


Precision 3580

Owner's Manual

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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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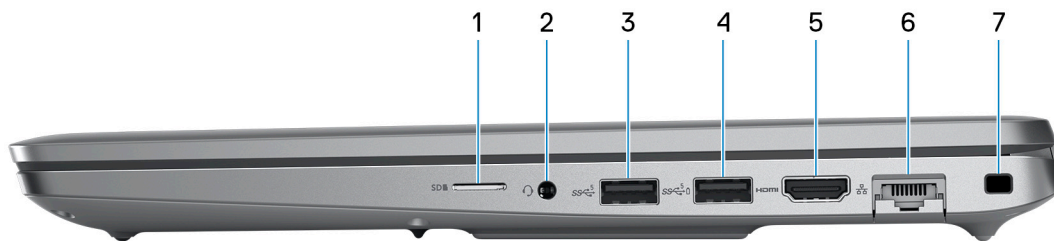
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Views of Precision 3580

Right



1. microSD-card slot

Reads from and writes to the microSD-card.

2. Universal audio jack

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

3. USB 3.2 Gen 1 port

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

4. USB 3.2 Gen 1 port with PowerShare

Connect devices such as external storage devices and printers.

Provides data transfer speeds up to 5 Gbps. PowerShare enables you to charge your USB devices even when your computer is turned off.

NOTE: If the charge on your computer's battery is less than 10 percent, you must connect the power adapter to charge your computer, and USB devices connected to the PowerShare port.

NOTE: If a USB device is connected to the PowerShare port before the computer is turned off or in hibernate state, you must disconnect and connect it again to enable charging.

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

5. HDMI 2.0 port

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

6. Network port

Connect an Ethernet (RJ-45) cable from a router or a broadband modem for network or Internet access, with a transfer rate of 10/100/1000 Mbps.

7. Security-cable slot (wedge-shaped)

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

Left



1. Thunderbolt 4.0 port with Power Delivery and DisplayPort

Supports USB4, DisplayPort 1.4, Thunderbolt 4 and also enables you to connect to an external display using a display adapter. Provides data transfer rates of up to 40 Gbps for USB4 and Thunderbolt 4.

NOTE: You can connect a Dell Docking Station to the Thunderbolt 4 ports. For more information, search in the Knowledge Base Resource at www.dell.com/support.

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

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

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

2. Thunderbolt 4.0 port with Power Delivery and DisplayPort

Supports USB4, DisplayPort 1.4, Thunderbolt 4 and also enables you to connect to an external display using a display adapter. Provides data transfer rates of up to 40 Gbps for USB4 and Thunderbolt 4.

NOTE: You can connect a Dell Docking Station to the Thunderbolt 4 ports. For more information, search in the Knowledge Base Resource at www.dell.com/support.

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

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

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

3. Battery-status light

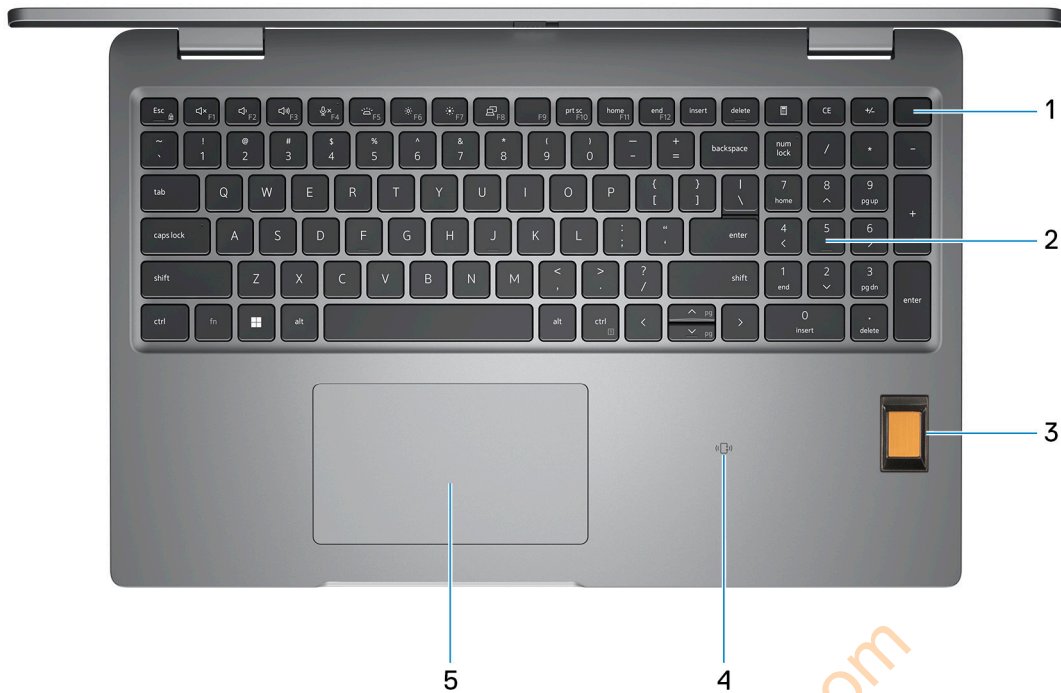
Indicates the battery-charge status.

