



# User Guide

## **SUMMARY**

This guide provides information about components, network connection, power management, security, backing up, and more.

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## Product notice

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

Not all features are available in all editions or versions of Windows. Systems might require upgraded and/or separately purchased hardware, drivers, software or BIOS update to take full advantage of Windows functionality. Windows 10 is automatically updated, which is always enabled. ISP fees might apply and additional requirements might apply over time for updates. Go to <http://www.microsoft.com> for details.

To access the latest user guides, go to <http://www.hp.com/support>, and follow the instructions to find your product. Then select **Manuals**.

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By installing, copying, downloading, or otherwise using any software product preinstalled on this computer, 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 full refund subject to the refund policy of your seller.

For any further information or to request a full refund of the price of the computer, please contact your seller.

## Safety warning notice

Reduce the possibility of heat-related injuries or of overheating the computer by following the practices described.

---

 **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 come into contact with 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 applicable safety standards.

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## Processor configuration setting (select products only)

Important information about processor configurations.



**IMPORTANT:** Select products are configured with an Intel® Pentium® N35xx/N37xx series or a Celeron® N28xx/N29xx/N30xx/N31xx series processor and a Windows® operating system. **If your computer is configured as described, do not change the processor configuration setting in msconfig.exe from 4 or 2 processors to 1 processor.** If you do so, your computer will not restart. You will have to perform a factory reset to restore the original settings.



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# 1 Getting started

This computer is a powerful tool designed to enhance your work and entertainment.

Read this chapter to learn about best practices after you set up your computer, fun things to do with your computer, and where to find additional HP resources.

## Best practices

After you set up and register the computer, we recommend the following steps to get the most out of your smart investment:

- Back up your hard drive by creating recovery media. See [Backing up, restoring, and recovering on page 51](#).
- If you haven't already done so, connect to a wired or wireless network. See details in [Connecting to a network on page 16](#).
- Become familiar with the computer hardware and software. For more information, see [Getting to know your computer on page 3](#) and [Enjoying entertainment features on page 20](#).
- Update or purchase antivirus software. See [Using antivirus software on page 41](#).
- **Access HP Support Assistant app**—For quick online support, open the HP Support Assistant app (select products only). HP Support Assistant optimizes computer performance and resolves problems using the latest software updates, diagnostic tools, and guided assistance. Type `support` in the taskbar search box, and then select **HP Support Assistant**. Then select **Support**.

## More HP resources

To locate resources that provide product details, how-to information, and more, use this table.

**Table 1-1 Additional information**

| Resource                                                                                                                                    | Contents                                                                                                                                             |
|---------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------|
| <i>Setup Instructions</i>                                                                                                                   | <ul style="list-style-type: none"><li>• Overview of computer setup and features</li></ul>                                                            |
| HP support                                                                                                                                  | <ul style="list-style-type: none"><li>• Online chat with an HP technician</li></ul>                                                                  |
| For HP support, go to <a href="http://www.hp.com/support">http://www.hp.com/support</a> , and follow the instructions to find your product. | <ul style="list-style-type: none"><li>• Support telephone numbers</li></ul>                                                                          |
| – or –                                                                                                                                      | <ul style="list-style-type: none"><li>• Replacement parts videos (select products only)</li></ul>                                                    |
| Type <code>support</code> in the taskbar search box, and then select <b>HP Support Assistant</b> . Then select <b>Support</b> .             | <ul style="list-style-type: none"><li>• Maintenance and service guides</li></ul>                                                                     |
| – or –                                                                                                                                      | <ul style="list-style-type: none"><li>• HP service center locations</li></ul>                                                                        |
| Select the question mark icon in the taskbar search box. Then select <b>Support</b> .                                                       |                                                                                                                                                      |
| <i>Safety &amp; Comfort Guide</i>                                                                                                           | <ul style="list-style-type: none"><li>• Proper workstation setup</li></ul>                                                                           |
| To access this guide:                                                                                                                       | <ul style="list-style-type: none"><li>• Guidelines for posture and work habits that increase your comfort and decrease your risk of injury</li></ul> |

