### Notebook Tour User Guide

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#### **Product notice**

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

#### Safety warning notice

▲ WARNING! To reduce the possibility of heat-related injuries or of overheating the computer, do not place the computer directly on your lap or obstruct the computer air vents. Use the computer 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 computer 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 Identifying hardware

| 2  | Components                               |    |
|----|--|----|
|    | Top components                           | 3  |
|    | Pointing devices                         |    |
|    | Lights                                   | 4  |
|    | Buttons, switches and fingerprint reader |    |
|    | Keys                                     |    |
|    | Display                                  |    |
|    | Front components                         |    |
|    | Rear components                          | 11 |
|    | Right-side components                    | 12 |
|    | Left-side components                     | 13 |
|    | Bottom components                        | 14 |
|    | Wireless antennae                        | 15 |
|    | Additional hardware components           | 16 |
|    |  |    |
| 3  | Labels                                   |    |
| In | dex                                      | 19 |

# 1 Identifying hardware

To see a list of hardware installed in the computer, follow these steps:

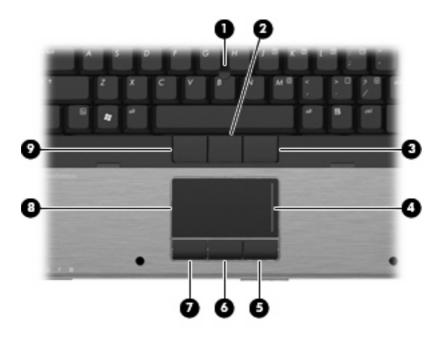
- 1. Select Start > My Computer.
- 2. In the left pane of the System Tasks window, select **View system information**.
- 3. Select Hardware tab > Device Manager.

You can also add hardware or modify device configurations using Device Manager.

# 2 Components

### **Top components**

#### **Pointing devices**



| Component |                              | Description   |
|-----------|------------------------------|---|
| (1)       | Pointing stick               | Moves the pointer and selects or activates items on the screen. |
| (2)       | Center pointing stick button | Functions like the center button on an external mouse.          |
| (3)       | Right pointing stick button  | Functions like the right button on an external mouse.           |
| (4)       | TouchPad scroll zone         | Scrolls up or down.   |
| (5)       | Right TouchPad button        | Functions like the right button on an external mouse.           |
| (6)       | Center TouchPad button       | Functions like the center button on an external mouse.          |
| (7)       | Left TouchPad button         | Functions like the left button on an external mouse.            |
| (8)       | TouchPad                     | Moves the pointer and selects or activates items on the screen. |
| (9)       | Left pointing stick button   | Functions like the left button on an external mouse.            |

This table describes factory settings. To view or change pointing device preferences, select **Start > Control Panel > Printers** and **Other Hardware > Mouse**.

#### Lights



| Component |                      | De | scription   |
|-----------|----------------------|----|---|
| (1)       | Wireless lights (2)† | •  | Turquoise: An integrated wireless device, such as a wireless local area network (WLAN) device, the HP Mobile Broadband, and/or a Bluetooth® device, is on.  |
|           |                      | •  | Amber: All wireless devices are off.  |
| (2)       | Power lights (2)*    | •  | On: The computer is on.   |
|           |                      | •  | Blinking: The computer is in the Standby state.   |
|           |                      | •  | Off: The computer is off or in Hibernation.   |
| (3)       | Battery light        | •  | Amber: A battery is charging.   |
|           |                      | •  | Aqua white: A battery is close to full charge capacity.   |
|           |                      | •  | Blinking amber: A battery that is the only available power source has reached a low battery level. When the battery reaches a critical battery level, the battery light begins blinking rapidly.  |
|           |                      | •  | Off: If the computer is plugged into an external power source, the light turns off when all batteries in the computer are fully charged. If the computer is not plugged into an external power source, the light stays off until the battery reaches a low battery level. |
| (4)       | Drive light          | •  | Turquoise: The hard drive or optical drive is being accessed.   |
|           |                      | •  | Amber: HP 3D DriveGuard has temporarily parked the internal hard drive.   |
| (5)       | Caps lock light      | On | : Caps lock is on.  |
| (6)       | Num lock light       | On | : Num lock is on or the embedded numeric keypad is enabled.   |

| Component |                   | Description  |
|-----------|-------------------|--|
| (7)       | Volume mute light | Off: Computer sound is on.   |
|           |                   | On: Computer sound is off.   |
| (8)       | Volume down light | Blinking: The volume scroll zone is being used to decrease speaker volume. |
| (9)       | Volume up light   | Blinking: The volume scroll zone is being used to increase speaker volume. |

<sup>\*</sup>The 2 power lights display the same information. The light on the power button is visible only when the computer is open. The power light on the front of the computer is visible whether the computer is open or closed.

