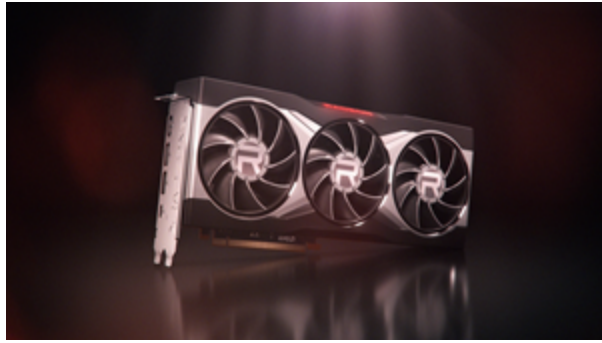


October 28, 2020

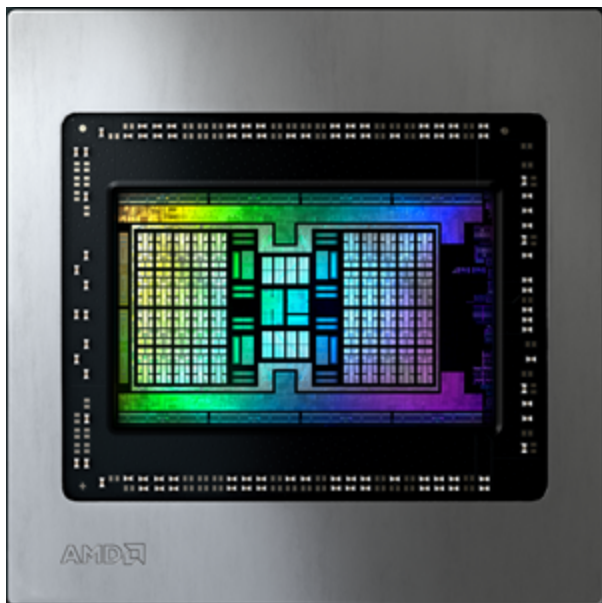


# **AMD Unveils Next-Generation PC Gaming with AMD Radeon™ RX 6000 Series – Bringing Leadership 4K Resolution Performance to AAA Gaming**

*– Groundbreaking AMD RDNA™ 2 gaming architecture delivers up to 2X higher performance<sup>1</sup> and up to 54 percent higher performance-per-watt compared to AMD RDNA™-based graphics cards<sup>2</sup> –*



AMD Radeon™ RX 6900 XT graphics card



AMD Radeon™ RX 6000 Series die shot

– *New flagship AMD Radeon™ RX 6900 XT is the ultimate 4K graphics card, and the fastest ever AMD gaming graphics card –*

SANTA CLARA, Calif., Oct. 28, 2020 (GLOBE NEWSWIRE) -- [AMD](https://www.amd.com) (NASDAQ: AMD) today unveiled the AMD Radeon™ RX 6000 Series graphics cards, delivering powerhouse performance, incredibly life-like visuals, and must-have features that set a new standard for enthusiast-class PC gaming experiences. Representing the forefront of extreme engineering and design, the highly anticipated AMD Radeon™ RX 6000 Series includes the AMD Radeon™ RX 6800 and Radeon™ RX 6800 XT graphics cards, as well as the new flagship Radeon™ RX 6900 XT – the fastest AMD gaming graphics card ever developed.

AMD Radeon™ RX 6000 Series graphics cards are built upon groundbreaking AMD RDNA™ 2 gaming architecture, a new foundation for next-generation consoles, PCs, laptops and mobile devices, designed to deliver the optimal combination of performance and power efficiency. AMD RDNA™ 2 gaming architecture provides up to 2X higher performance in select titles with the AMD Radeon™ RX 6900 XT graphics card compared to the AMD

Radeon™ RX 5700 XT graphics card built on AMD RDNA™ architecture<sup>1</sup>, and up to 54 percent more performance-per-watt when comparing the AMD Radeon™ RX 6800 XT graphics card to the AMD Radeon™ RX 5700 XT graphics card using the same 7nm process technology<sup>2</sup>.

