Dell G16 7620

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

1

Set up your Dell G16 7620

ⓘ **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:** 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 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
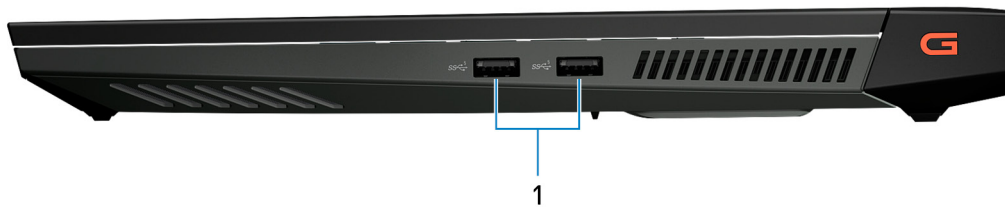
Resources	Description
	My Dell Centralized location for key Dell applications, help articles, and other important information about your computer. It also notifies you about the warranty status, recommended accessories, and software updates if available.
	SupportAssist SupportAssist proactively and predictively 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 www.dell.com/serviceabilitytools. 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 www.dell.com/support.
	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 www.dell.com/support.

Views of Dell G16 7620

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.

Back

1. **Thunderbolt 4.0 port with DisplayPort**

    Supports USB4, DisplayPort 1.4, Thunderbolt 4 and also enables you to connect to an external display using a display adapter. Provides data transfer rates of up to 40 Gbps for USB4 and Thunderbolt 4.

    (i) **NOTE:** This port is only available on computers shipped with an NVIDIA GeForce RTX 3060/3070/3070 Ti graphics card.

    (i) **NOTE:** You can connect a Dell Docking Station to the Thunderbolt 4 ports. For more information, search in the Knowledge Base Resource at www.dell.com/support.

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

    (i) **NOTE:** USB4 is backward compatible with USB 3.2, USB 2.0, and Thunderbolt 3.

    (i) **NOTE:** Thunderbolt 4 supports two 4K displays or one 8K display.

2. **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.

    (i) **NOTE:** This port is only available on computers shipped with an NVIDIA GeForce RTX 3050 Ti graphics card.

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

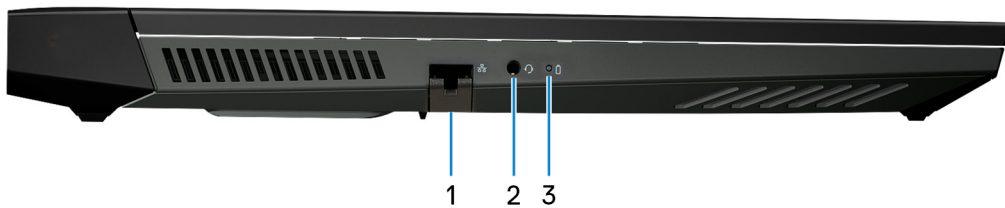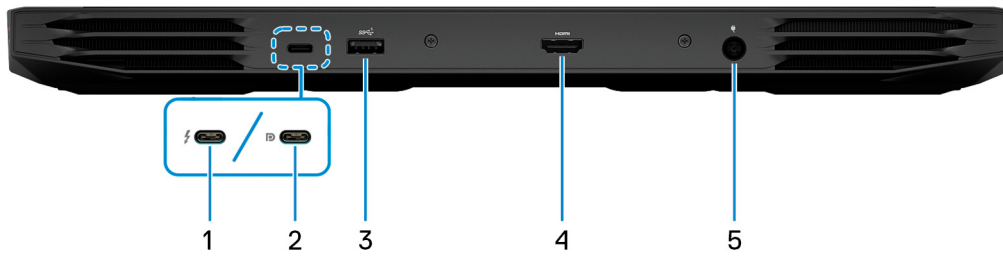3. **USB 3.2 Gen 1 port**

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

4. **HDMI port**

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

5. **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.

Top

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 fingers tap to right-click.

3. **Right-click area**

   Press to right-click.

