



## HP Slate 10 Plus Tablet

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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# Table of contents

<b>1 Product description .....</b>	<b>1</b>
<b>2 External component identification .....</b>	<b>3</b>
<b>3 Illustrated parts catalog .....</b>	<b>5</b>
Locating the serial number location .....	5
Tablet major components .....	6
Miscellaneous parts .....	8
Sequential part number listing .....	9
<b>4 Removal and replacement preliminary requirements .....</b>	<b>10</b>
Tools required .....	10
Service considerations .....	10
Plastic parts .....	10
Cables and connectors .....	10
Drive handling .....	11
Grounding guidelines .....	11
Electrostatic discharge damage .....	11
Packaging and transporting guidelines .....	13
Workstation guidelines .....	13
Equipment guidelines .....	14
<b>5 Removal and replacement procedures .....</b>	<b>15</b>
Display panel assembly .....	15
Antenna .....	18
Connector board .....	19
Battery .....	20
Speaker connector boards .....	21
Speakers .....	23
Rear-facing webcam .....	24
System board .....	25

Front-facing webcam .....	26
Display panel cable .....	27
<b>6 Specifications .....</b>	<b>29</b>
<b>7 Power cord set requirements .....</b>	<b>30</b>
Requirements for all countries .....	30
Requirements for specific countries and regions .....	30
<b>8 Recycling .....</b>	<b>32</b>
<b>Index .....</b>	<b>33</b>

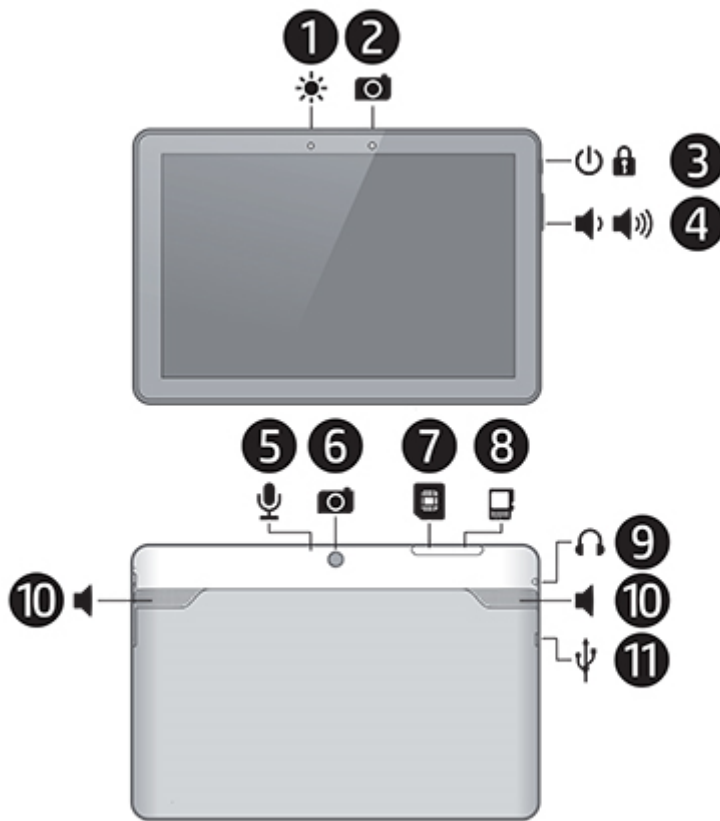
# 1 Product description

Category	Description
<b>Product Name</b>	HP Slate 10 Plus Tablet
<b>Chipset/processor</b>	Balong® V9R1 Cortex-A9 quad core 1.60-GHz processor
<b>Graphics</b>	Integrated with soldered-on-circuit (SoC)
<b>Panel</b>	10.0-in, diagonal capacitive, 10-point MultiTouch, in-plane switching (IPS), high-definition (HD), wide viewing angle (1280×800), display assembly
<b>Memory</b>	Supports 1 GB LP DDR2 533-MHz system memory, integrated onto system board
<b>Storage</b>	Supports 16 GB eMMC storage, integrated onto system board Supports external Micro SD up to 32 GB
<b>Audio and video</b>	0.3-MP front-facing webcam 3.0-MP rear-facing webcam One microphone Integrated 0.5-W stereo speakers (2) supporting DTS Sound Receiver
<b>Sensors</b>	<ul style="list-style-type: none"><li>• Axis sensor: accelerometer</li><li>• Light sensor: ambient light sensor</li><li>• GPS sensor: AGPS/GPS/Glonass</li></ul>
<b>Wireless</b>	<ul style="list-style-type: none"><li>• 231L<ul style="list-style-type: none"><li>◦ GSM band 2/3/5/8</li><li>◦ UMTS band 1/2/5/8</li><li>◦ FDD-LTE band 1/3/7/20</li><li>◦ TDD-LTE band 38/40</li></ul></li><li>• Wifi: 802.11 b/g/n</li><li>• Bluetooth: 4.0+LE</li></ul>

