

# Dell Precision 7730

## Setup and specifications guide

## 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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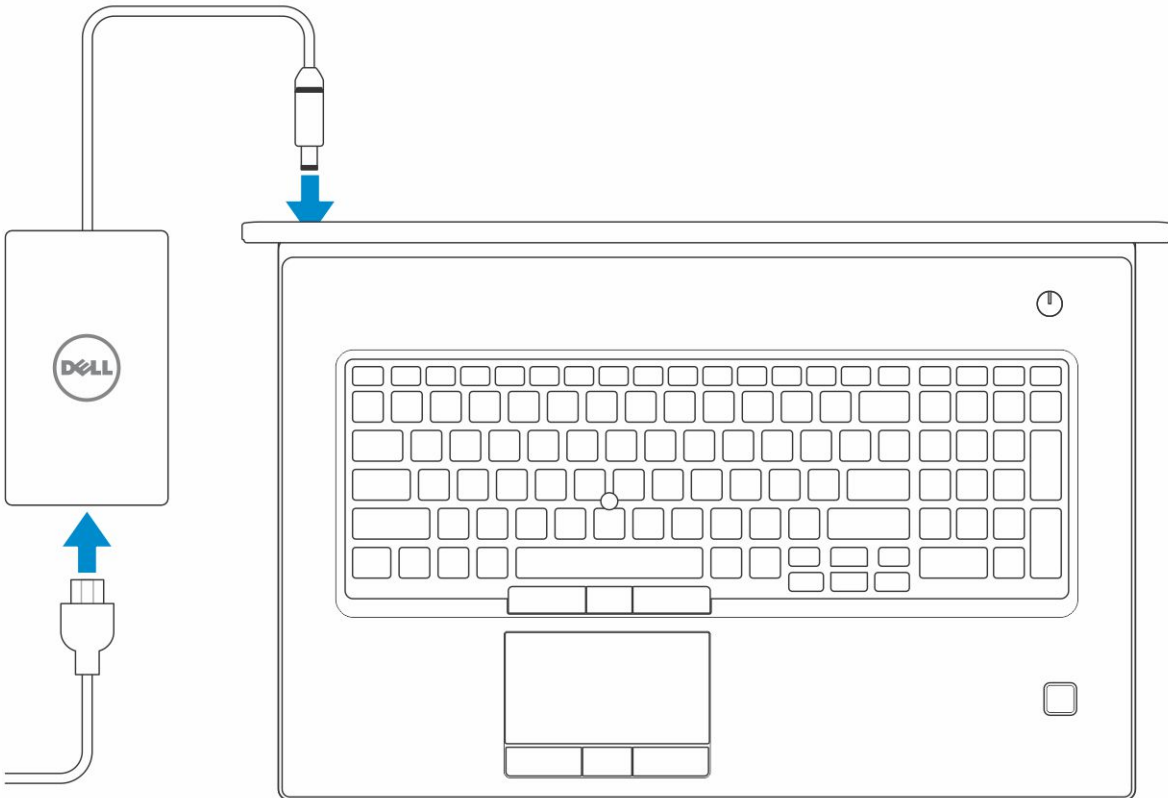
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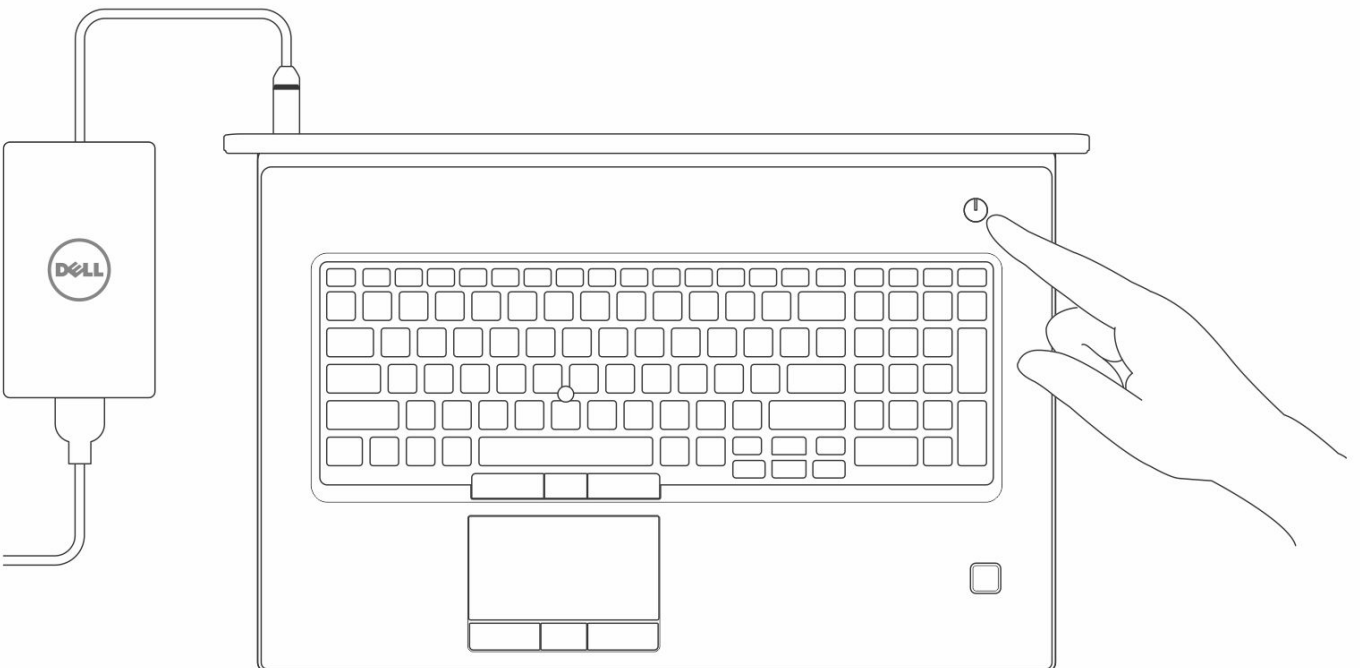
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# Set up your computer

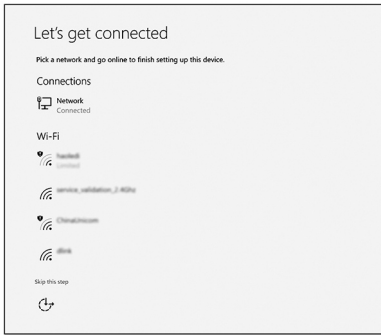
1. Connect the power cable.



