Copilot+ PC
Surface Pro for Business (Intel)

Product FAQ

11th Edition

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Versatile, powerful AI productivity

The new Surface Pro is the first Copilot+ PC[1] Surface Pro built exclusively for business with Intel® Core™ Ultra Processors (Series 2). Built with a powerful NPU to amplify your team's intelligence, efficiency, and creativity through Copilot+ PC experiences designed for work. It's ultra-versatile 2-in-1 design, all-day battery life,[2] and optional OLED display offer peak productivity to replace both your tablet and laptop, all backed by Microsoft's enterprise-grade security.

1. On some devices, Copilot+ PC experiences require free updates available starting later this year and continuing into 2025. Timing varies by device and region - aka.ms/copilotpluspcs.
2. Based on local video playback test. Battery life varies significantly based on usage, network and feature configuration, signal strength, settings, and other factors. See aka.ms/SurfaceBatteryPerformance for details.

Surface Pro technical specifications

Table 1. Surface Pro commercial tech specs

Feature	Description	
Processor	– Intel Core Ultra 5 processor 236V – Intel Core Ultra 5 processor 238V	– Intel Core Ultra 7 processor 266V – Intel Core Ultra 7 processor 268V
NPU	**Intel AI Boost with 40 TOPS** – Intel Core Ultra 5 processor 236V – Intel Core Ultra 5 processor 238V	**Intel AI Boost with 48 TOPS** – Intel Core Ultra 7 processor 266V – Intel Core Ultra 7 processor 268V
Graphics	– Intel Arc™ Graphics	
Memory	– 16GB, 32GB LPDDR5x RAM	
Storage[3]	– Removable[4] solid-state drive (Gen 4 SSD): 256GB, 512GB, 1TB	
Display	**Surface Pro with OLED display** – Touchscreen: 13" PixelSense™ Flow display[5] – Resolution: 2880 x 1920 (267 PPI) – Aspect ratio: 3:2 – Contrast ratio: 1M:1 – Dynamic refresh rate: up to 120Hz – Color profile: - SDR mode: sRGB and Vivid - HDR6 mode: HDR – Individually color-calibrated display – Adaptive color – Auto color management – Touch: 10-point multi-touch – Dolby Vision IQ™ support[7] – Corning® Gorilla® Glass 5 – Anti-reflective, ISO 9241-307 certified[8]	**Surface Pro with LCD display** – Touchscreen: 13" PixelSense Flow display[5] – Resolution: 2880 x 1920 (267 PPI) – Aspect ratio: 3:2 – Contrast ratio: 1100:1 – Dynamic refresh rate: up to 120Hz – Color profile: sRGB and Vivid – Individually color-calibrated display – Adaptive color – Auto color management – Touch: 10-point multi-touch – Dolby Vision IQ support[7] – Corning Gorilla Glass 5 – Anti-reflective, ISO 9241-307 certified[8]

3. System software and updates use significant storage space. Available storage is subject to change based on system software and updates and apps usage. 1 GB = 1 billion bytes. 1 TB = 1,000 GB. See Surface Storage for more details.

4. Solid State Drive (SSD) Retention is only available on Microsoft Surface devices in which the SSD is marketed as removable per the Technical Specifications. Solid State Drive (SSD) Retention is included in both Extended Hardware Service Plus and Microsoft Complete for Business Plus and is also available as an Optional Add-on when purchasing Microsoft Extended Hardware Service and Microsoft Complete for Business. Devices returned to Microsoft with a missing Solid-State Drive (SSD) are subject to a Solid-State Drive (SSD) replacement fee unless the device is enrolled in the Drive (SSD) Retention offer.

5. Surface Pro display has rounded corners within a standard rectangle. When measured as a standard rectangular shape the screen is 13" diagonally (actual viewable area is less)

6. HDR requires HDR content and enabling HDR in device settings.

7. Requires Dolby Vision® encoded content and video.

8. The Surface Pro (Intel) 11th Edition display has been designed to minimize unwanted reflections and has been certified by TÜV SÜD to meet the requirements of ISO 9241-307.

Feature	Description	
Brightness	**OLED display** – SDR: 600 nits maximum (typical) – HDR:[6] 900 nits peak luminance	**LCD display** – SDR: 600 nits maximum (typical)
Size[9] & weight[10]	– Length: 11.3" (287 mm) – Width: 8.2" (209 mm) – Height: 0.37" (9.3 mm) – Weight: 1.92 lbs. (872 g)	
Battery Life	– Up to 14 hours of local video playback[11] – Up to 10 hours of active web usage[12]	
Security	– Enterprise grade security with TPM 2.0 chip and BitLocker support – Windows 11 Secured-core PC – Microsoft Pluton technology – Windows Hello facial recognition with Enhanced Sign-in Security – NFC authentication	
Cameras	**Quad HD front-facing Surface Studio Camera** – 1440p Quad HD camera with ultrawide field of view – Support for Windows Studio Effects with automatic framing, eye contact, portrait blur and background blur **10 MP Ultra HD rear-facing camera** – Windows Hello face authentication camera with Enhanced Sign-in Security	
Audio	– Dual Studio Mics with voice focus[13] – 2W stereo speakers with Dolby® Atmos® – Support for Bluetooth® LE Audio	
Ports & charging	– 2 × USB-C® with USB4®/Thunderbolt™ 4 with support for: - Charging - Data transfer - DisplayPort 2.1 with support up to 1 x 8K monitor - Surface Thunderbolt 4™ Dock and other accessories	

9. Might vary depending on manufacturing processes.
10. Weight not including Keyboard.
11. Based on local video playback test. Testing conducted by Microsoft in January 2025 using preproduction software and preproduction Surface Pro Intel Core Ultra 5 256GB, 16GB RAM (LCD) devices and Intel Core Ultra 7 256GB, 16GB RAM (OLED) devices. Testing consisted of full battery discharge during video playback of a .mov file through the Windows Media Player application in 1080p at 24 FPS. All settings were default except screen brightness set to 150 nits with Auto-brightness disabled. Wi-Fi was connected to a network. Battery life varies significantly with settings, usage, and other factors
12. Based on a web browsing test. Testing conducted by Microsoft in January 2025 using preproduction software and preproduction Surface Pro Intel Core Ultra 5 256GB, 16GB RAM (LCD) devices and Intel Core Ultra 7 256GB, 16GB RAM (OLED) devices. Testing consisted of full battery discharge while accessing eight popular websites over multiple open tabs through the browser. All settings were default except screen brightness set to 150 nits with Auto-Brightness disabled. Wi-Fi was connected to a network. Battery life varies significantly with settings, usage, and other factors.
13. Voice focus requires activation, requires Windows 11 and is available in apps which use integrated device microphones and use certain Windows audio processing modes.

Feature	Description
	– Supports fast charging with minimum 60W charger via Surface Connect or USB-C[14] – Surface Connect port – Surface Pro Keyboard port
Network & connectivity	– Wi-Fi 7[15] – Bluetooth® Core 5.4 technology
Pen compatibility[16]	– Designed for Surface Slim Pen (2nd Edition) - Integrated storage and wireless charging for Surface Slim Pen (2nd Edition) with Surface Pro Keyboard and Surface Pro Flex Keyboard[17] – Supports tactile signals with Surface Slim Pen (2nd Edition) – Supports Microsoft Pen Protocol (MPP)
Keyboard compatibility[16]	– Surface Pro Flex Keyboard – Surface Pro Keyboard with pen storage – Surface Pro Signature Keyboard – Surface Pro Keyboard – Surface Pro X Signature Keyboard – Surface Pro X Keyboard
Software	– Windows 11 Pro 24H2 – Preloaded Microsoft 365 Apps[18] – Microsoft 365 Business Standard, Microsoft 365 Business Premium, or Microsoft 365 Apps 30-day trial[19]
Accessibility	– Compatible with the optional bold keyset version of Surface Pro Flex Keyboard and Surface Pro Keyboard[20] – Compatible with Surface precision haptic touchpad built into Surface Pro Flex Keyboard – Compatible with Surface Adaptive Kit – Compatible with Microsoft adaptive accessories – Supports Microsoft Accessibility Features – Accessible Technology, Products & Innovation | Microsoft Accessibility – Discover more Microsoft Accessible Devices & Products - Accessible Devices & Products for PC & Gaming | Assistive Tech Accessories - Microsoft Store
Sustainability	Surface Pro is designed with sustainability in mind. See more on the Surface Pro Eco Profile.

14. In select markets, only specific configurations come with 39 W Surface power supply. Fast charging (from 5% to 80%) is supported with minimum 65W Surface power supply or 60W USB Type-C PD charger or higher, sold separately. Testing conducted in December 2024. For details on fast charging see USB-C and fast charging for Surface - Microsoft Support.
15. 6GHz band not available in all regions.
16. Pen and keyboard sold separately.
17. Applies to Surface Pro Keyboard with pen storage, Surface Pro Flex Keyboard, and Surface Pro Signature Keyboard.
18 Sold separately. Software license required for some features.
19. Activation required. If your device is managed by your organization's IT department, contact your IT administrator for activation. After 30 days, you will be charged the applicable monthly or annual subscription fee. Credit card required. Cancel any time to stop future charges. See https://aka.ms/m365businesstrialinfo.
20. Surface Pro Flex Keyboard and Surface Pro Keyboard with bold keyset available only in US English.

Feature	Description
	More recycled materials – Enclosure is made with a minimum of 89.1% recycled content, including 100% recycled aluminum alloy and 100% recycled rare earth metals[21] **Thoughtful packaging** – 72% recycled content in wood-based fiber packaging[22] – Paper-based, minimizing plastic use – 100% of our virgin paper sourced comes from responsibly managed forests[23] **More energy efficient** – ENERGY STAR® certified **Repairability** – Clear visual icons and built-in access to repair instructions[24] **Surface Trade-in** – We make trade-in convenient and secure for our commercial customers in the USA at Microsoft Trade In Program Microsoft is committed to be carbon negative, water positive, and achieve zero waste by 2030. Learn more about how we design with sustainability in mind at Microsoft Surface Sustainability
Serviceability	Replaceable components[24] include: – Display module – Removable solid-state drive – Battery – Motherboard (including main processor and main memory) – Surface Connect – Thermal module – Microphone module (Including IR Camera) – Solid-state drive door – Speakers – Enclosure (bucket) – Front camera – Rear camera – Power and volume buttons

21. Enclosure includes bucket. 100% recycled aluminum alloy in bucket. 100% recycled rare earth metals in magnets. Based on validation performed by Underwriter Laboratories, Inc. using Environmental Claim Validation Procedure (ECVP) for Recycled Content, UL ECVP 2809-2, Second Edition, dated June 20, 2024.
22. Applies to sales packaging. Based on internal analysis using IEEE Std 1680.1-2018. IEEE Standard for Environmental and Social Responsibility Assessment of Computers and Displays. 4.7.3.1 Required—Recycled content in wood-based fiber packaging.
23. Sources must be Forest Stewardship Council (FSC) certified.
24. Replacement components available through online Microsoft Store and iFixIt for out-of-warranty repair. Components can be replaced by individuals with the knowledge and experience to repair electronic devices following Microsoft's Service Guide. Microsoft tools (sold separately) may also be required. Availability of replacement components and service options may vary by product, market and over time. See Self-repair information for your Surface device - Microsoft Support.

Feature	Description
	– Kickstand – Device entry kit
Exterior	– Casing: Anodized aluminum – Colors:[25] Platinum, Black – Physical Buttons: Volume, Power
Kickstand	– Kickstand with 165 degrees full friction hinge
Sensors	– Ambient color sensor – Accelerometer – Gyroscope – Magnetometer – NFC[26]
What's in the box	– Quick Start Guide – Safety and warranty documents – 39W Power Supply (In select markets, available only with specific configurations)
Warranty[27]	– 1-year limited hardware warranty
Battery Capacities[28]	– Battery Capacity Nominal (Wh) 47 – Battery Capacity Min (Wh) 46

25. Colors available on selected models only. Available colors, sizes, finishes, and processors may vary by store, market, and configuration.
26. Available for Surface Pro Wi-Fi only models.
27. Microsoft's Limited Warranty is in addition to your consumer law rights. See also: Microsoft Surface Warranty & Protection Plans.
28. Might vary depending on manufacturing processes.

Introduction

What's the one thing that stands out?

- Surface Pro is the first Copilot+ PC Surface Pro built exclusively for business with Intel® Core™ Ultra Processors (Series 2).

Who is Surface Pro designed for?

- Surface Pro is designed to meet the needs of **information workers** and **frontline power workers**, addressing their specific requirements for performance, usability, and management.

