

Bias power supply with SMPS pre-regulator

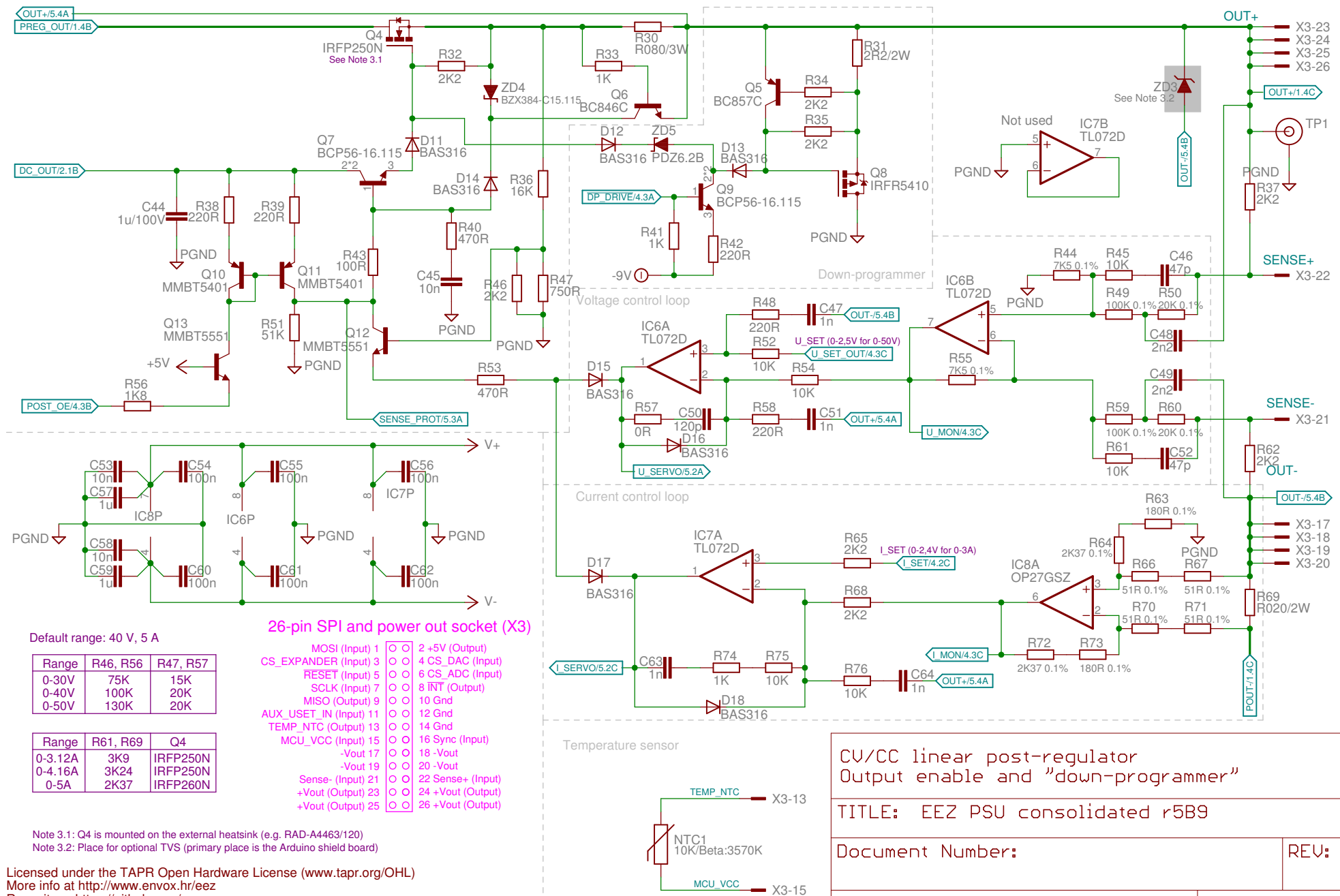
TITLE: EEZ PSU consolidated r5B9

