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Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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COMPASS TINYSHIELD

ASD2613-R



DESCRIPTION

This TinyShield features the high performance and low power Honeywell HMC5883L 3-axis compass. The HMC5883L includes state-of-the-art, high-resolution HMC118X series magneto-resistive sensors plus an ASIC containing amplification, automatic degaussing strap drivers, offset cancellation, and a 12-bit ADC that enables 1° to 2° compass heading accuracy.

The Compass TinyShield incorporates level shifters and a local power supply to ensure proper and safe operation over the entire TinyDuino operating voltage range up to 5V.

TECHNICAL DETAILS

To see what other TinyShields this will work with or conflict with, check out the **TinyShield Compatibility Matrix**

Honeywell HMC5883L Compass Specs

- o 3-axix (X, Y & Z)
- Digital resolution: 12bit (2 milli-gauss Field Resolution in ±8 Gauss Fields)
- 1° to 2° Degree Compass Heading Accuracy
- Wide Magnetic Field Range (+/-8 Oe)
- Low Power: 100uA

TinyDuino Power Requirements

- o Voltage: 3.0V 5.5V
- Current: 100uA Due to the low current, this board can be run using the TinyDuino coin cell option

Pins Used

- o A5/SCL I2C Serial Clock line
- A4/SDA I2C Serial Data line

Dimensions

- o 20mm x 20mm (.787 inches x .787 inches)
- Max Height (from lower bottom TinyShield Connector to upper top TinyShield Connector): 5.11mm (0.201 inches)
- Weight: .96 grams (.03 ounces)

NOTES

 You can also use this shield without the TinyDuino – there are 0.1" spaced connections for power, ground, and the two I2C signals along the side of the TinyShield to allow you to connect a different system.



https://tinycircuits.com/products/compass-tinyshield 10-16-17