Solid yellow—Battery charge is low.

Blinking yellow—Battery charge is critical.

4. Smart-card reader slot (optional)

Top



1. Power button with optional 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.

If the power button has a fingerprint reader, place your finger on the power button steadily to log in.

NOTE: The power-status light on the power button is available only on computers without the fingerprint reader. Computers that are shipped with the fingerprint reader that is integrated on the power button will not have the power-status light on the power button.

NOTE: You can customize the power-button behavior in Windows.

2. Keyboard

3. Fingerprint reader (optional)

Press your finger on the fingerprint reader to log in to your computer. The fingerprint reader enables your computer to recognize your fingerprints as a password.

NOTE: Configure the fingerprint reader to register your fingerprint and enable access.

4. NFC/Contactless smart card reader (optional)

Provides contactless access of cards in corporate networks.

5. Touchpad

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

Display



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.

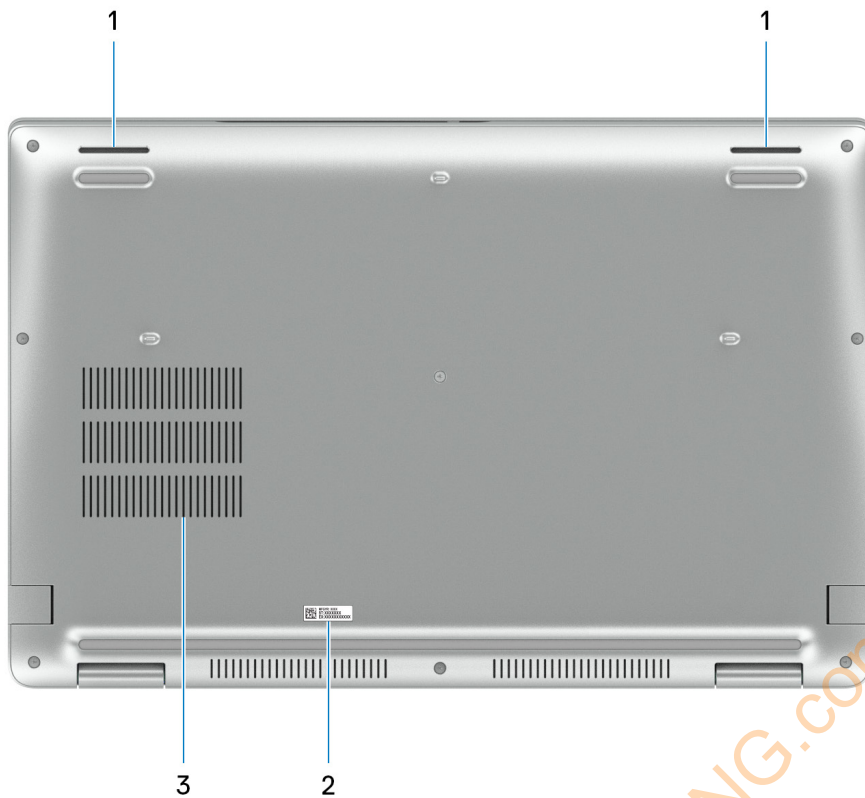
7. Ambient-light sensor

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



1. Speakers

Provide audio output.

