Dell G15 5530

Owner's Manual

Regulatory Model: P121F
Regulatory Type: P121F001
May 2024
Rev. A06

Notes, cautions, and warnings

NOTE: A NOTE indicates important information that helps you make better use of your product.

CAUTION: A CAUTION indicates either potential damage to hardware or loss of data and tells you how to avoid the problem.

WARNING: A WARNING indicates a potential for property damage, personal injury, or death.

© 2023-2024 Dell Inc. or its subsidiaries. All rights reserved. Dell Technologies, Dell, and other trademarks are trademarks of Dell Inc. or its subsidiaries. Other trademarks may be trademarks of their respective owners.

Contents

Chapter 1: Views of Dell G15 5530 7
Right 7
Left 7
Top 8
Front 9
Bottom 10
Back 10
Service Tag 11

Chapter 2: Set up your Dell G15 5530 12

Chapter 3: Specifications of Dell G15 5530 14
Dimensions and weight 14
Processor 14
Chipset 15
Operating system 16
Memory 16
External ports and slots 16
Internal slots 17
Ethernet 17
Wireless module 17
Audio 18
Storage 18
Keyboard 19
Keyboard shortcuts 19
Camera 21
Touchpad 22
Power adapter 22
Battery 23
Display 24
GPU—Integrated 25
GPU—Discrete 25
Operating and storage environment 25
ComfortView Plus 26

Chapter 4: Working inside your computer 27
Safety instructions 27
Before working inside your computer 27
Safety precautions 28
Electrostatic discharge—ESD protection 28
ESD Field Service kit 29
Transporting sensitive components 30
After working inside your computer 30
BitLocker 30

Recommended tools....30
Screw list....30
Major components of Dell G15 5530....32

Chapter 5: Removing and installing Customer Replaceable Units (CRUs)....35
Base cover....35
Removing the base cover....35
Installing the base cover....38
Solid-state drive....40
Removing the solid-state drive....40
Installing the solid-state drive....41
Wireless card....43
Removing the wireless card....43
Installing the wireless card....44
Memory....45
Removing the memory module....45
Installing the memory module....46
Speakers....47
Removing the speakers....47
Installing the speakers....47
Rear cover....48
Removing the rear cover....48
Installing the rear cover....49

Chapter 6: Removing and installing Field Replaceable Units (FRUs)....51
Battery....51
Rechargeable Li-ion battery precautions....51
Removing the battery....51
Installing the battery....53
Touchpad....54
Removing the touchpad....54
Installing the touchpad....55
Display assembly....56
Removing the display assembly....56
Installing the display assembly....59
Keyboard-controller board....61
Removing the keyboard-controller board....61
Installing the keyboard-controller board....62
Power-adapter port....63
Removing the power-adapter port....63
Installing the power-adapter port....64
System board....65
Removing the system board (single-color keyboard)....65
Installing the system board (single-color keyboard)....68
Removing the system board (four-zone keyboard)....71
Installing the system board (four-zone keyboard)....74
USB board....77
Removing the USB board....77
Installing the USB board....78

Ethernet and audio board....79
Removing the Ethernet and audio board....79
Installing the Ethernet and audio board....80
Fan and heat-sink assembly....81
Removing the fan and heat-sink assembly....81
Installing the fan and heat-sink assembly....82
Power-button assembly....83
Removing the power button....83
Installing the power button....84
Palm-rest and keyboard assembly....85
Removing the palm-rest and keyboard assembly....85
Installing the palm-rest and keyboard assembly....86

Chapter 7: Software....88
Operating system....88
Drivers and downloads....88

Chapter 8: BIOS Setup....89
Entering BIOS Setup program....89
Navigation keys....89
F12 One Time Boot menu....89
System setup options....90
Updating the BIOS....99
Updating the BIOS in Windows....99
Updating the BIOS using the USB drive in Windows....99
Updating the BIOS in Linux and Ubuntu....100
Updating the BIOS from the One Time Boot menu....100
System and setup password....101
Assigning a System Setup password....101
Deleting or changing an existing system password or setup password....101
Clearing CMOS settings....102
Clearing BIOS (System Setup) and System passwords....102

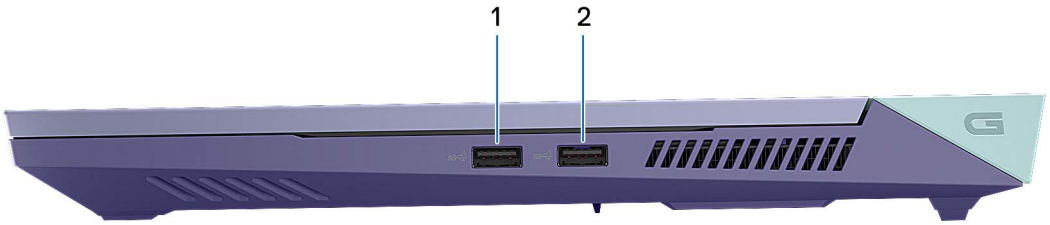
Chapter 9: Troubleshooting....103
Handling swollen rechargeable Li-ion batteries....103
Locating the Service Tag or Express Service Code of your Dell computer....103
Dell SupportAssist Pre-boot System Performance Check diagnostics....104
Running the SupportAssist Pre-Boot System Performance Check....104
Built-in self-test (BIST)....104
M-BIST....104
LCD Power rail test (L-BIST)....105
LCD Built-in Self-Test (BIST)....105
System-diagnostic lights....106
Recovering the operating system....107
Real-Time Clock (RTC Reset)....107
Backup media and recovery options....107
Wi-Fi power cycle....107
Drain residual flea power (perform hard reset)....108

