

HiveBoard Quick Setup Guide

The HiveBoard i2c communication operates at 5v to be compatible with all EZO circuits. A raspberry pi runs i2c communication runs at 3.3v. A level shifter is used to enable these devices to talk to each other. The level shifter provided with the HiveBoard is a 4channel level shifter, you will only need to use 2 channels from it.

For the level shifter: the high side (HV) is the higher voltage side and connects to the DroneBoard

The low side (LV) is for the lower voltage side and will connect to the raspberry pi

Connections for the HV side of the level shifter (connects to DroneBoard):

TX0 – Connect this to either the SCL or SDA line from the DroneBoard

RX1 – Connect the i2c line you did not connect to TX0 to this connection

HV – Connect to 5v output from the DroneBoard (lower pin from power connector for shifter)

GND – Connect to the GND connection from the DroneBoard (upper pin from shifter power connector)



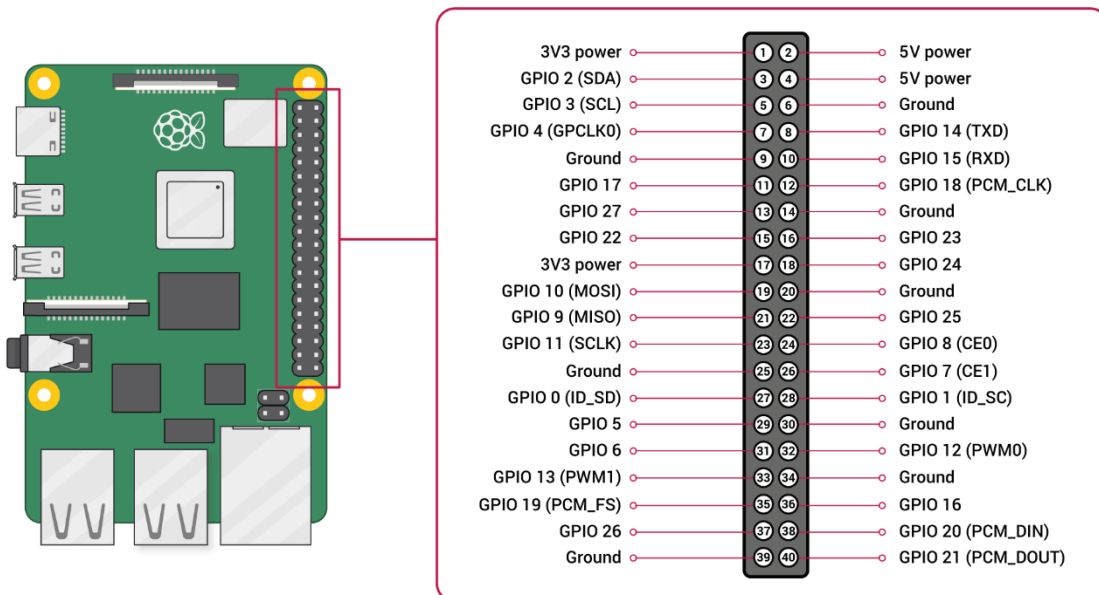
Connections for the LV side of the level shifter (connects to RPI): SDA-Pin3/SCL-Pin5 by default

TX1- Connect this to the corresponding TX0 i2c line from the RPI (if you connected TX0 to SCL from the HiveBoard then connect TX1 to SCL from the RPI)

RX0-Connect the opposite I2C connection

LV- - Connect to the 3.3v pin from the RPI

GND- Connect to GND from the RPI



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