

Service *Manual*

MODEL: A1000.4

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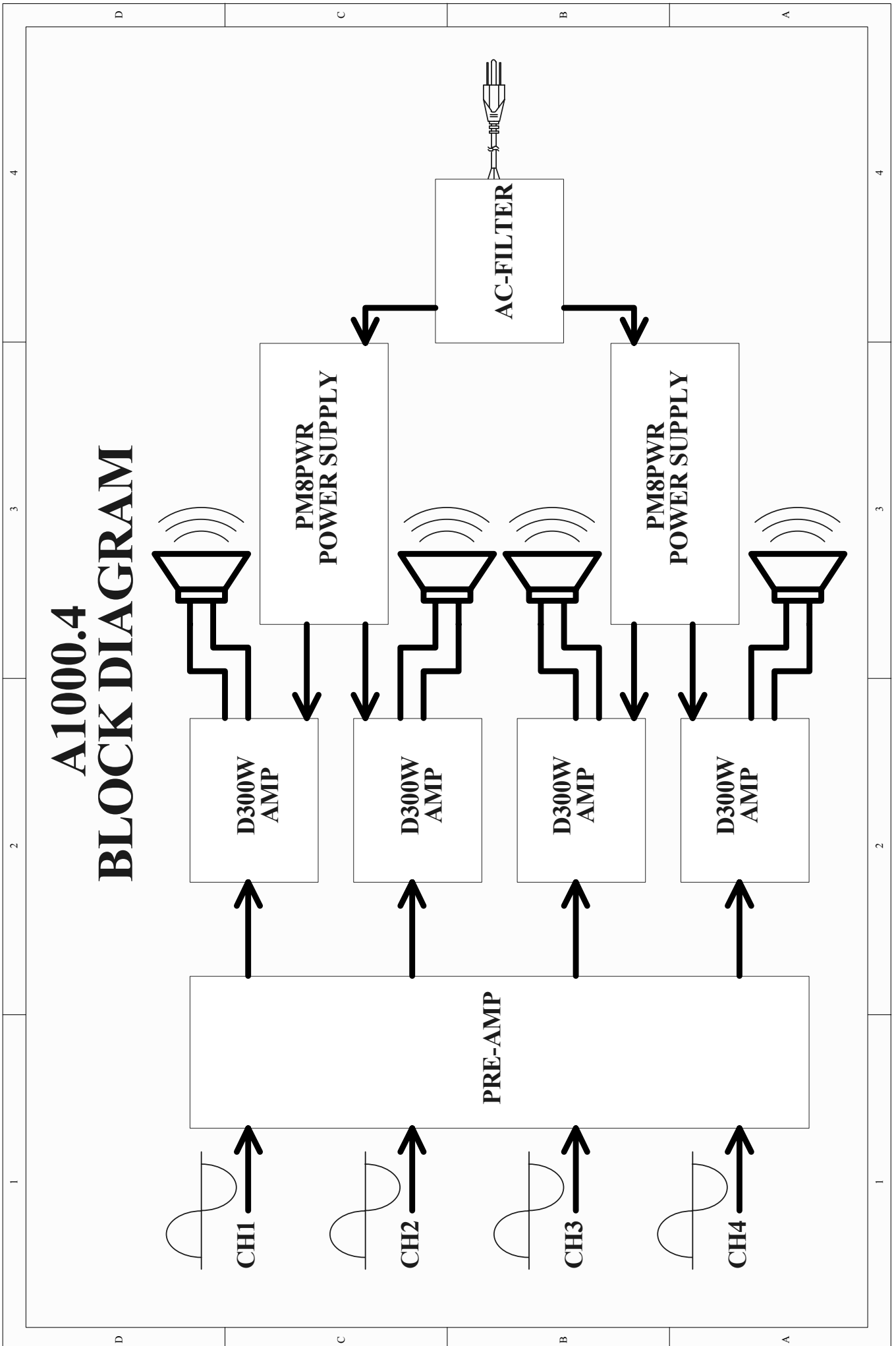
1. Introduction

- 1.5U for channel high power amplifier.
- Fantastic audio quality even with extremely high volume levels.
- Solid and durable, can be mounted into a cabinet.
- User-controllable clip limiter.
- 4×480Watts on 4 ohms (EIAJ)
- Balanced XLR inputs and 1/4"TRS jack to ensure noiseless long wiring.
- Neutrik Speak-on connectors for output.
- Front panel LED indicators for signal, limit and clip.
- Accurate gain control.
- Independent thermal overload protection on each channel automatically protects amplifier and speakers.
- Single channel over-heat protection.

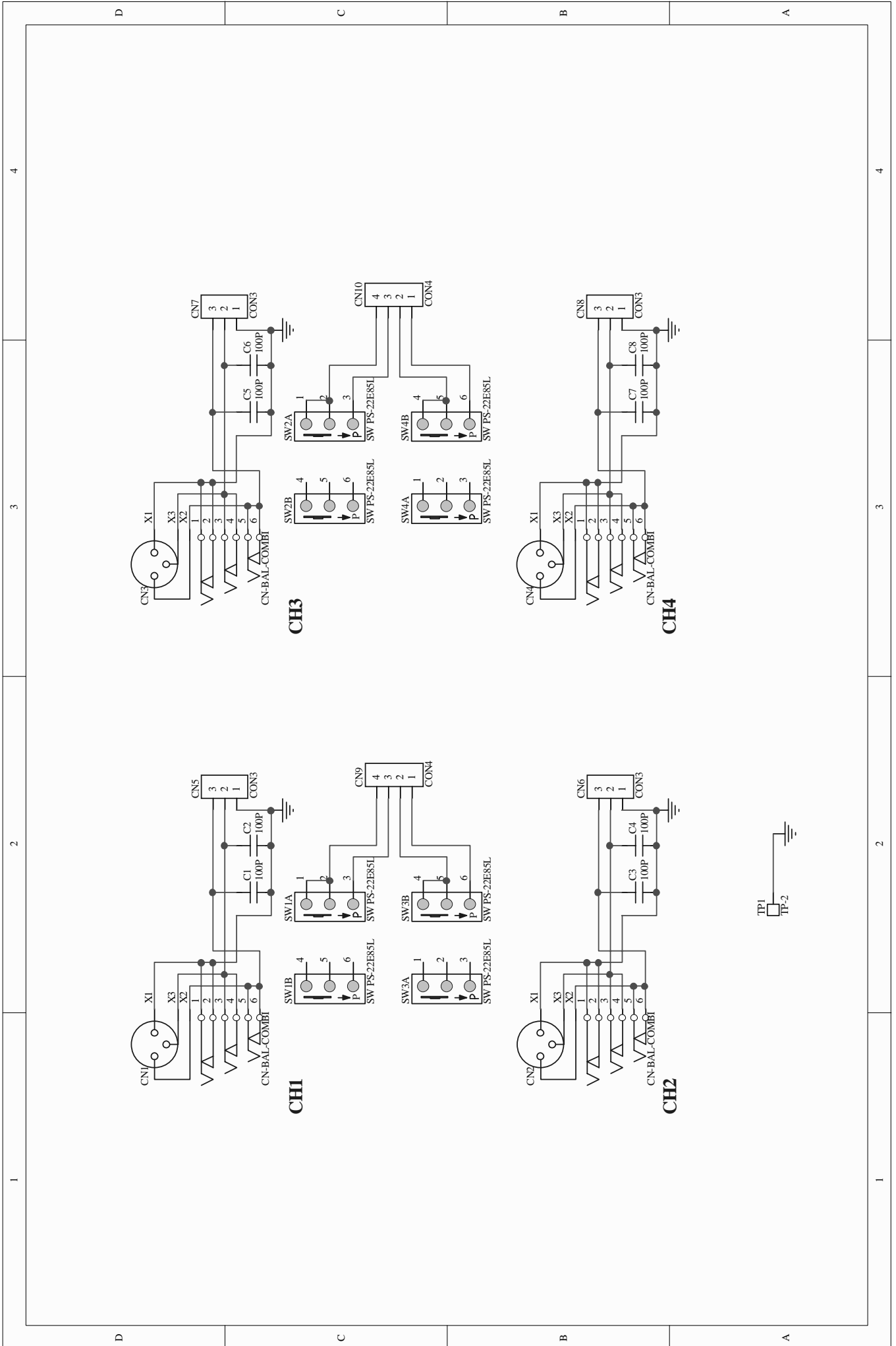
2. Specification

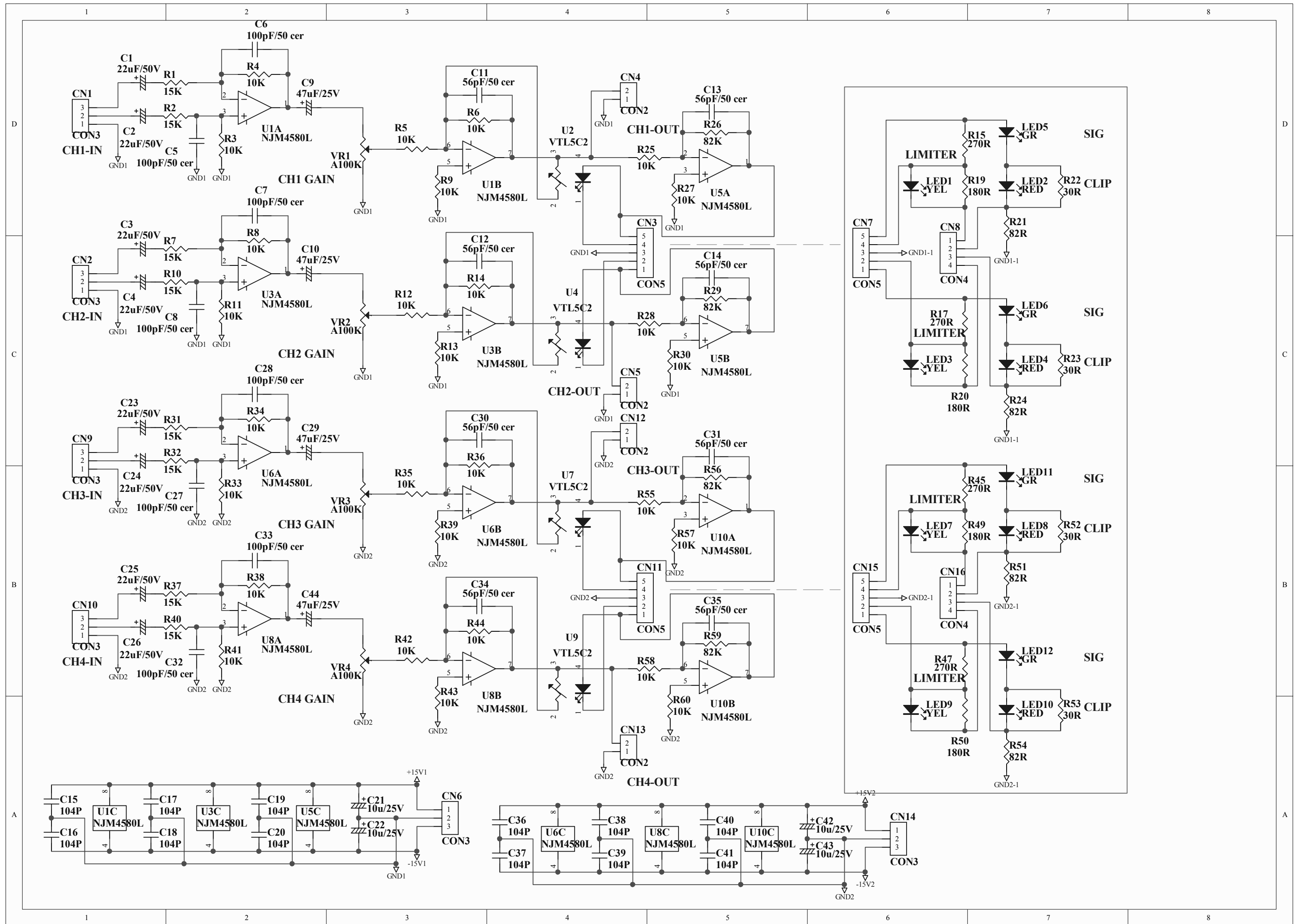
MODEL	A1000.4 DRAGONFLY
20Hz 20KHz@0.1%THD, Stereo Mode	
8 ohms per channel(EIAJ)	260W
4 ohms per channel(EIAJ)	480W
4 ohms per channel(RMS)	245W (at THD 1%)
Input Sensitivity @4 ohms	+3dBu
Controls	FRONT: Power switch, LEVEL knobs
	REAR: Four LIMITER Switches for channel 1- channel 4
Indicators (per channel)	Power-On: Green LED
	Clip: Red LED
	Limit: Yellow LED
	Signal: Green LED
Connectors of each channel	Input: COMBO connector
	Output: Neutrik Speak-on connector
Power Supply	190-240 Vac~50Hz / 95-120Vac~60Hz
Dimension	314mm*440mm*66.6mm
Net Weight	6.8Kg

