Precision 5570

Technical Guidebook

DELLTechnologies

Notes, cautions, and warnings

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

⚠ **CAUTION: A CAUTION indicates either potential damage to hardware or loss of data and tells you how to avoid the problem.**
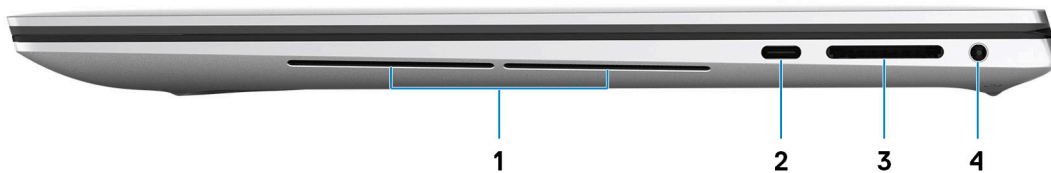
⚠ **WARNING: A WARNING indicates a potential for property damage, personal injury, or death.**

Contents

Views of Precision 5570

Right

1. **Right woofer**

   Enhances low-frequency audio output.

2. **USB 3.2 Gen 2 (Type-C) port with DisplayPort and Power Delivery**

   Connect peripherals such as external storage devices, printers, and external displays. Provides data transfer rate of up to 10 Gbps for USB 3.2 Gen 2x1 port.

   Supports DisplayPort and also enables you to connect an external display using a display adapter.

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

   Supports Power Delivery that enables two-way power supply between devices. Provides up to 5 V/1.50 A power output

3. **SD-card slot**

   Reads from and writes to the SD card. The computer supports the following card types:

   - Secure Digital (SD)
   - Secure Digital High Capacity (SDHC)
   - Secure Digital Extended Capacity (SDXC)

4. **Headset port**

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

Left

1. **Security-cable slot (wedge-shaped)**

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

2. **Thunderbolt 4 (USB4) Type-C port with Power Delivery (2)**

Supports USB4 Gen 3x2, DisplayPort 1.4a and Thunderbolt 4. Enables you to connect to an external display using a display adapter. Provides data transfer rates up to 40 Gbps for USB4 Gen 3x2 Thunderbolt 4. Supports Power Delivery that enables two-way power supply between devices. Provides up to 5 V/ 3 A power output that enables faster charging.

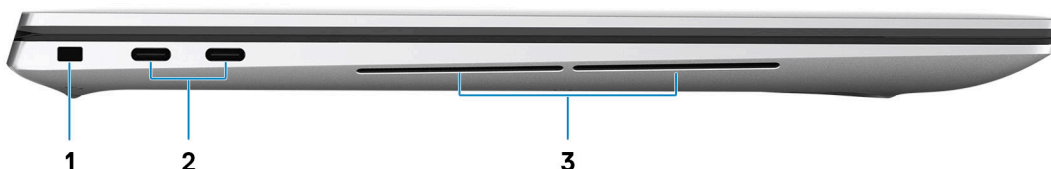(i) **NOTE:** A USB Type-C to DisplayPort adapter (sold separately) is required to connect a DisplayPort device.

(i) **NOTE:** A 40 Gbps-certified cable is required to achieve the maximum performance of 40 Gbps.

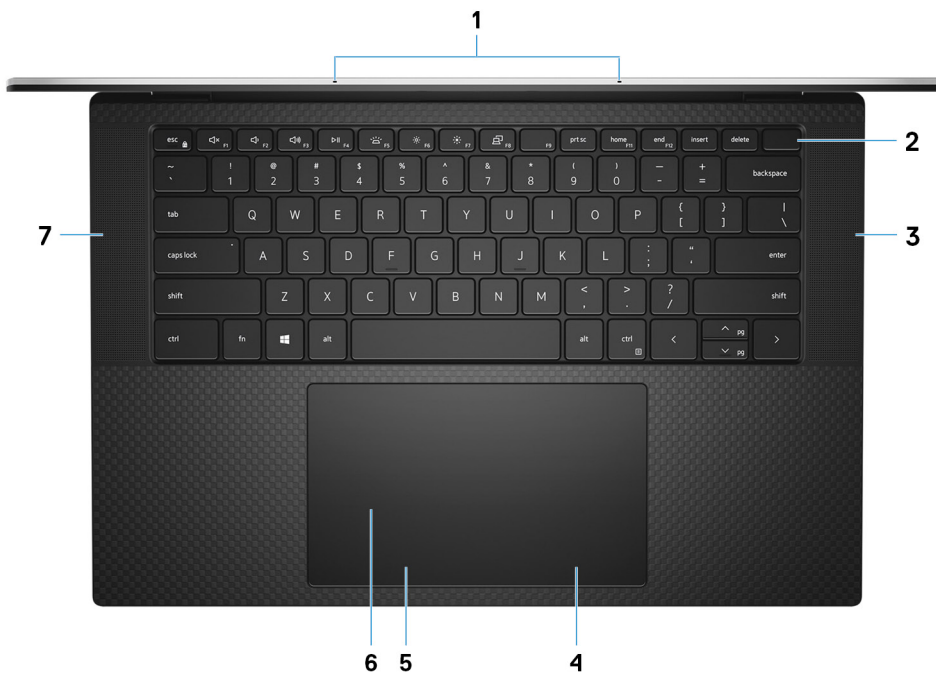(i) **NOTE:** Thunderbolt 4 supports two 4K displays or one 8K display.

