

# Dell G3 3590

## Setup and Specifications



## 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.

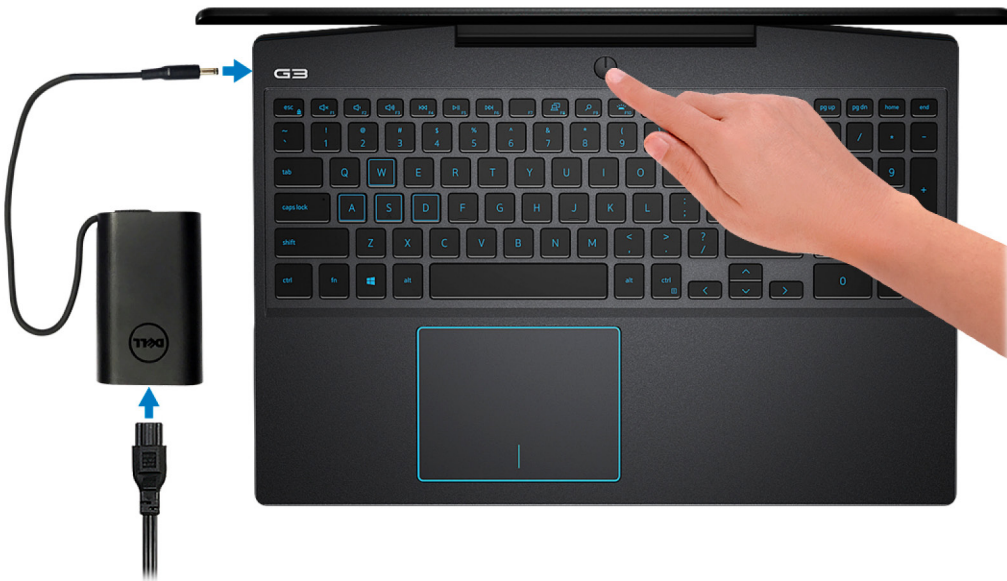
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# Set up your Dell G3 3590

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

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



**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](http://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  |
|---|--|
|  | <p><b>My Dell</b></p> <p>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.</p> |

## Resources

## Description

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### 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](http://www.dell.com/support).

 **NOTE: In SupportAssist, click the warranty expiry date to renew or upgrade your warranty.**

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### 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](http://www.dell.com/support) at [www.dell.com/support](http://www.dell.com/support).

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### 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](http://www.dell.com/support) at [www.dell.com/support](http://www.dell.com/support).

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## Views of Dell G3 3590

### Right



**1. SD-card slot**

Reads from and writes to the SD card.

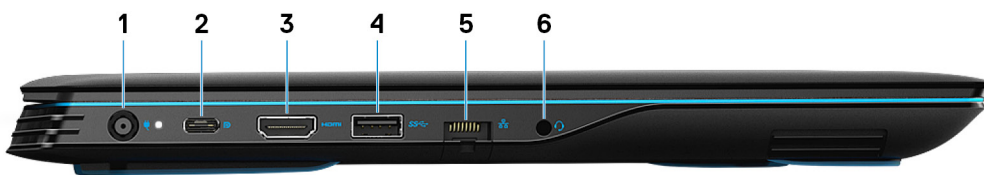
**2. USB 2.0 ports (2)**

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

**3. Security-cable slot (wedge-shaped)**

Connect a security cable to prevent unauthorized movement of your computer.

### Left



**1. Power-adaptor port**

Connect a power adaptor to provide power to your computer.

**2. USB 3.1 Gen 2 (Type-C) port with DisplayPort (for computers shipped with NVIDIA GeForce GTX 1650 and NVIDIA GeForce GTX 1660 Ti)**

Connect peripherals such as external storage devices, printers, and external displays. Provides data transfer speed of up to 10 Gbps. Supports DisplayPort 1.4 and also enables you to connect to an external display using a display adapter.

