Precision 5770

Setup and Specifications

D&LL Technologies

Notes, cautions, and warnings

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

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

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

Contents

Set up your Precision 5770

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

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

ⓘ **NOTE:** To conserve battery power, the battery might enter power saving mode. Connect the power adapter and press the power button to turn on the computer.

2. Finish operating system setup.

   For Ubuntu:

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

   For Windows:

   Follow the on-screen instructions to complete the setup. When setting up, Dell recommends that you:
   ● Connect to a network for Windows updates.
      ⓘ **NOTE:** If connecting to a secured wireless network, enter the password for the wireless network access when prompted.
   ● If connected to the internet, sign-in with or create a Microsoft account. If not connected to the internet, create an offline account.

   ● On the **Support and Protection** screen, enter your contact details.

3. Locate and use Dell apps from the Windows Start menu—Recommended.

Table 1. Locate Dell apps

Resources	Description
	Dell Product Registration Register your computer with Dell.
	Dell Help & Support Access help and support for your computer.
	SupportAssist SupportAssist is the smart technology that keeps your computer running at its best by optimizing settings, detecting issues, removing viruses and notifies when you need to make system updates. SupportAssist proactively checks the health of your system's hardware and software. When an issue is detected, the necessary system state information is sent to Dell to begin troubleshooting. SupportAssist is preinstalled on most of the Dell devices running Windows operating system. For more information, see SupportAssist for Home PCs User's Guide on www.dell.com/serviceabilitytools. (i) **NOTE:** In SupportAssist, click the warranty expiry date to renew or upgrade your warranty.
	Dell Update Updates your computer with critical fixes and latest device drivers as they become available. For more information on using Dell Update, search in the Knowledge Base Resource at www.dell.com/support.
	Dell Digital Delivery Download software applications, which are purchased but not preinstalled on your computer. For more information on using Dell Digital Delivery, search in the Knowledge Base Resource at www.dell.com/support.

Views of Precision 5770

Right

1. Two Thunderbolt 4 Type-C ports with DisplayPort Alt Mode and Power Delivery
2. SD-card slot
3. Universal audio jack

Left

1. Wedge-shaped lock slot
2. Two Thunderbolt 4 Type-C ports with DisplayPort Alt Mode and Power Delivery

Top

1. Dual digital-array microphones
2. Power button
3. Right speaker
4. Trackpad
5. Left speaker

Front
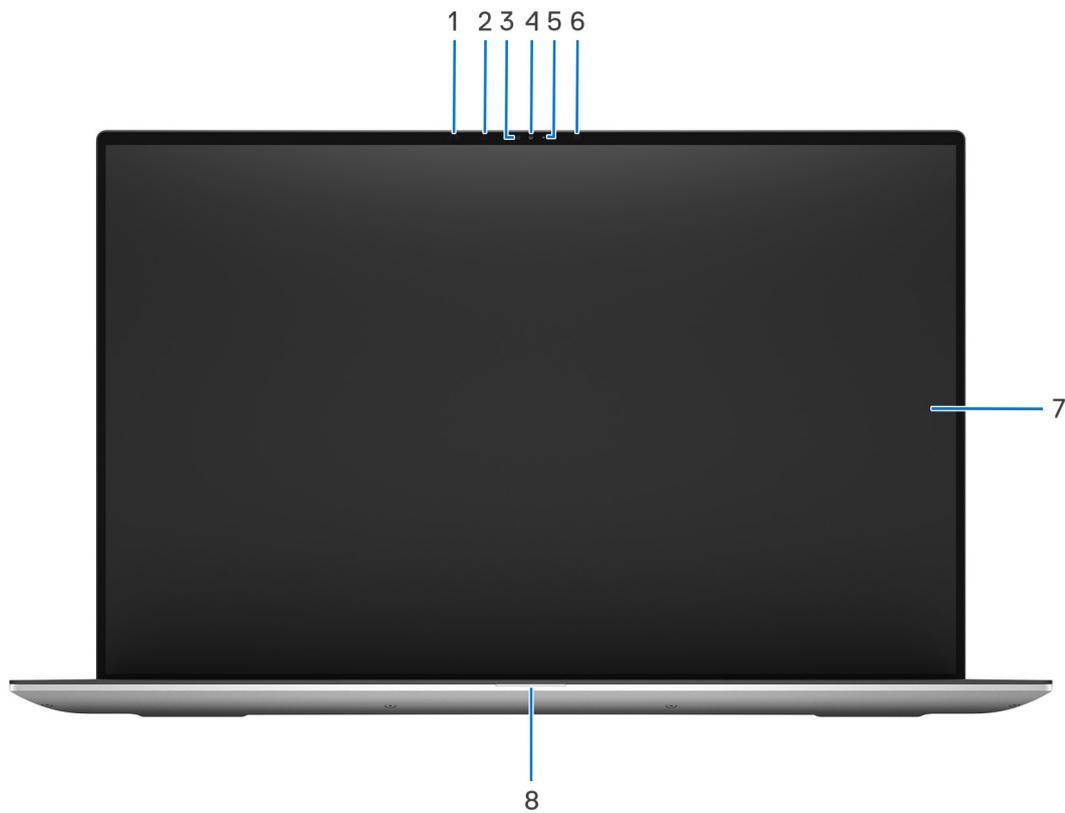
1. Proximity sensors
2. IR LED
3. Ambient Light Sensor (ALS)
4. Camera (RGB/IR)
5. Camera status light
6. IR LED
7. Display panel
8. Power LED indicator

