



Adoption of xSPI Standard by JEDEC Broadens Opportunities for Adesto's New EcoXiP eExecute-in-Place Products

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Adesto First to Announce Compatibility with New Industry Standard for High Data Throughput

SANTA CLARA, Calif., Sept. 12, 2017 (GLOBE NEWSWIRE) -- [Adesto Technologies](#) (NASDAQ:IOTS), a leading provider of application-specific, ultra-low power non-volatile memory products, today announced that its EcoXiP™ product family, a new eExecute-in-Place (XiP) non-volatile memory (NVM) solution, complies with the specifications outlined in JEDEC's new xSPI standard for non-volatile memory devices. This development opens new opportunities for EcoXiP, which is already being deployed across a wide range of application areas.

The xSPI standard establishes mechanical, electrical and transactional guidelines for developing high-throughput octal devices, such as the EcoXiP product, and provides users with assurance of controller compatibility with peripheral devices.

"Divergent products with different solutions to speed communication between the host controller and memory can confuse controller designers as to which direction to follow," said Gideon Intrater, CTO at Adesto. "This new standard will provide customers, including system developers and controller designers with assured compatibility. This milestone is key to faster and broader deployment of EcoXiP platform and provides the opportunity for new designs to move forward."

A growing number of products targeting the internet of things such as Wi-Fi and LTE communications modules, wearables, point-of-sale controllers and other embedded devices need more program memory than what can be implemented economically on-chip using embedded Flash or SRAM. Together, projections for these devices total production in the hundreds of millions annually. Standalone DRAM devices are also not an attractive solution to be used as program memory in these applications due to standby power requirements and cost. Until now, to hit performance targets, system designers have been required to invest in memory solutions that are expensive, power-hungry and performance limiting.

Built on an innovative memory and protocol architecture, Adesto's EcoXiP product family overcomes these challenges. The EcoXiP family is an eExecute-in-Place memory that eliminates the need for on-chip embedded flash, while more than doubling processor performance, lowering system power consumption and reducing system cost compared to quad serial peripheral interface (SPI) devices.

The new JEDEC xSPI standard which was developed by a task force comprised of representatives from most NOR Flash device manufacturers and several PC and microcontroller companies, defines its primary applications as computing, automotive, Internet of Things (IoT), embedded systems and mobile systems.

"While many of our peers will target their devices to accelerate systems' boot speed, EcoXiP not only provides this functionality, but also delivers the lowest power eExecute-in-Place performance," said Intrater. "This virtually eliminates the need for on-board flash to store firmware."

Supporting Quotes

"Realtek's ICs, such as our controllers for the digital home and Wi-Fi System-on-Chip devices, include a variety of solutions that offer high performance and ultra-low energy consumption," said Scott Shen, Director, Communications Network, at Realtek. "With the adoption of JEDEC's new xSPI standard, octal architectures are becoming very appealing to leverage improved SPI device communication. The combination of the octal xSPI interface and low power consumption makes Adesto's EcoXiP an excellent XiP solution."

"We're driving the future of smart, connected IoT products and we engage with partners that can bring their specialized expertise and the most innovative technologies to bear. Adesto's EcoXiP is a great example of that kind of innovation," said Emmanuel Sambuis, NXP® Semiconductors vice president, MCU & connectivity.

"The xSPI standard paves the way for the adoption of accelerated octal solutions, like Adesto's EcoXiP memory," said Marc Greenberg, group director, product marketing, DDR, HBM, flash/storage and MIPI IP at Cadence. "With silicon-proven IP and verification IP from Cadence, customers can now create low-power, low-cost MCUs while achieving unmatched performance in their IoT designs."

Availability

Adesto is sampling a 32Mb device now, with a family of densities planned for the future.

About Adesto Technologies

Adesto Technologies (NASDAQ:IOTS) is a leading provider of application-specific, ultra-low power, smart non-volatile memory products. The company has designed and built a portfolio of innovative products with intelligent features to conserve energy and enhance performance, including Fusion Serial Flash, DataFlash®, EcoXiP™ and products based on its trademark resistive RAM technology called Conductive Bridging RAM (CBRAM®). CBRAM® is a breakthrough technology platform that enables 100 times less energy consumption than today's flash memory technologies as well as delivering enhanced performance.

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