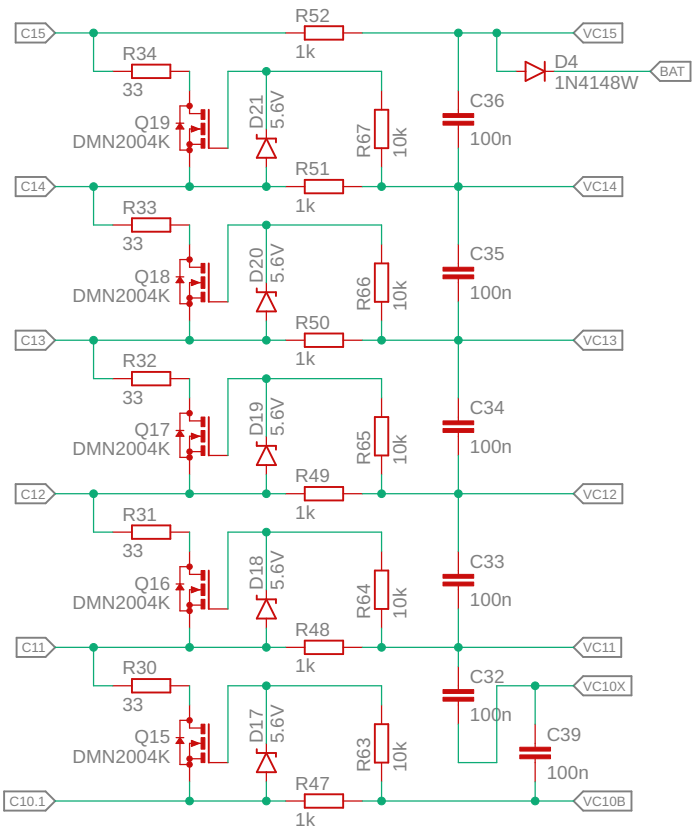
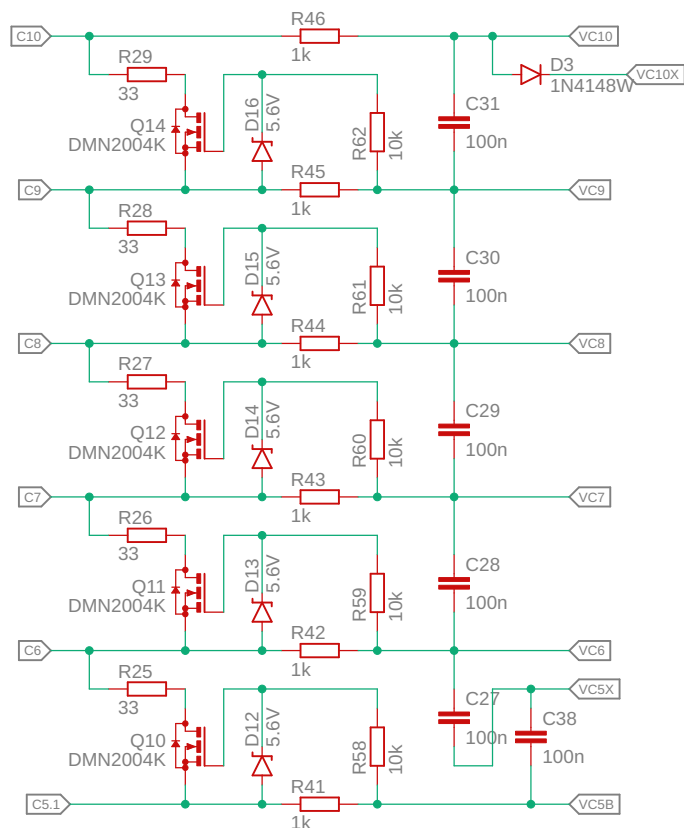