<b>Category</b>	<b>Description</b>
<b>Ports</b>	<ul style="list-style-type: none"><li>• Micro USB type B with MHL support</li><li>• Micro SD slot</li><li>• Micro SIM slot</li><li>• Audio jack: 3.5-mm with microphone and URAT support</li></ul>
<b>Power requirements</b>	Supports a 2-cell, 6280-mAh lithium-polymer, USB-charging battery Supports a 5V-2A, 10-W USB cable AC adapter
<b>Operating system</b>	<b>Preinstalled:</b> Android 4.4 + EMUI 2.3
<b>Serviceability</b>	<b>End user replaceable parts:</b> AC adapter and USB cable



## 2 External component identification



Item	Component	Item	Component
(1)	Ambient light sensor	(7)	Micro SD Card Reader slot
(2)	Front-facing webcam	(8)	Micro SIM slot
(3)	Power button	(9)	Audio-out (headphone)/Audio-in (microphone) jack
(4)	Volume control button	(10)	Speakers

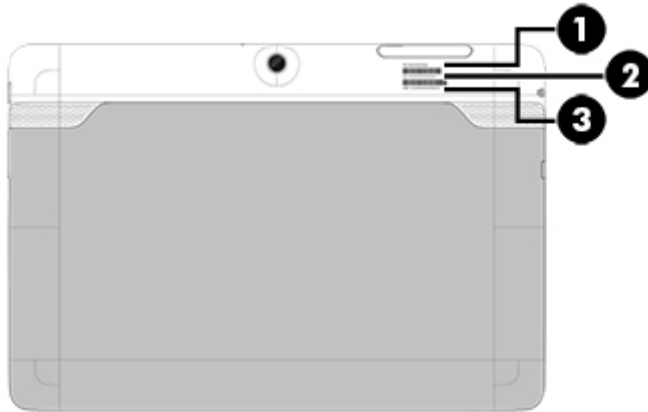
<b>Item</b>	<b>Component</b>	<b>Item</b>	<b>Component</b>
<b>(5)</b>	Microphone	<b>(11)</b>	Micro USB port
<b>(6)</b>	Rear-facing webcam		

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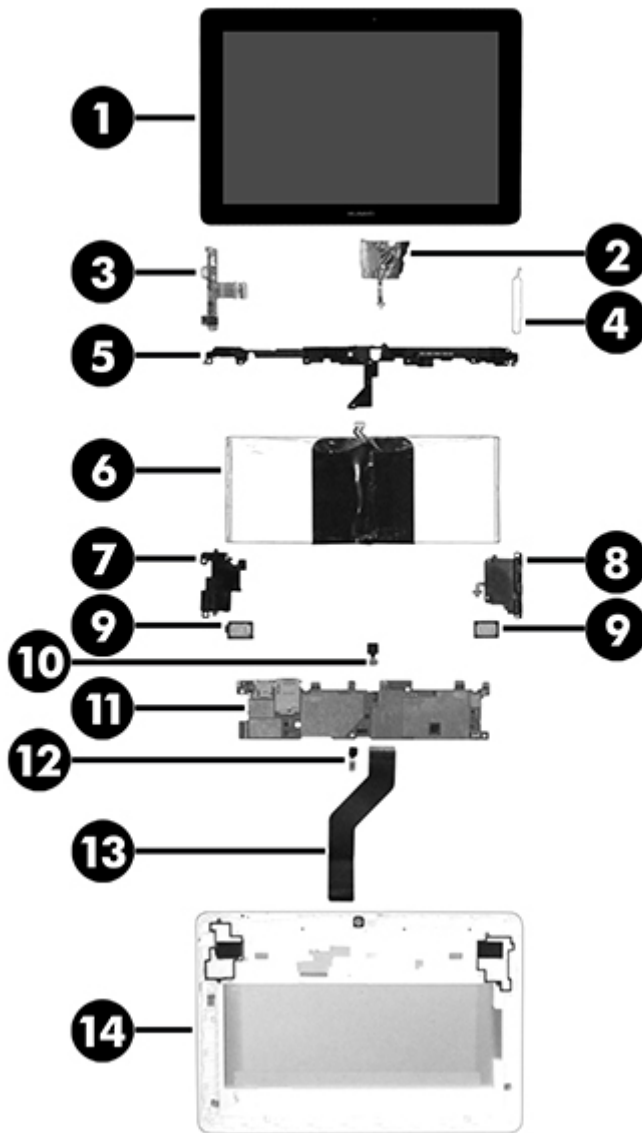
## 3 Illustrated parts catalog

### Locating the serial number location

The tablet part number **(1)**, serial number **(2)**, and International Mobile Station Equipment Identity number (IMEI) **(3)** are located on the tablet back cover. This information may be needed when travelling internationally or when contacting support.



