

Service
Service
Service

Second Generation



Service Manual

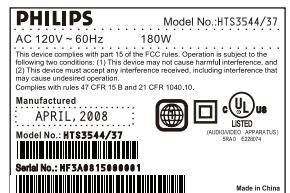


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This service manual is for HTS3544/37 Second Generation model, which is different from the previous generation HTS3544/37 models.

For Second Generation model the serial number begin with MF3AXXXXXXXXXX. Refer to the rating label illustration at right.



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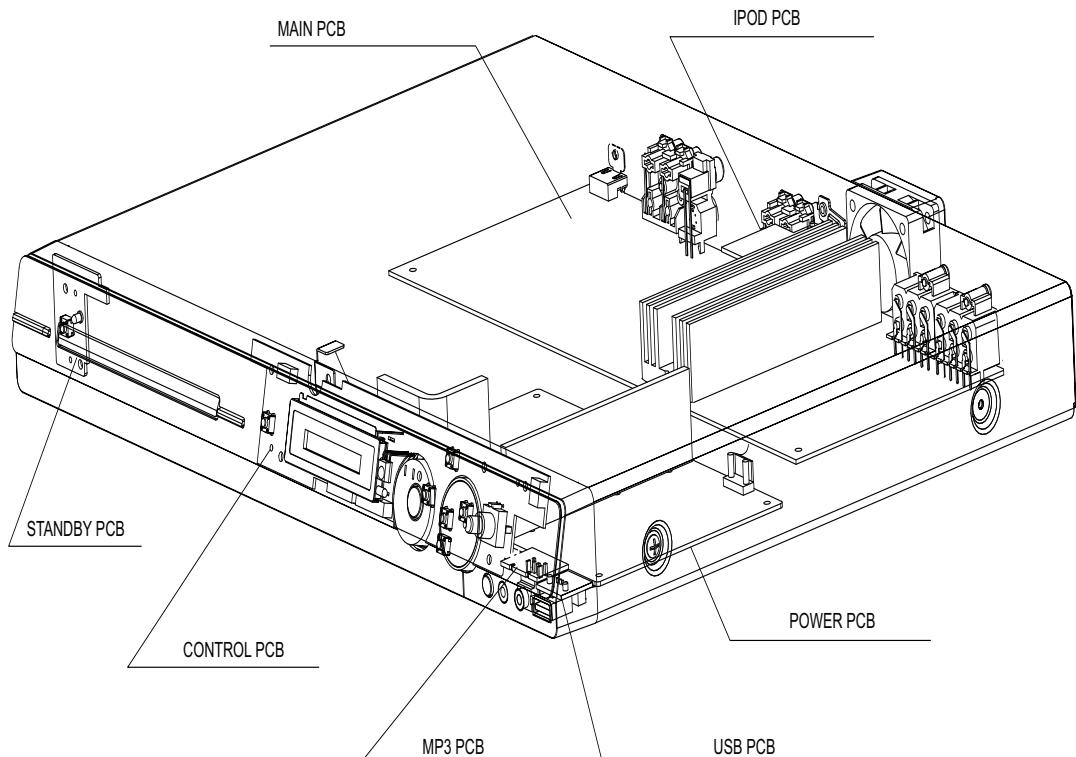
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Version 1.0



PHILIPS

LOCATION OF PCB BOARDS



VERSION VARIATION:

Type/Versions	HTS3544
Features	/37
Output Power - 1000W	X
Voltage (120V)	X
TV In	X

SERVICE SCENARIO MATRIX:

Type/Versions	HTS3544
Board in used	/37
Main Board	Bd
Power Board	Bd
CONTROL+USB+PHONE JACK+STANDBY+BKT Board	Bd
Ipod Board	Bd

*Bd = Board Level Repair

SPECIFICATIONS

AMPLIFIER

Total output power:	
- Home Theater mode	1000 W
- FTC* output power	510 W
Frequency Response	180 Hz – 14 kHz / ±3 dB
Signal-to-Noise Ratio.....	> 60 dB (A-weighted)
Input Sensitivity	
- AUX In.....	500 mV
- TV In.....	250 mV
- MP3 Line-In.....	500 mV
* (1% THD 1kHz)	

RADIO

Tuning Range.....	FM 87.5–108 MHz (100kHz)
.....	AM 530–1700 kHz (10kHz)
.....	26 dB Quieting
Sensitivity	FM 22 dBf, AM 5000µV/m
IF Rejection Ratio	FM 60 dB, AM 24 dB
Signal-to-Noise Ratio.....	FM 50 dB, AM 30 dB
AM Suppression Ratio.....	FM 30 dB
Harmonic Distortion.....	FM Mono 3%
.....	FM Stereo 3%
.....	AM 5%
Frequency Response	FM 180 Hz–10 kHz / ±6 dB
Stereo Separation.....	FM 26 dB (1 kHz)
Stereo Threshold.....	FM 23.5 dB

DISC

Laser Type.....	Semiconductor
Disc Diametre	12cm / 8cm
Video Decoding	MPEG-1 / MPEG-2 /
.....	/ DivX 3/4/5/6, Ultra
Video DAC.....	12 Bits
Signal System.....	NTSC / Multi
Video Format.....	4:3 / 16:9
Video	S/N 56 dB
Composite Video	
Output.....	1.0 Vp-p, 75Ω
S-Video Output.....	Y - 1.0 Vp-p, 75Ω
.....	C - 0.286 Vp-p, 75Ω
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

MAIN UNIT

Power Supply Rating.....	120 V; 60 Hz
Power Consumption	180 W
Low Standby power.....	< 1 W
Dimensions.....	435 x 55 x 367 (mm)
.....	(w x h x d)
Weight	4.04 kg

FRONT AND REAR SPEAKERS

System.....	Full range satellite
Impedance.....	6Ω
Speaker drivers	3" full range speaker
Frequency response.....	150 Hz – 20 kHz
Dimensions.....	95.5 x 198.3 x 75 (mm)
.....	(w x h x d)
Weight	0.62 kg/each

CENTER SPEAKER

System.....	Full range satellite
Impedance.....	3Ω
Speaker drivers	2 x 2.5" full range woofer, 1 x 2" tweeter
Frequency response	150 Hz – 20 kHz
Dimensions.....	435 x 93.5 x 67 (mm)
.....	(w x h x d)
Weight	1.26kg

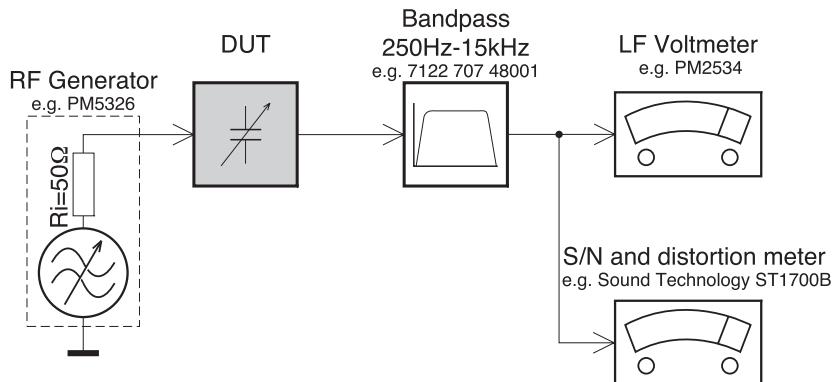
SUBWOOFER

Impedance.....	3Ω
Speaker drivers	203 mm (8") woofer
Frequency response.....	40 Hz – 150 Hz
Dimensions.....	159.5 x 355.5 x 370 (mm)
.....	(w x h x d)
Weight	4.78 kg

Specifications subject to change without prior notice.

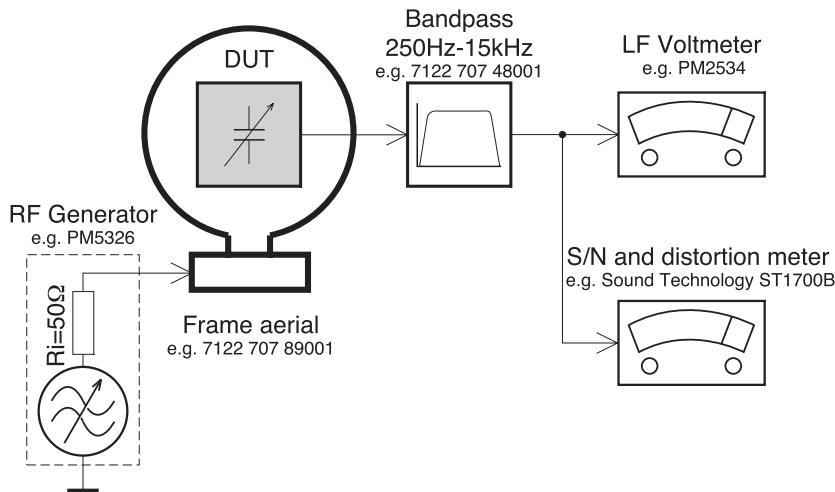
Measurement Setup

Tuner FM



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

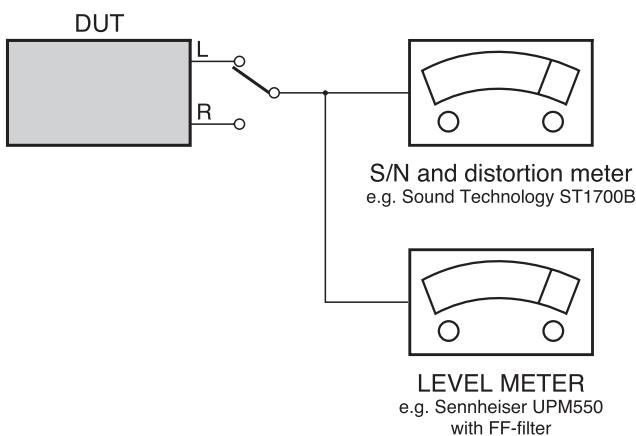
Tuner AM (MW,LW)



To avoid atmospheric interference all AM-measurements have to be carried out in a Faraday's cage.
Use a bandpass filter (or at least a high pass filter with 250Hz) to eliminate hum (50Hz, 100Hz).

CD

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



SERVICE AIDS

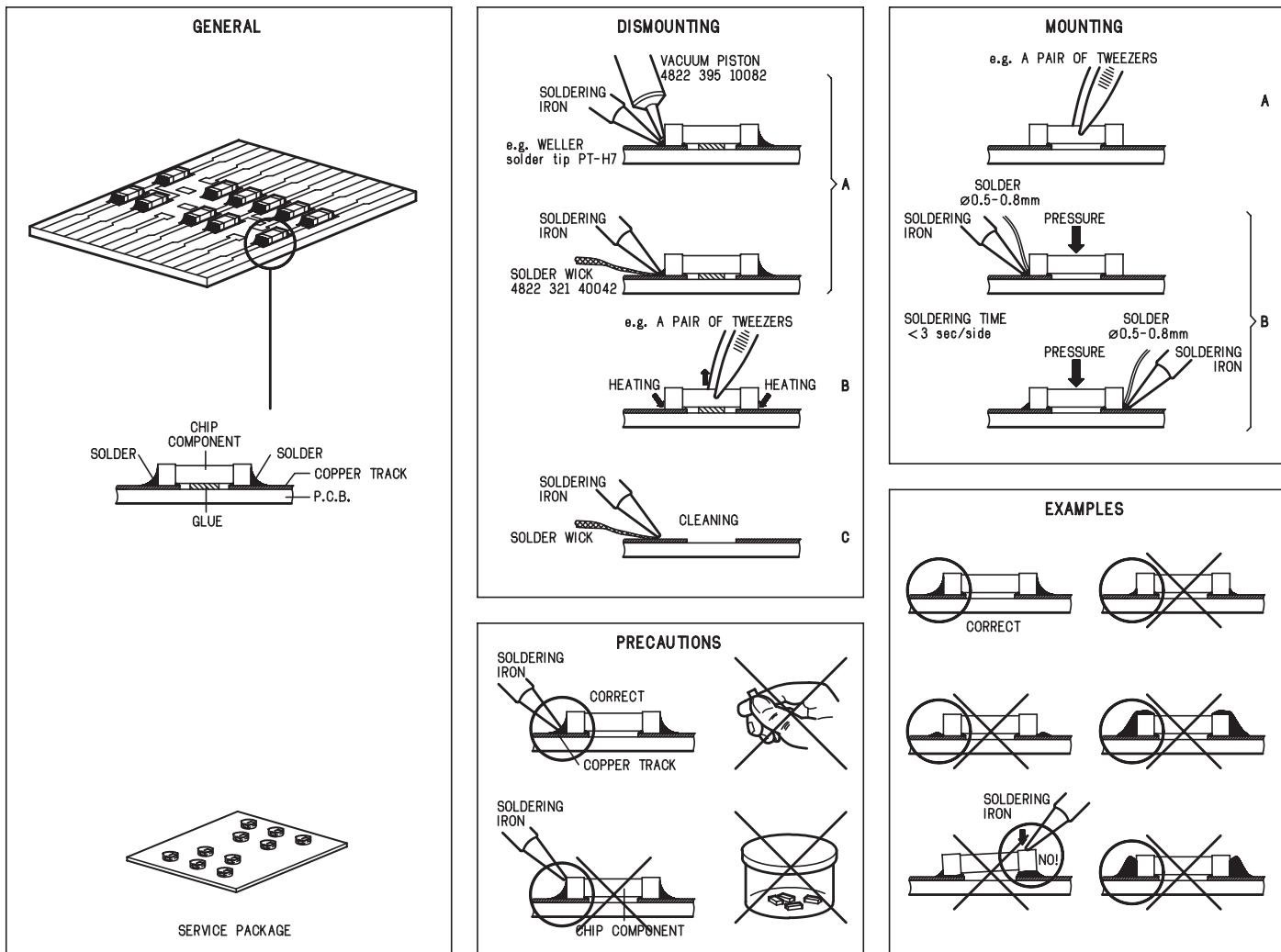
Service Tools:

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





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.



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 ditzelfde potentiaal.



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.



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.



AVVERTIMENTO

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

La loro longevità potrebbe essere fortemente ridotta 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.



ESD PROTECTION EQUIPMENT

Complete Kit ESD3 (small tablemat, wristband, connection box, estention cable and earth cable 4822 310 10671
Wristband tester 4822 344 13999



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 \triangle .



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 symbool \triangle .



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 \triangle .



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

Sicherheitsbauteile sind durch das Symbol \triangle markiert.



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.

Componenti di sicurezza sono marcati con \triangle .



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 suojalukituksen ohittaa olet alittiina näkymättömälle laserisäteilylle. Älä katso säteeseen!

(DK) Advarse !

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



"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.

IDENTIFICATION:

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 (leaded/ 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 leaded solder alloy / parts is possible but PHILIPS recommends strongly to avoid mixed solder alloy types (leaded 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 leaded 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 Procedure

1) System Reset

- a) Press "Setup" button on R/C, TV will show preference menu
- b) Select the menu using the ▼ and ► on R/C
- c) Go preference page to do system reset

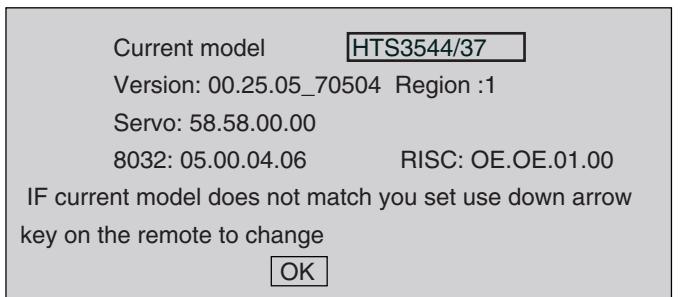
2) Region Code Change

- a) Press the "stop" button on R/C in open mode
- b) Press "7" "3" "4" "4" "6" "6" 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

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



CAUTION!

