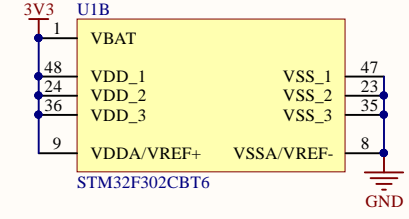
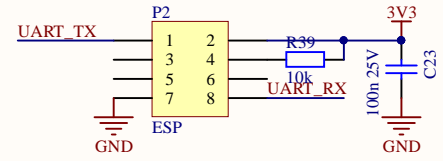
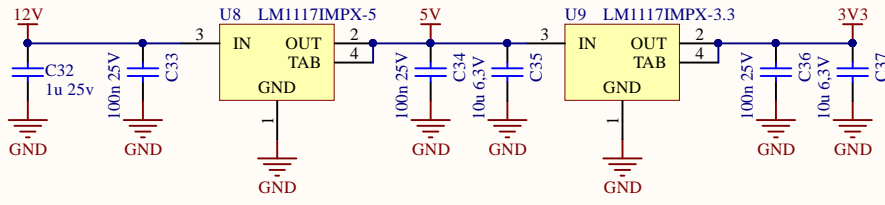


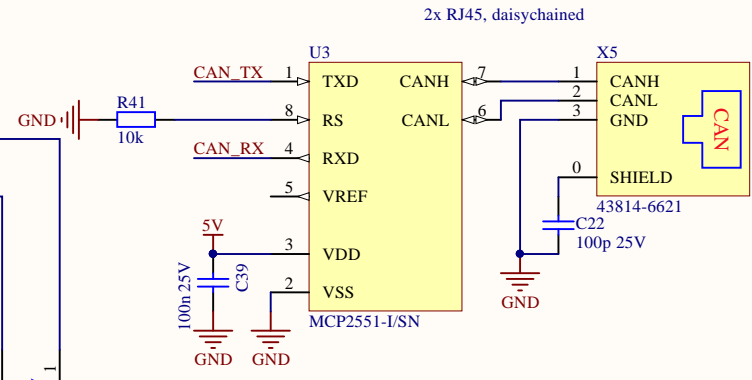
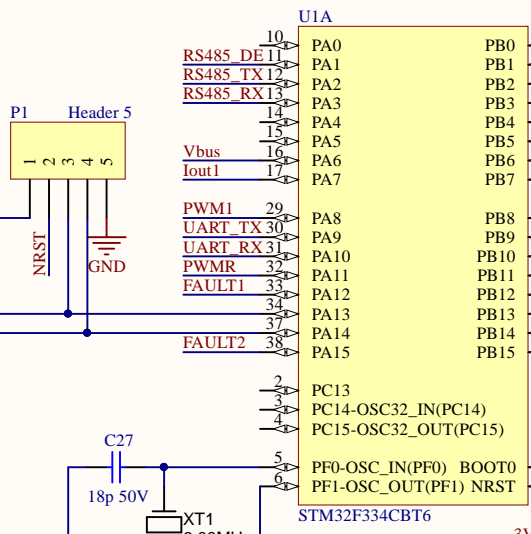
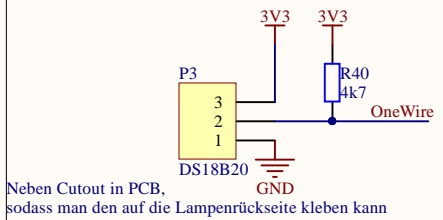
A

A



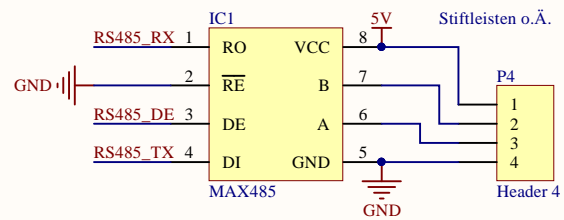
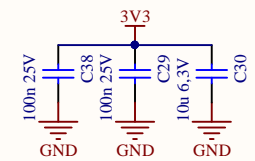
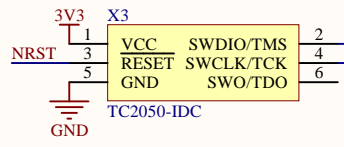
B

