

AMD RADEON™ RX 9000 SERIES DESKTOP GRAPHICS

QUICK REFERENCE GUIDE



AMD Radeon™ RX 9000 Series graphics cards are built to deliver ultra-fast gaming, with next-level visuals and future-ready features, supercharged with AI. The new AMD RDNA™ 4 architecture features powerful raytracing and AI accelerators, increased visual quality for video streaming and editing, all backed by continuous optimizations with AMD Software. With up to 16GB of VRAM, modern display connectivity, and compatibility with existing power supplies, this is the upgrade that will have desktop PCs feeling fast and fresh for years to come.

ULTRA-FAST GAMING

- AMD RDNA™ 4 Compute Units
 - 3rd generation Raytracing Accelerators
 - 2nd Generation AI Accelerators
- AMD HYPR-RX¹ with AMD Fluid Motion Frames 2.1 (AFMF)^{2,3}
- AMD Radeon™ Anti-Lag 2⁴

NEXT-LEVEL IMMERSION

- **AMD FSR™ Gaming Technologies⁵**
 - AMD FSR Upscaling
 - AMD FSR Frame Generation
 - AMD FSR Ray Regeneration
 - AMD FSR Radiance Caching
- AMD Radiance Display™ Engine and Enhanced Media Engine

FUTURE-READY FEATURES

- Up to 16GB of memory
- PCIe® 5.0
- DisplayPort™ 2.1a; HDMI® 2.1b
- AMD FreeSync™ technology
- AMD smart technologies
- AM5 Platform with AMD Ryzen™ 9000 Series processors

PRODUCT SPECIFICATIONS

GRAPHICS MODEL	GPU ARCHITECTURE	PROCESS	PCIe® SUPPORT	DISPLAY COMPATIBILITY	GPU CLOCK SPEED (BOOST CLOCK) (UP TO) ¹	AMD RDNA™ 4 COMPUTE UNITS	RAYTRACING ACCELERATORS	AI ACCELERATORS	STREAM PROCESSORS	MEMORY AMOUNT + INTERFACE	AMD 3RD GEN INFINITY CACHE™ TECHNOLOGY	MEMORY BANDWIDTH (UP TO)	TOTAL BOARD POWER	RECOMMENDED PSU	REQUIRED POWER SUPPLY CONNECTORS	FORM FACTOR	COMPETITIVE GRAPHICS
AMD RADEON™ RX 9070 XT	AMD RDNA™ 4	4nm	Gen 5	DisplayPort™ 2.1a HDMI™ 2.1b	2970	64	64	128	4096	16 GB GDDR6 + 256 bit	64 MB	640 GB/s	304W	750W	2x8 pin	Dual-Slot	NVIDIA RTX 5070 Ti
AMD RADEON™ RX 9070	AMD RDNA™ 4	4nm	Gen 5	DisplayPort™ 2.1a HDMI™ 2.1b	2520	56	56	112	3584	16 GB GDDR6 + 256 bit	64 MB	640 GB/s	220W	650W	2x8 pin	Dual-Slot	NVIDIA RTX 5070
AMD RADEON™ RX 9070 GRE	AMD RDNA™ 4	4nm	Gen 5	DisplayPort™ 2.1a HDMI™ 2.1b	2790	48	48	96	3072	12 GB GDDR6 + 192 bit	48 MB	432 GB/s	220W	650W	2x8 pin	Dual-Slot	NVIDIA RTX 5060 Ti 16GB
AMD RADEON™ RX 9060 XT 16 GB	AMD RDNA™ 4	4nm	Gen 5	DisplayPort™ 2.1a HDMI™ 2.1b	3130	32	32	64	2048	16 GB GDDR6 + 128 bit	32 MB	320 GB/s	160W	450W	1x8 pin	Dual-Slot	NVIDIA RTX 5060Ti 8GB
AMD RADEON™ RX 9060 XT 8 GB	AMD RDNA™ 4	4nm	Gen 5	DisplayPort™ 2.1a HDMI™ 2.1b	3130	32	32	64	2048	8 GB GDDR6 + 128 bit	32 MB	320 GB/s	150W	450W	1x8 pin	Dual-Slot	NVIDIA RTX 5060
AMD RADEON™ RX 9050 8GB	AMD RDNA™ 4	4nm	Gen 5	DisplayPort™ 2.1a HDMI™ 2.1b	2600	16	16	32	1024	8 GB GDDR6 + 128 bit	32 MB	288 GB/s	92W	450W	1x8 pin	Dual-Slot	NVIDIA RTX 3060 12GB