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

**3. HDMI port**

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

**4. USB 3.1 Gen 1 port**

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

**5. Network port**

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

**6. Headset port**

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

# Base



## 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 finger 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 10 seconds to force shut-down the computer.

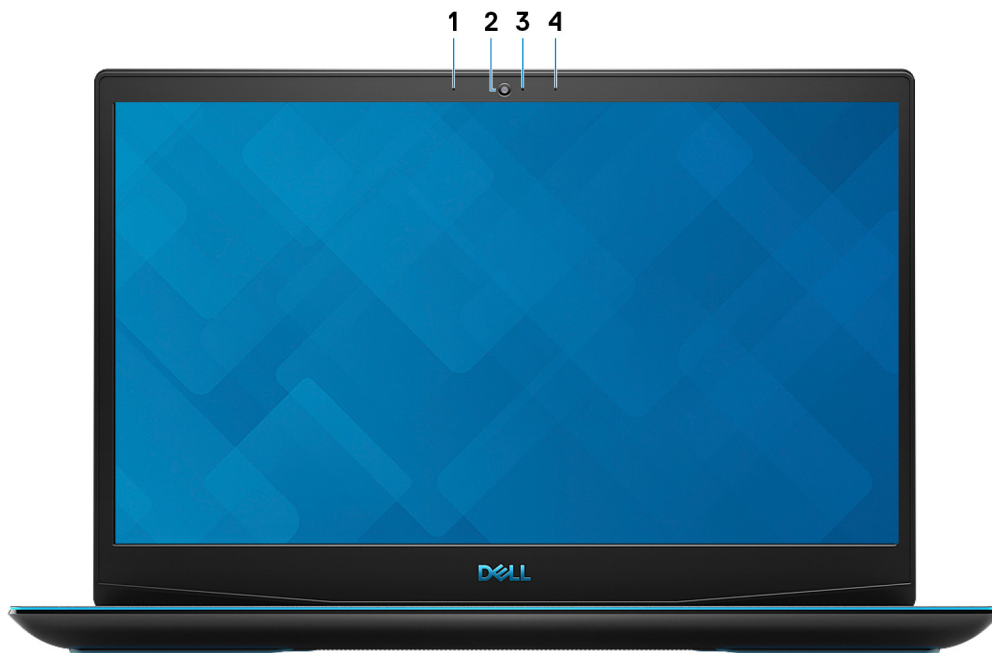
If the power button has a fingerprint reader, place your finger on the power button to log in.

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

**NOTE:** The power-status light on the power button is available only on computers without the fingerprint reader. Computers shipped with the fingerprint reader integrated on the power button will not have the power-status light on the power button.

**NOTE:** To reset the battery, press and hold the power button for 25 seconds.

# Display



- 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. Left speaker**

Provides audio output.

**2. Right speaker**

Provides audio output.

**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 Dell G3 3590

## Dimensions and weight

Table 2. Dimensions and weight

| Description   | Values                      |
|---|-----------------------------|
| Height:   |                             |
| Front   | 21.60 mm (0.85 in.)         |
| Rear  | 23.18 mm (0.91 in.)         |
| Width   | 365.50 mm (14.39 in.)       |
| Depth   | 254 mm (10 in.)             |
| Weight (maximum)  | 2.34 kg (5.16 lb) - minimum |
| <p><b>NOTE:</b> The weight of your computer depends on the configuration ordered and the manufacturing variability.</p> |                             |

## Processors

Table 3. Processors

| Description         | Values   |  |
|---------------------|--|--|
| Processors          | 9 <sup>th</sup> Generation Intel Core i5-9300H | 9 <sup>th</sup> Generation Intel Core i7-9750H |
| Wattage             | 45 W   | 45 W   |
| Core count          | 4  | 6  |
| Thread count        | 8  | 12   |
| Speed               | Up to 4.1 GHz                                  | Up to 4.5 GHz                                  |
| Cache               | 8 MB   | 12 MB  |
| Integrated graphics | Intel UHD Graphics 630                         | Intel UHD Graphics 630                         |

