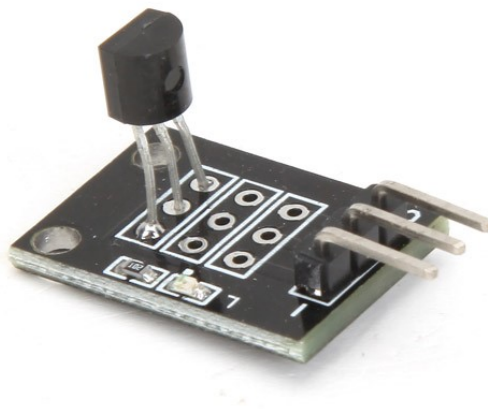


## User Manual for DS18B20 Temperature Sensor for Arduino(SE042)



### 1 Introduction

There are so many kinds of temperature sensor module for arduino, different temperature sensor chip has different sense range and specification, this module use the DS18B20 chip, the feature as below:

- Temperature measuring range:  $-55 \sim +125\text{ }^{\circ}\text{C}$
- Temperature measurement accuracy:  $0.5\text{ }^{\circ}\text{C}$
- Resolution adjustment range: 9-12byte
- Working voltage: DC 5V

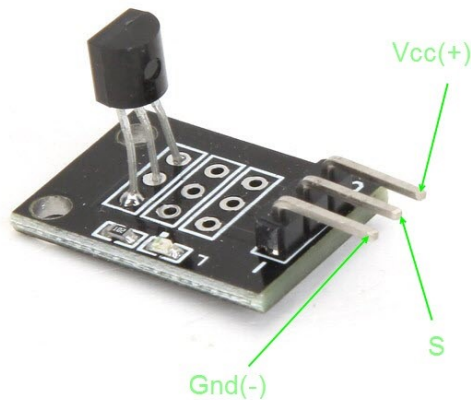
## 2 Pinout

| Pin | Description        |
|-----|--------------------|
| S   | Digital output pin |
| V   | Power pin          |
| G   | Ground             |

## 3. Example

This example shows you the environment temperature in the serial window.  
The connection as below:

V-----5V  
G-----Ground  
S-----D10



\*\*\*\*\*Code Begin\*\*\*\*\*

```
//Include libraries
```

```
#include <OneWire.h>
```

```
#include <DallasTemperature.h>
```

```
// Data wire is plugged into pin 2 on the Arduino
```

```
#define ONE_WIRE_BUS 2
```

```
// Setup a oneWire instance to communicate with any OneWire devices (not just  
Maxim/Dallas temperature ICs)
```

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```
OneWire oneWire(ONE_WIRE_BUS);
// Pass our oneWire reference to Dallas Temperature.
DallasTemperature sensors(&oneWire);

void setup(void)
{
  Serial.begin(9600); //Begin serial communication
  Serial.println("Arduino Digital Temperature // Serial Monitor Version"); //Print a
message
  sensors.begin();
}

void loop(void)
{
  // Send the command to get temperatures
  sensors.requestTemperatures();
  Serial.print("Temperature is: ");
  Serial.println(sensors.getTempCByIndex(0)); // Why "byIndex"? You can have more
than one IC on the same bus. 0 refers to the first IC on the wire
  //Update value every 1 sec.
  delay(1000);
}
*****Code End*****
```