Chapter 10: Getting help and contacting Dell..... 109

1

Views of Dell G15 5530

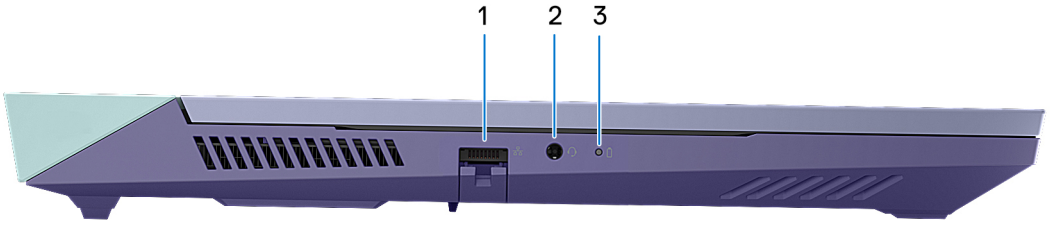
Right



1. **USB 3.2 Gen 1 ports (2)**

   Connect devices such as external storage devices and printers. Provides data transfer speeds up to 5 Gbps.

Left



1. **Network port**

   Connect an Ethernet (RJ45) cable from a router or a broadband modem for network or Internet access.

2. **Universal audio jack**

   Connect audio-output devices such as speakers, amplifiers, and so on.

3. **Battery-status light**

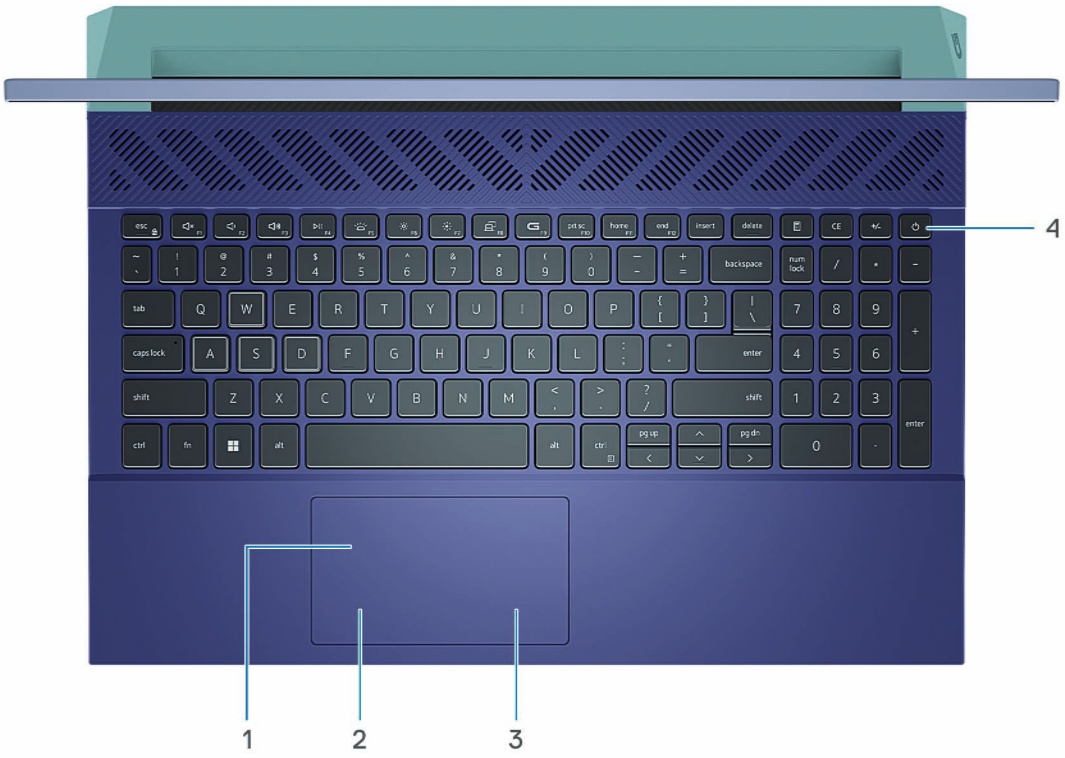
   Indicates the battery-charge status.

   Solid amber—Battery charge is low.

   Blinking amber—Battery charge is critical.

   Off—Battery is fully charged.

Top



1. **Touchpad**

   Move your finger on the touchpad to move the mouse pointer. Tap to left-click and two fingers tap to right-click.

2. **Left-click area**

   Press to left-click.

3. **Right-click area**

   Press to right-click.