(i) **NOTE:** USB4 is backward compatible with USB 3.2, USB 2.0, and Thunderbolt 3.

(i) **NOTE:** You can connect a Dell docking station to the Thunderbolt 4 ports. For more information, see the knowledge base article 000124295 at www.dell.com/support.

3. **Left woofer**

Enhances low-frequency audio output.

Top

1. **Microphones (2)**

Provide digital sound input for audio recording, voice calls, and so on.

2. **Power button with fingerprint reader**

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

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

Place your finger on the power button to log in with the fingerprint reader.

(i) **NOTE:** You can customize power-button behavior in Windows. For more information, see *Me and My Dell* at www.dell.com/support/manuals.

(i) **NOTE:** In Windows, Windows Hello supports a defined number of fingerprints per account. For more information about configuring your fingerprint reader with Windows Hello, search in the Knowledge Base Resource at www.dell.com/support.

3. **Right speaker**

Provides audio output.

4. **Right-click area**

   Press to right-click.

5. **Left-click area**

   Press to left-click.

6. **Touchpad**

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

7. **Left speaker**

   Provides audio output.

Front

1. **Infrared emitter**

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

2. **Ambient-light sensor**

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

3. **RGB-infrared camera**

   This combined camera supports both infrared Windows Hello facial recognition and standard RGB imaging for photos and videos.

4. **Camera-status light**

   Turns on when the camera is in use.

5. **Infrared emitter**

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

6. **Battery-status light**

   Indicates the battery-charge status.

   Solid white—Power adapter is connected and the battery has more than 5% charge.

   Amber—Computer is running on battery and the battery has less than 5% charge.

   Off—Power adapter is disconnected or the battery is fully charged.

Bottom

1. **Service Tag and regulatory labels**

   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. The regulatory label contains regulatory information of your computer.

Battery Charge and Status LED

Table 1. Battery Charge and Status LED Indicator

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 5570

Dimensions and weight

The following table lists the height, width, depth, and weight of your Precision 5570.

Table 2. Dimensions and weight

Description	Values
Height:	
Front height	18.54 mm (0.73 in.)
Rear height	11.65 mm (0.46 in.)
Width	344.40 mm (13.56 in.)
Depth	230.14 mm (9.06 in.)
Weight (i) **NOTE:** The weight of your computer depends on the configuration ordered and manufacturing variability.	2.10 kg (4.62 lb)

Processor

The following table lists the details of the processors supported by your Precision 5570.

Table 3. 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	Up to 4.50 GHz	Up to 4.70 GHz	Up to 4.80 GHz	Up to 5 GHz
Processor cache	18 MB	24 MB	24 MB	24 MB
Integrated graphics	Intel Iris Xe Graphics	Intel Iris Xe Graphics	Intel Iris Xe Graphics	Intel Iris Xe Graphics

Chipset

Table 4. Chipset

Description	Values
Chipset	Intel 600 Series
Processor	12th Generation Intel Core i5/i7/i9
DRAM bus width	64-bit
PCIe bus	Up to PCIe Gen 4

Operating system

Your Precision 5570 supports the following operating systems:

- Windows 11 Home, 64-bit
- Windows 11 Pro, 64-bit
- Ubuntu 20.04 LTS, 64-bit
- Red Hat Enterprise Linux (RHEL v8.6)

Memory

The following table lists the memory specifications of your Precision 5570.

Table 5. Memory specifications

Description	Values
Memory slots	Two-SODIMM slots
Memory type	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 16 GB, 2 x 8 GB, DDR5, 4800 MHz, dual-channel 32 GB, 2 x 16 GB, DDR5, 4800 MHz, dual-channel 64 GB, 2 x 32 GB, DDR5, 4800 MHz, dual-channel

External ports

The following table lists the external ports on your Precision 5570.

Table 6. External ports

Description	Values
USB ports	• One USB 3.2 Gen 2 (Type-C) port with DisplayPort Alt Mode • Two Thunderbolt 4 (USB4) Type-C ports with Power Delivery ⓘ **NOTE:** Connect the power adapter (USB Type-C) to one of the three USB Type-C ports.
Audio port	One headset (headphone and microphone combo) port
Video port/ports	USB Type-C port with DisplayPort Alt mode and Thunderbolt 4
Media-card reader	One SD-card slot
Power-adapter port	DC-IN through one of the three USB Type-C ports
Security-cable slot	1 wedge-shaped lock slot

Internal slots

The following table lists the internal slots of your Precision 5570.

Table 7. Internal slots

Description	Values
M.2	Two M.2 2230/2280 slots 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 5570.

Table 8. Wireless module specifications

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

Table 8. Wireless module specifications (continued)

Description	Values
Encryption	64-bit/128-bit WEP - AES-CCMP - TKIP
Bluetooth	Bluetooth 5.2

Audio

The following table lists the audio specifications of your Precision 5570.

