Dell Vostro 5581

Setup and specifications guide

Regulatory Model: P77F
Regulatory Type: P77F001

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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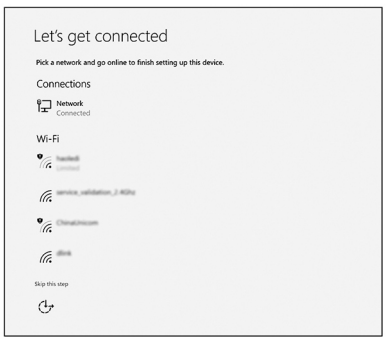
Set up your computer

1 Connect the power cable and press the power button.

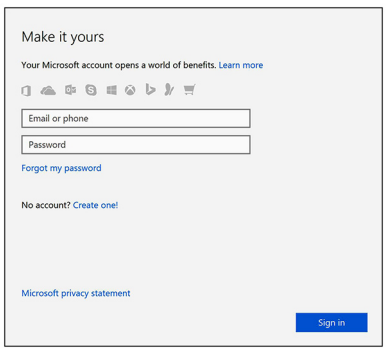


2 Follow the instructions on the screen to finish Windows setup:

a Connect to a network.

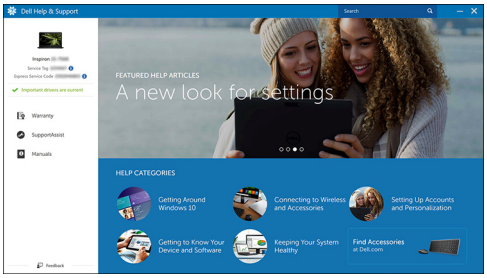


b Sign-in to your Microsoft account or create a new account.



3 Locate Dell apps.

Table 1. Locate Dell apps

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

2

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.

System information

Table 2. System information

Feature	Specifications
Chipset	Integrated in the processor
DRAM bus width	64-bit
FLASH EPROM	16 MB
PCIe bus	Up to Gen3
External bus frequency	Up to 8 GT/s

Processor

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

Table 3. Processor specifications

Type	UMA Graphics	Discrete Graphics
8th Gen Intel Core i7-8565U processor(8 MB cache, 4 core count/ 8 threads, 1.8 GHz to 4.6 GHz, 15 W TDP)	Intel UHD Graphics 620	Nvidia GeForce MX130 graphics
8th Gen Intel Core i5-8265U processor(6 MB cache, 4 core count/ 8 threads, 1.6 GHz to 4.1 GHz, 15 W TDP)	Intel UHD Graphics 620	Nvidia GeForce MX130 graphics
8th Gen Intel Core i3-8145U processor(4 MB cache, 2 core count/ 4 threads, 2.1 GHz to 3.9 GHz, 15 W TDP)	Intel UHD Graphics 620	Nvidia GeForce MX130 graphics

Memory

Table 4. Memory specifications

Feature	Specifications
Minimum memory configuration	4 GB
Maximum memory configuration	32 GB
Number of slots	2 x SoDIMM slots
Maximum memory supported per slot	16 GB
Memory options	• 4 GB(1 x 4 GB) • 8 GB(2 x 4 GB) • 8 GB(1 x 8 GB) • 12 GB(1 x 4 GB + 1 x 8 GB) • 16 GB(2 x 8 GB) • 16 GB(1 x 16 GB) • 32 GB(2 x 16 GB)
Type	Dual-channel DDR4
Speed	2666 Mhz **NOTE: The 2666 MHz memory functions at 2400 MHz for 8th Generation Intel Core processors.**

Storage

Table 5. Storage specifications

Type	Form factor	Interface	Capacity
Hard Disk Drive	SATA	SATA (5400 RPM)	Up to 2 TB
PCIe NVMe Solid-State Drive (Class 35)	M.2 SSD 2230	PCIe Gen 3x2 NVMe, up to 32 Gbps	Up to 512 GB
PCIe NVMe Solid-State Drive (Class 40)	M.2 SSD 2280	PCIe Gen 3x4 NVMe, up to 32 Gbps	512 GB

Intel Optane memory—optional

Intel Optane memory functions only as a storage accelerator. It neither replaces nor adds to the memory (RAM) installed on your computer.

