

Service
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Service Manual



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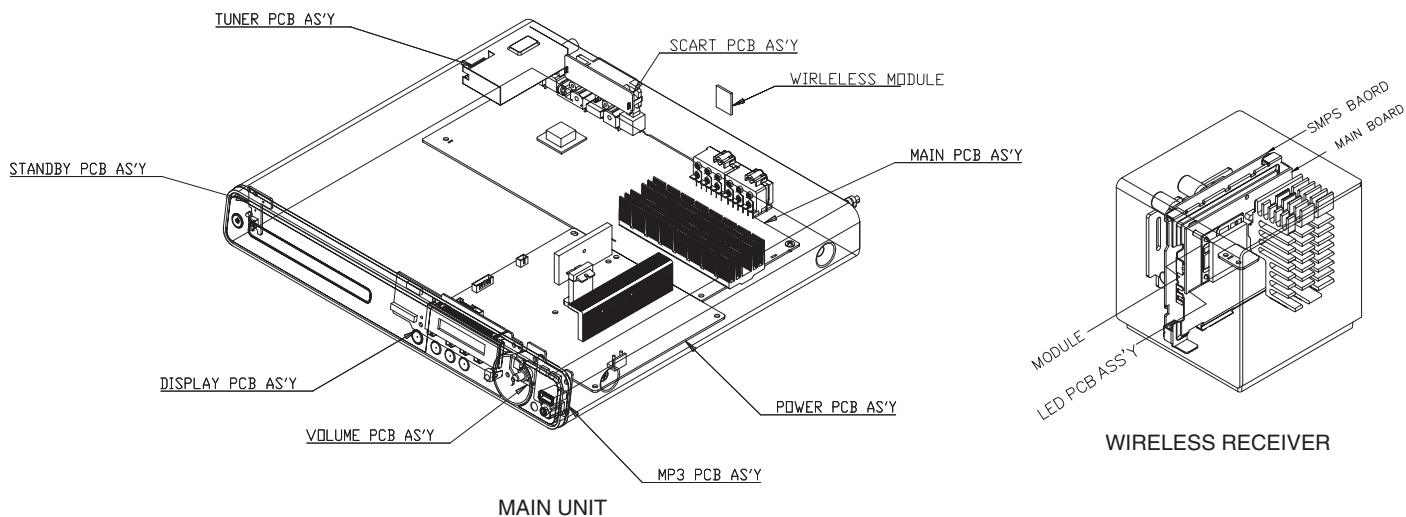
3141 785 33700

Version 1.0



PHILIPS

LOCATION OF PCB BOARDS



VERSION VARIATION:

Type/Versions	HTS3377W
	/12
Features	
Output Power - 1000W	X
Voltage (220~240V)	X
MP3 Link	X

SERVICE SCENARIO MATRIX:

Type/Versions	HTS3377W
	/12
Board in used	
Main Board	Bd
Power Board	Bd
DISP+LED+VOL Board	Bd
Scart Board	Bd
MP3 IN Board	Bd
Main+Led+Heat Board	Bd
SMPS Board	Bd

*Bd = Board Level Repair

SPECIFICATIONS

Playback media

DVD-Video, DVD+R/+RW, DVD-R/-RW, DVD+R DL, CD-R/
CD-RW, Audio CD, Video CD/SVCD, Picture CD, MP3-CD,
WMA-CD, DivX-CD, USB flash drive

Amplifier

Total output power.....
Home Theatre mode..... 1000 W(6 X 167)
Frequency response.....40 Hz ~ 20 kHz
Signal-to-noise ratio..... > 60 dB
..... (A-weighted)
Input sensitivity.....
AUX 400 mV
SCART TO TV..... 250 mV
MP3 LINK 250 mV

Disc

Laser Type..... Semiconductor
Disc diameter..... 12cm / 8cm
Video decoding..... MPEG1/ MPEG2 / DivX
..... / DivX Ultra
Video DAC..... 12 bits, 108 MHz
Signal system PAL / NTSC
Video S/N 56 dB
Audio DAC.....24 bits / 96 kHz
Frequency response.....
..... 4 Hz - 20 kHz (44.1 kHz)
..... 4 Hz - 22 kHz (48 kHz)
..... 4 Hz - 44 kHz (96 kHz)
PCM..... IEC 60958
Dolby Digital IEC 60958, IEC 61937
DTS IEC 60958, IEC 61937

Radio

Tuning range FM 87.5–108 MHz (50 kHz)
2.6 dB quieting sensitivity FM 22 dB
IF rejection ratio..... FM 60 dB
Signal-to-noise ratio..... FM 50 dB
Harmonic distortion..... FM 3%
Frequency response..... FM 180 Hz~10 kHz
..... / ± 6 dB
Stereo separation FM 26 dB (1 kHz)
Stereo Threshold..... FM 29 dB

USB

Compatibility Hi-Speed USB (2.0)
Class support..... UMS (USB Mass Storage Class)
File system FAT12, FAT16, FAT32

Main Unit

Power supply220–240 V; ~ 50 Hz
Power consumption 180 W
Standby power consumption < 1 W
Dimensions (WxHxD) 360 x 57 x 331 (mm)
Weight2.87 kg

Speakers

System..... full range satellite
Speaker impedance..... 4 ohm (centre), 4 ohm (Front/Rear)
Speaker drivers
Centre/Front/Rear..... 3" full range
Frequency response..... 150 Hz ~ 20 kHz
Dimensions (WxHxD)
- Centre..... 244 x 103 x 74 (mm)
- Front..... 103 x 203 x 71 (mm)
- Rear..... 262 x 1199 x 264 (mm)
Weight
- Centre.....0.79 kg
- Front.....0.54 kg
- Rear.....3.38 kg

Subwoofer

Impedance..... 4 ohm
Speaker drivers 165 (6.5") woofer
Frequency response.....40 Hz ~ 150 Hz
Dimensions (WxHxD) 163 x 363 x 369 (mm)
Weight4.85 kg

Wireless receiver

Power Consumption 50 W
Frequency Response 6000 Hz
S/N Ratio 60 dB (A-Weighted)
Input Sensitivity: 400-600 mV
Distortion 1%
Dimensions (WxHxD)
..... 126 x 130.5 x 126 (mm)
Weight:1.11 kg

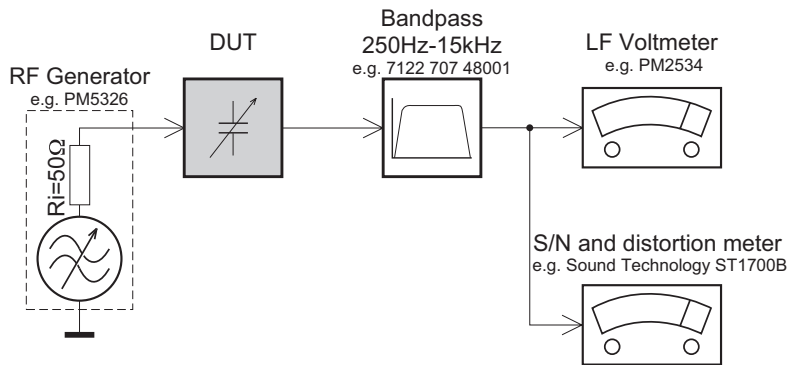
Laser specification

Type..... Semiconductor laser GaAlAs (CD)
Wave length..... 645 - 665 nm (DVD),770 - 800 nm (CD)
Output power6 mW (DVD),7 mW (VCD/CD)
Beam divergence..... 60 degrees.

Specifications subject to change without prior notice.

MEASUREMENT SETUP

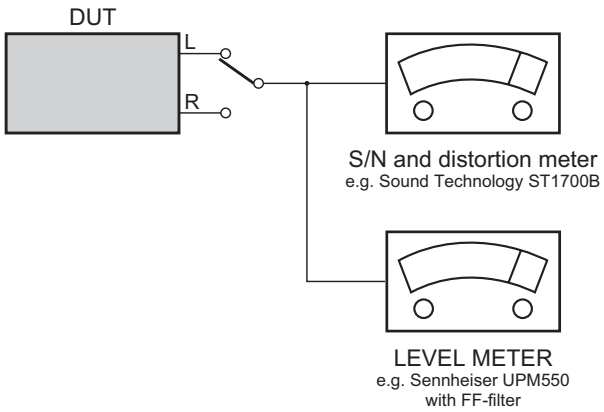
Tuner FM



Use a bandpass filter to eliminate hum (50Hz, 100Hz) and disturbance from the pilotone (19kHz, 38kHz).

CD

Use Audio Signal Disc SBC429 4822 397 30184
(replaces test disc 3)



SERVICE AIDS

Service Tools:

Universal Torx driver holder	4822 395 91019
Torx bit T10 150mm	4822 395 50456
Torx driver set T6-T20	4822 395 50145
Torx driver T10 extended	4822 395 50423

Compact Disc:

SBC426/426A Test disc 5 + 5A	4822 397 30096
SBC442 Audio Burn-in test disc 1kHz	4822 397 30155
SBC429 Audio Signals disc	4822 397 30184
Dolby Pro-logic Test Disc	4822 395 10216

HANDLING CHIP COMPONENTS

GENERAL

Labels in diagram: SOLDER, CHIP COMPONENT, SOLDER, COPPER TRACK, P.C.B., GLUE, SERVICE PACKAGE

DISMOUNTING

Labels in diagram: VACUUM PISTON 4822 395 10082, SOLDERING IRON, e.g. WELLER solder tip PT-H7, SOLDER WICK 4822 321 40042, e.g. A PAIR OF TWEEZERS, HEATING, HEATING, SOLDERING IRON, SOLDER WICK, CLEANING

MOUNTING

Labels in diagram: e.g. A PAIR OF TWEEZERS, SOLDERING IRON, SOLDER 0.5-0.8mm, PRESSURE, SOLDERING TIME < 3 sec/side, SOLDER 0.5-0.8mm, PRESSURE, SOLDERING IRON

PRECAUTIONS

Labels in diagram: SOLDERING IRON, CORRECT, COPPER TRACK, SOLDERING IRON, CHIP COMPONENT

EXAMPLES

Labels in diagram: CORRECT, SOLDERING IRON, NO!

(GB) WARNING

All ICs and many other semi-conductors are susceptible to electrostatic discharges (ESD). Careless handling during repair can reduce life drastically.

When repairing, make sure that you are connected with the same potential as the mass of the set via a wrist wrap with resistance. Keep components and tools also at this potential.

(F) ATTENTION

Tous les IC et beaucoup d'autres semi-conducteurs sont sensibles aux décharges statiques (ESD).

Leur longévité pourrait être considérablement écourtée par le fait qu'aucune précaution n'est prise à leur manipulation.

Lors de réparations, s'assurer de bien être relié au même potentiel que la masse de l'appareil et enfiler le bracelet serti d'une résistance de sécurité.

Veiller à ce que les composants ainsi que les outils que l'on utilise soient également à ce potentiel.

(D) WARNUNG

Alle ICs und viele andere Halbleiter sind empfindlich gegenüber elektrostatischen Entladungen (ESD).

Unsorgfältige Behandlung im Reparaturfall kann die Lebensdauer drastisch reduzieren. Veranlassen Sie, dass Sie im Reparaturfall über ein Pulsarmband mit Widerstand verbunden sind mit dem gleichen Potential wie die Masse des Gerätes.

Bauteile und Hilfsmittel auch auf dieses gleiche Potential halten.

(NL) WAARSCHUWING

Alle IC's en vele andere halfgeleiders zijn gevoelig voor electrostatische ontladingen (ESD).

Onzorgvuldig behandelen tijdens reparatie kan de levensduur drastisch doen verminderen. Zorg ervoor dat u tijdens reparatie via een polsband met weerstand verbonden bent met hetzelfde potentiaal als de massa van het apparaat.

Houd componenten en hulpmiddelen ook op hetzelfde potentiaal.

(I) AVVERTIMENTO

Tutti IC e parecchi semi-conduttori sono sensibili alle scariche statiche (ESD).

La loro longevità potrebbe essere fortemente ridatta in caso di non osservazione della più grande cauzione alla loro manipolazione.

Durante le riparazioni occorre quindi essere collegato allo stesso potenziale che quello della massa dell'apparecchio tramite un braccialetto a resistenza.

Assicurarsi che i componenti e anche gli utensili con quali si lavora siano anche a questo potenziale.

(GB) ESD PROTECTION EQUIPMENT

Complete Kit ESD3 (small tablemat, wristband, connection box, estention cable and earth cable4822 310 10671
Wristband tester4822 344 13999

(GB)

Safety regulations require that the set be restored to its original condition and that parts which are identical with those specified, be used.

Safety components are marked by the symbol Δ .

(NL)

Veiligheidsbepalingen vereisen, dat het apparaat bij reparatie in zijn oorspronkelijke toestand wordt teruggebracht en dat onderdelen, identiek aan de gespecificeerde, worden toegepast.

De Veiligheidsonderdelen zijn aangeduid met het symbol Δ .

(F)

Les normes de sécurité exigent que l'appareil soit remis à l'état d'origine et que soient utilisés les pièces de rechange identiques à celles spécifiées.

Less composants de sécurité sont marqués Δ .

(D)

Bei jeder Reparatur sind die geltenden Sicherheitsvorschriften zu beachten. Der Originalzustand des Geräts darf nicht verändert werden; für Reparaturen sind Original-Ersatzteile zu verwenden.

Sicherheitsbauteile sind durch das Symbol Δ markiert.

(I)

Le norme di sicurezza esigono che l'apparecchio venga rimesso nelle condizioni originali e che siano utilizzati i pezzi di ricambio identici a quelli specificati.

Componenty di sicurezza sono marcati con Δ .

(GB)

After servicing and before returning set to customer perform a leakage current measurement test from all exposed metal parts to earth ground to assure no shock hazard exist, The leakage current must not exceed 0.5mA.

**(GB) Warning !**

Invisible laser radiation when open.
Avoid direct exposure to beam.

(S) Varning !

Osynlig laserstrålning när apparaten är öppnad och spärren är urkopplad. Betrakta ej strålen.

(SF) Varoitus !

Avatussa laitteessa ja suojaelukituksen ohitettaessa olet alttiina näkymättömälle laserisäteilylle. Älä katso säteeseen!

(DK) Advarsel !

Usynlig laserstrålning ved åbning når sikkerhedsafbrydere er ude af funktion. Undgå udsættelse for stråling.

(F)

"Pour votre sécurité, ces documents doivent être utilisés par des spécialistes agréés, seuls habilités à réparer votre appareil en panne".

Pb(Lead) Free Solder

When soldering, be sure to use the pb free solder.

INDENTIFICATION:

Regardless of special logo (not always indicated)



one must treat all sets from **1 Jan 2005** onwards, according next rules:

Important note: In fact also products of year 2004 must be treated in this way as long as you avoid mixing solder-alloys (lead-ed/ lead-free). So best to always use SAC305 and the higher temperatures belong to this.

Due to lead-free technology some rules have to be respected by the workshop during a repair:

- Use only lead-free solder alloy Philips SAC305 with order code 0622 149 00106. If lead-free solder-paste is required, please contact the manufacturer of your solder-equipment. In general use of solder-paste within workshops should be avoided because paste is not easy to store and to handle.
- Use only adequate solder tools applicable for lead-free solder alloy. The solder tool must be able
 - To reach at least a solder-temperature of 400°C,
 - To stabilize the adjusted temperature at the solder-tip
 - To exchange solder-tips for different applications.
- Adjust your solder tool so that a temperature around 360°C – 380°C is reached and stabilized at the solder joint. Heating-time of the solder-joint should not exceed ~ 4 sec. Avoid temperatures above 400°C otherwise wear-out of tips will rise drastically and flux-fluid will be destroyed. To avoid wear-out of tips switch off unused equipment, or reduce heat.
- Mix of lead-free solder alloy / parts with lead-ed solder alloy / parts is possible but PHILIPS recommends strongly to avoid mixed solder alloy types (lead-ed and lead-free).
If one cannot avoid or does not know whether product is lead-free, clean carefully the solder-joint from old solder alloy and re-solder with new solder alloy (SAC305).
- Use only original spare-parts listed in the Service-Manuals. Not listed standard-material (commodities) has to be purchased at external companies.
- Special information for BGA-ICs:
 - Always use the 12nc-recognizable soldering temperature profile of the specific BGA (for de-soldering always use the lead-free temperature profile, in case of doubt)
 - Lead free BGA-ICs will be delivered in so-called 'dry-packaging' (sealed pack including a silica gel pack) to protect the IC against moisture. After opening,

dependent of MSL-level seen on indicator-label in the bag, the BGA-IC possibly still has to be baked dry. (MSL=Moisture Sensitivity Level). This will be communicated via AYS-website.

Do not re-use BGAs at all.

- For sets produced before 1.1.2005 (except products of 2004), containing lead-ed solder-alloy and components, all needed spare-parts will be available till the end of the service-period. For repair of such sets nothing changes.
- On our website www.atyourservice.ce.Philips.com you find more information to:
 - BGA-de-/soldering (+ baking instructions)
 - Heating-profiles of BGAs and other ICs used in Philips-sets

You will find this and more technical information within the "magazine", chapter "workshop news".

For additional questions please contact your local repair-helpdesk.

System , Region Code , etc. Setting Prochure

1)System Reset

- Press "SETUP" button on R/C,TV will show setup menu
- Select the menu using the ▼ and ► on R/C
- Go preference page to do system reset

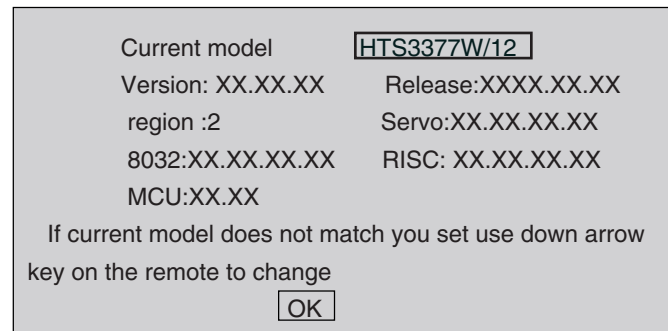
2)Region Code Change

- In open mode, press"9" "9" "9" on R/C,then input desired number to change region code :

- | | |
|---|-----------------------|
| 1 | USA |
| 2 | EU |
| 3 | AP |
| 4 | Australia ,NZ , Latam |
| 5 | Russia , INDIA |
| 6 | CHINA |

3)Version Control Change

- In open mode, press "1" "5" "9" on R/C
- Press "ok" button to confirm
- TV will show message as below:



4)Password Change

- Press "SETUP" button on R/C,TV will show setup menu
 - Select the menu using the ▼ and ► on R/C
 - Go preference page select "password" to change
- * 000000 is default password supplied.

5)Check on the Software Version

- Open the CD Door
- Press "INFO" button on R/C
- TV will show the version on screen

6)Trade model

- Press "Open/Close " button on R/C
- Press "2" "5" "9" on R/C,VFD will display "TRA ON " or "TRA OFF"

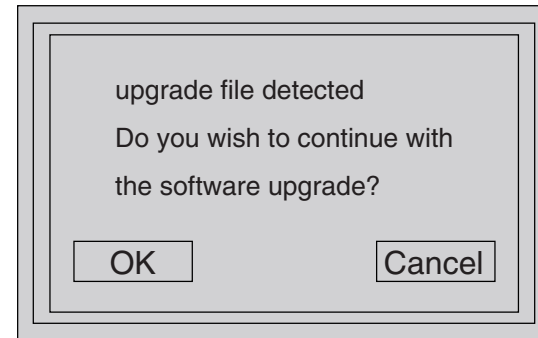
7) Upgrading new software

- Copy "software files" into a CD-R
- Open the CD Door,then insert the CD-R program disc
- Close the CD Door
- VFD will show:

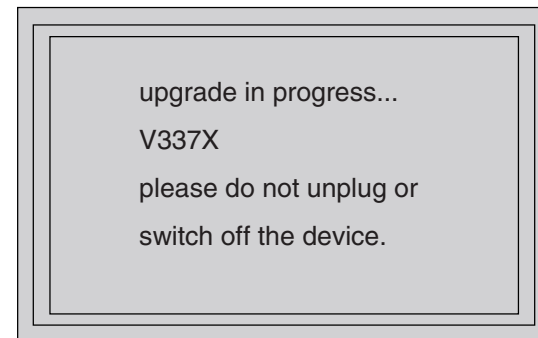
"Loading"
 "Erase" -- erase the flash memory
 "Writing" about 1 minute
 "done "

* the system will switch off and on again automatically.

- OSD will show:



- Select "OK", OSD will show:

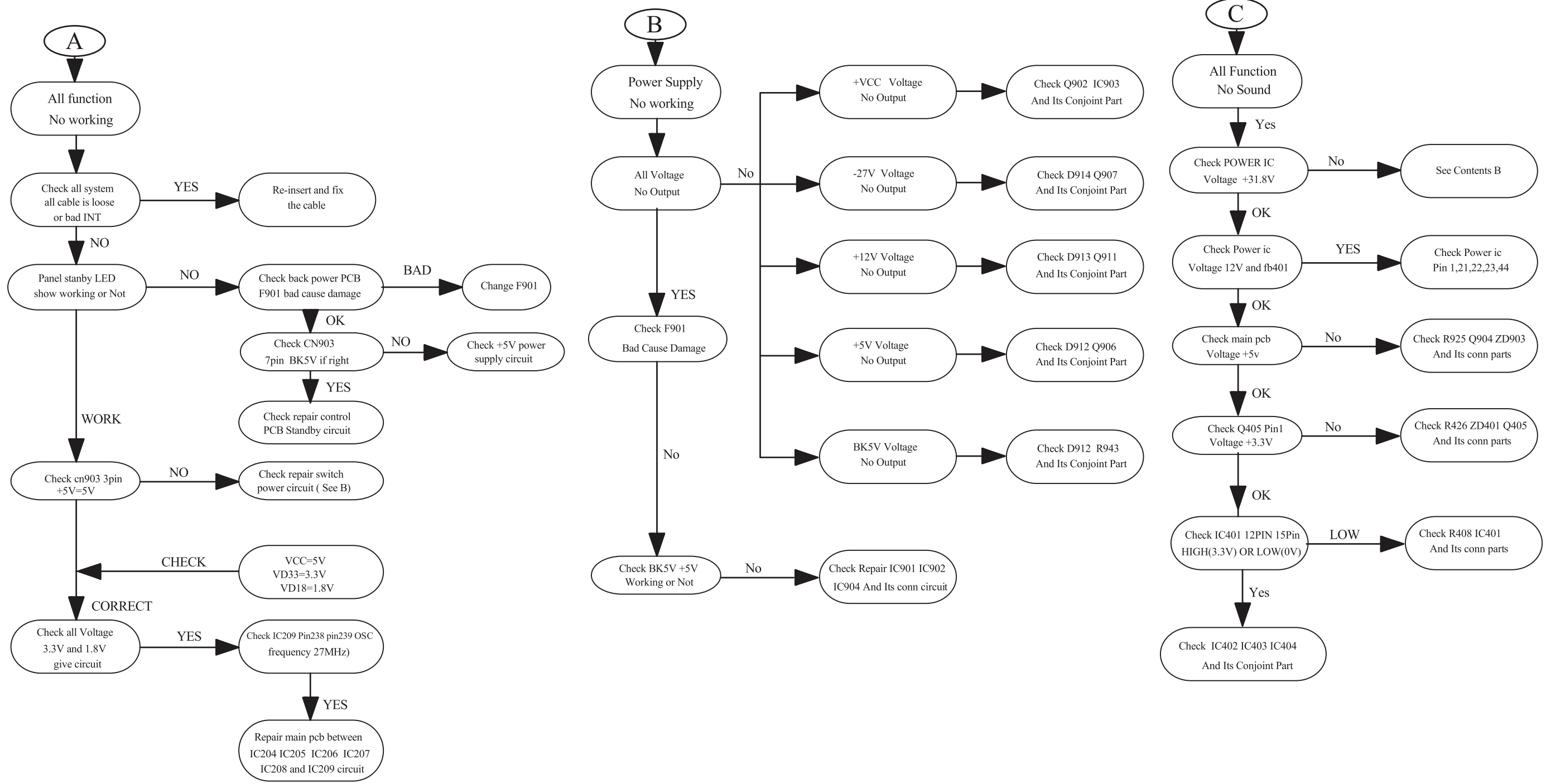


CAUTION!

This information is confidential and may not be distributed.Only a qualified service person should reprogram the Region Code.