Table 9. Audio specifications

Description	Values
Audio controller	Realtek ALC3281
Stereo conversion	Supported
Internal audio interface	High definition audio interface
External audio interface	Universal audio jack
Number of speakers	Two
Internal-speaker amplifier	Supported
External volume controls	Keyboard shortcut controls
Speaker output:		
	Average speaker output	Tweeters (2 x 2 Watt); Woofers (2 x 2 Watt)
	Peak speaker output	2.5 Watt x 4 = 10 Watt
Subwoofer output		Supported
Microphone		Digital-array microphones

Storage

This section lists the storage options on your Precision 5570.

Your Precision 5570 supports one of the following storage configurations:
- One M.2 2230 solid-state drive and one M.2 2280 solid-state drive
- Two M.2 2280 solid-state drives

Table 10. Storage specifications

Storage type	Interface type	Capacity
M.2 2230 solid-state drive	PCIe Gen3.0x4 NVMe, up to 32 Gbps	Up to 256 GB
M.2 2230 solid-state drive	PCIe Gen4.0x4 NVMe, up to 64 Gbps	Up to 256 GB
M.2 2280 solid-state drive	PCIe Gen3.0x4 NVMe SED, up to 32 Gbps	Up to 1 TB

Table 10. Storage specifications (continued)

Storage type	Interface type	Capacity
M.2 2280 solid-state drive	PCIe Gen4.0x4 NVMe, up to 64 Gbps	Up to 4 TB

Media-card reader

The following table lists the media cards supported by your Precision 5570.

Table 11. Media-card reader specifications

Description	Values
Media-card type	One SD 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 5570.

Table 12. Keyboard specifications

Description	Values
Keyboard type	Standard backlit keyboard
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. For more information, see Keyboard shortcuts.

Camera

The following table lists the camera specifications of your Precision 5570.

Table 13. Camera specifications

Description		Values
Number of cameras		One
Camera type		HD RGB Camera
Camera location		Front camera
Camera sensor type		CMOS-sensor technology
Camera resolution:		
	Still image	0.92 megapixel
	Video	1280 x 720 (HD) at 30 fps
Infrared camera resolution:		
	Still image	0.20 megapixel
	Video	576 x 360 (VGA) at 15 fps
Diagonal viewing angle:		
	Camera	78.50 degrees
	Infrared camera	78.50 degrees

Touchpad

The following table lists the touchpad specifications of your Precision 5570.

Table 14. Touchpad specifications

Description		Values
Touchpad resolution:		
	Horizontal	1770
	Vertical	1039
Touchpad dimensions:		
	Horizontal	150.90 mm (5.94 in.)
	Vertical	90 mm (3.54 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 5570.

Table 15. Power adapter specifications

Description		Option one	Option two
Type		90 W USB Type-C	130 W USB Type-C
Input voltage		100 VAC–240 VAC	100 VAC–240 VAC
Input frequency		50 Hz–60 Hz	50 Hz–60 Hz
Input current (maximum)		1.50 A	1.80 A
Output current (continuous)		4.50 A	6.50 A
Rated output voltage		20 VDC	20 VDC
Temperature range:			
	Operating	0°C to 40°C (32°F to 104°F)	0°C to 40°C (32°F to 104°F)
	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 5570.

Table 16. Battery specifications

Description		Option one	Option two
Battery type		3-cell, 56 Wh "smart" lithium-ion	6-cell, 86 Wh "smart" lithium-ion
Battery voltage		11.40 VDC	11.40 VDC
Battery weight (maximum)		0.26 kg (0.57 lb)	0.34 kg (0.75 lb)
Battery dimensions:			
	Height	77.70 mm (3.06 in.)	77.70 mm (3.06 in.)
	Width	295.20 mm (11.62 in.)	295.20 mm (11.62 in.)
	Depth	7.56 mm (0.30 in.)	7.56 mm (0.30 in.)
Temperature range:			
	Operating	0°C to 70°C (32°F to 158°F)	0°C to 70°C (32°F to 158°F)
	Storage	-20°C to 65°C (-4°F to 149°F)	-20°C to 65°C (-4°F to 149°F)
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.

Table 16. Battery specifications (continued)

Description	Option one	Option two
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/	2hr (Express charge), 3hr (Standard charge) hours (when the computer is off)	2hr (Express charge), 3hr (Standard charge) hours (when the computer is off)
Coin-cell battery	Not supported	Not supported

Display

The following table lists the display specifications of your Precision 5570.

