Latitude 7520

Setup and Specifications



Notes, cautions, and warnings

(i) 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.

MARNING: A WARNING indicates a potential for property damage, personal injury, or death.

© 2021 Dell Inc. or its subsidiaries. All rights reserved. Dell, EMC, and other trademarks are trademarks of Dell Inc. or its subsidiaries. Other trademarks may be trademarks of their respective owners.

Contents

Chapter 2: Views of Latitude 7520	6
Right	6
Left	6
Тор	7
Display	8
Bottom	9
Battery Charge and Status LED	9
Chapter 3: Specifications of Latitude 7520	
Dimensions and weight	
Processor	
Chipset	
Operating system	
Memory	
External ports	
Internal slots	
Wireless module	
WWAN module	
Audio	
Storage	
Media-card reader	
Keyboard	15
Camera	16
Touchpad	
Power adapter	17
Battery	17
Display	
Fingerprint reader	
GPU—Integrated	20
Operating and storage environment	20
Chapter 4: Keyboard shortcuts	

Set up your Latitude 7520

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

Steps

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:

- 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

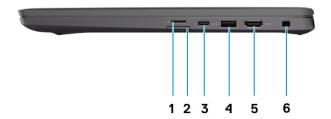
Dell apps	Details
	Dell Product Registration
	Register your computer with Dell.
	Dell Help & Support

Table 1. Locate Dell apps (continued)

Dell apps	Details
	Access help and support for your computer.
	SupportAssist
	SupportAssist is the smart technology that keeps your computer running at its best by optimizing settings, detecting issues, removing viruses and notifies when you need to make system updates. SupportAssist proactively checks the health of your system's hardware and software. When an issue is detected, the necessary system state information is sent to Dell to begin troubleshooting. SupportAssist is preinstalled on most of the Dell devices running Windows operating system. For more information, see SupportAssist for Business PCs User's Guide on www.dell.com/serviceabilitytools.
S	Dell Update
	Updates your computer with critical fixes and important device drivers as they become available.
	Dell Digital Delivery
	Download software applications including software that is purchased but not preinstalled on your computer.

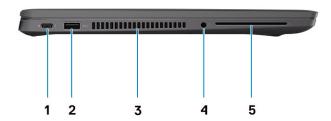
Views of Latitude 7520

Right



- 1. microSD 4.0 card reader slot
- 2. SIM card slot (optional with WWAN configuration only)
- 3. Thunderbolt 4 port with DisplayPort Alt Mode/USB4/Power Delivery
- 4. USB 3.2 Gen 1 port with PowerShare
- **5.** HDMI 2.0 port
- 6. Wedge-shaped lock slot

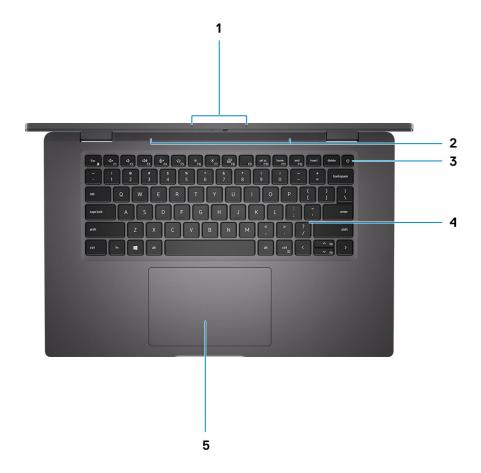
Left



1. Thunderbolt 4 port with DisplayPort Alt Mode/USB4/Power Delivery

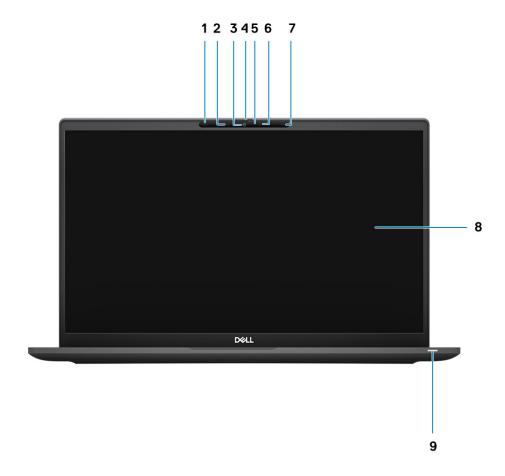
- 2. USB 3.2 Gen 1 port with PowerShare
- 3. Cooling vents
- 4. Headset (headphone and microphone combo) port
- 5. Smart card reader slot (optional)

