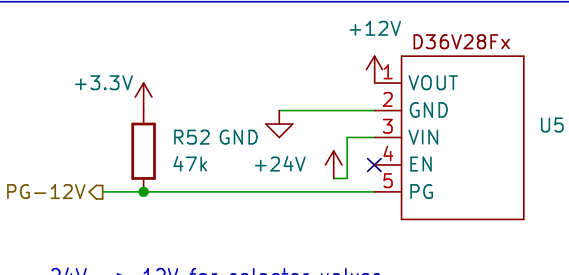
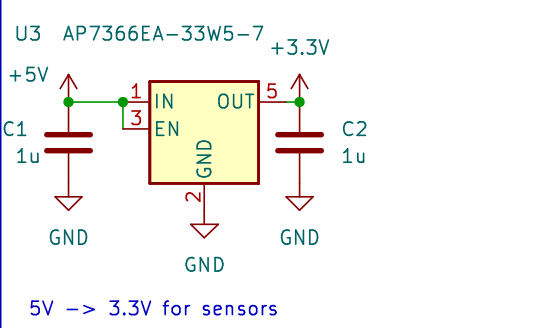


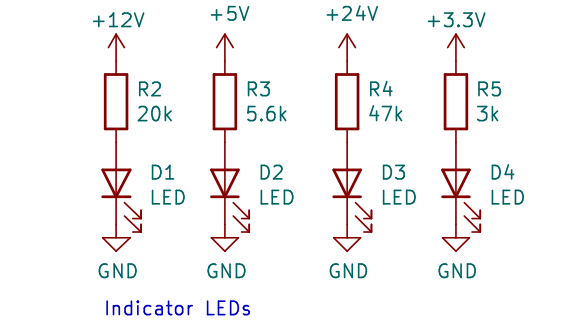
24V -> 5V for disc pump, sensors



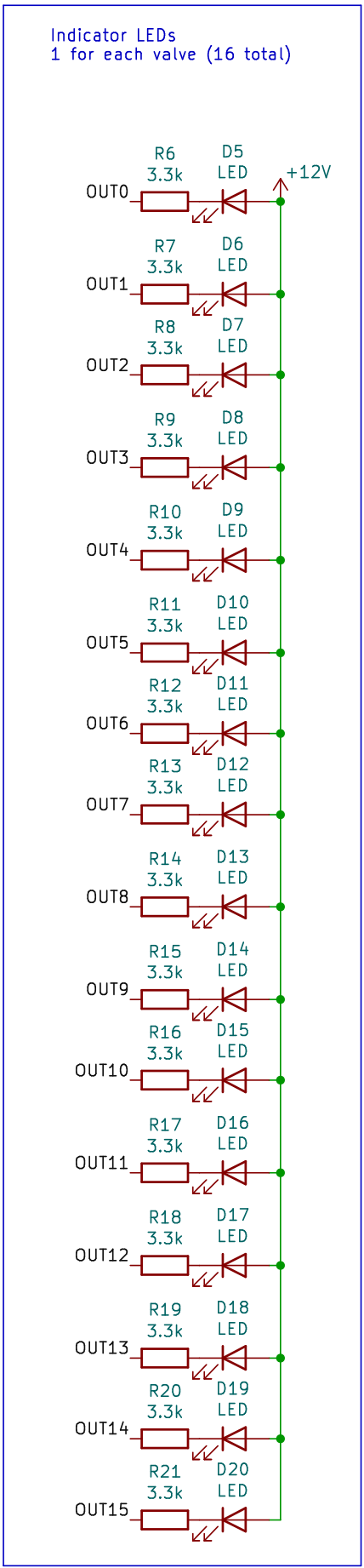
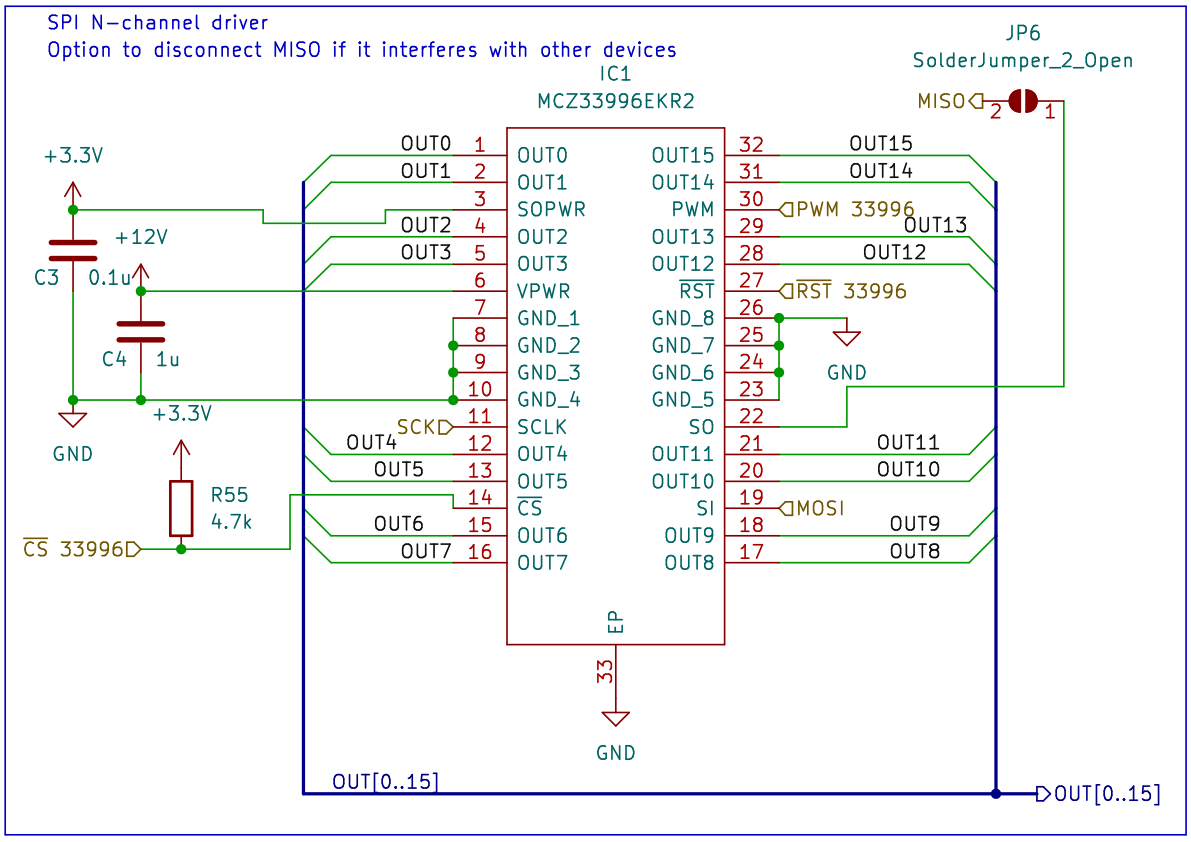
24V -> 12V for selector valves

