SparkFun VR IMU Breakout - BNO080 (Qwiic)

SEN-14686

2







Previous Versions

DESCRIPTION | FEATURES | DOCUMENTS

- Operating Voltage: 1.65V - 3.6V
- I²C (Default): Up to 400kHz
- SPI: Up to 3MHz
- UART: 3Mbps
- Rotation Vector
  - Dynamic Error: 3.5°
  - Static Error: 2.0°
- Gaming Rotation Vector
  - Dynamic Error: 2.5°
  - Static Error: 1.5°
  - Heading Drift: 0.5° / min
- Geomagnetic Rotation Vector
  - Dynamic Rotation Error: 4.5°
  - Static Rotation Error: 3.0°
- Gravity Angle Error: 1.5°
- Linear Acceleration Accuracy: 0.35m/s²
- Accelerometer Accuracy: 0.3m/s²
- Gyroscope Accuracy: 3.1° / sec
- Magnetometer Accuracy: 1.4µT
- 2x Qwiic Connection Ports

Tags

ACCELEROMETER | BNO080 | BREAKOUT | GYROSCOPE | I2C | IMU | MAGNETOMETER | QWIIC | SENSOR | SPI | UART

SparkFun VR IMU Breakout - BNO080 (Qwiic) Product Help and Resources

TUTORIALS | VIDEOS | SKILLS NEEDED

Qwiic VR IMU (BNO080) Hookup Guide

APRIL 30, 2018

Figure out how things are oriented with the robust 9 degrees of freedom (DOF) BNO080 IMU. Maybe even make your own virtual reality (VR) applications if you're feeling savvy.

COMMENTS 13 | REVIEWS ★★★☆☆ 2

Customer Reviews

★★★☆☆ 3 out of 5

Based on 2 ratings:

5 star	1
4 star	0
3 star	0
2 star	0
1 star	1

Currently viewing all customer reviews.

★★★★★ Best MEMS gyro I've ever purchased (and I've bought most of 'em)!

about 3 months ago by cinti ✔ verified purchaser

IMHO, a gyro capable of keeping track of heading (i.e., integrating angular velocity) must have its own IMU for doing the calculations and filtering: this one has it! The Bosch BNO055 has one too but I found that gyro insensitive at low angular velocities. This one is very accurate with very little drift. This is the gyro that I've been waiting for (and have spent many s in my search).

★☆☆☆☆ Has issues.

about 2 months ago by Member #534057 ✔ verified purchaser

This IMU (2 boards tested) produces max of total range spikes on x,y,z at random intervals, both in-motion and not-in-motion (Using QWIIC and basic demo sketches provided)

> CF replied on January 2, 2020:
>
> It sounds like you may have received some damaged boards. Please contact our returns department by filling out the form on this page and we can get this fixed for you!