

Bias power supply (+/-5V, +5V, -12V)  
Powergood signal

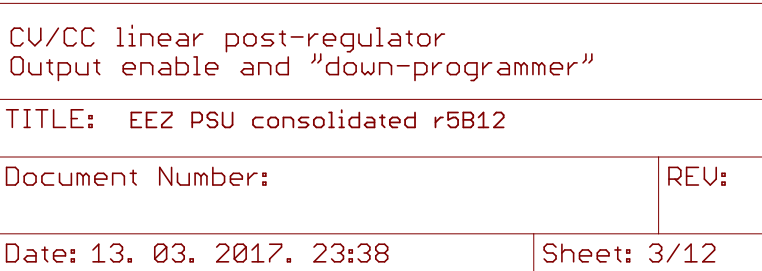
TITLE: EEZ PSU consolidated r5B12

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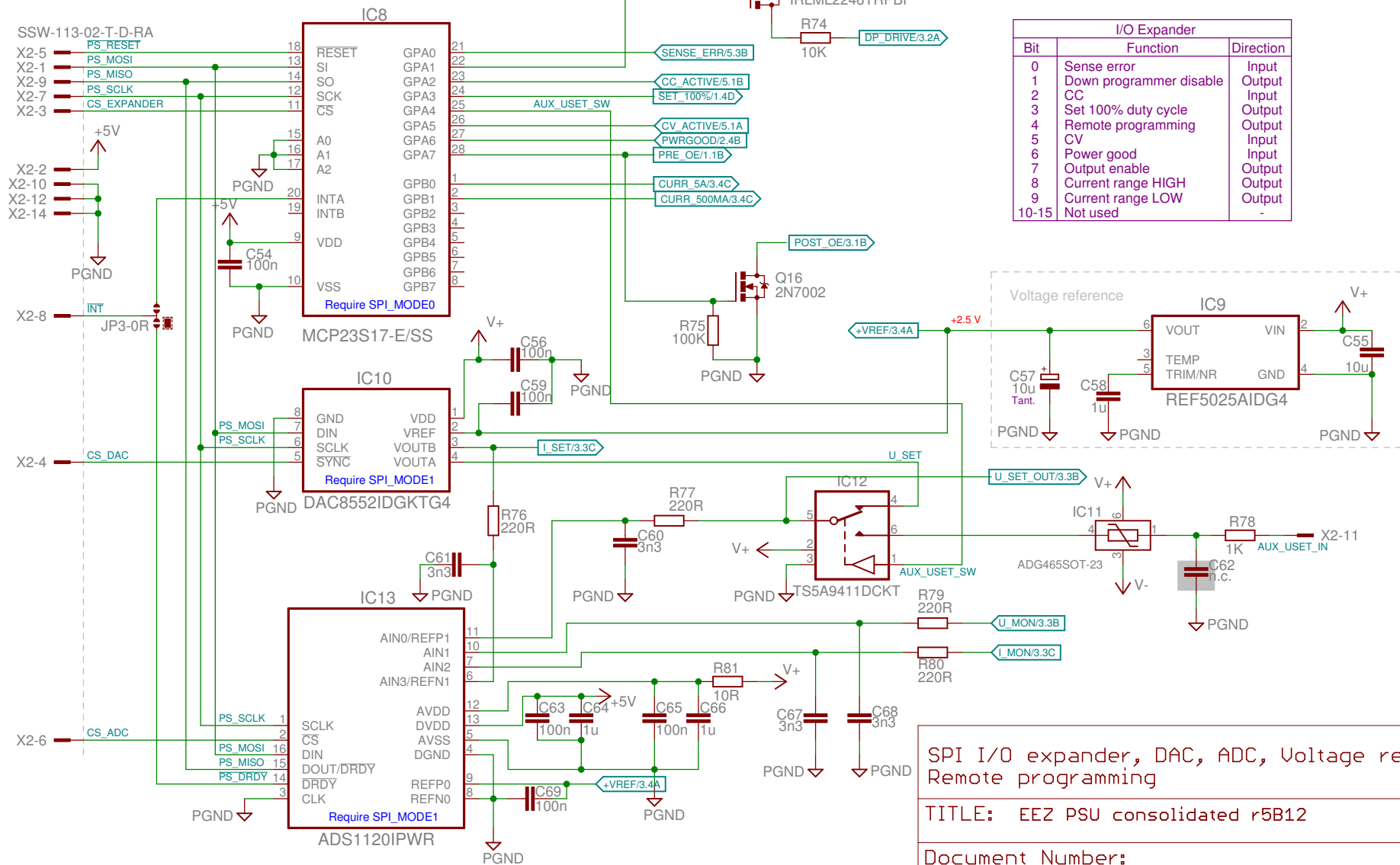
