Silicon Labs Enhances RDS Data Receivers for Portable and In-Car Navigation Devices

Si4706 and Si4749 Increase Reliability and Sensitivity to Provide the Best Customer Experience

AUSTIN, Texas--(BUSINESS WIRE)--March 17, 2008--Silicon Laboratories Inc. (NASDAQ: SLAB), a leader in high-performance, analog-intensive, mixed-signal ICs, today announced the expansion of its broadcast audio portfolio to include two high-performance radio data system (RDS) receivers. These devices meet the growing demand to couple RDS traffic message channel (TMC) and open data applications (ODA) with static GPS navigation maps to dynamically route drivers around traffic anomalies. The Si4706 and Si4749 receive RDS data with greater accuracy and reliability, offering unprecedented integration and performance for all classes of GPS navigation applications, including portable navigation devices (PNDs), GPS-enabled mobile devices and in-car telematics.

The Si4706 and Si4749 apply sophisticated, patent-pending digital decoding techniques and leverage the strength of Silicon Labs' patented digital low-IF architecture to offer improved receiver sensitivity in low-signal environments, increased reliability of received RDS data and unmatched RDS synchronization persistence. The Si4706 and Si4749 improve RDS sensitivity over the current leading portable solution by 33 percent, achieving 8 uVemf sensitivity with a five percent block error rate (BLER). This allows applications using the new receivers to receive data more reliably at greater distances from RDS transmitters. The devices also decrease decoder error rate (DER) by more than 10 times over the current leading solution, resulting in higher confidence in received RDS data.

The Si4706 and Si4749 are able to quickly establish and maintain RDS synchronization in all types of signal environments, minimizing initial synchronization time and avoiding time required to re-establish dropped connections and recover lost data. The devices' ability to maintain RDS synchronization is more than two times better than leading technology, maintaining synchronization in environments with greater than 70 percent BLER. They also reduce average synchronization times to less than 90 ms in normal signal environments.

"Silicon Labs has quickly established market leadership for both receive and transmit technology in portable navigation devices. The Si4706 and Si4749 further extend our market leadership position and launch our product offerings into the automotive market," said Mark Thompson, general manager of Silicon Laboratories. "By leveraging our proven and patented digital architecture, Silicon Labs is able to help customers provide the best all-around experience for the fast-growing navigation markets."

The two new devices have unique features for their target markets. The Si4706 utilizes Silicon Labs' patent-pending tuned resonance technology for embedded antennas to provide "antenna-free" reception and provide audio out for GPS-enabled mobile devices and PNDs. As an automotive companion tuner for in-car telematics applications, the Si4749 is AEC-Q100 qualified and provides a full suite of received signal quality metrics for RDS alternate frequencies (AF) including RSSI, SNR, adjacent and alternate blockers, frequency offset, multi-path interference and other proprietary information. This feature allows automotive tuners to quickly build and monitor AF lists to seamlessly switch the primary tuner to the highest quality channel as users move between broadcast tower coverage. This is a popular requirement in Europe where broadcast power is limited.

The Si4706 and Si4749 offer a highly flexible applications programming interface (API) that supports both minimal interrupts with only the very highest reliability in the RDS data, or alternatively, more interrupts more frequently, providing detailed visibility by individual RDS block. This allows the host processor to conserve power or perform RDS post-processing according to the customer preference. The devices also provide interrupt programmability on changes to RDS block A or block B, and the on-chip buffer will cache up to 11 full RDS groups with BLER.

Pricing and Availability

Samples of both the Si4706 and Si4749 are available now. The Si4706 is packaged in a 20-pin, 3- x 3- x 0.55-mm QFN package and pricing starts at $4.01 in quantities of 10K. The Si4749 is packaged in a 24-pin, 4- x 4-mm QFN package and pricing starts at $4.33 in quantities of 10K. Evaluation boards are available for $150.

RDS and Traffic Message Channel (TMC)

RDS is a data service on the FM sub-carrier at 57 kHz offset. TMC is a nationally supported traffic anomaly information service carried on RDS. TMC is popular throughout Europe and the US and boasts an average 30-second delay between traffic event and TMC notification to the end-devices. More information on TMC can be found at http://www.tmcforum.com/.

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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