back cover.
- 2. Remove the battery.
- **3.** Remove the solid-state drive.
- 4. Remove the wireless card.
- 5. Remove the tablet bezel.
- 6. Remove the docking connector board.
- 7. Remove the coin-cell battery.
- 8. Remove the speakers.
- 9. Remove the I/O board.
- **10.** Remove the front camera.
- 11. Remove the back camera.
- 12. Remove the system board.

Procedure

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



1. display assembly

Replacing the display assembly

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

Topics:

- Procedure
- Post-requisites

Procedure

Place the display assembly on a clean surface.

Post-requisites

- **1.** Replace the system board.
- **2.** Replace the back camera.
- **3.** Replace the front camera.
- 4. Replace the I/O board.
- 5. Replace the speakers.
- 6. Replace the coin-cell battery.
- 7. Replace the docking connector board.
- 8. Replace the tablet bezel.
- 9. Replace the wireless card.
- **10.** Replace the solid-state drive.
- 11. Replace the battery.
- 12. Replace the back cover.

Flashing the BIOS

You may need to flash (update) the BIOS when an update is available or when you replace the system board. To flash the BIOS: **1.** Turn on the tablet.

- 2. Go to www.dell.com/support.
- 3. Tap Product Support, enter the Service Tag of your tablet and tap Submit.

(i) NOTE: If you do not have the Service Tag, use the auto-detect feature or manually browse for your tablet model.

- 4. Tap Drivers and downloads.
- 5. Select the operating system installed on your tablet.
- 6. Scroll down the page and expand **BIOS**.
- 7. Tap Download File to download the latest version of the BIOS for your tablet.
- 8. Save the file and, once the download is complete, navigate to the folder where you saved the BIOS update file.
- 9. Double-tap the BIOS update file icon and follow the instructions on the screen.

Topics:

Clearing CMOS

Clearing CMOS

If the power adapter is connected, press and hold the power button for 25 seconds. The tablet turns on automatically after 90 seconds.

- If the power adapter is not connected:
- 1. Press and hold the power button for 25 seconds.
- **2.** Then, press the power button for 2-3 seconds.

The tablet turns on automatically after 90 seconds.

Technology and components

Topics:

- Power adapter
- Processors
- Chipsets
- Graphic options
- Realtek ALC3266–CG Waves MaxxAudio Pro controller
- WLAN cards
- Hard drive options
- Camera features
- Memory features
- Intel chipset drivers
- Intel HD Graphics drivers
- Realtek HD audio drivers
- Realtek RTS5242-GR Card Reader drivers
- Realtek LAN network drivers
- Intel Wireless 3165 WiFi and Bluetooth drivers

Power adapter

This tablet is offered with the 30 W power adapter.

WARNING: When you disconnect the power adapter cable from the tablet, 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 tablet is shipped with the following processors:

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

(i) 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.

Processors
 Intel(R) Core(TM) m5-6Y57 CPU @ 1.10GHz
 Intel(R) Core(TM) m5-6Y57 CPU @ 1.10GHz
 Intel(R) Core(TM) m5-6Y57 CPU @ 1.10GHz
 Intel(R) Core(TM) m5-6Y57 CPU @ 1.10GHz

Identifying processors in Windows 8

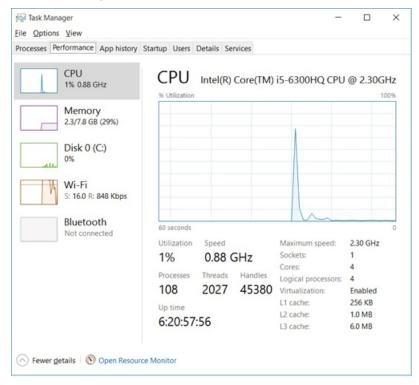
- 1. Tap Search the Web and Windows.
- 2. Type Device Manager.
- 3. Tap Processor.

The basic information of the processor is displayed.

Processors
 Intel(R) Core(TM) m5-6Y57 CPU @ 1.10GHz
 Intel(R) Core(TM) m5-6Y57 CPU @ 1.10GHz
 Intel(R) Core(TM) m5-6Y57 CPU @ 1.10GHz
 Intel(R) Core(TM) m5-6Y57 CPU @ 1.10GHz

Verifying the processor usage in Task Manager

- 1. Press and hold the taskbar.
- Select Start Task Manager. The Windows Task Manager window is displayed.
- **3.** Tap the **Performance** tab in the **Windows Task Manager** window. The processor performance details are displayed.