Bottom
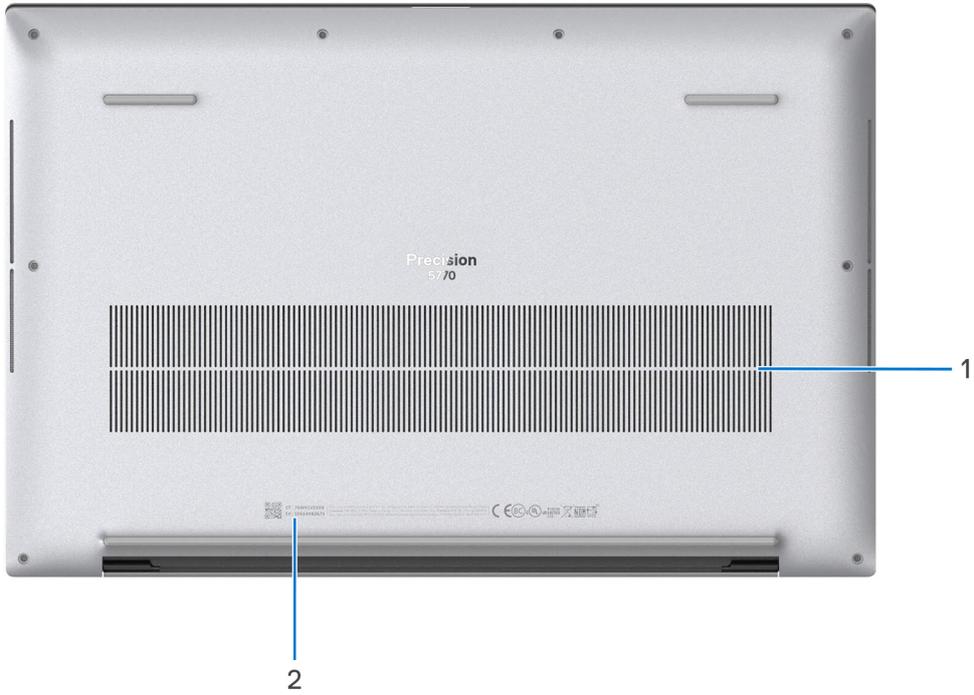
1. Air vents
2. Service tag label

