



## HP Slate8 Pro

Maintenance and Service Guide

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HP authorized service providers only.

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### **Product notice**

This guide describes features that are common to most models. Some features may not be available on your tablet.

### **Software terms**

By installing, copying, downloading, or otherwise using any software product preinstalled on this tablet, you agree to be bound by the terms of the HP End User License Agreement (EULA). If you do not accept these license terms, your sole remedy is to return the entire unused product (hardware and software) within 14 days for a refund subject to the refund policy of your place of purchase.

For any further information or to request a full refund of the tablet, please contact your local point of sale (the seller).

## Safety warning notice

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**⚠ WARNING!** To reduce the possibility of heat-related injuries or of overheating the device, do not place the device directly on your lap or obstruct the device air vents. Use the device only on a hard, flat surface. Do not allow another hard surface, such as an adjoining optional printer, or a soft surface, such as pillows or rugs or clothing, to block airflow. Also, do not allow the AC adapter to contact the skin or a soft surface, such as pillows or rugs or clothing, during operation. The device and the AC adapter comply with the user-accessible surface temperature limits defined by the International Standard for Safety of Information Technology Equipment (IEC 60950).

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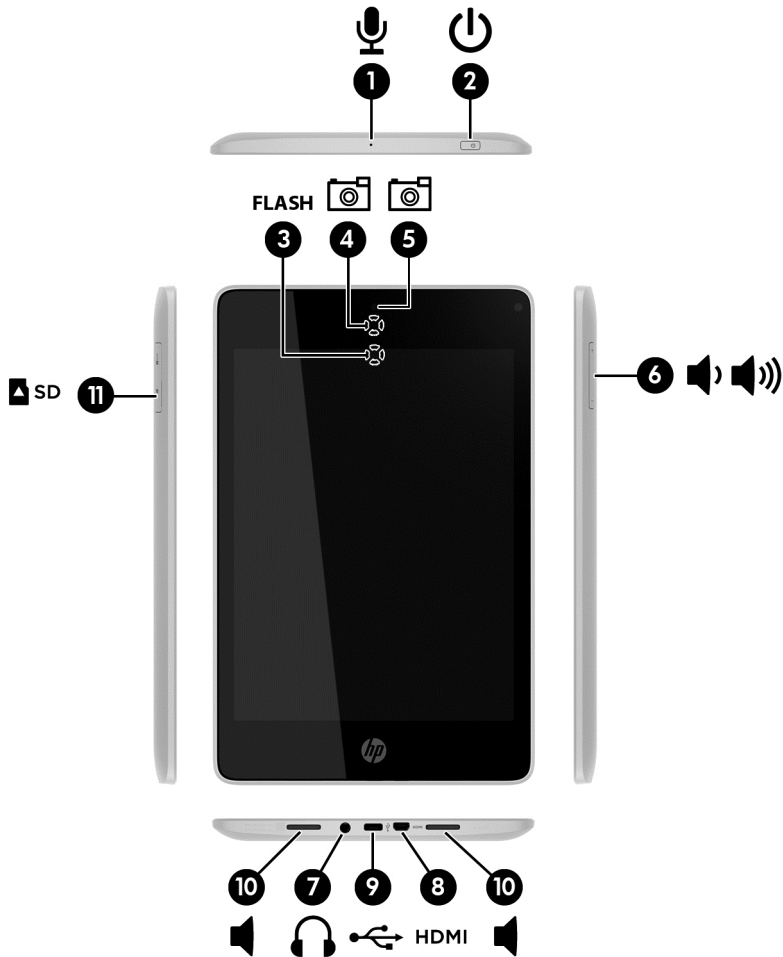
# 1 Product description

Category	Description
<b>Product Name</b>	HP Slate8 Pro
<b>Processor</b>	nVidia® T40S A15 1.80-GHz quad core soldered on-chip (SOC) processor
<b>Panel</b>	<p>7.98-in, (1600×1200), AntiGlare, UltraSlim, TouchScreen display panel with light-emitting diode (LED) backlight; 4:3 wide aspect ratio</p> <p>Touch Screen: Multi-touch capacitive digitizer, Gorilla glass 3 with anti-smudge and direct-bonding (compliant with Windows 8 requirements)</p> <p>Typical brightness: 360 nits</p>
<b>Graphics</b>	<p>Internal graphics: nVidia graphics accelerator</p> <p>Supports HD playback, streaming, and recording @ 1080p/30fps</p> <p>Supports open GL ES 2.0</p> <p>Supports HDMI</p>
<b>Memory</b>	<p>Supports 2 configurations:</p> <ul style="list-style-type: none"><li>• 2-GB, 16-GB 1600-MHz LP-DDR3 single package 4×128-MB×32 dual-channel Memory IC with 32-GB storage</li><li>• 1-GB, 8-GB 1600-MHz LP-DDR3 single package 2×128-MB×32 dual-channel Memory IC with 16-GB storage</li></ul>
<b>Mass storage</b>	<p>Supports embedded MultiMedia Card (eMMC) solid-state drives NAND flash v. 4.5 and later</p> <p>Supports 32.0- and 16.0-GB eMMC solid-state drives</p>
<b>Audio and video</b>	<p>Integrated stereo speakers (2), 0.5-W per channel</p> <p>One digital microphone</p> <p>Support Beats Audio</p> <p>8.0-MP, autofocus rear-facing webcam with LED flash</p> <p>1.0-MP, 720-p front-facing webcam</p>

Category	Description
<b>Sensors</b>	<p>Accelerometer</p> <p>Ambient light</p> <p>e-Compass</p> <p>GPS position</p> <p>Gyro</p> <p>Hall-effect</p>
<b>Wireless networking</b>	<p><b>Integrated WiFi option:</b> Broadcom 43241 WiFi/BT 4.0 combo with 2 antenna</p> <p><b>Integrated GPS option:</b> Integrated GPS SOC with 1 antenna</p> <p><b>Integrated Bluetooth option:</b> Class 1 Bluetooth (10-m+ range), Bluetooth 4.0+LE Wifi 802.11abgn 2x2 MIMO</p> <p><b>Integrated WiDi option:</b> Global ME936 WWAN module SOC</p>
<b>External expansion</b>	Integrated micro SD Card Reader expandable to 32-GB
<b>Ports</b>	<ul style="list-style-type: none"> <li>• Audio: 3.5-mm headphone/microphone combo jack (supports North American-type headset only)</li> <li>• Micro HDMI connector</li> <li>• Micro USB 2.0 type AB connector (supports OTG and charging)</li> </ul>
<b>Power requirements</b>	<p>Supports a 2-cell, 21-WHr, 2.84-AHr, Li-ion battery (non-removable), USB charging</p> <p>Supports a 10-W AC adapter with DC plug and localized cable plug support</p>
<b>Operating system</b>	<b>Preinstalled:</b> Android 4.2
<b>Serviceability</b>	<b>End user replaceable part:</b> AC adapter



## 2 External component identification



Item	Component	Item	Component
(1)	Microphone	(7)	Audio-out (headphone)/Audio-in (microphone) jack
(2)	Power button	(8)	Micro HDMI port
(3)	Camera flash	(9)	Micro USB 2.0 port
(4)	Rear-facing webcamera	(10)	Speakers (2)

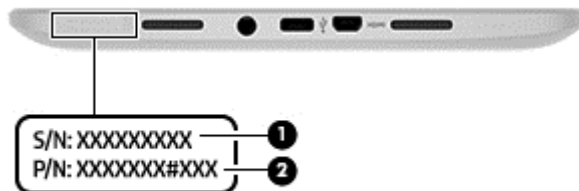
<b>Item</b>	<b>Component</b>	<b>Item</b>	<b>Component</b>
<b>(5)</b>	Front-facing webcam	<b>(11)</b>	Micro SD Card Reader slot
<b>(6)</b>	Volume control buttons (2)		

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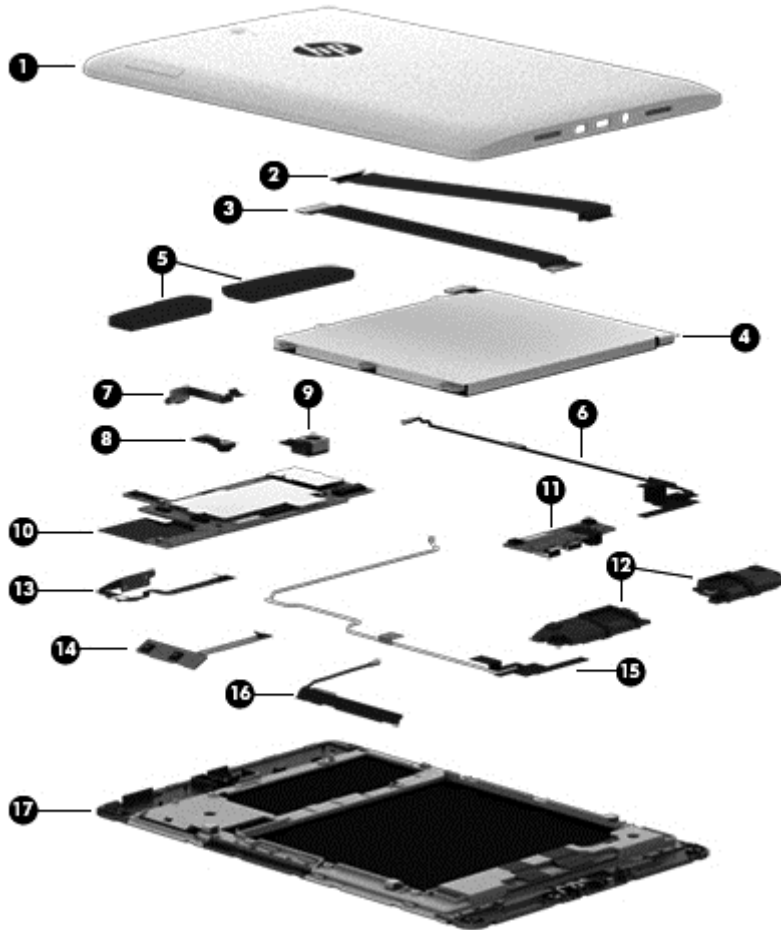
## 3 Illustrated parts catalog

### Locating the serial number, product number, and model number

The serial number and product number of your tablet are located on the bottom edge of the tablet. You may need this information when you travel internationally or when you contact support.



