

## **HP Stream 7 Tablet**

Maintenance and Service Guide IMPORTANT! This document is intended for HP authorized service providers only.

© Copyright 2014 Hewlett-Packard Development Company, L.P.

Bluetooth is a trademark owned by its proprietor and used by Hewlett-Packard Company under license. Intel is a trademark of Intel Corporation in the U.S. and other countries. Microsoft and Windows are U.S. registered trademarks of the Microsoft group of companies. SD Logo is a trademark of its proprietor.

The information contained herein is subject to change without notice. The only warranties for HP products and services are set forth in the express warranty statements accompanying such products and services. Nothing herein should be construed as constituting an additional warranty. HP shall not be liable for technical or editorial errors or omissions contained herein.

First Edition: October 2014

Document Part Number: 791742-001

#### **Product notice**

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

Not all features are available on all editions of Windows 8. This tablet may require upgraded and/or separately purchased hardware, drivers, and/or software to take full advantage of Windows 8 functionality. See <a href="http://www.microsoft.com">http://www.microsoft.com</a> for details.

#### 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

**MARNING!** 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 useraccessible surface temperature limits defined by the International Standard for Safety of Information Technology Equipment (IEC 60950-1).

# **Table of contents**

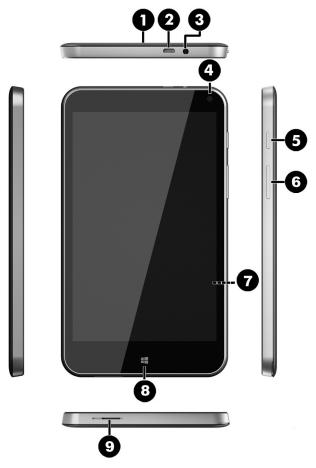
1 Pi	roduct descriptionrigidation	1
2 Ex	external component identification	2
3 III	llustrated parts catalog	3
	Locating the serial number, product number, and model number	3
	Tablet major components	4
	Miscellaneous parts	5
	Sequential part number listing	6
4 R	Removal and replacement preliminary requirements	9
	Tools required	g
	Service considerations	9
	Plastic parts	<u>c</u>
	Cables and connectors	<u>9</u>
	Grounding guidelines	9
	Electrostatic discharge damage	<u>9</u>
	Packaging and transporting guidelines	11
	Workstation guidelines	11
5 R	Removal and replacement procedures	13
	Tablet component replacement procedures	13
	Back cover	13
	Mid-frame cover	14
	Battery	15
	Rear-facing webcamera	16
	Front-facing webcamera	17
	Antenna board	19
	Display cable	20
	Speaker	21
	System board	22
	Power button board	26
	Power button	27
	Volume control button	28

6 Specifications	29
7 Using HP PC Hardware Diagnostics (UEFI)	30
Downloading HP PC Hardware Diagnostics (UEFI) to a USB device	30
8 Backup and recovery	31
Backing up your information	31
Performing a system recovery	31
Recovery from an external USB flash drive	31
Using Windows Refresh or Windows Reset	32
9 Power adapter requirements	
Requirements for all countries	33
Requirements for specific countries and regions	
10 Recycling	35
Index	36

# 1 Product description

Category	Description		
Product Name	HP Stream 7 Tablet		
Processor	Intel® Atom Z3735G quad core 1.3 GHz/ 1.80 GHz burst mode processor		
Panel	7.0 in, display with light-emitting display (LED) backlight (1280×800) In-plane Switching (IPS), five-finger capacitive touch, auto rotate (selectable), tempered glass, anti-glare TouchScreen display assembly		
Memory	1 GB RAM memory, integrated onto system board		
Storage	32 GB eMMC, integrated onto system board		
	Supports external Micro SD up to 32 GB		
Audio and video	One microphone		
	One speaker		
	2.0 MP full-frame, rear-facing webcamera		
	0.3 MP full-frame, VGA front-facing webcamera		
	Supports MP3, Ogg, FLAC, AAC, and AMR audio formats		
	Supports CTIA headset only		
Sensor	Accelerometer/G-sensor		
Wireless networking	Integrated wireless option: WLAN 802.11b/g/n (n is select models only) with one antenna		
	Bluetooth®: 4.0 WAPI		
External expansion	Integrated micro SD Card Reader expandable to 32 GB		
Ports	Audio: headphone/microphone combo jack, 3.5 mm		
	Micro SD Card Reader		
	Micro USB 2.0		
Power requirements	3000 mAh, Li-ion battery, USB charging		
	5V 2A AC adapter with Micro USB cable and localized cable plug support		
Operating system	<b>Preinstalled</b> : Microsoft™ Windows™ 8.1 with Bing (32 bit)		
Serviceability	End user replaceable parts:		
	AC adapter		
	USB cable		

# 2 External component identification



ltem	Component	ltem	Component
(1)	Rear-facing webcamera	(6)	Volume control button
(2)	Micro USB 2.0 port	(7)	Micro SD Card Reader slot
(3)	Audio-out (headphone)/Audio-in (microphone) jack	(8)	Windows button
(4)	Front-facing webcamera	(9)	Speaker
(5)	Power button		

