

Latitude 5540

Owner's Manual

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.

Contents

Chapter 1: Views of Latitude 5540.....	8
Right.....	8
Left.....	9
Top.....	10
Front.....	11
Back.....	12
Bottom.....	12
Service Tag.....	13
Battery charge and status light	13
Chapter 2: Set up your Latitude 5540.....	14
Chapter 3: Specifications of Latitude 5540.....	16
Dimensions and weight.....	16
Processor.....	16
Chipset.....	18
Operating system.....	18
Memory.....	18
External ports.....	19
Internal slots.....	19
Ethernet.....	20
Wireless module.....	20
WWAN module.....	20
Audio.....	22
Storage.....	22
Media-card reader	23
Keyboard.....	23
Keyboard function keys.....	23
Camera.....	24
Touchpad.....	25
Power adapter.....	25
Battery.....	26
Display.....	28
Fingerprint reader (optional).....	29
Sensor	29
GPU—Integrated.....	29
GPU—Discrete.....	30
External display support.....	30
Hardware security.....	30
Smart-card reader.....	31
Contactless smart-card reader.....	31
Contacted smart-card reader.....	32
Operating and storage environment.....	33
Dell Support policy.....	33

ComfortView Plus.....	33
Using the privacy shutter.....	34
Dell Optimizer.....	34
Chapter 4: Working inside your computer.....	36
Safety instructions.....	36
Before working inside your computer.....	36
Safety precautions.....	37
Electrostatic discharge—ESD protection.....	37
ESD field service kit	38
Transporting sensitive components.....	39
After working inside your computer.....	39
BitLocker.....	39
Recommended tools.....	39
Screw list.....	40
Major components of Latitude 5540.....	41
Chapter 5: Removing and installing Customer Replaceable Units (CRUs).....	44
SIM card tray (Optional)	44
Removing the SIM card tray (Optional).....	44
Installing the SIM card tray (Optional).....	45
Base cover.....	46
Removing the base cover.....	46
Installing the base cover.....	48
Wireless card.....	51
Removing the WLAN card.....	51
Installing the WLAN card.....	52
WWAN card (Optional).....	53
Removing the 4G WWAN card (Optional).....	53
Installing the 4G WWAN card (Optional).....	54
Removing the 5G WWAN card (Optional).....	56
Installing the 5G WWAN card (Optional).....	57
Memory modules.....	58
Removing the memory module.....	58
Installing the memory module.....	59
Solid-state drive.....	60
Removing the M.2 2230 solid-state drive from Slot 1.....	60
Installing the M.2 2230 solid-state drive in Slot 1.....	61
Removing the M.2 2280 solid-state drive from Slot 1.....	63
Installing the M.2 2280 solid-state drive in Slot 1.....	64
Removing the M.2 2230 solid-state drive from Slot 2.....	65
Installing the M.2 2230 solid-state drive in Slot 2.....	66
Fan.....	67
Removing the fan.....	67
Installing the fan.....	67
Chapter 6: Removing and installing Field Replaceable Units (FRUs).....	69
Battery.....	69
Rechargeable Li-ion battery precautions.....	69

Removing the battery.....	69
Installing the battery.....	71
Assembly inner frame.....	73
Removing the assembly-inner frame.....	73
Installing the assembly-inner frame.....	74
Speakers.....	76
Removing the speakers.....	76
Installing the speakers.....	77
Coin-cell battery.....	78
Removing the coin-cell battery.....	78
Installing the coin-cell battery.....	79
Heat sink.....	80
Removing the heat sink (Discrete GPU).....	80
Installing the heat sink (Discrete GPU).....	81
Removing the heat sink (Integrated GPU).....	82
Installing the heat sink (Integrated GPU).....	83
System board.....	84
Removing the system board.....	84
Installing the system board.....	87
Power button.....	90
Removing the power button.....	90
Installing the power button.....	91
Power button with optional fingerprint reader.....	92
Removing the power button with optional fingerprint reader.....	92
Installing the power button with optional fingerprint reader.....	93
Keyboard.....	94
Removing the keyboard.....	94
Installing the keyboard.....	96
Display assembly.....	98
Removing the display assembly.....	98
Installing the display assembly.....	101
Display bezel.....	103
Removing the display bezel.....	103
Installing the display bezel.....	103
Display panel.....	104
Removing the display panel.....	104
Installing the display panel.....	107
Camera module.....	110
Removing the camera module.....	110
Installing the camera module.....	111
Display hinges.....	112
Removing the display hinges.....	112
Installing the display hinges.....	113
Display back cover.....	114
Removing the display back cover.....	114
Installing the display back cover.....	115
Display cable.....	116
Removing the display cable.....	116
Installing the display cable.....	117
Sensor board.....	118

Removing the sensor board.....	118
Installing the sensor board.....	119
Fingerprint reader (Optional).....	120
Removing the fingerprint reader (Optional).....	120
Installing the fingerprint reader (Optional).....	121
Smart-card reader.....	123
Removing the smart-card reader.....	123
Installing the smart-card reader.....	123
Dummy SIM-card slot filler.....	124
Removing the dummy SIM-card slot filler.....	124
Installing the dummy SIM-card slot filler.....	125
Palm-rest assembly.....	126
Removing the palm-rest assembly.....	126
Installing the palm-rest assembly.....	128
Chapter 7: Software.....	130
Operating system.....	130
Drivers and downloads.....	130
Chapter 8: BIOS Setup.....	131
Entering BIOS setup program.....	131
Navigation keys.....	131
F12 One Time Boot menu.....	131
System setup options.....	132
Updating the BIOS.....	143
Updating the BIOS in Windows.....	143
Updating the BIOS in Linux and Ubuntu.....	143
Updating the BIOS using the USB drive in Windows.....	143
Updating the BIOS from the F12 One-Time boot menu.....	144
System and setup password.....	144
Assigning a System Setup password.....	145
Deleting or changing an existing system setup password.....	145
Clearing CMOS settings.....	146
Clearing BIOS (System Setup) and System passwords.....	146
Chapter 9: Troubleshooting.....	147
Handling swollen rechargeable Li-ion batteries.....	147
Locate the Service Tag or Express Service Code of your Dell computer	147
Dell SupportAssist Pre-boot System Performance Check diagnostics.....	148
Running the SupportAssist Pre-Boot System Performance Check.....	148
Built-in self-test (BIST).....	148
M-BIST.....	148
LCD Power rail test (L-BIST).....	149
LCD Built-in Self Test (BIST).....	149
System-diagnostic lights.....	150
Recovering the operating system.....	151
Real-Time Clock (RTC Reset).....	151
Backup media and recovery options.....	151
Wi-Fi power cycle.....	151

Drain residual flea power (perform hard reset).....	151
Chapter 10: Getting help and contacting Dell.....	153

Views of Latitude 5540

Right



1. microSD-card slot

Reads from and writes to the microSD-card.

