Inspiron 3880

Setup and Specifications

Regulatory Model: D29M Regulatory Type: D29M002 May 2021 Rev. A02



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.

WARNING: 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.



(i) **NOTE:** If you ordered your computer with a discrete graphics card, the HDMI and VGA ports on the back panel of your computer are covered. Connect the display to the discrete graphics card.

4. Connect the power cable.



5. Press the power button.



6. Finish operating system setup.

For Ubuntu:

Follow the instructions on the screen to finish setup.

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 Product Registration Register your computer with Dell.
1 I I I I I I I I I I I I I I I I I I I	Dell Help & Support Access help and support for your computer.

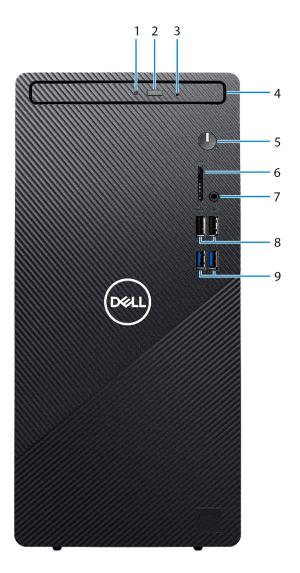
Table 1. Locate Dell apps (continued)

<u>~</u>	SupportAssist Proactively checks the health of your computer's hardware and software. (i) 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.



Views of Inspiron 3880

Front



1. Optical-drive activity light

The Optical-drive activity light turns on when the computer reads from or writes to an optical drive.

2. Optical-drive eject button

Press to open the optical drive tray.

3. Optical-drive emergency eject pinhole

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

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

4. Optical drive

An optical drive reads from and writes to CDs and DVDs.

5. Power button

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.

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

6. SD-card slot

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

- Secure Digital (SD)
- Secure Digital High Capacity (SDHC)
- Secure Digital Extended Capacity (SDXC)

7. Headset port

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

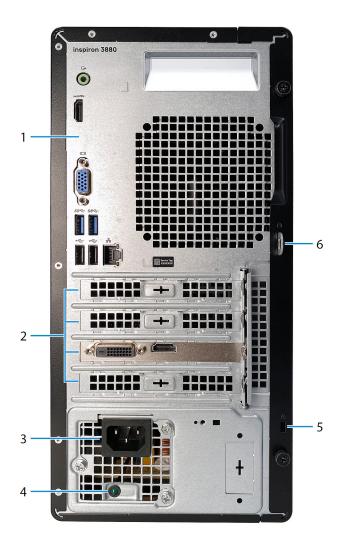
8. USB 2.0 ports (2)

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

9. USB 3.2 Gen 1 ports (2)

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

Back



1. Back panel

Connect USB, audio, video, and other devices.

2. Expansion-card slots

Provide access to ports on any installed PCI Express cards.

3. Power port

Connect a power cable to provide power to your computer.

4. Power-supply diagnostics light

Indicates the power-supply state.

5. Padlock rings

Attach a standard padlock to prevent unauthorized access to the interior of your computer.

6. Security-cable slot (wedge-shaped)

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

Back panel



1. Line-out port

Connect speakers.

2. HDMI port

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

() 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. VGA port

Connect an external display or a projector.

() **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. USB 3.2 Gen 1 ports (2)

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

5. USB 2.0 ports (2)

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

6. Network port

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

Specifications of Inspiron 3880

Dimensions and weight

The following table lists the height, width, depth, and weight of your Inspiron 3880.

Table 2. Dimensions and weight

Description	Values
Height:	
Front height	324.30 mm (12.77 in.)
Rear height	324.30 mm (12.77 in.)
Width	154 mm (6.06 in.)
Depth	293 mm (11.54 in.)
Weight (maximum)	6.02 kg (13.27 lb) (i) NOTE: The weight of your computer depends on the configuration ordered and manufacturing variability.

Processor

The following table lists the details of the processors that are supported by your Inspiron 3880.

