

Inspiron Gaming Desktop Setup and Specifications

Computer Model: Inspiron 5680
Regulatory Model: D27M
Regulatory Type: D27M002



Notes, cautions, and warnings



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



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



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

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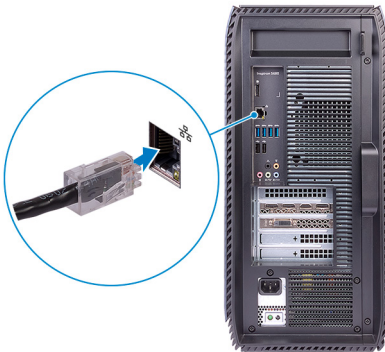
Set up your computer

- 1 Connect the keyboard and mouse.



 **NOTE:** For setup instructions, see the documentation shipped with the keyboard and mouse.

- 2 Connect the network cable—Optional.



- 3 Connect the display.



NOTE: Connect the display to the discrete graphics card shipped with your computer.

- 4 Connect the power cable.



- 5 Press the power button.



- 6 Finish Windows setup.

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 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 pre-installed on your computer.

8 Create recovery drive for Windows.



NOTE: It is recommended to create a recovery drive to troubleshoot and fix problems that may occur with Windows.

For more information, see [Create a USB recovery drive for Windows](#).

Create a USB recovery drive for Windows

Create a recovery drive to troubleshoot and fix problems that may occur with Windows. An empty USB flash drive with a minimum capacity of 16 GB is required to create the recovery drive.



NOTE: This process may take up to an hour to complete.



NOTE: The following steps may vary depending on the version of Windows installed. Refer to the [Microsoft support site](#) for latest instructions.

- 1 Connect the USB flash drive to your computer.
- 2 In Windows search, type *Recovery*.
- 3 In the search results, click **Create a recovery drive**.
The **User Account Control** window is displayed.
- 4 Click **Yes** to continue.
The **Recovery Drive** window is displayed.
- 5 Select **Back up system files to the recovery drive** and click **Next**.
- 6 Select the **USB flash drive** and click **Next**.
A message appears, indicating that all data in the USB flash drive will be deleted.
- 7 Click **Create**.
- 8 Click **Finish**.

For more information about reinstalling Windows using the USB recovery drive, see the *Troubleshooting* section of your product's *Service Manual* at www.dell.com/support/manuals.

Reinstall Windows using a USB recovery drive



CAUTION: This process formats the hard drive and removes all data on your computer. Ensure that you back up data on your computer before beginning this task.



NOTE: Before reinstalling Windows, ensure your computer has more than 2 GB of memory and more than 32 GB of storage space.

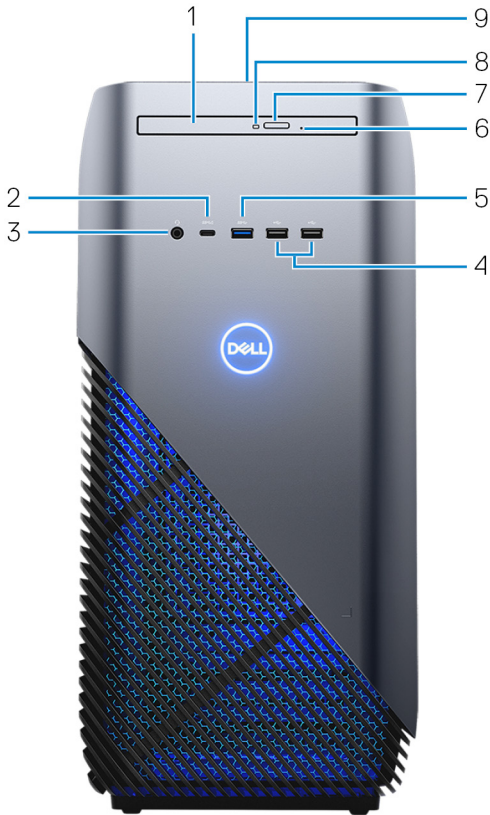


NOTE: This process may take up to an hour to complete and your computer will restart during the recovery process.

