



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts,Customers Priority,Honest Operation,and Considerate Service",our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



## Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China




# MAX71334L

## 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

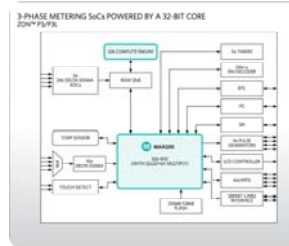
#### Description

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