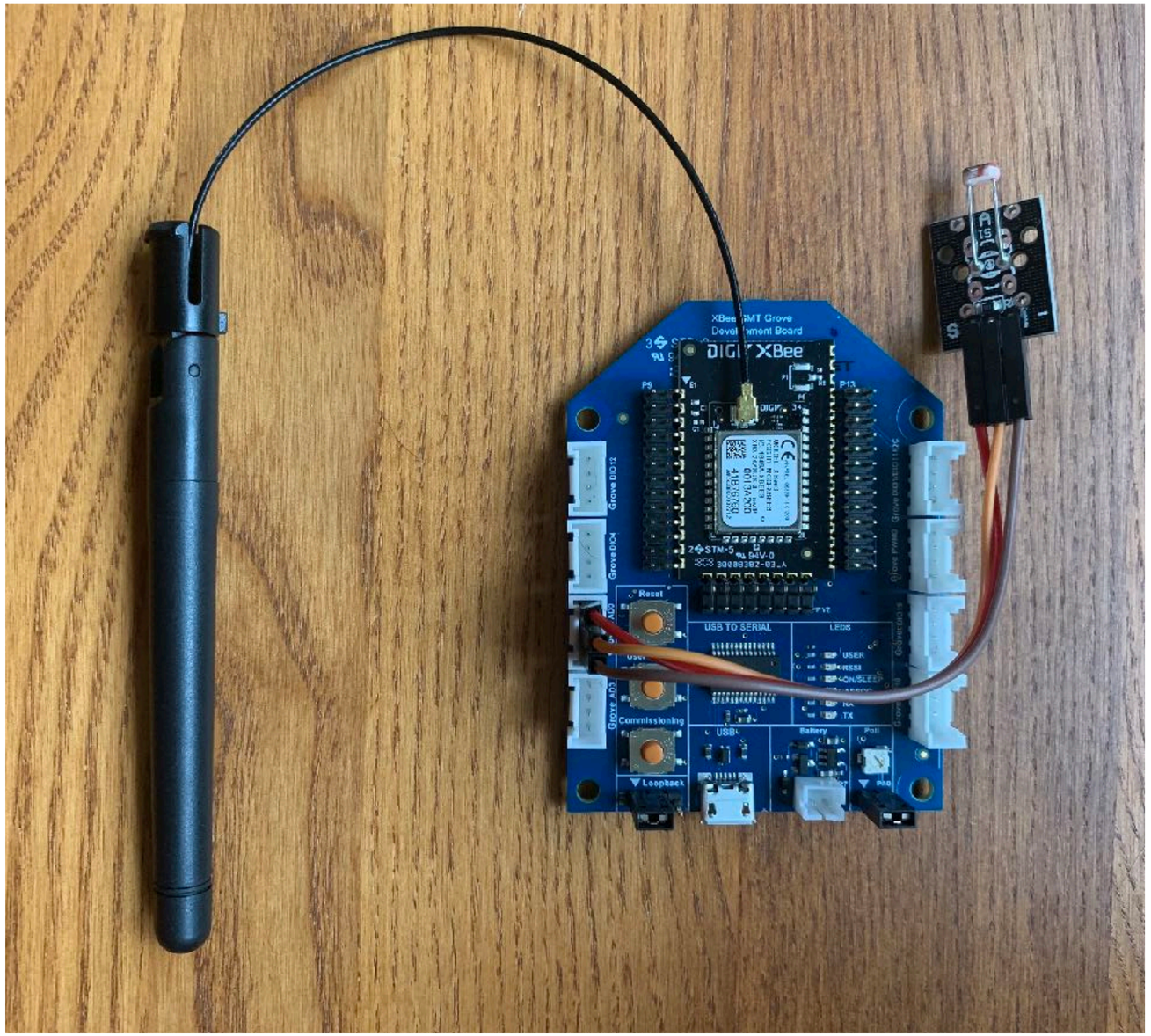
PhotoResistor
analog to digital port sampling

