

## HP 8 G21411 Tablet

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

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#### **Product notice**

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

#### Software terms

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

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

#### Safety warning notice

<u>MARNING!</u> 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  | 3  |
| 3 | Illustrated parts catalog  | 4  |
|   | Locating tablet serial number, product name, product number, and part number | 4  |
|   | Tablet major components  | 5  |
|   | Miscellaneous parts  | 6  |
|   | Sequential part number listing   | 6  |
| 4 | Removal and replacement preliminary requirements                             | 8  |
|   | Tools required   | 8  |
|   | Service considerations   | 8  |
|   | Plastic parts  | 8  |
|   | Cables and connectors  | 8  |
|   | Grounding guidelines   | 9  |
|   | Electrostatic discharge damage   | 9  |
|   | Packaging and transporting guidelines  | 10 |
|   | Workstation guidelines   | 10 |
| 5 | Removal and replacement procedures   | 12 |
|   | Tablet component replacement procedures                                      | 12 |
|   | Back cover   | 12 |
|   | Battery  | 14 |
|   | Power/volume button board  | 15 |
|   | Front-facing webcam  | 16 |
|   | Rear-facing webcam   | 18 |
|   | Speakers   | 19 |
|   | System board   | 20 |
| 6 | Specifications   | 23 |
| 7 | Backing up and recovering your data  | 24 |
|   | Updating apps, widgets, and the operating system                             | 24 |
|   | Factory data reset   | 24 |

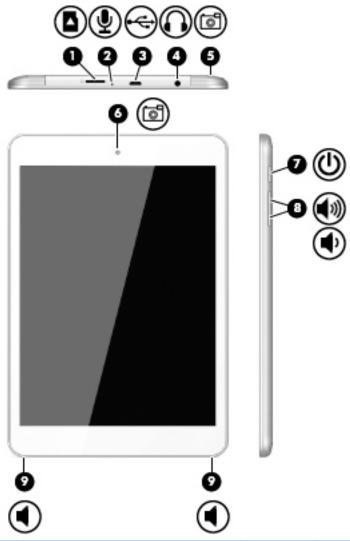
| 8 Power cord set requirements                   | 25 |
|---|----|
| Requirements for all countries                  | 25 |
| Requirements for specific countries and regions | 25 |
| 9 Recycling                                     | 27 |
| Index   | 28 |

# 1 Product description

| Category            | Description   |  |
|---------------------|---|--|
| Product Name        | HP 8 G21411 Tablet  |  |
| Processor           | AllWinner® A33 ARM cortex-A7 1.20-GHz quad core processor   |  |
| Panel               | 7.85-in, (1024×768), 5-point IPS capacitive TouchScreen display panel   |  |
| Graphics            | Mail400 MP2   |  |
| Memory              | Supports 1.0-GB DDR3 system memory  |  |
| Mass storage        | Supports a 16.0-GB Nand solid-state drive   |  |
| Audio and video     | Stereo speakers (2)   |  |
|                     | One microphone on top of tablet   |  |
|                     | Supports MP3, OGG, Flac, AAC, and AMR, audio formats  |  |
|                     | 2.0-MP, fixed-focus, rear-facing webcam   |  |
|                     | 0.3-MP, fixed-focus, front-facing webcam  |  |
|                     | Supports MPEG1, MPEG2, MPEG4-XVID, H264, H263, WMV7/8/9, VC-1, VP8, AVS, MJPEG, VP6, WMV1/2, DIVX video formats |  |
|                     | Supports JPG, BMP, GIF and PNG photo formats  |  |
| Sensor              | Accelerometer   |  |
|                     | G-sensor G-sensor   |  |
|                     | GPS   |  |
| Wireless networking | Integrated wireless option: WLAN: 802.11b/g/n with WIFiDirect   |  |
|                     | 1. Bluetooth Traditional Mode:  |  |
|                     | a. Bluetooth 3.0  |  |
|                     | <b>b.</b> Bluetooth 3.0+HS, and   |  |
|                     | c. Other backwards modes  |  |
|                     | 2. Bluetooth 4.0 Dual Mode:   |  |
|                     | a. BLE  |  |
|                     | <b>b.</b> Music and voice (traditional mode)  |  |
|                     | 3. Bluetooth 4.0 Single Mode: BLE   |  |
| External expansion  | Integrated micro SD Card Reader expandable to 32-GB   |  |
|                     | Tflash Storage up to 32-GB  |  |
| Ports               | Audio: headphone/microphone combo jack  |  |
|                     | Micro SD Card Reader  |  |
|                     | Micro USB port  |  |
| Power requirements  | Supports a 3950-mAh, Li-ion battery, USB charging   |  |

