

## HP SlateBook 10 x2 PC

Maintenance and Service Guide

© Copyright 2013 Hewlett-Packard Development Company, L.P.

Android is a U.S. registered trademark of Android Corporation. Bluetooth is a trademark owned by its proprietor and used by Hewlett-Packard Company under license. NVIDIA is a trademark of NVIDIA Corporation in the U.S. and other countries. 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: June 2013

Document Part Number: 727166-001

#### **Product notice**

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

Not all features are available in all editions of Windows 8. This computer may require upgraded and/or separately purchased hardware, drivers, and/or software to take full advantage of Windows 8 functionality. See for http://www.microsoft.com details.

#### Safety warning notice

▲ 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).

# **Table of contents**

1	Product description	1
2	External component identification	4
	Tablet	. 4
	Keyboard base	. 5
	Keyboard	5
3	Illustrated parts catalog	6
	Locating the serial number, product number, and model number	. 6
	Tablet major components	, 7
	Keyboard base major components	9
	Miscellaneous parts	11
	Sequential part number listing	12
4	Removal and replacement procedures preliminary requirements	15
	Tools required	15
	Service considerations	15
	Plastic parts	15
	Cables and connectors	16
	Grounding guidelines	16
	Electrostatic discharge damage	16
	Packaging and transporting guidelines	18
	Workstation guidelines	18
	Removal and replacement procedures	20
	Tablet component replacement procedures	20
	Display enclosure	20
	Rear webcam	21
	Front webcam	23
	Display panel cable	24
	Wireless antenna	25
	Power button board	26

	Volume button board	28
	TouchScreen cable	29
	Battery	30
	Bezel	31
	Speakers	33
	System board	34
	Keyboard base component replacement procedures	36
	Bottom cover	36
	Battery	37
	Media card reader board	38
	Hinge assembly	39
	Docking board	41
	TouchPad	43
5		
	Specifications 4	•••
	Backing up and recovering your data	
		16
	Backing up and recovering your data 4	<b>16</b> 46
	Backing up and recovering your data	<b>16</b> 46 46
	Backing up and recovering your data	<b>46</b> 46 46 47
6	Backing up and recovering your data	<b>46</b> 46 47 47
6	Backing up and recovering your data	46 46 47 47
6	Backing up and recovering your data	46 46 47 47 47
6 7	Backing up and recovering your data	46 46 47 47 47 48 48

# **Product description**

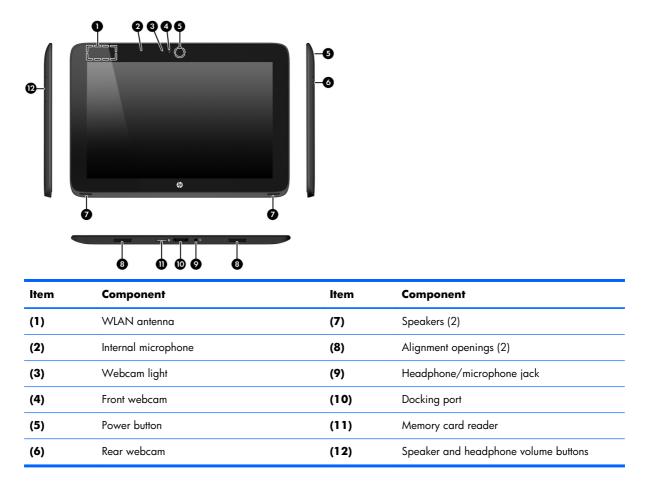
Category	Description			
Product Name	HP SlateBook 10 x2 PC			
Processor	NVIDIA® T40S 1.8-GHz processor (4-plus-1®, quad)			
Chipset NVIDIA Tegra 4, ARM® Cortex-A15 MPCore®				
Graphics	2D and 3D graphics			
	Supports HD playback, streaming, and recording at 1080p and 30fps			
Panel	10.1-in (1920×1200), WUXGA, WLED, AntiGlare, TouchScreen with MultiTouch enabled 16:10 ultra-wide aspect ratio; typical brightness: 400 nits; ultraslim (2.5-mm)			
	Supports low-voltage differential signaling (LVDS)			
Memory	Supports DDR3L-1600MHz			
	Supports dual channel			
	Supports up to 2048-MB maximum on-board system memory (4 pieces of 256-MB $ imes$ 16)			
Storage	Supports embedded MultiMedia Controller (eMMC) NAND flash v4.41			
	Supports eMMC v4.51			
	Supports the following eMMC configurations:			
	• 64GB eMMC			
	• 32GB eMMC			
	• 16GB eMMC			
Audio and video	Front webcam: HD (720p), fixed (no tilt), with activity light and microphone			
	Rear webcam: FHD (1080p), fixed (no tilt), no activity light or microphone			
	Single digital microphone with appropriate echo-cancellation and noise- suppression software			
	dts Sound+			
	Two speakers			
	Supports MP3, AAC, AAC+, EAAC+, OGG, and MIDI formats			

Category	Description		
Sensors	Accelerometer		
	eCompass		
	Gyroscope		
Wireless	Integrated wireless local area network (WLAN) options by way of wireless module		
	One built-in WLAN antenna		
	Supports Miracast		
	Supports a Broadcom BCM4334 802.11abgn 1×1 Wi-Fi + BT 4.0 Combo Adapter		
External media cards	HP multiformat Micro Digital Media Reader Slot with push-push technology. Reads data from and writes data to digital memory cards such as Secure Digital (SD).		
Ports	Tablet:		
	Headphone/microphone combo jack		
	<ul> <li>Docking connector (charging/docking)</li> </ul>		
	Keyboard base:		
	Docking connector (charging)		
	• HDMI v1.4 supporting up to 1920×1200 @ 60Hz (on the right side)		
	Headphone/microphone combo jack		
	• USB 2.0 (on the left side)		
Keyboard/pointing devices	91%-size, textured, island-style keyboard		
devices	Touchpad requirements:		
	Image Sensor ClickPad		
	Multitouch gestures enabled:		
	° Touch		
	° Long touch		
	° Swipe		
	° Drag		
	<ul> <li>Double tap</li> </ul>		
	Supports Palm rejection		
	Taps enabled as default		
Power requirements	Tablet and keyboard base support a 20-W AC adapter (non-PFC)		
	Tablet supports a 2-cell, 25-Wh, 2.86-Ah, Li-ion battery		
	Keyboard base supports a 2-cell, 21-Wh, 3.38-Ah, Li-ion battery		

Category	Description	
Operating system	Preinstalled: Android 4.2	
	Supports Android next version upgrade	
Serviceability	End user replaceable parts: AC adapter	

# **2** External component identification

## **Tablet**

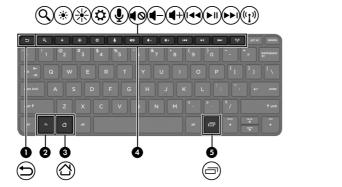


## **Keyboard base**



ltem	Component	ltem	Component
(1)	Caps lock key	(6)	HDMI port
(2)	Alignment posts (2)	(7)	Power connector
(3)	Mute key	(8)	Memory card reader
(4)	Tablet release latch	(9)	USB port
(5)	Docking connector	(10)	Headphone/microphone jack