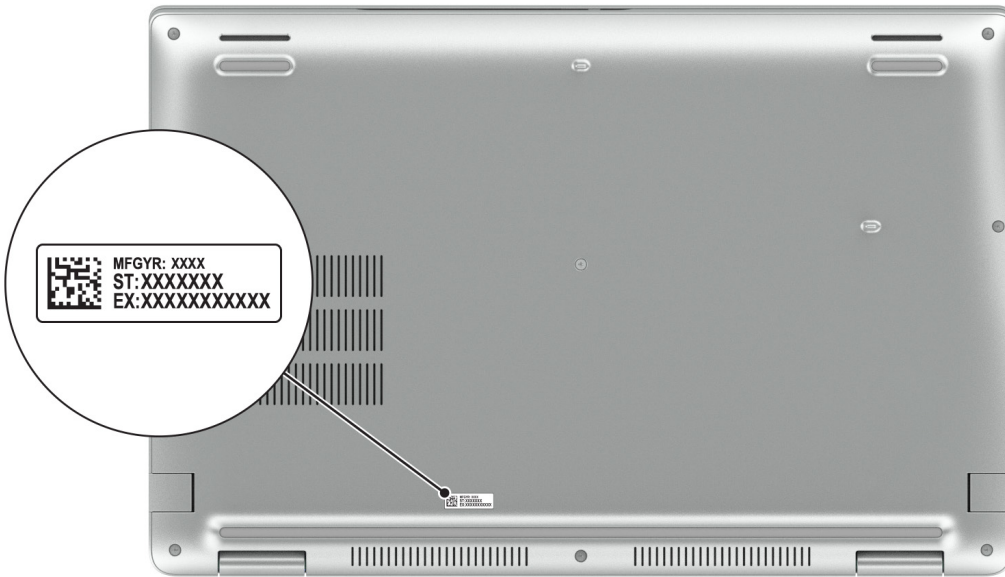
2. Service Tag label

The Service Tag is a unique alphanumeric identifier that enables Dell service technicians to identify the hardware components in your computer and access warranty information.

3. Fan vents

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 3580.

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

Set up your Precision 3580

About this task

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

Steps

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



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 2. Locate Dell apps


Resources	Description
	<p>Dell Product Registration Register your computer with Dell.</p>
	<p>Dell Help & Support Access help and support for your computer.</p>
	<p>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.</p> <p>NOTE: In SupportAssist, click the warranty expiry date to renew or upgrade your warranty.</p>
	<p>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.</p>
	<p>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.</p>

Specifications of Precision 3580

Dimensions and weight

The following table lists the height, width, depth, and weight of your Precision 3580.

Table 3. Dimensions and weight

Description	Values
Height:	
Front height	20.80 mm (0.82 in.)
Rear height	22.80 mm (0.90 in.)
Width	357.80 mm (14.09 in.)
Depth	233.30 mm (9.19 in.)
Weight  NOTE: The weight of your computer depends on the configuration ordered and manufacturing variability.	1.613 kg (3.56 lb)

Processor

The following table lists the details of the processors supported by your Precision 3580.

Table 4. Processor

Description	Option one	Option two	Option three	Option four	Option five	Option six
Processor type	13 th Generation Intel Core i5-1335U	13 th Generation Intel Core i7-1355U	13 th Generation Intel Core i5-1340P	13 th Generation Intel Core i5-1350P vPro	13 th Generation Intel Core i7-1360P	13 th Generation Intel Core i7-1370P vPro
Processor wattage	15 W	15 W	28 W	28 W	28 W	28 W
Processor total core count	10	10	12	12	12	14
Performance-cores	2	2	4	4	4	6
Efficient-cores	8	8	8	8	8	8
Processor total thread counts	12	12	16	16	16	20
i NOTE: Intel Hyper-Threading Technology is only available on Performance-cores.						
Processor speed	Up to 4.60 GHz	Up to 5 GHz	Up to 4.60 GHz	Up to 4.70 GHz	Up to 5 GHz	Up to 5.20 GHz
Performance-cores frequency						
Processor base frequency	1.30 GHz	1.70 GHz	1.90 GHz	1.90 GHz	2.20 GHz	1.90 GHz
Maximum turbo frequency	4.60 GHz	5 GHz	4.60 GHz	4.70 GHz	5 GHz	5.20 GHz
Efficient-cores frequency						
Processor base frequency	0.90 GHz	1.20GHz	1.40 GHz	1.40 GHz	1.60 GHz	1.40 GHz
Maximum turbo frequency	3.40 GHz	3.70 GHz	3.40 GHz	3.50 GHz	3.70 GHz	3.90 GHz
Processor cache	12 MB	12 MB	12 MB	12 MB	18 MB	24 MB
Integrated graphics	Intel Iris Xe Graphics	Intel Iris Xe Graphics	Intel Iris Xe Graphics	Intel Iris Xe Graphics	Intel Iris Xe Graphics	Intel Iris Xe Graphics

Chipset

The following table lists the details of the chipset supported by your Precision 3580.