2. Universal audio jack

Connect headphones or a headset (headphone and microphone combo).

3. USB 3.2 Gen 1 port

Connect devices such as external storage devices and printers. Provides data transfer speeds up to 5 Gbps.

4. USB 3.2 Gen 1 port with PowerShare

Connect devices such as external storage devices and printers.

Provides data transfer speeds up to 5 Gbps. PowerShare enables you to charge your USB devices even when your computer is turned off.

NOTE: If the charge on your computer's battery is less than 10 percent, you must connect the power adapter to charge your computer, and USB devices connected to the PowerShare port.

NOTE: If a USB device is connected to the PowerShare port before the computer is turned off or in hibernate state, you must disconnect and connect it again to enable charging.

NOTE: Certain USB devices may not charge when the computer is turned off or in sleep state. In such cases, turn on the computer to charge the device.

5. HDMI 2.0 port

Connect to a TV, external display or another HDMI-in enabled device. Provides video and audio output.

6. Network port

Connect an Ethernet (RJ-45) cable from a router or a broadband modem for network or Internet access, with a transfer rate of 10/100/1000 Mbps.

7. Security-cable slot (wedge-shaped)

Connect a security cable to prevent unauthorized movement of your computer.

Left



1. Thunderbolt 4.0 port with Power Delivery and DisplayPort

Supports USB4, DisplayPort 1.4, Thunderbolt 4 and also enables you to connect to an external display using a display adapter. Provides data transfer rates of up to 40 Gbps for USB4 and Thunderbolt 4.

NOTE: You can connect a Dell Docking Station to the Thunderbolt 4 ports. For more information, search in the Knowledge Base Resource at www.dell.com/support.

NOTE: A USB Type-C to DisplayPort adapter (sold separately) is required to connect a DisplayPort device.

NOTE: USB4 is backward compatible with USB 3.2, USB 2.0, and Thunderbolt 3.

NOTE: Thunderbolt 4 supports two 4K displays or one 8K display.

2. Thunderbolt 4.0 port with Power Delivery and DisplayPort

Supports USB4, DisplayPort 1.4, Thunderbolt 4 and also enables you to connect to an external display using a display adapter. Provides data transfer rates of up to 40 Gbps for USB4 and Thunderbolt 4.

NOTE: You can connect a Dell Docking Station to the Thunderbolt 4 ports. For more information, search in the Knowledge Base Resource at www.dell.com/support.

NOTE: A USB Type-C to DisplayPort adapter (sold separately) is required to connect a DisplayPort device.

NOTE: USB4 is backward compatible with USB 3.2, USB 2.0, and Thunderbolt 3.

NOTE: Thunderbolt 4 supports two 4K displays or one 8K display.

3. Battery-status light

Indicates the battery-charge status.

Solid yellow—Battery charge is low.

Blinking yellow—Battery charge is critical.

4. Smart-card reader slot (optional)

Top



1. Power button with optional fingerprint reader

Press to turn on the computer if it is turned off, in sleep state, or in hibernate state.

When the computer is turned on, press the power button to put the computer into sleep state; press and hold the power button for 10 seconds to force shut-down the computer.

If the power button has a fingerprint reader, place your finger on the power button steadily to log in.

NOTE: The power-status light on the power button is available only on computers without the fingerprint reader. Computers that are shipped with the fingerprint reader that is integrated on the power button will not have the power-status light on the power button.

NOTE: You can customize the power-button behavior in Windows.

2. Keyboard

3. Fingerprint reader (optional)

Press your finger on the fingerprint reader to log in to your computer. The fingerprint reader enables your computer to recognize your fingerprints as a password.

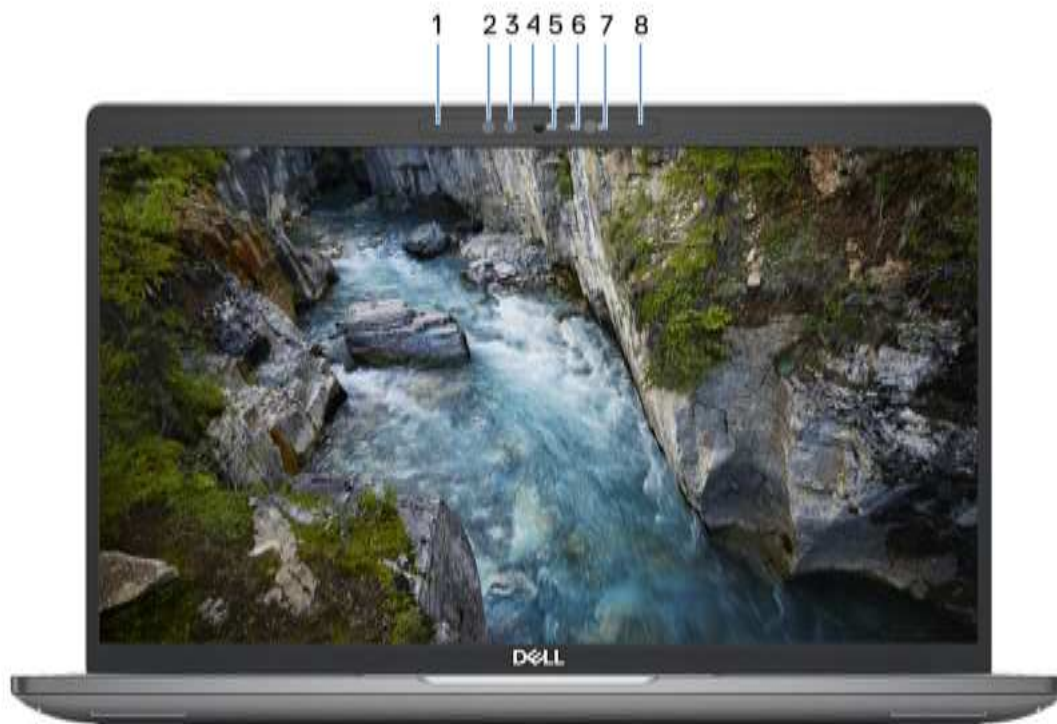
NOTE: Configure the fingerprint reader to register your fingerprint and enable access.