## Keyboard

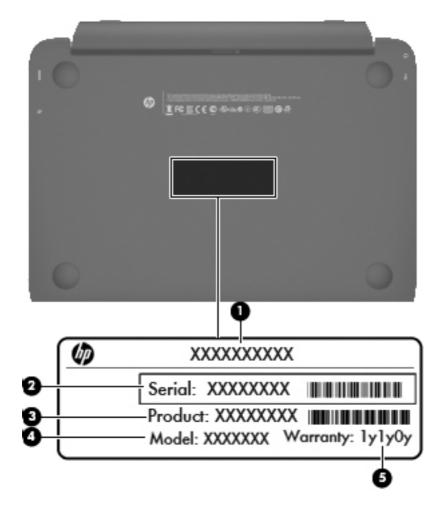


ltem	Component	ltem	Component	
(1)	Back key	(4)	Action keys	
(2)	fn key	(5)	Recent apps key	
(3)	Home key			

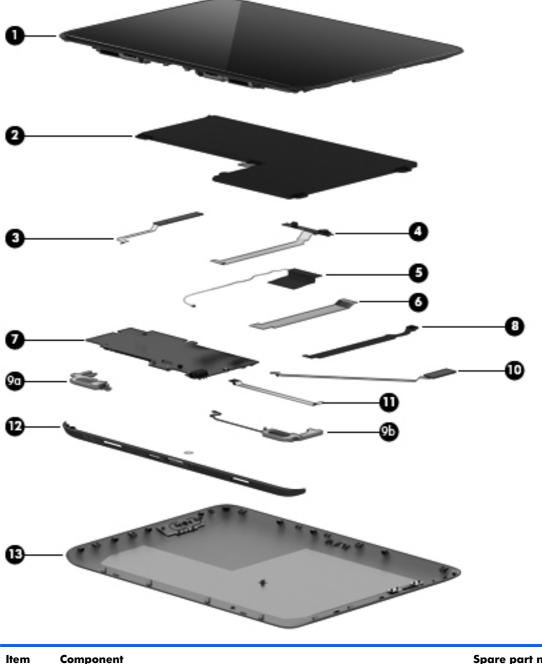
# **3** Illustrated parts catalog

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

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



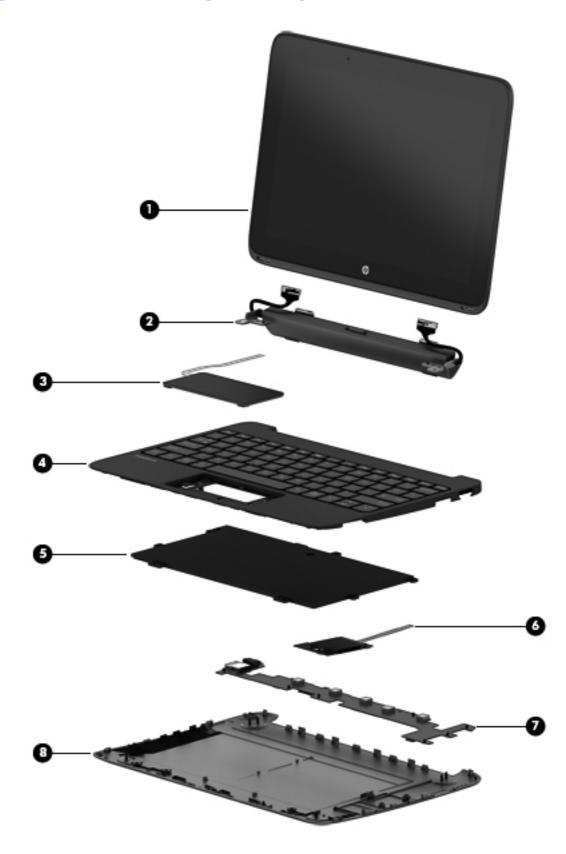
## **Tablet major components**



ltem	Component	Spare part number
(1)	Display panel (10.1-inch, AG, UWVA, WLED TouchScreen)	728152-001
(2)	2-cell, 25-Wh, 2.86-Ah, Li-ion battery (for use only in the tablet, includes cable)	722232-005
(3)	Volume button board (includes cable)	728151-001
(4)	Front webcam (includes microphone and cable)	728159-001
(5)	Antenna Kit (includes wireless antenna cable and transceiver)	728134-001

ltem	Component	Spare part number		
(6)	Display panel cable (included in the Display Panel Cable Kit, spare part number 728142-001)			
(7)	<b>System board</b> equipped with an NVIDIA T40S 1.8-GHz processor (4-plus-1, quad) and a graphics subsystem with UMA memory (includes WLAN module and replacement thermal material)			
	Includes 64-GB of memory	728158-001		
	Includes 32-GB of memory	728157-001		
	Includes 16-GB of memory	728156-001		
(8)	Rear webcam (includes cable)	730530-001		
	Speaker Kit, includes:	728154-001		
(9a)	Right speaker (includes cable)			
(9b)	Left speaker (includes cable)			
(10)	Power button board (includes cable)	728150-001		
(11)	TouchScreen cable (included in the Display Panel Cable Kit, spare part number 728142-001)			
(12)	Bezel:			
	For use only in Asian Pacific (AP) countries and regions and Japan	728145-001		
	For use only in European, Middle Eastern, and African (EMEA) countries and regions	728144-001		
	For use only in Latin American and North American countries and regions	728143-001		
	For use only in South Korea and Taiwan	728146-001		
(13)	Display enclosure:			
	In royal blue finish	728137-001		
	In smoke silver finish	728135-001		
	In snow white finish	728136-001		

## Keyboard base major components



ltem	Component	Spare part number	
(1)	<b>HP TabletBook 10 x2 PC</b> : The tablet is spared at the subcomponent level only. For tablet subassembly spare part information, see <u>Tablet major components on page 7</u> .		
(2)	Hinge assembly (includes 2 cables and 2 rubber feet):		
	In royal blue finish	730528-001	
	In smoke silver finish	728147-001	
	In snow white finish	730527-001	
(3)	TouchPad (includes cable)	728149-001	
(4)	Keyboard/top cover (includes keyboard cable):		
	For use in Belgium	728160-A41	
	For use in Canada	728160-DB1	
	For use in the Czech Republic and Slovakia	728160-FL1	
	For use in Denmark, Finland, and Norway	728160-DH1	
	For use in France	728160-051	
	For use in Germany	728160-041	
	For use in Greece	728160-151	
	For use in Italy	728160-061	
	For use in Japan	728160-291	
	For use in Latin America	728160-161	
	For use in the Netherlands	728160-B31	
	For use in Portugal	728160-131	
	For use in Russia	728160-251	
	For use in Saudi Arabia	728160-171	
	For use in South Korea	728160-AD1	
	For use in Spain	728160-071	
	For use in Switzerland	728160-BG1	
	For use in Taiwan	728160-AB1	
	For use in Thailand	728160-281	
	For use in Turkey	728160-141	
	For use in the United Kingdom and Singapore	728160-031	
	For use in the United States	728160-001	
(5)	2-cell, 21-Wh, 3.38-Ah, Li-ion battery (for use only in the keyboard base, includes cable)	722231-005	
(6)	Media card reader board (includes cable)	728148-001	

ltem	Component	Spare part number
(7)	Docking board	728155-001
(8)	Bottom cover (includes rubber foot):	
	In royal blue finish	728140-001
	In smoke silver finish	728138-001
	In snow white finish	728139-001

