

Latitude 5520

Setup and Specifications



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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Set up your Latitude 5520

NOTE: The images in this document may differ from your computer depending on the configuration you ordered.

1. Connect the power adapter and press the power button.



NOTE: The battery may go into power-saving mode during shipment to conserve charge on the battery. Ensure that the power adapter is connected to your computer when it is turned on for the first time.

2. Finish Windows setup.

Follow the on-screen instructions to complete the setup. When setting up, Dell recommends that you:

- Connect to a network for Windows updates.
 - NOTE:** If connecting to a secured wireless network, enter the password for the wireless network access when prompted.
- If connected to the Internet, sign in with or create a Microsoft account. If not connected to the Internet, create an offline account.
- On the **Support and Protection** screen, enter your contact details.

3. Locate and use Dell apps from the Windows Start menu—Recommended.

Table 1. Locate Dell apps




Resources	Description
	<p>SupportAssist</p> <p>Proactively checks the health of your computer's hardware and software. The SupportAssist OS Recovery tool troubleshoots issues with the operating system. For more information, see the SupportAssist documentation at www.dell.com/support.</p> <p>NOTE: In SupportAssist, click the warranty expiry date to renew or upgrade your warranty.</p>

Table 1. Locate Dell apps

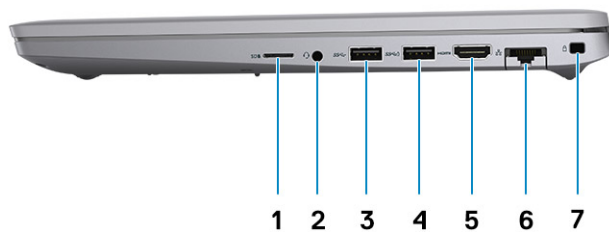
Resources	Description
	<p>Dell Update</p> <p>Updates your computer with critical fixes and latest device drivers as they become available. For more information about using Dell Update, see the knowledge base article SLN305843 at www.dell.com/support.</p>
	<p>Dell Digital Delivery</p> <p>Download software applications, which are purchased but not pre-installed on your computer. For more information about using Dell Digital Delivery, see the knowledge base article 153764 at www.dell.com/support.</p>

Views of Latitude 5520

Topics:

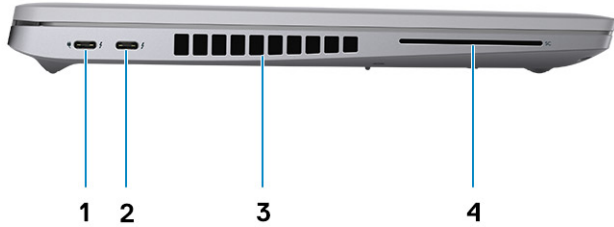
- Right view
- Left view
- Palm-rest view
- Display view
- Bottom view
- System board layout
- Keyboard shortcuts
- Battery charge and status LED

Right view



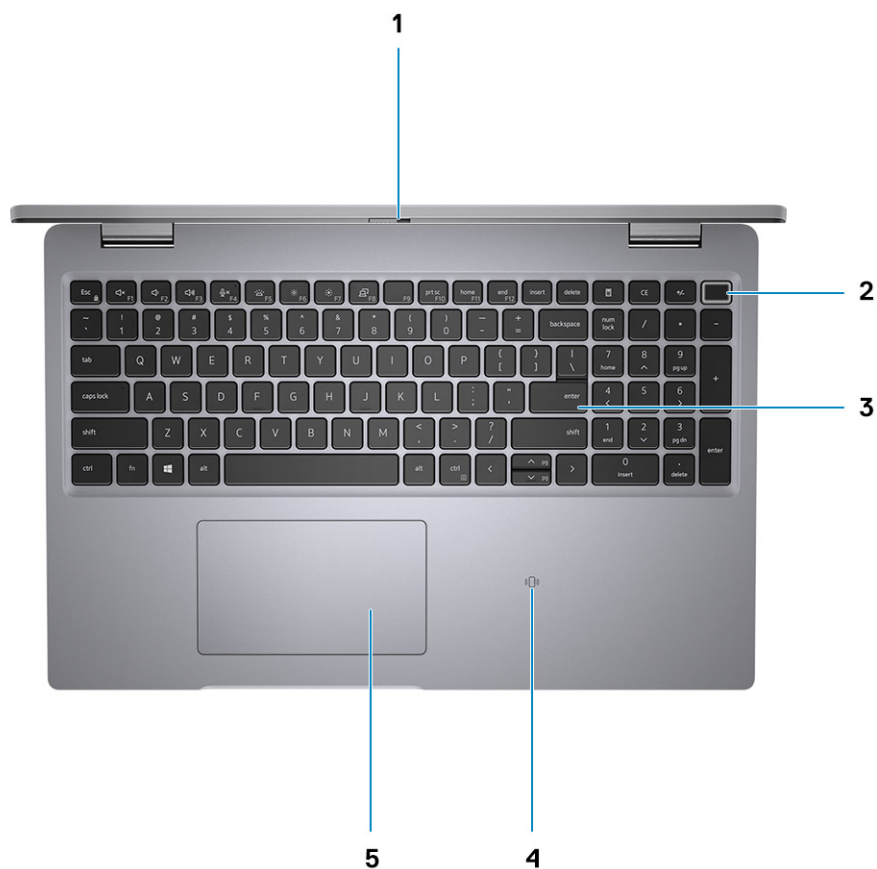
1. micro-SD card slot
2. Universal audio port
3. USB 3.2 Gen 1 port
4. USB 3.2 Gen 1 port with PowerShare
5.
 - HDMI 1.4 port for 10th Generation Intel Core i5/i7 processors
 - HDMI 2.0 port for 11th Generation Intel Core i3/i5/i7 processors
7. Wedge-shaped lock slot

