Latitude 7450

Technical Guidebook

D⌬LL Technologies

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

Views of Latitude 7450

Right

Figure 1. Right view

1. **NanoSIM slot (optional)**

   Insert a nano-SIM card to connect to a mobile broadband network.

   (i) **NOTE:** Availability of the nano-SIM card slot depends on the region and configuration ordered.

2. **Universal audio port**

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

3. **USB 3.2 Gen 1 port**

   Connect devices such as external storage devices and printers.

4. **USB 3.2 Gen 1 port with PowerShare**

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

5. **Wedge-shaped lock slot**

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

Left

Figure 2. Left view

1. **HDMI 2.1 port**

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

2. **Thunderbolt 4.0 with DisplayPort Alt Mode/USB Type-C/USB4/Power Delivery**

   Supports USB4, DisplayPort 2.1, 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:** You can connect a Dell Docking Station to one of 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.

3. **Thunderbolt 4.0 with DisplayPort Alt Mode/USB Type-C/USB4/Power Delivery**

   Supports USB4, DisplayPort 2.1, 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:** You can connect a Dell Docking Station to one of 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.

4. **Battery-status/diagnostic light**

   Indicates the battery-charge status.

   - Solid yellow-Battery charge is low.
   - Blinking yellow-Battery charge is critical.
   - Solid white-Battery is fully charged.

5. **Smart card reader slot (optional)**

   Using smart card provides authentication in corporate networks.

Front

Figure 3. Image: Front view

1. **Infrared camera (optional)**

   Enhances security when paired with Windows Hello face authentication.

2. **Infrared LED**

   Emits infrared light, which enables the infrared camera to sense and track motion.

3. **RGB Camera**

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

4. **Camera-status light**

   Turns on when the camera is in use.

5. **Ambient-light sensor (ALS)**

   The sensor detects the ambient light and automatically adjusts the display brightness.

6. **LCD panel**

   Provides visual output to the user.

Top
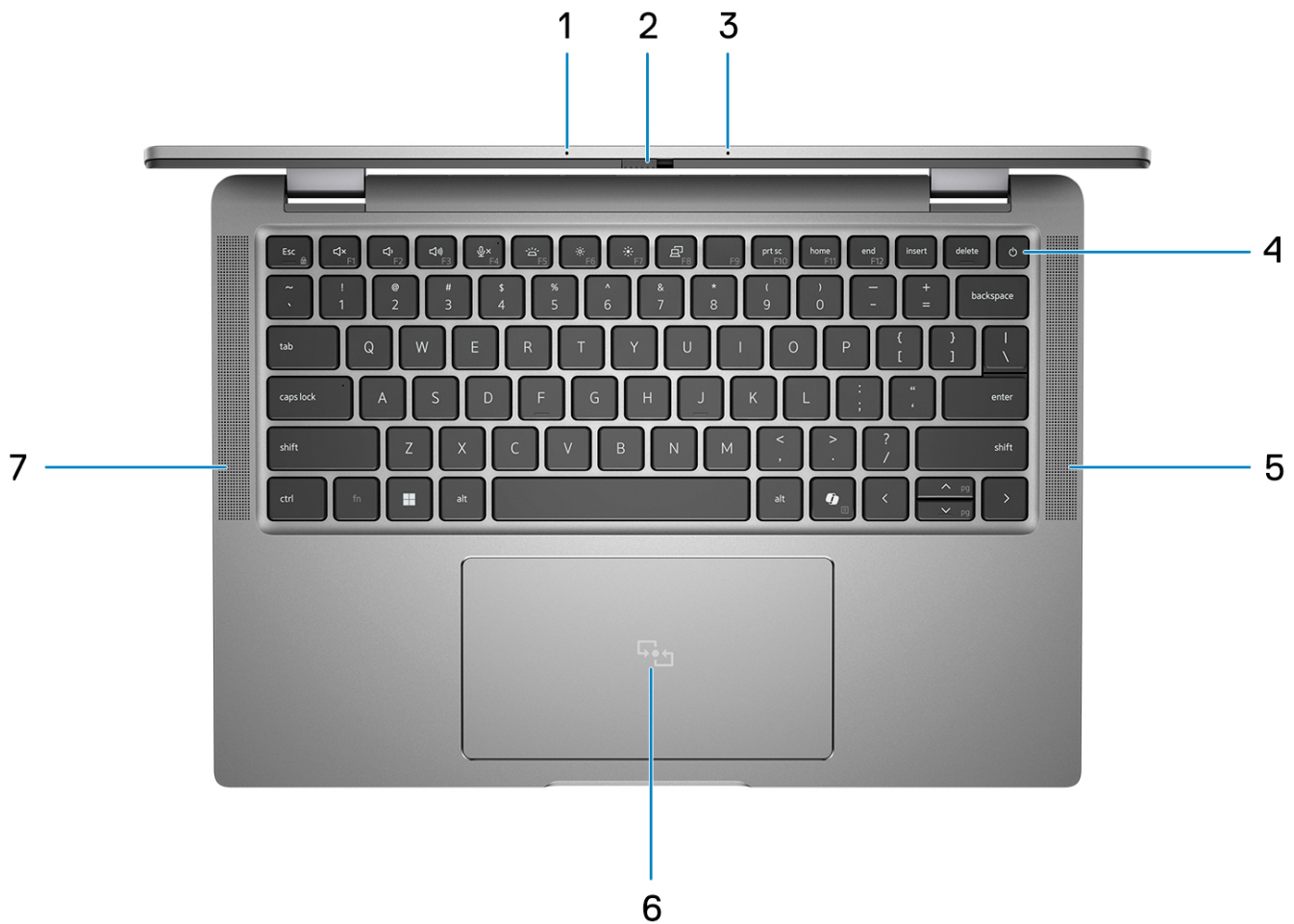
Figure 4. Image: Top view

1. **Dual-array microphone**

   Provides digital sound input for audio recording and voice calls.

2. **Camera shutter**

   Slide the privacy shutter to the left to access the camera lens.

3. **Dual-array microphone**

   Provides digital sound input for audio recording and voice calls.

4. **Power button with fingerprint reader (optional)**

   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 a 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 steadily to log in.

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

   (i) **NOTE:** You can customize the power-button behavior in Windows.

5. **Speaker**

Provides audio output.

6. **Clickpad with optional NFC/contactless smart-card reader**

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

7. **Speaker**

   Provides audio output.

Bottom

Figure 5. Image: Bottom view

1. **Speakers**

   Provide 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.

Service Tag

The service tag is a unique alphanumeric identifier that allows Dell service technicians to identify the hardware components in your computer and access warranty information.
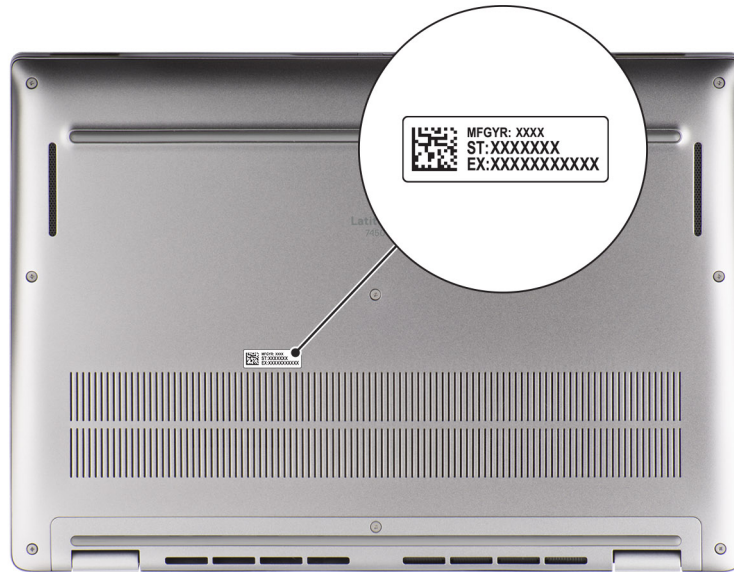
Figure 6. Image: Service Tag location

Modes

The following modes are applicable for your 2-in-1 computers.

Notebook

Figure 7. Image: Notebook mode

Tablet

Figure 8. Image: Tablet mode

Stand

Figure 9. Image: Stand mode

Tent

Figure 10. Image: Tent mode

Battery charge and status light

The following table lists the battery charge and status light behavior of your Latitude 7450.

Table 1. Battery charge and status light behavior

Power Source	LED Behavior	System Power State	Battery Charge Level
AC Adapter	Off	S0 - S5	Fully Charged
AC Adapter	Solid White	S0 - S5	< Fully Charged
Battery	Off	S0 - S5	11-100%
Battery	Solid Amber (590+/-3 nm)	S0 - S5	< 10%

- S0 (ON) - System is turned on.
- S4 (Hibernate) - The system consumes the least power compared to all other sleep states. The system is almost at an OFF state, except for a trickle power. The context data is written to a hard drive.
- S5 (OFF) - The system is in a shutdown state.

Specifications of Latitude 7450

Dimensions and weight

The following table lists the height, width, depth, and weight of your Latitude 7450.

