AMD RYZEN™ 7 6800U VS INTEL CORE i7-1260P

AMD RYZEN™ 6000 SERIES ARE THE ULTIMATE PROCESSORS FOR ULTRATHIN LAPTOPS

AMD Ryzen™ processors bring the perfect balance of speed and efficiency to deliver what customers need -- long-lasting battery life and fast performance on-the-go.

#1 IN BATTERY LIFE

AMD Ryzen™ 7 6800U processor gets up to **26 hours battery life**[1], holding the number one spot on the Bapco MobileMark results website[2]

AMD IS THE RUNAWAY LEADER IN BENCHMARK PERFORMANCE

Up to
31% Faster
multi-threaded performance[3]

Up to
48% Faster
overall productivity[4]

Up to
Twice as Fast
on overall content creation[4]

Still the
World's Best
built-in graphics[5]

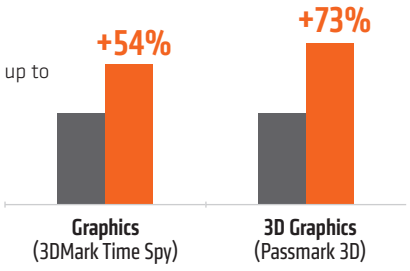
MORE HIGH-PERFORMANCE CORES THAN INTEL

AMD maintains **8 high-performance cores** all the way from 45W to the 15W AMD Ryzen™ 7 6800U

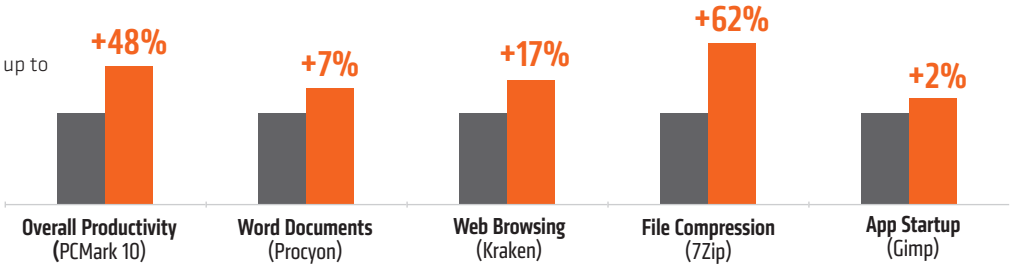
Intel drops performance cores significantly in ultrathins, **down to just 4P cores** in the Core i7-1260P

AMD RYZEN™ 7 6800U PROCESSOR VS INTEL CORE i7-1260P

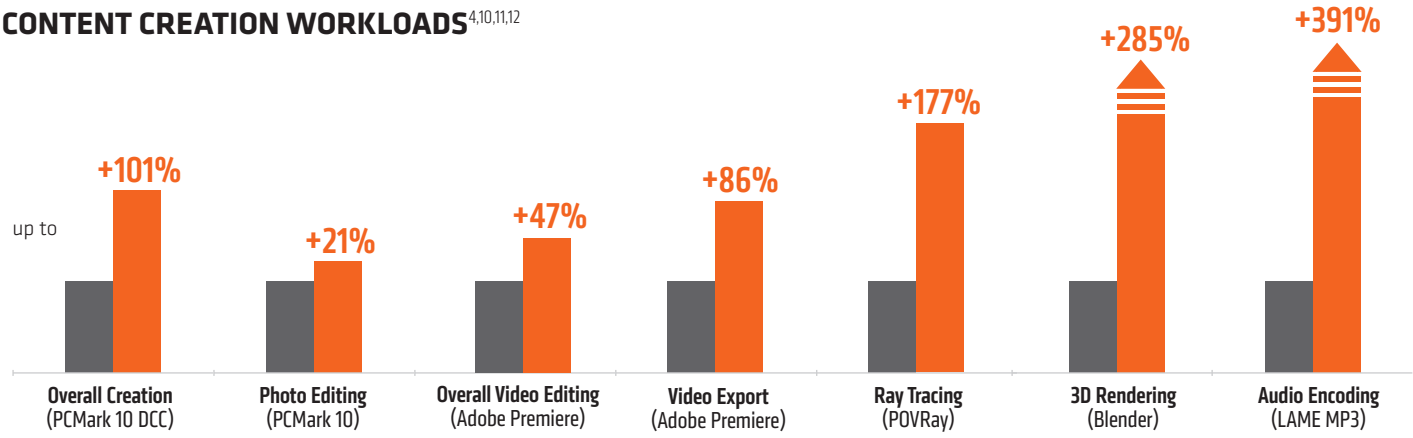
GRAPHICS[5,6]



