


Latitude 9450 2-in-1

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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Views of Latitude 9450 2-in-1

Right



Figure 1. Right view

1. Universal audio port

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

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 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.

3. Wedge-shaped lock slot

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


Left





Figure 2. Left view


1. 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 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.


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 **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.


3. Battery-status light

Indicates the battery-charge status.

- If the computer is connected to the electrical outlet, the battery light operates as follows:
 - Solid white — The battery is charging. When the charge is complete, the LED turns off.
- If the computer is running on a battery, the battery light operates as follows:
 - Off— The battery is adequately charged (or the computer is turned off).
 - Solid amber— The battery charge is critically low (approximately 30 minutes or less remaining battery life).

4. Nano-SIM 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.

Top

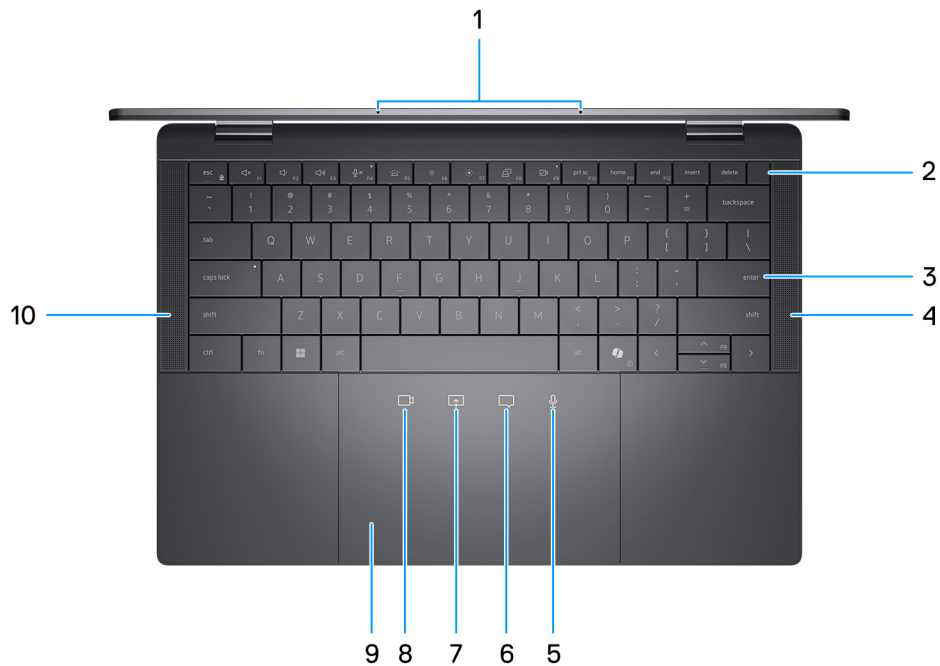


Figure 3. Top view

1. Microphones

Provides digital sound input for audio recording and voice calls.

2. Power button with optional fingerprint reader

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

NOTE: When the computer is turned on, press the power button to put the computer into sleep state; press and hold the power button for 10 seconds to force shut-down the computer.

NOTE: 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.

3. Zero-Lattice Keyboard with Battery-saving backlight

4. Right speaker

Provides audio output.

5. Mute mic control (Zoom app and Teams for work or school (Windows desktop) app support only)

Tap to turn on or mute the microphone. Icon turn white when mic is on and red when mic is off.

6. Chat box control (Zoom app and Teams for work or school (Windows desktop) app support only)

Tap to show or hide the chat window. The icon blinks when you receive a new chat message.

7. Screen share control (Zoom app and Teams for work or school (Windows desktop) app support only)

Tap once to share your screen. Tap again to stop sharing.

8. Webcam control (Zoom app and Teams for work or school (Windows desktop) app support only)

Tap to turn on or off the camera. Icon turns white when camera is on and red when camera is off.

9. Haptic Collaboration Touchpad

Collaboration icons are only visible when a Zoom or Teams call is ongoing. Compatible video conferencing applications are subject to change.

10. **Left speaker**

Provides audio output.

