Guerrilla RF High-Power GaN HEMT Models Now Available in Modelithics COMPLETE Library™

Modelithics and Guerrilla RF Collaborate to Deliver Nonlinear GaN-on-SiC HEMT Models from 15 W to 150 W P_{SAT} for Next-Generation RF Power Amplifier Designs

TAMPA, FL — May 13, 2026 — Modelithics®, the leading provider of high-accuracy RF and microwave simulation models, today announced that new high-power GaN models from Guerrilla RF, Inc. (OTCQX: GUER) — a leading provider of high-performance radio frequency (RF) and microwave semiconductors — have been added to the Modelithics COMPLETE Library™. These new nonlinear models were developed through Guerrilla RF's collaboration with Modelithics via the Sponsoring MVP (Modelithics Vendor Partner) Program.

The first set of models are now available for the following devices:

- **GRF0010** — 15 W P_{SAT}
- **GRF0020** — 30 W P_{SAT}
- **GRF0030** — 50 W P_{SAT}
- **GRF0065** — 80 W P_{SAT}
- **GRF0090** — 110 W P_{SAT}
- **GRF0135** — 150 W P_{SAT}

Models for additional power variants will continue to roll out over the course of the next few months.

The availability of these models marks the final step in commercializing Guerrilla RF's new GaN-on-SiC HEMT product line. All devices listed above are in production and readily available for purchase. For customers who depend on nonlinear models as a core part of their design process, these new additions are expected to significantly reduce overall development time and hence accelerate design-in activity.

> *"Market consolidation and competitor exits have created a real gap in high-power GaN — and Guerrilla RF exists to fill it. The surge in demand we're seeing for drone, counter-drone, and tactical radio applications requires ultra-wideband power amplifiers that perform without compromise. Our GaN-on-SiC HEMTs — spanning 5 W to 150 W, supporting 28 V and 50 V, and fully EAR99 compliant — were designed from the ground up to meet that challenge. Partnering with Modelithics to deliver these nonlinear models isn't just a technical milestone — it's the final unlock that gives engineers worldwide the design confidence to commit to GRF GaN and accelerate their programs. Becoming a Modelithics Sponsoring MVP and releasing these models puts the full modeling infrastructure in engineers' hands, so they can reduce costly prototype iterations and accelerate fielding of the systems our warfighters and commercial customers depend on."*
>
> **— Ryan Pratt, CEO & Founder, Guerrilla RF, Inc.**

Modeling Specifics

As part of the Sponsoring MVP collaboration, Modelithics has completed the development of six new nonlinear GaN HEMT models for Guerrilla RF devices, now available to designers worldwide within the Modelithics COMPLETE Library™:

- HMT GUR GRF0010 001 — models the 15 W unmatched GaN on SiC HEMT
- HMT GUR GRF0020 001 — models the 30 W unmatched GaN on SiC HEMT
- HMT GUR GRF0030 001 — models the 50 W unmatched GaN on SiC HEMT
- HMT GUR GRF0065 001 — models the 80 W unmatched GaN on SiC HEMT
- HMT GUR GRF0090 001 — models the 110 W unmatched GaN on SiC HEMT
- HMT GUR GRF0135 001 — models the 150 W unmatched GaN on SiC HEMT

These high-accuracy models are validated against measured broadband multi-frequency S-parameters and large-signal load-pull data, enabling designers to confidently simulate broadband RF power amplifier performance across a wide range of bias, frequency, and thermal conditions.

The new models leverage the Modelithics-Enhanced Angelov nonlinear formulation and include advanced features such as scalable bias control, electro-thermal self-heating effects, and intrinsic voltage/current sensing for waveform-based RF power amplifier design. They support 28 V to 50 V operation and are validated over relevant RF power and frequency ranges, making them well suited for applications including aerospace and defense, infrastructure, test and measurement, and industrial RF systems. These models are part of a growing Modelithics library for Guerrilla RF products, which also includes a large list of amplifier behavioral models.

> *"I'm excited to release these new Guerrilla RF GaN models in Modelithics COMPLETE Library™. This welcome collaboration is producing more of the up-to-date, high-demand content we aim to support for the RF design community. We are pleased to have Guerrilla RF expand their engagement with Modelithics through the Sponsoring MVP program and look forward to adding to the model portfolio as additional devices are released."*
>
> **— Larry Dunleavy, President & CEO, Modelithics**

The new models are available now in both Keysight Advanced Design System (ADS) and Cadence® AWR Design Environment simulators and may be accessed through the Modelithics COMPLETE Library™, as well as via 90-day free trial access of the entire Modelithics Guerrilla RF sub-library, including the new GaN HEMT models along with models for many other Guerilla RF Products. To learn more and request free access, visit: modelithics.com/mvp/guerrillarf.