PRODUCTIVITY WORKLOADS[4,7,8,9]



CONTENT CREATION WORKLOADS[4,10,11,12]



MODEL SPEC COMPARISON

Model	Architecture	Cores	Threads	Cache	Boost Freq[13] (up to)	TDP
AMD Ryzen™ 7 6800U	6nm "Zen 3+"	8 High-Performance Cores	16T	20 MB	4.7 GHz	28W
Intel Core™ i7-1260P	Intel 7 (10nm)	4P cores / 8e cores	16T	18 MB	4.7 GHz	28W

ENDNOTES

1. RMP-33 All battery life claims are approximate. Battery life tested by HP as of 4.7.22, using the Bapco MobileMark 18 benchmark test on an HP Elitebook 865 G9 laptop configured with a 76WHr battery, Ryzen PRO 6850U processor with Radeon graphics, 256GB HDD, 8GB memory, Win 10 Pro, video resolution of 1920 x 1200 x 60 Hz and the power slider set to "better battery." Actual battery life will vary based on several factors, including, but not limited to: product configuration and usage, software, operating conditions, wireless functionality, power management settings, screen brightness and other factors. The maximum capacity of the battery will naturally decrease with time and use. AMD has not independently tested or verified the battery life claim. For more information about HP's published battery life testing and the MobileMark 18 benchmark test, see https://results.bapco.com/fdr/63601890f0f14ab5c99c634be6721d95.
2. RMB-72 As of 4/18/22 AMD Ryzen 7 6800U is #1 spot on Bapco MobileMark 18 benchmark. Battery life tested on an HP Elitebook 865 G9 laptop configured with a 76WHr battery, Ryzen 7 6800U processor with Radeon graphics, 256GB HDD, 8GB memory, Win 10 Pro, video resolution of 1920 x 1200 x 60 Hz and the power slider set to "better battery." Actual battery life will vary based on several factors, including, but not limited to: product configuration and usage, software, operating conditions, wireless functionality, power management settings, screen brightness and other factors. The maximum capacity of the battery will naturally decrease with time and use. For more information about the MobileMark 18 benchmark test, see https://results.bapco.com/fdr/63601890f0f14ab5c99c634be6721d95.
3. RMB-61 Testing conducted by AMD Performance Labs as of April 12, 2022, using Cinebench R20 benchmarks to test a Lenovo Thinkpad P16s Gen 1 laptop configured with a Ryzen™ 7 6850U/6800U with CPU TDP 28W 32GB 6400MHz LPDDR5, Windows 11 Professional (x64) Build 22000.527, 2048 GB NVMe, Radeon™ Integrated graphics , 1024 MB GDDR6 SDRAM, GPU driver 30.0.14018.1002, BIOS R23ET22WT03 (0.22) vs a similarly configured Lenovo Thinkpad X1 Carbon Gen 10 configured with an Intel Core i7-1260P, CPU TDP 28W 16GB LPDDR5, Microsoft Windows 11 Professional (x64) Build 22000.593, 1024 GB NVMe, Intel Iris Xe Graphics (Alder Lake-P 682 GT2) integrated graphics controller [L0] [Lenovo], 1024 MB, GPU driver 30.0.101.1631, BIOS N3AET45W (1.10). Results may vary.
4. RMB-65 Testing conducted by AMD Performance Labs as of April 12, 2022, using PCMark® 10 benchmark to test a Lenovo Thinkpad P16s Gen 1 laptop configured with a Ryzen™ 7 6850U/6800U with CPU TDP 28W 32GB 6400MHz LPDDR5, Windows 11 Professional (x64) Build 22000.527, 2048 GB NVMe, Radeon™ Integrated graphics, 1024 MB GDDR6 SDRAM, GPU driver 30.0.14018.1002, BIOS R23ET22WT03 (0.22) vs a similarly configured Lenovo Thinkpad X1 Carbon Gen 10 configured with an Intel Core i7-1260P, CPU TDP 28W 16GB LPDDR5, Microsoft Windows 11 Professional (x64) Build 22000.593, 1024 GB NVMe, Intel Iris Xe Graphics (Alder Lake-P 682 GT2) integrated graphics controller [L0] [Lenovo], 1024 MB, GPU driver 30.0.101.1631, BIOS N3AET45W (1.10). Results may vary
