POWER. PERFORMANCE. EFFICIENCY. All are at your fingertips due to the technological innovation of the 5nm "Zen 4" core found inside AMD Ryzen™ 7000 Series processors.

THE ULTIMATE GAMING PROCESSOR

When your PC has the world's most advanced desktop processor[1] for an x86 platform, you can focus on what really matters: being victorious on the digital battlefield. With up to 16 cores, 32 threads, boost clocks of up to 5.7GHz[2] and up to 144MB of cache, AMD Ryzen 7000 Series processors deliver winning, game changing performance.

TECHNOLOGY DESIGNED TO SAVE YOU TIME

AMD Ryzen™ 7000 Series processors are built to beat the clock. With time-saving connectivity like PCIe® 5.0 storage support, ultra-fast WiFi® 6E wireless, up to 32 processing threads, and dedicated video encode/decode accelerators[3], elevate your creator experience with AMD Ryzen 7000 Series processors.

UPGRADEABLE FOR YEARS TO COME

The all-new AMD Ryzen 7000 Series processors are packed with state-of-the-art technologies to keep you on the bleeding edge with the insane speed of DDR5 memory, jaw-dropping bandwidth with PCIe® 5.0 support, AMD EXPO™ one-touch memory overclocking[4], and hyper-efficient 5nm manufacturing.

PRODUCT SPECIFICATIONS

	CORES/ THREADS	TYPICAL TDP	UP TO MAX / BASE FREQUENCY[1]	TOTAL CACHE	PCIE® LANES WITH X670 CHIPSET (UP TO)	UNLOCKED FOR OVERCLOCKING[3]?	COMPETITIVE PROCESSOR	COOLER INCLUDED	BUILT-IN GRAPHICS
AMD RYZEN™ 9 7950X3D	16/32	120W	5.7 / 4.2	144MB	44/24	PBO & Curve Optimizer	13900K / KS	No	Yes
AMD RYZEN™ 9 7950X	16/32	170W	5.7 / 4.5	80MB	44/24	Yes	13900K / KF	No	Yes
AMD RYZEN™ 9 7900X3D	12/24	120W	5.6 / 4.4	140MB	44/24	PBO & Curve Optimizer	13900K	No	Yes
AMD RYZEN™ 9 7900X	12/24	170W	5.6 / 4.7	76MB	44/24	Yes	13900	No	Yes
AMD RYZEN™ 9 7900	12/24	65W	5.4 / 3.7	76MB	44/24	Yes	13900	Wraith Prism w/RGB	Yes
AMD RYZEN™ 7 7800X3D	8/16	120W	5.0 / 4.2	104MB	44/24	PBO & Curve Optimizer	13700K	No	Yes
AMD RYZEN™ 7 7700X	8/16	105W	5.4 / 4.5	40MB	44/24	Yes	13700K / KF	No	Yes
AMD RYZEN™ 7 7700	8/16	65W	5.3 / 3.8	40MB	44/24	Yes	13700	Wraith Prism w/RGB	Yes
AMD RYZEN™ 5 7600X	6/12	105W	5.3 / 4.7	38MB	44/24	Yes	13600K / KF	No	Yes
AMD RYZEN™ 5 7600	6/12	65W	5.1 / 3.8	38MB	44/24	Yes	13600	Wraith Stealth	Yes
AMD RYZEN™ 5 7500F	6/12	65W	5.0/3.7	38MB	44/24	Yes	13600	Wraith Stealth	No

This chart illustrates relative product positioning on key functionality and is not necessarily an indication of relative performance. Performance may vary by application.