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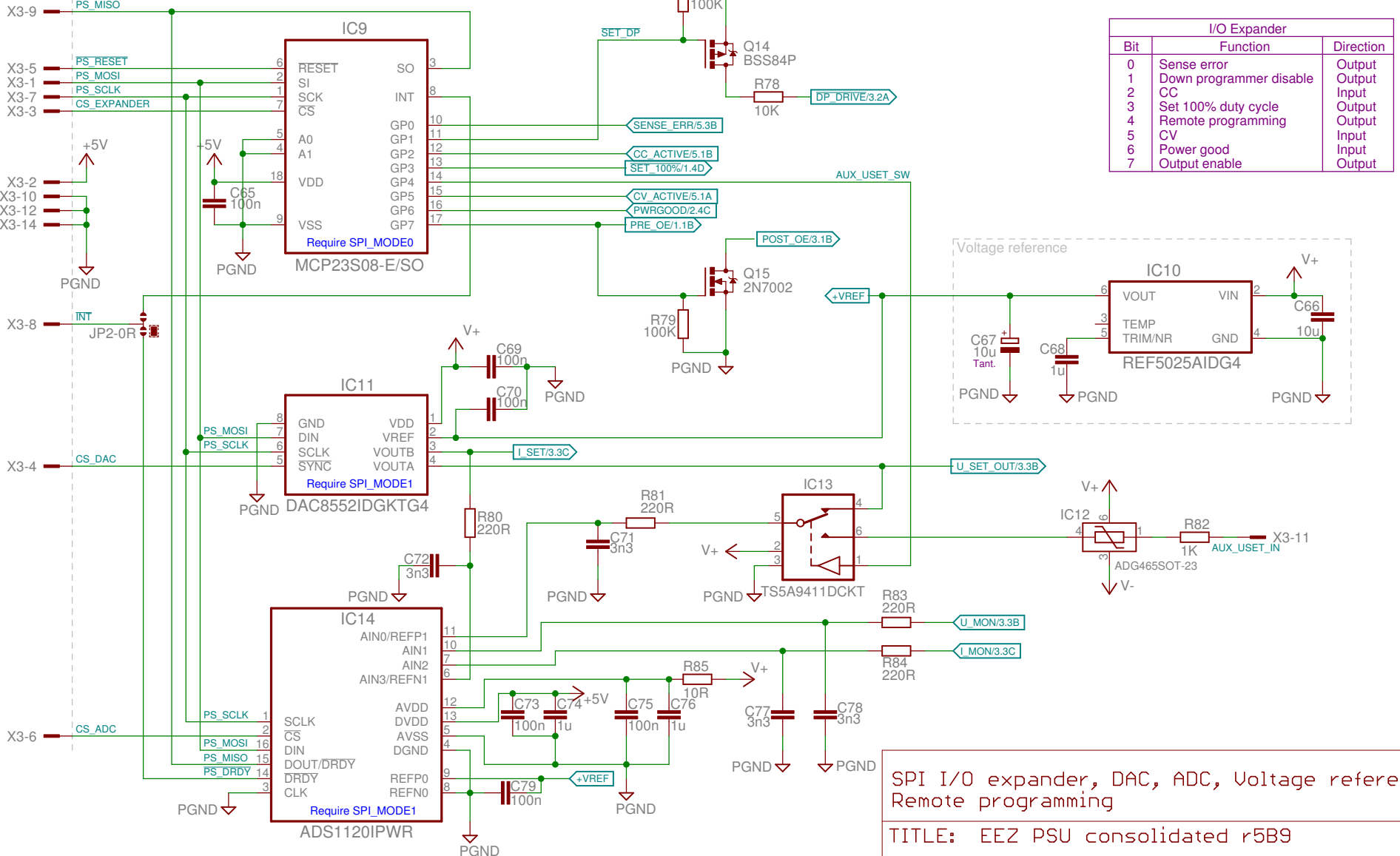
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Digital control (SPI)

