Specifications of Precision 3580

Dimensions and weight

The following table lists the height, width, depth, and weight of your Precision 3580.

Table 3. Dimensions and weight

| D | escription | 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 i 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 Precision 3580.

Table 4. Processor

| Description | Option one | Option two | Option three | Option four | Option five | Option six |
|--|---|---|---|--|--|---|
| Processor type | 13 th Generation Intel Core i5-1335U | 13 th Generation Intel Core i7-1355U | 13 th Generation Intel Core i5-1340P | 13 th Generation Intel Core i5-1350P vPro | 13 th Generation Intel Core i7-1360P | 13 th Generation Intel Core i7-1370P vPro |
| Processor wattage | 15 W | 15 W | 28 W | 28 W | 28 W | 28 W |
| Processor total core count | 10 | 10 | 12 | 12 | 12 | 14 |
| Performance- cores | 2 | 2 | 4 | 4 | 4 | 6 |
| Efficient-cores | 8 | 8 | 8 | 8 | 8 | 8 |
| Processor total thread counts | 12 | 12 | 16 | 16 | 16 | 20 |
| NOTE: Intel Hyper- Threading Technology is only available on Performanc e-cores. | | | | | | |
| Processor speed | Up to 4.60 GHz | Up to 5 GHz | Up to 4.60 GHz | Up to 4.70 GHz | Up to 5 GHz | Up to 5.20 GHz |
| Performance-cor | es frequency | <u> </u> | <u> </u> | | | |
| Processor base frequency | 1.30 GHz | 1.70 GHz | 1.90 GHz | 1.90 GHz | 2.20 GHz | 1.90 GHz |
| Maximum turbo frequency | 4.60 GHz | 5 GHz | 4.60 GHz | 4.70 GHz | 5 GHz | 5.20 GHz |
| Efficient-cores fr | equency | • | • | | | |
| Processor base frequency | 0.90 GHz | 1.20GHz | 1.40 GHz | 1.40 GHz | 1.60 GHz | 1.40 GHz |
| Maximum turbo frequency | 3.40 GHz | 3.70 GHz | 3.40 GHz | 3.50 GHz | 3.70 GHz | 3.90 GHz |
| Processor cache | 12 MB | 12 MB | 12 MB | 12 MB | 18 MB | 24 MB |
| Integrated 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 Precision 3580.

Table 5. Chipset

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

Operating system

Your Precision 3580 supports the following operating systems:

Memory

The following table lists the memory specifications of your Precision 3580.

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 MHz 4800 MHz |
| 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 MHz, single-channel 16 GB, 2 x 8 GB, DDR4, 3200 MHz, dual-channel 16 GB, 1 x 16 GB, DDR4, 3200 MHz, single-channel 32 GB, 2 x 16 GB, DDR4, 3200 MHz, dual-channel 64 GB, 2 x 32 GB, DDR4, 3200 MHz, dual-channel 8 GB, 1 x 8 GB, DDR5, 4800 MHz, single-channel 16 GB, 2 x 8 GB, DDR5, 4800 MHz, dual-channel 16 GB, 1 x 16 GB, DDR5, 4800 MHz, single-channel 32 GB, 2 x 16 GB, DDR5, 4800 MHz, dual-channel 64 GB, 2 x 32 GB, DDR5, 4800 MHz, dual-channel 64 GB, 2 x 32 GB, DDR5, 4800 MHz, dual-channel |

External ports

The following table lists the external ports of your Precision 3580.

Table 7. External ports

| Description | Values |
|---------------------|--|
| Network port | One RJ-45 port |
| USB ports | Two Thunderbolt 4 port with DisplayPort Alt Mode/USB Type-C/USB4/Power Delivery 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 port |
| Video port | One HDMI 2.0 port |
| Media-card reader | One smart card reader slot (optional) |
| Power-adapter port | Type-C adapter |
| Security-cable slot | One security-cable slot (wedge-shaped) |

Internal slots

The following table lists the internal slots of your Precision 3580.

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 slot for WWAN (optional) 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 Precision 3580.