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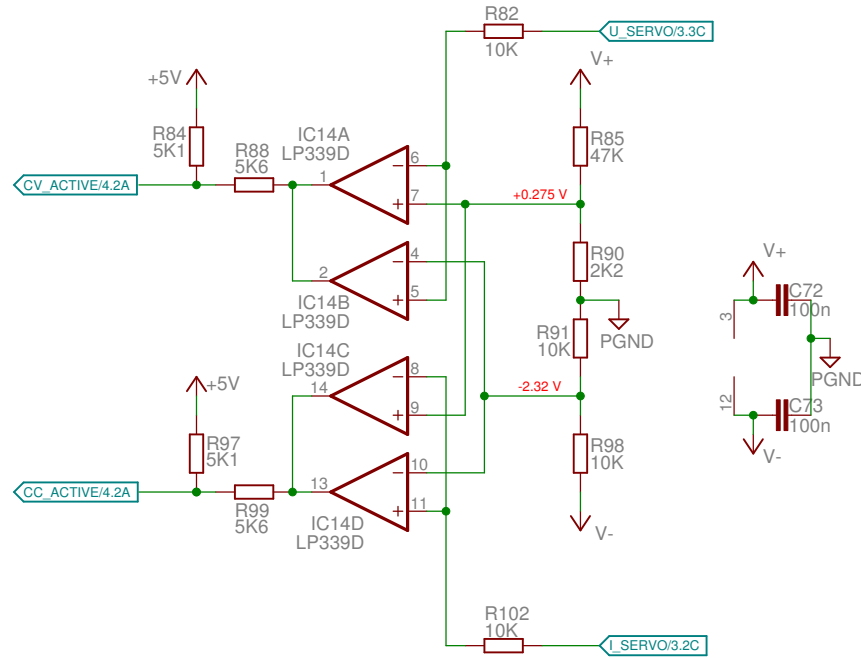
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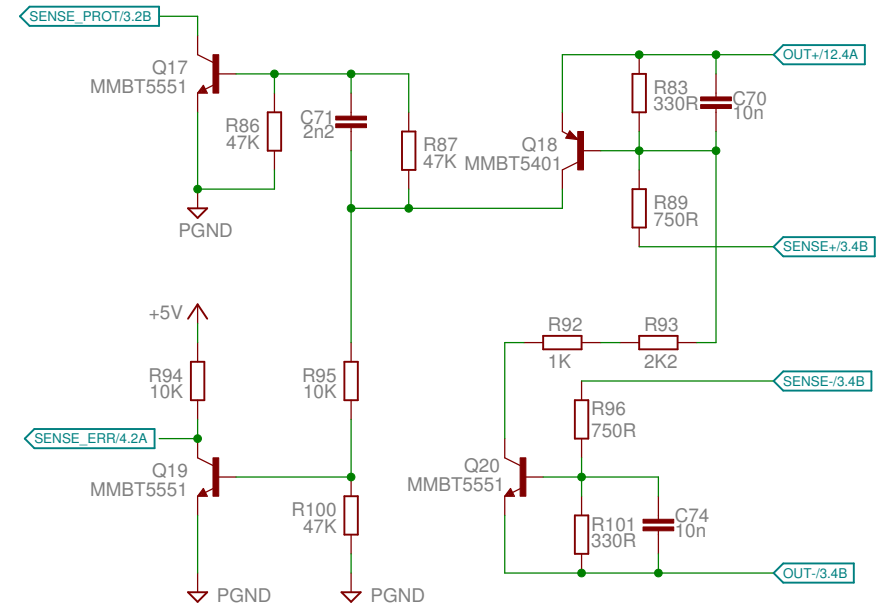
# Digital control (SPI)



