Dell G15 5510

Setup and Specifications

Notes, cautions, and warnings

(i) **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.**

Contents

Set up your Dell G15 5510

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

1. Connect the power adapter and press the power button.
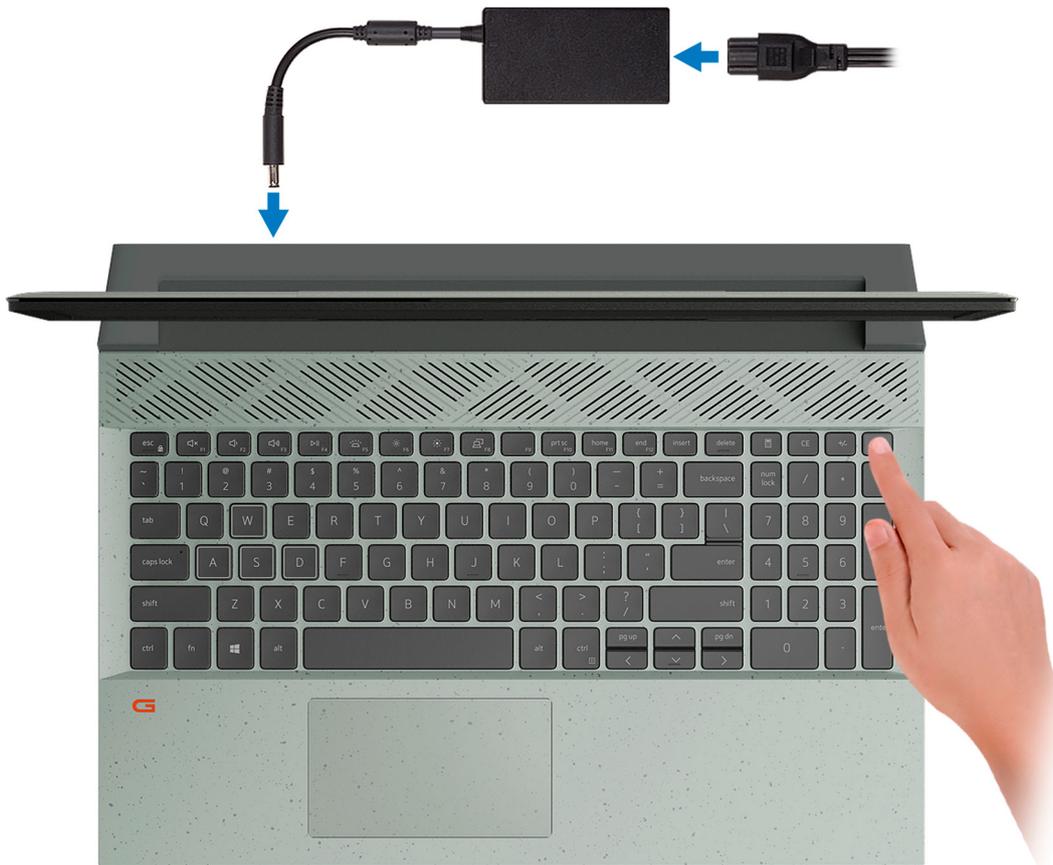
ⓘ NOTE: To conserve battery power, the battery might enter power saving mode. Connect the power adapter and press the power button to turn on the computer.

2. Finish operating system setup.

   For Ubuntu:

   Follow the on-screen instructions to complete the setup. For more information about installing and configuring Ubuntu, see the knowledge base articles SLN151664 and SLN151748 at www.dell.com/support.

   For Windows:

   Follow the on-screen instructions to complete the setup. When setting up, Dell 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 on www.dell.com/serviceabilitytools. To navigate to SupportAssist for Home PCs User's Guide, click **SupportAssist** and then, click **SupportAssist for Home PCs User's Guide**. ⓘ **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 about using Dell Update, see the knowledge base article SLN305843 at www.dell.com/support.
	Dell Digital Delivery Download software applications, which are purchased but not pre-installed on your computer. For more information about using Dell Digital Delivery, see the knowledge base article 153764 at www.dell.com/support.