AMD RDNA™ 2 offers a number of innovations, including applying advanced power saving techniques to high-performance compute units to improve energy efficiency by up to 30 percent per cycle per compute unit<sup>3</sup>, and leveraging high-speed design methodologies to provide up to a 30 percent frequency boost at the same power level<sup>4</sup>. It also includes new AMD Infinity Cache technology that offers up to 2.4X greater bandwidth-per-watt compared to GDDR6-only AMD RDNA™-based architectural designs<sup>5</sup>.

“Today’s announcement is the culmination of years of R&D focused on bringing the best of AMD Radeon graphics to the enthusiast and ultra-enthusiast gaming markets, and represents a major evolution in PC gaming,” said Scott Herkelman, corporate vice president and general manager, Graphics Business Unit at AMD. “The new AMD Radeon RX 6800, RX 6800 XT and RX 6900 XT graphics cards deliver world class 4K and 1440p performance in major AAA titles, new levels of immersion with breathtaking life-like visuals, and must-have features that provide the ultimate gaming experiences. I can’t wait for gamers to get these incredible new graphics cards in their hands.”

## **Powerhouse Performance, Vivid Visuals & Incredible Gaming Experiences**

AMD Radeon™ RX 6000 Series graphics cards support high-bandwidth PCIe® 4.0 technology and feature 16GB of GDDR6 memory to power the most demanding 4K workloads today and in the future. Key features and capabilities include:

### **Powerhouse Performance**

- **AMD Infinity Cache** – A high-performance, last-level data cache suitable for 4K and 1440p gaming with the highest level of detail enabled. 128 MB of on-die cache dramatically reduces latency<sup>6</sup> and power consumption<sup>7</sup>, delivering higher overall gaming performance than traditional architectural designs.
- **AMD Smart Access Memory**<sup>8</sup> – An exclusive feature of systems with AMD Ryzen™ 5000 Series processors, AMD B550 and X570 motherboards and Radeon™ RX 6000 Series graphics cards. It gives AMD Ryzen™ processors greater access to the high-speed GDDR6 graphics memory, accelerating CPU processing and providing up to a 13-percent performance increase on a AMD Radeon™ RX 6800 XT graphics card in Forza Horizon™ 4 at 4K when combined with the new Rage Mode one-click overclocking setting.<sup>9,10</sup>
- **Built for Standard Chassis** – With a length of 267mm and 2x8 standard 8-pin power connectors, and designed to operate with existing enthusiast-class 650W-750W power supplies, gamers can easily upgrade their existing large to small form factor PCs without additional cost.

### **True to Life, High-Fidelity Visuals**

- **DirectX® 12 Ultimate Support** – Provides a powerful blend of raytracing, compute, and rasterized effects, such as DirectX® Raytracing (DXR) and Variable Rate Shading, to elevate games to a new level of realism.

- **DirectX® Raytracing (DXR)** – Adding a high performance, fixed-function Ray Accelerator engine to each compute unit, AMD RDNA™ 2-based graphics cards are optimized to deliver real-time lighting, shadow and reflection realism with DXR. When paired with [AMD FidelityFX](#), which enables hybrid rendering, developers can combine rasterized and ray-traced effects to ensure an optimal combination of image quality and performance.
- **AMD FidelityFX** – An open-source toolkit for game developers available on [AMD GPUOpen](#). It features a collection of lighting, shadow and reflection effects that make it easier for developers to add high-quality post-process effects that make games look beautiful while offering the optimal balance of visual fidelity and performance.
- **Variable Rate Shading (VRS)** – Dynamically reduces the shading rate for different areas of a frame that do not require a high level of visual detail, delivering higher levels of overall performance with little to no perceptible change in image quality.

