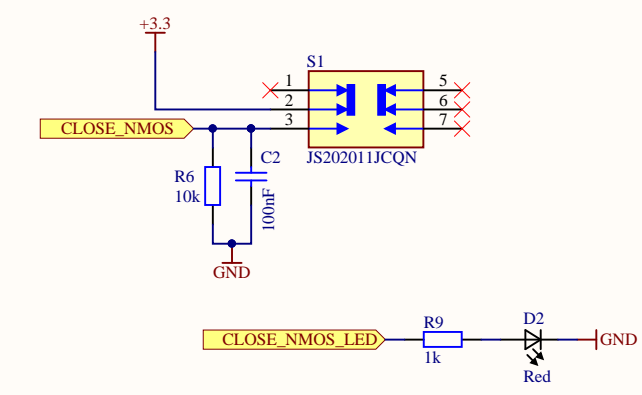
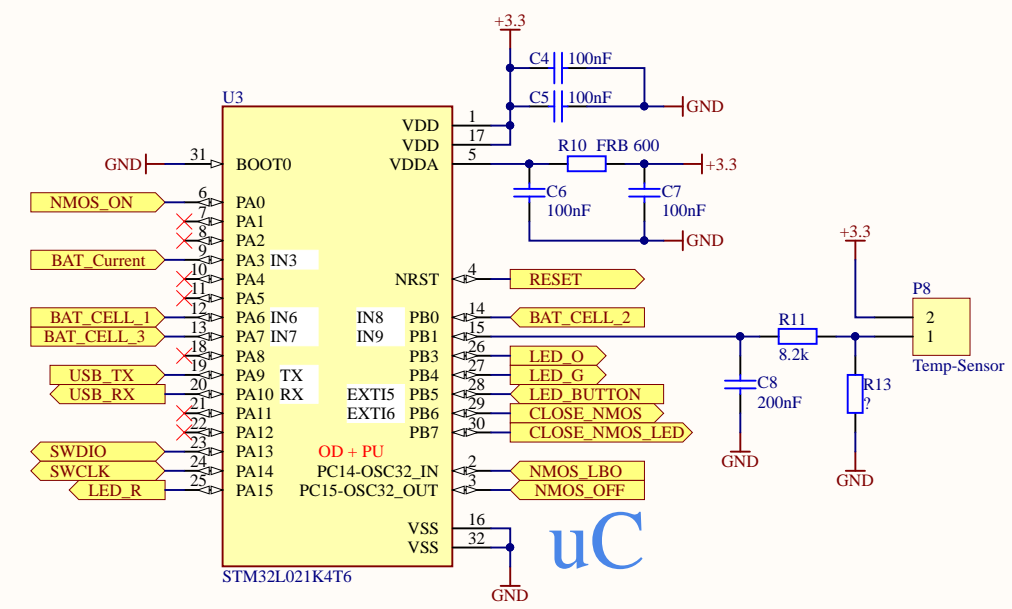
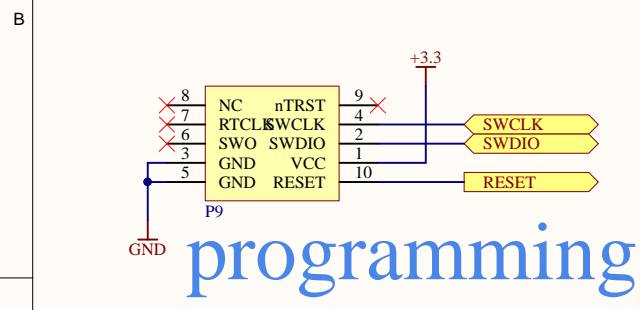