Views of Dell G15 5510

Right
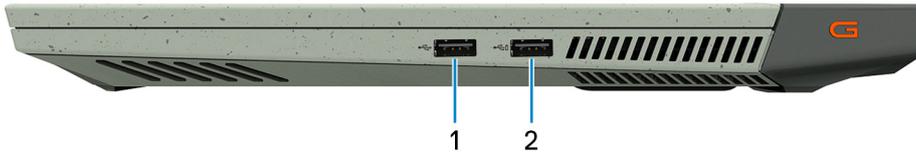
1. **USB 2.0 port**

   Connect devices such as external storage devices and printers. Provides data transfer speeds up to 480 Mbps.

2. **USB 2.0 port with PowerShare**

   Connect devices such as external storage devices and printers.

   Provides data transfer speeds up to 5 Gbps. PowerShare enables you to charge your USB devices even when your computer is turned off.

   (i) **NOTE:** If your computer is turned off or in hibernate state, you must connect the power adapter to charge your devices using the PowerShare port. You must enable this feature in the BIOS setup program.

   (i) **NOTE:** Certain USB devices may not charge when the computer is turned off or in sleep state. In such cases, turn on the computer to charge the device.

Left
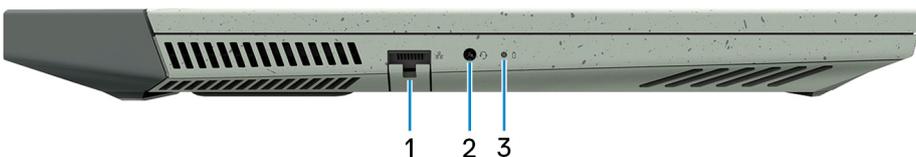
1. **Network port**

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

2. **Headset port**

   Connect headphones or a headset (headphone and microphone combo).

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.

Back

1. **USB 3.2 Gen 1 port**

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

2. **HDMI port**

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

3. **Power-adapter port**

   Connect a power adapter to provide power to your computer and charge the battery.

Display

1. **Left microphone**

   Provides digital sound input for audio recording and voice calls.

2. **Camera**

   Enables you to video chat, capture photos, and record videos.

3. **Camera-status light**

   Turns on when the camera is in use.

4. **Right microphone**

Provides digital sound input for audio recording and voice calls.

5. **Speakers**

Provide audio output.

Base

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 www.dell.com/support/manuals.

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.

Specifications of Dell G15 5510

Dimensions and weight

The following table lists the height, width, depth, and weight of your Dell G15 5510.

Table 2. Dimensions and weight

Description	Values
Height:	
Front height	21.21 mm (0.84 in.)
Rear height	23.33 mm (0.92 in.)
Width	357.26 mm (14.07 in.)
Depth	272.11 mm (10.71 in.)
Weight (maximum)	2.65 kg (5.84 lb) ⓘ **NOTE:** The weight of your computer depends on the configuration ordered and manufacturing variability.

Processor

The following table lists the details of the processors supported by your Dell G15 5510.

Table 3. Processor

Description	Option one	Option two
Processor type	10th Generation Intel Core i5-10200H	10th Generation Intel Core i7-10870H
Processor wattage	45 W	45 W
Processor core count	4	8
Processor thread count	8	16
Processor speed	Up to 4.10 GHz	Up to 5 GHz
Processor cache	8 MB	16 MB
Integrated graphics	Intel UHD Graphics	Intel UHD Graphics

Chipset

The following table lists the details of the chipset supported by your Dell G15 5510.

