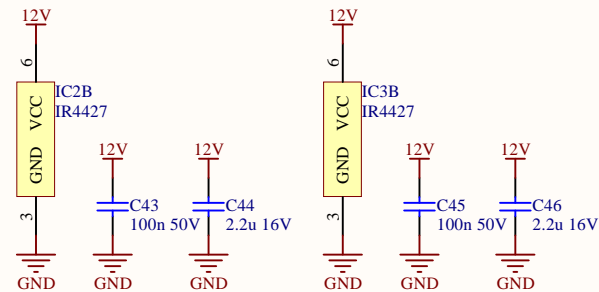
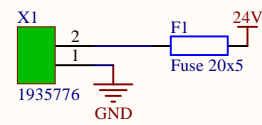
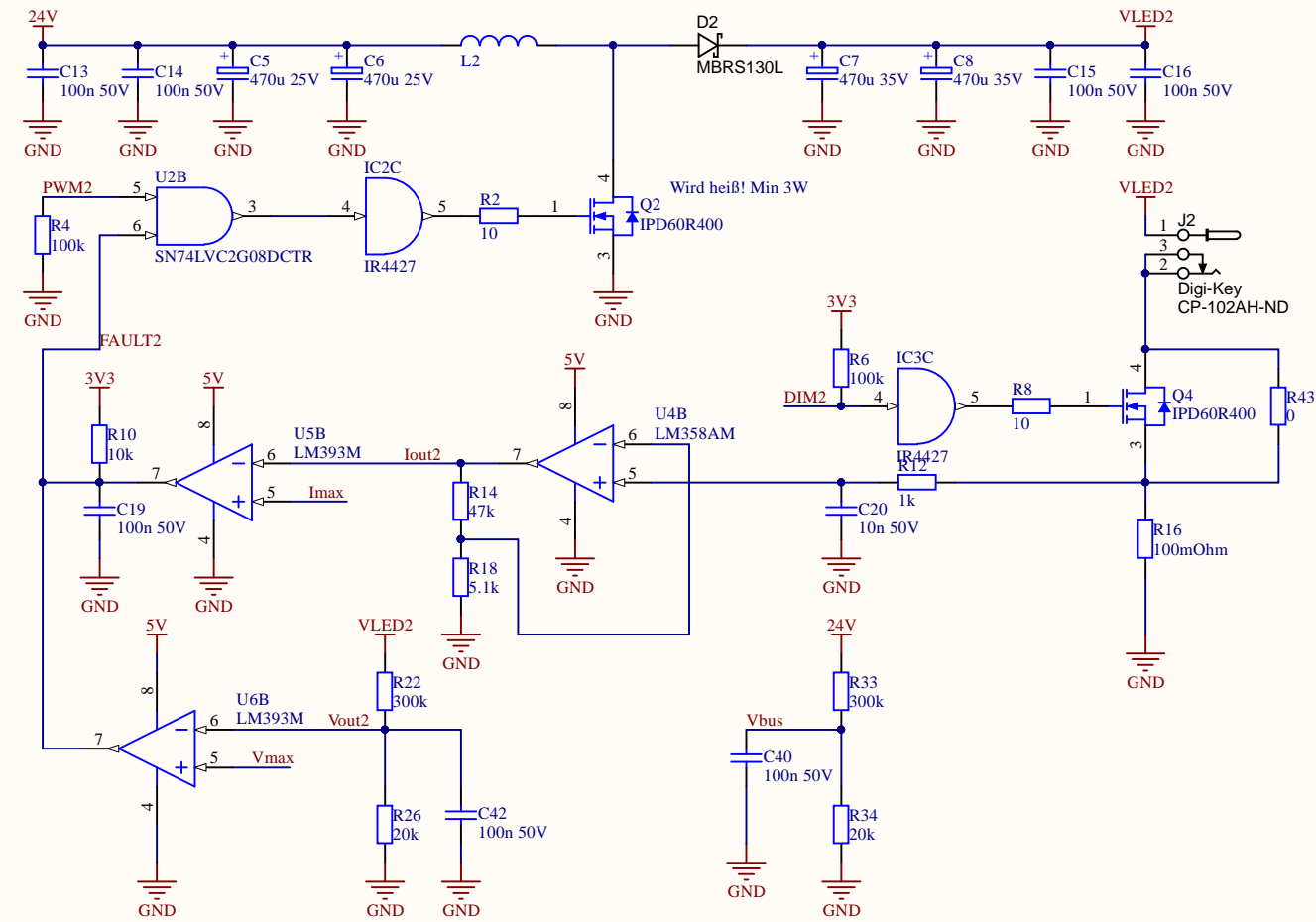
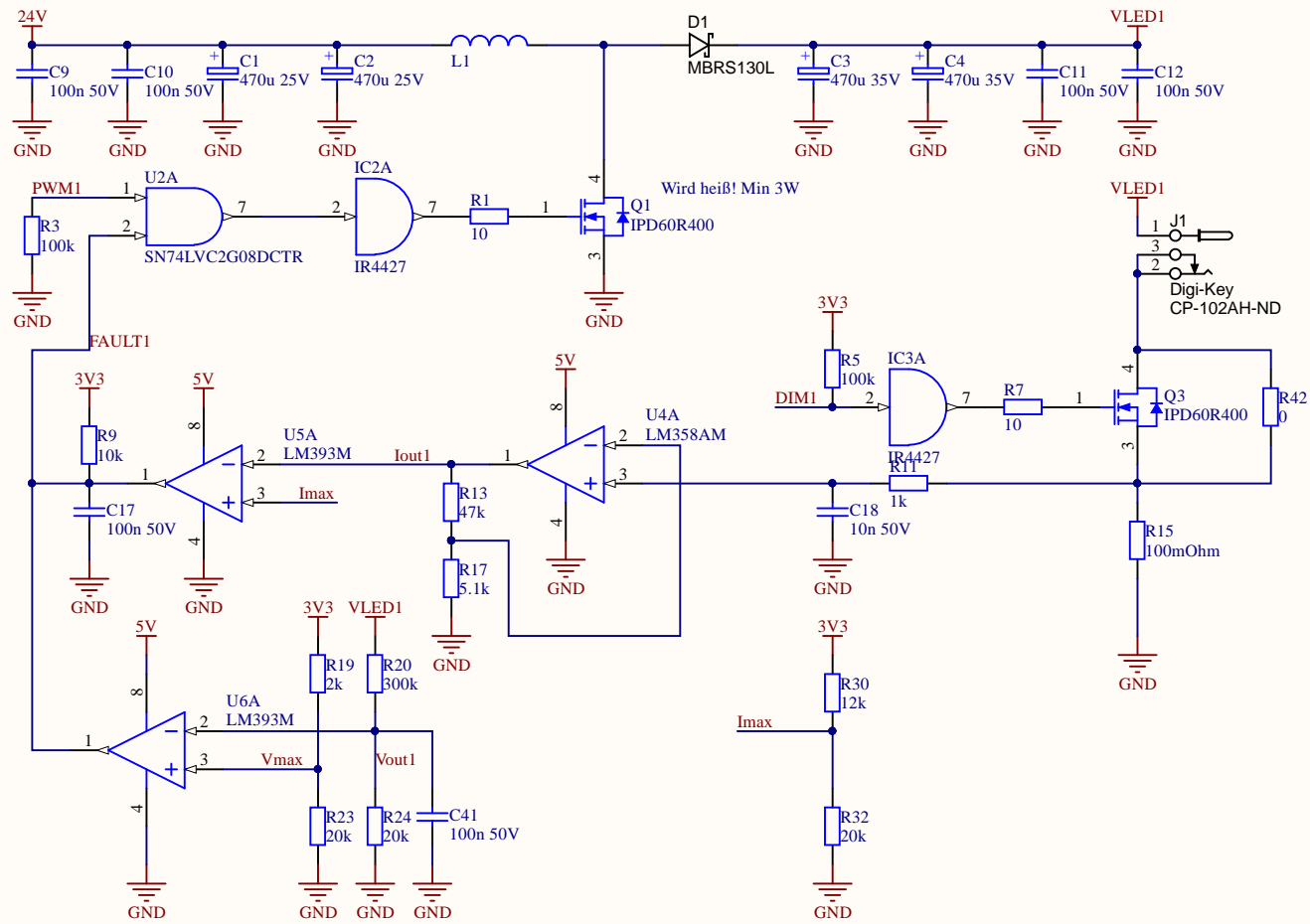
