Precision 5530

## Setup and Specifications

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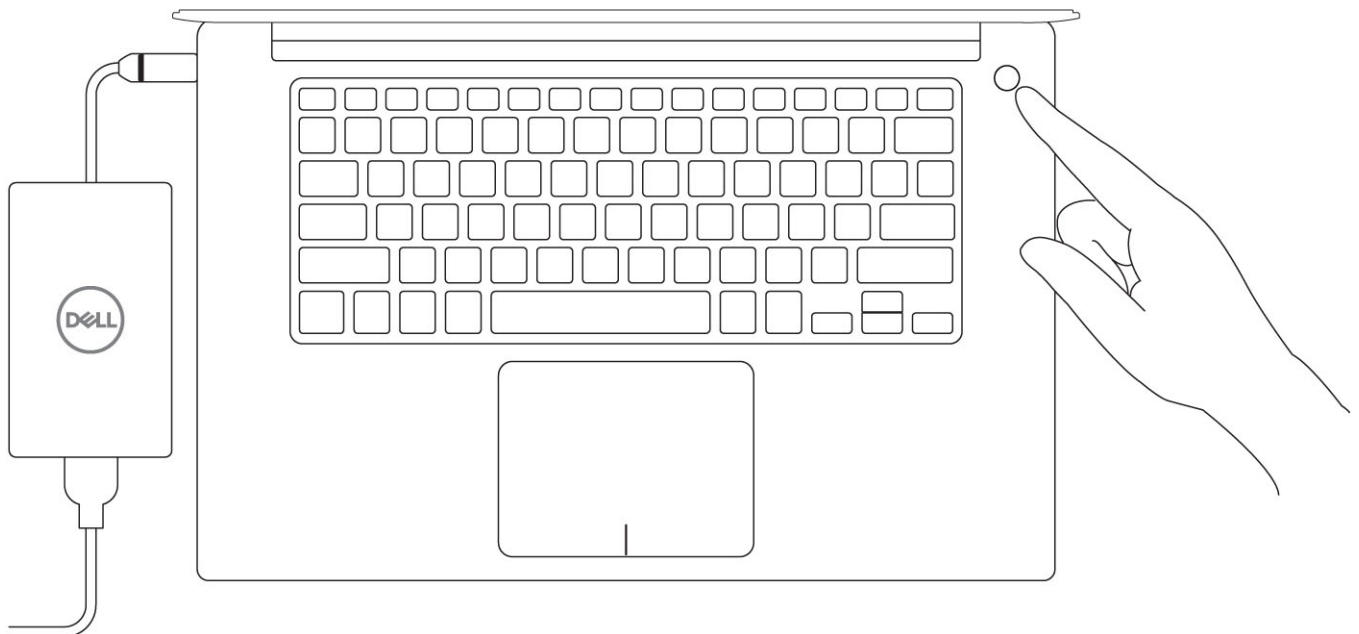
⚠ **WARNING: A WARNING indicates a potential for property damage, personal injury, or death.**

Set up your computer

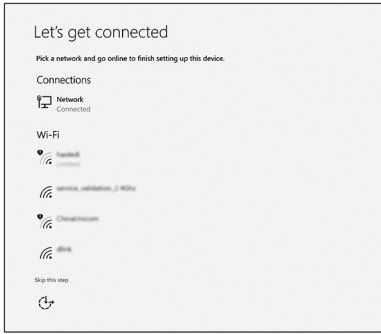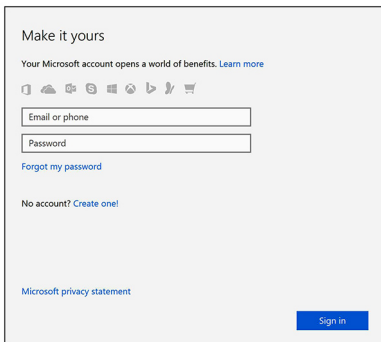1. Connect the power adapter.
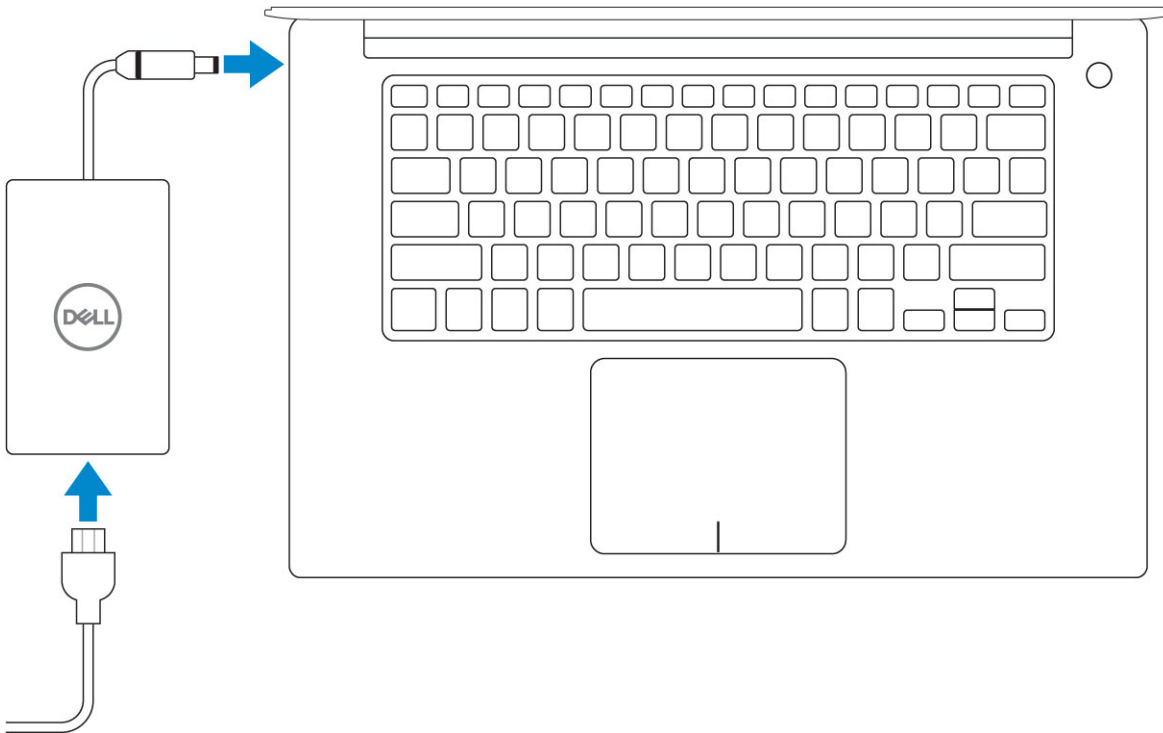
2. Press the power button.

