## Vostro 5301

1

Setup and Specifications

Regulatory Model: P121G Regulatory Type: P121G002 October 2020 Rev. A00



### Notes, cautions, and warnings

(i) NOTE: A NOTE indicates important information that helps you make better use of your product.

CAUTION: A CAUTION indicates either potential damage to hardware or loss of data and tells you how to avoid the problem.

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

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## Set up your Vostro 5301

### About this task

(i) NOTE: The images in this document may differ from your computer depending on the configuration you ordered.

### Steps

1. Connect the power adapter and press the power button.



- (i) NOTE: All pictures shown are for illustration purposes only. Actual product may differ in color.
- **NOTE:** To conserve battery power, the battery might enter power saving mode. Connect the power adapter and press the power button to turn on the computer.

#### 2. Finish operating system setup.

### For Ubuntu:

Follow the on-screen instructions to complete the setup. For more information about installing and configuring Ubuntu, see the knowledge base articles SLN151664 and SLN151748 at www.dell.com/support.

### 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.
   NOTE: 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

Resources	Description	
	My Dell	
Deell	Centralized location for key Dell applications, help articles, and other important information about your computer. It also notifies you about the warranty status, recommended accessories, and software updates if available.	
	SupportAssist	
~	Pro-actively checks the health of your computer's hardware and software. The SupportAssist OS Recovery tool troubleshoots issues with the operating system. For more information, see the SupportAssist documentation at www.dell.com/support.	
	<b>(i) NOTE:</b> In SupportAssist, click the warranty expiry date to renew or upgrade your warranty.	
	Dell Update	
-\$¢>	Updates your computer with critical fixes and latest device drivers as they become available. For more information about using Dell Update, see the knowledge base article SLN305843 at www.dell.com/support.	
	Dell Digital Delivery	
	Download software applications, which are purchased but not pre-installed on your computer. For more information about using Dell Digital Delivery, see the knowledge base article 153764 at www.dell.com/support.	

## Views of Vostro 5301

## Right



(i) NOTE: All pictures shown are for illustration purposes only. Actual product may differ in color.

### 1. microSD-card slot

Reads from and writes to the microSD card. The computer supports the following card types:

- microSecure Digital (microSD)
- microSecure Digital High Capacity (microSDHC)
- microSecure Digital Extended Capacity (microSDXC)

### 2. Headset port

Connect headphones or a headset (headphone and microphone combo).

### 3. USB 3.2 Gen 1 port

Connect devices such as external storage devices and printers. Provides data transfer speeds up to 5 Gbps.

## Left



(i) NOTE: All pictures shown are for illustration purposes only. Actual product may differ in color.

### 1. Power-adapter port

Connect a power adapter to provide power to your computer.

2. Power connector LED/ Diagnostics LED

### 3. HDMI port

Connect to a TV or another HDMI-in enabled device. Provides video and audio output.

### 4. USB 3.2 Gen 1 port

Connect devices such as external storage devices and printers. Provides data transfer speeds up to 5 Gbps.

### 5. USB 3.2 Gen 2 (Type-C) port with Power Delivery/DisplayPort

Connect peripherals such as external storage devices, printers, and external displays.

Supports Power Delivery that enables two-way power supply between devices. Provides up to 15 W power output that enables faster charging.

### () NOTE:

The Dell Adapter USB-C to USB-A 3.0 is shipped with this computer. Use this adapter to connect legacy USB 3.0 accessories to USB (Type-C) ports on your computer.

(i) NOTE: A USB Type-C to DisplayPort adapter (sold separately) is required to connect a DisplayPort device.

## Base



(i) NOTE: All pictures shown are for illustration purposes only. Actual product may differ in color.

### 1. Left-click area

Press to left-click.

### 2. Touchpad

Move your finger on the touchpad to move the mouse pointer. Tap to left-click and two fingers tap to right-click.

### 3. Right-click area

Press to right-click.

### 4. Power button with optional fingerprint reader

Press to turn on the computer if it is turned off, in sleep state, or in hibernate state.

When the computer is turned on, press the power button to put the computer into sleep state; press and hold the power button for 4 seconds to force shut-down the computer.

If the power button has a fingerprint reader, place your finger on the power button to log in.

**NOTE:** You can customize power-button behavior in Windows. For more information, see *Me and My Dell* at www.dell.com/support/manuals.

## Display



(i) NOTE: All pictures shown are for illustration purposes only. Actual product may differ in color.

### 1. Left microphone

Provides digital sound input for audio recording and voice calls.

### 2. Camera

Enables you to video chat, capture photos, and record videos.

### 3. Camera-status light

Turns on when the camera is in use.

### 4. Right microphone

Provides digital sound input for audio recording and voice calls.

## Bottom



#### 1. Speaker grills

Provides audio output.

### 2. Fan vents

Provides for entry of air intake.

### 3. Service Tag label

The Service Tag is a unique alphanumeric identifier that enables Dell service technicians to identify the hardware components in your computer and access warranty information.

## **Specifications of Vostro 5301**

## **Dimensions and weight**

The following table lists the height, width, depth, and weight of your Vostro 5301.

### Table 2. Dimensions and weight

Description		Values
Height:		
	Front height	14.00 mm (0.551 in.)
	Rear height	15.90 mm (0.626 in.)
Width		306.00 mm (12.00 in.)
Depth		204.00 mm (8.03 in.)
Weight (maximum)		<ul> <li>UMA: 1.16 kg (2.56 lb)</li> <li>DSC: 1.25 kg (2.75 lb)</li> <li>(i) NOTE: The weight of your computer depends on the configuration ordered and manufacturing variability.</li> </ul>

### Processors

() NOTE: Global Standard Products (GSP) are a subset of Dell's relationship products that are managed for availability and synchronized transitions on a worldwide basis. They ensure the same platform is available for purchase globally. This allows customers to reduce the number of configurations managed on a worldwide basis, thereby reducing their costs. They also enable companies to implement global IT standards by locking in specific product configurations worldwide.

Device Guard (DG) and Credential Guard (CG) are the new security features that are only available on Windows 10 Enterprise today. Device Guard is a combination of enterprise-related hardware and software security features. When you configure together, it locks a device down so that it can only run trusted applications. Credential Guard uses virtualization-based security to isolate secrets (credentials) so that only privileged system software can access them. Unauthorized access to these secrets can lead to credential theft attacks. Credential Guard prevents these attacks by protecting NT LAN Manager (NTLM) password hashes and Kerberos Ticket Granting Tickets.

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

### **Table 3. Processors**

Description	Option one	Option two
Processors	11 <sup>th</sup> Generation Intel Core i5-1135G7	11 <sup>th</sup> Generation Intel Core i7-1165G7
Wattage	15 W	28 W
Core count	4	4

### Table 3. Processors (continued)

Description	Option one	Option two
Thread count	8	8
Speed	2.4 GHz to 4.2 GHz	2.8 GHz to 4.7 GHz
Cache	8 MB	8 MB
Integrated graphics	Intel Iris Xe Graphics	Intel Iris Xe Graphics

## Chipset

The following table lists the details of the chipset supported by your Vostro 5301.

### Table 4. Chipset

Description	Values
Chipset	Intel
Processor	11 <sup>th</sup> Generation Intel Tiger Lake Core i5/i7
DRAM bus width	64-bit
Flash EPROM	32 MB
PCIe bus	Up to Gen3

## **Operating system**

Your Vostro 5301 supports the following operating systems:

- Windows 10 Home (64-bit)
- Windows 10 Pro (64-bit)
- Ubuntu 18.04 LTS (64-bit)

## Memory

The following table lists the memory specifications of your Vostro 5301.

