



# Atmospheric Sensor Breakout - BME280 (with Headers)

SEN-13905

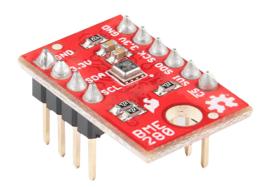
#### **Product Overview**

10/18/2022

For the most up-to-date information, visit <u>www.mouser.com</u> or the supplier's website.

### **Description**

SparkFun Atmospheric Sensor Breakout - BME280 (with Headers) is designed to measure barometric pressure, humidity, and temperature readings without too much space. This breakout board can measure atmospheric pressure from 30kPa to 110kPa and relative humidity and temperature. The BME280 atmospheric sensor breakout board provides a 3.3V SPI interface, a 5V tolerant I<sup>2</sup>C interface (with pull-up resistors to 3.3V), takes measurements at less than 1mA, and idles less than 5µA. This breakout board has 10 pins and no more than six are used simultaneously. The left side of the board provides



power, ground, and I<sup>2</sup>C pins. The other side of the board has the remaining pins which provide SPI functionality and have another power and ground. Applications include indoor/outdoor navigation, weather forecasting, home automation, and personal health and wellness monitoring.

#### **Features**

- 3.3V operation voltage
- I<sup>2</sup>C and SPI communications interface
- -40°C to 85°C operating temperature range
- Humidity range:
  - 0 100% RH, =-3% from 20-80%
- Pressure range:
  - 30,000Pa to 110,000Pa, relative accuracy of 12Pa, and absolute accuracy of 100Pa
- Altitude range:
  - 0 to 30,000ft (9.2km), relative accuracy of 3.3ft (1m) at sea level, and 6.6 (2m) at 30,000ft
- Compact size
- Pre-soldered headers





## **Mouser Part Number**

View Part

To learn more, visit <a href="https://www.mouser.com/new/sparkfun/sparkfun-atmospheric-sensor-breakout-bme280/">https://www.mouser.com/new/sparkfun/sparkfun-atmospheric-sensor-breakout-bme280/</a>