3. Follow the instructions on the screen to finish Windows setup:

    a. Connect to a network.

b. Sign-in to your Microsoft account or create a new account.

4. Locate Dell apps.

Table 1. Locate Dell apps

	Register your computer
	Dell Help & Support
	SupportAssist — Check and update your computer

Chassis

This chapter illustrates the multiple chassis views along with the ports and connectors and also explains the FN hot key combinations.

Topics:

- System Overview
- Hot key combinations

System Overview

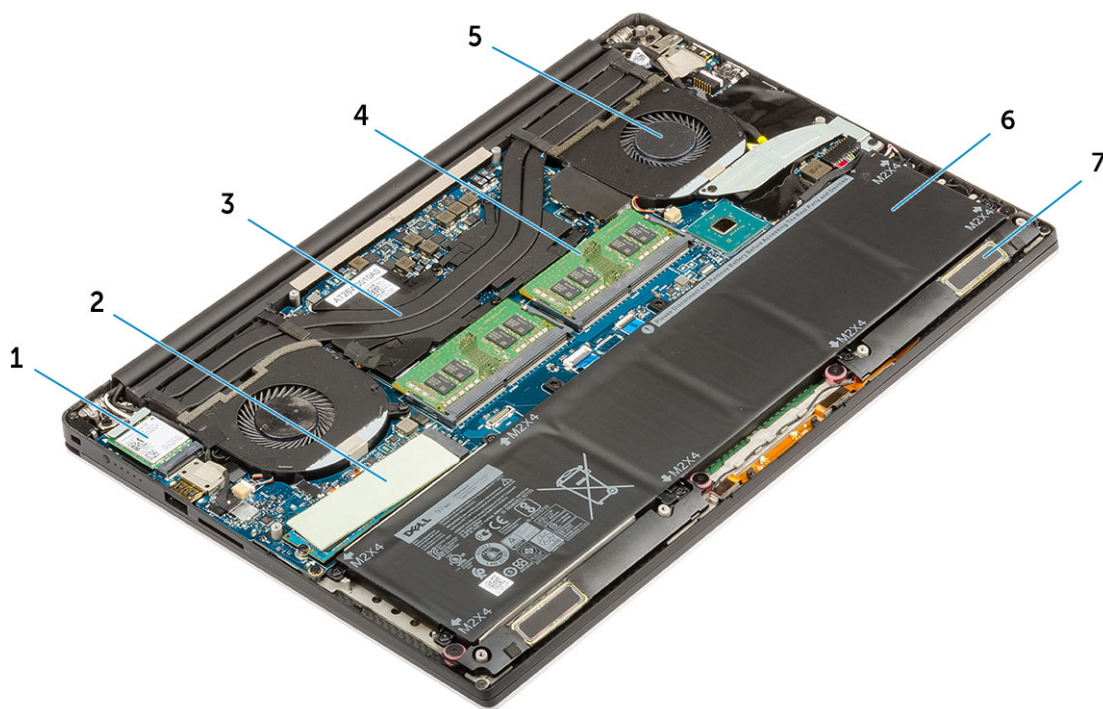**Figure 1. Inside View — Back**

1. WLAN card
2. M.2 PCIe SSD
3. heatsink
4. memory modules
5. system fan
6. battery
7. speakers

Figure 2. Front View

1. Power button with light indicator / Power button with fingerprint reader without light indicator (optional)
2. Keyboard
3. Palmrest
4. Touchpad
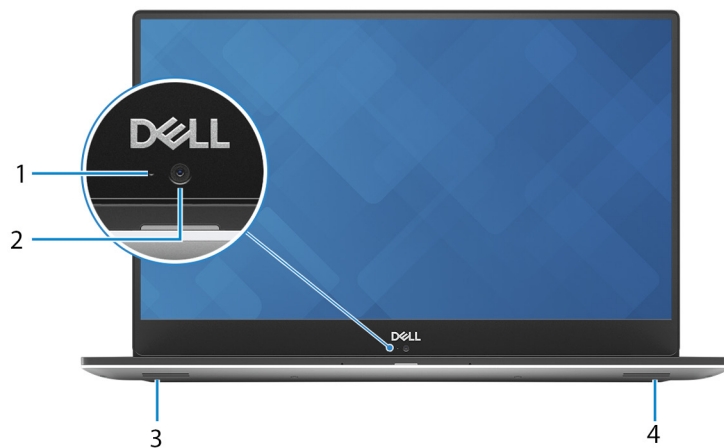
Figure 3. Front Open View