**Table 1-1 Additional information (continued)**

| Resource                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Contents                                                                                                                                        |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>▲ Type <b>HP Documentation</b> in the taskbar search box, and then select <b>HP Documentation</b>.</p> <p>– or –</p> <p>▲ Go to <a href="http://www.hp.com/ergo">http://www.hp.com/ergo</a>.</p> <p><b>IMPORTANT:</b> You must be connected to the internet to access the latest version of the user guide.</p>                                                                                                                                                                                                                                                                                                                | <ul style="list-style-type: none"><li>• Electrical and mechanical safety information</li></ul>                                                  |
| <p><i>Regulatory, Safety, and Environmental Notices</i></p> <p>To access this document:</p> <p>▲ Type <b>HP Documentation</b> in the taskbar search box, and then select <b>HP Documentation</b>.</p>                                                                                                                                                                                                                                                                                                                                                                                                                             | <ul style="list-style-type: none"><li>• Important regulatory notices, including information about proper battery disposal, if needed.</li></ul> |
| <p><i>Limited Warranty*</i></p> <p>To access this document:</p> <p>▲ Type <b>HP Documentation</b> in the taskbar search box, and then select <b>HP Documentation</b>.</p> <p>– or –</p> <p>▲ Go to <a href="http://www.hp.com/go/orderdocuments">http://www.hp.com/go/orderdocuments</a>.</p> <p><b>IMPORTANT:</b> You must be connected to the internet to access the latest version of the user guide.</p>                                                                                                                                                                                                                      | <ul style="list-style-type: none"><li>• Specific warranty information about this computer</li></ul>                                             |
| <p>*You can find your HP Limited Warranty located with the user guides on your product and/or on the CD or DVD provided in the box. In some countries or regions, HP might provide a printed warranty in the box. For countries or regions where the warranty is not provided in printed format, you can request a copy from <a href="http://www.hp.com/go/orderdocuments">http://www.hp.com/go/orderdocuments</a>. For products purchased in Asia Pacific, you can write to HP at POD, PO Box 161, Kitchener Road Post Office, Singapore 912006. Include your product name, and your name, phone number, and postal address.</p> |                                                                                                                                                 |

## 2 Getting to know your computer

Your computer features top-rated components. This chapter provides details about your components, where they are located, and how they work.

### Locating hardware

To find out what hardware is installed on your computer, type `device manager` in the taskbar search box, and then select the **Device Manager** app.

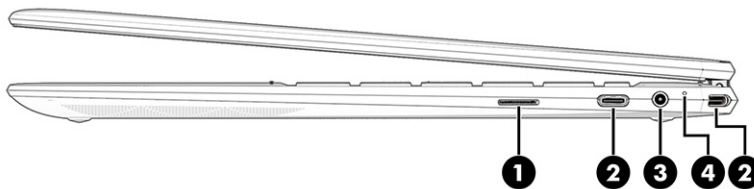
For information about system hardware components and the system BIOS version number, press `fn+esc` (select products only).

### Locating software

To find out what software is installed on your computer, right-click the **Start** button, and then select **Apps and Features**.

### Right side

Identify the components on the right side of the computer.



**Table 2-1** Right-side components and their descriptions

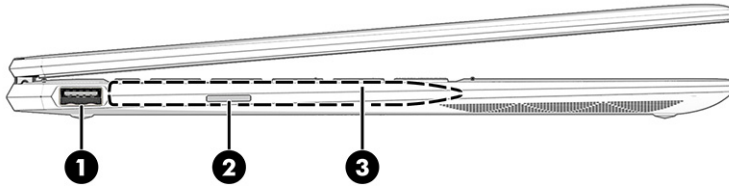
| Component |                             | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|-----------|-----------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| (1)       | microSD™ memory card reader | <p>Reads optional memory cards that enable you to store, manage, share, or access information.</p> <p>To insert a card:</p> <ol style="list-style-type: none"><li>1. Hold the card label-side up, with connectors facing the computer.</li><li>2. Insert the card into the memory card reader, and then press in on the card until it is firmly seated.</li></ol> <p>To remove a card:</p> <ul style="list-style-type: none"><li>▲ Press in on the card, and then remove it from the memory card reader.</li></ul> |