## **Miscellaneous parts**

Component	Spare part number
20-W AC adapter (non-PFC)	714656-001
HP micro-USB-to-USB cable	728141-001
Power cord (3-pin, black, 1.83-m):	
For use in Argentina	490371-D01
For use in Australia	490371-011
For use in Denmark	490371-081
For use in Europe	490371-021
For use in India	490371-D61
For use in Italy	490371-061
For use in Japan	490371-291
For use in North America	490371-001
For use in the People's Republic of China	490371-AA1
For use in South Korea	490371-AD1
For use in Switzerland	490371-111
For use in Taiwan	490371-201
For use in the United Kingdom and Singapore	490371-031
Rubber Feet Kit (includes keyboard base rubber feet)	728153-001
Screw Kit	730529-001

## Sequential part number listing

Spare part number	Description
490371-001	Power cord for use in North America (3-pin, black, 1.83-m)
490371-011	Power cord for use in Australia (3-pin, black, 1.83-m)
490371-021	Power cord for use in Europe (3-pin, black, 1.83-m)
490371-031	Power cord for use in the United Kingdom and Singapore (3-pin, black, 1.83-m)
490371-061	Power cord for use in Italy (3-pin, black, 1.83-m)
490371-081	Power cord for use in Denmark (3-pin, black, 1.83-m)
490371-111	Power cord for use in Switzerland (3-pin, black, 1.83-m)
490371-201	Power cord for use in Thailand (3-pin, black, 1.83-m)
490371-291	Power cord for use in Japan (3-pin, black, 1.83-m)
490371-AA1	Power cord for use in the People's Republic of China(3-pin, black, 1.83-m)
490371-AB1	Power cord for use in Taiwan (3-pin, black, 1.83-m)
490371-AD1	Power cord for use in South Korea (3-pin, black, 1.83-m)
490371-D01	Power cord for use in Argentina (3-pin, black, 1.83-m)
490371-D61	Power cord for use in India (3-pin, black, 1.83-m)
714656-001	20-W AC adapter (non-PFC)
722231-005	2-cell, 21-Wh, 3.38-Ah, Li-ion battery for use only in the keyboard base (includes cable)
722232-005	2-cell, 25-Wh, 2.86-Ah, Li-ion battery for use only in the tablet (includes cable)
728134-001	Antenna Kit (includes wireless antenna cable and transceiver)
728135-001	Display enclosure in smoke silver finish
728136-001	Display enclosure in snow white finish
728137-001	Display enclosure in royal blue finish
728138-001	Bottom cover in smoke silver finish (includes rubber foot)
728139-001	Bottom cover in snow white finish (includes rubber foot)
728140-001	Bottom cover in royal blue finish (includes rubber foot)
728141-001	HP micro-USB-to-USB cable
728142-001	Display Panel Cable Kit (includes display panel cable and TouchScreen cable)
728143-001	Bezel for use only in Latin American and North American countries and regions
728144-001	Bezel for use only in European, Middle Eastern, and African (EMEA) countries and regions
728145-001	Bezel for use only in Asian Pacific (AP) countries and regions and Japan
728146-001	Bezel for use only in South Korea and Taiwan

Spare part number	Description
728147-001	Hinge assembly in smoke silver finish (includes cables)
728148-001	Media card reader board (includes cable)
728149-001	TouchPad (includes cable)
728150-001	Power button board (includes cable)
728151-001	Volume button board (includes cable)
728152-001	10.1-inch, AG, UWVA, WLED TouchScreen display panel
728153-001	Rubber Feet Kit (includes keyboard base rubber feet)
728154-001	Speaker Kit (includes left and right speakers and cables)
728155-001	Docking board
728156-001	System board equipped with an NVIDIA T40S 1.8-GHz processor (4-plus-1, quad), a graphics subsystem with UMA memory, and 16-GB of memory (includes WLAN module and replacement thermal material)
728157-001	System board equipped with an NVIDIA T40S 1.8-GHz processor (4-plus-1, quad), a graphics subsystem with UMA memory, and 32-GB of memory (includes WLAN module and replacement thermal material)
728158-001	System board equipped with an NVIDIA T40S 1.8-GHz processor (4-plus-1, quad), a graphics subsystem with UMA memory, and 64-GB of memory (includes WLAN module and replacement thermal material)
728159-001	Front webcam (includes microphone and cable)
728160-001	Keyboard/top cover for use in the United States
728160-031	Keyboard/top cover for use in the United Kingdom and Singapore
728160-041	Keyboard/top cover for use in Germany
728160-051	Keyboard/top cover for use in France
728160-061	Keyboard/top cover for use in Italy
728160-071	Keyboard/top cover for use in Spain
728160-131	Keyboard/top cover for use in Portugal
728160-141	Keyboard/top cover for use in Turkey
728160-151	Keyboard/top cover for use in Greece
728160-161	Keyboard/top cover for use in Latin America
728160-171	Keyboard/top cover for use in Saudi Arabia
728160-251	Keyboard/top cover for use in Russia
728160-281	Keyboard/top cover for use in Thailand
728160-291	Keyboard/top cover for use in Japan
728160-A41	Keyboard/top cover for use in Belgium
728160-AB1	Keyboard/top cover for use in Taiwan

Spare part number	Description
728160-AD1	Keyboard/top cover for use in South Korea
728160-B31	Keyboard/top cover for use in the Netherlands
728160-BG1	Keyboard/top cover for use in Switzerland
728160-DB1	Keyboard/top cover for use in Canada
728160-DH1	Keyboard/top cover for use in Denmark, Finland, and Norway
728160-FL1	Keyboard/top cover for use in the Czech Republic and Slovakia
730527-001	Hinge assembly in snow white finish (includes cables)
730528-001	Hinge assembly in royal blue finish (includes cables)
730529-001	Screw Kit
730530-001	Rear webcam (include cable)

# 4 Removal and replacement procedures preliminary requirements

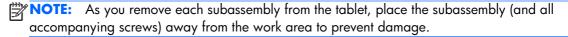
## **Tools required**

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

- Flat-bladed screw driver
- Magnetic screw driver
- Phillips PO screw driver

### Service considerations

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



#### **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 hum		Relative humidity	idity	
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	

Typical electrostatic voltage levels			
	Relative humidity		
Event	10%	40%	55%
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

## **Removal and replacement procedures**

#### **Tablet component replacement procedures**

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

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

There are as many as 16 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 enclosure**

Description	Spare part number
In royal blue finish	728137-001
In smoke silver finish	728135-001
In snow white finish	728136-001

Before disassembling the tablet, follow these steps:

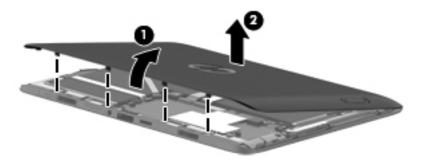
- 1. Turn off the tablet. If you are unsure whether the tablet is off or in Hibernation, turn the tablet on, and then shut it down through the operating system.
- 2. Disconnect the power from the tablet by unplugging the power cord from the tablet.
- 3. Disconnect all external devices from the tablet.

