

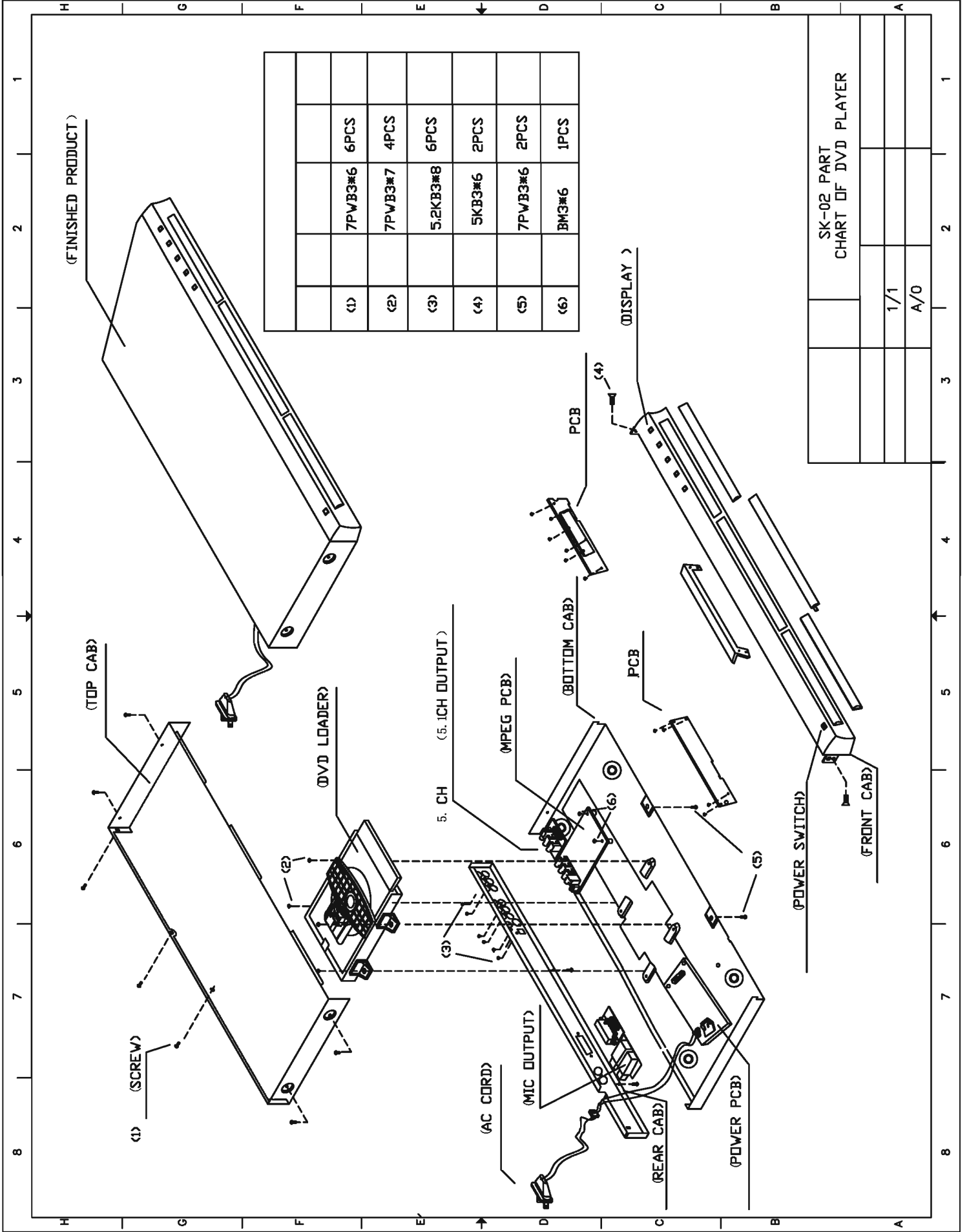


AKAI

HOME THEATRE SYSTEM

Model:
DV-R4050VSMK

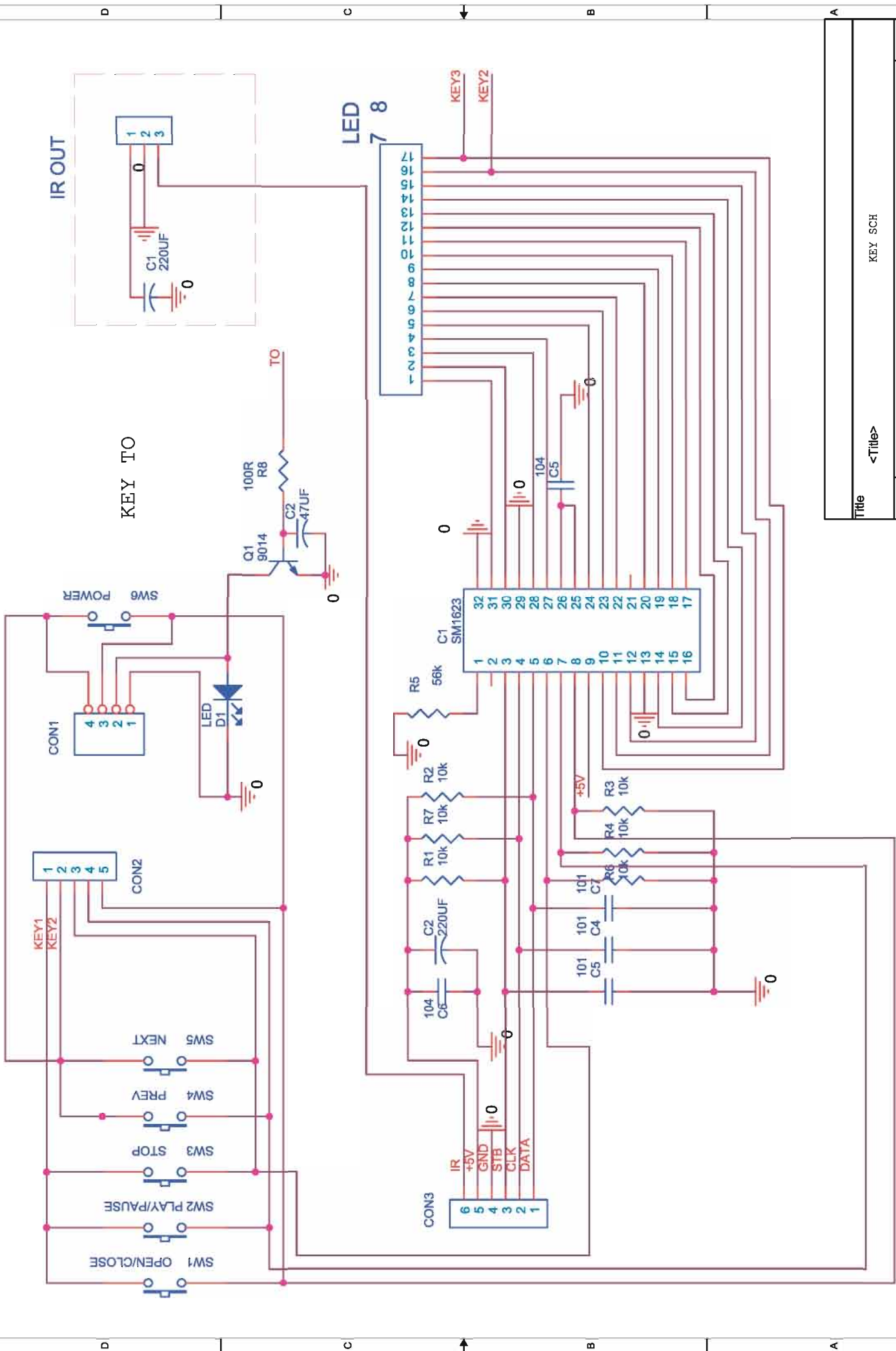
SERVICE MANUAL



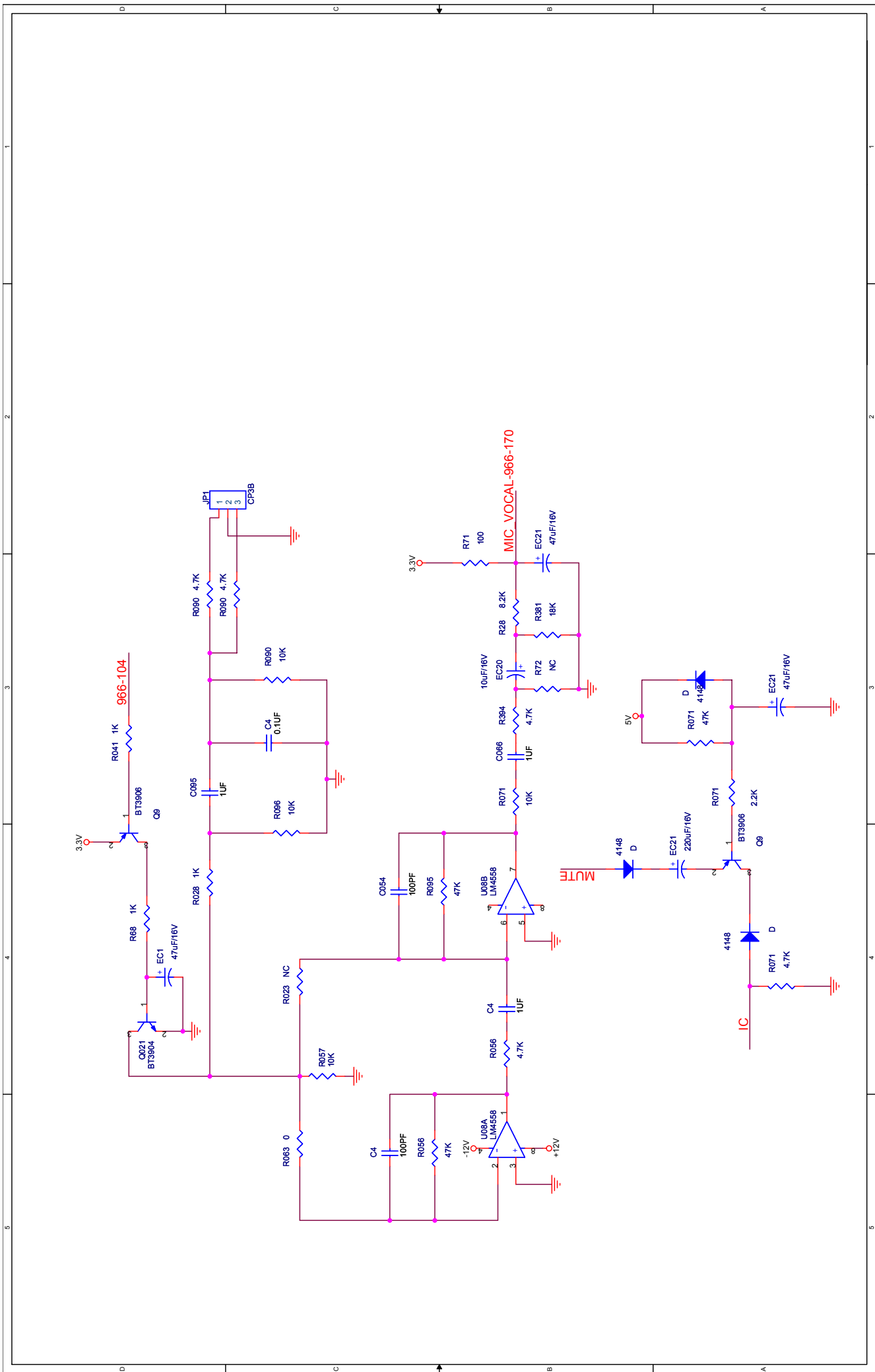
(FINISHED PRODUCT)

