



HP Slate<sup>7</sup> VoiceTab (in Asia Pacific countries and regions and India) and HP Slate<sup>7</sup> 3G (in the People's Republic of China)

Maintenance and Service Guide

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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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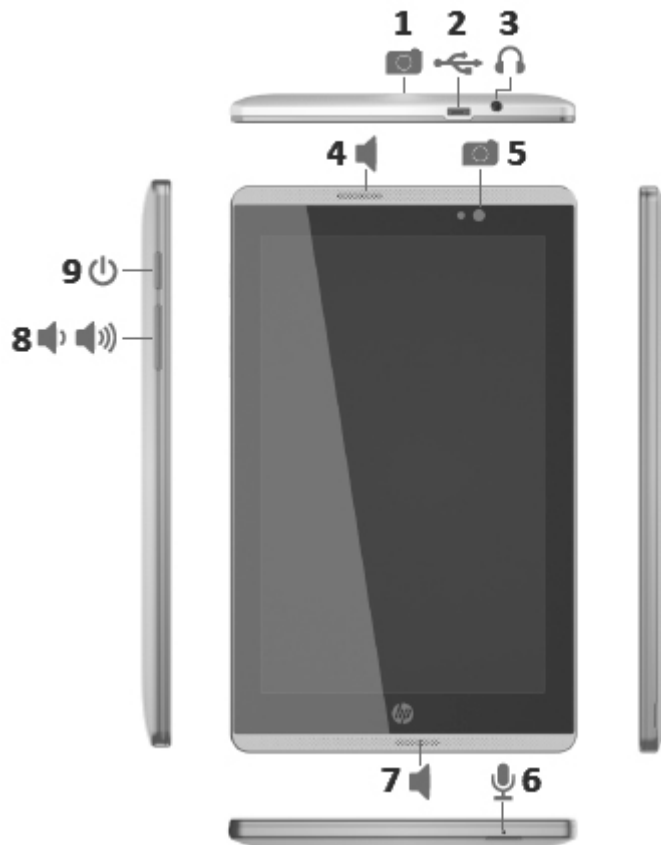
# 1 Product description

Category	Description
Product Name	HP Slate <sup>7</sup> VoiceTab (in Asia Pacific countries and regions and India)
	HP Slate <sup>7</sup> 3G (in the People's Republic of China)
Processor	Marvel® PXA1088 1.20-GHz quad core soldered on-chip (SOC) processor
Panel	7.0-in, (1280×800), IPS, liquid crystal display (LCD), air-bond TouchScreen display panel with 5-point, capacitive touch, brightness: 400 nits (maximum)
Graphics	Marvel GC100T
Memory	Supports 1-GB LP-DDR2
Mass storage	Supports a 16-GB eMMC solid-state drive
Audio and video	Integrated, forward-facing stereo speakers (2)
	One microphone
	Stereo FM radio
	5.0-MP, autofocus rear-facing webcamera
	2.0-MP, fixed-focus front-facing webcamera
Sensor	Accelerometer
	AGPS
	eCompass
	GPS
	Gyroscope
	Proximity/ambient light sensor

Category	Description
<b>Networking</b>	<p>GSM: Support for 850-/900-/1800-/1900-MHz</p> <p>WCDMA: Primary support for 900- and 2100-MHz with printed circuit board (PCB) design to support 850- and 2100-MHz.</p> <p>Phone voice calling optimized</p> <p>Dual SIM dual standby (1 micro-SIM [GSM/WCDMA], 1 mini-SIM [GSM], inside back cover)</p> <p>SIM hot-swap is not required but SIM detection via back cover removal is required using a mechanical switch.</p>
<b>Wireless networking</b>	<p><b>Integrated WiFi option:</b> 802.11 b/g/n (2.4-GHz) with 1 antenna</p> <p><b>Bluetooth:</b> 3.0 enhanced data rate (EDR)</p> <p><b>WWAN:</b> 3G data enable</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 USB 2.0 (supports charging)</li> </ul>
<b>Power requirements</b>	<p>Supports a 4100-mAh, Li-ion battery (non-removable), USB charging battery</p> <p>Supports an HP 10-W, 5V-2A, USB, AC adapter with duck head DC plug and localized cable plug support</p>
<b>Operating system</b>	<b>Preinstalled:</b> Android 4.2.2
<b>Serviceability</b>	<p><b>End user replaceable part:</b></p> <ul style="list-style-type: none"> <li>• HP 10-W, 5V-2A AC adapter</li> <li>• USB cable</li> <li>• Wired headset</li> </ul>



## 2 External component identification



Item	Component	Item	Component
(1)	Rear-facing webcam	(5)	Front-facing webcam
(2)	Micro USB port	(6)	Microphone
(3)	Audio-out (headphone)/Audio-in (microphone) jack	(7)	Volume control buttons (2)
(4)	Speakers (2)	(8)	Power button