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



Remote sense reverse polarity detection



CC/CV indicators, Sense error detection

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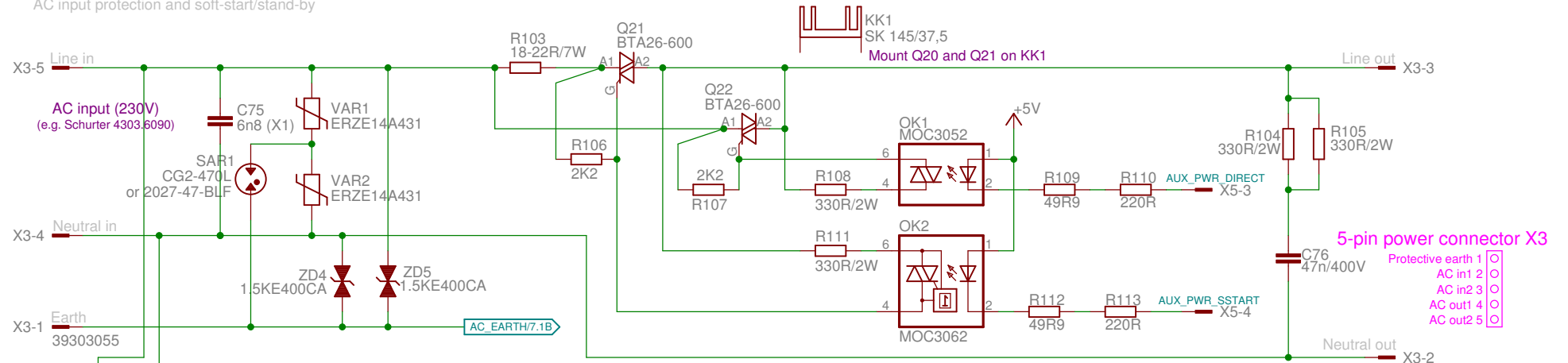
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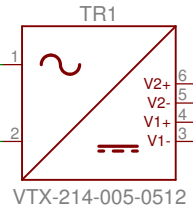
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# AC input protection and soft-start/stand-by



## +5 V, +12 V power supply (max. 5W)



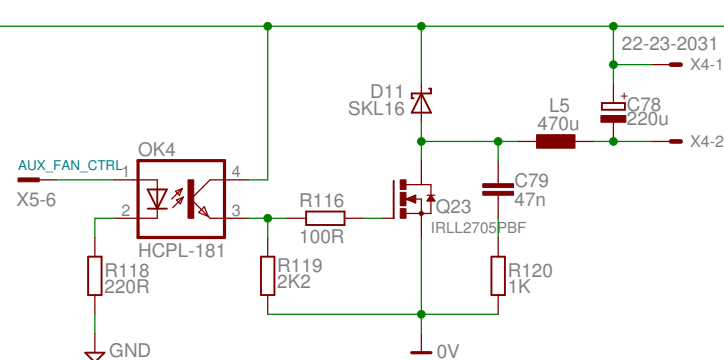
## 10-pin IDC connector X5

10 +5V (Output)	○	Gnd 9
8 +5V (Output)	○	DOUT2 (Output) 7
6 FAN_PWM (Input)	○	FAN_SENSE (Output) 5
4 PWR_SSTART (Input)	○	PWR_DIRECT (Input) 3
2 Gnd	○	Gnd 1

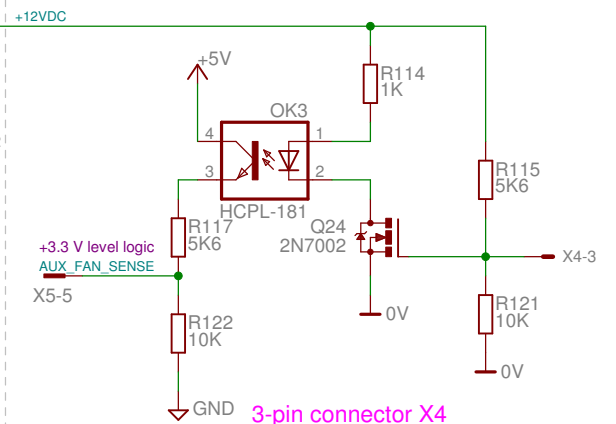
## 115VAC option:

Name	Value	Code
SAR1	2027-23-BLF	Farnell: 1780455, TME: CG2-230L
TR2	VPP24-210	Digikey: 237-1085-ND Mouser: 553-VPP24-210 Newark: 93F8764
VAR1, VAR2	or AC/DC module Myrra 47202	Farnell: 2469211
ZD1, ZD2	S20K140	Farnell: 1004387, TME: SIOV-S20K140
	1.5KE200CA	Farnell: 1837117, TME: 1.5KE200CA

## +12VDC fan control



## Fan sense (tacho out)



AC input protection, in-rush current limiter  
+5V/+12V 5W power supply, fan control

