

MaxLinear and PBI Develop Next-Generation Digital ODU for New Class of Multichannel Satellite TV Operator Services

• Leading satellite antenna and RF system company designs MxL865 digital channel stacking SoC into its next-generation outdoor units for low power draw, unmatched performance and fast time-to-market

CARLSBAD, Calif.--(BUSINESS WIRE)-- MaxLinear Inc. (NYSE: MXL), <u>a leading provider of</u> <u>integrated radio frequency (RF) and mixed-signal integrated circuits</u> for broadband communications applications, today announced satellite antenna and low-noise block downconverter (LNB) developer Pro Brand International Inc. (PBI) has selected the MxL865 Full-Spectrum Capture[™] (FSC[™]) system on chip (SoC) for a new direct broadcast satellite digital outdoor unit (D-ODU).

PBI's new D-ODU, targeting multi-satellite, channel-stacking LNB applications, complements its full line of satellite antennas and LNBs.

The MxL865 is a digital channel-stacking SoC that supports up to 24 channels over a single cable for simplified connections between the indoor set-top boxes/gateways and rooftop LNBs and multi-dwelling unit switches. The device has five FSC inputs for a total capture bandwidth of 10 GHz and features a single L-band IF output.

PBI selected the MxL865 due to its high level of integration and low power consumption, which makes the deployment of high-density channel-stacking D-ODUs commercially viable for the first time. The 10mm x 10mm device integrates a host CPU microcontroller, FSK and DiSEqC modems, and power management controllers. All major analog functions are also integrated into the device, including broadband input and output filters, RF gain blocks, channel filters, PLLs and automatic gain control (AGC) circuitry.

The device was designed to exceed stringent RF performance and MOCA co-existence requirements from leading direct broadcast satellite operators. The superior RF performance of the device, well in excess of the nominal system requirements, helps customers to significantly reduce design complexity, thereby enabling robust D-ODU solutions to be deployed in the market more rapidly.

"Digital ODUs enable a new range of satellite services. MaxLinear's MxL86x SoC family has significantly higher levels of integration and lower power draw, which vastly simplifies ODU installation compared to legacy analog ODUs in the market. The MxL86x SoC family is

ideally suited to help satellite operators with the transition from analog to digital ODUs," said Brian Sprague, MaxLinear Vice President and General Manager. "We're pleased to enable PBI to be a leader in the transition to digital ODUs in the satellite market."

"Developing this D-ODU is vital to PBI because our operator customers want to deliver an increasing number of channels to the home, which cannot be supported in a cost-effective manner with analog roof top equipment," said Jim Crownover, Pro Brand Chief Executive Officer. "The MxL865 dramatically simplified the design of the D-ODU and helped us get to market quickly with a performance leading solution, which was one of our key criteria for vendor selection."

Technical Details

The MxL865 is part of a family of 24-digital-channel stacking SoCs designed to replace existing analog channel-stacking ICs that can only support up to three channels per device. The MxL865 has five FSC RF inputs and features a single L-band IF output. The MxL865 supports a total RF capture bandwidth of 10 GHz.

Other parts in the family include the MxL868, which has eight FSC half L-band inputs for either LNB or MDU applications and the MxL862, which has two FSC wideband inputs and features a single L-band IF output. The MxL862 supports a total RF capture bandwidth of 4.1GHz.

All of the MxL86x devices support both FSK and DiSEqC/EN50607 operation on the IF port. They come with a software environment that includes a real-time operating system running on an embedded 32-bit CPU with a complete set of APIs to control the band translation and channel stacking engine and the chip interfaces.

Due to the devices' high levels of system integration, the bill of material (BOM) in end applications is reduced to a minimal number of low-cost, passive components, which enables ultra-compact, low-cost system solutions when compared to existing analog solutions.

About Pro Brand International Inc.

Pro Brand International is a leading designer and developer of advanced antenna and RF systems for the satellite and telecommunications (wireless) sectors. Pro Brand serves the leading North American DBS operators, and has extensive expertise in related verticals such as very small aperture terminals (VSATs). Through its in-house engineering design team combined with advanced R&D labs, state-of-the-art feed range and an indoor compact antenna range, Pro Brand offers shortened time to market and a complete end-to-end solution.

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 <u>www.maxlinear.com</u>.

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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 Pro Brand International's selection of MaxLinear's MxL865 SoC for the satellite market. These forward-looking 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. We cannot predict whether or to what extent the design win with Pro Brand International will result in future revenues. 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, including Pro Brand International, to cancel or reduce orders; uncertainties concerning how end user markets for our products will develop, including the market for our satellite television products; our lack of long-term supply contracts and dependence on limited sources of supply; potential decreases in average selling prices for our products; and the potential for intellectual property litigation, which is prevalent 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 guarter ended September 30, 2013. All forward-looking statements are gualified 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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