Left view



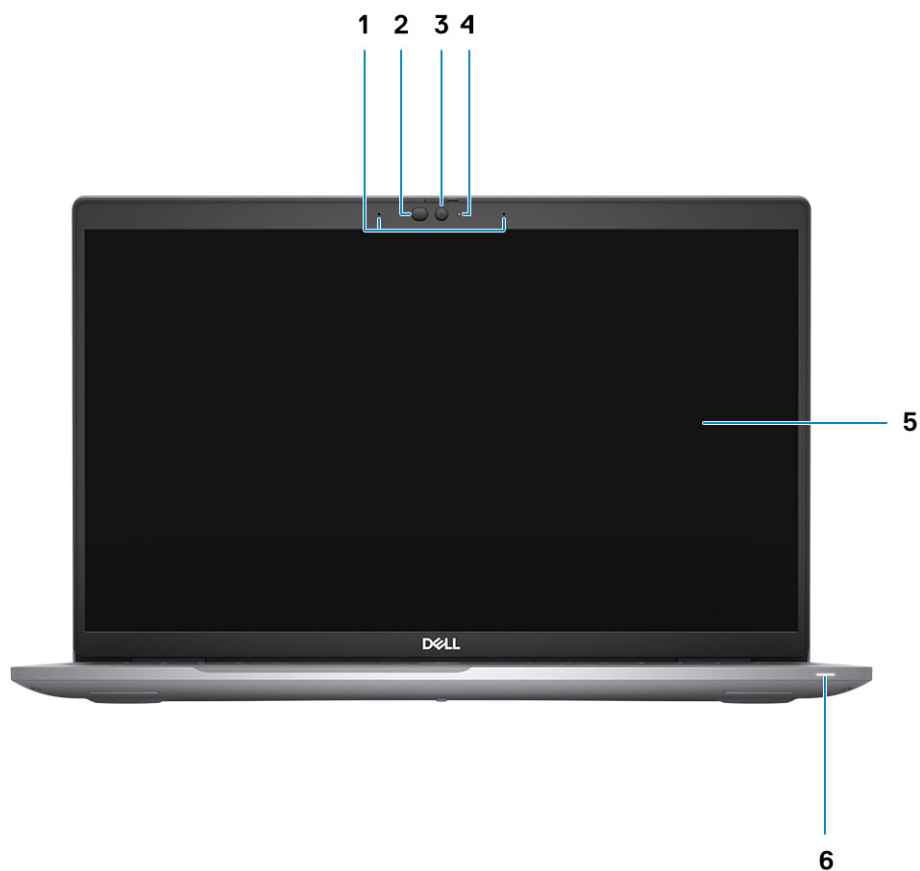
1.
 - Thunderbolt 3 port with DisplayPort Alt Mode/USB 3.2 Gen 2/Power Delivery for 10th Generation Intel Core i5/i7 processors
 - Thunderbolt 4 port with DisplayPort Alt Mode/USB4/Power Delivery for 11th Generation Intel Core i3/i5/i7 processors
2.
 - Thunderbolt 3 port with DisplayPort Alt Mode/USB 3.2 Gen 2/Power Delivery for 10th Generation Intel Core i5/i7 processors
 - Thunderbolt 4 port with DisplayPort Alt Mode/USB4/Power Delivery for 11th Generation Intel Core i3/i5/i7 processors
3. Air vents
4. Smart card reader slot (optional)

Palm-rest view



1. Privacy shutter
2. Power button with fingerprint reader—(optional)
3. Keyboard
4. NFC/Contactless smart card reader—(optional)
5. Clickpad