<sup>†</sup>The 2 wireless lights display the same information. The light on the wireless button is visible only when the computer is open. The wireless light on the front of the computer is visible whether the computer is open or closed.

#### **Buttons, switches and fingerprint reader**

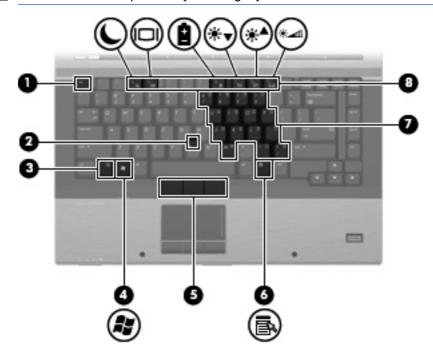


| Component |                         | Description   |
|-----------|-------------------------|---|
| (1)       | Power button            | <ul> <li>When the computer is off, press the button to turn on the<br/>computer.</li> </ul>   |
|           |                         | <ul> <li>When the computer is on, press the button to shut down the<br/>computer.</li> </ul>  |
|           |                         | <ul> <li>When the computer is in the Standby state, press the button<br/>briefly to exit Standby.</li> </ul>  |
|           |                         | <ul> <li>When the computer is in Hibernation, press the button briefly<br/>to exit Hibernation.</li> </ul>  |
|           |                         | If the computer has stopped responding and Windows® shutdown procedures are ineffective, press and hold the power button for at least 5 seconds to turn off the computer. |
|           |                         | To learn more about your power settings, select <b>Start &gt; Control Panel &gt; Performance and Maintenance &gt; Power Options</b> .                                     |
| (2)       | Info button             | Launches Info Center, which enables you to open various software solutions.   |
| (3)       | Wireless button         | Turns the wireless feature on or off, but does not establish a wireless connection.   |
|           |                         | <b>NOTE:</b> A wireless network must be set up in order to establish a wireless connection.   |
| (4)       | Internal display switch | Turns off the display if the display is closed while the power is on.   |

| Component |  | Description  |
|-----------|--|--|
| (5)       | Presentation button                        | Starts the presentation feature.   |
| (6)       | Volume mute button                         | Mutes and restores speaker sound.  |
| (7)       | Volume scroll zone                         | Adjusts speaker volume. Slide your finger to the left to decrease volume and to the right to increase volume. You can also press the left side of the volume scroll zone to decrease volume, or press the right side of the volume scroll zone to increase volume. |
| (8)       | HP Fingerprint Sensor (fingerprint reader) | Allows a fingerprint logon to Windows, instead of a password logon.  |

#### Keys

NOTE: Your computer may look slightly different from the illustration in this section.



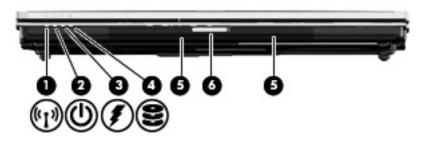
| Component |                              | Description   |
|-----------|------------------------------|---|
| (1)       | esc key                      | Displays system information when pressed in combination with the fn key.                                  |
| (2)       | Pointing stick               | Moves the pointer and selects or activates items on the screen.   |
| (3)       | fn key                       | Executes frequently used system functions when pressed in combination with a function key or the esc key. |
| (4)       | Windows logo key             | Displays the Windows Start menu.  |
| (5)       | Pointing stick buttons       | Function like the buttons on an external mouse.   |
| (6)       | Windows applications key     | Displays a shortcut menu for items beneath the pointer.   |
| (7)       | Embedded numeric keypad keys | Can be used like the keys on an external numeric keypad.  |
| (8)       | Function keys                | Execute frequently used system functions when pressed in combination with the fn key.                     |

