

Dell Precision 3630 Tower

Technical Guidebook



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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Introduction

The goal of this reference material is to provide with the necessary information about Dell Precision tower 3630 and its eco-system, for sales and marketing teams to provide accurate and effective resolution to customers inquiries.

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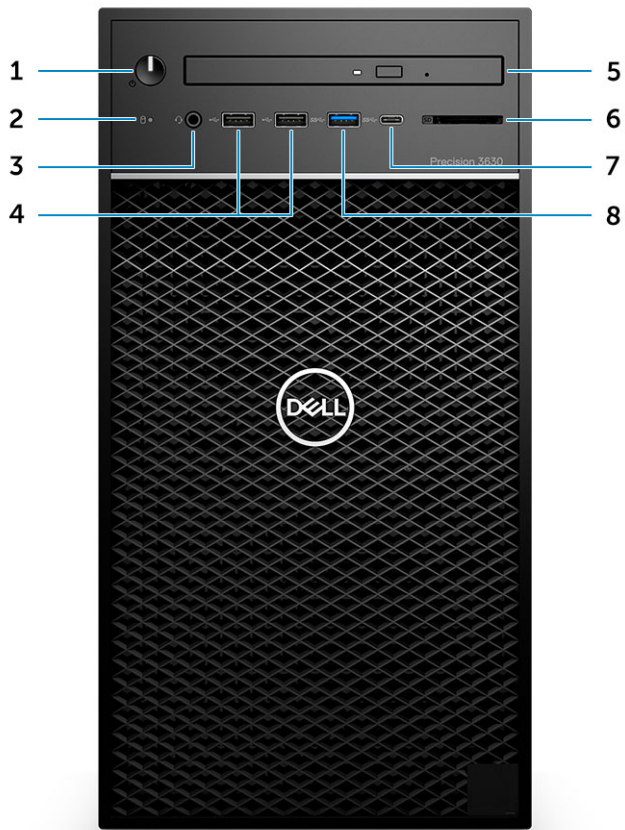
- Core team
- Engineering extended team

Chassis overview

Dell Precision Tower 3630



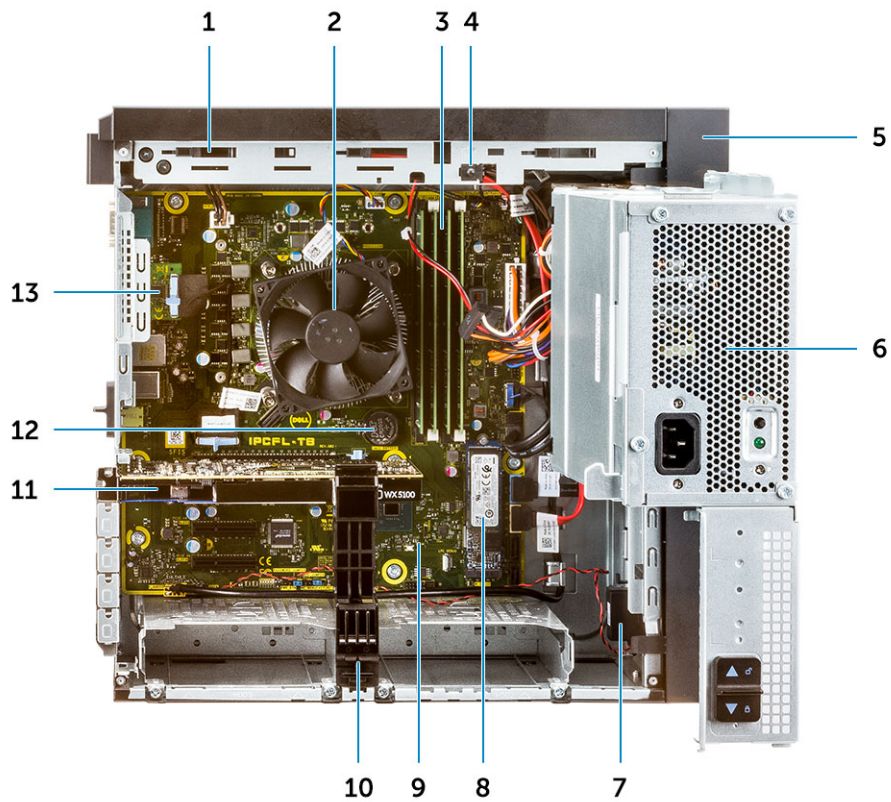
Front view



1. Power button/Diagnostics indicator
2. Hard drive activity LED
3. 3.5 mm stereo headset/mic combo
4. USB 2.0 Type-A ports
5. Optical drive/CAC Reader (Optional)
6. Media card reader (Optional)
7. USB 3.1 Type-C port
8. USB 3.0 Type-A port

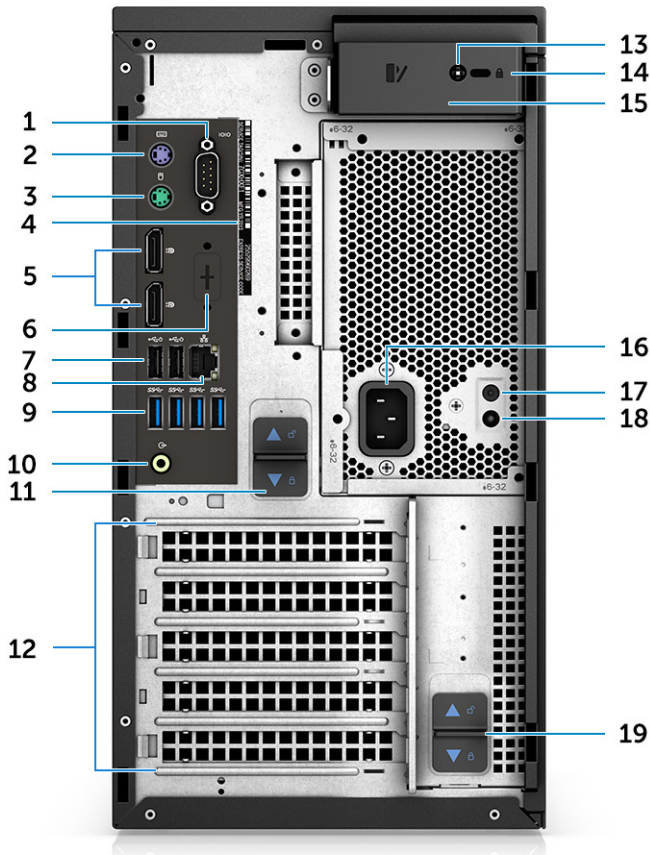
Inside chassis overview

NOTE: Dell Precision 3630 Tower that is customized with 850 W PSU has an extra fan on the front of the chassis.



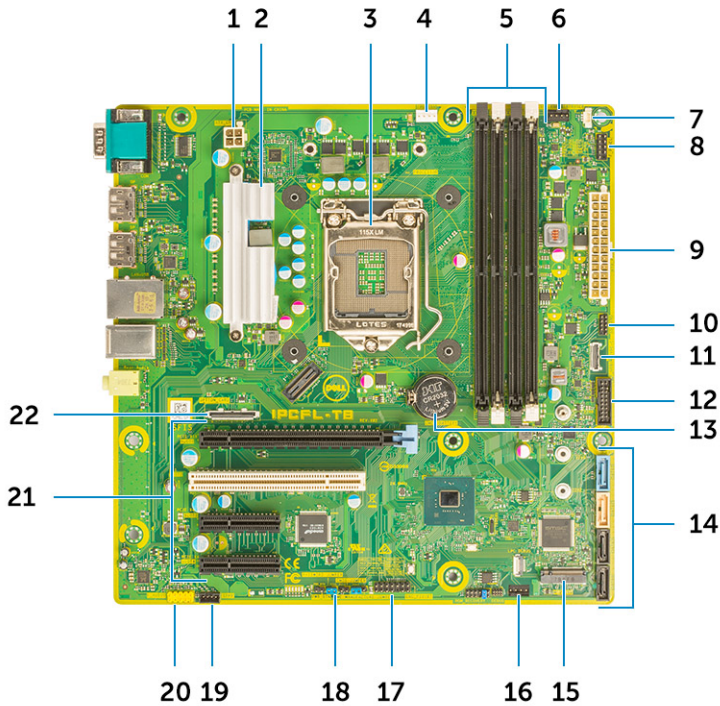
1. Side cover latch
2. CPU heat-sink fan
3. Memory
4. Intrusion detection switch
5. Front bezel
6. Power Supply Unit (PSU)
7. Speaker
8. M.2 SSD
9. Password CLR jumper
10. Expansion card support bracket
11. PCIe add-on card
12. CMOS battery
13. VGA daughterboard

Back view



1. Serial port
2. PS2 port (Keyboard)
3. PS2 port (Mouse)
4. Service Tag label
5. DisplayPort x 2
6. Placeholder for optional VGA, DP, HDMI, Type-C daughterboards
7. Two USB 2.0 Type-A (with SmartPower)
8. RJ45 network connector (speed up to 1000 Mbps)
9. 4 x USB 3.1 Gen1 ports
10. Audio line out
11. PSU hinge release latch
12. Expansion card slots
13. Side cover safety screw
14. Kensington/padlock slot
15. Cover release latch
16. Power connector port
17. PSU Built in Self Test (BIST) button
18. PSU Built in Self Test (BIST) LED
19. PSU hinge release latch

Motherboard layout



Tower system board components

1. Power (CPU)
2. VR Heatsink (Available only with 95 W heat sink solution)
3. Processor socket
4. CPU fan connector
5. Memory module connector
6. System fan connector
7. Intruder switch connector
8. Power button module connector
9. ATX PSU power connector
10. SD Card reader connector
11. Front panel USB Type-C connector
12. Front USB connector
13. Coin cell battery
14. SATA connectors
15. M.2 connector
16. Front fan connector



NOTE: Computers purchased before July, 19 did not have provision for front fan and old system board may not have this connector.