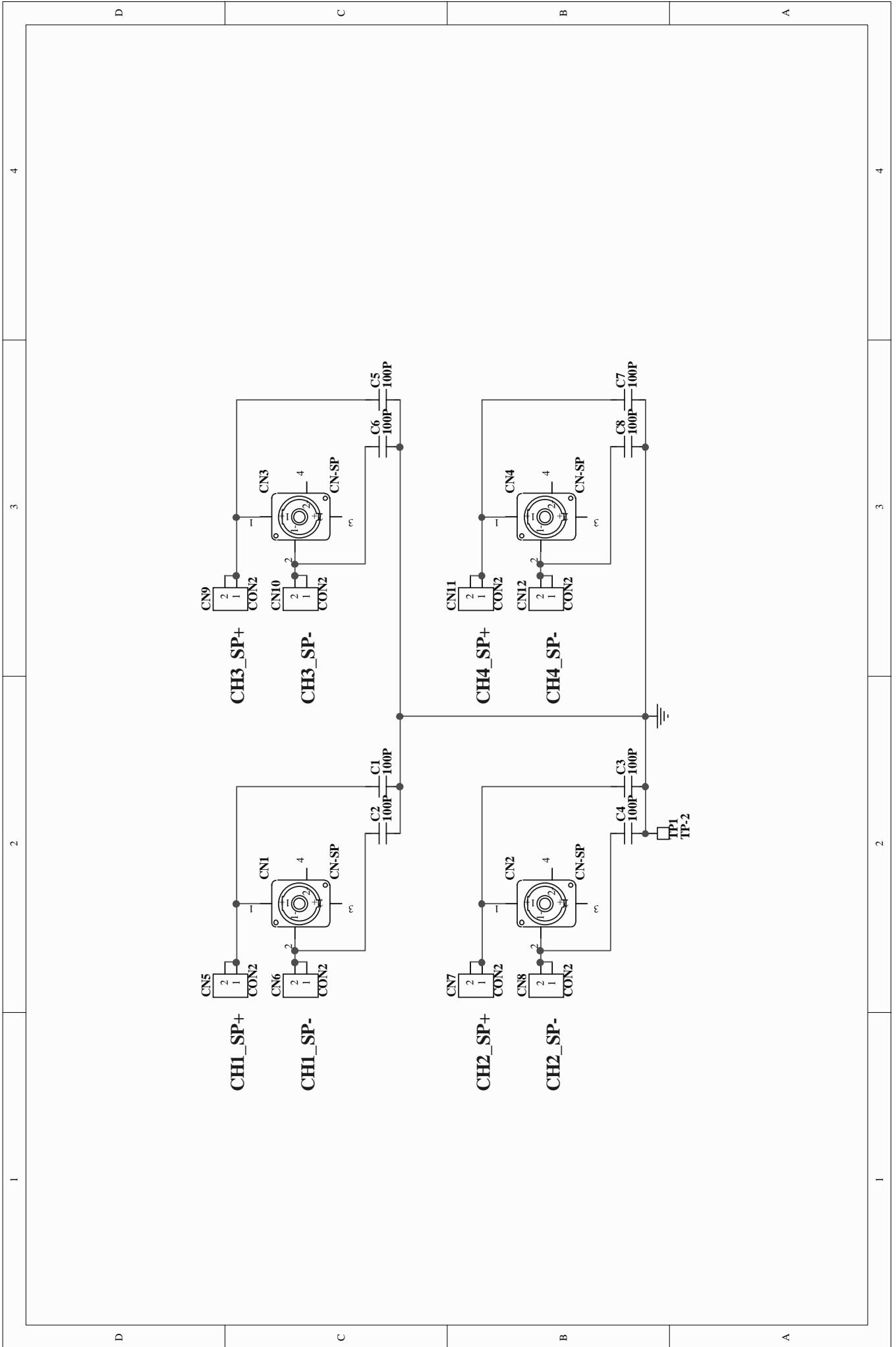
3. Block Diagram

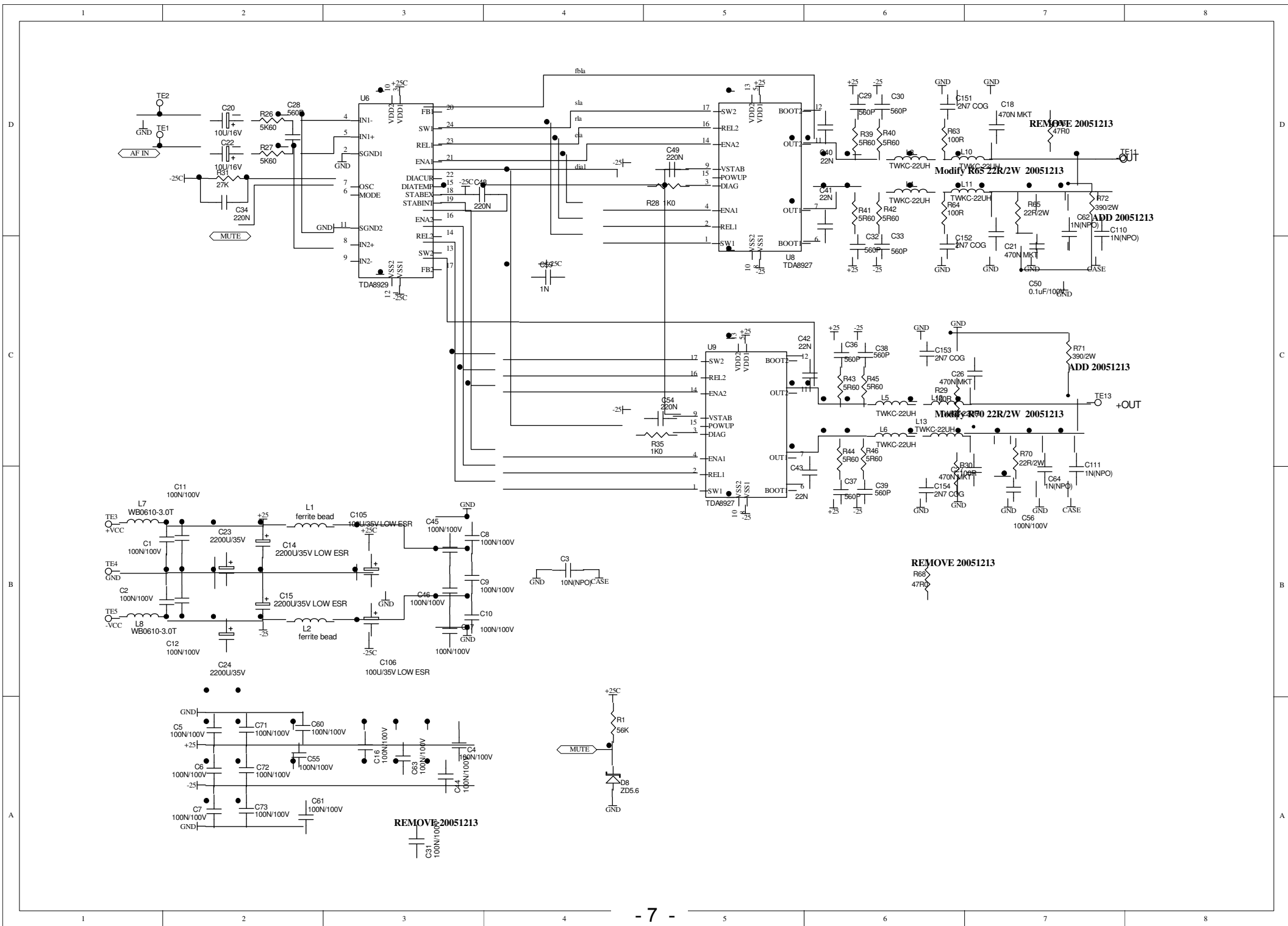


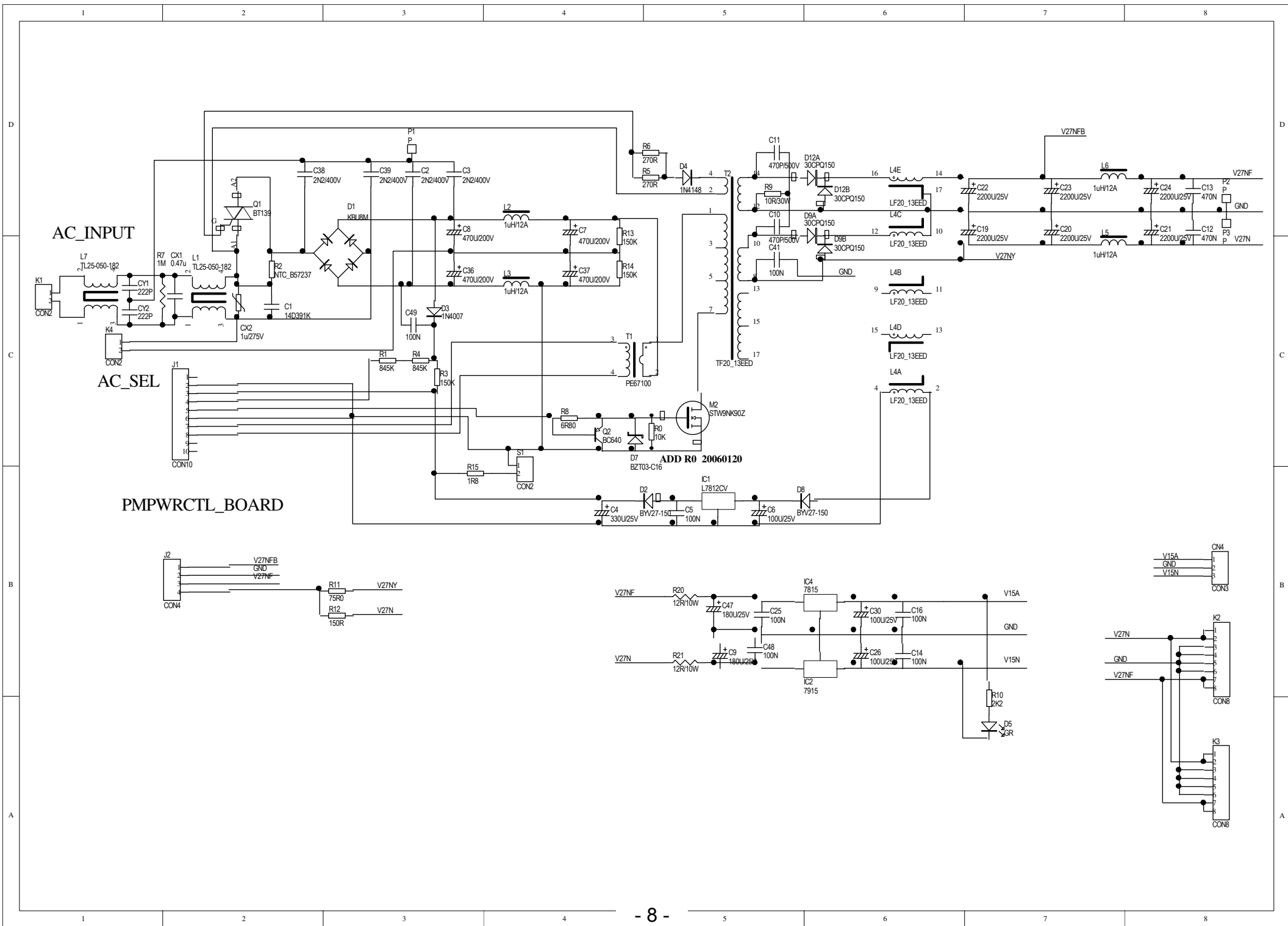
4. Schematic Diagram

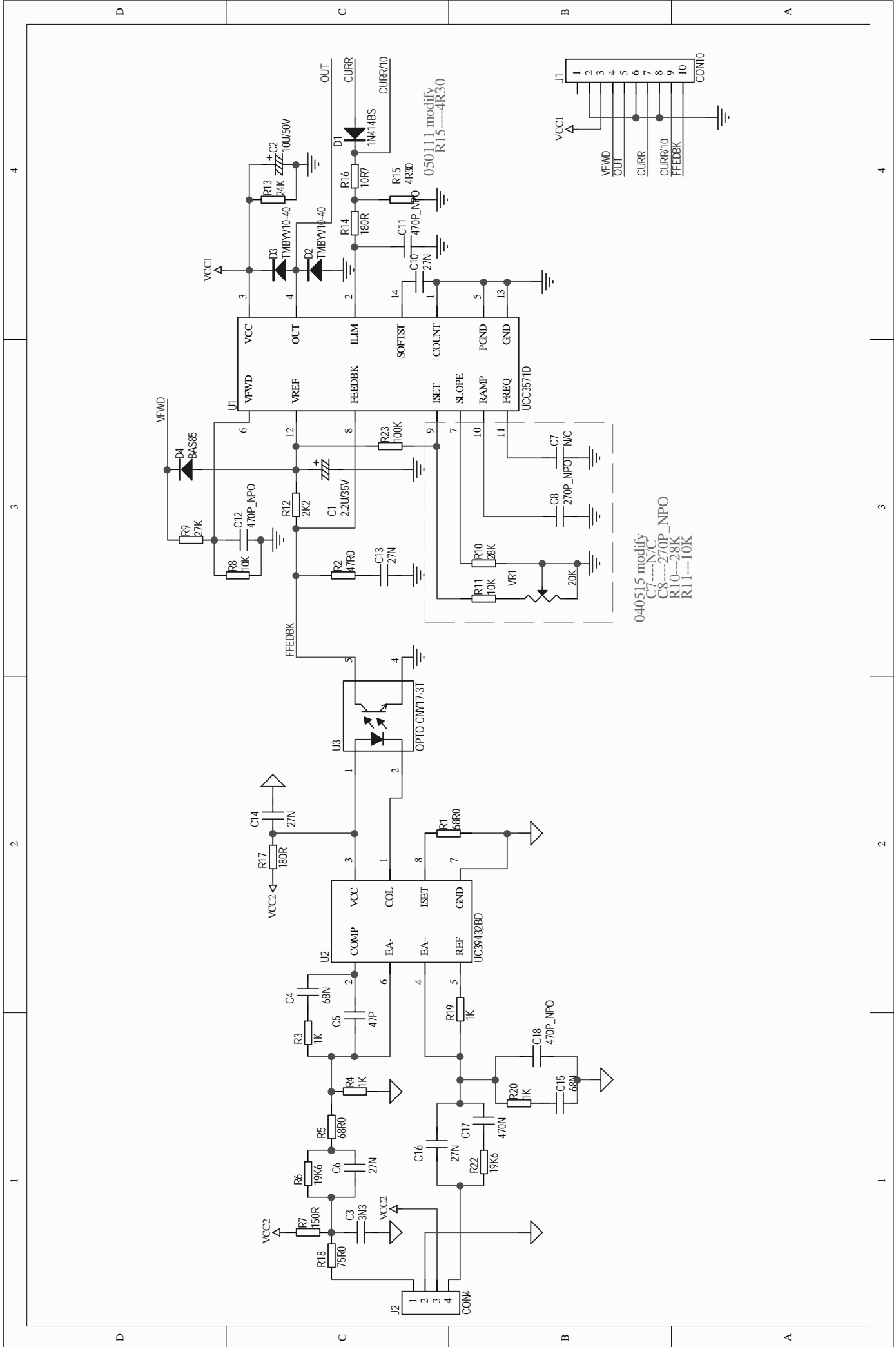


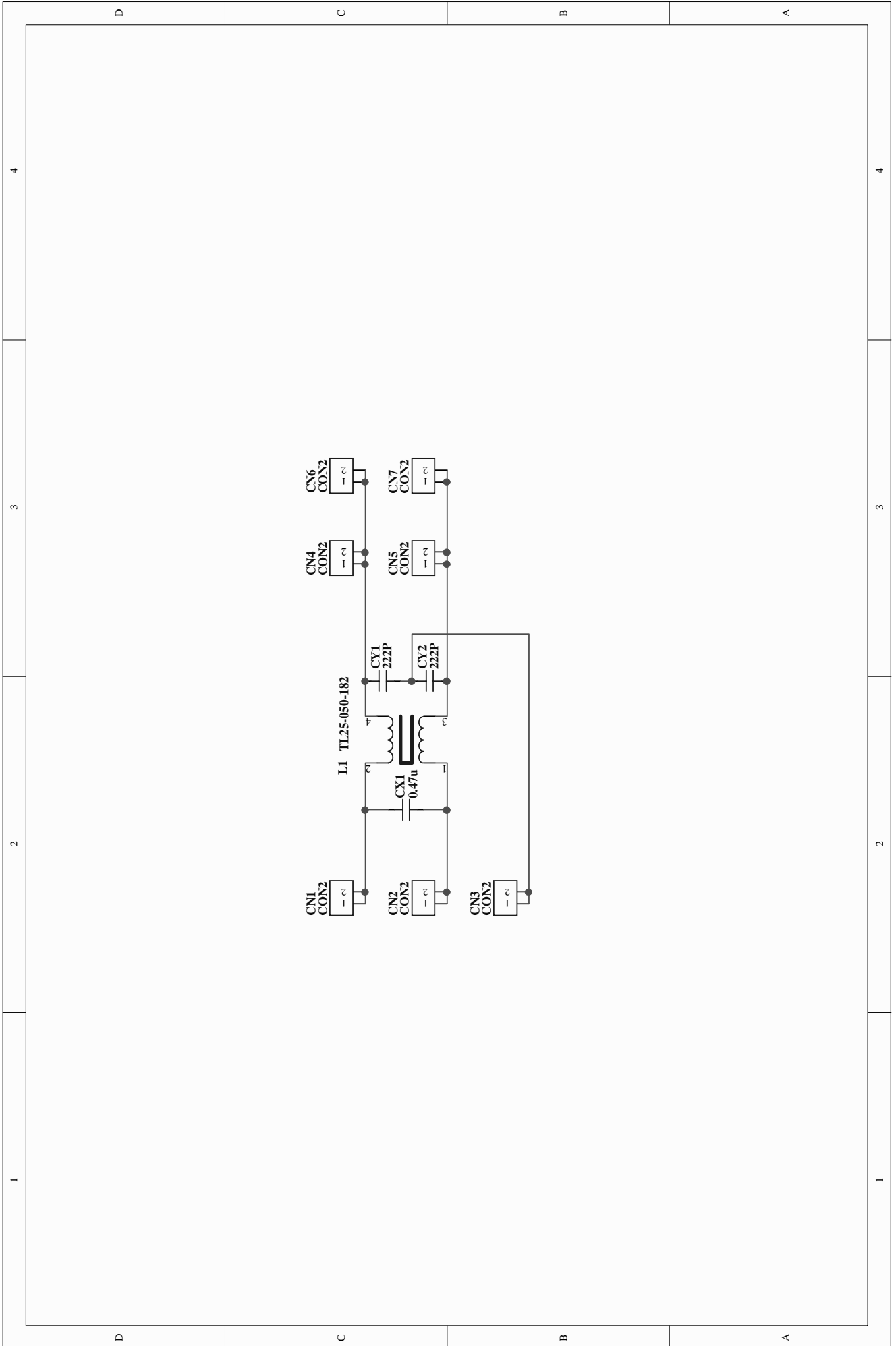


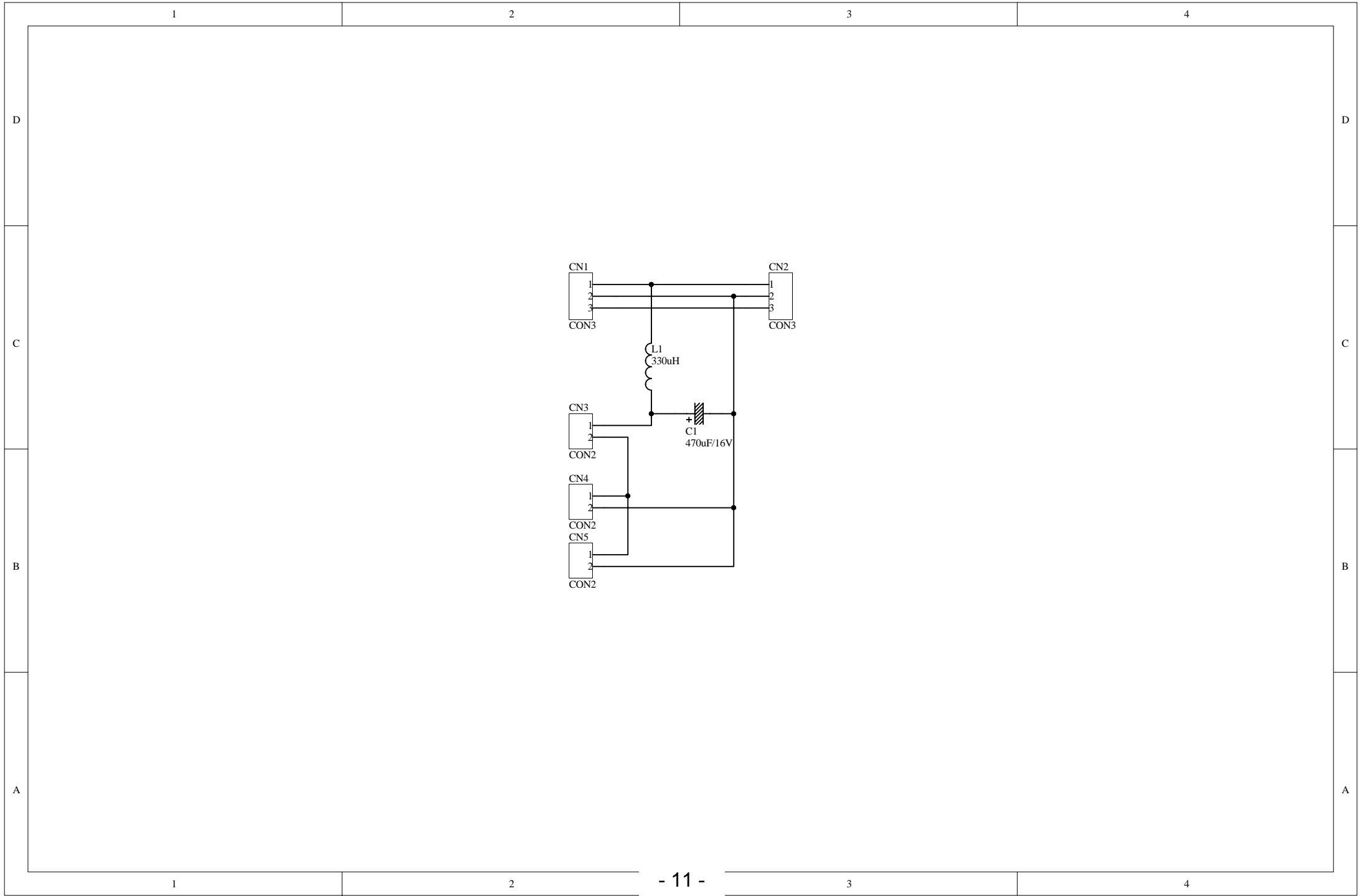




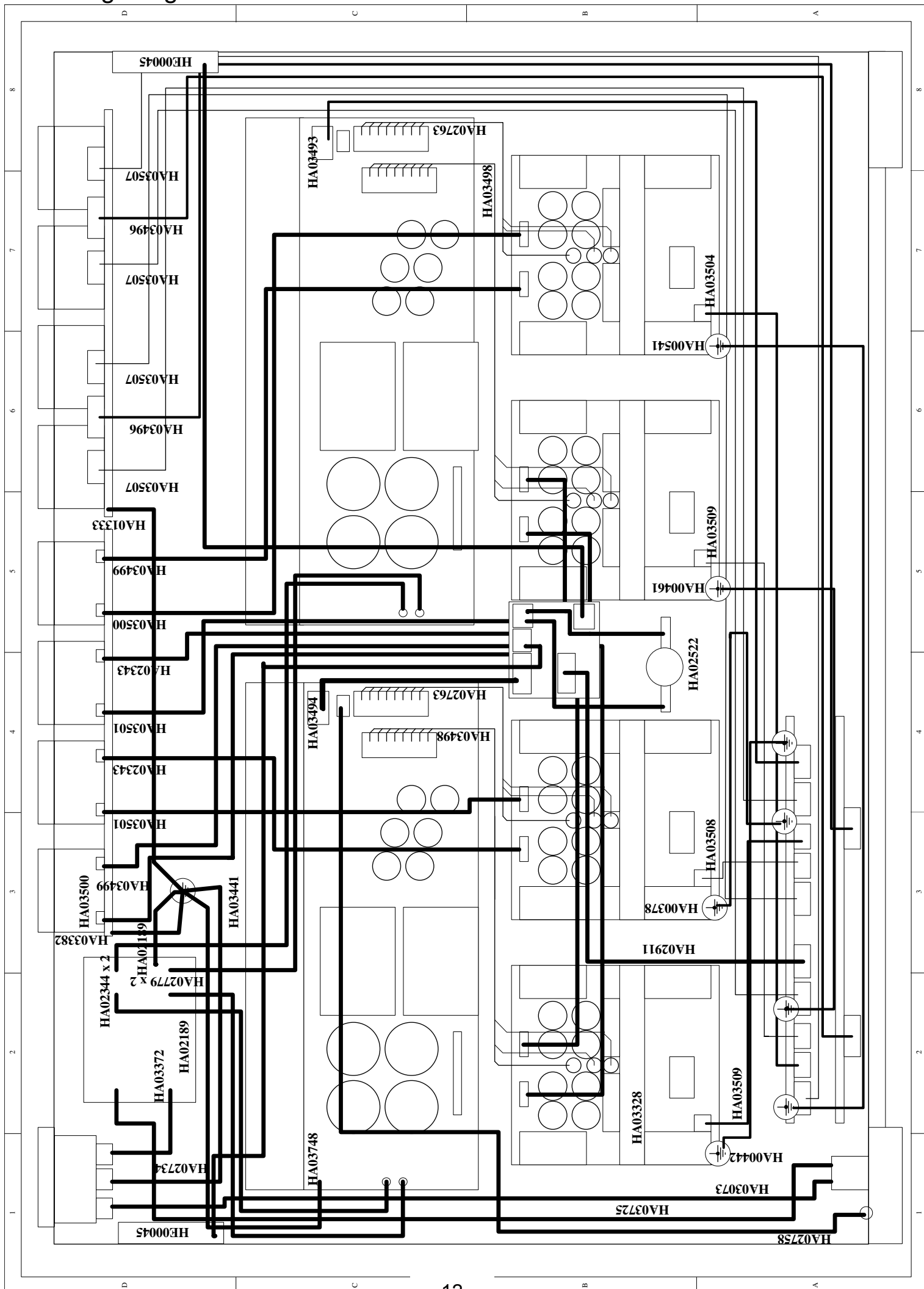




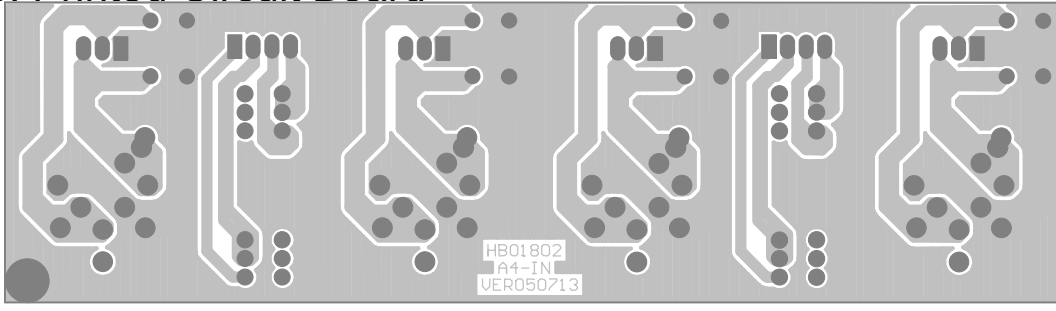




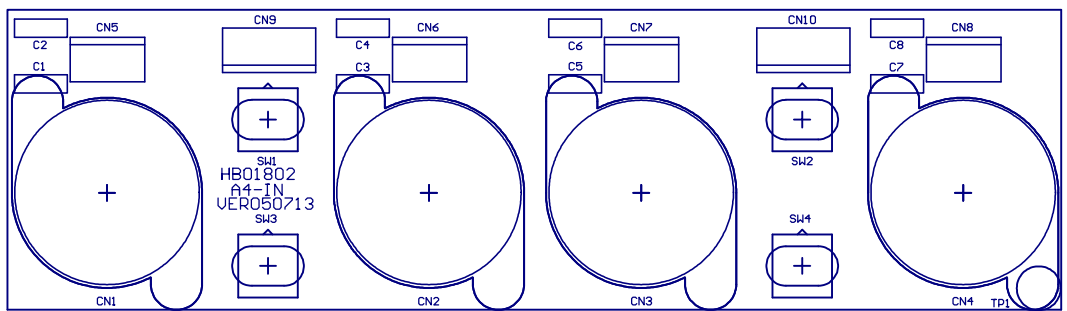
5. Wiring Diagram



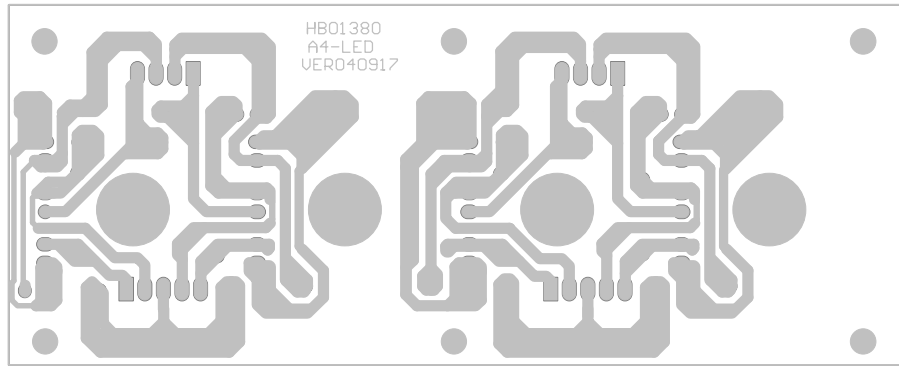
6. Printed Circuit Board



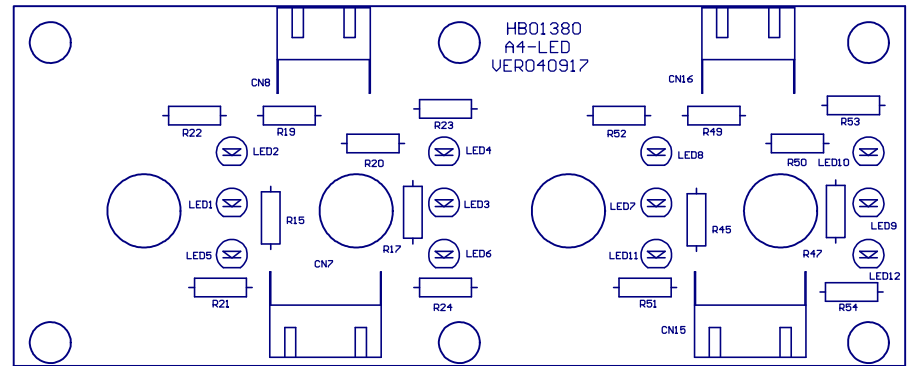
PCB:A4-IN BOTTOM LAYER BOTTOM SOLDER



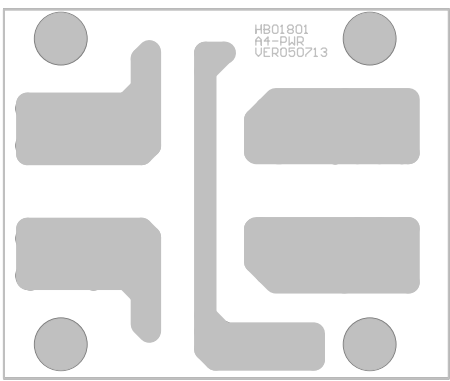
PCB:A4-IN TOP OVERLAY



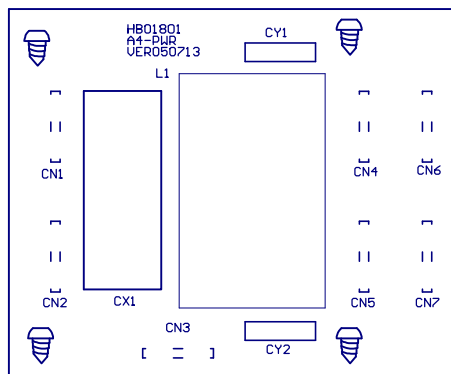
PCB:A4-LED BOTTOM LAYER BOTTOM SOLDER



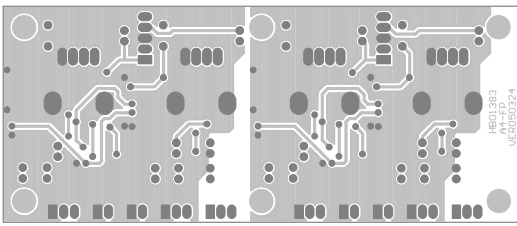
PCB:A4-LED TOP OVERLAY



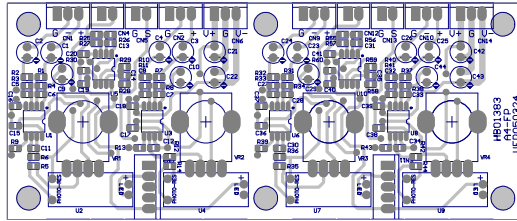
PCB:A4-PWR BOTTOM LAYER BOTTOM SOLDER



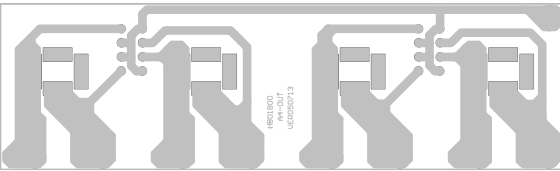
PCB:A4-PWR TOP OVERLAY



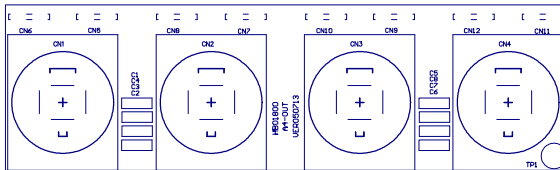
PCB:A4-FP BOTTOM LAYER BOTTOM SOLDER



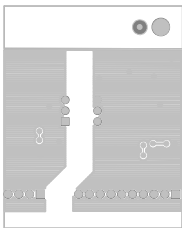
PCB:A4-FP TOP LAYER TOP OVERLAY TOP SOLDER



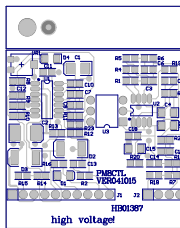
PCB:A4-OUT BOTTOM LAYER BOTTOM SOLDER



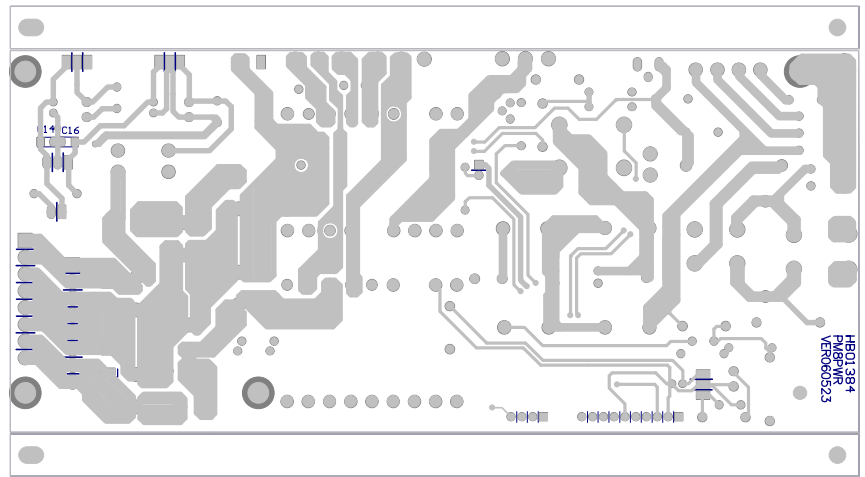
PCB:A4-OUT TOP OVERLAY



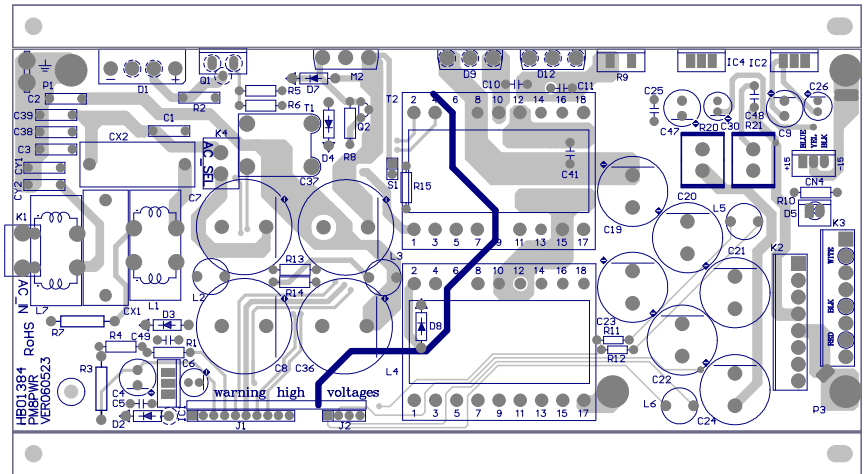
PCB:PM8CTL
BOTTOM
LAYER
BOTTOM
SOLDER



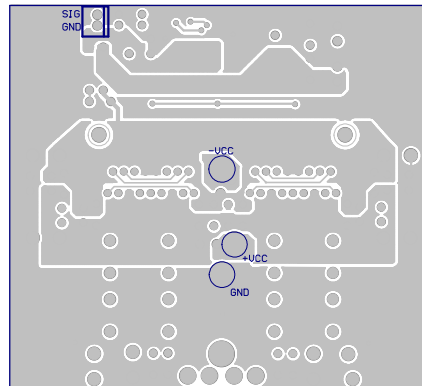
PCB:PM8CTL
TOP LAYER
TOP SOLDER
TOP OVERLAY



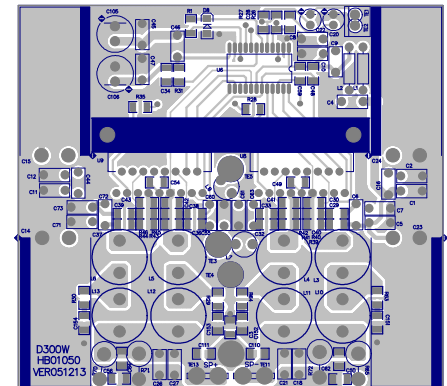