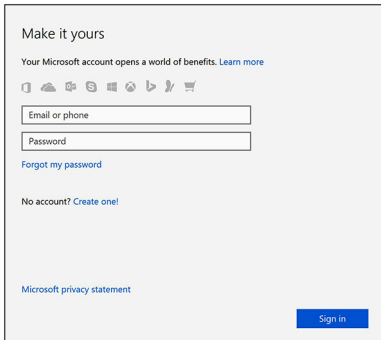
2. Press the power button.



3. Follow the instructions on the screen to finish Windows setup:
  - a. Connect to a network.



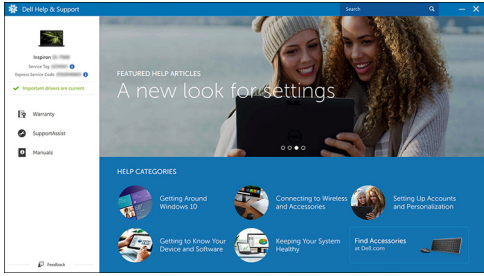



- b. Sign-in to your Microsoft account or create a new account.



4. Locate Dell apps.

**Table 1. Locate Dell apps**

Features	Specifications
	Register your computer
	Dell Help & Support 
	SupportAssist — Check and update your computer

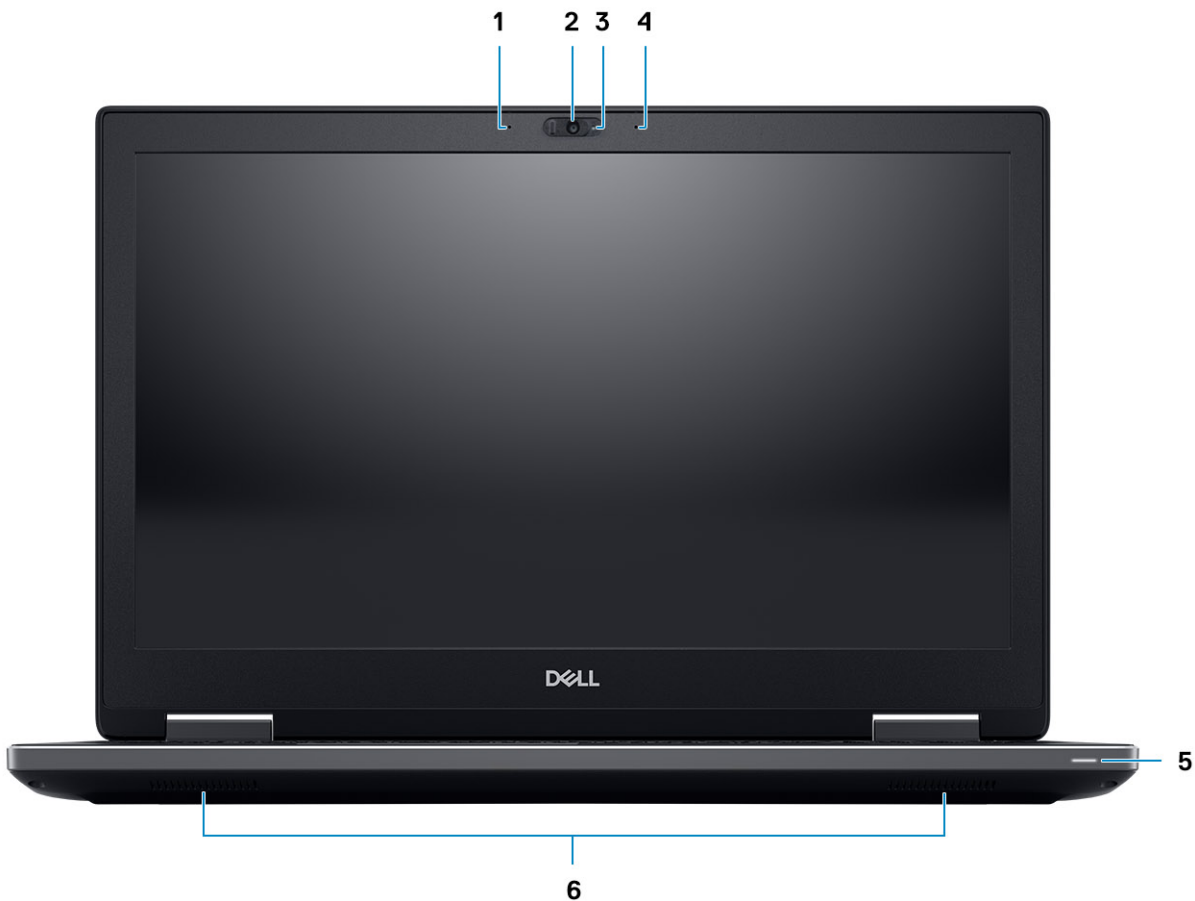
## Chassis

This chapter illustrates the multiple chassis views along with the ports and connectors and also explains the FN hot key combinations.

