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

Not all features are available in all editions or versions of Windows. Systems may require upgraded and/or separately purchased hardware, drivers, software or BIOS update to take full advantage of Windows functionality. Windows is automatically updated, which is always enabled. High-speed internet and Microsoft account required. ISP fees may apply and additional requirements may apply over time for updates. See http://www.windows.com. **If your product ships with Windows in S Mode:** Windows in S Mode works exclusively with apps from the Microsoft Store within Windows. Certain default settings, features, and apps cannot be changed. Some accessories and apps that are compatible with Windows may not work (including some antivirus, PDF writers, driver utilities, and accessibility apps), and performance may vary, even if you switch out of S Mode. If you switch to Windows, you cannot switch back to S Mode. Learn more at Windows.com/SmodeFAQ.

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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.

Processor configuration setting (select products only)

Important information about processor configurations.

IMPORTANT: Select computer 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.

Table of contents

1 Getting started 1

Finding information 1

2 Components 3

Locating hardware 3

Locating software 3

Right 3

Left 4

Display 5

Low blue light mode (select products only) 6

Keyboard area 8

Touchpad 8

Touchpad settings 8

Adjusting touchpad settings 8

Turning on the touchpad 8

Touchpad components 9

Lights 9

Power key, speakers, and fingerprint reader 11

Special keys 12

Action keys 13

Hot keys (select products only) 15

Bottom 15

Labels 16

3 Network connections 19

Connecting to a wireless network 19

Using the wireless controls 19

Wireless button 19

Operating system controls 19

Connecting to a WLAN 20

Using HP Mobile Broadband (select products only) 20

Using Bluetooth wireless devices (select products only) 21

Connecting Bluetooth devices 21

Connecting to a wired network 21

Connecting to a local area network (LAN) (select products only) 22

Using HP LAN-Wireless Protection (select products only) 22

Using HP MAC Address Pass Through (select products only) 23

4 Navigating the screen 24

Using touchpad and touch screen gestures 24

Tap 24

Two-finger pinch zoom....24
Two-finger slide (touchpad and precision touchpad)....25
Two-finger tap (touchpad and precision touchpad)....25
Three-finger tap (touchpad and precision touchpad)....25
Four-finger tap (touchpad and precision touchpad)....26
Three-finger swipe (touchpad and precision touchpad)....26
Four-finger swipe (precision touchpad)....26
One-finger slide (touch screen)....27
Using an optional keyboard or mouse....27
Using an on-screen keyboard (select products only)....27
5 Entertainment features....28
Using a camera (select products only)....28
Using audio....28
Connecting speakers....28
Connecting headphones....28
Connecting headsets....29
Using sound settings....29
Viewing or changing sound settings....29
Using the control panel to view and control audio settings....29
Using video....29
Connecting a DisplayPort device using a USB Type-C cable (select products only)....30
Discovering and connecting wired displays using MultiStream Transport....31
Connecting displays to computers with AMD or NVIDIA graphics (with an optional hub)....31
Connecting displays to computers with Intel graphics (with an optional hub)....31
Connecting displays to computers with Intel graphics (with a built-in hub)....31
Using data transfer....32
Connecting devices to a USB Type-C port (select products only)....32
6 Managing power....34
Using Sleep and Hibernation....34
Initiating and exiting Sleep....34
Initiating and exiting Hibernation (select products only)....35
Shutting down (turning off) the computer....35
Using the Power icon....36
Running on battery power....36
Using HP Fast Charge (select products only)....36
Displaying battery charge....36
Finding battery information in HP Support Assistant (select products only)....37
Conserving battery power....37
Identifying low battery levels....37
Resolving a low battery level....37
Resolving a low battery level when external power is available....38
Resolving a low battery level when no power source is available....38
Resolving a low battery level when the computer cannot exit Hibernation....38
Factory-sealed battery....38

