

Service *Manual*

MODEL: MAC2.2/2.3/2.4



www.altoproaudio.com

Version 1.0

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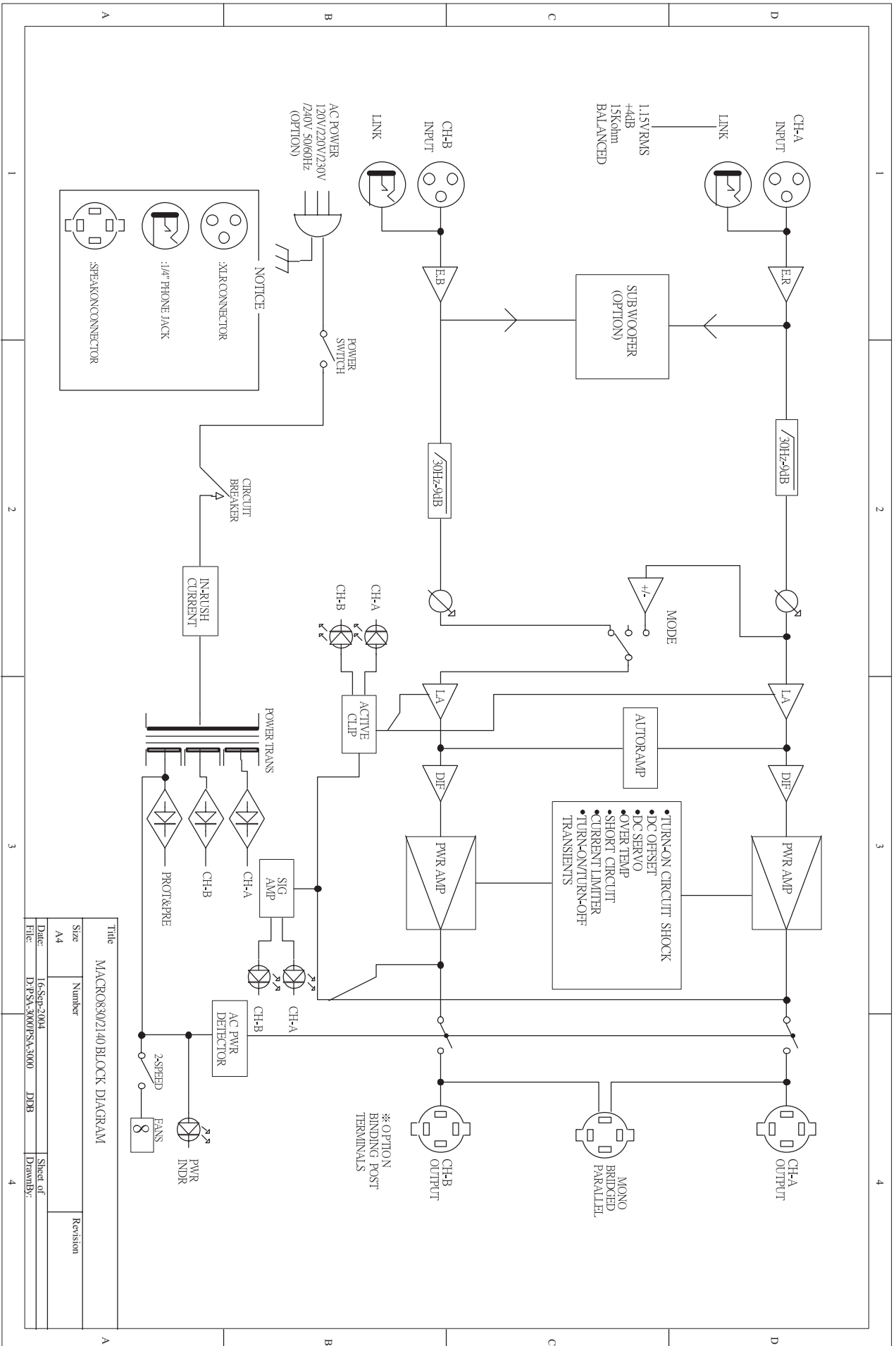
1. Introduction

- 1.1 The stereo amplifier apparatus specialization in the performance, have versatility-changed output (stereo, parallel and bridged selector), you will hear excellence music.
- 1.2. Input matching allows collection with any preamplifier
- 1.3. Excellent frequency echo and sound quality
- 1.4. XLR unbalanced and 6.3ϕ jack output.
- 1.5. High-speed and low noise fan for releasing heat. When the temperature rises, the fan automatically switches to high- speed, it re-back to normal speed at other times to reduce power consumption
- 1.6. The apparatus have changed limited overload function, when it turns on the apparatus most output.
- 1.7. Status indicators of SIG and CLIP. When there is any signal added, the SIG LED lights up. When there is overload, the CLIP LED lights up. If anything abnormal happens to the circuits, the CLIP LED will be continuously on, with no action from the circuits. This helps the user to determine which status it is in. .
- 1.8. Power supply of steady circuit adopted to unaided voltage output of highly cabinet.
- 1.9. Output jack specialization in female speaker jack.

2. Specification

Power specifications		MAC2.2	MAC2.3	MAC2.4
Stereo mode (both channels driven)20Hz~20KHz	2Ohms	480	800	1400
	4Ohms	300	450	750
	8Ohms	205	310	575
Bridge mono mode 20Hz~KHz	8Ohms	560	900	1500
	4Ohms	800	1400	2500
Electrical Specifications		600W	900W	1500W
Input sensitivity		1.15V(+3.4dBu)		
Input impedance		10KΩ unbalanced 20KΩ balanced		
Frequency response (at 10dB		25Hz~25KHz +0/-1dB-3dB points:5Hz~50KHz		
Voltage Gain		30dB	32dB	34dB
Distortion (smpte-1m)		<0.03%		
Signal to noise ratio		100dB		
General specification		600W	900W	1500W
Protections		Full short circuit, open circuit, thermal, ultrasonic, and RF protection stable into reactive or mismatched loads, turn ON/OFF, muting, tried crowbar.		
Controls		Front: AC switch 40-detect input level control for each channel. Rear: stereo/parallel/bridged selector, 30Hz filter selector clip ON/OFF selector.		
Indicators		Signal: 2×green LED CLIP:2×red LED		
Connectors		Input: Active balanced XLR and 1/4"(6.3mm)TRS		
Power supply		Available for 110-120V or 220~240VAC.50/60Hz		
Dimensions		483(W) ×400(D) ×88.8(H)mm		
Weight		14.4ka	16.5ka	19.02ka

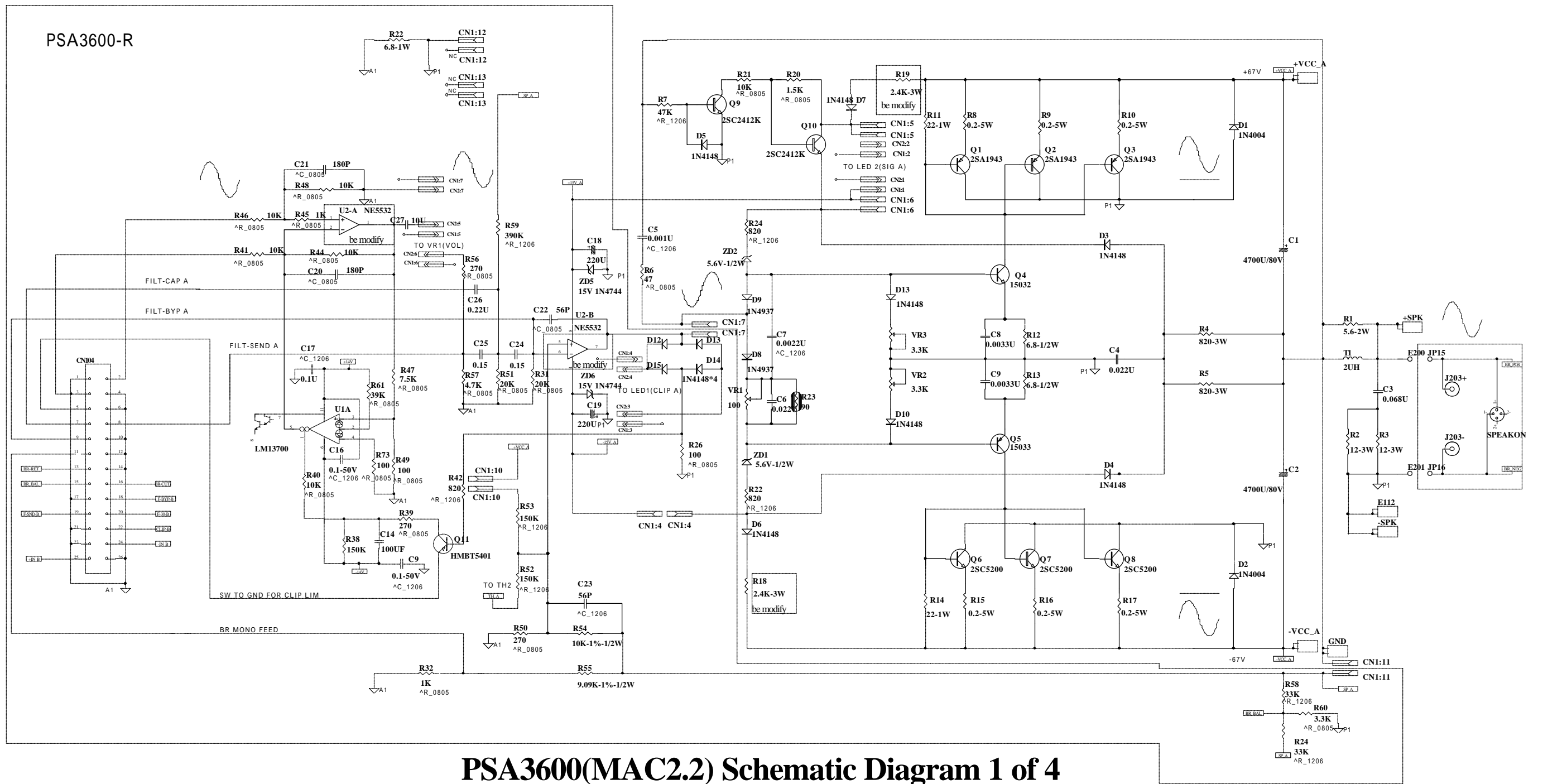
3. Black Diagram



Title		MACROS02140 BLOCK DIAGRAM	
Size	Number	Revision	
A4			
Date	16-Sep-2004	Sheet of	
File:	D:\PSA-3000\PSA-3000	DDB	Dynamby:

4. Schematic Diagram

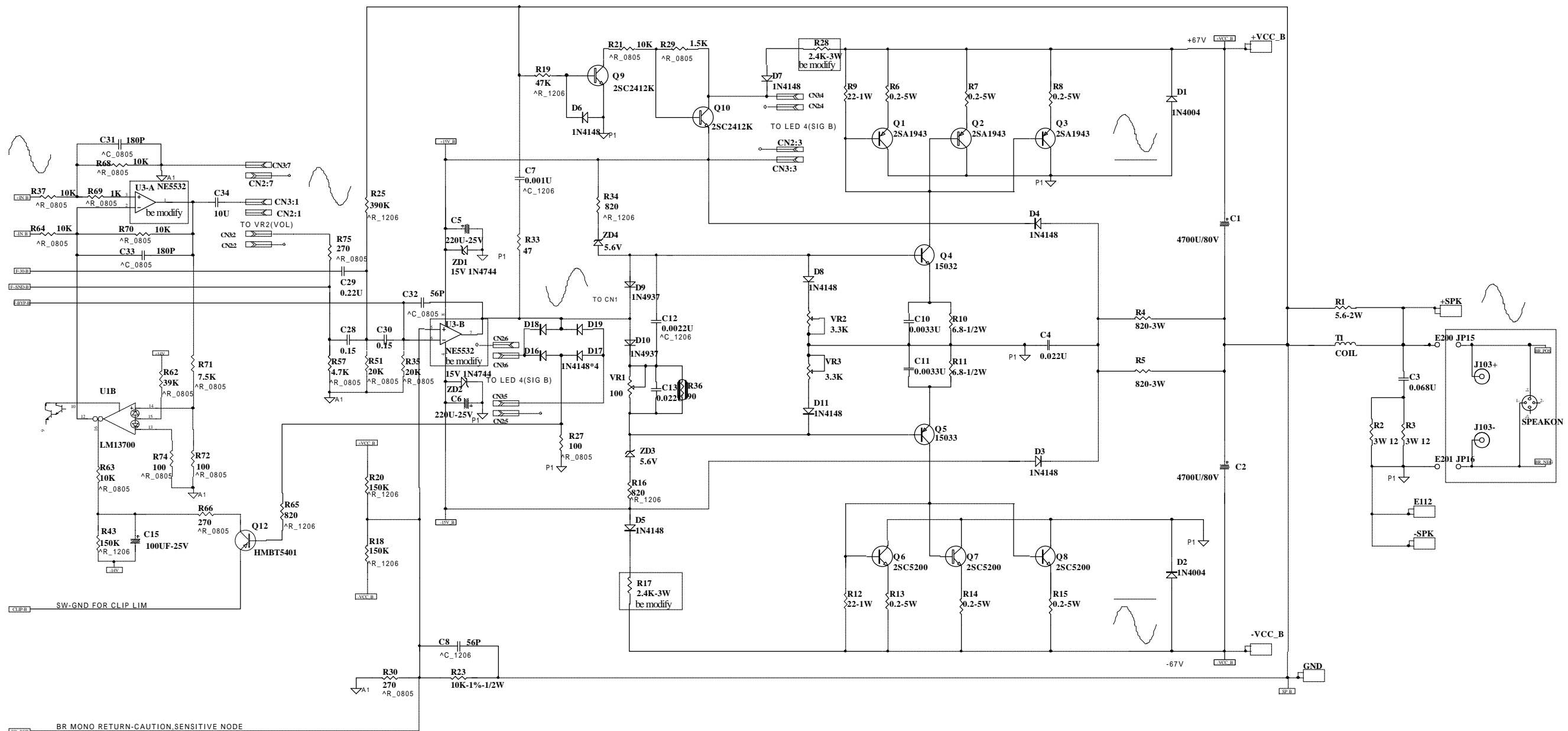
CHANNEL-A



PSA3600(MAC2.2) Schematic Diagram 1 of 4
Channel-A

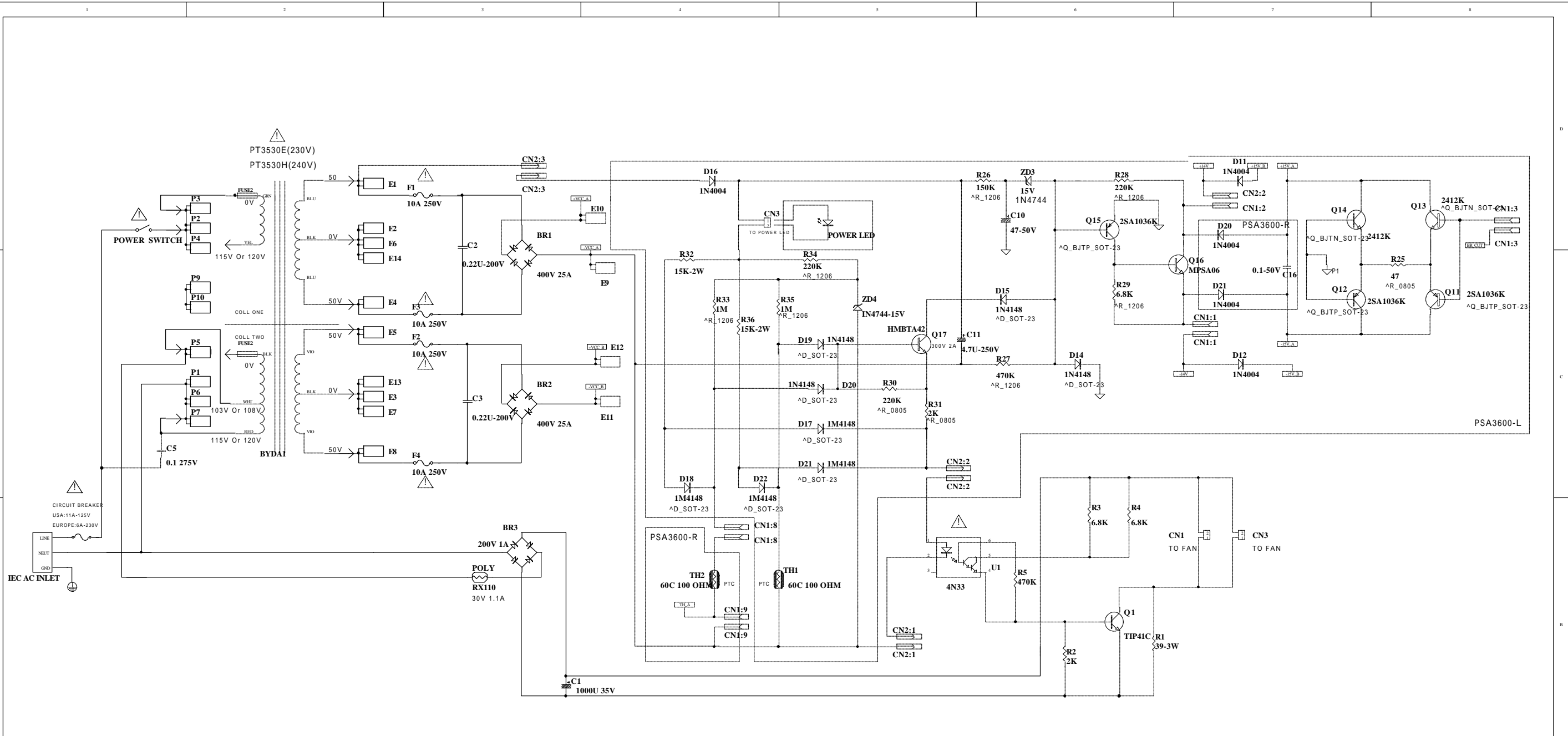
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Size	Number	Revision	
D	PSA3600-L		
File	PSA3600-L	Sheet 1 of 4	Printed Date
Drawn By	sh	Checked By	Printed Date

CHANNEL-B



PSA3600(MAC2.2) Schematic Diagram 2 of 4
 Channel-B

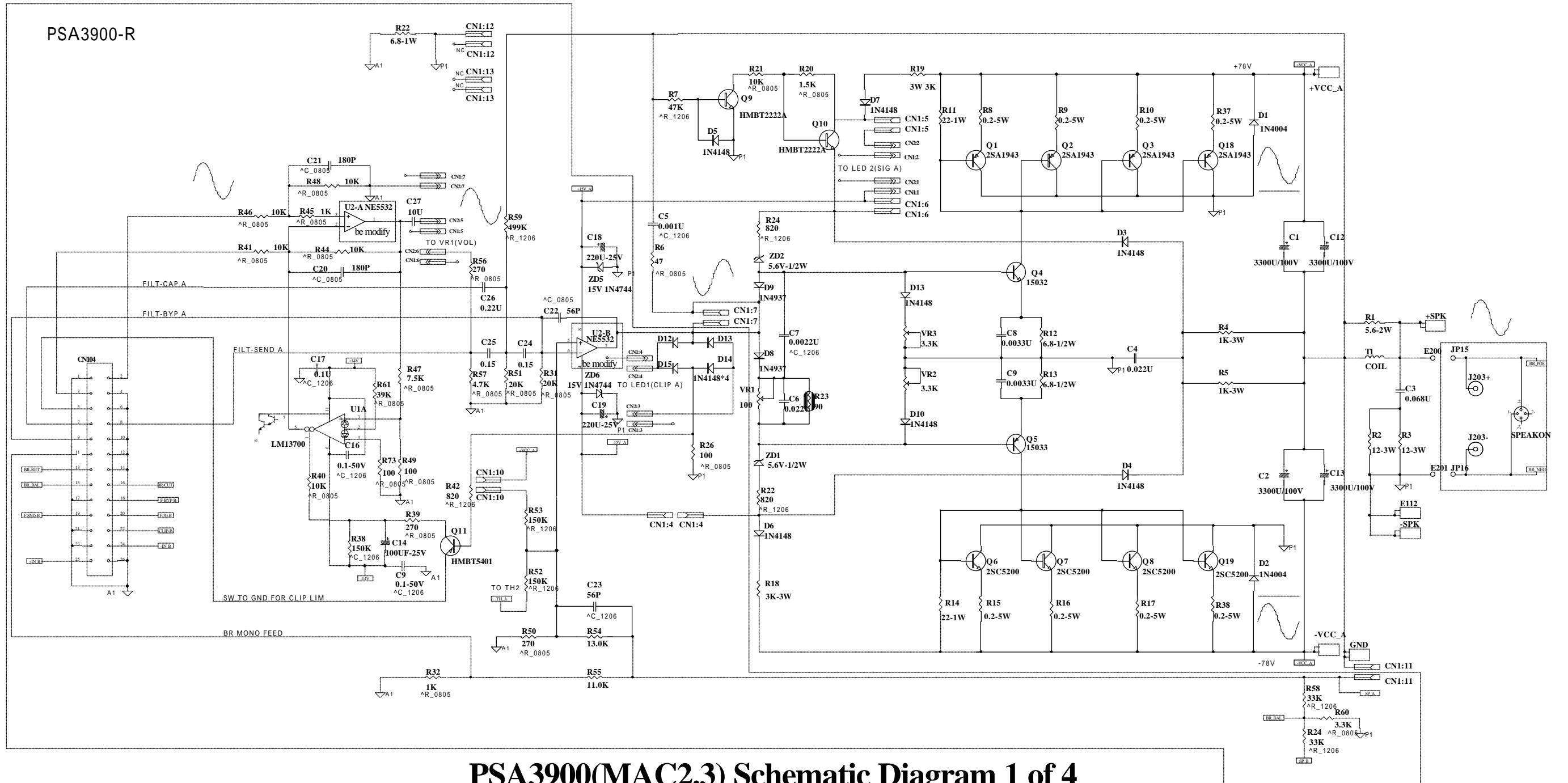
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Size	Number	Revision	
D	PSA3600-R		
Drawn By	Checked By	Design	Drawn/Checked
File	Job	Drawn By	Drawn/Checked



PSA3600(MAC2.2)Schematic Diagram 3 of 4
Power Supply

Title			PSA-3000
Size	Number	Revision	
D	PSA3600	PSA3600 Power Supply	
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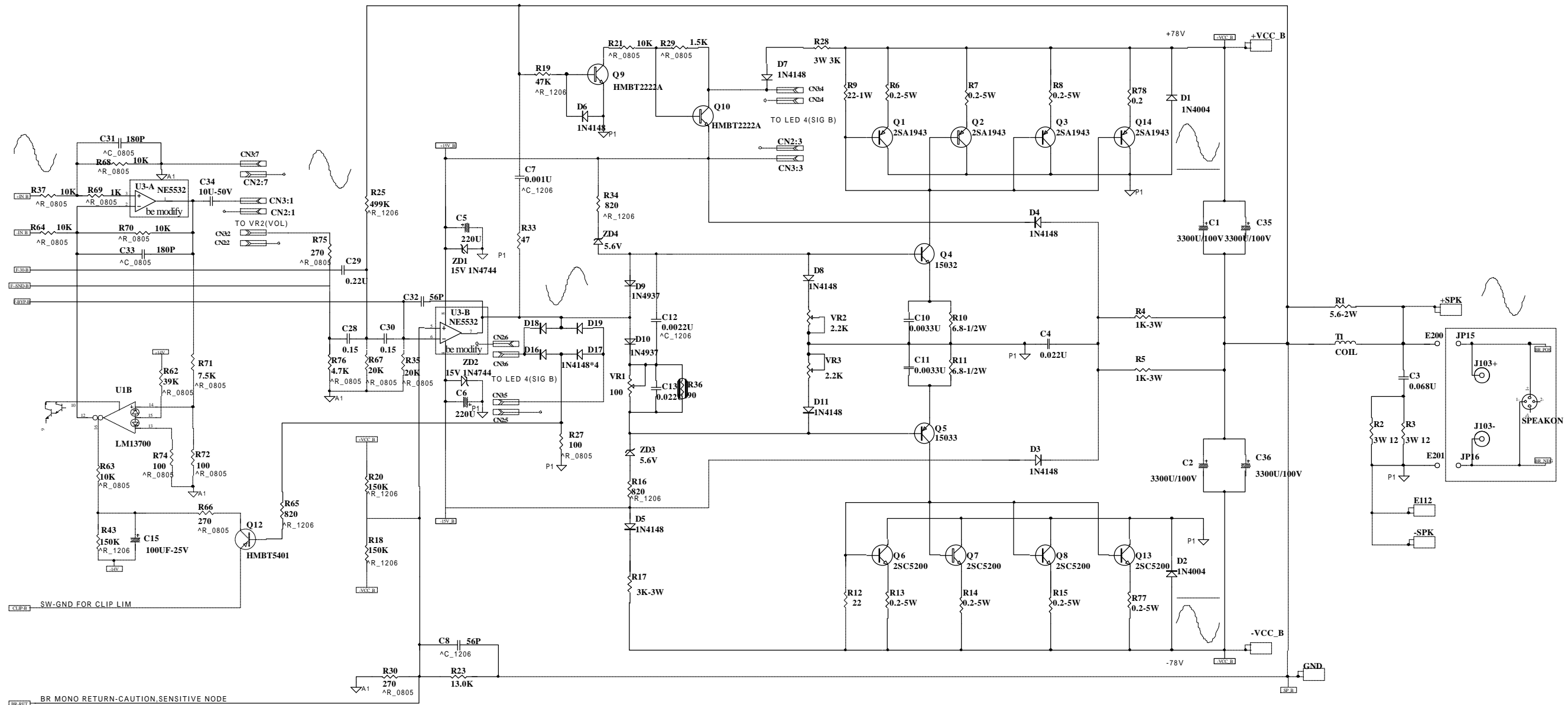
CHANNEL-A



PSA3900(MAC2.3) Schematic Diagram 1 of 4
Channel-A

Title	PSA-3000		
Size	Number	Revision	
D	PSA3900-L		
Drawn By	Y. Wang	Checked By	Y. Wang