Table 2. Dimensions and weight

Description	Laptop-Mainstream	2-in-1	Laptop-Ultralight
Height:			
Front height	17.10 mm (0.67 in.)	17.10 mm (0.67 in.)	17.15 mm (0.68 in.)
Rear height	18.21 mm (0.72 in.)	18.21 mm (0.72 in.)	17.95 mm (0.70 in.)
Width	313.00 mm (12.32 in.)	313.00 mm (12.32 in.)	313.00 mm (12.32 in.)
Depth	222.75 mm (8.77 in.)	222.75 mm (8.77 in.)	220.20 mm (8.67 in.)
Weight (i) **NOTE:** The weight of your computer depends on the configuration ordered and manufacturing variability.	1.33 kg (2.93 lb)	1.53 kg (3.37 lbs.)	1.05 kg (2.33 lbs.)

Processor

The following table lists the details of the processors that are supported for your Latitude 7450.

Table 3. Processor

Description	Option one	Option two	Option three	Option four	Option five	Option six
Processor type	Intel Core Ultra 5 135H	Intel Core Ultra 5 125U	Intel Core Ultra 5 135U	Intel Core Ultra 7 155U	Intel Core Ultra 7 165H	Intel Core Ultra 7 165U
Intel vPro Enterprise support	YES	NO	YES	NO	YES	YES
Processor wattage	28 W	15 W	15 W	15 W	28 W	15 W
Processor core count	14	12	12	12	16	12
Processor thread count	18	14	14	14	22	14
Processor speed	Up to 4.6 GHz	Up to 4.3 GHz	Up to 4.4 GHz	Up to 4.8 GHz	Up to 5.0 GHz	Up to 4.9 GHz
P-Core base frequency	1.7 GHz	1.3 GHz	1.6 GHz	1.7 GHz	1.4 GHz	1.7 GHz

Table 3. Processor (continued)

Description	Option one	Option two	Option three	Option four	Option five	Option six
P-Core Maximum turbo frequency	4.6 GHz	4.3 GHz	4.4 GHz	4.8 GHz	5.0 GHz	4.9 GHz
E-Core base frequency	1.2 GHz	0.8 GHz	1.1 GHz	1.2 GHz	0.9 GHz	1.2 GHz
E-Core Maximum turbo frequency	3.6 GHz	3.6 GHz	3.6 GHz	3.8 GHz	3.8 GHz	3.8 GHz
Processor cache	18 MB	12 MB	12 MB	12 MB	24 MB	12 MB
Integrated graphics	Intel Arc Graphics	Intel Graphics	Intel Graphics	Intel Graphics	Intel Arc Graphics	Intel Graphics

Chipset

The following table lists the details of the chipset that is supported for your Latitude 7450.

Table 4. Chipset

Description	Option one	Option two
Processors	Intel Core Ultra 5	Intel Core Ultra 7
Chipset	Integrated in the processor	Integrated in the processor
DRAM bus width	Dual-channel, 64-bit	Dual-channel, 64-bit
Flash EPROM	64 MB	64 MB
PCIe bus	Gen 4	Gen 4

Operating system

Your Latitude 7450 supports the following operating systems:

● Windows 11 22H2
● Windows 11 23H2
● Ubuntu Linux 22.04 LTS

Memory

The following table lists the memory specifications of your Latitude 7450.

Table 5. Memory specifications

Description	Values
Memory slots	Onboard memory ⓘ **NOTE:** The memory is not ungradable
Memory type	Dual-channel, LPDDR5x

Table 5. Memory specifications (continued)

Description	Values
Memory speed	6400 MT/s
Maximum memory configuration	64 GB
Minimum memory configuration	16 GB
Memory configurations supported	16 GB: LPDDR5x, 6400 MT/s, dual-channel 32 GB: LPDDR5x, 6400 MT/s, dual-channel 64 GB: LPDDR5x, 6400 MT/s, dual-channel

External ports

The following table lists the external ports on your Latitude 7450.

Table 6. External ports

Description	Values
USB ports	- Two Thunderbolt™ 4 with DisplayPort™ Alt Mode/USB Type-C/USB4/Power Delivery - Two USB 3.2 Gen 1 ports
Audio port	One Universal audio port
Video port/ports	One HDMI 2.1 port
Media-card reader	Not supported
Power-adapter port	60W/65W/100W adapter USB Type-C, 2-pin, 3-pin
Security-cable slot	One Wedge-shaped lock slot
Smart Card Reader	Contacted and Contactless + NFC (optional)
SIM slot	NanoSIM slot (optional)

Internal slots

The following table lists the internal slots of your Latitude 7450.

Table 7. Internal slots

Description	Values
M.2	- One M.2 2230 slot for solid-state drive - One M.2 3042 slot for WWAN Card (optional) **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.

Wireless module

The following table lists the Wireless Local Area Network (WLAN) module that is supported on your Latitude 7450.

Table 8. Wireless module specifications

Description	Values
Model number	Intel BE200 (integrated on system board)
Transfer rate	5760 Mbps
Frequency bands supported	2.40 GHz/5 GHz/6 GHz
Wireless standards	- WiFi 802.11a/b/g - Wi-Fi 4 (WiFi 802.11n) - Wi-Fi 5 (WiFi 802.11ac) - Wi-Fi 6E (WiFi 802.11ax) - Wi-Fi 7 (WiFi 802.11be)
Encryption	64-bit/128-bit WEP - AES-CCMP - TKIP
Bluetooth wireless card	Bluetooth 5.4 wireless card
	(i) **NOTE:** The version of the Bluetooth wireless card may vary depending on the operating system that is installed on your computer.

WWAN module

The following table lists the Wireless Wide Area Network (WWAN) module supported on your Latitude 7450.

Table 9. WWAN module specifications

Description	Option one	Option two
Model number	DW5825e (FM101R-GL), Qualcomm Snapdragon X12 global LTE-Advanced, CAT12	DW5932e, 5G, Qualcomm Snapdragon X62 Global 5G Modem
Form Factor	M.2 3042 Key-B	M.2 3042 Key
Host Interface	PCIe Gen2	PCIe Gen3
Network Standard	LTE FDD/TDD, WCDMA/HSPA+, GPS/GLONASS/BDS/Galileo	LTE FDD/TDD, WCDMA/HSPA+, GNSS/Beidou NR FR1 (Sub6) FDD/TDD, LTE FDD/TDD, WCDMA/HSPA+, GPS/GLONASS/Galileo/BDS/QZSS
Transfer data rate	- Up to 1 Gbps DL (Cat 12) - Up to 150 Mbps UL	- SA: DL 4.67 Gbps/UL 1.25 Gbps - NSA: DL 3.74 Gbps/UL 700 Mbps - LTE: DL 1.6 Gbps (CAT19)/UL 150 Mbps - UMTS: DL 384 kbps/UL 384 kbps DL DC-HSPA+: 42 Mbps (CAT24)/UL 11.5 Mbps (CAT7)

Table 9. WWAN module specifications (continued)

Description	Option one	Option two
Operating Frequency Bands	• LTE (B1, B2, B3, B4, B5, B7, B8, B12, B13, B14, B17, B18, B19, B20, B25, B26, B28, B29, B30, B32, B34, B38, B39, B40, B41(HPUE), B42, B43, B46(receiver only), B48, B66, B71 • WCDMA/HSPA+ (1, 2, 4,5, 8)	• NR (n1, n2, n3, n5, n7, n8, n20, n25, n28, n30, n38, n40, n41, n48, n66, n71, n77, n78, n79) • LTE (B1, B2, B3, B4, B5, B7, B8, B12, B13, B14, B17, B18, B19, B20, B25, B26, B28, B29, B30, B32, B34, B38, B39, B40, B41, B42, B43, B46, B48, B66, B71) • WCDMA/HSPA+ (1, 2, 4, 5, 8)
Power supply	DC 3.135 V to 4.4 V, Typical 3.3 V	DC 3.135 V to 4.40 V, Typical 3.30 V
SIM card	Supported through external SIM slot	Supported through external SIM slot
eSIM with Dual SIM (DSSA)	Supported	Supported
Antenna Diversity	Supported	Supported
Radio On/Off	Supported	Supported
Wake On Wireless	Supported	Supported
Temperature	• Normal operating temperature: -10°C to + 55°C (14°F to 131°F) • Extended Operating temperature: -20°C to + 65°C (-4°F to 149°F)	• Normal operating temperature: -10°C to + 55°C (14°F to 131°F) • Extended Operating temperature: -30°C to +75°C (-22°F to 167°F) • Storage temperature: -40°C to +85°C (-40°F to 185°F)
Antenna connector	• WWAN Main Antenna x 4 • Supports 4x4 MIMO	• WWAN Main Antenna x 4 • Supports 4x4 MIMO

> ⓘ **NOTE:** For instructions on how to find your computer's International Mobile Station Equipment Identity (IMEI) number, search in the Knowledge Base Resource at www.dell.com/support.

Audio

The following table lists the audio specifications of your Latitude 7450.

