


# Precision 3490

## Technical Guidebook

## 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 Precision 3490

## Right



Figure 1. Right view

### 1. Universal audio jack

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

### 2. 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. PowerShare enables you to charge your USB devices even when your computer is turned off.

**NOTE:** If your computer is turned off or in a hibernation state, you must connect the power adapter to charge your devices using the PowerShare port. You must enable this feature in the BIOS setup program.

**NOTE:** Certain USB devices may not charge when the computer is turned off or in a sleep state. In such cases, turn on the computer to charge the device.

### 3. HDMI 2.1 TMDs port

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

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

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

## Left

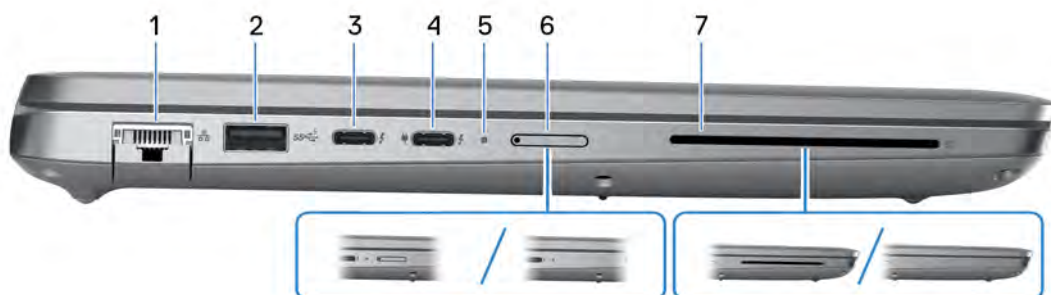


Figure 2. Left view

### 1. Network port

Connect an Ethernet (RJ45) cable from a router or a broadband modem for network or Internet access, with a transfer rate of 10/100/1000 Mbps.

### 2. USB 3.2 Gen 1 port

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

### 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.

**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](http://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.

### 4. 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.

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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.

### 5. Power and battery-status light

Indicates the power state and battery state of the computer.

Solid white—Power adapter is connected and the battery is charging.

Solid amber—Battery charge is low or critical.

Off—Battery is fully charged.

**NOTE:** On certain computer models, the power and battery-status light are also used for diagnostics. For more information, see the *Troubleshooting* section in your computer's *Service Manual*.

### 6. nano-SIM slot (optional)

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

### 7. Smart-card reader slot (optional)

Using smart card provides authentication in corporate networks.

# Top



**Figure 3. Top view**

## 1. Touchpad

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

## 2. NFC or Contactless smart card reader (optional)

Provides contactless access of cards in corporate networks.

## 3. Power button with optional fingerprint reader

Press to turn on the computer if it is turned off, in sleep state, or in hibernation 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:** You can customize the power-button behavior in Windows.

# Front



Figure 4. Front view

**1. Left microphone**

Provides digital sound input for audio recording and voice calls.

**2. Infrared emitter (optional)**

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

**3. Infrared camera (optional)**

Enhances security when paired with Windows Hello face authentication.

**4. Camera shutter**

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

**5. Camera**

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

**6. Camera-status light**

Turns on when the camera is in use.

**7. Ambient-light sensor**

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

**8. Right microphone**

Provides digital sound input for audio recording and voice calls.



# Bottom

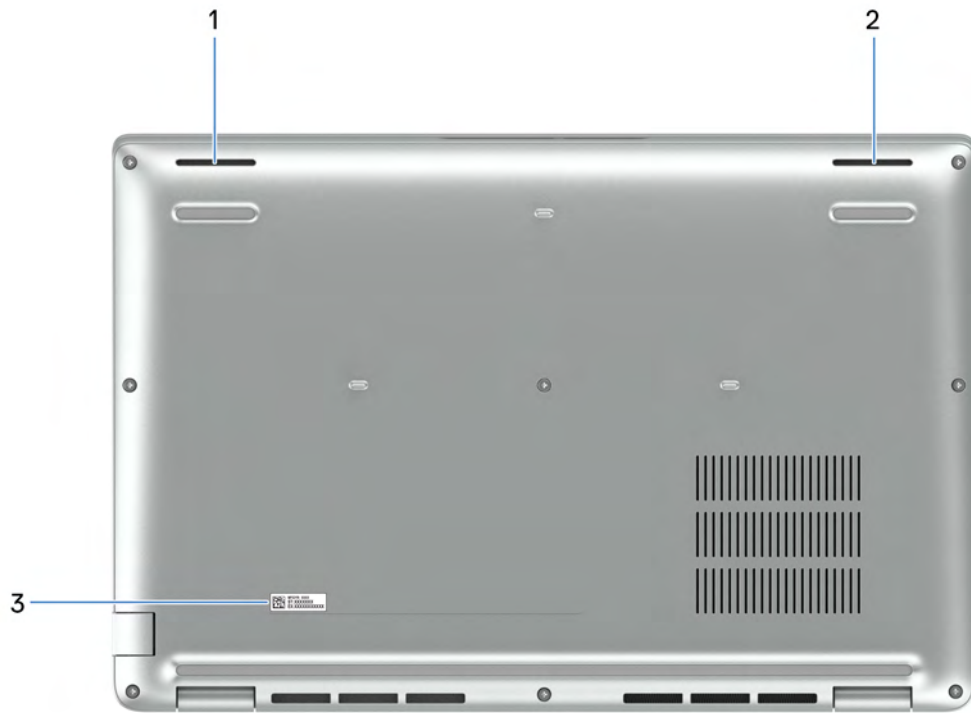


Figure 5. Bottom view

- 1. **Left speaker**  
Provides audio output.
- 2. **Right speaker**  
Provides audio output.
- 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

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.

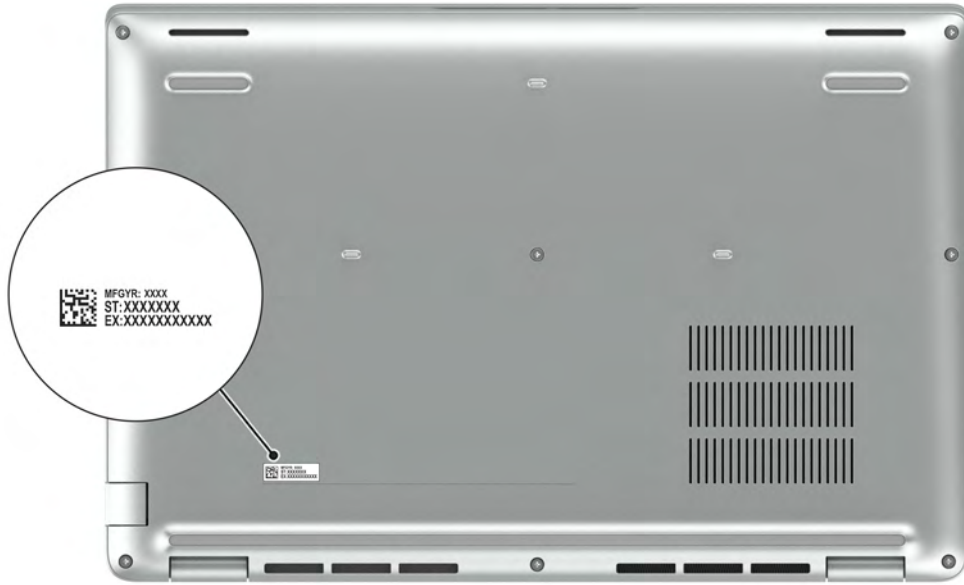


Figure 6. Service Tag location

## Battery charge and status light

The following table lists the battery charge and status light behavior of your Precision 3490.

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 Precision 3490

## Dimensions and weight

The following table lists the height, width, depth, and weight of your Precision 3490.

**Table 2. Dimensions and weight**

Description	Values
Height:	
Front height	19.06 mm (0.75 in.)
Rear height	21.04 mm (0.83 in.)
Width	321.35 mm (12.65 in.)
Depth	212.00 mm (8.35 in.)
Weight  <b>NOTE:</b> The weight of your computer depends on the configuration that is ordered and manufacturing variability.	1.40 kg (3.09 lb) - minimum

## Processor

The following table lists the details of the processors that are supported for your Precision 3490.