Front

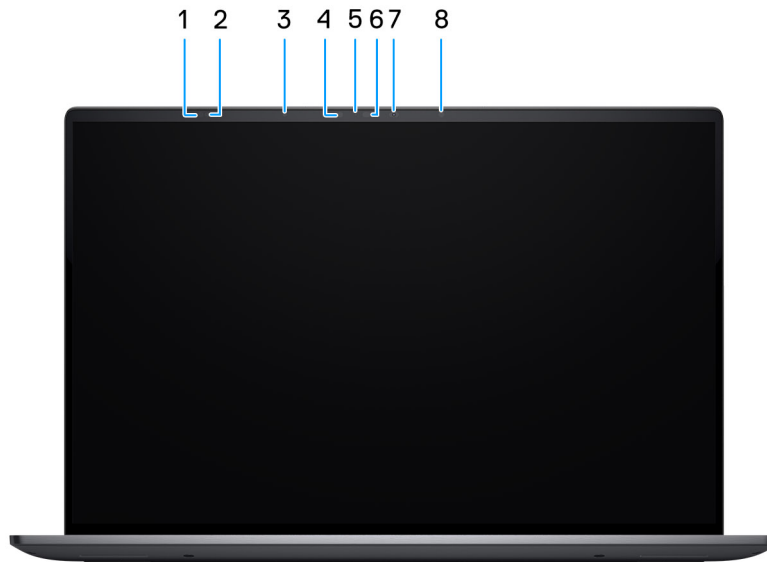


Figure 4. Front view

1. **Time-of-Flight Sensor**

Time-of-Flight or ToF sensor detects the absence of the user and locks the system for securing the computer and reducing power consumption.

2. **Time-of-Flight Sensor**

Time-of-Flight or ToF sensor detects the absence of the user and locks the system for securing the computer and reducing power consumption.

3. **Ambient-light sensor**

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

4. **Infrared emitter**

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

5. **Camera-status light**

Turns on when the camera is in use.

6. **Infrared camera**

Enhances security when paired with Windows Hello face authentication.

7. **RGB camera**

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

8. **Infrared emitter**

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

Bottom

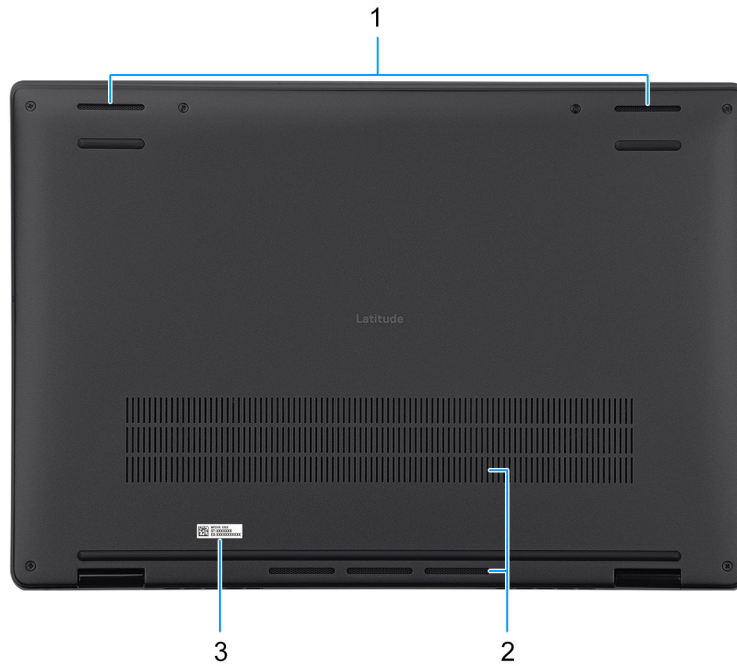


Figure 5. Bottom view

1. Speakers

Provide audio output.

2. Air vents

Air vents provide ventilation for your computer. Clogged air vents can cause overheating and can affect your computer's performance and potentially cause hardware issues. Keep the air vents clear of obstructions and clean them regularly to prevent the build-up of dust and dirt. For more information about cleaning air vents, search for articles in the Knowledge

Base Resource at www.dell.com/support.

3. 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

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Figure 6. Service tag location

Modes

The following modes are applicable for your Latitude 9450 2-in-1 computer.