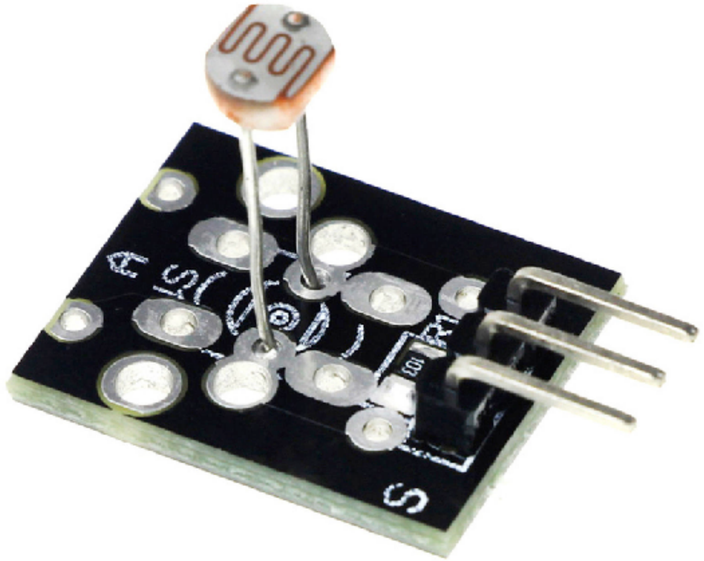
XBee REPL Console

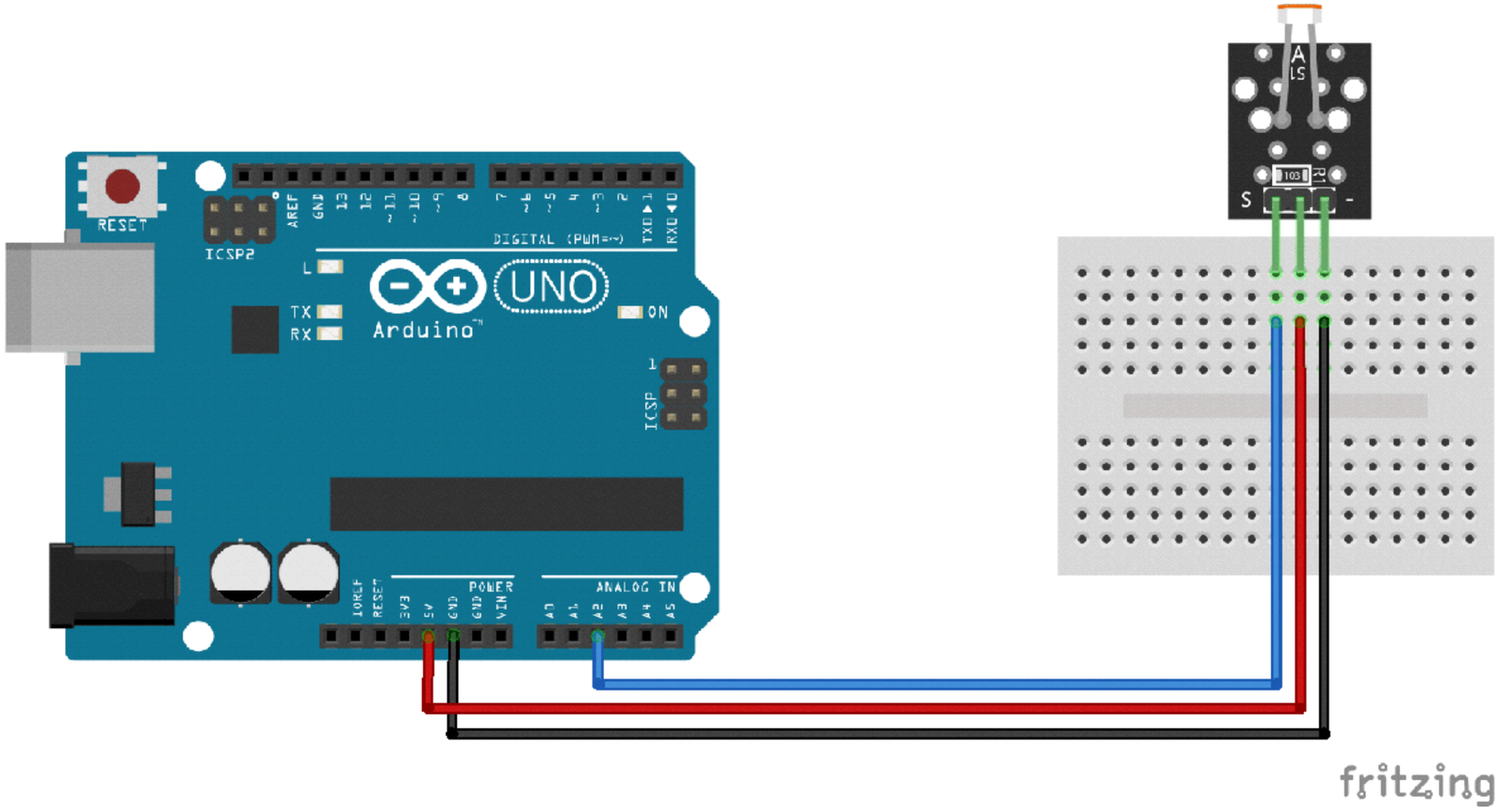
Selected XBee device: /dev/tty.usbserial-AB0JVOG7 - 115200/8/N/1/N

```
PhotoResistor value: 50
Original ADC value: 2017

PhotoResistor value: 47
Original ADC value: 2137

PhotoResistor value: 48
Original ADC value: 2129

PhotoResistor value: 48
Original ADC value: 2115
```



