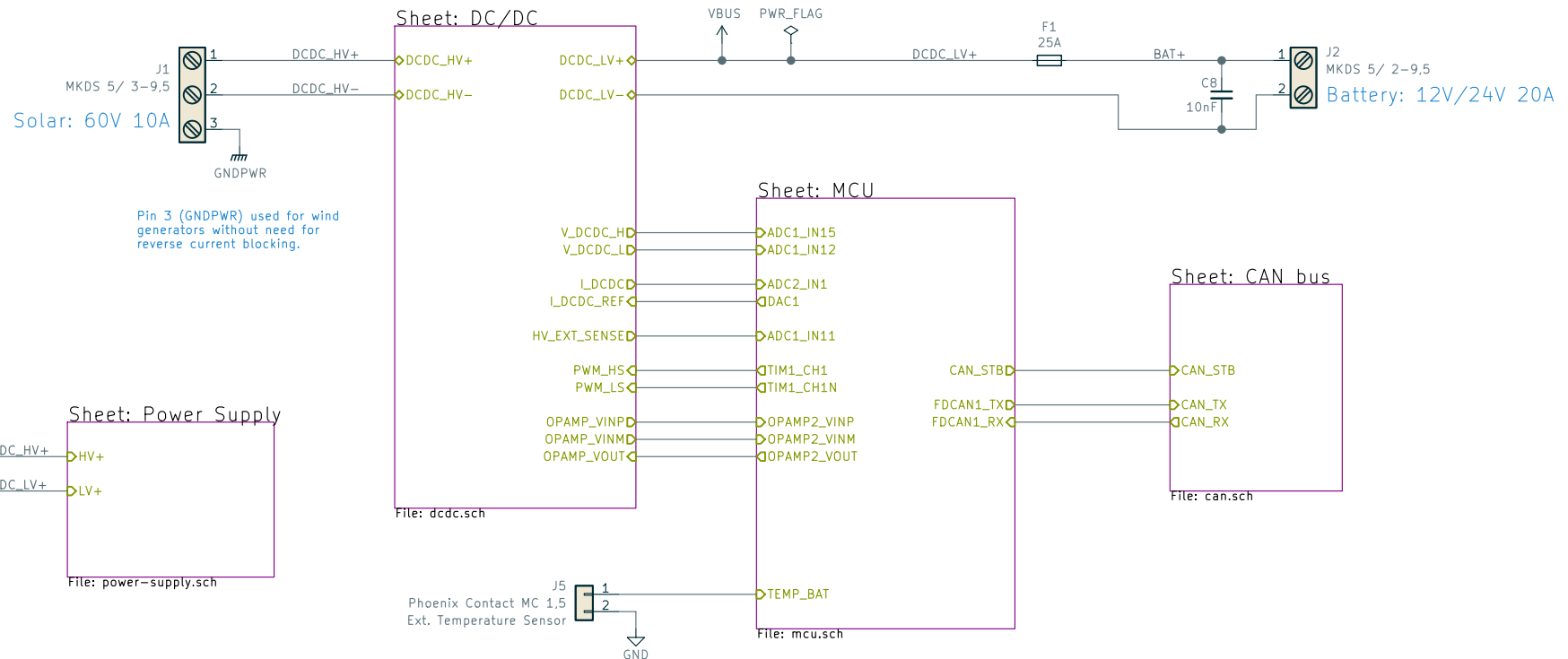
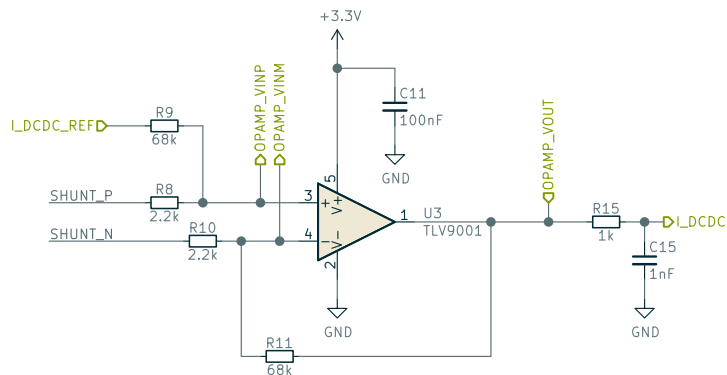