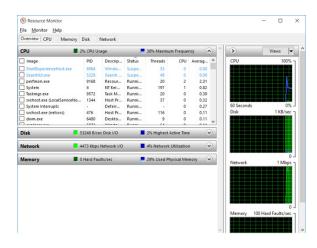


Verifying the processor usage in Resource Monitor

- 1. Press and hold the taskbar.
- 2. Select Start Task Manager.

The Windows Task Manager window is displayed.

- **3.** Tap the **Performance** tab in the **Windows Task Manager** window. The processor performance details are displayed.
- 4. Tap Open Resource Monitor.



Chipsets

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

Downloading the chipset driver

- 1. Turn on the tablet.
- 2. Go to www.dell.com/support.
- 3. Tap Product Support, enter the Service Tag of your tablet, and then tap Submit.

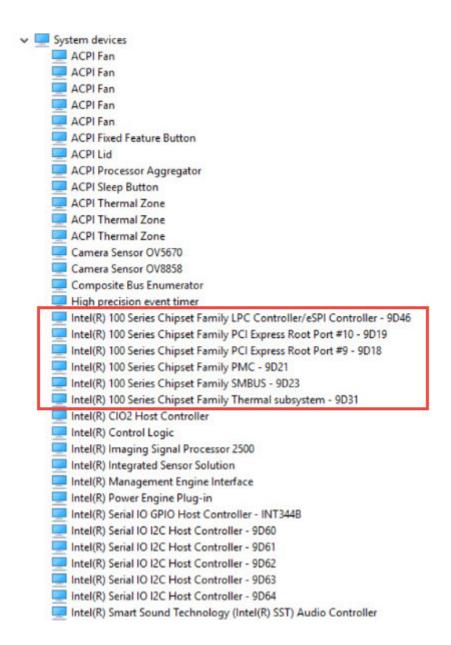
(i) NOTE: If you do not have the Service Tag, use the autodetect feature or manually browse for your tablet model.

4. Tap Drivers and Downloads.

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

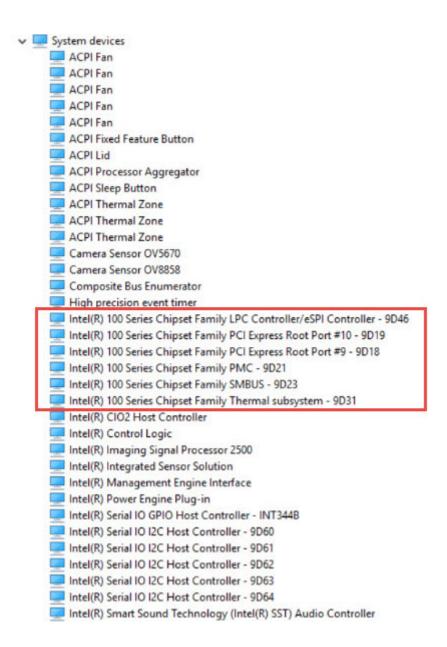
Identifying the chipset in Device Manager on Windows 10

- 1. Tap 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. Tap 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 tablet consists of the Intel HD Graphics 515 graphics chipset.

Downloading Driver

- 1. Turn on the tablet.
- 2. Go to www.dell.com/support.
- 3. Tap Product Support, enter the Service Tag of your tablet, and then tap Submit.

(i) NOTE: If you do not have the Service Tag, use the auto detect feature or manually browse for your tablet model.

- 4. Tap Drivers and Downloads.
- 5. Select the operating system installed on your tablet.
- 6. Scroll down the page and select the graphic driver to install.
- 7. Tap Download File to download the graphic driver for your tablet.
- 8. After the download is complete, navigate to the folder where you saved the graphic driver file.

9. Double-tap 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.

V I Display adapters

Intel(R) HD Graphics 515

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.

Settings ADVANCED DISPLAY SETTINGS	-	 ×
Customize your display		Í
1		
Identify Detect Connect to a wireless display Resolution 1920 × 1080 (Recommended) V		
Apply Cancel		
Related settings		
Color calibration		- 1
ClearType text		- 1
Advanced sizing of text and other items		- 1
Display adapter properties		- 1
		~

Rotating the display

- 1. Right click on the desktop. A sub menu is displayed.
- 2. Select Graphic Options > Rotation and choose one 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 tablet has 10.8-inch FHD with 1920 x 1080 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.

(i) 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 $\clubsuit \rightarrow$ Change PC Settings \rightarrow PC and devices \rightarrow 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 must be cleaned.
- 2. Use a microfiber cloth to remove any obvious dust and gently brush off any dust particles.
- 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.
- 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.

