



# The science behind the report:

# Dell Pro Slim: Improve efficiency, enhance decision-making, and drive innovation

This document describes what we tested, how we tested, and what we found. To learn how these facts translate into real-world benefits, read the report <u>Dell Pro Slim: Improve efficiency, enhance decision-making, and drive innovation</u>.

We concluded our hands-on testing on June 10, 2025. During testing, we determined the appropriate hardware and software configurations and applied updates as they became available. The results in this report reflect configurations that we finalized on May 26, 2025 or earlier. Unavoidably, these configurations may not represent the latest versions available when this report appears.

# Our results

To learn more about how we have calculated the wins in this report, go to <a href="https://facts.pt/calculating-and-highlighting-wins">https://facts.pt/calculating-and-highlighting-wins</a>. Unless we state otherwise, we have followed the rules and principles we outline in that document.

Table 1: Median results of our resource-intensive performance benchmark testing. Higher scores are better.

	Dell™ Pro Slim	Dell OptiPlex™ 7000 SFF	Percentage win
PugetBench for Creators: Adobe Premiere® P	ro   Standard		
Overall score	2,405	1,776	35.41%
LongGOP score	25.3	18.0	40.55%
Intraframe score	24.3	16.6	46.38%
RAW score	85.1	59.7	42.54%
GPU effects score	6.4	5.6	15.08%
3DMark® Steel Nomad			
Graphics score	340	70	385.71%
Procyon® Photo Editing Benchmark v1.2.411	Adobe Photoshop® v26.6.1 and Lightro	oom® Classic v14.3.1	
Overall score	5,687	5,276	7.78%
Image-retouching score	6,587	7,078	-6.93%
Batch-processing score	4,911	3,934	24.83%

	Dell™ Pro Slim	Dell OptiPlex™ 7000 SFF	Percentage win
Procyon Video Editing Benchmark v1.2.411   Adobe Premiere Pro v25.2.3			
Score	5,072	4,000	26.80%
Cinebench 2024			
CPU multi-core score	1,426	775	84.00%
CPU single-core score	135	112	20.53%

Table 2: Median results of our AI testing. Higher scores are better, unless otherwise noted.

	Dell Pro Slim	Dell OptiPlex 7000 SFF	Percentage win
Procyon Al Computer Vision Benchmark   Inte	I OpenVINO™   INT8		
Overall score	686	215	219.06%
MobileNet V3 total inferences count	68,587	41,590	64.91%
ResNet 50 total inferences count	33,674	9,347	260.26%
Inception V4 total inferences count	9,866	3,086	219.70%
DeepLab V3 total inferences count	2,651	2,543	4.24%
YOLO V3 total inferences count	5,442	1,449	275.56%
Real-ESRGAN total Inferences count	239	42	469.04%
Procyon Al Image Generation Benchmark   St	able Diffusion 1.5   INT8		
Overall score	803.00	397.00	102.26%
Overall duration in seconds	311.17	629.65	50.58%
Image generation speed (seconds/image)	38.90	78.71	50.58%
Average UNET speed (iterations/second)	1.32	0.66	100.45%
Procyon Al Image Generation Benchmark   St	able Diffusion XL   FP16		
Overall score	48.00	24.00	100.00%
Overall duration in seconds	12,295.95	24,730.25	50.27%
Image generation speed (seconds/image)	768.50	1545.64	50.27%