4. **Power button**

   Press to turn on the computer if it is turned off, in sleep state, or in hibernate state.

   When the computer is turned on, press the power button to put the computer into sleep state; press and hold the power button for 10 seconds to force shut-down the computer.

   NOTE: You can customize the power-button behavior in Windows.

1. **Touchpad**

   Move your finger on the touchpad to move the mouse pointer. Tap to left-click and two fingers tap to right-click.

2. **Left-click area**

   Press to left-click.

3. **Right-click area**

   Press to right-click.

4. **Power button**

   Press to turn on the computer if it is turned off, in sleep state, or in hibernate state.

   When the computer is turned on, press the power button to put the computer into sleep state; press and hold the power button for 10 seconds to force shut-down the computer.

NOTE: You can customize the power-button behavior in Windows. For more information, see *Me and My Dell* at Dell Support Mannuals.

Front

1. **Camera**

   Make video calls, capture photos, or record videos.

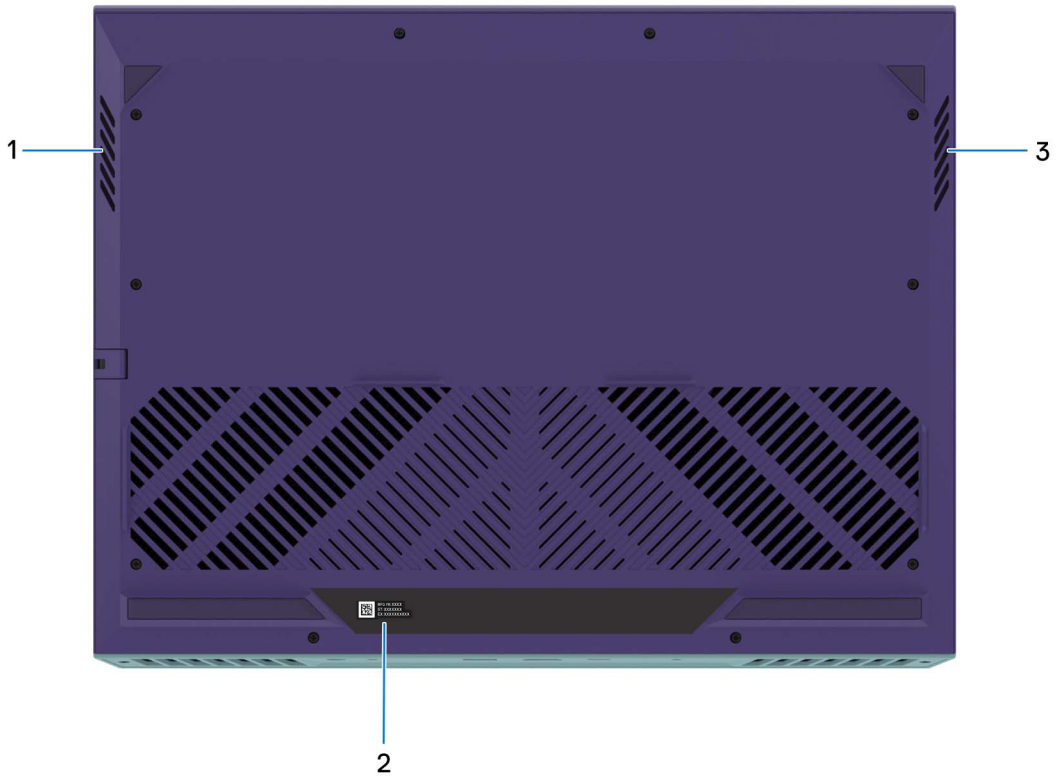
2. **Camera-status light**

   Turns on when the camera is in use.

3. **Microphone**

   Provides digital sound input for audio recording, voice calls, and so on.

Bottom



1. **Left speaker**

   Provides audio output.

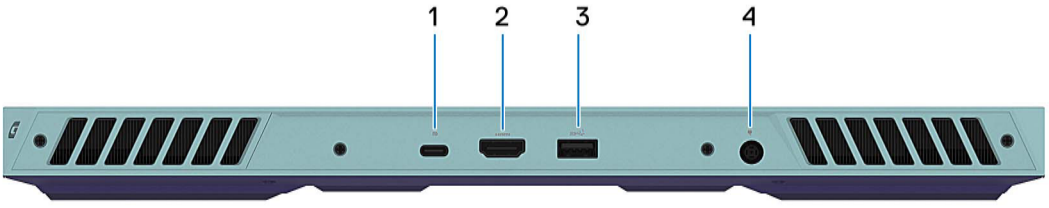
2. **Service Tag label**

   The Service Tag is a unique alphanumeric identifier that enables Dell service technicians to identify the hardware components in your computer and access warranty information.

3. **Right speaker**

   Provides audio output.

Back



1. **USB 3.2 Gen 2 (Type-C) port with DisplayPort**

   Connect devices such as external storage devices, printers, and external displays. Provides data transfer rate of up to 10 Gbps.

   Supports DisplayPort 1.4 and also enables you to connect an external display using a display adapter.