1. Camera-status light
2. Camera
3. Left speaker
4. Right speaker
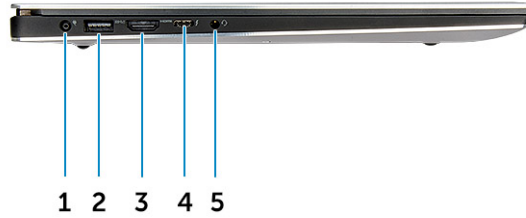
Figure 4. Left View

1. Power connector port
2. USB 3.1 Gen 1 port with PowerShare
3. HDMI port
4. Thunderbolt 3 Type-C port
5. Headset port
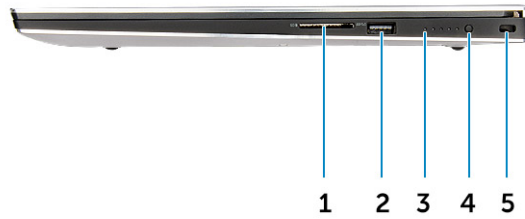
Figure 5. Right View

1. Memory card reader
2. USB 3.1 Gen 1 port with PowerShare
3. Battery-charge status lights
4. Battery-charge status button
5. Noble wedge security slot

Hot key combinations

Table 2. Hot key combination

Fn key combination	Precision 5530
Fn+ESC	Fn Toggle
Fn+ F1	Speaker Mute
Fn+ F2	Volume Down
Fn+ F3	Volume Up

Table 2. Hot key combination (continued)

Fn key combination	Precision 5530
Fn+ F4	Rewind
Fn+ F5	Play/Pause
Fn+ F6	Forward
Fn+ F8	Display Toggle (Win + P)
Fn+ F9	Search
Fn+ F10	Increase Keyboard Back light Brightness
Fn+ F11	Panel Brightness Down
Fn+ F12	Panel Brightness Up
Fn+ PrtScr	Wireless

Technical specifications

> ⓘ **NOTE:** Offerings may vary by region. The following specifications are only those required by law to ship with your computer. For more information about the configuration of your computer, go to **Help and Support** in your Windows operating system and select the option to view information about your computer.

Topics:

Physical specifications

Table 3. Dimensions and weight

Features	Specification
Height	17 mm (0.66 in)
Width	357 mm (14.06 in)
Depth	235 mm (9.26 in)
Weight	1.78 kg (3.93 lb) - Non Touch / 2.04 kg (4.5 lb) - Touch

System information

Table 4. System information

Features	Specifications
Chipset	Intel CM246

Table 4. System information (continued)

Features	Specifications
DRAM bus width	64-bit wide channels
FLASH EPROM	32 MB
PCIe bus	up to Gen3; 8 Gbps

Processor specifications

(i) **NOTE:** Processor numbers are not a measure of performance. Processor availability is subject to change and may vary by region/country.

Table 5. Processor specifications

Type	UMA Graphics
Intel Xeon E-2176M (6-core 2.7GHz, 4.4GHz Turbo, 12MB 45W)	Intel UHD Graphics P630
Intel 8th generation Intel Core i9-8950HK,(6-core 2.9GHz, 4.8GHz Turbo, 12MB 45W)	Intel UHD Graphics 630
Intel 8 th generation Intel Core i7-8850H (6-core 2.6GHz, 4.3GHz Turbo, 9MB 45W)	Intel UHD Graphics 630
Intel 8 th generation Intel Core i5-8300H (4-core 2.3GHz, 4.0GHz Turbo, 8MB 45W)	Intel UHD Graphics 630

Operating system specifications

Table 6. Operating system specifications

Features	Specification
Operating systems supported	- Microsoft 10 Windows Pro 64-bit - Microsoft Windows 10 Home 64-bit· - Microsoft Windows 10 Pro National Academic (64-bit) - Microsoft Windows 10 Home National Academic (64-bit) - Microsoft Windows 10 Pro for Enterprise - Microsoft windows 10 Pro for Workstation (64-bit) - Red Hat Enterprise Linux (RHEL) - Ubuntu 16.04 LTS SP1 64-bit

Memory specifications

Table 7. Memory specifications

Features	Specification
Minimum memory configuration	8 GB
Maximum memory configuration	64 GB
Number of slots	2 SoDIMM

Table 7. Memory specifications (continued)

Features	Specification
Maximum memory supported per slot	32 GB
Memory options	8 GB DDR4 2666 MHz (8Gx1) 8 GB DDR4 2666 MHz (4Gx2) 12 GB DDR4 2666 MHz (8Gx1 + 4Gx1) 16 GB DDR4 2666 MHz (8Gx2) 16 GB DDR4 2666 MHz (16Gx1) 24 GB DDR4 2666 MHz (16Gx1 + 8Gx1) 32 GB DDR4 2666 MHz (16Gx2) 64 GB DDR4 2666 MHz (32Gx2) (i) **NOTE:** The memory modules are customer replaceable units (CRU), and it can be upgraded. (i) **NOTE:** - Memory configuration of 2666 MHz pair with core i5, i7, and i9 CPU
Type	DDR4 SDRAM Non-ECC memory
Speed	2666 MHz on Core i5, i7, and i9 processor

Port and connector specifications

Table 8. Ports and connectors

Features	Specification
USB	- Two USB 3.1 Gen 1 ports with PowerShare - One Thunderbolt 3 port (USB 3.1 Gen 2 Type-C) with power delivery
Security	Noble lock slot
Audio	One headset port (headphone and microphone combo)
Video	HDMI 2.0 port
Memory Card reader	SD 4.0

Communication specifications

Table 9. Communication specifications

Features	Specifications
Network adapter	Ethernet via USB-to-Ethernet Dongle (Optional)
Wireless	- Intel Wi-Fi 6 AX200 2x2 .11ax 160MHz + Bluetooth 5.0 - Intel Wireless-AC 9260 2x2 802.11ac + BT5.0 (vPro) - Qualcomm QCA6174A 2x2 802.11ac + BT5.0 - Bluetooth 5.0

