Dell G7 15

Setup and Specifications

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.**

Contents

Set up your computer

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 configuring the Ubuntu install, see the knowledge base article SLN151664 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

   Dell Product Registration

Register your computer with Dell.

   Dell Help & Support

Access help and support for your computer.

   SupportAssist

Pro-actively checks the health of your computer's hardware and software. The SupportAssist OS Recovery tool troubleshoots issues with the operating system. For more information, see the SupportAssist documentation at www.dell.com/support.

ⓘ | 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.

Dell Digital Delivery

Download software applications, which are purchased but not pre-installed on your computer.

4   Create recovery drive for Windows.

ⓘ | NOTE: It is recommended to create a recovery drive to troubleshoot and fix problems that may occur with Windows.

For more information, see Create a USB recovery drive for Windows.

ⓘ | NOTE: Ensure that you download the Dell Power Manager (DPM 3.0) from Dell.com/support before connecting a Dell docking station. For more information on setting up your Dell docking station, see the user's guide for your Dell docking station at Dell.com/support/manuals.

ⓘ | NOTE: When you connect your computer to the docking station, a pop-up message appears, indicating that certain docking station features are not supported with your computer. For more information, see Dell docking station features.

Create a USB recovery drive for Windows

Create a recovery drive to troubleshoot and fix problems that may occur with Windows. An empty USB flash drive with a minimum capacity of 16 GB is required to create the recovery drive.

ⓘ **NOTE: This process may take up to an hour to complete.**

ⓘ **NOTE: The following steps may vary depending on the version of Windows installed. Refer to the** Microsoft support site **for latest instructions.**

1   Connect the USB flash drive to your computer.

2   In Windows search, type `Recovery`.

3   In the search results, click **Create a recovery drive**.
     The **User Account Control** window is displayed.

4   Click **Yes** to continue.
     The **Recovery Drive** window is displayed.

5   Select **Back up system files to the recovery drive** and click **Next**.

6   Select the **USB flash drive** and click **Next**.
     A message appears, indicating that all data in the USB flash drive will be deleted.

7   Click **Create**.

8   Click **Finish**.
     For more information about reinstalling Windows using the USB recovery drive, see the *Troubleshooting* section of your product's *Service Manual* at www.dell.com/support/manuals.

Dell Visor headset

The Dell Visor headset is a head-mounted device that enables you to experience an immersive Virtual Reality and Windows Mixed Reality when connected to your computer.

ⓘ **NOTE: Dell Visor headset is supported on computers shipping with NVIDIA GeForce GTX 1060 with Max-Q Design graphics card. For more information, see** *Dell Visor User's Guide* **at www.dell.com/support/manuals.**

Views

Front
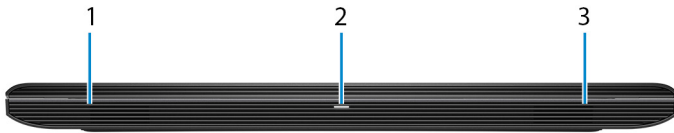
1   **Left speaker**

Provides audio output.

2   **Power and battery-status light/hard-drive activity light**

Indicates the battery-charge status or the hard-drive activity.

ⓘ **NOTE: Press Fn+H to toggle between the power and battery-status light, and hard-drive activity light.**

Hard-drive activity light

Turns on when the computer reads from or writes to the hard drive.

Power and battery-status light

Indicates the power and battery-charge status.

Solid white — Power adapter is connected and the battery has more than 5% charge.

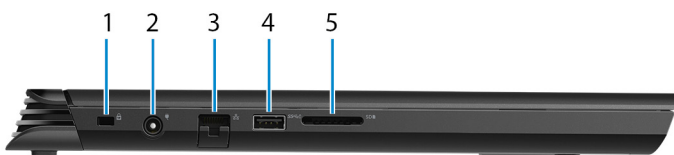**Amber** — Computer is running on battery and the battery has less than 5% charge.

Off

- Power adapter is connected and the battery is fully charged.
- Computer is running on battery and the battery has more than 5% charge.
- Computer is in sleep state, hibernation, or turned off.

3   **Right speaker**

Provides audio output.

Left

1   **Security-cable slot (for Noble locks)**

Connect a security cable to prevent unauthorized movement of your computer.

2 **Power-adapter port**

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

3 **Network port**

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

4 **USB 3.1 Gen 1 port with PowerShare**

Connect peripherals 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.