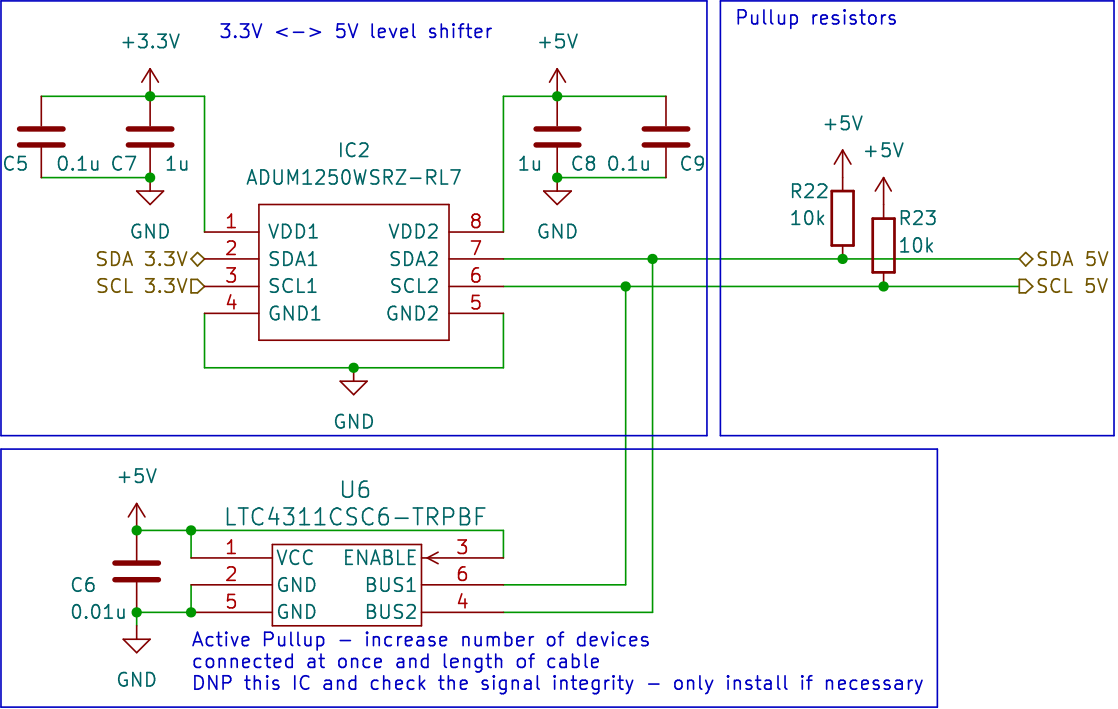


5V -> 3.3V for sensors



Indicator LEDs





14 input devices – 12 DIP switches, 1 switch, 1 button

12 DIP switches
Control up to 12 valves independently

SW11 SW10 SW9 SW8 SW7 SW6 SW0 SW1 SW2 SW3 SW4 SW5

R24 10k R25 10k R26 10k R27 10k R28 10k R29 10k R36 10k R35 10k R34 10k R33 10k R32 10k R31 10k