- 1 Connect the USB recovery drive to your computer.
- 2 Restart your computer.
- 3 Press F12 after the Dell logo is displayed on the screen to access the boot menu. A **Preparing one-time boot menu** message appears.
- 4 After the boot menu loads, select the USB recovery device under **UEFI BOOT**. The system reboots and a screen to **Choose the keyboard layout** is displayed.
- 5 Choose your keyboard layout.
- 6 In the **Choose an option** screen, click **Troubleshoot**.
- 7 Click **Recover from a drive**.
- 8 Choose one of the following options:
 - **Just remove my files** to do a quick format.
 - **Fully clean the drive** to do a complete format.
- 9 Click **Recover** to start the recovery process.

Views

Front



- 1 Slim optical drive**
Reads from and writes to CDs, DVDs, and Blu ray discs.
- 2 USB 3.1 Gen 1 Type-C port with PowerShare**
Connect peripherals such as external storage devices, printers, and external displays.

Provides data transfer speeds up to 5 Gbps. Supports Power Delivery that enables two-way power supply between devices. Provides up to 15 W power output that enables faster charging.



NOTE: Adapters (sold separately) are required to connect standard USB and DisplayPort devices.



NOTE: PowerShare enables you to charge your USB devices even when your computer is turned off.



NOTE: If a USB device is connected to the PowerShare port before the computer is turned off or in hibernate state, you must disconnect and connect it again to enable charging

3 **Headset port**

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

4 **USB 2.0 ports (2)**

Connect peripherals such as external storage devices and printers. Provides data transfer speeds up to 480 Mbps.

5 **USB 3.1 Gen 1 port**

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

6 **Optical-drive emergency eject pinhole**

Used to eject the optical-drive tray manually if the optical-drive eject button fails.



NOTE: For more information about manually ejecting optical-drive trays, see the knowledge base article [SLN301118](https://www.dell.com/support) at www.dell.com/support.

7 **Optical-drive eject button**

Press to open the optical drive tray.

8 **Optical-drive activity light**

Turns on when the computer reads from or writes to the optical disc.

9 **Power button**

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

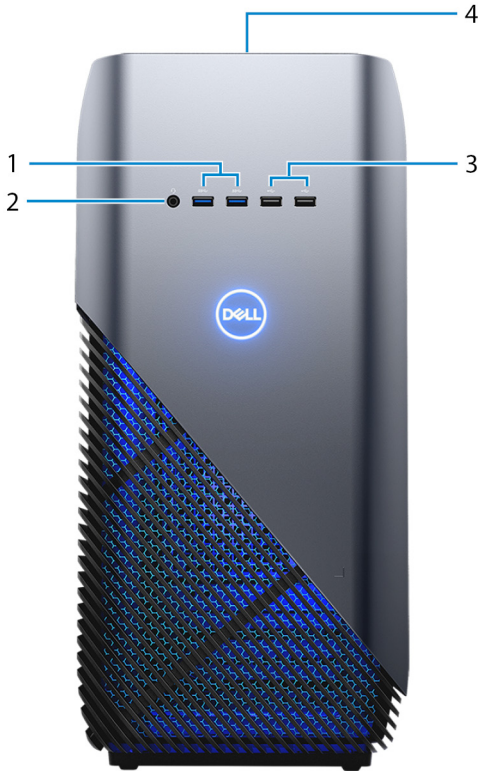
Press to put the computer in sleep state if it is turned on.

Press and hold to force shut-down the computer.



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

Front (For computers shipped without optical drive)



1 USB 3.1 Gen 1 ports (2)

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

2 Headset port

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

3 **USB 2.0 ports (2)**

Connect peripherals such as external storage devices and printers. Provides data transfer speeds up to 480 Mbps.