   NOTE: This port is only available on computers shipped with an NVIDIA GeForce RTX 3050/4050/4060 graphics card.

NOTE: A USB Type-C to DisplayPort adapter (sold separately) is required to connect a DisplayPort device.

2. **HDMI port**

   Connect to a TV, external display or another HDMI-in enabled device. Supports video and audio output.

3. **USB 3.2 Gen 1 port**

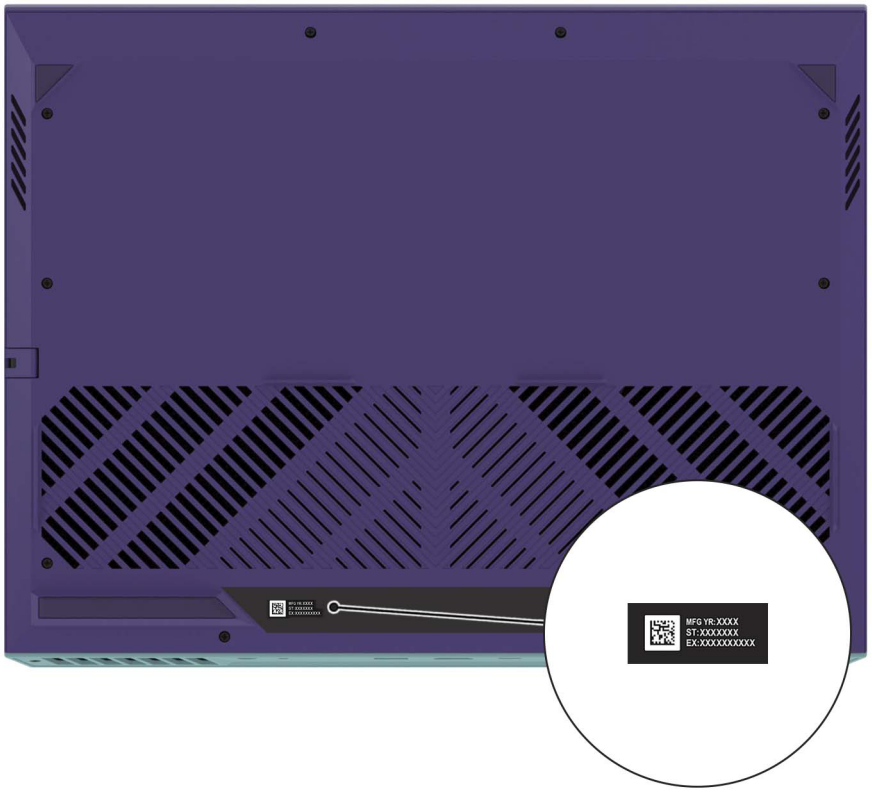
   Connect devices such as external storage devices and printers. Provides data transfer speeds up to 5 Gbps.

4. **Power-adapter port**

   Connect the power adapter to charge your computer battery.

Service Tag

The service tag is a unique alphanumeric identifier that allows Dell service technicians to identify the hardware components in your computer and access warranty information.



2

Set up your Dell G15 5530

About this task

NOTE: The images in this document may differ from your computer depending on the configuration you ordered.

Steps

1. Connect the power adapter and press the power button.

NOTE: The battery may go into power-saving mode during shipment to conserve charge on the battery. Ensure that the power adapter is connected to your computer when it is turned on for the first time.

2. Finish Windows setup.

   Follow the on-screen instructions to complete the setup. When setting up, Dell Technologies recommends that you:

   - Connect to a network for Windows updates.

     NOTE: If connecting to a secured wireless network, enter the password for the wireless network access when prompted.

   - If connected to the Internet, sign in with or create a Microsoft account. If not connected to the Internet, create an offline account.
   - On the **Support and Protection** screen, enter your contact details.

3. Locate and use Dell apps from the Windows Start menu—Recommended.

Table 1. Locate Dell apps

Resources	Description
	My Dell Centralized location for key Dell applications, help articles, and other important information about your computer. It also notifies you about the warranty status, recommended accessories, and software updates if available.
	SupportAssist SupportAssist proactively and predictively identifies hardware and software issues on your computer and automates the engagement process with Dell Technical support. It addresses performance and stabilization issues, prevents security threats, monitors, and detects hardware failures. For more information, see *SupportAssist for Home PCs User's Guide* at Serviceability Tools at the Dell Support Site. Click **SupportAssist** and then, click **SupportAssist for Home PCs**. **NOTE:** In SupportAssist, click the warranty expiry date to renew or upgrade your warranty.
	Dell Update Updates your computer with critical fixes and latest device drivers as they become available. For more information on using Dell Update, search in the Knowledge Base Resource at the Dell Support Site.
	Dell Digital Delivery Download software applications, which are purchased but not preinstalled on your computer. For more information on using Dell Digital Delivery, search in the Knowledge Base Resource at the Dell Support Site.

3

Specifications of Dell G15 5530

Dimensions and weight

The following table lists the height, width, depth, and weight of your Dell G15 5530.

