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# AMD Details Strategy to Deliver Best-in-Class Growth and Strong Shareholder Returns at 2020 Financial Analyst Day

— *High-performance computing leadership, disruptive solutions and sustained execution to drive significant growth across \$79 billion data center, PC and gaming markets*<sup>1</sup> —

SANTA CLARA, Calif., March 05, 2020 (GLOBE NEWSWIRE) -- Today at its Financial Analyst Day, [AMD](#) (NASDAQ: AMD) detailed plans for its next phase of growth driven by multi-generational high-performance CPU and GPU roadmaps and aggressive technology investments designed to deliver leadership products and disruptive solutions.

“Our multi-generational computing and graphics roadmaps are designed to significantly accelerate revenue growth and deliver strong shareholder returns,” said Dr. Lisa Su, AMD president and CEO. “We are focused on relentlessly executing our leadership IP roadmaps and aggressively introducing advanced technologies to drive sustained market share gains across the large and growing high-performance PC, gaming and data center markets.”

## Technology Updates

Having shipped more than 260 million “Zen” x86 cores in our AMD Ryzen™ and AMD EPYC™ processors, AMD shared plans to build on this success with next-generation CPU core, packaging and interconnect innovations:

- AMD plans to introduce the first processors based on its next-generation “Zen 3” core in late 2020. The “Zen 4” core is currently in design and is targeted to use advanced 5nm process technology.
- AMD unveiled plans to expand its chiplet and die stacking leadership, including new “X3D” packaging that combines chiplets and hybrid 2.5D and 3D die stacking to deliver more than a 10x increase in bandwidth density.
- AMD announced its upcoming 3<sup>rd</sup> Generation AMD Infinity Architecture with optimized CPU and GPU memory coherency that can enable significant performance improvements and simplify the software programming required for accelerated computing solutions by allowing the CPU and GPU to seamlessly and coherently share the same memory.
- AMD is building on its strong product security portfolio with expanded features. AMD announced it joined the [Confidential Computing Consortium](#), a group of leading hardware and software companies working to close gaps to protect data through its entire lifecycle.

To address the growing number and diversity of GPU workloads, AMD announced a multi-generational roadmap to deliver two optimized graphics architectures for gaming and data center compute markets:

- The AMD Radeon™ DNA (AMD RDNA) architecture was designed for gaming and is currently powering the award-winning AMD Radeon™ RX 5000 series GPUs. The next-generation AMD RDNA 2 architecture is planned to deliver a 50% performance-per-watt improvement over the first-generation AMD RDNA architecture. It will support hardware-accelerated ray tracing, variable rate shading (VRS) and other advanced features. The first AMD RDNA 2-based products are expected to launch in late 2020.
- AMD unveiled its new AMD Compute DNA (AMD CDNA) architecture, designed to accelerate data center compute workloads. The first-generation AMD CDNA architecture, planned to launch later this year, includes 2<sup>nd</sup> Generation AMD Infinity Architecture to enhance GPU to GPU connectivity and is optimized for machine learning and high-performance computing applications. The follow-up AMD CDNA 2 architecture will support 3<sup>rd</sup> Generation AMD Infinity Architecture to enable next generation exascale-class supercomputers.
- Expanding on previous generations of the ROCm open source software platform for the data center, AMD plans to introduce ROCm 4.0 later this year as a complete software solution for high-performance computing exascale systems and machine learning workloads.

### **Data Center Market Updates**

Since 2017, AMD has delivered significant innovation to the data center market. AMD outlined an aggressive roadmap of leadership products, building on the execution of its first and second generation AMD EPYC server processors, and detailed its plans to drive continuous innovation across a wide range of growing markets within the data center:

- AMD is powering the future of exascale computing with its CPU, GPU, interconnects and software products, including the [recently announced](#) El Capitan supercomputer at Lawrence Livermore National Laboratory. Expected to come online in 2023, El Capitan is expected to deliver more than 2 exaFLOPs of double-precision performance, making it more powerful than today's 200 fastest supercomputers combined.
- AMD is continuing to gain traction with its 2<sup>nd</sup> Generation AMD EPYC™ processors in enterprise, cloud and HPC markets based on delivering performance leadership and TCO advantages across the most important enterprise and cloud workloads. In 2020 we expect more than 150 AMD EPYC processor-powered cloud instances and 140 server platforms to be available.
- AMD is unlocking accelerated computing with new technologies including AMD CDNA architecture, 3<sup>rd</sup> Generation Infinity Architecture and the ROCm 4.0 software platform, all of which will support the AMD-powered Frontier and El Capitan supercomputers.

