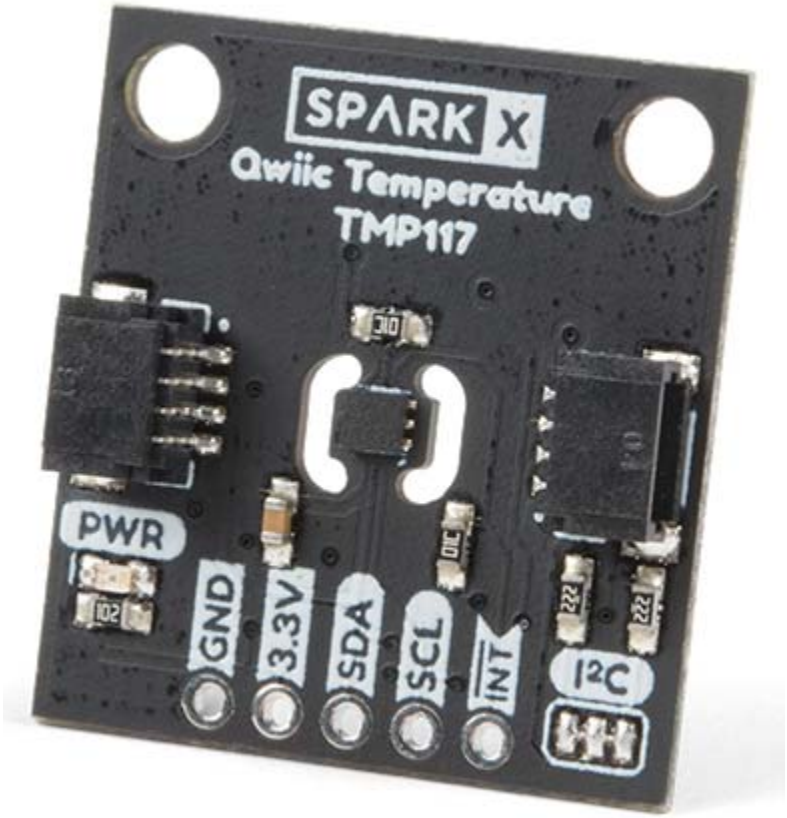


High Precision Temperature Sensor - TMP117 (Qwiic)

SPX-15413 ROHS

The TMP117AIDRVT is a high precision temperature sensor equipped with an I²C interface. It outputs temperature readings with high precision of +/- 0.1°C across the temperature range of -20°C to +50°Cs with no calibration. The sensors maximum range is from -55°C to 150°C. It also has a very low power consumption which minimizes the impact of self-heating on measurement accuracy. The sensor operates from 1.8V to 5.5V.

The sensor also includes programmable temperature limits, and digital offset for system correction. The TMP117 sensor is medical grade, meeting ASTM E1112 and ISO 80601-2-56 with NIST traceability.

While the TMP102 is capable of reading temperatures to a resolution of 0.0625°C and is accurate up to 0.5°C, the TMP117 is not only more precise but has a 16-bit resolution of .0078°C.

We've written an Arduino library to help you get started quickly. You can download the library through the Arduino library manager by searching '**SparkFun TMP117**' or you can get the GitHub repo as a .zip file and install the library from there.

This board is one of our many Qwiic compatible boards! Simply plug and go. No soldering, no figuring out which is SDA or SCL, and no voltage regulation or translation required!

We do not plan to regularly produce SparkX products so get them while they're hot!

Experimental Product: SparkX products are rapidly produced to bring you the most cutting edge technology as it becomes available. These products are tested but come with no guarantees. Live technical support is not available for SparkX products. Head on over to our forum for support or to ask a question.







https://www.sparkfun.com/products/15413 /7-22-19