4. **Power button**

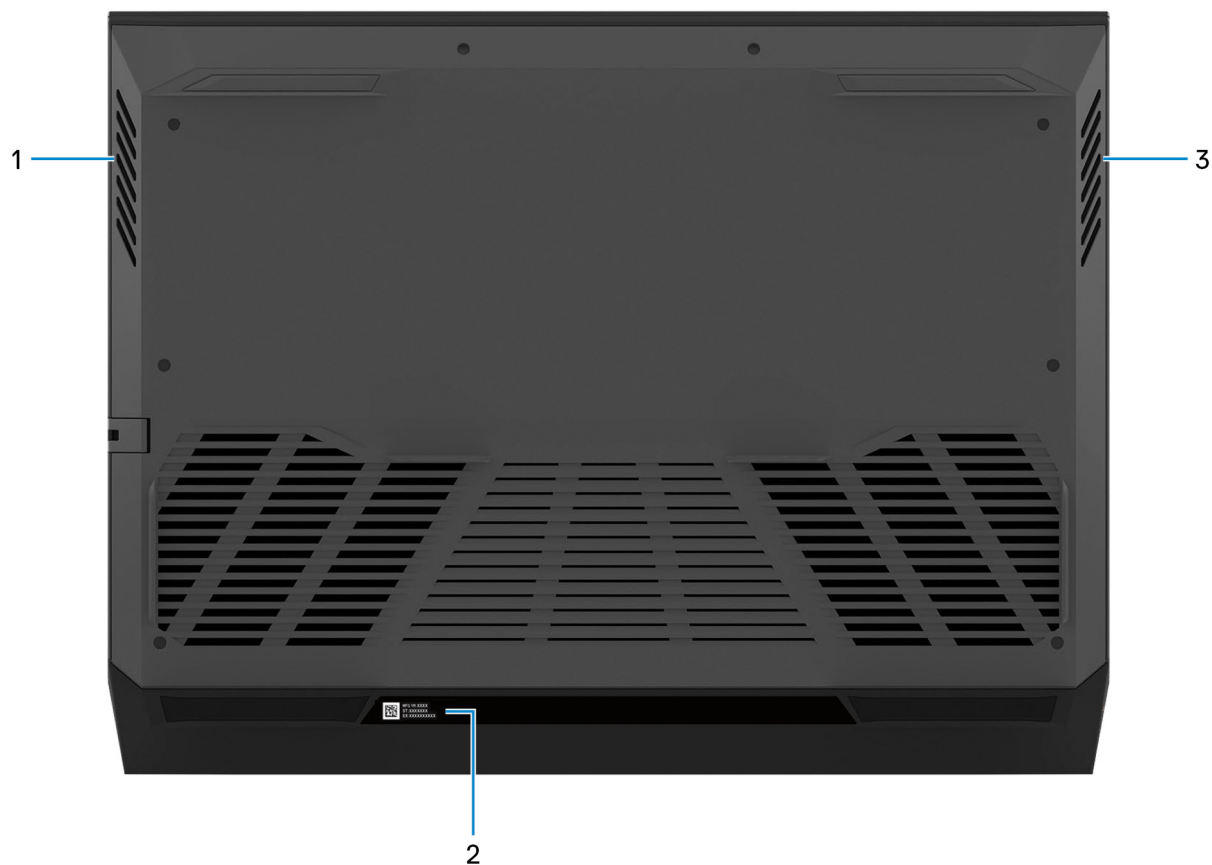   Press to turn on the computer if it is turned off, in sleep state, or in hibernate state.

   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 G16 7620

Dimensions and weight

The following table lists the height, width, depth, and weight of your Dell G16 7620.

Table 2. Dimensions and weight

Description	Values
Height:	
Front height	20.60 mm (0.81 in.)
Rear height	26.40 mm (1.03 in.)
Width	357.26 mm (14.06 in.)
Depth	272.11 mm (10.71 in.)
Weight ⓘ **NOTE:** The weight of your computer depends on the configuration ordered and manufacturing variability.	2.70 kg (5.95 lb)

Processor

The following table lists the details of the processors supported by your Dell G16 7620.

Table 3. Processor

Description	Option one	Option two
Processor type	12th Generation Intel Core i7-12700H	12th Generation Intel Core i9-12900H
Processor wattage	45 W	45 W
Processor core count	14	14
Processor thread count	20	20
Processor speed	Up to 4.70 GHz	Up to 5 GHz
Processor cache	24 MB	24 MB
Integrated graphics	Intel Iris Xe Graphics	Intel Iris Xe Graphics

Chipset

The following table lists the details of the chipset supported by your Dell G16 7620.

Table 4. Chipset

Description	Values
Chipset	ADL-P PCH
Processor	12th Generation Intel Core i7/i9
DRAM bus width	64-bit
Flash EPROM	32 MB
PCIe bus	Up to Gen4

Operating system

Your Dell G16 7620 supports the following operating systems:

- Windows 11 Home, 64-bit
- Windows 11 Pro, 64-bit

Memory

The following table lists the memory specifications of your Dell G16 7620.