Table 10. Audio specifications

Description		Values
Audio controller		Realtek ALC3281
Stereo conversion		Stereo (2.0)
Internal audio interface		High definition audio interface
External audio interface		Universal Audio Jack
Number of speakers		Four
Internal-speaker amplifier		Supported
External volume controls		Supported
Speaker output:		
	Average speaker output	2W

Table 10. Audio specifications (continued)

Description		Values
	Peak speaker output	2.5W
Subwoofer output		Not supported
Microphone		Camera module above LCD

Storage

This section lists the storage options on your Latitude 7450.

Your computer supports the following storage configurations:
- One M.2 2230 solid state drive

The M.2 2230 solid state drive is the primary drive of your computer.

Table 11. Storage specifications

Storage type	Interface type	Capacity
M.2 2230 solid state drive	PCIe NVMe Gen 4x4	256 GB/512 GB/1 TB/2 TB
M.2 2230 solid state drive, Self-encrypting drive, Opal 2.0	PCIe NVMe Gen 4x4	512 GB

Keyboard

The following table lists the keyboard specifications of your Latitude 7450.

Table 12. Keyboard specifications

Description	Values
Keyboard type	Battery-saving Mini LED backlit AI hotkey keyboard (i) **NOTE:** Copilot in Windows is available only in approved markets.
Keyboard layout	QWERTY
Number of keys	• United States and Canada: 79 keys • United Kingdom: 80 keys
Keyboard size	X=19.05 mm (0.75 in.) key pitch Y=18.05 mm (0.71 in.) 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. (i) **NOTE:** You can define the primary behavior of the function keys (F1–F12) changing **Function Key Behavior** in BIOS setup program.

Camera

The following table lists the camera specifications of your Latitude 7450.

Table 13. Camera specifications

Description		Option one	Option two	Option three
Number of cameras		There is one camera option: ● FHD RGB HDR Camera	There is one camera option: ● FHD RGB-IR HDR	There is one camera option: ● 5M RGB-IR
Camera type		3.8 mm, 1080p at 30 fps, FHD RGB Webcam	3.8 mm, 1080p at 30 fps, FHD RGB+IR Webcam with ALS	4.4 mm, 1080p at 30 fps, 5M RGB+IR Webcam with ALS
Camera location		Front camera	Front camera	Front camera
Camera sensor type		Ambient light sensor	Ambient light sensor	Ambient light sensor does not support
Camera resolution:				
	Still image	1080p	1080p	1920p
	Video	1080p at 30 fps	1080p at 30 fps	1920p at 30 fps
Infrared camera resolution:				
	Still image	Not supported	640 x 360	640 x 480
	Video	Not supported	640 x 360 at 15 fps	640 x 480 at 15 fps
Diagonal viewing angle:				
	Camera	82 degrees	80 degrees	92 degrees
	Infrared camera	Not supported	86.6 degrees	77.3 degrees

Clickpad

The following table lists the clickpad specifications of your Latitude 7450.

Table 14. Clickpad specifications

Description		Values
Clickpad resolution:		
	Horizontal	>300 dpi
	Vertical	
Clickpad dimensions:		
	Horizontal	133 mm (5.23 in.)
	Vertical	72 mm (2.83 in.)
Clickpad gestures		For more information about clickpad gestures available on Windows, see the Microsoft knowledge base article at support.microsoft.com.

Clickpad with collaboration controls

The following table lists the clickpad specifications of your Latitude 7450 Ultralight.

Table 15. Clickpad specifications

Description	Values
Clickpad type	Collaboration Touchpad
Collaboration controls on clickpad	Four controls are available to control video, share screen, chat, and mute functions during conference calls. The controls are visible on the clickpad during any conference calls. Compatible with Zoom and Teams for work or school.
Collaboration controls settings	- Control brightness manually or configure icon brightness to automatically adjust to the ambient light. - Customize settings to activate collaboration controls with a single tap or a double tap. - Customize specific controls to be activated or deactivated.
Collaboration controls functionality	- Video icon: Turn on or off the camera. - White icon: The camera is turned on. - Red icon: The camera is off. Share screen icon: Tap once to share your screen. Tap again to stop sharing. Chat icon: Show or hide the chat window. The icon blinks when you receive a new chat message. Microphone icon: Turn on or mute the microphone. - White icon: The microphone is turned on. - Red icon: The microphone is muted.
Required apps for collaboration controls	- Dell Optimizer Version 4.2.0.0 and higher - Zoom Client Version 5.9.3 and higher - Teams for work or school (Windows desktop) Version 1.6.00.24078 and higher
Clickpad resolution:	
Horizontal	>300 dpi
Vertical	
Clickpad dimensions:	
Horizontal	133 mm (5.23 in.)
Vertical	72 mm (2.83 in.)
Clickpad gestures	For more information about clickpad gestures available on Windows, see the Microsoft Knowledge Base article at support.microsoft.com.

> (i) **NOTE:** To enjoy the collaboration touchpad (CTP) controls feature on your keyboard, ensure that you have the latest versions of the Dell Optimizer app and Zoom or Teams for work or school installed on your computer. Dell Optimizer offers modular installation which allows you to select the modules you want to install. Install the collaboration touchpad module within the Dell Optimizer app to enjoy the functionality of collaboration controls. For more information, search for the Dell Optimizer User 's Guide in the Knowledge Base Resource at www.dell.com/support.

> (i) **NOTE:** For more information about how to configure and use your collaboration controls, search for the Collaboration Touchpad Reference Guide in the Knowledge Base Resource at www.dell.com/support. Or, watch the video at www.dell.com/collaboration-touchpad.

Table 15. Clickpad specifications (continued)

Description	Values
ⓘ **NOTE:** Collaboration Touchpad is supported only on Teams for work or school (Windows desktop) application. Teams for home and Teams on web are currently not supported.	

Power adapter

The following table lists the power adapter specifications of your Latitude 7450.

Table 16. Power adapter specifications

Description		Option one	Option two	Option three
Type		60W AC adapter, USB Type-C	65W AC adapter, USB Type-C	100W AC adapter, USB Type-C
Power-adapter dimensions:				
	Height	22.00 mm (0.86 in.)	28.00 mm (1.10 in.)	26.50 mm (1.04 in.)
	Width	66.00 mm (2.59 in.)	51.00 mm (2.01 in.)	60.00 mm (2.36 in.)
	Depth	55.00 mm (2.16 in.)	112.00 mm (4.41 in.)	122.00 mm (4.80 in.)
Weight		0.10 kg (0.23 lbs)	0.20 kg (0.44 lbs)	0.33 kg (0.73 lbs)
Input voltage		100 VAC – 240 VAC	100 VAC – 240 VAC	100 VAC – 240 VAC
Input frequency		50 Hz – 60 Hz	50 Hz – 60 Hz	50 Hz – 60 Hz
Input current (maximum)		1.70 A	1.70 A	1.70 A
Output current (continuous)		5 V/3 A 9 V/3 A 15 V/3 A 20 V/3 A	5 V/3 A 9 V/3 A 15 V/3 A 20 V/3.25 A	5 V/3 A 9 V/3 A 15 V/3 A 20 V/5 A
Rated output voltage		5 VDC 9 VDC 15 VDC 20 VDC	5 VDC 9 VDC 15 VDC 20 VDC	5 VDC 9 VDC 15 VDC 20 VDC
Temperature range:				
	Operating	0°C to 40°C (32°F to 104°F)	0°C to 40°C (32°F to 104°F)	0°C to 40°C (32°F to 104°F)
	Storage	-20°C to 70°C (-4°F to 158°F)	-40°C to 70°C (-40°F to 158°F)	-40°C to 70°C (-40°F to 158°F)
⚠ **CAUTION: Operating and storage temperature ranges may differ among components, so operating or storing the device outside these ranges may impact the performance of specific components.**				

Battery

The following table lists the battery specifications of your Latitude 7450.