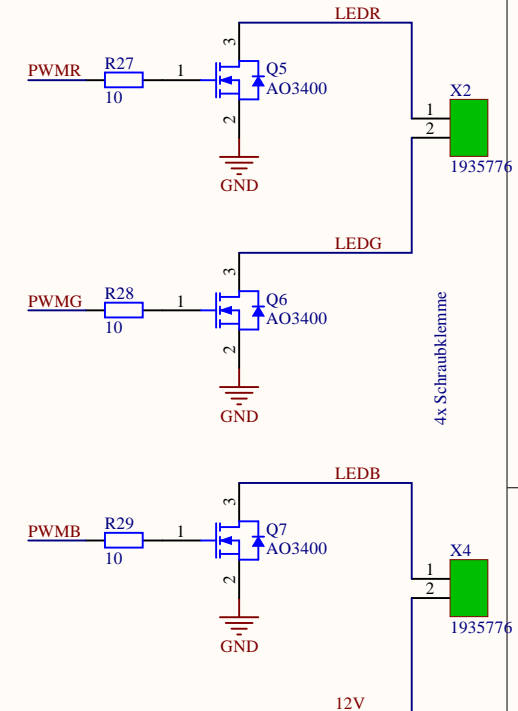
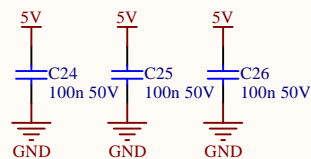
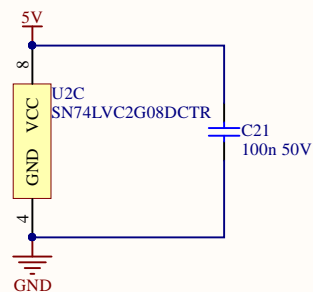