### Elevated Gaming Experience

- **Microsoft® DirectStorage Support** – Future support for the DirectStorage API enables lightning-fast load times and high-quality textures by eliminating storage API-related bottlenecks and limiting CPU involvement.
- **Radeon™ Software Performance Tuning Presets** – Simple one-click presets in Radeon™ Software help gamers easily extract the most from their graphics card. The presets include the new Rage Mode stable over clocking setting that takes advantage of extra available headroom to deliver higher gaming performance<sup>10</sup>.
- **Radeon™ Anti-Lag**<sup>11</sup> – Significantly decreases input-to-display response times and offers a competitive edge in gameplay.

### AMD Radeon™ RX 6000 Series Product Family

| Model                  | Compute Units | GDDR6 | Game Clock <sup>12</sup> (MHz) | Boost Clock <sup>13</sup> (MHz) | Memory Interface | Infinity Cache |
|------------------------|---------------|-------|--------------------------------|---------------------------------|------------------|----------------|
| AMD Radeon™ RX 6900 XT | 80            | 16GB  | 2015                           | Up to 2250                      | 256 bit          | 128 MB         |
| AMD Radeon™ RX 6800 XT | 72            | 16GB  | 2015                           | Up to 2250                      | 256 bit          | 128 MB         |
| AMD Radeon™ RX 6800    | 60            | 16GB  | 1815                           | Up to 2105                      | 256 bit          | 128 MB         |

### Robust Gaming Ecosystem and Partnerships

In the coming weeks, AMD will release a series of videos from its ISV partners showcasing the incredible gaming experiences enabled by AMD Radeon™ RX 6000 Series graphics cards in some of this year's most anticipated games. These videos can be viewed on the AMD [website](#).

- *DIRT® 5* – October 29
- *Godfall™* – November 2
- *World of Warcraft®: Shadowlands* – November 10
- *RiftBreaker™* – November 12
- *FarCry® 6* – November 17

## Pricing and Availability

AMD Radeon™ RX 6800 and Radeon™ RX 6800 XT graphics cards are expected to be available from global e-tailers/retailers and on AMD.com beginning November 18, 2020, for \$579 USD SEP and \$649 USD SEP, respectively. The AMD Radeon™ RX 6900 XT is expected to be available December 8, 2020, for \$999 USD SEP.

AMD Radeon™ RX 6800 and RX 6800 XT graphics cards are also expected to be available from AMD board partners, including ASRock, ASUS, Gigabyte, MSI, PowerColor, SAPPHIRE and XFX, beginning in November 2020.

## Supporting Resources

- Learn more about the AMD Radeon™ RX 6000 Series [here](#)
- Learn more about AMD RDNA™ 2 graphics architecture [here](#)
- Learn more about the AMD Radeon™ Software [here](#)
- Learn more about AMD Ryzen™ 5000 Series [here](#)
- Become a fan of AMD on [Facebook](#)
- Follow AMD on [Twitter](#)

## About AMD

For 50 years AMD has driven innovation in high-performance computing, graphics and visualization technologies — the building blocks for gaming, immersive platforms and the datacenter. Hundreds of millions of consumers, leading Fortune 500 businesses and cutting-edge scientific research facilities around the world rely on AMD technology daily to improve how they live, work and play. AMD employees around the world are focused on building great products that push the boundaries of what is possible. For more information about how AMD is enabling today and inspiring tomorrow, visit the AMD (NASDAQ:AMD) [website](#), [blog](#), [Facebook](#) and [Twitter](#) pages.

## CAUTIONARY STATEMENT

This press release contains forward-looking statements concerning Advanced Micro Devices, Inc. (AMD) such as the features, functionality, performance, availability, timing and expected benefits of AMD products including the AMD Radeon™ RX 6000 Series graphics cards, which are made pursuant to the Safe Harbor provisions of the Private Securities Litigation Reform Act of 1995. Forward looking statements are commonly identified by words such as "would," "may," "expects," "believes," "plans," "intends," "projects" and other terms with similar meaning. Investors are cautioned that the forward-looking statements in this press release are based on current beliefs, assumptions and expectations, speak only as of the date of this press release and involve risks and uncertainties that could cause actual results to differ materially from current expectations. Such statements are subject to certain known and unknown risks and uncertainties, many of which are difficult to predict and generally beyond AMD's control, that could cause actual results and other future events to differ materially from those expressed in, or implied or projected by, the forward-looking information and statements. Material factors that could cause actual results to differ materially from current expectations include, without limitation, the following: Intel Corporation's dominance of the microprocessor market and its aggressive business practices; the ability of third party manufacturers to manufacture AMD's products on a timely basis in sufficient quantities and using competitive technologies; expected manufacturing yields for AMD's products; the availability of essential equipment, materials or manufacturing processes; AMD's ability to introduce products on a timely basis with features and

