DVD Home Theater System

HTS3011/98

Service
Service
Service

Service Manual

KARAOKE DVD VIDEO DivX ULTRA DOLBY DIGITAL PRO LOGIC II ENERGY STAR

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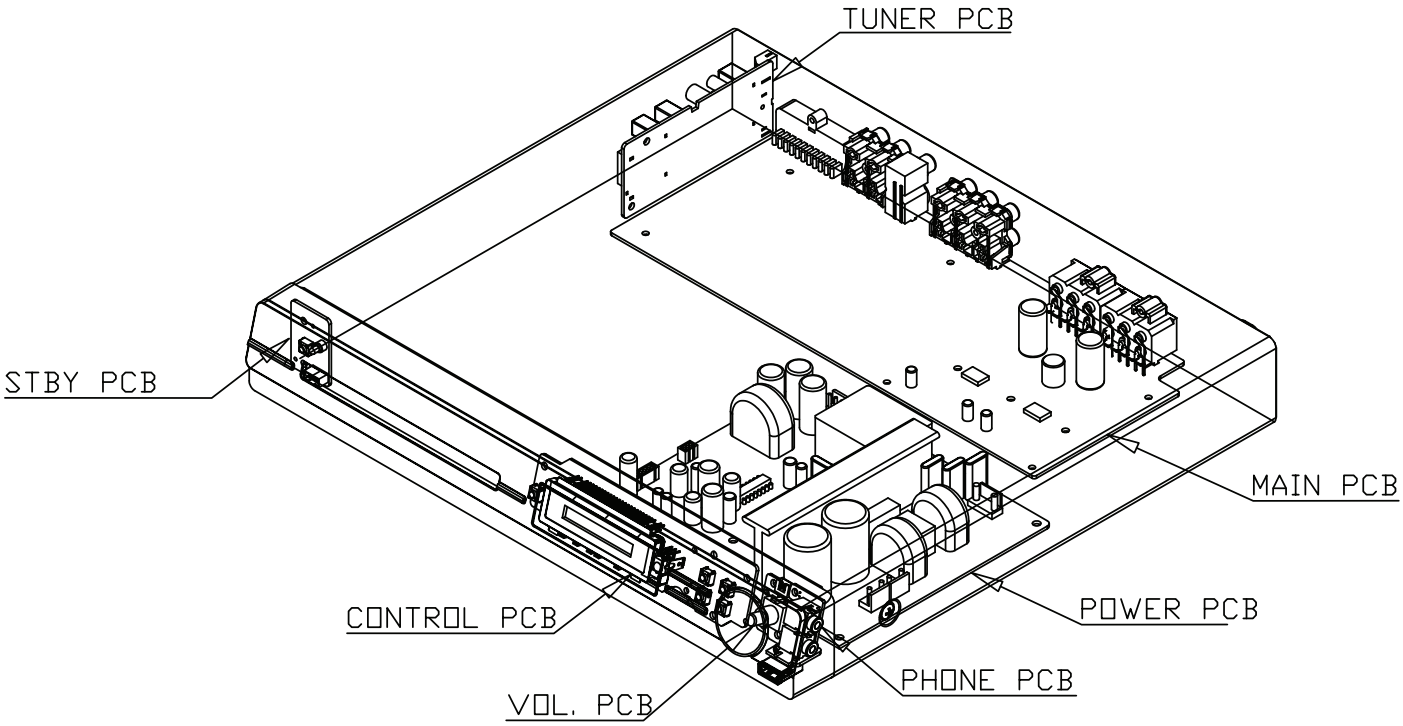
Published by LM0812 Service Audio Printed in The Netherlands Subject to modification

GB 3139 785 33910

Version 1.1

PHILIPS

LOCATION OF PCB BOARDS



VERSION VARIATION:

Type/Versions / Features	HTS3011 /98
Output Power - 200W	X
Voltage (110V~240V)	X
Aux In	X

SERVICE SCNARIO MATRIX:

Type/Versions / Board in used	HTS3011 /98
Main Board	C
Power Board	C
VFD+STANDBY+VOL+MP3+BRACKETBoard	C

*C = Component Level Repair

SPECIFICATIONS

AMPLIFIER

Total output power :
- Home Theatre mode ..... 200 W
Frequency Response ..... 180 Hz – 18 kHz / ±3 dB
Signal-to-Noise Ratio..... > 60 dB (A-weighted)
Input Sensitivity
- AUX 1 ..... 400 mV
- AUX 2 ..... 400 mV

