Infineon Introduces Next-Generation GOLDMOS® Technology and High-Power RF Transistors for High Linear Efficiency

June 28 2004

Munich, Germany – June 28, 2004 – Infineon Technologies AG is introducing the next generation of its GOLDMOS® LDMOS (laterally diffused metal-oxide semiconductor) die technology for high-performance, high-power RF transistors that will enable amplifier developers to design more reliable and cost-effective linear amplifiers. In addition to leading-edge linear efficiency, ultra-wide-bandwidth performance and reduced memory effect, the new Infineon GOLDMOS High-Power RF Transistors will provide the industry's best thermal performance. The GOLDMOS transistors will be integrated into products designed for use in UMTS/WCDMA, GSM, CDMA, EDGE, TDSCDMA, PCS/DCS, MMDS, TV broadcast and DAB amplifiers.

The new GOLDMOS technology reflects the company's commitment to advanced LDMOS wafer fabrication processes for high-power RF transistors that set new performance standards for tomorrow's wireless networks. Infineon continues to support gold metallization because of its proven superior reliability at high temperatures. In combination with the company's extensive packaging engineering and advanced semiconductor modeling experience, the new process technology has resulted in high-power RF transistors that set new performance standards.

"Our engineering teams developed and introduced this next-generation silicon and packaging, with the best performance in the industry, in less than a year," said Johan Tingsborg, Vice President and General Manager,

Wireless Infrastructure, Secure Mobile Solutions Business Group, at Infineon Technologies. "This shows the dedication Infineon has to the wireless infrastructure market. We will continue with an even higher level of determination because we are committed to this market and to helping our customers meet the challenges of RF power management for future wireless networks."

Technical information on GOLDMOS High-Power RF Transistors

Infineon's new GOLDMOS High-Power RF Transistors provide leading-edge linear efficiency (a typical 10 percent improvement compared to the previous generation), ultra-wide-bandwidth performance, reduced memory effect, and the industry's best thermal performance. For example, one of the first products incorporating the new technology is the single-ended, 100-watt PTFA211001E 2.1 GHz device. In 2-carrier WCDMA 3GPP mode, this device has an average output of 22 watts and 16.5 dB gain with 30 percent efficiency. It has an ultra-wide-bandwidth of several hundred MHz, third-order intermodulation distortion (IM3) performance of -37 dBc and a thermal resistance of only 0.38°C/W.

With a 30 percent increase in power density and higher terminal impedance compared to its previous-generation GOLDMOS, Infineon is bringing a new family of power transistors to market that is targeted at today's most advanced amplifier applications, which require high peak-to-average power levels over wide bandwidths. The thermal performance of the GOLDMOS transistors is significantly improved over previous-generation transistors, achieving the lowest junction temperatures compared to other RF power transistors available in the market, emphasizing Infineon's dedication to delivering the industry's most reliable devices.

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Availability

Initial GOLDMOS product samples will be available in the 3rd quarter of 2004, with full production beginning in the 4th quarter of 2004. Additional information on Infineon's RF power products is available at: www.infineon.com/wireless

Citation: Infineon Introduces Next-Generation GOLDMOS® Technology and High-Power RF Transistors for High Linear Efficiency (2004, June 28) retrieved 10 May 2024 from https://phys.org/news/2004-06-infineon-next-generation-goldmos-technology-high-power.html

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