Table 5. Memory specifications

Description	Values
Memory slots	Two SoDIMM slots
Memory type	Dual-Channel DDR5
Memory speed	4800 MHz
Maximum memory configuration	32 GB
Minimum memory configuration	8 GB
Memory size per slot	8 GB, 16 GB, 32 GB
Memory configurations supported	8 GB, 1 x 8 GB, DDR5, 4800 MHz 16 GB, 2 x 8 GB, DDR5, 4800 MHz, dual channel 32 GB, 2 x 16 GB, DDR5, 4800 MHz, dual channel

External ports

The following table lists the external ports of your Dell G16 7620.

Table 6. External ports

Description	Values
Network port	One RJ45 port
USB ports	● Three USB 3.2 Gen 1 ports ● One Thunderbolt 4 port with DisplayPort, for computers shipped with an NVIDIA GeForce RTX 3060/3070/3070 Ti graphics card ● One USB-C 3.2 Gen 2 port with DisplayPort, for computers shipped with an NVIDIA GeForce RTX 3050 Ti graphics card
Audio port	One Universal audio jack
Video port	One HDMI 2.1 port
Media-card reader	Not applicable
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 G16 7620.

Table 7. Internal slots

Description	Values
M.2	● One M.2 2230 slot for WiFi and Bluetooth combo card ● One M.2 2280 slot for solid-state drive ⓘ **NOTE:** To learn more about the features of different types of M.2 cards, search in the Knowledge Base Resource at www.dell.com/support.

Ethernet

The following table lists the wired Ethernet Local Area Network (LAN) specifications of your Dell G16 7620.

Table 8. Ethernet specifications

Description	Values
Model number	● Killer E2600 PCI-e Gigabit ethernet controller, for computers shipped with an NVIDIA GeForce RTX 3060/3070/3070 Ti graphics card ● Realtek RTL8111H PCI-e Gigabit ethernet controller, for computers shipped with an RTX 3050 Ti graphic card
Transfer rate	10/100/1000 Mbps

Wireless module

The following table lists the Wireless Local Area Network (WLAN) modules supported on your Dell G16 7620.

Table 9. Wireless module specifications

Description	Option one	Option two
Model number	Killer 1650i	Intel AX201
Transfer rate	Up to 2400 Mbps	Up to 2400 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 802.11a/b/g • 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 5.2	Bluetooth 5.2

Audio

The following table lists the audio specifications of your Dell G16 7620.

Table 10. Audio specifications

Description		Values
Audio controller		Realtek ALC3254
Stereo conversion		Supported
Internal audio interface		High Definition Audio
External audio interface		Universal audio jack
Number of speakers		Two
Internal-speaker amplifier		Supported
External volume controls		Keyboard shortcut controls
Speaker output:		
	Average speaker output	2 W
	Peak speaker output	2.5 W
Subwoofer output		Not supported
Microphone		Digital-array microphones in camera assembly

Storage

This section lists the storage options on your Dell G16 7620.

Your Dell G16 7620 supports one M.2 2280 solid-state drive.

ⓘ **NOTE:** For more information about Dell qualified solid-state drives supported by your computer, see Parts & Accessories at https://www.dell.com/support.

Table 11. Storage specifications

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

Keyboard

The following table lists the keyboard specifications of your Dell G16 7620.

Table 12. Keyboard specifications

Description	Values
Keyboard type	- RGB per key keyboard - One-zone RGB keyboard - RGB per key mechanical keyboard
Keyboard layout	QWERTY
Number of keys	United States and Canada: 85 keys
Keyboard size	X=19.05 mm key pitch Y=19.05 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 G16 7620.

Table 13. Camera specifications

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

Table 13. Camera specifications (continued)

Description	Values
Camera resolution:	
Still image	0.92 megapixel
Video	1280 x 720 (HD) at 30 fps
Diagonal viewing angle:	● 78.6 degrees ● 74.9 degrees

Touchpad

The following table lists the touchpad specifications of your Dell G16 7620.

Table 14. Touchpad specifications

Description	Values
Touchpad resolution:	> 300 dpi
Touchpad dimensions:	
Horizontal	104.4 mm (4.11 in.)
Vertical	59.4 mm (2.34 in.)
Touchpad gestures	For more information about touchpad gestures available on Windows, see the Microsoft knowledge base article at support.microsoft.com.

Power adapter

The following table lists the power adapter specifications of your Dell G16 7620.

