

Latitude 7450

Owner's Manual

Notes, cautions, and warnings

 **NOTE:** A NOTE indicates important information that helps you make better use of your product.

 **CAUTION:** A CAUTION indicates either potential damage to hardware or loss of data and tells you how to avoid the problem.

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

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Introduction

Welcome - Getting started

The Latitude 7450 field service manual enables the service technicians to accurately and effectively resolve customer inquiries and technical issues regarding this computer. The document informs the field service technicians of the proper steps for replacing hardware and also gives an overview of the system BIOS, features, and safety precautions.

To contact Dell regarding issues with this reference material, write to Educate@dell.com.

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.



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 enabled 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.

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.

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

NOTE: USB4 is backward compatible with USB 3.2, USB 2.0, and Thunderbolt 3.

NOTE: Thunderbolt 4 supports two 4K displays or one 8K display.

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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

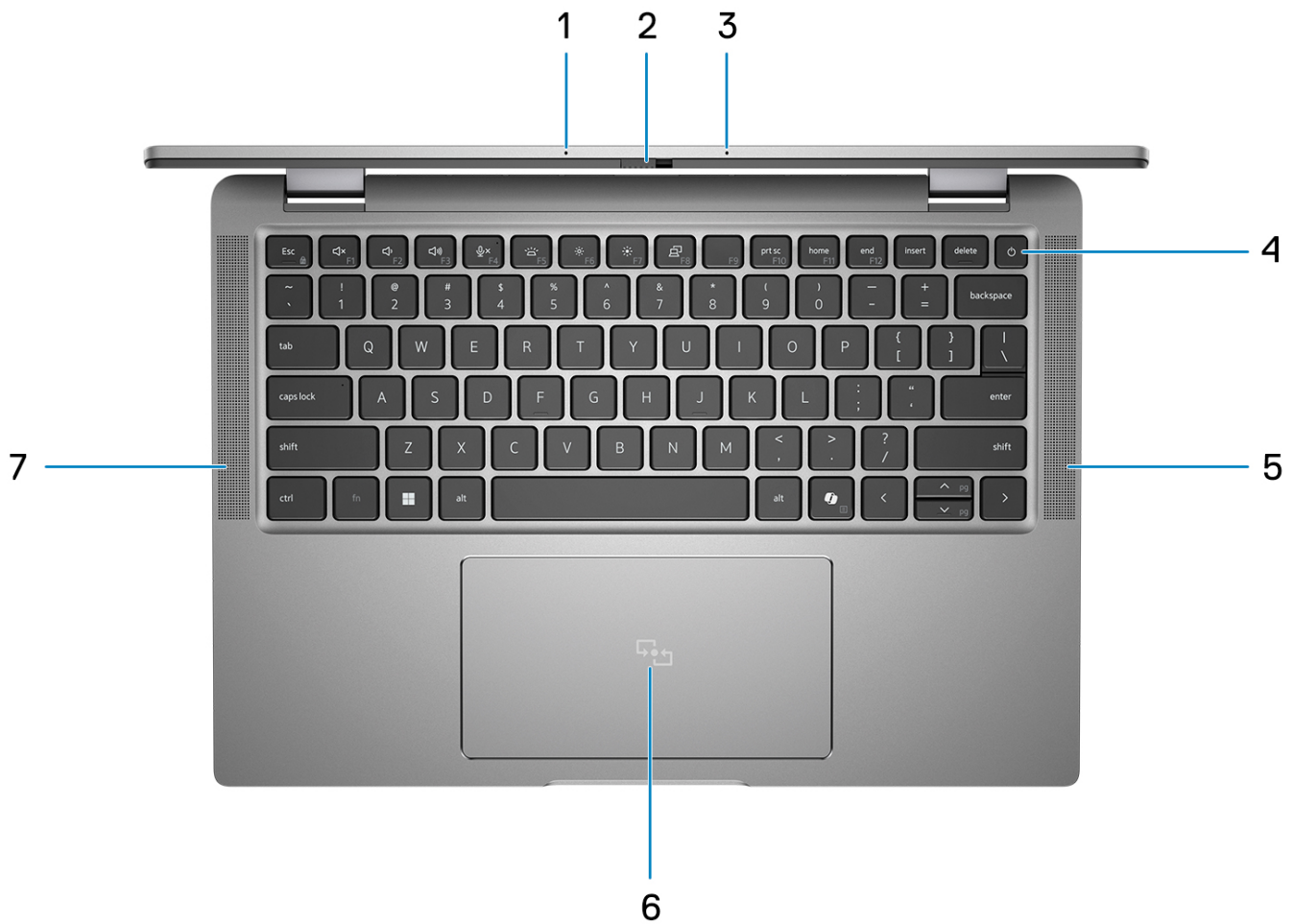


Figure 4. Image: Top view

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.