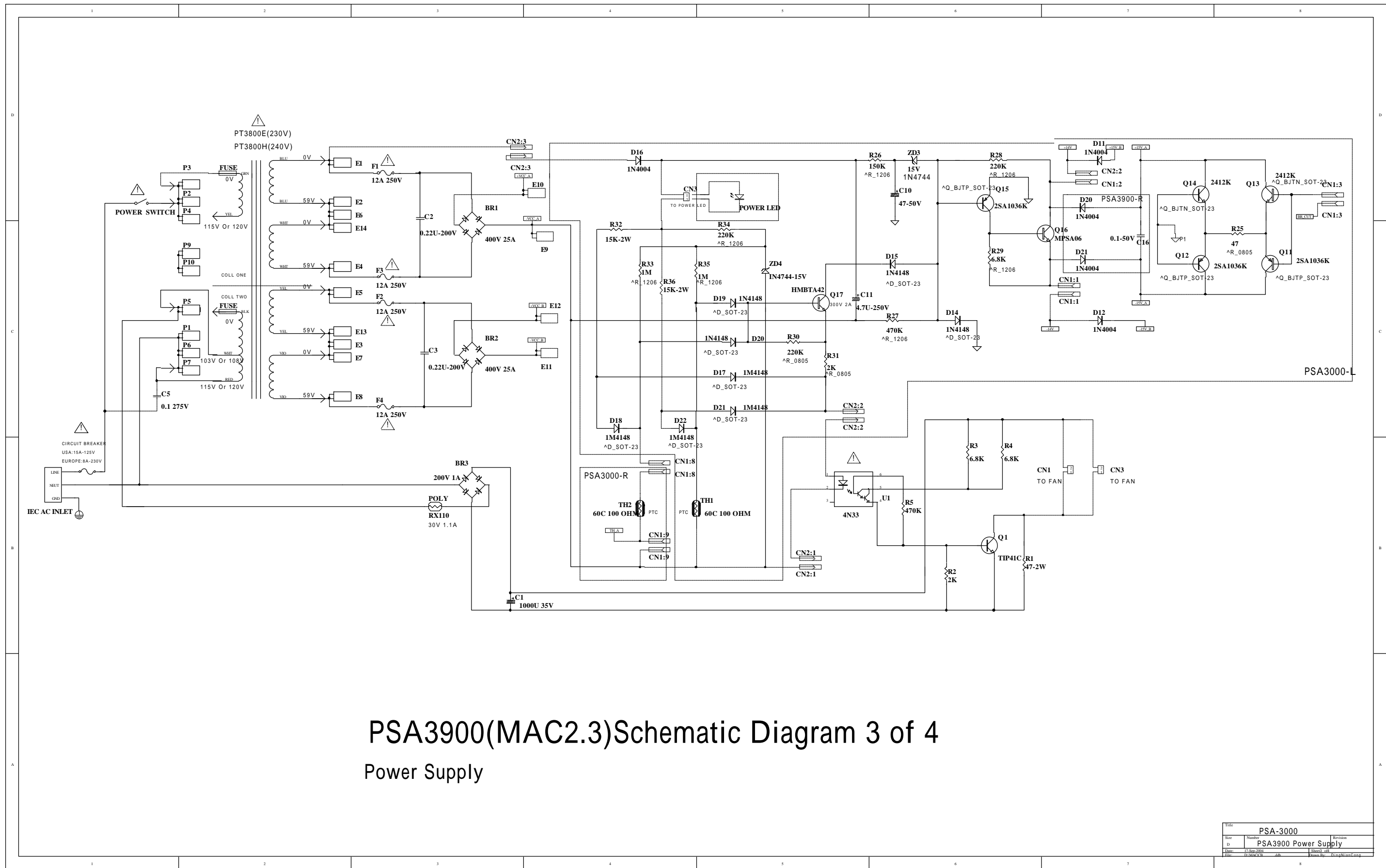
CHANNEL-B



PSA3900(MAC2.3) Schematic Diagram 2 of 4

Channel-B

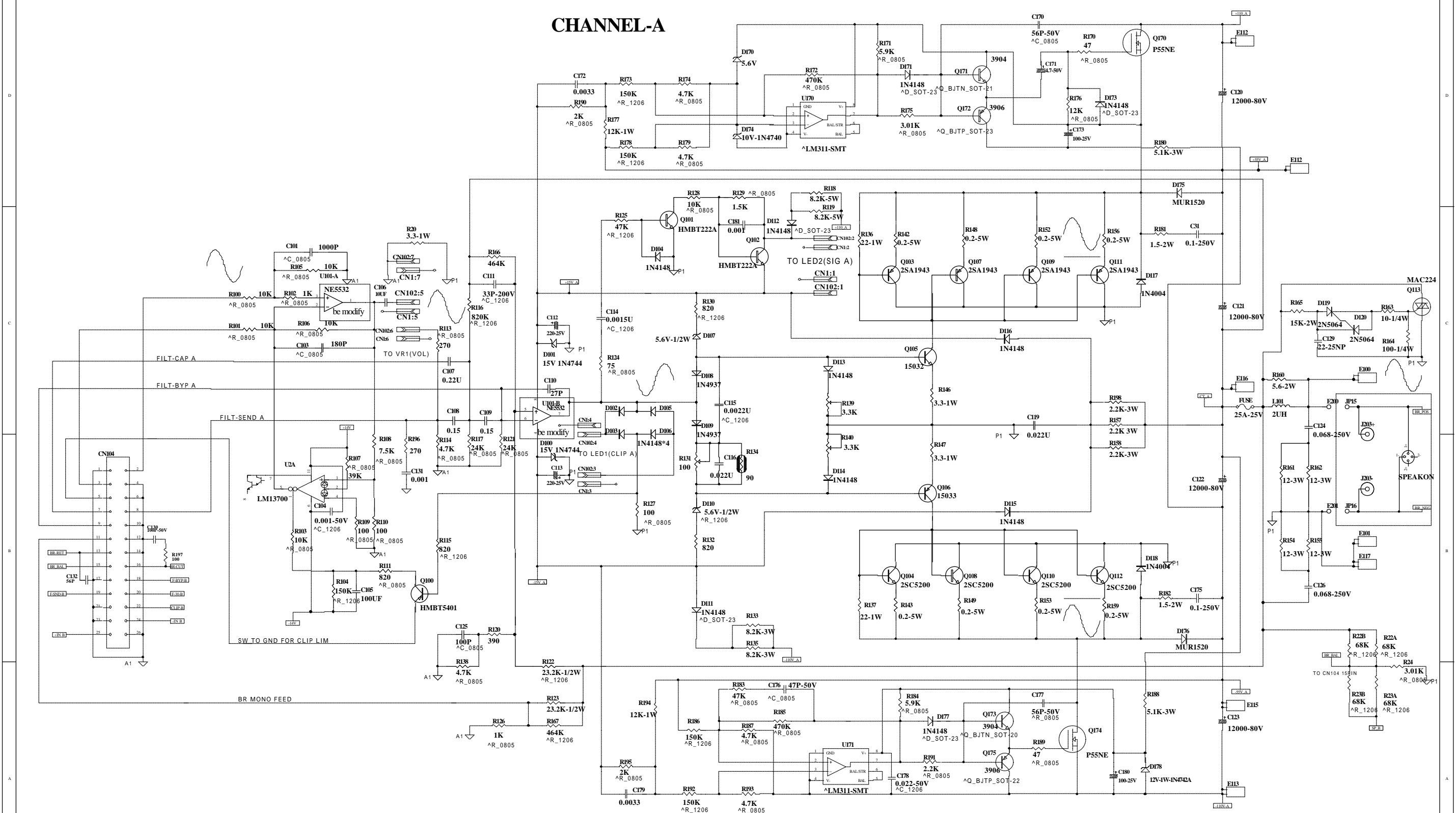
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Size	Number	Revision	
D	PSA3900-R		
Drawn By	Checked By	Design Date	Drawn Date
11/20/00	1/28/01		



PSA3900(MAC2.3)Schematic Diagram 3 of 4
Power Supply

Title			PSA-3000
Size	Number	Revision	
D	PSA3900	PSA3900 Power Supply	
File	PSA3900.dwg	Drawn By	PragnaDasC.ang

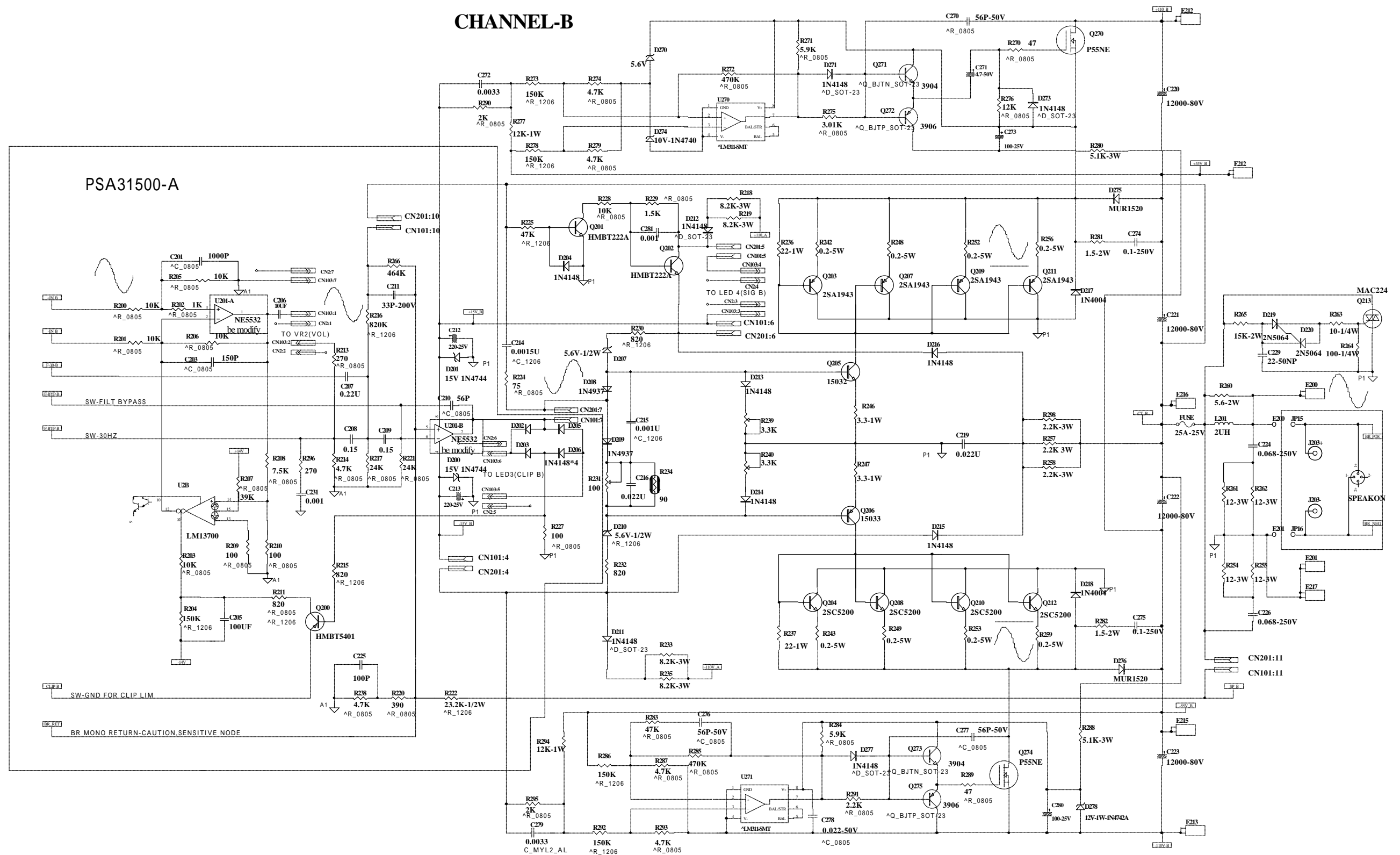
CHANNEL-A



PSA31500(MAC2.4) Schematic Diagram 1 of 4
Channel-A

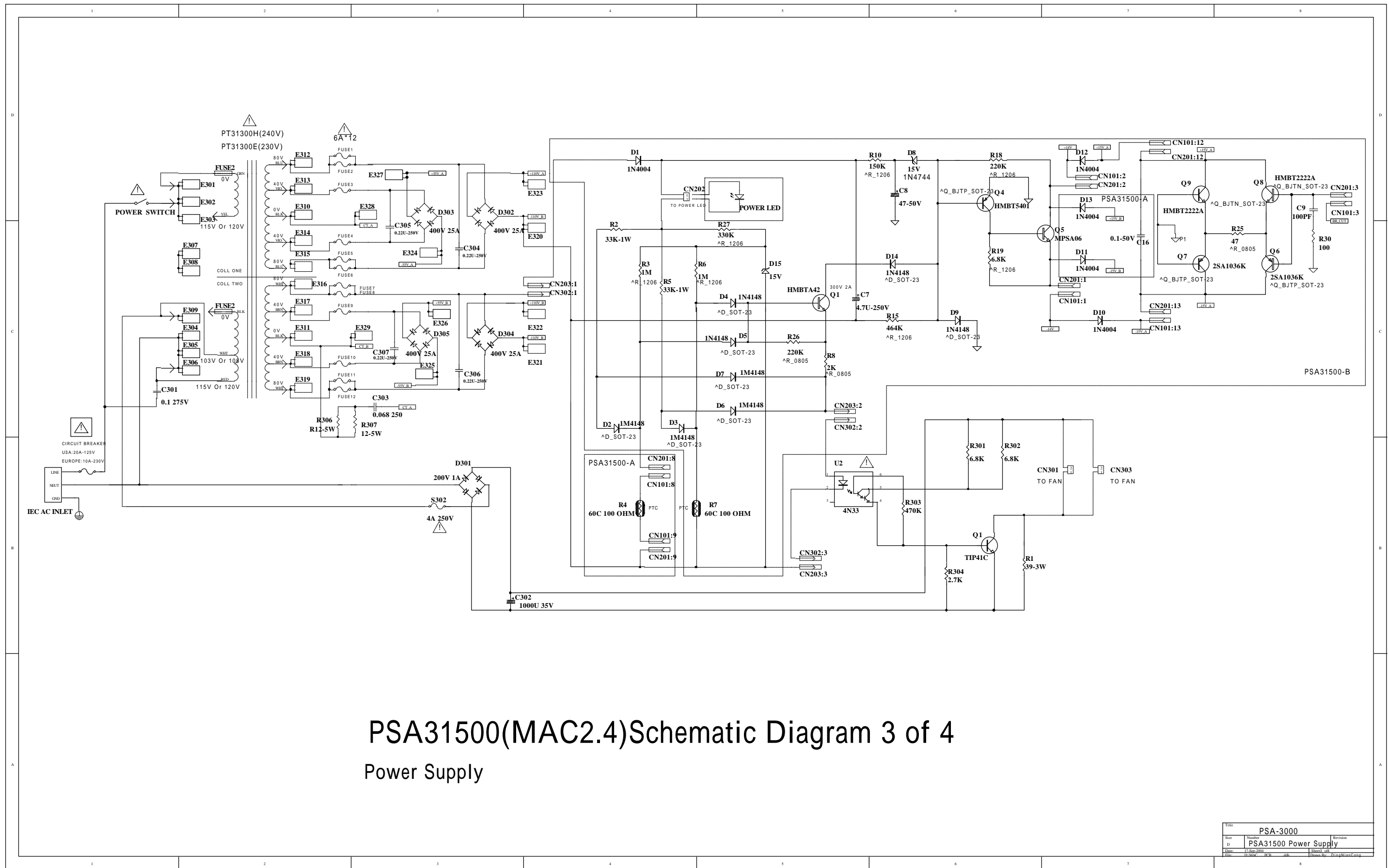
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D	PSA31500-A	
Drawn By	Checked By	Sheet 1 of 4
File	D:\MAC\1300\PSA31500-A.dwg	

CHANNEL-B



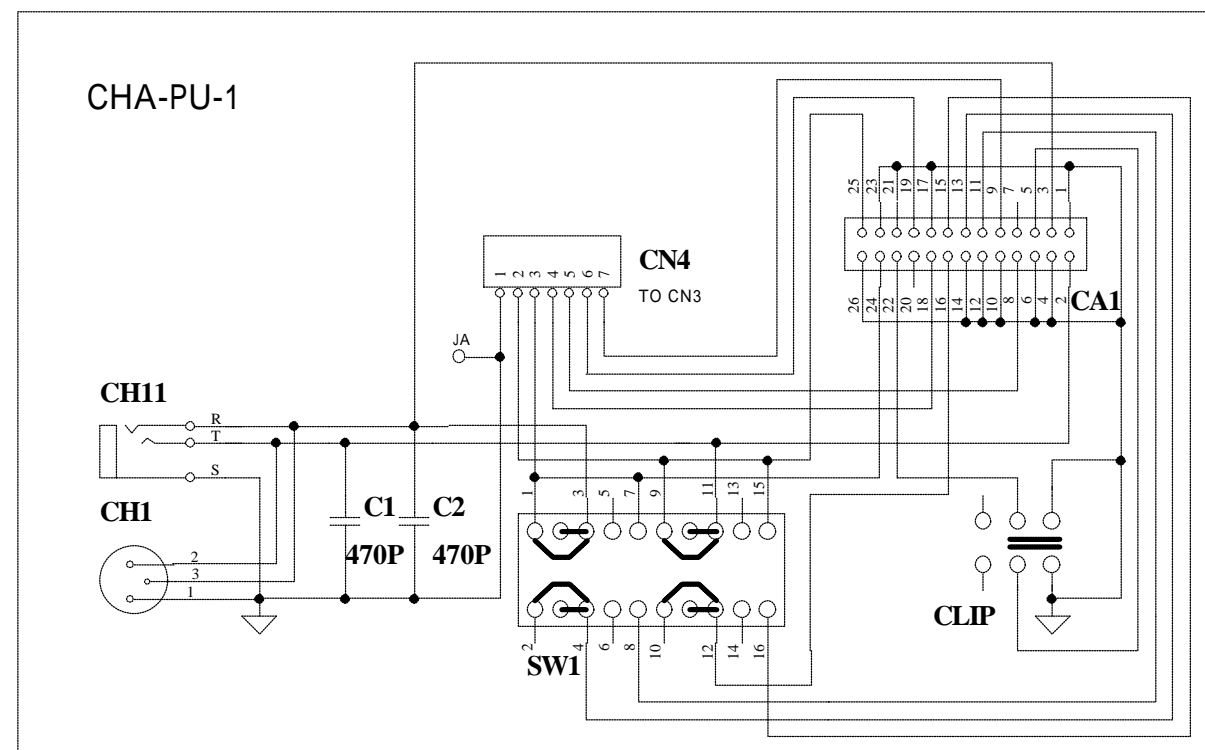
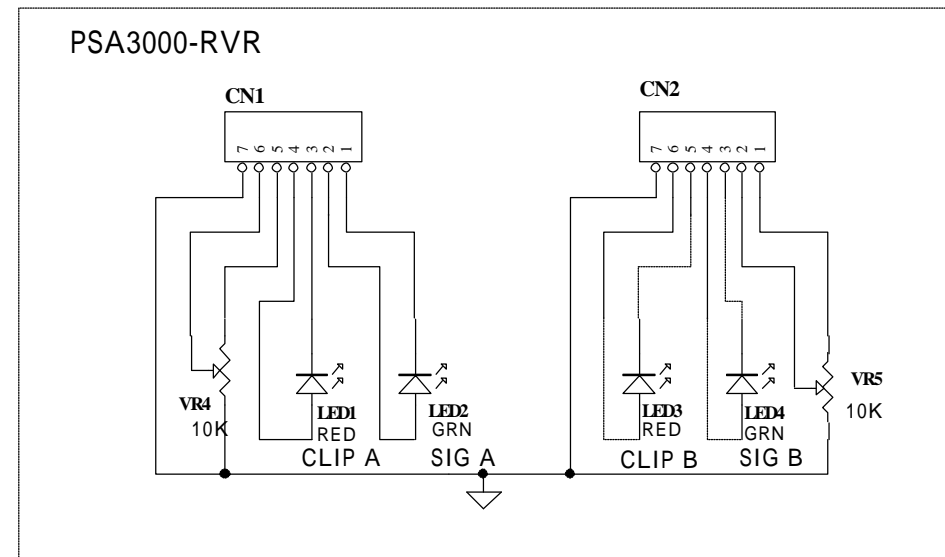
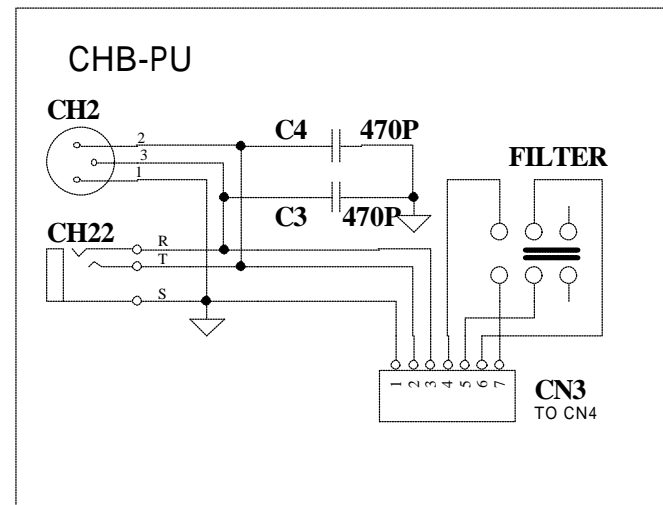
PSA3150(MAC2.4) Schematic Diagram 2 of 4
Channel-B

PSA-3000		
Size	Number	Revision
D	PSA31500-B	
Date	1/16/2000	Sheet 1 of 4
File	PSA31500-B	Drawn By: Pongkhan Cong



PSA31500(MAC2.4)Schematic Diagram 3 of 4
Power Supply

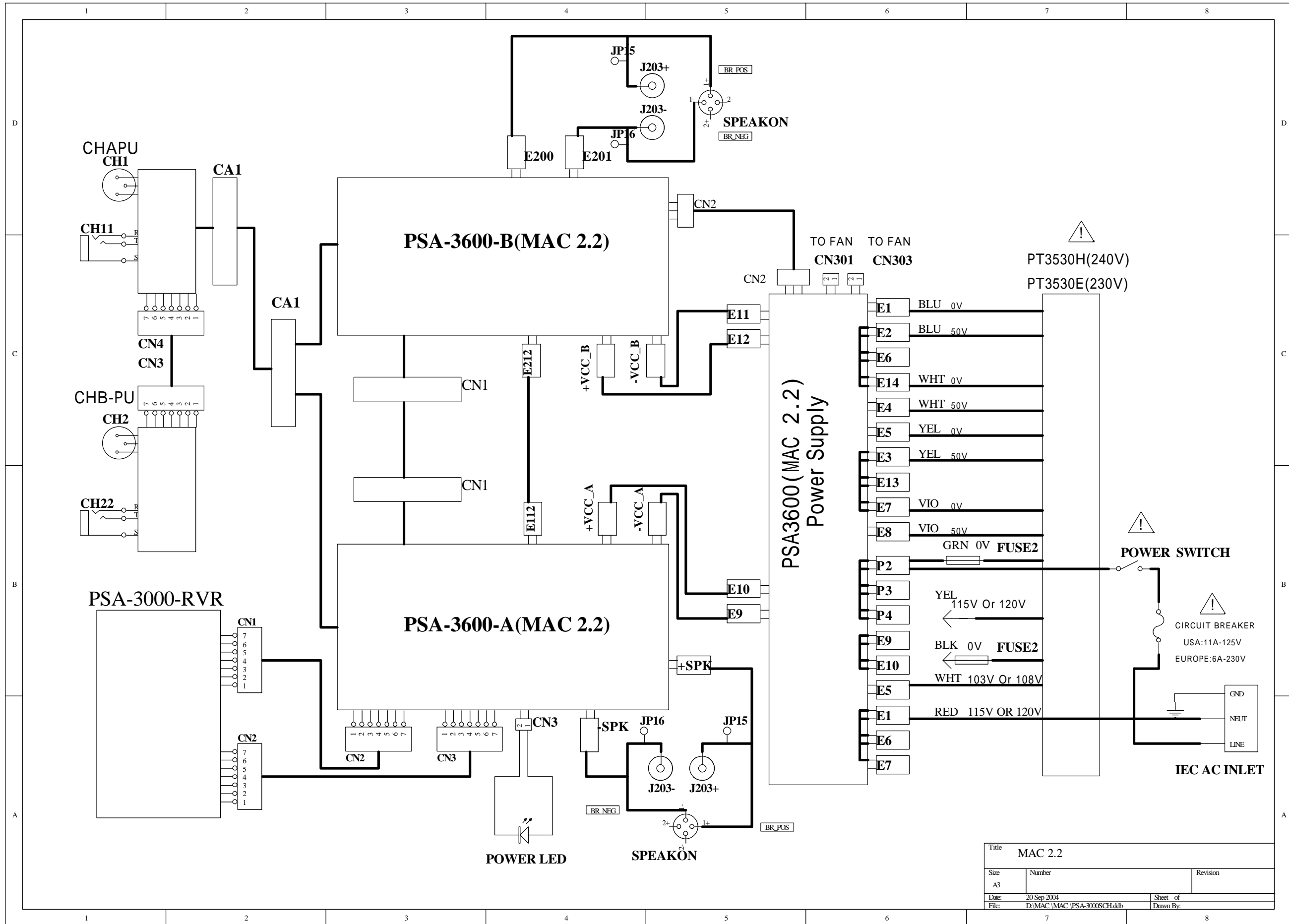
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Size	Number	Revision	
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Drawn	Checked	Approved	
File: D:\3000\PSA31500	Rev: 1.0	Drawn By: P. Wang	Checked By: P. Wang



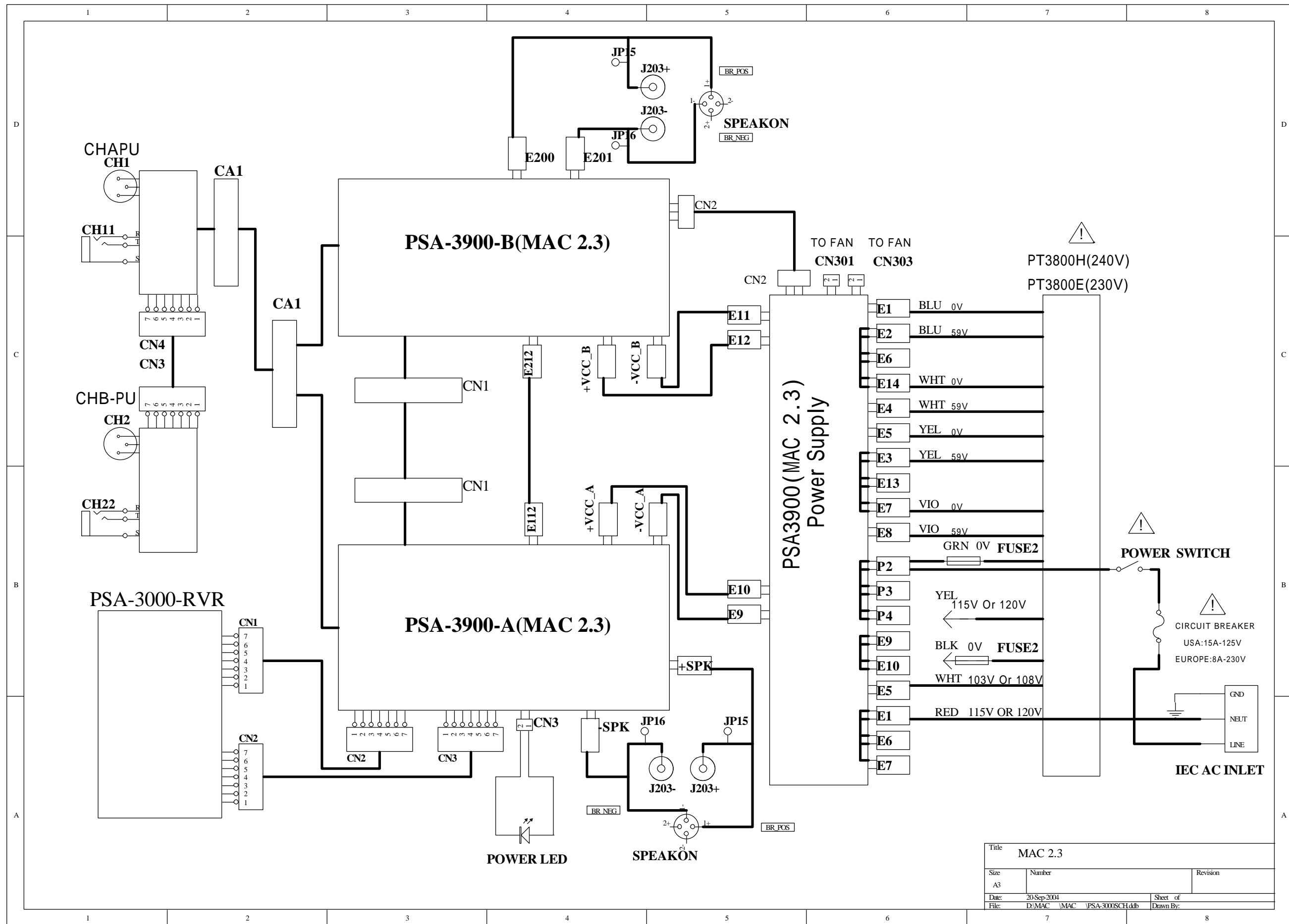
PSA3000 Schematic Diagram 4 of 4

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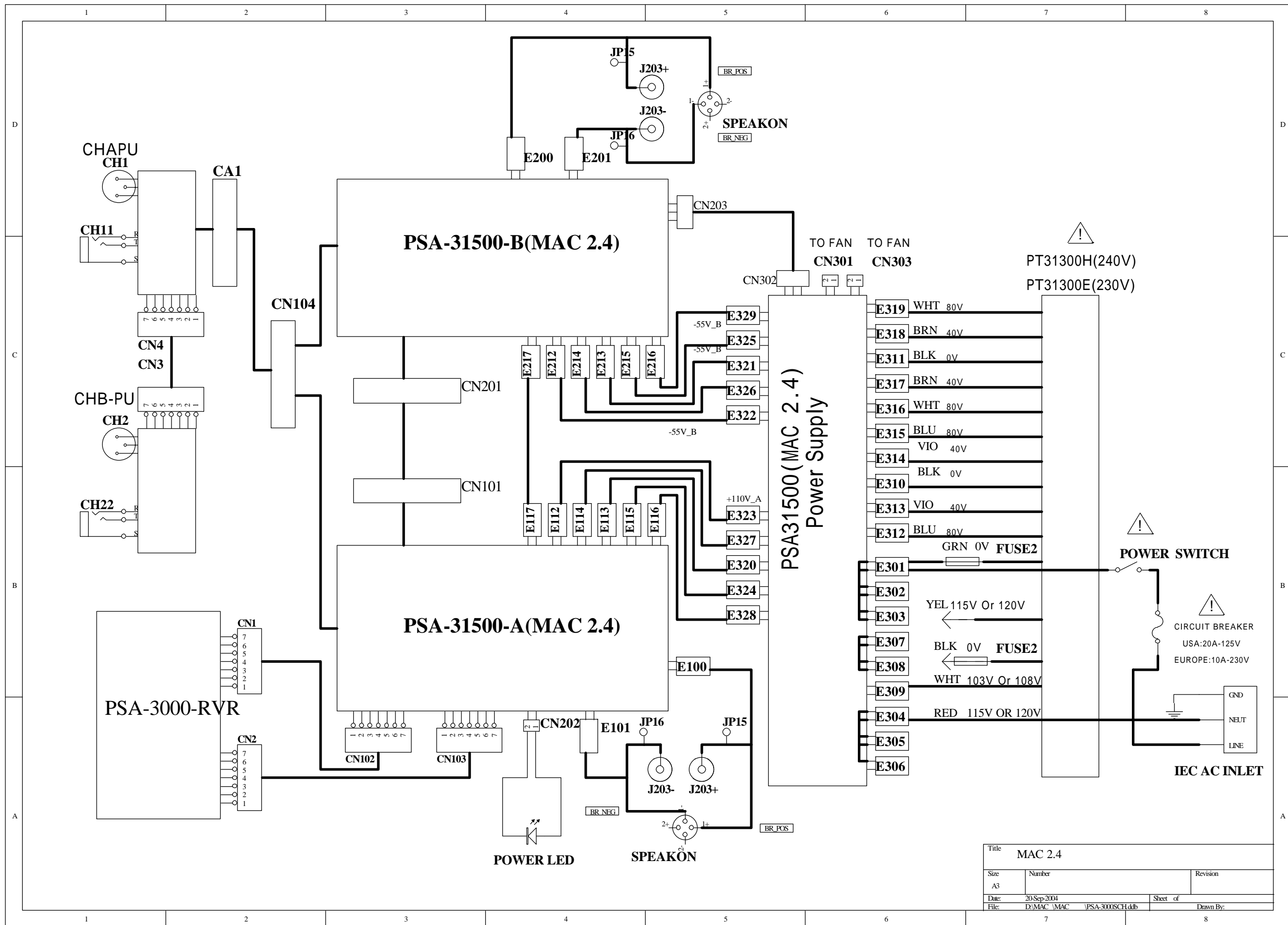
5. Wiring Diagram