<https://de.aliexpress.com/item/Free-shipping-Shielded-Inductor-Chip-Inductor-330-33UH-3A-12-12-7MM-SMD-power-inductors/1237223651.html>



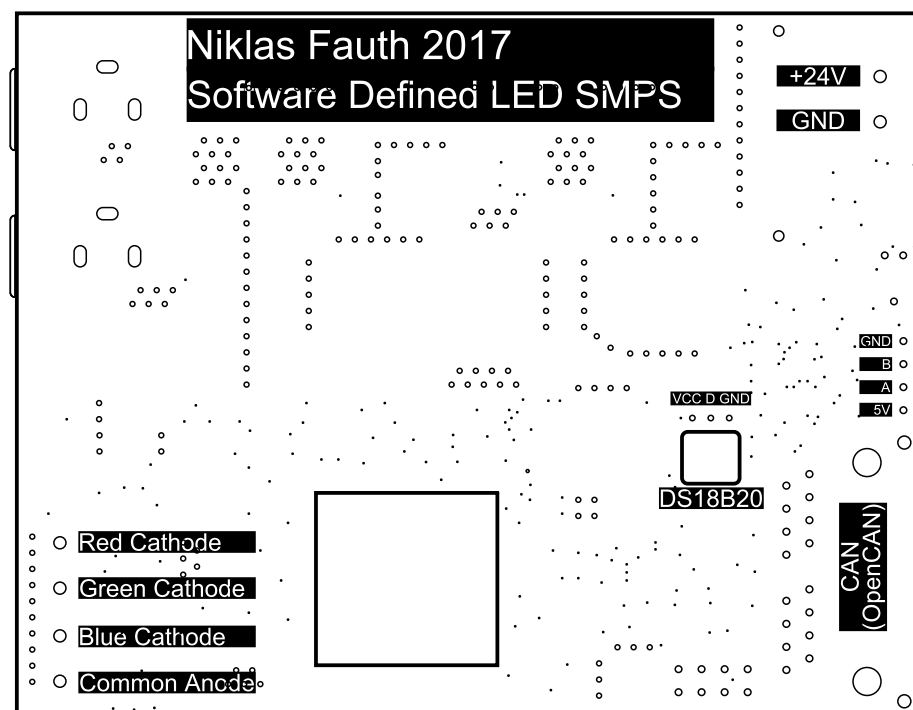
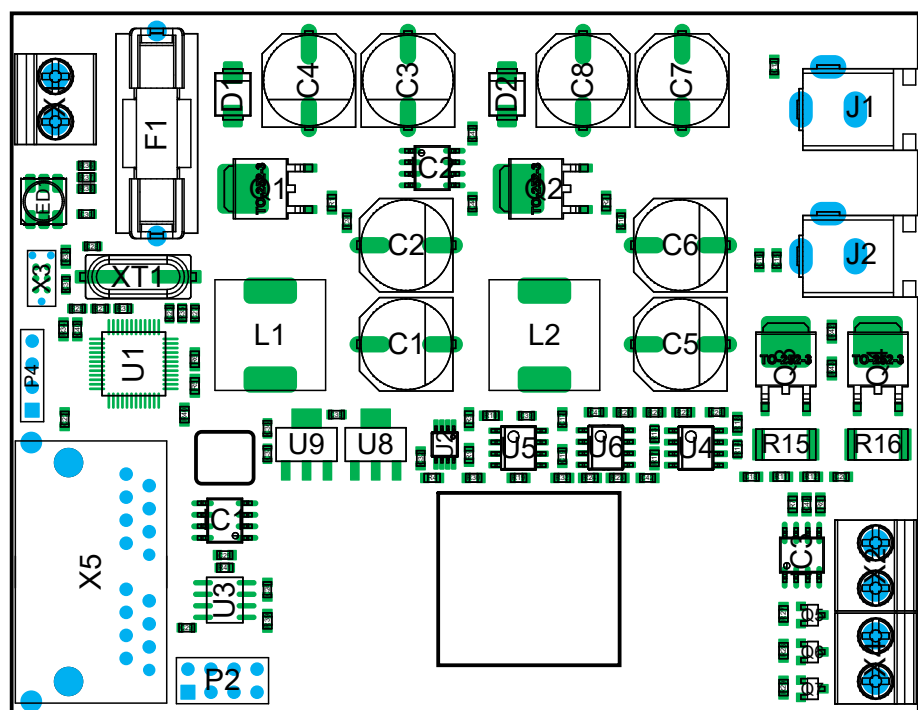
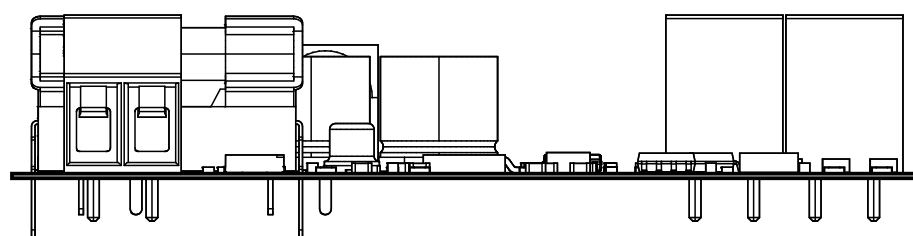