## Chipset

Table 4. Chipset

| Description    | Values                                      |
|----------------|---|
| Chipset        | HM370                                       |
| Processor      | 9 <sup>th</sup> Generation Intel Core i5/i7 |
| DRAM bus width | 64-bit                                      |

| Description | Values        |
|-------------|---------------|
| Flash EPROM | 16 MB         |
| PCIe bus    | Up to Gen 3.0 |

## Operating system

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

## Memory

**Table 5. Memory specifications**

| Description              | Values  |
|--------------------------|---|
| Slots                    | Two SODIMM slots  |
| Type                     | DDR4  |
| Speed                    | 2666 MHz  |
| Maximum memory           | 32 GB   |
| Minimum memory           | 4 GB  |
| Memory size per slot     | 4 GB, 8 GB, and 16 GB   |
| Configurations supported | <ul style="list-style-type: none"> <li>• 4 GB DDR4 at 2666 MHz (1 x 4 GB)</li> <li>• 8 GB DDR4 at 2666 MHz (2 x 4 GB)</li> <li>• 8 GB DDR4 at 2666 MHz (1 x 8 GB)</li> <li>• 12 GB DDR4 at 2666 MHz (1 x 4 GB + 1 x 8 GB)</li> <li>• 16 GB DDR4 at 2666 MHz (2 x 8 GB)</li> <li>• 16 GB DDR4 at 2666 MHz (1 x 16 GB)</li> <li>• 32 GB DDR4 at 2666 MHz (2 x 16 GB)</li> </ul> |

## Ports and connectors

**Table 6. External ports and connectors**

| Description       | Values  |
|-------------------|---|
| <b>External:</b>  |   |
| Network           | One RJ45 port   |
| USB               | <ul style="list-style-type: none"> <li>• One USB 3.1 Gen 2 Type-C port with DisplayPort (for computers shipped with NVIDIA GeForce GTX 1650 and NVIDIA GeForce GTX 1660 Ti)</li> <li>• One USB 3.1 Gen 1 port</li> <li>• Two USB 2.0 ports</li> </ul> |
| Audio             | One headset (headphone and microphone combo) port   |
| Video             | One HDMI 2.0 port   |
| Media card reader | One SD-card slot  |

| Description        | Values                                 |
|--------------------|--|
| Docking port       | Not supported                          |
| Power adapter port | 7.40 mm x 5.08 mm                      |
| Security           | One security-cable slot (wedge-shaped) |

**Table 7. Internal ports and connectors**

| Description      | Values  |
|------------------|---|
| <b>Internal:</b> |   |
| M.2              | <ul style="list-style-type: none"> <li>One M.2 slot for Wi-Fi and Bluetooth combo card</li> <li>One M.2 slot for one of the following: <ul style="list-style-type: none"> <li>Solid-state drive (2230/2280)</li> <li>Intel Optane Memory M15 (2280)</li> <li>Intel Optane Memory H10 with solid-state storage (2280)</li> </ul> </li> </ul> |
|                  | <p><b>NOTE:</b> To learn more about the features of different types of M.2 cards, see the knowledge base article <a href="#">SLN301626</a>.</p>   |

## Communications

### Ethernet

**Table 8. Ethernet specifications**

| Description   | Values   |
|---------------|--|
| Model number  | Realtek RTL8111 Ethernet controller (integrated on system board) |
| Transfer rate | 10/100/1000 Mbps   |