Notebook



Figure 7. Notebook mode

Tablet



Figure 8. Tablet mode

Stand



Figure 9. Stand mode

Tent



Figure 10. Tent mode

Battery charge and status light

The following table lists the battery charge and status light behavior of your Latitude 9450 2-in-1.

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 9450 2-in-1

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. Connecting the power adapter

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 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.
- 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


Resources	Description
	<p>Dell Command Update</p> <p>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.</p>
	<p>Dell Digital Delivery</p> <p>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.</p>
	<p>SupportAssist</p> <p>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.</p> <p> NOTE: In SupportAssist, click the warranty expiry date to renew or upgrade your warranty.</p>

Specifications of Latitude 9450 2-in-1

Dimensions and weight

The following table lists the height, width, depth, and weight of your Latitude 9450 2-in-1.

Table 3. Dimensions and weight

Description	Values
Height:	
Front height	14.92 mm (0.59 in.)
Rear height	16.28 mm (0.64 in.)
Width	310.5 mm (12.22 in.)
Depth	215 mm (8.46 in.)
Weight  NOTE: The weight of your computer depends on the configuration that is ordered and manufacturing variability.	1.54 kg (3.38 lb)

Processor

The following table lists the details of the processors that are supported for your Latitude 9450 2-in-1.

Table 4. Processor



Description	Option one	Option two	Option three
Processor type	Intel Core Ultra 7 165U	Intel Core Ultra 5 135U	Intel Core Ultra 5 125U
Processor wattage	15 W	15 W	15 W
Processor total core count	10	10	10
Performance-cores	2	2	2
Efficient-cores	8	8	8
Processor total thread counts  NOTE: Intel Hyper-Threading Technology is only available on Performance-cores.	12	12	12
Processor speed	1.7 GHz to 4.9 GHz	0.8 GHz to 4.3 GHz	1.3 GHz to 4.3 GHz
Performance-cores frequency			

Table 4. Processor (continued)

Description		Option one	Option two	Option three
	Processor base frequency	1.7 GHz	1.6 GHz	1.3 GHz
	Maximum turbo frequency	4.9 GHz	4.4 GHz	4.3 GHz
Efficient-cores frequency				
	Processor base frequency	1.2 GHz	1.1 GHz	0.8 GHz
	Maximum turbo frequency	3.4 GHz	3.2 GHz	3.2 GHz
Thermal Mode/Thermal Design Power (TDP)				
	Cool	12 W-20 W	12 W-20 W	12 W-20 W
	Optimized	15 W-35 W	15 W-35 W	15 W-35 W
	Quiet	12 W-20 W	12 W-20 W	12 W-20 W
	Ultra Performance	22 W-40 W	22 W-40 W	22 W-40 W
		 NOTE: Processor clock speeds and thermal design power differ according to the thermal mode selected in the My Dell app on your computer.		
	Processor cache	12 MB	12 MB	12 MB
	Integrated graphics	Intel Graphics	Intel Graphics	Intel Graphics

Chipset

The following table lists the details of the chipset that is supported for your Latitude 9450 2-in-1.

Table 5. Chipset

Description	Values
Chipset	Integrated with the processor
Processor	Intel Core Ultra 5/7
DRAM bus width	64-bit
Flash EPROM	64 MB
PCIe bus	Up to Gen4

Operating system


Your Latitude 9450 2-in-1 supports the following operating systems:

- Windows 11 22H2
- Windows 11 23H2

Memory

The following table lists the memory specifications of your Latitude 9450 2-in-1.


Table 6. Memory specifications

Description	Values
Memory slots	On-board memory  NOTE: Integrated memory is not upgradable.
Memory type	LPDDR5x
Memory speed	7467 MT/s
Maximum memory configuration	64 GB
Minimum memory configuration	16 GB
Memory configurations supported	<ul style="list-style-type: none">• 16 GB, LPDDR5x, 7467 MT/s, dual-channel, integrated• 32 GB, LPDDR5x, 7467 MT/s, dual-channel, integrated• 64 GB, LPDDR5x, 7467 MT/s, dual-channel, integrated

External ports

The following table lists the external ports of your Latitude 9450 2-in-1.