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

4) Password Change

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

5) Check on the Software Version

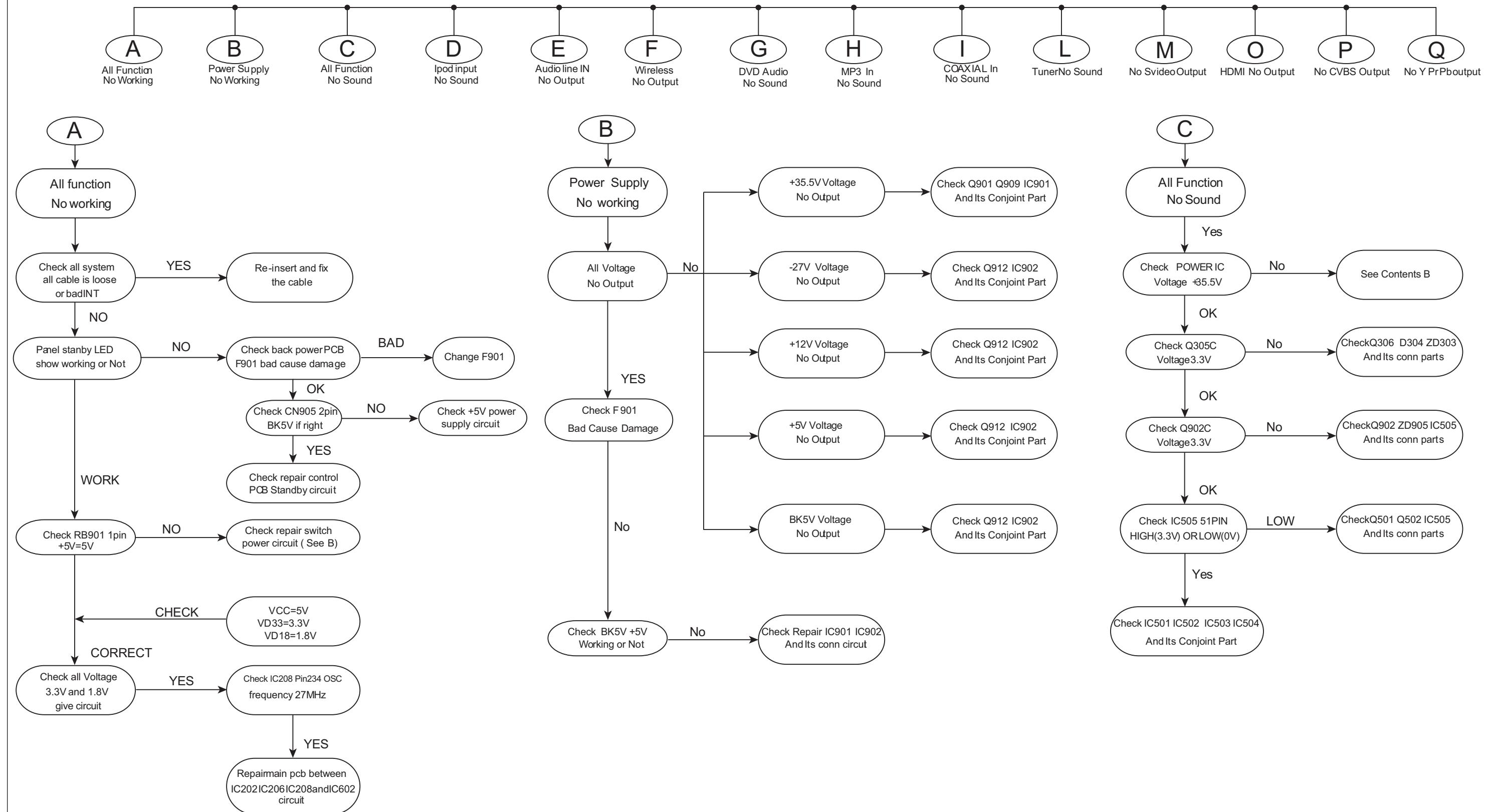
- a) Open the CD Door
- b) Press "display" button on R/C
- c) TV will show the version on screen

6) Trade model

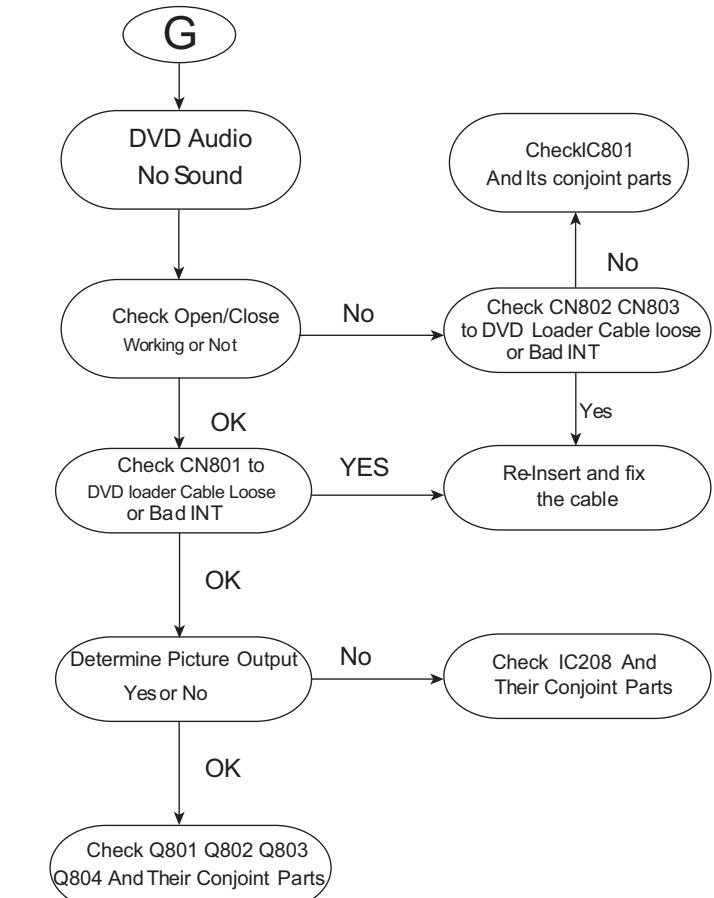
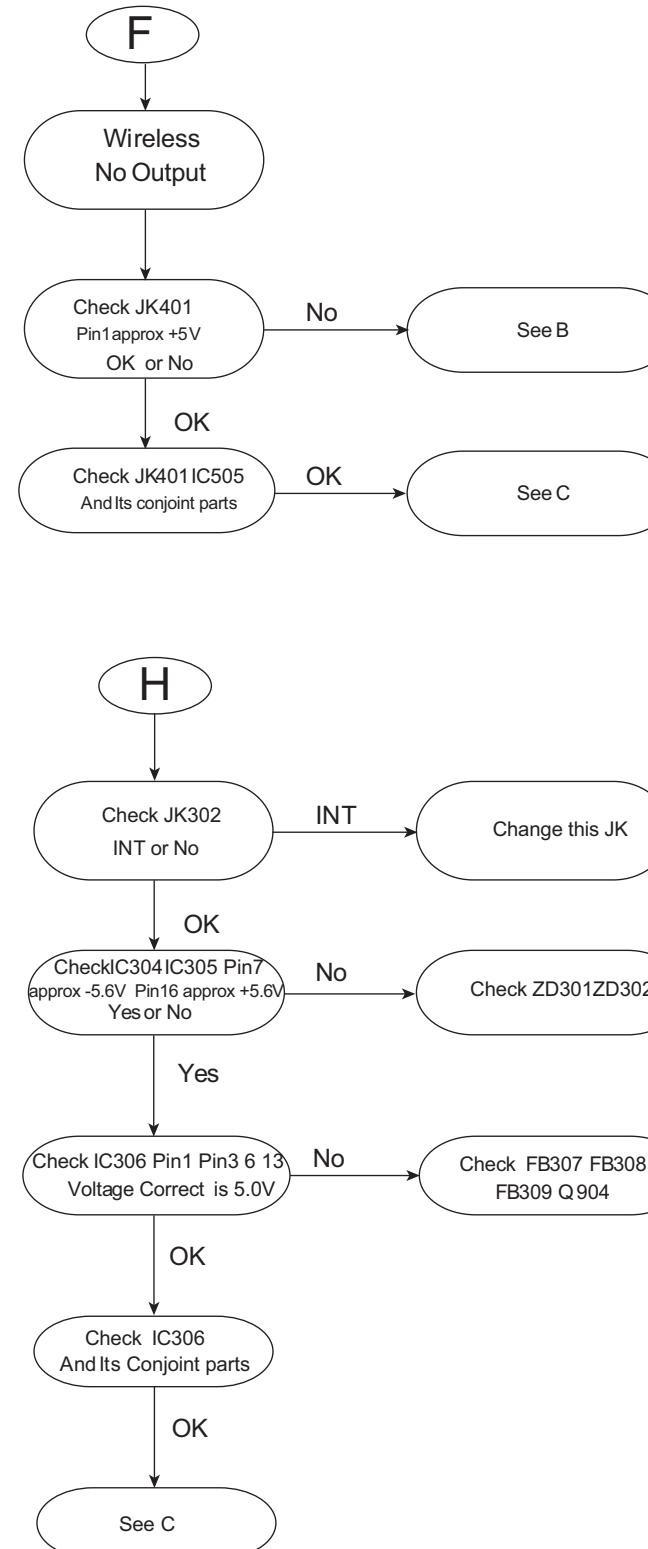
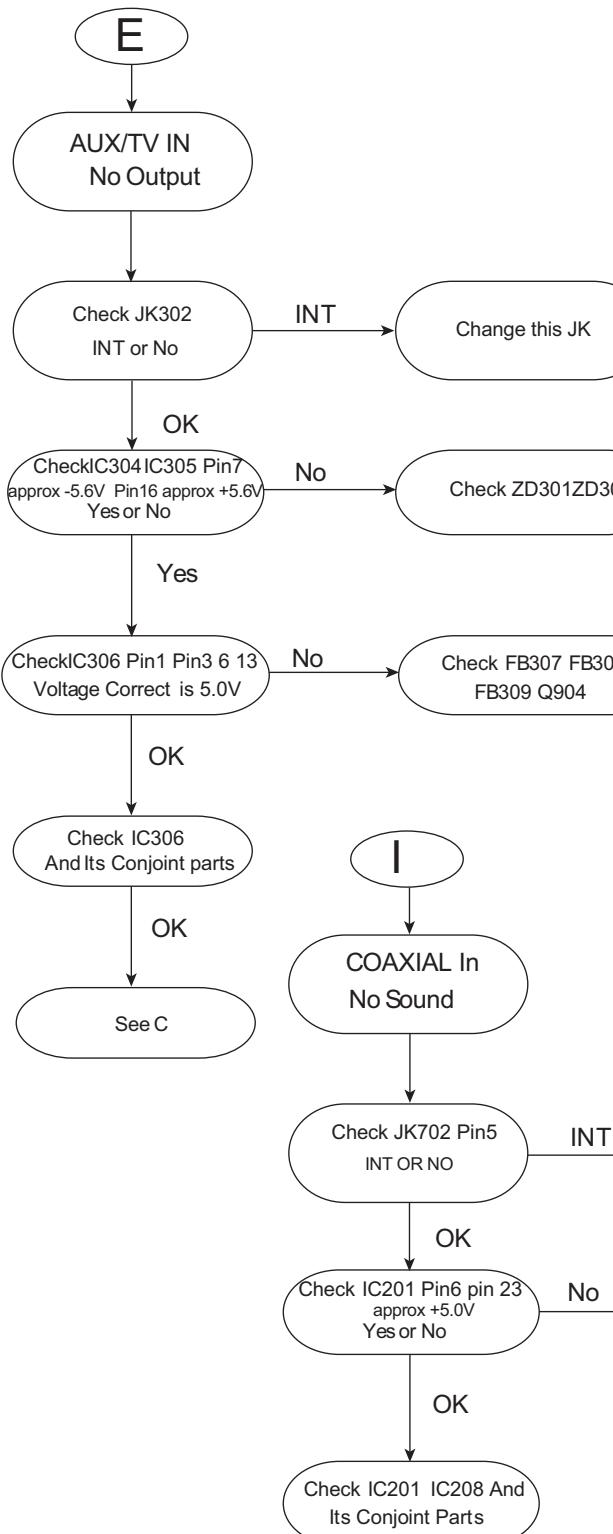
- a) Press "Open/Close" button on R/C
- b) Press "2" "5" "9" on R/C, VFD will display "TRA ON" or "TRA OFF"

REPAIR INSTRUCTION (Part One)

MAIN UNIT REPAIR CHART 1/ 3

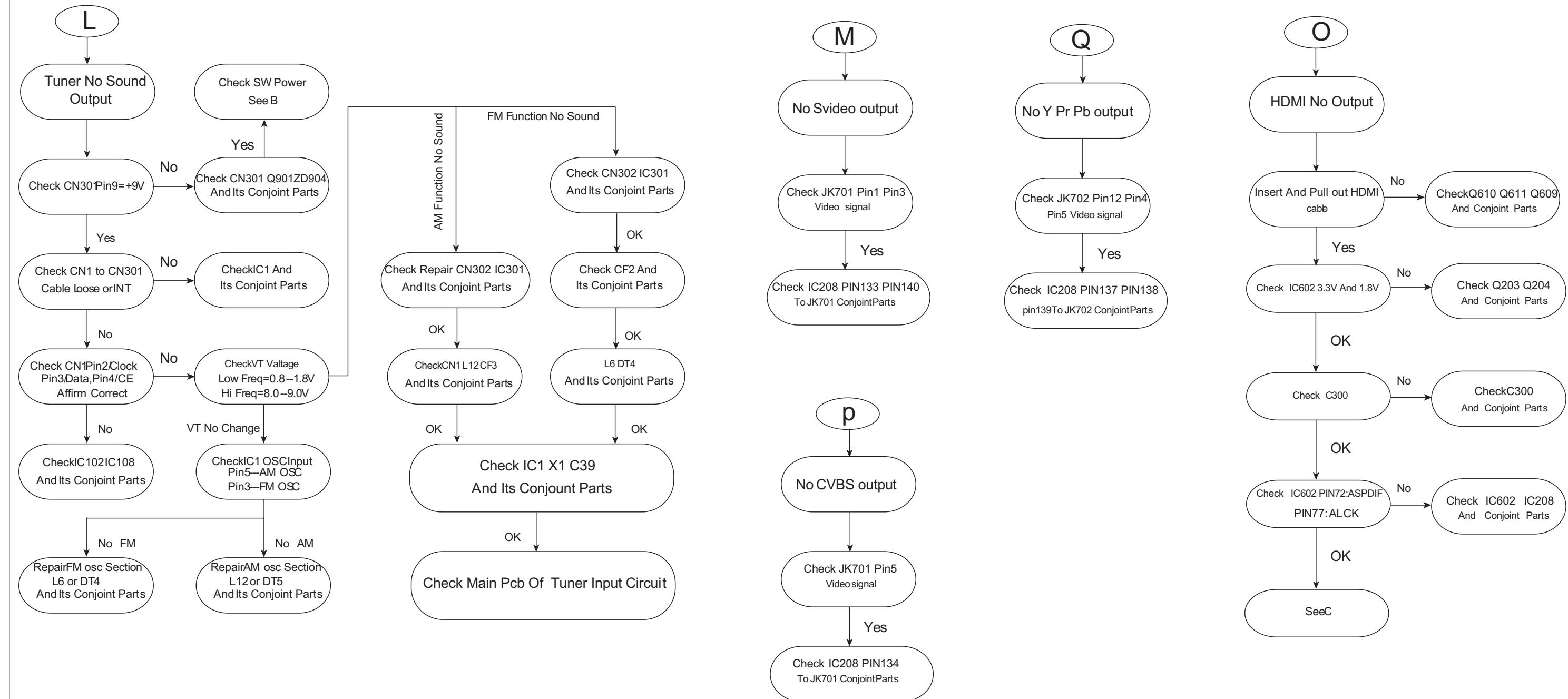


MAIN UNIT REPAIR CHART 2/3



REPAIR INSTRUCTION (Part Three)

MAIN UNIT REPAIR CHART 3/3



DISASSEMBLY INSTRUCTIONS

Dismantling of the Front Panel Assembly

- 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 right as shown in figure 1 until the Tray moves out of the Front Panel.

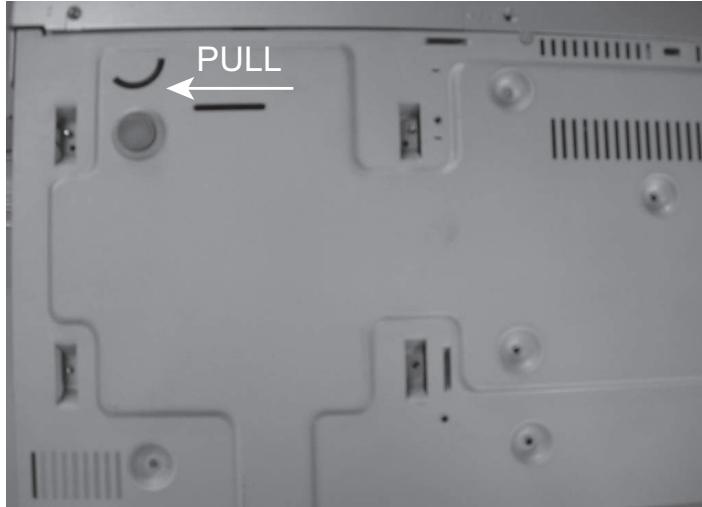


Figure 1



Figure 2

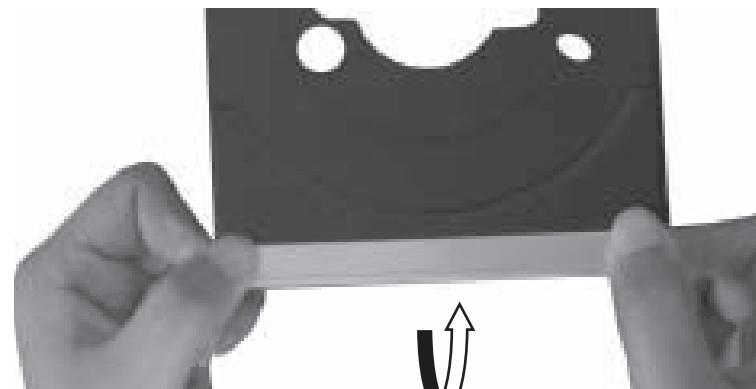


Figure 3

3 - 1

- 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.
- 3) Loosen 5 screws and remove the Top Cover by lifting the rear portion upwards before sliding it out towards the rear.
 - 3 screws on the back
 - 1 screws each on the left & right side
- 4) Loosen 5 screws & lift up the top edge of Front Panel assembly to free some catches before sliding it out towards the front.
 - 3 screws on the bottom
 - 1 screw each on the left & right side

3 - 1

Dismantling of the Main PCB

- 2) Loosen 3 screw "A" on the top of main board as shown in figure 4.
- 1) Loosen 7 screw "B" at the back panel as shown in figure 5.