Title			MAC 2.2		
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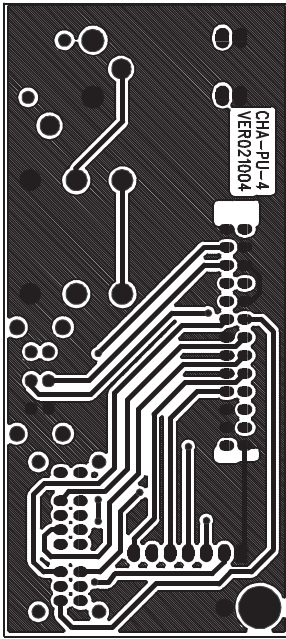
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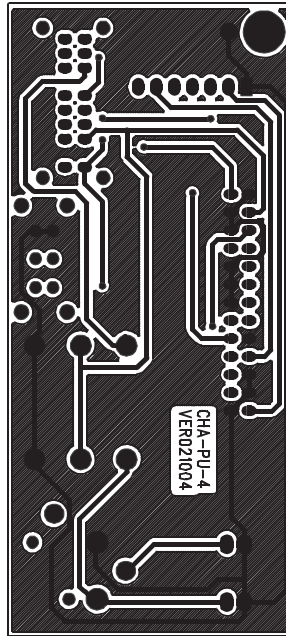
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Size	Number	Revision			
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6. PCB Layout

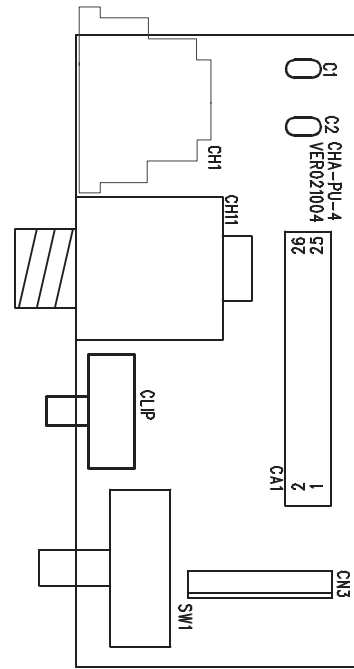
PCB-CHA-PU-4



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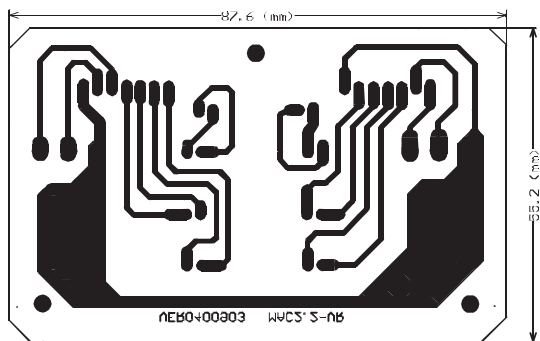


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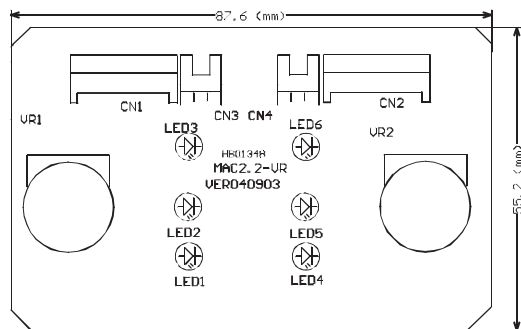


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PCB-MAC2.2-VR

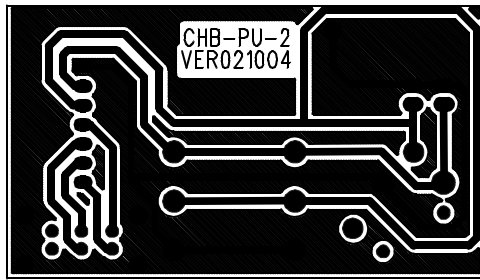


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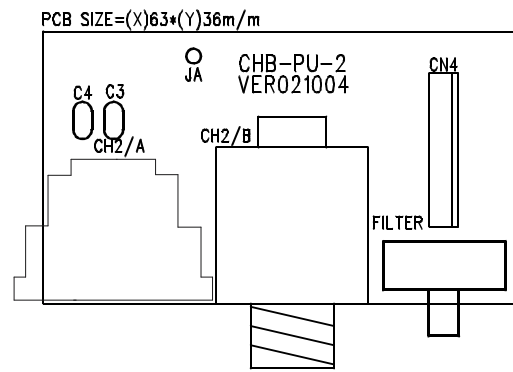


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PCB-CHB-PU-2



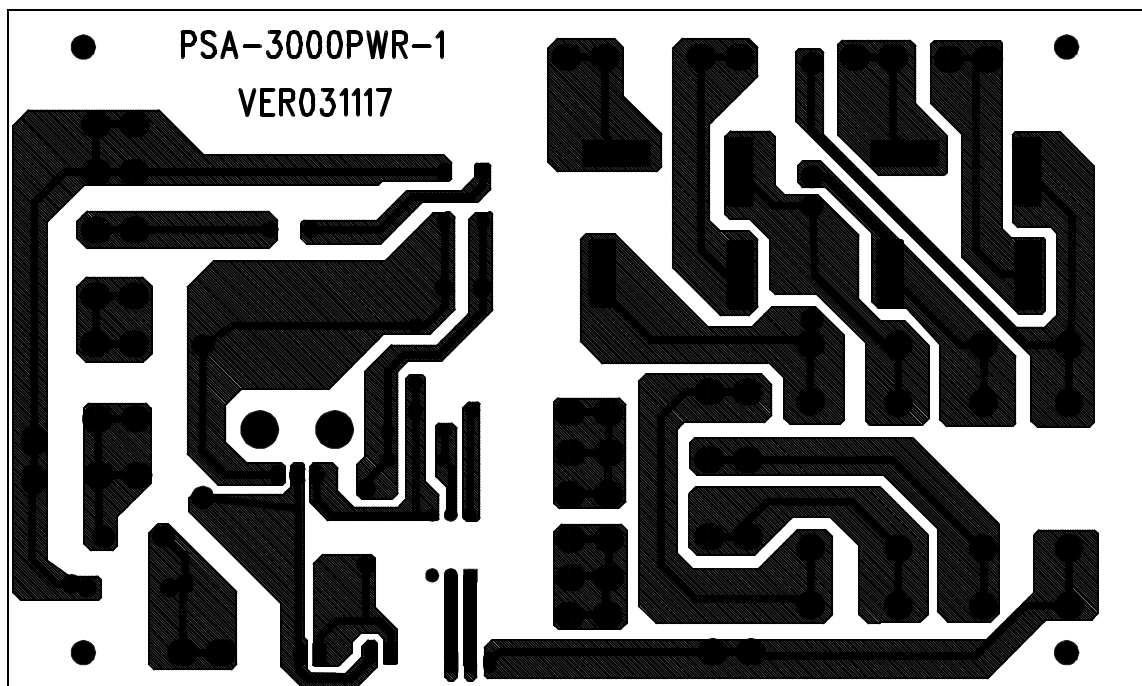
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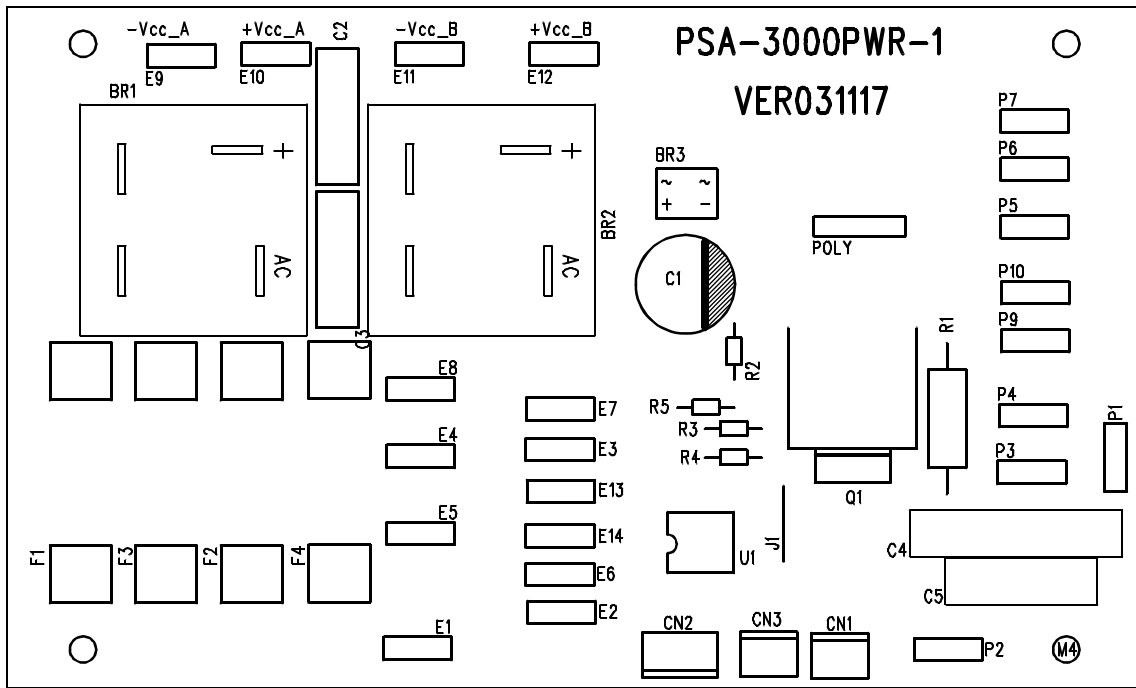
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MAC2.2/2.3

PCB-PSA-3000PWE-1

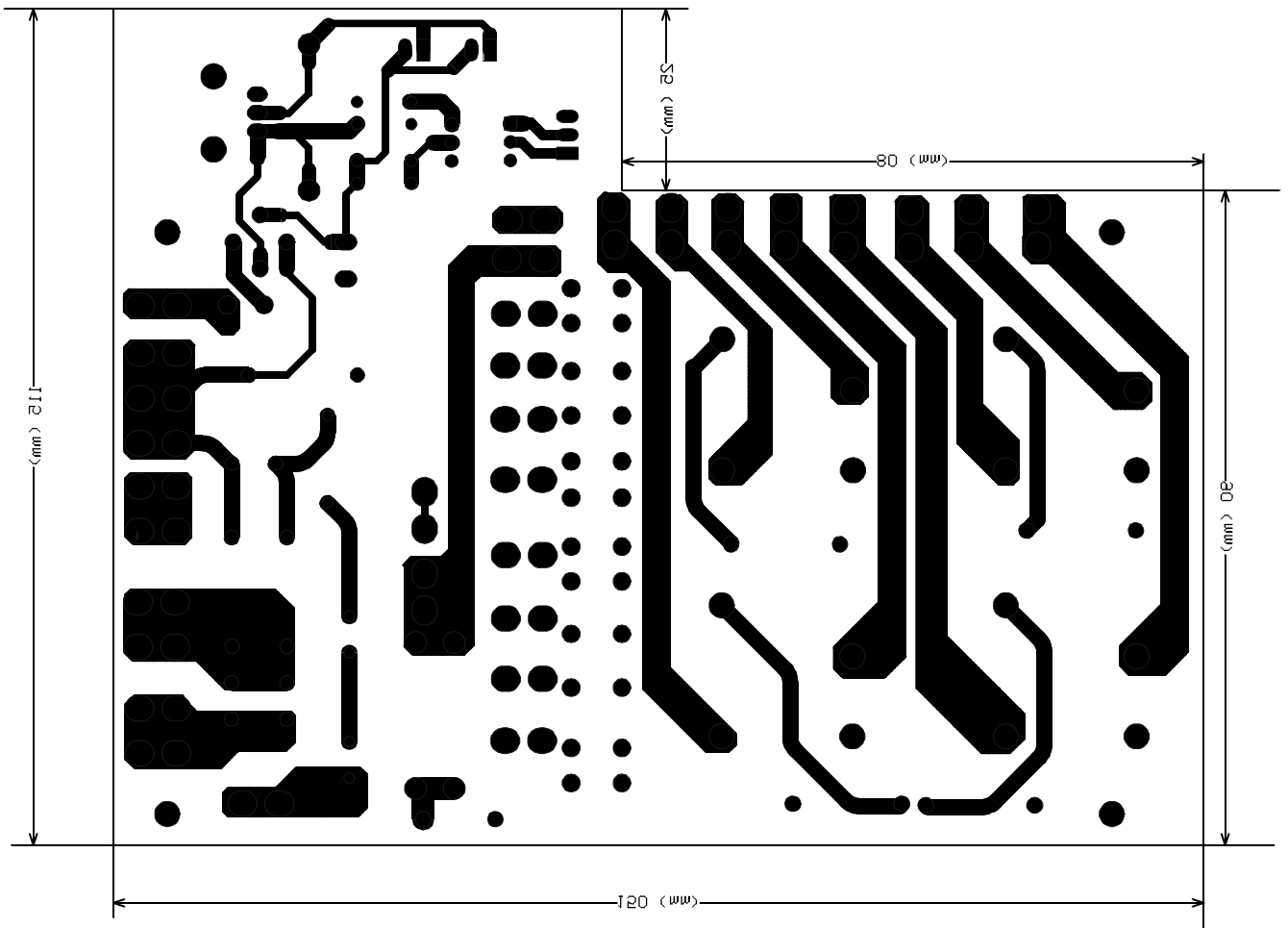


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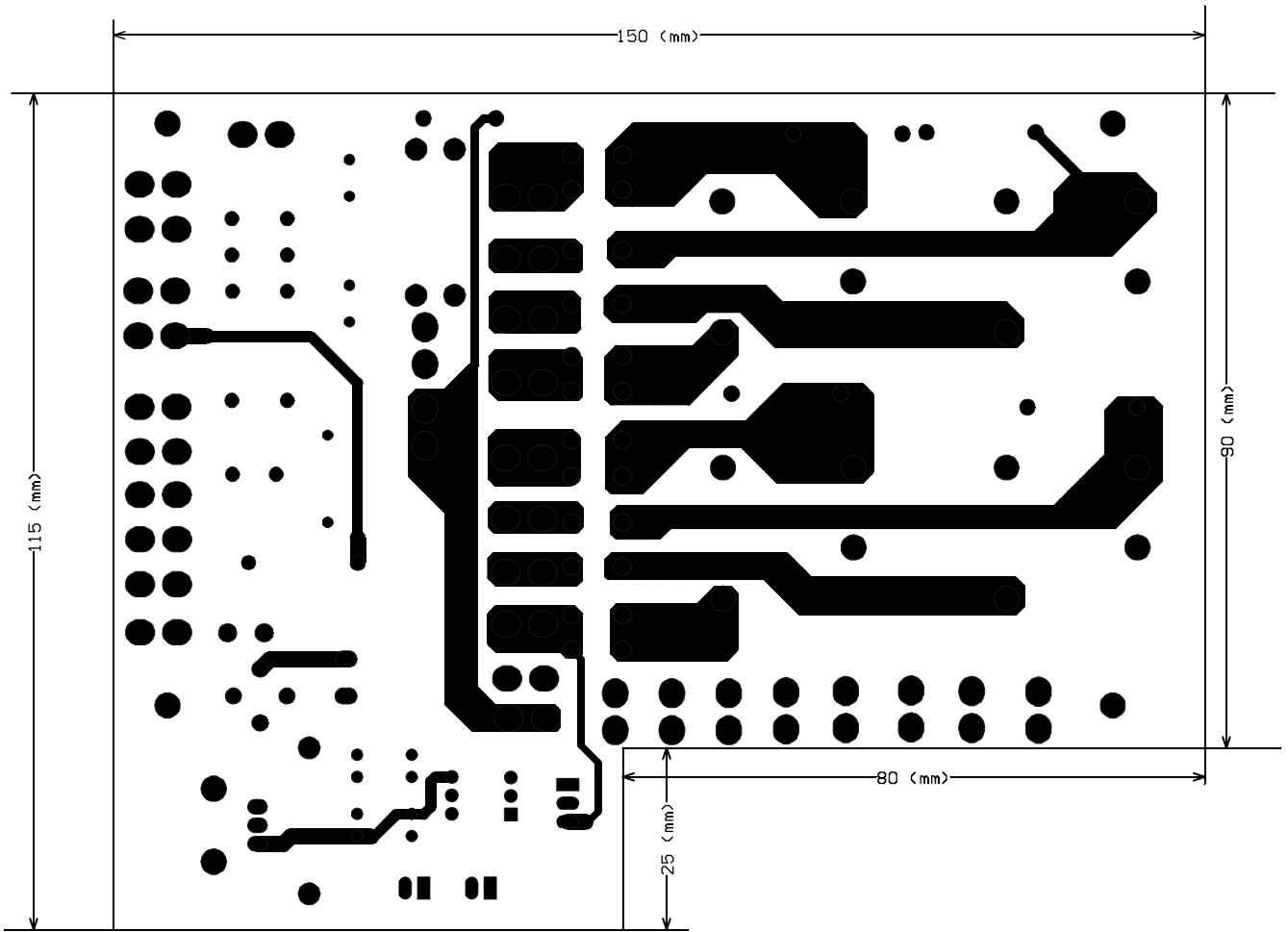


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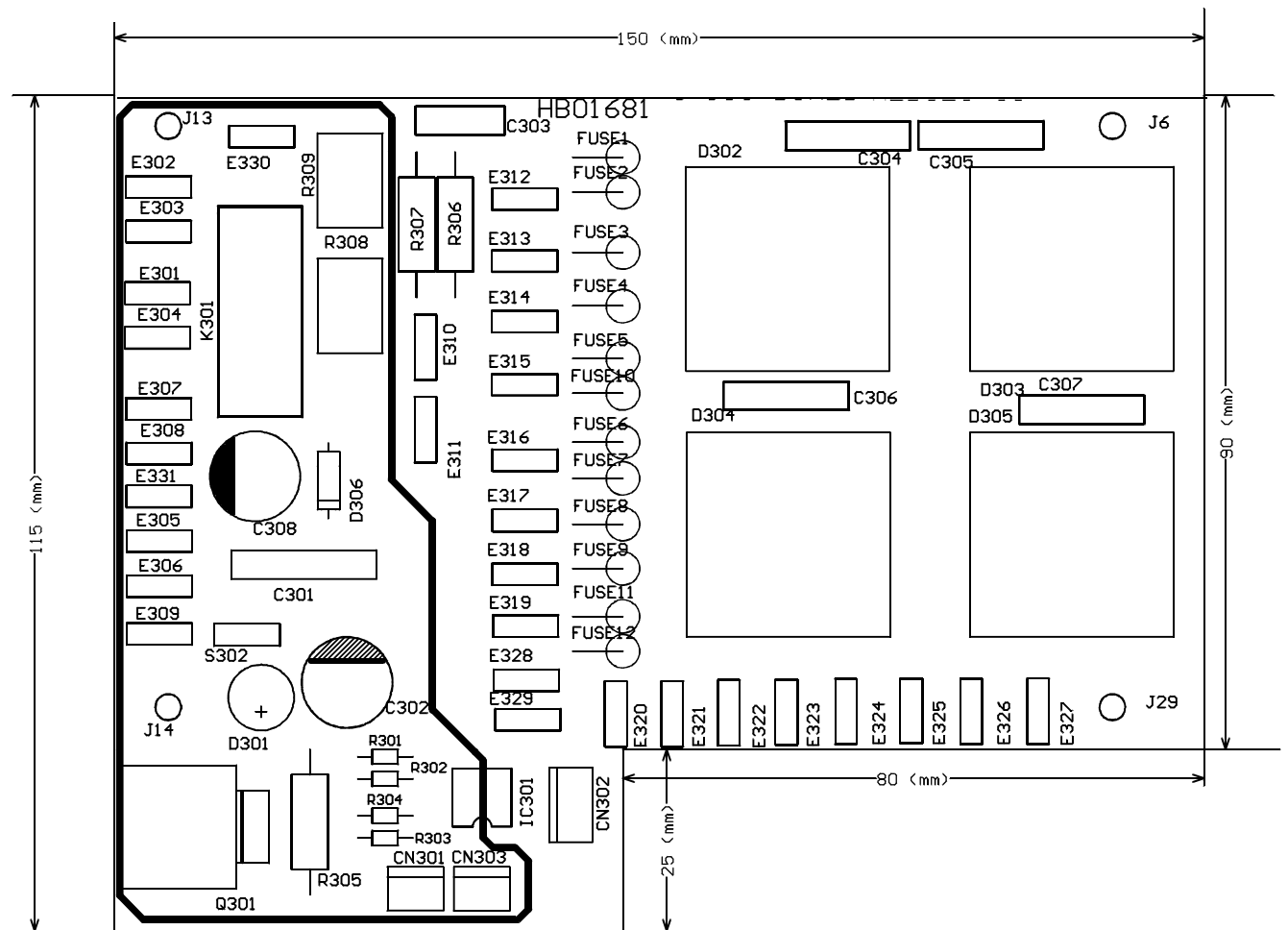
MAC2.4 □
PCB-POWER