17. CAC_PIV/BT connector
18. Password Jumper
19. Speaker connector
20. Audio connector
21. PCIe slots (Top to Bottom):
 - a. Full Height PCIe x16
 - b. PCI x1
 - c. Two Full Height PCIe x4

22. Optional card connector (VGA, HDMI, DP,USB Type-C)

Technical specifications

System information

Table 1. System information

Feature	Specifications
Chipset	Intel C246 chipset
DRAM bus width	64-bit
FLASH EPROM	SP1 128 Mbits
PCIe bus	8 GHz
External bus frequency	DMI 3.0-8GT/s

Processor

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

Table 2. Processor specifications

Type	UMA Graphics
Intel Xeon E Processors:	
Intel Xeon E Processor E-2224 (4 Core, 4T, 8 MB cache, 3.3 GHz, 4.5 GHz Turbo, 71 W)	Intel UHD Graphics P630
Intel Xeon E Processor E-2224G (4 Core, 4T, 8 MB cache, 3.4 GHz, 4.7 GHz Turbo, 80 W)	Intel UHD Graphics P630
Intel Xeon E Processor E-2236 (6 Core, 12T, 12 MB Cache, 3.4 GHz, 4.8 Ghz, Turbo, 71 W)	Intel UHD Graphics P630
Intel Xeon E Processor E-2246G (6 Core, 12T, 12 MB Cache, 3.5 GHz, 4.8 Ghz, Turbo, 80 W)	None
Intel Xeon E Processor E-2274G (4 Core 8T, 8 MB Cache, 3.5 GHz, 4.9 GHz, Turbo, 80 W)	Intel UHD Graphics P630
Intel Xeon E Processor E-2286G (9 Core, 12T, 12 MB Cache, 3.8 GHz, 4.9 GHz, Turbo, 95 W)	None
Intel Xeon E Processor E-2124 (4 Core, 8 MB Cache, 3.4 GHz, 4.5 GHz Turbo, 71 W)	None
Intel Xeon E Processor E-2124G (4 Core, 8 MB Cache, 3.4 GHz, 4.5 GHz Turbo, 80 W)	Intel UHD Graphics P630
Intel Xeon E Processor E-2136 (6 Core HT, 12 MB Cache, 3.3 Ghz, 4.5 GHz Turbo, 71 W)	None
Intel Xeon E Processor E-2146G (6 Core 12T, 12 MB Cache, 3.5 GHz, 4.5 Ghz Turbo, 80 W)	Intel UHD Graphics P630

Type	UMA Graphics
Intel Xeon E Processor E-2174G (4 Core 8T, 8 MB Cache, 3.8 Ghz, 4.7 GHz Turbo, 80 W)	Intel UHD Graphics P630
Intel Xeon E Processor E-2186G (6 Core 12T, 12 MB Cache, 3.8 Ghz, 4.7 GHz Turbo, 95 W)	Intel UHD Graphics P630
Intel Core Processors:	
Intel Core Processor i3-9100 (4 Core, 4T, 6 MB Cache, 4.0 GHz, 65 W)	Intel UHD Graphics 630
Intel Core Processor i5-9500 (6 Core, 6T, 9 MB Cache, 3.0 GHz, 4.0 GHz Turbo, 65 W)	Intel UHD Graphics 630
Intel Core Processor i5-9600 (6 Core, 6T, 9 MB Cache, 3.6 GHz, 4.60 GHz Turbo, 65 W)	Intel UHD Graphics 630
Intel Core Processor i7-9700 (8 Core, 8T, 12 MB Cache, 3.6 GHz, 4.70 GHz Turbo, 65 W)	Intel UHD Graphics 630
Intel Core Processor i7-9700K (8 Core, 8T, 12 MB Cache, 3.6 GHz, 4.90 GHz Turbo, 95 W)	Intel UHD Graphics 630
Intel Core Processor i9-9900 (8 Core, 16 MB Cache, 3.1 Ghz, 5.0 Ghz Turbo)	Intel UHD Graphics 630
Intel Core Processor i9-9900K (8 Core, 16 MB Cache, 3.6 Ghz, 5.0 Ghz Turbo)	Intel UHD Graphics 630
Intel Core Processor i3-8100 (4 Core, 4T, 6 MB Cache, 3.6 GHz, 65 W)	Intel HD Graphics 630
Intel Core Processor i5-8500 (6 Core, 6T, 9 MB Cache, 3.0 GHz, 4.1 GHz Turbo, 65 W)	Intel HD Graphics 630
Intel Core Processor i5-8600 (6 Core, 6T, 9 MB Cache, 3.1 GHz, 4.3 GHz, Turbo, 65 W)	Intel HD Graphics 630
Intel Core Processor i7-8700 (6 Core, 12T, 12 MB Cache, 3.20 GHz, 4.6 GHz, Turbo, 65 W)	Intel HD Graphics 630
Intel Core Processor i7-8700K (6 Core, 12T, 12 MB Cache, 3.7 GHz, 4.7 GHz, Turbo, 91 W)	Intel HD Graphics 630
Intel Pentium Gold Processors:	
Intel Pentium Gold G5420 (2 Core, 4T, 4 MB Cache, 3.6 GHz , 65 W)	Intel UHD Graphics 610
Intel Pentium Gold G5400 (2 Core, 4T, 4 MB Cache, 3.6 GHz , 65 W)	Intel UHD Graphics 610

Memory

Table 3. Memory specifications

Feature	Specifications
Minimum memory configuration	4 GB
Maximum memory configuration	128 GB
Number of slots	4 UDIMM slots
Maximum memory supported per slot	32 GB
Memory options	<ul style="list-style-type: none"> 4 GB DDR4 (1 x 4 GB) - Non-ECC

Feature	Specifications
Type	<ul style="list-style-type: none"> 8 GB DDR4 (2 x 4 GB) - Non-ECC 8 GB DDR4 (1 x 8 GB) - ECC/ Non-ECC 16 GB DDR4 (2 x 8 GB) - ECC/ Non-ECC 16 GB DDR4 (4 x 4 GB) - Non-ECC 32 GB DDR4 (4 x 8 GB) - ECC/ Non-ECC 32 GB DDR4 (2 x 16 GB) - ECC/ Non-ECC 64 GB DDR4 (4 x 16 GB) - ECC/ Non-ECC 128 GB DDR4 (4 x 32 GB) - ECC/ Non-ECC
Speed	<ul style="list-style-type: none"> 2666 MHz (6 Cores) 2400 MHz (4 Cores)

Storage

Table 4. Storage specifications

Type	Form factor	Interface	Security option	Capacity
One Solid-State Drive (SSD)	M.2 2280/ 2230/ 2242 PCIe x4	<ul style="list-style-type: none"> SATA AHCI, Up to 6 Gbps PCIe 3 x 4 NVME, Up to 32 Gbps 	Yes, with SED drives	Up to 2 TB
One 2.5 inch Hard-Disk Drive (HDD)	Approximately (2.760 x 3.959 x 0.374 inches)	SATA AHCI, Up to 6 Gbps	Yes, with SED/FIPS HDD	Up to 2 TB
One 2.5 inch Solid-State Drive (SSD)	Approximately (2.760 x 3.959 x 0.374 inches)	SATA AHCI, Up to 6 Gbps	NONE	Up to 1 TB
One 3.5 inch Hard-Disk Drive (HDD)	Approximately (4.00 x 1.00 x 0.984 inches)	SATA AHCI, Up to 6 Gbps	NONE	Up to 8 TB
Zoom2 card	M.2 2280 PCIe x4	PCIe x 4 up to 32 Gbps	NONE	Up to 2 TB

Storage Matrix

Table 5. Storage combinations

Primary/Boot drive	Secondary drive
M.2 Drive	Upto 3x 3.5" / 4x 2.5" SATA SSD/HDD / PCIe SSD M.2 Interposer Card
2.5 inch Drive	Upto 2x 3.5" / 3x 2.5" SATA SSD/HDD /1 x M.2 Drive /PCIe SSD M.2 Interposer Card
3.5 inch Drive	Upto 2x 3.5" / 3x 2.5" SATA SSD/HDD /1 x M.2 Drive / PCIe SSD M.2 Interposer Card

Media card-reader

Table 6. Media-card reader specifications

Feature	Specifications
Type	Push-Pull type with USB 3.0 interface
Supported cards	<ul style="list-style-type: none">• SD• SDHC• SDXC• UHS-I• UHS-II

System board connectors

Table 7. System board connectors

M.2 Connectors	One x (2280/ 2230/ 2242 Key-M for SSD)
Serial ATA (SATA) connector	Four
PCIe X16 slot	One x Gen 3 Full Height (FH)
PCIe X16 slot (wired x4) slot	Two x FH PCIe x4 Gen 3 (open ended)
PCI slot	One x Full Height

Audio

Table 8. Audio specifications

Feature	Specifications
Controller	Integrated Realtek ALC3234
Type	Two-channel high-definition audio
Speakers	One
Interface	<ul style="list-style-type: none">• Universal audio jack (Rear)• Stereo headset/mic combo (Front)
Internal speaker amplifier	2 W

Video card

Table 9. Video card specifications

Controller	Type	CPU Dependency	Graphics memory type	Capacity	External display support	Maximum resolution
Intel HD Graphics 630	UMA	Intel Core i3,i5 or i7 8XXX Series Processors	Integrated	Shared system memory	DisplayPort X 2	4096 × 2304
Intel UHD Graphics 610	UMA	Intel Pentium Gold G54XX	Integrated	Shared system memory	DisplayPort X 2	4096 × 2304

Controller	Type	CPU Dependency	Graphics memory type	Capacity	External display support	Maximum resolution
Intel UHD Graphics 630	UMA	Series Processors Intel Core i3,i5 or i7 9XXX Series Processors	Integrated	Shared system memory	DisplayPort X 2	4096 × 2304
Intel UHD Graphics P630	UMA	Intel Xeon E-21XXG and 22XXG Series Processors	Integrated	Shared system memory	DisplayPort X 2	4096 × 2304
nVIDIA Quadro P Series (P5000, P4000, P2000, P1000, P620, P400)	Discrete	NA	GDDR5/ GDDR5X	2 GB - 16 GB	Upto four DisplayPort(DP 1.4) DVI-I	4096 × 2304
nVIDIA GeForce series 10 (GTX 1080/1060)	Discrete	NA	GDDR5/ GDDR5X	6 GB / 8 GB	DVI-D HDMI 2.0 3x DP1.3 (DP 1.4 ready)	4096 × 2304
nVIDIA Quadro RTX series (RTX4000, RTX5000)	Discrete	NA	GDDR5/ GDDR5X	6 GB / 8 GB	DVI-D HDMI 2.0 3x DP1.3 (DP 1.4 ready)	4096 × 2304
nVIDIA GeForce series 20 (RTX2060 Si, RTX 2080B)	Discrete	NA	GDDR5/ GDDR5X	6 GB / 8 GB	DVI-D HDMI 2.0 3x DP1.3 (DP 1.4 ready)	4096 × 2304
AMD Radeon Pro WX Series (2100, 3200, 3100, 4100, 5100, 7100) and RX580	Discrete	NA	GDDR5	2 GB - 8 GB	DP1.3 2-4 mini-DP	4096 × 2304

NOTE: Graphics cards with power rating equals to or more than 75 Watts requires a 6-pin and/or 8-pin power connector dongle.

