

Reduced Power Time-to-Digital Converter with AFE, RTC, and Flash

DESCRIPTION

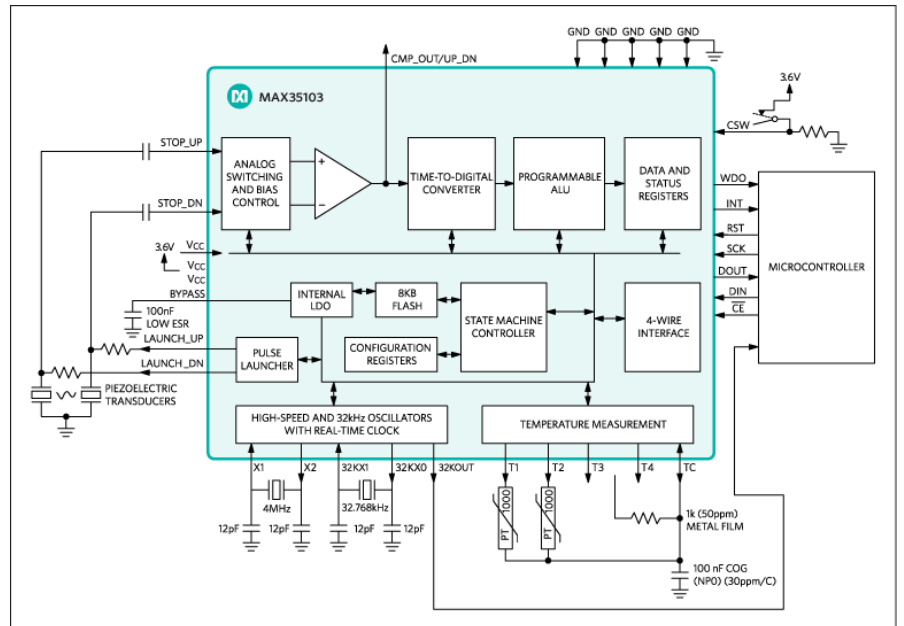
The MAX35103 is a time-to-digital converter with built-in amplifier and comparator targeted as a low-cost analog front-end solution for the ultrasonic heat meter and flow meter markets. It is similar to the MAX35101, but consumes about half the average power and increases the maximum ToF measurement frequency in event timing mode from 2Hz to 16Hz.

With a time measurement accuracy of 20ps and automatic differential time-of-flight (ToF) measurement, this device makes for simplified computation of liquid flow.

Key Features

- High Accuracy Flow Measurement for Billing and Leak Detection
- High Accuracy Temperature Measurement for Precise Heat and Flow Calculations
- Maximizes Battery Life with Low Device and Overall System Power
- High-Integration Solution Minimizes Parts Count and Reduces BOM Cost

BLOCK DIAGRAM



Order

Part Number	Sensing Element	PGA Gain	Calibration Method	Output Type	I _{CC} (mA) typ	Interface	V _{SUPPLY} (V)	Budgetary Price
MAX35103	Ultrasonic Piezoelectric Transducer	Fixed	External microcontroller	Digital	0.006	SPI	2.3 to 3.6	\$150.00 @1

[See All Sensor Signal Conditioners \(12\)](#)

RELATED RESOURCES