NOTE: Intel Optane memory is supported on computers that meet the following requirements:

- 7th Generation or higher Intel Core i3/i5/i7 processor
- Windows 10 64-bit version or higher (Anniversary Update)
- Intel Rapid Storage Technology driver version 15.9.1.1018 or higher

Table 6. Intel Optane memory specification

Feature	Specifications
Interface	PCIe3x2 NVMe 1.1
Connector	M.2 card slot (2230/2280)
Configurations supported	• 7th Generation or higher Intel Core i3/i5/i7 processor • Windows 10 64-bit version or higher (Anniversary Update) • Intel Rapid Storage Technology driver version 15.9.1.1018 or higher
Capacity	16 GB

System board connectors

Table 7. System board connectors

Feature	Specifications
M.2 Connectors	One M.2 2230/2280 Key-M Connector

Media card-reader

Table 8. Media-card reader specifications

Feature	Specifications
Type	One SD-card slot
Supported cards	• Secure Digital (SD) • MicroSD via transfer card

Audio

Table 9. Audio specifications

Feature	Specifications
Controller	Realtek ALC3204 with Waves MaxxAudio Pro
Stereo conversion	24-bit DAC (Digital-to-Analog) and ADC (Analog-to-Digital)
Type	HD Audio
Speakers	Two
Interface	Internal: • Intel HDA (high-definition audio) External: • 7.1 channel output via HDMI

Feature	Specifications
	• Digital microphone input on camera module • Headset combo jack (stereo headphones/microphone-in)
Internal speaker amplifier	Integrated in ALC3204 (Class-D 2W)
External volume controls	Media-control shortcut keys
Speaker output:	Average: 2 W Peak: 2.5 W
Microphone	Digital-array microphones

Video card

Table 10. Video card specifications

Controller	Type	CPU Dependency	Graphics memory type	Capacity	External display support	Maximum resolution
Intel UHD Graphics 620	UMA	• Intel Core i7-8565U CPU • Intel Core i5-8265U CPU • Intel Core i3-8145U CPU	Integrated	Shared system memory	HDMI 1.4b port	1920x1200@60Hz
Nvidia GeForce MX130 equivalent, 2 GB	Discrete	NA	GDDR5	2 GB	HDMI1.4b port	1920x1200@60Hz

Camera

Table 11. Camera specifications

Feature	Specifications
Resolution	Still image: HD resolution (1280x720) Video: HD resolution (1280x720) at 30 fps
Diagonal viewing angle	74.9 degree
Sensor type	CMOS sensor technology

Communication

Table 12. Communication specifications

Feature	Specifications
Network adapter	Integrated Realtek RTL8111 10/100/1000 Mb/s Ethernet (RJ-45)

Wireless

Table 13. Wireless specifications

Specifications
Intel Wireless-9462 802.11AC 1x1 Wi-Fi + BT V5.0 Wireless Card
Intel Wireless-9560 802.11AC 2x2 Wi-Fi + BT V5.0 Wireless Card
Dell Qualcomm QCA9377 (DW1810)
Dell Qualcomm QCA61x4A (DW1820)

Ports and connectors

Table 14. Ports and connectors

Feature	Specifications
Memory card reader	One SD card reader
USB	• Two USB 3.1 Gen 1 (Type-A) ports • One USB 2.0 (Type-A) port • One USB 3.1 Gen 1 (USB Type-C) port /DisplayPort
Security	Noble wedge lock slot
Audio	One headset (headphone and microphone combo) port
Video	One HDMI 1.4b port (supports up to 2k)
Network adapter	RJ-45, 10/100/1000, No LED indicator

Display

Table 15. Display specifications

Feature	Specifications
Type	15.6 inch, 1920 x 1080 (FHD IPS Low Specs Narrow Anti-Glare), 16:9
Height (Active area)	205.7 mm (8.10 inches)
Width (Active area)	355.7 mm (13.81 inches)
Diagonal	394.9 mm (15.55 inches)
Megapixels	2.07
Pixels Per Inch (PPI)	141
Contrast ratio	400:1
Luminance/Brightness (typical)	220 nits
Refresh rate	60 Hz
Horizontal viewing angle (min)	+/- 80 degrees
Vertical viewing angle (min)	+/- 80 degrees
Power consumption (max)	3.5 W

Keyboard

Table 16. Keyboard specifications

Feature	Specifications
Number of keys	• 80 (U.S. and Canada) • 81 (UK) • 84 (Japan)
Size	Full sized • X= 19.05 mm (0.75 inches) key pitch • Y= 18.05 mm (0.71 inches) key pitch
Backlit keyboard	Optional
Layout	QWERTY

Touchpad

Table 17. Touchpad specifications

Feature	Specifications
Resolution	1229 x 749
Dimensions	• Width: 105 mm (4.13 inches) • Height: 80 mm (3.14 inches)
Multi-touch	Supports five fingers