Display view



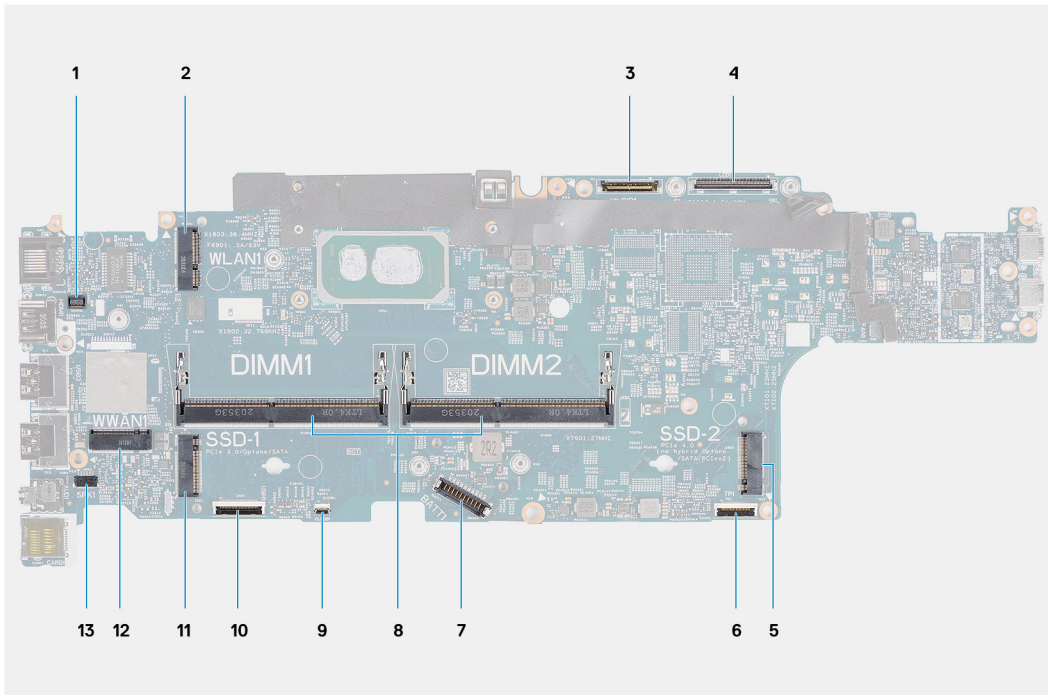
1. Dual-array microphones
2. IR emitter/Ambient Light Sensor (ALS)—(optional)
3. Camera (FHD RGB IR/HD RGB IR/HD RGB)
4. Camera status LED
5. Display panel
6. Battery indicator LED

Bottom view



- 1. Speakers
- 2. microSIM-card slot (optional)
- 3. Service tag label
- 4. Air vent

System board layout



1. Fingerprint reader connector
2. WLAN connector
3. Camera/IR cable connector
4. eDP/display cable connector
5. Solid-state drive—SSD-2 slot
6. Clickpad cable connector
7. Battery cable connector
8. Memory modules
9. Battery LED board connector
10. USH board connector
11. Solid-state drive—SSD-1 slot
12. WWAN connector
13. Speaker cable connector


Keyboard shortcuts

NOTE: Keyboard characters may differ depending on the keyboard language configuration. Keys that are used for shortcuts remain the same across all language configurations.

Table 2. List of keyboard shortcuts

Keys	Primary Behavior	Secondary Behavior (Fn + Key)
Fn + Esc	Escape	Toggle Fn-key lock
Fn + F1	Mute audio	F1 behavior
Fn + F2	Decrease volume	F2 behavior
Fn + F3	Increase volume	F3 behavior
Fn + F4	Mic Mute	F4 behavior

Table 2. List of keyboard shortcuts

Keys	Primary Behavior	Secondary Behavior (Fn + Key)
Fn + F5	Keyboard backlight  NOTE: Not applicable for non-backlight keyboard.	F5 behavior
Fn + F6	Decrease screen brightness	F6 behavior
Fn + F7	Increase screen brightness	F7 behavior
Fn + F8	Switch to external display	F8 behavior
Fn + F9	Disable camera	F9 behavior
Fn + F10	Print Screen	F10 behavior
Fn + F11	Home	F11 behavior
Fn + F12	End	F12 behavior
Fn + Left Arrow	Left Arrow	Home
Fn + Right Arrow	Right Arrow	End
Fn + Right Ctrl	Emulates right click	--

Battery charge and status LED

Table 3. Battery charge and status LED Indicator

Power Source	LED Behavior	computer Power State	Battery Charge Level
AC Adapter	Off	S0 - S5	Fully Charged
AC Adapter	Solid White	S0 - S5	< Fully Charged
Battery	Off	S0 - S5	11-100%
Battery	Solid Amber (590+/-3 nm)	S0 - S5	< 10%

- S0 (ON) - Computer is turned on.
- S4 (Hibernate) - The computer consumes the least power compared to all other sleep states. The computer is almost at an OFF state, expect for a trickle power. The context data is written to hard drive.
- S5 (OFF) - The computer is in a shutdown state.

Specifications of Latitude 5520

Topics:

- Dimensions and weight
- Processors
- Chipset
- Operating system
- Memory
- Ports and connectors
- Communications
- Audio
- Storage
- Media-card reader
- Keyboard
- Camera
- Clickpad
- Power adapter
- Battery
- Display
- Fingerprint reader (optional)
- Video
- Security
- Computer environment
- Sensor and control

Dimensions and weight

Table 4. Dimensions and weight

Description	Values
Height	0.78 in. (19.87 mm)
Width	14.09 in. (357.80 mm)
Depth	9.19 in. (233.30 mm)
Weight (minimum)	3.50 lb (1.59 kg) <i>i</i> NOTE: The weight of your computer depends on the configuration ordered and the manufacturing variability.