B



C

C



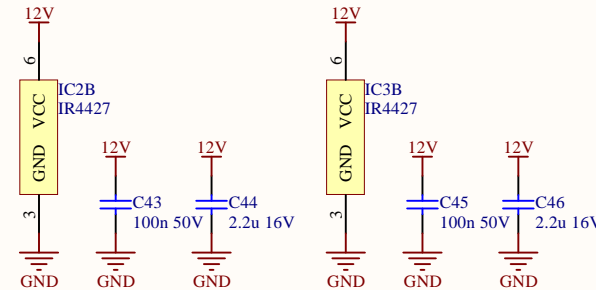
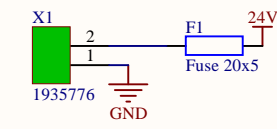
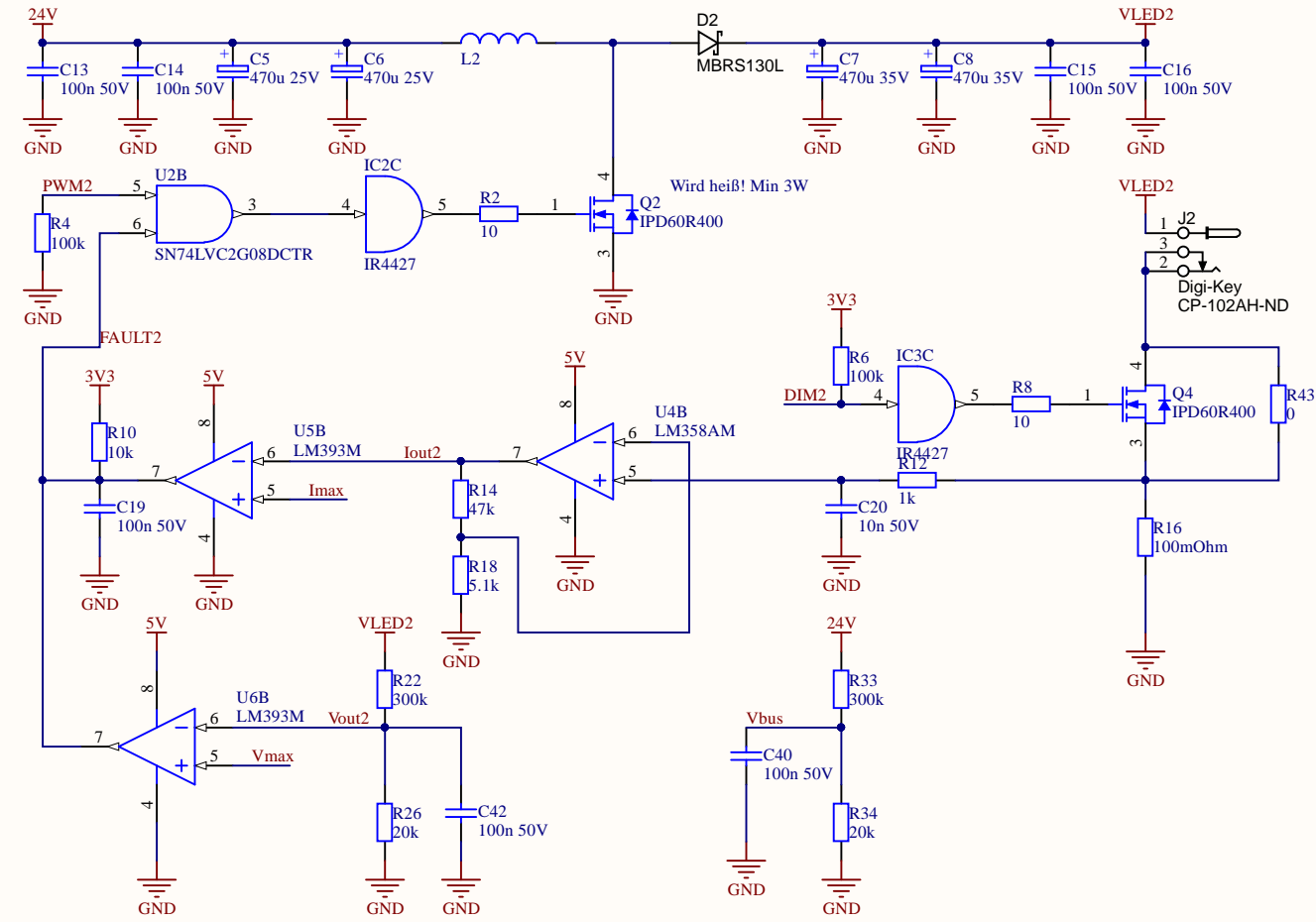
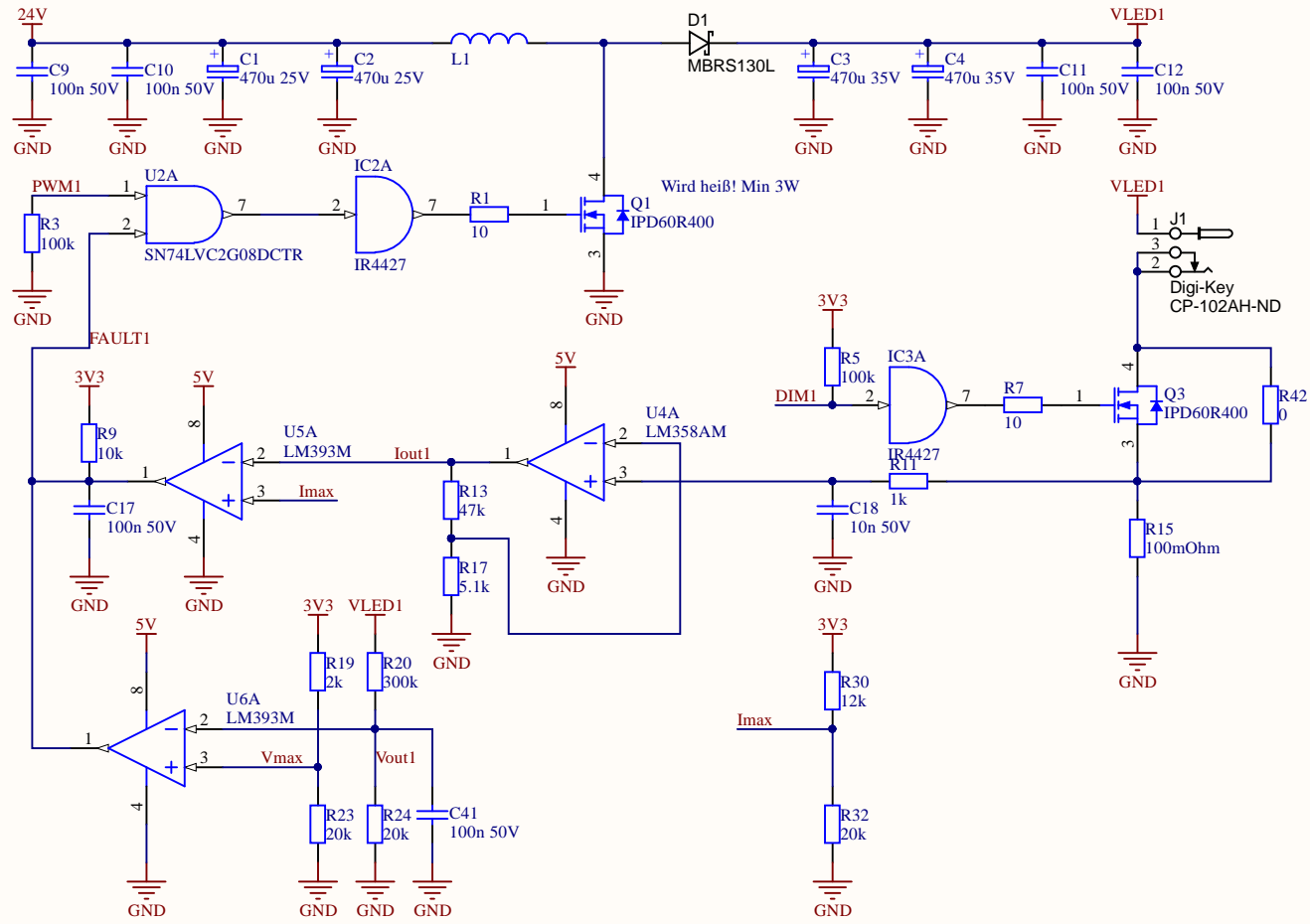
D