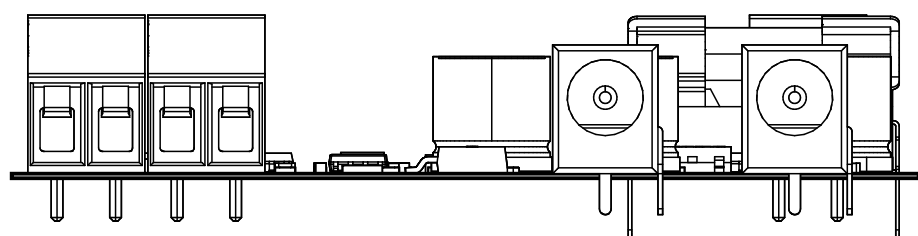
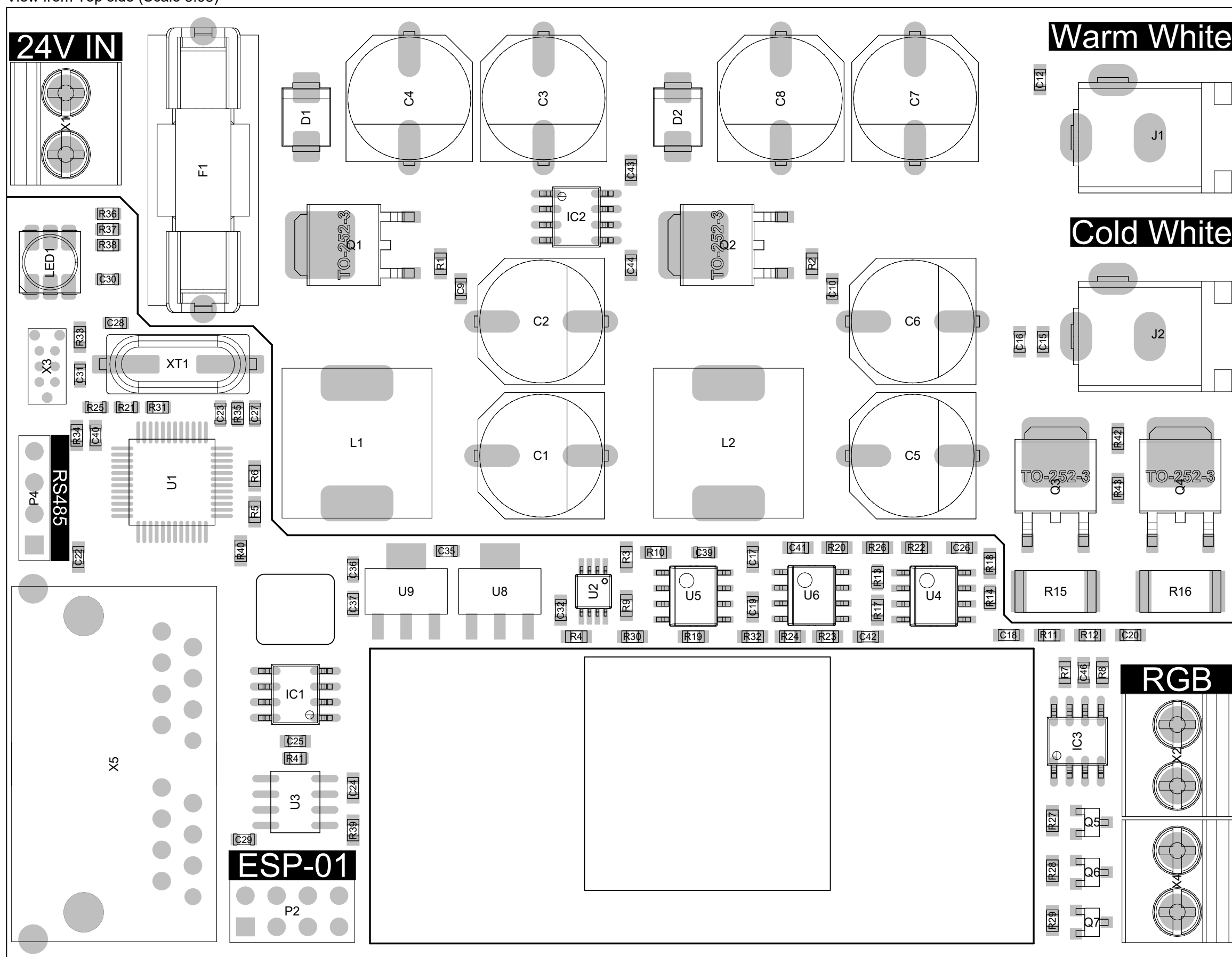
Schaltwandler 24V --> 12V:
<https://de.aliexpress.com/item/5A-DC-DC-DC-DC-Step-Down-Adjustable-Power-Supply-Module-Lithium-Charger-XL4015-4-38V/32582826097.html>