Processors

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

Table 5. Processors

Table 5. Processors

Processors	Wattage	Core count	Thread count	Speed	Cache	Integrated graphics
10 th Generation Intel Core i5-10210U	15 W	4	8	1.60 GHz to 4.20 GHz	6 MB	Intel UHD Graphics
10 th Generation Intel Core i5-10310U	15 W	4	8	1.70 GHz to 4.40 GHz	6 MB	Intel UHD Graphics
10 th Generation Intel Core i7-10610U	15 W	4	8	1.80 GHz to 4.90 GHz	8 MB	Intel UHD Graphics
11 th Generation Intel Core i3-1125G4	17.50 W	4	8	2.00 GHz to 3.70 GHz	8 MB	Intel UHD Graphics
11 th Generation Intel Core i5-1135G7	17.50 W	4	8	2.40 GHz to 4.20 GHz	8 MB	Intel Iris X ^e Graphics <i>i</i> NOTE: System with single-channel memory is shown as Intel UHD Graphics in Intel Graphics Command Center (IGCC).
11 th Generation Intel Core i5-1145G7	17.50 W	4	8	2.60 GHz to 4.40 GHz	8 MB	Intel Iris X ^e Graphics <i>i</i> NOTE: System with single-channel memory is shown as Intel UHD Graphics in Intel Graphics Command Center (IGCC).
11 th Generation Intel Core i7-1185G7	17.50 W	4	8	3.00 GHz to 4.80 GHz	12 MB	Intel Iris X ^e Graphics <i>i</i> NOTE: System with single-channel memory is shown as Intel UHD Graphics in Intel Graphics Command Center (IGCC).

Chipset

Table 6. Chipset

Description	Values
Chipset	Intel PCH-LP
Processor	<ul style="list-style-type: none"> 10th Generation Intel Core i5/i7 processors 11th Generation Intel Core i3/i5/i7 processors
DRAM bus width	64-bit
Flash EPROM	32 MB

Table 6. Chipset

Description	Values
PCIe bus	<ul style="list-style-type: none"> Up to Gen 3 for 10th Generation Intel Core i5/i7 processors Up to Gen 4 for 11th Generation Intel Core i3/i5/i7 processors

Operating system

- Windows 10 Pro, 64-bit
- Ubuntu Linux 20.04 LTS, 64-bit

Memory

Table 7. Memory specifications

Description	Values
Slots	Two SO-DIMM slots
Type	DDR4, Dual-channel
Speed	<ul style="list-style-type: none"> 2667 MHz for 10th Generation Intel Core i5/i7 processors 3200 MHz for 11th Generation Intel Core i3/i5/i7 processors
Maximum memory	64 GB
Minimum memory	4 GB
Memory size per slot	4 GB, 8 GB, 16 GB, 32 GB
Configurations supported	<ul style="list-style-type: none"> 4 GB, 1 x 4 GB, DDR4, 3200 MHz 8 GB, 2 x 4 GB, DDR4, 3200 MHz 8 GB, 1 x 8 GB, DDR4, 3200 MHz 16 GB, 2 x 8 GB, DDR4, 3200 MHz 16 GB, 1 x 16 GB, DDR4, 3200 MHz 32 GB, 2 x 16 GB, DDR4, 3200 MHz

Ports and connectors

Table 8. External ports and connectors

External:	
USB	<ul style="list-style-type: none"> One USB 3.2 Gen 1 port One USB 3.2 Gen 1 port with PowerShare Two Thunderbolt 4 ports with DisplayPort Alt Mode/USB4/Power Delivery for 11th Generation Intel Core i3/i5/i7 processors Two Thunderbolt 3 ports with DisplayPort Alt Mode/USB 3.2 Gen2/Power Delivery for 10th Generation Intel Core i5/i7 processors
Audio	One universal audio port

Table 8. External ports and connectors

External:	
Video	<ul style="list-style-type: none"> One HDMI 2.0 port for 11th Generation Intel Core i3/i5/i7 processors One HDMI 1.4 port for 10th Generation Intel Core i5/i7 processors
Media card reader	One micro-SD card slot
Docking port	Supported through USB Type-C
Power adapter port	Type-C power input
Security	One security-cable slot (wedge-shaped)
Communication	<ul style="list-style-type: none"> RJ45 port microSIM card (optional)
Card slot	Smart card reader slot (optional)

Table 9. Internal ports and connectors

Internal:	
M.2	<ul style="list-style-type: none"> M.2 2230 slot for Wi-Fi and Bluetooth combo card M.2 3042 for WWAN UMA: Two M.2 2280 slot for solid-state drive DSC: One M.2 2280 slot for solid-state drive <p>NOTE: To learn more about the features of different types of M.2 cards, see the knowledge base article SLN301626.</p>