D

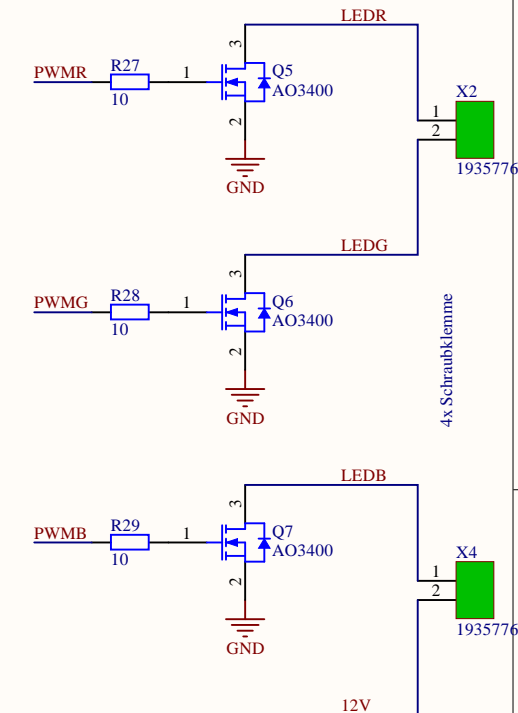
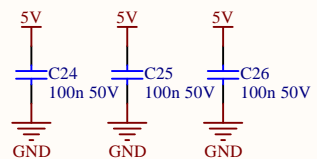
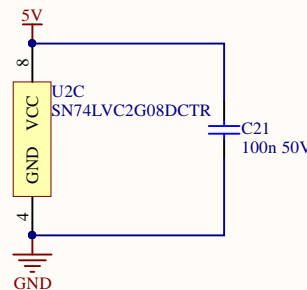
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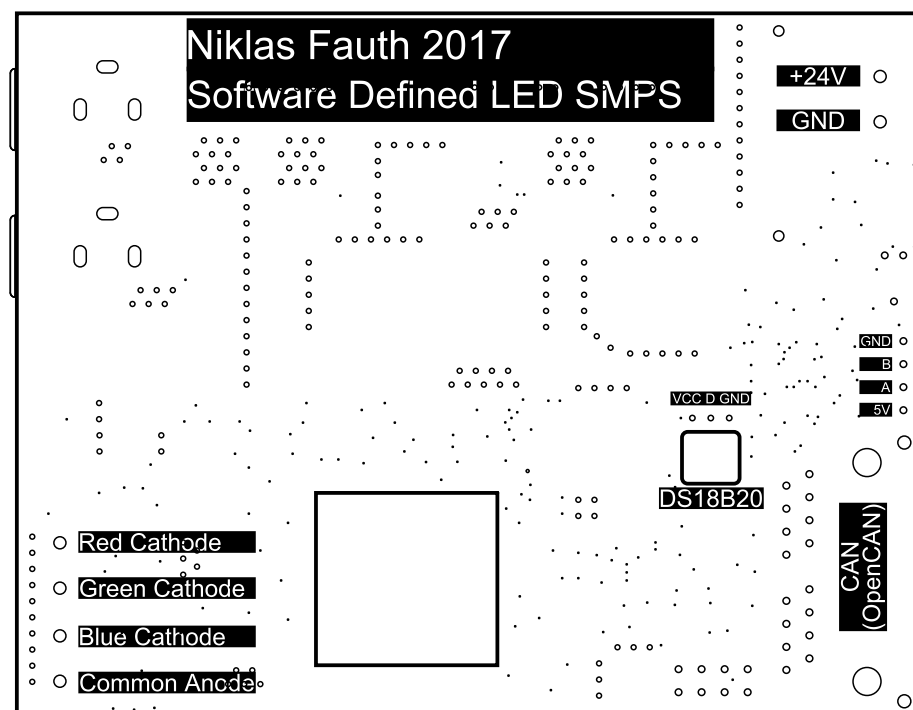