# Tablet major components



Item	Component	Spare part number
(1)	<b>Back cover</b>	743926-001
(2)	<b>Display panel cable</b>	743832-001
(3)	<b>I/O board cable</b>	743830-001
(4)	<b>Battery, 2-cell, 21-WHr, 2.84-AHr, LI (includes cable)</b>	743821-001
(5)	<b>LTE antenna</b>	
	LTE main antenna	746232-001
	LTE auxilliary antenna	746233-001
(6)	<b>WLAN main antenna (includes cable and transceiver)</b>	746230-001
(7)	<b>Microphone (includes cable)</b>	743927-001
(8)	<b>Front-facing webcamera (includes cable)</b>	743817-001
(9)	<b>Rear-facing webcamera (includes cable)</b>	743818-001
(10)	<b>System board</b> equipped with an nVidia T40S quad core A15 1.80-GHz processor:	

Item	Component	Spare part number
	Equipped with 2.0-GB DDR3 system memory and a 32-GB eMMC hard drive	743816-001
	Equipped with 1.0-GB DDR3 system memory and a 16-GB eMMC hard drive	743815-001
<b>(11)</b>	<b>I/O board</b>	743829-001
<b>(12)</b>	<b>Speaker Kit</b> (includes left and right speakers and cables)	743819-001
<b>(13)</b>	<b>Power button board</b> (includes cable)	743928-001
<b>(14)</b>	<b>Volume button board</b> (includes cable and double-sided adhesive)	743831-001
<b>(15)</b>	<b>WLAN auxiliary antenna</b> (includes cable and transceiver)	746231-001
<b>(16)</b>	<b>GPS antenna</b> (includes cable and transceiver)	746229-001
<b>(17)</b>	<b>Display panel assembly</b> , 7.98-in, AntiGlare, LED, TouchScreen	745814-001

## Miscellaneous parts

Component	Spare part number
<b>AC adapter:</b>	
10-W, USB (non-PFC) AC adapter	743820-001
10-W AC adapter with plug for use only in Australia	745807-002
10-W AC adapter with plug for use only in Europe and South Korea	745807-009
10-W AC adapter with plug for use only in North America	745807-008
10-W AC adapter with plug for use only in the United Kingdom and Singapore	745807-003
<b>HP Slate8 Pro:</b>	
Equipped with an nVidia T40S quad core A15 1.80-GHz processor, 1.0-GB DDR3 system memory, and a 16-GB eMMC hard drive	743834-001
Equipped with an nVidia T40S quad core A15 1.80-GHz processor, 2.0-GB DDR3 system memory, and a 32-GB eMMC hard drive	743833-001
<b>Screw Kit</b>	746286-001
<b>USB extension cable</b>	743828-001

## Sequential part number listing

Spare part number	Description
743815-001	System board equipped with an nVidia T40S quad core A15 1.80-GHz processor, 1.0-GB DDR3 system memory, and a 16-GB eMMC hard drive
743816-001	System board equipped with an nVidia T40S quad core A15 1.80-GHz processor, 2.0-GB DDR3 system memory, and a 32-GB eMMC hard drive

<b>Spare part number</b>	<b>Description</b>
743817-001	1-MP front-facing webcam (includes cable)
743818-001	8-MP rear-facing webcam (includes cable)
743819-001	Speaker Kit (includes left and right speakers and cables)
743820-001	10-W, USB (non-PFC) AC adapter
743821-001	Battery, 2-cell, 21-WHr, 2.84-AHr, LI (includes cable)
743828-001	USB extension cable
743829-001	I/O board
743830-001	I/O board cable
743831-001	Volume button board (includes cable and double-sided adhesive)
743832-001	Display panel cable
743833-001	HP Slate8 Pro equipped with an nVidia T40S quad core A15 1.80-GHz processor, 1.0-GB DDR3 system memory, and a 16-GB eMMC hard drive
743834-001	HP Slate8 Pro equipped with an nVidia T40S quad core A15 1.80-GHz processor, 2.0-GB DDR3 system memory, and a 32-GB eMMC hard drive
743926-001	Back cover
743927-001	Microphone (includes cable)
743928-001	Power button board (includes cable)
745807-002	10-W AC adapter with plug for use only in Australia
745807-003	10-W AC adapter with plug for use only in the United Kingdom and Singapore
745807-008	10-W AC adapter with plug for use only in North America
745807-009	10-W AC adapter with plug for use only in Europe and South Korea
745814-001	7.98-in, AntiGlare, LED, TouchScreen display panel assembly
746229-001	GPS antenna (includes antenna cable and transceiver)
746230-001	WLAN main antenna (includes antenna cable and transceiver)
746231-001	WLAN auxilliary antenna (includes antenna cable and transceiver)
746232-001	LTE main antenna
746233-001	LTE auxilliary antenna
746286-001	Screw Kit

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# 4 Removal and replacement preliminary requirements

## Tools required


You will need the following tools to complete the removal and replacement procedures:

- Magnetic screw driver
- Phillips P0 screw driver
- Plastic case utility tool

## Service considerations

The following sections include some of the considerations that you must keep in mind during disassembly and assembly procedures.


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 **NOTE:** As you remove each subassembly from the tablet, place the subassembly (and all accompanying screws) away from the work area to prevent damage.

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## Plastic parts


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 **CAUTION:** Using excessive force during disassembly and reassembly can damage plastic parts. Use care when handling the plastic parts. Apply pressure only at the points designated in the maintenance instructions.

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## Cables and connectors

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 **CAUTION:** When servicing the tablet, be sure that cables are placed in their proper locations during the reassembly process. Improper cable placement can damage the tablet.

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Cables must be handled with extreme care to avoid damage. Apply only the tension required to unseat or seat the cables during removal and insertion. Handle cables by the connector whenever possible. In all cases, avoid bending, twisting, or tearing cables. Be sure that cables are routed in such a way that they cannot be caught or snagged by parts being removed or replaced. Handle flex cables with extreme care; these cables tear easily.

# Grounding guidelines

## Electrostatic discharge damage

Electronic components are sensitive to electrostatic discharge (ESD). Circuitry design and structure determine the degree of sensitivity. Networks built into many integrated circuits provide some protection, but in many cases, ESD contains enough power to alter device parameters or melt silicon junctions.

A discharge of static electricity from a finger or other conductor can destroy static-sensitive devices or microcircuitry. Even if the spark is neither felt nor heard, damage may have occurred.

An electronic device exposed to ESD may not be affected at all and can work perfectly throughout a normal cycle. Or the device may function normally for a while, then degrade in the internal layers, reducing its life expectancy.

**⚠ CAUTION:** To prevent damage to the tablet when you are removing or installing internal components, observe these precautions:

Keep components in their electrostatic-safe containers until you are ready to install them.

Before touching an electronic component, discharge static electricity by using the guidelines described in this section.

Avoid touching pins, leads, and circuitry. Handle electronic components as little as possible.

If you remove a component, place it in an electrostatic-safe container.

The following table shows how humidity affects the electrostatic voltage levels generated by different activities.

**⚠ CAUTION:** A product can be degraded by as little as 700 V.

Typical electrostatic voltage levels			
Event	Relative humidity		
	10%	40%	55%
Walking across carpet	35,000 V	15,000 V	7,500 V
Walking across vinyl floor	12,000 V	5,000 V	3,000 V
Motions of bench worker	6,000 V	800 V	400 V
Removing DIPS from plastic tube	2,000 V	700 V	400 V
Removing DIPS from vinyl tray	11,500 V	4,000 V	2,000 V
Removing DIPS from Styrofoam	14,500 V	5,000 V	3,500 V
Removing bubble pack from PCB	26,500 V	20,000 V	7,000 V
Packing PCBs in foam-lined box	21,000 V	11,000 V	5,000 V



## Packaging and transporting guidelines

Follow these grounding guidelines when packaging and transporting equipment:

- To avoid hand contact, transport products in static-safe tubes, bags, or boxes.
- Protect ESD-sensitive parts and assemblies with conductive or approved containers or packaging.
- Keep ESD-sensitive parts in their containers until the parts arrive at static-free workstations.
- Place items on a grounded surface before removing items from their containers.
- Always be properly grounded when touching a component or assembly.
- Store reusable ESD-sensitive parts from assemblies in protective packaging or nonconductive foam.
- Use transporters and conveyors made of antistatic belts and roller bushings. Be sure that mechanized equipment used for moving materials is wired to ground and that proper materials are selected to avoid static charging. When grounding is not possible, use an ionizer to dissipate electric charges.

## Workstation guidelines

Follow these grounding workstation guidelines:

- Cover the workstation with approved static-shielding material.
- Use a wrist strap connected to a properly grounded work surface and use properly grounded tools and equipment.
- Use conductive field service tools, such as cutters, screw drivers, and vacuums.
- When fixtures must directly contact dissipative surfaces, use fixtures made only of static-safe materials.
- Keep the work area free of nonconductive materials, such as ordinary plastic assembly aids and Styrofoam.
- Handle ESD-sensitive components, parts, and assemblies by the case or PCM laminate. Handle these items only at static-free workstations.
- Avoid contact with pins, leads, or circuitry.
- Turn off power and input signals before inserting or removing connectors or test equipment.

## Equipment guidelines

Grounding equipment must include either a wrist strap or a foot strap at a grounded workstation.

- When seated, wear a wrist strap connected to a grounded system. Wrist straps are flexible straps with a minimum of one megohm  $\pm 10\%$  resistance in the ground cords. To provide proper ground, wear a strap snugly against the skin at all times. On grounded mats with banana-plug connectors, use alligator clips to connect a wrist strap.
- When standing, use foot straps and a grounded floor mat. Foot straps (heel, toe, or boot straps) can be used at standing workstations and are compatible with most types of shoes or boots. On conductive floors or dissipative floor mats, use foot straps on both feet with a minimum of one megohm resistance between the operator and ground. To be effective, the conductive must be worn in contact with the skin.

The following grounding equipment is recommended to prevent electrostatic damage:

- Antistatic tape
- Antistatic smocks, aprons, and sleeve protectors
- Conductive bins and other assembly or soldering aids
- Nonconductive foam
- Conductive tabletop workstations with ground cords of one megohm resistance
- Static-dissipative tables or floor mats with hard ties to the ground
- Field service kits
- Static awareness labels
- Material-handling packages
- Nonconductive plastic bags, tubes, or boxes
- Metal tote boxes
- Electrostatic voltage levels and protective materials

The following table lists the shielding protection provided by antistatic bags and floor mats.

<b>Material</b>	<b>Use</b>	<b>Voltage protection level</b>
Antistatic plastics	Bags	1,500 V
Carbon-loaded plastic	Floor mats	7,500 V
Metallized laminate	Floor mats	5,000 V

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# 5 Removal and replacement procedures

## Tablet component replacement procedures

**⚠ CAUTION:** Tablet components described in this chapter should only be accessed by an authorized service provider. Accessing these parts can damage the tablet and void the warranty.

This chapter provides removal and replacement procedures for authorized service provider only parts.

There are as many as 14 screws that must be removed, replaced, and/or loosened when servicing the tablet. Make special note of each screw size and location during removal and replacement.

### Back cover

Description	Spare part number
Back cover	743926-001
Display panel assembly, 7.98-in, AntiGlare, LED, TouchScreen	745814-001

Before disassembling the tablet, follow these steps:

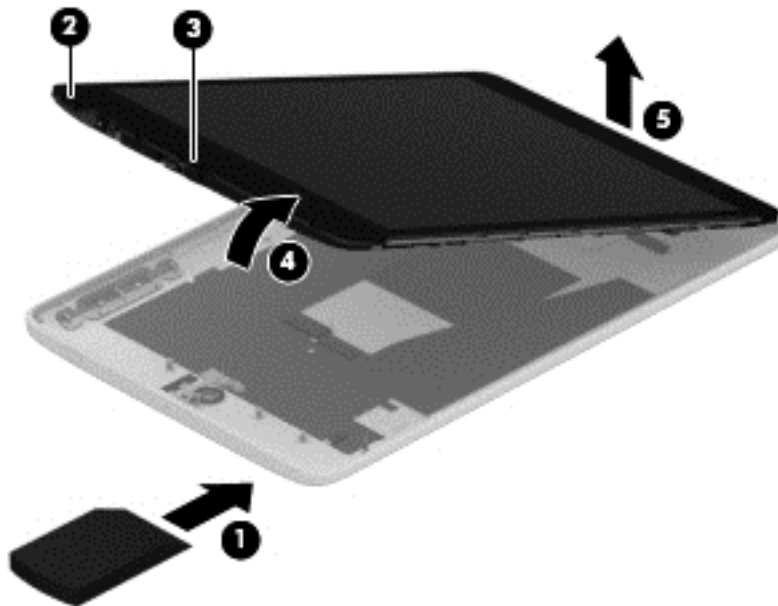
1. Turn off the tablet. If you are unsure whether the tablet is off or in Hibernation, turn the tablet on, and then shut it down through the operating system.
2. Disconnect the power from the tablet by unplugging the power cord from the tablet.
3. Disconnect all external devices from the tablet.

Remove the back cover:

1. Place the tablet on a flat surface, display panel side up, with the SIM slot and SD Card slot toward you.
2. Insert a thin, plastic tool **(1)** between the back cover and the display panel assembly. The first insertion point should be in the top edge of the tablet away from the power button and microphone area.

