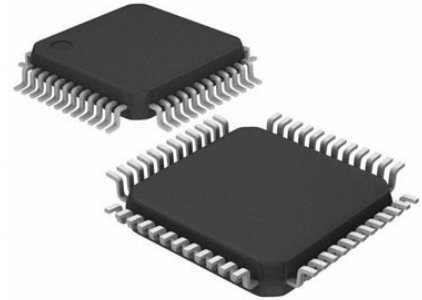


Temperature Sensor IC, Digital, $\pm 0.1^{\circ}\text{C}$, -40°C , 125°C , LQFP, 48 Pins

Manufacturers	Analog Devices, Inc
Package/Case	48-LQFP
Product Type	PMIC - Thermal Management
RoHS	Pb-free Halide free
Lifecycle	



Images are for reference only

Please submit RFQ for LTC2984HLX#PBF or [Email to us: sales@ovaga.com](mailto:sales@ovaga.com) We will contact you in 12 hours.

[RFQ](#)

General Description

The LTC2984 measures a wide variety of temperature sensors and digitally outputs the result, in $^{\circ}\text{C}$ or $^{\circ}\text{F}$, with 0.1°C accuracy and 0.001°C resolution. The LTC2984 can measure the temperature of virtually all standard (type B, E, J, K, N, S, R, T) or custom thermocouples, automatically compensate for cold junction temperatures and linearize the results. The device can also measure temperature with standard 2-, 3-, or 4-wire RTDs, thermistors, and diodes. It has 20 reconfigurable analog inputs enabling many sensor connections and configuration options. The LTC2984 includes excitation current sources and fault detection circuitry appropriate for each type of temperature sensor as well as an EEPROM for storing custom coefficients and channel configuration data.

The LTC2984 allows direct interfacing to ground referenced sensors without the need for level shifters, negative supply voltages, or external amplifiers. All signals are buffered and simultaneously digitized with three high accuracy, 24-bit $\Delta\Sigma$ ADC's, driven by an internal $10\text{ppm}^{\circ}\text{C}$ (maximum) reference.

Features

Directly Digitizes 2-, 3-, or 4-Wire RTDs, Thermocouples, Thermistors, and Diodes

On-Chip EEPROM Stores Channel Configuration Data and Custom Coefficients

Single 2.85V to 5.25V Supply

20 Flexible Inputs Allow Interchanging Sensors

Automatic Thermocouple Cold Junction Compensation

Built-In Standard and User-Programmable Coefficients for Thermocouples, RTDs and Thermistors

Measures Negative Thermocouple Voltages

Automatic Burn Out, Short-Circuit and Fault Detection

Buffered Inputs Allow External Protection

Simultaneous 50Hz/60Hz Rejection

Includes 15ppm°C (Max) Reference (I-Grade)

Application

Direct Thermocouple Measurements

Direct RTD Measurements

Direct Thermistor Measurements

Custom Sensor Applications

Related Products



[LT3763EFE](#)

Analog Devices, Inc
TSSOP28



[LT1038CK](#)

Analog Devices, Inc
TO-3



[LTC4417IUF](#)

Analog Devices, Inc
QFN-24



[LTC3440EMS](#)

Analog Devices, Inc
MSOP10



[LTC1966CMS8#PBF](#)

Analog Devices, Inc
MSOP-8P



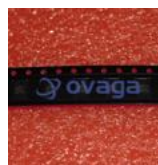
[LTC2990IMS#PBF](#)

Analog Devices, Inc
10MSOP



[LTM8045EX#PBF](#)

Analog Devices, Inc
BGA40



[LT4295IUFD#PBF](#)

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28-WFQFN