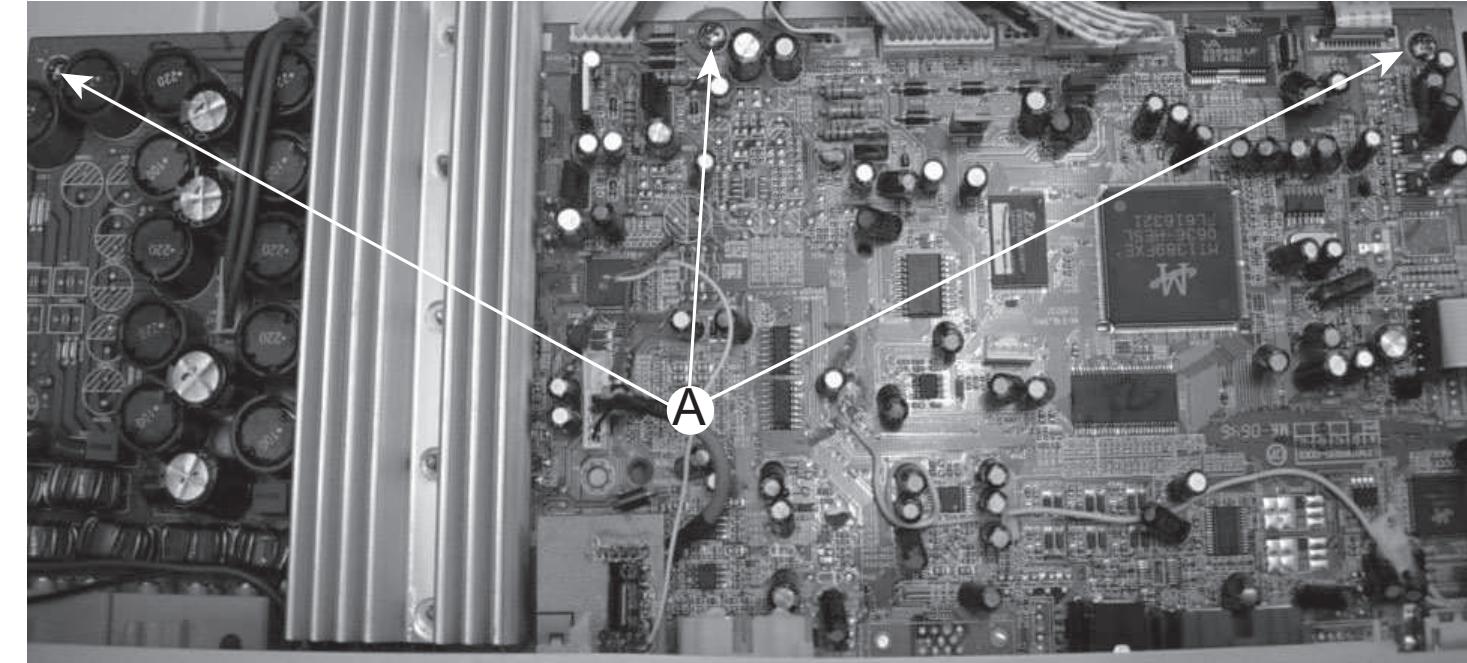


Figure 4

Dismantling of the iPod Board

- 1) Loosen 1 screws "C" at the back pance as shown in figure5

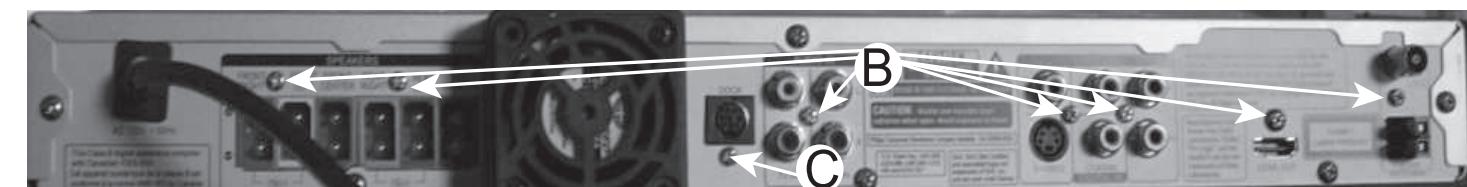


Figure 5

Dismantling of the Control Board

- 1) Loosen 10 screws "E" at the back pance as shown in figure 6

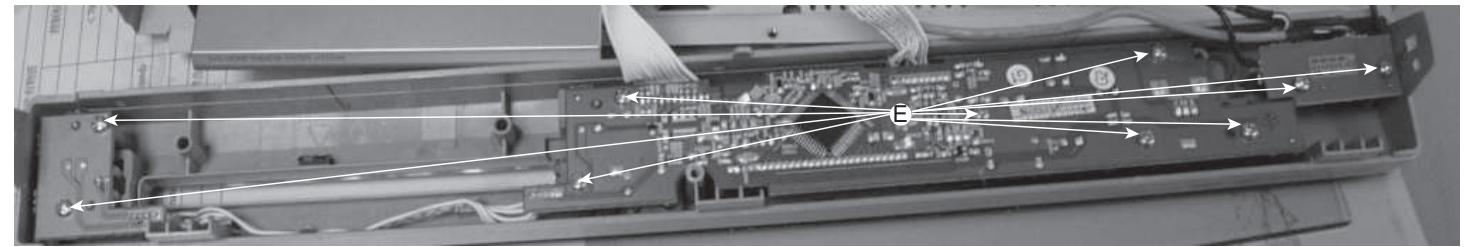


Figure 6

Dismantling of the Power Board

- 1) Loosen 5 screws "D" at the top of the Power Board as shown in figure 7

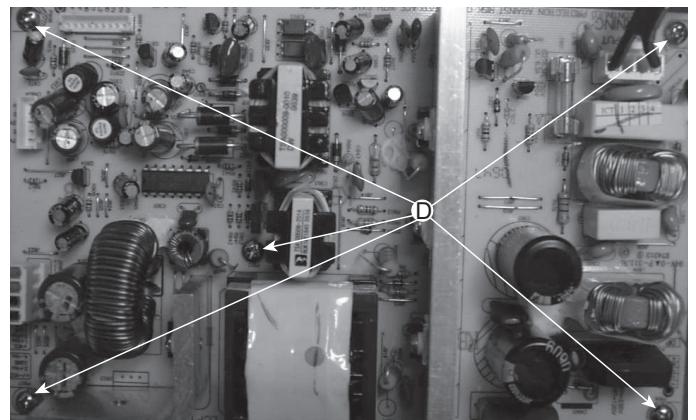


Figure 7

Dismantling of the DVD Module

- 1) Loosen 4 screws "F" to remove the DVD Module as shown in figure 8.

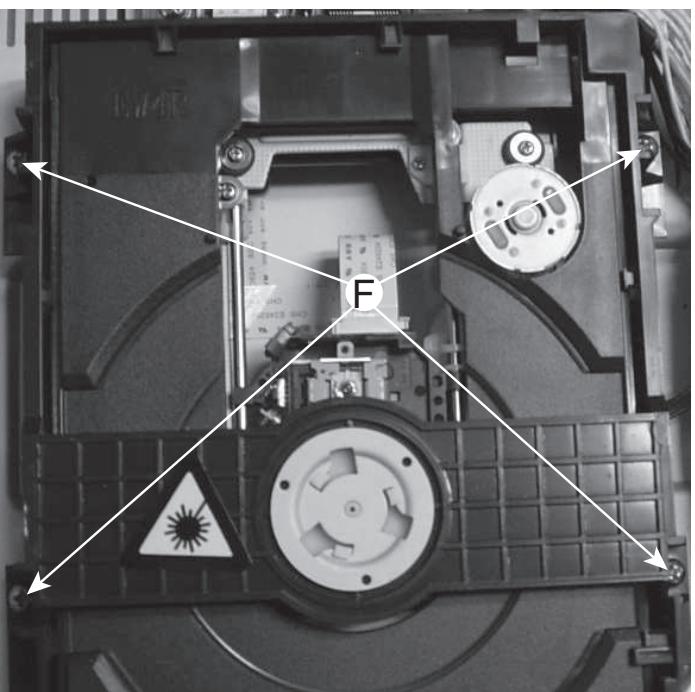
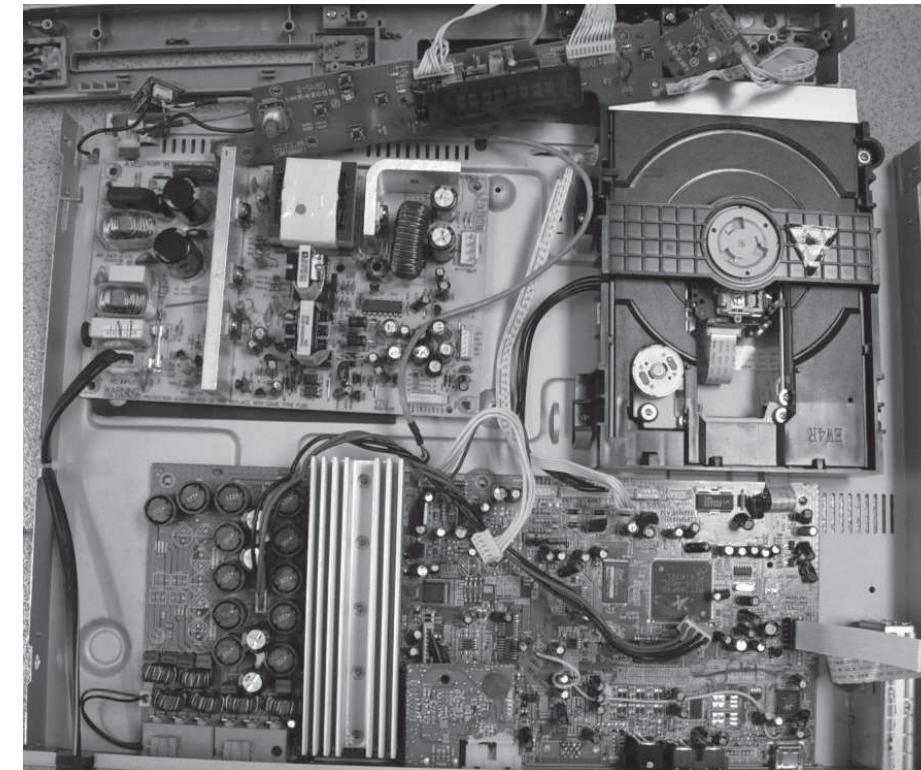


Figure 8

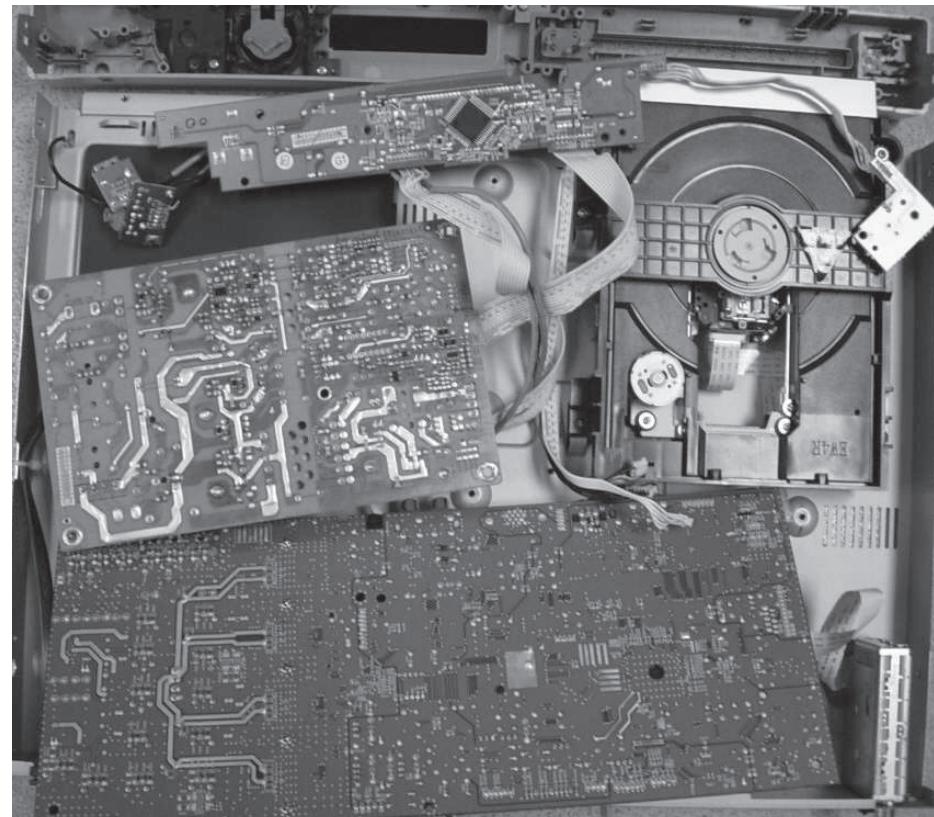
SERVICE POSITIONS

Service position A

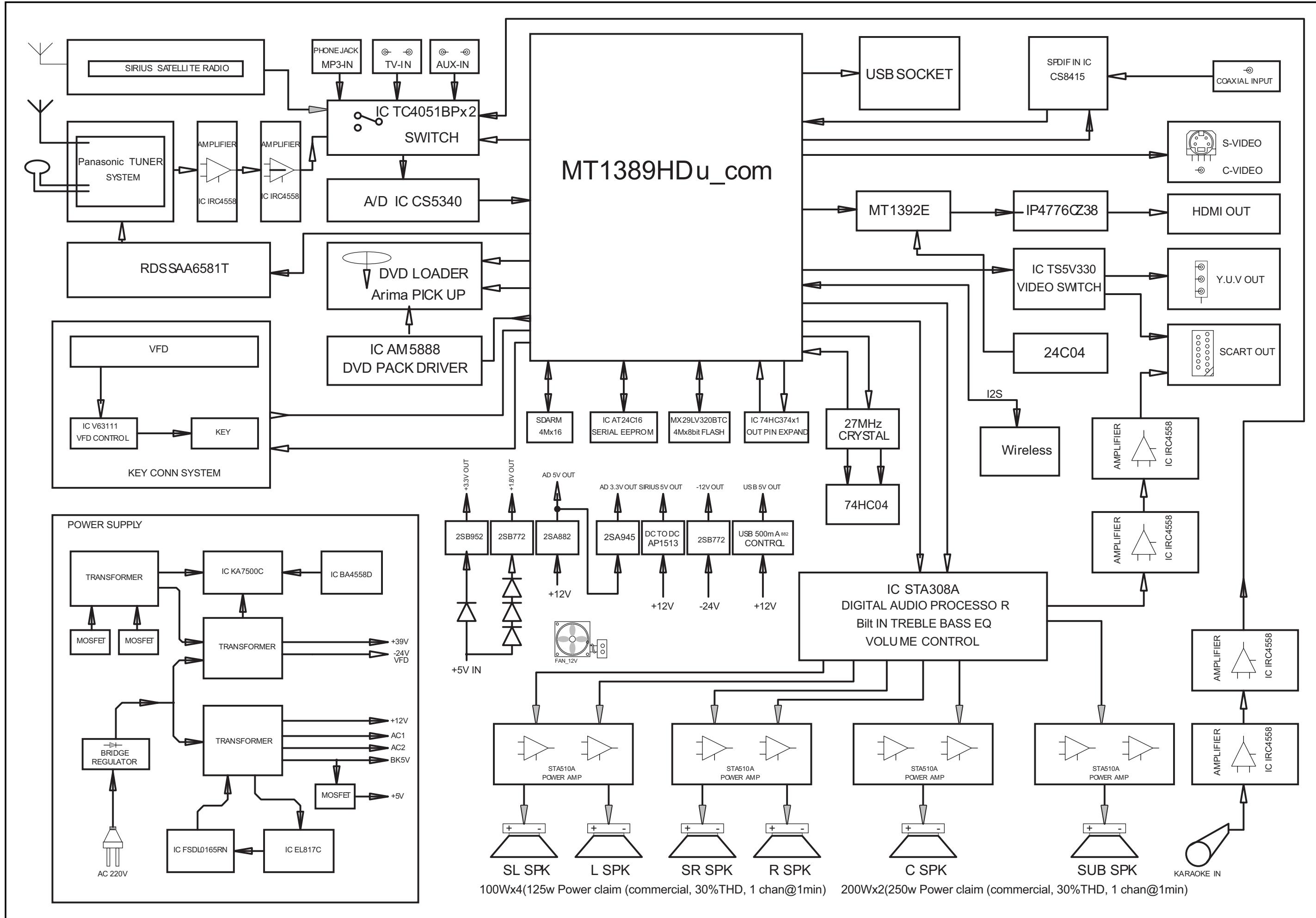


Note: In some service positions the components or copper patterns of one board may risk touching its neighbouring pc boards or metallic parts. To prevent such short-circuit use a piece of hard paper or other insulating material between them.