ⓘ **NOTE: If the charge on your computer's battery is less than 10 percent, you must connect the power adapter to charge your computer, and USB devices connected to the PowerShare port.**

ⓘ **NOTE: If a USB device is connected to the PowerShare port before the computer is turned off or in hibernate state, you must disconnect and connect it again to enable charging.**

ⓘ **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.**

5 **Media-card reader**

Reads from and writes to media cards.

Right
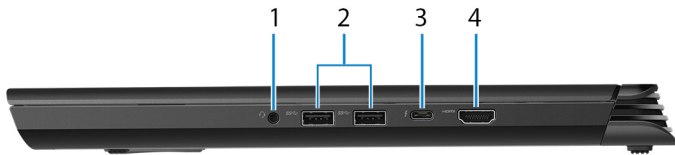
1 **Headset port**

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

2 **USB 3.1 Gen 1 ports (2)**

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

3 **Thunderbolt 3 (USB 3.1 Gen 2 Type-C) port/DisplayPort**

Supports USB 3.1 Gen 2 Type-C, DisplayPort 1.2, Thunderbolt 3 and also enables you to connect to an external display using a display adapter. Provides data transfer rates up to 10 Gbps for USB 3.1 Gen 2 and up to 40 Gbps for Thunderbolt 3.

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

4 **HDMI port**

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

Base
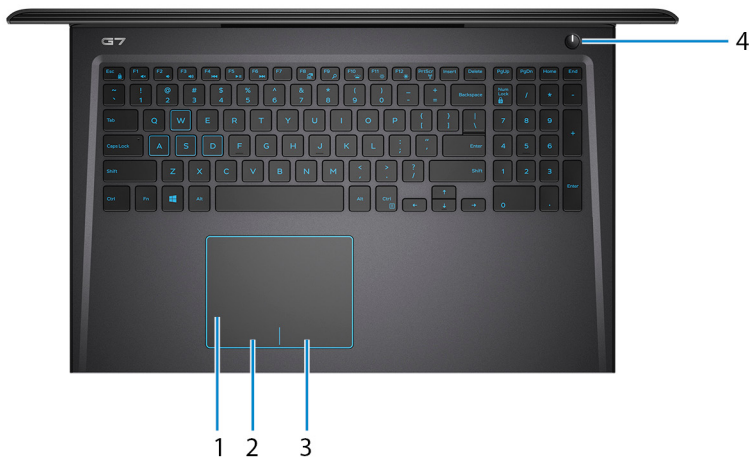
1 **Touchpad**

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

2 **Left-click area**

Press to left-click.

3 **Right-click area**

Press to right-click.

4 **Power button with optional fingerprint reader**

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.

If the power button has a fingerprint reader, place your finger on the power button to log in.

ⓘ **NOTE:** Before using the fingerprint reader, configure it in Windows to recognize your fingerprint as a passcode and enable access. For more information, see www.dell.com/support/windows.

ⓘ **NOTE:** You can customize power-button behavior in Windows. For more information, see *Me and My Dell* at www.dell.com/support/manuals.

ⓘ **NOTE:** The power-status light on the power button is available only on computers without the optional fingerprint reader. Computers shipped with the fingerprint reader integrated on the power button will not have the power-status light on the power button.

Display
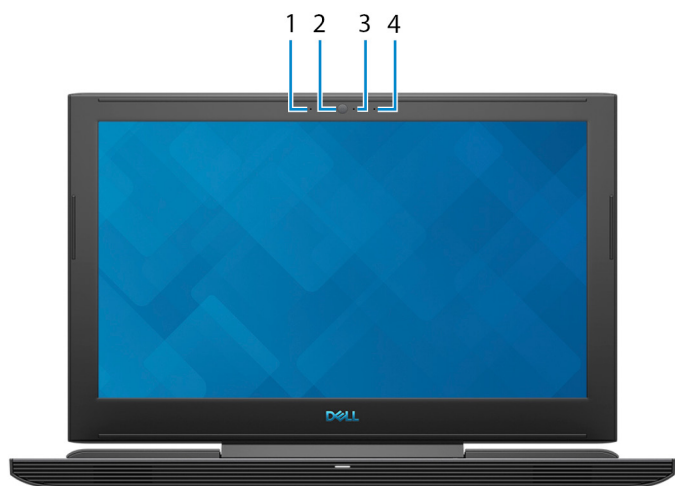
1   **Left microphone**

     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.

