

MaxLinear Launches Highest Performance Single-Chip Receiver for ISDB-T Set-Top Boxes

- MxL683 offers unmatched field performance and multi-radio coexistence robustness
- Integration of ISDB-T tuner and demodulator in 65nm CMOS results in industry-leading power consumption and system cost

LAS VEGAS--(BUSINESS WIRE)-- <u>MaxLinear Inc.</u> (NYSE:MXL), a leading provider of integrated radio frequency (RF) and mixed-signal integrated circuits for broadband communications applications, today announced the MxL683, its next-generation high-performance, single-chip receiver for ISDB-T and SBTVD-T terrestrial set-top box applications.

The MxL683 is a monolithic system-on-chip based on 65nm CMOS process technology. The device integrates MaxLinear's latest "super radio" core with a state-of-the-art ISDB-T demodulator to deliver exceptional system performance, even in very difficult terrestrial broadcast environments commonly found in Brazil and other Latin American countries. The MxL683 includes an embedded CPU for adaptive tuner and demodulator performance control, fast channel acquisition, and advanced power management. It also integrates voltage regulation, RF loop-through output and clock output for sharing a single crystal with multiple devices.

The MxL683 device was designed to provide excellent rejection of out-of-band interference from 4G/LTE, Wi-Fi, Satellite and MoCA signals. This performance makes the MxL683 an ideal choice for hybrid set-top boxes that combine multiple reception (e.g., satellite and terrestrial) and connectivity technologies in a single box, or on a single cable.

"MaxLinear's ISDB-T tuner technology was already well proven, but we were surprised at the extremely good demodulator performance, even in the most stringent time varying channel or echo conditions," said Prof. Dr. Gunnar Bedicks, Chief Researcher, Mackenzie University Digital TV Laboratory, a leading digital TV laboratory for transmission and reception systems in Sao Paulo, Brazil. "The demodulator outperformed all other commercially available solutions that we have tested, in the lab and in the field."

"The MxL683 is the industry's first true single-chip receiver for ISDB-T set-top boxes. The typical complexity and risks associated with RF design is virtually eliminated with this device," said Brian Sprague, MaxLinear Vice President and General Manager. "This solution allows our customers to get to market faster with better performance, lower cost and lower risk, the ultimate signs of a value-added product."

Technical Highlights

Thanks to a noise figure lower than 4dB and exceptional demodulator C/N performance, the MxL683 achieves best-in-class sensitivity, which is important for low cost set-top boxes in emerging countries with widely scattered transmitters and typical weak signal conditions. The unmatched adjacent and co-channel interferer immunity provides assurance that set-top boxes will be reliable and robust in a crowded TV spectrum.

The MxL683 is fully compliant with the Japanese ISDB-T (ARIB STD-B21) and Brazilian SBTVD-T (ABNT NBR 15604) terrestrial TV receiver specifications. Additional features include auxiliary channel decoding for emergency broadcast warning system, high accuracy receiver signal strength indicator (RSSI), and fast channel scan algorithm to reduce the settop box scan time by up to 50 percent.

MxL683's power consumption is approximately 470 milliwatts (mW) in active mode and 25mA in standby mode. The low power consumption and ultra-small 7 mm x 7 mm footprint make it an ideal solution for low cost, small form-factor designs as well as multi-tuner set-top boxes with personal video recorder (PVR) capabilities.

The MxL683 is currently sampling in a 7mm x7mm 48-QFN package. A complete reference design kit with hardware, software and full documentation is available for both single and dual-channel applications.

About MaxLinear, Inc.

MaxLinear, Inc. is a leading provider of radio-frequency and mixed-signal semiconductor solutions for broadband communications applications. MaxLinear is located in Carlsbad, California, and its address on the Internet is www.maxlinear.com.

MxL and the MaxLinear logo are trademarks of MaxLinear, Inc. Other trademarks appearing herein are the property of their respective owners.

Cautionary Note About Forward-Looking Statements

This press release contains "forward-looking" statements within the meaning of federal securities laws. Forward-looking statements include, among others, statements concerning or implying future financial performance or trends and opportunities affecting MaxLinear, in particular statements relating to MaxLinear's MxL683 single-chip receiver. These statements involve known and unknown risks, uncertainties, and other factors that may cause actual results to be materially different from any future results expressed or implied by these forward-looking statements. MaxLinear cannot predict its future rates of revenue growth, if any, including whether or the extent to which new product introductions such as the MxL683 may affect future revenues. MaxLinear's business, revenues, and operating results are and will be subject to numerous risks and uncertainties, including (among others) uncertainties concerning how end user markets for its products will develop; its substantial dependence on a limited number of customers; its ability to continue to develop and introduce new and enhanced products on a timely basis; and potential decreases in average selling prices for its products. In addition to these risks and uncertainties, investors should review the risks and uncertainties contained in MaxLinear's filings with the United States Securities and Exchange Commission, including risks and uncertainties identified in its most recent

Quarterly Report on Form 10-Q.

MaxLinear Inc. Press Contact:

The David James Agency LLC David Rodewald, 805-494-9508 david@davidjamesagency.com

MaxLinear Inc. Corporate Contact:

Yves Rasse Senior Director, TV & STB Product Line 760-692-0711 yrasse@maxlinear.com

Source: MaxLinear Inc.