Running on external power 38

7 Security 40

Protecting the computer 40

Using passwords 41

Setting passwords in Windows 41

Setting passwords in Computer Setup 41

Managing a BIOS administrator password 42

Setting a new BIOS administrator password 42

Changing a BIOS administrator password 43

Deleting a BIOS administrator password 43

Entering a BIOS administrator password 44

Using DriveLock Security Options 44

Selecting Automatic DriveLock (select products only) 44

Enabling Automatic DriveLock 44

Disabling Automatic DriveLock 45

Entering an Automatic DriveLock password 45

Selecting manual DriveLock 45

Setting a DriveLock master password 46

Enabling DriveLock and setting a DriveLock user password 46

Disabling DriveLock 47

Entering a DriveLock password 48

Changing a DriveLock password 48

Windows Hello (select products only) 48

Using antivirus software 49

Using firewall software 49

Installing software updates 49

Using HP Client Security (select products only) 50

Using HP TechPulse (select products only) 50

Using an optional security cable (select products only) 50

Using a fingerprint reader (select products only) 50

8 Maintenance 51

Improving performance 51

Using Disk Defragmenter 51

Using Disk Cleanup 51

Using HP 3D DriveGuard (select products only) 51

Identifying HP 3D DriveGuard status 52

Updating programs and drivers 52

Cleaning your computer 52

Enabling HP Easy Clean (select products only) 52

Removing dirt and debris from your computer 53

Cleaning your computer with a disinfectant 53

Caring for wood veneer (select products only) 54

Traveling with or shipping your computer 54

9 Backing up, restoring, and recovering 56
Backing up information and creating recovery media 56
Using Windows tools for backing up 56
Using the HP Cloud Recovery Download Tool to create recovery media (select products only) 56
Restoring and recovering your system 56
Creating a system restore 57
Restoring and recovery methods 57
Recovering using HP Recovery media 57
Changing the computer boot order 58
Using HP Sure Recover (select products only) 58
10 Computer Setup (BIOS), TPM, and HP Sure Start 59
Using Computer Setup 59
Navigating and selecting in Computer Setup 59
Restoring factory settings in Computer Setup 59
Updating the BIOS 60
Determining the BIOS version 60
Preparing for a BIOS update 60
Downloading a BIOS update 61
Installing a BIOS update 61
Changing the boot order using the f9 prompt 61
TPM BIOS settings (select products only) 62
Using HP Sure Start (select products only) 62
11 Using HP PC Hardware Diagnostics 63
Using HP PC Hardware Diagnostics Windows (select products only) 63
Using an HP PC Hardware Diagnostics Windows hardware failure ID code 63
Accessing HP PC Hardware Diagnostics Windows 63
Accessing HP PC Hardware Diagnostics Windows from HP Help and Support (select products only) 63
Accessing HP PC Hardware Diagnostics Windows from HP Support Assistant 64
Accessing HP PC Hardware Diagnostics Windows from the Start menu (select products only) 64
Downloading HP PC Hardware Diagnostics Windows 64
Downloading the latest HP PC Hardware Diagnostics Windows version from HP 64
Downloading HP Hardware Diagnostics Windows by product name or number (select products only) 64
Downloading the HP PC Hardware Diagnostics Windows from the Microsoft Store 65
Installing HP PC Hardware Diagnostics Windows 65
Using HP PC Hardware Diagnostics UEFI 65
Using an HP PC Hardware Diagnostics UEFI hardware failure ID code 65
Starting HP PC Hardware Diagnostics UEFI 66
Downloading HP PC Hardware Diagnostics UEFI to a USB flash drive 66
Downloading the latest HP PC Hardware Diagnostics UEFI version 66
Downloading HP PC Hardware Diagnostics UEFI by product name or number (select products only) 66
Using Remote HP PC Hardware Diagnostics UEFI settings (select products only) 67
Downloading Remote HP PC Hardware Diagnostics UEFI 67
Downloading the latest Remote HP PC Hardware Diagnostics UEFI version 67
Downloading Remote HP PC Hardware Diagnostics UEFI by product name or number 67
Customizing Remote HP PC Hardware Diagnostics UEFI settings 67

12 Specifications 69
Input power 69
Operating environment 70
13 Electrostatic discharge 72
14 Accessibility 73
HP and accessibility 73
Finding the technology tools you need 73
The HP commitment 73
International Association of Accessibility Professionals (IAAP) 74
Finding the best assistive technology 74
Assessing your needs 74
Accessibility for HP products 74
Standards and legislation 75
Standards 75
Mandate 376 – EN 301 549 75
Web Content Accessibility Guidelines (WCAG) 75
Legislation and regulations 75
Useful accessibility resources and links 76
Organizations 76
Educational institutions 76
Other disability resources 76
HP links 77
Contacting support 77
Index 78

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 and where to find additional HP resources.