RADIO

Tuning Range ..... FM 87.5-108 MHz
..... (50/100 kHz)
..... 26 dB Quieting
Sensitivity ..... FM 22 dBf
IF Rejection Ratio ..... FM 60 dB
Signal-to-Noise Ratio..... FM 50 dB
AM Suppression Ratio..... FM 30 db
Harmonic Distortion ..... FM Mono 3%
..... FM Stereo 3%
Frequency Response ..... FM 180 Hz–10 kHz / ±6 dB
Stereo Separation..... FM 26 dB (1 kHz)
Stereo Threshold ..... FM 29 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..... PAL / NTSC
Video Format ..... 4:3 / 16:9
Video S/N ..... 56 dB
Composite Video
Output..... 1.0 Vp-p, 75Ω
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

MAIN UNIT

Power Supply Rating..... 110-240 V; 50-60 Hz
Power Consumption ..... 40 W
Dimensions..... 360 x 55 x 332 (mm)
..... (w x h x d)
Weight ..... 2.58 kg

FRONT AND REAR SPEAKERS

System..... Full range satellite
Impedance..... 4 Ω
Speaker drivers ..... 3” full range speaker
Frequency response..... 150 Hz – 20 kHz
Dimensions..... 100 x 95.5 x 83.5 (mm)
..... (w x h x d)
Weight ..... 0.47 kg/each

CENTRE SPEAKER

System..... Full range satellite
Impedance..... 8 Ω
Speaker drivers ..... 3” full range speaker
Frequency response..... 150 Hz – 20 kHz
Dimensions..... 100 x 99.5 x 83.5 (mm)
..... (w x h x d)
Weight ..... 0.52 kg

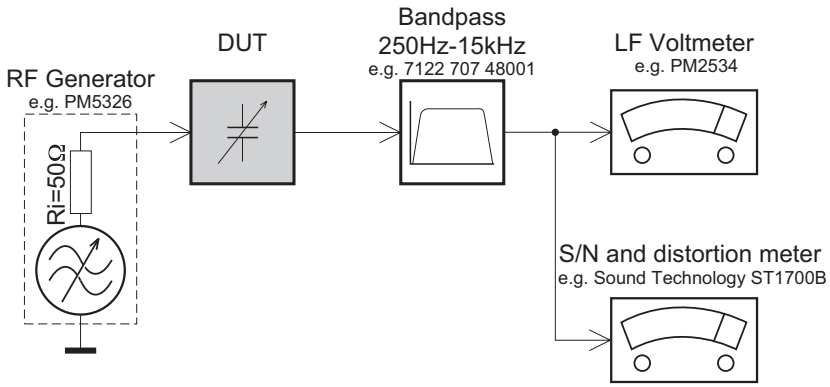
SUBWOOFER

Impedance..... 8 Ω
Speaker drivers ..... 165 mm (6.5”) woofer
Frequency response..... 40 Hz – 150 Hz
Dimensions..... 131 x 315.5 x 386 (mm)
..... (w x h x d)
Weight ..... 3.6 kg

Specifications subject to change without prior notice.