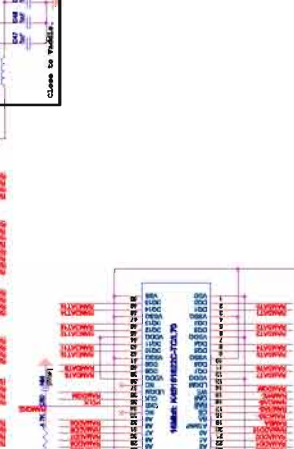
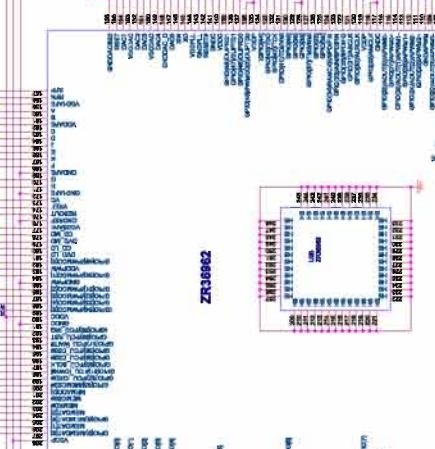
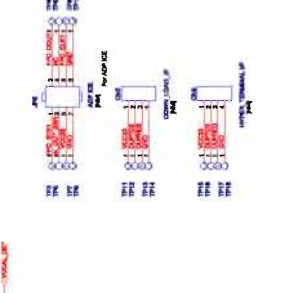
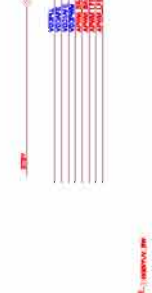
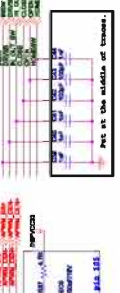
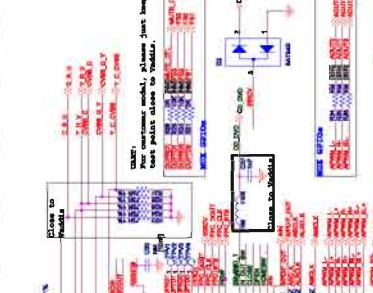
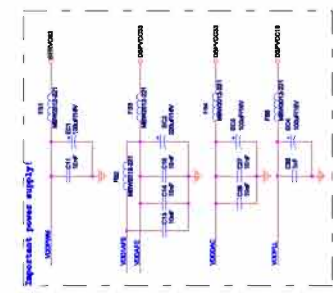
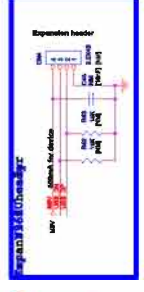
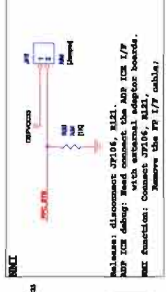
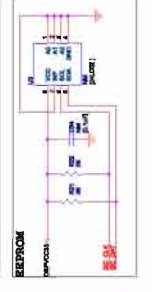
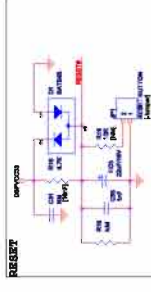
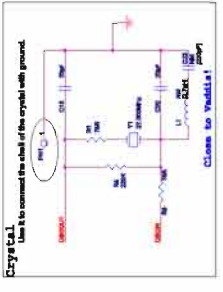
(1)	7PW/B3#6	6PCS
(2)	7PW/B3#7	4PCS
(3)	5.2KB3#8	6PCS
(4)	5KB3#6	2PCS
(5)	7PW/B3#6	2PCS
(6)	BMS#6	1PCS

SK-02 PART		CHART OF DVD PLAYER	
		1/1	
		A/O	



Title		<Title>	
Size		A	
Document Number		<Doc>	
Date:	Sheet	1	of 1



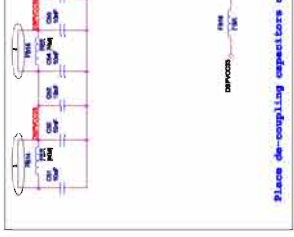
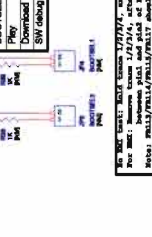
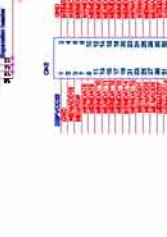
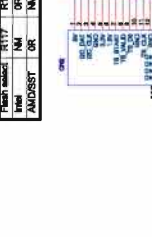
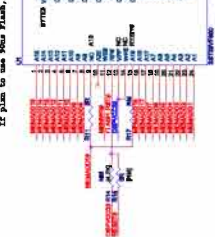
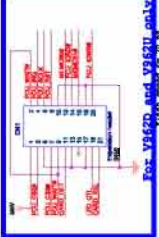
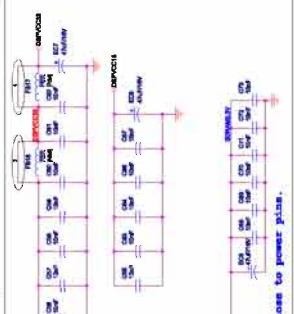
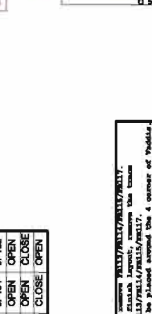
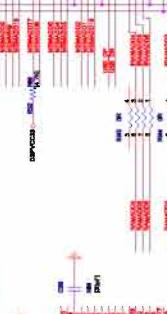
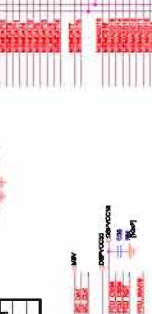


While using BA854

000	8108
BA15E	518
BA15D	518
BA15C	518
BA15B	518
BA15A	518

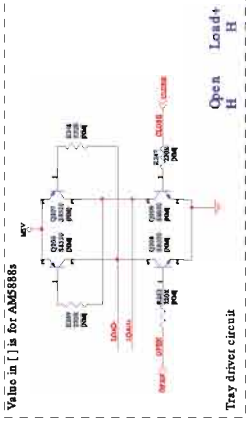
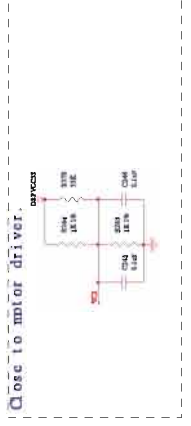
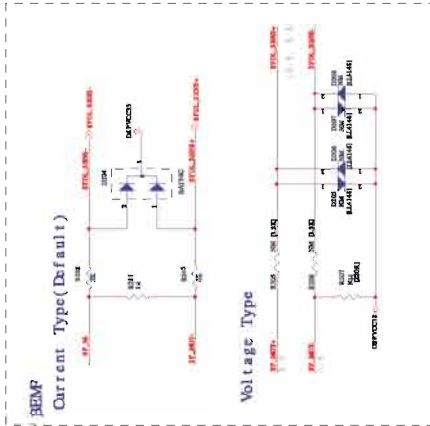
While using AM8854

000	8108
AM15E	518
AM15D	518
AM15C	518
AM15B	518
AM15A	518



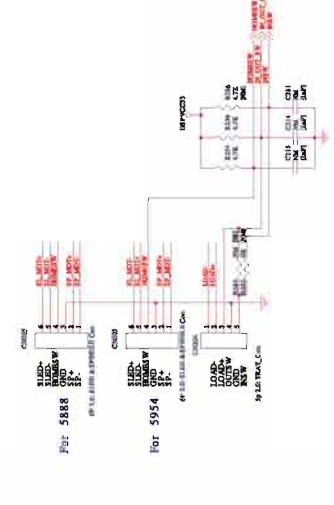
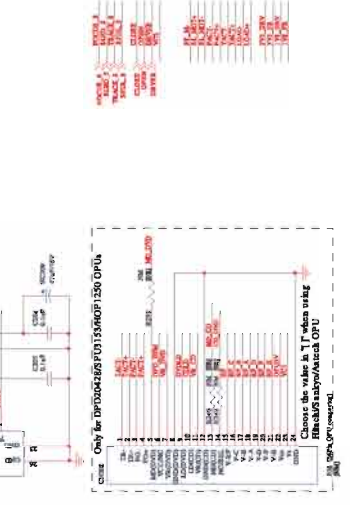
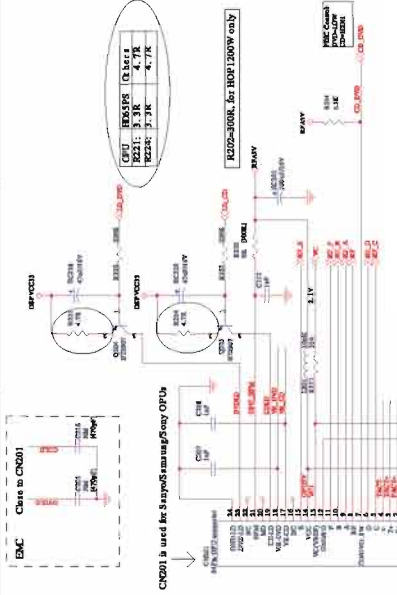
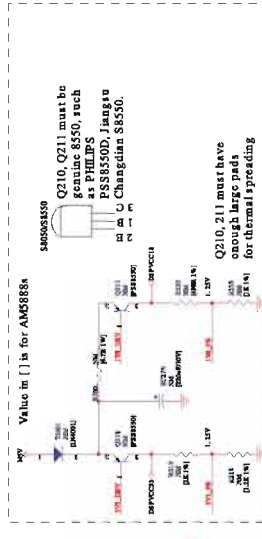
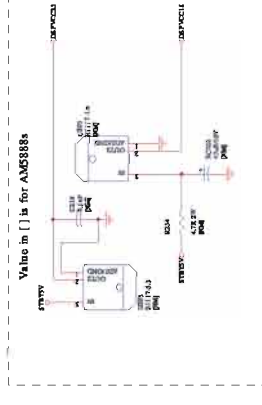
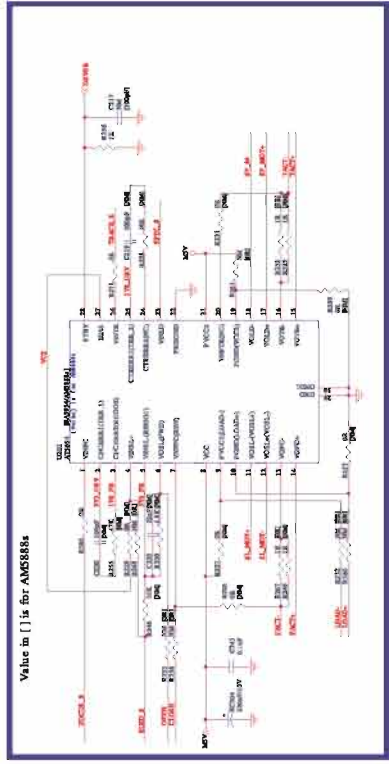
IN THE END: Make sure V8620, and connect V8620/V8620/V8620.
For the test: Make sure V8620, and connect V8620/V8620/V8620.
For the test: Make sure V8620, and connect V8620/V8620/V8620.