4. NFC/Contactless smart card reader (optional)

5. Touchpad

Move your finger on the touchpad to move the mouse pointer. Tap to left-click and two fingers tap to right-click.

Front



1. Left microphone

Provides digital sound input for audio recording and voice calls.

2. Infrared emitter (optional)

Emits infrared light, which enables the infrared camera to sense and track motion.

3. Infrared camera (optional)

Enhances security when paired with Windows Hello face authentication.

4. Camera shutter

Slide the privacy shutter to the left to access the camera lens.

5. Camera

Enables you to video chat, capture photos, and record videos.

6. Camera-status light

Turns on when the camera is in use.

7. Ambient-light sensor

The sensor detects the ambient light and automatically adjusts the display brightness.

8. Right microphone

Provides digital sound input for audio recording and voice calls.

Back

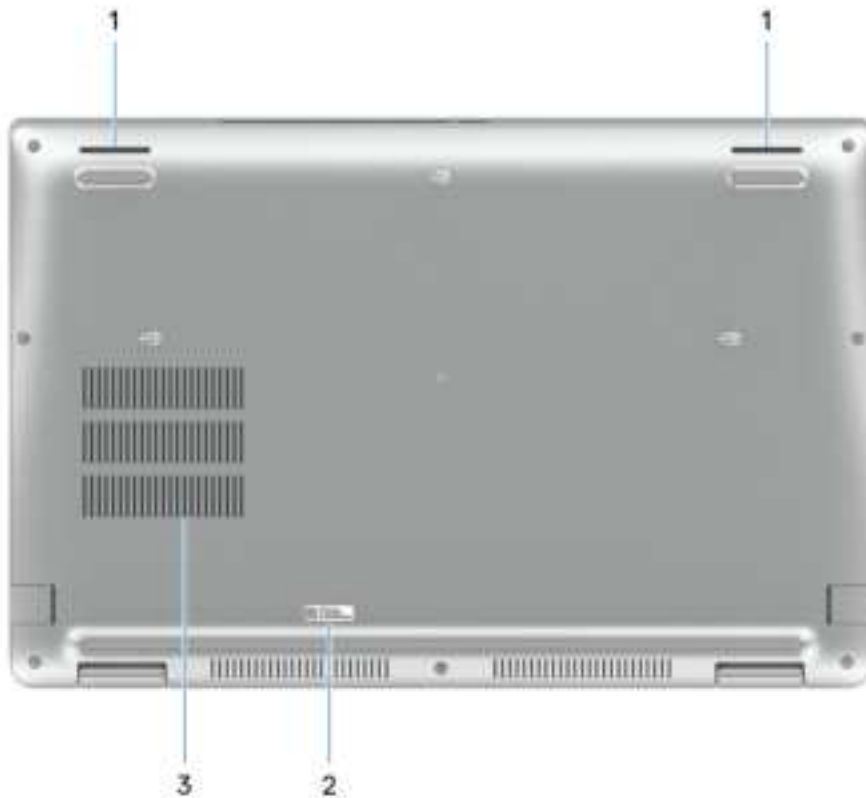


1. Nano-SIM card slot (optional)

Insert a nano-SIM card to connect to a mobile broadband network.

 **NOTE:** Availability of the nano-SIM card slot depends on the region and configuration ordered.

Bottom



1. Speakers

Provide audio output.

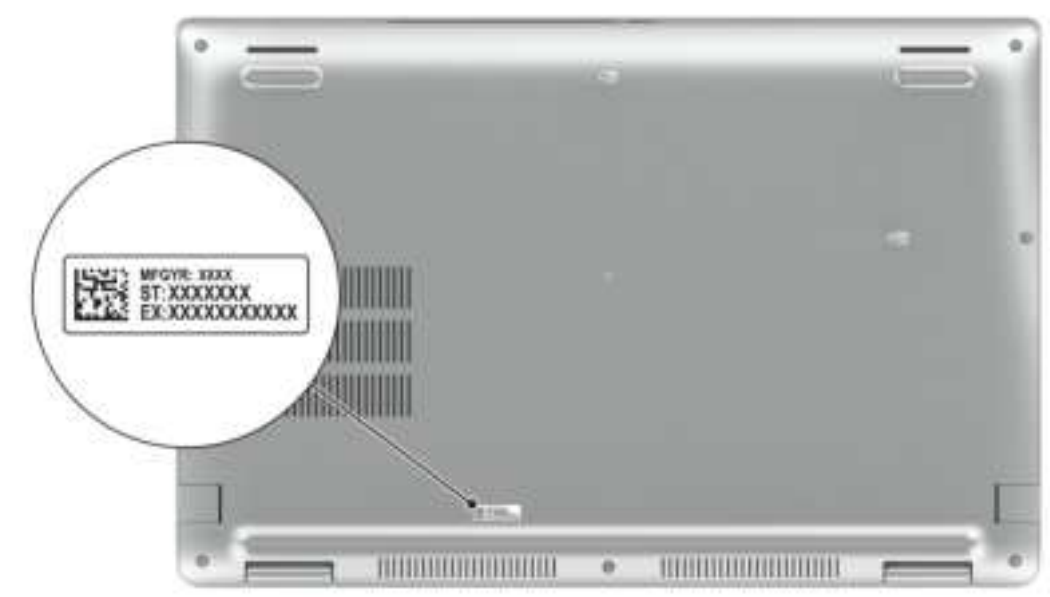
2. Service Tag label

The Service Tag is a unique alphanumeric identifier that enables Dell service technicians to identify the hardware components in your computer and access warranty information.