5. RMB-63 Testing conducted by AMD Performance Labs as of April 12, 2022, using 3DMark-W8 benchmark to test a Lenovo Thinkpad P16s Gen 1 laptop configured with a Ryzen™ 7 6850U/6800U with CPU TDP 28W 32GB 6400MHz LPDDR5, Windows 11 Professional (x64) Build 22000.527, 2048 GB NVMe, Radeon™ Integrated graphics, 1024 MB GDDR6 SDRAM, GPU driver 30.0.14018.1002, BIOS R23ET22WT03 (0.22) vs a similarly configured Lenovo Thinkpad X1 Carbon Gen 10 configured with an Intel Core i7-1260P, CPU TDP 28W 16GB LPDDR5, Microsoft Windows 11 Professional (x64) Build 22000.593, 1024 GB NVMe, Intel Iris Xe Graphics (Alder Lake-P 682 GT2) integrated graphics controller [L0] [Lenovo], 1024 MB, GPU driver 30.0.101.1631, BIOS N3AET45W (1.10). Results may vary.
6. RMB-64 Testing conducted by AMD Performance Labs as of April 12, 2022, using PassMark® 10 benchmark to test a Lenovo Thinkpad P16s Gen 1 laptop configured with a Ryzen™ 7 6850U/6800U with CPU TDP 28W 32GB 6400MHz LPDDR5, Windows 11 Professional (x64) Build 22000.527, 2048 GB NVMe, Radeon™ Integrated graphics, 1024 MB GDDR6 SDRAM, GPU driver 30.0.14018.1002, BIOS R23ET22WT03 (0.22) vs a similarly configured Lenovo Thinkpad X1 Carbon Gen 10 configured with an Intel Core i7-1260P, CPU TDP 28W 16GB LPDDR5, Microsoft Windows 11 Professional (x64) Build 22000.593, 1024 GB NVMe, Intel Iris Xe Graphics (Alder Lake-P 682 GT2) integrated graphics controller [L0] [Lenovo], 1024 MB, GPU driver 30.0.101.1631, BIOS N3AET45W (1.10). Results may vary.
7. RMB-66 Testing conducted by AMD Performance Labs as of April 12, 2022, using Procyon 2.0 benchmark to test a Lenovo Thinkpad P16s Gen 1 laptop configured with a Ryzen™ 7 6850U/6800U with CPU TDP 28W 32GB 6400MHz LPDDR5, Windows 11 Professional (x64) Build 22000.527, 2048 GB NVMe, Radeon™ Integrated graphics, 1024 MB GDDR6 SDRAM, GPU driver 30.0.14018.1002, BIOS R23ET22WT03 (0.22) vs a similarly configured Lenovo Thinkpad X1 Carbon Gen 10 configured with an Intel Core i7-1260P, CPU TDP 28W 16GB LPDDR5, Microsoft Windows 11 Professional (x64) Build 22000.593, 1024 GB NVMe, Intel Iris Xe Graphics (Alder Lake-P 682 GT2) integrated graphics controller [L0] [Lenovo], 1024 MB, GPU driver 30.0.101.1631, BIOS N3AET45W (1.10). Results may vary.
8. RMB-67 Testing conducted by AMD Performance Labs as of April 12, 2022, using Kraken 1.1, Speedometer 2.0, Octane, and WebXPRT (all on Canary Edge Browser) benchmark to test a Lenovo Thinkpad P16s Gen 1 laptop configured with a Ryzen™ 7 6850U/6800U with CPU TDP 28W 32GB 6400MHz LPDDR5, Windows 11 Professional (x64) Build 22000.527, 2048 GB NVMe, Radeon™ Integrated graphics, 1024 MB GDDR6 SDRAM, GPU driver 30.0.14018.1002, BIOS R23ET22WT03 (0.22) vs a similarly configured Lenovo Thinkpad X1 Carbon Gen 10 configured with an Intel Core i7-1260P, CPU TDP 28W 16GB LPDDR5, Microsoft Windows 11 Professional (x64) Build 22000.593, 1024 GB NVMe, Intel Iris Xe Graphics (Alder Lake-P 682 GT2) integrated graphics controller [L0] [Lenovo], 1024 MB, GPU driver 30.0.101.1631, BIOS N3AET45W (1.10). Results may vary.