Table 17. Display specifications

Description		Option one	Option two
Display type		Full High Definition (FHD+)	WLED UHD+ Touch
Display-panel technology		Wide Viewing Angle (WVA)	Wide Viewing Angle (WVA)
Display-panel dimensions (active area):			
	Height	210.24 mm (8.28 in.)	210.24 mm (8.28 in.)
	Width	336.38 mm (13.24 in.)	336.38 mm (13.24 in.)
	Diagonal	396.24 mm (15.6 in.)	396.24 mm (15.6 in.)
Display-panel native resolution		1920 x 1200	3840 x 2400
Luminance (typical)		500 nits	500 nits
Megapixels		2.30	9.20
Color gamut		sRGB 100%	100% AdobeRGB, 94% DCI-P3
Pixels Per Inch (PPI)		145	290
Contrast ratio (min.)		1650:1 (typical)	1600:1 (typical)
Response time (max.)		35 ms	60 ms
Refresh rate		60 Hz	60 Hz
Horizontal view angle		+/- 89 degrees	+/- 89 degrees
Vertical view angle		+/- 89 degrees	+/- 89 degrees
Pixel pitch		0.18 mm	0.09 mm
Power consumption (maximum)		4.41 W	10.4 W
Anti-glare vs glossy finish		Anti-glare	Anti-reflective
Touch options		No	Touch support, with 10 touch points

Fingerprint reader

The following table lists the fingerprint-reader specifications of your Precision 5570.

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

Table 18. Fingerprint reader specifications

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

Sensors

Table 19. Sensors

Sensor support
eCompass/Magnetometer
Ambient Light Sensor
Adaptive Thermal Performance (via Gyroscope/Accelerometer)
Dell ExpressSign-In 1.0 (via Proximity Sensor)
Dell ExpressSign-in 2.0 IR/RGB Camera Sensing Technology
Wake/Power on with lid open
Hall sensor

GPU—Integrated

The following table lists the specifications of the integrated Graphics Processing Unit (GPU) supported by your Precision 5570.

Table 20. GPU—Integrated

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

GPU—Discrete

The following table lists the specifications of the discrete Graphics Processing Unit (GPU) supported by your Precision 5570.

Table 21. GPU—Discrete

Controller	Memory size	Memory type
NVIDIA RTX A1000 Laptop	4 GB	GDDR6

Table 21. GPU—Discrete (continued)

Controller	Memory size	Memory type
NVIDIA RTX A2000 Laptop	8 GB	GDDR6

Multiple display support matrix

The following table lists the multi-monitor support matrix supported by your Precision 5570.

Table 22. Integrated - Multiple display support matrix

Video ports on Integrated Graphics Card	• One USB 3.2 Gen 2 Type-C port with DisplayPort Alt Mode • Two Thunderbolt 4 ports with Power Delivery
Video port on Option Video module	• One USB 3.2 Gen 2 Type-C port with DisplayPort Alt Mode • Two Thunderbolt 4 ports with Power Delivery
Number of displays	Three 4K external displays, one 5K or one 8K and above displays using the Thunderbolt 4 (USB-C) ports available on your Precision 5570

Table 23. Discrete - Multiple display support matrix

Graphics Card	NVIDIA RTX A1000 Laptop	NVIDIA RTX A2000 Laptop
Memory	4 GB GDDR6	8 GB GDDR6
Video Ports on system	• One USB 3.2 Gen 2 Type-C port with DisplayPort Alt Mode • Two Thunderbolt 4 ports with Power Delivery	• One USB 3.2 Gen 2 Type-C port with DisplayPort Alt Mode • Two Thunderbolt 4 ports with Power Delivery
Max Displays (direct connect)	4	4
Max Displays (DP multi-stream)	1	1
Number of displays	1	1
Supported Resolution	4096x2304 @60 Hz	4096x2304 @60 Hz
Total Power	35 W to 95 W	35 W to 95 W

Hardware security

The following table lists the hardware security of your Precision 5570.

Table 24. Hardware security

Hardware security options
NIST 800-147 protocol
Trusted Platform Module (TPM) 2.0 FIPS-140-2 Certified/TCG Certified
Touch Fingerprint Reader (in Power Button) with Control Vault 3.0 Advanced Authentication with FIPS 140-2 Level 3 Certification (Optional)
Face IR camera (Windows Hello compliant) with ExpressSign-in 1.0 (Proximity Sensor)
Face IR camera (Windows Hello compliant) with ExpressSign-in 2.0 (Camera Sensing) (Optional)
Intel vPro Technology (iAMT 12) (optional, requires Intel WiFi Link WLAN and a vPro compatible processor)

Table 24. Hardware security (continued)

Hardware security options
Dell Client Command Suite available (dell.com/command), Factory Installed Dell Client Command | Update, Dell Command | Power Manager
Intel Platform Trust Technology
Chassis wedge-shaped security lock
Support for Absolute module interface and external SmartCard Reader

Operating and storage environment

This table lists the operating and storage specifications of your Precision 5570.

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 (-49.87 ft to 10000 ft)	-15.2 m to 10668 m (-49.87 ft to 35000 ft)

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

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

† Measured using a 2 ms half-sine pulse when the hard drive is in use.

Engineering specifications

This chapter lists out the specification of each and every component in a comprehensive format. Specific features/models/ configurations/options discussed in the document may or may not be available.