KY-018
Photoresistor

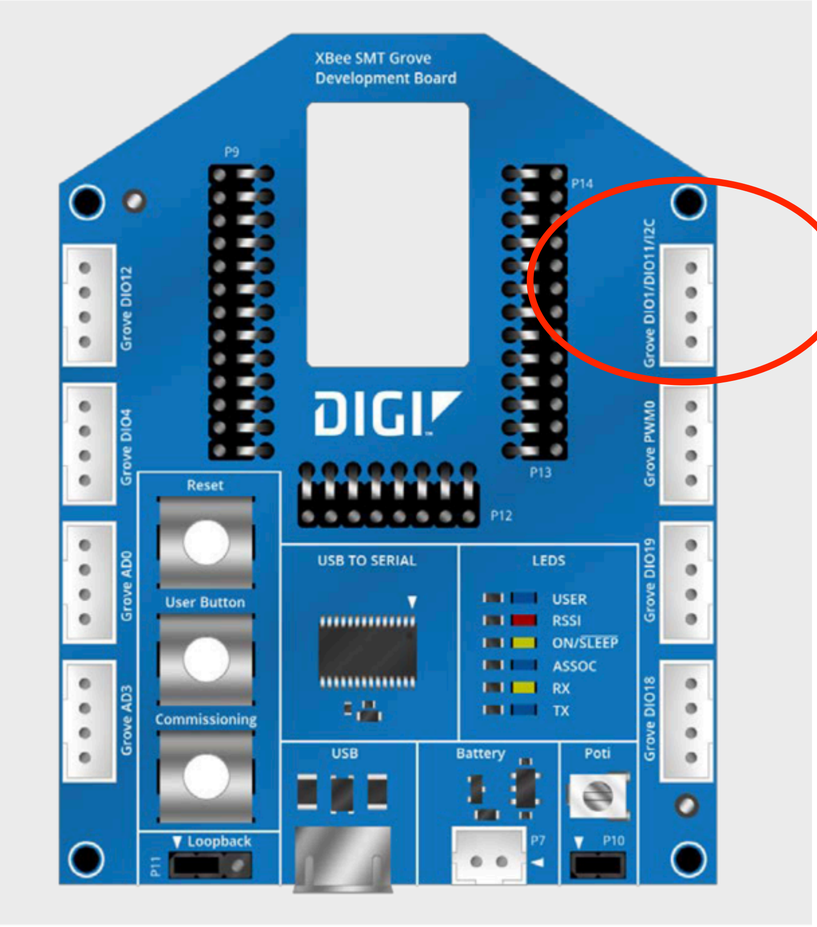




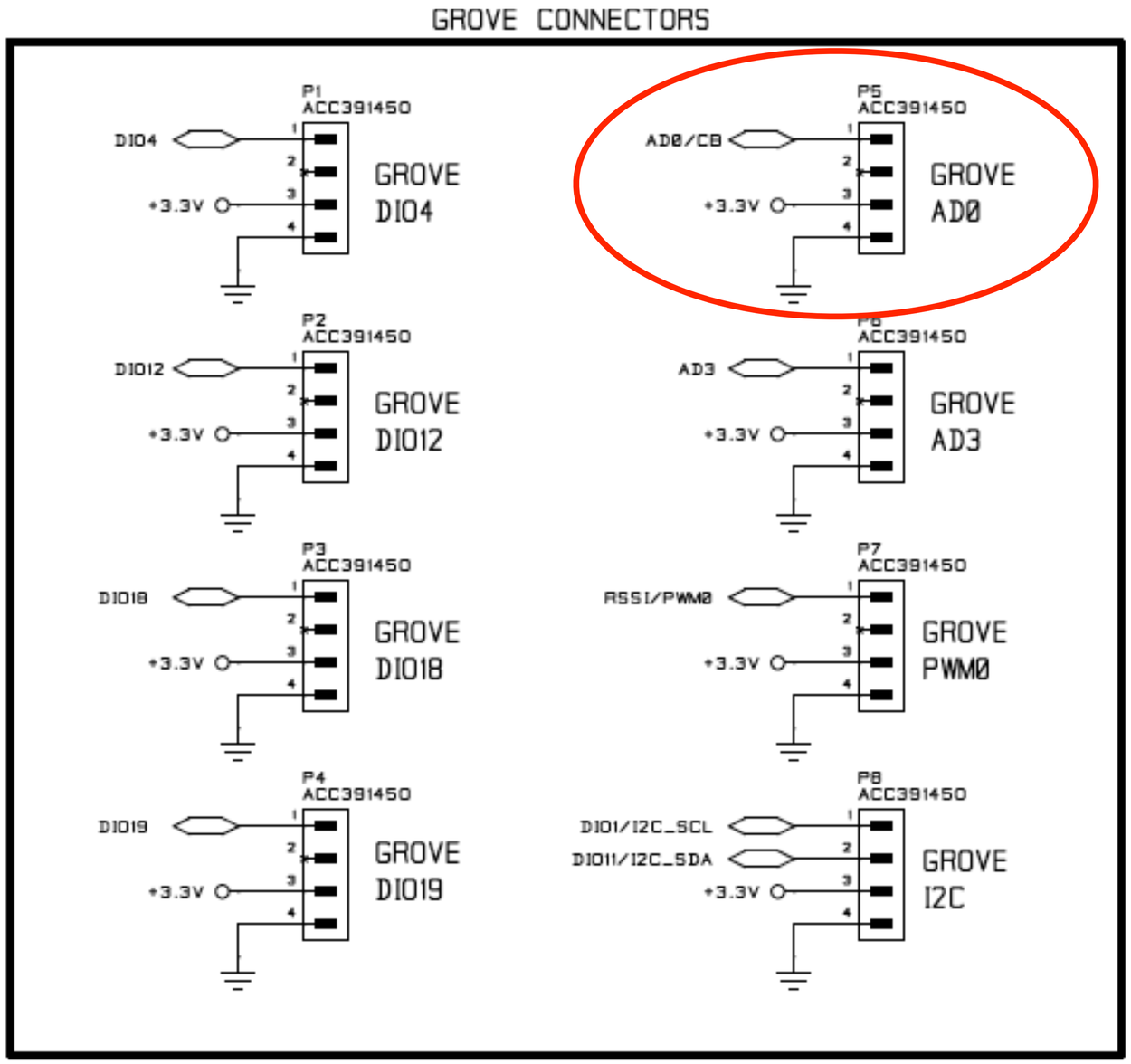
KY-018	Arduino
S	Pin A2
middle	+5V
-	GND
Operating Voltage	3.3V to 5V
Output Type	Analog