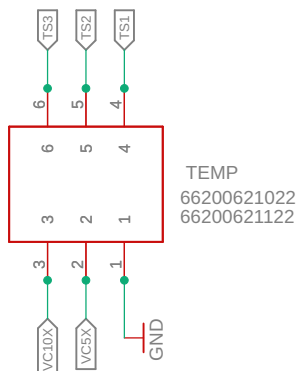
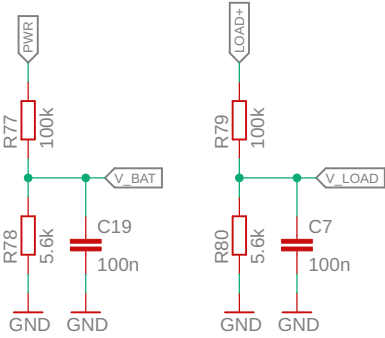
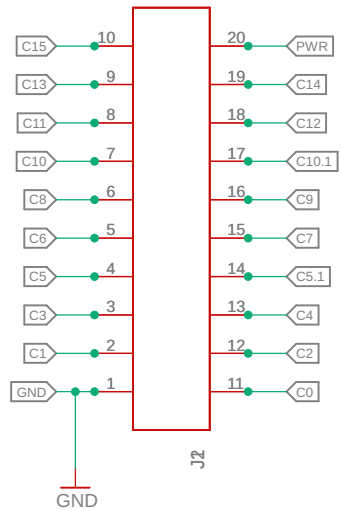
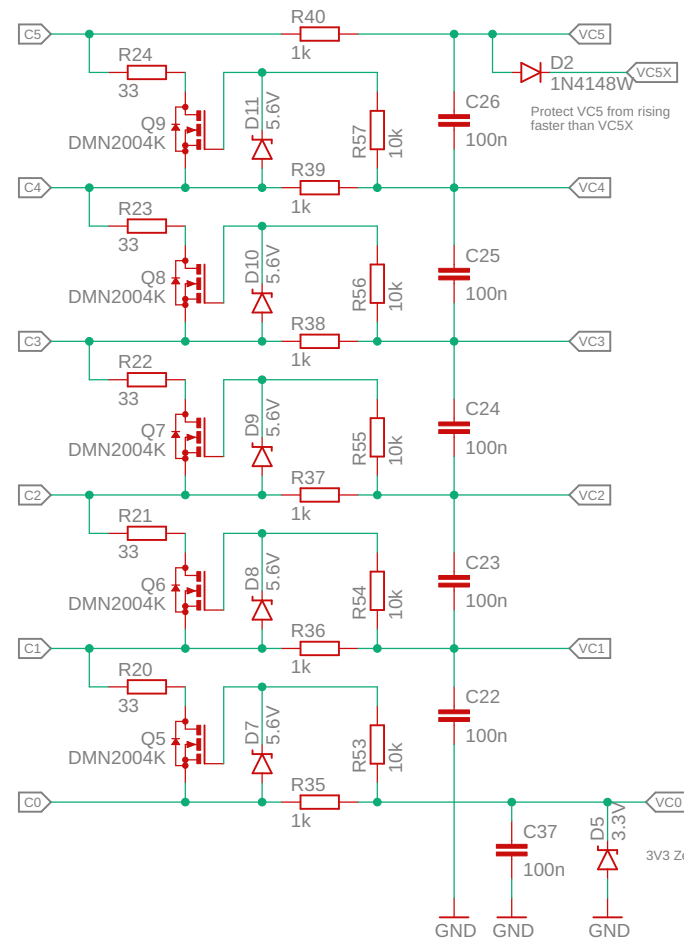
Balancing



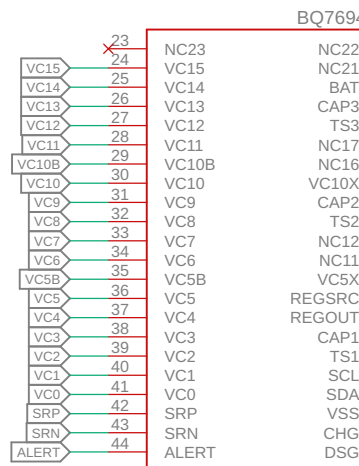
Balancing (33R resistors)  
Current: 100-130 mA (3.3V-4.2V)  
Heat dissipation: 300-600 mW

