**Interface April 15 – Multi-channel analogue inputs Listing 1**

import RPi.GPIO as GPIO

import time

GPIO.setmode(GPIO.BOARD)

GPIO.setwarnings(False)

GPIO.setup(22, GPIO.OUT)

GPIO.setup(24, GPIO.IN)

GPIO.setup(26, GPIO.OUT)

GPIO.setup(18, GPIO.OUT)

GPIO.output(22, GPIO.HIGH)

GPIO.output(26, GPIO.LOW)

GPIO.output(18, GPIO.HIGH)

Readings = 0

Average = 0

while(Readings < 10):

dataword = 0

GPIO.output(22, GPIO.LOW)

GPIO.output(26, GPIO.HIGH)

GPIO.output(26, GPIO.LOW)

GPIO.output (18, GPIO.HIGH)

GPIO.output(26, GPIO.HIGH)

GPIO.output(26, GPIO.LOW)

GPIO.output (18, GPIO.LOW)

GPIO.output(26, GPIO.HIGH)

GPIO.output(26, GPIO.LOW)

GPIO.output (18, GPIO.HIGH)

GPIO.output(26, GPIO.HIGH)

GPIO.output(26, GPIO.LOW)

GPIO.output (18, GPIO.HIGH)

GPIO.output(26, GPIO.HIGH)

GPIO.output(26, GPIO.LOW)

GPIO.output(26, GPIO.HIGH)

GPIO.output(26, GPIO.LOW)

GPIO.output(26, GPIO.HIGH)

GPIO.output(26, GPIO.LOW)

GPIO.output(26, GPIO.HIGH)

B11 = GPIO.input(24)

GPIO.output(26, GPIO.LOW)

GPIO.output(26, GPIO.HIGH)

B10 = GPIO.input(24)

GPIO.output(26, GPIO.LOW)

GPIO.output(26, GPIO.HIGH)

B9 = GPIO.input(24)

GPIO.output(26, GPIO.LOW)

GPIO.output(26, GPIO.HIGH)

B8 = GPIO.input(24)

GPIO.output(26, GPIO.LOW)

GPIO.output(26, GPIO.HIGH)

B7 = GPIO.input(24)

GPIO.output(26, GPIO.LOW)

GPIO.output(26, GPIO.HIGH)

B6 = GPIO.input(24)

GPIO.output(26, GPIO.LOW)

GPIO.output(26, GPIO.HIGH)

B5 = GPIO.input(24)

GPIO.output(26, GPIO.LOW)

GPIO.output(26, GPIO.HIGH)

B4 = GPIO.input(24)

GPIO.output(26, GPIO.LOW)

GPIO.output(26, GPIO.HIGH)

B3 = GPIO.input(24)

GPIO.output(26, GPIO.LOW)

GPIO.output(26, GPIO.HIGH)

B2 = GPIO.input(24)

GPIO.output(26, GPIO.LOW)

GPIO.output(26, GPIO.HIGH)

B1 = GPIO.input(24)

GPIO.output(26, GPIO.LOW)

GPIO.output(26, GPIO.HIGH)

B0 = GPIO.input(24)

GPIO.output(26, GPIO.LOW)

GPIO.output(22, GPIO.HIGH)

GPIO.output(18, GPIO.HIGH)

if B11:

dataword = dataword + 2048

if B10:

dataword = dataword + 1024

if B9:

dataword = dataword + 512

if B8:

dataword = dataword + 256

if B7:

dataword = dataword + 128

if B6:

dataword = dataword + 64

if B5:

dataword = dataword + 32

if B4:

dataword = dataword + 16

if B3:

dataword = dataword + 8

if B2:

dataword = dataword + 4

if B1:

dataword = dataword + 2

if B7:

dataword = dataword + 1

Average = Average + dataword

Readings = Readings + 1

print (Average/10)

GPIO.cleanup()

print ("Finished")