### Topics:

- [Front open view](#)
- [Left view](#)
- [Right view](#)
- [Palmrest view](#)
- [Back view](#)
- [Bottom view](#)

### Front open view



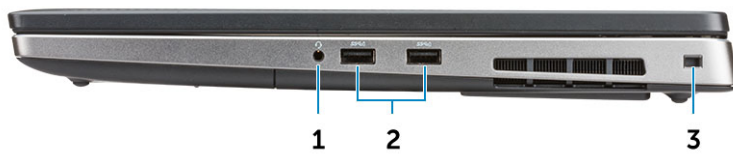
- |                                   |                                   |
|-----------------------------------|-----------------------------------|
| 1. Microphone (Optional)          | 2. Camera-with shutter (Optional) |
| 3. Camera-status light (Optional) | 4. Microphone (Optional)          |
| 5. Battery status light           | 6. Speakers                       |

## Left view



1. Thunderbolt 3 Type-C port
2. Thunderbolt 3 Type-C port
3. SD Card reader
4. Smartcard reader

## Right view



1. Headset port
2. USB 3.1 Gen 1 ports with PowerShare
3. Security cable slot

## Palmrest view



1. Power button
2. Fingerprint reader (optional)
3. Contactless Card Reader (optional)
4. Touchpad

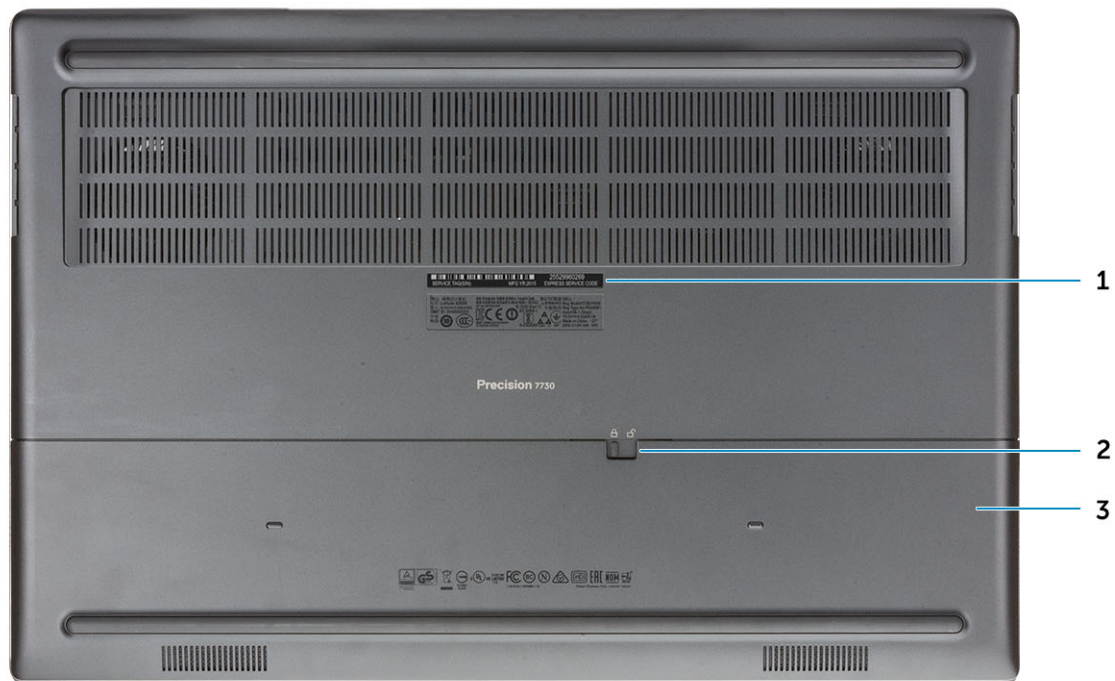


## Back view



- 1. HDMI port
- 2. Mini DisplayPort
- 3. RJ45 Network port
- 4. USB 3.1 Gen 1 port with PowerShare
- 5. Power connector port

## Bottom view



- 1. Service tag label
- 2. Battery door release latch
- 3. Battery door

# 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.

## Topics:

- [Base](#)
- [System information](#)
- [Processor](#)
- [Memory](#)
- [Storage](#)
- [System board connectors](#)
- [Media card-reader](#)
- [Audio](#)
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- [Display](#)
- [Keyboard](#)
- [Touchpad](#)
- [Operating system](#)
- [Battery](#)
- [Power adapter](#)
- [Dimensions and weight](#)
- [Security](#)

## Base

**Table 2. Base**

Base
Dell Precision 7730 CTO Type C SC Base
Dell Precision 7730 TAA Type C SC Base
Dell Precision 7730 BTX Type C SC Base

## System information

**Table 3. System information**

Features	Specifications
Chipset	Intel CM246 chipset

**Table 3. System information (continued)**

Features	Specifications
DRAM bus width	64-bit per channel (total 128 bit)
FLASH EPROM	48 kHz
PCIe bus	8 Gbps
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 4. Processor specifications**

Type	UMA Graphics
Intel Core Processor i5-8300H, 4 Core, 8M Cache, 2.30GHz up to 4.0GHz Turbo, 45W	Integrated Intel UHD 630
Intel Core Processor i5-8400H, 4 Core, 8M Cache, 2.50GHz up to 4.1GHz Turbo, 45W, vPro	Integrated Intel UHD 630
Intel Core Processor i7-8750H, 6 Core, 9M Cache, 2.20GHz up to 4.1GHz Turbo, 45W	Integrated Intel UHD 630
Intel Core Processor i7-8850H, 6 Core, 9M Cache, 2.60GHz up to 4.3GHz Turbo, 45W, vPro	Integrated Intel UHD 630
Intel Core Processor i9-8950HK, 6 Core, 12MB Cache, 2.90GHz up to 4.60GHz Turbo, 45W	Integrated Intel UHD 630
Intel Xeon E-2176M, 6 Core Xeon, 12M Cache, 2.70GHz up to 4.40GHz Turbo, 45W, vPro	Integrated Intel UHD P630
Intel Xeon E-2186M, 6 Core Xeon, 12M Cache, 2.90GHz up to 4.60GHz Turbo, 45W, vPro	Integrated Intel UHD P630

