Vostro 3681

Setup and Specifications

Regulatory Model: D15S
Regulatory Type: D15S002
August 2021
Rev. A02

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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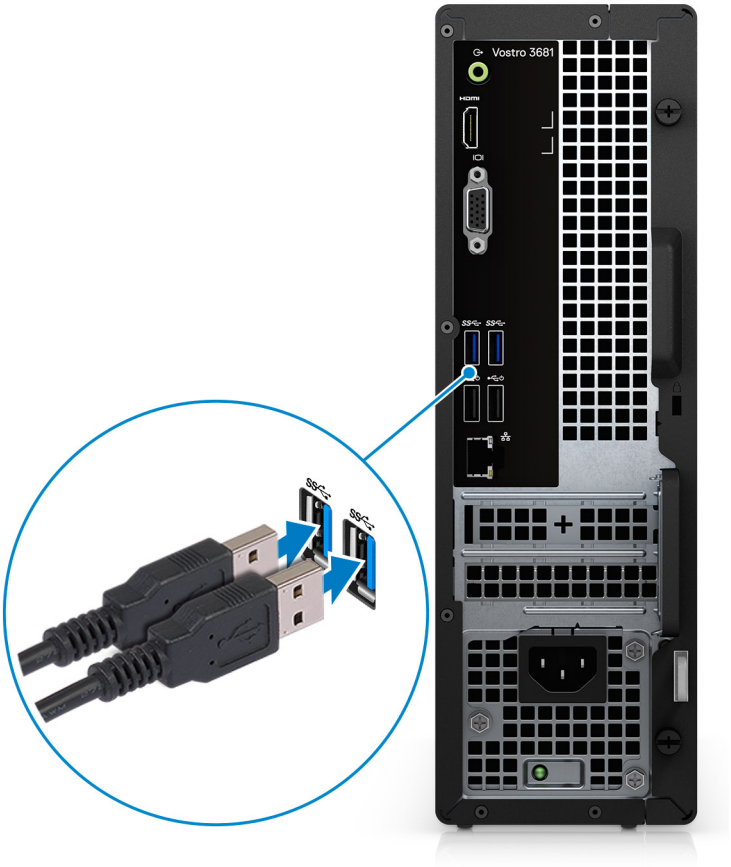
1

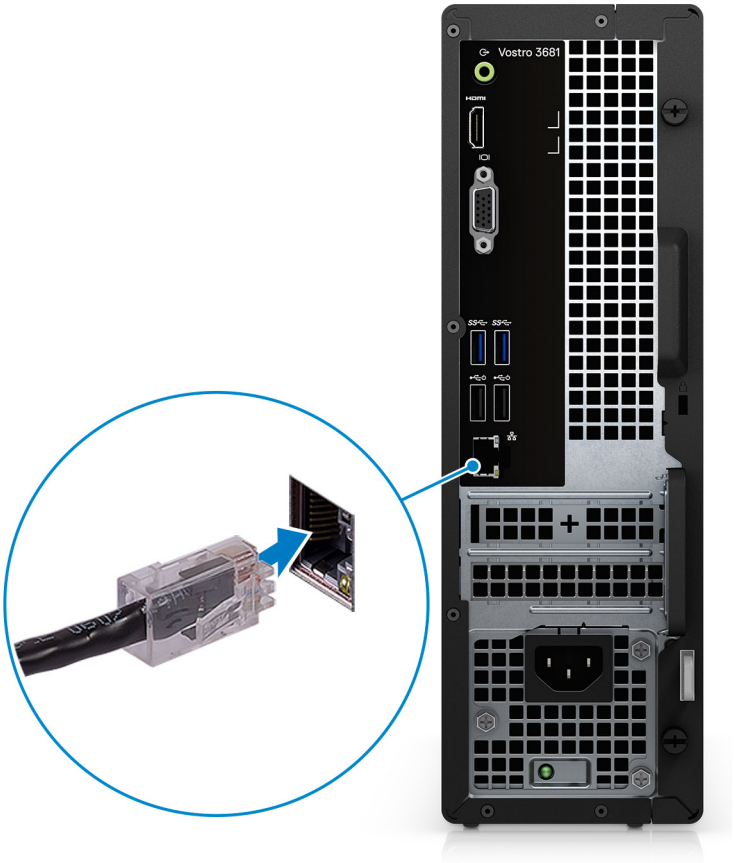
Set up your computer

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.

