

Micron First to Ship Critical Memory for Al Data Centers

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Micron reaches industry milestone as first to validate and ship 128GB DDR5 32Gb server DRAM to address the rigorous speed and capacity demands of memory-intensive Gen AI applications

BOISE, Idaho, May 01, 2024 (GLOBE NEWSWIRE) -- Micron Technology, Inc. (Nasdaq: MU), today announced it is leading the industry by validating and shipping its high-capacity monolithic 32Gb DRAM die-based 128GB DDR5 RDIMM memory in speeds up to 5,600 MT/s on all leading server platforms. Powered by Micron's industry-leading 1β (1-beta) technology, the 128GB DDR5 RDIMM memory delivers more than 45% improved bit density,¹ up to 22% improved energy efficiency² and up to 16% lower latency¹ over competitive 3DS through-silicon via (TSV) products.

Micron's collaboration with industry leaders and customers has yielded broad adoption of these new high-performance, large-capacity modules across high-volume server CPUs. These high-speed memory modules were engineered to meet the performance needs of a wide range of mission-critical applications in data centers, including artificial intelligence (AI) and machine learning (ML), high-performance computing (HPC), in-memory databases (IMDBs) and efficient processing for multithreaded, multicore count general compute workloads. Micron's 128GB DDR5 RDIMM memory will be supported by a robust ecosystem including AMD, Hewlett Packard Enterprise (HPE), Intel, Supermicro, along with many others.

"With this latest volume shipment milestone, Micron continues to lead the market in providing high-capacity RDIMMs that have been qualified on all the major CPU platforms to our customers," said Praveen Vaidyanathan, vice president and general manager of Micron's Compute Products Group. "Al servers will now be configured with Micron's 24GB 8-high HBM3E for GPU-attached memory and Micron's 128GB RDIMMs for CPU-attached memory to deliver the capacity, bandwidth and power-optimized infrastructure required for memory intensive workloads."

Industry Adoption

"A core tenet of our work with Micron is advancing the capabilities of data center infrastructure through highly-performant memory for compute intensive workloads," said Dan McNamara, senior vice president and general manager, Server Business Unit, AMD. "Through this collaboration, our joint customers can now get immediate impact out of the high-capacity DDR5 memory offering from Micron in an AMD EPYC CPU powered server, delivering the performance and efficiency needed for the modern data center."

"Adopting advanced memory capabilities, while ensuring high-performance and efficiency, is critical to supporting growing AI workloads in training, tuning, and inferencing," Krista Satterthwaite, senior vice president and general manager, Compute at HPE. "We are committed to providing the most high-performing, energy-efficient solutions, and through our collaboration with Micron, plan to deliver monolithic, high-density DRAM across our AI portfolio to help our enterprise customers gain optimal performance to tackle any workload."

"Micron's 128GB DDR5 RDIMM memory is the first 32Gb monolithic DRAM-based high-capacity DIMM that has completed Intel platform memory compatibility qualification on 4th and 5th Gen Intel[®] Xeon[®] processors," said Dr. Dimitrios Ziakas, vice president of Intel's Memory and IO Technologies, Intel Corporation. "32Gb density based DDR5 DIMMs accelerates critical server and AI system configurations bringing forward key performance, capacity, and most importantly power efficiency benefits to Intel[®] Xeon[®] processor-based systems. We are excited to continue our collaboration with Micron to drive broad adoption of innovative products in the market that solve memory capacity and power bottlenecks for AI and server customers."

"Supermicro is leading the industry with the broadest accelerated server and solution portfolio based on NVIDIA, AMD and Intel," said Wally Liaw, senior vice president of Business Development and co-founder at Supermicro. "Savvy customers are looking for large memory footprint, performance, and efficiency improvements in the Al infrastructure. Customers can benefit significantly from Supermicro's advanced GPU SuperServers with the new 32Gb monolithic DRAM-based 128GB memory, and we are excited to collaborate with Micron to enable this."

Micron 128GB DDR5 RDIMM memory is available now directly from Micron and will be available through select global channel distributors and resellers in June 2024. As part of its comprehensive data center memory portfolio, Micron offers a wide array of memory options across DDR5 RDIMMs, MCRDIMMs, MRDIMMs, CXL and LPDDR5x form factors to allow customers to integrate optimized solutions for Al and high-performance computing (HPC) applications that suit their needs for bandwidth, capacity and power optimization. For more information, visit Micron's DDR5 webpage.

Resources:

- DDR5 webpage
- TEP webpage
- Micron image gallery
- Product brief

About Micron Technology, Inc.

We are an industry leader in innovative memory and storage solutions transforming how the world uses information to enrich life *for all*. With a relentless focus on our customers, technology leadership, and manufacturing and operational excellence, Micron delivers a rich portfolio of high-performance DRAM, NAND and NOR memory and storage products through our Micron[®] and Crucial[®] brands. Every day, the innovations that our people create fuel the data economy, enabling advances in artificial intelligence and 5G applications that unleash opportunities — from the data center to the intelligent edge and across the client and mobile user experience. To learn more about Micron Technology, Inc. (Nasdaq: MU), visit

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¹ Based on competitive data sheets and JEDEC specifications.

² Micron 5,600 MT/s 128GB DDR5 RDIMM memory compared to SK Hynix's 5,600 MT/s 3DS TSV product yields 22.2% better power efficiency.