

Generational improvement

with up to 30.2% higher CrossMark Overall Rating with a Dell Latitude with an Intel Core i5-1245U processor*



Increase business performance

with up to 10.4% higher CrossMark Overall Rating with a Dell Latitude with Intel Core i5-1250P processor**



Finish creative projects faster

with up to 40.5% higher PugetBench for Adobe Premiere Pro benchmark scores with a Dell Latitude with Intel Core i5-1250P processor***

Boost productivity and scale to performance with Latitude 5000 and 7000 series laptops powered by new 12th Gen Intel Core processors

A series of tests revealed 12th Gen Intel Core U- and P-series processor-enabled Dell Latitude devices offer different advantages for different types of users

With so many options available, it can be difficult to know which laptop configuration best suits your unique workload. Business users might not require the same processing power as professionals who frequently use demanding creative applications. Fortunately for those considering Dell® Latitude® laptops, the 12th Gen Intel® Core™ U- and P-series processor-enabled 5000 and 7000 series devices offer flexibility and mobility at multiple price points. We conducted hands-on testing of two similarly configured Latitude 5000 series laptops and two similarly configured 7000 series laptops, each pair featuring one U-series and one P-series processor. To understand the generational improvement offered by the 12th Gen Intel Core U-series process-enabled devices, we also measured the CrossMark performance of a Latitude 5420 with a previous-generation processor. For more details on our workloads and configurations, see the science behind the report.

*Newer Dell Latitude 5430 vs. Dell Latitude 5420 with previous gen Intel Core i5-1135G7 processor

**Dell Latitude 5431 laptop powered by an Intel Core i5-1250P processor vs. a Latitude 5430 laptop powered by an Intel Core i5-1245U processor

***Dell Latitude 7430 laptop powered by an Intel Core i5-1250P processor vs. the same Latitude 7430 laptop powered by an Intel Core i5-1245U processor

Highlights

The Dell Latitude laptops featuring Intel Core i5 U-series processors we tested are more affordable than their Intel Core i5 P-series processor-enabled counterparts and offer strong business performance.* The Latitude laptops we tested featuring Intel Core i5 P-series processors offer performance advantages over their Intel Core i5 U-series processor-enabled counterparts.

About Dell Latitude laptops

According to Dell, these ultra-mobile devices combine intelligent privacy features such as Onlooker Detection and Look Away Detect, workspace flexibility, performance enhancements, advanced thermal technology, and new connectivity options so “you can make the world your workplace.”¹

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.



Everyday office productivity with Intel Core i5-1245U processor-enabled Latitude laptops



Dell Latitude 5430 laptop featuring an Intel Core i5-1245U processor, 16 GB of RAM, 256GB SSD



Enhanced performance with Intel Core i5-1250P processor-enabled Latitude laptops



*Dell Latitude 5431 laptop featuring an Intel Core i5-1250P processor, 16 GB of RAM, 1TB SSD**

Generational improvement with up to 30.2% higher CrossMark Overall Rating than Latitude 5420 with previous gen processor**



Dell Latitude 7430 laptop featuring an Intel Core i5-1245U processor, 16 GB of RAM, 256GB SSD

Increase business performance with up to 10.4% higher CrossMark Overall Rating than device with U-series processor



Dell Latitude 7430 laptop featuring an Intel Core i5-1250P processor, 16 GB of RAM, 256GB SSD

Generational improvement for everyday productivity and more affordable than P-series processor-enabled device*

Finish creative projects faster with up to 40.5% higher PugetBench for Adobe Premiere Pro benchmark score than device with U-series processor

**Dell provided the devices we tested, so while we can't cite exact prices for these configurations, as of September 1st, 2022, similarly configured U-series and P-series processor-enabled Latitude devices available from Dell align with this pricing structure. Also, because of availability at the time of testing, we were unable to compare devices with the same amount of storage.*

***Newer Latitude 5430 vs. Latitude 5420 with previous gen Intel Core i5-1135G7 processor.*

How we tested

To understand the advantages of each configuration, we conducted a series of performance benchmark tests and have included the following selection for this report:

- CrossMark® v1.0.1.88 Pro
- PugetBench v0.95.5 for Adobe Premiere® Pro
- UL Procyon® Video Editing v2.1.459
- PugetBench for Adobe After Effects®

Our results

The Intel Core i5-1245U and Intel Core i5-1250P processor-enabled Dell Latitude 5000 and 7000 series laptops we tested showed strong performance across multiple benchmark tests. Each configuration offered advantages for distinct types of users. The U-series processor-enabled devices showed generational improvement and excellent mainstream business performance. The P-series processor-enabled devices offered performance enhancements in demanding creative applications.