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

TIP: To quickly return to the computer Start screen from an open app or the Windows desktop, press the Windows key on your keyboard. Pressing the Windows key again returns you to the previous screen.

- **Connect to the internet**—Set up your wired or wireless network so that you can connect to the internet. For more information, see Network connections on page 19.
- **Update your antivirus software**—Protect your computer from damage caused by viruses. The software is preinstalled on the computer. For more information, see Using antivirus software on page 49.
- **Get to know your computer**—Learn about your computer features. See Components on page 3 and Navigating the screen on page 24 for additional information.
- **Find installed software**—Access a list of the software preinstalled on the computer:

  Select the **Start** button, and then select **All apps**.

  – or –

  Right-click the **Start** button, and then select **Apps and Features**.
- **Back up your hard drive**—Create recovery discs or a recovery USB flash drive to back up your hard drive. See Backing up, restoring, and recovering on page 56.
- **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. Select the **Search** icon in the taskbar, type `support` in the search box, and then select **HP Support Assistant**.

Finding information

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

Table 1-1 Additional information

Resource	Contents
Setup Instructions	• Overview of computer setup and features

Table 1-1 Additional information (continued)

Resource	Contents
HP support For HP support, go to https://www.hp.com/support, and follow the instructions to find your product. – or – Select the **Search** icon in the taskbar, type `support` in the search box, and then select **HP Support Assistant**. – or – Select the question mark icon (select products only) in the taskbar.	• Online chat with an HP technician • Support telephone numbers • Replacement parts videos (select products only) • Maintenance and service guides • HP service center locations
Safety & Comfort Guide To access this guide: ■ Select the **Search** icon in the taskbar, type `HP Documentation` in the search box, and then select **HP Documentation**. – or – ■ Go to http://www.hp.com/ergo. **IMPORTANT:** You must be connected to the internet to access the latest version of the user guide.	• Proper workstation setup • Guidelines for posture and work habits that increase your comfort and decrease your risk of injury • Electrical and mechanical safety information
Regulatory, Safety, and Environmental Notices To access this document: ■ Select the **Search** icon in the taskbar, type `HP Documentation` in the search box, and then select **HP Documentation**.	• Important regulatory notices, including information about Restrictions of Hazardous Substances (RoHS) and proper battery disposal, if needed.
*Limited Warranty** To access this document: ■ Select the **Search** icon in the taskbar, type `HP Documentation` in the search box, and then select **HP Documentation**. – or – ■ Go to http://www.hp.com/go/orderdocuments. **IMPORTANT:** You must be connected to the internet to access the latest version of the user guide.	• Specific warranty information about this computer

*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 http://www.hp.com/go/orderdocuments. 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.

2 Components

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

Locating hardware

Use these instructions to find out what hardware is installed on your computer.

- Select the **Search** icon in the taskbar, type `device manager` in the search box, and then select the **Device Manager** app.

A list displays all the devices installed on your computer.

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

Locating software

Use these instructions to find out what software is installed on your computer:

- Right-click the **Start** button, and then select **Apps and Features**.

Right

Use the illustration and table to identify the components on the right side of the computer.