Communication

Table 10. Communication specifications

Feature	Specifications
Wireless	Intel® Dual Band Wireless-AC 9260 (Thunder Peak 2) 802.11AC 2x2 Wi-Fi + BT 5 LE M.2 Wireless Card
Frequency band: 2.4 GHz, 5 GHz	Qualcomm QCA9377 dual band WiFi and Bluetooth Card
Add-in cards	1 GB NIC, 2.5 GB/5 Gb NIC
RJ45 Network adapter (10/100/1000 Mbps)	Intel® Ethernet Connection I219 Series

Ports and connectors

Table 11. Ports and connectors

Feature	Specifications
Memory card reader	Optional SD 4.0 media card reader
Smart card reader	Optional
USB	<ul style="list-style-type: none">• Two USB 2.0 Type-A port(Front)• One USB 3.1 Gen 2 Type-C port (Front)• One USB 3.1 Type-A port (Front)• Four USB 3.1 Gen 1 port (Rear, with SmartPower)• Two USB 2.0 ports (Rear, with SmartPower)
Security	Noble Wedge/Kensington lock slot
Audio	Universal audio jack (Front) Line-out (Rear)
Video	<ul style="list-style-type: none">• DisplayPort/HDMI/VGA/USB Type-C (optional)• Two x DisplayPort
Network adapter	One RJ-45 connector
Serial port	One serial port
PS/2	<ul style="list-style-type: none">• Mouse• Keyboard

Operating system

Table 12. Operating system

Operating systems supported	<ul style="list-style-type: none">• Windows 10 Home (64 bit)• Windows 10 Professional (64 bit)• Windows 10 Pro National Academic• Windows 10 Enterprise Ready• Ubuntu 18.04 LTS (64bit)• NeoKylin 6.0• Red hat Enterprise Linux 7.5
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Physical system dimensions

Table 13. Physical system dimensions

Feature	Specifications
Chassis volume (liters)	20.41
Chassis weight (pounds / kilograms)	23.37/10.6

Table 14. Chassis dimensions

Feature	Specifications
Height (inches / centimeters)	13.19/33.50

Feature	Specifications
Width (inches / centimeters)	6.95/ 17.66
Depth (inches / centimeters)	13.58 /34.50
Shipping weight (pounds / kilograms – includes packaging materials)	33/14.97

Table 15. Packaging parameters

Feature	Specifications
Height (inches / centimeters)	18.5/47
Width (inches / centimeters)	13.9/35.3
Depth (inches / centimeters)	19.37/49.2

Security

Table 16. Security

Trusted Platform Module (TPM) 2.0	Yes, integrated on the system board.
Firmware TPM	Nuvoton
Padlock	Dell Premium Keyed Lock, Noble OptiPlex Lock.
Cable cover	Yes
Chassis intrusion switch	Yes
Dell Smartcard Keyboard	Optional
Chassis lock slot and loop support	Kensington Desktop and Peripheral / MicroSaver Keyed /ClickSafe Keyed Laptop locking kit, Noble OptiPlex Lock, Dell Combination Lock.

Security Software

Table 17. Security Software

Dell Endpoint Security Suite Enterprise	Optional
Dell Data Guardian	Optional
Dell Encryption (Enterprise or Personal)	Optional
Dell Threat Defense	Optional
RSA SecurID Access	Optional
RSA NetWitness Endpoint	Optional
MozyPro or MozyEnterprise	Optional
VMware Airwatch/WorkspaceONE	Optional
Absolute Data & Device Security	Optional

Miscellaneous software

Table 18. Miscellaneous software

Dell Precision Optimizer V4.0	Standard
Teradici PCoIP Workstation Access Software	Optional
Adobe Creative Cloud	Optional
AutoDesk AutoCAD	Optional

Accessories

Table 19. Supported Accessories

Cable Covers - chassis designed with hooks for removable and securable cover	Yes, Optional
Dust filter. Includes a cleaning maintenance reminder in the BIOS.	Yes, Optional

Power Supply

Table 20. Power Specifications

Feature	Specifications
Energy efficient power supply	Internal
80 plus bronze certification	300 W EPA bronze (No SD)
80 plus gold certification	460 W(w/SD) and 850 W(w/SD)
Recyclable packaging	Optional, US only
MultiPack packaging	No

Graphics cards power matrix

This topic explains about the GPUs supported by Dell Precision 3630 and its power requirements along with the power dongle description.

Table 21. Supported GPU and its Power requirements.

GPU Cards	Power	Power Dongle	PSU required for single GPU
nVidia Quadro P Series P400	30 W	N/A	300 W / 460 W / 850 W
nVidia Quadro P Series P620	40 W	N/A	300 W / 460 W / 850 W
nVidia Quadro P Series P1000	47 W	N/A	300 W / 460 W / 850 W
nVidia Quadro P Series P2000	75W	N/A	300 W / 460 W / 850 W
AMD Radeon Pro WX2100	35 W	N/A	300 W / 460 W / 850 W
AMD Radeon Pro WX3100	50 W	N/A	300 W / 460 W / 850 W
AMD Radeon Pro WX3200	55 W	N/A	300 W / 460 W / 850 W
AMD Radeon Pro WX4100	50 W	N/A	300 W / 460 W / 850 W
AMD Radeon Pro WX5100	75 W	N/A	300 W / 460 W / 850 W

GPU Cards	Power	Power Dongle	PSU required for single GPU
nVidia Quadro Series P4000	105 W	6 pin	460 W / 850 W
nVidia Quadro Series P5000	180 W	8 pin	460 W / 850 W
AMD Radeon Pro WX7100	130 W	6 pin	460 W / 850 W
AMD RX580 / RX580X	180 W	6 pin	460 W / 850 W
nVIDIA GeForce GTX1060	150 W	8 pin	460 W / 850 W
nVIDIA GeForce GTX 1080	180 W	8 pin	460 W / 850 W
nVIDIA Quadro RTX4000	160 W	8 pin	460 W / 850 W
nVIDIA Quadro RTX5000	160 W	8 pin	850 W
nVIDIA RTX GeForce RTX2060 SI	160 W	8 pin	460 W / 850 W
nVIDIA RTX GeForce RTX2080B	215 W	8 pin	850 W

Computer environment

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

NOTE: For more details on Dell environmental features, please go to the environmental attributes section. See your specific region for availability.

Table 22. 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 80 % (non-condensing) NOTE: Maximum dew point temperature = 26 °C	10 % to 95 % (non-condensing) NOTE: Maximum dew point temperature = 33 °C
Vibration (maximum)	0.26 GRMS	1.37 GRMS
Shock (maximum)	40 G [†]	105 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.

CMOS battery specifications

This topic explains about CMOS battery specifications.

Table 23. CMOS battery specifications

Brand	Type	Voltage	Composition	Life
PANASONIC	CR-2302L/BE	3 V	Lithium	Continuous Discharge Under 15 kΩ Load to 2.5V End-Voltage: 1100 hours or longer
MITSUBISHI	CR2302	3 V	Lithium Manganese Dioxide	Continuous Discharge Under 15 kΩ Load to 2.5V End-Voltage: 1000 hours or longer

Engineering specifications

System board connector maximum add-in card allowable dimensions

Table 24. PCIe x16 Connector

Number of slots	1
Voltage	3.30/12.0 V
Height (inches / centimeters)	4.38/11.12
Length (inches / centimeters)	4.50/11.44
Maximum wattage	75 W

Table 25. M.2 slot for SSD drive 2280 /2230

Number of slots	1
Voltage	3.30/12.0 V
Height (inches / centimeters)	4.38/11.12
Length (inches / centimeters)	4.50/11.44
Maximum wattage	75 W

Table 26. PCIe x4 Connector (Open ended)

Number of Slots	2
Voltage	3.30/12.0 V
Height (inches / centimeters)	4.38/11.12
Length (inches / centimeters)	4.50/11.44
Maximum wattage	75 W

Table 27. PCI

Number of Slots	1
Voltage	3.30/12.0 V
Height (inches / centimeters)	4.38/11.12
Length (inches / centimeters)	4.50/11.44
Maximum wattage	75 W

Graphics options

NVIDIA Quadro P620

Table 28. NVIDIA Quadro P620 specifications

Graphics memory	2 GB GDDR5
Bus type	PCIe x16 Gen 3
Memory Interface	128-bit
Clock Speeds	1266 MHz graphics core (min. at P0) 4012 MHz memory
GPU base clock	1266 MHz (min. at P0)
Estimated Maximum Power	40 W
Display Support	4 x mini-DisplayPort
Maximum Color Depth	Up to 10 bit/color
Maximum Vertical Refresh Rate	<ul style="list-style-type: none">Up to 395 Hz at 1920 x 1080Up to 118 Hz at 3840 x 2160
Operating Systems Graphics/ Video API Support	DirectX 12, OpenGL 4.5
Supported Resolutions and Max Refresh Rates (Hz)	Max Digital : Single DisplayPort 1.4 - 5120 x 2880 (4k) @ 60 Hz
Numbers of displays supported	Up to four displays
Power Dongle	N/A
PSU required for single GPU	300 W / 460 W

NVIDIA Quadro P1000

Table 29. NVIDIA Quadro P1000 specifications

Graphics memory	4 GB GDDR5
Bus type	PCIe x16 Gen3
Memory Interface	128-bit
Clock Speeds	1088 MHz graphics core (min. at P0) 2430 MHz memory
GPU base clock	3504 MHz (min. at P0)
Estimated Maximum Power	47 W
Display Support	eDP/mDP/HDMI/Type-C
Maximum Color Depth	Up to 10bit/color
Maximum Vertical Refresh Rate	Up to 395 Hz at 1920 x 1080 Up to 118 Hz at 3840 x 2160
Operating Systems Graphics/ Video API Support	DirectX 12, OpenGL 4.5

Supported Resolutions and Max Refresh Rates (Hz)	<ul style="list-style-type: none"> • Max Digital : Single DisplayPort 1.4 - 7680 x 4320 (8k) @ 30 Hz (mDP/Type-C to DP) • Max Digital : Dual DisplayPort 1.4 - 7680 x 4320 (8k) @ 60 Hz (mDP/Type-C to DP)
Numbers of display supported	Up to four displays
Power Dongle	N/A
PSU required for single GPU	300 W / 460 W

NVIDIA GTX1060

Table 30. NVIDIA GTX1060 specifications

Graphics memory	6 or 3 GB GDDR5
Bus type	PCIe x16 Gen3
Memory Interface	192-bit
Clock Speeds	1708 MHz graphics core (min. at P0)
GPU base clock	1506 MHz (min. at P0)
Estimated Maximum Power	150 W
Display Support	DP 1.4, HDMI 2.0b, Dual Link-DVI
Maximum Color Depth	Up to 10 bit/color
Maximum Vertical Refresh Rate	Up to 7680x4320 @60 Hz
Operating Systems Graphics/ Video API Support	DirectX 12, OpenGL 4.5
Supported Resolutions and Max Refresh Rates (Hz)	<ul style="list-style-type: none"> • Max Digital : Single DisplayPort 1.4 - 7680 x 4320 (8k) @ 30 Hz (mDP/type-c to DP) • Max Digital : Dual DisplayPort 1.4 - 7680 x 4320 (8k) @ 60 Hz (mDP/type-c to DP)
Numbers of Display Support	Up to four displays
Power Dongle	8 pin
PSU required for single GPU	300 W / 460 W

NVIDIA Quadro P2000

Table 31. NVIDIA Quadro P2000 specifications

Graphics memory	5 GB GDDR5
Bus type	PCIe x16 Gen3
Memory Interface	160-bit
Clock Speeds	1088 MHz graphics core (min. at P0) 2430 MHz memory
GPU base clock	3504 MHz (min. at P0)
Estimated Maximum Power	75 W

Display Support	eDP/mDP/HDMI/Type-C
Maximum Color Depth	Up to 10 bit/color
Maximum Vertical Refresh Rate	Up to 395 Hz at 1920 x 1080 Up to 118 Hz at 3840 x 2160
Operating Systems Graphics/ Video API Support	DirectX 12, OpenGL 4.5
Supported Resolutions and Max Refresh Rates (Hz)	<ul style="list-style-type: none"> • Max Digital : Single DisplayPort 1.4 - 7680 x 4320 (8k) @ 30 Hz (mDP/type-c to DP) • Max Digital : Dual DisplayPort 1.4 - 7680 x 4320 (8k) @ 60 Hz (mDP/type-c to DP)
Numbers of Display Support	Up to four displays
Power Dongle	N/A
PSU required for single GPU	300 W / 460 W