Guerrilla RF's GaN Offering

The **GRF0010**, **GRF0020**, **GRF0030**, **GRF0065**, **GRF0090** and **GRF0135** are part of a broader family of discrete, unmatched GaN-on-SiC HEMTs ranging from 5 W to 150 W. These transistor cores natively support 50 V operation and are also compatible with 28 V supply rails.

Device variants with $P_{SAT} \leq 50$ W are housed in industry-standard 3×3 mm QFN-16 packaging, while transistors with power ratings greater than 50 W are housed in compact 6×3 mm DFN-14 packages.

All unmatched transistors in this family are EAR99 compliant, meaning they are not subject to U.S. export restrictions—a significant advantage for global customers. Given their broadband frequency coverage and high power ratings, these HEMTs are proving highly popular in both commercial and Aerospace & Defense markets. In particular, the broadband nature of these devices makes them ideal for:

- Tactical Radios
- UAS (Drone) Systems
- C-UAS (Counter-Drone) Applications

To learn more about Guerrilla RF's entire family of GaN devices, visit guerrilla-rf.com/GaN.

About Modelithics

Modelithics, Inc. (www.Modelithics.com) was formed in 2001 to address the industry-wide need for high-accuracy RF and microwave active and passive simulation models for use in Electronic Design Automation (EDA). Modelithics' premium product is the Modelithics® COMPLETE Library, containing highly scalable Microwave Global Models™ , and advanced behavioral models for a multitude of commercially available passive component families, as well as non-linear diode models, non-linear transistor models, and system-level component models. Modelithics' services also address a wide range of custom RF and microwave measurement and modeling needs. Modelithics product offerings, which support multiple EDA software platforms, also include the Modelithics mmWave Library, Modelithics System Components Library™, and the Modelithics COMPLETE+3D Library. Modelithics® is a registered trademark of Modelithics, Inc. Microwave Global Models™, and System Components Library are also trademarks of Modelithics, Inc. The Modelithics Vendor Partner (MVP) Program allows for collaboration and open communication during the development of advanced data sets and models for commercially available microwave components and devices, with flexible sponsorship and distribution arrangements for the resulting data and models. An example of such an arrangement is the Modelithics Qorvo GaN Library, a fully sponsored library distributed for free by Modelithics under the sponsorship of Qorvo®. Modelithics also offers a Standard and Custom Test Fixture and Accessory Product Line, for a family of thin film Probe Point™ Alumina substrate fixtures compatible with RF probing.

About Guerrilla RF

Founded in 2013, Guerrilla RF, Inc., develops and manufactures high-performance, state-of-the-art radio frequency (RF) and microwave semiconductors for wireless OEMs in multiple high-growth market segments, including network infrastructure for 5G/4G macro and small cell base stations, SATCOM, cellular repeaters/DAS, automotive telematics, military communications, navigation, and high-fidelity wireless audio. The Company has an extensive portfolio of 175+ high-performance RF and microwave semiconductor devices with 35+ new products in development. As one of the fastest-growing semiconductor firms in the industry, Guerrilla RF drives innovation through its R&D to commercialization initiatives and focuses on product excellence and custom solutions to underserved markets. The Company has shipped over 285 million devices. For more information, please visit https://www.guerrilla-rf.com/ or follow the Company on Twitter and LinkedIn.

Forward-Looking Statements

This press release may contain forward-looking statements within the meaning of Section 21E of the Securities Exchange Act of 1934 and the Private Securities Litigation Reform Act of 1995, which statements are inherently subject to risks and uncertainties. Forward-looking statements include projections, predictions, expectations, or beliefs about future events or results or otherwise are not statements of historical fact. Such

statements are often characterized by the use of qualifying words (and their derivatives) such as “expect,” “believe,” “estimate,” “plan,” “project,” “anticipate,” or other statements concerning opinions or judgments of the Company and its management about future events. You should not place undue reliance on forward-looking statements because they involve known and unknown risks, uncertainties, and assumptions that are difficult or impossible to predict and, in some cases, beyond the Company’s control. Actual results may differ materially from those in the forward-looking statements as a result of several factors, including those described in the Company’s filings with the SEC available at https://www.sec.gov. Forward-looking statements speak only as of the date they are made. The Company undertakes no obligation to revise or update information in this release to reflect events or circumstances in the future, even if new information becomes available.

Contacts

Angie Rogers, VP of Marketing & Sales
Modelithics, Inc.
+1 813 866 6335
arogers@modelithics.com

Jim Ahne, SVP of Marketing
Guerrilla RF, Inc.
+1 336 265 7760
jahne@guerrilla-rf.com