3. Fan vents

Service Tag

The service tag is a unique alphanumeric identifier that allows Dell service technicians to identify the hardware components in your computer and access warranty information.



Battery charge and status light

The following table lists the battery charge and status light behavior of your Latitude 5540.

Table 1. Battery charge and status light behavior

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.

Set up your Latitude 5540

About this task

NOTE: 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: To conserve battery power, the battery might enter power saving mode. Connect the power adapter and press the power button to turn on the computer.

2. Finish operating system setup.

For Ubuntu:

Follow the on-screen instructions to complete the setup. For more information about installing and configuring Ubuntu, search in the Knowledge Base Resource at www.dell.com/support.

For Windows:

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 2. Locate Dell apps

Resources	Description
	Dell Product Registration Register your computer with Dell.
	Dell Help & Support 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 Home PCs User's Guide on www.dell.com/serviceabilitytools.  NOTE: In SupportAssist, click the warranty expiry date to renew or upgrade your warranty.
	Dell Update Updates your computer with critical fixes and latest device drivers as they become available. For more information on using Dell Update, search in the Knowledge Base Resource at www.dell.com/support.
	Dell Digital Delivery Download software applications, which are purchased but not preinstalled on your computer. For more information on using Dell Digital Delivery, search in the Knowledge Base Resource at www.dell.com/support.

Specifications of Latitude 5540

Dimensions and weight

The following table lists the height, width, depth, and weight of your Latitude 5540.

Table 3. Dimensions and weight

Description	Values
Height:	
Front height	20.80 mm (0.82 in.)
Rear height	22.80 mm (0.90 in.)
Width	357.80 mm (14.09 in.)
Depth	233.30 mm (9.19 in.)
Weight  NOTE: The weight of your computer depends on the configuration ordered and manufacturing variability.	1.613 kg (3.56 lb)

Processor

The following table lists the details of the processors supported by your Latitude 5540.

Table 4. Processor

Description	Option one	Option two	Option three	Option four	Option five	Option six	Option seven	Option eight
Processor type	13 th Generation Intel Core i3-1315U	13 th Generation Intel Core i5-1335U	13 th Generation Intel Core i5-1345U vPro	13 th Generation Intel Core i5-1340P	13 th Generation Intel Core i5-1350P vPro	13 th Generation Intel Core i7-1355U	13 th Generation Intel Core i7-1365U vPro	13 th Generation Intel Core i7-1370P vPro
Processor wattage	15 W	15 W	15 W	28 W	28 W	15 W	15 W	28 W
Processor total core count	6	10	10	12	12	10	10	14
Performance-cores	2	2	2	4	4	2	2	6
Efficient-cores	4	8	8	8	8	8	8	8
Processor total thread counts	8	12	12	16	16	12	12	20
 NOTE: Intel® Hyper-Threading Technology is only available on Performance-cores.								
Processor speed	Up to 4.50 GHz	Up to 4.60 GHz	Up to 4.70 GHz	Up to 4.60 GHz	Up to 4.70 GHz	Up to 5 GHz	Up to 5.20 GHz	Up to 5.20 GHz
Performance-cores frequency								
Processor base frequency	1.20 GHz	1.30 GHz	1.60 GHz	1.90 GHz	1.90 GHz	1.70 GHz	1.80 GHz	1.90 GHz
Maximum turbo frequency	4.50 GHz	4.60 GHz	4.70 GHz	4.60 GHz	4.70 GHz	5 GHz	5.20 GHz	5.20 GHz
Efficient-cores frequency								
Processor base frequency	0.90 GHz	0.90 GHz	1.20 GHz	1.40 GHz	1.40 GHz	1.20 GHz	1.30 GHz	1.40 GHz
Maximum turbo frequency	3.30 GHz	3.40 GHz	3.50 GHz	3.40 GHz	3.50 GHz	3.70 GHz	3.90 GHz	3.90 GHz
Processor cache	10 MB	12 MB	12 MB	12 MB	12 MB	12 MB	12 MB	24 MB
Integrated graphics	Intel UHD Graphics	Intel Iris Xe Graphics	Intel Iris Xe Graphics	Intel Iris Xe Graphics	Intel Iris Xe Graphics	Intel Iris Xe Graphics	Intel Iris Xe Graphics	Intel Iris Xe Graphics

Chipset

The following table lists the details of the chipset supported by your Latitude 5540.

Table 5. Chipset

Description	Values
Chipset	Integrated in the processor
Processor	13 th Generation Intel Core i3/i5/i7
DRAM bus width	64-bit
Flash EPROM	32 MB for non-vPro, 32 MB + 16 MB for vPro/vPro Essentials
PCIe bus	Up to Gen 4

Operating system

Your Latitude 5540 supports the following operating systems:

- Windows 11 Home, 64-bit
- Windows 11 Pro, 64-bit
- Windows 11 Pro downgrade (Win 10 Pro image FI + Win 11 Pro DPK)
- Ubuntu 22.04 LTS, 64-bit

Memory

The following table lists the memory specifications of your Latitude 5540.

Table 6. Memory specifications

Description	Values
Memory slots	Two-SODIMM slots
Memory type	• Single-channel DDR4 • Dual-channel DDR4 • Single-channel DDR5 • Dual-channel DDR5
Memory speed	• 3200 MT/s • 4800 MT/s • 5200 MT/s
Maximum memory configuration	64 GB
Minimum memory configuration	8 GB
Memory size per slot	8 GB, 16 GB, or 32 GB
Memory configurations supported	• 8 GB, 1 x 8 GB, DDR4, 3200 MT/s, single-channel • 16 GB, 2 x 8 GB, DDR4, 3200 MT/s, dual-channel • 16 GB, 1 x 16 GB, DDR4, 3200 MT/s, single-channel • 32 GB, 2 x 16 GB, DDR4, 3200 MT/s, dual-channel • 64 GB, 2 x 32 GB, DDR4, 3200 MT/s, dual-channel

Table 6. Memory specifications (continued)

Description	Values
	8 GB, 1 x 8 GB, DDR5, 4800 MT/s, single-channel 16 GB, 2 x 8 GB, DDR5, 4800 MT/s, dual-channel 16 GB, 1 x 16 GB, DDR5, 4800 MT/s, single-channel 32 GB, 2 x 16 GB, DDR5, 4800 MT/s, dual-channel 64 GB, 2 x 32 GB, DDR5, 4800 MT/s, dual-channel 8 GB, 1 x 8 GB, DDR5, 5200 MT/s, single-channel 16 GB, 2 x 8 GB, DDR5, 5200 MT/s, dual-channel 16 GB, 1 x 16 GB, DDR5, 5200 MT/s, single-channel 32 GB, 2 x 16 GB, DDR5, 5200 MT/s, dual-channel 64 GB, 2 x 32 GB, DDR5, 5200 MT/s, dual-channel

External ports

The following table lists the external ports of your Latitude 5540.

