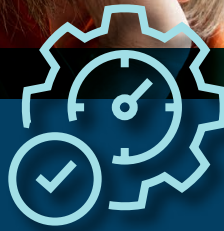




Be more productive on the go

with over 8 hours of battery life and up
to 56.93% better energy efficiency*



Finish GPU-intensive activities in less time

with up to 2.8x the graphics
performance†



Reduce wait times and safeguard data

with up to 3.8x the on-device
AI performance††

Be ready for tomorrow's needs with a longer-lasting, higher-performing PC

In our battery life and performance tests, a Dell Pro 14 Plus AI PC powered by an Intel® Core™ Ultra 7 265U processor outperformed 2022 and 2023 Latitude laptops

Many experienced IT decision-makers follow the “refresh devices every 3 to 5 years” rule and shop previous-gen models at upgrade time. But with those strategies, your company could be missing productivity benefits. One important reason is that Dell™ Pro 14 Plus AI PCs contain Intel® Core™ Ultra 7 265U processors with built-in neural processing unit (NPU) technology. This cutting-edge technology shifts the burden of on-device AI processing from the central and graphics processing units (CPU and GPU) and improves overall performance.

Our hands-on testing shows that a Dell Pro 14 Plus AI PC powered by an Intel® Core™ Ultra 7 265U processor with Intel vPro® received significantly higher scores in general and on-device AI system performance benchmarks versus Intel® Core™ i7 processor-powered Dell Latitude™ 5540 and 5430 laptops. Plus, the Dell Pro 14 Plus lasted over 2 hours longer unplugged than its 2023 predecessor. Serious business landscape changes are on the way.¹ Having cutting-edge technology at everyone's fingertips will help your organization be better prepared for what's coming.

*Based on MobileMark® 30 battery life benchmark results.

† Based on 3DMark® Steel Nomad benchmark results.

†† Based on Geekbench AI CPU (Half Precision) benchmark results.

How and what we tested

To determine the benefits of investing in new Dell Pro 14 Plus laptops powered by Intel® Core™ Ultra 5 235 U processors, we compared a new Dell Pro 14 Plus AI PC's performance and battery life to those of similarly configured two- and three-year-old Latitude laptops, all running Windows 11 Pro:

Dell Pro 14 Plus AI PC (2025)

- Intel® Core Ultra™ 7 265U processor with Intel vPro®
- Intel® Arc™ Graphics
- 16 GB of LPDDR-5x memory
- 256 GB of NVMe® storage
- 55-Whr battery

Dell Latitude 5540 laptop (2023)

- Intel® Core™ i7-1365U processor with Intel vPro®
- Intel® Iris® Xe graphics
- 16 GB of DDR-4 memory
- 256 GB of NVMe storage
- 54-Whr battery

Dell Latitude 5430 laptop (2022)

- Intel® Core™ i7-1265U processor with Intel vPro®
- Intel® Iris® Xe graphics
- 16 GB of DDR-4 memory
- 512 GB of NVMe storage
- 58-Whr battery

To assess general and on-device AI system performance, we set the Windows power mode to “best performance” and ran these benchmarks:

- 3DMark Steel Nomad
- Cinebench 2024
- CrossMark®
- Geekbench AI
- Procyon® AI Computer Vision Benchmark
- Procyon AI Image Generation Benchmark
- Procyon AI Text Generation Benchmark
- Procyon Office Productivity Benchmark
- Procyon Photo Editing Benchmark
- Procyon Video Editing Benchmark
- PugetBench for Creators

For real-world battery life testing, we set the Windows power mode to “Best battery life” on all three laptops and conducted unplugged tests from multiple perspectives. First, we measured office productivity and system efficiency metrics using MobileMark 30 and Procyon Battery Life Benchmark tools. Then, we determined how long each laptop would run a Microsoft Teams video call for nine participants while unplugged.

The results we report reflect the specific configurations we tested. Any difference in the configurations you test, as well as screen brightness, network traffic, or software additions, can affect these results. For a deeper dive into our testing parameters and procedures, see the [science behind the report](#).



About the Dell Pro 14 Plus

This mainstream business laptop is lightweight and slim, with “an aluminum top cover and palmrest for an elegant look and feel, as well as added protection wherever you go.”² With Windows 11 Pro, which offers “more security, more performance, more success,”³ this AI PC also includes built-in technologies to better support your business goals and objectives:

Windows Copilot key: The button unlocks your own personal AI assistant, so you can “get real answers, inspiration, and solutions.”⁴

Clearer video calls: The 5MP camera (optional) features high dynamic range (HDR) technology, which “accurately captures image detail, even in challenging lighting conditions.”⁵

Sustainability: This ENERGY STAR® laptop, with its improved twist and impact resistance as well as a modular USB-C port (attached to the motherboard by screws instead of solder), “meets the best-in-class standards for energy use and repair.”⁶

Simplified IT: Use ProDeploy for ready-to-use laptops on day one, improve cyber resilience with Dell Trusted Workspace, and use Microsoft Intune to manage your fleet over the cloud.⁷

Remote management: The Intel vPro® platform also enables IT teams to monitor for threats and maintain their fleet on their schedule.⁸

Multilayered security: Intel vPro® Security helps “defend against modern threats at each layer: hardware, BIOS/firmware, hypervisor, VMs, OS, and applications.”² The Intel® Threat Detection Technology (Intel® TDT) tool leverages AI power to detect and monitor threats.¹⁰

The Dell Pro 14 Plus we tested was powered by an Intel® Core™ Ultra 7 265U processor with Intel vPro®. This processor is built on integrated CPU, GPU, and NPU architectures. The CPU architecture has two performance-cores and eight efficient-cores. The GPU architecture has four Xe-cores and supports up to four displays. The NPU architecture (Intel® AI Boost) supports OpenVINO™, WindowsML, DirectML, ONNX RT, and WebGPU AI software.

Learn more at: <https://www.intel.com/content/www/us/en/products/sku/241859/intel-core-ultra-7-processor-265u-12m-cache-up-to-5-30-ghz/specifications.html>.