SSW-113-02-T-D-RA



SPI I/O expander, DAC, ADC, Voltage reference
Remote programming

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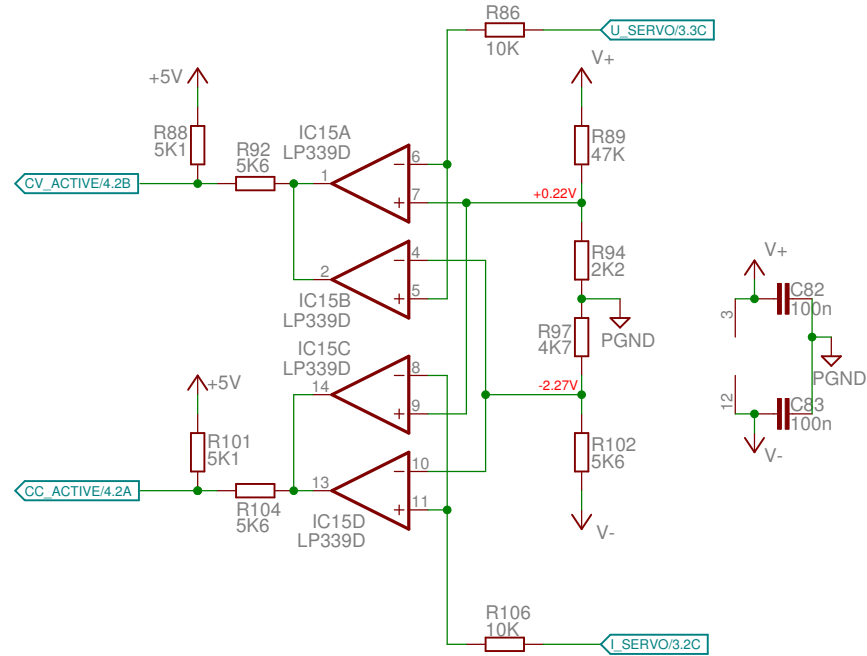
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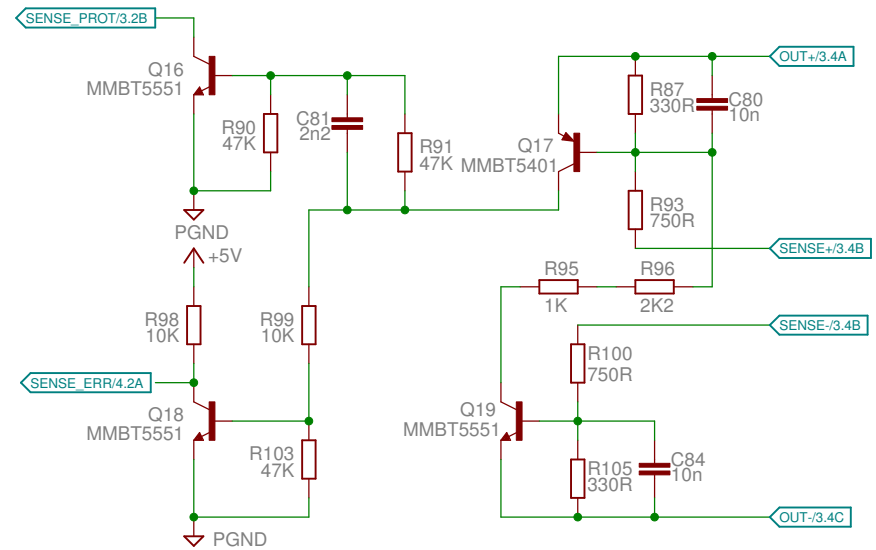
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Constant Voltage (CV) and Constant Current (CC) mode indicator



Remote sense reverse polarity detection



CC/CV indicators, Sense error detection

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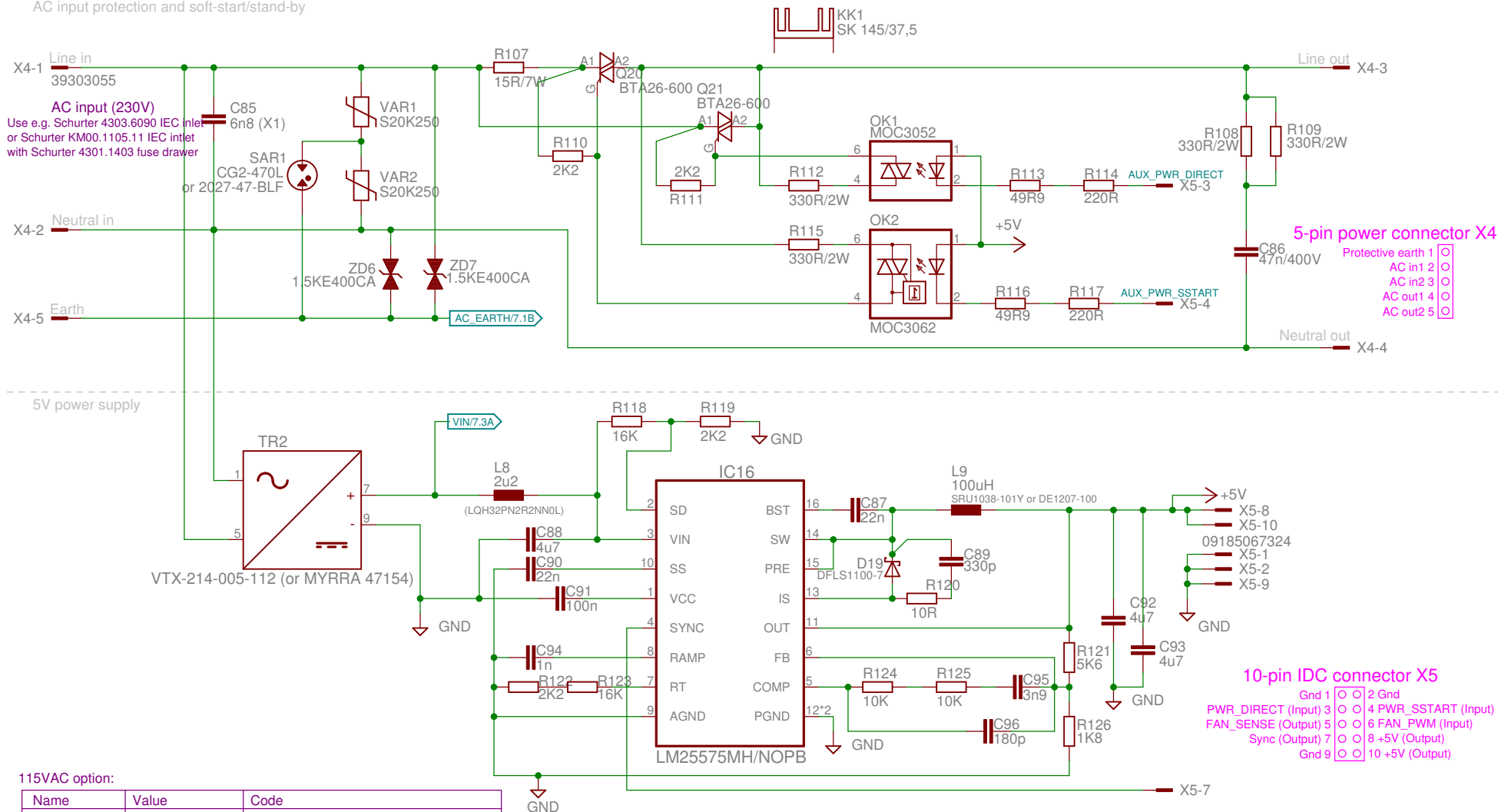
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AC input protection and soft-start/stand-by