QUICK REFERENCE GUIDE | AMD RYZEN™ 7000 SERIES PROCESSORS

AMD RYZEN TECHNOLOGY*

- Enjoy the benefits of next-gen **AMD 3D V-Cache™** technology for lower latency and even more game performance[6].
- Accelerate your gaming with **AMD EXPO™** technology that can unlock improved memory performance for faster gaming.[4]
- **Precision Boost 2**[5] automatically raises processor frequencies for supercharged performance, always watching temperature and power consumption to intelligently

- **AMD Ryzen™ 7000 Series** processors feature large cache sizes for intense gaming and large data sets. Precision Boost Overdrive makes automatic overclocking possible with increased clock speed and power limits at the touch of a button.[3]
- **AMD X670E, X670 and B650 chipsets** offer everything an enthusiast needs: processor and memory overclocking support[4], premium components, and support for PCIe® 5.0.
- Use **AMD Ryzen™ Master** with your AMD Ryzen™ desktop processor to easily personalize performance.

*Availability of overclocking, Ryzen™ Master, Precision Boost Overdrive, and other Ryzen™ technologies in pre-built OEM desktop systems will vary based on PC manufacturer settings. Check with your PC manufacturer for more information.

● BEST ◑ BETTER ○ GOOD

	MAX GAME PERFORMANCE	GAMING & STREAMING	CONTENT CREATION	PRODUCTIVITY & ENTERTAINMENT
AMD RYZEN™ 9 7950X3D	●	●	●	●
AMD RYZEN™ 9 7950X	◑	●	●	●
AMD RYZEN™ 9 7900X3D	●	●	●	●
AMD RYZEN™ 9 7900X	◑	●	●	●
AMD RYZEN™ 9 7900	○	●	●	●
AMD RYZEN™ 7 7800X3D	●	◑	◑	●
AMD RYZEN™ 7 7700X	◑	◑	◑	●
AMD RYZEN™ 7 7700	○	◑	◑	●
AMD RYZEN™ 5 7600X	◑	◑	◑	●
AMD RYZEN™ 5 7600	○	◑	◑	●
AMD RYZEN™ 5 7500F	○	◑	◑	●

This chart illustrates relative product positioning on key functionality and is not necessarily an indication of relative performance. Performance may vary by application.

For more information visit **www.AMD.com/RYZEN**

1. GD-203. Based on a smaller node size of the AMD processor for an x86 platform, as of August 2022.
2. GD-150. 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.
3. GD-179. Precision Boost Overdrive requires an AMD Ryzen Threadripper or a Ryzen 3000/4000/5000/70000 series desktop processor, and a compatible motherboard. AMD Ryzen 3400G and 3200G series processors are not compatible. Because Precision Boost Overdrive enables operation of the processor outside of AMD's published specifications, use of the feature invalidates the AMD product warranty and may also void warranties offered by the system manufacturer or retailer. Availability of Precision Boost Overdrive in pre-built OEM desktop systems will vary based on the PC manufacturer's settings. Check with the PC manufacturer prior to purchase
4. GD-106. Overclocking and/or Undervolting AMD processors and memory, including without limitation, altering clock frequencies / multipliers or memory timing / voltage, to operate outside of AMD's published specifications will void any applicable AMD product warranty, even when enabled via AMD hardware and/or software. This may also void warranties offered by the system manufacturer or retailer. Users assume all risks and liabilities that may arise out of overclocking / undervolting AMD processors, including, without limitation, failure of or damage to hardware, reduced system performance and/or data loss, corruption or vulnerability.
5. GD-188 For additional information about Precision Boost 2, see https://www.amd.com/en/support/kb/faq/cpu-pb2.
6. RPL-35. RPL-35. Game testing as of 5 December, 2022, by AMD Performance Labs using the following hardware to test 20+ games: AMD Socket AM5 Reference Motherboard with AMD Ryzen™ 9 7950X, Ryzen™ 9 7950X3D and G.Skill DDR5-6000C30 (F5-6000J3038F16GX2-TZ5N) with AMD EXPO™; ALL SYSTEMS configured with NXZ Kraken X63, open air test bench, GeForce 4090, Windows 11, PCIe® Resizable Base Address Register ("ReBAR") ON, Virtualization-Based Security (VBS) OFF. All games tested at 1920x1080 with HIGH in-game preset and the chronologically newest graphics industry API available within the game's rendering engine. Desktop system manufacturers may vary configurations, yielding different results.