#### **Display**



| Component |                          | Description  |
|-----------|--------------------------|--|
| (1)       | Internal display switch  | Turns off the display if the display is closed while the power is on.                              |
| (2)       | Internal microphones (2) | Records sound.   |
| (3)       | Webcam                   | Records audio and video and captures still photographs.  |
| (4)       | Webcam light             | On: The integrated camera is in use.   |
| (5)       | Keyboard light           | Illuminates the keyboard in low-light conditions when the keyboard light button is pressed.        |
| (6)       | Keyboard light button    | Opens and turns on the keyboard light.   |
| (7)       | Ambient light sensor     | Automatically adjusts the display brightness based on the lighting conditions in your environment. |

### **Front components**



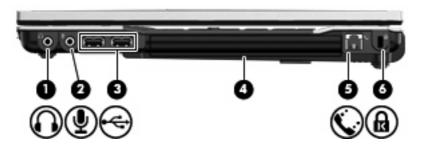
| Component |                       | Description   |
|-----------|-----------------------|---|
| (1)       | Wireless light        | <ul> <li>Turquoise: An integrated wireless device, such as a wireless<br/>local area network (WLAN) device, the HP Mobile Broadband,<br/>and/or a Bluetooth device, is on.</li> </ul>   |
|           |                       | <ul> <li>Amber: All wireless devices are off.</li> </ul>  |
| (2)       | Power light           | On: The computer is on.   |
|           |                       | Blinking: The computer is in the Standby state.   |
|           |                       | <ul> <li>Off: The computer is off or in Hibernation.</li> </ul>   |
| (3)       | Battery light         | Amber: A battery is charging.   |
|           |                       | <ul> <li>Turquoise: A battery is close to full charge capacity.</li> </ul>  |
|           |                       | <ul> <li>Blinking amber: A battery that is the only available power<br/>source has reached a low battery level. When the battery<br/>reaches a critical battery level, the battery light begins blinking<br/>rapidly.</li> </ul>  |
|           |                       | <ul> <li>Off: If the computer is plugged into an external power source,<br/>the light turns off when all batteries in the computer are fully<br/>charged. If the computer is not plugged into an external power<br/>source, the light stays off until the battery reaches a low<br/>battery level.</li> </ul> |
| (4)       | Drive light           | <ul> <li>Blinking turquoise: The hard drive or optical drive is being accessed.</li> </ul>  |
|           |                       | <ul> <li>Amber (select models only): HP 3D DriveGuard has<br/>temporarily parked the hard drive.</li> </ul>   |
| (5)       | Speakers              | Produce sound.  |
| (6)       | Display release latch | Opens the computer.   |

### **Rear components**



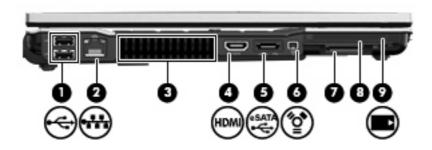
| Comp | oonent                | Description                                    |
|------|-----------------------|--|
| (1)  | Power connector       | Connects an AC adapter.                        |
| (2)  | External monitor port | Connects an external VGA monitor or projector. |

## **Right-side components**



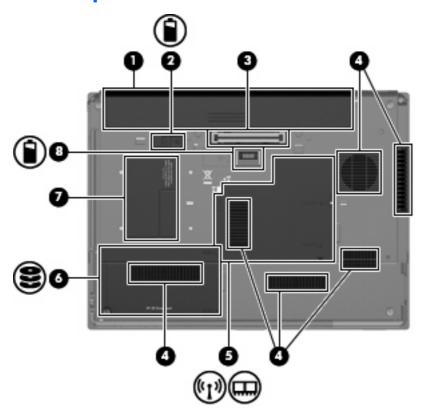
| Component |                                    | Description  |
|-----------|------------------------------------|--|
| (1)       | Audio-out (headphone) jack         | Produces sound when connected to optional powered stereo speakers, headphones, ear buds, a headset, or television audio.             |
| (2)       | Audio-in (microphone) jack         | Connects an optional computer headset microphone, stereo array microphone, or monaural microphone.                                   |
| (3)       | USB ports (2) (select models only) | Connect optional USB devices.  |
| (4)       | Optical drive                      | Reads optical discs and, on select models, also writes to optical discs.   |
| (5)       | RJ-11 (modem) jack                 | Connects a modem cable.  |
| (6)       | Security cable slot                | Attaches an optional security cable to the computer.   |
|           |                                    | <b>NOTE:</b> The security cable is designed to act as a deterrent, but may not prevent the computer from being mishandled or stolen. |