https://arduinomodules.info/ky-018-photoresistor-module/

SMT Schematic

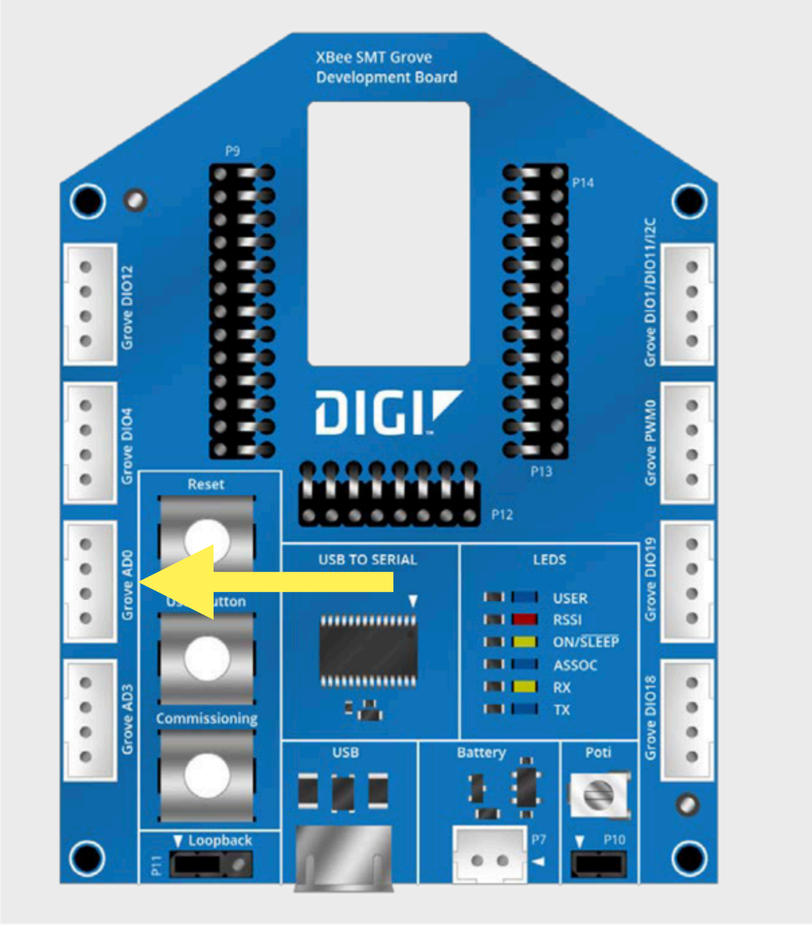


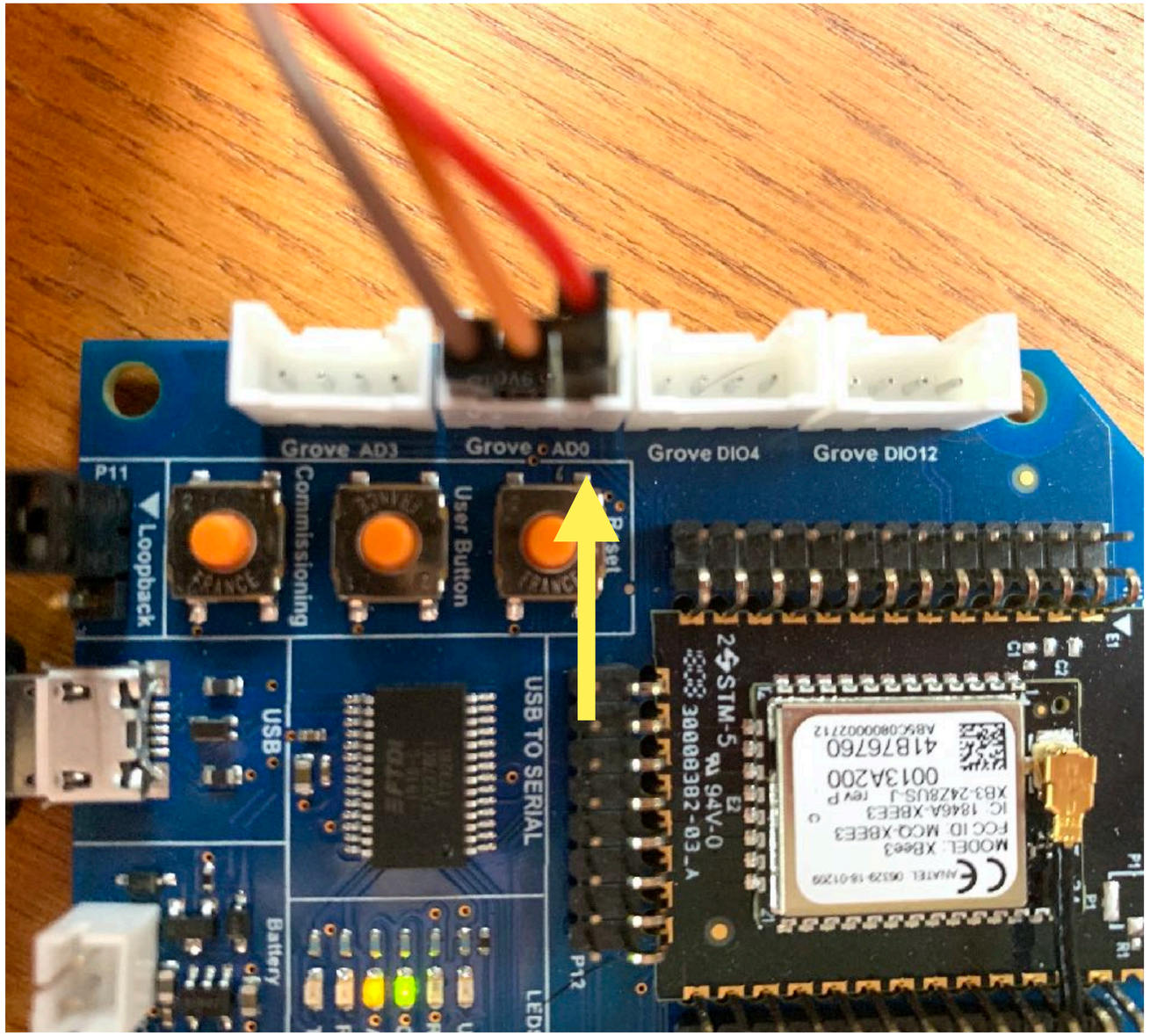