Video specifications

Table 10. Video

Controller	Type	CPU Dependency	Graphics memory type	Capacity	External display support	Maximum resolution
Intel UHD Graphics 630	UMA	Intel Core i5 - 8300H Intel Core i7 - 8850 Intel Core i9 - 8950	Integrated	Shared system memory	HDMI 2.0	HDMI : 1920x1080@60 Hz
Intel UHD Graphics P630	UMA	Intel Xeon E-2176M	Integrated	Shared system memory	HDMI 2.0	HDMI : 1920x1080@60 Hz
NVIDIA Quadro P1000	Discrete	N/A	GDDR5	4 GB	HDMI 2.0	HDMI = 1920x1200 (PC Mode), 1920x1080 (TV mode, 1080p) HDMI 2.0 = 3840x2160 (TV mode, 2160p)
NVIDIA Quadro P2000	Discrete	N/A	GDDR5	4 GB	HDMI 2.0	HDMI = 1920x1200 (PC Mode), 1920x1080 (TV mode, 1080p) HDMI 2.0 = 3840x2160 (TV mode, 2160p)

Audio specifications

Table 11. Audio specifications

Features	Specification
Controller	Waves MaxxAudio Pro
Type	Integrated
Interface	● High-quality speakers ● Dual-array microphones

Storage specifications

Table 12. Storage specifications

Type	Form factor	Interface	Capacity
Solid-State Drive (SSD)	M.2 PCIe SSD	PCIe , 3x4 NVMe up to 32Gbps	256 GB upto 2 TB SSD
Hard drive (HDD)	2.5 inch SATA HDD	SATA , Up to 6 Gbps	500 GB / 1 TB/ 2 TB HDD

Display specifications

Table 13. Display specifications

Features	Specification
Type	• 15.6-inch UltraSharp FHD IPS (1920x1080) Wide View Anti-Glare LED-backlit with Premium Panel Guarantee (72% color gamut) • 15.6-inch UltraSharp UHD IGZO (3840x2160) Touch Wide View LED-backlit with Premium Panel Guarantee (100% Minimum Adobe color gamut)
Luminance/Brightness (typical)	• 400 nits (FHD 72% color gamut) • 360 nits (UHD Adobe 100% color gamut)
Height (Active area)	• FHD - 194.5 mm (7.66 inches) • UHD - 194.5 mm (7.66 inches)
Width (Active area)	• FHD - 345.6 mm (13.61 inches) • UHD - 345.6 mm (13.55 inches)
Diagonal	• FHD - 396.52 mm (15.61 inches) • UHD - 396.52 mm (15.61 inches)
Megapixels	• FHD - 2.07 • UHD - 8.29
Pixels Per Inch (PPI)	• FHD - 141 • UHD - 282
Contrast ratio	• FHD - 1500:1 • UHD - 1500:1
Refresh rate	60 Hz
Horizontal viewing angle (min)	+/- 89 degrees
Vertical viewing angle (min)	+/- 89 degrees
Pixel pitch	• FHD - 0.18 mm • UHD - 0.09 mm
Power consumption (max)	• 4.22 W (FHD 72% color gamut) • 9.23 W (UHD Adobe 100% color gamut)

Keyboard specifications

Table 14. Keyboard specifications

Features	Specification
Number of keys	• 80 (U.S. and Canada) • 81 (Europe) • 84 (Japan)
Size	Full sized

Table 14. Keyboard specifications (continued)

Features	Specification
	• X= 19.05 mm key pitch • Y= 18.05 mm key pitch
Backlit keyboard	Easy enable/disable via hotkey <Fn+F10 Key> variable brightness levels
Layout	QWERTY

Camera

Table 15. Camera specifications

Features	Specification
Resolution	HD Camera: • Still image: 0.92 megapixels • Video: 1280x720 at 30 fps
Diagonal viewing angle	• Camera - 66 degrees

Touchpad specifications

Table 16. Touchpad specifications

Features	Specifications
Resolution	• Horizontal: 1952 • Vertical: 3220
Dimensions	• Width: 4.03 inches (102.40 mm) • Height: 2.45 inches (62.40 mm)
Multi-touch	Support 5 fingers

Power supply specifications

Table 17. Power supply

Features	Specification
Input Voltage	100 – 240 VAC
Input frequency	50 – 60 Hz
Type	130 W AC Adapter

Battery

Table 18. Battery specifications

Features	Specifications
Type	• 56 WHr lithium-ion 3 cell battery • 97 WHr lithium-ion 6 cell battery

Dimension	1. 56 WHr lithium-ion
	  • Length: 223.2 mm (8.79 inch)
	  • Width: 71.8 mm (2.83 inch)
	  • Height: 7.2 mm (0.28 inch)
	  • Weight: 250.00 g (0.55 lb)
	2. 97 WHr lithium-ion
	  • Length: 332 mm (13.07 inch)
	  • Width: 96.0 mm (3.78 inch)
	  • Height: 7.7 mm (0.30 inch)
	  • Weight: 450.00 g (0.992 lb)

Weight (maximum)	450.00 g (0.992 lb)
Voltage	• 56 WHr - 11.4 VDC • 97 WHr - 11.4 VDC
Life span	300 discharge/recharge cycles
Charging time when the computer is off (approximate)	4 hours
Operating time	Varies depending on operating conditions and can significantly reduce under certain power-intensive conditions
Temperature range: Operating	0°C to 35°C (32°F to 95°F)
Temperature range: Storage	-40°C to 65°C (-40°F to 149°F)
Coin-cell battery	ML1220

