

System specifications

NOTE: Offerings may vary by region. The following specifications are only those required by law to ship with your computer. For more information about the configuration of your computer, go to Help and Support in your Windows operating system and select the option to view information about your computer.

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Chipset

Table 2. Chipset

	Tower/ Small form factor/ Micro
Chipset	Intel Q370 Chipset
Non-volatile memory on chipset	
BIOS Configuration Serial Peripheral Interface (SPI)	256 Mbit (32 MB) located at SPI_FLASH on chipset
Trusted Platform Module (TPM) 2.0 Security Device (Discrete TPM Enabled)	24 KB located at TPM 2.0 on chipset
Firmware-TPM (Discrete TPM disabled)	By default the Platform Trust Technology feature is visible to the OS
NIC EEPROM	LOM configuration contained within LOM e-fuse – no dedicated LOM EEPROM

Processor

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.

Device Guard (DG) and Credential Guard (CG) are the new security features that are only available on Windows 10 Enterprise today.

Device Guard is a combination of enterprise-related hardware and software security features that, when configured together, will lock a device down so that it can only run trusted applications. If it is not a trusted application, it cannot run.

Credential Guard uses virtualization-based security to isolate secrets (credentials) so that only privileged system software can access them. Unauthorized access to these secrets can lead to credential theft attacks. Credential Guard prevents these attacks by protecting NTLM password hashes and Kerberos Ticket Granting Tickets

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

NOTE: These are available offline only.

Table 3. Processor

Intel Core Processors 9th Gen Core CPUs	Tower/ Small Form Factor	Micro	GSP	DG/CG Ready
Intel® Pentium G5420 (2 Cores/4MB/4T/3.8GHz/65W); supports Windows 10/Linux	x			x
Intel® Pentium G5420T (2 Cores/4MB/4T/3.2GHz/35W); supports Windows 10/Linux		x		
Intel® Pentium G5600 (2 Cores/4MB/4T/3.9GHz/65W); supports Windows 10/Linux	x			x
Intel® Pentium G5600T (2 Cores/4MB/4T/3.3GHz/35W); supports Windows 10/Linux		x		
Intel® Core™ i3-9100 (4 Cores/6MB/4T/3.6GHz to 4.2GHz/65W); supports Windows 10/Linux	x			x
Intel® Core™ i3-9100T (4 Cores/6MB/4T/3.1GHz to 3.7GHz/35W); supports Windows 10/Linux		x		x
Intel® Core™ i3-9300 (4 Cores/8MB/4T/3.7GHz to 4.3GHz/65W); supports Windows 10/Linux	x			x
Intel® Core™ i3-9300T (4 Cores/8MB/4T/3.2GHz to 3.8GHz/35W); supports Windows 10/Linux		x		x
Intel® Core™ i5-9400 (6 Cores/9MB/6T/2.9GHz to 4.1GHz/65W); supports Windows 10/Linux	x		x	x
Intel® Core™ i5-9400T (6 Cores/9MB/6T/1.8GHz to 3.4GHz/35W); supports Windows 10/Linux		x	x	x
Intel® Core™ i5-9500 (6 Cores/9MB/6T/3.0GHz to 4.4GHz/65W); supports Windows 10/Linux	x		x	x
Intel® Core™ i5-9500T (6 Cores/9MB/6T/2.2GHz to 3.7GHz/35W); supports Windows 10/Linux		x	x	x

Intel Core Processors 9th Gen Core CPUs	Tower/ Small Form Factor	Micro	GSP	DG/CG Ready
Intel® Core™ i5-9600 (6 Cores/9MB/6T/ 3.1GHz to 4.6GHz/65W); supports Windows 10/ Linux	x		x	x
Intel® Core™ i5-9600T (6 Cores/9MB/6T/ 2.3GHz to 3.9GHz/35W); supports Windows 10/ Linux		x	x	x
Intel® Core™ i7-9700 (8 Cores/12MB/8T/ 3.0GHz to 4.8GHz/65W); supports Windows 10/ Linux	x		x	x
Intel® Core™ i7-9700T (8 Cores/12MB/8T/ 2.0GHz to 4.3GHz/35W); supports Windows 10/ Linux		x	x	x