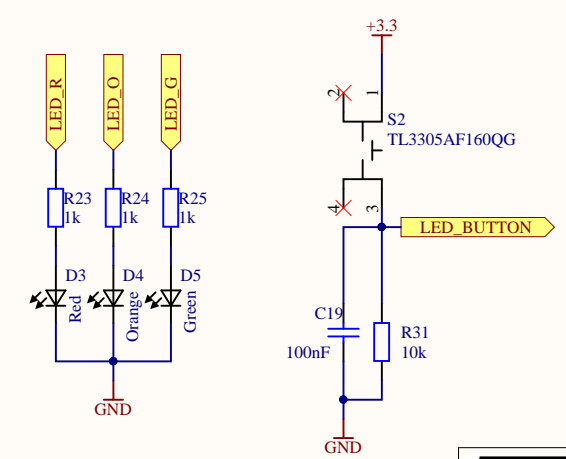
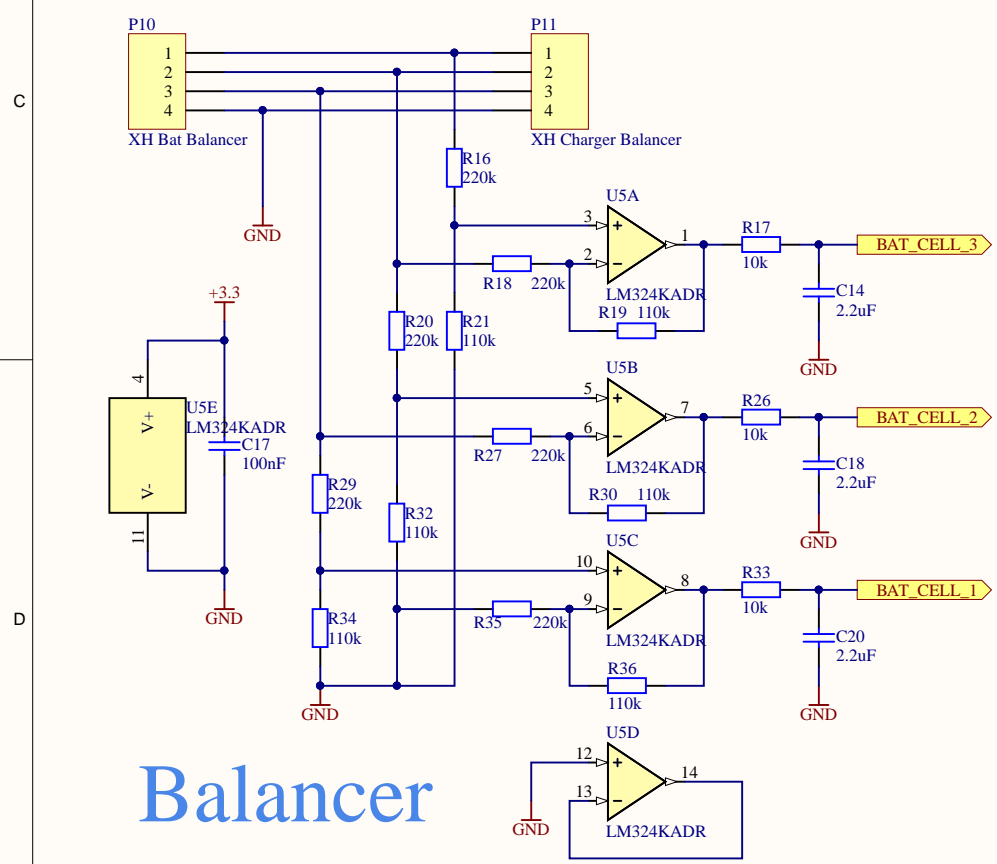
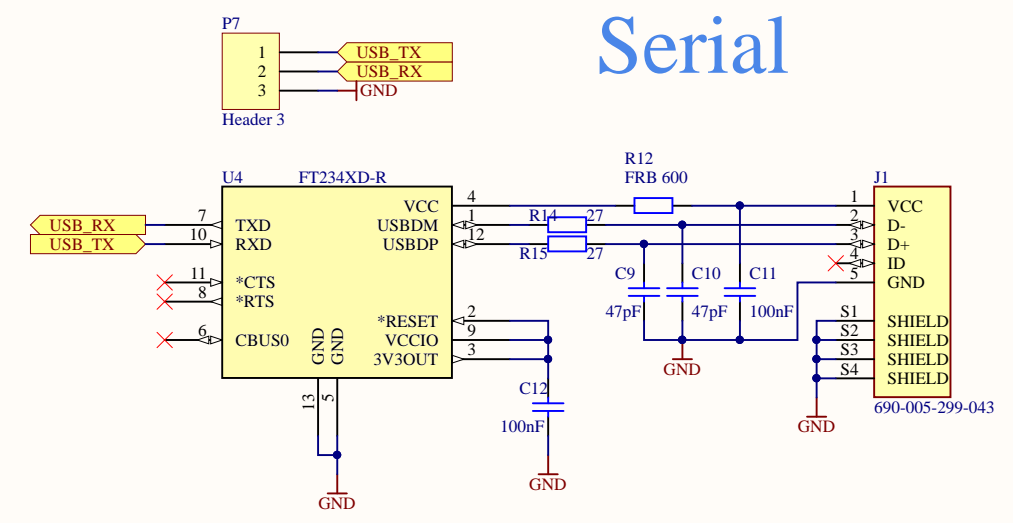
# N-MOS Force close