Bottom

1   **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.

Specifications

Computer model

Dell G7 7588

System information

Table 2. System information

Processor	8th Generation Intel Core i5/i7/i9
Chipset	Intel HM370

Dimensions and weight

Table 3. Dimensions and weight

Height	24.95 mm (0.98 in)
Width	389 mm (15.32 in)
Depth	274.70 mm (10.81 in)
Weight	2.70 kg (5.95 lbs)

> (i) NOTE: The weight of your laptop varies depending on the configuration ordered and the manufacturing variability.

Operating system

- Windows 10 Home (64-bit)
- Windows 10 Professional (64-bit)
- Ubuntu

Memory

Table 4. Memory specifications

Slots	Two SODIMM slots
Type	Dual-channel DDR4
Speed	2666 MHz
Configurations supported	
Per memory module slot	4 GB, 8 GB, and 16 GB
Total memory	4 GB, 8 GB, 12 GB, 16 GB, and 32 GB

Intel Optane memory

Intel Optane memory functions as a storage accelerator. It accelerates the computer and any type of SATA-based storage media such as hard drives and Solid-State Drives (SSDs).

(i) **NOTE: Intel Optane memory is supported on computers that meet the following requirements:**

- 7th Generation or higher Intel Core i3/i5/i7 processor
- Windows 10 64-bit version or higher (Anniversary Update)
- Intel Rapid Storage Technology driver version 15.5 or higher

Table 5. Intel Optane memory

Interface	PCIe Gen 3 x2, NVMe
Connector	M.2
Configurations supported	16 GB and 32 GB

(i) **NOTE: For more information about enabling or disabling the Intel Optane memory, see Enabling Intel Optane memory or Disabling Intel Optane memory.**

Ports and connectors

Table 6. Ports and connectors

External:	
Network	One RJ-45 port
USB/Video	- One USB 3.1 Gen 1 port with Power Delivery - Two USB 3.1 Gen 1 ports - One Thunderbolt 3 (USB 3.1 Gen 2 Type-C) port/DisplayPort - One HDMI port
Audio	One headset (headphone and microphone combo) port

Table 7. Ports and connectors

Internal:	
M.2 card	- One M.2 slot for Solid-State Drive (SSD) - One M.2 slot for wireless/bluetooth combo card

Communications

Table 8. Supported communications

Ethernet	10/100/1000 Mbps controller integrated on the system board
Wireless	- Wi-Fi 802.11ac - Bluetooth 4.2 - Miracast

Wireless

Table 9. Wireless

Transfer rate (maximum)	867 Mbps
Frequency bands	2.4 GHz/5 GHz
Encryption	64-bit/128-bit WEP

Audio

Table 10. Audio specifications

Controller	Realtek ALC3246-CG with Waves MaxxAudio Pro
Speakers	Two
Speaker output	• Average: 2 W • Peak: 2.5 W
Microphone	Digital-array microphones

Storage

Table 11. Storage specifications

Type	Interface	Capacity
One 2.5-inch Hard Disk Drive (HDD)	SATA AHCI, Up to 6 Gbps	Up to 2 TB
One 2.5-inch Solid-State Hybrid Drive (SSHD)	SATA AHCI, Up to 6 Gbps	Up to 1 TB
One M.2 2280 Solid-State Drive (SSD)	• SATA AHCI, Up to 6 Gbps • PCIe 3 x4 NVME, Up to 32 Gbps	• Up to 128 GB • Up to 1 TB

Media-card reader

Table 12. Media-card reader specifications

Type	One SD-card slot
Cards supported	• SD • SD High Capacity (SDHC) • SD Extended Capacity (SDXC) • MultiMediaCard (MMC)

Keyboard

Table 13. Keyboard specifications

Type	• Standard keyboard • Backlit keyboard (optional)
Shortcut keys	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: For better gaming experience, the tactile indicator is available on the S key. ⓘ NOTE: Press Fn+Esc to switch the primary behavior of the function keys (F1–F12) between two modes – multimedia key mode and function key mode. ⓘ NOTE: You can define the primary behavior of the function keys (F1-F12) by changing Function Key Behavior in BIOS setup program. Keyboard shortcuts

Camera

Table 14. Camera specifications

Resolution	
Camera	• Still image: 0.92 megapixel (HD) • Video: 1280 x 720 (HD) at 30 fps
Diagonal viewing angle	
Camera	75.3 degrees

Touchpad

Table 15. Touchpad

Resolution	• Horizontal: 1229 • Vertical: 929
Dimensions	• Width: 105 mm (4.13 in) • Height: 80 mm (3.15 in)

Touchpad gestures

For more information about touchpad gestures for Windows 10, see the Microsoft knowledge base article 4027871 at support.microsoft.com.

