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Pegatron 5G Selects MaxLinear's Sierra Radio SoC for their Next-Generation 5G Open RAN Macro Radio Unit

- *Highly integrated Radio System-on-Chip (SoC) accelerates Open RAN Radio Unit (O-RU) development with reduced size, weight, power, cooling, and cost.*

CARLSBAD, Calif.--(BUSINESS WIRE)-- MaxLinear, Inc. (Nasdaq: MXL), a leading provider of wireless infrastructure solutions, today announced that Pegatron 5G has selected Sierra, the company's single-chip Radio SoC, for their next generation PR2850 5G Macro Open RAN Radio Unit (O-RU). Pegatron is a global technology leader focusing on O-RAN-compliant solutions.

This press release features multimedia. View the full release here: https://www.businesswire.com/news/home/20251008466358/en/

Pegatron selects MaxLinear Sierra Radio SoC for carrier-grade 5G Open RAN Macro Radio

The PR2850 is Pegatron 5G's latest carrier-grade 5G Macro O-RU designed for Open RAN deployments. Purpose-built for performance and flexibility, the PR2850 combines high output power, TDD and FDD multi-band support, and advanced MIMO capabilities. Enabled by MaxLinear's Sierra Radio SoC, the PR2850 is a high-performance macro radio in an ultra-compact form factor with low power consumption. This balance of performance, efficiency, and size positions Pegatron 5G as a key partner in accelerating the global adoption of open, intelligent, and sustainable 5G networks. Pegatron will showcase the PR2850 at the upcoming India Mobile Congress 2025 (IMC 2025) in New Delhi from October 8 to 11 – Hall 1, stand #D10.

Sierra is an innovative Radio SoC that flexibly supports all major RU applications including traditional macro, massive MIMO, pico, and all-in-one small cells. Sierra integrates multiple sub-systems into a single chip, providing a complete software-programmable radio signal processing engine for O-RUs:

- Radio Frequency (RF) transceiver supporting up to 8 transmitters, 8 receivers, and 2 feedback receivers
- Digital Front End (DFE) with digital pre-distortion (DPD), crest factor reduction (CFR), and passive intermodulation (PIM) cancellation
- Low-PHY baseband processor supporting 5G, 4G, and NB-IoT air interfaces
- O-RAN Alliance Split 7.2x fronthaul interface

According to the August 2024 Open RAN Market Report from MarketsandMarkets, the global Open RAN market is projected to grow from USD 2.8 billion in 2024 to USD 20.9 billion by 2030 at a Compound Annual Growth Rate (CAGR) of 39.4%.

“Close collaboration between Pegatron 5G and MaxLinear dramatically accelerated the development of our new PR2850 5G Macro O-RU,” said CY Feng, General Manager of Pegatron Communication Products Business Group. “Sierra’s highly efficient PA linearization technology coupled with its superior system integration and flexibility enabled us to deliver highly competitive RUs with compact size and low power consumption. We’re grateful for MaxLinear’s technical support, which helped us accelerate our time to market.”

“MaxLinear is proud to support Pegatron 5G in our ongoing cooperation,” said Puneet Sethi, Vice President of MaxLinear’s Network Infrastructure & Carrier BU. “Sierra empowered Pegatron 5G’s development teams to rapidly and cost-effectively build high-performance Open Ran radio platforms. Sierra levels the playing field for Pegatron 5G to dramatically accelerate their deployment of cutting-edge Open RAN radios with global operators.”

About MaxLinear’s Sierra Radio SoC Solution

Sierra’s RF transceiver uses a low-power wide-band Zero-IF (ZIF) architecture and supports 8 transmitters (TX) and 8 receivers (RX) with 2 feedback receivers (FBRX). Each RX supports wide signal bandwidths up to 400MHz and each TX and FBRX supports signal bandwidths up to 900MHz. It can operate in 8T8R single-band or 2 x 4T4R multi-band configurations.

The digital front-end (DFE) integrates digital pre-distortion (DPD), crest factor reduction (CFR), passive intermodulation cancellation (PIMC), digital up conversion (DUC), and digital down conversion (DDC) blocks. MaxLinear's proprietary DPD/CFR technology, MaxLIN™, linearizes power amplifiers (PA) up to 400MHz of occupied bandwidth and dramatically improves PA energy efficiency while meeting spectral emission masks with margin. The PIMC block cancels passive intermodulation products in the uplink paths to improve receiver sensitivity and relax the specification of expensive RF filters. The DUC/DDC supports up to eight component carriers per transmit and receive path.