PCB:PM8PWR BOTTOM LAYER BOTOM OVERLAY BOTTOM SOLDER



PCB:PM8PWR TOP LAYER TOP OVERLAY TOP SOLDER

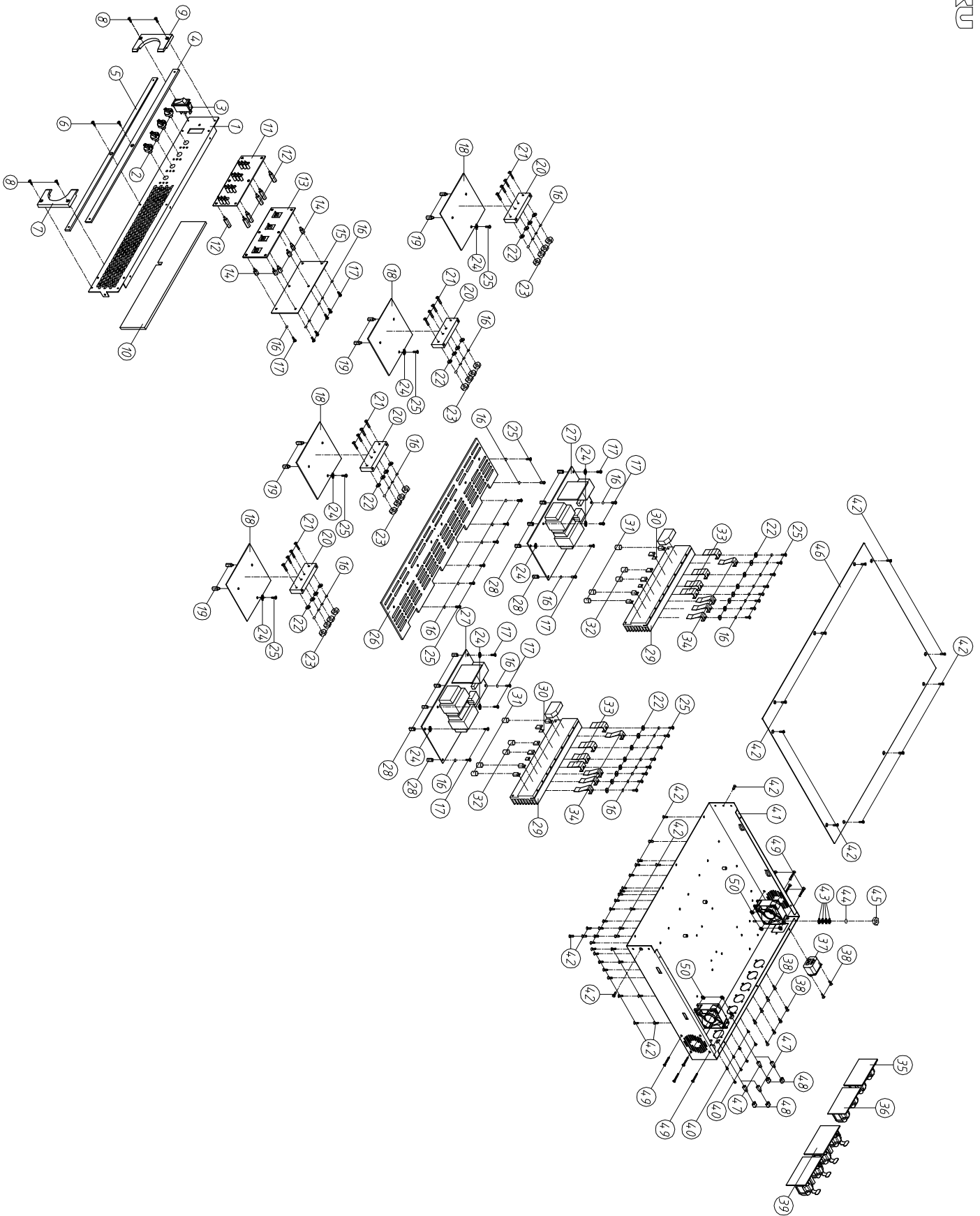


PCB:D300W BOTTOM LAYER
BOTTOM OVERLAY BOTTOM
SOLDER



PCB:D300W TOP LAYER TOP
OVERLAY TOP SOLDER

7. Exploded View & Mechanical Parts List



Part List

Mechanical Parts List				
No.	Item NO.	Item Description	Specification	pcs
1	MA00810	ZC-panel-2514	A1000.4 DRAGONFLY_V1.0	1
2	NI00360	plastic knob	1.5*15mm	4
3	HI00031	power supply switch	R415KKETOF	1
4	MJ00480	ZE-cushion	A1000.4 top_V1.1	1
5	MJ00482	ZE-cushion	A1000.4 bottom_V1.1	1
6	MG00281	Ni screw	M3*6	2
7	MI02593	ZE-front panel	A1000.4 right_V1.1	1
8	MG00578	Ni screw	M3*10*0.5PH_V1.0	4
9	MI02602	ZC-front panel	A1000.4 DRAGONFLY left ALTO-V1.0	1
10	NI03390	net-PU black	A1000.4 261*61.6*5t_V1.0	1
11	HK05269	K-PC board	P-A4LED	1
12	MG00251	copper pillar	M3*17.5*0.5PH length: 23.5	6
13	HK05267	K-PC board	P-A4FP-DIP	1
14	MG00243	copper pillar	M3*5*0.5PH length: 11	6
15	MJ00484	ZD-barrier-A1000.4-1.5U-10	A1000.4 1.2*57*127_V1.0	1
16	MF00037	spring washer	3* 5*1t	50
17	MG00041	black plated screw-pill	M3*6	16
18	HK04669	K-PC board	P-D300W-DIP(A500.2)	4
19	MG00461	copper pillar	M3*7.3*0.5PH length: 13.5	8
20	MI01836	heat sink	65*24*8 PM-12	4
21	MG00357	Ni screw-pill	M3*18	16
22	MF00030	Ni washer	3* 8*0.8t	32
23	ME00015	nut	3mm	16
24	MF00014	shake proof washer	3*φ6.5*0.5t	10
25	MG00162	Ni screw-pill	M3*8	28
26	MI02597	ZD-barrier-A1000.4-1.5U-08	A1000.4 3*90*406_V1.1	1