NOTE: If you ordered your computer with a discrete graphics card. Connect the display cable to the discrete graphics card connectors.

4. Connect the power cable.

5. Press the power button.

6. Finish operating system setup.

   For Ubuntu:

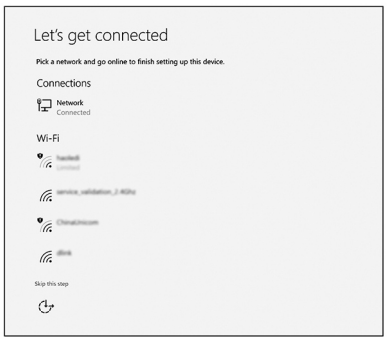
   Follow the on-screen instructions to complete the setup. For more information about installing and configuring Ubuntu, see the knowledge base articles SLN151664 and SLN151748 at www.dell.com/support.

   For Windows: Follow the on-screen instructions to complete the setup. When setting up, Dell recommends that you:

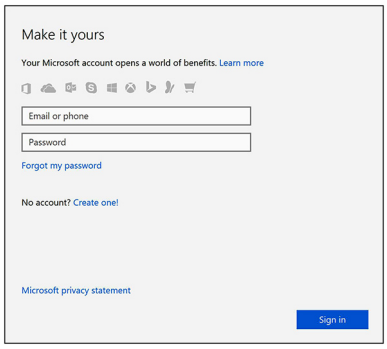
   - Connect to a network for Windows updates.

     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.

   a. Connect to a network.

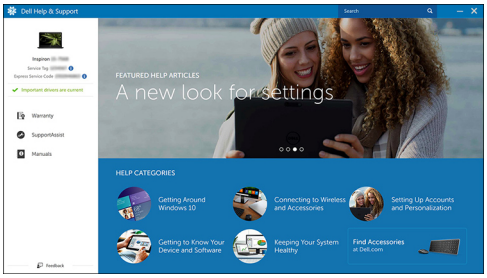


   b. Sign-in to your Microsoft account or create a new account.



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

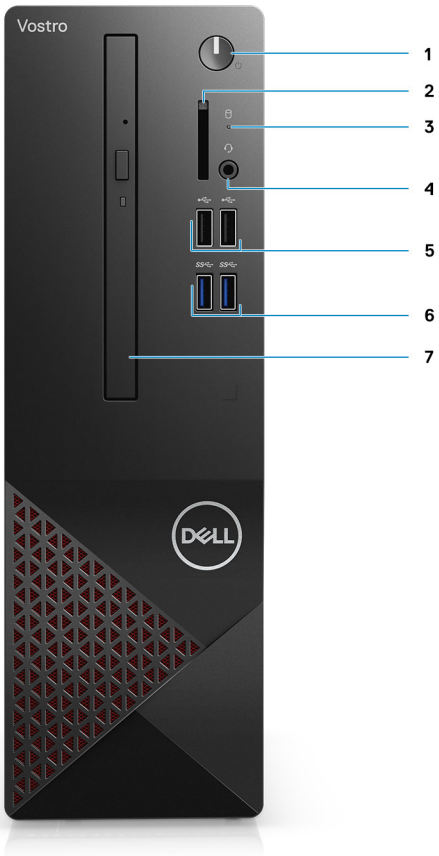
Table 1. Locate Dell apps

	Dell Product Registration Register your computer with Dell.
	Dell Help & Support Access help and support for your computer. 
	SupportAssist Proactively checks the health of your computer's hardware and software. **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.

