

Dell Precision 5550

Setup and Specifications

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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Set up your Precision 5550

About this task

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

Steps

1. Connect the power adapter to a power source and to the Thunderbolt 3 (USB Type-C) port with Power Delivery. Then press the power button on your computer.



NOTE: You can charge your system by connecting the power adapter to one of the Thunderbolt 3 (USB Type-C) ports that are located on the left side of your computer or to the USB 3.2 Gen 2 (Type-C) port located on the right side of your computer.

NOTE: The battery may go into power-saving mode during shipment to conserve charge on the battery. Ensure that the power adapter is connected to your computer when it is turned on for the first time.

2. Complete the operating system setup.

Table 1. Operating system setup

Operating system	Setup instructions
Windows	Follow the on-screen instructions to complete the setup. When setting up, it is recommended that you connect to a secure network to download and install the latest Windows updates.
Ubuntu	Follow the on-screen instructions to complete the setup. For more information about installing and configuring Ubuntu, see the knowledge base articles SLN151664 and SLN151748 at www.dell.com/support .

3. If Windows is installed on your computer, there are Dell apps with which you can get assistance and software updates.

 **NOTE:** Dell apps are not available on Ubuntu.

Table 2. Dell apps

Dell app	Description
	My Dell Access Dell applications, help articles, and other important information about your computer. My Dell also notifies you about the warranty status, recommended accessories, and software updates for your computer.
	SupportAssist Pro-actively checks the health of your computer's hardware and software and troubleshoots issues with the operating system. For more information about the app, see the SupportAssist documentation at www.dell.com/support .  NOTE: To renew or upgrade your warranty in the SupportAssist app, click the warranty expiry date.
	Dell Update Updates your computer with critical fixes and latest device drivers. For more information about the app, see the knowledge base article SLN305843 at www.dell.com/support .
	Dell Digital Delivery Download software applications, which are purchased but not pre-installed on your computer. For more information about the app, see the knowledge base article 153764 at www.dell.com/support .

Chassis overview

Topics:

- [Left](#)
- [Right](#)
- [Palmrest view](#)
- [Display view](#)
- [Bottom view](#)

Left



1. Wedge-shaped security slot
2. USB 3.2 Gen 2 Type-C port with Thunderbolt 3 (Power Delivery) (2)

Right



1. USB 3.2 Gen 2 Type-C Display port
2. SD-card slot
3. Universal Audio port

Palmrest view

- | | |
|--------------------|---|
| 1. Left speaker | 2. Touchpad |
| 3. Left-click area | 4. Right-click area |
| 5. Right speaker | 6. Power button with fingerprint reader |
| 7. Microphones (2) | |

Display view

- | | |
|------------------------|-------------------------|
| 1. Infrared emitter | 2. Ambient-light sensor |
| 3. RGB-infrared camera | 4. Camera-status light |
| 5. Infrared emitter | 6. Battery-status light |

Bottom view

1. Left woofer
2. Service Tag label
3. Right woofer

Specifications of Precision 5550

Topics:

- [Dimensions and weight](#)
- [Processors](#)
- [Chipset](#)
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Dimensions and weight

Table 3. Dimensions and weight

Description		Values
Height:		
	Front	7.70 mm (0.30 in.)
	Rear	11.65 mm (0.45 in.)
Width		344.40 mm (13.56 in.)
Depth		230.30 mm (9.07 in.)
Weight (maximum)		4.51 lb (2.05 Kg)
		 NOTE: The weight of your computer depends on the configuration ordered and the manufacturing variability.

Processors

Table 4. Processors

Description	Values					
Processors	10 th Generation Intel Core i5-10400H	10 th Generation Intel Core i7-10750H	10 th Generation Intel Core i7-10850H	10 th Generation Intel Core i7-10875H	10 th Generation Intel Core i9-10885H	10 th Generation Intel Xeon W-10855M
Wattage	45 W	45 W	45 W	45 W	45 W	45 W
Core count	4	6	6	8	8	6
Thread count	8	12	12	16	16	12
Speed	2.60 GHz to 4.60 GHz	2.60 GHz to 5.0 GHz	2.70 GHz to 5.1 GHz	2.30 GHz to 5.10 GHz	2.40 GHz to 5.30 GHz	2.40 GHz to 5.30 GHz
Cache	8 MB	12 MB	12 MB	16 MB	16 MB	12 MB
Integrated graphics	Intel UHD 630 Graphics	Intel UHD 630 Graphics	Intel UHD 630 Graphics	Intel UHD 630 Graphics	Intel UHD P630 Graphics	Intel UHD P630 Graphics

