



Guerrilla RF Releases New Broadband, Low Noise, Linear, Single Control Amplifier with Low Loss Bypass

Features High Gain and Linearity, 0.8 dB Noise Figure, Low Current and Simple Broadband Matching for VHF to 3.8 GHz Applications

Honolulu – June 8, 2017 – Guerrilla RF Inc., a leading provider of high performance MMICs, today introduces GRF4142, joining a growing list of bypass amplifiers from Guerrilla RF. This amplifier is targeted at small cells, cellular boosters and other broadband, high-performance applications offering broadband frequency coverage with a minimal number of external components. 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 which addresses an industry need for a cost-effective, broadband Low Noise Amplifier/driver with integrated bypass delivering outstanding RF performance with low-power consumption over a wide frequency range,” said Alan Ake, vice president of applications and technical marketing at Guerrilla RF. “The device’s flexible biasing capability allows for high levels of reuse with optimal efficiency over a wide range of linearity requirements. GRF4142 uses Guerrilla RF’s common 1.5 mm DFN-6 layout and application schematic which supports a growing family of drivers and LNA devices.”

According to Research and Markets, the overall wireless network infrastructure market will witness tremendous growth over the coming years. At a compound annual growth rate of over 5 percent, the market will account for over \$104 billion in annual spending by the end of 2020.

About Guerrilla RF’s New Broadband Low Noise Amplifier

The GRF4142 can be operated over a range of V_{dd} from 1.8 to 5.0 volts 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 easily cover fractional bandwidths > 20 percent, with a single set of external components. Gain Mode performance of 1900 MHz, with Gain: 16.0 dB, OP1dB: 19.0 dBm, OIP3: 34 dBm, Noise Figure: 0.95 dB at 5.0 volts and 50 mA. Bypass Mode performance of 1900 MHz, with Gain: -1.5 dB, OP1dB: 20 dBm, OIP3: 40 dBm at 5.0 volts and << 1.0 mA.

Pricing and Availability

GRF4142 samples and evaluation boards are available now. Pricing for 10,000 parts is \$0.65. Production is scheduled for Q3 2017.

About Guerrilla RF

Guerrilla RF provides high performance monolithic microwave integrated circuits (MMICs) to wireless original equipment manufacturers in multiple market segments, including enterprise/carrier-class WiFi access points, small cells, wireless backhaul, automotive and cellular repeaters. The company's patented Guerrilla Armor™ technology enables greater coverage area and higher data rates for wireless networks. Headquartered in Greensboro, N.C., the company was founded in April 2013 by Ryan Pratt. To date it has raised \$7.8 million in funding and has over 30 products shipping in production volumes. All trademarks are the property of their respective owners. For more information, please visit <http://guerrilla-rf.com> or follow the company on [LinkedIn](#).

###