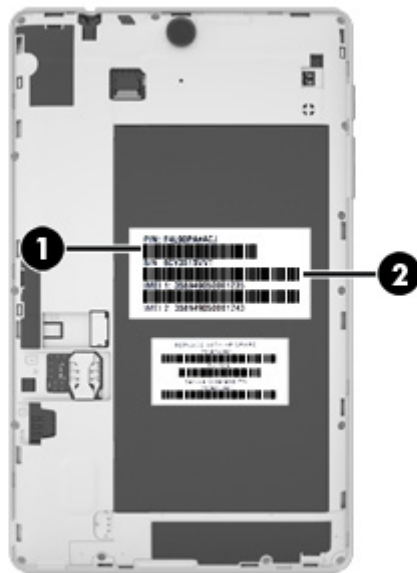
## 3 Illustrated parts catalog



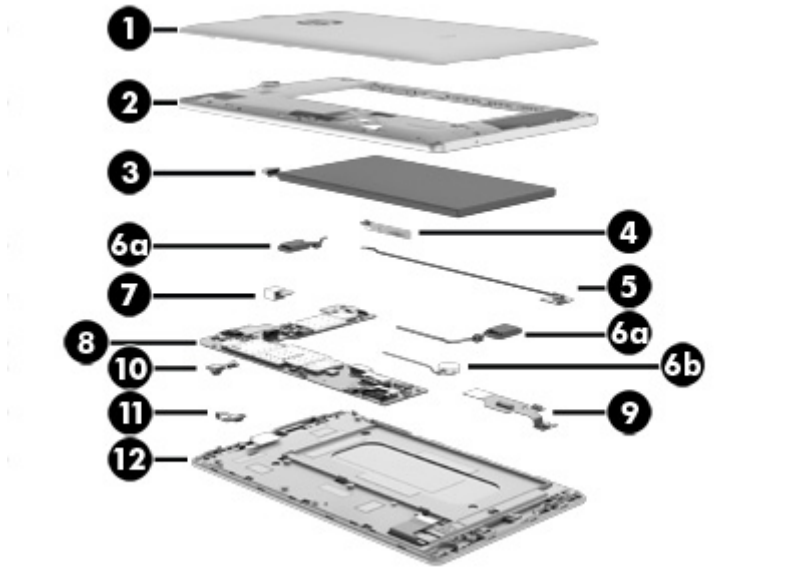
**NOTE:** HP continually improves and changes product parts. For complete and current information on supported parts for your computer, go to <http://partsurfer.hp.com>, select your country or region, and then follow the on-screen instructions.

### Locating the product name and serial number

The product name **(1)** and serial number **(2)** of your tablet are located on the battery. You may need this information when you travel internationally or when you contact support. Refer to [Back cover on page 12](#) to remove the back cover and access this information.



# Tablet major components



Item	Component	Spare part number
(1)	<b>Back cover</b>	751302-001
(2)	<b>Middle frame</b> (includes antenna transceivers, power/volume button actuator, rear-facing webcam lens, and speaker gaskets)	751304-001
(3)	<b>Battery</b> , 4100-mAh, Li-ion (includes cable and double-sided adhesive)	751312-001
(4)	<b>Power/volume button board</b> (includes cable and double-sided adhesive)	751305-001
(5)	<b>WiFi antenna board</b> (includes RF antenna cable and double-sided adhesive)	751315-001
	<b>Speaker/Vibrator Module Kit</b> , includes:	751307-001
(6a)	Left and right speakers, cables, and grommets	
(6b)	Vibrator module and cable	
(7)	<b>5.0-MP rear-facing webcam</b> (includes cable)	751309-001
(8)	<b>System board</b> equipped with a Marvel PXA1088 1.20-GHz quad core processor, 1.0-GB LP-DDR2 system memory, and a 16.0-GB eMMC solid state drive (includes left and right speakers and vibrator module)	751300-001
(9)	<b>FPC cable</b> (includes double-sided adhesive)	751310-001
(10)	<b>2.0-MP front-facing webcam</b> (includes cable and double-sided adhesive)	751308-001
(11)	<b>Proximity/ambient light sensor board</b> (includes cable and double-sided adhesive)	751314-001
(12)	<b>Display panel assembly</b> , 7-in., IPS, LCD, TouchScreen (includes display panel cable and TouchScreen cable)	751301-001

## Miscellaneous parts

Component	Spare part number
<b>10-W, 5-V, 2-A, USB, AC adapter</b>	
For use only in Europe and South Korea	744423-009
For use only in India	744423-005
For use only in the People's Republic of China	744423-006
<b>HP Slate7 VoiceTab</b> equipped with a 7-in., IPS, LCD, TouchScreen display panel, a Marvel PXA1088 1.20-GHz quad core processor, 1.0-GB LP-DDR2 system memory, and a 16.0-GB eMMC solid state drive	751317-001
<b>Screw Kit</b>	751313-001
<b>USB extension cable</b>	751316-001 and 751657-001

## Sequential part number listing

Spare part number	Description
744423-005	10-W, 5-V, 2-A, USB, AC adapter for use only in India (includes duck head adapter)
744423-006	10-W, 5-V, 2-A, USB, AC adapter for use only in the People's Republic of China (includes duck head adapter)
744423-009	10-W, 5-V, 2-A, USB, AC adapter for use only in Europe and South Korea (includes duck head adapter)
751300-001	System board equipped with a Marvel PXA1088 1.20-GHz quad core processor, 1.0-GB LP-DDR2 system memory, and a 16.0-GB eMMC solid state drive (includes left and right speakers and vibrator module)
751301-001	7-in., IPS, LCD, TouchScreen display panel assembly
751302-001	Back cover
751304-001	Middle frame
751305-001	Power/volume button board (includes cable and double-sided adhesive)
751307-001	Speaker/Vibrator Module Kit (includes left and right speakers, cables, and grommets and vibrator module and cable)
751308-001	2.0-MP front-facing webcam (includes cable and double-sided adhesive)
751309-001	5.0-MP rear-facing webcam (includes cable)
751310-001	FPC cable (includes double-sided adhesive)
751312-001	Battery, 4100-mAh, Li-ion (includes cable and double-sided adhesive)
751313-001	Screw Kit
751314-001	Proximity/ambient light sensor board (includes cable and double-sided adhesive)