| Category Description  |   |
|---|---|
| Supports a 5-V, 2-A AC adapter with DC plug and localized cable plug so |   |
| Operating system  | Preinstalled: Android 4.4.2                                   |
| Serviceability  | End user replaceable part: AC adapter and USB extension cable |

# 2 External component identification



| Item | Component   | Item | Component                  |
|------|---|------|----------------------------|
| (1)  | Micro SD Card Reader slot                           | (6)  | Front-facing webcam        |
| (2)  | Microphone  | (7)  | Power button               |
| (3)  | Micro USB 2.0 port                                  | (8)  | Volume control buttons (2) |
| (4)  | Audio-out (headphone)/Audio-in<br>(microphone) jack | (9)  | Speakers (2)               |
| (5)  | Rear-facing webcam                                  |      |                            |

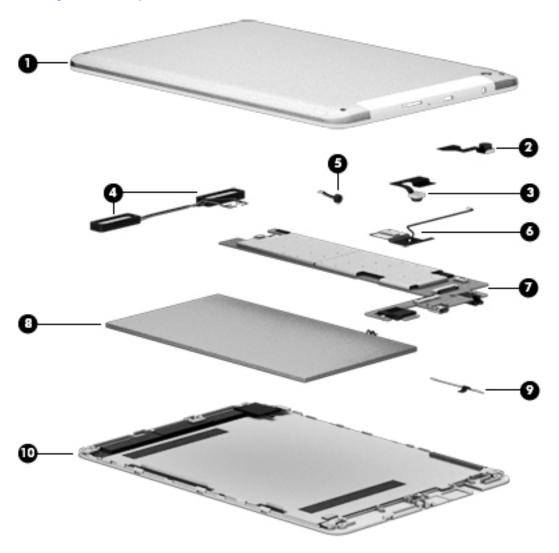
## 3 Illustrated parts catalog

# Locating tablet serial number, product name, product number, and part number

The tablet serial number (1), product name (2), product number (3), and part number (4) are located on the back cover. This information is needed when travelling internationally or contacting customer support.



## **Tablet major components**



| Item | Component   | Spare part number |  |
|------|---|-------------------|--|
| (1)  | Back cover (includes wireless antenna cable and transceiver)  | 785173-001        |  |
| (2)  | 0.3-MP, fixed-focus, front-facing webcam (includes cable)   | 785181-001        |  |
| (3)  | 2.0-MP, fixed-focus, rear-facing webcam (includes cable)  | 773139-001        |  |
| (4)  | Speaker Kit (includes top and bottom speakers and cables)   | 785179-001        |  |
| (5)  | Microphone (included with system board, spare part number 785180-001)   |                   |  |
| (6)  | Wireless antenna cable and transceiver (included with back cover, spare part number 785173-001)   |                   |  |
| (7)  | <b>System board</b> equipped with an AllWinner A33 ARM cortex-A7 1.20-GHz quad core processor, graphics subsystem with UMA memory, 1.0-GB DDR3 system memory, and a 16-GB Nand hard drive | 785180-001        |  |
| (8)  | Battery, 3.7-V, 3950-mAh, LI (includes cable)   | 777233-001        |  |

| Item | Component   | Spare part number |
|------|---|-------------------|
| (9)  | Power/volume button board (includes cable)  | 785175-001        |
| (10) | <b>Display panel assembly</b> (7.85-in, 1024×768, IPS, 5-point capacitive, TouchScreen; includes display panel cable and TouchScreen cable) | 785177-001        |