Table 3. Processor

Descriptio n	Option one	Option two	Option three	Option four	Option five	Option six	Option seven	Option eight
Processor type	10 th Generation Intel Celeron G5900	10 th Generation Intel Celeron G5905	10 th Generation Intel Pentium Gold G6400	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
Processor wattage	58 W	58 W	58 W	65 W	65 W	65 W	65 W	65 W
Processor core count	2	2	2	4	6	6	8	8
Processor thread count	2	2	4	8	12	12	16	16
Processor speed	3.4 GHz	3.5 GHz	4 GHz	Up to 4.3 GHz	Up to 4.3 GHz	Up to 4.3 GHz	Up to 4.8 GHz	Up to 4.8 GHz
Processor cache	2 MB	4 MB	4 MB	6 MB	12 MB	12 MB	16 MB	16 MB

Table 3. Processor (continued)

Descriptio n	Option one	Option two	Option three	Option four	Option five	Option six	Option seven	Option eight
Integrated graphics	Intel UHD Graphics 610	Intel UHD Graphics 610	Intel UHD Graphics 610	Intel UHD Graphics 630	Intel UHD Graphics 630	Not supported	Intel UHD Graphics 630	Not supported

Chipset

The following table lists the details of the chipset supported by your Inspiron 3880.

Table 4. Chipset

Description	Values
Chipset	Intel CML PCH-V B460
Processor	 10th Generation Intel Core i3/i5/i7 10th Generation Intel Core i5F/i7F 10th Generation Intel Pentium Gold 10th Generation Intel Celeron
DRAM bus width	64-bit
Flash EPROM	16 MB
PCle bus	Up to Gen3

Operating system

Your Inspiron 3880 supports the following operating systems:

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

Memory

The following table lists the memory specifications of your Inspiron 3880.

Table 5. Memory specifications

Description	Values	
Memory slots	Two DIMM slots	
Memory type	Dual-Channel DDR4	
Memory speed	 2666 MHz, 2933 MHz NOTE: 2933 MHz speed memory modules are only available for computers shipped with 10th Generation Intel Core i7/i7F processors. 	
Maximum memory configuration	64 GB	

Table 5. Memory specifications (continued)

Description	Values
Minimum memory configuration	4 GB
Memory size per slot	4 GB, 8 GB, 16 GB, and 32 GB
Memory configurations supported	 4 GB, 1 x 4 GB, DDR4, 2666 MHz to 2933 MHz 8 GB, 1 x 8 GB, DDR4, 2666 MHz to 2933 MHz 8 GB, 2 x 4 GB, dual-channel DDR4, 2666 MHz to 2933 MHz 16 GB, 1 x 16 GB, DDR4, 2666 MHz to 2933 MHz 16 GB, 2 x 8 GB, dual-channel DDR4, 2666 MHz to 2933 MHz 32 GB, 1 x 32 GB, DDR4, 2666 MHz to 2933 MHz 32 GB, 2 x 16 GB, dual-channel DDR4, 2666 MHz to 2933 MHz 64 GB, 2 x 32 GB, dual-channel DDR4, 2666 MHz to 2933 MHz

External ports

The following table lists the external ports of your Inspiron 3880.

Table 6. External ports

Description	Values	
Network port	One RJ-45 port	
USB ports	Four USB 2.0 portsFour USB 3.2 Gen 1 ports	
Audio port	 One headset (headphone and microphone combo) port One line-out port 	
Video port	 One HDMI 1.4 port One VGA port i) NOTE: These ports are not available for computers shipped with 10th Generation Intel Core i5-10400F and 10th Generation Intel Core i7-10700F processors. 	
Media-card reader	One SD-card slot	
Security	One padlock ring slotOne security-cable slot (wedge-shaped)	

Internal slots

The following table lists the internal slots of your Inspiron 3880.

Table 7. Internal slots

Description	Values	
PCle	One PCIe x16 expansion card slot.One PCIe x1 expansion card slot.	

Table 7. Internal slots (continued)

Description	Values
SATA	 One SATA slot for optical-disk drive One SATA slot for 3.5-inch hard-disk drive
M.2	 One M.2 2230 slot for WiFi and Bluetooth combo card One M.2 slot for 2280 solid-state drive/Intel Optane or 2230 solid-state drive NOTE: To learn more about the features of different types of M.2 cards, see the knowledge base article SLN301626 at www.dell.com/support.

Ethernet

The following table lists the wired Ethernet Local Area Network (LAN) specifications of your Inspiron 3880.

Table 8. Ethernet specifications

Description	Values
Model number	Realtek 8111HSD
Transfer rate	10/100/1000 Mbps

Wireless module

The following table lists the Wireless Local Area Network (WLAN) module specifications of your Inspiron 3880.

Table 9. Wireless module specifications

Description	Option one	Option two	Option three
Model number	Intel 3165	Intel 9260	Realtek RTL8723DE
Transfer rate	Up to 433 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	 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 WEPAES-CCMPTKIP	64-bit/128-bit WEPAES-CCMPTKIP
Bluetooth	Bluetooth 4.2	Bluetooth 5	Bluetooth 4.2

Audio

The following table lists the audio specifications of your Inspiron 3880.

