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## MaxLinear Passes 1 Million Digital Satellite ODU Shipments to Microelectronics Technology Inc.

- *Major satellite operator leverages MTI's outdoor units that feature MaxLinear's MxL868 digital channel stacking and band translation ICs*

AMSTERDAM--(BUSINESS WIRE)-- **IBC Exhibition** - MaxLinear Inc. (NYSE: MXL), a leading provider of radio frequency (RF) and mixed-signal integrated circuits for cable and satellite broadband communications, the connected home, data center, metro, long-haul fiber networks, and wireless infrastructure, today announced Microelectronics Technology Inc. (MTI) has produced over 1 million digital satellite outdoor units (D-ODU) using MaxLinear's MxL868 channel stacking and band translation system on chip (SoC).

The ODUs have shipped to a single, major satellite operator, who is a leading adopter of digital channel stacking technology.

MTI, based in Hsinchu, Taiwan, has established leading positions in the fields of satellite communications technologies, microwave radios, mobile base station components and broadband wireless access products. In the direct broadcast satellite industry, MTI is recognized for its LNBs and multi-dwelling unit switches.

The MxL868 is based on MaxLinear's Full-Spectrum Capture™ (FSC™) technology, and can simultaneously digitize up to 4GHz of spectrum from eight RF inputs. Each 500MHz-wide RF input can be translated in its entirety to another 500MHz-wide frequency band between 250MHz and 3000MHz and be fed to one of three outputs. Individual transponders from each RF input can also be selected, filtered and combined onto a single coaxial cable for distribution to multi-channel satellite gateways and individual low cost client set-top boxes.

MTI selected the MxL868 because of its high level of integration, market-leading performance and low power consumption. Unlike competitor's products, which rely on costly BGA packaging, the MxL868 is packaged in a standard 10mm x 10mm QFN device that reduces cost, simplifies manufacturing and improves reliability.

The MxL868 integrates all major supporting analog functions such as broadband input and output filters, RF gain blocks, channel select filters, automatic gain control (AGC) functionality and power management controllers. All features are software addressable and are controlled by an embedded host CPU microcontroller that communicates via FSK and DiSEqC modems with the set-top boxes attached to its outputs.

The MxL868 exceeds strict RF performance requirements from leading direct broadcast satellite operators. Having this additional performance margin helps customers like MTI significantly reduce the design complexity and as a result they were first-to-market with this robust D-ODU solution.

“MaxLinear’s D-ODU product family has been very well received by customers due to its high level of integration, unmatched performance and low power consumption to meet strict operator specifications,” said Will Torgerson, VP/GM Broadband and Terrestrial TV Group. “We’re pleased to enable MTI’s market leadership in the transition to D-ODU technology.”

“MTI is a leading supplier of satellite ODU solutions worldwide,” said Eugene Wu, MTI Vice President of Sales and Marketing. “We believe that D-ODU technology will enable satellite operators worldwide to deploy new generations of multi-channel, multi-room services over a single coaxial cable. Working with MaxLinear and the MxL868 has helped us to be a front-runner in this significant technology trend.”

## **Technical Details**

The MxL868 is part of a family of SoCs designed to improve upon the functionality of existing analog channel-stacking ICs. These analog solutions are only able to support up to three channels per device and require additional discrete bill of materials, custom discrete filters and external microcontrollers. The MxL868 supports eight individual FSC inputs and features up to three IF outputs packaged in a single 10mmx10mm QFN device.

The MxL86x family of devices has banks of programmable channel select filters, and supports stacked outputs in excess of 32 channels in a static configuration or 24 channels in fully dynamic channel assignment mode.

The MxL86x software environment 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 MTI**

Microelectronics Technology Inc. (MTI) is a technology company that has specialized in wireless communication product development, manufacturing and global sales for more than 30 years. Based on the core competence in microwave and RF technology, MTI has established a leading position in the fields of microwave radios, satellite ODUs and receivers, mobile base station components and broadband wireless access products. With this excellent record of accomplishment, MTI has established long-term partnerships with world’s leading communication equipment providers. For more information, please visit [www.mtigroup.com](http://www.mtigroup.com).

## **About MaxLinear, Inc.**

MaxLinear, Inc. (NYSE: MXL), a leading provider of radio frequency (RF) and mixed-signal

integrated circuits for cable and satellite broadband communications, the connected home, data center, metro, long-haul fiber networks, and wireless infrastructure markets. MaxLinear is headquartered in Carlsbad, California. For more information, please visit [www.maxlinear.com](http://www.maxlinear.com).

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### **Cautionary Note About Forward-Looking Statements**

This press release contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. Forward-looking statements include, among others, statements concerning or implying future financial performance or trends and growth opportunities affecting MaxLinear, including statements related to the performance of MaxLinear's MxL868. 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. Forward-looking statements are based on management's current, preliminary expectations and are subject to various risks and uncertainties, including (among others) risks relating to integration of our recently announced acquisitions of assets from Microsemi Corporation and from Broadcom; 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; currently pending intellectual property litigation; and the potential for additional 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, including our most recent Annual Report on Form 10-K for the fiscal year ended December 31, 2015 as amended by Amendment No. 1 filed with the SEC on April 28, 2016; our subsequent Quarterly Report on Form 10-Q for the quarters ended March 31, 2016 and June 30, 2016; and our Current Reports on Form 8-K. 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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