# Tablet major components



Item	Component	Spare part number
(1)	<b>Display panel assembly</b> (10.0-in, HD, LED, TouchScreen, includes front cover)	776014-001
(2)	<b>Antenna</b> (includes double-sided adhesive)	776022-001
(3)	<b>Connector board</b> (includes audio jack, double-sided adhesive, USB power connector, and vibrator module)	776025-001
(4)	<b>Power/volume button actuator</b> (included with the back cover spare part kit, spare part number 776015-001)	
(5)	<b>Plastic frame</b> (included in the back cover spare part kit, spare part number 776015-001)	
(6)	<b>Battery</b> , 2-cell, 6280-mAh, Li-ion, USB-charging (includes cable and double-sided adhesive)	776016-001

<b>Item</b>	<b>Component</b>	<b>Spare part number</b>
<b>(7)</b>	<b>Speaker connector board</b> for left speaker (includes power button and volume control buttons)	776017-001
<b>(8)</b>	<b>Speaker connector board</b> for right speaker	776018-001
<b>(9)</b>	<b>Speaker Kit</b> (includes left and right speakers)	776020-001
<b>(10)</b>	<b>3.0-MP rear-facing webcam</b> (includes cable)	776024-001
<b>(11)</b>	<b>System board</b> equipped with a Balong V9R1 Cortex-A9 quad core 1.60-GHz processor, 1.0-GB of system memory, 8-GB eMMC system storage, and a graphics subsystem with UMA memory	776019-001
<b>(12)</b>	<b>0.3-MP front-facing webcam</b> (includes cable and double-sided adhesive)	776023-001
<b>(13)</b>	<b>Display panel cable</b> (includes double-sided adhesive)	776021-001
<b>(14)</b>	<b>Back cover</b> (includes battery, plastic frame, and power and volume button actuators)	776015-001

## Miscellaneous parts

Component	Spare part number
<b>10-W AC adapter:</b>	
For use only in Europe	773125-009
For use only in India	773125-005
For use only in North America	773125-008
For use only in South Africa	773125-007
For use only in the United Kingdom	773125-003
<b>HP Slate 7 VoiceTab Ultra Tablet:</b>	
HP Slate 10 Plus Tablet for use in all countries and regions except Europe, the Middle East, and Africa (equipped with a Balong V9R1 Cortex-A9 quad core 1.60-GHz processor, 10.0-in, FHD, LED, TouchScreen, display panel assembly, 1.0-GB of system memory, 8-GB eMMC system storage, and a graphics subsystem with UMA memory)	776026-001
HP Slate 10 Plus Tablet for use only in Europe, the Middle East, and Africa (equipped with a Balong V9R1 Cortex-A9 quad core 1.60-GHz processor, 10-in, FHD, LED, TouchScreen, display panel assembly, 1-GB of system memory, 8-GB eMMC system storage, and a graphics subsystem with UMA memory)	776026-021
<b>Rubber Kit</b>	777614-001
<b>Screw Kit</b>	778242-001
<b>USB dongle</b>	780960-001
<b>USB extension cable</b>	776027-001

## Sequential part number listing

Spare part number	Description
773125-003	10-W AC adapter for use only in the United Kingdom (includes plug)
773125-005	10-W AC adapter for use only in the India (includes plug)
773125-007	10-W AC adapter for use only in the South Africa (includes plug)
773125-008	10-W AC adapter for use only in the North America (includes plug)
773125-009	10-W AC adapter for use only in the Europe (includes plug)
776014-001	10.0-in, HD, LED, TouchScreen, display panel assembly (includes front cover)
776015-001	Back cover with battery (2-cell, 6280-mAh, Li-ion, USB-charging, includes cable)
776016-001	Battery, 2-cell, 6280-mAh, Li-ion, USB-charging (includes cable and double-sided adhesive)
776017-001	Speaker connector board for left speaker (includes power button and volume control buttons)
776018-001	Speaker connector board for right speaker
776019-001	System board equipped with a Balong V9R1 Cortex-A9 quad core 1.60-GHz processor, 1.0-GB of system memory, 8-GB eMMC system storage, and a graphics subsystem with UMA memory
776020-001	Speaker Kit (includes left and right speakers)
776021-001	Display panel cable
776022-001	Antenna (includes double-sided adhesive)
776023-001	0.3-MP front-facing webcam (includes cable)
776024-001	3.0-MP rear-facing webcam (includes cable)
776025-001	Connector board (includes audio jack, double-sided adhesive, USB power connector, and vibrator module)
776026-001	HP Slate 10 Plus Tablet for use in all countries and regions except Europe, the Middle East, and Africa (equipped with a Balong V9R1 Cortex-A9 quad core 1.60-GHz processor, 10.0-in, FHD, LED, TouchScreen, display panel assembly, 1.0-GB of system memory, 8-GB eMMC system storage, and a graphics subsystem with UMA memory)
776026-021	HP Slate 10 Plus Tablet for use only in Europe, the Middle East, and Africa (equipped with a Balong V9R1 Cortex-A9 quad core 1.60-GHz processor, 10-in, FHD, LED, TouchScreen, display panel assembly, 1-GB of system memory, 8GB eMMC system storage, and a graphics subsystem with UMA memory)
776027-001	USB extension cable
777614-001	Rubber Kit
778242-001	Screw Kit
780960-001	USB dongle

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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:

- Flat-bladed screw driver
- Magnetic screw driver
- Phillips P0 screw driver
- Phillips P00 screw driver
- 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.

