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# Dell™ Latitude 11 5000 Series 2n1 5175, 5179 Technical Guidebook



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Dell Confidential

Specific features/models discussed in this document may not be available WW

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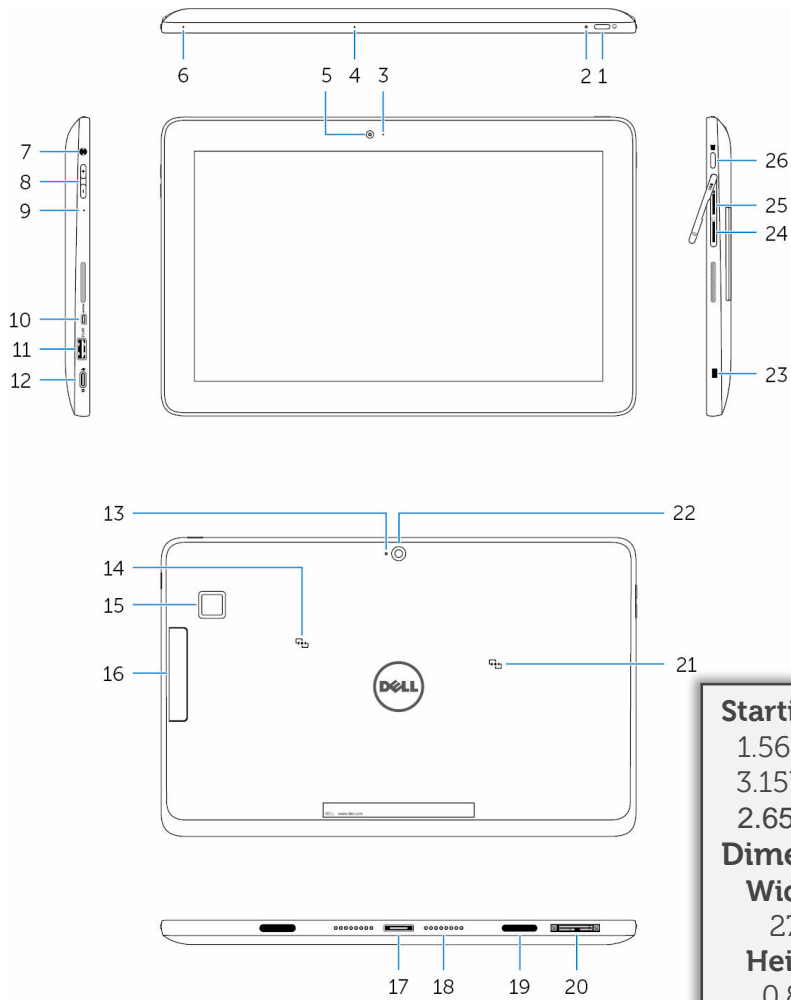
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# Product Views and Technical Specifications



# Latitude 11 (5175, 5179): Weight, Dimensions, View



1. Power Button
2. Power and battery – charge status light
3. Camera-status light
4. Microphone
5. Front camera
6. Microphone
7. Headset port
8. Volume-control buttons
9. Microphone
10. Micro-HDMI port
11. Full-Size USB 3.0 port
12. USB 3.0 and power-adapter port (USB-C)
13. Microphone
14. NFC-sensor area (Optional on 5175)
15. Fingerprint reader (5179 Only)
16. Smart-card reader (5179 Only)
17. Docking connector (Dell Tablet Dock)
18. Docking pins
19. Docking slots (2) - Keyboards
20. Service Tag label
21. NFC-sensor area (5179 Only)
22. Rear camera
23. Security-cable slot (Noble)
24. Micro-SIM card slot (WWAN enabled configurations only)
25. MicroSD-card slot
26. Windows button

## Starting weight (5175 WLAN):

- 1.56lbs (709.8g)
- 3.15lbs (1429.8g) w/Latitude 11 KB
- 2.65lbs (1202.8g) w/Latitude 11 Slim KB

## Dimensions (5175):

- Width** (landscape mode): 11.0" / 279.8mm
- Height** (thickness): 0.42"/ 10.78mm  
0.84"/21.23mm w/Latitude 11 KB  
0.83"/21.0 mm w/Latitude 11 Slim KB
- Length** (Landscape mode): 6.96"/176.8mm;

## Starting weight (5179 WLAN):

- 1.67lbs (757.8g)
- 3.26lbs (1477.8g) w/Latitude 11 KB
- 2.76lbs (1250.8g) w/Latitude 11 Slim KB

## Dimensions (5179):

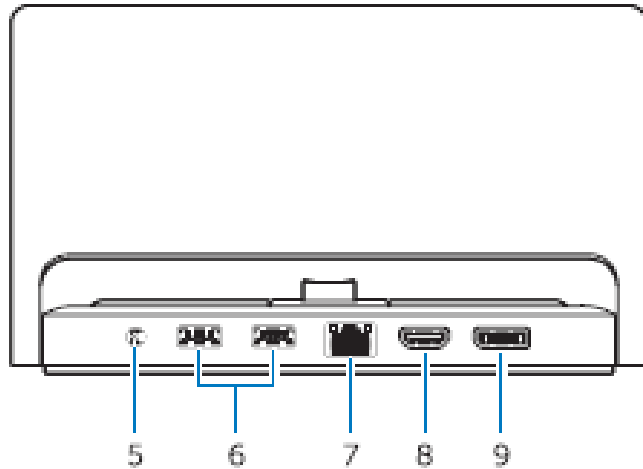
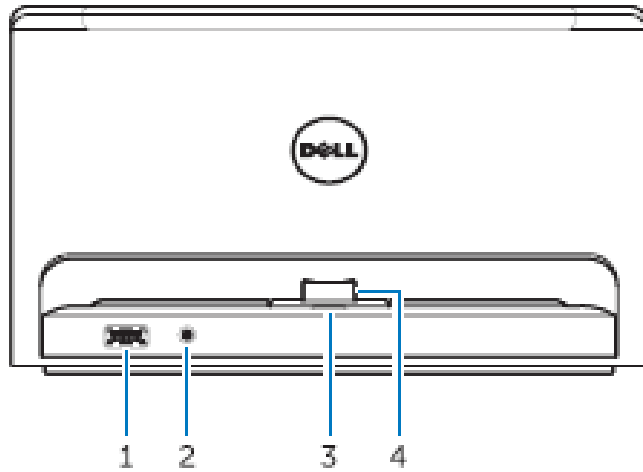
- Width** (landscape mode): 11.0" / 279.8mm
- Height** (thickness): 0.56"/ 14.32mm  
0.97"/24.75mm w/Latitude 11 KB  
0.96"/24.3 mm w/Latitude 11 Slim KB
- Length** (Landscape mode): 6.96"/176.8mm;



# Dell Tablet Dock II



1. USB 3.0 connector
2. audio connector
3. power status light
4. docking connector
5. power connector
6. USB 3.0 connectors
7. 10/100/1000 network connect
8. HDMI connector (1920x1080)
9. DP++ connector (2560x1440)



**Starting weight:**  
825g (1.82lb)

**External Display resolution**  
HDMI: 1920x1080  
DP: 2560x1440

**Dimensions:**

Width: 8.11" / 206.00mm  
Depth: 5.11" / 130.00mm  
Height: 4.72" / 120.00mm

	Dell Tablet Dock	New Dell Tablet Dock
<b>Product Support</b>	Venue 11 Pro	Venue 11 Pro
<b>Powered</b>	45Watt	65Watt
<b>USB</b>	3(4) x USB3.0*1	3(4) x USB3.0*1
<b>Display Port</b>	HDMI, Displayport	HDMI, DP++
<b>Audio</b>	3.5mm jack	3.5mm jack
<b>LAN</b>	10/100	10/100/1000

\*1 Dell Venue 11 Pro have the USB port on the device active while docked, providing the user with 4 active USB3.0 ports when docked to Dell Tablet Dock.



