

Latitude 5285 2-in-1

Owner's Manual



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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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:

- [Processor specifications](#)
- [System specifications](#)
- [Memory specifications](#)
- [Video specifications](#)
- [Audio specifications](#)
- [Port and connector specifications](#)
- [Communication specifications](#)
- [Camera specifications](#)
- [Display specifications](#)
- [AC adapter specifications](#)
- [Battery specifications](#)
- [Physical specifications](#)
- [Environmental specifications](#)

Processor specifications

Feature	Specification
Types	<ul style="list-style-type: none"> • 7th Generation Intel Core i3-7100U Processor (2.4GHz, 3M cache, 15W) • 7th Generation Intel Core i5-7200U Processor (up to 3.1GHz, 3M cache, 15W) • 7th Generation Intel Core i5-7300U Processor (up to 3.5GHz, 3M cache, 15W), vPro • 7th Generation Intel Core i7-7600U Processor (up to 3.9GHz, 4M cache, 15W), vPro

System specifications

Feature	Specification
Chipset	Integrated in the processor
DRAM bus width	64-bit; 2 channels

Memory specifications

Feature	Specification
Memory connector	Onboard memory



Feature	Specification
Memory capacity	4 GB, 8 GB and 16 GB (on board)
Memory type	LPDDR3—1866 MHz

Video specifications

Feature	Specification
Type	Integrated on system board
UMA controller	Intel Integrated HD Graphics 620
External display support	Optional Dell Adapter - USB Type-C to HDMI/VGA/ Ethernet/USB 3.0

NOTE: Supports VGA, DisplayPort, HDMI through the docking station.

Audio specifications

Feature	Specification
Types	High-definition audio
Controller	Realtek ALC3253
Stereo conversion	24-bit—analog-to-digital and digital-to-analog
Internal interface	High-definition audio
External interface	Microphone-in, stereo headphones, and speakers universal connector
Speakers	Two
Internal speaker amplifier	2 W (RMS) per channel
Volume controls	Volume up and Volume down buttons

Port and connector specifications

Feature	Specification
Audio	<ul style="list-style-type: none"> Realtek ALC3253-CG Controller microphone-in and stereo headphones/speakers universal connector
Video	<ul style="list-style-type: none"> two DisplayPorts over USB Type-C
Memory card reader	<ul style="list-style-type: none"> uSD 4.0 optional smart card reader
Micro Subscriber Identity Module (uSIM) card	Optional
USB ports	1 x USB 3.1 Gen1 (with PowerShare)
USIM	Optional micro-SIM card slot (under the kickstand)



Feature	Specification
Security Lock	Noble Wedge Lock slot
Other	<ul style="list-style-type: none"> · optional contacted smart card reader and touch finger print reader · Windows Home Button · Power Button · I2C for Dock Pin Keyboard connection

Communication specifications

Features	Specification
Wireless	WiFi Display (Miracast) ¹⁴
Wireless LAN	<ul style="list-style-type: none"> · Qualcomm QCA61x4A 802.11ac Dual Band (2x2) Wireless Adapter+ Bluetooth 4.1 · Intel Dual-Band Wireless-AC 8265 Wi-Fi + BT 4.2 Wireless Card (2x2). Bluetooth Optional
Mobile Broadband (Optional)	<ul style="list-style-type: none"> · Dell Wireless Qualcomm Snapdragon X7 LTE-A · Dell Wireless Qualcomm Snapdragon X7 LTE-A · Dell Wireless Qualcomm Snapdragon X7 HSPA+ · Dell Wireless Telit Intel Ln-930 AP LTE CAT4
WiGig (Optional)	Intel Tri-Band Wireless-AC 18265 WiGig + Wi-Fi + BT4.2 Wireless Card

Camera specifications

Feature	Specification
Type	<ul style="list-style-type: none"> · Front Camera-5MP fixed focus · Rear Camera- 8MP auto focus · IR Camera- VGA IR camera
Sensor type	CMOS sensor technology (Front and Rear camera)
Imaging rate	Up to 30 frames per second
Video Resolution	<ul style="list-style-type: none"> · Front Camera- 2592 x 1944 pixels · Rear Camera- 3264 x 2448 pixels

Display specifications

Feature	Specification
Type	12.3" 3:2 Touch with Corning Gorilla Glass 4, Anti-reflective and Anti-Smudge
Luminance	340 nits
Height	265.56 mm(10.55 inches)
Width	185.06 mm (7.28 inches)



Feature	Specification
Diagonal	312.42 mm (12.0 inches)
Maximum resolution	1920x1280
Refresh rate	60 Hz
Maximum viewing angles—horizontal	+/-80°
Maximum viewing angles—vertical	+/-80°
Pixel pitch	0.135 mm

AC adapter specifications

Feature	Specification
Type	45 W USB Type-C and 65 W USB Type-C
Input voltage	100 V AC to 240 V AC
Input current—maximum	1.3 A / 1.7 A
Input frequency	47 Hz to 63 Hz
Output current	2.25 A, 3 A, and 3.25 A
Rated output voltage	20 VDC/15 VDC/9 VDC/5 VDC
Weight	<ul style="list-style-type: none"> • 0.385 lbs(45 W) and 0.476 lbs(65 W) • 175 g (45 W) and 216.2 g (65 W)
Dimensions	<ul style="list-style-type: none"> • 0.191 x 0.121 x 0.048 inches (45 W) and 0.217 x 0.145 x 0.048 (65 W) • 87 x 55 x 22 mm (45 W) and 99 x 66 x 22 mm (65 W)
Temperature range—Operating	0°C to 40°C (32°F to 104°F)
Temperature range—Non-Operating	-40°C to 70°C (-40°F to 158°F)

Battery specifications

Feature	Specification
Type	<ul style="list-style-type: none"> • 32Whr Polymer battery with ExpressCharge • 42Whr Polymer battery with ExpressCharge • 42Whr Polymer Long Life Cycle
32Whr :	
Length	177.6 mm (6.99 inches)

Feature	Specification
Width	82.6 mm (3.25 inches)
Height	5.5 mm (0.21 inch)
Weight	135.0 g (0.29 lb) (126 GB m2 SATA)
Voltage	11.4 VDC
42 WHr:	
Length	177.6 mm (6.99 inches)
Width	82.6 mm (3.25 inches)
Height	5.5 mm (0.21 inch)
Weight	170 g (0.37 lb)
Voltage	7.6 VDC
Life span	300 discharge per charge cycles
Temperature range	
Operating	<ul style="list-style-type: none"> • Charge: 0°C to 50°C (32°F to 122°F) • Discharge: 0°C to 70°C (32°F to 158°F)
Non-operating	- 20°C to 85°C (- 4°F to 185°F)

Physical specifications

Feature	Specification
Weight - Tablet only (with 32 Whr battery and 126 GB m2 SATA base)	1.89 lbs (856 g)
Weight - Tablet +Keyboard	2.64 lbs (1.196 kg)
Input current—maximum	1.3 A / 1.7 A
Width	11.5 inches (292 mm)
Height (Tablet only)	0.38 inch (9.76 mm)
Height (Tablet +Keyboard only)	0.59 inch (14.9 mm)
Depth	8.22 inches (208.8 mm)

Environmental specifications

Temperature	Specifications
Operating	0°C to 35°C (32°F to 95°F)
Storage	-40°C to 65°C (-40°F to 149°F)



Relative humidity—maximum Specifications

Operating 10% to 90% (non-condensing)

Storage 10% to 95% (non-condensing)