THIS CHART ILLUSTRATES RELATIVE PRODUCT POSITIONING ON KEY FUNCTIONALITY AND IS NOT NECESSARILY AN INDICATION OF RELATIVE PERFORMANCE. PERFORMANCE MAY VARY BY APPLICATION.

FEATURES



AMD FSR GAMING TECHNOLOGIES⁵

- A suite of ML-powered features designed to deliver higher image quality and boosts to framerates in supported games

AI ACCELERATION

- 2nd Generation AI Accelerators for new levels of AI performance and capabilities
- Engineered to deliver up to 4X more FP16 operations and up to 8X more INT8 operations than previous generations across some of today's most popular generative AI workloads when using Sparsity.⁶

HIGH-PERFORMANCE RAYTRACING

- AMD RDNA™ 4 compute units with redesigned raytracing accelerators for incredible performance and improved image quality

RECOMMENDED USAGE CHART

BEST

BETTER

GOOD

SUPPORTED

NOT SUPPORTED

	1080P GAMING	1440P GAMING	4K GAMING	ESPORTS GAMING	AAA GAMING	VR GAMING	GAME STREAMING & VIDEO EDITING	HARDWARE RAYTRACING	WATCHING 4K MEDIA	AI ACCELERATION
GRAPHICS MODEL										
AMD RADEON™ RX 9070 XT										
AMD RADEON™ RX 9070										
AMD RADEON™ RX 9070 GRE										
AMD RADEON™ RX 9060 XT 16GB										
AMD RADEON™ RX 9060 XT 8GB										
AMD RADEON™ RX 9050 8GB										

THIS CHART ILLUSTRATES RELATIVE PRODUCT POSITIONING ON KEY FUNCTIONALITY AND IS NOT NECESSARILY AN INDICATION OF RELATIVE PERFORMANCE. PERFORMANCE MAY VARY BY APPLICATION.

NEXT STEPS

Find out more by visiting www.amd.com/RADEON
For more AMD product training, sign up at arena.amd.com and earn rewards!

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 to 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-231a: Advanced frame 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-231a
3. 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, AMD Ryzen™ 7000 and 8000 mobile processors with AMD Radeon™ 700M Series graphics, AMD Ryzen™ AI 300 Series Processors with AMD Radeon™ 800M Series Graphics, AMD Ryzen™ Z2 and Z1 Series handheld gaming processors, as well as AMD Ryzen™ 8000 series desktop processors with AMD Radeon™ 700M Series Graphics. GD-234d
4. 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/radeon-software-anti-lag.html> for additional information. GD-242
5. GD-187c: AMD FSR versions 1, 2, 3, and 4 and "Redstone" 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 FSR enablement on other vendors' graphics cards. See <https://www.amd.com/fsr> for additional information. GD-187c
6. RX-1143: Based on specifications of AMD RDNA 4 architecture compared to AMD RDNA 3 architecture as of December 2024. RX-1143
7. GD-151: Boost Clock Frequency is the maximum frequency achievable on the Radeon 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

© 2026 Advanced Micro Devices, Inc. All rights reserved. AMD, the AMD Arrow logo, FreeSync, Radeon, AMD FSR, AMD Radiance Display, AMD RDNA, Ryzen, and combinations thereof are trademarks of Advanced Micro Devices, Inc. PCIe and PCI Express are registered trademarks of PCI-SIG corporation. Other product names used in this publication are for identification purposes only and may be trademarks of their respective companies. PID #243109457-D