Table 17. Battery specifications

Description		Option one	Option two	Option three	Option four
Battery type		2-cell, 38 Wh, ExpressCharge Capable, Long Life Cycle, 3-year limited hardware warranty	3-cell, 57 Wh, ExpressCharge Capable, Long Life Cycle, 3-year limited hardware warranty	2-cell, 38 Wh, ExpressCharge, ExpressCharge Boost Capable	3-cell, 57 Wh, ExpressCharge, ExpressCharge Boost Capable
Battery voltage		7.60 VDC	11.40 VDC	7.60 VDC	11.40 VDC
Battery weight (maximum)		0.156 Kg (0.34 lb)	0.227 kg (0.50 lb)	0.156 Kg (0.34 lb)	0.227 kg (0.50 lb)
Battery dimensions:					
	Height	6.30 mm (0.24 in.)	6.30 mm (0.24 in.)	6.30 mm (0.24 in.)	6.30 mm (0.24 in.)
	Width	210.97 mm (8.30 in.)	254.80 mm (10.03 in.)	210.97 mm (8.30 in.)	254.8 mm (10.03 in.)
	Depth	79.80 mm (3.14 in.)	79.80 mm (3.14 in.)	79.80 mm (3.10 in.)	79.8 mm (3.10 in.)
Temperature range:					
	Operating	- Charge: 0°C to 45°C (32°F to 113°F) - Discharge: 0°C to 70°C (32°F to 158°F)	- Charge: 0°C to 45°C (32°F to 113°F) - Discharge: 0°C to 70°C (32°F to 158°F)	- Charge: 0°C to 45°C (32°F to 113°F) - Discharge: 0°C to 70°C (32°F to 158°F)	- Charge: 0°C to 45°C (32°F to 113°F) - Discharge: 0°C to 70°C (32°F to 158°F)
	Storage	-20°C to 65°C (-4°F to 149°F)	-20°C to 65°C (-4°F to 149°F)	-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.	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) (i) **NOTE:** Control the charging time, duration, start and end time, and so on using the Dell Power Manager application. For more information about Dell Power Manager, search in the Knowledge Base Resource at www.dell.com/ support.		**Express Charge Method:** 0 - 15°C maximum allowable charge time from 0 to 100% RSOC is 4 hours 16 - 45°C normal express charge 46 - 50°C maximum allowable charge time from 0 to 100% RSOC is 3 hours **Standard Charge/ Predominately AC User Charge Method:** 0 - 15°C maximum allowable charge	**Express Charge Method:** 0 - 15°C maximum allowable charge time from 0 to 100% RSOC is 4 hours 16 - 45°C normal express charge 46 - 50°C maximum allowable charge time from 0 to 100% RSOC is 3 hours **Standard Charge/ Predominately AC User Charge Method:** 0 - 15°C maximum allowable charge time	**Express Charge Method:** 0 - 15°C maximum allowable charge time from 0 to 100% RSOC is 4 hours 16 - 45°C normal express charge 46 - 50°C maximum allowable charge time from 0 to 100% RSOC is 3 hours **Standard Charge/ Predominately AC**	**Express Charge Method:** 0 - 15°C maximum allowable charge time from 0 to 100% RSOC is 4 hours 16 - 45°C normal express charge 46 - 50°C maximum allowable charge time from 0 to 100% RSOC is 3 hours **Standard Charge/ Predominately AC**

Table 17. Battery specifications (continued)

Description	Option one	Option two	Option three	Option four
	time from 0 to 100% RSOC is 4 hours ● 16 - 50°C maximum allowable charge time from 0 to 100% RSOC is 3 hours **Express Charge Boost Charge Method (Fast Charge for Initial 35%):** ● 16 - 45°C target charge time from 0 to 35% RSOC is 20 mins for Accelerated Charge	from 0 to 100% RSOC is 4 hours ● 16 - 50°C maximum allowable charge time from 0 to 100% RSOC is 3 hours **Express Charge Boost Charge Method (Fast Charge for Initial 35%):** ● 16 - 45°C target charge time from 0 to 35% RSOC is 20 mins for Accelerated Charge	**User Charge Method:** ● 0 - 15°C maximum allowable charge time from 0 to 100% RSOC is 4 hours ● 16 - 50°C maximum allowable charge time from 0 to 100% RSOC is 3 hours	**User Charge Method:** ● 0 - 15°C maximum allowable charge time from 0 to 100% RSOC is 4 hours ● 16 - 50°C maximum allowable charge time from 0 to 100% RSOC is 3 hours
RTC coin-cell battery	Supported Battery life of rechargeable coin cell is 60 days	Supported Battery life of rechargeable coin cell is 60 days	Supported Battery life of rechargeable coin cell is 60 days	Supported Battery life of rechargeable coin cell is 60 days

⚠ **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 Latitude 7450.

Table 18. Display specifications

Description		Option one	Option two	Option three	Option four	Option five
Display type		Full High Definition Plus (FHD+), Standard Power	Full High Definition Plus (FHD+)	Full High Definition Plus (FHD+) ultralight, Super Low Power (SLP), Low Blue Light	Quad High Definition Plus (QHD+), Super Low Power (SLP), Low Blue Light	Full High Definition Plus (FHD+) 2-in-1
Display-panel technology		Wide Viewing Angle (WVA)	Wide Viewing Angle (WVA)	Wide Viewing Angle (WVA)	Wide Viewing Angle (WVA)	Wide-viewing angle (WVA)
Display-panel dimensions (active area):						
	Height	301.59 mm (11.87 in.)	301.59 mm (11.87 in.)	301.59 mm (11.87 in.)	301.59 mm (11.87 in.)	301.59 mm (11.87 in.)
	Width	188.50 mm (7.42 in.)	188.50 mm (7.42 in.)	188.50 mm (7.42 in.)	188.50 mm (7.42 in.)	188.50 mm (7.42 in.)

Table 18. Display specifications (continued)

Description		Option one	Option two	Option three	Option four	Option five
	Diagonal	355.65 mm (14.00 in.)	355.65 mm (14.00 in.)	355.65 mm (14.00 in.)	355.65 mm (14.00 in.)	355.65 mm (14.00 in.)
Display-panel native resolution		1920 x 1200	1920 x 1200	1920 x 1200	2560 x1600	1920 x 1200
Luminance (typical)		250 nit	300 nit	400 nit	400 nit	300 nit
Megapixels		2.30	2.30	2.30	4.096	2.30
Color gamut		45% NTSC	72% NTSC	100% sRGB	100% sRGB	100% sRGB
Pixels Per Inch (PPI)		162 ppi	162 ppi	162 ppi	216 ppi	161 ppi
Contrast ratio (typ)		800:1	800:1	1200:1	1200:1	1200:1
Response time (max)		35 ms	35 ms	35 ms	35 ms	35 ms
Refresh rate		60 Hz	60 Hz	60 Hz	60 Hz	60 Hz
Horizontal view angle		● 85 degrees (typical) ● 80 degrees (min)	● 85 degrees (typical) ● 80 degrees (min)	● 85 degrees (typical) ● 80 degrees (min)	● 85 degrees (typical) ● 80 degrees (min)	+/- 88 degrees (min)
Vertical view angle		● 85 degrees (typical) ● 80 degrees (min)	● 85 degrees (typical) ● 80 degrees (min)	● 85 degrees (typical) ● 80 degrees (min)	● 85 degrees (typical) ● 80 degrees (min)	+/- 88 degrees (min)
Pixel pitch		0.157 mm	0.157 mm	0.157 mm	0.1178 mm	0.157 mm
Power consumption (maximum)		3.20 W	4.40 W	2.75 W	3.75 W	2.90 W
Anti-glare vs glossy finish		Anti-glare	Anti-glare	Anti-glare	Anti-glare	Anti-reflection and anti-smudge
Touch options		No	Yes	No	Yes	Yes
Color		16.2 M	16.2 M	16.7 M	16.7 M	16.2 M
Panel Type		6 bit+FRC	6 bit+FRC	True 8 bit	True 8 bit	6 bit+FRC

Fingerprint reader (optional)

The following table lists the fingerprint-reader specifications of your Latitude 7450.

ⓘ **NOTE:** The fingerprint reader is located on the power button.

Table 19. Fingerprint reader specifications

Description	Option One	Option two
Fingerprint-reader sensor technology	Capacitive	Capacitive
Fingerprint-reader sensor resolution	500 dpi	508 dpi

Table 19. Fingerprint reader specifications (continued)

Description	Option One	Option two
Fingerprint-reader sensor pixel size	- X: 108 - Y: 88	- X: 96 - Y: 96

Sensor

The following table lists the sensor of your Latitude 7450.

Table 20. Sensor

Sensor support
Accelerometer (ST Micro **LIS2DW12TR**): On the base (system board) for both laptop and 2-in-1 computer
Accelerometer + Gyro (ST Micro **LSM6DSOUSTR**): On the hinge-up sensor board for 2-in-1 computer
Accelerometer (ST Micro **LIS2DW12TR**): On the hinge-up mid-board in upsell configuration of laptop MIPI RGB+IR camera
Ambient Light Sensor
E-compass (ST Micro LIS2MDLTR), only for 2-in-1 system
Proximity for a SAR compliance (for the WWAN module) Near Field Proximity Sensor
Hall Effect Sensor

GPU—Integrated

The following table lists the specifications of the integrated Graphics Processing Unit (GPU) supported by your Latitude 7450.

Table 21. GPU—Integrated

Controller	Memory size	Processor
Intel Arc Graphics	Shared system memory	For Intel Core H processors and requires 128-bit (dual-channel) memory with minimum of 16 GB memory)
Intel Graphics	Shared system memory	Intel Core Ultra 5/7

Multiple display support matrix

The following table lists the multiple display support matrix for your Latitude 7450.

Table 22. Multiple display support matrix

Graphics Card	Direct Graphics Controller Direct Output Mode	Supported external displays with computer internal display on	Supported external displays with computer internal display off
Intel Arc Graphics	Not applicable	3	4
Intel Graphics	Not applicable	3	4

Hardware security

The following table lists the hardware security of your Latitude 7450.