Table 7. External ports

Description	Values
Network port	Not supported
USB ports	Three Thunderbolt 4 with Power Delivery and DisplayPort (USB Type-C)  NOTE: You can connect a Dell Docking Station to any of the three ports. For more information, search in the Knowledge Base Resource at www.dell.com/support
Audio port	One universal audio port
Video port	Supported through USB-C
Media-card reader	Not supported
Power-adaptor port	DC-in through one of the three Thunderbolt 4 USB Type-C ports
Security-cable slot	One wedge-shaped lock slot
SIM-card slot	nano-SIM slot (optional)

Internal slots

The following table lists the internal slots of your Latitude 9450 2-in-1.

Table 8. Internal slots

Description	Values
M.2	<ul style="list-style-type: none"> On-board Wi-Fi and Bluetooth One M.2 3052 slot for WWAN One M.2 2230 slot for solid-state drive (SSD) <p>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.</p>

Audio

The following table lists the audio specifications of your Latitude 9450 2-in-1.

Table 9. Audio specifications

Description	Values
Audio controller	Waves MaxxAudio Pro 13 Output
Stereo conversion	Supported
Internal audio interface	SoundWire interface
External audio interface	Universal audio jack
Number of speakers	Four
Internal-speaker amplifier	Realtek ALC1318
External volume controls	Keyboard shortcut controls
Speaker output:	
Average speaker output	2 W
Peak speaker output	2.5 W
Subwoofer output	Supported
Microphone	Dual-array microphone on FPC

Storage

This section lists the storage options on your Latitude 9450 2-in-1.

Your computer supports one M.2 2230 solid-state drive

Table 10. Storage specifications

Storage type	Interface type	Capacity
M.2 2230, Class 35 solid-state drive	Gen 4 PCIe x4 NVMe	256 GB/512 GB/1 TB

Table 10. Storage specifications (continued)

Storage type	Interface type	Capacity
M.2 2230, Class 35 solid-state drive, self-encrypting drive	Gen 4 PCIe x4 NVMe	512 GB
M.2 2230, Class 25 solid-state drive	Gen 4 PCIe x4 NVMe	2 TB

Keyboard

The following table lists the keyboard specifications of your Latitude 9450 2-in-1.

Table 11. Keyboard specifications

Description	Values
Keyboard type	Single-pointing spill-resistant, zero-lattice keyboard with battery-saving backlight
Keyboard layout	QWERTY
Number of keys	<ul style="list-style-type: none"> • United States and Canada: 79 keys • United Kingdom: 80 keys • Japan: 83 keys
Keyboard size	X=19.05 mm key pitch Y=18.05 mm key pitch
Keyboard shortcuts	Some keys on your keyboard have two symbols on them. These keys can be used to type alternate characters or to perform secondary functions. To type the alternate character, press Shift and the desired key. To perform secondary functions, press Fn and the desired key. ⓘ NOTE: You can define the primary behavior of the function keys (F1–F12) by changing the Function Key Behavior in the BIOS setup program.

Keyboard shortcuts of Latitude 9450 2-in-1

ⓘ **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 (see the following table).

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 12. List of keyboard shortcuts

Keys	Primary behavior
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 .
F1	Mute audio
F2	Decrease volume
F3	Increase volume
F4	Mute mic
F5	Adjust keyboard backlight level.  NOTE: Press to cycle the keyboard backlight level through low, medium, or high.
F6	Decrease display brightness
F7	Increase display brightness
F8	Switch to external display
F9	SafeShutter control
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 13. Secondary behavior

Key combination for the task	Secondary behavior
Fn + F1	Operating system and application-specific F1 behavior
Fn + F2	Operating system and application-specific F2 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 + R	System request

Table 13. Secondary behavior (continued)

Key combination for the task	Secondary behavior
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

Camera

The following table lists the camera specifications of your Latitude 9450 2-in-1.

