AMD RADEON™ RX 9070 SERIES GRAPHICS

HOW TO SELL | MARCH 2025

AMD RADEON RX 9000 Series

ALL THAT'S NEEDED FOR ULTRA-FAST GAMING

AMD Radeon™ RX 9070 Series graphics cards are built to deliver all that's needed for ultra-fast gaming, with next-level visuals and future-ready features, supercharged with AI. Built on the AMD RDNA™ 4 architecture, experience powerful raytracing and AI accelerators, 16GB of memory, increased visual quality for video streaming and editing, all backed by continuous optimizations with AMD Software.

AMD RADEON™ RX 9070 SERIES GRAPHICS CARDS ARE FOR *GAMERS WHO WANT:*

ULTRA-FAST GAMING

NEXT-LEVEL IMMERSION

FUTURE-READY FEATURES

SELL IT IN 60 SECONDS

AMD RDNA™ 4 ARCHITECTURE
- Up to 64 unified compute units
- 3rd generation raytracing accelerators
- 2nd generation AI accelerators

AMD HYPR-RX[1] TECHNOLOGY
- AMD Radeon™ Super Resolution[2] technology
- AMD Fluid Motion Frames 2.1 (AFMF)[3,4]
- AMD Radeon™ Anti-Lag 2[5]
- AMD Radeon™ Boost[6]

ENHANCED MEDIA ENGINE
- Supporting H.264, HEVC, AV1[7]
- Up to 8K | 80 FPS max encode/decode
- No limit on number of sessions/encode streams

AMD FIDELITYFX™ SUPER RESOLUTION 4 TECHNOLOGY[8]
- ML-powered upscaling
- Developed for AMD RDNA™ 4 architecture
- High-quality and low latency

FUTURE-READY TECHNOLOGIES
- Latest DisplayPort™ 2.1a and HDMI® 2.1b connections
- Seamless integration with existing ultra-enthusiast power supplies

AMD SOFTWARE - SUPERCHARGED WITH AI
- AI-optimized internal test processses
- Opt-in AI corruption reporting
- Enable AMD software features, such as AMD Chat
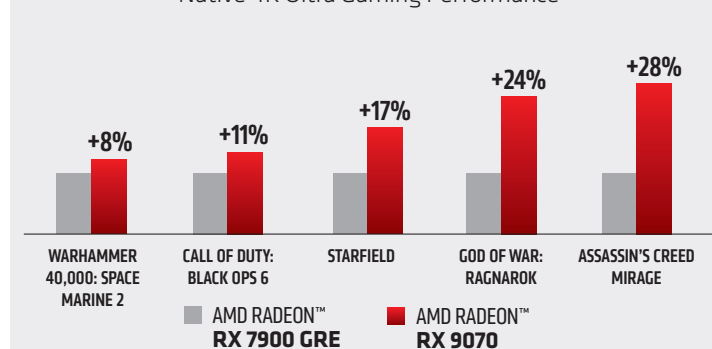
AMD RADEON™ RX 9070 SERIES SPECIFICATIONS

	AMD RDNA™ 4 COMPUTE UNITS	VIDEO MEMORY	BOOST CLOCK[3] (UP TO)	PEAK AI TOPS (INT4 WITH SPARSITY)	CONNECTIVITY	DISPLAY	TOTAL BOARD POWER*
AMD RADEON™ RX 9070 XT	64	16GB	2.97 GHz	1557 TOPS	PCIe® 5x16	DisplayPort™ 2.1a HDMI® 2.1b	304W
AMD RADEON™ RX 9070	56	16GB	2.52 GHz	1165 TOPS	PCIe® 5x16	DisplayPort™ 2.1a HDMI® 2.1b	220W

*Total board power (as listed) is AMD reference specifications. Partner board specification(s) may differ.
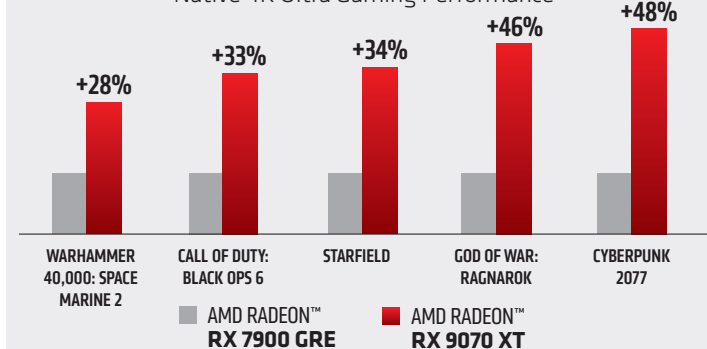
GENERATIONAL UPLIFT