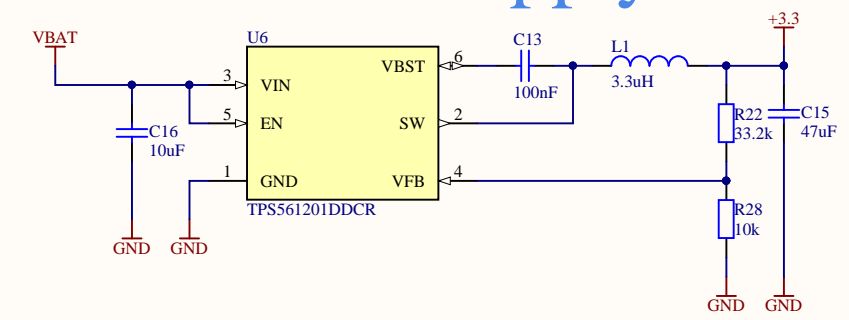
# Gate Driver

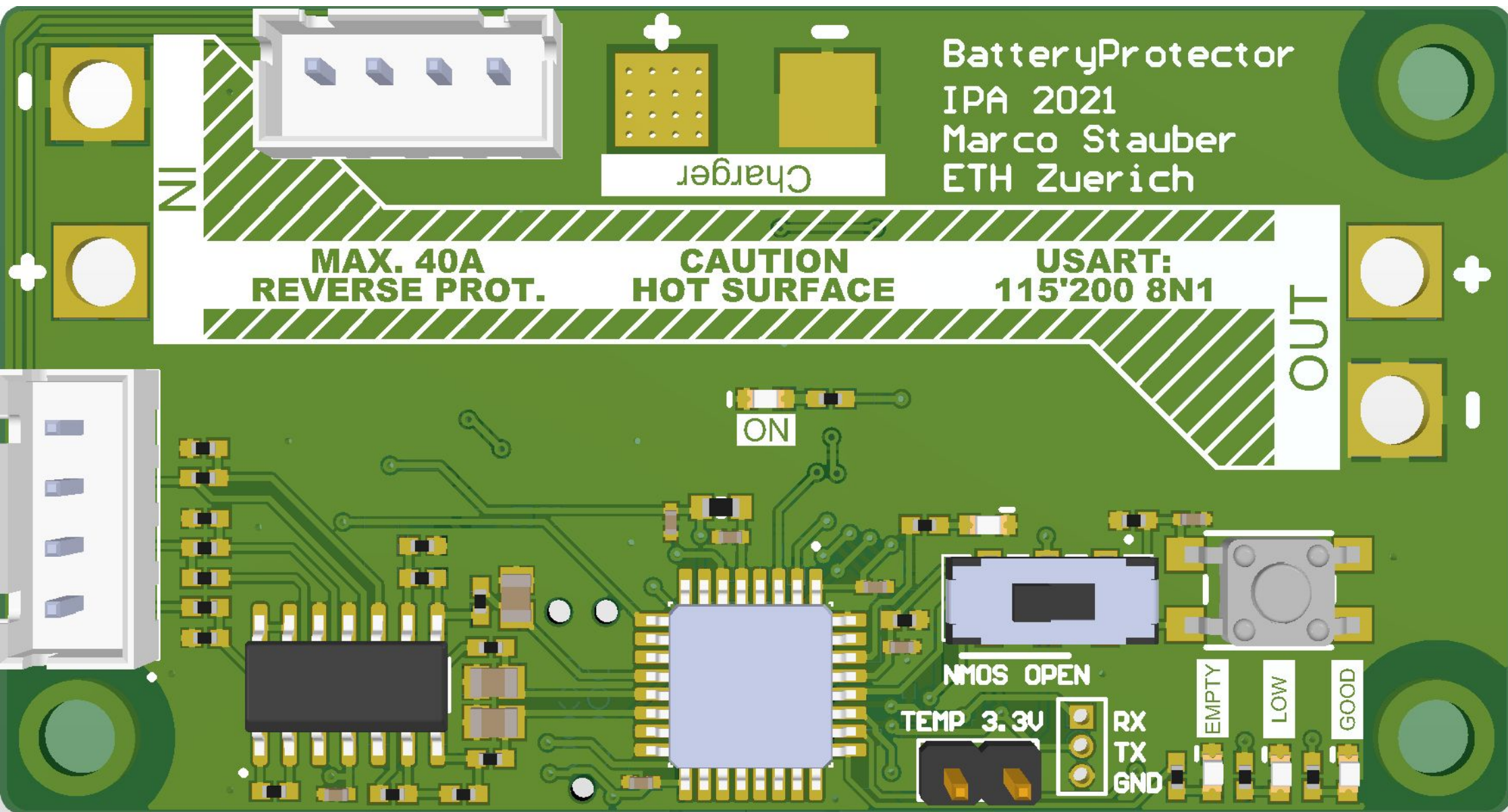


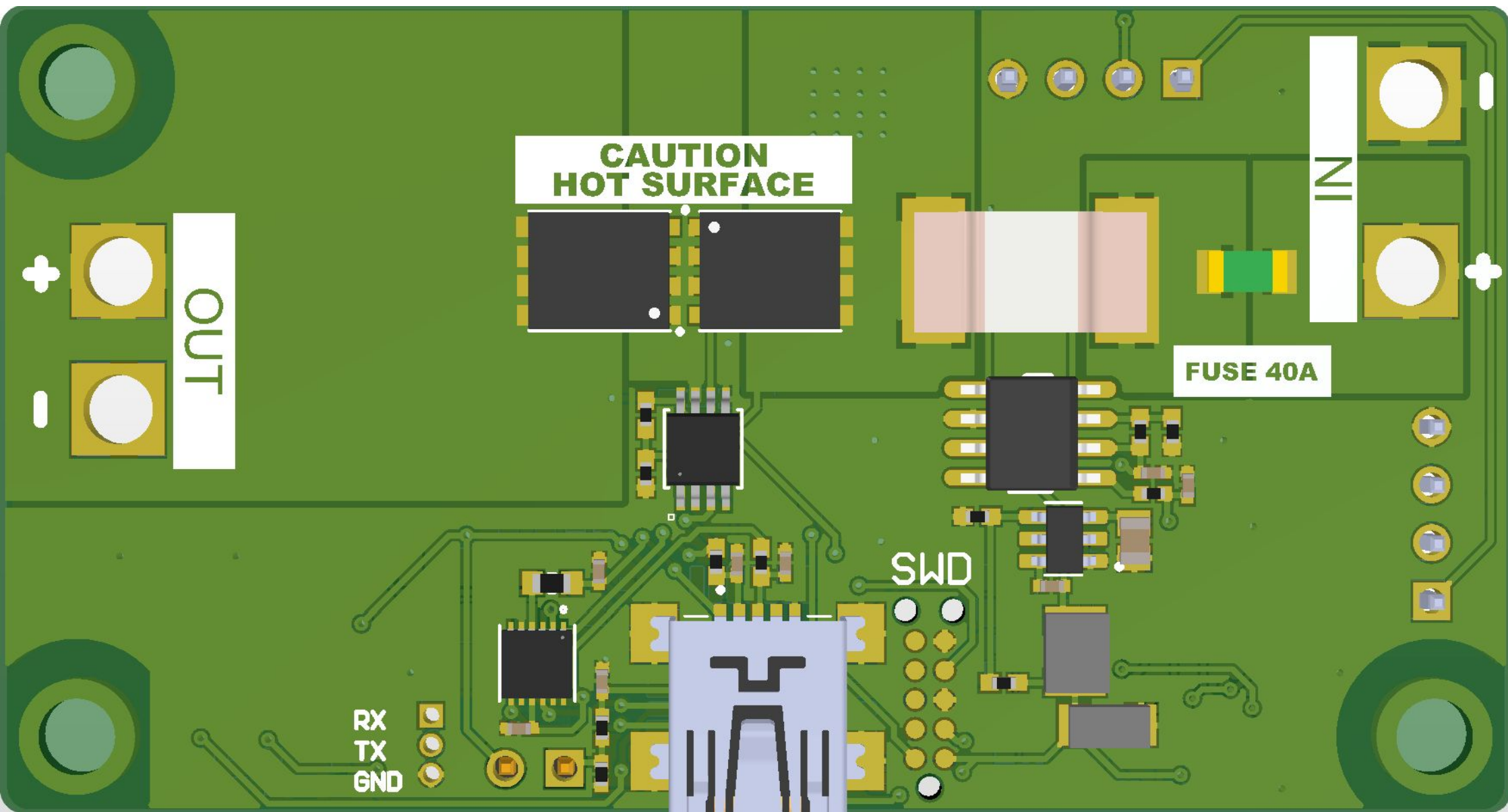
# Serial



# Power Supply







Charger

BatteryProtector  
IPA 2021  
Marco Stauber  
ETH Zuerich

MAX. 40A  
REVERSE PROT.