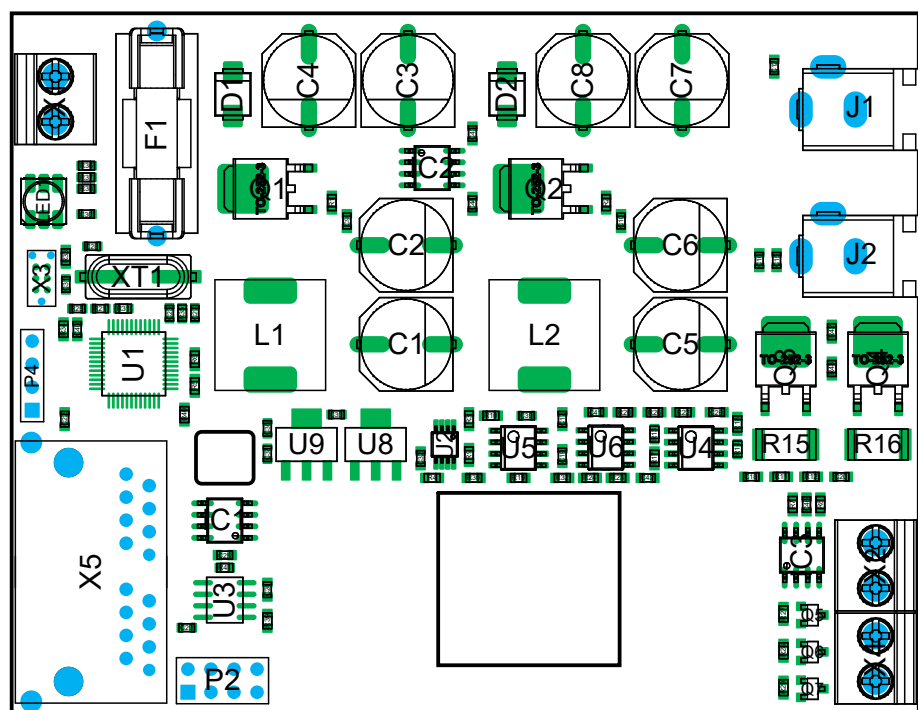
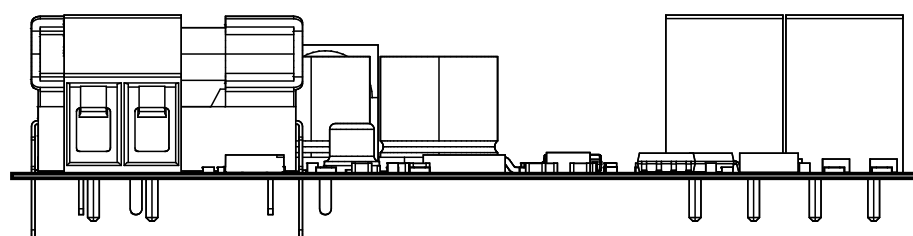
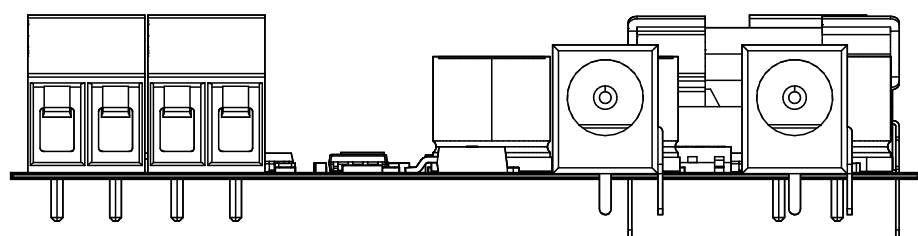
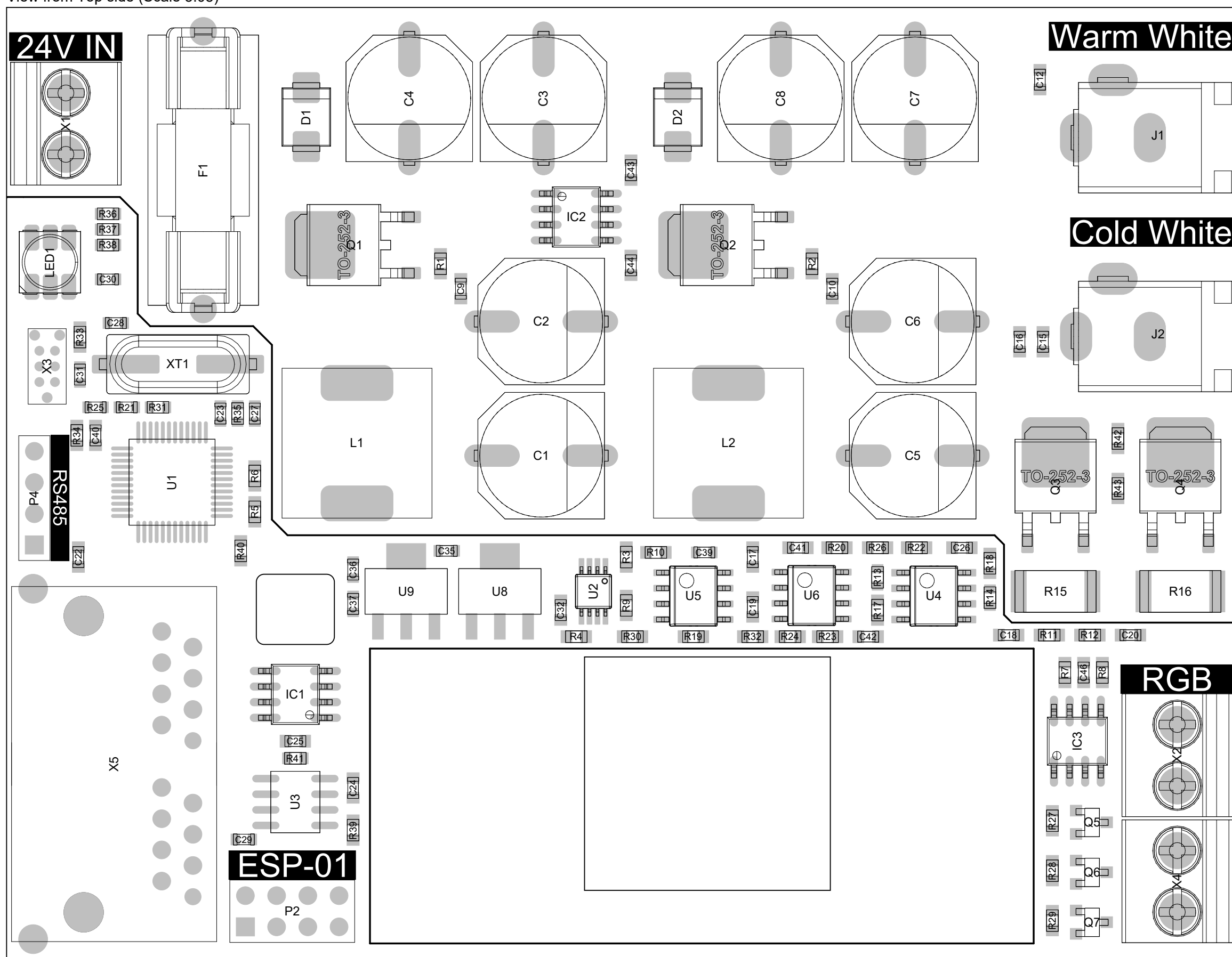
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Bill of Materials