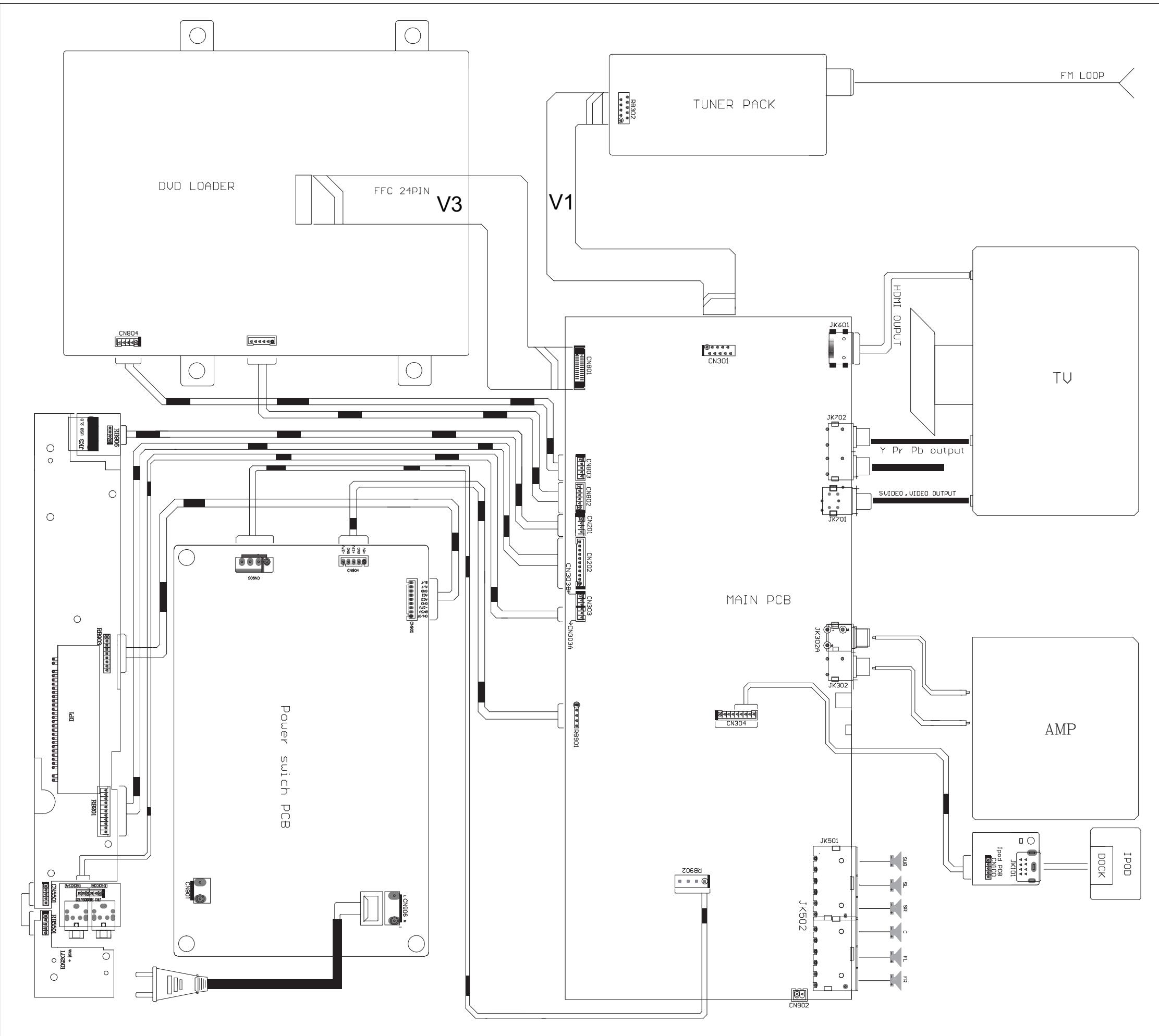
Service position B



BLOCK DIAGRAM



WIRING DIAGRAM

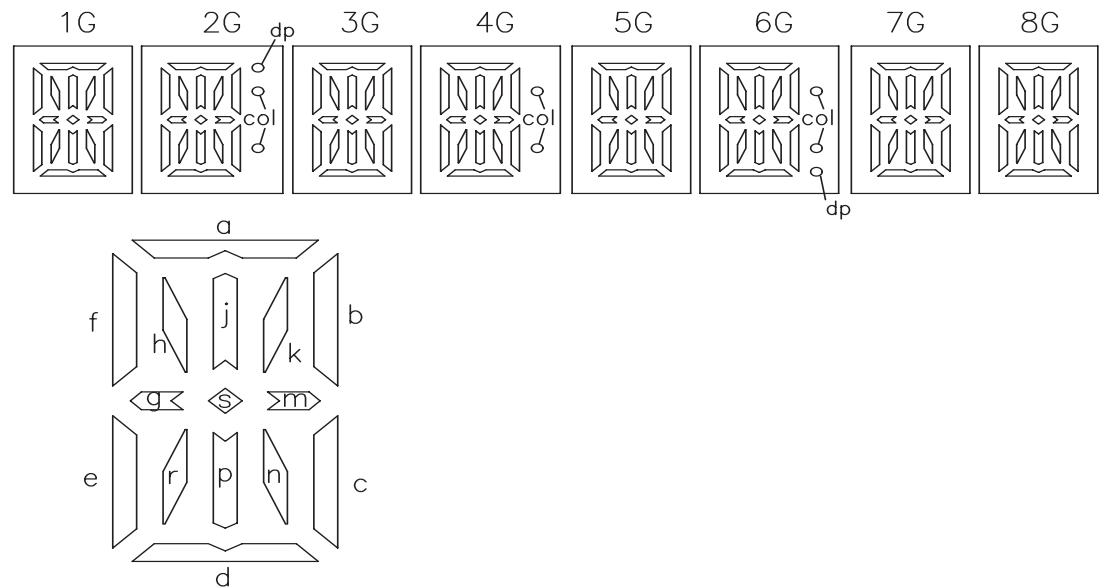


CONTROL BOARD

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FTD DISPLAY PIN ASSIGNMENT



	1G	2G	3G	4G	5G	6G	7G	8G
P1	a	a	a	a	a	a	a	a
P2	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	—	dp	—	col	—	col	—	—
P15	s	s	s	s	s	s	s	s
P16	—	col	—	—	—	dp	—	—

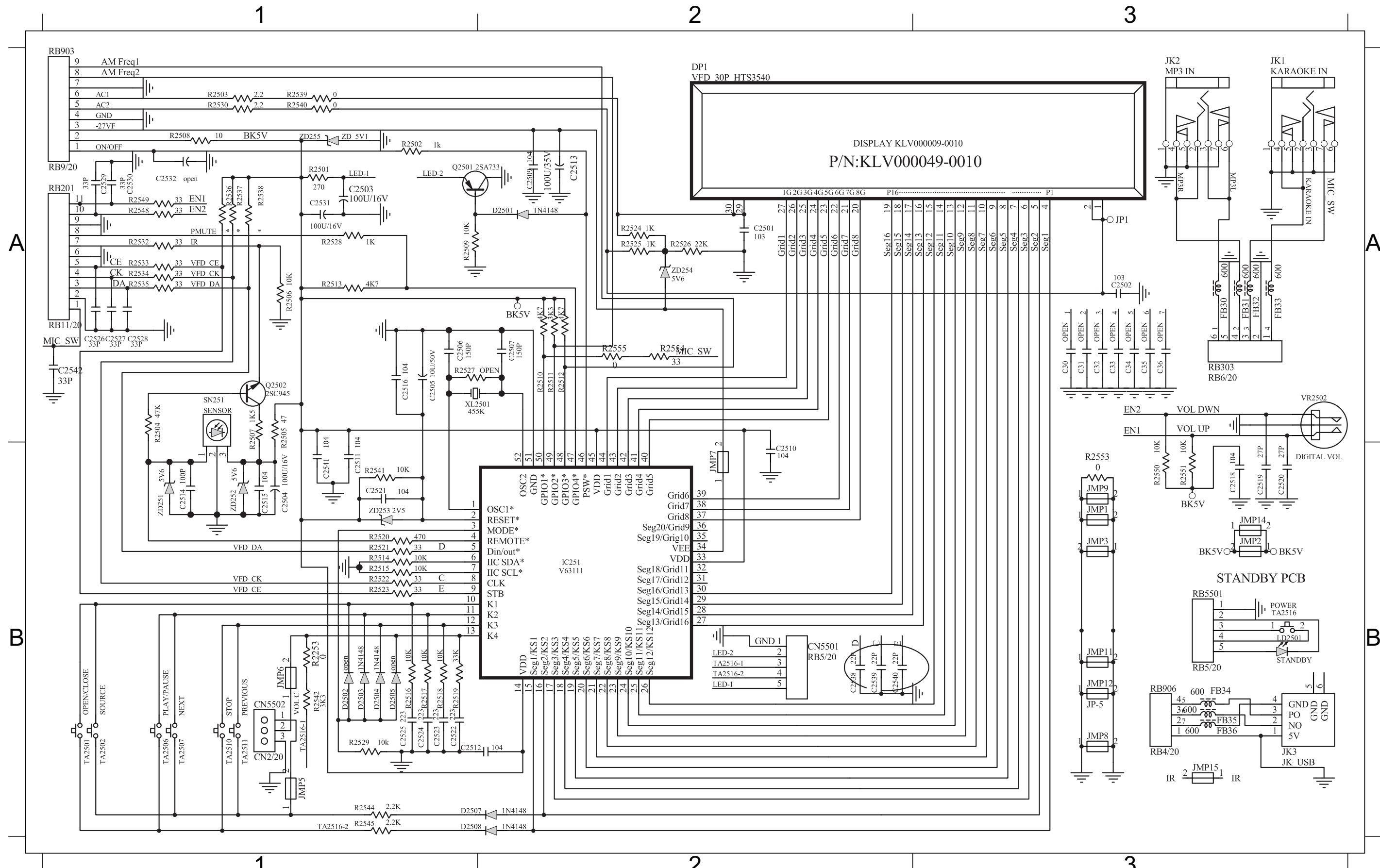
PIN CONNECTION

PIN NO.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
CONNECTION	F	F	NP	P1	P2	P3	P4	P5	P6	P7	P8	P9	P10	P11	P12
PIN NO.	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
CONNECTION	P13	P14	P15	P16	1G	2G	3G	4G	5G	6G	7G	8G	NP	F	F

Note: F: Filament P: Anode G: Grid NP: No pin

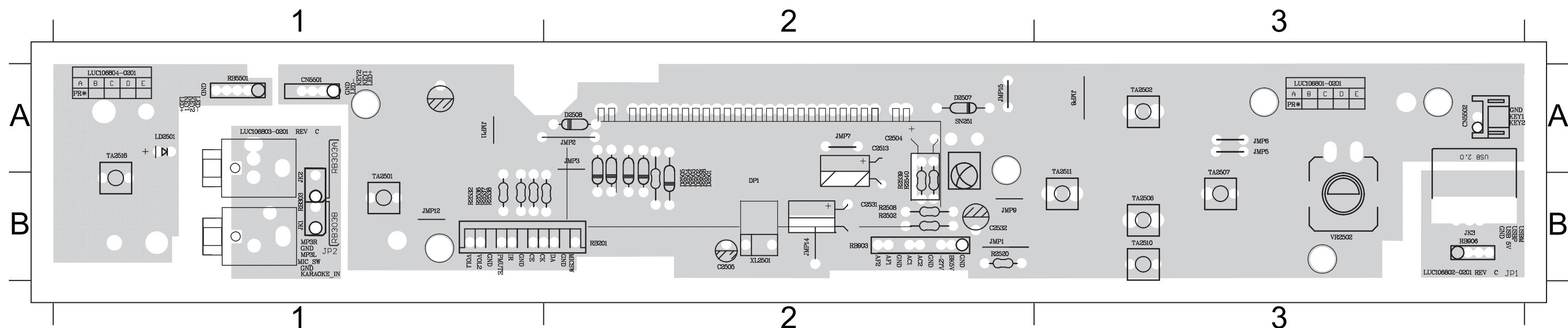
CIRCUIT DIAGRAM

C2501	A3	C2509	A2	C2515	B1	C2522	B1	C2528	A1	C2540	B2	D2507	B1	FB35	B3	JMP11	B3	JMP5	B1	LD2501	B3	R2503	A1	R2509	A1	R2517	B1	R2523	B1	R2530	A1	R2540	A1	R2549	A1	RB903	A1	TA2507	B1	ZD251	B1	R2537	A1
C2502	A3	C2510	B2	C2516	A1	C2523	B1	C2529	A1	C2541	B1	D2508	B1	FB36	B3	JMP12	B3	JMP6	B1	Q2501	A1	R2504	A1	R2510	A2	R2518	B1	R2524	A2	R2532	A1	R2541	B1	R2553	B3	RB906	B3	TA2510	B1	ZD252	B1	R2538	A1
C2504	B1	C2511	B1	C2518	B3	C2524	B1	C2530	A1	C2542	A1	DP1	A2	IC251	B2	JMP14	B3	JMP7	B2	Q2502	A1	R2505	A1	R2513	A1	R2519	B1	R2525	A2	R2533	A1	R2542	B1	R2554	A2	SN251	A1	TA2511	B1	ZD253	B1	R2555	A2
C2505	A1	C2512	B1	C2519	B3	C2525	B1	C2531	A1	D2501	A2	FB30	A3	JK2	A3	JMP15	B3	JMP8	B3	R2253	B1	R2506	A1	R2514	B1	R2520	B1	R2526	A2	R2534	A1	R2544	B1	RB201	A1	TA2501	B1	TA2516	B1	ZD254	A2		
C2506	A1	C2513	A2	C2520	B3	C2526	A1	C2538	B2	D2503	B1	FB31	A3	JK3	B3	JMP2	B3	JMP9	B3	R2501	A1	R2507	A1	R2515	B1	R2521	B1	R2528	A1	R2535	A1	R2545	B1	RB303AA3	TA2502	B1	VR2502	A3	ZD255	A1			
C2507	A2	C2514	B1	C2521	B1	C2527	A1	C2539	B2	D2504	B1	FB34	B3	JMP1	B3	JMP3	B3	JP1	A3	R2502	A1	R2508	A1	R2516	B1	R2522	B1	R2529	B1	R2539	A1	R2548	A1	RB5501B3	TA2506	B1	XL2501	A2	R2536	A1			

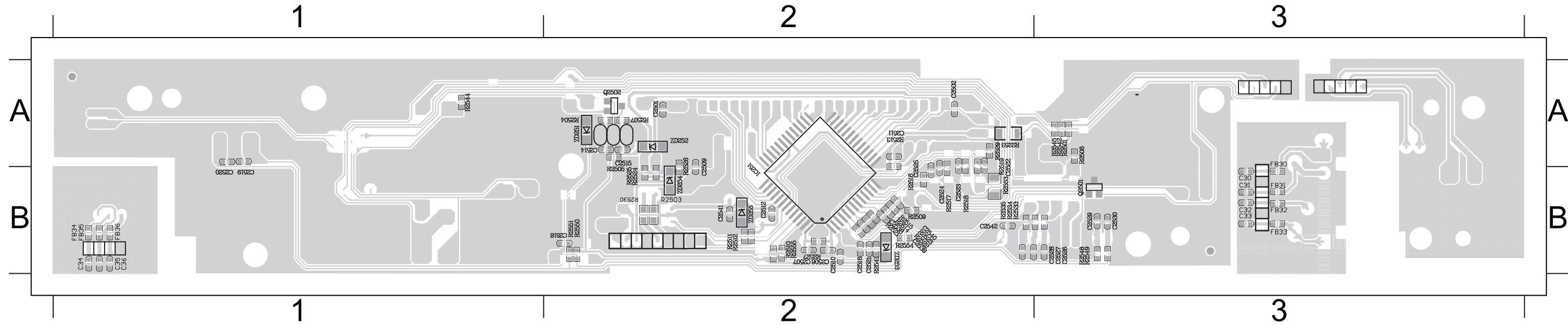


PCB LAYOUT - TOP VIEW

C2504 A2 C2531 B2 D2504 B2 DP1 B2 JMP1 B2 JMP14 B2 JMP3 A2 JMP7 A2 JP1 B3 R2502 B2 R2528 B2 R2540 B2 RB5501 A1 SN251 A2 TA2506 B3 TA2511 B3 XL2501 B2 R2538 B1
 C2505 B2 D2501 B2 D2507 A2 JK2 B3 JMP11 A1 JMP15 A2 JMP5 A3 JMP8 A3 JP2 B1 R2508 B2 R2532 B3 RB201 B2 RB903 B2 TA2501 A1 TA2507 B3 TA2516 A1 R2536 B1
 C2513 A2 D2503 B2 D2508 A2 JK3 B3 JMP12 B1 JMP2 A2 JMP6 A3 JMP9 B2 LD2501 A1 R2520 B2 R2539 B2 RB303A B3 RB906 B3 TA2502 A3 TA2510 B3 VR2502 B3 R2537 B1

**PCB LAYOUT - BOTTOM VIEW**

C2501 A2 C2509 B2 C2515 A2 C2520 B1 C2524 B2 C2538 B2 C2542 B2 FB35 B1 Q2502 A2 R2504 A2 R2509 B2 R2515 B2 R2519 B2 R2524 B2 R2530 B2 R2541 B2 R2548 B3 ZD251 A2 ZD255 B2
 C2502 A2 C2511 A2 C2516 B2 C2521 B2 C2525 A2 C2539 B2 FB30 B3 FB36 B1 R2253 A2 R2505 B2 R2510 B2 R2516 B2 R2521 B2 R2525 B2 R2533 B2 R2542 A3 R2549 B3 ZD252 A2 R2555 B2
 C2506 B2 C2512 B2 C2518 B2 C2522 B2 C2529 B3 C2540 B2 FB31 B3 IC251 B2 R2501 A3 R2506 A3 R2513 A2 R2517 B2 R2522 B2 R2526 B2 R2534 B2 R2544 A1 R2553 B2 ZD253 B2
 C2507 B2 C2514 A2 C2519 B1 C2523 B2 C2530 B3 C2541 B2 FB34 B1 Q2501 B3 R2503 B2 R2507 A2 R2514 B2 R2518 B2 R2523 B2 R2529 A2 R2535 B2 R2545 A3 R2554 B2 ZD254 B2