Operating system

Table 18. Operating system

Feature	Specifications
Operating systems supported	• Windows 10 Home (64-bit) • Windows 10 Professional (64bit) • Ubuntu

Battery

Table 19. Battery

Feature	Specifications	
Type	3-cell “smart” lithium-ion (42 WHr)	
Dimension	Width	97.15 mm (3.82 inches)
	Depth	184.15 mm (7.25 inches)
	Height	5.90 mm (0.23 inches)
Weight (maximum)	0.2 kg (0.44 lb)	
Voltage	11.40 VDC	
Life span	300 discharge / charge cycles	
Charging time when the computer is off (approximate)	Standard charge	0°C to 60°C : 4 hours
	Express Charge	0°C to 35°C : 4 hours
		16°C to 45°C : 2 hours
		46°C to 60°C : 3 hours
Operating time	Varies depending on operating conditions and can significantly reduce under certain power-intensive conditions	

Feature	Specifications
Temperature range: Operating	0°C to 35°C (32°F to 95°F)
Temperature range: Storage	-20°C to 60°C (-40°F to 149°F)
Coin-cell battery	CR-2032

Power adapter

Table 20. Power adapter specifications

Feature	Specifications (45 W)	Specifications (65 W)
Type	45 W	65 W
Input Voltage	100 VAC - 240 VAC	100 VAC - 240 VAC
Input current (maximum)	1.3 A	1.7 A
Adapter size	Dimensions	Dimensions
	In Inches: 1.02 x 1.57 x 3.7	In Inches: 1.1 x 1.9 x 4.3
	In mm: 26 x 40 x 94	In mm: 28 x 47 x 108
Weight	0.17 kg (0.37 lbs)	0.29 kg (0.64 lbs)
Input frequency	50 Hz to 60 Hz	50 Hz to 60 Hz
Output current	2.31 A (continuous)	3.34 A (continuous)
Rated output voltage	19.5 VDC	19.5 VDC
Temperature range (Operating)	0°C to 40° C (32°F to 104°F)	0°C to 40° C (32°F to 104°F)
Temperature range (Non-Operating)	-40°C to 70°C (-40°F to 158°F)	-40°C to 70°C (-40°F to 158°F)

Dimensions and weight

Table 21. Dimensions and weight

Feature	Specifications
Height	Front: 18.87 mm (0.74 inches)
	Rear: 20.3 mm (0.80 inches)
Width	361.1 mm (14.21 inches)
Depth	249.0 mm (9.80 inches)
Weight	1.9 kg (4.18 lbs)

Computer environment

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

Table 22. Computer environment

	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 80% (non-condensing) **NOTE: Maximum dew point temperature = 26°C**	0% to 95% (non-condensing) **NOTE: Maximum dew point temperature = 33°C**
Vibration (maximum)	0.26 GRMS	1.37 GRMS
Shock (maximum)	105 G †	40 G‡
Altitude (maximum)	-15.2 m to 3048 m (-50 ft to 10,000 ft)	-15.2 m to 10,668 m (-50 ft to 35,000 ft)

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

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

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

Security

Table 23. Security

Feature	Specifications
Trusted Platform Module (TPM) 2.0	Integrated on the system board
Firmware TPM	Optional
Windows Hello Support	Yes, optional fingerprint on power button
Cable lock	Noble lock
Chassis intrusion switch	Optional
Dell Smartcard Keyboard	Optional
Chassis lock slot and loop support	Optional

Security Software

Table 24. Security Software specifications

Feature	Specifications
Dell Endpoint Security Suite Enterprise	Optional
Dell Data Guardian	Optional
Dell Encryption (Enterprise or Personal)	Optional
Dell Threat Defense	Optional
RSA SecurID Access	Optional
RSA NetWitness Endpoint	Optional
MozyPro or MozyEnterprise	Optional
VMware Airwatch/WorkspaceONE	Optional
Absolute Data & Device Security	Optional

3

System setup

System setup enables you to manage your notebook 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:

- BIOS overview
- General options
- System configuration
- Video screen options
- Security
- Secure boot
- Intel Software Guard Extensions options
- Performance
- Power management
- Post behavior
- Virtualization support
- Wireless options
- Maintenance
- System logs
- SupportAssist system resolution

BIOS overview

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.