### Table 5. Memory specifications

Description	Values
Memory slots	Onboard system memory
Memory type	Single-channel LPDDR4x soldered down
Memory speed	4267 MHz
Maximum memory configuration	16 GB
Minimum memory configuration	8 GB
Memory configurations supported	• 8 GB, 1 x 8 GB, LPDDR4, 4267 MHz

### Table 5. Memory specifications (continued)

Description	Values
	<ul> <li>16 GB, 2 x 8 GB, LPDDR4, 4267 MHz</li> <li>16 GB, 1 x 16 GB, LPDDR4, 4267 MHz</li> </ul>

## **Ports and connectors**

### Table 6. External ports and connectors

Description	Values
External:	
USB	<ul> <li>One USB 3.2 Gen 2 Type-C port with DisplayPort 1.2 and Power Delivery support (10 Gbps)</li> <li>Two USB 3.2 Gen 1 Type-A port with PowerShare (5 Gbps)</li> </ul>
Audio	One headset (headphone and microphone combo) port
Video	One HDMI 2.0 Port
Media card reader	One microSD 3.0 card reader (integrated)
Power adapter port	One 4.5 mm x 2.9 mm DC-in port

### Table 7. Internal ports and connectors

Description	Values
Internal:	
M.2	<ul> <li>One M.2 2230 slot for Wi-Fi</li> <li>One M.2 2230/ 2280 slot for solid-state drive</li> <li>(i) NOTE: To learn more about the features of different types of M.2 cards, see the knowledge base article SLN301626.</li> </ul>

## **Wireless module**

The following table lists the Wireless Local Area Network (WLAN) module specifications of your Vostro 5301.

### Table 8. Wireless module specifications

Description	Option one	Option two
Model number	Qualcomm QCA61x4A (DW1820) (2x2) Wireless Adapter with Bluetooth 4.2	Intel Wi-Fi 6 AX201, 2x2, 802.11ax with Bluetooth 5.0
Transfer rate	<ul> <li>802.11ac - Up to 867 Mbps</li> <li>802.11n - Up to 450 Mbps</li> <li>802.11a/g - Up to 54 Mbps</li> <li>802.11b - Up to 11 Mbps</li> </ul>	<ul> <li>2.4 GHz 40M: Up to 574 Mbps</li> <li>5 GHz 80M: Up to 1.2 Gbps</li> <li>5 GHz 160M: Up to 2.4 Gbps</li> </ul>
Frequency bands supported	2.4 GHz (802.11b/g/n) and 5 GHz (802.11a/n/ac)	2.4/5 GHz

### Table 8. Wireless module specifications (continued)

Description Option one		Option two	
Wireless standards	<ul> <li>802.11a, 802.11b, 802.11g, 802.11n and 802.11ac</li> <li>Dual-mode Bluetooth 4.2, BLE (HW ready, SW depends on OS)</li> </ul>	IEEE 802.11a/b/g/n/ac/ax, 160MHz channel use	
Encryption	<ul><li>64-bit/128-bit WEP</li><li>AES-CCMP</li><li>TKIP</li></ul>	<ul> <li>64/128-bit WEP</li> <li>128-bit AES-CCMP</li> <li>TKIP</li> </ul>	
Bluetooth	Bluetooth 5.0	Bluetooth 5.0	

## Audio

The following table lists the audio specifications of your Vostro 5301.

### Table 9. Audio specifications

Description		Values
Audio controller		Realtek ALC3204
Stereo conversion		Supported
Internal audio interface		HD audio interface
External audio interface		Universal Audio Jack
Number of speakers		Тwo
Internal-speaker amplifier		Supported (audio codec integrated)
External volume controls		No hardware volume buttons, keyboard shortcut controls
Speaker output:		
	Average speaker output	2 W
	Peak speaker output	2.5 W
Subwoofer output		Not supported
Microphone		Dual array microphone

## Storage

Your computer supports one of the following configurations:

- M.2 2230 Class 35 SSD/SED
- M.2 2280 Class 40 SSD/SED
- M.2 2280 Intel Optane memory

### Table 10. Storage specifications

Storage type	Interface type	Capacity
M.2 Intel Optane with Storage	PCle x4 NVMe 3.0	512 GB

### Table 10. Storage specifications (continued)

Storage type	Interface type	Capacity
M.2 Class 35 solid-state drive	PCle x4 NVMe 3.0	<ul> <li>128 GB</li> <li>256 GB</li> <li>512 GB</li> </ul>
M.2 Class 40 solid-state drive	PCle x4 NVMe 3.0	<ul> <li>256 GB</li> <li>512 GB</li> <li>1 TB</li> </ul>

# Intel Optane Memory H10 with Solid State Storage (optional)

Intel Optane Memory technology utilizes 3D XPoint memory technology and functions as a non-volatile storage cache/ accelerator and/or storage device depending on the Intel Optane Memory installed in your computer.

Intel Optane Memory H10 with Solid State Storage functions as both a non-volatile storage cache/accelerator (enabling enhanced read/write speeds for hard-drive storage) and a solid-state storage solution. It neither replaces nor adds to the memory (RAM) installed on your computer.

### Table 11. Intel Optane Memory H10 with Solid State Storage specifications

Description	Values
Interface	PCle 3 x4 NVMe
	<ul> <li>One PCle 3 x2 for Optane memory</li> <li>One PCle 3 x2 for solid-state storage</li> </ul>
Connector	M.2
Form factor	2280
Capacity (Intel Optane memory)	Up to 32 GB
Capacity (solid-state storage)	Up to 512 GB

**NOTE:** Intel Optane Memory H10 with Solid State Storage is supported on computers that meet the following requirements:

- 9<sup>th</sup> Generation or higher Intel Core i3/i5/i7 processors
- Windows 10 64-bit version or higher (Anniversary Update)
- Intel Rapid Storage Technology driver version 15.9.1.1018 or higher

## Media-card reader

The following table lists the media cards supported by your Vostro 5301.

### Table 12. Media-card reader specifications

Description	Values
Media-card type	One micro-SD 3.0 card
Media-cards supported	Secure Digital (SD)
<b>NOTE:</b> The maximum capacity supported by the media-card reader varies depending on the standard of the media card installed in your computer.	

## Keyboard

The following table lists the keyboard specifications of your Vostro 5301.

### Table 13. Keyboard specifications

Description	Values
Keyboard type	• Standard spill resistant keyboard (Optional backlit)
Keyboard layout	QWERTY/ KANJI
Number of keys	<ul> <li>United States and Canada: 81 keys</li> <li>United Kingdom: 82 keys</li> <li>Japan: 85 keys</li> </ul>
Keyboard size	X=18.07 mm key pitch Y=18.07 mm key pitch
Keyboard shortcuts	Some keys on your keyboard have two symbols on them. These keys can be used to type alternate characters or to perform secondary functions. To type the alternate character, press Shift and the desired key. To perform secondary functions, press Fn and the desired key. (i) NOTE: You can define the primary behavior of the function keys (F1–F12) changing Function Key Behavior in BIOS setup program.

## Camera

The following table lists the camera specifications of your Vostro 5301.

### Table 14. Camera specifications

Desc	ription	Values
Num	per of cameras	One
Came	era type	RGB HD camera
Came	era location	Front camera
Came	era sensor type	CMOS sensor technology
Came	era resolution:	
	Still image	0.92 megapixel
Video		1280 x 720 (HD) at 30 fps
Diago	onal viewing angle:	74.9 degrees

## Touchpad

The following table lists the touchpad specifications of your Vostro 5301.

### Table 15. Touchpad specifications

Description		Values
Touchpad re	solution:	
	Horizontal	1229
	Vertical	749
Touchpad di	mensions:	
	Horizontal	105 mm (4.13 in.)
	Vertical	65 mm (2.56 in.)
Touchpad ge	estures	For more information about touchpad gestures available on Windows 10, see the Microsoft knowledge base article 4027871 at support.microsoft.com.

## **Power adapter**

The following table lists the power adapter specifications of your Vostro 5301.