The schematic diagram illustrates the internal circuitry of the LED Link module. It shows the connection between the 8-pin connector X8 and the internal components. The components include a transformer, IC17, TPD4E002DRLR, LMJ2138814S0L1T1C, and two LEDs (Right LED (Yellow) and Left LED (Green)).

8-pin connector X8:

- 1: LED Link (Input)
- 2: LED Act (Input)
- 3: Shield
- 4: RX+ (Output)
- 5: RX- (Output)
- 6: TX+ (Input)
- 7: TX- (Input)
- 8: +3.3V (Input)

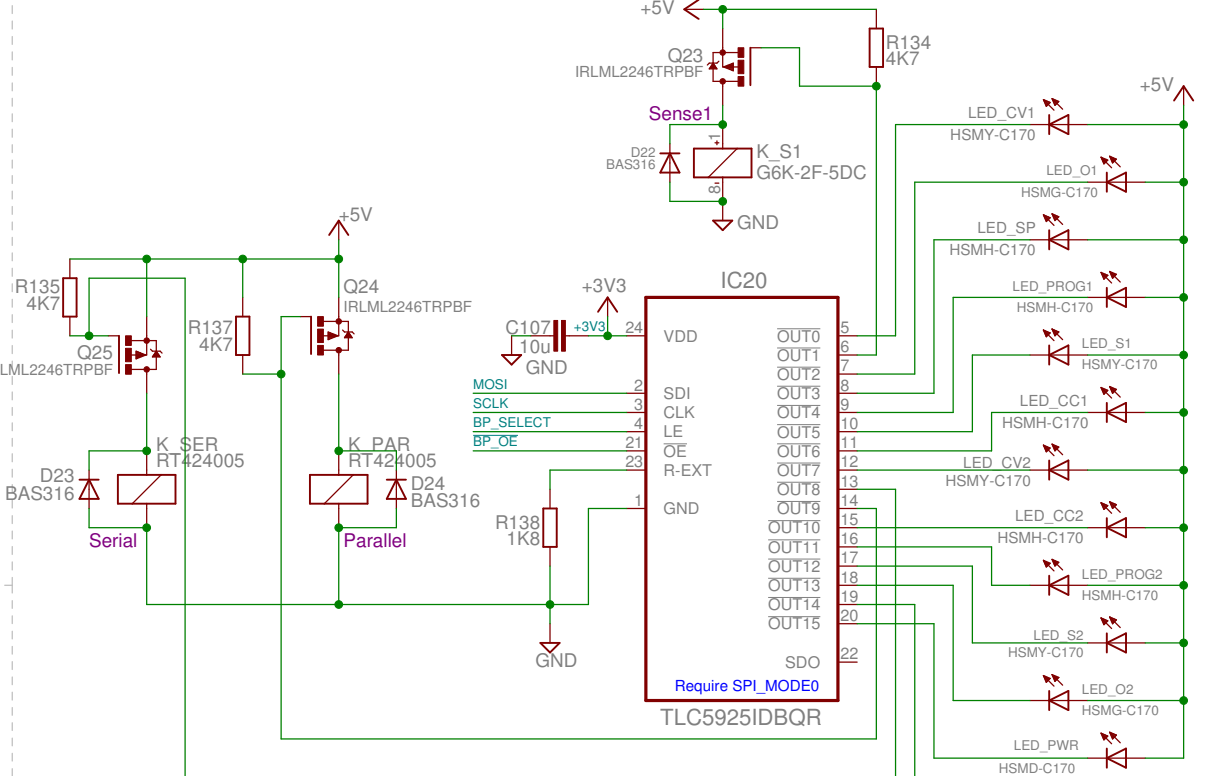
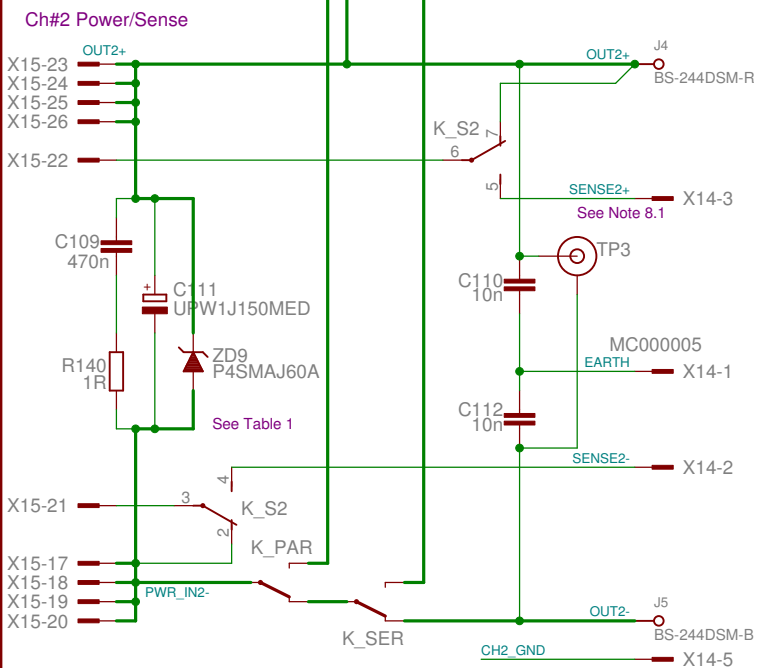
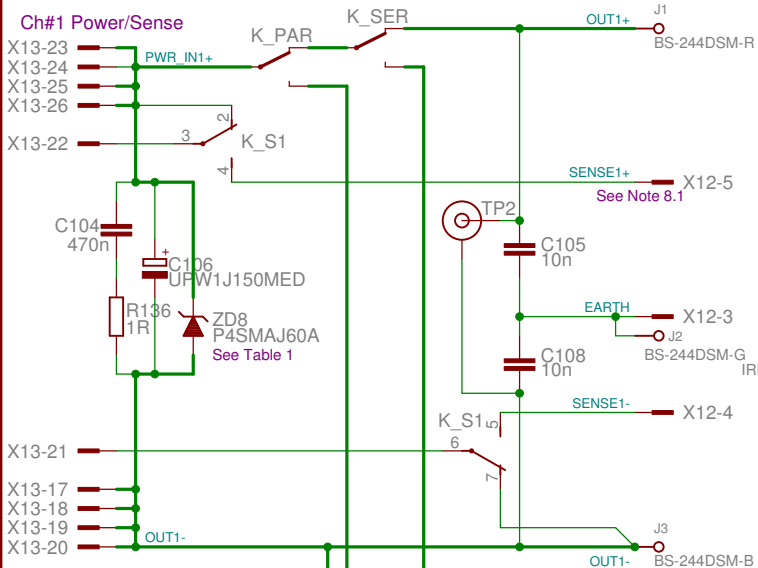
Internal Components and Connections:

- Transformer:** Connected to pins 1, 2, 3, 4, 5, 6, 7, and 8. The primary windings are connected to pins 1, 2, 3, and 4. The secondary windings are connected to pins 5, 6, 7, and 8.
- IC17:** A diode component connected to pins 1, 2, 3, 4, 5, and 6.
- TPD4E002DRLR:** A diode component connected to pins 1, 2, 3, 4, 5, and 6.
- LMJ2138814S0L1T1C:** A diode component connected to pins 1, 2, 3, 4, 5, and 6.
- Right LED (Yellow):** Connected to pins 1, 2, 3, 4, 5, and 6.
- Left LED (Green):** Connected to pins 1, 2, 3, 4, 5, and 6.

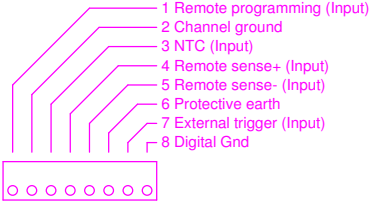
[illegible]

The schematic shows the internal components of the ADUM3160BRWZ isolator, including two optocouplers (IC18 and IC19), various capacitors (C99, C102, C101, C103), resistors (R132, R133), and ferrite beads (FB5, FB6). It details the power supply connections (+5V, PGND) and signal inputs (X10-2, X10-3). The output signals are labeled as X9-1 through X9-5 and X11-01.

