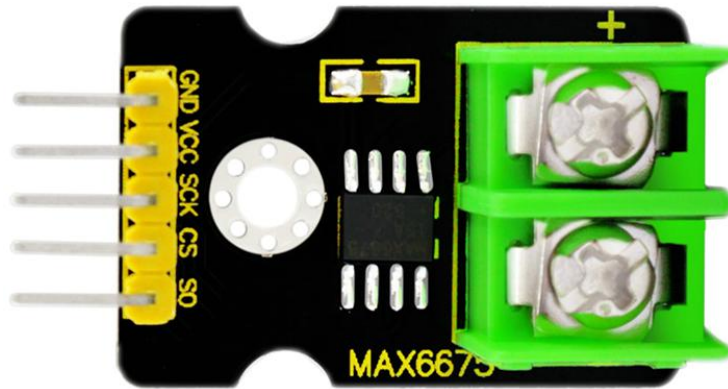


## Keystudio MAX6675 K-Thermocouple-to-Digital Converter Module



### Introduction

Keystudio MAX6675 K-Thermocouple-to-Digital converter module can independently perform functions of signal amplification, cold-junction compensation, linearization, A/D conversion and digital SPI Serial output.

MAX6675 is integrated with cold-junction compensation circuit, with simple 3-bit SPI-Compatible Serial Interface, digitalizing the signal from a type-K thermocouple and output in a 12-bit resolution.

This converter resolves temperatures to 0.25°C, allowing readings as high as +1023.75°C. Operating temperature range is among -20°C~80°C.

# keyestudio

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## Specification

1. Simple SPI Serial output
2. Temperature measuring range:  $0^{\circ}\text{C} \sim 1023.75^{\circ}\text{C}$
3. 12-Bit,  $0.25^{\circ}\text{C}$  Resolution
4. Integrated Cold-junction compensation circuit
5. High impedance differential input
6. Open Thermocouple Detection
7. Working voltage: 5V
8. Low power consumption
9. Operating temperature range:  $-20^{\circ}\text{C} \sim 80^{\circ}\text{C}$
10. ESD Protection (Human Body Model)