# 3 Illustrated parts catalog

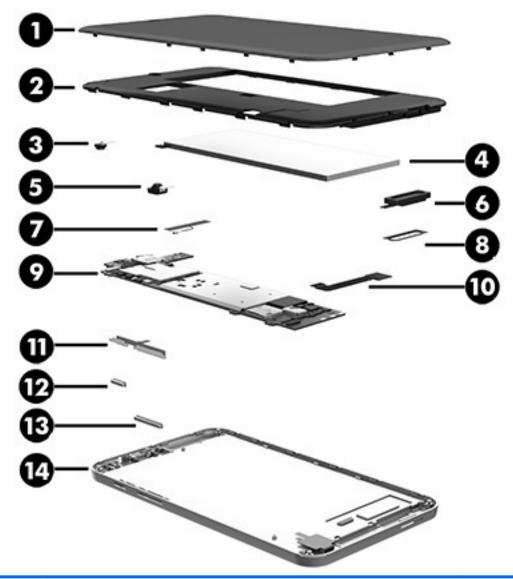
## Locating the serial number, product number, and model number

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

The model number (1), serial number (2), and product number (3) of your tablet are located on the back cover of the tablet. You may need the information when you travel internationally or when you contact support.



# **Tablet major components**



ltem	Component	Spare part number
(1)	Back cover	796782-001
(2)	Mid-frame cover	796783-001
(3)	Front-facing webcamera (includes cable)	796786-001
(4)	Battery, 3000 mAh, USB-charging (includes cable)	795065-001
(5)	Rear-facing webcamera (includes cable)	796787-001
(6)	<b>Speaker Kit</b> (includes speaker and cables); the speaker is also spared with the system board	796788-001
(7)	Antenna board (includes WLAN antenna cable and transceiver)	796789-001
(8)	Speaker rubber protector	796792-001

ltem	Component	Spare part number
(9)	<b>System board</b> equipped with Atom Z3735G processor, 1 GB RAM memory, and 32 GB eMMC hard drive (includes microphone, audio-out (headphone)/audio-in (microphone) jack, micro USB 2.0 port, and speaker)	
	For use only in Asia Pacific	796785-371
	For use only in Canada	796785-DB1
	For use only in the People's Republic of China	796785-AA1
	For use only in Europe, the Middle East, and Africa	796785-021
	For use only in Latin America	796785-161
	For use only in the North America	796785-001
(10)	Display cable	796790-001
(11)	Power button board	796791-001
(12)	Power button	796793-001
(13)	Volume control button	796794-001
(14)	7.0 in, LED, TouchScreen, display panel assembly	796784-001

# Miscellaneous parts

Component	Spare part number			
5V 2A AC adapter:				
For use only in Australia	757043-001			
For use only in Europe	747779-001			
For use only in the North America	745229-001			
For use only in the People's Republic of China	757280-001			
For use only in the United Kingdom	747780-001			
HP Stream 7 equipped with Atom Z3735G processor, 1 GB RAM memory, and 32	GB eMMC hard drive			
For use only in the Adriatic Region	794637-F81			
For use only in Africa	794637-DE1			
For use only in Asia Pacific	794637-371			
For use only in the Baltics	794637-DT1			
For use only in Belgium	794637-A41			
For use only in Bulgaria	794637-261			
For use only in Canada	794637-DB1			
For use only in Czech Republic and Slovak Republic	794637-FL1			
For use only in Europe, the Middle East, and Africa	794637-021			
For use only in France	794637-051			

Component	Spare part number
For use only in Germany	794637-041
For use only in Greece	794637-151
For use only in Hungary	794637-211
For use only in Israel	794637-BB1
For use only in Italy	794637-061
For use only in Latin America	794637-161
For use only in the Netherlands	794637-331
For use only in Nordic Regions	794637-DH1
For use only in the North America	794637-001
For use only in the People's Republic of China	794637-AA1
For use only in Poland	794637-241
For use only in Portugal	794637-131
For use only in Romania	794637-271
For use only in Russia	794637-251
For use only in Saudi Arabia	794637-DL1
For use only in Spain	794637-071
For use only in Switzerland	794637-BG1
For use only in the United Kingdom	794637-031
Screw Kit	796795-001
USB extension cable	745230-001

# Sequential part number listing

Spare part number	Description
745229-001	5V 2A AC adapter for use only in North America
745230-001	USB extension cable
747779-001	5V 2A AC adapter for use only in Europe
747780-001	5V 2A AC adapter for use only in the United Kingdom
757043-001	5V 2A AC adapter for use only in Australia
757280-001	5V 2A AC adapter for use only in People's Republic of China
794637-001	HP Stream 7, equipped with Atom Z3735G processor, 1 GB RAM memory, and 32 GB eMMC hard drive, for use only in North America
794637-021	HP Stream 7, equipped with Atom Z3735G processor, 1 GB RAM memory, and 32 GB eMMC hard drive, for use only in Europe, the Middle East, and Africa

