

Embrace a new era of computing with a Dell Latitude 5450 AI PC

In our tests, a Dell Latitude 5450 AI PC powered by an Intel Core Ultra 5 processor 135U provided faster performance and greater system efficiency than its legacy counterpart

Advanced processor technology for an improved user experience

Latitude AI PCs are powered by Intel® Core™ Ultra processors, with integrated central processing unit (CPU), graphics processing unit (GPU), and neural processing unit (NPU) components.

CPU is optimal for AI tasks that are time sensitive, such as identifying incoming mail as spam or speech-to-text translation.

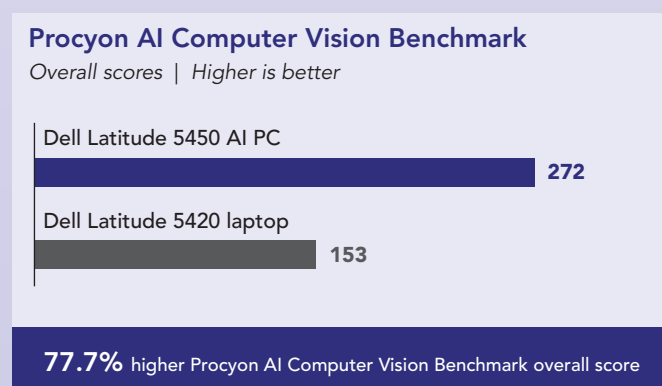
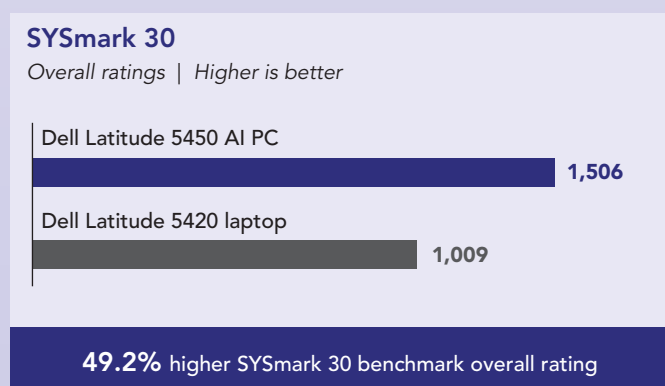
GPU is best for AI-enhanced content creation and data-filtering tasks, including media, 3D, and rendering use cases.

NPU is great for AI-based tasks such as facial or fingerprint recognition, and blurring backgrounds during video-conferencing meetings.

Refresh for higher system performance

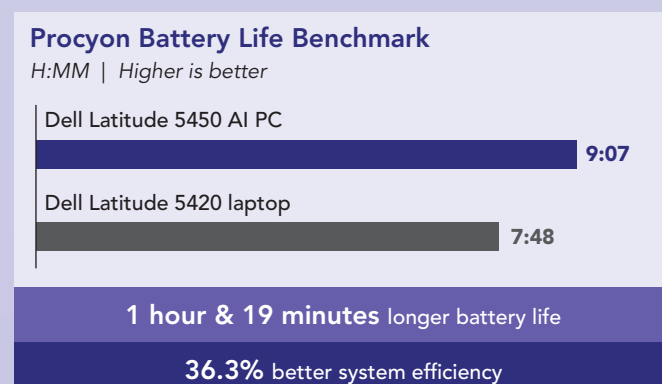
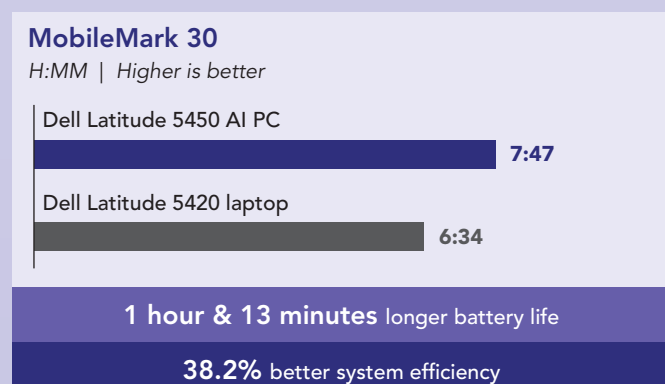
SYSmark 30 uses real applications and simulated user input to measure the response times of business-oriented workflows, media-centric tasks, and multitasking.¹