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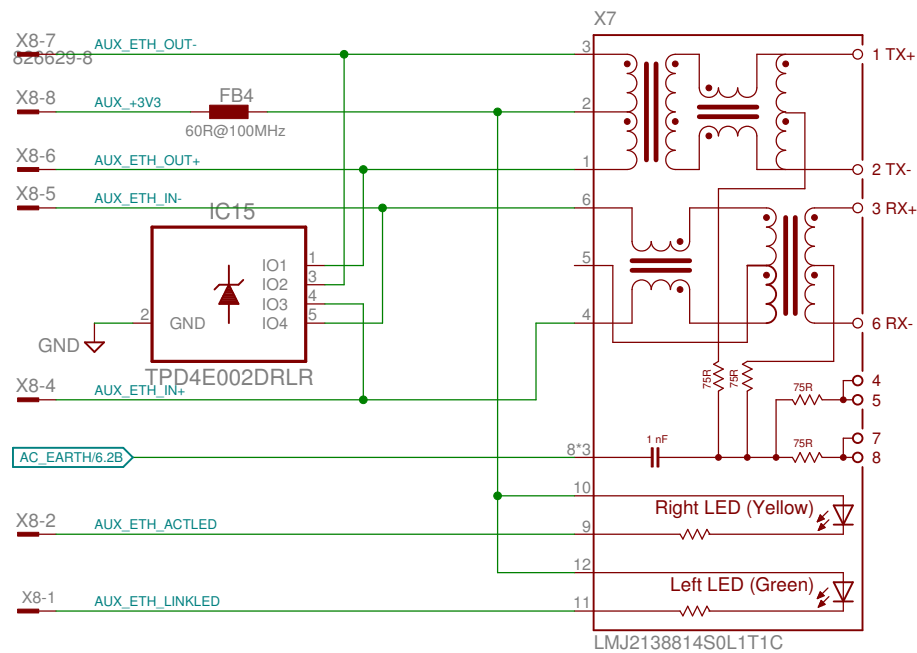
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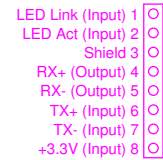
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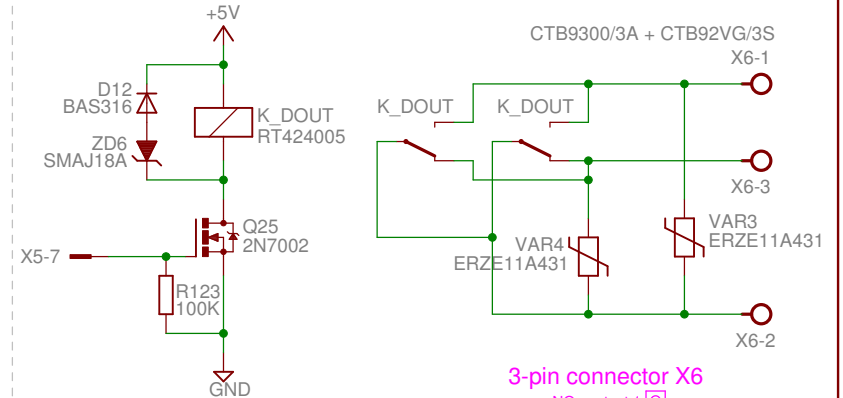
# Ethernet connector with optional surge protection



## 8-pin connector X8



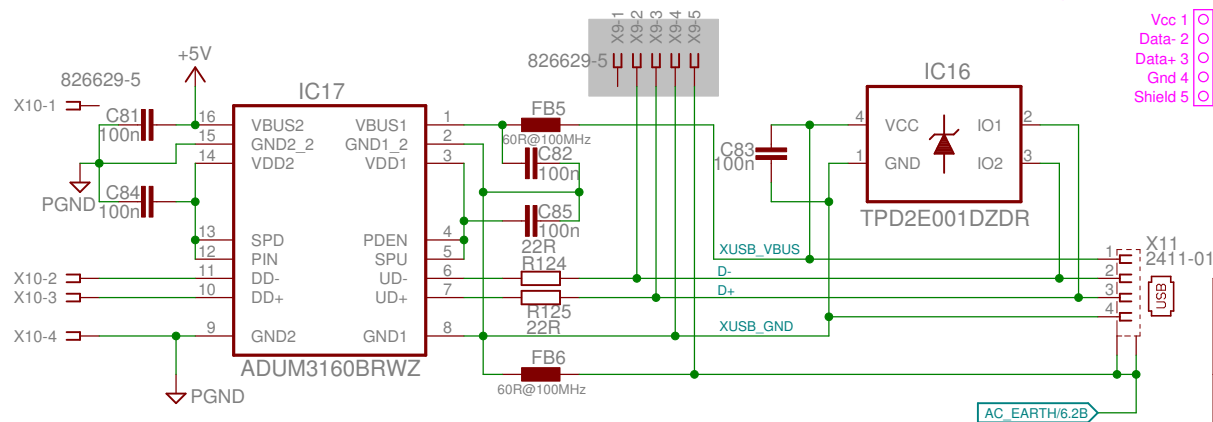
# Digital OUT2 relay



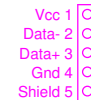
## 3-pin connector X6



# USB connector with optional isolator and surge protection



## 5-pin connector X9, X10



Note 7.1: Mount X4 and X8 on the opposite (top) side of the PCB. Use 14 mm (e.g. Bossard B3X14/BN3320) for enclosure with 3 mm rear panel