Altitude—maximum Specifications

Operating 0 m to 3048 m (0 to 10,000 ft)

Non-operating 0 m to 10,668 m (0 ft to 35,000 ft)

Airborne contaminant level G2 or lower as defined by ISA S71.04–1985



Using your tablet

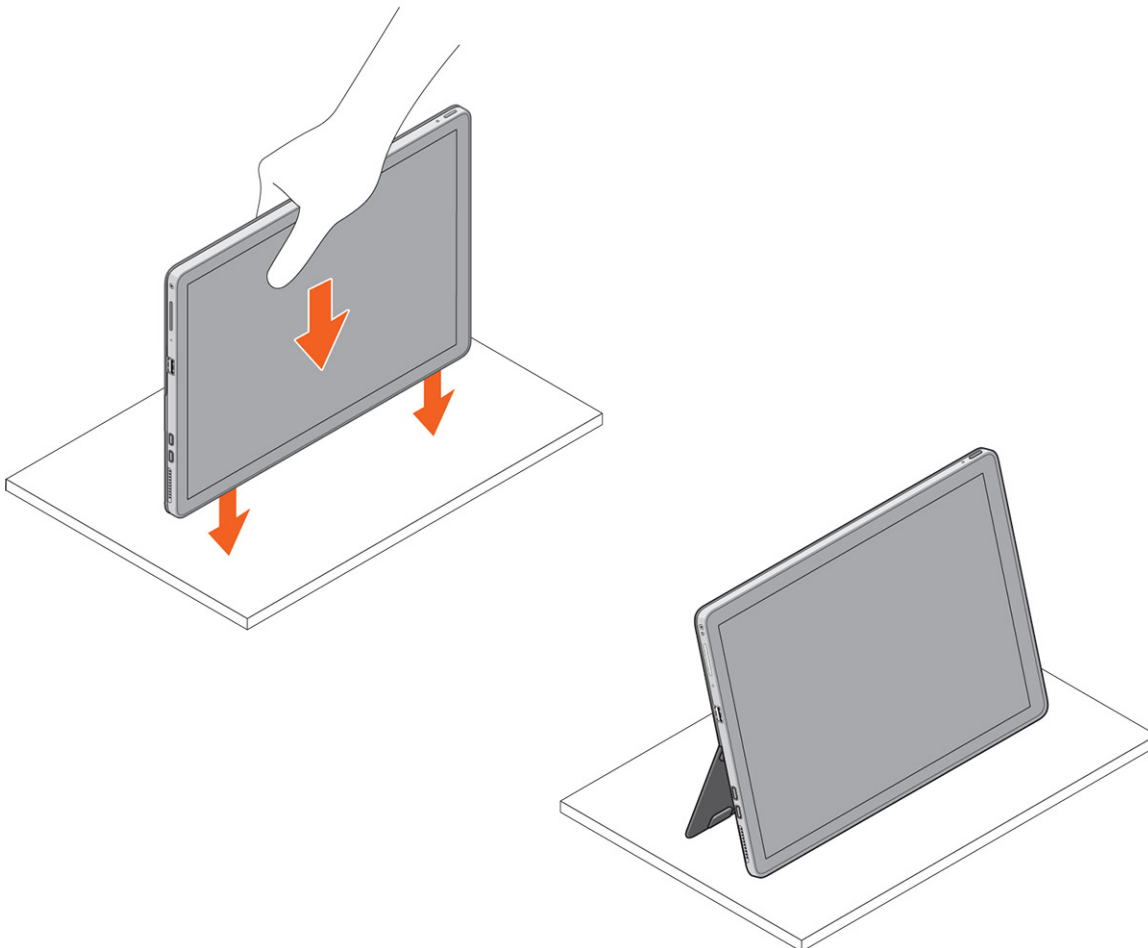
This section covers how to power on and turn off your tablet including how to install the micro SD and uSIM cards.

Topics:

- [Deploying the kickstand](#)
- [Before Working Inside Your Tablet](#)
- [After working inside your tablet](#)
- [Installing a microSD and/or micro-SIM card](#)

Deploying the kickstand

- 1 Hold the tablet vertically on a plane surface.
- 2 Press the tablet to allow the kickstand to open.



① **NOTE:** The pegs at the bottom of the tablet allow the kickstand to open.

Before Working Inside Your Tablet

Use the following safety guidelines to help protect your tablet from potential damage and to help to ensure your personal safety. Unless otherwise noted, each procedure included in this document assumes that the following condition exists:

- You have read the safety information that shipped with your tablet.

⚠ **WARNING:** Before working inside your tablet, read the safety information that shipped with your tablet. For additional safety best practices information, see the Regulatory Compliance Homepage at www.dell.com/regulatory_compliance

⚠ **CAUTION:** Many repairs may only be done by a certified service technician. You should only perform troubleshooting and simple repairs as authorized in your product documentation, or as directed by the online or telephone service and support team. Damage due to servicing that is not authorized by Dell is not covered by your warranty. Read and follow the safety instructions that came with the product.

⚠ **CAUTION:** To avoid electrostatic discharge, ground yourself by using a wrist grounding strap or by periodically touching an unpainted metal surface, such as a connector on the back of the tablet.

⚠ **CAUTION:** Handle components and cards with care. Do not touch the components or contacts on a card. Hold a card by its edges or by its metal mounting bracket.

⚠ **CAUTION:** When you disconnect a cable, pull on its connector or on its pull-tab, not on the cable itself. Some cables have connectors with locking tabs; if you are disconnecting this type of cable, press in on the locking tabs before you disconnect the cable. As you pull connectors apart, keep them evenly aligned to avoid bending any connector pins. Also, before you connect a cable, ensure that both connectors are correctly oriented and aligned.

① **NOTE:** The color of your tablet and certain components may appear differently than shown in this document.

To avoid damaging your tablet, perform the following steps before you begin working inside the tablet.

- 1 Ensure that your work surface is flat and clean to prevent the tablet cover from being scratched.
- 2 Turn off your tablet (see [Turning Off Your Tablet](#)).
- 3 If the tablet is connected to a docking device (docked) such as the optional docking station or keyboard dock, un-dock it.
- 4 Disconnect the power adapter from the tablet.
- 5 Press and hold the power button for a few seconds to remove the flea power from the system board.

⚠ **CAUTION:** To guard against electrical shock, always unplug your tablet from the electrical outlet.

⚠ **CAUTION:** Before touching anything inside your tablet, ground yourself by touching an unpainted metal surface, such as the metal at the back of the tablet. While you work, periodically touch an unpainted metal surface to dissipate static electricity, which could harm internal components.


- 6 Remove the storage SD card from the tablet.