NVIDIA GTX1080

Table 32. NVIDIA GTX1080 specifications

Graphics memory	5 GB GDDR5
Bus type	PCIe x16 Gen3
Memory Interface	256-bit
Clock Speeds	1733 MHz graphics core (min. at P0)
GPU base clock	1607 MHz (min. at P0)
Estimated Maximum Power	180 W
Display Support	DP 1.4, HDMI 2.0b, DL-DVI
Maximum Color Depth	Up to 10 bit/color
Maximum Vertical Refresh Rate	Up to 395 Hz at 1920 x 1080 Up to 118 Hz at 3840 x 2160
Operating Systems Graphics/ Video API Support	DirectX 12, OpenGL 4.5
Supported Resolutions and Max Refresh Rates (Hz)	<ul style="list-style-type: none"> • Max Digital : Single DisplayPort 1.4 - 7680 x 4320 (8k) @ 30 Hz (mDP/type-c to DP) • Max Digital : Dual DisplayPort 1.4 - 7680 x 4320 (8k) @ 60 Hz (mDP/type-c to DP)
Numbers of Display Support	Up to four displays
Power Dongle	8 pin
PSU required for single GPU	300 W / 460 W

NVIDIA RTX2080B

Table 33. NVIDIA RTX2080B specifications

Graphics memory	8 GB GDDR6
Bus type	PCIe x16 Gen3
Memory Interface	256-bit
Clock Speeds	Base :1515 MHz / Boost :1710 MHz / Memory: 7000 MHz
Display Support	<ul style="list-style-type: none">• 3 x DP• 1 x HDMI
Maximum Color Depth	Up to 10bit/color
Estimated Maximum Power	215 W
Maximum Vertical Refresh Rate	NA
Operating Systems Graphics/ Video API Support	DirectX 12, Open GL 4.5
Supported Resolutions and Max Refresh Rates (Hz)	<ul style="list-style-type: none">• Single DP 1.4a - 7680 x 4320 (8K) @ 60 Hz• Dual DP 1.4a - 7680 x 4320 (8K) @120 Hz• HDMI 2.0b - 4096 x 2160 (4K) @ 60 Hz
Numbers of Display Support	4 Direct

NVIDIA RTX4000

Table 34. NVIDIA RTX4000 specifications

Graphics memory	8 GB GDDR6
Bus type	PCI Express 3.0 x16
Memory Interface	256-bit
Clock Speeds	Base :1005 MHz / Boot :1545 MHz
Display Support	DP/Type-C
Maximum Color Depth	NA
Estimated Maximum Power	160 W
Maximum Vertical Refresh Rate	NA
Operating Systems Graphics/ Video API Support	Shader Model 5.1, OpenGL 4.66, DirectX 12.05, Vulkan 1.
Supported Resolutions and Max Refresh Rates (Hz)	Display port <ul style="list-style-type: none">• 7680 x 4320 x 24bpp at 120Hz• 7680 x 4320 x 36bpp at 60Hz• 5120 x 2880 x 24bpp at 60Hz USB Type-C <ul style="list-style-type: none">• 7680 x 4320 x 24bpp at 120Hz• 7680 x 4320 x 36bpp at 60Hz• 5120 x 2880 x 24bpp at 60Hz

Numbers of Display Support

3x DisplayPort , 1x USB Type-C

NVIDIA RTX5000

Table 35. NVIDIA RTX5000 specifications

Graphics memory	16 GB GDDR6
Bus type	PCI Express 3.0 x16
Memory Interface	256-bit
Clock Speeds	Base :1620 MHz / Boot :1815 MHz
Display Support	DP/Type-C
Maximum Color Depth	NA
Estimated Maximum Power	265 W
Maximum Vertical Refresh Rate	NA
Operating Systems Graphics/ Video API Support	DirectX 12.07 Shader Model 5.1, OpenGL 4.6, Vulkan 1.1
Supported Resolutions and Max Refresh Rates (Hz)	Display port <ul style="list-style-type: none">• 7680 x 4320 x 24bpp at 120Hz• 7680 x 4320 x 36bpp at 60Hz• 5120 x 2880 x 24bpp at 60Hz USB Type-C <ul style="list-style-type: none">• 7680 x 4320 x 24bpp at 120Hz• 7680 x 4320 x 36bpp at 60Hz• 5120 x 2880 x 24bpp at 60Hz
Numbers of Display Support	4x DisplayPort , 1x USB Type-C

NVIDIA Quadro P4000

Table 36. Quadro P4000 Specifications

NVIDIA Quadro P4000	
PCIe slot width	1
Memory (GDDR5)	8 GB
Open GL	4.5
Open CL	
DirectX	12.0
Vulkan	Yes
PCIe support	x16 Gen3
Max Resolution (# of DisplayPorts used)	<ul style="list-style-type: none">• 7680 x 4320 24bpp @120hz (four DisplayPorts)• 7680 x 4320 24bpp @60hz (two DisplayPorts)
Maximum Monitors using DP Multi-Stream (monitor to monitor connections)	4
Maximum monitors (direct connection)	4

NVIDIA Quadro P4000

Max # of 4K x 2K displays @ 60hz	4
Max # of 5120 x 2880 pixel displays @ 60hz	4
Video connectors	<ul style="list-style-type: none">• four DisplayPorts• one stereo (optional)
Included video adapters (with systems or customer kits)	
Aux power connectors needed	6-pin
PSU required for single GPU	300 W / 460 W

NVIDIA Quadro P5000

Table 37. Quadro P5000 Specifications

NVIDIA Quadro P5000

PCIe slot width	2
Memory (GDDR5)	24 GB GDDR5X
Open GL	4.5
Open CL	
DirectX	12.0
Vulcan	
PCIe support	x16 Gen3
Max Resolution (# of DisplayPorts used)	<ul style="list-style-type: none">• 7680 x 4320 24bpp @120 Hz (four DisplayPorts)• 7680 x 4320 24bpp @60 Hz (two DisplayPorts)
Maximum Monitors using DP Multi-Stream (monitor to monitor connections)	4
Maximum monitors (direct connection)	4
Max # of 4K x 2K displays @ 60hz	4
Max # of 5120 x 2880 pixel displays @ 60hz	6
Video connectors	<ul style="list-style-type: none">• one Dual Link DVI-I• four DisplayPorts• 1 Stereo (optional) SYNC connector
Card to Card connectors	SLI bridge
Aux power connectors needed	8-pin
PSU required for single GPU	300 W / 460 W

AMD Radeon Pro WX 4100

Table 38. Radeon Pro WX 4100 Specifications

Radeon Pro WX 4100

PCIe slot width	1
Memory (GDDR5)	4 GB
Open GL	4.5
Open CL	2.0

Radeon Pro WX 4100

DirectX	12.0
Vulcan	Yes
PCIe support	x16 Gen 3
Max Resolution (# of DisplayPorts used)	5120 x 2880 30bpp @ 60hz
Maximum Monitors using DP Multi-Stream (monitor to monitor connections)	4
Maximum monitors (direct connection)	4
Max # of 4Kx2K displays @ 60hz	4
Max # of 5120x2880 pixel displays @ 60hz	1
Video connectors	four DisplayPorts
Included video adapters (with systems or customer kits)	
Aux power connectors needed	N/A
PSU required for single GPU	300 W / 460 W

AMD Radeon Pro WX 5100

Table 39. Radeon Pro WX 5100 Specifications

Radeon Pro WX 5100

PCIe slot width	1
Memory (GDDR5)	4 GB
Open GL	4.5
Open CL	2.0
DirectX	12.0
Vulcan	Yes
PCIe support	x16 Gen3
Max Resolution (# of DisplayPorts used)	7680 x 4320 30bpp @60 Hz (two DisplayPorts)
Maximum Monitors using DP Multi-Stream (monitor to monitor connections)	4
Maximum monitors (direct connection)	4
Max # of 4Kx2K displays @ 60hz	4
Max # of 5120x2880 pixel displays @ 60hz	2
Video connectors	four DisplayPorts
Included video adapters (with systems or customer kits)	1 or 2 NVLink
Aux power connectors needed	N/A
PSU required for single GPU	300 W / 460 W

AMD Radeon Pro WX7100

Table 40. AMD Radeon Pro WX7100

Graphics memory	8 GB GDDR5
Bus type	PCIe x16 Gen3

Memory Interface	256-bit
Clock Speeds	1243 MHz graphics core, 1750 MHz memory
Estimated Maximum Power	110W TGP (GPU + frame buffer)
Display Support	HDMI/mDP/eDP/USB Type-C
Maximum Color Depth	Maximum 4:4:4 Color Depth:12 (bits/pixel)
Maximum Vertical Refresh Rate	Up to 85 Hz depending on resolution
Operating Systems Graphics/ Video API Support	DirectX 12, OpenGL 4.5
Supported Resolutions and Max Refresh Rates (Hz)	<ul style="list-style-type: none"> • Single DisplayPort 1.4 - 7680 x 4320 (8k) @ 30 Hz • Dual DisplayPort 1.4 - 7680 x 4320 (8k) @ 60 Hz • HDMI 2.0 - 4096 x 2160 (4K) @ 60 Hz
Numbers of displays supported	Up to five displays
Power Dongle	6 pin
PSU required for single GPU	300 W / 460 W

AMD Radeon RX 570

Table 41. AMD Radeon RX 570 specifications

Graphics memory	8 GB GDDR5
Bus type	PCIe x16 Gen3
Memory Interface	256-bit
Clock Speeds	1244 MHz graphics core (min. at P0)
GPU base clock	1168 MHz (min. at P0)
Estimated Maximum Power	150 W
Display Support	HDMI / DisplayPort
Maximum Color Depth	Up to 10 bit/color
Maximum Vertical Refresh Rate	Up to 395 Hz at 1920 x 1080 Up to 118 Hz at 3840 x 2160
Operating Systems Graphics/ Video API Support	DirectX 12, OpenGL 4.5
Supported Resolutions and Max Refresh Rates (Hz)	<ul style="list-style-type: none"> • Max Digital : Single DisplayPort 1.4 - 7680 x 4320 (8k) @ 30 Hz (mDP/type-c to DP) • Max Digital : Dual DisplayPort 1.4 - 7680 x 4320 (8k) @ 60 Hz (mDP/type-c to DP)
Numbers of Display Support	Up to four displays
Power Dongle	6 pin
PSU required for single GPU	300 W / 460 W

AMD RX580x

Table 42. AMD RX580x specifications

Graphics memory	8 GB GDDR5
Bus type	PCIe x16 Gen3
Memory Interface	256-bit
Clock Speeds	1340 MHz graphics core (min. at P0)
GPU base clock	1257 MHz (min. at P0)
Estimated Maximum Power	120 W
Display Support	HDMI/ 3x DisplayPort
Maximum Color Depth	Up to 10 bit/color
Maximum Vertical Refresh Rate	Up to 395 Hz at 1920 x 1080 Up to 118 Hz at 3840 x 2160
Operating Systems Graphics/ Video API Support	DirectX 12, OpenGL 4.5
Supported Resolutions and Max Refresh Rates (Hz)	<ul style="list-style-type: none">• Max Digital : Single DisplayPort 1.4 - 7680 x 4320 (8k) @ 30 Hz (mDP/type-c to DP)• Max Digital : Dual DisplayPort 1.4 - 7680 x 4320 (8k) @ 60 Hz (mDP/type-c to DP)
Numbers of Display Support	Up to four displays
Power Dongle	6 pin
PSU required for single GPU	300 W / 460 W

