AMD RYZEN™ 9 9950X3D2 DUAL EDITION DESKTOP PROCESSOR

THE FIRST AMD PROCESSOR DESIGNED WITH DUAL AMD 3D V-CACHE™ TECHNOLOGY

AMD RYZEN 9000 Series

UNLOCK A NEW FUTURE OF COMPUTING FOR DEVELOPERS AND CREATORS

The dual 2nd-Gen AMD 3D V-Cache™ technology-based processor with 16 cores, can deliver lower latency thanks to expanded cache capacity. Purpose-built for elite creators and developers, it can accelerate workflows that thrive on extra cache for fast creation and more agile iteration, giving users the freedom to define how it fits into their own workflows.

AMD RYZEN™ 9 9950X3D2 PROCESSOR IS FOR *CREATORS AND DEVELOPERS WHO WANT:*

- **INCREDIBLE PERFORMANCE**
- **LEADERSHIP TECHNOLOGIES**
- **DEPENDABLE LONGEVITY**

HIGHLIGHTS

DESIGNED FOR DEVELOPERS AND CREATORS

- 208MB cache for next-generation applications
- 16 cores for strong multi-thread performance

2ND GEN AMD 3D V-CACHE™ TECHNOLOGY

- Demonstrates higher base clock and max boost[2] than 1st Gen AMD 3D V-Cache technology

FUTURE-READY FEATURES

- AM5 platform for future upgradability
- DDR5 memory, PCIe® 5.0 support

AMD "ZEN 5" ARCHITECTURE

- Improved branch prediction accuracy and latency versus previous generation architecture

AMD EXPO™ TECHNOLOGY

- DDR5 memory overclocking for high, smooth framerates
- Full overclockability[1]

AMD SOCKET AM5 PLATFORM

- Supports existing coolers and storage
- Motherboards with a balance of features and value

PRODUCT SPECIFICATIONS

	CORES/ THREADS	BASE CLOCK	BOOST CLOCK[2] (UP TO)	TOTAL CACHE (L2+L3)	TYPICAL TDP	UNLOCKED FOR OVERCLOCKING[1]?
AMD RYZEN™ 9 9950X3D2 PROCESSOR	16/32	4.3 GHz	5.6 GHz	208 MB	200W	Yes

PEAK PERFORMANCE IN AN AM5 DESKTOP

Faster Render[3]

+7% Average Performance in specific applications vs. AMD Ryzen™ 9 9950X3D CPU

Faster Productivity[5]

+3% Average Performance in 10+ applications vs. AMD Ryzen™ 9 9950X3D CPU

Faster AI and Simulation[7]

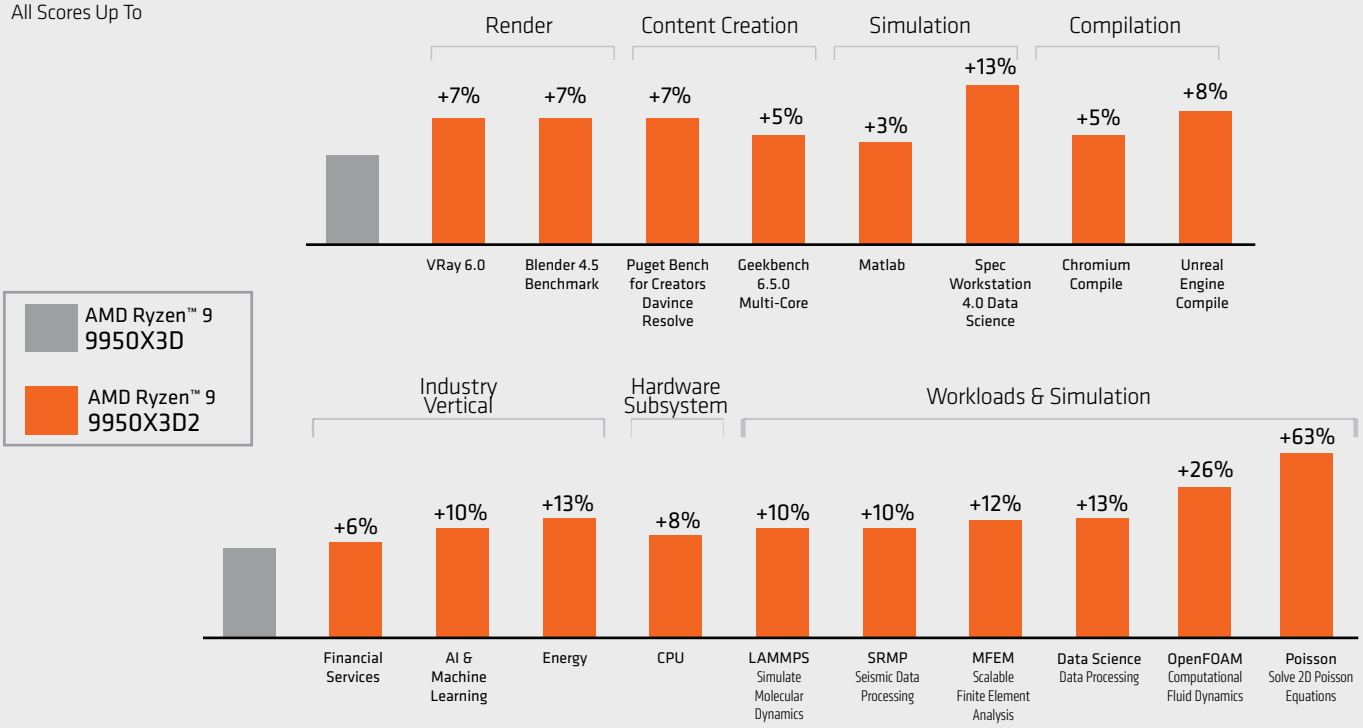
+7% Average Performance in specific applications vs. AMD Ryzen™ 9 9950X3D CPU