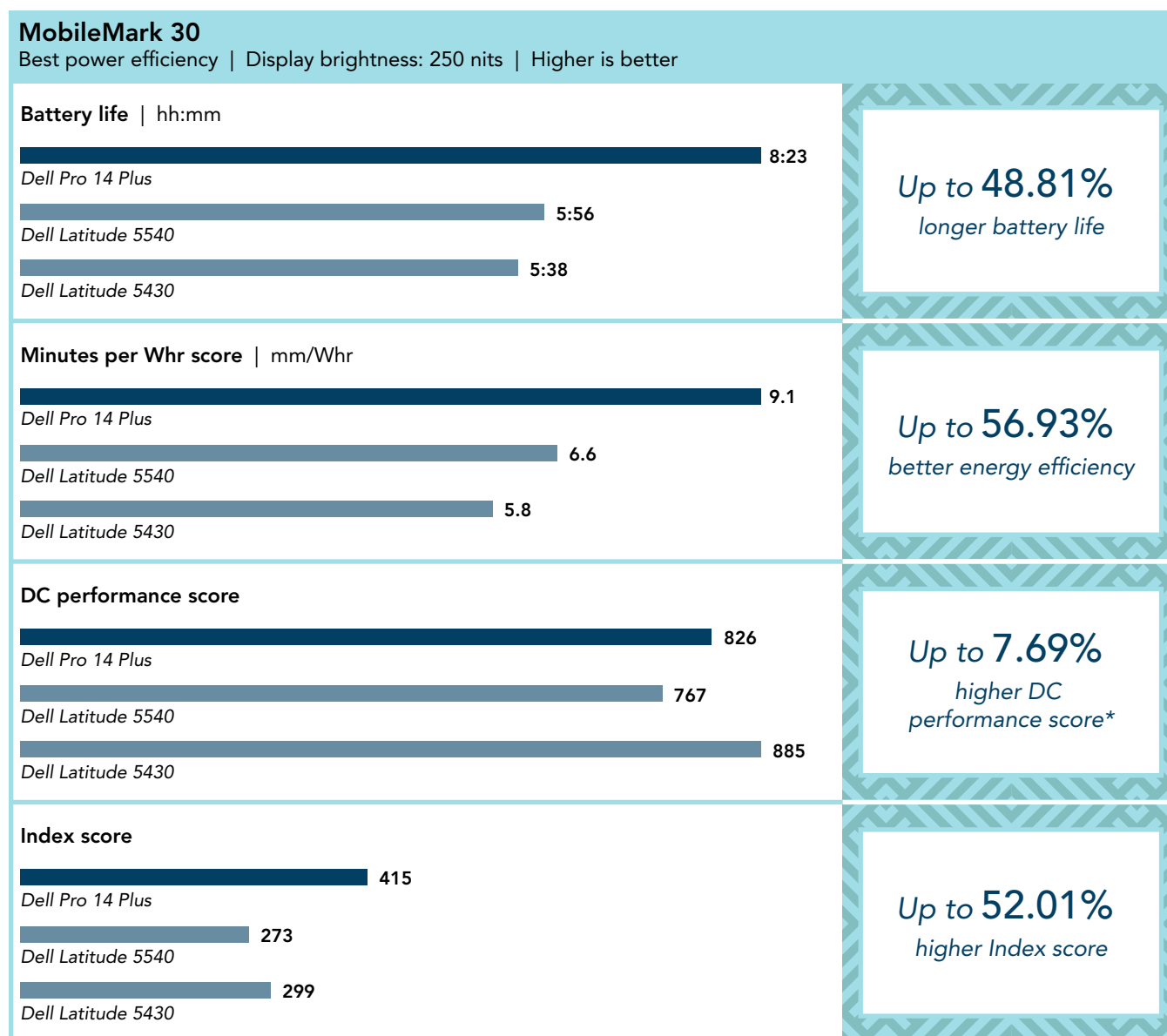
Note: The graphs in this report use different scales. Please be mindful of each graph's data range as you compare.

Jumpstart productivity

In January 2025, Dell Technologies introduced the Dell Pro line of AI PCs, which focus on AI integration, performance, long battery life, durability, and sustainability.¹¹ But how much of an improvement can you expect by upgrading from Latitude laptops that you recently bought to Dell Pro 14 Plus AI PCs with cutting-edge NPU architecture? The following battery life and general performance benchmark results paint a compelling picture.