Not Correct



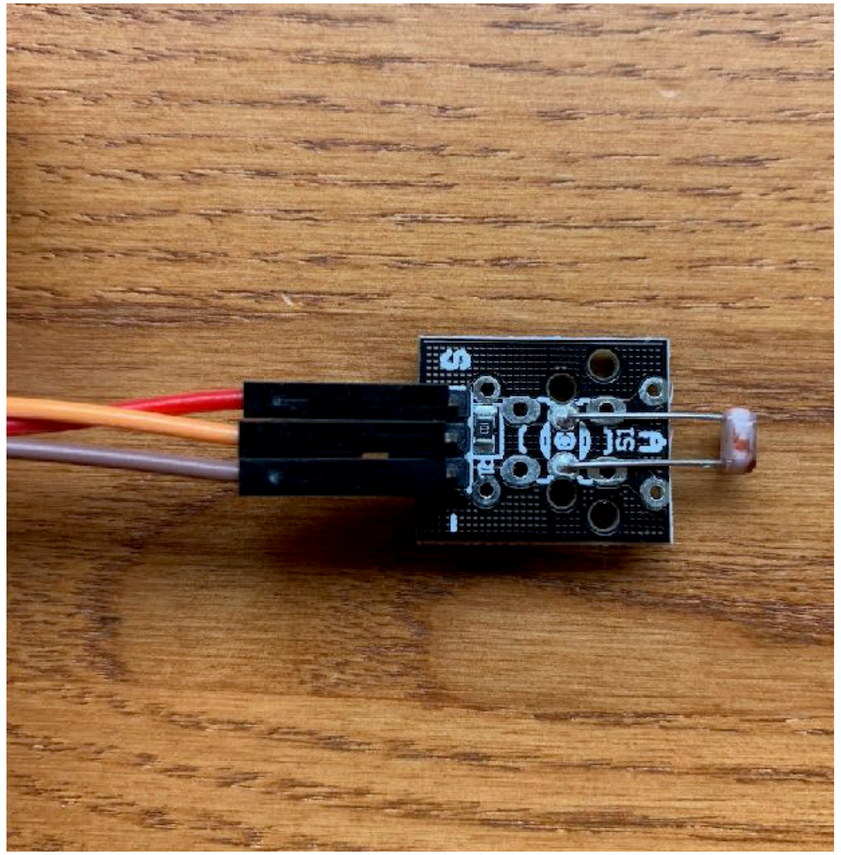
https://www.digi.com/resources/documentation/digidocs/90002219/tasks/t_xb_io_analog-to-digital.htm