Table 4. Chipset

Description	Values
Chipset	HM470
Processor	10th Generation Intel Core i5/i7
DRAM bus width	64-bit
Flash EPROM	32 MB
PCIe bus	Up to Gen3

Operating system

Your Dell G15 5510 supports the following operating systems:

- Windows 10 Home, 64-bit
- Windows 10 Professional, 64-bit
- Ubuntu 18.04 LTS, 64-bit

Memory

The following table lists the memory specifications of your Dell G15 5510.

Table 5. Memory specifications

Description	Values
Memory slots	Two SoDIMM slots
Memory type	Dual-channel DDR4
Memory speed	2933 MHz
Maximum memory configuration	32 GB
Minimum memory configuration	4 GB
Memory size per slot	4 GB, 8 GB, 16 GB
Memory configurations supported	8 GB, 1 x 8 GB, Dual-Channel DDR4, 2933 MHz 8 GB, 2 x 4 GB, Dual-Channel DDR4, 2933 MHz 12 GB, 1 x 4 GB + 1 x 8 GB, 2933 MHz 16 GB, 2 x 8 GB, Dual-Channel DDR4, 2933 MHz 32 GB, 2 x 16 GB, Dual-Channel DDR4, 2933 MHz

External ports

The following table lists the external ports of your Dell G15 5510.

Table 6. External ports

Description	Values
Network port	One RJ45 port
USB ports	- One USB 2.0 port with PowerShare - One USB 2.0 port - One USB 3.2 Gen 1 port
Audio port	One headset (headphone and microphone combo) port
Video port	One HDMI 2.0 port
Media-card reader	Not applicable
Power-adapter port	One 7.4 mm x 5.1 mm power-adapter port
Security-cable slot	One wedge-shaped lock slot

Internal slots

The following table lists the internal slots of your Dell G15 5510.

Table 7. Internal slots

Description	Values
M.2	- One M.2 2230 slot for WiFi and Bluetooth combo card - Two M.2 2230/2280 slot for solid-state drive ⓘ **NOTE:** To learn more about the features of different types of M.2 cards, see the knowledge base article SLN301626 at www.dell.com/support.

Ethernet

The following table lists the wired Ethernet Local Area Network (LAN) specifications of your Dell G15 5510.

Table 8. Ethernet specifications

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

Wireless module

The following table lists the Wireless Local Area Network (WLAN) modules supported on your Dell G15 5510.

Table 9. Wireless module specifications

Description	Option one	Option two
Model number	Intel AX201	Killer 1650i
Transfer rate	Up to 2500 Mbps	Up to 2500 Mbps
Frequency bands supported	2.4 GHz/5 GHz	2.4 GHz/5 GHz
Wireless standards	- WiFi 802.11a/b/g - Wi-Fi 4 (WiFi 802.11n) - Wi-Fi 5 (WiFi 802.11ac) - Wi-Fi 6 (WiFi 802.11ax)	- WiFi 802.11b/g/a - Wi-Fi 4 (WiFi 802.11n) - Wi-Fi 5 (WiFi 802.11ac) - Wi-Fi 6 (WiFi 802.11ax)
Encryption	64-bit/128-bit WEP - AES-CCMP - TKIP	64-bit/128-bit WEP - AES-CCMP - TKIP
Bluetooth	Bluetooth 5.1	Bluetooth 5.1

Audio

The following table lists the audio specifications of your Dell G15 5510.

Table 10. Audio specifications

Description		Values
Audio controller		Realtek ALC3254 with Nahimic 3D Audio for Gamers
Stereo conversion		Supported
Internal audio interface		Intel High-Definition Audio (HDA) via HDMI
External audio interface		Headset combo connector/Digital-array microphone input on camera module
Number of speakers		Two
Internal-speaker amplifier		Supported (audio codec built-in amplifier)
External volume controls		Keyboard shortcut controls
Speaker output:		
	Average speaker output	2 W
	Peak speaker output	2.5 W
Subwoofer output		Not supported
Microphone		Dual-array microphones

Storage

This section lists the storage options on your Dell G15 5510.

