

COMMITMENT TO CUSTOMER SUCCESS SINCE 2008

RTC AND PMU
CONTROLLER

Features

- · Nano power Real Time Clock (RTC) with 32kHz oscillator
- PMU control: individual regulators enable / disable control in high / low / ultra-low / adaptive ultra-low power
- Ultra-low power adaptive mode (Ludicrous)
- · Configurable supply domains isolation support
- Configurable reset and shutdown causes
- · Anti-temper mechanisms
- Different wake sources
- 48-bit time counter, 32-bit general-purpose register and 2 alarms
- Ultra-low leakage design
- Fast start-up time

General Description

SGC22300_01_GF_22FDSOI is a Real Time Clock (RTC) based on the leading SGC21510 solution. Using advanced analog design techniques, to guarantee ultra-low power and ultra-low leakage, it was designed to be the brain of the Power Management Unit (PMU). Controlling the state of each regulator of the PMU, it defines if the regulators are in high, low, ultra-low or adaptive ultra-low power mode. Additionally, it includes anti-temper mechanisms, wake, reset or shutdown causes, that can be masked, allowing also to configure the effect of a reset. Being specified from TJ = -40°C to 125°C, it also includes ultra-low leakage configuration registers to allow the system architect to save the status bits.

Applications

- Time keeping applications
- · Wireless Power devices
- Metering devices

Quick Reference

SYMBOL	DESCRIPTION	MIN	TYP	MAX	UNIT
V _{AVDD}	Analog Sup.	1.10		1.98	V
V _{DVDD}	Digital Sup.	0.70	-	0.90	V
F _{CLK}	XTAL Freq.	-	32.768		kHz