Communications

Wireless module

Intel Killer 1675 (AX211), 2x2 MIMO, 2400 Mbps, 2.4/5 GHz, WiFi 802.11ax, Bluetooth 5.2

Table 26. Intel Killer 1675 (AX211) 2x2 (Gig+) + Bluetooth 5.2 specifications

Feature	Values
Host interface	1216 form factor on-board module Intel CNVio3 (Connectivity Integration 3rd generation)
Network standard	IEEE 802.11a/b/g/n/ac/ax, 160MHz channel use, MU-MIMO
Wi-Fi alliance certifications	• Wi-Fi Certified a/b/g/n/ac with wave 2 features • Designed to be Wi-Fi Certified ax (Wi-Fi 6) • WMM • WMM-PS • WPA • WPA2 • WPS2 • Protected Management Frames • Wi-Fi Direct (For Windows only)
Operating frequency bands	• 2.4 Ghz • 5 Ghz
Data rate	• 2.4 GHz 40M - Up to 574 Mbps • 5 GHz 80M - Up to 1.2 Gbps • 5 GHz 160M - Up to 2.4 Gbps
Power consumption	Optimized power modes (sleep states) reduce power consumption during periods of inactivity
Authentication	• WPA and WPA2 Personal and Enterprise • WPA3 (pending OS support)
Authentication protocols	• 802.1X EAP-TLS • EAP-TTLS/MSCHAPv2 • PEAPv0 -MSCHAPv2 (EAP-SIM, EAP-AKA, EAP-AKA)
Encryption	• 64-bit and 128-bit WEP • TKIP • 128-bit AES-CCMP • 256-bit AES-GCMP

Table 26. Intel Killer 1675 (AX211) 2×2 (Gig+) + Bluetooth 5.2 specifications (continued)

Feature	Values
Product safety	- UL - C-UL - CB(IEC60950-1)
Management capabilities alerting	Support for Intel AMT
Government compliance	- FIPS 140-2 - FISMA
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 OS
Wireless PAN standard	Dual Mode Bluetooth 5.2, BLE
Bluetooth version	Bluetooth 5.2
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 OS
Bluetooth data encryption	128-bit encryption
Bluetooth output power	Power class 1
Temperature	- Operating temperature 0°C to + 50°C (Full performance at shield temperatures up to 80°C) - Storage temperature of -40°C to +70°C
Humidity	Up to 90% RH non-condensing (at temperatures of 25°C to 35°C)

GPU

GPU-Integrated

Intel Iris Xe Graphics

The following table lists the Intel Iris Xe Graphics specifications.

Table 27. Intel Iris Xe Graphics specifications

Bus type	Integrated graphics
	(i) **NOTE:** Intel Iris Xe Graphics uses the computers memory as video memory.

Table 27. Intel Iris Xᵉ Graphics specifications (continued)

Memory type	LPDDR4x
Memory interface	N/A (Unified Memory Architecture)
Estimated maximum power consumption (TDP)	12 W-28 W, included in the CPU power
Maximum color depth	10 bits
Maximum vertical refresh rate	Up to 120 Hz ⓘ **NOTE:** The refresh rate depends on the resolution.
External ports	HDMI 2.0 port, DisplayPort over USB Type-C
Multiple display support	Up to 4 displays including laptop display

Intel UHD Graphics

The following table lists the Intel UHD Graphics specifications.

Table 28. Intel UHD Graphics specifications

Bus type	Integrated graphics
Memory type	UMA
Graphics level	i5/i7/i9/Xeon: GT2 (UHD)
Estimated maximum power consumption (TDP)	45 W
Overlay planes	Yes
Operating systems graphics/ video API support	DirectX 12, OpenGL (4.5 from Intel CML POR)
Maximum vertical refresh rate	• HDMI 2.1: 4096 x 2160 @ 60 Hz, 24bpp (HDMI or optional USB Type-C to HDMI dongle) • Max Digital: 4096 x 2304 @ 60 Hz, 24bpp (mDP or DP 1.4 over Type-C Port)
External ports	• USB Type-C • mDP/HDMI (If no discrete graphics)
Multiple display support	Up to 4 displays via DisplayPort Multi-Streaming Technology (MST)

GPU-Discrete

NVIDIA graphic options

This topic lists the discreet graphic specifications.

NVIDIA RTX A2000

Table 29. NVIDIA RTX A2000 graphics specifications

Description	Values
NVIDIA CUDA Processing Cores	2,560
GPU Memory	8 GB
Peak Memory Bandwidth	176 GB/s

Table 29. NVIDIA RTX A2000 graphics specifications (continued)

Description	Values
Memory Type	GDDR6
Memory Interface	128-bit
TGP Max Power Consumption	40 W
Open GL	4.6
Shader Model	7.0
DirectX	12 Ultimate
PCIe Generation	4
Single Precision Floating-Point Performance (TFLOPS, Peak)	N/A
Tensor Performance (TFLOPS, Peak)	N/A
NVIDIA FXAA / TXAA Anti-Aliasing	✅
NVIDIA RTX Desktop Manager	❌
Vulkan Support	✅
NVIDIA Optimus	❌
3rd Gen MAX-Q Technology	✅
NVENC / NVDEC	✅

NVIDIA RTX A1000

Table 30. NVIDIA RTX A1000 graphics specifications

Description	Values
NVIDIA CUDA Processing Cores	1,024
GPU Memory	4 GB
Peak Memory Bandwidth	176 GB/s
Memory Type	GDDR6
Memory Interface	128-bit
TGP Max Power Consumption	40 W
Open GL	4.6
Shader Model	7.0
DirectX	12 Ultimate
PCIe Generation	4