MAIN UNIT REPAIR CHART 1/3

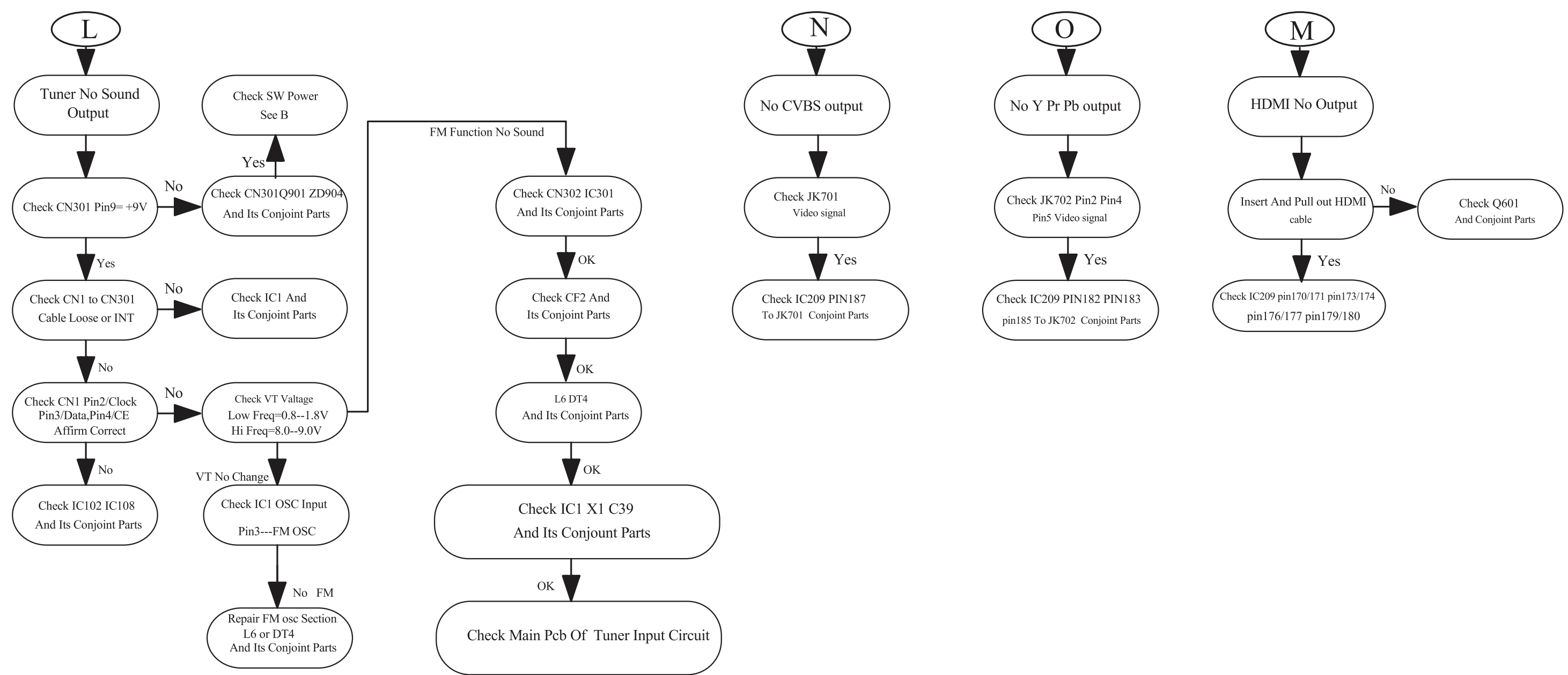
- A**
 All Function
 No Working
- B**
 Power Supply
 No Working
- C**
 All Function
 No Sound
- E**
 Audio line IN
 No Output
- G**
 DVD Audio
 No Sound
- H**
 MP3 In
 No Sound
- I**
 COAXIAL In
 No Sound
- j**
 Optical In
 No Sound
- L**
 Tuner No Sound
- M**
 HDMI No Output
- N**
 No CVBS Output
- O**
 No Y Pr Pb output



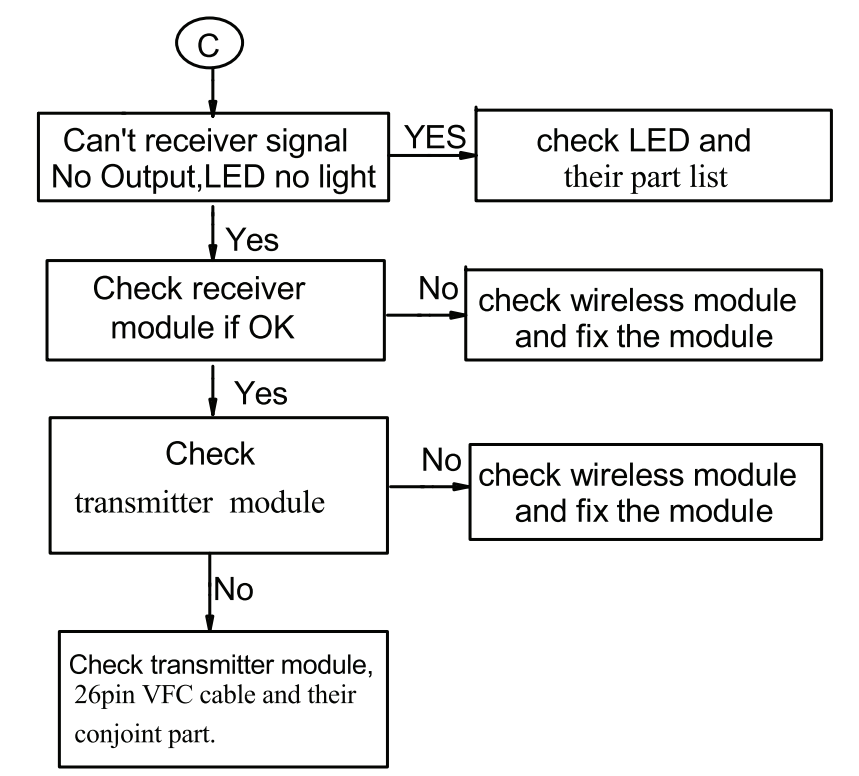
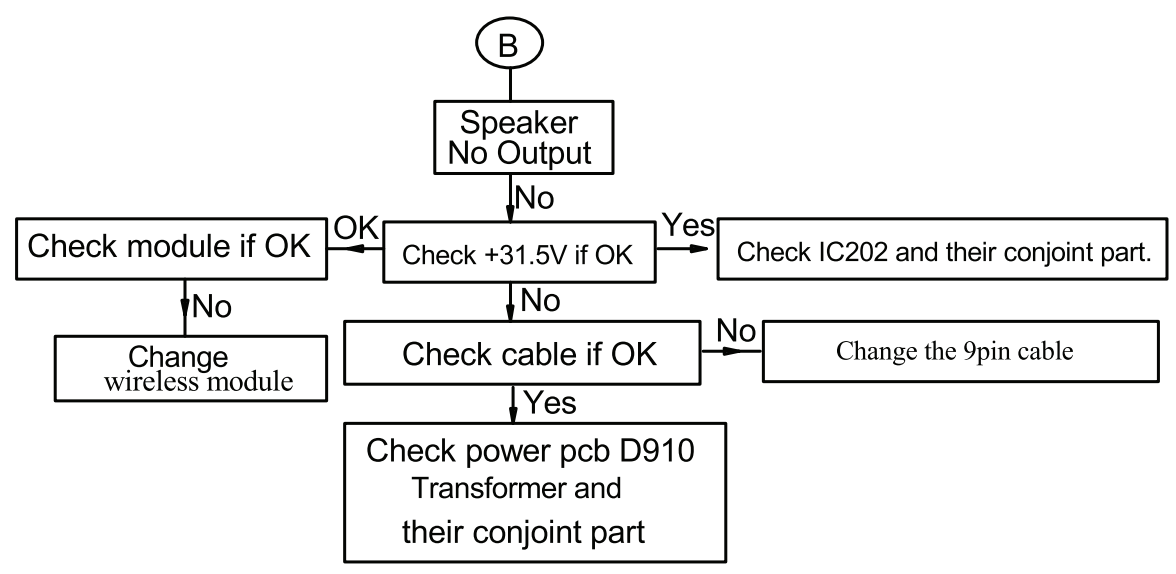
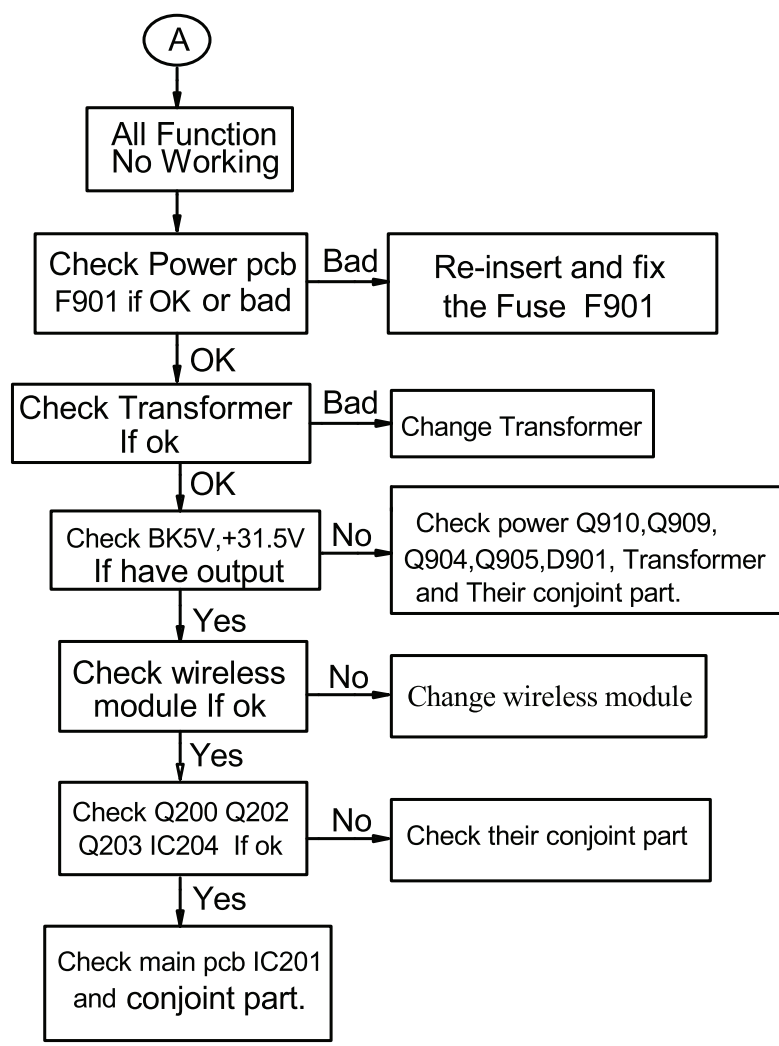
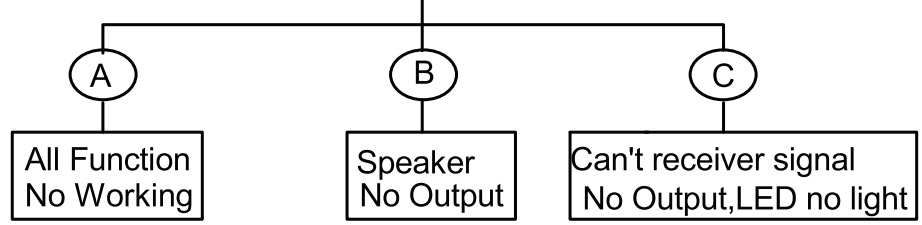
MAIN UNIT REPAIR CHART 2/3



MAIN UNIT REPAIR CHART 3/3



MAIN UNIT REPAIR CHART



3 - 1
DISASSEMBLY INSTRUCTIONS(part one _main unit)

Dismantling of the Front Panel Assemble

- 1) Open the DVD Tray by using the Open/Close Button while the Set is ON and disconnect the mains supply after removing the Tray Cover.
Note: If this is not possible, the DVD Tray has to be open manually.
Take a mini screw driver about 2mm diameter and make a marking 24mm from the tip as shown in figure 2 . Place the set on its side, insert the mini screw driver till the marking and slide it towards the left as shown in figure 1 until the Tray moves out of the Front Panel.
- 2) Return the set to its upright position and remove the Tray Cover as shown in Figure 3 and close the tray manually by pushing it back in.

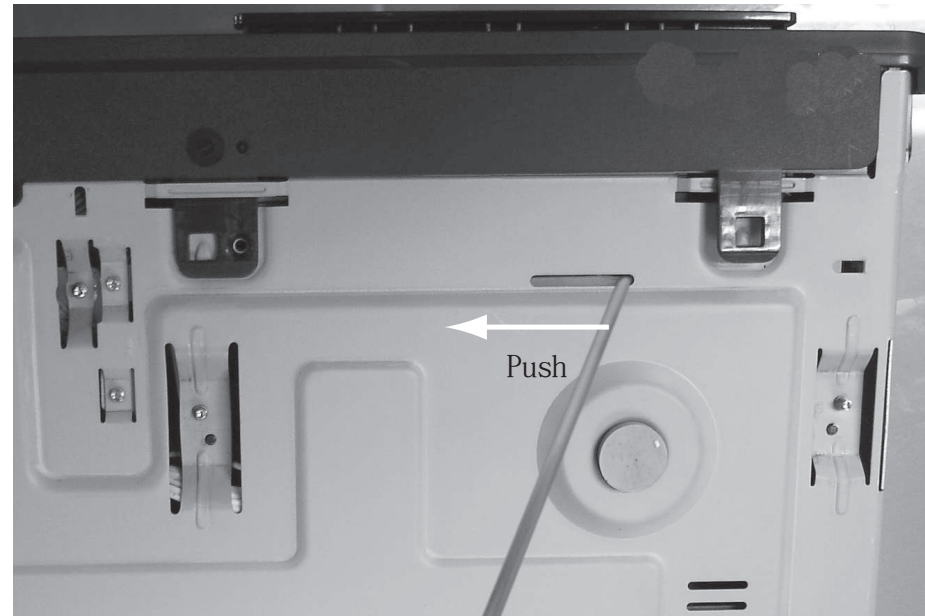


Figure 1



Figure 2

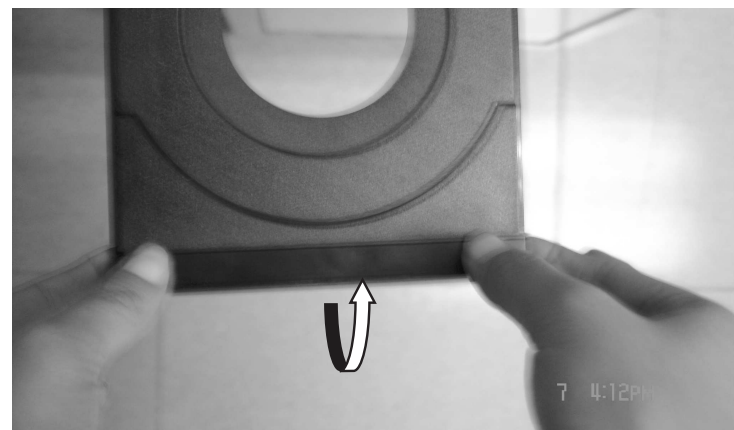


Figure 3

- 3) Loosen 6 screws and remove the Top Cover by lifting the rear portion upwards before sliding it out towards the rear.
 - 1 screw "A" each on the left & right side as shown in figure 4.
 - 4 screws "B" at the back panel as shown in figure 5.
- 4) Loosen 6 screws "C" at the front panel bracket as in figure 6A & figure 6B to remove the front panel.

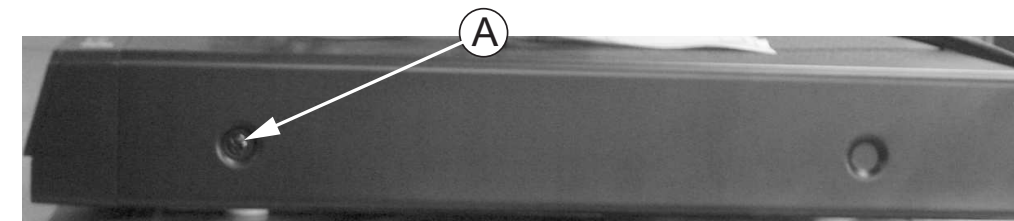


Figure 4

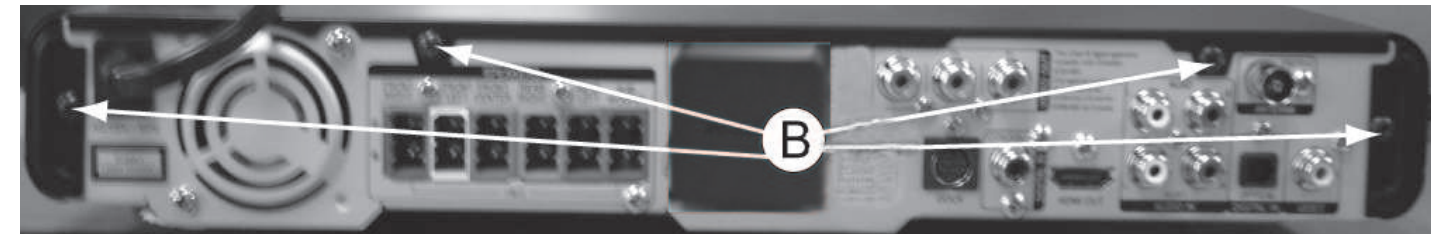


Figure 5

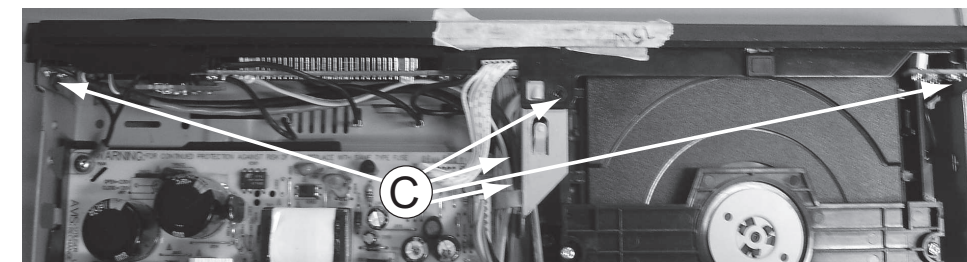


Figure 6A

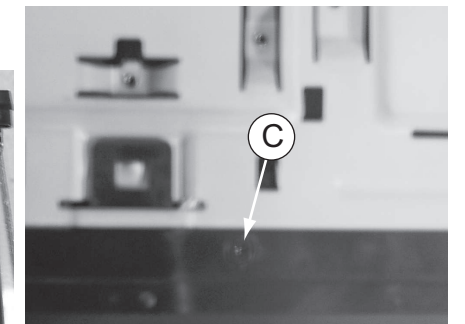


Figure 6B

Dismantling of the DVD Module

- 1) Loosen 4 screws "D" at the DVD Module as shown in figure 7.

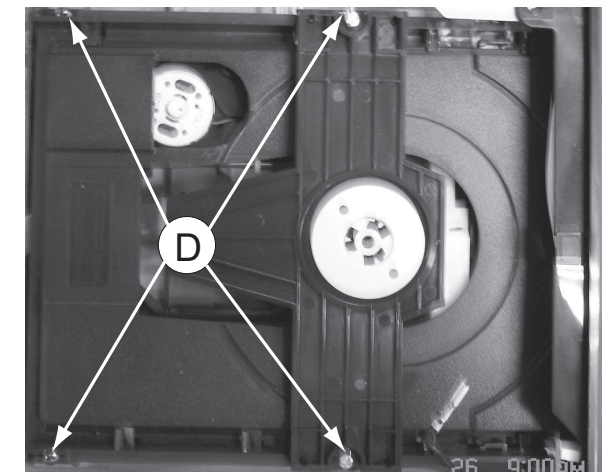


Figure 7

Dismantling of the DISP+LED+VOL&MP3 IN Board

1) Loosen 10 screws "E" on the top of DISP+LED+VOL & MP3 IN Board as shown in figure 8.

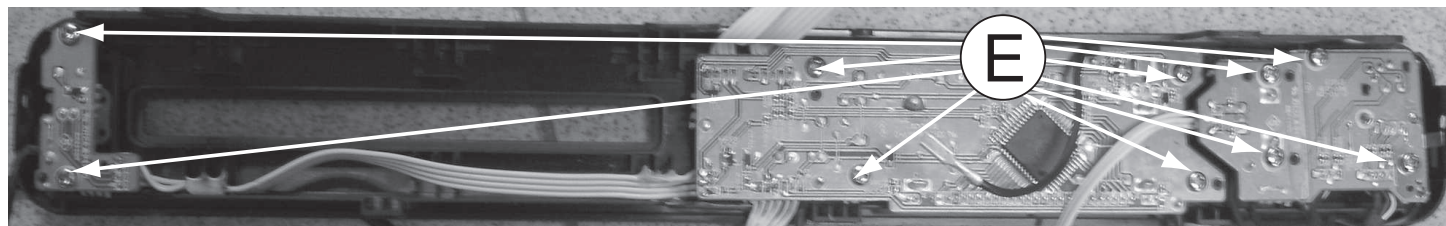


Figure 8

Dismantling of the Power Board

1) Loosen 4 screws "F" on the top of Power Board as shown in figure 9.
 2) With a pincers to nip this space as shown in figure 10 and to take up the power board.

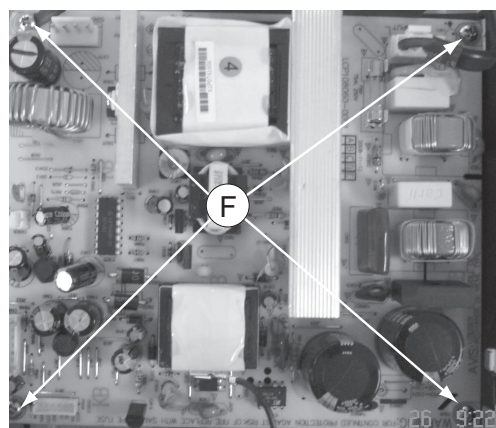


Figure 9

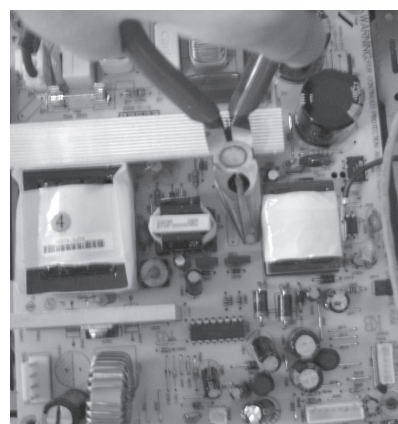


Figure 10

Dismantling of the MAIN+SCART Board

1) Loosen 4 screws "G" on the top of Main Board as shown in figure 11.
 2) At the back panel, loosen 9 screws "H" to remove Main Board and loosen 2 screws to remove Scart Board as shown in figure 12.

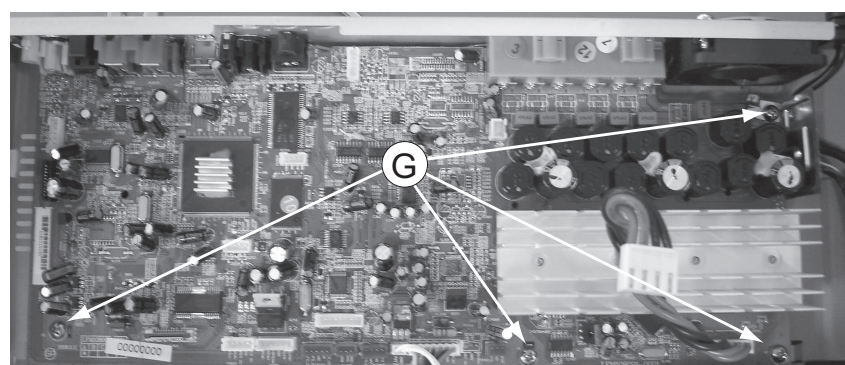


Figure 11

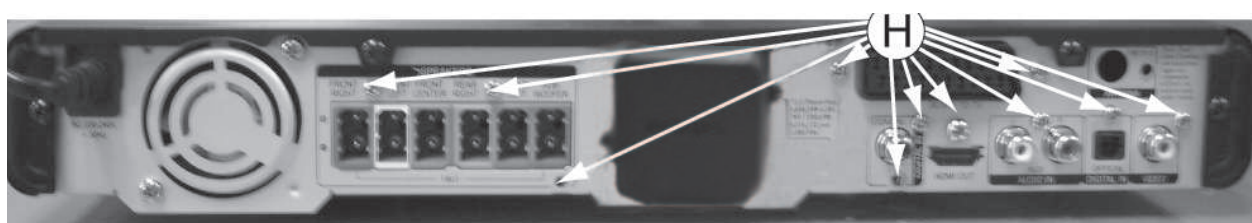
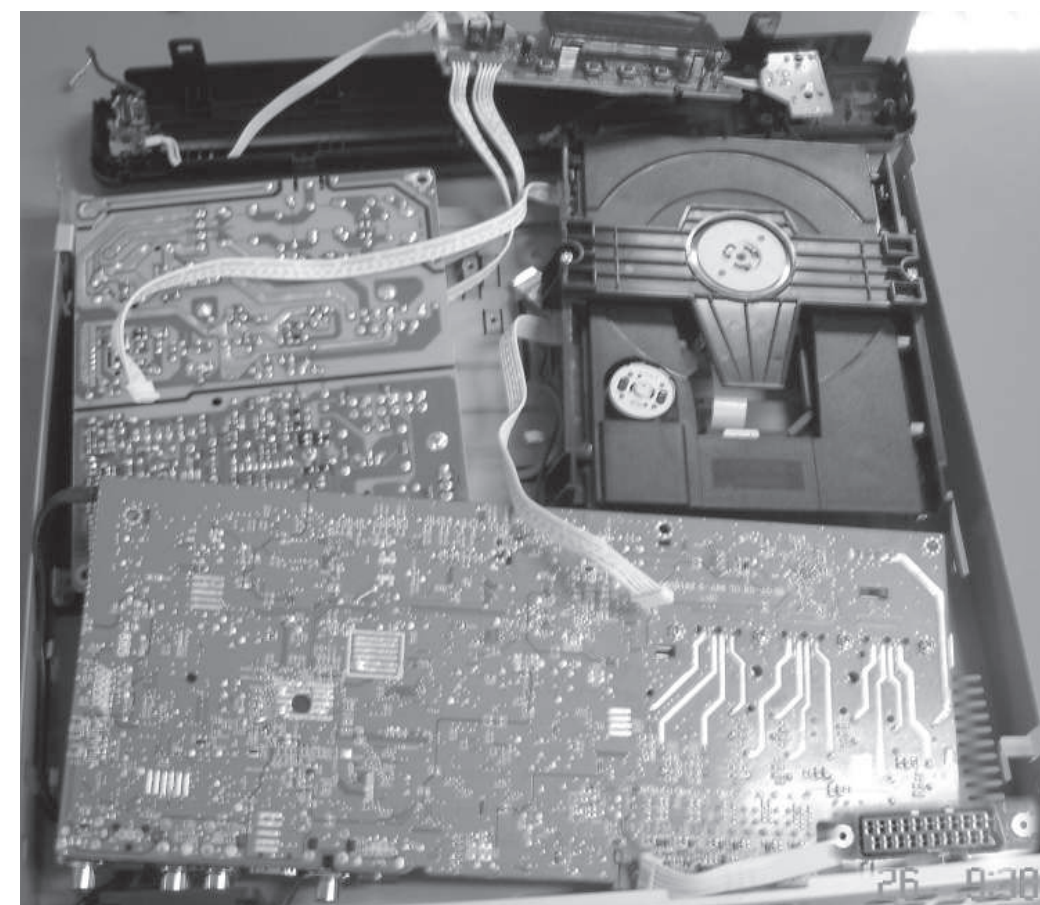


Figure 12

SERVICE POSITIONS

Service position A



Note: In some service positions the components or copper patterns of one board may risk touching its neighbouring pc boards or metallic parts. To prevent such short-circuit use a piece of hard paper or other insulating material between them.

DISASSEMBLY INSTRUCTIONS (part two_wireless)

Dismantling of the Receiver module outer cover Assembly

- 1) Loosen 4 screws "A" on the bottom and remove the front & top Cover by lifting the panel upwards before sliding it from the set as shown in figure 1.
- 2) Loosen 4 screws to remove the side & back & bottom panel:
 - 3 screws "B" on the bottom as shown in figure 2;
 - 1 screw "C" as shown in figure 3.