Table 2. Surface Pro target users

Information workers (70%)	Frontline power workers (30%)
Marketing managers, consultants, and project managers who need to stay productive and adaptable.	Doctors, store managers, and warehouse managers requiring portable, versatile tools for on-the-go productivity.
What they need	
- Powerful CPU performance for demanding tasks - Portable, versatile design with all-day battery life - Multiple input methods and accessibility for flexible workflows	- Portability and ease of use for seamless navigation - Performance to run specialized apps efficiently - All-day battery life and professional aesthetics
Key use cases	
- Seamlessly transitioning between laptop and tablet modes - Collaborating remotely with Slim Pen for whiteboarding and ultra-wide FOV camera - Using voice input with Copilot to analyze PDFs or webpages in Edge	- Lightweight design for tablet and laptop functionality with pen, touch, and voice - Improving customer engagement and sharing solutions side-by-side - Engaging remotely with ultra-wide front-facing and rear-facing HD cameras

Why do Copilot+ PCs vary based on silicon?

- We are excited to offer silicon choice for our customers, with hardware and software options that best meet their unique use cases and IT environments.

What does the Copilot key open, Consumer Copilot or M365 Copilot?

- Surface Pro doesn't have a keyboard, so it doesn't come with a Copilot key, but can be used when paired with a keyboard. The Copilot key can be configured to open Copilot or other applications including Windows Search.
- To learn more see, Evolving the Copilot key experience for commercial businesses - Windows IT Pro Blog

How does this device differ from Surface Pro with Qualcomm Snapdragon processors?

- **Trusted x86 architecture:** Ensures compatibility with a wide range of applications, software, and tools, making it ideal for professionals who require support for both modern and legacy Windows ecosystems.
- **Anti-reflective display:** The display reduces reflections by up to 50% while maintaining exceptional picture quality, touch, and pen interactions. It meets TÜV SÜD-certified ISO 9241-307 standards for durability and eye comfort, an advanced feature not available in Arm-based versions.
- **Thunderbolt 4 compatibility:** Includes two Thunderbolt™ 4-certified USB-C® ports, enabling faster data transfer speeds, advanced docking solutions, and support for external GPUs (eGPUs). This feature allows the Intel version to handle demanding workloads like high-end graphics processing and gaming, which are not supported on Arm models.
- **Dynamic USB-C disablement:** Provides IT administrators greater control over USB-C ports by disabling unauthorized access. Ports work normally when connected to authorized docks but are disabled when undocked or connected to untrusted devices, protecting sensitive organizational data from potential threats.
- **Certified as Imprivata Ready:** At launch, the Intel version is certified as "Imprivata Ready," making it a standout option for healthcare and other industries requiring strict regulatory compliance.
- **Optional OLED displays:** These displays represent an upgrade over Surface Pro 10, offering improved visuals and reduced blue light emissions for enhanced eye comfort.
- **Copilot+ PC experiences availability:** Surface devices powered by Intel processors deliver similar Copilot+ PC experiences, including Windows Studio Effects (available now), with additional features like Recall (preview), Live Captions, and Improved Windows Search rolling out through Windows Updates. For more details about the differences, refer to the next question below.

Does this device include the same AI experiences as Surface Pro with Qualcomm Snapdragon processors?

Available Copilot+ PC experiences will vary by device and market and some experiences will require updates continuing to roll out into 2025. The following AI experiences in Windows Studios Effects will **not be available** with Intel processors:

- Portrait Light
- Creative Filters

- Eye Contact - Teleprompter

Additionally, the new Intel-based devices will support different Windows Studio Effects features compared to the earlier Arm devices. The following Windows Studio Effects features **will be available** on the new Intel-based devices but will have the older UI:

- Automatic Framing
- Standard Blur
- Portrait Blur
- Eye Contact – Standard
- Voice Focus (Note: The setting to enable this will not be available on the Windows Studio Effects Quick Settings menu, but instead will be available in the Surface app.)

How does the performance of this device compare to Surface Pro powered by Qualcomm Snapdragon?

- Surface Copilot+ PCs, available with Snapdragon and Intel-powered processors, offer meaningful improvements on fundamentals like CPU and GPU Performance and Battery Life and lead with unique AI-powered Copilot + PC experiences.
- Visit Copilot+ PC performance details to learn more.

What are the commercial-focused features that are unique to these products?

- **Surface Copilot+ PCs**, powered by Intel Core Ultra 200V series processors, will enable AI experiences that businesses have come to love including Windows Studio Effects, Improved Windows Search, Live Caption, Recall (preview) and Click to Do (preview) with new features being introduced over time.
- **NFC (Near Field Communication):** Enables seamless device pairing and secure access control, enhancing workflow efficiency for modern workplace scenarios.
- **Antireflective display:** Minimizes glare and improves visibility in various lighting conditions, helping ensure an optimal viewing experience for professionals in diverse environments.

Is this device Surface Pro 12?

This Surface Copilot+ PC for Business is the Intel Core Ultra (Series 2) variation of the latest Surface Pro (11th Edition).

Has the form factor changed?

- Surface Pro maintains the same chassis design as Surface Pro 11th Edition and Surface Pro 10 for Business, ensuring compatibility with existing accessories.
- The device features a stunning 13" PixelSense™ Flow touchscreen display with optional OLED technology, providing vibrant colors with HDR and adaptive contrast.
- To details on other differences, see Appendix B: Comparing Surface Pro Commercial Editions.

Will Pro 10 5G continue to be available since Surface Pro does not have a 5G option?

Yes, Pro 10 5G will remain in production through Q3 FY27 or while supplies last.

How can I compare Surface Pro Editions?

- See Appendix B: Comparing Surface Pro Commercial Editions.

Performance & specifications

What are you highlighting for performance?

- Up to 28% faster performance than Surface Pro 9[29]
- Up to 4× more local AI performance than Surface Pro 10[30]
- More local AI performance than Surface Pro 10
- Handles your browser-based applications and tasks 46% faster than Surface Pro 9[31]
- Handles your browser-based applications and tasks 21% faster than Surface Pro 10[32]
- Experience up to 2× faster Wi-Fi with Wi-Fi 7 compared to Surface Pro 9[32]
- Experience up to 2× faster Wi-Fi with Wi-Fi 7 compared to Surface Pro 10 Wi-Fi model[33]
- Up to 98% faster graphics performance than Surface Pro 9[34]
- Up to 2×faster graphics performance than Surface Pro 10[33]

What processors power this device?

- It offers Intel® Core Ultra Series 2 processors, including Series 5 and Series 7, designed to prioritize performance, power efficiency, and compact design, making them ideal for workloads that benefit from high-speed, low-power memory.

What NPU is included?

- Intel AI Boost delivers up to 48 TOPS for AI-enhanced applications, supporting tasks like advanced productivity tools and real-time collaboration.

What are the memory options?

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29. Based on Cinebench 2024 multithread performance testing conducted by Microsoft in January 2025.
30. Configurations with Intel® Core™ Ultra 5 processor have up to 40 TOPS and up to 3.5 more AI performance than Surface Pro 10.
31. Based on WebXPRT 4 testing conducted by Microsoft in January 2025.
32. When comparing Surface Pro with Wi-Fi 7 320 MHz to models with Wi-Fi 6E 160MHz with compatible Wi-Fi 7 routers. 6 GHz band not available in all regions.
33. Based on 3D Mark WildLife Extreme Unlimited performance testing conducted by Microsoft in January 2025.

Core Ultra 5

- 236v: 16GB LPDDR5x RAM
- 238v: 32GB LPDDR5x RAM

Core Ultra 7

- 266v: 16GB LPDDR5x RAM
- 268v: 32GB LPDDR5x RAM

This structure is due to the RAM being integrated into the SoC (System on Chip), requiring distinct processor variants for each memory configuration.

Does Surface Pro support 64GB memory configurations?

- No, Intel Core Ultra Processors (Series 2) used in Surface Pro, do not include 64GB memory options due to the embedded memory design. Surface Pro 10 and Surface Laptop 6 are available for customers who need higher memory configurations.

What are the storage options?

- Storage options: Removable Gen 4 SSDs with capacities of 256GB, 512GB, or 1TB.

Is the NFC reader on Surface Pro able to read and use credit cards for payment processing?

- The NFC reader on Surface Pro is designed for secure and effortless authentication with NFC security keys like a YubiKey. Additional details on NFC functionality can be found here, NFC support in Surface Pro - Surface | Microsoft Learn.

What's the live captions support?

- To enhance communications and accessibility, you can enable Live Captions with translation from more than 40+ languages into English. Live Captions will display when someone is talking in real-time or recorded audio in any app on Windows.[34]

34. Currently supports translation for video and audio subtitles into English from 40+ languages. Learn more.

What's the difference between Ultra 5 and Ultra 7 processors?

Table 3. Ultra 5 vs. Ultra 7 processors: Key differences

Feature	Intel Core Ultra 5	Intel Core Ultra 7
Designed for	General productivity tasks and mid-range performance needs. Best for users prioritizing battery life or handling standard business tasks.	Power users requiring advanced performance, such as creative professionals working on 3D rendering or video production. Ideal for top-tier processing needs.
Core performance	Optimized for everyday tasks such as document editing, web browsing, and standard business applications.	Equipped to handle heavy workloads like video editing, large-scale data analysis, and multitasking with resource-intensive programs.
AI capabilities	Features Intel AI Boost with up to **40 TOPS**, sufficient for most AI-enhanced tasks like background noise cancellation and light AI workloads.	Enhanced with Intel AI Boost delivering up to **48 TOPS**, offering superior performance for real-time language translation or complex machine-learning computations.
Graphics and compute power	Provides sufficient graphics performance for basic tasks, including presentations, streaming, and light multitasking.	Provides better support for high-end graphics, 3D modeling, and multi-monitor setups.

Benefits and capabilities of Intel Core Ultra Series 2 processors

This section includes processor info sourced from Intel.

Do the new Intel Core Ultra Series 2 processors with integrated RAM on the compute tile impact performance or capability?

The Intel Core Ultra Series 2 processors feature Memory on Package (MoP) technology, which integrates Low Power DDR5X (LPDDR5X-8533) memory directly on the processor package. This memory configuration is not user-configurable and is available in two fixed capacities: 16GB and 32GB. It supports dual channels and is validated to operate at 8533 MT/s, delivering high-speed performance with low power consumption.

While the fixed memory capacity means users cannot upgrade it, this design provides several key benefits:

- **High bandwidth**: The LPDDR5X memory delivers fast data transfer speeds, making it well-suited for demanding applications.
- **Energy efficiency**: The integration reduces power consumption compared to traditional external memory configurations.

- **Compact device design:** This architecture aligns with the design principles of Surface Laptop and Surface Pro helping us deliver slimmer, lighter form factors without compromising on performance or battery efficiency.

Does the use of integrated RAM in the new Intel Core Ultra Series 2 processors limit their capabilities?

It depends on how you define capability, as it is workload-dependent. To provide clarity, here's a quick comparison of memory configurations between the previous generation and the new Intel Core Ultra Series 2 processors:

Table 4. Intel Core Ultra Series 2 vs. previous generation

Feature	Previous Generation	Intel Core Ultra Series 2
Memory type	LPDDR5 - 6400	LPDDR5X-8533 MoP
Memory cache	N/A	8 MB integrated memory side cache
Memory capacity	16 GB & 32 GB (2ch) capacity	16 GB or 32GB fixed capacity
Maximum capacity	64 GB (expandable)	16 GB or 32GB fixed

Key considerations:

- **Faster memory performance:** The new processors feature next-generation JEDEC memory speeds of 8533 MT/s, significantly faster than the previous generation's 6400 MHz.
- **Trade-offs in scalability:** While the new processors prioritize power efficiency and compact design with fixed memory capacities (16GB or 32GB), the previous generation offers flexibility and scalability, supporting up to 64GB of RAM.
- **Optimized for specific workloads:** The new architecture is ideal for workloads that benefit from high-speed, low-power memory, while the previous generation suits users needing higher memory capacity for their applications.

What benefits does a customer gain with the new architecture?

One of the key focus areas of the new architecture is optimizing power efficiency for mobile devices like Surface Laptop and Surface Pro. The use of Memory on Package (MoP) technology provides several significant advantages:

- **Reduced footprint**: By stacking memory on the same package as the processor, the design reduces the required PCB space. This helps us achieve the thinner, more compact designs customers love about Surface Laptop and Surface Pro.
- **Improved performance and battery efficiency**: The shorter signal paths between the processor

and memory enhance data transfer speeds and reduce power consumption, allowing us to deliver excellent performance with longer battery life.