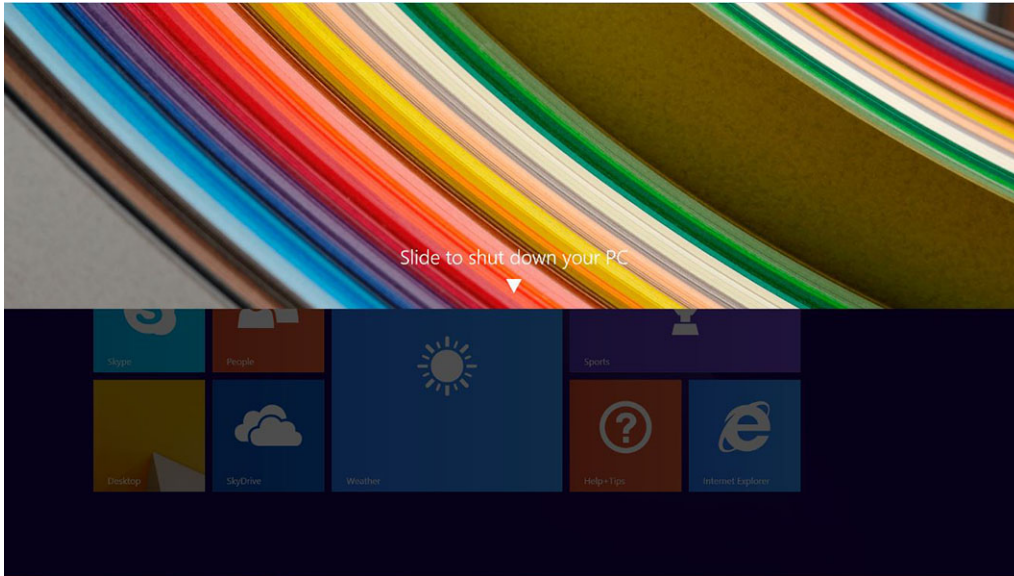
Turning off Your Tablet

Turning off your tablet completely shuts down your tablet. You can turn off your tablet by two ways:

- Using power button
- Using charms menu


- 1 To turn off your tablet using power button:

- a Press and hold the **Power** button  until you see “Slide to shut down your PC” on the screen.





NOTE: After you press and hold the Power button, by default, the “Slide to shut down your PC” screen displays only in *Venue 11 Pro 7130*. For *Venue 11 pro 7130 vPro* and *Venue 11 Pro 7139*, by default, the tablet enters sleep mode. However, if you change the power button setting to shut down, the tablet shuts down. To change the power button setting, go to Control Panel > Power Options > Change Plan Setting > Change Advanced Power Settings. To access Control Panel, swipe at the right edge of the screen, tap Search, enter Control Panel in the search box, and then click Control Panel.

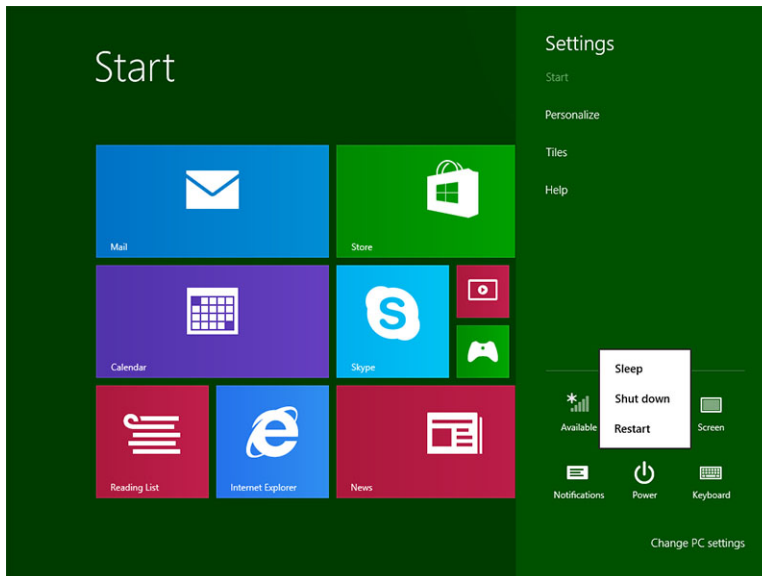
b Slide to shut down your tablet.

NOTE: You can also turn off your tablet without sliding down the screen. Press and hold the Power  button for >10 seconds to turn off your tablet. You can perform this force shutdown, if your tablet is not responding / behaving unexpectedly or touch is not working.

2 To turn off your tablet using the charms menu:

a Swipe from the right edge of the display to access the **Charms** menu.

b Touch **Settings**  —> **Power**  —> **Shut down** to turn off the tablet.



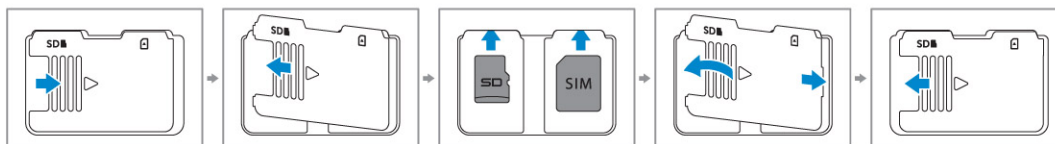
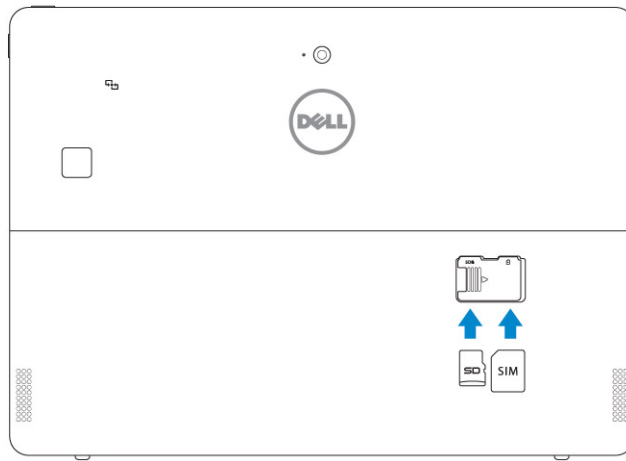
After working inside your tablet

⚠ CAUTION: Leaving stray or loose screws inside your tablet may severely damage your tablet.

- 1 Replace all screws and ensure that no stray screws remain inside your tablet.
- 2 Connect any external devices, peripherals, and cables you removed before working on your tablet.
- 3 Replace any media card, SIM card, and any other parts that you removed before working on your tablet.
- 4 Connect your tablet and all attached devices to their electrical outlets.
- 5 Turn on your tablet.

Installing a microSD and/or micro-SIM card

- 1 Flip the tablet on a plane surface.
- 2 Slide and lift the SD cover.
- 3 Insert the SD card and/or micro-SIM cards into the slots indicated on the slots.
- 4 Align the cover with the groove on the tablet and slide it inside to secure the microSD and the micro-SIM cards.



- 5 You can perform the same steps to remove the microSD or micro SIM cards

Technology and components

This chapter details the technology and components available in the systems.

Topics:

- Power adapter
- Processors
- Chipset
- Memory features
- Display options
- Camera features
- Hard drive options

Power adapter

This system is shipped with 45 W or 65 W Type-C power adapters.

⚠ WARNING: When you disconnect the power adapter cable from the tablet, grasp the connector, not the cable itself, and then pull firmly but gently to avoid damaging the cable.

⚠ WARNING: The power adapter works with electrical outlets worldwide. However, power connectors and power strips vary among countries. Using an incompatible cable or improperly connecting the cable to the power strip or electrical outlet may cause fire or equipment damage.

Processors

Latitude 5285 is shipped with:

- Intel Core i3-7100U (Dual Core, 3M cache, 2.4 GHz, 15 W)
- Intel Core i5-7200U (Dual Core, 3M Cache, up to 3.1 GHz, 15 W)
- Intel Core i5-7300U (vPro, Dual Core, 3M Cache, up to 3.5 GHz, 15 W)
- Intel Core i7-7600U (vPro, Dual Core, 4M cache, up to 3.9 GHz, 15 W)

📌 NOTE: The clock speed and performance varies depending on the workload and other variables.

