

Dell Latitude 7210 2-in-1

Setup and specifications guide



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 computer

1. Connect the power adapter and press the power button.
2. Finish operating system setup.

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. 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 1. Locate Dell apps

Dell apps	Details
	Dell Product Registration Register your computer with Dell.
	Dell Help & Support Access help and support for your computer.
	SupportAssist Proactively checks the health of your computer's hardware and software. Renew or upgrade your warranty by clicking the warranty expiry date in SupportAssist.
	Dell Update Updates your computer with critical fixes and important device drivers as they become available.
	Dell Digital Delivery Download software applications including software that is purchased but not preinstalled on your computer.

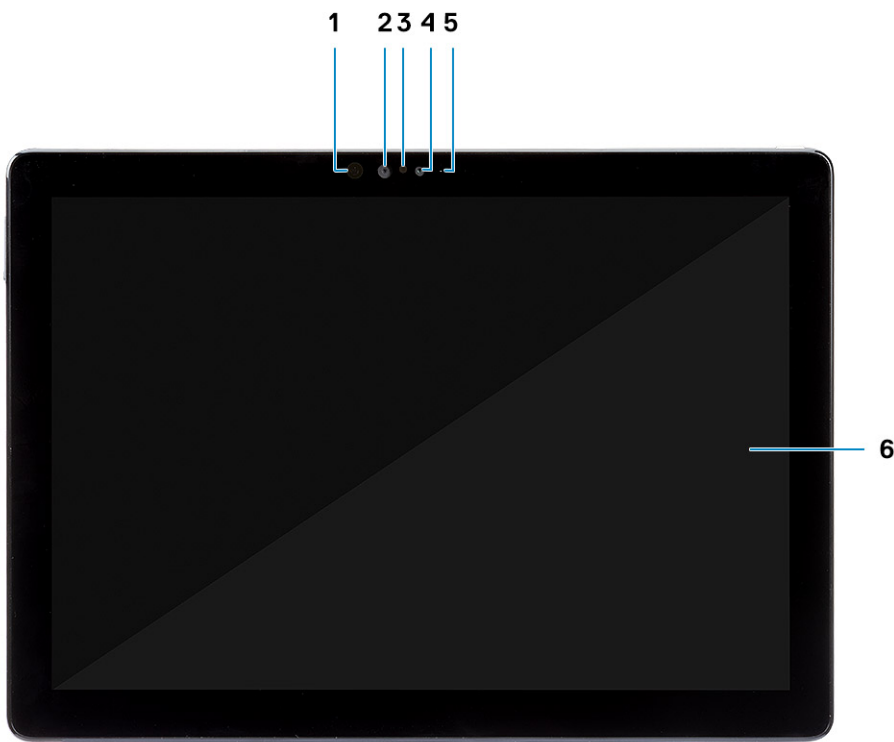
4. Create recovery drive for Windows. It is recommended to create a recovery drive to troubleshoot and fix problems that may occur with Windows.

For more information, see [Create a USB recovery drive for Windows](#).

Chassis view

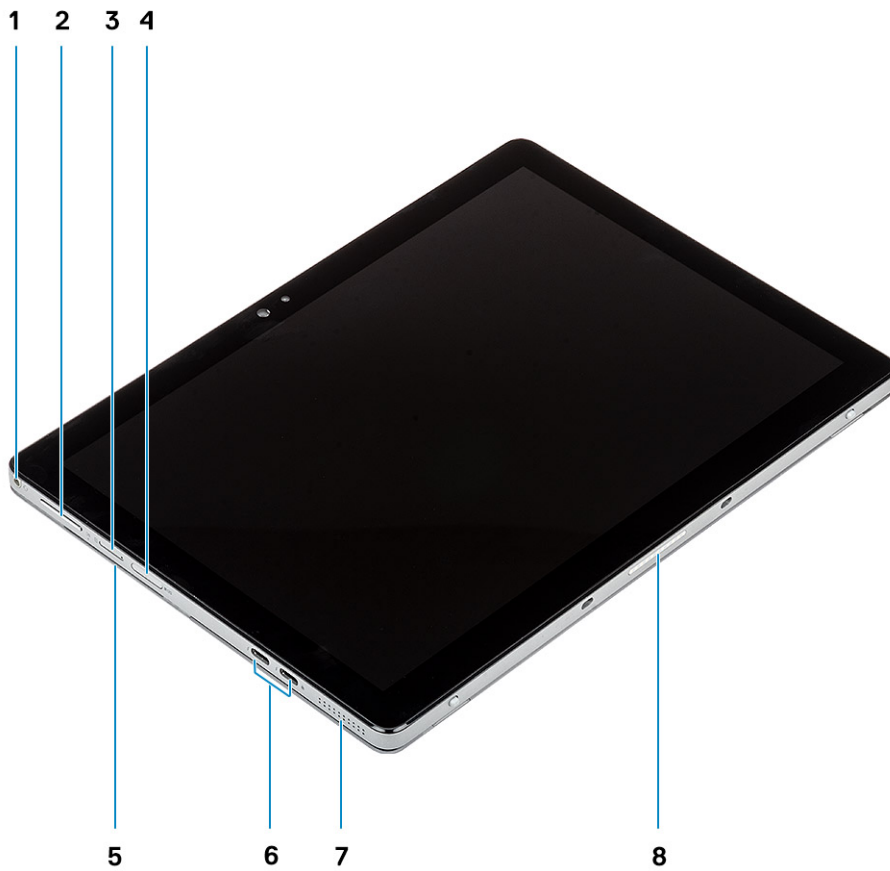
The chassis view displays only the standard components and all the optional components may not be listed.