2

Chassis overview

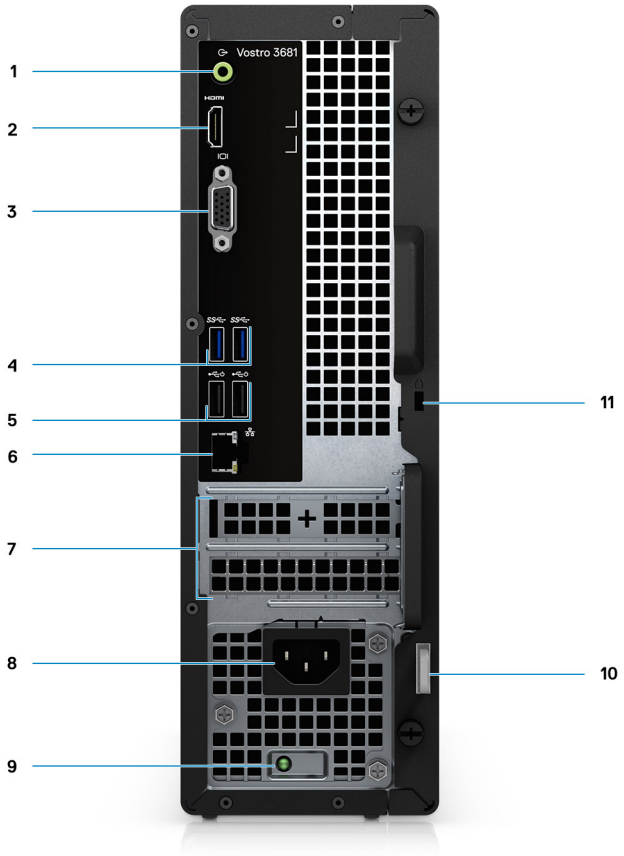
Front



1. Power button
2. SD card reader
3. HDD activity LED
4. Combo audio jack

   NOTE: 3.5 mm Global Headset Jack functionality varies by model configuration. For best results, use Dell recommended audio accessories.
5. 2 x USB 2.0 Type-A ports
6. 2 x USB 3.2 Gen 1 Type-A ports
7. 9.5 mm DVD +/- R/W tray type optical drive (optional)

Back



1. ● Line-out re-tasking Line-in jack (For Computer with Realtek configuration)
   ● Line-out jack (For computer with C-Media configuration)
2. HDMI 1.4b port
3. VGA port
4. 2 x USB 3.2 Gen 1 Type-A ports
5. 2 x USB 2.0 Type-A ports with Smart Power On
6. Ethernet port
7. Expansion slots
8. Power port
9. PSU indicator LED
10. Padlock ring
11. Kensington cable lock slot

3

Specifications of Vostro 3681

Dimensions and weight

Table 2. Dimensions and weight

Description	Values
Height	290 mm (11.42 in.)
Width	92.6 mm (3.65 in.)
Depth	292.8 mm (11.53 in.)
Weight (approximate)	4.66 Kg (10.28 lb) — Maximum
NOTE: The weight of your system unit varies depending on the configuration ordered and the manufacturing variability.	

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.

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

Table 3. Processors

Processors	Wattage	Core count	Thread count	Speed	Cache	Integrated graphics
10th Generation Intel Pentium Gold G-6400	58 W	2	4	Up to 4.0 GHz	4 MB	Intel UHD Graphics 610
10th Generation Intel Core i3-10100	65 W	4	8	3.6 GHz to 4.3 GHz	6 MB	Intel UHD Graphics 630
10th Generation Intel Core i5-10400F	65 W	6	12	2.9 GHz to 4.3 GHz	12 MB	N/A
10th Generation Intel Core i5-10400	65 W	6	12	2.9 GHz to 4.3 GHz	12 MB	Intel UHD Graphics 630
10th Generation Intel Core i7-10700	65 W	8	16	2.9 GHz to 4.8 GHz	16 MB	Intel UHD Graphics 630

Table 3. Processors (continued)

Processors	Wattage	Core count	Thread count	Speed	Cache	Integrated graphics
10th Generation Intel Core i7-10700F	65 W	8	16	2.9 GHz to 4.8 GHz	16 MB	N/A
10th Generation Intel Celeron G-5900	58 W	2	2	Up to 3.4 GHz	2 MB	Intel UHD Graphics 610
10th Intel Celeron G5905	58 W	2	2	Up to 3.5 GHz	4 MB	Intel UHD Graphics 610
10th Intel Pentium Gold 6405	58 W	2	4	Up to to 4.1 GHz	4 MB	Intel UHD Graphics
10th Intel Core i3-10105	65 W	4	8	3.7 GHz to 4.4 GHz	6 MB	Intel UHD Graphics
10th Intel Core i5-10505	65 W	6	12	3.2 GHz to 4.6 GHz	12 MB	Intel UHD Graphics 630