MEASUREMENT SETUP

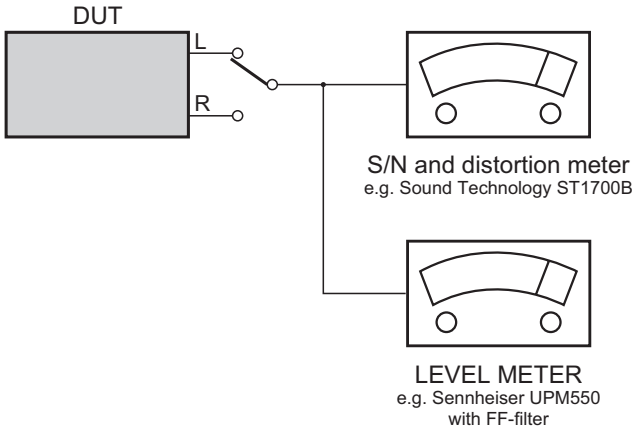
Tuner FM



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

CD

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



SERVICE AIDS

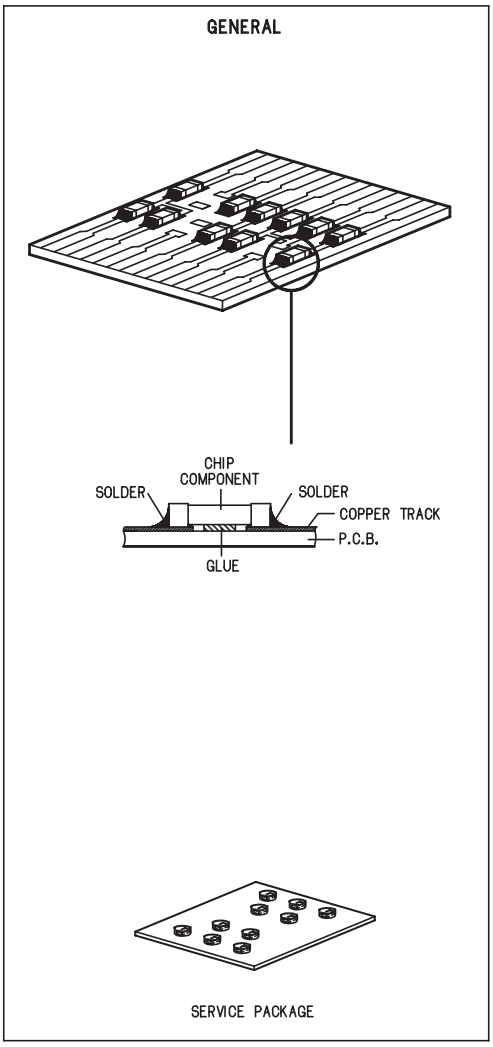
Service Tools:

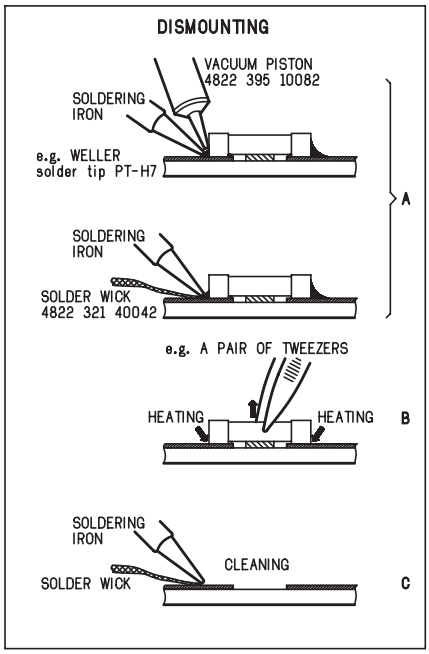
Universal Torx driver holder 4822 395 91019
Torx bit T10 150mm 4822 395 50456
Torx driver set T6-T20 .....4822 395 50145
Torx driver T10 extended 4822 395 50423

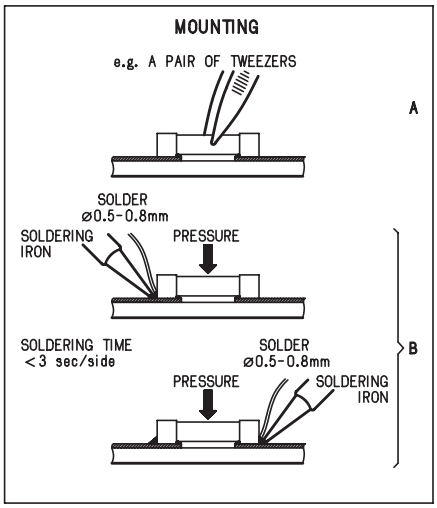
Compact Disc:

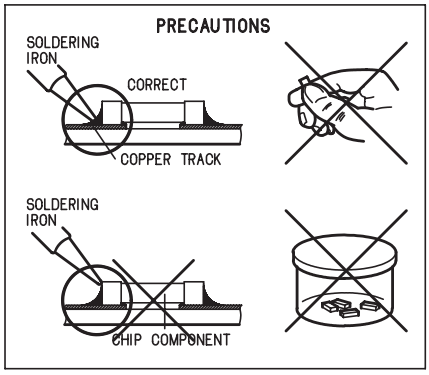
SBC426/426A Test disc 5 + 5A 4822 397 30096
SBC442 Audio Burn-in test disc 1kHz 4822 397 30155
SBC429 Audio Signals disc 4822 397 30184
Dolby Pro-logic Test Disc 4822 395 10216