Remove the display enclosure:

1. Lift up on the bottom edge of the display enclosure (1) until the tabs built into the enclosure release from the display assembly.

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

2. Remove the display enclosure (2) from the tablet.



3. Remove the display enclosure.

Reverse this procedure to install the display enclosure.

#### **Rear webcam**

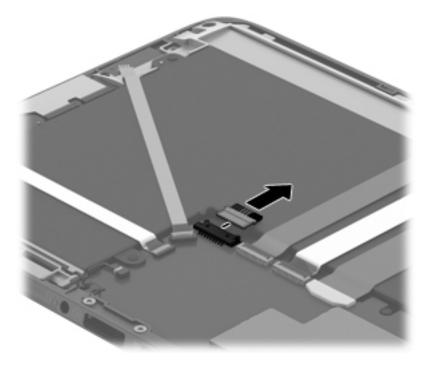
Description	Spare part number
Rear webcam (includes cable)	728159-001

Before removing the rear 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 enclosure (see <u>Display enclosure on page 20</u>).

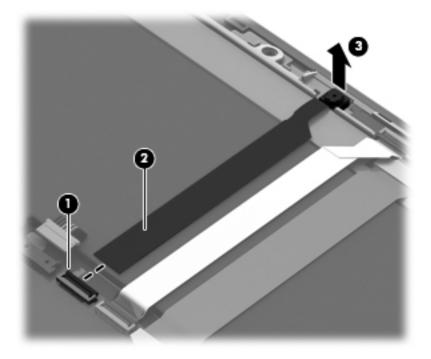
Remove the rear webcam:

**1.** Disconnect the battery cable from the system board.



- 2. Release the zero insertion force (ZIF) connector (1) to which the rear webcam cable is attached, and then disconnect the rear webcam cable from the system board.
- **3.** Detach the rear webcam ribbon cable **(2)** from the battery. (The rear webcam ribbon cable is attached to the battery with double-sided adhesive.)

4. Remove the rear webcam (3) and cable.



Reverse this procedure to install the rear webcam.

#### **Front webcam**

Description	Spare part number
Front webcam (includes microphone and cable)	728159-001

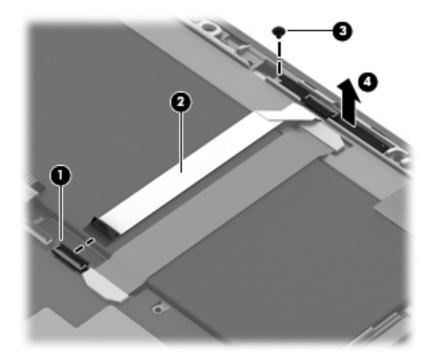
Before removing the front webcam, follow these steps:

- 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 enclosure (see Display enclosure on page 20).
- 5. Disconnect the battery cable from the system board (see <u>Rear webcam on page 21</u>).

Remove the front webcam:

- 1. Release the ZIF connector (1) to which the front webcam cable is attached, and then disconnect the front webcam cable from the system board.
- 2. Detach the front webcam cable (2) from the battery. (The front webcam cable is attached to the battery with double-sided adhesive.)

- 3. Remove the Phillips PM2.0×2.0 screw (3) that secures the front webcam to the display assembly.
- **4.** Remove the front webcam **(4)** and cable.



Reverse this procedure to install the front webcam.

#### **Display panel cable**

**NOTE:** The display panel cable is included in the Display Panel Cable Kit, spare part number 728142-001.

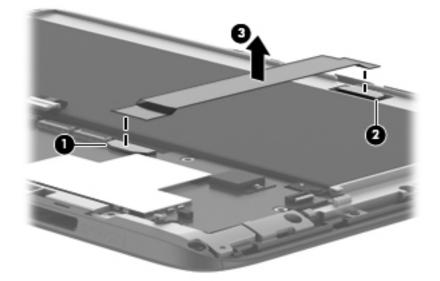
Before removing the display panel cable, follow these steps:

- 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 enclosure (see Display enclosure on page 20).
- 5. Disconnect the battery cable from the system board (see <u>Rear webcam on page 21</u>).

Remove the display panel cable:

- 1. Release the system board ZIF connector (1) to which the display panel cable is attached, and then disconnect the display panel cable from the system board.
- 2. Release the display panel ZIF connector (2) to which the display panel cable is attached, and then disconnect the display panel cable from the display panel.

3. Remove the display panel cable (3).



Reverse this procedure to install the display panel cable.

#### Wireless antenna

Description	Spare part number
Antenna Kit (includes wireless antenna cable and transceiver)	728134-001

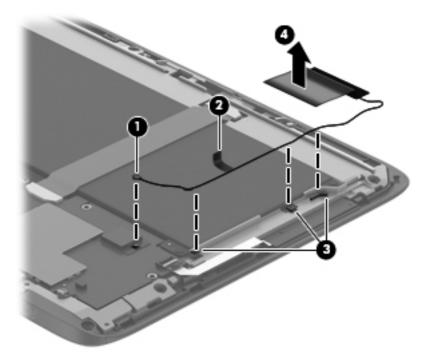
Before removing the wireless antenna, follow these steps:

- 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 enclosure (see <u>Display enclosure on page 20</u>).
- 5. Disconnect the battery cable from the system board (see Rear webcam on page 21).

Remove the wireless antenna:

- 1. Disconnect the wireless antenna cable (1) from the terminal on the WLAN module.
- 2. Detach the piece of tape (2) that secures the wireless antenna cable to the battery.
- 3. Release the wireless antenna cable from the routing clips (3) built into the display panel frame.

4. Detach the wireless antenna transceivers (4) from the surfaces of the battery and the display panel frame. (The wireless antenna transceiver is attached to the surfaces of the battery and the display panel frame with double-sided tape.)



5. Remove the wireless antenna.

Reverse this procedure to install the wireless antenna.

