

AMD RYZEN 5000 SERIES



FOR CREATIVE PROFESSIONALS

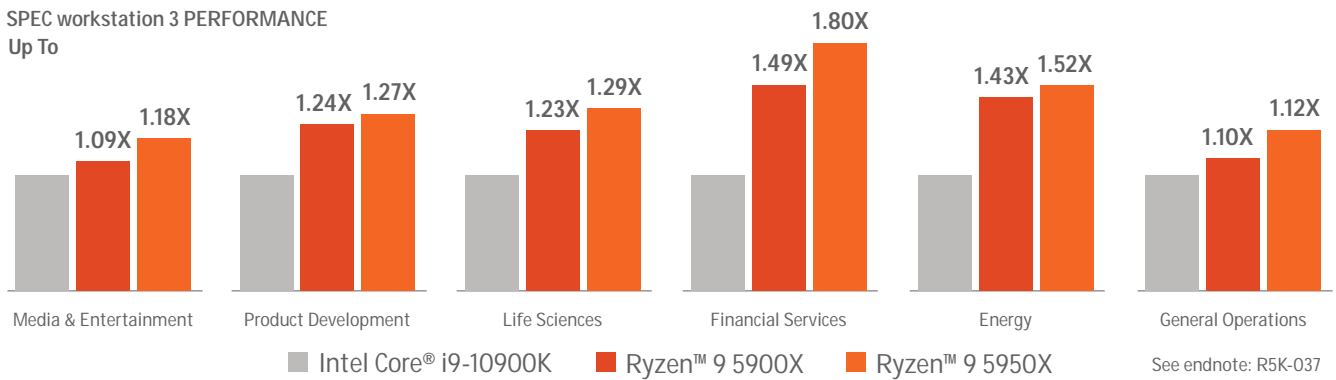
THE RIGHT TOOL FOR THE JOB

Professional content creators rely on a variety of applications to complete their work. Tasks like 3D modeling and design, character animation, rendering, generative design and product visualization have different compute needs that should be considered for optimal productivity. Now you can address the full spectrum of peak performance in your workflow with single threaded¹ and multi-threaded² leadership from the desktop processor that can do it all. Design faster. Render faster. Iterate faster. Create more, faster³ with AMD Ryzen™ 5000 series processors.

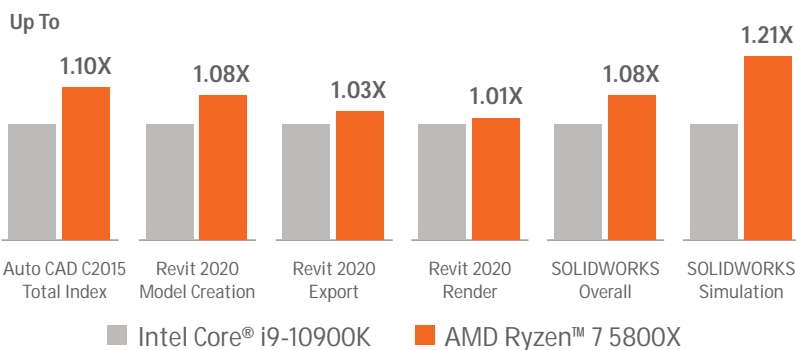


PERFORMANCE LEADERSHIP FOR PRO WORKLOADS

SPEC workstation 3 PERFORMANCE
Up To



PERFORMANCE LEADERSHIP FOR CAD & MANUFACTURING



Architects and engineers encounter a variety computational bottlenecks in their professional applications. Lightly threaded tasks like assembly rebuilds in SOLIDWORKS or 3D model creation in Revit can be accelerated by using processors with higher clock speeds.

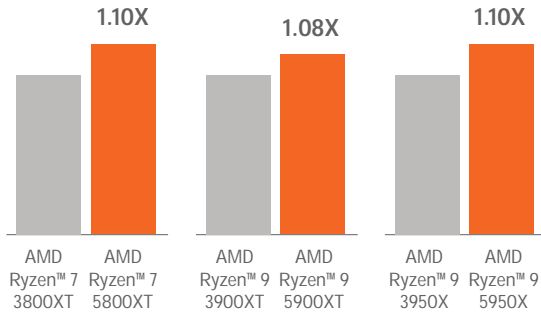
Multi-threaded tasks like simulation, generative design and simulation can take advantage of many CPU cores to help reduce the time to complete these tasks.

The AMD Ryzen™ 7 5800X Desktop Processor punches above its weight class, outperforming the competing top-end processor on several CAD and manufacturing workloads.



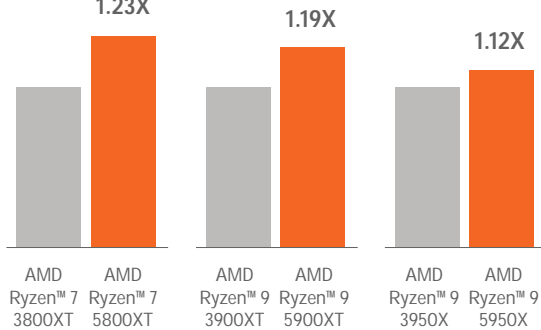
CONTINUED PERFORMANCE IMPROVEMENTS FOR MEDIA AND ENTERTAINMENT

DAVINCI RESOLVE OVERALL SCORE Up To



See endnote: R5K-030, R5K-031, R5K-032.