Table 5. Chipset

Description	Values
Chipset	Integrated in the processor
Processor	13 th Generation Intel Core i5/i7
DRAM bus width	64-bit
Flash EPROM	32 MB+16 MB for vPro
PCIe bus	Up to Gen 4

Operating system

Your Precision 3580 supports the following operating systems:

Memory

The following table lists the memory specifications of your Precision 3580.

Table 6. Memory specifications

Description	Values
Memory slots	Two-SODIMM slots
Memory type	<ul style="list-style-type: none">• Single-channel DDR4• Dual-channel DDR4• Single-channel DDR5• Dual-channel DDR5
Memory speed	<ul style="list-style-type: none">• 3200 MHz• 4800 MHz
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">• 8 GB, 1 x 8 GB, DDR4, 3200 MHz, single-channel• 16 GB, 2 x 8 GB, DDR4, 3200 MHz, dual-channel• 16 GB, 1 x 16 GB, DDR4, 3200 MHz, single-channel• 32 GB, 2 x 16 GB, DDR4, 3200 MHz, dual-channel• 64 GB, 2 x 32 GB, DDR4, 3200 MHz, dual-channel• 8 GB, 1 x 8 GB, DDR5, 4800 MHz, single-channel• 16 GB, 2 x 8 GB, DDR5, 4800 MHz, dual-channel• 16 GB, 1 x 16 GB, DDR5, 4800 MHz, single-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 of your Precision 3580.

Table 7. External ports

Description	Values
Network port	One RJ-45 port
USB ports	<ul style="list-style-type: none">Two Thunderbolt 4 port with DisplayPort Alt Mode/USB Type-C/USB4/Power Delivery <p>NOTE: You can connect a Dell Docking Station to this port. For more information, search in the Knowledge Base Resource at www.dell.com/support.</p> <ul style="list-style-type: none">One USB 3.2 Gen 1 port with PowerShareOne USB 3.2 Gen 1 port
Audio port	One Universal audio port
Video port	One HDMI 2.0 port
Media-card reader	One smart card reader slot (optional)
Power-adaptor port	Type-C adapter
Security-cable slot	One security-cable slot (wedge-shaped)

Internal slots

The following table lists the internal slots of your Precision 3580.

Table 8. Internal slots

Description	Values
M.2	<ul style="list-style-type: none">One M.2 2230 slot for WiFi and Bluetooth combo cardOne M.2 2230/2280 slot for solid-state driveOne M.2 2230 slot for solid-state driveOne M.2 3042/3052 slot for WWAN (optional) <p>NOTE: To learn more about the features of different types of M.2 cards, search in the Knowledge Base Resource at www.dell.com/support.</p>

Ethernet

The following table lists the wired Ethernet Local Area Network (LAN) specifications of your Precision 3580.

Table 9. Ethernet specifications

Description	Values
Model number	Intel I219-LM
Transfer rate	10/100/1000 Mbps

Wireless module

The following table lists the Wireless Local Area Network (WLAN) modules supported on your Precision 3580.

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"> • WiFi 802.11a/b/g • Wi-Fi 4 (WiFi 802.11n) • Wi-Fi 5 (WiFi 802.11ac) • Wi-Fi 6 (WiFi 802.11ax) 	<ul style="list-style-type: none"> • WiFi 802.11a/b/g • Wi-Fi 4 (WiFi 802.11n) • Wi-Fi 5 (WiFi 802.11ac) • Wi-Fi 6E (WiFi 802.11ax)
Encryption	<ul style="list-style-type: none"> • 64-bit/128-bit WEP • AES-CCMP • TKIP 	<ul style="list-style-type: none"> • 64-bit/128-bit WEP • AES-CCMP • TKIP
Bluetooth	Bluetooth 5.3	Bluetooth 5.3

WWAN module

The following table lists the Wireless Wide Area Network (WWAN) module supported on your Precision 3580.

