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# **AMD EPYC™ Momentum Grows with Datacenter Commitments from Tencent and JD.com, New Product Details from Sugon and Lenovo**

## **Global Partners Showcased at AMD China EPYC Technology Summit**

BEIJING, Aug. 23, 2017 (GLOBE NEWSWIRE) -- [AMD](#) (NASDAQ:AMD) announced the expansion of its global ecosystem of partners for its EPYC datacenter processors today at the China EPYC Technology Summit. New datacenter customers – Tencent and JD.com – along with OEM partners Lenovo and Sugon, joined AMD on-stage with new product announcements and to showcase a wide range of systems and performance demonstrations.

"Today we celebrate the AMD EPYC family of CPUs for the datacenter market in China and are excited to announce support from the leading cloud service providers, Tencent and JD.com, while continuing momentum from Baidu, Lenovo and Sugon," said Forrest Norrod, senior vice president and general manager, Enterprise, Embedded and Semi-Custom products, AMD. "The AMD EPYC family of processors provides incredible performance and scalability for the workloads that matter today and in the future. By partnering with these market leaders, AMD is bringing choice and competition to one of the fastest growing technology markets in the world."

Additional ecosystem participation at the Summit came from Acer, Asus, Dell, Fiberhome, Gigabyte, HPE, H3C, INVENTEC, Lenovo, Sugon, SuperCloud, SuperMicro, TYAN, and Wistron. Key server hardware and software ecosystem support was provided by partners including Mellanox, Redhat, Samsung and VMware.

## **Cloud Datacenters Choose EPYC**

"Tencent Cloud provides public services to benefit everyone. With our commitment to offer users with more choice and a more convenient user experience, Tencent Cloud is continuously seeking more cores, more I/O interfaces, more secure hardware features and improved total cost of ownership for server hardware products," said Sage Zou, senior director of Tencent Cloud. "To continue as a leading provider of high-performance and high-value cloud services, Tencent needs to adopt the most advanced infrastructure and the chip industry's latest achievements. By the end of this year, Tencent Cloud will launch AMD EPYC-based 2P cloud servers, with up to 64 processor cores and superior single system computing capability, to provide the industry with a more diverse portfolio of cloud products and services."

"China Internet and e-commerce companies need more compute cores and higher memory bandwidth. We saw AMD EPYC processors have up to 32 cores, providing competitive

advantage over current 2P server systems, and the eight memory channels enable greater memory bandwidth, which are believed to better match domestic customers' requirements," said Andrew Wang, technology leader of hardware system department at JD.com. "AMD EPYC will help JD.com improve the total cost of ownership (TCO) of our server systems. JD.com will collaborate with AMD on Big Data, AI and Cloud Services based on AMD EPYC in the future."

## **Featured OEM Platforms**

"As a strategic partner, Sugon and AMD have been working together for more than 15 years, AMD's new EPYC data center processors will bring a new value experience in the datacenter," said Cao Zhennan, vice president of Sugon. "Sugon will introduce full AMD EPYC processor based product line with nine new products across workstation, rack, blade and super rack systems for high-performance computing, cloud computing, large data analysis and deep learning applications today."

"AMD EPYC processors present unique opportunities for our customers to lower total cost of ownership via an unprecedented balance of cores, memory bandwidth, and I/O. We are excited to collaborate with AMD and several global Hyperscale customers to develop and deploy single socket and dual socket EPYC-based servers," said Paul Ju, vice president and general manager, Lenovo Global Hyperscale Business.

## **EPYC Performance**

The excitement around EPYC is driven by its competitive x86 performance in both one-socket and two-socket configurations, including record setting floating point performance.

