Generational Upgrade

Up to 33.2% higher CrossMark Overall rating than device with previous-generation processor with a Dell Latitude with Intel Core i5-1245U CPU*

Enhanced performance for specialized business users

Up to 5.8% higher CrossMark Overall rating with a Dell Latitude with Intel Core i5-1250P CPU**

Peak performance for demanding creative work

Up to 17.3% higher CrossMark Overall rating with a Dell Latitude with Intel Core i5-12600H CPU***

Enable on-the-go productivity at multiple price points with Dell Latitude 5000 series laptops featuring 12th Gen Intel Core processors

A series of tests revealed the advantages of Dell Latitude laptops featuring 12th Gen Intel Core U-, P-, and H-Series processors

According to Gallup, "the 'Great Global Work-From-Home Experiment' created by the COVID-19 pandemic has changed how we work and expect to work far into the future."[1] This shift in the way people work includes the way people use their computers. Dell® offers Latitude® 5000 series laptops that can be configured with 12th Gen Intel® Core™ U-, P-, or H-series processors to meet the needs of different types of users at different price points.[2] To identify the advantages of these configurations, we conducted three series of tests comparing similarly configured 5000 series Dell Latitude laptops.

- Latitude 5531 laptop featuring an Intel Core i5-12600H processor vs. a Latitude 5530 laptop featuring an Intel Core i5-1245U processor
- Latitude 5531 laptop featuring an Intel Core i5-12600H processor vs. a Latitude 5530 featuring an Intel Core i5-1250P processor
- Two Latitude 5530 laptops, one with an Intel Core i5-1250P processor vs. one with an Intel Core i5-1245U processor

We also compared the CrossMark® performance of a Latitude 5530 with a current-generation U-series processor to a Latitude 5420 with a previous-generation processor. For more details on our workloads and configurations, see the science behind the report.

*Dell Latitude 5530 laptop powered an Intel Core i5-1245U processor vs. a Latitude 5420 powered by a previous-gen Intel Core i5-1135G7 processor
**Dell Latitude 5530 powered by an Intel Core i5-1250P processor vs. a Latitude 5530 powered by an Intel Core 1245U processor
***Dell Latitude 5531 powered by an Intel Core i5-12600H processor vs. a Latitude 5530 powered by an Intel Core i5-1245U processor

Top wins for each laptop we tested

Dell Latitude 5530 laptop featuring an Intel Core i5-1245U processor, 16 GB of RAM, 512GB SSD

1. **Up to 33.2% higher** CrossMark Overall rating*

2. **Up to 39.8% higher** CrossMark Creativity rating*

Dell Latitude 5530 laptop featuring an Intel Core i5-1250P processor, 16 GB of RAM, 512GB SSD

1. **Up to 5.8% higher** CrossMark Overall rating**

2. **Up to 17.9% higher** CrossMark Responsiveness rating**

3. **Up to 6.7% higher** CrossMark Productivity rating**

Dell Latitude 5531 laptop featuring an Intel Core i5-12600H processor, 32 GB of RAM, 1TB SSD

1. **Up to 17.3% higher** CrossMark Overall rating**

2. **Up to 28.6% higher** CrossMark Creativity rating**

3. **Up to 10.1% higher** CrossMark Responsiveness rating**

Compared to the Dell Latitude 5420 laptop with a previous-generation Intel Core i5-1135G7 processor.
**Compared to the Dell Latitude 5530 laptop with an Intel Core i5-1245U processor.

To understand the advantages of each configuration, we conducted a series of performance benchmark tests:

- CrossMark®
- UL Procyon® Photo Editing
- PugetBench for Adobe® Lightroom® Classic
- PugetBench for Adobe Photoshop®
- UL Procyon Video Editing
- PugetBench for Adobe Premiere® Pro
- PugetBench for Adobe After Effects®

About Dell Latitude 5000 series laptops

According to Dell, Latitude 5000 series laptops are "the world's smallest, lightest, and most scalable PCs in their class."[3] The company claims these devices are the most sustainable laptops they have ever produced, thanks to the use of ocean-bound plastics, recycled and renewable materials, and 100% recyclable packaging.[4]

Latitude devices are optimized for videoconferencing with features such as Neural Noise Cancellation to reduce background noise and FHD IR camera options.

For more information on Dell Latitude laptops, visit: https://www.delltechnologies.com/asset/en-za/products/laptops-and-2-in-1s/briefs-summaries/latitude_family_brochure.pdf.

Our results

The Intel Core i5-1245U, Intel Core i5-1250P, and Intel Core i5-12600H processor-enabled Dell Latitude 5000 series laptops we tested showed strong performance across multiple tests. Each configuration also offered different advantages for different types of users.

