Press Release

Fujitsu Releases New 4 Mbit FRAM with Non-Volatile Memory with SRAM-Compatible Parallel Interface

Represents a battery-free solution for industrial control units and multi-functional printers

Yokohama, Japan, November 13, 2013 – Fujitsu Semiconductor Limited announced the development of the MB85R4M2T, a 4 Mbit FRAM chip with an SRAM-compatible parallel interface. The new product will be made available in sample quantities starting January 2014. It uses a 44-pin TSOP package compatible with standard low-power SRAM, so it can substitute for SRAM in industrial machinery, office equipment, medical devices, security systems, and other equipment that currently uses SRAM. Because it stores data persistently with no need of a battery, it contributes to hardware that is more compact, less power-hungry, and lower in total cost.

FRAM is a type of memory that features both non-volatility, which allows data to be retained even when the power is switched off, and random access, which enables fast data writing. Because FRAM can safely store data that is being written even at sudden power source failures and power outages, it is possible to ensure the protection of parameter information and log data in equipment recorded immediately preceding a power source outage.

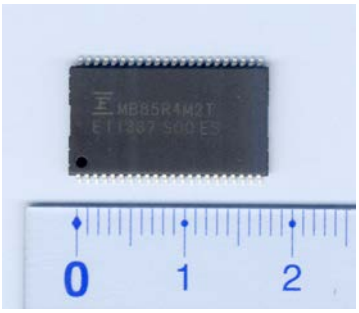

Fig.1 MB85R4M2T

Fujitsu Semiconductor has added the 4 Mbit MB85R4M2T, which has an SRAM-compatible parallel interface, to its line of FRAM products. Because it uses a 44-pin TSOP package that is compatible with standard SRAM memory, it can substitute for SRAM, without major change in circuit board design, in any high reliability application using SRAM, such as industrial control units, multi-functional printers, medical devices, and building security systems. In addition, because it stores data with no need for battery power, it contributes to hardware that is more compact, less power-hungry, and lower in total cost, as described below.

1. Reduced mounting area
Because it removes the need for a battery to store data, the mounting area for memory and related components on PCB board in machinery can be reduced by 50% or more.

2. Reduced power consumption
SRAM requires data retention current in order to retain data in memory when main power is shut off, consuming roughly 15 µW. Because FRAM is non-volatile, it consumes zero electricity when off.

3. Reduced total cost
Eliminating the battery not only reduces the cost of parts, it also eliminates the periodic costs associated with replacement batteries and maintenance, reducing total costs of memory system in terms of both development and running.

Fujitsu Semiconductor continues to provide its customers with memory products and solutions that contribute to increased performance and reduced total costs in their end-products.

The FRAM product will be exhibited at “Embedded Technology 2013”, at Pacifico Yokohama convention center from November 20 to 22, 2013.