27	HK04928	K-PC board	P-PM8PWR-DIP(A500.2)	2
28	MG00244	copper pillar	M3*10*0.5PH	10
29	MI02598	ZD-heat sink-A1000.4-1.5U-09	A1000.4 21*50*190 0.3Kg_V1.1	2
30	NC00027	Silicon insulator	0.2t*69*19mm	2
31	NI01877	Silicon sleeve	9*28mm T0.45mm	6
32	NI03044	Silicon sleeve	14*35 T0.45mm	4
33	MK00081	spring piece-black plated	0.4*10*12*35mm PM8-PWR_V1.0	8

34	MK00080	spring piece-black plated	0.4*10*12*35mm PM8-PWR_V1.0	8
35	HK05271	K-PC board	P-A2OUT(A1000.4-2)	1
36	HK05270	K-PC board	P-A2OUT(A1000.4-1)	1
37	HC00008	AC socket	3515 A TYPE(RF-2004-C-4.8)	1
38	MG00042	black plated screw-pan head	M3*10	10
39	HK04929	K-PC board	P-A2IN	2
40	MG00061	black plated screw-pill-iron plate	M3*10	8
41	MB03848	ZC-rear bottom panel	A1000.4 DRAGONFLY_V1.0	1
42	MG00025	black plated screw-pan head	M3*6	44
43	MF00048	shake proof washer	4* 8*0.5t	4
44	MF00038	spring washer	4* 7*1t	1
45	ME00016	nut	4mm	1
46	MC00674	ZC-top cover	A1000.4 DRAGONFLY_V1.0	1
47	NI01862	key handle	5.5*5.5*14.5	4
48	NI01863	key	5.5*W10*7.5 black	4
49	MG00638	black plated screw	M4*20*0.5PH	8
50	ME00016	nut	4mm	8

8. Electrical Parts List

No.	Part No.	Description	Specification	Remark
1	SA00052	L.E.D	φ3 round(green)long foot 26	
2	NI00498	self-adhere foot cushion	12.7*7*6mm(SF-005)	
3	NI00360	knob	φ15*15mm	
4	NI00218	cable tie	ALT-102SB	
5	NI00222	sleeve	φ1.5*30mm	
6	NI00221	sleeve	1.5φ*1000mm	
7	NI03390	net	A1000.4 261*52*5t_V1.2	
8	NI01863	key-RS	φ5.5*W10*7.5	
9	NI01862	key	5.5*5.5*14.5_V1.1	
10	NE11347	label	ALTO PI	