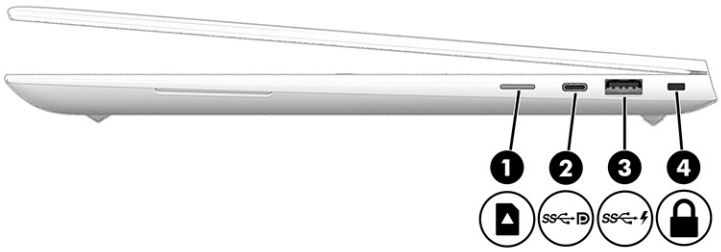

Table 2-1 Right-side components and their descriptions

Component		Description
(1)	microSD™ card reader	Reads optional memory cards that store, manage, share, or access information. To insert a card: 1. Hold the card label-side up, with the connectors facing the computer. 2. Insert the card into the memory card reader, and then press in on the card until it is firmly seated. To remove a card: ■ Press in on the card, and then remove it from the memory card reader.
(2)	USB Type-C® power connector port, SuperSpeed 20 Gbps port, and DisplayPort™ output	Connects a USB device, provides high-speed data transfer, and (for select products) charges small devices (such as a smartphone) when the computer is on or in Sleep mode. **NOTE:** Use a standard USB Type-C charging cable or cable adapter (purchased separately) when charging a small external device. – and – Connects a display device that has a USB Type-C connector, providing DisplayPort output.
(3)	USB SuperSpeed 20 Gbps port with HP Sleep and Charge	Connects a USB device, provides high-speed data transfer, and charges small devices (such as a smartphone), even when the computer is off. **NOTE:** Use a standard USB Type-A charging cable or cable adapter (purchased separately) when charging a small external device.
(4)	Security cable slot	Attaches an optional security cable to the computer. **NOTE:** The security cable is designed to act as a deterrent, but it might not prevent the computer from being mishandled or stolen.

Left

Use the illustration and table to identify the components on the left side of the computer.

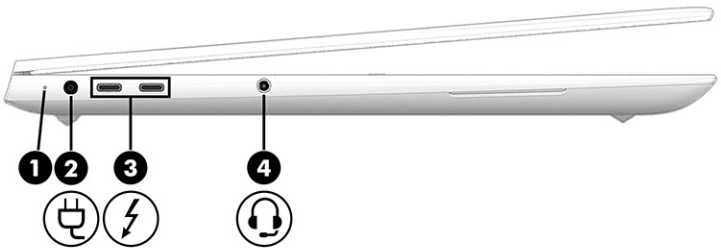

Table 2-2 Left-side components and their descriptions

Component		Description
(1)	Battery light	When AC power is connected: • White: The battery charge is greater than 90%. • Amber: The battery charge is from 0 to 90%. • Off: The battery is not charging. When AC power is disconnected (battery not charging): • Blinking amber: The battery has reached a low battery level. When the battery has reached a critical battery level, the battery light begins blinking rapidly. • Off: The battery is not charging.
(2)	Power connector	Connects an AC adapter.
(3)	USB Type-C power connectors and Thunderbolt™ ports with HP Sleep and Charge (2)	Connect a USB device, provides high-speed data transfer, and charges small devices (such as a smartphone), even when the computer is off. **NOTE:** Use a standard USB Type-C charging cable or cable adapter (purchased separately) when charging a small external device. **NOTE:** Your computer might also support a Thunderbolt docking station. – and – Connect a display device that has a USB Type-C connector, providing DisplayPort output.
(4)	Audio-out (headphone)/Audio-in (microphone) combo jack	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. **WARNING!** To reduce the risk of personal injury, adjust the volume before putting on headphones, earbuds, or a headset. For additional safety information, see the *Regulatory, Safety, and Environmental Notices*. To access this guide: ■ Select the **Search** icon in the taskbar, type `HP Documentation` in the search box, and then select **HP Documentation**. **NOTE:** When a device is connected to the jack, the computer speakers are disabled.

Display

Use the illustration and table to identify the display components.

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.

NOTE: Choose the illustration that matches your computer.