### **One-Socket Server**

- AMD EPYC™ 7601-based system scored 1200 on integer performance measured using SPECint®\_rate2006, landing in the top four of x86 systems tested to-date<sup>1</sup>
- AMD EPYC 7601-based system set a record for one-socket floating point performance, scoring 943 on SPECfp®\_rate2006<sup>2</sup>

### **Two-Socket Server**

- AMD EPYC 7601-based system scored 2360 on SPECint®\_rate2006, placing it in the upper tier of registered scores to-date.<sup>3</sup>

All EPYC processors combine innovative security features, enterprise class reliability, and support a full feature-set. An AMD EPYC™ 7601 CPU-based one-socket system shifts expectations for single socket server performance, helping lower total-cost-of-ownership (TCO).

## **EPYC Product Overview**

- A highly scalable System-on-Chip (SoC) design ranging from 8-core to 32-core, supporting two high-performance threads per core.
- Industry-leading memory bandwidth across the line-up, with eight channels of memory on every EPYC processor. In a two-socket server, support for up to 32 DIMMS of DDR4 on 16 memory channels, delivering up to four terabytes of total memory capacity.

- Unprecedented support for integrated, high-speed I/O with 128 lanes of PCIe® 3 on every product.
- A highly-optimized cache structure for high-performance, energy efficient compute.
- AMD Infinity Fabric coherent interconnect linking EPYC CPUs in a two-socket system.
- Dedicated security hardware.

## EPYC Product Lineup

| Model       | Core / Thread | Base Freq. | Max Boost | TDP      |
|-------------|---------------|------------|-----------|----------|
| EPYC™ 7601  | 32 / 64       | 2.2 GHz    | 3.2 GHz   | 180W     |
| EPYC™ 7551P | 32 / 64       | 2.0 GHz    | 3.0 GHz   | 180W     |
| EPYC™ 7501  | 32 / 64       | 2.0 GHz    | 3.0 GHz   | 155/170W |
| EPYC™ 7451  | 24 / 48       | 2.3 GHz    | 3.2 GHz   | 180W     |
| EPYC™ 7401P | 24 / 48       | 2.0 GHz    | 3.0 GHz   | 155/170W |
| EPYC™ 7351P | 16 / 32       | 2.4 GHz    | 2.9 GHz   | 155/170W |
| EPYC™ 7301  | 16 / 32       | 2.2 GHz    | 2.7 GHz   | 155/170W |
| EPYC™ 7281  | 16 / 32       | 2.1 GHz    | 2.7 GHz   | 155/170W |
| EPYC™ 7251  | 8 / 16        | 2.1 GHz    | 2.9 GHz   | 120W     |

## Additional Resources

- [EPYC](#) on AMD.com
- [Learn](#) more about the “Zen” x86 core
- Follow AMD datacenter developments on Twitter [@AMDServer](#)

## 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) [website](#), [blog](#), and [Facebook](#) and [Twitter](#) pages.

1. Score based on AMD internal testing of 1 x EPYC 7601 CPU in HPE Cloudline CL3150, Ubuntu 16.04, x86 Open64 v4.5.2.1 Compiler Suite, 256 GB (8 x 32GB 2Rx4 PC4-2666) memory, 1 x 500 GB SSD. As of Aug. 23, 2017. See [www.spec.org](#) for more information. NAP-09
2. Score based on AMD internal testing of 1 x EPYC 7601 CPU in HPE Cloudline CL3150, Ubuntu 16.04, x86 Open64 v4.5.2.1 Compiler Suite, 256 GB (8 x 32GB 2Rx4 PC4-2666) memory, 1 x 500 GB SSD. As of Aug. 23, 2017. See [www.spec.org](#) for more information. NAP-10
3. Score based on AMD internal testing of 2 x EPYC 7601 CPU in, Supermicro AS-1123US-TR4, Ubuntu 16.04, x86 Open64 v4.5.2.1 Compiler Suite, 512 GB (16 x 32 GB 2Rx4 PC4-2666) memory, 1 x 500 GB SSD. As of Aug. 23, 2017. See [www.spec.org](#) for more information. NAP-11

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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 June 30, 2017.

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