



# SILICON LABS

## Silicon Labs Expands Family of Automotive-Qualified Microcontrollers

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AUSTIN, Texas, Nov 04, 2009 (BUSINESS WIRE) -- [Silicon Laboratories](#) Inc. (NASDAQ: SLAB), a leader in high-performance, analog-intensive, mixed-signal ICs, today announced a new line of highly C8051F5xx automotive-qualified microcontrollers (MCUs) that enable a dramatic reduction in system cost and footprint in body electronics applications. The highly integrated C8051F5xx family eliminates the need for discrete analog components and offers industry-leading throughput, reducing code size and further lowering system cost. The new pin- and software-compatible 8-bit devices are ideal for cost-sensitive, space-constrained embedded body control applications, such as fan control, seat adjustment, window lifters and fuel tank sensors.

The F5xx automotive MCUs offer an unprecedented level of mixed-signal integration, creating a compact footprint as small as 4x4 mm with a system cost savings of more than \$0.50 compared to competing solutions. The F5xx devices include an integrated precision voltage reference, a 5 V regulator and a high-accuracy on-chip oscillator, which enables the latest high-speed control area network (CAN 2.0) and local interconnect bus (LIN 2.1) connections without an external clock crystal. This industry first reduces system cost while improving system reliability. A patented automatic analog adjustment feature enables the use of lower cost sensors. The parts operate from 1.8 to 5.25 V, eliminating the need for an external voltage regulator, further reducing the bill of materials. The new F5xx MCUs feature automotive-grade embedded flash with densities available up to 32 kB.

Offering a CPU throughput of up to 50 MIPS, the F5xx family enables real-time computations instead of look-up tables, which reduces code size. Signal processing algorithms can be implemented in real-time, reducing the need for external filtering components, which in turn lowers system complexity and cost. The high digital throughput also enables the F5xx devices to be used in place of more expensive 16-bit MCUs.

"The C8051F5xx microcontroller family is the fastest and most integrated 8-bit automotive MCU offering on the market today," said Mark Thompson, vice president and general manager of Silicon Laboratories. "The family contains more than 100 unique products with pin and software compatibility, providing an unparalleled development platform for embedded automotive and industrial electronic systems."

Software compatibility throughout the F5xx family allows developers to maximize software reuse and minimize development cost. The family offers a variety of memory and processor options, accelerating prototyping and streamlining product development. The broad range of device options and compatibility also reduces development risk and enables complete optimization for target applications.

The C8051Fxx automotive MCUs are AEC-Q100 qualified, operate at up to 125 degrees C and are 5 V tolerant. Silicon Labs and its supply chain conform to the standards set forth by ISO/TS 16949:2009.

### Pricing and Availability

The C8051Fxx products are available in space-saving QFN packages, as well as leaded QFP packages. Samples and production quantities are available now. Pricing for the F5xx family starts at \$1.90 (USD) in 1k quantities.

The newest devices are supported by two development kits -- the C8051F540DK (F54x devices) and the C8051F560DK (F55x, F56x and F57x devices). Both kits feature two MCUs on a single board, enabling the designer to develop a fully functioning CAN 2.0B and LIN 2.1 master/slave network with a single piece of hardware. In addition, the external connector and 12 V regulator allow the designer to connect to any existing automotive network for maximum design and test flexibility. Both development kits are priced at \$99.00 (USD).

### 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.

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