### Table 16. Power adapter specifications

Desc	ription	Option one	Option two
Туре		45 W	65 W
Conn	ector dimensions:		
	External diameter	4.50	4.50
	Internal diameter	2.90	2.90
Input	voltage	100 VAC-240 VAC	100 VAC-240 VAC
Input	frequency	50 Hz–60 Hz	50 Hz–60 Hz
Input	current (maximum)	1.30 A	1.60 A
Outp	ut current (continuous)	2.31 A	3.34 A
Rateo	d output voltage	19.50 VDC	19.50 VDC
Temp	erature 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)

## Battery

### Table 17. Battery specifications

Descriptio	on	Values	
Туре		3-cell, 40 WHr, Polymer battery 4-cell, 53 WHr, Polymer battery	
Voltage		11.40 VDC	15.2 VDC
Weight (m	aximum)	0.18 kg (0.4 lb)	0.235 kg (0.518 lb)
Dimension	5:	-	
	Height	5.75 mm (0.23 in.)	5.75 mm (0.23 in.)
	Width	184.1 mm (7.25 in.)	239.1 mm (9.41 in.)
	Depth	90.73 mm (3.6 in.)	90.73 mm (3.6 in.)
Temperatu	ire range:		
	Operating	0 °C to 35 °C (32 °F to 95 °F)	0 °C to 35 °C (32 °F to 95 °F)
	Storage	-40 °C to 65 °C (-40 °F to 149 °F)	-40 °C to 65 °C (-40 °F to 149 °F)
Operating	time	Varies depending on operating conditions power-intens	and can significantly reduce under certain ive conditions.
Charging time (approximate) 4 hours (when the computer is off) 4 hours (when the computer is		4 hours (when the computer is off)	
	(i) <b>NOTE:</b> Control the charging time, duration, start and end time, and so on u the Dell Power Manger application. For more information on the Dell Power Manger see, https://www.dell.com/support/home/product-support/product- power-manager/docs		ation, start and end time, and so on using r more information on the Dell Power upport/home/product-support/product/
Life span (approximate)		300 discharge/charge cycles	300 discharge/charge cycles
ExpressCh	arge Supported Supported		Supported
User replac	ceable	No (FRU) No (FRU)	
Coin-cell b	attery	CR2032	

() NOTE: For batteries with the ExpressCharge feature, the battery will typically have at least an 80% charge after about an hour of charging with the system off, and fully charged in about 2 hours with the system off.

Enabling ExpressCharge requires that both the computer and the battery used be ExpressCharge capable. If these requirements are not met, ExpressCharge will not be enabled.

## Display

The following table lists the display specifications of your Vostro 5301.

### Table 18. Display specifications

Description	Values
Display type	Full High Definition (FHD)
Display-panel technology	NA

### Table 18. Display specifications (continued)

Description		Values
Display-panel dim	nensions (active area):	
	Height	165.24 mm (6.5 in.)
	Width	293.76 mm (11.57 in.)
	Diagonal	337.82 mm (13.3 in.)
Display-panel nat	ive resolution	1920 x 1080
Luminance (typic	al)	300 nits
Megapixels		2.07
Color gamut		sRGB 95%
Pixels Per Inch (PPI)		166
Contrast ratio (min)		600:1
Response time (r	nax)	35 ms
Refresh rate		60 Hz
Horizontal view a	ingle	+/-80°
Vertical view angle		+/-80°
Pixel pitch		0.153 mm × 0.153 mm
Power consumption (maximum)		4 W
Anti-glare vs glos	ssy finish	Anti-glare
Touch options		No

## **Fingerprint reader (optional)**

The following table lists the specifications of the optional fingerprint-reader of your Vostro 5301.

### Table 19. Fingerprint reader specifications

Description	Values
Fingerprint-reader sensor technology	Capacitive
Fingerprint-reader sensor resolution	500 dpi
Fingerprint-reader sensor pixel size	64 x 80

## **GPU**—Integrated

The following table lists the specifications of the integrated Graphics Processing Unit (GPU) supported by your Vostro 5301.

### Table 20. GPU—Integrated

Controller	External display support	Memory size	Processor
Intel Iris Xe Graphics	HDMI 2.0/ Display over USB Type-C	Shared system memory	11 <sup>th</sup> Generation Intel Core i5/i7

## **GPU—Discrete**

The following table lists the specifications of the discrete Graphics Processing Unit (GPU) supported by your Vostro 5301.

### Table 21. GPU—Discrete

Controller	External display support	Memory size	Memory type
NVIDIA GeForce MX350	NA	2 GB	GDDR5

## **Operating and storage environment**

This table lists the operating and storage specifications of your Vostro 5301.

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

### Table 22. Computer environment

Description	Operating	Storage
Temperature range	0 °C to 40 °C (32 °F to 104 °F)	-40°C to 65°C (-40°F to 149°F)
Relative humidity (maximum)	10% to 90% (non-condensing)	10% to 95% (non-condensing)
Vibration (maximum)*	0.66 GRMS	1.30 GRMS
Shock (maximum)	140 G†	160 G†
Altitude range	0 m to 3048 m (32 ft to 5518.4 ft)	0 m to 10668 m (32 ft to 19234.4 ft)

 $\ast$  Measured using a random vibration spectrum that simulates user environment.

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



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.

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

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

Use the BIOS Setup program for the following purposes:

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

## **Entering BIOS setup program**

#### About this task

Turn on (or restart) your computer and press F2 immediately.

## **Navigation keys**

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

#### Table 23. Navigation keys

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.
Spacebar	Expands or collapses a drop-down list, if applicable.
Tab	Moves to the next focus area. <b>NOTE:</b> For the standard graphics browser only.
Esc	Moves to the previous page until you view the main screen. Pressing Esc in the main screen displays a message that prompts you to save any unsaved changes and restarts the system.

### **Boot Sequence**

Boot Sequence allows 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 (if available)
   NOTE: XXX denotes the SATA drive number.
- Optical Drive (if available)
- SATA Hard Drive (if available)
- Diagnostics

### (i) NOTE: Choosing Diagnostics, will display the SupportAssist diagnostics screen.

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

## One time boot menu

To enter one time boot menu, turn on your computer, and then press F2 immediately.

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

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

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

(i) NOTE: Choosing Diagnostics, will display the SupportAssist diagnostics screen.

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

## System setup options

() NOTE: Depending on this computer and its installed devices, the items that are listed in this section may or may not be displayed.

### Table 24. System setup options—System information menu

Overview	
BIOS Version	Displays the BIOS version number.
Service Tag	Displays the Service Tag of the computer.
Asset Tag	Displays the Asset Tag of the computer.
Ownership Tag	Displays the ownership tag of the computer.
Manufacture Date	Displays the manufacture date of the computer.
Ownership Date	Displays the ownership date of the computer.
Express Service Code	Displays the express service code of the computer.
Ownership Tag	Displays the ownership tag of the computer.
Signed Firmware Update	Displays whether the signed firmware update is enabled.
Battery	Displays the battery health information.
Primary	Displays the primary battery.

### Table 24. System setup options—System information menu (continued)

Overview	
Battery Level	Displays the battery level.
Battery State	Displays the battery state.
Health	Displays the battery health.
AC Adapter	Displays whether an AC adapter is installed.
Processor Information	
Processor Type	Displays the processor type.
Maximum Clock Speed	Displays the maximum processor clock speed.
Core Count	Displays the number of cores on the processor.
Processor L2 Cache	Displays the processor L2 Cache size.
Processor ID	Displays the processor identification code.
Processor L3 Cache	Displays the processor L3 Cache size.
Current Clock Speed	Displays the current processor clock speed.
Minimum Clock Speed	Displays the minimum processor clock speed.
Microcode Version	Displays the microcode version.
Intel Hyper-Threading Capable	Displays whether the processor is Hyper-Threading (HT) capable.
64-Bit Technology	Displays whether 64-bit technology is used.
Memory Information	
Memory Installed	Displays the total computer memory installed.
Memory Available	Displays the total computer memory available.
Memory Speed	Displays the memory speed.
Memory Channel Mode	Displays single or dual channel mode.
Memory Technology	Displays the technology that is used for the memory.
Device Information	
Video Controller	Displays the integrate graphics information of the computer.
dGPU Video Controller	Displays the discrete graphics information of the computer.
Video BIOS Version	Displays the video BIOS version of the computer.
Video Memory	Displays the video memory information of the computer.
Panel Type	Displays the Panel Type of the computer.
Native Resolution	Displays the native resolution of the computer.
Audio Controller	Displays the audio controller information of the computer.
Wi-Fi Device	Displays the wireless device information of the computer.
Bluetooth Device	Displays the Bluetooth device information of the computer.

### Table 25. System setup options—Boot options menu

Boot options	
Advanced Boot Options	
Enable UEFI Network Stack	Enables or disables UEFI Network Stack.
	Default: OFF.
Boot Mode	
Boot Mode: UEFI only	Displays the boot mode of this computer.

### Table 25. System setup options—Boot options menu (continued)

Boot options	
Enable Boot Devices	Enables or disables boot devices for this computer.
Boot Sequence	Displays the boot sequence.
BIOS Setup Advanced Mode	Enables or disables advanced BIOS settings.
	Default: ON.
UEFI Boot Path Security	Enables or disables the system to prompt the user to enter the Admin password when booting a UEFI boot path from the F12 boot menu.
	Default: Always Except Internal HDD.

