AMD Radeon™ R9, R7 and R5 Series Graphics Cards Quick Reference Guide

Radeon™ is gaming.

Performance	AMD Radeon™ Model	GPU Architecture	API Support	PCI Express Version[1]	AMD PowerTune Technology[2]	AMD ZeroCore Technology[2]	4K Resolution Support	DDM Audio	HDMI® (With 3D, Deep Color, x.v.Color)	AMD TrueAudio Technology	AMD Eyefinity Technology[3] (Maximum displays, support for three displays without DisplayPort yes/no)	Video Codec Engine (VCE) (With support for H.264, MPEG-4 ASP, MPEG-2, VC-1 & Blu-ray 3D)	GPU Clock Speed	GPU Power Wattage-TDP	PSU Recommendation	Memory Bandwidth	Memory Amount	Stream Processing Units	Required Power Supply Connectors	AMD CrossFire® Support (Maximum number of GPUs and CrossFire™ Bridge Interconnect required)	Form Factor	NVIDIA GeForce™
↑	R9 295X2	28 nm	DirectX® 12, Mantle, OpenGL 4.3	3.0	•	•	•	•	•	•	6, Yes	•	Up to 1018MHz	500W	1500W	Up to 640GB/s	8GB GDDR5	5632	2 x 8-pin	4(total on 2 cards), no	Full height, dual slot + 120 mm Radiator	GTX Titan Black GTX 980
	R9 290X	28 nm	DirectX® 12, Mantle, OpenGL 4.3	3.0	•	•	•	•	•	•	6, Yes	•	Up to 1GHz	250W	750W	Up to 320GB/s	4GB GDDR5	2816	1 x 6-pin + 1 x 8-pin	4, no	Full height, dual slot	GTX 980 GTX 780Ti
	R9 290	28 nm	DirectX® 12, Mantle, OpenGL 4.3	3.0	•	•	•	•	•	•	6, Yes	•	Up to 947MHz	250W	750W	Up to 320GB/s	4GB GDDR5	2560	1 x 6-pin + 1 x 8-pin	4, no	Full height, dual slot	GTX 970 GTX 780
	R9 280X	28 nm	DirectX® 12, Mantle, OpenGL 4.3	3.0	•	•	•	•	•		6, Yes	•	Up to 1GHz	250W	750W	Up to 288GB/s	3GB GDDR5	2048	1 x 6-pin + 1 x 8-pin	4, yes	Full height, dual slot	GTX 770 GTX 760
	R9 285	28 nm	DirectX® 12, Mantle, OpenGL 4.3	3.0	•	•	•	•	•	•	6, Yes	•	Up to 918MHz	190W	600W	Up to 176GB/s	Up to 4GB GDDR5	1792	2 x 6-pin	4, no	Full height, dual slot	GTX 760
	R9 280	28 nm	DirectX® 12, Mantle, OpenGL 4.3	3.0	•	•	•	•	•		6, Yes	•	Up to 933MHz	250W	750W	Up to 240GB/s	3GB GDDR5	1792	1 x 6-pin + 1 x 8-pin	4, yes	Full height, dual slot	GTX 760
	R9 270X	28 nm	DirectX® 12, Mantle, OpenGL 4.3	3.0	•	•	•	•	•		6, Yes	•	Up to 1.05GHz	180W	500W	Up to 179.2GB/s	Up to 4GB GDDR5	1280	2 x 6-pin	2, yes	Full height, dual slot	GTX 660
	R9 270	28 nm	DirectX® 12, Mantle, OpenGL 4.3	3.0	•	•	•	•	•		6, Yes	•	Up to 925MHz	150W	500W	Up to 179.2GB/s	2GB GDDR5	1280	1 x 6-pin	2, yes	Full height, dual slot	GTX 660
	R7 265	28 nm	DirectX® 12, Mantle, OpenGL 4.3	3.0	•	•	•	•	•		6, Yes	•	Up to 925MHz	150W	500W	Up to 179.2GB/s	2GB GDDR5	1024	1 x 6-pin	2, yes	Full height, dual slot	GTX 750 Ti
	R7 260X	28 nm	DirectX® 12, Mantle, OpenGL 4.3	3.0	•	•	•	•	•	•	6, Yes	•	Up to 1.1GHz	115W	500W	Up to 104GB/s	Up to 2GB GDDR5	896	1 x 6-pin	2, no	Full height, dual slot	GTX 750
	R7 260	28 nm	DirectX® 12, Mantle, OpenGL 4.3	3.0	•	•	•	•	•	•	6, Yes	•	Up to 1GHz	95W	500W	Up to 96GB/s	Up to 2GB GDDR5	768	1 x 6-pin	2, no	Full height, dual slot	GTX 650 Ti
	R7 250X	28 nm	DirectX® 12, Mantle, OpenGL 4.3	3.0	•	•	•	•	•		6, Yes	•	Up to 1GHz	80W	400W	Up to 72GB/s	Up to 2GB GDDR5	640	1 x 6-pin	2, no	Full height, dual or single slot	GT 740
	R7 250	28 nm	DirectX® 12, Mantle, OpenGL 4.3	3.0	•	•	•	•	•		2, No	•	Up to 1.05GHz	65W	400W	Up to 72GB/s	Up to 2GB GDDR5 or 4GB DDR3	384	N/A	2, no	Full height, dual or single slot	GT 740
	R7 240	28 nm	DirectX® 12, Mantle, OpenGL 4.3	3.0	•	•	•	•	•		2, No	•	Up to 780MHz	30W	400W	Up to 28.8-72GB/s	Up to 2GB, GDDR5 or 4GB DDR3	320	N/A	2, no	Low profile, single slot	GT 730 GT 720
	R5 230	40 nm	DirectX® 11, OpenGL 4.2	2.1				•	•		3, No		Up to 625MHz	20W	400W	Up to 28.8GB/s	Up to 1GB GDDR5 or DDR3	160	N/A	2, no	Low profile, single slot	GT 610

* This chart illustrates competitive product placement and is not necessarily an indication of relative performance.

