



## Silicon Labs Expands MCU Portfolio with High Pin-Count, Touch-Sensing Device

March 2, 2009 1:00 PM EST

### C8051F700 Enables Robust, Cost-Effective Capacitive Touch Sensing

AUSTIN, Texas--(BUSINESS WIRE)--Mar. 2, 2009-- [Silicon Laboratories Inc.](#) (Nasdaq: SLAB), a leader in high-performance, analog-intensive, mixed-signal ICs, today announced the introduction of its [C8051F7xx family](#) of high pin-count MCUs for cost-sensitive, high I/O embedded systems. This family is the first to offer a new, patent-pending touch sensing feature that is robust, accurate, responsive and easy to configure. Offering up to 54 general purpose I/O pins and a 25 MIPS 8051 CPU, the C8051F7xx family brings a high level of processing power and flexibility to applications such as industrial controls, security systems, residential HVAC, home appliances, keyboards, cash machines and fax/printer/scanner front panels.

The industry's fastest touch sense on-chip peripheral uses a capacitance-to-digital converter (CDC) with a 40 us acquisition time that when combined with the 25 MIPS CPU on the C8051F7xx enables sophisticated human interface functions, even when large arrays of touch sense elements are used. To combat issues in electrically noisy environments, the CDC offers best-in-class noise immunity, insuring reliable performance. With up to 32 touch sensing inputs, featuring wake-on-touch, the MCU can be placed in a power saving mode and wake quickly upon touch to save overall system power in applications. An intuitive software GUI allows fast and easy configuration. And, an API library is provided for all common touch sense configurations such as virtual buttons, wheels and sliders.

The C8051F7xx family also provides a number of analog features on board, further reducing system cost. A highly accurate 10-bit successive approximation (SAR) analog-to-digital converter (ADC) with on-chip voltage reference and temperature sensor provides best-in-class analog capability for measurement and control. Up to 54 general purpose I/Os are offered to be used as ADC voltage measurement inputs, capacitive touch-sense inputs and/or digital communications I/Os. A calibrated two percent oscillator with guaranteed accuracy over the full MCU voltage supply and temperature range eliminates the need for an external crystal. In addition, the C8051F7xx family offers byte-erasable EEPROM with 100,000 write/erase cycle endurance guaranteed for storage of frequently updated data.

"Silicon Labs' mixed-signal capability has enabled a new level of performance in capacitive touch-sensing," said Mark Thompson, vice president and general manager of Silicon Labs' MCU products. "The C8051F7xx family enables our customers to cost-effectively add best-in-class touch sensing capability to any product requiring higher I/O count and high performance analog peripherals."

Silicon Labs offers a full suite of industry-leading tools to help speed design and accelerate market entry with the C8051F7xx. A complete, low-cost professional development kit includes everything required to immediately begin system design including IDE, target board, cables and power supply. A Silicon Labs GUI is provided for easy and intuitive setup of the capacitive touch sense peripheral to get the desired configuration and performance in minutes. A separate capacitive touch sense evaluation kit provides fast and easy evaluation of the Silicon Labs capacitive sensing solution. To enter to win a free development kit for the C8051F7xx, click [www.silabs.com/C8051F7xxgiveaway](http://www.silabs.com/C8051F7xxgiveaway).

#### Pricing and Availability

The C8051F700 MCU family is available now in QFP64, QFP48, and QFN48 packages with pricing beginning at \$1.90 in quantities of 10K and can be purchased at [www.silabs.com/mcu](http://www.silabs.com/mcu).

#### Silicon Laboratories Inc.

Silicon Laboratories is an industry leader in the innovation of high-performance, analog-intensive, mixed-signal ICs. Developed by a world-class engineering team with unsurpassed expertise in mixed-signal design, Silicon Labs' diverse portfolio of highly-integrated, easy-to-use products offers customers significant advantages in performance, size and power consumption. These patented solutions serve a broad set of markets and applications including consumer, communications, computing, industrial and automotive.

Headquartered in Austin, TX, Silicon Labs is a global enterprise with operations, sales and design activities worldwide. The company is committed to contributing to our customers' success by recruiting the highest quality talent to create industry-changing innovations. For more information about Silicon Labs, please visit [www.silabs.com](http://www.silabs.com).

#### Cautionary Language

This press release may contain forward-looking statements based on Silicon Laboratories' current expectations. These forward-looking statements involve risks and uncertainties. A number of important factors could cause actual results to differ materially from those in the forward-looking statements. For a discussion of factors that could impact Silicon Laboratories' financial results and cause actual results to differ materially from those in the forward-looking statements, please refer to Silicon Laboratories' filings with the SEC. Silicon Laboratories disclaims any intention or obligation to update or revise any forward-looking statements, whether as a result of new information, future events or otherwise.

Note to editors: C8051F7xx product family, Silicon Laboratories, Silicon Labs, the "S" symbol, the Silicon Laboratories logo, and the Silicon Labs logo are trademarks of Silicon Laboratories Inc. All other product names noted herein may be trademarks of their respective holders.

Source: Silicon Laboratories Inc.

Silicon Laboratories Inc.,  
Lindsey Starnes, +1-512-532-5349  
[Lindsey.starnes@silabs.com](mailto:Lindsey.starnes@silabs.com)