**Table 3. Processor**

Description	Option one	Option two	Option three
Processor type	Intel Core Ultra 5 125U vPro Essentials	Intel Core Ultra 5 155U vPro Essentials	Intel Core Ultra 5 125H vPro Essentials
Processor wattage	15 W	15 W	28 W
Processor total core count	12	12	14
Performance-cores	2	2	4
Efficient-cores	<ul style="list-style-type: none"> <li>E-cores: 8</li> <li>LPE-cores: 2</li> </ul>	<ul style="list-style-type: none"> <li>E-cores: 8</li> <li>LPE-cores: 2</li> </ul>	<ul style="list-style-type: none"> <li>E-cores: 8</li> <li>LPE-cores: 2</li> </ul>
Processor total thread counts <i>i</i> <b>NOTE:</b> Intel Hyper-Threading Technology is only available on Performance-cores.	14	14	18
Processor speed	Up to 4.30 GHz	Up to 4.80 GHz	Up to 4.50 GHz
Performance-cores frequency			
Processor base frequency	1.30 GHz	1.70 GHz	1.20 GHz
Maximum turbo frequency	4.30 GHz	4.80 GHz	4.50 GHz
Efficient-cores frequency			
Processor base frequency	0.80 GHz	1.20 GHz	0.70 GHz
Maximum turbo frequency	3.60 GHz	3.80 GHz	3.60 GHz
Processor cache	12 MB	12 MB	18 MB
Integrated graphics	Intel Graphics	Intel Graphics	Intel Arc Graphics

**Table 4. Processor**

Description	Option four	Option five	Option six
Processor type	Intel Core Ultra 7 135H vPro Enterprise	Intel Core Ultra 7 155H vPro Essentials	Intel Core Ultra 7 165H vPro Enterprise
Processor wattage	28 W	28 W	28 W
Processor total core count	14	16	16
Performance-cores	4	6	6
Efficient-cores	<ul style="list-style-type: none"> <li>E-cores: 8</li> <li>LPE-cores: 2</li> </ul>	<ul style="list-style-type: none"> <li>E-cores: 8</li> <li>LPE-cores: 2</li> </ul>	<ul style="list-style-type: none"> <li>E-cores: 8</li> <li>LPE-cores: 2</li> </ul>
Processor total thread counts <i>i</i> <b>NOTE:</b> Intel Hyper-Threading Technology is only available on Performance-cores.	18	22	22
Processor speed	Up to 4.60 GHz	Up to 4.80 GHz	Up to 5.00 GHz
Performance-cores frequency			
Processor base frequency	1.70 GHz	1.70 GHz	1.40 GHz
Maximum turbo frequency	4.60 GHz	4.80 GHz	5.00 GHz
Efficient-cores frequency			
Processor base frequency	1.20 GHz	1.20 GHz	0.90 GHz
Maximum turbo frequency	3.60 GHz	3.80 GHz	3.80 GHz
Processor cache	18 MB	24 MB	24 MB
Integrated graphics	Intel Arc Graphics	Intel Arc Graphics	Intel Arc Graphics

## Chipset

The following table lists the details of the chipset that is supported for your Precision 3490.

**Table 5. Chipset**

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

# Operating system

Your Precision 3490 supports the following operating systems:

- Windows 11 Home
- Windows 11 Pro
- Ubuntu Linux 22.04 LTS
- Red Hat 9.4

# Memory

The following table lists the memory specifications of your Precision 3490.

**Table 6. Memory specifications**

Description	Values
Memory slots	Two-SODIMM slots
Memory type	DDR5
Memory speed	5600 MT/s
Maximum memory configuration	64 GB
Minimum memory configuration	8 GB
Memory size per slot	8 GB, 16 GB, or 32 GB
Memory configurations supported	<ul style="list-style-type: none"><li>• 8 GB, 1 x 8 GB, DDR5, 5600 MT/s, single-channel</li><li>• 16 GB, 1 x 16 GB, DDR5, 5600 MT/s, single-channel</li><li>• 16 GB, 2 x 8 GB, DDR5, 5600 MT/s, dual-channel</li><li>• 32 GB, 2 x 16 GB, DDR5, 5600 MT/s, dual-channel</li><li>• 32 GB, 1 x 32 GB, DDR5, 5600 MT/s, single-channel</li><li>• 64 GB, 2 x 32 GB, DDR5, 5600 MT/s, dual-channel</li></ul>

# External ports

The following table lists the external ports of your Precision 3490.

**Table 7. External ports**

Description	Values
Network port	One RJ45 Ethernet port
USB ports	<ul style="list-style-type: none"><li>• One USB 3.2 Gen 1 port</li><li>• One USB 3.2 Gen 1 port with PowerShare</li><li>• Two Thunderbolt 4.0 ports with DisplayPort Alt Mode/USB Type-C/USB4/Power Delivery</li></ul> <p><b>NOTE:</b> You can connect a Dell Docking Station to this port. For more information, search in the Knowledge Base Resource at <a href="http://www.dell.com/support">www.dell.com/support</a>.</p>
Audio port	One universal audio port
Video port	One HDMI 2.1 TMDS port

**Table 7. External ports (continued)**

Description	Values
Media-card reader	One smart-card reader slot (optional)
Power-adaptor port	USB Type-C power input
Security-cable slot	Security-cable slot (wedge-shaped)
SIM-card slot	nano-SIM card slot (optional)

## Internal slots

The following table lists the internal slots of your Precision 3490.

**Table 8. Internal slots**

Description	Values
M.2	<ul style="list-style-type: none"> <li>One M.2 2230 slot for WiFi and Bluetooth combo card</li> <li>One M.2 2230 slot for solid state drive</li> <li>One M.2 3042 slot for WWAN card (optional)</li> </ul> <p><b>NOTE:</b> To learn more about the features of different types of M.2 cards, search in the Knowledge Base Resource at <a href="http://www.dell.com/support">www.dell.com/support</a>.</p>

## Ethernet

The following table lists the wired Ethernet Local Area Network (LAN) specifications of your Precision 3490.

**Table 9. Ethernet specifications**

Description	Values
Model number	<ul style="list-style-type: none"> <li>Intel Jacksonville I219-LM 10/100/Gb (1000BASE-T) for vPRO configurations</li> <li>Intel Jacksonville I219-V 10/100/Gb (1000BASE-T) for non-vPRO configurations</li> </ul>
Transfer rate	10/100/1000 Mbps

## Wireless module

The following table lists the Wireless Local Area Network (WLAN) modules that are supported on your Precision 3490.

**Table 10. Wireless module specifications**

Description	Option one	Option two
Model number	Realtek RTL8852BE	Intel AX211
Transfer rate	Up to 1201 Mbps	Up to 2400 Mbps
Frequency bands supported	2.4 GHz/5 GHz	2.4 GHz/5 GHz/6 GHz
Wireless standards	<ul style="list-style-type: none"> <li>WiFi 802.11a/b/g</li> </ul>	<ul style="list-style-type: none"> <li>WiFi 802.11a/b/g</li> </ul>

**Table 10. Wireless module specifications (continued)**

Description	Option one	Option two
	<ul style="list-style-type: none"> <li>• Wi-Fi 4 (WiFi 802.11n)</li> <li>• Wi-Fi 5 (WiFi 802.11ac)</li> <li>• Wi-Fi 6 (WiFi 802.11ax)</li> </ul>	<ul style="list-style-type: none"> <li>• Wi-Fi 4 (WiFi 802.11n)</li> <li>• Wi-Fi 5 (WiFi 802.11ac)</li> <li>• Wi-Fi 6E (WiFi 802.11ax)</li> </ul> <p><b>NOTE:</b> Wi-Fi 6 is supported in regions where Wi-Fi 6E is unavailable.</p>
Encryption	<ul style="list-style-type: none"> <li>• 64-bit/128-bit WEP</li> <li>• AES-CCMP</li> <li>• TKIP</li> </ul>	<ul style="list-style-type: none"> <li>• 64-bit/128-bit WEP</li> <li>• AES-CCMP</li> <li>• TKIP</li> </ul>
Bluetooth wireless card	Bluetooth 5.3	Bluetooth 5.3
	<p><b>NOTE:</b> The version of the Bluetooth wireless card may vary depending on the operating system that is installed on your computer.</p>	

## WWAN module

The following table lists the Wireless Wide Area Network (WWAN) module supported on your Precision 3490.

**Table 11. WWAN module specifications**

Description	Option one	Option two
Model number	Qualcomm Snapdragon X12 Global LTE-Advanced (DW5825e), CAT12	Qualcomm Snapdragon X62 Global 5G Modem (DW5932e)
Form factor	M.2 3042 Key-B	M.2 3042 Key-B
Host interface	USB 3.0/2.0	PCIe Gen3
Network standard	LTE FDD/TDD, WCDMA/HSPA+, GNSS/Beidou, GPS/GLONASS/Galileo	NR FR1 (Sub6) FDD/TDD, LTE FDD/TDD, WCDMA/HSPA+, GPS/GLONASS/Galileo/Beidou
Transfer data rate	<ul style="list-style-type: none"> <li>• Up to 600 Mbps DL (CAT12)</li> <li>• Up to 150 Mbps UL</li> </ul>	<ul style="list-style-type: none"> <li>• 5G NR: DL 3.5 Gbps/UL 900 Mbps</li> <li>• LTE: DL 1.6 Gbps (CAT19)/UL 211 Mbps (CAT18)</li> <li>• UMTS: DL DC-HSPA+ Rel8:42 Mbps/UL 5.76 Mbps</li> </ul>
Operating frequency bands	<ul style="list-style-type: none"> <li>• 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)</li> <li>• HSPA+ (1, 2, 4, 5, 6, 8, 19)</li> </ul>	<ul style="list-style-type: none"> <li>• 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)</li> <li>• 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*)</li> <li>• WCDMA/HSPA+ (1, 2, 4, 5, 8)</li> </ul> <p>*Modem hardware supports but currently disabled.</p>
Power supply	DC 3.135 V to 4.400 V, Typical 3.300 V	DC 3.135 V to 3.630 V, Typical 3.300 V