AMD Radeon RX Vega⁶⁴ Graphics

Table 43. Radeon RX Vega⁶⁴ Graphics specifications

Graphics memory	8 GB GDDR5
Bus type	PCIe x16 Gen3
Memory Interface	2048-bit
Clock Speeds	1247 MHz graphics core (min. at P0)
GPU base clock	1546 MHz (min. at P0)
Estimated Maximum Power	300 W
Display Support	HDMI / DisplayPort
Maximum Color Depth	Up to 10 bit/color
Maximum Vertical Refresh Rate	Up to 395 Hz at 1920 x 1080 Up to 118 Hz at 3840 x 2160
Operating Systems Graphics/ Video API Support	DirectX 12, OpenGL 4.5

Supported Resolutions and Max Refresh Rates (Hz)	<ul style="list-style-type: none"> Max Digital : Single DisplayPort 1.4 - 7680 x 4320 (8k) @ 30 Hz (mDP/type-c to DP) Max Digital : Dual DisplayPort 1.4 - 7680 x 4320 (8k) @ 60 Hz (mDP/type-c to DP)
Numbers of Display Support	Up to four displays
Power Dongle	8 pin
PSU required for single GPU	460 W

Supported hard drives

2.5 inches 500 GB 7200 RPM SATA Hard Drive

Table 44. 2.5 inches 500GB 7200RPM SATA Hard Drive

Capacity (GB)	500 GB HDD 7200 RPM
Dimensions (W x D x H)	Approximately (2.76 x 3.959 x 0.276 inches)
Interface type and maximum speed	Up to 6Gb/s (SATA 3.0)
MTBF	550,000 hours
Logical blocks	976,773,168
Power source	
Power consumption (reference only)	Idle 0.7 W, Active 3.10 W
Environmental Operating Conditions (Non-Condensing)	
Temperature range	5°C to 60°C
Relative humidity range	5% to 90%
Op shock (@ 2ms)	350G
Environmental Non-Operating Conditions (Non-Condensing)	
Temperature range	-40°C to 65°C
Relative humidity range	5% to 90%

2.5 inch 500 GB 7200 RPM OPAL SED FIPS

Table 45. 2.5 inch 500 GB 7200 RPM OPAL SED FIPS

2.5 inch 500 GB 7200 RPM OPAL SED FIPS

Capacity (bytes)	500 GB 7200 OPAL SED FIPS
Dimensions inches (W x D x H)	Approximately (2.75 x 3.937 x 0.276 inches)
Interface type and Maximum speed	Up to 6Gb/s (SATA 3.0)
MTBF	550,000 hours
Logical Blocks	976,773,168
Power Source	
Power Consumption (reference only)	Idle 0.7 W, Active 3.25 W

2.5 inch 500 GB 7200 RPM OPAL SED FIPS

Environmental Operating Conditions (Non-condensing)

Temperature Range	5°C to 60°C
Relative Humidity Range	5% to 90%
Op Shock (@2ms)	350 G

Environmental Non-Operating Conditions (Non-condensing)

Temperature Range	-40°C to 65°C
Relative Humidity Range	5% to 95%

2.5 inch 1TB SATA 7200 RPM Hard Disk Drive

Table 46. 2.5 inch 1TB SATA 7200 RPM Hard Disk Drive

Capacity (TB)	1TB HDD 7200 RPM
Dimensions (inches) (W x D x H)	2.760 x 3.959 x 0.374
Interface type and Maximum speed	Up to 6Gb/s (SATA 3.0)
MTBF	550,000 hours
Logical Blocks	1,953,525,168

Power Source:

Power Consumption (reference only)	Idle 0.7W, Active 3.10 W
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Environmental Operating Conditions (Non-Condensing):

Temperature Range	5°C to 60°C
Relative Humidity Range	5 to 90%
Op Shock (@2ms)	350G

Environmental Non-Operating Conditions (Non-Condensing):

Temperature Range	-40°C to 65°C
Relative Humidity Range	5% to 95%

2.5 inch 2 TB SATA 5400 RPM Hard Disk Drive

Table 47. 2.5 inch 2 TB SATA 5400 RPM Hard Disk Drive

Capacity (GB)	2 TB
Dimensions inches (W x D x H)	2.75 x 3.951 x 0.276 inch
Interface type and maximum speed	SATA 6 Gb/s and 140 MB/s
Logical blocks	3,907,029,168
Power consumption (reference only)	Write/Read/idle:1.8 W/1.7 W/0.5 W

Environmental operating conditions (non-condensing)

Temperature range	0 ° to 60 °C
Relative humidity range	5 % to 95 %
Op Shock (@2 ms)	400 Gs at 2 ms max

Environmental non-operating

(non-condensing)

Temperature range	-40 °C to 70 °C
Relative humidity range	5 % to 95 %

1TB solid-state hybrid drive -SSHD

Table 48. 2.5 inch 1 TB solid-state hybrid drive

Capacity (GB)	1 TB
Dimensions inches (W x D x H)	4.0 X 4 X 0.7825 inch
Interface type and maximum speed	SATA 6Gb/s and 600MB/s
Logical blocks	3,907,029,168
Power consumption (reference only)	Write/Read/idle: 0.9 Watt, 2.7 Watt

Environmental operating conditions (non-condensing)

Temperature range	0° to 60°C
Relative humidity range	5% to 95% non-condensing (30% per hour max)
Op Shock (@2 ms)	400 Gs at 2 ms max

Environmental non-operating**(non-condensing)**

Temperature range	-40° to 70°C
Relative humidity range	5% to 95% non-condensing (30% per hour max)

3.5 inch 500 GB SATA 7200 RPM Hard Disk Drive

Table 49. 3.5 inch 500 GB SATA 7200 RPM Hard Disk Drive

Detail	Specification
Capacity (GB)	500 GB HDD 7200RPM
Dimensions (inches) (W x D x H)	5.79 x 4 x 1
Interface type and Maximum speed	Up to 6 Gb/s (SATA 3.0)
MTBF	550,000 hours
Logical Blocks	976, 773,168
Power Source:	
Power Consumption (reference only)	Idle 5 W, Active 10 W
Environmental Operating Conditions (Non-Condensing):	
Temperature Range	5 °C to 60 °C
Relative Humidity Range	5 % to 90 %
Op Shock (@2ms)	65G
Environmental Non-Operating Conditions (Non-Condensing):	
Temperature Range	-40 °C to 65 °C
Relative Humidity Range	5 % to 95 %

3.5 inch 1 TB SATA3 7200 RPM Hard Disk Drive

Table 50. 3.5 inch 1 TB SATA3 7200 RPM Hard Disk Drive

Capacity (TB)	1 TB HDD 7200RPM
Dimensions (inches) (W x D x H)	5.79 x 4 x 1
Interface type and Maximum speed	Up to 6 Gb/s (SATA 3.0)
MTBF	550,000 hours
Logical Blocks	1,953, 525,168
Power Source:	
Power Consumption (reference only)	Idle 5 W, Active 10 W
Environmental Operating Conditions (Non-Condensing):	
Temperature Range	5 °C to 60 °C
Relative Humidity Range	5 %to 90 %
Op Shock (@2ms)	65 G
Environmental Non-Operating Conditions (Non-Condensing):	
Temperature Range	-40 °C to 65 °C
Relative Humidity Range	5 % to 95 %

3.5 inch 2 TB SATA 7200 RPM Hard Disk Drive

Table 51. 3.5 inch 2 TB SATA7200 RPM Hard Disk Drive

Capacity (TB)	2 TB HDD 7200 RPM
Dimensions (inches) (W x D x H)	5.79 x 4 x 1
Interface type and Maximum speed	Up to 6 Gb/s (SATA 3.0)
MTBF	550,000 hours
Logical Blocks	3,907, 029,168
Power Source:	
Power Consumption (reference only)	Idle 5 W, Active 10 W
Environmental Operating Conditions (Non-Condensing):	
Temperature Range	5 °C to 60 °C
Relative Humidity Range	5 % to 90 %
Op Shock (@2 ms)	65 G
Environmental Non-Operating Conditions (Non-Condensing):	
Temperature Range	-40 °C to 65 °C
Relative Humidity Range	5 % to 95 %

3.5 inch 4 TB 5400 RPM Hard Disk Drive

Table 52. 3.5 inch 4 TB 5400 RPM Hard Disk Drive

3.5 inch 4TB 5X00 RPM HDD

Capacity (bytes)	4 TB HDD 5400 RPM
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3.5 inch 4TB 5X00 RPM HDD

Dimensions inches (W x D x H)	Approximately (5.79 x 4.0 x 1.0 inches)
Interface type and maximum speed	Up to 6 Gb/s (SATA 3.0)
MTBF	550,000 hours
Logical Blocks	7,814, 037,168

Power Source

Power consumption (reference only)	Idle 5 W, Active 10 W
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Environmental Operating Conditions (Non-condensing)

Temperature Range	5°C to 60°C
Relative Humidity Range	5% to 90%
Op Shock (@2ms)	65 G

Environmental Non-Operating Conditions (Non-condensing)

Temperature Range	-40 °C to 65 °C
Relative Humidity Range	5 % to 95 %

3.5 inch 4 TB 7200 RPM Hard Disk Drive

Table 53. 3.5 inch 4 TB 7200 RPM Hard Disk Drive

3.5 inch 4 TB 7200 RPM HDD

Capacity (bytes)	4 TB HDD 7200 RPM
Dimensions inches (W x D x H)	Approximately (5.79 x 4.0 x 1.0 inches)
Interface type and maximum speed	Up to 6 Gb/s (SATA 3.0)
MTBF	550,000 hours
Logical Blocks	7,814, 037,168

Power Source

Power consumption (reference only)	Idle 5 W, Active 10 W
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Environmental Operating Conditions (Non-condensing)

Temperature Range	5°C to 60°C
Relative Humidity Range	5% to 90%
Op Shock (@2ms)	65 G

Environmental Non-Operating Conditions (Non-condensing)

Temperature Range	-40 °C to 65 °C
Relative Humidity Range	5 % to 95 %

3.5 inch 8 TB 7200 RPM Hard Disk Drive

Table 54. 3.5 inch 8TB 7200 RPM Hard Disk Drive

3.5 inch 8 TB 7200 RPM HDD

Capacity (bytes)	8 TB HDD 7200 RPM
Dimensions inches (W x D x H)	Approximately (5.79 x 4.0 x 1.0 inches)
Interface type and maximum speed	Up to 6 Gb/s (SATA 3.0)
MTBF	550,000 hours

3.5 inch 8 TB 7200 RPM HDD

Logical Blocks	15,628,074,336
Power Source	
Power consumption (reference only)	Idle 5 W, Active 10 W
Environmental Operating Conditions (Non-condensing)	
Temperature Range	5°C to 60°C
Relative Humidity Range	5% to 90%
Op Shock (@2ms)	65 G
Environmental Non-Operating Conditions (Non-condensing)	
Temperature Range	-40 °C to 65 °C
Relative Humidity Range	5 % to 95 %