**Table 2-1 Right-side components and their descriptions (continued)**

| Component |                                                                                                                                          | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|-----------|------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| (2)       | USB Type-C power connector and Thunderbolt™ ports with HP Sleep and Charge (2)                                                           | <p>Connect an AC adapter that has a USB Type-C connector, supplying power to the computer and, if needed, charging the computer battery.</p> <p>– and –</p> <p>Connect a USB device, provide high-speed data transfer, and charge small devices, even when the computer is off.</p> <p>– and –</p> <p>Connect a display device that has a USB Type-C connector, providing DisplayPort™ output.</p> <p><b>NOTE:</b> Your computer might also support a Thunderbolt docking station.</p> <p><b>NOTE:</b> Cables, adapters, or both (purchased separately) might be required.</p>                                                                                                                        |
| (3)       |  Audio-out (headphone)/Audio-in (microphone) combo jack | <p>Connects optional powered stereo speakers, headphones, earbuds, a headset, or a television audio cable. Also connects an optional headset microphone. This jack does not support optional standalone microphones.</p> <p><b>WARNING!</b> To reduce the risk of personal injury, adjust the volume before putting on headphones, earbuds, or a headset. For additional safety information, see the <i>Regulatory, Safety, and Environmental Notices</i>.</p> <p>To access this guide:</p> <p>▲ Type <b>HP Documentation</b> in the taskbar search box, and then select <b>HP Documentation</b>.</p> <p><b>NOTE:</b> When a device is connected to the jack, the computer speakers are disabled.</p> |
| (4)       | AC adapter and battery light                                                                                                             | <ul style="list-style-type: none"><li>• White: The AC adapter is connected and the battery is fully charged.</li><li>• Blinking white: The AC adapter is disconnected and the battery has reached a low battery level.</li><li>• Amber: The AC adapter is connected and the battery is charging.</li><li>• Off: The battery is not charging.</li></ul>                                                                                                                                                                                                                                                                                                                                                |

## Left side

Identify the components on the left side of the computer.



**Table 2-2 Left-side components and their descriptions**

| Component |                                           | Description                                                                                                                                                                                                                                                  |
|-----------|-------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| (1)       | USB port with HP Sleep and Charge         | Connects a USB device, provides high-speed data transfer, and charges small devices, even when the computer is off.                                                                                                                                          |
| (2)       | Nano SIM card slot (select products only) | Supports a wireless subscriber identity module (SIM) card.<br>For SIM card installation steps, see <a href="#">Using a SIM card (select products only) on page 15</a> .                                                                                      |
| (3)       | Magnetic pen attachment area              | Holds an optional pen. With the pen tip facing towards you, place the flat magnetic side of the pen against the left side of the computer near the display.<br><b>NOTE:</b> For more information about the pen, see the documentation provided with the pen. |

