Dell Vostro 5880

Setup and specifications guide



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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 computer

Steps

1. Connect the keyboard and mouse.



2. Connect to your network using a cable, or connect to a wireless network.



3. Connect the display.



4. Connect the power cable.



5. Press the power button.



6. 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.
- 7. Locate and use Dell apps from the Windows Start menu—Recommended

Table 1. Locate Dell apps

Dell apps	Details
	Dell Product Registration Register your computer with Dell.

Table 1. Locate Dell apps (continued)

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

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Chassis overview

Topics:

- Front
- Back
- System board layout

Front



- 1. Optical drive
- 2. Power button with diagnostics LED
- 3. SD-card reader
- 4. Hard drive activity light
- 5. Universal audio/microphone connector
- 6. USB 2.0 port with PowerShare
- 7. USB 2.0 port
- 8. USB 3.2 Gen 1 Type-C port
- 9. USB 3.2 Gen 1 Type-A port

Back



- 1. Line-Out Audio jack (Re-tasking to Line-in)
- 2. HDMI 1.4b port
 - () NOTE: This port is not available for computers shipped with 10th Generation Intel Core i5-10400F and 10th Generation Intel Core i7-10700F processors.
- 3. DisplayPort 1.4
 - () NOTE: This port is not available for computers shipped with 10th Generation Intel Core i5-10400F and 10th Generation Intel Core i7-10700F processors.
- 4. Serial port
- 5. USB 3.2 Gen 1 Type-A ports
- 6. USB 2.0 ports with Smart power on
- 7. Expansion card slots
- 8. Power connector port
- 9. Power-supply diagnostics light
- 10. Kensington lock slot
- 11. Network port
- 12. pad lock slot

System board layout



- 1. PSU power connector
- 3. Memory module slot
- 5. M.2 SSD card reader slot
- 7. M.2 WLAN slot
- 9. SATA3 connector (white)
- 11. ATX power connector
- 13. CMOS_CLR/Password/Service_Mode jumper
- 15. PCle x1 (Slot4)
- 17. PCI-32 (Slot3)
- 19. PCIe x1 (Slot1)
- 21. Processor socket

- 2. Processor fan connector
- 4. Power button connector
- 6. SATA0 connector (blue)
- 8. SATA1/2 connector (black)
- 10. SATA power connector
- 12. Coin-cell battery
- 14. APS/PETS connector (Debug)
- 16. LPC debug card connector
- 18. PCle x16 (Slot2)
- 20. M.2 2230/2280 SSD/Optane card connector

Specifications of Vostro 5880

Topics:

- Dimensions and weight
- Processors
- Chipset
- Operating system
- Memory
- Storage
- Ports and connectors
- Communications
- Audio
- Intel Optane memory
- Media-card reader
- Video
- Power supply unit
- Computer environment
- Energy Star and Trusted Platform Module (TPM)
- Accessories
- Add-in cards

Dimensions and weight

Table 2. Dimensions and weight

Description Va		Values
Height:		
	Front	367 mm (14.44 in.)
	Rear	367 mm (14.44 in.)
V	Vidth	169 mm (8.65 in.)
C	lepth	300.50 mm (11.83 in.)
V	Veight (maximum)	 7.95 kg (17.52 lb) NOTE: The weight of your computer depends on the configuration ordered and the manufacturing variability.

Processors

Table 3. Processors

Description	Val	ues			
Processors	10 th Generation Intel Core i3-10100	10 th Generation Intel Core i5-10400	10 th Generation Intel Core i5-10400F	10 th Generation Intel Core i7-10700	10 th Generation Intel Core i7-10700F

Table 3. Processors (continued)

Description	Val	ues			
Wattage	65 W	65 W	65 W	65 W	65 W
Core count	4	6	6	8	8
Thread count	8	12	12	16	16
Speed	3.6 GHz to 4.3 GHz	2.9 GHz to 4.3 GHz	2.9 GHz to 4.3 GHz	2.9 GHz to 4.8 GHz	2.9 GHz to 4.8 GHz
Cache	6 MB	12 MB	12 MB	16 MB	16 MB
Integrated graphics	Intel UHD Graphics 630	Intel UHD Graphics 630	NA	Intel UHD Graphics 630	NA

Chipset

Table 4. Chipset

Description	Values
Chipset	H470
Processor	10 th Generation Intel core i3/i5/i7
DRAM bus width	64-bit
PCIe bus	Up to Gen3

Operating system

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

Memory

Table 5. Memory specifications

Description	Values
Slots	Two UDIMM slots
Туре	Dual-channel DDR4
Speed	2666 MHz for Intel i3/i5 processors, 2933 MHz for Intel i7 processor
Maximum memory	64 GB
Minimum memory	4 GB
Memory size per slot	4 GB, 8 GB, 16 GB, 32 GB