### Table 26. System setup options—System Configuration menu

System Configuration	
Date/Time	
Date	Sets the computer date in MM/DD/YYYY format. Changes to the date take effect immediately.
Time	Sets the computer time in HH/MM/SS 24-hour format. You can switch between 12-hour and 24-hour clock. Changes to the time take effect immediately.
Enable SMART Reporting	Enables or disables SMART (Self-Monitoring, Analysis, and Reporting Technology) during computer startup to report hard drive errors.
	Default: OFF.
Enable Audio	Enables or disables all integrated audio controller.
	Default: ON.
Enable Microphone	Enables or disables microphone.
	Default: ON.
Enable Internal Speaker	Enables or disables internal speaker.
	Default: ON.
USB Configuration	
Enable Boot Support	Enables or disables booting from USB mass storage devices such as external hard drive, optical drive, and USB drive.
Enable External USB Ports	Enables or disables USB ports to be functional in an operating system environment.
SATA Operation	Configures operating mode of the integrated SATA hard drive controller.
	Default: RAID. SATA is configured to support RAID (Intel Rapid Restore Technology).
Drives	Enables or disables various onboard drives.
M.2 PCIe SSD-0/SATA-2	Default: ON.
SATA-0	Default: ON.
Drive Information	Displays the information of various onboard drives.
Miscellaneous Devices	Enables or disables various onboard devices.
Enable Camera	Enables or disables the camera.
	Default: ON.
Keyboard Illumination	Configures the operating mode of the keyboard illumination feature.
	Default: Disabled. The keyboard illumination will always be off.

### Table 26. System setup options—System Configuration menu (continued)

System Configuration	
Keyboard Backlight Timeout on AC	Configures the timeout value for the keyboard when an AC adapter is connected to the computer. The keyboard backlight timeout value is only effect when the backlight is enabled.
	Default: 10 seconds.
Keyboard Backlight Timeout on Battery	Configures the timeout value for the keyboard when the computer is running on battery. The keyboard backlight timeout value is only effect when the backlight is enabled.
	Default: 10 seconds.
Touchscreen	Enables or disables the touchscreen for the operating system. () NOTE: Touchscreen will always work in the BIOS setup irrespective of this setting.
	Default: ON.

### Table 27. System setup options—Video menu

Video	
LCD Brightness	
Brightness on battery power	Sets the screen brightness when the computer is running on battery power.
Brightness on AC power	Sets the screen brightness when the computer is running on AC power.
EcoPower	Enables or disables EcoPower which increases the battery life by reducing the screen brightness when appropriate.
	Default: ON.

### Table 28. System setup options—Security menu

Security	
Enable Admin Setup Lockout	Enables or disables the user from entering BIOS Setup when an Admin Password is set.
	Default: OFF.
Password Bypass	Bypass the System (Boot) Password and the internal hard drive password prompts during a system restart.
	Default: Disabled.
Enable Non-Admin Password Changes	Enables or disables the user to change the system and hard drive password without the need for admin password.
	Default: ON.
Non-Admin Setup Changes	
Allow Wireless Switch Changes	Enables or disables changes to the setup option when an Administrator password is set.
	Default: OFF.
Enable UEFI Capsule Firmware Updates	Enables or disables BIOS updates through UEFI capsule update packages.
Computrace	Enable or disable the BIOS module interface of the optional Computrace(R) Service from Absolute Software.
Intel Platform Trust Technology On	Enables or disables Platform Trust Technology (PTT) visibility to the operating system.
	Default: ON.

### Table 28. System setup options—Security menu (continued)

Security	
PPI Bypass for Clear Commands	Enables or disables the operating system to skip BIOS Physical Presence Interface (PPI) user prompts when issuing the Clear command.
	Default: OFF.
Clear	Enables or disables the computer to clear the PTT owner information, and returns the PTT to the default state.
	Default: OFF.
Intel SGX	Enables or disables the Intel Software Guard Extensions (SGX) to provide a secured environment for running code/storing sensitive information.
	Default: Software Control
SMM Security Mitigation	Enables or disables additional UEFI SMM Security Mitigation protections.
	Default: OFF.
	(i) <b>NOTE:</b> This feature may cause compatibility issues or loss of functionality with some legacy tools and applications.
Enable Strong Passwords	Enables or disables strong passwords.
	Default: OFF.
Password Configuration	Control the minimum and maximum number of characters that are allowed for Admin and System passwords.
Admin Password	Sets, Changes, or deletes the administrator (admin) password (sometimes called the "setup" password).
System Password	Sets, Changes, or deletes the system password.
Enable Master Password Lockout	Enables or disables the master password support.
	Default: OFF.

### Table 29. System setup options—Secure Boot menu

Secure Boot	
Enable Secure Boot	Enables or disables the computer to boos using only validated boot software.
	Default: OFF.
	(i) NOTE: For Secure Boot to be enabled, the computer needs to be in UEFI boot mode and the Enable Legacy Option ROMs option needs to be turned off.
Secure Boot Mode	Selects the Secure Boot operation mode.
	Default: Deployed Mode.
	(i) NOTE: Deployed Mode should be selected for normal operation of Secure Boot.

### Table 30. System setup options—Expert Key Management menu

Expert Key Management	
Enable Custom Mode	Enables or disables the keys in the PK, KEK, db, and dbx security key databases to be modified.
	Default: OFF.
Custom Mode Key Management	Selects the custom values for expert key management.
	Default: PK.

### Table 31. System setup options—Performance menu

Performance	
Intel Hyper-Threading Technology	Enables or disables the Intel Hyper-Threading Technology to use processor resources more efficiently.
	Default: ON.
Intel SpeedStep	Enables or disables the Intel SpeedStep Technology to dynamically adjust processor voltage and core frequency, decreasing average power consumption and heat production.
	Default: ON.
Intel TurboBoost Technology	Enabled or disabled the Intel TurboBoost mode of the processor. If enabled, the Intel TurboBoost driver increases the performance of the CPU or graphics processor.
	Default: ON.
Multi-Core Support	Changes the number of CPU cores available to the operating system. The default value is set to the maximum number of cores.
	Default: All Cores.
Enable C-State Control	Enables or disables the CPU's ability to enter and exit low-power states.
	Default: ON.

### Table 32. System setup options—Power Management menu

Power Management	
Wake on AC	Enables the computer to turn on and go to boot when AC power is supplied to the computer.
	Default: OFF.
Auto on Time	Enables the computer to automatically power on for defined days and times.
	Default: Disabled. The system will not automatically power up.
Battery Charge Configuration	Enables the computer to run on battery during power usage hours. Use the below options to prevent AC power usage between certain times of each day.
	Default: Adaptive. Battery settings are adaptively optimized based on your typical battery usage pattern.
Enable Advanced Battery Charge Configuration	Enables Advanced Battery Charge Configuration from the beginning of the day to a specified work period. Advanced Battery Charged maximizes battery health while still supporting heavy use during the work day.
	Default: OFF.
Block Sleep	Blocks the computer from entering Sleep (S3) mode in the operating system.
	Default: OFF.
	() <b>NOTE:</b> If enabled, the computer will not go to sleep, Intel Rapid Start will be disabled automatically, and the operating system power option will be blank if it was set to Sleep.
Enable USB Wake Support	Enables the USB devices to wake the computer from Standby mode.
	Default: OFF.
Enable Intel Speed Shift Technology	Enables or disables Intel Speed Shift Technology support which enables the operating system to select the appropriate processor performance automatically.
	Default: ON.

### Table 32. System setup options—Power Management menu (continued)

Power Management	
Lid Switch	Enables the computer to power up from the off state whenever the lid is opened.
	Default: ON.

### Table 33. System setup options—Wireless menu

Wireless	
Wireless Switch	<ul> <li>Determines which wireless devices can be controlled by the Wireless Switch.</li> <li>For Windows 8 systems, this is controlled by an operating system drive directly.</li> <li>As a result, the setting does not affect the Wireless Switch behavior.</li> <li>(i) NOTE: When both WLAN and WiGig are present, enable/disable controls are tied together. Thus, they cannot be enabled or disabled independently.</li> </ul>
WLAN	Default: ON.
Bluetooth	Default: ON.
Wireless Device Enable	Enable or disable internal WLAN/Bluetooth devices.
WLAN	Default: ON.
Bluetooth	Default: ON.

