Community Sensor Lab: V3.0

Featherwing

RTC real time clock
PCF8523
i2c addr: 0x68

Micro SD
memory card

USB TO
COMPUTER

Featherwing OLED
display + buttons
i2c addr: 0x3C

u-controller

ATSAMD21G

#10 cs

SPI

#9* button A
#6 button B
#5 button C

* pin #9 is Vbat.
Disable pull-up to read analog.
Set pull-up for button.

#2 en
#4 rst
#7 irq
#8 cs

SPI

3.7V

4400mAh lipo recharge battery

Wifi

WINC1500

Feather M0 Wifi

#12 enable

SPI

Serial1 RX/TX

#11 enable

Sensirion SCD30
CO2

i2c addr: 0x61

BME280
Temp Press RH%

i2c addr: 0x76 or 0x77

Sensirion SPS30
PM2.5

i2c addr: 0x69

5V

TPS61023
5V boost

Honeywell
HSC differential
pressure sensor

Special for Met Museum

SPI   SPI bus: MISO, MOSI, SCK common
+ CS dedicated DIO pin

#10 cs   connected DIO pin 10

i2c addr: 0x68   i2C bus: SCL, SDA common + address