## Drive handling

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**⚠ CAUTION:** Drives are fragile components that must be handled with care. To prevent damage to the tablet, damage to a drive, or loss of information, observe these precautions:

Before removing or inserting a drive, shut down 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.

Before handling a drive, be sure that you are discharged of static electricity. While handling a drive, avoid touching the connector.

Before removing a diskette drive or optical drive, be sure that a diskette or disc is not in the drive and be sure that the optical drive tray is closed.

Handle drives on surfaces covered with at least one inch of shock-proof foam.

Avoid dropping drives from any height onto any surface.

After removing a drive, place it in a static-proof bag.

Avoid exposing a drive to products that have magnetic fields, such as monitors or speakers.

Avoid exposing a drive to temperature extremes or liquids.

If a drive must be mailed, place the drive in a bubble pack mailer or other suitable form of protective packaging and label the package "FRAGILE."

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## 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 a bench worker	6,000 V	800 V	400 V
Removing DIPS from a plastic tube	2,000 V	700 V	400 V
Removing DIPS from a 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 a 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 non-conductive 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 non-conductive 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
- Non-conductive foam
- Conductive countertop 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
- Non-conductive 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

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

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

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.

## Display panel assembly

Description	Spare part number
Display panel assembly (10.0-in, HD, LED, TouchScreen, includes front cover)	776014-001
Back cover (includes battery, plastic frame, and power and volume button actuators)	776015-001

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.

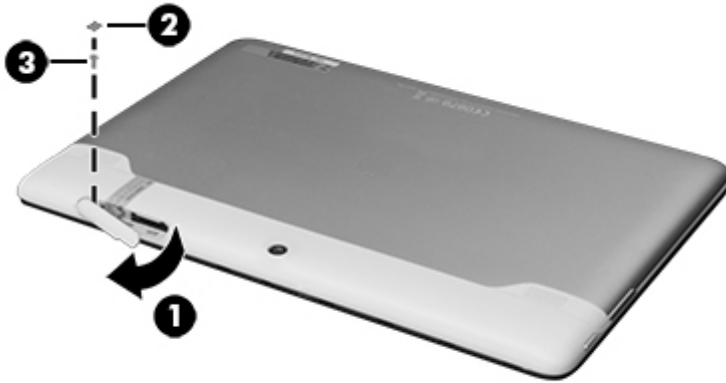
Remove the display panel assembly:

**CAUTION:** Before positioning the tablet with 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.

1. Position the tablet with the display panel facing down and the SD Card Reader/SIM slot cover toward you.
2. Open the SD Card Reader/SIM slot cover **(1)**.

**NOTE:** The following screw should have a warranty tag **(2)** on it. This tag should not have any signs of tampering on it. When repairs have been completed on the tablet, this warranty tag should be replaced.

3. Remove the Phillips PM1 .3x2.0 screw **(3)** that secures the back cover to the display panel assembly.

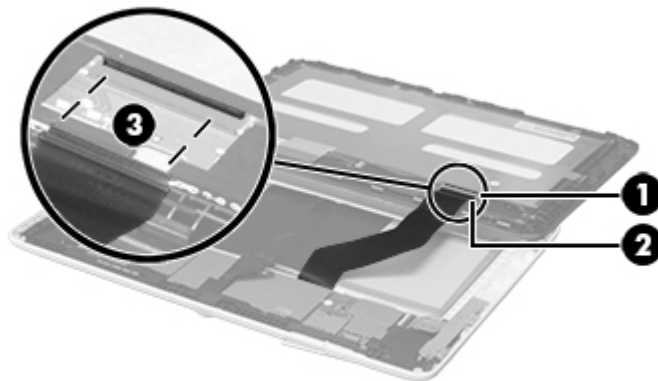


4. Position the tablet with the display panel facing up and the SD Card Reader/SIM slot cover toward you.
5. Release the warranty label **(1)**.

6. Separate the front edge of the display panel assembly **(2)** from the back cover, and then swing the display panel assembly up and back until it rests upside down next to the back cover.



7. Release the ZIF connector **(1)** to which the display panel cable is attached.
8. Detach the display panel cable **(2)** from the display panel assembly. (The display panel cable is attached to the display panel assembly with double-sided adhesive.)
9. Disconnect the display panel cable from the display panel assembly **(3)**.



10. Remove the display panel assembly.

Reverse this procedure to install the display panel assembly.

# Antenna

Description	Spare part number
Antenna (includes double-sided adhesive)	776022-001

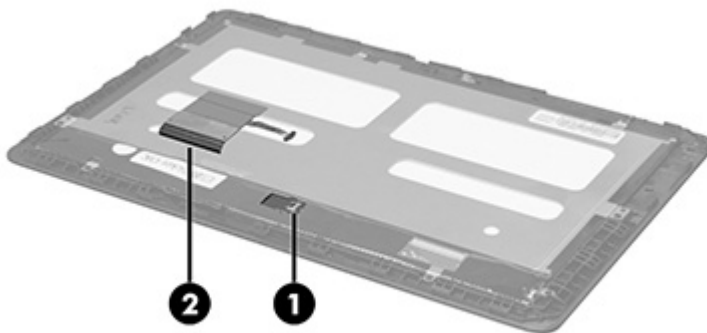
Before removing the antenna, follow these steps:

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 display panel assembly (see [Display panel assembly on page 15](#)).

