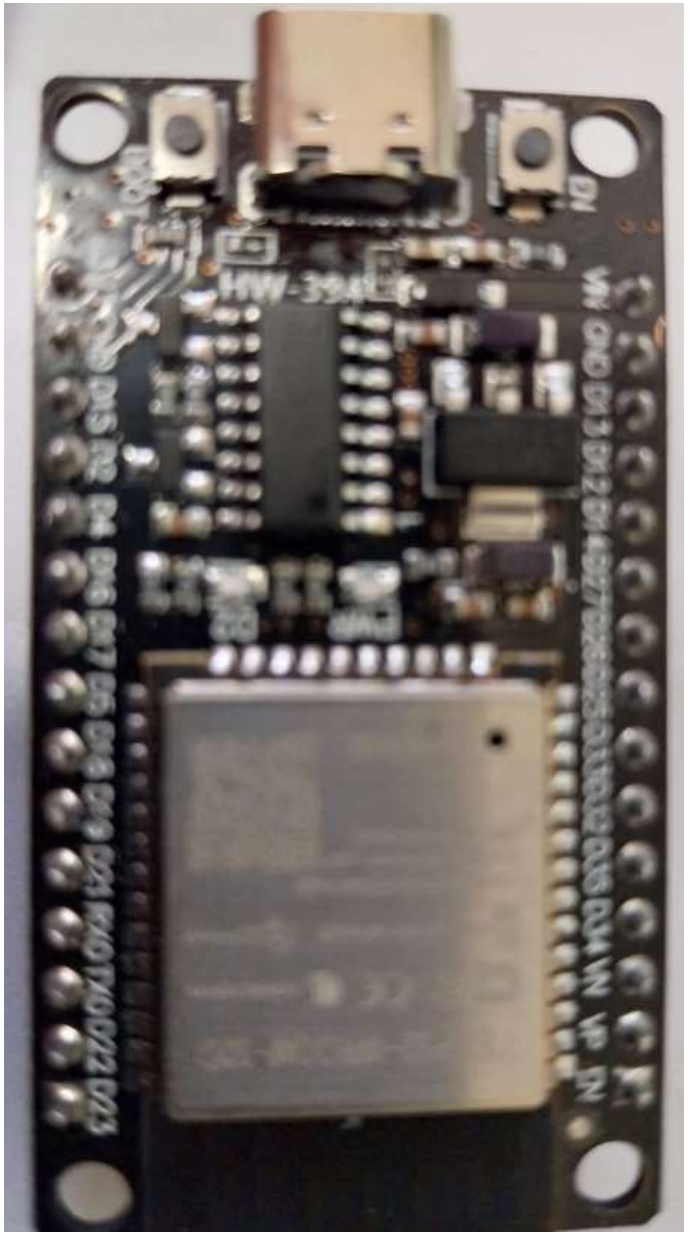
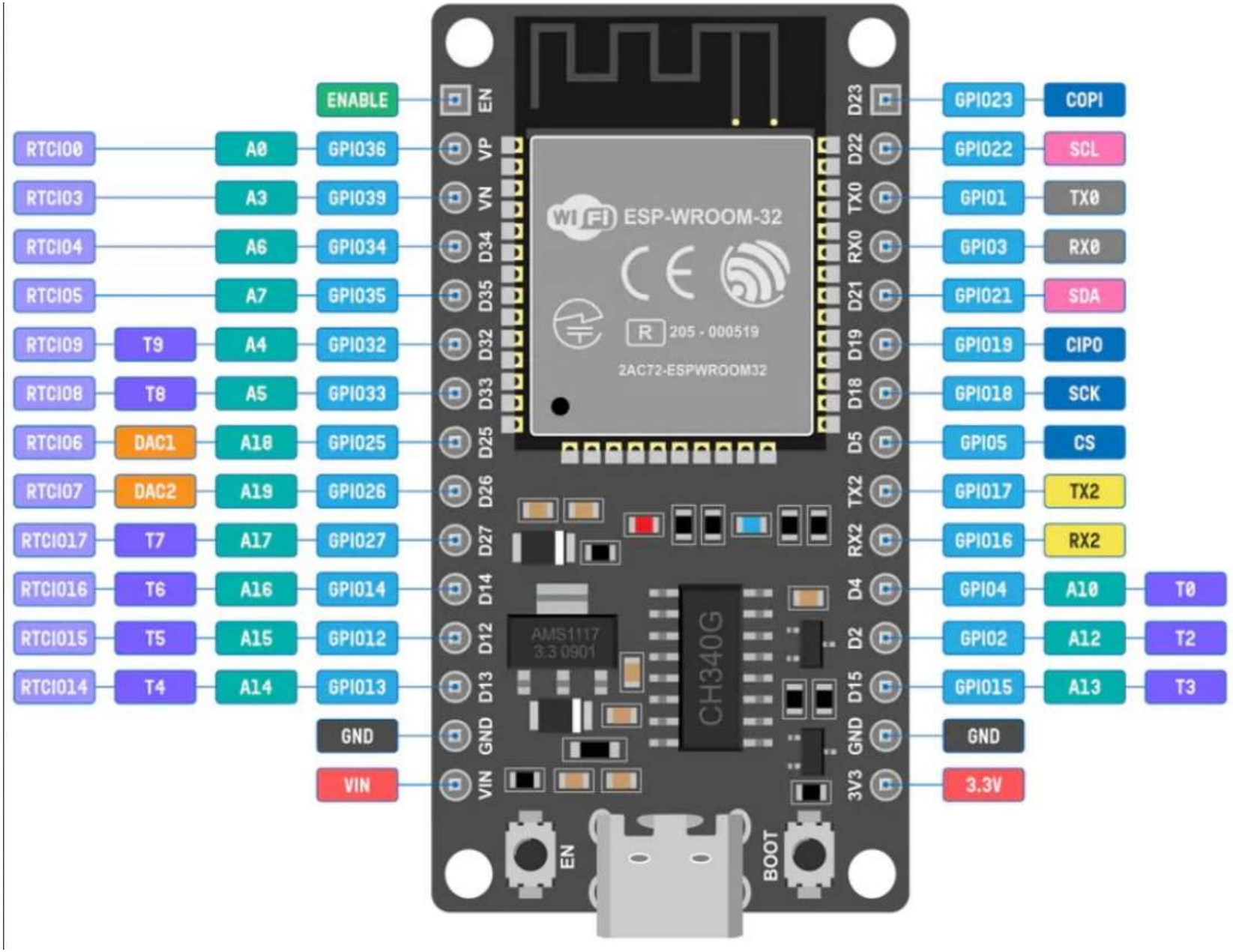
Montaje de sensores en ESP32