Identifying processors in Windows 10

- 1 Type **Device Manager** in **Ask me anything** field.
The **iDevice Manager** window is displayed.
- 2 Click **Processor**.
The processor information is displayed.



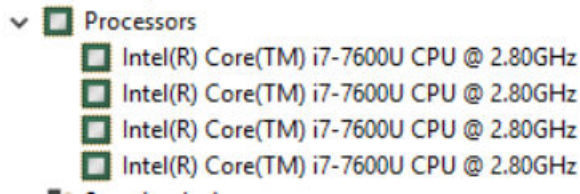
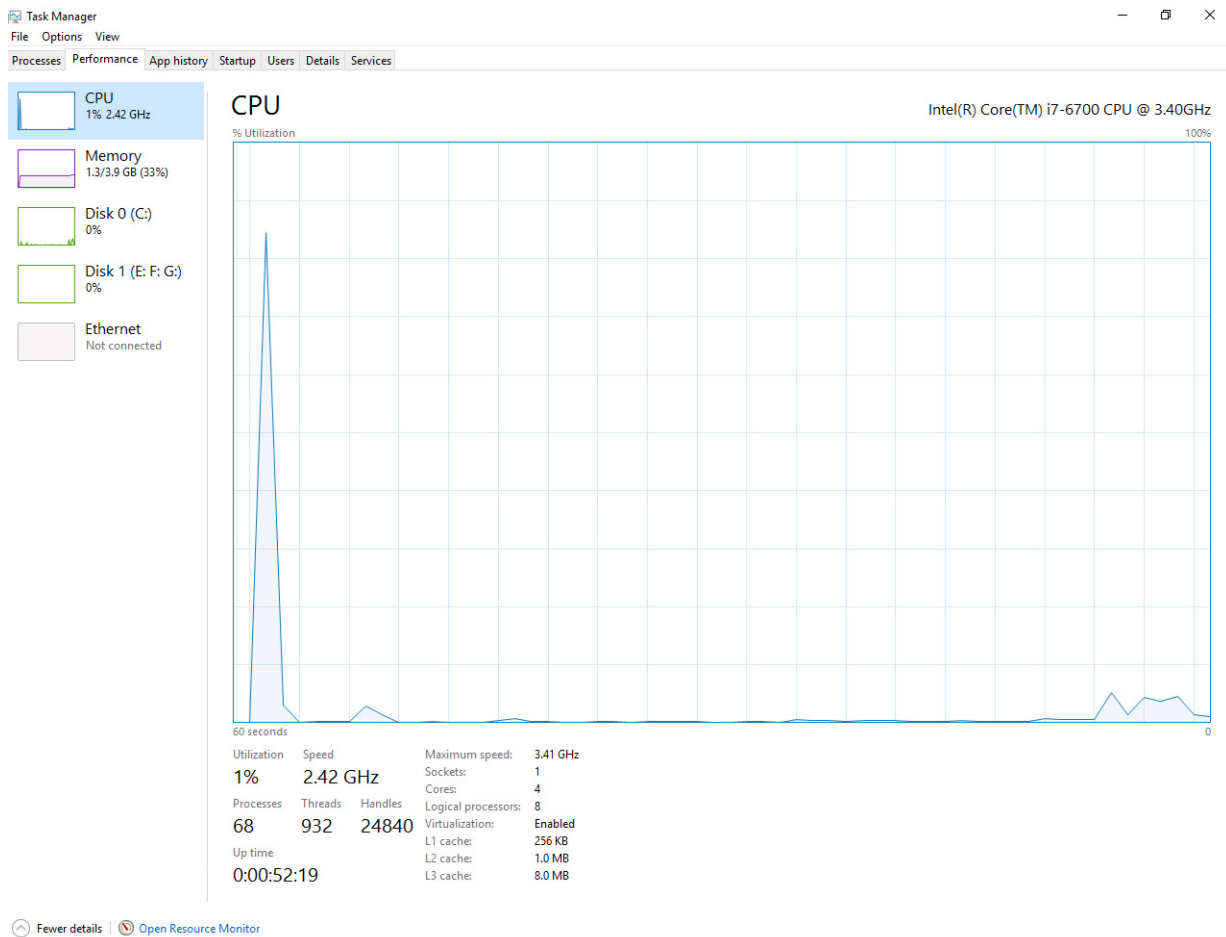


Figure 1.

Verifying processor usage in task manager

- 1 Right click on the desktop.
- 2 Select **Start Task Manager**.
The **Windows Task Manager** window is displayed.
- 3 Click the **Performance** tab in the **Windows Task Manager** window.

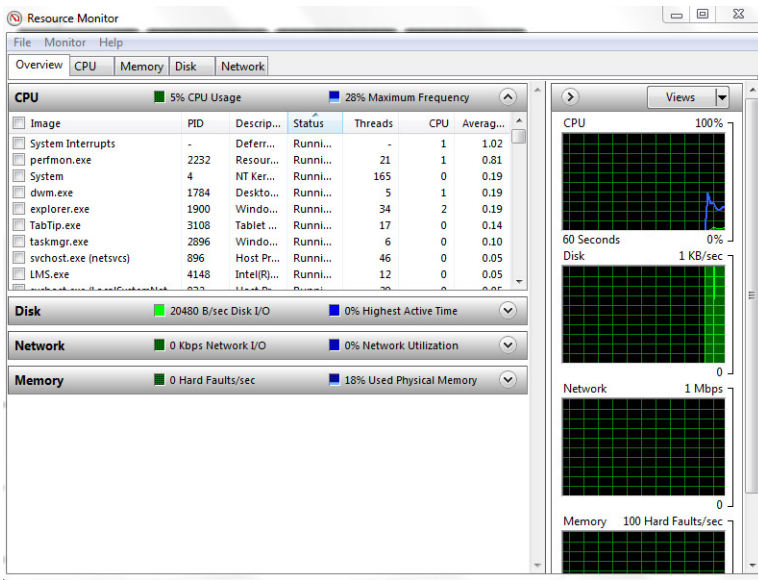


Verifying processor usage in resource monitor

- 1 Right click the desktop.
- 2 Select **Start Task Manager**.
The **Windows Task Manager** window is displayed.



- 3 Click the **Performance** tab in the **Windows Task Manager** window.
The processor performance details are displayed.
- 4 Click **Open Resource Monitor**.



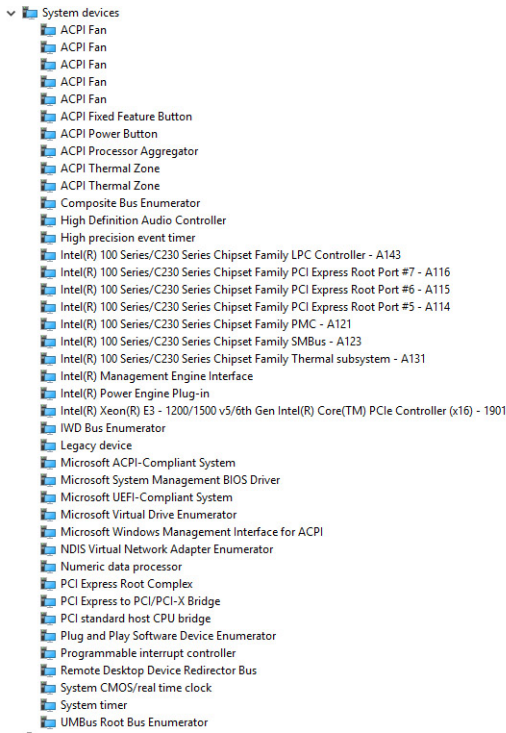
Chipset

The chipset is integrated on the processor.