#### **Power button board**

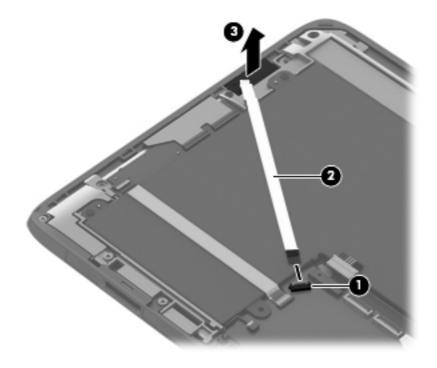
Description	Spare part number
Power button board (includes cable)	728150-001

Before removing the power button board, follow these steps:

- 1. Turn off the tablet. If you are unsure whether the tablet is off or in Hibernation, turn the tablet on, and then shut it down through the operating system.
- 2. Disconnect the power from the tablet by unplugging the power cord from the tablet.
- 3. Disconnect all external devices from the tablet.
- 4. Remove the display enclosure (see <u>Display enclosure on page 20</u>).
- 5. Disconnect the battery cable from the system board (see <u>Rear webcam on page 21</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. Detach the power button board cable (2) from the battery. (The power button board cable is attached to the battery with double-sided tape.)
- **3.** Detach the power button board **(3)** from the display assembly. (The power button board is attached to the display assembly with double-sided tape.)



4. Remove the power button board.

Reverse this procedure to install the power button board.

#### Volume button board

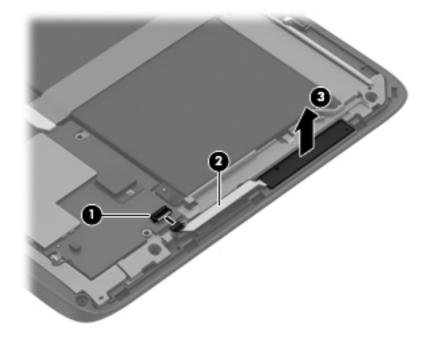
Description	Spare part number
Volume button board (includes cable)	728151-001

Before removing the power button board, follow these steps:

- 1. Turn off the tablet. If you are unsure whether the tablet is off or in Hibernation, turn the tablet on, and then shut it down through the operating system.
- 2. Disconnect the power from the tablet by unplugging the power cord from the tablet.
- 3. Disconnect all external devices from the tablet.
- 4. Remove the display enclosure (see Display enclosure on page 20).
- 5. Disconnect the battery cable from the system board (see <u>Rear webcam on page 21</u>).

Remove the volume button board:

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



4. Remove the volume button board.

Reverse this procedure to install the volume button board.

#### **TouchScreen cable**

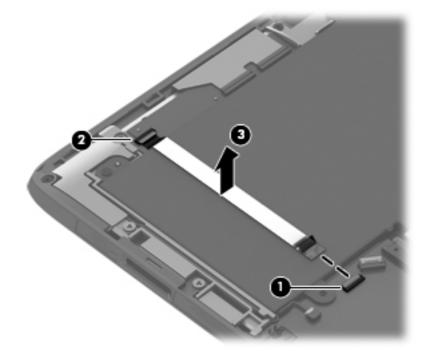
**NOTE:** The TouchScreen cable is included in the Display Panel Cable Kit, spare part number 728142-001.

Before removing the TouchScreen 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 enclosure (see <u>Display enclosure on page 20</u>).
- 5. Disconnect the battery cable from the system board (see <u>Rear webcam on page 21</u>).

Remove the TouchScreen cable:

- 1. Release the system board ZIF connector (1) to which the TouchScreen cable is attached, and then disconnect the TouchScreen cable from the system board.
- 2. Release the display panel ZIF connector (2) to which the TouchScreen cable is attached, and then disconnect the TouchScreen cable from the display panel.
- 3. Detach the TouchScreen cable (3) from the battery. (The TouchScreen cable is attached to the battery with double-sided tape.)
- 4. Remove the TouchScreen cable (4).



Reverse this procedure to install the TouchScreen cable.

#### **Battery**

Description	Spare part number
2-cell, 25-Wh, 2.86-Ah, Li-ion battery for use only in the tablet (includes cable)	722232-005

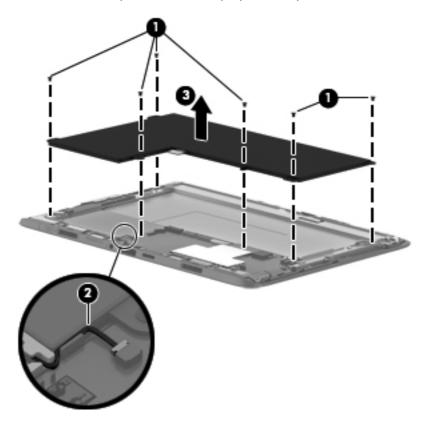
Before removing the tablet battery, follow these steps:

- 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.
- Remove the display enclosure (see <u>Display enclosure on page 20</u>), and then remove the following components:
  - **a.** Rear webcam (see <u>Rear webcam on page 21</u>)
  - **b.** Front webcam (see Front webcam on page 23)
  - c. Display panel cable (see <u>Display panel cable on page 24</u>)
  - d. Wireless antenna (see Wireless antenna on page 25)
  - e. Power button board (see <u>Power button board on page 26</u>)
  - f. Volume button board (see <u>Volume button board on page 28</u>)
  - g. TouchScreen cable (see <u>TouchScreen cable on page 29</u>)
- **WARNING!** To reduce potential safety issues, use only the battery provided with the tablet, a replacement battery provided by HP, or a compatible battery purchased from HP.
- **CAUTION:** Removing a battery that is the sole power source for the tablet can cause loss of information. To prevent loss of information, save your work or shut down the tablet through Windows before removing the battery.

Remove the tablet battery:

- 1. Remove the six Phillips PM2.0×2.5 screws (1) that secure the battery to the display assembly.
- 2. Release the speaker cable (2) from the clip built into the battery.

3. Remove the battery (3) from the display assembly.



Reverse this procedure to install the tablet battery.

### Bezel

Description	Spare part number
For use only in Asian Pacific (AP) countries and regions and Japan	728145-001
For use only in European, Middle Eastern, and African (EMEA) countries and regions	728144-001
For use only in Latin American and North American countries and regions	728143-001
For use only in South Korea and Taiwan	728146-001

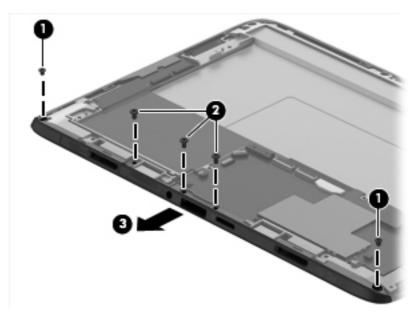
Before removing the bezel, follow these steps:

- 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 enclosure (see <u>Display enclosure on page 20</u>), and then remove the following components:
  - a. Rear webcam (see <u>Rear webcam on page 21</u>)
  - b. Front webcam (see Front webcam on page 23)
  - c. Display panel cable (see Display panel cable on page 24)
  - d. Wireless antenna (see Wireless antenna on page 25)
  - e. Power button board (see Power button board on page 26)
  - f. Volume button board (see Volume button board on page 28)
  - g. TouchScreen cable (see <u>TouchScreen cable on page 29</u>)
  - h. Battery (see <u>Battery on page 30</u>)

Remove the bezel:

- 1. Remove the two Phillips PM2.0×2.5 screws (1) and the three Phillips PM2.0×4.5 screws (2) that secure the bezel to the display assembly.
- 2. Remove the bezel (3) from the display assembly.