<b>Spare part number</b>	<b>Description</b>
751315-001	WiFi antenna board (includes RF antenna cable and double-sided adhesive)
751316-001	USB extension cable
751317-001	HP Slate7 VoiceTab equipped with a 7-in., IPS, LCD, TouchScreen display panel, a Marvel PXA1088 1.20-GHz quad core processor, 1.0-GB LP-DDR2 system memory, and a 16.0-GB eMMC solid state drive
751657-001	USB extension cable

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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
- Torx T5 screw driver

### 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.

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

## 5 Removal and replacement procedures

 **NOTE:** HP continually improves and changes product parts. For complete and current information on supported parts for your computer, go to <http://partsurfer.hp.com>, select your country or region, and then follow the on-screen instructions.

### 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 20 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	751302-001
7-in., IPS, LCD, TouchScreen display panel assembly (includes display panel cable and TouchScreen cable)	751301-001

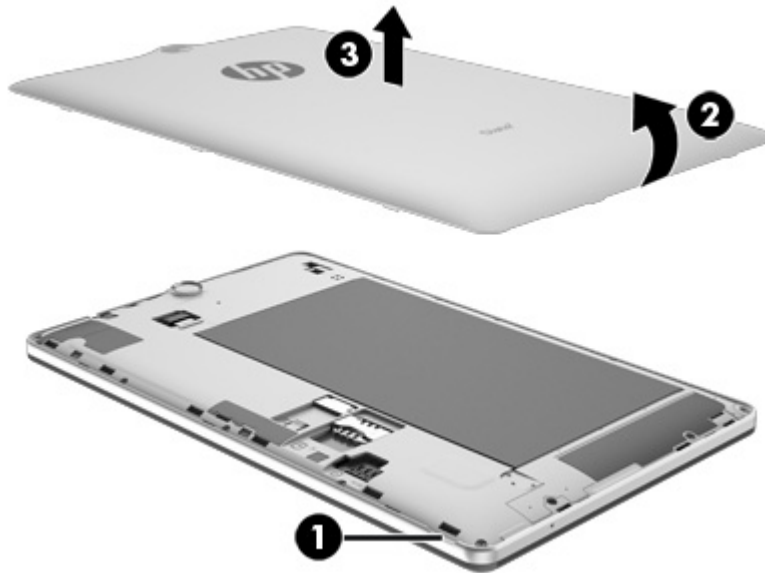
Before disassembling the tablet, follow these steps:

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:

**⚠ CAUTION:** Before positioning the tablet with the display panel facing down, make sure the work surface is clear of tools, screws, and any other foreign objects. Failure to follow this caution can result in damage to the display panel surface.

1. Place the tablet on a flat surface, display panel side down, with the power button and volume buttons facing away from you.
2. Use the release notch **(1)** to release the bottom edge of the back cover **(2)** from the display panel assembly.
3. Remove the back cover **(3)**.



Reverse this procedure to install the back cover.

## Middle frame

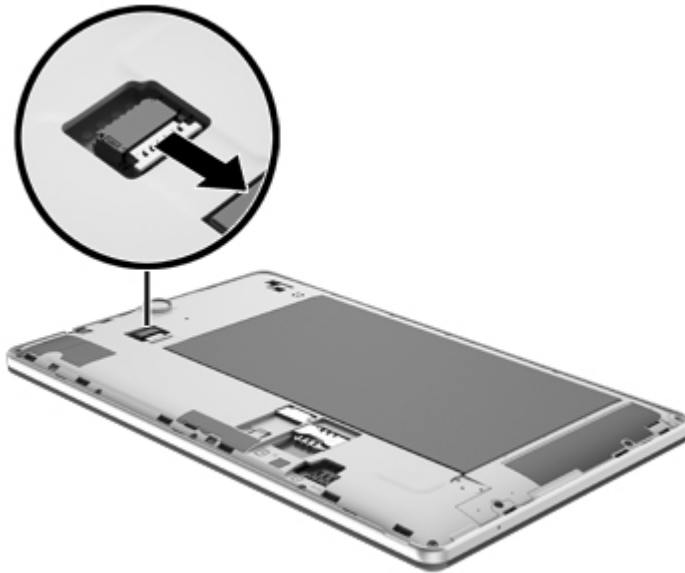
Description	Spare part number
Middle frame (includes antenna transceivers, power/volume button actuator, rear-facing webcamera lens, and speaker gaskets)	751304-001

Before removing the middle frame, 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 12](#)).

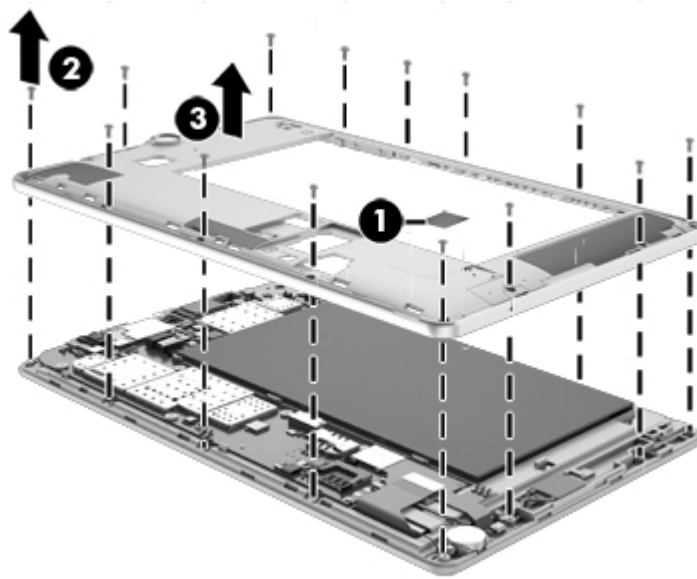
Remove the middle frame:

1. Disconnect the battery cable from the system board.



2. Remove the warranty sticker **(1)** that covers the system board retention screw.
3. Remove the 14 Phillips PM1.35×3.75 screws **(2)** that secure the middle frame to the display panel assembly.

