Fujitsu launches new SPI FRAMs in 0.18µm technology

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Fujitsu Semiconductor Europe is sampling customers with the new SPI FRAMs based on its 0.18µm technology. With this step, Fujitsu approaches the end of the migration process from 0.35 to 0.18µm technology achieving the industry-leading FRAM performance with E2PROM compatible package.

FRAM (Ferroelectric Random Access Memory) combines the advantages of fast writing SRAM with non-volatile Flash into one device. The new SPI FRAM family MB85RSxxx incorporates 3 devices: MB85RS256A, MB85RS128A and MB85RS64A, which represent 3 density levels of 256Kbit, 128Kbit and 64Kbit respectively. All devices operate at a voltage range between 3.0 and 3.6V and provide an

endurance of 10 billion write/read cycles as well as data retention of 10 years at 55°C. Operating frequency has been significantly increased to a maximum of 25MHz, and since FRAM products render voltage boosters unnecessary for the writing process, they are well-suited for low power applications. The products are offered in 8-pin plastic SOP packages with standard memory pin assignment, which are fully compatible with E2PROM devices.

With in-house development and manufacturing, Fujitsu is able to optimise the closest co-operation between design and factory. This builds up the basis of a substantial and high-quality product to be offered to the market with a stable supply chain.

Besides the SPI FRAM family, Fujitsu offers FRAM standalone devices with I^2C as well as parallel interfaces. Density levels vary from 16Kbit to 4Mbit. Fujitsu intends expansion of its FRAM portfolio to meet market requirements.

FRAM standalone memory devices are widely used in metering, factory automation applications as well as various industrial segments, where data logging, high speed write access and high endurance is essential. FRAM can ideally replace all battery back-up solutions and enable an environment-friendly product for its customers.

Provided by Fujitsu