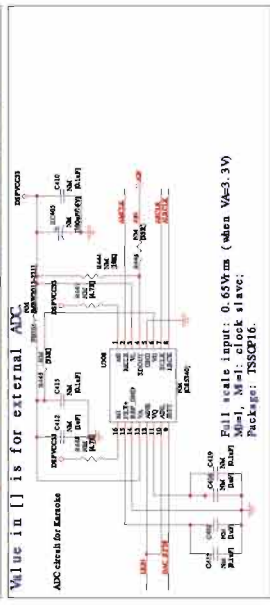
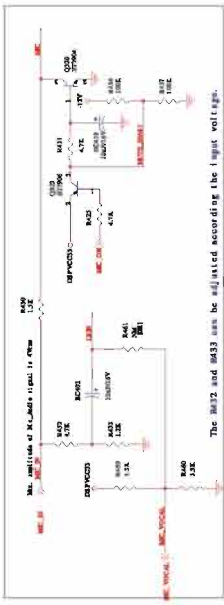
Place de-coupling capacitors close to power pins.



While using BAS954

S54310	0	100R	R210	100R	R213
S54309	0	100R	R210	100R	R213
REACT	NM	NM	R210	91R	91R
SECCD-SPT	0	10R	R10R	0	0
MS7805C33W	0	0	0	0	0
REF7200W	NM	NM	NM	NM	NM
REF7200W	0	0	0	0	0
74138	NM	NM	NM	NM	NM
R210	0	100R	R213	0	100R
R210	0	100R	R213	0	100R
R210	0	100R	R213	0	100R
R210	0	100R	R213	0	100R
R210	0	100R	R213	0	100R
R210	0	100R	R213	0	100R
R210	0	100R	R213	0	100R
R210	0	100R	R213	0	100R



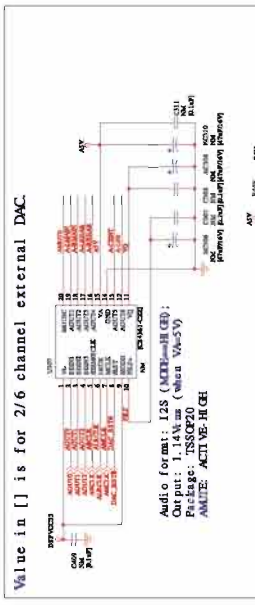


The R102 and R103 can be adjusted according to the input voltage.

Value in [] is for external DAC.

ADC channel for Karaoke

Full scale input: 0.65Vrms (when Vref=3.3V)
 Package: TSSOP16.

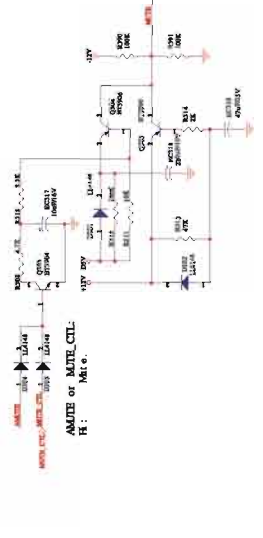


Value in [] is for 2/6 channel external DAC.

Audio format: I2S (MCLK=H/60)
 Output: 1.14Vrms (when Vref=5V)
 Package: TSSOP20
 AMUTE: ACTIVE-HIGH

Audio format: CS4344: I2S format;
 CS4345: Left justified;
 CS4346: Right justified;
 Output: 1.17Vrms (when Vref=5V)
 Package: TSSOP10

DAC configuration:
 2 channel: CS4344/5/6, ADOUT0;
 6 channel: CS4360 ADOUT0, 1, 2;

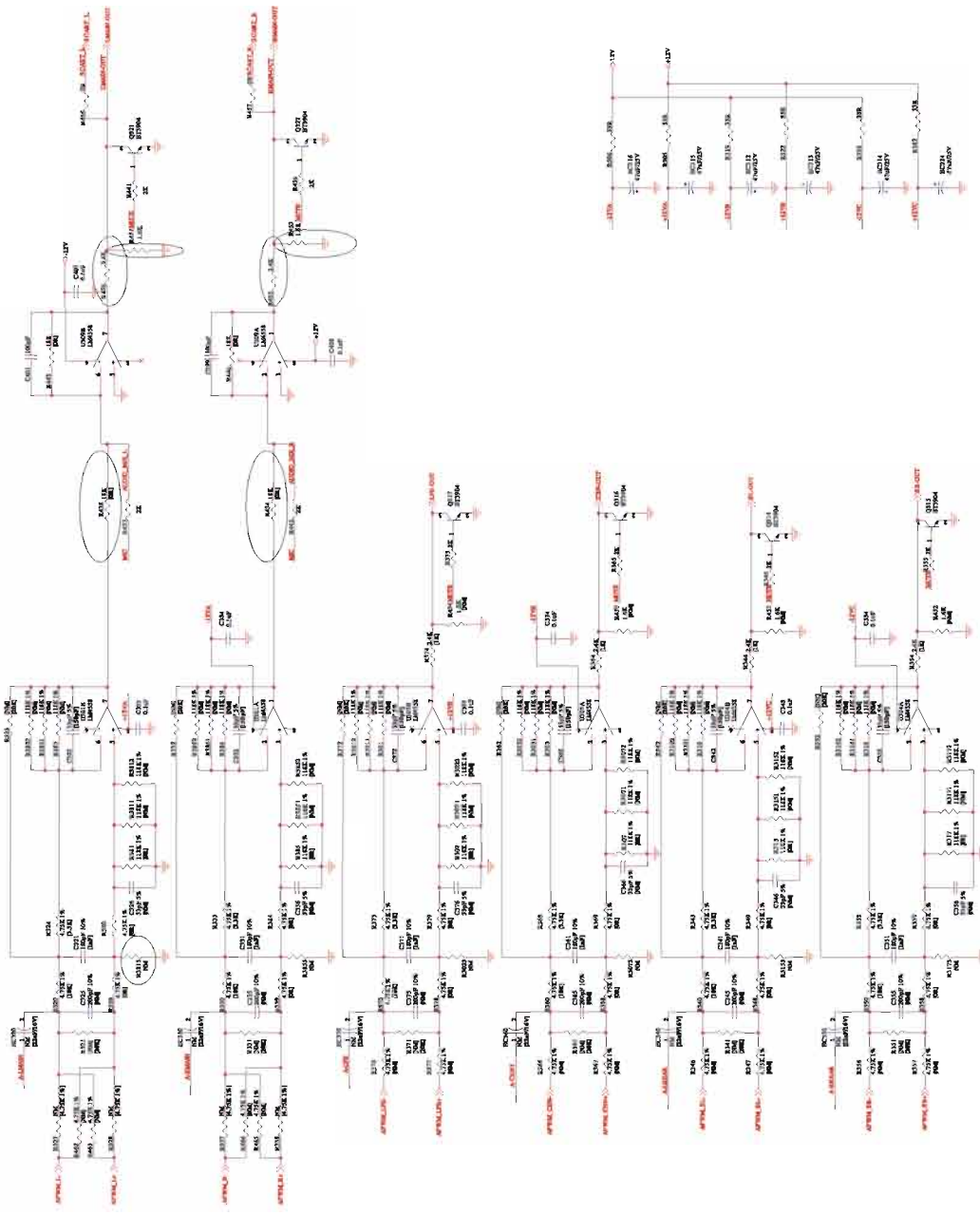


AMUTE or MUTE CTL
 PK: Mute.

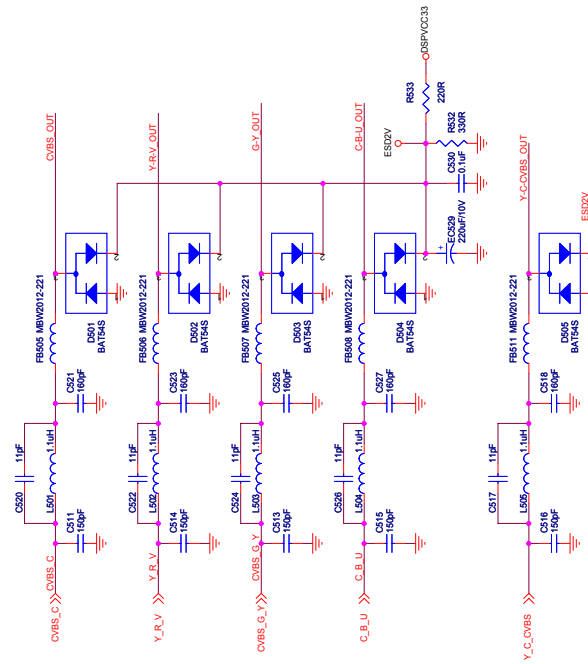
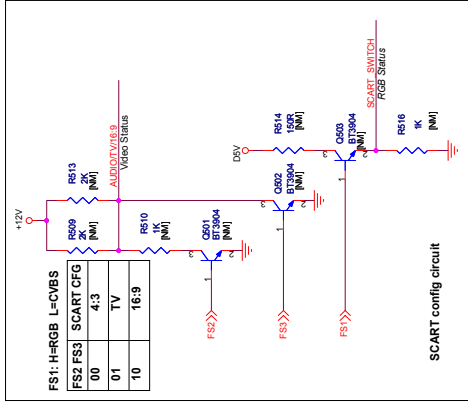
When INTERNAL DAC		
RES1	RES2	W. Resistor
R102	R103	4.75K 1% 1W
R104	R105	4.75K 1% 1W

When external DAC:
 Please refer to the option value in [...]
 When external DAC + Karaoke:
 Refer to Wall's 6 solution.