**Table 11. WWAN module specifications (continued)**

Description	Option one	Option two
SIM card	Supported through external SIM slot	Supported through external SIM slot
eSIM with dual SIM (DSSA)	Supported <i>i</i> <b>NOTE:</b> The availability of eSIM functionality embedded on the module is dependent on the region and specific carrier requirements.	Supported <i>i</i> <b>NOTE:</b> The availability of eSIM functionality embedded on the module is dependent on the region and specific carrier requirements.
Antenna diversity	Supported	Supported
Radio On/Off	Supported	Supported
Wake on wireless	Supported	Supported
Temperature	<ul style="list-style-type: none"> <li>Normal operating temperature: -10°C to +55°C (15°F to +131°F)</li> <li>Extended Operating temperature: -30°C to +75°C (-22°F to +131°F)</li> </ul>	<ul style="list-style-type: none"> <li>Normal operating temperature: -10°C to +55°C (15°F to +131°F)</li> <li>Extended Operating temperature: -40°C to +85°C (-40°F to +185°F)</li> </ul>
Antenna connector	<ul style="list-style-type: none"> <li>WWAN Main Antenna x 1</li> <li>WWAN Diversity Antenna x 1</li> </ul>	<ul style="list-style-type: none"> <li>WWAN Main Antenna x 1</li> <li>WWAN Diversity Antenna x 1</li> <li>4x4 MIMO Antenna x 2</li> </ul>
<i>i</i> <b>NOTE:</b> For instructions on how to find your computer's International Mobile Equipment Identity (IMEI) number, search in the Knowledge Base Resource at <a href="http://www.dell.com/support">www.dell.com/support</a> .		

## Audio

The following table lists the audio specifications of your Precision 3490.

**Table 12. Audio specifications**

Description	Values
Audio controller	Waves MaxxAudio Pro 13.0
Stereo conversion	Supported
Internal audio interface	High definition audio interface
External audio interface	Universal Audio Jack/HDMI 2.1 TMDS port
Number of speakers	2
Internal-speaker amplifier	Not supported
External volume controls	Keyboard shortcut controls
Speaker output:	
Average speaker output	2 W
Peak speaker output	2 W
Subwoofer output	Not supported
Microphone	Digital-array microphones in camera assembly

# Storage

This section lists the storage options on your Precision 3490. Your Precision 3490 supports one M.2 2230 solid state drive.

**Table 13. Storage specifications**

Storage type	Interface type	Capacity
M.2 2230 solid state drive	PCIe Gen4 NVMe, up to 64 Gbps	Up to 2 TB
M.2 2230 self-encrypting solid state drive	PCIe Gen4 NVMe, up to 64 Gbps	512 GB

# Keyboard

The following table lists the keyboard specifications of your Precision 3490.

**Table 14. Keyboard specifications**

Description	Values
Keyboard type	<ul style="list-style-type: none"> <li>Standard backlit AI hotkey keyboard</li> <li>Standard non-backlit AI hotkey keyboard</li> </ul> <p><b>NOTE:</b> Copilot in Windows is available only in approved markets.</p>
Keyboard layout	QWERTY
Number of keys	<ul style="list-style-type: none"> <li>English US, English International, Arabic, Canada bilingual (MUI), Chinese traditional, French-Canadian, Greek, Hebrew, Korean, Russian, Thai, Ukrainian: 79 keys</li> <li>French-Canadian Quebec, Portuguese Brazilian, Belgian, Bulgarian, Czech &amp; Slovakian (MUI), Danish, English UK, Estonian, French European, German, Hungarian, Icelandic, Italian, Nordic (MUI), Norwegian, Portugese Iberian, Slovenian, Spanish (Castillian), Spanish (Latin America), Swedish/Finnish, Swiss European (MUI), Turkish, Turkish (F): 80 keys</li> <li>Japanese: 83 keys</li> </ul>
Keyboard size	<p>X=19.05 mm key pitch</p> <p>Y=18.05 mm key pitch</p>
Keyboard shortcuts	<p>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.</p> <p><b>NOTE:</b> You can define the primary behavior of the function keys (F1–F12) changing <b>Function Key Behavior</b> in BIOS setup program.</p>

## Keyboard function keys

The **F1-F12** keys at the top of the keyboard are function keys. By default, these keys are used to perform specific functions defined by the software application in use.

**Table 15. List of keyboard shortcuts**

Function key	Primary behavior
F1	Mute audio
F2	Decrease volume
F3	Increase volume
F4	Mute microphone
F5	Keyboard backlight <i>i</i> <b>NOTE:</b> Toggle to cycle the keyboard backlight status through off, low-backlight, and high-backlight.
F6	Decrease brightness
F7	Increase brightness
F8	Switch to external display
F10	Print Screen
F11	Home
F12	End
Copilot	Launch Copilot in Windows <i>i</i> <b>NOTE:</b> 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 <a href="http://www.dell.com/support">www.dell.com/support</a> .

You can run the secondary tasks that are indicated by the symbols on the function keys by pressing the function key with **fn**, for example, **fn** and **F1**. See the table below for the list of secondary tasks and the key combinations to run them.

*i* **NOTE:** Keyboard characters may differ depending on the keyboard language configuration. Keys that are used for tasks remain the same, regardless of the keyboard language.

*i* **NOTE:** You can define the primary behavior of function keys in the **Function Key Behavior** menu of the BIOS setup program.

**Table 16. Secondary tasks of keyboard keys**

Key combination for task	What the task does
<b>fn</b> and <b>F1</b>	Operating system and application-specific F1 behavior
<b>fn</b> and <b>F2</b>	Operating system and application-specific F2 behavior
<b>fn</b> and <b>F3</b>	Operating system and application-specific F3 behavior
<b>fn</b> and <b>F4</b>	Operating system and application-specific F4 behavior
<b>fn</b> and <b>F5</b>	Operating system and application-specific F5 behavior
<b>fn</b> and <b>F6</b>	Operating system and application-specific F6 behavior
<b>fn</b> and <b>F7</b>	Operating system and application-specific F7 behavior
<b>fn</b> and <b>F8</b>	Operating system and application-specific F8 behavior
<b>fn</b> and <b>F9</b>	Operating system and application-specific F9 behavior
<b>fn</b> and <b>F10</b>	Operating system and application-specific F10 behavior
<b>fn</b> and <b>F11</b>	Operating system and application-specific F11 behavior
<b>fn</b> and <b>F12</b>	Operating system and application-specific F12 behavior

## Keys with alternate characters

There are other keys on your keyboard with alternate characters. The symbols that are shown at the bottom of these keys are the main characters that are displayed when the key is pressed; the symbols that are shown at the top of these keys are displayed when the key is pressed with the shift key. For example, if you press **2**, **2** is displayed; if you press **Shift** and **2**, **@** is displayed.

## Camera

The following table lists the camera specifications of your Precision 3490.

**Table 17. Camera specifications**

Description	Values
Number of cameras	One
Camera type	<ul style="list-style-type: none"><li>FHD RGB HDR camera</li><li>FHD RGB+IR HDR camera</li><li>FHD RGB+IR HDR camera with Ambient Light Sensor, Express Sign-In with Presence Detection and Intelligent Privacy</li></ul>
Camera location	Front camera
Camera sensor type	CMOS sensor technology
Camera resolution:	
Still image	2.07 megapixel
Video	1920 x 1080 (FHD) at 30 fps
Infrared camera resolution:	
Still image	0.23 megapixels
Video	640 x 360 at 30 fps
Diagonal viewing angle:	
Camera	80 degrees
Infrared camera	86.60 degrees

## Touchpad

The following table lists the touchpad specifications of your Precision 3490.

**Table 18. Touchpad specifications**

Description	Values
Touchpad resolution:	> 300 DPI
Touchpad dimensions:	
Horizontal	115 mm (4.52 in.)
Vertical	67 mm (2.64 in.)





**Table 18. Touchpad specifications (continued)**

Description	Values
Touchpad gestures	<p>For more information about touchpad gestures are available on:</p> <ul style="list-style-type: none"> <li>Windows, see the Microsoft Knowledge Base article at <a href="https://support.microsoft.com">support.microsoft.com</a>.</li> <li>Ubuntu, see <a href="https://ubuntu.com/support">ubuntu.com/support</a>.</li> </ul>

## Power adapter

The following table lists the power adapter specifications of your Precision 3490.