Table 11. WWAN module specifications

Description	Option one	Option two
Model number	DW5823, Intel XMM 7560 R Global LTE-Advanced, CAT16	5G DW5931e, Intel 5G 5000 Global Gigabit NR/LTE, 3GPP Release 15
Form factor	M.2 3042 Key-B	M.2 3042 Key-B
Host interface	PCIe Gen2	PCIe Gen3
Network standard	LTE FDD/TDD, WCDMA/HSPA+,GPS/GLONASS/BDS/Galileo	LTE FDD/TDD, WCDMA/HSPA+, GNSS/Beidou NR FR1(Sub6) FDD/TDD, LTE FDD/TDD, WCDMA/HSPA+, GPS/GLONASS/Galileo/BDS/QZSS
Transfer data rate	<ul style="list-style-type: none"> • Up to 1 Gbps DL (CAT16) • Up 150 Mbps UL 	<ul style="list-style-type: none"> • SA: DL 4.67Gbps / UL 1.25Gbps • NSA: DL 3.74Gbps / UL 700Mbps • LTE: DL 1.6Gbps (CAT19) / UL 150Mbps • UMTS: DL 384 kbps / UL 384 kbps DL DC-HSPA+: 42 Mbps (CAT24) / UL 11.5 Mbps (CAT7)
Operating frequency bands	<ul style="list-style-type: none"> • LTE(B1, B2, B3, B4, B5, B7, B8, B12, B13, B14, B17, B18, B19, B20, B25, B26, B28, B29, B30, B32, B34, B38, B39, B40, B41(HPUE), B42, B43, B46(receiver only), B48, B66, B71 • WCDMA/HSPA+(1, 2, 4, 5, 8) 	<ul style="list-style-type: none"> • NR(n1, n2, n3, n5, n7, n8, n20, n25, n28, n30, n38, n40, n41, n48, n66, n71, n77, n78, n79) • LTE (B1, B2, B3, B4, B5, B7, B8, B12, B13, B14, B17, B18, B19, B20, B25,

Table 11. WWAN module specifications (continued)

Description	Option one	Option two
		B26, B28, B29, B30, B32, B34, B38, B39, B40, B41, B42, B43, B46, B48, B66, B71*) <ul style="list-style-type: none"> WCDMA/HSPA+ (1, 2, 4, 5, 8)
Power supply	DC 3.135 V to 4.40 V, typical 3.30 V	DC 3.135 V to 4.4 V, Typical 3.3 V
SIM card	Supported through external SIM slot	Supported through external SIM slot
eSIM with dual SIM (DSSA)	Supported (the availability of eSIM functionality embedded on the module is dependent on the region and specific carrier requirements)	Supported
Antenna diversity	Supported	Supported
Radio On/Off	Supported	Supported
Wake on wireless	Supported	Supported
Temperature	<ul style="list-style-type: none"> Normal operating temperature: -10°C to + 55°C Extended Operating temperature: -20°C to +65°C 	<ul style="list-style-type: none"> Normal operating temperature: -10°C to + 55°C Extended Operating temperature: -30°C to +75°C Storage temperature: -40°C to +85°C
Antenna connector	<ul style="list-style-type: none"> WWAN Main Antenna x 4 Supports 4x4 MIMO 	<ul style="list-style-type: none"> WWAN Main Antenna x 4 Supports 4x4 MIMO
<p>i NOTE: For instructions on how to find your computer's IMEI (International Mobile Station Equipment Identity) number, search in the Knowledge Base Resource at www.dell.com/support.</p>		

Audio

The following table lists the audio specifications of your Precision 3580.

Table 12. Audio specifications

Description	Values
Audio controller	Realtek Waves, MaxxAudio 12.0
Stereo conversion	Supported
Internal audio interface	High definition audio interface
External audio interface	e.g. Universal Audio Jack/HDMI 2.0 port
Number of speakers	2
Internal-speaker amplifier	Not supported
External volume controls	Keyboard shortcut controls
Speaker output:	

Table 12. Audio specifications (continued)

Description		Values
	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 3580.

Your Precision 3580 supports one of the following options

- One M.2 2230/2280 solid-state drive
- One M.2 2230 self-encrypting drive

Table 13. Storage specifications

Storage type	Interface type	Capacity
M.2 2230/2280 solid-state drive	PCIe Gen4 x4 NVMe, up to 64 Gbps	2 TB
M.2 2230 self-encrypting drive	PCIe Gen4 x4 NVMe, up to 64 Gbps	256 GB

Media-card reader

The following table lists the media-card reader specifications of your Precision 3580.

Table 14. Media-card reader (standard offering)

Description	Values
Media supported (Maximum capacity supported will vary by Flash Media Types)	
Media Supported	<ul style="list-style-type: none"> • Micro Secure Digital (mSD) • Micro Secure Digital High Capacity (mSDHC) • Micro Secure Digital Extended Capacity (mSDXC)
Support Specification Versions	microSD 4.0 card

Keyboard

The following table lists the keyboard specifications of your Precision 3580.