Power adapter

Table 19. Power adapter specifications

Features	Specification
Type	130W adapter
Input Voltage	100 to 240 VAC
Adapter size	Height:22 mm (0.86 inches) Width:66 mm (2.59 inches) Depth:143 mm (5.62 inches)
Input frequency	50 Hz to 60 Hz
Output current	130 W - 6.67 A (continuous)
Rated output voltage	19.5 VDC

Table 19. Power adapter specifications (continued)

Features	Specification
Temperature range (Operating)	0° to 40° C (32° to 104° F)
Temperature range (Non-Operating)	40° to 70° C (-40° to 158° F)

Security

Table 20. Security

Features	Specification
Security HW	Trusted Platform Module (TPM) 2.0 - Integrated on system board

Computer environment

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

Table 21. Computer environment

	Operating	Storage
Temperature range	0°C to 40°C (32°F to 104°F)	-40°C to 65°C (-40°F to 149°F)
Relative humidity (maximum)	20% to 80% (non-condensing)	5% to 95% (non-condensing)
Vibration (maximum)	2 to 600 Hz at 0.66 Grms	2 to 600 Hz at 1.3 Grms
Shock (maximum)	140 G with pulse duration of 2 msec +/- 5% (equivalent to 70 in/sec)	160 G with pulse duration of 2 msec +/- 5% (equivalent to 80 in/sec)
Altitude (maximum)	0 m to 3048 m (0 to 10,000 ft); 0° to 40°C (32° to 104°F)	0 m to 10668 m (0 to 35,000 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.

‡ Measured using a 2 ms half-sine pulse when the hard-drive head is in parked position.

BIOS setup

⚠ **CAUTION: Unless you are an expert computer user, do not change the settings in the BIOS Setup program. Certain changes can make your computer work incorrectly.**

ⓘ **NOTE:** Depending on the computer and its installed devices, the items listed in this section may or may not be displayed.

ⓘ **NOTE:** Before you change BIOS Setup program, it is recommended that you write down the BIOS Setup program screen information for future reference.

Use the BIOS Setup program for the following purposes:
- Get information about the hardware installed in your computer, such as the amount of RAM and the size of the hard drive.
- Change the system configuration information.
- Set or change a user-selectable option, such as the user password, type of hard drive installed, and enabling or disabling base devices.

Topics:

- BIOS overview
- Entering BIOS setup program
- Navigation keys
- One time boot menu
- System Setup Options
- Updating the BIOS
- System and setup password
- Clearing BIOS (System Setup) and System passwords

BIOS overview

The BIOS manages data flow between the computer's operating system and attached devices such as hard disk, video adapter, keyboard, mouse, and printer.

Entering BIOS setup program

1. Turn on your computer.
2. Press F2 immediately to enter the BIOS setup program.

   ⓘ **NOTE:** If you wait too long and the operating system logo appears, continue to wait until you see the desktop. Then, turn off your computer and try again.

Navigation keys

ⓘ **NOTE:** For most of the System Setup options, changes that you make are recorded but do not take effect until you restart the system.

Table 22. Navigation keys

Keys	Navigation
Up arrow	Moves to the previous field.

Keys	Navigation
Down arrow	Moves to the next field.
Enter	Selects a value in the selected field (if applicable) or follow the link in the field.
Spacebar	Expands or collapses a drop-down list, if applicable.
Tab	Moves to the next focus area. (i) **NOTE:** For the standard graphics browser only.
Esc	Moves to the previous page until you view the main screen. Pressing Esc in the main screen displays a message that prompts you to save any unsaved changes and restarts the system.

One time boot menu

To enter **one time boot menu**, turn on your computer, and then press F12 immediately.

(i) **NOTE:** It is recommended to shutdown the computer if it is on.

The one-time boot menu displays the devices that you can boot from including the diagnostic option. The boot menu options are:

- Removable Drive (if available)
- STXXXX Drive (if available)
  - (i) **NOTE:** XXX denotes the SATA drive number.
- Optical Drive (if available)
- SATA Hard Drive (if available)
- Diagnostics

The boot sequence screen also displays the option to access the System Setup screen.

System Setup Options

(i) **NOTE:** Depending on your computer and its installed devices, the items listed in this section may or may not appear.

Table 23. Main

Option	Description
System Time/Date	Allows you to set the date and time.
BIOS Version	Displays the BIOS version.
Product Name	Displays the product name. **Dell Precision 5530** (Default Setting)
Service Tag	Displays the service tag.
Asset Tag	Displays the asset tag. **None** (Default Setting)
CPU Type	Displays the CPU type.
CPU Speed	Displays the CPU speed.
CPU ID	Displays the CPU ID.
CPU Cache	Displays the sizes of the CPU caches.

Table 23. Main (continued)

Option	Description
Fixed HDD	Displays the type and size of the HDD.
mSATA Device	Displays the type and size of the mSATA device.
AC Adapter Type	Displays the type of the AC adapter. **None** (Default Setting)
System Memory	Displays the size of the system memory.
Extended Memory	Displays the size of the extended memory.
Memory Speed	Displays the speed of the memory.
Keyboard Type	Displays the type of keyboard. **Backlits** (Default Setting)

