



FOR IMMEDIATE RELEASE

## MaxLinear Introduces Optimized Power Management IC for Low Power FPGAs and SoCs

- *5-Output Universal PMIC, designed to meet the power requirements of a broad range of low power FPGAs, DSPs, and microprocessors*
- *Includes a conditional sequencing engine suitable for nearly any processor*
- *Integrated 8-bit ADC with 2 external inputs and temperature monitoring provides telemetry and flexibility*

CARLSBAD, Calif. – March 6, 2018 – MaxLinear, Inc. (NYSE:MXL), a leading provider of radio frequency (RF), analog and mixed-signal integrated circuits for the connected home, wired and wireless infrastructure, and industrial and multimarket applications, today announced a Universal PMIC specifically designed to power a broad range of low power FPGAs, DSPs, and microprocessors. This perfect power companion is a great fit for FPGAs and SoCs used in embedded computing systems, IoT clients, industrial control systems, POS terminals and test equipment.

The MxL7704 includes four synchronous step-down buck regulators that provide system, memory, I/O and core power from 1.5A to 4A. An on-board 100mA LDO provides clean 1.5V to 3.6V power for analog sub-systems. This PMIC utilizes a conditional sequencing state machine that is flexible enough to meet the requirements of virtually any processor. The MxL7704-X and MxL7704-A are the first standard configurations to be launched based on this unique universal PMIC.

The MxL7704-X has been optimized for powering the Xilinx® Zynq® Ultrascale+™ ZU2 and ZU3 MPSoCs. The bucks are pre-programmed to provide the core rail (0.85V up to 4A), LPDDR3 memory power (1.35V), I/O and system power (1.8V and 3.3V). Sequencing is tailored to the unique needs of the ZU2 and ZU3 MPSoCs, offering accelerated time to market with Xilinx® Zynq® Ultrascale+™ ZU2 and ZU3 devices. The MxL7704-X adds to the existing selection of MaxLinear power delivery solutions available at [www.xilinx.com](http://www.xilinx.com) and [www.exar.com/xilinx](http://www.exar.com/xilinx).

The MxL7704-A is designed to power a wide range of ARM<sup>®</sup> Cortex<sup>®</sup>- based processors (A7, A9, and A53) which use a more conventional sequencing scheme where the I/O rails power up first and core is last. The bucks provide the 1.2V core rail, 1.35V LPDDR3 power, 1.8V and 3.3V rails for I/O and system power.

"We created the perfect companion PMIC by working very closely with high profile lead customers," said Tuomas Hollman, MaxLinear Senior Director of Marketing, Power Management Products. "The MxL7704 provides system designers with 5 rails pre-optimized for ease of use with a host of features that allow monitoring, telemetry and additional flexibility."

This PMIC offers a high 1MHz to 2.1MHz switching frequency and utilizes a current mode architecture with internal compensation. These features enable a very fast transient response to line and load changes without sacrificing stability or board space. An I2C interface allows dynamic voltage control on all outputs, status monitoring by channel, input voltage status, sequencing control and PGOOD routing. In addition, an on-board 8-bit ADC has 2 external inputs and die temperature monitoring. It operates over an input voltage range of 4V to 5.5V and includes fault protection features such as input under-voltage, overvoltage, overcurrent protection, and thermal protection.

#### **Availability**

The MxL7704-X and MxL7704-A are available now in a RoHS compliant, green/halogen free, industry standard 5mm x 5mm 32-pin QFN packages. Evaluation boards and samples are available at [www.exar.com/MxL7704](http://www.exar.com/MxL7704).

#### **About MaxLinear, Inc.**

MaxLinear, Inc. (NYSE:MXL), a leading provider of radio frequency (RF), analog and mixed-signal integrated circuits for the connected home, wired and wireless infrastructure, and industrial and multimarket applications. 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 Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended. Forward-looking statements include, among others, statements concerning the MxL7704 and statements concerning or implying the performance of MaxLinear's technologies, their potential use cases, and the potential impact of these technologies on our business and future operating results. 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. In particular, our future operating results are substantially dependent on our assumptions about market trends and conditions and our expectations with respect to recently completed acquisitions, including our ability to

integrate our recently completed acquisition of Exar Corporation. Additional risks and uncertainties arising from our operations generally and our recently completed acquisitions 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; indemnification obligations of Exar arising from a recent divestiture; the impact on our financial condition of acquisition indebtedness and cash usage arising from the Exar transaction; 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 our filings with the Securities and Exchange Commission (SEC), including the information under the caption "Risk Factors" in our Annual Report on Form 10-K for the year ended December 31, 2017. All forward-looking statements are based on the estimates, projections and assumptions of management as of the date of this press release, and MaxLinear is under no obligation (and expressly disclaims any such obligation) to update or revise any forward-looking statements whether as a result of new information, future events, or otherwise.

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