Reverse this procedure to install the bezel.

### **Speakers**

Description	Spare part number
Speaker Kit (includes left and right speakers and cables)	728154-001

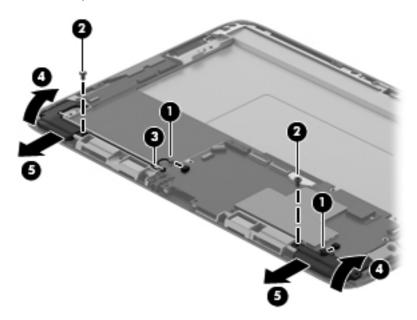
Before removing the speakers, follow these steps:

- 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 enclosure (see <u>Display enclosure on page 20</u>), and then remove the following components:
  - **a.** Rear webcam (see <u>Rear webcam on page 21</u>)
  - **b.** Front webcam (see Front webcam on page 23)
  - c. Display panel cable (see <u>Display panel cable on page 24</u>)
  - d. Wireless antenna (see Wireless antenna on page 25)
  - e. Power button board (see Power button board on page 26)
  - f. Volume button board (see <u>Volume button board on page 28</u>)
  - g. TouchScreen cable (see TouchScreen cable on page 29)
  - **h.** Battery (see <u>Battery on page 30</u>)
  - i. Bezel (see <u>Bezel on page 31</u>)

Remove the speakers:

- **1.** Disconnect the speaker cables **(1)** from the system board.
- 2. Remove the two Phillips PM2.0×4.5 screws (2) that secure the speakers to the display assembly.
- 3. Release the right speaker cable from the clip (3) built into the display assembly.
- 4. Release the speakers (4) from the display assembly by rotating them up and back.

5. Remove the speakers (5).



Reverse this procedure to install the speakers.

### System board

Description	Spare part number
Equipped with an NVIDIA T40S 1.8-GHz processor (4-plus-1, quad), 64-GB of memory, and a graphics subsystem with UMA memory (includes WLAN module and replacement thermal material)	728158-001
Equipped with an NVIDIA T40S 1.8-GHz processor (4-plus-1, quad), 32-GB of memory, and a graphics subsystem with UMA memory (includes WLAN module and replacement thermal material)	728157-001
Equipped with an NVIDIA T40S 1.8-GHz processor (4-plus-1, quad), 16-GB of memory, and a graphics subsystem with UMA memory (includes WLAN module and replacement thermal material)	728156-001

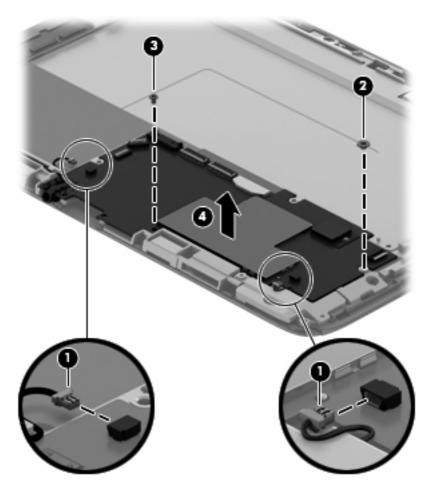
Before removing the system board, follow these steps:

- 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 enclosure (see <u>Display enclosure on page 20</u>), and then remove the following components:
  - a. Rear webcam (see <u>Rear webcam on page 21</u>)
  - **b.** Front webcam (see Front webcam on page 23)

- c. Display panel cable (see <u>Display panel cable on page 24</u>)
- d. Wireless antenna (see Wireless antenna on page 25)
- e. Power button board (see <u>Power button board on page 26</u>)
- f. Volume button board (see <u>Volume button board on page 28</u>)
- g. TouchScreen cable (see <u>TouchScreen cable on page 29</u>)
- **h.** Battery (see <u>Battery on page 30</u>)
- i. Bezel (see <u>Bezel on page 31</u>)

Remove the system board:

- 1. Disconnect the speaker cables (1) from the system board.
- 2. Remove the Phillips PM2.0×2.3 broad head screw (2) and the Phillips PM2.0×4.5 screw (3) that secure the system board to the display assembly.
- **3.** Remove the system board **(4)**.



Reverse this procedure to install the system board.

### **Keyboard base component replacement procedures**

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

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

There are as many as 29 screws that must be removed, replaced, and/or loosened when servicing the keyboard base. Make special note of each screw size and location during removal and replacement.

#### **Bottom cover**

MOTE: The bottom cover includes a rubber foot.

Description	Spare part number
In royal blue finish	728140-001
In smoke silver finish	728138-001
In snow white finish	728139-001

Before disassembling the keyboard base, follow these steps:

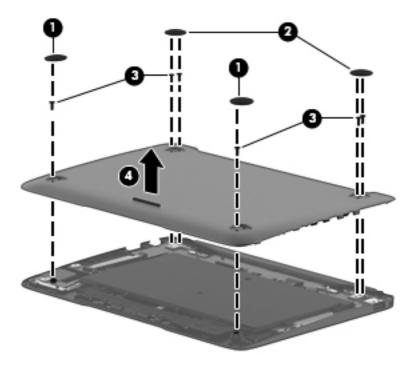
- 1. Turn off the tablet and keyboard base. If you are unsure whether the tablet and keyboard base are off or in Hibernation, turn the tablet on, and then shut it down through the operating system.
- 2. Disconnect the power from the tablet and keyboard base by unplugging the power cord from the tablet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

Remove the bottom cover:

1. Remove the front (1) and rear rubber feet (2).

**NOTE:** The front and rear rubber feet are different shaped and sized and are available in the Rubber Feet Kit, spare part number 728153-001.

 Remove the six Phillips PM2.0×6.35 screws (3) that secure the bottom cover to the keyboard/ top cover. 3. Remove the bottom cover (4).



Reverse this procedure to install the bottom cover.

### **Battery**

Description	Spare part number
2-cell, 21-Wh, 3.38-Ah, Li-ion battery for use only in the keyboard base (includes cable)	722231-005

Before removing the keyboard base battery, follow these steps:

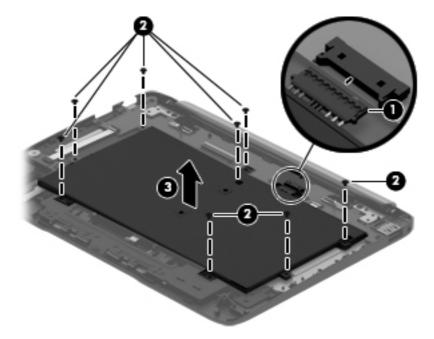
- 1. Turn off the tablet and keyboard base. If you are unsure whether the tablet and keyboard base are off or in Hibernation, turn the tablet on, and then shut it down through the operating system.
- 2. Disconnect the power from the tablet and keyboard base by unplugging the power cord from the tablet and keyboard base.
- **3.** Disconnect the tablet from the keyboard base.
- 4. Remove the bottom cover (see <u>Bottom cover on page 36</u>).