Front view



- | | |
|-----------------------------------|---------------------|
| 1. IR emitter | 2. IR camera |
| 3. Ambient light sensor | 4. Front RGB camera |
| 5. Front/rear camera status light | 6. LCD display |

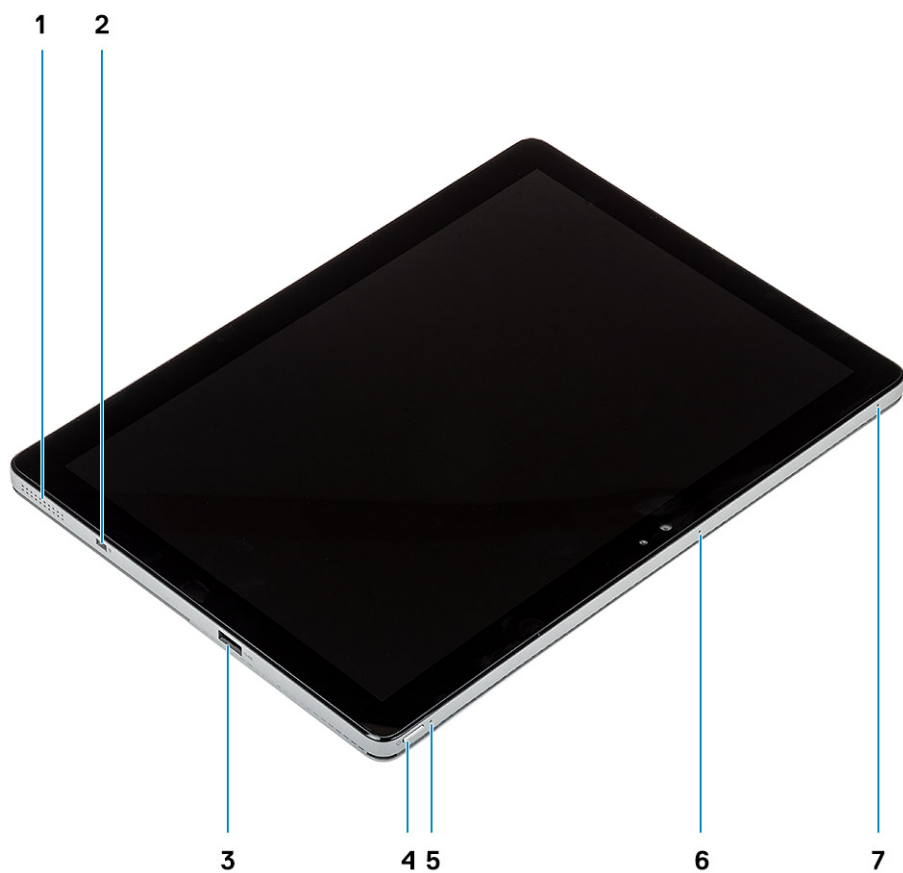
Side view



1. Combo Mic/Headphone Jack
3. Nano SIM card slot (optional)
5. Contacted smart card reader
7. Speaker

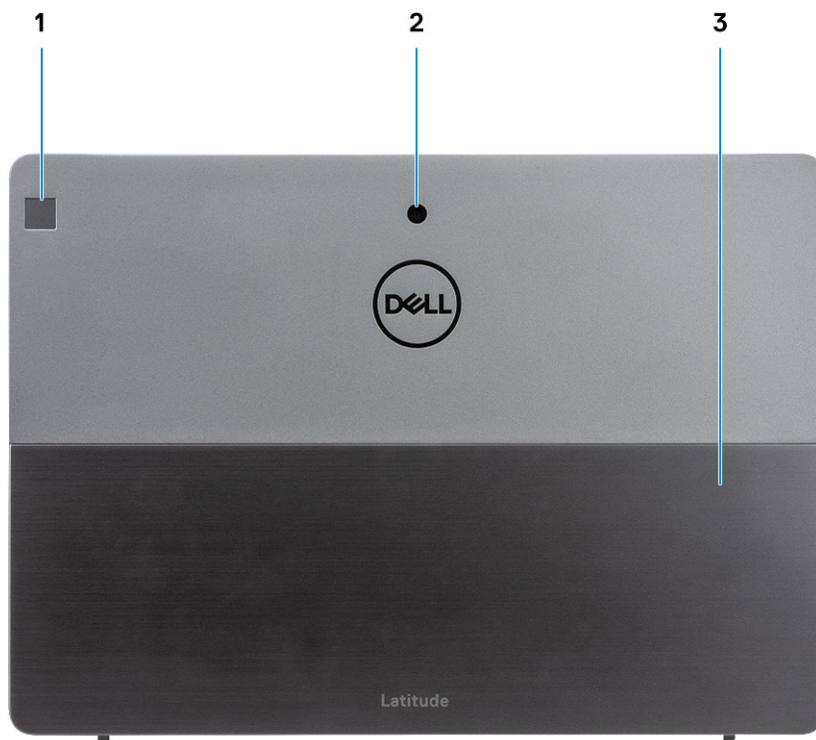
2. Volume up/down button
4. microSD card slot
6. USB 3.1 Gen 2 Type-C ports with Thunderbolt3/
PowerDelivery/DisplayPort
8. Pogo connector

Side right view



- | | |
|--|---------------------------|
| 1. Speaker | 2. Wedge-shaped lock slot |
| 3. 1 USB 3.1 Gen 1 Type-A port with PowerShare | 4. Power button |
| 5. Battery charge LED | 6. Microphone |
| 7. Microphone | |

Bottom view



1. Fingerprint reader
2. Rear RGB camera
3. Kickstand

Specifications of Latitude 7210 2-in-1

Topics:

- Dimensions and weight
- Processors
- Chipset
- Operating system
- Memory
- Ports and connectors
- Battery
- Communications
- Audio
- Storage
- Media-card reader
- Keyboard
- Camera
- Power adapter
- Display
- Fingerprint reader
- Video
- Operating and storage environment
- Sensor and control specifications

Dimensions and weight

Table 2. Dimensions and weight

Description	NFC Config	Non NFC Config
Height:		
Front	9.35 mm (0.37 in.)	12.15mm(0.47 in.)
Rear	9.35 mm (0.37 in.)	12.15mm(0.47 in.)
Width	292.00 mm (11.50 in.)	292.00 mm (11.50 in.)
Depth	208.80 mm (8.23 in.)	208.80mm(8.23 in.)
Weight (maximum)	0.85 kg (1.87 lb) <i>i</i> NOTE: The weight of your computer depends on the configuration ordered and the manufacturing variability.	0.935 kg (2.06lb) <i>i</i> NOTE: The weight of your computer depends on the configuration ordered and the manufacturing variability.

Processors

Table 3. Processors

Description	Values				
Processors	10th Generation Intel Core i3-10110U	10th Generation Intel Core i5-10210U	10th Generation Intel Core i5-10310U	10th Generation Intel Core i7-10610U	10th Generation Intel Core i7-10810U
Wattage	15 W	15 W	15 W	15 W	15 W
Core count	2	2	4	4	6
Thread count	4	8	12	8	12
Speed	Up to 4.20 GHz	Up to 4.20 GHz	Up to 4.20 GHz	Up to 4.90 GHz	Up to 4.90 GHz
Cache	4 MB	4 MB	6 MB	8 MB	12 MB
Integrated graphics	Intel UHD Graphics 620	Intel UHD Graphics 620	Intel UHD Graphics 620	Intel UHD Graphics 620	Intel UHD Graphics 620

Chipset

The following table lists the details of the chipset supported by your Latitude 5320.