### Table 34. System setup options—POST Behavior menu

POST	Behavior

Numlock Enable	Enables or disables Numlock when the computer boots.
	Default: ON.
Enable Adapter Warnings	Enables the computer to display adapter warning messages during boot.
	Default: ON.
Extend BIOS POST Time	Configures the BIOS POST (Power-On Self-Test) load time.
	Default: 0 seconds.
Fastboot	Configures the speed of the UEFI boot process.
	Default: Thorough. Performs complete hardware and configuration initialization during boot.
Fn Lock Options	Enables or disables the Fn lock mode.
	Default: ON.
Lock Mode	Default: Lock Mode Secondary. Lock Mode Secondary = If this option is selected, the F1-F12 keys scan the code for their secondary functions.
Pull Screen Logo	Enabled or disabled the computer to display full screen logo if the image match screen resolution.
	Default: OFF.
Warnings and Errors	Selects an action on encountering a warning or error during boot.
	Default: Prompt on Warnings and Errors. Stop, prompt and wait for user input when warnings or errors are detected.
	(i) <b>NOTE:</b> Errors deemed critical to the operation of the computer hardware will always halt the computer.

### Table 35. System setup options—Virtualization menu

Virtualization	
Intel Virtualization Technology	Enables the computer to run a virtual machine monitor (VMM).
	Default: ON.
VT for Direct I/O	Enables the computer to perform Virtualization Technology for Direct I/O (VT-d). VT-d is an Intel method that provides virtualization for memory map I/O.
	Default: ON.

### Table 36. System setup options—Maintenance menu

Maintenance	
Asset Tag	Creates a system Asset Tag that can be used by an IT administrator to uniquely identify a particular system. Once set in BIOS, the Asset Tag cannot be changed.
Service Tag	Displays the Service Tag of the computer.
BIOS Recovery from Hard Drive	Enables the computer to recover from a bad BIOS image, as long as the Boot Block portion is intact and functioning.
	Default: ON.
	(i) <b>NOTE:</b> BIOS recovery is designed to fix the main BIOS block and cannot work if the Boot Block is damaged. In addition, this feature cannot work in the event of EC corruption, ME corruption, or a hardware issue. The recovery image must exist on an unencrypted partition on the drive.
BIOS Auto-Recovery	Enables the computer to automatically recover the BIOS without user actions. This feature requires BIOS Recovery from Hard Drive to be set to Enabled.
	Default: OFF.
Start Data Wipe	CAUTION: This Secure Wipe Operation will delete information in a way that it cannot be reconstructed.
	If enabled, the BIOS will queue up a data wipe cycle for storage devices that are connected to the motherboard on the next reboot.
	Default: OFF.
Allow BIOS Downgrade	Controls flashing of the system firmware to previous revisions.
	Default: ON.

### Table 37. System setup options—System Logs menu

System Logs	
Power Event Log	Displays Power events.
	Default: Keep.
BIOS Event Log	Displays BIOS events.
	Default: Keep.
Thermal Event Log	Displays Thermal events.
	Default: Keep.

### Table 38. System setup options—SupportAssist menu

### SupportAssist Dell Auto operating system Recovery Threshold Controls the automatic boot flow for SupportAssist System Resolution Console and for Dell operating system Recovery tool.

### Table 38. System setup options—SupportAssist menu (continued)

SupportAssist	
	Default: 2.
SupportAssist operating system Recovery	Enables or disables the boot flow for SupportAssist operating system Recovery tool in the even of certain system errors.
	Default: ON.

### **Clearing BIOS (System Setup) and System passwords**

#### About this task

To clear the system or BIOS passwords, contact Dell technical support as described at www.dell.com/contactdell.

(i) NOTE: For information on how to reset Windows or application passwords, refer to the documentation accompanying Windows or your application.

## **Technology and components**

**NOTE:** Instructions provided in this section are applicable on computers shipped with Windows 10 operating system. Windows 10 is factory-installed with this computer.

## Audio

The following table lists the audio specifications of your Vostro 5301.

### Table 39. Audio specifications

Description		Values
Audio controller		Realtek ALC3204
Stereo conversion		Supported
Internal audio interface	9	HD audio interface
External audio interfac	e	Universal Audio Jack
Number of speakers		Тwo
Internal-speaker amplifier		Supported (audio codec integrated)
External volume contro	bls	No hardware volume buttons, keyboard shortcut controls
Speaker output:		
	Average speaker output	2 W
Peak speaker output		2.5 W
Subwoofer output		Not supported
Microphone		Dual array microphone

### Identifying the audio controller

#### Steps

- 1. On the taskbar, click the search box, and then type **Device Manager**.
- 2. Click Device Manager.
  - The **Device Manager** window is displayed.
- 3. Expand Sound, video and game controllers to view the audio controller.

### Changing the audio settings

### Steps

- 1. On the taskbar, click the search box, and then type  ${\bf Audio}.$
- 2. Click Audio and change the audio settings as required.

### Identifying the audio controller

### Steps

- 1. On the taskbar, click the search box, and then type **Device Manager**.
- 2. Click Device Manager.
- The **Device Manager** window is displayed.
- 3. Expand Sound, video and game controllers to view the audio controller.

## Camera

The following table lists the camera specifications of your Vostro 5301.

### Table 40. Camera specifications

Desc	ription	Values		
Num	per of cameras	One		
Came	era type	RGB HD camera		
Came	era location	Front camera		
Came	era sensor type	CMOS sensor technology		
Came	era resolution:			
Still image		0.92 megapixel		
Video		1280 x 720 (HD) at 30 fps		
Diago	onal viewing angle:	74.9 degrees		

### Identifying the webcam in device manager

### Steps

- 1. On the taskbar, click the search box, and then type **Device Manager**.
- 2. Click Device Manager. The Device Manager window is displayed.
- 3. Expand Camera Imaging Devices.

### Starting the camera application

### Steps

- 1. On the taskbar, click the search box, and then type **Camera**.
- 2. Click Camera.



## Display

The following table lists the display specifications of your Vostro 5301.

### Table 41. Display specifications

Description		Values
Display type		Full High Definition (FHD)
Display-panel tec	hnology	NA
Display-panel dim	nensions (active area):	
	Height	165.24 mm (6.5 in.)
	Width	293.76 mm (11.57 in.)
	Diagonal	337.82 mm (13.3 in.)
Display-panel nat	ive resolution	1920 x 1080
Luminance (typic	al)	300 nits
Megapixels		2.07
Color gamut		sRGB 95%
Pixels Per Inch (F	²PI)	166

### Table 41. Display specifications (continued)

Description	Values
Contrast ratio (min)	600:1
Response time (max)	35 ms
Refresh rate	60 Hz
Horizontal view angle	+/-80°
Vertical view angle	+/-80°
Pixel pitch	0.153 mm × 0.153 mm
Power consumption (maximum)	4 W
Anti-glare vs glossy finish	Anti-glare
Touch options	No

### Adjusting the brightness

### Steps

- 1. Right-click on your desktop and select **Display settings**.
- 2. Drag the Change brightness slider to adjust the brightness.

Settings			- 0	×	7
e Home	Display				
Find a setting	Brightness and color	Have a question?			^
System	Change brightness	occup			
Display	Night light	Make Windows bette Give us feedback	r		
Notifications & actions	Off Night light settings				
O Power & sleep	Scale and lavout				
Battery	Change the size of text, apps, and other items				
Storage	100% (Recommended)				
-B Tablet mode	Custom scaling				
Multitasking	Resolution       1366 × 769 (Recommended)				
X Shared experiences	Orientation				I
>< Remote Desktop	Landscape $\checkmark$				
① About	Multiple displays				
	Connect to a wireless display				Ļ
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Alternatively, press F11 to decrease brightness and F12 to increase brightness.

### Changing the screen resolution

### Steps

- 1. Right-click on your desktop and select **Display settings**.
- 2. Select the appropriate resolution from the drop-down list.
- 3. Click Apply.