Table 23. Hardware security

Hardware security
Trusted Platform Module (TPM) 2.0 discrete
FIPS 140-2 certification for TPM
Trusted Computing Group (TCG) Certification for TPM
Contacted smart card and Control vault 3 +
Contactless smart card, NFC, and Control vault 3 +
SED SSD NVMe, SSD, and HDD (Opal and non-Opal) per SDL
Fingerprint reader in the power button tied to Control vault 3 +
One wedge-shaped lock slot
SED (Opal 2.0 only - PCIe Interface)
Windows Hello - Fingerprint Reader (optional)
Mechanical privacy shutter for camera (only for metal laptops)
Control vault 3 + Advanced Authentication with FIPS 140-2 Level 3 Certification

Smart-card reader

Contactless smart-card reader

This section lists the contactless smart-card reader specifications of your Latitude 7450. This module is only available in computers shipped with Smart-card readers.

Table 24. Contactless smart-card reader specifications

Title	Description	Dell ControlVault 3 contactless smart-card reader with NFC
Felica Card Support	Reader and software capable of supporting Felica contactless cards	Yes
ISO 14443 Type A Card Support	Reader and software capable of supporting ISO 14443 Type A contactless cards	Yes
ISO 14443 Type B Card Support	Reader and software capable of supporting ISO 14443 Type B contactless cards	Yes
ISO/IEC 21481	Reader and software capable of supporting ISO/IEC 21481 compliant contactless cards and tokens	Yes
ISO/IEC 18092	Reader and software capable of supporting ISO/IEC 21481 compliant contactless cards and tokens	Yes
ISO 15693 Card Support	Reader and software capable of supporting ISO15693 contactless cards	Yes

Table 24. Contactless smart-card reader specifications (continued)

Title	Description	Dell ControlVault 3 contactless smart-card reader with NFC
NFC Tag Support	Supports reading and processing of NFC-compliant tag information	Yes
NFC Reader Mode	Support for NFC Forum Defined Reader mode	Yes
NFC Writer Mode	Support for NFC Forum Defined Writer mode	Yes
NFC Peer-to-Peer Mode	Support for NFC Forum Defined Peer to Peer mode	Yes
EMVCo Compliant	Compliant with EMVCO smart card standards as posted to www.emvco.com	Yes
EMVCo Certified	Formally certified based on EMVCO smart card standards	Yes
NFC Proximity operating system Interface	Enumerates NFP (Near Field Proximity) device for OS to use	Yes
PC/SC operating system interface	Personal Computer/Smart Card specification for integration of hardware readers into personal computer environments	Yes
CCID driver compliance	Common driver support for Integrated Circuit Card Interface Device for OS level drivers	Yes
Windows Certified	Device certified by Microsoft WHCK	Yes
Dell ControlVault support	Device connects to Dell ControlVault for usage and processing	Yes
FIDO2 compliance	Dell ControlVault 3 Smart-card reader is compliant with the FIDO SPEC	No

(i) **NOTE:** 125 Khz proximity cards are not supported.

Table 25. Supported cards

Manufacturer	Card
HID	jCOP readertest3 A card (14443a)
	1430 1L
	DESFire D8H
	iClass (Legacy)
	iClass SEOS
NXP/Mifare	Mifare DESFire 8 K White PVC Cards
	Mifare Classic 1 K White PVC Cards
	NXP Mifare Classic S50 ISO Card
G&D	idOnDemand - SCE3.2 144 K
	SCE6.0 FIPS 80 K Dual+ 1 K Mifare
	SCE6.0 non-FIPS 80 K Dual+ 1 K Mifare
	SCE6.0 FIPS 144 K Dual + 1 K Mifare

Table 25. Supported cards (continued)

Manufacturer	Card
	SCE6.0 non-FIPS 144K Dual + 1 K Mifare
	SCE7.0 FIPS 144 K
Oberthur	idOnDemand - OCS5.2 80 K
	ID-One Cosmo 64 RSA D V5.4 T = 0 card

Contacted smart-card reader

The following table lists the contacted smart-card reader specifications of your Latitude 7450.

Table 26. Contacted smart-card reader specifications

Title	Description	Dell ControlVault 3 smart-card reader
ISO 7816 -3 Class A Card Support	Reader capable of reading 5V powered smart mcard	Yes
ISO 7816 -3 Class B Card Support	Reader capable of reading 3V powered smart card	Yes
ISO 7816 -3 Class C Card support	Reader capable of reading 1.8V powered smart card	Yes
ISO 7816-1 Compliant	Specification for the reader	Yes
ISO 7816 -2 Compliant	Specification for smart card device physical characteristics (size, location of connection points, so forth.)	N/A
T=0 support	Cards support character level transmission	Yes
T=1 support	Cards support block level transmission	Yes
EMVCo Compliant	Compliant with EMVCo (for electronic payment standards) smart card standards as posted to www.emvco.com	Yes
EMVCo Certified	Formally certified based on EMVCO smart card standards	Yes
PC/SC OS interface	Personal Computer/Smart Card specification for integration of hardware readers into personal computer environments	Yes
CCID driver compliance	Common driver support for Integrated Circuit Card Interface Device for OS level drivers.	Yes
Windows Certified	Device certified by WHCK	Yes
FIPS 201 (PIV/HSPD-12) Compliant using GSA	Device compliant with FIPS 201/PIV/ HSPD-12 requirements	Yes
FIDO2 compliance	Dell ControlVault 3 Smart-card reader is compliant with the FIDO SPEC.	No

Operating and storage environment

This table lists the operating and storage specifications of your Latitude 7450.

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

Table 27. 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 (49.86 ft to 10000 ft)	-15.2 m to 10668 m (49.86 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 the user environment.

† Measured using a 2 ms half-sine pulse.

Engineering specifications

Wireless module

Intel BE200, 2x2 MIMO, 320MHz, 5760 Mbps, 2.4/5/6 GHz, Wi-Fi 7 (WiFi 802.11 a/b/g/n/ac/ax/be), Bluetooth wireless card

The following table lists the Intel BE200 specifications.

ⓘ **NOTE:** Wi-Fi 6 is supported in regions where Wi-Fi 6E is unavailable.

Table 28. Intel BE200 specifications

Intel BE200 specifications	Values
Host interface	PCIe for Wi-Fi; USB/I2S for Bluetooth
Network standard	IEEE 802.11a/b/g/n/ac/ax/be, 320MHz channel use, MU-MIMO, new 6 GHz band
Wi-Fi Alliance certifications	Wi-Fi 7 Technology support, Wi-Fi CERTIFIED 6 with Wi-Fi 6E, Wi-Fi CERTIFIED a/b/g/n/ac, WMM, WMM-Power Save, WPA3, PMF, Wi-Fi Direct, Wi-Fi Agile Multiband, Wi-Fi Location R2 HW readiness ⓘ **NOTE:** Other names and brands may be claimed as the property of others.
Operating frequency bands	2.4 GHz 5 GHz 6 GHz
Data rate	2.4 GHz 40M: Up to 688 Mbps 5/6 GHz 80M: Up to 1.44 Gbps 5/6 GHz 160M: Up to 2.88 Gbps 5/6 GHz 320M: Up to 5.76 Gbps
Power consumption	Optimized power modes (sleep states) reduce power consumption during periods of inactivity.
Security methods	- WPA2 Transition mode - WPA3 Personal and Enterprise
Authentication protocols	802.1X EAP-TLS - EAP-TTLS/MSCHAPv2 - PEAPv0 -MSCHAPv2 (EAP-SIM, EAP-AKA, EAP-AKA)
Encryption	128-bit AES-CCMP 256-bit AES-GCMP
Product safety	- UL - C-UL - CB (IEC60950-1)
Management capabilities alerting	Support for Intel AMT

Table 28. Intel BE200 specifications (continued)

Intel BE200 specifications	Values
Government compliance	FIPS 140-3
Client utility	Intel PRO/Set wireless software v23 and later.
Antenna diversity	Supported
Radio On/Off	Supported
Roaming	Support seamless roaming between access points.
Wake on wireless	Supported
Wireless display	Native Miracast support by Windows
Wireless PAN standard	● Dual-Mode Bluetooth wireless card 5.4 ● BLE
Bluetooth data rates	Up to 3 Mbps
Bluetooth operating frequency bands	2.4 GHz
Bluetooth profiles supported	Support for Microsoft Inbox Bluetooth profiles in Windows.
Bluetooth data encryption	128-bit encryption
Bluetooth output power	Power Class 1
Operating temperature	0°C to + 80°C (Adapter shield)
Storage temperature	-40°C to +70°C
Humidity	50% to 90% RH non-condensing (at temperatures of 25°C to 35°C)

WWAN module

Qualcomm Snapdragon SDX12 Global LTE-Advanced (DW5825e)

The following table lists specifications of the Qualcomm Snapdragon SDX12 Global LTE-Advanced (DW5825e) WWAN module.