Identifying chipset in device manager on Windows 10

NOTE: The Chipset information displayed is a generic image and may be different from what is displayed.

- 1 Click **All Settings**  on the Windows 10 Charms Bar.
- 2 From the **Control Panel**, select **Device Manager**.
- 3 Expand **System Devices** and search for the chipset.



Memory features

Latitude 5285 supports the following memory configurations:


- 4G 1866MHz LPDDR3 - Intel Core i3-7100U
- 8G 1866MHz LPDDR3 - Intel Core i5-7200U/ Intel Core i5-7300U
- 16G 1866MHz LPDDR3 - Intel Core i7-7600U

Verifying system memory in setup

- 1 Turn on or restart your tablet.
- 2 Perform one of the following actions after the Dell logo is displayed:
 - With keyboard — Tap F2 until the Entering BIOS setup message appears. To enter the Boot selection menu, tap F12.
- 3 On the left pane, select **Settings > General > System Information**.
The memory information is displayed on the right pane.

Verifying system memory

Windows 10

- 1 Click the **Windows** button and select **All Settings**  **> System**.
- 2 Under **System**, click **About**.

Testing memory using ePSA

- 1 Turn on or restart your tablet.
- 2 Perform one of the following actions after the Dell logo is displayed:
 - With keyboard — Press **F12**.
 - Tablet only — Press **Volume Up** button before pressing the **Power button** to turn on the tablet. Once the power sequence is initiated you can release the **Volume Up** button and ePSA will launch.

The PreBoot System Assessment (PSA) is launched on your tablet.

NOTE: If you wait too long and the operating system logo appears, continue to wait until you see the desktop. Turn off the tablet and try again.

- 3 Follow the steps in [Running ePSA diagnostics](#).

Display options

This tablet is shipped with 12.3" 1920x1280 Touch with Corning Gorilla Glass, Anti-reflective and Anti-Smudge display.

Identifying display adapter

- 1 Type **Device manager** in the **Ask me anything** field.
The **Display Manager** window is displayed.
- 2 Expand the **Display adapters**.
The display adapter information is displayed.

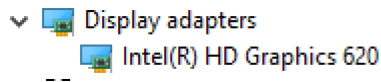
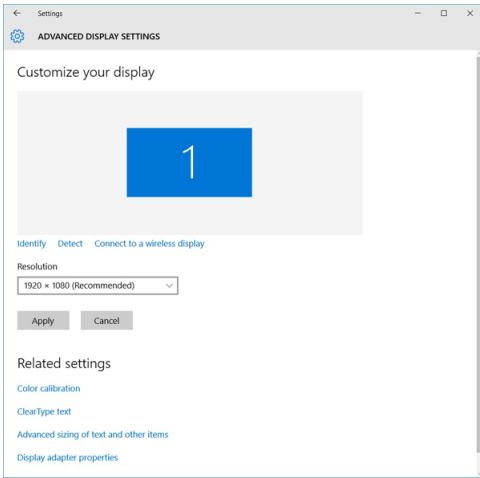


Figure 2. display adapter

Changing the screen resolution

- 1 Right click on the desktop and select **Display Settings**.
- 2 Tap or click **Advanced display settings**.
- 3 Select the required resolution from the drop-down list and tap **Apply**.

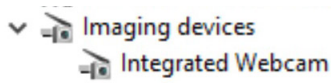


Camera features

This system is shipped with front-facing camera with 5 MP and rear facing camera with 8 MP

Identifying the camera in Device Manager on Windows 10

- 1 In the **Search** box, type `device manager`, and tap to start it.
- 2 Under **Device Manager**, expand **Imaging devices**.

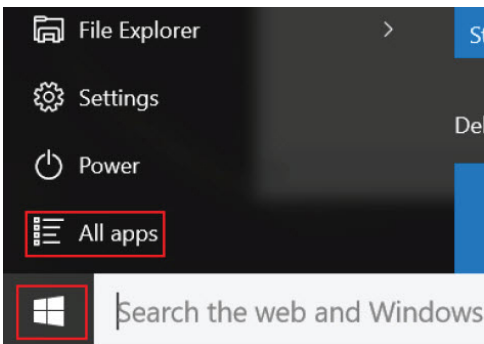


Starting the camera

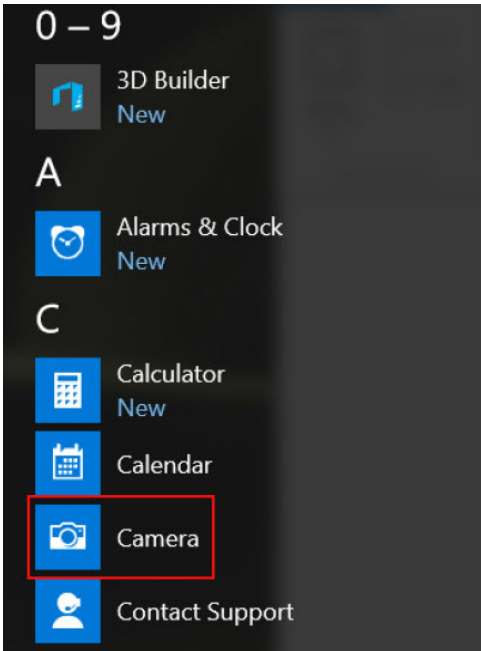
To start the camera, open an application that uses the camera. For instance, if you tap the Dell webcam central software or the Skype software that is shipped with the 2-in-1, the camera turns on. Similarly, if you are chatting on the internet and the application requests to access the webcam, the webcam turns on.

Starting the camera application

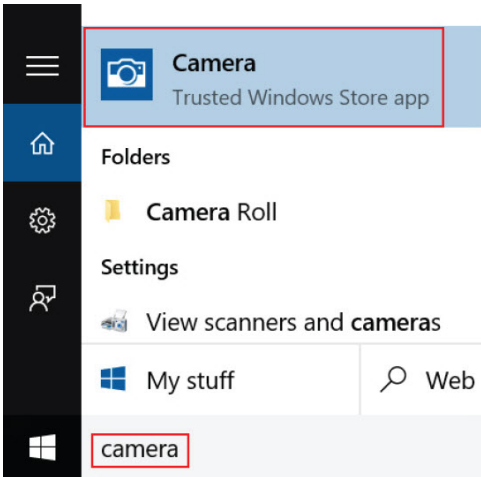
- 1 Tap or click the **Windows** button and select **All apps**.



- 2 Select **Camera** from the apps list.



- 3 If the **Camera** App is not available in the apps list, search for it.



Hard drive options

This system supports M.2 SATA SSD, M.2 PCIe NVMe SSD, and M.2 PCIe NVMe SED.

Identifying the hard drive in the BIOS

- 1 Turn on or restart your laptop.
- 2 When the Dell logo appears, perform one of the following actions to enter the BIOS setup program:
 - With keyboard — Tap F2 until the Entering BIOS setup message appears. To enter the Boot selection menu, tap F12.
 - In tablet mode — Press the Volume Up button to display the F12 boot selection or press Volume Down button to enter BIOS setup directly.
 -

Hard drive is listed under the **System Information** under the **General** group.



