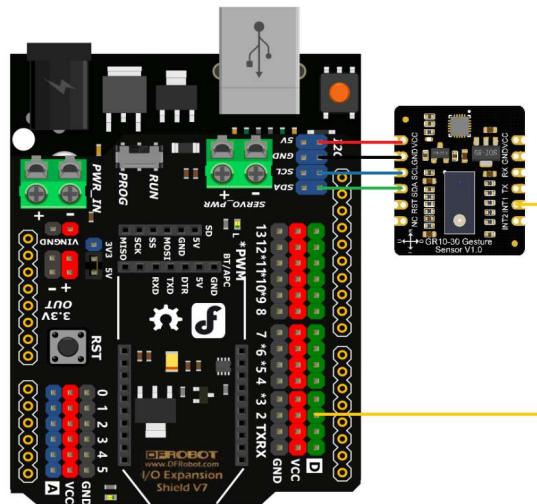


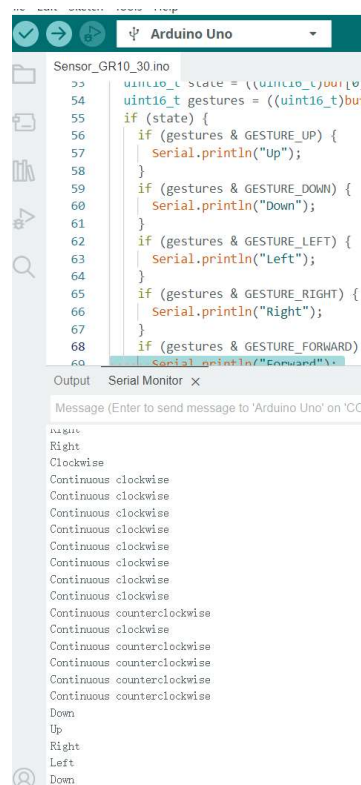
1. Test Sensor_GR10_30.ino

Connect the GR10_30 sensor to the Arduino as shown in the following wiring diagram and upload the Sensor_GR10_30.ino from the current folder to the Arduino.



When a normal reading appears in the serial monitor, the sensor is normal.

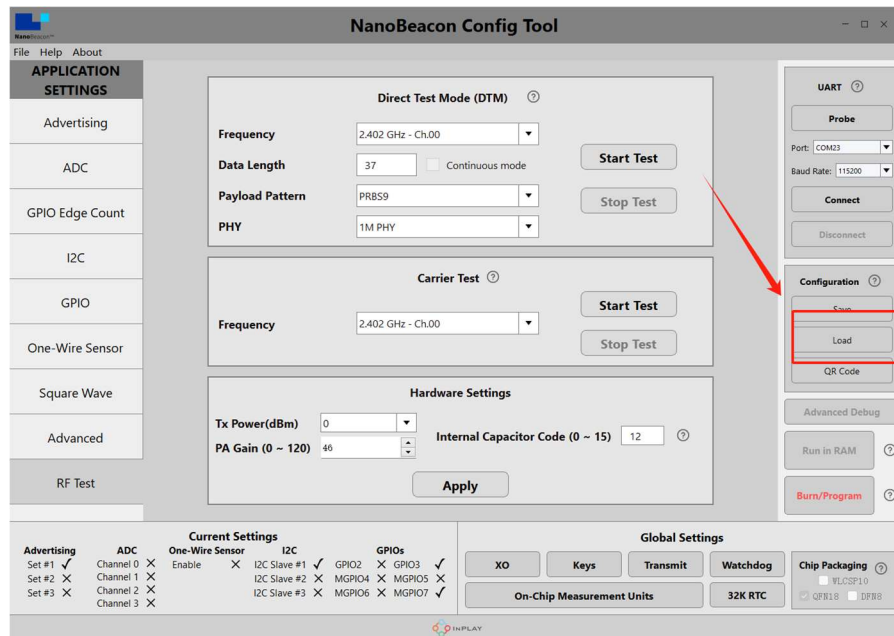
The sensor can be connected to a Beacon for testing.



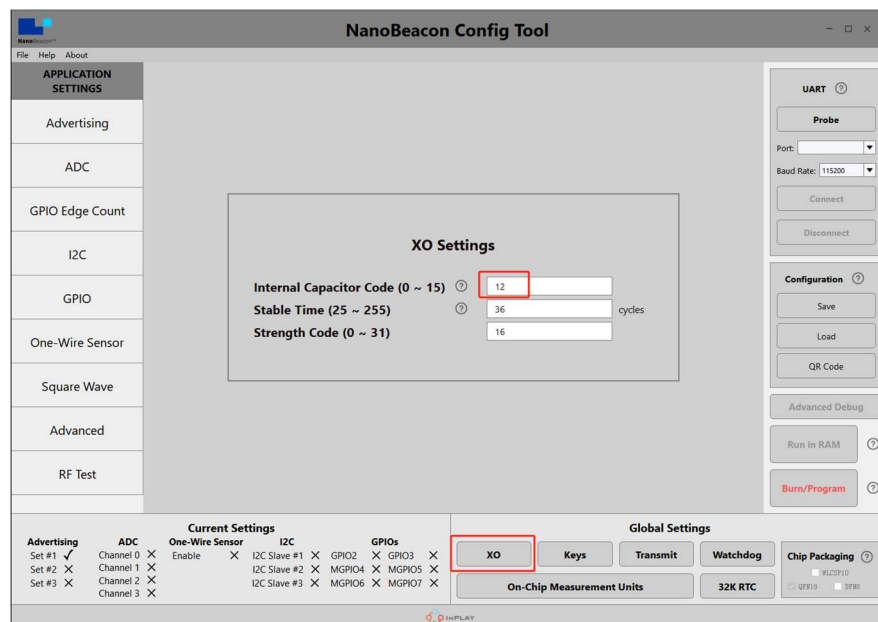
2. Burning Beacon and Connecting sensor

Please use a USB-TTL converter to burn the .cfg file into the Beacon.

