

# AMD Showcases Industry-Leading Innovation Across the High-Performance Computing Ecosystem at COMPUTEX 2021

— Keynote highlights company's growing momentum, strong and expanding set of partners, and breakthrough AMD technologies powering gaming, PCs and the data center —

SANTA CLARA, Calif., May 31, 2021 (GLOBE NEWSWIRE) -- Today at COMPUTEX 2021, AMD (NASDAQ: AMD) showcased its latest computing and graphics technology innovations to accelerate the high-performance computing ecosystem, spanning gaming, PCs and the data center. AMD President and CEO Dr. Lisa Su unveiled the latest breakthrough in high-performance computing pioneered by AMD with new 3D chiplet technology; expanded adoption of AMD computing and graphics technologies in the automotive and mobile markets with industry leaders Tesla and Samsung; new AMD Ryzen™ processor offerings for enthusiasts and consumer PCs; leadership data center performance with the latest 3<sup>rd</sup> Gen AMD EPYC™ processors; and a full slate of new AMD graphics technologies for gamers.

"At Computex, we highlighted the growing adoption of our high-performance computing and graphics technologies as AMD continues setting the pace of innovation for the industry," said Dr. Su. "With the launches of our new Ryzen and Radeon processors and the first wave of AMD Advantage notebooks, we continue expanding the ecosystem of leadership AMD products and technologies for gamers and enthusiasts. The next frontier of innovation in our industry is taking chip design into the third dimension. Our first application of 3D chiplet technology at Computex demonstrates our commitment to continue pushing the envelope in high-performance computing to significantly enhance user experiences. We are proud of the deep partnerships we have cultivated across the ecosystem to power the products and services that are essential to our daily lives."

# **Accelerating Chiplet and Packaging Innovation**

AMD continues to build on its leadership IP and investments in leading manufacturing and packaging technologies with AMD 3D chiplet technology, a packaging breakthrough that combines AMD's innovative chiplet architecture with 3D stacking using an industry-leading hybrid bond approach that provides over 200 times the interconnect density of 2D chiplets and more than 15 times the density compared to existing 3D packaging solutions. Pioneered in close collaboration with TSMC, the industry-leading technology also consumes less energy<sup>1</sup> than current 3D solutions and is the most flexible active-on-active silicon stacking technology in the world.

AMD showed the first application of 3D chiplet technology at COMPUTEX 2021 – a 3D vertical cache bonded to an AMD Ryzen™ 5000 Series processor prototype that is designed to deliver significant performance gains across a broad set of applications. AMD is on-track to begin production on future high-end computing products with 3D chiplets by the end of this year. [33:49-38:49]

# Bringing the AMD RDNA™ 2 Gaming Architecture to New Markets

AMD announced that it is bringing new gaming experiences to the automotive and mobile markets through its deep partnerships with industry leaders.

- The newly designed infotainment systems in the Tesla Model S and Model X are powered by an AMD Ryzen Embedded APU and an AMD RDNA 2 architecture-based GPU that enables AAA gaming. [11:19-12:02]
- AMD is partnering with Samsung on its next generation Exynos SoC, which will feature custom AMD RDNA 2 architecture-based graphics IP that brings raytracing and variable rate shading capabilities to flagship mobile devices. [12:08-12:40]

# AMD Radeon 6000M Series Mobile Graphics Powering Next-Gen Premium Gaming Laptops

AMD <u>introduced</u> several powerful new solutions that take high-performance gaming to new levels.

- AMD Radeon RX 6000M Series Mobile Graphics: Designed to bring world-class performance, incredible visual fidelity and immersive experiences to gaming laptops, AMD Radeon RX 6000M Series GPUs harness the breakthrough AMD RDNA 2 gaming architecture to deliver up to 1.5X<sup>2</sup> higher gaming performance than AMD RDNA architecture. [12:40-19:06]
- AMD Advantage Design Framework: A <u>collaborative effort</u> between AMD and its global PC partners to deliver the next generation of premium gaming laptops by combining high-performance AMD Radeon RX 6000M Series Mobile Graphics, AMD Radeon™ Software and AMD Ryzen™ 5000 Series Mobile Processors with exclusive AMD smart technologies and other advanced system design characteristics. The first AMD Advantage laptops are expected to be available from leading OEMs starting this month. [24:10-32:28]
- AMD FidelityFX Super Resolution (FSR): A cutting-edge spatial upscaling technology designed to boost framerates up to 2.5X in select titles to deliver a highquality, high-resolution gaming experience. The open-source technology offers broad support on more than 100 AMD processors and GPUs, as well as competitor GPUs, and more than 10 game developers plan to integrate FSR into their top titles and game engines in 2021. [19:10-23:17]

## **Expanding the AMD Ryzen Portfolio**

AMD expanded the Ryzen family of processors further into the desktop space with new options for commercial systems and enthusiasts.

- AMD Ryzen 5000G Series Desktop APUs: The Ryzen 7 5700G and the Ryzen 5 5600G bring the power of "Zen 3" and integrated Radeon graphics performance together in a single chip and will be available to the DIY market later this year. [8:26-10:20]
- AMD Ryzen PRO 5000 Series Desktop Processors: The G- and GE-Series of desktop processors, also launching today, bring leadership performance and the most modern security features to business-ready, enterprise-grade systems.

# Solving Business Challenges with 3<sup>rd</sup> Gen AMD EPYC™ Processors

AMD showcased how its leadership <u>3<sup>rd</sup> Gen AMD EPYC processors</u> and deep partnerships across the server ecosystem are enabling the digital services and experiences that billions of users rely on every day.

