May 16, 2017

AMD Unveils Expanding Set of High-Performance Products and Technologies Propelling Next Phase of Growth

SUNNYVALE, Calif., May 16, 2017 (GLOBE NEWSWIRE) -- Today at its Financial Analyst Day, AMD (NASDAQ:AMD) detailed the next phase of its long-term growth strategy focused on delivering products and technologies for a combined $60 billion market for PCs, immersive devices, and datacenters.

"Our long-term technology roadmaps position AMD to take advantage of the major shifts in the technology industry and deliver significant financial returns," said AMD President and CEO Dr. Lisa Su. "We are entering the next phase of our growth strategy through ramping our phenomenal new products across a diverse set of markets. AMD is the only company with the combination of high-performance computing and graphics technologies required to deliver truly immersive and instinctive computing experiences."

Datacenter Updates
AMD ushered in a new era for high-performance server processors and the datacenter with EPYC™. With its high core count, superior memory bandwidth, and unparalleled support for high-speed input/output (I/O) channels in a single chip, EPYC aims to revolutionize the dual-socket server market while simultaneously reshaping expectations for single-socket servers. Previously codenamed "Naples", this new family of high-performance processors for cloud-based and traditional on-premise datacenters will deliver the highly-successful "Zen" x86 processing engine scaling up to 32 physical cores. The first EPYC-based servers will launch in June with widespread support from original equipment manufacturers (OEMs) and channel partners. AMD issued a separate EPYC press release with further details.

Client Compute Updates
AMD's upcoming high-performance consumer and commercial Ryzen™ processors are designed to bring innovation and competition back to the full spectrum of premium PC markets. These processors leverage the company's high-performance x86 "Zen" core architecture to deliver advanced feature sets, increased efficiency, and leadership performance on today's most demanding PC workloads.

"Strong adoption of our AMD Ryzen processors shows customers are ready and excited for the innovative performance and features we deliver — and we're just getting started," said Jim Anderson, senior vice president and general manager, AMD Compute and Graphics business group. "Our upcoming AMD Ryzen processor lineup builds on the foundation we have set to drive our further expansion into the high-performance desktop, premium consumer notebook, and commercial markets."
Upcoming AMD client compute processors include:

- Consumer desktop PC solutions

    - Ryzen™ Threadripper™, a “Zen”-based CPU with up to 16-cores and 32-threads with a new platform with expanded memory and I/O bandwidth, designed for the High-End Desktop (HEDT) market to fulfill the insatiable desire for more cores and threads that permeates the extreme desktop market. It is scheduled for summer 2017.
    - Ryzen™ 3 desktop CPUs are scheduled for availability in Q3 2017.
    - AMD provided an ecosystem update on its in-market Ryzen desktop processors – Ryzen™ 7 and Ryzen™ 5 – noting that it expects Ryzen-powered Windows-based systems from the top five OEMs to launch in Q2 2017.
- Consumer notebook PC solutions
    - Ryzen™ Mobile APUs (codenamed “Raven Ridge”) integrate a 4-core, 8-thread “Zen”-based CPU and high-performance “Vega” graphics to deliver an expected 50 percent increase in CPU performance and over 40 percent better graphics performance, at half the power of its previous generation. Launching in the second half of 2017, Ryzen Mobile APUs are designed for premium 2-in-1s, ultraportables, and gaming form factors.
- Commercial PC solutions
    - Targeted for commercial, enterprise, and public sector implementation, Ryzen PRO processors are designed to deliver powerful multi-threaded performance for premium business PCs with workstation-class performance, state-of-the-art silicon-level security, and reliable solutions with enterprise-class support and top-to-bottom manageability.
        - Ryzen PRO desktop solutions are slated for availability in the second half of 2017.
        - Ryzen PRO mobile is planned for first half of 2018.

Graphics Updates

AMD announced the Radeon™ Vega Frontier Edition, its first graphics card based on the high-end Radeon Vega architecture and as a premier solution for both machine learning and advanced visualization. With 64 compute units (4096 stream processors), Radeon Vega Frontier Edition delivers an estimated 25 TFLOPS of FP16 and an estimated 13 TFLOPS of FP32 peak performance and is designed to handle the most demanding design, rendering, and machine intelligence workloads. Radeon Vega Frontier Edition will be available for purchase in Q2 2017.

