

# 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 <a href="#">SLN151664</a> and <a href="#">SLN151748</a> at <a href="http://www.dell.com/support">www.dell.com/support</a> .

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
	<p><b>My Dell</b></p> <p>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.</p>
	<p><b>SupportAssist</b></p> <p>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 <a href="http://www.dell.com/support">www.dell.com/support</a>.</p> <p> <b>NOTE:</b> To renew or upgrade your warranty in the SupportAssist app, click the warranty expiry date.</p>
	<p><b>Dell Update</b></p> <p>Updates your computer with critical fixes and latest device drivers. For more information about the app, see the knowledge base article <a href="http://www.dell.com/support">SLN305843</a> at <a href="http://www.dell.com/support">www.dell.com/support</a>.</p>
	<p><b>Dell Digital Delivery</b></p> <p>Download software applications, which are purchased but not pre-installed on your computer. For more information about the app, see the knowledge base article <a href="http://www.dell.com/support">153764</a> at <a href="http://www.dell.com/support">www.dell.com/support</a>.</p>

## Chassis overview

### Left



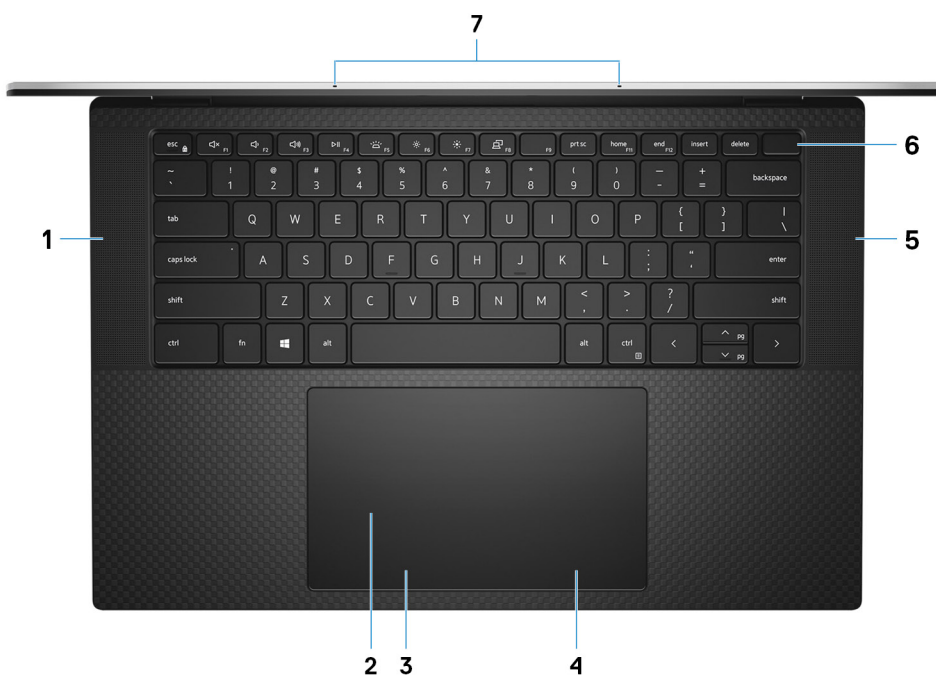
1. Wedge-shaped security slot
2. USB 3.2 Gen 2 Type-C port with Thunderbolt 3 (Power Delivery) (2)

### 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
- 5. Right speaker
- 7. Microphones (2)

- 4. Right-click area
- 6. Power button with fingerprint reader

## Display view



- 1. Infrared emitter
- 3. RGB-infrared camera
- 5. Infrared emitter

- 2. Ambient-light sensor
- 4. Camera-status light
- 6. Battery-status light

## Bottom view




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



# Specifications of Precision 5550

## 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)  <b>NOTE: The weight of your computer depends on the configuration ordered and the manufacturing variability.</b>

## Processors

**Table 4. Processors**

Description	Values					
Processors	10 <sup>th</sup> Generation Intel Core i5-10400H	10 <sup>th</sup> Generation Intel Core i7-10750H	10 <sup>th</sup> Generation Intel Core i7-10850H	10 <sup>th</sup> Generation Intel Core i7-10875H	10 <sup>th</sup> Generation Intel Core i9-10885H	10 <sup>th</sup> 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

**Table 5. Chipset(continued)**

Description	Values
Processor	10 <sup>th</sup> 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
- Redhat 8.2 (Certification Only)

