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## MaxLinear's MxL7704 Power Management IC Powers the Raspberry Pi 3 Model B+

- *Raspberry Pi selects MxL7704 Five Output Universal PMIC to power their new single-board computer, the Raspberry Pi 3 Model B+*

CARLSBAD, Calif.--(BUSINESS WIRE)-- 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 that Raspberry Pi has selected MaxLinear's MxL7704 Universal PMIC to power its latest single-board computer, the Raspberry Pi 3 Model B+.

The MxL7704 enables the Raspberry Pi 3 Model B+ to be more compact and flexible. The PMIC's I<sup>2</sup>C interface communicates with the computer's on-board SoC for dynamic voltage scaling, status monitoring, sequencing control and PGOOD routing. These unique features provide the Raspberry Pi 3 Model B+ with more knowledge and control of power status and performance than previous systems using discrete power management solutions.

In addition to added power management flexibility and functionality, the MxL7704 also decreases the space and number of components required to power the computer's SoC and surrounding ICs. A typical 4-channel analog power solution can utilize nearly 150 components. More components can be accommodated if soft-start, margining, or sequencing functionalities are implemented discretely. The MxL7704 supplies four power rails and a 100mA LDO, uses less than 80 components and includes many features not available in a basic analog solution. The IC is available in a compact, 5mm x 5mm QFN package.

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.

"We worked closely with Raspberry Pi all the way from product definition to product release," said Tuomas Hollman, MaxLinear Senior Director of Marketing, Power Management Products. "This very open collaboration resulted in the MxL7704, which provides 5 rails pre-optimized for ease of use in single-board computer systems, with a host of features that allow monitoring, telemetry and additional flexibility."

"Working closely with MaxLinear on the MxL7704 design has been great. Despite the challenging requirements and schedule, our close collaboration has been both a lot of fun and has resulted in a device that meets or exceeds our original engineering and commercial goals," said James Adams, Chief Operating Officer, Raspberry Pi. "The MxL7704 has

allowed us to improve both the output currents and efficiency of the power rails on the new Raspberry Pi 3 Model B+ as well as reduce the overall cost of the power-chain by removing the need for external sequencing and monitoring components (as compared to the Raspberry Pi 3 Model B)."

### **About Raspberry Pi**

The Raspberry Pi Foundation is a UK-based charity that works to put the power of digital making into the hands of people all over the world, so they are capable of understanding and shaping our increasingly digital world, able to solve the problems that matter to them, and equipped for the jobs of the future.

We provide low-cost, high-performance computers that people use to learn, solve problems and have fun. We provide outreach and education to help more people access computing and digital making. We develop free resources to help people learn about computing and how to make things with computers, and train educators who can guide other people to learn.

### **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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