This powerful new graphics card excels in:

- Machine learning – Together with AMD’s ROCm open software platform, Radeon Vega Frontier Edition enables developers to tap into the power of “Vega” for machine learning algorithm development. Frontier Edition delivers more than 30 percent more performance than today’s most powerful machine learning GPUs[1] in the DeepBench benchmark.
- Advanced visualization – Delivering up to an average of 42 percent more performance than the Titan Xp on select professional applications[2], the Frontier Edition provides the performance required to drive increasingly large and complex models for real-time visualization, physically-based rendering, and virtual reality (VR) through the design and rendering phase of product development.
- VR workloads – The Radeon Vega Frontier Edition enables tasks like video editing, animation, post-production and VR, in addition to supporting AMD’s LiquidVR™ technology that is breaking new ground with advanced features to deliver the gripping content, advanced visual comfort, and compatibility needed for next-generation VR experiences.

- Revolutionized game design workflows – Radeon Vega Frontier Edition simplifies and accelerates game creation by providing a single GPU optimized for every stage of a game developer's workflow, from asset production to playtesting and performance optimization.

Visit Radeon.com for more details.

Technology Updates

AMD detailed its next-generation processor, graphics, and platform technologies that will power future high-performance server, client, graphics, and semi-custom products. Its roadmap implements next-generation technologies than can deliver substantial performance and energy efficiency gains, accelerate the adoption of AMD technologies, and expand the computing capabilities of a wide-range of systems.

"Our engineering focus remains on delivering a steady drumbeat of new high-performance CPU and GPU architectures that build on the strong foundations we have set with 'Zen' and 'Polaris' to drive broader adoption of our products," said Mark Papermaster, senior vice president and chief technology officer, AMD. "Infinity Fabric is the secret sauce within each of our products that allows us to bring together our leadership x86 CPUs and graphics in an efficient way to deliver breakthrough products to meet the needs of the most demanding workloads."
AMD's next-generation roadmaps include:

- AMD will follow up its current-generation "Zen" architecture with the 7nm "Zen 2" and "Zen 3" CPU architectures that combine smarter design with process technology advances and are expected to enable significant performance and performance-per-watt gains.
- AMD plans to follow its "Vega" architecture with the introduction of "Navi" and its subsequent next-gen architecture, both of which are planned to be built using 7nm process technology.
- In addition to adopting advanced transistor nodes, AMD will use a combination of on-chip integration, software, and system design engineering innovations to continue to create smarter, more efficient architecture designs to achieve improved performance and energy efficiency into the future.
- Starting with new 2017 product introductions, future AMD products are also planned to harness the power of breakthrough AMD Infinity Fabric technology to efficiently create highly-scalable SoCs and platforms that meet the growing demand for high-performance compute and graphics technologies.

Supporting Resources

- View the FAD webcast replay and updated product roadmaps on AMD's Investor Relations Page
- Learn more about EPYC in the press release and whitepaper
- Read more about Radeon Vega Frontier Edition
- Follow AMD and AMD CEO Lisa Su on Twitter

About AMD
For more than 45 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), blog, Facebook and Twitter pages.

Cautionary Statement

This press release contains forward-looking statements concerning Advanced Micro Devices, Inc. (AMD) including: AMD's growth strategy, future plans and expectations; the features, functionality, availability, timing and expected benefits of AMD future products, including AMD's Epyc. Ryzen, Radeon Vega, "Zen" and "Navi" products; and AMD's technology and product roadmaps, 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," "intends," "believes," "expects," "may," "will," "should," "seeks," "intends," "plans," "pro forma," "estimates," "anticipates," or the negative of these words and phrases, other variations of these words and phrases or comparable terminology. Investors are cautioned that the forward-looking statements in this document are based on current beliefs, assumptions and expectations, speak only as of the date of this document 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 may limit AMD's ability to compete effectively; AMD has a wafer supply agreement with GF with obligations to purchase all of its microprocessor and APU product requirements, and a certain portion of its GPU product requirements, from GLOBALFOUNDRIES Inc. (GF) with limited exceptions. If GF is not able to satisfy AMD's manufacturing requirements, its business could be adversely impacted; AMD relies on third parties to manufacture its products, and if they are unable to do so on a timely basis in sufficient quantities and using competitive technologies, AMD's business could be materially adversely affected; failure to achieve expected manufacturing yields for AMD's products could negatively impact its financial results; the success of AMD's business is dependent upon its 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; if AMD cannot generate sufficient revenue and operating cash flow or obtain external financing, it may face a cash shortfall and be unable to make all of its planned investments in research and development or other strategic investments; the loss of a significant customer may have a material adverse effect on AMD; AMD's receipt of revenue from its semi-custom SoC products is dependent upon its technology being designed into third-party products and the success of those products; global economic uncertainty may adversely impact AMD's business and operating results; the markets in which AMD's products are sold are highly competitive; AMD may not be able to generate sufficient cash to service its debt obligations or meet its working capital requirements; AMD has a large amount of indebtedness which could adversely affect its financial position and prevent it from implementing its strategy or fulfilling its contractual obligations; the agreements governing AMD's notes and the Secured Revolving Line of Credit impose restrictions on AMD that may adversely affect its ability to operate its business; AMD's issuance to West Coast Hitech L.P. (WCH) of warrants to purchase 75 million shares of its common stock, if and when exercised, will dilute the ownership interests of its existing