4. Remove the middle frame (3).



Reverse this procedure to install the middle frame.

## Battery

Description	Spare part number
Battery, 4100-mAh, Li-ion (includes cables)	751312-001

Before removing the battery, follow these steps:

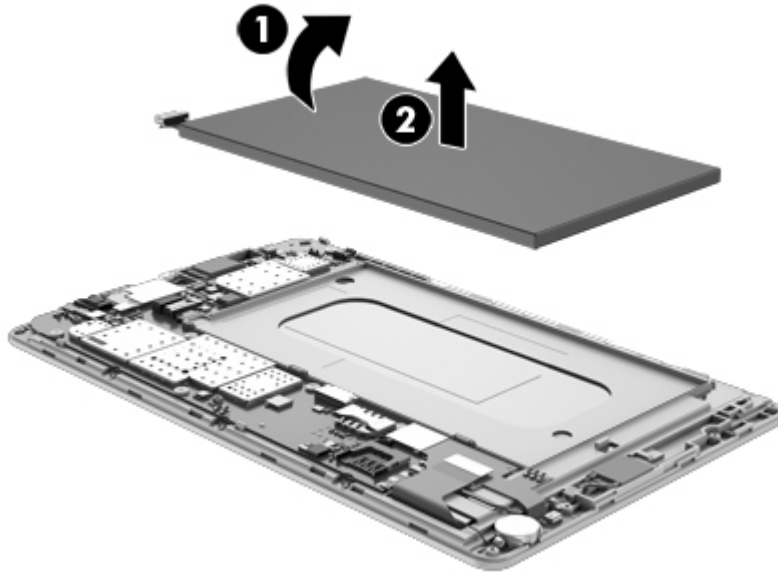
1. Turn off the tablet. If you are unsure whether the tablet is off or in Hibernation, turn the tablet on, and then shut it down through the operating system.
2. Disconnect the power from the tablet by unplugging the power cord from the tablet.
3. Disconnect all external devices from the tablet.
4. Remove the back cover (see [Back cover on page 12](#)).
5. Remove the middle frame (see [Middle frame on page 14](#)).

**⚠ 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. Lift up on the front edge of the battery **(1)** until it detaches from the display panel assembly. (The battery is attached to the display panel assembly with double-sided adhesive.)
2. Remove the battery **(2)**.



Reverse this procedure to install the battery.

## Power/volume button board

Description	Spare part number
Power/volume button board (includes cable and double-sided adhesive)	751305-001

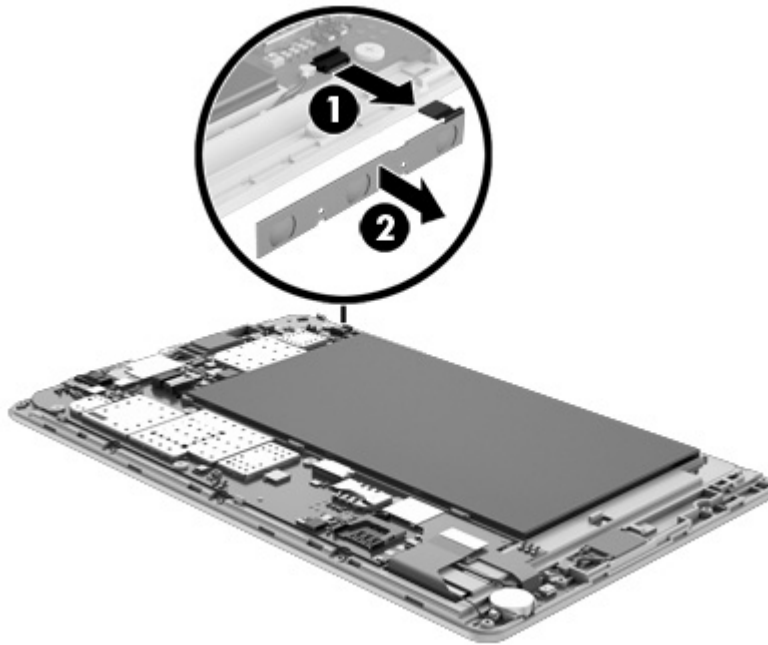
Before removing the power/volume button board, follow these steps:

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 12](#)).
5. Remove the middle frame (see [Middle frame on page 14](#)).

Remove the power/volume button board:

1. Release the ZIF connector to which the power/volume button board cable is attached, and then disconnect the power/volume button board cable **(1)** from the system board.

2. Detach the power/volume button board **(2)** from the display panel assembly. (The power/volume button board is attached to the display panel assembly with double-sided adhesive.)



3. Remove the power/volume button board and cable.

Reverse this procedure to install the power/volume button board.