Table 15. Keyboard specifications

Description	Values
Keyboard type	Standard keyboard
Keyboard layout	QWERTY
Number of keys	<ul style="list-style-type: none"> • United States and Canada: 99 keys • United Kingdom: 100 keys • Japan: 103 keys

Table 15. Keyboard specifications (continued)

Description	Values
Keyboard size	X=18.05 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. i NOTE: You can define the primary behavior of the function keys (F1–F12) changing Function Key Behavior in BIOS setup program.

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.

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
fn and F1	Mutes audio
fn and F2	Decreases audio volume
fn and F3	Increases audio volume
fn and F4	Turn off/on the microphone
fn and F5	Changes the brightness of the backlit keyboard
fn and F6	Decreases display brightness
fn and F7	Increases display brightness
fn and F8	Switches to an external display
fn and F10	Prints screen (Screen capture)
fn and F11	Home (Moves cursor to beginning of the line)
fn and F12	End (Moves cursor to the end of the line)
fn and Esc	Locks the fn key on and off
fn and Ctrl	Opens the menu of the software application

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 3580.

Table 17. Camera specifications

Description	Values
Number of cameras	One
Camera type	<ul style="list-style-type: none">FHD RGB cameraFHD RGB + IR cameraFHD RGB+IR camera with Ambient Light Sensor, Express Sign-In with Presence Detection and Intelligent Privacy
Camera location	Front camera
Camera sensor type	CMOS sensor technology
Camera resolution:	
Still image	2.07 megapixels
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	86.6 degrees

Touchpad

The following table lists the touchpad specifications of your Precision 3580.


Table 18. Touchpad specifications

Description	Values
Touchpad resolution:	>300 DPI
Touchpad dimensions:	
Horizontal	115 mm
Vertical	67 mm
Touchpad gestures	For more information about touchpad gestures available on: <ul style="list-style-type: none">Windows, see the Microsoft knowledge base article at support.microsoft.comUbuntu, see ubuntu.com/support

Power adapter

The following table lists the power adapter specifications of your Precision 3580.

Table 19. Power adapter specifications

Description	Option one	Option two	Option three
Type	<ul style="list-style-type: none"> 65 W USB-C 65 W USB-C two-pin 	100 W, USB-C	130 W, USB-C
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)	1.7A	1.7A	1.8A
Output current (continuous)	<ul style="list-style-type: none"> 20V/3.25A (Continuous) 15V/3A (Continuous) 9.0V/3A (Continuous) 5.0V/3A (Continuous) 	<ul style="list-style-type: none"> 20V/5A (Continuous) 15V/3A (Continuous) 9.0V/3A (Continuous) 5.0V/3A (Continuous) 	<ul style="list-style-type: none"> 20V/6.5A (Continuous) 5.0V/1A (Continuous)
Rated output voltage	20VDC/15VDC/9VDC/5VDC	20VDC/15VDC/9VDC/5VDC	20VDC/5VDC
Temperature range:			
Operating	0° to 40°C (32°F to 104°F)	0° to 40°C (32°F to 104°F)	0° to 40°C (32°F to 104°F)
Storage	- 40° to 70°C (-40°F to 158°F)	- 40° to 70°C (-40°F to 158°F)	- 40° 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 3580.

Table 20. Battery specifications

Description	Option one	Option two
Battery type	3-cell "smart" lithium-ion 42 Wh	3-cell "smart" lithium-ion 54 Wh
Battery voltage	11.4 VDC	11.4 VDC
Battery weight (maximum)	0.19 kg (0.41 lb)	0.22 kg (0.48 lb)
Battery dimensions:		
Height	5.73 mm (0.22 in.)	5.73 mm (0.22 in.)
Width	263 mm (10.35 in.)	263 mm (10.35 in.)
Depth	68.90 mm (2.71 in.)	68.90 mm (2.71 in.)
Temperature range:		
Operating	<ul style="list-style-type: none"> Charge: 0°C to 45°C (32°F to 113°F) 	<ul style="list-style-type: none"> Charge: 0°C to 45°C (32°F to 113°F)

Table 20. Battery specifications (continued)