This architecture reflects the Surface engineering team's commitment to designing devices that balance portability and energy efficiency with uncompromising performance, meeting the needs of modern users.

Why isn't a 64GB RAM configuration available for Surface devices with Intel Core Ultra Series 2?

- The Intel Core Ultra Series 2 processors utilize Memory on Package (MoP) technology, which integrates memory directly into the processor package. As a result, the memory configuration is not user-configurable and is only available in two fixed capacities: 16GB and 32GB.
- These configurations are designed with dual channels and validated for JEDEC-compliant 8533 MHz speeds, providing high performance and energy efficiency. While this design limits the available memory options, it helps facilitate the power-efficient architecture in our latest Surface devices.

Display

What display options are available for Surface Pro?

Surface Pro features both OLED and LCD options:

- **OLED Display:** 13" PixelSense Flow with 267 PPI resolution, 1M:1 contrast ratio, and HDR 4 support (900 nits peak brightness).
- **LCD Display:** 13" PixelSense Flow with 267 PPI resolution, 1100:1 contrast ratio, and HDR support (600 nits brightness).

What's the benefit of the optional OLED display?

- **Deeper blacks and higher contrast**: OLED displays use self-lighting pixels that can turn off completely to achieve true black levels. This creates a striking contrast ratio that makes images more vibrant and realistic.
- **Richer colors**: OLED displays produce a wider color gamut and more accurate colors, making them ideal for content creators, designers, or anyone who values vivid and lifelike visuals.
- **Better HDR performance**: With brighter highlights and deeper shadows, OLED panels deliver a more immersive viewing experience for HDR content.
- **Wider viewing angles**: OLED displays maintain consistent brightness and color accuracy from almost any angle, making them great for collaborative work or presentations.

How does the OLED display compare to LCD displays?

- With optional OLED get up to 50% greater HDR peak brightness, a wider color range, and a 1M:1

contrast ratio compared to Surface Pro 10 with LCD.

What's the anti-reflective display?

- The integrated anti-reflective display in both the OLED and LCD models of Surface Pro reduces reflections by up to 50% while preserving exceptional picture quality, touch, and pen interactions to improve visibility in bright light conditions and even outdoors.
- The anti-reflective technology used on Surface Pro has been designed to be highly durable and has passed rigorous environment and chemical tests in addition to sustained pen and touch use.
- Because of this anti-reflective display, the displays on Surface Pro have been certified by TÜV SÜD to meet the requirements of ISO 9241-307.6.[35]

What else have you done to improve the comfort of the display?

- The displays on Surface Pro have been engineered to reduce blue light exposure which can improve eye comfort and can let your teams work longer.
- The display on Surface Pro has been tested to be flicker-free which can improve eye comfort and reduce eye strain.[8]

35. Testing and certification has been performed by TÜV SÜD and only applies to Surface Pro Intel 11th Edition.

Cost & value

SKUs & availability

When are commercial SKUs available?

- SKUs will begin to be generally available starting February 18, 2025, in select Surface markets. Availability varies per market.

What are the SKUs?

Table 5. SKUs: Surface Pro LCD

Processor/RAM/Storage	Price	Colors
Intel Core Ultra 5 / 16 / 256	$1,499	Platinum / Black
Intel Core Ultra 5 / 16 / 512	$1,599	Platinum / Black
Intel Core Ultra 5 / 32 / 256	$1,799	Platinum
Intel Core Ultra 5 / 32 / 512	$1,999	Platinum

Table 6. SKUs: Surface Pro OLED

Processor/RAM/Storage	Price	Colors
Intel Core Ultra 7 / 16 / 256	$1,799	Platinum / Black
Intel Core Ultra 7 / 16 / 512	$1,899	Platinum / Black
Intel Core Ultra 7 / 16 / 1 TB	$2,099	Platinum
Intel Core Ultra 7 / 32 / 256	$2,099	Platinum
Intel Core Ultra 7 / 32 / 512	$2,299	Platinum
Intel Core Ultra 7 / 32 / 1 TB	$2,499	Platinum

Does this Surface Pro have 5G configurations?

- No, Surface Pro 11th Edition, running Intel Core Ultra processors, doesn't offer 5G options. Customers needing 5G connectivity can use Surface Pro 10 with 5G or Surface Pro 11th Edition with 5G, running Qualcomm Snapdragon processors.

How can I place an order?

- Visit: Authorized Microsoft Reseller List - Surface Business.

Is there any way for a consumer or a self-employed individual to purchase the Intel-based Surface Pro?

- This device is designed for our commercial customers and authorized for sale to commercial entities on microsoft.com and through authorized Surface for Business commercial resellers.

Power & battery

What's the battery life?

- Up to 14 hours of local video playback.[11]
- Up to 10 hours of active web usage.[12]

What else are you highlighting for battery performance?

- Surface Bancroft has up to 1.5× the battery life of Surface Pro 9[36]

Does this device come with a charger?

- Yes, this device includes a charger by default in most regions. However, to support EU initiatives aimed at reducing e-waste, the charger is optional in the EU. Customers in the EU can choose whether to include a power supply with their purchase or opt out if they already have a compatible charger.
- EU customers who need a charger can purchase one separately:
  - **Surface Connect:** Buy Microsoft Surface 65W Power Supply - Microsoft Store.
  - **USB-C:** Minimum 60W charger recommended.

What charger is included with eligible Surface Pro devices?

- 39W PSU in select markets, available only with specific configurations.[14]

Can you recommend a 65W power supply to purchase for this device?

- Buy Microsoft Surface 65W Power Supply - Microsoft Store

Can I charge this device with another Surface Charger?

- Yes, but if the wattage is insufficient, a message will be displayed indicating the slow charge status.

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36. Based on local video playback compared to Surface Pro 9. Testing conducted by a third-party lab January 2025 using a Surface Pro 9 with an i7-1225U processor, 16GB RAM, and 256GB storage and by Microsoft using a Surface Pro (11th Edition) with an Intel Core Ultra 7 236V processor, 16GB RAM, and 256GB storage. Testing consisted of full battery discharge during video playback of a .mov file through the Windows Media Player application in 1080p at 24 FPS. All settings were default except screen brightness set to 150 nits with Auto-brightness disabled. Wi-Fi was connected to a network. Tested with Windows 11. Battery life varies significantly with settings, usage, and other factors.

Can I charge Surface Pro via the USB-C port?

- Yes, with Surface Pro, you can charge your devices in two ways – via USB-C or the inbox PSU. For fast charging with USB-C, ensure your charger delivers sufficient watts, equal to or greater than 60 watts.[14]

Will inbox PSUs continue to have Surface Connect?

- Yes.

Is fast charging supported?

- Yes, it supports fast charging with minimum 60W charger via Surface Connect or USB-C.

What are the smart charging features?

Surface Pro includes a new smart charging UI in the Surface app that provides customers with enhanced control over charging behavior to optimize battery performance and extend device lifespan. Key features include:

- **Adaptive**: Automatically determines when to enable or disable Smart Charging based on usage patterns.
- **Limit to 80%:** Restricts charging to a maximum of 80% to protect battery health.
- **Charge to 100%:** Allows the device to fully charge to 100% temporarily, with user-configurable options for 1 day or 1 week.

These features empower IT administrators and users to maintain battery health efficiently without compromising productivity.

Will it harm the battery to have the device plugged in and on all the time?

- No, the Surface charger automatically stops charging once the battery reaches full capacity.

How are you measuring battery life?

- **Local video playback.** Measures battery life based on playing video files stored locally, rather than streamed over the internet. This scenario typically involves less power consumption than active web usage because it doesn't require the use of networking hardware and often relies on optimized playback software that can take advantage of hardware acceleration.
- **Active web usage.** Reflects battery life during continuous use of web-based applications and browsing. This scenario is more demanding than local video playback since it involves constant data exchange over Wi-Fi or cellular networks, frequent screen refreshes, and possibly more intensive CPU and GPU usage.

Accessibility

What's your approach to accessibility?

Surface products are thoughtfully designed to empower everyone to achieve more. By prioritizing inclusiveness in our designs, we deliver a more comfortable and empowering experience for all, ensuring that no one is left behind. Our comprehensive accessibility offerings span from adaptive accessories to features embedded in both hardware and software, seamlessly integrating Surface devices, Copilot, Microsoft 365, and Windows 11 into a unified Microsoft accessibility solution.

Key benefits

- **Inclusive by design:** Surface Pro adapts to the way your teams want to use it, not the other way around. Its 2-in-1 form factor enables use as a tablet, laptop, or on a stand,[37] making it ideal for diverse environments, including accommodating wheelchair users.
- **Adaptive touch mode**: Included in the Surface Pro Flex Keyboard, supports customization of the touchpad settings through the Surface app, offering enhanced usability with different input methods, supporting diverse needs and input methods, enabling users to interact with the touchpad using their palm, foot, edges of the hand, or residual limbs.
- **Precision haptic touchpad:** Included in the Surface Pro Flex Keyboard, users can toggle settings to adjust haptic feedback and sensitivity for personalized input.
- **Bold keyset options:** Surface Pro Keyboard and Surface Pro Flex Keyboard offer larger, bold fonts, higher contrast, and brighter backlighting for enhanced visibility of the keys and more confident typing.[38]
- **Windows 11 innovations:** Accessibility tools built into Windows 11 provide an integrated experience for everyday use.
- **Copilot assistance:** Intelligent assistance helps users navigate tasks efficiently and supports accessibility needs across Microsoft 365 and other tools.
- **Multi-touch screens:** Surface devices include high-quality touchscreens with intuitive interaction at your fingertips.
- **High-quality microphones:** Enable clear and accurate voice input communication, enhancing accessibility in environments where typing may be difficult.

Additional accessibility resources

- Pair your Surface Pro with Microsoft adaptive accessories to create a personalized setup tailored to your needs.
- Access free support from the Enterprise Disability Answer Desk, a service that provides accessibility solutions for organizations of any size.

37 Device mount required, sold separately.
38. Surface Pro Flex Keyboard and Surface Pro Keyboard with bold keyset available only in US English.

Security

General security overview

What security features are you highlighting?

- Secured-core PC with hardware-based protection.
- Microsoft-designed firmware, including Surface UEFI for enhanced configurability.
- TPM 2.0 and Microsoft Pluton for secure data storage.
- Windows Hello for Business with facial recognition and Enhanced Sign-In Security.
- NFC for additional secure authentication options.

How does Secure Boot protect my Surface device?

- Secure Boot ensures that only trusted software loads during the startup process. It prevents malicious code, such as rootkits, from running, ensuring your device starts securely every time.

How does BitLocker help secure my data?

- BitLocker encrypts your data, protecting it from unauthorized access. Even if your device is lost or stolen, the data remains secure because decryption requires authentication.

What is hardware-backed root of trust, and how does it protect my device?

- Hardware-backed root of trust ensures that an authentic version of Windows runs on the device. It uses secure processors, such as TPM, to verify the integrity of the firmware and operating system.

Secured Core PCs

What is a Secured Core PC?

- A Secured Core PC is designed to provide advanced protections against common and sophisticated malware attacks. It integrates hardware, firmware, and software security measures to safeguard your data and ensure the integrity of your device.
- All built-in hardware and software security protections turned on by default. Key features include protection against:
  - **External threats** with Windows Hello and Credential Guard, safeguarding identities and isolating sensitive company data.
  - **Malware** through Hypervisor Enforced Code Integrity (HVCI) and Virtualization Based Security (VBS), ensuring only trusted code runs.
  - **Firmware attacks** with a hardware-enforced root of trust that ensures a secure state regardless

of firmware integrity.

Why are Secured Core PCs important for businesses?

- Secured Core PCs offer advanced hardware and software security for protecting sensitive data, making them ideal for industries handling critical information, such as healthcare, finance, and government. These devices ensure compliance with strict security standards and minimize risks of data breaches.

What advantages do Secured-Core PCs offer for handling sensitive data?

- Designed with deep integration between hardware and software and featuring the most advanced CPUs available, Secured-core PCs, like Surface Pro, are intended to handle mission-critical data in some of the most data-sensitive industries. A Secured-core PC is a modern Windows device that comes with the highest level of hardware, software, and identity protection ready right out-of-the-box. To learn more, see Windows 11 Secured-Core PCs | Microsoft.
- Secured-core PCs, like Surface Pro are the most secure Windows 11 devices for workers who need a multi-layered security system (L3 requirements) to handle the most sensitive data.

Are the security features for Surface Pro the same as Windows 11?