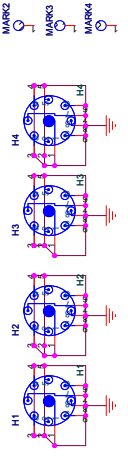
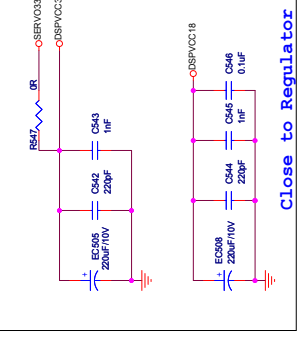
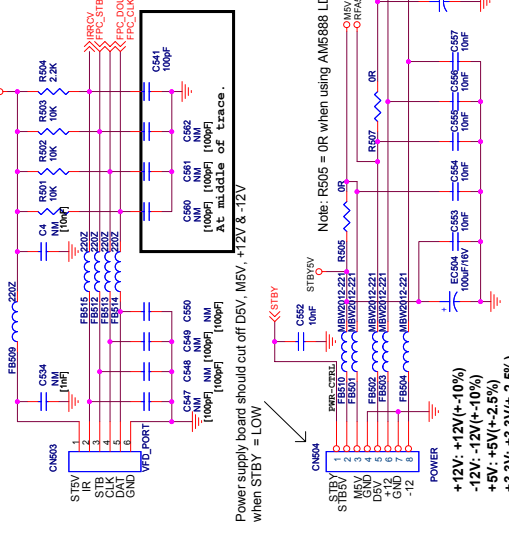
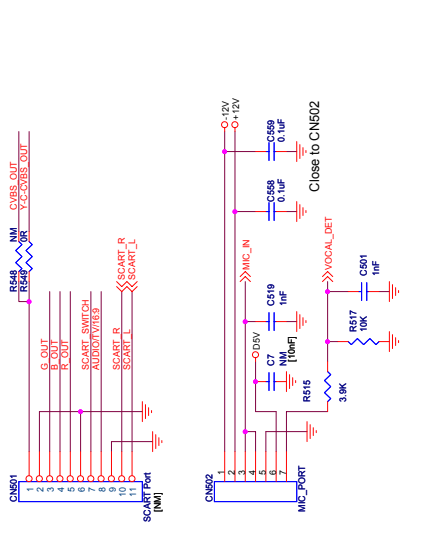
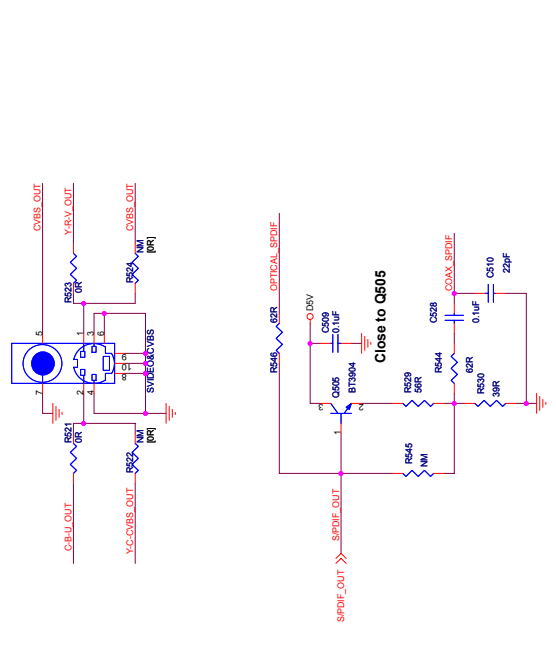
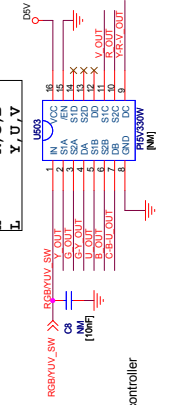
Value in [] is for external DAC.



AMUTE or MUTE CTL
 PK: Mute.

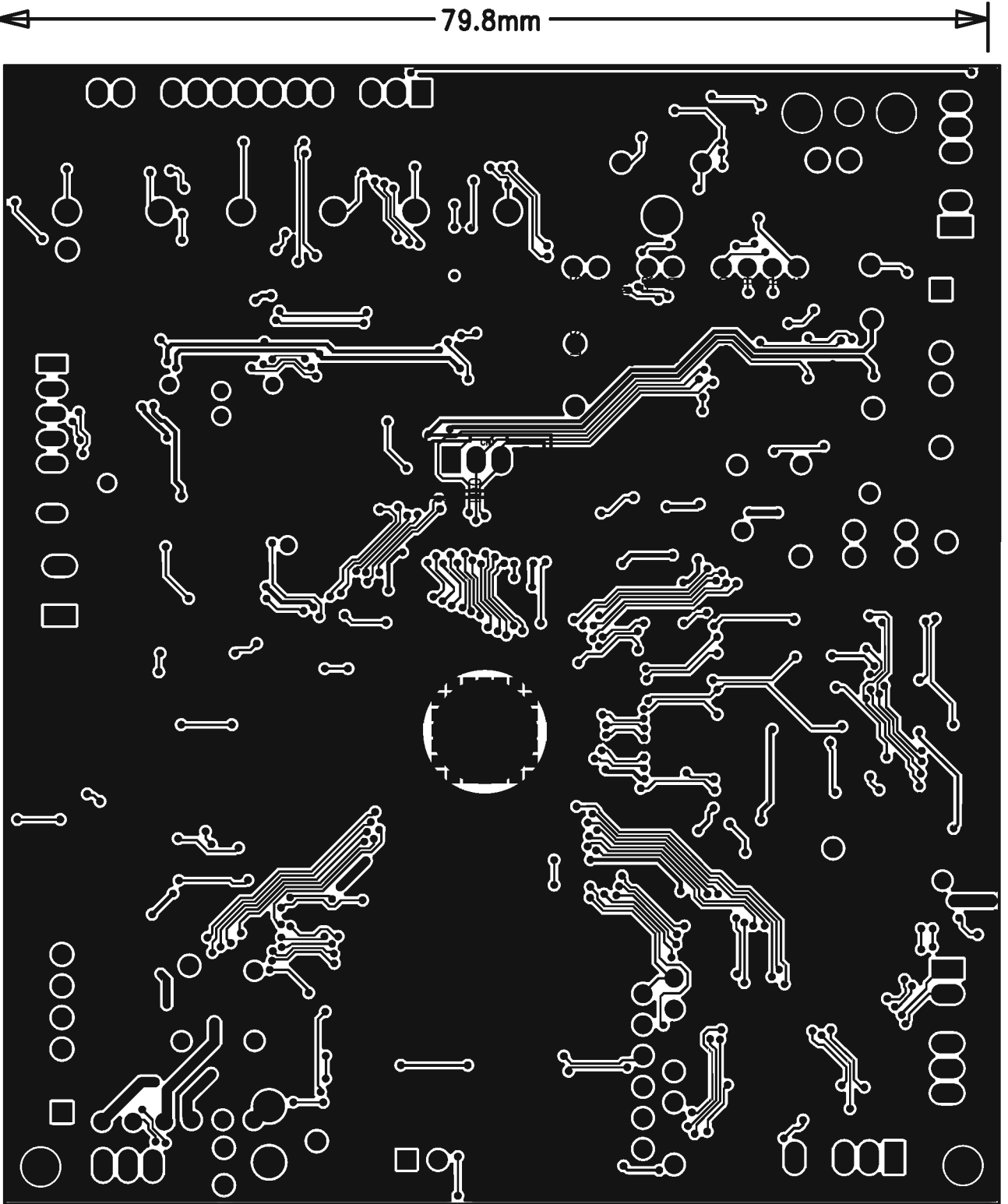


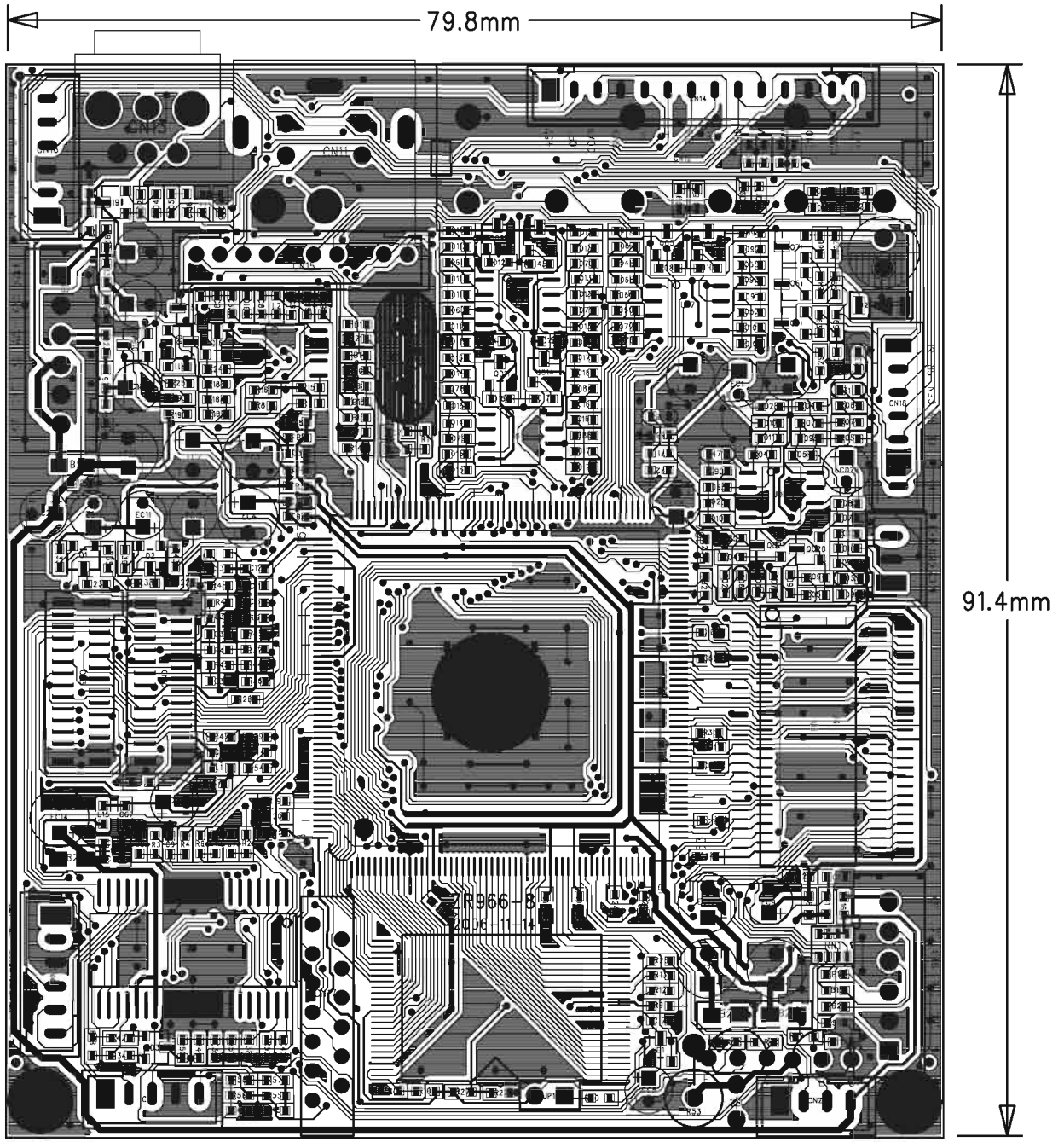
In case of enable 5th video DAC, Vaddis can output S-VIDEO and YUV signals at same time.