CAUTION  
HOT SURFACE

USART:  
115'200 8N1

OUT

ON

MOS OPEN

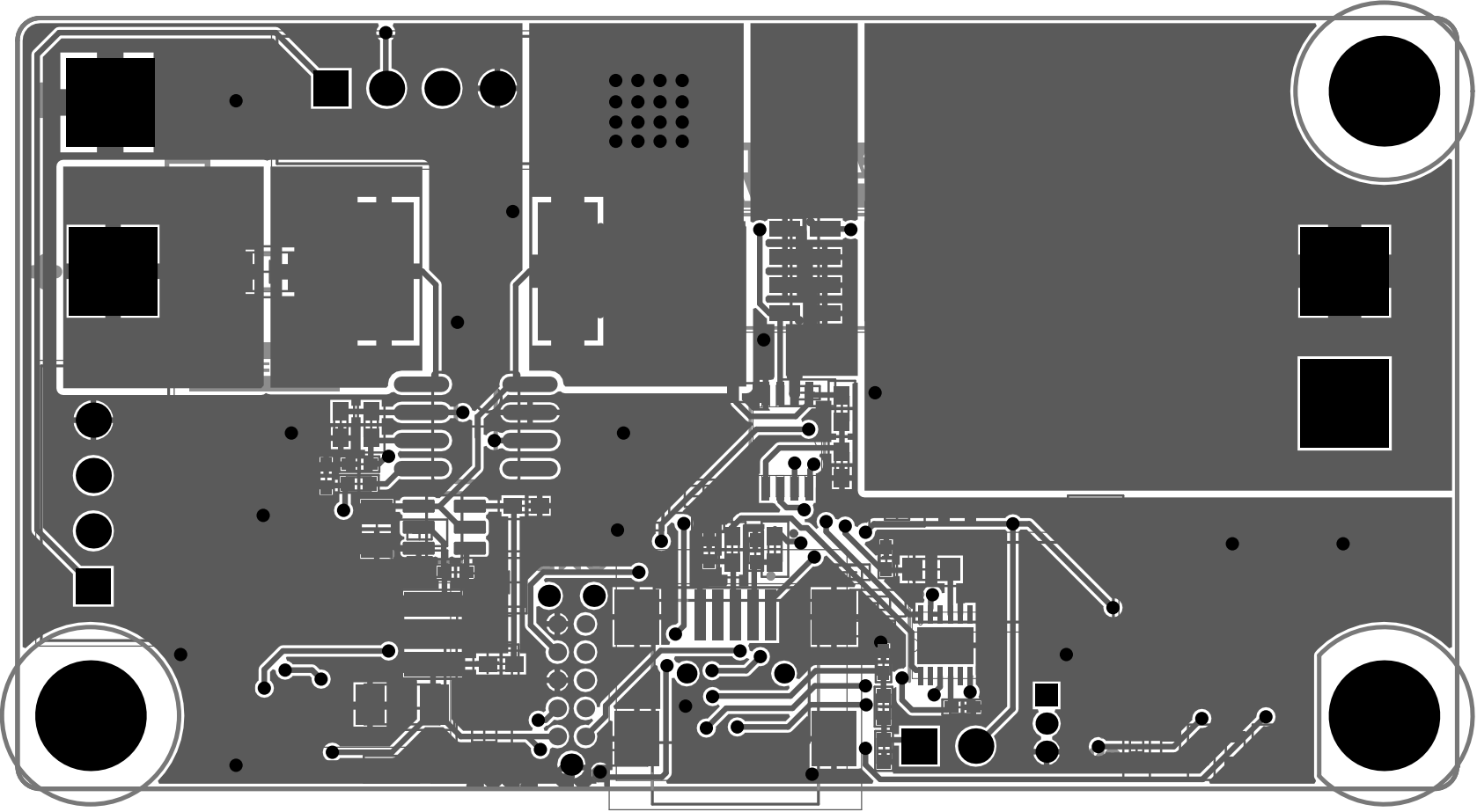
REG 3.3V

RX  
TX  
GND

EMPTY

LOW

GOOD





Comment	Description	Designator	Footprint	LibRef	Quantity
100nF	capacitor	C1, C2, C4, C5, C6	CAP_0402i_1005m	Cap	11
200nF	capacitor	C3, C8	CAP_0402i_1005m	Cap	2
47pF	capacitor	C9, C10	CAP_0402i_1005m	Cap	2
2.2uF	capacitor	C14, C18, C20	CAP_0805i_2012m	Cap	3
47uF	capacitor	C15	CAP_1206i_3216m	Cap	1
10uF	capacitor	C16	CAP_0805i_2012m	Cap	1
Green	Red 631nm LED IR	D1, D5	0603_LED	LTST-C191KRKT	2
Red	Red 631nm LED IR	D2, D3	0603_LED	LTST-C191KRKT	2
Orange	Red 631nm LED IR	D4	0603_LED	LTST-C191KRKT	1
40A Fuse	Fuse	F1	FUSE_1206i_3216m	Fuse	1
690-005-299-043	USB - mini B USB	J1	EDAC_690-005-299-043	690-005-299-043	1
3.3uH	Inductor	L1	IND_1210i_3225m	Inductor	1
Charger +		P1	AWG-10-Hole-1	Pin	1
Charger -		P2	AWG-10-Hole-1	Pin	1
BAT +		P3	AWG-10-Hole-1	Pin	1
OUT +		P4	AWG-10-Hole-1	Pin	1
BAT -		P5	AWG-10-Hole-1	Pin	1
OUT -		P6	AWG-10-Hole-1	Pin	1
Header 3	Header, 3-Pin	P7	1.27mm HDR1X3	Header 3	1
Temp-Sensor	Header, 2-Pin	P8	HDR1X2	Header 2	1
Tag-Connect TC20	10-pin pogo pin p	P9	TAG-CONNECT T	Tag-Connect TC20	1