# Dell Tablet Dock – Display Capability

## Venue 11 Pro (5130)

- ① Supports tablet display image and one external image.  
If 2 external displays are connected the image will be duplicated.

### Venue 11 Pro 5130

The Venue 11 5130 can only drive the same image on two externally connected displays.



## Venue 11 Pro (7130/7139/7140) and Latitude 11 (5175/5179)

- ① Supports tablet display image and two external images  
If 2 external displays are connected both displays can portray separate images.
- ② 2 separate external display images can exist when tablet display is not utilised and an active signal splitter is used

### Venue 11 7130/7139/7140 and Latitude 11 (5175/5179)

Can drive different images on two externally connected displays, in addition to the image on the tablet, or it can drive three external images.



Note: Driving three external images requires the use of an active signal splitter.

# Dell Dock



The Dell Dock allows users to quickly connect their laptop or tablet to a single data and power source with a single cable allowing for an easy, reliable connection from laptops and tablets to displays and peripherals .

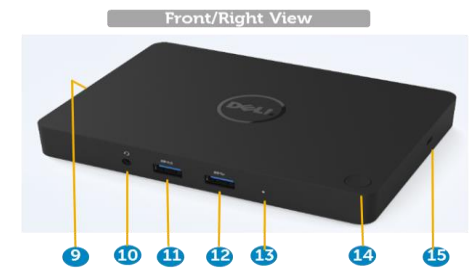
## Key Features:

- Common docking experience across platforms with USB-C port(s) having data, video, and power capabilities.
- Supporting compatible non-Dell systems
- Single cable for audio, video, data & power
- Supports dual FHD displays
- Small footprint

## Dell Dock Features



1. HDMI
2. mDP
3. VGA
4. RJ-45 with LEDs
5. USB 2.0 (2x)
6. USB 3.0
7. Speaker Out
8. 7.4mm DC-IN Power Input



9. Dell Docking Station Connector
10. Global Headset Jack
11. USB 3.0 w/PowerShare
12. USB 3.0
13. Power Adapter LED
14. Dock Button
15. Kensington Lock Slot



# Dell Dock – Display Capability

- ① Supports system display image and two external images
  - If 2 external displays are connected both displays can portray separate images.
- ② Supports system display image and 3 external display images but in clone mode vs. Extended display



or





# Docks Comparison

Product	Dell Tablet Dock	Dell Dock
Displays	HDMI, DP++,	VGA, mDP, HDMI
# Displays supported	3 <sup>1,2</sup>	3 <sup>3</sup>
Max resolution supported	DisplayPort: 2560 x 1440 HDMI: 1920 x 1080	3840 x 2160 @30Hz / 2560 x 1600 @60Hz
USB Ports	3 x USB3.0	2 x USB2.0 3 x USB3.0
Audio/Headphone	1 x 3.5 Audio headphone Line Out	1 x Combo 1 x speaker output
Network	Gigabit Ethernet	Gigabit Ethernet
LED Indicator	Power Adapter LED 40-pin Docking Connector LED	Power Adapter LED Docking Cable Connector LED RJ-45 LEDs
Dock connector	40-pin port	USB Type-C cable
AC adapter options	65W (4.5mm barrel)	130W/180W (7.4mm barrel)
Stand	Built-in Stand	Optional Dell Tablet Stand
Dimension and Weight	Weight: 825g Dimension: 206mm x 130mm x 120mm	Weight: 422g Dimension: 155mm x 110mm x 22mm

<sup>1</sup>Venue 11 5130 can only drive the same image on two externally connected displays. Total of 2 extended displays

<sup>2</sup>Venue 11 7130/7139/7140 can drive different images on two externally connected displays, in addition to the image on the tablet, or it can drive three external images. Total of 3 extended displays

<sup>3</sup>If the 3<sup>rd</sup> display is connected with VGA port the image will be in clone mode vs. Extended display



# Latitude 11 Keyboard



When you snap your tablet into the Dell Latitude 11 Keyboard, you gain laptop productivity and extend your battery time.

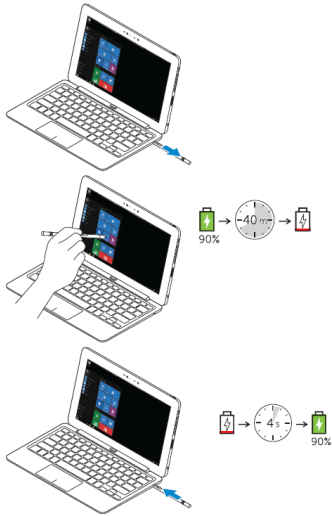
## Key features

- Brings the speed and comfort of a classic keyboard to a tablet for mobile productivity
- Full-sized, well-spaced, **backlit** chiclet keys for effortless typing
- Mouse cursor control with high precision, gesture touchpad
- Includes **mini active pen** with quick charging (4 sec charging time for 39 mins continuous usage)
- **Built-in rechargeable battery (28Whr)** to extend tablet battery life. Includes a USB Type-C port to charge keyboard
- Sturdy design to dock your tablet.
- **Multi-angle viewing (up to 120 degrees)** of your tablet using a built in hinge
- Windows 8.1/10 compliant full-sized keyboard

*\*Latitude 11 Keyboard is not backward compatible, meaning it will not work with Venue 11 Pro systems (5130, 7130, 7139, and 7140)*



# Latitude 11 Keyboard – mini Active Pen Usage



	90%	100%
Continuous usage time	<b>39 minutes</b>	43 minutes
Charging time*	<b>4 seconds</b>	25 seconds



Customizable lower and upper button

	Default functionality	Customizable option**
Lower Button	<b>Erase</b>	<ol style="list-style-type: none"> <li>1. Barrel button</li> <li>2. Erase</li> <li>3. Page Up</li> <li>4. Page Down</li> <li>5. Copy</li> <li>6. Paste</li> <li>7. Undo</li> <li>8. Redo</li> <li>9. Disabled</li> </ol>
Upper Button	<b>Right Click</b>	

*\*mini Active Pen charges in KB pen garage when tablet is docked on KB and tablet is powered on*

*\*\*Need to install "Active Control Panel" from [dell.com/support/drivers](http://dell.com/support/drivers)*



# Latitude 11 Slim Keyboard

Super Thin, light weight design for travel, work, or any working environment



## Key features

- Brings the speed and comfort of a classic keyboard to a tablet for mobile productivity
- Full sized, well spaced, **backlit chiclet** keys for effortless typing
- Mouse cursor control with high precision, gesture touch pad
- **Super-thin, light weight design** that not only increases productivity but also folds up to protect your screen
- **Easy snap on with magnetic connectors**
- **Multi-angle (up to 150 degrees)** viewing of your tablet using a built-in hinged kickstand
- Includes pen holder
- Windows 8.1/10 compliant full-sized keyboard

*\*\*Latitude 11 Keyboard Folio is not backward compatible, meaning it will not work with Venue 11 Pro systems (5130, 7130, 7139, and 7140)*