Table 24. Advanced

Option	Description
Intel (R) SpeedStep (TM)	Allows you to enable or disable the Intel (R) SpeedStep (TM) feature. **Enabled** (Default Setting)
Virtualization	This option specifies whether a Virtual Machine Monitor (VMM) can utilize the additional hardware capabilities provided by Intel Virtualization technology. Allows you to enable or disable the Virtualization feature. **Enabled** (Default Setting)
Multi Core Support	Specifies whether the processor will have one or more cores enabled. **All** (Default Setting)
Intel TurboBoost	Enables or disables the Intel TurboBoost mode of the processor. **Enabled** (Default Setting)
C-States Control	This option enables or disables additional processor sleep states. **Enabled** (Default Setting)
Audio	Enables or disables the integrated audio controller. **Enabled** (Default Setting)
Keyboard Illumination	This field lets you choose the operating mode of the keyboard illumination feature. **Disabled** (Default Setting)
USB Configuration	Allows you to configure the integrated USB controller. **Default Enabled**: Enable Boot Support, Enable Thunderbolt Ports; Always Allow Dell Docks; Enable External USB Port
Touchscreen	This field controls whether the touchscreen is enabled or disabled. **Enabled** (Default Setting)
AC Behavior	Allows the system (if OFF or in Hibernate) to power-on automatically when AC is inserted.
Wake On LAN	Allows the computer to power up from the off state when triggered by special LAN. **Disabled** (Default Setting)
Advanced Battery Charge Configuration	Maximizes battery health while still supporting heavy use during the work day. **Disabled** (Default Setting)
Block Sleep	Lets you to block entering to sleep (S3 state) in OS environment. **Disabled** (Default Setting)

Table 24. Advanced (continued)

Option	Description
Auto On Time	Sets the time of day when you would like the system to turn on automatically. **Disabled** (Default Setting)
Peak Shift	Minimizes AC power usage at times of peak demand. **Disabled** (Default Setting)
USB Wake Support	Allows you to enable USB devices to wake the system from Standby. **Enabled** (Default Setting)
LCD Brightness	This options sets the panel brightness independently for Battery and AC power.
USB Emulation	Allows you to enable or disable the USB Emulation feature. **Enabled** (Default Setting)
USB PowerShare	Allows you to enable or disable the USB PowerShare feature. **Enabled** (Default Setting)
USB Wake Support	This option allows you to enable USB devices to wake the system from Standby. **Disable**(Default Setting)
SATA Operation	Displays the SATA Operation information.
Adapter Warnings	Allows you to enable or disable the adapter warnings feature.
Multimedia Key Behaviour	**Function Key** (Default Setting)
Battery Health	Displays the battery health information.
Battery Charge Configuration	**Adaptive** (Default Setting)
Miscellaneous Devices	Allows you enable or disable the various on board devices. The options are: ● **External USB Ports** - **Enabled** (Default Setting) ● **USB Debug** - **Disabled** (Default Setting)

Table 25. Security

Option	Description
Unlock Setup Status	**Unlocked** (Default Setting)
Admin Password Status	Displays the status of the admin password. Default Setting: **Not set**
System Password Status	Displays the status of the system password. Default Setting: **Not set**
HDD Password Status	Displays the status of the system password. Default Setting: **Not set**
Asset Tag	Allows you to set the asset tag.
Admin Password	Allows you to set, change, or delete the administrator (admin) password. (i) **NOTE:** You must set the admin password before you set the system or hard drive password. (i) **NOTE:** Successful password changes take effect immediately.

Table 25. Security (continued)

Option	Description
	ⓘ **NOTE:** Deleting the admin password automatically deletes the system password and the hard drive password. ⓘ **NOTE:** Successful password changes take effect immediately.
System Password	Allows you to set, change or delete the system password. ⓘ **NOTE:** Successful password changes take effect immediately.
HDD Password	Allows you to set, change or delete the administrator password.
Strong Password	This field enforces strong passwords that contain at least one uppercase character, one lowercase character, and be at least 8 characters long.
Password Change	Allows you to enable or disable permissions to set a System password and a Hard Drive password when the admin password is set. Default Setting: **Permitted**
Password Bypass	This option lets you bypass the System (Boot) password and the internal HDD password prompts during system re-start. **Disabled** (Default Setting)
Password configuration	These fields control the minimum and maximum number of characters allowed for Admin and System passwords.
Computrace	Allows you to activate or disable the optional Computrace software The options are: ● **Deactivate** (Default Setting) ● Activate ⓘ **NOTE:** The Activate and Disable options will permanently activate or disable the feature and no further changes will be allowed.
TPM Security	This option lets you control whether the Trusted Platform Module (TPM) in the system is enabled and visible to the operating system. When disabled the BIOS will not turn On the TPM During POST. The TPM will be non-functional and invisible to the operating system. When enabled, the BIOS will turn On the TPM during POST so that it can be used by the operating system. This option is **Enable** by default. ⓘ **NOTE:** Disabling this option does not change any settings you may have made to the TPM, nor does it delete or change any information or keys you may have stored there. It simply turns Off the TPM so that it cannot be used. When you re-enable this option, the TPM will function exactly as it did before it was disabled. ⓘ **NOTE:** Changes to this option take effect immediately.
UEFI Capsule Firmware Updates	This option controls whether this system allows BIOS updates via UEFI capsule update packages. **Enabled** (Default Setting)
CPU XD Support	This option enables or disables the Execute Disable mode for the processor. **Enabled** (Default Setting)
OROM Keyboard Access	This option determines whether users are able to enter Option ROM configuration screens via hotkeys during boot.

Table 26. Boot

Option	Description
Boot List Option	Default Setting: **Legacy**
Secure Boot	This option enables or disables the Secure Boot feature. ● **Disabled** (Default Setting) - Windows 10 ● Enabled - Windows 10
Load Legacy Option ROM	This option enables or disables the Load Legacy Option ROM feature.