Spare part number	Description
794637-031	HP Stream 7, equipped with Atom Z3735G processor, 1 GB RAM memory, and 32 GB eMMC hard drive, for use only in the United Kingdom
794637-041	HP Stream 7, equipped with Atom Z3735G processor, 1 GB RAM memory, and 32 GB eMMC hard drive, for use only in Germany
794637-051	HP Stream 7, equipped with Atom Z3735G processor, 1 GB RAM memory, and 32 GB eMMC hard drive, for use only in France
794637-061	HP Stream 7, equipped with Atom Z3735G processor, 1 GB RAM memory, and 32 GB eMMC hard drive, for use only in Italy
794637-071	HP Stream 7, equipped with Atom Z3735G processor, 1 GB RAM memory, and 32 GB eMMC hard drive, for use only in Spain
794637-131	HP Stream 7, equipped with Atom Z3735G processor, 1 GB RAM memory, and 32 GB eMMC hard drive, for use only in Portugal
794637-151	HP Stream 7, equipped with Atom Z3735G processor, 1 GB RAM memory, and 32 GB eMMC hard drive, for use only in Greece
794637-161	HP Stream 7, equipped with Atom Z3735G processor, 1 GB RAM memory, and 32 GB eMMC hard drive, for use only in Latin America
794637-211	HP Stream 7, equipped with Atom Z3735G processor, 1 GB RAM memory, and 32 GB eMMC hard drive, for use only in Hungary
794637-241	HP Stream 7, equipped with Atom Z3735G processor, 1 GB RAM memory, and 32 GB eMMC hard drive, for use only in Poland
794637-251	HP Stream 7, equipped with Atom Z3735G processor, 1 GB RAM memory, and 32 GB eMMC hard drive, for use only in Russia
794637-261	HP Stream 7, equipped with Atom Z3735G processor, 1 GB RAM memory, and 32 GB eMMC hard drive, for use only in Bulgaria
794637-271	HP Stream 7, equipped with Atom Z3735G processor, 1 GB RAM memory, and 32 GB eMMC hard drive, for use only in Romania
794637-331	HP Stream 7, equipped with Atom Z3735G processor, 1 GB RAM memory, and 32 GB eMMC hard drive, for use only in the Netherlands
794637-371	HP Stream 7, equipped with Atom Z3735G processor, 1 GB RAM memory, and 32 GB eMMC hard drive, for use only in Asia Pacific
794637-A41	HP Stream 7, equipped with Atom Z3735G processor, 1 GB RAM memory, and 32 GB eMMC hard drive, for use only in Belgium
794637-AA1	HP Stream 7, equipped with Atom Z3735G processor, 1 GB RAM memory, and 32 GB eMMC hard drive, for use only in the People's Republic of China
794637-BB1	HP Stream 7, equipped with Atom Z3735G processor, 1 GB RAM memory, and 32 GB eMMC hard drive, for use only in Israel
794637-BG1	HP Stream 7, equipped with Atom Z3735G processor, 1 GB RAM memory, and 32 GB eMMC hard drive, for use only in Switzerland
794637-DB1	HP Stream 7, equipped with Atom Z3735G processor, 1 GB RAM memory, and 32 GB eMMC hard drive, for use only in Canada
794637-DE1	HP Stream 7, equipped with Atom Z3735G processor, 1 GB RAM memory, and 32 GB eMMC hard drive, for use only in Africa
794637-DH1	HP Stream 7, equipped with Atom Z3735G processor, 1 GB RAM memory, and 32 GB eMMC hard drive, for use only in Nordic Regions

Spare part number	Description
794637-DL1	HP Stream 7, equipped with Atom Z3735G processor, 1 GB RAM memory, and 32 GB eMMC hard drive, for use only in Saudi Arabia
794637-DT1	HP Stream 7, equipped with Atom Z3735G processor, 1 GB RAM memory, and 32 GB eMMC hard drive, for use only in the Baltics
794637-F81	HP Stream 7, equipped with Atom Z3735G processor, 1 GB RAM memory, and 32 GB eMMC hard drive, for use only in the Adriatic Region
794637-FL1	HP Stream 7, equipped with Atom Z3735G processor, 1 GB RAM memory, and 32 GB eMMC hard drive, for use only in Czech Republic and Slovak Republic
795065-001	Battery, 3000mAh, USB-charging (includes cable)
796782-001	Back cover
796783-001	Mid-frame cover
796784-001	7.0 in, LED, TouchScreen, display panel assembly
796785-001	System board equipped with Atom Z3735G processor, 1 GB RAM memory, and 32 GB eMMC (includes microphone, audio-out (headphone)/audio-in (microphone) jack, speaker, and micro USB 2.0 port), for use only in the North America
796785-021	System board equipped with Atom Z3735G processor, 1 GB RAM memory, and 32 GB eMMC (includes microphone, audio-out (headphone)/audio-in (microphone) jack, speaker, and micro USB 2.0 port), for use only in Europe, the Middle East, and Africa
796785-161	System board equipped with Atom Z3735G processor, 1 GB RAM memory, and 32 GB eMMC (includes microphone, audio-out (headphone)/audio-in (microphone) jack, speaker, and micro USB 2.0 port), for use only in Latin America
796785-371	System board equipped with Atom Z3735G processor, 1 GB RAM memory, and 32 GB eMMC (includes microphone, audio-out (headphone)/audio-in (microphone) jack, speaker, and micro USB 2.0 port), for use only in Asia Pacific
796785-AA1	System board equipped with Atom Z3735G processor, 1 GB RAM memory, and 32 GB eMMC (includes microphone, audio-out (headphone)/audio-in (microphone) jack, speaker, and micro USB 2.0 port), for use only in the People's Republic of China
796785-DB1	System board equipped with Atom Z3735G processor, 1 GB RAM memory, and 32 GB eMMC (includes microphone, audio-out (headphone)/audio-in (microphone) jack, speaker, and micro USB 2.0 port), for use only in Canada
796786-001	Front-facing webcamera (includes cable)
796787-001	Rear-facing webcamera (includes cable)
796788-001	Speaker Kit (includes speaker and cables); the speaker is also spared with the system board
796789-001	Antenna board (includes WLAN antenna cable and transceiver)
796790-001	Display cable
796791-001	Power button board
796792-001	Speaker rubber protector
796793-001	Power button
796794-001	Volume control button
796795-001	Screw Kit

# Removal and replacement preliminary requirements

## **Tools required**

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

- Magnetic screw driver
- Phillips PO 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.