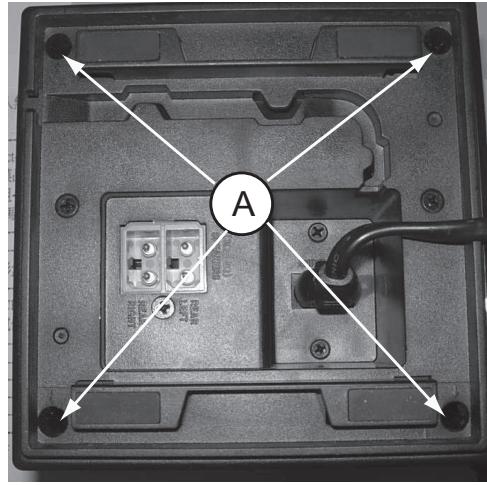


Figure 1

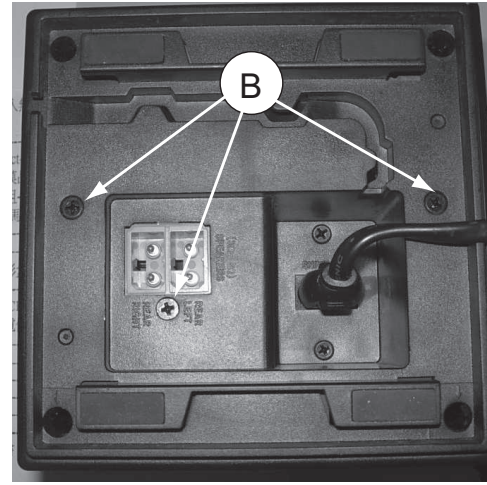


Figure 2

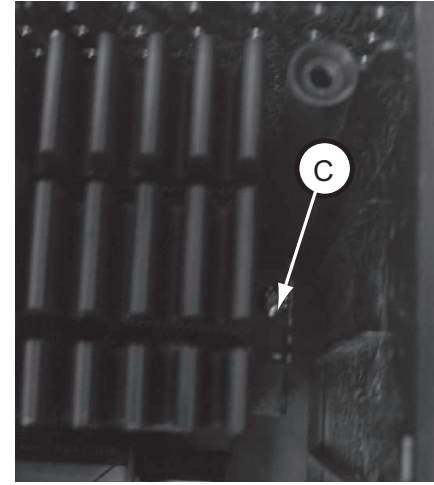


Figure 3

Dismantling of the SMPS Board

- 1) Loosen 4 screws "D" on the top of SMPS Board as shown in figure 4 to remove SMPS Board.
- 2) Loosen 3 screws "E" as shown in figure 5.

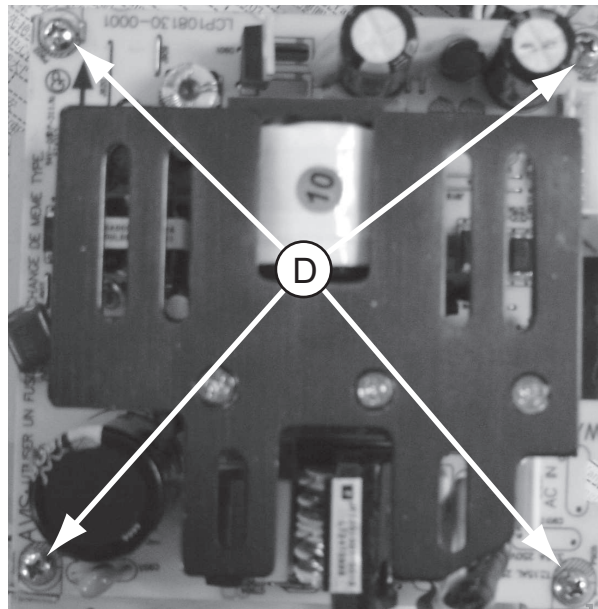


Figure 4

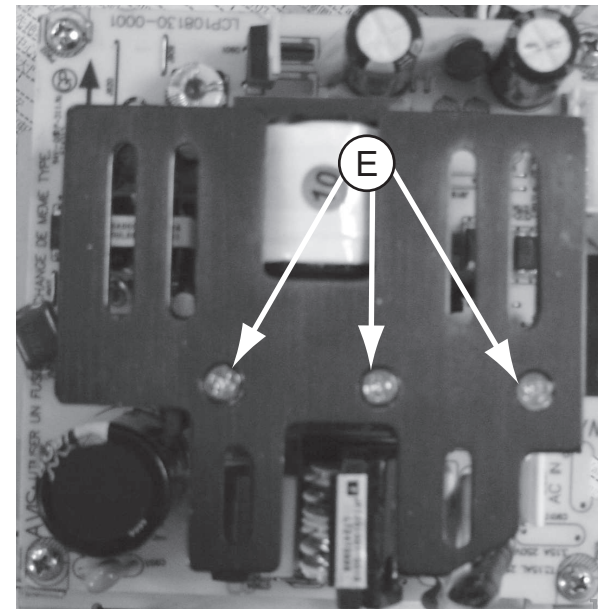


Figure 5

Dismantling of the MAIN+LED+HEAT SINK Board

- 1) With a pincers to nip this space as shown in figure 6 and to take up this board.
- 2) Loosen 2 screws "F" as shown in figure 7, and loosen 1 screw "G" on the top of Wireless Main Board as shown in figure 8 to remove the Wireless Main Board.
- 3) Loosen 2 screws "H" at the bottom of Wireless Main Board to remove Heat Sink as shown in figure 9.
- 4) Loosen 2 screws "I" on the top of LED Board as shown in figure 10.

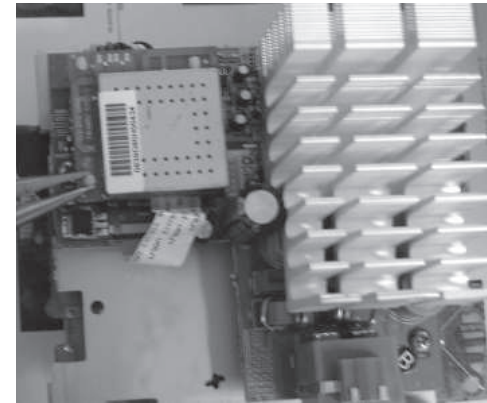


Figure 6

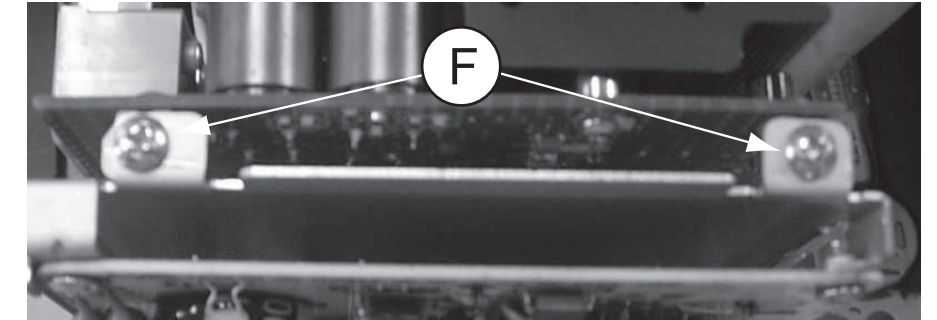


Figure 7

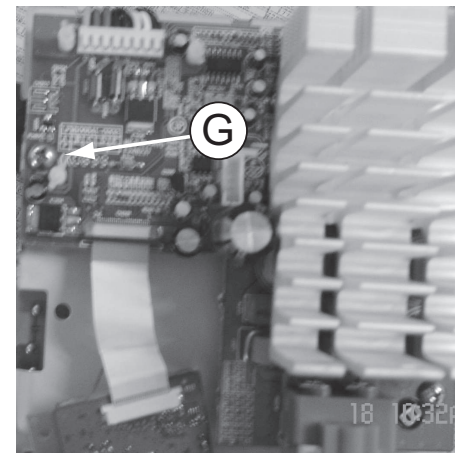


Figure 8

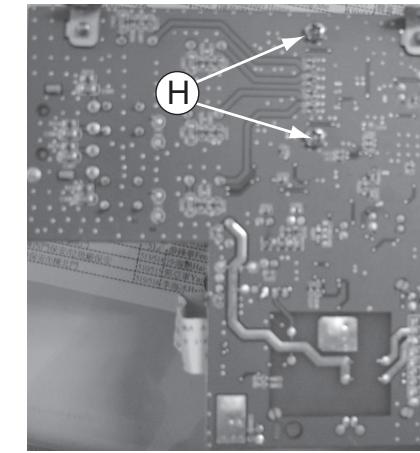


Figure 9

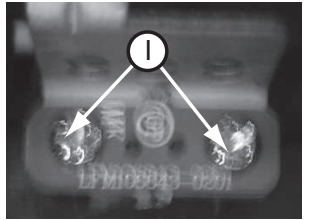
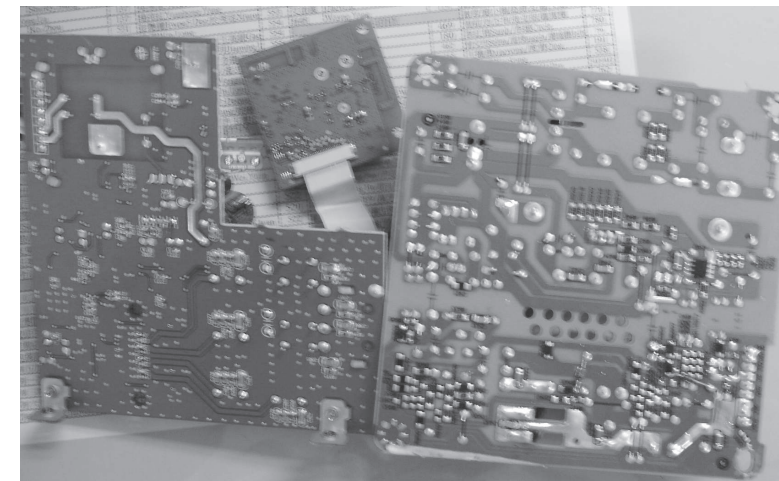
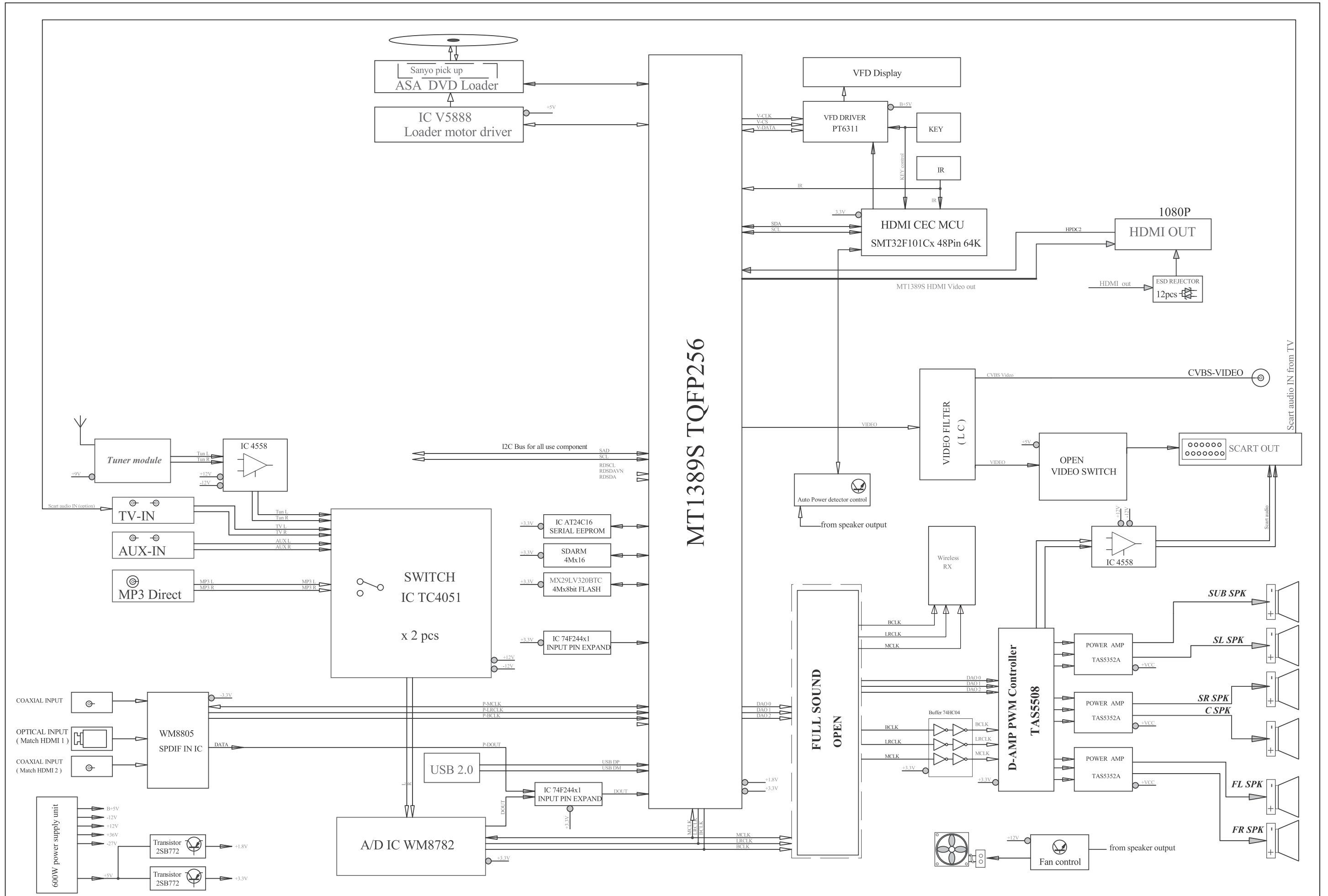


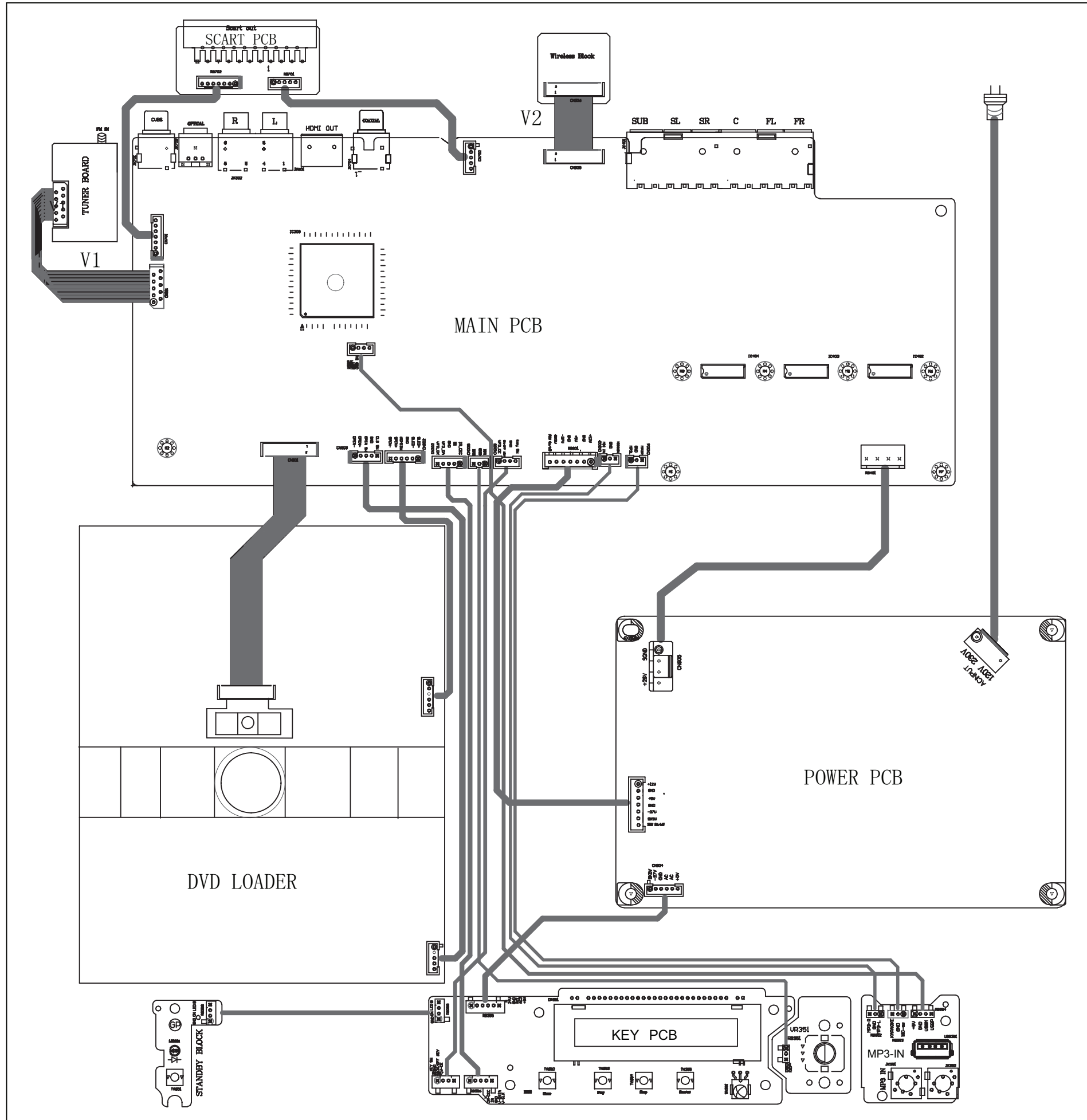
Figure 10

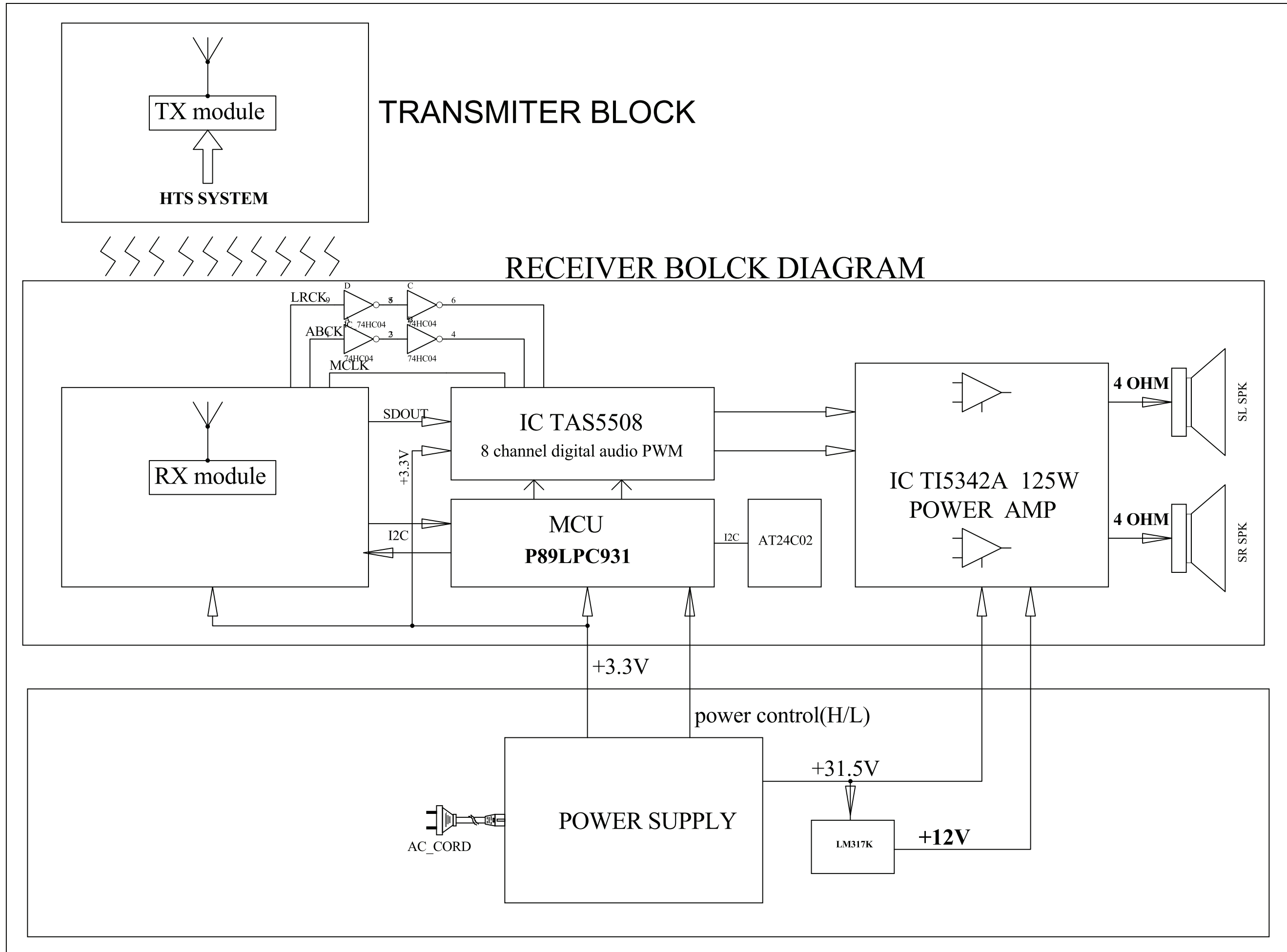
SERVICE POSITIONS (wireless)

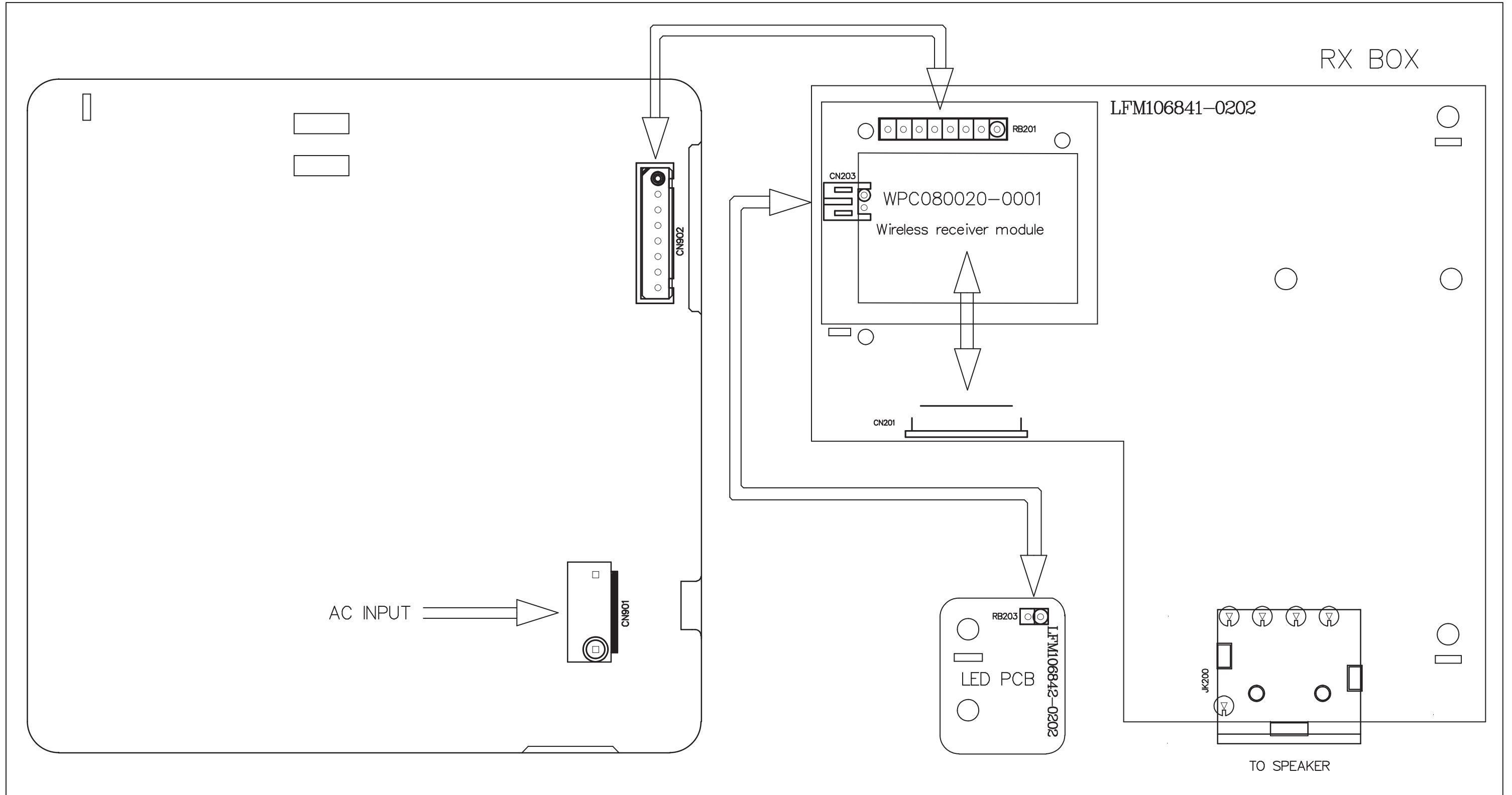


Note: In some service positions the components or copper patterns of one board may risk touching its neighbouring pc boards or metallic parts. To prevent such short-circuit use a piece of hard paper or other insulating material between them.