## Memory

**Table 5. Memory specifications**

Feature	Specifications
Minimum memory configuration	8 GB
Maximum memory configuration	128 GB
Number of slots	4 SODIMM
Maximum memory supported per slot	32 GB
Memory options	<ul style="list-style-type: none"> <li>8 GB - 1 x 8 GB</li> <li>16 GB - 1 x 16 GB</li> </ul>

**Table 5. Memory specifications (continued)**

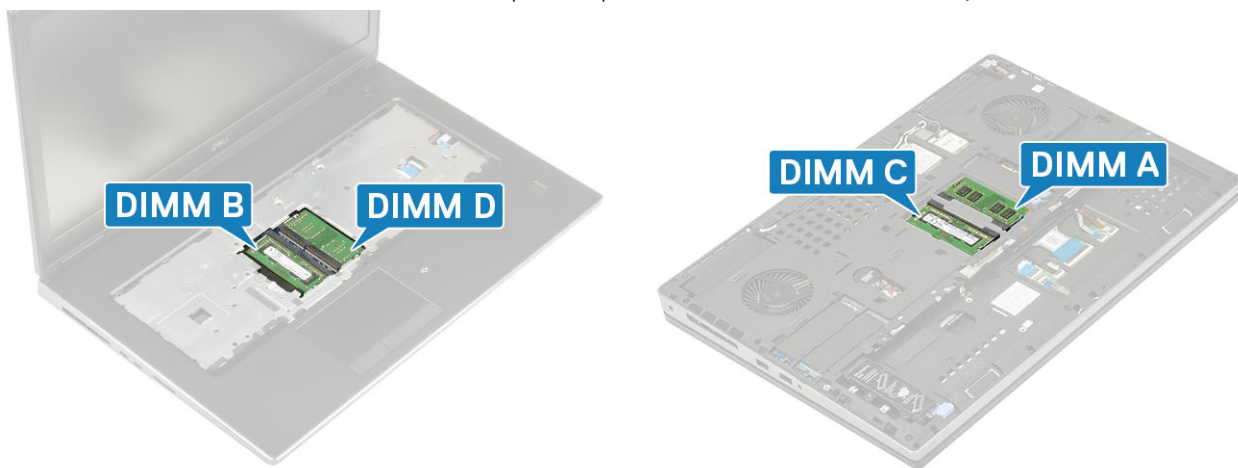
Feature	Specifications
	<ul style="list-style-type: none"> <li>• 16 GB - 2 x 8 GB</li> <li>• 32 GB - 1 x 32 GB</li> <li>• 32 GB - 2 x 16 GB</li> <li>• 32 GB - 4 x 8 GB</li> <li>• 64 GB - 4 x 16 GB</li> <li>• 64 GB - 2 x 32 GB</li> <li>• 128 GB - 4 x 32 GB</li> </ul>
Type	DDR4 SDRAM ECC and Non-ECC memory <i>i</i> <b>NOTE:</b> ECC memory requires Xeon processors.
Speed	<ul style="list-style-type: none"> <li>• 2400 MHz</li> <li>• 2666 MHz</li> <li>• 2933 MHz</li> </ul>

**Table 6. Memory population rules**

DIMM Sku	Implementation
X1	B
X2	B+D
X3	A+B+C+D

Location of channel A, B, C, D:

1. B and D under Keyboard– Slot B close to touchpad and Slot D close to LCD
2. A and C under Base– Slot C close to rear Input/Output and Slot A close to the battery



## Storage

**Table 7. Storage specifications**

Type	Form factor	Interface	Security option	Capacity
Four Solid-State Drive (SSD)	M.2 2280	<ul style="list-style-type: none"> <li>• SATA AHCI, Up to 6 Gbps</li> <li>• PCIe 4x4 NVMe, Up to 32 Gbps</li> </ul>	SED	<ul style="list-style-type: none"> <li>• Up to 512 GB</li> <li>• Up to 2 TB</li> </ul>

**Table 7. Storage specifications (continued)**

Type	Form factor	Interface	Security option	Capacity
One 2.5" Hard-Disk Drive (HDD) with 4 cell battery only	Approximately (2.760 x 3.959 x 0.374 inches)	SATA AHCI, Up to 6 Gbps	SED FIPS	Up to 2 TB

**NOTE:** Slot 4: SATA; Slot 3, 5, 6: PCIe. Please note that the slots are marked against there respective slots in the system.

## System board connectors

**Table 8. System board connectors**

Features	Specifications
M.2 Connectors	<ul style="list-style-type: none"> <li>Slot 1 3030 socket 1 key A</li> <li>Slot 2 3042 socket 2 key B</li> <li>Slot 3 2280 socket 3 key M</li> <li>Slot 4 2280 socket 3 key M</li> <li>Slot 5 2280 socket 3 key M</li> <li>Slot 6 2280 socket 3 key M</li> </ul>
Serial ATA (SATA) connector	1 (with 4 cell battery only)

## Media card-reader

**Table 9. Media-card reader specifications**

Features	Specifications
Type	One SD-card slot
Supported cards	<ul style="list-style-type: none"> <li>SD</li> <li>SDHC</li> <li>SDXC</li> </ul>

## Audio

**Table 10. Audio specifications**

Features	Specifications
Controller	Realtek ALC3281
Type	Four-channel high-definition audio
Speakers	Two (Directional speakers)
Interface	<ul style="list-style-type: none"> <li>Universal audio jack</li> <li>Stereo headphone</li> <li>Stereo headset</li> <li>Stereo line in</li> <li>Microphone in</li> <li>Stereo line out</li> </ul>

