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The Gaming Legend Continues — AMD Introduces Next-Generation AMD Ryzen 7 9800X3D Processor

Innovative AMD 3D V-Cache Technology Expands Portfolio of Leadership Desktop Processors

SANTA CLARA, Calif., Oct. 31, 2024 (GLOBE NEWSWIRE) -- Oct. 31, 2024 (GLOBE NEWSWIRE) — Today, [AMD](#) (NASDAQ: AMD) unveiled new desktop computing products, delivering enhanced performance for gamers. The lineup features the new AMD Ryzen™ 7 9800X3D Desktop processor, based on the "Zen 5" architecture and utilizing 2nd Gen AMD 3D V-Cache™ technology.

With the AMD Ryzen 7 9800X3D processor, AMD has re-engineered its cutting-edge on-chip memory solution with 2nd Gen AMD 3D V-Cache technology. The 64MB cache memory has been relocated below the processor, which puts the core complex die (CCD) closer to the cooling solution to help keep the "Zen 5" cores cooler, delivering high clock rates and providing up to an average 8% gaming performance improvement compared to our last-gen generation¹ and up to an average 20% faster than the competition². This revolutionary change in placement allows for extreme overclocking of the processor³. It's the first X3D processor to be fully unlocked, empowering enthusiasts and gamers to push its performance to new limits.

"We continue to push the boundaries of performance and innovation in desktop computing, delivering solutions that exceed the needs of gamers and creators alike," said Jack Huynh, senior vice president and general manager, computing and graphics, AMD. "With the introduction of the Ryzen 7 9800X3D processor, built on our advanced 'Zen 5' architecture, we are elevating gaming performance like never before. Featuring innovative 2nd AMD Gen 3D V-Cache technology, this processor reflects our commitment to excellence and our ability to innovate in ways that redefine the industry."

Delivering Performance for Gamers

Combined with the advanced "Zen 5" processor architecture, the AMD 3D V-Cache technology works to attain the highest processor gaming performance on the market. While the generational uplift in average FPS is about 8%, many games such as Star Wars Outlaws will experience double-digit percentage improvements generationally⁴. What's more, the Ryzen 7 9800X3D processor can demonstrate substantial generational improvements in minimum frame rates even when average frame rates are similar, providing the user with an experience that feels smoother, with less stutter – for instance, in The Last Of Us: Part 1, where the Ryzen 7 9800X3D has a similar average frame rate compared to the competition, but a 31% higher 1% low frame rate⁵.

Introducing the Ryzen 7 9800X3D Desktop Processor

The Ryzen 7 9800X3D is the ultimate solution for the PC gaming market, with eight high-performance “Zen 5” processor cores and 16 processing threads ready to make quick work of gaming and productivity tasks. 4.7 GHz base clock speed is combined with a 5.2 GHz max boost clock⁶, and these represent the highest clock speeds ever on an X3D chiplet. A hearty 120W TDP and its huge 104MB of total cache provides the processor with the power it needs to perform.

Model	Cores / Threads	Boost ⁶ / Base Frequency	Total Cache	TDP	SEP (USD)
AMD Ryzen 7 9800X3D	8C/16T	Up to 5.2 / 4.7 GHz	104MB	120W	\$479

Partnering with Game Developers

"We're thrilled to team up with AMD as the exclusive CPU, GPU, and APU partner for Call of Duty. The Ryzen 7 9800X3D processor's exceptional performance and efficiency will elevate the gaming experience to new heights, ensuring our players enjoy unparalleled gameplay. This partnership marks a significant milestone for Call of Duty and AMD, and we're excited to see what we can achieve together," said William Gahagan, senior director, global partnerships at Activision.

"We've been so thrilled to collaborate with AMD on Warhammer 40,000: Space Marine 2," said Tim Willits, chief creative officer, Saber Interactive. "The power and innovation of AMD's Ryzen 7 9800X3D processor has allowed us to push the boundaries of what's possible, delivering an unparalleled gaming experience. Having faster high-performance hardware is always exciting to us because it means we have more power to deliver more innovation, better immersion, and more fun."

"Our long-standing partnership with AMD has been instrumental in bringing our most ambitious game design ideas to life," said Szymon Jabłoński, technical director, 11 bit Studios. "Without the support of AMD, groundbreaking titles like Frostpunk 2 and the upcoming sci-fi epic The Alters may not have been possible. Now, the Ryzen 7 9800X3D processor's power and efficiency allow us to push the boundaries of what is possible in gaming. With AMD as our exclusive CPU, GPU, and APU partner, we can create immersive worlds and intricate gameplay that our players have come to love. We look forward to continuing this journey with AMD and seeing where our combined innovations can take us."