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.
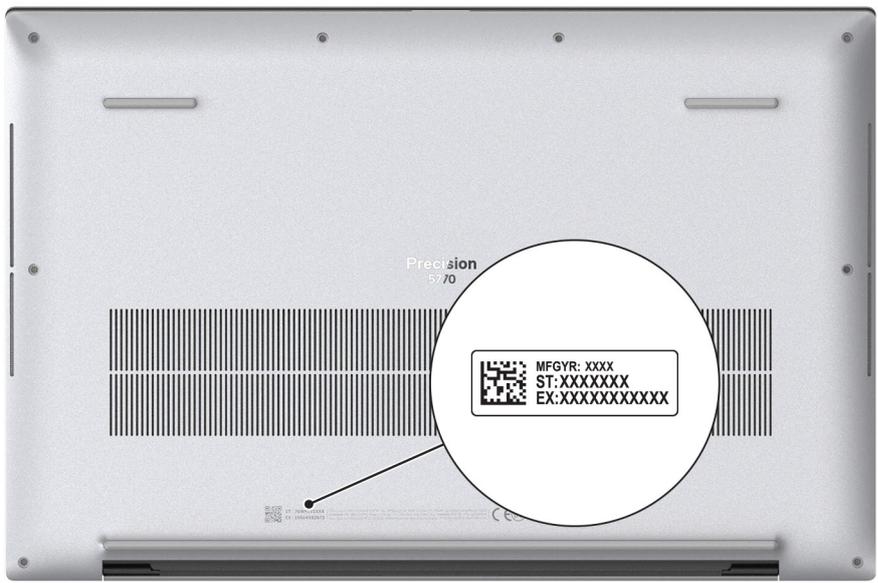
Battery charge and status light

The following table lists the battery charge and status light behavior of your Precision 5770.

Table 2. 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, expect for a trickle power. The context data is written to hard drive.
- S5 (OFF) - The system is in a shutdown state.

Specifications of Precision 5770

Dimensions and weight

The following table lists the height, width, depth, and weight of your Precision 5770.

Table 3. Dimensions and weight

Description	Values
Height:	
Front height	8.67 mm (0.34 in.)
Rear height	13.15 mm (0.51 in.)
Width	374.48 mm (14.74 in.)
Depth	248.08 mm (9.76 in.)
Weight ⓘ **NOTE:** The weight of your computer depends on the configuration ordered and manufacturing variability.	● Minimum: 2.17 kg (4.79 lb) ● Maximum: 2.57 kg (5.67 lb)

Processor

The following table lists the details of the processors supported by your Precision 5770.

Table 4. Processor

Description	Option one	Option two	Option three	Option four
Processor type	12th Generation Intel Core i5-12600H	12th Generation Intel Core i7-12700H	12th Generation Intel Core i7-12800H	12th Generation Intel Core i9-12900H
Processor wattage	45 W	45 W	45 W	45 W
Processor core count	12	14	14	14
Processor thread count	16	20	20	20
Processor speed	2.70 Ghz to 4.50 GHz	2.30 GHz to 4.70 GHz	2.40 GHz to 4.80 GHz	2.50 GHz to 5.00 GHz
Processor cache	18 MB	24 MB	24 MB	24 MB
Integrated graphics	Intel Iris Xe Graphics **OR** Intel UHD Graphics	Intel Iris Xe Graphics **OR** Intel UHD Graphics	Intel Iris Xe Graphics **OR** Intel UHD Graphics	Intel Iris Xe Graphics **OR** Intel UHD Graphics

Chipset

The following table lists the details of the chipset supported by your Precision 5770.

Table 5. Chipset

Description	Values
Chipset	Intel Alder Lake H45
Processor	12th Generation Intel Core i5/i7/i9
DRAM bus width	128 bit
Flash EPROM	64 MB
PCIe bus	Up to Gen 4.0

Operating system

Your Precision 5770 supports the following operating systems:

- Windows 10 Pro, 64-bit
- Windows 10 Pro National Academic, 64-bit
- Windows 11 Home, 64-bit
- Windows 11 Pro, 64-bit
- Windows 11 Pro National Academic, 64-bit
- Ubuntu 20.04 LTS, 64-bit
- RedHat v8.6

Memory

The following table lists the memory specifications of your Precision 5770.