Dell Latitude 5431

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.”² 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.³

Designed for professionals who value efficiency and productivity. Dell says that these devices “offer the highest security and scalable performance for desk productivity with the flexibility to work anywhere.”⁴



Dell Latitude 7430

About Dell Latitude 7000 series laptops

According to Dell, Latitude 7000 series laptops are optimized “for team leaders and managers that are driven to connect teams and need high performance with seamless collaboration and connectivity for at-the-desk or on-the-go versatility.”⁵

Designed for multi-taskers who frequently use productivity-based apps and have multiple workspaces. Dell says that these devices offer “a broad range of premium features that provide an amazing screen experience, intelligent performance, and built-in security and privacy.”⁶

CrossMark

To measure the overall system performance and responsiveness of the devices, we used the CrossMark v1.0.1.88 Pro benchmark test. As Figure 1 shows, users seeking more performance might consider the P-series processor-enabled devices, which offered an up to 10.4 percent higher score than their U-series processor-enabled counterparts. With this benchmark, we also tested an additional device: a similarly configured Latitude 5420 with a previous-generation processor. Compared to that device, the Latitude 5430 with an Intel Core i5-1245U processor achieved an overall score that was 30.2 percent higher.

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.”⁷ The benchmark measures system performance and system responsiveness using real-world applications.

CrossMark

Median overall score

Dell Latitude 5000 series comparison

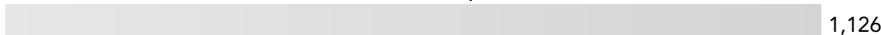
Dell Latitude 5431 with an Intel Core i5-1250P processor



Dell Latitude 5430 with an Intel Core i5-1245U processor



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



Up to 30.2% higher score

Dell Latitude 7000 series comparison

Dell Latitude 7430 with an Intel Core i5-1250P processor



Dell Latitude 7430 with an Intel Core i5-1245U processor



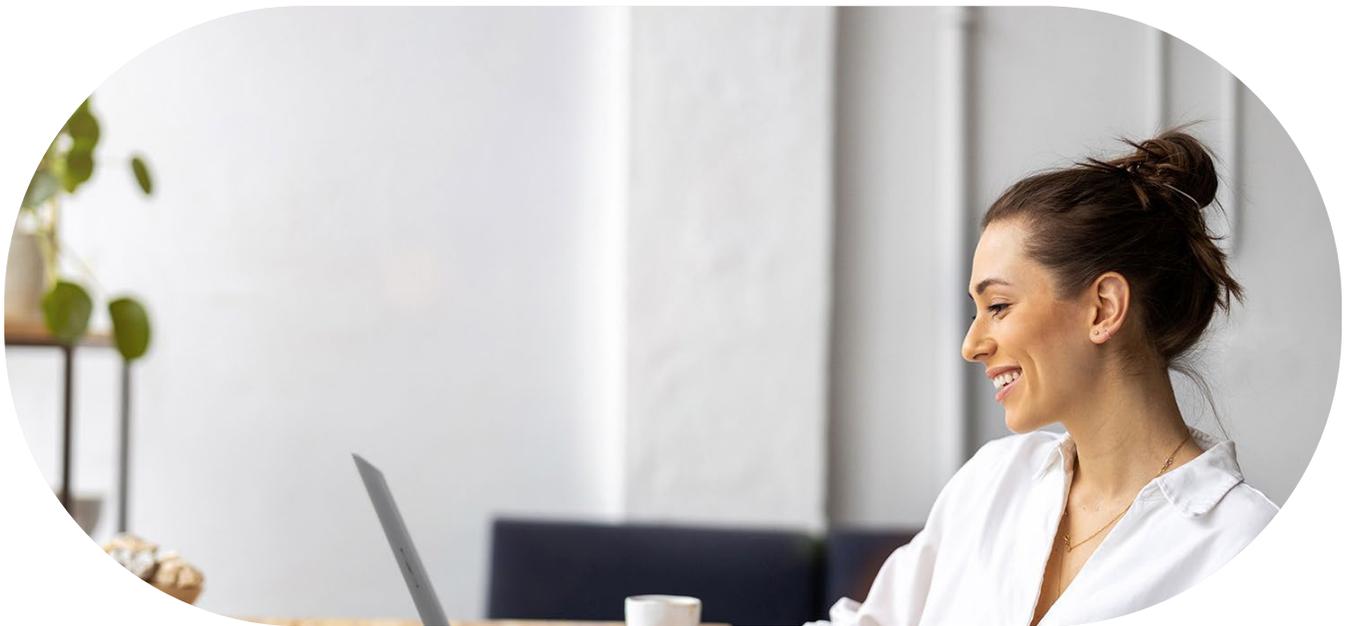
Figure 1: CrossMark benchmark test results. We ran each test three times and report the median result. Higher is better. Source: Principled Technologies.

