

Silicon Labs' Broadcast Audio ICs Streamline Design of Wheel-Tuned, Digital-Display Radios

New Si484x Multi-Band Receivers Boost RF Performance, Reduce BOM and Manufacturing Costs for Radios

AUSTIN, Texas--(BUSINESS WIRE)-- [Silicon Laboratories Inc.](http://www.silabs.com) (NASDAQ: SLAB), a leader in high-performance, analog-intensive, mixed-signal ICs, today introduced a multi-band radio receiver IC solution that will modernize wheel-tuned radio products with digital displays. Based on a patented low-IF digital architecture, the Si484x receivers offer unmatched integration in CMOS, reducing radio component count by more than 70 percent. The new receivers dramatically shrink bill-of-materials (BOM) and PCB area requirements in applications such as tabletop and portable radios, stereos, mini/micro systems, boom boxes, clock radios, docking stations, radio toys or any consumer electronics product containing a digital-display radio tuned by a mechanical wheel.

Silicon Labs' Si484x receivers solve a critical design challenge for the 40-million-unit-per-year wheel-tuned, digital-display radio market. Competitive solutions use frequency counter ICs to approximate the tuned frequency of traditional analog ICs. With this approach, the actual tuned frequency could be significantly different from the displayed frequency, leading to a frustrating tuning experience for radio users. The Si484x family addresses these challenges by providing precise mechanical tuning that enables radio users to hear the exact channel that is being displayed.

The Si484x receivers deliver unsurpassed RF performance in the worldwide AM/FM/SW bands, as well as audio features that are unmatched by competing radio ICs. The Si484x receivers' automatically tuned RF front-end circuitry adjusts to reject noise and amplify the target signal for exceptional sensitivity in weak signal conditions. In crowded broadcast environments, the RF front-end automatically attenuates undesired blockers and receives the audio signals on the desired channel with exceptional signal quality. The receivers provide advanced audio conditioning for all signal environments, removing pops, clicks and loud static in variable signal conditions. The Si484x ICs also enable display indicators for valid stations, mono/stereo signals and tuned frequency. Additional unique audio features include digital volume control, soft mute and bass/treble audio control.

"Radio designs based on the new Si484x receivers require no manually tuned components, enabling radio makers to eliminate costly manual placement, testing and tuning in their manufacturing lines, thereby reducing labor cost while improving capacity, yield and time to market," said Diwakar Vishakhadatta, general manager of Silicon Labs' broadcast audio products. "Silicon Labs' Si484x receivers provide radio makers with a highly integrated multi-band receiver solution with unprecedented flexibility, simplifying design and manufacturing for a broad range of wheel-tuned, digital-display radio products."

Pricing and Availability

The Si484x multi-band receivers are available in a compact 24-pin SSOP package, enabling cost-efficient, single-sided PCB designs and easy handling in manufacturing lines. Samples and production quantities of the Si484x radio ICs are available now. The Si4840 AM/FM radio IC is priced at \$1.81 (USD), and the Si4844 AM/FM/SW radio IC is priced at \$1.96 (USD), both in 10,000-unit quantities. To ease radio system design, Silicon Labs offers the Si4840-DEMO and Si4844-DEMO evaluation kits, each priced at \$50.00 (USD MSRP). For more information about Silicon Labs' Si484x wheel-tuned, digital-display radio ICs and to purchase samples and development tools, please visit www.silabs.com/pr/radio-receiver.

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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