

SGCPMU\_01\_TSMC\_CM018MG

## PMU – POWER MANAGEMENT UNIT

### Features

- Reverse Protected Charger Regulator
- Audio Grade DC/DC Buck Regulator
- Programmable MIC BIAS Regulator
- *Li-Ion* Low Power Battery Charger
- RC Oscillator (262.144kHz)
- Low-Dropout Regulators
- I<sup>2</sup>C serial interface (100kHz)
- Advanced Power Controller w/ Power On Reset

### Applications

- SoC

### General Description

*SGCPMU\_01\_TSMC\_CM018MG* is a *Power Management Unit* with a battery charger, supported by a *JTM ΣΔ ADC* for voltage and temperature monitoring. The *SGCPMU\_01\_TSMC\_CM018MG* voltage and current thresholds for charging can be programmed in an on-chip OTP. The *SGCPMU\_01\_TSMC\_CM018MG* also includes three *DC/DCs*, two *LDOs*, one *MICBIAS*, three *Led Drivers*, a *Test Block* and a *Real Time Clock (RTC)*. The *RTC* is designed to be the controller of the *PMU*. The *Test Block* supports different test modes, targeting production and characterization. The *SGCPMU\_01\_TSMC\_CM018MG* is specified from  $T_j = -40^{\circ}\text{C}$  to  $+125^{\circ}\text{C}$ .

### Quick Reference

SYMBOL	DESCRIPTION	MIN	TYP	MAX	UNIT
$V_{IN}$	Input Voltage	3.40	—	5.50	V
$V_{BAT}$	Battery Voltage	2.80	—	4.90	V
$I^2C_{Freq}$	I <sup>2</sup> C Frequency	—	100	—	kHz

### Applications Diagram