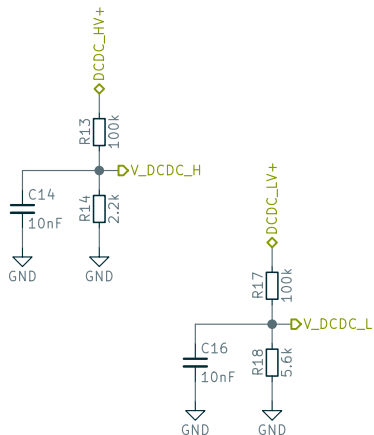
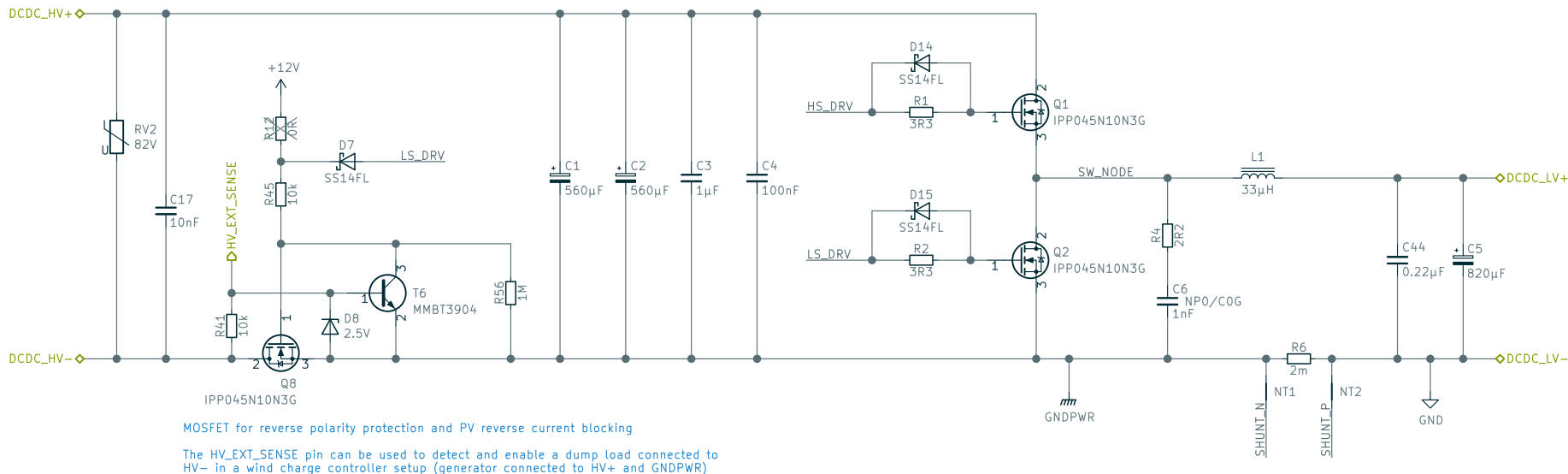