## Miscellaneous parts

| Component  | Spare part number |  |
|--|-------------------|--|
| 5.0-V, 2-A AC adapter:   |                   |  |
| For use only in Argentina  | 757042-001        |  |
| For use only in Australia  | 757043-001        |  |
| For use only in Brazil   | 761437-001        |  |
| For use only in Europe   | 747779-001        |  |
| For use only in India  | 757282-001        |  |
| For use only in North America  | 745229-001        |  |
| For use only in the People's Republic of China   | 757280-001        |  |
| For use only in the United Kingdom and Singapore   | 747780-001        |  |
| HP 8 G21411 Tablet equipped with a 7.85-in, 1024×768, IPS, 5-point capacitive, TouchScreen display panel assembly, AllWinner A33 ARM cortex-A7 1.20-GHz quad core processor, graphics subsystem with UMA memory, 1.0-GB DDR3 system memory, and a 16-GB Nand hard drive, and a 3.7-V, 3950-mAh, LI battery |                   |  |
| For use only in the Asia Pacific countries and regions   | 785174-371        |  |
| For use only in Europe   | 785174-021        |  |
| For use only in Latin America  | 785174-161        |  |
| For use only in North America  | 785174-001        |  |
| Screw Kit  | 785178-001        |  |
| USB extension cable  | 779120-001        |  |

## Sequential part number listing

| Spare part number Description                                  |  |
|--|--|
| 745229-001 5.0-V, 2-A AC adapter for use only in North America |  |
| 747779-001   | 5.0-V, 2-A AC adapter for use only in Europe                           |
| 747780-001   | 5.0-V, 2-A AC adapter for use only in the United Kingdom and Singapore |
| 757042-001   | 5.0-V, 2-A AC adapter for use only in Argentina                        |
| 757043-001   | 5.0-V, 2-A AC adapter for use only in Australia                        |
| 757280-001   | 5.0-V, 2-A AC adapter for use only in the People's Republic of China   |

| Spare part number | Description  |
|-------------------|--|
| 757282-001        | 5.0-V, 2-A AC adapter for use only in India  |
| 761437-001        | 5.0-V, 2-A AC adapter for use only in Brazil   |
| 773139-001        | 2.0-MP, fixed-focus, rear-facing webcam (includes cable)   |
| 777233-001        | Battery (3.7-V, 3950-mAh, LI, includes cable)  |
| 785173-001        | Back cover (includes wireless antenna cable and transceiver)   |
| 785174-001        | HP 8 G21411 Tablet equipped with a 7.85-in, 1024×768, IPS, 5-point capacitive, TouchScreen display panel assembly, an AllWinner A33 ARM cortex-A7 1.20-GHz quad core processor, graphics subsystem with UMA memory, 1.0-GB DDR3 system memory, and a 16-GB Nand hard drive, and a 3.7-V, 3950-mAh, LI battery for use only in North America                      |
| 785174-021        | HP 8 G21411 Tablet equipped with a 7.85-in, 1024×768, IPS, 5-point capacitive, TouchScreen display panel assembly, an AllWinner A33 ARM cortex-A7 1.20-GHz quad core processor, graphics subsystem with UMA memory, 1.0-GB DDR3 system memory, and a 16-GB Nand hard drive, and a 3.7-V, 3950-mAh, LI battery for use only in Euope                              |
| 785174-161        | HP 8 G21411 Tablet equipped with a 7.85-in, 1024×768, IPS, 5-point capacitive, TouchScreen display panel assembly, an AllWinner A33 ARM cortex-A7 1.20-GHz quad core processor, graphics subsystem with UMA memory, 1.0-GB DDR3 system memory, and a 16-GB Nand hard drive, and a 3.7-V, 3950-mAh, LI battery for use only in Latin America                      |
| 785174-371        | HP 8 G21411 Tablet equipped with a 7.85-in, 1024×768, IPS, 5-point capacitive, TouchScreen display panel assembly, an AllWinner A33 ARM cortex-A7 1.20-GHz quad core processor, graphics subsystem with UMA memory, 1.0-GB DDR3 system memory, and a 16-GB Nand hard drive, and a 3.7-V, 3950-mAh, LI battery for use only in Asia Pacific countries and regions |
| 785175-001        | Power/volume button board (includes cable)   |
| 785176-001        | Cover Kit (includes top and bottom covers)   |
| 785177-001        | Display panel assembly (7.85-in, 1024×768, IPS, 5-point capacitive, TouchScreen; includes display panel cable and TouchScreen cable)   |
| 785178-001        | Screw Kit  |
| 785179-001        | Speaker Kit (includes top and bottom speakers and cables)  |
| 785180-001        | System board equipped with an AllWinner A33 ARM cortex-A7 1.20-GHz quad core processor, graphics subsystem with UMA memory, 1.0-GB DDR3 system memory, and a 16-GB Nand hard drive   |
| 785181-001        | 0.3-MP, fixed-focus, front-facing webcam (includes cable)  |
| 779120-001        | USB extension cable  |

