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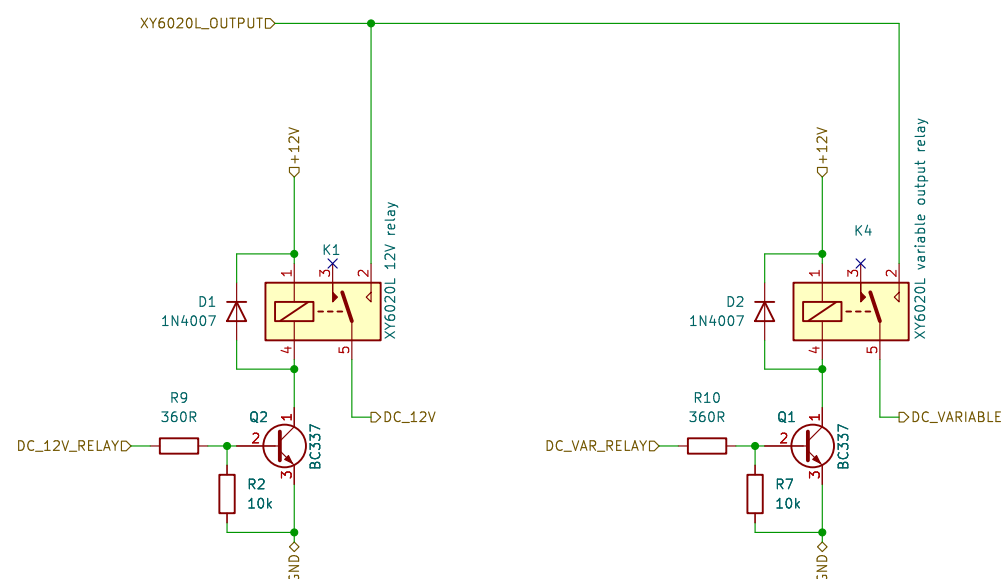
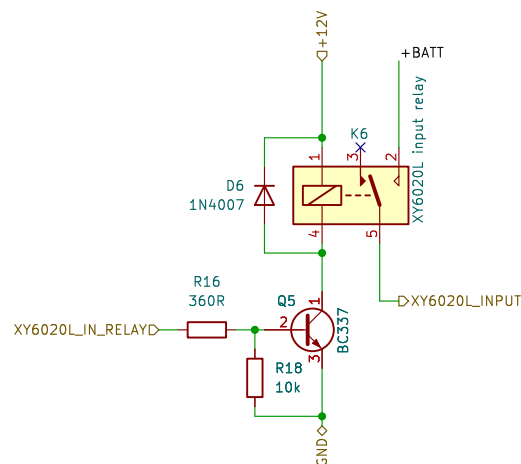
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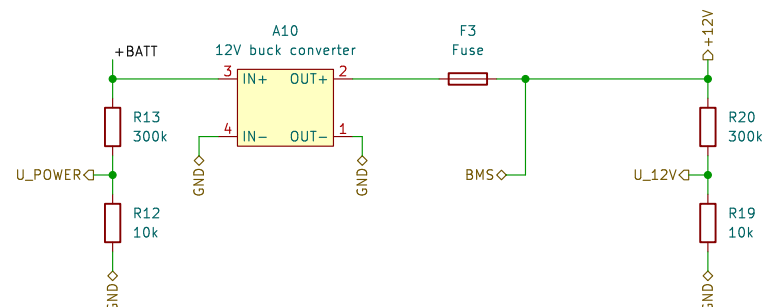
Size: A4 Date: 2024-05-13
KiCad E.D.A. 8.0.0

Rev: 1
Id: 1/4

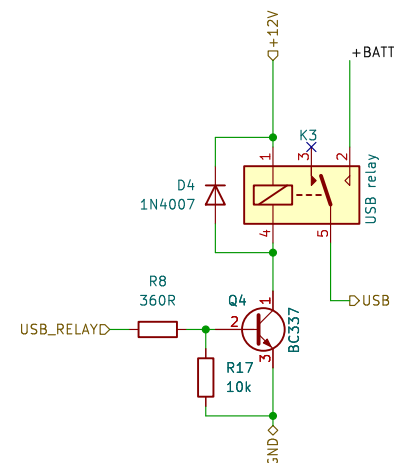
XY6020L (DC-DC converter)