Table 4. Chipset

Description	Values
Chipset	Intel
Processor	10th Generation Intel Core i3/i5/i7
DRAM bus width	64-bit
Flash EPROM	NA
PCIe bus	Up to Gen3

Operating system

Your Latitude 7210 2-in-1 supports the following operating systems:

- Windows 10 Home (64-bit)
- Windows 10 Professional (64-bit)

Memory

The following table lists the memory specifications of your Latitude 7210 2-in-1:

Table 5. Memory specifications

Description	Values
Slots	onboard

Table 5. Memory specifications (continued)

Description	Values
	 NOTE: Since Latitude 7210 2-in-1 supports onboard memory, the memory is not expandable and cannot be changed.
Type	LPDDR4
Speed	2667 MHz
Maximum memory	16 GB
Minimum memory	4 GB
Memory size per slot	4 GB, 8 GB, 16 GB
Configurations supported	• 4 GB • 8 GB • 16 GB

Ports and connectors

Table 6. External ports and connectors

Description	Values
External:	
Network	NA
USB	• 1 USB 3.2 Gen 1 Type-A port with PowerShare • 2 USB 3.2 Gen 1 Type-C ports with Thunderbolt3/PowerDelivery/DisplayPort
Audio	1 Combo Mic/Headphone Jack
Video	DisplayPort through USB 3.2 Gen 1 Type-C port
Docking port	Supported through USB 3.2 Gen 1 Type-c ports
Power adapter port	NA

Table 7. Internal ports and connectors

Description	Values
Internal:	
M.2	 NOTE: To learn more about the features of different types of M.2 cards, see the knowledge base article SLN301626 .

Battery

Table 8. Battery specifications

Description		Values	
Type		2-Cell, 38 WHr, Polymer	2-Cell, 38 WHr, Long Cycle Life, Polymer
Voltage		8.90 VDC	8.90 VDC
Weight (maximum)		0.16 kg (0.35 lb)	0.16 kg (0.35 lb)
Dimensions:			
	Height	4.80 mm (0.188 in)	4.80 mm (0.19 in)
	Width	81.20 mm (3.19 in)	81.2 mm (3.19 in)
	Depth	185 mm (7.28 in)	185 mm (7.28 in)
Temperature range:			
	Operating	0 °C–45 °C (32°F to 113°F)	0 °C–45 °C (32 °F–113 °F)
	Storage	-20°C to 65°C (-4°F to 149°F)	-20°C to 65°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)		4 hours (when the computer is off)	4 hours (when the computer is off)
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.
LCL support		Yes	Yes

Communications

Wireless module

Table 9. Wireless module specifications

Description	Values				
Model number	Intel Dual Band Wireless-AX201	Qualcomm QCA61x4A 802.11ac MU-MIMO Dual Band (2x2) Wi-Fi	Qualcomm Snapdragon X20 LTE-A	Qualcomm Snapdragon X20 LTE-A (DW5821e) (eSIM capable) WW except US, China and Turkey	Qualcomm Snapdragon X20 LTE-A for AT&T, Verizon & Sprint, US
Transfer rate	1.73 Gbps	Up to 867 Mbps	Up to 867 Mbps	Up to 867 Mbps	Up to 867 Mbps

Table 9. Wireless module specifications (continued)

Description	Values				
Frequency bands supported	2.4/ 5 GHz (160 MHz)	2.4 GHz/5 GHz	2.4 GHz/5 GHz	2.4 GHz/5 GHz	2.4 GHz/5 GHz
Wireless standards	802.11abgn+acR 2+ax (prestandard) mimo2x2	Wi-Fi 5 (WiFi 802.11ac)	Wi-Fi 5 (WiFi 802.11ac)	Wi-Fi 5 (WiFi 802.11ac)	Wi-Fi 5 (WiFi 802.11ac)
Encryption	64-bit/128-bit WEP - AES-CCMP - TKIP	64-bit/128-bit WEP - AES-CCMP - TKIP	64-bit/128-bit WEP - AES-CCMP - TKIP	64-bit/128-bit WEP - AES-CCMP - TKIP	64-bit/128-bit WEP - AES-CCMP - TKIP
Bluetooth	Bluetooth 5.1	Bluetooth 5.0	Bluetooth 4.2	Bluetooth 4.2	Bluetooth 4.2

Audio

Table 10. Audio specifications

Description	Values
Controller	Realtek ALC3254-CG
Stereo conversion	Supported
Internal interface	Intel HDA
External interface	Universal Audio Jack
Speakers	Stereo
Internal speaker amplifier	2 W average per channel
External volume controls	Supported
Speaker output:	
Average	2 W per channel
Peak	2.5 W per channel
Subwoofer output	Not supported
Microphone	Array dual microphones

Storage

Your computer supports one of the following configurations:

- One M.2 2230 solid-state drive
- One M.2 2230 PCIe/NVMe Class 35 SED

The primary drive of your computer varies with the storage configuration. For computers with M.2 drive, the M.2 drive is the primary drive.

Table 11. Storage specifications

Storage type	Interface type	Capacity
M.2 2230, Class 35 SSD	Gen 3 PCIe x4 NVMe	Up to 1 TB
M.2 2230, Class 35 SED SSD	Gen 3 PCIe x4 NVMe	256 GB

Media-card reader

Table 12. Media-card reader specifications

Description	Values
Type	1 Micro SD 4.0 Card slot
Cards supported	Secure Digital (SD) - Secure Digital High Capacity(SDHC) - Secure Digital Extended Capacity(SDXC)

Keyboard

Table 13. Keyboard specifications

Description	Values
Type	- Standard keyboard - Backlit keyboard - Dell Latitude 7210/7200 2-in-1 keyboard
Layout	QWERTY
Number of keys	- United States and Canada: 82 keys - United Kingdom: 83 keys - Japan: 86 keys
Size	X=270.7 mm (10.65 inches) Y=104.95 mm (4.13 inches)

Camera

Table 14. Camera specifications

Description	Values			
Number of cameras	Three			
Type	5M RGB Camera	8M RGB Camera	5M RGB+IR Camera	
Location	Front	Rear	Front	
Sensor type	CMOS sensor technology	CMOS sensor technology	CMOS sensor technology	
Resolution				
Camera				

Table 14. Camera specifications (continued)