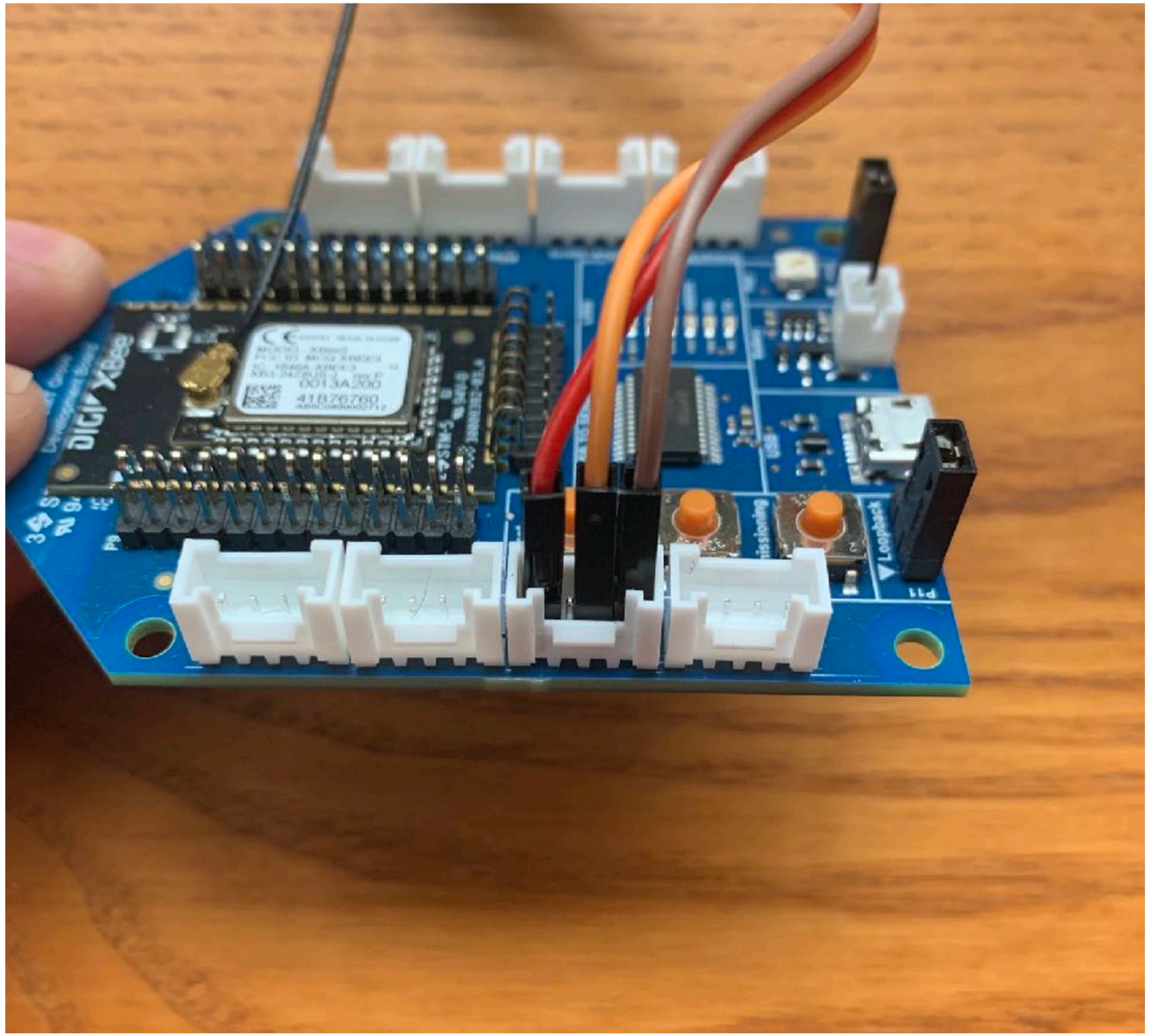
AD0


XBee SMT Grove
Development Board
P9
P14
P13
P12
DIGI
Grove DIO12
Grove DIO4
Grove AD0
Grove AD3
Grove DIO1/DIO11/I2C
Grove PWM0
Grove DIO19
Grove DIO18
Reset
Commissioning
Loopback
P11
USB TO SERIAL
LEDS
USER
RSSI
ON/SLEEP
ASSOC
RX
TX
USB
Battery
Poti
P7
P10