CrossMark

According to BAPco, developers of the CrossMark benchmark test, it is a "native cross-platform benchmark that measures the overall system performance and system responsiveness using models of real-world applications.[6]

CrossMark

To measure the overall system performance of the devices, we used the CrossMark benchmark test. As Figure 1 shows, the Intel Core i5 H-series processor-enabled device provided the highest performance of the devices we tested, up to 10.8 percent higher than the Intel Core i5 P-series processor-enabled device, and up to 17.3 percent higher than the Intel Core i5 U-series processor-enabled device. The Intel Core i5 U-series processor-enabled device offered up to 33.2 percent higher performance than the Latitude 5420 with a previous-generation processor.

CrossMark
Median overall score

Dell Latitude 5530 with an Intel Core i5-1245U processor
1,500

Dell Latitude 5530 with an Intel Core i5-1250P processor
1,588

Dell Latitude 5531 with an Intel Core i5-12600H processor
1,760

Dell Latitude 5420 with an Intel Core i5-1135G7 processor
1,126

Figure 1: CrossMark benchmark test results. We ran each test three times and report the median result. Higher is better. Source: Principled Technologies.

Photo-editing performance

Some industry analysts expect the size of camera sensors to double by the year 2024, allowing users to take larger photos — but requiring more compute power to edit them.[7] For professionals who frequently use photo-editing apps such as Adobe Lightroom and Adobe Photoshop, it can be hard to know which laptop configuration is best suited to their needs. To evaluate the photo-editing capabilities of the three devices using Adobe Photoshop Lightroom Classic and Adobe Photoshop, we used a series of benchmark tests:

- UL Procyon Photo Editing Benchmark using Adobe Photoshop and Lightroom Classic
- PugetBench for Adobe Lightroom Classic
- PugetBench for Adobe Photoshop

As Figures 2-4 show, for users who frequently edit photos, the Intel Core i5 H-series processor-enabled Latitude 5531 could offer significant performance advantages.

Procyon Photo Editing Benchmark using Adobe Photoshop and Lightroom Classic
Median overall score

Dell Latitude 5530 with an Intel Core i5-1245U processor
6,152

Dell Latitude 5530 with an Intel Core i5-1250P processor
6,404

Dell Latitude 5531 with an Intel Core i5-12600H processor
7,535
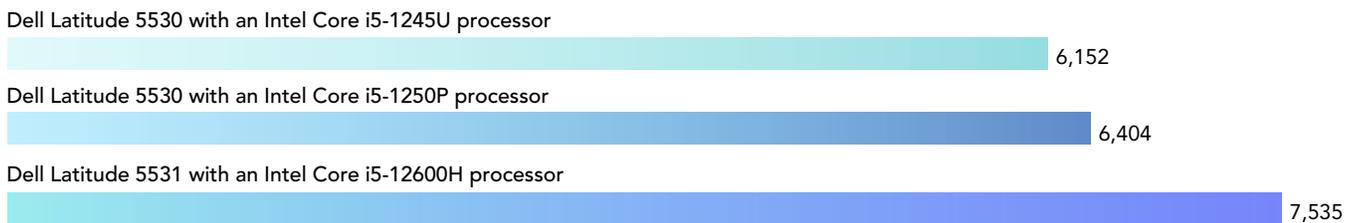
Figure 2: UL Procyon Photo Editing Benchmark test results. We ran each test three times and report the median result. Higher is better. Source: Principled Technologies.

PugetBench photo-editing benchmarks

About PugetBench

According to Puget Systems, developers of the PugetBench Adobe Creative Cloud benchmark tests, this set of benchmark tests meets the "need for comprehensive, repeatable, and consistent benchmark testing" of Adobe products.[8]

PugetBench for Adobe Lightroom Classic
Median overall score

Dell Latitude 5530 with an Intel Core i5-1245U processor
837.0

Dell Latitude 5530 with an Intel Core i5-1250P processor
923.5

Dell Latitude 5531 with an Intel Core i5-12600H processor
1,087.0
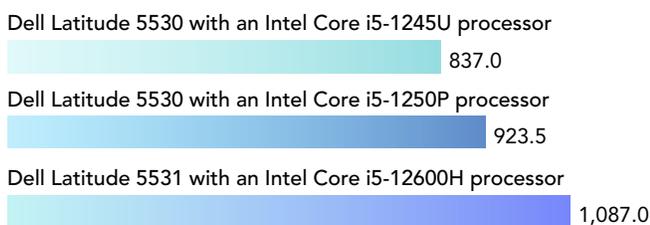
Figure 3: PugetBench for Adobe Lightroom Classic benchmark test results. We ran each test three times and report the median result. Higher is better. Source: Principled Technologies.