Top



- 1. Microphone array
- 2. Speakers
- **3.** Power button (with optional fingerprint reader)
- 4. Keyboard
- 5. Touchpad

Display



- 1. Proximity sensor (optional)
- 2. IR emitter (optional)
- 3. RGB or IR camera optional
- 4. Camera shutter
- 5. Camera status LED
- 6. IR emitter(optional)
- 7. Ambient Light Sensor (ALS) (optional)
- 8. LCD panel
- 9. LED indicator

Bottom



- 1. Speakers
- 2. Service tag label
- 3. Air vents

Battery Charge and Status LED

Table 2. Battery Charge and Status LED Indicator

Power Source	LED Behavior	System 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) System is turned on.
- S4 (Hibernate) The system consumes the least power compared to all other sleep states. The system is almost at an OFF state, expect for a trickle power. The context data is written to hard drive.
- S5 (OFF) The system is in a shutdown state.

Specifications of Latitude 7520

Dimensions and weight

The following table lists the height, width, depth, and weight of your Latitude 7520.

Table 3. Dimensions and weight

Description	Values
Height:	
Front height	17.50 mm (0.69 in.)
Rear height	Aluminum: 18.40 mm (0.72 in.)Carbon Fiber(CF): 18.89 mm (0.74 in.)
Width	357.70 mm (14.08 in.)
Depth	229.75 mm (9.05 in.)
Weight (minimum)	CF: 1.53 kg (3.37 lb) Aluminum: 1.76 kg (3.88 lb) NOTE: The weight of your computer depends on the configuration ordered and manufacturing variability.

Processor

The following table lists the details of the processors supported by your Latitude 7520.

Table 4. Processor

Description	Option one	Option two	Option three	Option four
Processor type	11 th Generation Intel Core i5-1135G7 Non- vPro	11 th Generation Intel Core i5-1145G7 vPro	11 th Generation Intel Core i7-1165G7 Non- vPro	11 th Generation Intel Core i7-1185G7 vPro
Processor wattage	cTDP (configurable Thermal Design Power): 13 W - 15 W Maximum TDP: 28 W	 cTDP: 13 W - 15 W Maximum TDP: 28 W 	 cTDP: 13 W - 15 W Maximum TDP: 28 W 	cTDP: 13 W - 15 WMaximum TDP: 28 W
Processor core count	4	4	4	4
Processor thread count	8	8	8	8
Processor speed	2.40 GHz to 4.20 GHz	2.60 GHz to 4.40 GHz	2.80 GHz to 4.70 GHz	3.00 GHz to 4.80 GHz

Table 4. Processor (continued)

Description	Option one	Option two	Option three	Option four
Processor cache	8 MB	8 MB	12 MB	12 MB
Integrated graphics	Intel Iris X ^e Graphics			

Chipset

The following table lists the details of the chipset supported by your Latitude 7520.

Table 5. Chipset

Description	Values
Chipset	Intel Tiger Lake U PCH
Processor	11 th Generation Intel Core i5/i7
DRAM bus width	64-bit
Flash EPROM	32 MB
PCle bus	Up to Gen4

Operating system

Your Latitude 7520 supports the following operating systems:

- Windows 10 Home, 64-bit
- Windows 10 Professional, 64-bit
- Ubuntu 20.04 LTS, 64-bit

Memory

The following table lists the memory specifications of your Latitude 7520.

Table 6. Memory specifications

Description	Values
Memory slots	Integrated on the system board. i NOTE: You cannot upgrade the memory on your Latitude 7520.
Memory type	Dual-channel LPDDR4x
Memory speed	4267 MHz
Maximum memory configuration	32 GB
Minimum memory configuration	8 GB
Memory size per slot	8 GB, 16 GB, 32 GB
Memory configurations supported	• 8 GB

Table 6. Memory specifications (continued)

Description	Values
	 16 GB 32 GB NOTE: Memory is not ungradable.

