

# MaxLinear Combines DVB-C Video and DOCSIS® 3.0 Data in New Family of Full-Spectrum Capture™ Front-End Receivers

MxL21x devices are ideal for multi-channel video set-top box design with up to 200
 Mbps data connection for over-the-top (OTT) video and other data services

LAS VEGAS--(BUSINESS WIRE)-- **CES -** MaxLinear Inc. (NYSE: MXL), <u>a leading provider of integrated radio frequency (RF) and mixed-signal integrated circuits</u> for broadband communications applications, today announced the MxL21x family of Full-Spectrum Capture<sup>™</sup> (FSC<sup>™</sup>) receivers supporting two to four QAM/DVB-C video channels and four DOCSIS® 3.0 channels.

Cable set-top-box OEMs can use the receivers to design less expensive and less complex STBs that deliver both multi-channel broadcast cable TV services, including personal video recording and fast channel change, and high-speed Internet access for over-the-top (OTT) Internet video plus other data services.

The MxL21x family features an FSC-based front-end that receives the full 1 GHz cable spectrum. The devices support two to four QAM demodulators for transport stream output to a MPEG decoder SoC, and a four-channel wideband intermediate frequency (IF) output for connecting to an Intel Puma5® DOCSIS cable modem chip.

The device features two I2C buses that enable independent control of the MxL21x devices by both the MPEG SoC and the Intel Puma5. This feature allows the MPEG decoder and the DOCSIS modem to exclusively select the channels needed for video and data, respectively, without the necessity for any communication between the MPEG decoder and DOCSIS chips. With this dual I2C control capability, the STB designer has complete flexibility in the selection of the MPEG decoder, the ability to develop software for video and data applications independently and a reduced bill of materials cost.

The MxL21x family (MxL212, MxL213 and MxL214) also supports remote monitoring functions including signal power levels across the full spectrum and channel equalizer parameter settings. This remote spectrum monitoring capability allows cable MSOs to resolve network problems at customer premises remotely, resulting in substantial savings in customer support and network maintenance costs.

MaxLinear has partnered with ZCorum to offer a remote spectrum analyzer solution for STBs based on MaxLinear FSC tuners. The solution will be demonstrated in the company's suite at the Consumer Electronics Show in Las Vegas from Jan. 7 to Jan. 10.

"The MxL21x family enables the design of cost-effective video gateways for emerging markets like China and Latin America," said Brian Sprague, Vice President and General Manager for MaxLinear. "Now, OEMs can take advantage of our FSC technology, scaled down channel count and dual I2C control to create broadcast plus OTT STBs with many of the features and capabilities typically found in high-end boxes at a fraction of the cost."

## **Technical Highlights**

Based on MaxLinear's industry-leading, low-power 40nm CMOS process technology, devices in the MxL21x family offer a monolithic digital cable front-end with integrated low-noise amplifier (LNA) and signal conditioning functions.

The DOCSIS 3.0 ports on the MxL21x devices provide up to 200 Mbps downstream speeds. With all four video channels and all four DOCSIS channels enabled, the chip consumes less than 1.9W, eliminating the need for expensive heat removal components such as fans, heat shields and heat sinks inside the STB.

For video applications, the use of FSC technology enables the devices to simultaneously receive any combination of two or four video and four DOCSIS channels located arbitrarily in the cable spectrum.

The devices also support an integrated narrow-band, single-channel tuner for VoIP service when in battery back up mode or for low-power single-channel operation. The MxL21x product family is pin-compatible allowing one board design to support a variety of channel configurations.

# **Availability**

The MxL21x devices are now available for sampling and will be generally available in early 2014. Contact MaxLinear sales team at <a href="mailto:sales@maxlinear.com">sales@maxlinear.com</a> for details.

### About MaxLinear, Inc.

MaxLinear, Inc. is a leading provider of radio-frequency and mixed-signal semiconductor solutions for broadband communications applications. MaxLinear is headquartered in Carlsbad, California. For more information, please visit <a href="https://www.maxlinear.com">www.maxlinear.com</a>.

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## **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 growth opportunities affecting MaxLinear, in particular statements relating to the introduction of the MxL21x family of Full-Spectrum Capture (FSC™) receivers supporting two to four QAM/DVB-C video channels and four DOCSIS® 3.0 channels. These forward-looking statements involve known and unknown risks, uncertainties, and other factors that may cause actual results to differ materially from any future results expressed or implied by these forward-looking statements. We cannot predict whether or to what extent we will realize revenues from the MxL21x family of

receivers. Forward-looking statements are based on management's current, preliminary expectations and are subject to various risks and uncertainties, including (among others) intense competition in our industry; the ability of our customers to cancel or reduce orders; uncertainties concerning how end user markets for our products will develop; our lack of long-term supply contracts and dependence on limited sources of supply; potential decreases in average selling prices for our products; and risks associated with intellectual property protection and the prevalence of intellectual property litigation in our industry. 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 (SEC), including risks and uncertainties identified in our Quarterly Report on Form 10-Q for the quarter ended September 30, 2013. All forward-looking statements are qualified in their entirety by this cautionary statement. MaxLinear is providing this information as of the date of this release and does not undertake any obligation to update any forward-looking statements contained in this release as a result of new information, future events, or otherwise.

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