Communications

Ethernet

Table 10. Ethernet specifications

Description	Values
Model number	<ul style="list-style-type: none"> Intel I219-LM Intel I219-V
Transfer rate	10/100/1000 Mbps

Wireless module

Table 11. Wireless module specifications

Description	Values		
	Model number	Intel Wi-Fi 6 AX201	Intel Wi-Fi 6 AX210
Transfer rate	Up to 2400 Mbps	Up to 2400 Mbps	Up to 867 Mbps
Frequency bands supported	2.4 GHz/5 GHz	2.4 GHz/5 GHz/6 GHz	2.4 GHz/5 GHz

Table 11. Wireless module specifications

Description	Values		
Wireless standards	<ul style="list-style-type: none"> • Wi-Fi 802.11a/b/g • Wi-Fi 4 (Wi-Fi 802.11n) • Wi-Fi 5 (Wi-Fi 802.11ac) • Wi-Fi 6 (Wi-Fi 802.11ax) 	<ul style="list-style-type: none"> • Wi-Fi 802.11a/b/g • Wi-Fi 4 (Wi-Fi 802.11n) • Wi-Fi 5 (Wi-Fi 802.11ac) • Wi-Fi 6 (Wi-Fi 802.11ax) 	<ul style="list-style-type: none"> • Wi-Fi 802.11a/b/g • Wi-Fi 4 (Wi-Fi 802.11n) • Wi-Fi 5 (Wi-Fi 802.11ac)
Encryption	<ul style="list-style-type: none"> • 64-bit/128-bit WEP • AES-CCMP • TKIP 	<ul style="list-style-type: none"> • 64-bit/128-bit WEP • AES-CCMP • TKIP 	<ul style="list-style-type: none"> • 64-bit/128-bit WEP • AES-CCMP • TKIP
Bluetooth	Bluetooth 5.1	Bluetooth 5.2	Bluetooth 5.0

WWAN module

Table 12. Wireless module specifications

Description	Values
Model number	Intel XMM 7360 Global LTE-Advanced, CAT9
Transfer rate	Up to 450 Mbps DL/50 Mbps UL (Cat 9)
Frequency bands supported	(1,2,3,4,5,7,8,11,12,13,17,18,19,20,21,26,28,29,30,38,39,40,41,66), HSPA+ (1, 2, 4,5, 8)
Wireless standards	Not Applicable
Encryption	Not Applicable
Bluetooth	Not Applicable

Audio

Table 13. Audio specifications

Description	Values
Controller	REALTEK ALC3204
Stereo conversion	Supported
Internal interface	High definition audio interface
External interface	Universal Audio port
Speakers	Two
Internal speaker amplifier	Supported (audio codec integrated)
External volume controls	Keyboard shortcut controls
Speaker output:	
Average	2 W
Peak	2.5 W

Table 13. Audio specifications

Description	Values
Subwoofer output	Not supported
Microphone	Dual-array microphones

Storage

Your computer supports one of the following configurations:

- One M.2 2230, Gen 3 PCIe x4 NVMe, Class 35 SSD (slot 1)
- One M.2 2230, Gen 3 PCIe x4 NVMe, Class 35 SSD (slot 1) with one M.2 2280, Gen 4 PCIe x4 NVMe, Class 40 SSD (slot 2)
- One M.2 2280, Gen 3 PCIe x4 NVMe, Class 40 SSD (slot 1)
- One M.2 2280, Gen 3 PCIe x4 NVMe, Class 40 SSD (slot 1) with M.2 2280, Gen 4 PCIe x4 NVMe, Class 40 SSD (slot 2)
- One M.2 2280, Gen 4 PCIe x4 NVMe, Class 40 SSD (slot 2)
- One M.2 2280, Gen 3 PCIe x4 NVMe, Class 40 SSD, Self-encrypting drive (slot 1)
- One M.2 2280, Gen 3 PCIe x4 NVMe, Class 40 SSD, Self-encrypting drive (slot 1) with one M.2 2280, Gen 4 PCIe x4 NVMe, Class 40 SSD (slot 2)

The primary drive of your computer varies with the storage configuration.

Table 14. Storage specifications

Form factor	Interface type	Capacity
M.2 2230, Class 35 solid-state drive	Gen 3 PCIe x4 NVMe	Up to 512 GB
M.2 2280, Class 40 solid-state drive	Gen 3 PCIe x4 NVMe	Up to 1 TB
M.2 2280, Class 40 solid-state drive	Gen 4 PCIe x4 NVMe	Up to 2 TB
M.2 2280, Class 40 solid-state drive, Self-encrypting drive	Gen 3 PCIe x4 NVMe	Up to 512

Media-card reader

Table 15. Media-card reader specifications

Description	Values
Type	One microSD-card
Cards supported	<ul style="list-style-type: none"> • Secure Digital (SD) 4.0 • Secure Digital High Capacity (SDHC) • Secure Digital Extended Capacity (SDXC)

Keyboard

Table 16. Keyboard specifications

Description	Values
Type	<ul style="list-style-type: none"> • Extended single-point non-backlit keyboard • Extended single-point backlit keyboard
Layout	QWERTY