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

### **Plastic parts**

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.

#### Cables and connectors

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.

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				
	Relative humidity			
Event	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 staticsafe 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 ±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

### 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.

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

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

There are as many as 15 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	796782-001
7.0 in, HD, LED, TouchScreen, display panel assembly	796784-001

Before disassembling the tablet, follow these steps:

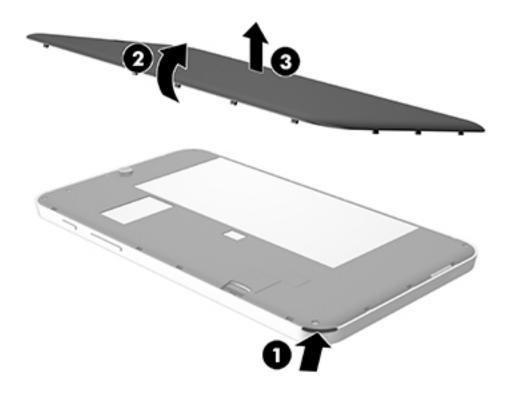
- 1. Turn off the tablet. If you are unsure whether the tablet is off or in Hibernation, turn the tablet on, and then shut it down through the operating system.
- 2. Disconnect the power from the tablet by unplugging the power adapter cord from the tablet.
- 3. Disconnect all external devices from the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

Remove the back cover:

CAUTION: Before turning the display panel assembly upside 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 assembly.

- 1. Place the tablet on a flat surface, display panel side down, with the SD card slot and volume control buttons toward you.
- Use the finger 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.

## **Mid-frame cover**

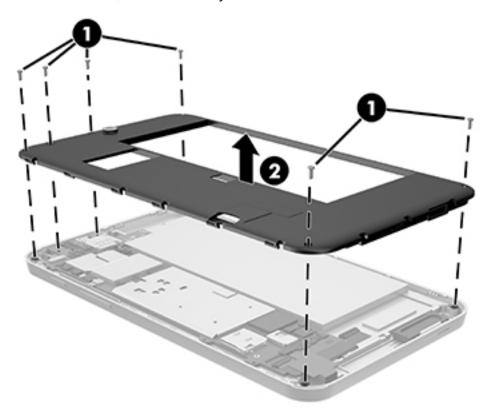
Description	Spare part number
Mid-frame cover	796783-001

- 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 adapter cord from the tablet.
- 3. Disconnect all external devices from the tablet.
- Remove the back cover (see <u>Back cover on page 13</u>).

#### Remove the mid-frame cover:

1. Remove the 6 PHO screws (1) from the mid-frame cover.

2. Lift the mid-frame cover (2) from the battery area.



Reverse this procedure to install the mid-frame cover.

## **Battery**

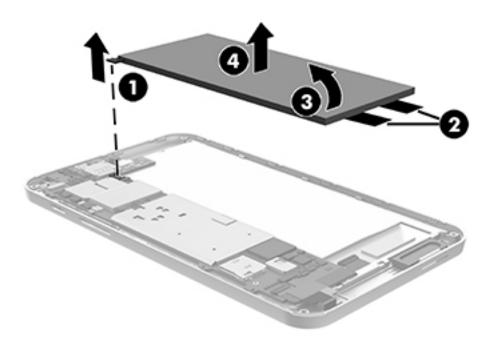
Description	Spare part number
Battery, 3000 mAh, USB-charging (includes cable)	795065-001

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.
- Disconnect the power from the tablet by unplugging the power adapter cord from the tablet.
- 3. Disconnect all external devices from the tablet.
- 4. Remove the back cover (see Back cover on page 13).
- **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 disconnecting and removing the battery.

Remove the battery:

- NOTE: Disconnect the battery cable carefully; pulling too hard can break the system board connector.
  - 1. Disconnect the battery cable (1) from the system board.
  - 2. Release the battery tabs and tape (2) holding the battery.
  - NOTE: Be careful not to bend the battery as you lift it.
  - 3. Lift up the battery (3) to release it.
  - 4. Remove the battery (4).



Reverse this procedure to install the battery.

## **Rear-facing webcamera**

Description	Spare part number
Rear-facing webcamera (includes cable)	796787-001

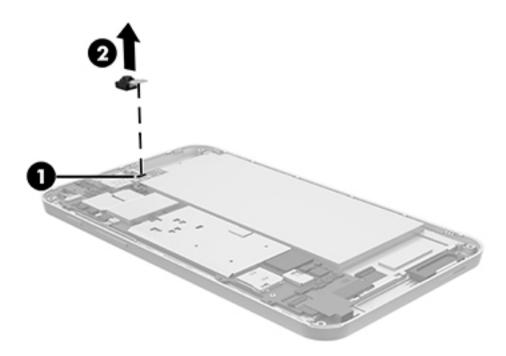
Before removing the rear-facing webcamera, follow these steps:

- 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 adapter cord from the tablet.
- 3. Disconnect all external devices from the tablet.
- 4. Remove the back cover (see <u>Back cover on page 13</u>).

- 5. Remove the mid-frame cover (see Mid-frame cover on page 14).
- **6.** Disconnect the battery (see <u>Battery on page 15</u>).