79.8mm

91.4mm

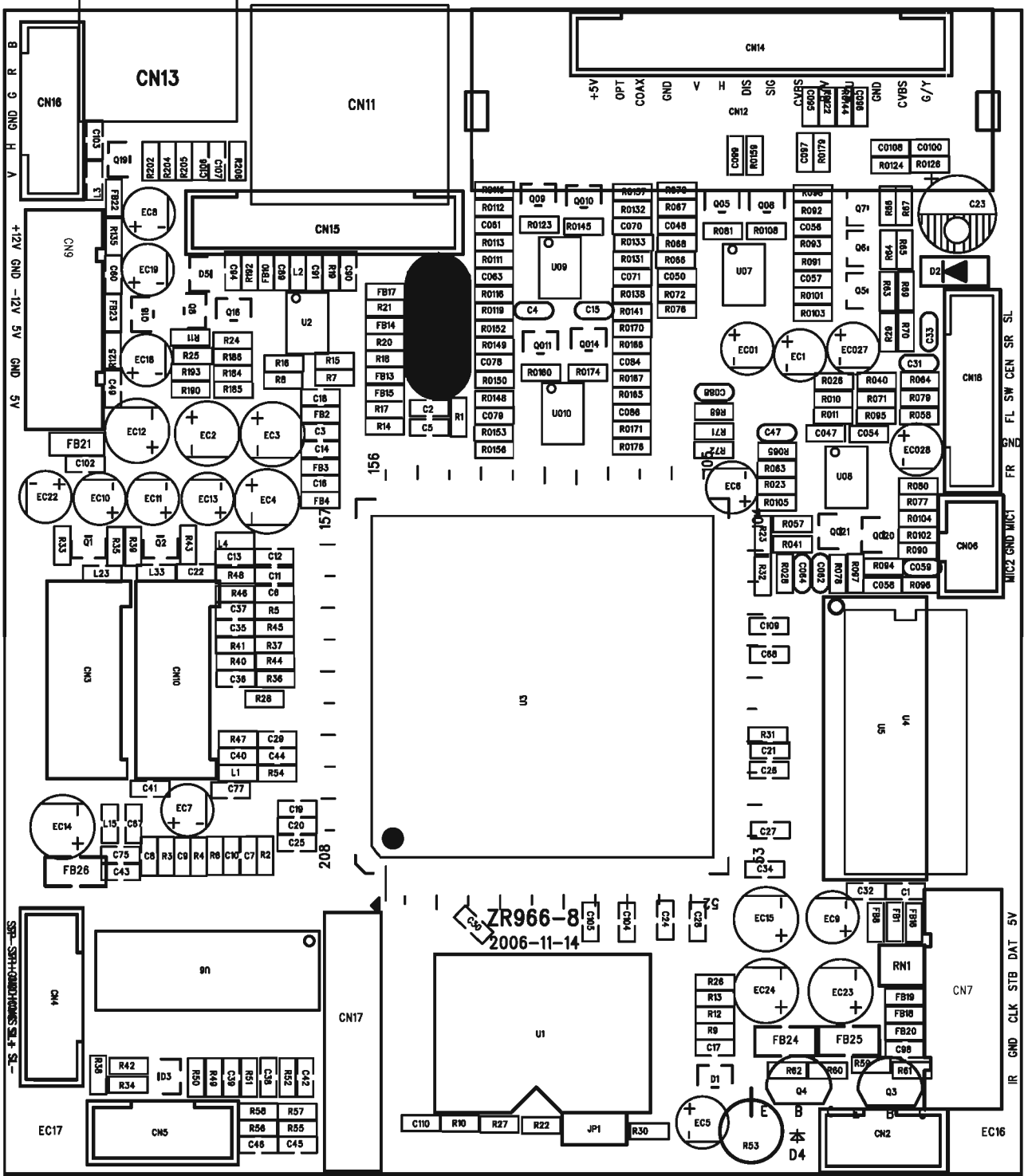




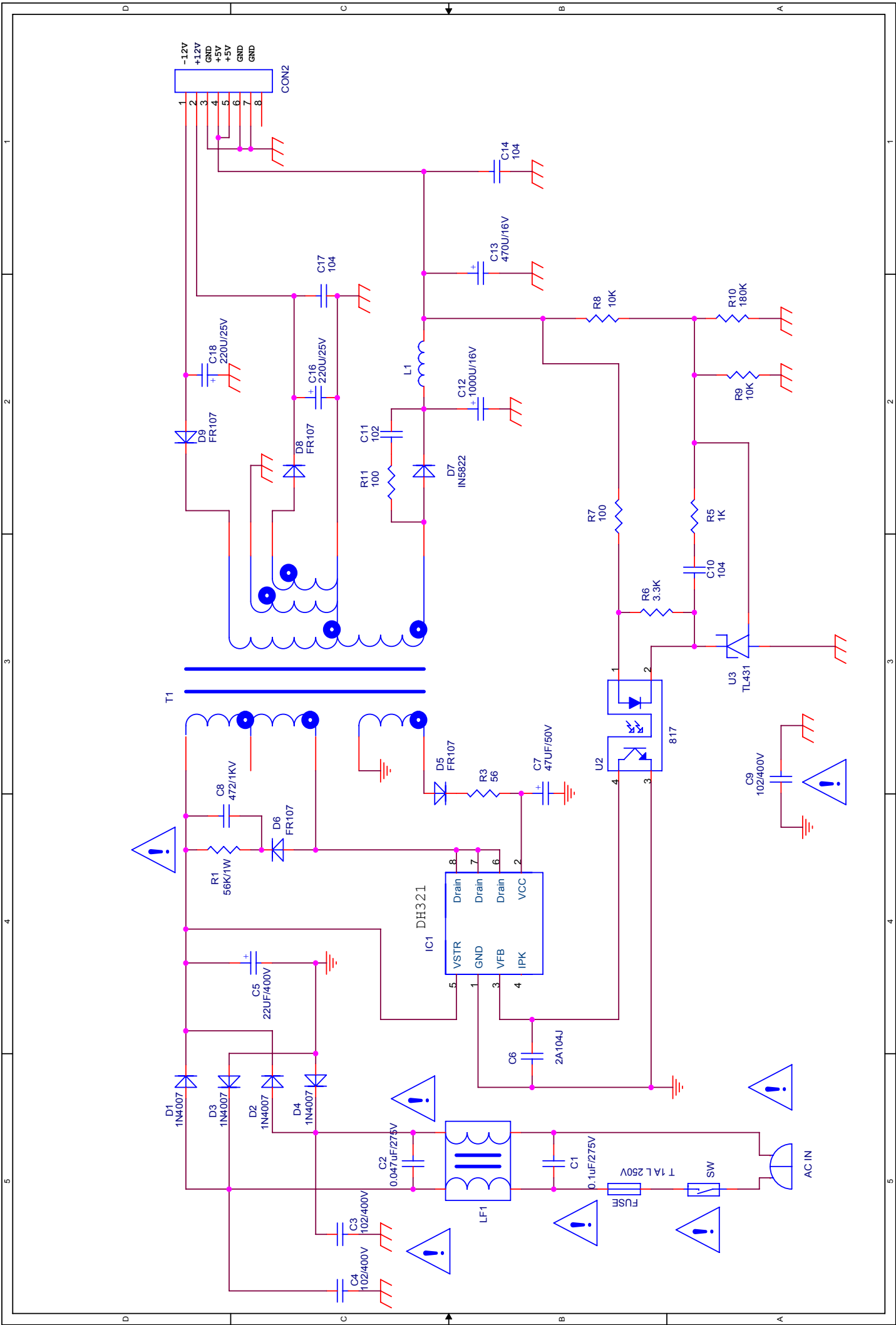
2
1

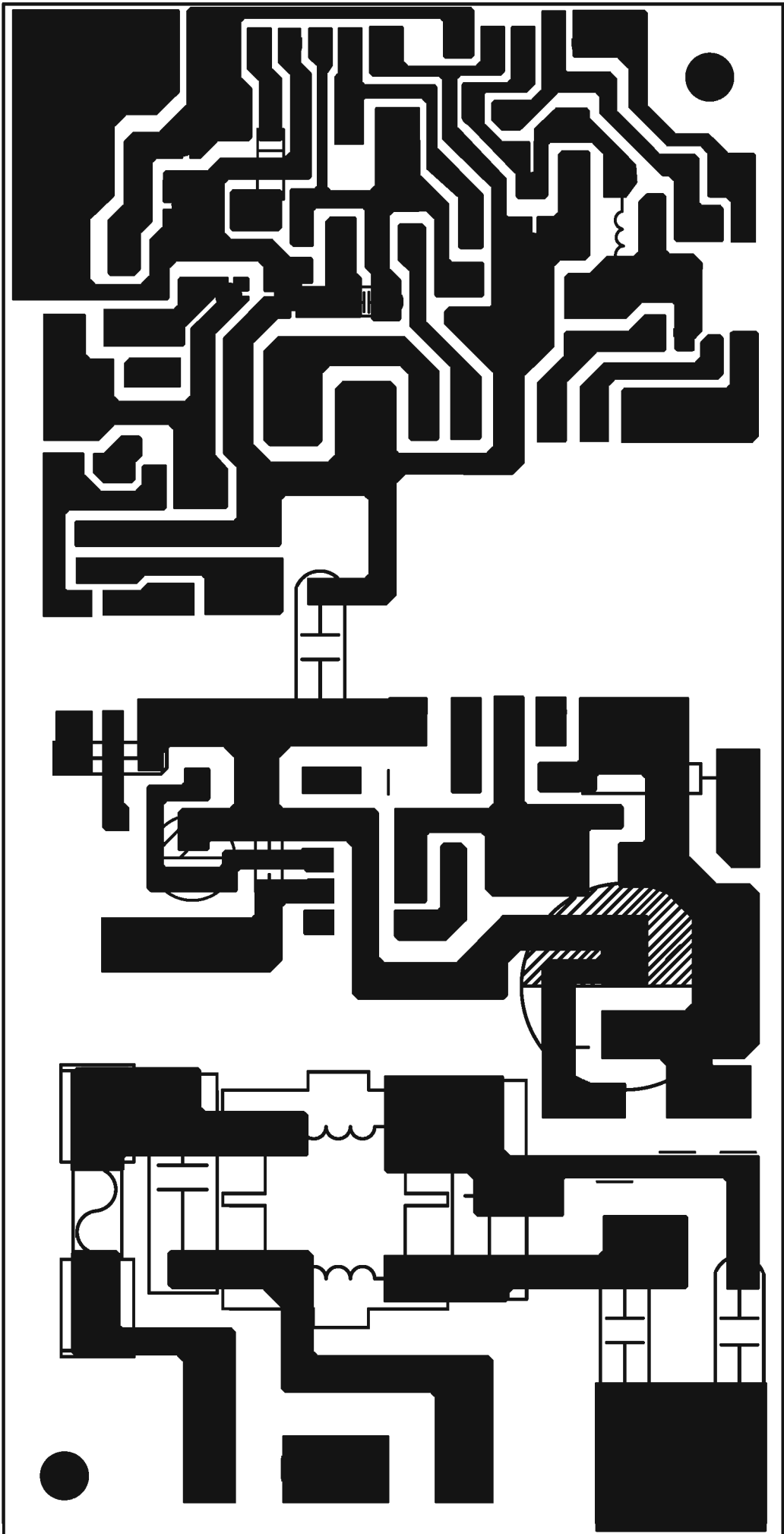
79.8mm

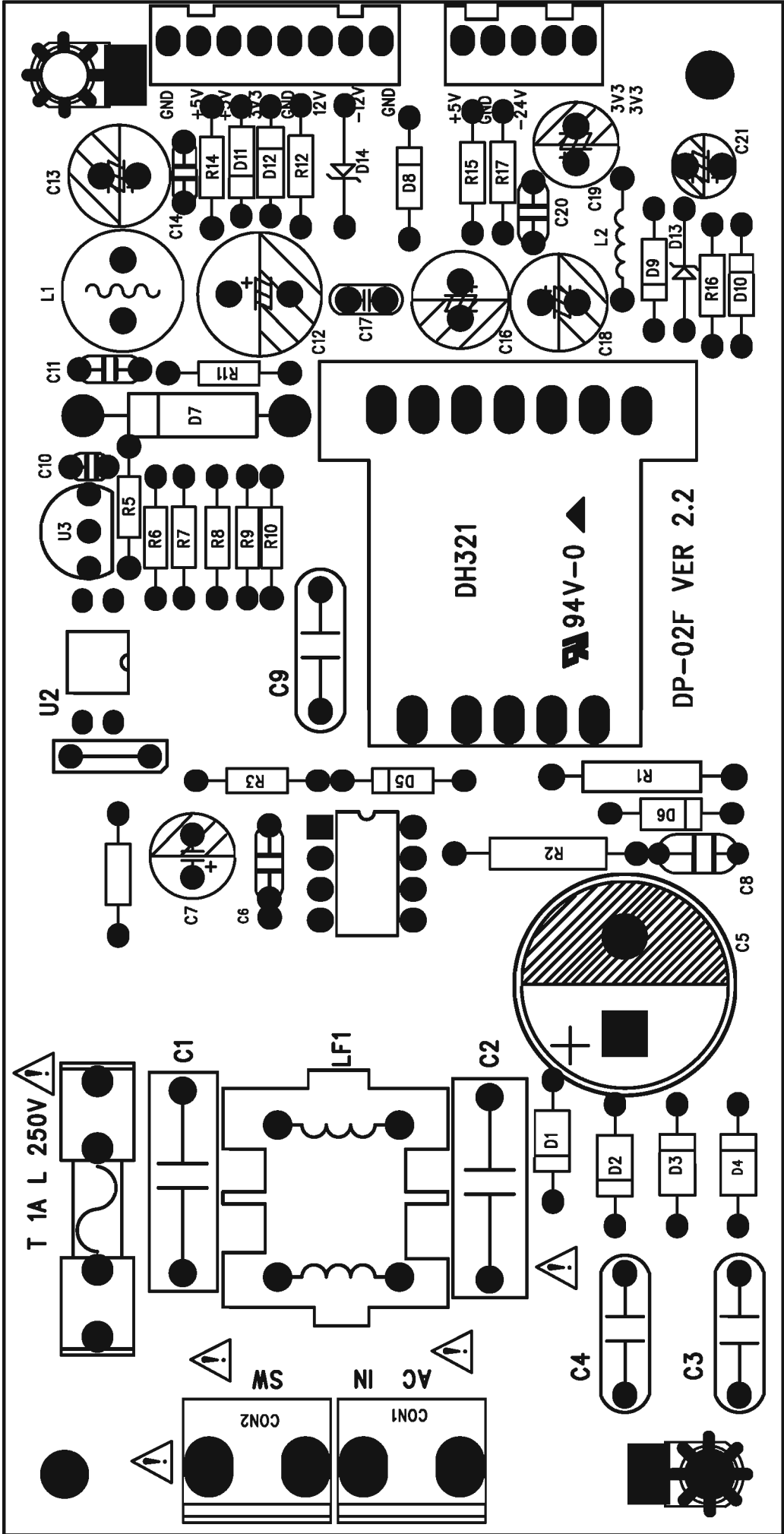
91.4mm



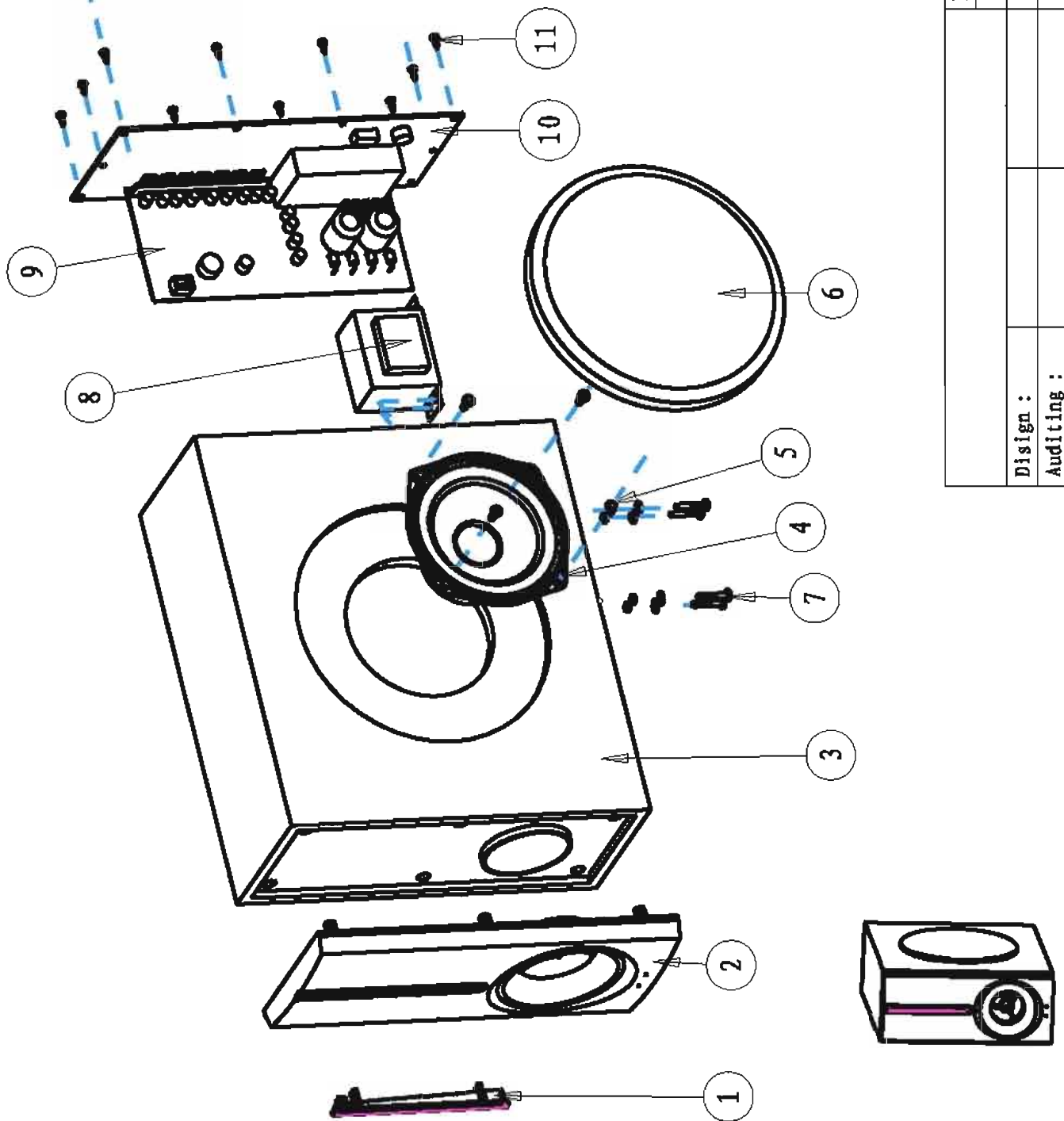
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