2.5 inch 256 GB SATA Class 20 Solid State Drive

Table 55. 2.5 inch 256 GB SATA Class 20 Solid State Drive

Capacity (TB)	256 GB
Dimensions (inches) (W x D x H)	2.75 x 3.94 x 0.268
Interface type and Maximum speed	Up to 6 Gb/s (SATA 3.0)
MTBF	800K hours
Logical Blocks	500,118,192
Power Source:	
Power Consumption (reference only)	Idle 0.5W, Active 2.5 W
Environmental Operating Conditions (Non-Condensing):	
Temperature Range	0 °C to 70 °C
Relative Humidity Range	10% to 90 %
Op Shock (@2ms)	1,000 G
Environmental Non-Operating Conditions (Non-Condensing):	
Temperature Range	-40 °C to 70 °C
Relative Humidity Range	5 % to 95 %

2.5 inch 512 GB SATA Class 20 Solid State Drive

Table 56. 2.5 inch 512 GB SATA3 Class 20 Solid State Drive

Capacity (TB)	512 GB
Dimensions (inches) (W x D x H)	2.75 x 3.94 x 0.268
Interface type and Maximum speed	Up to 6 Gb/s (SATA 3.0)
MTBF	800K hours
Logical Blocks	1,000, 215, 216
Power Source:	

Power Consumption (reference only) Idle 0.5 W, Active 2.5 W

Environmental Operating Conditions (Non-Condensing):

Temperature Range 0 °C to 70 °C
Relative Humidity Range 10 % to 90 %
Op Shock (@2ms) 1,500 G

Environmental Non-Operating Conditions (Non-Condensing):

Temperature Range -40 °C to 70 °C
Relative Humidity Range 5 % to 95 %

2.5 inch 1 TB SATA Class 20 Solid State Drive

Table 57. 2.5 inch 1 TB SATA3 Class 20 Solid State Drive

Capacity (TB) 1 TB
Dimensions (inches) (W x D x H) 2.75 x 3.94 x 0.268
Interface type and Maximum speed Up to 6 Gb/s (SATA 3.0)
MTBF 800K hours
Logical Blocks 2,000,430,432

Power Source:

Power Consumption (reference only) Idle 0.5 W, Active 2.5 W

Environmental Operating Conditions (Non-Condensing):

Temperature Range 0 °C to 70 °C
Relative Humidity Range 10 % to 90 %
Op Shock (@2ms) 1,500 G

Environmental Non-Operating Conditions (Non-Condensing):

Temperature Range -40 °C to 70 °C
Relative Humidity Range 5 % to 95 %

256 GB M.2 2280 PCIe Class 40 SSD

Table 58. 256 GB M.2 2280 PCIe Class 40 SSD

Capacity (GB) 256 GB
Dimensions mm (W x D x H) 22 x 80 x 2.38 inches
Interface type and Maximum speed PCIe Gen 3, 8 Gb/s (up to 4 lanes)
MTFF 1.4M hours
Logical Blocks 500, 118, 192

Power Source:

Power Consumption (reference only) Idle 1.7 W, Active 4.5 W

Environmental Operating Conditions (Non-Condensing):

Temperature Range 0 °C to 70 °C
Relative Humidity Range 10 % to 90 %

Op Shock (@0.5ms)	1,500 G
Environmental Non-Operating Conditions (Non-Condensing):	
Temperature Range	-40 °C to 70 °C
Relative Humidity Range	5 % to 95 %

512 GB M.2 2280 PCIe Class 40 SSD

Table 59. 512 GB M.2 2280 PCIe Class 40 SSD

Capacity (GB)	512 GB
Dimensions mm (W x D x H)	22 x 80 x 2.38
Interface type and Maximum speed	PCIe Gen 3, 8 Gb/s (up to 4 lanes)
MTFF	1.4M hours
Logical Blocks	1,000, 215, 216
Power Source:	
Power Consumption (reference only)	Idle 1.7 W, Active 4.5 W
Environmental Operating Conditions (Non-Condensing):	
Temperature Range	0 °C to 70 °C
Relative Humidity Range	10 % to 90 %
Op Shock (@0.5ms)	1,500 G
Environmental Non-Operating Conditions (Non-Condensing):	
Temperature Range	-40 °C to 70 °C
Relative Humidity Range	5 % to 95 %

M.2 2280 512 GB PCIe NVMe Class 50 Solid State Drive

Table 60. M.2 512 GB PCIe NVMe Class 50 Solid State Drive

Capacity (TB)	512 GB
Dimensions (inches) (W x D x H)	22 x 80 x 2.38
Interface type and Maximum speed	PCIe Gen 3, 8 Gb/s (up to 4 lanes)
MTBF	800K hours
Logical Blocks	1,000, 215, 216
Power Source:	
Power Consumption (reference only)	Idle 1.7 W, Active 4.5 W
Environmental Operating Conditions (Non-Condensing):	
Temperature Range	0 °C to 70 °C
Relative Humidity Range	10 % to 90 %
Op Shock (@2ms)	1,000 G
Environmental Non-Operating Conditions (Non-Condensing):	
Temperature Range	-40 °C to 70 °C

Relative Humidity Range 5 % to 95 %

512 GB M.2 2280 SATA Class 20 SSD SED

Table 61. 512 GB M.2 2280 SATA Class 20 SSD SED

Capacity (GB)	512 GB
Dimensions mm (W x D x H)	22 x 80 x 2.38
Interface type and Maximum speed	Up to 6 Gb/s (SATA 3.0)
MTFF	1.4M hours
Logical Blocks	1,000, 215, 216
Power Source:	
Power Consumption (reference only)	Idle 1.7 W, Active 4.5 W
Environmental Operating Conditions (Non-Condensing):	
Temperature Range	0 °C to 70 °C
Relative Humidity Range	10 % to 90 %
Op Shock (@0.5ms)	1,500 G
Environmental Non-Operating Conditions (Non-Condensing):	
Temperature Range	-40 °C to 70 °C
Relative Humidity Range	5 % to 95 %

512 GB M.2 2280 PCIe Class 40 SSD SED

Table 62. 512 GB M.2 2280 PCIe Class 40 SSD SED

Capacity (GB)	512 GB
Dimensions mm (W x D x H)	22 x 80 x 2.38
Interface type and Maximum speed	PCIe Gen 3, 8 Gb/s (up to 4 lanes)
MTFF	1.4M hours
Logical Blocks	1,000, 215, 216
Power Source:	
Power Consumption (reference only)	Idle 1.7 W, Active 4.5 W
Environmental Operating Conditions (Non-Condensing):	
Temperature Range	0 °C to 70 °C
Relative Humidity Range	10 % to 90 %
Op Shock (@0.5 ms)	1,500 G
Environmental Non-Operating Conditions (Non-Condensing):	
Temperature Range	-40 °C to 70 °C
Relative Humidity Range	5 % to 95 %

1 TB M.2 2280 PCIe Class 50 SSD

Table 63. 1 TB M.2 2280 PCIe Class 50 SSD

Capacity (GB)	1 TB
Dimensions mm (W x D x H)	22 x 80 x 3.73
Interface type and Maximum speed	PCIe Gen3 8 Gb/s (up to 4 lanes)
MTFF	1.4M hours
Logical Blocks	2,000, 409, 264
Power Source:	
Power Consumption (reference only)	Idle 1.7 W, Active 4.5 W
Environmental Operating Conditions (Non-Condensing):	
Temperature Range	0 °C to 70 °C
Relative Humidity Range	10 % to 90 %
Op Shock (@0.5ms)	1,500 G
Environmental Non-Operating Conditions (Non-Condensing):	
Temperature Range	-40 °C to 70 °C
Relative Humidity Range	5 % to 95 %

2 TB M.2 2280 PCIe Class 40 SSD

Table 64. 2 TB M.2 2280 PCIe Class 40 SSD

Capacity	2 TB
Dimensions mm (W x D x H)	22 x 80 x 3.73
Interface type and Maximum speed	PCIe Gen 3, 8 Gb/s (up to 4 lanes)
MTFF	1.4M hours
Logical Blocks	2,000,409,264
Power Source:	
Power Consumption (reference only)	Idle 1.7 W, Active 4.5 W
Environmental Operating Conditions (Non-Condensing):	
Temperature Range	0 °C to 70 °C
Relative Humidity Range	10 % to 90 %
Op Shock (@0.5ms)	1,500 G
Environmental Non-Operating Conditions (Non-Condensing):	
Temperature Range	-40 °C to 70 °C
Relative Humidity Range	5 % to 95 %

M.2 Intel Optane Memory 32 GB

Table 65. M.2 Intel Optane Memory 32 GB

Capacity (GB)	32 GB
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Dimensions (W x D x H)	Approximately (22 x 80 x 2.38 inches)
Interface type and maximum speed	PCIe Gen3 8Gb/s (up to 4 lanes)
MTBF	1.6 M hours
Power source	
Power consumption (reference only)	Deep Sleep/ 900 mW - 1.2 W, Active 3.5 W
Environmental Operating Conditions (Non-Condensing)	
Temperature range	0°C to 70°C
Relative humidity range	5% to 95%
Op shock (@ 2ms)	1000G / 0.5 ms
Environmental Non-Operating Conditions (Non-Condensing)	
Temperature range	-10°C to 85°C
Relative humidity range	5 to 95%

Communications

Wired communications

This topic lists the detailed wired specifications.

Table 66. Wired communications

Network adapter (NIC) - Intel	Intel Ethernet Controller I219 Series
External connector type	RJ-45
Data rates	10/100/1000 Mbps
Controller architecture	PCI-e V1.1x1
Power consumption (full operation per data rate connection speed)	<ul style="list-style-type: none"> • 100 Mbps: 1000 mW • 100 Mbps: 441.77 mW • 10 Mbps: 387.94 mW • WOL disabled: 10 mW (disabled using driver) • No Link (w/WOL): 51.89 mW (cable disconnect)
Power consumption (standby operation)	<ul style="list-style-type: none"> • 10 Mbps idle (w/WOL): 68 mW • 100 Mbps idle (w/WOL): 176 mW
IEEE standard compliance	802.3, 802.3ab, 802.3u, 802.az
Boot ROM support	Support boot from PXE option ROM
Network transfer rate	Full duplex at 10, 100, 1000 Mbps and half duplex at 10 or 100 Mbps
Operating temperature	0 °C to 75 °C
Storage temperature	-55 °C to 125 °C
Operating humidity	20 % to 80 % (non-condensing)
Operating system drive support	Windows 10
Manageability	WOL PXE

Wireless Communication

Wireless Specifications

Table 67. Intel Dual Band Wireless/Bluetooth Card AC 9260

Intel Dual Band Wireless-AC 9260 (Thunder Peak 2) 802.11AC 2x2 Wi-Fi + BT 5 LE M.2 Wireless Card

Host Interface	M.2 2230 (Key-AE) form factor (WiFi- PCIe, Bluetooth- USB)
Network Standard	IEEE 802.11a/b/g/n/ac, DL MU-MIMO, 160 MHz channel use
Operating Frequency	2.4 GHz and 5 GHz
Data Rate	<ul style="list-style-type: none"> • 2.4 GHz 40 M; upto 300 Mbps • 5 GHz 80 M; upto 867 Mbps • 5 GHz 160 M; upto 1.73 Gbps
Authentication	WPA and WPA2,802.1X(EAP-TLS,TTLS,PEAP,EAP-SIM,EAP-AKA)
Authentication Protocol	PAP,CHAP,TLS,GTC,MS-CHAP v2
Encryption	64-bit and 128 bit WEP, TKIP, 128-bit AES-CCMP
Product Safety	
Management capabilities Alerting	Support for Intel AMT
Governance Compliance	FIPS, FISMA
Wake on Wireless	Supported
Bluetooth	
Wireless PAN Standard	Dual Mode Bluetooth 5, BLE (HW ready, SW depends on OS, Windows 10 Supports upto 4.1)
Bluetooth Data Rates	Upto 3 Mbps
Operating Frequency	2.4 GHz
Encryption	128-bit encryption
Output Power	Power Class 1