Description		Values			
	Still image	5.03 megapixel	7.99 megapixel	5.03 megapixel	
	Video	1920 x 1080 at 30 fps	1920 x 1080 at 30 fps	1920 x 1080 at 30 fps	
	Infrared camera				
	Still image	5.03 megapixel		0.23 megapixel	
	Video	1920 x 1080 at 30 fps		640 x 360 at 30 fps	
Diagonal viewing angle					
	Camera	88.9 degrees	77.3	88.9	
	Infrared camera	86.7 degrees		86.7	

Power adapter

Table 15. Power adapter specifications

Description		Values	
Type		65 W, USB Type-C	45 W, USB Type-C SFF
Diameter (connector)		22.00 mm x 66.00 mm x 99.00 mm (0.87 x 2.60 x 3.90 inches)	22.00 mm x 55.00 mm x 60.00 mm (0.87 x 2.17 x 2.36 inches)
Input voltage		100 VAC–240 VAC	100 VAC–240 VAC
Input frequency		50 Hz–60 Hz	50 Hz–60 Hz
Input current (maximum)		1.70 A	1.30 A
Output current (continuous)		3.25 A	2.25 A
Rated output voltage		20 VDC	20 VDC
Temperature range:			
	Operating	0°C to 40°C (32°F to 104°F)	0°C to 40°C (32°F to 104°F)
	Storage	-40°C to 70°C (-40°F to 158°F)	-40°C to 70°C (-40°F to 158°F)

Display

Table 16. Display specifications

Description	Values
Type	Full High Definition (FHD+)
Panel technology	Wide-viewing angle (WVA)
Luminance (typical)	400 nits
Dimensions (active area):	

Table 16. Display specifications (continued)

Description		Values
	Height	172.80 mm (6.80 in.)
	Width	259.20 mm (10.20 in.)
	Diagonal	312.42mm (12.26 in.)
Native resolution		1920 x 1280
Megapixels		2.30
Color gamut		100% (sRGB)
Pixels Per Inch (PPI)		188
Contrast ratio (min)		1000.1
Response time (max)		40 ms
Refresh rate		60 Hz / 48 Hz
Horizontal view angle		89 +/- 9 degrees
Vertical view angle		89 +/- 9 degrees
Pixel pitch		0.135 mm
Power consumption (maximum)		3.44 W
Anti-glare vs glossy finish		Anti-Reflection /Anti-Smudge coating
Touch options		Yes
Adaptive sync		N/A
Stylus support		Yes (Wacom pen)

Fingerprint reader

Table 17. Fingerprint reader specifications

Description		Values
Sensor technology		Capacitive
Sensor resolution		363 dpi
Sensor area		7.42 mm x 5.95 mm
Sensor pixel size		104 x 86

Video

Table 18. Integrated graphics specifications

Integrated graphics			
Controller	External display support	Memory size	Processor
Intel UHD Graphics 620	DisplayPort through USB 3.2 Gen1 Type-C port	Shared system memory	10th Generation Intel Core i3/i5/i7

Operating and storage environment

This table lists the operating and storage specifications of your Latitude 7210 2-in-1.

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

Table 19. 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 (4.64 ft to 5518.4 ft)	-15.2 m to 10668 m (4.64 ft to 19234.4 ft)
 CAUTION: Operating and storage temperature ranges may differ among components, so operating or storing the device outside these ranges may impact the performance of specific components.		

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

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

Sensor and control specifications

Hall Effect sensor is located on System board

Create a USB recovery drive for Windows

Create a recovery drive to troubleshoot and fix problems that may occur with Windows. An empty USB flash drive with a minimum capacity of 16 GB is required to create the recovery drive.

 **NOTE:** This process may take up to an hour to complete.

 **NOTE:** The following steps may vary depending on the version of Windows installed. Refer to the [Microsoft support site](#) for latest instructions.

1. Connect the USB flash drive to your computer.
2. In Windows search, type **Recovery**.
3. In the search results, click **Create a recovery drive**.
The **User Account Control** window is displayed.
4. Click **Yes** to continue.
The **Recovery Drive** window is displayed.
5. Select **Back up system files to the recovery drive** and click **Next**.
6. Select the **USB flash drive** and click **Next**.
A message appears, indicating that all data in the USB flash drive will be deleted.
7. Click **Create**.
8. Click **Finish**.
For more information about reinstalling Windows using the USB recovery drive, see the *Troubleshooting* section of your product's *Service Manual* at www.dell.com/support/manuals.

System 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:** 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:

- [Boot menu](#)
- [Navigation keys](#)
- [Boot Sequence](#)
- [System setup options](#)
- [Updating the BIOS in Windows](#)
- [System and setup password](#)

Boot menu

Press <F12> when the Dell logo appears to initiate a one-time boot menu with a list of the valid boot devices for the system. Diagnostics and BIOS Setup options are also included in this menu. The devices listed on the boot menu depend on the bootable devices in the system. This menu is useful when you are attempting to boot to a particular device or to bring up the diagnostics for the system. Using the boot menu does not make any changes to the boot order stored in the BIOS.

The options are:

- **UEFI Boot:**
 - Windows Boot Manager
- **Other Options:**
 - BIOS Setup
 - Device Configuration
 - BIOS Flash Update
 - Diagnostics
 - SupportAssist OS Recovery
 - Exit Boot Menu and Continue

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.

Keys

Navigation

Up arrow

Moves to the previous field.

Down arrow

Moves to the next field.

Enter

Selects a value in the selected field (if applicable) or follow the link in the field.

Keys	Navigation
Spacebar	Expands or collapses a drop-down list, if applicable.
Tab	Moves to the next focus area.
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.

Boot Sequence

Boot sequence enables you to bypass the System Setup–defined boot device order and boot directly to a specific device (for example: optical drive or hard drive). During the Power-on Self-Test (POST), when the Dell logo appears, you can:

- Access System Setup by pressing F2 key
- Bring up the one-time boot menu by pressing F12 key.

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
 -  **NOTE:** XXXX denotes the SATA drive number.
- Optical Drive (if available)
- SATA Hard Drive (if available)
- Diagnostics
 -  **NOTE:** Choosing **Diagnostics**, displays the **SupportAssist** screen.

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

System setup options

 **NOTE:** Depending on the tabletcomputerlaptop and its installed devices, the items listed in this section may or may not appear.

General options

Table 20. General options

Option	Description
System Information	This section lists the primary hardware features of your computer. The options are: • System Information • Memory Configuration • Processor Information • Device Information
Battery Information	Displays the battery status and the type of AC adapter connected to the computer.
Boot Sequence	Allows you to change the order in which the computer attempts to find an operating system. The options are: • Windows Boot Manager—Enable or disable the Windows Boot Manager option.