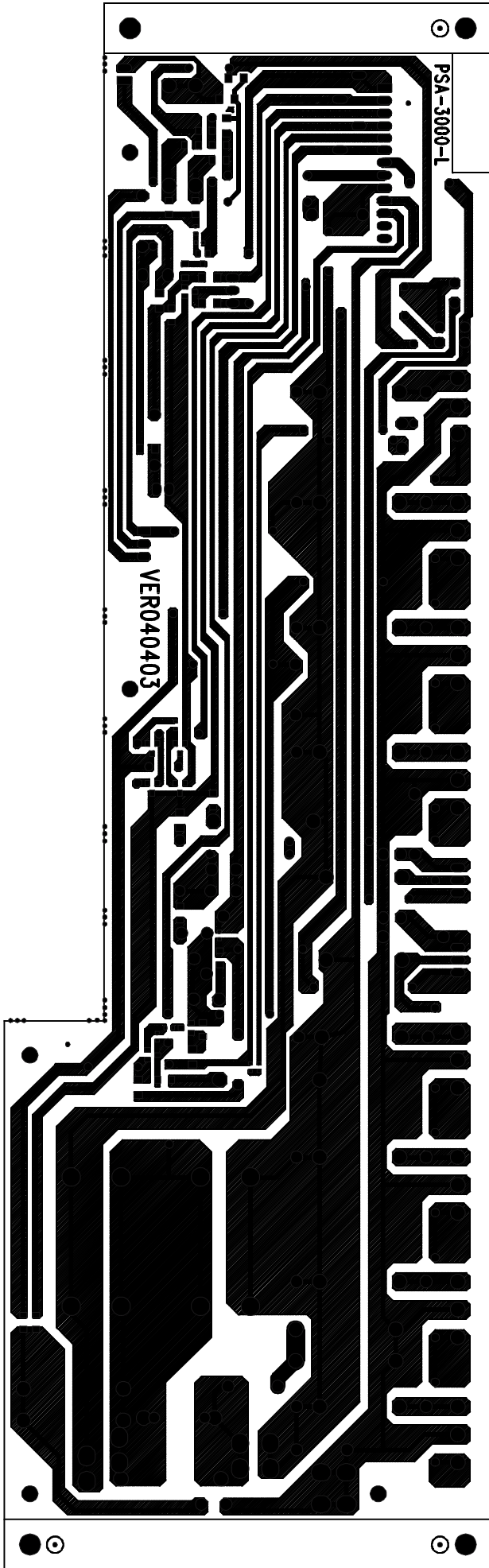
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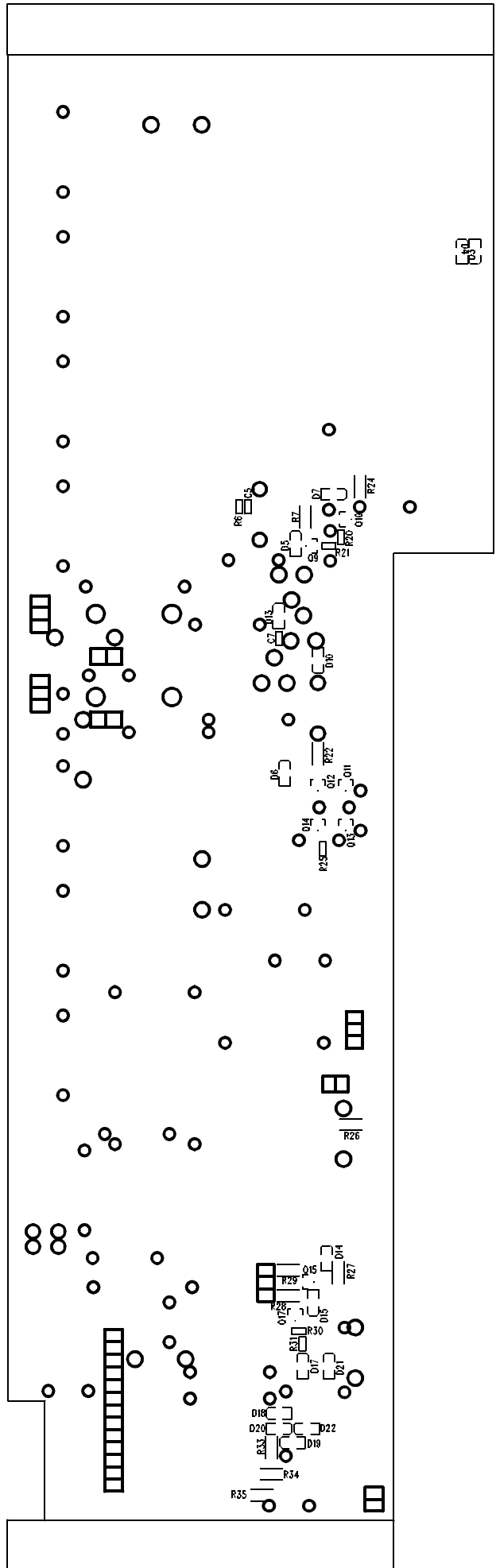
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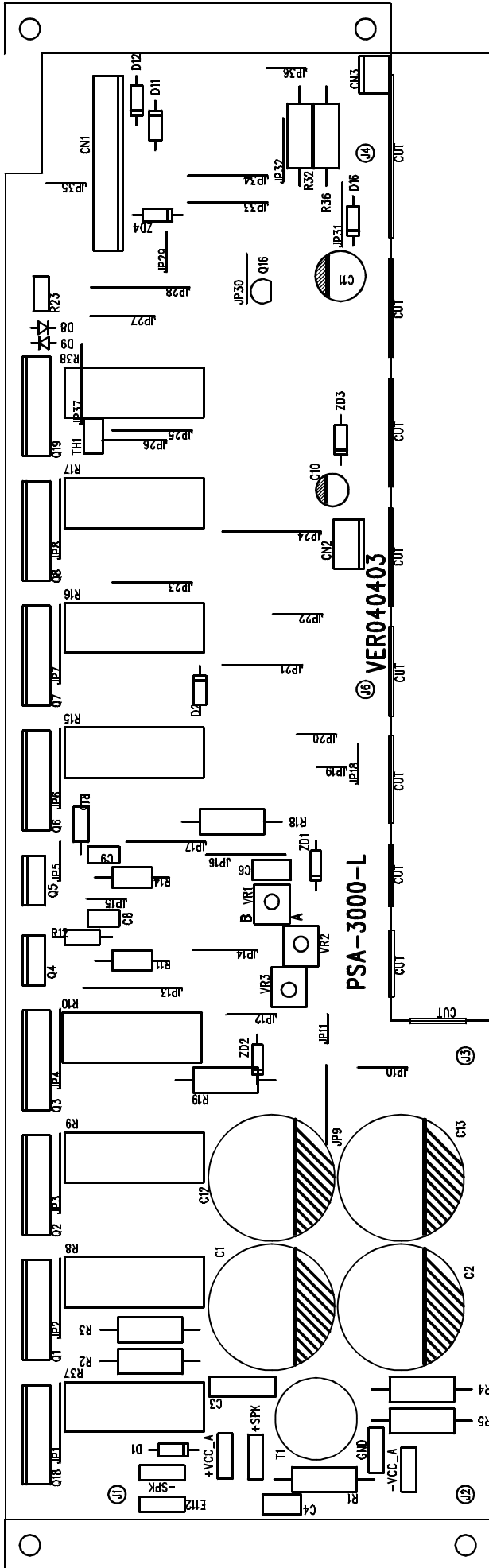
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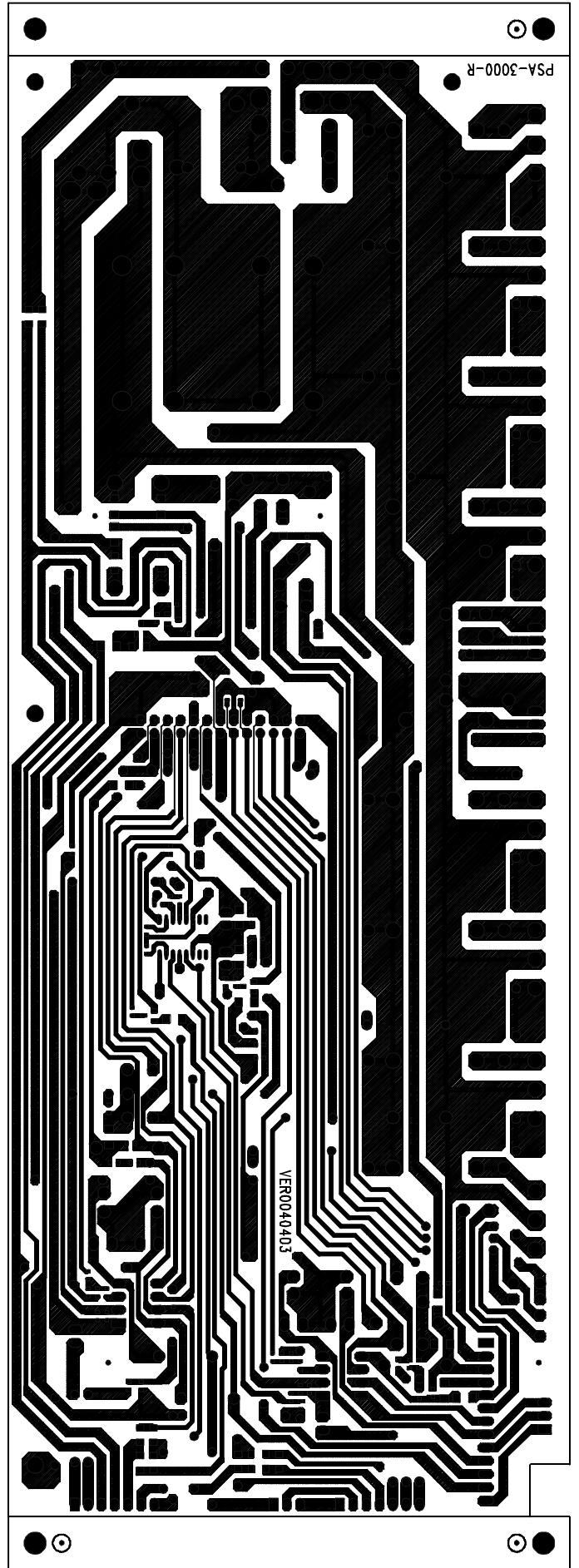
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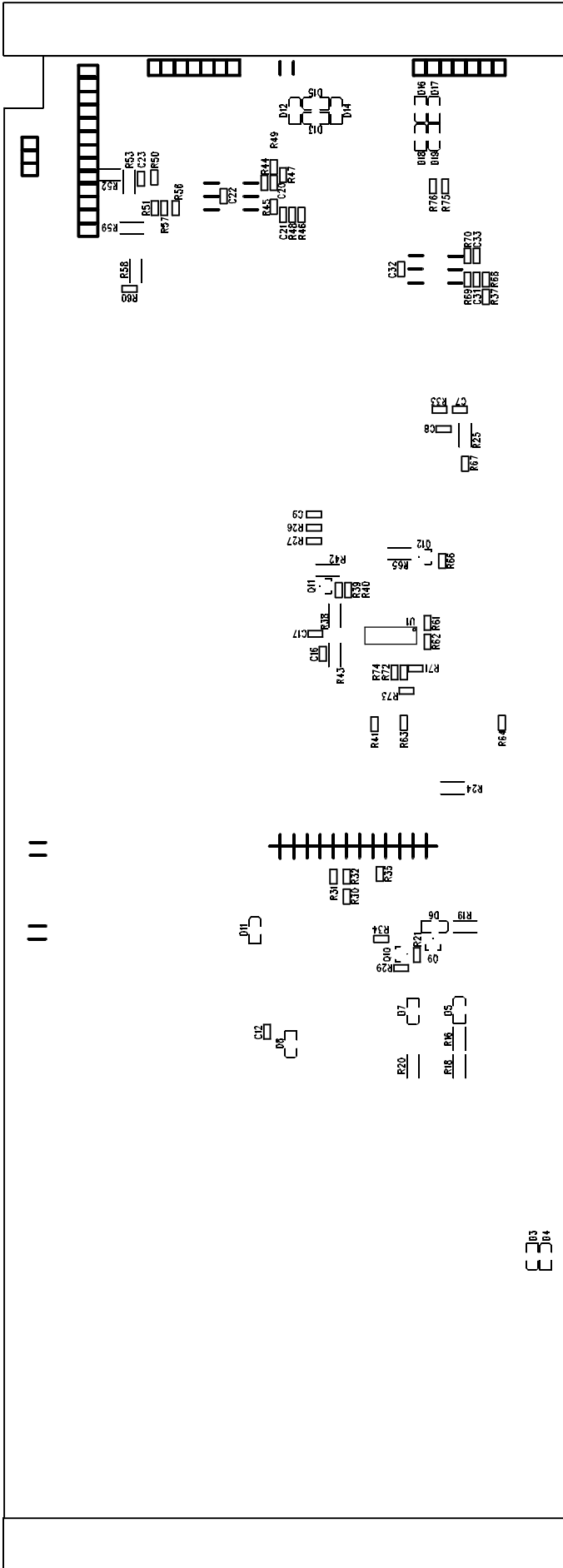
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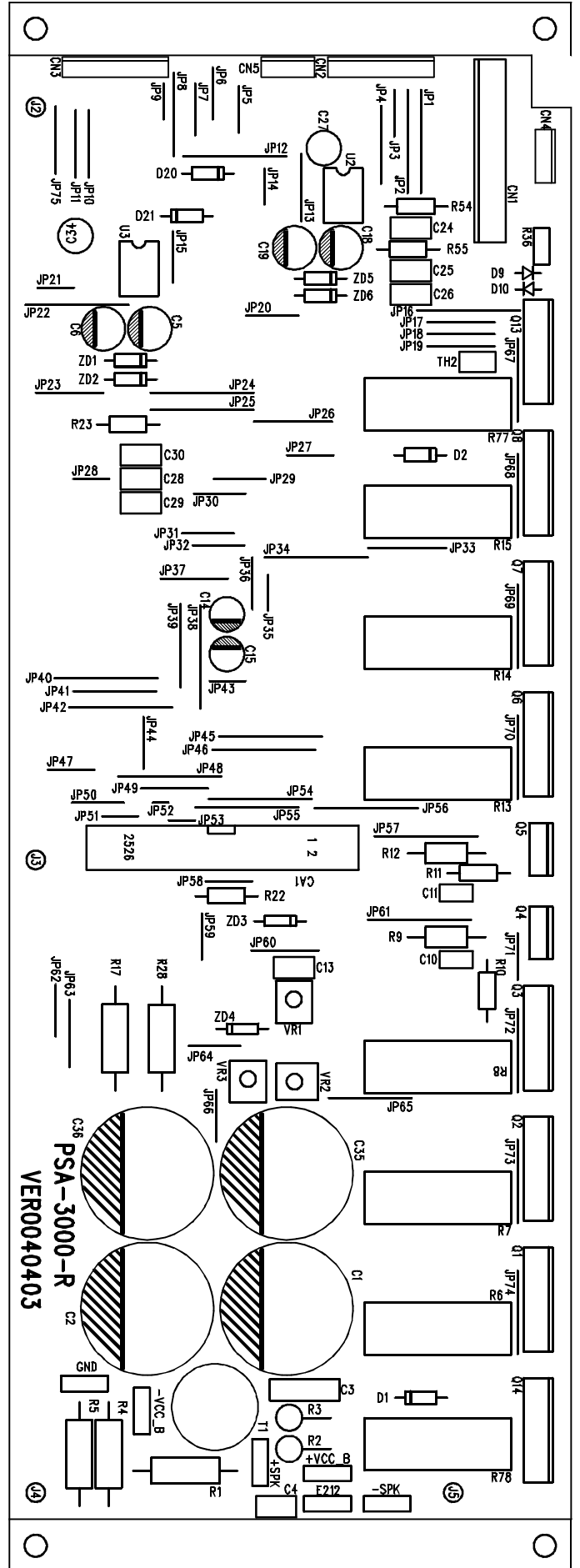
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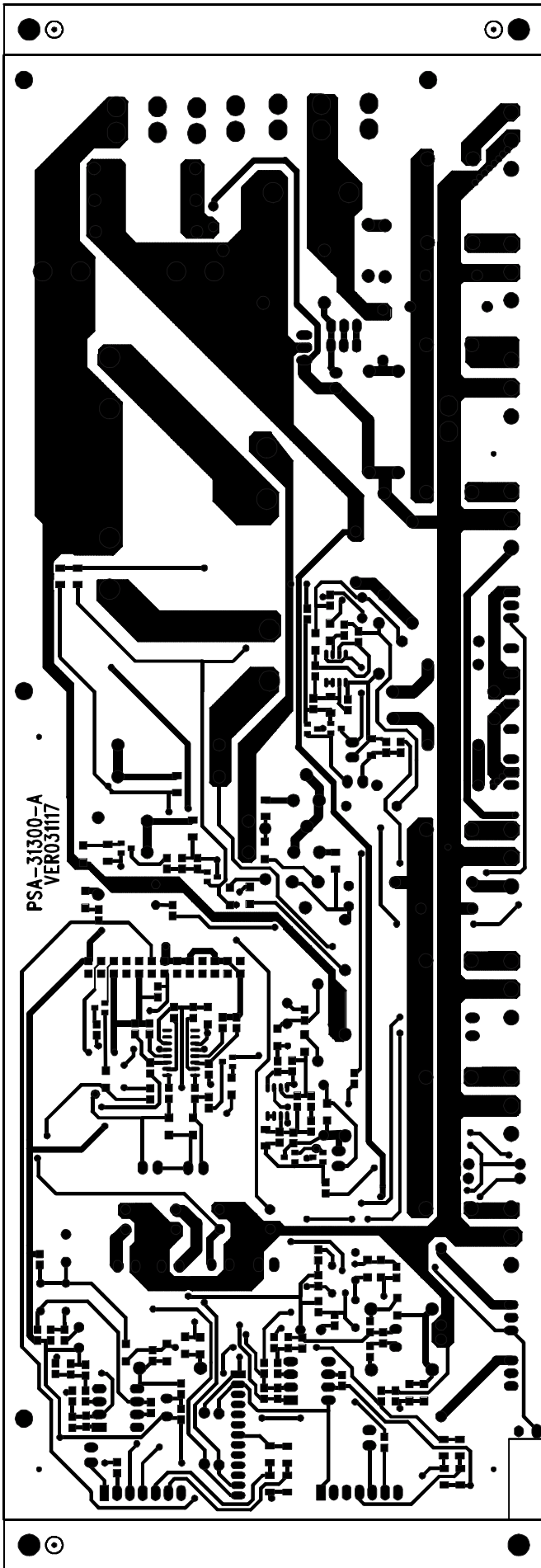
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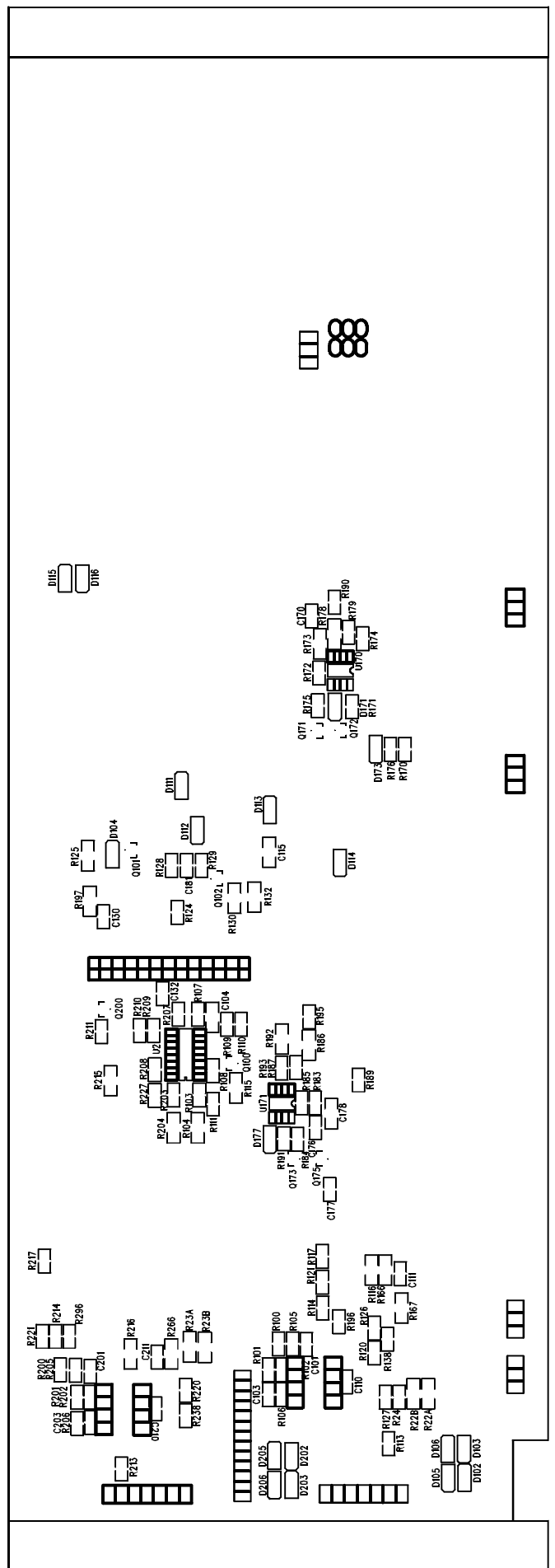
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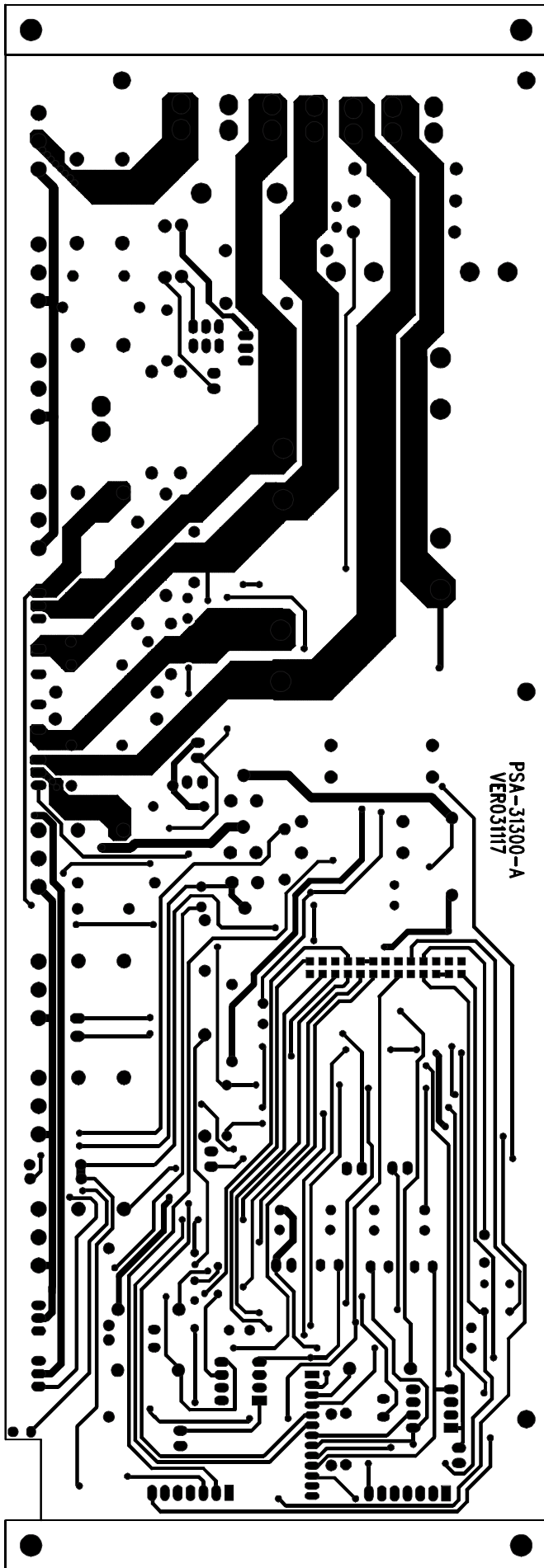
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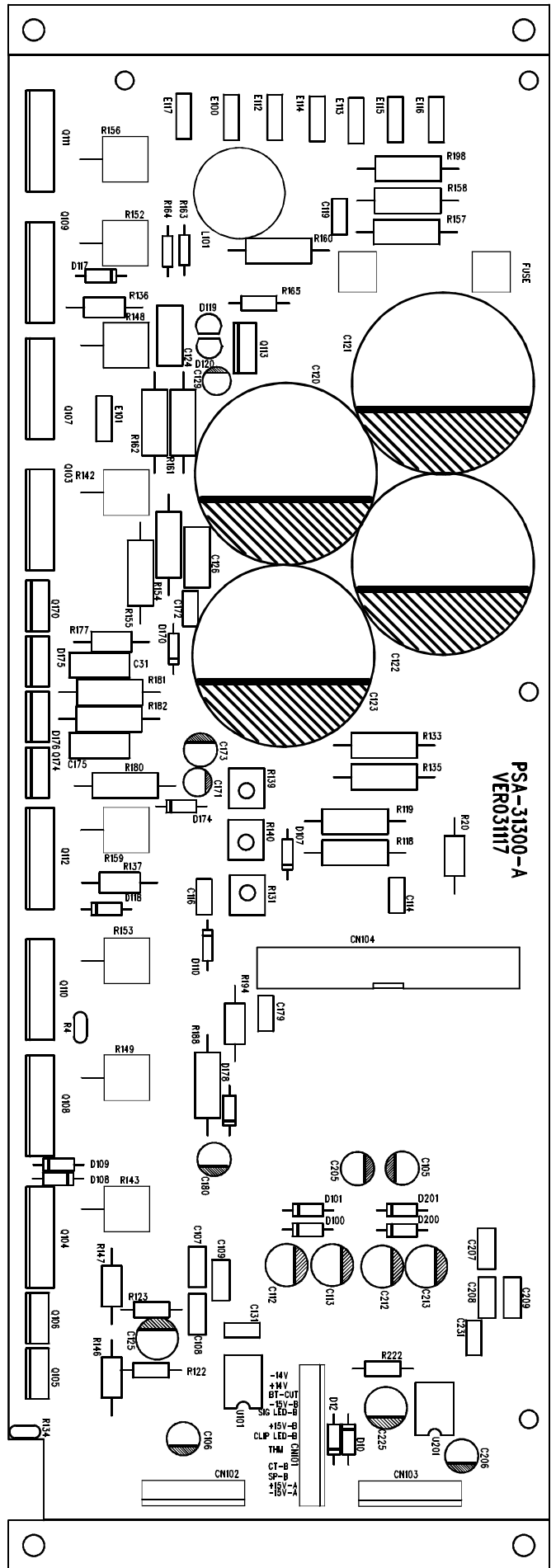
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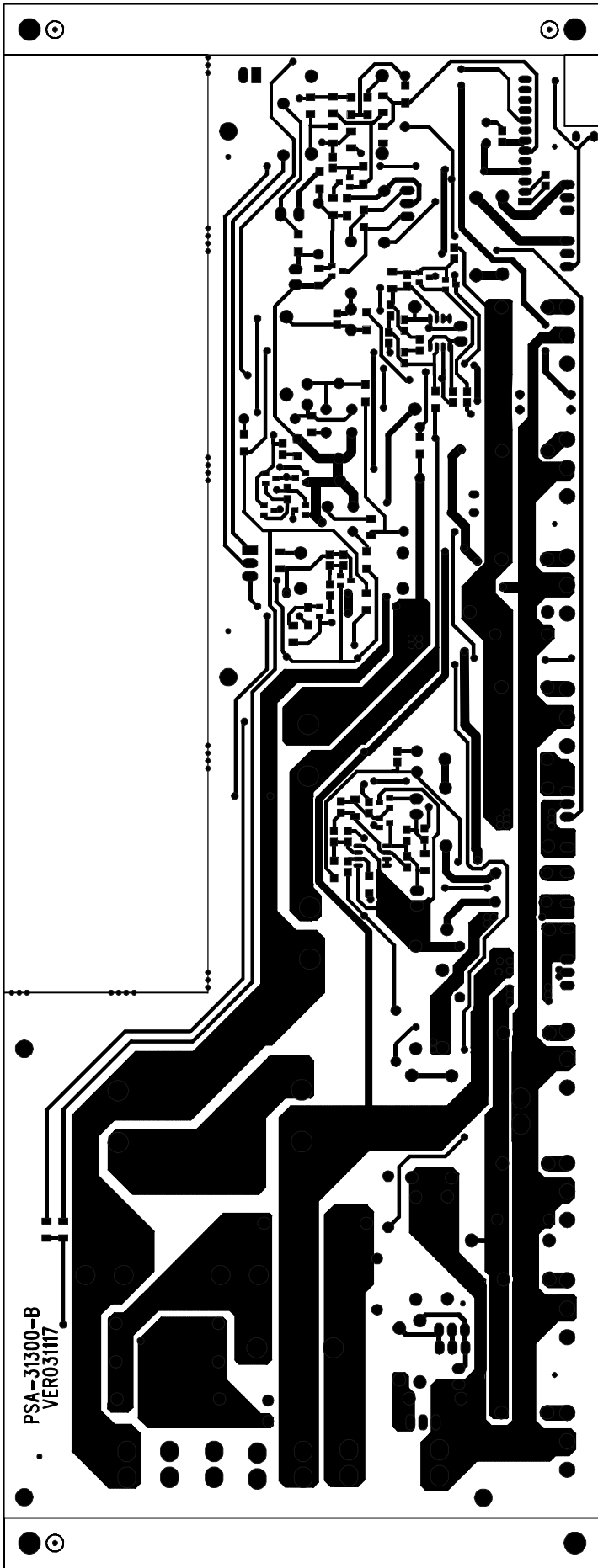
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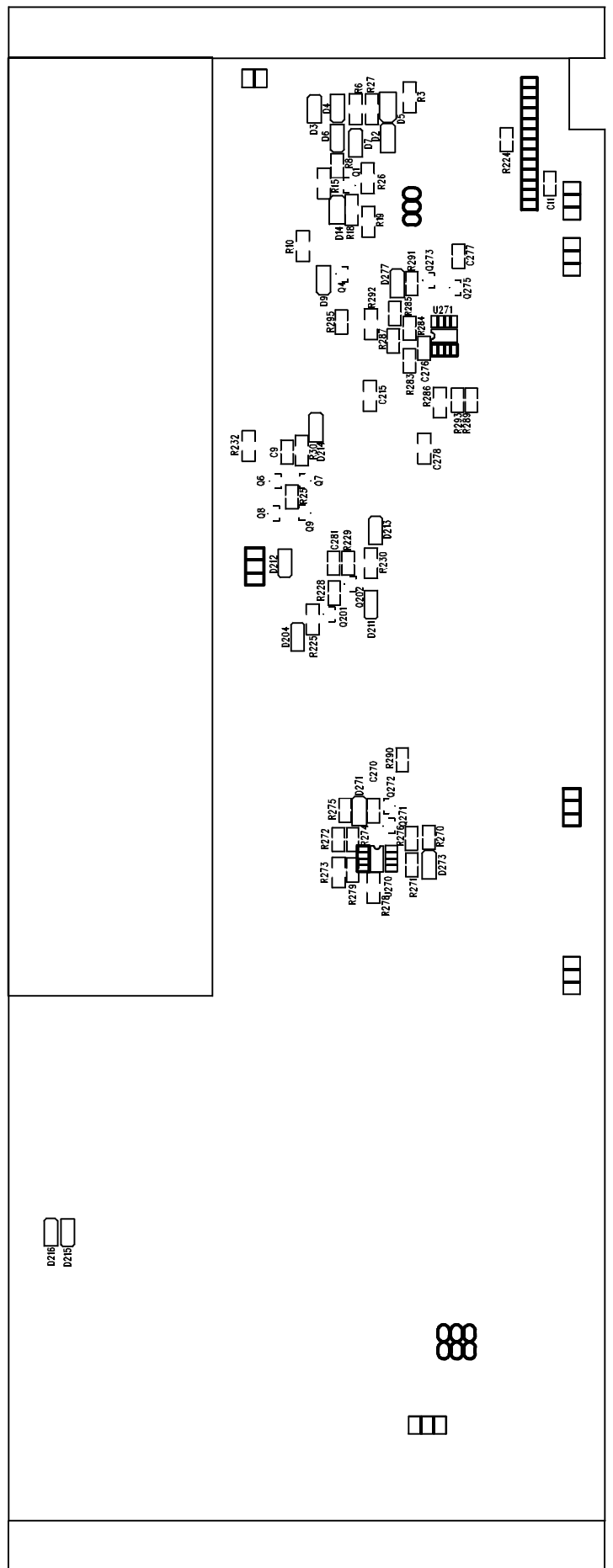
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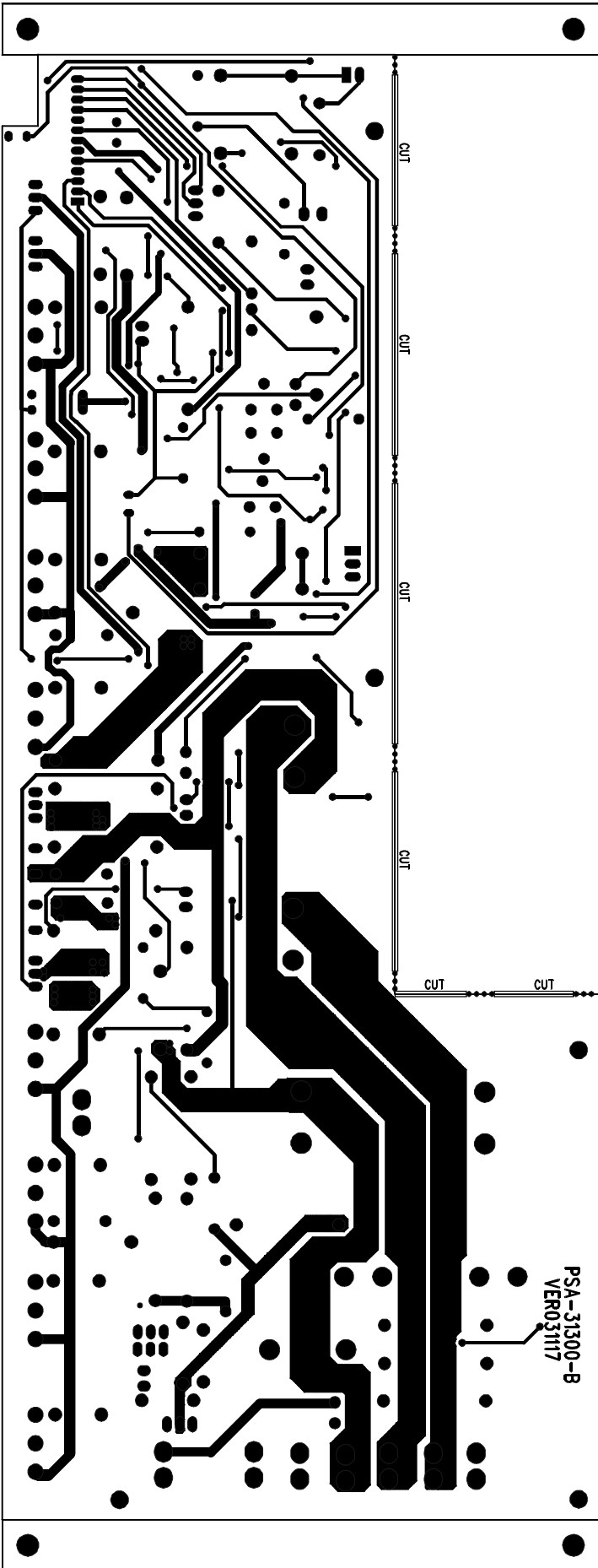
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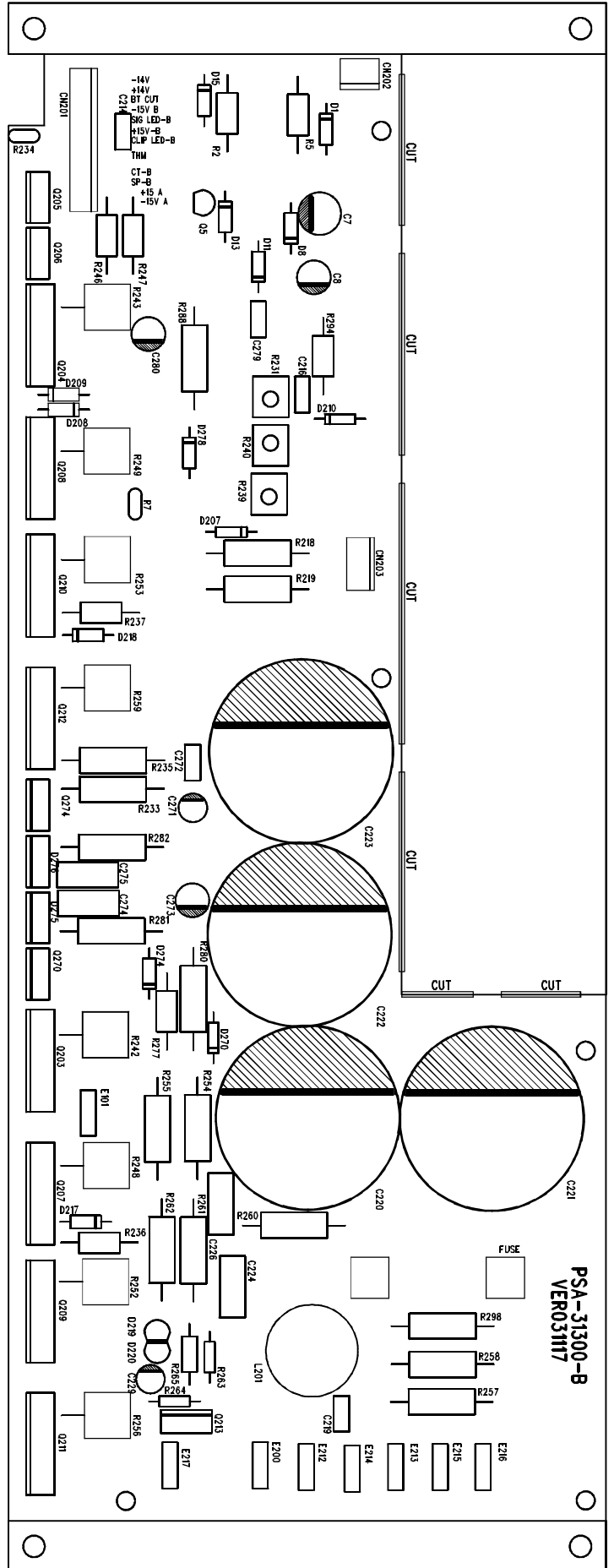
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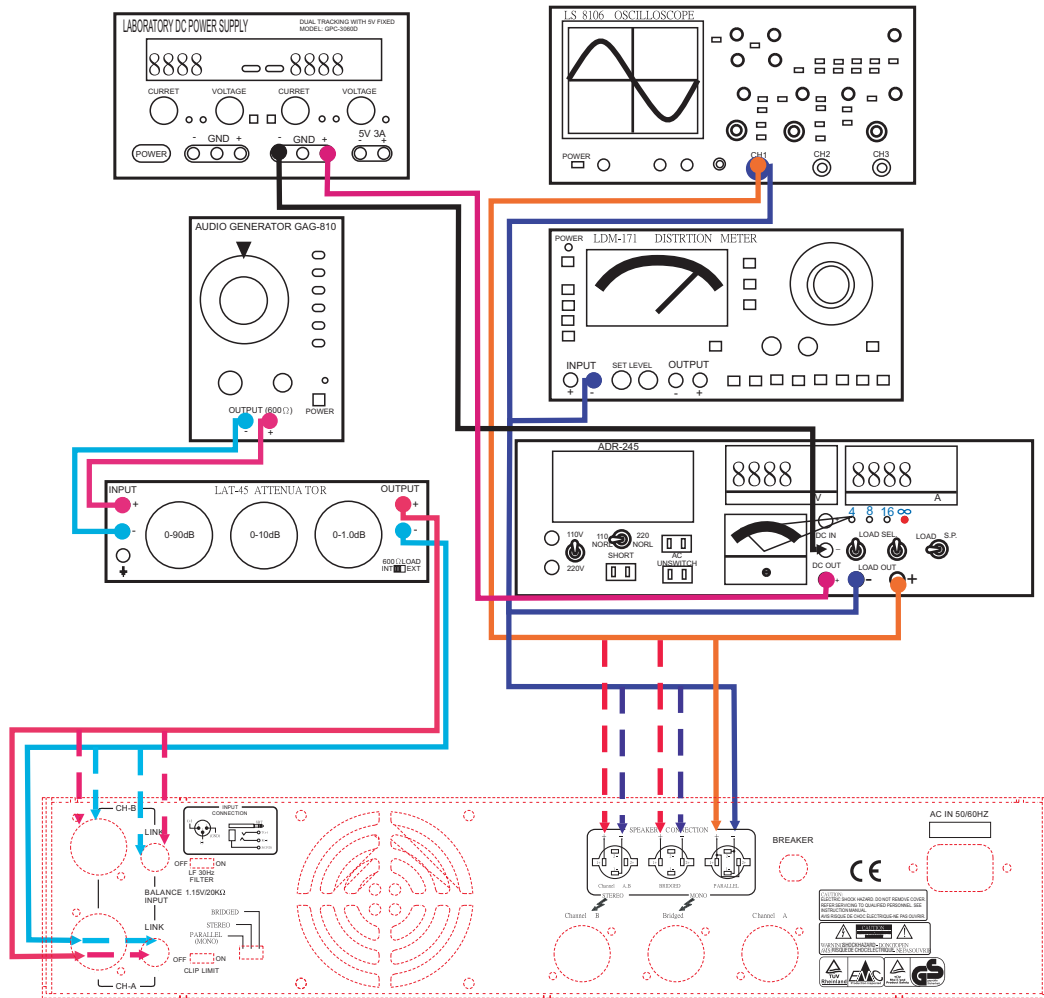