PugetBench for Adobe Photoshop
Median overall score

Dell Latitude 5530 with an Intel Core i5-1245U processor
761

Dell Latitude 5530 with an Intel Core i5-1250P processor
772

Dell Latitude 5531 with an Intel Core i5-12600H processor
1,110
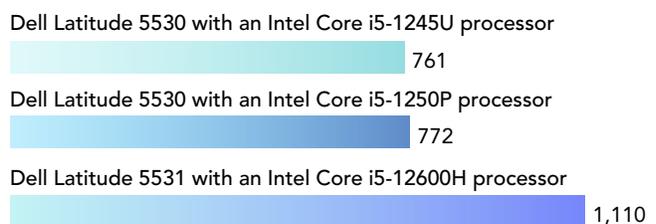
Figure 4: PugetBench for Adobe Photoshop benchmark test results. We ran each test three times and report the median result. Higher is better. Source: Principled Technologies.
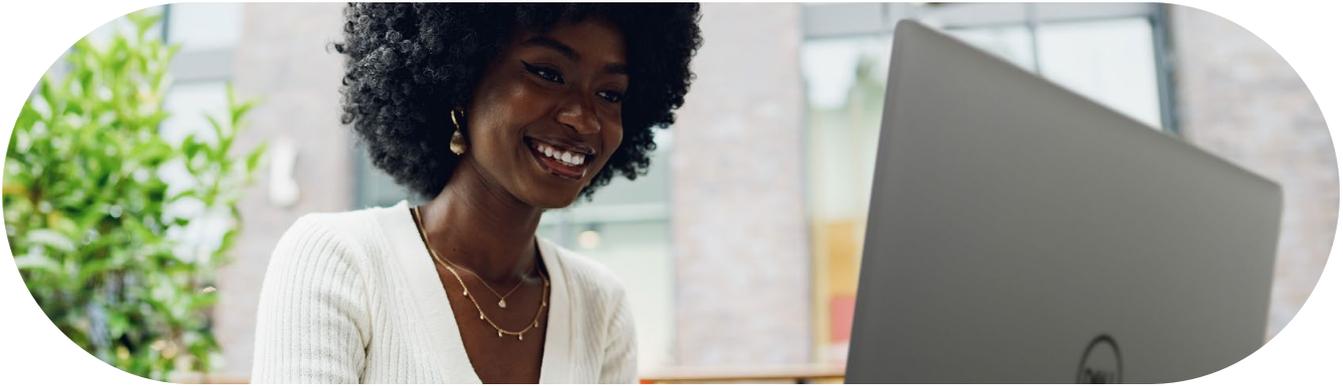
Video-editing performance

For content creators and media professionals who often edit videos, it can be difficult to know if a device can meet the demands of compute-intensive applications such as Adobe Premiere Pro. To evaluate the performance of our three devices using Adobe Premiere Pro, we used two benchmark tests:

- UL Procyon Video Editing benchmark using Adobe Premiere Pro
- PugetBench for Adobe Premiere Pro

PugetBench for Adobe Premiere Pro
Standard overall score

Dell Latitude 5530 with an Intel Core i5-1245U processor
206

Dell Latitude 5530 with an Intel Core i5-1250P processor
228

Dell Latitude 5531 with an Intel Core i5-12600H processor
428
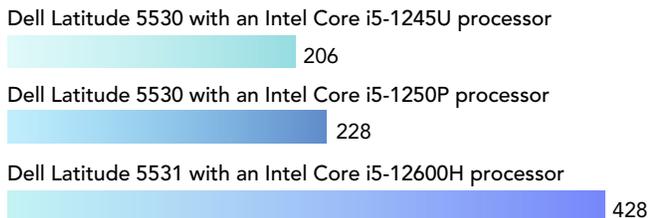
Figure 5: UL Procyon Video Editing benchmark test results. We ran each test three times and report the median result. Higher is better. Source: Principled Technologies.

Procyon Video Editing benchmark using Adobe Premiere Pro
Median overall score

Dell Latitude 5530 with an Intel Core i5-1245U processor
1,647

Dell Latitude 5530 with an Intel Core i5-1250P processor
1,798

Dell Latitude 5531 with an Intel Core i5-12600H processor
2,866
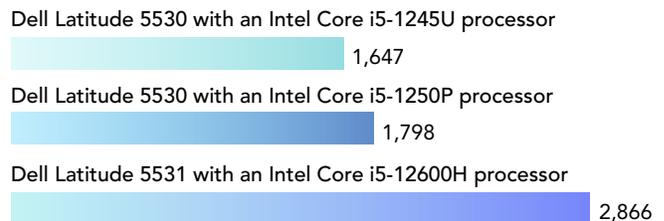
Figure 6: PugetBench for Adobe Premiere Pro standard overall score. We timed each task three times and report the median result. Higher is better. Source: Principled Technologies.

