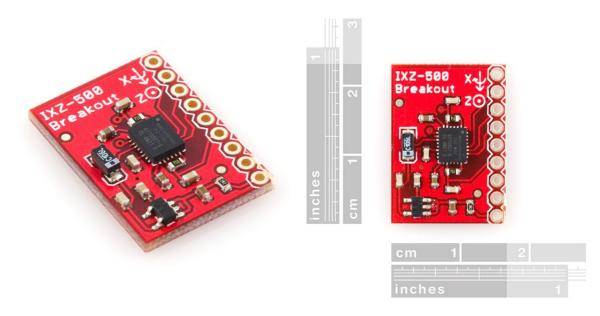
SparkFun

Gyro Breakout Board - IXZ500 Dual 500?/s (SKU: SEN-09410)



Description: This is a breakout board for the dual axis IXZ-500 gyro. The IXZ-500 is a very small gyroscope, designed to sense angular velocity on the x and z axes (pitch/yaw). The gyro features a primary output with a $\pm 500^{\circ}$ /s full scale range, for measuring higher speed motions, and has a secondary output with a $\pm 110^{\circ}$ /s full-scale range, for sensing more precise movements. These dual outputs allow the system designer to use an analog-to-digital-converter (ADC) with two fewer bits, saving overall system cost.

This breakout board includes the IXZ-500 and all components as shown - a 2.8VDC LDO voltage regulator, and filtering components. All necessary pins of the IXZ-500 are brought out to a 9-pin 0.1" pitch header.

Not sure which gyro is right for you? Our Accelerometer and Gyro Buying Guide might help!

Features:

- IXZ-500 Dual Axis Gyroscope
- On-board 2.8VDC voltage regulator
- All necessary filtering components
- Pins broken out to a 0.1" pitch header
- Integrated X- and Z-axis gyros on a single chip with in-plane mounting
- Two separate outputs per axis for higher speed motions and lower-speed precise movements:
 - o 500°/s full scale range (higher speed)
 - 110°/s full scale range (high precision)
- Integrated amplifiers and low-pass filters
- Auto Zero function for bias calibration
- On-chip temperature sensor

Dimensions:

• Board: 0.65x0.9"

Documents:

Schematic

- <u>IXZ-500 Datasheet</u> <u>Wiring Example</u> (IXZ-500)