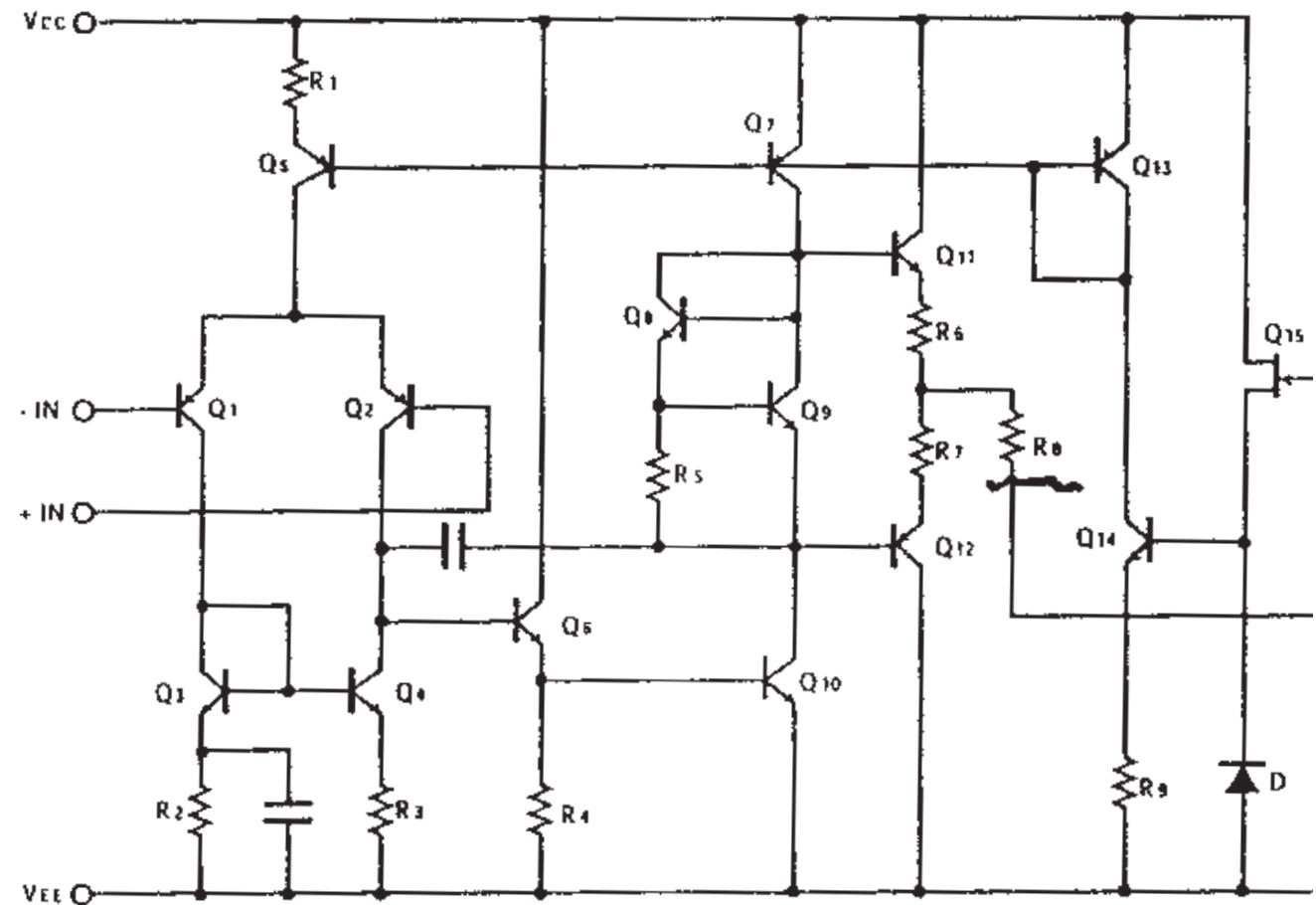


MAIN BOARD

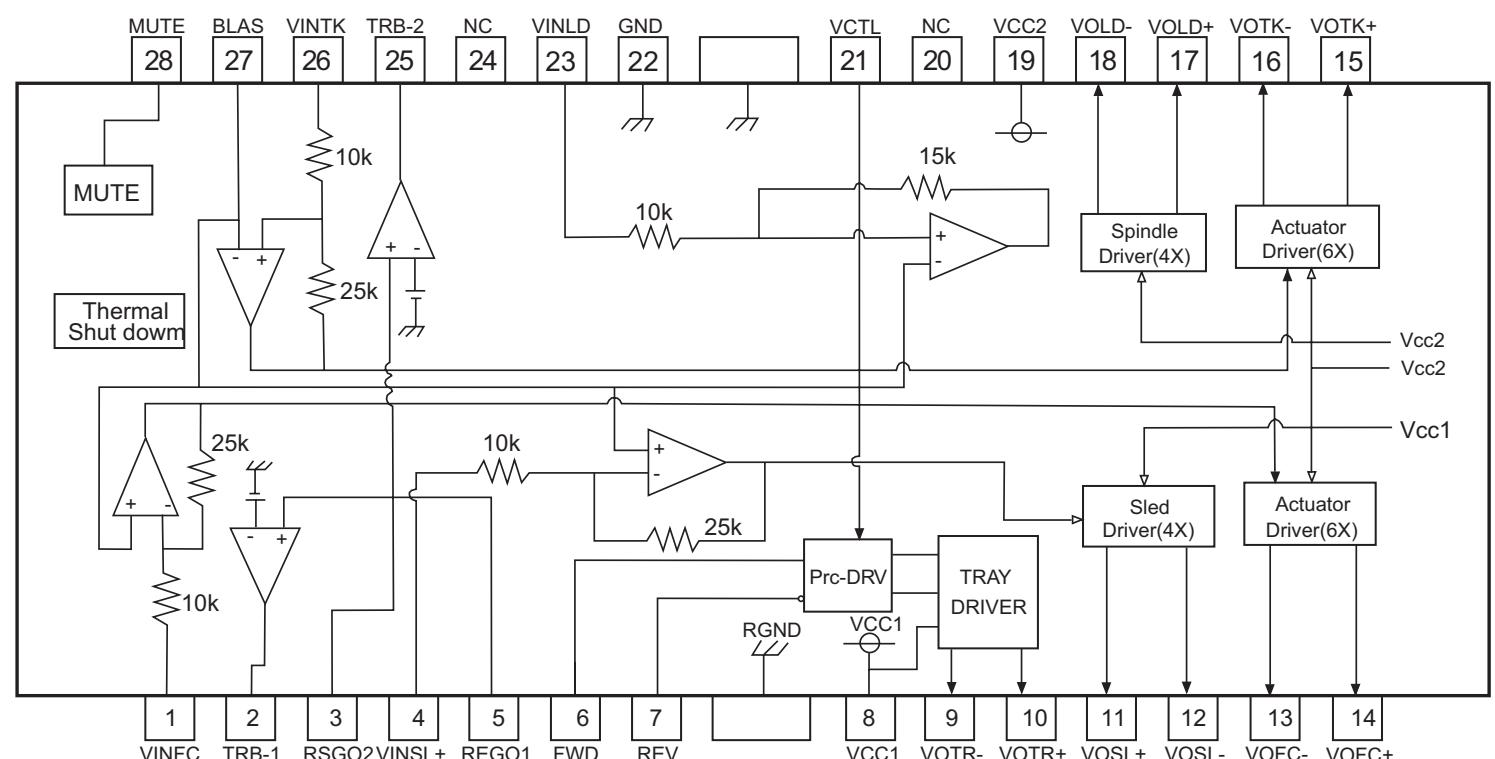
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INTERNAL IC DIAGRAM - CO4558A HOSP

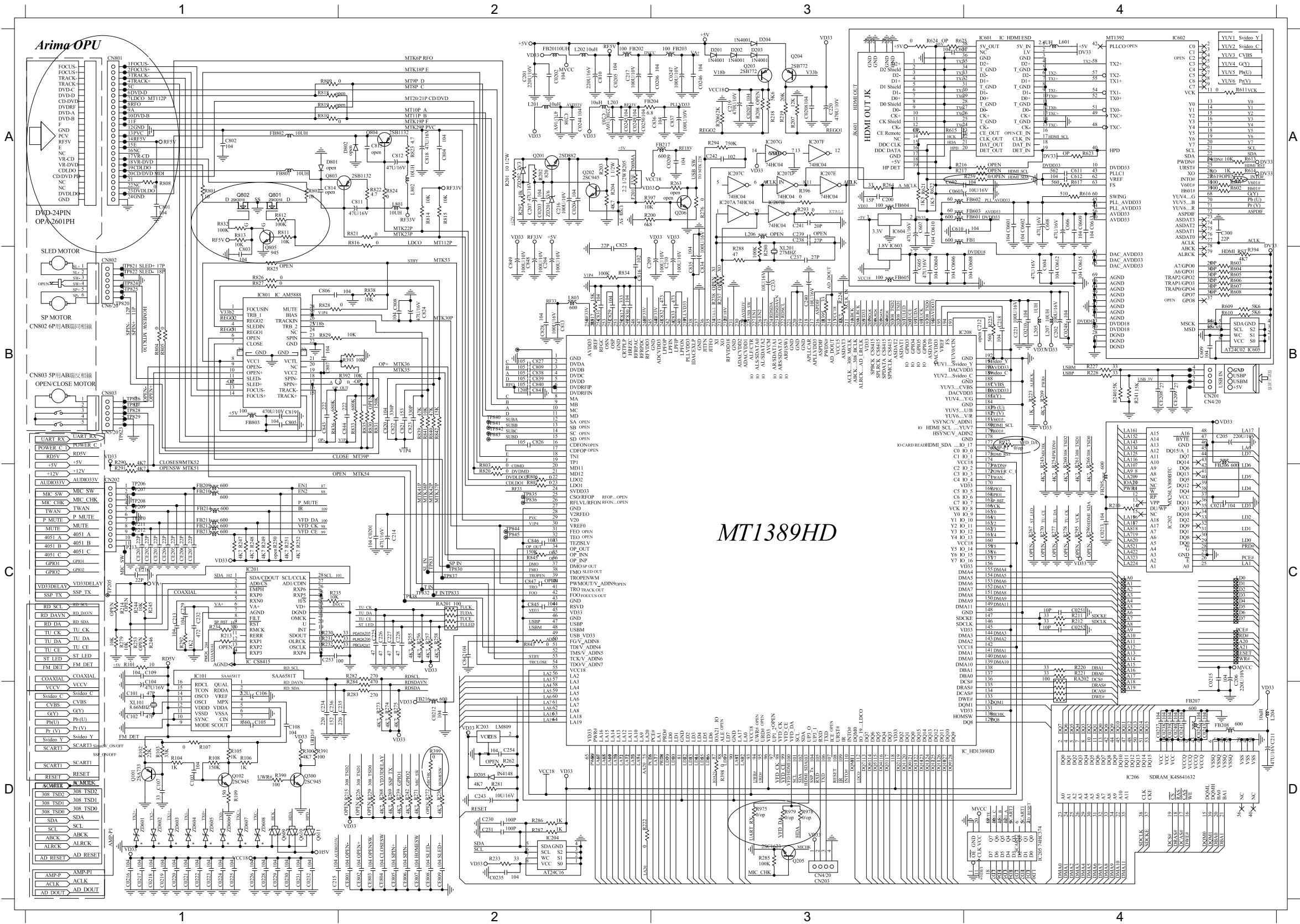


INTERNAL IC DIAGRAM - V5888S HOSP



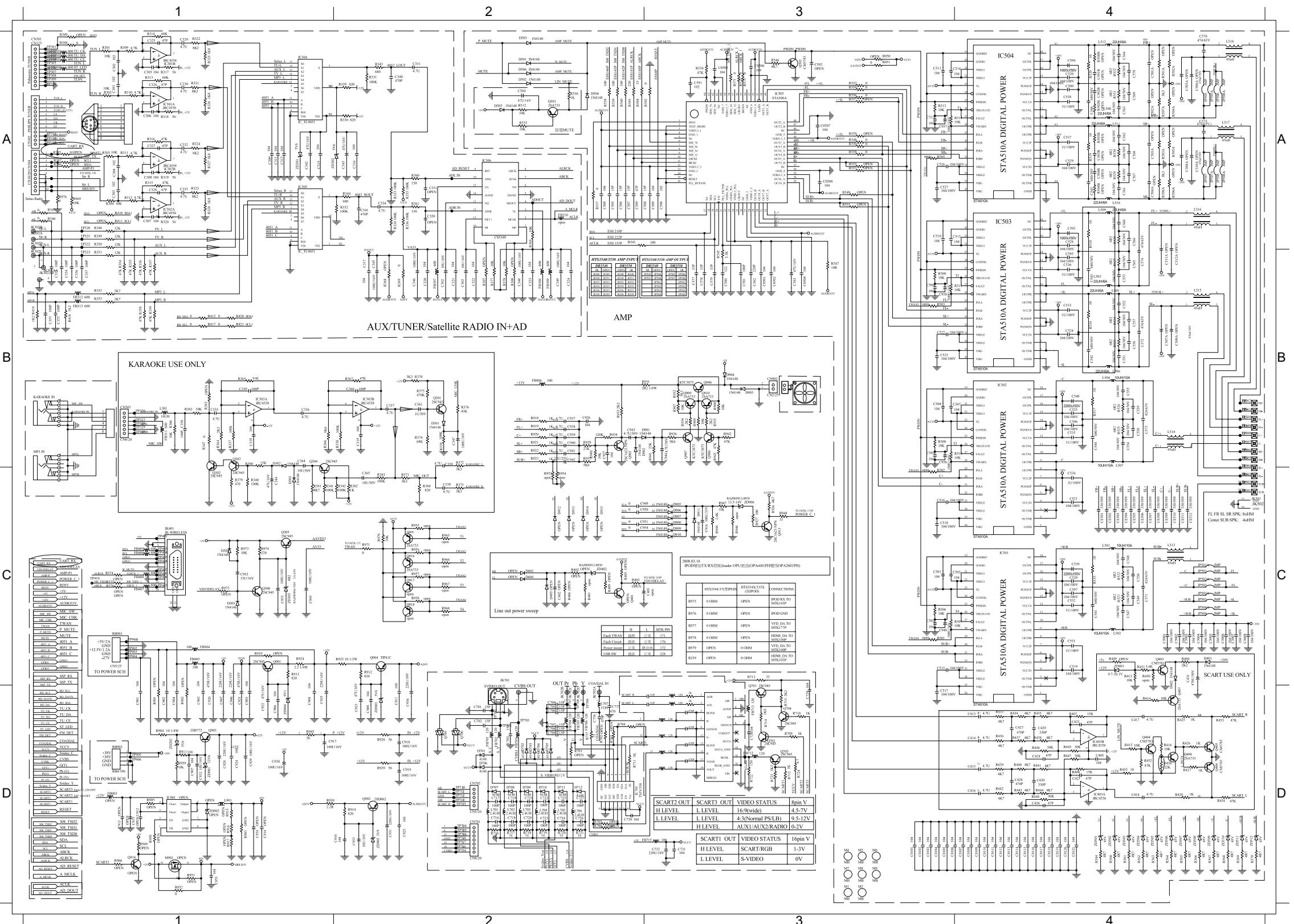
Circuit Diagram (part one)

C0201	C2	C0215	C4	C0229	D1	C0245	A2	C0608	B4	C208	A2	C225	C2	C242	A3	C610	A3	C811	A2	C826	B2	C839	B2	CE204	C1	CE808	D2	FB1	A4	FB213	C1	IC202	C4	L204	D4	Q610	D1	R206	A3	R223	B4	R241	B4	R258	C2	R283	C2	R391	D1	R613	A4	R807	C2	R822	A2	R838	B2	ZD201	A2
C0202	A2	C0216	D1	C0230	D1	C0246	A3	C0609	A4	C209	B2	C226	C2	C243	D2	C611	A4	C812	A2	C827	B2	C840	B2	CE205	C1	CE809	D2	FB201	A2	FB214	C1	IC203	D2	L205	B4	Q611	D1	R207	A3	R224	B3	R242	D2	R260	B4	R284	C2	R392	B2	R614	A4	R808	A1	R823	A2	R839	B2	ZD202	A2
C0203	A2	C0217	D1	C0231	D1	C0247	A3	C0610	A3	C210	B3	C227	C2	C253	C1	C612	A4	C813	B2	C828	B2	C841	B2	CE206	C1	CN201	B4	FB202	A2	FB216	D2	C204	D2	L207	B4	Q801	A1	R209	B4	R225	B4	R243	B4	R261	B4	R286	D2	R393	B2	R616	A4	R809	A1	R824	A2	R840	B2		
C0204	A2	C0218	D1	C0232	D1	C0248	B4	C0612	B4	C211	D4	C228	C2	C254	D2	C801	A1	C816	B2	C829	B2	C842	C2	CE207	C1	CN202	C1	FB203	A3	FB217	A3	IC205	D4	L601	A3	Q802	A1	R210	C4	R227	B4	R245	C1	R264	A3	R287	D2	R394	B4	R617	A4	R810	A1	R826	B1	R841	B2		
C0205	A2	C0219	D1	C0235	D2	C0249	A2	C0613	A4	C213	C1	C229	C1	C300	A4	C802	A1	C817	B2	C830	B2	C843	B1	CE208	B4	CN203	D3	FB204	A2	FB601	A4	IC206	D4	L801	A2	Q803	A1	R211	C4	R228	B4	R247	C1	R266	B4	R288	B3	R395	B3	R621	A3	R811	A1	R827	B1	R842	B2		
C0206	A3	C0220	D1	C0237	D4	C0250	A2	C0615	B4	C214	C2	C230	D2	C601	A3	C803	B1	C818	A2	C831	B2	C844	B2	CE209	B4	CN801	A1	FB205	C4	FB602	A4	IC207	A3	L802	A2	Q804	A2	R212	C4	R230	C1	R248	C1	R269	D2	R290	C1	R397	A2	R622	A3	R812	A1	R828	B1	R843	C2		
C0207	A3	C0221	D1	C0238	D4	C0251	C4	C201	A2	C215	D2	C231	D2	C602	A3	C804	A2	C819	B1	C832	B3	C845	C2	CE210	C1	CN802	B1	FB206	C4	FB603	A4	IC208	B2	L803	A2	Q805	A1	R216	A3	R231	C1	R249	C1	R271	D2	R291	C1	R398	D3	R624	A3	R813	A1	R829	B1	R845	C2		
C0208	A3	C0222	D1	C0239	D4	C0252	C4	C202	B4	C216	A2	C232	C1	C604	B4	C805	B1	C820	B2	C833	C3	C846	C2	CE801	D1	CN803	B1	FB207	D4	FB604	A3	IC602	A4	Q201	A2	R200	A2	R217	A3	R232	C1	R251	C1	R272	D2	R292	C1	R399	D2	R801	A1	R814	A2	R830	B2	R975	D3		
C0209	A3	C0223	D1	C0240	D4	C0601	A4	C203	A2	C217	A2	C233	B3	C605	B3	C806	B1	C821	B2	C834	B3	C848	B2	CE802	D2	D201	A3	FB208	D4	FB605	B3	IC801	B4	Q202	A2	R201	A2	R218	A3	R233	D2	R252	C1	R276	A3	R293	A3	R601	A4	R802	A1	R815	A2	R831	B2	R977	B4		
C0210	B4	C0224	D1	C0241	D4	C0602	A4	C204	B2	C218	B4	C237	B3	C606	A4	C807	B1	C822	B2	C835	B3	C849	B2	CE803	D2	D202	A3	FB209	C1	FB801	A1	JK601	A3	Q203	A3	R202	A2	R219	A3	R234	C1	R253	C1	R279	C1	R294	A3	R602	A4	R803	C2	R816	A2	R832	A1	R978	D3		
C0212	D2	C0225	D1	C0242	D4	C0603	A3	C205	B4	C219	A3	C238	A3	C607	A3	C808	B2	C823	B2	C836	A3	CE201	C1	CE804	D2	D203	A3	FB210	C1	FB802	A1	L201	A2	Q204	A3	R203	A2	R220	C4	R235	C1	R255	C2	R280	B3	R297	A2	R609	B4	R804	B1	R817	B2	R833	C2	RA201	C2		
C0213	C4	C0226	D1	C0243	D4	C0604	B3	C206	C4	C220	A3	C240	B2	C608	A4	C809	B2	C824	B2	C837	A3	CE202	C1	CE805	D2	A3	B1	L202	A2	Q300	D1	R204	A2	R221	C4	R239	D2	R256	C2	R281	D2	R300	D1	R610	B4	R805	B1	R820	C2	R834	B2	RA202	C4						
C0214	C4	C0228	D1	C0244	A2	C0606	B3	C207	A2	C221	B4	C241	A3	C609	B4	C810	A2	C825	A2	CE203	C1	CE806	D2	D205	C1	IC201	C1	L203	A2	Q609	D1	R205	A2	R222	D2	R240	B4	R206	C2	R282	C1	R390	D1	R611	A4	R806	C2	R821	A2	R836	B1	XL201	B3						



Circuit Diagram (part two)

