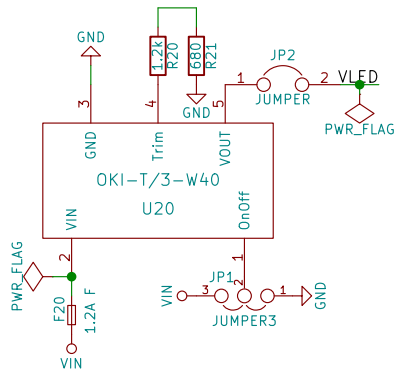
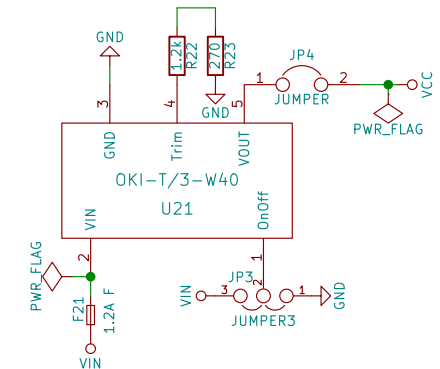


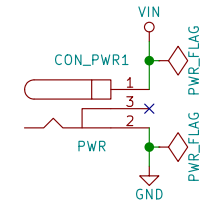
Note:
The Rtrim resistor must be a 1/10 Watt precision metal film type, ±1% accuracy or better with low temperature coefficient, ±100 ppm/°C or better. Mount the resistor close to the converter.



VLED

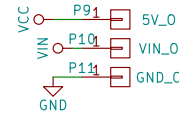
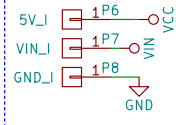


VCC



VIN

Note:
6A Capable Trace between VIN_I/O, GND_I/O and CON_PWR

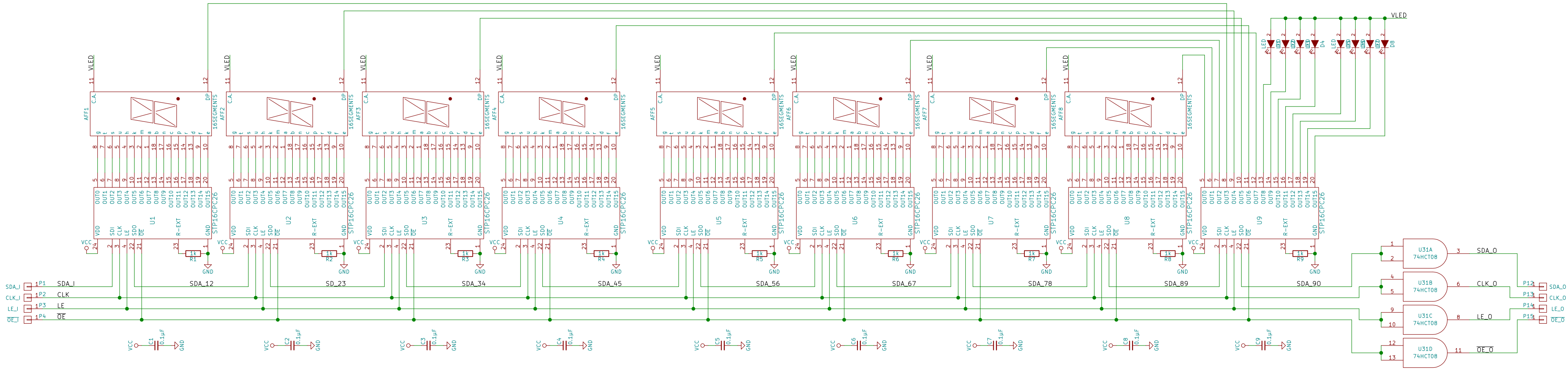


Voltage Testpoints

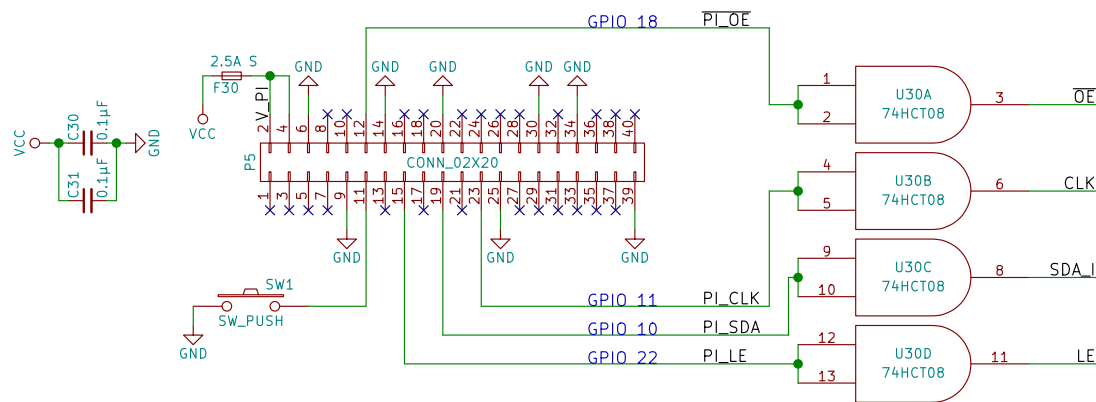


POWER

Note:
On the first Board, CON_PWR and the 5V Power Module is populated. The 5V (VCC) generated here from is then passed on to the other boards, together with V_IN. V_LED is generated on each Board separately from V_IN. The Jumper on ONOFF are for positive/negative module selection. The Jumper on the outputs are for In-Situ Current Measurement.



RPI Interface



Note:
The HCT-Type Gate here is used as a Level-Shifter from 3.3V to 5V, so it is important to use a HCT-Type Gate (not HC/AC/LS or other type)

Note:
One the first of the multiple Display-Boards, the RPI-Section is populated, while on the other boards it can simply be left Blank.

It contains an RPI Extension Port Socket, which connects the RPi's SPI-Port via a Level-Shifter to the Shift-Registers and GPIO 22 to the LE-Line of all Boards. It also powers the RPI from the 5V for the Shift-Registers, which is generated from the# 12V Barrel Connector.

The Local Regulator for the VLED Rail which powers the LEDs must be populated on all Boards.