	Dell Pro Slim	Dell OptiPlex 7000 SFF	Percentage win
Procyon Al Text Generation Benchmark			
PHI 3.5 overall score	296.00	161.00	83.85%
Average TTFT in seconds (lower is better)	4.55	11.24	59.51%
Average OTS (tokens/second)	15.60	11.41	36.72%
Load time in seconds (lower is better)	17.60	5.30	-232.07%
MISTRAL 7B overall score	243.00	129.00	88.37%
Average TTFT in seconds (lower is better)	7.23	19.27	62.48%
Average OTS (tokens/second)	9.40	7.03	33.71%
Load time in seconds (lower is better)	9.26	20.46	54.74%
LLAMA 3.1 overall score	230.00	126.00	82.53%
Average TTFT in seconds (lower is better)	6.42	17.06	62.36%
Average OTS (tokens/second)	8.38	6.64	26.20%
Load time in seconds (lower is better)	12.39	9.99	-24.02%
Geekbench AI GPU			
Full Precision score	4,871.00	2,504.00	94.52%
Half Precision score	8,092.00	3646.00	121.94%
Quantized score	12532.00	5,743.00	118.21%
Geekbench AI CPU			
Full Precision score	5,956.00	5,026.00	18.50%
Half Precision score	9,009.00	4,945.00	82.18%
Quantized score	14,030.00	12,259.00	14.44%

# System configuration information

Table 3: Detailed information on the systems we tested.

System configuration information	Dell Pro Slim (QCS1250)	Dell OptiPlex 7000 SFF (D17S)
Processor		
Vendor	Intel®	Intel®
Model number	Core™ Ultra 7 265	Core <sup>™</sup> i7-12700
Core frequency (GHz)	2.4–5.3	2.1–4.9
Number of cores	20	8
Number of threads	20	20
Memory module(s)	,	
Amount (GB)	16	16
Туре	DDR5	DDR4
Graphics		
Vendor	Intel®	Intel®
Model number	Graphics	UHD Graphics 770
Storage		
Amount (GB)	512	512
Туре	NVMe® SSD	PCle® SSD
Connectivity/expansion		
Wireless internet	N/A	N/A
Operating system		
Vendor	Microsoft	Microsoft
Name	Windows 11 Pro	Windows 11 Pro
Version	24H2 (Build 26100.4061)	24H2 (Build 26100.4061)
Dimensions		,
Height (in.)	11.95	11.42
Width (in.)	3.74	3.65
Depth (in.)	11.54	11.53
Weight (lb.)	8.61	8.59

# How we tested

# Setting up the systems

#### Setting up and updating the OEM image

- 1. Boot the system.
- 2. Follow the on-screen instructions to complete installation, using the default selections when appropriate.
- 3. Set the Windows (plugged in) Power Mode to Best Performance.
- 4. Set Screen and Sleep options to Never:
  - a. Right-click the desktop, and select Display settings.
  - b. From the left column, select System.
  - c. Click Power & Battery.
  - d. For all power options listed under Screen and Sleep, select Never.
- 5. Disable User Account Control notifications:
  - a. Select Windows Start, type UAC, and press the Enter key.
  - b. Move the slider control to Never notify, and click OK.
- 6. Run Windows Update, and install all updates available.
- 7. Run the OEM's Support Assistant utility, and install all recommended BIOS and driver updates available.
- 8. Verify the date and time are correct, and synchronize the system clock with the time server.
- 9. Pause Automatic Windows Updates:
  - a. Click the Windows Start button.
  - b. Type Windows Update settings and press the Enter key.
  - c. From the Pause updates drop-down menu, select Pause for 5 weeks.

#### Capturing an image

- 1. Connect an external HDD to the system.
- 2. Click Windows Menu button, and type Control Panel in the search bar. Click Control Panel → System and Security → Backup and Restore (Windows 7) → Create a system image.
- 3. Verify that the external HDD is selected as the save drive, and click Next.
- 4. Verify that all drives are selected to back up, and click Next.
- 5. Click Start backup.
- 6. When you see the prompt to create a system repair disc, select No, and close the dialogs.

#### Restoring an image

- 1. Connect an external HDD to the system.
- 2. Press and hold the Shift key while restarting the system.
- 3. Select Troubleshoot.
- 4. Select Advanced options.
- 5. Select See more recovery options.
- 6. Select System image recovery.
- 7. Select the User account.
- 8. Enter the system password, and click Continue.
- 9. At the Restore system files and settings screen, select Next.
- 10. Verify that the external HDD is selected, and click Next.
- 11. Once the recovery has completed, click Finish.