Table 30. NVIDIA RTX A1000 graphics specifications (continued)

Description	Values
Single Precision Floating-Point Performance (TFLOPS, Peak)	N/A
Tensor Performance (TFLOPS, Peak)	N/A
NVIDIA FXAA / TXAA Anti-Aliasing	✅
NVIDIA RTX Desktop Manager	❌
Vulkan Support	✅
NVIDIA Optimus	❌
3rd Gen MAX-Q Technology	✅
NVENC / NVDEC	✅

Storage

M.2 2230 256 GB PCIe NVMe Gen3 x4 Class 35 Solid-State Drive

Table 31. M.2 2230 256 GB PCIe NVMe Gen3 x4 NVMe Class 35 Solid-State Drive

Features	Specifications
Capacity	256 GB
Dimensions	22.00 mm x 30.00 mm x 2.38 mm
Interface type and maximum speed	Gen 3 PCIe 32 Gb/s (Up to 4 lanes)
MTTF	1.4 M hours
Logical blocks	500,118,192
Power Source	
Power consumption (reference only)	● Idle : 5 mW (PS4) ● Active : 3.5 W
Environmental Operating Conditions (Non-Condensing)	
Temperature range	0°C to 70°C
Relative humidity range	10% to 90%
Non-op shock (@0.5 ms)	1500G

Table 31. M.2 2230 256 GB PCIe NVMe Gen3 x4 NVMe Class 35 Solid-State Drive (continued)

Features	Specifications
Environmental Non-Operating Conditions (Non-Condensing)	
Temperature range	-40°C to 70°C
Relative humidity range	5% to 95%

M.2 2230, 256 GB, PCIe NVMe Gen4 x4, Class 35 SSD

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

Table 32. 256 GB SSD specifications

Capacity	256 GB
Height (approximate)	2.38 mm (0.09 in.)
Width (approximate)	22.00 mm (0.87 in.)
Depth (approximate)	30.00 mm (1.18 in.)
Interface type	PCIe Gen4
Speed (maximum)	64 Gb/s (up to 4 lanes)
MTBF	1.4M hours
Logical blocks	500,118,192
Power source	
Power consumption (reference only)	- Idle: 5 mW (PS4) - Active: 4 W
Environmental operating conditions (non-condensing)	
Temperature range	0°C to 70°C
Relative humidity range	10% to 90%
Op shock	1500G
Environmental non-operating conditions (non-condensing)	
Temperature range	-40°C to 70°C
Relative humidity range	5% to 95%

M.2 2280 512 GB Gen 4 PCIe x4 NVMe Class 40 Solid-State Drive

Table 33. M.2 2280 512 GB Gen 4 PCIe x4 NVMe Class 40 Solid-State Drive

Features	Specifications
Capacity	512 GB
Dimensions	22.00 mm x 80.00 mm x 2.38 mm
Interface type and maximum speed	Gen 4 PCIe 64 Gb/s
MTTF	1.4 M hours
Logical blocks	1000,215,216

Table 33. M.2 2280 512 GB Gen 4 PCIe x4 NVMe Class 40 Solid-State Drive (continued)

Features	Specifications
Power Source	
Power consumption (reference only)	● Idle : 5 mW (PS4) ● Active : 4.5 W
Environmental Operating Conditions (Non-Condensing)	
Temperature range	0°C to 70°C
Relative humidity range	10% to 90%
Non-op shock (@0.5 ms)	1500G
Environmental Non-Operating Conditions (Non-Condensing)	
Temperature range	-40°C to 70°C
Relative humidity range	5% to 95%

M.2 2280 1 TB Gen 4 PCIe x4 NVMe Class 40 Solid-State Drive

Table 34. M.2 2280 1 TB Gen 4 PCIe x4 NVMe Class 40 Solid-State Drive

Features	Specifications
Capacity	1 TB
Dimensions	22.00 mm x 80.00 mm x 3.73 mm
Interface type and maximum speed	Gen 4 PCIe 64 Gb/s
MTTF	1.4 M hours
Logical blocks	2000,409,264
Power Source	
Power consumption (reference only)	● Idle : 5 mW (PS4) ● Active : 4.5 W
Environmental Operating Conditions (Non-Condensing)	
Temperature range	0°C to 70°C
Relative humidity range	10% to 90%
Non-op shock (@0.5 ms)	1500G
Environmental Non-Operating Conditions (Non-Condensing)	
Temperature range	-40°C to 70°C
Relative humidity range	5% to 95%

M.2 2280 2 TB Gen 4 PCIe x4 NVMe Class 40 Solid-State Drive

Table 35. M.2 2280 2 TB Gen 4 PCIe x4 NVMe Class 40 Solid-State Drive

Capacity	2 TB
Dimensions	22.00 mm x 80.00 mm x 3.73 mm
Interface type and maximum speed	Gen 4 PCIe 64 Gb/s
MTTF	1.4 M hours
Logical blocks	4000,797,360
Power Source	
Power consumption (reference only)	- Idle : 5 mW (PS4) - Active : 4.5 W
Environmental Operating Conditions (Non-Condensing)	
Temperature range	0°C to 70°C
Relative humidity range	10% to 90%
Non-op shock (@0.5 ms)	1500G
Environmental Non-Operating Conditions (Non-Condensing)	
Temperature range	-40°C to 70°C
Relative humidity range	5% to 95%