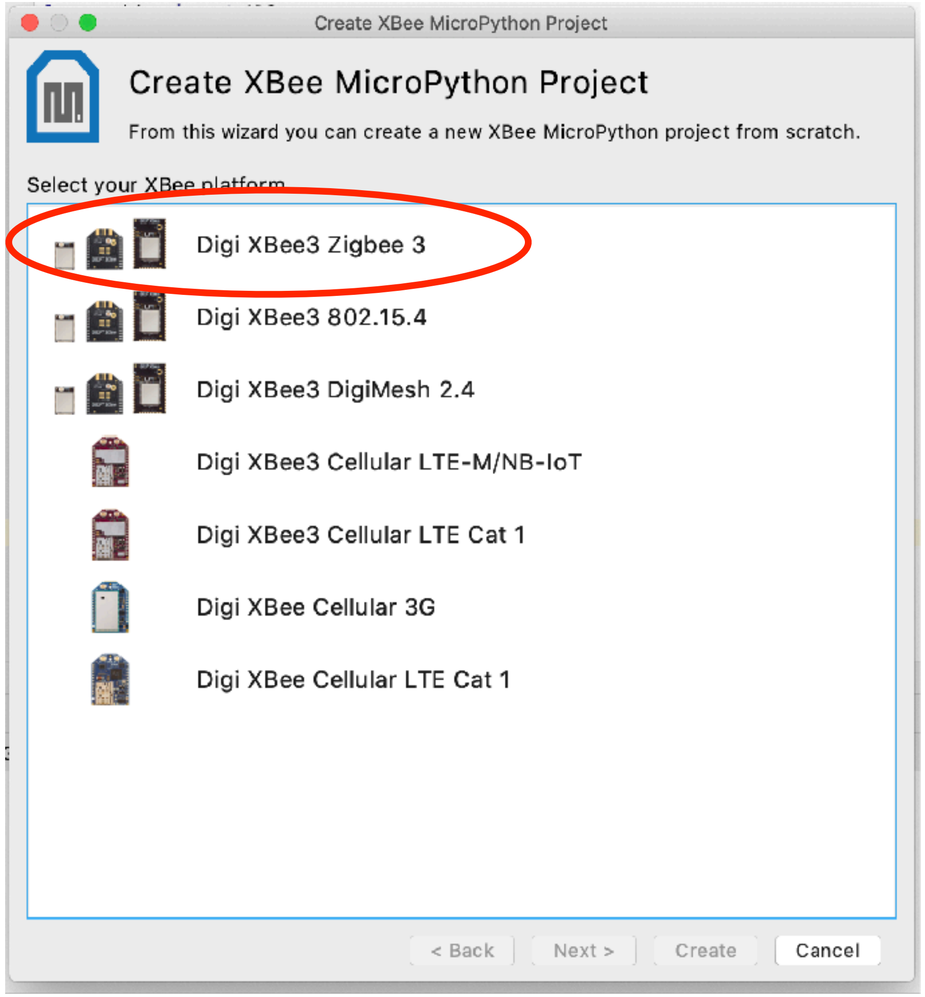

Grove AD3
Grove AD0
Grove DIO4
Grove DIO12
P11
Loopback
Commissioning
User Button
Reset
USB
USB TO SERIAL
Battery
P12
LED
STM-5
94V-0
30000382-03_A
41876760
0013A200

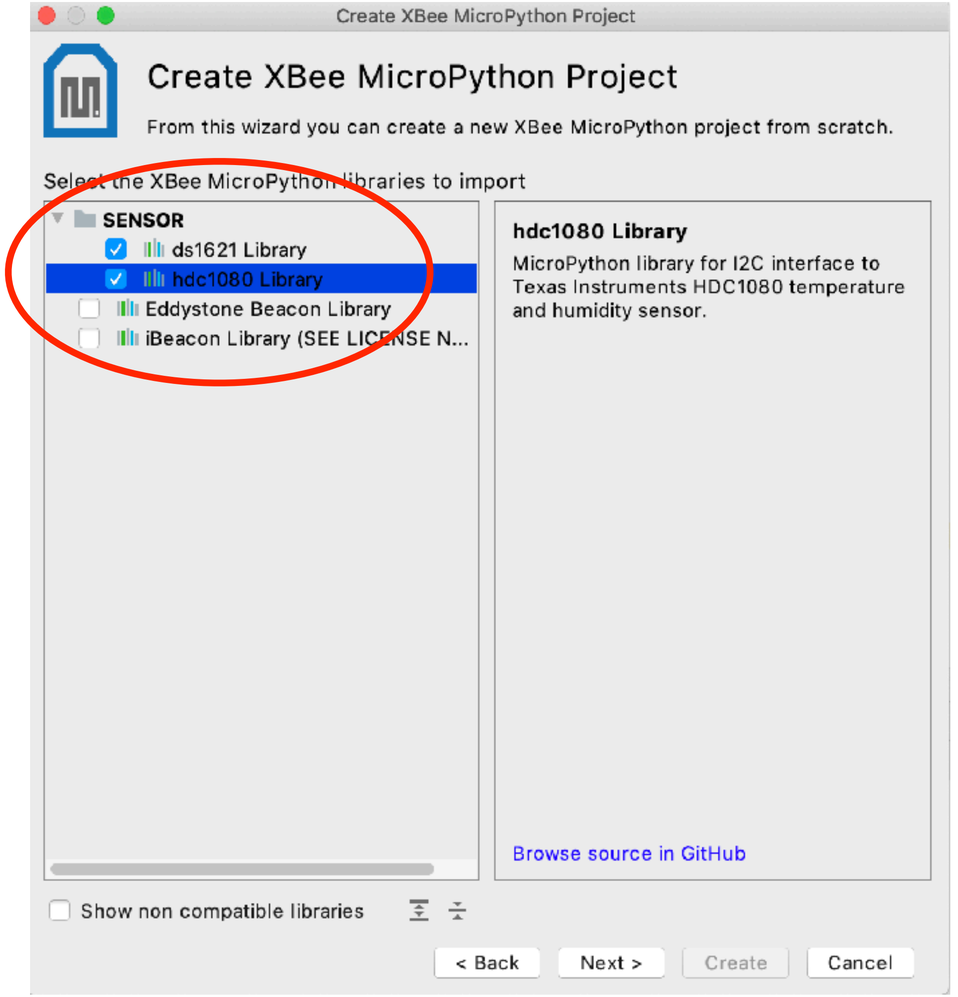
Jumper wiring





Project setup





Micropython Code

main.py

```
from machine import Pin
from machine import ADC
import time

help(Pin.board)

ad0 = Pin("D0", Pin.IN, Pin.PULL_UP)

print("\nCreating an ADC object for pin AD0...")

adc0 = ADC("D0")

print("Reading the ADC value on the pin...")

for i in range(0, 100):

    adc_value = (((adc0.read()/4095)*100)-100)*-1
    adc_value2 = adc0.read()
    print("PhotoResistor value: %d" % adc_value)
    print("Original ADC value: %d\n" % adc_value2)
    time.sleep(1.5)

```