## Ethernet and USB PCB connectors

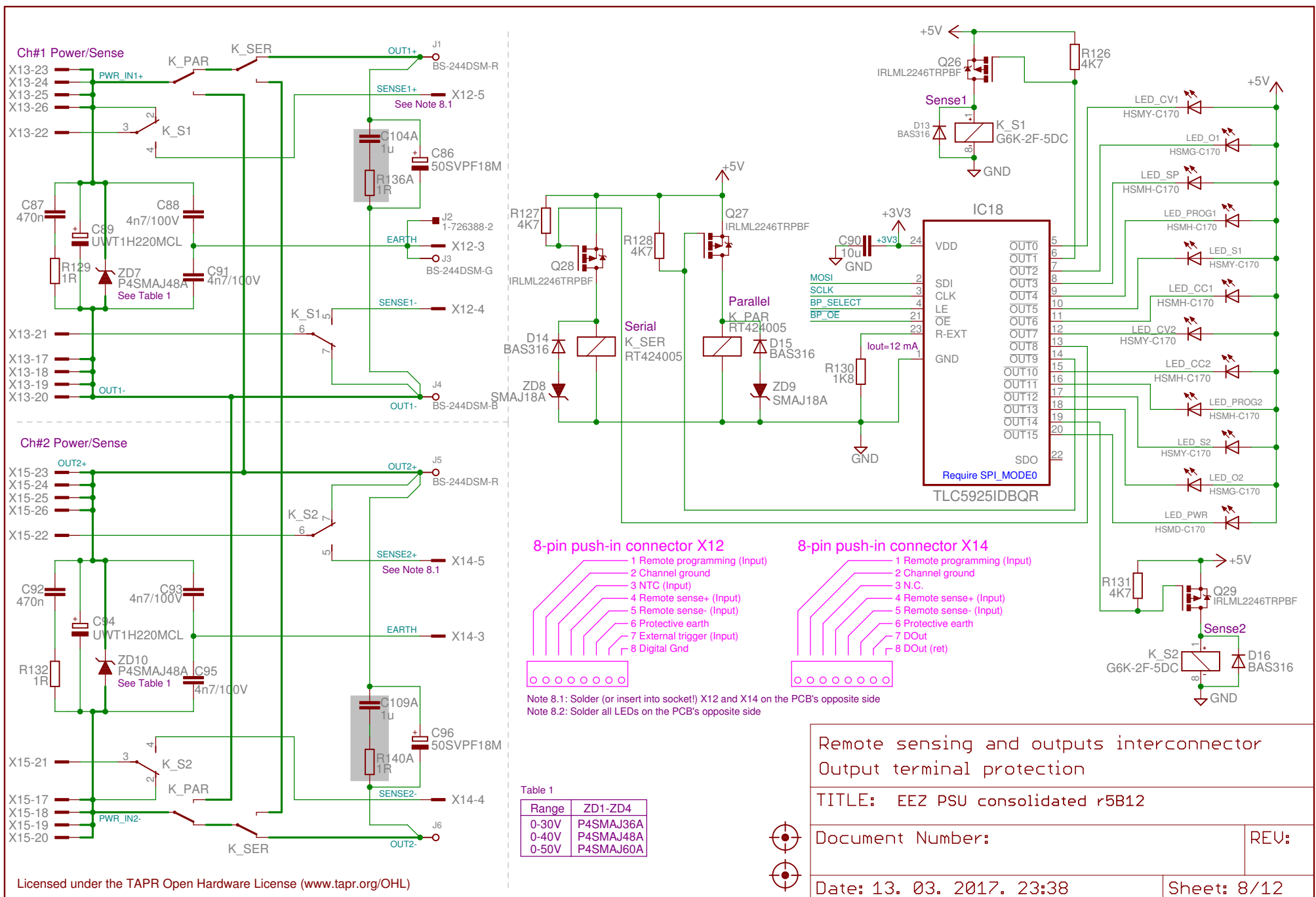
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