Chipset

Table 5. Chipset

Description	Values
Chipset	WM490
Processor	10 th Generation Intel Core i5/i7/i9 and Xeon W
DRAM bus width	64-bit
Flash EPROM	32 MB
PCIe bus	Up to Gen 3.0

Operating system

- Windows 10 Home (64-bit)
- Windows 10 Professional (64-bit)
- Windows 10 Pro for Workstations
- Windows 10 Pro Education
- Windows 10 IoT Enterprise (64-bit)
- Ubuntu 18.04 SP1
- Red Hat® Enterprise Linux® 8.2 (Certification Only)

Memory

Table 6. Memory specifications

Description	Values
Slots	Two-SODIMM slots

Table 6. Memory specifications (continued)

Description	Values
Type	Dual-channel DDR4, ECC
Speed	2667 MHz, 2933 MHz
Maximum memory	64 GB
Minimum memory	8 GB
Memory size per slot	8 GB, 16 GB, 32 GB
Configurations supported	• 8 GB, 2 x 4 GB, DDR4, 2933 MHz, dual-channel • 16 GB, 2 x 8 GB, DDR4, 2933 MHz, dual-channel • 32 GB, 2 x 16 GB, DDR4, 2933 MHz, dual-channel • 64 GB, 2 x 32 GB, DDR4, 2933 MHz, dual-channel • 8 GB, 2 x 4 GB, DDR4, ECC, 2677 MHz, dual-channel • 16 GB, 2 x 8 GB, DDR4, ECC 2677 MHz, dual-channel • 32 GB, 2 x 16 GB, DDR4, ECC 2677 MHz, dual-channel

Ports and connectors

Table 7. External ports and connectors

External:	
USB	• Two USB 3.2 Gen 2 Type-C port with Thunderbolt 3 (Power Delivery) • One USB 3.2 Gen 2 Type-C Display port
Audio	One Universal Audio port
Video	USB Type-C to DisplayPort adapter (sold separately)
Media card reader	One SD 3.0/4.0/6.0 card
Docking port	Not supported
Power adapter port	USB Type-C port <i>i</i> NOTE: Connect the power adaptor (USB Type-C) to only one of the three USB Type-C ports.
Security	One wedge-shaped security slot

Table 8. Internal ports and connectors

Internal:	
M.2	Two M.2 2230/2280 slot for solid-state drives <i>i</i> NOTE: To learn more about the features of different types of M.2 cards, see the knowledge base article SLN301626 .

Communications

Wireless module

Table 9. Wireless module specifications

Description	Values
Model number	Intel Wi-Fi 6 AX201
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 (Wi-Fi 802.11n) • Wi-Fi 5 (Wi-Fi 802.11ac) • Wi-Fi 6 (Wi-Fi 802.11ax)
Encryption	• 64-bit/128-bit WEP • AES-CCMP • TKIP
Bluetooth	Bluetooth 5.1

Audio

Table 10. Audio specifications

Description		Values
Controller		Realtek ALC3281-CG
Stereo conversion		Supported
Internal interface		High definition audio interface
External interface		Universal Audio Jack
Speakers		2-way speaker
Internal speaker amplifier		Supported
External volume controls		Keyboard shortcut controls
Speaker output:		
	Average	4 W
	Peak	5 W
Subwoofer output		Supported
Microphone		Digital-array microphones

Storage

Your computer supports the following configurations:

- Two M.2 2280 or M.2 2230 solid-state drive
- Supports RAID 0 and RAID 1

The primary drive of your computer varies with the storage configuration. For computers:

- With 2 M.2 drives SSD1 is the primary drive

Table 11. Storage specifications

Storage type	Interface type	Capacity
Up to two M.2 2230 or 2280 solid-state drive	PCIe Gen3.0x4 NVMe, up to 32 Gbps	Up to 2 TB

Media-card reader

Table 12. Media-card reader specifications

Description	Values
Type	One SD 3.0/4.0/6.0 card slot
Cards supported	• Secure Digital (SD) • Secure Digital High Capacity (SDHC) • Secure Digital eXtended Capacity (SDXC)

Keyboard

The following table lists the keyboard specifications of your Precision 5550.

