

Part Number: DFR0023

Description: Gravity: Analog LM35 Temperature Sensor For Arduino

## INTRODUCTION

This is an <u>Arduino Temperature Sensor</u> based on LM35 temperature chip. A Temperature Sensor can be used to detect ambient air temperature.

The LM35 chip is produced by National Semiconductor Corporation and offers a functional range between 0 degree Celsius to 100 degree Celsius with a sensitivity of 10mV per degree Celsius. The output voltage is proportional to the temperature.

It is commonly used as a temperature measurement sensors. It includes thermocouples, platinum resistance, thermal resistance and temperature semiconductor chips, which commonly used in high temperature measurement thermocouples. Platinum resistance temperature used in the measurement of 800 degrees Celsius, while the thermal resistance and semiconductor temperature sensor suitable for measuring the temperature of 100-200 degrees or below, in which the application of a simple semiconductor temperature sensor has good linearity and high sensitivity. The LM35 linear temperature sensor and sensor-specific expansion of Arduino board, in combination, can be very easy to achieve. The LM35 linear temperature sensor pin definitions: (1) Output (2) complex (3) power.

To ease the difficult of using this sensor, a <u>Gravity</u> Interface is adapted to allow plug&play. The <u>Arduino IO expansion shield</u> is the best match for this sound senor connecting to your <u>Arduino</u>. As this sensor can work at 3.3V which make it compatible with <u>Raspberry Pi, intel edison</u>, joule and <u>curie nano</u>.



## **FEATURES**

- Based on the semiconductor LM35 temperature sensor
- Can be used to detect ambient air temperature

## **SPECIFICATION**

Type: Analog

Working Voltage: 3.3-5V

• Sensitivity: 10mV per degree Celcius

• Functional range: 0 degree Celsius to 100 degree Celsius

## **SHIPPING LIST**

- Arduino LM35 Temperature Sensor x1
- Analog Sensor Cable (SKU:FIT0031) x1