Remove the rear-facing webcamera:

- 1. Disconnect the rear-facing webcamera cable (1) from the system board.
- Remove the rear-facing webcamera (2) from the display panel assembly.



Reverse this procedure to install the rear-facing webcamera.

## Front-facing webcamera

Description	Spare part number
Front-facing webcamera (includes cable)	796786-001

Before removing the front-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 adapter cord from the tablet.
- 3. Disconnect all external devices from the tablet.
- Remove the back cover (see <u>Back cover on page 13</u>).

- 5. Remove the mid-frame cover (see Mid-frame cover on page 14).
- **6.** Disconnect the battery (see <u>Battery on page 15</u>).

Remove the front-facing webcamera:

- 1. Release the ZIF connector (1) to which the front-facing webcamera cable is attached.
- **2.** Remove the front-facing webcamera **(2)** from the display panel assembly.



Reverse this procedure to install the front-facing webcamera.

### **Antenna board**

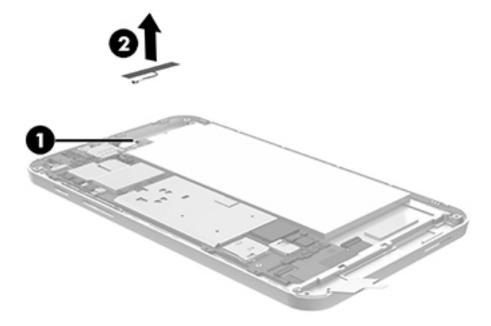
Description	Spare part number
Antenna (includes WLAN antenna cable and transceiver)	796789-001

Before removing the 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 adapter cord from the tablet.
- Disconnect all external devices from the tablet.
- 4. Remove the back cover (see <u>Back cover on page 13</u>).
- 5. Remove the mid-frame cover (see Mid-frame cover on page 14).
- **6.** Disconnect the battery (see <u>Battery on page 15</u>).

#### Remove the antenna board:

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



3. Remove the antenna board and cable.

Reverse this procedure to install the antenna board.

## **Display cable**

Description	Spare part number
Display cable	796790-001

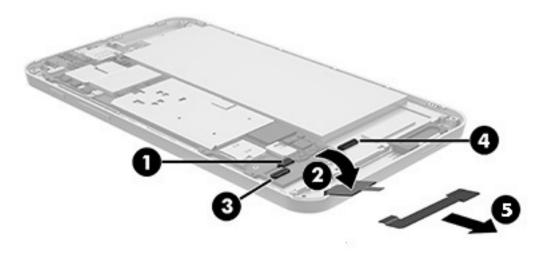
#### Before removing the display cable, follow these steps:

- 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 adapter 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 mid-frame cover (see Mid-frame cover on page 14).
- Disconnect the battery (see <u>Battery on page 15</u>).

#### Remove the display cable:

- 1. Release the ZIF connector (1) to which the touch controller cable is connected to the system board, disconnect the touch controller cable from the system board, and then place the touch controller cable (2) clear of the display cable.
- 2. Release the ZIF connector (3) to which the display cable is connected to the system board, and then disconnect the display cable from the system board.
- 3. Release the ZIF connector (4) to which the display cable is connected to the display panel, and then disconnect the display cable from the display panel.

4. Slide the display cable (5) to the right to remove it.



Reverse this procedure to install the display cable.

## **Speaker**

**NOTE:** The speaker is also spared with the system board.

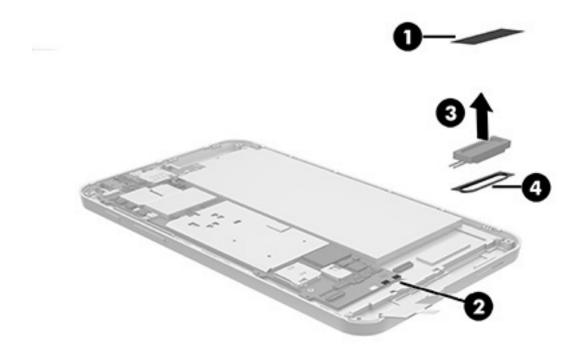
Description	Spare part number
Speaker Kit (includes speaker and cables)	796788-001
Speaker rubber protector	796792-001

Before removing the speaker, 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 adapter 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 mid-frame cover (see Mid-frame cover on page 14).
- **6.** Disconnect the battery (see <u>Battery on page 15</u>).
- 7. Remove the display cable (see <u>Display cable on page 20</u>).

#### Remove the speaker:

- 1. Remove the shield tape (1) that covers the speaker cables.
- 2. Make note of the location the speaker cables are soldered on the system board, and then unsolder the speaker cables (2) from the system board speaker connectors.
- NOTE: When installing the speaker, the red speaker cable should be soldered to the system board speaker "positive" terminal. The black speaker cable should be soldered to the system board speaker "negative" terminal.
- Remove the speaker (3).
- 4. If you need to replace the speaker rubber protector, lift the speaker rubber protector (4) to remove it.



Reverse this procedure to install the speaker and speaker rubber protector.