Affordability and productivity on the go with Dell Latitude 5000 and 7000 series laptops featuring U-series Intel processors

Office workers who mostly use their devices for lightly threaded applications such as Microsoft Word, internet browsing, and videoconferencing might consider the Intel Core i5-1245U processor-enabled Dell Latitude 5000 and 7000 series laptops we tested. In addition to their lower price points, these devices are fan-less, thinner, and weigh less than the Intel Core i5-1250P processor-enabled laptops we compared them to. The U-series processor-enabled devices offered these benefits without sacrificing single-core performance, which was comparable to the single-core performance of the P-series processor-enabled devices in the Cinebench R23 benchmark testing we conducted.

Enhanced performance for multi-tasking and demanding creative applications with Dell Latitude 5000 and 7000 series laptops featuring P-series Intel processors

Specialized professionals and multi-taskers who frequently use demanding creative applications might consider the Intel Core i5-1250P processor-enabled Dell Latitude 5000 and 7000 series laptops we tested. In multiple tests, the P-series processor-enabled laptops showed strong performance advantages over their U-series processor-enabled counterparts in applications for video editing and digital visual effect creation.



Video editing performance

To better understand how these devices might perform when running compute-intensive creative applications, we conducted a series of tests using several relevant benchmarks. To measure the video-editing performance of the devices using Adobe Premiere Pro v22.5, we used the PugetBench and Procyon Video Editing benchmark tests. As Figures 2 and 3 show, users who frequently edit video might consider purchasing the P-series processor-enabled devices.

PugetBench for Adobe Premiere Pro

Median overall score

Dell Latitude 5000 series comparison

Dell Latitude 5431 with an Intel Core i5-1250P processor
252

Dell Latitude 5430 with an Intel Core i5-1245U processor
212

Dell Latitude 7000 series comparison

Dell Latitude 7430 with an Intel Core i5-1250P processor
281

Dell Latitude 7430 with an Intel Core i5-1245U processor
200

Figure 2: PugetBench for Adobe Premiere Pro benchmark test results. We ran each test three times and report the median score. Higher is better. Source: Principled Technologies.

Up to 40.5%
higher score

Procyon Video Editing

Median overall score

Dell Latitude 5000 series comparison

Dell Latitude 5431 with an Intel Core i5-1250P processor
1,911

Dell Latitude 5430 with an Intel Core i5-1245U processor
1,696

Dell Latitude 7000 series comparison

Dell Latitude 7430 with an Intel Core i5-1250P processor
1,976

Dell Latitude 7430 with an Intel Core i5-1245U processor
1,542

Figure 3: Procyon Video Editing benchmark test results. We ran each test three times and report the median score. Higher is better. Source: Principled Technologies.

Up to 21.8%
higher score



Digital visual effects performance

To measure the digital visual effects capabilities of the devices, we used the PugetBench for Adobe After Effects benchmark test. As Figure 4 shows, the P-series processor-enabled devices we tested offered a performance advantage for digital visual effects content creation compared to their U-series processor-enabled counterparts.

PugetBench for Adobe After Effects

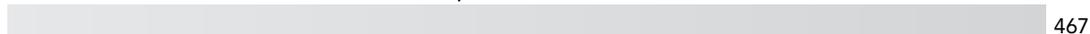
Median overall score

Dell Latitude 5000 series comparison

Dell Latitude 5431 with an Intel Core i5-1250P processor



Dell Latitude 5430 with an Intel Core i5-1245U processor



Dell Latitude 7000 series comparison

Dell Latitude 7430 with an Intel Core i5-1250P processor



Dell Latitude 7430 with an Intel Core i5-1245U processor



Figure 4: 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.

Office productivity with Intel
Core i5-1245U processor-enabled
Latitude laptops

Enhanced performance with Intel
Core i5-1250P processor-enabled
Latitude laptops



*Dell Latitude laptops featuring
Intel Core i5 U-series processors*



*Dell Latitude laptops featuring
Intel Core i5 P-series processors*



Conclusion

As the way we work changes, so do the tools we need to get the job done. Dell designed the 12th Generation Dell Latitude 5000 and 7000 series laptops featuring 12th Generation Intel Core U- and P-series processors to meet the needs of multiple types of users at multiple price points. In our tests, we found these devices achieved strong performance and offered different advantages to various types of consumers. For professionals who mostly use office productivity applications, the U-series Intel processor offered performance improvements over a previous-generation processor-enabled device and is more affordable. For multi-taskers who frequently use demanding creative applications, the Latitude 5000 and 7000 series laptops featuring P-series Intel processors offered performance advantages over the U-series processor-powered devices we tested.

1. "Latitude Laptops & 2-in-1 PCs," accessed August 31, 2022, <https://www.dell.com/en-us/shop/cty/sf/latitude-laptops>.
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. "Latitude Family."
6. "Latitude Family."
7. "CrossMark," accessed September 8, 2022, <https://bapco.com/products/crossmark/>.

Read the science behind this report at <https://facts.pt/2vX5sNb> ►



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