11	NH00334	cone paper	0.040*1m	
12	NF00061	assurance card	ALTO	
13	NE13782	label	A1000.4_V1.0	
14	NH00334	cone paper	0.040*1m	
15	NB03377	carton	A1000.4 ALTO_V1.0	
16	NB03379	gift carton	A1000.4 ALTO_V1.0	
17	NB03371	cushion	A1000.4_V1.0	
18	ND00150	silicone sleeve	φ12*150mm	
19	ND00026	silicone sleeve	100*20	
20	MI02597	barrier	A1000.4 3*90*406_V1.1	
21	MJ00057	AL plate-RS	3.0t*2000*1000mm 16.32kg	
22	MI02593	front board	A1000.4 right_V1.0	
23	MI02594	front board	A1000.4 right_V1.0	
24	MI02959	front board	6*40*1M(1M/0.59kg) A500.2_V1.0	
25	MI02602	front board	A1000.4 DRAGONFLY left ALTO_V1.0	
26	MI02595	front board	A1000.4 left	
27	MI02596	front board	A1000.4 left_V1.0	
28	MI02959	front board	6*40*1M(1M/0.59kg) A500.2_V1.0	
29	NA00279	clip-chain bag	0.04t*100*150mm_V1.0	
30	NA00135	PE bag	0.05t*610*500mm	
31	NA00137	clip-chain bag	5*7	
32	MJ00480	cushion	A1000.4 up_V1.0	
33	MJ00481	cushion	A1000.4 up_V1.0	
34	MJ00057	AL plate-RS	3.0t*2000*1000mm 16.32kg	
35	MJ00482	cushion	A1000.4 down_V1.0	
36	MJ00483	cushion	A1000.4 down_V1.0	
37	MJ00057	AL plate-RS	3.0t*2000*1000mm 16.32kg	
38	MB03848	chassis	A1000.4 DRAGONFLY_V1.0	
39	MB03845	chassis	A1000.4	
40	MB03846	chassis	A1000.4 1.2t*64.8*343*433_V1.3	
41	ME00038	iron pillar	6.35*M3*8.4_V1.3	
42	ME00107	screw pillar	M4*15.5*0.7PH	

No.	Part No.	Description	Specification	Remark
43	MJ00063	iron board	1.2*2135*1220 24.54kg	
44	MG00284	copper pillar	M3*8*0.5PH	
45	MG00025	screw	M3*6	
46	MG00027	screw	M3*12	
47	MG00281	screw	M3*6	