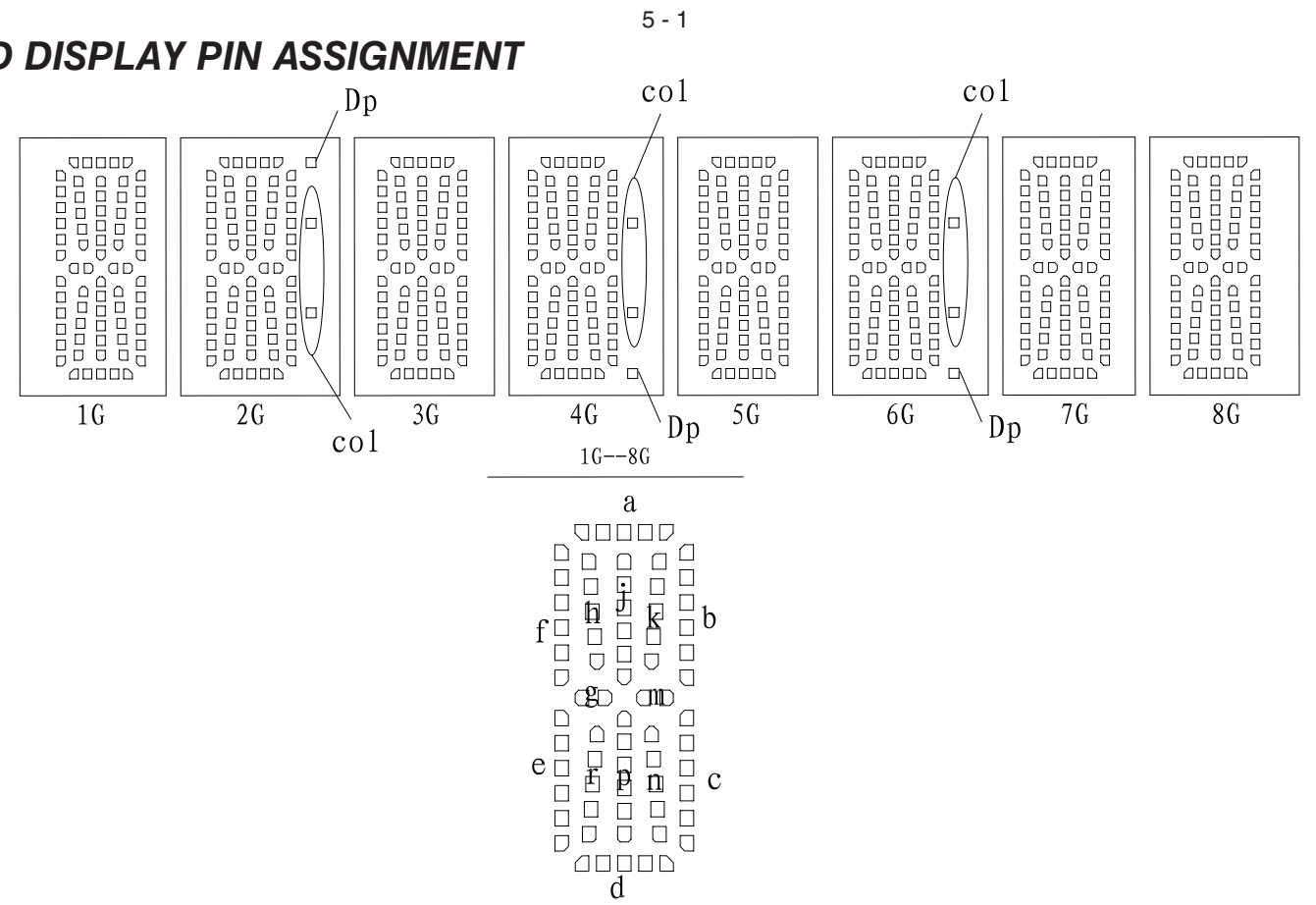








FTD DISPLAY PIN ASSIGNMENT



DISP+LED+VOL BOARD-main unit

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	1G	2G	3G	4G	5G	6G	7G	8G
P1	a	a	a	a	a	a	a	a
P2	j, p	j, p	j, p	j, p	j, p	j, p	j, p	j, p
P3	h	h	h	h	h	h	h	h
P4	k	k	k	k	k	k	k	k
P5	b	b	b	b	b	b	b	b
P6	f	f	f	f	f	f	f	f
P7	m	m	m	m	m	m	m	m
P8	g	g	g	g	g	g	g	g
P9	c	c	c	c	c	c	c	c
P10	e	e	e	e	e	e	e	e
P11	r	r	r	r	r	r	r	r
P12	n	n	n	n	n	n	n	n
P13	d	d	d	d	d	d	d	d
P14	/	col	/	col	/	col	/	/
P15	/	Dp	/	Dp	/	Dp	/	/

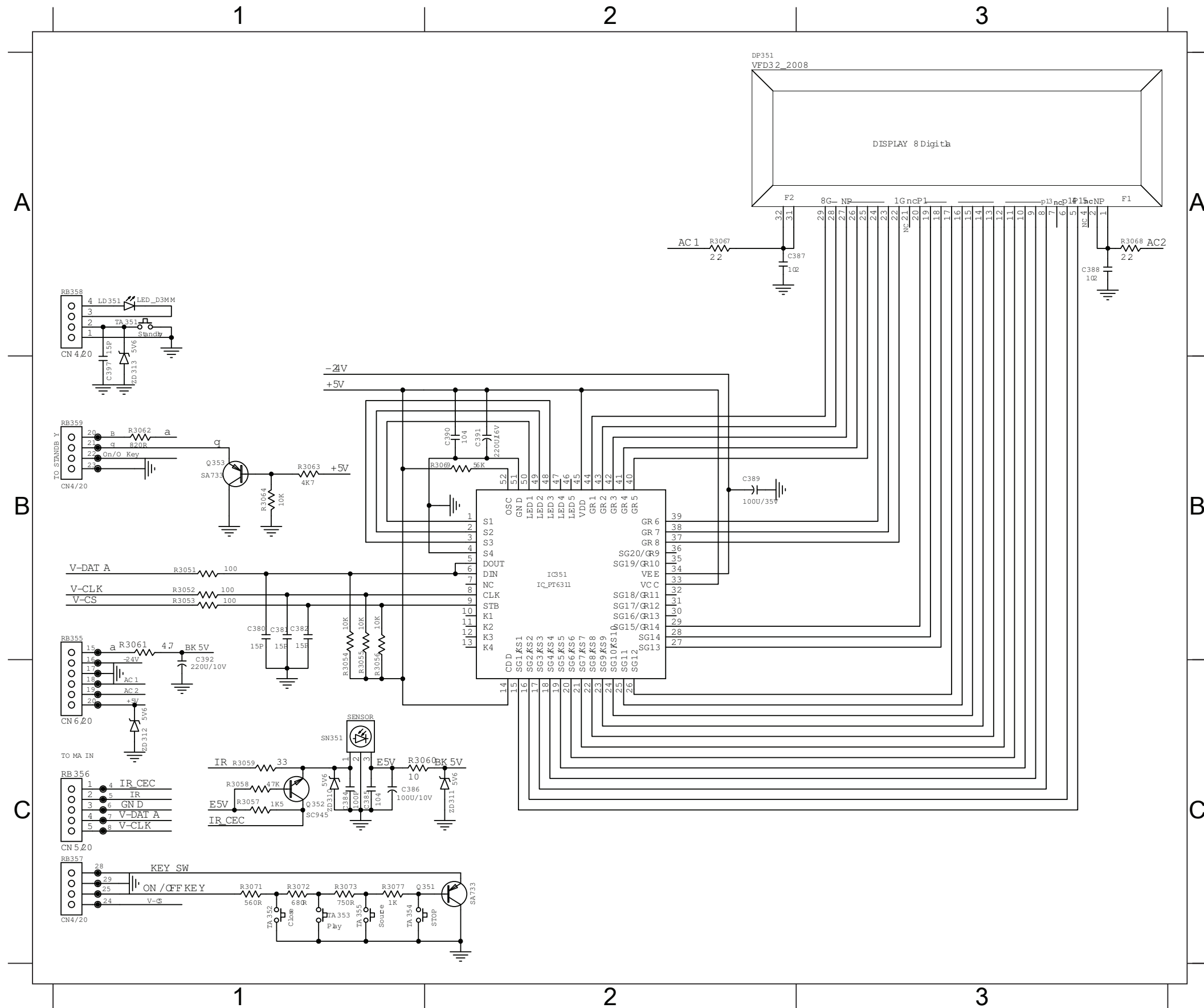
PIN CONNECTION

管脚序号 (Pin NO.)	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
连接 (Connection)	F1	F1	NP	NC	P15	P14	NC	P13	P12	P11	P10	P9	P8	P7	P6	P5
管脚序号 (Pin NO.)	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
连接 (Connection)	P4	P3	P2	P1	NC	1G	2G	3G	4G	5G	6G	7G	8G	NP	F2	F2

注 (Notes) : Fn : 灯丝 (Filament Pin) nG : 栅极 (Grid Pin)
 Pn : 阳极 (Anode Pin) NP : 无引出脚 (No Pin)
 NC : 无功能 (No connection Pin)

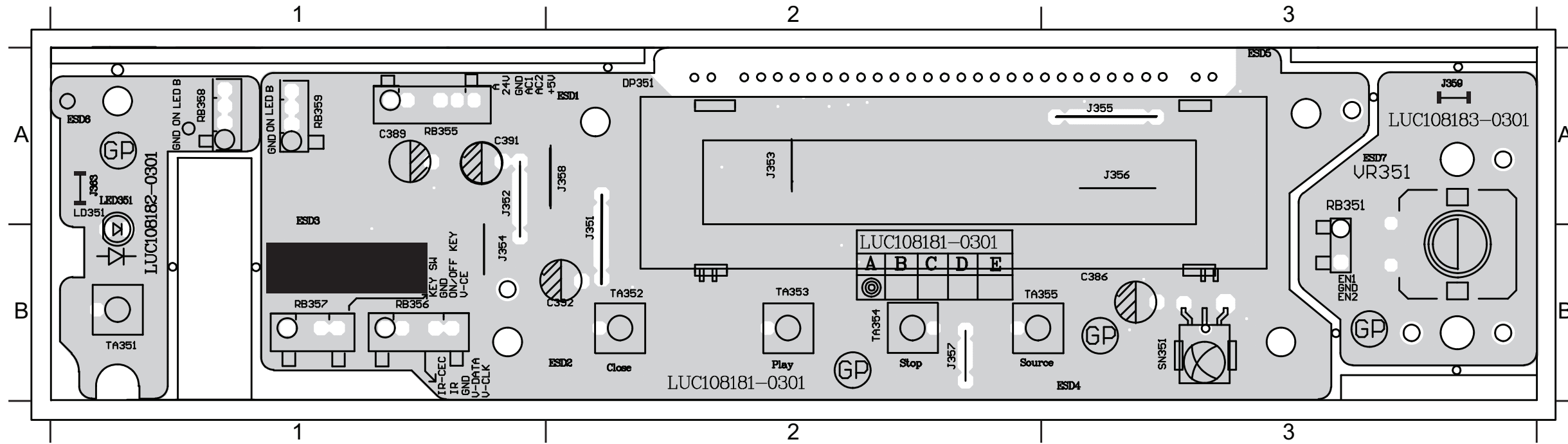
CIRCUIT DIAGRAM

C380 B1 C384 C1 C387 A2 C390 B2 C395 C4 DP351 A2 Q351 C1 R3051 B1 R3054 B1 R3057 C1 R3060 C1 R3063 B1 R3068 A3 R3072 C1 RB351 C4 RB357 C1 TA351 A1 TA354 C1 ZD310 C1 ZD313 B1
 C381 B1 C385 C1 C388 A3 C391 B2 C396 C4 IC351 B2 Q352 C1 R3052 B1 R3055 B1 R3058 C1 R3061 B1 R3064 B1 R3069 B2 R3073 C1 RB355 B1 RB359 B1 TA352 C1 TA355 C1 ZD311 C2
 C382 B1 C386 C1 C389 B2 C392 B1 C397 B1 LD351 A1 Q353 B1 R3053 B1 R3056 B1 R3059 C1 R3062 B1 R3067 A2 R3071 C1 R3077 C1 RB356 C1 SN351 C1 TA353 C1 VR351 C4 ZD312 C1



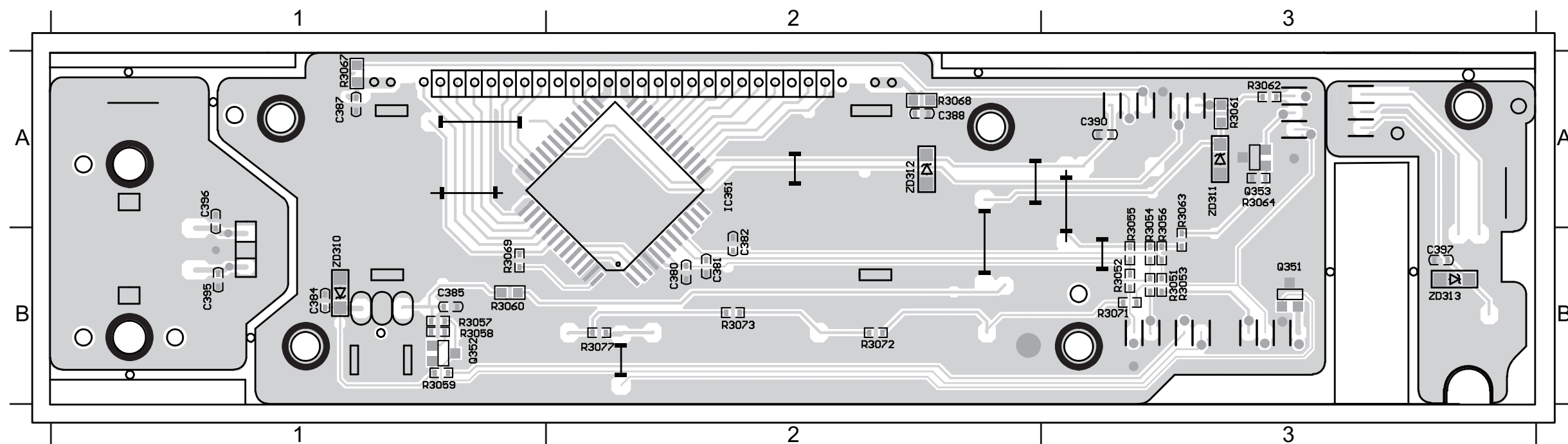
PCB LAYOUT - TOP VIEW

C386 A3 C391 A1 DP351 A2 ESD4 A3 ESD6 A1 J351 A2 J353 A2 J355 A3 J357 B2 J359 A3 LD351 A1 RB355 A1 RB357 B1 SN351 B3 TA352 B2 TA354 B2 VR351 A3
 C389 A1 C392 B2 ESD1 A2 ESD5 B3 ESD7 A3 J352 B1 J354 B1 J356 A3 J358 A2 J363 A1 RB351 A3 RB356 B1 RB359 A1 TA351 B1 TA353 B2 TA355 B2



PCB LAYOUT - BOTTOM VIEW

C380 B2 C382 B2 C387 A1 C390 A3 C396 A1 IC351 A2 Q352 B1 R3051 B3 R3053 B3 R3055 A3 R3057 B1 R3059 B1 R3061 A3 R3063 A3 R3067 A1 R3069 B1 R3072 B2 R3077 B2 ZD311 A3 ZD313 B3
 C381 B2 C385 B1 C388 A2 C395 B1 C397 B3 Q351 B3 Q353 A3 R3052 B3 R3054 A3 R3056 A3 R3058 B1 R3060 B1 R3062 A3 R3064 A3 R3068 A2 R3071 B3 R3073 B2 ZD310 B1 ZD312 A2

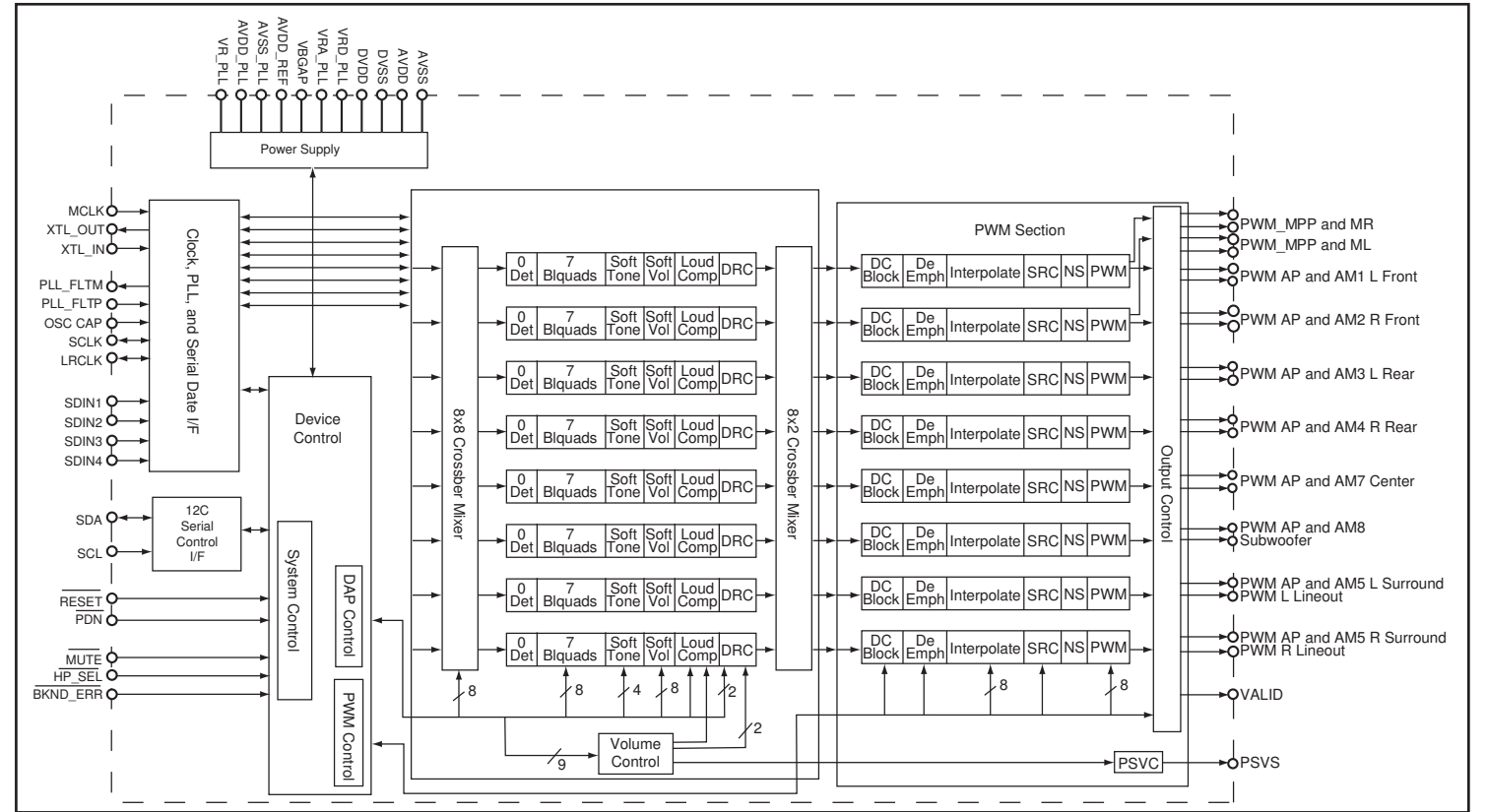


MAIN BOARD-main unit

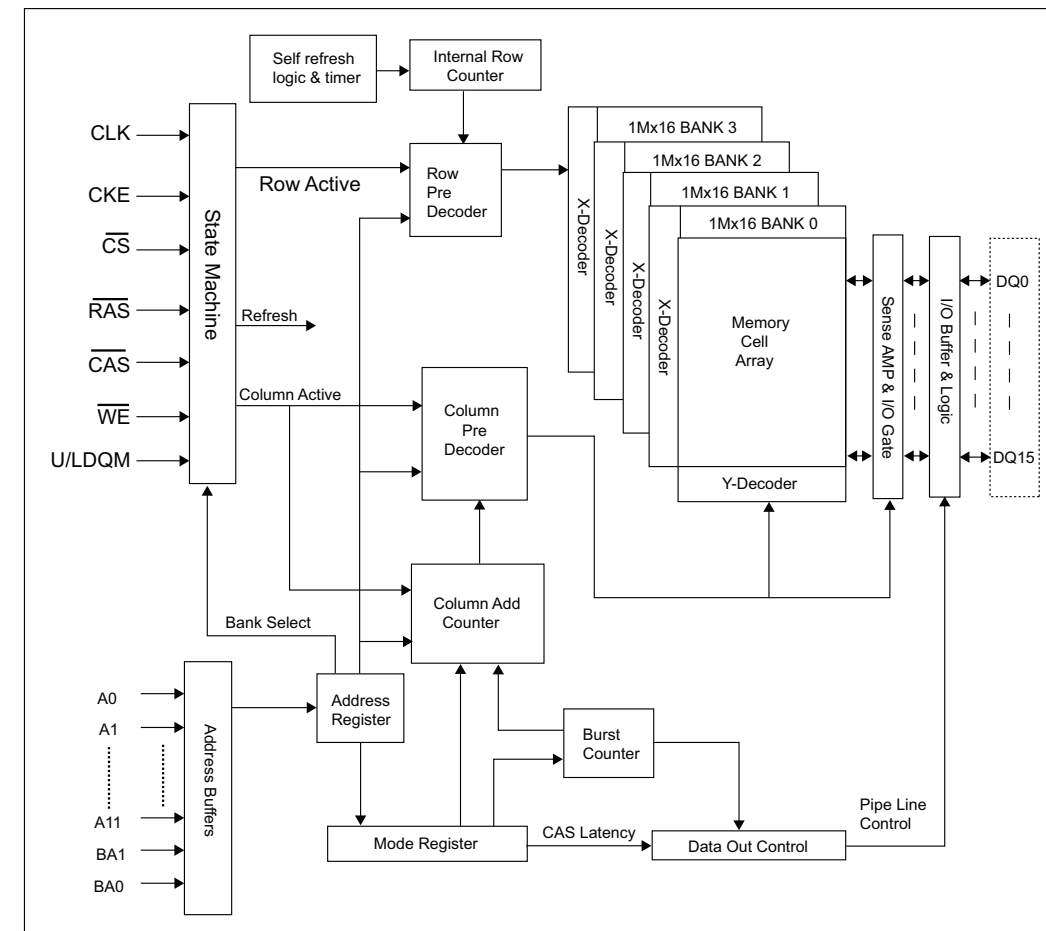
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INTERNAL IC DIAGRAM - TAS5508B