# 11" Keyboards

Product	Dell Latitude 11 Keyboard	Dell Latitude 11 Slim Keyboard	Dell Venue Mobile Keyboard	Dell Venue Slim Keyboard
Compatibility	Latitude 11 5000 Series 2-in-1 (5175, 5179)	Latitude 11 5000 Series 2-in-1 (5175, 5179)	Latitude 11 5000 Series 2-in-1 (7155, 7159), Venue 11 Pro (5130, 7130, 7139, 7140)	Latitude 11 5000 Series 2-in-1 (7155, 7159), Venue 11 Pro (5130, 7130, 7139, 7140)
Weight	728 g	494.8g	675g	398.5g
Dimensions	279.20 mm (L) x 174.62 mm (W) x 9.70 mm (H)	277.6 mm (L) x 357.1 mm (W) x 5.4 mm (H)	279.31mm (L) x 186.12mm (W) x 9.14 mm (H)	361.3mm (L) * 279.7mm (W) * 4.1mm (H)
Keys	Full-size, <b>backlit</b> chiclet keys with <b>1.3 mm</b> key travel	Full-size, <b>backlit</b> chiclet keys with <b>1.3 mm</b> key travel	Full-size chiclet keys with 1.2 mm key travel	Full-size keys with 0.2mm key travel
Keyboard Layout	Windows	Windows	Windows	Windows
Docking Method	Pogo pins with latch mechanism	Pogo pins with magnetic connectors	Pogo pins with latch mechanism	Pogo pins with magnetic connectors
Built-in Battery	28 wHr	N/A	28WHr	N/A
Charging Method	<b>USB Type-C</b> (cable not included) or through tablet	N/A	Micro-USB port (cable not included) or through tablet	N/A
Viewing Angles	Adjustable, up to <b>120 degrees</b>	Adjustable, up to <b>150 degrees</b>	Adjustable, up to 117 degrees	118 degrees or 124 degrees
Features	Includes <b>mini Active Pen</b> with built-in charging garage; Clamshell style	Includes pen holder	Clamshell style	Include pen holder



# Dell Active Pen



Natural writing feel for a pen on paper experience

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## Key features

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- Industry-leading accuracy, built with Wacom feel IT technologies
- Active stylus with hovering and pressure-sensitive tip (2048 levels of pressure)
- Customizable\* 2 barrel buttons and Top button
- Quick launch and note taking over lock screen (requires Bluetooth pairing)
- Easy to use with no calibration required
- LED light to show Bluetooth pairing status
- 8 months battery life, with AAAA battery

*\*Need to install "Active Control Panel" from [dell.com/support/drivers](http://dell.com/support/drivers)*



# Dell Active Stylus/Pen Feature Comparison

Features		Dell Active Pen	Dell mini Active Pen**
Performance	Hover Sensing	Yes	Yes
	Pressure sensitivity*	2048	2048
	Palm-rejection	Yes	Yes
	Battery with typical usage of 1hour/day	8 months	39 min with Quick 90% charging in 4 sec in keyboard garage
Productivity	Side buttons	2 (Eraser + context)	2 (Eraser + context)
	Wake from lock	Yes	N/A
	Top Button	Yes (One click to open OneNote two clicks to take screen shot)	No
	LED	Yes (to show pairing status)	No
Mobility	Pen clip	Yes	No
Others	BT connectivity	Yes	No
	Dimension	145mm (L); 9.5mm (D)	125.5mm (L); 5.3mm (D)
	Weight	18 g	5.3 g

\*Higher pressure level indicates pen capability to draw detailed/nuanced thin to bold line, light to deep color

\*\*Only ships with Latitude 11 Keyboard, and Venue 10 Pro Keyboard. Not sold as APOS option but available in Services



# Latitude 11 5000 Series 2n1 Technical Specifications

Feature	Technical Specification
Model Number <sup>1</sup>	5175, 5179 (Security Edition)
Processor Options <sup>1</sup>	6th Generation: Intel® Core™ m3-6Y30 Processor (4M Cache, up to 2.20 GHz) Intel® Core™ m5-6Y57 Processor (4M Cache, up to 2.80 GHz) with vPro
Operating System <sup>1,2</sup>	Microsoft® Windows® 8.1 64-bit Microsoft® Windows® 8.1 Pro 64-bit Microsoft® Windows® 8.1 Single Language 64-bit Microsoft® Windows® 10 Home 64-bit Microsoft® Windows® 10 Pro 64-bit Microsoft® Windows® 10 Single Language 64-bit
Memory Options <sup>1,2,3</sup>	LPDDR3 SDRAM 1600MHz; 4GB or 8GB
Chipset <sup>1</sup>	Integrated with the Processor
Graphics <sup>1,13</sup>	Intel® HD Graphics 515
Display <sup>1</sup>	10.8" FHD Touch with Corning® Concore® Glass (1920 x 1080), Anti-Finger Print, (16:9), 360 nits
Storage Options <sup>1,5</sup>	SSD M.2 128G SATA SSD M.2 256G SATA SSD M.2 512G SATA SSD M.2 SED 256G SATA (Opal 2.0) SSD M.2 SED 512G SATA (Opal 2.0) (March 2016)
Security <sup>1</sup>	TPM 2.0 (TCG/FIPS-140-2 certification pending Spring 2016) Dell ControlVault 2.0™ Contacted FIPS 201 Smartcard reader (5179 Only) Dell ControlVault 2.0™ NFC Contactless Smartcard reader (5179 Only) Dell ControlVault 2.0™ Touch Fingerprint reader (5179 only) Optional Computrace <sup>6</sup> Noble Lock Slot Dell Data Protection   Security Tools Dell Data Protection   Protected Workspace (1 year subscription included) Dell Data Protection   Encryption (optional)
Docking Options <sup>1</sup>	Dell Tablet Dock (65W) Dell Dock (130W) - Type C Compatible
Optical Drive Options	External Options Only





# Latitude 11 5000 Series 2n1 Technical Specifications

Feature	Technical Specification
Multimedia <sup>1</sup>	Stereo Speakers with MaxxAudio Pro enhancement Headphone/Microphone combo jack Volume Up/Down Rocker 5MP Integrated Camera (user-facing fixed focus) 8MP Integrated Camera (world-facing auto focus)
Battery Options <sup>1</sup>	35Whr (2 Cell) battery - Field Replaceable
Power Options <sup>1</sup>	30W (3' AC/6' DC Type C)
Connectivity options <sup>1,8, 14,15</sup>	Intel® Dual Band Wireless-AC 8260 802.11AC Wi-Fi + BT 4.1 LE Wireless Card (2x2) Low Power Intel Pro WiDi & Miracast NXP NFC (optional for 5175) Dell ControlVault 2.0™ NFC (5179 only) <u>Optional Mobile Broadband Options:</u> Dell Wireless™ Qualcomm® Snapdragon™ X7 LTE –A (DW5811e for AT&T, Sprint, Verizon, and Generic for ROW) Dell Wireless™ Qualcomm® Snapdragon™ X7 HSPA+ (DW5811e for China/Indonesia)
Ports, Slots & Chassis <sup>1</sup>	1 x USB 3.0 Type C 1 x Full Size USB 3.0 Type A 1 x micro HDMI SD 4.0 Memory Card Reader (3-in-1; micro, SD,SDHC,SDIO,SDXC with UHS) 1 x micro SIM card slot (on WWAN only) Pogo Pins for Keyboard Connectivity & 40-pin Connector for Dell Tablet Dock Connectivity Noble Lock Slot



