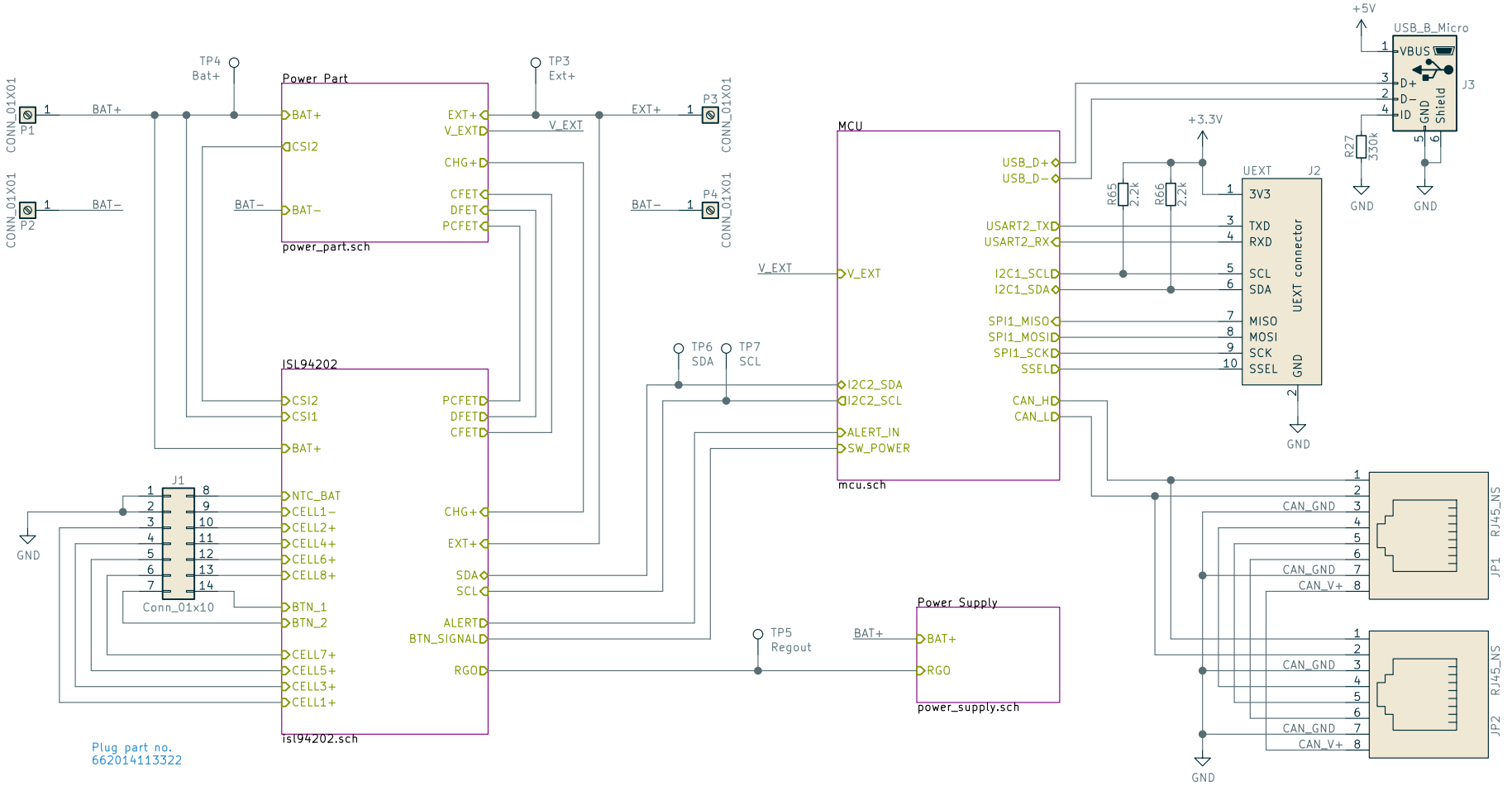
