NOTE: The panel seems to work best with signals of 3V6 so using a buck to control the level shifter 5V till you get a signal (CLK,DIN,LOAD) which is 3V6 appears to work most reliably. -[ISET] U1 nodeMCU\_ESP32 D23 30 Conn1 D22 CONN1\_PANEL\_LOAD TX0 RX0 27 5 CONN1\_PANEL\_CLK D34 GOND 7 CONN1\_PANEL\_DIN 80NB GND 1 GND CH1\_MCU\_DIN 1 A1 CH1\_MCU\_CLK 2 A2 CH1\_MCU\_LOAD 3 A3 20 CONN1\_PANEL\_DIN 26 CH2\_MCU\_DIN D35 D21 .8 CONN1\_PANEL\_CLK - D32 D19 25 CH2\_MCU\_CLK CONN1\_PANEL\_LOAD - D33 24 CH2\_MCU\_LOAD CH2\_MCU\_DIN 7 A5
CH2\_MCU\_CLK 8 A6
CH2\_MCU\_LOAD 9 A7
10 A8 B5 15 CONN2\_PANEL\_DIN J2 (CH1\_MCU\_DIN 8 D25 B6 14 CONN2\_PANEL\_CLK B7 13 CONN2\_PANEL\_LOAD D5 -Conn2 (CH1\_MCU\_CLK) 9 D26 TX2 (CH1\_MCU\_LOAD 10 D27 RX2 D4 20 5 (CONN2\_PANEL\_CLK) GONNZ PANEL CLK
GOND GND
CONNZ PANEL DIN
GND GND
GND GND 19 - D12 D2 -GND D15 18 \_13| D13 U2 GND GND 14 GND GND 17GND GND TXB0108DQSR 3V3 16 3V3 Connectors are 2.54mm male pin header.
The panel ribbon cables need the driving end DIN connector
removed and soldered to a female header.
Pin 1 corresponds to the red stripe on the ribbon cable NOTE: I used a cheap 8 channel level shifter module from China. There's nothing in KiCAD for that so I used the symbol shown. Author: Brian Norman Connected Humber Sheet: / File: Level Shifter.sch Title: BUS Panel Driver/Interface Size: A4 Date: 2020-06-12 Rev: 1.0 KiCad E.D.A. kicad (5.1.0)-1 ld: 1/1