## Removal and replacement preliminary requirements

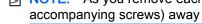
### **Tools required**

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

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

#### Service considerations

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



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

A 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

A 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.

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

<u>CAUTION</u>: 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 7 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 (includes wireless antenna cable and transceiver)   | 785173-001        |
| Display panel assembly (7.85-in, 1024×768, IPS, 5-point capacitive, TouchScreen; includes display panel cable and TouchScreen cable) | 785177-001        |

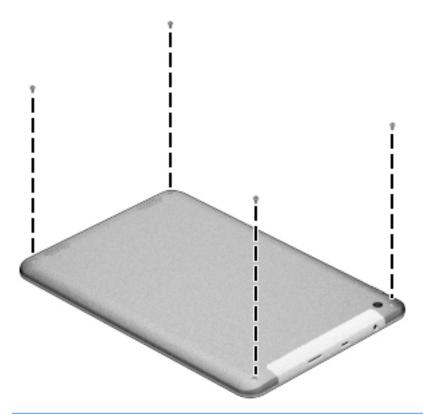
Before disassembling the tablet, follow these steps:

- 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.
- Disconnect the power from the tablet by unplugging the power cord from the tablet.
- Disconnect all external devices from the tablet.

Remove the back cover:

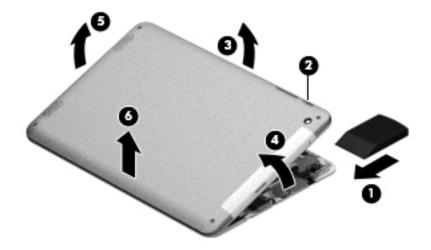
- - Place the tablet on a flat surface, display panel side down, with the SD Card slot and volume control buttons toward you.

2. Remove the four Torx5 TM1.3×4.0 screws that secure the back cover to the display panel assembly.



- 3. Insert a thin, plastic tool (1) between the back cover and the display panel assembly. The first insertion point should be near the power button (2) in the rear right corner of the tablet.
- 4. Lift the left edge of the back cover (3) until it separates from the display panel assembly.
- 5. Lift the top edge of the back cover (4) until it separates from the display panel assembly.
- 6. Lift the bottom edge of the back cover (5) until it separates from the display panel assembly.

#### 7. Remove the back cover (6).



Reverse this procedure to install the back cover.

### **Battery**

| Description                                  | Spare part number |
|--|-------------------|
| Battery 3.7-V, 3950-mAh, LI (includes cable) | 777233-001        |

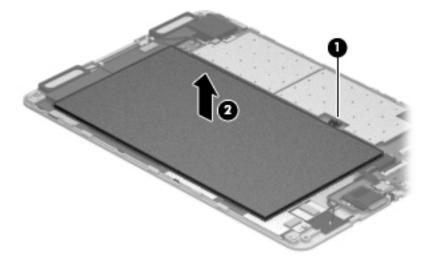
Before removing the battery, follow these steps:

- 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 cord from the tablet.
- 3. Disconnect all external devices from the tablet.
- 4. Remove the back cover (see <u>Back cover on page 12</u>).
- <u>MARNING!</u> 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.

#### Remove the battery:

1. Unsolder the battery cables (1) from the system board.

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



Remove the battery.

Reverse this procedure to install the battery.