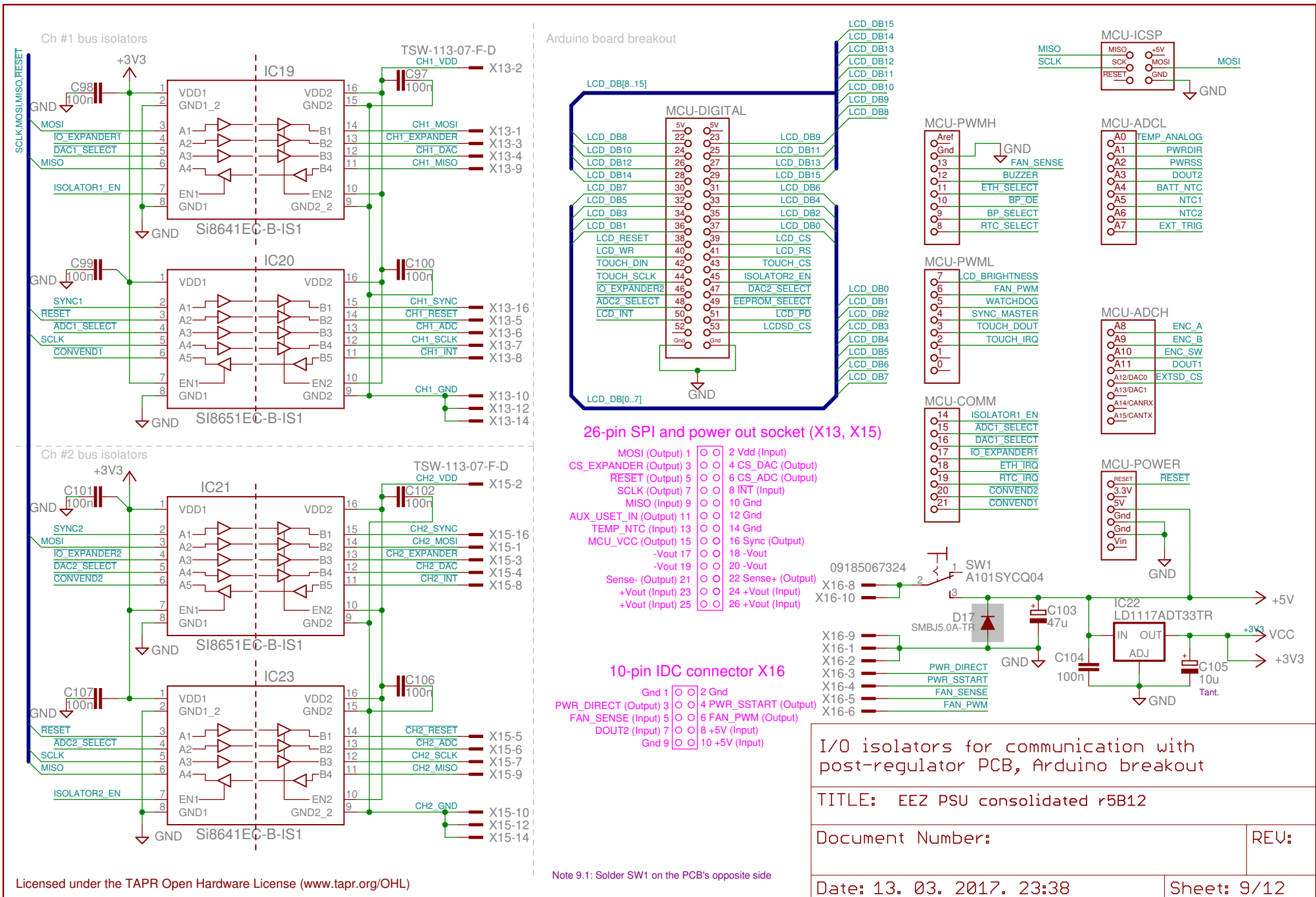
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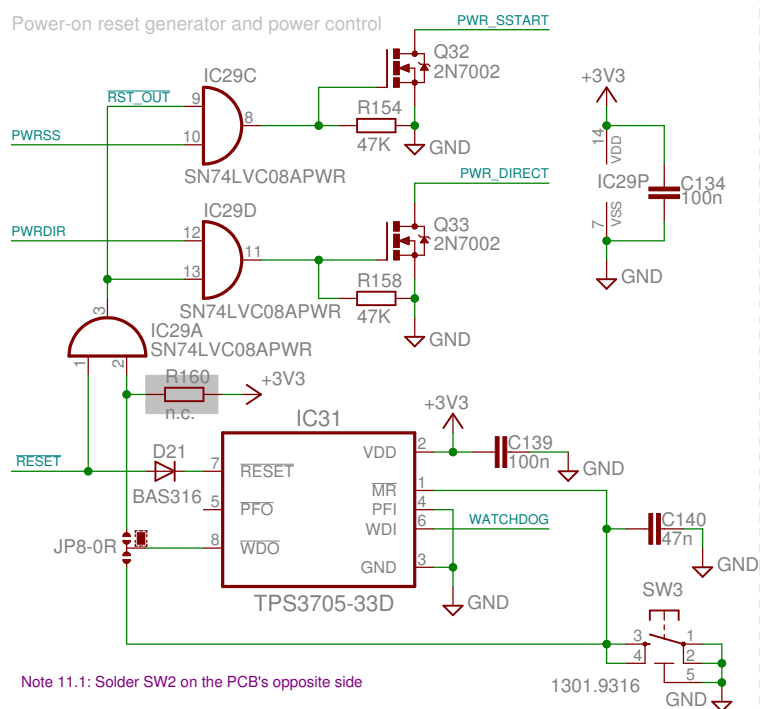