- Surface Pro provides the highest default level of security for Windows 11 devices.
  - **Secured-core PC** – Surface Pro is a Secured-core PC. To learn more, see Secured-core PCs.
  - **Microsoft Pluton** Security processor is included in Surface Pro. To learn more, see Microsoft Pluton security processor - Windows Security | Microsoft Learn.
  - Surface Pro ships with **Windows Hello Enhanced Sign-in Security (ESS),** which enables more secure sign-in using biometric. To learn more, see Windows Hello Enhanced Sign-in Security (ESS).

Advanced features

What is Hypervisor Code Integrity, and why is it important?

- Hypervisor Code Integrity creates a secure layer that isolates critical code execution from malicious interference. This feature is enabled by default on all Windows 11 Surface devices, adding a vital layer of protection.

Does Surface Pro support Dynamic USB-C disablement?

- Yes, with the Surface Thunderbolt™ 4 Dock,[39] you can protect your organization's data from unauthorized USB access. Dynamic USB-C disablement allows IT admins to control the functionality of the USB-C ports on Surface Pro. When the device is connected to an authorized

39. Sold separately. Software license required for some features.

dock, the USB-C ports work normally. When the device is undocked or connected to an untrusted dock, the USB-C ports are disabled for data transfer. This way, you have more control and can prevent data theft and have more security over your devices.

- To learn more, see Manage USB ports on Surface devices - Surface | Microsoft Learn.

Does Surface Pro have a Smart card reader?

- No. See Surface Laptop 7th Editon running Intel Core Ultra processors.

TPM

What TPM is supported on Surface Pro?

- Surface Pro utilizes a discrete Trusted Platform Module (TPM) 2.0 and is certified for government and security-minded enterprise standards, achieving FIPS 140-2 Level 2 with Intrusion Detection and Common Criteria / EAL4.

Why is a discrete TPM 2.0 chip important for security in a commercial environment?

- **Enhanced security and integrity:** TPM 2.0 offers a hardware-based solution for securing cryptographic keys, ensuring that only trusted software is run during the boot process, thereby protecting against unauthorized access and malicious attacks.
- **Advanced encryption and authentication:** It securely manages encryption keys for disk encryption like BitLocker, supports multi-factor authentication methods, and protects against brute-force attacks, enhancing data protection and user authentication.
- **Compliance and remote attestation:** Meets regulatory compliance requirements for security standards, and facilitates remote attestation, allowing devices to verify their integrity and trustworthiness in remote and cloud computing environments.

Pluton security

What is Microsoft Pluton?

- Designed by Microsoft and built by silicon partners, Microsoft Pluton is a secure crypto-processor built into the CPU for security at the core to ensure code integrity and the latest protection with updates delivered by Microsoft through Windows Update. Pluton protects credentials, identities, personal data, and encryption keys. Information is significantly harder to remove even if an attacker installs malware or has complete physical possession of the PC.
- Pluton is a requirement for all Copilot+ PCs, including Surface Pro.
- To learn more, see Microsoft Pluton security processor - Windows Security | Microsoft Learn.

Does Pluton provide TPM functionality on Surface Pro?

- No. The TPM on Surface Pro is provided by a discrete TPM 2.0 chip, validated by FIPS 140-3

What value does Pluton provide Commercial customers if it's not being used as a TPM?

- One of the other major security problems solved by Pluton is keeping the system firmware up to date across the entire PC ecosystem. Pluton for Windows computers will be integrated with the Windows Update process in the same way that the Azure Sphere Security Service connects to IoT devices.

Are Windows 11 devices without Pluton not secure?

- Windows 11 is our most secure operating system ever and Pluton is taking that security to the next level. We're continually iterating on and improving security on Windows to help protect against the evolving threat landscape.

Why is Pluton better than TPM?

- The TPM is a critical part of the security of Windows 11 and is part of the minimum hardware baseline. On supported hardware Pluton also implements a TPM.
- The TPM specification is an industry standard that helps to prescribe methods for the various layers of the system like UEFI firmware, the OS bootloader and kernel to track security information like how the system booted and gate usage of resources like keys based on that information
- Pluton is a flexible platform that can add additional capabilities beyond the TPM specification and its core areas of focus. As an example, with the KSP we have focused on building interfaces that allow applications on Windows to benefit from hardware-based key protection with greater reliability across device events like firmware updates that application developers do not control.

What is a key storage provider (KSP)? How does it keep a customer secure?

- Key storage providers, or KSPs, are a long-standing architectural feature of the Windows cryptography APIs used by numerous 1st and 3rd party applications.
- Key storage providers are used to create, delete, export, import, open and store keys which can be used to perform cryptographic operations used by OS functionality and applications.
- Windows has had support for various KSPs like the software and TPM KSP. The Pluton KSP creates a way to benefit from the security properties of Pluton like higher isolation, using an approach that is familiar to Windows developers.

When will KSPs be made available?

- One of the core benefits of Pluton is its integration with the Windows Update system that has delivered security and feature updates that enhance the customer experience over time while adhering to safe deployment practices.

- The Pluton KSP and the enhanced protection of Entra and Intune assets demand a high degree of quality and reliability to ensure they meet the needs of customers running mission critical activities on Windows. These capabilities will be made available when we have met the quality and reliability bar set by our customers.

Will the Pluton KSP be coming to all devices with Pluton chips? Will it be available across silicon – Intel & Qualcomm?

- The Pluton KSP will be available across silicon from Intel and Qualcomm for Copilot+ PCs.

SSD retention

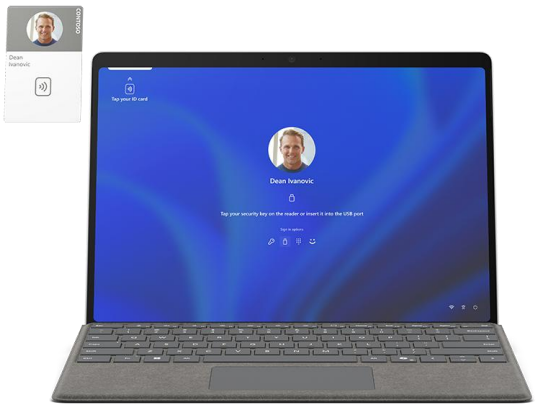
What's the primary purpose of having a removable SSD for commercial enterprises?

- The removable SSD (rSSD) is designed to help businesses maintain control of their sensitive information.[40]
- It also facilitates service and repair: Retaining data is made easy with the ability to retain the SSD.

When will the Surface Drive Retention service plan offer be available for purchase?

- Surface Drive (SSD) Retention is available on Surface devices where the SSD is marketed as removable, subject to terms and conditions. To learn more, see Surface Warranty, Protection Plans & Support.

Near Field Communication (NFC)



40. Drive (SSD) Retention is only available on Microsoft Surface devices in which the SSD is marketed as removable per the Technical Specifications. Drive (SSD) Retention is included in Microsoft Complete for Business Plus and is available as an Optional Add-on when purchasing Microsoft Extended Hardware Service and Microsoft Complete for Business. Except for Surface Pro X and Surface Pro 7+, devices returned to Microsoft with a missing SSD are subject to an SSD replacement fee unless the user is enrolled in the Drive (SSD) Retention offer.

Figure 1. NFC reader on Surface Pro

Are there new NFC features?

- The NFC experience is the same as Surface Pro 10 for Business. To learn more, see NFC support in Surface Pro - Surface | Microsoft Learn.
- Surface Pro is now certified for use with Imprivata Enterprise Access Management (EAM), formerly known as Imprivata OneSign. This certification ensures secure, compliant, and seamless data access for healthcare personnel. To learn more, see Surface for Business devices are now Imprivata Ready | Microsoft Community Hub.

Is the NFC reader on Surface Pro able to read and use credit cards for payment processing?

- No, the NFC reader on Surface Pro is designed for secure and effortless authentication with NFC security keys like a YubiKey. To learn more, see NFC support in Surface Pro - Surface | Microsoft Learn.

Why doesn't Surface Pro support NFC payments?

- We engineered NFC in Surface Pro for enterprise customers where the primary applications of NFC technology extend to authentication, access control, and the exchange of information. These use cases are fundamental in environments that demand heightened security and streamlined operations, such as workplaces and educational institutions. Consequently, we focused on enhancing features critical to these sectors, including secure login processes and the ability to read and write NFC tags efficiently. This strategic choice allows us to tailor Surface Pro to the specific needs of our target audience, prioritizing functionalities that support professional activities over consumer-oriented transactions like NFC payments.

Does NFC login have the same 10-user limit as Windows Hello for Business?

- No. For devices with more than 10 users, or for users that sign in to many devices, such as support technicians, it's recommended to use a FIDO2 security key as enabled by NFC.

Where can IT admins learn more about Surface security?

- See Surface security overview - Surface | Microsoft Learn

Manageability & integration

Is an N-1 OS supported for Surface Pro, 11th Edition?

- No, this device ships with Windows 11 24H2.

How are you applying AI to Windows 365 to make Cloud PC management easier for IT teams?

- Using AI, Windows 365 analyzes your employees' usage patterns and performance needs to offer recommendations to IT that help find optimal Cloud PC configurations to improve the overall experience for your employees and reduce costs. Cloud PC recommendations are then created with utilization and performance insights gathered in Microsoft Intune. This feature is now in public preview.

What's the purpose of the new QR code on Surface Pro?

- The SN QR code allows IT administrators to quickly and accurately retrieve the device's serial number by scanning the code, reducing manual entry errors and streamlining asset management.
- For IT admins and asset managers deploying Surface devices, we recommend:
  - **Testing scanner compatibility**: Ensure your scanners support QR code reading.
  - **Updating asset management workflows**: Adapt your processes to take advantage of SN QR scanning for faster serial number retrieval.

Surface Management Portal and IT tools

What's new with the Surface Management Portal and IT tools?

- With the new Security Copilot in the Surface Management Portal, users will be able to interact with their device data and warranty data that is in Intune. This will save IT time by completing multi-step tasks in one click and eliminating the need to navigate multiple areas in the Surface Management Portal. Copilot can also generate contextually relevant reports based on users' tenant data, such as Service Order history or end-of-servicing dates for their devices.

What are the requirements to use Surface Management Portal?

- Customers must be licensed to access Microsoft Intune.
- Surface devices must be enrolled in the Surface Management Portal via automatic device enrollment through Intune
- To learn more, visit: Surface Management Portal overview | Microsoft Learn

How will IT pros be able to use Copilot? Is this new Copilot functionality? What actions are now available in the Copilot in Surface Management Portal?

Yes, this is brand new functionality. IT Pros will be able to use the various prompts located in the Surface Management Portal to:

- Build reports on end of servicing dates for their devices.
- Get assistance in troubleshooting devices.
- Build reports on Service Orders for a given device.
- Generate warranty reports for the entire fleet.

What data protections are in place for data Copilot engages within the Surface Management Portal?

- When users interact with Microsoft Security Copilot, Customer Data and system-generated logs are stored and processed as part of the service.
- Data sharing is turned on by default. Global Administrators and Security Administrators are assigned a Copilot owner role in Security Copilot. Copilot owners can change data sharing settings for Customer Data during the first run experience and at any time thereafter. For more information on roles, see:
  - Security Copilot roles
  - Privacy and data security in Microsoft Security Copilot | Microsoft Learn
- When users interact with the Security Copilot to get Intune data, the Security Copilot pulls that data from Intune. The prompts, the retrieved Intune data, and the output shown in the prompt results are processed and stored within the Security Copilot service.
- Security Copilot adheres to the RBAC roles and Intune scope tags assigned to users when accessing data.
- When users use Security Copilot to get Intune data, Security Copilot also has access to the data and permissions defined by the RBAC roles and Intune scope tags assigned to them. To learn more, see Privacy and data security in Security Copilot.

What are the security uses of Copilot in the Surface Management Portal?

- Users can prompt Copilot to learn how to set up compliance policies and prevent malware. Additional security-centric functionality will be added in the future.

When will Copilot be made available in Surface Management Portal?

- Public Preview will launch on February 17, 2025.

What licenses are needed to access Copilot in SMP?

- Users will need Security Compute Units (SCUs). To learn more, see Manage usage of security compute units in Security Copilot | Microsoft Learn.
- Microsoft Intune licensing is required.

- No license is needed for SMP itself.

Will Copilot in the Surface Management Portal be made available on Intel & Qualcomm-based devices?

- Yes, Copilot will work for any Surface device enrolled in the Surface Management Portal, regardless of chipset, as it runs in the cloud.

Will Copilot roll out to other OEMs management tools/portals?

- Surface aims to enhance the Windows experience. While we cannot comment on other OEMs' plans, the recent integration of HP and Dell portals with Intune showcases the growing value of OEM collaboration with Microsoft.

Recall (preview) and Click to Do (preview)

Should Commercial Customers roll out Recall? What about security concerns?