Remove the antenna:

**CAUTION:** Before positioning the tablet with 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.

1. Position the tablet with the display panel facing up and the SD Card Reader/SIM slot cover toward you.
2. Release the ZIF connector **(1)** to which the antenna cable is attached, and then disconnect the antenna cable from the display panel assembly.
3. Detach the antenna transceiver **(2)** from the display panel assembly. (The antenna transceiver is attached to the display panel assembly with double-sided adhesive.)



4. Remove the antenna.

Reverse this procedure to install the antenna.



# Connector board

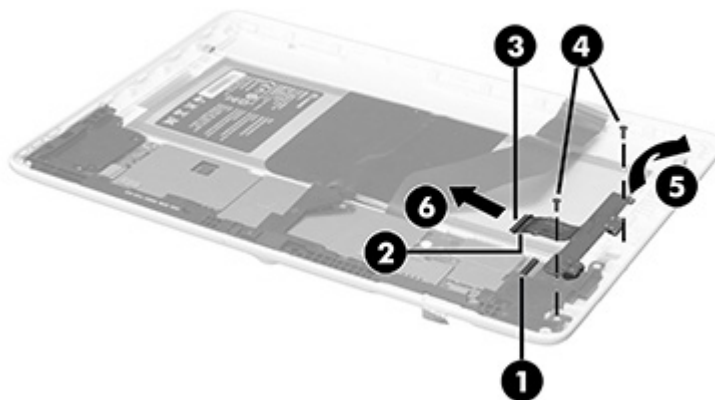
Description	Spare part number
Connector board (includes USB power connector, audio jack, and vibrator module)	776025-001

Before removing the connector 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 display panel assembly (see [Display panel assembly on page 15](#)).

Remove the connector board:

1. Release the ZIF connector **(1)** to which the connector board cable is attached.
2. Detach the connector board cable **(2)** from the system board. (The connector board cable is attached to the system board with double-sided adhesive.)
3. Disconnect the connector board cable **(3)** from the system board.
4. Remove the two Torx T5M1.3×3.7 screws **(4)** that secure the connector board to the back cover.
5. Lift the rear edge of the connector board **(5)** until it rests at an angle.
6. Remove the connector board **(6)** by sliding it up and back at an angle.



Reverse this procedure to install the I/O board.

# Battery

Description	Spare part number
2-cell, 6280-mAh, Li-ion, USB-charging battery (includes cable and double-sided adhesive)	776016-001

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 [Display panel assembly on page 15](#)).
5. Remove the connector board (see [Connector board on page 19](#)).

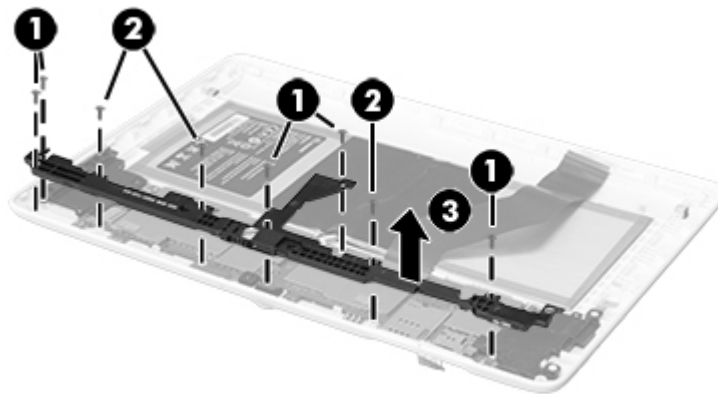
**⚠ WARNING!** To reduce potential safety issues, use only the battery provided with the tablet, a replacement battery provided by HP, or a compatible battery purchased from HP.

**⚠ 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 the operating system before removing the battery.

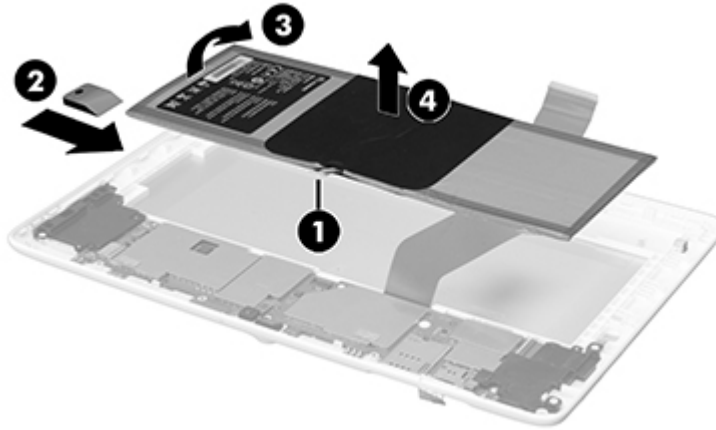
Remove the battery:

1. Remove the five Torx T5M1 .3×3.7 screws **(1)** that secure the plastic frame to the back cover.
2. Remove the three Phillips PM1 .3×3.0 screws **(2)** that secure the plastic frame to the back cover.
3. Remove the plastic frame **(3)**.