Leading 1080p Game Performance[4]

SAME Average FPS vs. AMD Ryzen™ 9 9950X3D CPU

ULTIMATE LOW-LATENCY PROCESSOR FOR DEVELOPERS & CREATORS[6,7,8,9,10]

All Scores Up To



Find out more by visiting **www.amd.com/RYZEN**

ENDNOTES

1. GD-106: Overclocking AMD processors, including without limitation, altering clock frequencies / multipliers or memory timing / voltage, to operate beyond their stock specifications will void any applicable AMD product warranty, even when such overclocking is 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 AMD processors, including, without limitation, failure of or damage to hardware, reduced system performance and/or data loss, corruption or vulnerability. GD-106.
2. GD-150: Boost Clock Frequency is the maximum frequency achievable on the CPU running a bursty workload. Boost clock achievability, frequency, and sustainability will vary based on several factors, including but not limited to: thermal conditions and variation in applications and workloads. GD-150.
3. GNR-66: Testing done by AMD performance labs as of February 2026, on a test system configured with Ryzen™ 9 9950X3D2 CPU, 16 core, 32 GB DDR5-6000 Memory, Windows 11 Pro, X870E Motherboard, Nvidia GeForce RTX 5090 (GeForce 591.86), compared against a similarly configured system with Ryzen™ 9 9950X3D CPU comparing performance (Best Performance) in the following render applications: Blender 4.3, CineBench 2026 nT, Corona Benchmark 10.0, POV-Ray nT, VRay 6.0.0, Keyshot Viewer. System manufacturers may vary configurations, yielding different results. GNR-66.
4. GNR-67: Testing done by AMD performance labs as of February 2026, on a test system configured with Ryzen™ 9 9950X3D2 CPU, 16 core, 32 GB DDR5-6000 Memory, Windows 11 Pro, X870E Motherboard, Nvidia GeForce RTX 5090 (GeForce 591.86), compared against a similarly configured system with Ryzen™ 9 9950X3D CPU comparing performance (Best Performance) in the following games: Anno 117: Pax Romana (DX12, High) ARC Raiders (DX12, High) Assassin's Creed Shadows (DX12, High) Avatar: Frontiers of Pandora (DX12, High) Baldur's Gate 3 (Vulkan, High) Battlefield 6 (DX12, High) Black Myth: Wukong (DX12, High) Borderlands 3 (DX12, High) Borderlands 4 (DX12, High) Call of Duty: Black Ops 7 (DX12, Ultra) Clair Obscur: Expedition 33 (DX12, High) Counter-Strike 2 (Vulkan, High) Cyberpunk 2077 (DX12, High) DOOM: The Dark Ages (Vulkan, High) Dragon Age: The Veilguard (DX12, High) F1 25 (DX12, High) Far Cry 6 (DX12, High) FinalFantasy14 Dawntrail (DX11, Maximum) Forza Horizon 5 (DX12, High) Grand Theft Auto V Enhanced (DX12, High) HITMAN 3 (DX12, High) Hogwarts Legacy (DX12, High) Horizon Zero Dawn (DX12, High) League of Legends (DX11, High) Marvel Rivals (DX12, High) Marvel's Spider-Man Remastered (DX12, High) Metro Exodus (DX12, High) Metro Exodus Enhanced Edition (DX12, Ultra) Monster Hunter Wilds (DX12, High) Shadow of the Tomb Raider (DX12, High) Sid Meier's Civilization VII (DX12, High) Star Wars Outlaws (DX12, High) Starfield (DX12, High) Tiny Tina's Wonderlands (DX12, High) Tom Clancy's Rainbow Six Siege (DX12, High) Total War: WARHAMMER III (DX11, High) Warhammer 40,000: Space Marine 2 (DX12, High). System manufacturers may vary configurations, yielding different results. GNR-67.
5. GNR-68: Testing done by AMD performance labs as of February 2026, on a test system configured with Ryzen™ 9 9950X3D2 CPU, 16 core, 32 GB DDR5-6000 Memory, Windows 11 Pro, X870E Motherboard, Nvidia GeForce RTX 5090 (GeForce 591.86), compared against a similarly configured system with Ryzen™ 9 9950X3D CPU comparing performance (Best Performance) in the following applications: 7zip 24.09, Geekbench 6.4.0, PassMark 11.X, PCMark10 v2.3, CrossMarkPro 1.0.1, PhoronixTestSuite 10.8.5, Handbrake 1.8.1, Puget Bench For Creators, Procyon Photo Editing, Procyon Video Editing, Procyon Office . System manufacturers may vary configurations, yielding different results. GNR-68.
