

# Surface PCs powered by ARM

Boost productivity with Copilot+ PCs featuring the latest Qualcomm® Snapdragon® X series processors



## Get peak performance with Surface and ARM

Surface devices with **Snapdragon® X Elite and Plus processors** deliver fast startup, exceptional battery life, and blazing-fast performance to handle demanding tasks while remaining energy-efficient and reliable—even while unplugged.

## Accelerate productivity with advanced AI

Copilot+ PCs feature an industry-leading **Qualcomm Hexagon™ NPU with 45 TOPS**. Leap ahead with groundbreaking AI features running directly on the device, helping employees collaborate seamlessly, communicate effectively, and get more done in a day.

**NPU with 45 TOPS**  
for industry-leading AI

**All-day battery life<sup>1</sup>**

**Microsoft Pluton**  
built into processor  
for chip-level security

## Advanced system-on-chip (SoC) design

**Qualcomm's SoC architecture** integrates most computer components into a single chip, boosting performance while enabling thinner, lighter devices with enhanced battery life and cutting-edge technology.

## Versatile app ecosystem

ARM-based Surface devices support a wide range of applications natively and through optimized emulation. Microsoft partners with 300+ developers to optimize apps on ARM. Key productivity, creativity, security, and entertainment apps perform seamlessly. The new emulation engine, **Prism**, helps emulated apps run faster than native apps on older Surface models. Microsoft continues to invest in ARM and app compatibility through programs like [App Assure](#).

## Efficient management with familiar tools

Manage ARM-based Surface devices using **Microsoft Intune** or **Microsoft Endpoint Configuration Manager**. Zero-touch **Autopilot** provisioning and modern deployment workflows simplify the device lifecycle.

## Robust hardware-based security

Strengthen security with the **Microsoft Pluton** security processor and **Trusted Platform Module (TPM) 2.0**. Zero-trust principles are designed into every layer of our chip-to-cloud security including **Windows Hello Enhanced Sign-in Security (ESS)**, enabled by default to protect biometric data.

<sup>1</sup> Battery life varies significantly based on device configuration, usage, network and feature configuration, signal strength, settings, and other factors. See [aka.ms/SurfaceBatteryPerformance](https://aka.ms/SurfaceBatteryPerformance) for details.

## Surface Copilot+ PCs use ARM processors to deliver groundbreaking experiences

Snapdragon® X Elite and Plus processors drive new levels of speed and efficiency.

Meet challenges confidently with a blazing-fast CPU and breakthrough NPU, integrated in a highly efficient design for all day productivity.



Provide uninterrupted performance with exceptionally long battery life.<sup>1</sup>

Microsoft Pluton technology enables future security features to be deployed via Windows Update.

## A legacy of innovation

Surface and ARM's partnership began with the Surface RT in 2012. Microsoft has continually invested in evolving Windows on ARM, enhancing performance, compatibility, and capabilities. These investments include developing native ARM versions of Microsoft Edge, Office, and other key applications. The introduction of 64-bit app support, ARM64EC for hybrid app development, and native developer tools like Visual Studio support a robust technology ecosystem. These efforts reflect Microsoft's long-term commitment to silicon diversity and customer choice.

**2012:** Launch of Surface RT, the first ARM-based Windows Surface device.

**2019:** Introduction of Surface Pro X with Qualcomm Snapdragon processor.

**2020:** Support for 64-bit app emulation on Windows 10 ARM.

**2021:** Windows 11 enhancements with ARM64EC and native ARM toolchain.

**2023:** Launch of Surface Pro 9 with 5G connectivity and advanced AI features.

**2024:** Launch of Copilot+ PCs featuring Snapdragon X series processors driving industry-leading AI experiences.

## Windows PCs: Where technology and business meet

Take advantage of key features delivering deep business benefits across Windows 11 Pro devices and Copilot+ PCs

- ✦ AI & productivity (Microsoft Copilot<sup>2</sup>, Microsoft 365 Copilot<sup>3</sup>)
- 🚀 High-performance devices
- 🔒 Business-readiness (security and management)



<sup>1</sup> Battery life varies significantly based on device configuration, usage, network and feature configuration, signal strength, settings, and other factors. See [aka.ms/SurfaceBatteryPerformance](https://aka.ms/SurfaceBatteryPerformance) for details. <sup>2</sup> Copilot with commercial data protection is available at no additional cost for users with an Entra ID enabled, eligible M365 license. [Overview of Copilot | Microsoft Learn](#). <sup>3</sup> Microsoft 365 Copilot sold separately and requires a qualifying volume license or subscription. [Microsoft 365 Copilot for Enterprise—Pricing and Features | Microsoft 365](#)

# Surface Copilot+ PCs powered by ARM

Surface Copilot+ PCs deliver industry-leading AI acceleration on the device and in the cloud to drive productivity, creativity, and innovation. To ensure a seamless experience, we built and tested Copilot<sup>2</sup> and Microsoft 365 Copilot<sup>3</sup> on Surface devices.