- Recall (preview) is available in the Windows Insider Program, and commercial customers are encouraged to test and provide feedback. Once feedback is gathered, we plan to make Recall available more widely.
- Recall includes granular management controls for IT, such as enabling/disabling the feature via policy and managing settings. To learn more, see Manage Recall | Microsoft Learn.
- Enhanced security measures include data encryption and Windows Hello protection, ensuring Recall offers robust personal data protection.
- To learn more, see Update on Recall security and privacy architecture | Windows Experience Blog.

Do the latest AI features like Recall (preview) and Click to Do (preview) comply with the EU AI Act?

- Microsoft complies with applicable laws, regulations, and sanctions, and requires our suppliers to do the same while conducting business on behalf of or with Microsoft.

What actions are being taken to address concerns about Recall (preview) capturing sensitive information such as social security and credit card numbers?

- Recall is currently in preview in the Windows Insider Program, and Microsoft is actively working on updates to enhance data protection based on feedback from Insiders.
- Customers are encouraged to report their experiences via the Feedback Hub.

Can organizations manage features like Recall (preview)?

- Yes, Recall (preview) includes policy controls for IT to manage availability and snapshots. To learn more, see Previewing More Copilot+ Experiences with Windows Insiders in the Dev Channel |

Windows Insider Blog.

Can organizations manage features like Click to Do (preview)?

- Click to Do (preview), launched on December 6 in the Windows Insider Program, currently does not have IT controls. To learn more, see Previewing More Copilot+ Experiences with Windows Insiders in the Dev Channel | Windows Insider Blog.

Will Recall (preview) be available on these devices when they ship? When will it be available?

- Recall (preview) has been available to Windows Insiders since November 22, 2024. It will be made generally available after leveraging feedback from the Insider community. To learn more, see Previewing Recall with Click to Do on Copilot+ PCs with Windows Insiders in the Dev Channel | Windows Insider Blog.

Will there be exclusive commercial features for Recall (preview) on these devices?

- Recall (preview) has been available for commercial devices via the Windows Insider Program since November 2024. To learn more, see: Update on the Recall preview feature for Copilot+ PCs | Windows Experience Blog.

What licensing is needed to take advantage of these new features?

- No additional licenses are needed for Recall (preview) or Click to Do (preview) during their availability in the Windows Insider Program.

Durability & service

Serviceability

When and where will replaceable components be available to purchase?

- Components will be available from Authorized Microsoft Resellers shortly after the initial launch; the timing of availability varies by component and market.
- New SSDs will be available for purchase through commercial channels and published on pricelist. To learn more, see Authorized Microsoft Reseller List.

What are you doing to reduce the environmental impact of your devices?

- Sustainability has long been a core priority for Microsoft, and that goal is embedded in all we do – including our devices. To learn more, see Microsoft Surface Sustainability - Microsoft Sustainability.

- Over the past decade, we've steadily improved energy efficiency, decreased packaging waste, reduced, or eliminated hazardous substances, and improved our devices' serviceability and recyclability. We are constantly developing initiatives to lower our carbon emissions by using more recycled materials such as our use of 100% recycled aluminum.
- In FY24, we expanded truckload electric vehicle capabilities to cover both of our United States distribution centers, enabling full truckloads within a 100-mile range of the distribution centers to be delivered via EV.
- We have also worked to help improve the sustainability of our suppliers and supply chain. For example, this year, we converted our main European distribution center for Surface devices into a facility powered 100% by Renewable Energy. Our supply chain for devices is shifting to 100% carbon-free electricity for Microsoft-related production.[41]
- Our newest devices feature our most significant sustainability advancements yet including enclosures made from 100% recycled aluminum, 100% rare-earth metals in magnets, reducing plastic waste with all-new paper-based packaging with more recyclable components, and extending the lifetime of the device with innovative repairability features.
- Surface Pro is easier to repair than iPad Pro 13" M4 due to clear wayfinding icons inside the device, accessible service guides, spare parts, and easier removal of battery and screen.[42]

How have you increased use of recycled materials in Surface Pro?

- Surface Pro is made with more recycled materials than any previous Surface Pro, containing a minimum of 27.6% recycled content.[43]

What's Microsoft's stance on the Right to Repair?

- Microsoft has a longstanding commitment to environmental sustainability. We also have a longstanding commitment to building high-quality, innovative, and safe devices that customers love. We have been taking steps for years to improve device repairability and to expand the available choices for device repair.
- For more information on our work around sustainability, including repairability, see the 2024 Environmental Sustainability Report.

Where can I learn more about service and repair?

- Surface for Business service and repair
- Downloadable Surface Service Guides

41. Learn more about supplier carbon-free electricity criteria at the Environmental Protection FAQs of our Supplier Code of Conduct.

[42] Based on comparison of field-replaceable units in published repair manual for iPad Pro 13" M4 as of 9/16/24.

43. Surface Pro, excluding power supply, contains a minimum of 27.6% recycled content. Based on validation performed by Underwriter Laboratories, Inc. using Environmental Claim Validation Procedure (ECVP) for Recycled Content, UL ECVP 2809-2, Second Edition, dated June 20, 2024.

Audio and camera

What camera features are available?

- **Quad HD front-facing Surface Studio Camera** with 1440p resolution, ultrawide field of view, and support for Windows Studio Effects (e.g., automatic framing, eye contact, background blur).
- **10 MP Ultra HD rear-facing camera** with advanced security and Windows Hello facial recognition.

What audio features are integrated?

- Dual Studio Mics with voice focus.
- Two-watt stereo speakers with Dolby Atmos® support.
- Support for Bluetooth® LE Audio.

Connectivity & expansion

What ports are available?

- USB-C with USB4®/Thunderbolt™ 4 support.
- DisplayPort 2.1 for up to 8K monitor support.
- Surface Connect port.
- Surface Pro Keyboard port.

What connectivity options are supported?

- Wi-Fi 7 and Bluetooth Core 5.4 technology.

Wi-Fi 7

- Offers up to twice the bandwidth of Wi-Fi 6E for faster, freeze-free video calls.[44]
- Features reduced latency and improved reliability for real-time activities like gaming or video streaming.
- Includes advanced security features to prevent eavesdropping and enhance public hotspot connections.

Bluetooth Core 5.4

- Supports clearer voice calls and more stable connections, even in environments with wireless interference.
- Enables faster data transfers and lower energy consumption, improving battery life for connected

44. When comparing Surface Pro with Wi-Fi 7 320MHz to models with Wi-Fi 6E 160MHz with compatible Wi-Fi 7 routers. 6GHz band not available in all regions.

accessories.

- Provides low-latency audio playback for smoother video and gaming experiences.

What's the difference between USB-C and USB4?

- **USB-C refers to the physical connector type**. It is a reversible, oval-shaped connection for data transfer, power delivery, and video output. USB-C connectors can support a variety of different protocols, such as USB 2.0, USB 3.0, USB 3.1, USB 3.2, Thunderbolt 3, Thunderbolt 4, and USB4.
- **USB4 is a standard for the actual data transfer protocol**, which defines the speed and functions of the USB connection. USB4 can only be implemented with USB-C connectors and supports higher data transfer speeds, and improved resource allocation when multiple devices are connected.

Does Surface Pro include a microSD slot for storage expansion?

- No, Surface Pro does not have a microSD slot. Customers are encouraged to use cloud storage or external USB drives for additional space.

Does Surface Pro have an audio jack?

- No. See Surface Laptop 7th Edition.

What's the external monitor support?

- The following table shows the maximum refresh rates and resolution when connecting external monitors to Surface Pro.

Table 7. Surface Pro external monitor support

Interface	1 External Display (Plus Internal display)		2 External Displays (Plus Internal display)	
	Max Refresh	Max Resolution	Max Refresh	Max Resolution
USB-C (USB4)	30 Hz	7680 × 4320 (8K)	60 Hz	3840 × 2160 (4K)
	60 Hz	5120 × 2880 (5K)		
	120 Hz	3840 × 2160 (4K)		
USB4 Dock	30 Hz	7680 × 4320 (8K)	60 Hz	3840 × 2160 (4K)
	60 Hz	3840 × 2160 (4K)		
USB-C: Surface Thunderbolt 4 Dock	60 Hz	5120 × 2880 (5K)	60 Hz	3840 × 2160 (4K)
	120 Hz	3840 × 2160 (4K)		
USB-C: Surface Dock 2	60 Hz	5120 × 2880 (5K)	60 Hz	3840 × 2160 (4K)

Tested peripherals

What peripherals have you tested for Surface Pro?

- The most used monitors, docks, cables, and adapters in commercial are tested extensively to ensure interoperability with Surface Pro. For a complete list, see Tested peripherals for new Surface devices.
- For the best experience, be sure to get the latest updates. To manage your options and see available updates, select **Start** > **Settings** > **Windows Update**.

What if a peripheral is not included in your testing? Will it still work?

- The testing results cover popular in-market peripherals but are not intended to be comprehensive. Many peripherals not shown may still function as expected.
- Based on our research, we estimate that customers will have a generally positive experience with these peripherals.

Will previous generation type covers -- without a Copilot key -- also be compatible?

- Existing keyboards used for Surface Pro 8, Surface Pro 9, and Surface Pro X are compatible with

Surface Pro, except for the Pro Fingerprint Reader Keyboard, which is no longer compatible.

Surface Accessories

Table 8. Supported accessories for Surface Pro, 11th Edition with Intel processors

Category	Accessory
Charger	65W Power Supply (SL)
	127W Power Supply (SL)
Mice	Surface Arc Mouse
	Surface Mouse
Keyboards	Surface Pro Flex Keyboard
	Surface Pro Keyboard with pen storage
	Surface Pro Signature Keyboard
	Surface Pro Keyboard
	Surface Pro X Signature Keyboard
	Surface Pro X Keyboard
Pen	Surface Slim Pen (2nd Edition)
Docks	Surface USB-C Travel Hub
	Surface USB4 Dock
	Surface Thunderbolt 4 Dock
Accessibility	Surface Adaptive Kit
	Microsoft Adaptive Accessories

What additional accessories are recommended for Surface Pro?

- Surface Accessories are a crucial part of employees making Surface Pro their own allowing employees to personalize and optimize their device to suit their individual needs and preferences.

Many Designed for Surface and Accessible accessories options are also available to build your ideal workspace. These are especially important for employees who need more adaptive workspaces to meet their accessibility requirements.

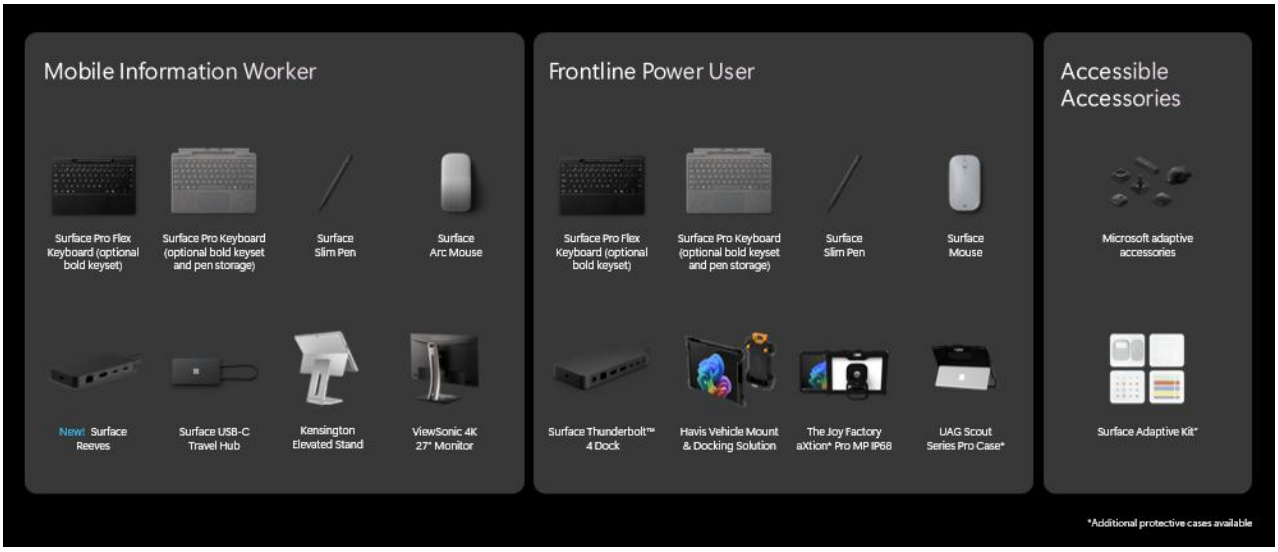


Figure 2. Surface Pro accessories listed in priority order

Are current Pro type covers compatible with Surface Pro?