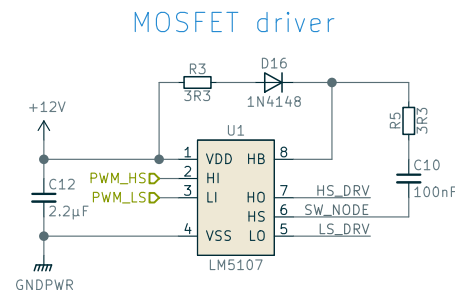
MPPT charge controller for DIN rail mounting



DC/DC power stage



Use MCU internal OPAMP if U3 is not populated.



MPPT 2420 RC

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

Sheet: /DC/DC/
File: dcdc.sch

Author: Martin Jäger

Size: A4	Date: 2020-05-30
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KiCad E.D.A.	kicad 5.1.5
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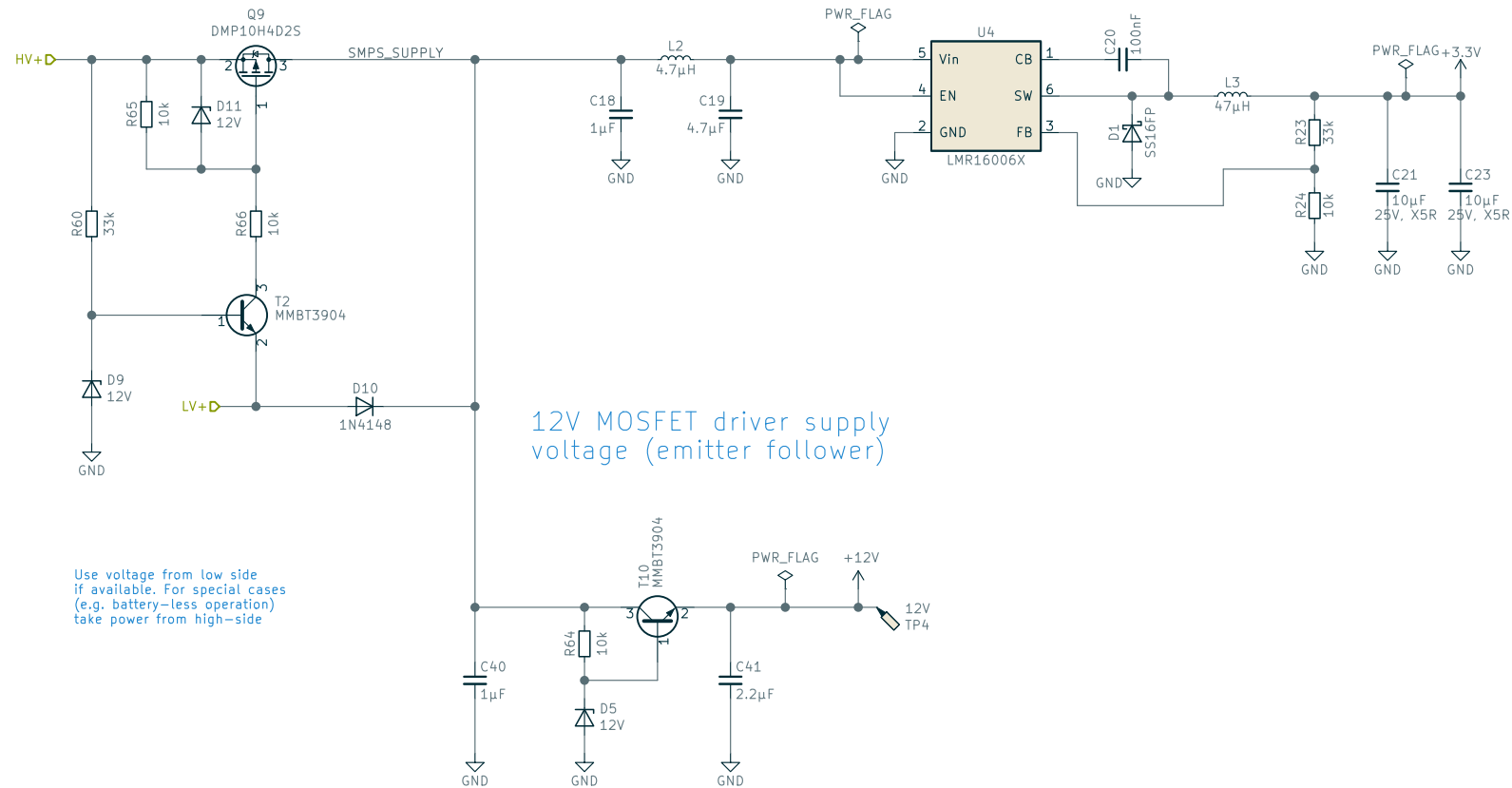