4 **Power button**

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

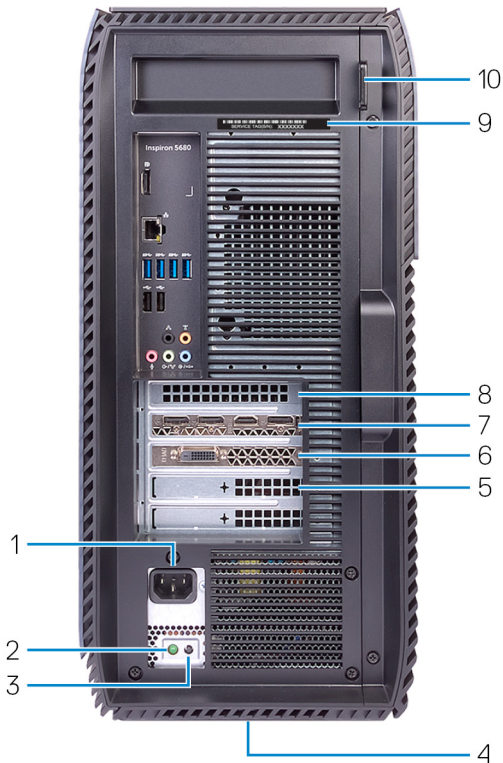
Press to put the computer in sleep state if it is turned on.

Press and hold to force shut-down the computer.



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

Back



1 Power port

Connect a power cable to provide power to your computer.

2 Power-supply diagnostics light

Indicates the power-supply state.

3 Power-supply diagnostics button

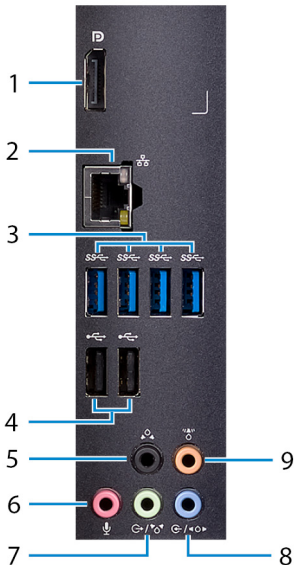
Press to check the power-supply state.

4 Regulatory label

Contains regulatory information of your computer.

- 5 **PCI-Express X4 slot**
Connect a PCI-Express card such as graphics, audio, or network card to enhance the capabilities of your computer.
- 6 **PCI-Express X1 slot**
Connect a PCI-Express card such as graphics, audio, or network card to enhance the capabilities of your computer.
- 7 **PCI-Express X16 (graphics) slot**
Connect a PCI-Express graphics card to enhance the capabilities of your computer.
- 8 **PCI-Express X1 slot**
Connect a PCI-Express card such as graphics, audio, or network card to enhance the capabilities of your computer.
- 9 **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.
- 10 **Padlock ring(s)**
Attach a standard padlock to prevent unauthorized access to the interior of your computer.

Back panel



1 Display port

Connect only for debug purposes.



NOTE: Use the video ports on the discrete graphics card to connect external displays or projectors.

2 Network port

Connect an Ethernet (RJ45) cable from a router or a broadband modem for network or Internet access.

3 USB 3.1 Gen 1 ports (4)

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

4 USB 2.0 ports (2)

Connect peripherals such as external storage devices and printers. Provides data transfer speeds up to 480 Mbps.

5 **Rear L/R surround port**

Connect audio-output devices such as speakers and amplifiers. In a 5.1 speaker channel setup, connect the rear-left and rear-right speakers.

6 **Microphone port**

Connect an external microphone to provide sound input.

7 **Line-out/Front L/R surround port**

Connect audio-output devices such as speakers and amplifiers. If you have a surround-sound speaker system, connect the front-left and front-right speakers to this port.

8 **Line-in/Side L/R surround port**

Connect recording or playback devices such as a microphone and CD player. If you have a surround-sound speaker system, connect the side-left and side-right speakers to this port.

9 **Center/subwoofer LFE surround port**

Connect the subwoofer.