Table 14. Camera specifications

Description	Values
Number of cameras	One
Camera type	<ul style="list-style-type: none"> FHD RGB + IR Camera with built-in collaboration features Low light capability TNR, Intelligent Privacy, IPU6, Proximity Sensor, Intel Camera Sensing Technology (ExpressSign-in 2.0), dual-array microphones FHD RGB + IR Camera with built-in collaboration features - Low light capability, TNR, Intelligent Privacy, IPU6, Proximity Sensor, Intel Camera Sensing Technology (ExpressSign-in 2.0), dual-array microphones
Camera location	Front camera
Camera sensor type	Intel Camera Sensing Technology (ExpressSign-in 2.0)
Camera resolution:	
Still image	2.07 megapixels
Video	1920 x 1080 (FHD) at 60 fps
Infrared camera resolution:	
Still image	0.18 megapixels
Video	1280 x 720 at 30 fps
Diagonal viewing angle:	
Camera	82.2 degrees
Infrared camera	78.1 degrees



Clickpad

The following table lists the clickpad specifications of your Latitude 9450 2-in-1.

Table 15. Clickpad specifications

Description	Values
Clickpad type	Haptic Collaboration Touchpad
Haptic functionality	Control the level of loudness and haptic feedback from the Windows 11 operating system settings, Bluetooth and Devices . Select from 0 % to 100 % for intensity of the haptic feedback.
Collaboration controls on clickpad	<p>Four controls are available to control video, share screen, chat, and mute microphone functions during conference calls.</p> <p>NOTE:</p> <ul style="list-style-type: none"> The collaboration controls are compatible only with Zoom and Microsoft Teams for work or school. The collaboration controls are visible only when a conference call is ongoing.
Collaboration controls settings	<ul style="list-style-type: none"> 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 settings to enable or disable specific controls.
Collaboration controls functionality	<ul style="list-style-type: none"> Video icon: Turn on or off the webcam. <ul style="list-style-type: none"> 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. <ul style="list-style-type: none"> White icon: The microphone is turned on. Red icon: The microphone is muted.
Required apps for collaboration controls	<ul style="list-style-type: none"> Dell Optimizer Version 4.2.0.0 and higher Zoom Client Version 5.9.3 and higher Microsoft Teams for work or school (Windows desktop) Version 1.6.00.24078 and higher
Clickpad resolution:	> 300 dpi
Clickpad dimensions:	
Horizontal	135.00 mm (5.31 in.)
Vertical	91.40 mm (3.59 in.)
Clickpad gestures	For more information about clickpad gestures available on Windows, see the Microsoft Knowledge Base article at support.microsoft.com .
<p>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 supports 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.</p>	


Table 15. Clickpad specifications (continued)

Description	Values
<p> NOTE: For more information about how to configure and use the 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.</p> <p> 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.</p>	

Power adapter

The following table lists the power adapter specifications of your Latitude 9450 2-in-1.




Table 16. Power adapter specifications

Description	Option one	Option two	Option three
Type	60 W AC adapter, USB-C	65 W AC adapter, USB-C	100 W AC adapter, USB-C
Power-adapter dimensions:			
Height	22.00 mm (0.866 in.)	28.00 mm (1.10 in.)	26.50 mm (4.80 in.)
Width	66.00 mm (2.598 in.)	51.00 mm (2.01 in.)	60.00 mm (2.36 in.)
Depth	55.00 mm (2.165 in.)	112.00 mm (4.41 in.)	122.00 mm (4.80 in.)
Weight	0.105 kg (0.231 lbs)	0.201 kg (0.443 lbs)	0.33 kg (0.731 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)	<ul style="list-style-type: none"> • 5 V/3 A • 9 V/3 A • 15 V/3 A • 20 V/3 A 	<ul style="list-style-type: none"> • 5 V/3 A • 9 V/3 A • 15 V/3 A • 20 V/3.25 A 	<ul style="list-style-type: none"> • 5 V/3 A • 9 V/3 A • 15 V/3 A • 20 V/5 A
Rated output voltage	<ul style="list-style-type: none"> • 5 VDC • 9 VDC • 15 VDC • 20 VDC 	<ul style="list-style-type: none"> • 5 VDC • 9 VDC • 15 VDC • 20 VDC 	<ul style="list-style-type: none"> • 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)
<p> 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.</p>			

Battery

The following table lists the battery specifications of your Latitude 9450 2-in-1.