LIBRESOLAR

Rev: 0.1.1

Page: 2/5

HV/LV side to 3.3V (SMPS)



MPPT 2420 RC

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

Sheet: /Power Supply/
File: power-supply.sch

Author: Martin Jäger

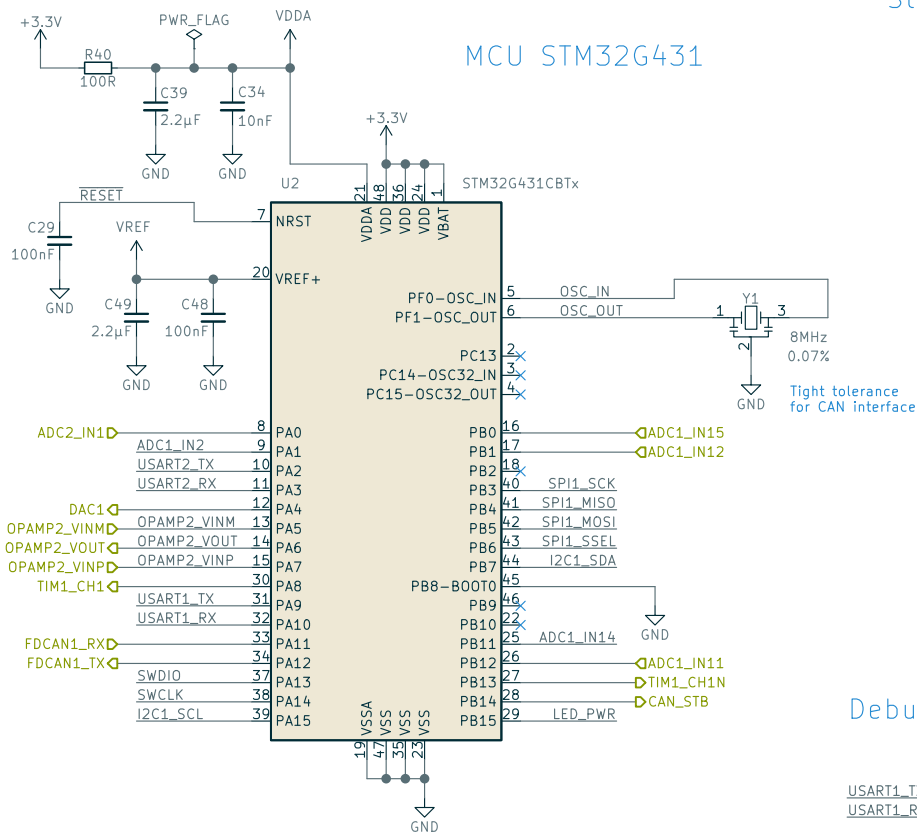
Size: A4 Date: 2020-05-30

KiCad E.D.A. kicad 5.1.5

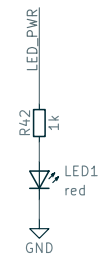


Rev: 0.1.1

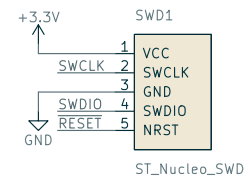
Page: 3/5



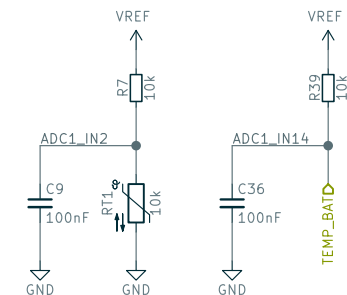
Status LED



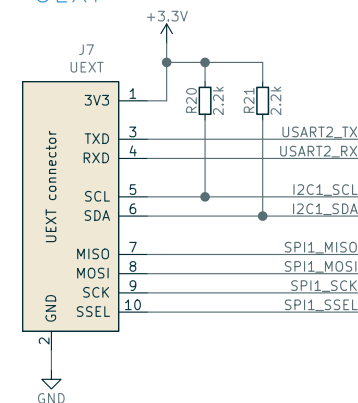
STM Nucleo SWD and USART



Temperature (ext./int.)