(i) 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. Right click on the Start menu.
- 2. Select 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 \mathbf{Q} .
- 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 tablet to an external display device:

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

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

Realtek ALC3266–CG Waves MaxxAudio Pro controller

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

Downloading the audio driver

- 1. Turn on the tablet.
- 2. Go to www.dell.com/support.
- 3. Tap Product Support, enter the Service Tag of your tablet and tap Submit.

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

- 4. Tap Drivers and Downloads.
- 5. Select the operating system installed on your tablet.
- 6. Scroll down the page and expand Audio.
- 7. Select the audio driver.
- 8. Tap Download File to download the latest version of the audio driver for your tablet.
- 9. After the download is complete, navigate to the folder where you saved the audio driver file.
- 10. Double-tap 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 $\frac{\xi_{\rm O}}{\xi_{\rm O}}$.
- 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 tablet supports the Intel Dual Band Wireless AC 8260 WLAN card.

Downloading the WLAN driver

- 1. Turn on the tablet.
- 2. Go to www.dell.com/support.
- Tap Product Support, enter the Service Tag of your tablet, and then tap Submit.
 NOTE: If you do not have the Service Tag, use the autodetect feature or manually browse for your tablet model.
- 4. Tap Drivers and Downloads.
- 5. Select the operating system installed on your tablet.
- 6. Scroll down the page, expand Network, and select the WLAN driver.

(i) NOTE: The WLAN driver varies depending on the WLAN card in the tablet.

- 7. After the download is complete, navigate to the folder where you saved the driver file.
- 8. Double-tap the WLAN driver file icon and follow the instructions on the screen.

Hard drive options

This tablet has the following mSATA solid-state drive options:

- 128 GB solid-state drive
- 256 GB solid-state drive
- 512 GB solid-state drive
- 256 GB self-encrypting drive

Identifying the hard drive in Windows 10

- 1. Right click on Start menu
- 2. SelectDevice 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.

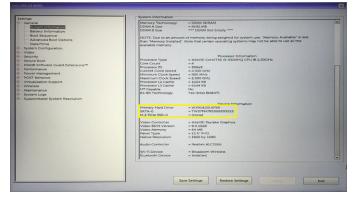
Disk drives

The hard drive is listed under Disk drives.

Entering BIOS setup

- 1. Turn on or restart your tablet.
- 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 tablet comes with 5 MP fixed focus front-facing camera and 8 MP auto focus rear-facing camera with the image resolution of 1920 x 1080 (maximum).

NOTE: On Windows 8.1 and Windows 10 tablets, Dell Webcam Central Software will not be available. Use the built-in Camera App.

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.

Imaging devices

🔚 Intel(R) RealSense(TM) 3D Camera (R200) Depth

Intel(R) RealSense(TM) 3D Camera (R200) Left-Right

The Intel(R) RealSense(TM) 3D Camera (R200) RGB

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.
 - Imaging devices

📷 Intel(R) RealSense(TM) 3D Camera (R200) Depth

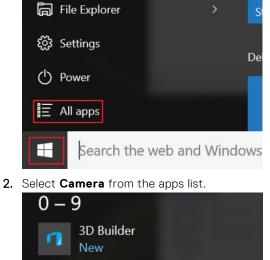
- The Intel(R) RealSense(TM) 3D Camera (R200) Left-Right
- \overline Intel(R) RealSense(TM) 3D Camera (R200) RGB

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 tablet, the camera turns on. Similarly, if you are chatting on the internet and the application requests to access the webcam, the webcam turns on.

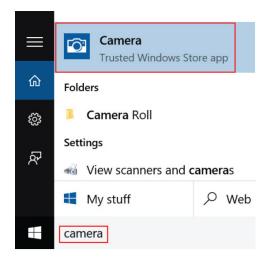
Starting the camera application

1. Tap or click the Windows button and select All apps.



1	New
А	
$\overline{\mathbf{O}}$	Alarms & Clock New
С	
	Calculator New
1	Calendar
O	Camera
2	Contact Support

3. If the **Camera** App is not available in the apps list, search for it.



Memory features

In this tablet, the memory (RAM) is a part of the system board. This tablet supports 4 GB and 8 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. Click on the start menu and select **Settings** \mathcal{C} > **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 tablet.
- 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

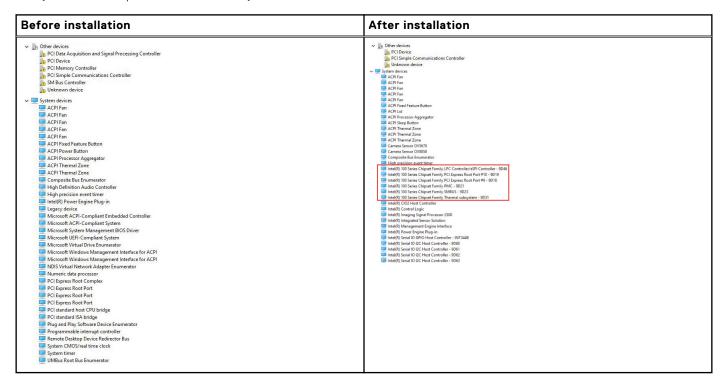
- 1. Turn on or restart your tablet.
- 2. Perform one of the following actions after the Dell logo is displayed:
 - With keyboard Press F2.
 - Without keyboard Press and hold the **Volume Up** button when the Dell logo is displayed on the screen. When the F12 ٠ boot selection menu is displayed, select **Diagnostics** from the boot menu, and press Enter.

