

# **Analog temperature**

#### **Overview**



This experiment is to read the value of the thermistor.

# **Specification**

Model: MF52-103

Insulation Material: Ceramic

Color: Black

Rated Power: 0.05W Resistance Value: 10k

Resistance Tolerance: H (±3%)

B Value: 3950K

Pin Pitch: 1.5mm / 0.059"

# **Hardware required**

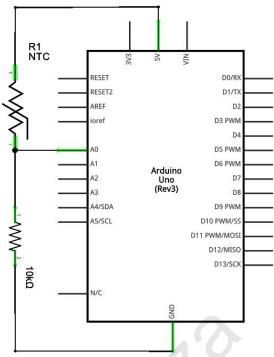
| Material diagram   | Material name | Number  |
|--|---------------|---------|
| <b>39</b>  | Thermistor    | 1       |
| <b>—1113</b> —   | 10KΩ resistor | 1       |
|  | USB Cable     | 1       |
| The creation of the creation o | MEGA 2560     | 1       |
|  | Breadboard    | 1       |
|  | Jumper wires  | Several |

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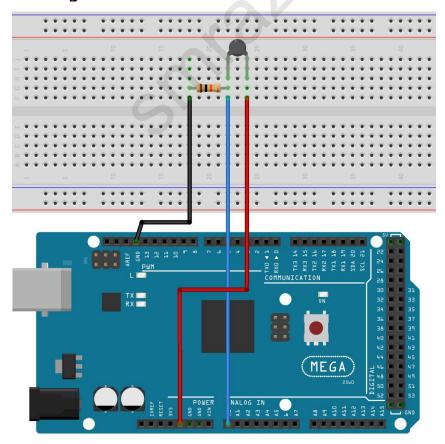


## **Connection**

#### Schematic



## **Connection diagram**



Note: Thermistor 's pin does not distinguish between positive and negative poles.



## Sample code

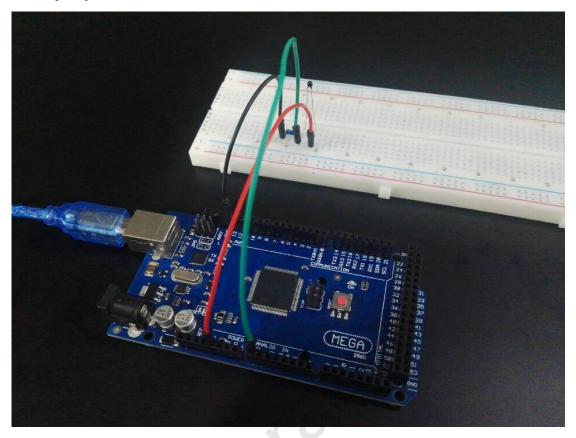
```
Note : sample code under the Sample code folder
void setup()
{
        Serial.begin(9600);
}
void loop()
{
        int val;
        val=analogRead(0);
        Serial.print("Val=");
        Serial.println(val,DEC);
        delay(200);
}
```

/\*Tips: Open the serial port.



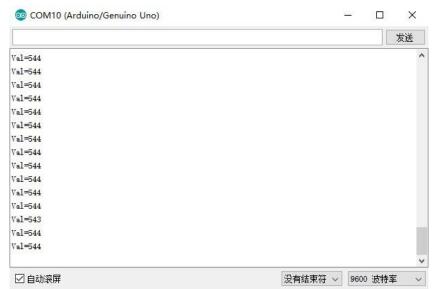


## **Example picture**



### Result

Upload the program then open the monitor, we can see the data as below:(It shows the temperature of the environment)





#### Language reference

serial DEC

#### **Application effect**

After uploading the program, open the serial port monitor, you will see a series of temperature values

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