Chipset

Table 4. Chipset

Description	Values
Chipset	B460
Processor	10th Generation Intel Core i3/i5/i7 and Intel Pentium Gold G-6400 and Celeron G-5900
DRAM bus width	64-bit
PCIe bus	Up to Gen3

Operating system

Your Vostro 3681 supports the following operating systems:

- Windows 11 Home, 64-bit
- Windows 11 Home National Academic, 64-bit
- Windows 11 Pro, 64-bit
- Windows 11 Pro National Academic, 64-bit
- Windows 10 Home, 64-bit
- Windows 10 Pro, 64-bit
- Ubuntu 18.04 LTS, 64-bit

Memory

Table 5. Memory specifications

Description	Values
Slots	2 UDIMM slots

Table 5. Memory specifications (continued)

Description	Values
Type	DDR4
Speed	• 2666 MHz • 2933 MHz (supported on Core i7-10700 processor) **NOTE:** Memory speed may be subject to change by regions.
Maximum memory	64 GB
Minimum memory	4 GB
Memory per slot	4 GB, 8 GB, 16 GB, 32 GB
Configurations supported:	• 4 GB: 1 x 4 GB • 8 GB: 1 x 8 GB, 8 GB, 2 x 4 GB • 12 GB: 1 x 4 GB and 1 x 8 GB • 16 GB: 1 x 16 GB, 2 x 8 GB • 32 GB: 1 x 32 GB, 2 x 16 GB • 64 GB: 2 x 32 GB

Ports and connectors

Table 6. Ports and connectors

Description	Values
Front	
USB	• Two USB 3.2 Gen 1 Type-A ports • Two USB 2.0 Type-A ports
Audio	• Universal audio jack (For computer with Realtek configuration) • Global headset jack (For computer with C-Media configuration) **NOTE:** 3.5 mm Global Headset Jack functionality varies by model configuration. For best results, use Dell recommended audio accessories.
Back	
Network	One RJ-45 Port 10/100/1000 Mbps
USB	• Two USB 3.2 Gen 1 Type-A ports • Two USB 2.0 Type-A ports with Smart Power On
Audio	• Line-out re-tasking Line-in jack (For Computer with Realtek configuration) • Line-out jack (For computer with C-Media configuration)
Video	• One HDMI 1.4b port • One VGA port **NOTE:** Video ports are not available with systems configured with Intel Core i5-10400F and i7-10700F processors.

Table 6. Ports and connectors (continued)

Description	Values
Memory card reader	SD 4.0 card reader (optional)
Security	• One Kensington cable lock slot • One Padlock ring
Internal	
Expansion	• One half-height PCIe x1 slot • One half-height PCIe x16 slot
M.2	• One M.2 2230 slot for Wi-Fi/Bluetooth card • One M.2 2230/2280 slot for solid-state drive **NOTE:** To learn more about the features of different types of M.2 cards, see the knowledge base article at https://www.dell.com.

Communications

Ethernet

Table 7. Ethernet specifications

Description	Values
Model number	Realtek RTL8111HS
Transfer rate	10/100/1000 Mbps

Wireless module

Table 8. Wireless module specifications

Description	Values		
Model number	Intel Wireless-AC 3165 802.11ac 1x1 + Bluetooth 4.2	Intel Wireless-AC 9260 802.11ac 2x2 + Bluetooth 5.0	Realtek RTL8723DE 802.11bgn 1x1 + Bluetooth v4.2
Transfer rate	Up to 433 Mbps	Up to 1.73 Gbps	Up to 150 Mbps
Frequency bands supported	2.4 GHz/5 GHz	2.4 GHz/5 GHz	2.4 GHz
Wireless standards	• WiFi 802.11a/b/g • Wi-Fi 4 (WiFi 802.11n) • Wi-Fi 5 (WiFi 802.11ac)	• WiFi 802.11a/b/g • Wi-Fi 4 (WiFi 802.11n) • Wi-Fi 5 (WiFi 802.11ac)	• WiFi 802.11a/b/g • Wi-Fi 4 (WiFi 802.11n)
Encryption	• 64-bit/128-bit WEP • AES-CCMP • TKIP	• 64-bit/128-bit WEP • AES-CCMP • TKIP	• 64-bit/128-bit WEP • AES-CCMP • TKIP
Bluetooth	Bluetooth 4.2	Bluetooth 5.0	Bluetooth 4.2