Table 10. Audio specifications

Description	Values	
Audio controller	Realtek ALC3246	
Stereo conversion	Supported	
Internal audio interface	High definition audio interface	
External audio interface	 One 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. One headset (headphone and microphone combo) port One line-out port 	

Storage

This section lists the storage options on your Inspiron 3880.

Your Inspiron 3880 supports one of the following storage configurations:

- One 3.5-inch hard-disk drive
- One M.2 2230 solid-state drive
- One M.2 2230 solid-state drive + One 3.5-inch hard-disk drive

The primary drive of your Inspiron 3880 varies with the storage configuration. For computers:

- with a solid-state drive, the solid-state drive is the primary drive
- without a solid-state drive, the hard drive is the primary drive

Table 11. Storage specifications

Storage type	Interface type	Capacity
3.5-inch hard-disk drive	SATA AHCI, up to 6 Gbps	Up to 2 TB .
M.2 2230 solid-state drive	PCle Gen3.0x4 NVMe, up to 32 Gbps	Up to 512 GB
9.5mm DVD+/-RW drive	SATA AHCI, up to 1.5 Gbps	One DVD+/-RW

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.

() 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

Table 12. Intel Optane memory (continued)

Description	Values
Interface	PCle Gen3.0 x2
Connector	M.2 2280
Configurations supported	16 GB or 32 GB
Capacity	Up to 32 GB

Media-card reader

The following table lists the media cards supported by your Inspiron 3880.

Table 13. Media-card reader specifications

Description	Values
Media-card type	One SD card slot
Media-cards supported	 Secure Digital (SD) Secure Digital High Capacity (SDHC) Secure Digital Extended Capacity (SDXC)
(i) NOTE: The maximum capacity supported by the media-card reader varies depending on the standard of the media card installed in your computer.	

Power supply

The following table lists the power supply specifications of your Inspiron 3880.

Table 14. Power supply specifications

Desc	cription	Option 1	Option 2
Туре		200W Bronze	260W Bronze
Input	voltage	90 VAC-264 VAC	90 VAC-264 VAC
Input	frequency	47 Hz-63 Hz	47 Hz-63 Hz
Input	current (maximum)	3.20 A	4.20 A
Output current (continuous)		Operating: • 12 VA: 16.5 A • 12 VB: 14 A Standby: • 12 VA: 0.5 A • 12 VB: 2.5 A	Operating: • 12 VA: 16.5 A • 12 VB: 16 A Standby: • 12 VA: 0.5 A • 12 VB: 2.5 A
Rated output voltage		12 VA, 12 VB	12 VA, 12 VB
Tem	perature 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)

GPU—Integrated

The following table lists the specifications of the integrated Graphics Processing Unit (GPU) supported by your Inspiron 3880.

Table 15. GPU—Integrated

Controller	External display support	Memory size	Processor
Intel UHD Graphics 610	One HDMI 1.4b portOne VGA port	Shared system memory	10 th Generation Intel Celeron/Pentium Gold
Intel UHD Graphics 630	One HDMI 1.4b portOne VGA port	Shared system memory	10 th Generation Intel Core i3/i5/i7

GPU—Discrete

The following table lists the specifications of the discrete Graphics Processing Unit (GPU) supported by your Inspiron 3880.

Table 16. GPU—Discrete

Controller	External display support	Memory size	Memory type
NVIDIA GeForce GT 730	 One HDMI 1.4 port One VGA port One DVI-D port 	2 GB	GDDR5
NVIDIA GeForce GT 1030	One HDMI 1.4 portOne DVI-D port	2 GB	GDDR5

Operating and storage environment

This table lists the operating and storage specifications of your Inspiron 3880.

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)	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 range	-15.2 m to 3048 m (-49.87 ft to 10000 ft)	-15.2 m to 10668 m (-49.87 ft to 35000 ft)

the device outside these ranges may impact the performance of specific components.

* 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.

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 18. Self-help resources

Self-help resources	Resource location	
Information about Dell products and services	www.dell.com	
My Dell	Deell	
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.	 Go to https://www.dell.com/support/home/? app=knowledgebase. Type the subject or keyword in the Search box. Click Search to retrieve the related articles. 	
 Learn and know the following information about your product: Product specifications Operating system Setting up and using your product Data backup Troubleshooting and diagnostics Factory and system restore BIOS information 	 See Me and My Dell at www.dell.com/support/manuals. 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.

(i) 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.

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