GaN RF Unmatched Power Transistor Boasts Improved Performance

RF Micro Devices, a global leader in the design and manufacture of high-performance radio frequency components and compound semiconductor technologies, released the RF3932, a 75-watt, highly efficient gallium nitride (GaN) RF unmatched power transistor (UPT) that delivers superior performance versus competing GaAs and silicon power technologies.

The release of the RF3932 follows the recent release of the 140-watt RF3934, which is the highest output power device in RFMD’s UPT family. RFMD plans to release a third GaN UPT device in the first calendar quarter of 2011, significantly expanding the GaN power transistor options available to RFMD’s customers.

RFMD's GaN unmatched power transistors support “green” architectures that reduce energy consumption, improve thermal management and optimize network efficiency for network operators. The RF3932 operates over a broad frequency range (DC to 3GHz) and delivers high peak efficiency of >65%. Additionally, the RF3932 incorporates simple, optimized matching networks external to the package, providing wideband gain and power performance advantages in a single amplifier. The RF3932 is packaged in a hermetic, flanged ceramic two-leaded package that leverages RFMD's advanced heat sink and power dissipation technologies to deliver excellent thermal stability and conductivity. The 75-watt RF3932 and the 140-watt RF3934 are optimal for both driver and/or output stages, depending on overall power requirements.

Bob Van Buskirk, President of RFMD's Multi-Market Products Group (MPG), said, “RFMD is very pleased to expand our GaN-based product portfolio, offering industry-leading power performance in support of diverse end markets. RFMD’s GaN product portfolio clearly demonstrates our commitment to technology and product leadership, and we look forward to introducing additional GaN devices that feature superior power density, high efficiency, rugged dependability and “green” power consumption advantages.”

RFMD's 48-volt, high power-density GaN semiconductor process features high RF power density and efficiency, low capacitance, and high thermal conductivity. This

unique combination of features enables the development of compact and efficient high power amplifiers (HPAs) for a broad range of applications, including private mobile radio (PMR), 3G/4G wireless infrastructure, ISM (industrial scientific & medical), military and civilian radar and CATV transmission networks

RFMD will showcase a broad portfolio of industry-leading RF components at the electronica 2010 trade show in Munich Germany, November 9 through November 12. Product brochures will be available at the RFMD booth (#A4.136), and datasheets can be obtained via RFMD's website at www.rfmd.com [1] or by contacting RFMD at 336-664-1233.

For more information, please visit RFMD's web site at www.rfmd.com [1].

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