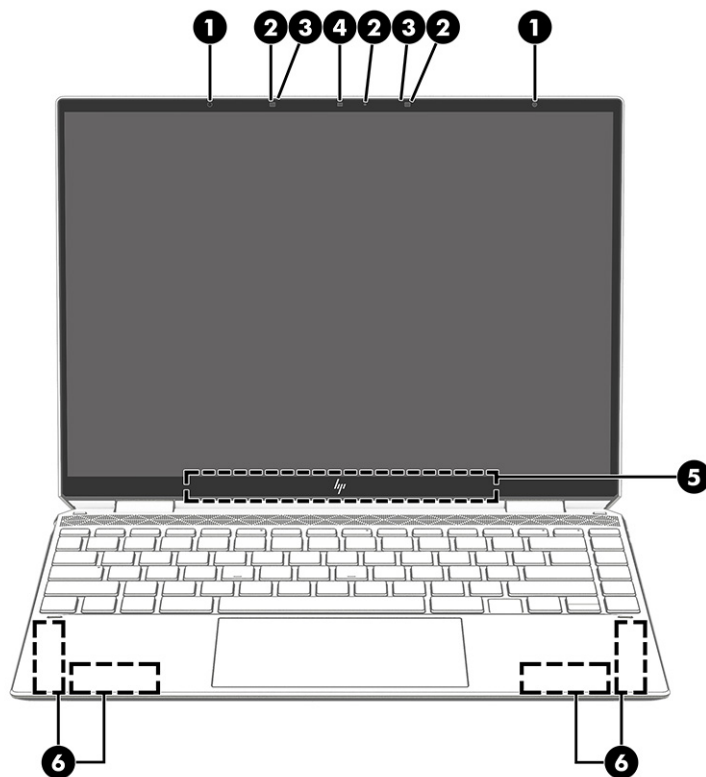
## Display

The computer display can include essential components such as speakers, antennas, cameras, and microphones.

### Low blue light mode (select products only)

Your computer display is shipped from the factory in low blue light mode for improved eye comfort and safety. Also, blue light mode automatically adjusts blue light emissions when you are using the computer at night or for reading.

**⚠ WARNING!** To reduce the risk of serious injury, read the *Safety & Comfort Guide*. It describes proper workstation setup and proper posture, health, and work habits for computer users. The *Safety & Comfort Guide* also provides important electrical and mechanical safety information. The *Safety & Comfort Guide* is available on the web at <http://www.hp.com/ergo>.



**Table 2-3 Display components and their descriptions**

| Component                                            | Description                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| (1) Ambient light sensors (2) (select products only) | Adjusts the brightness of the display, depending on the ambient light.                                                                                                                                                                                                                                                                                                                                                                                  |
| (2) Camera light(s)                                  | On: One or more cameras are in use.                                                                                                                                                                                                                                                                                                                                                                                                                     |
| (3) Internal microphones                             | Record sound.                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| (4) Camera                                           | Allows you to video chat, record video, and record still images. To use your camera, see <a href="#">Using the camera on page 20</a> . Some cameras also allow a facial recognition logon to Windows, instead of a password logon. For more information, see <a href="#">Using Windows Hello (select products only) on page 40</a> .<br><br><b>NOTE:</b> Camera functions vary depending on the camera hardware and software installed on your product. |
| (5) WLAN antennas*                                   | Send and receive wireless signals to communicate with wireless local area networks (WLANs).                                                                                                                                                                                                                                                                                                                                                             |
| (6) WWAN antennas* (select products only)            | Send and receive wireless signals to communicate with wireless wide area networks (WWANs).                                                                                                                                                                                                                                                                                                                                                              |

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

For wireless regulatory notices, see the section of the *Regulatory, Safety, and Environmental Notices* that applies to your country or region.

To access this guide:

▲ Type **HP Documentation** in the taskbar search box, and then select **HP Documentation**.

# Keyboard area

Keyboards can vary by language.

## Touchpad settings and components

Learn the touchpad settings and components

### Touchpad settings

Learn how to adjust touchpad settings.

#### Adjusting touchpad settings

Use these steps to adjust touchpad settings and gestures.

1. Type `touchpad settings` in the taskbar search box, and then press [enter](#).
2. Choose a setting.

#### Turning on the touchpad

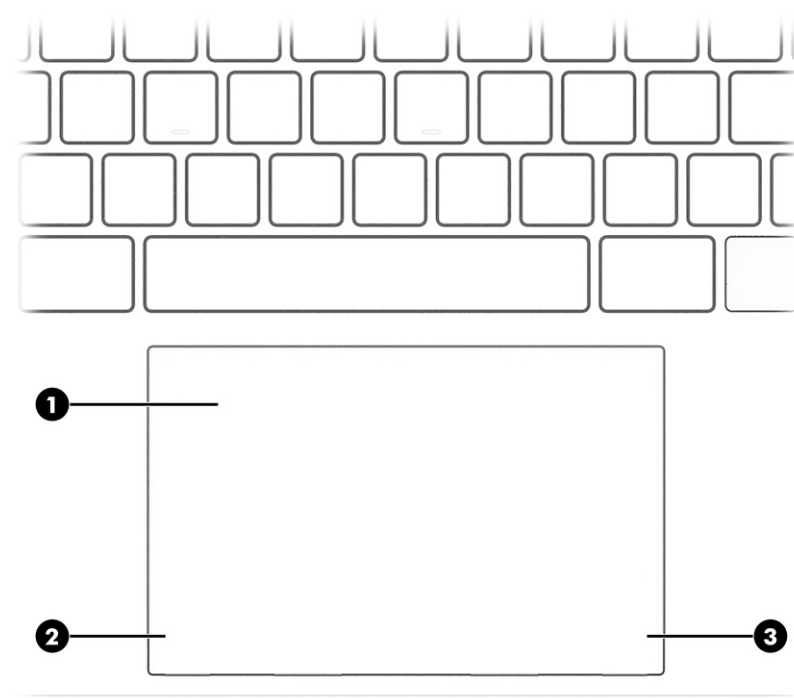
Follow these steps to turn on the touchpad.

