

10

AI PC myths
• that are holding
you back

• **Dell AI PCs uncovered**

From performance to battery life to security, discover how Dell AI PCs deliver tangible benefits that outpace traditional computers.





Your PC just got smarter.

Dell AI PCs combine powerful CPUs, GPUs, and dedicated NPUs (Neural Processing Units) to handle AI tasks right on your device.

That means faster performance, longer battery life, and features that make your workday easier, from instant meeting summaries to live captions, automatic noise removal, and intelligent document assistance.

Designed with built-in AI accelerators, these devices offer more compute capabilities that allow you to run some AI workloads without an internet connection. Whether you're collaborating remotely, analyzing data, or creating content, Dell AI PCs enhance productivity and efficiency, ensuring you stay ahead in today's world of work.



MYTH 1

"AI PCs are marketing hype. There's no real difference."

FACT

Dell AI PCs include a built-in Neural Processing Unit (NPU), a specialized processor that accelerates AI workloads.

Tasks like background removal, speech translation, or image enhancements are handled efficiently by the NPU, freeing the CPU and GPU to focus on other work. This means AI features run faster and smoother without slowing down the rest of your system.



The power trio

Think of the CPU as the brain of your PC, handling general tasks and keeping everything running smoothly.

The GPU specializes in graphics and parallel processing, making it ideal for gaming, video editing, and complex AI tasks like model training or processing large datasets.

The NPU is built specifically for everyday AI tasks, efficiently handling work that would otherwise overload the CPU and GPU.

When processors get overloaded, performance slows down, power consumption increases, decreasing your battery life. Together, this trio balances workloads, maintains high performance, and allows your PC to tackle advanced tasks with ease.



How you will notice the difference

Faster response

AI features work instantly, with no lag

Lower system load

Your CPU and GPU stay free for other tasks, so no multitasking doesn't slow you down

Quieter, smoother operations

Less strain on your processors means your PC can run cooler and more efficiently even during video calls or creative work

2

MYTH 2

“Almost no apps use the NPU.”

FACT

Hundreds of apps already include AI features that enhance productivity, creativity, collaboration, accessibility, and security.

Features like video background effects, live language translation, image enhancement, and on-device chatbots are just the beginning. The NPU accelerates these AI tasks by offloading workloads from the CPU and GPU, keeping your system fast and responsive. But it's not just the NPU—

Dell's AI PC architecture combines the CPU, GPU, and NPU to optimize performance across all apps, whether they rely on AI, graphics processing, or standard system operations. Every app benefits from this smarter, faster, and more balanced architecture.

300+ apps
for smarter performance

Even the apps you rely on every day:



Dell's AI PC architecture ensures they run faster, smoother, and more efficiently. By combining the CPU, GPU, and NPU, every app benefits from smarter, more balanced performance.

How these apps use AI and the new PC architecture



Productivity & collaboration: Apps like Microsoft Teams and Zoom leverage NPUs for background blur, noise cancellation, and real-time eye contact correction delivering smoother calls and meetings without straining your device.



Creativity: Creative tools, from photo editors to video suites, use NPUs for AI-powered selections, image enhancement, and automated effects, making content creation faster and more responsive.



Accessibility: Live captions, instant translations, and on-device voice assistants now run smoothly thanks to NPUs, helping make tech accessible to everyone often without needing a cloud connection.



Security: NPUs enable features like presence detection (auto-locking/unlocking) and support future security applications, improving protection while remaining energy-efficient.

3

MYTH 3

“AI features drain your battery.”

FACT

The new PC architecture intelligently distributes workloads across the CPU, GPU, and NPU.

By offloading AI computations to the NPU—which operates at significantly lower power than the CPU or GPU—and balancing processing tasks across all processors, the system keeps AI features energy-efficient, maintains responsiveness, and extends battery life.

AI doesn't automatically mean higher energy use. With dedicated hardware and smart workload management, AI features run quickly, efficiently, and remain battery-friendly.

What makes an NPU so efficient?

The NPU is purpose-built for AI tasks. Unlike a CPU or GPU, which handle a wide range of workloads, an NPU focuses on AI computations and executes them extremely efficiently. Because it operates at very low power, it can run AI features continuously without draining your battery. Meanwhile, the CPU and GPU are free to handle everything else, keeping your PC fast, powerful, and responsive.