External ports

The following table lists the external ports on your Latitude 7520.

Table 7. External ports

Description	Values
USB ports	 Two One USB 3.2 Gen 1 port one with PowerShare Two Thunderbolt 4 ports with DisplayPort Alt Mode/ USB4/Power Delivery
Audio port	One headset (headphone and microphone combo) port
Video port/ports	 One HDMI 2.0 port Two Thunderbolt 4 ports with DisplayPort Alt Mode/USB4
Media-card reader	One microSD-card slot
Power-adapter port	Thunderbolt 4 ports USB4 with Power Delivery
Security-cable slot	One wedge-shaped lock slot

Internal slots

The following table lists the internal slots of your Latitude 7520.

Table 8. Internal slots

Description	Values
M.2	One M.2 2230/2280 Keyed M slot for SSD
	NOTE: To learn more about the features of different types of M.2 cards, see the knowledge base article Article Number: 144170 at www.dell.com/support.

Wireless module

The following table lists the Wireless Local Area Network (WLAN) module supported on your Latitude 7520.

Table 9. Wireless module specifications

Description	Values
Model number	Intel Wi-Fi 6 AX201, 2x2, 802.11ax with Bluetooth 5.1 (onboard)
Transfer rate	• 2.4 GHz 40M: Up to 574 Mbps

Table 9. Wireless module specifications (continued)

Description	Values
	5 GHz 80M: Up to 1.2 Gbps5 GHz 160M: Up to 2.4 Gbps
Frequency bands supported	2.4 GHz/5 GHz
Wireless standards	IEEE 802.11a/b/g/n/ac/ax, 160 MHz channel use
Encryption	 64/128-bit WEP 128-bit AES-CCMP 256-bit AES-GCMP TKIP
Bluetooth	Bluetooth 5.1

WWAN module

The following table lists the Wireless Wide Area Network (WWAN) module supported on your Latitude 7520.

WWAN module specifications

Description	Option one	Option two	
Model number	 Qualcomm Snapdragon X20 Gigabit LTE CAT 16 (DW5821e; e-SIM enabled), WW excluding China, Turkey, US Qualcomm Snapdragon X20 Gigabit LTE CAT 16 (DW5821e) WW Qualcomm Snapdragon X20 Gigabit LTE CAT 16 (DW5821e) for AT&T, Verizon, and Sprint, US only 	 Qualcomm Snapdragon X20 LTE-A CAT 9 (DW5829e; e-SIM enabled) WW excluding China, Turkey, US Qualcomm Snapdragon X20 LTE-A CAT 9 (DW5829e) WW Qualcomm Snapdragon X20 LTE-A CAT 9 (DW5829e) for AT&T, Verizon, and Sprint, US only 	
Transfer rate	up to 1 Gbps DL/150 Mbps UL (Cat 16)	up to 450 Mbps DL/75 Mbps UL (Cat 9)	
Frequency bands supported	 1, 2, 3, 4, 5, 7, 8, 12, 13, 14, 17, 18, 19, 20, 25, 26, 28, 29, 30, 32, 38, 39, 40, 41, 42, 43, 46, 66 HSPA+ (1, 2, 4, 5, 6, 8, 9, 19) 	 1, 2, 3, 4, 5, 7, 8, 12, 13, 14, 17, 18, 19, 20, 25, 26, 28, 29, 30, 32, 38, 39, 40, 41, 66 HSPA+ (1, 2, 4, 5, 6, 8) 	
Network standards	LTE FDD/TDDWCDMA/HSPA+GPS/GLONASS/Beidou/Galileo	LTE FDD/TDDWCDMA/HSPA+GPS/GLONASS/Beidou/Galileo	
Antenna connector	 WWAN Main Antenna X 1 WWAN Diversity Antenna X 1 4 x 4 MIMO Antenna x 2 	WWAN Main Antenna X 1WWAN Diversity Antenna X 1	
Temperature	 Normal operating temperature: -30°C to + 70°C Extended Operating temperature: -40°C to +85°C 	 Normal operating temperature: -30°C to + 70°C Extended Operating temperature: -40°C to +85°C 	

Audio

The following table lists the audio specifications of your Latitude 7520.