Table 5. Memory specifications (continued)

Description	Values
Configurations supported	 4 GB, 1 x 4 GB, DDR4, (2666 MHz for Intel i3/i5 processors, 2933 MHz for Intel i7 processor) 8 GB, 1 x 8 GB, DDR4, (2666 MHz for Intel i3/i5 processors, 2933 MHz for Intel i7 processor) 8 GB, 2 x 4 GB, DDR4, (2666 MHz for Intel i3/i5 processors, 2933 MHz for Intel i7 processor) 12 GB, 1 x 4 GB and 1 x 8 GB, DDR4, (2666 MHz for Intel i3/i5 processors, 2933 MHz for Intel i7 processor) 16 GB, 1 x 16 GB, DDR4, (2666 MHz for Intel i3/i5 processors, 2933 MHz for Intel i7 processor) 16 GB, 2 x 8 GB, DDR4, (2666 MHz for Intel i3/i5 processors, 2933 MHz for Intel i7 processor) 16 GB, 1 x 16 GB, DDR4, (2666 MHz for Intel i3/i5 processors, 2933 MHz for Intel i7 processor) 32 GB, 1 x 32 GB, DDR4, (2666 MHz for Intel i3/i5 processors, 2933 MHz for Intel i7 processor) 32 GB, 2 x 16 GB, DDR4, (2666 MHz for Intel i3/i5 processors, 2933 MHz for Intel i7 processor) 64 GB, 2 x 32 GB, DDR4, (2666 MHz for Intel i3/i5 processors, 2933 MHz for Intel i7 processor)

Storage

Your computer supports one of the following configurations:

- One 3.5-inch hard drive
- One M.2 2230 SSD or One M.2 2280 SSD/Intel Optane Module

The primary drive of your computer varies with the storage configuration. For computers:

- with a M.2 solid-state drive, the M.2 solid-state drive is the primary drive
- without a M.2 solid-state drive, the 3.5-inch hard drive is the primary drive

Table 6. Storage specifications

Storage type	Interface type	Capacity
3.5-inch 7200 rpm HDD	SATA 3.0	2 ТВ
M.2 2230 PCIe NVMe SSD	PCle	Up to 512 GB

Ports and connectors

Table 7. External ports and connectors

Description	Values	
External:		
Network	1 RJ-45 port	
USB	 1 USB 2.0 port (Front) 1 USB 2.0 port with Power share (Front) 1 USB 3.2 Gen 1 (Type-A) port (Front) 1 USB 3.2 Gen 1 (Type-C) port (Front) 2 USB 3.2 Gen 1 (Type-A) ports (Rear) 2 USB 2.0 ports with Smart Power On (Rear) 	

Table 7. External ports and connectors (continued)

Description	Values	
Audio	 1 universal audio jack (front) 1 Line-Out Audio jack (Re-tasking to Line-in) (rear) 	
Video	One HDMI 1.4b port/One DisplayPort 1.4 (i) NOTE: These ports are not available for computers shipped with 10 th Generation Intel Core i5-10400F and 10 th Generation Intel Core i7-10700F processors.	
Media card reader	1 SD-card 3.0 slot (optional)	
Expansion card	Supported	
Smart card reader	Supported	
External Device	1 Serial Port	
Docking port	Not supported	
Power adapter port	1 AC-in	
Security	 1 padlock loop 1 Kensington slot	

Table 8. Internal ports and connectors

Description	Values
Internal:	
Expansion	2 PCI-e x1 / One PCI-e x16 / 1 PCI-32 expansion card slot
SATA slots	4 SATA Slots for 3.5-inch HDD/ ODD
M.2	 1 M.2 slot for Wi-Fi and Bluetooth 1 M.2 2230/2280 slot for solid-state drive/Intel Optane (i) NOTE: To learn more about the features of different types of M.2 cards, see the knowledge base article SLN301626.

Communications

Ethernet

Table 9. Ethernet specifications

Description	Values
Model number	1219V
Transfer rate	10/100/1000 Mbps

Wireless module

Table 10. Wireless module specifications

Description	Values		
Model number	Qualcomm QCA61x4A	Qualcomm QCA9377	Realtek RTL8723DE
Transfer rate	Up to 867 Mbps	Up to 433 Mbps	Up to 150 Mbps
Frequency bands supported	2.4 GHz/ 5 GHz	2.4 GHz/ 5 GHz	2.4 GHz
Wireless standards	• Wi-Fi 802.11ac	• Wi-Fi 802.11ac	• Wi-Fi 802.11b/g/n
Encryption	 64/128-bit WEP AES-CCMP TKIP 	 64/128-bit WEP AES-CCMP TKIP 	 64/128-bit WEP AES-CCMP TKIP
Bluetooth	Bluetooth 5.0	Bluetooth 5.0	Bluetooth 4.2