## Memory

**Table 6. Memory specifications**

Description	Values
Slots	Two-SODIMM slots
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	<ul style="list-style-type: none"> <li>• 8 GB, 2 x 4 GB, DDR4, 2933 MHz, dual-channel</li> <li>• 16 GB, 2 x 8 GB, DDR4, 2933 MHz, dual-channel</li> <li>• 32 GB, 2 x16 GB, DDR4, 2933 MHz, dual-channel</li> <li>• 64 GB, 2 x 32 GB, DDR4, 2933 MHz, dual-channel</li> <li>• 8 GB, 2 x 4 GB, DDR4, ECC, 2677 MHz, dual-channel</li> <li>• 16 GB, 2 x 8 GB, DDR4, ECC 2677 MHz, dual-channel</li> <li>• 32 GB, 2 x 16 GB, DDR4, ECC 2677 MHz, dual-channel</li> </ul>

## Ports and connectors

**Table 7. External ports and connectors**

External:	
USB	<ul style="list-style-type: none"> <li>• Two USB 3.2 Gen 2 Type-C port with Thunderbolt 3 (Power Delivery)</li> <li>• One USB 3.2 Gen 2 Type-C Display port</li> </ul>

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

External:	
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 <b>i</b> <b>NOTE: Connect the power adaptor (USB Type-C) to only one of the three USB Type-C ports.</b>
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 <b>i</b> <b>NOTE: To learn more about the features of different types of M.2 cards, see the knowledge base article <a href="#">SLN301626</a>.</b>

## 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	<ul style="list-style-type: none"> <li>· Wi-Fi 802.11a/b/g</li> <li>· Wi-Fi 4 (WiFi 802.11n)</li> <li>· Wi-Fi 5 (WiFi 802.11ac)</li> <li>· Wi-Fi 6 (WiFi 802.11ax)</li> </ul>
Encryption	<ul style="list-style-type: none"> <li>· 64-bit/128-bit WEP</li> <li>· AES-CCMP</li> <li>· TKIP</li> </ul>
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	<ul style="list-style-type: none"><li>• Secure Digital (SD)</li><li>• Secure Digital High Capacity (SDHC)</li><li>• Secure Digital eXtended Capacity (SDXC)</li></ul>

# 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	<ul style="list-style-type: none"> <li>· United States and Canada: 79 keys</li> <li>· United Kingdom: 80 keys</li> <li>· Japan: 83 keys</li> </ul>
Keyboard size	X=19.05 mm key pitch Y=18.05 mm key pitch
Keyboard shortcuts	<p>Some keys on your keyboard have two symbols on them. These keys can be used to type alternate characters or to perform secondary functions. To type the alternate character, press Shift and the desired key. To perform secondary functions, press Fn and the desired key.</p> <p><b>NOTE: You can define the primary behavior of the function keys (F1–F12) changing Function Key Behavior in BIOS setup program.</b></p> <p><a href="#">Keyboard shortcuts</a></p>

# 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

**Table 14. Camera specifications(continued)**

Description		Values
	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/4027871) at [support.microsoft.com](https://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)	<ul style="list-style-type: none"> <li>• 20 V/4.5 A (Continuous)</li> <li>• 15 V/3 A (Continuous)</li> <li>• 9.0 V/3 A (Continuous)</li> <li>• 5.0 V/3 A (Continuous)</li> </ul>	<ul style="list-style-type: none"> <li>• 20 V/6.5 A (Continuous)</li> <li>• 5.0 V/1 A (Continuous)</li> </ul>
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)
	Storage	-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) <b>i</b> <b>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 <a href="http://www.dell.com/">www.dell.com/</a></b>	2 hr ( Express charge ), 3 hr ( Standard charge) (when the computer is off) <b>i</b> <b>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 <a href="http://www.dell.com/">www.dell.com/</a></b>
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):		

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

Description		Values	
	Height	336.38 mm	336.38 mm
	Width	210.24 mm	210.24 mm
	Diagonal	15.6 mm	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
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)
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.

