
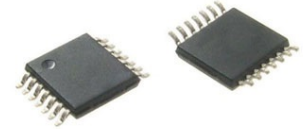


Sensor and Detector Interface 3.6V 1.2mA SPI Interface 14-Pin TSSOP

Manufacturer:	Maxim Integrated
Package/Case:	TSSOP14
Product Type:	Drivers
RoHS:	RoHS Compliant/Lead free 
Lifecycle:	Active



Images are for reference only

[Inquiry](#)

General Description

The MAX31856 performs cold-junction compensation and digitizes the signal from any type of thermocouple. The output data is formatted in degrees Celsius. This converter resolves temperatures to 0.0078125°C, allows readings as high as +1800°C and as low as -210°C (depending on thermocouple type), and exhibits thermocouple voltage measurement accuracy of ±0.15%. The thermocouple inputs are protected against overvoltage conditions up to ±45V. A lookup table (LUT) stores linearity correction data for several types of thermocouples (K, J, N, R, S, T, E, and B). Line frequency filtering of 50Hz and 60Hz is included, as is thermocouple fault detection. A SPI-compatible interface allows selection of thermocouple type and setup of the conversion and fault detection processes.

Key Features

- Supply voltage range is 3V to 3.6V
- Operating temperature range from -55°C to 125°C
- Includes automatic linearization correction for 8 thermocouple types
- 19bit, 0.0078125°C thermocouple temperature resolution
- ±0.7°C (max, -20°C to +85°C) cold-junction accuracy
- Detects open thermocouples, over and undertemperature fault detection

Application

Sensing & Instrumentation, Industrial

Recommended For You

MAX232ESE+

Maxim Integrated
SOP16

MAX14830ETM+

Maxim Integrated
TQFN48

MAX483ESA+

Maxim Integrated
SOP8

MAX232ACSE+T

Maxim Integrated

SOP-16

MAX6675ISA+T

Maxim Integrated

SOP-8

MAX7300AAX+

Maxim Integrated

SSOP-36

MAX485CPA+

Maxim Integrated

DIP8

MAX232CSE+

Maxim Integrated

SOP16

MAX3100EEE+

Maxim Integrated

SSOP16

MAX31855KASA+

Maxim Integrated

SOP-8

MAX22246CAWA+

Maxim Integrated

SOP-8

MAX3140CEI+

Maxim Integrated

SSOP28

MAX9860ETG+T

Maxim Integrated

TQFN-24

MAX3344EEUE+

Maxim Integrated

TSSOP-16

MAX9180EXT

Maxim Integrated

SC70-6