### Wireless module

**Table 9. Wireless module specifications**

| Description               | Values  |   |  |
|---------------------------|---|---|--|
| Model number              | Qualcomm QCA9377 (DW1820)   | Intel 9560 (160 MHz)  | Intel AX200  |
| Transfer rate             | Up to 433 Mbps  | Up to 1.73 Gbps   | Up to 2.4 Gbps   |
| Frequency bands supported | Dual band 2.4 GHz/5 GHz   | Dual band 2.4 GHz/5 GHz   | Dual band 2.4 GHz/5 GHz  |
| Wireless standards        | <ul style="list-style-type: none"> <li>WiFi 802.11a/b/g</li> <li>Wi-Fi 4 (WiFi 802.11n)</li> <li>Wi-Fi 5 (WiFi 802.11ac)</li> </ul> | <ul style="list-style-type: none"> <li>WiFi 802.11a/b/g</li> <li>Wi-Fi 4 (WiFi 802.11n)</li> <li>Wi-Fi 5 (WiFi 802.11ac)</li> </ul> | <ul style="list-style-type: none"> <li>WiFi 802.11a/b/g</li> <li>Wi-Fi 4 (WiFi 802.11n)</li> <li>Wi-Fi 5 (WiFi 802.11ac)</li> <li>Wi-Fi 6 (WiFi 801.11ax)</li> </ul> |
| Encryption                | <ul style="list-style-type: none"> <li>64-bit/128-bit WEP</li> <li>AES-CCMP</li> <li>TKIP</li> </ul>                                | <ul style="list-style-type: none"> <li>64-bit/128-bit WEP</li> <li>AES-CCMP</li> <li>TKIP</li> </ul>                                | <ul style="list-style-type: none"> <li>64-bit/128-bit WEP</li> <li>AES-CCMP</li> <li>TKIP</li> </ul>   |
| Bluetooth                 | Bluetooth 4.2   | Bluetooth 5   | Bluetooth 5  |



# Audio

**Table 10. Audio specifications**

| Description                | Values   |
|----------------------------|--|
| Controller                 | Realtek ALC3254 with Nahimic 3D Audio for Gamers   |
| Stereo conversion          | Supported  |
| Internal interface         | Intel High-Definition Audio (HDA) via HDMI   |
| External interface         | <ul style="list-style-type: none"> <li>Headset combo connector</li> <li>Digital-array microphone input on camera module</li> </ul> |
| Speakers                   | Two  |
| Internal speaker amplifier | Supported (audio codec built-in amplifier)   |
| External volume controls   | Keyboard shortcut controls   |
| Speaker output:            |  |
| Average                    | 2 W  |
| Peak                       | 2.5 W  |
| Subwoofer output           | Not supported  |
| Microphone                 | Dual-array microphones   |

# Storage

Your computer is shipped with **one** of the following configurations:

- One M.2 card (solid-state drive or Intel Optane Memory H10 with solid-state storage)
- One 2.5-inch hard drive
- One M.2 card (solid-state drive or Intel Optane Memory H10 with solid-state storage) and one 2.5-inch hard drive
-  **NOTE: The solid-state drive or the Intel Optane Memory H10 with solid-state storage is the primary drive.**
- One 2.5-inch hard drive and one M.2 card (Intel Optane Memory M15)
-  **NOTE: The 2.5-inch hard drive is the primary drive.**

**Table 11. Storage specifications**

| Form factor   | Interface type  | Capacity   |
|---|---|--|
| 2.5-inch hard drive                                       | SATA AHCI, up to 6 Gbps   | <ul style="list-style-type: none"> <li>1 TB (5400 RPM)</li> <li>1 TB + 8 GB Hybrid</li> <li>2 TB (5400 RPM)</li> </ul> |
| M.2 2230/2280 solid-state drive                           | <ul style="list-style-type: none"> <li>SATA PCIe (up to x4)</li> <li>PCIe NVMe 3.0 x4, up to 32 Gbps</li> <li>PCIe 3.0, 8 Gbps (up to 4 lanes)</li> </ul> | Up to 1 TB   |
| M.2 2280 Intel Optane Memory H10 with solid-state storage | Solid-state storage: PCIe NVMe 3.0 x2   | Solid-state storage: Up to 512 GB  |

# Intel Optane memory (optional)

Intel Optane 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.