Table 7. External ports

Description	Values
Network port	One RJ-45 port
USB ports	- Two Thunderbolt 4 port Power Delivery and DisplayPort NOTE: You can connect a Dell Docking Station to this port. For more information, search in the Knowledge Base Resource at www.dell.com/support. - One USB 3.2 Gen 1 port with PowerShare - One USB 3.2 Gen 1 port
Audio port	One Universal audio jack
Video port	One HDMI 2.0 port
Media-card reader	One microSD-card slot
Power-adaptor port	USB Type-C power input
Security-cable slot	One security-cable slot (wedge-shaped)

Internal slots

The following table lists the internal slots of your Latitude 5540.

Table 8. Internal slots

Description	Values
M.2	- One M.2 2230 slot for WiFi and Bluetooth combo card - One M.2 2230/2280 slot for solid-state drive - One M.2 2230 slot for solid-state drive - One M.2 3042/3052 for WWAN card NOTE: To learn more about the features of different types of M.2 cards, search in the Knowledge Base Resource at www.dell.com/support.

Ethernet

The following table lists the wired Ethernet Local Area Network (LAN) specifications of your Latitude 5540.

Table 9. Ethernet specifications

Description	Values
Model number	Intel I219-V/Intel I219-LM
Transfer rate	10/100/1000 Mbps

Wireless module

The following table lists the Wireless Local Area Network (WLAN) modules that are supported on your Latitude 5540.

Table 10. Wireless module specifications

Description	Option one	Option two
Model number	Realtek RTL8852BE	Intel AX211
Transfer rate	Up to 1201 Mbps	Up to 2400 Mbps
Frequency bands supported	2.4 GHz/5 GHz	2.4 GHz/5 GHz/6 GHz
Wireless standards	• WiFi 802.11a/b/g • Wi-Fi 4 (WiFi 802.11n) • Wi-Fi 5 (WiFi 802.11ac) • Wi-Fi 6 (WiFi 802.11ax)	• WiFi 802.11a/b/g • Wi-Fi 4 (WiFi 802.11n) • Wi-Fi 5 (WiFi 802.11ac) • Wi-Fi 6E (WiFi 802.11ax)  NOTE: Wi-Fi 6 is supported in regions where Wi-Fi 6E is unavailable.
Encryption	• 64-bit/128-bit WEP • AES-CCMP • TKIP	• 64-bit/128-bit WEP • AES-CCMP • TKIP
Bluetooth wireless card	Bluetooth 5.3	Bluetooth 5.3
	 NOTE: The version of the Bluetooth wireless card may vary depending on the operating system that is installed on your computer.	

WWAN module

The following table lists the Wireless Wide Area Network (WWAN) module supported on your Latitude 5540.

Table 11. WWAN module specifications

Description	Option one	Option two
Model number	DW5823, Intel XMM 7560 R Global LTE-Advanced, CAT16	DW5931e, Intel 5G 5000 Global Gigabit NR/LTE, 3GPP Release 15
Form factor	M.2 3042 Key-B	M.2 3042 Key-B
Host interface	PCIe Gen2	PCIe Gen3

Table 11. WWAN module specifications (continued)

Description	Option one	Option two
Network standard	LTE FDD/TDD, WCDMA/HSPA+,GPS/GLONASS/BDS/Galileo	NR FR1(Sub6) FDD/TDD, LTE FDD/TDD, WCDMA/HSPA+, GPS/GLONASS/Galileo/BDS/QZSS
Transfer data rate	- Up to 1 Gbps DL (CAT16) - Up 150 Mbps UL	- SA: DL 4.67 Gbps/UL 1.25 Gbps - NSA: DL 3.74 Gbps/UL 700 Mbps - LTE: DL 1.6 Gbps (CAT19)/UL 150 Mbps - UMTS: DL 384 kbps/UL 384 kbps - DL DC-HSPA+: 42 Mbps (CAT24)/UL 11.5 Mbps (CAT7)
Operating frequency bands	- LTE(B1, B2, B3, B4, B5, B7, B8, B12, B13, B14, B17, B18, B19, B20, B25, B26, B28, B29, B30, B32, B34, B38, B39, B40, B41(HPUE), B42, B43, B46(receiver only), B48, B66, B71 - WCDMA/HSPA+(1, 2, 4, 5, 8)	- NR(n1, n2, n3, n5, n7, n8, n20, n25, n28, n30, n38, n40, n41, n48, n66, n71, n77, n78, n79) - LTE (B1, B2, B3, B4, B5, B7, B8, B12, B13, B14, B17, B18, B19, B20, B25, B26, B28, B29, B30, B32, B34, B38, B39, B40, B41, B42, B43, B46, B48, B66, B71*) - WCDMA/HSPA+ (1, 2, 4, 5, 8)
Power supply	DC 3.135 V to 4.40 V, typical 3.30 V	DC 3.135 V to 4.4 V, Typical 3.3 V
SIM card	Supported through external SIM slot	Supported through external SIM slot
eSIM with dual SIM (DSSA)	Supported (the availability of eSIM functionality embedded on the module is dependent on the region and specific carrier requirements)	Supported
Antenna diversity	Supported	Supported
Radio On/Off	Supported	Supported
Wake on wireless	Supported	Supported
Temperature	- Normal operating temperature: -10°C to + 55°C - Extended Operating temperature: -20°C to +65°C	- Normal operating temperature: -10°C to + 55°C - Extended Operating temperature: -30°C to +75°C - Storage temperature: -40°C to +85°C
Antenna connector	- WWAN Main Antenna x 4 - Supports 4x4 MIMO	- WWAN Main Antenna x 4 - Supports 4x4 MIMO
 NOTE: For instructions on how to find your computer's IMEI (International Mobile Equipment Identity) number, search in the Knowledge Base Resource at www.dell.com/support .		

