

# PMB 8876

S-GOLD<sup>2</sup>™-Multimedia Engine with  
Advanced EDGE Modem Functionality



S-GOLD<sup>2</sup>™ is the latest member of Infineon's successful S-GOLD® baseband family. It combines advanced EDGE modem technology with the latest multimedia functions required for tomorrow's mobile phones. Its unique architecture makes S-GOLD<sup>2</sup>™ the ideal fit for feature-enhanced terminals, allowing for minimum cost system solutions at minimum space requirements.

Centered around the powerful ARM®926 CPU, S-GOLD<sup>2</sup>™ provides the horsepower needed for power-greedy software applications. Additionally it hosts on-chip hardware for the latest multimedia features, such as high-resolution display interface, dedicated camera interface, hardware support for MPEG4 encoding, Java hardware accelerator, and a large number of connectivity peripherals. MMS for still picture and video, 3D gaming, Java applications, 3GPP compliant video streaming are just a few of the latest applications that are easily supported with S-GOLD<sup>2</sup>™.

S-GOLD<sup>2</sup>™'s high integration level of the key feature set keeps system size and cost at a minimum. To accommodate for more demanding feature requirements S-GOLD<sup>2</sup>™ can easily be upgraded with multimedia ICs via its standardized multimedia interface. Its architecture provides the scalability needed to enable cost-efficient as well as top-of-the-line phones with a single baseband IC.

Combined with Infineon's SMARTi™ RF devices and S/M POWER™ power management ICs, S-GOLD<sup>2</sup>™ allows for a true 3-chip quad-band EDGE solution.

## Applications

- GSM/E-GPRS/GPRS multimedia phones with tomorrow's multimedia requirements
- Minimum space E-GPRS/GPRS data modules supporting up to multislot class 12

## Key Benefits

- High integration level of key multimedia features allowing for minimum cost system solutions with the right feature set
- Proven leading-edge modem technology with second generation E-GPRS evolution
- Feature flexibility through upgrade options with multimedia chips via standardized interface
- Connectivity to Bluetooth, FM Radio, WLAN, A-GPS and other modules
- Software compatibility to other members of the S-GOLD® family
- Complete software suite available from Layer1 up to application software based on APOXI™ API
- 3G upgradeable with WCDMA coprocessor

## Key Application Features

- ARM®926 based single modem and application processor with cache support and fast tightly-coupled memories
- Parallel/serial display interface supporting high resolution color displays
- ITU-R BT.656 compliant camera interface supporting camera applications of up to 2 MPixel
- MPEG4/H.263 encoder hardware (MOVE® coprocessor)
- MMC/SD interface, SD IO capable
- USB 2.0 on-the-go, full speed
- Fast IrDA
- Dedicated NAND flash controller supporting burst mode and error detection
- Standardized multimedia extension interface (MMIC-IF) supporting external hardware accelerator ICs such as complex display/camera modules or graphic accelerators
- 3 bi-directional digital audio interfaces (I<sup>2</sup>S) to connect audio companion ICs and Bluetooth modules
- Support for video streaming

## Key Modem Features

- GSM/E-GPRS/GPRS modem supporting up to multislot class 12
- FR, HR, EFR, AMR
- HSCSD class 10
- SAIC
- DTM class 9
- Polyphonic ringer support for up to 40 voices at up to 48 kHz sampling rate
- MP3 decoder
- Echo cancellation/noise reduction
- GTT/TTY