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8-pin push-in connector X12



6-pin push-in connector X14

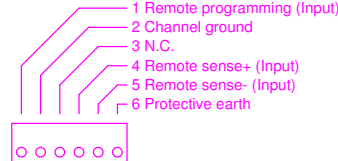


Table 1

Range	ZD1-ZD4
0-30V	P4SMAJ36A
0-40V	P4SMAJ48A
0-50V	P4SMAJ60A

Note 8.1: Solder X1 and X3 on the PCB's opposite side



Remote sensing and outputs interconnector
Output terminal protection

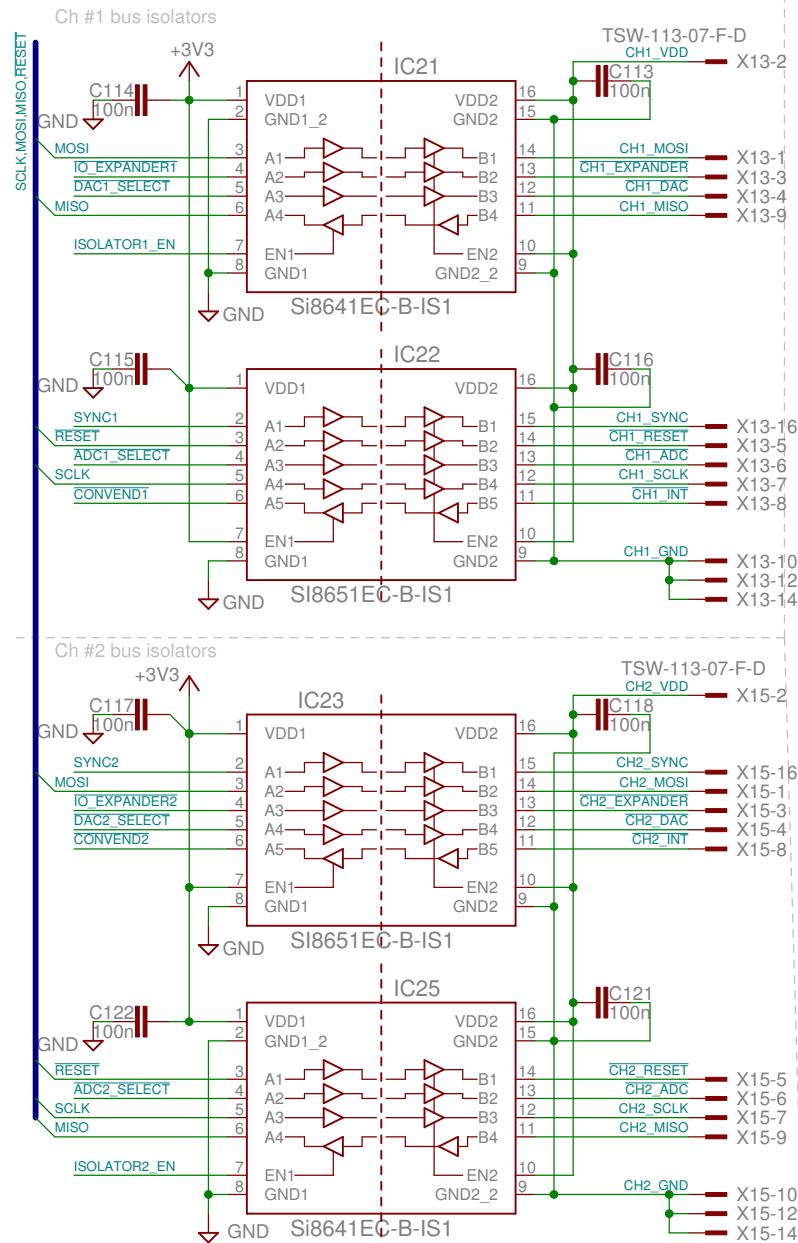
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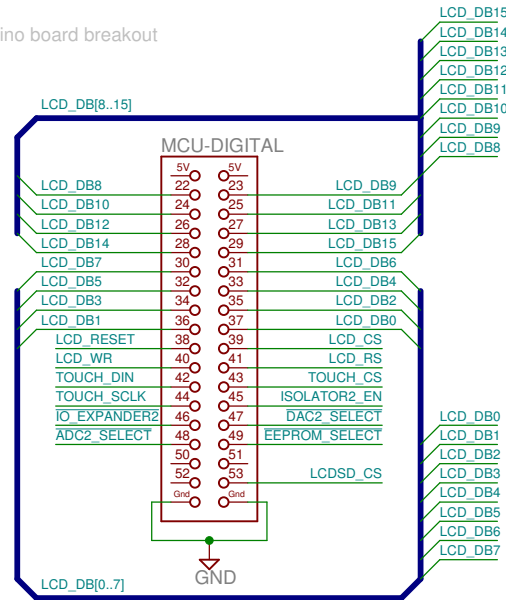
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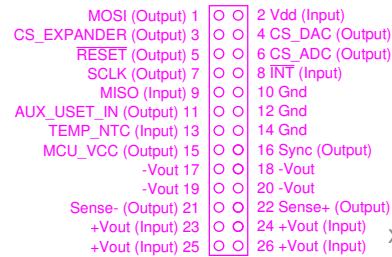
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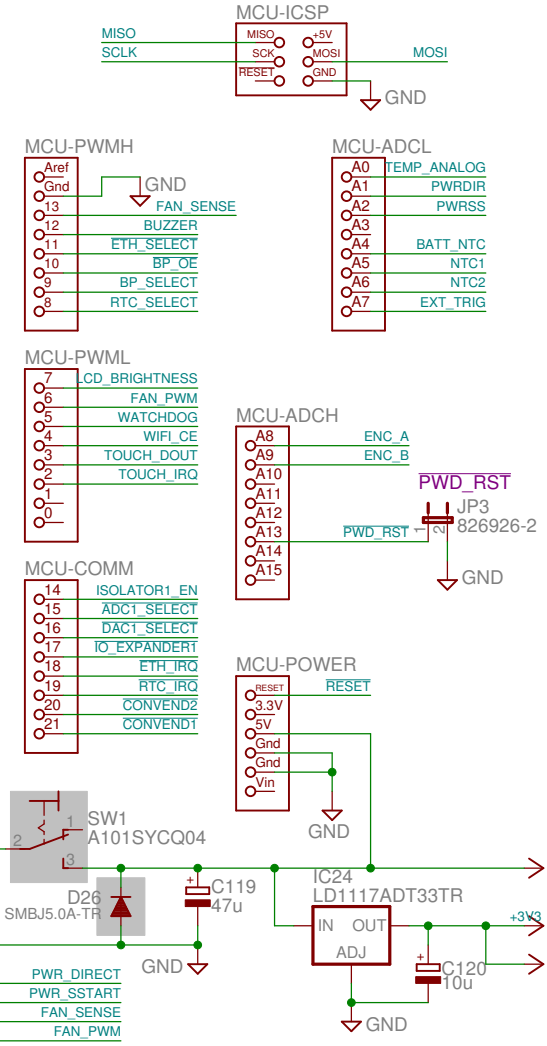
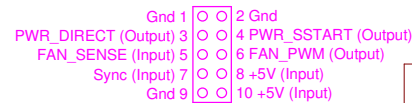
Arduino board breakout