# Latitude 11 5000 Series 2n1 Technical Specifications

Feature	Technical Specification
Dimensions & Weight <sup>1,16</sup>	Width Tablet: 11.0 inches (279.8mm) Height Tablet: 5175 - 0.42 inches (10.78mm), 5179 - 0.56 inches (14.32mm) Height Tablet with Keyboard (closed): 5175 - 0.84 inches (21.23mm), 5179 - 0.97 inches (24.75mm) Height Tablet with Keyboard Folio (closed): 5175 - 0.83 inches (21.0mm), 5179 - 0.96 inches (24.3mm) Length Tablet: 6.96 inches (176.8mm) Starting Weight Tablet: 5175 - 1.56 lbs (0.71kg/709.8g); 5179 - 1.67 lbs (0.76kg/757.8g) Starting Weight Tablet with Keyboard: 5175 - 3.15 lbs (1.43kg/1429.8g); 5179 - 3.26 lbs (1.48kg/1477.8g) Starting Weight Tablet with Keyboard Folio: 5175 - 2.65 lbs (1.20kg/1202.8g); 5179 - 2.76 lbs (1.25kg/1250.8g)
Regulatory and Environmental Compliance <sup>1</sup>	Regulatory Model: T04E Regulatory Type: T04E001 ENERGY STAR 6.1 EPEAT Gold Registered. For specific country participation and rating, please see <a href="http://www.epeat.net">www.epeat.net</a> TAA Compliant (5179 only) China ESPL Hg-Free/Arsenic-Free BFR/PVC free <sup>9</sup>
Input <sup>1</sup>	Touch Display Integrated Array Microphones: 3 Edge and 1 Rear Active Pen (Optional) 2 Backlit Keyboards with Precision touchpad (Optional)
Sensors	Gyroscope, eCompass/Magnetometer, Accelerometer/FFS, GPS (via WWAN Card only), Hall Effect,



# Latitude 11 5000 Series 2n1 Technical Specifications

Feature	Technical Specification
Systems Management <sup>1</sup>	Intel® vPro™ Intel® vPro™ (iAMT 11.0) Technology's advanced management features (optional, requires Intel WiFi® Link WLAN and a vPro compatible processor), Dell Client Command Suite available (dell.com/command), Factory Installed Dell Client Command   Update, Factory Installed Dell Command   Power Manager
Warranty and Service <sup>1</sup>	Limited Hardware Warranty <sup>4</sup> Standard 1 year Mail-in Service after Remote Diagnosis <sup>11</sup> optional 3, 4 and 5 year hardware warranty extensions and 3-5 year Dell ProSupport contracts available <sup>12</sup>
Peripheral Ecosystem <sup>1</sup>	Dell Tablet Dock, Dell Dock, Dell Tablet Stand, Dell Latitude 11 Rotating Folio, Dell UltraSharp 27 Monitor   U2715H, Dell Wireless Keyboard and Mouse - KM636, Dell Active Pen, Dell Latitude 11 Keyboard with Active pen garage, Dell Latitude 11 Slim Keyboard, Dell Adapter - USB-C to HDMI/VGA/Ethernet/USB 3.0, Dell 24 Wireless Monitor   U2417HWi (April 2016)

<sup>1</sup> Offering may also vary by country and by configuration

<sup>2</sup> A 64-bit operating system is required to support 4GB or more of system memory.

<sup>3</sup> GB means 1 billion bytes and TB equals 1 trillion bytes; actual capacity varies with preloaded material and operating environment and will be less.

<sup>4</sup> Limited Hardware Warranty: For copy of Limited Hardware Warranty, write Dell USA LP, Attn: Warranties, One Dell Way, Round Rock, TX 78682 or see [www.dell.com/warranty](http://www.dell.com/warranty)

<sup>5</sup> GB means 1 billion bytes and TB equals 1 trillion bytes; actual capacity varies with preloaded material and operating environment and will be less.

<sup>6</sup> COMPUTRACE Not a Dell offer. Certain conditions apply. For full details, see terms and conditions at [www.absolute.com/en/about/legal/agreements](http://www.absolute.com/en/about/legal/agreements). There is a BIOS setup option to enable it. The default setting is Deactivate. Settings->Security->Computrace->Deactivate/Disable/Activate

<sup>7</sup> Intel Rapid Storage Technology requires a HDD, mSATA, or an SSD, as primary storage device

<sup>8</sup> NFC on Enterprise version is stand-alone NXP solution and NFC on Enterprise-Secure is Broadcom USH-based solution. Tap to Pay will not be supported. Tap to Login is only supported in the USH SKU

<sup>9</sup> Dell Latitude products are brominated flame retardant free (BFR-free) and polyvinyl chloride free (PVC-free) except the Power Supply Adapters; meeting the definition of BFR-/PVC-free as set forth in the iNEMI Position Statement on the 'Definition of Low-Halogen Electronics (BFR-/CFR-/PVC-free)'. Plastic parts contain less than 1,000 ppm (0.1%) of bromine (if the Br source is from BFRs) and less than 1,000 ppm (0.1%) of chlorine (if the Cl source is from CFRs or PVC or PVC copolymers). All printed circuit board (PCB) and substrate laminates contain bromine/chlorine total less than 1,500 ppm (0.15%) with a maximum chlorine of 900 ppm (0.09%) and maximum bromine being 900 ppm (0.09%).

<sup>10</sup> Mobile Broadband Subject to service provider's broadband subscription and coverage area; additional charges apply.

<sup>11</sup> Onsite Service after Remote Diagnosis: Remote Diagnosis is determination by online/phone technician of cause of issue; may involve customer access to inside of system and multiple or extended sessions. If issue is covered by Limited Hardware Warranty ([www.dell.com/warranty](http://www.dell.com/warranty)) and not resolved remotely, technician and/or part will be dispatched, usually within 1 business day following completion of Remote Diagnosis. Availability varies. Other conditions apply.

<sup>12</sup> Dell Services: Availability and terms of Dell Services vary by region. For more information, visit [www.dell.com/servicesdescriptions](http://www.dell.com/servicesdescriptions).

<sup>13</sup> Significant system memory may be used to support graphics, depending on system memory size and other factors.

<sup>14</sup> Miracast & WIDI Technology: Requires a compatible media adapter (sold separately) and an HDMI-enabled display or a display with built-in capabilities

<sup>15</sup> Intel Wireless Display: Requires an Intel wireless card, a compatible media adapter (sold separately) and an HDMI or composite AV-enabled display.

<sup>16</sup> Weights vary depending on configuration and manufacturing variability.



# Marketing System Configurations



# Latitude 11 (5175 Only)

## Intel Core M Processor for Tablets



Feature	Intel® Core™ m3-6Y30 Processor (Skylake)
CPU	Dual Core turbo freq: 2.0GHz/ Base core freq; 900MHz/ Min. core freq: 400MHz
Graphics	Intel® HD Graphics 5300 max. dynamic freq; 850MHz
Memory	LPDDR3 4GB ; 2-ch 64bits
Storage	SSD M.2 128GB/256GB ; SATA
Power Management	Intel Instant-Go support Microsoft Connected Standby
Power Consumption	TDP : 4.5W/ cTDP: 4W
Internal Display	1 eDP panel, Primary up to FHD (1920 x 1080) with 10-pt capacitive touch
External Display	Micro HDMI
ISP	Integrated 1080p HD front facing video webcam 5.0 Mpixel and 8.0 Mpixel rear facing camera with AF with 30fps 1080p video capture, playback.
Security	Firmware TPM 2.0
IOS	GPIO, USB2.0, USB3.0, I2C,SMBus, PCIe,
Debug	EC JTAG ; Intel XDP
PMIC	No PMIC Support
Platform Sensor	Ambient light sensor, proximity, Accelerometer, Gyro, e-compass,



# Latitude 11 (5175 & 5179)

## Intel Core M Processor for Tablets



Feature	Intel® Core™ m5-6Y57 Processor (Skylake) - GSP
CPU	Dual Core turbo freq: 2.4GHz/ Base core freq; 1100MHz/ Min. core freq: 400MHz
Graphics	Intel® HD Graphics 5300 max. dynamic freq; 900MHz
Memory	LPDDR3 4GB ; 2-ch 64bits
Storage	SSD M.2 128GB/256GB ; SATA
Power Management	Intel Instant-Go support Microsoft Connected Standby
Power Consumption	TDP : 4.5W/ cTDP: 3.5W
Internal Display	1 eDP panel, Primary up to FHD (1920 x 1080) with 10-pt capacitive touch
External Display	Micro HDMI
ISP	Integrated 1080p HD front facing video webcam 5.0 Mpixel and 8.0 Mpixel rear facing camera with AF with 30fps 1080p video capture, playback.
Security	Firmware TPM 2.0
IOS	GPIO, USB2.0, USB3.0, I2C,SMBus, PCIe,
Debug	EC JTAG ; Intel XDP
PMIC	No PMIC Support
Platform Sensor	Ambient light sensor, proximity, Accelerometer, Gyro, e-compass,



