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!

Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832
Email & Skype: info@chipsmall.com Web: www.chipsmall.com
Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China

AMBIENT LIGHT TINYSHIELD

ASD2811-R

DESCRIPTION

Measure light with your TinyDuino - this TinyShield features a TAOS TSL2572 Ambient Light Sensor, that approximates human eye response to light intensity under a variety of lighting conditions and through a variety of attenuation materials. Accurate ALS measurements are the result of TAOS' patented dual-diode technology and the UV rejection filter incorporated in the package. In addition, the operating range is extended to 60,000 lux in sunlight when the low-gain mode is used.

The Ambient Light Sensor TinyShield incorporates level shifters and a local power supply to ensure proper and safe operation over the entire TinyDuino operating voltage range between 3 – 5V.

To learn more about the **TinyDuino Platform,** *click* **here**

https://tinycircuits.com/pages/tinyduino-overview

TECHNICAL DETAILS

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

TAOS TSL2572 Ambient Light Sensor Specs

o   Approximates Human Eye Response

o   45,000,000:1 Dynamic Range

o   Operation to 60,000 lux in Sunlight

o   Package UV Rejection Filter

o   Wide Magnetic Field Range (+/-8 Oe)

o   Low Power – Active: 200uA, Wait: 90uA, Sleep: 2.2u

TinyDuino Power Requirements

o   Voltage: 3.0V - 5.5V

o   Current: 200uA (Active). 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

o   A4/SDA - I2C Serial Data line

Dimensions

- o 20mm x 20mm (.787 inches x .787 inches)

- o Max Height (from lower bottom TinyShield Connector to upper top TinyShield Connector): 5.11mm (0.201 inches)

- o Weight: .96 gram (.03 ounces)

NOTES

- o 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.