Table 10. Audio specifications

Description		Values	
Audio controller		Realtek ALC3281-CG	
Stereo conversion		Supported	
Internal audio interface		Realtek ALC3281-CG, High Definition Audio with Realtek ALC1309 Smart Amp	
External audio interfac	ce	Universal Audio Jack	
Number of speakers		4	
Internal-speaker amplifier		Supported (Audio codec integrated)	
External volume contro	ols	Keyboard shortcut controls.	
Speaker output:			
	Average speaker output	2 W	
Peak speaker output		2.5 W	
Subwoofer output		Not supported	
Microphone		Digital-array microphones	

Storage

This section lists the storage options on your Latitude 7520.

Your system supports one of the following configurations:

- M.2 2230, PCIe x4 NVMe, Class 35 solid-state drive
- M.2 2280, PCle x4 NVMe, Class 40 solid-state drive
- M.2 2280, PCle x4 NVMe, Class 40 Self encrypting solid-state drive

Table 11. Storage specifications

Storage type	Interface type	Capacity
M.2 2230, PCle x4 NVMe, Class 35 solid-state drive	PCIe x4 NVMe 3.0	up to 512 GB
M.2 2280, PCIe x4 NVMe, Class 40 solid-state drive	PCIe x4 NVMe 3.0	up to 1 TB
M.2 2280, PCIe x4 NVMe, Class 40 Self encrypting solid-state drive	PCIe x4 NVMe 3.0	up to 512 GB

Media-card reader

The following table lists the media cards supported by your Latitude 7520.

Table 12. Media-card reader specifications

Description	Values
Media-card type	One micro-SD card slot
Media-cards supported	 micro-Secure Digital (mSD) micro-Secure Digital High Capacity (mSDHC) micro-SD Extended Capacity (mSDXC) NOTE: The maximum capacity supported by the mediacard reader varies depending on the standard of the mediacard installed in your computer.

⁽i) NOTE: The maximum capacity supported by the media-card reader varies depending on the standard of the media card installed in your computer.

Keyboard

The following table lists the keyboard specifications of your Latitude 7520.

Table 13. Keyboard specifications

Description	Values
Keyboard type	Standard non-backlit keyboard Standard backlit keyboard
Keyboard layout	QWERTY/KANJI
Number of keys	United States and Canada: 79 keysUnited Kingdom: 80 keysJapan: 83 keys
Keyboard size	X =19.05 mm key pitch Y =18.05 mm key pitch
Keyboard shortcuts	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 wanted key. To perform secondary functions, press Fn and the wanted key. (i) NOTE: You can define the primary behavior of the function keys (F1–F12) changing Function Key Behavior in BIOS setup program. For more information, see Keyboard shortcuts on page 21.

Camera

The following table lists the camera specifications of your Latitude 7520.

Table 14. Camera specifications

Description	Option 1	Option 2	Option 3	Option 4	Option 5
Number of cameras	One	One	One	One	One
Туре	Integrated 2.7 mm HD RGB Webcam	Integrated 2.7 mm HD RGB/IR Webcam with Proximity Sensor and optional ALS	Integrated 6 mm HD RGB Webcam	Integrated 6 mm HD RGB/IR Webcam with Proximity Sensor and optional ALS	Integrated 6 mm FHD RGB/IR Webcam with Proximity Sensor and optional ALS
Location	Front	Front	Front	Front	Front
Sensor type	CMOS sensor technology	CMOS sensor technology	CMOS sensor technology	CMOS sensor technology	CMOS sensor technology
Resolution (RGB):					
Still Image	0.92	0.92	0.92	0.92	2
Video	1280 x 720 at 30 fps	1280 x 720 at 30 fps	1280 x 720 at 30 fps	1280 x 720 at 30 fps	1920 x 1080 at 30 fps
Diagonal viewing angle	74.9°	75.8°	78.6°	87°	87.6°
Resolution (IR):			•	•	
Still Image	NA	0.23	NA	0.23	0.23
Video	NA	640 x 360 at 15 fps	NA	640 x 360 at 15 fps	640 x 360 at 15 fps
Diagonal viewing angle	NA	75.8°	NA	87°	87.6°

Touchpad

The following table lists the touchpad specifications of your Latitude 7520.