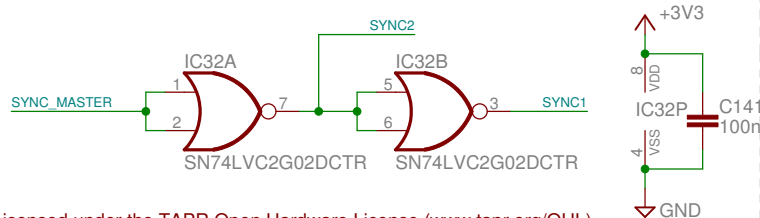
# Remote programming inputs



# Power-on reset generator and power control

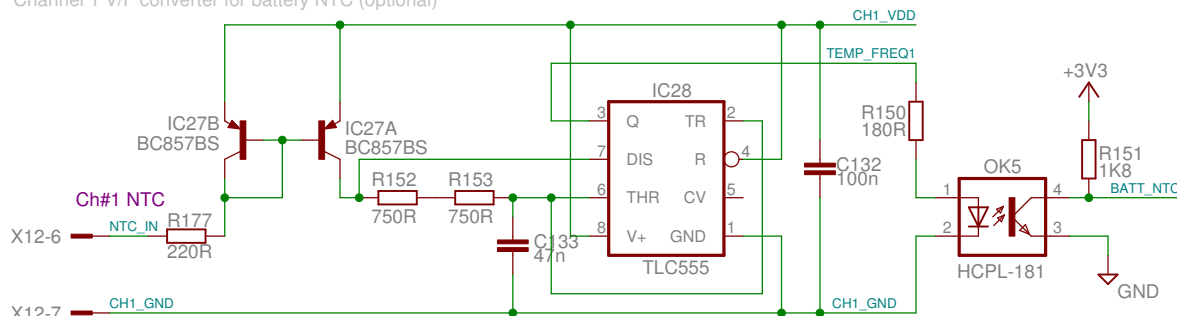


# Master sync signal phase shifting

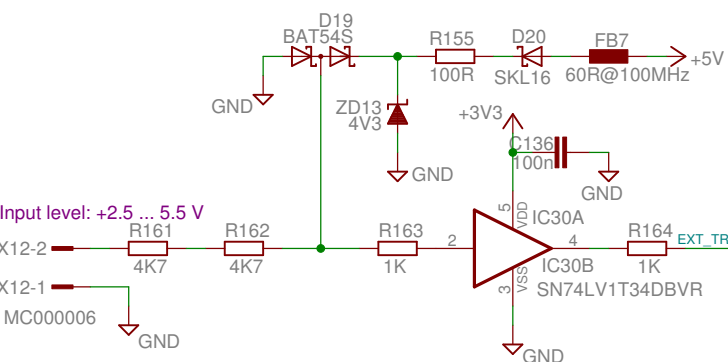


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More info at <http://www.envox.hr/eez>  
Repository: <https://github.com/eez-open>

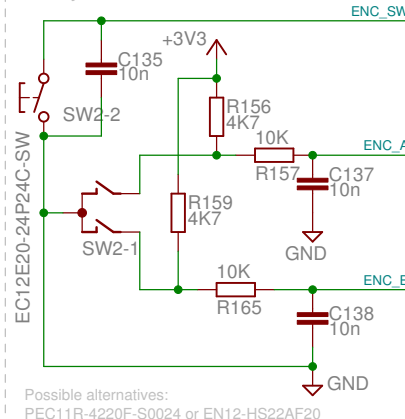
# Channel 1 V/F converter for battery NTC (optional)



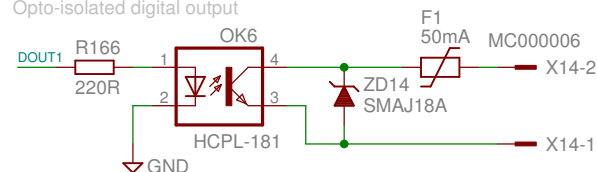
# External trigger protection and level shifter/buffer