Settings			-	ø	×
Ø Home	Display				
Find a setting $\begin{subarray}{c} \end{subarray} \end{subarray}$	Brightness and color	Have a question? Get help			
System	Night light	Make Windows bett Give us feedback	er		
Notifications & actions	Night light settings				
Battery	Scale and layout Change the size of text, apps, and other items				
Storage	100% (Recommended) V				
3 Tablet mode	Custom scaling				
Multitasking	1360 × 768 (Recommended) 1360 × 768				
Projecting to this PC	1280 × 768				
X Shared experiences	1280 × 600				
✓ Remote Desktop	1024 × 768 800 × 600				
<ul> <li>O About</li> <li>■ 戶 □ ○ □ ○ □ ○</li> </ul>		ቶ ^ ‱ *⁄ፈቀ <sup>EN</sup>	G 2:51	AM /2017	¢

### Rotating the display

### Steps

- 1. Right-click on your desktop.
- 2. Select Display Settings. The Settings window is displayed.
- 3. From the **Orientation** drop-down list, select one of the following options:
  - Landscape
  - Portrait
  - Landscape (flipped)
  - Portrait (flipped)

Settings			-	Ø	×
Home	Display				
Find a setting $\ensuremath{\mathcal{P}}$	Brightness and color	Have a question? Get help			
System	Night light	Make Windows bett	er		
Notifications & actions	Coff	Give us feedback			
O Power & sleep	Scale and layout				
Battery	Change the size of text, apps, and other items				
Tablet mode	Custom scaling				
Multitasking	Resolution 1366 × 768 (Recommended) ~				
Projecting to this PC	Orientation				
X Shared experiences	Landscape Portrait				
Remote Desktop	Landscape (flipped) Portrait (flipped)				
U AUDUI		£^ %ee *∷ d× ⊪N	IG 2:51 V 13/11	AM /2017	Q

4. Click Apply.

## Cleaning the display

### About this task

 $\triangle$  CAUTION: Do not use substances such as alcohol, chemicals, or household cleaners for cleaning the display.

CAUTION: To avoid damaging the display, do not apply force when cleaning and wipe off any remaining liquid after cleaning.

**NOTE:** A commercial display cleaning kit should be used for cleaning. If unavailable, use a soft, damp microfiber cloth lightly sprayed with distilled water.

### Steps

- 1. Turn off your computer and display before cleaning.
- 2. Gently wipe the display in circular motions to remove any dust or dirt particles.
- 3. Let the display dry thoroughly before turning it on.

## **GPU**—Integrated

The following table lists the specifications of the integrated Graphics Processing Unit (GPU) supported by your Vostro 5301.

### Table 42. GPU—Integrated

Controller	External display support	Memory size	Processor
Intel Iris Xe Graphics	HDMI 2.0/ Display over USB Type-C	Shared system memory	11 <sup>th</sup> Generation Intel Core i5/i7

### Identifying the display adapter

### Steps

- 1. On the taskbar, click the search box, and then type Device Manager.
- 2. Click Device Manager. The Device Manager window is displayed.
- **3.** Expand **Display adapters**.

### Changing the display settings

### Steps

- 1. On the taskbar, select Intel Graphics Command Center.
- 2. Click Display.



**3.** Change the display settings as required.

## **USB**

The following table shows the USB ports available in your computer.

### Table 43. USB ports and their locations

Ports	Location
One USB 3.2 Gen 1 (Type-A) port	Left side
One USB 3.2 Gen 1 (Type-A) port	Right side
One USB 3.2 Gen 1 (Type-C) with DisplayPort 1.2 port	Right side

### Enabling or disabling the USB in BIOS setup program

#### Steps

- 1. Turn on or restart your computer.
- Press F2 when the Dell logo is displayed on the screen to enter the BIOS setup program. The BIOS setup program is displayed.
- **3.** On the left pane, select **Settings** > **System Configuration** > **USB Configuration**. The USB configuration is displayed on the right pane.
- 4. Select or clear the Enable External USB Port check box to enable or disable it, respectively.
- 5. Save the settings and exit.

### Fixing a no-boot issue caused by USB-boot support

#### About this task

Sometimes the computer does not boot to the operating system when USB devices are connected to the computer during startup. This behavior occurs because the computer is looking for bootable files in connected USB devices.

Either disconnect USB devices before booting or follow these steps to fix the no-boot issue.

#### Steps

- 1. Turn on or restart your computer.
- 2. Press F2 when the Dell logo is displayed on the screen to enter the BIOS setup program.
  - () NOTE: The F2 prompt indicates that the keyboard is initialized. This prompt can appear very quickly, so you must watch for it, and then press F2. If you press F2 before the F2 prompt, this keystroke is lost. If you wait too long and the operating system logo appears, continue to wait until you see the desktop. Then, turn off your computer and try again.

The BIOS setup program is displayed.

- **3.** On the left pane, select **Settings** > **System Configuration** > **USB Configuration**. The USB configuration is displayed on the right pane.
- 4. Clear the Enable Boot Support check box to disable it.
- 5. Save the settings and exit.

## Wireless module

The following table lists the Wireless Local Area Network (WLAN) module specifications of your Vostro 5301.

Description	Option one	Option two
Model number	Qualcomm QCA61x4A (DW1820) (2x2) Wireless Adapter with Bluetooth 4.2	Intel Wi-Fi 6 AX201, 2x2, 802.11ax with Bluetooth 5.0
Transfer rate	<ul> <li>802.11ac - Up to 867 Mbps</li> <li>802.11n - Up to 450 Mbps</li> </ul>	<ul> <li>2.4 GHz 40M: Up to 574 Mbps</li> <li>5 GHz 80M: Up to 1.2 Gbps</li> <li>5 GHz 160M: Up to 2.4 Gbps</li> </ul>

#### Table 44. Wireless module specifications

### Table 44. Wireless module specifications (continued)

Description	Option one	Option two
	<ul> <li>802.11a/g - Up to 54 Mbps</li> <li>802.11b - Up to 11 Mbps</li> </ul>	
Frequency bands supported	2.4 GHz (802.11b/g/n) and 5 GHz (802.11a/n/ac)	2.4/5 GHz
Wireless standards	<ul> <li>802.11a, 802.11b, 802.11g, 802.11n and 802.11ac</li> <li>Dual-mode Bluetooth 4.2, BLE (HW ready, SW depends on OS)</li> </ul>	IEEE 802.11a/b/g/n/ac/ax, 160MHz channel use
Encryption	<ul><li>64-bit/128-bit WEP</li><li>AES-CCMP</li><li>TKIP</li></ul>	<ul> <li>64/128-bit WEP</li> <li>128-bit AES-CCMP</li> <li>TKIP</li> </ul>
Bluetooth	Bluetooth 5.0	Bluetooth 5.0

## **Media-card reader**

The following table lists the media cards supported by your Vostro 5301.

### Table 45. Media-card reader specifications

Description	Values
Media-card type	One micro-SD 3.0 card
Media-cards supported Secure Digital (SD)	
(i) NOTE: The maximum capacity supported by the media-card reader varies depending on the standard of the media card	

installed in your computer.

### Identifying the media-card reader

### Steps

- 1. On the taskbar, click the search box, and then type Device Manager.
- 2. Click Device Manager. The Device Manager window is displayed.
- 3. Expand Universal Serial Bus controllers.

### Browsing a media card

### Steps

- 1. Insert the media card with the metal contacts facing down. The card will auto-play and a notification is displayed on the screen.
- 2. Follow the onscreen instructions.

## Keyboard

The following table lists the keyboard specifications of your Vostro 5301.

### Table 46. Keyboard specifications

Description	Values
Keyboard type	• Standard spill resistant keyboard (Optional backlit)
Keyboard layout	QWERTY/ KANJI
Number of keys	<ul> <li>United States and Canada: 81 keys</li> <li>United Kingdom: 82 keys</li> <li>Japan: 85 keys</li> </ul>
Keyboard size	X=18.07 mm key pitch Y=18.07 mm key pitch
Keyboard shortcuts	Some keys on your keyboard have two symbols on them. These keys can be used to type alternate characters or to perform secondary functions. To type the alternate character, press Shift and the desired key. To perform secondary functions, press Fn and the desired key. (i) NOTE: You can define the primary behavior of the function keys (F1–F12) changing Function Key Behavior in BIOS setup program.

### Changing the keyboard language

### Steps

- 1. Click Start
- 2. Click Settings
- 3. Click Time & language > Region & language.
- 4. Click Add a language.
- 5. Choose the language you want to add and select a country for the language.
- 6. Under Languages, click the language that you want to set as the default language.
- 7. Click Set as default.

