**PMB 8876**  
**S-GOLD2™-Multimedia Engine with Advanced EDGE Modem Functionality**

*S-GOLD2™* 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-GOLD2™* 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-GOLD2™* 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-GOLD2™*.

*S-GOLD2™*’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-GOLD2™* 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-GOLD2™* 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 evolvement
- 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 Layers 1 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 (I²S) 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
- SAC
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

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Example for Quad-Band E-GPRS Solution

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