System setup

System Setup enables you to manage your tablet hardware and specify BIOS level options. From the System Setup, you can:

- Change the NVRAM settings after you add or remove hardware
- View the system hardware configuration
- Enable or disable integrated devices
- Set performance and power management thresholds
- Manage your computer security

Topics:

- [Entering BIOS without keyboard](#)
- [System setup options](#)
- [Updating the BIOS](#)
- [System and setup password](#)

Entering BIOS without keyboard

- 1 Press the power button to turn on your tablet.
- 2 Press and hold the Volume Up button when the Dell logo appears on the screen.
- 3 When the F12 boot selection menu appears, select **BIOS Setup** using the Volume Up button.
- 4 Press the Volume Down button to enter BIOS setup program.

System setup options

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

General screen options

This section lists the primary hardware features of your tablet.


Option	Description
System Information	This section lists the primary hardware features of your tablet. <ul style="list-style-type: none"> • System Information: Displays BIOS Version, Service Tag, Asset Tag, Ownership Tag, Ownership Date, Manufacture Date, Express Service Code, the Signed Firmware update—enabled by default • Memory Information: Displays Memory Installed, Memory Available, Memory Speed, Memory Channels Mode, Memory Technology • Processor Information: Displays Processor Type, Core Count, Processor ID, Current Clock Speed, Minimum Clock Speed, Maximum Clock Speed, Processor L2 Cache, Processor L3 Cache, HT Capable, and 64-Bit Technology • Device Information: Displays M.2 SATA, M.2 PCIe SSD-0, Passthrough MAC address, Video Controller, Video BIOS Version, Video Memory, Panel Type, Native Resolution, Audio Controller, Wi-Fi Device, WiGig Device, Cellular Device, Bluetooth Device

Option	Description
Battery Information	Displays the battery status health and whether the AC adapter is installed.
Boot Sequence	Allows you to change the order in which the tablet attempts to find an operating system. <ul style="list-style-type: none"> Internal SSD USB Storage Device CD/DVD/CD-RW Drive Onboard NIC
Boot sequence options	Allows you to change the order in which the tablet attempts to find an operating system: <ul style="list-style-type: none"> Windows boot manager—selected by default
Boot list options	<ul style="list-style-type: none"> Legacy UEFI—selected by default
Advanced Boot Options	This option allows you the legacy option ROMs to load. The options are: <ul style="list-style-type: none"> Enable Legacy Option ROMs—default Enable Attempt Legacy Boot Enable UEFI Network Stack
UEFI boot path security	<ul style="list-style-type: none"> Always, except internal SSD Always Never
Date/Time	Allows you to change the date and time.

System Configuration screen options

Option	Description
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. This option is disabled by default. <ul style="list-style-type: none"> Enable SMART Reporting
USB Configuration	This is an optional feature. <p>This field configures the integrated USB controller. If Boot Support is enabled, the system is allowed to boot any type of USB Mass Storage Devices—HDD, memory key, floppy.</p> <p>If USB port is enabled, device attached to this port is enabled and available for OS.</p> <p>If USB port is disabled, the OS cannot see any device attached to this port.</p> <p>The options are:</p> <ul style="list-style-type: none"> Enable USB Boot Support—enabled by default Enable External USB Port—enabled by default Always Allow dell docks—enabled by default



Option	Description
	 NOTE: USB keyboard and mouse always work in the BIOS setup irrespective of these settings.
USB PowerShare	This field configures the USB PowerShare feature behavior. This option allows you to charge external devices using the stored system battery power through the USB PowerShare port. This option is disabled by default
Audio	<p>This field enables or disables the integrated audio controller. By default, the Enable Audio option is selected. The options are:</p> <ul style="list-style-type: none"> · Enable Microphone—enabled by default · Enable Internal Speaker—enabled by default
Keyboard Illumination	<p>This field lets you choose the operating mode of the keyboard illumination feature. The keyboard brightness level can be set from 0% to 100%. The options are:</p> <ul style="list-style-type: none"> · Disabled—enabled by default · Dim (50%) · Bright
Keyboard Backlight Timeout on Battery	<p>The Keyboard Backlight Timeout dims out with the Battery option. The main keyboard illumination feature is not affected. Keyboard Illumination will continue to support the various illumination levels. This field has an effect when the backlight is enabled. The options are:</p> <ul style="list-style-type: none"> · 5 sec · 10 sec—enabled by default · 15 sec · 30 sec · 1 min · 5 min · 15 min · Never
Keyboard Backlight with AC	The Keyboard Backlight with AC option does not affect the main keyboard illumination feature. Keyboard Illumination will continue to support the various illumination levels. This field has an effect when the backlight is enabled. This option is enabled by default.
Keyboard Backlight Timeout on AC	<p>The Keyboard Backlight Timeout dims out with AC option. The main keyboard illumination feature is not affected. Keyboard Illumination will continue to support the various illumination levels. This field has an effect when the backlight is enabled. The options are:</p> <ul style="list-style-type: none"> · 5 sec · 10 sec—enabled by default · 15 sec · 30 sec · 1 min · 5 min · 15 min · Never
Unobtrusive Mode	This option, when enabled, pressing Fn+F7 turns off all light and sound emissions in the system. To resume normal operation, press Fn+F7 again. This option is disabled by default.
Miscellaneous Devices	<p>Allows you to enable or disable the following devices:</p> <ul style="list-style-type: none"> · Enable Front Camera—enabled by default

Option	Description
	<ul style="list-style-type: none"> · Enable Back Camera—enabled by default · Secure Digital (SD) card—enabled by default · Secure Digital (SD) card boot · Secure Digital (SD) card read-only-mode

Video screen options

Option	Description
Display Brightness(LCD Brightness)	Allows you to set the display brightness depending up on the power source—On Battery and On AC. The display brightness is independent for battery and AC adapter. It can be set using the slider.

Security screen options

Option	Description
Admin Password	<p>Allows you to set, change, or delete the administrator (admin) password.</p> <p>NOTE: You must set the admin password before you set the system or hard drive password. Deleting the admin password automatically deletes the system password and the hard drive password.</p> <p>NOTE: Successful password changes take effect immediately.</p> <p>Default setting: Not set</p>
System Password	<p>Allows you to set, change, or delete the system password.</p> <p>NOTE: Successful password changes take effect immediately.</p> <p>Default setting: Not set</p>
Strong Password	<p>Allows you to enforce the option to always set strong passwords.</p> <p>Default Setting: Enable Strong Password is not selected.</p> <p>NOTE: If Strong Password is enabled, the Admin and System passwords must contain at least one uppercase character, one lowercase character and be at least 8 characters long.</p>
Password Configuration	<p>Allows you to specify the minimum and max password lengths of the Administrator and System passwords.</p> <ul style="list-style-type: none"> · min-4—by default, if you want to change you can increase the number · max-32—you can decrease the number
Password Bypass	<p>Allows you to enable or disable the permission to bypass the System and the Internal HDD password, when they are set. The options are:</p> <ul style="list-style-type: none"> · Disabled · Reboot bypass <p>Default setting: Disabled</p>



