Joystick Set up Document

On raspberry Pi open command prom and type int

sudo nano /boot/config.txt

Find

dtparam=spi=on

Remove the # in front of it

Restart raspberry Pi

Joystick code can work now:

The CODE to use joysticks

import spidev

import time

import os

# Open SPI bus

spi = spidev.SpiDev()

spi.open(0,0)

# Function to read SPI data from MCP3008 chip

# Channel must be an integer 0-7

def ReadChannel(channel):

  adc = spi.xfer2([1,(8+channel)<<4,0])

  data = ((adc[1]&3) << 8) + adc[2]

  return data

# Define sensor channels

# (channels 6 to 7 unused)

swt\_channel = 0

vrx\_channel = 1

vry\_channel = 2

swt2\_channel = 3

vrx2\_channel = 4

vry2\_channel = 5

# Define delay between readings (s)

delay = 0.5

while True:

  # Read the first joystick position data

  vrx\_pos = ReadChannel(vrx\_channel)

  vry\_pos = ReadChannel(vry\_channel)

  # Read switch state

  swt\_val = ReadChannel(swt\_channel)

# Read the second joystick position data

  vrx2\_pos = ReadChannel(vrx\_channel)

  vry2\_pos = ReadChannel(vry\_channel)

  # Read switch state

  swt2\_val = ReadChannel(swt\_channel

  # Print out results

  print "--------------------------------------------"

print “The first Joystick”

  print("X : {}  Y : {}  Switch : {}".format(vrx\_pos,vry\_pos,swt\_val))

print "--------------------------------------------"

print “The second Joystick”

  print("X : {}  Y : {}  Switch : {}".format(vrx2\_pos,vry2\_pos,swt2\_val))

  # Wait before repeating loop

  time.sleep(delay)

Wiring:

