## **Dell G7 7790**

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.

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

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# Set up your Dell G7 7790

- i 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
Destr	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.

Table 1. Locate Dell apps(continued)

Resources	Description
	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 <a href="https://www.dell.com/support">www.dell.com/support</a> .
	NOTE: In SupportAssist, click the warranty expiry date to renew or upgrade your warranty.
	Dell Update
40	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.

**4.** Create recovery drive for Windows.

i 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.

## 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.

- i 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.

### Views of Dell G7 7790

### **Front**



#### 1. Left speaker

Provides audio output.

#### 2. Right speaker

Provides audio output.

### Right



#### 1. SD-card slot

Reads from and writes to the SD card.

#### 2. USB 3.1 Gen 1 port

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

### Left



#### 1. 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.

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

#### 2. 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 connected USB devices.

NOTE: Connected USB devices will not charge when the computer is turned off or in sleep state. To start charging connected devices, turn on the computer.

#### 3. Headset port

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

4. Battery-status light/Hard-drive activity light

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

- i NOTE: Hard-drive activity light is supported only on computers shipped with hard drive.
- i NOTE: Press Fn+H to toggle between the battery-status light and hard-drive activity light.

### **Base**



#### 1. Left-click area

Press to left-click.

#### 2. Touchpad

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

  Computers shipped with the fingerprint reader integrated on the power button will not have the power-status light on the power button.
- i) NOTE: To reset the battery, press and hold the power button for 25 seconds.

## **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.

### **Back**



#### 1. Security-cable slot (wedge-shaped)

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.

#### 3. HDMI port

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

#### 4. USB 3.1 Gen 1 port

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

#### 5. Mini DisplayPort

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

#### 6. Network port

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

### **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 of Dell G7 7790**

## **Dimensions and weight**

Table 2. Dimensions and weight

Description	Values
Height:	
Front	25 mm (0.98 in.)
Rear	23.22 mm (0.91 in.)
Width	404 mm (15.91 in.)
Depth	295.80 mm (11.65 in.)
Weight	3.30 kg (7.27 lb)  (i) NOTE: The weight of your computer depends on the configuration ordered and the manufacturing variability.

### **Processors**

Table 3. Processors

Description	Values				
Processors	8 <sup>th</sup> Generation Intel Core i5-8300HQ	8 <sup>th</sup> Generation Intel Core i7-8750HQ	9 <sup>th</sup> Generation Intel Core i5-9300H	9 <sup>th</sup> Generation Intel Core i7-9750H	9 <sup>th</sup> Generation Intel Core i9-9980H
Wattage	45 W	45 W	45 W	45 W	45 W
Core count	4	6	4	6	8
Thread count	8	12	8	12	16
Speed	Up to 4.0 GHz	Up to 4.1 GHz	Up to 4.1 GHz	Up to 4.5 GHz	Up to 4.8 GHz
Cache	8 MB	9 MB	8 MB	12 MB	16 MB
Integrated graphics	Intel UHD Graphics 630	Intel UHD Graphics 630	Intel UHD Graphics 630	Intel UHD Graphics 630	Intel UHD Graphics 630

## Chipset

Table 4. Chipset

Description	Values		
Processor	8 <sup>th</sup> Generation Intel Core i5/i7	9 <sup>th</sup> Generation Intel Core i5/i7/i9	

#### Table 4. Chipset(continued)

Description	Values		
Chipset	HM370	HM370	
DRAM bus width	64-bit	64-bit	
Flash EPROM	16 MB	16 MB	
PCle bus	Up to Gen3.0	Up to Gen3.0	
External bus frequency	Up to 4 GT/s	Up to 4 GT/s	

## **Operating system**

- · Windows 10 Home (64-bit)
- · Windows 10 Professional (64-bit)
- · Ubuntu
  - (i) NOTE: The Ubuntu version varies with region.

### **Memory**

#### **Table 5. Memory specifications**

Description	Values	
Slots	Two SODIMM slots	
Туре	DDR4	
Speed	Up to 2666 MHz	
Maximum memory	32 GB	
Minimum memory	4 GB	
Memory size per slot	4 GB, 8 GB, and 16 GB	
Configurations supported	<ul> <li>4 GB DDR4 at 2666 MHz (1 x 4 GB)</li> <li>8 GB DDR4 at 2666 MHz (2 x 4 GB)</li> <li>8 GB DDR4 at 2666 MHz (1 x 8 GB)</li> <li>12 GB DDR4 at 2666 MHz (1 x 4 GB + 1 x 8 GB)</li> <li>16 GB DDR4 at 2666 MHz (2 x 8 GB)</li> <li>16 GB DDR4 at 2666 MHz (1 x 16 GB)</li> <li>32 GB DDR4 at 2666 MHz (2 x 16 GB)</li> </ul>	

### Ports and connectors

#### **Table 6. Ports and connectors**

External:		
Network	One RJ-45 port	
USB	One Thunderbolt 3 (USB 3.1 Gen 2 Type-C) port/DisplayPort	

Table 6. Ports and connectors(continued)

External:	
	<ul> <li>One mini DisplayPort</li> <li>One USB 3.1 Gen 1 with PowerShare port</li> <li>Two USB 3.1 Gen 1 ports</li> </ul>
Audio	One headset (headphone and microphone combo) port
Video	One HDMI 2.0b port
Media card reader	One SD-card slot
Docking port	Supported through the USB Type-C port
Power adapter port	Supported
Security	Wedge-shaped lock slot
Internal:	<u>.</u>
M.2	One PCle NVMe Gen 3x2 slot for M.2 2230 solid-state drive, one PCle NVMe Gen 3x4 slot for 2280 solid-state drive, or Intel Optane memory One PCle Gen 3x2 slot for Wi-Fi and Bluetooth combo card  NOTE: To learn more about the features of different types of M.2 cards, see the knowledge base article SLN301626.

### **Communications**

### **Ethernet**

#### **Table 7. Ethernet specifications**

Description	Values	
Model number	Killer GB E2500V2 for RTX 2060, RTX 2070 Max-Q, or RTX 2080 Max-Q	
Transfer rate	10/100/1000 Mbps	

### Wireless module

Table 8. Wireless module specifications

Description	Values			
Model number	Qualcomm QCA61x4A (DW1820)	Intel 9560 2x2 ac (Intel 9560 2x2 ac (160 MHz)	Rivet Killer 1550 2x2 ac	
Transfer rate	Up to 867 Mbps	Up to 1.73 Gbps	Up to 1.73 Gbps	
Frequency bands supported	Dual band 2.4 GHz/5 GHz	Dual band 2.4 GHz/5 GHz	Dual band 2.4 GHz/5 GHz	
Wireless standards	· WiFi 802.11a/b/g	· WiFi 802.11a/b/g	· WiFi 802.11a/b/g	

Table 8. Wireless module specifications(continued)

Description	Values		
	<ul><li>Wi-Fi 4 (WiFi 802.11n)</li><li>Wi-Fi 5 (WiFi 802.11ac)</li></ul>	<ul><li>Wi-Fi 4 (WiFi 802.11n)</li><li>Wi-Fi 5 (WiFi 802.11ac)</li></ul>	<ul><li>Wi-Fi 4 (WiFi 802.11n)</li><li>Wi-Fi 5 (WiFi 802.11ac)</li></ul>
Encryption	<ul><li>64-bit/128-bit WEP</li><li>AES-CCMP</li><li>TKIP</li></ul>	<ul><li>64-bit/128-bit WEP</li><li>AES-CCMP</li><li>TKIP</li></ul>	<ul><li>64-bit/128-bit WEP</li><li>AES-CCMP</li><li>TKIP</li></ul>
Bluetooth	Bluetooth 4.2  i NOTE: Bluetooth 4.2 is supported by the latest Windows 10 update.	Bluetooth 5.0  i NOTE: Bluetooth 5.0 is supported by the latest Windows 10 update.	Bluetooth 5.0  i NOTE: Bluetooth 5.0 is supported by the latest Windows 10 update.

## **Audio**

**Table 9. Audio specifications** 

Description		Values	
Controller		Realtek ALC3254-CG with support for nahimic audio	
Stereo conversion		Supported	
Internal interface		High-definition audio interface	
External interface		Universal audio jack that supports headset/headphone/line-out/microphone/line-in functions     Digital-array microphone in camera assembly	
Speakers		Two	
Internal speaker amplifie	r	Supported	
External volume controls	3	Supported through keyboard shortcuts	
Speaker output:			
	Average	2 W	
Peak		2.5 W	
Subwoofer output		Not supported	
Microphone		One	

# Storage

Table 10. Storage specifications

Storage type	Interface type	Capacity
One 2.5-inch Hard-Disk Drive (HDD)  i NOTE: Hard-disk drive is supported only on the computers shipped with 4-cell battery configuration	SATA	<ul> <li>500 GB (7200 RPM)</li> <li>1TB (5400 RPM)</li> <li>2 TB (5400 RPM)</li> <li>1TB (5400 RPM) + 8 GB hybrid drive</li> </ul>

#### Table 10. Storage specifications(continued)

Storage type	Interface type	Capacity
One M.2 2230 solid-state drive	PCIe NVMe 3x2 Class 35	Up to 512 GB
One M.2 2280 solid-state drive	PCIe NVMe 3x4 Class 40	Up to 1 TB

## **Intel Optane memory**

Intel Optane memory functions only as a storage accelerator. It neither replaces nor adds to the memory (RAM) installed on your computer.