Álvaro Cuadrado


MRD068A
FOR ESP32
TERMINAL ADAPTER
3V3
GND
D15
D2
D4
RX2
TX2
D5
D18
D19
D21
RXD
TXD
D22
D23




ENABLE
EN
RTCIO0
A0
GPIO36
VP
RTCIO3
A3
GPIO39
VN
RTCIO4
A6
GPIO34
D34
RTCIO5
A7
GPIO35
D35
RTCIO9
T9
A4
GPIO32
D32
RTCIO8
T8
A5
GPIO33
D33
RTCIO6
DAC1
A18
GPIO25
D25
RTCIO7
DAC2
A19
GPIO26
D26
RTCIO17
T7
A17
GPIO27
D27
RTCIO16
T6
A16
GPIO14
D14
RTCIO15
T5
A15
GPIO12
D12
RTCIO14
T4
A14
GPIO13
D13
GND
GND
VIN
VIN
ESP-WROOM-32
205 - 000519
2AC72-ESPWROOM32
AMS1117
3.3 0901
CH340G
EN
BOOT
D23
GPIO23
COPI
D22
GPIO22
SCL
TX0
GPIO1
TX0
RX0
GPIO3
RX0
D21
GPIO21
SDA
D19
GPIO19
CIPO
D18
GPIO18
SCK
D5
GPIO5
CS
TX2
GPIO17
TX2
RX2
GPIO16
RX2
D4
GPIO4
A10
T0
D2
GPIO2
A12
T2
D15
GPIO15
A13
T3
GND
GND
3V3
3.3V