Table 26. Boot (continued)

Option	Description
	Enabled (Default Setting) - Windows 10 - Disabled - Windows 10
Expert Key Management	Expert Key Management allows the PK, KEK, db, and dbx security key databases to be manipulated. **Disabled** (Default Setting)
Intel Software Guard Extensions	Intel SGX Enabled: Enables Intel Software Guard Extensions (SGX) to provide a secured environment for running code/storing sensitive information in the context of the main OS. **Enabled** (Default Setting)
Set Boot Priority	Allows you to change the order in which the computer attempts to find an operating system: 1 st Boot Priority [CD/DVD/CD-RW Drive] 2nd Boot Priority [Network] 3rd Boot Priority [mini SSD] 4th Boot Priority [USB Storage Device 5th Boot Priority [Hard Drive] 6th Boot Priority [Diskette Drive]
Adapter Warnings	Lets you choose whether the system displays warning messages when you use certain power adapters. **Enabled** (Default Setting)
SupportAssist OS Recovery	Enables for disables the boot flow for SupportAssist OS Recovery tool in the event of certain errors. **Enabled** (Default Setting)
Keypad (embedded)	Lets you choose one of two methods to enable the keypad that is embedded in the internal keyboard. Fn Key Only **Enabled** by default.
Fastboot	This option can speed up the boot process by bypassing some compatibility steps. **Minimal** (Default Setting)
Extend BIOS POST Time	Creates an additional pre-boot delay to see POST messages.
Warnings and Errors	This option cause the boot process to only pause when warnings or errors are detected. **Enabled** (Default Setting)
Wireless Switch	Determines which wireless devices can be controlled by the Wireless Switch. WLAN and Bluetooth Enabled (Default Setting)
SupportAssist System Resolution	Auto OS Recovery Threshold: Controls the automatic boot flow for SupportAssist System Resolution Console and for Dell OS Recovery Tool. Setting 2 default

Table 27. Exit

Option	Description
Save Changes and Reset	Allows you to save the changes you made.
Discard Changes and Reset	Allows you to discard the changes you made.
Restore Defaults	Allows you to restore the default options.
Discard Changes	Allows you to discard the changes you made.
Save Changes	Allows you to save the changes you made.

Updating the BIOS

Updating the BIOS in Windows

⚠ **CAUTION: If BitLocker is not suspended before updating the BIOS, the next time you reboot the system it will not recognize the BitLocker key. You will then be prompted to enter the recovery key to progress and the system will ask for this on each reboot. If the recovery key is not known this can result in data loss or an unnecessary operating system re-install. For more information on this subject, see Knowledge Article: https://www.dell.com/support/article/sln153694**

1. Go to www.dell.com/support.
2. Click **Product support**. In the **Search support** box, enter the Service Tag of your computer, and then click **Search**.

   ⓘ **NOTE:** If you do not have the Service Tag, use the SupportAssist feature to automatically identify your computer. You can also use the product ID or manually browse for your computer model.

3. Click **Drivers & Downloads**. Expand **Find drivers**.
4. Select the operating system installed on your computer.
5. In the **Category** drop-down list, select **BIOS**.
6. Select the latest version of BIOS, and click **Download** to download the BIOS file for your computer.
7. After the download is complete, browse the folder where you saved the BIOS update file.
8. Double-click the BIOS update file icon and follow the on-screen instructions.
   For more information, see knowledge base article 000124211 at www.dell.com/support.

Updating the BIOS in Linux and Ubuntu

To update the system BIOS on a computer that is installed with Linux or Ubuntu, see the knowledge base article 000131486 at www.dell.com/support.

Updating the BIOS using the USB drive in Windows

⚠ **CAUTION: If BitLocker is not suspended before updating the BIOS, the next time you reboot the system it will not recognize the BitLocker key. You will then be prompted to enter the recovery key to progress and the system will ask for this on each reboot. If the recovery key is not known this can result in data loss or an unnecessary operating system re-install. For more information on this subject, see Knowledge Article: https://www.dell.com/support/article/sln153694**

1. Follow the procedure from step 1 to step 6 in Updating the BIOS in Windows to download the latest BIOS setup program file.
2. Create a bootable USB drive. For more information, see the knowledge base article 000145519 at www.dell.com/support.
3. Copy the BIOS setup program file to the bootable USB drive.
4. Connect the bootable USB drive to the computer that needs the BIOS update.
5. Restart the computer and press **F12** .
6. Select the USB drive from the **One Time Boot Menu**.
7. Type the BIOS setup program filename and press **Enter**.
   The **BIOS Update Utility** appears.
8. Follow the on-screen instructions to complete the BIOS update.

Updating the BIOS from the F12 One-Time boot menu

Update your computer BIOS using the BIOS update.exe file that is copied to a FAT32 USB drive and booting from the F12 One-Time boot menu.

⚠️ **CAUTION: If BitLocker is not suspended before updating the BIOS, the next time you reboot the system it will not recognize the BitLocker key. You will then be prompted to enter the recovery key to progress and the system will ask for this on each reboot. If the recovery key is not known this can result in data loss or an unnecessary operating system re-install. For more information on this subject, see Knowledge Article: https://www.dell.com/support/article/sln153694**

BIOS Update

You can run the BIOS update file from Windows using a bootable USB drive or you can also update the BIOS from the F12 One-Time boot menu on the computer.

Most of the Dell computers built after 2012 have this capability, and you can confirm by booting your computer to the F12 One-Time Boot Menu to see if BIOS FLASH UPDATE is listed as a boot option for your computer. If the option is listed, then the BIOS supports this BIOS update option.

ⓘ **NOTE:** Only computers with BIOS Flash Update option in the F12 One-Time boot menu can use this function.

