Cypress Debuts Ultra-Low-Power Data-Logging Solution for Portable Medical, Wearable and IoT Devices

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Excelon™ LP F-RAM™ Enables Fail-Safe Storage of Mission-critical User Data and Maximizes Battery Life

MUNICH--(BUSINESS WIRE)--Nov. 13, 2018-- Cypress Semiconductor Corp. (NASDAQ:CY), the embedded solutions leader, today introduced a nonvolatile data-logging solution with ultra-low power consumption. This solution is ideal for the latest-generation portable medical and wearable devices and other Internet of Things (IoT) applications that demand nonvolatile memories to continuously log an increasing amount of user and sensor data while using as little power as possible. Cypress' new Excelon™ LP Ferroelectric Random Access Memory (F-RAM™) is the industry's most energy-efficient nonvolatile RAM and delivers instant-write capabilities with virtually unlimited endurance, enabling these applications to perform mission-critical data logging requirements while maximizing battery life. The Excelon LP series is available in a low-pin-count, small-footprint package that is perfectly suited for space-constrained, portable applications.

This press release features multimedia. View the full release here: https://www.businesswire.com/news/home/20181113005523/en/

Pictured is Cypress' Excelon LP F-RAM that delivers nonvolatile data-logging with ultra-low power consumption for portable medical and wearable devices and other IoT applications. (Photo: Business Wire)

"With the rapid proliferation of portable medical devices and wearable health monitors, a premium is being placed on ultra-low-power, fail-safe storage," said Sam Geha, executive vice president of the Memory Products Division at Cypress. "Our new Excelon LP F-RAMs use 200 times less energy than EEPROMs and 3,000 times less than NOR Flash, while providing virtually infinite endurance in a small form factor, making them a perfect match for these applications."

The Excelon LP series offers 4-Mb and 8-Mb industrial and commercial-grade densities with 50 MHz and 20 MHz Serial Peripheral Interface (SPI) performance. The series reduces power consumption with 100nA hibernate and 1uA standby modes that greatly improve a battery-powered product's user experience by extending system operating time. The Excelon family's inherent instant writes also eliminate power failure "data-at-risk" due to volatile data buffers in legacy memories. The family features wide voltage operation from 1.71V to 3.6V and is available in RoHS-compliant industry-standard packages that are pin compatible with EEPROMs and other nonvolatile memories. Excelon LP F-RAMs provide 1000-trillion (10^{15}) read/write cycle endurance with 10 years of data retention at 85° C or 151 years at 65° C. More information about Cypress' F-RAM portfolio is available at www.cypress.com/fram.

Cypress is demonstrating its Excelon LP F-RAM, along with its complete embedded systems solution portfolio, here at the Electronica 2018 trade show in hall C5 stand 446 of the Messe München from November 13-16.

Availability

Cypress' Excelon LP F-RAMs are currently sampling with production scheduled in the second quarter of 2019.

About Cypress Excelon F-RAM Family

In addition to Excelon LP F-RAM, Cypress' Excelon F-RAM family also offers high-speed nonvolatile data logging, preventing data-loss even in harsh automotive and industrial operating environments over extreme temperatures. The family includes the Excelon Auto series in 2-Mb and 4-Mb automotive-grade densities and the Excelon Ultra series in 4-Mb and 8-Mb industrial-grade densities. F-RAM is the industry's most energy efficient

nonvolatile RAM solution; the F-RAM cell is inherently low power and operates without a charge pump. Cypress F-RAM is an ideal solution for applications requiring high-performance, high-reliability, low-cost nonvolatile memory solutions, including automotive, industrial, medical, computing, networking, smart meter, and multifunction printer applications. More information about Cypress' nonvolatile memory portfolio is available at www.cypress.com/nonvolatile.

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About Cypress

Cypress is the leader in advanced embedded system solutions for the world's most innovative automotive, industrial, smart home appliances, consumer electronics and medical products. Cypress' microcontrollers, wireless and USB-based connectivity solutions, analog ICs and reliable, high-performance memories help engineers design differentiated products and get them to market first. Cypress is committed to providing customers with the best support and development resources on the planet enabling them to disrupt markets by creating new product categories in record time. To learn more, go to www.cypress.com.

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