Table 13. Keyboard specifications

Description	Values
Keyboard type	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. Keyboard shortcuts

Camera

Table 14. Camera specifications

Description		Values
Number of cameras		One
Type		RGB HD camera/Infrared camera
Location		Front camera
Sensor type		CMOS sensor technology
Resolution		
	Camera	
	Still image	0.92 megapixel
	Video	1280 x 720 (HD) at 30 fps
	Infrared camera	
	Still image	0.2 megapixel
	Video	576 x 360 at 15 fps
Diagonal viewing angle		
	Camera	78.5 degrees
	Infrared camera	78.5 degrees

Touchpad

Table 15. Touchpad specifications

Description		Values
Resolution:		
	Horizontal	4655
	Vertical	2731
Dimensions:		
	Horizontal	150 mm
	Vertical	90 mm

Touchpad gestures

For more information about touchpad gestures for Windows 10, see the Microsoft knowledge base article [4027871](https://support.microsoft.com/en-us/topic/windows-keyboard-shortcuts-for-touchpads) at support.microsoft.com.

Power adapter

Table 16. Power adapter specifications

Description		Values	
Type		90 W USB-C (UMA)	130 W USB-C (Discrete)
Diameter		Type-C connector	Type-C connector
Input voltage		100 VAC-240 VAC	100 VAC-240 VAC
Input frequency		50 Hz-60 Hz	50 Hz-60 Hz
Input current (maximum)		1.5 A	1.8 A
Output current (continuous)		20 V/4.5 A (Continuous) 15 V/3 A (Continuous) 9.0 V/3 A (Continuous) 5.0 V/3 A (Continuous)	20 V/6.5 A (Continuous) 5.0 V/1 A (Continuous)
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)

Battery

Table 17. Battery specifications

Description		Values	
Type		3-cell lithium-ion 56 WHr	6-cell lithium-ion 86 WHr
Voltage		11.4 VDC	11.4 VDC
Weight (maximum)		0.255 kg	0.340 kg
Dimensions:			
	Height	7.56 mm	7.56 mm
	Width	77.7 mm	77.7 mm
	Depth	295.2 mm	295.2 mm
Temperature range:			
	Operating	Charge: 0 °C to 45 °C (32 °F to 113 °F) Discharge: 0 °C to 60 °C (32 °F to 149 °F)	Charge: 0 °C to 45 °C (32 °F to 113 °F) Discharge: 0 °C to 60 °C (32 °F to 149 °F)
	Storage	-20 °C to 60 °C (4 °F to 149 °F)	-20 °C to 60 °C (4 °F to 149 °F)
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.
Charging time (approximate)		2 hr (Express charge), 3 hr (Standard charge) (when the computer is off)	2 hr (Express charge), 3 hr (Standard charge) (when the computer is off)

Table 17. Battery specifications (continued)

Description	Values	
	 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 www.dell.com/	 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 www.dell.com/
Life span (approximate)	300 discharge/charge cycles	300 discharge/charge cycles
Coin-cell battery	Not supported	Not supported
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.

Display

Table 18. Display specifications

Description	Values	
Type	Full High Definition (FHD), Non-touch	Ultra High Definition (UHD), touch
Panel technology	Wide Viewing Angle (WVA)	Wide Viewing Angle (WVA)
Luminance (typical)	500 Nits	500 Nits
Dimensions (Active area):		
	Height	336.38 mm
	Width	210.24 mm
	Diagonal	15.6 mm
Native resolution	1920 x 1200	3840 x 2400
Megapixels	2.3 megapixels	9.2 megapixels
Color gamut	sRGB 100% min	Adobe 100% min; DCI-P3 94% typical, 90% minimum
Pixels per inch (PPI)	145	290
Contrast ratio (min)	1650:1	1600:1
Response time (max)	35 ms	35 ms
Refresh rate	60 Hz	60 Hz
Horizontal view angle	85 +/- degrees	85 +/- degrees
Vertical view angle	85 +/- degrees	85 +/- degrees
Pixel pitch	0.1752 mm	0.0876 mm