**⚠ CAUTION:** When inserting the plastic tool into the tablet as described in Step 2, make sure not to insert the tool into the power button **(2)** or microphone **(3)** areas. Failure to follow this caution can result in damage to the tablet.

3. Lift the top edge of the back cover **(4)** until it separates from the display panel assembly.
4. Remove the back cover **(5)**.



Reverse this procedure to install the back cover.

## Display panel cable

Description	Spare part number
Display panel cable	743832-001

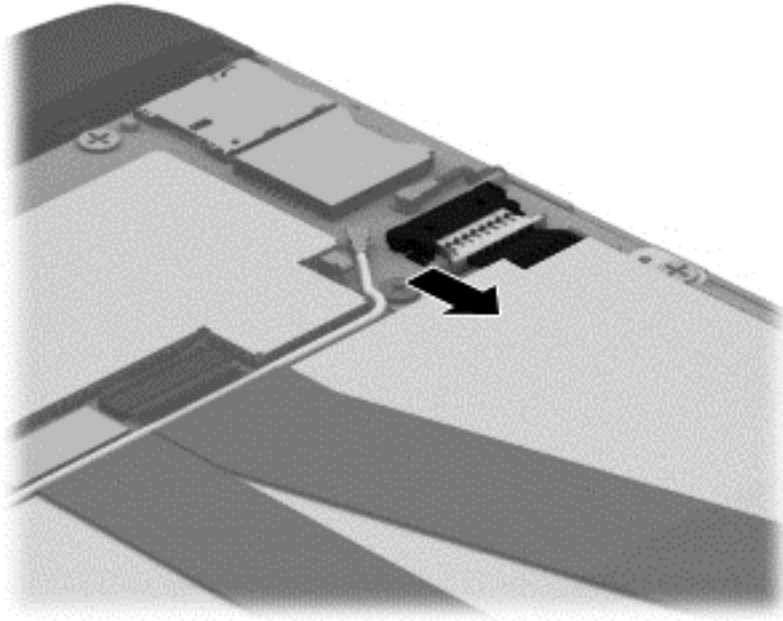
Before removing the display panel cable, follow these steps:

1. Turn off the tablet. If you are unsure whether the tablet is off or in Hibernation, turn the tablet on, and then shut it down through the operating system.
2. Disconnect the power from the tablet by unplugging the power cord from the tablet.

3. Disconnect all external devices from the tablet.
4. Remove the back cover (see [Back cover on page 13](#)).

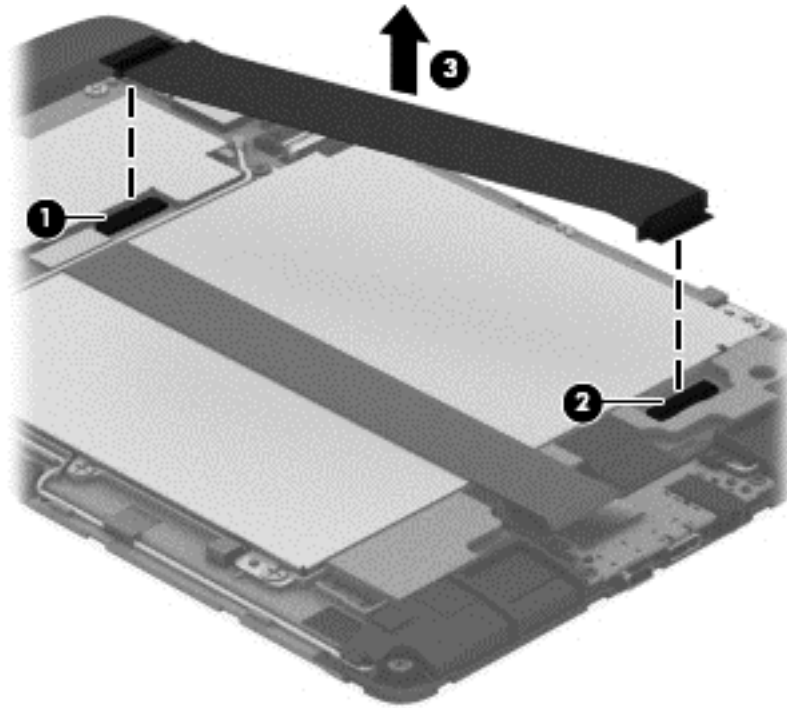
Remove the display panel cable:

1. Disconnect the battery cable from the system board.



2. Release the zero insertion force (ZIF) connector **(1)** to which the display panel cable is attached, and then disconnect the display panel cable from the system board.
3. Release the ZIF connector **(2)** to which the display panel cable is attached, and then disconnect the display panel cable from the display panel assembly.

4. Remove the display panel cable (3).



Reverse this procedure to install the display panel cable.

## I/O board cable

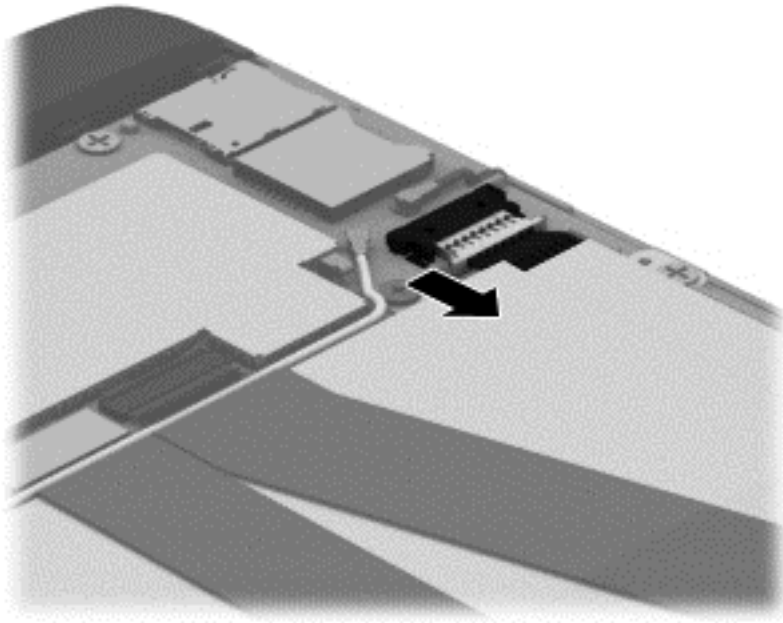
Description	Spare part number
I/O board cable	743830-001

Before removing the I/O board cable, follow these steps:

1. Turn off the tablet. If you are unsure whether the tablet is off or in Hibernation, turn the tablet on, and then shut it down through the operating system.
2. Disconnect the power from the tablet by unplugging the power cord from the tablet.
3. Disconnect all external devices from the tablet.
4. Remove the back cover (see [Back cover on page 13](#)).

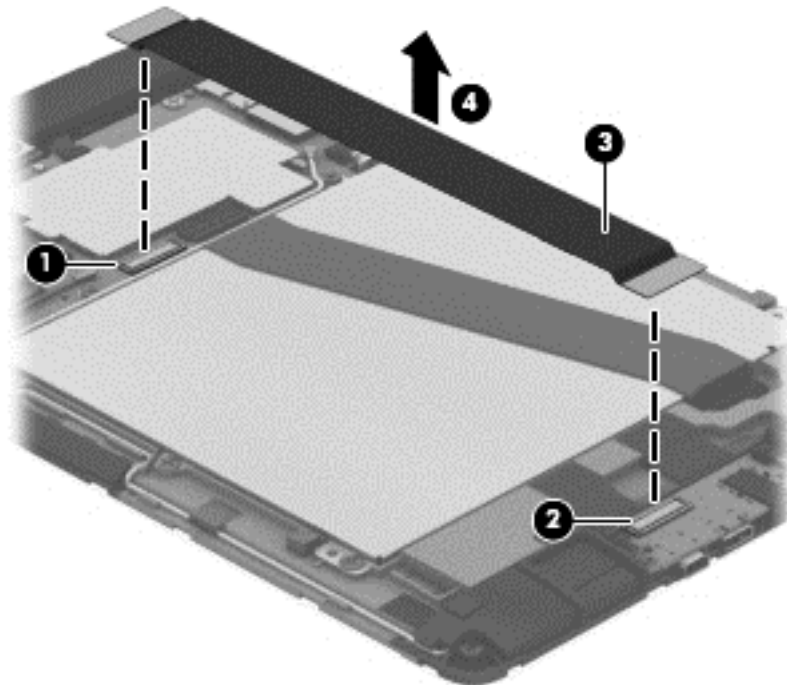
Remove the I/O board cable:

1. Disconnect the battery cable from the system board.



2. Release the ZIF connector **(1)** to which the I/O board cable is attached, and then disconnect the I/O board cable from the system board.
3. Release the ZIF connector **(2)** to which the I/O board cable is attached, and then disconnect the I/O board cable from the I/O board.

4. Remove the I/O board cable (3).



Reverse this procedure to install the I/O board cable.

## Battery

Description	Spare part number
Battery, 2-cell, 21-WHr, 2.84-AHr, LI (includes cable)	743821-001

Before removing the battery, follow these steps:

1. Turn off the tablet. If you are unsure whether the tablet is off or in Hibernation, turn the tablet on, and then shut it down through the operating system.
2. Disconnect the power from the tablet by unplugging the power cord from the tablet.
3. Disconnect all external devices from the tablet.
4. Remove the back cover (see [Back cover on page 13](#)).
5. Remove the display panel cable (see [Display panel cable on page 14](#)).
6. Remove the I/O board cable (see [I/O board cable on page 16](#)).

**⚠ WARNING!** To reduce potential safety issues, use only the battery provided with the tablet, a replacement battery provided by HP, or a compatible battery purchased from HP.

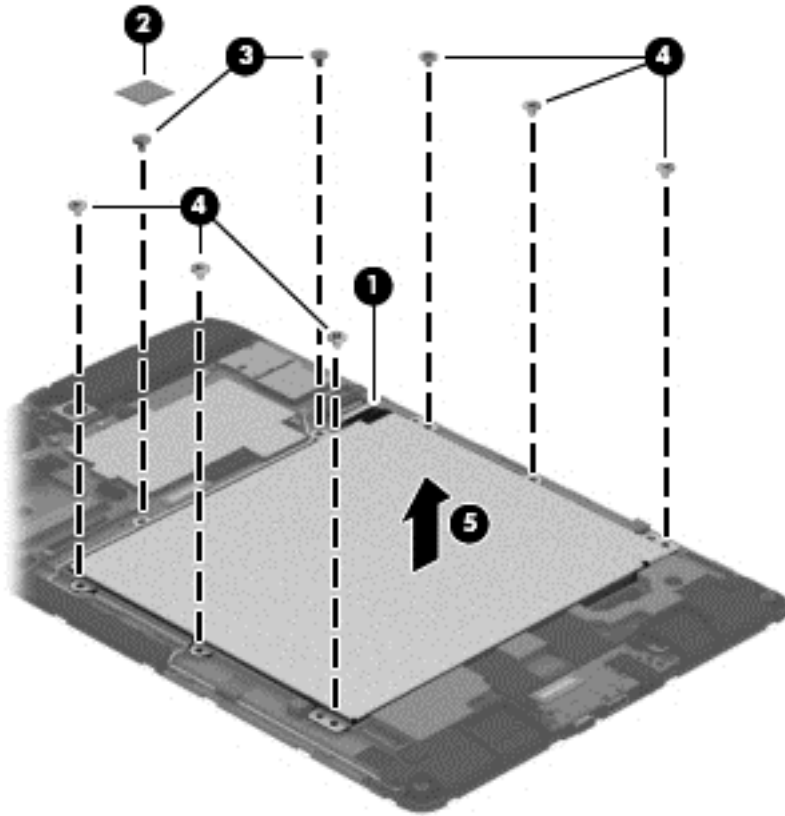


**⚠ CAUTION:** Removing a battery that is the sole power source for the tablet can cause loss of information. To prevent loss of information, save your work or shut down the tablet through Windows before removing the battery.