Table 16. Keyboard specifications

Description	Values
Number of keys	<ul style="list-style-type: none"> • United States and Canada: 99 keys • United Kingdom: 100 keys • Japan: 103 keys
Size	X=18.05 mm key pitch Y=18.05 mm key pitch
Shortcut keys	<p>Some keys on your keyboard have two symbols on them. These keys can be used to type alternate characters or to perform secondary functions. To type the alternate character, press Shift and the desired key. To perform secondary functions, press Fn and the desired key.</p> <p>NOTE: You can define the primary behavior of the function keys (F1–F12) by changing the Function Key Behavior in system setup program. Keyboard shortcuts</p>

Camera

Table 17. Camera specifications

Description	Values
Number of cameras	One
Type	HD RGB camera
Location	Front camera
Sensor type	CMOS sensor technology
Resolution	
Camera	
Still image	0.92 megapixel
Video	1280 x 720 (HD) at 30 fps
Infrared camera	
Still image	NA
Video	NA
Diagonal viewing angle	
Camera	78.60 degrees
Infrared camera	NA

Table 18. Full HD Webcam

Description	Values
Number of cameras	One
Type	HD RGB camera
Location	Front camera

Table 18. Full HD Webcam

Description		Values
Sensor type		CMOS sensor technology
Resolution		
Camera		
Still image		0.92 megapixels
Video		1280 x 720 (HD) at 30 fps
Diagonal viewing angle		78.6 degrees

Clickpad

Table 19. Clickpad specifications

Description		Values
Resolution		>=300 dpi
Dimensions:		
Horizontal		115 mm (4.53 inch)
Vertical		67 mm (2.64 inch)

Power adapter

Table 20. Power adapter specifications

Description	Option one	Option two	Option three
Type	65 W	90 W	130 W
Diameter/Size (connector)	USB-C	USB-C	USB-C
Input voltage	100 VAC x 240 VAC	100 VAC x 240 VAC	100 VAC x 240 VAC
Input frequency	50 Hz to 60 Hz	50 Hz to 60 Hz	50 Hz to 60 Hz
Input current (maximum)	1.7 A	1.5 A	1.8 A
Output current (continuous)	<ul style="list-style-type: none"> ● 20 V/3.25 A (Continuous) ● 15 V/3 A (Continuous) ● 9.0 V/3 A (Continuous) ● 5.0 V/3 A (Continuous) 	<ul style="list-style-type: none"> ● 20 V/4.5 A (Continuous) ● 15 V/3 A (Continuous) ● 9.0 V/3 A (Continuous) ● 5.0 V/3 A (Continuous) 	<ul style="list-style-type: none"> ● 20 V/6.5 A (Continuous) ● 5.0 V/1 A (Continuous)
Rated output voltage	20 VDC/15 VDC/9 VDC/5 VDC	20 VDC/15 VDC/9 VDC/5 VDC	20 VDC/5 VDC
Weight	0.20 Kg (0.44 lb)	0.29 Kg (0.64 lb)	0.50 Kg (1.10 lb)
Temperature range:			
Operating	0°C to 40°C (32°F to 104°F)	0°C to 40°C (32°F to 104°F)	0°C to 40°C (32°F to 104°F)
Storage	-40°C to 70°C (-40°F to 158°F)	-40°C to 70°C (-40°F to 158°F)	-40°C to 70°C (-40°F to 158°F)

Battery

NOTE: Dell recommends that you charge the battery regularly for optimal power consumption. If your battery charge is completely depleted, connect the power adapter, turn on your computer, and then restart your computer to reduce the power consumption.

Table 21. Battery specifications (continued)