C0101 D3 C0119 D4 C308 A1 C330 A1 C356 B1 C505
 C0102 D3 C0120 D4 C309 A1 C331 A2 C357 B1 C506
 C0103 D3 C0121 D4 C311 A1 C332 A2 C352 B2 C507
 C0104 D3 C0501 B3 C313 A1 C333 A1 C363 B2 C508
 C0105 D3 C0502 B3 C315 A1 C334 A2 C509
 C0106 D3 C0504 B3 C316 A2 C340 A2 C5001 C4 C510
 C0107 D4 C0505 A3 C317 B2 C341 A2 C5002 C4 C511
 C0109 D4 C0503 A1 C320 B2 C342 A1 C5003 C4 C512
 C0110 D4 C0507 A3 C321 B2 C343 A2 C5004 C4 C513
 C0111 D4 C0508 A3 C322 B2 C345 B2 C5005 C4 C514
 C0112 D4 C301 A1 C323 B2 C346 B2 C5006 C4 C515
 C0113 D4 C302 A1 C324 B2 C348 B2 C5007 C4 C516
 C0114 D4 C303 A1 C325 A1 C349 B2 C5008 C4 C517
 C0115 D4 C304 A1 C326 A1 C350 B2 C501 A1 C518
 C0116 D4 C305 A1 C327 A1 C353 B2 C502 C3 C519
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 C0118 D4 C307 A1 C329 A1 C355 B1 C504 B3 C521

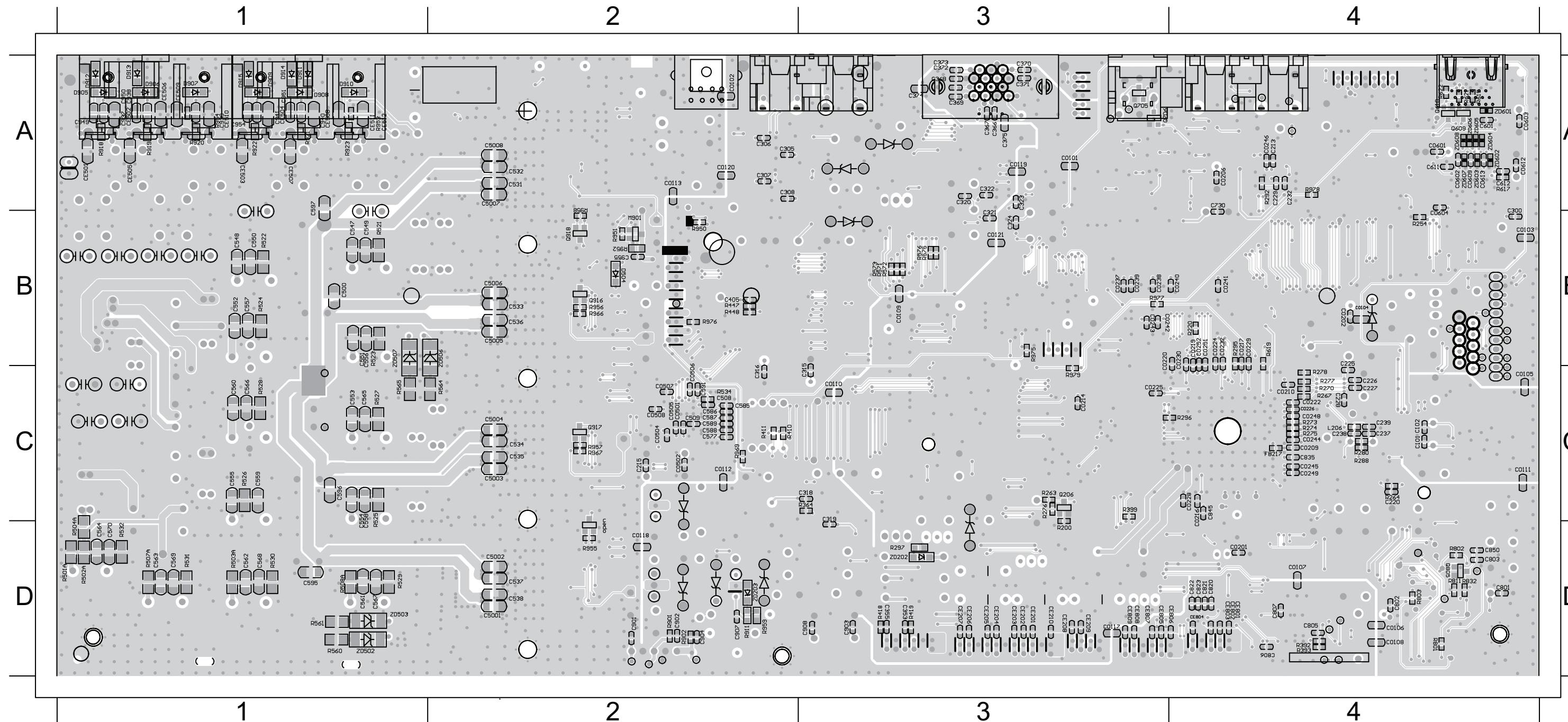


PCB Layout Top View

C0114	D3	C204	D1	C302	A2	C352	A2	C522	B3	C580	C3	C716	B2	C818	D1	C905	B1	FB203	A1	FB604	B1	IC304	B2	L207	B1	L705	B1	Q906	A3	R224	C1	R258	C1	R310	A3	R335	B2	R391	C2	R540	C3	R706	B1	R824	D1	R925	D3	R973	A2				
C0115	A3	C205	D2	C303	A3	C354	A3	C523	B3	C581	C3	C717	B1	C819	D1	C906	B1	C943	B3	FB204	C1	FB605	B1	IC305	B2	L501	B4	L706	B2	Q907	A3	R225	C1	R260	B2	R311	A2	R336	B2	R394	B1	R541	C3	R716	B2	R826	D1	R926	A2	R974	B2		
C0116	D3	C206	C2	C304	A3	C356	A2	C524	B3	C582	C3	C718	B2	C824	D1	C909	D3	C944	A3	D305	B2	FB205	C2	FB701	B1	IC306	A2	L502	B4	L707	A1	Q908	A3	R227	D2	D261	B2	R312	A3	R343	A2	R395	B1	R542	C3	R717	B2	R827	D1	R927	A2	R201	C1
C0203	C2	C207	C2	C309	C2	C357	A2	C525	C3	C583	C3	C719	B1	C825	D1	C910	D3	FB206	C2	FB703	B1	IC501	A3	L503	C4	L801	D1	Q909	A3	R228	D2	D266	B2	R313	A3	R344	A2	R397	D2	D254	C3	R718	B2	R828	B3	R928	B3	R202	B2				
C0204	D2	C208	C1	C311	D3	C362	B2	C526	D3	C584	B3	C720	B2	C826	D1	C911	D3	C947	B1	D505	B3	FB207	B2	FB704	A1	IC503	B3	L504	D4	L802	D1	Q910	A3	R230	A1	R269	B2	R314	A2	R345	A3	R398	C2	R545	C3	R719	B2	R829	D1	R929	B3	RB901	D3
C0205	D1	C209	B2	C313	B2	C363	A2	C527	D3	C590	C3	C721	B1	C827	D1	C916	A2	C948	B3	D506	B3	FB208	B2	FB704	A1	IC504	C3	L505	C4	L803	C1	Q913	A2	R231	A1	R271	C2	R315	A3	R346	A2	R504	C3	R720	B2	R830	D1	R930	D3	RB902	C3		
C0207	D2	C210	B2	C317	A2	C501	A3	C529	D3	C594	D4	C723	B2	C829	D1	C918	B3	C953	B2	D702	B2	FB210	D2	FB706	A1	IC505	C3	L507	D4	Q202	D2	R201	D2	R233	B2	R279	B1	R317	A2	R349	A3	R507	A3	R548	B3	R737	A1	R833	D1	R931	A3	ZD201	C1
C0208	D2	C211	B2	C325	A2	C502	A3	C529	D3	C602	A1	C724	B2	C830	D1	C919	B3	C956	C3	D703	B1	FB211	D2	FB715	A1	IC602	A1	L508	D4	Q203	D2	R202	C2	R234	A1	R281	B2	R318	A3	R350	A2	R508	C3	R550	B3	R804	D2	R834	D1	R933	B3	ZD301	B3
C0212	D1	C214	D1	C326	A3	C503	A3	C530	D3	C602	A1	C724	B2	C830	D1	C919	B3	C956	C3	D703	B1	FB211	D2	FB715	A1	IC602	A1	L508	D4	Q203	D2	R202	C2	R234	B2	R279	B1	R317	A2	R349	A3	R507	A3	R548	B3	R737	A1	R833	D1	R932	A3	ZD201	D2
C0213	C2	C216	C2	C327	A2	C504	C4	C539	B4	C604	A1	C725	B1	C831	D1	C920	D2	C957	D3	D704	B1	FB209	D2	FB705	A1	IC503	B3	L505	C4	L803	C1	Q913	A2	R231	A1	R271	C2	R316	A3	R348	A2	R504	C3	R546	C3	R720	B2	R830	D1	R930	D3	RB902	C3
C0215	C2	C217	A1	C328	A3	C505	C3	C540	C4	C605	B1	C726	B2	C832	D1	C921	B3	C958	B3	D705	B1	FB213	D2	FB802	D1	JK302	A3	L510	C4	Q300	C2	R204	C2	R239	B2	R283	C1	R320	A3	R352	D2	R510	C3	R554	B3	R806	D1	R838	D1	R935	A3	ZD303	B2
C0218	C2	C218	C1	C329	A2	C506	B3	C541	A3	C606	A1	C727	B2	C833	D1	C922	B1	CN201	D2	D706	B2	FB214	D2	FB803	D1	JK501	A4	L511	C4	Q305	A2	R205	D2	R240	B1	R284	C1	R321	A3	R353	D2	R511	B3	R556	D3	R807	C1	R839	A3	ZD901	D3		
C0221	D2	C219	D2	C330	A3	C507	C3	C542	B3	C607	A1	C731	A1	C834	D1	C923	D3	CN202	D2	D707	B1	FB216	D1	JK904	D3	JK502	A4	L512	D4	Q306	B2	R206	D2	R241	B2	R286	B2	R322	A3	R354	A2	R512	B3	R558	D3	R808	D1	R937	A3	ZD903	D3		
C0223	C2	C220	D2	C331	A2	C510	B3	C543	B3	C608	A1	C732	B1	C836	D1	C924	D3	CN203	B2	D708	B1	FB301	C1	FB905	D3	JK601	A1	L513	A4	Q501	B3	R207	D2	R242	B2	R287	B2	R323	B3	R355	A3	R513	D3	R601	A1	R809	D1	R841	A3	ZD904	B1		
C0231	C2	C221	B1	C332	B2	C511	C4	C544	B3	C609	A1	C736	A1	C837	D1	C925	C3	CN301	B1	D709	B1	FB302	C1	FB906	B3	JK701	A2	L514	A4	Q502	C3	R209	C2	R243	B2	R290	D1	R324	B3	R356	A2	R514	D3	R602	A1	R810	D1	R842	D1	R939	A3	ZD905	C3
C0235	B2	C230	B2	C333	B3	C512	D3	C545	D3	C610	B1	C737	A1	C838	D1	C926	A3	CN303	A2	D710	B2	FB303	C1	IC201	A1	JK702	A1	L515	A4	Q611	A1	R210	C2	R245	B1	R291	D1	R325	A3	R515	A3	R609	A1	R812	D1	R843	A3	ZD906	A2				
C0247	A1	C231	B2	C334	A2	C513	B3	C546	D3	C701	B1	C804	D1	C839	D1	C927	A3	CN304	B3	D711	B1	FB304	C2	IC202	C2	JP505	C4	L515	A4	Q801	D1	R211	B1	R247	C2	R293	C1	R326	A3	R358	D2	R516	B3	R610	A1	R813	D1	R845	A3	ZD91	A3		
C0250	D1	C233	C1	C340	A2	C514	D3	C571	A4	C702	B1	C808	D1	C840	D1	C928	D3	CN801	D1	D712	B2	FB307	B2	IC203	B2	JP505AC4	C4	L516	A4	Q802	D1	R212	B1	R248	C2	R294	D1	R327	B3	R359	D2	R517	C3	R611	B1	R814	D1	R904	A3	ZR942	A3		
C0606	B1	C240	C1	C341	A2	C515	A3	C572	A4	C703	B1	C809	D1	C841	D1	C929	D3	CN802	D2	D901	A3	FB308	A2	IC204	B2	JP507AB4	C4	L517	A4	Q803	C1	R216	A1	R249	C2	R300	C2	R328	B3	R360	B2	R518	B3	R613	B1	R815	D1	R907	A3	ZR943	A3		
C0610	A1	C242	D1	C343	C3	C517	A3	C574	D3	C705	A1	C811	C1	C843	D1	C931	C3	CN902	A4	D903	A3	FB312	D2	IC206	B1	L201	C1	L601	A1	Q901	B1	R218	D2	R252	B2	R302	A2	R330	C2	R369	B2	R520	D3	R616	A1	R817	D1	R909	A3	R945	B3		
C0615	A1	C243	B2	C345	B2	C518	C3	C575	B4	C706	A1	C812	D1</																																								

PCB Layout Bottom View

C0101 A3	C0118 D2	C0220 B3	C0241 B4	C0505 C2	C220 C4	C308 A2	C5003 C2	C536 B2	C557 B1	C570 D1	C612 A4	C845 C4	C950 A1	CE210 D3	CE801 D4	D909 A1	R280 C4	R525 C1	R622 A4	R952 B2
C0102 A2	C0119 A3	C0222 C4	C0242 B3	C0506 C2	C225 B4	C315 C3	C5004 C2	C537 D2	C558 C1	C577 C2	C730 A4	C901 D2	C951 A1	CE501 A1	CE802 D4	D910 A1	R288 C4	R526 C1	R801 D4	R959 D2
C0103 B4	C0120 A2	C0224 B4	C0243 B3	C0507 C2	C226 C4	C316 C2	C5005 B2	C538 D2	C559 C1	C585 C2	C801 D4	C902 D2	C954 A1	CE502 A1	CE803 D4	D911 A1	R292 A4	R527 C1	R802 D4	R969 C2
C0104 B4	C0121 B3	C0225 C3	C0244 C4	C0508 C2	C227 C4	C320 A3	C5006 B2	C547 B1	C560 C1	C586 C2	C802 D4	C903 D3	C955 B2	CE503 A1	CE804 D4	FB217 C4	R297 D3	R528 C1	R803 D4	R975 B3
C0105 C4	C0201 D4	C0226 C4	C0245 C4	C0601 A4	C228 C4	C321 B3	C5007 A2	C548 B1	C561 D1	C587 C2	C803 D4	C904 D2	CE201 D2	CE504 A1	CE805 D3	Q609 A4	R392 D4	R529 D1	R811 D4	R976 B2
C0106 D4	C0202 B4	C0228 C4	C0246 A4	C0602 A1	C229 A4	C322 A3	C5008 A2	C549 B1	C562 D1	C588 C2	C805 D4	C907 D2	CE202 D3	CE505 A1	CE806 D3	Q610 A4	R393 D4	R530 D1	R832 D4	R977 B3
C0107 D4	C0206 A4	C0229 B4	C0248 C4	C0603 A4	C232 A4	C323 A3	C5008 C2	C550 B1	C563 D1	C589 C2	C806 D4	C908 D3	CE203 D3	CE506 A1	CE808 D3	Q705 A3	R399 C3	R531 D1	R911 D2	R978 A4
C0109 B3	C0209 C4	C0230 B4	C0249 C4	C0604 A4	C237 C4	C324 B3	C5009 C2	C551 B1	C564 D1	C591 C2	C807 D4	C937 A1	CE204 D3	CE507 A1	CE809 D3	Q706 A3	R418 D3	R532 D1	R918 A1	ZD202 D3
C0110 C3	C0210 C4	C0232 B4	C0251 B4	C0609 A4	C238 C4	C353 D3	C531 A2	C552 B1	C565 C1	C595 D1	C820 D4	C938 A1	CE205 D3	CE508 A1	D504 B2	Q805 D4	R419 D3	R534 C2	R919 A1	ZD203 D2
C0111 C4	C0214 B3	C0237 B3	C0252 B4	C0612 A4	C300 B4	C355 D3	C532 A2	C553 C1	C566 C1	C596 C1	C821 D4	C939 A1	CE206 D3	CE509 A1	D905 A1	R200 C3	R521 B1	R571 B3	R920 A1	
C0112 C2	C0216 C4	C0238 B3	C0501 C2	C0613 A4	C305 A2	C500 B1	C533 B2	C554 C1	C567 D1	C597 A1	C822 D4	C940 A1	CE207 D3	CE510 A1	D906 A1	R220 B4	R522 B1	R572 B3	R921 A1	
C0113 A2	C0217 B4	C0239 B3	C0502 C2	C213 A4	C306 A3	C5001 D2	C534 C2	C555 C1	C568 D1	C601 A4	C823 D4	C941 A1	CE208 D3	CE511 A1	D907 A1	R264 C4	R523 B1	R573 B3	R922 A1	
C0117 D3	C0219 B4	C0240 B4	C0504 C2	C215 C2	C307 A2	C5002 D2	C535 C2	C556 B1	C569 D1	C611 A4	C835 C4	C949 A1	CE209 D3	CE512 A1	D908 A1	R276 C3	R524 B1	R621 A4	R923 A1	



