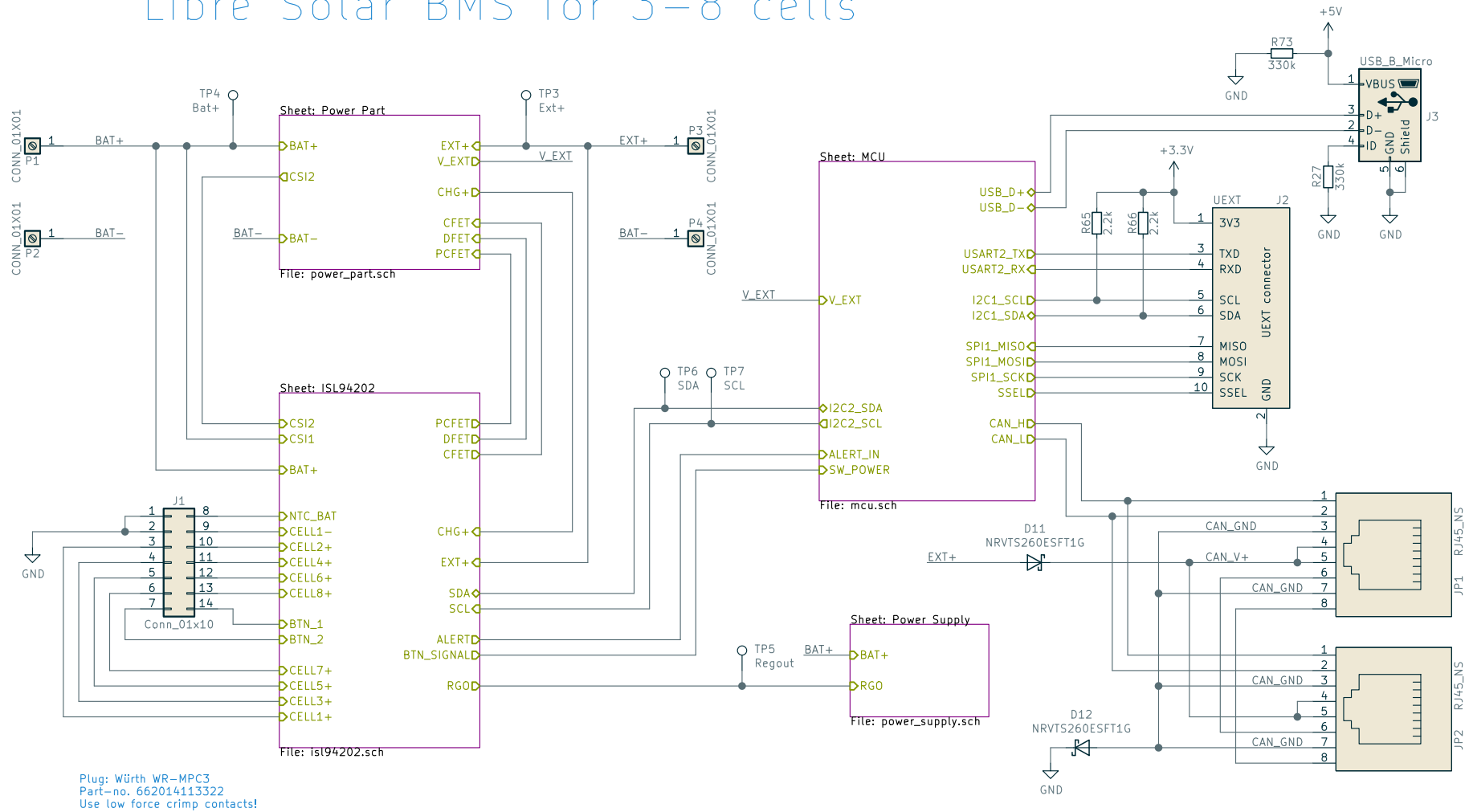


Libre Solar BMS for 3–8 cells



H1
MountingHole

H2
MountingHole



BMS 8S50 IC

Libre Solar Technologies GmbH
Author: Martin Jäger

Website: <https://libre.solar>



Sheet: /
File: bms-8s50-ic.sch