Table 2. Dimensions and weight

Description	Values
Height:	
Front height	21.28 mm (0.83 in.)
Rear height	26.15 mm (1.02 in.)
Width	357.26 mm (14.06 in.)
Depth	274.52 mm (10.80 in.)
Weight **NOTE:** The weight of your computer depends on the configuration that is ordered and manufacturing variability.	2.81 kg (6.20 lb)

Processor

The following table lists the details of the processors supported by your Dell G15 5530.

Table 3. Processor

Description	Option one	Option two	Option three	Option four
Processor type	13th Generation Intel Core i5-13450HX	13th Generation Intel Core i7-13650HX	13th Generation Intel Core i7-13700HX	13th Generation Intel Core i9-13900HX
Processor wattage	55 W	55 W	55 W	55 W
Processor total core count	10	14	16	24
Performance-cores	6	6	8	8
Efficient-cores	4	8	8	16
Processor total thread counts	16	20	24	32
	NOTE: Intel® Hyper-Threading Technology is only available on Performance-cores.			
Performance-cores frequency				
Processor base frequency	2.40 GHz	2.60 GHz	2.10 GHz	2.20 GHz
Maximum turbo frequency	Up to 4.60 GHz	Up to 4.90 GHz	Up to 5 GHz	Up to 5.40 GHz
Efficient-cores frequency				
Processor base frequency	1.80 GHz	1.90 GHz	1.50 GHz	1.60 GHz
Maximum turbo frequency	3.40 GHz	3.60 GHz	3.70 GHz	3.90 GHz
	NOTE: Processor clock speeds and thermal design power differ according to the thermal mode selected in the My Dell app on your computer.			
Processor cache	20 MB	24 MB	30 MB	36 MB
Integrated graphics	Intel UHD Graphics	Intel UHD Graphics	Intel UHD Graphics	Intel UHD Graphics

Chipset

The following table lists the details of the chipset that is supported in your Dell G15 5530.

Table 4. Chipset

Description	Values
Chipset	HM770
Processor	13th Generation Intel Core i5/i7/i9
DRAM bus width	64-bit
Flash EPROM	32 MB
PCIe bus	Up to Gen4

Operating system

Your Dell G15 5530 supports the following operating systems:

- Windows 11 Professional, 64-bit
- Windows 11 Home, 64-bit
- Ubuntu 20.04 LTS, 64-bit

Memory

The following table lists the memory specifications that are supported by your Dell G15 5530.

Table 5. Memory specifications

Description	Values
Memory slots	Two SODIMM slots
Memory type	DDR5
Memory speed	4800 MT/s
Maximum memory configuration	32 GB
Minimum memory configuration	8 GB
Memory size per slot	8 GB or 16 GB
Memory configurations supported	• 8 GB, 1 x 8 GB, DDR5, 4800 MT/s • 16 GB, 1 x 16 GB, DDR5, 4800 MT/s • 16 GB, 2 x 8 GB, DDR5, 4800 MT/s, dual-channel • 32 GB, 2 x 16 GB, DDR5, 4800 MT/s, dual-channel **NOTE:** When upgrading memory, Dell Technologies recommends replacing memory of the same capacity and speed in both the SODIMM slots to prevent compatibility and reliability issues. Ensure that the BIOS version is 1.6.0 or later when upgrading the memory.

External ports and slots

The following table lists the external ports of your Dell G15 5530.

Table 6. External ports and slots

Description	Values
Network port	One RJ-45 port
USB ports	• Three USB 3.2 Gen 1 ports • One USB 3.2 Gen 2 (Type-C) with DisplayPort
Audio port	One universal audio jack
Video port(s)	One HDMI 2.1 port
Media-card reader	Not supported

Table 6. External ports and slots (continued)

Description	Values
Power-adapter port	One 7.4 mm x 5.1 mm power-adapter port
Security-cable slot	Not supported

Internal slots

The following table lists the internal slots of your Dell G15 5530.

Table 7. Internal slots

Description	Values
M.2	• One M.2 2230 slot for Wi-Fi and Bluetooth combo card • Two M.2 2230/2280 slots for solid-state drives **NOTE:** To learn more about the features of different types of M.2 cards, search in the Knowledge Base Resource at Dell Support Site.

Ethernet

The following table lists the wired Ethernet Local Area Network (LAN) specifications of your Dell G15 5530.

Table 8. Ethernet specifications

Description	Values
Model number	Realtek RTL8111H PCI-e 1 Gigabit Ethernet controller
Transfer rate	10/100/1000 Mbps

Wireless module

The following table lists the Wireless Local Area Network (WLAN) module that is supported on your Dell G15 5530.

Table 9. Wireless module specifications

Description	Values
Model number	Intel AX201
Transfer rate	2400 Mbps
Frequency bands supported	2.4 GHz/5 GHz
Wireless standards	• Wi-Fi 802.11a/b/g • Wi-Fi 4 (Wi-Fi 802.11n) • Wi-Fi 5 (Wi-Fi 802.11ac) • Wi-Fi 6 (Wi-Fi 802.11ax)
Encryption	• 64-bit/128-bit WEP • AES-CCMP • TKIP

Table 9. Wireless module specifications (continued)

Description	Values
Bluetooth wireless card	Bluetooth 5.2
	NOTE: The version of the Bluetooth wireless card may vary depending on the operating system that is installed on your computer.