General options

Table 25. General

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** · **Boot List Option:** Allows you to change the boot list options. Click one of the following options: – **Legacy External Devices** – **UEFI**—Default
Advanced Boot Options	Allows you to Enable Legacy Option ROMs. The options are: · **Enable Legacy Option ROMs**—Default · **Enable Attempt Legacy Boot**
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 26. System Configuration

Option	Description
Integrated NIC	Allows you to configure the integrated network controller.

Option	Description
	Click one of the following options: · **Disabled** · **Enabled** · **Enabled w/PXE**—Default
SATA Operation	Allows you to configure the operating mode of the integrated SATA hard-drive controller. Click one of the following options: · **Disabled** · **AHCI** · **RAID On**—Default **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-2** · **M.2 PCIe SSD-0** All the options are set by default.
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. · **Enable SMART Reporting**
USB Configuration	Allows you to enable or disable the internal/integrated USB configuration. The options are: · **Enable USB Boot Support** · **Enable External USB Ports** All the options are set by default. **NOTE: USB keyboard and mouse always work in the BIOS setup irrespective of these settings.**
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** This option is set by default.
Keyboard Illumination	This field lets you choose the operating mode of the keyboard illumination feature. The keyboard brightness level can be set from 0% to 100%.

Option	Description
	The options are: · **Disabled** · **Dim** · **Bright**—Default
Keyboard Backlight Tmeout on AC	Allows to define the timeout value for the keyboard backlight when an AC adapter is plugged in the system. The Keyboard Backlight tiemout value is only in effect when the backlight is enabled. · **5 seconds** · **10 seconds**—Default · **15 seconds** · **30 seconds** · **1 minute** · **5 minutes** · **15 minutes** · **Never**
Keyboard Backlight Tmeout on Battery	Allows to define the timeout value for the keyboard backlight when the system is running only on battery power. The Keyboard Backlight tiemout value is only in effect when the backlight is enabled. · **5 seconds** · **10 seconds**—Default · **15 seconds** · **30 seconds** · **1 minute** · **5 minutes** · **15 minutes** · **Never**
Miscellaneous devices	Allows you to enable or disable various on board devices. · **Enable Camera**—Default · **Enable Hard Drive Free Fall Protection**—Default · **Enable Secure Digital (SD) Card**—Default · **Secure Digital (SD) Card Boot** · **Secure Digital Card (SD) Read-Only Mode**

Video screen options

Table 27. Video

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

Security

Table 28. 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: For the first time login, "Enter the old password:" field is marked to "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: For the first time login, "Enter the old password:" field is marked to "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** This option is not set by default.
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. Click one of the options: · **Disabled**—Default · **Reboot bypass**
Password Change	Allows you to change the System password when the administrator password is set. · **Allow Non-Admin Password Changes** This option is set by default.
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** This option is not set by default.

Option	Description
UEFI Capsule Firmware Updates	Allows you to update the system BIOS via UEFI capsule update packages. · **Enable UEFI Capsule Firmware Updates** This option is set by default.
TPM 2.0 Security	Allows you to enable or disable the Trusted Platform Module (TPM) during POST. The options are: · **TPM On**—Default · **Clear** · **PPI Bypass for Enable Command**—Default · **PPI Bypass for Disbale Command** · **PPI Bypass for Clear Command** · **Attestation Enable**—Default · **Key Storage Enable**—Default · **SHA-256**—Default
Computrace (R)	Allows you to activate or disable the optional Computrace software. The options are: · **Deactivate** · **Disable** · **Activate**—Default
OROM keyboard Access	Allows you to enable or disable Option ROM configuration screens via hotkeys during boot. · **Enable**—Default · **Disable** · **One Time Enable**
Admin Setup Lockout	Allows you to prevent users from entering Setup when an administrator password is set. · **Enable Admin Setup Lockout** This option is not set by default.
Master Password Lockout	Allows you to disable master password support. · **Enable Master Password Lockout** This option is not set by default. **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** This option is not set by default.