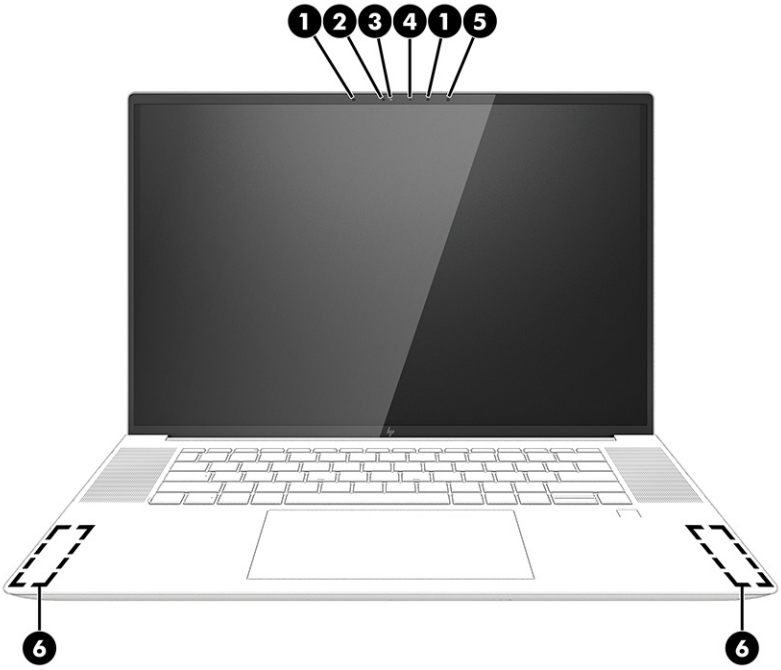

Table 2-3 Display components and their descriptions

Component		Description
(1)	Infrared (IR) LEDs (2)	On: Camera is operating.
(2)	Camera (IR)*	Allows you to video chat, record video, and record still images. To use your camera, see Using a camera (select products only) on page 28. Some cameras also allow a facial recognition logon to Windows, instead of a password logon. For more information, see Windows Hello (select products only) on page 48. **NOTE:** Camera functions vary depending on the camera hardware and software installed on your product.
(3)	Camera (Web)	Allows you to video chat, record video, and record still images. To use your camera, see Using a camera (select products only) on page 28. Some cameras also allow a facial recognition logon to Windows, instead of a password logon. For more information, see Windows Hello (select products only) on page 48. **NOTE:** Camera functions vary depending on the camera hardware and software installed on your product.
(4)	Webcam LED	On: Camera is operating.

Table 2-3 Display components and their descriptions (continued)

Component		Description
(5)	Ambient light sensor	Detects light levels in the environment to adjust the camera's noise reduction levels.
(6)	Antennas (2)**	Send and receive wireless signals to communicate with wireless local area networks (WLANs).

*The infrared camera and lenses are not visible from the outside of the computer.

**The antennas are not visible from the outside of the computer.

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:

- Select the **Search** icon in the taskbar, type `HP Documentation` in the search box, and then select **HP Documentation**.

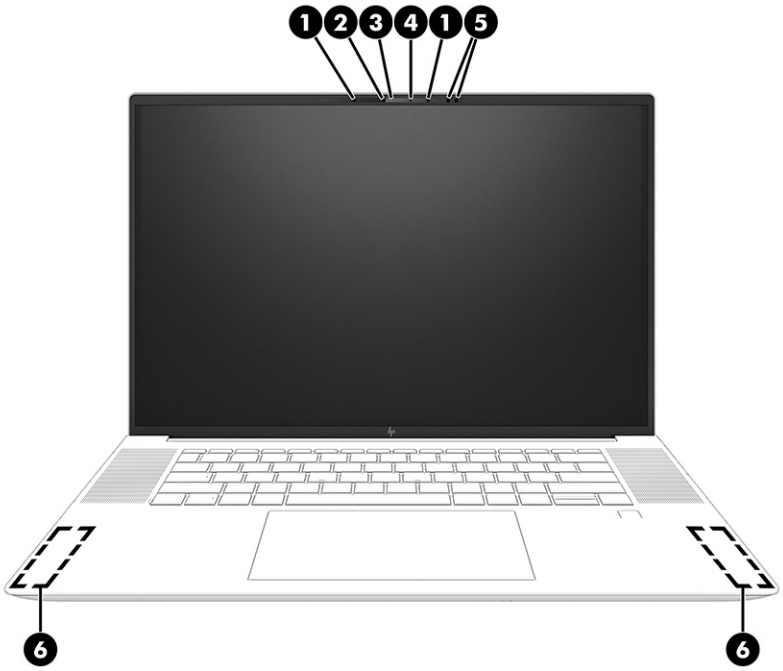

Table 2-4 Display components and their descriptions

Component		Description
(1)	Infrared LEDs (2)	On: Camera is operating.
(2)	Camera (IR)*	Allows you to video chat, record video, and record still images. To use your camera, see Using a camera (select products only) on page 28. Some cameras also allow a facial recognition logon to Windows, instead of a password logon. For more information, see Windows Hello (select products only) on page 48. **NOTE:** Camera functions vary depending on the camera hardware and software installed on your product.