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)

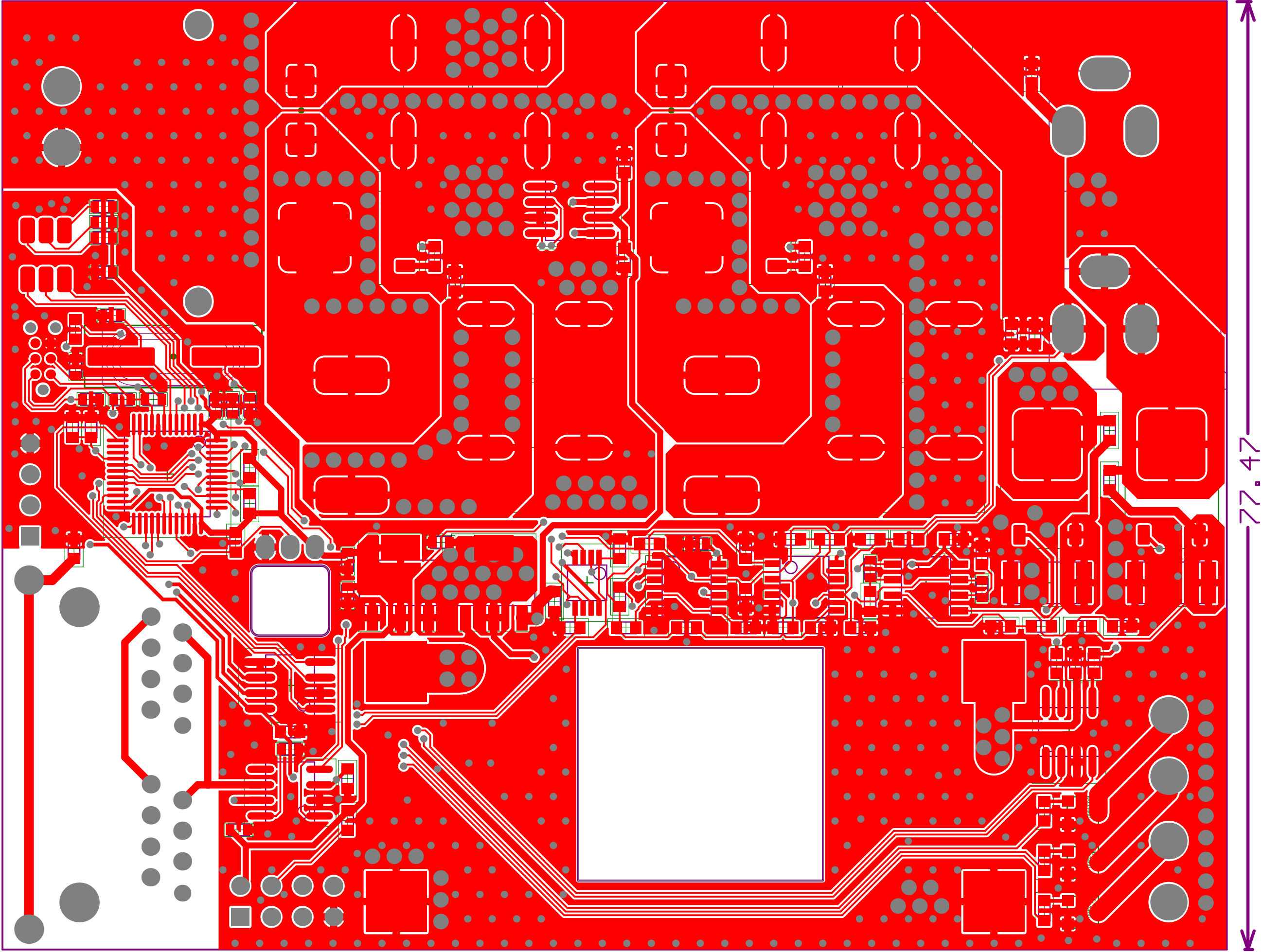


Layer Stack Legend

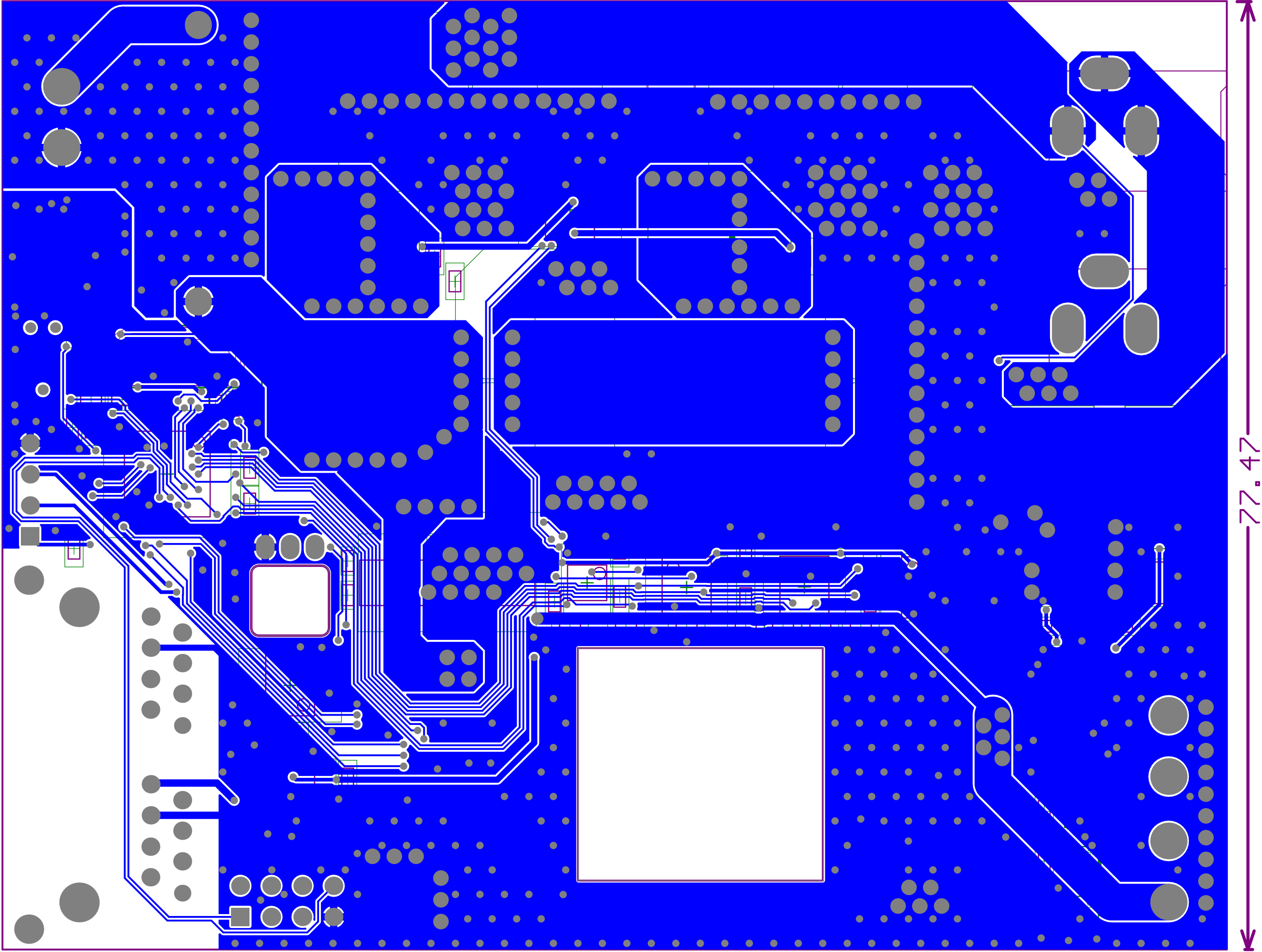
Material	Layer	Thickness	Dielectric	Material Type	Gerber
	Top Paste			Paste Mask	GTP
	Top Overlay			Legend	GTO
Surface Material	Top Solder	0mm	Solder Resist	Solder Mask	GTS
<b>Copper</b>	<b>Top Layer</b>	<b>0mm</b>		<b>Signal</b>	<b>GTL</b>
		<b>0mm</b>	<b>FR-4</b>	<b>Dielectric</b>	
<b>Copper</b>	<b>Bottom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