Your Dell G15 5510 supports two M.2 2230/2280 solid-state drive. The M.2 drive is the primary drive of your Dell G15 5510

Table 11. Storage specifications

Storage type	Interface type	Capacity
M.2 2230/2280 solid-state drive	PCIe Gen3 x4 NVMe	Up to 2 TB
M.2 2230/2280 solid-state drive	PCIe Gen4 x4 NVMe	Up to 2 TB

Keyboard

The following table lists the keyboard specifications of your Dell G15 5510.

Table 12. Keyboard specifications

Description	Values
Keyboard type	● Standard keyboard ● Backlit 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. For more information, see Keyboard shortcuts.

Camera

The following table lists the camera specifications of your Dell G15 5510.

Table 13. Camera specifications

Description	Values
Number of cameras	One
Camera type	RGB HD camera
Camera location	Front camera

Table 13. Camera specifications (continued)

Description		Values
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 5510.

Table 14. Touchpad specifications

Description		Values
Touchpad resolution:		
	Horizontal	1229
	Vertical	749
Touchpad dimensions:		
	Horizontal	105 mm (4.13 in.)
	Vertical	60 mm (2.36 in.)
Touchpad gestures		For more information about touchpad gestures available on Windows 10, see the Microsoft knowledge base article 4027871 at support.microsoft.com.

Power adapter

The following table lists the power adapter specifications of your Dell G15 5510.

Table 15. Power adapter specifications

Description		Option one	Option two
Type		180 W	240 W
Connector dimensions:			
	External diameter	7.40 mm	7.40 mm
	Internal diameter	5.10 mm	5.10 mm
Input voltage		100 VAC–240 VAC	100 VAC–240 VAC
Input frequency		50 Hz–60 Hz	50 Hz–60 Hz
Input current (maximum)		2.34 A	3.50 A
Output current (continuous)		9.23 A	12.31 A

Table 15. Power adapter specifications (continued)

Description		Option one	Option two
Rated output voltage		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)
	Storage	-40°C to 70°C (-40°F to 158°F)	-40°C to 70°C (-40°F to 158°F)

Battery

The following table lists the battery specifications of your Dell G15 5510.

Table 16. Battery specifications

Description		Option one	Option two
Battery type		3-cell (56 Wh) "smart" lithium-ion	6-cell (86 Wh) "smart" lithium-ion
Battery voltage		13.20 VDC	13.2 VDC /13.35 VDC
Battery weight (maximum)		0.25 kg (0.55 lb)	0.34 kg (0.74 lb)
Battery dimensions:			
	Height	7.56 mm (0.3 in.)	7.56 mm (0.3 in.)
	Width	295.20 mm (11.62 in.)	295.20 mm (11.62 in.)
	Depth	77.50 mm (3.05 in.)	77.50 mm (3.05 in.)
Temperature range:			
	Operating	0°C to 45°C (32°F to 113°F)	0°C to 45°C (32°F to 113°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) ⓘ **NOTE:** Control the charging time, duration, start and end time, and so on using the Dell Power Manager application. For more information on the Dell Power Manager see, *Me and My Dell* on www.dell.com.		4 hours (when the computer is off)	4 hours (when the computer is off)
Coin-cell battery		Not applicable	Not applicable

Display

The following table lists the display specifications of your Dell G15 5510.

Table 17. Display specifications

Description		Option one	Option two
Display type		Full High Definition (FHD)	Full High Definition (FHD)
Display-panel technology		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.)
	Width	344.16 mm (13.55 in.)	344.16 mm (13.55 in.)
	Diagonal	395 mm (15.55 in.)	395 mm (15.55 in.)
Display-panel native resolution		1920 x 1080	1920 x 1080
Luminance (typical)		250 nits	300 nits
Megapixels		2.07	2.07
Color gamut		45% NTSC	100% sRGB
Pixels Per Inch (PPI)		141	141
Contrast ratio (min.)		600 : 1	800 : 1
Response time (max.)		35 ms	13 ms
Refresh rate		120 Hz	165 Hz
Horizontal view angle		80 +/- degrees (minimum)	80 +/- degrees (minimum)
Vertical view angle		80 +/- degrees (minimum)	80 +/- degrees (minimum)
Pixel pitch		0.17925 mm x 0.17925 mm	0.17925 mm x 0.17925 mm
Power consumption (maximum)		4.60 W	6 W
Anti-glare vs glossy finish		Anti-glare	Anti-glare
Touch options		No	No