Table 9. Ethernet specifications

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

Wireless module

The following table lists the Wireless Local Area Network (WLAN) modules supported on your Precision 3580.

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) |
| Encryption | 64-bit/128-bit WEPAES-CCMPTKIP | 64-bit/128-bit WEPAES-CCMPTKIP |
| Bluetooth | Bluetooth 5.3 | Bluetooth 5.3 |

WWAN module

The following table lists the Wireless Wide Area Network (WWAN) module supported on your Precision 3580.

Table 11. WWAN module specifications

| Description | Option one | Option two |
|---------------------------|---|--|
| Model number | DW5823, Intel XMM 7560 R Global LTE- Advanced, CAT16 | 5G 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 | PCle Gen2 | PCIe Gen3 |
| Network standard | LTE FDD/TDD, WCDMA/HSPA+,GPS/ GLONASS/BDS/Galileo | LTE FDD/TDD, WCDMA/HSPA+, GNSS/ Beidou 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 4.67Gbps / UL 1.25Gbps NSA: DL 3.74Gbps / UL 700Mbps LTE: DL 1.6Gbps (CAT19) / UL 150Mbps 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, |

Table 11. WWAN module specifications (continued)

| Description | Option one | Option two |
|---------------------------|--|--|
| | | 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 4Supports 4x4 MIMO | WWAN Main Antenna x 4Supports 4x4 MIMO |

⁽i) **NOTE:** For instructions on how to find your computer's IMEI (International Mobile Station Equipment Identity) number, search in the Knowledge Base Resource at www.dell.com/support.

Audio

The following table lists the audio specifications of your Precision 3580.

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 | e.g. Universal Audio Jack/HDMI 2.0 port |
| Number of speakers | 2 |
| Internal-speaker amplifier | Not supported |
| External volume controls | Keyboard shortcut controls |
| Speaker output: | |

Table 12. Audio specifications (continued)

| Description | | Values |
|------------------|------------------------|--|
| | 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 Precision 3580.

Your Precision 3580 supports one of the following options

- One M.2 2230/2280 solid-state drive
- One M.2 2230 self-encrypting drive

Table 13. Storage specifications

| Storage type | Interface type | Capacity |
|---------------------------------|----------------------------------|----------|
| M.2 2230/2280 solid-state drive | PCle Gen4 x4 NVMe, up to 64 Gbps | 2 TB |
| M.2 2230 self-encrypting drive | PCle Gen4 x4 NVMe, up to 64 Gbps | 256 GB |

Media-card reader

The following table lists the media-card reader specifications of your Precision 3580.

Table 14. Media-card reader (standard offering)

| Description | Values | |
|---|--|--|
| 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 Precision 3580.

Table 15. Keyboard specifications

| Description | Values |
|-----------------|--|
| Keyboard type | Standard keyboard |
| Keyboard layout | QWERTY |
| Number of keys | United States and Canada: 99 keysUnited Kingdom: 100 keysJapan: 103 keys |

Table 15. Keyboard specifications (continued)

| Description | Values |
|--------------------|--|
| 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. (i) NOTE: You can define the primary behavior of the function keys (F1–F12) changing Function Key Behavior in 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 | Mutes audio |
| fn and F2 | Decreases audio volume |
| fn and F3 | Increases audio volume |
| fn and F4 | Turn off/on the microphone |
| fn and F5 | Changes the brightness of the backlit keyboard |
| fn and F6 | Decreases display brightness |
| fn and F7 | Increases display brightness |
| fn and F8 | Switches to an external display |
| fn and F10 | Prints screen (Screen capture) |
| fn and F11 | Home (Moves cursor to beginning of the line) |
| fn and F12 | End (Moves cursor to the end of the line) |
| fn and Esc | Locks the fn key on and off |
| fn and Ctrl | Opens the menu of the software application |

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 Precision 3580.