**Table 10. Audio specifications (continued)**

Features	Specifications
Internal speaker amplifier	2W (RMS) per channel

## Video

**Table 11. Video specifications**

Controller	Type	CPU Dependency	Graphics memory type	Capacity	External display support	Maximum resolution
Intel UHD Graphics 630	UMA	<ul style="list-style-type: none"> <li>Intel Core Processor i5</li> <li>Intel Core Processor i7</li> <li>Intel Core Processor i9</li> </ul>	Integrated	Shared system memory	eDP/mDP/HDMI/Type-C	4096x2304
Intel UHD Graphics P630	UMA	Intel Xeon	Integrated	Shared system memory	eDP/mDP/HDMI/Type-C	4096x2304
Radeon Pro WX 4150	Discrete	NA	GDDR5	4 GB	HDMI/mDP/eDP/USB-C	<ul style="list-style-type: none"> <li>Single DisplayPort 1.4 - 7680 x 4320 (8k) @ 30 Hz</li> <li>Dual DisplayPort 1.4 - 7680 x 4320 (8k) @ 60 Hz</li> <li>HDMI 2.0 - 4096 x 2160 (4K) @ 60 Hz</li> </ul>
Radeon Pro WX 7100	Discrete	NA	GDDR5	8 GB	HDMI/mDP/eDP/USB-C	<ul style="list-style-type: none"> <li>Single DisplayPort 1.4 - 7680 x 4320 (8k) @ 30 Hz</li> <li>Dual DisplayPort 1.4 - 7680 x 4320 (8k) @ 60 Hz</li> <li>HDMI 2.0 - 4096 x 2160 (4K) @ 60 Hz</li> </ul>
NVIDIA Quadro P3200	Discrete	NA	GDDR5	6 GB	eDP/mDP/HDMI/Type-C	<p>Max Digital:</p> <ul style="list-style-type: none"> <li>Single DisplayPort 1.4 - 7680 x 4320 (8k) @ 30 Hz (mDP/type-c to DP)</li> <li>Dual DisplayPort 1.4 - 7680 x 4320</li> </ul>

**Table 11. Video specifications (continued)**

Controller	Type	CPU Dependency	Graphics memory type	Capacity	External display support	Maximum resolution
						(8k) @ 60 Hz (mDP/type-c to DP)
NVIDIA Quadro P4200	Discrete	NA	GDDR5	8 GB	eDP/mDP/HDMI/Type-C	Max Digital: <ul style="list-style-type: none"> <li>• Single DisplayPort 1.4 - 7680 x 4320 (8k) @ 30 Hz (mDP/type-c to DP)</li> <li>• Dual DisplayPort 1.4 - 7680 x 4320 (8k) @ 60 Hz (mDP/type-c to DP)</li> </ul>
NVIDIA Quadro P5200	Discrete	NA	GDDR5	16 GB	eDP/mDP/HDMI/Type-C	Max Digital: <ul style="list-style-type: none"> <li>• Single DisplayPort 1.4 - 7680 x 4320 (8k) @ 30 Hz (mDP/type-c to DP)</li> <li>• Dual DisplayPort 1.4 - 7680 x 4320 (8k) @ 60 Hz (mDP/type-c to DP)</li> </ul>

## Camera

**Table 12. Camera specifications**

Features	Specifications
Resolution	Camera: <ul style="list-style-type: none"> <li>• Still image: 0.92 megapixels</li> <li>• Video: 1280x720 at 30 fps</li> </ul> Infrared camera (optional on FHD non-touch): <ul style="list-style-type: none"> <li>• Still image: 0.30 megapixels</li> <li>• Video: 340x340 at 60 fps</li> </ul>
Diagonal viewing angle	<ul style="list-style-type: none"> <li>• Camera - 86.7 degrees</li> <li>• Infrared camera - 70 degrees</li> </ul>

## Wireless

**Table 13. Wireless specifications**

Maximum transfer rate	867 Mbps
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**Table 13. Wireless specifications (continued)**

Frequency bands	2.4 GHz/5 GHz
Encryption	64-bit/128-bit WEP

## Ports and connectors

**Table 14. Ports and connectors**

Features	Specifications
Memory card reader	SD 4.0 memory card reader
Smart card reader	Standard
USB	Three USB 3.1 Gen 1 ports with PowerShare
Security	Noble wedge lock slot
Docking port	Cable dock support
Audio	<ul style="list-style-type: none"> <li>Headset port</li> <li>Noise reduction array microphones</li> <li>Microphone (Optional)</li> </ul>
Video	<ul style="list-style-type: none"> <li>Mini DisplayPort 1.4</li> <li>HDMI 2.0</li> </ul> <p><b>NOTE:</b> For the systems with DisplayPort 1.4 HBR3 is applicable, and HBR2 for every system that has DisplayPort 1.2.</p>
Network adapter	One RJ-45 connector
Thunderbolt	Two thunderbolt 3 Type-C ports

## Communications

**Table 15. Communications**

Features	Specifications
Network adapter	Integrated Intel i219LM10/100/1000 Mb/s Ethernet (RJ-45 ) with Intel Remote Wake UP and PXE
Wireless	<ul style="list-style-type: none"> <li>Wi-Fi 802.11n/ac via M.2</li> <li>Bluetooth</li> </ul>

## Contactless smart card


**Table 16. Contactless smartcard**

Title	Description	Dell ControlVault 3 Contactless Smartcard reader with NFC
Felica Card Support	Reader and software capable of supporting Felica contactless cards	Yes



