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# AMD Outlines Sharpened Focus at 2015 Financial Analyst Day

## Next-Generation Technologies and Products Designed to Drive Profitable Growth Across Gaming, Immersive Platforms, and Fuel a Significant Return to the Datacenter

NEW YORK, NY -- (Marketwired) -- 05/06/15 -- Today, at its [2015 Financial Analyst Day](#) taking place at Nasdaq MarketSite, [AMD](#) (NASDAQ: AMD) provided details on the company's multi-year strategy to drive profitable growth based on delivering next-generation technologies powering a broad set of high-performance, differentiated products across the key areas of gaming, immersive platforms, and the datacenter.

"We see strong long-term growth opportunities across a diverse set of markets for the kind of high-performance compute and visualization capabilities only AMD can provide," said [AMD President and CEO Dr. Lisa Su](#). "We are focusing our investments on our strongest opportunities to enable our customers to create great products that push the boundaries of what is possible and allow AMD to achieve profitable growth in the years to come."

### ***IP and Core Technology Updates***

AMD showcased a number of engineering innovations at the event, including details on its next-generation 64-bit x86 and ARM processor cores, future graphics cores expected to deliver a 2x performance-per-watt improvement compared to current generation offerings<sup>1</sup>, and breakthrough modular design methodology that reduces system-on-chip (SoC) development costs and accelerates time to market.

Technology-related announcements included:

- Development of a brand new x86 processor core codenamed "Zen," expected to drive AMD's re-entry into high-performance desktop and server markets through improved instructions per clock of up to 40 percent, compared to AMD's current x86 processor core. "Zen" will also feature simultaneous multi-threading (SMT) for higher throughput and a new cache subsystem.
- Updates on the company's first custom 64-bit ARM core, "K12" core. These enterprise-class 64-bit ARM cores are designed for efficiency and are ideally suited for server and embedded workloads.
- AMD's plans to extend its graphics technology leadership by offering the first high-performance graphics processing unit (GPU) in the industry featuring die stacked High Bandwidth Memory (HBM) using a 2.5D silicon interposer design. AMD plans to introduce this innovative packaging solution this year with its latest GPU.

In addition to discussing software, security, and other key platform enablers, AMD highlighted its new high-performance network-on-chip (NoC) technology, a modular design

approach that leverages re-usable IP building blocks to maximize design efficiency. This breakthrough design approach is expected to lower cost and time-to-market for both AMD's standard and future semi-custom products.

"We are doubling down on our IP core investments in alignment with our traditional development strengths to address key market needs for performance and customer choice through high-performance, scalable 64-bit x86 and ARM CPU cores and continued graphics leadership," said [Mark Papermaster, senior vice president and chief technology officer, AMD](#). "In addition, we have built a system for modular design around our new network-on-chip technology designed to substantially increase development agility."

### ***Computing and Graphics Segment Updates***

Additionally, AMD announced updates to its Computing and Graphics (CG) product roadmaps for accelerated processing unit (APU), central processing unit (CPU), and GPU products planned for introduction in 2016 and beyond. The upcoming products address key customer priorities, including increased performance, longer battery life, and improved [energy efficiency](#). AMD also provided further details and publicly demonstrated its 6<sup>th</sup> Generation A-Series APU, formerly [codenamed "Carrizo,"](#) as well as its next-generation GPU offerings launching in the coming months.

AMD's updated CG product roadmap includes:

- New AMD FX CPUs based on the "Zen" core and built using FinFET process technology. Featuring high core counts with SMT for high throughput and DDR4 compatibility, these CPUs will share the AM4 socket infrastructure with AMD's 2016 Desktop APUs.
- 7<sup>th</sup> Generation AMD APUs will enable a discrete-level GPU gaming experience and full [HSA](#) performance in the FP4 Ultrathin Mobile Infrastructure.
- Future generations of high-performance GPUs will be based on FinFET process technology, which will contribute to a doubling of performance-per-watt.<sup>1</sup> These cutting-edge discrete graphics will include second generation HBM technology.

### ***Enterprise, Embedded, and Semi-Custom Segment Updates***

AMD detailed the long-term strategy for its Enterprise, Embedded and Semi-Custom Business Group (EESC) to grow across a number of high-priority markets based on leveraging high-performance CPU and GPU cores that allow customers to build differentiated solutions. The near-term will bring continued focus on enabling scalable, semi-custom solutions and growth in the embedded pipeline. Looking ahead, next-generation "Zen" and "K12" cores will bring high performance to the datacenter, a space where AMD plans to regain share with a portfolio that includes x86 and ARM processors, increased power efficiency, and a renewed presence in the high-performance x86 server market.

"AMD's high-performance IP, efficient modular design methodology, and evolved semi-custom business model will fuel strong growth opportunities across multiple markets," said [Forrest Norrod, senior vice president and general manager, EESC](#). "In addition to driving sustained growth in our semi-custom and embedded businesses, we're reaffirming our commitment to high-performance server computing based on our strong set of new product offerings."

AMD's EESC roadmap details include:

- Next-generation AMD Opteron™ processors, based on the "Zen" core targeting mainstream servers that will enable a broad spectrum of workloads with significant increases in I/O and memory capacity.
- Building off of the expected availability of "Seattle"-based systems later this year, AMD detailed plans for its next-generation ARM processors featuring the upcoming "K12" core.
- AMD also provided a glimpse into its new high-performance APU targeting HPC and workstation markets that is intended to deliver massive improvements to vector applications with scale-up graphics performance, [HSA](#) enablement, and optimized memory architecture.