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Top overlay

7. Test Procedure and Test Result



Test Product

7.1. Stereo mode

- 7.1.1 Input 1KHz signal , load 4 Ohm , output voltage should be more than 32V(MAC2.2)/ 44V (MAC2.3)/ 55V(MAC2.4) , (CH -A &CH-B)
- 7.1.2 Set the SW on the rear panel to the STEREO position .
- 7.1.3 Turn on the unit, the SIG and CLIP-LED should be light off when whitout signal input . The SIG LED will light on when input signal. If the CLIP-LED lights on when the output level is too high
- 7.1.4 Bandwidth, distortion, S/N ratio, please refer to the specification .
- 7.1.5 Input 1KHz signal , turn on the CLIP-LIMIT SW, the output is not increase when the input signal level increases gradually .
- 7.1.6 Input 30Hz sine wave, output power is 1W. After turns on Flitter ,the out put will attenuate 9 ± 1.5 dB .

7.2. Paralle mode

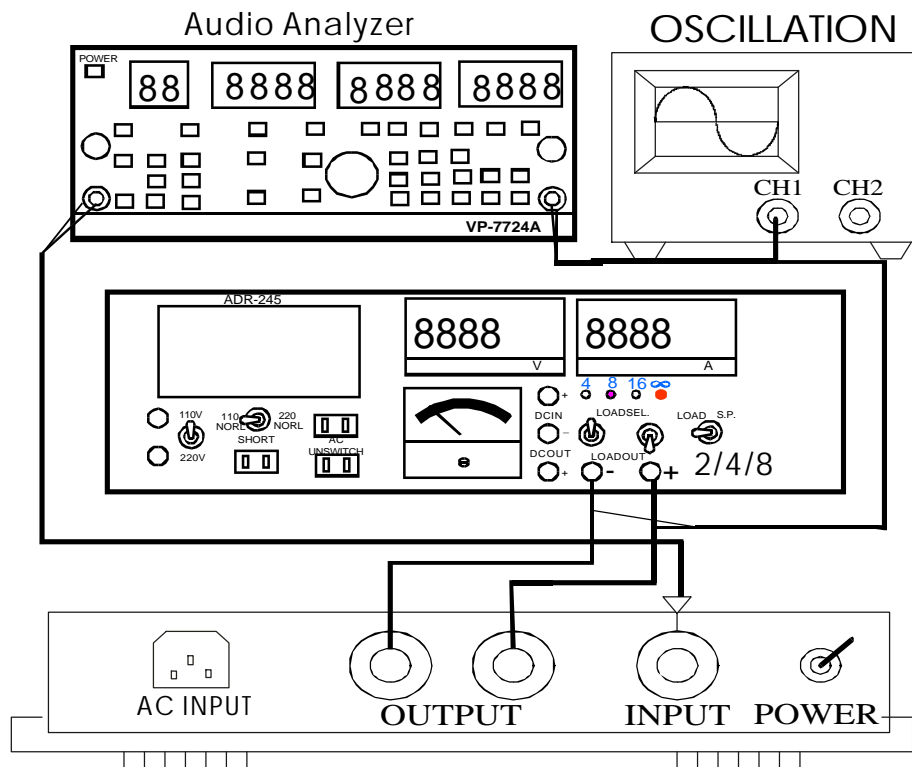
- 7.2.1 Set the SW to PAPPALLEL position, input signals from CHA; CHA,B have the output signal.

7.3. Bridged mode

- 7.3.1 Set the SW to bridged position ,input signal from CHA, the output should be more than 60V(MAC2.2) / 80V(MAC2.3) / 105V(MAC2.4).

PCB test procedure (MAC2.2/2.3)

Wiring Diagram



7.2. PCB test procedure & specification

instrument: (1) audio analysis 7724 (2) oscillograph (3) two loads 4 (4) power source (5) DMM.

7.2.1: Without the signal input, adjust VR1, to make DC voltage of R11(3000-R PCB) and R13 (3000-L PCB) by $0.16 \pm 0.01V$ (MAC2.2/2.3).

7.2.2: Input sine wave 1KHz 3dB to CH-A and CH-B, the output of each channel should be 36V larger(MAC2.2) 42V larger (MAC2.3), distortion less than 0.1%.

7.2.3: Input sine wave 1KHz 3dB, and then connect separately with 2 load. Adjust R2 & R3(PSA-3000-R) /R2 & R3(PSA-3000-L) to make the output $29.2 \pm 0.2V$ (MAC2.2), $37.5 \pm 0.2V$ (MAC2.3).

7.2.4: After heating P.T.C. on the heat sink for 10 seconds, the fan should work quicker. Heat P.T.C. about 5 seconds more again, then the signal should be cut off automatically. (CHA, CHB)

7.2.5: Set the switch to PARALLEL, input signals from CHA, output should be from CHB .

7.2.6: Set the switch to BRIDGE. Input signals from CHA. BRIDGE output should be more than $68V$ (MAC2.2) $84V$ (MAC2.3) .

7.2.7: Turn on the filter, then input 30Hz sine wave , output should attenuate $8.5 \pm 1dB$ (CHA, CHB)

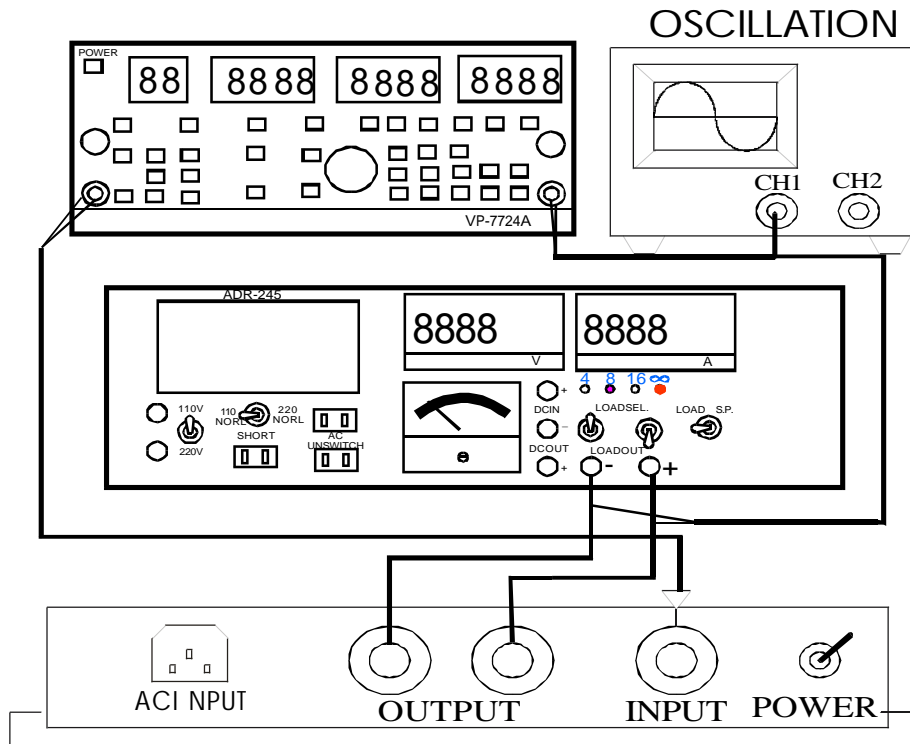
7.2.8: Turn on the LIMIT, increase input signal to +6dB gradually, output distortion should be limited less than 2%. (CHA, CHB)

7.2.9 Set the volume to minimum. Make the output terminal short-circuit. When set the volume to maximum, the power consumption should be less than 400W.(CHA, CHB)

Note: When PSA-3000-R is tested, do all the items above. When PSA-3000-L is tested, it is unnecessary to do item 5.

PCB test procedrue (MAC2.4)

Wiring Diagram



7.3. PCB test procedure and specification

Refer to instrument (1) audio analysis 7724 (2) oscillograph (3) two load 4 (4) power source (5) DMM.

7.3.1 Without the signal input, to make DC voltage of R131 (MAC2.4-A)/R131 (MAC2.4) & R146 (MAC2.4-A), R246(MAC2.4-B) by $0.09 \pm 0.01V$.

7.3.2 Input signal of 1KHz 2dB to CH-A & CH-B, each output is more than 55V and the distortion less than 0.1%. (Stereo)

7.3.3 Input sine wave 1KHz 2dB, and then connect separately with 2 of load. Adjust the output of R139/R140(MAC2.4-A) (MAC2.4-B) between $49.2 \pm 0.2V$.

7.3.4 After heating the P.T.C. on the heat sink with a heat gun for 10 seconds. The fan should work more quickly. Heat P.T.C. about 5 seconds more again, then the signal should be cut off automatically. (CHA, CHB)

7.3.5 Set the switch to PARALLEL, input signals from CHA, output should be from CHB

7.3.6 Set the switch to BRIDGE. Input signals from CHA. BRIDGE output should be more than 100V (8).

7.3.7 Turn on the filter, then input 30Hz sine wave , output should attenuate $8.5 \pm 1dB$. (CHA, CHB)

7.3.8 Turn on the LIMIT, input signal +6dB more, output distortion should be limited less than 3%. (CHA, CHB)

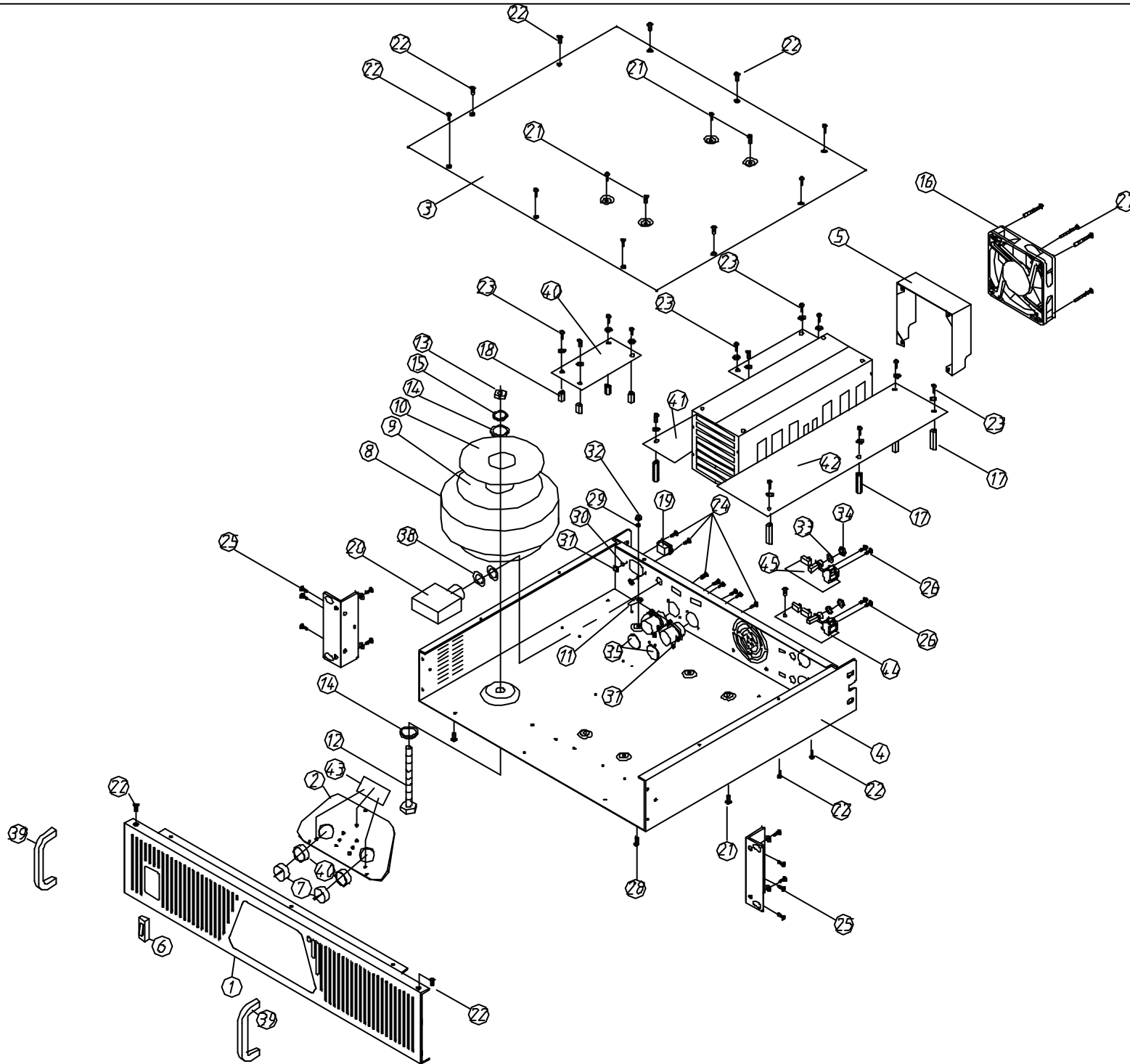
7.3.9 Without the signal input, test any one of R143 & R142, the voltage should be less than 60V(CHA); R243&R242, the voltage less than 60V (CHB).

7.3.10 Set the volumes to minimum, set the output terminal of short circuit. When set the volume to maximum, the power consumption should be less than 600W. (CHA, CHB)

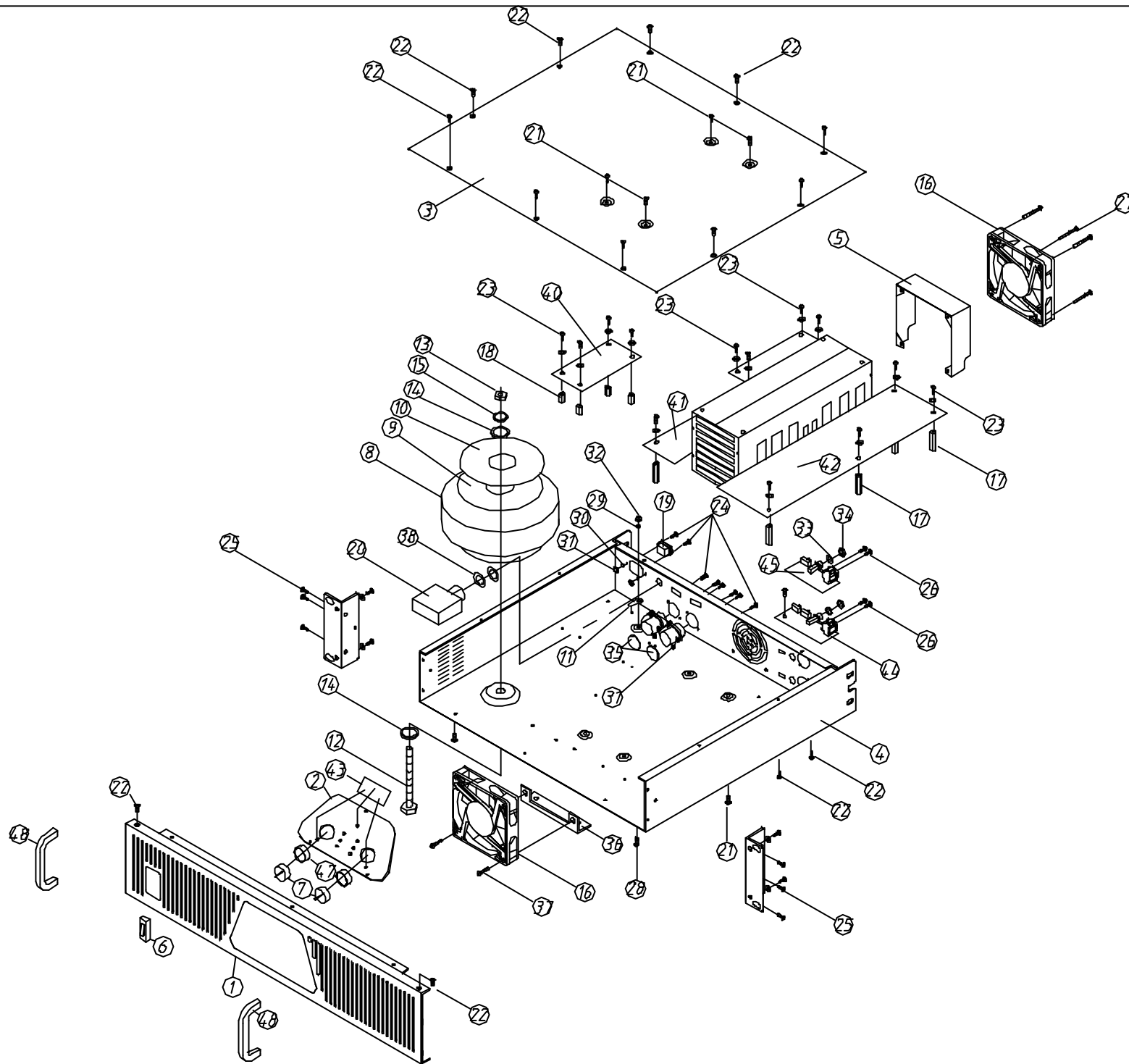
Note: When MAC2.4-A is tested, do all the items above. When MAC2.4-B is tested, it is unnecessary to do item 5.