Digital visual effects performance

To measure the digital visual effects capabilities of the devices, we used the PugetBench for Adobe After Effects benchmark. As Figure 7 shows, the Intel Core i5 H-series processor-enabled Latitude 5531 we tested achieved up to 63.8 percent better performance in Adobe After Effects than the Intel Core i5 U-series processor-enabled device we tested.

PugetBench for Adobe After Effects
Median overall score

Dell Latitude 5530 with an Intel Core i5-1245U processor
451

Dell Latitude 5530 with an Intel Core i5-1250P processor
474

Dell Latitude 5531 with an Intel Core i5-12600H processor
739

Figure 7: PugetBench for Adobe After Effects benchmark test results. We ran each test three times and report the median score. Higher is better. Source: Principled Technologies.
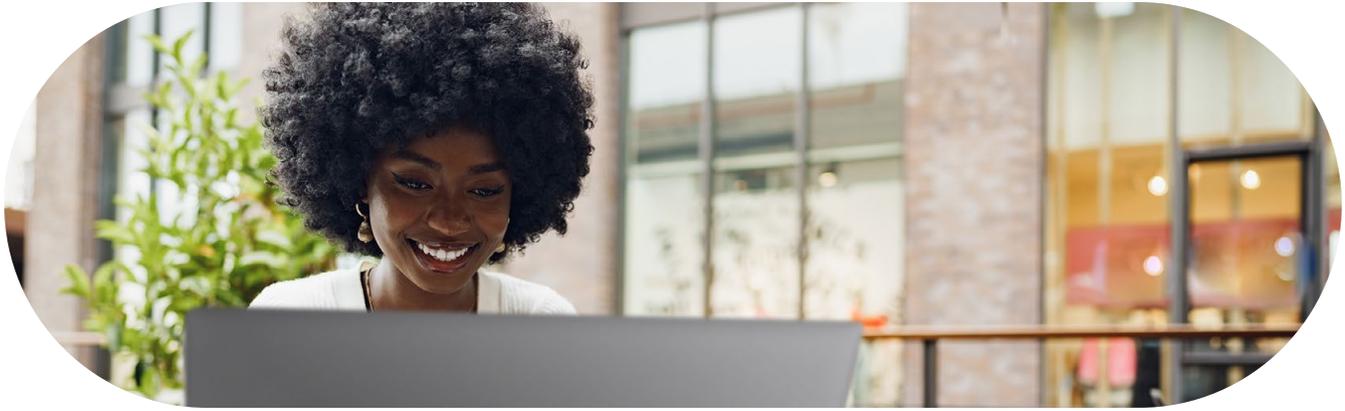
Conclusion

The Dell Latitude 5000 series laptops we tested showed strong performance in our benchmark tests. For office workers who mostly use productivity apps, the Dell Latitude 5530 featuring an Intel Core i5-1245U processor provided higher CrossMark performance than the Dell Latitude 5420 with a previous-generation Intel Core i5-1135G7 processor and was the most affordable current-generation device we tested.

For more specialized users who want a boost in performance and sometimes use demanding creative and compute-intensive apps, the Dell Latitude 5530 featuring an Intel Core i5-1250P processor had stronger performance than its U-series processor-enabled counterpart. For users who often use compute-intensive apps, the Dell Latitude 5531 featuring an Intel Core i5-12600H showed the highest performance of the devices we tested.

1. Ben Wigert and Sangeeta Agrawal, "Returning to the Office: The Current, Preferred and Future State of Remote Work," accessed September 1st, 2022, https://www.gallup.com/workplace/397751/returning-office-current-preferred-future-state-remote-work.aspx.

2. "Latitude Family," accessed September 1, 2022, https://www.delltechnologies.com/asset/en-za/products/laptops-and-2-in-1s/briefs-summaries/latitude_family_brochure.pdf.

3. "New Latitude 5000 Series are Dell's most sustainable laptops yet*," accessed September 1, 2022, https://investors.delltechnologies.com/news-releases/news-release-details/new-latitude-5000-series-are-dells-most-sustainable-laptops-yet.

4. "Latitude Family," accessed September 1, 2022, https://www.delltechnologies.com/asset/en-za/products/laptops-and-2-in-1s/briefs-summaries/latitude_family_brochure.pdf.

5. "MobileMark 25," accessed September 8, 2022, https://bapco.com/products/mobilemark-25/.

6. "CrossMark," accessed September 8, 2022, https:bapco.com/products/crossmark/.

7. "Smartphone Cameras Will Be Superior to SLRs by 2024, Says Sony CEO," accessed September 18, 2022, https://petapixel.com/2022/05/31/smartphone-cameras-will-be-superior-to-slrs-by-2024-says-sony-ceo/.

8. "PugetBench for Adobe Creative Cloud," accessed September 18, 2022, https://www.pugetsystems.com/labs/articles/PugetBench-for-Adobe-Creative-Cloud-1642/.

Read the science behind this report at https://facts.pt/CdF6d4B ▶

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