Specifications

Computer model

Table 2. Computer model

Computer model	Inspiron 5680
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System information

Table 3. System information

Processor	<ul style="list-style-type: none">• 8th Generation Intel Core i3• 8th Generation Intel Core i5/i5k• 8th Generation Intel Core i7/i7k
System chipset	Intel Z370

Operating system

Table 4. Operating system

Operating systems supported	<ul style="list-style-type: none">• Windows 10 Home (64-bit)• Windows 10 Professional (64-bit)
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Dimensions and weight

Table 5. Dimensions and weight

Height	458.86 mm (18.07 in)
Width	216 mm (8.5 in)
Depth	437.53 mm (17.23 in)
Weight (maximum)	13.742 kg (30.27 lb)



NOTE: The weight of your computer varies depending on the configuration ordered and the manufacturing variability.

Memory

Table 6. Memory

Slots	Four UDIMM slots
Type	DDR4
Configurations supported	<ul style="list-style-type: none">• 8 GB DDR4 at 2400 MHz (1 x 8 GB)• 8 GB DDR4 at 2666 MHz (1 x 8 GB)• 16 GB Dual Channel DDR4 at 2400 MHz (2 x 8 GB)• 16 GB Dual Channel DDR4 at 2666 MHz (2 x 8 GB)• 32 GB Dual Channel DDR4 at 2666 MHz (2 x 16 GB)• 64 GB Dual Channel DDR4 at 2666 MHz (4 x 16GB)

Intel Optane memory

Intel Optane memory functions as a storage accelerator. It accelerates the computer and any type of SATA-based storage media such as hard drives and solid-state drives (SSDs).



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

- 7th generation or higher Intel Core i3/i5/i7 processor
- Windows 10 64-bit version or higher(Anniversary Update)
- Intel Rapid Storage Technology driver version 15.5.xxxx or higher

Table 7. Intel Optane memory

Interface	PCIe NVMe 3.0 x2
Connector	M.2
Configurations supported	16 GB and 32 GB

 **NOTE: For more information about enabling or disabling the Intel Optane memory, see [Enabling Intel Optane memory](#) or [Disabling Intel Optane memory](#).**

Ports and connectors

Table 8. Ports and connectors

External	
Network	One RJ45 port
USB	<ul style="list-style-type: none">• USB 3.1 Gen 1 Type-C port with PowerShare (only for computers shipped with slim optical drive)• USB 3.1 Gen 1 Type-A port (for computers shipped without slim optical drive)• Five USB 3.1 Gen 1 ports• Four USB 2.0 ports
Audio/Video	<ul style="list-style-type: none">• One microphone port• One rear L/R surround port• One line-out/Front L/R surround port• One line-in/Side L/R surround port• One Center/Subwoofer LFE surround port• One DisplayPort V1.2

Communications

Table 9. Communications

Ethernet	10/100/1000 Mbps Ethernet controller integrated on system board
Wireless	<ul style="list-style-type: none">• M.2 802.11a/b/g/n/ac• Bluetooth 4.1

Audio

Table 10. Audio

Controller	Realtek ALC3861
Type	Integrated 7.1 channel Intel High Definition Audio

Storage

Table 11. Storage

Interface	<ul style="list-style-type: none">• SATA 6 Gbps for 2.5-inch hard drive• PCIe/NVMe for Solid-state drive• Intel Optane for Solid-state drive
Solid-state drive	One M.2 drive
Hard drive	<ul style="list-style-type: none">• One 2.5-inch hard drive• Two 3.5-inch hard drive
Optical drive	One 9.5 mm slim optical drive
Capacity	
Hard drive	Up to 2 TB
SSD	Up to 256 GB


Power ratings

Table 12. Power ratings

Type	460 W
Input voltage	100 VAC to 240 VAC
Input frequency	50 Hz to 60 Hz
Input current	8.0 A
Temperature range	
Operating	5°C to 50°C (41°F to 122°F)
Storage	-40°C to 70°C (-40°F to 158°F)