XH Bat Balancer	Header, 4-Pin	P10	JST_B4B-XH-A(LF	Header 4	1
XH Charger Balanc	Header, 4-Pin	P11	JST_B4B-XH-A(LF	Header 4	1
200u	RES 200 UOHM 1%	R1	WSL3921L2000FEA	WSL3921L2000FEA	1
10k	Resistor	R2, R5, R6, R17, R	RES_0402i_1005m	Res	8
12k	Resistor	R3, R4	RES_0402i_1005m	Res	2
8.2k	Resistor	R7, R11	RES_0402m_1005i	Res	2
1.5k	Resistor	R8	RES_0402i_1005m	Res	1
1k	Resistor	R9, R23, R24, R25	RES_0402i_1005m	Res	4
FRB 600	Resistor	R10, R12	RES_0603i_1608m	Res	2
?	Resistor	R13	RES_0402m_1005i	Res	1
27	Resistor	R14, R15	RES_0402i_1005m	Res	2
220k	Resistor	R16, R18, R20, R21	RES_0402i_1005m	Res	6
110k	Resistor	R19, R21, R30, R32	RES_0402i_1005m	Res	6
33.2k	Resistor	R22	RES_0402i_1005m	Res	1
JS202011JCQN	Slide Switch DPDT	S1	SW_JS202011JCQN	JS202011JCQN	1
TL3305AF160QG		S2	TL3305AF160QG	TL3305AF160QG	1
CSD16570Q5B	Power NMOS	T1, T2	CSD16570Q5B	CSD16570Q5B	2
MAX1614EUA+T	No Description Av	U1	21-0036K_MXM-L	MAX1614EUA+T	1
INA286AIDR	No Description Av	U2	D0008A_M	INA286AIDR	1
STM32L021K4T6	ARM@ Cortex@-M	U3	QFP80P900X900X1	STM32L051K6T6	1
FT234XD-R	No Description Av	U4	DFN-12_FTD	FT234XD-R	1
LM324KADR		U5	SOIC127P600X175	LM324KADR	1
TPS561201DDCR	4.5V to 17V Input,	U6	SOT95P280X110-6	TPS561201DDCR	1