**Table 19. Power adapter specifications**

Description	Option one	Option two	Option three
Type	65 W adapter, USB-C  <b>NOTE:</b> Applicable to computers shipped with integrated graphics card.	100 W adapter, USB-C  <b>NOTE:</b> Applicable to computers shipped with integrated or discrete graphics card.	130 W adapter, USB-C  <b>NOTE:</b> Applicable to computers shipped with integrated or discrete graphics card.
Power-adapter dimensions:			
Height	28.00 mm (1.10 in.)	26.50 mm (1.04 in.)	22.00 mm (0.87 in.)
Width	51.00 mm (2.01 in.)	60.00 mm (2.36 in.)	66.00 mm (2.60 in.)
Depth	112.00 mm (4.41 in.)	122.00 mm (4.80 in.)	143.00 mm (5.63 in.)
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	1.80 A
Output current (continuous)	<ul style="list-style-type: none"> <li>20 V/3.25 A (continuous)</li> <li>15 V/3.00 A (continuous)</li> <li>9 V/3.00 A (continuous)</li> <li>5 V/3.00 A (continuous)</li> </ul>	<ul style="list-style-type: none"> <li>20 V/5 A (continuous)</li> <li>15 V/3 A (continuous)</li> <li>9 V/3 A (continuous)</li> <li>5 V/3 A (continuous)</li> </ul>	<ul style="list-style-type: none"> <li>20 V/6.50 A (continuous)</li> <li>5 V/1.00 A (continuous)</li> </ul>
Rated output voltage	<ul style="list-style-type: none"> <li>20 VDC</li> <li>15 VDC</li> <li>9 VDC</li> <li>5 VDC</li> </ul>	<ul style="list-style-type: none"> <li>20 VDC</li> <li>15 VDC</li> <li>9 VDC</li> <li>5 VDC</li> </ul>	<ul style="list-style-type: none"> <li>20 VDC</li> <li>5 VDC</li> </ul>
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	-40°C to 70°C (-40°F to 158°F)	-40°C to 70°C (-40°F to 158°F)	-40°C to 70°C (-40°F to 158°F)
 <b>CAUTION:</b> 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 Precision 3490.

**Table 20. Battery specifications**

Description		Option one	Option two	Option three	Option four
Battery type		3 cell, 42 Wh, ExpressCharge, ExpressCharge Boost	3 cell, 42 Wh, Long Cycle Life, ExpressCharge	3 cell, 54 Wh, ExpressCharge, ExpressCharge Boost	3 cell, 54 Wh, Long Cycle Life, ExpressCharge
Battery voltage		11.40 VDC	11.40 VDC	11.40 VDC	11.40 VDC
Battery weight (minimum)		0.19 kg (0.41 lb)	0.19 kg (0.41 lb)	0.22 kg (0.48 lb)	0.22 kg (0.48 lb)
Battery dimensions:					
	Height	5.73 mm (0.22 in.)	5.73 mm (0.22 in.)	5.73 mm (0.22 in.)	5.73 mm (0.22 in.)
	Width	263.00 mm (10.35 in.)	263.00 mm (10.35 in.)	263.00 mm (10.35 in.)	263.00 mm (10.35 in.)
	Depth	68.90 mm (2.71 in.)	68.90 mm (2.71 in.)	68.90 mm (2.71 in.)	68.90 mm (2.71 in.)
Temperature range:					
	Operating	<ul style="list-style-type: none"> <li>Charge: 0°C to 45°C (32°F to 113°F)</li> <li>Discharge: 0°C to 70°C (32°F to 158°F)</li> </ul>	<ul style="list-style-type: none"> <li>Charge: 0°C to 45°C (32°F to 113°F)</li> <li>Discharge: 0°C to 70°C (32°F to 158°F)</li> </ul>	<ul style="list-style-type: none"> <li>Charge: 0°C to 45°C (32°F to 113°F)</li> <li>Discharge: 0°C to 70°C (32°F to 158°F)</li> </ul>	<ul style="list-style-type: none"> <li>Charge: 0°C to 45°C (32°F to 113°F)</li> <li>Discharge: 0°C to 70°C (32°F to 158°F)</li> </ul>
	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)		<p><b>Express Charge Method:</b></p> <ul style="list-style-type: none"> <li>0°C to 15°C maximum allowable charge time from 0% to 100% RSOC is 4 hours.</li> <li>16°C to 45°C normal express charge.</li> <li>46°C to 50°C maximum allowable charge time from 0% to 100% RSOC is 3 hours.</li> </ul> <p><b>Standard Charge/Predominately AC</b></p>	<p><b>Express Charge Method:</b></p> <ul style="list-style-type: none"> <li>0°C to 15°C maximum allowable charge time from 0% to 100% RSOC is 4 hours.</li> <li>16°C to 45°C normal express charge.</li> <li>46°C to 50°C maximum allowable charge time from 0% to 100% RSOC is 3 hours.</li> </ul> <p><b>Standard Charge/Predominately AC User Charge Method:</b></p>	<p><b>Express Charge Method:</b></p> <ul style="list-style-type: none"> <li>0°C to 15°C maximum allowable charge time from 0% to 100% RSOC is 4 hours.</li> <li>16°C to 45°C normal express charge.</li> <li>46°C to 50°C maximum allowable charge time from 0% to 100% RSOC is 3 hours.</li> </ul> <p><b>Standard Charge/Predominately AC</b></p>	<p><b>Express Charge Method:</b></p> <ul style="list-style-type: none"> <li>0°C to 15°C maximum allowable charge time from 0% to 100% RSOC is 4 hours.</li> <li>16°C to 45°C normal express charge.</li> <li>46°C to 50°C maximum allowable charge time from 0% to 100% RSOC is 3 hours.</li> </ul> <p><b>Standard Charge/Predominately AC</b></p>

**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](http://www.dell.com/support).

**Table 20. Battery specifications (continued)**

Description	Option one	Option two	Option three	Option four
	<p><b>User Charge Method:</b></p> <ul style="list-style-type: none"> <li>0°C to 15°C maximum allowable charge time from 0% to 100% RSOC is 4 hours.</li> <li>16°C to 50°C maximum allowable charge time from 0% to 100% RSOC is 3 hours.</li> </ul> <p><b>Express Charge Boost Charge Method (Fast Charge for Initial 35%):</b></p> <ul style="list-style-type: none"> <li>16°C to 45°C target charge time from 0% to 35% RSOC is 20 minutes for Accelerated Charge.</li> </ul>	<ul style="list-style-type: none"> <li>0°C to 15°C maximum allowable charge time from 0% to 100% RSOC is 4 hours.</li> <li>16°C to 50°C maximum allowable charge time from 0% to 100% RSOC is 3 hours.</li> </ul>	<p><b>User Charge Method:</b></p> <ul style="list-style-type: none"> <li>0°C to 15°C maximum allowable charge time from 0% to 100% RSOC is 4 hours.</li> <li>16°C to 50°C maximum allowable charge time from 0% to 100% RSOC is 3 hours.</li> </ul> <p><b>Express Charge Boost Charge Method (Fast Charge for Initial 35%):</b></p> <ul style="list-style-type: none"> <li>16°C to 45°C target charge time from 0% to 35% RSOC is 20 minutes for Accelerated Charge.</li> </ul>	<p><b>User Charge Method:</b></p> <ul style="list-style-type: none"> <li>0°C to 15°C maximum allowable charge time from 0% to 100% RSOC is 4 hours.</li> <li>16°C to 50°C maximum allowable charge time from 0% to 100% RSOC is 3 hours.</li> </ul>
Coin-cell battery	CR2032	CR2032	CR2032	CR2032
<p><b>⚠ 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.</b></p> <p><b>⚠ 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.</b></p>				

## Display

The following table lists the display specifications of your Precision 3490.

**Table 21. Display specifications**

Description	Option one	Option two	Option three
Display type	14-inch Full High Definition (FHD)	14-inch Full High Definition (FHD), ComfortView Plus Low Blue Light, battery saving	14-inch Full High Definition (FHD)
Touch options	Yes	No	No
Display-panel technology	In-Plane Switching (IPS)	In-Plane Switching (IPS)	In-Plane Switching (IPS)
Display-panel dimensions (active area):			
Height	173.95 mm (6.84 in.)	173.95 mm (6.84 in.)	173.95 mm (6.84 in.)
Width	309.40 mm (12.18 in.)	309.40 mm (12.18 in.)	309.40 mm (12.18 in.)

**Table 21. Display specifications (continued)**

Description		Option one	Option two	Option three
	Diagonal	355.60 mm (14.00 in.)	355.60 mm (14.00 in.)	355.60 mm (14.00 in.)
Display-panel native resolution		1920 x 1080	1920 x 1080	1920 x 1080
Luminance (typical)		250 nits	400 nits	300 nits
Megapixels		2.07	2.07	2.07
Color gamut		45% NTSC	100% sRGB	72% NTSC
Color depth		6-bit	True 8-bit	6-bit + FRC
Color		262 K	16.7 M	16.2 M
Pixels Per Inch (PPI)		157	157	157
Contrast ratio (typical)		600:1	1000:1	600:1
Response time (maximum)		35 millisecond	35 millisecond	35 millisecond
Refresh rate		60 Hz	60 Hz	60 Hz
Horizontal view angle		85 +/- degrees	85 +/- degrees	85 +/- degrees
Vertical view angle		85 +/- degrees	85 +/- degrees	85 +/- degrees
Pixel pitch		0.161 x 0.161 mm	0.161 x 0.161 mm	0.161 x 0.161 mm
Power consumption (maximum)		3.10 W	2.50 W	4.60 W
Anti-glare vs glossy finish		Anti-glare	Anti-glare	Anti-glare

## Fingerprint reader (optional)

The following table lists the specifications of the optional fingerprint-reader of your Precision 3490.

**Table 22. Fingerprint reader specifications**

Description	Values
Fingerprint-reader sensor technology	Capacitive
Fingerprint-reader sensor resolution	500 dpi
Fingerprint-reader sensor pixel size	108 x 88

## Sensor

The following table lists the sensor of your Precision 3490.