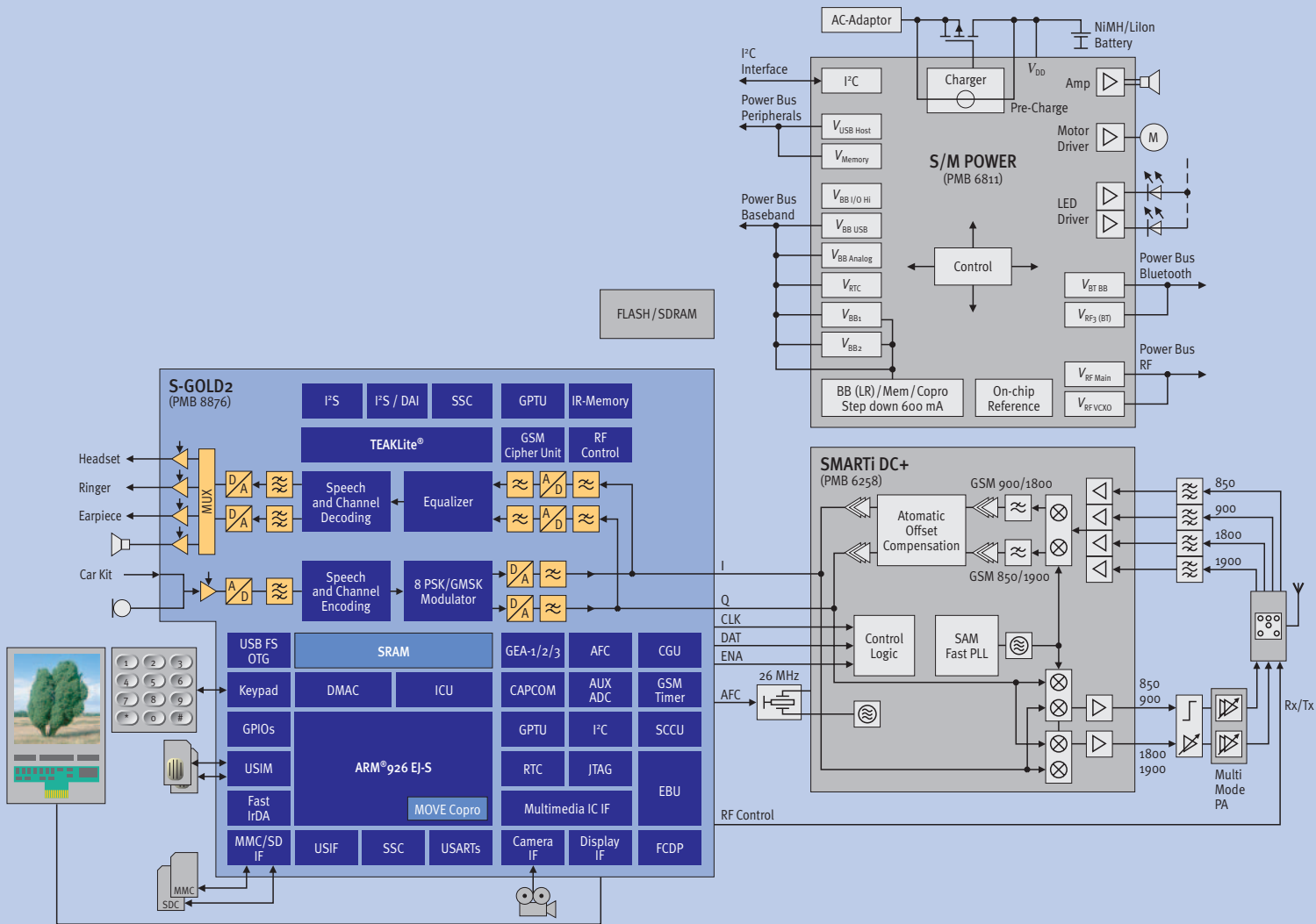
[www.infineon.com/mobilesolutions](http://www.infineon.com/mobilesolutions)

Mobile Solutions



Never stop thinking.

## Example for Quad-Band E-GPRS Solution



Note: TEAKLite® is a registered trademark of ParthusCeva, Ltd.  
ARM® is a registered trademark of ARM, Ltd.

How to reach us:  
<http://www.infineon.com>

Published by  
Infineon Technologies AG,  
St.-Martin-Strasse 53,  
D-81669 München

© Infineon Technologies AG 2004.  
All Rights Reserved.

Template: pb\_tmplt.fm/4/2004-01-01

### Attention please!

The information herein is given to describe certain components and shall not be considered as a guarantee of characteristics. Terms of delivery and rights to technical change reserved.

We hereby disclaim any and all warranties, including but not limited to warranties of non-infringement, regarding circuits, descriptions and charts stated herein.

### Information

For further information on technology, delivery terms and conditions and prices please contact your nearest Infineon Technologies Office.

### Warnings

Due to technical requirements components may contain dangerous substances. For information on the types in question please contact your nearest Infineon Technologies Office.

Infineon Technologies Components may only be used in life-support devices or systems with the express written approval of Infineon Technologies, if a failure of such components can reasonably be expected to cause the failure of that life-support device or system, or to affect the safety or effectiveness of that device or system. Life support devices or systems are intended to be implanted in the human body, or to support and/or maintain and sustain and/or protect human life. If they fail, it is reasonable to assume that the health of the user or other persons may be endangered.

Ordering No. B134-H8392-x-x-7600  
Printed in Germany  
PS 02042. NB