8. Exploded Views & Mechanical Parts List

SEKAKU



機種: MAC 2.2 2.3
圖號: MAC 2.2-00
日期: 20040914



機種: MAC 2.4
圖號: MAC 2.3-00
日期: 20040911

MAC2.2

No.	Part No.	Description	Specification	Qty
1	MA05423	panel	MAC II-V1.1	1
2	MA05420	panel	NAC2.2 ALTO	1
3	MC00631	Top	MAC II-V1.1	1
4	MB03687	chassis	MAC II-V1.1	1
5	MI00397	ZB- Zn	PSA-3000	1
6	HI00031	Power switch	R415KKETOF	1
7	NI02650	Plastic knob	18*18mm	2
8	TD00038	transformer	PT-3530E	1
9	NI00440	rubber	20* 105*2tB	2
10	MH00766	Iron pill	11* 90*2	1
11	MJ00344	Solder	AMP use GND-3	2
12	MG00220	screw	M8*78	1
13	ME00026	screw	M8	1
14	MF00026	Color washer	8* 18*1.5t	2
15	MF00041	washer	8* 13.5*2t	1
16	HE00007	Fan-AD0812US	DC12V/0.3A 80*80*2	1
17	MG00283	copper	M3*22*0.5PH	9
18	MG00244	copper	M3*10*0.5PH	4
19	HC00005	AC jack	AC-008	1
20	HI00143	switch	A0701HM-8A	1
21	HC00442	Speak jack	NL4MP	2
22	MG00020	screw	M3*8	8
23	MG00025	screw	M3*6	33
24	MG00161	screw	M3*6	16
25	MG00042	screw	M3*10	8
26	MG00044	screw	M4*10	6
27	MG00061	screw	M3*10	4
28	MG00067	screw	M4*35	4
29	MG00117	Color screw	M4*10	1
30	MF00048	washer	4* 8*0.5t	1
31	MF00037	washer	3* 5*1t	9
32	ME00015	Color nut	3mm	9
33	MC00016	Color nut	4mm	9
34	NC00131	washer	1* 11.3* 15.3	2
35	NI00002	Plastic nut	7/16"*G2	2
36	HB00009	PCB	SPOUT(23)	2
37	NC00059	Fixed board	1*46*46(sax-2000)	1
38	NI00389	Plastic washer	12* 16*0.5	2
39	MI02334	handle	MAC	2
40	NI02651	knob	10* 22.5	2
41	HK00217	PCB	P-PSA-3000PWR-2	1
42	HK00211	PCB	P-PSA-3000-R-DIP	1
43	HK00209	PCB	P-PSA-3000-L-DIP	1
44	HK04485	PCB	P-MAC2.2-VR	1
45	HK03058	PCB	P-CHA-PU-5	1
46	HK03056	PCB	P-CHB-PU-2	1

MAC2.3

No.	Part No.	Description	Specification	Qty
1	MA05423	panel	MAC II-V1.1	1
2	MA05421	panel	NAC2.2 ALTO	1
3	MC00631	Top	MAC II-V1.1	1
4	MB03687	chassis	MAC II-V1.1	1
5	MI00397	ZB- Zn	PSA-3000	1
6	HI00031	Power switch	R415KKETOF	1
7	NI02650	Plastic knob	18*18mm	2
8	TD00042	transformer	PT-3530E	1
9	NI00437	rubber	20* 105*2tB	2
10	MH00766	Iron pill	11* 90*2	1
11	MJ00344	Solder	AMP use GND-3	2
12	MG00220	screw	M8*78	1
13	ME00026	screw	M8	1
14	MF00026	Color washer	8* 18*1.5t	2
15	MF00041	washer	8* 13.5*2t	1
16	HE00007	Fan-AD0812US	DC12V/0.3A 80*80*2	1
17	MG00283	copper	M3*22*0.5PH	9
18	MG00244	copper	M3*10*0.5PH	4
19	HC00005	AC jack	AC-008	1
20	HI00143	switch	A0701HM-8A	1
21	HC00442	Speak jack	NL4MP	2
22	MG00020	screw	M3*8	8
23	MG00025	screw	M3*6	33
24	MG00161	screw	M3*6	16
25	MG00042	screw	M3*10	8
26	MG00044	screw	M4*10	6
27	MG00061	screw	M3*10	4
28	MG00067	screw	M4*35	4
29	MG00117	Color screw	M4*10	1
30	MF00048	washer	4* 8*0.5t	1
31	MF00037	washer	3* 5*1t	9
32	ME00015	Color nut	3mm	9
33	MC00016	Color nut	4mm	9
34	NC00131	washer	1* 11.3* 15.3	2
35	NI00002	Plastic nut	7/16"*G2	2
36	HB00009	PCB	SPOUT(23)	2
37	MI00427	Fixed board	1*46*46(sax-2000)	1
38	NI00389	Plastic washer	12* 16*0.5	2
39	MI00427	Fixed board	1*46*46(sax-2000)	1
40	HK00217	PCB	P-PSA-3000PWR-2	1
41	HK00211	PCB	P-PSA-3000-R-DIP	1
42	HK00209	PCB	P-PSA-3000-L-DIP	1
43	HK04485	PCB	P-MAC2.2-VR	1
44	HK03058	PCB	P-CHA-PU-5	1
45	HK03056	PCB	P-CHB-PU-2	1
46	NI02651	knob	10* 22.5	2
47	MI02334	handle	MAC	2

MAC2.4

No.	Part No.	Description	Specification	Qty
1	MA05423	panel	MAC II-V1.1	1
2	MA05422	panel	NAC2.2 ALTO	1
3	MC00631	Top	MAC II-V1.1	1
4	MB03687	chassis	MAC II-V1.1	1
5	MI00397	ZB- Zn	PSA-3000	1
6	HI00031	Power switch	R415KKETOF	1
7	NI02650	Plastic knob	18*18mm	2
8	TD00040	transformer	PT-3530E	1
9	NI00437	rubber	20* 105*2tB	2
10	MH00766	Iron pill	11* 90*2	1
11	MJ00344	Solder	AMP use GND-3	2
12	MG00220	screw	M8*78	1
13	ME00026	screw	M8	1
14	MF00026	Color washer	8* 18*1.5t	2
15	MF00041	washer	8* 13.5*2t	1
16	HE00007	Fan-AD0812US	DC12V/0.3A 80*80*2	1
17	MG00283	copper	M3*22*0.5PH	9
18	MG00244	copper	M3*10*0.5PH	4
19	HC00005	AC jack	AC-008	1
20	HI00143	switch	A0701HM-8A	1
21	HC00442	Speak jack	NL4MP	2
22	MG00020	screw	M3*8	8
23	MG00025	screw	M3*6	33
24	MG00161	screw	M3*6	16
25	MG00042	screw	M3*10	8
26	MG00044	screw	M4*10	6
27	MG00061	screw	M3*10	4
28	MG00067	screw	M4*35	4
29	MG00117	Color screw	M4*10	1
30	MF00048	washer	4* 8*0.5t	1
31	MF00037	washer	3* 5*1t	9
32	ME00015	Color nut	3mm	9
33	MC00016	Color nut	4mm	9
34	NC00131	washer	1* 11.3* 15.3	2
35	NI00002	Plastic nut	7/16"*G2	2
36	HB00009	PCB	SPOUT(23)	2
37	MI00427	Fixed board	1*46*46(sax-2000)	1
38	NI00389	Plastic washer	12* 16*0.5	2
39	MI00059	Fixed board	1*46*46(sax-2000)	1
40	HK00216	PCB	P-PSA-3000PWR-2	1
41	HK01378	PCB	P-PSA-3000-R-DIP	1
42	HK01379	PCB	P-PSA-3000-L-DIP	1
43	HK04485	PCB	P-MAC2.2-VR	1
44	HK03058	PCB	P-CHA-PU-5	1
45	HK03056	PCB	P-CHB-PU-2	1
46	NI02651	knob	10* 22.5	2
47	MI02334	handle	MAC	2

9. BOM

No.	Part No.	Descriptions	Specification	Remark
1	MA05423	panel	MAC _V1.0	
2	MA05426	panel	MACRO -01	
3	MA05413	panel	MACRO _V1.1	
4	MJ00089	iron board	1.6*2135*1220 32.72kg	
5	MI02355	fixed bracket	45.5*20*8.5*1.5t MACRO	_V1.0
6	MJ00088	iron board	1.5*2135*1220 30.67kg	
7	MA05411	panel	MACRO _V1.1	
8	MJ01240	iron board	3.0t*1950*1185mm 54kg	
9	ME00004	screw pillar	M3*10*0.5PH	
10	MA05420	panel	MAC 2.2 ALTO_V1.1	
11	MA05415	panel	MACRO	
12	MA05414	panel	MACRO _V1.3	
13	ME00165	iron pillar	M3*21*0.5PH_V1.0	
14	MJ00058	iron board	1*2135*1220 20.45kg	
15	MC00631	top cover	MAC _V1.0	
16	MC00628	top cover	MACRO	
17	MC00627	top cover	MACRO _V1.0	
18	MJ00089	iron board	1.6*2135*1220 32.72kg	
19	MB03687	bottom board	MAC _V1.2	
20	MB03670	bottom board	MACRO	
21	MB03669	chassis	MACRO _V1.1	
22	MJ01154	iron board	2.0t*1850*950mm 27.6kg	
23	MI00397	board	PSA-3000	
24	MI00396	board	PSA-3000	
25	MJ00060	iron board	0.7*2135*1220 14.31kg	
26	HI00031	power switch	R415KKETOF	
27	NI02650	knob	18*18mm	
28	TD00038	transformer	PT-3530_115/230V	
29	NI00440	rubber coil	20* 105*2tB	
30	MH00766	iron piece	11* 90*2_V1.1	
31	MH00768	iron piece	11* 90*2_V1.1	
32	MJ01154	iron board	2.0t*1850*950mm 27.6kg	
33	MJ00344	weldment	AMP	
34	MG00220	screw	M8*78	
35	ME00026	nut	8m/m	
36	MF00026	washer	8* 18*1.5t	
37	MF00041	washer	8* 13.5*2t	
38	HE00007	fan	DC12V/0.3A 80*80*25mm 500mm	
39	MG00283	copper pillar	M3*22*0.5PH	

No.	Part No.	Descriptions	Specification	Remark
40	MG00244	copper pillar	M3*10*0.5PH	
41	HC00005	AC socket	AC-008	
42	HA00861	power cord Europe 3P	LT-312+LT-501	
43	HD00041	glass tube fuse	10A 6*32mm	
44	HI00140	manual reposition switch	A0701HM-6A	
45	MG00020	screw	M3*8	
46	MG00025	screw	M3*6	
47	MG00161	screw	M3*6	
48	MG00042	screw	M3*10	
49	MG00044	screw	M4*10	
50	MG00061	screw	M3*10	
51	MG00067	screw	M4*35	
52	MG00117	screw	M4*10	
53	MF00048	washer	4* 8*0.5t	
54	MF00037	washer	3* 5*1t	
55	ME00015	nut	3m/m	
56	ME00016	nut	4m/m	
57	NC00131	washer	1* 11.3* 15.3 red	
58	NI00002	nut of plastic	7/16**G20/15*4.8(hexagon)	
59	HA01488	header wiring AF:W248	2P 140	
60	HA01525	wire	13P-13P 150mm UL2877 26AWG	
61	HA01528	wire	3P-3P 300mm UL2877 26AWG	
62	HA01530	wire	7P-7P 110mm UL1007 28AWG	
63	HA01571	header wiring	7P-7P 320mm UL1007 28AWG	
64	HC00295	terminal	JS205-110	
65	HA01333	wiringCF:W76	150mmUL101518AWGgreen/yellow	
66	HA01241	wire	480mm UL1015 14AWG brown	
67	HA01247	wire	180mm UL1015 14AWG blue	
68	HA01248	wire	150mm UL1015 14AWG brown	
69	HA01250	wire	250mm UL1015 14AWG Yellow	
70	HA01251	wire	200mm UL1015 14AWG red	
71	HA01242	wire	440mm UL1015 14AWG black	
72	HA01243	wire	300mm UL1015 14AWG brown	
73	HA01244	wire	380mm UL1015 14AWG red	
74	HA01756	P.V.CwiredUL1015	80 black	
75	NI00252	sleeve	4*20mm	
76	NI00248	sleeve	4*1000mm	
77	NA00235	bag	0.05t*650*550mm	
78	NI00218	cable tie-black	ALT-102SB	
79	NI00219	cable tie	CV-075 white (AST-145-K)	
80	HJ00006	desiccant	30g	

No.	Part No.	Descriptions	Specification	Remark
81	NF01893	instruction	MACRO series ALTO_V1.1	
82	NH00149	paper	889*640mm	
83	NB03188	color box	MAC 2.2 ALTO_V1.1	
84	NB03187	box	MAC ALTO_V1.0	
85	NI00389	plastic washer	12* 16*0.5	
86	NI00375	film	45*60.5*0.5mm	
87	NA00137	clip-chain bag	5*7	
88	NE02229	label	PSA-3600 220-230V	
89	NI00037	adhesive label	0.05*1M	
90	NI00034	membrane	0.045*1M	
91	NE02717	label	MADE IN CHINA	
92	NH00038	paper	0.115*1M	
93	NI00028	membrane	0.110*1M	
94	NF00061	assurance card	ALTO	
95	NE11347	label	ALTO PI	
96	NH00334	cone paper	0.040*1m	
97	NE05633	label	MAC 2.2_V1.0	
98	NH00012	bond paper	0.04*1M	
99	NI00014	membrane	0.035*1M	
100	NC00059	fixed board	1*46*46(Sax-2000)	
101	NC00175	insulator	1.0t*51mm*100M	
102	MI02436	handle	MAC2.2_V1.0	
103	MI02334	handle	MAC_V1.0	
104	NA00116	PE bag	0.04t*170*100mm	
105	HA01404	row-wire connecting	2P-2P 90	
106	NI02651	knob fix sheath	10* 22.5	
107	NB03191	cushion	MAC _V1.0	
108	HK00217	PC board	P-PSA-3000PWR-2	
109	HB00399	PCB	PSA-3000PWR-1_VER031117	
110	RA00362	fixed resistor 1/8W	2.0K M type	R2
111	RA00382	fixed resistor 1/8W	6.8K M type	R3,R4
112	RA00432	fixed resistor 1/8W	470K M type	R5
113	RA00033	metal-oxide-film resistor 2W	39 P type	
114	CB00073	electrolytic capacitor	1000uF/35V 13*20mm	C1
115	CF00035	metal-film capacitor MPX	0.1uF/275V	C5
116	CF00039	metal-film capacitor MEF	0.22uF/250V	C2,C3
117	SA00003	bridge rectifier	1A/400V DB104G	BR3
118	SA00011	bridge rectifier	25A/200V	BR1,BR2
119	RG00006	current limiter	1.1A 30V RX110	
120	SB00015	light-electron transistor	4N33.300	U1
121	SB00064	transistor	TIP41C(ST)	Q1

No.	Part No.	Descriptions	Specification	Remark
122	HC00076	row-wire header	2P 2.5mm 180°	CN1,CN3
123	HC00077	row-wire header	3P 2.5mm 180°	CN2
124	HC00056	FUSE holder	8*10.6*1.5 JEF-505	
125	HC00324	terminal	6.5m/m (PC250)	
126	MI00177	heat sink	MA103*25m/m*2PIN	
127	MI00267	heat-sink	3*30*15*36	
128	MG00110	screw	M4*20	
129	MF00018	washer	4* 10*1t	
130	MG00160	screw	M3*6 P0.5	
131	HA01922	jumper wire	8mm	C4
132	HA02249	wire	0.6	
133	MF00037	washer	3* 5*1t	
134	HA01925	jumper wire	10mm	J1
135	HA02249	wire	0.6	
136	AC00002	solder wire	63/37%	
137	HK00211	PC board	P-PSA-3000-R-DIP	
138	RA00156	fixed resistor 1/2W	6.8 M type	R10,R11,R22
139	RA00446	precise resistor 1/2W	9.09K M type	R55
140	RA00447	precise resistor 1/2W	10.0K M type	R23,R54
141	RA00007	metal-oxide-film resistor 1W	22 P type	R12,R9
142	RA00051	metal-oxide-film resistor 2W	5.6 P type	R1
143	RA00055	metal-oxide-film resistor 3W	12 RSS P type	R2,R3
144	RA00061	metal-oxide-film resistor 3W	820 RSS P type	R4,R5
145	RA00811	metal-oxide-film resistor 3W	2.4K RSS P type	R17,R28
146	RA00092	cement resistor 5W	0.2 Z type	R13,R14,R15,R6,R7,R8
147	CB00019	electrolytic capacitor	10uF/50V NP 5*11mm	C27,C34
148	CB00047	electrolytic capacitor	100uF/25V 6*11mm	C14,C15
149	CB00056	electrolytic capacitor	220uF/25V 8*11mm	C18,C19,C5,C6
150	CB00093	electrolytic capacitor	4700uF/80V LCM 25*50mm	C1,C2
151	CC00009	Mylar capacitor	0.0033uF/100V 10%	C10,C11
152	CC00027	Mylar capacitor	0.022uF/100V 5%	C13,C4
153	CF00013	metal-film capacitor MEF	0.068uF/250V	C3
154	CF00036	metal-film capacitor MSC	0.15uF/63V	C24,C25,C28,C30
155	CF00038	metal-film capacitor MSC	0.22uF/63V 5% CASE02	C26,C29
156	SA00098	rectifier diode	1A/400V IN4004	D1,D2,D20,D21
157	SA00002	high speed diode	1A/600V 1N4937	D10,D9
158	SA00107	zener diode	1W 15V 1N4744	ZD1,ZD2,ZD5,ZD6
159	SA00117	zener diode	1/2W 5.6V 6B1	ZD3,ZD4
160	SB00042	transistor	MJE15032	Q4
161	SB00044	transistor	MJE15033	Q5
162	SB00021	power transistor	2SC5200	Q6,Q7,Q8

No.	Part No.	Descriptions	Specification	Remark
163	SB00023	power transistor	2SA1943-O	Q1,Q2,Q3
164	SD00144	integrated circuit	NE5532N(PHI)	U2,U3
165	RC00161	resistor	3.3K 6 3P 3318F-1-332	VR2,VR3
166	RC00163	carbon-film semi-fixed resistor	100 6 3P horizontal 3318P-1-101	VR1
167	RH00004	thermistor	90 (NSA05A090L-500)	R36
168	RH00005	thermistor	100 (PTH9M04BH471TS2F333)	TH2
169	HC00087	row-wire header	13P 2.5mm 180°	CN1
170	HC00266	row-wire header	3P 2.5mm 180°	CN4,CN5
171	HC00267	row-wire header	7P 2.5mm 180°	CN2,CN3
172	HC00226	row-wire header	26PIN C01a-26AG1	CA1
173	CN00027	inductance	1 2UEW*6.35mm*25.5T(DS-2010)	T1
174	HC00324	terminal	6.5m/m (PC250)	
175	MI00259	heat-sink9 (black)	PSA-3000 6*79*36.5*240mm	
176	NC00005	silicone insulator	TO-220 square type	
177	MG00169	screw	M3*12	
178	HA01527	wire	3P-3P 100	
179	ND00182	silicone sleeve	1*30mm	
180	ND00171	silicone sleeve	1*1000mm	
181	NI00863	insulate bean	TO220B	
182	MF00037	washer	3* 5*1t	
183	ND00173	silicone sleeve	1*5mm	R10,R11,R22,R23,R54,R55,D9, D10
184	ND00171	silicone sleeve	1*1000mm	
185	HK01548	PC board	P-PSA-3000-R-2-AI	
186	HA01921	jumper wire	7mm	JP14,JP21,JP28,JP35,JP43, JP51,JP9
187	HA02249	wire	0.6	
188	HA01924	jumper wire	9mm	JP27,JP3,JP47,JP59,JP71
189	HA02249	wire	0.6	
190	HA01925	jumper wire	10mm	JP20,JP29,JP30,JP31,JP32, JP44,JP50,JP6,JP62,JP64, JP66,JP7
191	HA02249	wire	0.6	
192	HA01929	jumper wire	13mm	JP10,JP11,JP17,JP18,JP19, JP23,JP37,JP49,JP60,JP63, JP75
193	HA02249	wire	0.6	
194	HA01930	jumper wire	15mm	JP26,JP33,JP4
195	HA02249	wire	0.6	
196	HA01931	jumper wire	16mm	JP41,JP65,JP68,JP69,JP70, JP72,JP73,JP8
197	HA02249	wire	0.6	
198	HA01932	jumper wire	20mm	JP12,JP16,JP2,JP22,JP24,JP25, JP34,JP40,JP42,JP45,JP46, JP48,JP54,JP55,JP56,JP61, JP57
199	HA02249	wire	0.6	
200	HK00210	PC board	P-PSA-3000-R-SMD	

No.	Part No.	Descriptions	Specification	Remark
201	HB00377	PCB	PSA-3000-R_VER040403	
202	RD00137	SMD fixed resistor 1/4W	820 ±5% 1206	R16,R42,R65
203	RD00145	SMD fixed resistor 1/4W	33K ±5% 1206	R24,R58
204	RD00146	SMD fixed resistor 1/4W	47K ±5% 1206	R19
205	RD00148	SMD fixed resistor 1/4W	150K ±5% 1206	R38,R43
206	RD00151	SMD fixed resistor 1/4W	390K ±5% 1206	R25,R59
207	RD00065	SMD fixed resistor 1/10W	47 ±5% 0603	R33
208	RD00068	SMD fixed resistor 1/10W	100 ±5% 0603	R26,R27,R49,R72,R73,R74
209	RD00074	SMD fixed resistor 1/10W	270 ±5% 0603	R30,R39,R50,R56,R66,R75
210	RD00082	SMD fixed resistor 1/10W	820 ±5% 0603	R34
211	RD00083	SMD fixed resistor 1/10W	1.0K ±5% 0603	R32,R45,R69
212	RD00085	SMD fixed resistor 1/10W	1.5K ±5% 0603	R29
213	RD00091	SMD fixed resistor 1/10W	3.3K ±5% 0603	R60
214	RD00093	SMD fixed resistor 1/10W	4.7K ±5% 0603	R57,R76
215	RD00098	SMD fixed resistor 1/10W	7.5K ±5% 0603	R47,R71
216	RD00101	SMD fixed resistor 1/10W	10K ±5% 0603	R21,R40,R63
217	RD00109	SMD fixed resistor 1/10W	39K ±5% 0603	R61,R62
218	RD00257	SMD precise resistor 1/4W	150K ±1% 1206	R18,R20,R52,R53
219	RD00214	SMD precise resistor 1/10W	10.0K ±1% 0603	R37,R41,R44,R46,R48,R64,R68, R70
220	RD00219	SMD precise resistor 1/10W	20.0K ±1% 0603	R31,R35,R51,R67
221	CI00056	SMD ceramic capacitor 0603	56PF/50V NPO ±5%	C22,C23,C32,C8
222	CI00060	SMD ceramic capacitor 0603	150PF/50V NPO ±5%	C20,C21,C31,C33
223	CI00065	SMD ceramic capacitor 0603	0.001uF/50V X7R ±10%	C7
224	CI00067	SMD ceramic capacitor 0603	0.0022uF/50V X7R ±10%	C12
225	CI00075	SMD ceramic capacitor 0603	0.1uF/50V Y5V +80,-20%	C16,C17,C9
226	SE00011	SMD rectifier diode	RLS4148 0.5A (LL-34)	D11,D12,D13,D14,D15,D16,D17, D18,D19,D3,D4,D5,D6,D7,D8
227	SF00053	transistor	MMBT3906(SOT-23)/(PHI)	Q11,Q12
228	SF00056	transistor	MMBT3904(SOT-23)/(PHI)	Q10,Q9
229	SG00014	SMD integrated circuit	NJM13700M	U1
230	AE00221	tin soldering paste	SJ-617	
231	HA01919	jumper wire	5mm	JP53
232	HA02249	wire	0.6	
233	HA01924	jumper wire	9mm	JP5,JP58
234	HA02249	wire	0.6	
235	HA01925	jumper wire	10mm	JP15,JP36
236	HA02249	wire	0.6	
237	HA01929	jumper wire	13mm	JP13
238	HA02249	wire	0.6	
239	HA01931	jumper wire	16mm	JP39
240	HA02249	wire	0.6	

No.	Part No.	Descriptions	Specification	Remark
241	HA01932	jumper wire	20mm	JP1,JP38
242	HA02249	wire	0.6	
243	HA01917	jumper wire	3mm	JP52
244	AC00002	solder wire	63/37%	
245	HK00209	PC board	P-PSA-3000-L-DIP	
246	RA00156	fixed resistor 1/2W	6.8 M type	R12,R13
247	RA00007	metal-oxide-film resistor 1W	22 P type	R11,R14
248	RA00051	metal-oxide-film resistor 2W	5.6 P type	R1
249	RA00048	metal-oxide-film resistor 2W	15K P type	R32,R36
250	RA00055	metal-oxide-film resistor 3W	12 RSS P type	R2,R3
251	RA00061	metal-oxide-film resistor 3W	820 RSS P type	R4,R5
252	RA00811	metal-oxide-film resistor 3W	2.4K RSS P type	R18,R19
253	RA00092	cement resistor 5W	0.2 Z type	R10,R15,R16,R17,R8,R9
254	CB00017	electrolytic capacitor	4.7uF/250V 10*12mm	C11
255	CB00041	electrolytic capacitor	47uF/50V 6*11mm	C10
256	CB00093	electrolytic capacitor	4700uF/80V LCM 25*50mm	C1,C2
257	CC00009	Mylar capacitor	0.0033uF/100V 10%	C8,C9
258	CC00027	Mylar capacitor	0.022uF/100V 5%	C4,C6
259	CF00013	metal-film capacitor MEF	0.068uF/250V	C3
260	SA00098	rectifier diode	1A/400V IN4004	D1,D11,D12,D16,D2
261	SA00002	high speed diode	1A/600V 1N4937	D8,D9
262	SA00107	zener diode	1W 15V 1N4744	ZD3,ZD4
263	SA00117	zener diode	1/2W 5.6V 6B1	ZD1,ZD2
264	SB00039	transistor	MPSA06(TO-92)/(PHI)	Q16
265	SB00042	transistor	MJE15032	Q4
266	SB00044	transistor	MJE15033	Q5
267	SB00021	power transistor	2SC5200	Q6,Q7,Q8
268	SB00023	power transistor	2SA1943-O	Q1,Q2,Q3
269	RC00161	resistor	3.3K 6 3P 3318F-1-332	VR2,VR3
270	RC00163	carbon-film semi-fixed resistor	100 6 3P horizontal 3318P-1-101	VR1
271	RH00004	thermistor	90 (NSA05A090L-500)	R23
272	RH00005	thermistor	100 (PTH9M04BH471TS2F333)	TH1
273	HC00076	row-wire header	2P 2.5mm 180°	CN3
274	HC00077	row-wire header	3P 2.5mm 180°	CN2
275	HC00087	row-wire header	13P 2.5mm 180°	CN1
276	CN00027	inductance	1 2UEW*6.35mm*25.5T(DS-	T1
277	HC00324	terminal	6.5m/m (PC250)	
278	MI00259	heat-sink9 (black)	PSA-3000 6*79*36.5*240mm	
279	NC00005	silicone insulator	TO-220 square type	
280	MG00169	screw	M3*12	
281	NI00222	sleeve	1.5*30mm	
282	NI00221	sleeve	1.5 *1000mm	
283	NI00863	insulate bean	TO220B	
284	MF00037	washer	3* 5*1t	
285	HK01526	K-PC board	P-PSA-3000-L-2-AI	

No.	Part No.	Descriptions	Specification	Remark
286	HA01920	jumper wire	6mm	JP11,JP19
287	HA02249	wire	0.6	
288	HA01922	jumper wire	8mm	JP15,JP18,JP20,JP29,JP35, JP36,JP5
289	HA02249	wire	0.6	
290	HA01925	jumper wire	10mm	JP10,JP12,JP22,JP30
291	HA02249	wire	0.6	
292	HA01929	jumper wire	13mm	JP14,JP26,JP27,JP31,JP32
293	HA02249	wire	0.6	
294	HA01931	jumper wire	16mm	JP16,JP17,JP2,JP21,JP23, JP25,JP3,JP33,JP34,JP37,
295	HA02249	wire	0.6	
296	HA01932	jumper wire	20mm	JP13,JP24,JP28
297	HA02249	wire	0.6	
298	HK00208	PC board	P-PSA-3000-L-SMD	
299	HB00376	PCB	PSA-3000-L_VER040403	
300	RD00137	SMD fixed resistor 1/4W	820 ±5% 1206	R22,R24
301	RD00141	SMD fixed resistor 1/4W	6.8K ±5% 1206	R29
302	RD00146	SMD fixed resistor 1/4W	47K ±5% 1206	R7
303	RD00148	SMD fixed resistor 1/4W	150K ±5% 1206	R26
304	RD00149	SMD fixed resistor 1/4W	220K ±5% 1206	R28,R34
305	RD00152	SMD fixed resistor 1/4W	470K ±5% 1206	R27
306	RD00154	SMD fixed resistor 1/4W	1.0M ±5% 1206	R33,R35
307	RD00065	SMD fixed resistor 1/10W	47 ±5% 0603	R25,R6
308	RD00085	SMD fixed resistor 1/10W	1.5K ±5% 0603	R20
309	RD00087	SMD fixed resistor 1/10W	2.0K ±5% 0603	R31
310	RD00101	SMD fixed resistor 1/10W	10K ±5% 0603	R21
311	RD00119	SMD fixed resistor 1/10W	220K ±5% 0603	R30
312	CI00065	SMD ceramic capacitor 0603	0.001uF/50V X7R ±10%	C5
313	CI00067	SMD ceramic capacitor 0603	0.0022uF/50V X7R ±10%	C7
314	SE00011	SMD rectifier diode	RLS4148 0.5A (LL-34)	D10,D13,D14,D15,D17,D18,D19, D20,D21,D22,D3,D4,D5,D6,D7
315	SF00053	transistor	MMBT3906(SOT-23)/(PHI)	Q11,Q12,Q15
316	SF00056	transistor	MMBT3904(SOT-23)/(PHI)	Q10,Q13,Q14,Q9
317	SF00015	SMD transistor	HMBTA42	Q17
318	AE00221	tin soldering paste	SJ-617	
319	AC00002	solder wire	63/37%	
320	HK04485	PC board	P- MAC2.2-VR	
321	HB01348	PCB	MAC2.2-VR_VERO050323	
322	SA00052	L.E.D	3 round(green)long foot 26	
323	SA00053	L.E.D	3 round(red)long foot 26mm	
324	SA00255	L.E.D	3 long foot 27	
325	SA00254	L.E.D	3 long foot 27	
326	RC00469	potentiometer	A10K RV16A-30-15FW-A10K-301	
327	HC00264	row-wire header	7P 2.5mm 90°	
328	HC00065	row-wire header	2P 2.5mm 90°	