M.2 2280, 4 TB, PCIe NVMe Gen4 x4, Class 40 SSD

The following table lists the M.2 2280, 4 TB SSD specifications

Table 36. 4 TB SSD specifications

Capacity	4 TB
Height (approximate)	3.73 mm (0.15 in.)
Width (approximate)	22.00 mm (0.87 in.)
Depth (approximate)	80.00 mm (3.15 in.)
Interface type	PCIe Gen4
Speed (maximum)	64 Gb/s (up to 4 lanes)
MTBF	1.4M hours
Logical blocks	8,001,573,552
Power source	
Power consumption (reference only)	- Idle: 5 mW (PS4 - L1.2) - Active: 5 W
Environmental operating conditions (non-condensing)	
Temperature range	0°C to 70°C
Relative humidity range	10% to 90%

Table 36. 4 TB SSD specifications (continued)

Op shock	1500G
Environmental non-operating conditions (non-condensing)	
Temperature range	-40°C to 70°C
Relative humidity range	5% to 95%

M.2 2280, 1 TB, PCIe NVMe Gen3 x4, Class 40 SSD, self-encrypting drive

The following table lists the M.2 2280, 1 TB SSD, self-encrypting drive specifications

Table 37. 1 TB SSD, self-encrypting drive specifications

Capacity	1 TB
Height (approximate)	2.38 mm (0.09 in.)
Width (approximate)	22.00 mm (0.87 in.)
Depth (approximate)	80.00 mm (3.15 in.)
Interface type	PCIe Gen3
Speed (maximum)	32 Gb/s (up to 4 lanes)
MTBF	1.4M hours
Logical blocks	2,000,409,264
Power source	
Power consumption (reference only)	● Idle: 5 mW (PS4 - L1.2) ● Active: 4.50 W
Environmental operating conditions (non-condensing)	
Temperature range	0°C to 70°C
Relative humidity range	10% to 90%
Op shock	1500G
Environmental non-operating conditions (non-condensing)	
Temperature range	-40°C to 70°C
Relative humidity range	5% to 95%

M.2 2280, 512 GB, PCIe NVMe Gen3 x4, Class 40 SSD, self-encrypting drive

The following table lists the M.2 2280, 512 GB SSD, self-encrypting drive specifications

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

Capacity	512 GB
Height (approximate)	2.38 mm (0.09 in.)
Width (approximate)	22.00 mm (0.87 in.)
Depth (approximate)	80.00 mm (3.15 in.)
Interface type	PCIe Gen3

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

Speed (maximum)	32 Gb/s (up to 4 lanes)
MTBF	1.4M hours
Logical blocks	1,000,215,216
Power source	
Power consumption (reference only)	● Idle: 5 mW (PS4 - L1.2) ● Active: 4.50 W
Environmental operating conditions (non-condensing)	
Temperature range	0°C to 70°C
Relative humidity range	10% to 90%
Op shock	1500G
Environmental non-operating conditions (non-condensing)	
Temperature range	-40°C to 70°C
Relative humidity range	5% to 95%

Media-card reader

The following table lists the Media-card reader specifications on your computer.

Table 39. Media-card reader (standard offering)

Media Supported (Maximum capacity supported will vary by Flash Media Types)	
Media Supported	SDXC, SDHC, Micro-SD Secure Digital (SD) 4.0 UHS-II Secure Digital (SD) 3.0 UHS-I
Support Specification Versions	Secure Digital (SD) 4.0
Power Source	
Max Power Requirements	1.2 A
Supply Voltage Range	3.3 V
Power Consumption	MS 0.08 mA
Environmental Operating Conditions (Non-Condensing)	
Operating Temperature Range	0°C to 70°C
Relative Humidity Range	N/A
Environmental Non-Operating Conditions (Non-Condensing)	
Operating Temperature Range	N/A
Relative Humidity Range	N/A

Accessories

Table 40. Supported Accessories

Accessories	Options
Multimedia	Dell Premier Wireless ANC Headset - WL7022

Table 40. Supported Accessories (continued)

Accessories	Options
Monitor	• Dell UltraSharp 34 Curved USB-C HUB Monitor - U3421WE • Dell UltraSharp 24 USB-C HUB Monitor - U2422HE
Security	Noble TZ04T Wedge Lock (with barrel key) - TZ04T
Input Devices	• Dell Premier Multi-Device Wireless Keyboard and Mouse - KM7321W • Dell Premier Rechargeable Wireless Mouse - MS7421W • Wacom Cintiq Pro 24 Creative Pen Display Touch - DTH-2420
Cables, Dongles and, Adapters	• Dell USB-C Mobile Adapter - DA310 • Dell Mobile Adapter Speakerphone - MH3021P
Power and Docking	• Dell Thunderbolt Dock - WD19TBS • Dell Thunderbolt 4 Dock - WD22TB4
Mobility	• Dell Pinnacle Backpack - CP9522 • Dell Premier Sleeve - PE1521VX • Dell Pro Hybrid Briefcase Backpack 15 - PO1521HB

