Fujitsu Releases 24 New Wide Voltage 8-bit Microcontrollers Featuring LCD Control Functionality
Optimized for display panel applications in healthcare devices and home appliances

Yokohama, Japan, August 23, 2012 – Fujitsu Semiconductor Limited today announced the addition of new products to its "New 8FX" family of high-performance 8-bit microcontrollers, including 12 products from the 64-pin MB95770 Series and 12 products from the 80-pin MB95710 Series, both of which feature LCD control functionality and support a wide voltage operation range from 1.8V to 5.5V. Sample quantities of these new products will begin shipping today.

The MB95770 Series and MB95710 Series, which feature LCD control functionality, are low-cost, low-power consumption 8-bit microcontrollers for a wide range of applications in both domestic and overseas products, including display panel applications ranging from battery-powered healthcare devices such as blood pressure and blood glucose level meters, to home appliances including washing machines and air conditioner indoor units, and FA devices such as thermometers and pressure gauges.
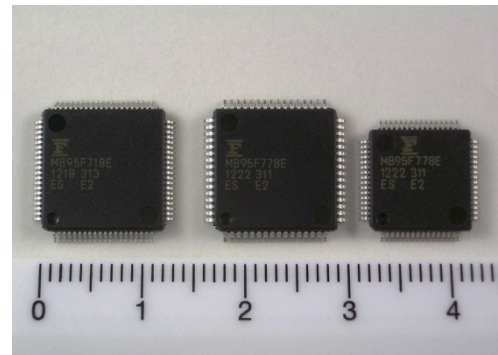

Figure 1. MB95770 / MB95710 Series

The expansion of the market for blood pressure monitors, blood glucose level meters and other healthcare devices has led to increased demand for a wide range of different products, from tabletop devices to portable solutions. At the same time, the average unit price for these kinds of products is falling at a rate of several tens of percent per year. As a result, device manufacturers have been facing a major challenge in cutting costs by reducing the number of components required for production and by shrinking the size of the system components for such devices.

The MB95770 Series and MB95710 Series meet these demands as power-efficient microcontrollers that are available in 64- and 80-pin packages with up to 60KB of embedded flash memory. In addition to featuring LCD control functionality supporting up to 224 and 288 pixels, respectively, the two series are equipped with peripheral circuits such as various timers, communications functions, high-precision A/D converters and analog comparators that are useful for general-purpose applications. By employing these new microcontrollers, manufacturers will be able to reduce the number of system components required in healthcare devices.

Supporting a wide voltage operation range from 1.8V to 5.5V, the MB95770 Series and MB95710 Series can be employed in battery-powered healthcare devices, as well as in 5V power supply circuit boards for the display components of washing machines, air conditioner indoor units, and other applications. Moreover, the new products can be used as power supply control microcontrollers that help reduce energy consumption by managing the system's power supply, or as a sub-microcontroller for added functionality in response to specification changes. Samples

of the 12 new products from both the MB95770 Series and MB95710 Series will begin shipping today.

Product Overview

1. LCD control functionality
The new products are equipped with control functionality necessary for LCD displays. The MB95770 Series features display control support for up to 224 pixels, while the MB95710 Series can control up to 288 pixel displays.

2. Embedding external components reduces number of components
Because the internal CR oscillating circuit that runs the operating clock, the low-voltage detection circuit that detects a drop in voltage, an analog comparator, and an event counter, which is essential for blood pressure meters, are built into the microcontrollers, the need for an external oscillator, reset IC, and operational amplifier is eliminated, thus contributing to a reduction in external components. The CR oscillator has a precision level of ±2%.

3. High-performance flash memory with industry-leading re-write/readability
The microcontrollers are embedded with industry-leading high-performance flash memory that can be re-written/read 100,000 times. In addition, because the microcontrollers can re-write data during program execution, it is possible to eliminate the need for external EEPROMs.

Furthermore, a flash security function protects the customer's software from unauthorized external program reading.

Sample Price & Release Schedule

Product Name	Sample Price	Delivery
MB95F778LPMC1-G-SNE2	JPY 170	From August 2012
MB95F718LPMC-G-SNE2	JPY 190	From August 2012

Sales Target
2,000,000 pieces per month when in mass production (total of two series)

For More Information:
http://jp.fujitsu.com/group/fsl/en/ (Fujitsu Semiconductor)

About Fujitsu Semiconductor
Fujitsu Semiconductor Limited designs, manufactures, and sells semiconductors, providing highly reliable, optimal solutions and support to meet the varying needs of its customers. Products and services include microcontrollers, ASICs, ASSPs, and power management ICs, with wide-ranging expertise focusing on mobile, ecological, automotive, imaging, security, and high-performance applications. Fujitsu Semiconductor also drives power efficiency and environmental initiatives. Headquartered in Yokohama, Fujitsu Semiconductor Limited (formerly named Fujitsu Microelectronics Limited) 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/

Appendix

Line-Up

MB95770 series (12 Products)

Operating Frequency (Max.)	Package Lead-pitch / Size	Optional reset function	Flash Memory/RAM		
			20KB/512B	36KB/1KB	60KB/2KB
16.25MHz	LQFP-64pin 0.5mm, 10.00mm x10.00mm	Dedicated reset input	MB95F774LPMC1-G-SNE2	MB95F776LPMC1-G-SNE2	MB95F778LPMC1-G-SNE2
		Low-voltage reset	MB95F774EPMC1-G-SNE2	MB95F776EPMC1-G-SNE2	MB95F778EPMC1-G-SNE2
	LQFP-64pin 0.65mm, 12.00mm x12.00mm	Dedicated reset input	MB95F774LPMC2-G-SNE2	MB95F776LPMC2-G-SNE2	MB95F778LPMC2-G-SNE2
		Low-voltage reset	MB95F774EPMC2-G-SNE2	MB95F776EPMC2-G-SNE2	MB95F778EPMC2-G-SNE2

MB95710 Series (12 Products)

Operating Frequency (Max.)	Package Lead-pitch / Size	Optional reset function	Flash Memory/RAM		
			20KB/512B	36KB/1KB	60KB/2KB
16.25MHz	LQFP-80pin 0.5mm, 12.00mm x12.00mm	Dedicated reset input	MB95F714LPMC-G-SNE2	MB95F716LPMC-G-SNE2	MB95F718LPMC-G-SNE2
		Low-voltage reset	MB95F714EPMC-G-SNE2	MB95F716EPMC-G-SNE2	MB95F718EPMC-G-SNE2
	LQFP-80pin 0.65mm, 14.00mm x14.00mm	Dedicated reset input	MB95F714LPMC1-G-SNE2	MB95F716LPMC1-G-SNE2	MB95F718LPMC1-G-SNE2
		Low-voltage reset	MB95F714EPMC1-G-SNE2	MB95F716EPMC1-G-SNE2	MB95F718EPMC1-G-SNE2