9. RMB-70 Testing conducted by AMD Performance Labs as of April 12, 2022, using 7zip, Hand Brake, Blender Bench, Lame MP3 Encoder benchmarks to test a Lenovo Thinkpad P16s Gen 1 laptop configured with a Ryzen™ 7 6850U/6800U with CPU TDP 28W 32GB 6400MHz LPDDR5, Windows 11 Professional (x64) Build 22000.527, 2048 GB NVMe, Radeon™ Integrated graphics, 1024 MB GDDR6 SDRAM, GPU driver 30.0.14018.1002, BIOS R23ET22WT03 (0.22) vs a similarly configured Lenovo Thinkpad X1 Carbon Gen 10 configured with an Intel Core i7-1260P, CPU TDP 28W 16GB LPDDR5, Microsoft Windows 11 Professional (x64) Build 22000.593, 1024 GB NVMe, Intel Iris Xe Graphics (Alder Lake-P 682 GT2) integrated graphics controller [L0] [Lenovo], 1024 MB, GPU driver 30.0.101.1631, BIOS N3AET45W (1.10). Results may vary.
10. RMB-69 Testing conducted by AMD Performance Labs as of April 12, 2022, using Adobe Premiere Puget Standard benchmark to test a Lenovo Thinkpad P16s Gen 1 laptop configured with a Ryzen™ 7 6850U/6800U with CPU TDP 28W 32GB 6400MHz LPDDR5, Windows 11 Professional (x64) Build 22000.527, 2048 GB NVMe, Radeon™ Integrated graphics, 1024 MB GDDR6 SDRAM, GPU driver 30.0.14018.1002, BIOS R23ET22WT03 (0.22) vs a similarly configured Lenovo Thinkpad X1 Carbon Gen 10 configured with an Intel Core i7-1260P, CPU TDP 28W 16GB LPDDR5, Microsoft Windows 11 Professional (x64) Build 22000.593, 1024 GB NVMe, Intel Iris Xe Graphics (Alder Lake-P 682 GT2) integrated graphics controller [L0] [Lenovo], 1024 MB, GPU driver 30.0.101.1631, BIOS N3AET45W (1.10). Results may vary.
11. RMB-71 Testing conducted by AMD Performance Labs as of April 12, 2022, using POV-Ray and AIDA64 benchmarks to test a Lenovo Thinkpad P16s Gen 1 laptop configured with a Ryzen™ 7 6850U/6800U with CPU TDP 28W 32GB 6400MHz LPDDR5, Windows 11 Professional (x64) Build 22000.527, 2048 GB NVMe, Radeon™ Integrated graphics, 1024 MB GDDR6 SDRAM, GPU driver 30.0.14018.1002, BIOS R23ET22WT03 (0.22) vs a similarly configured Lenovo Thinkpad X1 Carbon Gen 10 configured with an Intel Core i7-1260P, CPU TDP 28W 16GB LPDDR5, Microsoft Windows 11 Professional (x64) Build 22000.593, 1024 GB NVMe, Intel Iris Xe Graphics (Alder Lake-P 682 GT2) integrated graphics controller [L0] [Lenovo], 1024 MB, GPU driver 30.0.101.1631, BIOS N3AET45W (1.10). Results may vary.
12. RMB-70 Testing conducted by AMD Performance Labs as of April 12, 2022, using 7zip, Hand Brake, Blender Bench, Lame MP3 Encoder benchmarks to test a Lenovo Thinkpad P16s Gen 1 laptop configured with a Ryzen™ 7 6850U/6800U with CPU TDP 28W 32GB 6400MHz LPDDR5, Windows 11 Professional (x64) Build 22000.527, 2048 GB NVMe, Radeon™ Integrated graphics, 1024 MB GDDR6 SDRAM, GPU driver 30.0.14018.1002, BIOS R23ET22WT03 (0.22) vs a similarly configured Lenovo Thinkpad X1 Carbon Gen 10 configured with an Intel Core i7-1260P, CPU TDP 28W 16GB LPDDR5, Microsoft Windows 11 Professional (x64) Build 22000.593, 1024 GB NVMe, Intel Iris Xe Graphics (Alder Lake-P 682 GT2) integrated graphics controller [L0] [Lenovo], 1024 MB, GPU driver 30.0.101.1631, BIOS N3AET45W (1.10). Results may vary.
13. GD-150 Max boost for AMD processors is the maximum frequency achievable by a single core on the processor running a bursty single-threaded workload. Max boost will vary based on several factors, including, but not limited to: thermal paste; system cooling; motherboard design and BIOS; the latest AMD chipset driver; and the latest OS updates.