Table 15. Touchpad specifications

Description	Option 1	Option 2
Touchpad resolution:		
Horizontal	3561	1461
Vertical	2416	921
Touchpad dimensions:		
Horizontal	125 mm (4.92 in.)	125 mm (4.92 in.)
Vertical	80 mm (3.14 in.)	80 mm (3.14 in.)
Touchpad gestures	For more information about touchpad gestures available on Windows 10, see the	For more information about touchpad gestures available on Windows 10, see the Microsoft

Table 15. Touchpad specifications (continued)

Description	Option 1	
	Microsoft knowledge base article 4027871 at support.microsoft.com.	knowledge base article 4027871 at support.microsoft.com.

Power adapter

The following table lists the power adapter specifications of your Latitude 7520.

Table 16. Power adapter specifications

Description		Option one	Option two	
Туре		65 W AC adapter, USB-C	90 W, AC adapter, USB-C	
Input	voltage	100 VAC-240 VAC	100 VAC-240 VAC	
Input	frequency	50 Hz-60 Hz	50 Hz-60 Hz	
Input	current (maximum)	1.70 A	1.50 A	
Output current (continuous)		 20 V/3.25 A (Continuous) 15 V/3 A (Continuous) 9.0 V/3 A (Continuous) 5.0 V/3 A (Continuous) 	 20 V/4.5 A (Continuous) 15 V/3 A (Continuous) 9.0 V/3 A (Continuous) 5.0 V/3 A (Continuous) 	
Rated output voltage		20 VDC/15 VDC/9 VDC/5 VDC	20 VDC/15 VDC/9 VDC/5 VDC	
Temp	perature range:			
	Operating	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)	
Dime	nsions			
Width (mm/inch)		112 mm (4.41 in.)	130 mm (5.1 in.)	
Depth (mm/inch)		51 mm (2.01 in.)	66 mm (2.6 in.)	
Height (mm/inch)		28 mm (1.1 in.)	22 mm (0.8 in.)	
Weig	ht (kg/lb)	201 g (0.44 lb)	291 g (0.64 lb)	

Battery

The following table lists the battery specifications of your Latitude 7520.

Table 17. Battery specifications

Specifications	Option 1	Option 2
Туре	4-cell, 63 WHr, optional with ExpressCharge or Long Life Cycle	3-cell, 42 WHr, optional with ExpressCharge or Long Life Cycle
Voltage (VDC)	15.2 VDC	11.40 VDC
Weight (maximum)	0.26 kg (0.58 lb)	0.21 kg (0.46 lb)
Dimensions:		

Table 17. Battery specifications (continued)

Specifications		Option 1		Option 2	
	Height	92.8 mm (3.	654 in.)	92.8 mm (3.654 in.)	
	Width	238 mm (9.3	37 in.)	238 mm (9.37 in.)	
	Depth	5.7 mm (0.2	24 in.)	5.7 mm (0.224 in.)	
Temperature range:	•				
	Operating	"		C (32°F to 113°F) 5°C (32°F to 149°F)	
	Storage	-20°C to 60	°C (-4°F to	140°F)	
Battery Operating time			Varies depending on operating conditions and can significantly reduce under certain power-intensive conditions.		
Battery Charging time (ap	pproximate)	ExpressOminutes	ExpressCharge Boost (0% up to 35%): 20 minutes		
		• Express of	charge : 2 ho	urs	
		Standard	charge: 3 hc	purs	
		start and the Dell I more info see, http	NOTE: Control the charging time, duration, start and end time, and so on using the Dell Power Manger application. For more information on the Dell Power Manger see, https://www.dell.com/support/home/product-support/product/power-manager/docs		
Life span (approximate)		• Long Life	Cycle (LCL)	00 discharge/charge cycles capable: 3 Years or 1000 les (Optional)	
ExpressCharge		Supported o Charge Capa		Supported on Express Charge Capable Battery	
User replaceable		No (FRU¶)		No (FRU)	
Coin-cell battery		Main battery function.	Main battery reserves 2% of capacity for RTC function.		
Coin-cell Operating time		68 days with	68 days with 3-cell 42 WHr battery		
		and can	(i) NOTE: Varies depending on operating conditions and can significantly reduce under certain power-intensive conditions.		