No.	Part No.	Descriptions	Specification	Remark
329	NI01770	LED spacer support	LEDS-18 18mm	
330	ME00052	nut	7	
331	MF00060	washer	7* 12*0.5t	
332	AC00002	solder wire	63/37%	
333	HK03058	K-PC board	P-CHA-PU-5	
334	HB00798	PCB	CHA-PU-4_VER021004	
335	CA00033	ceramic capacitor	470PF Y5E	C1,C2
336	HC00112	XLR MIC jack	99M-107SP-1-2 90° PUSH	CH1
337	HC00108	stereo MIC jack	6.3 stereo LJB0661-6	CH11
338	HI00125	slide switch	SL20202-25Y-6mm	
339	HC00267	row-wire header	7P 2.5mm 180°	CN3
340	HA01656	header wiring adopted	FL-0476A 26P- adopt ed PH1.27	CA1
341	HI00128	slide switch	3-stages 16P SLB-43-10	SW1
342	AC00002	solder wire	63/37%	
343	HK03056	K-PC board	P-CHB-PU-2	
344	HB00799	PCB	CHB-PU-2_VER021004	
345	CA00033	ceramic capacitor	470PF Y5E	C3,C 4
346	HC00108	stereo MIC jack	6.3 stereo LJB0661-6	
347	HC00112	XLR MIC jack	99M-107SP-1-2 90° PUSH	
348	HI00125	slide switch	SL20202-25Y-6mm	
349	HC00267	row-wire header	7P 2.5mm 180°	CN4
350	HA01756	P.V.CwiredUL1015	80 black	
351	AC00002	solder wire	63/37%	
352	HA01198	wire	180mm UL1015 14AWG black	
353	NI01867	self-adhere foot cushion	20.5*14*7.6mm(SF-006)	
354	NA00279	clip-chain bag	0.04t*100*150mm_V1.0	
355	AD00012	twin adhesive	90*120mm_V1.0	
356	ND00410	dust-proof shade	167.3*85.6*5.0t_V1.1	
357	ND00409	dust-proof shade	167.3*85.6*5.0t_V1.1	
358	HK04688	PC board	P-MAC-SP	
359	HC00442	speaker holder	NL4MP (NEUTRIK)	
360	MJ00942	fixed bracket	CS12/600	
361	MJ00061	Zn-plated board	1*2135*1220 20.45kg	
362	HA01237	wiringCF:W207	200mm UL1015 14AWG gray	
363	HA01239	wiringCF:W209	180mm UL1015 14AWG white	
364	HA01259	quick terminal wiring	300mm UL1015 14AWG white	
365	HA01238	wiringCF:W208	250mm UL1015 14AWG gray	
366	HA03432	wire	100mm UL1015 14AWG	
367	HA03433	wire	100mm UL1015 14AWG	
368	HB01396	PCB	MIS60SP(2*4)_VER040922	
369	AC00002	solder wire	63/37%	
370	MF00039	washer	5* 8*1t	

MAC2.3

No.	Part No.	Descriptions	Specification	Remark
1	MA05423	panel	MAC _V1.0	
2	MA05426	panel	MACRO -01	
3	MA05413	panel	MACRO _V1.1	
4	MJ00089	iron board	1.6*2135*1220 32.72kg	
5	MI02355	fixed bracket	45.5*20*8.5*1.5t MACRO	_V1.0
6	MJ00088	iron board	1.5*2135*1220 30.67kg	
7	MA05411	panel	MACRO _V1.1	
8	MJ01240	iron board	3.0t*1950*1185mm 54kg	
9	ME00004	screw pillar	M3*10*0.5PH	
10	MA05421	panel	MAC 2.3 ALTO_V1.1	
11	MA05415	panel	MACRO	
12	MA05414	panel	MACRO _V1.3	
13	ME00165	iron pillar	M3*21*0.5PH_V1.0	
14	MJ00058	iron board	1*2135*1220 20.45kg	
15	MC00631	top cover	MAC _V1.0	
16	MC00628	top cover	MACRO	
17	MC00627	top cover	MACRO _V1.0	
18	MJ00089	iron board	1.6*2135*1220 32.72kg	
19	MB03687	chassis	MAC _V1.2	
20	MB03670	chassis	MACRO	
21	MB03669	chassis	MACRO _V1.1	
22	MJ01154	iron board	2.0t*1850*950mm 27.6kg	
23	MI00397	board	PSA-3000	
24	MI00396	board	PSA-3000	
25	MJ00060	iron board	0.7*2135*1220 14.31kg	
26	HI00031	power switch	R415KKETOF	
27	NI02650	knob	18*18mm	
28	TD00042	transformer	PT-3800_115/230V	
29	NI00437	rubber coil	20* 120*2tB	
30	MH00766	iron piece	11* 90*2_V1.1	
31	MH00768	iron piece	11* 90*2_V1.1	
32	MJ01154	iron board	2.0t*1850*950mm 27.6kg	
33	MJ00344	solder plate	AMP	
34	MG00220	outside hexagon screw	M8*78	
35	ME00026	nut	8m/m	
36	MF00026	washer	8* 18*1.5t	
37	MF00041	washer	8* 13.5*2t	
38	HE00007	fan	DC12V/0.3A 80*80*25mm 500mm	
39	MG00283	copper pillar	M3*22*0.5PH	
40	MG00244	copper pillar	M3*10*0.5PH	
41	HC00005	AC socket	AC-008	

No.	Part No.	Descriptions	Specification	Remark
42	HA00871	power cord(Europe 3P)	LT-322+1.5*3C(H05VV-F) 6FT+LT-501	
43	HD00042	glass tube fuse	12A 6*32mm	
44	HI00143	manual reposition switch	A0701HM-8A	
45	MG00020	screw	M3*8	
46	MG00025	screw	M3*6	
47	MG00161	screw	M3*6	
48	MG00042	screw	M3*10	
49	MG00044	screw	M4*10	
50	MG00061	screw	M3*10	
51	MG00067	screw	M4*35	
52	MG00117	screw	M4*10	
53	MF00048	washer	4* 8*0.5t	
54	MF00037	washer	3* 5*1t	
55	ME00015	nut	3m/m	
56	ME00016	nut	4m/m	
57	NC00131	washer	1* 11.3* 15.3 red	
58	NI00002	nut	7/16**G20/15*4.8(hexagon)	
59	HA01488	connector AF:W248	2P 140	
60	HA01525	wire	13P-13P 150mm UL2877 26AWG	
61	HA01528	wire	3P-3P 300mm UL2877 26AWG	
62	HA01530	wire	7P-7P 110mm UL1007 28AWG	
63	HA01571	header wiring	7P-7P 320mm UL1007 28AWG	
64	HC00295	terminal	JS205-110	
65	HA01333	wiringCF:W76	150mm UL1015 18AWG green/yellow	
66	HA01241	wire	480mm UL1015 14AWG brown	
67	HA01247	wiring	180mm UL1015 14AWG blue	
68	HA01248	wiring	150mm UL1015 14AWG brown	
69	HA01250	wire	250mm UL1015 14AWG Yellow	
70	HA01251	wire	200mm UL1015 14AWG red	
71	HA01242	wire	440mm UL1015 14AWG black	
72	HA01243	wire	300mm UL1015 14AWG brown	
73	HA01244	2 terminal wiring	380mm UL1015 14AWG red	
74	HA01756	P.V.C. wired UL 1015		
75	NI00252	sleeve	4*20mm	
76	NI00248	sleeve	4*1000mm	
77	NA00235	bag	0.05t*650*550mm	
78	NI00218	cable tie-black	ALT-102SB	
79	NI00219	cable tie	CV-075 white (AST-145-K)	
80	HJ00006	desiccant	30g	
81	NF01893	instruction	MACRO series ALTO_V1.1	
82	NH00149	paper	889*640mm	
83	NB03189	color box	MAC 2.3 ALTO_V1.1	
84	NB03187	box	MAC ALTO_V1.0	

No.	Part No.	Descriptions	Specification	Remark
85	MI00427	fixed bracket	PSA-3000	
86	MJ00058	iron board	1*2135*1220 20.45kg	
87	MG00111	screw	pill 4*30	
88	NI00389	washer	12* 16*0.5	
89	NI00375	film	45*60.5*0.5mm	
90	NA00137	clip-chain bag	5*7	
91	NE02231	label	PSA-3900 220-230V	
92	NI00037	adhesive label	0.05*1M	
93	NI00034	membrane	0.045*1M	
94	NE02717	label	MADE IN CHINA	
95	NH00038	paper	0.115*1M	
96	NI00028	membrane	0.110*1M	
97	NE08758	label	MAC 2.3_V1.0	
98	NH00012	bond paper	0.04*1M	
99	NI00014	membrane	0.035*1M	
100	NF00061	assurance card	ALTO	
101	NE11347	label	ALTO PI	
102	NH00334	cone paper	0.040*1m	
103	NC00059	fixed board	1*46*46(Sax-2000)	
104	NC00175	insulator	1.0t*51mm*100M	
105	NA00116	PE bag	0.04t*170*100mm	
106	HA01404	row-wire connecting	2P-2P 90	
107	HK00217	PC board	P-PSA-3000PWR-2	
108	HB00399	PCB	PSA-3000PWR-1_VER031117	
109	RA00362	fixed resistor 1/8W	2.0K M type	R2
110	RA00382	fixed resistor 1/8W	6.8K M type	R3,R4
111	RA00432	fixed resistor 1/8W	470K M type	R5
112	RA00033	metal-oxide-film resistor 2W	39 P type	
113	CB00073	electrolytic capacitor	1000uF/35V 13*20mm	C1
114	CF00035	metal-film capacitor MPX	0.1uF/275V	C5
115	CF00039	metal-film capacitor MEF	0.22uF/250V	C2,C3
116	SA00003	bridge rectifier	1A/400V DB104G	BR3
117	SA00011	bridge rectifier	25A/200V	BR1,BR2
118	RG00006	over current protector	1.1A 30V RX110	
119	SB00015	light-electron transistor	4N33.300	U1
120	SB00064	transistor	TIP41C(ST)	Q1
121	HC00076	row-wire header	2P 2.5mm 180°	CN1,CN3
122	HC00077	row-wire header	3P 2.5mm 180°	CN2
123	HC00056	FUSE holder	8*10.6*1.5 JEF-505	
124	HC00324	terminal	6.5m/m (PC250)	
125	MI00177	heat sink	MA103*25m/m*2PIN	
126	MI00267	heat-sink	3*30*15*36	

No.	Part No.	Descriptions	Specification	Remark
127	MG00110	screw	M4*20	
128	MF00018	washer	4* 10*1t	
129	MG00160	screw	M3*6 P0.5	
130	HA01922	jumper wire	8mm	C4
131	HA02249	wire	0.6	
132	MF00037	washer	3* 5*1t	
133	HA01925	jumper wire	10mm	J1
134	HA02249	wire	0.6	
135	AC00002	solder wire	63/37%	
136	HK01389	PC board	P-PSA-3000-L-1-DIP	
137	RA00156	fixed resistor 1/2W	6.8 M type	R12,R13
138	RA00007	metal-oxide-film resistor 1W	22 P type	R11,R14
139	RA00051	metal-oxide-film resistor 2W	5.6 P type	R1
140	RA00048	metal-oxide-film resistor 2W	15K P type	R32,R36
141	RA00055	metal-oxide-film resistor 3W	12 RSS P type	R2,R3
142	RA00062	metal-oxide-film resistor 3W	1.0K RSS P type	R4,R5
143	RA00066	metal-oxide-film resistor 3W	3.0K RSS P type	R18,R19
144	RA00092	cement resistor 5W	0.2 Z type	R10,R15,R16,R17,R37, R38,R8,R9
145	CB00017	electrolytic capacitor	4.7uF/250V 10*12mm	C11
146	CB00041	electrolytic capacitor	47uF/50V 6*11mm	C10
147	CB00086	electrolytic capacitor	3300uF/100V 25*50mm	C1,C12,C13,C2
148	CC00009	Mylar capacitor	0.0033uF/100V 10%	C8,C9
149	CC00027	Mylar capacitor	0.022uF/100V 5%	C4,C6
150	CF00013	metal-film capacitor MEF	0.068uF/250V	C3
151	SA00098	rectifier diode	1A/400V IN4004	D1,D11,D12,D16,D2
152	SA00002	high speed diode	1A/600V 1N4937	D8,D9
153	SA00107	zener diode	1W 15V 1N4744	ZD3,ZD4
154	SA00117	zener diode	1/2W 5.6V 6B1	ZD1,ZD2
155	SB00039	transistor	MPSA06(TO-92)/(PHI)	Q16
156	SB00042	transistor	MJE15032	Q4
157	SB00044	transistor	MJE15033	Q5
158	SB00021	power transistor	2SC5200	Q19,Q6,Q7,Q8
159	SB00023	power transistor	2SA1943-O	Q1,Q18,Q2,Q3
160	RC00161	resistor	3.3K 6 3P 3318F-1-332	VR2,VR3
161	RC00163	carbon-film resistor	100 6 3P horizontal 3318P-1-101	VR1
162	RH00004	thermistor	90 (NSA05A090L-500)	R23
163	RH00005	thermistor	100 (PTH9M04BH471TS2F333)	TH1
164	HC00076	row-wire header	2P 2.5mm 180°	CN3
165	HC00077	row-wire header	3P 2.5mm 180°	CN2
166	HC00087	row-wire header	13P 2.5mm 180°	CN1
167	CN00028	inductance	10*21.8mm	T1
168	HC00324	terminal	6.5m/m (PC250)	

No.	Part No.	Descriptions	Specification	Remark
169	MI00259	heat-sink9 (black)	PSA-3000 6*79*36.5*240mm	
170	NC00005	silicone insulator	TO-220 square type	
171	MG00169	screw	M3*12	
172	NI00222	sleeve	1.5*30mm	
173	NI00221	sleeve	1.5 *1000mm	
174	NI00863	insulate bean	TO220B	
175	MF00037	washer	3* 5*1t	
176	HK01525	K-PC board	P-PSA-3000-L-1-AI	
177	HA01920	jumper wire	6mm	JP11,JP19
178	HA02249	wire	0.6	
179	HA01922	jumper wire	8mm	JP15,JP18,JP20,JP29, JP35,JP36,JP5
180	HA02249	wire	0.6	
181	HA01925	jumper wire	10mm	JP10,JP12,JP22,JP30
182	HA02249	wire	0.6	
183	HA01929	jumper wire	13mm	JP14,JP26,JP27,JP31, JP32
184	HA02249	wire	0.6	
185	HA01931	jumper wire	16mm	JP1,JP16,JP17,JP2,JP21, JP23,JP25,JP3,JP33, JP34,JP37,JP4,JP6,JP7, JP8,JP9
186	HA02249	wire	0.6	
187	HA01932	jumper wire	20mm	JP13,JP24,JP28
188	HA02249	wire	0.6	
189	HK00204	PC board	P-PSA-3000-L-SMD-1	
190	HB00376	PCB	PSA-3000-L_VER040403	
191	RD00137	SMD fixed resistor 1/4W	820 ±5% 1206	R22,R24
192	RD00141	SMD fixed resistor 1/4W	6.8K ±5% 1206	R29
193	RD00146	SMD fixed resistor 1/4W	47K ±5% 1206	R7
194	RD00148	SMD fixed resistor 1/4W	150K ±5% 1206	R26
195	RD00149	SMD fixed resistor 1/4W	220K ±5% 1206	R28,R34
196	RD00152	SMD fixed resistor 1/4W	470K ±5% 1206	R27
197	RD00154	SMD fixed resistor 1/4W	1.0M ±5% 1206	R33,R35
198	RD00065	SMD fixed resistor 1/10W	47 ±5% 0603	R25,R6
199	RD00085	SMD fixed resistor 1/10W	1.5K ±5% 0603	R20
200	RD00087	SMD fixed resistor 1/10W	2.0K ±5% 0603	R31
201	RD00101	SMD fixed resistor 1/10W	10K ±5% 0603	R21
202	RD00119	SMD fixed resistor 1/10W	220K ±5% 0603	R30
203	CI00065	SMD ceramic capacitor 0603	0.001uF/50V X7R ±10%	C5
204	CI00067	SMD ceramic capacitor 0603	0.0022uF/50V X7R ±10%	C7
205	SE00011	SMD rectifier diode	RLS4148 0.5A (LL-34)	D10,D13,D14,D15,D17, D18,D19,D20,D21,D22, D3,D4,D5,D6,D7
206	SF00053	transistor	MMBT3906(SOT-23)/(PHI)	Q11,Q12
207	SF00011	SMD transistor	HMBT2222A(ZC)	Q10,Q13,Q14,Q9
208	SF00015	SMD transistor	HMBTA42	Q17

No.	Part No.	Descriptions	Specification	Remark
209	SF00019	SMD transistor	HMBT5401(ZA)	Q15
210	AE00221	tin soldering paste	SJ-617	
211	AC00002	solder wire	63/37%	
212	HK01386	PC board	P-PSA-3000-R-1-DIP	
213	RA00156	fixed resistor 1/2W	6.8 M type	R10,R11,R12
214	RA00448	precise resistor 1/2W	11.0K M type	R55
215	RA00449	precise resistor 1/2W	13.0K M type	R23,R54
216	RA00007	metal-oxide-film resistor 1W	22 P type	R12,R9
217	RA00051	metal-oxide-film resistor 2W	5.6 P type	R1
218	RA00055	metal-oxide-film resistor 3W	12 RSS P type	R2,R3
219	RA00062	metal-oxide-film resistor 3W	1.0K RSS P type	R4,R5
220	RA00066	metal-oxide-film resistor 3W	3.0K RSS P type	R17,R28
221	RA00092	cement resistor 5W	0.2 Z type	R13,R14,R15,R6,R7,R77, R78,R8
222	CB00019	electrolytic capacitor	10uF/50V NP 5*11mm	C27,C34
223	CB00047	electrolytic capacitor	100uF/25V 6*11mm	C14,C15
224	CB00056	electrolytic capacitor	220uF/25V 8*11mm	C18,C19,C5,C6
225	CB00086	electrolytic capacitor	3300uF/100V 25*50mm	C1,C2,C35,C36
226	CC00009	Mylar capacitor	0.0033uF/100V 10%	C10,C11
227	CC00027	Mylar capacitor	0.022uF/100V 5%	C13,C4
228	CF00013	metal-film capacitor MEF	0.068uF/250V	C3
229	CF00036	metal-film capacitor MSC	0.15uF/63V	C24,C25,C28,C30
230	CF00038	metal-film capacitor MSC	0.22uF/63V 5% CASE02	C26,C29
231	SA00098	rectifier diode	1A/400V IN4004	D1,D2,D20,D21
232	SA00002	high speed diode	1A/600V 1N4937	D10,D9
233	SA00107	zener diode	1W 15V 1N4744	ZD1,ZD2,ZD5,ZD6
234	SA00117	zener diode	1/2W 5.6V 6B1	ZD3,ZD4
235	SB00042	transistor	MJE15032	Q4
236	SB00044	transistor	MJE15033	Q5
237	SB00021	power transistor	2SC5200	Q13,Q6,Q7,Q8
238	SB00023	power transistor	2SA1943-O	Q1,Q14,Q2,Q3
239	SD00144	integrated circuit	NE5532N/(PHI)	U2,U3
240	RC00161	resistor	3.3K 6 3P 3318F-1-332	VR2,VR3
241	RC00163	carbon-film resistor	100 6 3P horizontal 3318P-1-101	VR1
242	RH00004	thermistor	90 (NSA05A090L-500)	R36
243	RH00005	thermistor	100 (PTH9M04BH471TS2F333)	TH2
244	HC00087	row-wire header	13P 2.5mm 180°	CN1
245	HC00266	row-wire header	3P 2.5mm 180°	CN4,CN5
246	HC00267	row-wire header	7P 2.5mm 180°	CN2,CN3
247	HC00226	row-wire header	26PIN C01a-26AG1	CA1
248	CN00028	inductance	10*21.8mm	T1
249	HC00324	terminal	6.5m/m (PC250)	
250	MI00259	heat-sink (black)	PSA-3000 6*79*36.5*240mm	
251	NC00005	silicone insulator	TO-220 square type	

No.	Part No.	Descriptions	Specification	Remark
252	MG00169	screw	M3*12	
253	HA01527	wire	3P-3P 100	
254	NI00222	sleeve	1.5*30mm	
255	NI00221	sleeve	1.5 *1000mm	
256	NI00863	insulate bean	TO220B	
257	MF00037	washer	3* 5*1t	
258	HK01547	PC board	P-PSA-3000-R-1-AI	
259	HA01921	jumper wire	7mm	JP14,JP21,JP28,JP35, JP43,JP51,JP9
260	HA02249	wire	0.6	
261	HA01924	jumper wire	9mm	JP27,JP3,JP47,JP59, JP71
262	HA02249	wire	0.6	
263	HA01925	jumper wire	10mm	JP20,JP29,JP30,JP31, JP32,JP44,JP50,JP6, JP62,JP64,JP66,JP7
264	HA02249	wire	0.6	
265	HA01929	jumper wire	13mm	JP10,JP11,JP17,JP18, JP19,JP23,JP37,JP49, JP60,JP63,JP75
266	HA02249	wire	0.6	
267	HA01930	jumper wire	15mm	JP26,JP33,JP4
268	HA02249	wire	0.6	
269	HA01931	jumper wire	16mm	JP41,JP65,JP67,JP68, JP69,JP70,JP72,JP73, P74,JP8
270	HA02249	wire	0.6	
271	HA01932	jumper wire	20mm	JP12,JP16,JP2,JP22, JP24,JP25,JP34,JP40, JP42,JP45,JP46,JP48, JP54,JP55,JP56,JP61, JP57
272	HA02249	wire	0.6	
273	HK01388	PC board	P-PSA-3000-R-SMD-1	
274	HB00377	PCB	PSA-3000-R_VER040403	
275	RD00137	SMD fixed resistor 1/4W	820 ±5% 1206	R16,R42,R65
276	RD00145	SMD fixed resistor 1/4W	33K ±5% 1206	R24,R58
277	RD00146	SMD fixed resistor 1/4W	47K ±5% 1206	R19
278	RD00148	SMD fixed resistor 1/4W	150K ±5% 1206	R38,R43
279	RD00065	SMD fixed resistor 1/10W	47 ±5% 0603	R33
280	RD00068	SMD fixed resistor 1/10W	100 ±5% 0603	R26,R27,R49,R72,R73, R74
281	RD00074	SMD fixed resistor 1/10W	270 ±5% 0603	R30,R39,R50,R56,R66, R75
282	RD00082	SMD fixed resistor 1/10W	820 ±5% 0603	R34
283	RD00083	SMD fixed resistor 1/10W	1.0K ±5% 0603	R32,R45,R69
284	RD00085	SMD fixed resistor 1/10W	1.5K ±5% 0603	R29
285	RD00091	SMD fixed resistor 1/10W	3.3K ±5% 0603	R60
286	RD00093	SMD fixed resistor 1/10W	4.7K ±5% 0603	R57,R76
287	RD00098	SMD fixed resistor 1/10W	7.5K ±5% 0603	R47,R71
288	RD00101	SMD fixed resistor 1/10W	10K ±5% 0603	R21,R40,R63

No.	Part No.	Descriptions	Specification	Remark
289	RD00109	SMD fixed resistor 1/10W	39K ±5% 0603	R61,R62
290	RD00257	SMD precise resistor 1/4W	150K ±1% 1206	R18,R20,R52,R53
291	RD00261	SMD precise resistor 1/4W	499K ±1% 1206	R25,R59
292	RD00214	SMD precise resistor 1/10W	10.0K ±1% 0603	R37,R41,R44,R46,R48, R64,R68,R70
293	RD00219	SMD precise resistor 1/10W	20.0K ±1% 0603	R31,R35,R51,R67
294	CI00056	SMD ceramic capacitor 0603	56PF/50V NPO ±5%	C22,C23,C32,C8
295	CI00060	SMD ceramic capacitor 0603	150PF/50V NPO ±5%	C20,C21,C31,C33
296	CI00065	SMD ceramic capacitor 0603	0.001uF/50V X7R ±10%	C7
297	CI00067	SMD ceramic capacitor 0603	0.0022uF/50V X7R ±10%	C12
298	CI00075	SMD ceramic capacitor 0603	0.1uF/50V Y5V +80,-20%	C16,C17,C9
299	SE00011	SMD rectifier diode	RLS4148 0.5A (LL-34)	D11,D12,D13,D14,D15, D16,D17,D18,D19,D3, D4,D5,D6,D7,D8
300	SF00019	SMD transistor	HMBT5401(ZA)	Q11,Q12
301	SF00011	SMD transistor	HMBT2222A(ZC)	Q10,Q9
302	SG00014	SMD integrated circuit	NJM13700M	U1
303	AE00221	tin soldering paste	SJ-617	
304	HA01919	jumper wire	5mm	JP53
305	HA02249	wire	0.6	
306	HA01924	jumper wire	9mm	JP5,JP58
307	HA02249	wire	0.6	
308	HA01925	jumper wire	10mm	JP15,JP36
309	HA02249	wire	0.6	
310	HA01929	jumper wire	13mm	JP13
311	HA02249	wire	0.6	
312	HA01931	jumper wire	16mm	JP39
313	HA02249	wire	0.6	
314	HA01932	jumper wire	20mm	JP1,JP38
315	HA02249	wire	0.6	
316	HA01917	jumper wire	3mm	JP52
317	HA01919	jumper wire	5mm	JP53
318	HA02249	wire	0.6	
319	AC00002	solder wire	63/37%	
320	HK04485	PC board	P- MAC2.2-VR	
321	HB01348	PCB	MAC2.2-VR_VERO050323	
322	SA00052	L.E.D	3 round(green)long foot 26	
323	SA00053	L.E.D	3 round(red)long foot 26mm	
324	SA00255	L.E.D	3 long foot 27	
325	SA00254	L.E.D	3 long foot 27	
326	RC00469	potentiometer	A10K RV16A-30-15FW-A10K-301	
327	HC00264	row-wire header	7P 2.5mm 90°	
328	HC00065	row-wire header	2P 2.5mm 90°	
329	NI01770	LED spacer support	LEDS-18 18mm	
330	ME00052	nut	7	

No.	Part No.	Descriptions	Specification	Remark
331	MF00060	washer	7* 12*0.5t	
332	AC00002	solder wire	63/37%	
333	HK03058	K-PC board	P-CHA-PU-5	
334	HB00798	PCB	CHA-PU-4_VER021004	
335	CA00033	ceramic capacitor	470PF Y5E	C1,C2
336	HC00112	balance MIC jack	99M-107SP-1-2 90° PUSH	CH1
337	HC00108	stereo MIC jack	6.3 stereo LJB0661-6	CH11
338	HI00125	slide switch	SL20202-25Y-6mm	
339	HC00267	row-wire header	7P 2.5mm 180°	CN3
340	HA01656	header wiring adopted	FL-0476A 26P PH1.27	CA1
341	HI00128	slide switch	3-stages 16P SLB-43-10	SW1
342	AC00002	solder wire	63/37%	
343	HK03056	K-PC board	P-CHB-PU-2	
344	HB00799	PCB	CHB-PU-2_VER021004	
345	CA00033	ceramic capacitor	470PF Y5E	C3,C 4
346	HC00108	stereo MIC jack	6.3 stereo LJB0661-6	
347	HC00112	balance MIC jack	99M-107SP-1-2 90° PUSH	
348	HI00125	slide switch	SL20202-25Y-6mm	
349	HC00267	row-wire header	7P 2.5mm 180°	CN4
350	HA01756	P.V.C wiredUL1015	80 black	
351	AC00002	solder wire	63/37%	
352	HA01198	wire	180mm UL1015 14AWG black	
353	NI01867	self-adhere foot cushion	20.5*14*7.6mm(SF-006)	
354	NA00279	clip-chain bag	0.04t*100*150mm_V1.0	
355	AD00012	twin adhesive	90*120mm_V1.0	
356	NI02651	knob fix sheath	10* 22.5	
357	NB03191	cushion	MAC _V1.0	
358	MI02436	handle	MAC2.2_V1.0	
359	MI02334	handle	MAC_V1.0	
360	ND00410	dust-proof shade	167.3*85.6*5.0t_V1.1	
361	ND00409	dust-proof shade	167.3*85.6*5.0t_V1.1	
362	HK04688	PC board	P-MAC-SP	
363	HC00442	speaker socket	NL4MP (NEUTRIK)	
364	MJ00942	fixed bracket	CS12/600	
365	MJ00061	Zn-plated board	1*2135*1220 20.45kg	
366	HA01237	wiring CF:W207	200mm UL1015 14AWG gray	
367	HA01239	wiring CF:W209	180mm UL1015 14AWG white	
368	HA01259	wiring	300mm UL1015 14AWG white	
369	HA01238	wiring CF:W208	250mm UL1015 14AWG gray	
370	HA03432	wiring	100mm UL1015 14AWG	
371	HA03433	wiring	100mm UL1015 14AWG	
372	HB01396	PCB	MIS60SP(2*4)_VER040922	
373	AC00002	solder wire	63/37%	
374	MF00039	washer	5* 8*1t	

