



MaxLinear Announces Single-Chip Solution for 5G Open RAN Radio Units

- *New software-defined silicon platform accelerates the development of Open RAN radios with industry-leading size, weight, power, cost, and cooling*

CARLSBAD, Calif.--(BUSINESS WIRE)-- [MaxLinear, Inc.](https://www.maxlinear.com) (NASDAQ: MXL), today announced Sierra, a fully integrated System on Chip (SoC) for 4G/5G Open RAN (Radio Access Network) radio units (RU). This complete silicon and software solution provides RU designers with a flexible system building block to deliver Macro, Massive MIMO, and Small Cell radios for Open RAN applications with high performance, low power consumption, and short time-to-market. MaxLinear began work last year in a collaboration with Meta Connectivity to design the single-chip solution.

This press release features multimedia. View the full release here: <https://www.businesswire.com/news/home/20220223005600/en/>



Sierra integrates the following sub-systems into a single chip to provide a compact and complete software-programmable radio signal processing engine for Open RAN RUs:

- RF Transceiver supporting up to 8 transmitters, 8 receivers, and 2 feedback receivers
- Digital Front End

Single-Chip Solution for 5G Open RAN RUs Accelerates Massive MIMO, Macro, and Small Cell Radio Unit Time-to-Market (Graphic: Business Wire)

(DFE), powered by MaxLIN™ the industry's leading digital pre-distortion (DPD) and crest factor reduction (CFR) solution, and supporting digital up-conversion (DUC) and digital down-conversion (DDC) of component carriers

- Low PHY Baseband Processor supporting 5G, 4G, and NB-IoT air interfaces
- Fronthaul Interface compliant with O-RAN Alliance Split 7.2x

“Sierra is an ultimate integration of MaxLinear’s highest performance RF and system technologies. It empowers radio vendors to rapidly and cost effectively develop new

platforms with best-in-class size, weight, and power consumption for Open RAN applications,” said Brendan Walsh, Vice President of MaxLinear’s Wireless Infrastructure Group. “In this way Sierra represents a game-changing innovation that will level the playing field for wireless infrastructure vendors and can dramatically accelerate the global rollout of Open RAN without compromise on network performance or cost.”

“We are excited that MaxLinear is delivering this new radio silicon platform to the Open RAN ecosystem,” said Jaydeep Ranade, Director of Wireless Engineering for Meta Connectivity. “Through Evenstar and our contributions to the TIP OpenRAN Project Group, we are an industry champion of Open RAN reference designs for 4G and 5G networks. Sierra is fully aligned with these goals to make high performance, innovative Open RAN solutions globally available.”

“The availability of high-performance RF silicon platforms is a critical catalyst for the development of a truly competitive Open RAN radio ecosystem,” said Andy Dunkin, Open RAN RF and Digital Platform Development Manager at Vodafone Group. “Vodafone welcomes devices such as Sierra which promote and accelerate the Open RAN community’s goals of open interfaces and software-defined functions”.

“The Open RAN movement has come a long way and remains on track to drive 15% of the RAN market by 2026,” said Stefan Pongratz, Vice President at Dell’Oro. “New technologies that reduce barriers-to-entry without compromising performance, such as optimized RU silicon solutions, play an essential role to realize the broader Open RAN vision of not just open interfaces but also improved supplier diversity.”

More about Sierra:

At the heart of Sierra is MaxLIN™, the industry’s leading DPD solution for wideband power amplifier linearization.

- Its linearization performance exceeds the 3rd Generation Partnership Project (3GPP) and Federal Communications Commission (FCC) unwanted emissions requirements with margin while delivering high PA efficiencies of >50%.
- The MaxLIN platform is software configurable to optimally support different PA architectures, technologies, and power levels for all potential RU applications from macro to pico cells.
- Its advanced machine learning algorithms feature variable delay memory banks, flexible logic and MaxLinear enhancements to correct for both long term and short-term nonlinear dynamics including GaN charge trapping and thermal transients.

Sierra samples will be supported by a full range of evaluation platforms, software, and tools to facilitate early system development. Please contact wireless@maxlinear.com for more information.

MaxLinear will be conducting briefings on MaxLinear’s radio solutions at Mobile World Congress – Hall 2, meeting rooms 2B13MR and 2B17MR – from February 28 through March 3, 2022. For an appointment, please contact MWC2022@maxlinear.com.

About MaxLinear, Inc.

MaxLinear, Inc. (NASDAQ: MXL) is a leading provider of radio frequency (RF), analog, digital and mixed-signal integrated circuits for the connectivity and access, wired and wireless infrastructure, and industrial and multimarket applications. MaxLinear is headquartered in Carlsbad, California. For more information, please visit www.maxlinear.com.

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Cautionary Note About Forward-Looking Statements

This press release contains "forward-looking" statements within the meaning of federal securities laws. Forward-looking statements include, among others, statements concerning or implying future financial performance, anticipated product performance and functionality of our products or products incorporating our products, and industry trends and growth opportunities affecting MaxLinear, in particular statements relating to MaxLinear's Sierra single-chip solution and MaxLIN DPD and CFR solution, including but not limited to the ability of Sierra to contribute to the acceleration of the global Open RAN movement, forecasts regarding the percentage of the RAN market driven by the Open RAN movement, anticipated resources to support Sierra to facilitate early system development, potential market opportunities, functionality, and the potential benefits of use of such products. 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. We cannot predict whether or to what extent these new and existing products will affect our future revenues or financial performance. Forward-looking statements are based on management's current, preliminary expectations and are subject to various risks and uncertainties that could cause actual results to differ materially from those described in the forward-looking statements. Forward-looking statements may contain words such as "will be," "will," "expect," "anticipate," "continue," or similar expressions and include the assumptions that underlie such statements. The following factors, among others, could cause actual results to differ materially from those described in the forward-looking statements: intense competition in our industry and product markets; risks relating to the development, testing, and commercial introduction of new products and product functionalities; 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; impacts from public health crises, such as the Covid-19 pandemic, or natural disasters; and the potential for 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 risks and uncertainties arising from other factors affecting the business, operating results, and financial condition of MaxLinear, including those set forth in MaxLinear's most recent Annual Report on Form 10-K, Quarterly Reports on Form 10-Q, and Current Reports on Form 8-K, as applicable. 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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