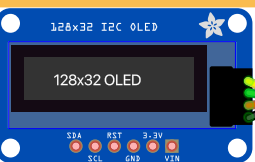


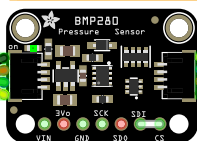
Adafruit LoRa FeatherM0
Rain and Soil Schematic
v2024-05-01

Adafruit OLED 128x32
Display SSD1306
I2C 7-bit address 0x3C



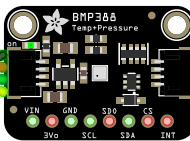
BMP280
Barometric Pressure
Altitude Sensor
Temperature

I2C 7-bit address
Default = 0x77
SD0 to GND = 0x76



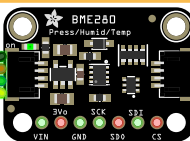
BMP388
Barometric Pressure
Altitude Sensor
Temperature

I2C 7-bit address
Default = 0x77
SD0 to GND = 0x76



BME288
Barometric Pressure
Altitude Sensor
Temperature
Humidity

I2C 7-bit address
Default = 0x76
SD0 to GND = 0x77



Soil Moisture Sensor 2
DF Robot SEN0193
Pin 1 GND
Pin 2 3.3V
Pin 3 Sens

DS18B20 Onewire
Temperature 2
Pin 1 GND
Pin 2 DQ
Pin 3 3.3V

Pinouts

RST
3v3
AREf
GND
A0 Soil Moisture Sensor 1
A1 Dallas Sensor 1wire 1
A2 Soil Moisture Sensor 2
A3 Dallas Sensor 1wire 2
A4 Enable Serial Console - Ground Pin
A5 OLED Reset
24 SCK SPI0 Clock- SD/LoRA
24 MOS SPI0 MOSI - SD/LoRA
22 MIS SPI0 MISO - SD/LoRA
0 RX
1 TX
io1

BAT VBAT
En - Connect to ground to disable the 3.3v regulator
USB VBUS
13 LED
12 Not in Use
11 Enable Soil Moisture 2n2222 or 2N3904
10 SD CS
9 Does not behave - not using
6 Not in Use
5 Rain Gauge Interrupt (put 10k-50k resistor to gnd, when not using)
21 SCL i2c - RTC/BMX
20 SDA i2c - RTC/BMX

Console Enable Jumper
Jump Pin A4 to Ground

Optional Soil Moisture Power Control
Pin D11
Transistor 2N2222
Pin 1 Collector - load placed before
Pin 2 Base - with 1K resistor
Pin 3 Emitter - tied to ground

SS3G
CDVN
LA3D

RT3G
XXVN
XX3D

AA3G
45VN
3D

AA3G
23VN
3D

G3SS
NVDC
D3AL

G3DD
NV32
D3

G3DD
NV54
D3

G3AA
NV10
D3

Rain Gauge (D5)
SS451A Omnipolar
Digital Hall-effect Sensor

Soil Moisture Sensor 1
DF Robot SEN0193
Pin 1 GND
Pin 2 3.3V
Pin 3 Sens

DS18B20 Onewire
Temperature 1
Pin 1 GND
Pin 2 DQ
Pin 3 3.3V

Feather Adalogger Shield
Pin - D10 SD CS
Pin - SPI MOSI
Pin - SPI MISO
Pin - SPI CLK
Pin - SDA
Pin - SCL