### **Keyboard shortcuts of Vostro 5301**

**NOTE:** Keyboard characters may differ depending on the keyboard language configuration. Keys used for shortcuts remain the same across all language configurations.

Some keys on your keyboard have two symbols on them. These keys can be used to type alternate characters or to perform secondary functions. The symbol shown on the lower part of the key refers to the character that is typed out when the key is pressed. If you press shift and the key, the symbol shown on the upper part of the key is typed out. For example, if you press **2**, **2** is typed out; if you press **Shift** + **2**, **a** is typed out.

The keys **F1-F12** at the top row of the keyboard are function keys for multi-media control, as indicated by the icon at the bottom of the key. Press the function key to invoke the task represented by the icon. For example, pressing **F1** mutes the audio (refer to the table below).

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

(i) NOTE: You can also define the primary behavior of the function keys (F1-F12) by changing Function Key Behavior in BIOS setup program.

Function key	Redefined key (for multimedia control)	Behavior
r]× F1	fn + CI× F1	Mute audio
<b>□</b> , <sup>F2</sup>	fn + , F2	Decrease volume
<b>لا)</b> ») F3	fn + 다»	Increase volume
	fn + DII F4	Play/Pause
کے ۔ F5	fn + ```	Toggle keyboard backlight
<b>:ب:</b> F6	fn + 🔅 F6	Decrease brightness
<b>F</b> 7	fn + +	Increase brightness
	fn + 🗗 F8	Switch to external display
prt sc F10	fn + prt sc	Print screen
home F11	fn + home F11	Home
end F12	fn + end F12	End

The **fn** key is also used with selected keys on the keyboard to invoke other secondary functions.

### Table 48. List of keyboard shortcuts

Function key	Behavior
fn + B	Pause/Break
fn + S	Toggle scroll lock
fn + R	System request
fn + ctrl	Open application menu
fn + esc	Toggle Fn-key lock
fn + H	Toggle Battery charge LED and HDD LED behavior
fn + T	Toggle Ultra performance mode
fn +	Emoji (Win + Period (.) or Win + Semicolon (;)

## Touchpad

The following table lists the touchpad specifications of your Vostro 5301.

### Table 49. Touchpad specifications

Description		Values
Touchpad resolution:		
	Horizontal	1229
	Vertical	749
Touchpad dimensions:		
	Horizontal	105 mm (4.13 in.)
	Vertical	65 mm (2.56 in.)

### Table 49. Touchpad specifications (continued)

Description	Values
Touchpad gestures	For more information about touchpad gestures available on Windows 10, see the Microsoft knowledge base article 4027871 at support.microsoft.com.

### Identifying the touchpad

#### Steps

- 1. On the taskbar, click the search box, and then type Device Manager.
- 2. Click Device Manager.
  - The **Device Manager** window is displayed.
- 3. Expand Mice and other pointing devices.

### Touchpad gestures

For more information about touchpad gestures for Windows 10, see the Microsoft knowledge base article 4027871 at support.microsoft.com.

## **Power adapter**

The following table lists the power adapter specifications of your Vostro 5301.

### Table 50. Power adapter specifications

Desc	ription	Option one	Option two
Туре		45 W	65 W
Conn	ector dimensions:		
	External diameter	4.50	4.50
	Internal diameter	2.90	2.90
Input	voltage	100 VAC-240 VAC	100 VAC-240 VAC
Input	frequency	50 Hz–60 Hz	50 Hz–60 Hz
Input	current (maximum)	1.30 A	1.60 A
Outp	ut current (continuous)	2.31 A	3.34 A
Rateo	d output voltage	19.50 VDC	19.50 VDC
Temp	erature 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)

## Chipset

The following table lists the details of the chipset supported by your Vostro 5301.

### Table 51. Chipset

Description	Values
Chipset	Intel
Processor	11 <sup>th</sup> Generation Intel Tiger Lake Core i5/i7
DRAM bus width	64-bit
Flash EPROM	32 MB
PCIe bus	Up to Gen3

### Identifying the chipset

### Steps

- 1. On the taskbar, click the search box, and then type **Device Manager**.
- 2. Click Device Manager. The Device Manager window is displayed.
- 3. Expand System devices.

## Memory

The following table lists the memory specifications of your Vostro 5301.

### Table 52. Memory specifications

Description	Values	
Memory slots	Onboard system memory	
Memory type	Single-channel LPDDR4x soldered down	
Memory speed	4267 MHz	
Maximum memory configuration	16 GB	
Minimum memory configuration	8 GB	
Memory configurations supported	<ul> <li>8 GB, 1 x 8 GB, LPDDR4, 4267 MHz</li> <li>16 GB, 2 x 8 GB, LPDDR4, 4267 MHz</li> <li>16 GB, 1 x 16 GB, LPDDR4, 4267 MHz</li> </ul>	

### Checking the system memory in Windows

### Steps

- 1. Click Start
- 2. Select Settings 🔅.
- 3. Click System > About.

### Checking the system memory in BIOS setup program

### Steps

- 1. Turn on or restart your computer.
- 2. Press F2 when the Dell logo is displayed to enter the BIOS setup program.
- **3.** On the left pane, select **Settings** > **General** > **System Information**. The memory information is displayed on the right pane.

### **Testing memory using ePSA diagnostics**

### Steps

- 1. Turn on or restart your computer.
- 2. Press F12 after the Dell logo is displayed on the screen to access the boot menu.
- 3. Use the arrow keys to highlight the **Diagnostics** menu option and press Enter.
- 4. Follow the instructions on the screen to complete the ePSA Pre-boot System Assessment (PSA).

(i) NOTE: If the operating system logo appears, wait until you see the desktop. Turn off your computer and try again.



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

## **Operating system**

- Windows 10 Home (64-bit)
- Windows 10 Pro (64-bit)
- Ubuntu 18.04 LTS (64-bit)

## Downloading the audio driver

#### Steps

- 1. Turn on your computer.
- 2. Go to www.dell.com/support.
- 3. Enter the Service Tag of your computer, and then click Submit.

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

- 4. Click Drivers & downloads.
- 5. Click the Detect Drivers button.
- 6. Review and agree to the Terms and Conditions to use SupportAssist, then click Continue.
- 7. If necessary, your computer starts to download and install SupportAssist.

(i) NOTE: Review on-screen instructions for browser-specific instructions.

- 8. Click View Drivers for My System.
- 9. Click Download and Install to download and install all driver updates detected for your computer.
- 10. Select a location to save the files.
- 11. If prompted, approve requests from User Account Control to make changes on the system.
- 12. The application installs all drivers and updates identified.
  - **NOTE:** Not all files can be installed automatically. Review the installation summary to identify if manual installation is necessary.
- 13. For manual download and installation, click Category.
- 14. Click Audio in the drop-down list.
- 15. Click **Download** to download the audio driver for your computer.
- 16. After the download is complete, navigate to the folder where you saved the audio driver file.
- 17. Double-click the audio driver file icon and follow the instructions on the screen to install the driver.

## Downloading the graphics driver

#### Steps

- 1. Turn on your computer.
- 2. Go to www.dell.com/support.
- 3. Enter the Service Tag of your computer, and then click Submit.

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

- 4. Click Drivers & downloads.
- 5. Click the Detect Drivers button.
- 6. Review and agree to the Terms and Conditions to use SupportAssist, then click Continue.
- 7. If necessary, your computer starts to download and install SupportAssist.

(i) NOTE: Review on-screen instructions for browser-specific instructions.

- 8. Click View Drivers for My System.
- 9. Click Download and Install to download and install all driver updates detected for your computer.
- 10. Select a location to save the files.
- 11. If prompted, approve requests from User Account Control to make changes on the system.
- 12. The application installs all drivers and updates identified.
  - **NOTE:** Not all files can be installed automatically. Review the installation summary to identify if manual installation is necessary.
- 13. For manual download and installation, click Category.
- 14. Click Video in the drop-down list.
- 15. Click **Download** to download the graphics driver for your computer.
- 16. After the download is complete, navigate to the folder where you saved the graphics driver file.
- 17. Double-click the graphics driver file icon and follow the instructions on the screen to install the driver.

