MAX71071, MAX71071H

Dual-Channel Isolated Metrology ADCs

Eliminate Current Transformers with Isolated ADC

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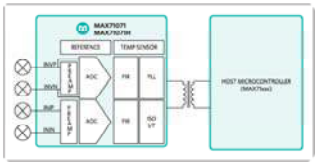
OVERVIEW

Description

The MAX71071/MAX71071H are dual-channel isolated analog-to-digital converters (ADCs) for use with a compatible MAX71xxx host. The device provides current and voltage measurements to the host while the host provides control, command, and power to the MAX71071/MAX71071H. A pulse transformer provides the isolated data, clock, and power path between the device and host, eliminating the need for additional isolation components in the measurement subsystem.

MAX71071, MAX71071H: Block Diagram



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Key Features

- 0.1% Accuracy Over 2000:1 Current Range
- Exceeds IEC 62053/ANSI C12.20 Standards
- Compatible with Shunt Resistors as Low as 50µΩ
- On-Chip Temperature Sensor Enables Localized Digital Temperature Compensation by the MAX71xxx
- Dual 24-Bit ADC
- Powered from the MAX71xxx Using Pulses Sent Through the Transformer
- 1.4mA Typical Consumption
- On-Chip Power Monitoring
- Industrial Temperature Range
- Small 10-Pin µMAX® Package

Applications/Uses

- Industrial Energy Meters
- Residential Energy Meters
- Smart Grid Monitoring