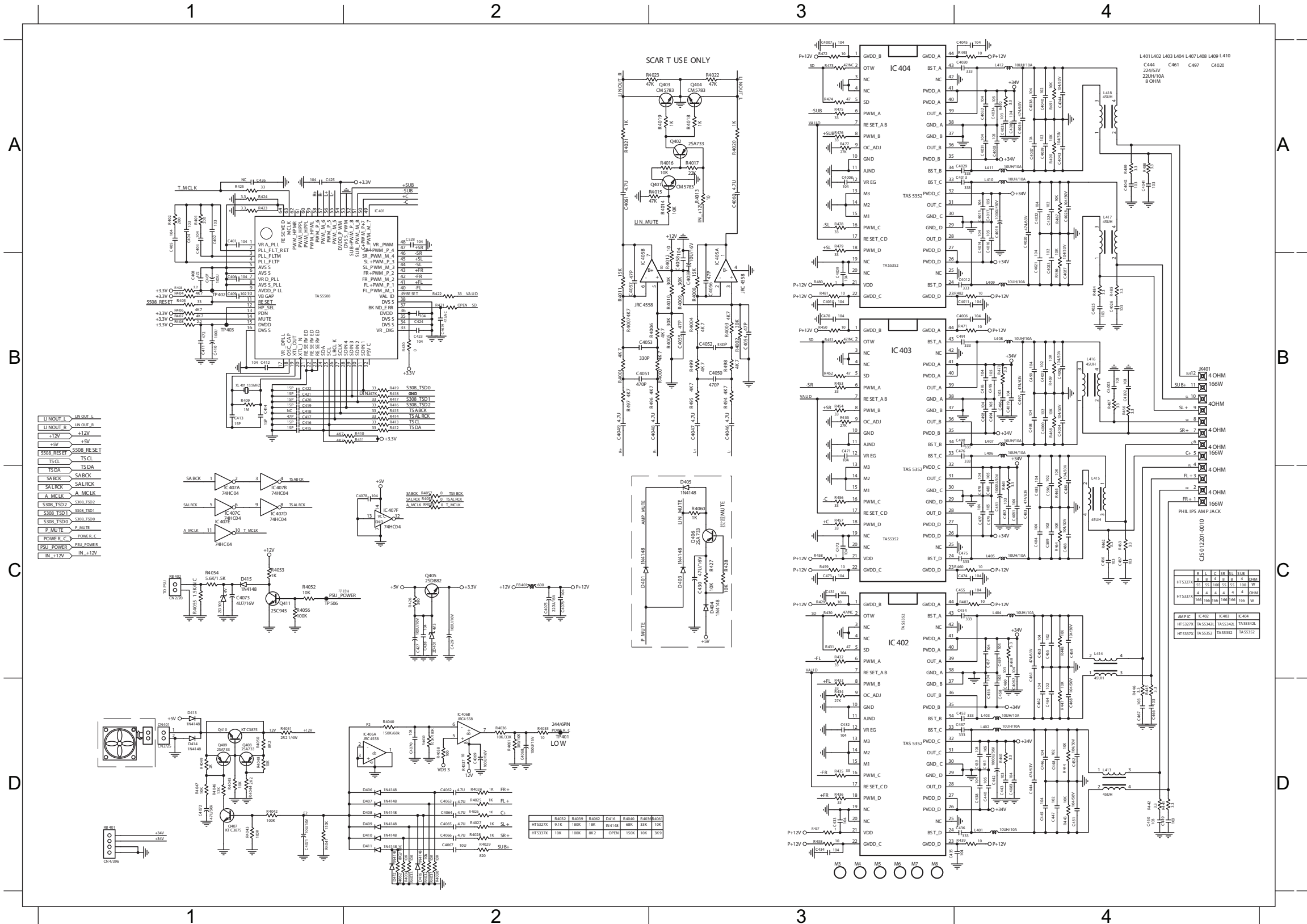


INTERNAL IC DIAGRAM - HY57V641620F



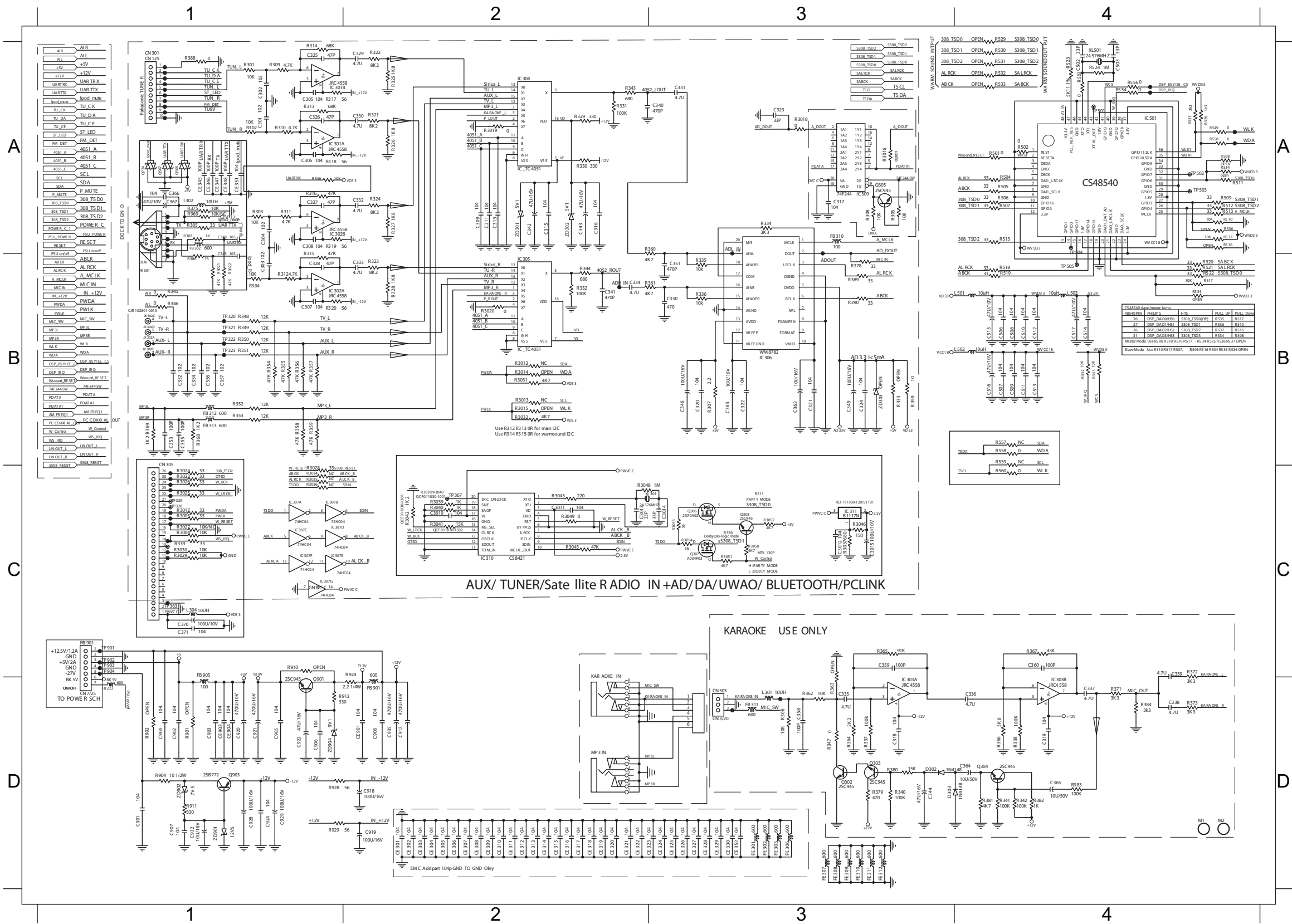
CIRCUIT DIAGRAM - part one

C4000 B4	C4014 A4	C4032 A4	C405 A1	C4063 D2	C408 B1	C422 B1	C438 D4	C457 C4	C476 B4	C493 B4	D408 D2	IC407 C1	Q402 A3	R4005 B3	R4019 A3	R4032 D2	R4046 D1	R4062 D2	R421 B2	R437 D3	R457 C3	R472 A3	R492 A4
C4001 B4	C4015 A4	C4035 A4	C4050 B3	C4064 D2	C4080 A4	C423 B2	C439 D4	C460 D4	C477 C4	C496 B4	D409 D2	JK401 B4	Q403 A3	R4006 B3	R402 A1	R4033 D2	R4047 D1	R407 B1	R422 B2	R438 D3	R458 C3	R474 A3	R493 A4
C4002 B4	C4018 A4	C4036 A4	C4051 B2	C4065 D2	C4081 C4	C424 B2	C442 D4	C461 C4	C478 C4	C497 B4	D410 D2	L401 D4	Q404 A3	R4007 B2	R4020 A3	R4034 D2	R4048 D1	R408 B1	R423 A1	R439 D3	R459 C3	R475 A3	R494 B3
C4003 B4	C402 A1	C4037 A4	C4052 B3	C4066 D2	C409 B1	C425 A1	C443 D4	C462 D4	C481 C4	C498 B4	D411 D2	L402 D4	Q405 C2	R4008 B3	R4021 A2	R4035 D2	R4049 D1	R409 B1	R424 A1	R440 D4	R460 C4	R476 A3	R495 B3
C4004 B4	C4020 A4	C4038 A4	C4053 B2	C4067 D2	C410 B1	C427 C2	C444 D4	C463 C4	C482 C4	C499 B4	D412 D2	L403 D4	Q406 C3	R4009 B3	R4022 A3	R4036 D2	R405 B1	R410 B2	R425 A1	R443 D4	R461 C4	R477 A3	R496 B3
C4005 B4	C4021 B4	C4039 A4	C4054 B3	C4068 D2	C411 B1	C428 C2	C445 D4	C464 C4	C483 C4	C528 A2	D413 D1	L404 C4	Q407 D1	R401 A1	R4023 A3	R4037 D2	R4050 D1	R411 B2	R426 C2	R444 D4	R462 C4	R478 A3	R497 B2
C4006 B4	C4022 A4	C404 A1	C4055 B3	C4069 D2	C412 B1	C429 C2	C446 D4	C465 C4	C484 C4	C589 C4	D414 D1	L405 C4	Q408 D1	R4010 B3	R4024 D2	R4038 D2	R4051 D1	R412 B2	R427 C3	R447 D4	R463 C4	R479 A3	R498 B3
C4007 A3	C4023 B4	C4040 A4	C4056 B3	C407 B1	C413 B1	C430 C3	C447 D4	C468 D4	C485 C4	C590 C4	D415 C1	L406 B4	Q409 D1	R4011 B2	R4025 D2	R4039 D2	R4052 C1	R413 B2	R428 C3	R448 C4	R464 C4	R480 B3	R499 B3
C4008 A3	C4024 A4	C4043 A4	C4057 B2	C4070 D2	C414 B1	C431 C3	C448 D4	C469 C4	C486 C4	CN401 D1	FB401 C2	L407 B4	Q410 D1	R4012 B3	R4026 D2	R404 B1	R4053 C1	R414 B2	R429 C3	R449 C4	R465 C4	R481 B3	RB401 D1
C4009 B3	C4027 B4	C4044 A4	C4058 B3	C4071 D1	C415 B1	C432 D3	C451 D4	C470 B3	C487 C4	D401 C2	IC401 A2	L408 B4	Q411 C1	R4013 A3	R4027 D2	R4040 D2	R4054 C1	R415 B2	R431 C3	R450 B3	R466 B4	R482 B4	RB402 C1
C401 A1	C4028 A4	C4045 A4	C4059 B3	C4072 D1	C416 B1	C433 D3	C452 D4	C471 B3	C488 C4	D403 C3	IC402 C3	L409 B4	R4000 B3	R4014 A3	R4028 D2	R4041 D1	R4055 C1	R416 B2	R432 C3	R452 B3	R467 B4	R483 C4	XL401 B1
C4010 B3	C4029 A4	C4046 B3	C406 B1	C4073 C1	C417 B1	C434 D3	C453 D4	C472 C3	C489 C4	D404 C3	IC403 B3	L410 A4	R4001 B2	R4015 A3	R4029 D2	R4042 D1	R4056 C1	R417 B2	R433 D3	R453 B3	R468 B4	R486 B4	ZD401 C2
C4011 B4	C403 A1	C4047 B3	C4060 A3	C4075 C2	C419 B1	C435 D4	C454 C4	C473 C3	C490 B4	D405 C3	IC404 A3	L411 A4	R4002 B3	R4016 A3	R403 B1	R4043 D1	R406 B1	R418 B2	R434 D3	R454 B3	R469 B4	R487 A4	
C4012 B4	C4030 A4	C4048 B3	C4061 A2	C4076 C2	C420 B1	C436 D4	C455 C4	C474 C4	C491 B4	D406 D2	IC405 B3	L412 A4	R4003 B3	R4017 A3	R4030 D2	R4044 D1	R4060 C1	R419 B2	R435 D3	R455 B3	R470 B4	R490 A4	
C4013 A4	C4031 A4	C4049 B2	C4062 D2	C4078 C2	C421 B1	C437 D4	C456 D4	C475 C4	C492 B4	D407 D2	IC406 D2	Q401 A3	R4004 B3	R4018 A3	R4031 D2	R4045 D1	R4061 D2	R420 B2	R436 D3	R456 C3	R471 B4	R491 A4	



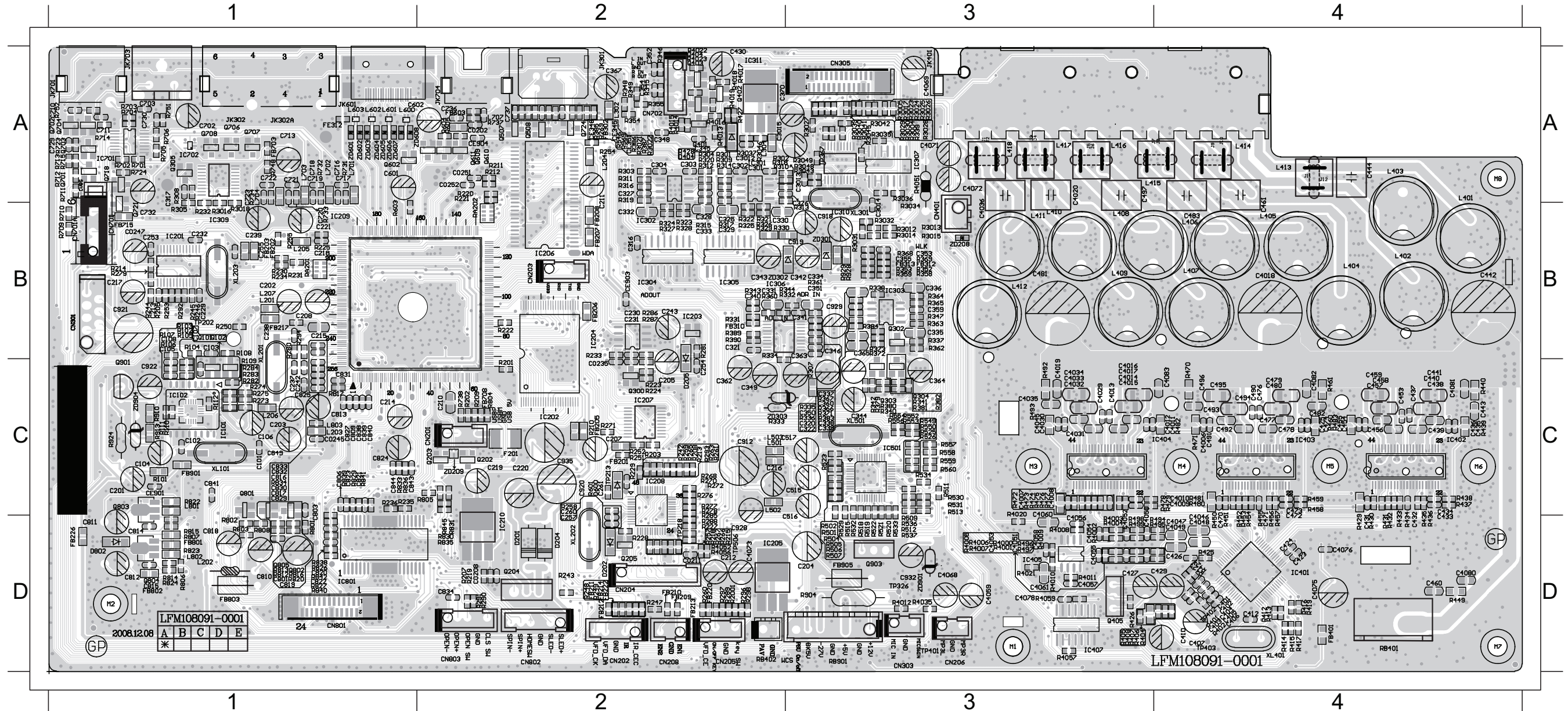
CIRCUIT DIAGRAM - part three

C301	A1	C313	A2	C326	A1	C351	B3	C506	B4	C901	D1	C921	D1	CE306	D2	CE329	D3	FB901	D1	IC304	A2	Q305	A3	R302	A1	R3037	C3	R3051	C3	R318	A1	R335	B3	R353	B1	R389	B3	R560	C4	ZD301	A2		
C3010	C2	C315	A2	C329	A2	C352	B1	C507	B4	C902	D1	C922	D1	CE307	D2	CE330	D3	FB905	C1	IC305	B2	Q306	C3	R3020	B2	R3039	C2	R3052	C3	R321	A2	R336	B3	R354	B1	R390	B3	R709	A4	ZD302	A2		
C3011	C2	C316	A2	C330	A2	C353	B1	C508	B4	C903	D1	C924	D1	CE308	D2	CE352	D3	FE301	D3	IC306	B3	Q307	C3	R3023	C1	R3040	C2	R3053	C3	R322	A2	R339	C1	R355	B1	R399	B3	R710	A4	ZD901	D1		
C3012	C3	C317	A3	C331	A3	C354	B1	C509	B4	C904	D1	C928	D1	CE309	D2	CE901	D2	FE302	D3	IC307	C1	Q308	C3	R3024	C1	R3041	C2	R3054	C3	R325	A2	R343	A2	R356	B1	R523	A4	R711	A3	ZD902	D1		
C3013	C2	C318	D3	C334	B2	C355	B1	C510	B4	C905	D1	C929	D1	CE310	D2	CE903	D1	FE306	D3	IC309	A3	Q901	D1	R3025	C1	R3042	C2	R307	B3	R326	A2	R344	B2	R357	B1	R529	A4	R904	D1	ZD904	D1		
C3014	C3	C319	D4	C340	A3	C356	B1	C511	B4	C906	D1	C932	D1	CE311	D2	CE904	D1	FE307	D3	IC310	C2	Q903	D1	R3026	C1	R3043	C2	R308	A3	R327	A2	R345	B1	R358	B1	R530	A4	R911	D1				
C3015	C3	C320	B3	C341	B2	C357	B1	C512	B4	C907	D1	C935	D2	CE312	D2	CN301	A1	FE308	D3	IC311	C3	R3004	C1	R3027	C1	R3045	C2	R309	A1	R328	B2	R346	B1	R359	B1	R531	A4	R913	D1				
C302	A1	C321	B3	C342	A2	C360	C4	C513	B4	C908	D2	CE301	D2	CE319	D2	CN305	C1	FE309	D3	JK302AB1		R3005	C1	R3028	C1	R3046	C3	R310	A1	R329	A2	R348	B1	R360	A2	R532	A4	R924	C2				
C305	A1	C322	B3	C343	A2	C362	B3	C514	B4	C912	D2	CE302	D2	CE321	D2	FB223	D1	FE310	D3	L304	C1	R301	A1	R3029	C1	R3048	C2	R313	A1	R330	A2	R349	B1	R361	B3	R533	A4	R928	D1				
C306	A1	C323	A3	C346	B3	C363	B3	C515	B4	C918	D2	CE303	D2	CE322	D2	FB310	A3	FE311	D3	L501	B4	R3017	C1	R3030	C1	R3049	C2	R314	A1	R331	A3	R350	B1	R378	B3	R552	B4	R929	D1				
C309	A2	C324	B3	C349	B3	C370	C1	C516	B4	C919	D2	CE304	D2	CE327	D3	FB312	B1	FE312	D3	L502	B4	R3018	A3	R3031	B2	R3045	A3	R316	A1	R332	B2	R351	B1	R380	D3	R553	B4	RB901	C1				
C311	A2	C325	A1	C350	B3	C371	C1	C517	B4	C920	D1	CE305	D2	CE328	D3	FB313	B1	FE313	A1	L503	B4	R3019	A2	R3032	B2	R3050	C3	R317	A1	R334	A3	R352	B1	R388	A1	R558	B4	XL301	C2				



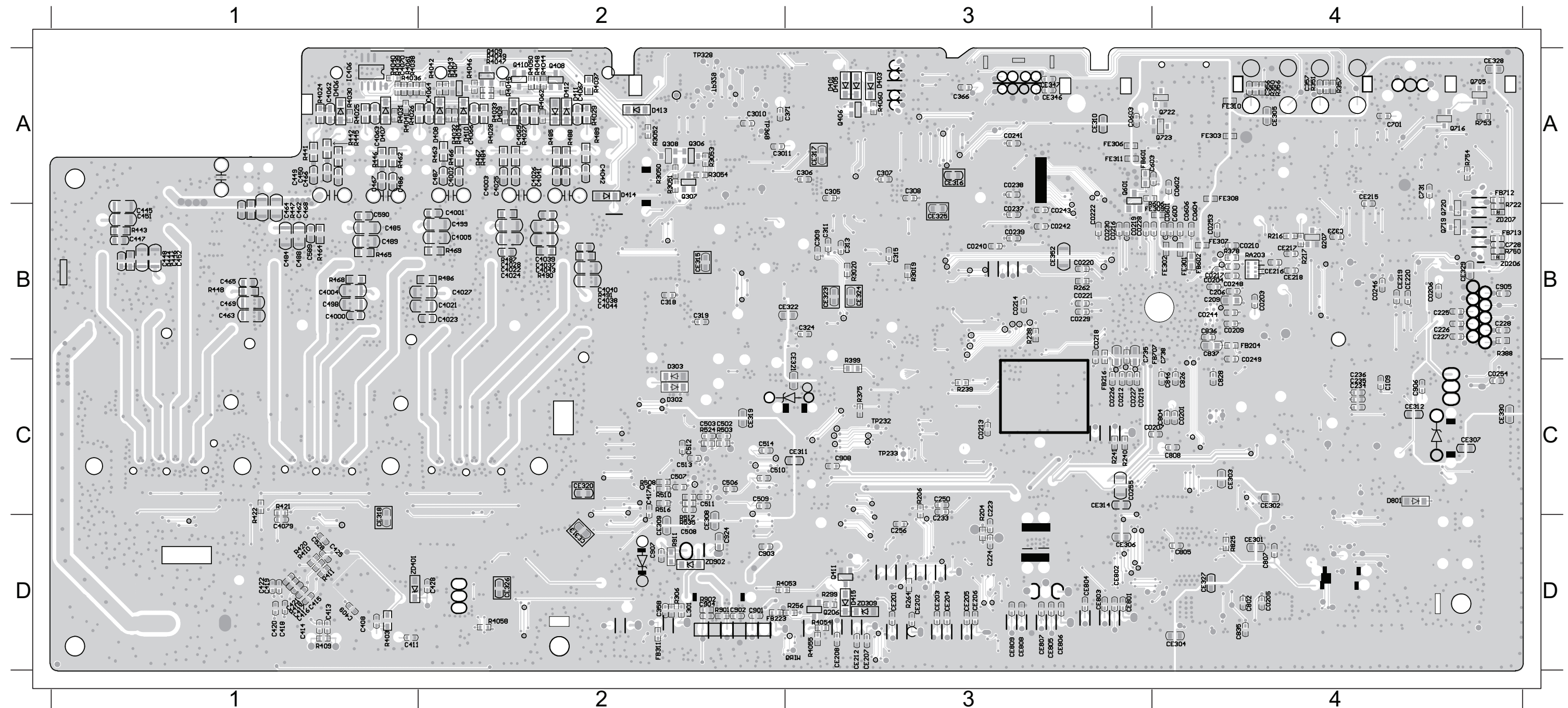
PCB LAYOUT - TOP VIEW

C0202 A2	C216 C2	C317 A1	C4008 C3	C4052 D3	C430 A2	C478 C4	C729 A1	C833 C1	CN301 B1	FB217 B1	IC210 D2	JK302AA2	L503 C2	Q707 A1	R213 C2	R253 B1	R288 D2	R3040 A3	R334 B2	R4007 D3	R412 D4	R454 C4	R499 D3	R732 A1	R829 C1	ZD209 C2
C0208 D2	C217 B1	C320 C3	C4009 C4	C4053 D3	C431 C4	C481 B3	C730 A1	C834 D2	CN305A3	FB220 D2	IC301 A2	JK401 A3	L701 A1	Q708 A1	R215 D2	R254 A2	R289 D2	R3041 A3	R335 C3	R4008 D3	R413 D4	R455 C4	R523 C3	R733 B1	R831 D2	ZD301 B3
C0211 D2	C218 B1	C321 B2	C401 D4	C4054 D3	C432 C4	C482 C4	C732 B1	C838 C1	CN401A3	FB222 D2	IC304 B2	JK601 A1	L702 A1	Q801 C1	R218 D2	R257 D2	R290 D2	R3042 A3	R336 C3	R4009 D3	R414 D4	R456 C4	R529 D3	R734 A1	R833 C1	ZD302 B2
C0235 C2	C219 C2	C322 C3	C4010 C4	C4055 D3	C433 D4	C483 B4	C736 A2	C839 C1	CN701 B1	FB226 D1	IC305 B2	JK701 A1	L703 A1	Q802 D1	R219 D2	R258 C2	R291 D2	R3043 A3	R339 A3	R401 D4	R415 D4	R457 C4	R530 C3	R737 A2	R834 C1	ZD901 D3
C0245 C1	C220 C2	C325 B2	C4011 C4	C4056 D3	C434 C4	C490 C4	C737 A2	C840 C1	CN702A2	FB310 B2	IC306 B2	JK703 A1	L704 A1	Q803 C1	R220 A2	R259 C2	R292 B1	R3045 A3	R343 B2	R4010 D3	R416 D4	R458 C4	R531 C3	R738 C2	R835 D2	ZD904 C1
C0247 B1	C221 B1	C326 A2	C4012 C4	C4057 D3	C435 C4	C491 C4	C738 A2	C841 C1	CN801 D1	FB312 B3	IC307 A3	JK704 A2	L707 A2	Q804 D1	R221 A2	R260 D2	R293 C2	R3046 A2	R344 B3	R4011 D3	R417 D4	R459 C4	R532 D3	R748 A1	R836 C1	
C0251 A2	C229 B1	C329 B2	C4013 C3	C4058 D3	C436 C4	C492 C4	C803 C1	C843 C1	CN802 D2	FB313 B3	IC309 B1	L201 B1	L801 C1	Q805 D1	R222 B2	R261 C2	R294 B1	R3048 A3	R345 A2	R4012 D3	R419 D4	R460 C4	R533 D3	R751 A1	R838 D1	
C0252 A2	C230 B2	C330 B2	C4014 B4	C4059 D3	C437 C4	C493 C4	C806 C1	C844 C1	CN803 D2	FB401 D4	IC310 A3	L202 D1	L802 D1	Q901 C1	R223 C2	R263 C2	R296 D2	R3049 A3	R346 A2	R4013 A2	R423 D4	R461 C4	R552 C3	R752 A1	R839 C1	
C101 C1	C231 B2	C331 B2	C4015 B4	C406 D4	C438 C4	C496 C4	C809 C1	C849 C1	CN801 D1	FB603 A2	IC311 A2	L203 C1	L803 C1	Q903 D3	R224 C2	R267 D2	R297 D2	R305 B1	R348 A2	R4014 A2	R424 D4	R470 C4	R553 C3	R801 D1	R840 D1	
C102 C1	C232 B1	C334 B3	C4018 B4	C4060 D3	C439 C4	C497 A3	C810 D1	C912 C2	D202 D2	FB703 A1	IC401 D4	L204 A2	Q101 B1	R101 C1	R225 B1	R268 C3	R298 D2	R307 C3	R349 A2	R4015 A2	R425 D4	R471 C4	R558 C3	R802 D1	R841 C1	
C103 B1	C237 C1	C340 B2	C402 D4	C4061 D3	C442 B4	C515 C3	C811 D1	C918 B3	D204 D2	FB708 C2	IC402 C4	L205 B1	Q102 B1	R102 B1	R227 D2	R269 A2	R3004 A3	R308 A1	R352 B3	R4016 A2	R426 D4	R472 C3	R560 C3	R803 D1	R842 D1	
C104 C1	C238 B1	C341 B3	C4020 A3	C4068 D3	C443 C4	C516 D3	C812 D1	C919 B3	D205 C2	FB715 B1	IC403 C4	L206 C1	Q204 D2	R103 B1	R228 D2	R270 C2	R3005 A3	R309 A2	R353 B3	R4017 A2	R427 A2	R474 C3	R601 C2	R804 C2	R845 D2	
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C106 C1	C242 C1	C343 B2	C403 D4	C407 D4	C453 C4	C601 A1	C816 C1	C921 B1	D600 C2	FB802 D1	IC405 D3	L304 A2	Q300 C2	R105 B1	R230 B2	R272 C2	R3017 A3	R313 B3	R355 A2	R4019 A2	R429 C4	R476 C3	R604 A2	R806 D1	R913 C1	
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C201 C1	C254 C2	C350 C3	C4032 C3	C4073 D2	C456 C4	C703 A1	C819 D1	C929 B3	FB202 B1	FB905 D3	J1 A3	L403 A4	Q402 A2	R109 C1	R233 B2	R275 C1	R3023 A3	R317 B2	R360 B2	R4021 D3	R433 C4	R479 C4	R704 A1	R812 D1	R929 B3	
C202 B1	C255 B1	C351 B3	C4035 C3	C4074 D4	C457 C4	C710 A1	C820 D1	C932 D1	FE312 A1	J10 A4	A3 L404 B4	Q403 A2	R201 C2	R234 B2	R276 C2	R278 C2	R3024 A3	R318 A2	R361 B3	R4022 A2	R434 C4	R480 C4	R705 A1	R813 D1	RA201 B1	
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C205 C2	C262 C2	C354 A2	C4045 C3	C4080 D4	C470 C4	C716 A1	C823 C1	CE903 B2	FB207 B2	IC202 C2	J2 A3	L407 B4	Q406 A1	R205 B1	R242 C1	R279 B1	R3027 A3	R325 B2	R390 B2	R404 D3	R437 C4	R483 C4	R711 A1	R816 D1	RB402 D2	
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PCB LAYOUT - BOTTOM VIEW

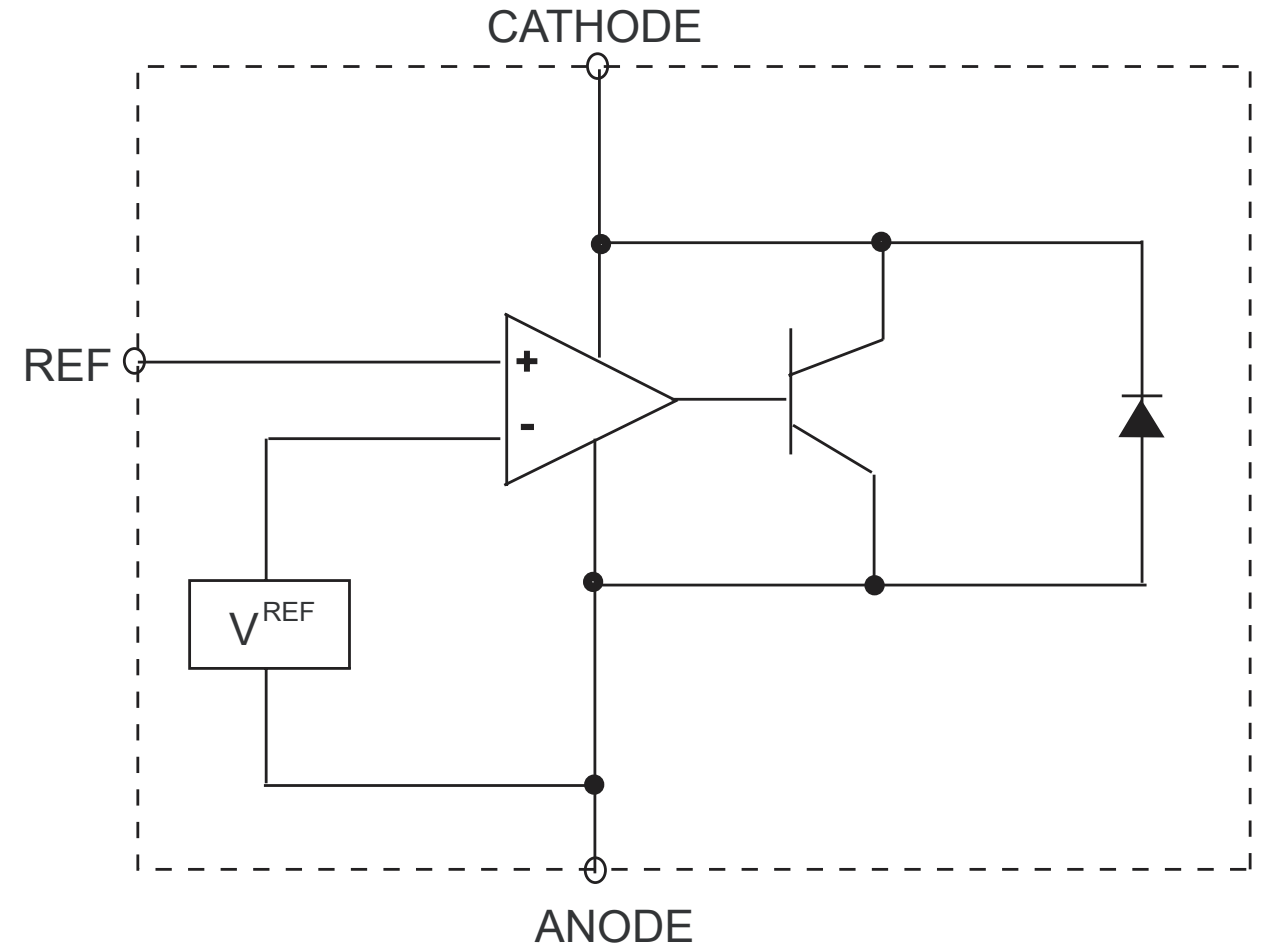
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C0204 B4	C0221 B3	C0246 B4	C225 B4	C311 B3	C4005 B2	C4064 A2	C421 D1	C469 B1	C512 C2	C805 D4	C907 D2	CE219 B4	CE321 B3	CE809 D3	FB216 C3	IC406 A1	R217 B4	R357 A4	R4034 A2	R4050 A2	R444 B1	R606 B4
C0205 D4	C0222 B3	C0248 B4	C226 B4	C313 B3	C4021 B2	C4065 A2	C422 D1	C484 B1	C513 C2	C807 D4	C908 C3	CE220 B4	CE322 B3	D401 A3	FB223 D2	Q206 D3	R238 B3	R378 B4	R4036 A1	R4053 D2	R447 B1	R750 B4
C0206 B4	C0226 C3	C0249 B4	C227 B4	C315 B3	C4022 B2	C4066 A2	C425 D1	C485 B1	C514 C2	C808 C4	C924 D2	CE301 D4	CE327 D4	D403 A3	FB601 A3	Q207 B4	R239 C3	R388 B4	R4037 A2	R4054 D3	R448 B1	R911 D2
C0207 C3	C0227 C3	C0253 B4	C228 B4	C318 B2	C4023 B2	C4067 A2	C428 D2	C486 A1	C528 D1	C826 C4	CE201 D3	CE302 C4	CE328 A4	D405 A3	FB602 B4	Q306 A2	R256 D3	R399 B3	R4038 A1	R4055 D3	R462 A1	RA203 B4
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POWER BOARD-main unit