26-pin SPI and power out socket (X13, X15)



10-pin IDC connector X16



I/O isolators for communication with post-regulator PCB, Arduino breakout

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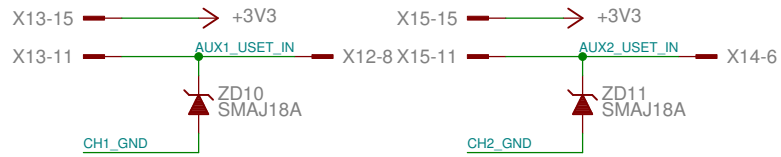
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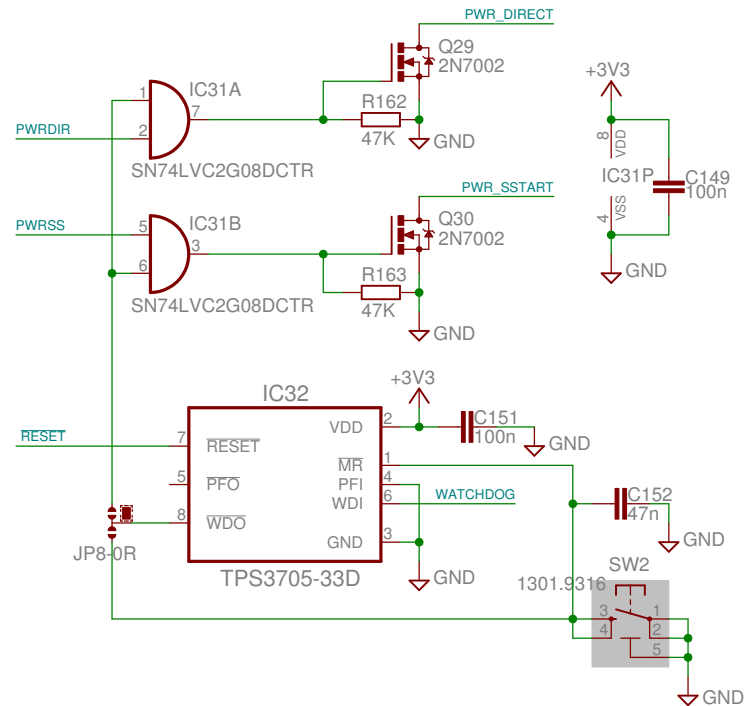
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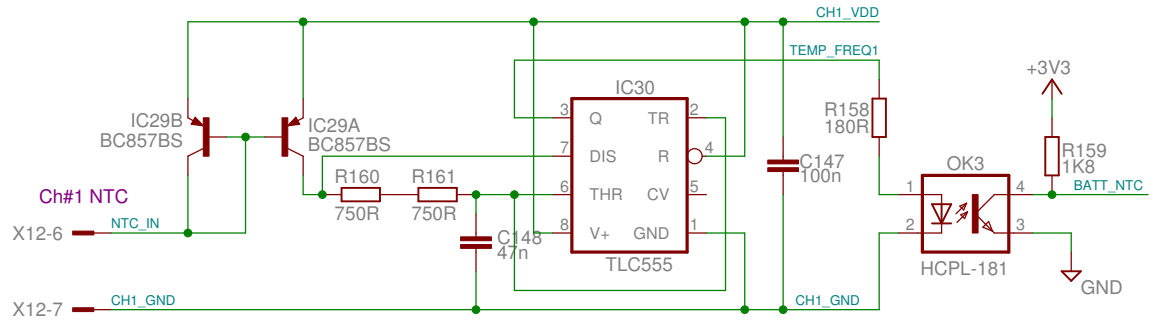
Remote programming inputs