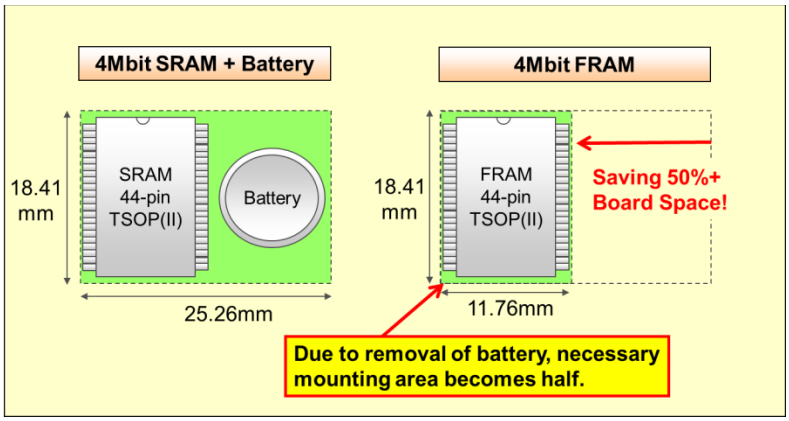

Fig.2 Mounted Area Comparison

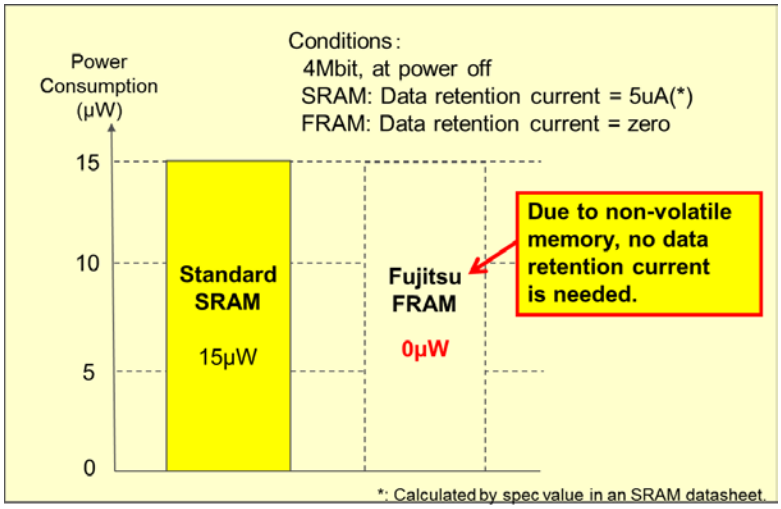

Fig.3 Power Consumption for Data Retention

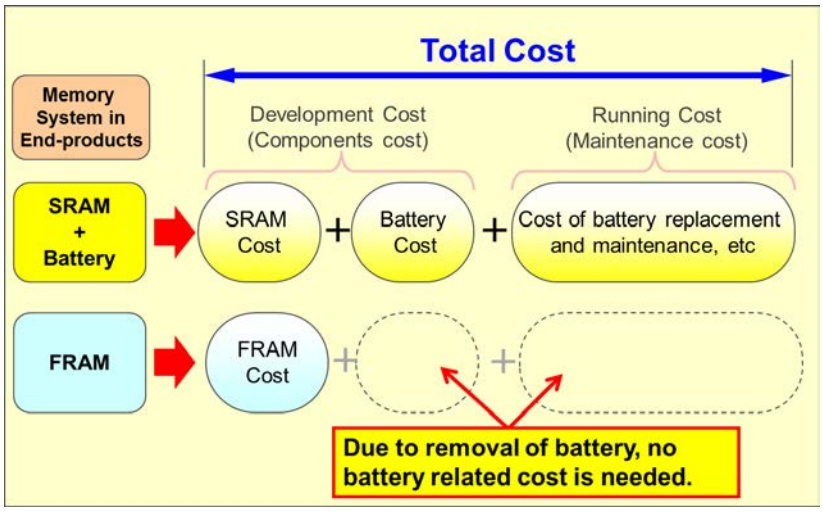

Fig. 4 Cost Comparison between Memory Systems

Sample Release Schedule

Product Name	Availability
MB85R4M2T	January 2014

Please contact your sales representatives for sample price.

Appendix

Key Specifications of MB85R4M2T
http://edevice.fujitsu.com/cgi-bin/document/document_search.cgi?LANG=EN&KEYWORD=NP501-00026&DOCTYPE=D05&DIST=1

For More Information

http://jp.fujitsu.com/group/fsl/en/ (Fujitsu Semiconductor)
http://www.fujitsu.com/global/services/microelectronics/product/memory/fram/ (FRAM Top Page)
http://www.fujitsu.com/global/services/microelectronics/product/memory/fram/standalone/4m-parallel.html (4Mbit Parallel Interface Products)

About Fujitsu Semiconductor

Fujitsu Semiconductor Limited designs and manufactures semiconductors, providing highly reliable, optimal solutions and support to meet the varying needs of its customers. Products and services include Customized SoCs (ASICs)、Foundry Service, ASSPs, and Ferroelectric RAMs(FRAMs), with wide-ranging expertise focusing on mobile, imaging, automotive and high performance applications. Fujitsu Semiconductor also drives power efficiency and environmental initiatives. Headquartered in Yokohama, it was established as a subsidiary of Fujitsu Limited on March 21, 2008. Through its global sales and development network, with sites in Japan and throughout Asia, Europe, and the Americas, Fujitsu Semiconductor offers semiconductor solutions to the global marketplace.
For more information, please see: : http://jp.fujitsu.com/fsl/en/

Press Contacts

Public Relations
Fujitsu Semiconductor Limited
Inquiry: https://www-s.fujitsu.com/jp/group/fsl/en/release/inquiry.html

Customer Contacts

Marketing and Operation Department
System Memory Business Division
Fujitsu Semiconductor Limited
Tel: +81-45-755-7035
Inquiry: http://edevice.fujitsu.com/en-qform.html