MAC2.4

No.	Part No.	Descriptions	Specification	Remark
1	MA05423	panel	MAC _V1.0	
2	MA05426	panel	MACRO -01	
3	MA05413	panel	MACRO _V1.1	
4	MJ00089	iron board	1.6*2135*1220 32.72kg	
5	MI02355	fixed bracket	45.5*20*8.5*1.5t MACRO _V1.0	
6	MJ00088	iron board	1.5*2135*1220 30.67kg	
7	MA05411	panel	MACRO _V1.1	
8	MJ01240	iron board	3.0t*1950*1185mm 54kg	
9	ME00004	screw pillar	M3*10*0.5PH	
10	MA05422	panel	MAC 2.4 ALTO_V1.1	
11	MA05415	panel	MACRO	
12	MA05414	panel	MACRO _V1.3	
13	ME00165	iron pillar	M3*21*0.5PH_V1.0	
14	MJ00058	iron board	1*2135*1220 20.45kg	
15	MC00631	top cover	MAC _V1.0	
16	MC00628	top cover	MACRO	
17	MC00627	top cover	MACRO _V1.0	
18	MJ00089	iron board	1.6*2135*1220 32.72kg	
19	MB03687	bottom board	MAC _V1.2	
20	MB03670	bottom board	MACRO	
21	MB03669	chassis	MACRO □	
22	MJ01154	iron board	2.0t*1850*950mm 27.6kg	
23	MI00397	board	PSA-3000	
24	MI00396	board	PSA-3000	
25	MJ00060	iron board	0.7*2135*1220 14.31kg	
26	HI00031	power switch	R415KKETOF	
27	NI02650	knob	18*18mm	
28	TD00040	transformer	PT-31300_115/230V	
29	NI00437	rubber coil	20* 120*2tB	
30	MJ00344	weldment	AMP	
31	MG00220	screw	M8*78	
32	ME00026	nut	8m/m	
33	MF00026	washer	8* 18*1.5t	
34	MF00041	washer	8* 13.5*2t	
35	HE00007	fan	DC12V/0.3A 80*80*25mm 500mm	
36	MG00283	copper pillar	M3*22*0.5PH	
37	MG00244	copper pillar	M3*10*0.5PH	
38	HC00005	AC socket	AC-008	
39	HA00871	power cord(Europe 3P)	LT-322+1.5*3C(H05VV-F) 6FT+LT-501	
40	HD00050	glass tube fuse	25A 6*32mm	
41	HI00143	manual reposition switch	A0701HM-8A	

No.	Part No.	Descriptions	Specification	Remark
42	MG00020	screw	M3*8	
43	MG00025	screw	M3*6	
44	MG00161	screw	M3*6	
45	MG00042	screw	M3*10	
46	MG00044	screw	M4*10	
47	MG00061	screw	M3*10	
48	MG00117	screw	M4*10	
49	MF00048	washer	4* 8*0.5t	
50	MF00037	washer	3* 5*1t	
51	ME00015	nut	3m/m	
52	ME00016	nut	4m/m	
53	NC00131	washer	1* 11.3* 15.3 red	
54	NI00002	nut of plastic	7/16**G20/15*4.8(hexagon)	
55	HA01488	header wiring AF:W248	2P 140	
56	HA01528	wire	3P-3P 300mm UL2877 26AWG	
57	HA01530	wire	7P-7P 110mm UL1007 28AWG	
58	HA01539	header wiring AF:W303	13P-13P 250mm UL1007 28AWG	
59	HA01571	header wiring	7P-7P 320mm UL1007 28AWG	
60	HA01333	wiring CF:W76	150mm UL1015 18AWG green/yellow	
61	HA01241	wire	480mm UL1015 14AWG brown	
62	HA01247	wire	180mm UL1015 14AWG blue	
63	HA01248	wire	150mm UL1015 14AWG brown	
64	HA01198	wire	180mm UL1015 14AWG black	
65	HA01250	wire	250mm UL1015 14AWG Yellow	
66	HA01251	wire	200mm UL1015 14AWG red	
67	HA01242	wire	440mm UL1015 14AWG black	
68	HA01243	wire	300mm UL1015 14AWG brown	
69	HA01244	wire	380mm UL1015 14AWG red	
70	HA01262	quick terminal wiring	170 blue	
71	HA01263	quick terminal wiring	170 green	
72	HA01264	wire	400mm UL1015 14AWG blue	
73	HA01265	wire	400mm UL1015 14AWG green	
74	HA01266	wire	200mm UL1015 14AWG orange	
75	HA01267	wire	380mm UL1015 14AWG orange	
76	HA01756	P.V.C wiredUL1015	80 black	
77	NI00252	sleeve	4*20mm	
78	NI00248	sleeve	4*1000mm	
79	NA00235	bag	0.05t*650*550mm	
80	NI00218	cable tie-black	ALT-102SB	
81	NI00219	cable tie	CV-075 white (AST-145-K)	
82	HJ00006	desiccant	30g	
83	NF01893	instruction	MACRO series ALTO_V1.1	

No.	Part No.	Descriptions	Specification	Remark
84	NH00149	paper	889*640mm	
85	NB03190	color box	MAC 2.4 ALTO_V1.1	
86	NB03187	box	MAC ALTO_V1.0	
87	HC00295	terminal	JS205-110	
88	MH00766	iron piece	11* 90*2_V1.1	
89	MH00768	iron piece	11* 90*2_V1.1	
90	MJ01154	iron board	2.0t*1850*950mm 27.6kg	
91	MI00427	fixed bracket	PSA-3000	
92	MJ00058	iron board	1*2135*1220 20.45kg	
93	MG00111	screw	pill 4*30	
94	NI00389	plastic washer	12* 16*0.5	
95	NI00375	film	45*60.5*0.5mm	
96	NA00137	clip-chain bag	5*7	
97	NE02227	label	PSA-31500 220-240V	
98	NI00037	adhesive label	0.05*1M	
99	NI00034	membrane	0.045*1M	
100	NE02717	label	MADE IN CHINA	
101	NH00038	paper	0.115*1M	
102	NI00028	membrane	0.110*1M	
103	NF00061	assurance card	ALTO	
104	NE11347	label	ALTO PI	
105	NH00334	cone paper	0.040*1m	
106	NE08759	label	MAC 2.4_V1.0	
107	NH00012	bond paper	0.04*1M	
108	NI00014	membrane	0.035*1M	
109	NC00059	fixed board	1*46*46(Sax-2000)	
110	NC00175	insulator	1.0t*51mm*100M	
111	NA00116	PE bag	0.04t*170*100mm	
112	HA01404	row-wire connecting	2P-2P 90	
113	HK00216	PC board	P-PSA-31300PWR-1	
114	HB00398	PCB	PSA-31300PWR-1_VER031117	
115	RA00367	fixed resistor 1/8W	2.7K M type	R304
116	RA00382	fixed resistor 1/8W	6.8K M type	R301,R302
117	RA00432	fixed resistor 1/8W	470K M type	R303
118	RA00033	metal-oxide-film resistor 2W	39 P type	
119	RA00055	metal-oxide-film resistor 3W	12 RSS P type	R306,R307
120	CB00073	electrolytic capacitor	1000uF/35V 13*20mm	C302
121	CF00035	metal-film capacitor MPX	0.1uF/275V	C301
122	CF00013	metal-film capacitor MEF	0.068uF/250V	C303
123	CF00039	metal-film capacitor MEF	0.22uF/250V	C304,C305,C306,C307
124	SA00001	bridge rectifier	1A/400V RB154	
125	SA00012	bridge rectifier	25A/200V BP25-06PWS	

No.	Part No.	Descriptions	Specification	Remark
126	SB00015	light-electron transistor	4N33.300	
127	SB00064	transistor	TIP41C(ST)	
128	HC00076	row-wire header	2P 2.5mm 180°	CN301,CN303
129	HC00077	row-wire header	3P 2.5mm 180°	CN302
130	HC00324	terminal	6.5m/m (PC250)	
131	MI00177	heat sink	MA103*25m/m*2PIN	
132	MI00267	heat-sink	3*30*15*36	
133	MG00110	screw	M4*20	
134	MF00018	washer	4* 10*1t	
135	MG00160	screw	M3*6 P0.5	
136	MF00037	washer	3* 5*1t	
137	MF00038	washer	4* 7*1t	
138	HD00022	glass tube fuse	4A 250V 4*11.5mm CSA/UL	
139	HD00053	glass tube fuse	6A 250V 4*11.5mm CSA/UL	
140	HA01925	jumper wire	10mm	
141	HA02249	wire	0.6	
142	AC00002	solder wire	63/37%	
143	HK01378	PC board	P-PSA-31300-A-DIP	
144	RA00142	fixed resistor 1/2W	15K M type	R165
145	RA00450	precise resistor 1/2W	23.2K M type	R122,R123,R222
146	RA00782	precise resistor 1/4W	10.0 M type	R163
147	RA00025	metal-oxide-film resistor 1W	3.3 P type	R20
148	RA00050	metal-oxide-film resistor 2W	1.5 P type	R181,R182
149	RA00067	metal-oxide-film resistor 3W	5.1K RSS P type	R180,R188
150	RA00027	metal-oxide-film resistor 1W	5.6 P type	R146,R147
151	RA00021	metal-oxide-film resistor 1W	12K P type	R177,R194
152	RA00007	metal-oxide-film resistor 1W	22 P type	R136,R137
153	RA00051	metal-oxide-film resistor 2W	5.6 P type	R160
154	RA00055	metal-oxide-film resistor 3W	12 RSS P type	R154,R155,R161,R162
155	RA00068	metal-oxide-film resistor 3W	8.2K RSS P type	R118,R119,R133,R135
156	RA00065	metal-oxide-film resistor 3W	2.2K RSS P type	R157,R158,R198
157	RA00091	cement resistor 5W	0.2 (P)	R142,R143,R148,R149,R152, R153,R156,R159
158	CB00015	electrolytic capacitor	4.7uF/50V SLL 5*11mm	C171
159	CB00019	electrolytic capacitor	10uF/50V NP 5*11mm	C106,C129,C206
160	CB00047	electrolytic capacitor	100uF/25V 6*11mm	C105,C125,C173,C180,C205, C225
161	CB00056	electrolytic capacitor	220uF/25V 8*11mm	C112,C113,C212,C213

No.	Part No.	Descriptions	Specification	Remark
162	CB00157	electrolytic capacitor	12000uF/80V 35*56mm	C120,C121,C122,C123
163	CC00001	Mylar capacitor	0.001uF/100V 5%	C131,C231
164	CC00009	Mylar capacitor	0.0033uF/100V 10%	C172,C179
165	CC00027	Mylar capacitor	0.022uF/100V 5%	C116,C119
166	CF00013	metal-film capacitor MEF	0.068uF/250V	C124,C126
167	CC00004	Mylar capacitor	0.0015uF/100V 10%	C114
168	CF00033	metal-film capacitor MEF	0.1uF/250V	C175,C31
169	CF00036	metal-film capacitor MSC	0.15uF/63V	C108,C109,C208,C209
170	CF00038	metal-film capacitor MSC	0.22uF/63V 5% CASE02	C107,C207
171	SA00098	rectifier diode	1A/400V IN4004	D10,D117,D118,D12
172	SA00002	high speed diode	1A/600V 1N4937	D108,D109
173	SA00107	zener diode	1W 15V 1N4744	D100,D101,D200,D201
174	SA00117	zener diode	1/2W 5.6V 6B1	D107,D110,D170
175	SB00042	transistor	MJE15032	Q107
176	SB00044	transistor	MJE15033	Q106
177	SB00021	power transistor	2SC5200	Q104,Q108,Q110,Q112
178	SB00023	power transistor	2SA1943-O	Q103,Q107,Q109,Q111
179	SD00144	integrated circuit	NE5532N/(PHI)	U101,U201
180	RC00161	resistor	3.3K 6 3P 3318F-1-332	R139,R140
181	RC00163	carbon-film semi-fixed resistor	100 6 3P horizontal 3318P-1-101	R131
182	RH00004	thermistor	90 (NSA05A090L-500)	R134
183	RH00005	thermistor	100 (PTH9M04BH471TS2F333)	R4
184	HC00262	row-wire header	13P 2.0mm 180°	CN101
185	HC00056	FUSE holder	8*10.6*1.5 JEF-505	
186	HD00050	glass tube fuse	25A 6*32mm	
187	HC00267	row-wire header	7P 2.5mm 180°	CN102,CN105
188	HC00226	row-wire header	26PIN C01a-26AG1	
189	CN00028	inductance	10*21.8mm	
190	HC00324	terminal	6.5m/m (PC250)	
191	NC00005	silicone insulator	TO-220 square type	
192	MG00169	screw	M3*12	
193	NI00222	sleeve	1.5*30mm	
194	NI00221	sleeve	1.5 *1000mm	
195	NI00863	insulate bean	TO220B	
196	MF00037	washer	3* 5*1t	
197	SA00104	zener diode	1W 10V 1N4740	D174
198	SA00105	zener diode	1W 12V 1N4742	D178
199	MI00268	heat-sink	6*79*36.5*270 PSA-31300right	
200	RA00452	precise resistor 1/4W	100 M type	R164
201	SB00002	Bi-directional S.C.R	Z0103A	D119,D120
202	SB00003	Bi-directional S.C.R	MAC224/BTA24-600	Q113

No.	Part No.	Descriptions	Specification	Remark
203	SA00099	rectifier diode	MUR1520/STPR1520D	D175,D176
204	SB00121	transistor	IRFZ44V(TO-220AB)	Q170,Q174
205	HK00212	PC board	P-PSA-31300-A-SMD	
206	HB00387	PCB	PSA-31300-A_VER041120	
207	RD00004	SMD fixed resistor 1/8W	47 ±5% 0805	R170,R189
208	RD00005	SMD fixed resistor 1/8W	75 ±5% 0805	R124
209	RD00006	SMD fixed resistor 1/8W	100 ±5% 0805	R109,R110,R127,R209, R210,R227
210	RD00010	SMD fixed resistor 1/8W	270 ±5% 0805	R113,R196,R213,R296
211	RD00013	SMD fixed resistor 1/8W	390 ±5% 0805	R120,R220
212	RD00017	SMD fixed resistor 1/8W	820 ±5% 0805	R111,R211
213	RD00018	SMD fixed resistor 1/8W	1.0K ±5% 0805	R102,R126,R202
214	RD00020	SMD fixed resistor 1/8W	1.5K ±5% 0805	R129
215	RD00022	SMD fixed resistor 1/8W	2.0K ±5% 0805	R190,R195
216	RD00023	SMD fixed resistor 1/8W	2.2K ±5% 0805	R191
217	RD00027	SMD fixed resistor 1/8W	4.7K ±5% 0805	R114,R138,R174,R179,R187, R193,R214,R238
218	RD00031	SMD fixed resistor 1/8W	7.5K ±5% 0805	R108,R208
219	RD00032	SMD fixed resistor 1/8W	10K ±5% 0805	R100,R101,R103,R105,R106, R128,R200,R201,R203,R205, R206
220	RD00033	SMD fixed resistor 1/8W	12K ±5% 0805	R176
221	RD00039	SMD fixed resistor 1/8W	24K ±5% 0805	R117,R121,R217,R221
222	RD00043	SMD fixed resistor 1/8W	39K ±5% 0805	R107,R207
223	RD00044	SMD fixed resistor 1/8W	47K ±5% 0805	R183
224	RD00054	SMD fixed resistor 1/8W	470K ±5% 0805	R172,R185
225	RD00234	SMD precise resistor 1/8W	3.01K ±1% 0805	R175,R24
226	RD00236	SMD precise resistor 1/8W	5.90K ±1% 0805	R171,R184
227	RD00259	SMD precise resistor 1/4W	464K ±1% 1206	R166,R167,R266
228	RD00254	SMD precise resistor 1/4W	68.0K ±1% 1206	R22A,R22B,R23A,R23B
229	RD00137	SMD fixed resistor 1/4W	820 ±5% 1206	R115,R130,R132,R215
230	RD00153	SMD fixed resistor 1/4W	820K ±5% 1206	R116,R216
231	RD00148	SMD fixed resistor 1/4W	150K ±5% 1206	R104,R173,R178,R186, R192,R204
232	RD00133	SMD fixed resistor 1/4W	100 ±5% 1206	R197
233	RD00146	SMD fixed resistor 1/4W	47K ±5% 1206	R125
234	SE00011	SMD rectifier diode	RLS4148 0.5A (LL-34)	D102,D103,D104,D105,D106, D111,D112,D113,D114,D115, D116,D171,D173,D177,D202, D203,D205,D206
235	CI00013	SMD ceramic capacitor 0805	56PF/50V NPO	C110,C132,C170,C176, C177,C210
236	CI00017	SMD ceramic capacitor 0805	150PF/50V NPO	C103,C203
237	CI00022	SMD ceramic capacitor 0805	0.001uF/50V X7R	C101,C130,C181,C201
238	CI00009	SMD ceramic capacitor 0805	33PF/50V NPO	C111,C211
239	CI00042	SMD ceramic capacitor 1206	0.001uF/50V NPO	C104,C115
240	CI00045	SMD ceramic capacitor 1206	0.022uF/50V X7R ±5%	C178
241	SG00038	SMD integrated circuit	LM311DT(SO-8)/(ST)	U170,U171

No.	Part No.	Descriptions	Specification	Remark
242	SG00014	SMD integrated circuit	NJM13700M	
243	SF00053	transistor	MMBT3906(SOT-23)/(PHI)	Q100,Q172,Q175,Q200
244	SF00056	transistor	MMBT3904(SOT-23)/(PHI)	Q101,Q102,Q171,Q173
245	AE00221	tin soldering paste	SJ-617	
246	NC00129	insulation	0.3t*45*24mm	
247	RA00583	precise resistor 1/4W	470K M type	
248	AC00002	solder wire	63/37%	
249	HK01379	PC board	P-PSA-31300-B-DIP	
250	RA00142	fixed resistor 1/2W	15K M type	R265
251	RA00007	metal-oxide-film resistor 1W	22 P type	R236,R237
252	RA00050	metal-oxide-film resistor 2W	1.5 P type	R281,R282
253	RA00051	metal-oxide-film resistor 2W	5.6 P type	R260
254	RA00055	metal-oxide-film resistor 3W	12 RSS P type	R254,R255,R261,R262
255	RA00065	metal-oxide-film resistor 3W	2.2K RSS P type	R257,R258,R298
256	RA00068	metal-oxide-film resistor 3W	8.2K RSS P type	R218,R219,R233,R235
257	RA00091	cement resistor 5W	0.2 (P)	R203,R242,R248,R249,R252, R253,R256,R259
258	RA00067	metal-oxide-film resistor 3W	5.1K RSS P type	R280,R288
259	CB00017	electrolytic capacitor	4.7uF/250V 10*12mm	C7
260	CB00041	electrolytic capacitor	47uF/50V 6*11mm	C8
261	CB00157	electrolytic capacitor	12000uF/80V 35*56mm	C220,C221,C222,C223
262	CC00004	Mylar capacitor	0.0015uF/100V 10%	C214
263	CC00009	Mylar capacitor	0.0033uF/100V 10%	C272,C279
264	CC00027	Mylar capacitor	0.022uF/100V 5%	C216,C219
265	CF00013	metal-film capacitor MEF	0.068uF/250V	C224,C226
266	CF00033	metal-film capacitor MEF	0.1uF/250V	C274,C275
267	SA00098	rectifier diode	1A/400V IN4004	D1,D11,D13,D217,D218
268	SA00002	high speed diode	1A/600V 1N4937	D208,D209
269	SA00107	zener diode	1W 15V 1N4744	D15,D8
270	SA00117	zener diode	1/2W 5.6V 6B1	D207,D210,D270
271	SB00034	transistor	2SC1815GR	Q5
272	SB00042	transistor	MJE15032	Q205
273	SB00044	transistor	MJE15033	Q206
274	SB00021	power transistor	2SC5200	Q204,Q208,Q210,Q212
275	SB00023	power transistor	2SA1943-O	Q203,Q207,Q209,Q211
276	RC00161	resistor	3.3K 6 3P 3318F-1-332	R239,R240
277	RC00163	carbon-film semi-fixed resistor	100 6 3P horizontal 3318P-1-	R231
278	RH00004	thermistor	90 (NSA05A090L-500)	R234
279	RH00005	thermistor	100 (PTH9M04BH471TS2F333)	R7
280	HC00076	row-wire header	2P 2.5mm 180°	CN202
281	HC00077	row-wire header	3P 2.5mm 180°	CN203
282	HC00262	row-wire header	13P 2.0mm 180°	CN201
283	CN00028	inductance	10*21.8mm	
284	HC00324	terminal	6.5m/m (PC250)	

No.	Part No.	Descriptions	Specification	Remark
285	HC00056	FUSE holder	8*10.6*1.5 JEF-505	
286	HD00050	glass tube fuse	25A 6*32mm	
287	NC00005	silicone insulator	TO-220 square type	
288	MG00169	screw	M3*12	
289	NI00222	sleeve	1.5*30mm	
290	NI00221	sleeve	1.5 *1000mm	
291	NI00863	insulate bean	TO220B	
292	MF00037	washer	3* 5*1t	
293	RA00782	precise resistor 1/4W	10.0 M type	R263
294	RA00452	precise resistor 1/4W	100 M type	R264
295	RA00027	metal-oxide-film resistor 1W	5.6 P type	R246,R247
296	RA00022	metal-oxide-film resistor 1W	33K P type	R2,R5
297	CB00015	electrolytic capacitor	4.7uF/50V SLL 5*11mm	C271
298	CB00047	electrolytic capacitor	100uF/25V 6*11mm	C273,C280
299	CB00019	electrolytic capacitor	10uF/50V NP 5*11mm	C229
300	SA00104	zener diode	1W 10V 1N4740	D274
301	SA00105	zener diode	1W 12V 1N4742	D278
302	MI00269	heat-sink	6*79*36.5*270 PSA-31300 left	
303	SB00002	Bi-directional S.C.R	Z0103A	D219,D220
304	SB00003	Bi-directional S.C.R	MAC224/BTA24-600	Q213
305	SA00099	rectifier diode	MUR1520/STPR1520D	D275,D276
306	SB00121	transistor	IRFZ44V(TO-220AB)	Q270,Q274
307	RA00021	metal-oxide-film resistor 1W	12K P type	R227,R294
308	HK00214	PC board	P-PSA-31300-B-SMD	
309	HB00388	PCB	PSA-31300-B_VER041120	
310	RD00004	SMD fixed resistor 1/8W	47 ±5% 0805	R25,R270,R289
311	RD00005	SMD fixed resistor 1/8W	75 ±5% 0805	R224
312	RD00020	SMD fixed resistor 1/8W	1.5K ±5% 0805	R229
313	RD00022	SMD fixed resistor 1/8W	2.0K ±5% 0805	R290,R295,R8
314	RD00027	SMD fixed resistor 1/8W	4.7K ±5% 0805	R274,R279,R293,R287
315	RD00032	SMD fixed resistor 1/8W	10K ±5% 0805	R228
316	RD00033	SMD fixed resistor 1/8W	12K ±5% 0805	R276
317	RD00044	SMD fixed resistor 1/8W	47K ±5% 0805	R283
318	RD00054	SMD fixed resistor 1/8W	470K ±5% 0805	R272,R285
319	RD00023	SMD fixed resistor 1/8W	2.2K ±5% 0805	R291
320	RD00133	SMD fixed resistor 1/4W	100 ±5% 1206	R30
321	RD00137	SMD fixed resistor 1/4W	820 ±5% 1206	R230,R232
322	RD00141	SMD fixed resistor 1/4W	6.8K ±5% 1206	R19
323	RD00146	SMD fixed resistor 1/4W	47K ±5% 1206	R225
324	RD00148	SMD fixed resistor 1/4W	150K ±5% 1206	R10,R273,R278,R286,R292
325	RD00149	SMD fixed resistor 1/4W	220K ±5% 1206	R18,R26
326	RD00150	SMD fixed resistor 1/4W	330K ±5% 1206	R27
327	RD00154	SMD fixed resistor 1/4W	1.0M ±5% 1206	R3,R6

No.	Part No.	Descriptions	Specification	Remark
328	RD00234	SMD precise resistor 1/8W	3.01K ±1% 0805	R275
329	RD00236	SMD precise resistor 1/8W	5.90K ±1% 0805	R271,R284
330	RD00259	SMD precise resistor 1/4W	464K ±1% 1206	R15
331	SE00011	SMD rectifier diode	RLS4148 0.5A (LL-34)	D14,D2,D204,D211,D212, D213,D214,D215,D216,D271, D273,D277,D3,D4,D5,D6,D7, D9
332	CI00013	SMD ceramic capacitor 0805	56PF/50V NPO	C270,C276,C277
333	CI00028	SMD ceramic capacitor 0805	0.01uF/50V Y5V	C11
334	CI00022	SMD ceramic capacitor 0805	0.001uF/50V X7R	C281,C9
335	CI00042	SMD ceramic capacitor 1206	0.001uF/50V NPO	C215
336	CI00045	SMD ceramic capacitor 1206	0.022uF/50V X7R ±5%	C278
337	SF00053	transistor	MMBT3906(SOT-23)/(PHI)	Q272,Q275,Q4,Q6,Q7
338	SF00056	transistor	MMBT3904(SOT-23)/(PHI)	Q201,Q202,Q271,Q273, Q8,Q9
339	SF00015	SMD transistor	HMBTA42	Q1
340	SG00038	SMD integrated circuit	LM311DT(SO-8)/(ST)	U270,U271
341	AE00221	tin soldering paste	SJ-617	
342	NC00129	insulation	0.3t*45*24mm	
343	AC00002	solder wire	63/37%	
344	HK04485	PC board	P- MAC2.2-VR	
345	HB01348	PCB	MAC2.2-VR_VERO050323	
346	SA00052	L.E.D	3 round(green)long foot 26	
347	SA00053	L.E.D	3 round(red)long foot 26mm	
348	SA00255	L.E.D	3 long foot 27	
349	SA00254	L.E.D	3 long foot 27	
350	RC00469	potentiometer	A10K RV16A-30-15FW-A10K-301	
351	HC00264	row-wire header	7P 2.5mm 90°	
352	HC00065	row-wire header	2P 2.5mm 90°	
353	NI01770	LED spacer support	LEDS-18 18mm	
354	ME00052	nut	7	
355	MF00060	washer	7* 12*0.5t	
356	AC00002	solder wire	63/37%	
357	HK03058	K-PC board	P-CHA-PU-5	
358	HB00798	PCB	CHA-PU-4_VER021004	
359	CA00033	ceramic capacitor	470PF Y5E	C1,C2
360	HC00112	XLR MIC jack	99M-107SP-1-2 90° PUSH	CH1
361	HC00108	stereo MIC jack	6.3 stereo LJB0661-6	CH11
362	HI00125	slide switch	SL20202-25Y-6mm	
363	HC00267	row-wire header	7P 2.5mm 180°	CN3
364	HA01656	header wiring adopter	FL-0476A 26P-male female adopt PH1.27	CA1
365	HI00128	slide switch	3-stages 16P SLB-43-10	SW1
366	AC00002	solder wire	63/37%	
367	HK03056	K-PC board	P-CHB-PU-2	
368	HB00799	PCB	CHB-PU-2_VER021004	
369	CA00033	ceramic capacitor	470PF Y5E	C3,C 4
370	HC00108	stereo MIC jack	6.3 stereo LJB0661-6	

No.	Part No.	Descriptions	Specification	Remark
371	HC00112	XLR MIC jack	99M-107SP-1-2 90° PUSH	
372	HI00125	slide switch	SL20202-25Y-6mm	
373	HC00267	row-wire header	7P 2.5mm 180°	CN4
374	HA01756	P.V.CwiredUL1015	80 black	
375	AC00002	solder wire	63/37%	
376	NI01867	self-adhere foot cushion	20.5*14*7.6mm(SF-006)	
377	NA00279	clip-chain bag	0.04t*100*150mm_V1.0	
378	AD00012	twin adhesive	90*120mm_V1.0	
379	NI02651	knob fix sheath	10* 22.5	
380	NB03191	cushion	MAC _V1.0	
381	MI02436	handle	MAC2.2_V1.0	
382	MI02334	handle	MAC_V1.0	
383	ND00410	dust-proof shade	167.3*85.6*5.0t_V1.1	
384	ND00409	dust-proof shade	167.3*85.6*5.0t_V1.1	
385	HK04608	PC board	P-MIS60SP	
386	HC00442	speaker holder	NL4MP (NEUTRIK)	SPK1,SPK2
387	MJ00942	fixed bracket	CS12/600	
388	MJ00061	Zn-plated board	1*2135*1220 20.45kg	
389	HA01239	wiringCF:W209	180mm UL1015 14AWG white	JP5
390	HA01237	wiringCF:W207	200mm UL1015 14AWG gray	JP2
391	HA02471	wire	360mm UL1015 14AWG white	JP7
392	HA01258	quick terminal wiring	380mm UL1015 14AWG gray	JP8
393	HA03432	wire	100mm UL1015 14AWG	JP1,JP3
394	HA03433	wire	100mm UL1015 14AWG	JP6,JP4
395	HB01396	PCB	MIS60SP(2*4)_VER040922	
396	AC00002	solder wire	63/37%	
397	MF00039	washer	5* 8*1t	
398	MG00067	screw	M4*35	