Make anywhere a more productive workspace

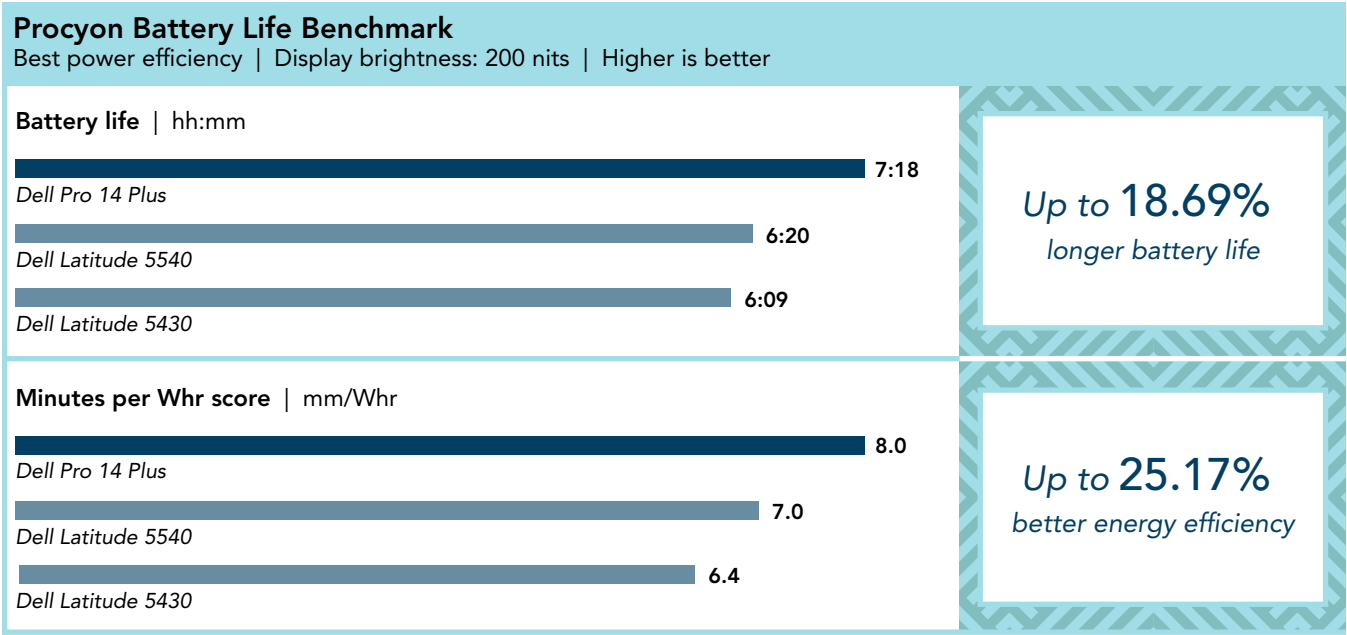
A long-lasting battery is essential for uninterrupted focus and collaboration. Additionally, investing in a more energy-efficient fleet can help your organization better support its ongoing sustainability goals. MobileMark 30 uses real-world applications to measure battery life in office productivity scenarios.¹² Power efficiency is the ratio of the useful output energy to the total input energy consumed. Higher minutes per watt-hour (Whr) scores point to better energy efficiency. MobileMark 30 also calculates DC performance and creates an Index score based on DC performance and battery life results.¹³ While the Latitude 5430 led in DC performance, the Dell Pro 14 Plus received a higher Index score. Higher Index scores reveal a better performance and battery life balance. Lower Dell Latitude Index 5430 scores indicate that performance suffered in pursuit of longer battery life.



*The Latitude 5430 has a larger capacity battery (58-Whr vs. 54-Whr on the Dell Pro 14 Plus and 55-Whr on the Latitude 5540). Note that the Dell Pro 14 Plus received a higher Index score.

Figure 1: MobileMark 30 benchmark results. *The Latitude 5430 has a larger capacity battery (58-Whr vs. 54-Whr on the Dell Pro 14 Plus and 55-Whr on the Latitude 5540). Note that the Dell Pro 14 Plus received a higher Index score. Source: PT.

Procyon Battery Life Benchmark measures battery life in real-world scenarios. For this comparison, we ran the office productivity scenario, which uses Microsoft 365 applications to simulate a typical workday use case.¹⁴



Speed day-to-day tasks

We ran a comprehensive series of general performance tests—including content creation benchmarks—to represent a wide swath of business users and existing and emerging use cases. Content creation tasks are processor-intensive energy hogs, so they provide some insight into how your fleet could handle emerging CPU- and GPU-intensive workloads that don't have established benchmarks yet. Our general productivity results show that the Intel® Core™ Ultra 7 265U processor-powered Dell Pro 14 Plus AI PC delivered useful improvements—especially in the area of graphics performance.

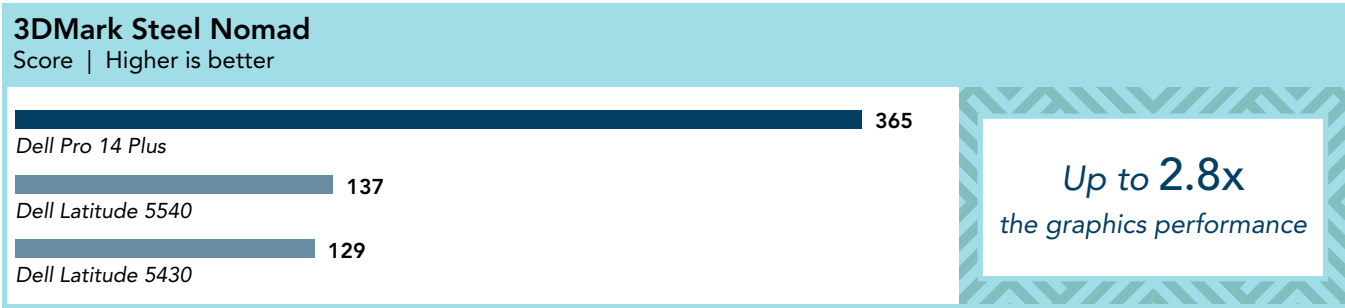


Figure 4: 3DMark Steel Nomad measures GPU performance. This content creation benchmark pushes the limits of graphics hardware by running a native 4K render resolution.¹⁵ Source: PT.

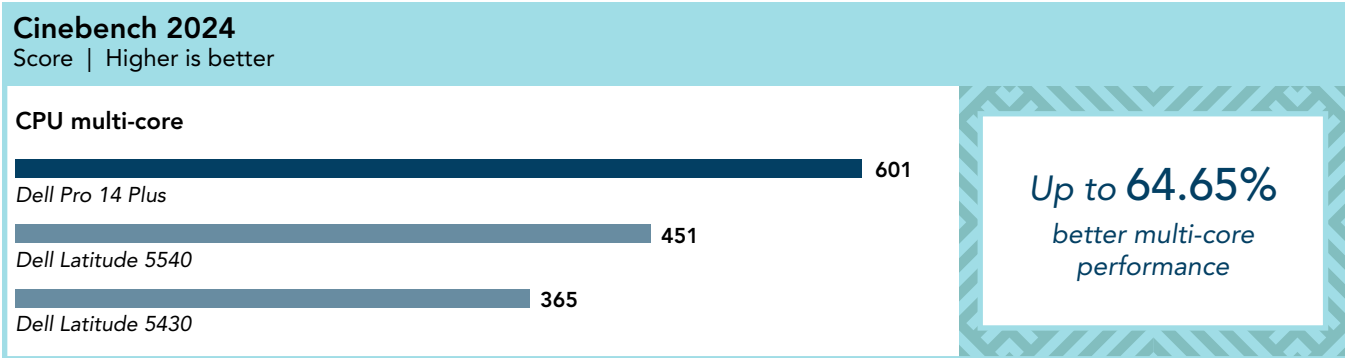


Figure 5: Cinebench 2024 measures CPU performance. This content creation benchmark utilizes Redshift for Cinema 4D to evaluate processor capabilities by rendering a 3D scene.¹⁶ Source: PT.