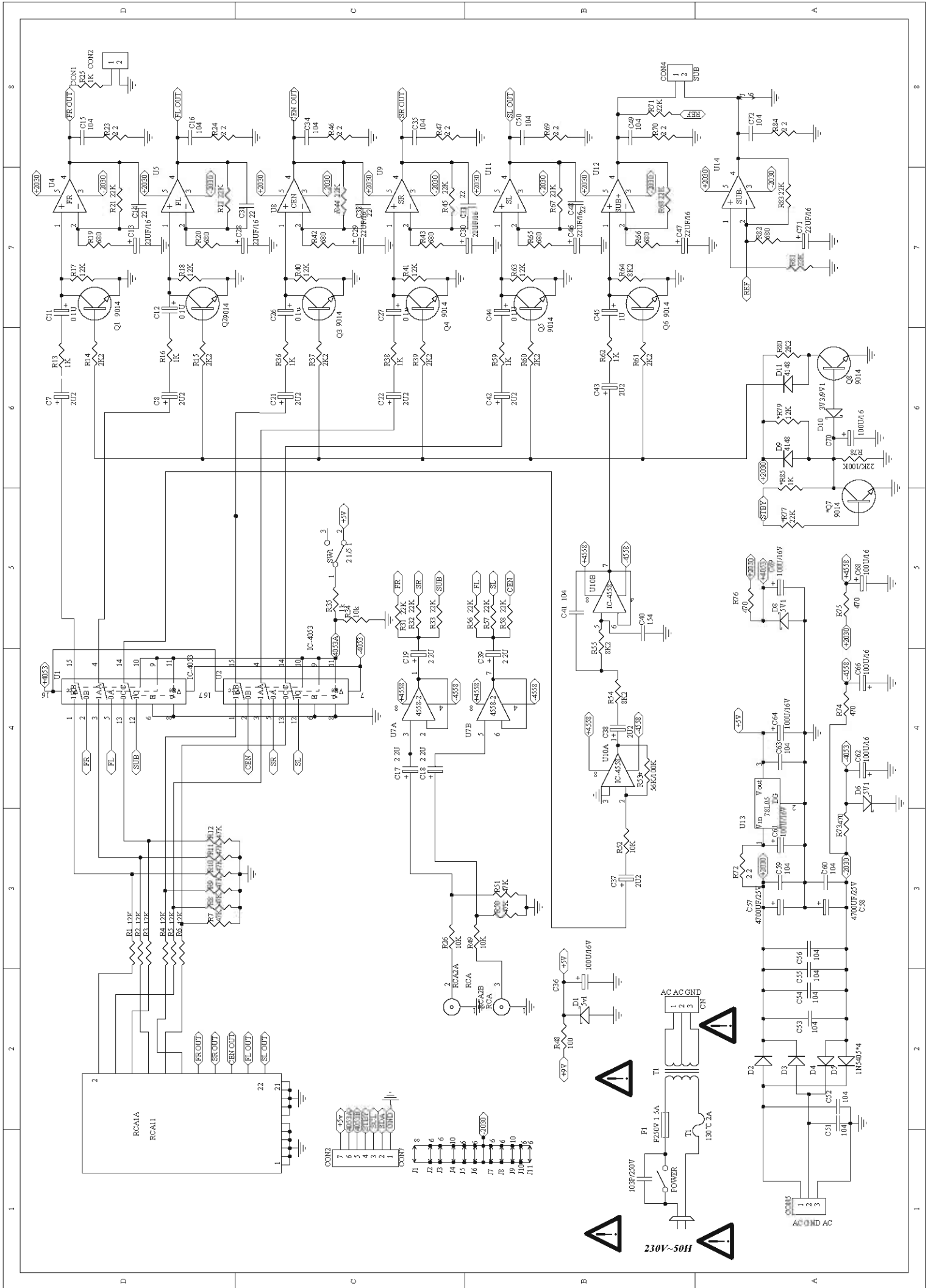




NO:	Component	QUY
1	lens	1
2	front panel	1
3	wooden box	1
4	subwoofer speaker	1
5	screw for fixing subwoofer speaker	4
6	Grill	1
7	screw for fixing transformer	4
8	transformer	1
9	amplifier	1
10	heat sink	1
11	screw for fixing back panel	10



