Silicon Labs Combines Voice and M2M Connectivity in Latest Communications Chipsets

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Next-Generation Si24xx Data ISOmodem® Family Offers Sophisticated Voice Features for Security Systems, Home Automation and Point-of-Sale Terminals

AUSTIN, Texas--(BUSINESS WIRE)-- Silicon Laboratories Inc. (NASDAQ: SLAB), a leader in high-performance, analog-intensive, mixed-signal ICs, today announced the next generation of its widely used Si24xx ISOmodem family, offering advanced voice features, lower power, reduced BOM costs and flexible interface options for a wide range of data modem applications. The innovative Si24xx data modem ICs address the need for voice and machine-to-machine (M2M) communications for security and home automation systems, smart utility meters, set-top boxes, point-of-sale (POS) terminals and many other electronics systems that connect to the public switched telephone network (PSTN).

The Si24xx ISOmodem family's voice feature set is more comprehensive and offers better performance and audio fidelity than legacy data modem solutions. When combined with Silicon Labs' popular Si3000 voice codec, the Si24xx data modems support handset, speakerphone (full or half-duplex), voice menu and answering machine implementations. Developers can easily add telephony and voice functions to any embedded system, without the need for the dedicated voice processing ICs or host-based DSP software required by legacy approaches. The voice-capable Si24xx ICs are ideal for any system with telephony functions ranging from POS terminals and security systems to video phones and medical monitoring equipment.

In addition to offering a complete suite of ITU-T "V-dot" data communications, compression and error correction protocols, the ISOmodem family supports specialized protocols used in security and POS applications. Standard DTMF generation and detection and user-programmable tone detection and generation give the Si24xx family the flexibility to support non-standard custom protocols through host software.

As part of Silicon Labs "green" solutions, the Si24xx ISOmodem family offers the industry's lowest power consumption in both active and standby modes. Operating from a single 3.3 V power supply, ISOmodem chipsets draw very little power — 56 mW in normal operation (on-hook, idle). Sleep and Wake-On-Ring (WOR) modes are available to reduce power consumption to 0.3 mW and 15 mW, respectively. This capability allows a system to appear to be "always on" while consuming very little power and still responding to events on the telephone line.

Si24xx ISOmodem ICs are available in a tiny 5 mm x 7 mm QFN package, resulting in the smallest total board area for embedded modem designs. Developers can use a small, low-cost 32 kHz "watch" crystal instead of the larger, more expensive crystal typically used in embedded modems. The Si24xx devices also offer the option of using a serial peripheral interface (SPI) in addition to UART and parallel interfaces, enabling resource sharing among multiple peripherals.

"As the inventor of the leading silicon DAA architecture, Silicon Labs continues to invest in embedded modem technology to help our customers reduce power, component count and system cost," said Carlos Garcia, vice president of Silicon Labs' Wireline products. "Our next-generation Si24xx ISOmodem family gives developers the utmost in flexibility, reliability, surge protection and advanced voice features for telephony applications."

The Si24xx data modems leverage the patented architecture of the world's most widely adopted silicon data access arrangement (DAA) solution. Silicon Labs' global silicon DAAs deliver unmatched surge immunity without additional BOM cost. One hardware design can support all speeds and meet worldwide compliance requirements.

Pricing and Availability

Samples and production quantities of the Si24xx ISOmodem chipsets are available now. Depending on the maximum data rate, system-side package type and temperature range, ISOmodem/DAA chipset prices range from $6.44 to $11.43 in 10,000-unit quantities. Evaluation kits such as the Si2494-A-FM18-EVB are available for $150 each. (All prices are in USD.)

For more information about Silicon Labs' Si24xx ISOmodem family and to purchase samples and development tools, please visit www.silabs.com/ISOmodem.

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 patented semiconductor solutions offers customers significant advantages in performance, size and power consumption. 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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