Secure boot

Table 29. Secure Boot

Option	Description
Secure Boot Enable	Allows you to enable or disable the Secure Boot Feature. • **Secure Boot Enable**—Default
Secure Boot Mode	Changes to the Secure Boot operation mode modifies the behaviour of Secure Boot to allow evaluation of UEFI driver signatures. Choose one of the option: • **Deployed Mode**—Default • **Audit Mode**
Expert Key Management	Allows you to enable or disable Expert Key Management. • **Enable Custom Mode** This option is not set by default. The Custom Mode Key Management options are: • **PK**—Default • **KEK** • **db** • **dbx**

Intel Software Guard Extensions options

Table 30. Intel Software Guard Extensions

Option	Description
Intel SGX Enable	This field specifies you to provide a secured environment for running code/storing sensitive information in the context of the main OS. 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 31. Performance

Option	Description
Multi Core Support	This field specifies whether the process 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	Allows you to enable or disable the Intel TurboBoost mode of the processor. · **Enable Intel TurboBoost** This option is set by default.
Hyper-Thread Control	Allows you to enable or disable the HyperThreading in the processor. · **Disabled** · **Enabled**—Default

Power management

Table 32. Power Management

Option	Description
AC Behavior	Allows you to enable or disable the computer from turning on automatically when an AC adapter is connected. · **Wake on AC** This option is not set by default.
Enable Intel Speed Shift Technology	Allows you to enable or disable the Intel Speed Shift Technology. · **Enabled**—Default

Option	Description
Auto On Time	Allows you to set the time at which the computer must turn on automatically. The options are: • **Disabled**—Default • **Every Day** • **Weekdays** • **Select Days** This option is not set by default.
USB Wake Support	Allows you to enable USB devices to wake the system from standby. • **Enable USB Wake Support** This option is not set by default.
Wake on LAN	This option allows the computer to power up from the off state when triggered by a special LAN signal. Wake-up from the Standby state is unaffected by this setting and must be enabled in the operating system. This feature only works when the computer is connected to AC power supply. • **Disabled**—Default - Does not allow the system to power on by special LAN signals when it receives a wake-up signal from the LAN or wireless LAN. • **LAN Only** - Allows the system to be powered on by special LAN signals.
Block Sleep	This option minimizez AC power usage at times of peak demand.
Peak Shift	Allows you to block entering to sleep in OS environment.
Advanced Battery Charge Configuration	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 non-work hours to improve the battery health.
Primary Battery Charge Configuration	Allows you to select the charging mode for the battery. The options are: • **Adaptive**—Default • **Standard** - Fully charges your battery at a standard rate. • **ExpressCharge**- The battery charges over a shorter period of time using Dell's fast charging technology. • **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. To enable this option, disable the Advanced Battery Charge Configuration option.**

Post behavior

Table 33. POST Behavior

Option	Description
Adapter Warnings	Allows you to enable or disable the system setup (BIOS) warning messages when you use certain power adapters. • **Enable Adapter Warnings**—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. • **Fn Lock**—Default Click one of the following options: • **Lock Mode Disable/Standard** • **Lock Mode Enable/Secondary**—Default
Fastboot	Allows you to speed up the boot process by bypassing some of the compatibility steps. Click one of the following options: • **Minimal** • **Thorough**—Default • **Auto**
Extended BIOS POST Time	Allows you to create an additional preboot delay. Click one of the following options: • **0 seconds**—Default • **5 seconds** • **10 seconds**
Full Screen Logo	Allows you to display full screen logo, if your image matches screen resolution. • **Enable Full Screen Logo** This option is not set by default.
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. Click one of the following options: • **Prompt on Warnings and Errors**—Default • **Continue on Warnings** • **Continue on Warnings and Errors**
MAC Address Pass-Through	This feature replaces the external NIC MAC address with the selected MAC address from the system. Click one of the following options: • **Passthrough MAC Address**—Default • **Integrated NIC 1 MAC Address** • **Disabled**

Virtualization support

Table 34. Virtualization Support

Option	Description
Virtualization	This option specifies whether a Virtual Machine Monitor (VMM) can utilize the additional hardware capabilities provided by the Intel Virtualization technology. · **Enable Intel Virtualization Technology** This option is set by default.
VT for Direct I/O	Enables or disables the Virtual Machine Monitor (VMM) from utilizing the additional hardware capabilities provided by the Intel Virtualization technology for direct I/O. · **Enable VT for Direct I/O** This option is set by default.

Wireless options

Table 35. 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 36. 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.

Option	Description
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**—This option is set by default. 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. **NOTE: BIOS Recovery from Hard Drive field should be enabled.** **Always Perform Integrity Check**—Performs integrity check on every boot.

System logs

Table 37. 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 38. SupportAssist System Resolution

Option	Description
Auto OS Recovery Threshold	This option controls the automatic boot flow for SupportAssist System Resolution console and for Dell OS recovery Tool. Click one of the options below: · **OFF** · **1** · **2**—Default · **3**
SupportAssist OS Recovery	This option enables or disables the boot flow for SupportAssist OS Recovery tool in the event of certain system errors.

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Getting help

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.