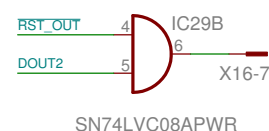
# Rotary encoder



# Opto-isolated digital output



# DOUT2 driver



Reset control, soft-start driver, encoder  
U/F converter for battery NTC, External trigger

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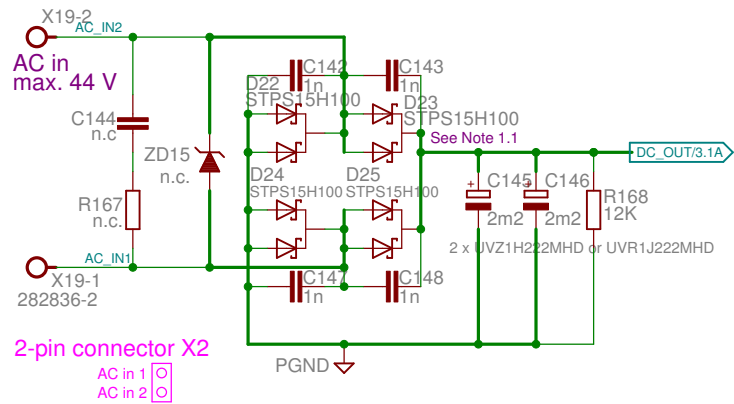
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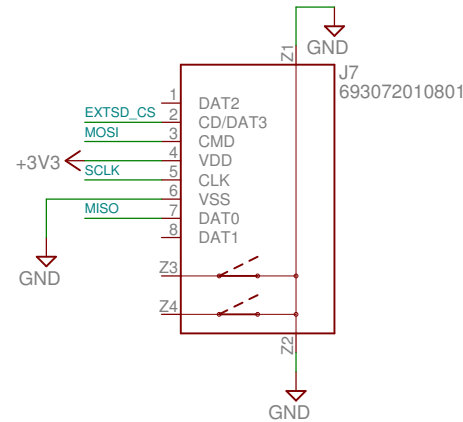
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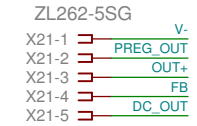
### AC input option



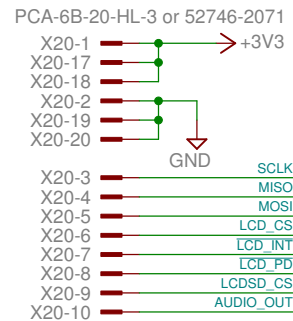
### Micro SD card (optional)



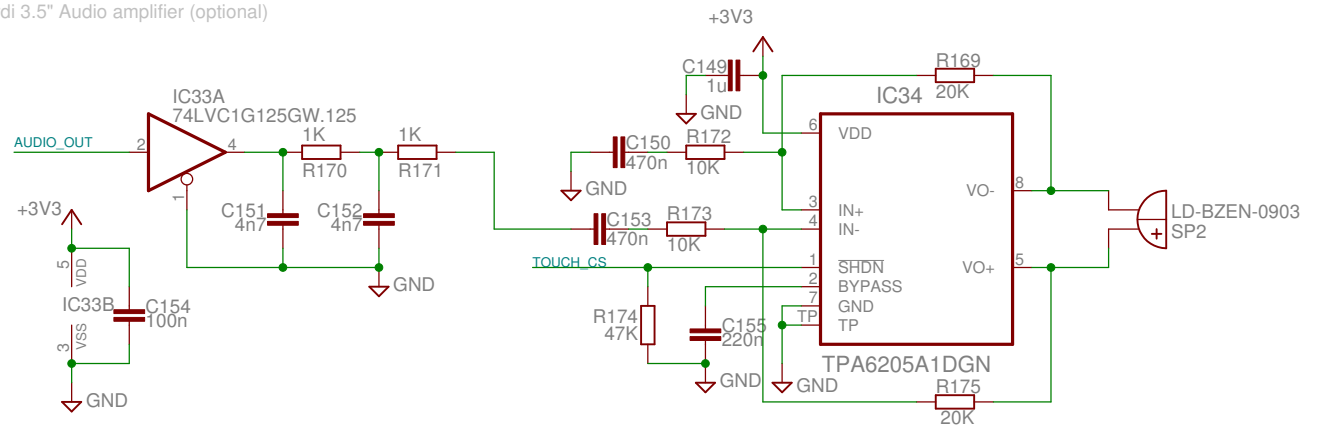
### Pre-regulator tracking (optional)



### Riverdi 3.5" LCD (optional)



### Riverdi 3.5" Audio amplifier (optional)



Optional sections: AC input, 20-pin 3.5" TFT display  
Audio amplifier for 3.5" TFT display, Micro SD card

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