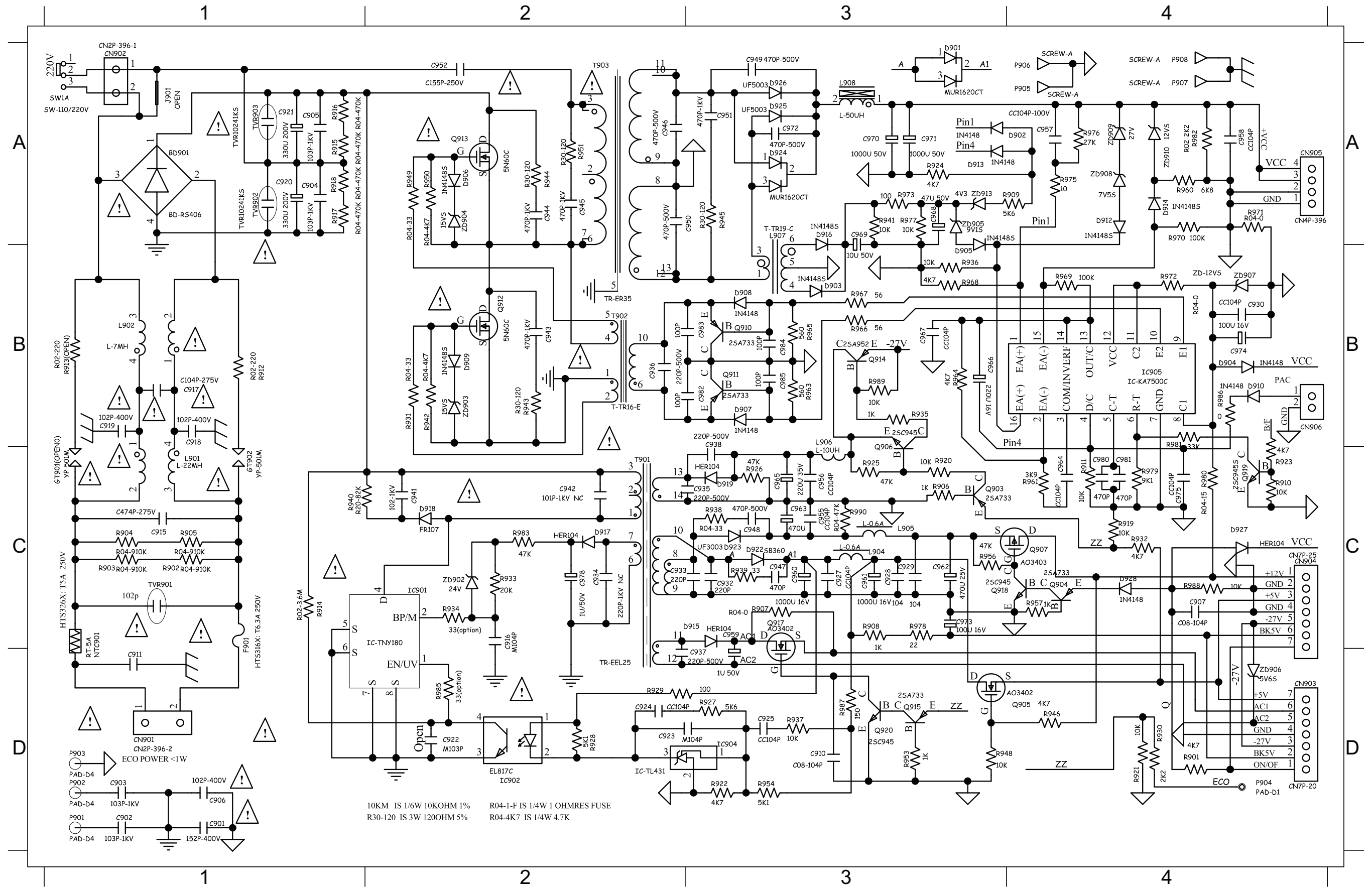
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CIRCUIT DIAGRAM

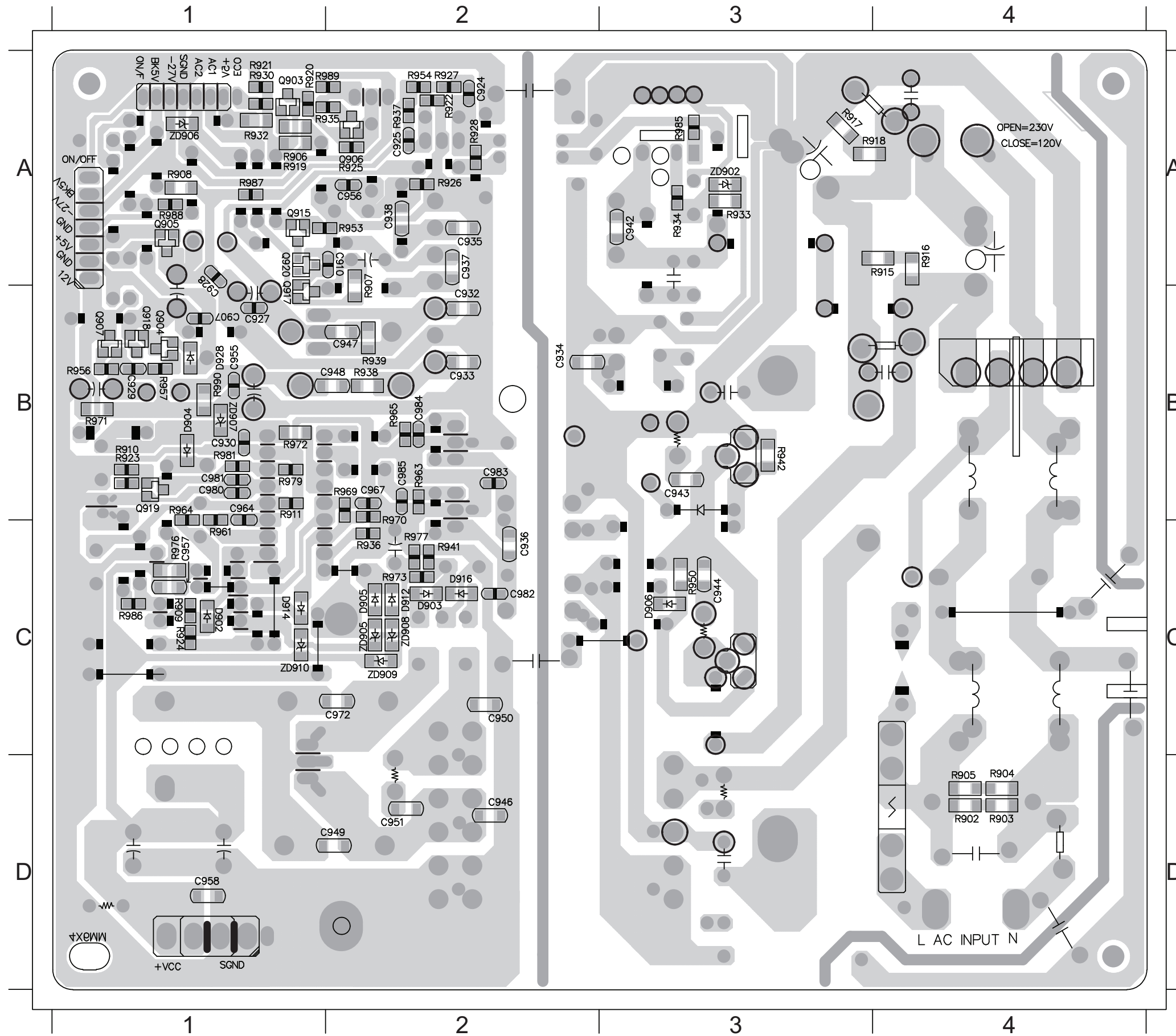
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10KM IS 1/6W 10KOHM 1% R04-1-F IS 1/4W 1 OHMRES FUSE
 R30-120 IS 3W 120OHM 5% R04-4K7 IS 1/4W 4.7K

PCB LAYOUT - BOTTOM VIEW

C907 B1 C928 A1 C938 A2 C947 B2 C955 B1 C967 B2 C983 B2 D904 B1 D928 B1 Q907 B1 R905 D4 R911 B1 R919 A1 R926 A2 R934 A3 R939 B2 R956 B1 R965 B2 R973 C2 R986 C1 ZD907 B1
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MP3 IN BOARD-main unit

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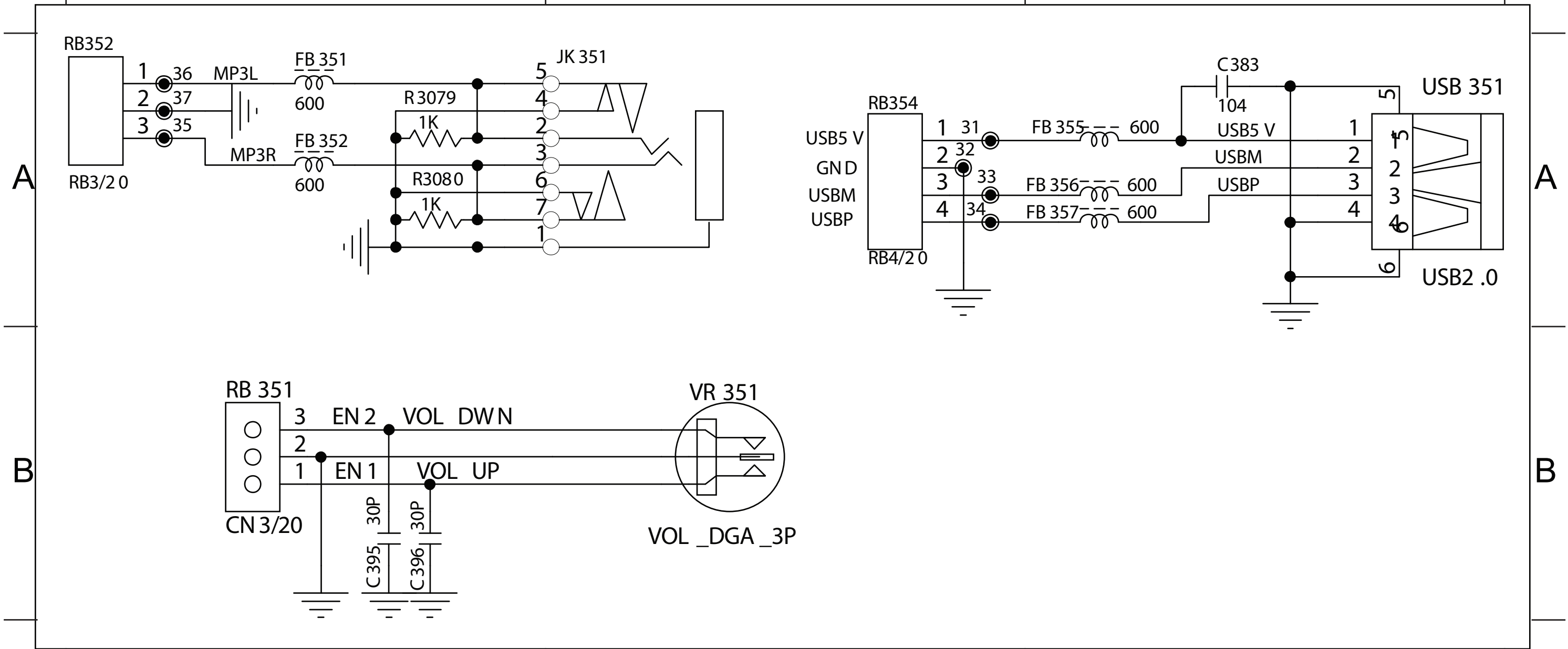
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2

3



A

A

B

B

1

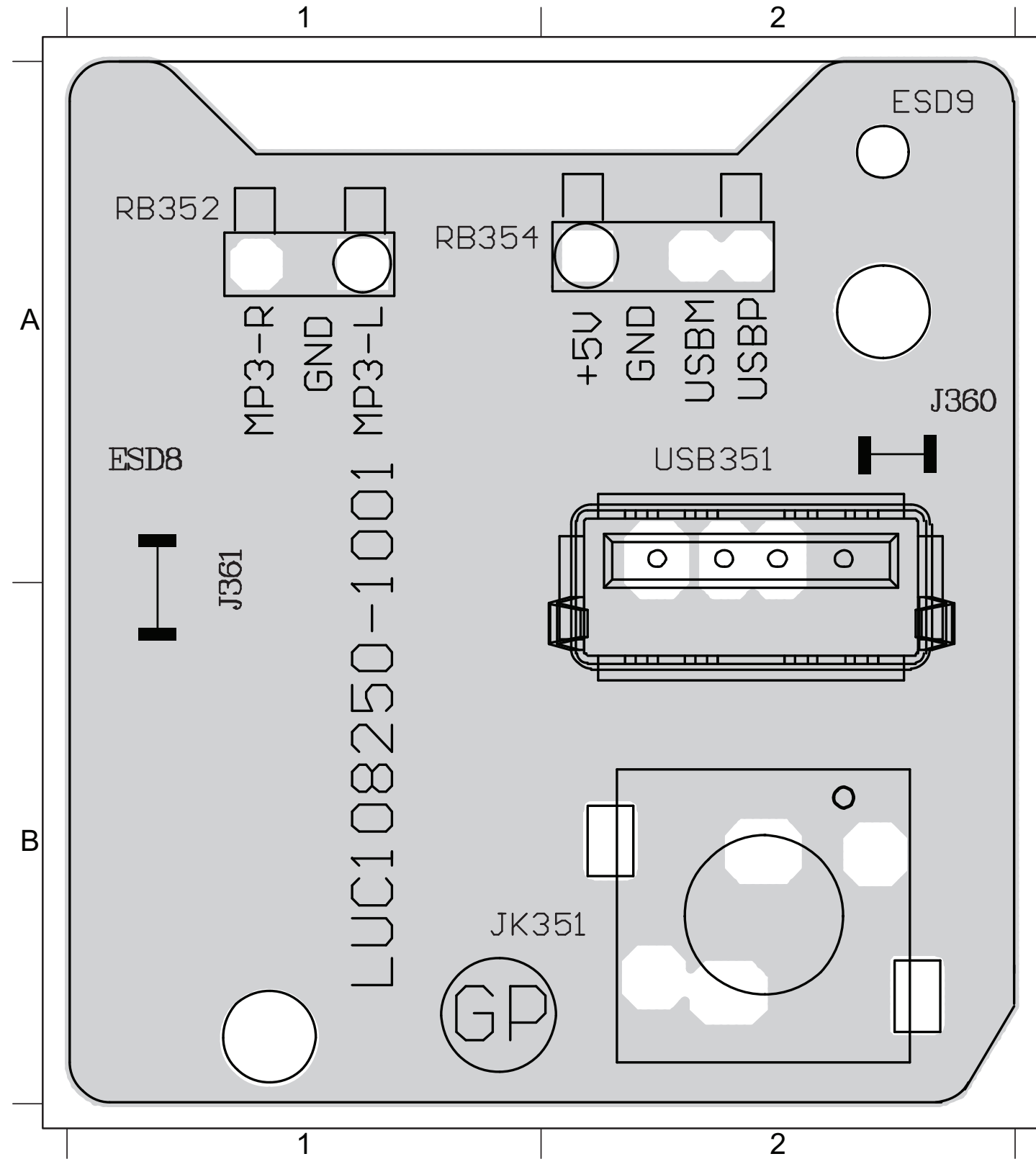
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3

PCB LAYOUT - TOP VIEW

8-3

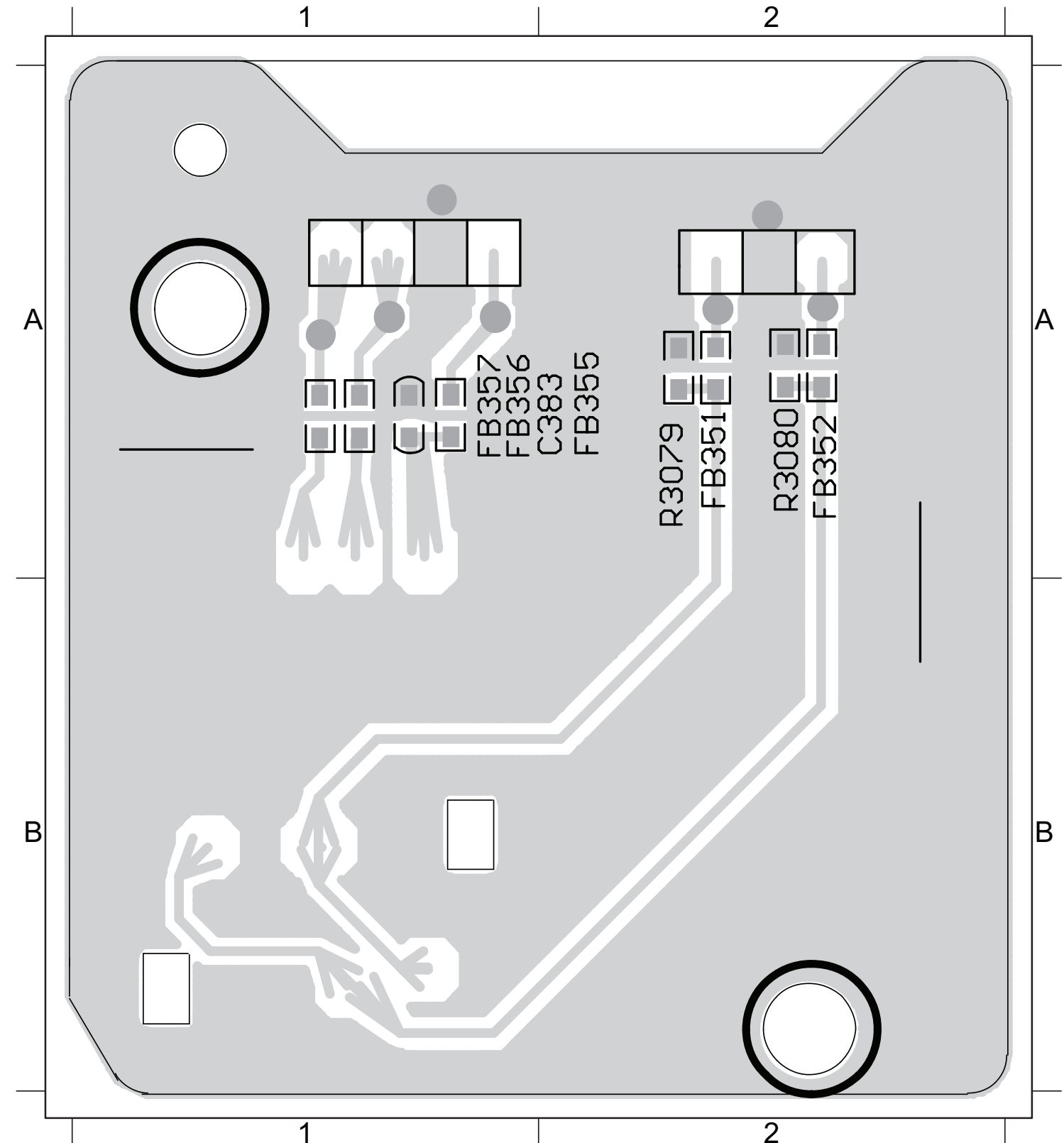
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PCB LAYOUT - BOTTOM VIEW

8-3

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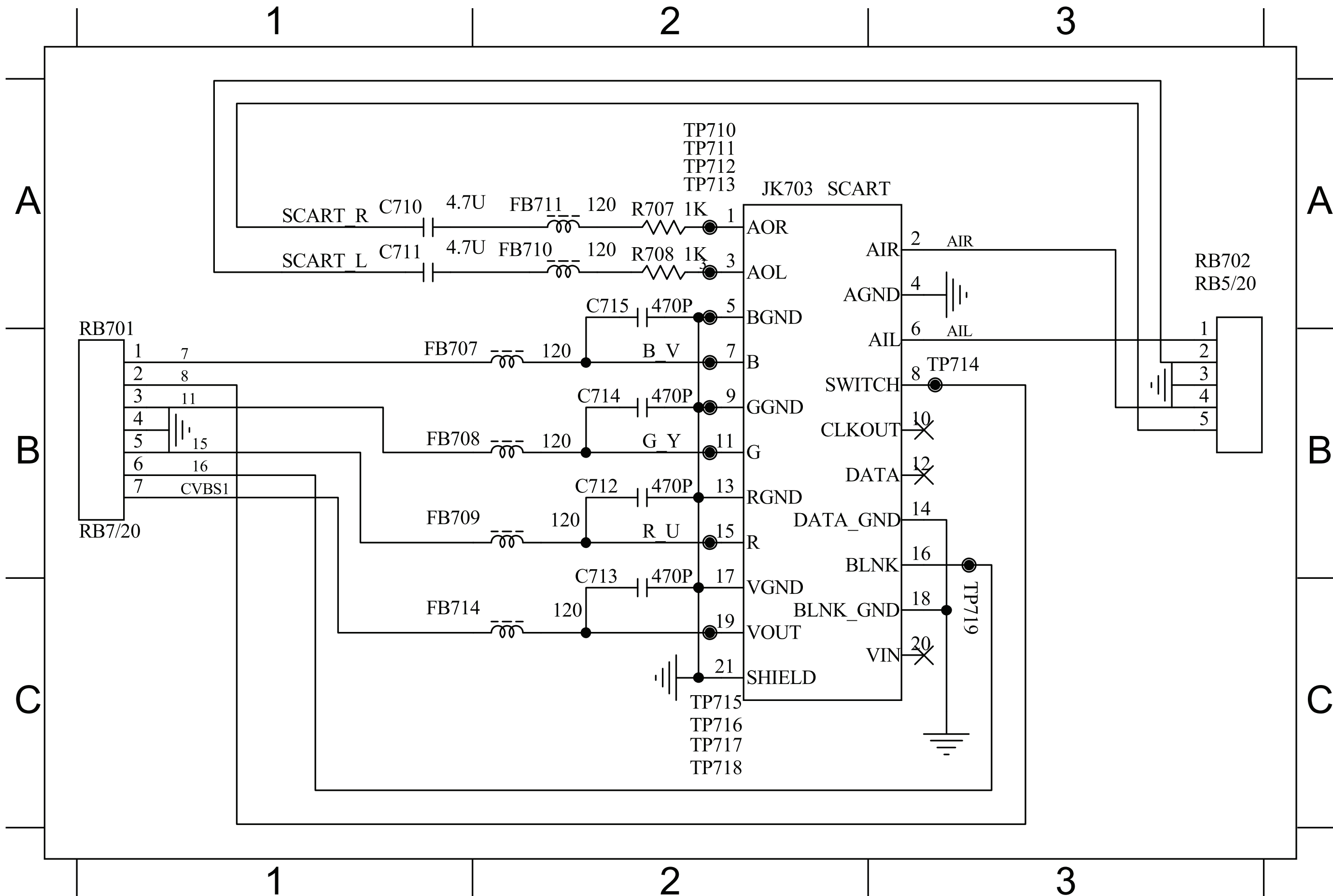
SCART BOARD

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CIRCUIT DIAGRAM

C710 A1 C712 B2 C714 B2 FB707 B1 FB709 B1 FB711 A2 JK703 A2 R708 A2 RB702 A1
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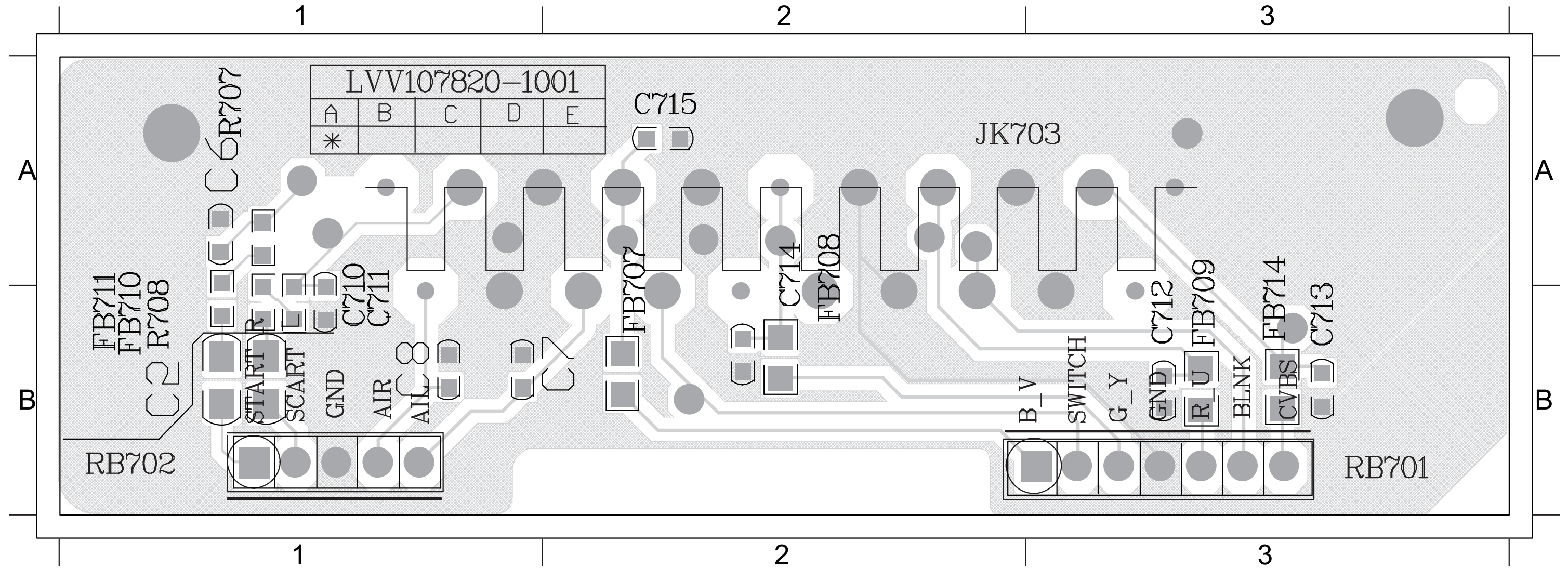