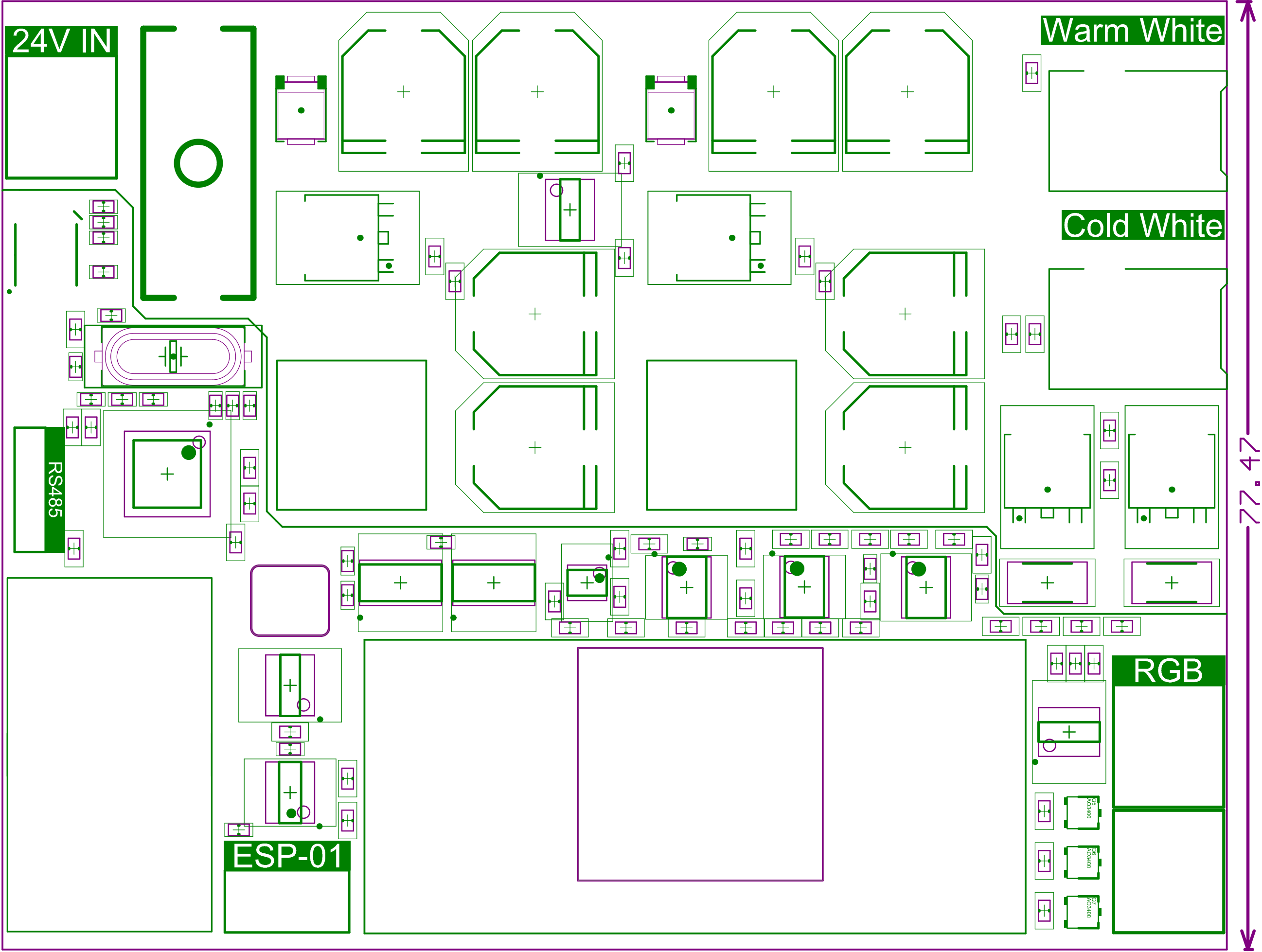
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UNLESS OTHERWISE SPECIFIED:		NAME	DATE	Niklas Fauth. ALL RIGHTS RESERVED.
DIMENSIONS ARE IN INCH		DRAWN	7/9/2017	
TOLERANCES:		CHECKED		
FRACTIONAL ±		ENG APPR.		
ANGULAR: MACH ±		MFG APPR.		TITLE
TWO PLACE DECIMAL ±		Q.A.		Erleuchtung
THREE PLACE DECIMAL ±		COMMENTS:		
NEXT ASSY	USED ON	FINISH		SIZE DWG. NO.
APPLICATION		DO NOT SCALE DRAWING		1
				SCALE: 1:1 WEIGHT: SHEET 1 OF 1