performance levels that provide value to its customers; global economic uncertainty; the loss of a significant customer; AMD's ability to generate revenue from its semi-custom SoC products; the impact of the COVID-19 pandemic on AMD's business, financial condition and results of operations; political, legal, economic risks and natural disasters; the impact of government actions and regulations such as export administration regulations, tariffs and trade protection measures; the impact of acquisitions, joint ventures and/or investments on AMD's business; potential security vulnerabilities; potential IT outages, data loss, data breaches and cyber-attacks; uncertainties involving the ordering and shipment of AMD's products; quarterly and seasonal sales patterns; the restrictions imposed by agreements governing AMD's notes and the revolving credit facility; the competitive markets in which AMD's products are sold; market conditions of the industries in which AMD products are sold; AMD's reliance on third-party intellectual property to design and introduce new products in a timely manner; AMD's reliance on third-party companies for the design, manufacture and supply of motherboards, software and other computer platform components; AMD's reliance on Microsoft Corporation and other software vendors' support to design and develop software to run on AMD's products; AMD's reliance on third-party distributors and add-in-board partners; the potential dilutive effect if the 2.125% Convertible Senior Notes due 2026 are converted; future impairments of goodwill and technology license purchases; AMD's ability to attract and retain qualified personnel; AMD's ability to generate sufficient revenue and operating cash flow or obtain external financing for research and development or other strategic investments; AMD's indebtedness; AMD's ability to generate sufficient cash to service its debt obligations or meet its working capital requirements; AMD's ability to repurchase its outstanding debt in the event of a change of control; the cyclical nature of the semiconductor industry; the impact of modification or interruption of AMD's internal business processes and information systems; compatibility of AMD's products with some or all industry-standard software and hardware; costs related to defective products; the efficiency of AMD's supply chain; AMD's ability to rely on third party supply-chain logistics functions; AMD's stock price volatility; worldwide political conditions; unfavorable currency exchange rate fluctuations; AMD's ability to effectively control the sales of its products on the gray market; AMD's ability to adequately protect its technology or other intellectual property; current and future claims and litigation; potential tax liabilities; and the impact of environmental laws, conflict minerals-related provisions and other laws or regulations. Investors are urged to review in detail the risks and uncertainties in AMD's Securities and Exchange Commission filings, including but not limited to AMD's Quarterly Report on Form 10-Q for the quarter ended September 26, 2020.

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The information contained herein is for informational purposes only, and is subject to change without notice. Timelines, roadmaps, and/or product release dates shown in this Press Release are plans only and subject to change. "Navi" is an AMD codename and is not a product name.

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<sup>1</sup> Testing done by AMD performance labs October 20 2020 on a Radeon RX 6900 XT and Radeon RX 5700 XT (20.45-201013n driver), AMD Ryzen 9 5900X (3.70GHz) CPU, 16GB DDR4-3200MHz, Engineering AM4 motherboard, Win10 Pro 64. The Following games were

tested at 4k at max settings: Battlefield V DX11, Doom Eternal Vulkan, Forza DX12, Resident Evil 3 DX11, Shadow of the Tomb Raider DX12. Performance may vary. RX-558