# Memory Options

- Supports a maximum of 8GB<sup>1</sup> of memory
- Greater than 4GB memory requires a 64-bit operating system.
- **ONLY MEMORY TYPE SUPPORTED: LPDDR3 (onboard)**

Memory – LPDDR3 SDRAM (onboard)	5175	5179
Minimum Memory Configuration	4GB	
Maximum Memory Configuration	8GB	8GB
Configurations:		
8G 1600MHz LPDDR3 (1x8G)	X	X
4G 1600MHz LPDDR3 (1x4G)	X	

<sup>1</sup> 1GB means 1 billion bytes



# Primary Storage Options

Memory Options	5175	5179
SSD M.2 128G SATA	X	
SSD M.2 256G SATA	X	X
SSD M.2 512G SATA	X	X
SSD M.2 256G PCIe NVMe (March 2016)	X	X
SSD M.2 512G PCIe NVMe (March 2016)	X	X
SSD M.2 SED 256G SATA (Opal 2.0)		X
SSD M.2 SED 512G SATA (Opal 2.0) (March 2016)		X





# Communication Options

Communication Option		5175	5179	Carriers and Countries
<b>WWAN</b>	Dell Wireless™ Qualcomm® Snapdragon™ X7 LTE-A (DW5811e for AT&T, Sprint, Verizon, and Generic for ROW)	X	X	Global CSTL (US ATT, Sprint, VZW);
	Dell Wireless™ Qualcomm® Snapdragon™ X7 HSPA+ (DW5811e for China/Indonesia)	X	X	China/Indonesia
	No WWAN	X	X	Tier 3 Countries
<b>WLAN/ Bluetooth</b>	Intel® Dual Band Wireless-AC 8260 802.11AC Wi-Fi + BT 4.1 LE Wireless Card (2x2) Low Power	X	X	

# Battery Overview

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## Battery Overview

	5175	5179
35WHr (2 Cell) battery – non-Swappable/Field Replaceable	X	X

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# Security Options

## Security Hardware Options

	5175	5179
TPM 2.0 TCG and FIPS-140-2 certification pending	X	X
Dell Hardware Crypto Accelerator		
Touch Fingerprint reader		X
Contacted FIPS 201 Smartcard reader		X
Contactless Smartcard [with NFC] reader		X
Dell ControlVault™ 2.0 security processor		X

<sup>1</sup>Contact your account representative to learn more about how to enable optional TPM 2.0

<sup>2</sup>Dell offers 1 configuration of hardware authentication bundle for 5179:

1. Dell ControlVault™ 2.0 with Touch Fingerprint reader, Contacted FIPS 201 Smartcard reader, & Contactless Smartcard [with NFC] reader

# Detailed Engineering Specifications



# Security Options – Fingerprint Reader

Category	Description	Next 2021 S
Sensor Technology	Describes the technology of the sensor (Optical, thermal, capacitive, etc.)	Active Thermal
Sensor Resolution	Resolution of image captured by sensor	385dpi
Sensor Size	physical size of sensor	11.9mm x 11.9mm
Sensor Pixel Size	Amount of pixels used to capture image	180x180 pixels
Connection to Dell ControlVault™ 2.0	N/A	SPI
Dell ControlVault™ support	Device connects to Dell ControlVault for usage and processing	No
Dell ControlVault™ 2.0 support	Device connects to Dell ControlVault™ 2.0 for usage and processing. <b>Enabled through Dell ControlVault driver.</b>	Yes
Programmed False Accept Rate	Describes the programmed rate at which the fingerprint match algorithm is set to ensure false fingers are not accepted	0.10%
Programmed False RejectionRate	Describes the programmed rate at which the fingerprint match algorithm is set to inappropriately reject a proper finger	1.00%
Template storage	Describes the location of where templates are stored for future reference	Dell ControlVault™ encrypted
Markers to generate template	Number of markers utilized to generate a successful match of presented fingerprint	>12
Match on chip	Match of fingerprint occurs off host of main CPU to remove possibility of spoofing	No
FIPS 201 (PIV/HSPD-12) Certified	Device certified with FIPS 201/PIV/HSPD-12 requirements	No
ANSI/INCITS 378 standard support	Template creation process provides support for ANSI/INCITS 378 standard	Yes

# Security Options –Dell ControlVault™ 2.0

ControlVault is a dedicated security processor with secure storage that provides hardware isolation for authentication. Reducing the risk of malware attacking critical login information associated with fingerprint readers and contacted or contactless smartcard readers

Title	Description	Dell ControlVault 2.0
CPU Technology	N/A	250Mhz ARM M3
RAM	N/A	512KB
ROM	N/A	256KB
TPM included	TPM enumeration included within ControlVault	No
Host Interface	N/A	USB 2.0
Fingerprint Processing on Chip	Fingerprint processing occurs within secure boundary of ControlVault™	Yes
Windows WBF Support	Support for Windows Biometric Framework when Fingerprint Reader is attached	Yes
FIPS 140-2 Level 3 Compliant	Device compliant with FIPS 140-3 Level 2 requirements	Yes
FIPS 140-2 Level 3 Certified	Device certified with FIPS 140-3 Level 2 requirements	Yes
FIPS 140-2 Level 3 Compliant	Device compliant with FIPS 140-3 Level 3 requirements	Yes
FIPS 140-2 Level 3 Certified	Device certified with FIPS 140-3 Level 3 requirements	Pending
Windows Certified	WHCK certified drivers for Windows 7, 8, 8.1	Yes
Compliance	Selective Suspend Support	Supports Selective Suspend as defined by Microsoft requirements

# Security Options - Contacted Smartcard Reader

Title	Description	Dell ControlVault 2.0 Smartcard Reader
ISO 7816 -3 Class A Card Support	Reader capable of reading 5V powered smartcard	Yes
ISO 7816 -3 Class B Card Support	Reader capable of reading 3V powered smartcard	Yes
ISO 7816 -3 Class C Card support	Reader capable of reading 1.8V powered smartcard	No <sup>1</sup>
T=0 support	Cards support character level transmission	Yes
T=1 support	cards support block level transmission	Yes
EMVCo Compliant	Compliant with EMVCo (for electronic payment standards) 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
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
FIPS 201 (PIV/HSPD-12) Compliant via GSA	Device compliant with FIPS 201/PIV/HSPD-12 requirements	Yes
ISO 7816-1 Compliant -	Specification for the reader	Yes
ISO 7816 -2 Compliant -	Specification for smartcard device physical characteristics (size, location of connection points, etc.)	N/A
Dell ControlVault™ support	Device connects to Dell ControlVault™ for usage and processing	Yes



# Security Options – Contactless Smartcard Reader

## (Broadcom NFC Solution)

Type	Description	Dell ControlVault 2 Contactless Smartcard Reader with NFC
Felica Card Support	Reader and software capable of supporting Felica contactless cards	No
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 <sup>1</sup>
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
Host Interface	What physical interface is the reader connected to the host on?	USB
Windows Certified	Device certified by Microsoft WHCK	Yes
Dell ControlVault support	Device connects to Dell ControlVault for usage and processing	Yes