Description		Option one	Option two
		<ul style="list-style-type: none"> Discharge: 0°C to 70°C (32°F to 158°F) 	<ul style="list-style-type: none"> Discharge: 0°C to 70°C (32°F to 158°F)
	Storage	-20°C to 65°C (-4°F to 149°F)	-20°C to 65°C (-4°F to 149°F)
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) 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 .		<ul style="list-style-type: none"> From 0% up to 35% in 20 minutes (ExpressCharge Boost) 80% in 1 hour 2 hours to full 3 hours to full (Standard charge) 	<ul style="list-style-type: none"> From 0% up to 35% in 20 minutes (ExpressCharge Boost) 80% in 1 hour 2 hours to full 3 hours to full (Standard charge)
Coin-cell battery		CR2032	CR2032
<p>⚠ CAUTION: Operating and storage temperature ranges may differ among components, so operating or storing the device outside these ranges may impact the performance of specific components.</p> <p>⚠ 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.</p>			

Display

The following table lists the display specifications of your Precision 3580.

Table 21. Display specifications

Description		Option one	Option two	Option three
Display type		15.60-inch Full High Definition (FHD)	15.60-inch Full High Definition (FHD)	15.60-inch Full High Definition (FHD)
Touch options		No	Yes	No
Display-panel technology		In-Plane Switching (IPS)	In-Plane Switching (IPS)	In-Plane Switching (IPS)
Display-panel dimensions (active area):				
	Height	193.60 mm (7.62 in.)	193.60 mm (7.62 in.)	193.60 mm (7.62 in.)
	Width	344.20 mm (13.55 in.)	344.20 mm (13.55 in.)	344.20 mm (13.55 in.)
	Diagonal	396 mm (15.60)	396 mm (15.60)	396 mm (15.60)
Display-panel native resolution		1920 x 1080	1920 x 1080	1920 x 1080
Luminance (typical)		250 nits	250 nits	400 nits
Megapixels		262,144 colors	262,144 colors	16,777,216 colors

Table 21. Display specifications (continued)

Description	Option one	Option two	Option three
Color gamut	45% NTSC	45% NTSC	100% sRGB
Pixels Per Inch (PPI)	141	141	141
Contrast ratio (typical)	700:1	700:1	800:1
Response time (max)	35 ms	35 ms	35 ms
Refresh rate	60 Hz	60 Hz	60 Hz
Horizontal view angle	+/- 80 degrees	+/- 80 degrees	+/- 80 degrees
Vertical view angle	+/- 80 degrees	+/- 80 degrees	+/- 80 degrees
Pixel pitch	0.179 x 0.179 mm	0.179 x 0.179 mm	0.179 x 0.179 mm
Power consumption (maximum)	4.6 W	4.6 W	4.5 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 3580.

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 3580.

Table 23. Sensor

Sensor support
Ambient Light Sensor
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 3580.

Table 24. GPU—Integrated

Controller	External display support	Memory size	Processor
Intel UHD Graphics	One HDMI 2.0 port	Single-channel memory	13 th Generation Intel Core i3/i5/i7
Intel Iris Xe Graphics	One HDMI 2.0 port	Dual-channel memory	13 th Generation Intel Core i5/i7

GPU—Discrete

The following table lists the specifications of the discrete Graphics Processing Unit (GPU) supported by your Precision 3580.


Table 25. GPU—Discrete

Controller	Memory size	Memory type
NVIDIA RTX A500	4 GB	GDDR6

External display support

The following table lists the external display support for your Precision 3580.

Table 26. External display support

Graphics card	Supported external displays with laptop display enabled	Supported external displays with laptop display disabled
Intel Iris Xe Graphics	3	4
Intel UHD Graphics	3	4
 NOTE: For more information about external display support, see the External Display Connection Guide on www.dell.com/support .		

Hardware security

The following table lists the hardware security of your Precision 3580.

Table 27. Hardware security

Hardware security
Trusted Platform Module (TPM) 2.0 discrete
FIPS 140-2 certification for TPM
TCG Certification for TPM (Trusted Computing Group)
Finger Print Reader in Power Button tied to ControlVault 3
ControlVault 3 Advanced Authentication with FIPS 140-2 Level 3 Certification
Contacted Smart Card and ControlVault 3
Contactless Smart Card, NFC, and ControlVault 3

Table 27. Hardware security (continued)

Hardware security
SED SSD NVMe, SSD and HDD (Opal and non-Opal) per SDL

Smart-card reader

Contactless smart-card reader

This section lists the contactless smart-card reader specifications of your Precision 3580.