77.47





24V IN

Warm White

Cold White

RS485

ESP-01

RGB

05  
AO3400

06  
AO3400

07  
AO3400

24.22

# Software Defined LED SMPS V1.1

Niklas Faeth 2017

+5V  
GND

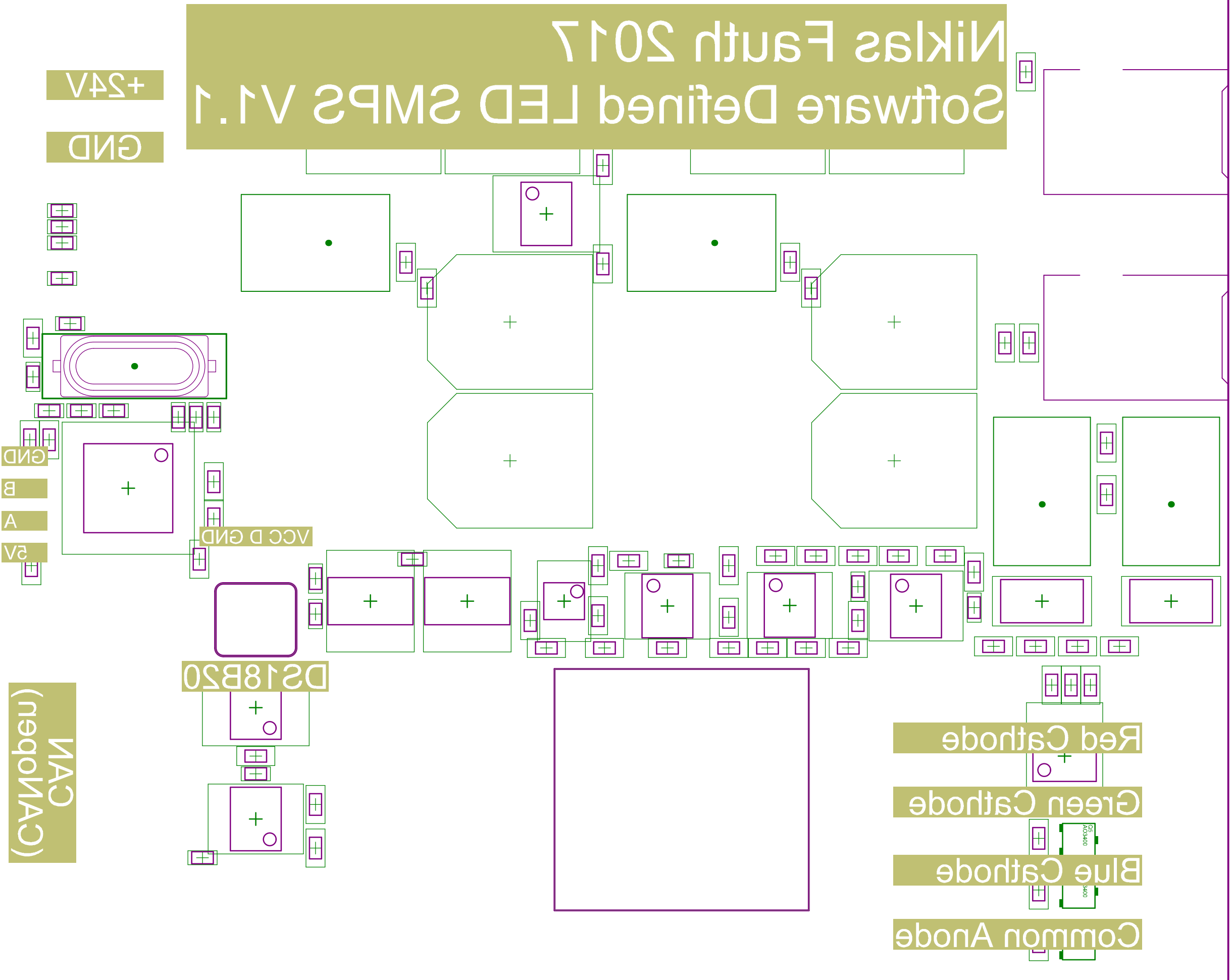
2V  
A  
B  
GND

DS18B50

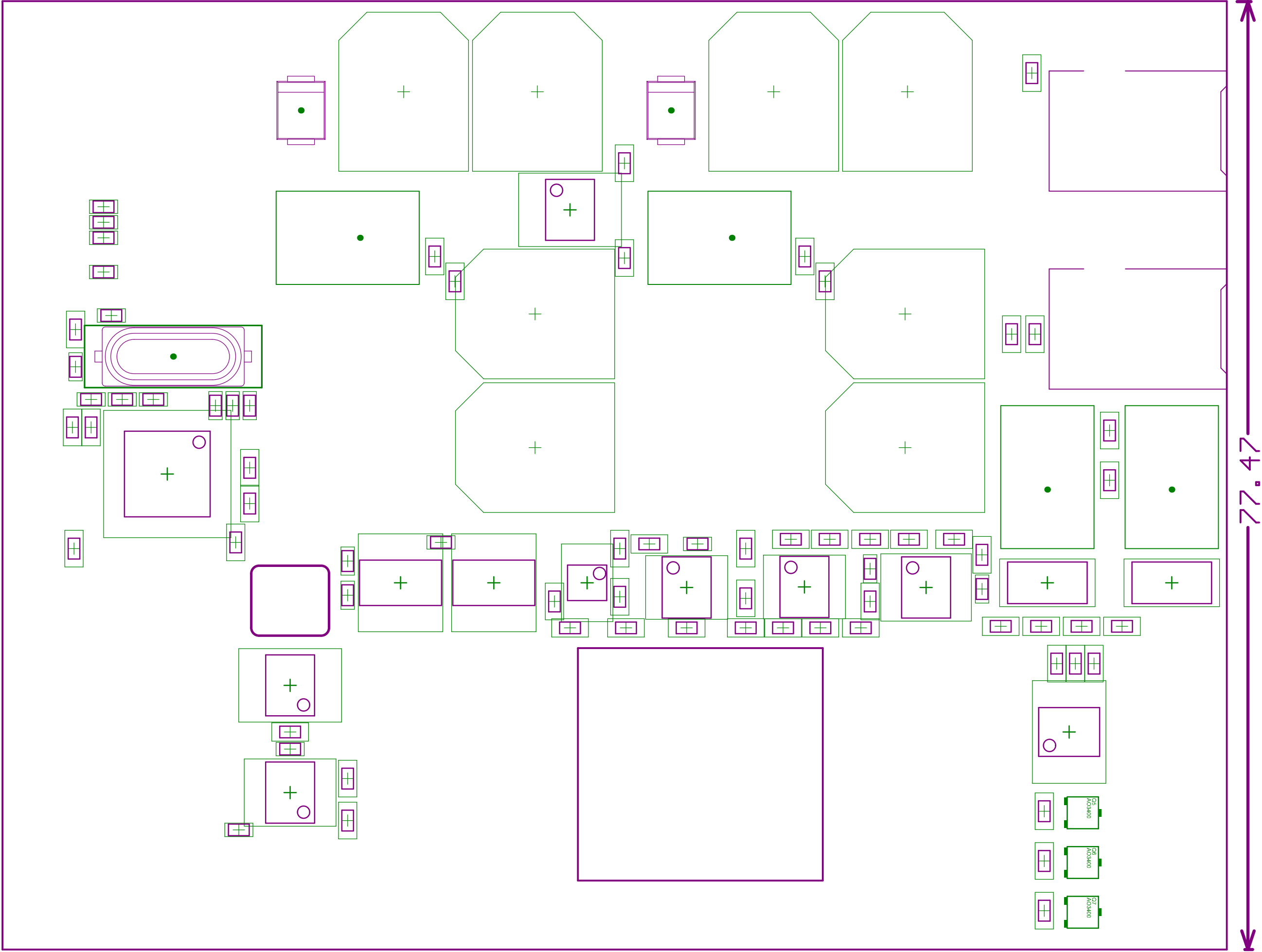
VCC D GND

MAC  
(napiMAC)

Common Anode  
Blue Cathode  
Green Cathode  
Red Cathode



77.47



77.47

05  
A03400

06  
A03400

07  
A03400