Supported Cards*		
Manufacturer	Card	
HID	jCOP readertest3 A card (14443a)	Yes
NXP/Mifare	Mifare DESFire 8K White PVC Cards	Yes
NXP/Mifare	Mifare Classic 1K White PVC Cards	Yes
NXP/Mifare	NXP Mifare Classic S50 ISO Card	Yes
G&D	idOnDemand - SCE3.2 144K	Yes
Oberthur	idOnDemand - OCS5.2 80K	Yes
HID	1430 1L	Yes
HID	DESFire D8H	Yes
Oberthur	ID-One Cosmo 64 RSA D V5.4 T=0 card	Yes
G&D	SCE6.0 FIPS 80K Dual+ 1 K Mifare	Yes
G&D	SCE6.0 nonFIPS 80K Dual+ 1 K Mifare	Yes
G&D	SCE6.0 FIPS 144K Dual + 1K Mifare	Yes
G&D	SCE6.0 nonFIPS 144K Dual + 1 K Mifare	Yes
G&D	SCE7.0 FIPS 144K	Yes

\*Supported cards listed here have been tested, additional cards may function and should be evaluated with the card manufacturer based on these specifications

<sup>1</sup>Limited functionality in Windows 7



# 128GB SSD SATA

Capacity (GB)	128
Drive Height	2.3mm
Form Factor M.2	22mm x 80mm
SATA Interface	Gen-3, 6Gb/s (1 lane)
M.2 Pinout (pins)	75
MTBF (MTTF):	1.5 Million Hours
<b>Power Consumption</b>	
Power Consumption – Active (reference only)	150mW
Power Consumption – Sleep (reference only)	2mW
<b>Environmental</b>	
Temperature Range (Operating)	0°C to 70°C
Temperature Range (Storage)	-40°C to 85°C

<sup>1</sup> For hard drives, GB means 1 billion bytes ; actual capacity varies with preloaded material and operating environment and will be less.



# 256GB SSD SATA (and SATA SED)

Capacity (GB)	256
Drive Height	2.3mm
Form Factor M.2	22mm x 80mm
SATA Interface	Gen-3, 6Gb/s (1 lane)
M.2 Pinout (pins)	75
MTBF (MTTF):	1.5 Million Hours
Logical Blocks	500,118,192
<b>Power Consumption</b>	
Power Consumption – Active (reference only)	150mW
Power Consumption – Sleep (reference only)	2mW
<b>Environmental</b>	
Temperature Range (Operating)	0°C to 70°C
Temperature Range (Storage)	-40°C to 85°C

<sup>1</sup> For hard drives, GB means 1 billion bytes ; actual capacity varies with preloaded material and operating environment and will be less.



# 512GB SSD SATA (and SATA SED)

Capacity (GB)	512
Drive Height	3.65mm
Form Factor M.2	22mm x 80 mm
SATA Interface	Rev 3.1 - 6Gb/s (1 lane)
M.2 Pinout (pins)	75
MTBF (MTTF):	1.5 Million Hours
Logical Blocks	1,000,215,216
<b>Power Consumption</b>	
Power Consumption – Active (reference only)	150mW
Power Consumption – Sleep (reference only)	2mW
<b>Environmental</b>	
Temperature Range (Operating)	0°C to 70°C
Temperature Range (Storage)	-40°C to 85°C

<sup>1</sup> For hard drives, GB means 1 billion bytes ; actual capacity varies with preloaded material and operating environment and will be less.



# Ports and Connectors

## Latitude 11

<b>USB &amp; microUSB</b>	One type-A USB 3.0 connector One type-C connector (including power delivery)
<b>Video</b>	micro HDMI (video output)
<b>Audio</b>	Two channels audio REALTEK ALC3266 Controller Stereo conversion: 24-bit (analog-to-digital and digital-to-analog)  Internal Interface - HDA audio codec. External Interface - microphone-in and stereo headphones/speakers combo connector  Speakers: Power / Peak Power : 2X1Wrms / 2x1.5Wpeak Internal speaker amplifier: 2.5 watt per channel @ 0dBfs, 4 ohms Internal microphone: digital microphone (dual array microphone) Volume control buttons
<b>Expansion</b>	40-pin dock connector SD Memory card reader (micro size)
<b>Micro SIM Card Slot</b>	Located in I/O side



# Latitude 11 (5175, 5179) Camera Specifications



**Easy Remote Collaboration:** Videoconference online with a built-in camera

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## Webcam Features

<b>Camera Type</b>	5MP - Fixed bezel-mounted camera, with fixed focus 8MP - Fixed bezel-mounted camera, with auto focus capability
<b>Sensor Type</b>	CMOS sensor technology
<b>Resolution: Front - Still Image</b>	Up to 5MP; Support image capture up to 2592x1944 resolution
<b>Resolution: Rear - Still Image</b>	Up to 8MP; Support image capture up to 3264 x 2448 resolution
<b>Motion Video Imaging Rate</b>	5MP - supports 1080p @ 30 FPS capture, playback, streaming 8MP - supports 1080p @ 30 fps capture, playback, streaming



# Wireless Communications: Wi-Fi (WLAN) + Bluetooth

## Intel® Dual Band Wireless-AC 8260 802.11AC 2x2 Wi-Fi + BT 4.1 LE Wireless Card

<b>Host interface</b>	M.2 2230 form factor (WiFi – PCIe, Bluetooth – USB)
<b>Network standard</b>	IEEE 802.11a/b/g/n/ac
<b>Wi-Fi Alliance Certifications</b>	802.11ac, 802.11n, 802.11w, WPA, WPS, WMM, WFD, Wi-Fi Direct
<b>Operating Frequency Bands</b>	2.4 GHz and 5 GHz
<b>Dual Stream N</b>	Support for two transmit and receive antennas enable better wireless at the same distance when compared to older 802.11a/b/g solutions.
<b>Data Rate</b>	Up to 867 Mbps
<b>Power Consumption</b>	Optimized power modes (sleep states) reduce power consumption during periods of inactivity
<b>Authentication Authentication Protocols Encryption Product Safety</b>	WPA and WPA2, 802.1X,(EAP-TLS, TTLS, PEAP, LEAP, EAP-FAST), EAP-SIM, EAP-AKA PAP, CHAP, TLS, GTC, MS-CHAP*, MS-CHAPv2 64-bit and 128-bit WEP, AES-CCMP, TKIP UL, C-UL, CB(IEC60950-1)
<b>Management Capabilities Alerting</b>	Support for Intel® AMT 11.0 on Skylake Y, U, H and DT
<b>Government Compliance</b>	FIPS (Windows® 7 only), FISMA
<b>Client Utility</b>	Intel® PRO/Set Wireless Software v18.1 and later.
<b>Software Support</b>	Microsoft® WHQL certified for Windows® 7, Windows® 8.1 and Windows® 10; Linux
<b>Radio On/Off</b>	Supported in software only
<b>LED output</b>	N/A
<b>Roaming</b>	Supports seamless roaming between respective access points (802.11b, 802.11g, 802.11a/b/g, and 802.11a/b/g/n/ac)
<b>Wake On Wireless</b>	Supported when VPro/AMT is activated, or Windows® 8 without Intel AMT
<b>Wireless Display</b>	Intel WiDi Wireless Display, supports external display resolutions up to 1080p
<b>Country Restrictions</b>	Indonesia supported by BIOS settings



# Wireless Communications: Wi-Fi (WLAN) + Bluetooth

## Intel® Dual Band Wireless-AC 8260 802.11AC 2x2 Wi-Fi + BT 4.1 LE Wireless Card (continued)

<b>Wireless PAN Standard</b>	Dual Mode Bluetooth* 2.1, 2.1+EDR, 3.0, 4.1 (BLE)
<b>Bluetooth Data rates</b>	Up to 3Mbps
<b>Bluetooth Operating Frequency Bands</b>	2.4GHz
<b>Bluetooth Profiles Supported</b>	For Windows 7, includes Streaming Stereo Quality Audio (A2DP), File Transfer (FTP), Dial-up Networking (DUN), Mice/Keyboards (HID), Printing (BPP), Digital Image Management (transfer, print, remote camera operation) (BIP), AVRCP  Support for MS Inbox BT profiles in Windows 8.1 and future OS versions.
<b>Bluetooth Data Encryption</b>	128-bit encryption
<b>Bluetooth Output Power</b>	Power class 2
<b>Temperature</b>	operating temperature 0° to +80° C storage temperature of -40° to +70° C
<b>Humidity</b>	Up to 90% RH non-condensing (at temperatures of 25° C to 35° C)



# WiDi – wireless display

The Intel® WiDi app uses Intel® Graphics and Wi-Fi components to deliver higher quality experience than Miracast baseline.