i NOTE:

For batteries with the ExpressCharge feature, the battery will typically have at least an 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 computer and the battery used be ExpressCharge capable. If these requirements are not met, ExpressCharge will not be enabled.

 \P : Field Replaceable Part

Display

The following table lists the display specifications of your Latitude 7520.

Table 18. Display specifications

Descriptio	n	Option one	Option two	Option three	Option four
Display type	9	15.6-inch Full HD (FHD)	15.6-inch FHD Super Low Power (SLP) ComfortView Plus Low Blue Light	15.6-inch FHD with integrated touch	15.6 inch Ultra High Definition (UHD) ComfortView Plus Low Blue Light
Display-pan	el technology	TFT , Wide View Angle (WVA)	TFT, IPS, Super Low Power (SLP) ComfortView Plus Low Blue Light, WVA	TFT, WVA	TFT, IPS, Super Low Power (SLP) ComfortView Plus Low Blue Light, WVA
Display-pan (active area	el dimensions a):				
Не	ight	344.16 mm (13.55 in.)	344.16 mm (13.55 in.)	344.16 mm (13.55 in.)	344.16 mm (13.55 in.)
Wi	dth	193.59 mm (7.62 in.)	193.59 mm (7.62 in.)	193.59 mm (7.62 in.)	193.59 mm (7.62 in.)
Dia	agonal	396.24 mm (15.6 in.)	396.24 mm (15.6 in.)	396.24 mm (15.6 in.)	396.24 mm (15.6 in.)
Display-pan resolution	el native	1920 x 1080	1920 x 1080	1920 x 1080	3840 x 2160
Luminance	(typical)	250 nits	400 nits	250 nits	400 nits
Megapixels		2.07	2.07	2.07	8.29
Color gamu	t	NTSC 45%	sRGB 100%	NTSC 45%	sRGB 100%
Pixels Per I	nch (PPI)	141	141	141	283
Contrast ra	tio (typ)	700:1	700:1	700:1	1000:1
Response t	ime (min)	25 milli-second (ms)	25 ms	25 ms	19 ms
Refresh rat	е	60 Hz	60 Hz	60 Hz	60 Hz
Horizontal	view angle	80/80 degrees (min)	80/80 degrees (min)	80/80 degrees (min)	80/80 degrees (min)
Vertical vie	w angle	80/80 degrees (min)	80/80 degrees (min)	80/80 degrees (min)	80/80 degrees (min)
Pixel pitch		0.17925 mm	0.17925 mm	0.17925 mm	0.08964 mm
Power cons (maximum)		4.6 W	4.5 W	4.6 W	4.5 W
Anti-glare v finish	s glossy	Anti-glare	Anti-glare	Anti-glare	Anti-glare
Touch option	ons	Non-touch	Non-touch	Touch	Non-touch

Fingerprint reader

The following table lists the fingerprint-reader specifications of your Latitude 7520.

i NOTE: The fingerprint reader is located on the power button.

Table 19. Fingerprint reader specifications

Description	Values
Fingerprint-reader sensor technology	Capacitive
Fingerprint-reader sensor resolution	500 dpi
Fingerprint-reader sensor pixel size	108 x 88

GPU—Integrated

The following table lists the specifications of the integrated Graphics Processing Unit (GPU) supported by your Latitude 7520.

Table 20. GPU—Integrated

Controller	External display support	Memory size	Processor
Intel Iris X ^e Graphics	Two Thunderbolt 4 ports with DisplayPort Alt Mode One HDMI 2.0 port	Shared system memory	11 th Generation Intel Tiger Lake Core i5/i7 processors

Operating and storage environment

This table lists the operating and storage specifications of your Latitude 7520.