---

Remove the battery:

1. Disconnect the battery cable **(1)** from the system board.
2. Remove the warranty tag **(2)** that covers the battery retention screw.
3. Remove the two Phillips PM1.5×3.0 screws **(3)** and the six Phillips PM1.5×2.5 screws **(4)** that secure the battery to the display panel assembly.
4. Remove the battery **(5)**.



Reverse this procedure to install the battery.

# I/O board

Description	Spare part number
I/O board	743829-001

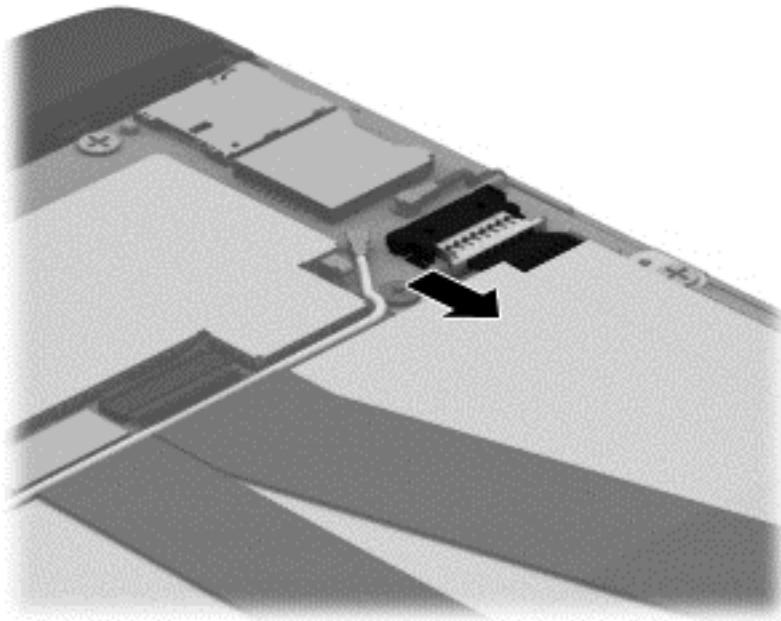
**NOTE:** The I/O board spare part kit does not include the I/O board cable. The I/O board cable is available using spare part number 743830-001.

Before removing the I/O board, follow these steps:

1. Turn off the tablet. If you are unsure whether the tablet is off or in Hibernation, turn the tablet on, and then shut it down through the operating system.
2. Disconnect the power from the tablet by unplugging the power cord from the tablet.
3. Disconnect all external devices from the tablet.
4. Remove the back cover (see [Back cover on page 13](#)).

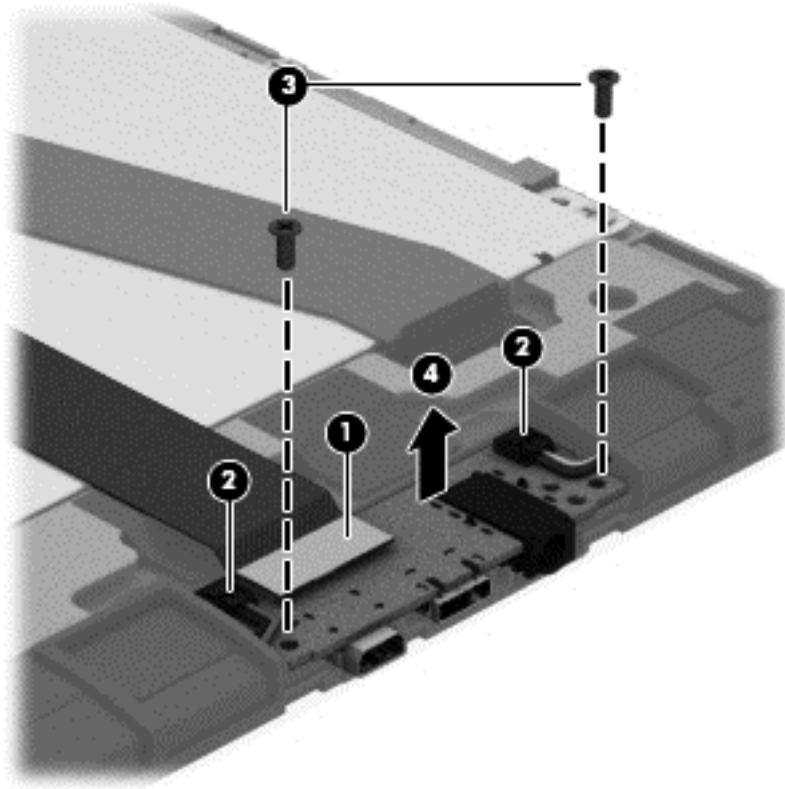
Remove the I/O board:

1. Disconnect the battery cable from the system board.



2. Release the ZIF connector **(1)** to which the I/O board cable is attached, and then disconnect the I/O board cable from the I/O board.
3. Disconnect the speaker cables **(2)** from the I/O board.
4. Remove the two Phillips PM1.5×4.0 screws **(3)** that secure the I/O board to the display panel assembly.

5. Remove the I/O board (4).



Reverse this procedure to install the I/O board.

## Speakers

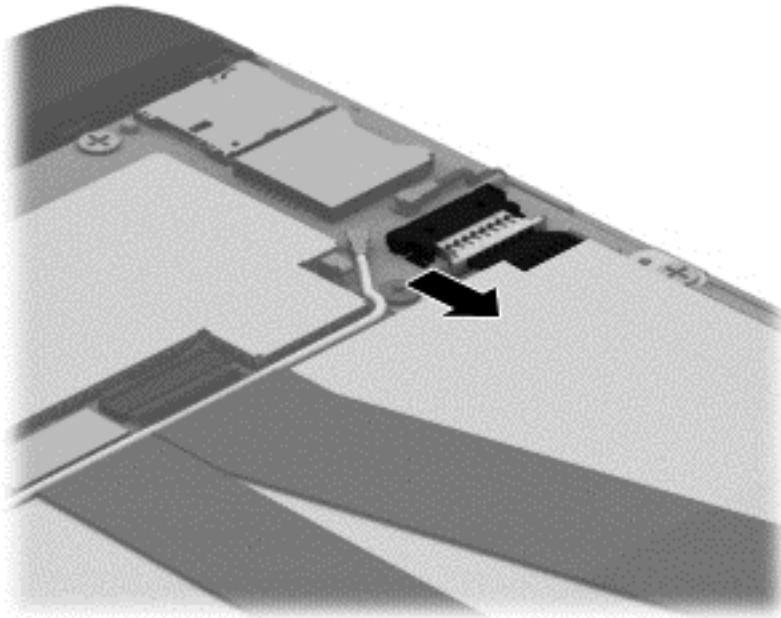
Description	Spare part number
Speaker Kit (includes left and right speakers and cables)	743819-001

Before removing the speakers, follow these steps:

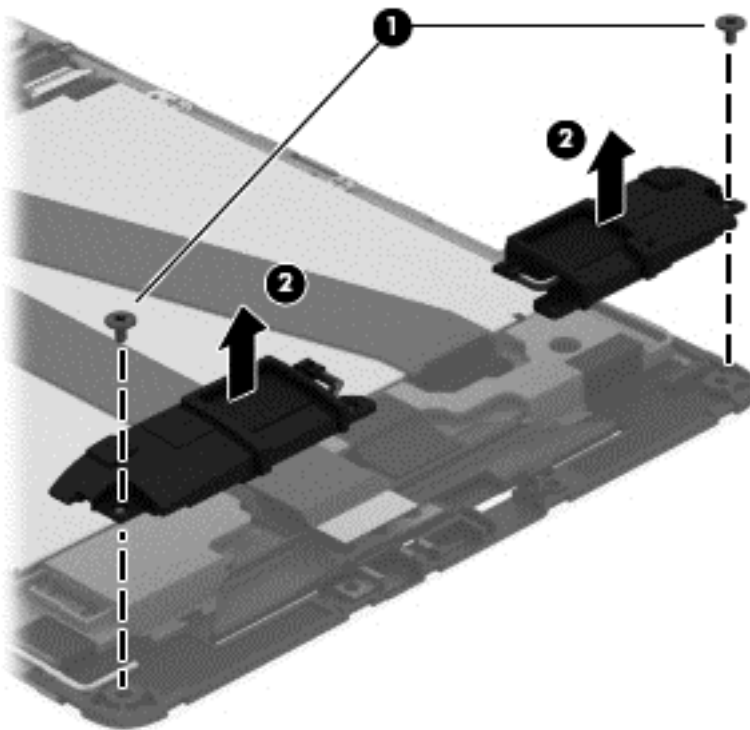
1. Turn off the tablet. If you are unsure whether the tablet is off or in Hibernation, turn the tablet on, and then shut it down through the operating system.
2. Disconnect the power from the tablet by unplugging the power cord from the tablet.
3. Disconnect all external devices from the tablet.
4. Remove the back cover (see [Back cover on page 13](#)).
5. Remove the I/O board (see [I/O board on page 20](#)).

Remove the speakers:

1. Disconnect the battery cable from the system board.



2. Remove the two Phillips PM1.5x3.0 screws (1) that secure the speakers to the display panel assembly.
3. Remove the speakers (2).



Reverse this procedure to install the speakers.

## WLAN antenna

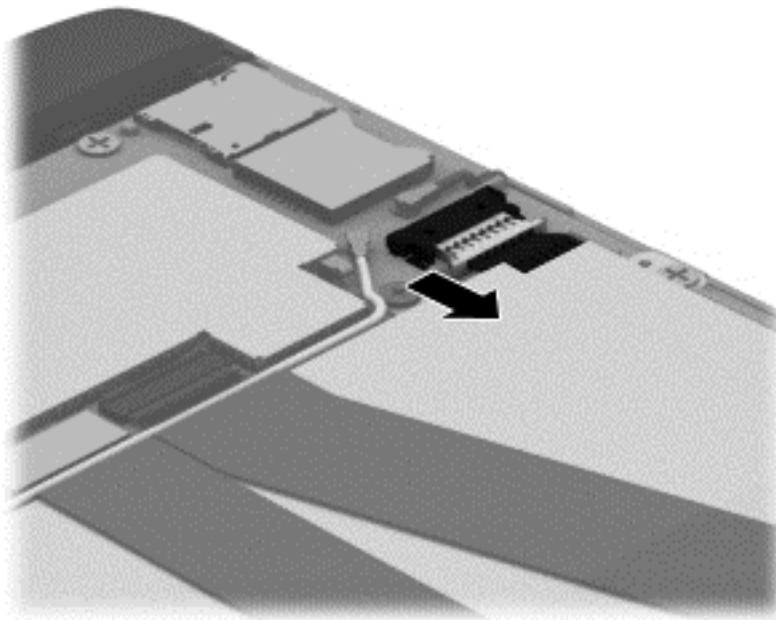
Description	Spare part number
WLAN main antenna (includes cable and transceiver)	746230-001
WLAN auxilliary antenna (includes cable and transceiver)	746231-001

Before removing the WLAN antenna, follow these steps:

1. Turn off the tablet. If you are unsure whether the tablet is off or in Hibernation, turn the tablet on, and then shut it down through the operating system.
2. Disconnect the power from the tablet by unplugging the power cord from the tablet.
3. Disconnect all external devices from the tablet.
4. Remove the back cover (see [Back cover on page 13](#)).

