



Guerrilla RF's Automotive-Qualified Linear LNA for SDARS, Compensator and Automotive Connectivity

High gain, sub 0.9 dB NF and OP1dB > 23 dBm

Greensboro – February 19, 2019 – Guerrilla RF Inc., a leading provider of high performance MMICs, today introduces GRF4002-W, a new addition to the company's growing list of AEC-Q100 automotive-qualified linear LNAs. This amplifier is targeted at high-volume LNA/driver applications, with compensators and second-stage satellite radio LNAs being prime examples. It is offered in an ultra-small 1.5 x 1.5 mm DFN-6 package, thus sharing a common pin out with numerous other Guerrilla RF devices including the GRF400X and GRF201X device families.

“Guerrilla RF is proud to offer this new amplifier for automotive applications. It addresses an industry need for a cost-effective, linear LNA delivering outstanding RF performance with low power consumption over a wide frequency range. The device's flexible biasing capability allows for high levels of re-use with optimal efficiency over a wide range of linearity requirements,” said Alan Ake, vice president of applications and technical marketing at Guerrilla RF. “Furthermore, simple matching, along with the 1.5 mm DFN-6 package, results in a compact application footprint.”

According to Technavio's Global Automotive Antenna Module Market report, the market is expected to grow steadily at a compound annual growth rate of 7.66 percent to 1,549.24 million by 2021. The market is driven by several factors, including the rise of wireless connectivity in vehicles, the rising adoption of embedded cellular connectivity, the drive toward autonomous vehicles, economies of scale advantage in satellite antennas, the legislative push to have eCall in cars, and the growing popularity of the truck platooning system. Additionally, the average age of car buyers in developed regions like the United States is increasing, owing to higher disposable income.

About Guerrilla RF's New Automotive LNA

- The GRF4002-W can be operated over a range of V_{dd} from 1.8 to 5.0 V and I_{ddq} can be controlled independently from V_{dd}, thus allowing the device efficiency to be optimized for a given application requirement.
- The device can cover 700 to 2700 MHz with a single set of external components yielding gain: 16.0 dB, OP1dB: 23.5 dBm, NF: 0.85 dB at 2300 MHz with bias conditions of 5.0 V and 65 mA.

Pricing and Availability

GRF4002-W samples and evaluation boards are available now. Pricing for 10,000 parts is \$0.50.

About Guerrilla RF

Guerrilla RF provides high performance monolithic microwave integrated circuits (MMICs) to wireless infrastructure original equipment manufacturers in multiple market segments, including automotive, enterprise/carrier-class WiFi access points, small cells, wireless backhaul and cellular repeaters. Headquartered in Greensboro, N.C., the company was founded in April 2013 by Ryan Pratt and has introduced over 70 products to date. All trademarks are the property of their respective owners. For more information please visit guerrilla-rf.com or follow the company on [LinkedIn](#).

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