Audio

The following table lists the audio specifications of your Latitude 5540.

Table 12. Audio specifications

Description		Values
Audio controller		Realtek Waves, MaxxAudio 12.0
Stereo conversion		Supported
Internal audio interface		High definition audio interface
External audio interface		Universal Audio Jack/HDMI 2.0 port
Number of speakers		2
Internal-speaker amplifier		Not supported
External volume controls		Keyboard shortcut controls
Speaker output:		
	Average speaker output	2 W
	Peak speaker output	2 W
Subwoofer output		Not supported
Microphone		Digital-array microphones in camera assembly

Storage

This section lists the storage options on your Latitude 5540.

Your Latitude 5540 supports one of the following options

- One M.2 2230/2280 solid-state drive or optional dual storage
 -  **NOTE:** SSD Slot 1 on the system board supports M.2 2230 or M.2 2280 solid-state drives.
 -  **NOTE:** SSD Slot 2 on the system board only supports M.2 2230 solid-state drives.
- One M.2 2230 self-encrypting drive

Table 13. Storage specifications

Storage type	Interface type	Capacity
M.2 2230 solid-state drive	PCIe Gen4 x4 NVMe, up to 64 Gbps	Up to 2 TB
M.2 2280 solid-state drive	PCIe Gen4 x4 NVMe, up to 64 Gbps	Up to 1 TB

Media-card reader

The following table lists the media-card reader specifications of your Latitude 5540.

Table 14. Media-card reader (standard offering)

Media supported (Maximum capacity supported will vary by Flash Media Types)	
Media Supported	Micro Secure Digital (mSD) Micro Secure Digital High Capacity (mSDHC) Micro Secure Digital Extended Capacity (mSDXC)
Support Specification Versions	microSD 4.0 card

Keyboard

The following table lists the keyboard specifications of your Latitude 5540.

Table 15. Keyboard specifications

Description	Values
Keyboard type	- Standard backlit keyboard - Standard non-backlit keyboard
Keyboard layout	QWERTY
Number of keys	- English US, English International, Arabic, Canada bilingual (MUI), Chinese traditional, French-Canadian, Greek, Hebrew, Korean, Russian, Thai, Ukrainian: 99 keys - French-Canadian Quebec, Brazilian, Belgian, Bulgarian, Czech & Slovakian (MUI), Danish, English UK, Estonian, French European, German, Hungarian, Italian, Nordic (MUI), Norwegian, Portugese Iberian, Slovenian, Spanish (Castillian), Spanish (Latin America), Swedish/Finnish, Swiss European (MUI), Turkish, Turkish F: 100 keys - Japanese: 103 keys
Keyboard size	X= 18.05 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 desired key. To perform secondary functions, press Fn and the desired key.  NOTE: You can define the primary behavior of the function keys (F1–F12) by changing Function Key Behavior in the BIOS setup program.

Keyboard function keys

The **F1-F12** keys at the top of the keyboard are function keys. By default, these keys are used to perform specific functions defined by the software application in use.

You can run the secondary tasks that are indicated by the symbols on the function keys by pressing the function key with **fn**, for example, **fn** and **F1**. See the table below for the list of secondary tasks and the key combinations to run them.

 **NOTE:** Keyboard characters may differ depending on the keyboard language configuration. Keys that are used for tasks remain the same, regardless of the keyboard language.

 **NOTE:** You can define the primary behavior of function keys in the **Function Key Behavior** menu of the BIOS setup program.

Table 16. Secondary tasks of keyboard keys

Key combination for task	What the task does
fn and F1	Operating system and application specific F1 behavior
fn and F2	Operating system and application specific F2 behavior
fn and F3	Operating system and application specific F3 behavior
fn and F4	Operating system and application specific F4 behavior
fn and F5	Operating system and application specific F5 behavior
fn and F6	Operating system and application specific F6 behavior
fn and F8	Operating system and application specific F8 behavior
fn and F9	Operating system and application specific F9 behavior
fn and F10	Operating system and application specific F10 behavior
fn and F11	Operating system and application specific F11 behavior
fn and F12	Operating system and application specific F12 behavior
fn and Right Ctrl	Open application menu
fn and Cursor up	Page up
fn and Cursor down	Page down

Keys with alternate characters

There are other keys on your keyboard with alternate characters. The symbols that are shown at the bottom of these keys are the main characters that are displayed when the key is pressed; the symbols that are shown at the top of these keys are displayed when the key is pressed with the shift key. For example, if you press **2**, **2** is displayed; if you press **Shift** and **2**, **@** is displayed.

Camera

The following table lists the camera specifications of your Latitude 5540.

Table 17. Camera specifications

Description	Values
Number of cameras	One
Camera type	- FHD RGB camera - FHD RGB + IR camera - FHD RGB+IR camera with Ambient Light Sensor, Express Sign-In with Presence Detection and Intelligent Privacy
Camera location	Front camera
Camera sensor type	CMOS sensor technology
Camera resolution:	

Table 17. Camera specifications (continued)

Description		Values
	Still image	2.07 megapixel
	Video	1920 x 1080 (FHD) at 30 fps
Infrared camera resolution:		
	Still image	0.23 megapixels
	Video	640 x 360 at 30 fps
Diagonal viewing angle:		
	Camera	80 degrees
	Infrared camera	86.6 degrees

Touchpad

The following table lists the touchpad specifications of your Latitude 5540.

Table 18. Touchpad specifications

Description		Values
Touchpad resolution:		>300 DPI
Touchpad dimensions:		
	Horizontal	115 mm (4.52 in.)
	Vertical	67 mm (2.64 in.)
Touchpad gestures		For more information about touchpad gestures available on: - Windows, see the Microsoft knowledge base article at support.microsoft.com - Ubuntu, see ubuntu.com/support

Power adapter

The following table lists the power adapter specifications of your Latitude 5540.