Supporting Resources

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About AMD

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possible. For more information about how AMD is enabling today and inspiring tomorrow, visit the AMD (NASDAQ: AMD) [website](#), [blog](#), [LinkedIn](#) and [X](#) 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 AMD Ryzen 7 9800X3D processors, 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; Nvidia's dominance in the graphics processing unit market and its aggressive business practices; the cyclical nature of the semiconductor industry; market conditions of the industries in which AMD products are sold; loss of a significant customer; competitive markets in which AMD's products are sold; economic and market uncertainty; quarterly and seasonal sales patterns; AMD's ability to adequately protect its technology or other intellectual property; unfavorable currency exchange rate fluctuations; ability of third party manufacturers to manufacture AMD's products on a timely basis in sufficient quantities and using competitive technologies; availability of essential equipment, materials, substrates or manufacturing processes; ability to achieve expected manufacturing yields for AMD's products; AMD's ability to introduce products on a timely basis with expected features and performance levels; AMD's ability to generate revenue from its semi-custom SoC products; potential security vulnerabilities; potential security incidents including IT outages, data loss, data breaches and cyberattacks; uncertainties involving the ordering and shipment of AMD's products; AMD's reliance on third-party intellectual property to design and introduce new products; AMD's reliance on third-party companies for design, manufacture and supply of motherboards, software, memory and other computer platform components; AMD's reliance on Microsoft 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; 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; efficiency of AMD's supply chain; AMD's ability to rely on third party supply-chain logistics functions; AMD's ability to effectively control sales of its products on the gray market; long-term impact of climate change on AMD's business; impact of government actions and regulations such as export regulations, tariffs and trade protection measures; AMD's ability to realize its deferred tax assets; potential tax liabilities; current and future claims and litigation; impact of environmental laws, conflict minerals related provisions and other laws or regulations; evolving expectations from governments, investors, customers and other stakeholders regarding corporate responsibility matters; issues related to the responsible use of AI; restrictions imposed by agreements governing AMD's notes, the guarantees of Xilinx's notes and the revolving credit agreement; the ability to obtain applicable regulatory approvals for the acquisition of ZT Systems in a timely manner or otherwise and to satisfy other closing conditions to the transaction; impact of acquisitions,

joint ventures and/or investments on AMD's business and AMD's ability to integrate acquired businesses; impact of any impairment of the combined company's assets; political, legal and economic risks and natural disasters; future impairments of technology license purchases; AMD's ability to attract and retain qualified personnel; and AMD's stock price volatility. 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 most recent reports on Forms 10-K and 10-Q.

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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.

¹ Testing as of October 2024 by AMD Performance Labs on test systems configured as follows: AMD Ryzen 7 7800X3D & 9800X3D system: GIGABYTE X670E AORUS MASTER, Balanced, 2x16GB DDR5-6000, Radeon RX 7900 XTX, VBS=On, SAM=On, KRACKENX63 (September 27, 2024); Intel Core i9-14900K system: MSI MEG Z790 ACE MAX (MS-7D86), Balanced, 2x16GB DDR5-6000, Radeon RX 7900 XTX, VBS=On, SAM=On, KRAKENX63 (September 11, 2024) {BIOS Profile=MSI Performance} on the following games: Ashes Of The Singularity: Escalation, Assassins Creed Mirage, Assassins Creed Valhalla, Avatar: Frontiers Of Pandora, Baldurs Gate 3, Black Myth: Wukong, Borderlands 3, Counter-Strike 2, CyberPunk 2077, Deus Ex: Mankind Divided, Dirt 5, DOTA 2, F1 2023, F1 2024, Far Cry 6, Final Fantasy 14 Dawntrail, Forza Horizon 5, Ghost Recon Breakpoint, Guardians Of The Galaxy, Hitman 3, Hogwarts Legacy, Horizon Zero Dawn, League of Legends, Metro Exodus, Metro Exodus Enhanced Edition, Middle Earth Shadow of War, Rainbow 6 Siege, Riftbreaker, Shadow Of The Tomb Raider, Spider Man Remastered, Starfield, Strange Brigade, The Callisto Protocol, Tiny Tinas Wonderlands, Total War Warhammer 3, Warhammer Dawn Of War 3, Watch Dogs Legion, World of Tanks encore, Wolfenstein Youngblood. System manufacturers may vary configurations, yielding different results. GNR-21

