## SINGLE PHASE ENERGY METER REFERENCE PLATFORM [A SINGLE-CHIP SOLUTION]

**MODEL: SE04EM38086** 

The Single Phase Energy Meter reference platform mentioned here is designed based on the Single-Chip solution using the Renesas 16-bit microcomputer, H8/300H Super Low Power series, H8/38086F only.

This design implementation is without the usual external metering IC and **reset IC**. Hence it is believed to help reduce the number of components and overall product cost, which is essential for this market segment.

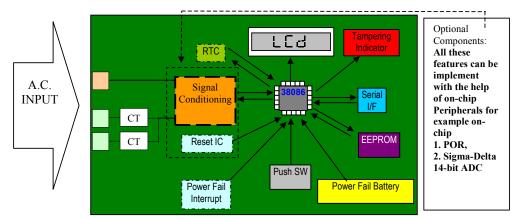
The reference design complies with the accuracy class 1.0 standard according to IEC standards, IS13779 as well the CBIP standard from India.

## **Key Features**

- Single-MCU solution without external Metering IC
- Single-Phase, 240VAC, 50Hz, 10~60Amps
- Accuracy Class 1.0 compliance to IEC & CBIP standard
- Renesas's H8/38024 MCU
- Active Energy & Apparent Energy display
- · Power Factor, Maximum Demand
- · LCD display, Power On LED indicator
- ELT and REV LED indicator
- Multi-Tariffs function: 4 Tariff type (with 6 slots)
- Power Fail Battery operation (Optional)

- Storage of past 9 months records and 88 tampering events
- Real Time Clock for Date and Time indication
- · Anti-Tampering handling and indications
- Scroll Buttons
- Small PCB size: 4" x 4"
- Auto-Scrolling and Manual Scrolling
- Communication Interface supported:
- RS-232 or Optical
- Data collection and Calibration software (for Demonstration purpose only)
- Compliance to IEC Standard, IS standard as well as CBIP technical report

## **System Configuration**



Promotion Devices					
Microcomputer Series	Promotion Devices	Product Part No.			
H8/300H SLP series	H8/38086	HD64F38086R			