Table 19. Power adapter specifications

Description		Option one	Option two	Option three
Type		60 W AC adapter, USB-C 60 W AC adapter, USB-C, 2-pin	65 W AC adapter	100 W AC adapter, USB-C
Power-adapter dimensions:				
	Height	22 mm (0.86 in.)	28 mm (1.10 in.)	122 mm (4.80 in.)
	Width	55 mm (2.16 in.)	112 mm (4.41 in.)	60 mm (2.36 in.)
	Depth	66 mm (2.59 in.)	26.50 (1.04 in.)	26.50 (1.04 in.)
Input voltage		100 VAC–240 VAC	100 VAC–240 VAC	100 VAC–240 VAC

Table 19. Power adapter specifications (continued)

Description	Option one	Option two	Option three
Input frequency	50 Hz–60 Hz	50 Hz–60 Hz	50 Hz–60 Hz
Input current (maximum)	1.70 A	1.70 A	1.70 A
Output current (continuous)	20 V/3 A (Continuous) 15 V/3 A (Continuous) 9 V/3 A (Continuous) 5 V/3 A (Continuous)	20 V/3.25 A (Continuous) 15 V/3 A (Continuous) 9 V/3 A (Continuous) 5 V/3 A (Continuous)	20 V/5 A (Continuous) 15 V/3 A (Continuous) 9 V/3 A (Continuous) 5 V/3 A (Continuous)
Rated output voltage	20 VDC/15 VDC/9 VDC/5 VDC	20 VDC/15 VDC/9 VDC/5 VDC	20 VDC/15 VDC/9 VDC/5 VDC
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	-20°C to 70°C (-4°F to 158°F)	-40°C to 70°C (-40°F to 158°F)	-40°C to 70°C (-40°F to 158°F)
 CAUTION: Operating and storage temperature ranges may differ among components, so operating or storing the device outside these ranges may impact the performance of specific components.			

Battery

The following table lists the battery specifications of your Latitude 5540.

Table 20. Battery specifications

Description	Option one	Option two	Option three	Option four
Battery type	3 cell, 42 WHr, lithium-ion, ExpressCharge + ExpressCharge Boost	3 cell, 42 WHr, lithium-ion, Long Cycle Life + ExpressCharge	3 cell, 54 WHr, lithium-ion, ExpressCharge + ExpressCharge Boost	3 cell, 54 WHr, lithium-ion, Long Cycle Life + ExpressCharge
Battery voltage	11.40 VDC	11.40 VDC	11.40 VDC	11.40 VDC
Battery weight (minimum)	0.19 kg (0.41 lb)	0.19 kg (0.41 lb)	0.22 kg (0.48 lb)	0.22 kg (0.48 lb)
Battery dimensions:				
Height	5.73 mm (0.22 in.)	5.73 mm (0.22 in.)	5.73 mm (0.22 in.)	5.73 mm (0.22 in.)
Width	263 mm (10.35 in.)	263 mm (10.35 in.)	263 mm (10.35 in.)	263 mm (10.35 in.)
Depth	68.90 mm (2.71 in.)	68.90 mm (2.71 in.)	68.90 mm (2.71 in.)	68.90 mm (2.71 in.)
Temperature range:				

Table 20. Battery specifications (continued)

Description		Option one	Option two	Option three	Option four
	Operating	- Charge: 0°C to 45°C (32°F to 113°F) - Discharge: 0°C to 70°C (32°F to 158°F)	- Charge: 0°C to 45°C (32°F to 113°F) - Discharge: 0°C to 70°C (32°F to 158°F)	- Charge: 0°C to 45°C (32°F to 113°F) - Discharge: 0°C to 70°C (32°F to 158°F)	- Charge: 0°C to 45°C (32°F to 113°F) - Discharge: 0°C to 70°C (32°F to 158°F)
	Storage	-20°C to 65°C (4°F to 149°F)	-20°C to 65°C (4°F to 149°F)	-20°C to 65°C (4°F to 149°F)	-20°C to 65°C (4°F to 149°F)
Battery 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.
Battery charging time (approximate) 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, <i>Me and My Dell</i> on www.dell.com .		Express Charge Method: 0°C to 15°C maximum allowable charge time from 0% to 100% RSOC is 4 hours 16°C to 45°C normal express charge 46°C to 50°C maximum allowable charge time from 0% to 100% RSOC is 3 hours Standard Charge/ Predominately AC User Charge Method: 0°C to 15°C maximum allowable charge time from 0% to 100% RSOC is 4 hours 16°C to 50°C maximum allowable charge time from 0% to 100% RSOC is 3 hours Express Charge Boost Charge Method (Fast Charge for Initial 35%): 16°C to 45°C target charge time from 0% to 35% RSOC is 20 mins for Accelerated Charge	Express Charge Method: 0°C to 15°C maximum allowable charge time from 0% to 100% RSOC is 4 hours 16°C to 45°C normal express charge 46°C to 50°C maximum allowable charge time from 0% to 100% RSOC is 3 hours Standard Charge/ Predominately AC User Charge Method: 0°C to 15°C maximum allowable charge time from 0% to 100% RSOC is 4 hours 16°C to 50°C maximum allowable charge time from 0% to 100% RSOC is 3 hours	Express Charge Method: 0°C to 15°C maximum allowable charge time from 0% to 100% RSOC is 4 hours 16°C to 45°C normal express charge 46°C to 50°C maximum allowable charge time from 0% to 100% RSOC is 3 hours Standard Charge/ Predominately AC User Charge Method: 0°C to 15°C maximum allowable charge time from 0% to 100% RSOC is 4 hours 16°C to 50°C maximum allowable charge time from 0% to 100% RSOC is 3 hours Express Charge Boost Charge Method (Fast Charge for Initial 35%): 16°C to 45°C target charge time from 0% to 35% RSOC	Express Charge Method: 0°C to 15°C maximum allowable charge time from 0% to 100% RSOC is 4 hours 16°C to 45°C normal express charge 46°C to 50°C maximum allowable charge time from 0% to 100% RSOC is 3 hours Standard Charge/ Predominately AC User Charge Method: 0°C to 15°C maximum allowable charge time from 0% to 100% RSOC is 4 hours 16°C to 50°C maximum allowable charge time from 0% to 100% RSOC is 3 hours

Table 20. Battery specifications (continued)

Description	Option one	Option two	Option three	Option four
			is 20 mins for Accelerated Charge	
Coin-cell battery	CR2032	CR2032	CR2032	CR2032
 CAUTION: Operating and storage temperature ranges may differ among components, so operating or storing the device outside these ranges may impact the performance of specific components.  CAUTION: 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.				

