



**THE DATASHEET OF  
MAX71335LECQ+**




# MAX71335L

## ZON P3/P3L Polyphase Electricity Meter SoC

Best-in-Class Metrology Performance and Custom Peripherals

 NDA Required. Request Full Data Sheet  Subscribe

 Active: In Production.

### OVERVIEW

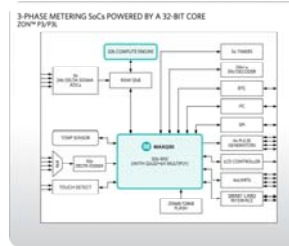
#### Description

The ZON™ P3L/P3 (MAX71334L/MAX71335L) metering SoC (systems on chip) integrates dual 32-bit processors for polyphase metering applications. It contains 256KB flash (ZON P3) or 128KB flash (ZON P3L), 12KB RAM and a single-cycle 32 x 32 + 64 multiplier. The application processor (CPU) is a 32-bit MAXQ®30 core. The metrology processor is a proprietary compute engine (CE), a 32-bit RISC processor dedicated to computing the metering parameters from voltage and current samples.

#### Key Features

- Dual-Core Architecture for Improved System Performance and Flexibility
  - Dedicated 32-Bit DSP Compute Engine for Metrology Processing
  - MAXQ30 32-Bit RISC MPU Core, Up to 10 MIPS (at 10MHz), with 256kB Flash or 128kB Flash, and 12kB data RAM

#### MAX71334L, MAX71335L: Diagram



Enlarge+

#### Applications/Uses

- Polyphase electricity meters
- Polyphase energy monitoring
- Smart Meters

- Advanced AFE with High Accuracy and Temperature Stability
- Four Independent ADCs Measuring Four Current Channels and Three Voltage Channels
- 0.1% Wh Accuracy over 2000:1 Current Range
- Digital Temperature Compensation for Metrology and RTC
- 40Hz–70Hz Line Frequency Range, Phase Compensation ( $\pm 10^\circ$ )
- Low-Power 5ksps Auxiliary ADC for Environmental Monitoring
- On-Chip Digital Temperature Sensor
- Highly Integrated Product Features and Flexible Peripherals Support Broad Application Needs
  - LCD Controller Supporting Up to Eight Common Planes
  - Two PWM Control Channels with Programmable Frequency, Duty Cycle, Ramp Time
  - Two Touch Switch Inputs
  - Oscillator Based on 32kHz Watch Crystal with Internal 24MHz Backup R/C Oscillator
  - SPI (Master and Slave), Master I<sup>2</sup>C

- Four UARTs (Configurable Pins), Smart Card Interface, 38kHz IR Decoder
- 100-Pin LQFP

## Looking for pricing, stock, or lifecycle information?

Click below to explore more details on WIN SOURCE:

 [View MAX71335LECQ+ on WIN SOURCE](#)

 [Maxim Integrated](#) Information

## Optimize Your Supply Chain with WIN SOURCE Solutions

-  Global Sourcing Solution
-  Obsolete Management
-  Cost Control Management
-  Shortage Management
-  Alternative Solution
-  Excess Inventory Management