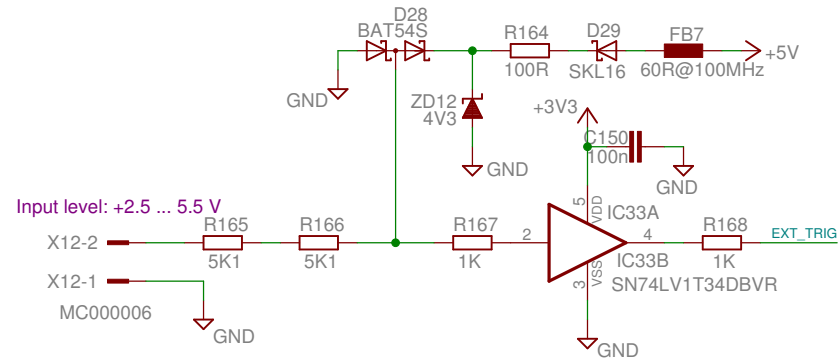
Power-on reset generator and power control



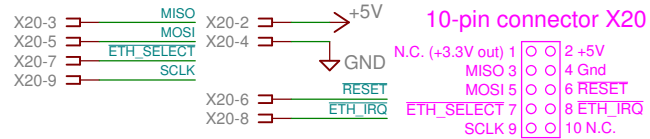
Channel 1 V/F converter for battery NTC (optional)



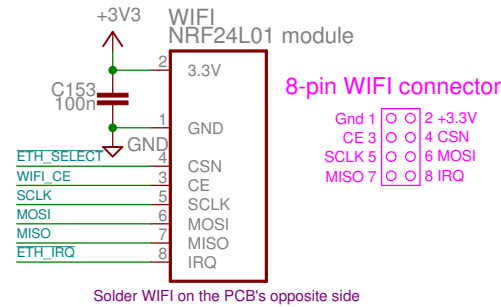
External trigger protection and level shifter/buffer



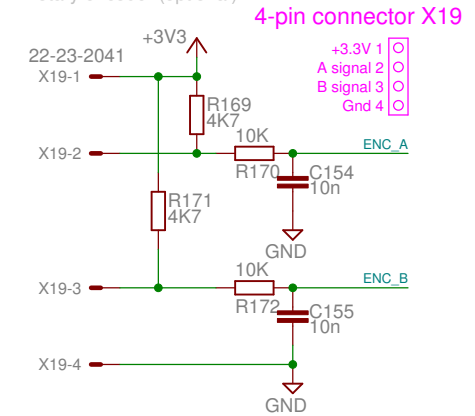
Optional Ethernet module connector



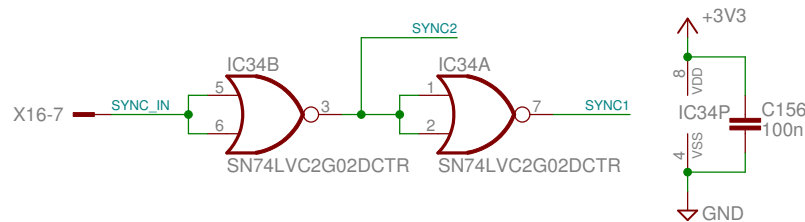
Optional Wifi module connector



Rotary encoder (optional)



Master sync signal phase shifting



Optional ethernet, Wifi and encoder
Power boards SMPS sync

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