48	MG00041	screw	M3*6	
49	MG00042	screw	M3*10	
50	MG00061	screw	M3*10	
51	MG00161	screw	M3*6	
52	MF00037	washer	φ3.2*φ5.5*1t	
53	MF00038	washer	φ4*φ7*1t	
54	MF00048	washer	φ4*φ8*0.5t	
55	ME00016	color nut	4m/m	
56	MC00674	top cover	A1000.4 DRAGONFLY_V1.3	
57	MC00672	top cover	A1000.4	
58	MC00673	top cover	A1000.4 1.2*343*433_V1.3	
59	MJ00059	single light board	1.2*2135*1220 24.54kg	
60	MF00014	washer	φ3*φ6.5*0.5t	
61	MH02000	magnet	VDGUF-90B	
62	MG00578	screw	M3*10*0.5PH_V1.0	
63	MG00373	screw	M3*5mm	
64	MG00251	copper pillar	M3*17.5*0.5PHsingle,length23.5	
65	MG00243	copper pillar	M3*5*0.5PH	
66	MG00244	copper pillar	M3*10*0.5PH	
67	MA00810	panel	A1000.4 DRAGONFLY_V1.0	
68	MA00761	panel	A1000.4	
69	MA00767	panel	A1000.4_V1.1	
70	MJ00058	single light board	1*2135*1220 20.45kg	
71	ME00184	iron pillar	A200.2 M3*11.2*0.5PH*φ5.8_V1.0	
72	HK05267	PC board	P-A4FP-DIP	
73	RC00209	potentiometer	A10KΩ RV110-40E1-225A-A14	VR1,VR2,VR3,VR4
74	HK02231	Photodiode	P-photosensitive resistance+φ5LLED	U2,U4,U7,U9
75	RH00020	photosensitive resistance	VT90N1	
76	SA00201	L.E.D	φ5 red(LI3330/A)	
77	NI02779	sleeve	φ9*30mm	
78	NI00274	sleeve	φ9*1000mm	
79	HK05268	PC board	P-A4FP-SMD	
80	SG00122	SMD integrated circuit	NJM4580M-TE3	U1,U3,U5,U6,U8,U10
81	RD00103	SMD fixed resistor 1/10W	15KΩ ±5% 0603	R1,R2,R7,R10,R31,R32,R37,R40
82	RD00101	SMD fixed resistor 1/10W	10KΩ ±5% 0603	R3,R4,R5,R6,R8,R9,R11,R12,R13,R14,R25,R27,R28,R30,R33,R34,R35,R36,R38,R39,R41,R42,R43,R44,R55,R57,R58,R60