AMD Radeon™ RX 9070 vs AMD Radeon™ RX 7900 GRE[11]

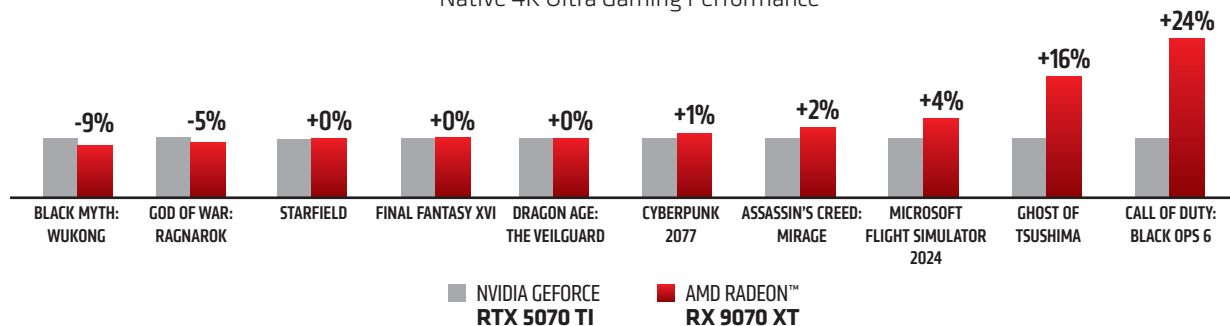Native 4K Ultra Gaming Performance

- WARHAMMER 40,000: SPACE MARINE 2 — +8%
- CALL OF DUTY: BLACK OPS 6 — +11%
- STARFIELD — +17%
- GOD OF WAR: RAGNAROK — +24%
- ASSASSIN'S CREED MIRAGE — +28%

AMD RADEON™ RX 7900 GRE / AMD RADEON™ RX 9070

AMD Radeon™ RX 9070 XT vs AMD Radeon™ RX 7900 GRE[10]

Native 4K Ultra Gaming Performance

- WARHAMMER 40,000: SPACE MARINE 2 — +28%
- CALL OF DUTY: BLACK OPS 6 — +33%
- STARFIELD — +34%
- GOD OF WAR: RAGNAROK — +46%
- CYBERPUNK 2077 — +48%

AMD RADEON™ RX 7900 GRE / AMD RADEON™ RX 9070 XT

COMPETITIVE EXPERIENCE[12]

Native 4K Ultra Gaming Performance

Bar chart comparing NVIDIA GEFORCE RTX 5070 TI vs AMD RADEON™ RX 9070 XT:

- BLACK MYTH: WUKONG: -9%
- GOD OF WAR: RAGNAROK: -5%
- STARFIELD: +0%
- FINAL FANTASY XVI: +0%
- DRAGON AGE: THE VEILGUARD: +0%
- CYBERPUNK 2077: +1%
- ASSASSIN'S CREED: MIRAGE: +2%
- MICROSOFT FLIGHT SIMULATOR 2024: +4%
- GHOST OF TSUSHIMA: +16%
- CALL OF DUTY: BLACK OPS 6: +24%

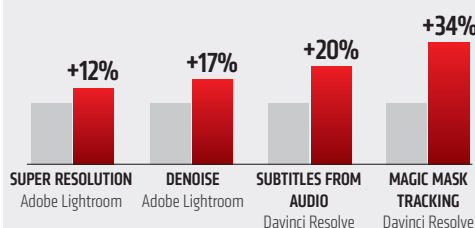■ NVIDIA GEFORCE **RTX 5070 TI**   ■ AMD RADEON™ **RX 9070 XT**

SUPERCHARGED EXPERIENCES

AMD HYPR-RX[1] TECHNOLOGY[13,14,15]
Average FPS Uplift | 4K Highest Settings
AMD Radeon™ RX 9070 XT + AMD Ryzen™ 7 9800X3D

- MICROSOFT FLIGHT SIMULATOR 2024: 2.8x (121 FPS)
- KINGDOM COME DELIVERANCE 2: 2.6x (147 FPS)
- STAR CITIZEN: 2.9x (170 FPS)