Audio

The following table lists the audio specifications of your Dell G15 5530.

Table 10. Audio specifications

Description		Values
Audio controller		Realtek ALC3204
Stereo conversion		Supported
Internal audio interface		High definition audio
External audio interface		One universal audio jack
Number of speakers		Two
Internal-speaker amplifier		Supported
External volume controls		Keyboard shortcut controls
Speaker output:		
	Average speaker output	2 x 2 W = 4 W
	Peak speaker output	2 x 2.5 W = 5 W
Subwoofer output		Not supported
Microphone		One microphone in camera assembly

Storage

This section lists the storage options on your Dell G15 5530.

Your Dell G15 5530 supports one of the following storage configurations:

- One M.2 2230 or M.2 2280 solid-state drive
- Two M.2 2280 solid-state drives (for systems with M.2 2280 solid-state drive configuration only).

The primary drive of your Dell G15 5530 is installed in solid-state drive slot one.

Table 11. Storage specifications

Storage type	Interface type	Capacity
M.2 2230 solid-state drive	PCIe NVMe Gen4 x4	Up to 1 TB
M.2 2280 solid-state drive	PCIe NVMe Gen4 x4	Up to 2 TB

Keyboard

The following table lists the keyboard specifications of your Dell G15 5530.

Table 12. Keyboard specifications

Description	Values
Keyboard type	• Single-color backlit (white) keyboard • Single-color backlit (hot coral) keyboard • Four-zone RGB backlit keyboard
Keyboard layout	QWERTY
Number of keys	• United States and Canada: 101 keys • United Kingdom: 102 keys • Japan: 105 keys
Keyboard size	X=18.70 mm key pitch Y=18.05 mm key pitch
Keyboard shortcuts	Some keys on your keyboard have two symbols on them. These keys can be used to type alternate characters or to perform secondary functions. To type the alternate character, press Shift and the desired key. To perform secondary functions, press Fn and the desired key. **NOTE:** You can define the primary behavior of the function keys (F1–F12) changing **Function Key Behavior** in BIOS setup program. **NOTE:** If Copilot in Windows is not available on your computer, the Copilot key launches Windows Search. For more information about Copilot in Windows, search in the Knowledge Base Resource at the Dell Support site.

Keyboard shortcuts

NOTE: Keyboard characters may differ depending on the keyboard language configuration. Keys used for shortcuts remain the same across all language configurations.

Some keys on your keyboard have two symbols on them. These keys can be used to type alternate characters or to perform secondary functions. The symbol shown on the lower part of the key refers to the character that is typed out when the key is pressed. If you press **Shift** and the key, the symbol shown on the upper part of the key is typed out. For example, if you press **2**, **2** is typed out; if you press **Shift** + **2**, **@** is typed out.

The keys **F1** to **F12** at the top row of the keyboard are function keys for multi-media control, as indicated by the icon at the bottom of the key. Press the function key to invoke the task represented by the icon. For example, pressing **F1** mutes the audio (refer to the table below).

However, if the function keys **F1** to **F12** are needed for specific software applications, multi-media functionality can be disabled by pressing **fn** + **Esc**. Subsequently, multi-media control can be invoked by pressing **fn** and the respective function key. For example, mute audio by pressing **fn** + **F1**.

NOTE: You can also define the primary behavior of the function keys (**F1** to **F12**) by changing **Function Key Behavior** in the BIOS Setup program.

Table 13. List of keyboard shortcuts

Function key	Redefined key (for multimedia control)	Primary behavior
		Mute audio
		Decrease volume
		Increase volume
		Play/Pause
		Toggle keyboard backlight (optional)
		Decrease brightness
		Increase brightness
		Switch to external display
		Search/G key (optional)
		Print screen
		Home
		End

The **Fn** key is also used with selected keys on the keyboard to invoke other secondary functions.

Table 14. Secondary behavior

Function key	Secondary behavior
	Turn off/on wireless
	Pause/Break
	Insert

Table 14. Secondary behavior (continued)

Function key	Secondary behavior
fn + S	Sleep
fn + H	Toggle between power and battery-status light/hard-drive activity light
fn + R	System request
fn + ctrl	Open application menu
fn + esc	Toggle fn-key lock
fn + pg up	Page up
fn + pg dn	Page down
fn + home F11	Home
fn + end F12	End

Camera

The following table lists the camera specifications of your Dell G15 5530.

Table 15. Camera specifications

Description		Values
Number of cameras		One
Camera type		HD RGB camera
Camera location		Front camera
Camera sensor type		CMOS sensor technology
Camera resolution:		
	Still image	0.92 megapixel
	Video	1280 x 720 (HD) at 30 fps
Diagonal viewing angle:		78.6 degrees

Touchpad

The following table lists the touchpad specifications of your Dell G15 5530.

