

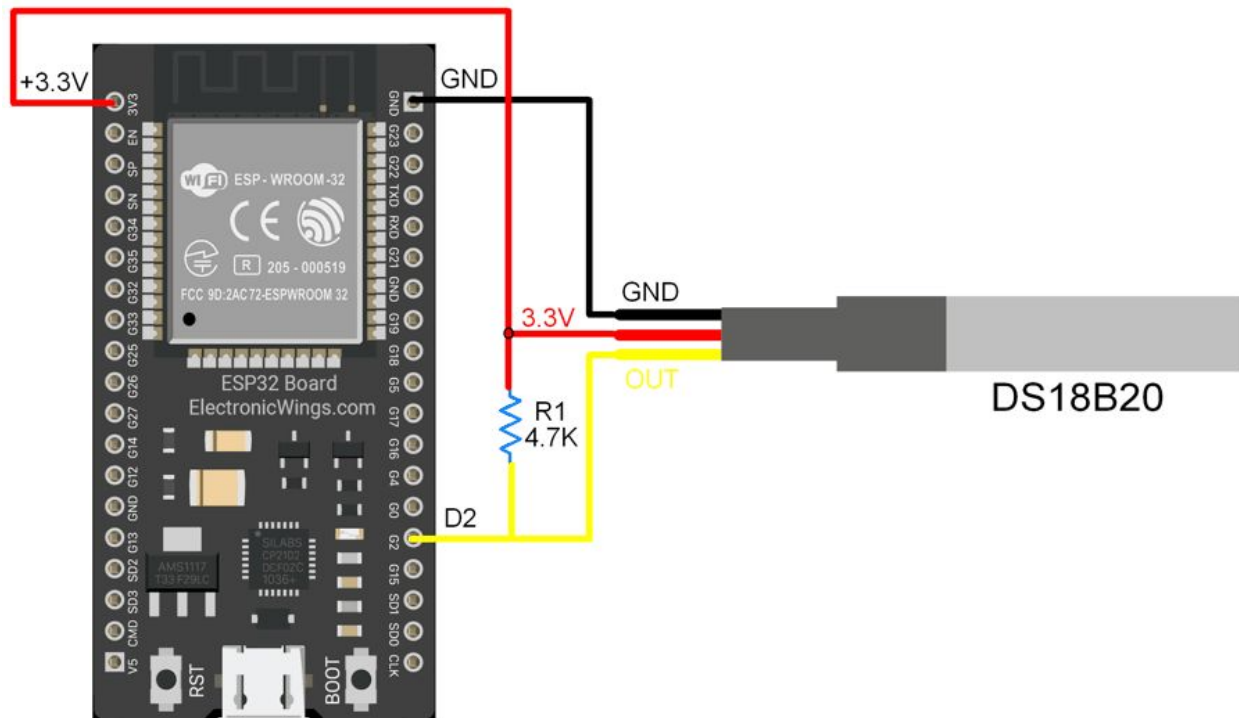
# Connecting a Temperature Sensor to an esp32

## Measure Temperature using DS18B20 and ESP32

Make sure you download the Dallas library and the OneWire library

```
/******  
  Rui Santos  
  Complete project details at https://RandomNerdTutorials.com  
*****/  
  
#include <OneWire.h>  
#include <DallasTemperature.h>  
  
// GPIO where the DS18B20 is connected to  
const int oneWireBus = 4;  
  
// Setup a oneWire instance to communicate with any OneWire devices  
OneWire oneWire(oneWireBus);  
  
// Pass our oneWire reference to Dallas Temperature sensor  
DallasTemperature sensors(&oneWire);  
  
void setup() {  
  // Start the Serial Monitor  
  Serial.begin(115200);  
  // Start the DS18B20 sensor  
  sensors.begin();  
}  
  
void loop() {  
  sensors.requestTemperatures();  
  float temperatureC = sensors.getTempCByIndex(0);  
  float temperatureF = sensors.getTempFByIndex(0);  
  Serial.print(temperatureC);  
  Serial.println("°C");  
  Serial.print(temperatureF);  
  Serial.println("°F");  
  delay(5000);  
}
```

## WIRING DIAGRAM:



## PINOUT:

		+	-----	+
	0		USB	0
			-----	---
~RST	o		3.7/4.2V	
3V3	o		LiPoly Batt	
NC	o		USB charge	
GND	o			---
A0 / DAC2	o			o   VBAT
A1 / DAC1	o			o   EN
A2 / 34	o			o   VUSB
A3 / 39	o			o   13 / A12
A4 / 36	o			o   12 / A11
A5 / 4	o			o   27 / A10
SCK / 5	o			o   33 / A9
MOSI / 18	o			o   15 / A8
MISO / 19	o			o   32 / A7
RX / 16	o			o   14 / A6
TX / 17	o			o   SCL / 22
21	o			o   SDA / 23
	0			0
		+	-----	+