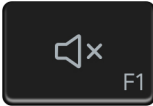

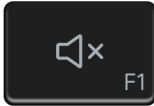
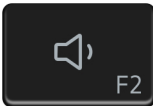
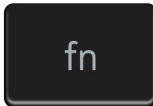
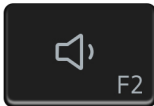
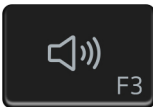
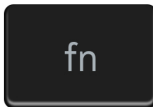
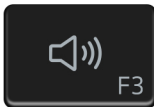
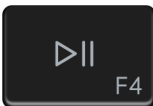
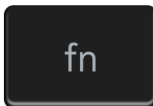
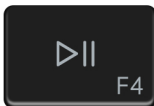

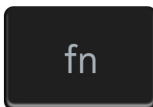

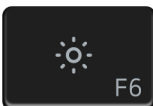
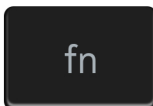
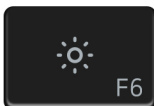
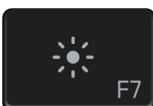
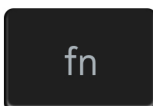
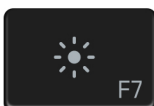
Some keys on your keyboard have two symbols on them. These keys can be used to type alternate characters or to perform secondary functions. The symbol shown on the lower part of the key refers to the character that is typed out when the key is pressed. If you press shift and the key, the symbol shown on the upper part of the key is typed out. For example, if you press **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).

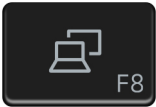
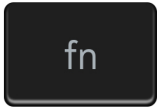

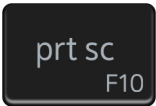

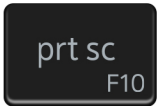
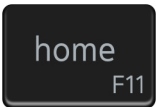
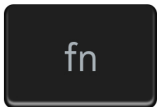

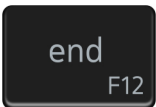
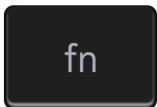
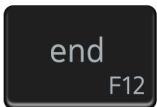
However, if the function keys **F1-F12** are needed for specific software applications, multi-media functionality can be disabled by pressing **Fn + esc**. Subsequently, multimedia control can be invoked by pressing **Fn** and the respective function key. For example, mute audio by pressing **Fn + F1**.

**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**

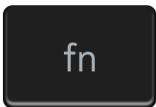

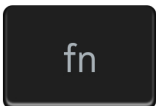
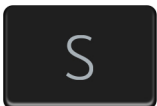
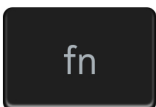

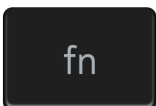
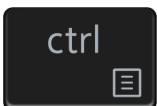
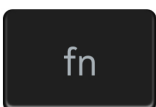
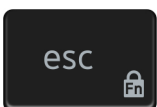
Function key	Redefined key (for multimedia control)	Behavior
	 + 	Mute audio
	 + 	Decrease volume
	 + 	Increase volume
	 + 	Play/Pause
	 + 	Toggle keyboard backlight
	 + 	Decrease brightness
	 + 	Increase brightness

**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	<a href="http://www.dell.com">www.dell.com</a>
My Dell	
Tips	
Contact Support	In Windows search, type <code>Contact Support</code> , and press Enter.
Online help for operating system	<a href="http://www.dell.com/support/windows">www.dell.com/support/windows</a> <a href="http://www.dell.com/support/linux">www.dell.com/support/linux</a>
Troubleshooting information, user manuals, setup instructions, product specifications, technical help blogs, drivers, software updates, and so on.	<a href="http://www.dell.com/support">www.dell.com/support</a>
Dell knowledge base articles for a variety of computer concerns.	<ol style="list-style-type: none"> <li>1. Go to <a href="https://www.dell.com/support/home/?app=knowledgebase">https://www.dell.com/support/home/?app=knowledgebase</a>.</li> <li>2. Type the subject or keyword in the <b>Search</b> box.</li> <li>3. Click <b>Search</b> to retrieve the related articles.</li> </ol>
Learn and know the following information about your product: <ul style="list-style-type: none"> <li>· Product specifications</li> <li>· Operating system</li> <li>· Setting up and using your product</li> <li>· Data backup</li> <li>· Troubleshooting and diagnostics</li> <li>· Factory and system restore</li> <li>· BIOS information</li> </ul>	See <i>Me and My Dell</i> at <a href="http://www.dell.com/support/manuals">www.dell.com/support/manuals</a> . To locate the <i>Me and My Dell</i> relevant to your product, identify your product through one of the following: <ul style="list-style-type: none"> <li>· Select <b>Detect Product</b>.</li> <li>· Locate your product through the drop-down menu under <b>View Products</b>.</li> <li>· Enter the <b>Service Tag number</b> or <b>Product ID</b> in the search bar.</li> </ul>

## Contacting Dell

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

 **NOTE: Availability 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.**