## Surface Pro (11<sup>th</sup> Edition)

Pioneering versatility matched by intelligent power

- Snapdragon<sup>®</sup> X Elite and Plus processors.
- CPUs up to 90% faster than CPUs on Surface Pro 9.
- Industry-defining NPU with 45 TOPS for seamless on-device AI.
- On-device AI empowers collaboration with real-time translation of 40+ languages to English with Live Captions.<sup>4</sup>
- With an ultra-portable 2-in-1 design and 13" touchscreen, you can replace your tablet and your laptop with a single device.
- Provide uninterrupted performance with up to 14 hours of battery life (Wi-Fi models only) and built-in power-saving features.<sup>5</sup> Supports fast charging with minimum of 65W power supply via Surface Connect or USB-C<sup>®</sup>.<sup>6</sup>
- Project professionalism with the ultrawide field of view Quad HD front-facing camera and unique AI-driven Windows Studio Effects.
- The optional 13" OLED display provides crisp visuals in varied conditions with HDR technology,<sup>7</sup> adaptive color, and outstanding contrast and brightness.
- Two USB-C<sup>®</sup>/USB 4<sup>®</sup> ports enable fast data transfer and support up to three 4K monitors at 60Hz with compatible docks.<sup>8</sup>
- Ensure fast, resilient connectivity with Wi-Fi 7.<sup>9</sup> Inquire about 5G option.<sup>10</sup>
- Engage Copilot through the new Copilot Key<sup>11</sup> on keyboard<sup>12</sup>, pen<sup>12</sup>, touch gestures, voice commands, and Microsoft Adaptive accessories<sup>12</sup>.
- Accommodate work at every angle with the 165-degree fluid kickstand and a full-friction hinge.
- Microsoft Pluton technology enables future security features to be deployed directly from Microsoft.

 Copilot+PC



## Surface Laptop (7<sup>th</sup> Edition)

Transformative design packed with intelligent power

- Sleek and ultralight laptop design, with choice of a 13.8" or 15" screen.
- Snapdragon<sup>®</sup> X Elite and Plus processors.
- CPUs up to 86% faster than CPUs on Surface Laptop 5.<sup>13</sup>
- Industry-defining NPU with 45 TOPS for seamless on-device AI.
- New HD 1080p Surface Studio camera and unique AI-driven Windows Studio Effects.
- On-device AI empowers collaboration with real-time translation of 40+ languages to English with Live Captions.<sup>4</sup>
- Uninterrupted performance with up to 20 hours of battery life.<sup>5</sup> Supports fast charging with minimum of 65W power supply via Surface Connect or USB-C<sup>®</sup>.<sup>14</sup>
- PixelSense<sup>™</sup> Flow touchscreen with adaptive color and contrast and HDR technology<sup>7</sup> offer a clear view in varied lighting.
- Two USB-C<sup>®</sup>/USB 4<sup>®</sup> ports enable fast data transfer and support up to three 4K monitors at 60Hz with compatible docks.<sup>8</sup>
- Ensure fast, resilient connectivity with Wi-Fi 7 capability.<sup>9</sup>
- Engage Copilot through the new Copilot Key<sup>11</sup> on keyboard, touch gestures, voice commands, and Microsoft Adaptive accessories<sup>12</sup>.
- Large Surface precision haptic touchpad for comfort and accessibility.
- Microsoft Pluton technology enables future security features to be deployed directly from Microsoft.

