

# PMB 8875

## S-GOLDlite-Advanced Single-Chip GSM/GPRS Baseband Controller



S-GOLDlite is Infineon's latest single-chip baseband controller for use in next-generation GSM/GPRS mobile terminals. It is part of Infineon's S-GOLD™ family comprising an EDGE-capable device as well as a GPRS multislot class 12 solution to satisfy your specific application needs. Combining all analog and digital radio functions on a single chip, S-GOLDlite is suited for cost-optimized high-feature multimedia phones. The GSM/GPRS best-in-class modem functionality is combined with high-performance application capability based on a 124 MHz ARM®926 CPU enabling a variety of applications with a lot of headroom for personalizing your system. It provides the horsepower to support top-of-the-line multimedia features such as integrated camera, MMS, high-resolution color display, Java, and polyphonic ringing tones making it the perfect fit for high-volume, consumer-oriented terminal platforms. Combined with Infineon's SMARTi SD CMOS RF device and S/M POWER management IC, S-GOLDlite enables a 3-chip quad-band solution at minimum cost and space requirements.

### Applications

- GSM/GPRS multimedia phones with high feature requirements
- Data modules with GPRS support up to class 12

### Key Benefits

- Single-chip modem and application processor
- Leading-edge modem technology
- Cost-optimized 3-chip system solution with low-power CMOS RF device
- Complete software suite available from Layer 1 up to application software based on APOXI API

### Key Features

- ARM 926-based single modem and application processor with cache support and fast tightly-coupled memories
- On-chip SRAM
- USB On-The-Go support
- TEAKLite®-based DSP subsystem
- Jazelle® Java hardware accelerator
- Advanced static and dynamic power management
- DMA support for many peripherals
- Support of A53/GEA-3 cipher algorithm
- Interface to Bluetooth module
- I<sup>2</sup>C bus interface
- I<sup>2</sup>S PCM digital audio I/Os
- Hifi stereo voiceband

### Firmware

- FR, HR, EFR, AMR
- GPRS class 12, CS 1..4
- HSCSD class 10
- Echo cancellation
- Noise reduction
- E-OTD
- GTT/TTY
- MP3 decoder
- Polyphonic ringer

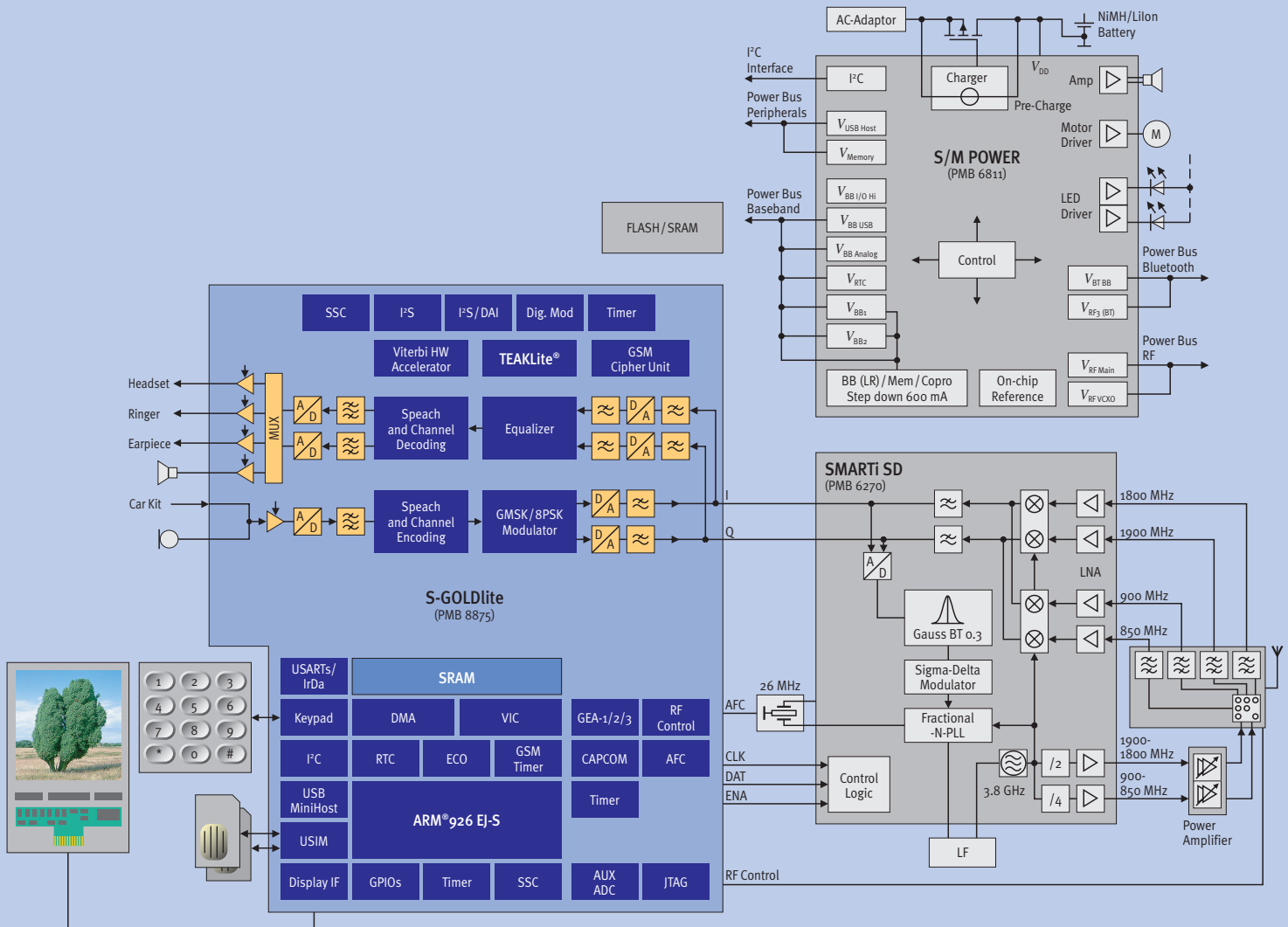
S-GOLDlite is already in mass production. Samples and evaluation boards are available at your request.

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

Mobile Solutions



## Application Example GPRS Quad-Band System 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.