### Power/volume button board

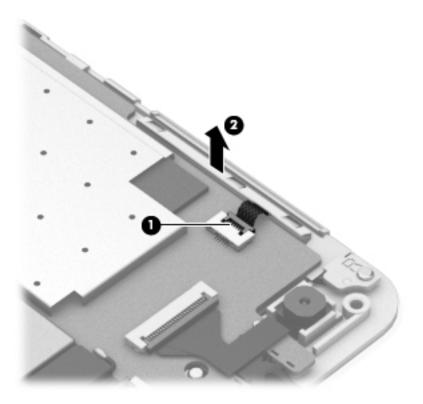
| Description                                | Spare part number |
|--|-------------------|
| Power/volume button board (includes cable) | 785175-001        |

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

- 1. Turn off the tablet. If you are unsure whether the tablet is off or in Hibernation, turn the tablet on, and then shut it down through the operating system.
- 2. Disconnect the power from the tablet by unplugging the power cord from the tablet.
- 3. Disconnect all external devices from the tablet.
- 4. Remove the back cover (see <u>Back cover on page 12</u>).
- 5. Disconnect the battery cable from the system board (see <u>Battery on page 14</u>).

Remove the power/volume button board:

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



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

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

### Front-facing webcam

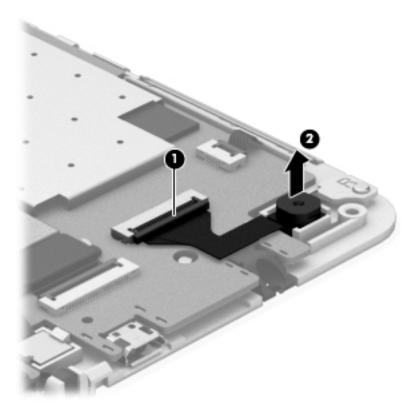
| Description                                   | Spare part number |
|---|-------------------|
| 0.3-MP, front-facing, webcam (includes cable) | 785181-001        |

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

- 1. Turn off the tablet. If you are unsure whether the tablet is off or in Hibernation, turn the tablet on, and then shut it down through the operating system.
- 2. Disconnect the power from the tablet by unplugging the power cord from the tablet.
- Disconnect all external devices from the tablet.
- 4. Remove the back cover (see Back cover on page 12).
- 5. Disconnect the battery cable from the system board (see <u>Battery on page 14</u>).

Remove the front-facing webcam:

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



3. Remove the front-facing webcam and cable.

Reverse this procedure to install the front-facing webcam.

## Rear-facing webcam

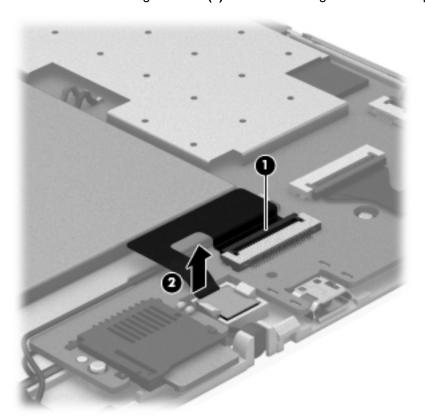
| Description  | Spare part number |
|--|-------------------|
| 2.0-MP, fixed-focus, rear-facing webcam (includes cable) | 773139-001        |

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

- 1. Turn off the tablet. If you are unsure whether the tablet is off or in Hibernation, turn the tablet on, and then shut it down through the operating system.
- 2. Disconnect the power from the tablet by unplugging the power cord from the tablet.
- 3. Disconnect all external devices from the tablet.
- Remove the back cover (see <u>Back cover on page 12</u>).
- 5. Disconnect the battery cable from the system board (see <u>Battery on page 14</u>).

Remove the rear-facing webcam:

- 1. Release the ZIF connector (1) to which the rear-facing webcam cable is attached, and then disconnect the rear-facing webcam cable from the system board.
- 2. Release the rear-facing webcam (2) from the molding built into the display panel assembly.



3. Remove the rear-facing webcam and cable.

Reverse this procedure to install the rear-facing webcam.