AMD App Acceleration

AMD Radeon™ R9, R7 and R5 series graphics cards with AMD App Acceleration allow you to run multiple applications without having to sacrifice speed and reliability.[4]

AMD Eyefinity Technology

Feel truly in the game with AMD Eyefinity technology, an immersive experience that expands your game across up to six displays. [3] Welcome to surround sight.

AMD CrossFire™ Technology

Don't settle for "medium." Crank those settings and see the latest games at their very best with two or more AMD Radeon™ GPUs configured with AMD CrossFire™ technology.[5] Don't forget to brag to your friends.
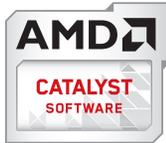
AMD TrueAudio Technology[6]

Introducing a new level of immersion. GPUs aren't just for graphics any more. With more acoustic bandwidth and capabilities for developers to play with, plus a healthy slug of extra audio performance, you get a richer in-game soundscape.

Mantle, Powered by AMD

There's optimization, and then there's Mantle.[7] Games enabled with Mantle speak the language of Graphics Core Next to unlock revolutionary performance and image quality. It's a game-changing innovation developed by AMD Radeon™ and AMD FirePro™ graphics.
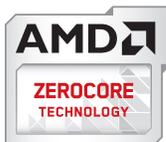
AMD Catalyst™ Software Suite

AMD Catalyst™ software enables you with the power to get the most out of an AMD Radeon™ graphics card. Whether it's adjusting power settings to help improve notebook battery life, configuring multiple displays with AMD Eyefinity technology, or enabling the latest image-enhancing settings, AMD Catalyst™ software is the definitive tool to maximize your experience.
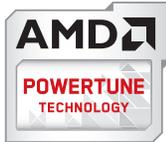
GCN Architecture

Submit to the unbridled power of the revolutionary AMD Radeon™ R9 and R7 and most R5[8] series graphics cards, armed with the ground-breaking GCN architecture. Crank the settings, devastate your enemies and bear witness to absurdly high frame rates – your games have never looked this good.

AMD ZeroCore Power Technology

AMD ZeroCore Power technology delivers unmatched power savings in systems with single or multi-GPU configurations.[2]

AMD PowerTune Technology

Enables intelligent power monitoring to enable higher clock speeds and better performance in your favorite games.[2]

Compatible with Windows® 7 — Windows 8 Compatible — Microsoft® DirectX®

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Additional hardware (e.g., Blu-ray drive, HD or 10-bit monitor, USB 3.0 ports, TV tuner, wirelessly enabled HDTV) and/or software (e.g., multimedia applications and/or wifi access) are required for the full enablement of some features. HD Video display requires an HD video source.
Not all features may be supported on all components or systems - check with your component or system manufacturer for specific model capabilities and supported technologies.

1. Utilization of PCI Express 3.0 bandwidth requires a mainboard equipped with a PCI Express 3.0 PHY. Not all mainboards feature this technology – check with your component or system manufacturer for specific model capabilities.

2. AMD PowerTune and AMD ZeroCore Power are technologies offered by certain AMD Radeon™ products, which are designed to intelligently manage GPU power consumption in response to certain GPU load conditions. Not all products feature all technologies – check with your component or system manufacturer for specific model capabilities.

3. AMD Eyefinity technology supports multiple monitors on an enabled graphics card. Supported display quantity, type and resolution vary by model and board design; confirm specifications with manufacturer before purchase. To enable more than two displays, or multiple displays from a single output, additional hardware such as DisplayPort™-ready monitors or DisplayPort 1.2 MST-enabled hubs may be required. A maximum of two active adapters is recommended for consumer systems. See www.amd.com/eyefinityfaq for full details. Gaming in 4K requires a 4K display and content. Supported resolution varies by GPU model and board design; confirm specifications with manufacturer before purchase.

4. AMD App Acceleration is a set of technologies designed to improve video quality and enhance application performance. Full enablement of some features requires support for OpenCL™, DirectCompute or DirectX® Video Acceleration (DXVA). Not all products have all features and full enablement of some capabilities and may require complementary products.

5. AMD CrossFire™ technology requires an AMD CrossFire Ready motherboard and may require a specialized power supply and AMD CrossFire Bridge Interconnect. Check with your component or system manufacturer for specific model capabilities.

6. AMD TrueAudio technology is offered on select AMD Radeon™ R9 and R7 200 Series GPUs and is designed to improve acoustic realism. Requires an enabled game or application. Not all audio equipment supports all audio effects; additional audio equipment may be required for some audio effects. Not all products feature all technologies—check with your component or system manufacturer for specific capabilities.

7. Application support for Mantle is required.

8. Please check the specifications of the particular card.