Description		Values			
Type		3-cell lithium-ion 42 WHr, ExpressCharge Boost	4-cell lithium-ion 63 WHr	3-cell lithium-ion 42 WHr LCL	4-cell lithium-ion 63 WHr LCL
Voltage		11.40 VDC	15.20 VDC	11.40 VDC	15.20 VDC
Weight (maximum)		0.18 kg (0.40 lb)	0.25 kg (0.55 lb)	0.18 kg (0.40 lb)	0.25 kg (0.55 lb)
Dimensions:					
	Height	5.70 mm (0.22 in.)	5.70 mm (0.22 in.)	5.70 mm (0.22 in.)	5.70 mm (0.22 in.)
	Width	95.90 mm (3.78 in.)	95.90 mm (3.78 in.)	95.90 mm (3.78 in.)	95.90 mm (3.78 in.)
	Depth	207.90 mm (8.19 in.)	238.00 mm (9.37 in.)	207.90 mm (8.19 in.)	238.00 mm (9.37 in.)
Temperature range:					
	Operating	<ul style="list-style-type: none"> Charge: 0°C to 50°C (32°F to 122°F) Discharge: 0°C to 70°C (32°F to 158°F) 	<ul style="list-style-type: none"> Charge: 0°C to 50°C (32°F to 122°F) Discharge: 0°C to 70°C (32°F to 158°F) 	<ul style="list-style-type: none"> Charge: 0°C to 50°C (32°F to 122°F) Discharge: 0°C to 70°C (32°F to 158°F) 	<ul style="list-style-type: none"> Charge: 0°C to 50°C (32°F to 122°F) Discharge: 0°C to 70°C (32°F to 158°F)
	Storage	-20 °C to 60 °C (-4 °F to 140 °F)	-20 °C to 60 °C (-4 °F to 140 °F)	-20 °C to 60 °C (-4 °F to 140 °F)	-20 °C to 60 °C (-4 °F to 140 °F)
Operating time		Varies depending on operating conditions and can significantly reduce under certain power-intensive conditions.	Varies depending on operating conditions and can significantly reduce under certain power-intensive conditions.	Varies depending on operating conditions and can significantly reduce under certain power-intensive conditions.	Varies depending on operating conditions and can significantly reduce under certain power-intensive conditions.
Charging time (approximate)		From 0% up to 35% in 20 minutes (ExpressCharge Boost), 2hr (Express charge), 3hr (Standard charge) (when the computer is off) NOTE: Control the charging time, duration, start and end time, and so on using the Dell Power Manager application. For more information on the Dell Power Manager see, on www.dell.com/	From 0% up to 35% in 20 minutes (ExpressCharge Boost), 2hr (Express charge), 3hr (Standard charge) (when the computer is off) NOTE: Control the charging time, duration, start and end time, and so on using the Dell Power Manager application. For more information on the Dell Power	2hr (Express charge), 3hr (Standard charge) (when the computer is off). NOTE: Control the charging time, duration, start and end time, and so on using the Dell Power Manager application. For more information on the Dell Power	2hr (Express charge), 3hr (Standard charge) (when the computer is off). NOTE: Control the charging time, duration, start and end time, and so on using the Dell Power Manager application. For more information on the Dell Power Manager see, on www.dell.com/

Table 21. Battery specifications

Description	Values			
		Manager see, on www.dell.com/	Manager see, on www.dell.com/	
Life span (approximate)	1 year	1 year	3 years	3 years
Coin-cell battery	CR-2032	CR-2032	CR-2032	CR-2032
Operating time	Varies depending on operating conditions and can significantly reduce under certain power-intensive conditions.	Varies depending on operating conditions and can significantly reduce under certain power-intensive conditions.	Varies depending on operating conditions and can significantly reduce under certain power-intensive conditions.	Varies depending on operating conditions and can significantly reduce under certain power-intensive conditions.

Display

The following table lists the display specifications of your Latitude 5520.

Table 22. Display specifications

Description	Option one	Option two	Option three	Option four	Option five
Display type	High Definition (HD)	Full High Definition (FHD)	Full High Definition (FHD)	Full High Definition (FHD)	Ultra High Definition (UHD)
Display-panel technology	Twisted Nematic (TN)	Thin Film Transistor (TFT), Wide Viewing Angle (WVA)	Wide Viewing Angle (WVA)	Thin Film Transistor (TFT), Wide Viewing Angle (WVA), Super Low Power, Low Blue Light (LBL)	Thin Film Transistor (TFT), Wide Viewing Angle (WVA), Low Blue Light (LBL)
Display-panel dimensions (active area):					
Height	344.16 mm	344.16 mm	344.16 mm	344.16 mm	344.16 mm
Width	193.59 mm	193.59 mm	193.59 mm	193.59 mm	193.59 mm
Diagonal	396.24 mm	396.24 mm	396.24 mm	396.24 mm	396.24 mm
Display-panel native resolution	1366 x 768	1920 x 1080	1920 x 1080	1920 x 1080	3840 x 2160
Luminance (typical)	220 nits	250 nits	250 nits	400 nits	400 nits
Megapixels	1.05	2.07	2.07	2.07	8.29
Color gamut	NTSC 45%	NTSC 45%	NTSC 45%	sRGB 100%	sRGB 100%
Pixels Per Inch (PPI)	100	141	141	141	283
Contrast ratio (typ)	500:1	700:1	700:1	700:1	1000:1
Response time (max)	25 ms	25 ms	25 ms	25 ms	19 ms

Table 22. Display specifications

Description	Option one	Option two	Option three	Option four	Option five
Refresh rate	60 Hz	60 Hz	60 Hz	60 Hz	60 Hz
Horizontal view angle	40 +/-degrees	80 +/-degrees	80 +/-degrees	80 +/-degrees	80 +/-degrees
Vertical view angle	10 (U)/30 (D) +/-degrees	80 +/-degrees	80 +/-degrees	80 +/-degrees	80 +/-degrees
Pixel pitch	TBD	0.17925 mm	0.17925 mm	0.17925 mm	0.08964 mm
Power consumption (maximum)	4.2 W	4.6 W	4.6 W	4.5 W	4.5 W
Anti-glare vs glossy finish	Anti-glare	Anti-glare	Anti-glare	Anti-glare	Anti-glare
Touch options	No	No	Yes	No	No

Fingerprint reader (optional)