## **Speakers**

| Description   | Spare part number |
|---|-------------------|
| Speaker Kit (includes top and bottom speakers and cables) | 785179-001        |

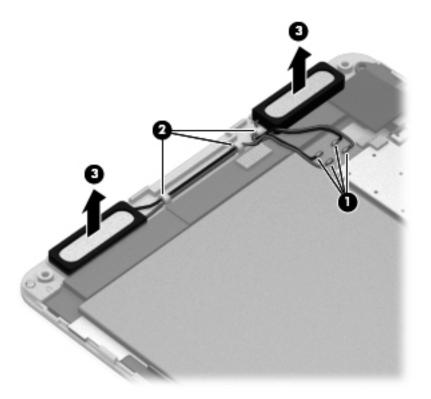
#### Before removing the speakers, follow these steps:

- 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.
- Remove the back cover (see <u>Back cover on page 12</u>).
- 5. Disconnect the battery cable from the system board (see <u>Battery on page 14</u>).

#### Remove the speakers:

- 1. Unsolder the speaker cables (1) from the system board speaker connectors.
- NOTE: When installing the speakers, the red speaker cables should be soldered to the system board "positive" terminals. The black speaker cables should be soldered to the system board "negative" terminals.
- 2. Release the speaker cables (2) from the clips built into the display panel assembly.

Detach the speakers (3) from the display panel assembly. (The speakers are attached to the display panel assembly with double-sided adhesive.)



Remove the speakers and cables.

Reverse this procedure to install the speakers.

## System board

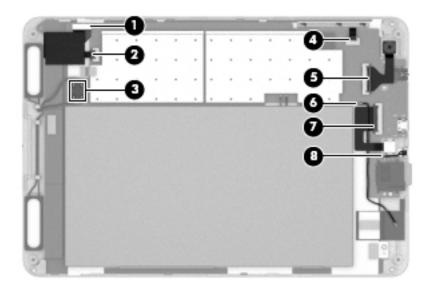
| Description  | Spare part number |
|--|-------------------|
| System board (equipped with an AllWinner A33 ARM cortex-A7 1.20-GHz quad core processor, graphics subsystem with UMA memory, 1.0-GB DDR3 system memory, and a 16-GB Nand hard drive) | 785180-001        |

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.
- Disconnect the power from the tablet by unplugging the power cord from the tablet.
- 3. Disconnect all external devices from the tablet.
- 4. Remove the back cover (see <u>Back cover on page 12</u>).
- 5. Disconnect the battery cable from the system board (see <u>Battery on page 14</u>).

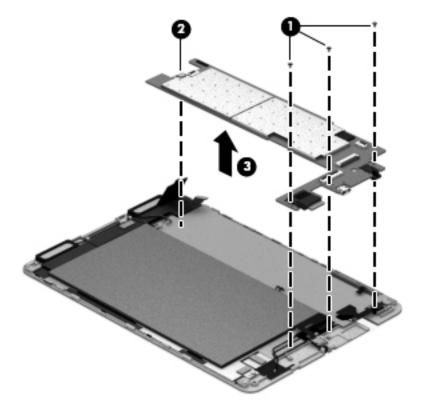
Remove the system board:

- 1. Disconnect the following cables from the system board:
  - (1) TouchScreen ZIF connector and cable
  - (2) Controller ZIF connector and cable
  - (3) Speaker cables (must be unsoldered, see Speakers on page 19)
  - (4) Power/button board ZIF connector and cable
  - (5) Front-facing webcam cable
  - (7) Rear-facing webcam cable



- 2. Remove the three Phillips PM1.5×2.5 screws (1) that secure the system board to the display panel assembly.
- 3. Detach the left side of the system board (2) from the display panel assembly. (The left side of the system board is attached to the display panel assembly with double-sided adhesive.)

#### 4. Remove the system board (3).



Reverse this procedure to install the system board.

## 6 Specifications

| Metric   | U.S.                            |   |
|----------|---------------------------------|---|
|          |                                 |   |
| 13.72 cm | 5.40 in                         |   |
| 20.20 cm | 7.95 in                         |   |
| 0.80 cm  | 0.32 in                         |   |
| 320 g    | 0.71 lb                         |   |
|          | 13.72 cm<br>20.20 cm<br>0.80 cm | 13.72 cm 5.40 in 20.20 cm 7.95 in 0.80 cm 0.32 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.

NOTE: The tablet can operate on DC power using an industry-standard micro-A or 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 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 QQ App store to download the latest versions of HP and third-party apps and widgets. The QQ App store displays the number of existing applications that you can update. If you want to update the operating system manually, go to <a href="http://www.hp.com/support">http://www.hp.com/support</a>.