### **Computing and Graphics Market Updates**

AMD is well positioned to drive sustained growth in the PC and gaming markets with its leadership AMD Ryzen™ processors, AMD Radeon™ graphics and semi-custom products. Since 2017, AMD has nearly doubled both client unit shipments and market share, built off a broad portfolio of performance-leading desktop, high-end desktop (HEDT) and notebook processors. In the gaming segment, AMD partners with world-class brands to bring AMD Radeon graphics to more than 500 million gamers on the most popular devices, with the opportunity to address 2.5 billion gamers worldwide. With Microsoft and Sony, AMD has established long-term relationships to continue market leadership as the number one silicon provider for game consoles.

In 2020 and beyond, AMD sees significant opportunities to drive continued growth across its computing and graphics portfolio:

- AMD expects to grow its performance leadership with the ramp of its 7nm “Zen 2”-based 3<sup>rd</sup> Generation AMD Ryzen™ processors designed specifically for desktops and notebooks across the consumer and commercial segments. Built to optimize the user experience in these markets, the newest AMD Ryzen processors deliver outstanding performance, responsiveness, battery-life and security features for the most demanding workloads. AMD is on track to bring increased performance to the gaming, content creation and productivity markets when it delivers the first “Zen 3”-based AMD Ryzen™ product in 2020.
- AMD plans to deliver a full stack of high-performance, AMD RDNA architecture-powered graphics products to further expand the AMD Radeon install base. Extending the outstanding performance of the Radeon RX 5000 series, AMD RDNA 2-based “Navi 2X” GPUs will bring uncompromised 4K gaming, new features including hardware-based ray tracing support and a significant performance uplift.

### **Statement on COVID-19**

As the outbreak of COVID-19 continues to evolve, the health and wellbeing of AMD employees, customers, partners and the members of the communities in which we operate are of the utmost importance. AMD greatly appreciates the commitment of the individuals and organizations working tirelessly to address this public health situation globally.

At its 2020 Financial Analyst Day, AMD reiterated its first quarter 2020 financial guidance. AMD expects the impact from COVID-19 in the first quarter to be modest, potentially resulting in revenue coming in at the lower end of the guidance of approximately \$1.8 billion, plus or minus \$50 million. Full year 2020 financial guidance remains unchanged.

### **Supporting Resources**

- Watch the replay of the event and view executive presentations [here](#)
- Follow [AMD News](#) on Twitter to stay up to date

### **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.

### **Cautionary Statement**

This press release contains forward-looking statements concerning Advanced Micro Devices, Inc. (AMD) such as AMD’s expected impact of COVID-19 on AMD’s first quarter of 2020 and fiscal 2020 financial outlook; the data center, PC and gaming total addressable markets; AMD’s expectations regarding future revenue growth and shareholder returns; AMD’s ability to execute its leadership IP roadmaps and introduce advanced technologies to drive sustained market share gains across high-performance PC, gaming and data center markets; the features, functionality, benefits, expectations, availability, timing of AMD future products including, AMD’s “Zen 3” and “Zen 4” architecture cores, “X3D” packaging, 3rd

Generation Infinity Architecture, next generation AMD RDNA 2 architecture, AMD Compute DNA architecture, ROCm 4.0 open source software platform, “Zen 3” -based Ryzen™ processor and RDNA 2-based “Navi 2X” GPU; and the features, functionality, expectations, availability and timing of El Capitan exascale system; the expected number of AMD EPYC™ processor-powered cloud instances and server platforms; the ability to ramp “Zen 2” -based 3rd Gen Ryzen 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 presentation 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; AMD's ability to introduce products on a timely basis with features and performance levels that provide value to its customers while supporting and coinciding with significant industry transitions; AMD's ability to generate sufficient revenue and operating cash flow or obtain external financing for research and development or other strategic investments; the loss of a significant customer; AMD's ability to generate revenue from its semi-custom SoC products; global economic uncertainty; political, legal and economic risks, natural disasters, and public health risks, including the impact of COVID-19; government actions and regulations such as export administration regulations, tariffs and trade protection measures may limit our ability export our products to certain customers; potential security vulnerabilities; potential IT outages, data loss, data breaches and cyber-attacks; the ability of a third party manufacturer to satisfy AMD's manufacturing requirements; 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 secured credit facility; the competitive markets in which AMD's products are sold; the potential dilutive effect if the 2.125% Convertible Senior Notes due 2026 are converted; the 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; future impairments of goodwill and technology license purchases; AMD's ability to attract and retain qualified personnel; 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 acquisitions, joint ventures and/or investments on AMD's business; the impact of modification or interruption of AMD's internal business processes and information systems; the availability of essential equipment, materials or manufacturing processes; 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 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 Annual Report on Form 10-K for the year ended December 28, 2019.

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**“Zen,” “Zen 3” and “Zen 4” are codenames for AMD architectures and are not product names.**

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<sup>1</sup> \$79B TAM based on AMD internal estimates, March 2020.

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