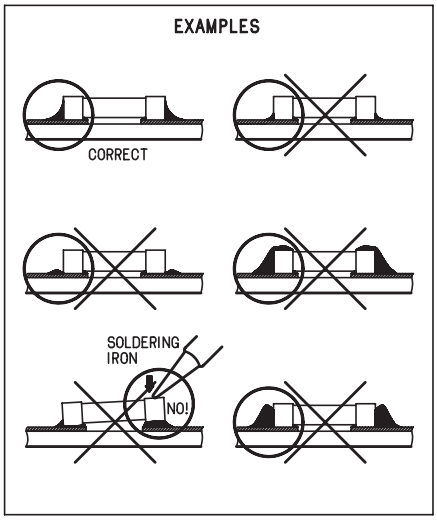
HANDLING CHIP COMPONENTS











ESD

(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.

(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 ditzelfde potentiaal.

(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 kan 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.

(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 cable 4822 310 10671
Wristband tester 4822 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 ⚠ .

(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 ⚠ .

(F)

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

Less composants de sécurité sont marqués ⚠ .

(D)

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 ⚠ 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 ⚠ .

(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 suojalukituksen ohitettaessa olet alttiina näkymättömälle laserisäteilylle. Älä katso säteeseen!

(DK) Advarse !

Usynlig laserstråling ved åbning når sikkerhedsafbrydere er ude af funktion. Undgå udsaettelse 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 (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 un-used 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.

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System , Region Code , etc. Setting Produre

1)System Reset

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

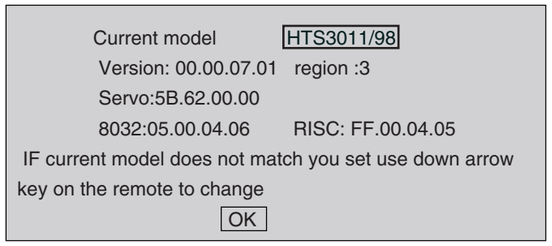
2)Region Code Change

a) In open model, press”9” “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

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



4)Password Change

a) Press “OPTIONS “ button on R/C,TV will show setup menu
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 Sofeware Version

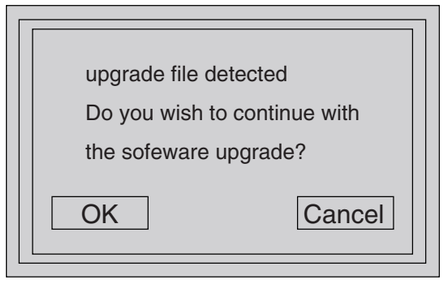
a) Open the CD Door
b) Press “INFO“ button on R/C
c) TV will show the version on screen

6)Trade model

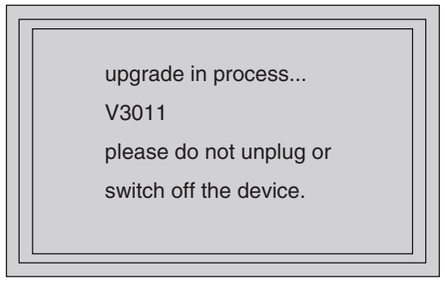
a) Press “Open/Close “ button on R/C
b) Press “2” “5” “9” on R/C,VFD will display “TRA ON “ or “TRA OFF“

7) Upgrading new sofeware

a) copy “sofeware files” into a CD-R
b) open the CD Door,then insert the CD-R program disc
c) close the CD Door
d) VFD will show:
“Loading“
“Erase” -- erase the flash memory
“Writing” about 1 minute
“done “
* the system will switch off and on again automatically.
e) OSD will show:



f) select “OK”, OSD will show:



CAUTION!