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 | on | Front camera |
| Camera sensor | rtype | CMOS sensor technology |
| Camera resolu | tion: | |
| Still imaç | ge | 2.07 megapixels |
| Video | | 1920 x 1080 (FHD) at 30 fps |
| Infrared camer | a resolution: | |
| Still imaç | ge | 0.23 megapixels |
| Video | | 640 x 360 at 30 fps |
| Diagonal viewi | ng angle: | |
| Camera | | 80 degrees |
| Infrared | camera | 86.6 degrees |

Touchpad

The following table lists the touchpad specifications of your Precision 3580.

Table 18. Touchpad specifications

| Description | | Values | |
|----------------------|------------|--|--|
| Touchpad resolution: | | >300 DPI | |
| Touchpad di | mensions: | | |
| | Horizontal | 115 mm | |
| | Vertical | 67 mm | |
| 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 Precision 3580.

Table 19. Power adapter specifications

| Description | | Option one | Option two | Option three |
|--|-----------------|---|---|--|
| Type • 65 W USB-C • 65 W USB-C two-pin | | | 100 W, USB-C | 130 W, USB-C |
| Inpu | t voltage | 100 VAC - 240 VAC | 100 VAC - 240 VAC | 100 VAC – 240 VAC |
| Input frequency 50 Hz - 60 Hz | | 50 Hz – 60 Hz | 50 Hz – 60 Hz | |
| Input current (maximum) 1.7A | | 1.7A | 1.8A | |
| Output current (continuous) | | 20V/3.25A (Continuous) 15V/3A (Continuous) 9.0V/3A (Continuous) 5.0V/3A (Continuous) | 20V/5A (Continuous)15V/3A (Continuous)9.0V/3A (Continuous)5.0V/3A (Continuous) | 20V/6.5A (Continuous)5.0V/1A (Continuous) |
| Rated output voltage 20\ | | 20VDC/15VDC/9VDC/5VDC | 20VDC/15VDC/9VDC/5VDC | 20VDC/5VDC |
| Tem | perature range: | | | |
| Operating 0° to 40°C (3 | | 0° to 40°C (32°F to 104°F | 0° to 40°C (32°F to 104°F | 0° to 40°C (32°F to 104°F |
| | Storage | - 40° to 70°C (-40°F to 158°F) | - 40° to 70°C (-40°F to 158°F) | - 40° 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 Precision 3580.

Table 20. Battery specifications

| Description | | Option one | Option two | |
|------------------------|-----------|---------------------------------------|---------------------------------------|--|
| Battery type | | 3-cell "smart" lithium-ion 42 Wh | 3-cell "smart" lithium-ion 54 Wh | |
| Battery voltage | | 11.4 VDC | 11.4 VDC | |
| Battery weight (maximu | m) | 0.19 kg (0.41 lb) | 0.22 kg (0.48 lb) | |
| Battery dimensions: | | | | |
| | Height | 5.73 mm (0.22 in.) | 5.73 mm (0.22 in.) | |
| Width | | 263 mm (10.35 in.) | 263 mm (10.35 in.) | |
| Depth | | 68.90 mm (2.71 in.) | 68.90 mm (2.71 in.) | |
| Temperature range: | | | | |
| | Operating | • Charge: 0°C to 45°C (32°F to 113°F) | • Charge: 0°C to 45°C (32°F to 113°F) | |

Table 20. Battery specifications (continued)

| Description | | Option one | Option two | |
|---|--|---|---|--|
| | | • Discharge: 0°C to 70°C (32°F to 158°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) | |
| Battery operating time | | Varies depending on operating conditions and can significantly reduce under certain power-intensive conditions. | ficantly and can significantly reduce under certain | |
| i) NOTE: Control the duration, start and e on using the Dell Por application. For more about Dell Power Main the Knowledge Ba | Battery charging time (approximate) NOTE: Control the charging time, duration, start and end time, and so on using the Dell Power Manager The properties of the charging time, and so on using the Dell Power Manager The properties of the charging time, and so on using the Dell Power Manager The properties of the charging time, (ExpressCharge Boost) The properties of the charging time (approximate) (ExpressCharge Boost) The properties of the charging time, (Express Charge Boost) The properties of the charge Boost Boos | | (ExpressCharge Boost) • 80% in 1 hour | |
| Coin-cell battery | | 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 Precision 3580.