Option	Description
Password Change	Allows you to enable the disable permission to the System and Hard Drive passwords when the admin password is set. Default setting: Allow Non-Admin Password Changes is selected.
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. Option "allow wireless switch changes" is not selected by default.
UEFI capsule firmware updates	This option controls whether the system allows BIOS updates using UEFI capsule update packages. This option is enabled by default
TPM 2.0 Security	Allows you to enable the Trusted Platform Module (TPM) during POST. The options are: <ul style="list-style-type: none"> • TPM On—enabled by default • Clear • PPI Bypass for Enable Commands—disabled by default • PPI Bypass for Disabled Commands • Attestation enable—enabled by default • Key storage enable—enabled by default • SHA-256—enabled by default • Disabled • Enabled—enabled by default
Computrace	Allows you to activate or disable the optional Computrace software The options are: <ul style="list-style-type: none"> • Deactivate • Disable • Activate—enabled by default <p>NOTE: The Activate and Disable options will permanently activate or disable the feature and no further changes are allowed</p>
CPU XD Support	Allows you to enable the Execute Disable mode of the processor. Enable CPU XD Support—enabled by default
Admin Setup Lockout	Allows you to prevent users from entering Setup when an Administrator password is set. Default Setting: This option is enabled
Master password lockout	This option is not enabled by default

Secure Boot screen options

Option	Description
Secure Boot Enable	This option enables or disables the Secure Boot feature. <ul style="list-style-type: none"> • Disabled • Enabled

Option	Description
	Default setting: Enabled
Expert Key Management	Allows you to manage all secure boot keys. Manage All Factory Keys (PK, KEK, DB, DBX)

NOTE: For Secure Boot to be enabled, the system needs to be in UEFI boot mode and the Enable Legacy Option ROMs option needs to be turned off.

Intel software guard extensions screen options

Option	Description
Intel SGX Enable	<p>This field specifies you to provide a secured environment for running code/storing sensitive information in the context of the main OS. The options are:</p> <ul style="list-style-type: none"> Software controlled—enabled by default Enabled <p>Default setting: Software controlled</p>
Enclave Memory Size	<p>This option allows you to set the SGX Enclave Reserve Memory Size. The options are:</p> <ul style="list-style-type: none"> 32 MB 64 MB 128 MB—enabled by default

Performance screen options

Option	Description
Multi-Core Support	<p>This field specifies whether the process has one or all cores enabled. The performance of some applications improves with the additional cores. This option is enabled by default. Allows you to enable or disable multi-core support for the processor. The installed processor supports two cores. If you enable Multi-Core Support, two cores are enabled. If you disable Multi-Core Support, one core is enabled.</p> <ul style="list-style-type: none"> Enable Multi-Core Support <p>Default setting: The option is enabled.</p>
Intel SpeedStep	<p>Allows you to enable or disable the Intel SpeedStep feature.</p> <ul style="list-style-type: none"> Enable Intel SpeedStep <p>Default setting: The option is enabled.</p>
C-States Control	<p>Allows you to enable or disable the additional processor sleep states.</p> <ul style="list-style-type: none"> C states <p>Default setting: The option is enabled.</p>
Intel TurboBoost	<p>Allows you to enable or disable the Intel TurboBoost mode of the processor.</p>



Option	Description
	<ul style="list-style-type: none"> · Enable Intel TurboBoost <p>Default setting: The option is enabled.</p>
HyperThread Control	<p>Allows you to enable or disable the Hyper-Threading in the processor.</p> <ul style="list-style-type: none"> · Disabled · Enabled <p>Default setting: Enabled is selected.</p>

Power management screen options

Option	Description
AC Behavior	<p>Allows you to enable or disable the tablet from turning on automatically when an AC adapter is connected.</p> <p>Default setting: Wake on AC is not selected.</p>
Auto On Time	<p>Allows you to set the time at which the tablet must turn on automatically. The options are:</p> <ul style="list-style-type: none"> · Disabled · Every Day · Weekdays · Select Days <p>Default setting: Disabled</p>
USB Wake Support	<p>Allows you to enable USB devices to wake the system from Standby.</p> <div style="border-left: 2px solid #0070C0; padding-left: 10px; margin-left: 20px;"> <p>NOTE: This feature is only functional when the AC power adapter is connected. If the AC power adapter is removed during Standby, the system setup removes power from all the USB ports to conserve battery power.</p> </div> <ul style="list-style-type: none"> · Wake on Dell USB-C dock <p>Default setting: The option is enabled by default.</p>
Wireless Radio Control	<p>Allows you to enable or disable the feature that automatically switches from wired or wireless networks without depending on the physical connection.</p> <ul style="list-style-type: none"> · Control WLAN Radio · Control WWAN Radio <p>Default setting: The options are disabled.</p>
Peak Shift	<p>This option enables you to minimize the AC power consumption during the peak power times of day. After you enable this option, your system runs only in battery even if the AC is attached.</p> <ul style="list-style-type: none"> · Enable peak shift · Set battery threshold (15% to 100%) - 15 % (enabled by default)




Option	Description
Advanced Battery Charge Configuration	<p>This option enables you to maximize the battery health. By enabling this option, your system uses the standard charging algorithm and other techniques, during the nonwork hours to improve the battery health.</p> <p>Disabled</p> <p>Default setting: Disabled</p>
Primary Battery Charge Configuration	<p>Allows you to select the charging mode for the battery. The options are:</p> <ul style="list-style-type: none"> Standard—Fully charges your battery at a standard rate—enabled by default ExpressCharge—The battery charges over a shorter time using Dell's fast charging technology. <p>If Custom Charge is selected, you can also configure Custom Charge Start and Custom Charge Stop.</p> <p>NOTE: All charging mode may not be available for all the batteries. To enable this option, disable the Advanced Battery Charge Configuration option.</p>

POST Behavior screen options

Option	Description
Adapter Warnings	<p>Allows you to enable or disable the system setup (BIOS) warning messages when you use certain power adapters.</p> <p>Default setting: Enable Adapter Warnings</p>
Keypad (Embedded)	<p>Allows you to choose one of two methods to enable the keypad that is embedded in the internal keyboard.</p> <ul style="list-style-type: none"> Fn Key Only—enabled by default By Numlock <p>NOTE: When setup is running, this option has no effect. Setup works in Fn Key Only mode.</p>
Numlock Enable	<p>Allows you to enable the Numlock option when the tablet boots.</p> <p>Enable Numlock. This option is enabled by default.</p>
Fn Key Emulation	<p>Allows you to set the option where the Scroll Lock key is used to simulate the Fn key feature.</p> <p>Enable Fn Key Emulation—enabled by default</p>
Fn Lock Options	<p>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. The available options are:</p> <ul style="list-style-type: none"> Fn Lock—enabled by default Lock Mode Disable/Standard Lock Mode Enable/Secondary
Fastboot	<p>Allows you to speed up the boot process by bypassing some of the compatibility steps. The options are:</p> <ul style="list-style-type: none"> Minimal Thorough—enabled by default Auto



Option	Description
Extended BIOS POST Time	<p>Allows you to create an additional preboot delay. The options are:</p> <ul style="list-style-type: none"> · 0 seconds—enabled by default · 5 seconds · 10 seconds
Full Screen Logo	<p>This option will display full screen logo if your image match screen resolution</p> <ul style="list-style-type: none"> · Enable Full Screen Logo
Warnings and Errors	<p>This option will cause the boot process to only pause when warnings or errors are detected.</p> <ul style="list-style-type: none"> · Prompt on Warnings and Errors—enabled by default · Continue on Warnings · Continue on Warnings and Errors <p> NOTE: Error deemed critical to the operation of the system hardware will always halt the system.</p>
Sign of Life Indication	<p>This option is disabled by default.</p>

Virtualization support screen options

Option	Description
Virtualization	<p>Allows you to enable or disable the Intel Virtualization Technology.</p> <p>Enable Intel Virtualization Technology—default.</p>
VT for Direct I/O	<p>Enables or disables the Virtual Machine Monitor (VMM) from utilizing the additional hardware capabilities provided by Intel® Virtualization technology for direct I/O.</p> <p>Enable VT for Direct I/O - enabled by default.</p>
Trusted Execution	<p>This option specifies whether a Measured Virtual Machine Monitor (MVMM) can utilize the additional hardware capabilities provided by Intel Trusted Execution Technology. The TPM Virtualization Technology, and the Virtualization technology for direct I/O must be enabled to use this feature.</p> <p>Trusted Execution - disabled by default.</p>

Wireless screen options

Option	Description
Wireless Device Enable	<p>Allows you to enable or disable the internal wireless devices.</p> <ul style="list-style-type: none"> · WWAN/GPS · WLAN/WiGig · Bluetooth <p>All the options are enabled by default.</p>

NOTE: IMEI number for WWAN can be found on the outer box or the WWAN card.