The plastic frame is included in the back cover spare part kit, spare part number 776015-001.



4. Disconnect the battery cable **(1)** from the system board.
5. Insert a case utility tool **(2)** between the battery and the back cover, and then detach the battery **(3)** from the back cover.
6. Remove the battery **(4)**.



Reverse this procedure to install the battery.

## Speaker connector boards

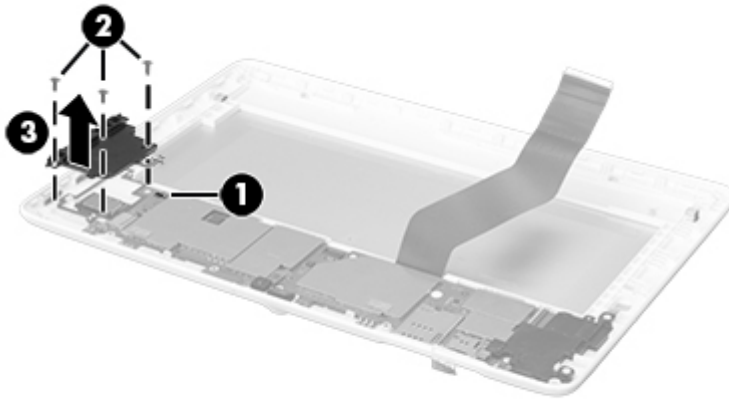
Description	Spare part number
<b>Speaker connector board</b> for left speaker (includes power button and volume control buttons)	776017-001
<b>Speaker connector board</b> for right speaker	776018-001


Before removing the speaker connector boards, follow these steps:

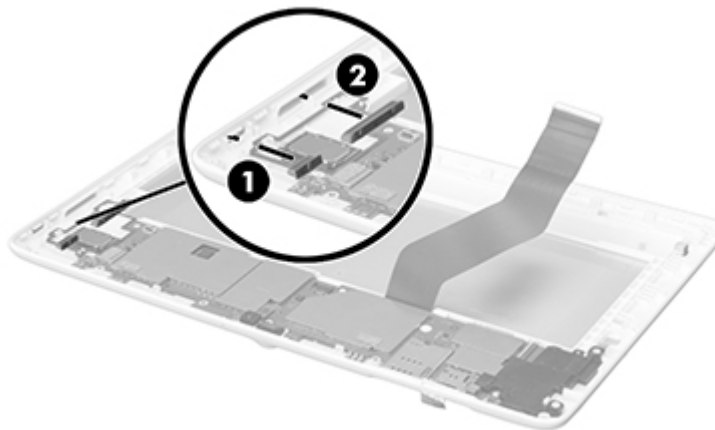
1. Turn off the tablet. If you are unsure whether the tablet is off or in Hibernation, turn the tablet on, and then shut it down through the operating system.
2. Disconnect the power from the tablet by unplugging the power cord from the tablet.
3. Disconnect all external devices from the tablet.
4. Remove the back cover (see [Display panel assembly on page 15](#)).
5. Remove the connector board (see [Connector board on page 19](#)).
6. Disconnect the battery cable from the system board (see [Battery on page 20](#)).

Remove the speaker connector boards:

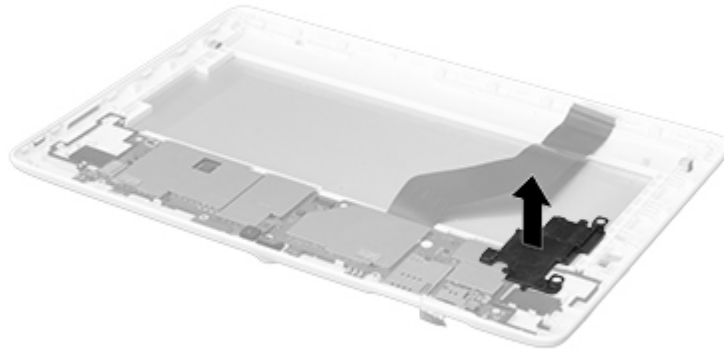
1. Release the ZIF connector **(1)** to which the left speaker connector board cable is attached, and then disconnect the left speaker connector board cable from the system board.
2. Remove the three Torx T5M1.3×3.7 screws **(2)** that secure the left speaker connector board to the back cover.
3. Remove the left speaker connector board **(3)**.



 **NOTE:** If the power **(1)** and volume board actuators **(2)** should become displaced during the removal of the left speaker connector board, install the actuators into the openings in the back cover as indicated in the following illustration. The power and volume board actuators are included in the back cover spare part kit, spare part number 776015-001.



4. Remove the right speaker connector board.



Reverse this procedure to install the speaker connector boards.