GND

+3.3V

SW1 D6C90F1LFS

SW12 R30 10k

GND

+3.3V

SW13 S2 450301014042

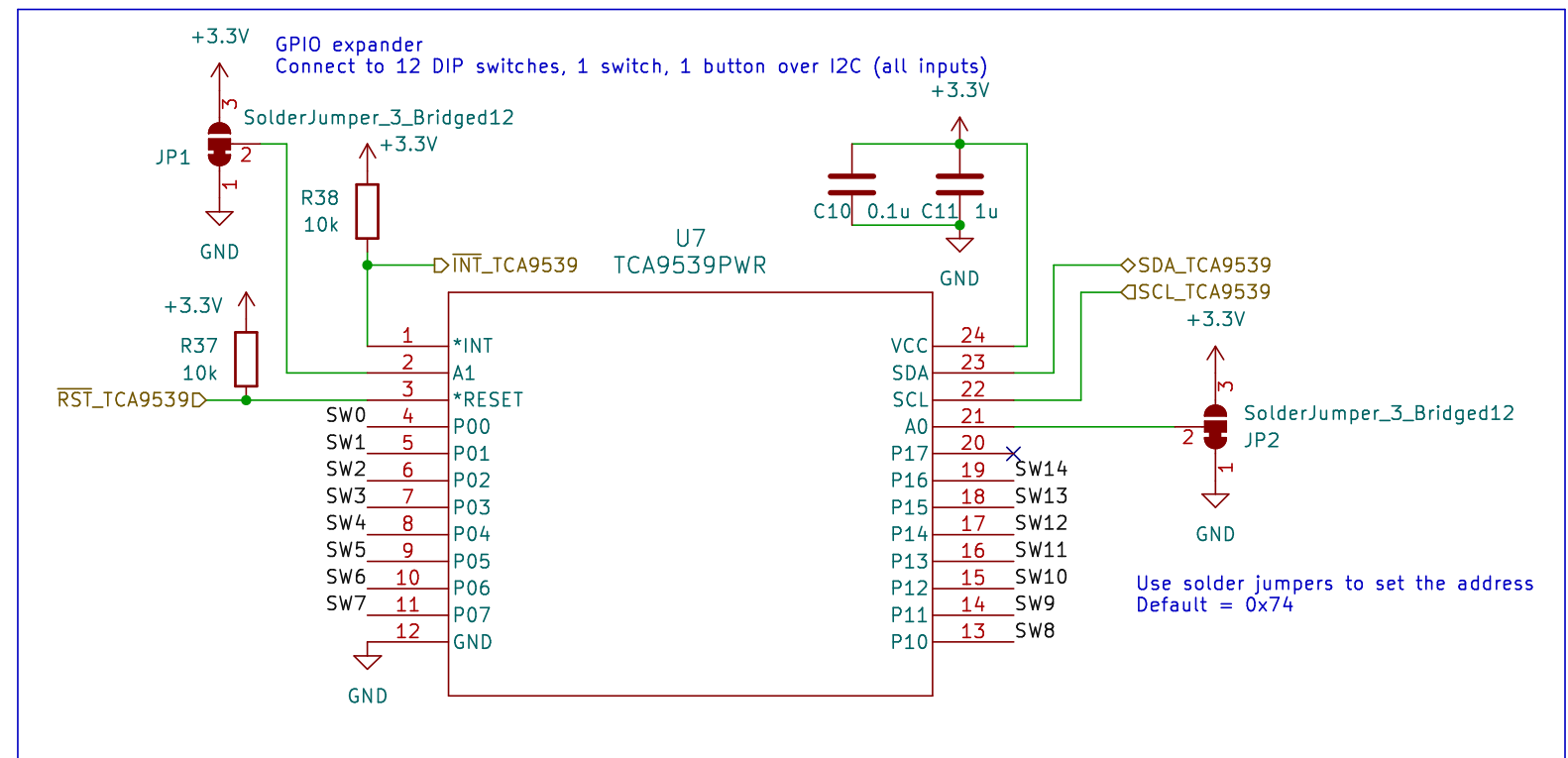
GND Enable/Disable Manual Control

+3.3V

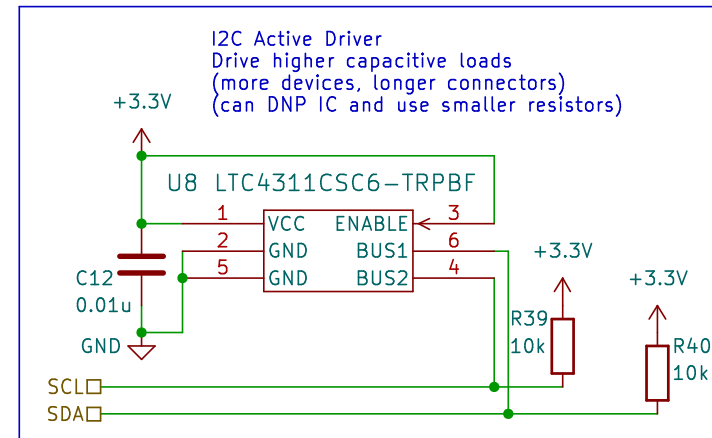
SW14 S3 450301014042

GND