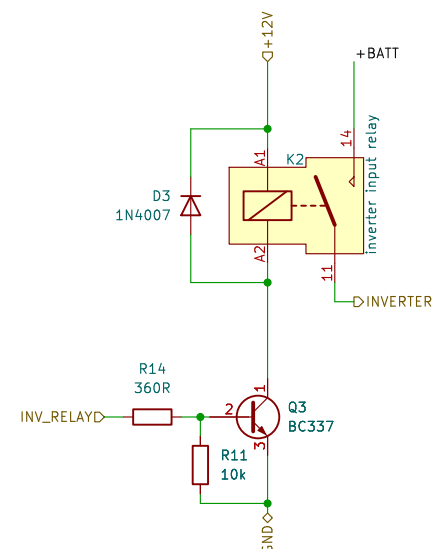
12V power managment



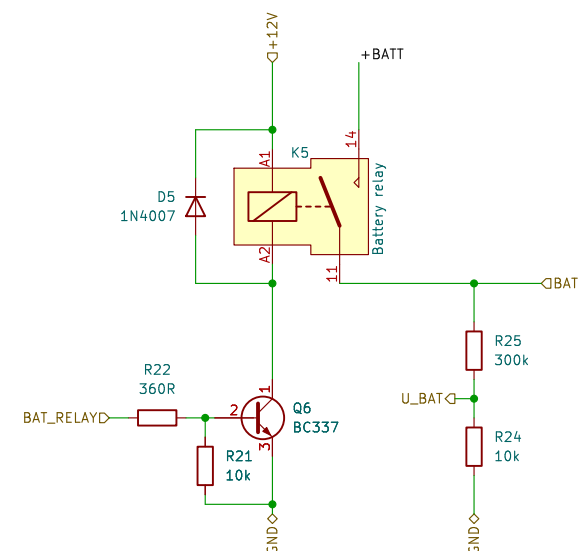
USB modules



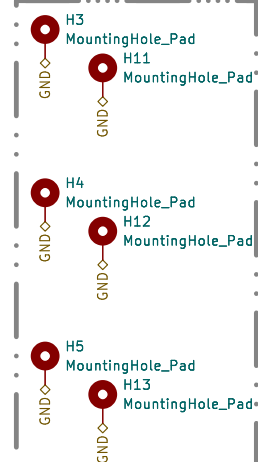
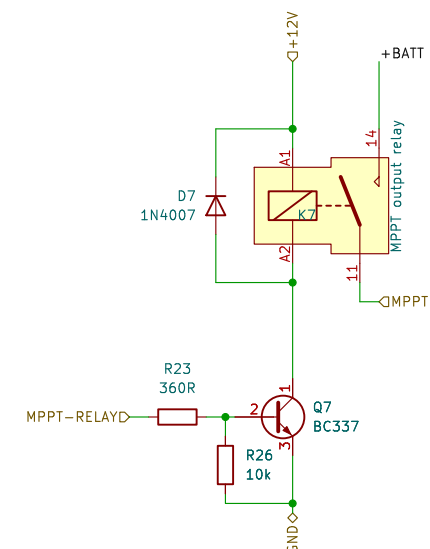
AC inverter



Battery



MPPT



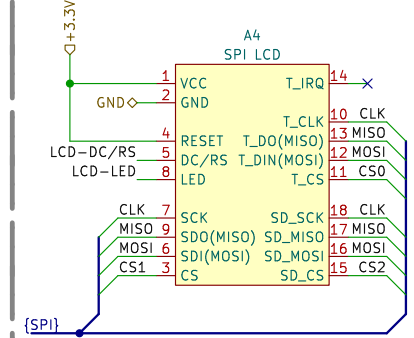
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Sheet: /Power board/
File: power_board.kicad_sch

Title: **Silová DPS**

Size: A3 Date: 2024-05-13
KiCad E.D.A. 8.0.0

Rev: 1
Id: 2/4



Pin connection diagram for MCP23017 module:

- VCC (pin 9) to +5V
- GND (pin 10) to ground
- I2C SCL (pin 11) to +5V
- I2C SDA (pin 12) to ground
- A0 (pin 19) to B0 (pin 1) via INV_RELAY
- A1 (pin 20) to B1 (pin 2) via MPPT_RELAY
- A2 (pin 21) to B2 (pin 3) via BAT_RELAY
- A3 (pin 22) to B3 (pin 4) via relay
- A4 (pin 23) to B4 (pin 5) to USB-ON-BTN
- A5 (pin 24) to B5 (pin 6) to INV-ON-BTN
- A6 (pin 25) to B6 (pin 7) to DC-ON-BTN
- A7 (pin 26) to B7 (pin 8) via relay
- EXP_INT_A (pin 14) to IB (pin 15) to EXP_INT_B
- RST (pin 13) to ground

MCP23017 module

The diagram shows a yellow rectangular module labeled 'A9' and '3.3V buck converter'. It has four pins: pin 3 (top-left) is labeled 'IN+' and is connected to a +12V source; pin 2 (top-right) is labeled 'OUT+' and is connected to a +3.3V source; pin 4 (bottom-left) is labeled 'IN-' and is connected to GND; pin 1 (bottom-right) is labeled 'OUT-' and is connected to GND.

0x68
0x57

A2
I2C RTC

1 2 3 4 5

VCC SDA SCL GND GND

+3.3V

(T_C)