 Copilot+PC



<sup>2</sup> Copilot with commercial data protection is available at no additional cost for users with an Entra ID enabled, eligible M365 license. [Overview of Copilot | Microsoft Learn](#). <sup>3</sup> Microsoft 365 Copilot sold separately and requires a qualifying volume license or subscription. [Microsoft 365 Copilot for Enterprise—Pricing and Features | Microsoft 365](#). <sup>4</sup> Currently supports translation for video and audio subtitles into English from 40+ languages. See [aka.ms/copilotpluspcs](#). <sup>5</sup> Based on local video playback test. Battery life varies significantly based on device configuration, usage, network and feature configuration, signal strength, settings and other factors. See [aka.ms/SurfaceBatteryPerformance](#) for details. <sup>6</sup> In select markets, only specific configurations come with 39W Surface power supply. Fast charging is supported with minimum 65W Surface power supply or USB Type-C PD charger rated at 60W or higher, sold separately. Testing conducted by Microsoft in March 2024. For details on Fast Charging see [USB-C and Fast Charging for Surface - Microsoft Support](#). <sup>7</sup> HDR requires HDR content and enabling HDR in device settings. <sup>8</sup> Supporting 3 external displays requires either 2 displays connected to a compatible dock or connected through daisy chain. <sup>9</sup> 6GHz band not available in all regions. <sup>10</sup> 5G not available in all areas; compatibility and performance depends on carrier network, plan and other factors. See carrier for details and pricing. <sup>11</sup> Copilot key feature availability varies by market, see [aka.ms/keysupport](#). <sup>12</sup> Sold separately. <sup>13</sup> Tested May 2024 using CineBench 2024 Multi-Core benchmark. Up to 86% faster comparing Surface Laptop 15" with Snapdragon X Elite 12 core to Surface Laptop 5 15" with Intel<sup>®</sup> Core<sup>™</sup> i7. Up to 73% faster comparing Surface Laptop 13.8" with Snapdragon X Elite 12 core to Surface Laptop 5 13.5" with Intel<sup>®</sup> Core<sup>™</sup> i7. <sup>14</sup> 13.8" Surface Laptop comes with 39W Surface power supply. Fast charging (from 5% to 80%) is supported with minimum 65W Surface power supply or USB-C<sup>®</sup> PD charger, sold separately. Testing was conducted at Microsoft in February 2024, using pre-production devices, software, and minimum of 65W USB-C<sup>®</sup> charger under controlled conditions. The device was powered on to the desktop screen with default display brightness settings. Actual charge time will vary based on operating conditions. Measured at typical office ambient temperature of 23C.

# Copilot+ PCs turbocharge your business impact.

These Copilot+ PC and enterprise application features are only the beginning of a growing list of industry-leading features for business that use Snapdragon X Series processors including the NPU. Equipping your workforce with next-generation Copilot+ PCs creates a hardware baseline upon which to build a flexible, scalable set of future AI tools.

## Make a bigger impact

Follow almost any call, conversation, or recording with **Live Captions** and real-time translation from 44 languages into English.

Exceptional battery life. Surface Laptop and the Snapdragon® X Elite and Plus processors deliver higher performance with up to 20 hours of battery life, the longest on any Surface.



## Hold more effective meetings anywhere

With **Windows Studio Effects**, put your best face forward in video calls with flattering portrait lighting, creative filters, natural eye contact, and more.

**Voice focus:** Enhanced voice focus removes background noise for maximum clarity on video or audio calls.

**Portrait blur:** Apply a light blur so you're always in focus.

**Eye contact:** Maintain eye contact even when you're reading content on the screen, now enhanced.

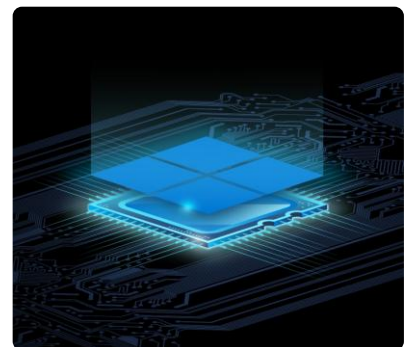
**Creative filters:** Activate three different artistic filters in any video platform and access them in Quick settings: Illustrated, Animated, Watercolor.

**Portrait light:** Automatically adjust the lighting in video calls, in any app or video platform, to brighten yourself against the background.



## Safeguard mission-critical data with the most powerful Windows security

Shield business information and privacy with Secured-core PC protection, Microsoft Pluton, and granular IT control across data, apps, and AI. Copilot+ PCs include a Pluton security processor to provide the highest level of Windows PC protection. Designed by Microsoft, Pluton is integrated into the processor to deliver built-in, next-generation security. Pluton receives its firmware and feature updates directly from Microsoft



Visit [microsoft.com/surface](https://microsoft.com/surface) to discover the latest ARM-powered Copilot+ PC Surface devices.