Table 23. Fingerprint reader specifications

Description	Power button option	FIPS option
Sensor technology	Capacitive	Capacitive
Sensor resolution	500 dpi	508 dpi
Sensor pixel size, X	108	256
Sensor pixel size, Y	88	360

Video

Table 24. Discrete graphics specifications

Discrete graphics			
Controller	External display support	Memory size	Memory Type
NVIDIA GeForce MX450	No	2 GB	GDDR6

Table 25. Integrated graphics specifications

Integrated graphics			
Controller	External display support	Memory size	Processor
Intel Iris X ^e Graphics	HDMI 2.0, DisplayPort over USB Type-C	Shared system memory	11 th Generation Intel Core i5/i7 Processors <i>i</i> NOTE: System with single-channel memory is shown as Intel UHD Graphics in Intel Graphics Command Center (IGCC).

Table 25. Integrated graphics specifications

Integrated graphics			
Controller	External display support	Memory size	Processor
Intel UHD Graphics	HDMI 2.0, DisplayPort over USB Type-C	Shared system memory	11 th Generation Intel Core i3 Processors
Intel UHD Graphics	HDMI 1.4, DisplayPort over USB Type-C	Shared system memory	10 th Generation Intel Core i5/i7 Processors

Security

Table 26. Hardware Security

Hardware security options
Trusted Platform Module (TPM) 2.0 discrete
FIPS 140-2 certification for TPM
TCG (Trusted Computing Group) Certification for TPM
Fingerprint reader in power button tied to ControlVault 3
ControlVault 3 Advanced Authentication with FIPS 140-2 Level 3 Certification
Contacted Smart Card and ControlVault 3
Contactless Smart Card, NFC, and ControlVault 3
SED SSD NVMe, SSD and HDD (Opal and non-Opal) per SDL
FIPS 201 Full Scan FPR and ControlVault 3

Table 27. Data Security

Data security options
McAfee Small Business Security 30-day trial
McAfee Small Business Security 12-months subscription, digitally delivered
McAfee Small Business Security 24-months subscription, digitally delivered
McAfee Small Business Security 36-months subscription, digitally delivered

Computer environment

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

Table 28. Computer environment

Description	Operating	Storage
Temperature range	0°C to 40°C (32°F to 104°F)	-40°C to 60°C (-40°F to 140°F)
Relative humidity (maximum)	10% to 90% (non-condensing)	0% to 95% (non-condensing)
Vibration (maximum)*	0.66 GRMS	1.30 GRMS
Shock (maximum)	140 G†	160 G†
Altitude (maximum)	-15.2 m to 3048 m (-50 ft to 10000 ft)	-15.2 m to 10668 m (-50 ft to 35000 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.

Sensor and control

Table 29. Sensor and control

Sensor support	
Sensor	Ambient Light Sensor on the hinge-up (optional)
	P-sensor on the hinge-up (optional)
	Accelerometer (G sensor): One on the base (system board) and another on the hinge-up (optional)

Dell low blue light display

 **WARNING: Prolonged exposure to blue light from the display may lead to long-term effects such as eye strain, eye fatigue, or damage to the eyes.**

Blue light is a color in the light spectrum which has a short wavelength and high energy. Chronic exposure to blue light, particularly from digital sources, may disrupt sleep patterns and cause long-term effects such as eye strain, eye fatigue, or damage to the eyes.

The display on this computer is designed to minimize blue light and complies with TÜV Rheinland's requirement for low blue light displays.

Low blue light mode is enabled at the factory, so no further configuration is necessary.

To reduce the risk of eye strain, it is also recommended that you:


- Position the display at a comfortable viewing distance between 20 and 28 inches (50 and 70 cm) from your eyes.
- Blink frequently to moisten your eyes, wet your eyes with water, or apply suitable eye drops.
- Look away from your display, and gaze at a distant object at 20 ft (609.60 cm) away for at least 20 seconds during each break.
- Take an extended break for 20 minutes every two hours.

Getting help and contacting Dell

Self-help resources


You can get information and help on Dell products and services using these self-help resources:


Table 30. Self-help resources

Self-help resources	Resource location
Information about Dell products and services	www.dell.com
Tips	
Contact Support	In Windows search, type <code>Contact Support</code> , and press Enter.
Online help for operating system	www.dell.com/support/windows www.dell.com/support/linux
Troubleshooting information, user manuals, setup instructions, product specifications, technical help blogs, drivers, software updates, and so on.	www.dell.com/support
Dell knowledge base articles for a variety of computer concerns.	<ol style="list-style-type: none"> 1. Go to https://www.dell.com/support/home/?app=knowledgebase. 2. Type the subject or keyword in the Search box. 3. Click Search to retrieve the related articles.

Contacting Dell

To contact Dell for sales, technical support, or customer service issues, see www.dell.com/contactdell.

 **NOTE:** Availability varies by country and product, and some services may not be available in your country.

 **NOTE:** If you do not have an active internet connection, you can find contact information on your purchase invoice, packing slip, bill, or Dell product catalog.