


Temp Sensor Digital Serial (SPI) 8-Pin SOIC N T/R

Manufacturer:	Maxim Integrated
Package/Case:	SOP8
Product Type:	Sensors, Transducers
RoHS:	RoHS Compliant/Lead free 
Lifecycle:	Active



Images are for reference only

[Inquiry](#)

General Description

The MAX31855 performs cold-junction compensation and digitizes the signal from a K-, J-, N-, T-, S-, R-, or E-type thermocouple. The data is output in a signed 14-bit, SPI-compatible, read-only format. This converter resolves temperatures to 0.25°C, allows readings as high as +1800°C and as low as -270°C, and exhibits thermocouple accuracy of ±2°C for temperatures ranging from -200°C to +700°C for K-type thermocouples. For full range accuracies and other thermocouple types, see the *Thermal Characteristics* specifications in the full data sheet.

FAQs: MAX31855

Key Features

- Supply voltage range from 3V to 3.6V
- Serial clock frequency of 5MHz
- Integration reduces design time and lowers system cost
- Detects thermocouple shorts to GND or VCC and open thermocouple
- 14bit, 0.25°C resolution converter
- Power supply current is 900µA
- Thermocouple input bias current is 100nA
- Temperature conversion time is 70ms and thermocouple conversion power-up time is 200ms

Application

- Appliances
- Automotive
- HVAC
- 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+

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MAX9860ETG+T

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