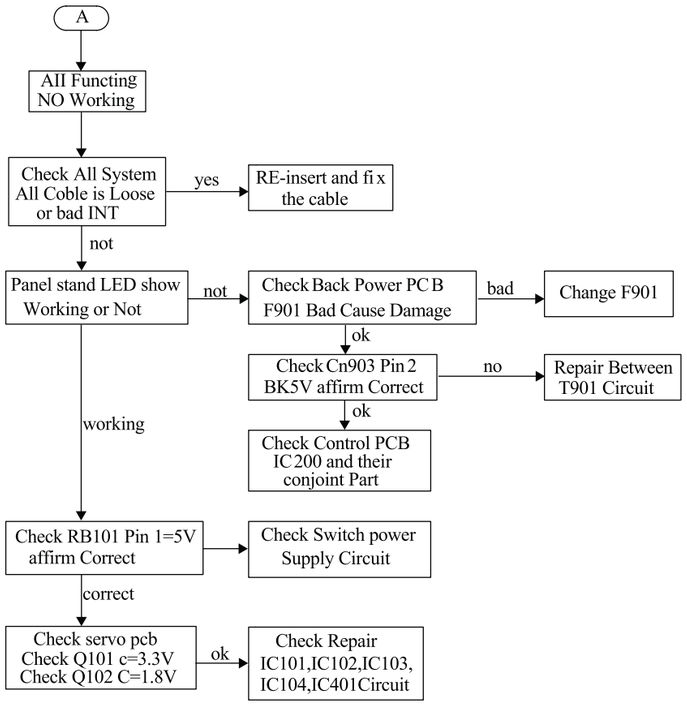
This information is confidential and may not be distributed.Only a qualified service person should reprogram the Region Code.

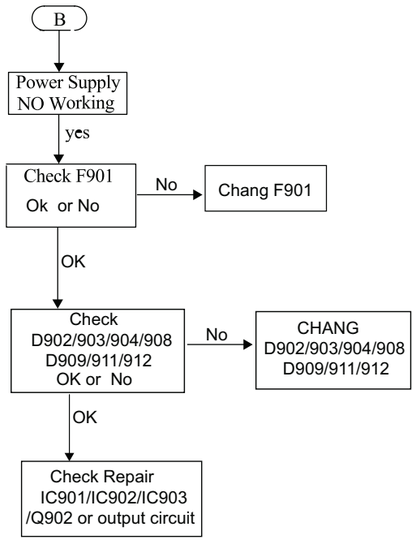
2 - 2

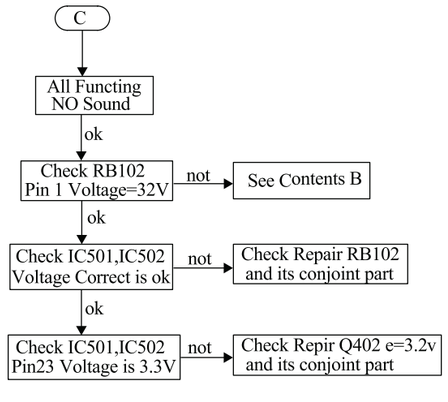
REPAIR INSTRUCTIONS

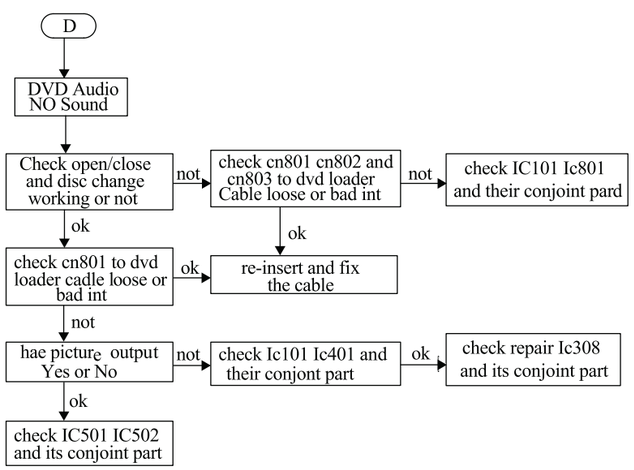
MAIN UNIT REPAIR CHART

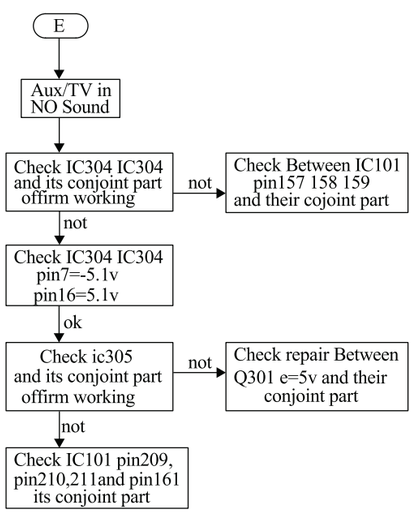
- A — AII Functing NO Working
- B — Power Supply NO Working
- C — All Functing NO Sound
- D — DVD Audio NO Sound
- E — Aux/TV in NO Sound
- F — Tuner NO Sound

