

PL8351

Single Phase DLMS Metering Controller

OVERVIEW

The PL8351 is an ultra-low-power mixed-signal processors consist of several devices featuring different sets of peripherals targeted for energy meter applications. They integrate analog front end and fixed function DSP solution with an ARM Cortex M0 32-bit MCU, RTC and LCD driver in a single chip. PL8351 also support the I2C, UART, PWM and timer interface for peripheral connection.

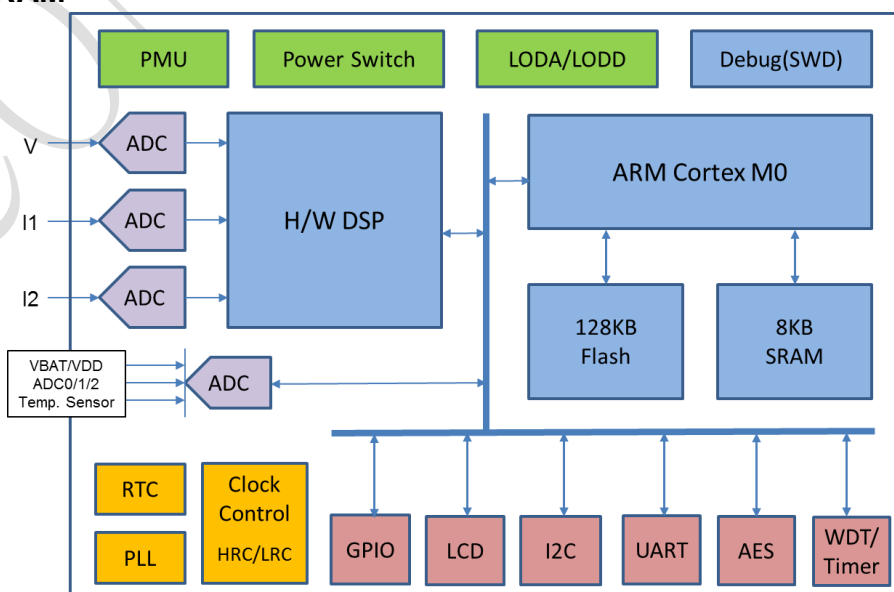
The PL8351 build in 128KB Flash for program space and 8KB internal SRAM memory for program. It also integrates three ADC channels and EMP (Energy Meter Processor) for 1V2I meter application.

The PL8351 build in internal and AES accelerator. It supports AES128, 192 and 256 encryption and decryption for security data communication. It reduces the program memory size requirement, MCU operation load and makes it easy to integrate complicated designs. The programming is very easy and supports ARM SWD two wire serial debug interface. No external voltage is required for programming.

FEATURES

- Wide supply voltage range: 2.4V to 5V
- Ultralow power consumption
 - Normal mode: 3.9mA
 - Low Power Mode: 2.3mA
 - Suspend mode: 3.7uA
 - Sleep Mode: 2.9uA
- Dual core architecture
- Individual energy meter processor (EMP)
- Multi-power saving mode function
- Internal switch between VDD and battery inputs
- Built-in Watch-dog timer
- Internal AES-128/192/256 encryption engine
- Build-in I2C, UART, IO and LCD interface
- RTC build-in temperature compensation
- Wake-up from standby mode in less than 5us
- 64-LQFP(10x10) package

BLOCK DIAGRAM



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