Table 20. General options (continued)

Option	Description
	• Boot List Option—You can add, delete, and view the boot options.
Advanced Boot Options	Enable or disable the UEFI Network Stack option.
UEFI Boot Path Security	Allows you to control whether the system prompts the user to enter the Admin password when booting to a UEFI boot path. Click one of the following options: • Always, Except Internal HDD—Default • Always • Never
Date/Time	Allows you to set the date and time. The change to the system date and time takes effect immediately.

System configuration

Table 21. System Configuration options

Option	Description
SATA Operation	Allows you to configure the operating mode of the integrated SATA hard-drive controller. The options are: • Disabled • AHCI • RAID On—By default, the RAID On option is enabled.  NOTE: SATA is configured to support RAID mode.
Drives	Allows you to enable or disable various drives on board. The options are: • SATA-0 • SATA-1 • M.2 PCIe SSD-0 • M.2 PCIe SSD-1 By default, all the options are enabled.
SMART Reporting	This field controls whether hard drive errors for integrated drives are reported during system startup. This technology is part of the SMART (Self Monitoring Analysis and Reporting Technology) specification. By default, the Enable SMART Reporting option is disabled .
USB Configuration	Allows you to enable or disable the internal/integrated USB configuration. The options are: • Enable USB Boot Support • Enable External USB Port By default, all the options are enabled.  NOTE: USB keyboard and mouse always work in the BIOS setup irrespective of these settings.

Table 21. System Configuration options (continued)

Option	Description
Thunderbolt Adapter Configuration	Allows you to configure the Thunderbolt adapter security settings within the operating system. The options are: • Thunderbolt—This option is enabled by default. • Enable Thunderbolt Support • Enable Thunderbolt (and PCIe behind TBT) Pre-boot Modules • No Security • User Authorization—This option is enabled by default. • Secure Connect • Display Port and USB Only
Thunderbolt Auto Switch	Allows you to configure the method used by the Thunderbolt controller to perform the PCIe device enumeration. By default, the Auto switch option is enabled. The options are: • Native Enumeration • BIOS Assist Enumeration
Audio	Allows you to enable or disable the integrated audio controller. By default, the Enable Audio option is selected. The options are: • Enable Microphone • Enable Internal Speaker By default, all the options are enabled.
Fingerprint Reader	Enables or disables the fingerprint reader device. The options are: • Enable Fingerprint Reader Device • Enable Finger Reader Single Sign On By default, both the options are enabled.
Miscellaneous devices	Allows you to enable or disable the following devices: • Enable Camera • Enable Hard Drive Free Fall Protection • WiFi Radio • Enable Secure Digital (SD) Card By default, all the options are enabled.

Video screen options

Table 22. Video

Option	Description
LCD Brightness	Allows you to set the display brightness depending upon the power source. By default, Brightness On Battery is 50% and Brightness On AC is 100%.

Security

Table 23. Security

Option	Description
Admin Password	Allows you to set, change, or delete the administrator (admin) password. The entries to set password are: • Enter the old password: • Enter the new password: • Confirm new password: Click OK once you set the password.  NOTE: By default, the Enter the old password field is marked as Not set. Hence, password has to be set for the first time you login and then you can change or delete the password.
System Password	Allows you to set, change, or delete the system password. The entries to set password are: • Enter the old password: • Enter the new password: • Confirm new password: Click OK once you set the password.  NOTE: By default, the Enter the old password field is marked as Not set. Hence, password has to be set for the first time you login and then you can change or delete the password.
Strong Password	Allows you to enforce the option to always set strong password. • Enable Strong Password By default, this option is disabled.
Password Configuration	You can define the length of your password. Min = 4, Max = 32
Password Bypass	Allows you to bypass the System password and the Internal HDD password, when it is set, during a system restart. The options are: • Disabled—This option is enabled by default. • Reboot bypass
Password Change	Allows you to change the system password when the administrator password is set. • Allow Non-Admin Password Changes By default, this option is enabled.
Non-Admin Setup Changes	Allows you to determine whether changes to the setup options are allowed when an administrator password is set. If disabled the setup options are locked by the admin password. • Allow Wireless Switch Changes By default, this option is disabled.
UEFI Capsule Firmware Updates	Allows you to update the system BIOS through UEFI capsule update packages. • Enable UEFI Capsule Firmware Updates By default, this option is enabled.
TPM 2.0 Security	Allows you to enable or disable the Trusted Platform Module (TPM) during POST. The options are: • TPM On—This option is enabled by default.

Table 23. Security (continued)

Option	Description
	• Clear • PPI Bypass for Enable Commands • PPI Bypass for Disable Commands • PPI Bypass for Clear Command • Attestation Enable—This option is enabled by default. • Key Storage Enable—This option is enabled by default. • SHA-256—This option is enabled by default.
Absolute®	This field lets you Enable, Disable, or Permanently Disable the BIOS module interface of the optional Absolute Persistence Module service from Absolute® Software.
Admin Setup Lockout	Allows you to prevent users from entering Setup when an administrator password is set. • Enable Admin Setup Lockout By default, this option is disabled.
Master Password Lockout	Allows you to disable master password support. • Enable Master Password Lockout By default, this option is disabled.  NOTE: Hard Disk password should be cleared before the settings can be changed.
SMM Security Mitigation	Allows you to enable or disable additional UEFI SMM Security Mitigation protection. • SMM Security Mitigation By default, this option is enabled.