Table 21. Display specifications

| Descript | tion | Option one | Option two | Option three |
|------------------------|---------------------------|---------------------------------------|---------------------------------------|--|
| Display type | | 15.60-inch Full High Definition (FHD) | 15.60-inch Full High Definition (FHD) | 15.60-inch Full High Definition (FHD) |
| Touch op | otions | No | Yes | No |
| Display-p | panel technology | In-Plane Switching (IPS) | In-Plane Switching (IPS) | In-Plane Switching (IPS) |
| Display-p (active a | panel dimensions rea): | | | |
| | 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) | 396 mm (15.60) | 396 mm (15.60) |
| Display-p | panel native n | 1920 x 1080 | 1920 x 1080 | 1920 x 1080 |
| Luminance (typical) | | 250 nits | 250 nits | 400 nits |
| Megapixe | els | 262,144 colors | 262,144 colors | 16,777,216 colors |

Table 21. Display specifications (continued)

| Description | Option one | Option two | Option three |
|-----------------------------|------------------|------------------|------------------|
| 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 |
| 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) | 4.6 W | 4.6 W | 4.5 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 Precision 3580.

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 Precision 3580.

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 Precision 3580.

Table 24. GPU—Integrated

| Controller | External display support | Memory size | Processor |
|------------------------|--------------------------|---------------------|--|
| Intel UHD Graphics | One HDMI 2.0 port | , | 13 th Generation Intel Core i3/i5/i7 |
| Intel Iris Xe Graphics | One HDMI 2.0 port | Dual-channel memory | 13 th Generation Intel Core i5/i7 |

GPU—Discrete

The following table lists the specifications of the discrete Graphics Processing Unit (GPU) supported by your Precision 3580.

Table 25. GPU—Discrete

| Controller | Memory size | Memory type |
|-----------------|-------------|-------------|
| NVIDIA RTX A500 | 4 GB | GDDR6 |

External display support

The following table lists the external display support for your Precision 3580.

Table 26. External display support

| Graphics card | Supported external displays with laptop display enabled | Supported external displays with laptop display disabled |
|------------------------|---|--|
| Intel Iris Xe Graphics | 3 | 4 |
| Intel UHD Graphics | 3 | 4 |

(i) 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 Precision 3580.

Table 27. Hardware security

| Hardware security |
|--|
| Trusted Platform Module (TPM) 2.0 discrete |
| FIPS 140-2 certification for TPM |
| TCG Certificatication 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 |

Table 27. Hardware security (continued)

Hardware security

SED SSD NVMe, SSD and HDD (Opal and non-Opal) per SDL

Smart-card reader

Contactless smart-card reader

This section lists the contactless smart-card reader specifications of your Precision 3580.

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 | |
| ISO 14443 Type B Card Support | Reader and software capable of supporting ISO 14443 Type B contactless cards | |
| ISO/IEC 21481 | Reader and software capable of supporting ISO/IEC 21481 compliant contactless cards and tokens | |
| ISO/IEC 18092 | Reader and software capable of supporting ISO/IEC 21481 compliant contactless cards and tokens | |
| ISO 15693 Card Support | Reader and software capable of supporting ISO15693 contactless cards | |
| NFC Tag Support | Supports reading and processing of NFC compliant tag information | |
| NFC Reader Mode | Support for NFC Forum Defined Reader mode | |
| NFC Writer Mode | Support for NFC Forum Defined Writer mode | |
| NFC Peer-to-Peer Mode | Support for NFC Forum Defined Peer to Peer mode | |
| EMVCo Compliant | Compliant with EMVCO smart card standards as posted to www.emvco.com | |
| EMVCo Certified | Formally certified based on EMVCO smart card standards | |
| NFC Proximity OS Interface | Enumerates NFP (Near Field Proximity) device for OS to utilize | |
| PC/SC OS interface | Personal Computer/Smart Card specification for integration of hardware readers into personal computer environments | |

Table 28. Contactless smart-card reader specifications (continued)

| Title | Description | Dell ControlVault 3 contactless smart-card reader with NFC |
|---------------------------|---|--|
| CCID driver compliance | Common driver support for Integrated Circuit Card Interface Device for OS level drivers | |
| Windows Certified | Device certified by Microsoft WHCK | |
| Dell ControlVault support | Device connects to Dell ControlVault for usage and processing | |
| FIDO2 compliance | Dell ControlVault 3 Smart-card reader is compliant with the FIDO SPEC | |

i NOTE: 125 Khz proximity cards are not supported.