Table 4. Processor

Intel Core Processors 8th Gen Core CPUs	Tower	Small Form Factor	Micro	GSP	DG/CG Ready
Intel Core i7-8700 (6 Cores/12 MB/12T/up to 4.6 GHz/65 W); supports Windows 10/Linux	Yes	Yes	No	GSP	Yes
Intel Core i5-8500 (6 Cores/9 MB/6T/up to 4.1 GHz/65 W); supports Windows 10/Linux	Yes	Yes	No	GSP	Yes
Intel Core i5-8400 (6 Cores/9 MB/6T/up to 4.0 GHz/65 W); supports Windows 10/Linux	Yes	Yes	No	GSP	Yes
Intel Core i3-8300 (4 Cores/8 MB/4T/3.7 GHz/65 W); supports Windows 10/Linux	Yes	Yes	No		Yes
Intel Core i3-8100 (4 Cores/6 MB/4T/3.6 GHz/65 W); supports Windows 10/Linux	Yes	Yes	No		Yes
Intel Pentium Gold G5500 (2 Cores/4 MB/4T/3.8 GHz/65 W); supports Windows 10/Linux	Yes	Yes	No		Yes
Intel Pentium Gold G5400 (2 Cores/4 MB/4T/3.7 GHz/65 W); supports Windows 10/Linux	Yes	Yes	No		Yes
Intel Celeron G4900 (2 Cores/2 MB/2T/up to 3.1 GHz/65 W); supports Windows 10/Linux	Yes	Yes	No		Yes
Intel Core i7-8700T (6 Cores/12 MB/12T/up to 4.0 GHz/35 W); supports Windows 10/Linux	No	No	Yes	GSP	Yes
Intel Core i5-8500T (6 Cores/9 MB/6T/up to 3.5 GHz/35 W); supports Windows 10/Linux	No	No	Yes	GSP	Yes
Intel Core i5-8400T (6 Cores/9 MB/6T/up to 3.3 GHz/35 W); supports Windows 10/Linux	No	No	Yes	GSP	Yes
Intel Core i3-8300T (4 Cores/8 MB/4T/3.2 GHz/35 W); supports Windows 10/Linux	No	No	Yes		Yes
Intel Core i3-8100T (4 Cores/6 MB/4T/3.1 GHz/35 W); supports Windows 10/Linux	No	No	Yes		Yes

Intel Core Processors 8th Gen Core CPUs	Tower	Small Form Factor	Micro	GSP	DG/CG Ready
Intel Pentium Gold G5500T (2 Cores/4 MB/4T/3.2 GHz/35 W); supports Windows 10/Linux	No	No	Yes		
Intel Pentium Gold G5400T (2 Cores/4 MB/4T/3.1 GHz/35 W); supports Windows 10/Linux	No	No	Yes		
Intel Celeron G4900T (2 Cores/2 MB/2T/2.9 GHz/35 W); supports Windows 10/Linux	No	No	Yes		

Memory

NOTE: Memory modules should be installed in pairs of matched memory size, speed, and technology. If the memory modules are not installed in matched pairs, the computer will continue to operate, but with a slight reduction in performance. The entire memory range is available to 64-bit operating systems.

Table 5. Memory

	Tower	Small Form Factor	Micro
Type: DDR4 DRAM Non-ECC Memory	2666 MHz on i5 and i7 processors (performs at 2400 MHz on Celeron, Pentium and i3 processors)		
DIMM Slots	4	4	2 (SoDIMM)s
DIMM Capacities	Up to 64 GB	Up to 64 GB	Up to 32 GB
Minimum Memory	4 GB	4 GB	4 GB
Maximum System Memory	64 GB	64 GB	32 GB
DIMMs/Channel	2	2	1
UDIMM support	Yes	Yes	No
Memory configurations:			
4 GB = 1 x 4 GB	Yes	Yes	Yes
8 GB = 2 x 4 GB and 1 x 8 GB	Yes	Yes	Yes
16 GB = 2 x 8 GB and 1 x 16 GB	Yes	Yes	Yes
32 GB = 4 x 8 GB	Yes	Yes	No
32 GB = 2 x 16 GB	Yes	Yes	Yes
64 GB = 4 x 16 GB	Yes	Yes	No

Intel Optane Memory

NOTE: Intel Optane memory cannot replace DRAM entirely. However, these two memory technologies complement each other within the PC.