Power adapter

Table 16. Power adapter specifications

Type	130 W	180 W
Dimensions (connector)	7.40 mm	7.40 mm
Input voltage	100 VAC–240 VAC	100 VAC–240 VAC
Input frequency	50 Hz–60 Hz	50 Hz–60 Hz
Input current (maximum)	1.80 A	2.34 A
Output current (continuous)	6.70 A	9.23 A
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)

Hybrid Power

The Hybrid Power feature enables the system to function optimally during instances of heavy loading, such as graphics and processor-intensive gaming. It does so by coordinating the power input from the power adapter and the battery. This feature is enabled as long as the battery capacity is above 10%.

When the Hybrid Power feature is enabled, these events may occur:

- Battery charge does not increase when connected to the power adapter.
- Battery charges slowly when connected to the power adapter.
- Battery charge depletes when connected to the power adapter.

When the battery charge depletes below 10%, Hybrid Power is disabled, and this may lead to a drop in system performance. Battery charging resumes immediately when the computer is no longer under heavy loading.

Battery

Table 17. Battery specifications

Type	4-cell 56 WHr "smart" lithium-ion
Dimension:	
Width	233.37 mm (9.19 in)
Depth	98.20 mm (3.87 in)

Height		5.90 mm (0.23 in)
Weight (maximum)		0.25 kg (0.55 lb)
Voltage		15.20 VDC
Charging time when the computer is off (approximate)		4 hours
Operating time		Varies depending on operating conditions and can significantly reduce under certain power-intensive conditions.
Life span (approximate)		300 discharge/charge cycles
Temperature range: Operating		0°C to 35°C (32°F to 95°F)
Temperature range: Storage		−40°C to 65°C (−40°F to 149°F)
Coin-cell battery		CR2032

> (i) **NOTE: It is recommended that you use a Dell coin-cell battery for your computer. Dell does not provide warranty coverage for problems caused by using accessories, parts, or components not supplied by Dell.**

Display

Table 18. Display specifications

	15.6-inch FHD non-touchscreen	15.6-inch 4K non-touchscreen
Resolution (maximum)	1920 x 1080	3840 x 2160
Pixel pitch	0.179 mm	0.090 mm
Panel technology	IPS	IPS
	(i) **NOTE: The maximum brightness and color gamut of the screen varies depending on the configuration ordered and is available only in certain regions.**	
Viewing angle (Left/Right/Down/Up)	80/80/80/80 degrees	80/80/80/80 degrees
Pixel pitch	0.0765 mm	0.0765 mm
Refresh rate	60 HZ	60 HZ
Operating angle	0 degrees (closed) to 135 degrees	0 degrees (closed) to 135 degrees
Controls	Brightness can be controlled using shortcut keys	Brightness can be controlled using shortcut keys
Dimension:		
Height (excluding bezel)	193.59 mm (7.62 in)	194.40 mm (7.65 in)
Width (excluding bezel)	344.16 mm (13.54 in)	345.60 mm (13.61 in)
Diagonal (excluding bezel)	394.87 mm (15.55 in)	396.52 mm (15.61 in)

Video

Type	Controller	Memory
Integrated	Intel UHD Graphics 630	Shared system memory
Discrete	NVIDIA GeForce GTX 1050	4 GB
	NVIDIA GeForce GTX 1050 TI	4 GB
	NVIDIA GeForce GTX 1060 Max-Q Design	6 GB

Computer environment

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

	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 (maximum)	−15.2 m to 3048 m (−50 ft to 10,000 ft)	−15.2 m to 10,668 m (−50 ft to 35,000 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.

‡ Measured using a 2 ms half-sine pulse when the hard-drive head is in parked position.