GPU—Integrated

The following table lists the specifications of the integrated Graphics Processing Unit (GPU) supported by your Dell G15 5510.

Table 18. GPU—Integrated

Controller	Memory size	Processor
Intel UHD Graphics	Shared system memory	10th Generation Intel Core i5/i7

GPU—Discrete

The following table lists the specifications of the discrete Graphics Processing Unit (GPU) supported by your Dell G15 5510.

Table 19. GPU—Discrete

Controller	Memory size	Memory type
NVIDIA GeForce GTX 1650	4 GB	GDDR6

Operating and storage environment

This table lists the operating and storage specifications of your Dell G15 5510.

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

Table 20. 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 (-49.87 ft to 10000 ft)	-15.2 m to 10668 m (-49.87 ft to 35000 ft)

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

† Measured using a 2 ms half-sine pulse when the hard drive is in use.

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 21. List of keyboard shortcuts

Function key	Redefined key (for multimedia control)	Behavior
◁× F1	fn + ◁× F1	Mute audio
◁ʲ F2	fn + ◁ʲ F2	Decrease volume
◁)) F3	fn + ◁)) F3	Increase volume
▷‖ F4	fn + ▷‖ F4	Play/Pause
☼ F5	fn + ☼ F5	Toggle keyboard backlight (optional)
☼ F6	fn + ☼ F6	Decrease brightness
☼ F7	fn + ☼ F7	Increase brightness
⊟ F8	fn + ⊟ F8	Switch to external display
F9	fn + F9	Search/G key (optional)

Table 21. List of keyboard shortcuts (continued)

Function key	Redefined key (for multimedia control)	Behavior
prt sc F10	fn + prt sc F10	Print screen
home F11	fn + home F11	Home
end F12	fn + end F12	End

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

Table 22. List of keyboard shortcuts

Function key	Behavior
fn + prt sc F10	Turn off/on wireless
fn + B	Pause/Break
fn + insert	Insert
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

Getting help and contacting Dell

Self-help resources

You can get information and help on Dell products and services using these self-help resources:

Table 23. Self-help resources

Self-help resources	Resource location
Information about Dell products and services	www.dell.com
My Dell	
Tips	
Contact Support	In Windows search, type `Contact Support`, and press Enter.
Online help for operating system	www.dell.com/support/windows www.dell.com/support/linux
Access top solutions, diagnostics, drivers and downloads, and learn more about your computer through videos, manuals and documents.	Your Dell computer is uniquely identified by a Service Tag or Express Service Code. To view relevant support resources for your Dell computer, enter the Service Tag or Express Service Code at www.dell.com/support. For more information on how to find the Service Tag for your computer, see Locate the Service Tag on your computer.
Dell knowledge base articles for a variety of computer concerns	1. Go to www.dell.com/support. 2. On the menu bar at the top of the Support page, select **Support** > **Knowledge Base**. 3. In the Search field on the Knowledge Base page, type the keyword, topic, or model number, and then click or tap the search icon to view the related articles.

Contacting Dell

To contact Dell for sales, technical support, or customer service issues, see www.dell.com/contactdell.

ⓘ **NOTE:** Availability varies by country/region and product, and some services may not be available in your country/region.

ⓘ **NOTE:** If you do not have an active Internet connection, you can find contact information about your purchase invoice, packing slip, bill, or Dell product catalog.