Table 6. M.2 16 GB Intel Optane

	Tower/Small form factor/Micro
Capacity (TB)	16 GB
Dimensions (inches) (W x D x H)	22 x 80 x 2.38

Tower/Small form factor/Micro	
Interface type and Maximum speed	PCIe Gen2
MTBF	1.6 M hours
Logical Blocks	28,181,328
Power Source:	
Power Consumption (reference only)	Idle 900 mW to 1.2 W, Active 3.5 W
Environmental Operating Conditions (Non-Condensing):	
Temperature Range	0°C to 70°C
Relative Humidity Range	10 to 90%
Op Shock (@2 ms)	1,000G
Environmental Non-Operating Conditions (Non-Condensing):	
Temperature Range	-10°C to 70°C
Relative Humidity Range	5 to 95%

Storage

Table 7. Storage

	Tower	Small Form Factor	Micro
Bays:			
Optical Drives Supported	1 Slim	1 Slim	0
Hard Drive Bay Supported (Internal)	1 x 3.5"/2 x2 .5"	1 x 3.5" or 2 x 2.5"	1 x 2.5"
Hard Drives Supported 3.5"/2.5" (maximum)	1/2	1/2	0/1
Interface:			
SATA 2.0	1	1	0
SATA 3.0	3	2	1 (HDD)
M.2 Socket 3 (for SATA / NVMe SSD)	1	1	1
M.2 Socket 1 (for WiFi/BT card)	1	1	1
3.5" Drives:			
3.5 inch 500 GB 7200 RPM Hard Disk Drive	Y	Y	N/A
3.5 inch 1 TB SATA 7200 RPM Hard Disk Drive	Y	Y	N/A
3.5 inch 2 TB SATA 7200 RPM Hard Disk Drive	Y	Y	N/A
2.5" Drives:			
2.5 inch 500 GB SATA 5400 RPM Hard Disk Drive	Y	Y	Y
2.5 inch 500 GB SATA 7200 RPM Hard Disk Drive	Y	Y	Y
2.5 inch 500GB 7200 RPM FIPS Self Encrypting Opal 2.0 Hard Disk Drive	Y	Y	Y
2.5 inch 1 TB SATA 7200 RPM Hard Disk Drive	Y	Y	Y

	Tower	Small Form Factor	Micro
2.5 inch 2 TB 5400 RPM SATA Hard Disk Drive	Y	Y	Y
2.5 inch 256 GB SATA Class 20 Solid State Drive ¹	Y	Y	Y
2.5 inch 512 GB SATA Class 20 Solid State Drive ¹	Y	Y	Y
2.5 inch 1 TB SATA Class 20 Solid State Drive ¹	Y	Y	Y

M.2 SSD:

M.2 1 TB PCIe Class 40 Solid State Drive	Y	Y	Y
M.2 256 GB PCIe NVMe Class 40 Solid State Drive	Y	Y	Y
M.2 512 GB PCIe NVMe Class 40 Self Encrypting Opal 2.0 Solid State Drive	Y	Y	Y
M.2 512 GB PCIe NVMe Class 40 Solid State Drive	Y	Y	Y
M.2 128 GB PCIe NVMe Class 35 Solid State Drive	Y	Y	Y
M.2 256 GB PCIe NVMe Class 35 Solid State Drive	Y	Y	Y
M.2 512 GB PCIe NVMe Class 35 Solid State Drive	Y	Y	Y

¹2.5 Inch Solid State Drives are only available as a secondary storage option and can only be paired with a M.2 Solid State Drive as the Primary Storage Device.

System board connectors

NOTE: See Detailed Engineering Specifications for maximum card dimensions.