Table 18. Display specifications (continued)

Description	Values	
Power consumption (maximum)	4.41 W	10.4 W
Anti-glare vs glossy finish	Anti-Glare	Anti-Reflection
Touch options	No	Yes

Fingerprint reader

Table 19. Fingerprint reader specifications

Description	Values
Sensor technology	Capacitive
Sensor resolution	500 dpi
Sensor area	5.49 mm x 4.47 mm
Sensor pixel size	108 x 88

Video

Table 20. Discrete graphics specifications

Discrete graphics			
Controller	External display support	Memory size	Memory Type
NVIDIA Quadro T1000	N/A	4 GB	GDDR6
NVIDIA Quadro T2000	N/A	4 GB	GDDR6

Table 21. Integrated graphics specifications

Integrated graphics			
Controller	External display support	Memory size	Processor
Intel UHD Graphics 630	Type-C	Shared system memory	10th Generation Intel Core i5/i7/i9
Intel UHD Graphics P630	Type-C	Shared system memory	Intel Xeon

Computer environment

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

Table 22. 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)

Table 22. Computer environment (continued)

Description	Operating	Storage
Vibration (maximum)*	0.66 GRMS	1.30 GRMS
Shock (maximum)	110 G†	160 G†
Altitude (maximum)	-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)

* 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.

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 5550

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).

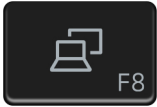
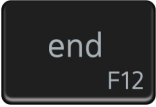
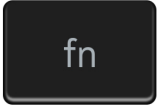
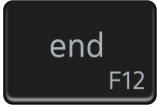
However, if the function keys **F1-F12** are needed for specific software applications, multi-media functionality can be disabled by pressing **Fn + esc**. Subsequently, multimedia control can be invoked by pressing **Fn** and the respective function key. For example, mute audio by pressing **Fn + F1**.

NOTE: You can also define the primary behavior of the function keys (**F1-F12**) by changing **Function Key Behavior** in BIOS setup program.

Table 23. List of keyboard shortcuts

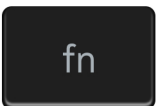
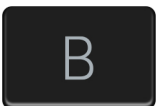
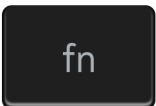
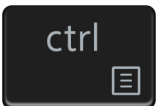
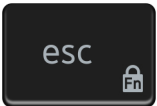
Function key	Redefined key (for multimedia control)	Behavior
 F1	fn +  F1	Mute audio
 F2	fn +  F2	Decrease volume
 F3	fn +  F3	Increase volume
 F4	fn +  F4	Play/Pause
 F5	fn +  F5	Toggle keyboard backlight
 F6	fn +  F6	Decrease brightness
 F7	fn +  F7	Increase brightness

Table 23. List of keyboard shortcuts (continued)

Function key	Redefined key (for multimedia control)	Behavior
	 + 	Switch to external display
	 + 	Print screen
	 + 	Home
	 + 	End

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

Table 24. List of keyboard shortcuts

Function key	Behavior
 + 	Pause/Break
 + 	Toggle scroll lock
 + 	System request
 + 	Open application menu
 + 	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 25. Self-help resources

Self-help resources	Resource location
Information about Dell products and services	www.dell.com
My Dell	
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
Troubleshooting information, user manuals, setup instructions, product specifications, technical help blogs, drivers, software updates, and so on.	www.dell.com/support
Dell knowledge base articles for a variety of computer concerns.	1. Go to https://www.dell.com/support/home/?app=knowledgebase. 2. Type the subject or keyword in the Search box. 3. Click Search to retrieve the related articles.
Learn and know the following information about your product: • Product specifications • Operating system • Setting up and using your product • Data backup • Troubleshooting and diagnostics • Factory and system restore • BIOS information	See <i>Me and My Dell</i> at www.dell.com/support/manuals . To locate the <i>Me and My Dell</i> relevant to your product, identify your product through one of the following: • Select Detect Product. • Locate your product through the drop-down menu under View Products. • Enter the Service Tag number or Product ID in the search bar.

Contacting Dell

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

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

 **NOTE:** If you do not have an active internet connection, you can find contact information on your purchase invoice, packing slip, bill, or Dell product catalog.