## **Left-side components**



| Component |                      | Description   |
|-----------|----------------------|---|
| (1)       | USB ports (2)        | Connect optional USB devices.   |
| (2)       | RJ-45 (network) jack | Connects a network cable.   |
|           |                      | <b>NOTE:</b> The RJ-45 (network) jack provides Gigabit Ethernet functionality.  |
| (3)       | Vent                 | Enables airflow to cool internal components.  |
|           |                      | <b>CAUTION:</b> To prevent overheating, do not obstruct vents. Use the computer 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 thick rugs or clothing, to block airflow. |
|           |                      | <b>NOTE:</b> The computer fan starts up automatically to cool internal components and prevent overheating. It is normal for the internal fan to cycle on and off during routine operation.  |
| (4)       | HDMI port            | Connects an optional video or audio device, such as a high-definition television, or any compatible digital or audio component.   |
| (5)       | eSATA port           | Connects an eSATA device.   |
| (6)       | 1394 port            | Connects an optional IEEE 1394 or 1394a device, such as a camcorder.  |
| (7)       | Media Card Reader    | Supports the following optional digital card formats: MultiMedia Card (MMC) and Secure Digital (SD) Memory Card. Memory Stick Duo (MS Duo), Memory Stick (MS), Memory Stick Pro (MSpro), and xD-Picture Card.   |
| (8)       | Smart card reader    | Supports optional smart cards.  |
| (9)       | ExpressCard slot     | Supports ExpressCards.  |

### **Bottom components**



| Component |                             | Description   |
|-----------|-----------------------------|---|
| (1)       | Battery bay                 | Holds the battery and a subscriber identity module (SIM). The SIM slot is located inside the battery bay.   |
| (2)       | Docking connector           | Connects an optional docking device.  |
| (3)       | Vents (6)                   | Enable airflow to cool internal components.   |
|           |                             | <b>NOTE:</b> The computer fan starts up automatically to cool internal components and prevent overheating. It is normal for the internal fan to cycle on and off during routine operation.  |
| (4)       | Memory module               | Contains the primary and expansion memory module slots and an HP Mobile Broadband Module (select models only).  |
|           |                             | <b>CAUTION:</b> To prevent an unresponsive system and the display of a warning message, replace the device with only a WLAN module authorized for use in the computer by the governmental agency that regulates wireless devices in your country. If you replace the device and then receive a warning message, remove the device to restore computer functionality, and then contact technical support through Help and Support. |
| (5)       | Hard drive bay              | Holds the hard drive.   |
| (6)       | Accessory battery connector | Connects an optional accessory battery.   |
| (7)       | Business card holder        | Holds an optional business card.  |
| (8)       | Battery release latch       | Releases the battery from the battery bay.  |

#### Wireless antennae



| Component |  | Description  |
|-----------|--|--|
| (1)       | WWAN antennae (2)*                       | Send and receive wireless signals to communicate with wireless wide-area networks (WWAN).  |
| (2)       | WLAN antennae (3)*                       | Send and receive wireless signals to communicate with wireless local area networks (WLAN). |
| *The      | antennae are not visible from the outsid | e of the computer. For ontimal transmission, keep the areas immediately around             |

\*The antennae are not visible from the outside of the computer. For optimal transmission, keep the areas immediately around the antennae free from obstructions.

To see wireless regulatory notices, refer to the section of the *Regulatory, Safety and Environmental Notices* that applies to your country or region. These notices are located in Help and Support.

### **Additional hardware components**



| Component |  | Description   |  |  |
|-----------|--|---|--|--|
| (1)       | Power cord*  | Connects an AC adapter to an AC outlet.   |  |  |
| (2)       | Battery*   | Powers the computer when the computer is not plugged into external power.                                       |  |  |
| (3)       | AC adapter   | Converts AC power to DC power.  |  |  |
| (4)       | Modem cable (select models only)*                                    | Connects the internal modem to an RJ-11 telephone jack or to a country- or region-specific modem cable adapter. |  |  |
| (5)       | Country- or region-specific modem cable adapter (select models only) | Adapts the modem cable to a non-RJ-11 telephone jack.   |  |  |

#### 3 Labels

The labels affixed to the computer provide information you may need when you troubleshoot system problems or travel internationally with the computer.