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

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

Remove the keyboard base battery:

- 1. Disconnect the battery cable (1) from the keyboard baseing board.
- Remove the eight Phillips PM2.0×2.5 screws (2) that secure the battery to the keyboard/ top cover.
- 3. Remove the keyboard base battery (3).



Reverse this procedure to install the keyboard base battery.

### Media card reader board

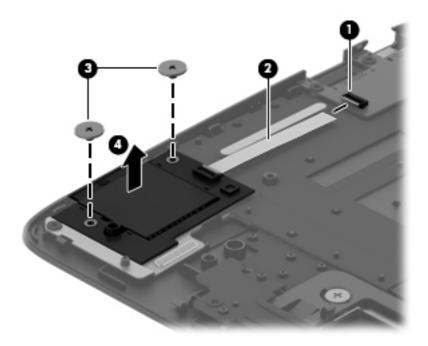
Description	Spare part number
Media card reader board (includes cable)	728148-001

Before removing the media card reader board, follow these steps:

- 1. Turn off the tablet and keyboard base. If you are unsure whether the tablet and keyboard base are off or in Hibernation, turn the tablet on, and then shut it down through the operating system.
- 2. Disconnect the power from the tablet and keyboard base by unplugging the power cord from the tablet and keyboard base.
- **3.** Disconnect the tablet from the keyboard base.
- 4. Remove the bottom cover (see <u>Bottom cover on page 36</u>).
- 5. Disconnect the battery cable from the docking board (see <u>Battery on page 37</u>).

Remove the media card reader board:

- 1. Release the ZIF connector (1) to which the media card reader board cable is attached, and then disconnect the media card reader board cable from the docking board.
- 2. Detach the media card reader board cable (2) from the keyboard/top cover. (The media card reader board cable is attached to the keyboard/top cover with double-sided adhesive.)
- **3.** Remove the two Phillips PM2.0×2.3 broad head screws **(3)** that secure the media card reader board to the keyboard/top cover.
- 4. Remove the media card reader board (4) and cable.



Reverse this procedure to install the media card reader board.

### **Hinge assembly**

NOTE: The hinge assembly spare part kit includes two cables and two rubber feet.

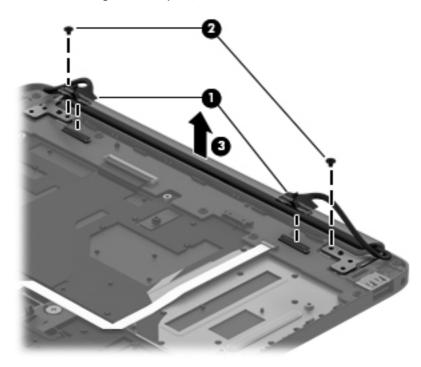
Description	Spare part number
In royal blue finish	730528-001
In smoke silver finish	728147-001
In snow white finish	730527-001

Before removing the hinge assembly, follow these steps:

- 1. Turn off the tablet and keyboard base. If you are unsure whether the tablet and keyboard base are off or in Hibernation, turn the tablet on, and then shut it down through the operating system.
- 2. Disconnect the power from the tablet and keyboard base by unplugging the power cord from the tablet and keyboard base.
- 3. Disconnect the tablet from the keyboard base.
- 4. Remove the bottom cover (see <u>Bottom cover on page 36</u>).
- 5. Disconnect the battery cable from the docking board (see <u>Battery on page 37</u>).

Remove the hinge assembly:

- 1. Disconnect the two hinge assembly cables (1) from the docking board.
- 2. Remove the two Phillips PM2.0×6.35 screws (2) that secure the hinge assembly to the keyboard/ top cover.
- 3. Remove the hinge assembly (3) and cables.



Reverse this procedure to install the hinge assembly.

### **Docking board**

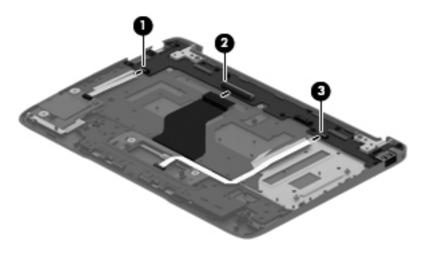
Description	Spare part number
Docking board	728155-001

Before removing the docking board, follow these steps:

- 1. Turn off the tablet and keyboard base. If you are unsure whether the tablet and keyboard base are off or in Hibernation, turn the tablet on, and then shut it down through the operating system.
- 2. Disconnect the power from the tablet and keyboard base by unplugging the power cord from the tablet and keyboard base.
- **3.** Disconnect the tablet from the keyboard base.
- 4. Remove the bottom cover (see <u>Bottom cover on page 36</u>).
- 5. Disconnect the battery cable from the docking board (see <u>Battery on page 37</u>).
- 6. Remove the hinge assembly (see <u>Hinge assembly on page 39</u>).

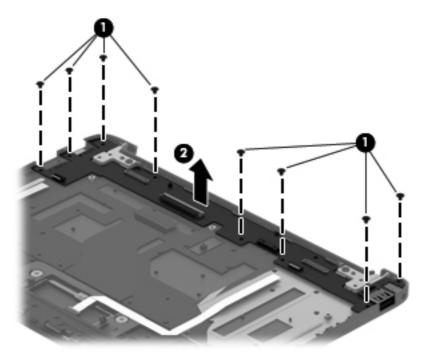
Remove the docking board:

- 1. Disconnect the following cables from the docking board ZIF connectors:
  - (1) Media card reader board cable
  - (2) Keyboard cable
  - (3) TouchPad cable



2. Remove the eight Phillips PM2.0×2.5 screws (1) that secure the docking board to the keyboard/ top cover.

3. Remove the docking board (2).



Reverse this procedure to install the docking board.

### TouchPad

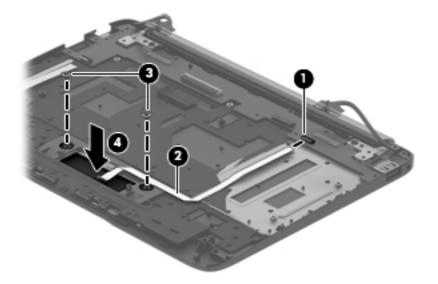
Description	Spare part number
TouchPad (includes cable)	728149-001

Before removing the TouchPad, follow these steps:

- 1. Turn off the tablet and keyboard base. If you are unsure whether the tablet and keyboard base are off or in Hibernation, turn the tablet on, and then shut it down through the operating system.
- 2. Disconnect the power from the tablet and keyboard base by unplugging the power cord from the tablet and keyboard base.
- **3.** Disconnect the tablet from the keyboard base.
- 4. Remove the bottom cover (see <u>Bottom cover on page 36</u>).
- 5. Remove the battery (see <u>Battery on page 37</u>).

