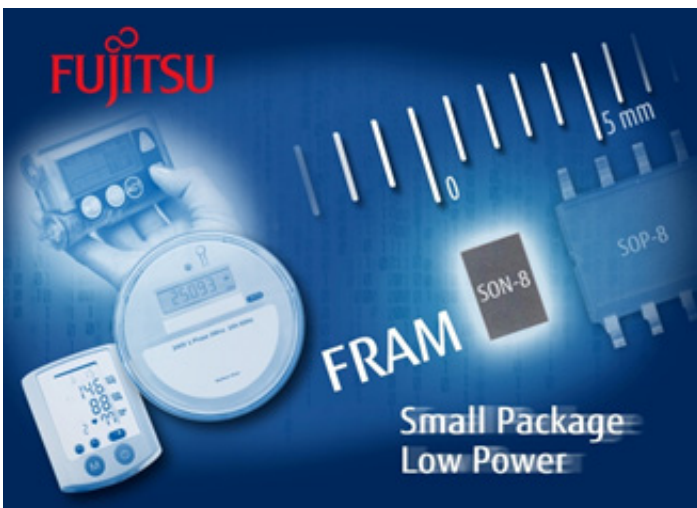


# Ultra low-power consumption 16K bit FRAM: Extending battery lifetime, minimizing PCB space for portable equipments

November 27 2012

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Fujitsu releases ultra-low-power 16kbit FRAM with new SON-8 small package for portable equipment extending battery lifetime and minimising PCB space.

Fujitsu Semiconductor today announced the addition of new small package to the MB85RC16, the 16kbit ultra low-power Ferroelectric Random Access Memory (FRAM) device with an I2C interface.

Fujitsu has been supplying MB85RC16 with standard package, SOP-8. The new SON-8 plastic LCC (Leadless Chip Carrier) package with a

dimension of 3x2 mm reduces the mounting space by 80 per cent in comparison to the SOP-8 package (see figure 1). The combination of small footprint and ultra low power consumption makes the MB85RC16 a perfect non-volatile [memory solution](#) for portable and sensing applications in medical and industrial segments. With this product, customer can significantly extend battery lifetime and minimise their PCB (Printed Circuit Board) space.

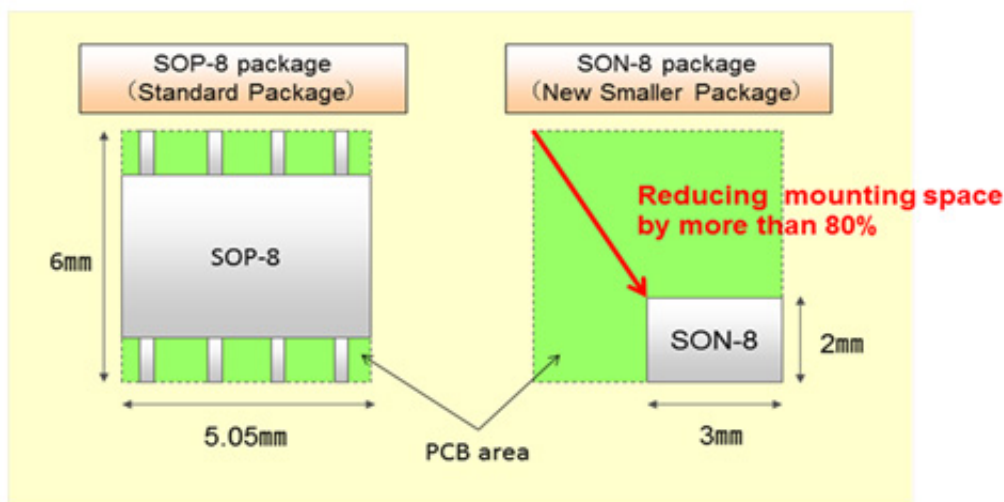


Figure 1: Comparison of Mounting Space.

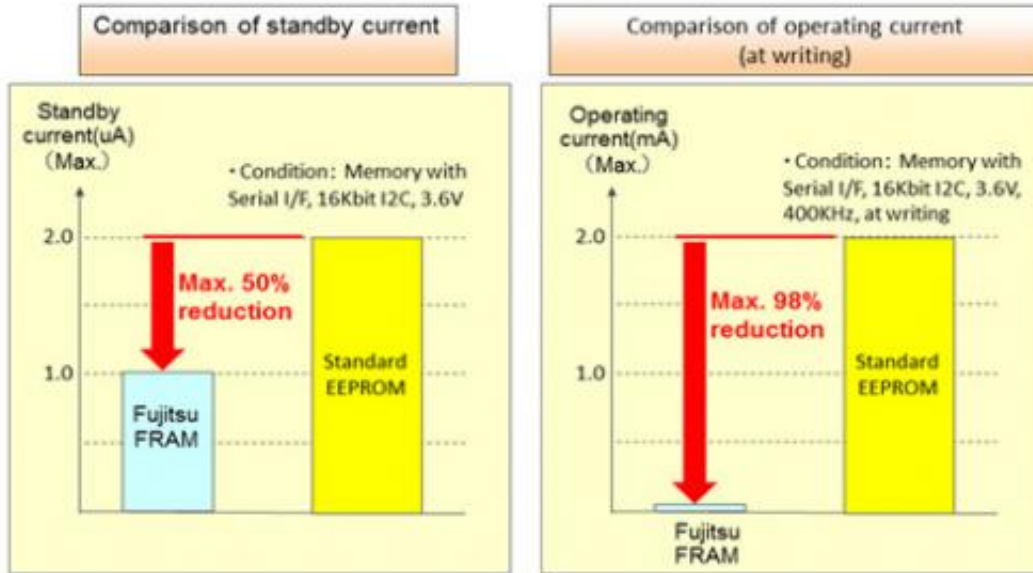


Figure 2: Comparison of Current Consumption.

Fujitsu's FRAM features fast write access, high endurance and low-power consumption in comparison to conventional non-volatile memories. It is widely used in various segments, such as metering, industrial measurement and factory automation. Fujitsu's MB85RC16 16kbit I2C FRAM device achieves an extremely low level of power consumption. With an active current of 70  $\mu\text{A}$  (typical at 1 MHz) and standby current of 0.1  $\mu\text{A}$ , it represents a maximum power saving of 98 per cent in comparison to standard EEPROM (see figure 2). While the low power feature contributes a great deal to extend battery lifetime for portable applications, the product's high endurance and fast access properties enable [real time data](#) logging, which is required by a number of portable medical measurement equipments.

Source: Fujitsu

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