1. Type `touchpad settings` in the taskbar search box, and then press [enter](#).
2. Using an external mouse, click the **touchpad** button.

If you are not using an external mouse, press the [Tab](#) key repeatedly until the pointer rests on the **touchpad** button. Then press the [spacebar](#) to select the button.

### Touchpad components

Identify the touchpad components.

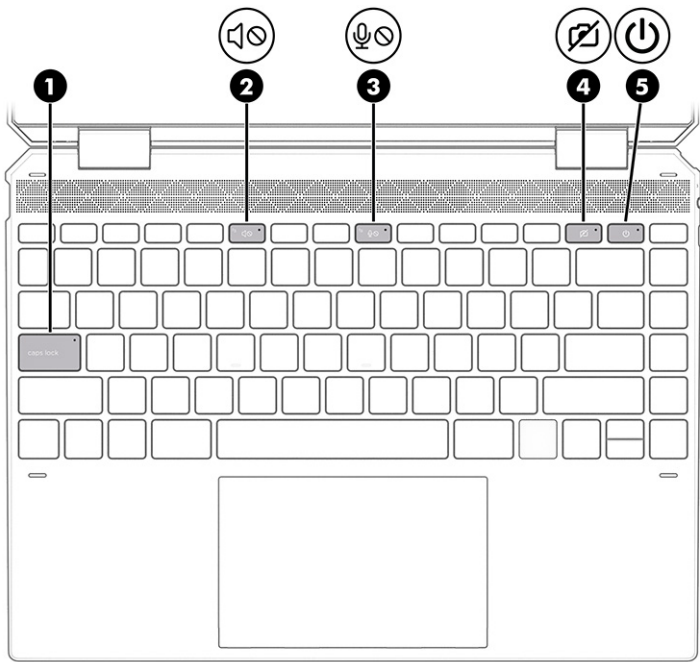


**Table 2-4 Touchpad components and their descriptions**

| Component |                       | Description                                                                                                                                                                                         |
|-----------|-----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| (1)       | Touchpad zone         | Reads your finger gestures to move the pointer or activate items on the screen.<br><br><b>NOTE:</b> For more information, see <a href="#">Using touchpad and touch screen gestures on page 24</a> . |
| (2)       | Left touchpad button  | Functions like the left button on an external mouse.                                                                                                                                                |
| (3)       | Right touchpad button | Functions like the right button on an external mouse.                                                                                                                                               |

## Lights

Identify the lights on the computer.



**Table 2-5 Lights and their descriptions**

| Component |                                                                                                           | Description                                                                                                   |
|-----------|-----------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------|
| (1)       | Caps lock light                                                                                           | On: Caps lock is on, which switches the key input to all capital letters.                                     |
| (2)       |  Mute light            | <ul style="list-style-type: none"><li>On: Computer sound is off.</li><li>Off: Computer sound is on.</li></ul> |
| (3)       |  Microphone mute light | <ul style="list-style-type: none"><li>On: Microphone is off.</li><li>Off: Microphone is on.</li></ul>         |
| (4)       |  Camera privacy light  | <ul style="list-style-type: none"><li>On: The camera is off.</li><li>Off: The camera is on.</li></ul>         |
| (5)       |  Power light           | <ul style="list-style-type: none"><li>On: The computer is on.</li></ul>                                       |