PCB LAYOUT - SCART PCB VIEW

9-3

9-3

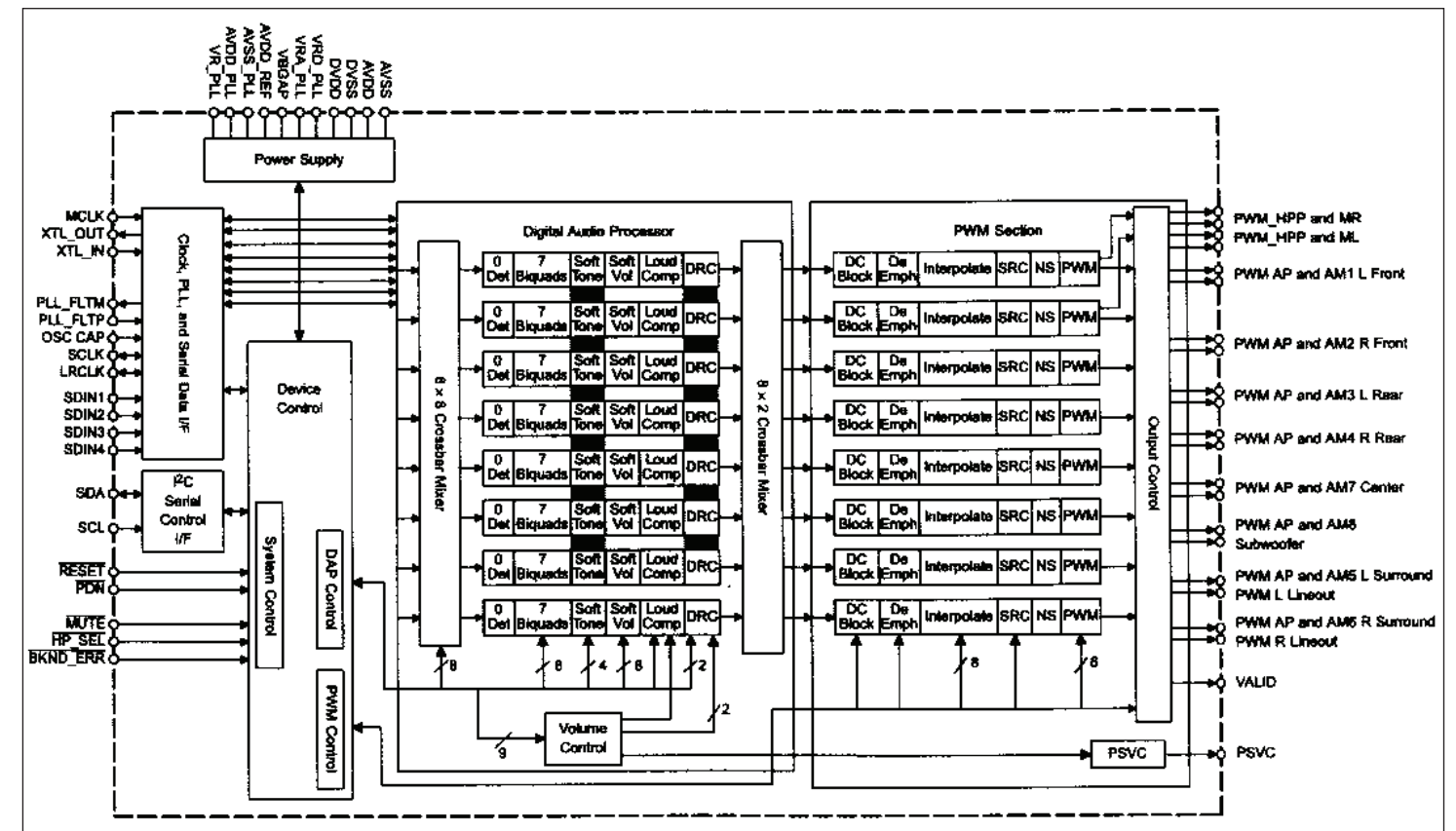
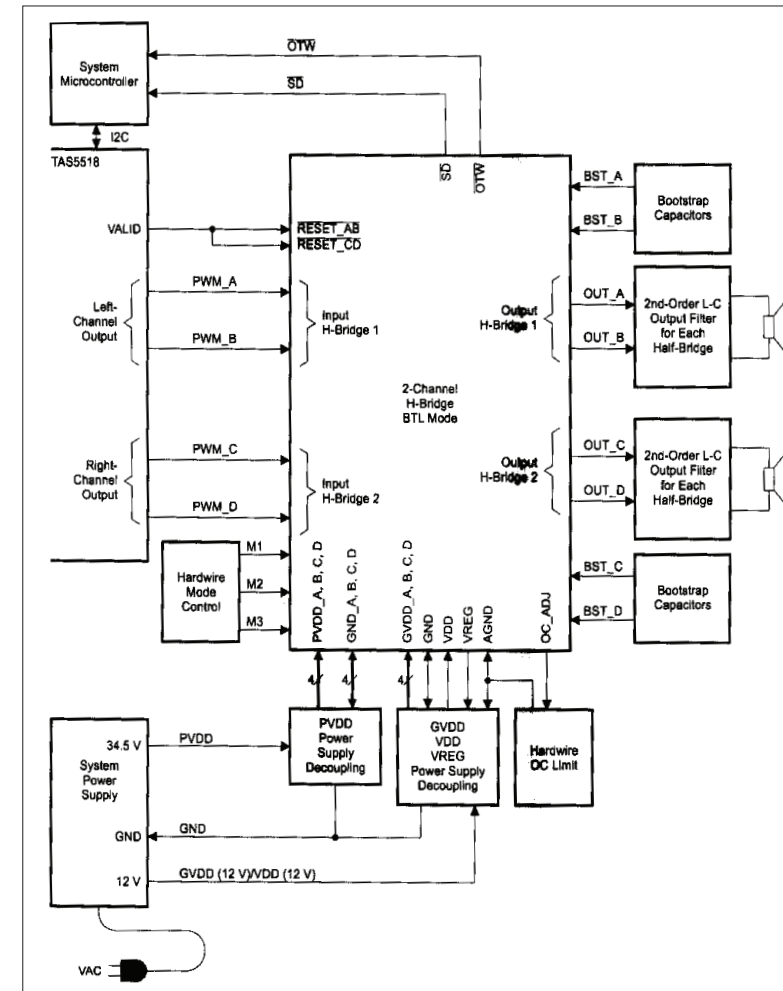
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MAIN+LED+HEAT BOARD-Wireless

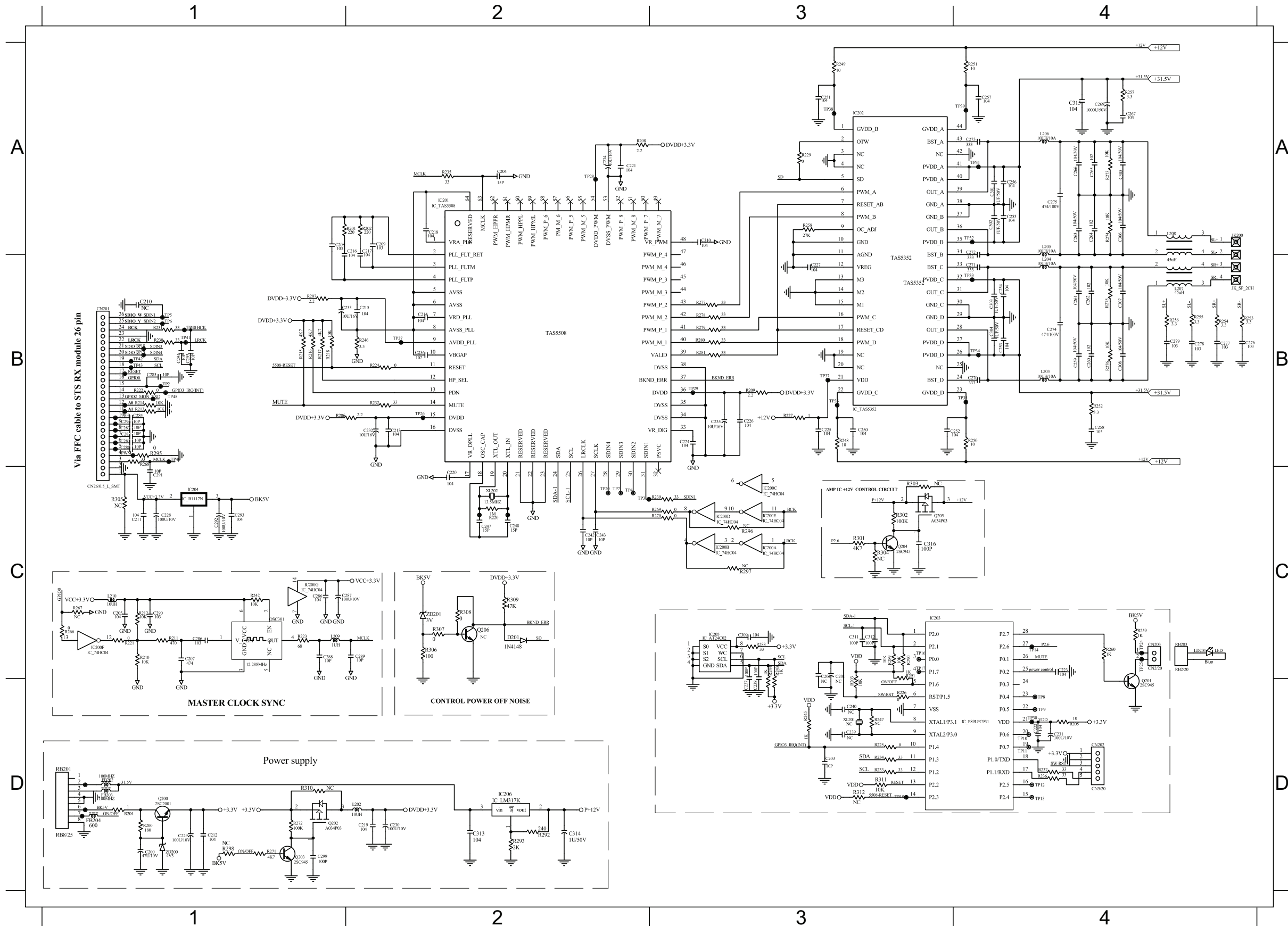
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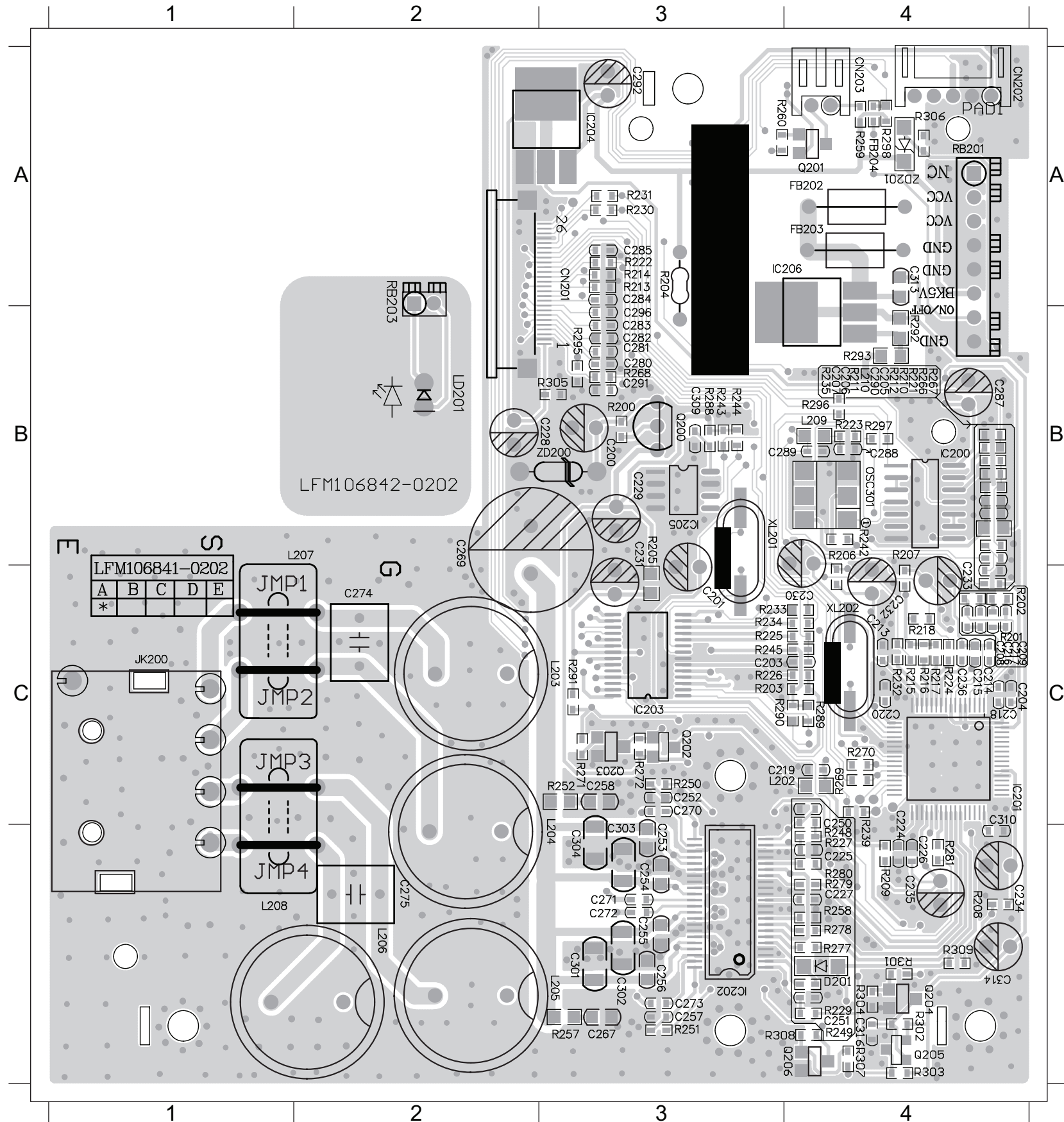
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 C203 D3 C213 B2 C222 D4 C231 D4 C243 C2 C256 A4 C265 A4 C275 A4 C284 B1 C293 C1 C305 A4 C314 D2 FB204 D1 L202 D2 Q200 D1 R203 C3 R212 C1 R222 B1 R232 B2 R244 C3 R254 B4 R269 C3 R278 B3 R293 D2 RB201 D1
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 C205 C1 C215 B2 C224 B3 C233 B2 C248 C2 C258 B4 C267 A4 C277 B4 C286 C1 C295 B1 C307 B4 C316 C3 IC201 A2 L204 B4 Q202 D1 R205 D4 R214 B1 R224 B2 R234 D3 R246 B2 R256 B4 R271 D1 R280 B3 R301 C3 XL202 C2
 C206 C1 C216 A2 C225 B3 C234 A2 C250 B3 C259 B4 C269 A4 C278 B4 C287 C1 C296 B1 C308 B4 CN201 B1 IC202 A3 L205 A4 Q203 D1 R206 B1 R215 B1 R225 D3 R235 A2 R248 B3 R257 A4 R272 D1 R281 B3 R302 C3 ZD200 D1
 C207 C1 C217 A2 C226 B3 C235 B3 C251 A3 C260 B4 C270 B4 C279 B4 C288 C1 C299 D1 C309 C3 CN202 D4 IC203 C3 L206 A4 Q204 C3 R207 B1 R216 B1 R226 D3 R236 D4 R249 A3 R258 A3 R273 A4 R288 C3 R306 C2 ZD201 C2
 C208 A1 C218 A2 C227 B3 C236 B2 C252 B4 C261 B4 C271 B4 C280 B1 C289 C2 C301 A4 C310 A3 CN203 C4 IC204 C1 L209 C1 Q205 C3 R208 A2 R217 B1 R227 B3 R237 D4 R250 B4 R259 C4 R274 A4 R289 C3 R307 C2
 C209 A2 C219 D2 C228 C1 C237 D3 C253 B4 C262 B4 C272 A4 C281 B1 C290 C1 C302 A4 C311 C3 D201 C2 IC205 C3 L210 C1 R200 D1 R209 B3 R218 B1 R229 A3 R239 C3 R251 A4 R260 C4 R275 B4 R290 C3 R308 C2
 C211 C1 C220 C2 C229 D1 C238 D3 C254 B4 C263 A4 C273 A4 C282 B1 C291 C1 C303 B4 C312 C3 FB202 D1 IC206 D2 LD201 C4 R201 A2 R210 C1 R220 C2 R230 B1 R242 C1 R252 B4 R266 C1 R276 B4 R291 C3 R309 C2



PCB LAYOUT - TOP VIEW

- C200 B3 C213 C4 C224 C4 C232 C4 C253 D3 C270 C3 C282 B3 C291 B3 C310 C4 FB202 A4 IC205 B3 L203 C3 Q200 B3 R202 C4 R210 B4 R218 C4 R229 D4 R242 B4 R252 C3 R270 C4 R288 B3 R302 D4 ZD200 B3
- C203 C3 C214 C4 C225 D4 C233 C4 C254 D3 C271 D3 C283 B3 C292 A3 C313 A4 FB203 A4 IC206 A4 L204 D3 Q201 A4 R203 C3 R211 B4 R221 B4 R230 A3 R243 B3 R257 D3 R271 C3 R289 C4 R306 A4 ZD201 A4
- C204 C4 C215 C4 C226 D4 C234 D4 C255 D3 C272 D3 C284 A3 C296 B3 C314 D4 FB204 A4 JK200 C1 L205 D3 Q202 C3 R204 A3 R212 B1 R222 A3 R231 A3 R244 B3 R258 D4 R272 C3 R290 C3 R307 D4
- C205 B4 C216 C4 C227 D4 C235 D4 C256 D3 C273 D3 C285 A3 C301 D3 C316 D4 IC200 B4 JMP1 C1 L206 D2 Q203 C3 R205 B3 R213 A3 R223 B4 R232 C4 R245 C3 R259 A4 R277 D4 R291 C3 R308 D4
- C206 B4 C217 C4 C228 B3 C236 C4 C257 D3 C274 C2 C287 B4 C302 D3 CN201 A3 IC201 C4 JMP2 C1 L209 B4 Q204 D4 R206 B4 R214 A3 R224 C4 R233 C3 R248 D4 R260 A3 R278 D4 R292 B4 R309 D4
- C207 B4 C218 C4 C229 B3 C250 C4 C258 C3 C275 D2 C288 B1 C303 D3 CN202 A4 IC202 D3 JMP3 C1 L210 B4 Q205 D4 R207 B4 R215 C4 R225 C3 R234 C3 R249 D4 R266 B4 R279 D4 R293 B4 RB201 A4
- C208 C4 C219 C3 C230 C4 C251 D4 C267 D3 C280 B3 C289 B4 C304 D3 CN203 A4 IC203 C3 JMP4 D1 LD201 B2 R200 B3 R208 D4 R216 C4 R226 C3 R235 B4 R250 C3 R268 B3 R280 D4 R295 B3 RB203 A2
- C209 C4 C220 C1 C231 B3 C252 C3 C269 B2 C281 B3 C290 B4 C309 B3 D201 D4 IC204 A3 L202 C3 osc301 B4 R201 C4 R209 D4 R217 C4 R227 D4 R239 D4 R251 D3 R269 C4 R281 D4 R301 D4 XL202 C4

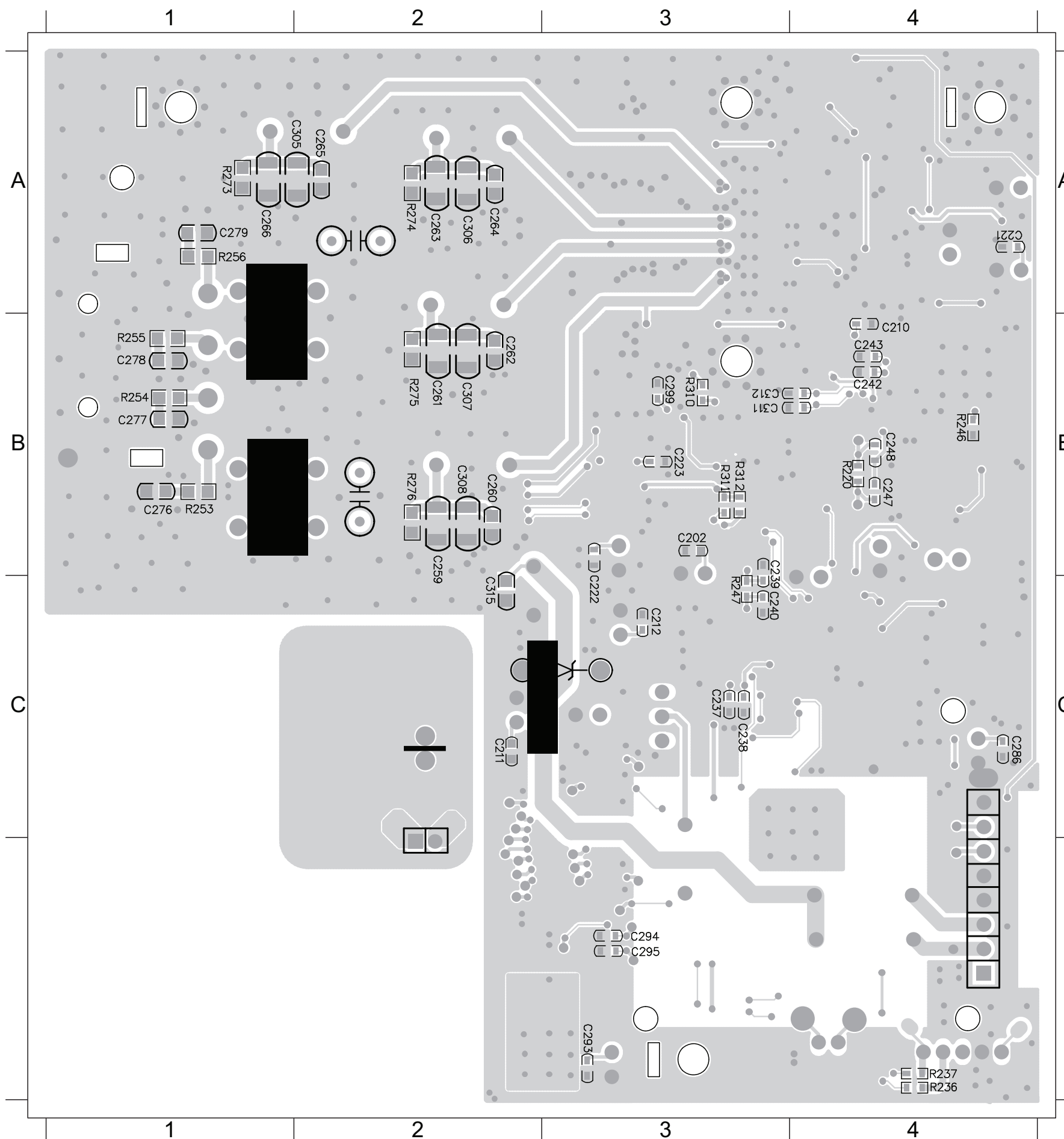


PCB LAYOUT - BOTTOM VIEW

10 - 4

10 - 4

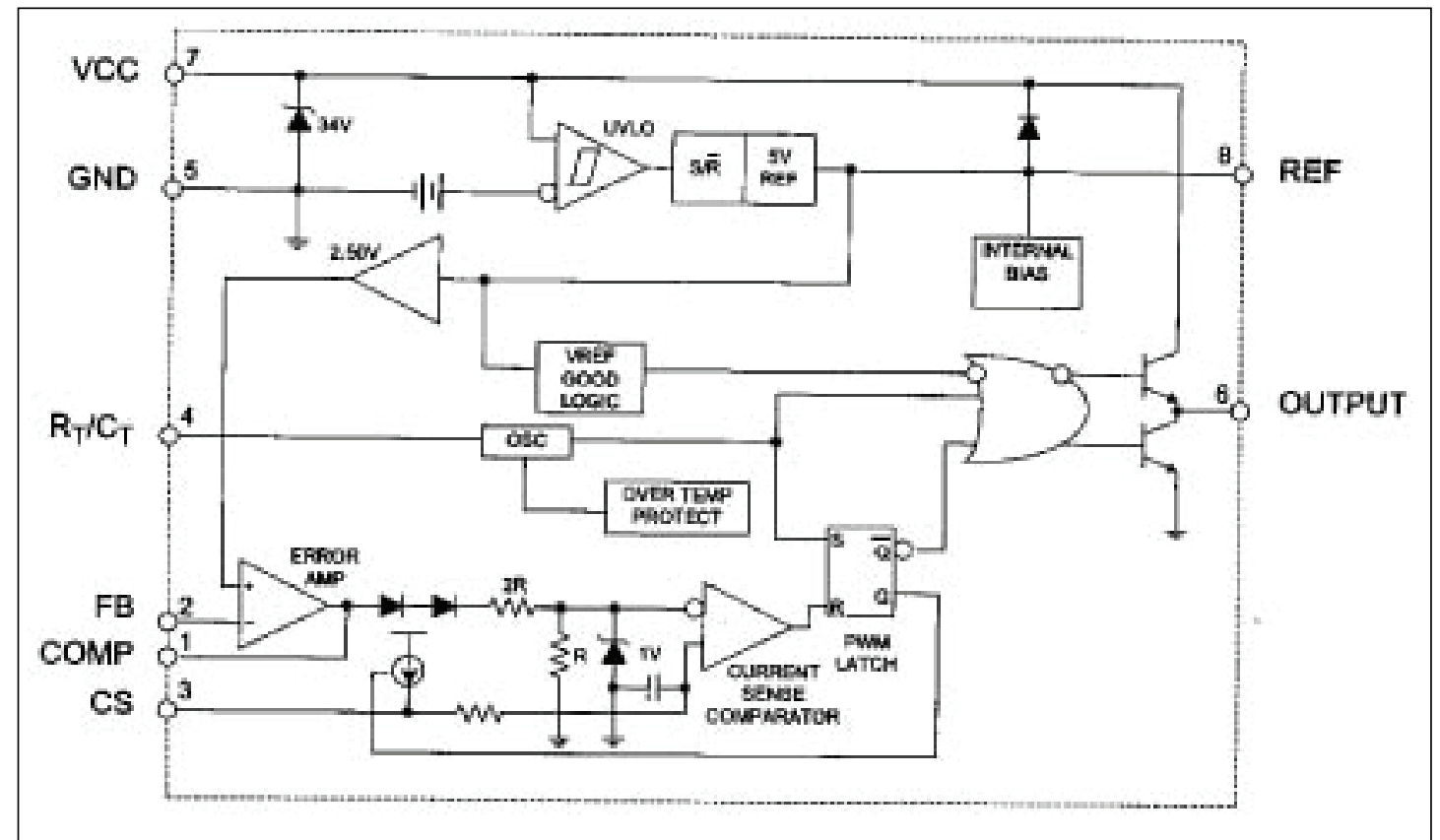
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 C212 C3 C222 C3 C237 C3 C242 B4 C247 B4 C259 B2 C261 B2 C263 A2 C265 A2 C276 B1 C278 B1 C286 C4 C294 D3 C299 B3 C306 A2 C308 B2 C312 B3 R220 B4 R237 D4 R253 B1 R255 B1 R273 A1 R275 B2 R311 B3



