

## World's Most Integrated GSM/GPRS Entry Phone Platform

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Infineon Technologies AG (FSE/NYSE: IFX) today announced its E-GOLDradio<sup>TM</sup> chip, a GSM/GPRS single-chip which combines a quadband radio transceiver part with a base band processor. The E-GOLDradio enables the base band and RF functionality to be realized on a board space of less than 4 square centimetres which is about 30 percent less than the area previously occupied by two-chip solutions. Featuring E-GOLDradio, Infineon is able to provide the word's most integrated platform. The new BP3 platform comprises all hardware and software components necessary to design a mobile phone, such as power management, filter, power amplifier, memory as well as a GSM/GPRS protocol stack and application framework (APOXI) with a reference man-machine interface.

Furthermore, the E-GOLDradio reduces the bill of material by about 30 percent through the elimination of external components, such as capacitors and discrete components which were necessary in a two-chip solution for the communication between RF and base band logic within a mobile phone. Particularly designers of clamshell or slider mobile phones are expected to significantly benefit from higher design flexibility due to the chip's high-integration and exceptionally small foot print of only 9 mm x 9 mm. The E-GOLDradio chip is especially suited for use in cost-driven mid-range and low-range mobile phones where it supports numerous functionalities without the necessity of an additional companion chip, such as camera, dual display, polyphonic ringer and MP3 playback.



"Infineon ranks first in overcoming the technical challenges of monolithic integration of GSM/GPRS ICs thus, again, reinforcing its leading position in the wireless semiconductors space, as we did before, being the first in the world to offer a two-chip GSM/GPRS solution and a single-chip Bluetooth product," said Kin Wah Loh, Member of the Management Board, and head of the Communications business group at Infineon Technologies. "With the introduction of the E-GOLDradio, and the platform BP3, we enable our customers to achieve a faster time-to-market through the provision of a complete solution. The BP3 comprises a very attractive form factor hardware reference design featuring the E-GOLDradio and all necessary software. The Infineon software suite has been proven in more than 30 million phones."

## **Technical details on E-GOLDradio (PMB 7870)**

The E-GOLDradio is the latest member of Infineon's successful E-GOLD family. It integrates the complete functionality of two CMOS chips already produced in high-volume: Infineon's base band chip, E-GOLDlite (PMB 7860), and its sophisticated quadband RF transceiver, SMARTi SD2 (PMB 6270). Without compromise in performance, E-GOLDradio provides the highest monolithic integration level of all available GSM/GPRS solutions in the market. Infineon successfully overcame one of the most-challenging issues when integrating base band logic and RF part close to each other on one single chip, such as crosstalk attenuation. The new IC supports up to GPRS class 12.

The package dimensions of E-GOLDradio are only 9 mm x 9 mm. Mobile phone manufacturers benefit from an extremely compact GSM/GPRS system design for entry level phones with best-in-class system costs.

World's most integrated GSM/GPRS entry phone platform Infineon will offer the E-GOLDradio as the key component of a comprehensive platform solution, the BP3. The BP3 is a small form-



factor hardware reference design featuring all necessary hardware components comprising E-GOLDradio, power supply, memory, keypad, camera and colour displays. The platform comes with a comprehensive software solution containing Infineon's GSM/GPRS Release 99 protocol stack, the APOXI (Application Programming Object-oriented Extendable Interface) application framework and MMI (Man-Machine-Interface) reference implementation. The APOXI significantly simplifies integration of further applications, such as e.g. Push-to-Talk, Java MIDP2.0, Bluetooth, MP3, MMS and allows to shorten customization times by several months in order to meet specific operator requirements or special regional aspects.

The BP3 platform is based on Infineon's BP2 platform already available that supports the GSM/GPRS cellular standards and includes all hardware and software components required for mobile entry phones. Sized only ten square centimeters, BP2 features an integrated-camera phone solution for picture taking and sending through MMS without need of companion chip. Additionally, BP2 provides polyphonic-ringing, multi-color display support, WAP, Java 1.0, and basic MMI. BP2 supports GPRS class 10. It features Infineon's E-GOLDlite base band processor and SMARTi SD2 RF transceiver.

## **Availability**

First samples of the E-GOLDradio are available. Start of high-volume production is scheduled for end of 2005. BP3 is expected to be available end of 2005.

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