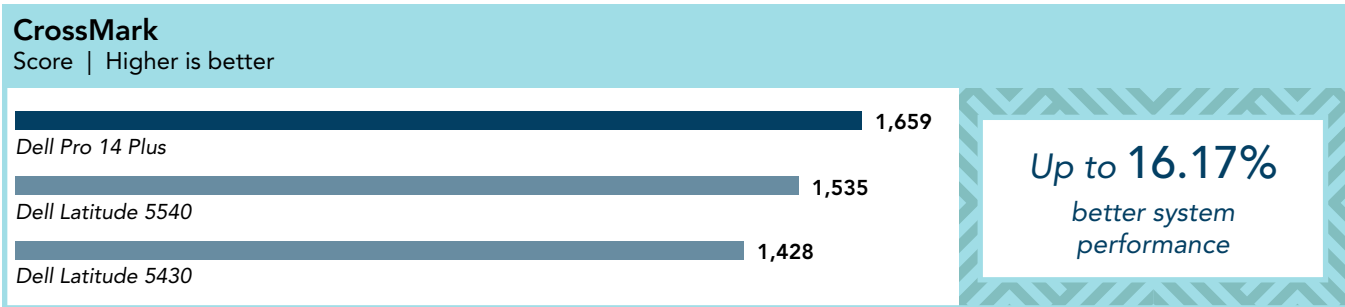
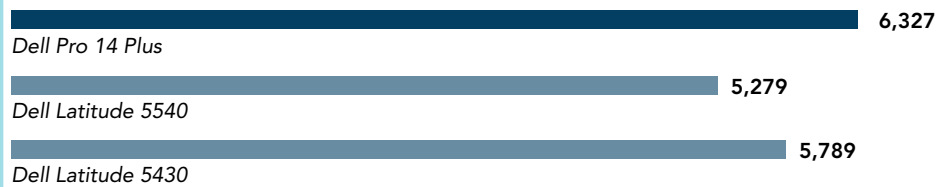


Figure 6: CrossMark measures overall system performance and system responsiveness. This general performance benchmark stresses system hardware by using models of real-world applications.¹⁷ Source: PT.

Procyon Office Productivity Benchmark

Score | Higher is better

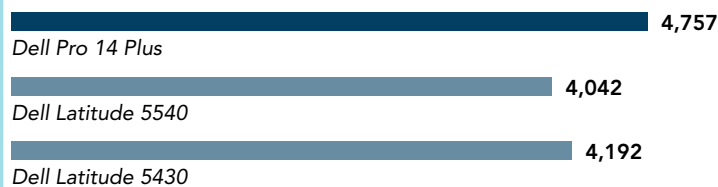


Up to 19.85%
better productivity
app-based performance

Figure 7: Procyon Office Productivity Benchmark measures CPU performance around common office productivity tasks. This general performance benchmark mimics a typical day at the office—even leaving Microsoft 365 apps “running in the background as the focus moves from one task to another.”¹⁸ Source: PT.

Procyon Photo Editing Benchmark

Score | Higher is better

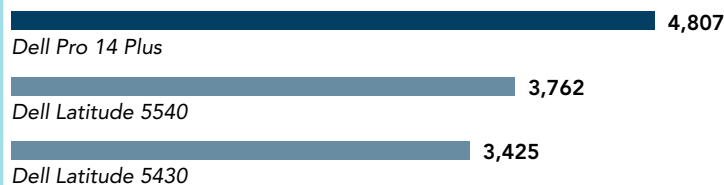


Up to 17.68%
better photo-editing
performance

Figure 8: Procyon Photo Editing Benchmark measures CPU performance. This content creation benchmark uses Adobe® Photoshop® and Lightroom® Classic applications to mimic a “typical photo editing workflow that includes batch processing and image retouching.”¹⁹ Source: PT.

Procyon Video Editing Benchmark

Score | Higher is better

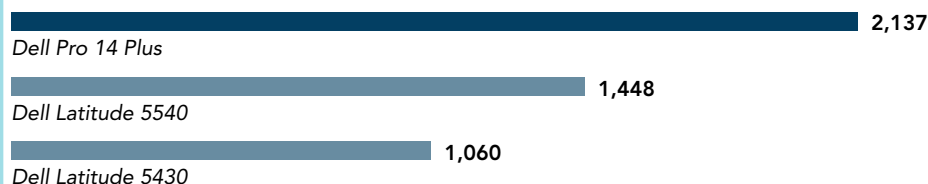


Up to 40.35%
better video-editing
performance

Figure 9: Procyon Video Editing Benchmark measures CPU and GPU performance. This content creation benchmark uses the Adobe Premiere® Pro application in a common video editing workflow that includes exporting video files.²⁰ Source: PT.

PugetBench for Premiere Pro

Score | Higher is better



Up to 2.0x
the video-editing
performance

Figure 10: PugetBench for Premiere Pro measures CPU and GPU performance. This content creation benchmark uses the Adobe Creative Cloud app in real-world workflows.²¹ Source: PT.

An AI primer

AI is software that mimics human behavior, decision-making, or intelligence. Machine learning (ML) is a subset of AI. ML uses algorithms to learn from data and make decisions on patterns. Deep learning (DL) is a subset of ML that contains generative AI (GenAI). DL uses neural networks to learn from data and interactions. GenAI is a type of DL that produces context (text, image, video) based on input and training. Small and large language models (SLMs and LLMs) are trained on text data to process, understand, and generate natural language. In addition to powering customer service chatbots and virtual assistants, they can automate text-based tasks, such as email generation, document summarization, language translation, and customer data analysis. For this analysis, we used benchmarks to measure both GenAI and LLM performance on the three Dell laptops under test:

GenAI apps can boost productivity in customer operations, research and development, sales and marketing, and software development.

LLMs can help companies identify emerging trends, make informed and strategic decisions, and improve the customer experience.