Table 68. Qualcomm 11ac 1x1 - WiFi - QCA9377 (DW1810)

Qualcomm 11ac 1x1 - WiFi - QCA9377 (DW1810)

Host Interface	M.2 1216 (Key-AE) form factor (WiFi- PCIe, Bluetooth- USB)
Network Standard	IEEE 802.11a/b/g/n/ac, DL MU-MIMO, 160 MHz channel use
Operating Frequency	2.4 GHz and 5 GHz
Data Rate	<ul style="list-style-type: none"> • 2.4 GHz 40 M; upto 300 Mbps • 5 GHz 80 M; upto 867 Mbps • 5 GHz 160 M; upto 1.73 Gbps
Authentication	WPA and WPA2,802.1X(EAP-TLS,TTLS,PEAP,EAP-SIM,EAP-AKA)
Authentication Protocol	PAP,CHAP,TLS,GTC,MS-CHAP v2
Encryption	64-bit and 128 bit WEP, TKIP, 128-bit AES-CCMP
Product Safety	
Management capabilities Alerting	Support for Intel AMT
Governance Compliance	FIPS, FISMA
Wake on Wireless	Supported

Bluetooth

Wireless PAN Standard	Dual Mode Bluetooth 5, BLE (HW ready, SW depends on OS, Windows 10 Supports upto 4.1)
Bluetooth Data Rates	Upto 3 Mbps
Operating Frequency	2.4 GHz
Encryption	128-bit encryption
Output Power	Power Class 1

Aquantia AQN-108 2.5Gbit/5Gbe single port PCIe (Gen3 x1) network card

This topic explains about Aquantia AQN-108 PCIe Gen3, x4 network card

Table 69.

Type	PCIe 3.0 multi-gigabit 5GBASE-T/2.5GBASE-T/1000BASE-T/100BASE-TX Ethernet adapter
External Connector Type	RJ45
Data Rates supported	5 G/2.5 G/1 G/100 Mbps
Controller Details	
Controller bus architecture	AQC-108
Integrated memory	N/A
Data transfer mode (example Bus-Master DMA)	Two SMBus (Master/Slave + Slave)
Power consumption (full operation per data rate connection speed)	4W at 5 Gbps with full length 100 M Cat5e
IEEE standards compliance (example 802.1P)	IEEE 802.3an/bz
Hardware Certifications (example FCC, B, GS mark...)	NBASE-T TM Alliance PHY
Boot ROM Support	UEFI (Unified Extensible Firmware Interface) 2.3/2.5, PXE (Preboot Execution Environment) 2.0
Operating System Driver Support	Windows 10, 8.1, 8.0, and 7 (32-Bit/64-Bit), Linux 3.2, 3.10, 3.12, 4.2 and 4.4

PCoIP Remote Access Host Solutions

This topic explains about optional Teradici PCoIP remote access host card.

Table 70. Dell PCIe Quad Display PCoIP Remote Access Host Card

Connector Type	PCIe x1
Displays supported	4
Number of Ports	Four mDP / 1x Ethernet
Memory	512 MB
Imaging Performance	up to 250 Mpps
Dongles supplied	Refer to order details.
Optional dongle for DMS59 to DVI graphics cards	Refer to order details.
Controller details	Teradici PCoIP TERA2240 Processor
Data transfer mode (example Bus-Master DMA)	Two SMBus (Master/Slave + Slave)

Power consumption (full operation per data rate connection speed)	13 W
Operating System Driver Support	Windows and Linux

Accessories

Audio and speakers

Table 71. Audio and speakers

Internal

Realtek ALC3234 High Definition Audio Codec (supports multiple streaming)	Integrated
Audio enhancement software	Wave MaxxAudioPro (Standard)
Internal speaker (mono)	Integrated
Speaker Performance, Speech Grade & Electrical Grade	Grade D

Table 72. External Speakers and Headsets

External

Dell 2.0 Speaker System - AE215	Optional
Dell 2.1 Speaker System - AE415	Optional
Dell AX210 USB Stereo speakers	Optional
Dell Wireless 360 Speaker System - AE715	Optional
AC511 Sound Bar	Optional
Dell Professional Sound Bar - AE515	Optional
Dell Stereo Soundbar - AX510	Optional
Dell Performance USB Headset - AE2	Optional
Dell Pro Stereo Headsets - UC150/UC350	Optional
Bose QuietComfort 35 Headphones	Optional
Dell Wireless 360 Speaker System - AE715	Optional
Dell 2.1 Speaker System - AE415	Optional
Bose Soundlink On-Ear Bluetooth Headphones	Optional
Dell 2.0 Speaker System - AE215	Optional
Dell USB SoundBar - AC511	Optional
Dell Performance USB Headset - AE2	Optional
Dell Professional Sound Bar - AE515	Optional
Plantronics Voyager Focus UC B825-M headset for Microsoft Lync	Optional
Bose Companion 2 Series III multimedia speaker system	Optional
Jabra PRO 935 USB MS Lync Headset	Optional
Salar A500i Headset	Optional
Sound Bar for InfinityEdge Monitors	Optional
Dell Stereo Soundbar - AX510	Optional
Dell Pro Stereo Headset - UC150	Optional
Jabra Evolve 75	Optional

External

Plantronics Savi W440M-400 Series convertible wireless headset - DECT 6.0	Optional
Dell Stereo Speaker System - AX210 USB	Optional
Dell Pro Stereo Headset - UC350	Optional
Jabra Evolve 65 MS Stereo - Headset	Optional
Dell In Ear Stereo Headset - IE600	Optional
Creative Sound Blaster Audigy FX	Optional

Cables, Dongles, and Adapters

Table 73. Supported cables, dongles, and adapters

Dell Adapter - DisplayPort to DVI (Single Link)
Dell-Adapter - Dual DVI Video Cable
Dell-Adapter - DP to HDMI 2.0 Adapter, 8 inches, Bizlink, (4K, 60 Hz, Round)
Dell-Adapter - Dual Monitor VGA Cable
Dell-Adapter - DisplayPort to DVI-D(DL) Dongle
Dell DisplayPort to HDMI Dongle
Dell-Adapter - DisplayPort to DVI-D(SL) Dongle, 8 inch Dongle Cable, (DP2VGA)
Adapter Connector USB Type-C to DisplayPort Dongle
ASSY DisplayPort 1.3 to Thunderbolt 3/USB 3.1 Cable
Type-C to RJ45 Dongle, Bizlink
Adapter Connector USB Type-C to USB Type-A Dongle
USB 3.0 cable for Type-C connector
Dell Adapter - DisplayPort to HDMI 2.0 (4K)
Dell Adapter - DisplayPort to VGA
Dell Adapter - HDMI to VGA
C2G 15ft Cat6 Snagless Unshielded (UTP) Network Patch Ethernet Cable
C2G HDMI to DVI Adapter
C2G 6ft Displayport Cable With Latches M/M - Black

External data storage

Table 74. External data storage Options

USB Type A interface external storage devices
Apricorn 1TB Aegis Padlock 256-bit AES Encrypted Hard Drive
Western Digital My Passport Ultra 2TB , Black
Promise Pegasus3 PC Edition R4
Western Digital My Passport Ultra 1TB , Black
USB Type C interface external storage devices
Dell Portable Thunderbolt 3 SSD, 500GB

Dell Portable Thunderbolt 3 SSD, 1TB
 Western Digital My Passport Ultra 4TB , Black
 Dell Portable SSD, USB-C 250GB

Optical drives

Table 75. Optical Drive Specifications

Overview	DVD-ROM	DVD-RW	DVD-BlueRay	DVD-RAM
External Dimensions inches/ centimeters (Without Bezel – W x H x D)	128.0 mm (5.04 in)/ 9.5 mm (0.37 in)/ 126.1 mm (4.97 in)	128.0 mm (5.04 in)/ 9.5 mm (0.37 in)/ 126.1 mm (4.97 in)	128.0 mm (5.04 in)/ 9.5 mm (0.37 in)/ 126.1 mm (4.97 in)	128.0 mm (5.04 in)/ 9.5 mm (0.37 in)/ 126.1 mm (4.97 in)
Weight (max) pounds/ kilograms	140 g	140 g	140 g	140 g
Interface type and speed	SATA 1.5 Gbit/s	SATA 1.5 Gbit/s	SATA 1.5 Gbit/s	SATA 1.5 Gbit/s
Disc Capacity	Standard	Standard	Standard	Standard
Internal buffer size	Supplier dependent	Supplier dependent	Supplier dependent	Supplier dependent
Access Times (typical)	Supplier dependent	Supplier dependent	Supplier dependent	Supplier dependent
Maximum Data Transfer Rates				
Writes	N/A	8x DVD/ 24x CD		Upto 16x
Reads	8x DVD/ 24x CD	8x DVD/ 24x CD	8x (DVD/ 24x CD), 6x / 8x / 4x (BlueRay)	3x
Power Source				
DC Power Requirements	5 V	5 V	5 V	5 V
DC Current	1300 mA	1300 mA	1300 mA	1300 mA
Environmental Operating Conditions (Non-Condensing):				
Operating Temperature Range	5 °C to 50 °C	5 °C to 50 °C	5 °C to 50 °C	5 °C to 50 °C
Relative Humidity Range	10 % to 90 % RH	10 % to 90 % RH	10 % to 90 % RH	10 % to 90 % RH
Maximum Wet Bulb Temperature	29 °C	29 °C	29 °C	29 °C
Altitude Range	-200 m to 3048 m	-200 m to 3048 m	-200 m to 3048 m	-200 m to 3048 m
Environmental Non-Operating Conditions (Non-Condensing):				
Operating Temperature Range	-40 °C to 65 °C	-40 °C to 65 °C	-40 °C to 65 °C	-40 °C to 65 °C
Relative Humidity Range	5 % to 95 % RH	5 % to 95 % RH	5 % to 95 % RH	5 % to 95 % RH
Maximum Wet Bulb Temperature	38 °C	38 °C	38 °C	38 °C
Altitude Range	-200 m to 10600 m	-200 m to 10600 m	-200 m to 10600 m	-200 m to 10600 m

SD 4.0 Media Card Reader

Table 76. SD 4.0 Media Card Reader

Precision 3630 Tower	
External Dimensions (in) W x H x D	2.38 (6.04 cm) x 1.34 (3.41 cm) x 1.19 (3.017)
External Dimensions (mm) W x H x D	60.45 / 34.036 / 71.8058

Precision 3630 Tower

Weight (max) pounds/kilograms	~ 0.056/0.025
Interface type and speed	PCIe Gen II, 5 GT/s

Media Supported (maximum capacity supported will vary by Flash Media Types)

Media Supported	Secure Digital (SD), SDXC, SDHC, Multi-Media Card (MMC), -(With adapter) Mini-SD, Micro-SD (T-flash),RS-MMC, Mobile-MMC and MMC-micro <ul style="list-style-type: none">· MMC 4-bit date mode· SDXC up to 2 TB· Support SD 4.0 UHS-II FD/HD mode, up to 312 MB/sec· Support SD 3.0 UHS-I SDR-104 (208 MHz SD clock), SDR-50 (100 MHz SD clock) and DDR 50 (50 MHz SD clock)
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PCIe NVMe Card

This topic explains about the optional PCIe NVMe add on card.

