Silicon Labs Introduces Industry's First Single-Chip Hybrid TV Receiver

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Si2185 Receiver IC Integrates Digital/Analog TV Tuner and Demodulators to Simplify TV and Set-Top Box Designs

AUSTIN, Texas--(BUSINESS WIRE)-- Silicon Laboratories Inc. (NASDAQ: SLAB), a leader in high-performance, analog-intensive, mixed-signal ICs, today introduced the industry's first single-chip hybrid TV receiver family designed to simplify the design of TVs, set-top boxes (STBs), Blu-ray recorders and PC accessories. The new receiver family includes the Si2185 hybrid receiver, which combines a digital/analog TV tuner, a multi-standard analog demodulator, and DVB-T and DVB-C demodulators into a fully integrated, monolithic solution. The receiver family also includes the Si2115/13/11 digital-only receivers designed for DVB-T and DVB-C digital STBs offering terrestrial and cable reception.

The new Si2185/15/13/11 receiver family enables TV and STB developers to eliminate numerous external components such as surface acoustical wave (SAW) filters, tracking filter inductors, wirewound inductors and low-noise amplifiers (LNAs), thereby simplifying their designs and reducing BOM cost. The receiver family's unprecedented single-chip integration can enable a total system savings of up to 75 percent compared to more complex two-chip solutions.

Silicon Labs' single-chip TV receiver architecture provides a fully optimized, integrated signal path from RF antenna input to demodulated digital or analog baseband output, enabling superior RF performance. In addition, the single-chip design eliminates the sensitive intermediate-frequency PCB traces used to connect a tuner to a separate demodulator, reducing the likelihood of system noise interference and degraded performance.

The superior sensitivity of Silicon Labs' TV receivers (with a very low 4 dB noise figure) makes it easier for TVs to receive weak RF signals, allowing viewers to receive more channels. The receivers also offer excellent front-end linearity and channel selectivity, resulting in better reception in crowded spectrum areas. Strong blocking performance is especially critical in urban settings where many undesired blocking channels can reduce the number of channels received.

"Silicon Labs' new TV receiver family represents a significant technical achievement in the broadcast video industry," said James Stansberry, general manager of Silicon Labs' broadcast video products. "We've broken new ground in RF integration by demonstrating the ability to combine a silicon TV tuner with analog and digital TV demodulators into a single-chip receiver solution that enhances system performance and simplifies TV and STB designs."

To ease application development, the Si2185/15/13/11 receiver family is supported by a unified software application programming interface (API) that encompasses both tuner and demodulator functions. This unified API simplifies software design compared to competing two-chip solutions, which require separate APIs for the tuner and demodulator. In addition, all members of Silicon Labs' receiver family are pin and software compatible, which helps reduce the cost of developing TV and STB products for multiple markets.

Pricing and Availability

Samples and production quantities of the Si2185/15/13/11 TV receivers are available now. The Si2185 receiver is priced at $3.12 (USD) in 10,000-unit quantities. Pricing for the Si2115/13/11 receivers begins at $2.55 (USD) in 10,000-unit quantities. The Si2185-A-EVB and the Si2115-A-EVB, both priced at $495 (USD MSRP), provide comprehensive evaluation platforms for hybrid digital/analog TV platforms and digital DVB-T and DVB-C TV platforms, respectively.

For more information about Silicon Labs' TV receiver products and to purchase samples and development tools, please visit www.silabs.com/pr/tv-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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