Table 29. Supported cards

| Manufacturer | Card |
|--------------|---------------------------------------|
| HID | jCOP readertest3 A card (14443a) |
| | 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 Precision 3580.

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 | |

Table 30. Contacted smart-card reader specifications (continued)

| Title | Description | Dell ControlVault 3 smart-card reader |
|---|--|---------------------------------------|
| ISO 7816 -3 Class C Card support | Reader capable of reading 1.8V powered smart card | |
| ISO 7816-1 Compliant | Specification for the reader | |
| ISO 7816 -2 Compliant | Specification for smart card device physical characteristics (size, location of connection points, etc.) | |
| T=0 support | Cards support character level transmission | |
| T=1 support | Cards support block level transmission | |
| EMVCo Compliant | Compliant with EMVCo (for electronic payment standards) smart card standards as posted to www.emvco.com | |
| EMVCo Certified | Formally certified based on EMVCO smart card standards | |
| PC/SC OS interface | Personal Computer/Smart Card specification for integration of hardware readers into personal computer environments | |
| CCID driver compliance | Common driver support for Integrated Circuit Card Interface Device for OS level drivers. | |
| Windows Certified | Device certified by WHCK | |
| FIPS 201 (PIV/HSPD-12) Compliant via GSA | Device compliant with FIPS 201/PIV/ HSPD-12 requirements | |
| FIDO2 compliance | Dell ControlVault 3 Smart-card reader is compliant with the FIDO SPEC | |

Operating and storage environment

This table lists the operating and storage specifications of your Precision 3580.

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

Table 31. Computer environment

| Description | Operating | Storage |
|-----------------------------|---|--|
| Temperature range | 0°C to 35°C (32°F to 95°F) | -40°C to 65°C (-40°F to 149°F) |
| Relative humidity (maximum) | 10% to 90% (non-condensing) | 0% to 95% (non-condensing) |
| Vibration (maximum)* | 0.66 GRMS | 1.30 GRMS |
| Shock (maximum) | 110 G† | 160 G† |
| Altitude range | -15.2 m to 3048 m (-49.87 ft to 10000 ft) | -15.2 m to 10668 m (-49.87 ft to 35000 ft) |

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.

* Measured using a random vibration spectrum that simulates user environment.

† Measured using a 2 ms half-sine pulse.

Dell Support policy

For information on Dell support policy, search in the Knowledge Base Resource at www.dell.com/support.

ComfortView Plus

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.

Using the privacy shutter

- 1. Slide the privacy shutter to the left to access the camera lens.
- 2. Slide the privacy shutter to the right to cover the camera lens.



Figure 1. Camera shutter

Dell Optimizer

This section provides the Dell Optimizer specifications of your Precision 3580.

On Precision 3580 with Dell Optimizer, the following features are supported:

- **ExpressConnect**—Automatically joins the access point with the strongest signal, and directs bandwidth to conferencing applications when in use.
- ExpressSign-in—The Intel Context Sensing Technology's proximity sensor detects your presence to instantly wake up the computer and login using the IR camera and Windows Hello feature. Windows locks when you walk away.
- ExpressResponse—Prioritizes the most important applications. Applications open faster and perform better.
- **ExpressCharge**—Extends the battery runtime and improves battery performance by adapting to your patterns.
- Intelligent Audio—Collaborate like you're in the same room. Intelligent Audio enhances your audio quality and reduces background noises, so you can hear and be heard, creating a better conference experience for all.

For more information about configuring and using these features, see *Dell Optimizer User Guide*.