Fujitsu introduces new FRAM-based device for radio frequency ID applications

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Fujitsu Semiconductor America has introduced a new FRAM-based device with the industry's highest memory capacity for a high-frequency RFID (radio frequency ID) IC.

The MB89R112 is the latest member of the Fujitsu FerVID Family, which uses FRAM [memory](#) for fast write speeds and high-frequency rewriting capabilities, providing excellent radiation tolerance and low-power operation. The device includes 9 kilobytes (KB) of FRAM, with a full 8 KB available as user memory. Memory is structured as 256 blocks of 32 bytes per block, permitting read and write access to the entire 8 KB region defined in ISO/IEC15693. Writing 8 KB of data takes about four seconds, a high-speed operation six times faster than products using EEPROM.

The MB89R112 operates at 13.5 MHz +/- 7kHz and assures [data retention](#) for up to 10 years. In addition to its wireless HF interface, the dual-interface MB89R112 incorporates a wired serial interface (SPI) for microcontroller connectivity.

Supplying more available data on [RFID tags](#) enables efficient use in various applications, and the combined features of the MB89R112 create new options for RFID use in embedded and industrial designs. Examples include facilitating wireless modification of product operating parameters, logging environmental readings for logistics, detecting equipment errors, modifying [electronic displays](#), altering sensor threshold values, and changing firmware settings. Capabilities like these

can enhance production control in automotive and electronics manufacturing. They can also help with maintenance applications in aviation, road building, construction and civil engineering.

"The MB89R112 meets the market need for higher capacity memory with an RFID interface to sensors and microcontrollers," said Tong Swan Pang, senior manager of marketing at Fujitsu Semiconductor America. "The dual-interface FRAM-based RFID enables customers to log, store, modify and exchange data flexibly between wireless RFIDs and wired embedded systems."

The MB89F112 is now available in sample quantities.

More information: us.fujitsu.com/semi/fram

Source: Fujitsu

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