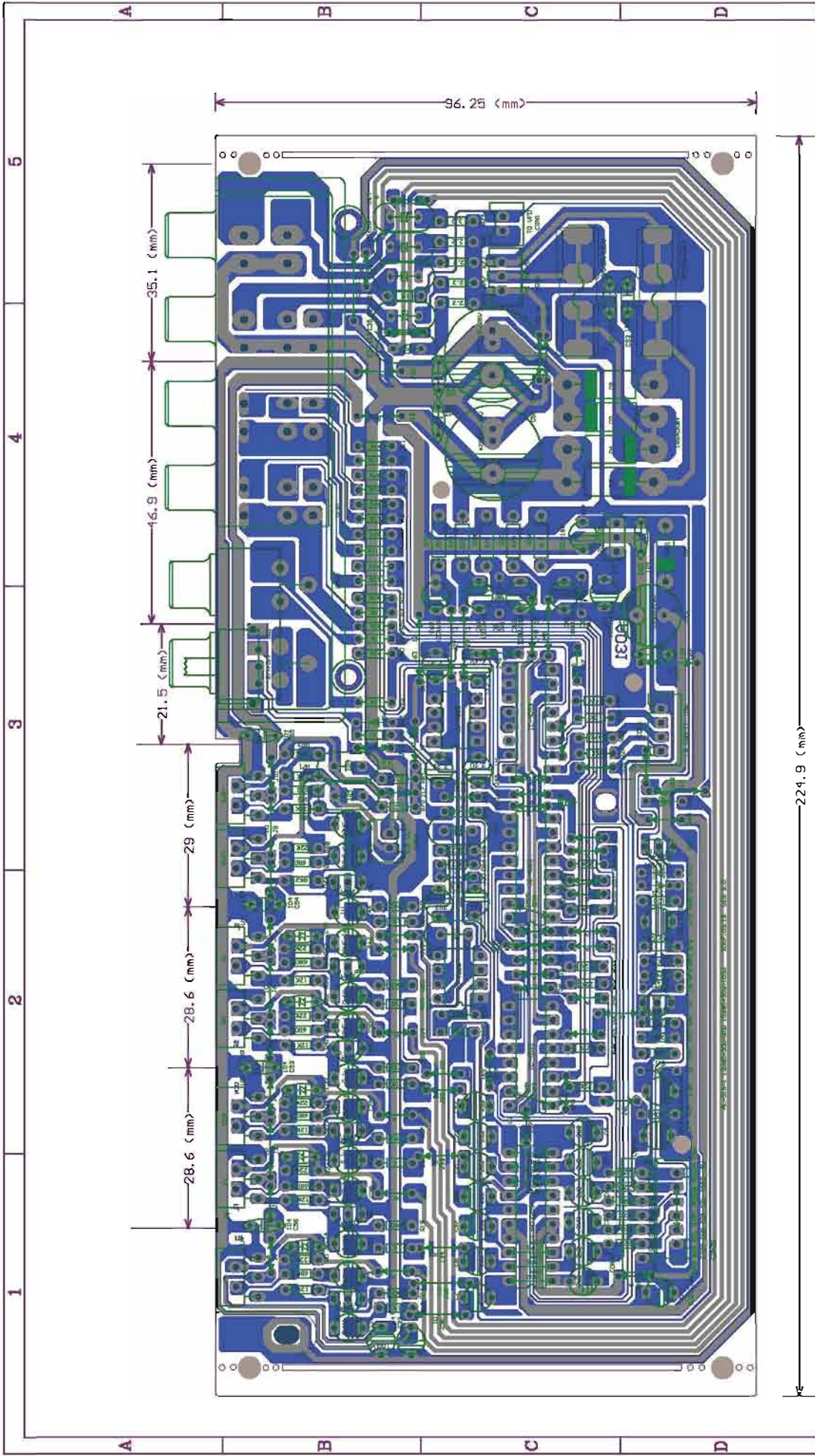
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Picture NO.	RDM-BT0420-010E	
Design :	Item	DV4050VSMK Explode drawing
Auditing :	Unit: mm	Material: Colour:
Approve :	Proportion	 Page: 1/1



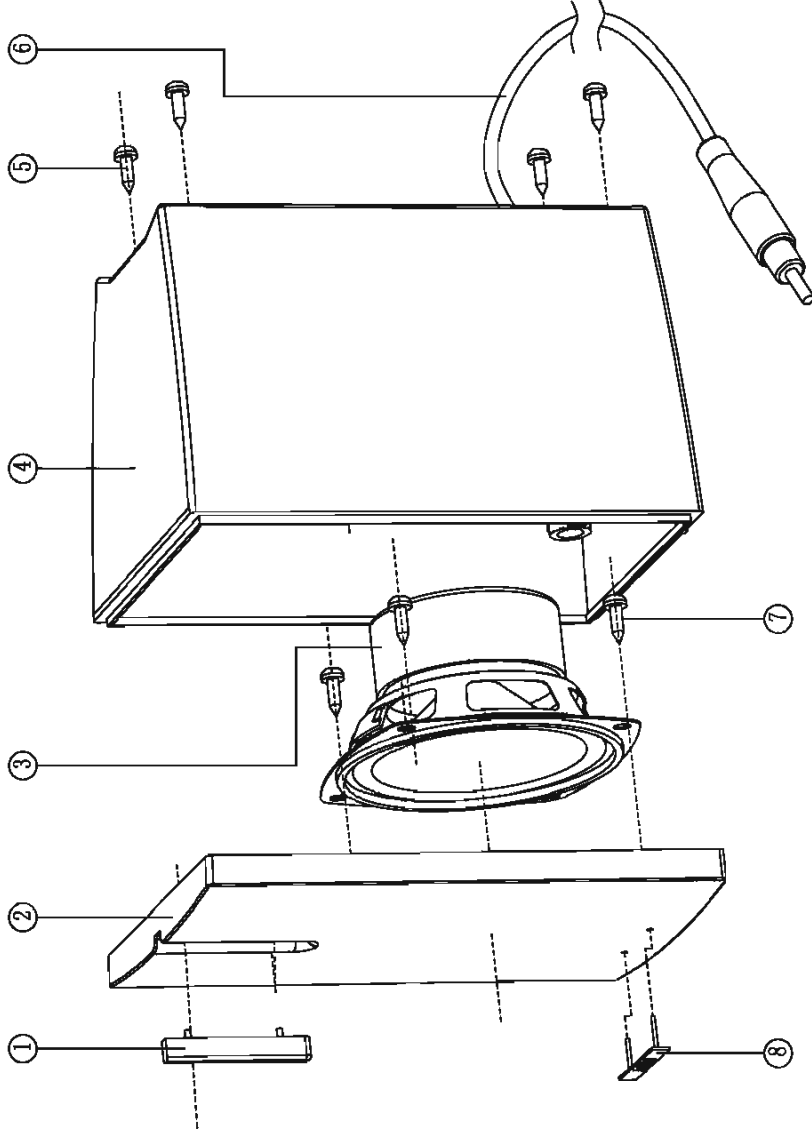
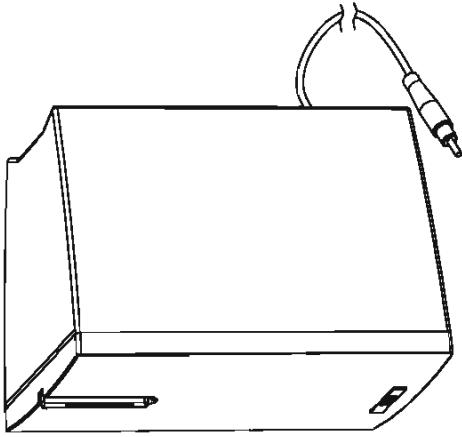
230V-50Hz



- CON2
- 7 +5V
 - 6 GND
 - 5 +5V
 - 4 +5V
 - 3 +5V
 - 2 +5V
 - 1 GND
- CON1
- 8
 - 7
 - 6
 - 5
 - 4
 - 3
 - 2
 - 1
- CON7
- 11
 - 10
 - 9
 - 8
 - 7
 - 6
 - 5
 - 4
 - 3
 - 2
 - 1



APPR	CHKD	DATE	VER	APPR	CHKD	DATE	VER	APPR	CHKD	DATE	VER	APPR	CHKD	DATE	VER	APPR	CHKD	DATE	VER	101-05501-001	1 of 1	
															DESIGN	APPR						
															MODEL	CHKD						
															DATE	SHEET						
															PRAD NO	VER						



8	Logo	1
7	Screw	4
6	Wire	1
5	Screw	4
4	Back shell	1
3	Speaker	1
2	Grill	1
1	adornning	1
No	Component	QTY

Design:	tolerance	Picture no:	WI-DVR4050VSMK-020Q
Auditing:	Item: :	Unit: mm	DV-R4050VSMK satellite Explode Drawing
Approve:	Proportion:	Material:	Colour:
			Page: 1/1
			Format: 1.0

Scart Board Component

S/N	Material Code	Material Name	Material Specification	Alteration	Position of use	Dose	Remarks
1	190-SCAR12-00	PCB	SCART V1.0 PCB (94HB 1/00Z 149*96.2MM H=1.6MM)			1.00000	single side PCB board
2	162-052120-0	21 pin SCART socket	21 pin: 105 level stalled, without screen shield			1.00000	
3	160-012300-0	Pin socket	XH-12A 12PIN E11 pin distance=2.5MM			1.00000	

Package

S/N	Material Code	Material Name	Material Specification	Alterati	Position of use	Dose	Remarks
1	642-PASS01-0	QC PASS LABLE	QC PASS LABLE		back panel	1.00000	
2	641-OHIPOT-0	HI-POT LABLE	HI-POT LABLE: HI-POT PASSED*		back panel	1.00000	
3	648-LEAR00-0	Sun lable	Triangle sun sticker		pick-up lens	1.00000	
4	648-LEAR02-0	Un-tear lable	30*20MM		side of the unit	1.00000	
5	619-533115-3	RCA calbe	L=1500MM			1.00000	
6	828-000025-0	Remote control	as customer confirmed.			1.00000	
7	617-3R0315-0	Battery	Zn/MnO2 R03 AAA 1.5V			2.00000	
8	630-SK0201-07	Manual	DV-R4050VSMK			1.00000	
9	631-SK0258-00	Warranty card	as customer confirmed.			1.00000	
10	633-SK0202-0	Service manual				1.00000	
11	643-210803-07	Serial No.	as customer confirmed.			6.00000	
12	600-195803-00	Polyfoam	1958 T:87MM(match L=430MM H=38MM) (UP)			1.00000	
13	600-195804-00	Polyfoam	1958 T:87MM(match L=430MM H=38MM) (DOWN)			1.00000	
14	607-0BOX01-0	Buckle	1SET FOR GIFTBOX			1.00000	
15	603-SK0201-07	White box				1.00000	
16	601-SK0201-07	polybag	for unit, size: 350*600MM			1.00000	
17	601-SK0202-07	polybag	for manual			1.00000	
18	601-082530-02	polybag	for remote control, size:80MM*250*MM*0.03MM			1.00000	
19	601-SK0203-07	polybag	for power cord (with hole, size:80*300MM)			1.00000	