■ HYPR-RX Off (Native)   ■ HYPR-RX On (Upscaling + Frame Generation)
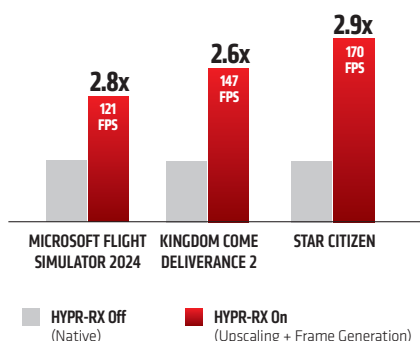
CREATOR AI PERFORMANCE[16]
Average Scores

- SUPER RESOLUTION — Adobe Lightroom: +12%
- DENOISE — Adobe Lightroom: +17%
- SUBTITLES FROM AUDIO — Davinci Resolve: +20%
- MAGIC MASK TRACKING — Davinci Resolve: +34%

GENERATIVE AI PERFORMANCE[17]
Average Scores

- FLUX SCHNELL — Amuse: +41%
- COMPUTERVISION FP16 — Procyon: +45%
- SD 1.5 — Procyon: +64%
- SD XL — Procyon: +70%

■ AMD Radeon™ RX **7900 GRE 16GB**   ■ AMD Radeon™ RX **9070 XT 16GB**
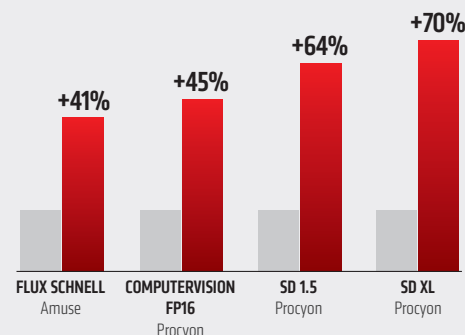
Find out more by visiting **www.amd.com/RADEON**