Bill of Materials

Item	Designator	Comment	Quantity	Footprint
1	C1, C2, C5, C6	470u 25V	4	SMD-10x10
2	C18, C20	10n 50V	2	C-0603-M
3	C22	100p 25V	1	C-0603-M
4	C23, C29, C31, C36, C39	100n 25V	5	C-0603-H
5	C27, C28	18p 50V	2	C-0603-H
6	C3, C4, C7, C8	470u 35V	4	SMD-10x10
7	C30, C35, C37	10u 6.3V	3	C-0603-H
8	C32	1u 25v	1	C-0603-M
9	C44, C46	2.2u 16V	2	C-0603-M
10	C9, C10, C12, C15-C17, C19, C24-C26, C40-C43	100n 50V	14	C-0603-M
11	D1, D2	MBRS130L	2	DO-214AA
12	F1	Fuse 20x5	1	FUSE-22.5
13	IC1	MAX485	1	SOIC-8
14	IC2, IC3	IR4427	2	SOIC-8
15	J1, J2	Comment	2	CONN_PWR_JACK_2.1x5.5mm
16	L1, L2	PIS4728	2	PIS47xx
17	LED1	RGB_LED_5050	1	plcc6
18	P2	ESP	1	HDR2X4
19	P4	Header 4	1	HDR1X4
20	Q1-Q4	IPD60R400	4	TO-252
21	Q5-Q7	AO3400	3	AO-SOT23-V
22	R1, R2, R7, R8, R27-R29	10	7	R-0603-M
23	R11, R12	1k	2	R-0603-M
24	R13, R14, R31	47k	3	R-0603-H
25	R15, R16	100mOhm	2	R-2512-M
26	R17, R18	5.1k	2	R-0603-M
27	R19	2k	1	R-0603-M
28	R20, R22, R33	300k	3	R-0603-M
29	R21, R25	24k	2	C-0603-H
30	R23, R24, R26, R32, R34	20k	5	R-0603-M
31	R3-R6	100k	4	R-0603-M
32	R30	12k	1	R-0603-M
33	R36-R38	470	3	R-0603-H
34	R40	4k7	1	R-0603-M
35	R42, R43	0	2	R-0603-M
36	R9, R10, R35, R39, R41	10k	5	R-0603-M
37	U1	STM32F334CBT6	1	STM-LQFP48_N
38	U2	SN74LVC2G08DCTR	1	DCT0008A_M
39	U3	MCP2551-I/SN	1	SOIC-SN8_N
40	U4	LM358AM	1	D0008A_N
41	U5, U6	LM393M	2	D0008A_L
42	U8	LM1117IMPX-5	1	MP04A_L
43	U9	LM1117IMPX-3.3	1	MP04A_L
44	X1, X2, X4	1935776	3	PHOENIX-2P-5mm
45	X3	TC2050-IDC	1	TC2030-IDC-NL
46	X5	43814-6621	1	RJ45_DUAL
47	XT1	6.00MHz	1	CRYSTAL_HC49-US-SM