Consumer:

No wires in the Living room; Blu-Ray\* and Gaming quality and performance. New dual screen usages.

Business:

No wires in dense conference room environments; video conferencing performance, low wireless interference.

Current support max resolution : 1920x1080@60Hz		Receivers		
		Certified Intel® Pro WiDi Channel Management	Certified Intel® WiDi	Miracast
Transmitters	Intel® vPro™ Technology With Intel Pro WiDi	<b>Intel® Pro WiDi</b> WPAN/WLAN isolation WPAN restricted to WiDi Privacy Features Starts a Managed Meeting	<b>Intel® WiDi</b> Performance & Quality WPAN/WLAN isolation WPAN restricted to WiDi	Connects WPAN/WLAN isolation WPAN restricted to WiDi
	Non Intel® vPro™ Platforms With Intel WiDi	<b>Intel® WiDi</b> Performance & Quality Joins a Managed Meeting	<b>Intel® WiDi</b> Performance & Quality over Miracast* baseline	Connects

Up to Full UHD 4k H.264 HW Encode (4k Receiver/TV Dependent)

Note: System must be connected to AP at 5GHz for resolutions >1080p; WiDi requires an Intel wireless card, a compatible Media Adapter (sold separately) and an HDMI or composite AV-enabled display





# Wireless Communications: Mobile Broadband (LTE/WWAN)

- Dell Wireless™ Qualcomm® Snapdragon™ X7 LTE (DW5811E) for AT&T, Verizon & Sprint, US. (DAO)
- Dell Wireless™ Qualcomm® Snapdragon™ X7 LTE (DW5811E), (EMEA/APJ/ROW)

## Dell Wireless™ 5811E Gobi™ LTE Mobile Broadband Card for AT&T, Verizon, Sprint Wireless (US, Canada, Generic)

Carrier	Verizon	AT&T	Sprint	Rogers	Telus	Generic
<b>Network</b>	LTE CAT6	LTE CAT6	LTE CAT6	LTE CAT6	LTE CAT6	LTE CAT6
<b>Speed (Downlink)</b>	< 300 Mbps	< 300 Mbps	< 300 Mbps	< 300 Mbps	< 300 Mbps	< 300 Mbps
<b>Speed (Uplink)</b>	< 50 Mbps	< 50 Mbps	< 50 Mbps	< 50 Mbps	< 50 Mbps	< 50 Mbps
<b>Fallback Network</b>	NA	HSPA+	NA	HSPA+	HSPA+	HSPA+
<b>Fallback Speed (Downlink)</b>	NA	HSPA+ 42 Mbps	NA	HSPA+ 42 Mbps	HSPA+ 42 Mbps	HSPA+ 42 Mbps
<b>Frequency Bands</b>	Band 4, 13 LTE	Band 13 LTE Band 2, 4, 5, 17 and 7	Band 25, 26, 41 LTE	Band 13 LTE Band 2, 4, 5, 17 and 7	Band 13 LTE Band 2, 4, 5, 17 and 7	Band 1, 2, 3, 4, 5, 7, 8, 12, 13, 20, 25, 26, 29, 30, 41 LTE
<b>SIM</b>	Yes	Yes	Yes	Yes	Yes	Yes
<b>LTE/WWAN Antenna</b>	Main (Tx/Rx) + Aux (Rx/GNSS)	Main (Tx/Rx) + Aux (Rx/GNSS)	Main (Tx/Rx) + Aux (Rx/GNSS)	Main (Tx/Rx) + Aux (Rx/GNSS)	Main (Tx/Rx) + Aux (Rx/GNSS)	Main (Tx/Rx) + Aux (Rx/GNSS)
<b>Operating System Support</b>	Windows 8.1, 32/64 bits Windows 7, 32/64 bits Windows 10, 32/64 bits	Windows 8.1, 32/64 bits Windows 7, 32/64 bits Windows 10, 32/64 bits	Windows 8.1, 32/64 bits Windows 7, 32/64 bits Windows 10, 32/64 bits	Windows 8.1, 32/64 bits Windows 7, 32/64 bits Windows 10, 32/64 bits	Windows 8.1, 32/64 bits Windows 7, 32/64 bits Windows 10, 32/64 bits	Windows 8.1, 32/64 bits Windows 7, 32/64 bits Windows 10, 32/64 bits
<b>Host Interface</b>	Supported both USB 3.0/2.0	Supported both USB 3.0/2.0	Supported both USB 3.0/2.0	Supported both USB 3.0/2.0	Supported both USB 3.0/2.0	Supported both USB 3.0/2.0



# Wireless Communications: Mobile Broadband (WWAN)

## Qualcomm® Snapdragon™ X7 HSPA+ (DW5811e) for China and Indonesia regions


Carrier	Generic	China / Indonesia
Network	HSPA+	HSPA+
Speed (Downlink)	< 100 Mbps	< 100 Mbps
Speed (Uplink)	< 50 Mbps	< 50 Mbps
Fallback Network	HSPA+	HSPA+
Fallback Speed (Downlink)	HSPA+ 42 Mbps	HSPA+ 42 Mbps
Frequency Bands	Band 1, 2, 3, 4, 5, 8, HSPA+	Band 1, 2, 3, 4, 5, 8, HSPA+
SIM	Yes	Yes
LTE/WWAN Antenna	Main (Tx/Rx) + Aux (Rx/GNSS)	Main (Tx/Rx) + Aux (Rx/GNSS)
Operating System Support	Windows 8.1, 32/64 bits Windows 10, 32/64 bits	Windows 8.1, 32/64 bits Windows 10, 32/64 bits
GNSS	Supports both autonomous GNSS (GPS + GLONASS) and assisted GNSS (A-GNSS)	Supports both autonomous GNSS (GPS + GLONASS) and assisted GNSS (A-GNSS)
Host Interface	USB 3.0/USB 2.0	USB 3.0/USB 2.0

- *LTE not supported in China and Indonesia*

# Wireless Communications: NFC (5175)

## NXP NFC NPC100 Controller

<b>NFC Standard</b>	ISO/IEC 18092 and ISO/IEC 21481
<b>Support NFC Card</b>	Type1 / Type 2 / Type 3 / Type 4 ; NFC Card Spec is shown as the below Photo.
<b>Temperature</b>	operating temperature -30° to +85° C
<b>Humidity</b>	Up to 90% RH non-condensing (at temperatures of 25° C to 35° C)

	NFC Forum Platform				NXP Specific Platform
	Type 1 Tag	Type 2 Tag	Type 3 Tag	Type 4 Tag	Type MIFARE Classic Tag
<b>Compatible Products</b>	Innovision Topaz	NXP MIFARE Ultralight / NXP MIFARE Ultralight C	Sony FeliCa	NXP DESFire / NXP SmartMX- JCOP	NXP MIFARE Classic 1k / NXP MIFARE Classic 4k / NXP MIFARE Classic Mini
<b>Memory Size</b>	96 Bytes	48 Bytes / 144 Bytes	1, 4, 9 KB	4 KB / 32 KB	768 Bytes / 3584 Bytes / 192 Bytes
<b>Unit Price</b>	Low	Low	High	Medium / High	Low