Remove the WLAN antenna:

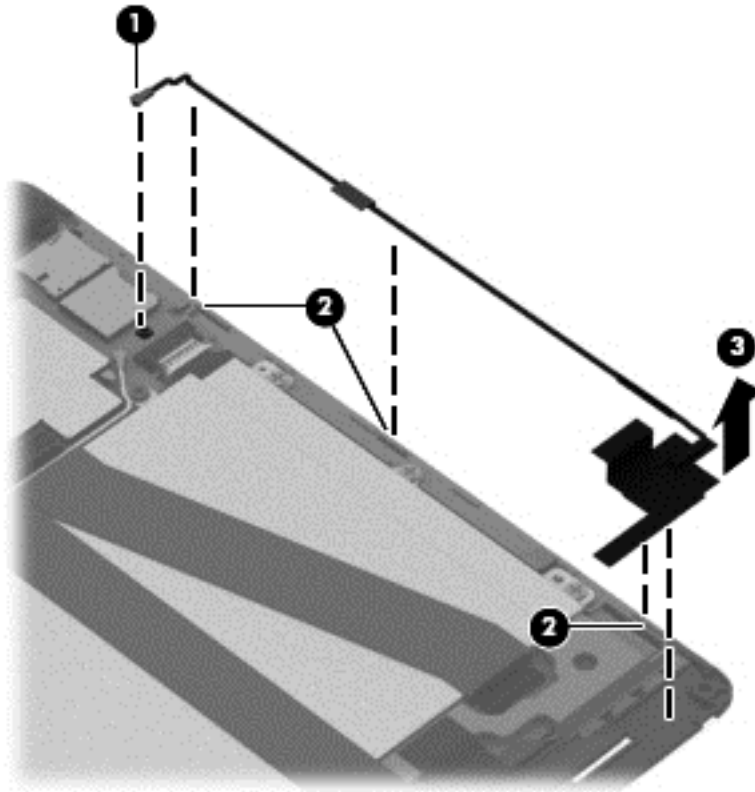
1. Disconnect the battery cable from the system board.




**NOTE:** Steps 2 through 5 contain WLAN main antenna removal information. See steps 6 through 9 for WLAN auxilliary antenna removal information.

2. Disconnect the WLAN main antenna cable **(1)** from the main terminal on the system board.
3. Release the WLAN main antenna cable from the routing clips **(2)** and channel built into the display panel assembly.

4. Detach the WLAN main antenna transceiver **(3)** from the display panel assembly. (The WLAN main antenna transceiver is attached to the display panel assembly with double-sided adhesive.)

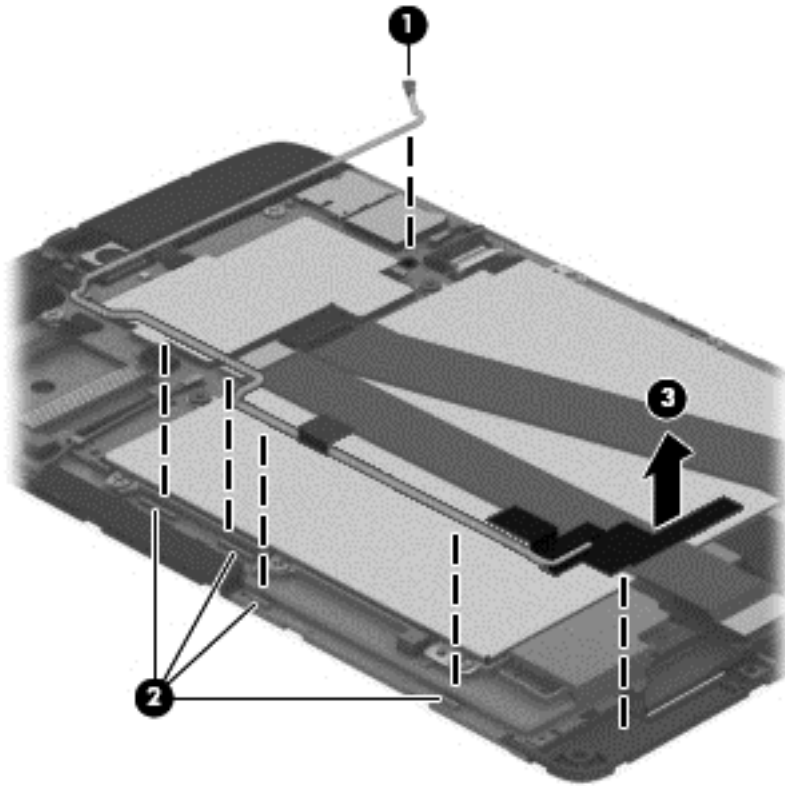


5. Remove the WLAN main antenna transceiver and cable.

 **NOTE:** Steps 6 through 9 contain WLAN auxilliary antenna removal information. See steps 2 through 5 for WLAN main antenna removal information.

6. Disconnect the WLAN auxilliary antenna cable **(1)** from the auxilliary terminal on the system board.
7. Release the WLAN auxilliary antenna cable from the routing clips **(2)** and channel built into the display panel assembly.

8. Detach the WLAN auxilliary antenna transceiver (**3**) from the display panel assembly. (The WLAN auxilliary antenna transceiver is attached to the display panel assembly with double-sided adhesive.)



9. Remove the WLAN auxilliary antenna transceiver and cable.  
Reverse this procedure to install the WLAN antenna.

## GPS antenna

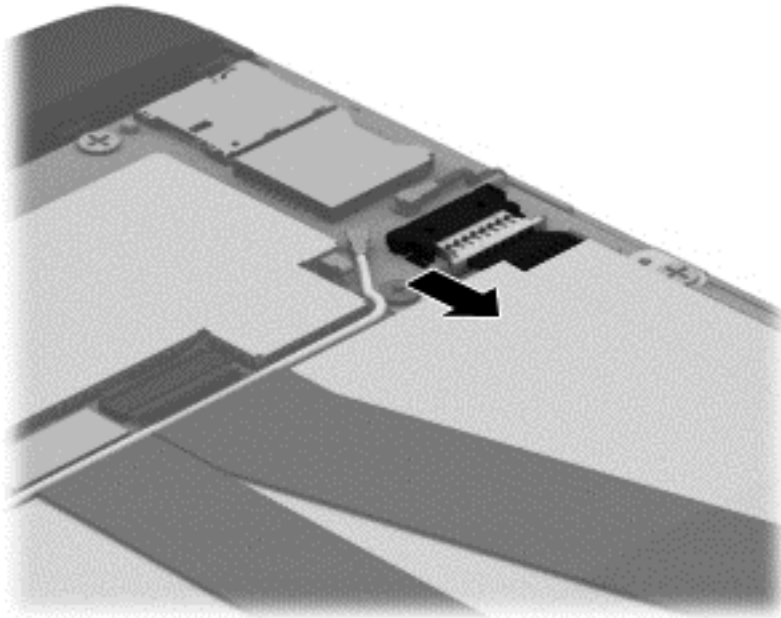
Description	Spare part number
GPS antenna (includes cable and transceiver)	746229-001

Before removing the GPS antenna, follow these steps:

1. Turn off the tablet. If you are unsure whether the tablet is off or in Hibernation, turn the tablet on, and then shut it down through the operating system.
2. Disconnect the power from the tablet by unplugging the power cord from the tablet.
3. Disconnect all external devices from the tablet.
4. Remove the back cover (see [Back cover on page 13](#)).

Remove the GPS antenna:

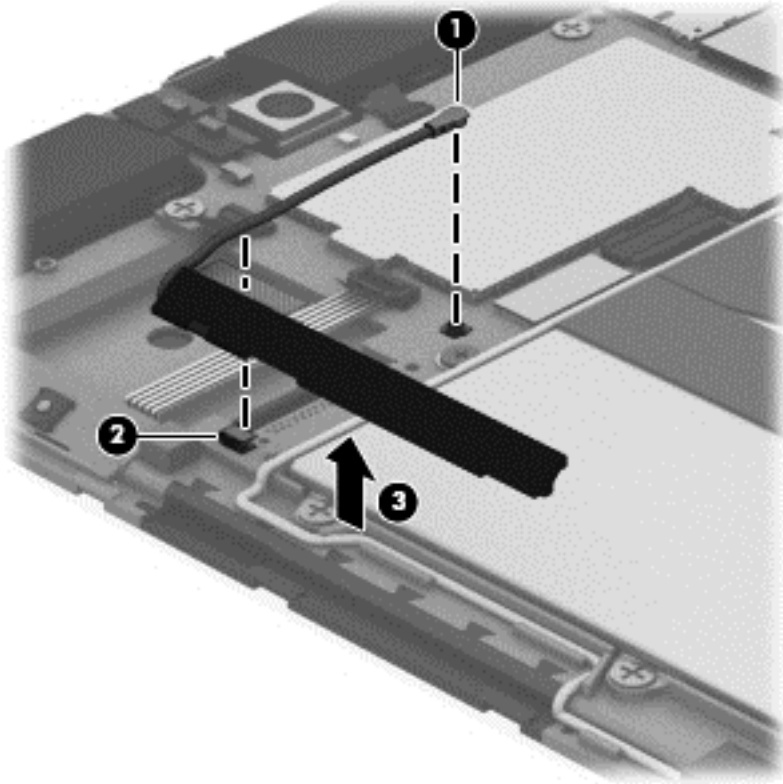
1. Disconnect the battery cable from the system board.



2. Disconnect the GPS antenna cable **(1)** from the GPS terminal on the system board.
3. Release the GPS antenna cable from the routing clip **(2)** built into the display panel assembly.



4. Detach the GPS antenna transceiver **(3)** from the display panel assembly. (The GPS antenna transceiver is attached to the display panel assembly with double-sided adhesive.)



5. Remove the GPS antenna transceiver and cable.

Reverse this procedure to install the GPS antenna.

## Microphone

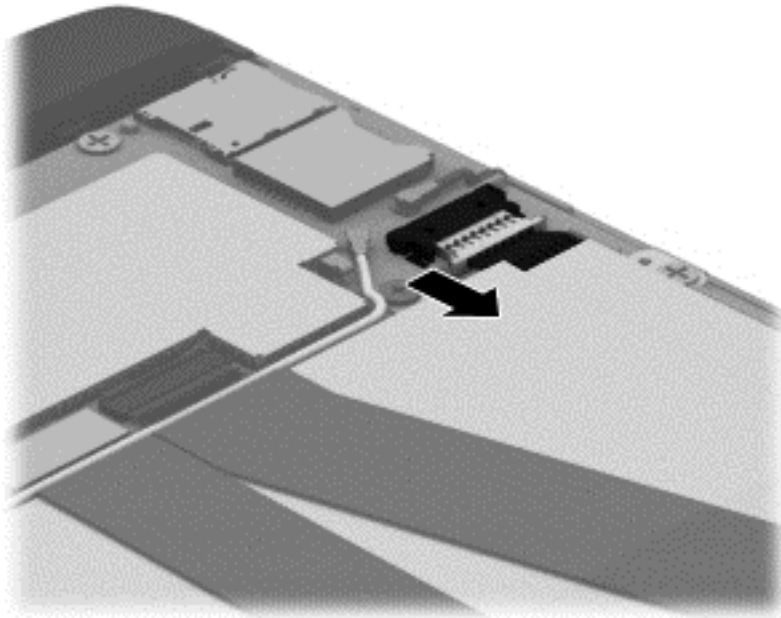
Description	Spare part number
Microphone (includes cable)	743927-001

Before removing the microphone, follow these steps:

1. Turn off the tablet. If you are unsure whether the tablet is off or in Hibernation, turn the tablet on, and then shut it down through the operating system.
2. Disconnect the power from the tablet by unplugging the power cord from the tablet.
3. Disconnect all external devices from the tablet.
4. Remove the back cover (see [Back cover on page 13](#)).