- Yes, Surface Pro is compatible with the Pro Keyboard, Pro Keyboard with Pen Storage, and Pro Flex Keyboard.

Table 9. Keyboard compatibility

Model	SKUs	Pen Storage	Touchpad	Bold Keyset	Wireless	Compatibility	Colors
Surface Pro Keyboard		-	Mechanical	-	-	Surface Pro (11th Edition, 10 for Business, 9, 8, X	Black (PU)
Surface Pro Keyboard with Slim Pen	Surface Pro Keyboard with pen storage Surface Pro Keyboard with bold keyset Surface Pro Keyboard with Slim Pen	✓	Haptic	✓	-	Surface Pro (11th Edition, 10 for Business, 9, 8, X	Black Platinum Bold (US/CA)
Surface Pro Flex Keyboard	Surface Pro Flex Keyboard Surface Pro Flex Keyboard with bold keyset Surface Pro Flex Keyboard with Slim Pen	✓	Haptic	✓	✓	Surface Pro (11th Edition, 10 for Business, 9, 8	Black Bold (US/CA)

Appendix A: Microsoft Surface USB4 Dock

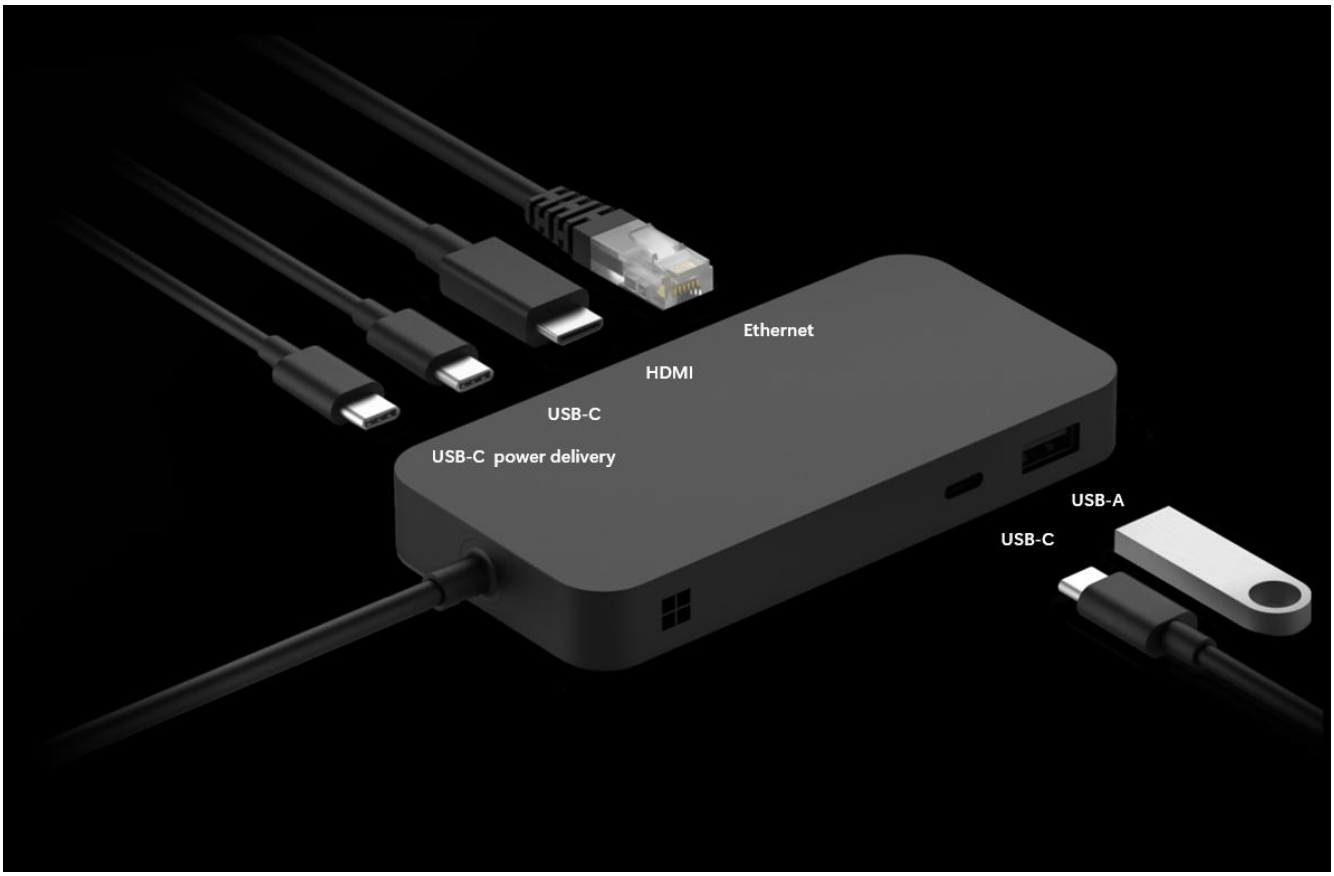


Figure 3. Surface USB4 Dock delivers expanded connectivity including HDMI

What's the new Surface USB4 Dock?

The Microsoft Surface USB4 Dock is the best value dock, for productivity and connectivity, allowing commercial customers to optimize their team's workspace with a blend of speed, power, and versatility. Commercial customers can connect and power devices like the new Surface Pro and Surface Laptop with essential accessories via two USB-C®, one USB-A, Ethernet and HDMI ports.

Designed to keep your workspace organized, it offers:

- **Expanded connectivity**: More ports to connect essential accessories
- **Power delivery**: 65W charging to keep your devices powered throughout the workday
- **Fast data transfer**: Benefit from ultra-fast speeds via USB4® or Thunderbolt 4™.
- **Dual 4K monitor support**: Connect via USB-C or HDMI for enhanced multitasking
- **Compact design**: Sleek and space-saving, ensuring a clutter-free environment

Surface USB4 Dock is optimized for Surface devices and is compatible with a wide range of USB-C, USB4, and Thunderbolt 4 devices. It strikes the perfect balance between speed, power, and versatility, making it

a versatile solution for modern IT environments.

What are the commercial manageability features of the Surface USB4 Dock?

The Surface USB4 Dock includes core commercial features designed to enhance IT management, security, and productivity:

- **PXE Boot:** Enables streamlined deployment and management by allowing devices to boot from a network. To learn more, see https://aka.ms/Surface-USB4-Dock.
- **Windows Management Instrumentation (WMI):** Allows IT administrators to monitor and manage connected devices remotely.
- **MAC Address Passthrough:** Simplifies shared workspace environments by maintaining device network identity across docks.
- **Wake on LAN (WOL) from Modern Standby and Wake on Power**: Provides remote power-on capabilities for efficient maintenance. Note that WOL requires a planned Windows Update to be fully functional on Surface USB4 Dock.[45]

NOTE: Surface USB4 Dock supports Wake-on-LAN from Connected Standby, instead of Wake-on-LAN from S4/S5, or via dock MAC address passthrough instead of device MAC Address passthrough. Surface USB4 Dock does not currently support Wake-on-LAN with MAC address passthrough**.**

- To learn more about managing these features, see https://aka.ms/Surface-USB4-Dock.

What are the key features of the Surface USB4 Dock?

- Single USB-C/USB4 cable connectivity for power and device connection
- Designed for Surface devices[46] and compatible with numerous USB-C, USB4 and Thunderbolt 4 devices
- Dual 4K monitor support at 60Hz through USB- C or HDMI 2.1 ports
- Commercial features like PXE boot,[47] MAC Address Passthrough, WMI, and Wake on LAN[48]
- Data speed of up to 40 Gbps through USB 4
- A variety of ports including 2 USB-C/USB4, 1 USB-C PD port (Power), 1 USB-A, 1 HDMI, and 1 Gigabit Ethernet
- Inclusive design with front-facing and versatile rear-facing ports with raised tactile indicators
- Sustainable supply chain and use of recycled materials

45. Wake on LAN (WOL) does not work with MAC Address Passthrough.
46. Surface USB4 Dock is compatible with Surface devices that support USB-C® charging (devices later than Surface Pro 7 and Surface Laptop 3). For more details on compatibility, please visit: USB-C and Fast Charging for Surface - Microsoft Support
47. Network PXE boot requires the latest UEFI update on host devices., pending availability anticipated for MSD. See How to use Surface UEFI - Microsoft Support.
48. To support WOL, Surface devices must be plugged into AC power and use a Surface Ethernet adapter or docking device that is connected to a wired network.

- 100W USB-C PSU with up to 65W power passthrough
- Sleek and compact design
- Compatibility with Windows Updates and the Surface app
- Security lock port[49] feature for added security

How does Surface USB 4 Dock compare to other Surface docks? How should customers choose which dock is right for them?

Our current Surface Hub and Dock portfolio offers three main options that together bring the right docking solution for every customer.

Surface USB-C Travel Hub: Perfect for on-the-go professionals in need of a portable hub that allows them to extend ports with USB-C, USB-A and HDMI ports.

Surface Thunderbolt 4 Dock: The most premium, full featured dock in the portfolio, ideal for performance-driven environments requiring advanced capabilities.

- Built for power users who need a premium, comprehensive docking solution.
- Offers additional ports and advanced manageability features, such as Surface Enterprise Management Mode (SEMM) for enhanced security.
- Provides up to 96W power passthrough to meet demanding workloads.

Surface USB4 Dock: Designed for organizations seeking a balance between functionality and affordability:

- A cost-effective docking option that delivers essential connectivity and productivity features.
- Supports dual 4K monitors via USB-C and HDMI, catering to multitasking needs.
- Includes core commercial manageability features, such as PXE boot, MAC address passthrough, and WMI.
- Compact design and a 100W USB-C power supply with 65W passthrough, ensuring devices stay charged throughout the day

What dock is the Surface USB4 dock replacing in the portfolio?

- Surface USB4 Dock is set to replace Surface Dock 2 in the portfolio by Spring 2025.

Can Surface USB4 Dock support dual 4K monitors?

- Yes, Surface USB4 Dock supports two 4K monitors at 60Hz via USB-C® or HDMI 2.1 ports, or a single 8K monitor at 30Hz when connected over USB-C. Surface USB4 Dock allows you to expand your visual workspace while working simultaneously on three screens. This requires a device with USB4/Thunderbolt 4 port and a supported device and display.

49. Security Lock not included.

Is Surface USB4 Dock compatible with non-Surface devices?

- Yes, it offers compatibility with numerous USB-C USB4.0/Thunderbolt 4 devices ensuring seamless connectivity for your docking needs.

Is Surface USB4 Dock backwards compatible with older Surface devices?

- Surface USB4 Dock is designed to support **Surface devices that are tested and validated for USB-C charging with up to 65 W power passthrough via USB-C ports**. For more information on USB-C charging compatibility, see USB-C and Fast Charging for Surface - Microsoft Support.
- While the USB4 Dock may work with some older Surface devices that support USB-C charging--like Surface Pro X or Surface Laptop 3--performance has not been validated and compatibility may vary. When connected to devices with USB3, the dock operates at the speeds and capabilities of the USB3 standard.

What type of USB ports does Surface USB4 Dock have?

- Surface USB4 Dock includes 2 USB-C ports, 1 USB-C PD port, 1 USB-A port, 1 HDMI and Gigabit Ethernet port. Plus, a security lock port.

Does the Surface USB4 Dock come with a power supply unit (PSU)?

- Yes, it includes a 100W USB-C PSU that offers up to 65W power passthrough.

Can Surface USB4 Dock charge my Surface device even if it has a Surface Connect?

- Yes, it can charge Surface devices that support USB-C charging with up to 65W power passthrough via USB-C port. For more information on USB-C charging compatibility, visit: USB-C and Fast Charging for Surface - Microsoft Support.

How does the Surface USB4 Dock maintain device network identity with MAC Address Passthrough?

- It allows the device's network identity to be maintained when switching between docks.

What makes the Surface USB4 Dock an inclusive design?

- Surface USB4 Dock offers front and rear-facing ports with raised tactile indicators to help you find and identify ports with ease. Surface USB4 Dock port selection has been thoughtfully designed to allow you to utilize the ports more easily. The most frequently used ports are positioned at the front for effortless access and connectivity, while the rear-facing ports are distinguishable by their tactile cues, providing a user-friendly reminder of port functionality, such as the power icon.

How is Surface USB4 Dock sustainable by design?

The Surface USB4 Dock is designed with sustainability in mind, incorporating significant amounts of recycled materials while meeting evolving environmental regulations:

- Overall, the dock features a minimum of **55.2% recycled content**, including 100% recycled tin, 100% recycled gold, and 50% recycled plastic, setting a new standard for sustainable design in the Surface portfolio.[50]

What are the security features of the Surface USB4 Dock?