**Table 16. Contactless smartcard (continued)**

<b>Title</b>	<b>Description</b>	<b>Dell ControlVault 3 Contactless Smartcard reader with NFC</b>
Prox (Proximity) (125kHz) Card support	Reader and software capable of supporting Prox/Proximity/125kHz contactless cards	No
ISO 14443 Type A Card Support	Reader and software capable of supporting ISO 14443 Type A contactless cards	Yes
ISO 14443 Type B Card Support	Reader and software capable of supporting ISO 14443 Type B contactless cards	Yes
ISO/IEC 21481	Reader and software capable of supporting ISO/IEC 21481 compliant contactless cards and tokens	Yes
ISO/IEC 18092	Reader and software capable of supporting ISO/IEC 21481 compliant contactless cards and tokens	Yes
ISO 15693 Card Support	Reader and software capable of supporting ISO15693 contactless cards	Yes
NFC Tag Support	Supports reading and processing of NFC compliant tag information	Yes
NFC Reader Mode	Support for NFC Forum Defined Reader mode	Yes
NFC Writer Mode	Support for NFC Forum Defined Writer mode	Yes
NFC Peer-to-Peer Mode	Support for NFC Forum Defined Peer to Peer mode	Yes
EMVCo Compliant	Compliant with EMVCO smartcard standards as posted to <a href="http://www.emvco.com">www.emvco.com</a>	Yes
EMVCo Certified	Formally certified based on EMVCO smartcard standards	Yes
NFC Proximity OS Interface	Enumerates NFP (Near Field Proximity) device for OS to utilize	Yes
PC/SC OS interface	Personal Computer/Smart Card specification for integration of hardware readers into personal computer environments	Yes
CCID driver compliance	Common driver support for Integrated Circuit Card Interface Device for OS level drivers	Yes
Windows Certified	Device certified by Microsoft WHCK	Yes
Dell ControlVault support	Device connects to Dell ControlVault for usage and processing	Yes

 **NOTE:** 125 Khz proximity cards are not supported.

**Table 17. Supported cards**

<b>Manufacturer</b>	<b>Card</b>	<b>Supported</b>
HID	jCOP readertest3 A card (14443a)	Yes

**Table 17. Supported cards (continued)**

Manufacturer	Card	Supported
	1430 1L	
	DESFire D8H	
	iClass (Legacy)	
	iClass SEOS	
NXP/Mifare	Mifare DESFire 8K White PVC Cards	Yes
	Mifare Classic 1K White PVC Cards	
	NXP Mifare Classic S50 ISO Card	
G&D	idOnDemand - SCE3.2 144K	Yes
	SCE6.0 FIPS 80K Dual+ 1 K Mifare	
	SCE6.0 nonFIPS 80K Dual+ 1 K Mifare	
	SCE6.0 FIPS 144K Dual + 1K Mifare	
	SCE6.0 nonFIPS 144K Dual + 1 K Mifare	
	SCE7.0 FIPS 144K	
Oberthur	idOnDemand - OCS5.2 80K	Yes
	ID-One Cosmo 64 RSA D V5.4 T=0 card	

## Display

**Table 18. Display specifications**

Type	<ul style="list-style-type: none"> <li>17.3-inch HD+ TN 1600x900 AG non-touch, No Mic, 60% color gamut</li> <li>17.3-inch HD+ TN 1600x900 AG non-touch, Mic, 60% color gamut</li> <li>17.3-inch HD+ TN 1600x900 AG non-touch, Cam/Mic, 60% color gamut</li> <li>17.3-inch UltraSharp FHD WVA 1920x1080 AG, NT, No Mic, w/Prem Panel Guar 72% color gamut</li> <li>17.3-inch UltraSharp FHD WVA 1920x1080 AG, NT, Mic, w/Prem Panel Guar 72% color gamut</li> <li>17.3-inch UltraSharp FHD WVA 1920x1080 AG, NT, Cam/Mic, w/Prem Panel Guar 72% color gamut</li> <li>17.3-inch UltraSharp FHD WVA 1920x1080 AG, NT, No WWAN, IR Cam/Mic, w/Prem Panel Guar 72% color gamut</li> <li>17.3-inch UltraSharp UHD WVA 3840x2160 AG NT, No WWAN, Cam/Mic, w/Prem Panel Guar 100% color gamut</li> </ul>
Luminance/Brightness (typical)	<ul style="list-style-type: none"> <li>220 nits (HD+ 60% color gamut )</li> <li>300 nits (FHD 72% color gamut )</li> <li>400 nits (UHD Adobe 100% color gamut)</li> </ul>
Height (Active area)	<ul style="list-style-type: none"> <li>HD+ - 214.92 mm (8.46 inches)</li> <li>FHD - 214.81 mm (8.46 inches)</li> <li>UHD - 214.94 mm or 214.81mm (8.46 inches)</li> </ul>
Width (Active area)	<ul style="list-style-type: none"> <li>HD+ - 382.08 mm (15.04 inches)</li> </ul>

**Table 18. Display specifications (continued)**

	<ul style="list-style-type: none"> <li>● FHD - 381.89 mm (15.04 inches)</li> <li>● UHD - 382.12 mm or 381.89 mm (15.04 inches)</li> </ul>
Diagonal	<ul style="list-style-type: none"> <li>● HD+ - 438.38 mm (17.30 inches)</li> <li>● FHD - 438.16 mm (17.30 inches)</li> <li>● UHD - 438.42 mm or 438.16mm (17.30 inches)</li> </ul>
Megapixels	<ul style="list-style-type: none"> <li>● HD+ - 1.44</li> <li>● FHD - 2.07</li> <li>● UHD - 8.29</li> </ul>
Pixels Per Inch (PPI)	<ul style="list-style-type: none"> <li>● HD+ - 106</li> <li>● FHD - 127</li> <li>● UHD - 255</li> </ul>
Contrast ratio	<ul style="list-style-type: none"> <li>● HD+ - 500:1</li> <li>● FHD - 700:1</li> <li>● UHD - 1000:1</li> </ul>
Refresh rate	60 Hz
Horizontal viewing angle (min)	<ul style="list-style-type: none"> <li>● HD+ - 40/40 degrees</li> <li>● FHD - 80/80 degrees</li> <li>● UHD - 80/80 degrees</li> </ul>
Vertical viewing angle (min)	<ul style="list-style-type: none"> <li>● HD+ - 10/30 degrees</li> <li>● FHD - 80/80 degrees</li> <li>● UHD - 80/80 degrees</li> </ul>
Pixel pitch	<ul style="list-style-type: none"> <li>● HD+ - 0.2388 mm</li> <li>● FHD - 0.1989 mm</li> <li>● UHD - 0.0995 mm</li> </ul>
Power consumption (max)	<ul style="list-style-type: none"> <li>● 4.4 W (HD+ 60% color gamut )</li> <li>● 8 W (FHD 72% color gamut )</li> <li>● 14 W (UHD Adobe 100% color gamut)</li> </ul>