Table 2-4 **Display components and their descriptions (continued)**

Component		Description
(3)	Camera (Web)	Allows you to video chat, record video, and record still images. To use your camera, see Using a camera (select products only) on page 28. Some cameras also allow a facial recognition logon to Windows, instead of a password logon. For more information, see Windows Hello (select products only) on page 48. **NOTE:** Camera functions vary depending on the camera hardware and software installed on your product.
(4)	Web cam LED	On: Camera is operating.
(5)	Ambient light sensors (2)	Detect light levels in the environment to adjust the camera's noise reduction levels.
(6)	Antennas (2)**	Send and receive wireless signals to communicate with wireless local area networks (WLANs).

*The infrared camera and lenses are not visible from the outside of the computer.

**The antennas are not visible from the outside of the computer.

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:

- Select the **Search** icon in the taskbar, type `HP Documentation` in the search box, and then select **HP Documentation**.

Keyboard area

Keyboards can vary by language.

NOTE: The keyboard, including the function keys and power key (select products only), is disabled in stand, tent, and tablet modes. To enable the keyboard, including the power key, change to the clamshell mode.

Touchpad

The touchpad settings and components are described here.

Touchpad settings

You learn how to adjust the touchpad settings and components here.

Adjusting touchpad settings

Use these steps to adjust touchpad settings and gestures.

1. Select the **Search** icon in the taskbar, type `touchpad settings` in the search box, and then press enter.
2. Choose a setting.

Turning on the touchpad

Follow these steps to turn on the touchpad.

1. Select the **Search** icon in the taskbar, type `touchpad settings` in the 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

Use the illustration and table to identify the touchpad components.

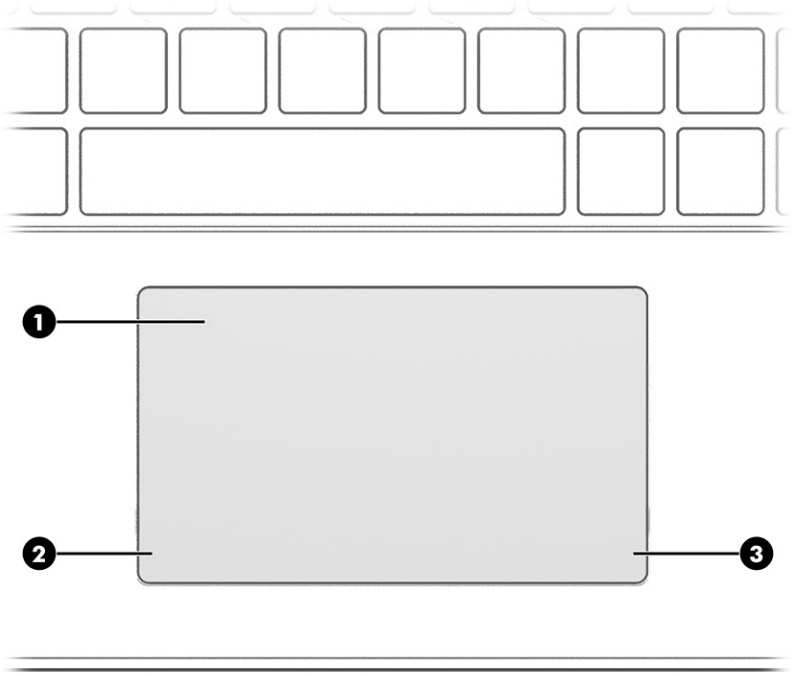

Table 2-5 Touchpad components and their descriptions

Component		Description
(1)	Touchpad zone	Reads your finger gestures to move the pointer or activate items on the screen. **NOTE:** For more information, see Using touchpad and touch screen gestures on page 24.
(2)	Left touchpad zone	Functions like the left button on an external mouse.
(3)	Right touchpad zone	Functions like the right button on an external mouse.

Lights

Use the illustration and table to identify the lights on the computer.