Table 17. Battery specifications

Description		Values
Battery type		3-cell, 60 WHr, ExpressCharge Boost capable, Long-lifecycle capable
Battery voltage		11.55 VDC
Battery weight (maximum)		0.24 kg (0.52 lb)
Battery dimensions:		
	Height	250.70 mm (9.87 in.)
	Width	81.18 mm (3.19 in.)
	Depth	5.35 mm (0.21 in.)
Temperature range:		
	Operating	<ul style="list-style-type: none"> Charge: 0°C to 50°C (32°F to 122°F) Discharge: 0°C to 70°C (32°F to 158°F)
	Storage	-20°C to 60°C (-4°F to 140°F)
Battery operating time		Varies depending on operating conditions and can significantly reduce under certain power-intensive conditions.
Battery charging time (approximate)		<ul style="list-style-type: none"> 3 hours (when the computer is turned off) 80% in 60 min with ExpressCharge 1.0 35% in 20 min with ExpressCharge Boost
 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 .		
Coin-cell battery		Not supported
 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 Technologies recommends that you charge the battery regularly for optimal power consumption. If your battery charge is 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 9450 2-in-1.

Table 18. Display specifications

Description	Values
Display type	14-inch, Quad High Definition (QHD+)
Touch options	Yes

Table 18. Display specifications (continued)

Description		Values
Display-panel technology		IPS
Display-panel dimensions (active area):		
	Height	188.49 mm (7.42 in.)
	Width	301.59 mm (11.87 in.)
	Diagonal	355.64 mm (14.00 in.)
Display-panel native resolution		2560 x 1600
Luminance (typical)		500 nits
Megapixels		2.30
Color gamut		sRGB 100%
Pixels Per Inch (PPI)		161
Contrast ratio (minimum)		1000:1
Response time (maximum)		35 ms
Refresh rate		60 Hz
Horizontal view angle		88 degree
Vertical view angle		88 degree
Pixel pitch		0.15 mm
Power consumption (maximum)		2.85 W
Anti-glare vs glossy finish		anti-reflection, anti-smudge

Fingerprint reader (optional)

The following table lists the specifications of the optional fingerprint-reader of your Latitude 9450 2-in-1.

Table 19. Fingerprint reader specifications

Description	Values
Fingerprint-reader sensor technology	Trans-capacitive sensing
Fingerprint-reader sensor resolution	500 dpi
Fingerprint-reader sensor pixel size	108 mm x 88 mm

Sensor

The following table lists the sensor of your Latitude 9450 2-in-1.

Table 20. Sensor

Sensor support
Low Power Vision AI Based User Presence Detection
Ambient Light Sensor
Windows Auto Brightness
IR User Proximity Detection
eCompass/Magnetometer
Accelerometer
Gyro + Accelerometer
Adaptive Thermal Performance (via Gyroscope/Accelerometer)
Screen Rotation support
Near Field Proximity Sensor
Hall Effect Sensor
Sensor Hub
Wake/Power on with lid open
Dell ExpressSign-In 1.0 (via Proximity Sensor)
Dell ExpressSign-in 2.0 (via Intel Camera Sensing Technology)
GPS (via WWAN Card only)
Gyroscope
Accelerometer: ST Micro LIS2DW12TR(1st) or Bosch BMA422(2nd) in the base (system board) for 2-in-1
Accelerometer + Gyro: ST Micro LSM6DSOUSTR in the hinge-up sensor board for 2-in-1

GPU—Integrated

The following table lists the specifications of the integrated Graphics Processing Unit (GPU) supported by your Latitude 9450 2-in-1.

Table 21. GPU—Integrated

Controller	Memory size	Processor
Intel Graphics	Shared system memory	Intel Core Ultra 5/7

Multiple display support matrix

The following table lists the multiple display support matrix of your Latitude 9450 2-in-1.

Table 22. Multiple display support matrix

Graphics Card	Supported external displays with computer internal display on	Supported external displays with computer internal display off
Integrated GPU	Up to 3	Up to 4

Hardware security

The following table lists the hardware security of your Latitude 9450 2-in-1.