## Keyboard


**Table 19. Keyboard specifications**

Features	Specifications
Number of keys	<ul style="list-style-type: none"> <li>● 103 (U.S. and Canada)</li> <li>● 104 (Europe)</li> <li>● 106 (Brazil)</li> <li>● 107 (Japan)</li> </ul>
Size	Full sized <ul style="list-style-type: none"> <li>● X= 19.00 mm key pitch</li> <li>● Y= 19.00 mm key pitch</li> </ul>
Backlit keyboard	Optional
Layout	QWERTY/AZERTY/Kanji

# Touchpad

**Table 20. Touchpad specifications**

Features	Specifications
Resolution	<ul style="list-style-type: none"> <li>Horizontal: 1048</li> <li>Vertical: 984</li> </ul>
Dimensions	<ul style="list-style-type: none"> <li>Width: 3.92 inches (99.50 mm )</li> <li>Height: 2.09 inches (53 mm)</li> </ul>
Multi-touch	Configurable single finger and multi-finger gestures

 **NOTE:** For more information about touchpad gestures for Windows 10, see the knowledge base article [4027871](#)

# Operating system

**Table 21. Operating system**

Features	Specifications
Operating systems supported	<ul style="list-style-type: none"> <li>Windows 10 Home (64 bit)</li> <li>Windows 10 Professional (64 bit)</li> <li>Windows 10 Pro for Workstations (64 bit)</li> <li>Ubuntu 16.04 LTS (64bit)</li> <li>Red Hat Linux Enterprise 8.0</li> </ul>

# Battery

**Table 22. Battery**

Type	<ul style="list-style-type: none"> <li>64 WHr Lithium ion 4 cell battery with ExpressCharge</li> <li>97 WHr Lithium ion 6 cell battery with ExpressCharge</li> <li>97 WHr Lithium ion 6 cell battery with three year warranty</li> </ul>
Dimension	<ol style="list-style-type: none"> <li>64 WHr "smart" lithium-ion           <ul style="list-style-type: none"> <li>Length - 222.40 mm (8.76 in)</li> <li>Width - 73.80 mm (2.90 in)</li> <li>Height - 11.15 mm (0.44 in)</li> <li>Weight - 298.00 g</li> </ul> </li> <li>97 WHr "smart" lithium-ion           <ul style="list-style-type: none"> <li>Length - 332.00 mm (13.07 in)</li> <li>Width - 73.80 mm (2.90 in)</li> <li>Height - 11.15 mm (0.439 in)</li> <li>Weight - 445.00 g</li> </ul> </li> </ol>
Weight (maximum)	<ul style="list-style-type: none"> <li>64 WHr - 2.98 kg (0.66 lb)</li> <li>97 WHr - 4.45 kg (0.98 lb)</li> </ul>
Voltage	<ul style="list-style-type: none"> <li>64 WHr - 7.8 VDC</li> <li>97 WHr - 11.4 VDC</li> </ul>
Life span	300 discharge/recharge cycles

**Table 22. Battery (continued)**

Charging time when the computer is off (approximate)	4 hours
Operating time	Varies depending on operating conditions and can significantly reduce under certain power-intensive conditions
Temperature range: Operating	0°C to 35°C (32°F to 95°F)
Temperature range: Storage	-40°C to 65°C (-40°F to 149°F)
Coin-cell battery	ML1220

## Power adapter

**Table 23. Power adapter specifications**

Features	Specifications
Type	240 W adapter
Input Voltage	100 to 240 VAC
Input current (maximum)	240 W - 3.5 A
Input frequency	50 Hz to 60 Hz
Output current	240 W - 12.31 A (continuous)
Rated output voltage	19.5 VDC
Temperature range (Operating)	0° to 40° C (32° to 104° F)
Temperature range (Non-Operating)	40° to 70° C (-40° to 158° F)

## Dimensions and weight

**Table 24. Dimensions and weight**

Features	Specifications
Height	Front height - 1.03 inches (26.15 mm) Rear height - 1.19 inches (30.3 mm)
Width	16.31 inches (414.20 mm)
Depth	10.78 inches (273.7 mm)
Weight	Starting 6.81 lbs (3.09 kg)

## Security

**Table 25. Security**

Trusted Platform Module (TPM) 2.0	Integrated on system board
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**Table 25. Security (continued)**

Smartcard	Yes
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# Software

This chapter details the supported operating systems along with instructions on how to install the drivers.

## Topics:

- [Operating system](#)
- [Downloading Windows drivers](#)
- [Network adapter drivers](#)
- [Audio drivers](#)
- [Display adapter](#)
- [Security drivers](#)
- [Storage controller](#)
- [System device drivers](#)
- [Other device drivers](#)
- [Identifying Windows 10 OS version](#)


## Operating system

**Table 26. Operating system**

Features	Specifications
Operating systems supported	<ul style="list-style-type: none"> <li>• Windows 10 Home (64 bit)</li> <li>• Windows 10 Professional (64 bit)</li> <li>• Windows 10 Pro for Workstations (64 bit)</li> <li>• Ubuntu 16.04 LTS (64bit)</li> <li>• Red Hat Linux Enterprise 8.0</li> </ul>

## Downloading Windows drivers

1. Turn on the notebook.
2. Go to **Dell.com/support**.
3. Click **Product Support**, enter the Service Tag of your notebook, and then click **Submit**.