Video

Table 13. Video

	Discrete
Controller	<ul style="list-style-type: none">• NVIDIA GTX 1050• NVIDIA GTX 1060• NVIDIA GTX 1070• NVIDIA GTX 1080• AMD RX 560• AMD RX 580• One PCI-Express X16, single-width/double-width, full length (maximum 10.5 inches) <p> NOTE: The graphics configuration of your desktop varies depending on the graphics card configuration ordered.</p>
Memory	<ul style="list-style-type: none">• 2 GB GDDR5• 3 GB GDDR5

Discrete

- 4 GB GDDR5
- 8 GB GDDR5

Computer environment

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

Table 14. Computer environment

	Operating	Storage
Temperature range	0°C to 35°C (32°F to 95°F)	-40°C to 65°C (-40°F to 149°F)
Relative humidity (maximum)	10% to 90% (non-condensing)	0% to 95% (non-condensing)
Vibration (maximum)*	0,66 GRMS	1,30 GRMS
Shock (maximum)	110 G [†]	160 G [‡]
Altitude (maximum)	-15.2 m to 3048 m (-50 ft to 10,000 ft)	-15.2 m to 10,668 m (-50 ft to 35,000 ft)

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

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

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

Intel Optane memory

Enabling Intel Optane memory

- 1 On the taskbar, click the search box, and then type `Intel Rapid Storage Technology`.
- 2 Click **Intel Rapid Storage Technology**.
The **Intel Rapid Storage Technology** window is displayed.
- 3 On the **Status** tab, click **Enable** to enable the Intel Optane memory.
- 4 On the warning screen, select a compatible fast drive, and then click **Yes** to continue enabling Intel Optane memory.
- 5 Click **Intel Optane memory** → **Reboot** to complete enabling your Intel Optane memory.



NOTE: Applications may take up to three subsequent launches after enablement to see the full performance benefits.

Disabling Intel Optane memory



CAUTION: Do not try to remove the Intel Rapid Storage Technology driver after disabling Intel Optane memory, it will result in a blue screen error. The Intel Rapid Storage Technology user interface can be removed without uninstalling the driver.



NOTE: Disabling Intel Optane memory is required before removing the SATA storage device accelerated by the Intel Optane memory or the Intel Optane memory module from the system.

- 1 On the taskbar, click the search box, and then type `Intel Rapid Storage Technology`.
- 2 Click **Intel Rapid Storage Technology**.
The **Intel Rapid Storage Technology** window is displayed.
- 3 On the **Intel Optane memory** tab, click **Disable** to disable the Intel Optane memory.
- 4 Click **Yes** if you accept the warning.
The disabling progress is displayed.

- 5 Click **Reboot** to complete disabling your Intel Optane memory and restart your computer.

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 15. Self-help resources

Information about Dell products and services

www.dell.com

Dell Help & Support app



Tips



Contact Support

In Windows search, type **Contact Support**, and press Enter.

Online help for operating system

www.dell.com/support/windows

www.dell.com/support/linux

Troubleshooting information, user manuals, setup instructions, product specifications, technical help blogs, drivers, software updates, and so on.

www.dell.com/support

Dell knowledge base articles for a variety of computer concerns.

- 1 Go to www.dell.com/support.
- 2 Type the subject or keyword in the **Search** box.
- 3 Click **Search** to retrieve the related articles.

Learn and know the following information about your product:

See *Me and My Dell* at www.dell.com/support/manuals.

- Product specifications
- Operating system

- Setting up and using your product
- Data backup
- Troubleshooting and diagnostics
- Factory and system restore
- BIOS information

To locate the *Me and My Dell* relevant to your product, identify your product through one of the following:

- Select **Detect Product**.
- Locate your product through the drop-down menu under **View Products**.
- Enter the **Service Tag number** or **Product ID** in the search bar.

Contacting Dell

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



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



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.