Service tag—Provides important information including:



- Product Name (1). This is the product name affixed to the front of your notebook.
- Serial Number (s/n) (2). This is an alphanumeric number that is unique to each product.
- Part Number/Product Number (p/n) (3). This number provides specific information about the product's hardware components. The part number helps a service technician to determine what components and parts are needed.
- Model Description (4). This is the number you need to locate documents, drivers, and support for your notebook.

Have this information available when you contact technical support. The service tag label is affixed to the bottom of the computer.

- Microsoft® Certificate of Authenticity—Contains the Windows® Product Key. You may need the Product Key to update or troubleshoot the operating system. This certificate is affixed to the bottom of the computer.
- Regulatory label—Provides regulatory information about the computer. The regulatory label is affixed inside the battery bay.
- Modem approval label—Provides regulatory information about the modem and lists the agency
  approval markings required by some of the countries in which the modem has been approved for
  use. You may need this information when traveling internationally. The modem approval label is
  affixed inside the memory module compartment.
- Wireless certification label(s) (select models only) Provide information about optional wireless
  devices and the approval markings of some of the countries and regions in which the devices have
  been approved for use. An optional device may be a wireless local area network (WLAN) device,
  an HP Mobile Broadband Module, or an optional Bluetooth® device. Wireless certification labels
  are affixed inside the memory module compartment.

- SIM (subscriber identity module) label (select models only)—Provides the ICCID (Integrated Circuit Card Identifier) of your SIM. This label is located inside the battery bay.
- HP Mobile Broadband serial number label (select models only)—Provides the serial number of your HP Mobile Broadband. This label is located inside the memory module compartment.

# Index

| Symbols/Numerics                     | components                        |                                  |   |
|--------------------------------------|-----------------------------------|----------------------------------|---|
| 1394 port, identifying 13            | additional hardware 16            | IEEE 1394 port, identifying 13   |   |
|                                      | bottom 14                         | info button, identifying 6       |   |
| A                                    | front 10                          | internal display switch,         |   |
| AC adapter, identifying 16           | left-side 13                      | identifying 6, 9                 |   |
| accessory battery connector,         | rear 11                           | internal microphone, identifying | 9 |
| identifying 14                       | right-side 12                     | 3                                |   |
| ambient light sensor, identifying 9  | top 3                             | J                                |   |
| applications key, Windows 8          | wireless antennae 15              | jacks                            |   |
| audio-in (microphone) jack,          | cord, power 16                    | audio-in (microphone) 12         |   |
| identifying 12                       | country-specific modem cable      | audio-out (headphone) 12         |   |
| audio-out (headphone) jack,          | adapter, identifying 16           | RJ-11 (modem) 12                 |   |
| identifying 12                       | adapter, identifying 10           | RJ-45 (network) 13               |   |
| identifying 12                       | D                                 | rto ro (notwork) ro              |   |
| В                                    | display release latch,            | K                                |   |
| battery bay 14, 17                   | identifying 10                    | keyboard light button,           |   |
| battery light, identifying 4, 10     | display switch, identifying 6     | identifying 9                    |   |
| battery, identifying 16              | docking connector, identifying 14 | keyboard light, identifying 9    |   |
| bays                                 | drive light, identifying 4, 10    | keypad keys, identifying 8       |   |
| bays<br>battery 14, 17               | drive light, identifying 4, 10    | keys                             |   |
| hard drive 14                        | E                                 | esc 8                            |   |
| Bluetooth label 17                   |                                   | fn 8                             |   |
|                                      |                                   |                                  |   |
| business card holder,                | esc key, identifying 8            | function 8                       |   |
| identifying 14                       | external monitor port,            | keypad 8                         |   |
| buttons                              | identifying 11                    | Windows applications 8           |   |
| info 6                               | E                                 | Windows logo 8                   |   |
| keyboard light 9                     | F                                 |                                  |   |
| pointing stick 3, 8                  | fingerprint sensor, identifying 7 | L                                |   |
| power 6                              | fn key, identifying 8             | labels                           |   |
| presentation 7                       | function keys, identifying 8      | Bluetooth 17                     |   |
| TouchPad 3                           |                                   | HP Broadband 17                  |   |
| volume mute 7                        | H                                 | Microsoft Certificate of         |   |
| wireless 6                           | hard drive bay, identifying 14    | Authenticity 17                  |   |
|                                      | HDMI port, identifying 13         | modem approval 17                |   |
| C                                    | headphone (audio-out) jack 12     | regulatory 17                    |   |
| caps lock light, identifying 4       | HP Fingerprint sensor,            | service tag 17                   |   |
| Certificate of Authenticity label 17 | identifying 7                     | SIM 18                           |   |
| compartment, memory                  | HP Mobile Broadband serial        | wireless certification 17        |   |
| module 14                            | number label 18                   | WLAN 17                          |   |
|                                      |                                   |                                  |   |

