TEAM ID :PNT2022TMID38196

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#! /usr/bin/python2

Import time
Import sys

EMULATE_HX711=False

referenceUnit = 1

if not EMULATE_HX711:
   import RPi.GPIO as GPIO
   from hx711 import HX711
else:
   from emulated_hx711 import HX711

def cleanAndExit():
   print("Cleaning…")

   if not EMULATE_HX711:
      GPIO.cleanup()

   Print("Bye!")
   Sys.exit()

Hx = HX711(5, 6)

# I've found out that, for some reason, the order of the bytes is not always the same between versions of python, numpy and the hx711 itself.
# Still need to figure out why does it change.
```

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# If you're experiencing super random values, change these values to MSB or LSB until to get more stable values.

# There is some code below to debug and log the order of the bits and the bytes.

# The first parameter is the order in which the bytes are used to build the "long" value.

# The second paramter is the order of the bits inside each byte.

# According to the HX711 Datasheet, the second parameter is MSB so you shouldn't need to modify it.

Hx.set_reading_format("MSB", "MSB")


# HOW TO CALCULATE THE REFFERENCE UNIT

# To set the reference unit to 1. Put 1kg on your sensor or anything you have and know exactly how much it weights.

# In this case, 92 is 1 gram because, with 1 as a reference unit I got numbers near 0 without any weight

# and I got numbers around 184000 when I added 2kg. So, according to the rule of thirds:

# If 2000 grams is 184000 then 1000 grams is 184000 / 2000 = 92.

#hx.set_reference_unit(113)

Hx.set_reference_unit(referenceUnit)


Hx.reset()


Hx.tare()


Print("Tare done! Add weight now…")


# to use both channels, you'll need to tare them both

#hx.tare_A()

#hx.tare_B()


While True:

    Try:
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    # These three lines are usefull to debug wether to use MSB or LSB in the reading formats
    # for the first parameter of “hx.set_reading_format(“LSB”, “MSB”)”.
    # Comment the two lines “val = hx.get_weight(5)” and “print val” and uncomment these three lines to see what it prints.

    # np_arr8_string = hx.get_np_arr8_string()
    # binary_string = hx.get_binary_string()
    # print binary_string + “ “ + np_arr8_string

    # Prints the weight. Comment if you’re debbuging the MSB and LSB issue.
    Val = hx.get_weight(5)
    Print(val)

    # To get weight from both channels (if you have load cells hooked up
    # to both channel A and B), do something like this
    #val_A = hx.get_weight_A(5)
    #val_B = hx.get_weight_B(5)
    #print “A: %s  B: %s” % ( val_A, val_B )

    Hx.power_down()
    Hx.power_up()
    Time.sleep(0.1)

  Except (KeyboardInterrupt, SystemExit):
    cleanAndExit()
```