<sup>2</sup> RX-549 - Testing done by AMD performance labs 10/16/20, using Assassins Creed Odyssey (DX11, Ultra), Battlefield V (DX12, Ultra), Borderlands 3 (DX12, Ultra), Control (DX12, High), Death Stranding (DX12 Ultra), Division 2 (DX12, Ultra), F1 2020 (DX12, Ultra), Far Cry 5 (DX11, Ultra), Gears of War 5 (DX12, Ultra), Hitman 2 (DX12, Ultra), Horizon Zero Dawn (DX12, Ultra), Metro Exodus (DX12, Ultra), Resident Evil 3 (DX12, Ultra), Shadow of the Tomb Raider (DX12, Highest), Strange Brigade (DX12, Ultra), Total War Three Kingdoms (DX11, Ultra), Witcher 3 (DX11, Ultra no HairWorks) at 4K. System comprised of a Radeon RX 6800 XT with AMD Radeon Graphics driver 27.20.12031.1000 and an Radeon RX 5700 XT with AMD Radeon Graphics driver 26.20.13001.9005. Performance may vary. RX-549

<sup>3</sup> AMD internal modeling based on the average CAC of 33 apps tested on the RX 5700 XT and RX 6900 XT divided by the number of active compute units 40 and 80, respectively. Performance will vary. RX-543

<sup>4</sup> AMD internal modeling based on graphics-engine-only measured average gaming power consumption and 3DMark11 power consumption vs. frequency for RX5700 XT and RX 6900 XT divided by the number of compute units (40 and 80 respectively). RX-536

<sup>5</sup> Measurement calculated by AMD engineering, on a Radeon RX 6000 series card with 128 MB AMD Infinity Cache and 256-bit GDDR6. Measuring 4k gaming average AMD Infinity Cache hit rates of 58% across top gaming titles, multiplied by theoretical peak bandwidth from the 16 64B AMD Infinity Fabric channels connecting the Cache to the Graphics Engine at boost frequency of up to 1.94 GHz. RX-547

<sup>6</sup> Based on internal modeling and testing done by AMD engineering labs 10/5/2020 on Radeon RX 6800 XT with 128 MB of AMD Infinity Cache vs a Radeon RX 5700 XT graphics card measuring memory latency. Performance may vary. RX-564

<sup>7</sup> Based on internal modeling and testing done by AMD engineering labs 10/5/2020 on a Radeon RX 6800 XT vs a Radeon RX 5700 XT, using measurements taken of Cac, frequency at same power uplifts, and AMD Infinity Cache uplifts. Performance may vary. RX-566

<sup>8</sup> AMD Smart Access Memory is only supported on AMD Radeon RX 6000 series graphics cards. Not validated on any other graphics solutions. GD-178.

<sup>9</sup> Testing done by AMD performance labs October 18 2020 on Radeon RX 6800 XT (20.45-201013n driver), RTX 3080 (driver 456.71), AMD Ryzen 9 5900X (3.70GHz) CPU, 16GB DDR4-3200MHz, Engineering AM4 motherboard, Win10 Pro 64. The following games were tested at 4k at max settings with RAGE MODE + SMART ACCESS MEMORY enabled and disabled: Borderlands 3, best API Ultra; Doom Eternal, Vulkan Ultra Nightmare; Forza Horizon 4, DX 12 Ultra; Gears 5, DX12 Ultra; Hitman 2, DX12 Ultra; Resident Evil 3, best API, Ultra; Wolfenstein: Young Blood, Vulkan Mein Leben. Performance may vary. RX-559

<sup>10</sup> AMD's product warranty does not cover damages caused by overclocking, even when overclocking is enabled via AMD hardware and/or software. GD-26

<sup>11</sup> Radeon™ Anti-Lag is compatible with DirectX 9 and DirectX 11 APIs, Windows 7 and 10. Hardware compatibility includes GCN and newer consumer dGPUs Ryzen 2000 and newer APUs, including hybrid and detachable graphics configurations. No mGPU support GD-157

<sup>12</sup> 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

<sup>13</sup> 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

**Contacts:**

**George Millington**

AMD Communications

(408) 547-7481

[George.Millington@amd.com](mailto:George.Millington@amd.com)

**Jason Schmidt**

AMD Investor Relations

(408) 749-6688

[Jason.Schmidt@amd.com](mailto:Jason.Schmidt@amd.com)

Photos accompanying this announcement are available at

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