Security

Security Software

Table 41. Security Software specifications

Specifications
Dell Client Command Suite
Dell Supply Chain Defense
Optional Dell Data Security and Management Software
Dell BIOS Verification
Optional Dell Endpoint Security and Management Software
VMware Carbon Black Endpoint Standard
VMware Carbon Black Endpoint Standard + Secureworks Threat Detection and Response
Dell Encryption Enterprise
Dell Encryption Personal
Carbonite
VMware Workspace ONE
Absolute Endpoint Visibility and Control
Netskope

Fingerprint reader

The following table lists the fingerprint reader specifications of your Precision 5570.

Table 42. Fingerprint reader specifications

Category	Goodix—GF5288WNC
Sensor technology	Capacitive sensing
Sensor resolution	500 dpi
Sensor size	5.48 mm x 4.47 mm
Sensor pixel size	108 x 88 pixels
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

Systems management

Table 43. Systems management

Systems management
Dell Client Command Suite (dell.com/command)
Factory installed Dell Client Command
Dell Command Update
Dell Power Manager
Dell Optimizer

4

Dell low blue light display

⚠️ **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.**

The ComfortView feature on Dell laptops and displays is designed to minimize blue light emitted from the display for better eye comfort.

To reduce the risk of eye strain after looking at the laptop's display for an extended period of time, it is recommended that you:

1. Set the laptop's display at a comfortable viewing distance between 20 inches and 28 inches (50 cm and 70 cm) from your eyes.
2. Blink frequently to moisten your eyes, or wet your eyes with water.
3. Take a break for 20 minutes every two hours.
4. 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.

Keyboard shortcuts of Precision 5570

ⓘ **NOTE:** Keyboard characters may differ depending on the keyboard language configuration. Keys 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 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 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 multi-media control, as indicated by the icon at the bottom of the key. Press the function key to invoke the task represented by the icon. For example, pressing **F1** mutes the audio (refer to the table below).

However, if the function keys **F1**-**F12** are needed for specific software applications, multi-media 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 44. List of keyboard shortcuts
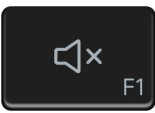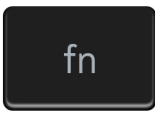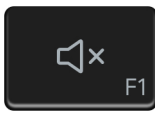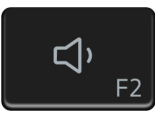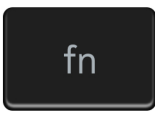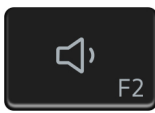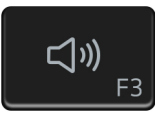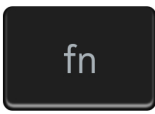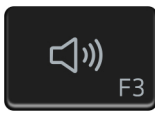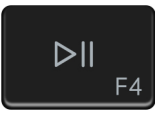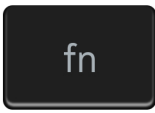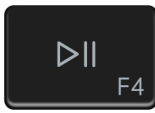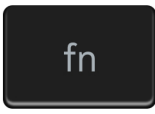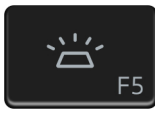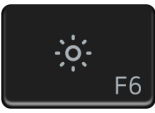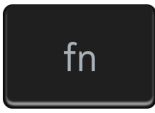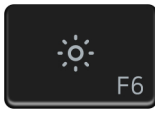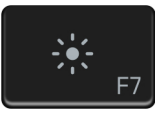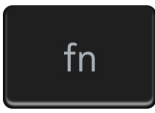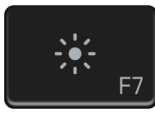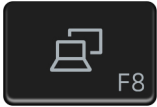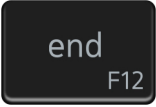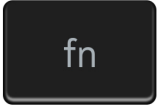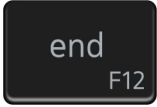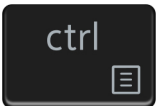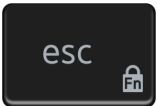
Function key	Redefined key (for multimedia control)	Behavior
F1	fn + F1	Mute audio
F2	fn + F2	Decrease volume
F3	fn + F3	Increase volume
F4	fn + F4	Play/Pause
F5	fn + F5	Toggle keyboard backlight
F6	fn + F6	Decrease brightness
F7	fn + F7	Increase brightness

Table 44. List of keyboard shortcuts (continued)

Function key	Redefined key (for multimedia control)			Behavior
F8 (display icon)	fn	+	F8 (display icon)	Switch to external display
prt sc / F10	fn	+	prt sc / F10	Print screen
home / F11	fn	+	home / F11	Home
end / F12	fn	+	end / F12	End

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

Table 45. 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
fn	+	esc	Toggle Fn-key lock

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 46. Self-help resources

Self-help resources	Resource location
Information about Dell products and services	www.dell.com
My Dell app	
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.

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

ⓘ **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.