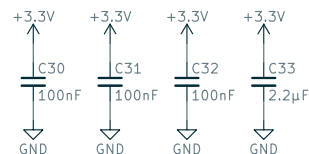
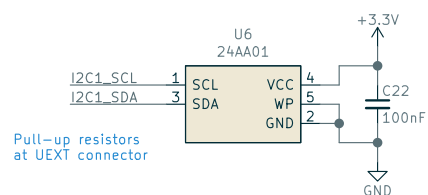
UEXT



Debug Serial



EEPROM



If not stated otherwise, all MLCC 50V X7R

MPPT 2420 RC

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

Sheet: /MCU/
File: mcu.sch

Author: Martin Jäger

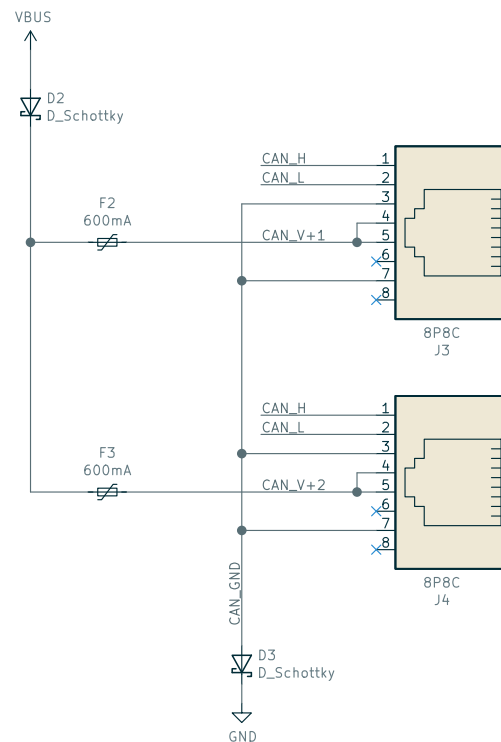
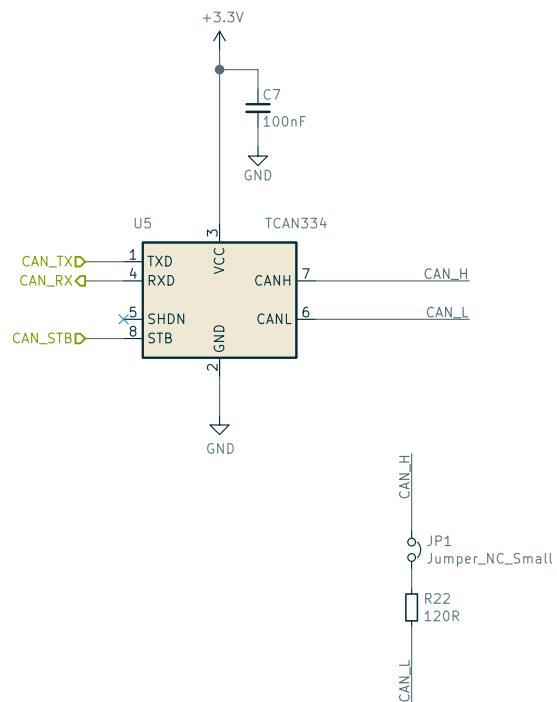
Size: A4 Date: 2020-05-30

KiCad E.D.A. kicad 5.1.5

LIBRESOLAR

Rev: 0.1.1

Page: 4/5



CAN bus power supply
 - 10V-32V
 - 600 mA (like PoE)

Diodes necessary to prevent
 separate GND loops.

Polyfuse to prevent
 over-current in daisy-chained
 bus with multiple sources and
 sinks.

MPPT 2420 RC

Libre Solar Technologies GmbH



Sheet: /CAN bus/
 File: can.sch

Author: Martin Jäger

Size: A4 Date: 2020-05-30

KiCad E.D.A. kicad 5.1.5

Rev: 0.1.1

Page: 5/5