Table 29. Qualcomm Snapdragon SDX12 Global LTE-Advanced (DW5825e) specifications

Description	Value
Form factor	M.2 3042 Key-B
Host interface	USB 3.0/2.0
Network standard	● LTE FDD/TDD ● WCDMA/HSPA+ ● GPS/GLONASS/Beidou/Galileo
Transfer rate	● Up to 600 Mbps DL (CAT6) ● Up to 150 Mbps UL
Operating frequency bands	● LTE (B1, B2, B3, B4, B5, B7, B8, B12, B13, B14, B17, B18, B19, B20, B25, B26, B28, B29, B30, B32, B38, B39, B40, B41, B42, B43, B48, B66, B71) ● HSPA+ (1,2,4,5,6,8,19)
Power supply	DC 3.135 V to 4.4 V, Typical 3.3 V
SIM card	Supported through external SIM-card slot
eSIM with Dual SIM (DSSA)	Supported

Table 29. Qualcomm Snapdragon SDX12 Global LTE-Advanced (DW5825e) specifications (continued)

Description	Value
	ⓘ **NOTE:** The availability of eSIM functionality embedded on the module is dependent on the region and specific carrier requirements.
Antenna diversity	Supported
Radio On/Off	Supported
Wake on wireless	Supported
Normal operating temperature	-10°C to +55°C
Extended operating temperature	-30°C to +75°C
Antenna connector	• WWAN Main Antenna x 1 • WWAN Diversity Antenna x 1

Qualcomm Snapdragon X62 Global 5G Modem (DW5932e)

The following table lists specifications of the Qualcomm Snapdragon X62 Global 5G Modem (DW5932e) WWAN module.

Table 30. Qualcomm Snapdragon X62 Global 5G Modem (DW5932e) specifications

Description	Value
Form factor	M.2 3042 Key-B
Host interface	PCIe Gen3
Network standard	• NR FR1 (Sub6) FDD/TDD • LTE FDD/TDD • WCDMA/HSPA+ • GPS/GLONASS/Beidou/Galileo
Transfer rate	• 5G NR: DL 3.5 Gbps/UL 900 Mbps • LTE: DL 1.6 Gbps (CAT19)/UL 211 Mbps (CAT18) • UMTS: DL DC-HSPA+ Rel8:42 Mbps/UL 5.76 Mbps
Operating frequency bands	• NR (n1, n2, n3, n5, n7, n8, n12, n13, n14, 18, n20, n25, n26, n28, n30, n38, n40, n41, n48, n53, n66, n70, n71, n75, n76, n77, n78, n79) • LTE (B1, B2, B3, B4, B5, B7, B8, B12, B13, B14, B17, B18, B19, B20, B25, B26, B28, B29, B30, B32, B34, B38, B39, B40, B41, B42, B43, B46, B48, B66, B71) • WCDMA/HSPA+ (1, 2, 4, 5, 8)
Power supply	DC 3.135 V to 3.63 V, Typical 3.3 V
SIM card	Supported through external SIM-card slot
eSIM with Dual SIM (DSSA)	Supported ⓘ **NOTE:** The availability of eSIM functionality embedded on the module is dependent on the region and specific carrier requirements.
Antenna diversity	Supported
Radio On/Off	Supported
Wake on wireless	Supported
Normal operating temperature	-30°C to +70°C
Extended operating temperature	-40°C to +85°C

Description	Value
Storage temperature	-40°C to +85°C
Antenna connector	● WWAN Main Antenna x 1 ● WWAN Diversity Antenna x 1 ● 4x4 MIMO Antenna x 2

GPU—Integrated

Graphics

Table 31. Intel Arc Graphics specifications

Intel Arc Graphics specifications	Values
Bus type	Integrated graphics ⓘ **NOTE:** Intel Arc Graphics uses the computers memory as video memory.
Memory type	Shared system memory
Graphics level	i5/i7
Memory interface	64 Gbps, Unified Memory Architecture
Estimated maximum power consumption (TDP)	28 W (H-series) included in the CPU power
Overlay planes	Yes
Operating systems graphics/ video API support	DirectX 12 Ultimate, OpenGL 4.6
Maximum color depth	10 bits
Maximum vertical refresh rate	Up to 120 Hz ⓘ **NOTE:** The refresh rate depends on the resolution.
External ports	HDMI 2.1 port, DisplayPort 2.1 over USB Type-C
Multiple display support	Up to four displays including laptop display.

Table 32. Intel Graphics specifications

Intel Graphics specifications	Values
Bus type	Integrated graphics ⓘ **NOTE:** Intel Arc Graphics uses the computers memory as video memory.
Memory type	Shared system memory
Graphics level	i5/i7
Memory interface	64 Gbps, Unified Memory Architecture
Estimated maximum power consumption (TDP)	15 W (U-series)/28 W (H-series), included in the CPU power
Overlay planes	Yes
Operating systems graphics/ video API support	DirectX 12 Ultimate, OpenGL 4.6
Maximum color depth	10 bits
Maximum vertical refresh rate	Up to 120 Hz ⓘ **NOTE:** The refresh rate depends on the resolution.

Table 32. Intel Graphics specifications (continued)

Intel Graphics specifications	Values
External ports	HDMI 2.1 port, DisplayPort 2.1 over USB Type-C
Multiple display support	Up to four displays including laptop display.

Video port and resolution matrix

The following table lists the Video port and resolution matrix of your Latitude 7450.

Table 33. Video port and resolution matrix

Port type	USB Type-C Thunderbolt 4 with DisplayPort 1.4	HDMI-OUT port-HDMI 2.0
Maximum resolution —single display	7680 x 4320 @ 60 Hz	4096 x 2160 @ 60 Hz
Maximum resolution —dual MST	4096 x 2304 @ 60 Hz, 4096 x 2304 @ 60 Hz	Not applicable
Maximum resolution —triple MST	4096 x 2304 @ 60 Hz, 4096 x 2304 @ 60 Hz, 4096 x 2304 @ 60 Hz	Not applicable

Storage

M.2 2230, 256 GB, TLC PCIe NVMe Gen 4, Class 35 SSD

The following table lists the M.2 2230, 256 GB SSD specifications.

Table 34. 256 GB SSD specifications

Description	Values
Capacity	256 GB
Height (approximate)	3.50 mm (0.13 in.)
Width (approximate)	22 mm (0.87 in.)
Depth (approximate)	30 mm (1.18 in.)
Interface type	PCIe Gen 4
Speed (maximum)	64 Gb/s (up to 4 lanes)
MTTF	1.4M hours
Logical blocks	500,118,192
Power source	
Power consumption (reference only)	● Idle: 5 mW (PS4) ● Active: 4W
Environmental operating conditions (non-condensing)	
Temperature range	0°C to 70°C
Relative humidity range	10% to 90%
Op shock	1500G
Environmental non-operating conditions (non-condensing)	
Temperature range	-40°C to 70°C

Table 34. 256 GB SSD specifications (continued)

Description	Values
Relative humidity range	5% to 95%

M.2 2230, 512 GB, TLC PCIe NVMe Gen 4, Class 35 SSD

The following table lists the M.2 2230, 512 GB SSD specifications.

Table 35. 512 GB SSD specifications

Description	Values
Capacity	512 GB
Height (approximate)	3.50 mm (0.13 in.)
Width (approximate)	22 mm (0.87 in.)
Depth (approximate)	30 mm (1.18 in.)
Interface type	PCIe Gen 4
Speed (maximum)	64 Gb/s (up to 4 lanes)
MTTF	1.4M hours
Logical blocks	1,000,215,216
Power source	
Power consumption (reference only)	● Idle: 5 mW (PS4) ● Active: 4W
Environmental operating conditions (non-condensing)	
Temperature range	0°C to 70°C
Relative humidity range	10% to 90%
Op shock	1500G
Environmental non-operating conditions (non-condensing)	
Temperature range	-40°C to 70°C
Relative humidity range	5% to 95%

M.2 2230, 1 TB, TLC PCIe NVMe Gen 4, Class 35 SSD

The following table lists the M.2 2230, 1 TB SSD specifications.

Table 36. 1 TB SSD specifications

Description	Values
Capacity	1 TB
Height (approximate)	3.50 mm (0.13 in.)
Width (approximate)	22 mm (0.87 in.)
Depth (approximate)	30 mm (1.18 in.)
Interface type	PCIe Gen 4
Speed (maximum)	64 Gb/s (up to 4 lanes)
MTBF	1.4M hours

Table 36. 1 TB SSD specifications (continued)

Description	Values
Logical blocks	2,000,409,264
Power source	
Power consumption (reference only)	• Idle: 5 mW (PS4) • Active: 4W
Environmental operating conditions (non-condensing)	
Temperature range	0°C to 70°C
Relative humidity range	10% to 90%
Op shock	1500G
Environmental non-operating conditions (non-condensing)	
Temperature range	-40°C to 70°C
Relative humidity range	5% to 95%

M.2 2230, 2 TB, PCIe NVMe Gen 4 x4, Class 25 SSD

The following table lists the M.2 2230, 2 TB SSD specifications.