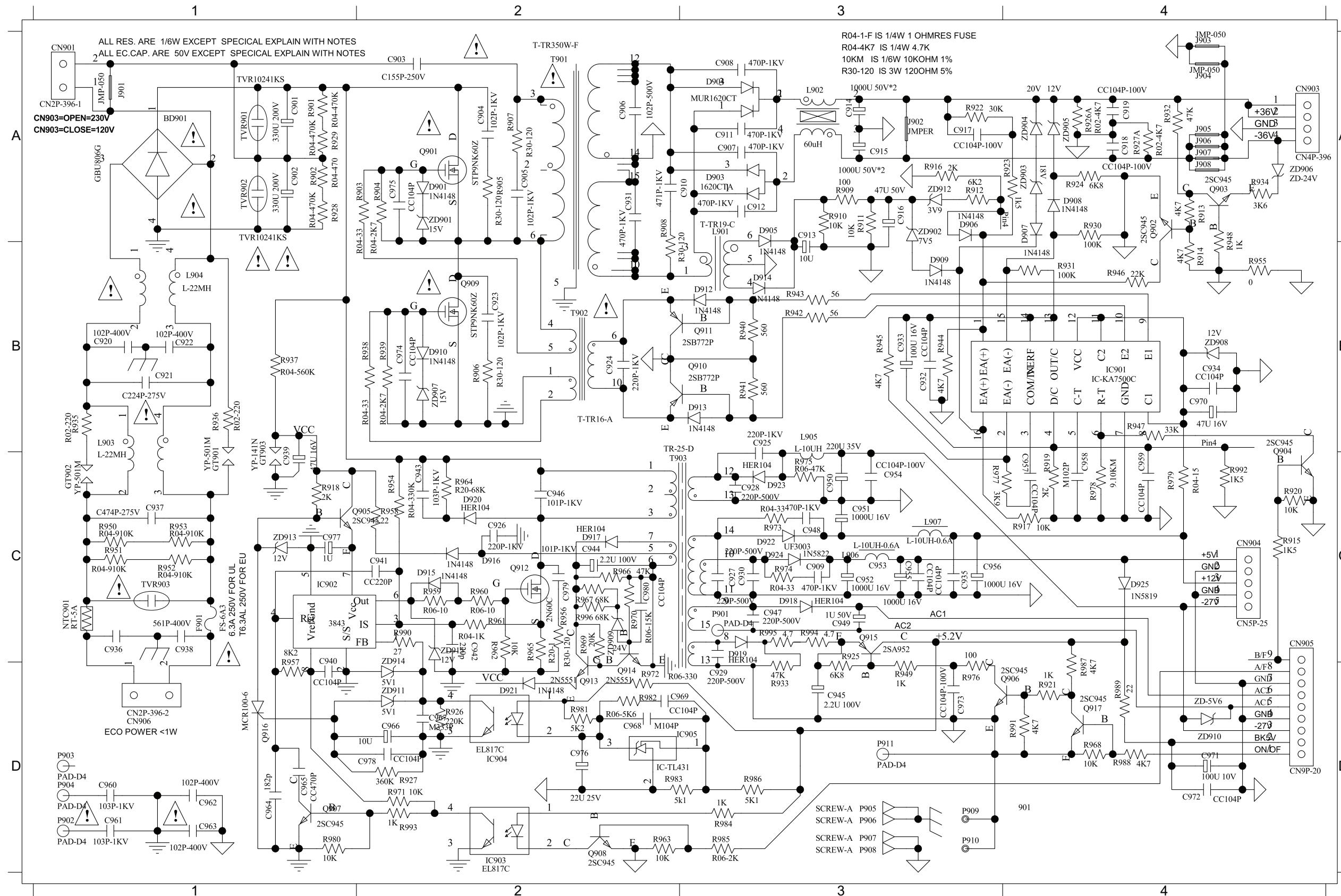
POWER BOARD

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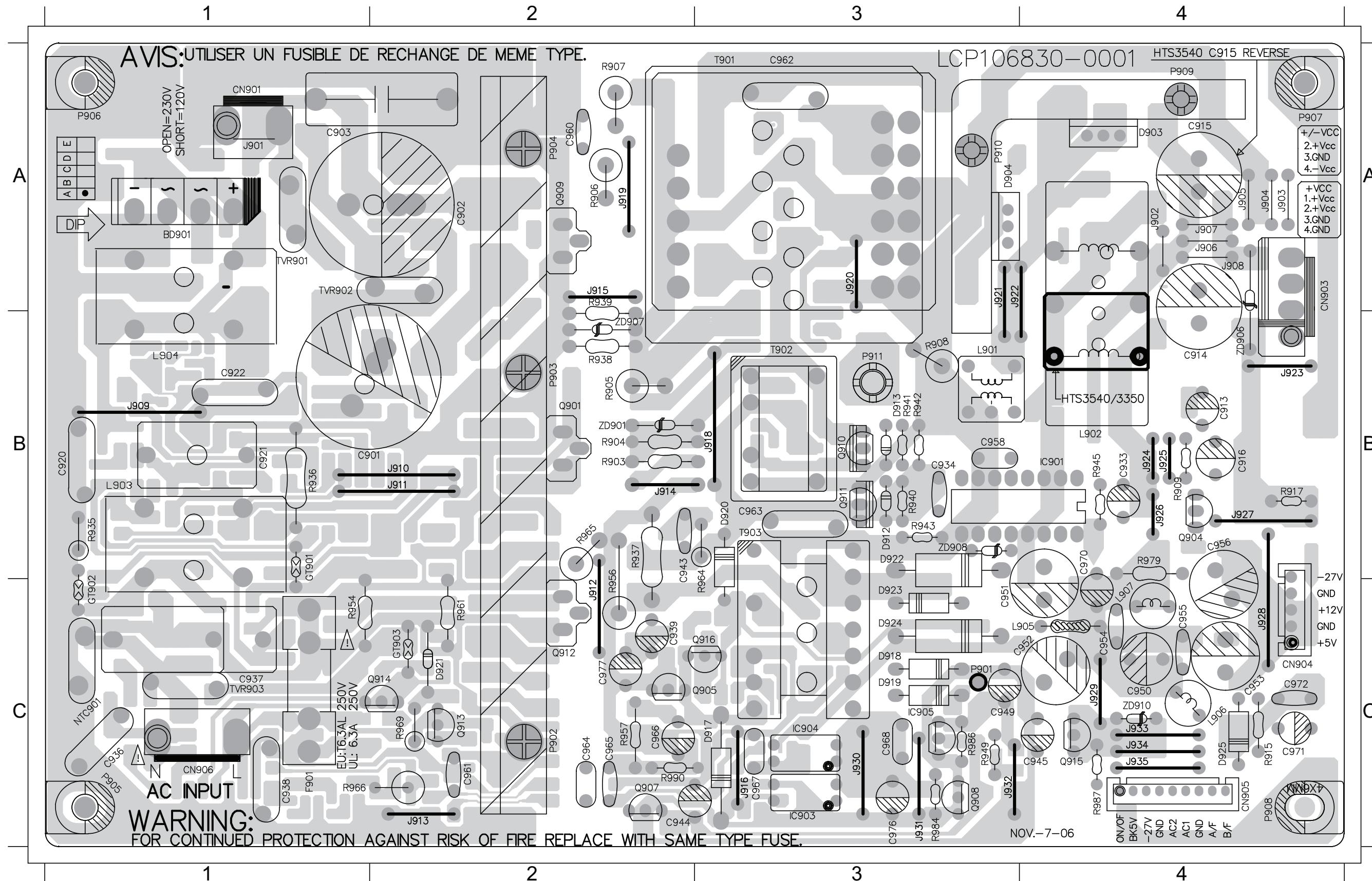
CIRCUIT DIAGRAM

BD901	A1 C913	A3 C924	B2 C934	B4 C945	D3 C956	C3 C966	D2 C978	D2 D908	A4 D919	C3 IC901	B4 L904	B1 Q908	D2 R901	A1 R912	A3 R924	A4 R936	B1 R947	B4 R959	C2 R969	C2 R979	C4 R989	D4 TVR901	A1 ZD909	C2
C901	A1 C914	A3 C925	B3 C935	C3 C946	C2 C957	C4 C967	D2 C980	C2 D909	B3 D920	C2 IC902	C1 L905	B3 Q909	B2 R902	A1 R915	C4 R925	C3 R937	B1 R949	D3 R960	C2 R970	C2 R980	D1 R990	C2 TVR902	A1 ZD910	D4
C902	A1 C915	A3 C926	C2 C937	C1 C948	C3 C958	C4 C968	D2 CN903	A4 D910	B2 D921	D2 IC903	D2 L906	C3 Q910	B3 R903	A2 R916	A3 R926A	D2 R938	B2 R950	C1 R961	C2 R971	D2 R981	C2 R980	D4 TVR902	A1 ZD911	D2
C903	A2 C916	A3 C927	C3 C938	C1 C949	C3 C959	C4 C969	D2 CN904	C4 D912	B3 D922	C3 IC904	D2 L907	C3 Q911	B3 R904	A2 R917	C4 R927	D2 R939	B2 R951	C1 R962	C2 R972	D2 R982	D2 R993	C3 ZD902	A3 ZD913	C1
C904	A2 C917	A3 C928	C3 C939	C1 C950	C3 C960	D1 C970	B4 CN905	C4 D913	B3 D923	C3 IC905	D2 NTC901	C1 Q912	C2 R905	A2 R918	C1 R928	A1 R940	B3 R952	C1 R963	D2 R973	C3 R983	D2 R994	C3 ZD902	A3 ZD913	C1
C906	A2 C919	A4 C929	D3 C940	D1 C951	C3 C961	D1 C971	D4 CN906	D1 D914	B3 D924	C3 J903	A4 Q901	A2 Q913	D2 R906	B2 R919	C4 R929	A1 R941	B3 R953	C1 R964	C2 R974	C3 R984	D3 R995	C3 ZD903	A4 ZD914	D2
C908	A3 C920	B1 C930	C3 C941	C2 C952	C3 C962	D1 C972	D4 D901	A2 D915	C2 D925	C4 J904	A4 Q904	C4 Q914	D2 R908	A2 R920	C4 R930	A4 R942	B3 R954	C2 R965	C3 R985	D3 R996	C2 ZD904	A4		
C909	C3 C921	B1 C931	A2 C942	C2 C953	C3 C963	D1 C973	D3 D904	A3 D916	C2 F901	C1 L901	B3 Q905	C1 Q915	C3 R909	A3 R921	D4 R931	B4 R943	B3 R955	B4 R966	C2 R976	D3 T901	A2 ZD905	A4		
C910	A3 C922	B1 C932	B3 C943	C2 C954	C3 C964	D1 C976	D2 D905	A3 D917	C2 GT901	C1 L902	A3 Q906	D1 R910	A3 R922	D3 R933	D1 R944	B3 R957	D1 R967	C3 R987	D4 T902	B2 ZD907	B2			
C911	A3 C923	B2 C933	B3 C944	C2 C955	C3 C965	D1 C977	C1 D907	A4 D918	C3 GT902	C1 L903	B1 Q907	D1 Q917	D4 R911	A3 R923	A4 R935	B1 R945	B3 R958	B2 R968	C4 R988	D4 T903	C2 ZD908	B4		



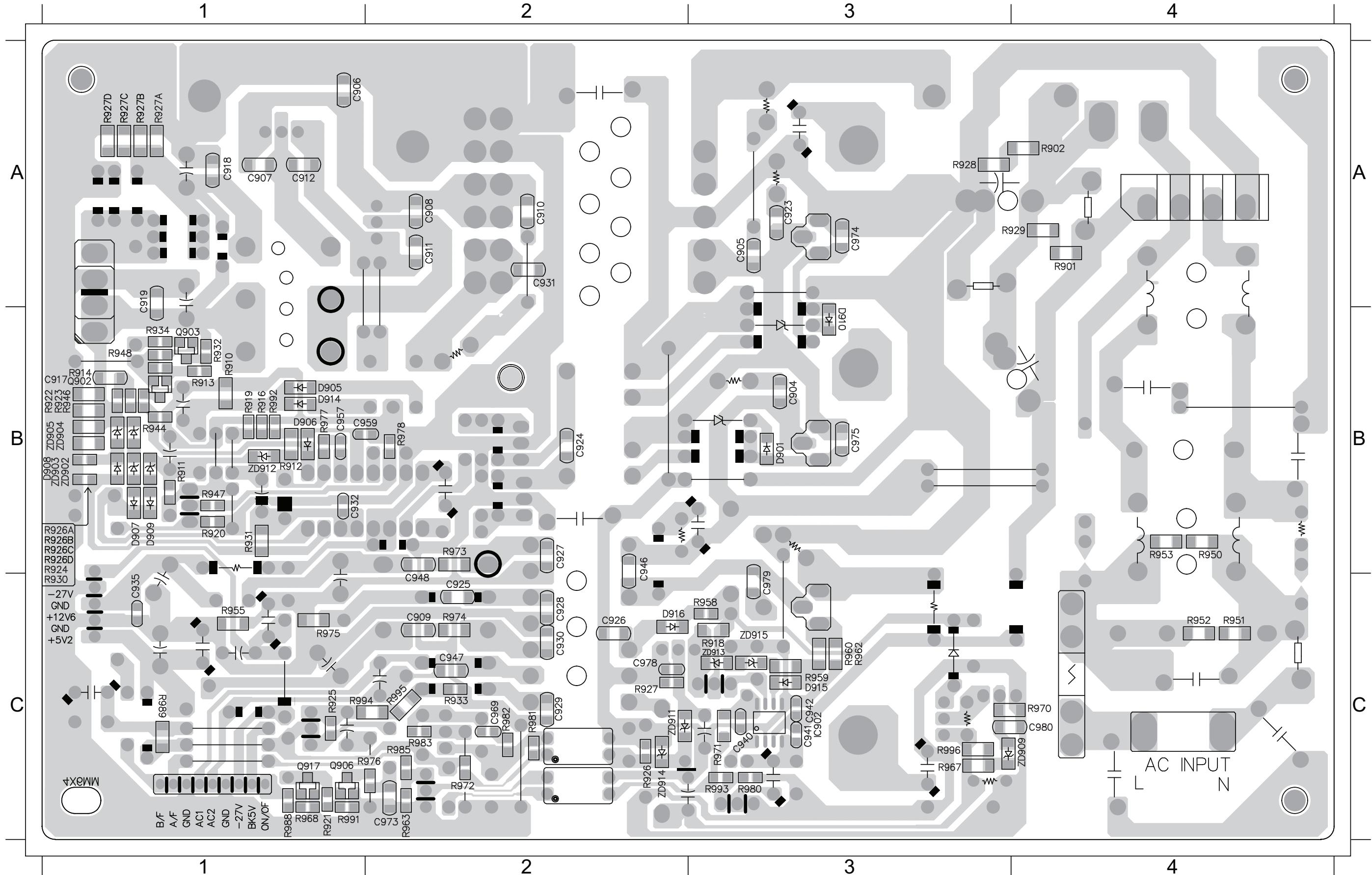
PCB LAYOUT - TOP VIEW

BD901	A1	C920	B1	C943	B2	C954	C4	C964	C2	C976	C3	D913	B3	D924	C3	IC905	C3	J912	C2	J922	A3	J930	C3	L903	B1	Q905	C3	Q914	C2	R909	B4	R940	B3	R961	C2	R987	C4	ZD907	B2
C901	B1	C921	B1	C944	C2	C955	C4	C965	C2	C977	C2	D917	C3	D925	C4	J901	A1	J913	C2	J923	B4	J931	C3	L904	B1	Q907	C2	Q915	C4	R915	C4	R941	B3	R964	B3	R990	C2	ZD908	B3
C902	A2	C922	B1	C945	C4	C956	B4	C966	C2	CN903	A4	D918	C3	F901	C1	J902	A4	J914	B2	J924	B4	J932	C3	L905	C4	Q908	C3	Q916	C3	R917	B4	R942	B3	R965	B2	T901	A3	ZD910	C4
C903	A1	C933	B4	C949	C3	C958	B3	C967	C3	CN904	C4	D919	C3	GT901	B1	J903	A4	J915	A2	J925	B4	J933	C4	L906	C4	Q909	A2	R903	B2	R935	B1	R943	B3	R966	C1	T902	B3		
C913	B4	C934	B3	C950	C4	C960	A2	C968	C3	CN905	C4	D920	B3	GT902	C1	J904	A4	J916	C3	J926	B4	J934	C4	L907	C4	Q910	B3	R904	B2	R936	B1	R945	B4	R969	C2	T903	B3		
C914	B4	C937	C1	C951	C3	C961	C2	C970	B4	CN906	C1	D921	C2	IC901	B4	J909	B1	J918	B3	J927	B4	J935	C4	NTC901	C1	Q911	B3	R905	B2	R937	B2	R949	C3	R979	B4	TVR901	A1		
C915	A4	C938	C1	C952	C3	C962	A3	C971	C4	D904	A3	D922	B3	IC903	C3	J910	B2	J920	A3	J928	C4	L901	B3	Q901	B2	Q912	C2	R906	A2	R938	B2	R954	C1	R984	C3	TVR902	A1		
C916	B4	C939	C2	C953	C4	C963	B3	C972	C4	D912	B3	D923	C3	IC904	C3	J911	B2	J921	A3	J929	C4	L902	B4	Q904	B4	Q913	C2	R908	B3	R939	A2	R957	C2	R986	C3	ZD901	B2		



PCB LAYOUT - BOTTOM VIEW

C904	B3	C917	B1	C927	B2	C935	C1	C957	B1	D901	B3	D915	C3	R902	A4	R919	B1	R925	C1	R928	A3	R947	B1	R958	C3	R968	C1	R975	C1	R982	C2	R993	C3	ZD902	B1	ZD911	C2
C906	A1	C919	A1	C928	C2	C940	C3	C959	B1	D905	B1	D916	C2	R910	B1	R920	B1	R926A	C2	R929	A4	R950	B4	R959	C2	R970	C4	R976	C1	R983	C2	R994	C1	ZD903	B1	ZD912	B1
C908	A2	C923	A3	C929	C2	C941	C3	C969	C2	D907	B1	IC902	C3	R911	B1	R921	C1	R926B	B1	R930	B1	R951	C4	R960	C3	R971	C3	R977	B1	R985	C2	R995	C2	ZD904	B1	ZD913	C3
C909	C2	C924	B2	C930	C2	C942	C3	C973	C2	D908	B1	Q906	C1	R912	B1	R922	B1	R926CB	B1	R931	B1	R952	C4	R962	C3	R972	C2	R978	B2	R988	C1	R996	C3	ZD905	B1	ZD914	C2
C910	A2	C925	C2	C931	A2	C946	B2	C978	C2	D909	B1	Q917	C1	R916	B1	R923	B1	R926DB	B1	R933	C2	R953	B4	R963	C2	R973	B2	R980	C3	R989	C1	TVR901	A4	ZD909	C4		
C911	A2	C926	C2	C932	B1	C948	C2	C980	C4	D914	B1	R901	A4	R918	C3	R924	B1	R927	C1	R944	B1	R955	C1	R967	C3	R974	C2	R981	C2	TVR902	A4	ZD910	B3				