Table 16. Touchpad specifications

Description		Values
Touchpad resolution:		
	Horizontal	1229
	Vertical	689
Touchpad dimensions:		
	Horizontal	105 mm (4.13 in.)
	Vertical	60 mm (2.36 in.)
Touchpad gestures		For more information about touchpad gestures that are available on: • Windows, see the Microsoft Knowledge Base article at Microsoft Support Site. • Ubuntu, see Ubuntu Support Site.

Power adapter

The following table lists the power adapter specifications of your Dell G15 5530.

Table 17. Power adapter specifications

Description		Option one	Option two	Option three
Type		180 W **NOTE:** The availability of computer configurations with a 180 W adapter may vary and may not be available in your specific country or region.	240 W	330 W
Connector dimensions:				
	External diameter	7.40 mm (0.29 in.)	7.40 mm (0.29 in.)	7.40 mm (0.29 in.)
	Internal diameter	5.10 mm (0.20 in.)	5.10 mm (0.20 in.)	5.10 mm (0.20 in.)
Power-adapter dimensions:				
	Height	30 mm (1.18 in.)	25.40 mm (1 in.)	43 mm (1.69 in.)
	Width	76.20 mm (3 in.)	100 mm (3.94 in.)	100 mm (3.94 in.)
	Depth	155 mm (6.10 in.)	200 mm (7.87 in.)	200 mm (7.87 in.)
Input voltage		100 VAC x 240 VAC	100 VAC x 240 VAC	100 VAC x 240 VAC
Input frequency		50 Hz x 60 Hz	50 Hz x 60 Hz	50 Hz x 60 Hz
Input current (maximum)		2.34 A	3.50 A	4.40 A

Table 17. Power adapter specifications (continued)

Description		Option one	Option two	Option three
Output current (continuous)		2.34 A	12.31 A	16.92 A
Rated output voltage		19.50 VDC	19.50 VDC	19.50 VDC
Temperature range:				
	Operating	0°C to 40°C (32°F to 104°F)	0°C to 40°C (32°F to 104°F)	0°C to 40°C (32°F to 104°F)
	Storage	-40°C to 70°C (-40°F to 158°F)	-40°C to 70°C (-40°F to 158°F)	-40°C to 70°C (-40°F to 158°F)
CAUTION: Operating and storage temperature ranges may differ among components, so operating or storing the device outside these ranges may impact the performance of specific components.				

Battery

The following table lists the battery specifications of your Dell G15 5530.

Table 18. Battery specifications

Description		Option one	Option two
Battery type		3-cell, 56 Wh, Lithium-ion, ExpressCharge Boost	6-cell, 86 Wh, Lithium-ion, ExpressCharge Boost
Battery voltage		11.40 VDC	11.40 VDC
Battery weight (maximum)		0.25 Kg (0.56 lb)	0.34 kg (0.75 lb)
Battery dimensions:			
	Height	7.56 mm (0.30 in.)	7.56 mm (0.30 in.)
	Width	77.70 mm (3.06 in.)	77.70 mm (3.06 in.)
	Depth	295.20 mm (11.62 in.)	295.20 mm (11.62 in.)
Temperature range:			
	Operating	• Charge: 0°C to 50°C (32°F to 122°F) • Discharge: 0°C to 60°C (32°F to 140°F)	• Charge: 0°C to 50°C (32°F to 122°F) • Discharge: 0°C to 60°C (32°F to 140°F)
	Storage	–20°C to 65°C (-4°F to 149°F)	–20°C to 65°C (-4°F to 149°F)
Battery operating time		Varies depending on operating conditions and can significantly reduce under certain power-intensive conditions.	Varies depending on operating conditions and can significantly reduce under certain power-intensive conditions.
Battery charging time (approximate)		• Express Charge Method: 2 hours • Standard Charge/Predominately AC User Charge Method: 3 hours • Express Charge Boost Charge Method (Fast Charge for Initial	• Express Charge Method: 2 hours • Standard Charge/Predominately AC User Charge Method: 3 hours • Express Charge Boost Charge Method (Fast Charge for Initial 35%): From 0% up to 35% in as little as 20 minutes

Table 18. Battery specifications (continued)

Description	Option one	Option two
	35%): From 0% up to 35% in as little as 20 minutes	
Coin-cell battery	Not supported	Not supported

CAUTION: Operating and storage temperature ranges may differ among components, so operating or storing the device outside these ranges may impact the performance of specific components.

CAUTION: Dell Technologies recommends that you charge the battery regularly for optimal power consumption. If your battery charge is depleted, connect the power adapter, turn on your computer, and then restart your computer to reduce the power consumption.

Display

The following table lists the display specifications of your Dell G15 5530.

