



Silicon Labs Announces Smallest Automotive Communications Controller

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Highly-Integrated C8051F50x Reduces Board Space in Body Electronics

The C8051F50x family provides the highest functional density for automotive applications by integrating a 50 MIPS core, up to 64 kB of high-endurance Flash, four kB of RAM, 32-message buffer CAN 2.0B hardware controller and a hardware LIN 2.0 controller in a 5 x 5 mm² package, providing customers with the memory and computational resources for real-time applications requiring CAN and LIN software stacks. The 50-MHz instruction clock provides up to five times better 8-bit CPU throughput than the competition, offering 16-bit class performance at a lower system cost. The internal precision oscillator provides an accuracy of +/-0.5 percent across the entire temperature (-40 to +125 degrees C) and voltage (1.8 to 5.25 V) range, insuring the four-corner operation that Silicon Labs' customers have come to expect.

By integrating world-class analog on-chip, Silicon Labs provides a number of advantages. The integrated 12-bit, 200 ksp/s, 32-channel analog to digital converter (ADC) has the highest signal-to-noise ratio (SNR) than any other integrated MCU device in this space, offering higher precision and accuracy when simultaneous analog and digital processing is required. Analog performance is further enhanced through the inclusion of a precision voltage reference, typically not found on integrated solutions. The programmable comparator can be dynamically re-mapped to different I/O pins during run-time providing a simple but powerful solution for motor commutation. Additionally, the integrated temperature sensor provides an internal mechanism for diagnostics and system calibration.

"Increasing reliance on electronics to develop more efficient, safer and more full-featured automobiles is driving demand for cost-effective, high-performance, mixed-signal solutions," said Derrell Coker, vice president and general manager. "With the addition of this new family of automotive 8-bit MCUs, we're able to provide customers with a portfolio that further simplifies in-car communication networks while enabling new features."

Silicon Labs delivers industry-leading, low cost tools to help speed design and accelerate market entry. A complete, low-cost professional development kit is available for all family members and includes everything required to immediately begin system design including IDE, target board, cables and power supply. An inexpensive ToolStick daughter card, base adapter and programming card are also available. Please visit www.silabs.com/mcu for more information.

Silicon Labs is an ISO/TS-16949 registered company, and all of the company's automotive products are AEC-Q100 qualified.

Pricing and Availability

All members of the C8051F50x family are available now in 32-pin and 48-pin QFN and QFP packages, and pricing begins at \$1.87 in 10,000 piece quantities. The full C8051F500DK development kit is available now for \$99.00. The ToolStick502DC is also available for \$9.90 to be used in conjunction with the ToolStick base adapter. To receive free samples or purchase please visit www.silabs.com/buysample.

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.

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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