



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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Performance

- -5°C to 50°C accuracy: 0.1°C
- -40°C to 125°C accuracy: 0.5°C
- Very low power consumption
- Operates 5V
- Time constant –4 seconds typical in air
- Fast conversion time – 8.22ms typical

MEAS TSYS01 SENSOR FOR GROVE SYSTEM

Digital Temperature Sensor

The TSYS01 provides the necessary hardware to interface the TSYS01 digital temperature sensor to any system that utilizes Grove compatible expansion ports configurable for I²C communication. The TSYS01 sensor is a self-contained temperature sensor that is fully calibrated during manufacture. The sensor model works in 5V voltage external. The TSYS01 has a low power stand-by mode for power-sensitive applications.

Specifications

- Measures temperature from -40°C to 125°C
- I²C communication
- Fully calibrated
- Fast response time
- Very low power consumption

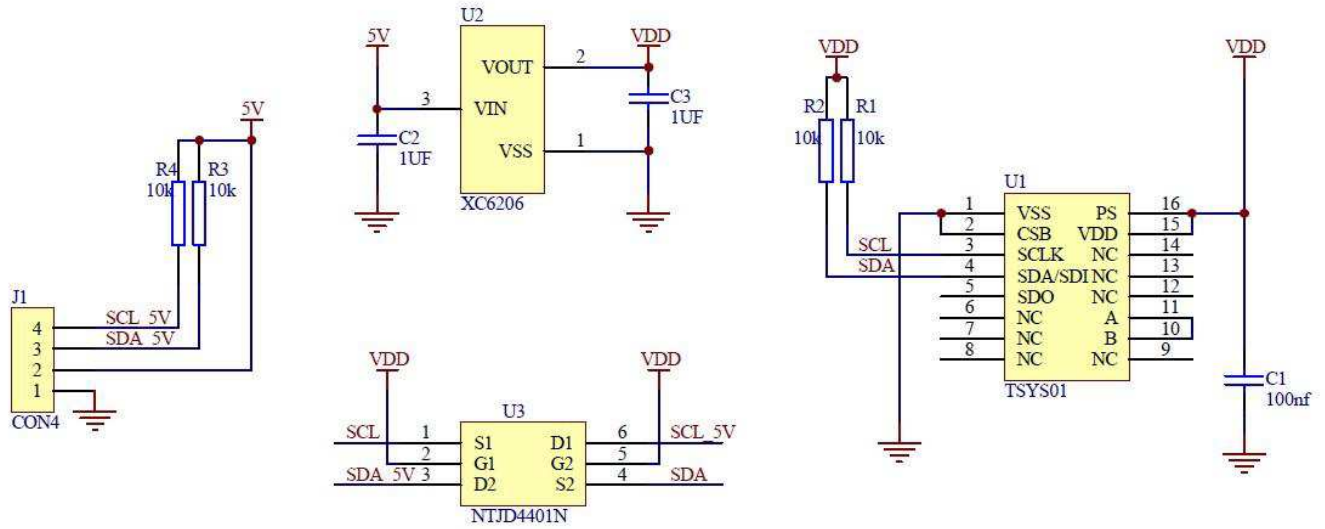
Features

- 4-pin Grove compatible connector
- I²C interface
- 24/16 bit resolution for temperature
- Parameters stored on chip

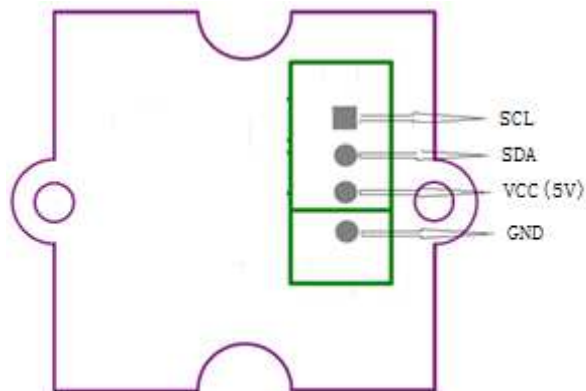
MEAS TSYS01 FOR GROVE SYSTEM

Digital Temperature Sensor

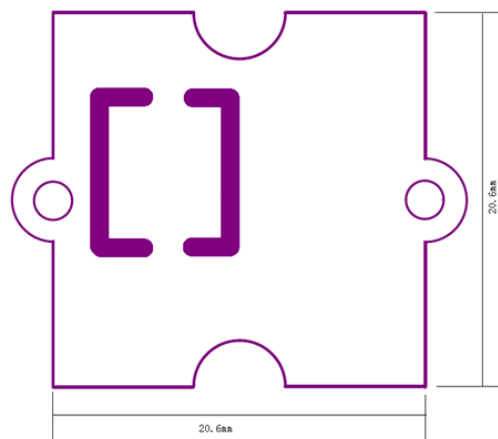
Schematic



Connector Pin Assignments (I²C Communications)



Dimensions (mm)



MEAS TSYS01 FOR GROVE SYSTEM

Digital Temperature Sensor

Detailed Description

I²C Interface:

The TSYS01 Grove compliant module can interface to the host in I²C model with 5V supply, it has a Grove compatible four pins port connector configured for I²C.

External Control Signals 5V supply:

The IC operates as an I²C slave using the standard 2-wire I²C connection scheme. As IC is power rated at 3.6V, the board integrates necessary fixture such as a regulator and electrical level shift so that the SCL and SDA signals could be driven directly from an external 5V I²C lines and power supply.

Reference Material

Detailed information regarding operation of the IC:

- [TSYS01 Datasheet](#)

Ordering Information

Description	Part Number
TSYS01 GROVE BOARD	DPP201G000

te.com/sensorsolutions

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