For example, during a live video conference with AI background effects, the NPU handles background segmentation and rendering locally, the CPU manages system tasks, and the GPU processes video encoding. This separation of duties keeps performance smooth, power consumption low, and ensures the PC remains responsive even during demanding AI workloads.



Dell AI PCs now run up to 22% cooler & 33% more energy efficient

when using select AI-enhanced collaboration workloads on Zoom.¹



Get up to 2.5x longer battery life

when using CyberLink's PowerDirector AI Background Effects feature, with NPU hardware acceleration.²

1 Based on internal analysis and testing, compared to previous generation Intel® Core™ Ultra processor, September 2024. Select AI-enhanced collaboration features include, eye contact correction, standard blur, portrait blur, automatic framing, calls with audio only, virtual background running on devices with Intel® Core™ Ultra 200V series processor. Results may vary.

2 Based on internal analysis and testing, November 2024. Cyberlink's PowerDirector AI Background Effects running on devices with Intel® Core™ Ultra 200V series processors with NPU hardware acceleration enabled compared to Intel® Core™ Ultra 200V series processors without NPU hardware acceleration. Results may vary.

4

MYTH 4

“You still need to use cloud-based AI for anything useful.”

FACT

While cloud-based AI isn’t going anywhere, many AI tasks that you are already using today are able to run locally on your device with lower latency, offline capability, and privacy benefits.

BEST OF BOTH WORLDS

Cloud-based and on-device AI

You don’t have to choose between using AI, the cloud, and your device; it’s a partnership between them.

Cloud AI is best for tasks that need tremendous computing power and scale—such as generating complex reports, analyzing business trends, automating customer support or powering virtual assistants that manage emails or schedules—but it usually requires a solid internet connection and may involve privacy trade-offs since sensitive information is sent to remote servers. On-device AI runs directly on your PC offering fast, private and offline-ready features that are ideal for real-time tasks like voice assistants, personalized recommendations or offline document editing. Many modern workplaces use a combination of both.

This hybrid approach allows you to use the right tool for the job. You can rely on the cloud for heavy-duty AI processing and your AI PC for immediate, real-time tasks. This intelligent distribution of work ensures you get the best performance, security, and flexibility possible, creating a seamless experience that adapts to your needs.

The clear advantages of on-device AI

Running AI tasks locally on your AI PC offers three significant benefits that empower you to work more effectively and securely.



Stronger privacy and security

When you use a cloud-based AI service, your data is sent to a remote server for processing. With on-device AI, your information never leaves your computer. This is a critical advantage for anyone working with sensitive or confidential data.



Fast, smooth performance

Cloud services can lag because they depend on the internet. On-device AI runs directly on your computer, so tasks like live captions, translations, or background effects happen instantly with no delays.



Work anywhere, anytime

With on-device AI, you’re not tied to the internet. Whether you’re on a plane, out in the field, or somewhere with weak Wi-Fi, your AI tools still work reliably with no connection needed.

5

MYTH 5

“AI PCs are just for developers.”

FACT

Everyone benefits—everyday knowledge’s workers in finance, HR, sales, legal, even students, and accessibility use cases gain from on-device AI.

Dell’s messaging and productization reflect broad-use scenarios, not just niche pro workflows.



A common misconception about powerful new technology is that it’s only for specialists. AI PCs streamline routine tasks, boost productivity, and provide helpful tools across many professions:



Students

Benefit from real-time lecture transcription, quick research summaries, and instant language translation, making learning more efficient and accessible.



Sales and marketing

Use AI for inbox prioritization, automated meeting notes, customer email drafting, and prepping for client meetings—all with greater ease.



HR and operations

Speed through form filling, resume screening, and employee feedback analysis with AI-powered automation. Accessibility tools like live captions support a more inclusive workplace.



Finance

Automate data summaries, extract key figures from dense reports, and securely handle sensitive information—all on-device for extra privacy.

6

MYTH 6

“NPUs make GPUs obsolete.”

FACT

NPUs, GPUs, and CPUs are complementary.

PUs are optimized for inference and real-time background features; GPUs handle massive parallel workloads and rendering/training; CPUs orchestrate and run general logic. The best AI PCs intelligently route workloads to the right engine.