Power board components

S/N	Material Code	Material Name	Material Specification	Alteration	Position of use	Dose	Remarks
1	113-560405-12	Resistance	Carbon film resistance 56Ω 1/4W ±5%		R3	1.00000	
2	113-101405-12	Resistance	Carbon film resistance 100Ω 1/4W ±5%		R7, 11	2.00000	
3	113-102405-12	Resistance	Carbon film resistance 1K 1/4W ±5%		R5	1.00000	
4	113-332405-12	Resistance	Carbon film resistance 3.3K 1/4W ±5%		R6	1.00000	
5	113-103401-62	Resistance	Metal film resistance 10K 1/4W ±1%		R8, 9	2.00000	
6	113-334401-62	Resistance	Metal film resistance 330K 1/4W ±1%		R10	1.00000	
7	113-103205-12	Resistance	Carbon film resistance 10K 1/2W ±5%		R2	1.00000	
8	113-563A05-12	Resistance	Carbon film resistance 56K 1W ±5%		R1	1.00000	
9	123-102170-0	Capacitance	Porcelain capacitance 1000PF 100V +80% -20%		C11	1.00000	
10	123-104370-0	Capacitance	Porcelain capacitance 0.1uF 50V +80/-20% Y5V		C10, 14, 17, 20	4.00000	
11	126-104140-0	Capacitance	Terylene capacitance 0.1uF 100V ±5% (distance of two legs ≤6MM)		C6	1.00000	
12	123-472670-0	Capacitance	Porcelain capacitance 4700PF 1KV +80/-20% Y5V		C8	1.00000	
13	127-476072-0	Capacitance	Electrolytic capacitor 47uF 50V ±20% 6.3*12mm		C7	1.00000	
14	127-227052-0	Capacitance	Electrolytic capacitor 220uF/25V ±20% 8*12mm		C16, 18	2.00000	
15	127-477042-0	Capacitance	Electrolytic capacitor 470uF/16V ±20% 8*12mm		C13	1.00000	
16	127-108042-0	Capacitance	Electrolytic capacitor 1000uF/16V ±20% 8*16mm		C12	1.00000	
17	127-226402-2	Capacitance	Electrolytic capacitor 22uF/400V ±20%(D:16MM H:16MM blast type)		C5	1.00000	
18	123-102461-0	Capacitance	CT7 UL standard ,Porcelain capacitance 1000PF AC:400V ±20% Brand ''CD或JN ''		C3, 4, 9	3.00000	CE Standard
19	126-104A54-1	Capacitance	0.1uF ±10% 275V AC X2, 40/100/21/C brand		C1	1.00000	CE Standard
20	126-473A54-1	Capacitance	0.047uF ±10% 275V AC X2, 40/100/21/C		C2	1.00000	CE Standard
21	133-0EL817-0	IC	IC:EL817 double line four legs VCE=5V		U2	1.00000	standby No. PC817
22	133-TL431A-0	IC	IC TL431A TO-92		U3	1.00000	standby No. TL431
23	133-0DH321-0	IC	IC DH321 DIP8		U1	1.00000	DIP8
24	130-004007-0	Diode	Commute Diode 1N4007 Reverse voltage VRRM=1000V IF=1.0A		D1, 2, 3, 4	4.00000	
25	130-005822-0	Diode	1N5822 (DO-201AD) Reverse voltage VRRM=40V IF=3.0A		D7	1.00000	
26	130-000107-0	Diode	FR107		D5, 6, 8, 9	4.00000	

Power board components

S/N	Material Code	Material Name	Material Specification	Alteration	Position of use	Dose	Remarks
27	108-413100-0	Fliter	Filter UU-10.5 (SG02430A) Inductance capacity ≥41mH (Φ0.27MM 120TS) label			1.00000	CE standard
28	105-100101-0	Inductance	DRS*10 I-shaped inductance 10uH ±10% (Φ0.60MM 17.5TS) JN-1207-2/A			1.00000	
29	101-19EL19-08	Transformer	High frequency transformer EEL-19-5 (Horizontal 5+7) V2.2 'CE certification label:03879'			1.00000	CE standard
30	182-211000-1	Insurance tube	T1A L250V 5T (fuse slowly in glass tube) Φ5*20MM CE standard			1.00000	CE standard
31	380-052000-0	Insurance tube seat	Metal Insurance tube seat (nip) match 5*20 Insurance tube			2.00000	
32	333-0PC801-0	earth solder slice	outer Φ7.5MM inner Φ4.2MM overall length:16MM			2.00000	
33	160-103420-1	pin jack	VH-3A (two pin, no pin in middle) distance of pin=3.96MM insert and odd button (L shape)		AC IN jack	1.00000	
34	160-008300-0	pin jack	XH-8A 8PIN distance of pin=2.5MM insert and double button			0.00000	cancel this jack from order 761
35	172-000066-00	skip line	L=6.6MM			1.00000	
36	172-000080-00	skip line	L=8.0MM		SW	1.00000	
37	172-000100-00	skip line	L=10MM			3.00000	
38	190-DP0201-11	PCB	power supply board DP-02F V2.2 94VOZD 126*64MM H=1.6MM			1.00000	CE standard

Panel control board component

Material Code	Material Name	Material Specification	Alterati	Position of use	Dose	Remarks
190-SK0207-00	PCB	DVD screen			1.00000	
190-SK0207-10	PCB	DVD keyboard:SK-02-LED-KEY H=1.0MM VER2.0			1.00000	
190-SK0222-00	PCB	SK-02 STANDBY PCB H=1.6MM			1.00000	
033-SM1623-0	IC	SM1623 SMD 32PIN			1.00000	
135-600011-2	Display	LED screen:green 66*11.8*5.6MM 7 words			1.00000	
136-603386-0	Receiver	SM3386T			1.00000	
113-479405-12	Resistance	carbon film resistance 4.7Ω 1/4W ±5% "			2.00000	
113-101405-12	Resistance	carbon film resistance 100Ω 1/4W ±5% "			1.00000	
113-103805-12	Resistance	carbon film resistance 10K 1/8W ±5% "			4.00000	
113-513805-12	Resistance	carbon film resistance 51K 1/8W ±5% "			1.00000	
127-476042-0	Capacitance	electrolyse capacitance 47uF/16V ±20% 5*5mm"			1.00000	Indicator circuit
127-227042-0	Capacitance	electrolyse capacitance 220uF/16V ±20% 6.3*7mm-40+105℃"			2.00000	strain wave
123-101350-0	Capacitance	porcelain capacitance100PF 50V ±10% Z5U"			3.00000	
123-104370-0	Capacitance	porcelain capacitance 0.1uF 50V +80/-20% Y5V"			2.00000	strain wave
047-001102-2	light-touch sw	5.2*5.2*1.7MM			5.00000	
147-001100-5	light-touch sw	6*6*5mm			1.00000	STANDBY
131-0S9014-0	Dyantron	S9014			1.00000	
130-053007-0	LBD	round red light?3			1.00000	
172-000110-00	Skip line	L=11MM			3.00000	
501-080808-20	sponge	size 8*8*8MM black, stick on both side (8*8)			3.00000	
190-OMIC16-20	PCB	MIC.PCB: DV316SI-MIC (match 2 mic jack)			1.00000	
161-3650B2-3	socket	CK6.35-18"		used on the back panel	2.00000	

Plastic component

Material Code	Material Name	Material Specification	Alterati	Position of use	Dose	Remarks
200-SK0200-05	Front panel	DV-R4050VSMK SILVER COLOR			1.00000	
234-SK0200-01	keyboard	SILVER OIL PAINTING			1.00000	
230-SK0200-02	powerboard	DV-R4050VSMK SILVER OIL PAINTING			1.00000	
217-SK0201-0	keyboard fixed	DV-R4050VSMK Keyboard fixed bracket			2.00000	
253-SK0200-05	CD mirror	DV-R4050VSMK (SK-02)			1.00000	
254-SK0200-05	left mirror	DV-R4050VSMK (SK-02)			1.00000	
251-SK0200-05	display	DV-R4050VSMK (SK-02)			1.00000	

Hardware/Plastic component

S/N	Material Code	Material Name	Material Specification	Alteration	Position of use	Dose	Remarks
1	821-100603-0	mpeg board	zoran36962			1.00000	
2	821-100603-1	mpeg output board	5.1CH output board(PCB model: AA1B 2004-12-5)™	*		1.00000	
3	830-060000-0	pick up component	Misumi502W loader			1.00000	
4	829-012801-1	lens	LD128			1.00000	
5	303-SK0203-04	bottom cabinet	DV-R4050VSMK 430*38*200MM			1.00000	
6	301-SK0203-04	back panel	DV-R4050VSMK 430*38MM			1.00000	
7	302-SK0203-04	top cabinet	DV-R4050VSMK 430*38*200MM power painting T:0.6MM™			1.00000	
8	315-SK0224-0	front panel bracket	DVD panel bracket, screw hole:4PCS			1.00000	
9	332-SK0201-0	fixed metal slice	SK-02 STANDBY PCB board fixed iron slice			1.00000	
10	314-SK0201-0	MIC iron slice	back panel MIC iron slice			1.00000	
11	368-301704-2	self-tepping screw	7PWB3*4 triangle, nickel plating.		used on back panel	1.00000	
12	368-301706-2	self-tepping screw	7PWB3*6 triangle, nickel plating		back and bottom cabinet	2.00000	
13	368-301706-2	self-tepping screw	7PWB3*6 triangle, nickel plating		top cabinet	8.00000	
14	368-301706-2	self-tepping screw	7PWB3*6 triangle, nickel plating		front panel and bottom	3.00000	
15	368-301707-2	self-tepping screw	7PWB3*7 triangle, nickel plating		loader	4.00000	
16	367-301506-2	self-tepping screw	5KB3*6 triangle, nickel plating		two sides of the F/pane	2.00000	
17	352-301706-1	screw	7PWB3*6 nickel plating		fixed power board	2.00000	
18	352-301706-2	screw	7PWB3*6 triangle, nickel plating		fixed mic socket	2.00000	
19	350-300106-1	screw	BM3*6 nickel plating		fixed mpeg board	1.00000	
20	361-300108-0	self-tepping screw	PA3*8 nickel plating		Panel control PCB	13.00000	
21	361-300108-0	self-tepping screw	PA3*8 nickel plating		panel bracket	4.00000	
22	364-300108-1	self-tepping screw	5.2PB3*8 nickel plating		SCART board	2.00000	
23	364-300108-1	self-tepping screw	5.2PB3*8 nickel plating		fixed mpeg board	6.00000	
24	342-000M11-0	self-tepping screw	Mic nut (Φ13MM内Φ11MM)™		fixed mic socket	2.00000	
25	282-351000-0	single side buckle	Φ3.5MM H=10MM™		mpeg board	1.00000	
26	282-351000-0	single side buckle	Φ3.5MM H=10MM™		fixed power board	2.00000	

Hardware/Plastic component

S/N	Material Code	Material Name	Material Specification	Alteration	Position of use	Dose	Remarks
27	280-100102-0	white prick cord	L=100MM flat,wide:2MM			4.00000	
28	381-000100-0	black prick cord	black prick cable L=100MM			1.00000	
29	510-110020-10	rubber pad	round rubber pad, single side, black Φ 11MM*2MM™			2.00000	
30	502-110030-10	unit feet sponge	EVA90 single side, black Φ11MM*3MM		feet	4.00000	
31	502-110040-10	unit feet sponge	EVA90 single side black Φ11MM*4MM			1.00000	
32	533-080303-0	red washer	Φ8MM*3MM H=0.3MM			2.00000	