Running AI on devices instead of on the cloud enables users to keep sensitive data local, which enhances your company's control of and security around that data. Secure local data access also has productivity advantages—users can access important information and complete assignments in areas with limited or intermittent internet access. Investing in laptops with better on-device AI system performance results means users have to wait less when running AI locally.

Prepare for what's coming

Don't be left behind. McKinsey found that 78 percent of the companies they surveyed are utilizing AI technologies in 2025.²² As AI processes become better and more efficient, their datasets improve. This opens up new pathways for innovation and discovery and powers better decision-making. Improved performance in this area allows you to redesign workflows, elevate governance, and better mitigate risks.

This section shows how the built-in NPU (Intel® AI Boost) architecture in the Dell Pro 14 Plus reduces the load on the CPU and the GPU. If you're exploring AI, upgrading to Dell Pro 14 Plus AI PCs powered by Intel® Core™ Ultra 7 265U processors with Intel vPro® can help prepare your company for what's coming.

Enhance decision-making abilities

Utilizing effective LLMs and GenAI tools can free up valuable time for more strategic and creative work. And, as always, the less time you and your teams have to wait for answers, the better.

Geekbench AI measures on-device AI performance using LLMs.²³ We chose to highlight the Half Precision scores because Half Precision (FP16) "provides a good balance between speed and accuracy."²⁴ In our testing, we used the Intel OpenVINO™ AI framework for these tests. For a deeper dive into our results, which includes Single Precision (FP32), Half Precision (FP16), and Quantized (INT8) scores, go to the [science behind the report](#).

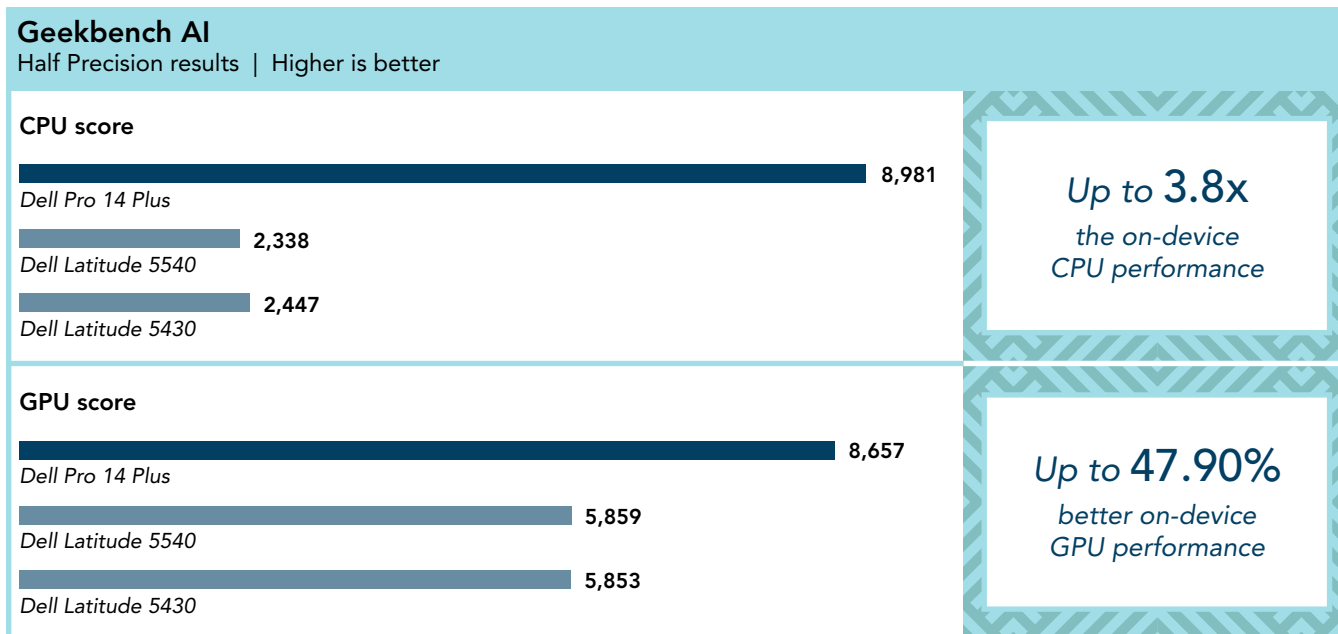


Figure 11: Geekbench AI benchmark results. Source: PT.

Speed image processing and recognition tasks

Whether you're using computer vision algorithms to process visual data at the edge, analyze 3D images, or classify images and objects, the faster the device you're using accomplishes this task, the sooner you can move on to the next item on your to-do list.

Procyon AI Computer Vision Benchmark measures AI inference performance using different AI inference engines.²⁵ In our testing, we used the Intel OpenVINO™ toolkit. These are the inference engines and their use cases:

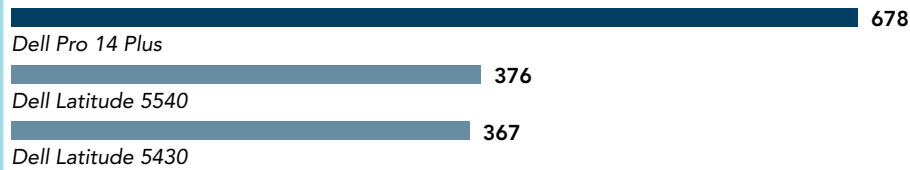
- **MobileNetV3, ResNet-50, and Inception-v4:** Research institutions, tech companies, and individuals use these models for image recognition, object detection, and image classification tasks.^{26,27,28}
- **YOLOv3:** Video surveillance companies, healthcare providers, and manufacturers use this Deep Neural Network (DNN) architecture to distinguish between different objects and features within images and videos.²⁹
- **Real-ESRGAN:** Digital artists, medical professionals, and real estate firms use this generator and discriminator network (GAN) architecture to enhance image quality and resolution.³⁰

In the integer-optimized testing, we found that, while the inference counts were highest on the Real-ESRGAN model, which is a super-resolution model that uses complex calculations to restore and improve existing media,³¹ the Intel® Core™ Ultra 5 135U processor-powered Dell Pro 14 Plus dominated in all categories. For a deeper dive into all of our results, which include integer, float16, and float32 scores, go to the [science behind the report](#).