View from Top side (Scale 3.05)



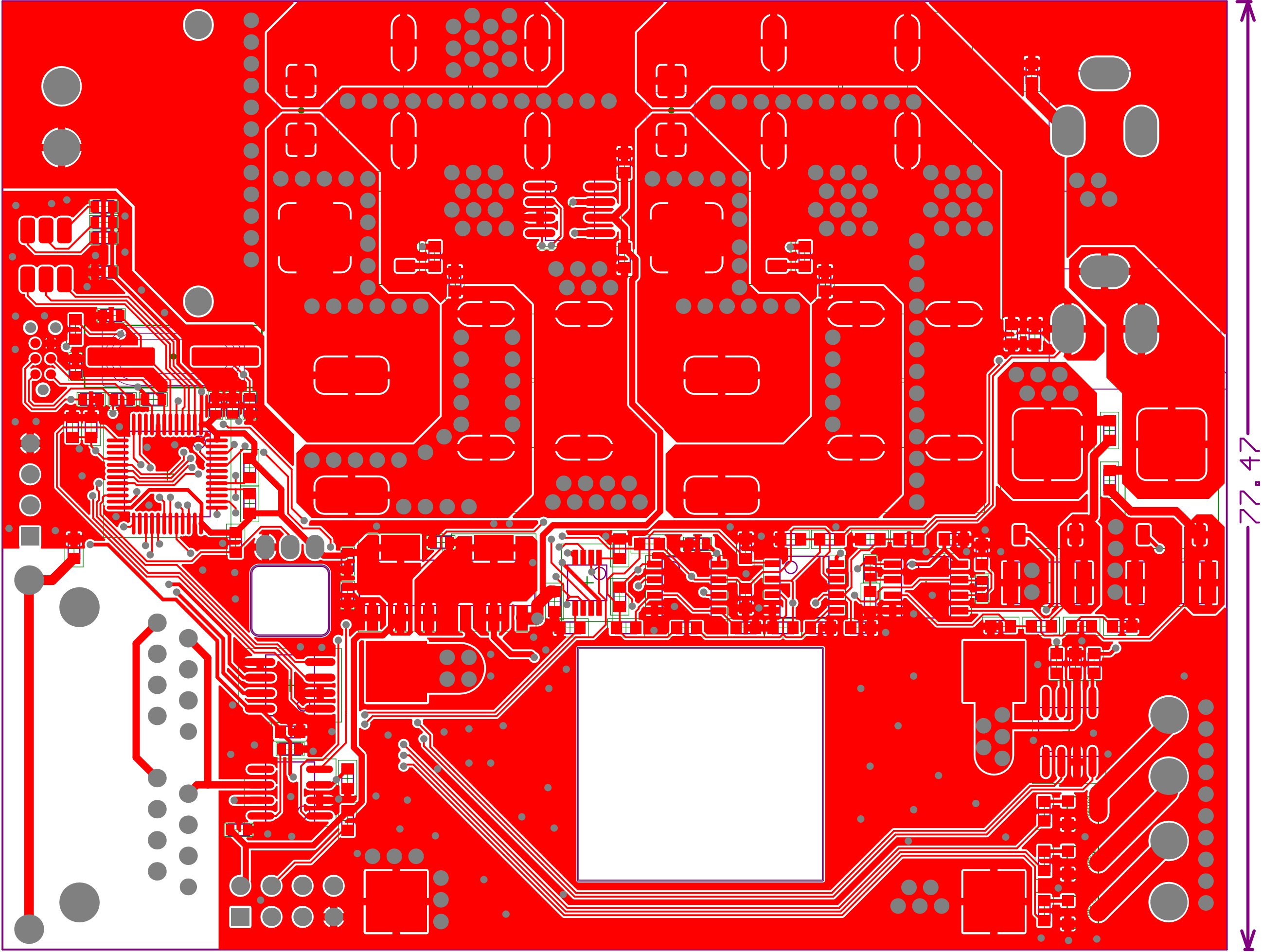
Layer Stack Legend

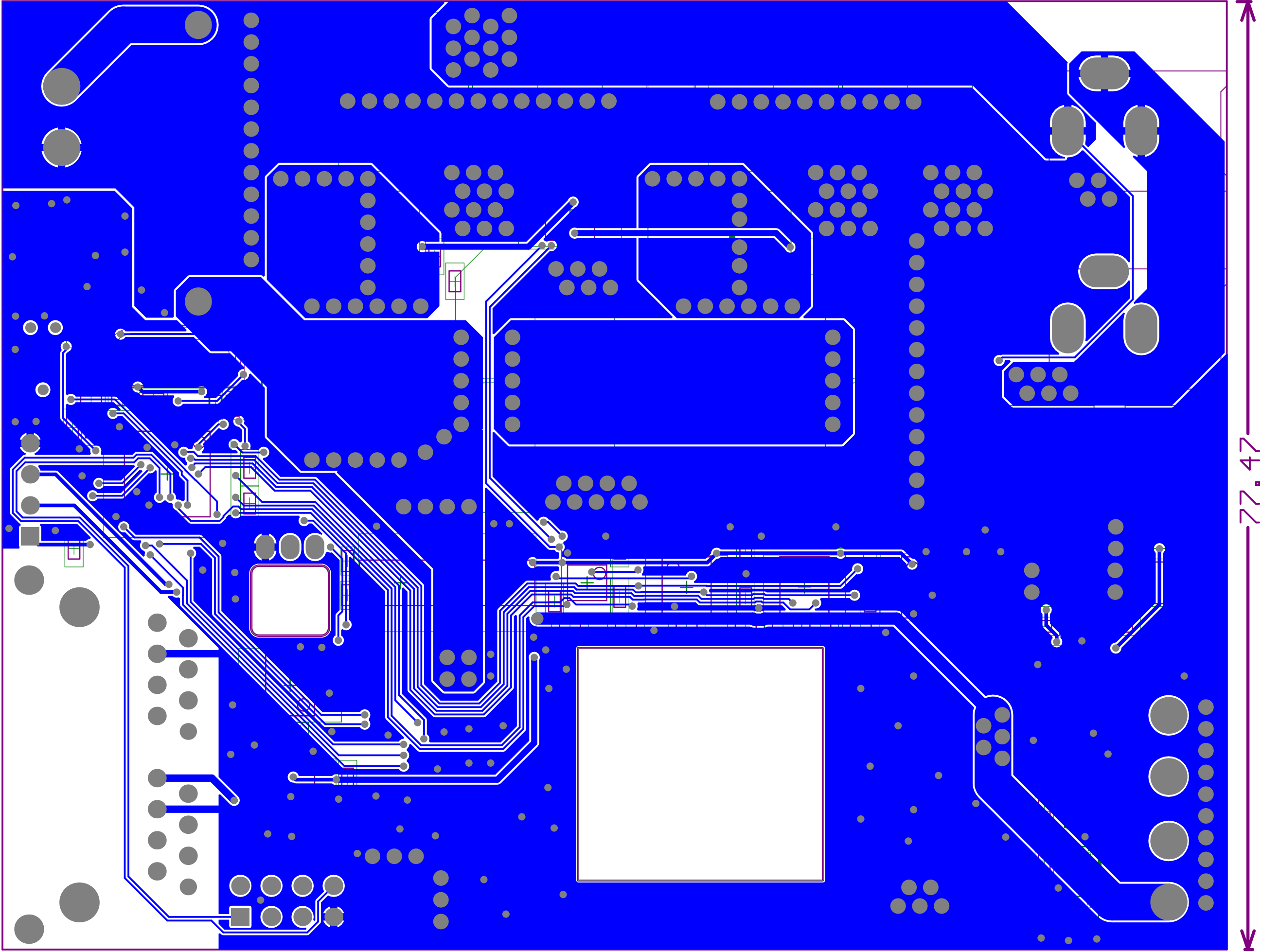
Material	Layer	Thickness	Dielectric	Material Type	Gerber
	Top Paste			Paste Mask	GTP
	Top Overlay			Legend	GTO
Surface Material	Top Solder	0mm	Solder Resist	Solder Mask	GTS
Copper	Top Layer	0mm		Signal	GTL
		0mm	FR-4	Dielectric	
Copper	Bottom Layer	0mm		Signal	GBL
Surface Material	Bottom Solder	0mm	Solder Resist	Solder Mask	GBS
	Bottom Overlay			Legend	GBO
	Bottom Paste			Paste Mask	GBP
Total thickness: 0mm					

