



# PMB 6811

## S/M POWER

### Power Management for Cellular Systems

S/M POWER is a highly integrated Power and Battery Management IC for mobile handsets and provides all power supply functions for complete systems ranging from GSM over GPRS up to EDGE smart phones and modules.

It has been optimized for usage with Infineon's S-GOLD family based systems in conjunction with cellular RF transceiver like SMARTi-DC+ and SMARTi-SD as well as Infineon's single chipsolution for Bluetooth. The low power system performance required in market demanding feature rich terminals can be ensured with this advanced power management concept at best in class system costs and highest system integration level.

#### Applications

- System Powermanagement IC for all GSM/GPRS/EDGE Mobile Phones and Data Modules

#### Features

- Support of dedicated standby power-down concept for S-GOLD family
- Charger for NiMH and Li-Ion/Polymer batteries including precharge current generator
- Highly efficient DC/DC step-down converter
- Low-drop-out (LDO) regulators for system memory devices
- LDO regulators for baseband I/O supply
- Low-noise LDO regulators for RF devices
- LDO regulator for analog mixed-signal section of S-GOLD
- Supply for Infineon's single chip solution Bluemoon Single
- USB interface support for peripheral and mini-host mode
- Vibra driver fully programable
- 400 mW Audio amplifier for handsfree and Polyringer
- RTC regulator with ultra-low quiescent current
- Backlight LEDs driver with dimming function
- Two single LED driver outputs for signalling
- Fully controllable by software via I<sup>2</sup>C-Bus
- Interrupt channels for peripherals
- System debug mode
- Based on robust 0.5 μm BiCMOS technology

#### Package

- P-VQFN48-4 package with heat sink and non-protruding leads
- Smallest board footprint of 7x7 mm
- Superior thermal characteristics can handle up to 2 Watt

#### Documentation/Development and Support Tools

- Product Overview
- Specification
- User Manual
- Application Note
- Evaluation Board

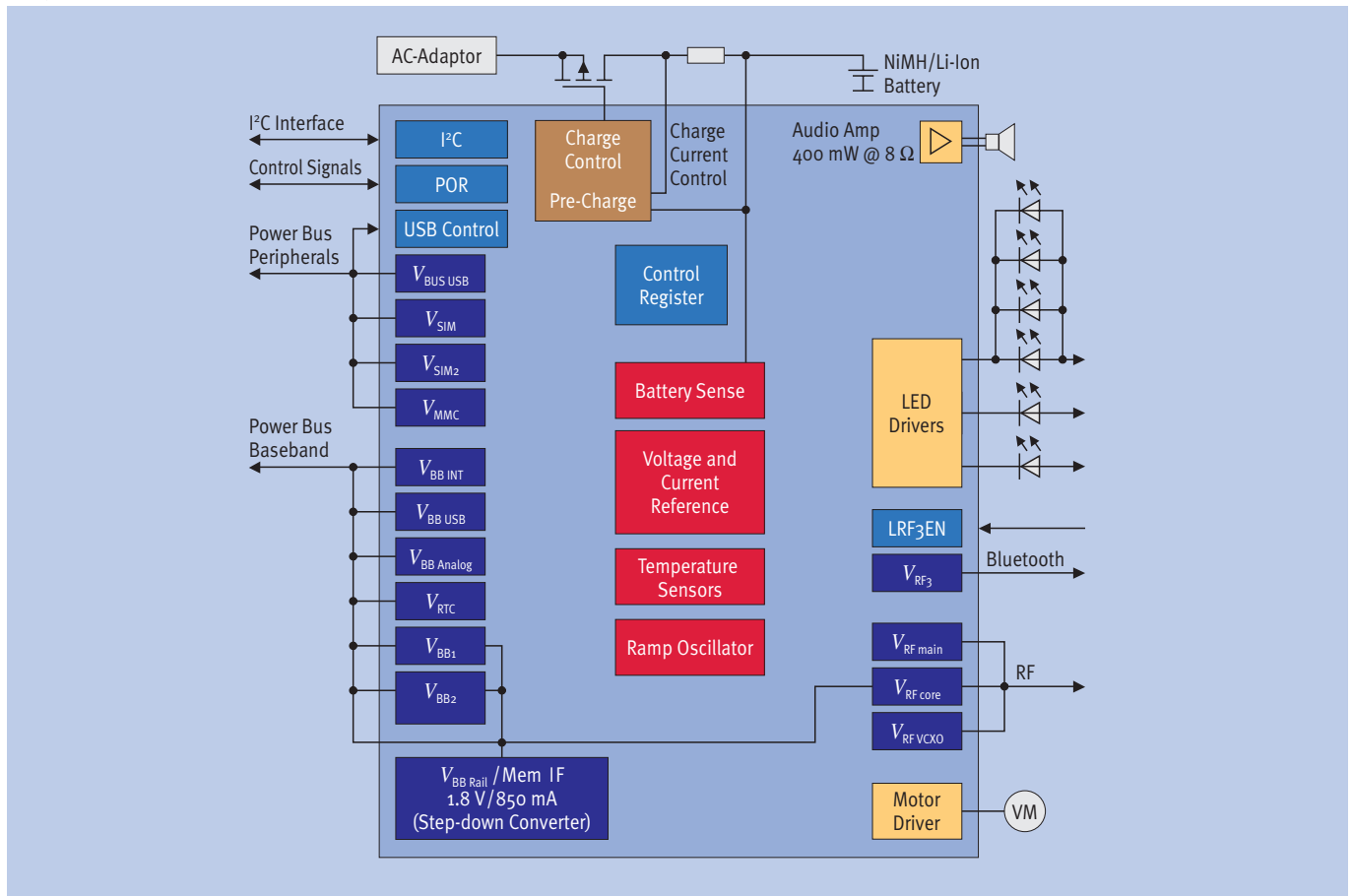
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## Mobile Solutions



Never stop thinking.

## Top Level Architecture for S/M POWER



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