

SPI and I2C Interface Card for the PolyVent

An interface card for the PolyVent to bring out SPI bus for the GPAD. Level shift from 5V to 3V on the CIP0.

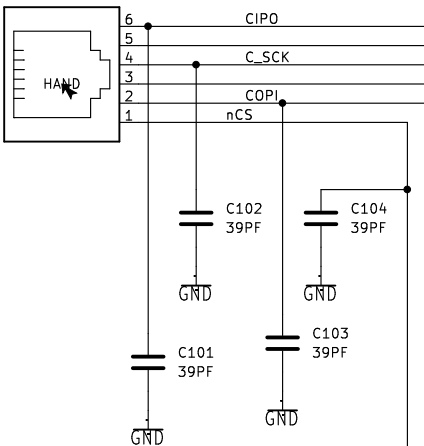
Also to bring out I2C buss through bidirectional level shifters.

J102 is an RJ12 Connector for SPI with 5V logic level.

SPI Connector Signal Names

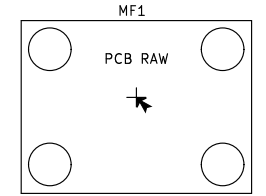
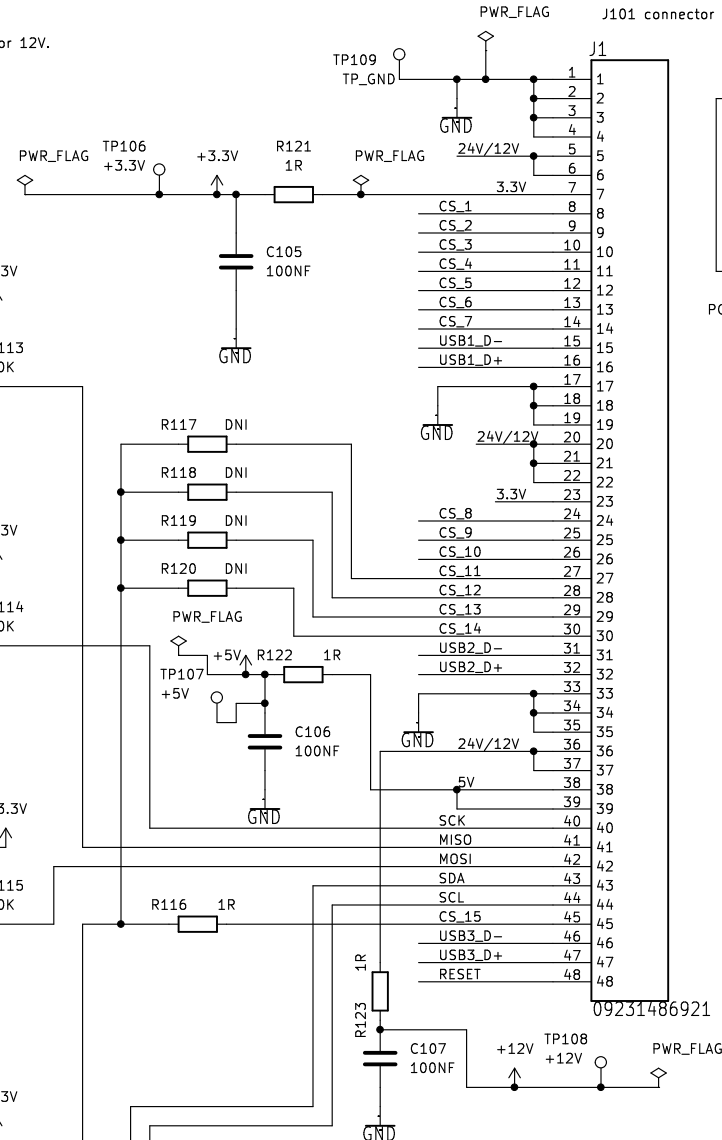
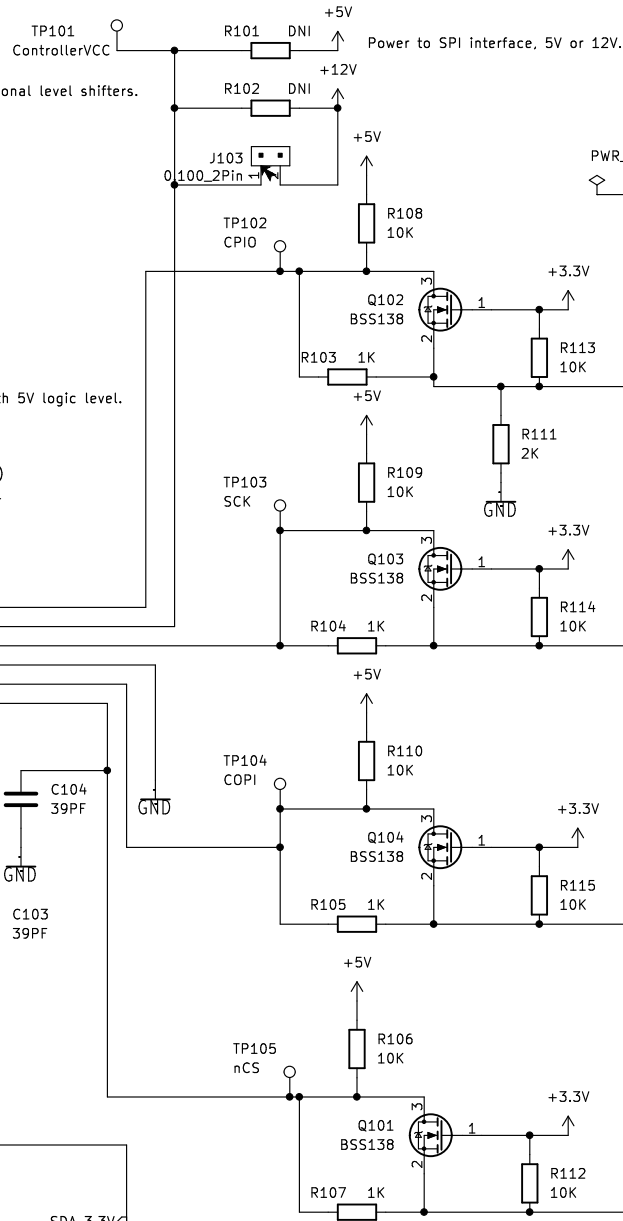
CIP0: Controller In, Peripheral Out
C_SCK: Controller Serial Clock (output)
COPI: Controller Out, Peripheral In
nCS: not Chip Select, ie /CHIP_SELECT