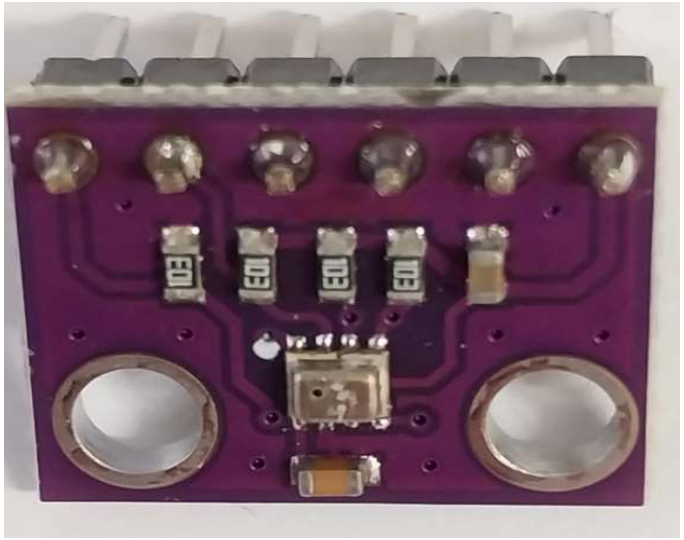
Definir cada entrada / salida para lo que sirve

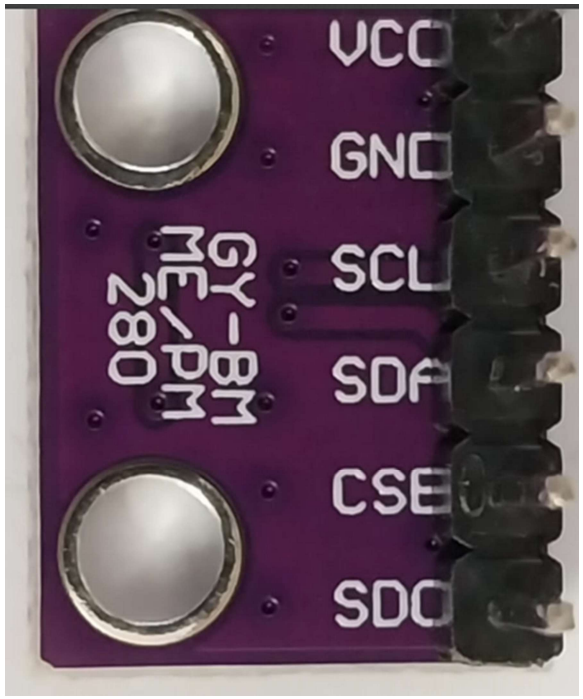
- Bus I2C pines (ya definidos en la ESP 32):
    - D22 (SDA)
    - D21 (SCL)

Globals.h

```
#define RFID_SDA 5      // ESP32 pin GPIO05
#define RFID_RST 4      // ESP32 pin GPIO04
#define RFID_MISO 19    // ESP32 pin GPIO19
#define RFID_MOSI 23    // ESP32 pin GPIO23
#define RFID_SCK 18     // ESP32 pin GPIO18
#define doorOpen 2      // ESP32 pin GPIO02
#define microPin 34     // ESP32 pin GPIO34
#define detectPin 16    // ESP32 pin GPIO16
#define pirPin 26       // ESP32 pin GPIO26
#define NUMITEMS(arg) ((unsigned int) (sizeof (arg) / sizeof (arg[0])))
#define SCREEN_WIDTH 128
#define SCREEN_HEIGHT 64
#define OLED_MOSI   13 // ESP32 pin GPIO13
#define OLED_D0     14 // ESP32 pin GPIO14
#define OLED_DC     17 // ESP32 pin GPIO17
#define OLED_CS     15 // ESP32 pin GPIO15
#define OLED_RESET  25 // ESP32 pin GPIO25
```

PM 280 (Sensor de temperatura)