 **NOTE:** If you do not have the Service Tag, use the auto detect feature or manually browse for your notebook model.

4. Click **Drivers and Downloads**.
5. Select the operating system installed on your notebook.
6. Scroll down the page and select the driver to install.
7. Click **Download File** to download the driver for your notebook.
8. After the download is complete, navigate to the folder where you saved the driver file.
9. Double-click the driver file icon and follow the instructions on the screen.

## Network adapter drivers

Verify if the Network adapter drivers are already installed in the system.

- Network adapters
  - Bluetooth Device (Personal Area Network)
  - Bluetooth Device (RFCOMM Protocol TDI)
  - Intel(R) Ethernet Connection (7) I219-LM
  - Qualcomm QCA61x4A 802.11ac Wireless Adapter

## Audio drivers

Verify if the audio drivers are already installed in the computer.

- Audio inputs and outputs
  - Microphone Array (Realtek Audio)
  - Speakers / Headphones (Realtek Audio)
- Sound, video and game controllers
  - Intel(R) Display Audio
  - Realtek Audio

## Display adapter

Verify if the display adapter drivers are already installed in the system.

- Display adapters
  - Intel(R) UHD Graphics 630

## Security drivers

Verify if the security drivers are already installed in the system.

- Security devices
  - Trusted Platform Module 2.0

## Storage controller

Verify if the storage control drivers are already installed in the system.







- Storage controllers
  - Intel(R) Chipset SATA/PCIe RST Premium Controller
  - Microsoft Storage Spaces Controller


## System device drivers

Verify if the system device drivers are already installed in the system.



- System devices
    - 8th Gen Intel(R) Core(TM) Host Bridge/DRAM Registers - 3E10
    - ACPI Fixed Feature Button
    - ACPI Lid
    - ACPI Power Button
    - ACPI Processor Aggregator
    - ACPI Sleep Button
    - ACPI Thermal Zone
    - CannonLake LPC Controller (CM246) - A30E
    - CannonLake PCI Express Root Port #1 - A338
    - CannonLake PCI Express Root Port #6 - A33D
    - CannonLake PCI Express Root Port #7 - A33E
    - CannonLake SMBus - A323
    - CannonLake SPI (flash) Controller - A324
    - CannonLake Thermal Subsystem - A379
    - Charge Arbitration Driver
    - Composite Bus Enumerator
    - Dell Diag Control Device
    - Dell System Analyzer Control Device
    - DPO Control Device
    - High Definition Audio Controller
    - High precision event timer
    - Intel(R) Dynamic Platform and Thermal Framework Generic Participant
    - Intel(R) Dynamic Platform and Thermal Framework Generic Participant
    - Intel(R) Dynamic Platform and Thermal Framework Generic Participant
    - Intel(R) Dynamic Platform and Thermal Framework Generic Participant
    - Intel(R) Dynamic Platform and Thermal Framework Manager
    - Intel(R) Dynamic Platform and Thermal Framework Processor Participant
    - Intel(R) Management Engine Interface
    - Intel(R) Power Engine Plug-in
    - Intel(R) Serial IO GPIO Host Controller - INT3450
    - Intel(R) Serial IO I2C Host Controller - A368
    - Intel(R) Serial IO I2C Host Controller - A369
    - Intel(R) Xeon(R) E3 - 1200/1500 v5/6th Gen Intel(R) Core(TM) Gaussian Mixture Model - 1911
    - Microsoft ACPI-Compliant Embedded Controller
    - Microsoft ACPI-Compliant System
    - Microsoft System Management BIOS Driver
    - Microsoft UEFI-Compliant System
    - Microsoft Virtual Drive Enumerator
    - Microsoft Windows Management Interface for ACPI
    - Microsoft Windows Management Interface for ACPI
    - Microsoft Windows Management Interface for ACPI



-  Microsoft Windows Management Interface for ACPI
-  NDIS Virtual Network Adapter Enumerator
-  NFC USB Bus Driver
-  Numeric data processor
-  PCI Express Root Complex
-  PCI standard RAM Controller
-  Plug and Play Software Device Enumerator
-  Programmable interrupt controller
-  Remote Desktop Device Redirector Bus
-  STMicroelectronics 3-Axis Digital Accelerometer
-  System CMOS/real time clock
-  System timer
-  UMBus Root Bus Enumerator

 **NOTE:** Serial IO driver needs to be installed before the Touchpad driver. If the touchpad driver is installed first, it will give an error that the touchpad is not supported.

## Other device drivers

Verify if the following drivers are already installed in the system.

### Control Vault Device

-  ControlVault Device
  -  Dell ControlVault w/ Fingerprint Touch Sensor




### Universal Serial Bus Controller

-  Universal Serial Bus controllers
  -  Intel(R) USB 3.1 eXtensible Host Controller - 1.10 (Microsoft)
  -  UCSI USB Connector Manager
  -  USB Composite Device
  -  USB Composite Device
  -  USB Root Hub (USB 3.0)



### Software components

-  Software devices
  -  Microsoft Device Association Root Enumerator
  -  Microsoft GS Wavetable Synth

### Smart card reader

-  Smart card readers
  -  Microsoft Usbccid Smartcard Reader (WUDF)
  -  Microsoft Usbccid Smartcard Reader (WUDF)

### Mice and other pointing devices

-  Mice and other pointing devices
  -  HID-compliant mouse

## Memory technology devices

- Memory technology devices
  - Realtek PCIE CardReader

## Firmware

- Firmware
  - System Firmware

# Identifying Windows 10 OS version

Run dialog box with the Windows Key + R keyboard shortcut. Once that box shows up, enter winver (it stands for Windows version).

**Table 27. Identifying Windows 10 OS version**


OS Version	Code name	Version	Latest build
Windows 10	Threshold 1	1507	10240
Windows 10	Threshold 2	1511	10586
Windows 10	Redstone 1	1607	14393
Windows 10	Redstone 2	1703	15063
Windows 10	Redstone 3	1709	16299
Windows 10	Redstone 4	1803	17134

# 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.