IPOD BOARD

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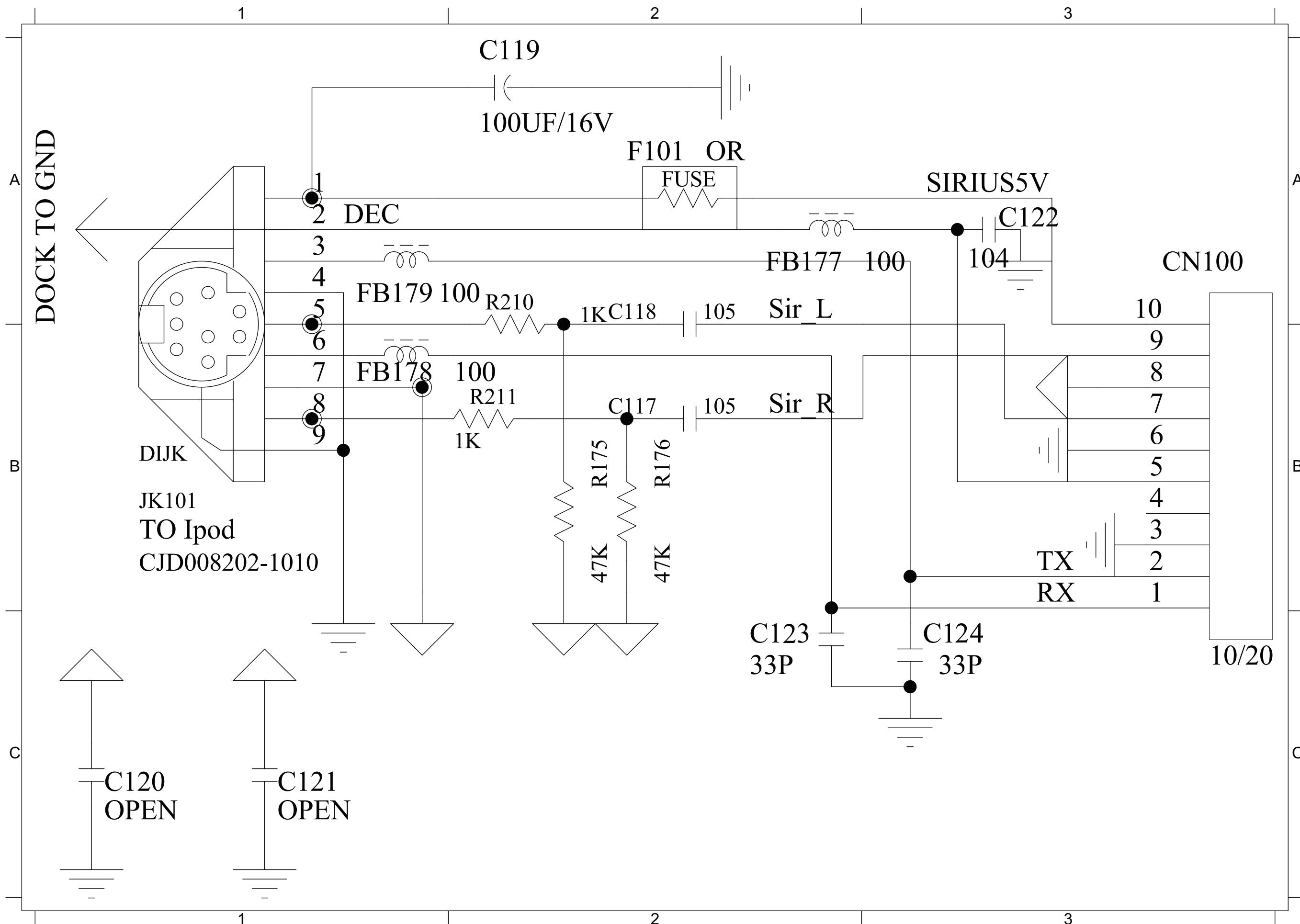
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PCB Layout Bottom View	8-3

CIRCUIT DIAGRAM

C117 B2 C118 A2 C119 A2 C122 A3 C123 C2 C124 C3 CN100 A3 F101 A2 FB177A2 FB178B1 FB179A1 JK101 C1 R175 B2 R176 B2 R210 A2 R211 B2

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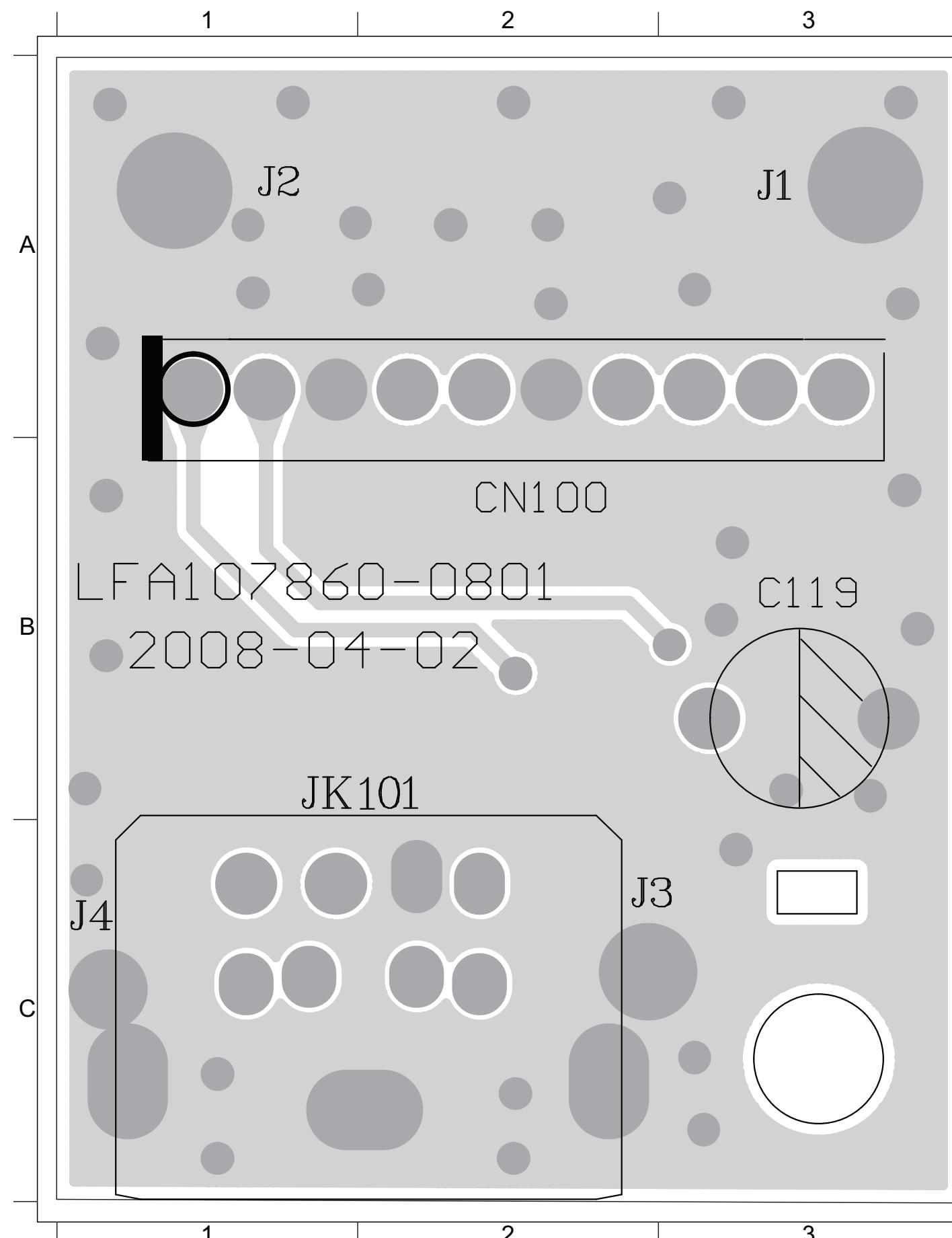
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PCB LAYOUT - TOP VIEW

C119 B3 CN100 B2

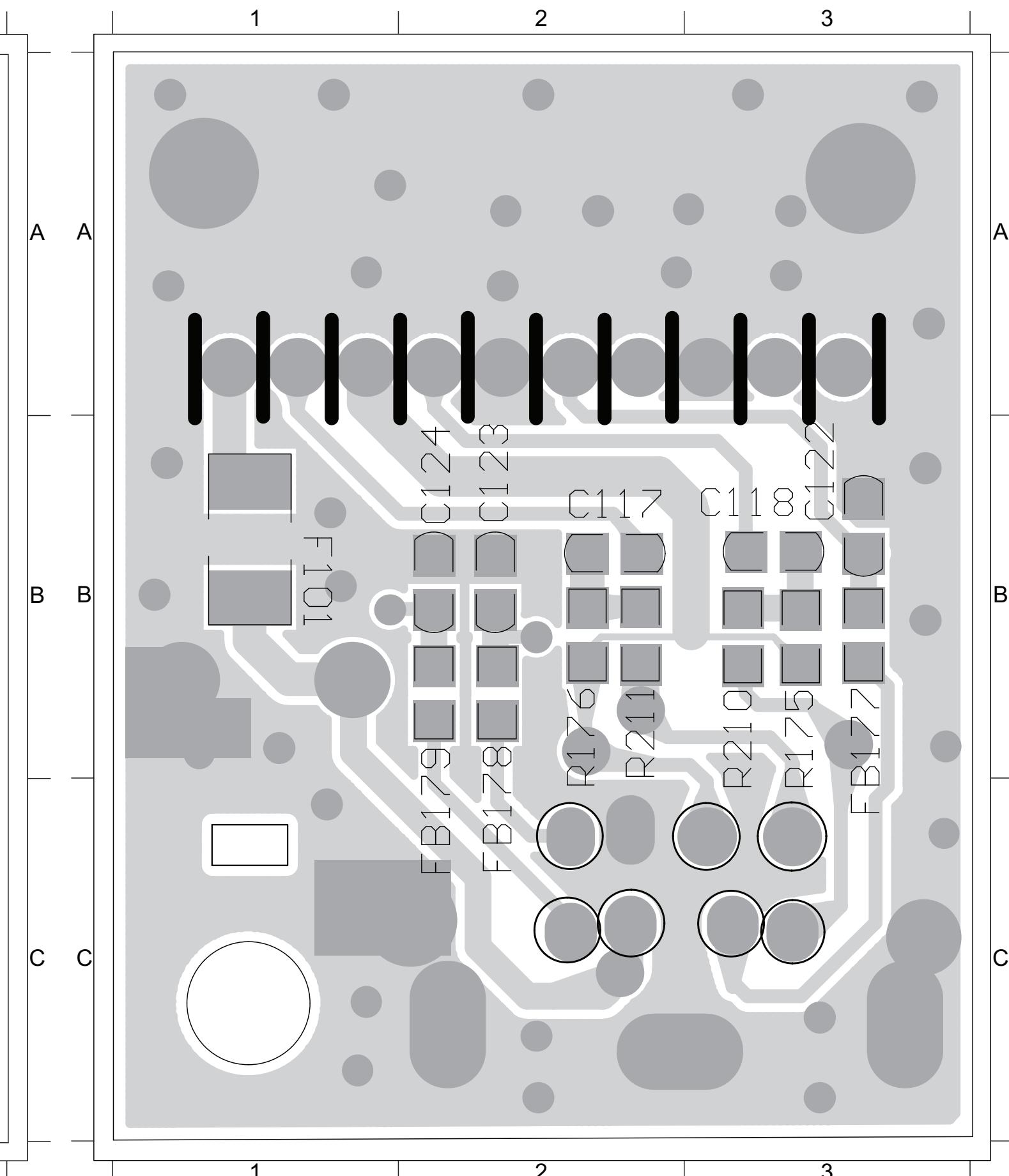
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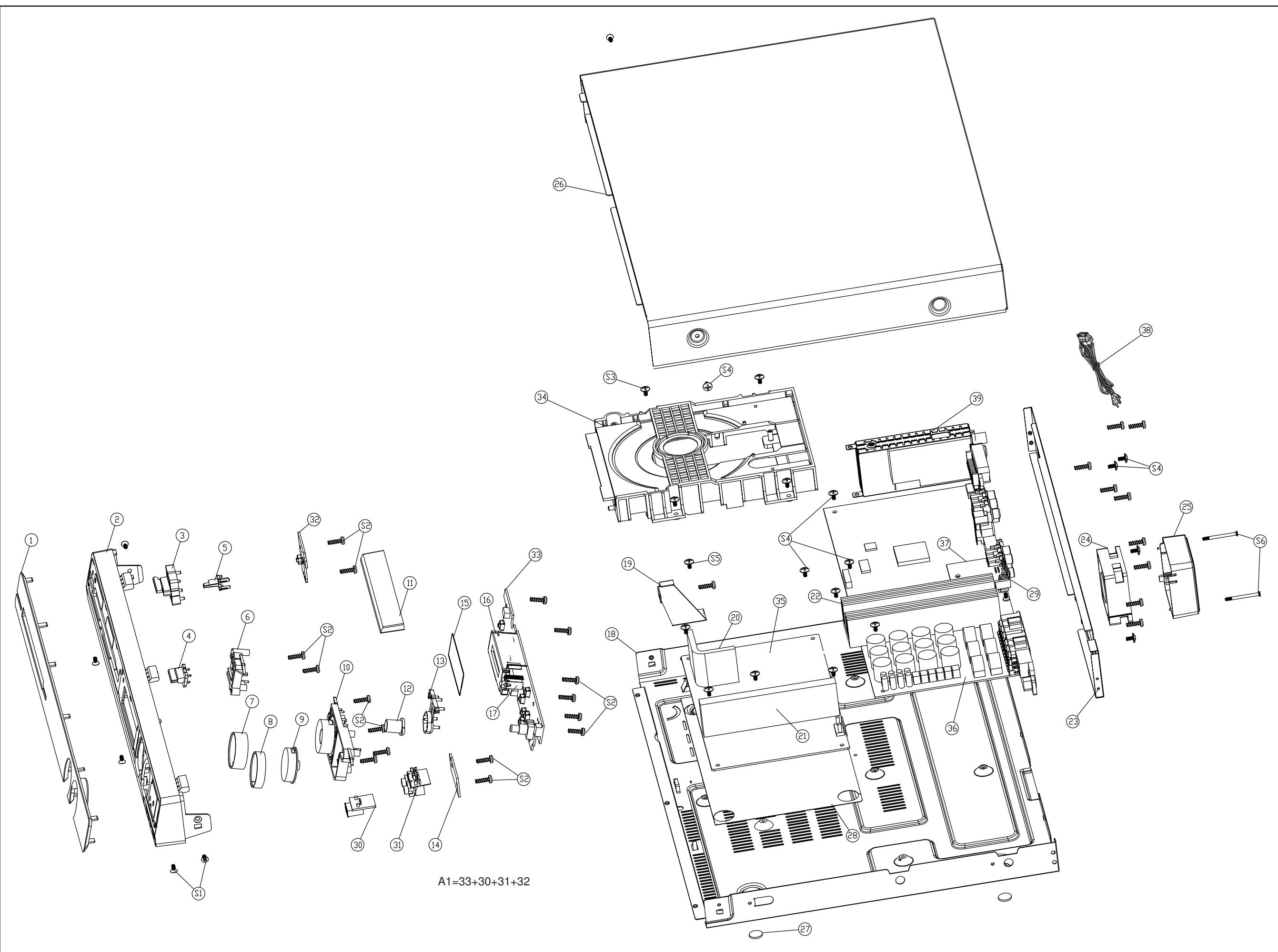
PCB LAYOUT - BOTTOM VIEW

C117 B2 C122 B3 C124 B2 FB177 B3 FB179 B2 R175 B3 R210 B3
C118 B3 C123 B2 F101 B1 FB178 B2 JK101 B1 R176 B2 R211 B2

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Mechanical Exploded View



MECHANICAL PART LIST

Loc.	Part No.	Description
1	996510001254	DISPLAY LENS
2	996510016361	FRONT PANEL HIPS
3	996510001256	STANDY BUTTON
4	996510001257	OPEN/CLOSE BUTTON
5	996510001662	STANDY LED LENS
6	996510003834	OPEN /CLOSE BUTTON HOLDER
7	996510001259	FUNCTION BUTTON RING
8	996510001269	VOLUME KNOB RING
9	996510001261	VOLUME KNOB RING
10	996510001262	FUNCTION BUTTON
11	996510016360	DVD DOOR ABS
12	996510007576	SOURCE BUTTON
13	996510003836	SOURCE BUTTON HOLDER
15	996510003837	VFD FILTER
18	996510016363	BOTTOM CAB SECC
23	996510016362	BACK PANEL SECC
24	996500042571	FAN DC 12V 0.1A 4000RPM
25	996510001615	FAN COVER
26	996510007321	TOP CAB
27	994000005305	RUBBER FOOT
28	996510003875	PVC SHEET
34	996510010819	DVD LOADER
35	996510016357	POWER PCB ASS'Y
36	996510016358	MAIN PCB ASS'Y
37	996510016359	IPOD PCB ASS'Y
38	996510001252	PWR CORD
39	996510016364	TUNER PACK
A1	996510016356	CTRL+USB+PHONEJACK+STANDBY+BKT
DOCK	996510010855	SIMPLE IPOD DOCK
FM	996510008251	FM ANTENNA 1000MM
VIDEO	996500013058	RCA CABLE 2P 1.2M
V3	996510013767	FFC CABLE 24P
V1	996510007429	FFCCBLE 10P
RC	996510001263	REMOTE CONTROL

SPEAKER

RFC	996510001599	RUBBER FOOT -CENTER SPK
RFF	996510001600	RUBBER FOOT-FRONT SPK
RFR	996510001601	RUBBER FOOT - REAR SPK
RFS	996500028375	RUBBER FOOT
SPKC	996510017698	SPEAKER BOX -CENTER
SPKFL	996510017699	SPEAKER BOX -FRONT LEFT
SPKFR	996510017700	SPEAKER BOX - FRONT RIGHT
SPKRL	996510017701	SPEAKER BOX- REAR LEFT
SPKRR	996510017702	SPEAKER BOX- REAR RIGHT
SUBW	996510017703	SUBWOOFER

REVISION LIST

Version 1.0

*Initial release