² Testing as of October 2024 by AMD Performance Labs on test systems configured as follows: AMD Ryzen 7 9800X3D system: GIGABYTE X870E AORUS MASTER, Balanced, 2x16GB DDR5-6000, GeForce RTX 4090, VBS=On, SAM=On, KRACKENX63 (September 27, 2024); Intel Core Ultra 9 285K system: ASUS ROG STRIX Z890-E GAMING WIFI, Balanced, 2x16GB DDR5-6400, GeForce RTX 4090, VBS=On, SAM=On. KRAKENX63 (Oct 24, 2024) on the following games: Black Myth: Wukong, Avatar: Frontiers of Pandora, Ashes of the Singularity: Escalation, Hogwarts Legacy, Counter-Strike 2, Starfield, HITMAN 3, Final Fantasy 14, Dawntrail, Warhammer 40,000: Space Marine 2, Call of Duty: Black Ops 6, Far Cry 6, Watch Dogs: Legion, Cyberpunk 2077. System manufacturers may vary configurations, yielding different results. GNR-25

³ Overclocking and/or Undervolting AMD processors and memory, including without limitation, altering clock frequencies / multipliers or memory timing / voltage, to operate outside of AMD's published specifications will void any applicable AMD product warranty, even when enabled via AMD hardware and/or software. This may also void warranties offered by the system manufacturer or retailer. Users assume all risks and liabilities that may arise out of overclocking / undervolting AMD processors, including, without limitation, failure of or damage to hardware, reduced system performance and/or data loss, corruption or

vulnerability. GD-106.

⁴ AMD Ryzen 7 7800X3D & 9800X3D system: GIGABYTE X870E AORUS MASTER, Balanced, 2x16GB DDR5-6000, GeForce 4090, VBS=On, SAM=On, KRACKENX63 (September 27, 2024); Intel Core i9-14900K system: MSI MEG Z790 ACE MAX (MS-7D86), Balanced, 2x16GB DDR5-6000, GeForce 4090, VBS=On, SAM=On, KRAKENX63 (September 11, 2024) {BIOS Profile=MSI Performance} on the following games: Ashes Of The Singularity: Escalation, Assassins Creed Mirage, Assassins Creed Valhalla, Avatar: Frontiers Of Pandora, Baldurs Gate 3, Black Myth: Wukong, Borderlands 3, Counter-Strike 2, CyberPunk 2077, Deus Ex: Mankind Divided, Dirt 5, DOTA 2, F1 2023, F1 2024, Far Cry 6, Final Fantasy 14 Dawntrail, Forza Horizon 5, Ghost Recon Breakpoint, Guardians Of The Galaxy, Hitman 3, Horizon Zero Dawn, Metro Exodus, Metro Exodus Enhanced Edition, Middle Earth Shadow Of War, Rainbow 6 Siege, Red Dead Redemption 2, Riftbreaker, Shadow Of The Tomb Raider, Spider Man Remastered, Star Wars Outlaws, Starfield, Strange Brigade, The Callisto Protocol, Tiny Tinas, Wonderlands, Total War Warhammer 3, Warhammer Dawn Of War 3, Watch Dogs Legion, World of Tanks enCore, Wolfenstein Youngblood. System manufacturers may vary configurations, yielding different results. GNR-23

⁵ Testing as of October 2024 by AMD Performance Labs on test systems configured as follows: AMD Ryzen 7 7800X3D & 9800X3D system: GIGABYTE X870E AORUS MASTER, Balanced, 2x16GB DDR5-6000, GeForce RTX 4090, VBS=On, SAM=On, Windows 11 PRO. Intel Core i9-14900K system: MSI MEG Z790 ACE MAX (MS-7D86), Balanced, 2x16GB DDR5-6000, GeForce RTX 4090, VBS=On, SAM=On, Windows 11 PRO {BIOS Profile=MSI Performance} on the following games: Assassins Creed Mirage, Red Dead Redemption 2, F1 2024, Forza Horizon 5, The Last Of Us Part 1. System manufacturers may vary configurations, yielding different results. GNR-22

⁶ Boost Clock Frequency is the maximum frequency achievable on the CPU 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-150.

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A photo accompanying this announcement is available at

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Source: Advanced Micro Devices, Inc.

Ryzen 9000 Series Chip Shot



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