# Integrated Graphics Controller

<b>Integrated Graphics Controller</b>	<b>Intel® HD Graphics 515</b>
<b>Models</b>	Latitude 11 (Core M / Core M vPro)
<b>Bus Type</b>	HDMI 1.4, eDP 1.3, DP 1.2
<b>Memory Interface</b>	LPDDR3 DDR3L-RS
<b>Clock Speeds</b>	Basic 100 MHz graphics core
<b>Max Graphics dynamic frequency</b>	900MHz
<b>Estimated Maximum Power Consumption</b>	NA
<b>Display Support</b>	Micro HDMI
<b>Maximum Color Depth</b>	32bit
<b>Maximum Vertical Refresh Rate</b>	60Hz
<b>Operating Systems Graphics/ Video API Support</b>	DirectX 11,1 ; Open GL 4.0
<b>Supported Resolutions and Max Refresh Rates (Hz) (Note: Analog and/or digital)</b>	eDP: 1920x1080@60Hz DP :3840x2160 @ 60Hz HDMI:3840x2160 @ 30Hz
<b>Numbers of Displays Supports</b>	Un-Docked – 2 max (system with external display) Docked – 3 max (system with 2 external display, through dock) Note : Docked requires optional productivity dock)



# Display – FHD

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## Latitude 11

<b>Type</b>	FHD TFT
<b>Luminance (typical)</b>	400 nits
<b>Dimensions</b>	
<b>Height (max)</b>	149.45 mm
<b>Width (max)</b>	250.4 mm
<b>Diagonal</b>	10.8 inches
<b>Native Resolution</b>	1920 x 1080 (FHD)
<b>Megapixels</b>	2.07
<b>Pixels per Inch (PPI)</b>	203
<b>Contrast Ratio (Typ)</b>	900:1
<b>Response Time (max)</b>	25 ms
<b>Refresh Rate</b>	60 Hz
<b>Horizontal View Angle (min)</b>	80 degrees
<b>Vertical View Angle (min)</b>	80 degrees
<b>Pixel Pitch (mm)</b>	0.0415 (H) x 0.1245 (V)
<b>Power Consumption (max.; Cell + BL)</b>	3.45W

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# Battery Specification

Test Type	Ambient Temperature (°C)	Number of Physical Cycles	Retained Capacity (%)
Continuous Cycling	5	50	60%
Continuous Cycling	24	300	75%
Continuous Cycling	40	200	80%
Interval Cycling	40	80	80%

<b>Models 5175, 5179</b>		<b>35WHr Field Replaceable/non-Swappable</b>	
<b>Battery Type</b>	Lithium ion polymer cell		
<b>Dimension</b>			
<b>Length</b>	206.75 mm (8.14")		
<b>Width</b>	65.20 mm (2.57")		
<b>Height</b>	5.4 mm (0.21")		
<b>Weight</b>	150.00 g (0.33 lb)		
<b>Voltage</b>	7.6VDC		
<b>Typical Amp-hour capacity</b>	4.6Ahr		
<b>Typical Watt-hour capacity</b>	35Whr		
<b>Temperature</b>			
<b>Operating</b>	Charge: 0 °C to 50 °C, 32 °F to 158 °F Discharge: 0 °C to 70 °C, 32 °F to 122 °F -20 °C to 65 °C		
<b>Non-Operating</b>	4 °F to 149 °F		
<b>Charging time</b>	0~15degC: 4 hour 16~60degC: 3 hours		
<b>ExpressCharge Capable</b>	Yes (exceeds Dell spec – 80% by 75 min; 100% by 135 min)		
<b>BATTMAN Capable</b>	Yes		

**Express charge benefits**

- For a battery advertised as having the ExpressCharge™ feature, the battery typically will have greater than 80% charge after about an hour of charging with the system off, and fully charged in about 2 hours with the system off.
- Enabling Expresscharge™ requires that both the Latitude notebook and the battery that is used on the system be ExpressCharge™ capable. If any of the above requirements is missing, ExpressCharge™ will not be enabled.



# Power Adapters

Adapter Specifications		30W
		Type C connector
Input voltage		120~240 V
Input current (max)		0.9 A
Input frequency		50-60 Hz
Output current		2A/2A/1.5A
Rated output voltage		5V/12V/20V
Weight (lbs)		0.264 lb
Weight (kg)		0.12 Kg
Dimensions (inches)		2.638 * 2.173 * 0.875
Dimensions (mm)		67 * 55 * 22
Temperature range:		0~40 degree (operational temperature)
Storage		-40 ~70 degree

Note: Input Current is limited to 45W max. Larger capacity Type C adapters will work but will only charge at 45W.

AC power adapters are compliant with the ErP II Lot 6 new Europe Regulatory Power Requirements effective 1/3/2013

E5 US AC Power Cord (Supplier:SLT)			E5 PD Adapter: DC Cord (Supplier: LineTEK)		
Weight	81.25g	0.18lbs	Weight	56.5g	0.125lbs
Length	0.914m	35.98"	Length	1.8m	70.87"



# Environmental Specifications and MIL-STD 810G Testing Performed

<b>Models</b>	<b>5175, 5179</b>
<b>Temperature Range</b>	Operating 0° to 35°C (32° to 95°F) Storage -40° to 65°C (-40° to 149°F)
<b>Relative humidity (maximum)</b>	Operating 10% to 90% (noncondensing) Storage 5% to 95% (noncondensing)
<b>Altitude (maximum)</b>	Operating -16m to 3048 m (-52 to 10,000 ft) Storage -15.2 to 10,668 m (-50 to 35,000 ft)
<b>Airborne contaminant level</b>	G1 as defined by ISA-71.04-1985
<b>MIL-STD-810G Tests Performed<sup>1</sup></b>	<ol style="list-style-type: none"> <li>1. METHOD 500.5 LOW PRESSURE (ALTITUDE) Procedure I - Storage/Air Transport</li> <li>2. METHOD 500.5 LOW PRESSURE (ALTITUDE) Procedure II - Operation/Air Carriage</li> <li>3. METHOD 501.5 HIGH TEMPERATURE Procedure I Induced (Storage and Transition) Conditions</li> <li>4. METHOD 501.5 HIGH TEMPERATURE Procedure II - Operation Cycling temperature exposure</li> <li>5. METHOD 502.5 LOW TEMPERATURE Procedure I (Exaggerated)</li> <li>6. METHOD 502.5 LOW TEMPERATURE Procedure II</li> <li>7. METHOD 507.5 HUMIDITY Procedure I - Induced (Storage &amp; Transit) and Natural and Cycles Table 507.5-I Hot-humid (Cycle B3)</li> <li>8. Method 516.6 SHOCK Procedure VI: Bench Handling</li> <li>9. METHOD 510.5 SAND AND DUST Procedure I</li> <li>10. METHOD 514.6 VIBRATION Procedure I</li> <li>11. Method 516.6 SHOCK Procedure I: Functional Shock</li> <li>12. Method 516.5 SHOCK Procedure II: Material to be Packaged</li> <li>13. Method 516.5 SHOCK Procedure V: Crash Hazard Shock</li> <li>14. Method 516.6 SHOCK Procedure IV: Transit Drop</li> </ol>

Link to Product Safety, EMC and Environmental Data Sheets:

[http://www.dell.com/content/topics/global.aspx/about\\_dell/values/regulatory\\_compliance/dec\\_conform?c=us&cs=04&l=en&s=bsd&redirect=1](http://www.dell.com/content/topics/global.aspx/about_dell/values/regulatory_compliance/dec_conform?c=us&cs=04&l=en&s=bsd&redirect=1)