Table 8. System board connectors

	Tower	Small Form Factor	Micro
PCIe x16 Slot(s) ¹	1	1	0
PCIe x16 (wired x4) Slot(s) ²	1	1 x4 open ended	0
PCIe x1 Slot(s) ²	2	0	0
Serial ATA (SATA) ³	4	3	1
M.2 Socket 3 ⁴ (for SSD)	1 - 2280/2230	1 - 2280/2230	1 - 2280/2230
M.2 Socket 1 ⁵ (for WiFi/BT card)	1 - 2230	1 - 2230	1 – 2230

¹ PCIe x16 Slots (Support Standard Rev 3.0)

² PCIe x16 (wired x 4), PCIe x1 Slots, M.2 Slot (Support Standard Rev 3.0)

³ Serial ATA (Tower/Small Form Factor support one Gen2 port for ODD and the rest of the ports support Gen3)

⁴ M.2 Socket3: Support SATA & PCIe interface

⁵ M.2 Socket1: Support Intel CNVi or USB2.0/PCIe

External ports and connectors

NOTE: Tower supports Full Height (FH) cards and Small Form Factor supports Low Profile (LP) cards. See chassis diagrams section for port/connector locations.

Table 9. External ports and connectors

	Tower	Small Form Factor	Micro
USB 2.0 (SmartPower On)	2 Rear	2 Rear	0
USB 3.1 Gen 1 (Front/Rear/Internal)	1/4/0	1/4/0	0/3/0
USB 3.1 Gen 1 (SmartPower On)	0	0	1 Rear
USB 3.1 Gen 1 PowerShare	0	0	1 Front
USB 2.0 port	1 Front	1 Front	0
USB 2.0 PowerShare (2A max)	1 Front	1 Front	0
USB 3.1 Gen 2 Type C with PowerShare	1 Front	1 Front	1 Front
Serial port	Optional	Optional	2 Options: #1 - Serial port in option port, #2 Serial & PS/2 via fan out cable
Network Connector (10/100/1000 RJ-45)	1 Rear	1 Rear	1 Rear
PS/2	Optional	Optional	Optional
Video:			
DisplayPort 1.2	2 Rear (3rd optional video out: HDMI 2.0, DP, VGA, USB Type C (with DP Alt Mode))	2 Rear (3rd optional video out: HDMI 2.0, DP, VGA, USB Type C (with DP Alt Mode))	2 Rear (3rd optional video out: HDMI 2.0, DP, VGA, USB Type C (with DP Alt Mode))
Support for Dual 50 W Graphics	Yes	N/A	N/A
Support for Dual 25 W Graphics	N/A	Yes	N/A
Audio:			
Rear panel Mic-in/Line-in, Line-out	1 x Line-out	1 x Line-out	N/A
Universal Audio Jack	1 x UAJ	1 x UAJ	1 x UAJ and 1 x Line-out

Graphics and Video Controller

NOTE: Tower supports Full Height (FH) cards and Small Form Factor supports low profile (LP) cards.

Table 10. Graphics and Video Controller

	Tower	Small Form Factor	Micro
Intel UHD 630 Graphics [with 9th Generation Core i3/i5/i7 CPU-GPU combo]	Integrated on CPU	Integrated on CPU	Integrated on CPU
Intel UHD 610 Graphics [with 9th Generation Pentium CPU-GPU combo]	Integrated on CPU	Integrated on CPU	Integrated on CPU
Enhanced Graphic/ Video Options			
2 GB AMD Radeon R5 430	Optional	Optional	Not available
2 GB NVIDIA GeForce GT 730	Optional	Optional	Not available
4 GB AMD Radeon RX 550	Optional	Optional	Not available
2 GB Dual AMD Radeon R5 430	Optional	Optional	Not available
4 GB Dual AMD Radeon RX 550	Optional	Not available	Not available

Communications—Wireless

Table 11. Communications—Wireless

	Tower/Small Form Factor/Micro
Qualcomm QCA9377 Dual-band 1x1 802.11ac Wireless with MU-MIMO + Bluetooth 4.1	Yes
Qualcomm QCA61x4A Dual-band 2x2 802.11ac Wireless with MU-MIMO + Bluetooth 4.2	Yes
Intel Wireless-AC 9560, Dual-band 2x2 802.11ac Wi-Fi with MU-MIMO + Bluetooth 5	Yes
Internal Wireless Antennas	Yes
External Wireless Connectors and Antenna	Yes
Support for 802.11n and 802.11ac wireless NIC	Yes via M.2
Energy-Efficient Ethernet capability” as specified in IEEE 802.3az-2010.	Yes