6. GNR-69: Testing done by AMD performance labs as of February 2026, on a test system configured with Ryzen™ 9 9950X3D2 CPU, 16 core, 32 GB DDR5-6000 Memory, Windows 11 Pro, X870E Motherboard, Nvidia GeForce RTX 5090 (GeForce 591.86), compared against a similarly configured system with Ryzen™ 9 9950X3D CPU comparing performance (Best Performance) in the following render applications: Unreal Engine Compilation: Uninitialized Shader Cache, Unreal Engine Compilation: Initialized Shader Cache, Chromium Compilation. System manufacturers may vary configurations, yielding different results. GNR-69.
7. GNR-70: Testing done by BOXX performance labs as of February 2026, on a test system configured with Ryzen™ 9 9950X3D2 CPU, 16 core, 32 GB DDR5-6000 Memory, Windows 11 Pro, X870E Motherboard, Nvidia GeForce RTX 5090 (GeForce 591.86), compared against a similarly configured system with Ryzen™ 9 9950X3D CPU; comparing performance (Best Performance) in the following applications: ComfyUI, Matlab, SPEC Workstation 4.0 Data Science, SPEC Workstation 4.0 LAMMPS, SPEC Workstation 4.0 ONNX Inference, SPEC Workstation 4.0 OpenFOAM, SPEC Workstation 4.0 Python 3, SPEC Workstation 4.0 MFEM, SPEC Workstation 4.0 NAMD, SPEC Workstation 4.0 Convolution, SPEC Workstation 4.0 Rodinia CFD, SPEC Workstation 4.0 Rodinia Life Sciences. System manufacturers may vary configurations, yielding different results. GNR-70.
8. GNR-71: Testing done by BOXX performance labs as of February 2026, on a test system configured with Ryzen™ 9 9950X3D2 CPU, 16 core, 32 GB DDR5-6000 Memory, Windows 11 Pro, X870E Motherboard, Nvidia GeForce RTX 5090 (GeForce 591.86), compared against a similarly configured system with Ryzen™ 9 9950X3D CPU comparing performance (Best Performance) in the following applications: SPEC Workstation 4.0 Industry Vertical Scores, SPEC Workstation 4.0 Subsystem Hardware Scores, SPEC Workstation 4.0 Workload Scores. System manufacturers may vary configurations, yielding different results. GNR-71.
9. GNR-72: Testing done by BOXX performance labs as of February 2026, on a test system configured with Ryzen™ 9 9950X3D2 CPU, 16 core, 32 GB DDR5-6000 Memory, Windows 11 Pro, X870E Motherboard, Nvidia GeForce RTX 5090 (GeForce 591.86), compared against a similarly configured system with Ryzen™ 9 9950X3D CPU; comparing performance (Best Performance) in the following rendering applications: V-RAY Benchmark 6.00.02, Keyshot Viewer 2025.3, Revit Render 2026.4, Corona Render Benchmark 10, Twinmotion 2025.2 White Studio, Blender 4.5, Autodesk Maya. System manufacturers may vary configurations, yielding different results. GNR-72.
10. GNR-73: Testing done by BOXX performance labs as of February 2026, on a test system configured with Ryzen™ 9 9950X3D2 CPU, 16 core, 32 GB DDR5-6000 Memory, Windows 11 Pro, X870E Motherboard, Nvidia GeForce RTX 5090 (GeForce 591.86), compared against a similarly configured system with Ryzen™ 9 9950X3D CPU; comparing performance (Best Performance) in the following content creation applications: Puget Bench for Creators After Effects 25.5, Puget Bench for Creators Davinci Resolve, Geekbench 6.5.0 Single Core Score, Geekbench 6.5.0 Multi Core Score, Blackmagic RAW Speed Test 5.1 BRAW 12:1 HD CPU, Blackmagic RAW Speed Test 5.1 BRAW 12:1 4K CPU, Blackmagic RAW Speed Test 5.1 BRAW 12:1 6K CPU, Blackmagic RAW Speed Test 5.1 BRAW 12:1 8k CPU. System manufacturers may vary configurations, yielding different results. GNR-73.