Audio

Table 11. Audio specifications

Description		Values
Controller		Realtek ALC3246
Stereo conversion		Supported
Internal interface		High definition audio interface
External interface		Universal Audio Jack
Speakers		N/A
Internal speaker amplifier		Not supported
External volume contro	ls	N/A
Speaker output:		
	Average	2 W
	Peak	2.5 W
Subwoofer output		Not supported
Microphone		Not supported

Intel Optane memory

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

(i) **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)

• Latest version of Intel Rapid Storage Technology driver

Table 12. Intel Optane memory

Description	Values
Туре	Storage accelerator
Interface	PCle 3.0
Connector	M.2 2280
Configurations supported	32 GB
Capacity	32 GB

Media-card reader

Table 13. Media-card reader specifications

Description	Values
Туре	One SD 3.0 card slot (optional)
Cards supported	 Secure Digital TM (SD) MultiMediaCard TM (MMC) SDHC, SDXC, Mini-SD, Micro-SD (T-flash) MMC, MMCPlus and MMC-micro Memory Stick TM (MS), Memory Stick PROTM (MS-PRO), Duo, MS-PRO Duo and Micro-MS (M2) MSPRO-HG Duo 8-bit mode xD-Picture Card TM (xD)

Video

Table 14. Discrete graphics specifications

Discrete graphics			
Controller	External display support	Memory size	Memory Type
NVIDIA 1660 TI	1 DL-DVI-D/1 DisplayPort /1 HDMI port	6 GB	GDDR6
NVIDIA 2060	1 DL-DVI-D/1 DisplayPort /1 HDMI port	6 GB	GDDR6
NVIDIA 2070 Super	3 DisplayPort 1.4 /1 HDMI port 2.0b	8 GB	GDDR6
NVIDIA GT 730	1 DVI-D/1 VGA/1 HDMI port	2 GB	GDDR5

Table 15. Integrated graphics specifications

Integrated graphics			
Controller	External display support	Memory size	Processor
Intel UHD 630 Graphics	One HDMI port/One DisplayPort	, , ,	10th Generation Intel core i3/i5/i7

Power supply unit

Table 16. Power supply unit specifications

Description	Values	
Туре	D9 260 W EPA Bronze	D10 460 W EPA Bronze
Diameter (connector)	Not supported	Not supported
Input voltage	90 VAC to 264 VAC	90 VAC to 264 VAC
Input frequency	47 Hz to 63 Hz	47 Hz to 63 Hz
Input current (maximum)	4.20 A	7 A
Output current (continuous)	 +12 VA/16.50 A +12 VB/16 A +12 VSB/2.50 A Standby mode: +12 VA/0.5 A +12 VB/2.5 A 	 +12 VA1/18 A +12 VA2/18 A +12 VB/18 A +12 VC/18 A Standby mode: +12 VA1/1.50 A +12 VA2/1.50 A +12 VB/2.50 A
Rated output voltage	 +12 VA +12 VB 	 +12 VA1 +12 VA2 +12 VB +12 VC
Temperature range:		
Operating	5°C to 45°C (41°F to 113°F)	5°C to 45°C (41°F to 113°F)
Storage	-40°C to 70°C (-40°F to 158°F)	-40°C to 70°C (-40°F to 158°F)

Computer environment

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

Table 17. Computer environment

Description	Operating	Storage
Temperature range	10°C to 35°C (50°F to 95°F)	-40°C to 65°C (-40°F to 149°F)
Relative humidity (maximum)	20% to 80% (non-condensing)	5% to 95% (non-condensing)
Vibration (maximum)*	0.26 GRMS	1.37 GRMS
Shock (maximum)	40 G†	105 G†
Altitude (maximum)	0 m to 3048 m (0 ft to 10,000 ft)	0 m to 10668 m (0 ft to 35,000 ft)

 \ast 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.

Energy Star and Trusted Platform Module (TPM)

Table 18. Energy Star and TPM

Features	Specifications
TPM (Optional)	HW/FW Trusted Platform Module support

Accessories

Table 19. Accessories

Accessories	
Audio	Dell Pro Stereo Headset - UC350
Keyboard and Mice	Dell Wireless Keyboard and Mouse, KM636, Black
Monitors	Dell 24 Monitor - E2420HS
Stands and Mounts	 Dell Dual Monitor Arm - MDA20 Dell Dual Monitor Stand - MDS19 Dell Single Monitor Arm - MSA20

Add-in cards

Table 20. Add-in cards

Add-in cards

Serial and parallel port PCIe card

Getting help

Topics:

• Contacting Dell

Contacting Dell

Prerequisites

() 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.

About this task

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:

Steps

- 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.

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