**Table 23. Sensor**

Sensor support
Ambient Light Sensor



**Table 23. Sensor (continued)**

<b>Sensor support</b>
Accelerometer in the base: ST Micro LIS2DW12TR
Accelerometer in the hinge-up (Upsell config with Emza/ALS/IR camera): ST Micro LNG2DMTR

## GPU—Integrated

The following table lists the specifications of the integrated Graphics Processing Unit (GPU) supported by your Precision 3490.

**Table 24. GPU—Integrated**

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

## GPU—Discrete

The following table lists the specifications of the discrete Graphics Processing Unit (GPU) supported by your Precision 3490.

**Table 25. GPU—Discrete**


Controller	Memory size	Memory type
NVIDIA RTX 500 Ada Generation	4 GB	GDDR6

## External display support

The following table lists the external display support for your Precision 3490.

**Table 26. External display support**

Graphics card	Supported external displays with laptop display enabled	Supported external displays with laptop display disabled
Intel Arc Graphics	3	4
Intel Graphics	3	4

 **NOTE:** For more information about external display support, see the External Display Connection Guide on [www.dell.com/support](http://www.dell.com/support).

## Hardware security

The following table lists the hardware security of your Precision 3490.

**Table 27. Hardware security**

<b>Hardware security</b>
Trusted Platform Module (TPM) 2.0 discrete
FIPS 140-2 certification for TPM

**Table 27. Hardware security (continued)**

<b>Hardware security</b>
TCG Certification for TPM (Trusted Computing Group)
Finger Print Reader in Power Button available with and without ControlVault 3 Plus
ControlVault 3 Plus Advanced Authentication with FIPS 140-3 Level 3 Certification
Contacted Smart Card and ControlVault 3 Plus
Contactless Smart Card, NFC, and ControlVault 3 Plus
SED SSD NVMe, SSD, and hard drive (Opal and non-Opal) per SDL
FIPS 201 Full Scan FPR and ControlVault 3 Plus

## Smart-card reader

### Contactless smart-card reader


This section lists the contactless smart-card reader specifications of your Precision 3490. This module is only available in computers shipped with Smart-card readers.

**Table 28. Contactless smart-card reader specifications**

<b>Title</b>	<b>Description</b>	<b>Dell ControlVault 3 Plus Contactless smart-card reader with NFC</b>
Felica Card Support	Reader and software capable of supporting Felica contactless cards	Yes
Prox (Proximity) (125kHz) Card support	Reader and software capable of supporting Prox /Proximity/125 kHz contactless cards	No
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
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

**Table 28. Contactless smart-card reader specifications (continued)**

Title	Description	Dell ControlVault 3 Plus Contactless smart-card reader with NFC
NFC Proximity OS Interface	Enumerates NFP (Near Field Proximity) device for operating system to utilize	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 operating system level drivers	Yes
Dell ControlVault support	The device connects to Dell ControlVault for usage and processing	Yes

 **NOTE:** 125 KHz proximity cards are not supported.

**Table 29. Contactless card types supported**

Interface	Card type	Supported functionality
NFC Forum (Microsoft Proximity Device)	Type 1 tag	Read/Write NDEF
	Type 2 tag	Read/Write NDEF
	Type 3 tag	Read/Write NDEF
	Type 4 tag	Read/Write NDEF
	Type 5 tag	Read/Write NDEF
	P2P	Exchange NDEF
RFID (Microsoft Smartcard Device)	ISO14443A	Read UUID and APDU Exchange (ISO7816)
	ISO14443B	Read UUID and APDU Exchange (ISO7816)
	Sony FeliCa	Read UUID only
	Legacy iClass (ISO15693)	Read UUID only
	Mifare Classic	Read UUID only
	Low Frequency (125 KHz )	Not supported

**Table 30. Supported cards**

Manufacturer	Card
HID	jCOP readertest3 A card (14443a)
	1430 1L
	DESFire D8H
	DESFIRE 4K Standard - 1450NGGNN
	iClass 16K/16 - 2002PGGMN
	iClass SR 16K/16 - 2002HPGGMN
	iCLASS 2K tag
	iCLASS GP - 2003 PGGMN
	iClass Clamshell - 2080PMSMV

**Table 30. Supported cards (continued)**

Manufacturer	Card
	iClass Prox 16K/16 - 2022BGGMNN
	Mifare M1P 1430 NGGNN
	iclass Prox 2020BGGMNM
	DesFire D8P 1456CSGMN
	iCLASS MIFARE Px GM49Y 2623BNPGGBNAB
	iCLASS MIFARE Px 8M1L
	iClass SEOS JW 5006PGGMN
	Crescendo iCLASS Px G8H
	iCLASS Seos 1Y
	SEOS JMC4 J1Y 5806VNG1NNN4
	SEOS Key FOB 5266PNNA
	SEOS Clamshell 5656PMSAV
	SEOS + Prox 5106RGGMNN
	SEOS + DESFire 5906PNG1ANN7
	SEOS iClass 5006PGGMN7
	Seos Essential + Prox 551PPGGANN
	iCLASS 2K 2000PGGMN
	iCLASS 2K 3000PGGMN
	MIFARE DESFire 3700CPGGAN
	iCLASS DP
	DESFire 1Y
NXP/Mifare	Mifare DESFire 8K White PVC card
	Mifare Classic 1K White PVC card
	NXP Mifare Classic S50 ISO card
	Mifare DESFire 2K
	Mifare Plus S 2K/4K
	Mifare Plus X 4K
G&D	idOnDemand - SCE3.2 144K
	SCE6.0 FIPS 80K Dual + 1K Mifare
	SCE6.0 nonFIPS 80K Dual + 1K Mifare
	SCE6.0 FIPS 144K Dual + 1K Mifare
	SCE6.0 nonFIPS 144K Dual + 1K Mifare
	SCE7.0 FIPS 144K
Oberthur	idOnDemand - OCS5.2 80K
	ID-One Cosmo 64 RSA D V5.4 T = 0 card
	ID-One Cosmo 128K V5.5 card
Gemalto	TOP DL GX4 144K card

**Table 30. Supported cards (continued)**

Manufacturer	Card
Sony	Felica RC-S962
	Felica RC-S965
	Felica RC-S966
PIVKey	C910 PKI
NIST	PIV1
IDENTIV	PIV programmed cards
	uTrust
Transport cards	Oyster (London) MIFARE DESFire
	T-Money (Korea)
	Octopus Card (Hong Kong)
	SUICA (Japan)

**Table 31. Qualified NFC tags**

NFC tag	Supported
Tap and do - NFC Forum Type 1 Tag - Topaz 512 (BCM920203)	Yes
Tap and do - NFC Forum Type 1 Tag - Topaz 512 (BCM20203T512)	Yes
Tap and do - NFC Forum Type 1 Tag - Topaz (BCM20203T96)	Yes
Tap and do - NFC Forum Type 2 Tag - Mifare UltraLight	Yes
Tap and do - NFC Forum Type 2 Tag - Mifare UltraLight C	Yes
Tap and do - NFC Forum Type 2 Tag - NTAG203	Yes
Tap and do - NFC Forum Type 3 Tag - FeliCa Lite RC-S965	Yes
Tap and do - NFC Forum Type 3 Tag - FeliCa RC-S962	Yes
Tap and do - NFC Forum Type 4 Tag - Mifare DESFire EV1Card 2K	Yes
Tap and do - NFC Forum Type 4 Tag - Mifare DESFire EV1Card 4K	Yes
Tap and do - NFC Forum Type 4 Tag - Mifare DESFire EV1Card 8K	Yes
Tap and do - ISO 15693 - Tag-it Plus	Yes
HID I-code ISO card	Yes

## Contacted smart-card reader

The following table lists the contacted smart-card reader specifications of your Precision 3490.

**Table 32. Contacted smart-card reader specifications**

Title	Description	Dell ControlVault 3 Plus Contacted smart-card reader
ISO 7816-3 Class A Card Support	Reader capable of reading 5 V powered smart card	Yes

**Table 32. Contacted smart-card reader specifications (continued)**

Title	Description	Dell ControlVault 3 Plus Contacted smart-card reader
ISO 7816-3 Class B Card Support	Reader capable of reading 3 V powered smart card	Yes
ISO 7816-3 Class C Card support	Reader capable of reading 1.8 V powered smart card	Yes
T = 0 support	Cards support character level transmission	Yes
T = 1 support	Cards support block level transmission	Yes
EMVCo Certified	Formally certified based on EMVCo smart card standards	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 operating system level drivers	Yes
Windows Certified	Certified by the Windows Hardware Certification program	Yes
FIPS 201 (PIV/HSPD-12) Compliant	Device compliant with FIPS 201/PIV/HSPD-12 requirements	Yes
ISO 7816-1 Compliant	Specification for the physical characteristics of integrated circuit cards with contacts	Yes
ISO 7816-2 Compliant	Specification for the dimensions and location of the contacts	Yes
ISO 7816-3 Compliant	Specification for electrical interface and transmission protocols	Yes
ISO 7816-4 Compliant	Specification for organization, security and commands for interchange	Yes
Dell ControlVault support	Device connects to Dell ControlVault for usage and processing	Yes

## Operating and storage environment


This table lists the operating and storage specifications of your Precision 3490.