Audio

Table 9. Audio specifications

Description	Values	
	Option one	**Option two**
Type	Stereo High Definition Audio Codec	Stereo USB Audio Codec
Controller	Realtek ALC3246 (For computer with Realtek configuration)	C-Media CM6548 (For computer with C-Media configuration)
Internal interface	High Definition Audio	USB 2.0
External interface	• One Universal audio jack (front) • One Line-out re-tasking Line-in audio jack (rear)	• One Global headset jack (front) • One Line-out jack (rear)

Storage

Your computer supports one or more combination of the following configurations:

- One 3.5-inch, 7200 RPM, SATA hard drive
- One M.2 Gen 3 PCIe x4 NVMe Solid State Drive
- One 9.5 mm DVD +/- R/W tray type optical drive

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

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

NOTE: For dual 2.5-inch hard drive and Intel Optane memory configuration, you must disconnect the 2nd hard drive from the controller to support Intel Optane memory in the Windows operating system.

Table 10. Storage specifications

Storage type	Interface type	Capacity
3.5-inch, 7200 RPM, SATA hard-disk drive	SATA AHCI, up to 6 Gbps	Up to 2 TB
M.2 Class 35 solid-state drive	PCIe x4 NVMe	Up to 512 GB
8x Optical Disk Drive DVD +/- R/W	SATA AHCI	Supplier dependent

Table 11. 9.5 mm 8x Optical Disk Drive DVD Read/Write

Description	Values
Type	8x Optical Disk 9.5 mm Drive DVD +/- R/W tray type (optional)
External dimensions without bezel (W x H X D)	8.0 mm (5.04 in)/ 9.5 mm (0.37 in)/ 126.1 mm (4.97 in)
Weight (max)	140 g (0.39 lb)
Interface type and speed	SATA 1.5 Gb/s
Disc capacity	Standard
Internal buffer size	0.5 MB
Access time (typical)	Supplier dependent
Maximum data transfer rates	

Table 11. 9.5 mm 8x Optical Disk Drive DVD Read/Write (continued)

Description	Values
Writes	8x DVD/24x CD
Reads	8x DVD/24x CD
Power source	
DC power requirement	5 V
DC current	1300 mA
Environmental Operating Conditions (Non-Condensing):	
Operating Temperature Range	5°C to 50°C
Relative Humidity Range	10% to 90% RH
Maximum Wet Bulb Temperature	29°C
Altitude Range	0 m to 3048 m
Environmental Non-Operating Conditions (Non-Condensing):	
Operating Temperature Range	-40°C to 65°C
Relative Humidity Range	5% to 95% RH
Maximum Wet Bulb Temperature	38°C
Altitude Range	0 m to 10600 m

Media-card reader

NOTE: Media-card reader is mutually exclusive with a dual M.2 configuration.

Table 12. Media-card reader specifications

Description	Values
Type	SD 4.0 card reader (optional)
Cards supported	• Secure Digital High Capacity (SDHC) • Secure Digital Extended Capacity (SDXC) • Secure Digital (SD)

Power supply unit

Table 13. Power supply unit specifications

Description	Values
Type	D9 200 W EPA Bronze
Input voltage	90 VAC to 264 VAC
Input frequency	47 Hz to 63 Hz
Input current (maximum)	3.20 A
Output current (continuous)	• +12 VA/16.50 A • +12 VB/14 A

Table 13. Power supply unit specifications (continued)

Description	Values
	Standby mode: • +12 VA/0.5 A • +12 VB/2.5 A
Rated output voltage	• +12 VA • +12 VB
Temperature range:	
Operating	5°C to 45°C (41°F to 113°F)
Storage	-40°C to 70°C (-40°F to 158°F)

Video

Table 14. Integrated graphics specifications

Integrated graphics			
Controller	**External display support**	**Memory size**	**Processor**
Intel UHD 610 Graphics	• VGA • HDMI 1.4b	Shared system memory	10th Generation Intel Celeron and Pentium Gold
Intel UHD 630 Graphics	• VGA • HDMI 1.4b	Shared system memory	10th Generation Intel Core i3/i5/i7 processor

Table 15. Discrete graphics specifications

Discrete graphics			
Controller	**External display support**	**Memory size**	**Memory Type**
NVIDIA GeForce GT730	• One HDMI • One Dual Link DVI-D	2 GB	GDDR5

CMOS battery

Table 16. CMOS battery

Brand	Type	Voltage	Composition	Battery life
MITSUBISHI	CR2032	3.0 V	Lithium metal	Continuous Discharge Under 15 kΩ Load to 2.0 V End-Voltage. 20℃±2℃ 940 Hrs. or Longer.910 Hrs.or Longer after 12 mo.