Zener diode 5.6V:  
BZX384-C5V6 or  
MM3Z5V6T1G or  
MMSZ5232BS-7-F

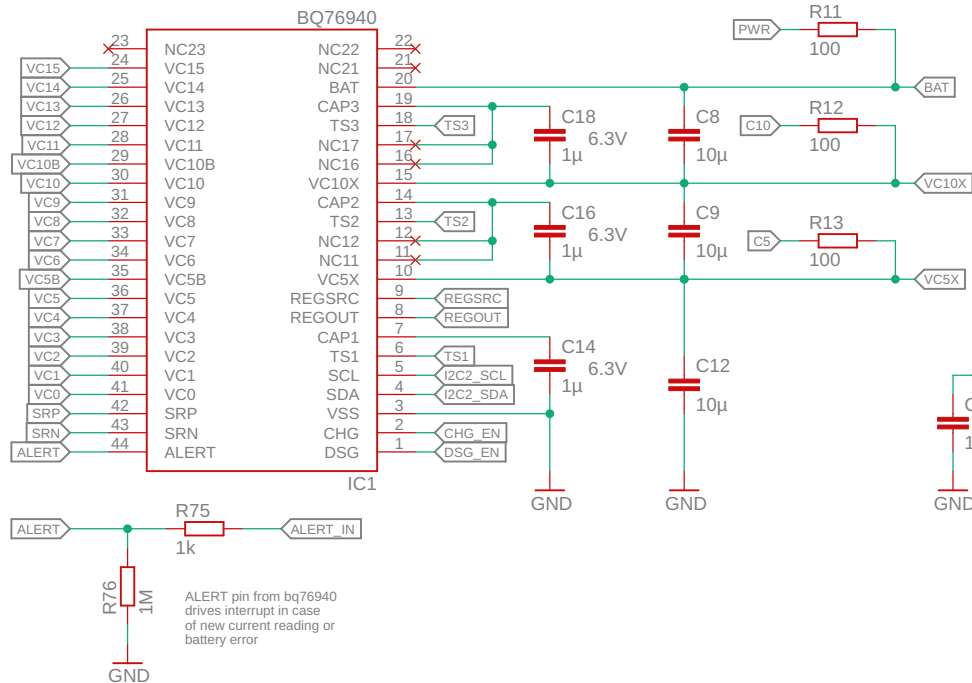
Protect VC5 from rising  
faster than VC5X



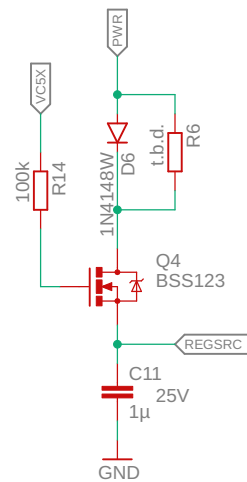
BMS IC: bq76940



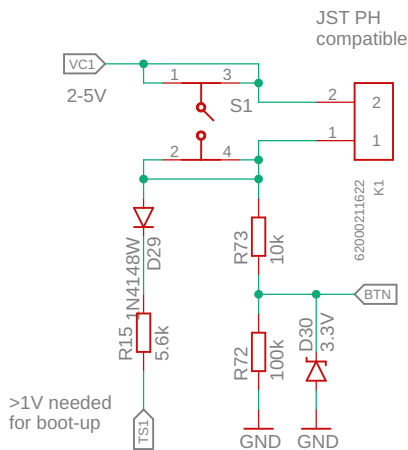
For bq76930:  
Short C8, don't put TS3, C17, C18, R12



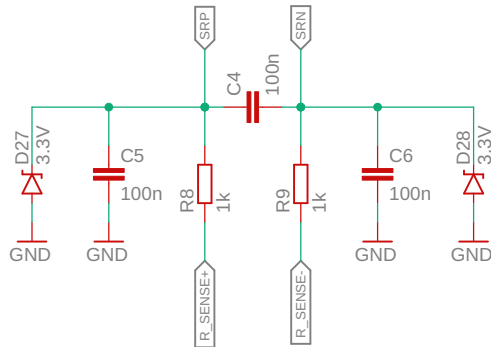
Source follower for  
decreased voltage  
drop in internal LDO  
(100V N-MOS)



Boot switch



BAT+ and BAT- unused, power  
supply via cell connector to prevent  
damages due to wrong connection order



Design: Martin Jäger (<http://libre.solar>)  
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REV:

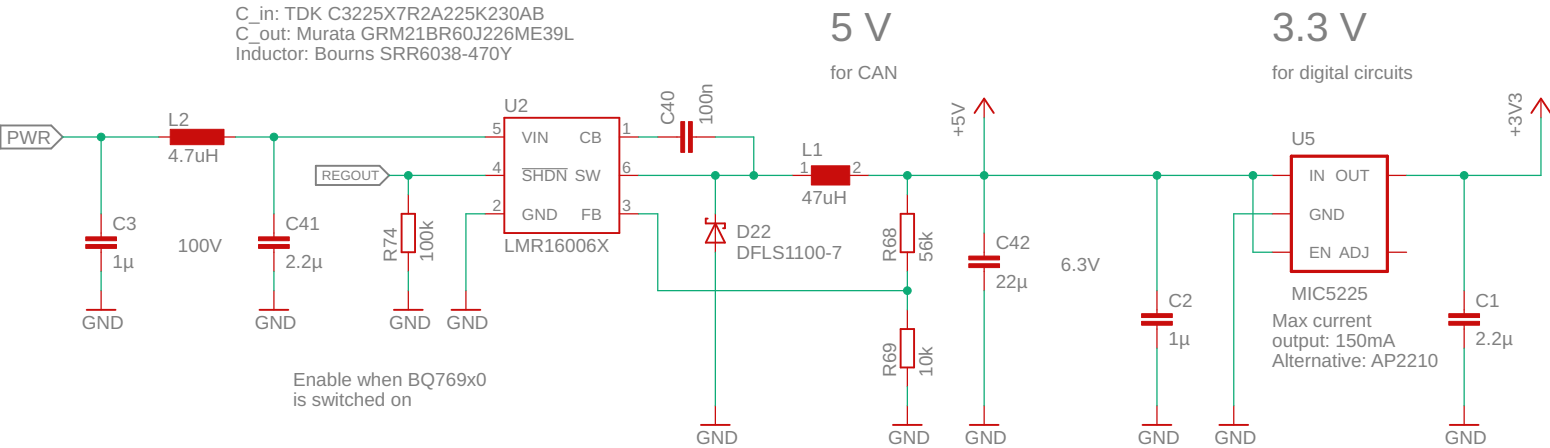
Date: 19.10.2020 07:26

Sheet: 1/2

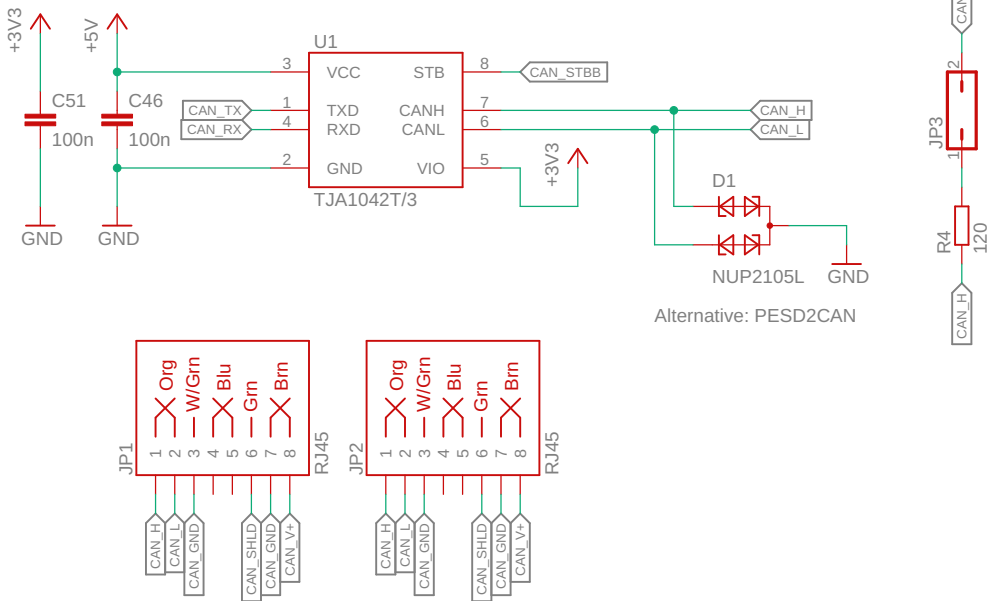
# Power supply

Layout for Vin<60V, Iout<300mA, Vout=5V

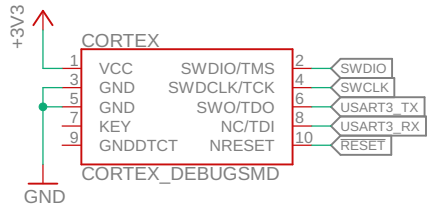
C\_in: TDK C3225X7R2A225K230AB  
C\_out: Murata GRM21BR60J226ME39L  
Inductor: Bourns SRR6038-470Y