POWER BOARD-Wireless

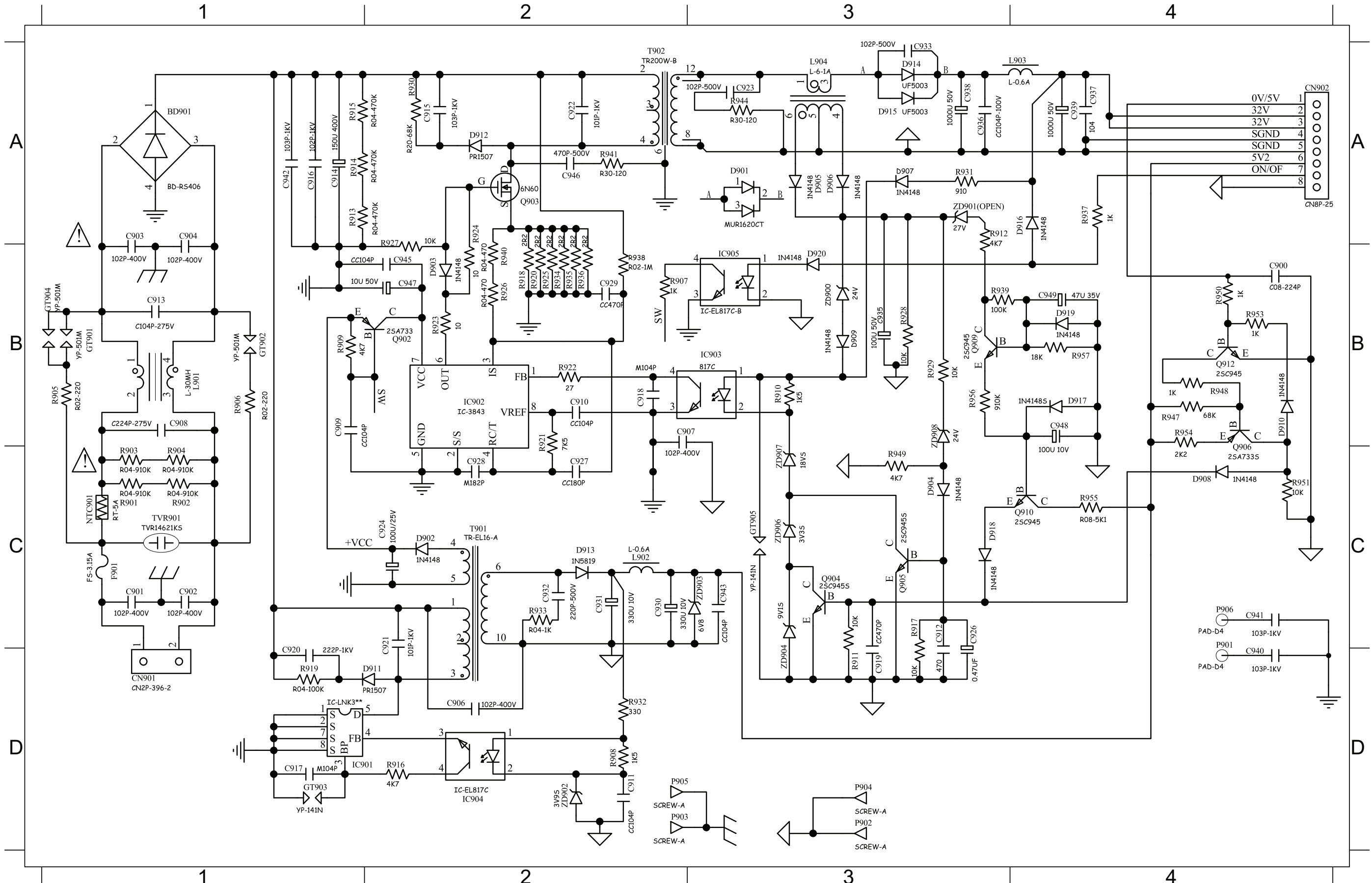
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PCB Layout Bottom View	10-4



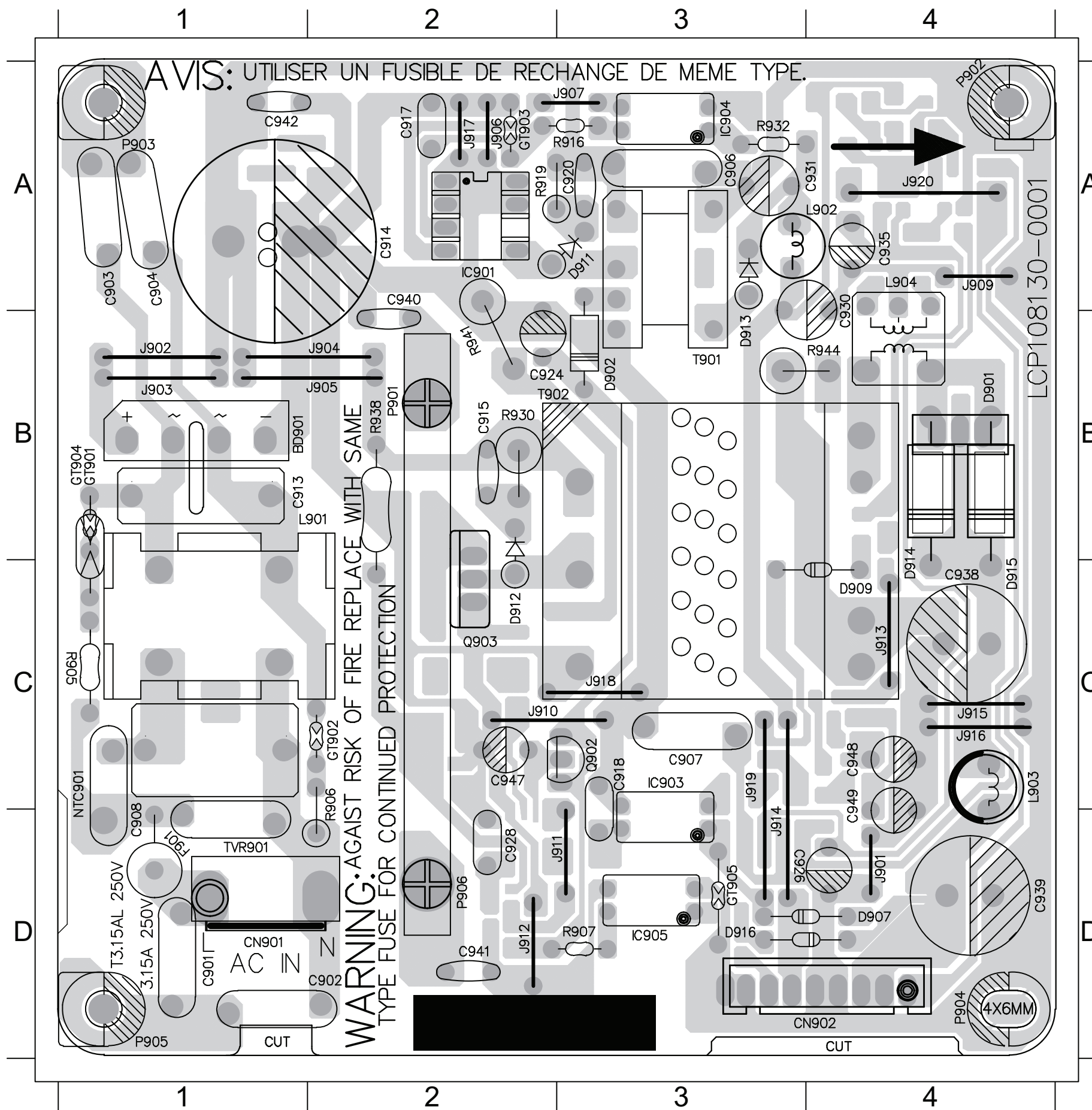
CIRCUIT DIAGRAM

BD901	A1	C909	B1	C916	A1	C924	C2	C932	C2	C939	A4	C946	A2	D903	B2	D912	A2	IC901	D1	L902	C2	R901	C1	R908	D2	R916	D2	R923	B2	R930	A2	R936	B2	T901	C2	ZD904	C3		
C903	A1	C910	B2	C917	D1	C927	C2	C933	A3	C940	C4	C947	B2	D905	A3	D913	C2	IC902	B2	L903	A4	R902	C1	R909	B1	R918	B2	R924	A2	R931	A3	R937	A4	T902	A2	ZD906	C3		
C904	A1	C911	D2	C918	B2	C928	C2	C935	B3	C941	C4	CN901	D1	D906	A3	D916	A4	IC903	B3	L904	A3	R903	C1	R910	B3	R919	D1	R925	B2	R932	D2	R938	B2	TVR901	C1	ZD907	C3		
C906	D2	C913	B1	C920	C1	C929	B2	C936	A3	C942	A1	CN902	A4	D907	A3	D920	B3	IC904	D2	NTC901	C1	R904	C1	R913	A1	R920	B2	R926	B2	R933	C2	R940	B2	ZD900	B3				
C907	B2	C914	A1	C922	A2	C930	C2	C937	A4	C943	C1	D901	A3	D909	B3	F901	C1	IC905	B3	Q902	B2	R905	B1	R914	A1	R921	B2	R927	A2	R934	B2	R941	A2	ZD902	D2				
C908	B1	C915	A2	C923	A3	C931	C2	C938	A3	C945	B2	D902	C2	D911	D2	GT901	B1	L901	B1	Q903	A2	R907	B2	R915	A1	R922	B2	R928	B3	R935	B2	R944	A3	ZD903	C3				



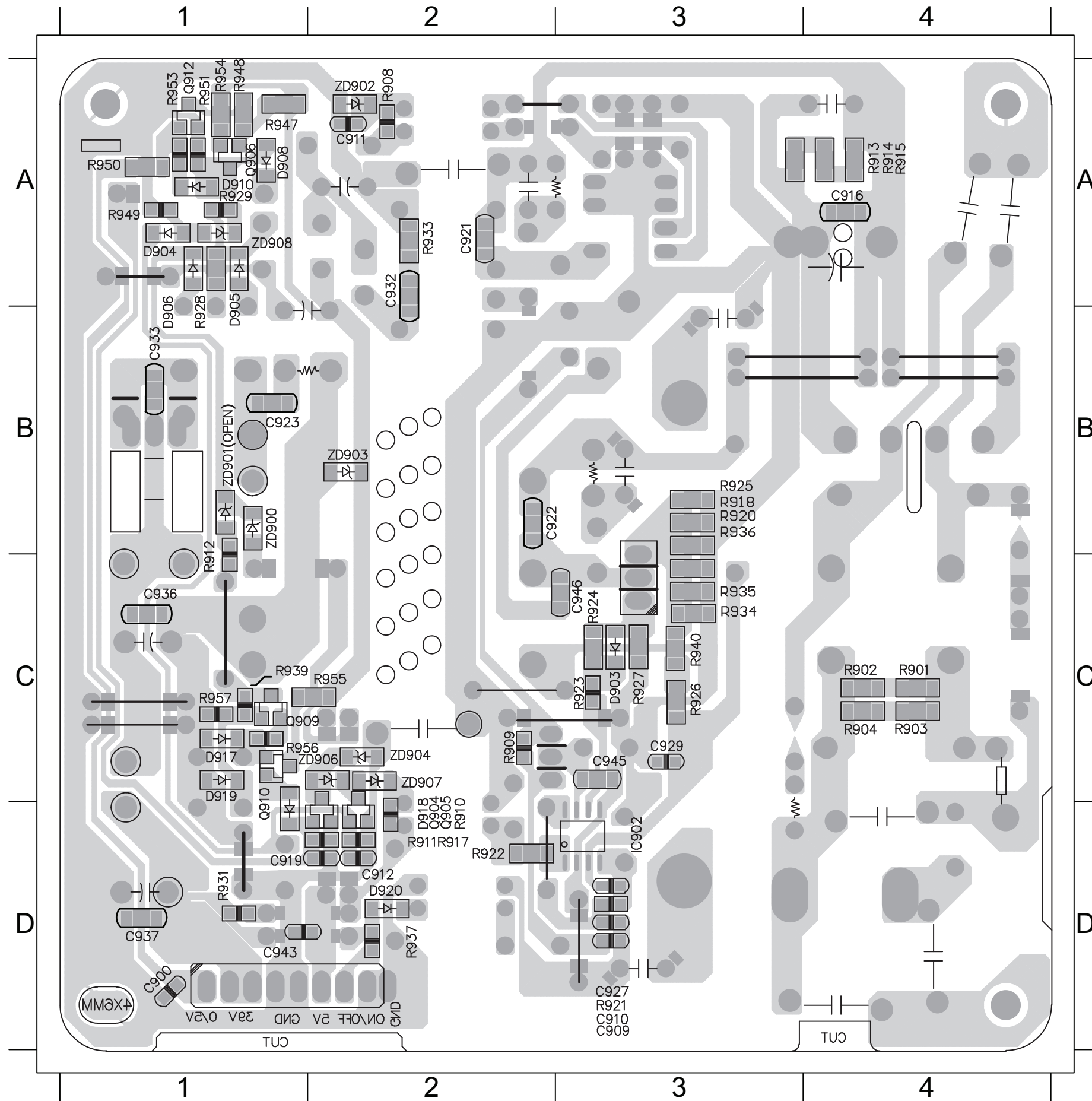
PCB LAYOUT - TOP VIEW

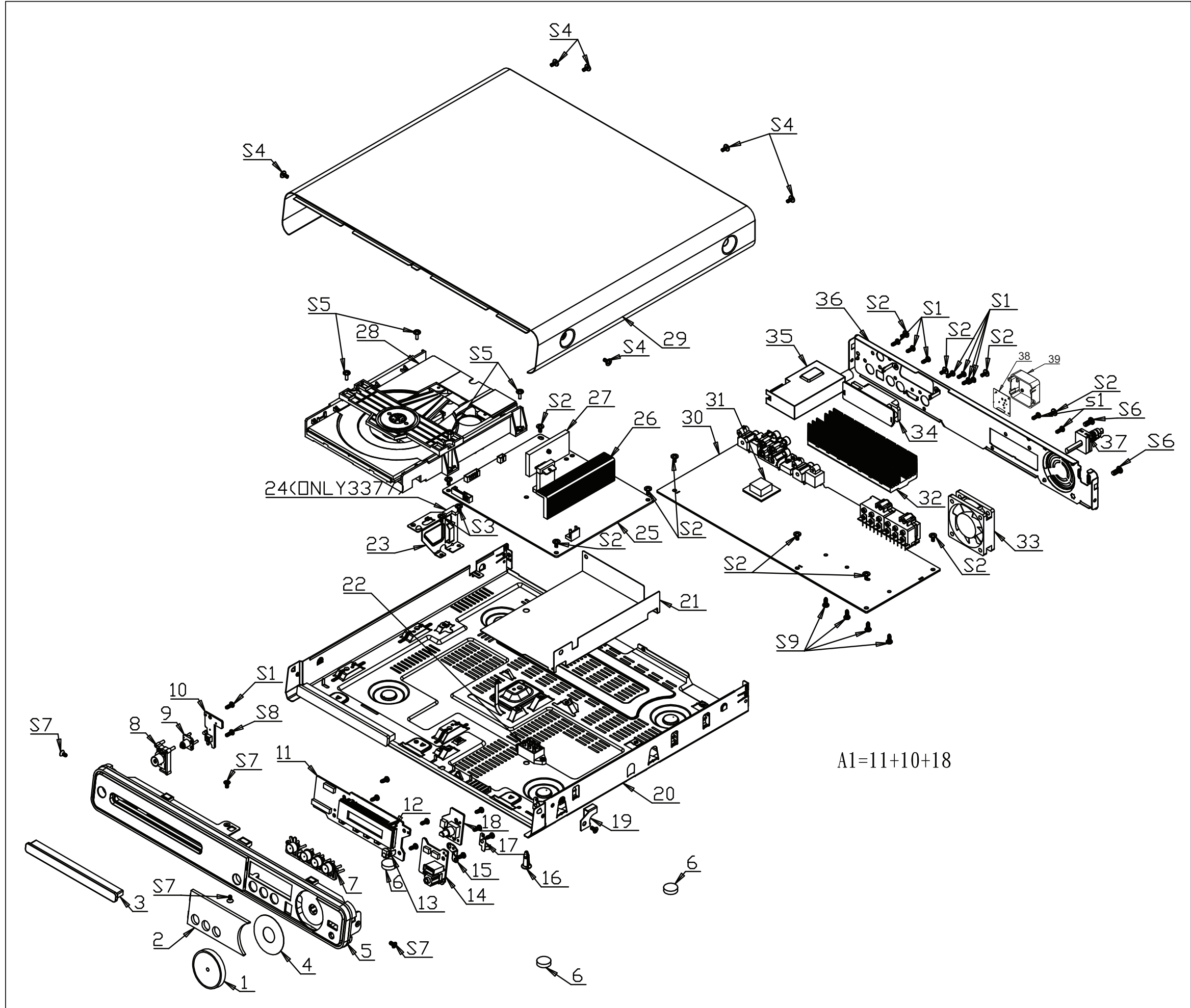
BD901	B1	C907	C3	C915	B2	C924	B2	C935	A4	C941	D2	CN902	D4	D909	C4	D916	D3	IC903	C3	J902	B1	J906	A2	J911	D3	J916	C4	L901	B2	NTC901	C1	R907	D3	R938	B2	T902	B3
C903	A1	C908	D1	C917	A2	C928	D2	C938	C4	C942	A1	D901	B4	D911	A3	F901	D1	IC904	A3	J903	B1	J907	A3	J912	D2	J917	A2	L902	A4	Q902	C3	R919	A2	R941	B2	TVR901	D1
C904	A1	C913	B1	C918	C3	C930	A4	C939	D4	C947	C2	D902	B3	D912	C2	GT901	B1	IC905	D3	J904	B2	J909	A4	J914	D3	J918	C3	L903	C4	Q903	C2	R930	B2	R944	B4		
C906	A3	C914	A2	C920	A3	C931	A4	C940	A2	CN901	D1	D907	D4	D913	B3	IC901	A2	J901	D4	J905	B2	J910	C2	J915	C4	J919	C3	L904	A4	R905	C1	R932	A3	T901	B3		



PCB LAYOUT - BOTTOM VIEW

C909	D3	C922	B2	C932	A2	C943	D1	D905	A1	R901	C4	R908	A2	R914	A4	R920	B3	R924	C3	R928	A1	R935	C3	ZD900	B1	ZD906	C1
C910	D3	C923	B1	C933	B1	C945	C3	D906	A1	R902	C4	R909	C2	R915	A4	R921	D3	R925	B3	R931	D1	R936	B3	ZD902	A2	ZD907	C2
C911	A2	C927	D3	C936	C1	C946	C3	D920	D2	R903	C4	R910	C2	R916	A3	R922	D2	R926	C3	R933	A2	R937	D2	ZD903	B2		
C916	A4	C929	C3	C937	D1	D903	C3	IC902	D3	R904	C4	R913	A4	R918	B3	R923	C3	R927	C3	R934	C3	R940	C3	ZD904	C2		

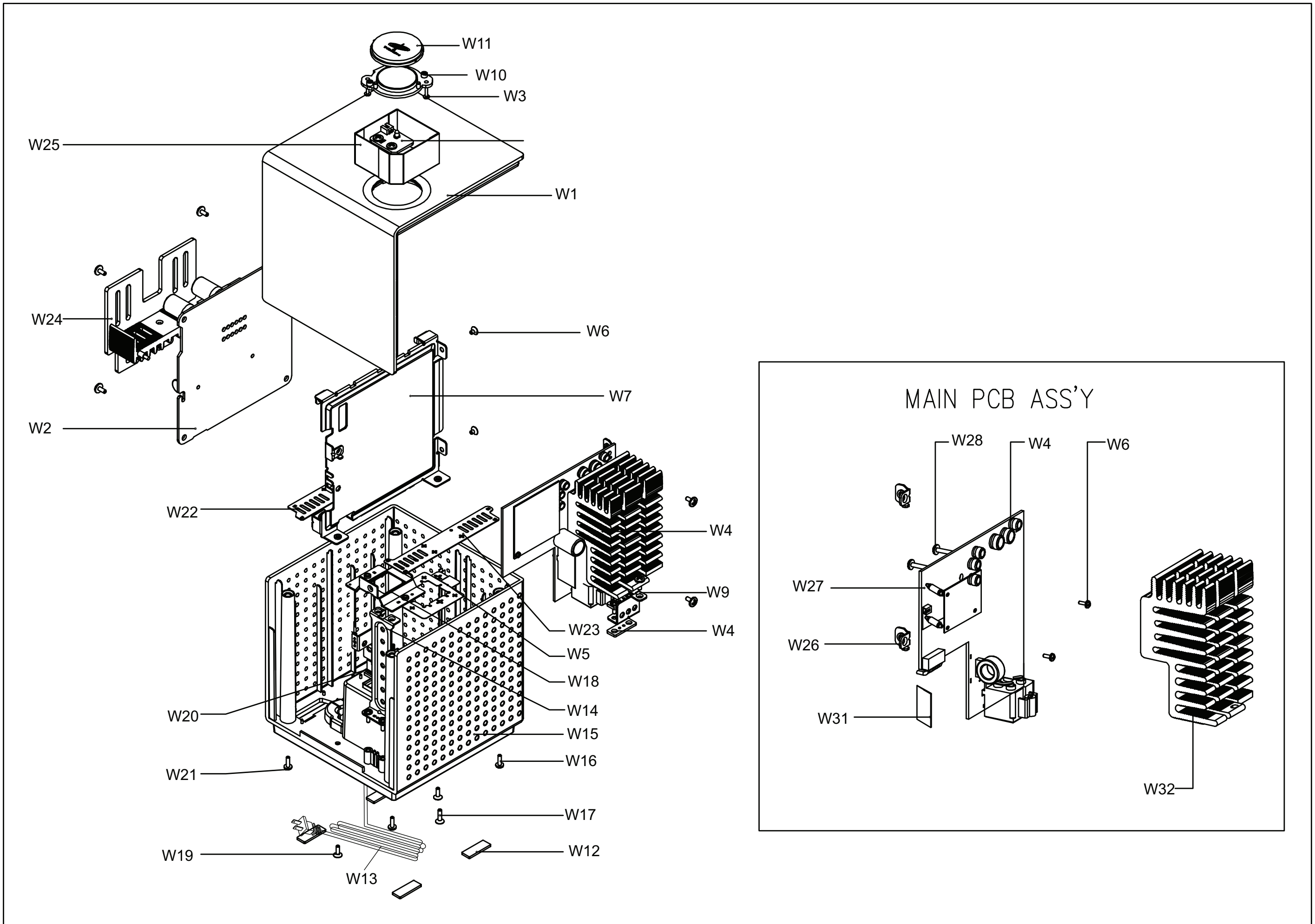




Mechanical Exploded View-Wireless

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PARTS LIST

Loc.	12NC	Description
<i>MAIN UNIT</i>		
1	996510021087	VOLUME KNOB
2	996510021093	DISPLAY LENS
3	996510022471	DVD DOOR
5	996510021057	FRONT PANEL
6	996510021942	RUBBER FOOT D14xH4.2
7	996510021068	FUNCTION KNOB
8	996510021069	STANDBY KNOB
9	996510021064	STANDBY LENS
14	996510021066	MP3 IN PCB ASSY
20	996510021945	BOTTOM CABINET T0.6mm
25	996510021073	POWER PCB ASSY 850W
28	996510021248	DVD LOADER
29	996510022469	TOP COVER SECC
30	996510022474	MAIN PCB ASSY
33	996510021076	FAN DC12V 0.55A
34	996510021058	SCART PCB ASSY
35	996510018486	TUNER PACK KST-MT004FS1-6D
36	996510022501	REAR PANEL
37	△ 996510001638	POWER CORD
38	996510022419	OEM MODULE DWAM80_D2D STS
39	996510021589	WIRELESS COVER
A1	996510021089	DISP+LED+VOL PCB ASSY
FM	996510008251	FM ANT
HSCREV	996510017273	SCREW
JK351	996510004129	KARAOKE JACK D3.6MM 7P
RC	996510021067	REMOTE CONTROL 39 KEYS
Scart	996510001650	SCART CABL
V1	996510007429	FFC CBLE 10P100mmUL20798 P=1
V2	996510021565	FFC CABLE 26P 80mm UL20706

PARTS LIST

Loc.	12NC	Description
<i>WIRELESS UNIT</i>		
W1	996510006941	GP FRONT CABINET FOR RCV ABS
W10	996520031043	LED LENS TRANSPARENT
W11	996520031044	LENS BASE PMMA
W12	996510005060	RUBBER FOOT
W13	△ 994000005444	LINE CORD 2P 1500MM
W14	996510022419	WIRELESS MODULE DWAM80_D2D STS
W2	996510021574	SMPS PCB ASSY 125W
W4	996510021593	MAIN+LED+HEAT SINK 2
W5	996510021599	BOTTOM HOLDER
W8	△ 996510022472	AC SOCKET
WIRR	996510022473	WIRELESS RECEIVER ASSY
WV1	996510021616	FFC CABLE 26P 50mm UL20706

LOUDSPEAKER SYSTEM

RFC	996510001599	RUBBER FOOT - CENTER SPK
RFF	996510001601	RUBBER FOOT - REAR SPK
RFR	996510012224	RUBBER FOOT - REAR
RFS	996510010854	RUBBER FOOT - SUB
SPKC	996510021046	SPEAKER BOX - REAR RIGHT
SPKFL	996510021051	SPEAKER BOX - FRONT LEFT
SPKFR	996510021047	SPEAKER BOX - FRONT RIGHT
SPKRL	996510021048	SPEAKER BOX - CENTER
SPKRR	996510021052	SPEAKER BOX - REAR LEFT
SUBW	996510021049	SPEAKER BOX - SUBWOOFER

Note: Only these parts mentioned in the list are normal service parts.

REVISION LIST

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Version 1.0
*Initial release