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
Power-adapter dimensions:		
Height	29.97 mm (1.18 in.)	25.40 mm (1 in.)
Width	76.20 mm (3 in.)	100.08 mm (3.94 in.)
Depth	154.94 mm (6.10 in.)	199.90 mm (7.87 in.)
Input voltage	100 VAC–240 VAC	100 VAC–240 VAC
Input frequency	50 Hz–60 Hz	50 Hz–60 Hz

Table 15. Power adapter specifications (continued)

Description		Option one	Option two
Input current (maximum)		2.34 A	3.5 A
Output current (continuous)		9.23 A	12.31 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)
⚠ 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 G16 7620.

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	• 13.20 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.		• 2 hours (Express charge) • 3 hours (Standard charge)	• 2 hours (Express charge) • 3 hours (Standard charge)
Coin-cell battery		Not applicable	Not applicable

Table 16. Battery specifications (continued)

Description	Option one	Option two
⚠ 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 recommends that you charge the battery regularly for optimal power consumption. If your battery charge is completely 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 G16 7620.

Table 17. Display specifications

Description		Values
Display type		Quad-High Definition Plus (QHD+)
Display-panel technology		Wide-Viewing Angle (WVA)
Display-panel dimensions (active area):		
	Height	215.42 mm (8.48 in.)
	Width	344.68 mm (13.57 in.)
	Diagonal	406.46 mm (16.00 in.)
Display-panel native resolution		2560 x 1600
Luminance (typical)		300 nits
Megapixels		4.096
Color gamut		100% (sRGB), typical
Pixels Per Inch (PPI)		188
Contrast ratio (min)		800 : 1
Response time (max)		● With Overdrive: 3 ms (typical) ● Without Overdrive: 7 ms (typical)
Refresh rate		165 Hz
Horizontal view angle		+/- 85 degrees (typical)
Vertical view angle		+/- 85 degrees (typical)
Pixel pitch		0.1346 mm x 0.1346 mm
Power consumption (maximum)		6 W
Anti-glare vs glossy finish		Anti-glare
Touch options		No
Adaptive sync support		NVIDIA Advanced Optimus, G-SYNC

GPU—Integrated

The following table lists the specifications of the integrated Graphics Processing Unit (GPU) supported by your Dell G16 7620.

Table 18. GPU—Integrated

Controller	Memory size	Processor
Intel Iris Xe Graphics	Shared system memory	12th Generation Intel Core i7/i9

GPU—Discrete

The following table lists the specifications of the discrete Graphics Processing Unit (GPU) supported by your Dell G16 7620.

Table 19. GPU—Discrete

Controller	Memory size	Memory type
NVIDIA GeForce RTX 3050 Ti	4 GB	GDDR6
NVIDIA GeForce GTX 3060	6 GB	GDDR6
NVIDIA GeForce GTX 3070	8 GB	GDDR6
NVIDIA GeForce RTX 3070 Ti	8 GB	GDDR6

Operating and storage environment

This table lists the operating and storage specifications of your Dell G16 7620.

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)
⚠ **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 user environment.

† Measured using a 2 ms half-sine pulse.

Keyboard shortcuts

(i) **NOTE:** Keyboard characters may differ depending on the keyboard language configuration. Keys that are 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 **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**.

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

Table 21. List of keyboard shortcuts

Keys	Description
fn + **F1**	Launch Windows Connect to display connected Bluetooth devices
fn + **F7**	Adjust keyboard backlight brightness
fn + **F8**	Switch to external display
fn + **F9**	Disable/enable Game Shift
fn + **F10**	Decrease display brightness
fn + **F11**	Increase display brightness
fn + **F12**	Disable/enable touchpad

Your computer comes with pre-programmable macro keys that enable you to perform multiple actions with a single key press.

Table 22. List of Macro keys

Keys	Description
A **F2**	
B **F3**	Macro keys (i) **NOTE:** You can configure modes and assign multiple tasks for the macro keys on the keyboard.
C **F4**	
D **F5**	

Table 22. List of Macro keys (continued)

Keys	Description
▤ F6	

Your computer comes with dedicated keys that enable you to control audio features of the computer with a single key press.

Table 23. List of keys to control audio features

Keys	Description
🎤×	Mute microphone
🔇	Mute speakers
🔊	Increase volume
🔉	Decrease volume

Dell low blue light display

⚠️ **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 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.

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 24. Self-help resources

Self-help resources	Resource location
Information about Dell products and services	www.dell.com
My Dell app	
Tips	
Contact Support	In Windows search, type `Contact Support`, and press Enter.
Online help for operating system	www.dell.com/support/windows
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.

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

(i) **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.