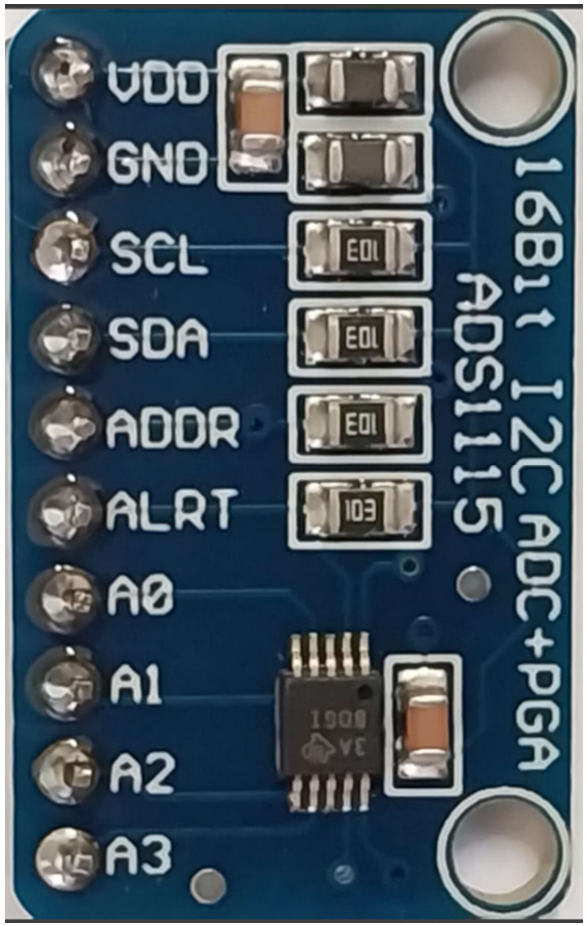




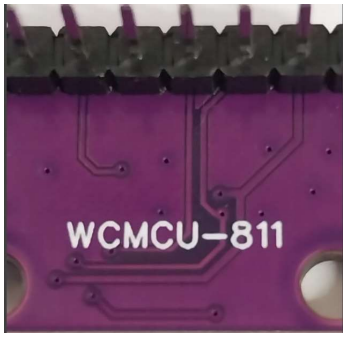
3,3V
GND
D21
D22
NC
NC

Conversor A/D ADS1115 pinza amperimétrica

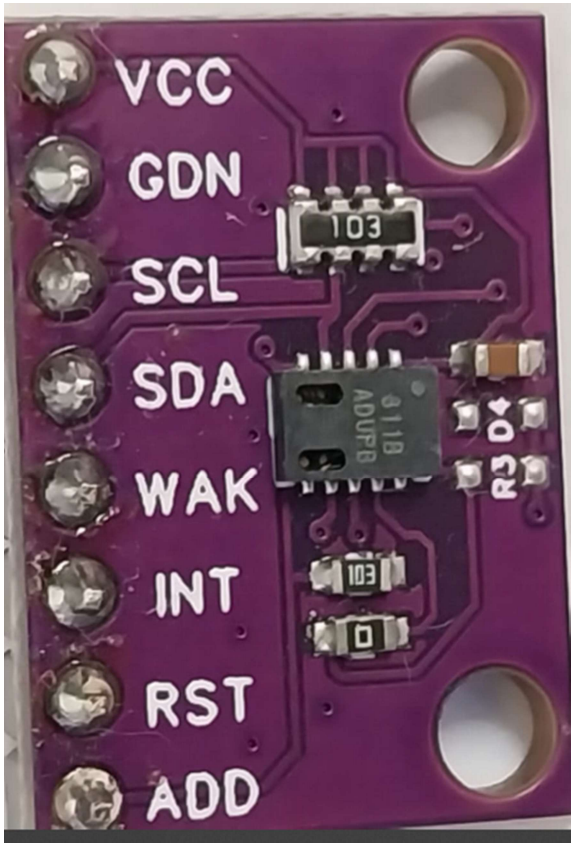
3,3
GND
D21
D22
GND
NC
Pinza
Pinza
NC
NC