### Factory data reset

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

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

## 8 Power cord set requirements

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

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

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

### Requirements for all countries

The following requirements are applicable to all countries and regions:

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

### Requirements for specific countries and regions

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

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

- 1. The flexible cord must be Type HO5VV-F, 3-conductor, 1.0-mm² 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 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-mm² 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-mm² conductor size. Power cord set fittings (appliance coupler and wall plug) must bear the certification mark of the agency responsible for evaluation in the country or region where it will be used.
- 5. The flexible cord must be Type VCTF, 3-conductor, 0.75-mm² 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.

# 9 Recycling

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

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

# Index

| A                                  | G  | power requirements, product      |
|------------------------------------|--|----------------------------------|
| AC adapter, spare part numbers     | graphics, product description 1                | description 1                    |
| 6, 7                               | grounding guidelines 9                         | power/volume button board        |
| audio, product description 1       | guidelines                                     | removal 15                       |
| audio-in jack 3                    | equipment 11                                   | spare part number 6, 7, 15       |
| audio-out jack 3                   | grounding 9                                    | processor, product description 1 |
|                                    | packaging 10                                   | product description              |
| В                                  | transporting 10                                | audio 1                          |
| back cover                         | workstation 10                                 | display panel 1                  |
| removal 12                         |  | external expansion 1             |
| spare part number 5, 7, 12         | Н  | graphics 1                       |
| battery                            | headphone jack 3                               | mass storage 1                   |
| removal 14                         |  | memory module 1                  |
| spare part number 5, 7, 14         | J  | microphone 1                     |
| bottom cover, spare part number    | jacks  | operating system 2               |
| 7                                  | audio-in 3                                     | ports 1                          |
| buttons                            | audio-out 3                                    | power requirements 1             |
| power 3                            | headphone 3                                    | processors 1                     |
| volume control 3                   | microphone 3                                   | product name 1                   |
|                                    |  | sensor 1                         |
| C                                  | M  | serviceability 2                 |
| cables, service considerations 8   | mass storage device, product                   | video 1                          |
| Card Reader slot 3                 | description 1                                  | wireless networking 1            |
| connectors, service                | memory module, product                         | product name 1                   |
| considerations 8                   | description 1                                  |                                  |
| Cover Kit, spare part number 7     | microphone                                     | R                                |
|                                    | location 3                                     | rear-facing webcam               |
| D                                  | product description 1                          | location 3                       |
| display panel assembly, spare part | microphone jack 3                              | removal 18                       |
| number 6, 7, 12                    | model name 1                                   | spare part number 5, 7, 18       |
| display panel, product             |  |                                  |
| description 1                      | 0  | S                                |
| =                                  | operating system, product                      | Screw Kit, spare part number 6,  |
| E alestrostatio disabarra 0        | description 2                                  | 7                                |
| electrostatic discharge 9          | P  | sensor, product description 1    |
| equipment guidelines 11            |  | service considerations           |
| external expansion, product        | packaging guidelines 10 plastic parts, service | cables 8                         |
| description 1                      | considerations 8                               | connectors 8                     |
| F                                  | ports  | plastic parts 8                  |
| front-facing webcam                | product description 1                          | serviceability, product          |
| location 3                         | USB 2.0 3                                      | description 2                    |
| removal 16                         | power button 3                                 | Speaker Kit, spare part number   |
| spare part number 5, 7, 16         | power cord, set requirements 25                | 5, 7, 19                         |
| Spare part number 3, 1, 10         | power coru, ser requirements 23                | speakers                         |
|                                    |  | location 3                       |

```
removal 19
  spare part number 5, 7, 19
system board
  removal 20
  spare part number 5, 7, 20
tablet
  major components 5
  spare part numbers 6, 7
  specifications 23
tools required 8
top cover, spare part number 7
transporting guidelines 10
U
USB 2.0 port 3
USB extension cable, spare part
 number 6, 7
V
video, product description 1
volume control buttons 3
W
webcam
  removal 16, 18
  spare part numbers 5, 7, 16,
    18
wireless networking, product
 description 1
workstation guidelines 10
```