- You can invest in peace of mind using the convenient security lock port in Surface USB4 Dock to physically secure the docking station and connected devices. The security lock port[49] provides a hassle-free security experience, allowing you to focus on your core business without security concerns.

What is the price point of the Surface USB4 Dock and how does it offer value?

- Surface USB4 Dock is priced at $199.99, offering a cost-effective docking solution with versatile connectivity options. It includes a USB-C 100W PSU with 65W power passthrough, data transfer speeds of up to 40 Gbps, and delivers essential commercial manageability features. Designed to balance affordability and functionality, it's the best value Surface dock in the portfolio, comparing favorably to other options on the market.

How does the Surface USB4 Dock enhance productivity and connectivity for users?

- It simplifies the workspace with a single USB-C/USB4 cable connection, supports high-resolution displays, and offers a variety of ports for peripheral connections, enhancing user productivity and connectivity.

What are the main differences between Thunderbolt 4 and USB4 protocol?

This dock uses USB4 technology, not Thunderbolt 4. While both technologies share similarities, there are key distinctions:

USB4:

- An open standard that builds on Thunderbolt 3 but is not identical to the Thunderbolt 4 protocol.
- Supports data transfer speeds of up to 40 Gbps, depending on cable quality and length. USB4 supports Thunderbolt 3 but does not mandate Thunderbolt 4 features.

Thunderbolt 4:

- A proprietary standard by Intel that includes mandatory certification and guarantees compatibility with Thunderbolt 3 and USB4 devices.
- Supports up to 40 Gbps data transfer speeds with longer cable lengths (up to 2 meters), while USB4 typically achieves these speeds with cables up to 1 meter.
- Includes stricter requirements for power delivery, video output, and external GPU support.

50. Dock (excluding PSU) contains 55.2% recycled content. This includes 11.8% recycled plastics, consisting of a minimum of 50% recycled plastics and 0.3% other recycled metals, consisting of 100% recycled gold in PCB and 100% recycled tin in solder. Based on validation performed by Underwriter Laboratories, Inc. using Environmental Claim Validation Procedure (EVCP) for Recycled Content, UL EVCP-2809-2, Second Edition, dated June 20, 2024. Recycled Content is defined in accordance with ISO 14201.

Both USB4 and Thunderbolt 4 cables have distinct logos to differentiate them. For customers requiring Thunderbolt 4 functionality, such as longer cable lengths or certified compatibility, we recommend using a Thunderbolt 4 dock, such as the Surface Thunderbolt 4 Dock.

Why is Surface USB4 Dock using a USB4 protocol and not Thunderbolt 4 protocol?

- The USB4 protocol provides a balance of high-speed data transfer and compatibility with a wide range of devices, including those with USB4 and Thunderbolt 4 ports. The Surface USB4 Dock is designed to support most Thunderbolt 4 features, including 40Gbps throughput, dual 4K@60Hz displays, and 2x downstream-facing USB4 ports.

Is the USB-C connection in Surface USB4 Dock compatible with all Surface models?

- The Surface USB4 Dock will be compatible with devices that support USB-C charging. For more information on USB-C charging visit: USB-C and Fast Charging for Surface - Microsoft Support.

Appendix B: Comparing Surface Pro Commercial Editions

The following table applies to commercial versions of Surface Pro.

Table 10. Comparing commercial versions of Surface Pro

Component	Surface Pro 7*	Surface Pro 9	Surface Pro 10	Surface Pro 11th Edition Copilot+ PC Snapdragon X Elite or Plus Processor	Surface Pro 11th Edition Copilot+ PC Intel Core Ultra Processor (Series 2)
Processor	Dual-core 11th Gen Intel® Core™ i3-111 4 Processor (Wi-Fi) Quad-core 11th Gen Intel® Core™ i5-1135G7 Processor (Wi-Fi or LTE) Quad-core 11th Gen Intel Core i7-1165G7 Processor (Wi-Fi)	12th Gen Intel Core i7 or 12th Gen Intel Core i5 processors (Devices configured with 256 GB storage or greater built on the Intel Evo™ platform)	Intel Core Ultra 5 Processor 135U 1.6 GHz P-Core Base Frequency 4.4 GHz P-Core Turbo Boost Frequency Intel Core Ultra 7 Processor 165U 1.7 GHz P-Core Base Frequency 4.9 GHz P-Core Turbo Boost Frequency	Snapdragon X Elite (12 core) Snapdragon X Plus (10 core)	Intel Core Ultra 5 processor 236V Intel Core Ultra 5 processor 238V Intel Core Ultra 7 processor 266V Intel Core Ultra 7 processor 268V
Graphics	Intel UHD Graphics (i3) Intel Iris® Xe Graphics (i5, i7)	Intel Iris Xe graphics	Intel Graphics 2 GHz GPU frequency	Snapdragon X Elite - X1E80100 - Qualcomm Adreno GPU (12 Core) Snapdragon X Elite - X1P64100 - Qualcomm Adreno GPU (10 Core)	Intel Arc™ Graphics

Component	Surface Pro 7*	Surface Pro 9	Surface Pro 10	Surface Pro 11th Edition Copilot+ PC Snapdragon X Elite or Plus Processor	Surface Pro 11th Edition Copilot+ PC Intel Core Ultra Processor (Series 2)
NPU	N/A	N/A	Intel AI Boost	**Qualcomm Hexagon™** – **45 TOPS**	**Intel Core Ultra 5 processor 236V/238V** - Intel AI Boost with 40 TOPS **Intel Core Ultra 7 processor 266V/268V** - Intel AI Boost with **48 TOPS**
Memory	8GB, 16GB: LPDDR4x RAM (Wi-Fi or LTE) 32GB: LPDDR4x RAM (Wi-Fi) (i7 only)	8 GB, 16 GB, 32 GB LPDDR5 RAM	8 GB, 16 GB, 32 GB, 64 GB LPDDR5x RAM	16 GB, 32 GB LPDDR5x RAM	16 GB, 32 GB LPDDR5x RAM
OS compatibility	Windows 10 Pro 1909 Windows 11 Pro 21H2 and later	**Intel processors** Windows 10 Pro 21H2 |Windows 11 Pro 22H2 **Arm processors** Windows 11 Pro 22H2	**Wii-Fi only** Windows 11 Pro 24H2 and later Downgradable to Windows 10 via MSI **5G** Windows 11 Pro 24H2 and later	Windows 11 Pro 24H2 and later	Windows 11 Pro 24H2 and later
Architecture	x86	x86 (Wi-Fi) Arm (5G)	x86	Arm Prism emulation	x86
rSSD options:	128GB, 256GB (Wi-Fi & LTE) 512GB, 1TB (Wi-Fi)	M.2 2230: 128 GB, 256 GB, 512 GB, 1 TB	M.2 2230: 256 GB, 512 GB, 1 TB	M.2 2230 Gen4: 256 GB, 512 GB	(Gen 4 SSD): 256GB, 512GB, 1TB

Component	Surface Pro 7*	Surface Pro 9	Surface Pro 10	Surface Pro 11th Edition Copilot+ PC Snapdragon X Elite or Plus Processor	Surface Pro 11th Edition Copilot+ PC Intel Core Ultra Processor (Series 2)
Battery life connected via Wi-Fi	Up to **15 hours** of typical device usage	Up to **15.5 hours**[51] of typical device usage	Up to **8.5 hours** of active web usage	[52] Up to **10 hours** of active web usage[53]	Up to **10 hours** of active web usage[12]
			Up to **13 hours** of local video playback	Up to **14 hours** of local video playback	Up to **14 hours** of local video playback[11]
Battery life connected via cellular	Up to **13.5 hours** typical device usage[54]	Up to **19 hours** of typical device usage[55]	Up to **8.5 hours** of active web usage Up to **13 hours** of local video playback	Up to **9 hours** of active web usage	N/A
Display	LCD	LCD	LCD	OLED & LCD options	OLED & LCD options
Anti-reflective technology			✓		✓

51. Surface Pro 9: Up to 15.5 hours of battery life based on typical Surface device usage. Testing conducted by Microsoft in August 2022 using preproduction software and preproduction Intel®12th Gen Core™ i5, 256GB, 8GB RAM device. Testing consisted of full battery discharge with a mixture of active use and modern standby. The active use portion consists of (1) a web browsing test accessing eight popular websites over multiple open tabs, (2) a productivity test utilizing Microsoft Word, PowerPoint, Excel, OneNote and Outlook, and (3) a portion of time with the device in use with idle applications. All settings were default except screen brightness was set to 150 nits with Auto-Brightness and Adaptive Color disabled. Wi-Fi was connected to a network. Tested with Windows Version 11.0.22621 (21H2). Battery life varies significantly with settings, usage and other factors.

52. Wi-Fi only models. Based on local video playback test. Testing conducted by Microsoft in April 2024 using preproduction software and preproduction Surface Pro Snapdragon® X Plus C10 256GB and 512GB, 16GB RAM (LCD), Wi-Fi only devices and Surface Pro Snapdragon® X Elite C12 1TB 32GB RAM (OLED), Wi-Fi only devices. Testing consisted of full battery discharge during video playback of a .mov file through the Windows Media Player application in 1080p at 24 FPS. All settings were default except screen brightness set to 150 nits with Auto-brightness disabled. Wi-Fi was connected to a network. Battery life varies significantly with settings, usage, and other factors.

53. Wi-Fi only models. Based on a web browsing test. Testing conducted by Microsoft in April 2024 using preproduction software and preproduction Surface Pro Snapdragon® X Plus C10 256GB and 512GB, 16GB RAM (LCD), Wi-Fi only devices and Surface Pro Snapdragon® X Elite C12 1TB 32GB RAM (OLED), Wi-Fi only devices. Testing consisted of full battery discharge while accessing eight popular websites over multiple open tabs through the browser. All settings were default except screen brightness set to 150 nits with Auto-Brightness disabled. Wi-Fi was connected to a network. Battery life varies significantly with settings, usage, and other factors.

54. LTE battery life: Up to 13.5 hours of battery life based on typical Surface device usage. Testing conducted by Microsoft in December 2020 (Surface Pro 7+ with Intel 11th Gen Intel® Core™ i5-1135G7 @ 2.40GHz, 256GB SSD, 8GB DRAM) using preproduction software and preproduction configurations of Surface Pro 7+. Testing consisted of full battery discharge with a mixture of active use and modern standby. The active use portion consists of (1) a web browsing test accessing 8 popular websites over multiple open tabs, (2) a productivity test utilizing Microsoft Word, PowerPoint, Excel and Outlook, and (3) a portion of time with the device in use with idle applications. All settings were default except screen brightness was set to 150nits with Auto-Brightness disabled. LTE enabled and device connected to LTE Network. Wi-Fi and Bluetooth in airplane mode. Battery life varies significantly with settings, usage and other factors.

* Sold separately.

55. Surface Pro 9 with 5G Wi-Fi: Up to 19 hours of battery life based on typical Surface device usage. Testing conducted by Microsoft in August 2022 using preproduction software and preproduction SQ® 3, 128/256/512GB, 8/16GB RAM device. Testing consisted of full battery discharge with a mixture of active use and modern standby. The active use portion consists of (1) a web browsing test accessing eight popular websites over multiple open tabs, (2) a productivity test utilizing Microsoft Word, PowerPoint, Excel, OneNote and Outlook, and (3) a portion of time with the device in use with idle applications. All settings were default except screen brightness was set to 150 nits with Auto-Brightness and Adaptive Color disabled. Wi-Fi was connected to a network. Tested with Windows Version 11.0.22621 (21H2). Battery life varies significantly with settings, usage and other factors.