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

**Table 33. 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†

**Table 33. Computer environment (continued)**

Description	Operating	Storage
Altitude range	-15.2 m to 3048 m (-49.87 ft to 10,000 ft)	-15.2 m to 10,668 m (-49.87 ft to 35,000 ft)
 <b>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.</b>		

\* 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](http://www.dell.com/support).

# Engineering specifications

## Ethernet

### Intel Ethernet Connection i219-LM

The following table lists the i219-LM specifications.

**Table 34. Intel Ethernet Connection i219-LM specifications**

Feature	Values
External connector type	RJ45
Data rate	10/100/1000 Mbps
<b>Controller Details</b>	
Controller bus architecture	PCI Express base specification revision 1.1
Integrated memory	Yes
Data transfer mode	Yes (Bus-Master DMA)
Power consumption (Full operation per data rate connection speed)	542 mW (Max)
Power consumption (Standby operation)	76 mW (Max)
IEEE standards compliance	802.3
Hardware certifications	N/A
Boot ROM support	EEPROM (Located in SPI)
<b>Network Transfer Mode</b>	
Network transfer rate	10 Mb (full/half-duplex)
10BASE-T (full-duplex) 20 Mbps	100 Mb (full/half-duplex)
100BASE-TX (half-duplex) 100 Mbps	1000 Mb (full-duplex)
<b>Environmental</b>	
Operating temperature range	0°C–85°C (32°F–185°F)
Operating humidity	20% to 80% (non condensing)
Operating system driver Support	<ul style="list-style-type: none"> <li>• Windows (x64)</li> <li>• Ubuntu</li> <li>• Neokylin</li> </ul>
Manageability	<ul style="list-style-type: none"> <li>• Wakeup On LAN</li> <li>• PXE 2.1</li> </ul>
Management capabilities alerting	Optional Intel Standard Manageability (must be made at time of purchase).

This term does not connote an actual operating speed of 1 Gb/sec. For high-speed transmission, connection to a Gigabit Ethernet server and network infrastructure is required.



# Intel Ethernet Connection i219-V

The following table lists the i219-V specifications.

**Table 35. Intel Ethernet Connection i219-V specifications**

Feature	Values
External connector type	RJ45
Data rate	10/100/1000 Mbps
<b>Controller Details</b>	
Controller bus architecture	PCI Express base specification revision 1.1
Integrated memory	Yes
Data transfer mode	Yes (Bus-Master DMA)
Power consumption (Full operation per data rate connection speed)	542 mW (Max)
Power consumption (Standby operation)	76 mW (Max)
IEEE standards compliance	802.3
Hardware certifications	N/A
Boot ROM support	EEPROM (Located in SPI)
<b>Network Transfer Mode</b>	
Network transfer rate	10 Mb (full/half-duplex)
10BASE-T (full-duplex) 20 Mbps	100 Mb (full/half-duplex)
100BASE-TX (half-duplex) 100 Mbps	1000 Mb (full-duplex)
<b>Environmental</b>	
Operating temperature range	0°C–85°C (32°F–185°F)
Operating humidity	20% to 80% (non-condensing)
Operating system driver Support	<ul style="list-style-type: none"> <li>• Windows (x64)</li> <li>• Ubuntu</li> <li>• Neokylin</li> </ul>
Manageability	<ul style="list-style-type: none"> <li>• Wakeup On LAN</li> <li>• PXE 2.1</li> </ul>
Management capabilities alerting	Optional Intel Standard Manageability (must be made at time of purchase).


This term does not connote an actual operating speed of 1 Gb/sec. For high-speed transmission, connection to a Gigabit Ethernet server and network infrastructure is required.

# Wireless module

## Realtek RTL8852BE, 2x2, Wi-Fi 6 (Wi-Fi 802.11 a/b/g/n/ac/ax), Bluetooth 5.3 wireless card

The following table lists the Realtek RTL8852BE specifications.

**Table 36. Realtek RTL8852BE specifications**

Description	Value
Host interface	<ul style="list-style-type: none"> <li>• PCIe for Wi-Fi</li> <li>• USB for Bluetooth</li> </ul>
Network standard	IEEE 802.11a/b/g/n/ac/ax, MU-MIMO
Wi-Fi Alliance certifications	Wi-Fi CERTIFIED* a/b/g/n/ac/ax, WMM*, WPA, WPA2*, WPA3*, and Wi-Fi Direct (Microsoft Windows* only)
Operating frequency bands	<ul style="list-style-type: none"> <li>• 2.4 GHz</li> <li>• 5 GHz</li> </ul>
Data rate	<ul style="list-style-type: none"> <li>• 2.4 GHz 40M: Up to 574 Mbps</li> <li>• 5 GHz 80M: Up to 1201 Mbps</li> </ul>
Power consumption	Optimized power modes (sleep states) reduce power consumption during periods of inactivity
Authentication	<ul style="list-style-type: none"> <li>• WPA* and WPA2* Personal and Enterprise</li> <li>• WPA3* Personal and Enterprise</li> </ul>
Client utility	Native Wi-Fi and Bluetooth Microsoft UI support
Software support	<ul style="list-style-type: none"> <li>• Microsoft WHQL certified for Windows</li> <li>• Linux</li> </ul>
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	<ul style="list-style-type: none"> <li>• Dual Mode Bluetooth 5.3</li> <li>• BLE</li> </ul>
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
Operating temperature	0°C to + 70°C
Storage temperature	-40°C to +85°C
 <b>NOTE:</b> *Other names and brands may be claimed as the property of others.	

# Intel AX211, 2x2 MIMO, 2400 Mbps, 2.4/5/6 GHz, Wi-Fi 6E (WiFi 802.11ax), Bluetooth 5.3 wireless card


The following table lists the Intel AX211 specifications.

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

**Table 37. Intel AX211 specifications**

Description	Value
Host interface	CNVio
Network standard	IEEE 802.11a/b/g/n/ac/ax, 160 MHz channel use, MU-MIMO, new 6 GHz band
Wi-Fi Alliance certifications	Wi-Fi CERTIFIED* 6, Wi-Fi CERTIFIED* a/b/g/n/ac, WMM*, WMM*-Power Save, WPA2*, WPA3*, WPS*, PMF* ,Wi-Fi Direct*, Wi-Fi Agile Multiband*
Operating frequency bands	<ul style="list-style-type: none"> <li>• 2.4 GHz</li> <li>• 5 GHz</li> <li>• 6 GHz</li> </ul>
Data rate	<ul style="list-style-type: none"> <li>• 2.4 GHz 40M: Up to 574 Mbps</li> <li>• 5/6 GHz 80M: Up to 1.2 Gbps</li> <li>• 5/6 GHz 160M: Up to 2.4 Gbps</li> </ul>
Power consumption	Optimized power modes (sleep states) reduce power consumption during periods of inactivity
Security methods	<ul style="list-style-type: none"> <li>• WPA2 Personal and Enterprise</li> <li>• WPA3</li> </ul>
Authentication protocols	<ul style="list-style-type: none"> <li>• 802.1X EAP-TLS</li> <li>• EAP-TTLS/MSCHAPv2</li> <li>• PEAPv0 -MSCHAPv2 (EAP-SIM, EAP-AKA, EAP-AKA)</li> </ul>
Encryption	<ul style="list-style-type: none"> <li>• 64-bit and 128-bit WEP</li> <li>• TKIP</li> <li>• 128-bit AES-CCMP</li> <li>• 256-bit AES-GCMP</li> </ul>
Product safety	<ul style="list-style-type: none"> <li>• UL</li> <li>• C-UL</li> <li>• CB (IEC60950-1)</li> </ul>
Management capabilities alerting	Support for Intel AMT
Government compliance	<ul style="list-style-type: none"> <li>• FIPS 140-2</li> <li>• FISMA</li> </ul>
Client utility	Intel PRO/Set wireless software v22 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	<ul style="list-style-type: none"> <li>• Dual Mode Bluetooth 5.3</li> <li>• BLE</li> </ul>

**Table 37. Intel AX211 specifications (continued)**


Description	Value
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 +50°C (Full performance at shield temperatures up to 80°C)
Storage temperature	-40°C to +70°C
Humidity	Up to 90% RH non-condensing (at temperatures of 25°C to 35°C)
 <b>NOTE:</b> *Other names and brands may be claimed as the property of others.	