## Rear-facing webcamera

Description	Spare part number
5.0-MP rear-facing webcamera (includes cable)	753193-001

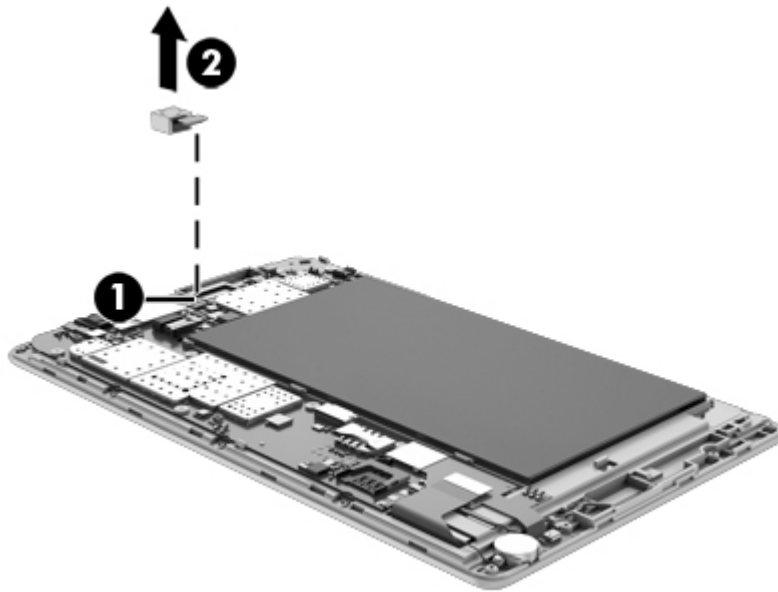
Before removing the rear-facing webcamera, follow these steps:

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 12](#)).
5. Remove the middle frame (see [Middle frame on page 14](#)).

Remove the rear-facing webcamera:

1. Release the zero insertion force (ZIF) connector **(1)** to which the rear-facing webcamera is attached, and then disconnect the rear-facing webcamera from the system board.

2. Remove the rear-facing webcam (2) and cable.



Reverse this procedure to install the rear-facing webcam.

## WiFi antenna board

Description	Spare part number
WiFi antenna board (includes RF antenna cable and double-sided adhesive)	751315-001

Before removing the WiFi antenna board, follow these steps:

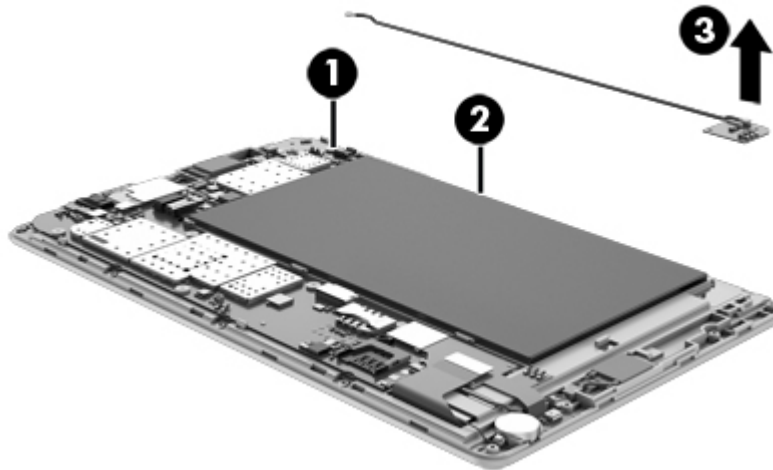
1. Turn off the tablet. If you are unsure whether the tablet is off or in Hibernation, turn the tablet on, and then shut it down through the operating system.
2. Disconnect the power from the tablet by unplugging the power cord from the tablet.
3. Disconnect all external devices from the tablet.
4. Remove the back cover (see [Back cover on page 12](#)).
5. Remove the middle frame (see [Middle frame on page 14](#)).

Remove the WiFi antenna board:

1. Disconnect the WiFi antenna board cable from the system board wireless terminal (1).
2. Release the WiFi antenna board cable from the routing channel (2) between the battery and the system board.



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



4. Remove the WiFi antenna board and cable.

Reverse this procedure to install the WiFi antenna board.

## FPC cable

Description	Spare part number
FPC cable (includes double-sided adhesive)	751310-001

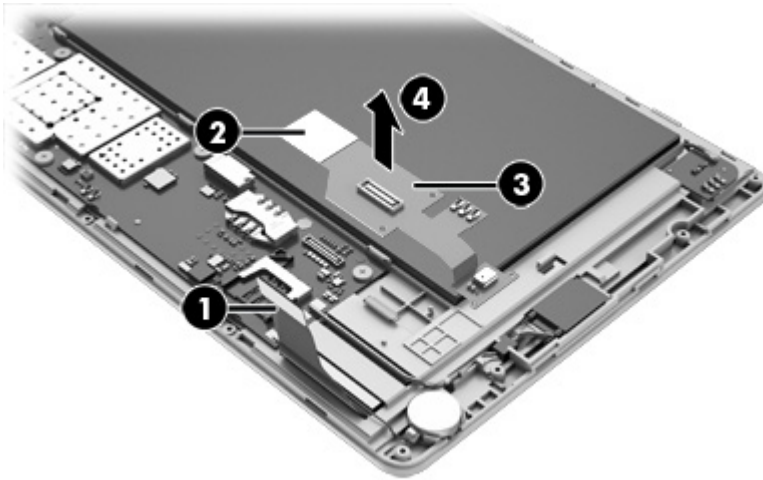
Before removing the FPC cable, follow these steps:

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 12](#)).
5. Remove the middle frame (see [Middle frame on page 14](#)).