Table 37. 2 TB SSD specifications

Description	Values
Capacity	2 TB
Height (approximate)	2.38 mm (0.09 in.)
Width (approximate)	22 mm (0.87 in.)
Depth (approximate)	30 mm (1.18 in.)
Interface type	PCIe Gen 4
Speed (maximum)	64 Gb/s (up to four lanes)
MTBF	1.4M hours
Logical blocks	4,000,797,360
Power source	
Power consumption (reference only)	• Idle: 5 mW (PS4) • Active: 4W
Environmental operating conditions (non-condensing)	
Temperature range	0°C to 70°C
Relative humidity range	10% to 90%
Op shock	1500G
Environmental nonoperating conditions (non-condensing)	
Temperature range	-40°C to 70°C
Relative humidity range	5% to 95%

M.2 2230, 512 GB, PCIe NVMe Gen 4 x4, Opal Self-Encrypting, Class 35 SSD

The following table lists the M.2 2230, 512 GB SSD specifications.

Table 38. 512 GB SSD, self-encrypting drive specifications

Description	Values
Capacity	512 GB
Height (approximate)	2.38 mm (0.09 in.)
Width (approximate)	22 mm (0.87 in.)
Depth (approximate)	30 mm (1.18 in.)
Interface type	PCIe Gen 4
Speed (maximum)	64 Gb/s (up to 4 lanes)
MTBF	1.4M hours
Logical blocks	500,118,192
Power source	
Power consumption (reference only)	● Idle: 5 mW (PS4) ● Active: 4W
Environmental operating conditions (non-condensing)	
Temperature range	0°C to 70°C
Relative humidity range	10% to 90%
Op shock	1500G
Environmental non-operating conditions (non-condensing)	
Temperature range	-40°C to 70°C
Relative humidity range	5% to 95%

Power adapter

The following table lists the power adapter specifications of your Latitude 7450.

Table 39. Power adapter specifications

Description		Option one	Option two	Option three
Type		60W AC adapter, USB Type-C	65W AC adapter, USB Type-C	100W AC adapter, USB Type-C
Power-adapter dimensions:				
	Height	22.00 mm (0.86 in.)	28.00 mm (1.10 in.)	26.50 mm (1.04 in.)
	Width	66.00 mm (2.59 in.)	51.00 mm (2.01 in.)	60.00 mm (2.36 in.)
	Depth	55.00 mm (2.16 in.)	112.00 mm (4.41 in.)	122.00 mm (4.80 in.)
Weight		0.10 kg (0.23 lbs)	0.20 kg (0.44 lbs)	0.33 kg (0.73 lbs)
Input voltage		100 VAC – 240 VAC	100 VAC – 240 VAC	100 VAC – 240 VAC
Input frequency		50 Hz – 60 Hz	50 Hz – 60 Hz	50 Hz – 60 Hz
Input current (maximum)		1.70 A	1.70 A	1.70 A

Table 39. Power adapter specifications (continued)

Description		Option one	Option two	Option three
Output current (continuous)		• 5 V/3 A • 9 V/3 A • 15 V/3 A • 20 V/3 A	• 5 V/3 A • 9 V/3 A • 15 V/3 A • 20 V/3.25 A	• 5 V/3 A • 9 V/3 A • 15 V/3 A • 20 V/5 A
Rated output voltage		• 5 VDC • 9 VDC • 15 VDC • 20 VDC	• 5 VDC • 9 VDC • 15 VDC • 20 VDC	• 5 VDC • 9 VDC • 15 VDC • 20 VDC
Temperature range:				
	Operating	0°C to 40°C (32°F to 104°F)	0°C to 40°C (32°F to 104°F)	0°C to 40°C (32°F to 104°F)
	Storage	-20°C to 70°C (-4°F to 158°F)	-40°C to 70°C (-40°F to 158°F)	-40°C to 70°C (-40°F to 158°F)

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

Accessories

The following table lists the supported accessories on your Latitude 7450.

Table 40. Accessories

Accessories
Audio: Dell Premier Wireless ANC Headset
Adapters: • Dell 7-in-1 USB-C Multiport Adapter • Dell Mobile Adapter Speakerphone
Carrying case: • Dell EcoLoop Pro Backpack • Dell EcoLoop Pro Sleeve 11-14 • Dell EcoLoop Pro Sleeve 15-16 • Dell Premier Briefcase 15 • Dell Premier Slim Backpack 15
Dock: Dell Thunderbolt 4 Dock
Mouse: Dell Premier Rechargeable Wireless Mouse
Keyboard: Dell Premier Multi-Device Wireless Keyboard and Mouse
Stylus: Dell Premier Rechargeable Active Pen

Table 40. Accessories (continued)

Accessories
Monitor: ● Dell Collaboration 27 USB-C Hub Monitor ● Dell UltraSharp 27 4K USB-C Monitor
Webcam: Dell UltraSharp Webcam
Power bank: Dell Notebook Power Bank Plus û USB C, 65 Wh

Security

Software security

The following table lists the software security details of your Latitude 7450.

Table 41. Software security

Security options
Dell Client Command Suite: On-prem
Dell Client Command Suite: Cloud
Dell Optimizer
Dell SupportAssist for PCs
Dell SupportAssist OS Recovery (Excalibur)
Dell SafeBIOS - Off Host Verification
Dell SafeBIOS - Indicators of Attack
Dell SafeID
VMware Carbon Black Endpoint Standard
VMware Carbon Black Endpoint Advanced
VMware Carbon Black Endpoint Enterprise
Absolute Visibility
Absolute Control
Absolute Resilience
Dell Encryption Personal
Dell Encryption Enterprise
Netskope Cloud Access Security Broker (CASB)
Netskope Secure Web Gateway
Netskope Private Access

Dell Control Vault 3 +

The following table lists the Dell ControlVault 3.0 specifications of your Latitude 7450.

Table 42. Dell Control Vault 3 + specifications

Title	Description	Dell Control Vault 3 +
CPU technology	N/A	1 GHz ARM Cortex A7
RAM	N/A	1 MB
ROM	N/A	16 MB
TPM included	TPM enumeration included within Control vault +	No
Host Interface	N/A	USB 2.0
Fingerprint procession on chip	Fingerprint processing occurs within secure boundary of Control vault +	Yes
Windows WBF support	Support for Windows biometric framework when Fingerprint reader is attached	Yes
FIPS 140-2 level 3 complaint	Device complaint with FIPS 140-2 level 3 requirements	Yes
FIPS 140-2 level 3 certified	Device certified with FIPS 140-2 level 3 requirements	Yes

Trusted Platform Module

The following table lists the Trusted Platform Module (TPM) of your Latitude 7450.

Table 43. Trusted Platform Module (TPM)

TPM: ST/ST33 HTPH2X32AHE4
Trusted Platform Module (TPM) 2.0 discrete
FIPS 140-2 certification for TPM
Trusted Computing Group (TCG) certification for TPM

System management features

Dell commercial systems come with a number of systems management options that are include by default for In-Band management with our Dell Client Command Suite. In-Band management meaning that the Operating System is functional and the device is connected to a network so that it can be managed. The Dell Client Command Suite of tools can be leveraged individually or with a systems management console like SCCM, LANDESK, KACE, etc.

We also offer Out-of-Band management as an option. Out-of-band management is when the system does not have a functional operating system or is turned off and you still want to be able to manage the system in that state.

Dell Client Command Suite for in-band systems management

Dell Client Command Suite is a free toolkit available for download, for all Latitude Rugged tablets at dell.com/support, that automates and streamlines systems management tasks, saving time, money, and resources. It consists of the following modules that can be used independently, or with a variety of systems management consoles such as SCCM.

Dell Client Command Suite's integration with VMware Workspace ONE Powered by AirWatch, now allows customers to manage their Dell client hardware from the cloud, using a single Workspace ONE console.

Dell Command | Deploy enables easy operating system (OS) deployment across all major OS deployment methodologies and provides numerous system-specific drivers that have been extracted and reduced to an OS-consumable state.

Dell Command I Configure is a graphical user interface (GUI) admin tool for configuring and deploying hardware settings in a pre-OS or post-OS environment, and it operates seamlessly with SCCM and Airwatch and can be self-integrated into LANDesk and KACE. Simply, this is all about the BIOS. Command I Configure allows you to remotely automate and configure over 150+ BIOS settings for a personalized user experience.

Dell Command I PowerShell Provider can do the same things as Command I Configure, but with a different method. PowerShell is a scripting language that allows customers to create a customized and dynamic configuration process.

Dell Command I Monitor is a Windows Management Instrumentation (WMI) agent that provides IT admins with an extensive inventory of the hardware and health-state data. Admins can also configure hardware remotely by using command line and scripting.

Dell Command | Update (end-user tool) is factory-installed and allows admins to individually manage and automatically present and install Dell updates to the BIOS, drivers, and software. Command I Update eliminates the time-consuming hunting and pecking process of update installation.

Dell Command I Update Catalog provides searchable metadata that allows the management console to retrieve the latest system-specific updates (driver, firmware or BIOS). The updates are then delivered seamlessly to end-users using the customer's systems management infrastructure that is consuming the catalog (like SCCM).

Dell Command | vPro Out of Band console extends hardware management to systems that are offline or have an un-reachable OS (Dell exclusive features).