Table 6. Memory specifications

Description	Values
Memory slots	Two-SODIMM slots
Memory type	Dual-channel DDR5
Memory speed	4800 MHz
Maximum memory configuration	64 GB
Minimum memory configuration	8 GB
Memory size per slot	8 GB, 16 GB, 32 GB
Memory configurations supported	8 GB, 1 x 8 GB, DDR5, 4800 MHz, Non-ECC, single channel 16 GB, 2 x 8 GB, DDR5, 4800 MHz, Non-ECC, dual channel 32 GB, 2 x 16 GB, DDR5, 4800 MHz, Non-ECC, dual channel 64 GB, 2 x 32 GB, DDR5, 4800 MHz, Non-ECC, dual channel

External ports

The following table lists the external ports on your Precision 5770.

Table 7. External ports

Description	Values
USB ports	• Four Thunderbolt 4 (USB Type-C) with DisplayPort Alt Mode and Power Delivery
Audio port	One universal audio jack
Video port/ports	Via Thunderbolt 4 (USB Type-C) ports
Media-card reader	One SD 4.0 card slot
Power-adapter port	USB Type-C
Security-cable slot	One Wedge-shaped lock slot

Internal slots

The following table lists the internal slots of your Precision 5770.

Table 8. Internal slots

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

Wireless module

The following table lists the Wireless Local Area Network (WLAN) module supported on your Precision 5770.

Table 9. Wireless module specifications

Description	Values
Model number	Intel Wi-Fi 6 AX211 (onboard)
Transfer rate	Up to 2400 Mbps
Frequency bands supported	2.4 GHz/5 GHz
Wireless standards	• Wi-Fi 802.11a/b/g • Wi-Fi 4 (WiFi 802.11n) • Wi-Fi 5 (WiFi 802.11ac) • Wi-Fi 6 (WiFi 802.11ax)
Encryption	• 64-bit/128-bit WEP • AES-CCMP • TKIP

Table 9. Wireless module specifications (continued)

Description	Values
Bluetooth	Bluetooth 5.2

Audio

The following table lists the audio specifications of your Precision 5770.

Table 10. Audio specifications

Description		Values
Audio controller		Realtek ALC711-CG
Stereo conversion		Supported
Internal audio interface		SoundWire
External audio interface		Universal audio jack
Number of speakers		● 2 x Woofers ● 2 x Tweeters
Internal-speaker amplifier		Realtek ALC1319D
External volume controls		Keyboard shortcut controls
Speaker output:		
	Average speaker output	● Woofer: 2 x 2 W ● Tweeters: 2 x 2 W
	Peak speaker output	● Woofer: 2 x 2.5 W ● Tweeters: 2 x 2.5 W
Subwoofer output		Not supported
Microphone		Dual-array microphones

Storage

This section lists the storage options on your Precision 5770.

Your computer supports one of the following configurations:
● M.2 2230, solid-state drive
● M.2 2280, solid-state drive
● M.2 2280, Opal Self-Encrypting solid-state drive
The primary drive of your computer varies with the storage configuration.

Table 11. Storage specifications

Storage type	Interface type	Capacity
M.2 2230, Class 35 solid-state drive	PCIe NVMe Gen3 x4	256 GB
M.2 2230, Class 35 solid-state drive	PCIe NVMe Gen4 x4	256 GB

Table 11. Storage specifications (continued)

Storage type	Interface type	Capacity
M.2 2280, Class 40 solid-state drive	PCIe NVMe Gen4 x4	Up to 4 TB ⓘ **NOTE:** 4 TB SSD is only supported on systems configured with discrete graphics.
M.2 2280, Class 40 solid-state drive, Opal Self-Encrypting solid-state drive	PCIe NVMe Gen3 x4	Up to 1 TB

Media-card reader

The following table lists the media cards supported by your Precision 5770.