Table 77. Dell PCIe NVMe card

External Connector Type	PCIe x8
Internal Connector Type	Two M.2 connectors
Number of SSD supported	1
Data Rates supported	PCIe Gen3
Controller Details	Passive card
Hardware Certifications (example FCC, B, GS mark...)	Integrated with Avalon
Data transfer mode (example Bus-Master DMA)	PCIe
Power consumption (full operation per data rate connection speed)	Passive with support of 2 NVMe drives
Operating System Driver Support	Yes, with Intel iRST/RSTe drivers
Boot ROM Support	Yes

USB Type-C PCIe add-in card

This topic explains about the USB Type-C PCIe add-in card.

Table 78. USB Type-C PCIe add-in card

Type	PCIe add-in card
External Connector Type	Two USB Type-C 3.1 connector / One DP sink connector
Data Rates supported	USB 3.1 Gen 2
Displays supported	2
Dongles supplied	Refer to order details.
Controller details	Asmedia USB controller
Hardware Certifications (example FCC, B, GS mark...)	FCC, CE, VCCI, BSMI
Power consumption (full operation per data rate connection speed)	15 W
Operating System Driver Support	Windows

Common Access Card (CAC) Or Smart Card Reader

Personal Identity Verification / Common Access Cards (PIV / CAC) also known as a "Smart" card reader.

Table 79.

Interface	USB 2.0
Size	9.5 mm
Type	Slim ODD Bay module
Controller bus architecture / Data Transfer Mode	USB
Integrated Memory	No
Boot ROM Support	No
Operating system driver support	Broadcom Driver

Mounts and Stands

Table 80. Mounts and Stands

- Dell Dual Monitor Stand 2
- Dell Single Monitor Arm
- Dell Premium Keyed Lock
- Humanscale M8 Single Heavy Duty Clamp Mount Arm
- Dell Slim Single Monitor Arm
- Dell Dual Monitor Arm

Input Devices

Table 81. Input Devices

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
Dell Premier Wireless Keyboard and Mouse - KM717	Optional
Dell Wireless Keyboard and Mouse - KM636	Optional
Logitech Wireless Performance Combo MX800 - Keyboard and Mouse Set	Optional
Dell Multimedia Keyboard - KB216	Optional
Dell Premier Wireless Keyboard - WK717	Optional

Dell Wireless Mouse - WM326	Optional
Dell Premier Wireless Mouse - WM527	Optional
Dell Laser Scroll USB 6-Buttons Silver and Black Mouse	Optional
Logitech MX Master Wireless Mouse	Optional
3Dconnexion SpaceMouse Pro Wireless	Optional
3Dconnexion SpaceNavigator	Optional
Newmen 100 KM-101 Keyboard/Mouse Combo	Optional
Microsoft Wireless Comfort Desktop 5050 combo	Optional
X-Rite Colorimeter iDisplay Pro	Optional
Logitech K840 Mechanical - Wired Keyboard	Optional
Dell Business Multimedia Keyboard - KB522	Optional
Dell KB813 Smartcard Keyboard	Optional
Dell Wireless Keyboard and Mouse - KM117	Optional
Dell Canvas	Optional
Logitech Wireless Combo MK520	Optional
Logitech Wireless Wave Combo MK550	Optional
Logitech Wireless Desktop MK710	Optional
Logitech MK850 Performance - Wireless Keyboard and Mouse Combo	Optional
Dell Optical Mouse - MS116	Optional
Wacom Intuos Pro - Medium	Optional
Dell Palm Rest for KB216 and KM636	Optional
3Dconnexion SpaceMouse Wireless	Optional
Dual mode wireless mouse	Optional
Wired Mouse with Fingerprint Reader	Optional
Logitech MX Master 2S Mouse- Graphite, Teal, Light Grey	Optional
Logitech MX Anywhere 2S Mouse- Graphite, Teal, Light Grey	Optional
Dell Wireless Mouse - WM126	Optional
Microsoft Wireless Xbox 360 Controller	Optional
3Dconnexion CAD Mouse	Optional
Dell Bluetooth Mouse - WM615	Optional
3Dconnexion SpaceMouse Compact	Optional

Monitors

Table 82. Supported monitors

Dell UltraSharp 32 Monitor - UP3216Q
Dell UltraSharp 38 Monitor - U3818DW
Dell UltraSharp 27 Monitor - UP2718Q
Dell UltraSharp 27 Monitor - U2718Q
Dell UltraSharp 25 Monitor - U2518D
Dell 24 Touch Monitor - P2418HT

Dell UltraSharp 27 Monitor - U2717DA
Dell UltraSharp 27 Monitor - U2717D
Dell 22 Monitor - P2217
Dell 23 Monitor - P2314T
Dell 24 Monitor - P2415Q
Dell 24 Monitor - P2416D
Dell 24 Monitor - P2417H
Dell 24 Monitor - P2418D
Dell 27 Monitor - P2715Q
Dell 27 Monitor - P2717H
Dell 43 Multi-Client Monitor - P4317Q
Dell UltraSharp 24 Monitor - U2417H
Dell UltraSharp 24 Monitor - U2417HA
Dell UltraSharp 24 Monitor - U2417HJ
Dell UltraSharp 25 Monitor - U2515H
Dell UltraSharp 25 Monitor - U2518DA
Dell UltraSharp 25 Monitor - U2715H
Dell UltraSharp 29 Monitor - U2913WM
Dell UltraSharp 29 Monitor - U2917W
Dell UltraSharp 30 Monitor - U3014
Dell UltraSharp 34 Monitor - U3415W
Dell UltraSharp 34 Monitor - U3417W
Dell UltraSharp 25 Monitor - UP2516D
Dell UltraSharp 27 Monitor - UP2715K
Dell UltraSharp 27 Monitor - UP2716D
Dell UltraSharp 30 Monitor - UP3017
Dell UltraSharp 32 Monitor - UP3218K
Dell UltraSharp 23 Monitor - UZ2315H
Dell 22 Monitor - P2217H
Dell 23 Monitor - P2317H
Dell 70 Conference Room Monitor C7016H
Dell 55 Touch Interactive Monitor C5518QT
Dell 70 Touch Interactive Monitor - C7017T
Dell Medical Review 22 Monitor - MR2217
Dell Medical Review 24 Monitor - MR2416
Dell 22 Monitor - P2219H
Dell UltraSharp 49 Multi-Client Monitor - U4919DW
Dell 27 Monitor - P2719H
Dell 24 Monitor - P2419H
Dell UltraSharp 32 4K Monitor - U3219Q
Dell 23 Monitor - P2319H

Dell 22 Monitor - P2219HC
 Dell UltraSharp 24 Ultrathin Monitor - U2419H
 Dell 86 Touch Interactive Monitor C8618QT
 Dell 55 Conference Room Monitor C5517H
 Dell UltraSharp 27 Ultrathin Monitor - U2719DC
 Dell UltraSharp 27 Ultrathin Monitor - U2719D
 Dell UltraSharp 24 Ultrathin Monitor - U2419HC

Webcam

Table 83. Webcam

Logitech C615 HD Webcam
 Logitech C930e HD Webcam

Power

Table 84. Power Supply Unit

	300 W 80Plus Bronze/Gold	460 W 80Plus Gold	850 W 80Plus Gold
Wattage	300 W	460 W	850 W
AC input voltage range	100 VAC - 240 VAC	100 VAC - 240 VAC	100 VAC - 240 VAC
AC input current (low ac range / high ac range)	6 A / 3 A	8 A / 4 A	10 A
AC input frequency	50 Hz - 60 Hz	50 Hz - 60 Hz	50 Hz - 60 Hz
AC holdup time (80% load)	16 mS	16 mS	16 mS
Average efficiency (ESTAR 6.1 qualified)	EPA Bronze: 82-85-82% @ 20-50-100% load EPA Gold: 87-90-87% @ 20-50-100% load	EPA Gold: 87-90-87% @ 20-50-100% load	EPA Gold: 87-90-87% @ 20-50-100% load
DC Parameters	+5.1V/ 13A +12VB/ 16.5A +12VC/ 16A +3.3V/ 10A	+5.1V/ 25A +12VA/ 18A +12VB/ 16.5A +12VC/ 16A +3.3V/ 17A	3.3V/20A 5V/20A 12VA/32A 12VB/48A 12VD/16A -12V/0.5A 5Vaux/4A
+12.0v auxiliary output	4.0 A	4.0 A	4.0 A
Max total power	300 W	460 W	850 W
BTUs/h (based on PSU max WT)	1024 BTU	1570 BTU	1570 BTU
Power Supply Fan	92 mm * 25 mm	92 mm * 25 mm	92 mm * 25 mm
ErP Lot6 Tier 2 0.5watt requirement	Yes	Yes	Yes
80Plus Certified	Yes	Yes	Yes

	300 W 80Plus Bronze/Gold	460 W 80Plus Gold	850 W 80Plus Gold
FEMP Standby Power Compliant	Yes	Yes	Yes

Table 85. External Power Supply and Surge Protectors

External Power Supply and Surge Protectors

- APC NoBreak Back-UPS
- Dell Smart-UPS DLT1500
- APC CUBIC300BI-BR Surge Protector
- SurgeArrest Performance Surge Suppressor
- American Power Conversion BE750G Back UPS
- BACK-UPS 650VA 8OUTLET
- Belkin 8-outlet Surge Protector with 6ft Power Cord & Telephone Protection

Printers

Table 86. Supported printers

- Dell Mono Laser Printers
- Dell Color Multifunction Printer - E525w
- Dell Multifunction Printer - E515dw
- Dell Mono Multifunction Printer - B5465dnf
- Dell Color Smart Printer - S5840cdn
- Dell Color Cloud Multifunction Printer - H625cdw
- Dell Color Multifunction Printer - C5765dn
- Dell Smart Printer - S5830dn
- Dell Color Laser Printers
- Dell Inkjet Printers

Projectors

Table 87. Supported projectors

- Dell Advanced 4K Laser Projector
- Dell Network Projector: 4320
- Dell Professional Projector: 1650
- Dell Advanced Projector: 7760
- Dell Advanced Projector S560
- Dell Advanced Projector S560P
- Dell Advanced Projector S560T
- Dell Professional Projector 1550
- Dell Advanced Projector 4350

Dust Filters and Cable Covers

This topic illustrates the optional dust filters and cable cover attachments for Dell Precision Tower 3630

Cable Covers





Dust Filters




Getting help

Topics:

- [Contacting Dell](#)

Contacting Dell

 **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.**

Dell provides several online and telephone-based support and service options. Availability varies by country and product, and some services may not be available in your area. To contact Dell for sales, technical support, or customer service issues:

1. Go to **Dell.com/support**.
2. Select your support category.
3. Verify your country or region in the **Choose a Country/Region** drop-down list at the bottom of the page.
4. Select the appropriate service or support link based on your need.