## 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 38. 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	<ul style="list-style-type: none"> <li>• LTE FDD/TDD</li> <li>• WCDMA/HSPA+</li> <li>• GPS/GLONASS/Beidou/Galileo</li> </ul>
Transfer rate	<ul style="list-style-type: none"> <li>• Up to 600 Mbps DL (CAT6)</li> <li>• Up to 150 Mbps UL</li> </ul>
Operating frequency bands	<ul style="list-style-type: none"> <li>• 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)</li> <li>• HSPA+ (1,2,4,5,6,8,19)</li> </ul>
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  <b>NOTE:</b> 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


**Table 38. Qualcomm Snapdragon SDX12 Global LTE-Advanced (DW5825e) specifications (continued)**

Description	Value
Extended operating temperature	-30°C to +75°C
Antenna connector	<ul style="list-style-type: none"> <li>• WWAN Main Antenna x 1</li> <li>• WWAN Diversity Antenna x 1</li> </ul>

## Qualcomm Snapdragon X62 Global 5G Modem (DW5932e)

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

**Table 39. Qualcomm Snapdragon X62 Global 5G Modem (DW5932e) specifications**



Description	Value
Form factor	M.2 3042 Key-B
Host interface	PCIe Gen3
Network standard	<ul style="list-style-type: none"> <li>• NR FR1 (Sub6) FDD/TDD</li> <li>• LTE FDD/TDD</li> <li>• WCDMA/HSPA+</li> <li>• GPS/GLONASS/Beidou/Galileo</li> </ul>
Transfer rate	<ul style="list-style-type: none"> <li>• 5G NR: DL 3.5 Gbps/UL 900 Mbps</li> <li>• LTE: DL 1.6 Gbps (CAT19)/UL 211 Mbps (CAT18)</li> <li>• UMTS: DL DC-HSPA+ Rel8:42 Mbps/UL 5.76 Mbps</li> </ul>
Operating frequency bands	<ul style="list-style-type: none"> <li>• 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)</li> <li>• 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)</li> <li>• WCDMA/HSPA+ (1, 2, 4, 5, 8)</li> </ul>
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  <b>NOTE:</b> 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
Storage temperature	-40°C to +85°C
Antenna connector	<ul style="list-style-type: none"> <li>• WWAN Main Antenna x 1</li> <li>• WWAN Diversity Antenna x 1</li> <li>• 4x4 MIMO Antenna x 2</li> </ul>

# GPU—Integrated

## Intel Arc Graphics

The following table lists the Intel Arc Graphics specifications.



**Table 40. Intel Arc Graphics specifications**

Description	Value
Bus type	Integrated graphics  <b>NOTE:</b> Intel Arc Graphics uses the computer memory as video memory.
Memory type	Shared with 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  <b>NOTE:</b> 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 4 displays including laptop display

## Intel Graphics

The following table lists the Intel Graphics specifications.

**Table 41. Intel Graphics specifications**

Description	Value
Bus type	Integrated graphics  <b>NOTE:</b> Intel Graphics uses the computer memory as video memory.
Memory type	Shared with 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  <b>NOTE:</b> The refresh rate depends on the resolution.
External ports	HDMI 2.1 port, DisplayPort 2.1 over USB Type-C

**Table 41. Intel Graphics specifications (continued)**

Description	Value
Multiple display support	Up to 4 displays including laptop display

## GPU—Discrete

### NVIDIA RTX 500 ADA Generation, 4 GB, GDDR6, GB3C-64

The following table lists the NVIDIA RTX 500 ADA Generation specifications.

**Table 42. NVIDIA RTX 500 ADA Generation specifications**

Feature	Values
GPU	NVIDIA RTX 500 ADA Generation Laptop GPU
Cores	CUDA cores 2048
Memory bandwidth	112 Gbps
Memory type	GDDR6
Memory size	4 GB
Memory interface	64-bit
Memory configuration	2 x 8 GB (2CH x 256M x 16,16 Gbps)
GPU package	GB3C-64
TDP	<ul style="list-style-type: none"> <li>GPU - 26.3 W</li> <li>Memory - 7.2 W</li> </ul>
TGP	30 W
GPU base clock	1485 MHz
GPU boost clock	2025 MHz
Vram clock	8001 MHz
PCIe	Gen 4 x4
Features	N/A
Concurrency	14 to 44 W CPU + 30 W GPU

## Video port and resolution matrix

The following table lists the Video port and resolution matrix of your Precision 3490.

**Table 43. Video port and resolution matrix**

Port type	USB Type-C Thunderbolt 4 with DisplayPort 2.1	HDMI 2.1 TMDS port
Maximum resolution—single display	7680 x 4320 at 60 Hz	4096 x 2160 at 60 Hz
Maximum resolution—dual MST	Two 4096 x 2304 at 60 Hz	Not applicable
Maximum resolution—triple MST	Three 4096 x 2304 at 60 Hz	Not applicable

# Storage

## 256 GB, M.2 2230, TLC PCIe NVMe Gen4

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

**Table 44. 256 GB SSD specifications**

Description	Values
Capacity	256 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 Gen4
Speed (maximum)	64 Gb/s (up to four lanes)
MTTF	1.4M hours
Logical blocks	500,118,192
<b>Power source</b>	
Power consumption (reference only)	<ul style="list-style-type: none"><li>• Idle: 5 mW (PS4)</li><li>• Active: 4 W</li></ul>
<b>Environmental operating conditions (non-condensing)</b>	
Temperature range	0°C to 70°C
Relative humidity range	10% to 90%
Op shock	1500G
<b>Environmental nonoperating conditions (non-condensing)</b>	
Temperature range	-40°C to 70°C
Relative humidity range	5% to 95%

## 512 GB, M.2 2230, QLC PCIe NVMe Gen4 x4

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

**Table 45. 512 GB SSD 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 Gen4
Speed (maximum)	64 Gb/s (up to four lanes)
MTTF	1.4M hours
Logical blocks	1,000,215,216
<b>Power source</b>	



**Table 45. 512 GB SSD specifications (continued)**

Description	Values
Power consumption (reference only)	<ul style="list-style-type: none"> <li>Idle: 5 mW (PS4)</li> <li>Active: 4 W</li> </ul>
<b>Environmental operating conditions (non-condensing)</b>	
Temperature range	0°C to 70°C
Relative humidity range	10% to 90%
Op shock	1500G
<b>Environmental nonoperating conditions (non-condensing)</b>	
Temperature range	-40°C to 70°C
Relative humidity range	5% to 95%

## 512 GB, M.2 2230, TLC PCIe NVMe Gen4, SED SSD (Opal certified)

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

**Table 46. 512 SED SSD 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 Gen4
Speed (maximum)	64 Gb/s (up to four lanes)
MTBF	1.4M hours
Logical blocks	1,000,215,216
<b>Power source</b>	
Power consumption (reference only)	<ul style="list-style-type: none"> <li>Idle: 5 mW (PS4)</li> <li>Active: 4 W</li> </ul>
<b>Environmental operating conditions (non-condensing)</b>	
Temperature range	0°C to 70°C
Relative humidity range	10% to 90%
Op shock	1500G
<b>Environmental nonoperating conditions (non-condensing)</b>	
Temperature range	-40°C to 70°C
Relative humidity range	5% to 95%

## 1 TB, M.2 2230, QLC PCIe NVMe Gen4, SSD

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

**Table 47. 1 TB GB SSD specifications**

Description	Values
Capacity	1 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 Gen4
Speed (maximum)	64 Gb/s (up to four lanes)
MTBF	1.4M hours
Logical blocks	2,000,409,264
<b>Power source</b>	
Power consumption (reference only)	<ul style="list-style-type: none"> <li>• Idle: 5 mW (PS4)</li> <li>• Active: 4 W</li> </ul>
<b>Environmental operating conditions (non-condensing)</b>	
Temperature range	0°C to 70°C
Relative humidity range	10% to 90%
Op shock	1500G
<b>Environmental nonoperating conditions (non-condensing)</b>	
Temperature range	-40°C to 70°C
Relative humidity range	5% to 95%

## 2 TB, M.2 2230, QLC PCIe NVMe Gen4, SSD

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

**Table 48. 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 Gen4
Speed (maximum)	64 Gb/s (up to four lanes)
MTBF	1.4M hours
Logical blocks	4,000,797,360
<b>Power source</b>	
Power consumption (reference only)	<ul style="list-style-type: none"> <li>• Idle: 5 mW (PS4)</li> <li>• Active: 4 W</li> </ul>

**Table 48. 2 TB SSD specifications (continued)**

Description	Values
<b>Environmental operating conditions (non-condensing)</b>	
Temperature range	0°C to 70°C
Relative humidity range	10% to 90%
Op shock	1500G
<b>Environmental nonoperating conditions (non-condensing)</b>	
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 Precision 3490.

**Table 49. Power adapter specifications**

Description	Option one	Option two	Option three
Type	65 W adapter, USB-C <b>i</b> <b>NOTE:</b> Applicable to computers shipped with integrated graphics card.	100 W adapter, USB-C <b>i</b> <b>NOTE:</b> Applicable to computers shipped with integrated or discrete graphics card.	130 W adapter, USB-C <b>i</b> <b>NOTE:</b> Applicable to computers shipped with integrated or discrete graphics card.
Power-adapter dimensions:			
Height	28.00 mm (1.10 in.)	26.50 mm (1.04 in.)	22.00 mm (0.87 in.)
Width	51.00 mm (2.01 in.)	60.00 mm (2.36 in.)	66.00 mm (2.60 in.)
Depth	112.00 mm (4.41 in.)	122.00 mm (4.80 in.)	143.00 mm (5.63 in.)
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	1.80 A
Output current (continuous)	<ul style="list-style-type: none"> <li>20 V/3.25 A (continuous)</li> <li>15 V/3.00 A (continuous)</li> <li>9 V/3.00 A (continuous)</li> <li>5 V/3.00 A (continuous)</li> </ul>	<ul style="list-style-type: none"> <li>20 V/5 A (continuous)</li> <li>15 V/3 A (continuous)</li> <li>9 V/3 A (continuous)</li> <li>5 V/3 A (continuous)</li> </ul>	<ul style="list-style-type: none"> <li>20 V/6.50 A (continuous)</li> <li>5 V/1.00 A (continuous)</li> </ul>
Rated output voltage	<ul style="list-style-type: none"> <li>20 VDC</li> <li>15 VDC</li> <li>9 VDC</li> <li>5 VDC</li> </ul>	<ul style="list-style-type: none"> <li>20 VDC</li> <li>15 VDC</li> <li>9 VDC</li> <li>5 VDC</li> </ul>	<ul style="list-style-type: none"> <li>20 VDC</li> <li>5 VDC</li> </ul>
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	-40°C to 70°C (-40°F to 158°F)	-40°C to 70°C (-40°F to 158°F)	-40°C to 70°C (-40°F to 158°F)

**Table 49. Power adapter specifications (continued)**

Description	Option one	Option two	Option three
 <b>CAUTION:</b> 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 Precision 3490.