| lights                                | power light, identifying 10        | volume scroll zone, identifying 7 |
|---------------------------------------|------------------------------------|-----------------------------------|
| battery 4, 10                         | power lights, identifying 4        | volume up light, identifying 5    |
| caps lock 4                           | presentation button, identifying 7 | 1 0 7                             |
| drive 4, 10                           | Product Key 17                     | W                                 |
| mute 5                                | product name and number,           | webcam light, identifying 9       |
| num lock 4                            | computer 17                        | webcam, identifying 9             |
| power 4, 10                           |                                    | Windows applications key,         |
| volume down 5                         | R                                  | identifying 8                     |
| volume mute 5                         | regulatory information             | Windows logo key, identifying 8   |
| volume up 5                           | modem approval label 17            | wireless button, identifying 6    |
| webcam 9                              | regulatory label 17                | wireless certification label 17   |
|                                       | wireless certification labels 17   | wireless light, identifying 4, 10 |
| wireless 4, 10                        | RJ-11 (modem) jack,                | WLAN antennae, identifying 15     |
| M                                     | identifying 12                     | WLAN device 17                    |
|                                       |                                    | WLAN label 17                     |
| memory module compartment,            | RJ-45 (network) jack,              |                                   |
| identifying 14                        | identifying 13                     | WWAN antenna, identifying 15      |
| microphone (audio-in) jack 12         | •                                  |                                   |
| Microsoft Certificate of Authenticity | S corolling regions TouchDod 2     |                                   |
| label 17                              | scrolling regions, TouchPad 3      |                                   |
| modem approval label 17               | serial number, computer 17         |                                   |
| modem cable adapter,                  | service tag 17                     |                                   |
| identifying 16                        | SIM label 18                       |                                   |
| modem cable, identifying 16           | slots                              |                                   |
| monitor port, external 11             | ExpressCard 13                     |                                   |
| mute button, identifying 7            | Media Card Reader 13               |                                   |
| mute light, identifying 5             | memory module 14                   |                                   |
|                                       | security cable 12                  |                                   |
| N                                     | security cable slot,               |                                   |
| num lock light, identifying 4         | identifying 12                     |                                   |
|                                       | smart card reader 13               |                                   |
| 0                                     | WWAN 14                            |                                   |
| operating system                      | speaker, identifying 10            |                                   |
| Microsoft Certificate of              |                                    |                                   |
| Authenticity label 17                 | Т                                  |                                   |
| Product Key 17                        | TouchPad                           |                                   |
| optical drive, identifying 12         | scrolling regions 3                |                                   |
| _                                     | TouchPad buttons,                  |                                   |
| P                                     | identifying 3                      |                                   |
| pointing devices, identifying 3       | TouchPad, identifying 3            |                                   |
| pointing stick buttons,               | traveling with the computer        |                                   |
| identifying 3, 8                      | modem approval label 17            |                                   |
| pointing stick, identifying 3, 8      | wireless certification labels 17   |                                   |
| ports                                 |                                    |                                   |
| 1394 13                               | U                                  |                                   |
| eSATA 13                              | USB ports, identifying 12, 13      |                                   |
| external monitor 11                   |                                    |                                   |
| HDMI 13                               | V                                  |                                   |
| USB 12, 13                            | vents, identifying 13, 14          |                                   |
| power button, identifying 6           | volume down light, identifying 5   |                                   |
| power connector, identifying 11       | volume mute button, identifying 7  |                                   |
| power cord, identifying 16            | volume mute light, identifying 5   |                                   |