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

Table 21. Computer environment

Description	Operating	Storage
Temperature range	Normal ambient condition 25°C and 40~50% 0°C to Normal ambient condition 25°C and 40~50% 40°C (32°F to 104°F)	-40°C to 65°C (-40°F to 149°F)
Relative humidity (maximum)	Normal ambient condition 25°C and 40%~50% 10% to Normal ambient condition 25°C and 40%~50% 90% (non-condensing)	10% to 95% (non-condensing)
Vibration (maximum)*	0.66 GRMS	1.30 GRMS
Shock (maximum)	140 G†	160 G†
Altitude range	0 m to 3048 m (0 ft to 10,000 ft)	0 m to 10,688 m (0 ft to 35,000 ft)

 $^{^{}st}$ Measured using a random vibration spectrum that simulates user environment.

 $[\]dagger$ Measured using a 2 ms half-sine pulse when the hard drive is in use.

Keyboard shortcuts

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

Some keys on your keyboard have two symbols on them. These keys can be used to type alternate characters or to perform secondary functions. The symbol shown on the lower part of the key refers to the character that is typed out when the key is pressed. If you press shift and the key, the symbol shown on the upper part of the key is typed out. For example, if you press **2**, **2** is typed out; if you press **Shift** + **2**, **@** is typed out.

The keys F1-F12 at the top row of the keyboard are function keys for multi-media control, as indicated by the icon at the bottom of the key. Press the function key to invoke the task represented by the icon. For example, pressing F1 mutes the audio (refer to the table below).

However, if the function keys F1-F12 are needed for specific software applications, multi-media functionality can be disabled by pressing \mathbf{Fn} + \mathbf{Esc} . Subsequently, multi-media control can be invoked by pressing \mathbf{Fn} and the respective function key. For example, mute audio by pressing \mathbf{Fn} + $\mathbf{F1}$.

NOTE: You can also define the primary behavior of the function keys (F1–F12) by changing **Function Key Behavior** in BIOS setup program.

Table 22. List of keyboard shortcuts

Function key	Redefined key (for multimedia control)	Behavior
F1	Fn + F1	Mute audio
F2	Fn + F2	Decrease volume
F3	Fn + F3	Increase volume
F4	Fn + F4	Mic Mute
F5	Fn + F5	Keyboard backlight (i) NOTE: Not applicable for non-backlight keyboard.
F6	Fn + F6	Decrease screen brightness
F7	Fn + F7	Increase screen brightness
F8	Fn + F8	Switch to external display
F10	Fn + F10	Print Screen
F11	Fn + F11	Home
F12	Fn + F12	End

The \mathbf{Fn} key is also used with selected keys on the keyboard to invoke other secondary functions.

Table 23. Secondary behavior

Function key	Behavior
Fn + Ctrl	Open application menu
Fn + Esc	Toggle Fn-key lock

Table 23. Secondary behavior (continued)

Function key	Behavior
Fn + Home	Home
Fn + End	End

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 24. Self-help resources

Self-help resources	Resource location
Information about Dell products and services	www.dell.com
My Dell	DELL
Tips	*
Contact Support	In Windows search, type Contact Support, and press Enter.
Online help for operating system	www.dell.com/support/windows
	www.dell.com/support/linux
Access top solutions, diagnostics, drivers and downloads, and learn more about your computer through videos, manuals and documents.	Your Dell computer is uniquely identified by a Service Tag or Express Service Code. To view relevant support resources for your Dell computer, enter the Service Tag or Express Service Code at www.dell.com/support. For more information on how to find the Service Tag for your computer, see Locate the Service Tag on your computer.
Dell knowledge base articles for a variety of computer concerns	 Go to www.dell.com/support. On the menu bar at the top of the Support page, select Support > Knowledge Base. In the Search field on the Knowledge Base page, type the keyword, topic, or model number, and then click or tap the search icon to view the related articles.

Contacting Dell

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

- (i) NOTE: Availability varies by country/region and product, and some services may not be available in your country/region.
- NOTE: If you do not have an active Internet connection, you can find contact information about your purchase invoice, packing slip, bill, or Dell product catalog.