Your computer supports the following Intel Optane memory:

- Intel Optane Memory M15
- Intel Optane Memory H10 with solid-state storage

## Intel Optane Memory M15

Intel Optane Memory M15 functions only as a non-volatile storage cache/accelerator, enabling enhanced read/write speeds for hard-drive storage. It neither replaces nor adds to the memory (RAM) installed on your computer.

**Table 12. Intel Optane Memory M15 specifications**

| Description | Values         |
|-------------|----------------|
| Interface   | PCIe 3.0 x2    |
| Connector   | M.2            |
| Form factor | 2280           |
| Capacity    | 32 GB or 64 GB |

**NOTE:** Intel Optane Memory M15 is supported on computers that meet the following requirements:

- 7<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

## Intel Optane Memory H10 with solid-state storage

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 13. Intel Optane Memory H10 with solid-state storage specifications**

| Description                    | Values  |
|--------------------------------|---|
| Interface                      | PCIe 3.0 x4 <ul style="list-style-type: none"><li>• One PCIe 3.0 x2 for Optane memory</li><li>• One PCIe 3.0 x2 for solid-state storage</li></ul> |
| Connector                      | M.2   |
| Form factor                    | 2280  |
| Capacity (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

Table 14. Media-card reader specifications

| Description     | Values   |
|-----------------|--|
| Type            | One SD-card slot   |
| Cards supported | <ul style="list-style-type: none"><li>Secure Digital (SD)</li><li>Secure Digital High Capacity (SDHC)</li><li>Secure Digital Extended Capacity (SDXC)</li></ul> <p><b>NOTE:</b> The maximum capacity supported by the media card varies depending on the standard of the media card used in your computer.</p> |

# Keyboard

Table 15. Keyboard specifications

| Description    | Values  |
|----------------|---|
| Type           | <ul style="list-style-type: none"><li>Standard keyboard</li><li>Backlit keyboard (optional)</li><li>Four-zone RGB backlit keyboard (optional)</li></ul>   |
| Layout         | QWERTY  |
| Number of keys | <ul style="list-style-type: none"><li>United States and Canada: 101 keys</li><li>United Kingdom: 102 keys</li><li>Japan: 105 keys</li></ul>   |
| Size           | X = 19.05 mm key pitch<br>Y = 18.05 mm key pitch  |
| Shortcut keys  | <p>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.</p> <p><b>NOTE:</b> You can define the primary behavior of the function keys (F1–F12) by changing Function Key Behavior in BIOS setup program.</p> <p>See <a href="#">Keyboard shortcuts</a></p> |

# Camera

Table 16. Camera specifications

| Description       | Values                 |
|-------------------|------------------------|
| Number of cameras | One                    |
| Type              | HD RGB camera          |
| Location          | Front                  |
| Sensor type       | CMOS sensor technology |

| Description            | Values                    |
|------------------------|---------------------------|
| Resolution:            |                           |
| Still image            | 0.92 megapixel (HD)       |
| Video                  | 1280 x 720 (HD) at 30 fps |
| Diagonal viewing angle | 78.6 degrees              |

## Touchpad

**Table 17. Touchpad specifications**

| Description | Values            |
|-------------|-------------------|
| Resolution: |                   |
| Horizontal  | 1229              |
| Vertical    | 749               |
| Dimensions: |                   |
| Horizontal  | 105 mm (4.13 in.) |
| Vertical    | 80 mm (3.15 in.)  |

## Touchpad gestures

For more information about touchpad gestures for Windows 10, see the Microsoft knowledge base article [4027871](https://support.microsoft.com/4027871) at [support.microsoft.com](https://support.microsoft.com).