Table 19. Display specifications

Description		Option one	Option two	Option three	Option four
Display type		Full High Definition (FHD)	Full High Definition (FHD), ComfortView Plus	Full High Definition (FHD), ComfortView Plus	Quad-High Definition (QHD), ComfortView Plus
Display-panel technology		Wide-Viewing Angle (WVA)	Wide-Viewing Angle (WVA)	Wide-Viewing Angle (WVA)	Wide-Viewing Angle (WVA)
Display-panel dimensions (active area):					
	Height	193.59 mm (7.62 in.)	193.59 mm (7.62 in.)	193.59 mm (7.62 in.)	193.59 mm (7.62 in.)
	Width	344.16 mm (13.55 in.)	344.16 mm (13.55 in.)	344.16 mm (13.55 in.)	344.16 mm (13.55 in.)
	Diagonal	395 mm (15.60 in.)	395 mm (15.60 in.)	394.87 mm (15.60 in.)	394.87 mm (15.60 in.)
Display-panel native resolution		1920 x 1080	1920 x 1080	1920 x 1080	2560 x 1440
Luminance (typical)		250 nits	300 nits	300 nits	400 nits
Megapixels		2.07	2.07	2.07	3.68
Color gamut		45% NTSC (typical)	100% sRGB (typical)	100% sRGB (typical)	99% DCI-P3 (typical)
Pixels Per Inch (PPI)		141	141	141	188
Contrast ratio (typical)		• 600:1 (minimum) • 800:1 (typical)	• 800:1 (minimum) • 1000:1 (typical)	• 800:1 (minimum) • 1000:1 (typical)	• 800:1 (minimum) • 1000:1 (typical)
Response time (maximum)		• Tr+Tf: 25 ms (typical) • Tr+Tf: 35 ms (maximum)	• GtG with Overdrive: 3 ms (typical)	GtG with Overdrive: 1 ms (typical)	GtG with Overdrive: 2 ms (typical)

Table 19. Display specifications (continued)

Description	Option one	Option two	Option three	Option four
		• GtG without Overdrive: 8 ms (typical)		
Refresh rate	120 Hz	165 Hz	360 Hz	240 Hz
Horizontal view angle	+/- 85 degrees (typical)	+/- 85 degrees (typical)	+/- 85 degrees (typical)	+/- 85 degrees (typical)
Vertical view angle	+/- 85 degrees (typical)	+/- 85 degrees (typical)	+/- 85 degrees (typical)	+/- 85 degrees (typical)
Pixel pitch	0.17925 mm x 0.17925 mm	0.17925 mm x 0.17925 mm	0.17925 mm x 0.17925 mm	0.13446 mm x 0.13446 mm
Power consumption (maximum)	4.60 W	6 W	7.60 W	8.55 W
Anti-glare vs glossy finish	Anti-glare	Anti-glare	Anti-glare	Anti-glare
Touch options	No	No	No	No

GPU—Integrated

The following table lists the specifications of the integrated Graphics Processing Unit (GPU) supported by your Dell G15 5530.

Table 20. GPU—Integrated

Controller	Memory size	Processor
Intel UHD Graphics	Shared system memory	13th Generation Intel Core i5/i7/i9

GPU—Discrete

The following table lists the specifications of the discrete Graphics Processing Unit (GPU) supported by your Dell G15 5530.

Table 21. GPU—Discrete

Controller	Memory size	Memory type
NVIDIA GeForce RTX 3050	6 GB	DDR6
NVIDIA GeForce RTX 4050	6 GB	DDR6
NVIDIA GeForce RTX 4060	8 GB	DDR6

Operating and storage environment

This table lists the operating and storage specifications of your Dell G15 5530.

Airborne contaminant level: G1 as defined by ISA-S71.04-1985

Table 22. Computer environment

Description	Operating	Storage
Temperature range	0°C to 35°C (32°F to 95°F)	-40°C to 65°C (-40°F to 149°F)
Relative humidity (maximum)	10% to 90% (non-condensing)	0% to 95% (non-condensing)
Vibration (maximum)*	0.66 GRMS	1.30 GRMS
Shock (maximum)	110 G†	160 G†
Altitude range	-15.2 m to 3048 m (4.64 ft to 5518.4 ft)	-15.2 m to 10668 m (4.64 ft to 19234.4 ft)
CAUTION: Operating and storage temperature ranges may differ among components, so operating or storing the device outside these ranges may impact the performance of specific components.		

* Measured using a random vibration spectrum that simulates the user environment.

† Measured using a 2 ms half-sine pulse.

ComfortView Plus

WARNING: Prolonged exposure to blue light from the display may lead to long-term effects such as eye strain, eye fatigue, or damage to the eyes.

Blue light is a color in the light spectrum which has a short wavelength and high energy. Chronic exposure to blue light, particularly from digital sources may disrupt sleep patterns and cause long-term effects such as eye strain, eye fatigue, or damage to the eyes.

The display on this computer is designed to minimize blue light and complies with TÜV Rheinland's requirement for low blue light displays.

Low blue light mode is enabled at the factory, so no further configuration is necessary.

To reduce the risk of eye strain, it is also recommended that you:

- Position the display at a comfortable viewing distance between 20 and 28 inches (50 cm and 70 cm) from your eyes.
- Blink frequently to moisten your eyes, wet your eyes with water, or apply suitable eye drops.
- Look away from your display, and gaze at a distant object at 20 ft (609.60 cm) away for at least 20 seconds during each break.
- Take an extended break for 20 minutes every two hours.