- (i) NOTE: Intel Optane memory is supported on computers that meet the following requirements:
  - 7<sup>th</sup> Generation or higher Intel Core i3/i5/i7 processor
  - Windows 10 64-bit version or higher (Anniversary Update)
  - Latest version of Intel Rapid Storage Technology driver

#### **Table 11. Intel Optane memory**

Description	Values
Туре	Storage accelerator
Interface	PCIe NVMe 3.0x2 or 3.0x4
Connector	M.2 2280
Configurations supported	16 GB and 32 GB
Capacity	Up to 32 GB

### Media-card reader

#### Table 12. Media-card reader specifications

Description	Values
Туре	One SD-card slot
Cards supported	<ul><li>Secure Digital (SD)</li><li>Secure Digital High Capacity (SDHC)</li><li>SD Extended Capacity (SDXC)</li></ul>

## Keyboard

#### Table 13. Keyboard specifications

Description	Values
Туре	<ul><li>Standard non-backlit keyboard</li><li>Backlit keyboard (optional)</li><li>Four-zone RGB keyboard (optional)</li></ul>
Layout	QWERTY
Number of keys	United States and Canada: 101 keys

Table 13. Keyboard specifications(continued)

Description	Values	
	<ul><li>United Kingdom: 102 keys</li><li>Japan: 105 keys</li></ul>	
Size	X = 19.05 mm key pitch $Y = 18.05$ mm key pitch	
Shortcut keys	For more information on shortcut keys, see Keyboard shortcuts.	

## Camera

#### **Table 14. Camera specifications**

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

## **Touchpad**

#### Table 15. Touchpad specifications

Description		Values
Resolution:		
	Horizontal	1229 pixels
	Vertical	929 pixels
Dimensions:		
	Horizontal	105 mm (4.13 in.)
	Vertical	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

Description		Valu	alues	
Туре		130 W	180 W	
Diame	eter (connector)	7.4 mm	7.4 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/2.50 A	2.34 A	
Output current (continuous)		6.70 A	9.23 A	
Rated	l 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:

- $\cdot\quad$  Battery charge does not increase when connected to the power adapter.
- $\cdot\ \$  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** 

Descriptio	n	Values	Values
Туре		4-cell "smart" lithium-ion/polymer (60 WHr)	6-cell "smart" lithium-ion/polymer (90 WHr)
		NOTE: Hard-disk drive configuration is available only on the computers that are shipped with 4-cell battery.	
Voltage 15.20 VDC 11.40 VDC		11.40 VDC	
Weight (ma	aximum)	0.25 kg (0.556 lb)	0.37 kg (0.82 lb)
Dimensions:			
	Height	11.60 mm (0.46 in.)	11.60 mm (0.46 in.)

Table 17. Battery specifications(continued)

Description		Values	Values	
	Width	222.20 mm (8.75 in.)	332.65 mm (13.10 in.)	
	Depth	74.20 mm (2.92 in.)	74.20 mm (2.92 in.)	
Temperatu	ure range:			
	Operating	0°C to 35°C (32°F to 95°F)	0°C to 35°C (32°F to 95°F)	
	Storage	-40°C to 65°C (-40°F to 149°F)	-40°C to 65°C (-40°F to 149°F)	
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.	
Charging time (approximate)		4 hours (when the computer is off)  i 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 https://www.dell.com/	4 hours (when the computer is off)  i 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 https://www.dell.com/	
Life span (approximate)		300 discharge/charge cycles	300 discharge/charge cycles	
Coin-cell battery		CR-2032	CR-2032	
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.	

# **Display**

**Table 18. Display specifications** 

Description	Values	Values
Туре	Full High Definition (FHD)	Full High Definition (FHD)
Panel technology	Wide Viewing Angle (WVA)	Wide Viewing Angle (WVA)
Luminance (typical)	<ul><li>300 nits at 60 Hz</li><li>300 nits at 144 Hz (optional)</li></ul>	300 nits
Dimensions (Active area):	·	·
Height	214.81 mm (8.46 in.)	214.81 mm (8.46 in.)
Width	381.89 mm (15.04 in.)	381.89 mm (15.04 in.)
Diagonal	438.16 mm (17.25 in.)	438.16 mm (17.25 in.)
Native resolution	1920 × 1080	1920 x 1080
Megapixels	2.07	2.07
Color gamut	72% (NTSC)	72% (NTSC)