Procyon AI Computer Vision Benchmark

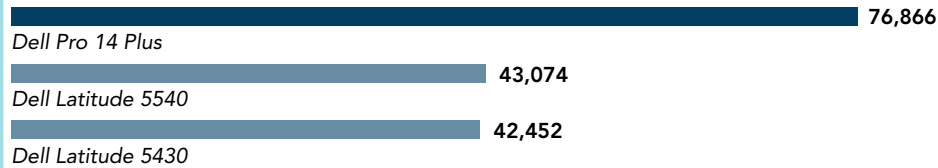
Intel® OpenVINO™ | Integer-optimized results | Higher is better

Overall score



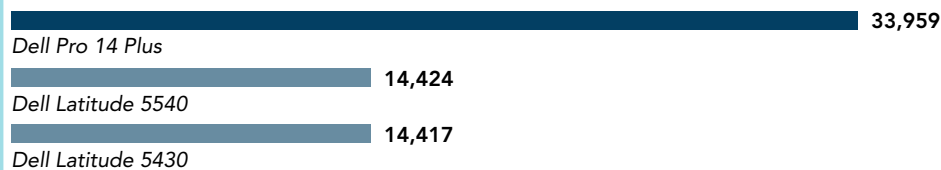
Up to **84.74%**
better Intel OpenVINO™
performance

MobileNetV3 total inferences count



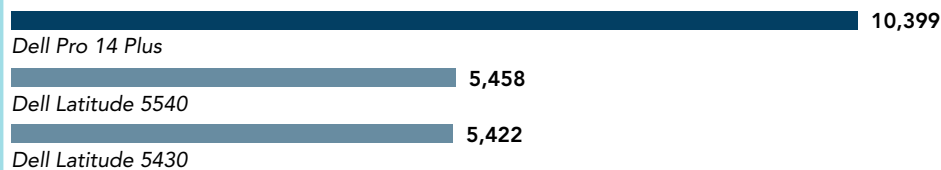
Up to **81.06%**
higher MobileNetV3 total
inferences count

ResNet-50 total inferences count



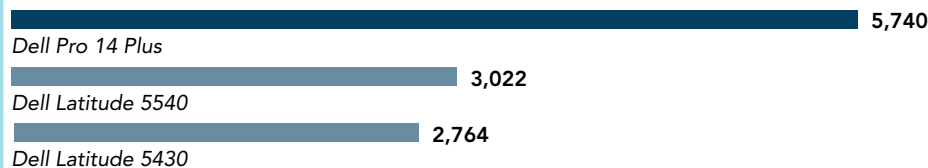
Up to **135.54%**
higher ResNet-50 total
inferences count

Inception-v4 total inferences count



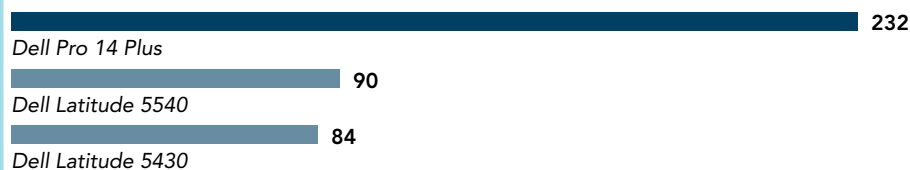
Up to **91.79%**
higher Inception-v4 total
inferences count

YOLOv3 total inferences count



Up to **107.67%**
higher YOLOv3 total
inferences count

Real-ESRGAN total inferences count



Up to **176.19%**
higher Real-ESRGAN total
inferences count

Figure 12: Procyon AI Computer Vision Benchmark results. Source: PT.

Reduce image and text generation wait times

Imagine your laptop users as skilled pilots navigating a complex flight path through changing weather conditions. The processor is the aircraft's powerful engine, delivering the thrust and control necessary for smooth flying. GenAI serves as the co-pilot, offering real-time data, strategic advice, and quick adjustments so the pilot can maintain course and land safely and efficiently. When all elements work well together, planes and workflows get where they're going faster.

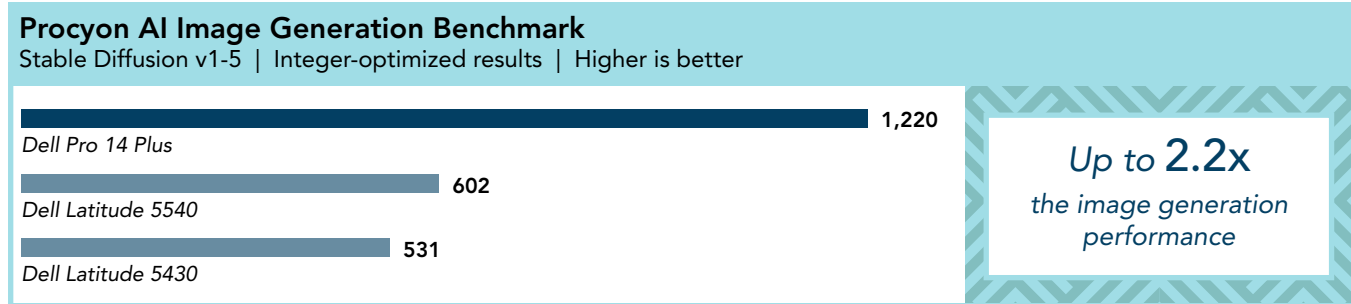


Figure 13: Procyon AI Image Generation Benchmark measures the inference performance of on-device AI accelerators.³² Stable Diffusion v1-5 generates photo-realistic images from text prompts.³³ Source: PT.

In addition to scoring higher on the Procyon AI Image Generation Benchmark, the Dell Pro 14 Plus powered by Intel® Core™ Ultra 7 265U processor with Intel vPro® completed the task in just under 3-1/2 minutes. The same task took almost 8 minutes on the 2022 Dell Latitude 5430 powered by an Intel Core i7-1265U processor with Intel vPro®. To check out the overall duration and image generation speed sub-scores, go to the [science behind the report](#).