The **Procyon AI Computer Vision Benchmark** provides insights into how well on-device AI inference engines can tackle computer vision scanning and identification activities such as language translation, facial and object recognition, inventory management, and medical imaging.^{2,3}



Refresh for greater system efficiency

To measure general-use battery life, we ran MobileMark 30 and Procyon Battery Life Benchmark tests, which use real-world applications to gauge battery life in office productivity and video playback situations.^{4,5}



While the Latitude 5450 AI PC was slightly louder than the Latitude 5240 we tested, the 5450 AI PC delivered more than twice the Cinebench 2024 performance of its predecessor. Even better, they were both still whisper-quiet under load.



Normal breathing*

Soft whisper*

Quiet library*

10dB

20dB

30dB

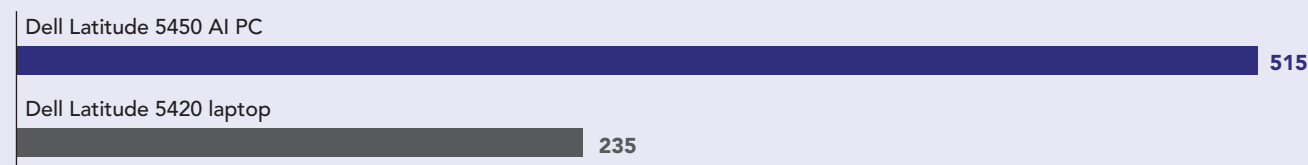
40dB

* International Noise Awareness Day, "Common Noise Levels," accessed July 2, 2024, <https://noiseawareness.org/info-center/common-noise-levels/>.

Thermal & acoustic testing during a Cinebench 2024 sustained performance workload

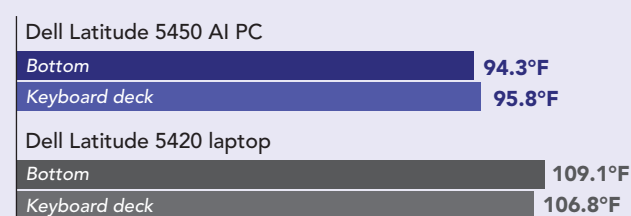
Performance score

Higher is better



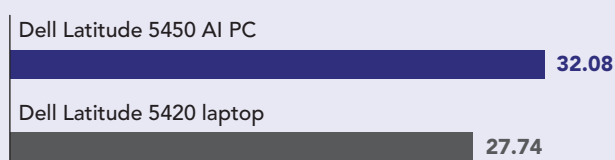
External temperatures

Lower is better



Average dBA

Lower is better



The **Cinebench 2024** benchmark is a CPU- and GPU-intensive media-rendering benchmark. We consider it a stand-in for resource-intensive applications and processes, such as security scans, scientific simulations, and video-conferencing calls with shared screens, which can make an under-powered laptop run hot to the touch or roar with fan noise during operation.

1 BAPCo, "SYSmark 30 whitepaper," accessed August 12, 2024, <https://bapco.com/wp-content/uploads/2024/03/bapco.sysmark.30.whitepaper.v1.1.pdf>.

2 UL Solutions, "UL Procyon AI Computer Vision Benchmark," accessed August 12, 2024, <https://benchmarks.ul.com/procyon/ai-inference-benchmark-for-windows>.

3 Jye Sawtell-Rickson, "What is Computer Vision?" accessed August 12, 2024, <https://builtin.com/machine-learning/computer-vision>.

4 BAPCo, "MobileMark 30," accessed July 12, 2024, <https://store.bapco.com/product/mobilemark-30/>.

5 UL Solutions, "Overview of U: Procyon Battery Life Benchmark," accessed July 1, 2024, <https://support.benchmarks.ul.com/support/solutions/articles/44002347112-overview-of-ul-procyon-battery-lifebenchmark>.

Learn more at <https://facts.pt/fwYj13B>