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AMD Bolsters Embedded Portfolio with New Ryzen Embedded 5000 Series Processors for Networking Solutions

“Zen 3” powered Ryzen Embedded family offers mid-range scalable performance solution for space-and power-constrained networking applications

SANTA CLARA, Calif., April 20, 2023 (GLOBE NEWSWIRE) -- AMD (NASDAQ: AMD) today announced the availability of its high-performance AMD Ryzen™ Embedded 5000 Series, a new solution for customers requiring power-efficient processors optimized for “always on” networking firewalls, network-attached storage systems and other security applications. The Ryzen Embedded 5000 Series rounds out the “Zen 3”-based AMD embedded processor portfolio which also includes the Ryzen Embedded V3000 and EPYC™ Embedded 7000 series families.

Built on 7nm technology with planned five-year manufacturing availability, and equipped with 6, 8, 12 or 16 cores and 24 lanes of PCIe® Gen4 connectivity, Ryzen Embedded 5000 Series processors are designed for enterprise reliability to support the consistent uptime requirements needed by security and networking customers. Ryzen Embedded 5000 Series processors include robust reliability, availability and serviceability (RAS) features, including an ECC-supported memory subsystem. With a thermal design power (TDP) profile ranging from 65W to 105W, Ryzen Embedded 5000 processors enable the reduction of overall system cooling footprint for space-constrained and cost-sensitive applications.

“Ryzen Embedded 5000 processors deliver the ideal combination of performance and reliability required for 24x7 security and networking applications,” said Rajneesh Gaur, corporate vice president & general manager, Embedded Solutions Group, AMD. “This expansion of our embedded product portfolio offers a mid-range solution that fills the gap between our low-power BGA Ryzen Embedded and our world-class EPYC embedded family for customers requiring both high performance and scalability of up to 16 cores.”

“AMD’s success in the embedded market is built on offering differentiated and scalable offerings that address a wide range of applications with different power, performance and environmental requirements,” said Kevin Krewell, principal analyst at TIRIAS Research. “The AMD Ryzen Embedded 5000 strikes an optimal balance of power and performance for applications ranging from small-form factor embedded systems to storage, security, and networking systems, suiting the broadest range of customers and use cases.”

Ryzen Embedded 5000 Series processors offer:

- Scalability up to 16 cores and 32 threads
- Up to 64MB of shared L3 CPU Cache
- Energy efficient TDP from 65W to 105W

- ECC-supported memory and security features
- 24 lanes of PCIe® 4 connectivity (expandable I/O up to 36 lanes with AMD X570 chipset)
- Optimized performance for enterprise reliability

Ryzen Embedded 5000 Series Processor Product Chart

Model	CPU Cores	Threads count	CPU Base Freq (GHz)	CPU 1T Boost Freq (up to GHz1)	L3 CPU Cache (MB)	Nominal TDP (W)	DDR4 Channels	Max DDR4 rate (MT/s) (1DPC)	PCIe® Gen 43 Lanes	Socket
5950E	16	32	3.05	3.4	64	105	2	3200	24	AM4
5900E	12	24	3.35	3.7	64	105	2	3200	24	AM4
5800E	8	16	3.4	3.7	32	100	2	3200	24	AM4
5600E	6	12	3.3	3.6	32	65	2	3200	24	AM4

[1]Max boost for Ryzen Embedded 5000 processors is the maximum frequency achievable by any single core on the processor under normal operating conditions for enterprise systems.

[2]Ryzen Embedded 5800E processor supports configurable Thermal Design Power (cTDP) from 65W to 100W.

[3]Ryzen Embedded 5000 processors support a total of 24 lanes of PCIe® Gen4. Optionally paired with the AMD X570 Chipset, up to 36 lanes of PCIe® Gen4 can be supported.

AMD Ryzen Embedded 5000 Series processors are currently in production with five-year planned manufacturing availability.

Supporting Resources

- Read more about the AMD “Zen 3” Core Architecture
- Learn more about the AMD Ryzen Embedded Family
- Follow AMD on Twitter
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About AMD

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CAUTIONARY STATEMENT

This press release contains forward-looking statements concerning Advanced Micro Devices, Inc. (AMD) including the five-year planned manufacturing availability of the AMD Ryzen™ Embedded 5000 Series 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 press release 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; global economic uncertainty; cyclical nature of the semiconductor industry; market conditions of the industries in which AMD products are sold; loss of a significant customer; impact of the COVID-19 pandemic on AMD's business, financial condition and results of operations; competitive markets in which AMD's products are sold; quarterly and seasonal sales patterns; AMD's ability to adequately protect its technology or other intellectual property; unfavorable currency exchange rate fluctuations; ability of third party manufacturers to manufacture AMD's products on a timely basis in sufficient quantities and using competitive technologies; availability of essential equipment, materials, substrates or manufacturing processes; ability to achieve expected manufacturing yields for AMD's products; AMD's ability to introduce products on a timely basis with expected features and performance levels; AMD's ability to generate revenue from its semi-custom SoC products; potential security vulnerabilities; potential security incidents including IT outages, data loss, data breaches and cyber-attacks; potential difficulties in upgrading and operating AMD's new enterprise resource planning system; uncertainties involving the ordering and shipment of AMD's products; 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 design, manufacture and supply of motherboards, software and other computer platform components; AMD's reliance on Microsoft 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; impact of modification or interruption of AMD's internal business processes and information systems; compatibility of AMD's products with some or all industry-standard software and hardware; costs related to defective products; efficiency of AMD's supply chain; AMD's ability to rely on third party supply-chain logistics functions; AMD's ability to effectively control sales of its products on the gray market; impact of government actions and regulations such as export administration regulations, tariffs and trade protection measures; AMD's ability to realize its deferred tax assets; potential tax liabilities; current and future claims and litigation; impact of environmental laws, conflict minerals-related provisions and other laws or regulations; impact of acquisitions, joint ventures and/or investments on AMD's business and AMD's ability to integrate acquired businesses; impact of any impairment of the combined company's assets on the combined company's financial position and results of operation; restrictions imposed by agreements governing AMD's notes, the guarantees of Xilinx's notes and the revolving credit facility; AMD's indebtedness; AMD's ability to generate sufficient cash to meet its working capital requirements or generate sufficient revenue and operating cash flow to make all of its planned R&D or strategic investments; political, legal, economic risks and natural disasters; future impairments of goodwill and technology license purchases; AMD's ability to attract and retain qualified personnel; AMD's stock price volatility; and worldwide political conditions. 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 most recent reports on Forms 10-K and 10-Q.

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