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Size: A4 Date: 2021-02-13

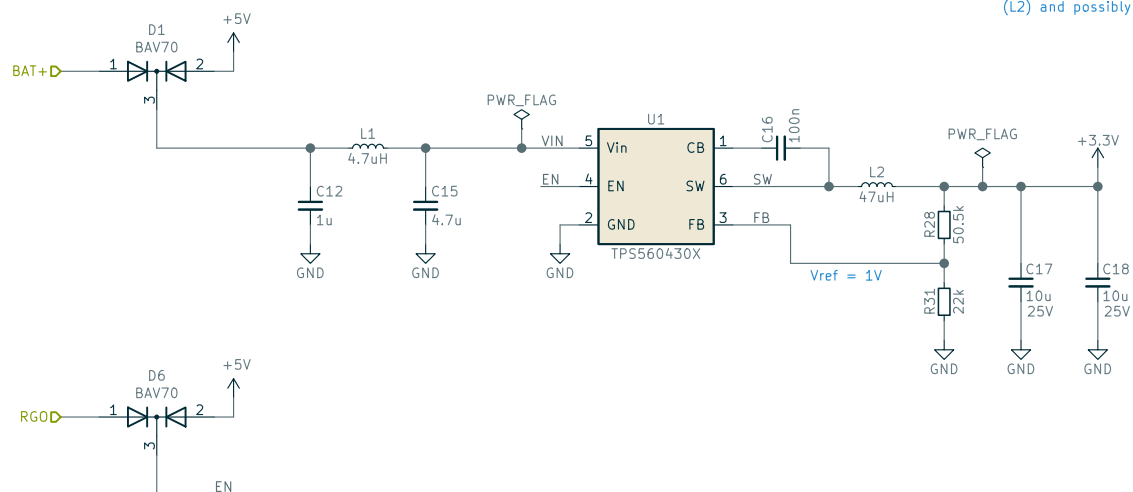
Rev: 0.2

KiCad E.D.A. kicad 5.1.8

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Battery to 3.3V (SMPS)