No.	Part No.	Description	Specification	Remark
83	RD00115	SMD fixed resistor 1/10W	82K Ω \pm 5% 0603	R26,R29,R56,R59
84	HB01383	PCB	A4-FP_VER050324	
85	CI00056	SMD ceramic capacitor 0603	56PF/50V NPO \pm 5%	C11,C12,C13,C14,C30,C31,C34,C35
86	CI00059	SMD ceramic capacitor 0603	100PF/50V NPO \pm 5%	C5,C6,C7,C8,C27,C28,C32,C33
87	CI00075	SMD ceramic capacitor 0603	0.1uF/50V Y5V +80,-20%	C15,C16,C17,C18,C19,C20,C36,C37,C38,C39,C40,C41
88	AE00449	solder material without lead	9308/Sn Ag Cu	
89	HC00077	connector(male)	3P 2.5mm 180 $^{\circ}$	CN1,CN2,CN6,CN9,CN10,CN14
90	HC00076	connector(male)	2P 2.5mm 180 $^{\circ}$	CN4,CN5,CN12,CN13
91	HC00079	connector(male)	5P 2.5mm 180 $^{\circ}$	CN3,CN11
92	CB00039	electrolytic capacitor	47uF/25V ϕ 5*11mm	C9,C10,C44,C29
93	CB00029	electrolytic capacitor	22uF/35V ϕ 5*11mm	C1,C2,C3,C4,C23,C24,C25,C26
94	CB00047	electrolytic capacitor	100uF/25V ϕ 6*11mm	C21,C22,C42,C43
95	AC00179	tin without lead	M705E Sn 3Ag-0.5Cu	
96	HK05270	PC board	P-A4OUT	
97	MH02001	magnet	VDT17.5X9.5X12.7	
98	MJ00942	fixed bracket	CS12/600	CN1,CN2,CN3,CN4
99	MJ00061	iron board	1*2135*1220 20.45kg	
100	HC00442	speaker socket	NL4MP (NEUTRIK)	CN1,CN2,CN3,CN4
101	CA00024	ceramic capacitor	100PF SL	C1,C2,C3,C4,C5,C6,C7,C8
102	HA03501	single terminal wiring	300mm UL1015 18AWG red	CN9,CN7
103	HA03499	single terminal wiring	350mm UL1015 18AWG black	CN6,CN12
104	HA03500	single terminal wiring	350mm UL1015 18AWG white	CN5,CN11
105	HA03382	single terminal wiring	50mm UL1015 18AWG black	TP1
106	HA02343	single terminal wiring	300mm UL1015 18AWG	CN10,CN8
107	AC00179	tin without lead	M705E Sn 3Ag-0.5Cu	
108	HB01800	PCB	A4-OUT_VER050713	
109	ND00622	silicone sleeve	ϕ 5*150mm	
110	ND00200	silicone sleeve	ϕ 5*1000mm	
111	HK05269	PC board	P-A4LED	
112	RA00168	fixed resistor 1/4W	30 Ω M type	R22,R23,R52,R53
113	RA00181	fixed resistor 1/4W	82 Ω M type	R21,R24,R51,R54
114	RA00191	fixed resistor 1/4W	180 Ω M type	R19,R20,R49,R50
115	RA00196	fixed resistor 1/4W	270 Ω M type	R15,R17,R45,R47
116	SA00054	L.E.D	3m/m round(yellow)long foot 26	LED1,LED3,LED7,LED9
117	SA00052	L.E.D	ϕ 3 round(green)long foot 26	LED5,LED6,LED11,LED12
118	SA00053	L.E.D	ϕ 3 round(red)long foot 26mm	LED2,LED4,LED8,LED10
119	NI01781	LED spacer support	LEDS-8 8mm	
120	HB01380	PCB	A4-LED(2*4)_VER040917	
121	HC00067	connector(male)	4P 2.5mm 90 $^{\circ}$	CN8,CN16
122	HC00069	connector(male)	5P 2.5mm 90 $^{\circ}$	CN7,CN15
123	AC00179	tin without lead	M705E Sn 3Ag-0.5Cu	

No.	Part No.	Description	Specification	Remark
124	HK05271	PC board	P-A4-IN	
125	HC00582	balance MIC jack	NCJ6FI-V (NEUTRIK)	CN1,CN2,CN3,CN4
126	HI00162	push-button switch	2 paragraphs 6p PS-22E8552L	SW1,SW2,SW3,SW4
127	HC00077	connector(male)	3P 2.5mm 180°	CN5,CN6,CN7,CN8
128	HC00078	connector(male)	4P 2.5mm 180°	CN9,CN10
129	CA00024	ceramic capacitor	100PF SL	C1,C2,C3,C4,C5,C6,C7,C8
130	HA01333	single terminal wiring CF:W76	150mm UL1015 18AWG green/yellow	
131	AC00179	tin without lead	M705E Sn 3Ag-0.5Cu	
132	HB01802	PCB	A4-IN_VER050713	
133	HI00289	thermal switch	NO55 U-A	
134	HJ00006	dessicant	30g	
135	HE00045	fan-JF0615S2H-000	DC24V/0.13A 60*60*15 350mm 350mm JST2P	
136	HI00031	power switch-RS	R415KKETOF	
137	HD00058	glass tube fuse	12A 250V φ5.2*20mm T	
138	HC00008	AC socket	3515 A TYPE(RF-2004-C-4.8)	
139	HA01394	row-wire connector wiring	3P-3P 120	
140	HA00442	wire	210mm blue L5R5	
141	HA00461	wire	200mm blue L5R5	
142	HA00871	power cord(European 3P)	LT-322+1.5*3C(H05VV-F) 6FT+LT-501	
143	HA00378	wire	130mm black L5R5	
144	HA00541	wire	300mm red L5R5	
145	HA03073	wire	350mm UL1015 18AWG red	
146	HA03497	wire	5P-5P 50mm UL1007 28AWG	
147	HA03724	wire	90mm UL1015 18AWG	
148	HA03725	wire	310mm UL1007 18AWG green	
149	HA03493	wire	3P-3P 500mm UL1007 28AWG	
150	HA03504	wire	2P-2P 350mm UL1185 26AWG	
151	HA03507	wire	3P-3P 500mm UL2547 28AWG	
152	HA03509	wire	2P-2P 250mm UL1185 26AWG	
153	HA03496	wire	4P-4P 700mm UL1007 28AWG	
154	HA03498	wire	8P 280mm UL1007 18AWG	
155	HA03748	wire	200mm UL1015 18AWG	
156	HA03508	wire	2P-2P 150mm UL1185 26AWG	
157	HA02911	wire	3P-3P 200mm UL2547 28AWG brown	
158	HA02734	wire	180mm UL1015 14AWG	
159	HA03372	wire	60mm UL1015 18AWG palm	
160	HA02344	single terminal wiring	250mm UL1015 18AWG	
161	HA02758	wire	2P 345mm UL1007 28AWG red black	
162	HA02779	single terminal wiring	270mm UL1015 18AWG black	
163	HA02763	wire	8P 200mm UL1007 18AWG	
164	AD00012	twin adhesive	90*120mm_V1.0	
165	NI03787	mount	TH-2	

No.	Part No.	Description	Specification	Remark
166	HK05803	PC board	P-A4-PWR	
167	HC00324	connect terminal	6.5m/m (PC250)	CN1,CN2,CN4,CN5,CN6,CN7
168	CG00065	X2-capacitor MPX	1.0uF/275V VDE/UL/CSA	CX1
169	CG00034	filter	2*1.8(TL25-050-182 6A<=38mΩ)	L1
170	HA02189	single terminal wiring	100mm	CN3
171	AC00179	tin without lead	M705E Sn 3Ag-0.5Cu	
172	HB01801	PCB	A4-PWR_VER050713	
173	CG00070	capacitor	6800PF/400V Y5V ±20% Y2	CY1,CY2
174	NF02215	user manual English	A1000.4 ALTO_V1.1	
175	NH00149	paper	889*640mm	
176	ND00622	silicone sleeve	φ5*150mm	
177	ND00200	silicone sleeve	φ5*1000mm	
178	HK04928	PC board	P-PM8PWR-DIP(A500.2)	
179	CB00130	electrolytic capacitor	100uF/25V 105 SH φ6*11mm	C26,C30,C6
180	CB00131	electrolytic capacitor	180uF/25V 105 WL φ8*11mm	C9,C47
181	CB00132	electrolytic capacitor	330uF/25V 105 LZ φ8*15mm	C4
182	CB00133	electrolytic capacitor	470uF/200V 85 LP φ22*40mm	C36,C37,C7,C8
183	CB00164	electrolytic capacitor	2200uF/35V 105°C TL φ16*32mm	C19,C20,C21,C22,C23,C24
184	CG00056	X2 capacitor	0.47uF/275VAC	CX1
185	CG00065	X2-capacitor MPX	1.0uF/275V VDE/UL/CSA	CX2
186	CG00028	metal oxide varistor	CNR-14D391K	C1
187	CG00030	X1/Y2 capacitor	2200PF/400V Y5V ±20% Y2CAP	C2,C3,C38,C39,CY1,CY2
188	CG00033	metal oxide varistor	B57237-S100-M	R2
189	CN00150	common inductance	TC2208-15mH/V644	L1
190	CN00151	common inductance	TC2208-20mH/V645	L7
191	CH00027	laminated capacitor	0.1uF/100V X7R PH5mm	C25,C41,C5,C48,C49
192	CH00028	laminated capacitor	470PF/100V X7R PH5mm	C10,C11
193	CN00058	inductance	1UH/12A(CR4F-302817)	L2,L3,L5,L6
194	RA00573	precise resistor 1/4W	150KΩ M type	R13,R14
195	RA00727	precise resistor 1/8W	75.0Ω M type	R11
196	RA00728	precise resistor 1/8W	150Ω M type	R12
197	RA00729	precise resistor 1/4W	1.80Ω M type	R15
198	RA00730	precise resistor 1/4W	6.80Ω M type	R8
199	RA00731	precise resistor 1/4W	270Ω M type	R5,R6
200	RA00733	precise resistor 1/4W	845KΩ M type	R4,R1
201	RA01440	precise resistor 1/2W	1M Ω	R7
202	RA00735	precise resistor 30W	10.0Ω TO-126 MP930-10.0-1%	R9
203	SA00004	high speed diode	2A/100V BYV27-200,113	D2,D8
204	SA00007	bridge rectifier	8A KBU-806 comb type	D1
205	SA00093	rectifier diode	1N4148 0.5A	D4
206	SA00159	rectifier diode	1A/1000V IN4007	D3
207	SA00146	zener diode	3W 16V BZT03-C16	D7