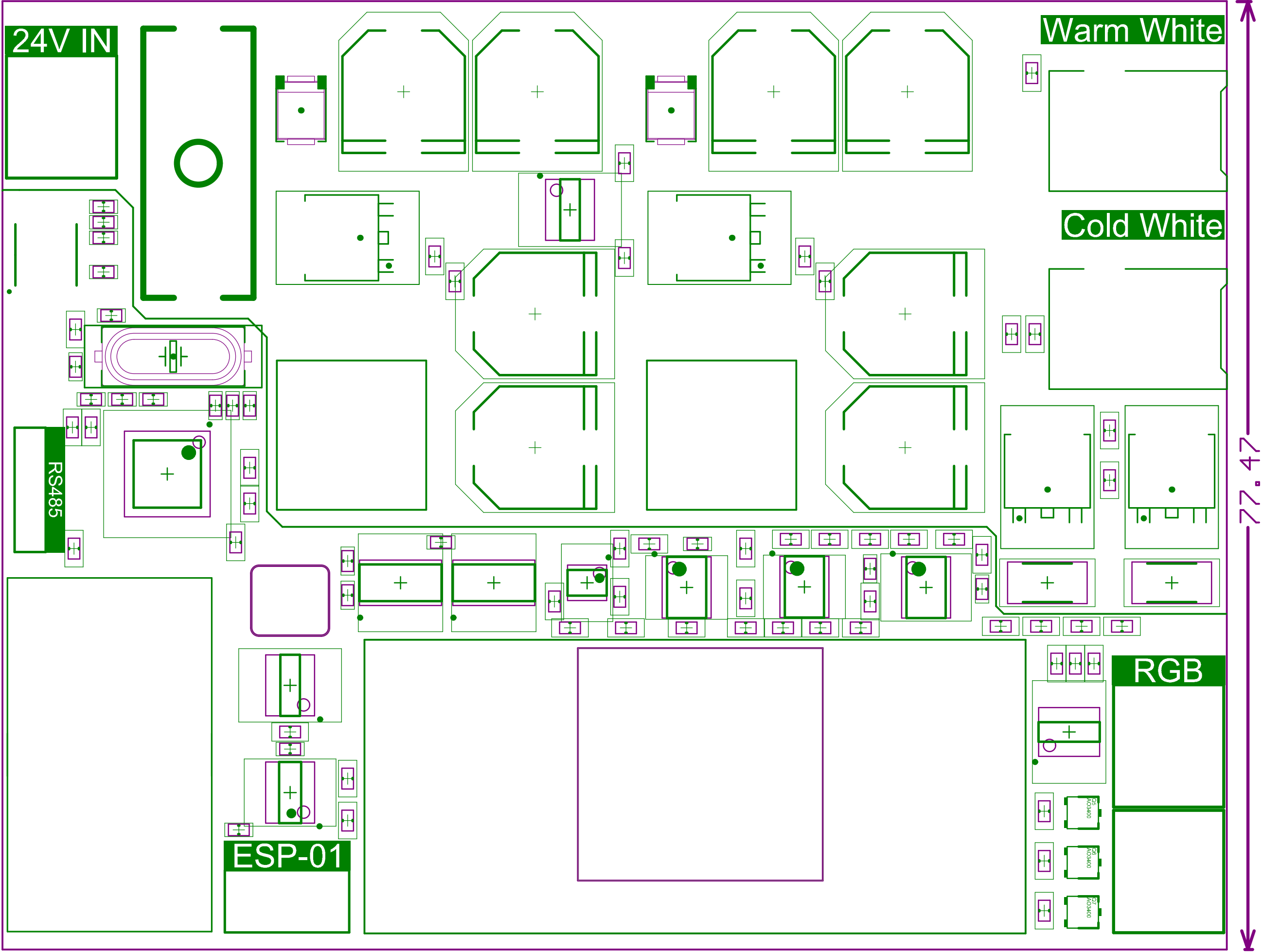
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UNLESS OTHERWISE SPECIFIED:	NAME	DATE
DIMENSIONS ARE IN INCH	DRAWN	4/23/2017
TOLERANCES:	CHECKED	
FRACTIONAL ±	ENG APPR.	
ANGULAR: MACH ±	MFG APPR.	
TWO PLACE DECIMAL ±	Q.A.	
THREE PLACE DECIMAL ±	COMMENTS:	
INTERPRET GEOMETRIC TOLERANCING PER:		
MATERIAL		
NEXT ASSY	USED ON	FINISH
APPLICATION		DO NOT SCALE DRAWING

Entropia e.V.		
TITLE		
Erleuchtung		
SIZE	DWG. NO.	
	1	
SCALE: 1:1	WEIGHT:	SHEET 1 OF 1







Warm White

Cold White

24V IN

RS485

ESP-01

RGB

77.22

24.22

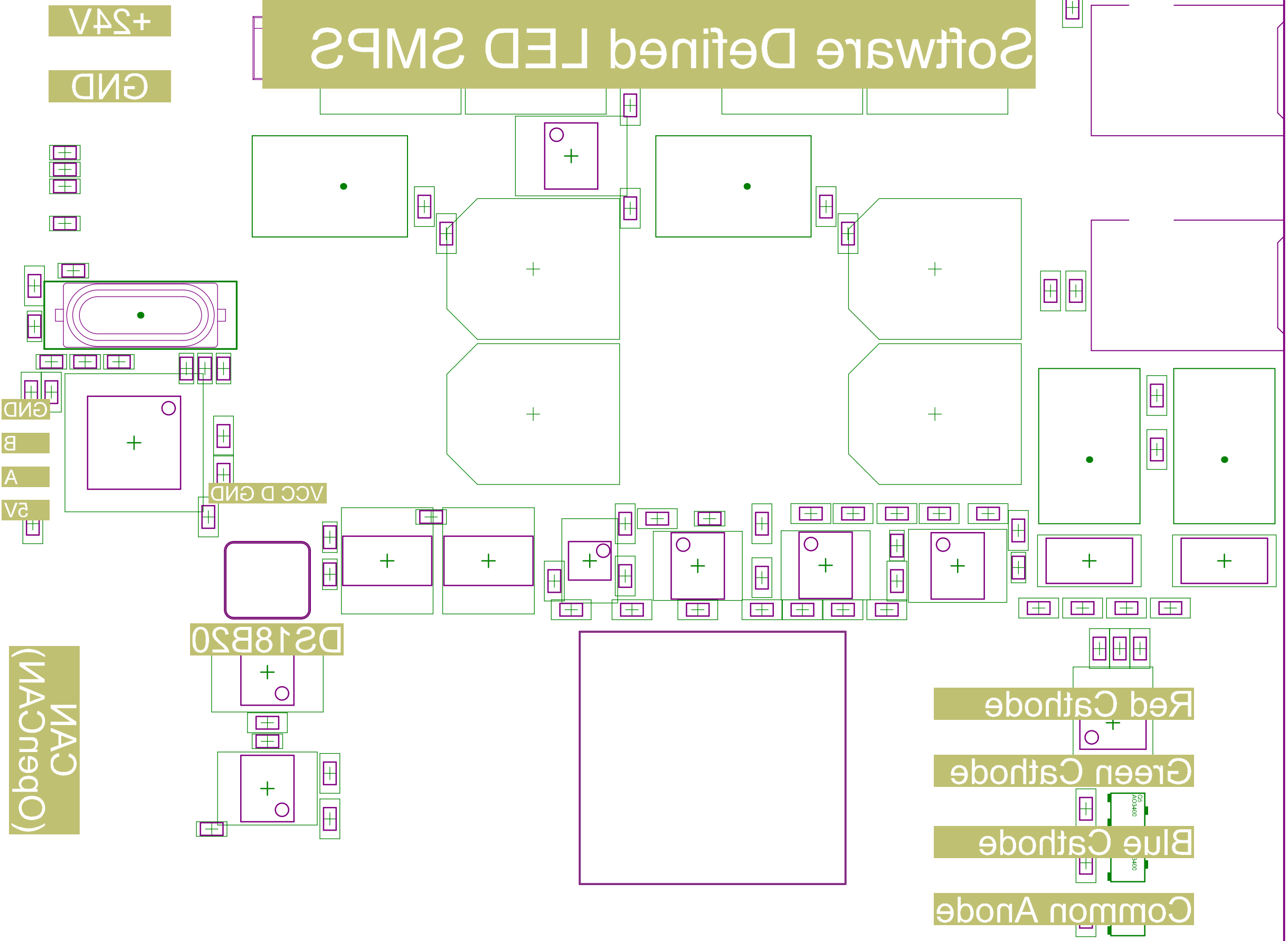
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A03400