# Testing with 3DMark Steel Nomad

# Setting up the test

- 1. Download 3DMark from <a href="http://www.futuremark.com/benchmarks/3dmark/all.">http://www.futuremark.com/benchmarks/3dmark/all.</a>
- 2. To install 3DMark with the default options, double-click the 3DMark installer.exe file.
- 3. To launch 3DMark, double-click the 3DMark desktop icon.
- 4. Enter the registration code, and click Register.
- 5. Install the Steel Nomad benchmark.
- 6. Exit 3DMark.

#### Running the test

- 1. To launch the benchmark, double-click the 3DMark desktop icon.
- 2. At the 3DMark Home screen, click the More Tests button.
- 3. Select the Steel Nomad benchmark.
- 4. Move the slider button to turn off the "Include Demo" feature.
- 5. Click Run.
- 6. When the benchmark run completes, record the results.
- 7. Perform steps 1 through 6 twice more.

# **Testing with Cinebench 2024**

#### Setting up the test

- 1. Download and install Cinebench 2024 from https://www.maxon.net/en/downloads/cinebench-2024-downloads.
- 2. Launch Cinebench 2024.
- 3. Select File → Advanced benchmark.
- 4. From the Minimum Test Duration drop-down menu, select Off.

# Running the multi-core test

- 1. Launch Cinebench 2024.
- 2. Click Start next to CPU (Multi Core).
- 3. Record the result.
- 4. Wait 10 minutes before rerunning.
- 5. Repeat steps 1 through 4 twice more.

# Running the single-core test

- 1. Launch Cinebench 2024.
- 2. Click Start next to CPU (Single Core).
- 3. Record the result.
- 4. Wait 10 minutes before rerunning.
- 5. Repeat steps 1 through 4 twice more.

# Testing with Geekbench Al

#### Setting up the test

- 1. Purchase and download a Geekbench AI Pro license from https://www.geekbench.com/ai/download/.
- 2. Using all the defaults, run the installer, and install the benchmark.

# Running the test

- 1. Launch Geekbench Al.
- 2. Enter the license key.
- 3. For CPU/NPU testing, select:
  - Al Framework: OpenVINO™
  - Al Backend: CPU
  - Al Device: processor
- 4. For GPU testing, select:
  - AI Framework: OpenVINO™
  - Al Backend: GPU
  - Al Device: graphics card
- 5. Click Run Al Benchmark.
- 6. Wait 5 minutes, and repeat steps twice more.

# Testing with the Procyon Al Computer Vision Benchmark

#### Setting up the test

- 1. Purchase and download the Procyon Al Computer Vision benchmark from https://benchmarks.ul.com/procyon.
- 2. Install the Procyon benchmark.
- 3. Double-click the installer.
- 4. Click Next.
- 5. Click to agree to the EULA, and click Next.
- 6. Click Next.
- 7. Launch Procyon.
- 8. Select Settings, and input the license key.
- 9. Close Procyon.

#### Running the test

- 1. Launch Procyon.
- 2. Select the Computer Vision test.
- 3. For all tests, select the Intel OpenVINO tab.
- 4. Choose the GPU, and select Float32.
- 5. To begin the test, click Run.
- 6. When the test completes, record the results, and wait 15 minutes before rerunning.
- 7. When 3 runs have been completed complete 3 runs of GPU and Float16 on systems with no NPU and Float16 and NPU on systems with an NPU.
- 8. When 3 runs have been completed complete 3 runs of GPU and integer on systems with no NPU and integer and NPU on systems with an NPU.
- 9. When the test completes, record the results, and wait 15 minutes before rerunning.
- 10. Complete 3 runs.

# Testing with the Procyon Al Image Generation Benchmark

#### Setting up the test

- 1. Purchase and download the Procyon AI Image Generation benchmark from https://benchmarks.ul.com/procyon.
- 2. Install the Procyon benchmark.
- 3. Double-click the installer.
- 4. Click Next.
- 5. Click to agree to the EULA, and click Next.
- 6. Click Next.
- 7. Launch Procyon.
- 8. Select Settings, and input the license key.
- 9. Close Procyon.