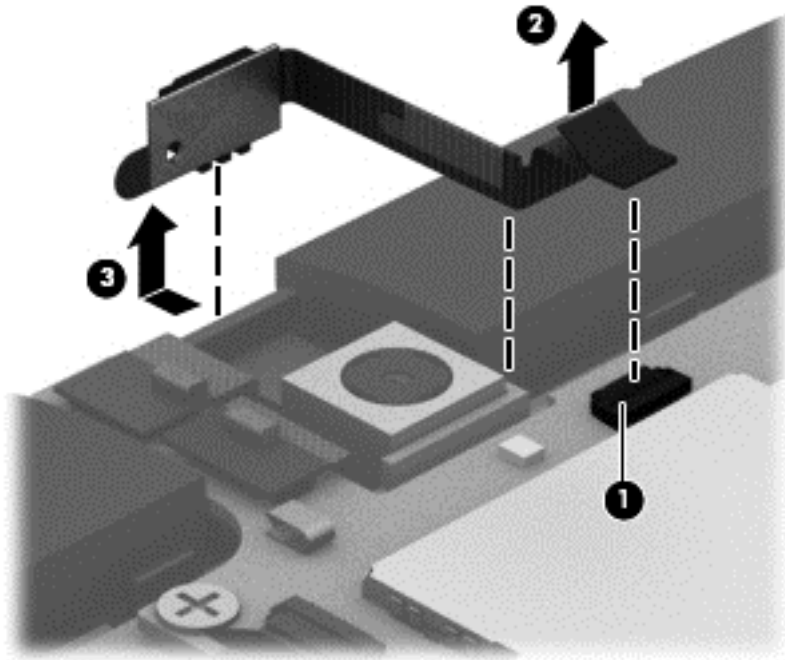
Remove the microphone:

1. Disconnect the battery cable from the system board.



2. Release the ZIF connector **(1)** to which the microphone cable is attached, and then disconnect the microphone cable from the system board.
3. Detach the microphone cable **(2)** from the display panel assembly. (The microphone cable is attached to the display panel assembly with double-sided adhesive.)

4. Detach the microphone (3) from the display panel assembly. (The microphone is attached to the display panel assembly with double-sided adhesive.)



5. Remove the microphone and cable.

Reverse this procedure to install the microphone.

## Rear-facing webcam

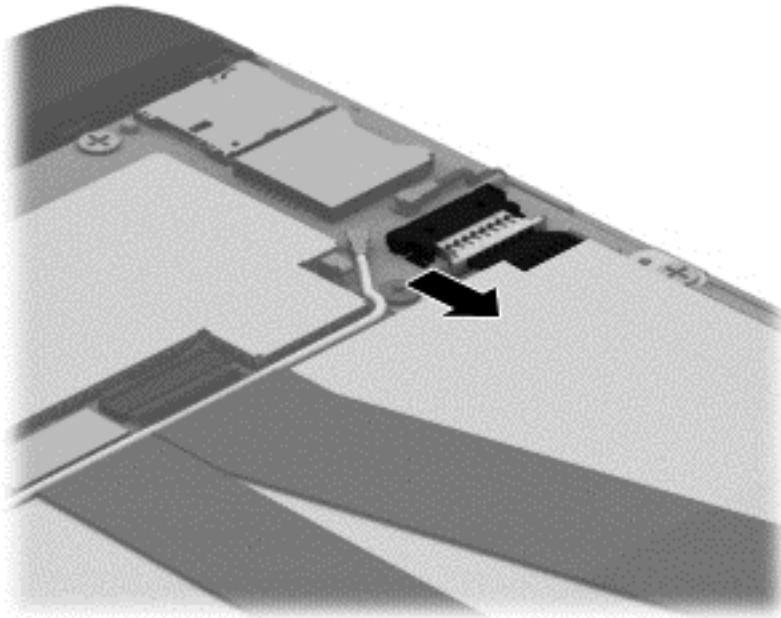
Description	Spare part number
Rear-facing webcam (includes cable)	743818-001

Before removing the rear-facing webcam, follow these steps:

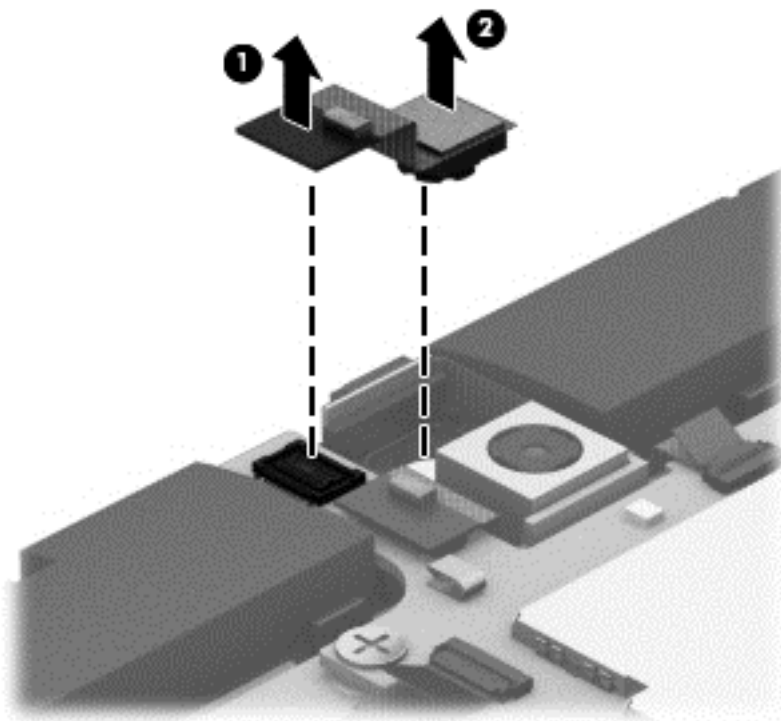
1. Turn off the tablet. If you are unsure whether the tablet is off or in Hibernation, turn the tablet on, and then shut it down through the operating system.
2. Disconnect the power from the tablet by unplugging the power cord from the tablet.
3. Disconnect all external devices from the tablet.
4. Remove the back cover (see [Back cover on page 13](#)).

Remove the rear-facing webcam:

1. Disconnect the battery cable from the system board.



2. Disconnect the rear-facing webcam cable (1) from the system board.
3. Release the rear-facing webcam (2) from the molding built into the display panel assembly.



4. Remove the rear-facing webcam and cable.

Reverse this procedure to install the rear-facing webcam.

## Front-facing webcam

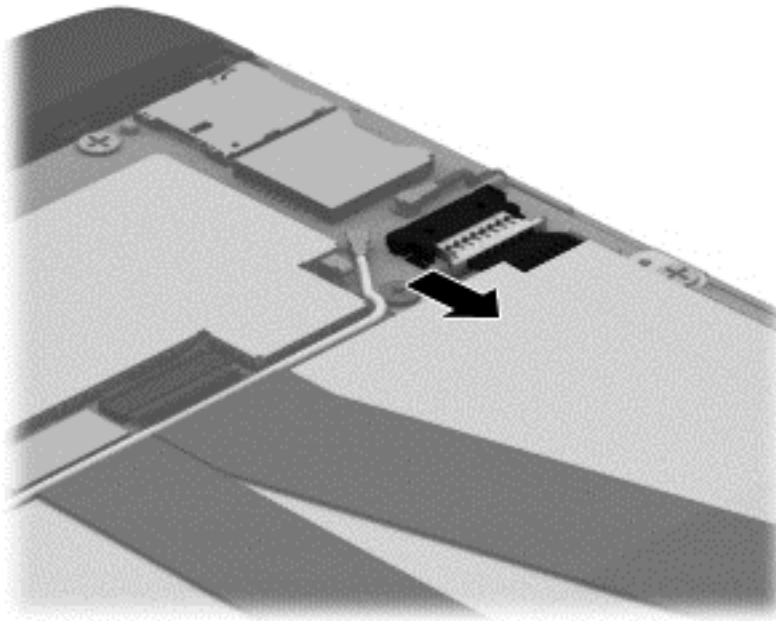
Description	Spare part number
Front-facing webcam (includes cable)	743817-001

Before removing the front-facing webcam, follow these steps:

1. Turn off the tablet. If you are unsure whether the tablet is off or in Hibernation, turn the tablet on, and then shut it down through the operating system.
2. Disconnect the power from the tablet by unplugging the power cord from the tablet.
3. Disconnect all external devices from the tablet.
4. Remove the back cover (see [Back cover on page 13](#)).

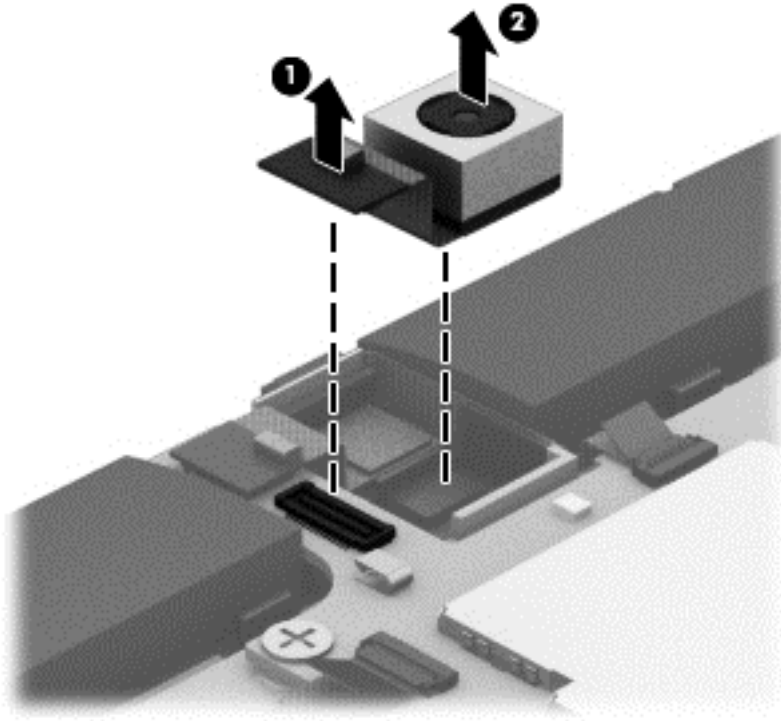
Remove the front-facing webcam:

1. Disconnect the battery cable from the system board.



2. Disconnect the front-facing webcam cable (1) from the system board.

3. Detach the front-facing webcamera **(2)** from the display panel assembly. (The front-facing webcamera is attached to the display panel assembly with double-sided adhesive.)



4. Remove the front-facing webcamera and cable.

Reverse this procedure to install the front-facing webcamera.

## Power button board

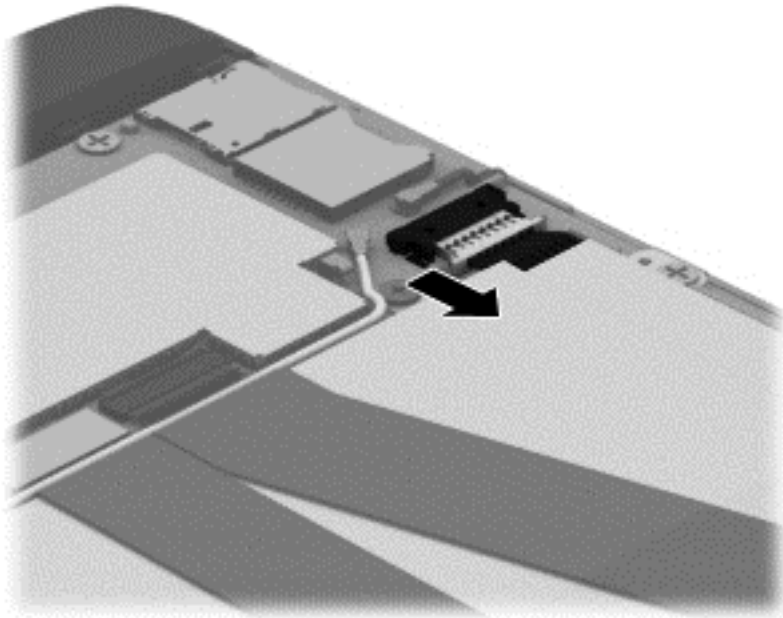
Description	Spare part number
Power button board (includes cable)	743928-001

Before removing the power button board, follow these steps:

1. Turn off the tablet. If you are unsure whether the tablet is off or in Hibernation, turn the tablet on, and then shut it down through the operating system.
2. Disconnect the power from the tablet by unplugging the power cord from the tablet.
3. Disconnect all external devices from the tablet.
4. Remove the back cover (see [Back cover on page 13](#)).