## **System board**

Description	Spare part number
<b>System board</b> equipped with Atom Z3735G processor, 1 GB RAM memory, and 32 GB eMMC hard drive (includes microphone, audio-out (headphone)/audio-in (microphone) jack, speaker, and micro USB 2.0 port)	
For use only in Asia Pacific	796785-371
For use only in Canada	796785-DB1
For use only in the People's Republic of China	796785-AA1
For use only in Europe, the Middle East, and Africa	796785-021

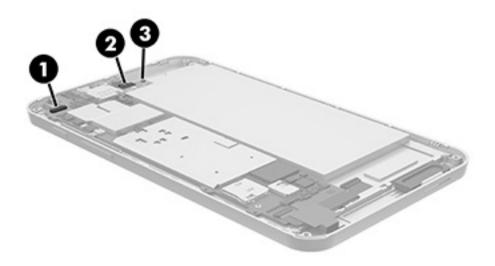
Description	Spare part number
For use only in Latin America	796785-161
For use only in the North America	796785-001

### Before removing the system board, follow these steps:

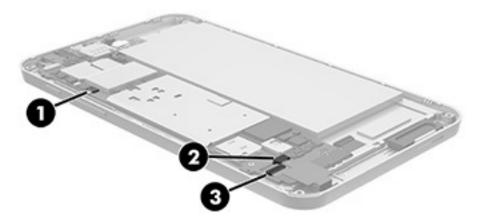
- 1. Turn off the tablet. If you are unsure whether the tablet is off or in Hibernation, turn the tablet on, and then shut it down through the operating system.
- 2. Disconnect the power from the tablet by unplugging the power adapter cord from the tablet.
- 3. Disconnect all external devices from the tablet.
- **4.** Remove the back cover (see <u>Back cover on page 13</u>).
- 5. Remove the mid-frame cover (see Mid-frame cover on page 14).
- Disconnect the battery (see <u>Battery on page 15</u>).

#### Remove the system board:

- 1. Disconnect the following cables from the system board:
  - (1) Front-facing webcamera cable
  - (2) Rear-facing webcamera cable
  - (3) Antenna board cable

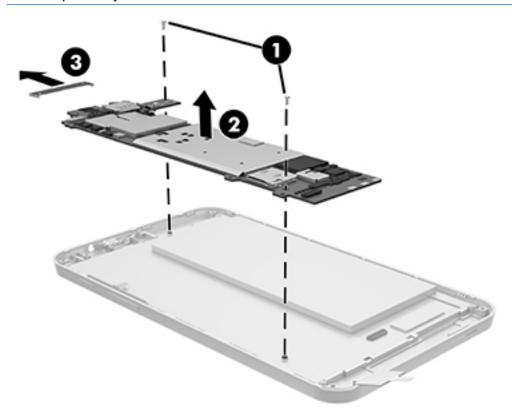


- Release the system board ZIF connectors to which the following cables are connected, and then disconnect the following cables from the system board:
  - (1) Button board
  - (2) Touch controller
  - (3) Display panel graphics



- 3. Remove the two Phillips PM1.3×1.6 screws (1) that secure the system board to the display panel assembly.
- 4. Remove the system board (2).

- 5. Slide off the metal audio-out (headphone)/audio-in (microphone) jack, and micro USB 2.0 port protection plate (3). Retain this plate to insert on the replacement system board.
- NOTE: The protection plate and the left side of the system board are also held in place by two screws that were previously removed when the mid-frame cover was removed.



Reverse this procedure to install the system board.

### **Power button board**

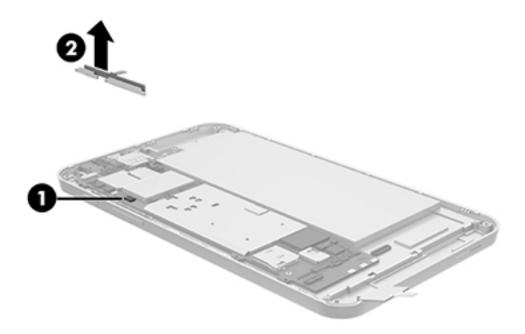
Description	Spare part number
Power button board	796791-001

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 adapter 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 mid-frame cover (see Mid-frame cover on page 14).
- 6. Disconnect the battery (see <u>Battery on page 15</u>).

#### Remove the power button board:

- 1. 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.
- 2. Remove the power button board (2).



Reverse this procedure to install the power button board.

### **Power button**

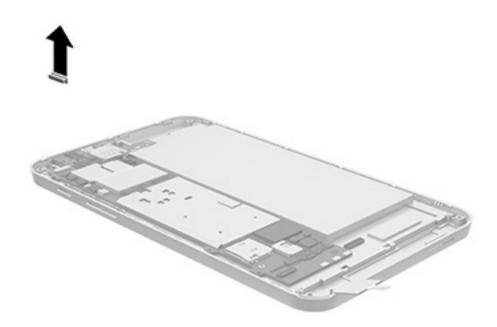
Description	Spare part number
Power button	796793-001

#### Before removing the power button, 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 adapter cord from the tablet.
- 3. Disconnect all external devices from the tablet.
- 4. Remove the back cover (see <u>Back cover on page 13</u>).
- 5. Remove the mid-frame cover (see Mid-frame cover on page 14).
- **6.** Disconnect the battery (see <u>Battery on page 15</u>).
- 7. Remove the power button board (see <a href="Power button board on page 26">Power button board on page 26</a>).

#### Remove the power button:

▲ Lift up the power button.



Reverse this procedure to install the power button.