The myth that the NPU makes the GPU obsolete comes from a misunderstanding of their roles. The NPU is not a replacement for the GPU; it's a valuable partner. It brings a new level of efficiency to AI tasks, freeing up the GPU and CPU to do what they do best. This synergy creates a more balanced, powerful, and capable system.

This collaborative architecture is a testament to a future where technology is designed to work smarter, not just harder. By integrating these specialized processors, AI PCs deliver a computing experience that is both more powerful and more efficient, empowering you to tackle any challenge. This partnership is built to drive human progress, providing the tools you need to create, connect, and achieve more than ever before.



7

MYTH 7

“This hardware will become outdated as AI evolves.”

FACT

Software stacks and runtimes are constantly improving. AI PCs will become more relevant as software continues to integrate AI features.

Here's why:

- **AI features are growing fast.** Everything from Microsoft Copilot to Zoom and Adobe already uses AI on your PC. That trend will only accelerate, so hardware that can run AI efficiently will stay valuable.
- **NPUs are scalable.** Like CPUs and GPUs evolved over decades, NPUs will keep improving in speed, efficiency, and capabilities, making your PC more future-ready, not obsolete.
- **Balanced architecture is here to stay.** The combination of CPU + GPU + NPU is designed for flexible workloads. As tasks change, this architecture can shift and adapt, unlike single-purpose devices.
- **Local AI matters.** Even as cloud AI gets stronger, privacy, latency, and cost advantages of on-device AI will keep demand for AI PCs high. Running AI workloads on-device have a cost advantage because every time your PC does an AI task locally, that's an AI inference you don't have to send to (or pay for) a cloud provider. On-device AI gives you instant results, stronger privacy, and essentially zero ongoing costs beyond the PC you already own.



AI PCs keep getting smarter

NPUs have already made huge performance gains. They're measured in TOPS (trillions of operations per second)—a way to quantify how many AI operations a processor can execute each second. In just a short time, NPUs have jumped from roughly 10 TOPS to 40 TOPS or more today.

The higher the TOPS, the faster and more complex the AI tasks you can run locally—everything from real-time background removal to on-device large language model inference, all happening simultaneously.

8

MYTH 8

"Local AI is less secure and harder to manage."

FACT

On-device AI keeps sensitive data local, aligning with security controls like disk encryption, secure boot, and policy-based management.

IT teams can easily manage updates and model packages with tools like Dell Pro AI Studio to simplify the process.