Procyon AI Text Generation Benchmark measures LLM performance.³⁴ These are the models and their use cases:

- **PHI 3.5:** This Microsoft SLM summarizes text for researchers, code generation and assistance for developers, and multi-lingual translations for customer service chatbots.³⁵
- **Mistral 7B:** This LLM converts text between languages, generates educational materials, automates data analysis, and aids code generation and analysis.³⁶
- **Llama 3.1:** This LLM provides advanced reasoning and context for multilingual customer service agents and coding assistants.³⁷

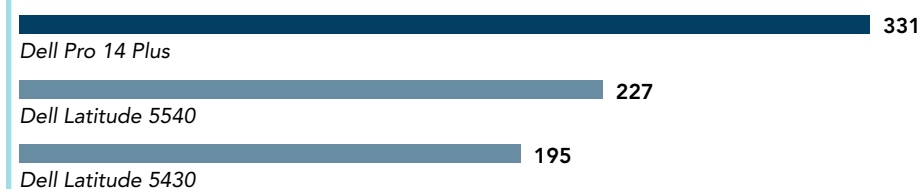


To check out the time to first token, output token speed, and load time results, go to the [science behind the report](#).

Procyon AI Text Generation Benchmark

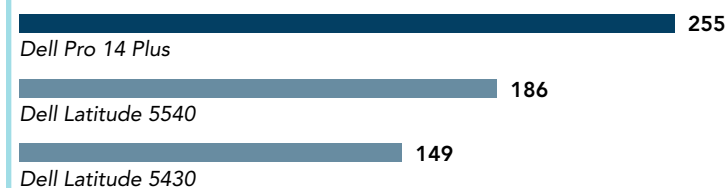
Higher is better

PHI 3.5 overall score



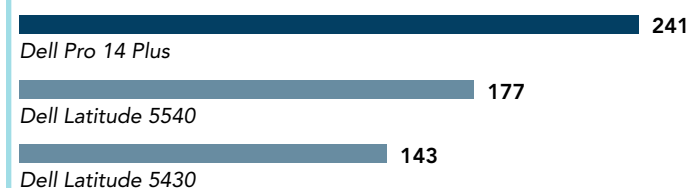
Up to **69.74%**
better PHI 3.5
performance

Mistral 7B overall score



Up to **71.14%**
better Mistral 7B
performance

LLAMA 3.1 overall score



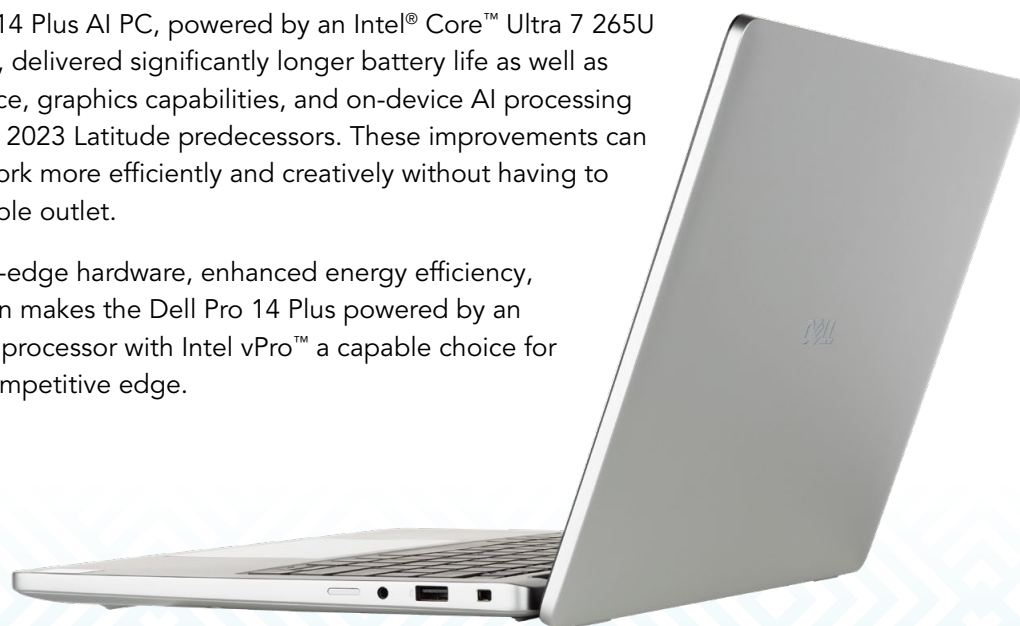
Up to **68.53%**
better LLAMA 3.1
performance

Figure 14: Procyon AI Text Generation Benchmark results. Source: PT.

Conclusion

We found that a Dell Pro 14 Plus AI PC, powered by an Intel® Core™ Ultra 7 265U processor with Intel vPro®, delivered significantly longer battery life as well as better general performance, graphics capabilities, and on-device AI processing compared to its 2022 and 2023 Latitude predecessors. These improvements can enable professionals to work more efficiently and creatively without having to focus on finding an available outlet.

Its combination of cutting-edge hardware, enhanced energy efficiency, and built-in AI acceleration makes the Dell Pro 14 Plus powered by an Intel® Core™ Ultra 7 265U processor with Intel vPro™ a capable choice for businesses who want a competitive edge.