Component	Surface Pro 7*	Surface Pro 9	Surface Pro 10	Surface Pro 11th Edition Copilot+ PC Snapdragon X Elite or Plus Processor	Surface Pro 11th Edition Copilot+ PC Intel Core Ultra Processor (Series 2)
Chassis					
Length	11.5″ (292 mm)	11.3 " (287 mm)	11.3" (287 mm)	11.3" (287 mm)	11.3″ (287 mm)
Width	7.5" (201 mm)	8.2" (208 mm)	8.2" (208 mm)	8.2" (209 mm)	8.2″ (208.6 mm)
Height	0.33" (8.5 mm)	0.37" (9.3 mm)	0.37" (9.3 mm)	0.37" (9.3 mm)	0.37″ (9.3 mm)
Weight[56]	i3, i5 (Wi-Fi): 1.70 lb. (770g) i5 (LTE): 1.75lb. (796g) i7 (Wi-Fi): 1.73lb. (784g)	1.94 lb. (879 g)	1.95 lb. (885 g)	1.97 lbs. (895 g)	1.97 lbs. (895g)
Cameras & Video					
Front-Facing Camera	5.0MP with 1080p full HD video	5.0MP with 1080p full HD video	12MP with 1440p@30 fps (Quad HD) video Fixed focus Ultra-Wide FOV, 114-degree DFOV after lens distortion correction (LDC)	Quad HD front-facing Surface Studio Camera 1440p Quad HD camera with ultrawide field of view 12 MP, f/2.2, 1 µm, 5p Fixed-focus, Ultra-wide 114° DFOV (post LDC) Windows Studio Effects with automatic framing, Portrait Blur, Creative filters, (illustrated, animated, watercolor), Eye Contact, and Portrait light	1440p Quad HD camera with ultrawide field of view Support for Windows Studio Effects with automatic framing, eye contact, portrait blur and background blur

56. Not including Keyboard.

Component	Surface Pro 7*	Surface Pro 9	Surface Pro 10	Surface Pro 11th Edition Copilot+ PC Snapdragon X Elite or Plus Processor	Surface Pro 11th Edition Copilot+ PC Intel Core Ultra Processor (Series 2)
Rear-Facing Camera	8.0 MP autofocus Up to 1080p full HD video	10 MP autofocus Up to 1080p HD and 4K video	10 MP autofocus Up to 4K@30 fps video 77° DFOV	10 MP Ultra HD autofocus Up to 4K@30fps 77° DFOV (No LDC) UHD 3840x2160 Motion Compensation (MCTF)	10 MP Ultra HD autofocus Up to 4K@30fps 77° DFOV (No LDC) UHD 3840x2160 Motion Compensation (MCTF)
IR camera	Windows Hello face authentication	Windows Hello face authentication	Windows Hello face authentication ESS (Enhanced Sign-In Security)	Windows Hello Face Authentication Enhanced Sign-In Security (ESS)	Windows Hello Face Authentication Enhanced Sign-In Security (ESS)
Network & Connectivity					
Wi-Fi only models	Wi-Fi 6: 802.11ax compatible Bluetooth Wireless 5.0 technology	Wi-Fi 6E: 802.11ax compatible Bluetooth Wireless 5.1 technology	Wi-Fi 6E: 802.11ax compatible Bluetooth Wireless 5.3 technology (including LE functionality) NFC with Reader Mode	Wi-Fi 7 802.11be (2.4 GHz, 5 GHz, 6 GHz) Bluetooth Wireless 5.4 technology including LE functionality NFC with Reader Mode	Wi-Fi 7[57] Bluetooth Wireless Core 5.4 technology including LE functionality NFC with Reader Mode
Wi-Fi+ LTE/5G models	Wi-Fi 6: 802.11ax compatible	Wi-Fi 6E: 802.11ax compatible Bluetooth Wireless 5.1 technology Location: GPS, Glonass, Galileo and Beidou support NanoSIM and eSIM support	Wi-Fi 7: 802.11be compatible Bluetooth Wireless 5.3 technology Location: GPS, Glonass, Galileo, GNSS L1, BDS, QZSS NanoSIM and eSIM[20] support	Wi-Fi 7: 802.11be compatible Bluetooth Core 5.4 technology Location: GPS, Glonass, Galileo, GNSS L1, BDS, QZSS NanoSIM and eSIM support[58]	N/A

57. 6GHz band not available in all regions.
58. eSIM support may vary by carrier.

Component	Surface Pro 7*	Surface Pro 9	Surface Pro 10	Surface Pro 11th Edition Copilot+ PC Snapdragon X Elite or Plus Processor	Surface Pro 11th Edition Copilot+ PC Intel Core Ultra Processor (Series 2)
5G	N/A	NSA (mmWave) Release 15 DL 64 QAM up to 4.2 Gbps 4x4 MIMO UL 256 QAM NSA (Sub-6): Release 15 UL 4x4 MIMO	SA/NSA Release 15 DL 256 QAM up to 2.9 Gbps 4x4 MIMO UL 256 QAM Advanced Pro Release 15, DL Cat 19 up to 1.6 Gbps 256 QAM 4x4 MIMO 5x DL CA UL Cat 18 Contiguous 2x ULCA	SA/NSA, Release 15 DL 256 QAM up to 2.9 Gbps 4x4 MIMO UL 256 QAM Advanced Pro Release 15, DL Cat 19 up to 1.6 Gbps 256 QAM 4x4 MIMO 5x DL CA UL Cat 18 Contiguous 2x ULCA	N/A
LTE		Advanced Pro Release 15 with 4x4 MIMO & LAA UL Cat 20 256 QAM up to 2 Gbps 5x DL CA UL Cat 13 64 QAM Contiguous 2x ULCA	Advanced Pro Release 15 with 4x4 MIMO & LAA UL Cat 20 256 QAM up to 2 Gbps 5x DL CA UL Cat 13 64 QAM Contiguous 2x ULCA	Advanced Pro Release 15 with 4x4 MIMO & LAA UL Cat 20 256 QAM up to 2 Gbps 5x DL CA UL Cat 13 64 QAM Contiguous 2x ULCA	N/A
5G-NR Bands					
mmWave		n257, n260, n261	n257, n260, n261	n257, n260, n261	N/A
Sub-6		n1, n2, n3, n5, n7, n8, n20, n25, n28, n38,	n1, n2, n3, n5, n7, n8, n12, n14, n20, n25, n26, n28, n29, n30,	n1, n2, n3, n5, n7, n8, n12, n14, n20, n25, n26, n28, n29, n30,	N/A

Component	Surface Pro 7*	Surface Pro 9	Surface Pro 10	Surface Pro 11th Edition Copilot+ PC Snapdragon X Elite or Plus Processor	Surface Pro 11th Edition Copilot+ PC Intel Core Ultra Processor (Series 2)
		n40, n41, n48, n66, n71, n77, n78, n79	n38, n40, n41, n48, n66, n71, n77, n78, n79	n38, n40, n41, n48, n66, n71, n77, n78, n79	
LTE Bands	1,2,3,4,5,7,8,12,13,14, 19, 20,25,26,28 29,30,38,39,40,41,66	1, 2, 3, 4, 5, 7, 8, 12, 13, 14, 19, 20, 25, 26, 28, 29, 30, 38, 39, 40, 41, 42, 46, 48, 66, 71	1, 2, 3, 4, 5, 7, 8, 12, 13, 14, 19, 20, 25, 26, 28, 29, 30, 38, 39, 40, 41, 42, 48, 66, 71	1, 2, 3, 4, 5, 7, 8, 12, 13, 14, 19, 20, 25, 26, 28, 29, 30, 38, 39, 40, 41, 42, 48, 66, 71	N/A
WCDMA Bands		1, 2, 5, 8	1, 2, 4, 5, 8	1, 2, 4, 5, 8	N/A
Ports	1 x USB-C 1 x full-size USB-A 3.5mm headphone jack 1 x Surface Connect port Surface Type Cover port[59] MicroSDXC card reader (Wi-Fi) 1 x nano SIM (LTE) Compatible with Surface Dial off-screen interaction*	2 × USB-C with USB 4.0/Thunderbolt 4 Surface Connect port Surface Type Cover port NanoSIM (5G only)[60]	2 × USB-C with USB 4.0/Thunderbolt 4 Surface Connect port Surface Type Cover port	2 x USB-C/ USB4 Surface Connect port Surface Pro Keyboard port NanoSIM (5G only)[61]	2 × USB-C with USB4®/Thunderbolt™ 4 with support for: Charging Data transfer DisplayPort 2.1 with support up to 1 x 8K monitor
Security					
Hardware TPM 2.0 chip for enterprise-grade	✓	✓	✓	✓	✓

59. Compatible with the Surface Pro Type Cover and Surface Pro Signature Type Cover only (sold separately).
* Sold separately.
60. Surface Pro with Wi-Fi+5G models only.
61. Surface Pro with Wi-Fi+5G models only.

Component	Surface Pro 7*	Surface Pro 9	Surface Pro 10	Surface Pro 11th Edition Copilot+ PC Snapdragon X Elite or Plus Processor	Surface Pro 11th Edition Copilot+ PC Intel Core Ultra Processor (Series 2)
security and BitLocker support					
Microsoft Pluton technology				✓	✓
Windows Hello face sign-in	✓	✓	✓	✓	✓
ESS (Enhanced Sign-In Security)			✓	✓	✓
Windows 11 Secured-core PC		✓	✓	✓	✓
NFC authentication			✓	✓	✓
Sensors					
Sensors	Accelerometer Gyroscope Magnetometer Ambient light sensor	Accelerometer Gyroscope Magnetometer Ambient Color sensor	Accelerometer Gyroscope Magnetometer Ambient Color sensor NFC	Accelerometer Gyroscope Magnetometer Ambient Color sensor NFC	Accelerometer Gyroscope Magnetometer Ambient Color sensor NFC
Audio					
Dual Studio Mics (voice clarity or voice focus)	✓	✓	✓	✓	✓
1.6W stereo speakers with Dolby Atmos	✓				
2-Watt Stereo Speakers with Dolby Atmos		✓	✓	✓	✓

Component	Surface Pro 7*	Surface Pro 9	Surface Pro 10	Surface Pro 11th Edition Copilot+ PC Snapdragon X Elite or Plus Processor	Surface Pro 11th Edition Copilot+ PC Intel Core Ultra Processor (Series 2)
Bluetooth LE Audio			✓ Wi-Fi only	✓ Wi-Fi only	✓ Wi-Fi only
Bluetooth Audio	✓	✓			
Pen compatibility					
Designed for Surface Pen and Surface Slim Pen	✓				
Designed for Surface Slim Pen (2nd Edition)		✓	✓	✓	✓
Supports tactile signals with Surface Slim Pen	✓	✓	✓	✓	✓
Integrated storage and wireless charging for Slim Pen (2nd Edition)		✓	✓	✓	✓
Supports Microsoft Pen Protocol 2.6	✓	✓	✓	✓	✓
Keyboard Compatibility					
Surface Pro Signature Type Cover	✓	✓	✓	✓	✓
Surface Pro Type Cover	✓				
Surface Pro Keyboard		✓	✓	✓	✓
Surface Pro Flex Keyboard			✓	✓	✓

Component	Surface Pro 7*	Surface Pro 9	Surface Pro 10	Surface Pro 11th Edition Copilot+ PC Snapdragon X Elite or Plus Processor	Surface Pro 11th Edition Copilot+ PC Intel Core Ultra Processor (Series 2)
Surface Pro X Signature Keyboard	✓	✓	✓	✓	✓
Surface Pro X Keyboard	✓	✓	✓	✓	✓
Software					
Windows 10 Pro version 20H2	✓				
Windows 11 Pro		✓	✓	✓	✓
Preloaded Microsoft 365 Apps	✓	✓	✓	✓	✓
Microsoft 365 Business Standard	✓	✓	✓	✓	✓
Microsoft 365 Business Premium	✓	✓	✓	✓	✓
Microsoft 365 Apps 30-day trial	✓	✓	✓	✓	✓
Serviceability					
Replaceable components		Kickstand Display (Screen) Removable solid-state drive Battery Motherboard (including main processor and main memory) Surface Connect	Kickstand Display module Removable solid-state drive Battery Motherboard (including main processor and main memory) Surface Connect	Kickstand Display module Removable solid-state drive Battery Motherboard (including main processor and main memory) Surface Connect	Kickstand Display module Removable solid-state drive Battery Motherboard (including main processor and main memory) Surface Connect

Component	Surface Pro 7*	Surface Pro 9	Surface Pro 10	Surface Pro 11th Edition Copilot+ PC Snapdragon X Elite or Plus Processor	Surface Pro 11th Edition Copilot+ PC Intel Core Ultra Processor (Series 2)
		Thermal Module Speakers SSD Door Enclosure (bucket) Front camera Rear camera Power & Volume Buttons Camera & Wi-Fi Deck	Thermal module Microphone module Speakers SSD door Enclosure (bucket) Front camera Rear camera Power & volume buttons Device entry kit SIM card connector	Thermal module Microphone module Speakers SSD door Enclosure (bucket) Front camera Rear camera Power & volume buttons Device entry kit SIM card connector	Thermal module Microphone module Speakers SSD door Enclosure (bucket) Front camera Rear camera Power & volume buttons Device entry kit
Built-in guidance			Visual wayfinding icons Access via a QR code to repair instructions	Visual wayfinding icons Access via a QR code to repair instructions	Visual wayfinding icons Access via a QR code to repair instructions

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