Table 12. Media-card reader specifications

Description	Values
Media-card type	One SD 4.0 card slot
Media-cards supported	● Secure Digital (SD) ● Secure Digital High Capacity (SDHC) ● Secure Digital Extended Capacity (SDXC)
ⓘ **NOTE:** The maximum capacity supported by the media-card reader varies depending on the standard of the media card installed in your computer.	

Keyboard

The following table lists the keyboard specifications of your Precision 5770.

Table 13. Keyboard specifications

Description	Values
Keyboard type	● Backlit
Keyboard layout	QWERTY
Number of keys	● 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) changing **Function Key Behavior** in BIOS setup program.

Camera

The following table lists the camera specifications of your Precision 5770.

Table 14. Camera specifications

Description		Values
Number of cameras		One
Camera type		RGB-Ir camera with dual digital-array microphones
Camera location		Front camera
Camera sensor type		CMOS RGB-Ir hybrid technology
Camera resolution:		
	Still image	0.90 megapixel
	Video	1280 x 720 (HD) at 30 fps
Infrared camera resolution:		
	Still image	0.92 megapixel
	Video	640 x 360 at 30 fps
Diagonal viewing angle:		
	Camera	78.5 degrees
	Infrared camera	78.5 degrees

Touchpad

The following table lists the touchpad specifications of your Precision 5770.

Table 15. Touchpad specifications

Description		Values
Touchpad resolution:		
	Horizontal	4655
	Vertical	2731
Touchpad dimensions:		
	Horizontal	149.90 mm (5.90 in.)
	Vertical	89 mm (3.50 in.)
Touchpad gestures		For more information about touchpad gestures available on Windows, see the Microsoft knowledge base article at support.microsoft.com.

Power adapter

The following table lists the power adapter specifications of your Precision 5770.

Table 16. Power adapter specifications

Description		Option one	Option two
Type		90 W USB Type-C	130 W Type-C
Input voltage		100 VAC to 240 VAC	100 VAC to 240 VAC
Input frequency		50 to 60 Hz	50 to 60 Hz
Input current (maximum)		1.50 A	1.80 A
Output current (continuous)		20 V/4.5 A 15 V/3 A 9 V/3 A 5 V/3 A	20 V/6.5 A 5.0 V/1 A
Rated output voltage		20 VDC 15 VDC 9 VDC 5 VDC	20 VDC 5 VDC
Temperature range:			
	Operating	0°C to 40°C (32°F to 104°F)	0°C to 40°C (32°F to 104°F)
	Storage	-40°C to 70°C (-40°F to 158°F)	-40°C to 70°C (-40°F to 158°F)
⚠ **CAUTION: Operating and storage temperature ranges may differ among components, so operating or storing the device outside these ranges may impact the performance of specific components.**			

Battery

The following table lists the battery specifications of your Precision 5770.

Table 17. Battery specifications

Description		Option one	Option two
Battery type		3-cell, 56 WHr ExpressCharge	6-cell, 97 WHr ExpressCharge
Battery voltage		11.40 VDC	11.40 VDC
Battery weight (maximum)		0.27 kg (0.60 lb)	0.385 kg (0.85 lb)
Battery dimensions:			
	Height	8.45 mm (0.33 in.)	8.45 mm (0.33 in.)
	Width	69.70 mm (2.74 in.)	69.70 mm (2.74 in.)
	Depth	330.65 mm (13.02 in.)	330.65 mm (13.02 in.)
Temperature range:			

Table 17. Battery specifications (continued)