ToDo: Check Bourns inductor part number (L2) and possibly reduce footprint size



BMS 8S50 IC

Libre Solar Technologies GmbH
Author: Martin Jäger

Website: <https://libre.solar>



Sheet: /Power Supply/
File: power_supply.sch

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Size: A4 Date: 2021-02-13

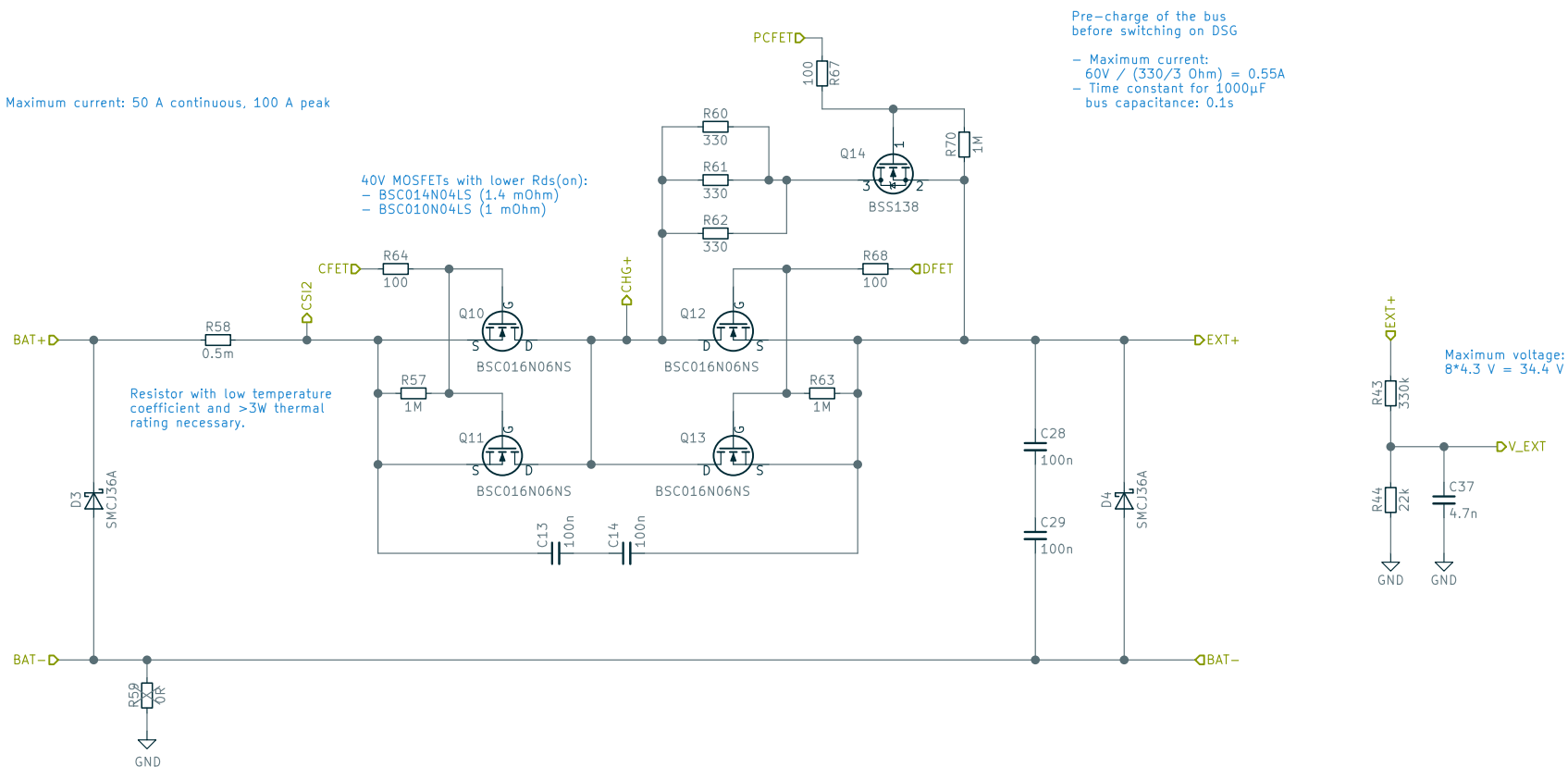
Rev: 0.2

KiCad E.D.A. kicad 5.1.8

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Maximum current: 50 A continuous, 100 A peak

40V MOSFETs with lower $R_{ds(on)}$:
 - BSC014N04LS (1.4 mOhm)
 - BSC010N04LS (1 mOhm)



