May 10, 2022

AMD Announces Three New Radeon RX 6000 Series Graphics Cards and First Games Adding Support for AMD FidelityFX Super Resolution 2.0

– Three new models feature faster game clocks, faster GDDR6 memory, and enhanced software and firmware compared to previous-generation products, and deliver exceptional performance-per-watt based on AMD RDNA™ 2 architecture –

– Initial list of games adding future support for AMD FidelityFX™ Super Resolution (FSR) 2.0 include Farming Simulator 22, Forspoken, Microsoft Flight Simulator, and others; DEATHLOOP expected to add support for AMD FSR 2.0 on May 12, 2022 –

SANTA CLARA, Calif., May 10, 2022 (GLOBE NEWSWIRE) -- AMD (NASDAQ: AMD) today announced new additions to the AMD Radeon™ RX 6000 Series product line: the AMD Radeon RX 6950 XT — the most powerful graphics card in the Radeon RX 6000 Series family — the Radeon RX 6750 XT and the Radeon RX 6650 XT graphics cards.

With a 2.1GHz Game Clock[1] coupled with 16GB of high-speed GDDR6 memory, the AMD Radeon RX 6950 XT graphics card delivers incredible performance and breathtaking visuals for the most demanding AAA and esports titles at 4K resolution with max settings. The AMD Radeon RX 6750 XT graphics card offers a cutting-edge, high-performance gaming experience at 1440p resolution with max settings, while the AMD Radeon RX 6650 XT graphics card offers ultra-smooth, high-refresh rate 1080p gaming with max settings in the latest titles.

All of the new AMD Radeon graphics cards are built on the breakthrough AMD RDNA 2 gaming architecture, include process optimizations plus firmware and software enhancements, and are equipped with high-bandwidth, low-latency AMD Infinity Cache™ technology and ultra-fast GDDR6 memory at up to 18Gbps. They also support Microsoft Windows 11 and Microsoft DirectX® 12 Ultimate, AMD FidelityFX™ Super Resolution (FSR) 1.0, the forthcoming AMD FSR 2.0[2] and AMD Radeon Super Resolution upscaling technologies, as well as other advanced features that provide visually stunning, high-refresh rate gaming experiences.

“There are three billion gamers worldwide and counting, and about half play on PCs[3],” said Scott Herkelman, senior vice president and general manager, Graphics Business Unit at AMD. “As gamers grow in numbers, these new Radeon graphics cards will provide next-level gaming experiences and performance. And the incredible efficiencies of AMD RDNA 2 architecture deliver substantially better performance-per-dollar with the new Radeon graphics cards compared to the competition[4].”

High Performance, High Visual Fidelity & Elevated Gaming Experiences
The new AMD Radeon RX 6950 XT, Radeon RX 6750 XT and Radeon RX 6650 XT graphics cards provide gamers with incredible gaming performance, stunning visuals and elevated experiences. Key features and capabilities include:

- **AMD Software: Adrenalin Edition™** – Brings advanced and innovative capabilities to unlock the full potential of gaming experiences on AMD graphics- and processor-powered systems. The latest release offers up to 10 percent higher performance across a range of select DX®11 titles[5]. In addition, AMD Radeon Super Resolution 1.1 driver-based upscaling technology now adds support for select AMD Ryzen™ 6000 Series processors equipped with Radeon integrated graphics.
- **AMD FidelityFX Technology** – AMD FidelityFX technology is an open-source toolkit of visual enhancement effects for game developers available at AMD GPUOpen. It includes AMD FidelityFX Super Resolution (FSR) 1.0 spatial upscaling technology, which is supported in 80+ games and counting. It also includes the forthcoming AMD FSR 2.0, a cutting-edge temporal upscaling solution that boosts framerates in supported games and generates similar or better than native image quality on a wide range of graphics cards.
- **AMD Smart Access Memory (SAM) Technology** – Unlocks higher performance when pairing AMD Radeon RX 6000 Series graphics cards with select AMD Ryzen desktop processors and AMD 500 Series motherboards by providing AMD Ryzen processors with access to the entire high-speed GDDR6 graphics memory. SAM can provide up to 14 percent higher performance in a system equipped with an AMD Radeon RX 6950 XT graphics card and an AMD Ryzen 7 5800X3D processor[6].
- **AMD Infinity Cache Technology** – Last-level data cache integrated on the GPU die is designed to reduce latency and power consumption and can help enable higher gaming performance than traditional architectural designs.

Product Specifications

Model	Compute Units	GDDR6	Game Clock (MHz)	Boost Clock[7] (MHZ)	Memory Interface	Effective Memory Bandwidth w/ AMD Infinity Cache™	TBP	Price (USD SEP)
Radeon RX 6950 XT	80	16GB	2100	Up to 2310	256-bit	Up to 1793GB/s	335W	$1099
Radeon RX 6750 XT	40	12GB	2495	Up to 2600	192-bit	Up to 1326GB/s	250W	$549
Radeon RX 6650 XT	32	8GB	2410	Up to 2635	128-bit	Up to 469GB/s	180W	$399

AMD FidelityFX Super Resolution 2.0 Game Support
The next-generation of the widely adopted AMD open-source, cross-platform upscaling technology, FSR 2.0 helps boost framerates in supported games by using previous frame data to provide similar or better than native image quality at all resolutions. It supports a wide range of graphics products and platforms, including AMD and select competitor solutions, without requiring dedicated machine learning hardware. The first game to add support for AMD FSR 2.0 is DEATHLOOP by Arkane Studios and Bethesda, which is expected to be available via an update on May 12, 2022. Additional games planning to add support for the technology in the coming months include Asterigos, Delysium, EVE Online, Farming Simulator 22, Forspoken, Grounded, Microsoft Flight Simulator, NiShuiHan, Perfect World Remake, Swordsman Remake, and Unknown 9: Awakening.