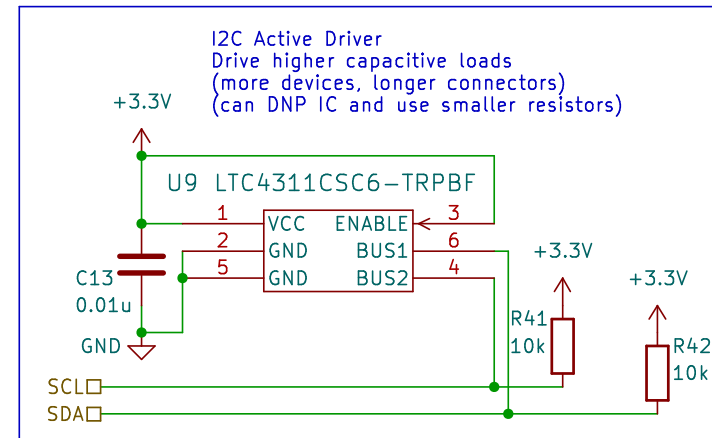
Pressure/Vacuum selector (sets valves 1/4 to either be both on or both off)



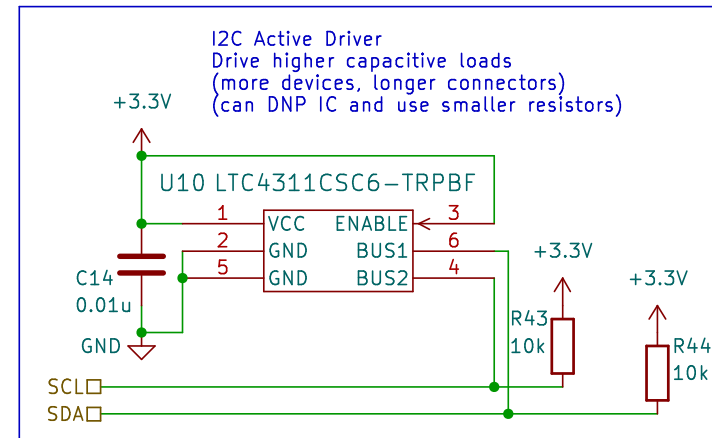
DNP – test signal integrity without the active pullups and populate them if necessary