Input devices

Table 12. Input devices

	Tower/ Small Form Factor/ Micro
Dell Business Multimedia Keyboard KB522	Optional
Dell Multimedia Keyboard KB216	Optional
Dell Smartcard Keyboard KB813	Optional
Dell Wireless Mouse WM326	Optional
Dell Wireless Keyboard and Mouse KM636	Optional
Dell Premier Wireless Keyboard WK717	Optional
Dell Premier Wireless Keyboard and Mouse KM717	Optional
Dell Premier Wireless Mouse WM527	Optional
Dell Laser Scroll USB 6-Buttons Silver and Black Mouse	Optional
Dell Optical Mouse MS116	Optional
Dell Palm Rest for KB216 and KM636	Optional

Accessories

Table 13. Accessories

Accessories	Tower	Small Form Factor	Micro Form Factor
Cable Covers - chassis designed with hooks for removable and securable cover	Yes	Yes	Yes
Dust Filters includes a cleaning maintenance reminder in BIOS	Yes	Yes	Yes
Basic Stand	No	No	Vertical Stand
Dual Monitor Stand	No	Yes	Yes
Dual Monitor Arm	Yes	Yes	Yes
Single Monitor Arm	Yes	Yes	Yes
Slim Single Monitor Arm	Yes	Yes	Yes
Desktop AIO Stands includes custom cable cover, handle, VESA adapter bracket	No	Yes	Yes
Desktop Micro Mounts	No	No	Yes
Expansion Module	No	No	DVD RW
VESA Mounting	No	No	Yes

Environmental

Table 14. Environmental

	Tower/ Small Form Factor/ Micro
Recyclable packaging	X
MultiPack packaging	Optional, US only
Energy Efficient Power Supply	Optional Bronze and Platinum ¹ available/Standard

 **NOTE:** ¹Power Supplies not available in all countries.

Regulatory and environmental compliance

Product related conformity assessment and regulatory authorizations including Product Safety, Electromagnetic Compatibility (EMC), Ergonomics, and Communication Devices relevant to this product may be viewed at www.dell.com/regulatory_compliance. The Regulatory Datasheet for this product is located at http://www.dell.com/regulatory_compliance.

Details of Dell's environmental stewardship program to conserve product energy consumption, reduce or eliminate materials for disposal, prolong product life span and provide effective and convenient equipment recovery solutions may be viewed at www.dell.com/environment. Product related conformity assessment, regulatory authorizations, and information encompassing Environmental, Energy Consumption, Noise Emissions, Product Materials Information, Packaging, Batteries, and Recycling relevant to this product may be viewed by clicking the Design for Environment link on the webpage.

Table 15. Regulatory/Environmental Certifications

	Tower	SFF	Micro
Energy Star 7.0/7.1 Compliant (Windows & Ubuntu)	Yes	Yes	Yes
EPEAT 2018 Bronze Rated Configurations	Yes	Yes	Yes
NFPA 99 Leakage Current Spec (Dell ENG0011750)	Yes	Yes	Yes
TCO 8.0	Yes	Yes	Yes
BFR / PVC Free: (aka Halogen Free) : The system shall comply with the limits defined in Dell specification ENV0199 - BFR/CFR/PVC-Free Specification	No	No	Yes
California Energy Commission (CEC) MEPS - Internal PSU Requirements	Yes	Yes	No
Br/CL Reduction:	Yes	Yes	Yes
Plastic parts above 25 grams shall not contain greater than 1000 ppm chlorine or greater than 1000 ppm bromine at the homogenous level.			
Following can be excluded:			
- Printed circuit boards, cable and wiring, fans, and electronic components			
Anticipated Required Criteria for EPEAT Revision Effective 1H 2018			
Minimum 2% Post-Consumer Recycled (PCR) plastics as standard in product.	Yes	No	No
Anticipated Required Criteria for EPEAT Revision Effective 1H 2018			
Higher level % Post-Consumer Recycled (PCR) plastics in product:	Yes	No	No
* DT, Workstations, Thin Clients - 10%			
* Integrated Desktop Computers (AIO) 15%			
(Anticipated 1 Optional point in the EPEAT Revision for higher level PCR)			