WCMCU-811 Dióxido de carbono



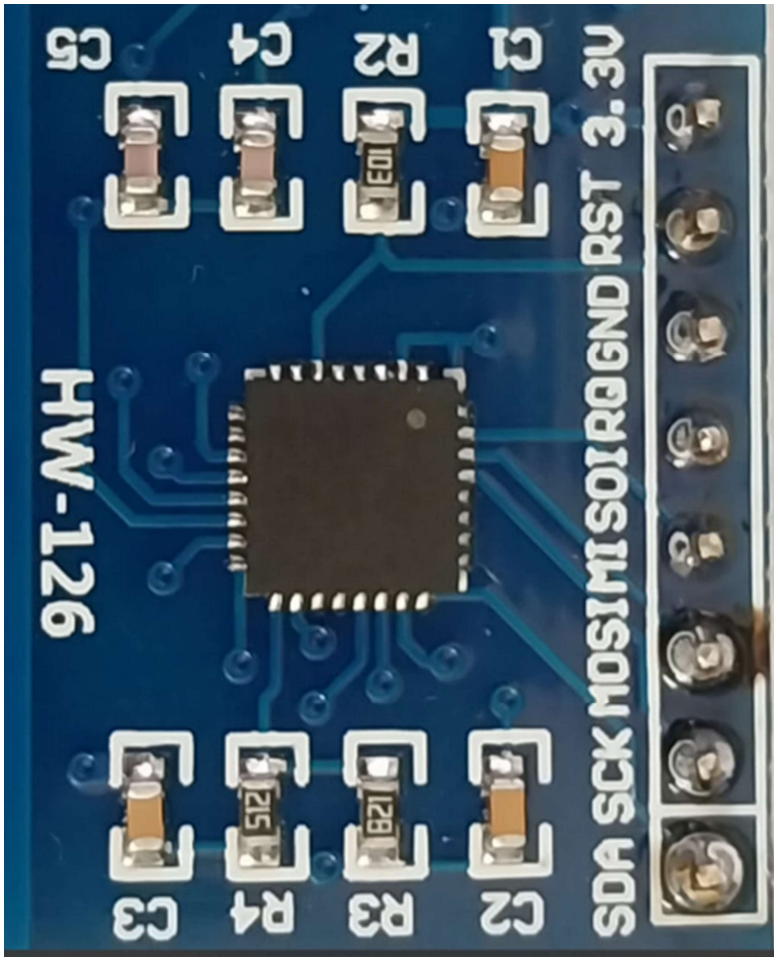
3,3V
GND
D21
D22
GND
NC
NC
NC



3,3V
GND
D21
D22
NC

RFID HW-126

```
#define RFID_SDA 5      // ESP32 pin GPIO05
#define RFID_RST 4      // ESP32 pin GPIO04
#define RFID_MISO 19    // ESP32 pin GPIO19
#define RFID_MOSI 23    // ESP32 pin GPIO23
#define RFID_SCK 18     // ESP32 pin GPIO18
```

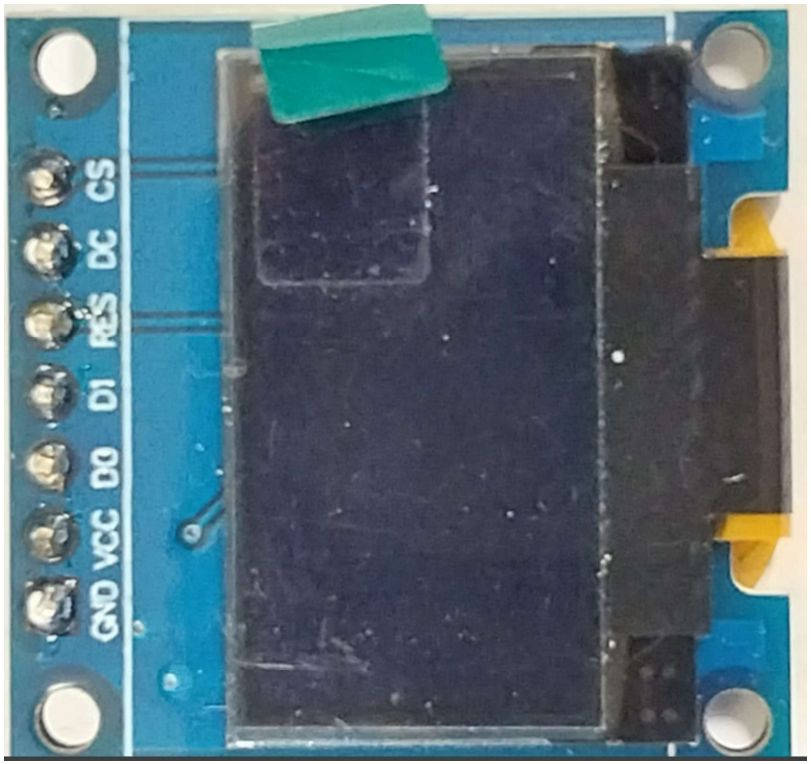


3,3V
D4
GND
No Conectada
D19
D23
D18
D5

Pantalla OLED

```
#define OLED_MOSI   13 // ESP32 pin GPIO13
#define OLED_D0     14 // ESP32 pin GPIO14
#define OLED_DC     17 // ESP32 pin GPIO17
#define OLED_CS     15 // ESP32 pin GPIO15
#define OLED_RESET  25 // ESP32 pin GPIO25
```

D15
D17
D25
D13
D14
3,3V
GND



Rele para cerradura

```
#define doorOpen 2      // ESP32 pin GPIO02
```