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.

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

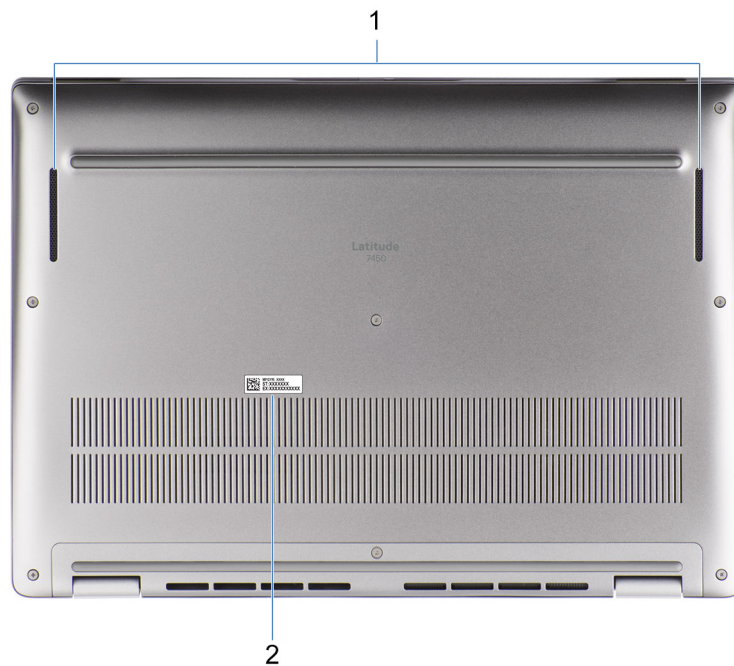


Figure 5. Image: Bottom view

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.

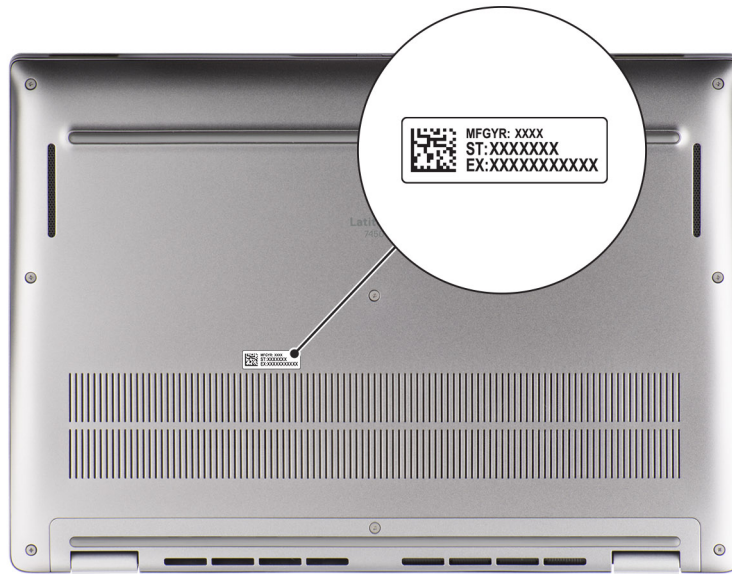


Figure 6. Image: Service Tag location

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



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.