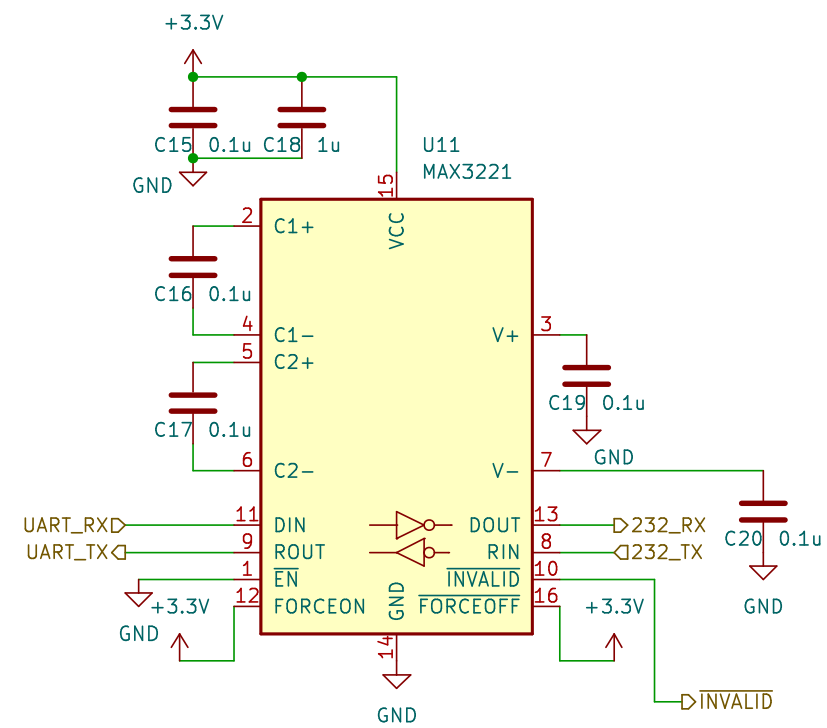


DNP – test signal integrity without the active pullups and populate them if necessary



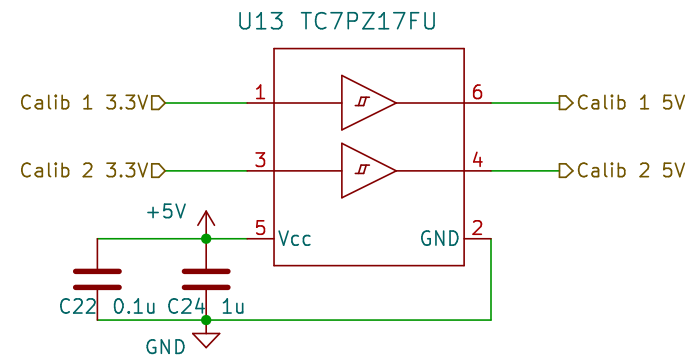
DNP – test signal integrity without the active pullups and populate them if necessary