### **Volume control button**

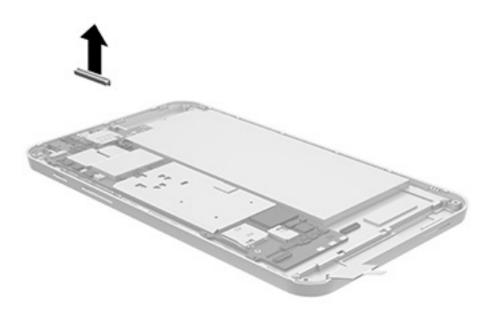
Description	Spare part number
Volume control button	796794-001

Before removing the volume control button, 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 adapter cord from the tablet.
- 3. Disconnect all external devices from the tablet.
- 4. Remove the back cover (see <u>Back cover on page 13</u>).
- 5. Remove the mid-frame cover (see Mid-frame cover on page 14).
- 6. Disconnect the battery (see <u>Battery on page 15</u>).
- 7. Remove the power button board (see <a href="Power button board on page 26">Power button board on page 26</a>).

Remove the volume control button:

▲ Lift the volume control button.



Reverse this procedure to install the volume control button.

# **6** Specifications

Metric	U.S.	
11.07 cm	4.36 in	
19.27 cm	7.59 in	
0.99 cm	0.37 in	
0.36 kg	0.79 lb	
	11.07 cm 19.27 cm 0.99 cm	11.07 cm 4.36 in 19.27 cm 7.59 in 0.99 cm 0.37 in

#### **Input power**

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, 0.3-1.0 A.

**NOTE:** The tablet can operate on DC power using an industry-standard micro-B USB cable. The HP 5V 2A adapter included with your tablet is recommended for charging the tablet.

Temperature		
Operating	5°C to 35°C	41°F to 95°F
Nonoperating	-20°C to 60°C	-4°F to 140°F
Relative humidity (non-condensing)		
Operating	10% to 90%	
Nonoperating	5% to 95%	
Maximum altitude (unpressurized)		
Operating	-15 m to 3,048 m	-50 ft to 10,000 ft
Nonoperating	-15 m to 12,192 m	-50 ft to 40,000 ft

**NOTE:** Applicable product safety standards specify thermal limits for plastic surfaces. The device operates well within this range of temperatures.

## 7 Using HP PC Hardware Diagnostics (UEFI)

HP PC Hardware Diagnostics is a Unified Extensible Firmware Interface (UEFI) that allows you to run diagnostic tests to determine whether the tablet hardware is functioning properly. The tool runs outside the operating system so that it can isolate hardware failures from issues that are caused by the operating system or other software components.

To start HP PC Hardware Diagnostics (UEFI):

- 1. Turn off the tablet.
- Press and hold the Volume down button.
- 3. While continuing to hold the **Volume down** button, press the power button to turn on the tablet.

The Startup menu is displayed.

After the startup menu is displayed, release the **Volume down** button.

- 4. Press f2 at the bottom of the screen.
- When the diagnostic tool opens, select the type of diagnostic test you want to run, and then follow the on-screen instructions.
- **NOTE:** If you need to stop a diagnostic test, press the **Volume down** button.

## Downloading HP PC Hardware Diagnostics (UEFI) to a USB device

NOTE: Instructions for downloading HP PC Hardware Diagnostics (UEFI) are provided in English only.

There are two options to download HP PC Hardware Diagnostics to a USB device:

Option 1: HP PC Diagnostics homepage— Provides access to the latest UEFI version

- Go to http://hp.com/go/techcenter/pcdiags.
- 2. Tap the UEFI Download link, and then select Run.

**Option 2: Support and Drivers pages**—Provide downloads for a specific product for earlier and later versions

- 1. Go to http://www.hp.com.
- **2.** Tap **Support**, located at the top of the page, and then tap **Download Drivers**.
- 3. In the text box, enter the product name, and then tap **Go**.

– or –

Tap **Find Now** to let HP automatically detect your product.

In the Diagnostic section, tap HP UEFI Support Environment.

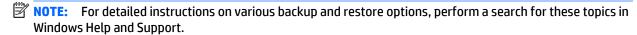
- or -

Tap **Download**, and then select **Run**.

## 8 Backup and recovery

To protect your information, use Windows backup and restore utilities to back up individual files and folders, back up your entire hard drive, or create system restore points. In case of system failure, you can use the backup files to restore the contents of your tablet.

- Swipe from the right edge of the touch screen to display the charms, tap Search, and then tap the search box.
- In the search box, type restore, and then select from the list of displayed options.



In case of system instability, HP recommends that you print the recovery procedures and save them for later use.

NOTE: Windows includes the User Account Control feature to improve the security of your tablet. You may be prompted for your permission or password for tasks such as installing software, running utilities, or changing Windows settings. For more information, see Windows Help and Support.

### **Backing up your information**

Recovery after a system failure is as good as your most recent backup. You should create system repair media and your initial backup immediately after initial system setup. As you add new software and data files, you should continue to back up your system on a regular basis to maintain a reasonably current backup.

For more information on the Windows backup features, see Windows Help and Support.

### Performing a system recovery

**IMPORTANT:** If you will be using F11 startup recovery or USB media recovery to recover your system, the tablet battery must have at least 70% battery power remaining before starting the recovery process.

In case of system failure or instability, the tablet provides the following tools to recover your files:

- Windows recovery tools: You can use Windows Backup and Restore to recover information you have previously backed up. You can also use Windows Automatic Repair to fix problems that might prevent Windows from starting correctly.
- NOTE: If you are unable to boot (start up) your tablet, contact support.

### Recovery from an external USB flash drive

To change the boot order so that you can boot from an external USB flash drive:

- 1. If possible, back up all personal files.
- 2. Shut down the tablet.
- 3. Connect the external flash drive.
- Press and hold the Volume down button.