## Power adapter

**Table 18. Power adapter specifications**

| Description                 | Values                         |                                |
|-----------------------------|--------------------------------|--------------------------------|
| Type                        | 130 W (E4 Series)              | 180 W (E4 Series)              |
| Diameter (connector)        | 7.40 mm x 5.08 mm              | 7.40 mm x 5.08 mm              |
| Input voltage               | 100 VAC–240 VAC                | 100 VAC–240 VAC                |
| Input frequency             | 50 Hz–60 Hz                    | 50 Hz–60 Hz                    |
| Input current (maximum)     | 2.50 A                         | 2.34 A                         |
| Output current (continuous) | 6.70 A                         | 9.34 A                         |
| Rated output voltage        | 19.50 VDC                      | 19.50 VDC                      |
| Temperature 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 19. Battery specifications**

| Description                 | Values   |
|-----------------------------|--|
| Type                        | 3-cell "smart" lithium-ion (51 WHr)  |
| Voltage                     | 11.40 VDC  |
| Weight (maximum)            | 0.23 kg (0.51 lb)  |
| Dimensions:                 |  |
| Height                      | 7.05 mm (0.28 in.)   |
| Width                       | 67.65 mm (2.66 in.)  |
| Depth                       | 241.25 mm (9.50 in.)   |
| Temperature range:          |  |
| Operating                   | 0°C to 70°C (32°F to 158°F)  |
| Storage                     | -20°C to 65°C (-4°F to 149°F)  |
| Operating time              | Varies depending on operating conditions and can significantly reduce under certain power-intensive conditions.  |
| Charging time (approximate) | 3 hours (when the computer is off)<br><b>NOTE: Control the charging time, duration, start and end time, and so on using the Dell Power Manager application. For more information on the Dell Power Manager see, <i>Me and My Dell</i> on <a href="https://www.dell.com/">https://www.dell.com/</a></b> |
| Life span (approximate)     | 300 discharge/charge cycles  |
| Coin-cell battery           | CR-2032  |
| Operating time              | Varies depending on operating conditions and can significantly reduce under certain power-intensive conditions.  |

# Display

**Table 20. Display specifications**

| Description               | Values                   |                          |                          |
|---------------------------|--------------------------|--------------------------|--------------------------|
| Type                      | FHD Anti-Glare           | FHD Anti-Glare           | FHD Anti-Glare           |
| Panel technology          | In-Plane Switching (IPS) | In-Plane Switching (IPS) | In-Plane Switching (IPS) |
| Luminance (typical)       | 220 nits                 | 300 nits                 | 300 nits                 |
| Dimensions (active area): |                          |                          |                          |
| Height                    | 193.60 mm (7.62 in.)     | 193.60 mm (7.62 in.)     | 193.60 mm (7.62 in.)     |
| Width                     | 344.20 mm (13.55 in.)    | 344.20 mm (13.55 in.)    | 344.20 mm (13.55 in.)    |
| Diagonal                  | 394.90 mm (15.60 in.)    | 394.90 mm (15.60 in.)    | 394.90 mm (15.60 in.)    |
| Native resolution         | 1920 x 1080              | 1920 x 1080              | 1920 x 1080              |

| <b>Description</b>          | <b>Values</b>                   |                                 |                                 |
|-----------------------------|---------------------------------|---------------------------------|---------------------------------|
| Megapixels                  | 2.07                            | 2.07                            | 2.07                            |
| Color gamut                 | NTSC 45%                        | NTSC 72%                        | NTSC 72%                        |
| Pixels per inch (PPI)       | 141                             | 141                             | 141                             |
| Contrast ratio (min)        | 700:1 (typical)/600:1 (minimum) | 700:1 (typical)/600:1 (minimum) | 800:1 (typical)/600:1 (minimum) |
| Response time (max)         | 35 ms rise/fall                 | 35 ms rise/fall                 | 9 ms rise/fall                  |
| Refresh rate                | 60 Hz                           | 60 Hz                           | 144 Hz                          |
| Horizontal view angle       | +/- 85 degrees                  | +/- 85 degrees                  | +/- 85 degrees                  |
| Vertical view angle         | +/- 85 degrees                  | +/- 85 degrees                  | +/- 85 degrees                  |
| Pixel pitch                 | 0.179 mm                        | 0.179 mm                        | 0.179 mm                        |
| Power consumption (maximum) | 4.2 W                           | 6.2 W                           | 7.8 W                           |
| Anti-glare vs glossy finish | Anti-glare                      | Anti-glare                      | Anti-glare                      |
| Touch options               | No                              | No                              | No                              |