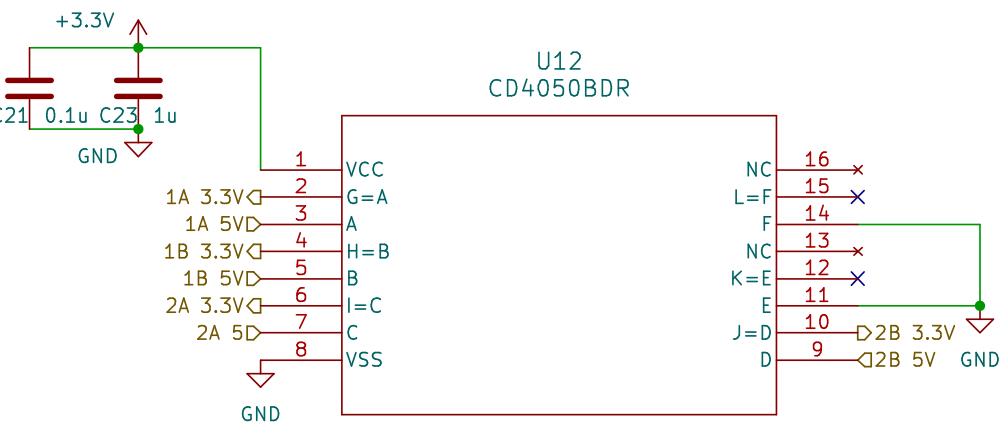


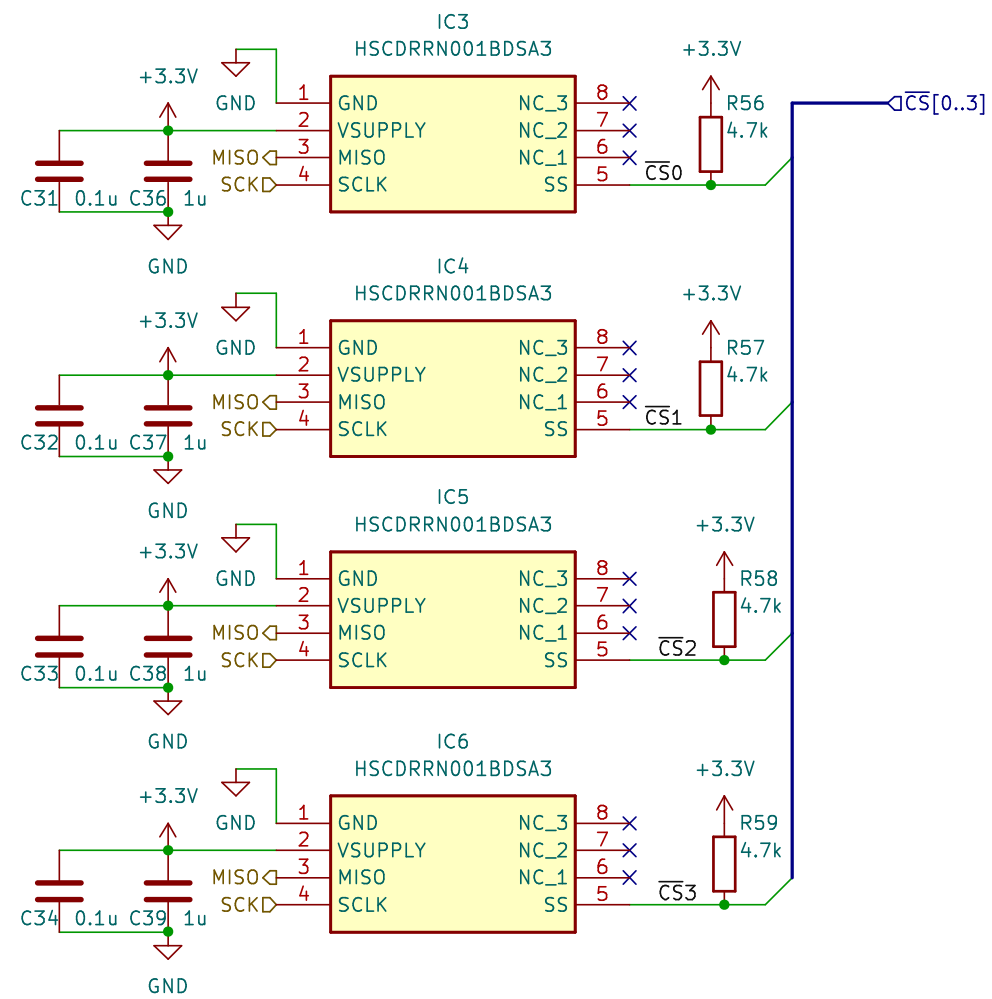
Convert from 3.3V UART to RS232

Level shift the calibration signal from 3.3V to 5V



Level shift the bubble detection signal from 5V to 3.3V





Pressure sensors connect over SPI and have unique chip select pins

Address translator for fourth flow sensor – DNP if using only three
If the translator is not populated, connect the solder jumpers to use 4th connector