Updating from the One-Time boot menu

To update your BIOS from the F12 One-Time boot menu, you need the following:

- USB drive formatted to the FAT32 file system (key does not have to be bootable)
- BIOS executable file that you downloaded from the Dell Support website and copied to the root of the USB drive
- AC power adapter that is connected to the computer
- Functional computer battery to flash the BIOS

Perform the following steps to perform the BIOS update flash process from the F12 menu:

⚠️ **CAUTION: Do not turn off the computer during the BIOS update process. The computer may not boot if you turn off your computer.**

1. From a turn off state, insert the USB drive where you copied the flash into a USB port of the computer.
2. Turn on the computer and press F12 to access the One-Time Boot Menu, select BIOS Update using the mouse or arrow keys then press Enter.
   The flash BIOS menu is displayed.
3. Click **Flash from file**.
4. Select external USB device.
5. Select the file and double-click the flash target file, and then click **Submit**.
6. Click **Update BIOS**. The computer restarts to flash the BIOS.
7. The computer will restart after the BIOS update is completed.

System and setup password

Table 28. System and setup password

Password type	Description
System password	Password that you must enter to log in to your system.
Setup password	Password that you must enter to access and make changes to the BIOS settings of your computer.

You can create a system password and a setup password to secure your computer.

⚠️ **CAUTION: The password features provide a basic level of security for the data on your computer.**

⚠️ **CAUTION: Anyone can access the data that is stored on your computer if it is not locked and left unattended.**

ⓘ **NOTE:** System and setup password feature is disabled.

Assigning a system setup password

You can assign a new **System or Admin Password** only when the status is in **Not Set**.

To enter the system setup, press F12 immediately after a power-on or reboot.

1. In the **System BIOS** or **System Setup** screen, select **Security** and press Enter.
   The **Security** screen is displayed.
2. Select **System/Admin Password** and create a password in the **Enter the new password** field.
   Use the following guidelines to assign the system password:
   ● A password can have up to 32 characters.
   ● At least one special character: ! " # $ % & ' ( ) * + , - . / : ; < = > ? @ [\ ] ^ _ ` { | }
   ● Numbers 0 through 9.
   ● Upper case letters from A to Z.
   ● Lower case letters from a to z.
3. Type the system password that you entered earlier in the **Confirm new password** field and click **OK**.
4. Press Esc and save the changes as prompted by the pop-up message.
5. Press Y to save the changes.
   The computer restarts.

Deleting or changing an existing system setup password

Ensure that the **Password Status** is Unlocked (in the System Setup) before attempting to delete or change the existing System and/or Setup password. You cannot delete or change an existing System or Setup password, if the **Password Status** is Locked.

To enter the System Setup, press F12 immediately after a power-on or reboot.

1. In the **System BIOS** or **System Setup** screen, select **System Security** and press Enter.
   The **System Security** screen is displayed.
2. In the **System Security** screen, verify that **Password Status** is **Unlocked**.
3. Select **System Password**, update, or delete the existing system password, and press Enter or Tab.
4. Select **Setup Password**, update, or delete the existing setup password, and press Enter or Tab.

   ⓘ **NOTE:** If you change the System and/or Setup password, reenter the new password when prompted. If you delete the System and/or Setup password, confirm the deletion when prompted.

5. Press Esc and a message prompts you to save the changes.
6. Press Y to save the changes and exit from System Setup.
   The computer restarts.

Clearing BIOS (System Setup) and System passwords

To clear the system or BIOS passwords, contact Dell technical support as described at www.dell.com/contactdell.
ⓘ **NOTE:** For information on how to reset Windows or application passwords, refer to the documentation accompanying Windows or your application.

Software

This chapter details the supported operating systems along with instructions on how to install the drivers.
Topics:

- Supported operating systems
- Downloading drivers
- Downloading the chipset driver

Supported operating systems

The topic lists the operating systems supported for Precision 5530 .

Table 29. Supported operating systems

Features	Specifications
Supported operating systems	Description
Windows 10	• Microsoft 10 Windows Pro 64-bit • Microsoft Windows 10 Home 64-bit • Microsoft Windows 10 Pro National Academic (64-bit) • Microsoft Windows 10 Home National Academic (64-bit) • Microsoft Windows 10 Pro for Enterprise • Microsoft windows 10 Pro for Workstation (64-bit)
Other	• Ubuntu 16.04 LTS SP1 64-bit • RedHat Enterprise Linux 7.5

Downloading drivers

1. Turn on the .
2. Go to **Dell.com/support**.
3. Click **Product Support**, enter the Service Tag of your , and then click **Submit**.

   ⓘ **NOTE:** If you do not have the Service Tag, use the auto detect feature or manually browse for your model.

4. Click **Drivers and Downloads**.
5. Select the operating system installed on your .
6. Scroll down the page and select the driver to install.
7. Click **Download File** to download the driver for your .
8. After the download is complete, navigate to the folder where you saved the driver file.
9. Double-click the driver file icon and follow the instructions on the screen.

Downloading the chipset driver

1. Turn on the computer.
2. Go to **Dell.com/support**.
3. Click **Product Support**, enter the Service Tag of your computer, and then click **Submit**.

ⓘ **NOTE:** If you do not have the Service Tag, use the autodetect feature or manually browse for your computer model.

4. Click **Drivers and Downloads**.
5. Select the operating system installed in your computer.
6. Scroll down the page, expand **Chipset**, and select your chipset driver.
7. Click **Download File** to download the latest version of the chipset driver for your computer.
8. After the download is complete, navigate to the folder where you saved the driver file.
9. Double-click the chipset driver file icon and follow the instructions on the screen.

6

Getting help

Topics:

- Contacting Dell

Contacting Dell

ⓘ **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.

Dell provides several online and telephone-based support and service options. Availability varies by country and product, and some services may not be available in your area. To contact Dell for sales, technical support, or customer service issues:

1. Go to **Dell.com/support.**
2. Select your support category.
3. Verify your country or region in the **Choose a Country/Region** drop-down list at the bottom of the page.
4. Select the appropriate service or support link based on your need.