ENDNOTES

1. GD-225A: AMD HYPR-RX works on the AMD Radeon™ RX 7000 Series GPUs and newer or the Ryzen 7040 Series APUs with integrated RDNA 3 graphics and newer. AMD HYPR-RX allows various features within AMD Software interoperate, working at the same time, including Radeon Super Resolution, FidelityFX Super Resolution, Radeon Anti-Lag, Radeon Boost, and AMD Fluid Motion Frames where applicable to select titles. GD-225A
2. GD-197: Radeon Super Resolution works with games that support exclusive and borderless full-screen modes. AMD Software: Adrenalin Edition 22.5.2 or newer is required. GD-197
3. GD-231: AMD Fluid Motion Frames interpolation technology when used with AMD FidelityFX Super Resolution (FSR) 3 inserts 1 frame between existing ones which can therefore enable up to 2x the framerate in supported games. GD-231
4. GD-234d: AMD Fluid Motion Frames, or AFMF, is a frame generation technology designed to increase frame rates and smoothness for game winning performance with minimal impact to image quality. AFMF is integrated into the AMD Software: Adrenalin Edition™ Application. AFMF supports AMD Radeon™ RX 6000 Series and up discrete desktop graphics cards, as well as AMD Ryzen™ 8000 Series desktop processors with AMD Radeon™ 700M Series Graphics. GD-234d.
5. GD-242: AMD Radeon Anti-Lag 2 is available in select games which require game developer integration and is supported on select AMD RDNA™ architecture and above discrete and integrated graphics cards. See https://www.amd.com/en/products/software/adrenalin/radeonsoftware-anti-lag.html for additional information. GD-242
6. Radeon Boost is compatible with Windows 10/11 in select titles. Hardware compatibility includes Radeon RX 400 dGPUs and newer, Ryzen 2000 Series CPUs and newer, including hybrid and detachable graphics configurations. No mGPU support. Radeon Boost Variable Rate Shading is compatible with AMD Radeon RX 6000 Series Graphics and newer. For a list of compatible titles see https://www.amd.com/en/technologies/radeon-boost. GD-158
7. GD-176: Video codec acceleration (including at least the HEVC (H.265), H.264, VP9, and AV1 codecs) is subject to and not operable without inclusion/installation of compatible media players. GD-176
8. GD-187b: AMD FidelityFX Super Resolution (FSR) versions 1, 2, 3, and 4 are available on select games which require game developer integration and are supported on select AMD products. AMD does not provide technical or warranty support for AMD FidelityFX Super Resolutionenablement on other vendors' graphics cards. See https://www.amd.com/en/technologies/fidelityfx-super-resolution for additional information. GD-187b
9. GD-151: Boost Clock Frequency is the maximum frequency achievable on the GPU 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-151
10. RX-1179: Testing done by AMD performance labs February 2025, on a test system configured with Ryzen 7 9800X3D CPU, 32 GB DDR5-6000 Memory, Windows 11 Pro and Radeon RX 9070 XT (Driver 25.3.1) vs. a similarly configured system with an RX 7900 GRE (Driver 25.3.1) comparing gaming performance at 4K in the following applications: Cyberpunk 2077 (DX12, Ultra), Starfield (DX12, Ultra), God of War: Ragnarok (DX12, Ultra), Call of Duty: Black Ops 6 (DX12, Extreme), Warhammer 40,000: Space Marine 2 (DX12, Ultra). Testing conducted with latest game builds as of February 5, 2025 (Marvel's Spider-Man 2, Microsoft Flight Simulator 2024, The Last of Us: Part 1, and Forza Horizon 5 using latest builds as of February 14th, 2025). System manufacturers may vary configurations, yielding different results. RX-1179.
11. RX-1176: Testing done by AMD performance labs February 2025, on a test system configured with Ryzen 7 9800X3D CPU, 32 GB DDR5-6000 Memory, Windows 11 Pro and Radeon RX 9070 (Driver 25.3.1) vs. a similarly configured system with an RX 7900 GRE (Driver 25.3.1) comparing gaming performance at 4K in the following applications: Assassin's Creed Mirage (DX12, Ultra High), Starfield (DX12, Ultra), God of War: Ragnarok (DX12, Ultra), Call of Duty: Black Ops 6 (DX12, Extreme), Warhammer 40,000: Space Marine 2 (DX12, Ultra) using latest builds as of February 14th, 2025). System manufacturers may vary configurations, yielding different results. RX-1176.
12. RX-1173: Testing done by AMD performance labs February 2025, on a test system configured with Ryzen 7 9800X3D CPU, 32 GB DDR5-6000 Memory, Windows 11 Pro and Radeon RX 9070 XT (Driver 25.3.1) vs. a similarly configured system with an RTX 5070 Ti (Driver 572.47) comparing gaming performance at 4K in the following applications: Cyberpunk 2077 (DX12, Ultra), Assassin's Creed Mirage (DX12, Ultra High), Starfield (DX12, Ultra), God of War: Ragnarok (DX12, Ultra), Call of Duty: Black Ops 6 (DX12, Extreme), Black Myth: Wukong (DX12, Cinematic), Ghost of Tsushima (DX12, Very High), Dragon Age: The Veilguard (DX12, Ultra), Microsoft Flight Simulator 2024 (DX12 Ultra), Final Fantasy XVI Demo (DX12, Ultra). Testing conducted on Radeon RX 9070 XT with latest game builds as of February 5, 2025 (Microsoft Flight Simulator 2024 using latest game builds as of February 14th, 2025). Testing conducted on RTX 5070 Ti with latest game builds as of February 20, 2025. System manufacturers may vary configurations, yielding different results. RX-1173.
13. RS-688a: Up to 2.6x performance uplift with AMD HYPR-RX enabled (vs. native) in Kingdom Come: Deliverance II at 4K. RS-688a
14. RS-689a: Up to 2.8x performance uplift with AMD HYPR-RX enabled (vs. native) in Microsoft Flight Simulator 2024 at 4K. RS-689a
15. RS-690a: Up to 2.9x uplift in performance with AMD HYPR-RX enabled (vs. native) in Star Citizen at 4K. RS-690a
16. RX-1168: Testing by AMD, as of February 2025 using Amuse 2.3.15 and Procyon 2.10.1542 64. Models used: SD 1.5, SDXL, ComputerVision FP16, and FLUX Schnell. System configuration: AMD Ryzen 7 9800X3D, 32GB 6000 MT/s DDR5 RAM, 2TB SSD with an AMD Radeon RX 9070 XT GPU vs. a similarly configured system with a Radeon RX 7900 GRE GPU. Driver 25.3.1 RC 31. Performance may vary. RX-1168
17. RX-1169: Testing done by AMD performance labs February 2025, on a test system configured with Ryzen 9 7950X3D CPU, 32 GB DDR5-6000 Memory, Windows 11 and Radeon RX 9070 XT (Driver 25.3.1 RC 31) vs. a similarly configured system with an RX 7900 GRE (Driver 25.3.1 RC31) comparing AI creator performance in the following Puget Benchmarks: Adobe Lightroom (AI Super Resolution), Adobe Lightroom (AI Denoise), Davinci Resolve (Subtitles from Audio), Davinci Resolve (Magic Mask Tracking). System manufacturers may vary configurations, yielding different results. RX-1169