Remove the FPC cable:

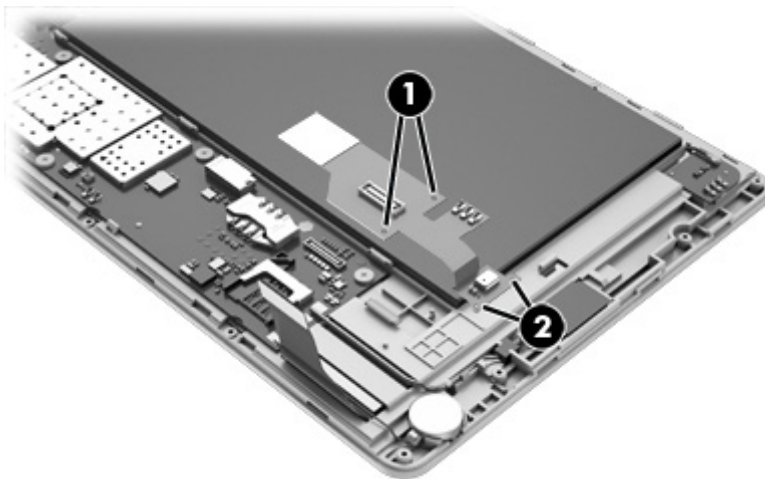
1. Disconnect the display panel cable **(1)** from the FPC cable.
2. Disconnect the FPC cable **(2)** from the system board.
3. Detach the FPC cable **(3)** from the system board. (The FPC cable is attached to the system board with double-sided adhesive.)

4. Remove the FPC cable (4).




Reverse this procedure to install the FPC cable.

 **NOTE:** When installing the FPC cable, make sure the alignment holes (1) on the main part of the FPC cable engage the alignment pins on the system board. Also, make sure the alignment holes (2) on the end of the FPC cable engage the alignment pins on the display panel assembly.



# Speakers


 **NOTE:** The speakers are included in the Speaker/Vibrator Module Kit, spare part number 751307-001. This kit includes the left and right speakers, cables, and grommets and the vibrator module and cable. The speakers are also included with the system board spare part kit, spare part number 751300-001.

Before removing the speakers, follow these steps:

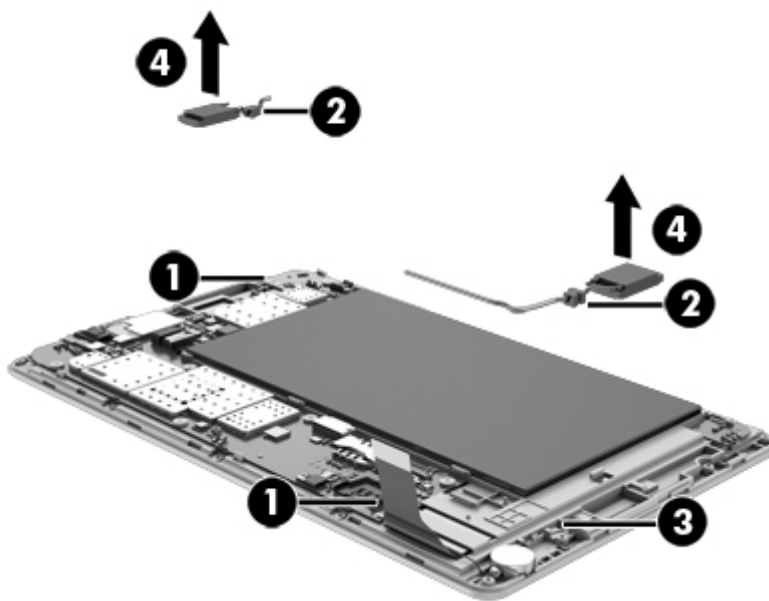
1. Turn off the tablet. If you are unsure whether the tablet is off or in Hibernation, turn the tablet on, and then shut it down through the operating system.
2. Disconnect the power from the tablet by unplugging the power cord from the tablet.
3. Disconnect all external devices from the tablet.
4. Remove the back cover (see [Back cover on page 12](#)).
5. Remove the middle frame (see [Middle frame on page 14](#)).
6. Remove the FPC cable (see [FPC cable on page 19](#)).

Remove the speakers:

1. Unsolder the speaker cables **(1)** from the system board terminals.


 **NOTE:** When installing the speakers, the speaker red cables should be soldered to the system board "+" terminals, and the speaker black cables should be soldered to the "-" terminals.

2. Release the speaker cable grommets **(2)** from the retention clips built into the display panel assembly.
3. Release the right speaker cable **(3)** from the retention clip built into the display panel assembly.
4. Remove the speakers **(3)**.



Reverse this procedure to install the speakers.

## Vibrator module


 **NOTE:** The vibrator module is included in the Speaker/Vibrator Module Kit, spare part number 751307-001. This kit includes the vibrator module and cable and the left and right speakers, cables, and grommets. The vibrator module is also included with the system board spare part kit, spare part number 751300-001.