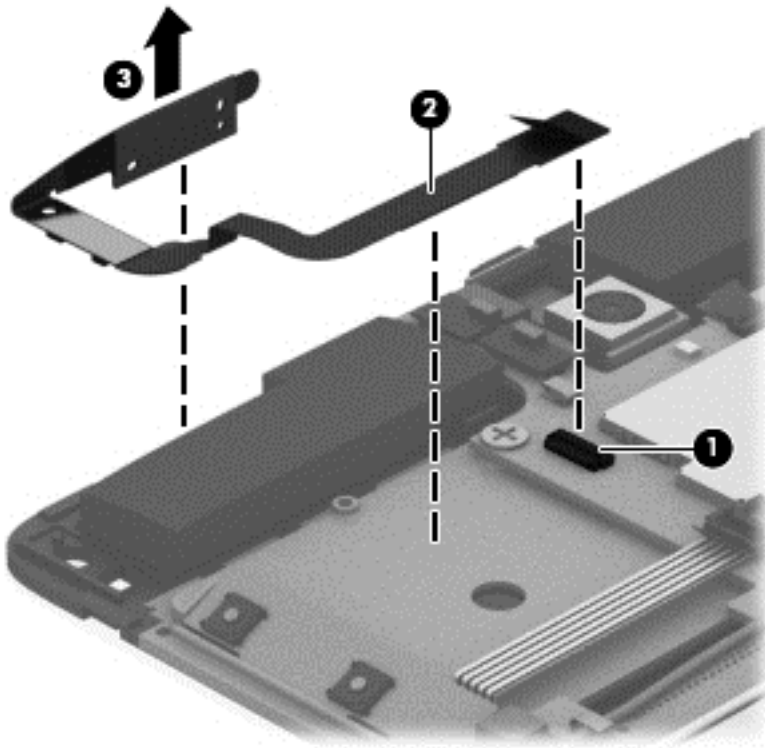
Remove the power button board:

1. Disconnect the battery cable from the system board.



2. Release the ZIF connector **(1)** to which the power button board cable is attached, and then disconnect the power button board cable from the system board.
3. Detach the power button board cable **(2)** from the display panel assembly. (The power button board cable is attached to the display panel assembly with double-sided adhesive.)

4. Remove the power button board (3) and cable.



Reverse this procedure to install the power button board and cable.



# Volume button board

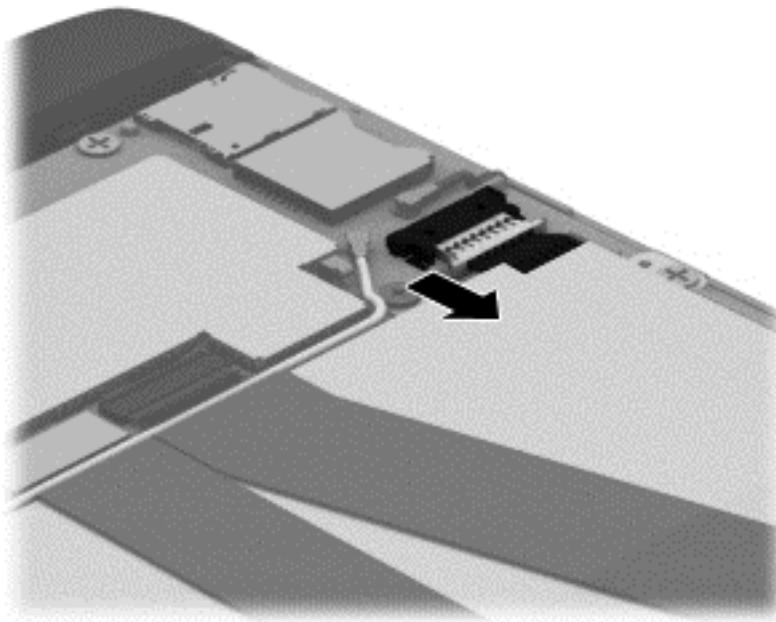
Description	Spare part number
Volume button board (includes cable)	743831-001

Before removing the volume button board, follow these steps:

1. Turn off the tablet. If you are unsure whether the tablet is off or in Hibernation, turn the tablet on, and then shut it down through the operating system.
2. Disconnect the power from the tablet by unplugging the power cord from the tablet.
3. Disconnect all external devices from the tablet.
4. Remove the back cover (see [Back cover on page 13](#)).

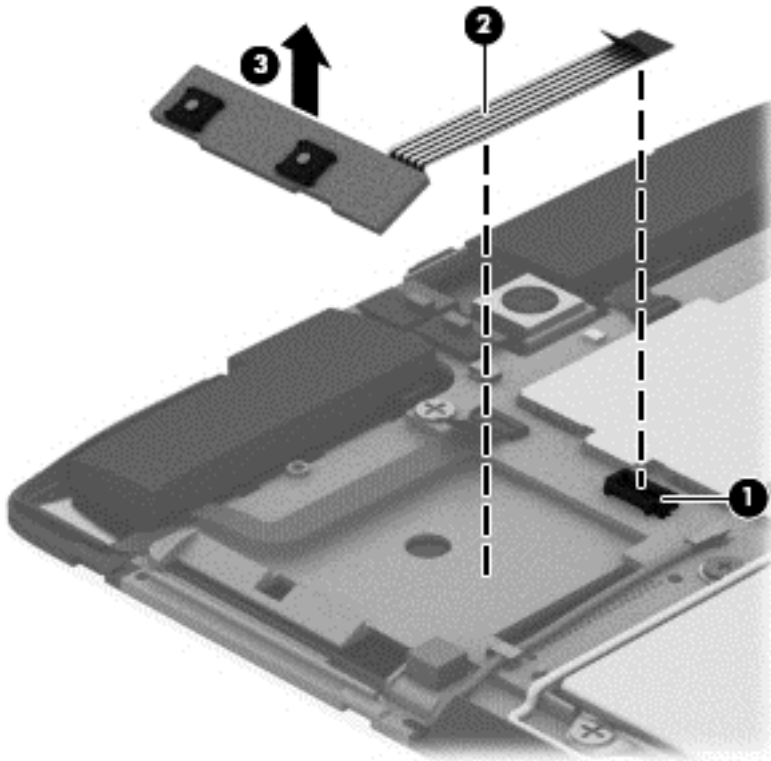
Remove the volume button board:

1. Disconnect the battery cable from the system board.



2. Release the ZIF connector **(1)** to which the volume button board cable is attached, and then disconnect the volume button board cable from the system board.
3. Detach the volume button board cable **(2)** from the display panel assembly. (The volume button board cable is attached to the display panel assembly with double-sided adhesive.)

4. Detach the volume button board **(3)** from the display panel assembly. (The volume button board is attached to the display panel assembly with double-sided adhesive.)



5. Remove the volume button board and cable.

Reverse this procedure to install the volume button board.

# LTE antenna

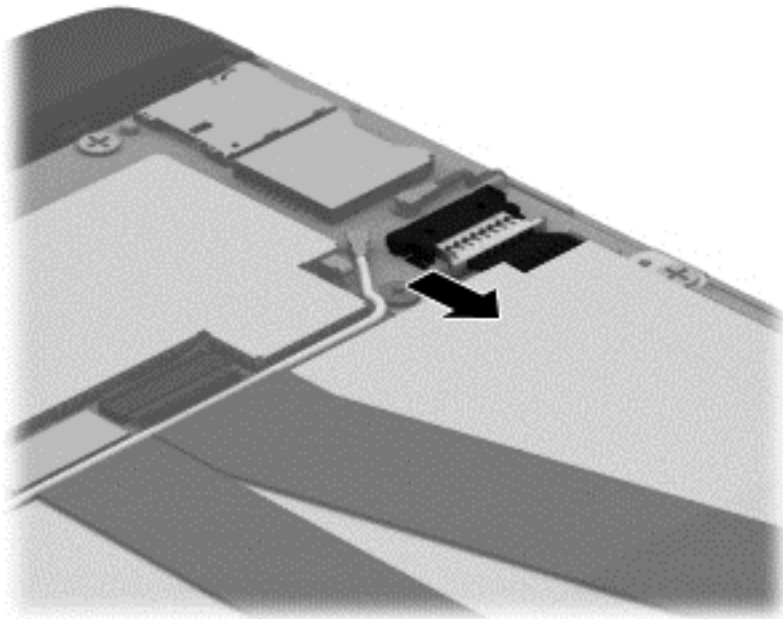
Description	Spare part number
LTE main antenna	746232-001
LTE auxilliary antenna	746233-001

Before removing the LTE antenna, follow these steps:

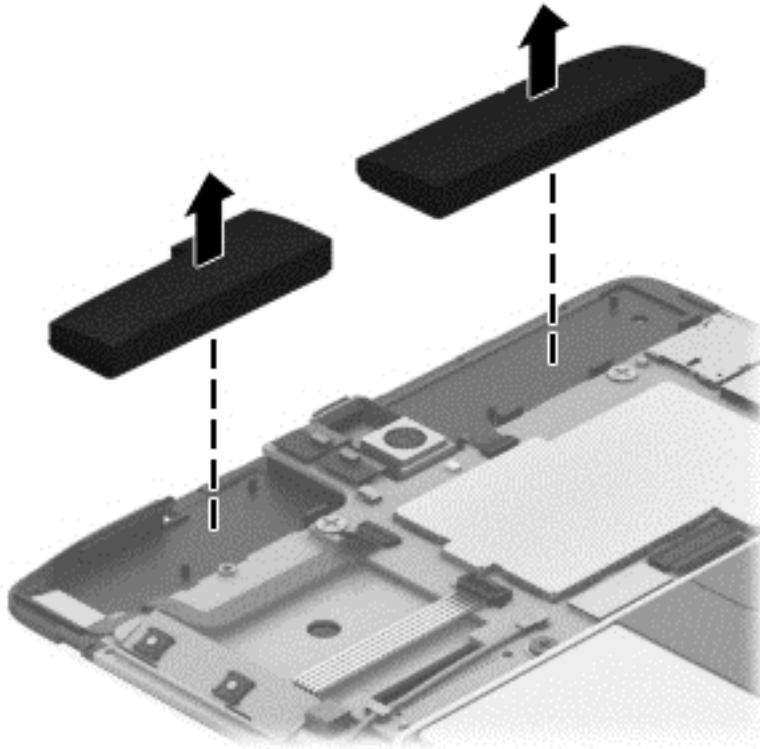
1. Turn off the tablet. If you are unsure whether the tablet is off or in Hibernation, turn the tablet on, and then shut it down through the operating system.
2. Disconnect the power from the tablet by unplugging the power cord from the tablet.
3. Disconnect all external devices from the tablet.
4. Remove the back cover (see [Back cover on page 13](#)).

Remove the LTE antenna:

1. Disconnect the battery cable from the system board.



2. Detach the LTE main and auxiliary antenna transceivers from the display panel assembly. (The LTE antenna transceivers are attached to the display panel assembly with double-sided adhesive.)



3. Remove the LTE main and auxiliary antenna transceivers.

Reverse this procedure to install the LTE main and auxiliary antenna transceivers.