## Speakers

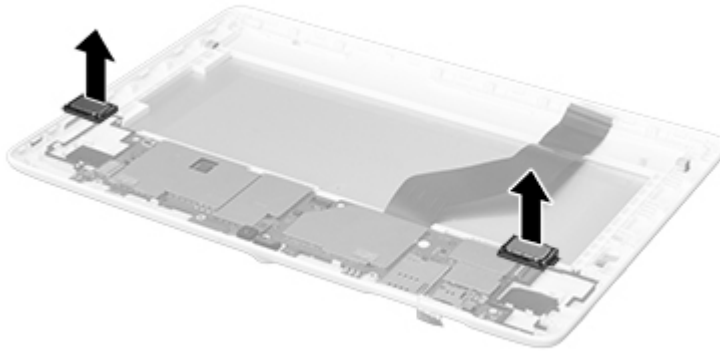
Description	Spare part number
Speaker Kit (includes left and right speakers)	776020-001

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 display panel assembly (see [Display panel assembly on page 15](#)).
5. Remove the connector board (see [Connector board on page 19](#)).
6. Disconnect the battery cable from the system board (see [Battery on page 20](#)).
7. Remove the left and right speaker connector boards (see [Speaker connector boards on page 21](#)).

Remove the speakers:

- ▲ Remove the speakers.



Reverse this procedure to install the speakers.

## Rear-facing webcam

Description	Spare part number
3.0-MP rear-facing webcam (includes cable)	776024-001

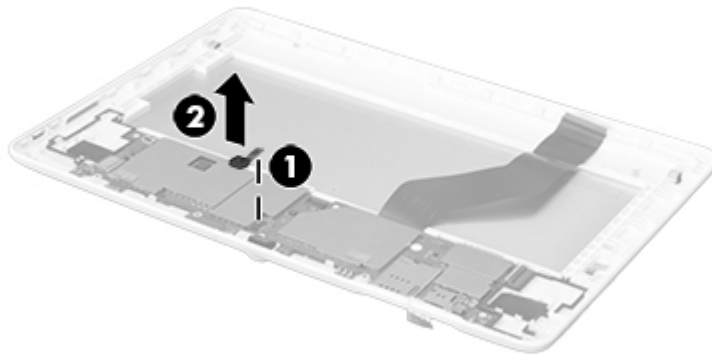
Before removing the rear-facing webcam, follow these steps:

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 display panel assembly (see [Display panel assembly on page 15](#)).
5. Remove the connector board (see [Connector board on page 19](#)).
6. Disconnect the battery cable from the system board (see [Battery on page 20](#)).

Remove the rear-facing webcam:

1. Disconnect the rear-facing webcam cable **(1)** from the system board.

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



Reverse this procedure to install the rear-facing webcam.

## System board

Description	Spare part number
System board equipped with a Balong V9R1 Cortex-A9 quad core 1.60-GHz processor, 1.0-GB of system memory, 8-GB eMMC system storage, and a graphics subsystem with UMA memory	776019-001

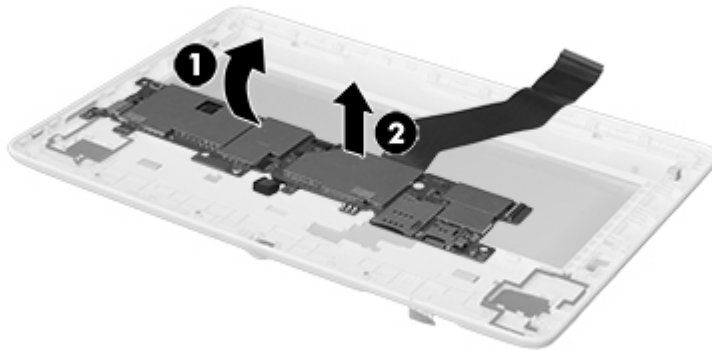
Before removing the system board, follow these steps:

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 display panel assembly (see [Display panel assembly on page 15](#)).
5. Remove the connector board (see [Connector board on page 19](#)).
6. Disconnect the battery cable from the system board (see [Battery on page 20](#)).
7. Remove the left and right speaker connector boards (see [Speaker connector boards on page 21](#)).

Remove the system board:

1. Lift the outside edge of the system board **(1)** until it rests at an angle.

2. Remove the system board **(2)**.



Reverse this procedure to install the system board.

## Front-facing webcam

Description	Spare part number
0.3-MP front-facing webcam (includes cable)	776023-001

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

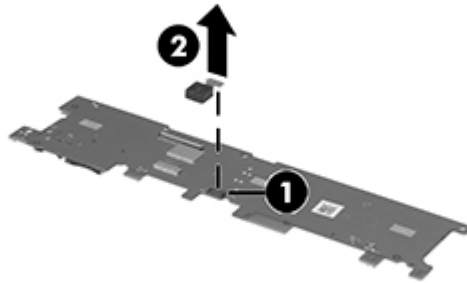
1. Turn off the tablet. If you are unsure whether the tablet is off or in Hibernation, turn the tablet on, and then shut it down through the operating system.
2. Disconnect the power from the tablet by unplugging the power cord from the tablet.
3. Disconnect all external devices from the tablet.
4. Remove the display panel assembly (see [Display panel assembly on page 15](#)).
5. Remove the connector board (see [Connector board on page 19](#)).
6. Disconnect the battery cable from the system board (see [Battery on page 20](#)).
7. Remove the left and right speaker connector boards (see [Speaker connector boards on page 21](#)).
8. Remove the system board (see [System board on page 25](#)).

