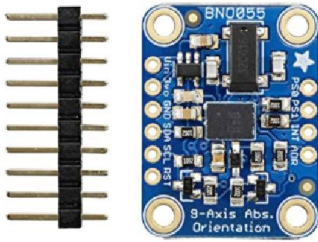


Adafruit 9-DOF Absolute Orientation IMU Fusion Breakout - BNO055

Brand: Adafruit
4.5 out of 5 stars_ 125 ratings

Meaningful sensor data in minutes with Bosch's smart BNO055 smart 9-DOF sensor



I2C

orientation, angular velocity, acceleration, magnetic field strength, linear acceleration, gravity, temperature

Adafruit tutorials

header pins required

- Data output over
- Absolute
- Easy to use
- Easy soldering of

Specifications for this item

Brand Name	Adafruit
Ean	0717520028796 , 0748347529234 , 8436565500211 , 4060137032646 , 0743724368543 , 0604310746278 , 3700386524721 , 0618996990092
Global Trade Identification Number	04060137032646
Material	Composite
Model Number	2472
Part Number	2472
UNSPSC Code	43201500
UPC	604310746278 , 743724368543 , 717520028796 , 748347529234 , 618996990092

Product description

If you've ever ordered and wire up a 9-DOF sensor, chances are you've also realized the challenge of turning the sensor data from an accelerometer, gyroscope and magnetometer into actual "3D space orientation"! Orientation is a hard problem to solve. The sensor fusion algorithms (the secret sauce that blends accelerometer, magnetometer and gyroscope data into stable three-axis orientation output) can be mind-numbingly difficult to get right and implement on low cost real time systems. Rather than spending weeks or months fiddling with algorithms of varying accuracy and complexity, you can have meaningful sensor data in minutes thanks to the BNO055 - a smart 9-DOF sensor that does the sensor fusion all on its own! This sensor can output: Absolute orientation(Euler Vector, 100Hz and Quaternion, 100Hz), Angular velocity Vector(100Hz), Acceleration Vector(100Hz), Magnetic Field Strength Vector(20Hz), Linear Acceleration Vector(100Hz), Gravity Vector(100Hz), and Temperature! Handy, right? Adafruit placed this very nice sensor on its own breakout, complete with 3.3V regulator, logic level shifting for the Reset and I2C pins, an external 32.768KHz crystal (recommended for best performance), and breakouts for some other pins you might find handy. Some soldering is required to attach the header to the breakout PCB, but its pretty easy work. Item Specifics Size: 20mm x 27mm x 4mm / 0.8" x 1.1" x 0.2" Header holes begin 4mm from the mounting holes Mounting Hole dimensions: 20mm x 12mm apart Uses I2C address 0x28 (default) or 0x29 Weight: 3g

Product details

- Is Discontinued By Manufacturer : No
- Product Dimensions : 3 x 2 x 1 inches; 0.32 Ounces
- Item model number : 2472
- Date First Available : November 7, 2015
- Manufacturer : Adafruit Industries
- ASIN : B017PEIGIG
- Best Sellers Rank: #234 in [Home Security Systems](#)