

```
import Adafruit_BBIO.UART as UART
import beaglebone_pru_adc as adc
import serial
import time
import threading

class captureThread(threading.Thread):
    def __init__(self):
        threading.Thread.__init__(self)
        self.numSamples = 10000
        self.captureSamples = ()
        self.offset = 100

    def run(self):
        self.captureData()

    def captureData(self):
        capture = adc.Capture()
        capture.oscilloscope_init(adc.OFF_VALUES, self.numSamples) # captures AIN0 - the
        first elt in AIN array
        capture.start()

        while(True):
            if capture.oscilloscope_is_complete():
                break

        capture.stop()
        capture.wait()
        #print("Buffer atualizado com %d amostras"%(self.numSamples,))
        self.captureSamples = capture.oscilloscope_data(self.numSamples)
        capture.close()
        self.captureData()

UART.setup("UART2")
thread1 = captureThread()
thread1.start()
channelSize = 100
numChannel = int((thread1.numSamples-thread1.offset)/channelSize-1)
ser = serial.Serial(port = "/dev/ttyO2", baudrate=921600)
ser.close()
print(ser.name)
while True:
    currentCapture = thread1.captureSamples
    for i in range(0,numChannel):
        currentOffset = thread1.offset+i*channelSize
        lastOffset = currentOffset+channelSize
        captureData = ''
        for x in currentCapture[currentOffset:lastOffset]:
            captureData += str(x) + ' '
        captureData += '\n'
        ser.open()
        ser.write(captureData)
        ser.close()

# Eventually, you'll want to clean up, but leave this commented for now,
# as it doesn't work yet
#UART.cleanup()
```