Secure boot

Table 24. Secure Boot

Option	Description
Secure Boot Enable	Allows you to enable or disable the Secure Boot Feature. • Secure Boot Enable—By default, this option is disabled.
Secure Boot Mode	Changes to the Secure Boot operation mode modifies the behavior of Secure Boot to allow evaluation of UEFI driver signatures. This options are: • Deployed Mode—By default, this option is enabled. • Audit Mode
Expert Key Management	Allows you to enable or disable Expert Key Management. • Enable Custom Mode—By default, this option is disabled. The Custom Mode Key Management options are: • PK—By default, this option is disabled. • KEK • db • dbx

Intel Software Guard Extensions options

Table 25. Intel Software Guard Extensions

Option	Description
Intel SGX Enable	This field allows you to provide a secured environment for running code/storing sensitive information in the context of the main operating systems. Click one of the following options: • Disabled • Enabled • Software controlled—Default
Enclave Memory Size	This option sets SGX Enclave Reserve Memory Size Click one of the following options: • 32 MB • 64 MB • 128 MB—Default

Performance

Table 26. Performance

Option	Description
Multi Core Support	This field specifies whether the processor has one or all cores enabled. The performance of some applications improves with the additional cores. • All—Default • 1 • 2 • 3
Intel SpeedStep	Allows you to enable or disable the Intel SpeedStep mode of processor. • Enable Intel SpeedStep This option is set by default.
C-States Control	Allows you to enable or disable the additional processor sleep states. • C states This option is set by default.
Intel® TurboBoost™	This option enables or disables the Intel® TurboBoost™ mode of the processor
Hyper-Thread Control	Allows you to enable or disable the HyperThreading in the processor. • Disabled • Enabled—Default

Power management

Table 27. Power Management

Option	Description
Lid Switch	Allows you to disable the lid switch. The options are: • Enable Lid Switch—enabled by default • Power On Lid Open—enabled by default
AC Behavior	Allows you to enable or disable the computer from turning on automatically when an AC adapter is connected. • Wake on AC By default, this option is disabled.
Enable Intel Speed Shift technology	Allows you to enable or disable the Intel Speed Shift Technology option. By default, this option is enabled.
Auto On Time	Allows you to set the time at which the computer must turn on automatically. The options are: • Disabled—enabled by default • Every Day • Weekdays • Select Days
USB Wake Support	Allows you to enable USB devices to wake the system from standby. By default, the option Enable USB Wake Support is disabled.
Advanced Battery Charge Configuration	This option enables you to maximize the battery health. When you enable this option, your system uses the standard charging algorithm and other techniques, during the nonwork hours to improve the battery health. By default, the Enable Advanced Battery Charge Mode option is disabled.
Primary Battery Charge Configuration	Allows you to select the charging mode for the battery. The options are: • Adaptive—enabled by default • Standard • ExpressCharge • Primarily AC use • Custom If Custom Charge is selected, you can also configure Custom Charge Start and Custom Charge Stop.  NOTE: All charging mode may not be available for all the batteries.
Type-C Connector Power	Allows you to set the maximum power that can be drawn from the type-c connector. The options are: • 7.5 Watts—enabled by default • 15 Watts

Post behavior

Table 28. POST Behavior

Option	Description
Adapter Warnings	Allows you to enable or disable the system setup (BIOS) warning messages when you use certain power adapters.

Table 28. POST Behavior (continued)

Option	Description
	• Enable Adapter Warnings—enabled by default
Keypad (embedded)	Allows you to choose one of two methods to enable the keyboard that is embedded in the internal keyboard. The options are: • Fn Key Only—enabled by default • By Numlock
Numlock Enable	Allows you to enable or disable the Numlock function when the system boots. • Enable Numlock—enabled by default
Fn Lock Options	Allows you to let hot key combinations Fn + Esc toggle the primary behavior of F1–F12, between their standard and secondary functions. If you disable this option, you cannot toggle dynamically the primary behavior of these keys. By default, the Fn Lock option is enabled. Select one of the following options: • Lock Mode Disable/Standard • Lock Mode Enable/Secondary—enabled by default
Fastboot	Allows you to speed up the boot process by bypassing some of the compatibility steps. Select one of the following options: • Minimal—enabled by default • Thorough • Auto
Extended BIOS POST Time	Allows you to create an additional preboot delay. Select one of the following options: • 0 seconds—enabled by default • 5 seconds • 10 seconds
Full Screen Logo	Allows you to display full screen logo, when your image matches screen resolution. By default, the Enable Full Screen Logo option is disabled.
Warnings and Errors	Allows you to select different options to either stop, prompt and wait for user input, continue when warnings are detected but pause on errors, or continue when either warnings or errors are detected during the POST process. Select one of the following options: • Prompt on Warnings and Errors—enabled by default • Continue on Warnings • Continue on Warnings and Errors

Virtualization support

Table 29. Virtualization Support

Option	Description
Virtualization	This option specifies whether a Virtual Machine Monitor (VMM) can use the additional hardware capabilities that are provided by the Intel Virtualization technology. By default, the Enable Intel Virtualization Technology option is enabled.
VT for Direct I/O	Enables or disables the Virtual Machine Monitor (VMM) from using the additional hardware capabilities that are provided by the Intel Virtualization technology for direct I/O. By default, the Enable VT for Direct I/O option is enabled.

Wireless options

Table 30. Wireless

Option	Description
Wireless Switch	Allows to set the wireless devices that can be controlled by the wireless switch. The options are: • WLAN • Bluetooth® All the options are enabled by default.
Wireless Device Enable	Allows you to enable or disable the internal wireless devices. The options are: • WLAN • Bluetooth® All the options are enabled by default.

Maintenance

Table 31. Maintenance

Option	Description
Service Tag	Displays the service tag of your computer.
Asset Tag	Allows you to create a system asset tag if an asset tag is not already set. This option is not set by default.
BIOS Downgrade	Allows you to flash previous revisions of the system firmware. • Allow BIOS Downgrade This option is set by default.
Data Wipe	Allows you to securely erase data from all internal storage devices. • Wipe on Next Boot This option is not set by default.
Bios Recovery	BIOS Recovery from Hard Drive —By default, this option is enabled. Allows you to recover the corrupted BIOS from a recovery file on the HDD or an external USB key. BIOS Auto-Recovery — Allows you to recover the BIOS automatically.

System logs

Table 32. System Logs

Option	Description
BIOS events	Allows you to view and clear the System Setup (BIOS) POST events.
Thermal Events	Allows you to view and clear the System Setup (Thermal) events.
Power Events	Allows you to view and clear the System Setup (Power) events.

SupportAssist system resolution

Table 33. SupportAssist System Resolution

Option	Description
Auto OS Recovery Threshold	The Auto OS Recovery Threshold setup option controls the automatic boot flow for Support Assist System Resolution Console and Dell OS Recovery tool. Click one of the following options: • OFF • 1 • 2—enabled by default • 3
SupportAssist OS Recovery	Allows you to recover the SupportAssist OS Recovery (Disabled by default). By default, this option is enabled.

Updating the BIOS in Windows

It is recommended to update your BIOS (System Setup) when you replace the system board or if an update is available. For laptops, ensure that your computer battery is fully charged and connected to a power before initiating a BIOS update.

 **NOTE:** If BitLocker is enabled, it must be suspended prior to updating the system BIOS, and then re enabled after the BIOS update is completed.