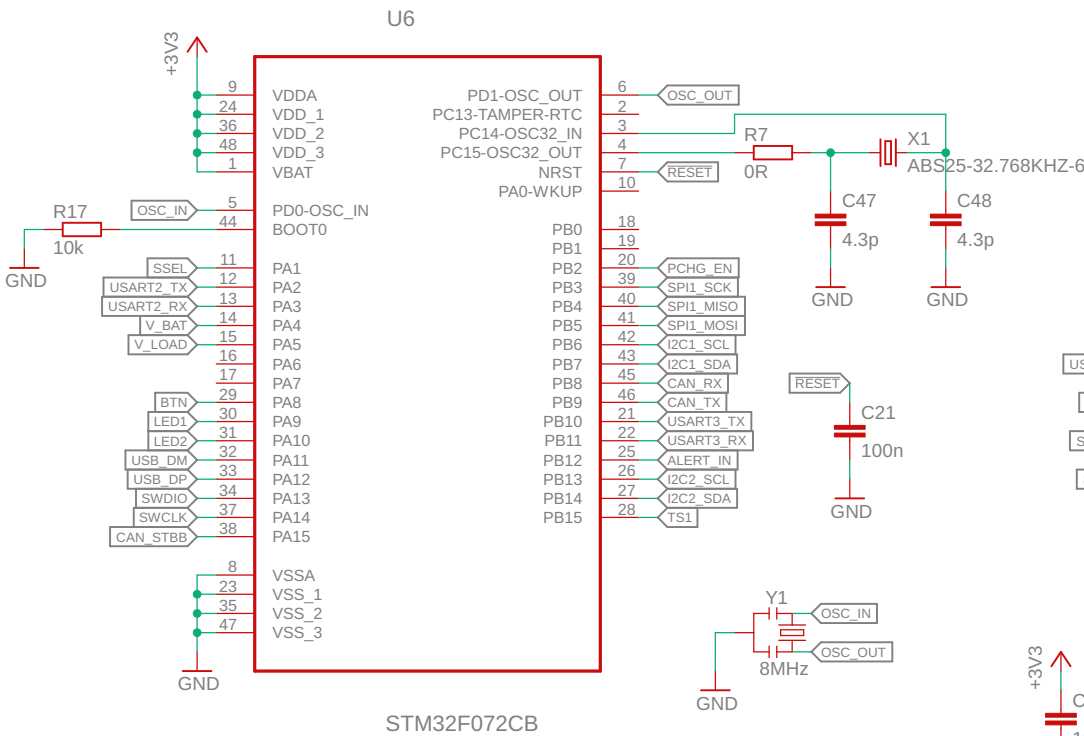
# CAN interface



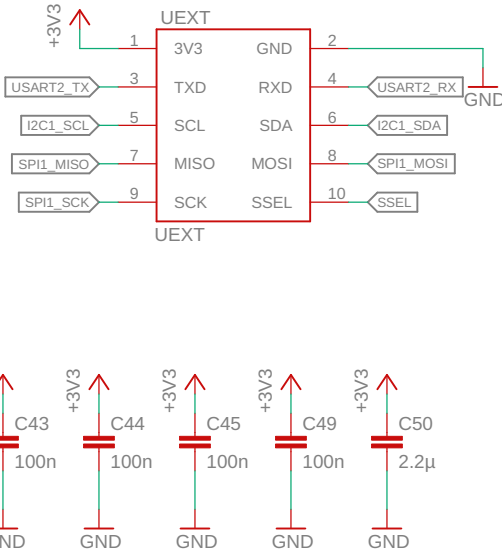
# Cortex SWD



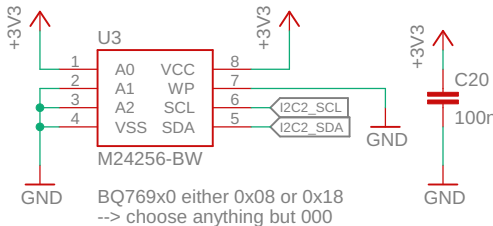
# MCU STM32F072



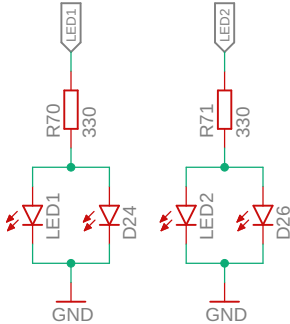
# Extension connector



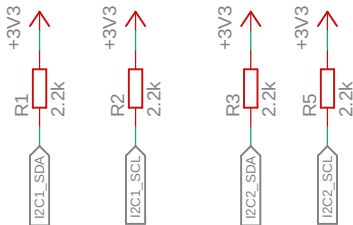
# EEPROM



# Status LEDs



# I2C pull-ups



Libre Solar



open hardware

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