Remove the TouchPad:

- 1. Release the ZIF connector (1) to which the TouchPad cable is attached, and then disconnect the TouchPad cable from the docking board.
- 2. Detach the TouchPad cable (2) from the keyboard/top cover. (The TouchPad cable is attached to the keyboard/top cover with double-sided adhesive.)
- **3.** Remove the two Phillips PM2.0×2.3 broad head screws **(3)** that secure the TouchPad to the keyboard/top cover.
- 4. Remove the TouchPad (4) by pressing it through the keyboard/top cover.



Reverse this procedure to install the TouchPad.

# Specifications

	Metric	U.S.
Tablet dimensions		
Width	25.8 cm	10.2 in
Depth	18.2 cm	7.2 in
Height	0.9 cm	0.4 in
Weight	0.6 kg	1.3 lbs
Keyboard base dimensions		
Width	25.8 cm	10.2 in
Depth	19.4 cm	7.6 in
Height	1.0 cm	0.4 in
Weight	0.6 kg	1.3 lbs
Computer dimensions (tablet and keyboard base)		
Width	25.8 cm	10.2 in
Depth	19.4 cm	7.6 in
Height (includes gaps between tablet and keyboard base)	2.1 cm	0.8 in
Weight	1.2 kg	2.7 lbs
Input power		
Operating voltage and current	15V dc 1.33A - 19.95W	
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 (noncondensing)		
Operating	10% to 90%	
Nonoperating	5% to 95%	
Maximum altitude (unpressurized)		
Operating	-15 m to 3,048 m	-50 ft to 10,000 ft

	Metric	U.S.
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.

# 6 Backing up and recovering your data

## Updating apps, widgets, and the operating system

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

Go to the Google Play store to download the latest versions of HP and third-party apps and widgets. The operating system will download system updates automatically and notify you when it is ready to install these updates. If you want to update the operating system manually, go to <a href="http://www.hp.com/support">http://www.hp.com/support</a>.

You can also set preferences for backing up and restoring your data in case of loss.

### **Back up and reset**

- 1. To access Settings, touch the **All apps** icon, and then touch **Settings**.
- 2. Under PERSONAL, touch Back up & reset.
- Under BACKUP & RESTORE, select one or more of the following:
  - Back up my data—Select the check box to enable backing up app data, Wi-Fi passwords, and other settings to Google servers.
  - **Backup account**—Select a Google account for backing up data.
  - Automatic restore—Select the check box to enable backed up settings and data to be restored when an app is reinstalled.

### Factory data reset

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

- 1. To access Settings, touch the **All apps** icon, and then touch **Settings**.
- 2. Under PERSONAL, touch Back up & reset.
- 3. Under **PERSONAL DATA**, select **Factory data reset**, and then follow the on-screen instructions.

# Android system recovery mode

- 1. Press the power button, and then touch **Power off**.
- 2. Press the power button and the volume down button at the same time.
- 3. Press the volume up or volume down button to advance through the options, and then press the power button to select one of the following options:
  - Reboot system now
  - Apply update from SD card
  - Wipe data/factory reset
  - Wipe cache partition
  - Reboot into fastboot mode

# 7 Power cord set requirements

The wide-range input feature of the computer 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 computer 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 computer 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 computer. Requirements for all countries 113

### **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

Country/region	Accredited agency	Applicable note number
France	UTE	1
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	СЕМКО	1
Switzerland	SEV	1
Taiwan	BSMI	4
The United Kingdom	BSI	1
The United States	UL	2

 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.
- 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.

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

# Index

### A

AC adapter, spare part number 11, 12 action keys 5 alignment opening 4 alignment post 5 antenna location 4 removal 25 spare part number 7, 12, 25 Antenna Kit, spare part number 7, 12, 25 audio, product description 1

### B

back key 5 battery removal 30, 37 spare part numbers 7, 10, 12, 30, 37 bezel removal 31 spare part numbers 8, 12, 31 bottom cover removal 36 spare part numbers 11, 12, 36 buttons power 4 speaker and headphone volume 4

### С

cables, service considerations 16 caps lock key 5 chipset, product description 1 components keyboard 5 keyboard base 5 tablet 4 connectors docking 5 power 5 connectors, service considerations 16

### D

display enclosure removal 20 spare part numbers 8, 12, 20 display panel product description 1 spare part number 7, 13 display panel cable removal 24 spare part number 8, 12, 24 Display Panel Cable Kit, spare part number 8, 12 docking board removal 41 spare part number 11, 13, 41 docking connector 5 docking port 4

### E

electrostatic discharge 16 equipment guidelines 19 external media cards, product description 2

### F

fn key 5 front webcam location 4 removal 23 spare part number 7, 13, 23

### G

graphics, product description 1 grounding guidelines 16 guidelines equipment 19 grounding 16 packaging 18 transporting 18 workstation 18 н HDMI port 5 headphone jack 4, 5 hinge assembly removal 39 spare part numbers 10, 13,

### K

14, 39

home key 5

keyboard base exterior components 5 major components 9 keyboard components 5 keyboard/top cover, spare part numbers 10, 13, 14 keys action 5 back 5 caps lock 5 fn 5 home 5 mute 5 recent apps 5

### M

media card reader board removal 38 spare part number 10, 13, 38 memory card reader 4, 5 memory, product description 1 micro-USB-to-USB cable, spare part number 11, 12 microphone location 4 product description 1 microphone jack 4, 5 model name 1 mute key 5

#### 0

operating system, product description 3

#### P

packaging guidelines 18 plastic parts, service considerations 15 ports docking 4 HDMI 5 product description 2 USB 5 power button 4 power button board removal 26 spare part number 8, 13, 26 power connector 5 power cord set requirements 48 spare part numbers 12 power requirements, product description 2 processor, product description 1 product description audio 1 chipset 1 display panel 1 external media cards 2 araphics 1 memory 1 microphone 1 operating system 3 ports 2 power requirements 2 processors 1 product name 1 sensors 2 serviceability 3

storage 1 video 1 wireless 2 product name 1

#### R

rear webcam location 4 removal 21 spare part number 8, 14, 21 recent apps key 5 Rubber Feet Kit, spare part number 11, 13, 36 rubber feet, removal 36

### S

Screw Kit, spare part number 11, 14 sensors, product description 2 service considerations cables 16 connectors 16 plastic parts 15 serviceability, product description 3 Speaker Kit, spare part number 8, 13, 33 speakers location 4 removal 33 spare part number 8, 13, 33 storage, product description 1 system board removal 34 spare part numbers 8, 13, 34

### T,

tablet exterior components 4 major components 7 tablet release latch 5 tools required 15 TouchPad removal 43 spare part number 10, 13, 43 TouchScreen cable removal 29 spare part number 8, 12, 29 transporting guidelines 18

### U

USB port 5

### V

video, product description 1 volume button board removal 28 spare part number 7, 13, 28

### W

webcam location 4 removal 21, 23 spare part numbers 7, 8, 13, 14, 21, 23 webcam light 4 wireless antenna location 4 removal 25 spare part number 7, 12, 25 wireless, product description 2 workstation guidelines 18