## Fingerprint reader (optional)

**Table 21. Fingerprint reader specifications**

| <b>Description</b> | <b>Values</b>                         |
|--------------------|---------------------------------------|
| Sensor technology  | Capacitive                            |
| Sensor resolution  | 500 PPI                               |
| Sensor area        | 5.5 mm (0.22 in.) x 4.5 mm (0.18 in.) |
| Sensor pixel size  | 108 x 88 pixels                       |

## Video

**Table 22. Video specifications**

| <b>Discrete graphics</b>   |   |                    |                    |
|----------------------------|---|--------------------|--------------------|
| <b>Controller</b>          | <b>External display support</b>   | <b>Memory size</b> | <b>Memory Type</b> |
| NVIDIA GeForce GTX 1050    | One HDMI 2.0 port   | 3 GB               | GDDR5              |
| NVIDIA GeForce GTX 1650    | <ul style="list-style-type: none"> <li>• One USB 3.1 Gen 2 (Type-C) port with DisplayPort</li> <li>• One HDMI 2.0 port</li> </ul> | 4 GB               | GDDR5              |
| NVIDIA GeForce GTX 1660 Ti | <ul style="list-style-type: none"> <li>• One USB 3.1 Gen 2 (Type-C) port with DisplayPort</li> <li>• One HDMI 2.0 port</li> </ul> | 6 GB               | GDDR6              |
| NVIDIA GeForce RTX 2060    | <ul style="list-style-type: none"> <li>• One USB 3.1 Gen 2 (Type-C) port with DisplayPort</li> <li>• One HDMI 2.0 port</li> </ul> | 6 GB               | GDDR6              |

**Table 23. Video specifications**

**Integrated graphics**

| Controller             | External display support  | Memory size          | Processor                                   |
|------------------------|---|----------------------|---|
| Intel UHD Graphics 630 | <ul style="list-style-type: none"><li>One USB 3.1 Gen 2 (Type-C) port with DisplayPort (optional)</li><li>One HDMI 2.0 port</li></ul> | Shared system memory | 9 <sup>th</sup> Generation Intel Core i5/i7 |

## Computer environment

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

**Table 24. Computer environment**

| Description                 | 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 3,048 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.

# Using Game Shift

Game Shift improves gaming performance by increasing the fan speed for optimal thermal cooling of the processor.

## Enabling Game Shift

To enable Game Shift, press **F7** (if **fn** default is enabled; otherwise, press **fn + F7**). For more information, see [Keyboard shortcuts](#).

Alienware Command Center displays a blue G icon, a notification pops up to indicate that Game Shift is enabled.

## Disabling Game Shift


When you are not using the computer for gaming, disable Game Shift by pressing **F7** (if **fn** default is enabled; otherwise, press **fn + F7**).

Game Shift is also disabled when:

- You set your computer to a sleep state.
- You restart your computer.
- Game Shift has been active for 24 consecutive hours.
- You start a new game.
- You terminate the game that has been running on Game Shift.
- You change power plans or thermal profiles of the computer.

## Installing Game Shift after reinstalling the operating system

Alienware Command Center and Alienware OC Controls are installed at the factory. If you reinstall the operating system, you have to reinstall Alienware Command Center and Alienware OC Controls before you can use Game Shift.

