

March 7, 2017



# AMD Previews "Naples" High-Performance Server Processor, Prepares to Return Innovation and Choice to the Datacenter in Q2 2017

## AMD Targets Needs of Modern Datacenter and Cloud Applications with More Cores, More Memory Capacity and More I/O than the Competition

SANTA CLARA, CA -- (Marketwired) -- 03/07/17 -- [AMD](#) (NASDAQ: AMD) today took a significant step into the server and datacenter market with its most detailed look yet at the upcoming high-performance CPU for servers, codenamed "Naples". Purpose-built to disrupt the status-quo and to scale across the cloud datacenter and traditional on-premise server configurations, "Naples" delivers the highly regarded "Zen" x86 processing engine in industry-leading configurations of up to 32 cores. Superior memory bandwidth and the number of high-speed input / output channels in a single-chip further differentiate "Naples" from anything else in the server market today. The first processors are scheduled to be available in Q2 2017, with volume availability building in the second half of the year through OEM and channel partners.

"Today marks the first major milestone in AMD re-asserting its position as an innovator in the datacenter and returning choice to customers in high-performance server CPUs," said Forrest Norrod, senior vice president and general manager, Enterprise, Embedded and Semi-Custom business unit, AMD. "'Naples' represents a completely new approach to supporting the massive processing requirements of the modern datacenter. This groundbreaking system-on-chip delivers the unique high-performance features required to address highly virtualized environments, massive data sets and new, emerging workloads."

The new AMD server processor exceeds today's top competitive offering on critical parameters, with 45% more cores<sup>1</sup>, 60% more input / output capacity (I/O)<sup>2</sup>, and 122% more memory bandwidth<sup>3</sup>.

"It is exciting to see AMD back in the server conversation with a new CPU and a sound strategy for why it is the right processor for the modern datacenter and the cloud computing era," said Matt Eastwood, senior vice president, Enterprise Infrastructure and Datacenter, IDC. "Looking at the product details announced today, it sounds like a compelling combination that will give IT buyers a unique new option to consider when making their next upgrade."

### ***"Naples" features:***

- A highly scalable, 32-core System on Chip (SoC) design, with support for two high-performance threads per core

- Industry-leading memory bandwidth, with 8-channels of memory per "Naples" device. In a 2-socket server, support for up to 32 DIMMS of DDR4 on 16 memory channels, delivering up to 4 terabytes of total memory capacity.
- The processor is a complete SoC with fully integrated, high-speed I/O supporting 128 lanes of PCIe® 3<sup>4</sup>, negating the need for a separate chip-set
- A highly-optimized cache structure for high-performance, energy efficient compute
- AMD Infinity Fabric coherent interconnect for two "Naples" CPUs in a 2-socket system
- Dedicated security hardware

AMD will deliver two presentations on its datacenter strategy and upcoming products this week during the [Open Compute Summit](#). Scott Aylor, vice president of enterprise solutions will talk in the main hall on Wed., March 8<sup>th</sup> at 4:55 PM PST, while Dan Bounds, senior director of enterprise products, will deliver an engineering Tech Talk on Thurs., March 9<sup>th</sup> at 9:20 AM PST on the Expo Hall stage.

### **Supporting Resources**

- [Introduction to "Naples"](#) on AMD.com
- Blog by Forrest Norrod in the [AMD Community](#)
- [Learn](#) more about the "Zen" x86 core
- Follow AMD datacenter developments on Twitter [@AMDServer](#)

### **About AMD**

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1. AMD "Naples" processor includes up to 32 CPU cores versus the Xeon E5-2699A v4 processor with 22 CPU cores. NAP-02
2. AMD "Naples" processor offers up to 64 PCI Express high speed I/O lanes per socket, versus the Xeon E5-2699A v4 processor at 40 lanes per socket. Note that the "Naples" pre-production processor used for this comparison is not yet certified as PCI Express-compliant. NAP-05
3. AMD "Naples" processor supports up to 21.3 GB/s per channel with DDR4-2667 x 8 channels (total 170.7 GB/s), versus the Xeon E5-2699A v4 processor at 19.2 GB/s with max DDR4-2400 x 4 channels (total 76.8 GB/s). NAP-03
4. Pending PCIe certification. PCIe is a registered trademark of PCI-SIG Corporation.

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This press release contains forward-looking statements concerning Advanced Micro Devices, Inc. ("AMD," "our" or the "Company") that relate to, among other things: the timing, availability, features, functionality and expected benefits of AMD's "Naples" products, which are made pursuant to the Safe Harbor provisions of the Private Securities Litigation Reform Act of 1995. These forward-looking statements are based on current expectations and beliefs and involve numerous risks and uncertainties that could cause actual results to differ materially from expectations. Forward-looking statements are commonly identified by words such as "would," "intends," "believes," "expects," "may," "will," "should," "seeks," "intends," "plans," "pro forma," "estimates," "anticipates," "projects," 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 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. 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 GLOBALFOUNDRIES Inc. (GF) with obligations to purchase all of our microprocessor and APU product requirements, and a certain portion of its GPU product requirements, from 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 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 the secured revolving line of credit impose restrictions on AMD that may adversely affect its ability to operate its business; 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 Annual Report on Form 10-K for the year ended December 31, 2016.

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Source: Advanced Micro Devices