

Blue Danube Selects MaxLinear Clock Jitter Cleaner Product for Massive MIMO Wireless Systems

• MaxLinear's new PM7531 provides ultra-low jitter clock that enhances system performance for BeamCraft™ product

BARCELONA, Spain--(BUSINESS WIRE)-- MaxLinear Inc. (NYSE: MXL), a leading provider of radio frequency (RF) and mixed-signal integrated circuits for the connected home and wired and wireless infrastructure markets, today announced that Blue Danube has selected its PM7531 as the high-accuracy clock generator in its next-generation massive MIMO product, BeamCraft[™].

Blue Danube's BeamCraft[™] products generate agile 3D beams for unparalleled accuracy in spectrum power placement to improve capacity for 4G/5G networks. BeamCraft systems can be easily mounted onto existing antenna locations on towers and buildings and support both AWS and PCS frequency bands. Recently, Blue Danube concluded commercial trials of the industry's first FDD massive MIMO system.

The PM7531 is an ultra-low power clock synthesizer with an integrated jitter attenuator that delivers the industry's lowest output phase noise of -165dBc/Hz for a 122.88MHz carrier frequency measured at 800kHz offset. Operating at less than 700mW, the PM7531 integrates high-performance phase-lock loops (PLLs) and voltage-controlled oscillators (VCO) to generate and condition the precision system clocks and reference signals used inside wireless base station radio modules.

PM7531 features include multiple reference inputs, reference switching, short-term holdover, and JESD SYSREF generation, with programmable dividers and delay for each of 18 outputs. Its ultra-low output jitter enhances radio system performance for next-generation 4G/5G macrocell base stations, active antenna systems (AAS), small cells, software-defined radios (SDR), digital broadcast, wired communications, test and measurement, and medical imaging applications.

"MaxLinear's clock product family has been very well received by major telecom customers because of its high level of integration, unmatched phase noise performance, and lowest power consumption – all of which are required to power best-in-class wireless infrastructure radios," said Brendan Walsh, Vice President of Marketing, Wireless Infrastructure Group. "We're pleased to enable the high-performance architecture of Blue Danube's BeamCraft™ products."

"MaxLinear's PM7531 provides the ultra-low jitter clock and proven performance we need to

quickly integrate and commercialize our active antenna products with existing infrastructure solutions," said Mihai Banu, CTO of Blue Danube Systems.

The PM7531 is available in volume quantities. For more information email: info@maxlinear.com.

About Blue Danube Systems

Blue Danube Systems provides mobile wireless communications solutions that significantly and cost-effectively expand network capacity to enhance quality of service. The company's proprietary approach combines reliable hardware and intelligent software to enable a significant increase in capacity, utilizing existing infrastructure and today's mobile devices. Blue Danube Systems is backed by investors including Sequoia Capital, Northgate and AT&T and has locations in Warren, NJ and Santa Clara, CA. Blue Danube Systems is listed among *EE Times* Silicon 60 and is a winner of *FierceWireless* Fierce 15 for 2016. For more information, please visit <u>www.bluedanube.com</u>.

About MaxLinear

MaxLinear, Inc. (NYSE: MXL), a leading provider of radio frequency (RF) and mixed-signal integrated circuits for the connected home and wired and wireless infrastructure markets. MaxLinear is headquartered in Carlsbad, California. For more information, please visit <u>www.maxlinear.com</u>.

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 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 PM7531. 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 the forward-looking statements. Forward-looking statements are based on management's current, preliminary expectations and are subject to various risks and uncertainties. The closing of recent acquisitions of wireless infrastructure assets from Microsemi and Broadcom present particular risks associated with our ability to integrate the acquired businesses, and maintain relationships with employees, customers, and vendors. In addition, our current expectations with respect to the size of the available market and growth opportunities in future years are subject to substantial management assumptions that are themselves subject to material risks and uncertainties. Additional risks and uncertainties that could affect our assumptions and expectations with respect to the completed acquisitions that also generally affect our business, operating results, financial condition, and stock price, include, intense competition in our industry; our dependence on a limited number of customers for a substantial portion of our revenues; uncertainties concerning how end user markets for our products will develop; potential uncertainties arising from continued consolidation among cable television and satellite operators in our target markets and continued consolidation among competitors within the semiconductor

industry generally; our ability to develop and introduce new and enhanced products on a timely basis and achieve market acceptance of those products, particularly as we seek to expand outside of our historic markets; potential decreases in average selling prices for our products; risks relating to intellectual property protection and the prevalence of intellectual property litigation in our industry, including pending litigation against us by a third parties in the United States District Court in Delaware and Superior Court of California; our reliance on a limited number of third party manufacturers; and our lack of long-term supply contracts and dependence on limited sources of supply. 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, 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.

View source version on businesswire.com: http://www.businesswire.com/news/home/20170227005335/en/

MaxLinear Inc. Press Contact:

The David James Agency LLC David Rodewald, +1 805-494-9508 david@davidjamesagency.com or MaxLinear Inc. Corporate Contact: **Brendan Walsh** Vice President, Wireless Infrastructure Tel: 760-692-0711 bwalsh@maxlinear.com or Media Contacts for Blue Danube Systems: US/North America Mike Newson, 617.803.5385 (call or text) Babel PR mike@babelpr.com or EMEA Paul Campbell, +44 (0)7986.385.807 Babel PR Paul@babelpr.com

Source: MaxLinear Inc.