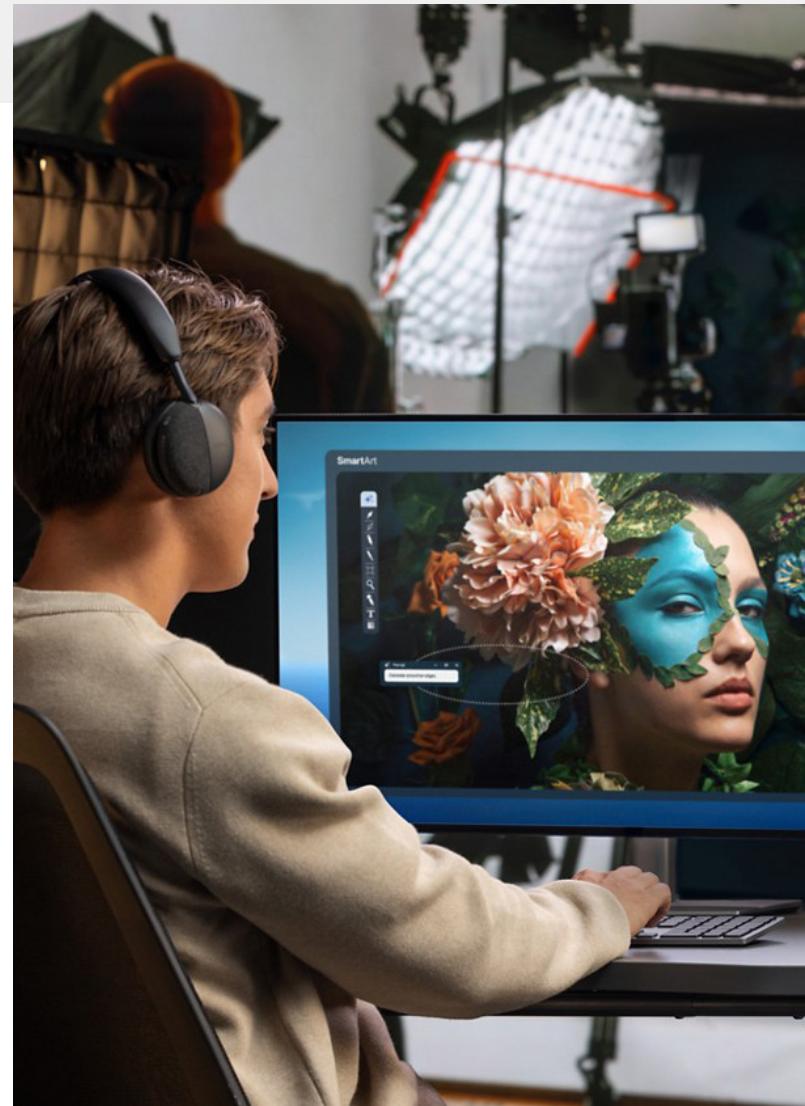
A new level of data privacy and control

One of the most significant advantages of on-device AI is data privacy. When AI tasks are processed locally, your information never has to leave your computer to be sent to a cloud server. This is a fundamental shift that puts you in control and provides a powerful layer of security.

For businesses, this is critical. Proprietary information, customer data, and confidential strategic plans can be used to power AI features without ever exposing them to external networks.

For example, an employee can use an AI assistant to summarize a sensitive internal report. On an AI PC, that entire process happens on the device, ensuring the document's contents remain private. This approach minimizes the risk of data breaches during transmission and keeps confidential information under the protection of your company's security policies.

Dell Pro AI Studio makes managing on-device AI as easy as the cloud. This free, all-in-one AI toolkit streamlines AI app development while enhancing on-device AI manageability. It provides seamless access to AI models and reference applications, empowering users and organizations to develop and deploy AI solutions securely and efficiently.



9

MYTH 9

“I don’t use AI, so I don’t need it.”

FACT

You’re probably already using AI.

Everyday features like background blur, autocorrect, grammar suggestions, meeting transcriptions, and image editing all rely on AI to work. Even though they might seem like small parts of your day, each of these tasks is powered by AI behind the scenes.

The benefit of an AI PC is not just about introducing new features; it’s about enhancing the ones you already know and love. By dedicating AI tasks to the NPU, the entire system becomes more balanced and powerful.

This means the AI-powered tools you use every day become more:

- Features like background blur run smoothly without causing your video to stutter or lag.
- The NPU uses very little power, so you can use these “always-on” AI features without worrying about your battery life.
- With dedicated processing power, AI tools can deliver more accurate and instant results, from better noise cancellation to faster transcriptions.



MYTH 10

"AI PCs cost more, but don't deliver value."

FACT

AI PCs actually provide significant value that offsets any price difference.

One of the key benefits is on-device AI inferencing—running AI tasks locally on the PC instead of in the cloud. This means every AI-powered feature you use, from live translations and background effects to meeting transcriptions and content generation, happens instantly, privately, and without recurring cloud costs.

Imagine you're multitasking at work, running a video call with background blur, editing a document with AI-powered grammar suggestions, and letting an AI assistant summarize your emails.

On a regular PC, these tasks could slow down your system or require cloud processing, which can be delayed or costly.

On an AI PC, the NPU efficiently handles the AI workloads, while the CPU and GPU manage everything else. The result is smoother multitasking, faster responses, and no extra cost for AI processing.

In the long-run

By offloading AI workloads to the NPU, the CPU and GPU aren't overworked, which reduces heat and wear over time. This balanced workload management helps your PC maintain peak performance longer.

Combined with energy-efficient AI processing, smart cooling, and optimized hardware, Dell AI PCs deliver long-term reliability, consistent performance, and real cost value making them a long-term investment.



Discover AI PCs that work for you

Take the next step and find the
Dell AI PC that fits your needs at
Dell.com/ShopPCs



Get started

Join the Dell AI Accelerator
Workshop (fee waived) and
kickstart your AI journey

Advance from refresh to results from Dell services

- Optimize refresh costs
- Deploy seamlessly
- Achieve IT efficiency

Fast track your AI transformation

Deploy the latest AI PCs with
predictable costs using Dell
APEX PC as a Service

Have questions?

Your Dell Sales Representative is ready to help you find
the right solution for your organization.