Dell Command | Integration Suite for System Center - This suite integrates all the key components of the Client Command Suite into Microsoft System Center Configuration Manager 2012 and Current Branch versions.

Out-of-band systems management

Intel Standard Manageability option **must be configured in our factory at the time of purchase, as it is NOT field upgradable.** It offers out-of-band management and DASH compliance (https://registry.dmtf.org/registry/results/field_initiative_name%3A%22DASH%201.0%22).

ComfortView Plus

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

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

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

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

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

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

Dell Optimizer

This section details the Dell Optimizer specifications of your Latitude 7450.

Dell Optimizer is a software application that intelligently optimizes the performance of your computer by using artificial intelligence and machine learning. Dell Optimizer dynamically configures your computer settings to optimize the performance of your applications. It improves the productivity, performance, and user experience through computer usage analysis and learning.

On Latitude 7450 with Dell Optimizer, the following features are supported:
● Improves user experience through computer usage analysis and learning
● Faster application launch and seamless application transition
● Intelligent battery run-time extension
● Optimized Audio for best meeting experience
● Locks computer when walks away for enhanced security
● Faster computer wake-on-user approach
● Intelligently shows alerts
● Updates automatically to minimize disruption

For more information about configuring and using these features, search for the Dell Optimizer User Guide at www.dell.com/support.

Color, material, and finish

This section details the color, material, and finish (CMF) specifications of your Latitude 7450.
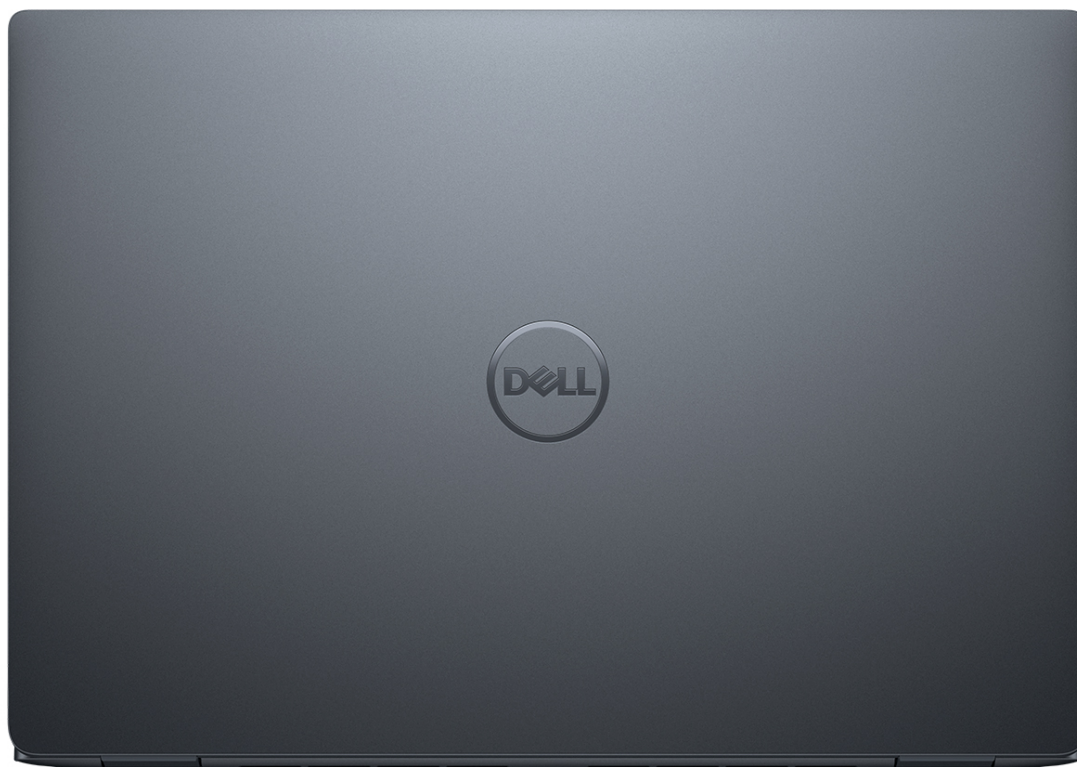
Mainstream
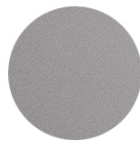
Ano Titan Gray

Table 44. CMF specifications

Mainstream / Anodized Titan Gray	
A cover	- Aluminum + Stamping - Stamping + Bead blasting + Anodizing (<0.5 R hard EDGE) - Ano Titan Gray BB Dull - Bead blasting 11+/-3 GU
B Cover	- Touch: - Single-Shot Plastic (Apollo, Resin) - WB Painted: Basecoat + Velvet Top Coat - Apollo Velvet WPUST

Table 44. CMF specifications (continued)

Mainstream / Anodized Titan Gray	
	○ 5+/-1.5 GU ● Nontouch: ● ○ Single-Shot Plastic (Apollo, Resin) ○ WB Painted: Basecoat + Velvet Top Coat ○ Apollo Velvet WPUST ○ 5+/-1.5 GU
C cover	● AL Stamping with Anodized ● Stamping + Bead blasting + Anodizing + CNC drilled speaker holes + Print I/O Icons (<0.5 R hard EDGE) ● Ano Titan Gray BB Dull ● Bead blasting 11+/-3 GU
D Cover	● Aluminum + Stamping ● Stamping + Bead blasting + Anodizing (<0.5 R hard EDGE) + Print Model Name ● Ano Titan Gray BB Dull ● Bead blasting 11+/-3 GU

Ultralight

River Matte

Table 45. CMF specifications

Lightweight / Painted River	
A cover	- Magnesium - As Molded + WB Painted: Primer (Black) + WPUCOB - River Matte WPUCOB 5+/-1.5 GU
B Cover	- Single-Shot Plastic (Apollo, Resin) - WB Painted: Basecoat + Velvet Top Coat - Apollo Velvet WPUST 5+/-1.5 GU
C cover	- Magnesium + Insert Molding (Dell Standard Black Resin) - WB Painted: Primer (Black) + WPUCOB + CNC Drilled Speaker Holes + Print I/O Icons - River Matte WPUCOB 5+/-1.5 GU
D Cover	- Magnesium + Insert Molding (Dell Standard Black Resin) - WB Painted: Primer (Black) + WPUCOB + Print Model Name with PMS 9C - River Matte WPUCOB 5+/-1.5 GU

Keyboard shortcuts of Latitude 7450

ⓘ **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 that is 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 that is 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 multimedia 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, multimedia functionality can be disabled by pressing **Fn** + **Esc**. Later, multimedia 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–F12) by changing **Function Key Behavior** in BIOS setup program.

Table 46. List of keyboard shortcuts

Keyboard shortcut	Primary behavior
F1	Mute audio
F2	Decrease volume
F3	Increase volume
F4	Mute mic
F5	Click keyboard backlight (optional). ⓘ **NOTE:** Non-backlight keyboards have the F10 function key without the backlight icon and do not support the toggle keyboard backlight function. ⓘ **NOTE:** Toggle to cycle the keyboard backlight status through off, low-backlight, and high-backlight.
F6	Decrease brightness
F7	Increase brightness
F8	Win+P
F9	Null
F10	Print screen
F11	Home
F12	End

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

Table 47. Secondary behavior

Keyboard shortcut	Secondary behavior
Fn + F1	Operating system and application-specific F1 behavior
Fn + F2	Operating system and application-specific F2 behavior

Table 47. Secondary behavior (continued)

Keyboard shortcut	Secondary behavior
Fn + F3	Operating system and application-specific F3 behavior
Fn + F4	Operating system and application-specific F4 behavior
Fn + F5	Operating system and application-specific F5 behavior
Fn + F6	Operating system and application-specific F6 behavior
Fn + F8	Operating system and application-specific F8 behavior
Fn + F9	Operating system and application-specific F9 behavior
Fn + F10	Operating system and application-specific F10 behavior
Fn + F11	Operating system and application-specific F11 behavior
Fn + F12	Operating system and application-specific F12 behavior
Fn + PrtScr	Turn off or on wireless
Fn + B	Pause or Break
Fn + Insert	Sleep
Fn + S	Toggle scroll lock
Fn + H	Toggle between power and battery-status light or hard drive activity light
Fn + R	System request
Fn + Ctrl	Open the application menu
Fn + Esc	Toggle Fn-key lock
Fn + PgUp	Page up
Fn + PgDn	Page down
Fn + Home	Home
Fn + End	End
Copilot	Launch Copilot in Windows ⓘ **NOTE:** If Copilot in Windows is not available on your computer, the Copilot key launches Windows Search. For more information about Copilot in Windows, search in the Knowledge Base Resource at www.dell.com/support.

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 48. Self-help resources

Self-help resources	Resource location
Information about Dell products and services	www.dell.com
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 using 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 about how to find the Service Tag for your computer, see Locate the Service Tag on your computer.
Dell knowledge base articles	1. Go to www.dell.com/support. 2. On the menu bar at the top of the Support page, select **Support** > **Support Library**. 3. In the Search field on the Support Library 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 of the services may vary depending on the country or region, and product.

ⓘ **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.