- With the introduction of 3<sup>rd</sup> Gen EPYC processors, AMD has more than doubled the number of available solutions compared to the previous generation processor, including leading solutions for hyper converged infrastructure, data management, data analytics and HPC that deliver outstanding performance, security features and value to customers. [2:45-5:00]
- In the first public competitive demonstration against the latest Intel Xeon Scalable processors using an e-commerce application, 3<sup>rd</sup> Gen EPYC processors delivered 50% more business transactions than the competition's most powerful two-socket system, while maintaining a comparable SLA<sup>3</sup>. [5:00-6:48]
- AMD EPYC processors currently <u>hold 220 world records<sup>4</sup> across cloud, enterprise and HPC workloads and applications</u>.

# **Supporting Resources**

- Watch the keynote
- Learn more about <u>AMD Radeon 6000M Series GPUs</u>
- Learn more about AMD Advantage
- Learn more about AMD FidelityFX Super Resolution
- Learn more about AMD Ryzen 5000 Series Desktop APUs
- Become a fan of AMD on Facebook
- Follow AMD on Twitter

### About AMD

For more than 50 years AMD has driven innovation in high-performance computing, graphics and visualization technologies — the building blocks for gaming, immersive platforms and the data center. 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.

AMD, the AMD Arrow logo, EPYC, Radeon, Ryzen and combinations thereof, are trademarks of Advanced Micro Devices, Inc. Other names are for informational purposes only and may be trademarks of their respective owners.

### **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 Radeon™ RX 6000M Series Mobile Graphics GPUs, the AMD Advantage Design Framework, AMD FidelityFX Super Resolution and AMD Radeon RX 6000M-based laptops, 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; global economic uncertainty; the loss of a significant customer; the impact of the COVID-19 pandemic on AMD's business, financial condition and results of operations; the competitive markets in which AMD's products are sold; quarterly and seasonal sales patterns; market conditions of the industries in which AMD products are sold; the cyclical nature of the semiconductor industry; AMD's ability to adequately protect its technology or other intellectual property; unfavorable currency exchange rate fluctuations; the ability of third party manufacturers to manufacture AMD's products on a timely basis in sufficient quantities and using competitive technologies; the availability of essential equipment, materials, substrates or manufacturing processes; expected manufacturing yields for AMD's products; AMD's ability to introduce products on a timely basis with features and performance levels that provide value to its customers; AMD's ability to generate revenue from its semi-custom SoC products; potential security vulnerabilities; potential IT outages, data loss, data breaches and cyber-attacks; uncertainties involving the ordering and shipment of AMD's products; 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 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 ability to effectively control the sales of its products on the gray market; the impact of government actions and regulations such as export administration regulations, tariffs and trade protection measures; AMD's ability to realize its deferred tax assets; potential tax liabilities; current and future claims and litigation; the impact of environmental laws, conflict minerals-related provisions and other laws or regulations; the impact of acquisitions, joint ventures and/or investments on AMD's business, including the announced acquisition of Xilinx, and the failure to integrate acquired businesses; AMD's ability to complete the Xilinx merger; the impact of the announcement and pendency of the Xilinx merger on AMD's business; the impact of any impairment of the combined company's assets on the combined company's financial position and results of operation; the restrictions imposed by agreements governing AMD's notes and the revolving credit facility; 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; AMD's ability to generate sufficient revenue and operating cash flow or obtain external financing for research and development or other strategic investments; political, legal, economic risks and natural disasters; future impairments of goodwill and technology license purchases; AMD's ability to attract and retain qualified personnel; AMD's stock price volatility; and worldwide political conditions. 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.

<sup>&</sup>lt;sup>1</sup> Based on AMD engineering internal analysis, May 2021

 $<sup>^2</sup>$  Testing done by AMD performance labs April 9 2021, on 25 games at 1440p using the flagship AMD RDNA 2 mobile part versus the flagship AMD RDNA mobile part using 20.50-210215n driver, AMD Ryzen 9, 16GB DDR4-3200MHz, Win10 Pro 64. Performance may

vary. RX-661

- <sup>3</sup> MLN-092: SPECjbb® 2015-MultiJVM Critical comparison based on best performing systems published at www.spec.org as of 4/28/2021, 2x AMD EPYC™ 7763 scored 301,297 Critical-iOPS SPECjbb® 2015-MultiJVM (359,067 max-jOPS, https://spec.org/jbb2015/results/res2021q1/jbb2015-20210224-00612.html) which has 50% higher critical server-side Java® operations than the top "Ice Lake" 2x Intel® Xeon® 201.334 critical-jOPS 8380 that scored (258.368 max-iOPS. https://spec.org/jbb2015/results/res2021g2/jbb2015-20210324-00635.html). 2x AMD EPYC critical-jOPS 7H12 scored 248.942 (315.663 max-iOPS. http://spec.org/jbb2015/results/res2020q2/jbb2015-20200423-00550.html). SPEC® SPECjbb® are registered trademarks of the Standard Performance Evaluation Corporation. See www.spec.org for more information.
- <sup>4</sup> EPYC-22: For a complete list of world records see <a href="https://www.amd.com/en/processors/epyc-world-records">https://www.amd.com/en/processors/epyc-world-records</a>.

# Contact:

Sarah Feller AMD Communications (512) 602-4333 sarah.feller@amd.com

Laura Graves
AMD Investor Relations
(408) 749-5467
Laura.Graves@amd.com



Source: Advanced Micro Devices, Inc.