## Downloading the USB driver

#### Steps

- 1. Turn on your computer.
- 2. Go to www.dell.com/support.
- 3. Enter the Service Tag of your computer, and then click Submit.

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

- 4. Click Drivers & downloads.
- 5. Click the Detect Drivers button.
- 6. Review and agree to the Terms and Conditions to use SupportAssist, then click Continue.
- 7. If necessary, your computer starts to download and install SupportAssist.

(i) **NOTE:** Review on-screen instructions for browser-specific instructions.

- 8. Click View Drivers for My System.
- 9. Click Download and Install to download and install all driver updates detected for your computer.
- 10. Select a location to save the files.
- 11. If prompted, approve requests from User Account Control to make changes on the computer.
- 12. The application installs all drivers and updates identified.

**NOTE:** Not all files can be installed automatically. Review the installation summary to identify if manual installation is necessary.

- 13. For manual download and installation, click Category.
- 14. Click Chipset in the drop-down list.
- 15. Click **Download** to download the USB driver for your computer.
- 16. After the download is complete, browse the folder where you saved the USB driver file.
- 17. Double-click the USB driver file icon and follow the instructions on the screen to install the driver.

## Downloading the WiFi driver

### Steps

- 1. Turn on your computer.
- 2. Go to www.dell.com/support.
- 3. Enter the Service Tag of your computer, and then click **Submit**.

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

- 4. Click Drivers & downloads.
- 5. Click the Detect Drivers button.
- 6. Review and agree to the Terms and Conditions to use SupportAssist, then click Continue.
- 7. If necessary, your computer starts to download and install SupportAssist.

(i) NOTE: Review on-screen instructions for browser-specific instructions.

- 8. Click View Drivers for My System.
- 9. Click Download and Install to download and install all driver updates detected for your computer.
- **10.** Select a location to save the files.
- 11. If prompted, approve requests from User Account Control to make changes on the system.
- 12. The application installs all drivers and updates identified.

**NOTE:** Not all files can be installed automatically. Review the installation summary to identify if manual installation is necessary.

- 13. For manual download and installation, click Category.
- 14. Click Network in the drop-down list.
- 15. Click **Download** to download the WiFi driver for your computer.
- 16. After the download is complete, navigate to the folder where you saved the WiFi driver file.
- 17. Double-click the WiFi driver icon and follow the instructions on the screen to install the driver.

## Downloading the media-card reader driver

### Steps

- 1. Turn on your computer.
- 2. Go to www.dell.com/support.
- 3. Enter the Service Tag of your computer, and then click Submit.

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

- 4. Click Drivers & downloads.
- 5. Click the Detect Drivers button.
- 6. Review and agree to the Terms and Conditions to use SupportAssist, then click Continue.
- 7. If necessary, your computer starts to download and install SupportAssist.

(i) NOTE: Review on-screen instructions for browser-specific instructions.

- 8. Click View Drivers for My System.
- 9. Click Download and Install to download and install all driver updates detected for your computer.
- 10. Select a location to save the files.
- 11. If prompted, approve requests from User Account Control to make changes on the system.
- 12. The application installs all drivers and updates identified.

**NOTE:** Not all files can be installed automatically. Review the installation summary to identify if manual installation is necessary.

- 13. For manual download and installation, click Category.
- 14. Click Chipset in the drop-down list.
- 15. Click Download to download the media-card reader driver for your computer.
- 16. After the download is complete, navigate to the folder where you saved the media-card reader driver file.
- 17. Double-click the media-card reader driver file icon and follow the instructions on the screen to install the driver.

## Downloading the chipset driver

### Steps

- 1. Turn on your computer.
- 2. Go to www.dell.com/support.
- 3. Enter the Service Tag of your computer, and then click Submit.

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

- 4. Click Drivers & downloads.
- 5. Click the **Detect Drivers** button.
- 6. Review and agree to the Terms and Conditions to use SupportAssist, then click Continue.
- 7. If necessary, your computer starts to download and install SupportAssist.

(i) NOTE: Review on-screen instructions for browser-specific instructions.

- 8. Click View Drivers for My System.
- 9. Click Download and Install to download and install all driver updates detected for your computer.
- 10. Select a location to save the files.
- 11. If prompted, approve requests from User Account Control to make changes on the computer.
- 12. The application installs all drivers and updates identified.

**NOTE:** Not all files can be installed automatically. Review the installation summary to identify if manual installation is necessary.

- 13. For manual download and installation, click Category.
- 14. Click Chipset in the drop-down list.
- 15. Click Download to download the chipset driver for your computer.
- 16. After the download is complete, browse the folder where you saved the chipset driver file.
- 17. Double-click the chipset driver file icon and follow the instructions on the screen to install the driver.

## Downloading the network driver

#### Steps

- 1. Turn on your computer.
- 2. Go to www.dell.com/support.
- 3. Enter the Service Tag of your computer, and then click Submit.

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

- 4. Click Drivers & downloads.
- 5. Click the Detect Drivers button.
- 6. Review and agree to the Terms and Conditions to use SupportAssist, then click Continue.
- 7. If necessary, your computer starts to download and install SupportAssist.

(i) NOTE: Review on-screen instructions for browser-specific instructions.

- 8. Click View Drivers for My System.
- 9. Click Download and Install to download and install all driver updates detected for your computer.
- **10.** Select a location to save the files.
- 11. If prompted, approve requests from User Account Control to make changes on the system.
- 12. The application installs all drivers and updates identified.
  - **NOTE:** Not all files can be installed automatically. Review the installation summary to identify if manual installation is necessary.
- 13. For manual download and installation, click Category.
- 14. Click Network in the drop-down list.
- 15. Click **Download** to download the network driver for your computer.
- 16. After the download is complete, navigate to the folder where you saved the network driver file.
- 17. Double-click the network driver file icon and follow the instructions on the screen to install the driver.

7

## **Getting help and contacting Dell**

## Self-help resources

You can get information and help on Dell products and services using these self-help resources:

### Table 53. Self-help resources

Self-help resources	Resource location
Information about Dell products and services	https://www.dell.com/
Dell Support	Deell
Tips	· 🌪
Contact Support	In Windows search, type Contact Support, and press Enter.
Online help for operating system	<ul> <li>Windows: https://www.dell.com/support/windows</li> <li>Linux: https://www.dell.com/support/linux</li> </ul>
Troubleshooting information, user manuals, set up instructions, product specifications, technical help blogs, drivers, software updates, and so on.	https://www.dell.com/support/home/
Dell knowledge base articles for various of system concerns:	<ol> <li>Go to https://www.dell.com/support/home/? app=knowledgebase.</li> <li>Type the subject or keyword in the Search box.</li> <li>Click Search to retrieve the related articles.</li> </ol>
<ul> <li>Learn and get more information about your product:</li> <li>Product specifications</li> <li>Operating system</li> <li>Setting up and using your product</li> <li>Data backup</li> <li>Troubleshooting and diagnostics</li> <li>Factory and system restore</li> <li>BIOS information</li> </ul>	<ul> <li>Dell provides several online and telephone-based support and service options. If you do not have an active Internet connection, you can find contact information about your purchase invoice, packing slip, bill, or Dell product catalog.</li> <li>Select Detect Product.</li> <li>Locate your product through the drop-down menu under View Products.</li> <li>Enter the Service Tag number or Product ID in the search bar.</li> <li>Once on product support page, scroll down to Manuals and Documents section to preview all the Manuals, documents, and other information for your product.</li> </ul>

## Contacting Dell

Dell provides several online and telephone-based support and service options. If you do not have an active Internet connection, you can find contact information about your purchase invoice, packing slip, bill, or Dell product catalog. Availability varies by country/region 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 https://www.dell.com/support/.
- 2. Select your country/region from the drop-down menu on the lower right corner of the page.

#### 3. For customized support:

- a. Enter your system Service Tag in the Enter your Service Tag field.
- b. Click submit.
  - The support page that lists the various support categories is displayed.
- 4. For general support:
  - **a.** Select your product category.
  - **b.** Select your product segment.
  - c. Select your product.
    - The support page that lists the various support categories is displayed.
- 5. For contact details of Dell Global Technical Support, see https://www.dell.com/contactdell.
  - **NOTE:** The Contact Technical Support page is displayed with details to call, chat, or email the Dell Global Technical Support team.

(i) NOTE: Availability varies by country/region and product, and some services may not be available in your area.