Table 23. Hardware security


Hardware security
Trusted Platform Module (TPM) 2.0 FIPS-140-2 Certified/TCG Certified
Touch Fingerprint Reader (in Power Button) with Control Vault 3.0 Plus Advanced Authentication with FIPS 140-2 Level 3 Certification (Optional)
Face IR camera (Windows Hello compliant) with ExpressSign-in 1.0 (Proximity Sensor) and ExpressSign-in 2.0 (Camera Sensing)
Dell SafeBIOS - Verifies the integrity of BIOS using a secure off-host source, and if the test fails, captures and stores a copy of the test result in a secure area in the computer.
Dell SafeBIOS - Indicators of Attack - Alerts when malicious activity is detected
Dell SafeID - Dedicated FIPS Level 3 security chip secures end user credentials ¹ - TCG Certified
Dell SafeSupply Chain - Optional tamper evident packing and pre-imaging HDD wipes to NIST standards from a secure Dell facility.
Dell SafeShutter - Control your camera shutter by pressing F9 on your keyboard to enable or disable the shutter.

Operating and storage environment

This table lists the operating and storage specifications of your Latitude 9450 2-in-1.

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

Table 24. 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 140°F)
Relative humidity (maximum)	10% to 90% (non-condensing)	0% to 95% (non-condensing)
Vibration (maximum)*	0.66 GRMS	Not applicable
Shock (maximum)	140 G†	Not applicable
Altitude range	0 m to 3,048 m (0 ft to 10,000 ft)	0 m to 10,668 m (0 ft to 35,000 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.

Dell support policy

For information about Dell support policy, search in the Knowledge Base Resource at www.dell.com/support.

SafeShutter

This section details the SafeShutter specifications of your Latitude 9450 2-in-1.

SafeShutter lets you take control of your privacy with the camera disable (F9 key), and mic mute (F4 key) to override software settings. When the camera is on, press the F9 key to close the camera shutter and then press the F9 key again to open the camera shutter.

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.

Working inside your computer

Safety instructions

Use the following safety guidelines to protect your computer from potential damage and to ensure your personal safety. Unless otherwise noted, each procedure in this document assumes that you have read the safety information that shipped with your computer.

-  **WARNING:** Before working inside your computer, read the safety information that is shipped with your computer. For more safety best practices, see the Regulatory Compliance home page at www.dell.com/regulatory_compliance.
-  **WARNING:** Disconnect your computer from all power sources before opening the computer cover or panels. After you finish working inside the computer, replace all covers, panels, and screws before connecting your computer to an electrical outlet.
-  **CAUTION:** To avoid damaging the computer, ensure that the work surface is flat, dry, and clean.
-  **CAUTION:** To avoid damaging the components and cards, handle them by their edges, and avoid touching the pins and the contacts.
-  **CAUTION:** You should only perform troubleshooting and repairs as authorized or directed by the Dell technical assistance team. Damage due to servicing that is not authorized by Dell is not covered by your warranty. See the safety instructions that is shipped with the product or at www.dell.com/regulatory_compliance.
-  **CAUTION:** Before touching anything inside your computer, ground yourself by touching an unpainted metal surface, such as the metal at the back of the computer. While you work, periodically touch an unpainted metal surface to dissipate static electricity which could harm internal components.
-  **CAUTION:** When you disconnect a cable, pull it by its connector or its pull tab, not the cable itself. Some cables have connectors with locking tabs or thumbscrews that you must disengage before disconnecting the cable. When disconnecting cables, keep them evenly aligned to avoid bending the connector pins. When connecting cables, ensure that the ports and the connectors are correctly oriented and aligned.
-  **CAUTION:** Press and eject any installed card from the media-card reader.
-  **CAUTION:** Exercise caution when handling rechargeable Li-ion batteries in laptops. Swollen batteries should not be used and should be replaced and disposed properly.
-  **NOTE:** The color of your computer and certain components may differ from what is shown in this document.

Service Mode

Service Mode allows users to immediately cut off power from the system and conduct repairs without disconnecting the battery cable from the system board:

1. Shut down the system and disconnect the AC adapter.
2. Press and hold the **** key on the keyboard and then press the **Power** button. The system boots.