No.	Part No.	Description	Specification	Remark
208	SA00147	diode	30A/150V IR30CPQ150	D12,D9
209	SB00056	Bidirectional S.C.R	double direct s.c.r	Q1
210	SB00109	transistor	BC640	Q2
211	SD00066	integrated circuit	L7812CV(TO-220)(ST)	IC1
212	TC00118	transformer	PE-67100	T1
213	TC00203	transformer	4022-369-7449.2	L4
214	TC00202	transformer	27-12-648	T2
215	TC00168	transformer	27-12-648	
216	HI00176	thermal switch	OP62/100 /145mm	
217	RA00701	fixed resistor 1/4W	2.2K Ω M type	R10
218	RA00870	chassis bracket 5W	12 Ω SQM type	R20,R21
219	HC00076	connector(male)	2P 2.5mm 180°	D5
220	HC00175	connector(male)	4P 3.96mm 180°	
221	HC00077	connector(male)	3P 2.5mm 180°	CN4
222	MF00014	washer	ϕ 3* ϕ 6.5*0.5t	
223	SD00077	integrated circuit-RS	L7815CV(TO-220)(ST)(MOROCCO)	IC4
224	SD00079	integrated circuit	L7915CV(TO-220)(ST)	IC2
225	MI02598	heat-sink	A1000.4 21*50*190 0.3kg_V1.3	
226	MI03119	heat-sink	21*50*1M+5(1M/1.6KG)_V1.0	
227	MK00080	battery cover	0.4*10*12*35mm PM8-PWR_V1.1	Q1,D9,D12,R9,IC4,IC2
228	NI01877	silicone sleeve	ϕ 10*28mm T0.45mm	
229	NI03044	silicone sleeve	ϕ 14*35 T0.45mm	
230	MG00041	screw	M3*6	
231	MF00037	washer	ϕ 3.2* ϕ 5.5*1t	
232	MF00132	MIC jack	ϕ 3* ϕ 8*0.8t_v1.0	
233	MF00030	washer	ϕ 3.5* ϕ 8*0.8t_V1.0	
234	MJ00067	single light board	0.8t*2135*1220mm 18.69kg	
235	MG00244	copper pillar	M3*10*0.5PH	
236	MG00162	screw	M3*8	
237	AC00179	tin without lead	M705E Sn 3Ag-0.5Cu	
238	HK04217	PC board	P-PM8PWR-SMD	
239	HB01384	PCB-RS	PM8PWR_VER060523	
240	CI00095	SMD ceramic capacitor 1206	0.1uF/50V X7R	C14,C16
241	CI00118	SMD ceramic capacitor 1812	0.47uF/50V X7R	C12,C13
242	AE00449	solder material without lead	9308/Sn Ag Cu	
243	CN00036	bead coil	T-3.5*1.2*5.2(22-06)	
244	RA01009	fixed resistor 1W	130K P type	R3
245	MK00122	spring piece	1.2t*17*16*21(ML000007)_V1.1	D1,M2
246	SB00182	transistor	STW12NK90Z(TO247)/(ST)	M2
247	NC00852	mica-RS	25*40mm	
248	HK04594	PC board	P-PM8CTL-DIP	
249	HC00416	connector	2.54 90° 4P	J2

No.	Part No.	Description	Specification	Remark
250	HC00417	connector	2.54 90° 10P	J1
251	SB00111	Photodiode	CNY17-3.300(QTC)	U3
252	HK04595	PC board	P-PM8CTL-SMD	
253	HB01387	PCB	PM8CTL(2*5)_VER041015	
254	CI00012	SMD ceramic capacitor 0805	47PF/50V NPO	C5
255	CI00019	SMD ceramic capacitor 0805	470PF/50V NPO ±5%	C11,C12,C18
256	CI00026	SMD ceramic capacitor 0805	0.0033uF/50V X7R ±10%	C3
257	CI00097	SMD ceramic capacitor 0805	0.027uF/50V X7R ±10%	C10,C13,C14,C16,C6
258	CI00107	SMD ceramic capacitor 0805	270PF/50V NPO ±5%	C8
259	CI00120	SMD ceramic capacitor 1206	0.068uF/25V X7R 50V±10%	C15,C4
260	CI00124	SMD ceramic capacitor 1206	0.47uF/25V Y5V-1206(3216)	C17
261	CI00125	SMD ceramic capacitor 1210	10uF/16V Y5V-1210(3225)	C2
262	CL00003	SMD tantalum capacitor	2.2uF/16V case A	C1
263	RD00232	SMD precise resistor 1/8W	2.20KΩ ±1% 0805	R12
264	RD00239	SMD precise resistor 1/8W	24.0KΩ ±1% 0805	R13
265	RD00507	SMD precise resistor 1/8W	4.30Ω ±1% 0805	R15
266	RD00372	SMD precise resistor 1/8W	10.7Ω ±1% 0805	R16
267	RD00373	SMD precise resistor 1/8W	47.0Ω ±1% 0805	R2
268	RD00374	SMD precise resistor 1/8W	68.0Ω ±1% 0805	R1,R5
269	RD00375	SMD precise resistor 1/8W	75.0Ω ±1% 0805	R18
270	RD00376	SMD precise resistor 1/8W	150Ω ±1% 0805	R7
271	RD00377	SMD precise resistor 1/8W	180Ω ±1% 0805	R14,R17
272	RD00378	SMD precise resistor 1/8W	1.00KΩ ±1% 0805	R19,R20,R3,R4
273	RD00380	SMD precise resistor 1/8W	10.0KΩ ±1% 0805	R8,R11
274	RD00383	SMD precise resistor 1/8W	27.0KΩ ±1% 0805	R9,R10
275	RD00403	SMD precise resistor 1/8W	100KΩ ±1% 0805	R23
276	RD00434	SMD precise resistor 1/8W	19.6KΩ ±1% 0805	R22,R6
277	SE00011	SMD rectifier diode	RLS4148 0.5A (LL-34)	D1
278	SE00032	SMD diode	SS14	D2,D3
279	SE00033	SMD rectifier diode	BAS85(S0D80DC)	D4
280	SG00124	SMD integrated circuit	UC39432BD	U2
281	SG00181	SMD integrated circuit	UCC35701D(TI)	U1
282	RF00005	SMD semi-fixed resistor	20K 3314J-1-203E	VR1
283	AE00449	solder material without lead	9308/Sn Ag Cu	
284	AC00179	tin without lead	M705E Sn 3Ag-0.5Cu	
285	RA00242	fixed resistor 1/4W	10KΩ M type	R0
286	HC00324	connect terminal	6.5m/m (PC250)	P1
287	HK04669	PC board	P-D300W-DIP(A500.2)	
288	CB00021	electrolytic capacitor	10uF/16V φ4*5mm	C20,C22
289	CB00162	electrolytic capacitor	100uF/35V 105°C TL φ8*11mm	C105,C106
290	CB00164	electrolytic capacitor	2200uF/35V 105°C TL φ16*32mm	C14,C15,C23,C24
291	CF00042	metal-film capacitor MSC	0.47uF/63V 5% CASE02	C18,C21,C26,C27

No.	Part No.	Description	Specification	Remark
292	CN00045	fixed inductance	TWLC-220K	L3,L4,L5,L6,L10,L11,L12,L13
293	CN00069	inductance-EMI SUPPRESSOR	TB36-13-850485	L1,L2
294	HC00324	connect terminal	6.5m/m (PC250)	TE11,TE13
295	ME00015	color nut	3m/m	
296	MF00132	MIC jack	φ3*φ8*0.8t_v1.0	
297	MF00030	washer	φ3.5*φ8*0.8t_V1.0	
298	MJ00067	single light board	0.8t*2135*1220mm 18.69kg	
299	MF00037	washer	φ3.2*φ5.5*1t	
300	MG00357	screw	M3*18	
301	MG00461	copper pillar	M3*7.3*0.5PH	
302	MI01836	heat-sink	65*24*8 PM-12	
303	SD00257	integrated circuit	ADU27_V1.1	U8,U9
304	SD00148	integrated circuit	TDA8927J/N1	
305	NI02597	knob	3M#1350Y 10mm*66M	
306	NC00027	mica	ADP 69*19*0.1t_V1.1	
307	AC00179	tin without lead	M705E Sn 3Ag-0.5Cu	
308	HK00494	PC board	P-D300W-SMD	
309	CI00141	SMD ceramic capacitor 1206	0.0027uF/50V X7R ±10%	C151,C152,C153,C154
310	CI00042	SMD ceramic capacitor 1206	0.001uF/50V NPO	C59,C62,C64,C110,C111
311	CI00045	SMD ceramic capacitor 1206	0.022uF/50V X7R ±5%	C40,C41,C42,C43
312	CI00134	SMD ceramic capacitor 1206	0.01uF/50V NPO ±5%	C3
313	CI00136	SMD ceramic capacitor 1206	560PF/50V NPO ±5%	C28,C29,C30,C32,C33,C36,C37,C38,C39
314	CI00138	SMD ceramic capacitor 1206	0.22uF/50V X7R ±10%	C34,C48,C49,C54
315	HB01050	PCB	D300W(1*4)_VER051213	
316	RD00132	SMD fixed resistor 1/4W	47Ω ±5% 1206	R65,R66,R68,R70
317	RD00133	SMD fixed resistor 1/4W	100Ω ±5% 1206	R29,R30,R63,R64
318	RD00245	SMD precise resistor 1/4W	1.00KΩ ±1% 1206	R28,R35
319	RD00249	SMD precise resistor 1/4W	5.60KΩ ±1% 1206	R26,R27
320	RD00417	SMD precise resistor 1/4W	27.0KΩ ±1% 1206	R31
321	RD00429	SMD precise resistor 1/4W	5.60Ω ±1% 1206	R39,R40,R41,R42,R43,R44,R45,R46
322	RD00433	SMD precise resistor 1/4W	56.0KΩ ±1% 1206	R1
323	SE00017	SMD zener diode	1/2W 5.6V(RLZ5.6B) LL-34	D8
324	SG00293	integrated circuit	ADU29_V1.1	U6
325	SG00150	SMD integrated circuit	TDA8929T	
326	CI00154	SMD ceramic capacitor 1206	0.1uF/100V X7R ±10%	C50,C56
327	AE00449	solder material without lead	9308/Sn Ag Cu	
328	CN00149	inductance	WB0610-3.0T	L7,L8
329	HC00076	connector(male)	2P 2.5mm 180°	TE1
330	CF00031	metal-film capacitor	0.1uF/100V	C4,C6,C9,C16,C44,C46,C55,C63,C72,C5,C7,C60,C61,C71,C73,C8,C10,C45,C47,C1,C2,C11,C12
331	RA00007	metal-oxide-film resistor 1W	22Ω	R65,R70
332	RA00060	metal-oxide-film resistor 3W	390Ω RSS P type	R71,R72

No.	Part No.	Description	Specification	Remark
333	HK06599	PC board	A-SERIES-CONNECT	
334	HB01378	PCB	A SERIES CONNECT PCB VER060112	
335	HC00077	connector(male)	3P 2.5mm 180°	CN1,CN2
336	HC00076	connector(male)	2P 2.5mm 180°	CN3,CN4,CN5
337	CN00026	inductance	330uH(LGA0307-331K)	L1
338	CB00064	electrolytic capacitor	470uF/16V φ10*12mm	C1
339	AC00179	tin without lead	M705E Sn 3Ag-0.5Cu	
340	MJ00484	barrier	A1000.4 0.3t*35*59*123_V1.1	
341	MJ00087	iron board	0.3*200*3000 1.431kg	
342	MG00683	screw	M4*20*0.5PH	
343	HA02522	wire	2P 120mm UL1007 28AWG red black	