



## SparkFun Atmospheric Sensor Breakout - BME280 (Qwiic)

SEN-15440 ROHS

The SparkFun BME280 Atmospheric Sensor Breakout is an easy way to measure barometric pressure, humidity, and temperature readings, all without taking up too much space. Basically, you can find out anything you need to know about atmospheric conditions from this tiny breakout. The BME280 Breakout has been designed to be used in indoor/outdoor navigation, weather forecasting, home automation, and even personal health and wellness monitoring. Utilizing our handy Qwiic system, no soldering is required to connect it to the rest of your system. However, we still have broken out 0.1"-spaced pins in case you prefer to use a breadboard.

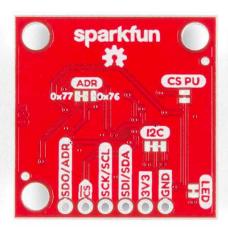
The on-board BME280 sensor measures atmospheric pressure from 30kPa to 110kPa as well as relative humidity and temperature. The breakout provides a 3.3V SPI interface, a 5V tolerant I<sup>2</sup>C interface (with pull-up resistors to 3.3V), can be configured to take measurements with less than 1mA of current draw.

The SparkFun Qwiic connect system is an ecosystem of PC sensors, actuators, shields and cables that make prototyping faster and less prone to error. All Qwiic-enabled boards use a common 1mm pitch, 4-pin JST connector. This reduces the amount of required PCB space, and polarized connections mean you can't hook it up wrong.

## **FEATURES**

- Operating Voltage: 1.71V-3.6V (Default on Qwiic System: 3.3V)
- I2C & SPI Interface
- Temperature Range: 0°C-65°C (32°F-149°F)
- Humidity Range: 0-100% RH
- Pressure Range: 300-1100 hPa (30,000-110,000 Pa or approx. 4.35-15.95 PSI)
- I<sup>2</sup>C Address: 0x77 (Default) or 0x76







https://www.sparkfun.com/products/15440/8-28-19