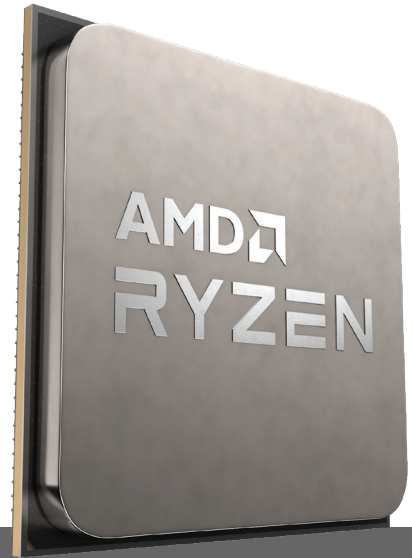
3D RENDERING WITH V-RAY Up To



See endnote: R5K-026, R5K-027, R5K-028, R5K-029.

The production of cutting-edge visual effects has never been more complex as the industry moves towards the increasing demands of 8K rendering and post-production editing. When the limits of your creativity are bound by computer hardware, it is no wonder that performance seeking artists and renowned studios are constantly looking for a competitive edge.

AMD Ryzen™ 5000 series processors build on the amazing capability of the prior generation and are equipped to increase creative iterations throughout VFX pipelines via reduced render times, seamless shot editing and enhanced multitasking.



MODEL SPECIFICATIONS

Model	Cores/ Threads	Base/Boost Frequency	PCIe Express®	Graphics	Node	TDP
AMD Ryzen™ 9 5950X	16 / 32	3.4GHz/4.9GHz	PCIe 4.0	Discrete Graphics Card Required	7nm	105W
AMD Ryzen™ 9 5900X	12 / 24	3.7GHz/4.8GHz	PCIe 4.0	Discrete Graphics Card Required	7nm	105W
AMD Ryzen™ 7 5800X	8 / 16	3.8GHz/4.7GHz	PCIe 4.0	Discrete Graphics Card Required	7nm	105W
AMD Ryzen™ 5 5600X	6 / 12	3.7GHz/4.6GHz	PCIe 4.0	Discrete Graphics Card Required	7nm	65w

- R5K-004: Testing by AMD performance labs as of 09/01/2020 with a Ryzen 9 5950X processor vs a Core i9-10900K configured with NVIDIA GeForce GTX 2080 Ti graphics, Samsung 860 Pro SSD, 2X8 DDR4-3600, Windows 10 and a Noctua NH-D15s cooler. Single-core performance evaluated with Cinebench R20 TT benchmark. Results may vary. R5K-004
- R5K-005: Testing by AMD performance labs as of 09/01/2020. Multi-core performance evaluated with Cinebench R20 nT with a similarly configured Ryzen 9 5950X vs. a Core i9-10900K. Results may vary. R5K-005
- R5K-001: Engineering projections are not a guarantee of final performance. Performance projection by AMD engineering based on expected Cinebench R20 nT, Keyshot, VRay, Blender and DaVinci Resolve performance vs the Intel Core i9-10900K desktop processor. Specific projections are based on reference design platforms and are subject to change when final products are released in market. R5K-001
- R5K-026: Testing by AMD Performance Labs as of September 23, 2020 using a Ryzen 5 5600X and Ryzen 5 3600XT configured with DDR4-3600C16 and NVIDIA GeForce RTX 2080 Ti. Results may vary. R5K-026
- R5K-027: Testing by AMD Performance Labs as of September 23, 2020 using a Ryzen 7 5800X and Ryzen 7 3800XT configured with DDR4-3600C16 and NVIDIA GeForce RTX 2080 Ti. Results may vary. R5K-027
- R5K-028: Testing by AMD Performance Labs as of September 23, 2020 using a Ryzen 9 5900X and Ryzen 9 3900XT configured with DDR4-3600C16 and NVIDIA GeForce RTX 2080 Ti. Results may vary. R5K-028
- R5K-029: Testing by AMD Performance Labs as of September 23, 2020 using a Ryzen 9 5950X and Ryzen 9 3950X configured with DDR4-3600C16 and NVIDIA GeForce RTX 2080 Ti. Results may vary. R5K-029
- R5K-030: Testing by AMD Performance Labs as of September 23, 2020 using a Ryzen 7 5800X and Ryzen 7 3800XT configured with DDR4-3600C16 and NVIDIA GeForce RTX 2080 Ti. Results may vary. R5K-030
- R5K-031: Testing by AMD Performance Labs as of September 23, 2020 using a Ryzen 9 5900X and Ryzen 9 3900XT configured with DDR4-3600C16 and NVIDIA GeForce RTX 2080 Ti. Results may vary. R5K-031
- R5K-032: Testing by AMD Performance Labs as of September 23, 2020 using a Ryzen 9 5950X and Ryzen 9 3950X configured with DDR4-3600C16 and NVIDIA GeForce RTX 2080 Ti. Results may vary. R5K-032
- R5K-033: Testing by AMD Performance Labs as of September 23, 2020 using an Ryzen 7 5800X, Ryzen 9 5900X, Ryzen 9 5950X and Core i9-10900K configured with DDR4-3600C16 and NVIDIA GeForce RTX 2080 Ti in AutoCAD, Revit 2020 and SOLIDWORKS 2019. Results may vary. R5K-033
- R5K-037: Testing by AMD Performance Labs as of September 23, 2020 using an AMD Ryzen™ 9 5900X, AMD Ryzen™ 9 5950X and Intel Core i9-10900K configured with DDR4-3600C16, GeForce RTX 2080 Ti and Microsoft Windows 10 Professional Build 19041.388. Additional information about SPEC® benchmarks can be found at www.spec.org. SPEC® and SPECworkstation™ are registered trademarks of the Standard Performance Evaluation Corporation. PC manufacturers may vary configurations yielding different results. Performance may vary based on use of latest drivers. R5K-037

Max boost for AMD Ryzen 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