Before removing the vibrator module, follow these steps:

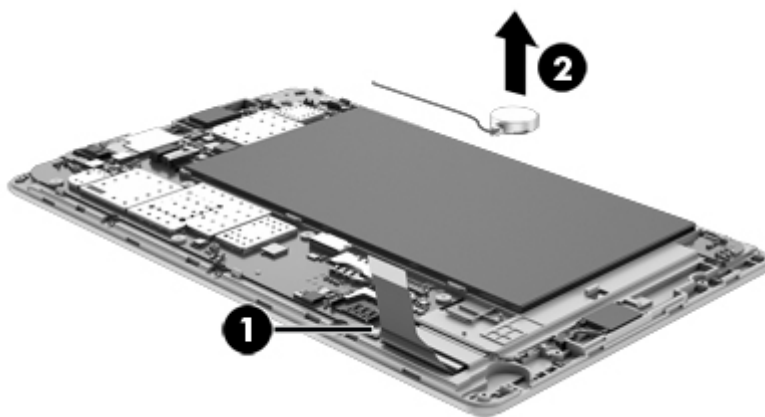
1. Turn off the tablet. If you are unsure whether the tablet is off or in Hibernation, turn the tablet on, and then shut it down through the operating system.
2. Disconnect the power from the tablet by unplugging the power cord from the tablet.
3. Disconnect all external devices from the tablet.
4. Remove the back cover (see [Back cover on page 12](#)).
5. Remove the middle frame (see [Middle frame on page 14](#)).
6. Remove the FPC cable (see [FPC cable on page 19](#)).

Remove the vibrator module:

1. Unsolder the vibrator module cables **(1)** from the system board terminals.

 **NOTE:** When installing the vibrator module, the vibrator module red cable should be soldered to the system board "+" terminal, and the vibrator module black cable should be soldered to the "-" terminal.

2. Detach the vibrator module **(2)** from the display panel assembly. (The vibrator module is attached to the display panel assembly with double-sided adhesive.)



3. Remove the vibrator module.

Reverse this procedure to install the vibrator module.

# System board

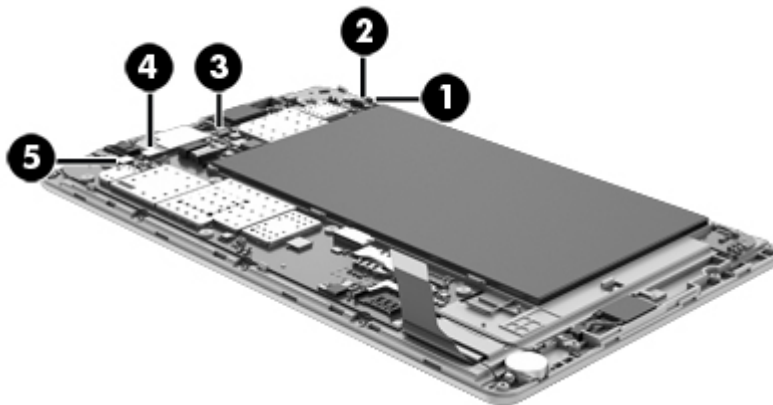
Description	Spare part number
System board equipped with an AllWinner A31S 1.00-GHz quad core processor, 1.0-GB LP-DDR2 system memory, and an 8.0-GB Nand flash drive	754942-001

Before removing the system board, follow these steps:

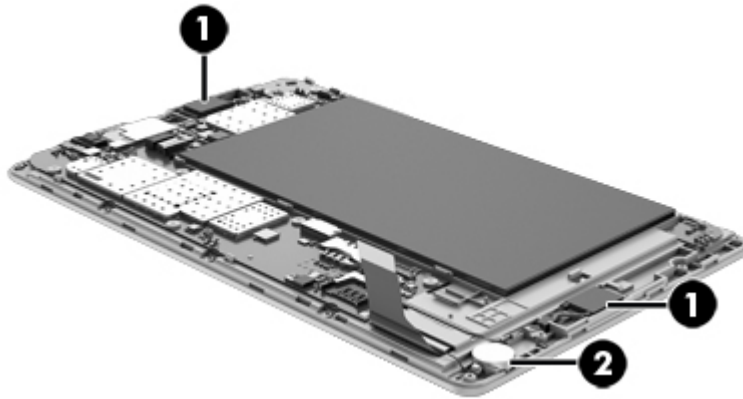
1. Turn off the tablet. If you are unsure whether the tablet is off or in Hibernation, turn the tablet on, and then shut it down through the operating system.
2. Disconnect the power from the tablet by unplugging the power cord from the tablet.
3. Disconnect all external devices from the tablet.
4. Remove the back cover (see [Back cover on page 12](#)).
5. Remove the middle frame (see [Middle frame on page 14](#)).
6. Remove the FPC cable (see [FPC cable on page 19](#)).

Remove the system board:

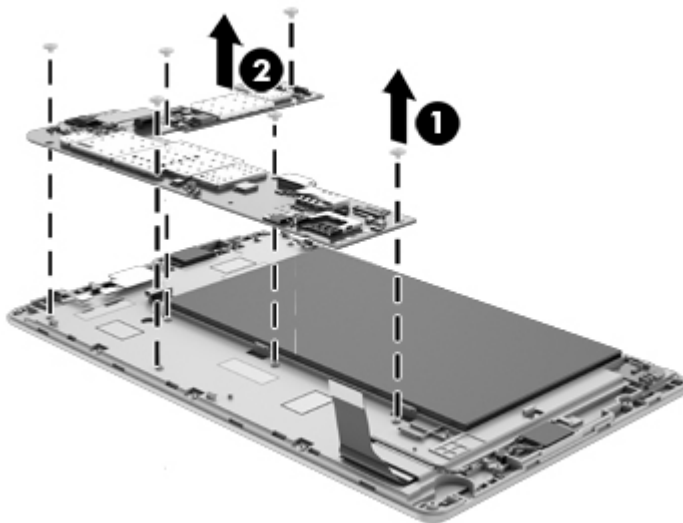
1. Disconnect the following cables from the system board:
  - (1) WiFi antenna board cable (see [WiFi antenna board on page 18](#))
  - (2) Power/volume button board ZIF connector and cable (see [Power/volume button board on page 16](#))
  - (3) Rear-facing webcam ZIF connector and cable (see [Rear-facing webcam on page 17](#))
  - (4) TouchScreen ZIF connector and cable
  - (5) Proximity/ambient light sensor board ZIF connector and cable



2. Detach the speakers **(1)** and the vibrator module **(2)** from the display panel assembly. (The speakers and the vibrator module are attached to the display panel assembly with double-sided adhesive.)



