

# ADT7410 High Accuracy I2C Temperature Sensor Breakout Board

PRODUCT ID: 4089

Analog Devices, known for their reliable and well-documented sensor chips – has a high precision and high resolution temperature sensor on the market, and we've got a breakout to make it easy to use! The Analog Devices ADT7410 gets straight to the point – it's an I2C temperature sensor, with 16-bit 0.0078°C temperature resolution and 0.5°C temperature tolerance. Wire it up to your microcontroller or single-board computer to get reliable temperature readings with ease

The ADT7410 has 2 address pins, so you can have up to 4 sensors on one I2C bus. There's also interrupt and critical-temperature alert pins. The sensor is good from 2.7V to 5.5V power and logic, for easy integration.

We've got both Arduino (C/C++) and CircuitPython (Python 3) libraries available so you can use it with any microcontroller like Arduino, ESP8266, Metro, etc or

with Raspberry Pi or other Linux computers thanks to Blinka (our CircuitPython library support helper).

Each order comes with a fully tested and assembled breakout and some header for soldering to a PCB or breadboard. You'll be up and running in under 5 minutes!

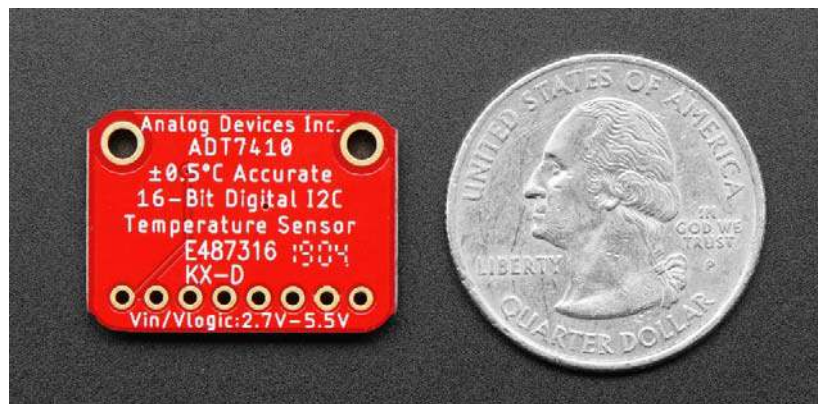
Thanks to Digi-Key and Analog Devices for sponsoring the development of this breakout board - we've made the PCB "Digi-Key red" in their honor!

## TECHNICAL DETAILS

- Wide input-voltage range: 2.7 V to 5.5 V
- Up to 16-bit temperature resolution (0.0078°C per lsb), default is 13 bits (0.0625°C per lsb).
- Highly accurate temperature tolerances:
  - $\pm 0.5^{\circ}\text{C}$  from  $-40^{\circ}\text{C}$  to  $+105^{\circ}\text{C}$  (2.7 V to 3.6 V)
  - $\pm 0.4^{\circ}\text{C}$  from  $-40^{\circ}\text{C}$  to  $+105^{\circ}\text{C}$  (3.0 V)
- Configurable I2C address allows up to four sensors on the I2C bus
- Operates over I2C, so only two shared lines required

Product Dimensions: 23.3mm x 16.5mm x 3.2mm / 0.9" x 0.6" x 0.1"

Product Weight: 1.4g / 0.0oz



<https://www.adafruit.com/product/4089/2-8-19>