Remove the front-facing webcam:

1. Turn the system board upside down, with the front-facing webcam toward you.
2. Disconnect the front-facing webcam cable **(1)** from the system board.



3. Remove the front-facing webcam **(2)** and cable.



Reverse this procedure to install the front-facing webcam.

## Display panel cable

Description	Spare part number
Display panel cable (includes double-sided adhesive)	776021-001

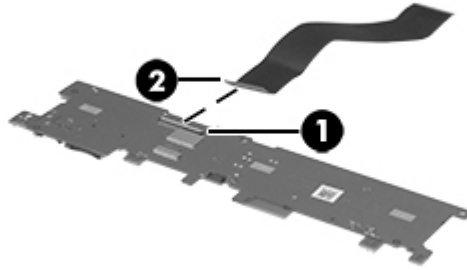
Before removing the display panel cable, follow these steps:

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 display panel assembly (see [Display panel assembly on page 15](#)).
5. Remove the connector board (see [Connector board on page 19](#)).
6. Disconnect the battery cable from the system board (see [Battery on page 20](#)).
7. Remove the left and right speaker connector boards (see [Speaker connector boards on page 21](#)).
8. Remove the system board (see [System board on page 25](#)).

Remove the display panel cable:

1. Turn the system board upside down, with the front-facing webcam toward you.
2. Release the ZIF connector **(1)** to which the display panel cable is attached.

3. Disconnect the display panel cable **(2)** from the system board.



Reverse this procedure to install the display panel cable.

# 6 Specifications

	Metric	U.S.
<b>Dimensions</b> (Landscape orientation)		
Height	<b>17.59 cm</b>	6.93 in
Width	<b>25.74 cm</b>	10.13 in
Depth	<b>0.99 cm</b>	0.39 in
Weight	<b>640 g</b>	1.41 lb
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-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.		

# 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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# Index

## A

AC adapter, spare part numbers 9  
ambient light sensor 3  
antenna  
  removal 18  
  spare part number 6, 9, 18  
audio, product description 1  
audio-in jack 3  
audio-out jack 3

## B

back cover  
  removal 15  
  spare part number 7, 9, 15  
battery  
  removal 20  
  spare part number 6, 9, 20  
buttons  
  power 3  
  volume control 3

## C

cables, service considerations 10  
chipset, product description 1  
connector board  
  removal 19  
  spare part number 6, 9, 19  
connectors, service considerations 10

## D

display panel assembly  
  removal 15  
  spare part number 6, 9, 15  
display panel cable  
  removal 27  
  spare part number 7, 9, 27

display panel, product description 1  
drives  
  precautions 11  
  preventing damage 11

## E

electrostatic discharge 11  
equipment guidelines 14

## F

front-facing webcam  
  location 3  
  removal 26  
  spare part number 7, 9, 26

## G

graphics, product description 1  
grounding guidelines 11  
guidelines  
  equipment 14  
  grounding 11  
  packaging 13  
  transporting 13  
  workstation 13

## H

headphone jack 3

## J

jacks  
  audio-in 3  
  audio-out 3  
  headphone 3  
  microphone 3

## M

memory, product description 1  
microphone 4

microphone jack 3  
microphone, product description 1  
model name 1

## O

operating system, product description 2

## P

packaging guidelines 13  
plastic frame  
  removal 20  
  spare part number 6  
plastic parts, service considerations 10  
ports  
  product description 2  
  USB 4  
power adapter, spare part numbers 8  
power button 3  
power cord, set requirements 30  
power requirements, product description 2  
processor, product description 1  
product description  
  audio 1  
  chipset 1  
  display panel 1  
  graphics 1  
  memory 1  
  microphone 1  
  operating system 2  
  ports 2  
  power requirements 2  
  processors 1  
  product name 1  
  sensors 1

- serviceability 2
- storage 1
- video 1
- wireless 1

product name 1

## R

- rear-facing webcam
  - location 4
  - removal 24
  - spare part number 7, 9, 24
- Rubber Kit, spare part number 8, 9

## S

- Screw Kit, spare part number 8, 9
- SD Card Reader slot 3
- sensors, product description 1
- service considerations
  - cables 10
  - connectors 10
  - plastic parts 10
- serviceability, product description 2
- SIM slot 3
- speaker connector board
  - removal 21
  - spare part numbers 7, 9, 21
- Speaker Kit, spare part number 7, 9, 23
- speakers
  - location 3
  - removal 23
  - spare part number 7, 9, 23
- storage, product description 1
- system board
  - removal 25
  - spare part number 7, 25

## T

- tablet
  - IMEI number 5
  - major components 6
  - part number 5
  - serial number 5
  - spare part numbers 8, 9
  - specifications 29
- transporting guidelines 13

## U

- USB dongle, spare part number 8, 9
- USB extension cable, spare part number 8, 9
- USB port, location 4

## V

- video, product description 1
- volume control button 3

## W

- webcam
  - removal 24, 26
  - spare part numbers 7, 9, 24, 26
- wireless, product description 1
- workstation guidelines 13