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Silicon Labs Pumps Up the Volume for Automotive Infotainment with Scalable Car Radio System Solutions

Expanded Portfolio Includes AM/FM Radio Receivers with Integrated Audio Processing Paired with Digital Radio Coprocessors and Data Receivers

AUSTIN, Texas--(BUSINESS WIRE)-- Silicon Labs (NASDAQ: SLAB), a leading provider of broadcast audio solutions for automotive infotainment, today introduced a complete portfolio of receivers/audio processors and multi-standard digital radio ICs designed to deliver best-in-class AM/FM and digital radio performance for the global car radio market. The Si479xx family of AM/FM receivers and digital radio tuners delivers a new benchmark for car radio reception performance with on-chip audio processing at the lowest system cost. The new Si46xx family, which includes single-chip digital radio coprocessors and data receivers, provides an advanced digital radio audio decoding and data reception solution for analog and digital radio.

According to IHS Automotive, global automotive sales for 2015 will reach 88.6 million light vehicle units, with China leading the volume growth. Many of today's vehicles feature sophisticated infotainment systems with multiple tuner ICs and antennas to support maximal ratio combining (MRC) for digital radio, FM phase diversity reception, Radio Data System (RDS) info-navigation data, and digital radio standards such as HD Radio™ and Digital Audio Broadcast (DAB). Silicon Labs developed the Si479xx and Si46xx portfolio to address the global demand for advanced car radio technology supporting all worldwide broadcast radio bands.

The Si479xx family of analog AM/FM receivers and digital radio tuners sets a new standard for automotive broadcast reception. Leveraging Silicon Labs' patented low-IF digital architecture, the Si479xx family delivers superior RF performance and interference rejection for car radio applications. The proven RF CMOS design, combined with comprehensive AM/FM firmware, sets a higher bar for key automotive radio metrics, such as sensitivity in weak signal environments, selectivity in the presence of blockers, and immunity to multipath fading and distortion. An integrated audio subsystem provides an innovative solution to synchronize, process and distribute digital and audio signals in the automotive head-unit. To reduce time-to-market for developers, Silicon Labs offers four-channel and six-channel audio post-processing reference designs. In addition, Silicon Labs provides a software development kit (SDK) that simplifies porting of third-party algorithms to the audio subsystem.

Silicon Labs' Si462x data receiver family offers a comprehensive, cost-effective platform that supports analog and digital radio by integrating a multiband RF tuner, demodulator and channel decoder on a single die. The Si462x receivers provide significant advances in size, power consumption and performance over all other solutions in the market to enable HD Radio and DAB/DAB+ data services in automotive infotainment systems and car radios. The Si462x family's high level of single-chip integration simplifies infotainment system design cycles.

The Si461x digital radio coprocessors provide channel demodulation and source decoding of HD Radio and DAB/DAB+ digital radio. The Si461x coprocessors minimize the system bill of materials (BOM) by eliminating the external RAM memory module for channel decoding typically required by competing digital radio processors. All Si461x/2x IC products are HD Radio certified by iBiquity, giving automotive OEMs and Tier 1 suppliers the assurance that these devices have gone through rigorous testing and meet or exceed iBiquity's high-performance digital radio requirements.

Silicon Labs' complete radio system comprising receivers/tuners, coprocessors and data receivers enables industry-leading performance at the lowest external system BOM cost. For example, Si479xx integrated active loop-through buffers eliminate the need for external RF splitters, simplifying design for applications requiring a data receiver for background scanning and real-time traffic information. The Si479xx audio subsystem with integrated analog-to-digital converters (ADCs) and digital-to-analog converters (DACs) and the Si461x digital radio coprocessors with integrated RAM for channel decoding eliminate numerous external components, resulting in significant cost savings and reduced board area.

The Si479xx/Si46xx portfolio provides a scalable architecture well-suited to support multiple segments across the global automotive infotainment market. Leveraging the portfolio, Tier 1 suppliers and OEMs can reuse their R&D investment across multiple product lines ranging from entry level to premium automotive radio systems. For example, a single global printed circuit board (PCB) can be designed with options to use Si461x coprocessors or Si462x data receivers as needed to enable RDS, HD Radio and DAB/DAB+. All Si479xx/Si46xx devices share a common application programming interface (API), enabling developers to reuse the same software across different product lines and market segments.

"As a leading tuner supplier for broadcast applications with more than 1.2 billion ‘radio-on-a-chip' ICs shipped to date, Silicon Labs is committed to helping automotive OEMs and Tier 1 suppliers enhance the performance of car radio systems while

reducing system cost and complexity," said James Stansberry, senior vice president and general manager of Silicon Labs' Internet of Things and broadcast products. "Our new Si479xx/Si46xx portfolio provides a complete platform for developing a wide range of systems for the global automotive infotainment market, ranging from entry-level car radios to multi-tuner, multi-antenna designs."

Pricing and Availability

Samples of Si479xx receivers and tuners and Si46xx coprocessors and data receivers are available now. To accelerate development, the Si4791-3T1A-EVB evaluation kit is available for $1495 (USD). For detailed Si479xx/Si46xx product pricing, please contact your local Silicon Labs sales representative or an authorized distributor. For additional product information, please visit www.silabs.com/automotive-tuner.

Silicon Labs

Silicon Labs 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 Labs' 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 Labs' financial results and cause actual results to differ materially from those in the forward-looking statements, please refer to Silicon Labs' filings with the SEC. Silicon Labs 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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