 **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 Base Article: <https://www.dell.com/support/kbdoc/000134415/>.

1. Restart the computer.
2. Go to **Dell.com/support**.
 - Enter the **Service Tag** or **Express Service Code** and click **Submit**.
 - Click **Detect Product** and follow the instructions on screen.
3. If you are unable to detect or find the Service Tag, click **Choose from all products**.
4. Choose the **Products** category from the list.

 **NOTE:** Choose the appropriate category to reach the product page.
5. Select your computer model and the **Product Support** page of your computer appears.
6. Click **Get drivers** and click **Drivers and Downloads**.
The Drivers and Downloads section opens.
7. Click **Find it myself**.
8. Click **BIOS** to view the BIOS versions.
9. Identify the latest BIOS file and click **Download**.
10. Select your preferred download method in the **Please select your download method below** window, click **Download File**.
The **File Download** window appears.
11. Click **Save** to save the file on your computer.
12. Click **Run** to install the updated BIOS settings on your computer.
Follow the instructions on the screen.

Updating BIOS on systems with BitLocker enabled

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 reinstall. For more information about this subject, see Knowledge Article: [Updating the BIOS on Dell Systems With BitLocker Enabled](#)

Updating your system BIOS using a USB flash drive

If the system cannot load into Windows, but there is still a need to update the BIOS, download the BIOS file using another system and save it to a bootable USB Flash Drive.

NOTE: You will need to use a bootable USB flash drive. Please refer to the following article for further details [How to Create a Bootable USB Flash Drive using Dell Diagnostic Deployment Package \(DDDP\)](#)

1. Download the BIOS update .EXE file to another system.
2. Copy the file e.g. O9010A12.EXE onto the bootable USB flash drive.
3. Insert the USB flash drive into the system that requires the BIOS update.
4. Restart the system and press F12 when the Dell splash logo appears to display the One Time Boot Menu.
5. Using arrow keys, select **USB Storage Device** and click **Enter**.
6. The system will boot to a Diag C:\> prompt.
7. Run the file by typing the full filename, for example, O9010A12.exe and press **Enter**.
8. The BIOS Update Utility will load. Follow the instructions on screen.

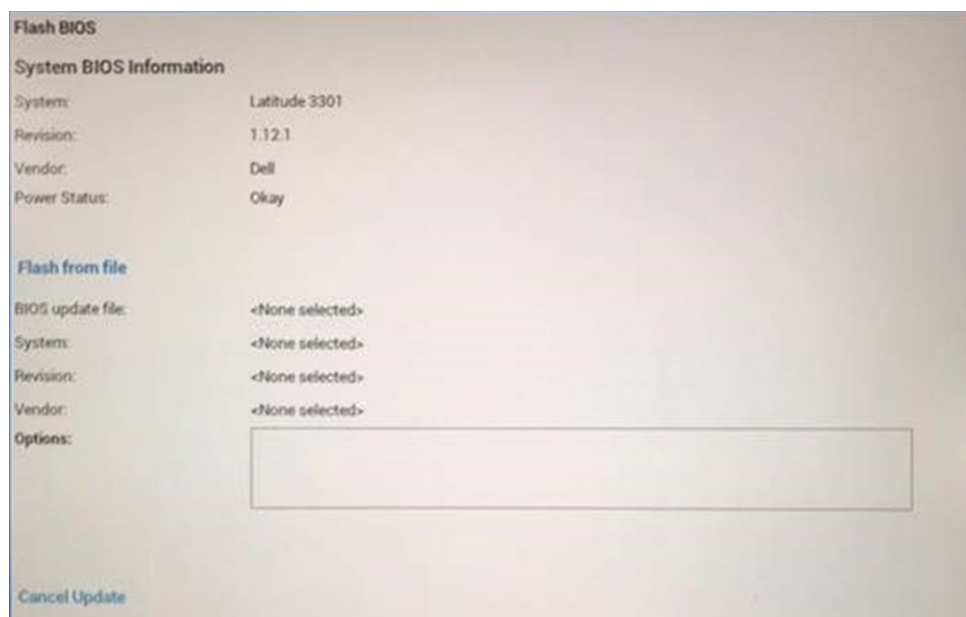


Figure 1. DOS BIOS Update Screen

Updating the Dell BIOS in Linux and Ubuntu environments

If you want to update the system BIOS in a Linux environment, such as Ubuntu, see <https://www.dell.com/support/article/sln171755/>.

Flashing the BIOS from the F12 One-Time boot menu

Updating your system BIOS using a BIOS update .exe file copied to a FAT32 USB key and booting from the F12 one time boot menu.

BIOS Update

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

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

NOTE: Only systems with BIOS Flash Update option in the F12 One-Time Boot Menu can use this function.

Updating from the One-Time Boot Menu

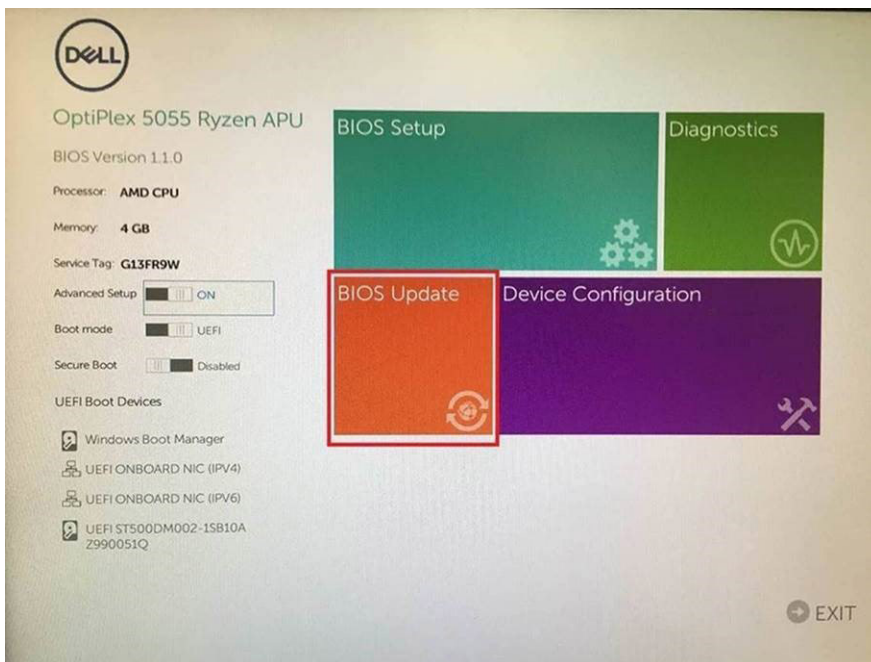
To update your BIOS from the F12 One-Time boot menu, you will need:

- USB key 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 key
- AC power adapter connected to the system
- Functional system battery to flash the BIOS

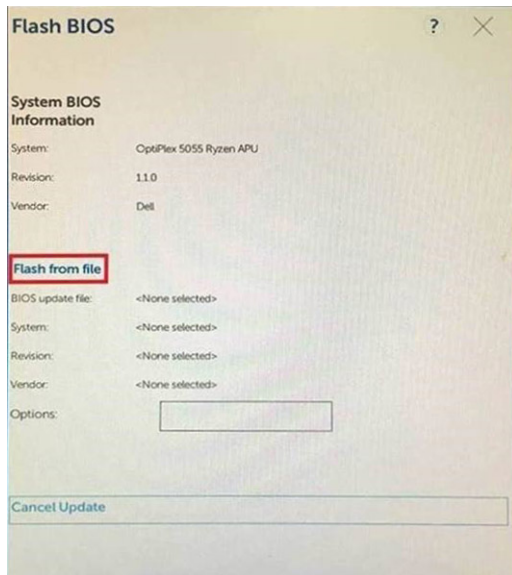
Perform the following steps to execute the BIOS update flash process from the F12 menu:

CAUTION: Do not power off the system during the BIOS update process. Powering off the system could make the system fail to boot.

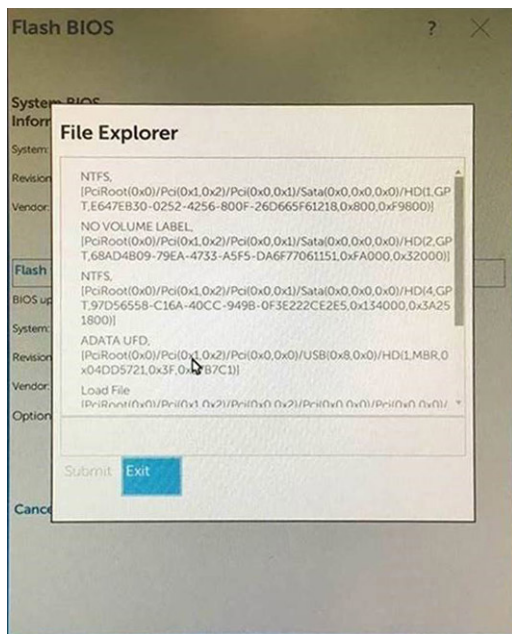
1. From a power off state, insert the USB key where you copied the flash into a USB port of the system .
2. Power on the system and press the F12 key to access the One-Time Boot Menu, Highlight BIOS Update using the mouse or arrow keys then press **Enter**.



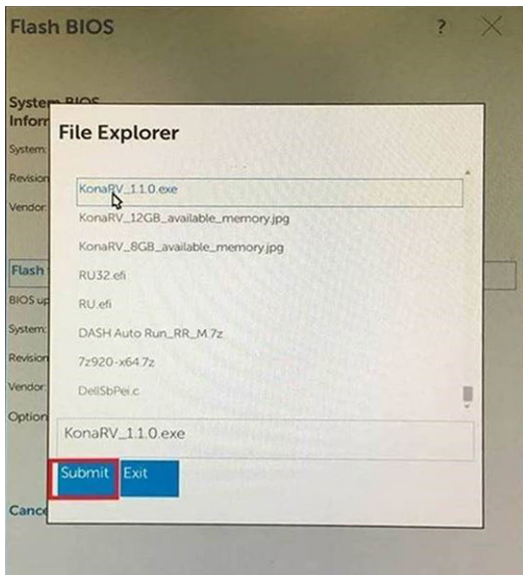
3. The Bios flash menu will open then click the **Flash from file**.



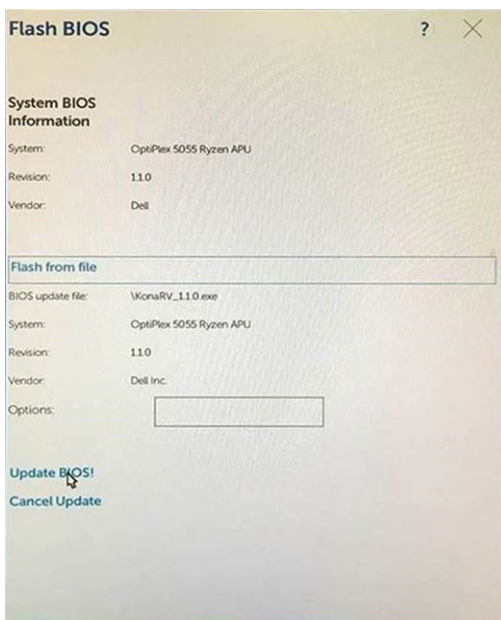
4. Select external USB device



5. Once the file is selected, Double click the flash target file, then press submit .



6. Click the **Update BIOS** then system will reboot to flash the BIOS.



7. Once complete, the system will reboot and the BIOS update process is completed.

System and setup password

Table 34. System and setup password

Password type	Description
System password	Password that you must enter to log on 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 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 F2 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.
 - The password can contain the numbers 0 through 9.
 - Only lower case letters are valid, upper case letters are not allowed.
 - Only the following special characters are allowed: space, ("), (+), (.), (-), (.), (/), (:), ([), (\), (]), (`).
3. Type the system password that you entered earlier in the **Confirm new password** field and click **OK**.
4. Press **Esc** and a message prompts you to save the changes.
5. Press **Y** to save the changes.
The computer reboots.

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 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 **F2** 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**, alter or delete the existing system password and press **Enter** or **Tab**.
4. Select **Setup Password**, alter or delete the existing setup password and press **Enter** or **Tab**.
 **NOTE:** If you change the System and/or Setup password, re enter the new password when prompted. If you delete the System and 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.

Software

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

Topics:

- [Downloading Windows drivers](#)

Downloading Windows drivers

1. Turn on the notebook.
2. Go to **Dell.com/support**.
3. Click **Product Support**, enter the Service Tag of your notebook, and then click **Submit**.
 **NOTE:** If you do not have the Service Tag, use the auto detect feature or manually browse for your notebook model.
4. Click **Drivers and Downloads**.
5. Select the operating system installed on your notebook.
6. Scroll down the page and select the driver to install.
7. Click **Download File** to download the driver for your notebook.
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.

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.