3. Remove the six Phillips PM1.35×1.75 broad head screws **(1)** that secure the system board to the display panel assembly.
4. Remove the system board **(2)**.



Reverse this procedure to install the system board.

# Front-facing webcam

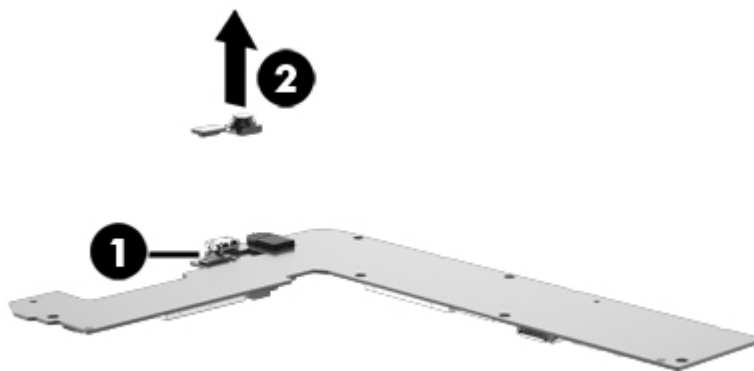
Description	Spare part number
2.0-MP front-facing webcam (includes cable)	751308-001

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 12](#)), and then remove the following components:
  - a. Middle frame (see [Middle frame on page 14](#))
  - b. FPC cable (see [FPC cable on page 19](#))
  - c. System board (see [System board on page 23](#))

Remove the front-facing webcam:

1. Turn the system board upside down with the top toward you.
2. Release the ZIF connector **(1)** to which the front-facing webcam cable is attached, and then disconnect the front-facing webcam cable from the system board.
3. Remove the front-facing webcam **(2)**.



Reverse this procedure to install the front-facing webcam.

# Proximity/ambient light sensor board

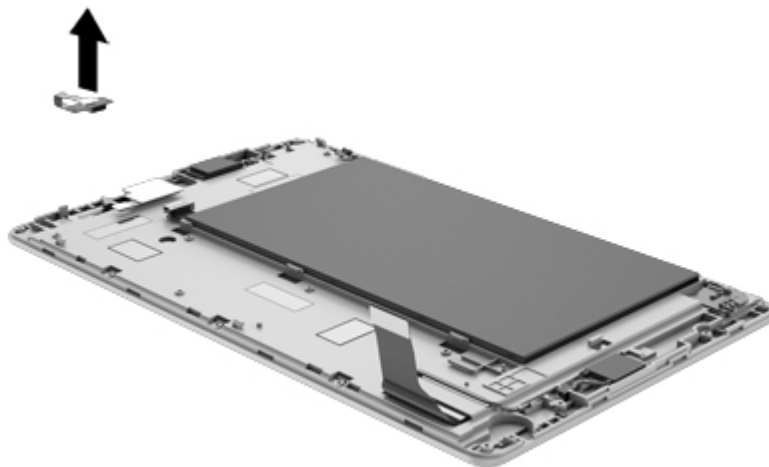
Description	Spare part number
Proximity/ambient light sensor board (includes cable)	751314-001

Before removing the front-facing proximity/ambient light sensor 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 12](#)), and then remove the following components:
  - a. Middle frame (see [Middle frame on page 14](#))
  - b. FPC cable (see [FPC cable on page 19](#))
  - c. System board (see [System board on page 23](#))

Remove the proximity/ambient light sensor board:

1. Detach the proximity/ambient light sensor board from the display panel assembly. (The proximity/ambient light sensor board is attached to the display panel assembly with double-sided adhesive.)



2. Remove the proximity/ambient light sensor board and cable.

Reverse this procedure to install the proximity/ambient light sensor board.



## 6 Specifications

	Metric	U.S.
<b>Dimensions</b>		
Width	<b>11.54 cm</b>	4.54 in
Depth	<b>0.95 cm</b>	0.37 in
Height	<b>18.90 cm</b>	7.44 in
Weight (lowest weight configuration)	<b>0.33 g</b>	0.72 lb
<b>Input power</b>		
The voice 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, 0.3-1.0 A.		
<b>NOTE:</b> The voice tablet can operate on DC power using an industry-standard micro-A or micro-B USB cable. The HP adapter included with your voice tablet is recommended for charging the voice 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.		

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## 7 Updating apps, widgets, and the operating system

HP recommends that you update your apps, widgets, and the operating system on a regular basis to the latest versions. Updates can resolve issues and bring new features and options to your tablet. Technology is always changing, and updating apps, widgets, and the operating system allows your tablet to run the latest technology available. For example, older apps and widgets might not work well with the most recent operating system.

Go to the QQ App store to download the latest versions of HP and third-party apps and widgets. The QQ App store displays the number of existing applications that you can update. If you want to update the operating system manually, go to <http://www.hp.com/support>.

### Factory data reset

To reset all settings and delete all data on the device:

1. Touch , and then touch .
2. Under **PERSONAL**, touch **Back up & reset**.
3. Under **PERSONAL DATA**, select **Factory data reset**, and then follow the on-screen instructions.

## 8 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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## 9 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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