1. Harvard Business Review, "Agentic AI Is Already Changing the Workforce," accessed August 4, 2025, <https://hbr.org/2025/05/agentic-ai-is-already-changing-the-workforce>.
2. Dell Technologies, "Dell Pro 14 Plus Laptop or 2-in-1," accessed August 4, 2025, https://www.dell.com/en-us/shop/dell-laptops/dell-pro-14-plus/spd/dell-pro-pb14250-2-in-1-laptop/gcto_pb14250_usx?redirectTo=SOC.
3. Microsoft, "Windows 11 Pro for business: Boost productivity with Copilot," accessed August 4, 2025, <https://www.microsoft.com/en-us/windows/business/windows-11-pro>.
4. Dell Technologies, "Dell Pro 14 Plus Laptop or 2-in-1," accessed August 4, 2025, https://www.dell.com/en-us/shop/dell-laptops/dell-pro-14-plus/spd/dell-pro-pb14250-2-in-1-laptop/gcto_pb14250_usx?redirectTo=SOC.
5. Dell Technologies, "Dell Pro 14 Plus Laptop or 2-in-1."
6. Dell Technologies, "Dell Pro 14 Plus Laptop or 2-in-1."
7. Dell Technologies, "Dell Pro 14 Plus Laptop or 2-in-1."
8. Intel, "What is Intel vPro®?" accessed August 4, 2025, <https://www.intel.com/content/www/us/en/architecture-and-technology/vpro/vpro-security/overview.html>.
9. Intel, "Intel vPro® Security," accessed August 4, 2025, <https://www.intel.com/content/www/us/en/architecture-and-technology/vpro/vpro-security/overview.html>.
10. Intel, "Intel vPro® Security."
11. Dell Technologies, "Dell transforms AI PC portfolio for anywhere productivity," accessed May 22, 2025, <https://investors.delltechnologies.com/news-releases/news-release-details/dell-transforms-ai-pc-portfolio-anywhere-productivity>.
12. BAPCo, "MobileMark 30," accessed August 4, 2025, <https://bapco.com/mobilemark-30/>.
13. BAPCo, "MobileMark 30."
14. UL Solutions, Procyon® Battery Life Benchmark," accessed August 4, 2025, <https://benchmarks.ul.com/procyon/battery-life-benchmark>.
15. UL Solutions, "3DMark, Steel Nomad is out now!" accessed August 4, 2025, <https://benchmarks.ul.com/news/3dmark-steel-nomad-is-out-now>.
16. Maxon, Cinebench," accessed August 4, 2025, https://www.maxon.net/en/cinebench?srsId=AfmBOoq3jePUR91HPyM2RkVYTezcZaasjsWPMI9uITTC_EYQCB6TL6JC.
17. BAPCo, "CrossMark," accessed August 4, 2025, <https://bapco.com/crossmark/>.
18. UL Solutions, "Procyon® Office Productivity Benchmark," accessed August 4, 2025, <https://benchmarks.ul.com/procyon/office-productivity-benchmark>.
19. UL Solutions, "Procyon® Photo Editing Benchmark," accessed August 4, 2025, <https://benchmarks.ul.com/procyon/photo-editing-benchmark>.
20. UL Solutions, "Procyon® Video Editing Benchmark," accessed August 4, 2025, <https://benchmarks.ul.com/procyon/video-editing-benchmark>.
21. Puget Systems, "PugetBench for Premiere Pro," accessed August 4, 2025, <https://www.pugetsystems.com/pugetbench/creators/premiere-pro/>.
22. McKinsey, "The state of AI: How organizations are rewiring to capture value," accessed August 4, 2025, <https://www.mckinsey.com/capabilities/quantumblack/our-insights/the-state-of-ai>.
23. Geekbench AI, "Introducing Geekbench AI," accessed August 4, 2025, <https://www.geekbench.com/ai/>.
24. Vishalinde, "Understanding FP32, FP16, and INT8 Precision in Deep Learning Models: Why INT8 is Essential," accessed August 4, 2025, <https://medium.com/@vishalindev/understanding-fp32-fp16-and-int8-precision-in-deep-learning-models-why-int8-calibration-is-5406b1c815a8>.
25. UL Solutions, "Procyon® AI Computer Vision Benchmark," accessed August 4, 2025, <https://benchmarks.ul.com/procyon/ai-inference-benchmark-for-windows>.

26. Activeloop, "MobileNetV3," accessed August 4, 2025, <https://www.activeloop.ai/resources/glossary/mobile-net-v-3/>.
27. Petru Potrimba, "What is ResNet-50?" accessed August 4, 2025, <https://blog.roboflow.com/what-is-resnet-50/#:~:text=ResNet%2D50%20is%20a%20convolutional,it%2C%20and%20categorize%20them%20accordingly.>
28. GeeksforGeeks, "Inception-V4 and Inception-ResNets," accessed May 27, 2025, <https://www.geeksforgeeks.org/inception-v4-and-inception-resnets/>.
29. Petru Potrimba, "What is YOLOv3? An Introductory Guide." accessed August 4, 2025, <https://blog.roboflow.com/what-is-yolov3/>.
30. Natsunoyuki, "Upscaling images with Real-ESRGAN," accessed August 4, 2025, <https://medium.com/@natsunoyuki/upscaling-images-with-real-esrgan-db579e9fb68d>.
31. Maria Llain, "Restoring Image Quality With AI using Real-ESRGAN and SwinIR," accessed August 4, 2025, <https://medium.com/@mariallain/restoring-image-quality-with-ai-using-real-esrgan-and-swinir-20d54c483e39>.
32. UL Solutions, "Procyon® AI Image Generation Benchmark," accessed August 4, 2025, <https://benchmarks.ul.com/procyon/ai-image-generation-benchmark>.
33. Runwayml, "Stable Diffusion v1-5," accessed August 4, 2025, <https://stablediffusionapi.com/models/sd-1.5>.
34. UL Solutions, "Procyon® AI Text Generation Benchmark," accessed August 4, 2025, <https://benchmarks.ul.com/procyon/ai-text-generation-benchmark>.
35. AdinaTru, "Discover the New Multi-Lingual, High-Quality Phi-3.5 SLMs," accessed August 4, 2025, <https://techcommunity.microsoft.com/blog/azure-ai-services-blog/discover-the-new-multi-lingual-high-quality-phi-3-5-slms/4225280>.
36. Waleed Ahmed, "Mistral 7b: An Emergence in the Large Language Model Realm," accessed August 4, 2025, <https://datasciencedojo.com/blog/mistral-7b-emergence-in-llm/>.
37. Hugh Mahmood, "Comparing the Llama Models: Llama 3 vs Llama 3.1 vs Llama 3.2," accessed August 4, 2025, <https://datasciencedojo.com/blog/llama-model-debate/#>.

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