stockholders, and the conversion of the 2.125% Convertible Senior Notes due 2026 may dilute the ownership interest of its existing stockholders, or may otherwise depress the price of its common stock; uncertainties involving the ordering and shipment of AMD's products could materially adversely affect it; the demand for AMD's products depends in part on the market conditions in the industries into which they are sold. Fluctuations in demand for AMD's products or a market decline in any of these industries could have a material adverse effect on its results of operations; AMD's ability to design and introduce new products in a timely manner is dependent upon third-party intellectual property; AMD depends on third-party companies for the design, manufacture and supply of motherboards, software and other computer platform components to support its business; if AMD loses Microsoft Corporation's support for its products or other software vendors do not design and develop software to run on AMD's products, its ability to sell its products could be materially adversely affected; and AMD's reliance on third-party distributors and AIB partners subjects it to certain risks. 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 April 1, 2017.

Footnotes:

1. Testing conducted by AMD Performance Labs as of May 15th 2017 with the Radeon™ Vega Frontier Edition graphics card, Intel® Xeon E5 2640v4 2.4Ghz 10C/20T, Dual Socket, 32GB per socket, 64GB Total, Ubuntu 16.04 LTS, ROCm 1.5, and OpenCL 1.2. The Nvidia Tesla P100, was tested on a system comprising of Intel® Xeon E5 2640v4 2.4Ghz 10C/20T, Dual Socket, 32GB per socket, 64GB Total, Ubuntu 16.04 LTS with CuDNN 5.1, Driver 375.39 and Cuda version 8.0.61. When using the DeepBench Benchmark, Radeon™ Vega Frontier Edition completed in 88.7 ms and the Nvidia Tesla P100 completed in 133.1 ms. PC manufacturers may vary configurations, yielding different results. Performance may vary based on use of latest drivers. VG-9
2. Testing conducted by AMD Performance Labs as of May 12th, 2017 on a test system comprising of Intel E5-1650 v3 @ 3.50 GHz, 16GB DDR4 physical memory, Windows 10 Enterprise 64-bit, Radeon™ RX Vega Frontier Edition / NVIDIA Geforce TitanXp, AMD graphics driver 17.20/NVIDIA graphics driver 382.05 and Samsung 850 PRO 512G SSD.
    a. Benchmark Application: SPECViewperf 12.1 **catia-04** viewset: Radeon™ RX Vega Frontier Edition score: **135.78,** NVIDIA Geforce TitanXp score: **107.29.** Performance Differential: (135.78-107.29)/107.29 = **~26.55%** faster performance on Radeon™ RX Vega Frontier Edition. PC manufacturers may vary configurations, yielding different results. Performance may vary based on use of latest drivers. RPVG- **001**
    b. Benchmark Application: SPECViewperf 12.1 **creo-01** viewset: Radeon™ RX Vega Frontier Edition score: **83.94,** NVIDIA Geforce TitanXp score: **65.20.** Performance Differential: (83.94-65.20)/65.20 = **~28.74%** faster performance on Radeon™ RX Vega Frontier Edition. PC manufacturers may vary configurations, yielding different results. Performance may vary based on use of latest drivers. RPVG- **002**
    c. Benchmark Application: SPECViewperf 12.1 **sw-03** viewset: Radeon™ RX Vega Frontier Edition score: **114.88,** NVIDIA Geforce TitanXp score: **67.75.**

Performance Differential: (114.88-67.75)/67.75 = **~69.56%** faster performance on Radeon™ RX Vega Frontier Edition. PC manufacturers may vary configurations, yielding different results. Performance may vary based on use of latest drivers.
RPVG- **003**

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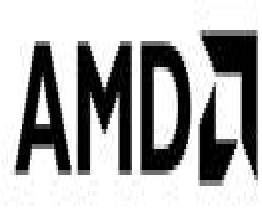

Source: Advanced Micro Devices, Inc.