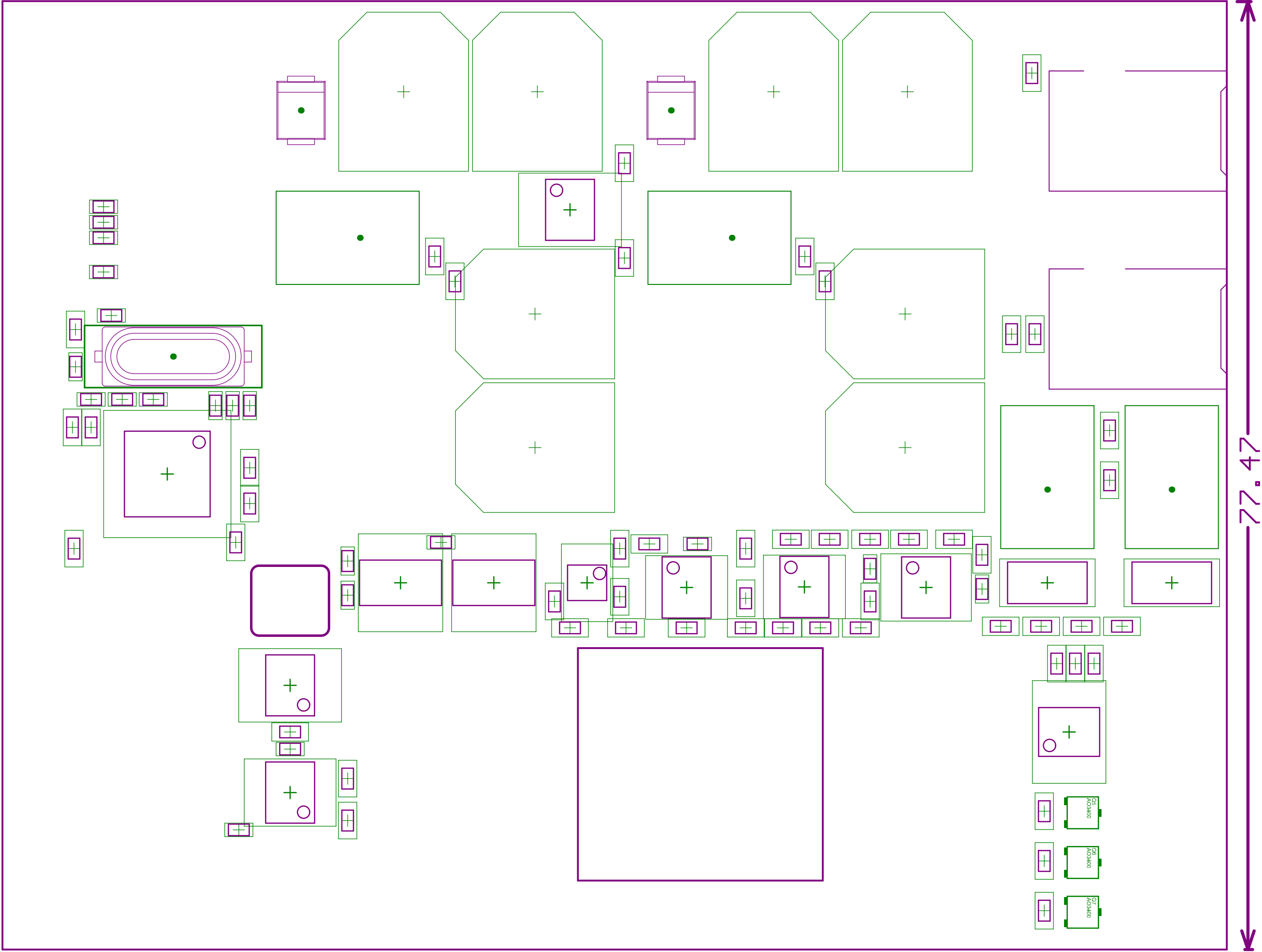
06
A03400

07
A03400

Software Defined LED SMPS

Niklas Fauth 2017





77.47

05
AO3400

06
AO3400

07
AO3400