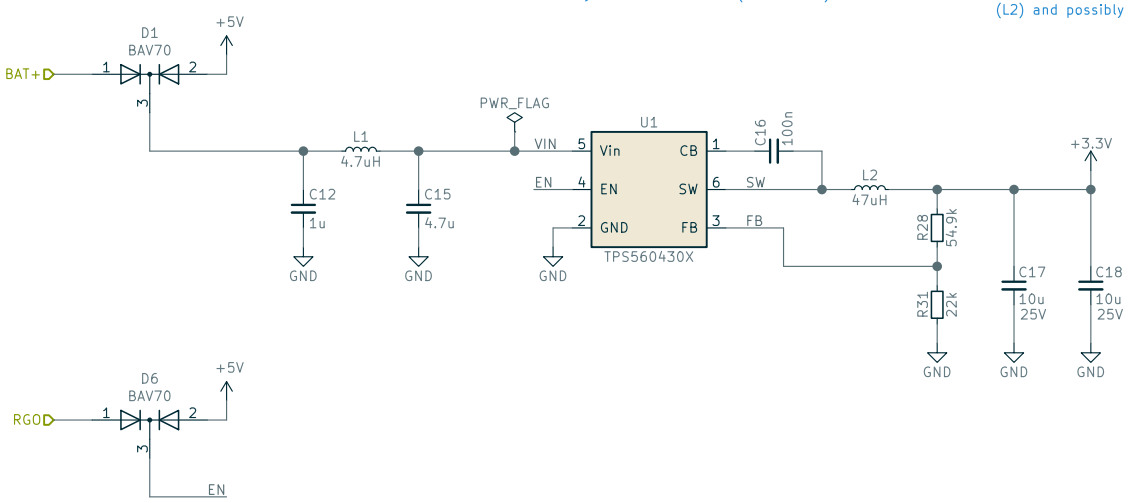
