



SparkFun Triple Axis Magnetometer Breakout - MLX90393 (Qwiic)

SEN-14571 ROHS Open Source Hardware

It's time to start utilizing the superior magnetometer, and what better way than to throw it onto an easy-to-use breakout board? The SparkFun MLX90393 Magnetometer Breakout is a triple-axis magnetic sensor board capable of sensing very small fields (like the Earth's magnetic field), while still behaving as one would expect during saturation in larger fields (like a nearby magnet). The MLX90393 breakout can be used as a compass sensor but also works well as a non-contact controller, a flow meter with a magnetic impeller, or a linear actuator position sensor. To make it even easier to get your readings, all communication is enacted exclusively via I²C, utilizing our handy Qwiic system. However, we still have broken out 0.1"-spaced pins in case you prefer to use a breadboard.

The MLX90393 features a resolution rate of 0.161 μ T with an operating voltage range of 2.2V to 3.6V at 100 μ A. This breakout is also equipped with a couple of jumper pads on the back of the board, a set that allows you to change the I²C address as well as one that can put the breakout into SPI mode (if I²C isn't your cup of tea).

The SparkFun Qwiic connect system is an ecosystem of I²C 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: 2.2V-3.6V
- Current Consumption: 100 μ A (Typ.)
- Operating Temperature: -20°C - 85°C
- Resolution: 0.161 μ T
- Max Full Scale Resolution: 44,000 μ T
- I²C Address: 0xC0
- 2x Qwiic Connection Ports