Description		Option one	Option two
	Operating	• Charge: 0°C to 50°C (32°F to 122°F) • Discharge: 0°C to 60°C (32°F to 140°F)	• Charge: 0°C to 50°C (32°F to 122°F) • Discharge: 0°C to 60°C (32°F to 140°F)
	Storage	–40°C to 60°C (-4°F to 140°F)	–40°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.	Varies depending on operating conditions and can significantly reduce under certain power-intensive conditions.
Battery charging time (approximate) ⓘ **NOTE:** Control the charging time, duration, start and end time, and so on using the Dell Power Manager application. For more information on the Dell Power Manager see, *Me and My Dell* on www.dell.com.		• Standard charge, 0°C to 50°C (32°F to 122°F): 4 hours • ExpressCharge, 0°C to 15°C (32°F to 59°F): 4 hours • ExpressCharge, 16°C to 45°C (60.80°F to 113°F): 2 hours • ExpressCharge, 46°C to 50°C (114.80°F to 122°F): 3 hours ⓘ **NOTE:** Control the charging time, duration, start and end time, and so on, using the Dell Power Manager application. For more information about the Dell Power Manager, see, *Me and My Dell* on www.dell.com/.	• Standard charge, 0°C to 50°C (32°F to 122°F): 4 hours • ExpressCharge, 0°C to 15°C (32°F to 59°F): 4 hours • ExpressCharge, 16°C to 45°C (60.80°F to 113°F): 2 hours • ExpressCharge, 46°C to 50°C (114.80°F to 122°F): 3 hours ⓘ **NOTE:** Control the charging time, duration, start and end time, and so on, using the Dell Power Manager application. For more information about the Dell Power Manager, see, *Me and My Dell* on www.dell.com/.
Coin-cell battery		Not supported	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 recommends that you charge the battery regularly for optimal power consumption. If your battery charge is completely depleted, connect the power adapter, turn on your computer, and then restart your computer to reduce the power consumption.**

Display

The following table lists the display specifications of your Precision 5770.

Table 18. Display specifications

Description		Option one	Option two
Display type		Full High Definition Plus (FHD+)	Ultra High Definition Plus (UHD+)
Display-panel technology		Wide Viewing Angle (WVA) with Low Blue Light	Wide Viewing Angle (WVA) with Low Blue Light
Display-panel dimensions (active area):			
	Height	366.34 mm (14.42 in.)	366.34 mm (14.42 in.)
	Width	228.96 mm (9.01 in.)	228.96 mm (9.01 in.)
	Diagonal	432.00 mm (17 in.)	432.00 mm (17 in.)

Table 18. Display specifications (continued)

Description	Option one	Option two
Display-panel native resolution	1920 x 1200	3840 x 2400
Luminance (typical)	500 nits	500 nits
Megapixels	2.3	9.2
Color gamut	sRGB 100% min	Adobe 100% min; DCI-P3 99% typ, 95% min
Pixels Per Inch (PPI)	133	266
Contrast ratio (min.)	1650:1 typical	1600:1 typical
Response time (max.)	35 ms	35 ms
Refresh rate	60 Hz	60 Hz
Horizontal view angle	+/- 85 degrees typical	+/- 85 degrees typical
Vertical view angle	+/- 85 degrees typical	+/- 85 degrees typical
Pixel pitch	0.1908 mm	0.0954 mm
Power consumption (maximum)	5.06 W	13.73 W
Anti-glare vs glossy finish	Anti-glare	Anti-reflective
Touch options	No	Yes, 10 finger touch

Fingerprint reader

The following table lists the fingerprint-reader specifications of your Precision 5770.

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

Table 19. 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 5770.

Table 20. Sensor

Sensor support
Accelerometer (ST Micro LIS2DW12TR): on the base (system board)
ALS for Panel Backlight Control

Table 20. Sensor (continued)

Sensor support
Single Proximity sensor - on upper bezel

GPU—Integrated

The following table lists the specifications of the integrated Graphics Processing Unit (GPU) supported by your Precision 5770.

Table 21. GPU—Integrated

Controller	Memory size	Processor
Intel UHD Graphics (Single-channel memory)	Shared system memory	12th Generation Intel Core i5/i7/i9 processors
Intel Iris Xe Graphics (Dual-channel memory)	Shared system memory	12th Generation Intel Core i5/i7/i9 processors

GPU—Discrete

The following table lists the specifications of the discrete Graphics Processing Unit (GPU) supported by your Precision 5770.