Table 28. Contactless smart-card reader specifications

Title	Description	Dell ControlVault 3 contactless smart-card reader with NFC
Felica Card Support	Reader and software capable of supporting Felica contactless cards	Yes
ISO 14443 Type A Card Support	Reader and software capable of supporting ISO 14443 Type A contactless cards	
ISO 14443 Type B Card Support	Reader and software capable of supporting ISO 14443 Type B contactless cards	
ISO/IEC 21481	Reader and software capable of supporting ISO/IEC 21481 compliant contactless cards and tokens	
ISO/IEC 18092	Reader and software capable of supporting ISO/IEC 21481 compliant contactless cards and tokens	
ISO 15693 Card Support	Reader and software capable of supporting ISO15693 contactless cards	
NFC Tag Support	Supports reading and processing of NFC compliant tag information	
NFC Reader Mode	Support for NFC Forum Defined Reader mode	
NFC Writer Mode	Support for NFC Forum Defined Writer mode	
NFC Peer-to-Peer Mode	Support for NFC Forum Defined Peer to Peer mode	
EMVCo Compliant	Compliant with EMVCO smart card standards as posted to www.emvco.com	
EMVCo Certified	Formally certified based on EMVCO smart card standards	
NFC Proximity OS Interface	Enumerates NFP (Near Field Proximity) device for OS to utilize	
PC/SC OS interface	Personal Computer/Smart Card specification for integration of hardware readers into personal computer environments	

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

Title	Description	Dell ControlVault 3 contactless smart-card reader with NFC
CCID driver compliance	Common driver support for Integrated Circuit Card Interface Device for OS level drivers	
Windows Certified	Device certified by Microsoft WHCK	
Dell ControlVault support	Device connects to Dell ControlVault for usage and processing	
FIDO2 compliance	Dell ControlVault 3 Smart-card reader is compliant with the FIDO SPEC	


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

Table 29. Supported cards

Manufacturer	Card
HID	jCOP readertest3 A card (14443a)
	1430 1L
	DESFire D8H
	iClass (Legacy)
	iClass SEOS
NXP/Mifare	Mifare DESFire 8K White PVC Cards
	Mifare Classic 1K White PVC Cards
	NXP Mifare Classic S50 ISO Card
G&D	idOnDemand - SCE3.2 144K
	SCE6.0 FIPS 80K Dual+ 1 K Mifare
	SCE6.0 nonFIPS 80K Dual+ 1 K Mifare
	SCE6.0 FIPS 144K Dual + 1K Mifare
	SCE6.0 nonFIPS 144K Dual + 1 K Mifare
	SCE7.0 FIPS 144K
Oberthur	idOnDemand - OCS5.2 80K
	ID-One Cosmo 64 RSA D V5.4 T=0 card

Contacted smart-card reader

The following table lists the contacted smart-card reader specifications of your Precision 3580.

Table 30. Contacted smart-card reader specifications

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

Table 30. Contacted smart-card reader specifications (continued)

Title	Description	Dell ControlVault 3 smart-card reader
ISO 7816 -3 Class C Card support	Reader capable of reading 1.8V powered smart card	
ISO 7816-1 Compliant	Specification for the reader	
ISO 7816 -2 Compliant	Specification for smart card device physical characteristics (size, location of connection points, etc.)	
T=0 support	Cards support character level transmission	
T=1 support	Cards support block level transmission	
EMVCo Compliant	Compliant with EMVCo (for electronic payment standards) smart card standards as posted to www.emvco.com	
EMVCo Certified	Formally certified based on EMVCO smart card standards	
PC/SC OS interface	Personal Computer/Smart Card specification for integration of hardware readers into personal computer environments	
CCID driver compliance	Common driver support for Integrated Circuit Card Interface Device for OS level drivers.	
Windows Certified	Device certified by WHCK	
FIPS 201 (PIV/HSPD-12) Compliant via GSA	Device compliant with FIPS 201/PIV/HSPD-12 requirements	
FIDO2 compliance	Dell ControlVault 3 Smart-card reader is compliant with the FIDO SPEC	

Operating and storage environment

This table lists the operating and storage specifications of your Precision 3580.

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

Table 31. 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)
<p>⚠ CAUTION: Operating and storage temperature ranges may differ among components, so operating or storing the device outside these ranges may impact the performance of specific components.</p>		


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

† Measured using a 2 ms half-sine pulse.

Dell Support policy

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

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.

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 1. Camera shutter

Dell Optimizer

This section provides the Dell Optimizer specifications of your Precision 3580.

On Precision 3580 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](#).