**Table 50. Accessories**

Accessories
<b>Audio:</b> Dell Pro Wireless ANC Headset WL5024
<b>Adapters:</b> <ul style="list-style-type: none"> <li>• Dell 6-in-1 USB-C Multiport Adapter - DA305</li> <li>• Dell 7-in-1 USB-C Multiport Adapter - DA310</li> </ul>
<b>Speakerphone:</b> Dell Speakerphone - SP3022
<b>Carrying case:</b> <ul style="list-style-type: none"> <li>• Dell EcoLoop Pro Backpack - CP5723</li> <li>• Dell EcoLoop Pro Briefcase - CC5623</li> <li>• Dell EcoLoop Pro Classic Briefcase 14 - CC5425C</li> <li>• Dell EcoLoop Pro Sleeve 11-14 - CV5423</li> <li>• Dell EcoLoop Pro Sleeve 15-16 - CV5623</li> </ul>
<b>Dock:</b> Dell Thunderbolt 4 Dock - WD22TB4
<b>Mouse:</b> Dell Pro Wireless Keyboard and Mouse - KM5221W
<b>Keyboard:</b> Dell Pro Wireless Keyboard and Mouse - KM5221W
<b>Monitor:</b> <ul style="list-style-type: none"> <li>• Dell 27 USB-C HUB Monitor - P2723DE</li> <li>• Dell Collaboration 24 Monitor - C2423H</li> </ul>
<b>Webcam:</b> Dell Pro Webcam - WB5023

# Security

## Software security

The following table lists the software security details of your Precision 3490.

**Table 51. Software security**

Security options
McAfee Generic Build 30-day Commercial
McAfee Generic Build 30 day Commercial JPN

## Fingerprint reader

The following table lists the fingerprint reader specifications of your Precision 3490.

**Table 52. Fingerprint reader specifications**

Description	Value
Category	Goodix—GF5288WNC
Sensor technology	Capacitive sensing
Sensor resolution	500 dpi
Sensor pixel size	108 x 88
Dell ControlVault support	Yes
Dell ControlVault 3.0 support	Yes
Anti-spoofing	Yes
Template storage	Dell ControlVault HW protected and encrypted
Match on chip	Yes
FIPS 201 certified	No

## Dell ControlVault 3 Plus

The following table lists the Dell ControlVault 3 Plus specifications of your Precision 3490.

**Table 53. Dell ControlVault 3 Plus specifications**

Title	Description	Dell ControlVault 3 Plus
CPU technology	Not applicable	1 GHz ARM Cortex A7
RAM	Not applicable	2 MB
ROM	Not applicable	16 MB
Host Interface	Not applicable	USB 2.0
Fingerprint procession chip	Fingerprint processing occurs within the secure boundary of ControlVault	Yes
Windows WBF support	Support for Windows biometric framework when Fingerprint reader is attached	Yes

**Table 53. Dell ControlVault 3 Plus specifications (continued)**

Title	Description	Dell ControlVault 3 Plus
Windows Hello Enhanced Sign-in Security Support	Support for Windows Hello Enhanced Sign-in Security when Fingerprint Reader is attached	Yes
FIPS 140-3 level 3 certified	Device certified with FIPS 140-3 level 3 requirements	Yes

## Trusted Platform Module

The following table lists the Trusted Platform Module (TPM) of your Precision 3490.

**Table 54. Trusted Platform Module (TPM)**

<b>TPM: ST/ST33 HTPH2X32AHE4</b>
SPI interface
TPM 2.0
FIPs 140-2 certificate

## Thermal and acoustic improvements

The following table lists the thermal and acoustic improvements of your Precision 3490.

**Table 55. Thermal and acoustic improvements**

Feature	Description
New larger single heat pipe	Increase the heat capacity to improve thermal dissipation
Better system tuning/setting	Get higher performance and good user experience
Pro-OS enhanced thermal setting (Dynamic PL1)	Optimized boot-up time to balance thermals at start-up
Linear fan control	Fan speed ramp more smoothly for better user experience, no more significant acoustic changing
DDT SSD setting	Protecting the SSD device in high temperature and worse cases to prevent blue screen of death (BSOD)
IEC 60529 ingress protection: IP-54	<ul style="list-style-type: none"><li>• Dust protected</li><li>• Protected against dripping water</li></ul>
Better acoustic experience	Enhance acoustic to 0.6 sone during daily working conditions

## 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](http://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 | 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 | Configure allows you to remotely automate and configure over 150+ BIOS settings for a personalized user experience.

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

**Dell Command | 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 | Update eliminates the time-consuming hunting and pecking process of update installation.

**Dell Command | 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 unreachable 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](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.



## Using the privacy shutter

1. Slide the privacy shutter to the left to access the camera lens.
2. Slide the privacy shutter to the right to cover the camera lens.



Figure 7. Camera shutter

## Dell Optimizer

This section provides the Dell Optimizer specifications of your Precision 3490.

On Precision 3490 with Dell Optimizer, the following features are supported:

- **ExpressConnect**—Automatically joins the access point with the strongest signal, and directs bandwidth to conferencing applications when in use.
- **ExpressSign-in**—The Intel Context Sensing Technology's proximity sensor detects your presence to instantly wake up the computer and login using the IR camera and Windows Hello feature. Windows locks when you walk away.
- **ExpressResponse**—Prioritizes the most important applications. Applications open faster and perform better.
- **ExpressCharge**—Extends the battery runtime and improves battery performance by adapting to your patterns.
- **Intelligent Audio**—Collaborate like you're in the same room. Intelligent Audio enhances your audio quality and reduces background noises, so you can hear and be heard, creating a better conference experience for all.

For more information about configuring and using these features, see [Dell Optimizer User Guide](#).

## Color, material, and finish

This section details the color, material, and finish (CMF) specifications of your Precision 3490.



**Table 56. CMF specifications**

Description	Value
A Cover (Top)	<ul style="list-style-type: none"> <li>Carbon Fiber Reinforced Plastic (CFRP) + Bi-Injection Antenna Cover</li> <li>Titan Gray Satin Waterborne UV Monocoat (WUVM)</li> <li>17+/-3 Gloss Units (GU)</li> </ul>
B Cover (Bezel)	<ul style="list-style-type: none"> <li>PC/ABS + Elastomer</li> <li><b>NOTE:</b> PC/ABS: PC/ABS (polycarbonate/acrylonitrile-butadiene-styrene terpolymer blend) is a thermoplastic alloy of (PC) polycarbonate and (ABS) acrylonitrile-butadiene-styrene.</li> <li>Apollo, Resin</li> <li>Bezel: Fine texture, 23 µm, 5+/-1 GU</li> <li>Bumper: Fine texture, 17 µm, 5+/-1 GU</li> </ul>
C Cover (Palmrest)	<ul style="list-style-type: none"> <li>Plastic (Rustic Pewter Resin)</li> <li>Titan Gray Satin WUVM</li> <li>17+/-3 GU</li> </ul>
D Cover (Bottom)	<ul style="list-style-type: none"> <li>Black CFRP</li> <li>Titan Gray Satin WUVM</li> <li>17+/-3 GU</li> </ul>


**NOTE:** Titan Gray, Cool Gray 9C = RGB 117 120 123 HEX/HTML 75787B CMYK 30 22 17 57

# 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 57. Self-help resources**

Self-help resources	Resource location
Information about Dell products and services	<a href="http://www.dell.com">www.dell.com</a>
Tips	
Contact Support	In Windows search, type <code>Contact Support</code> , and press Enter.
Online help for operating system	<a href="http://www.dell.com/support/windows">www.dell.com/support/windows</a> <a href="http://www.dell.com/support/linux">www.dell.com/support/linux</a>
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 <a href="http://www.dell.com/support">www.dell.com/support</a> .  For more information about how to find the Service Tag for your computer, see <a href="#">Locate the Service Tag on your computer</a> .
Dell knowledge base articles	<ol style="list-style-type: none"> <li>1. Go to <a href="http://www.dell.com/support">www.dell.com/support</a>.</li> <li>2. On the menu bar at the top of the Support page, select <b>Support &gt; Support Library</b>.</li> <li>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.</li> </ol>

## Contacting Dell

To contact Dell for sales, technical support, or customer service issues, see [www.dell.com/contactdell](http://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.