BMS 8S50 IC

Libre Solar Technologies GmbH

Author: Martin Jäger

Website: <https://libre.solar>



Sheet: /Power Part/

File: power_part.sch

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Size: A4

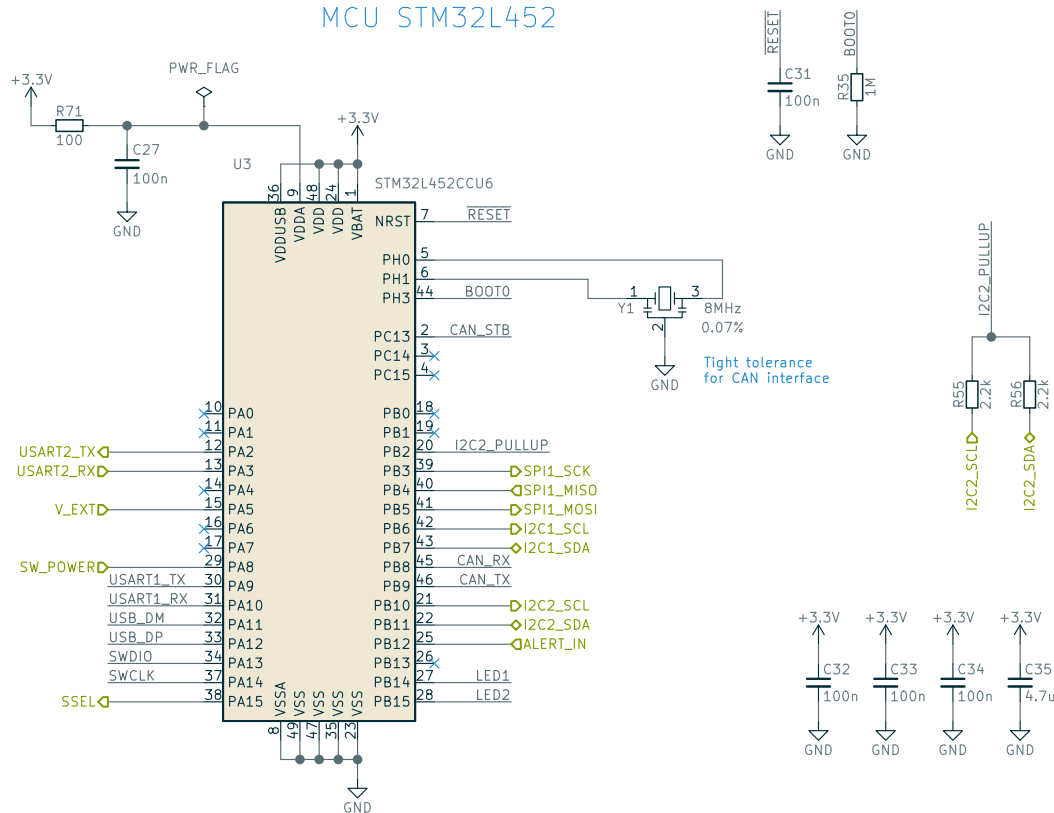
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Rev: 0.2

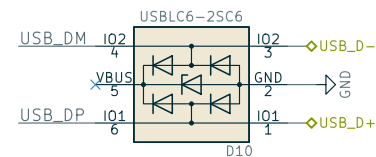
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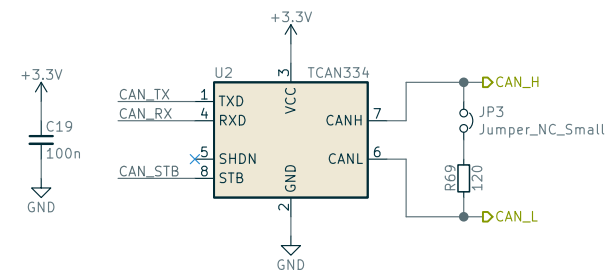
MCU STM32L452



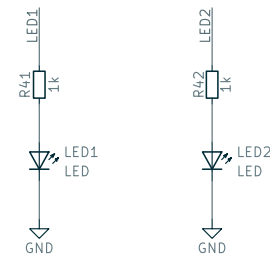
USB ESD protection



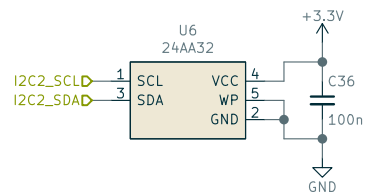
CAN transceiver



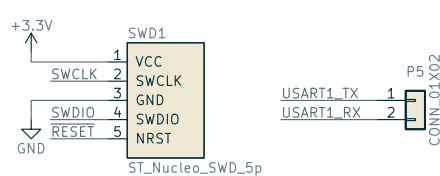
Status LEDs



EEPROM



STM Nucleo SWD and USART



BMS 8S50 IC

Libre Solar Technologies GmbH Website: <https://libre.solar>

Author: Martin Jäger
Sheet: /MCU/
File: mcu.sch

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Size: A4 Date: 2021-02-13

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Rev: 0.2
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