Maintenance screen options

Option	Description
Service Tag	Displays the Service Tag of your tablet.
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	This controls flashing of the system firmware to previous revisions. Option 'Allow BIOS downgrade' is enabled by default.
Data Wipe	This field allows users to erase the data securely from all internal storage devices. Option 'Wipe on Next boot' is not enabled by default. The following is list of devices affected: <ul style="list-style-type: none">· Internal M.2 SATA SDD· Internal M.2 PCIe SSD· Internal eMMC
BIOS Recovery	This field allows you to recover from certain corrupted BIOS conditions from a recover file on the user primary hard drive or an external USB key. <ul style="list-style-type: none">· BIOS Recovery from Hard Drive—enabled by default· Always perform integrity check—disabled by default

System logs screen options

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.

Updating the BIOS

It is recommended to update your BIOS (System Setup), on replacing the system board or if an update is available. For systems, ensure that your tablet battery is fully charged and connected to a power outlet

- 1 Restart the tablet.
- 2 Go to **Dell.com/support**.
- 3 Enter the **Service Tag** or **Express Service Code** and click **Submit**.

NOTE: To locate the Service Tag, click **Where is my Service Tag?**

NOTE: If you cannot find your Service Tag, click **Detect My Product**. Proceed with the instructions on screen.

- 4 If you are unable to locate or find the Service Tag, click the Product Category of your tablet.
- 5 Choose the **Product Type** from the list.
- 6 Select your tablet model and the **Product Support** page of your tablet appears.
- 7 Click **Get drivers** and click **View All Drivers**.
The Drivers and Downloads page opens.



- 8 On the Drivers and Downloads screen, under the **Operating System** drop-down list, select **BIOS**.
- 9 Identify the latest BIOS file and click **Download File**.
You can also analyze which drivers need an update. To do this for your product, click **Analyze System for Updates** and follow the instructions on the screen.
- 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 tablet.
- 12 Click **Run** to install the updated BIOS settings on your tablet.
Follow the instructions on the screen.

NOTE: It is recommended not to update the BIOS version for more than 3 revisions. For example: If you want to update the BIOS from 1.0 to 7.0, then install version 4.0 first and then install version 7.0.

System and setup password

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

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.

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: Your computer is shipped with the system and setup password feature disabled.

Assigning a system password and setup password

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

NOTE: If the password jumper is disabled, the existing System Password and Setup Password are deleted and you need not provide the system password to log on to the tablet.

To enter the system setup, press F2 immediately after a power-on or re-boot.

- 1 In the **System BIOS** or **System Setup** screen, select **Security** and press Enter.
The **Security** screen is displayed.
- 2 Select **System 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 and/or 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 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 promoted. If you delete the System and/or Setup password, confirm the deletion when promoted.

- 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 reboots.



Troubleshooting

Enhanced Pre-boot System Assessment (ePSA)

The ePSA is a diagnostic utility available on the tablet. This utility includes a series of tests for a tablet's hardware. Customers can run these tests even if the computer lacks any media (hard drive, CD drive, etc.). If an ePSA-tested component fails, the system displays an error code and generates a beep code.

Features:

- Graphical User Interface.
- Automatic Default Operation- runs test on all devices, allowing a user to interrupt and select any device.
- Checks the Master Boot Record for readiness to boot into a full OS environment.
- Tablet panel test.
- Video card.
- Battery test.
- Charger test.
- Primary battery.
- Multiprocessor cache test.

Running the ePSA Diagnostic Utility

NOTE: The following steps can be used to run the ePSA diagnostic utility in DOS mode without using an external keyboard.

- 1 Power on the system.
- 2 Before the Dell Logo is displayed, immediately press the **Volume Up** button to get the **Boot Menu**
- 3 Scroll down the **Diagnostics** and then press the **Volume Down** button to select
- 4 The tablet will begin running the ePSA utility.

Tablet LED

This section details the diagnostic features of the battery LED in a tablet.

Diagnostic LED

Tablets rely on the Battery LED light blinking amber/white pattern to determine failures listed in the following table:

NOTE:

- The blinking patterns will consist of 2 sets of numbers being represented by (First Group: Amber blinks, Second Group: White blinks)
- First Group : The LED blinks 1 to 9 times followed by a brief pause with LED off at the interval of 1.5 seconds. (This is in Amber color)
- Second Group : The LED blinks 1 to 9 times, that would be then followed by a longer pause before the next cycle starts again at the interval of 1.5 seconds. (This is in White color)
- **Example:** No Memory detected (2,3), Battery LED blinks two times of amber color followed by a pause, and then blinks three times of white color. The Battery LED will pause for 3 seconds before the next cycle repeat itself again

The following table depicts the amber and white blinking patterns with possible troubleshooting resolution:

Table 1. LED pattern

Blinking pattern	Problem Description	Suggested Resolution
2,1	processor	processor failure
2,2	system board, BIOS ROM	system board, covers BIOS corruption or ROM error
2,3	memory	no memory/no RAM detected
2,4	memory	memory failure/RAM failure
2,5	memory	invalid memory installed
2,6	system board; chipset	system board/ chipset error
2,7	display	display failure
3,1	RTC power failure	coin-cell battery failure
3,2	PCI/Video	PCI/Video card/chip failure
3,3	BIOS recovery 1	recovery image not found
3,4	BIOS recovery 2	recovery image found but invalid

Real Time Clock (RTC) reset

The Real Time Clock (RTC) reset function allows you or the service technician to recover the recently launched model Dell Latitude and Precision systems from select **No POST/No Boot/No Power** situations. You can initiate the RTC reset on the system from a power off state only if it is connected to AC power. Press and hold the power button for 25 seconds. The system RTC reset occurs after you release the power button.

NOTE: If AC power is disconnected from the system during the process or the power button is held longer than 40 seconds, the RTC reset process is aborted.

The RTC reset will reset the BIOS to Defaults, un-provision Intel vPro and reset the system date and time. The following items are unaffected by the RTC reset:

- Service Tag
- Asset Tag
- Ownership Tag
- Admin Password
- System Password
- HDD Password
- Key Databases
- System Logs

The following items may or may not reset based on your custom BIOS setting selections:



- The Boot List
- Enable Legacy OROMs
- Secure Boot Enable
- Allow BIOS Downgrade

Identifying the AC adapter shipped with your tablet

AC adapters are shipped based on customer requirements or based on regions. To identify the AC adapter shipped with your tablet, you can verify it from the service tag.

- 1 Go to **Dell.com/support**
- 2 Type the service tag of your tablet.
- 3 Click **System configuration**. System configuration details are displayed.
- 4 Click **Original configuration** to view the AC adapter shipped with your tablet.



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.