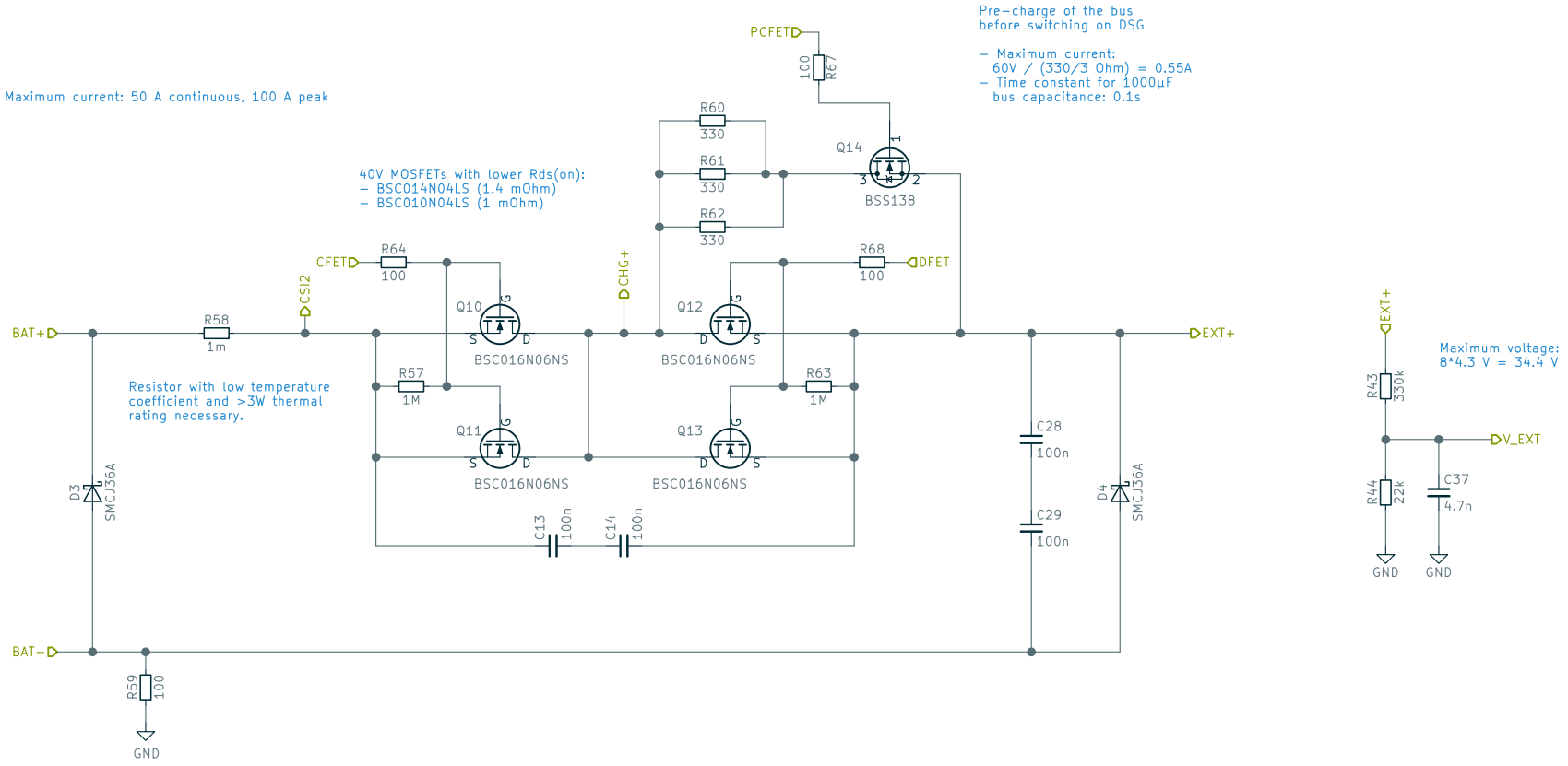