#### Running the test

- Launch Procyon.
- 2. Select the Image Generation Benchmark test.
- 3. Under the Stable Diffusion 1.5 (INT8) test option, select Intel OpenVINO for the AI Inference Engine and if the system has an NPU, select Intel® AI Boost as the device name. Otherwise, select the graphics device.
- 4. To begin the test, Click Run.
- 5. Complete and record 3 runs.
- 6. Under the Stable Diffusion XL (FP16) test option, select Intel OpenVINO for the AI inference Engine and select the graphics device name to be used.
- 7. To begin the test, click Run.
- 8. Complete and record 3 runs.

# Testing with the Procyon Al Text Generation Benchmark

#### Setting up the test

- 1. Purchase and download the Procyon AI Text Generation benchmark from <a href="https://benchmarks.ul.com/procyon">https://benchmarks.ul.com/procyon</a>.
- 2. Install the Procyon benchmark.
- 3. Double-click the installer.
- 4. Click Next.
- 5. Click to agree to the EULA, and click Next.
- 6. Click Next.
- 7. Launch Procyon.
- 8. Select Settings, and input the license key.
- 9. Close Procyon.

#### Running the test

- 1. Launch Procyon.
- 2. Select the Text Generation Benchmark test.
- 3. For the AI Inference Engine, select Intel OpenVINO.
- 4. For Workloads to run, select All.
- 5. To begin the test, click Run.
- 6. When the test completes, record the results, and wait 15 minutes before rerunning.
- 7. Repeat steps 1 through 6 twice more.

# Testing with the Procyon Photo Editing Benchmark

#### Setting up the test

- 1. Download and install Procyon.
- 2. Open Procyon.
- 3. Click Photo Editing Benchmark.
- 4. Click Register.
- 5. Enter the license key, and click Register.
- Before running the benchmarks, make sure to install licensed versions of Adobe Photoshop 22.0 or higher and Adobe Lightroom Classic 10.0 or higher.

#### Running the test

- 1. Launch Procyon.
- 2. Click Photo Editing Benchmark.
- Click Run.
- 4. When the benchmark is complete, record the results.
- 5. Wait 15 minutes before rerunning the benchmark.
- 6. Repeat steps 3 through 5 twice more.

# Testing with the Procyon Video Editing Benchmark

#### Setting up the test

- 1. Download and install Procyon.
- 2. Open Procyon.
- 3. Click Video Editing Benchmark.
- 4. Click Register.
- 5. Enter the license key, and click Register.
- 6. Before running the benchmarks, make sure to install licensed versions of Adobe Premiere Pro v14.5 or higher.

#### Running the test

- 1. Launch Procyon.
- 2. Click Video Editing Benchmark.
- 3. Click Run.
- 4. When the benchmark is complete, record the results.
- 5. Wait 15 minutes before rerunning the benchmark.
- 6. Repeat steps 3 through 5 twice more.

# Testing with PugetBench for Creators: Premiere Pro

#### Setting up the test

- 1. Launch Adobe Premiere Pro v25.2.3.
- 2. Click through the Tutorial pop-up tips.
- 3. Close Adobe Premiere Pro.
- 4. Purchase a PugetBench for Creators license from https://www.pugetsystems.com/pugetbench/creators/.
- 5. Click Download PugetBench for Creators for Windows.
- 6. After the download completes, double-click the installation file to install PugetBench.
- 7. Enter the license key in the license field, and click Activate.
- 8. Click Download Assets.

#### Running the test

- Boot the system.
- 2. Open PugetBench for Creators.
- 3. On the left side of the app, select the Premiere Pro test.
- 4. Click Start Test.
- 5. When the benchmark finishes, record the overall score.
- 6. Close PugetBench for Creators, and restart the system under test.
- 7. Wait 30 minutes before performing the next run.
- 8. Repeat steps 1 through 7 twice more.

Read the report at https://facts.pt/UCq0eHF

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