Security

Table 17. Security

Security options	Vostro 3681
Kensington cable lock	Supported
Padlock	Supported

Data security

Table 18. Data security

Data security options	Values
Microsoft Windows BitLocker	Supported
Local hard drive data wipe through BIOS (secure erase)	Supported

Computer environment

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

Table 19. 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 to10,000 ft)	0 m to 10668 m (0 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.

Energy Star and Trusted Platform Module (TPM)

Table 20. Energy Star and TPM

Features	Specifications
Energy Star	Compliant
Discrete TPM	Optional

Environmental

Table 21. Environmental specifications

Feature	
Recyclable packaging	Yes
BFR/PVC—free chassis	No
Vertical orientation packaging support	Yes
MultiPack packaging	Yes (DAO only)
Energy-Efficient Power Supply	Standard
ENV0424 compliant	Yes

NOTE: Wood-based fiber packaging contains a minimum of 35% recycled content by total weight of wood-based fiber. Packaging that contains without wood-based fiber can be claimed as Not Applicable. Anticipated Required Criteria for EPEAT Revision Effective 1H 2018.

Service and support

NOTE: For more details on Dell Service Plans, see https://www.dell.com/learn/us/en/19/services/warranty-support-services.

Table 22. Service and support

	Vostro 3681
1-year Base Next Business Day On-site warranty	Standard
2-4 Year Warranty[1] Next Business Day On-site[2] (3-3-3)	Optional
ProSupport	Optional
ProSupport Plus	Optional
Accidental damage	Optional

[1] For a copy of guarantees or limited warranties, write to Dell USA L.P., Attn: Warranties, One Dell Way, Round Rock, TX 78682. For more information, go to www.dell.com/warranty.

[2] Service may be provided by third party. Technician is dispatched if necessary, following phone-based troubleshooting. Subject to parts availability, geographical restrictions, and terms of service contract. Service timing dependent upon time-of-day call placed to Dell. U.S.A only.

4

Software

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

Operating system

Your Vostro 3681 supports the following operating systems:

- Windows 11 Home, 64-bit
- Windows 11 Home National Academic, 64-bit
- Windows 11 Pro, 64-bit
- Windows 11 Pro National Academic, 64-bit
- Windows 10 Home, 64-bit
- Windows 10 Pro, 64-bit
- Ubuntu 18.04 LTS, 64-bit

Downloading the drivers

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**.

   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**.

   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. From the drop-down list, select the preferred driver.
15. Click **Download** to download the driver for your computer.
16. After the download is complete, navigate to the folder where you saved the driver file.
17. Double-click the driver file icon and follow the instructions on the screen to install the driver.

5

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 23. Self-help resources

Self-help resources	Resource location
Information about Dell products and services	www.dell.com
My Dell app	
Tips	
Contact Support	In Windows search, type `Contact Support`, and press Enter.
Online help for operating system	www.dell.com/support/windows
Access top solutions, diagnostics, drivers and downloads, and learn more about your computer through videos, manuals and documents.	Your Dell computer is uniquely identified by a Service Tag or Express Service Code. To view relevant support resources for your Dell computer, enter the Service Tag or Express Service Code at www.dell.com/support. For more information on how to find the Service Tag for your computer, see Locate the Service Tag on your computer.
Dell knowledge base articles for a variety of computer concerns	1. Go to www.dell.com/support. 2. On the menu bar at the top of the Support page, select **Support** > **Knowledge Base**. 3. In the Search field on the Knowledge Base page, type the keyword, topic, or model number, and then click or tap the search icon to view the related articles.

Contacting Dell

To contact Dell for sales, technical support, or customer service issues, see www.dell.com/contactdell.

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

NOTE: 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.