The Low-PHY baseband processor supports 4G, 5G, and NB-IoT air interfaces, including uplink PRACH processing. It is software configurable for different modes and parameters including dynamic spectrum sharing (DSS), bandwidth parts, mixed numerology, and windowing.

Sierra supports an O-RAN fronthaul Split Option 7.2x Category A interface with up to four 10 or 25Gbit/s Ethernet interfaces.

Sierra integrates an embedded CPU for system control. The CPU is an integrated quad-core Arm® A53 processor with Neon™ extensions. Each Arm® core has 1MB of internal SRAM and has access to an additional 8GB of external DRAM through a DDR controller.

For more information on Sierra RF Radio SoC or MaxLIN DPD linearization technology, visit:

- www.maxlinear.com/sierra
- www.maxlinear.com/maxlin

About MaxLinear, Inc.

MaxLinear, Inc. (Nasdaq: MXL) is a leading provider of RF, analog, digital, and mixed-signal integrated circuits for access and connectivity, wired and wireless infrastructure, and industrial and multimarket applications. MaxLinear is headquartered in Carlsbad, California.

For more information, please visit https://www.maxlinear.com/

About Pegatron 5G

Pegatron 5G draws on the expertise of PEGATRON, a global leader in electronics manufacturing. Established in 2018, Pegatron 5G focuses on O-RAN-compliant solutions for private networks and industrial transformation. Our product portfolio includes 5G radios, Integrated Small Cells, servers, networking equipment, and CPE devices, leveraging edge computing and network management capabilities.

For more information, please visit https://5g.pegatroncorp.com/

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 or implying future financial performance, statements relating to MaxLinear's Sierra Radio SoC and PR2850 and the functionality, performance and benefits of such technology, statements about the potential market opportunity and rate of growth for MaxLinear's Sierra Radio SoC, including the projected growth rate of the global Open RAN market, statements by our Vice President of MaxLinear's Network Infrastructure & Carrier BU and the General Manager of Pegatron Communication Products Business Group. 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 and our future financial performance and operating results forecasts generally. Forward-looking statements are based on management's current, preliminary expectations and are subject to various risks and uncertainties. In particular, our future operating results are substantially dependent on our assumptions about market trends and conditions. Additional risks and uncertainties affecting our business, future operating results and financial condition include, without limitation; risks relating to the development, testing, and commercial introduction of new products and product functionalities; risks relating to our relationship with Pegatron; risks relating to: our terminated merger with Silicon Motion and related arbitration and class action complaint and the risks related to potential payment of damages; the effect of intense and increasing competition; increased tariffs, export controls or imposition of other trade barriers; impacts of global economic conditions; the cyclical nature of the semiconductor industry; a significant variance in our operating results and impact on volatility in our stock price, and our ability to sustain our current level of revenue, which has previously declined, and/or manage future growth effectively, and the impact of excess inventory in the channel on our customers' expected demand for certain of our products and on our revenue; escalating trade wars, military conflicts and other geopolitical and economic tensions among the countries in which we conduct business; international geopolitical and military conflicts; our ability to obtain or retain government authorization to export certain of our products or technology; the loss of,

or a significant reduction in orders from major customers; legal proceedings or potential violations of regulations; information technology failures; a decrease in the average selling prices of our products; failure to penetrate new applications and markets; development delays and consolidation trends in our industry; inability to make substantial and productive research and development investments; delays or expenses caused by undetected defects or bugs in our products; substantial quarterly and annual fluctuations in our revenue and operating results; failure to timely develop and introduce new or enhanced products; order and shipment uncertainties and differences between our estimates of customer demand and product mix and our actual results; failure to accurately predict our future revenue and appropriately budget expenses; lengthy and expensive customer qualification processes; customer product plan cancellations; failure to maintain compliance with government regulations; failure to attract and retain qualified personnel; any adverse impact of rising interest rates on us, our customers, and our distributors and related demand; risks related to compliance with privacy, data protection and cybersecurity laws and regulations; risks related to conforming our products to industry standards; risks related to business acquisitions and investments; claims of intellectual property infringement; our ability to protect our intellectual property; security vulnerabilities of our products; use of open source software in our products; and failure to manage our relationships with, or negative impacts from, third parties.

In addition to these risks and uncertainties, investors should review the risks and uncertainties contained in our filings with the Securities and Exchange Commission, including our Current Reports on Form 8-K, as well as the information to be set forth under the caption "Risk Factors" in MaxLinear's Quarterly Report on Form 10-Q for the quarter ended June 30, 2025. 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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