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

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

Intel chipset drivers

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



Intel HD Graphics drivers

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

Before installation	After installation	
 Image: Construction of the second seco	✓ Intel(R) HD Graphics 515 ✓ Sound, video and game controllers ✓ Intel(R) AVStream Camera 2500 ✓ Intel(R) Display Audio ✓ Realtek High Definition Audio(SST)	

Realtek HD audio drivers

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

Before installation	After installation
 Audio inputs and outputs Microphone (High Definition Audio Device) Speakers (High Definition Audio Device) Sound, video and game controllers High Definition Audio Device Intel(R) Display Audio 	✓

Realtek RTS5242-GR Card Reader drivers

Verify if the Realtek RTS5242-GR Card Reader drivers are already installed in the tablet.

Before installation	After installation
✓	✓ D Other devices
🦣 PCI Device	🦾 Unknown device
	✓
	Realtek PCIE CardReader

Realtek LAN network drivers

Verify if the Realtek LAN network drivers are already installed in the tablet.

Before installation	After installation
✓	Vetwork adapters Bluetooth Device (Personal Area Network) Bluetooth Device (RFCOMM Protocol TDI) EM7455 Intel(R) Dual Band Wireless-AC 8260

Intel Wireless 3165 WiFi and Bluetooth drivers

Verify if the Intel Wireless 3165 WiFi and Bluetooth drivers are already installed in the tablet.

Before installation	After installation
✓ ➡ Network adapters ➡ Intel(R) Dual Band Wireless-AC 3165	 Bluetooth Intel(R) Wireless Bluetooth(R) Microsoft Bluetooth Enumerator Microsoft Bluetooth LE Enumerator Microsoft Bluetooth Lexice (Personal Area Network) Bluetooth Device (PFCOMM Protocol TDI) EM7455 Intel(R) Dual Band Wireless-AC 8260

System LED diagnostics

The power LED states are shown in following table.

Power LED state	Description
Solid white	Power adapter is connected and the tablet is charging.
Amber	Tablet is running on battery and the battery has less than 10 percent charge.(i)NOTE: If you try turning on the tablet when the battery charge is critically low, the status light blinks amber in sequence of three on/off cycles indicating that the tablet cannot be turned on with this charge level.
Off	 Power adapter is connected and the battery is fully charged. Tablet is running on battery and the battery has more than 5 percent charge. Tablet is in standby, hibernate, or turned off.

WARNING: The power LED only serve as an indicator of the progress through the POST process. These LEDs do not indicate the problem that caused the POST routine to stop.

This tablet does not ship with legacy 4 quad pack diagnostic LEDs which are at the front of the chassis next to the power button. It is now relying on the power LED light blinking amber pattern to determine failures.

NOTE: Amber LED blinking pattern: The Power Button LED shall blink the corresponding LED codes for the corresponding fault condition. The repeated pattern has a long pause inserted in the middle.

For example, if the memory is not detected, the Power Button LED blinks two times followed by a pause, blinks three times, and pause. This pattern continues until the system is powered off.

The following table depicts the LED patterns with possible troubleshooting solution.

LED 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
3,3	Recovery image not found
3,4	Recovery image found but invalid

Getting help and contacting Dell

Self-help resources

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

Information about Dell products and services	www.dell.com
Windows 8.1 and Windows 10	Dell Help & Support app
Windows 10	Get started app
Windows 8.1	Help + Tips app
Accessing help in Windows 8, Windows 8.1, and Windows 10	In Windows search, type Help and Support , and press Enter .
Accessing help in Windows 7	Click Start > Help and Support.
Online help for operating system	www.dell.com/support/windows www.dell.com/support/linux
Troubleshooting information, user manuals, setup instructions, product specifications, technical help blogs, drivers, software updates, and so on	www.dell.com/support
Learn about your operating system, setting up and using your tablet, data backup, diagnostics, and so on.	See Me and My Dell at www.dell.com/support/manuals.

Contacting Dell

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

(i) 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.