## System board

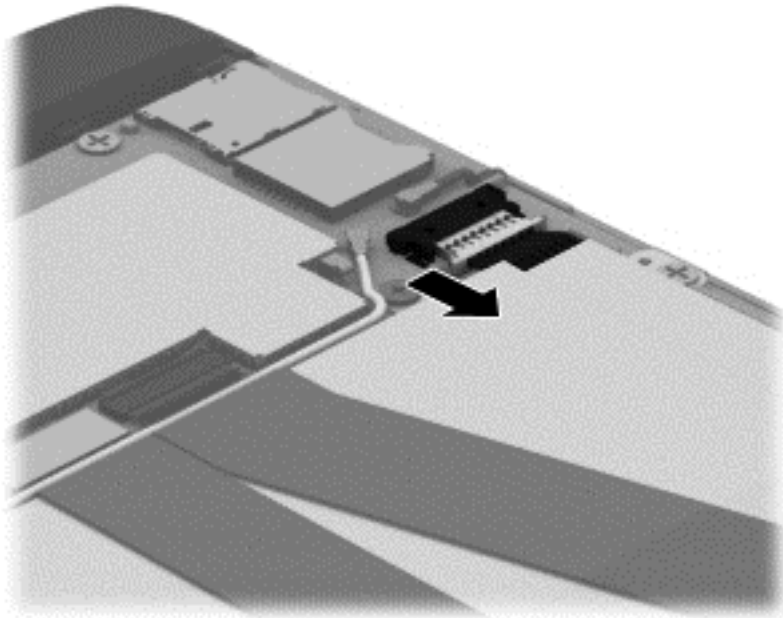
Description	Spare part number
System board equipped with an nVidia T40S quad core A15 1.80-GHz processor, 2.0-GB DDR3 system memory, and a 32-GB eMMC hard drive	743816-001
System board equipped with an nVidia T40S quad core A15 1.80-GHz processor, 1.0-GB DDR3 system memory, and a 16-GB eMMC hard drive	743815-001

Before removing the system board, follow these steps:

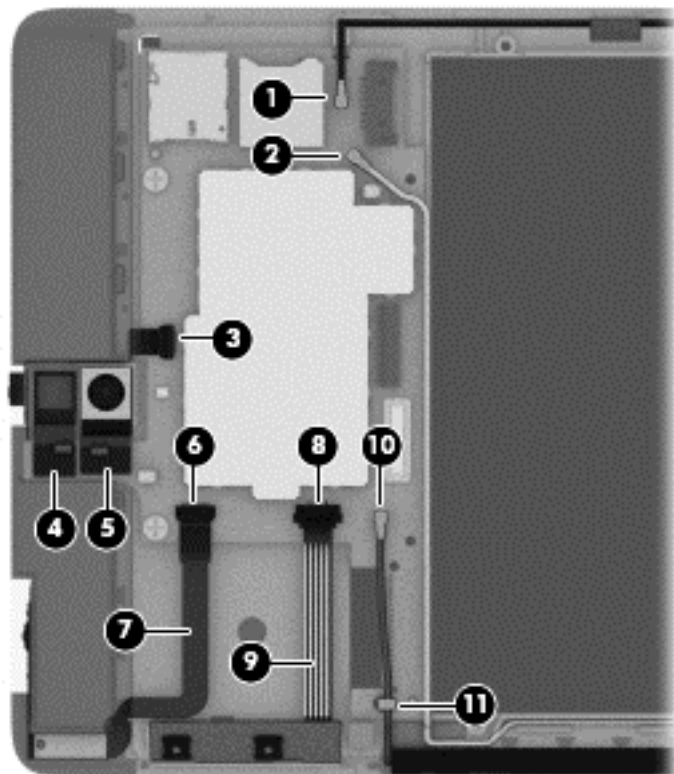
1. Turn off the tablet. If you are unsure whether the tablet is off or in Hibernation, turn the tablet on, and then shut it down through the operating system.
2. Disconnect the power from the tablet by unplugging the power cord from the tablet.
3. Disconnect all external devices from the tablet.
4. Remove the back cover (see [Back cover on page 13](#)).

Remove the system board:

1. Disconnect the battery cable from the system board.

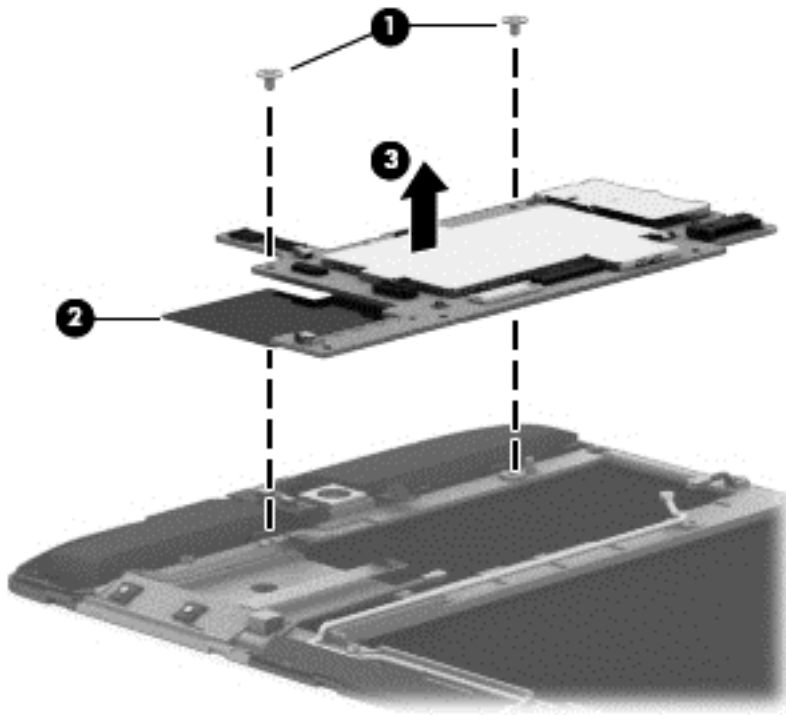


2. Disconnect the following cables from the system board:
  - (1) WLAN main antenna cable (see [WLAN antenna on page 23](#))
  - (2) WLAN auxilliary antenna cable (see [WLAN antenna on page 23](#))
  - (3) Microphone ZIF cable and connector (see [Microphone on page 27](#))
  - (4) Rear-facing webcam cable (see [Rear-facing webcam on page 29](#))
  - (5) Front-facing webcam cable (see [Front-facing webcam on page 31](#))
  - (6) Power button board ZIF cable and connector, and detach the power button board cable (7) from the display panel assembly. (The power button board cable is attached to the display panel assembly with double-sided adhesive; see [Power button board on page 32](#))
  - (8) Volume button board ZIF cable and connector, and detach the volume button board cable (9) from the display panel assembly. (The volume button board cable is attached to the display panel assembly with double-sided adhesive; see [Volume button board on page 35](#))
  - (10) GPS antenna cable, and release the GPS antenna cable (11) from the retention clip built into the display panel assembly (see [GPS antenna on page 25](#))



3. Remove the two Phillips PM1.5×2.5 screws (1) that secure the system board to the display panel assembly.
4. Detach the metal shielding (2) that secures the system board to the display panel assembly. (The metal shielding is attached to the display panel assembly with double-sided adhesive.)

5. Remove the system board (3).



Reverse this procedure to install the system board.

# 6 Specifications

	Metric	U.S.
<b>Dimensions</b>		
Width	<b>14.05 cm</b>	5.53 in
Depth	<b>0.99 cm</b>	0.39 in
Height	<b>21.70 cm</b>	8.54 in
Weight (lowest weight configuration)	<b>0.46 g</b>	1.01 lb
<b>Input power</b>		
The tablet operates on DC power, which can be supplied by an AC or a DC power source. The AC power source must be rated at 100–240 V, 50/60 Hz.		
<b>NOTE:</b> The tablet can operate on DC power using an industry-standard micro-A or micro-B USB cable. The HP 5.3V 2A adapter included with your tablet is recommended for charging the tablet.		
<b>Temperature</b>		
Operating	<b>5°C to 35°C</b>	41°F to 95°F
Nonoperating	<b>-20°C to 60°C</b>	-4°F to 140°F
<b>Relative humidity</b> (non-condensing)		
Operating	10% to 90%	
Nonoperating	5% to 95%	
<b>Maximum altitude</b> (unpressurized)		
Operating	<b>-15 m to 3,048 m</b>	-50 ft to 10,000 ft
Nonoperating	<b>-15 m to 12,192 m</b>	-50 ft to 40,000 ft
<b>NOTE:</b> Applicable product safety standards specify thermal limits for plastic surfaces. The device operates well within this range of temperatures.		



# 7 Power cord set requirements

The wide-range input feature of the tablet permits it to operate from any line voltage from 100 to 120 volts AC, or from 220 to 240 volts AC.

The 3-conductor power cord set included with the tablet meets the requirements for use in the country or region where the equipment is purchased.

Power cord sets for use in other countries and regions must meet the requirements of the country or region where the tablet is used.

## Requirements for all countries

The following requirements are applicable to all countries and regions:

- The length of the power cord set must be at least 1.0 m (3.3 ft) and no more than 2.0 m (6.5 ft).
- All power cord sets must be approved by an acceptable accredited agency responsible for evaluation in the country or region where the power cord set will be used.
- The power cord sets must have a minimum current capacity of 10 amps and a nominal voltage rating of 125 or 250 V AC, as required by the power system of each country or region.
- The appliance coupler must meet the mechanical configuration of an EN 60 320/IEC 320 Standard Sheet C13 connector for mating with the appliance inlet on the back of the tablet.

## Requirements for specific countries and regions

Country/region	Accredited agency	Applicable note number
Australia	EANSW	1
Austria	OVE	1
Belgium	CEBC	1
Canada	CSA	2
Denmark	DEMKO	1
Finland	FIMKO	1
France	UTE	1

Country/region	Accredited agency	Applicable note number
Germany	VDE	1
Italy	IMQ	1
Japan	METI	3
The Netherlands	KEMA	1
Norway	NEMKO	1
The People's Republic of China	COC	5
South Korea	EK	4
Sweden	CEMKO	1
Switzerland	SEV	1
Taiwan	BSMI	4
The United Kingdom	BSI	1
The United States	UL	2

1. The flexible cord must be Type HO5VV-F, 3-conductor, 1.0-mm<sup>2</sup> conductor size. Power cord set fittings (appliance coupler and wall plug) must bear the certification mark of the agency responsible for evaluation in the country or region where it will be used.
2. The flexible cord must be Type SPT-3 or equivalent, No. 18 AWG, 3-conductor. The wall plug must be a two-pole grounding type with a NEMA 5-15P (15 A, 125 V) or NEMA 6-15P (15 A, 250 V) configuration.
3. The appliance coupler, flexible cord, and wall plug must bear a "T" mark and registration number in accordance with the Japanese Dentori Law. The flexible cord must be Type VCT or VCTF, 3-conductor, 1.00-mm<sup>2</sup> conductor size. The wall plug must be a two-pole grounding type with a Japanese Industrial Standard C8303 (7 A, 125 V) configuration.
4. The flexible cord must be Type RVV, 3-conductor, 0.75-mm<sup>2</sup> conductor size. Power cord set fittings (appliance coupler and wall plug) must bear the certification mark of the agency responsible for evaluation in the country or region where it will be used.
5. The flexible cord must be Type VCTF, 3-conductor, 0.75-mm<sup>2</sup> conductor size. Power cord set fittings (appliance coupler and wall plug) must bear the certification mark of the agency responsible for evaluation in the country or region where it will be used.

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## 8 Recycling

When a non-rechargeable or rechargeable battery has reached the end of its useful life, do not dispose of the battery in general household waste. Follow the local laws and regulations in your area for battery disposal.

HP encourages customers to recycle used electronic hardware, HP original print cartridges, and rechargeable batteries. For more information about recycling programs, see the HP Web site at <http://www.hp.com/recycle>.

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