Set up your Latitude 7450

About this task

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

Steps

1. Connect the power adapter and press the power button.

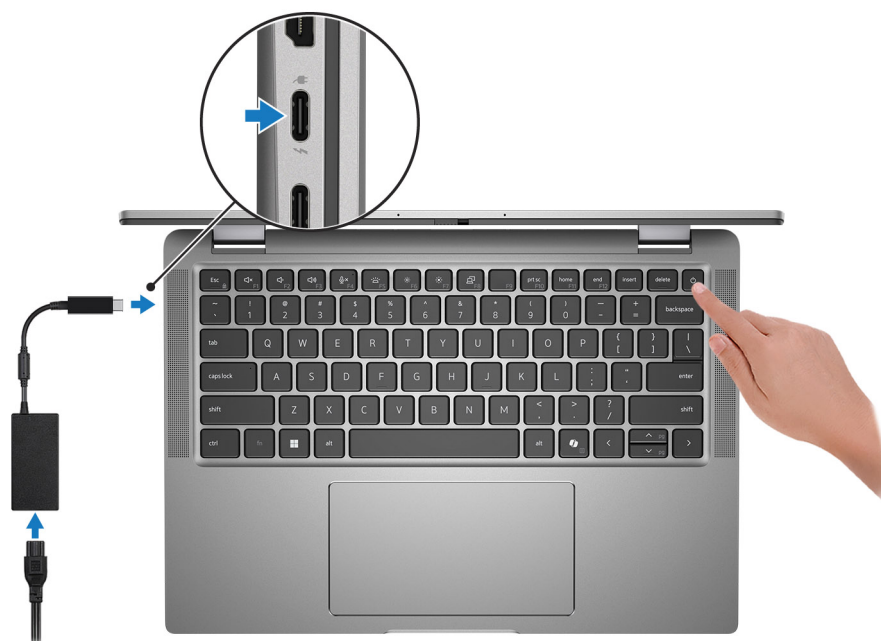


Figure 11. Connect the power adapter and press the power button

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 the operating system setup.

For Ubuntu:

Follow the on-screen instructions to complete the setup. For more information about installing and configuring Ubuntu, search in the Knowledge Base Resource at www.dell.com/support.

For Windows:

Follow the on-screen instructions to complete the setup. When setting up, Dell Technologies 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 2. Locate Dell apps in Windows in S-mode

Resources	Description
	Dell Product Registration Register your computer with Dell.
	Dell Help & Support Access help and support for your computer.
	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 <i>SupportAssist for Home PCs User's Guide</i> at www.dell.com/support/home/product-support/product/dell-supportassist-pcs-tablets/docs . NOTE: In SupportAssist, click the warranty expiry date to renew or upgrade your warranty.

Table 3. Locate Dell apps in Windows

Resources	Description
	Dell Command Update Updates your computer with critical fixes and latest device drivers as they become available. For more information about using Dell Command Update, see the product guides and third-party license documents at www.dell.com/support .
	Dell Digital Delivery Download software applications, which are purchased but not preinstalled on your computer. For more information about using Dell Digital Delivery, search in the Knowledge Base Resource at www.dell.com/support .
	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 <i>SupportAssist for Home PCs User's Guide</i> at www.dell.com/support/home/product-support/product/dell-supportassist-pcs-tablets/docs . NOTE: In SupportAssist, click the warranty expiry date to renew or upgrade your warranty.

Specifications of Latitude 7450

Dimensions and weight

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

Table 4. 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  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 5. 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 5. 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 6. 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 7. Memory specifications

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

Table 7. 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 8. 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-adaptor 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 9. 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 10. 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
	 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 11. 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 11. 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 12. 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 12. 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 13. 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 14. Keyboard specifications

Description	Values
Keyboard type	Battery-saving Mini LED backlit AI hotkey keyboard  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.  NOTE: You can define the primary behavior of the function keys (F1–F12) changing Function Key Behavior in BIOS setup program.
Copilot	Launch Copilot in Windows  NOTE: If Copilot in Windows is not available on your computer, the Copilot key launches Windows Search. For

Table 14. Keyboard specifications (continued)

Description	Values
	more information about Copilot in Windows, search in the Knowledge Base Resource at www.dell.com/support.

Camera

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

Table 15. 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 16. Clickpad specifications

Description	Values
Clickpad resolution:	
Horizontal	>300 dpi
Vertical	
Clickpad dimensions:	
Horizontal	133 mm (5.23 in.)
Vertical	72 mm (2.83 in.)

Table 16. Clickpad specifications (continued)

Description	Values
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 17. 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 .
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	

Table 17. Clickpad specifications (continued)

Description	Values
	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 .
 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 .
 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 18. 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 19. 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 19. 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 20. 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 20. 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 x 1600	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 21. Fingerprint reader specifications

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

Table 21. 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 22. 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 23. 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 24. 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 25. 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 26. 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