GlobalFoundries and RAAAM Memory Technologies announce the joint development of next-generation GCRAM technology and test chip on FDX platform

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Collaboration targets to enable the densest standard CMOS on-chip memory solution for the FDX platform widely used for advanced AI chips, by delivering 40% area shrink and up to 60% power reduction compared to commodity SRAM

MALTA, N.Y. and PETA TIKVA, Israel, Sept. 02, 2026 (GLOBE NEWSWIRE) -- GlobalFoundries (GF) (Nasdaq: GFS) and RAAAM Memory Technologies, a pioneer in advanced on-chip memory solutions, today announced a strategic collaboration to develop and qualify Gain-Cell RAM (GCRAM) technology. The partnership has reached a major milestone with the successful tape-out of a GCRAM test vehicle on GF's industry-leading FDX™ FD-SOI platform.

As edge AI, automotive, and IoT devices continue to demand unprecedented amounts of data, on-chip memory has become a critical bottleneck and often constitutes the majority of the silicon area. Designers are looking for innovative on-chip memory solutions offering higher-density and lower-power consumption compared to commodity SRAM.

Leveraging RAAAM's patented GCRAM, the companies have co-designed the GCRAM bitcell using "pushed" design rules on FDX technology, achieving 40% memory area shrink and up to 60% memory power reduction compared to SRAM. The companies have jointly designed and taped out a GCRAM test chip. At the next step, the companies will start providing GCRAM design access to lead customers in early 2027.

"The successful tape-out of our GCRAM test vehicle on GF's FDX platform is a testament to the powerful synergy between RAAAM's memory innovations and GlobalFoundries' manufacturing excellence," said Robert Giterman, CEO and co-founder of RAAAM Memory Technologies. "Our GCRAM technology allows semiconductor companies to significantly increase their on-chip memory capacity or reduce the silicon area while keeping the same amount of on-chip memory, while the ultra-low leakage of FD-SOI technology extends data retention, enabling designers to unlock substantial energy savings for edge AI devices."

"At GlobalFoundries, we are continuously pushing the boundaries of what is possible on our FDX platform and keep enhancing our IP offering to meet our customers' needs," said Sudipto Bose, vice president of FD-SOI product management at GlobalFoundries. "Partnering with RAAAM Memory Technologies allows us to offer our customers an incredibly compelling on-chip memory solution that redefines the power-performance-area (PPA) equation for advanced AI and other applications."

The semiconductor ecosystem is already recognizing the potential of this joint development. NXP Semiconductors, a leader in intelligent systems at the edge, is closely evaluating the benefits of the GCRAM solution.

"The industry needs a paradigm shift in on-chip memory. The GCRAM solution developed by RAAAM and GF offers immense potential," said Victor Wang, VP of front end innovation at NXP Semiconductors. "The projected area shrink and power reductions provide a clear path to increasing on-chip memory capacities, which is vital for reducing off-chip data movement and driving greater system-level efficiency."

About GF

GlobalFoundries (GF) is a leading manufacturer of essential semiconductors, enabling AI at scale from the cloud to the physical world. Through deep partnerships with customers, GF delivers differentiated, power-efficient and high-performance solutions for automotive, aerospace and defense, data center, smart mobile devices, internet of things and other high-growth markets. With global manufacturing operations across the U.S., Europe and Asia, GF is a trusted and holistic technology partner for customers around the world. GF's talented, global team remains focused every day on security, longevity and sustainability.

For more information, visit www.gf.com.

About RAAAM Technologies

RAAAM Memory Technologies is a fabless semiconductor IP company providing the most cost-effective on-chip memory technology in the industry. RAAAM's patented Gain-Cell RAM (GCRAM) technology provides up to 50% silicon area reduction and up to 3X reduced power consumption over traditional SRAM. GCRAM can serve as a drop-in SRAM replacement in SoCs and is fully compatible with standard CMOS fabrication flows, allowing designers to integrate more memory in a smaller die area with lower power consumption.

For more information, visit www.raaam-tech.com.

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