- 5. While continuing to hold the **Volume down** button, press the power button to turn on the tablet.
  - The Startup menu is displayed.
  - After the startup menu is displayed, release the **Volume down** button.
- Tap F9 Boot Options.
- Select the external flash drive as the boot device.
- 8. Restart the tablet, and follow the on-screen instructions to continue.

### **Using Windows Refresh or Windows Reset**

When your tablet is not working properly and you need to regain system stability, the Windows Refresh option allows you to start fresh and keep what is important to you.

The Windows Reset option allows you to perform detailed reformatting of your tablet, or remove personal information before you give away or recycle your tablet. For more information on these features and how to access them, see Windows Help and Support.

You also can access Windows Refresh and Windows Reset from F11 System Recovery.

- Shut down the tablet.
- Press and hold the Volume down button.
- 3. While continuing to hold the **Volume down** button, press the power button to turn on the tablet.
  - The Startup menu is displayed.
  - After the startup menu is displayed, release the **Volume down** button.
- 4. Tap F11 System Recovery.
- 5. Select **Troubleshoot** from Choose an option menu.
- 6. Follow the on-screen instructions to continue.

# **Power adapter 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 2-conductor power adapter included with the tablet meets the requirements for use in the country or region where the equipment is purchased.

Power adapters 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 adapter cord set must be at least 1.0 m (3.3 ft) and no more than 2.0 m (6.5 ft).
- All power adapters must be approved by an acceptable accredited agency responsible for evaluation in the country or region where the adapter will be used.

## Requirements for specific countries and regions

Country/region	Accredited agency
Argentina	IRAM
Australia	SAA
Austria	OVE
Belgium	CEBEC
Brazil	ABNT
Canada	CSA
Chile	IMQ
Denmark	DEMKO
Finland	FIMKO
France	UTE
Germany	VDE
India	ISI
Israel	SII
Italy	IMQ
Japan	JIS
The Netherlands	KEMA
New Zealand	SANZ

Country/region	Accredited agency
Norway	NEMKO
The People's Republic of China	ССС
Saudi Arabia	SASO
Singapore	PSB
South Africa	SABS
South Korea	KTL
Sweden	SEMKO
Switzerland	SEV
Taiwan	BSMI
Thailand	TISI
The United Kingdom	ASTA
The United States	UL

# 10 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 <a href="http://www.hp.com/">http://www.hp.com/</a> recycle.

# Index

A	F	plastic parts, service
AC adapter, spare part numbers 5,	front-facing webcamera	considerations 9
6	location 2	ports
antenna board	removal 17	product description 1
removal 19	spare part number 4, 8, 17	USB 2.0 2
spare part number 4, 8, 19		power adapter
audio, product description 1	G	set requirements 33
audio-in jack 2	grounding guidelines 9	power adapter, spare part
audio-out jack 2	guidelines	numbers 5
	equipment 12	power button 2
В	grounding 9	removal 27
back cover	packaging 11	spare part number 5, 8, 27
removal 13	transporting 11	power button board
spare part number 4, 8, 13	workstation 11	removal 26
battery		spare part number 5, 8, 26
removal 15	H	power requirements, product
spare part number 4, 8, 15	headphone jack 2	description 1
buttons	HP PC Hardware Diagnostics (UEFI)	processor, product description
power 2	downloading 30	product description
volume control 2		audio 1
	J	display panel 1
C	jacks	external expansion 1
cables, service considerations 9	audio-in 2	mass storage 1
Card Reader slot, location 2	audio-out 2	memory module 1
connectors, service considerations	headphone 2	microphone 1
9	microphone 2	operating system 1
		ports 1
D	M	power requirements 1
display cable	mass storage device, product	processors 1
removal 20	description 1	product name 1
spare 20	memory module, product	sensor 1
spare part number 5	description 1	serviceability 1
spare part numbers 8	microphone jack 2	storage 1
display panel assembly, spare part	microphone, product description 1	video 1
number 5, 8, 13	mid-frame cover	wireless networking 1
display panel, product description 1	spare part number 4, 8 model name 1	product name 1
E		R
electrostatic discharge 9	0	rear-facing webcamera
equipment guidelines 12	operating system, product	location 2
external expansion, product	description 1	removal 16
description 1		spare part number 4, 8, 16
	P	recovery 32
	packaging guidelines 11	refresh 32

```
Windows button, location 2
Screw Kit, spare part number 6, 8
                                      wireless networking, product
sensor, product description 1
                                       description 1
service considerations
                                      workstation guidelines 11
   cables 9
   connectors 9
   plastic parts 9
serviceability, product description 1
speaker
   location 2
   removal 21
   spare part number 4, 8, 21
Speaker Kit, spare part number 4,
 8, 21
speaker rubber protector
   spare part numbers 4, 8
storage, product description 1
system board
   removal 22
   spare part number 5, 8, 22
Ť
tablet
   major components 4
   spare part number 5, 6, 7, 8
   specifications 29
tools required 9
transporting guidelines 11
USB 2.0 port, location 2
USB extension cable, spare part
 number 6
video, product description 1
volume control button
   removal 28
   spare part number 5, 8, 28
volume control buttons
   location 2
webcamera
   location 2
   removal 16, 17
   spare part numbers 4, 8, 16, 17
Windows
   recovery 32
   Refresh 32
   Reset 32
```