J102
RJ12_6P6C_HORZ



I2C_LevelShifter

File: I2C_LevelShifter.kicad_sch



PCB_PolyVent_SPI_Controller_VER1

DrawnBy: (Forrest) Lee Erickson
GNU Affero General Public License v3.0

PublicInvention

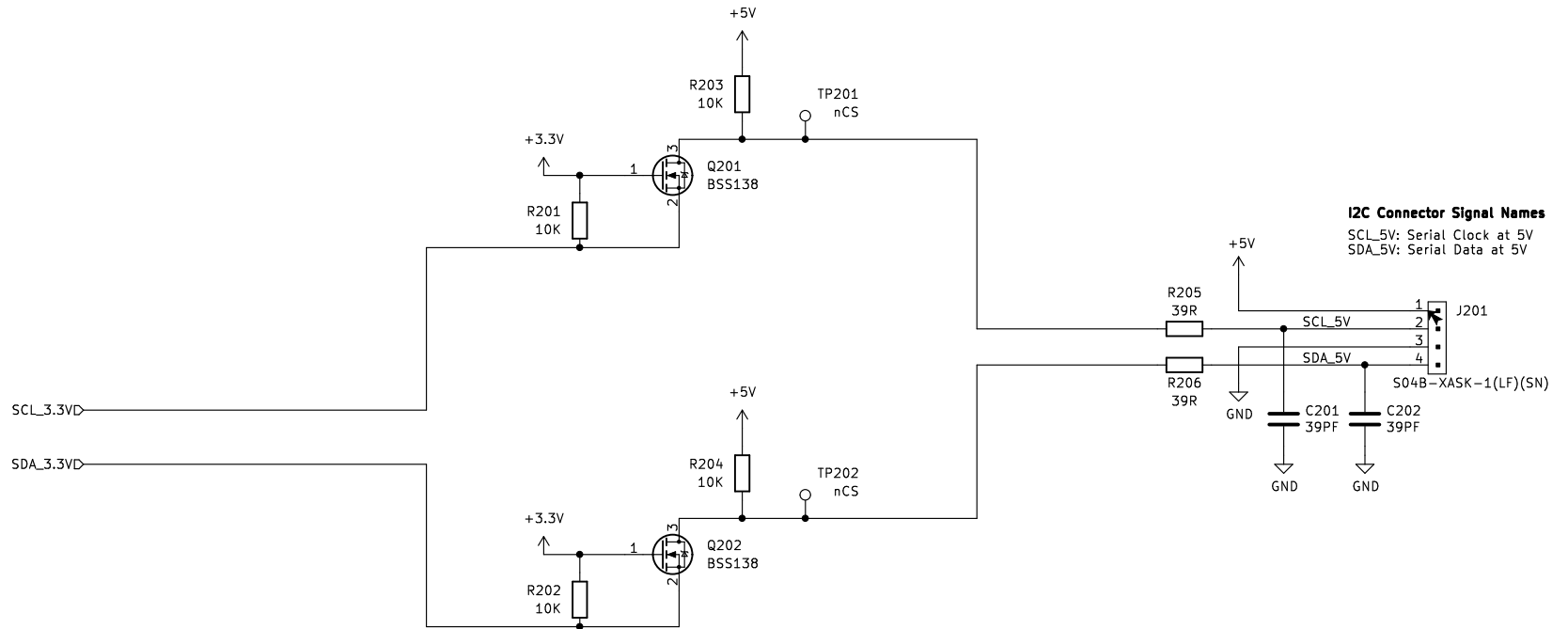
Sheet: /
File: PolyVent_SPI_Controller.kicad_sch

Title: PolyVent_SPL_Controller

Size: USLetter Date: 2022-10-25
KiCad E.D.A. kicad (6.0.6)

Rev: 0.1

Id: 1/2



DrawnBy: (Forrest) Lee Erickson
 GNU Affero General Public License v3.0

PublicInvention

Sheet: /I2C_LevelShifter/
 File: I2C_LevelShifter.kicad_sch

Title: PolyVent_SPLController

Size: USLetter Date: 2022-10-26
 KiCad E.D.A. kicad (6.0.6)

Rev: 0.1
 Id: 2/2