NanoBeacon Config Tool can load the GR10_30.cfg file in this folder.



Check that the XO capacitor configuration is 12

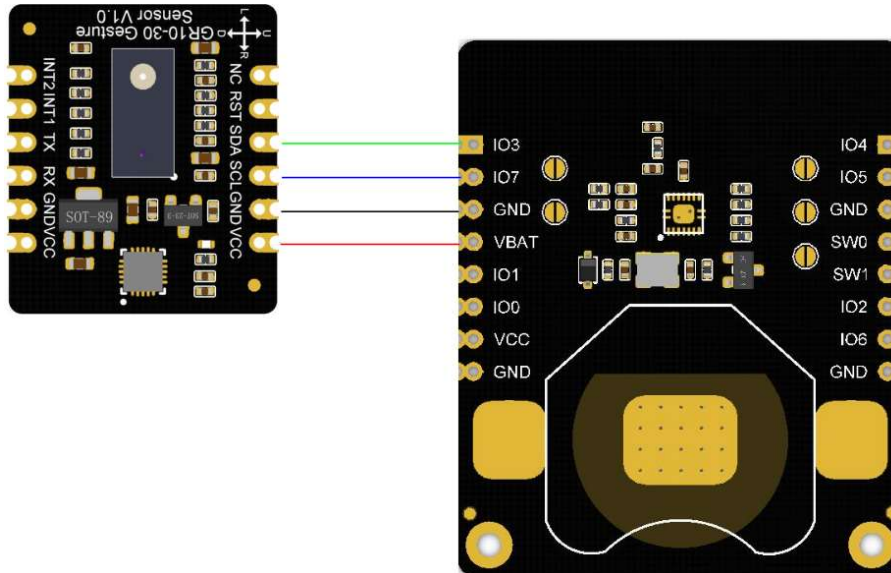


Please refer to Beacon's wiki for the burn-in process:

https://wiki.dfrobot.com.cn/_SKU_TEL0168_Fermion_BLE_%E4%BC%A0%E6%84%9F%E5%99%A8%E4%BF%A1%E6%A0%87#target_4

After the burn-in is complete, refer to the following diagram to connect the Beacon and the sensors.

Note: Our .cfg example file defaults SCL->GPIO7, SDA->GPIO3.



3. Upload ESP32 code and get readings

Upload the Beacon_GR10_30.ino in the same directory to the ESP32.

And power up the Beacon and sensors with either a CR2032 coin cell battery or 3.3V input from VCC and GND.

You will see the relevant data printed in the serial monitor

The screenshot displays the Arduino IDE 2.2.1 interface. The top menu bar includes 'File', 'Edit', 'Sketch', 'Tools', and 'Help'. The 'Boards Manager' tab is active on the left, showing a list of boards. The 'FireBeetle ESP32' board is selected, with version 0.2.1 installed. The 'Code' tab shows a sketch named 'Beacon_GR10_30.ino' with the following code:

```
110 pBLEScan->setAdvertisedDeviceCallbacks(new pBLEScan->getAdvertisedDeviceCallbacks()); // active scan
111 pBLEScan->setActiveScan(true); // active scan
112 pBLEScan->setInterval(100);
113 pBLEScan->setWindow(99); // less or equal to interval
114 }
115
116 void loop()
117 {
118     // put your main code here, to run repeatedly
119     BLEScanResults foundDevices = pBLEScan->scan();
120     pBLEScan->clearResults(); // delete results
121     delay(2000);
122 }
123
```

The 'Serial Monitor' tab is open, showing the output of the sketch. The output displays the device name 'GR10_30' and the manufacturer data '6 [5] [5] [0] [0] [0] [0]'. The output is as follows:

```
strManufacturerData: 6 [5] [5] [0] [0] [0] [0]
Device name: GR10_30
strManufacturerData: 6 [5] [5] [0] [0] [0] [0]
Device name: GR10_30
strManufacturerData: 6 [5] [5] [0] [0] [0] [0]
Device name: GR10_30
strManufacturerData: 6 [5] [5] [0] [1] [0] [1]
Up
Device name: GR10_30
strManufacturerData: 6 [5] [5] [0] [1] [0] [8]
Right
Device name: GR10_30
strManufacturerData: 6 [5] [5] [0] [1] [0] [4]
Left
Device name: GR10_30
strManufacturerData: 6 [5] [5] [0] [0] [0] [4]
Device name: GR10_30
strManufacturerData: 6 [5] [5] [0] [1] [0] [4]
Left
```