

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

MODEL: SE04EM38024

The Single Phase Energy Meter reference platform mentioned here is designed based on the Single-Chip solution using the Renesas 8-bit microcomputer, H8/300L Super Low Power series, H8/38024F only.

This design implementation is without the usual external metering 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)
- Storage of past 6 months records
- Real Time Clock for Date and Time indication
- Anti-Tampering handling and indications
- Scroll Buttons
- Small PCB size: 3" x 3"
- 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.
H8/300L SLP series	H8/38024	TBD