Keyboard shortcuts

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

Table 21. List of keyboard shortcuts

Keys	Description
F1 🔇	Mute audio
F2 🔉	Decrease volume
F3 🔊	Increase volume
F4 ⏮	Play previous track/chapter
F5 ⏯	Play/Pause
F6 ⏭	Play next track/chapter
F8	Switch to external display
F9 🔍	Search
F10	Toggle keyboard backlight (optional)
F11 ☀	Decrease brightness
F12 ☀	Increase brightness
Fn + PrtScr	Turn off/on wireless
Fn + B	Pause/Break
Fn + Insert	Sleep
Fn + S	Toggle scroll lock
Fn + H	Toggle between power and battery-status light/hard-drive activity light ⓘ **NOTE: Hard-drive activity light is supported only on computers shipped with a hard drive.**
Fn + R	System request
Fn + Ctrl	Open application menu

Keys	Description
Fn + **Esc** 🔒	Toggle Fn-key lock
Fn + **End →**	End
Fn + **← Home**	Home
Fn + **↓ PgDn**	Page down
Fn + **↑ PgUp**	Page up

Intel Optane memory

Enabling Intel Optane memory

1   On the taskbar, click the search box, and then type `Intel Rapid Storage Technology`.
2   Click **Intel Rapid Storage Technology**.
    The **Intel Rapid Storage Technology** window is displayed.
3   On the **Status** tab, click **Enable** to enable the Intel Optane memory.
4   On the warning screen, select a compatible fast drive, and then click **Yes** to continue enabling Intel Optane memory.
5   Click **Intel Optane memory** > **Reboot** to complete enabling your Intel Optane memory.

> ⓘ **NOTE: Applications may take up to three subsequent launches after enablement to see the full performance benefits.**

Disabling Intel Optane memory

> △ **CAUTION: Do not try to remove the Intel Rapid Storage Technology driver after disabling Intel Optane memory, it will result in a blue screen error. The Intel Rapid Storage Technology user interface can be removed without uninstalling the driver.**

> ⓘ **NOTE: Disabling Intel Optane memory is required before removing the SATA storage device accelerated by the Intel Optane memory or the Intel Optane memory module from the system.**

1   On the taskbar, click the search box, and then type `Intel Rapid Storage Technology`.
2   Click **Intel Rapid Storage Technology**.
    The **Intel Rapid Storage Technology** window is displayed.
3   On the **Intel Optane memory** tab, click **Disable** to disable the Intel Optane memory.
4   Click **Yes** if you accept the warning.
    The disabling progress is displayed.
5   Click **Reboot** to complete disabling your Intel Optane memory and restart your computer.

8

Dell docking station features

This computer does not support all Dell docking station features. For information about docking station features, see the user's guide for your Dell docking station at Dell.com/support/manuals

> (i) **NOTE: For more information regarding the compatibility of your computer with a Dell docking station, check the Compatability tab of the Dell docking station at Dell.com.**

Docking station features that are not supported by your computer are as follows.

Table 22. Non-supported Dell docking station features

Feature	Description
Power Delivery	Enables the docking station to provide power to your computer through the USB Type-C connector.
Power-on/Wake-up on dock button	Power-on/Wake-up your computer using the docking station power button.
Wake-up on dock attached	Wake-up your computer when docking station is connected.
Port disablement	Enables administrators to turn off ports on the docking station.
Error messages and dock-event notifications	Notifies you when there are errors (such as incompatible cables) or events (such as firmware updates) relating to the docking station.
Cable/dock firmware updates	Enables docking station firmware updates.
Cable LED	Indicates the status of the docking station connection to your computer.
Run-time MAC address overwrite	Bypasses the MAC address of the docking station to enable the identification of the MAC address of your computer.
LAN cable detection	Disables WLAN/WWAN when LAN cable is attached to the docking station.

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

Information about Dell products and services	www.dell.com
Dell Help & Support app	
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
Troubleshooting information, user manuals, setup instructions, product specifications, technical help blogs, drivers, software updates, and so on.	www.dell.com/support
Dell knowledge base articles for a variety of computer concerns.	1 Go to www.dell.com/support. 2 Type the subject or keyword in the **Search** box. 3 Click **Search** to retrieve the related articles.
Learn and know the following information about your product: • Product specifications • Operating system • Setting up and using your product • Data backup • Troubleshooting and diagnostics • Factory and system restore • BIOS information	See *Me and My Dell* at www.dell.com/support/manuals. To locate the *Me and My Dell* relevant to your product, identify your product through one of the following: • Select **Detect Product**. • Locate your product through the drop-down menu under **View Products**. • Enter the **Service Tag number** or **Product ID** in the search bar.

Contacting Dell

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

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

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