Display

The following table lists the display specifications of your Latitude 5540.

Table 21. Display specifications

Description		Option one	Option two	Option three
Display type		15-inch Full High Definition (FHD)	15-inch Full High Definition (FHD)	15-inch Full High Definition (FHD), ComfortView Plus Low Blue Light, Battery Saving
Touch options		No	Yes	No
Display-panel technology		In-Plane Switching (IPS)	In-Plane Switching (IPS)	In-Plane Switching (IPS)
Display-panel dimensions (active area):				
	Height	193.60 mm (7.62 in.)	193.60 mm (7.62 in.)	193.60 mm (7.62 in.)
	Width	344.20 mm (13.55 in.)	344.20 mm (13.55 in.)	344.20 mm (13.55 in.)
	Diagonal	396 mm (15.60 in.)	396 mm (15.60 in.)	396 mm (15.60 in.)
Display-panel native resolution		1920 x 1080	1920 x 1080	1920 x 1080
Luminance (typical)		250 nits	250 nits	400 nits
Megapixels		2.07	2.07	2.07
Color gamut		45% NTSC	45% NTSC	100% sRGB
Pixels Per Inch (PPI)		141	141	141
Contrast ratio (typical)		700:1	700:1	800:1
Response time (max)		35 ms	35 ms	35 ms
Refresh rate		60 Hz	60 Hz	60 Hz
Horizontal view angle		80 +/- degrees	80 +/- degrees	80 +/- degrees

Table 21. Display specifications (continued)

Description	Option one	Option two	Option three
Vertical view angle	80 +/- degrees	80 +/- degrees	80 +/- degrees
Pixel pitch	0.179 x 0.179 mm	0.179 x 0.179 mm	0.179 x 0.179 mm
Power consumption (maximum)	4.60 W	4.60 W	4.50 W
Anti-glare vs glossy finish	Anti-glare	Anti-glare	Anti-glare

Fingerprint reader (optional)

The following table lists the specifications of the optional fingerprint-reader of your Latitude 5540.

Table 22. Fingerprint reader specifications

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

Sensor

The following table lists the sensor of your Latitude 5540.

Table 23. Sensor

Sensor support
Ambient Light Sensor
Accelerometer in the base: ST Micro LIS2DW12TR
Accelerometer in the hinge-up (Upsell config with Emza/ALS/IR camera): ST Micro LNG2DMTR

GPU—Integrated

The following table lists the specifications of the integrated Graphics Processing Unit (GPU) supported by your Latitude 5540.

Table 24. GPU—Integrated

Controller	External display support	Memory size	Processor
Intel UHD Graphics	One HDMI 2.0 port	single-channel memory	13 th Generation Intel Core i3
Intel Iris Xe Graphics	One HDMI 2.0 port	dual-channel memory	13 th Generation Intel Core i5/17

GPU—Discrete

The following table lists the specifications of the discrete Graphics Processing Unit (GPU) supported by your Latitude 5540.

Table 25. GPU—Discrete

Controller	Memory size	Memory type
NVIDIA GeForce MX550	2 GB	GDDR6

External display support

The following table lists the external display support for your Latitude 5540.

Table 26. External display support

Graphics card	Supported external displays with laptop display enabled	Supported external displays with laptop display disabled
Intel Iris X ^e Graphics	3	4
Intel UHD Graphics	3	4
 NOTE: For more information about external display support, see the External Display Connection Guide on www.dell.com/support .		

Hardware security

The following table lists the hardware security of your Latitude 5540.

Table 27. Hardware security

Hardware security
Trusted Platform Module (TPM) 2.0 discrete
FIPS 140-2 certification for TPM
TCG Certification for TPM (Trusted Computing Group)
Finger Print 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

Smart-card reader

Contactless smart-card reader

This section lists the contactless smart-card reader specifications of your Latitude 5540.

Table 28. Contactless smart-card reader specifications

Title	Description	Dell ControlVault 3 contactless smart-card reader with NFC
Felica Card Support	Reader and software capable of supporting Felica contactless cards	Yes
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
NFC Proximity OS Interface	Enumerates NFP (Near Field Proximity) device for OS to utilize	Yes
PC/SC OS interface	Personal Computer/Smart Card specification for integration of hardware readers into personal computer environments	Yes
CCID driver compliance	Common driver support for Integrated Circuit Card Interface Device for OS level drivers	Yes
Dell ControlVault support	Device connects to Dell ControlVault for usage and processing	Yes

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

Table 29. Supported cards

Manufacturer	Card
HID	jCOP readertest3 A card (14443a)

Table 29. Supported cards (continued)

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

Contacted smart-card reader

The following table lists the contacted smart-card reader specifications of your Latitude 5540.

Table 30. Contacted smart-card reader specifications

Title	Description	Dell ControlVault 3 smart-card reader
ISO 7816 -3 Class A Card Support	Reader capable of reading 5V powered smart mcard	Yes
ISO 7816 -3 Class B Card Support	Reader capable of reading 3V powered smart card	Yes
ISO 7816 -3 Class C Card support	Reader capable of reading 1.8V powered smart card	Yes
ISO 7816-1 Compliant	Specification for the reader	Yes
ISO 7816 -2 Compliant	Specification for smart card device physical characteristics (size, location of connection points, etc.)	Not applicable
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) smart card standards as posted to www.emvco.com	Yes
EMVCo Certified	Formally certified based on EMVCO smart card standards	Yes
PC/SC OS interface	Personal Computer/Smart Card specification for integration of hardware	Yes