### **Supporting Resources**

- View the FAD webcast replay and updated product roadmaps on [AMD's Investor Relations Page](#)
- Find more details on AMD's [blog](#)
- Become a fan of AMD on [Facebook](#)
- Follow AMD on [Twitter](#)
- Learn more about [AMD CEO Lisa Su](#)

### **About AMD**

AMD (NASDAQ: AMD) designs and integrates technology that powers millions of intelligent devices, including personal computers, tablets, game consoles and cloud servers that define the new era of surround computing. AMD solutions enable people everywhere to realize the full potential of their favorite devices and applications to push the boundaries of what is possible. For more information, visit [www.amd.com](http://www.amd.com).

### **Cautionary Statement**

This press release contains forward-looking statements concerning Advanced Micro Devices, Inc. ("AMD" or the "Company") including, that AMD's next-generation technologies will launch on time, in sufficient volume, achieve expected performance gains and drive profitable growth for the company; that AMD will be successful in its use of die-stacked high-bandwidth memory; that AMD will make a significant return to the server market; that AMD will recover market share in traditional PC markets; that AMD's network-on-chip strategy will meet its stated goals; and that AMD's 6<sup>th</sup> Generation APU products will meet their stated goals; 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 document and involve risks and uncertainties that could cause actual results to differ materially from current expectations. Risks include that Intel Corporation's dominance of the microprocessor market and its aggressive business practices may limit AMD's ability to compete effectively; that AMD relies on GF to manufacture most of its microprocessor and APU products and certain of its GPU and semi-custom products. If GF is not able to satisfy its manufacturing requirements, AMD's business could be adversely impacted; that 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 its

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; that AMD may not be able to successfully implement its business strategy to refocus its business to address markets beyond AMD's core PC market to high-growth adjacent markets; the completion and impact of the 2014 restructuring plan and its transformation initiatives could adversely affect AMD; global economic uncertainty may adversely impact AMD's business and operating results; AMD may not be able to generate sufficient cash to service its debt obligations or meet its working capital requirements; AMD has a substantial 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 its amended and restated senior secured asset based line of credit for a principal amount up to \$500 million (Secured Revolving Line of Credit) impose restrictions on AMD that may adversely affect AMD's ability to operate its business; the markets in which AMD's products are sold are highly competitive; the loss of a significant customer may have a material adverse effect on it; AMD's receipt of revenue from its semi-custom SoC products is dependent upon AMD's technology being designed into third-party products and the success of those products; 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 AMD's 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, BIOS 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 AMD products could be materially adversely affected; AMD may incur future impairments of goodwill; uncertainties involving the ordering and shipment of AMD's products could materially adversely affect AMD; AMD's reliance on third-party distributors and AIB partners subjects AMD to certain risks; AMD's inability to continue to attract and retain qualified personnel may hinder its product development programs; in the event of a change of control, AMD may not be able to repurchase all of the outstanding debt as required by the applicable indentures and its Secured Revolving Line of Credit, which would result in a default under the indentures and its Secured Revolving Line of Credit; the semiconductor industry is highly cyclical and has experienced severe downturns that have materially adversely affected, and may continue to materially adversely affect, AMD's business in the future; AMD's business is dependent upon the proper functioning of its internal business processes and information systems and modification or interruption of such systems may disrupt AMD's business, processes and internal controls; data breaches and cyber-attacks could compromise AMD's intellectual property or other sensitive information and cause significant damage to AMD's business and reputation; AMD's operating results are subject to quarterly and seasonal sales patterns; if essential equipment or materials are not available to manufacture AMD's products, AMD could be materially adversely affected; if AMD's products are not compatible with some or all industry-standard software and hardware, AMD could be materially adversely affected; costs related to defective products could have a material adverse effect on AMD; if AMD fails to maintain the efficiency of its supply chain as it responds to changes in customer demand for AMD's products, AMD's business could be materially adversely affected; AMD outsources to third parties certain supply-chain logistics functions, including portions of its product distribution, transportation management and information technology support services; acquisitions could disrupt its business, harm its financial condition and operating results or

dilute, or adversely affect the price of, its common stock; AMD's worldwide operations are subject to political, legal and economic risks and natural disasters, which could have a material adverse effect on AMD; worldwide political conditions may adversely affect demand for AMD's products; unfavorable currency exchange rate fluctuations could adversely affect AMD; AMD's inability to effectively control the sales of its products on the gray market could have a material adverse effect on AMD; if AMD cannot adequately protect its technology or other intellectual property in the United States and abroad, through patents, copyrights, trade secrets, trademarks and other measures, AMD may lose a competitive advantage and incur significant expenses; AMD is party to litigation and may become a party to other claims or litigation that could cause it to incur substantial costs or pay substantial damages or prohibits AMD from selling its products; a variety of environmental laws that AMD are subject to could result in additional costs and liabilities; higher health care costs and labor costs could adversely affect AMD's business; and, AMD's business is subject to potential tax liabilities. Investors are urged to review in detail the risks and uncertainties in the Company's Securities and Exchange Commission filings, including but not limited to AMD's Quarterly Report on Form 10-Q for the quarter ended March 28, 2015.

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<sup>1</sup> Based on internal AMD estimates for 2016 Graphics Core Next GPU compared to previous generation GPU

Source: Advanced Micro Devices