Power Part
power_part.sch
ISL94202
isl94202.sch
MCU
mcu.sch
Power Supply
power_supply.sch
UEXT connector
USB_B_Micro
Conn_01x10
Plug part no.
662014113322
BMS 8S50 IC
Libre Solar
Author: Martin Jäger
Sheet: /
File: bms-8s50-ic.sch
License: CC-BY-SA
Size: A4
Date: 2019-04-26
Rev: 0.1
KiCad E.D.A. kicad 5.1.2
Page: 1/5
LIBRESOLAR
H1
MountingHole
H2
MountingHole
LOGO1
OPEN_HARDWARE
LOGO2
LIBRE_SOLAR

Battery to 3.3V (SMPS)

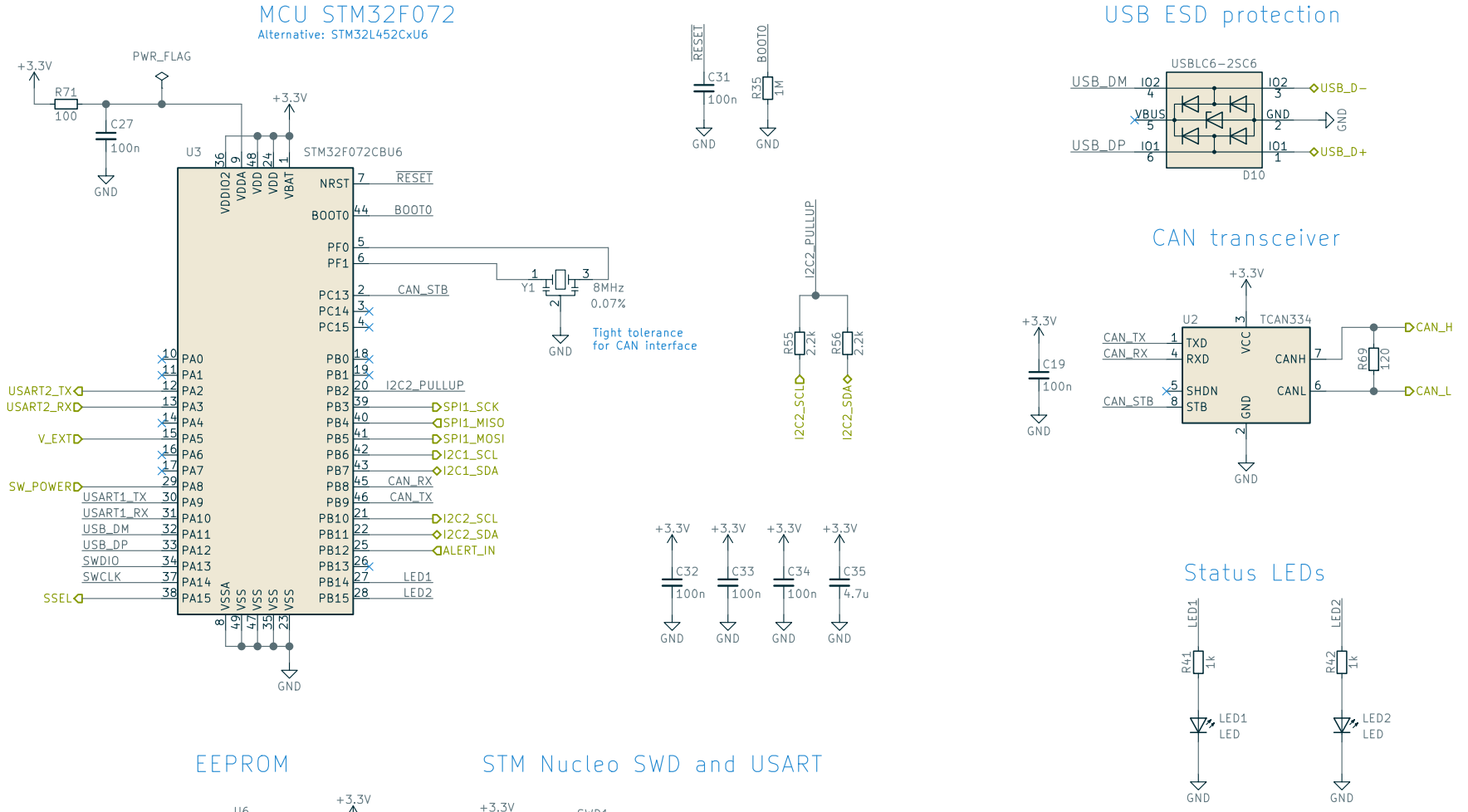
ToDo: Check Bourns inductor part number (L2) and possibly reduce footprint size



BMS 8S50 IC		LIBRESOLAR
Libre Solar Author: Martin Jäger		
Sheet: /Power Supply/ File: power_supply.sch		
License: CC-BY-SA		
Size: A4	Date: 2017-05-27	Rev: 0.1
KiCad E.D.A. kicad 5.1.2		Page: 2/5