 **NOTE: Ensure that the Windows operating system and all the compatible drivers are reinstalled in your computer. Windows update is also required.**

After you have reinstalled the operating system, Alienware Command Center, and Alienware OC Controls, install Game Shift:

1. Go to Dell support site [www.dell.com/support](http://www.dell.com/support).
2. Enter Dell G3 3590 and click **Search**.
3. Click **Drivers & downloads**.
4. Download and install **Alienware Command Center**.
5. Download and install **Alienware OC Controls**.
6. Restart your computer. You can now enable Game Shift (see [Enabling Game Shift](#)).

# Keyboard shortcuts

**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**, @ is typed out.










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

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








Table 25. List of keyboard shortcuts

| Function key  | Redefined key (for multimedia control)  | Behavior                    |
|---|---|-----------------------------|
|  |  +  | Mute audio                  |
|  |  +  | Decrease volume             |
|  |  +  | Increase volume             |
|  |  +  | Play previous track/chapter |
|  |  +  | Play/Pause                  |
|  |  +  | Play next track/chapter     |
|  |  +  | Enable/disable Game Shift   |
|  |  +  | Switch to external display  |
|  |  +  | Search                      |

| Function key  | Redefined key (for multimedia control)  | Behavior   |
|---|---|--|
|  |  +  | Toggle keyboard backlight (optional)<br><b>NOTE:</b> Non-backlight keyboards have the F10 function key without the backlight icon. In this case, the function key does not toggle the keyboard backlight function. |
|  |  +  | Decrease brightness  |
|  |  +  | Increase brightness  |

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

**Table 26. List of keyboard shortcuts**

| Function key  | Behavior  |
|---|---|
|  +      | Turn off/on wireless  |
|  +      | Pause/Break   |
|  +  | Sleep   |
|  +  | Toggle scroll lock  |
|  +  | Toggle between power and battery-status light/hard-drive activity light |
|  +  | System request  |
|  +  | Open application menu   |
|  +  | Toggle fn-key lock  |
|  +  | Page up   |
|  +  | Page down   |
|  +  | Home  |

**Function key****Behavior**

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End



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# 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 27. Self-help resources**

| Self-help resources  | Resource location   |
|--|---|
| Information about Dell products and services   | <a href="http://www.dell.com">www.dell.com</a>  |
| My Dell  |    |
| Tips   |    |
| Contact Support  | In Windows search, type <code>Contact Support</code> , and press Enter.   |
| Online help for operating system   | <a href="http://www.dell.com/support/windows">www.dell.com/support/windows</a><br><a href="http://www.dell.com/support/linux">www.dell.com/support/linux</a>  |
| Troubleshooting information, user manuals, setup instructions, product specifications, technical help blogs, drivers, software updates, and so on.   | <a href="http://www.dell.com/support">www.dell.com/support</a>  |
| Dell knowledge base articles for a variety of computer concerns.   | <ol style="list-style-type: none"> <li>1. Go to <a href="http://www.dell.com/support">www.dell.com/support</a>.</li> <li>2. Type the subject or keyword in the <b>Search</b> box.</li> <li>3. Click <b>Search</b> to retrieve the related articles.</li> </ol>  |
| Learn and know the following information about your product: <ul style="list-style-type: none"> <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> | <p>See <i>Me and My Dell</i> at <a href="http://www.dell.com/support/manuals">www.dell.com/support/manuals</a>.</p> <p>To locate the <i>Me and My Dell</i> relevant to your product, identify your product through one of the following:</p> <ul style="list-style-type: none"> <li>• Select <b>Detect Product</b>.</li> <li>• Locate your product through the drop-down menu under <b>View Products</b>.</li> <li>• Enter the <b>Service Tag number</b> or <b>Product ID</b> in the search bar.</li> </ul> |

## Contacting Dell

To contact Dell for sales, technical support, or customer service issues, see [www.dell.com/contactdell](http://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 on your purchase invoice, packing slip, bill, or Dell product catalog.**