Table 18. Display specifications (continued)

Description	Values	Values
Pixels per inch (PPI)	127	127
Contrast ratio (min)	600:1	600:1
Response time (max)	<ul><li>300 nits at 60 Hz: 35 msec</li><li>300 nits at 144 Hz (optional): 19 msec</li></ul>	19 msec (gray to gray)
Refresh rate	· 60 Hz · 144 Hz (optional)	144 Hz
Horizontal view angle	+/- 85 degrees	+/- 85 degrees
Vertical view angle	+/- 85 degrees	+/- 85 degrees
Pixel pitch	0.1989 mm	0.1989 mm
Power consumption (maximum)	<ul><li>300 nits at 60 Hz: 8 W</li><li>300 nits at 144 Hz (optional): 8.5 W</li></ul>	8.5 W
Anti-glare vs glossy finish	Anti-glare	Anti-glare
Touch options	Not supported	Not supported

## Fingerprint reader (optional)

#### Table 19. Fingerprint reader specifications

Description	Values
Sensor technology	Capacitive
Sensor resolution	500 dpi
Sensor area	5.50 mm x 4.50 mm (0.22 in. x 0.18 in.)
Sensor pixel size	108 x 88 pixels

### **Video**

#### Table 20. Discrete graphics specifications

Discrete graphics			
Controller External display support		Memory size	Memory Type
NVIDIA GeForce RTX 2060	HDMI 2.0b port     mini DisplayPort 1.4	6 GB	GDDR6
NVIDIA GeForce RTX 2070 Max-Q	HDMI 2.0b port mini DisplayPort 1.4	8 GB	GDDR6
NVIDIA GeForce RTX 2080 Max-Q	HDMI 2.0b port     mini DisplayPort 1.4	8 GB	GDDR6

#### Table 20. Discrete graphics specifications(continued)

Discrete graphics			
Controller	External display support	Memory size	Memory Type
NVIDIA GeForce GTX 1660 Ti	HDMI 2.0b port mini DisplayPort 1.4	6 GB	GDDR6

#### Table 21. Integrated graphics specifications

Integrated graphics			
Controller	External display support	Memory size	Processor
Intel UHD Graphics 630	One DisplayPort and one HDMI port	Shared system memory	8 <sup>th</sup> Generation Intel Core i5/i7

## **Computer environment**

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

#### **Table 22. Computer environment**

	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 3,048 m (-50 ft to 10,000 ft)	-15.2 m to 10,668 m (-50 ft to 35,000 ft)

 $<sup>\</sup>ensuremath{^{*}}$  Measured using a random vibration spectrum that simulates user environment.

<sup>†</sup> 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-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-F12 are needed for specific software applications, multi-media functionality can be disabled by pressing  $\mathbf{Fn} + \mathbf{Esc}$ . Subsequently, multi-media control can be invoked by pressing  $\mathbf{Fn}$  and the respective function key. For example, mute audio by pressing  $\mathbf{Fn} + \mathbf{F1}$ .

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

Table 23. List of keyboard shortcuts

Function key	Re-defined key (for multi-media control)	Behavior
F1 «IX	Fn + F1 ≪x	Mute audio
F2 ••	Fn + F2	Decrease volume
F3 (49)	Fn + F3	Increase volume
F4	Fn + F4	Play previous track/chapter
F5 ▶II	Fn + F5 ►II	Play/Pause
F6 ▶H	Fn + F6 ▶	Play next track/chapter
F8 🚉	Fn + F8	Switch to external display
F9 P	Fn + F9 p	Search
F10	Fn + F10	Toggle keyboard backlight (optional)
F11 **	Fn + F11 🔅	Decrease brightness
F12	Fn + F12	Increase brightness

The  $\mathbf{Fn}$  key is also used with selected keys on the keyboard to invoke other secondary functions.

Table 24. List of keyboard shortcuts

Function key	Behavior
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
Fn + R	System request
Fn + Ctrl	Open application menu
Fn + Esc	Toggle Fn-key lock
Fn + ↑PgUp	Page up
Fn + \$\dagger\$PgDn	Page down
Fn + ←-Home	Home
Fn + End →	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 25. Self-help resources

Self-help resources	Resource location
Information about Dell products and services	www.dell.com
My Dell	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
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.	<ol> <li>Go to www.dell.com/support.</li> <li>Type the subject or keyword in the Search box.</li> <li>Click Search to retrieve the related articles.</li> </ol>
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/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 on your purchase invoice, packing slip, bill, or Dell product catalog.