Table 22. GPU—Discrete

Controller	Memory size	Memory type
NVIDIA GeForce RTX A3000	12 GB	GDDR6
NVIDIA GeForce RTX A2000	8 GB	GDDR6

Multiple display support matrix

The following table lists the multiple display support matrix for your Precision 5770.

Table 23. Multiple display support matrix

Graphics Card	Direct Graphics Controller Direct Output Mode	Supported external displays with computer internal display on	Supported external displays with computer internal display off
NVIDIA GeForce RTX A2000	No	No	No
NVIDIA GeForce RTX A3000	Yes	Yes	Yes
Intel UHD Graphics	Not applicable	3	4
Intel Iris Xe Graphics	Not applicable	3	4

Hardware security

The following table lists the hardware security of your Precision 5770.

Table 24. Hardware security

Hardware security
Trusted Platform Module (TPM) 2.0 FIPS 140-2 Certified
Chassis Intrusion Detection
1 wedge-shaped lock slot

Operating and storage environment

This table lists the operating and storage specifications of your Precision 5770.

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

Table 25. Computer environment

Description	Operating	Storage
Temperature range	0°C to 35°C (32°F to 95°F)	-40°C to 65°C (-40°F to 149°F)
Relative humidity (maximum)	10% to 90% (non-condensing)	0% to 95% (non-condensing)
Vibration (maximum)*	0.66 GRMS	1.30 GRMS
Shock (maximum)	110 G†	160 G†
Altitude range	-15.2 m to 3048 m (4.64 ft to 5518.4 ft)	-15.2 m to 10668 m (4.64 ft to 19234.4 ft)

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

* Measured using a random vibration spectrum that simulates user environment.

† Measured using a 2 ms half-sine pulse.

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 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.

Keyboard shortcuts of Precision 5770

ⓘ **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 table below).

However, if the function keys **F1**-**F12** are needed for specific software applications, multimedia functionality can be disabled by pressing **fn** + **esc**. Subsequently, 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 26. List of keyboard shortcuts

Function key	Re-defined key (for multi-media control)	Behavior
F1	fn + F1	Mute audio
F2	fn + F2	Decrease volume
F3	fn + F3	Increase volume
F4	fn + F4	Play/Pause
F5	fn + F5	Click keyboard backlight ⓘ **NOTE:** Toggle to cycle the keyboard backlight status through off, low-backlight, and high-backlight
F6	fn + F6	Decrease brightness
F7	fn + F7	Increase brightness
F8	fn + F8	Switch to external display
F10	fn + F10	Print screen
F11	fn + F11	Home
F12	fn + F12	End

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

Table 27. List of keyboard shortcuts

Function key	Behavior
fn + B	Pause/Break
fn + S	Toggle scroll lock
fn + R	System request
fn + ctrl	Open application menu

Table 27. List of keyboard shortcuts (continued)

Function key	Behavior
fn + esc	Toggle fn-key lock
fn + left arrow	Home
fn + right arrow	End

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 28. Self-help resources

Self-help resources	Resource location
Information about Dell products and services	www.dell.com
Tips	
Contact Support	In Windows search, type `Contact Support`, and press Enter.
Online help for operating system	www.dell.com/support/windows www.dell.com/support/linux
Access top solutions, diagnostics, drivers and downloads, and learn more about your computer through videos, manuals and documents.	Your Dell computer is uniquely identified by a Service Tag or Express Service Code. To view relevant support resources for your Dell computer, enter the Service Tag or Express Service Code at www.dell.com/support. For more information on how to find the Service Tag for your computer, see Locate the Service Tag on your computer.
Dell knowledge base articles for a variety of computer concerns	1. Go to www.dell.com/support. 2. On the menu bar at the top of the Support page, select **Support** > **Knowledge Base**. 3. In the Search field on the Knowledge Base page, type the keyword, topic, or model number, and then click or tap the search icon to view the related articles.

Contacting Dell

To contact Dell for sales, technical support, or customer service issues, see www.dell.com/contactdell.

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

(i) **NOTE:** If you do not have an active Internet connection, you can find contact information about your purchase invoice, packing slip, bill, or Dell product catalog.