AMD Radeon Raise the Game Bundle
AMD also announced an upcoming version of the popular AMD Radeon Raise the Game Bundle, providing gamers with complimentary access to games with the purchase of eligible AMD Radeon RX 6000 Series products. Customers purchasing a qualifying Radeon product from a participating etailer beginning May 10, 2022 will receive a code that can be redeemed when the promotion launches later in the quarter, with the full offer details to be provided at that time. The new bundle will include the popular Saints Row and Sniper Elite 5 games, with more being revealed leading up to the launch of the promotion (bundle offer may vary by eligible product purchased). Customers can visit www.amdrewards.com/comingsoon to find a list of participating partners and check back for future updates and instructions on the promotion.

Availability
The AMD Radeon RX 6950 XT, Radeon RX 6750 XT and Radeon RX 6650 XT graphics cards are expected to be available starting today, May 10, 2022, from global etailers/retailers and AMD board partners, including ASRock, ASUS, BIOSTAR, Gigabyte, MSI, Sapphire, PowerColor, XFX and Yeston. AMD Radeon RX 6950 XT and Radon RX 6750 XT graphics cards are also expected to be available starting today at AMD.com. The latest version of AMD Software: Adrenalin Edition is expected to be available May 10, 2022.

Supporting Resources

- Lean more about the AMD Radeon RX 6000 Series graphics cards here
- Learn more about AMD Software: Adrenalin Edition here
- Learn more about AMD FidelityFX Super Resolution 2.0 here
- Follow AMD on LinkedIn
- Follow AMD on Twitter

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[1] Game clock is the expected GPU clock when running typical gaming applications, set to typical TGP (Total Graphics Power). Actual individual game clock results may vary. GD-147

[2] AMD FidelityFX™ Super Resolution (FSR) is available on select applications and requires developer integration. FSR is “application dependent” and scales across a broad spectrum of new and older AMD products, including integrated graphics. It is optimized for AMD RDNA™ and AMD RDNA 2™ architecture-based Radeon™ PRO W6000 and W5000 Series graphics cards. It is also compatible with all AMD Ryzen™ Desktop and Mobile processors with AMD Radeon™ graphics if the minimum requirements of the application are met. FSR is also supported on select competitor graphics solutions. AMD does not provide technical or warranty support for AMD FidelityFX Super Resolution enablement on other vendor’s graphics cards. GD-200

[3] Source: Newzoo, DFC Intelligence, AMD Research

[4] Testing done by AMD performance labs April 25, 2022 on AMD Radeon™ RX 6000 Series graphics cards, Ryzen™ 9 5900X, Ryzen™ 7 5800X3D and Ryzen™ 5 5600X CPUs, 16GB DDR4-3600MHz with AMD Smart Access Memory enabled, Win10 Pro 64 versus similarly configured systems with Nvidia GeForce RTX 3000 Series and GeForce GTX 1650, ReBAR enabled. Performance per watt calculated with total board power (TBP) of individual GPUs over average FPS. Performance per dollar calculated with competitive Newegg USD pricing as of April 25, 2022 over average FPS. Games tested at 4K, 1440P and 1080P resolutions at intended settings for each GPU: Assassin's Creed Valhalla (DX12), F1 2021 (DX12), Far Cry 6 (DX12), Forza Horizon 4 (DX12), Godfall (DX12), Horizon Zero Dawn (DX12), Watch Dogs Legion (DX12). Performance may vary. RX-785.

[5] Testing conducted by AMD as of April 26th, 2022, on a test system configured with a Ryzen 7 5800X3D CPU, 32GB DDR4, Radeon RX 6950 XT GPU, and Windows 10 Pro, with AMD Software: Adrenalin Edition 22.5.2 and 22.3.1 in 10 select DX®11-based games at different resolutions and settings: Assassin’s Creed Odyssey (1080p, ultrahigh pre-set), Far Cry 6, (1080p, ultra pre-set), Farming Simulator 22 (1080p very high pre-set), Grand Theft Auto V (4K, ultra pre-set), Total War Saga: Troy (1080p, ultra pre-set), Total War Hammer 3 (1080p, ultra pre-set), Watch Dogs Legion (1080p, ultra pre-set), Apex Legends (4K, ultra pre-set), Overwatch (1080p, Epic pre-set), Valorant (1440p, high pre-set). Performance may vary. RS-470

[6] Testing done by AMD performance labs April 2022 with AMD Radeon RX 6950 XT on driver 22.10-220411n and Ryzen 7 5800X3D with system BIOS P4.80, 32GB DDR4-3600MHz. Following games tested with AMD Smart Access Memory enabled versus disabled at UHD resolution: Forza Horizon 5 (Extreme, DX12); Watch Dogs Legion (Ultra, DX12); Horizon Zero Dawn (Ultimate Quality, DX12); Assassin's Creed Valhalla (Ultra High, DX12); Borderlands 3 (Badass, DX12). Performance may vary. RX-779

[7] 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



Source: Advanced Micro Devices, Inc.