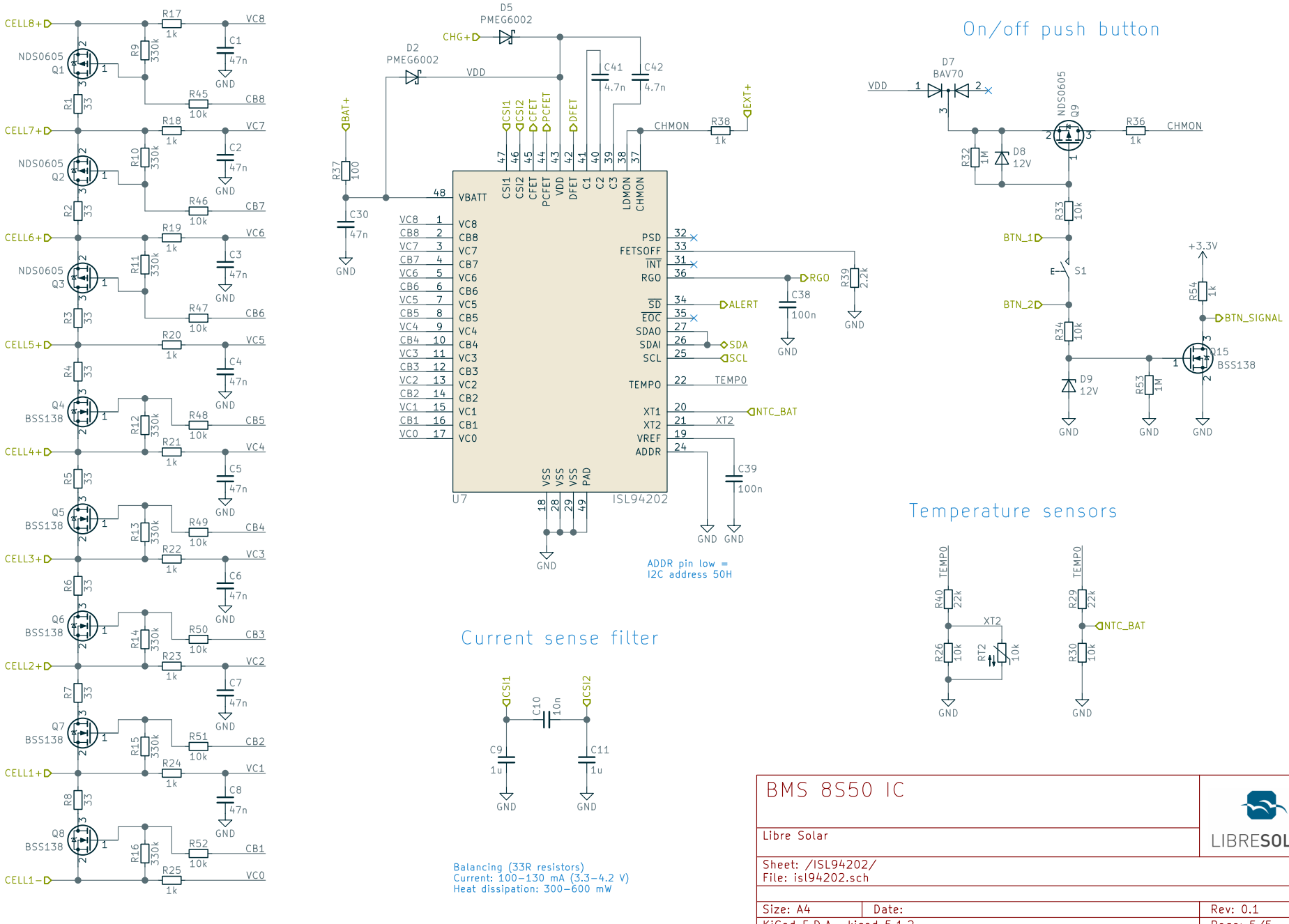


BMS 8S50 IC		LIBRESOLAR
Libre Solar		
Sheet: /Power Part/ File: power_part.sch		
Author: Martin Jäger		
Size: A4	Date: 2019-03-04	Rev: 0.1
KiCad E.D.A. kicad 5.1.2		Page: 3/5



BMS 8S50 IC

Libre Solar Author: Martin Jäger	LIBRESOLAR
Sheet: /MCU/ File: mcu.sch	
License: CC-BY-SA	
Size: A4	Date: 2017-05-27
KiCad E.D.A. kicad 5.1.2	Rev: 0.1 Page: 4/5


CELL8+
CELL7+
CELL6+
CELL5+
CELL4+
CELL3+
CELL2+
CELL1+
CELL1-
NDS0605
BSS138
VC8
VC7
VC6
VC5
VC4
VC3
VC2
VC1
VC0
CB8
CB7
CB6
CB5
CB4
CB3
CB2
CB1
GND
D5
PMEG6002
D2
PMEG6002
CHG+
VDD
BAT+
EXT+
CHMON
RGO
ALERT
SDA
SCL
TEMP0
NTC_BAT
XT2
U7
ISL94202
ADDR pin low =
I2C address 50H
On/off push button
D7
BAV70
BTN_1
BTN_2
S1
BTN_SIGNAL
+3.3V
Temperature sensors
Current sense filter
CSI1
CSI2
Balancing (33R resistors)
Current: 100–130 mA (3.3–4.2 V)
Heat dissipation: 300–600 mW
BMS 8S50 IC
Libre Solar
LIBRESOLAR
Sheet: /ISL94202/
File: isl94202.sch
Size: A4
Date:
Rev: 0.1
KiCad E.D.A. kicad 5.1.2
Page: 5/5