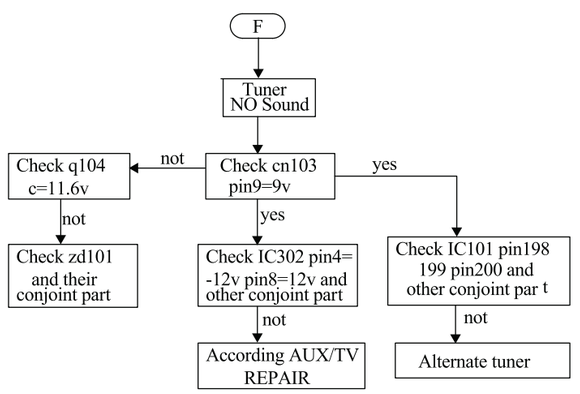












DISASSEMBLY INSTRUCTIONS

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.

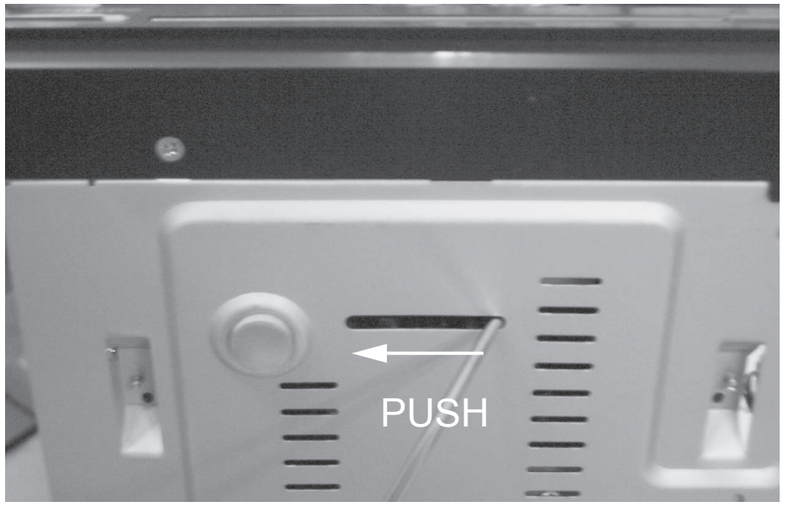


Figure 1

Figure 2

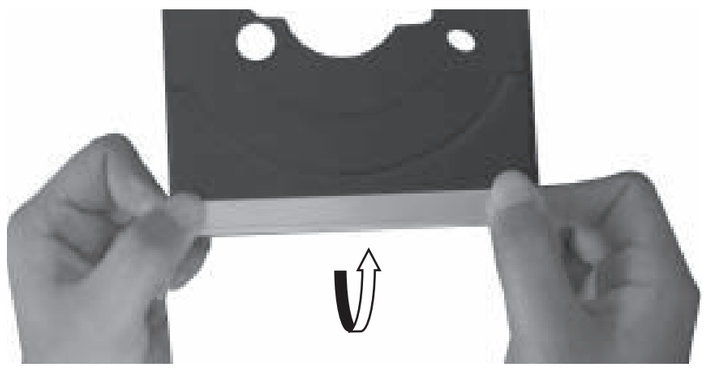


Figure 3

3 - 1

3) Loosen 5 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.
   - 3 screws “B” at the back panel as shown in figure 5.
4) Loosen 6 screws “C“ & “D” at the bottom panel as in figure 6 & figure 7 to remove the front panel.

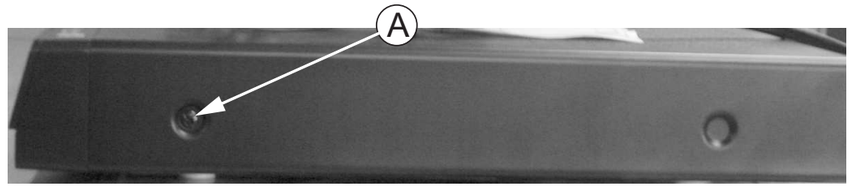


Figure 4

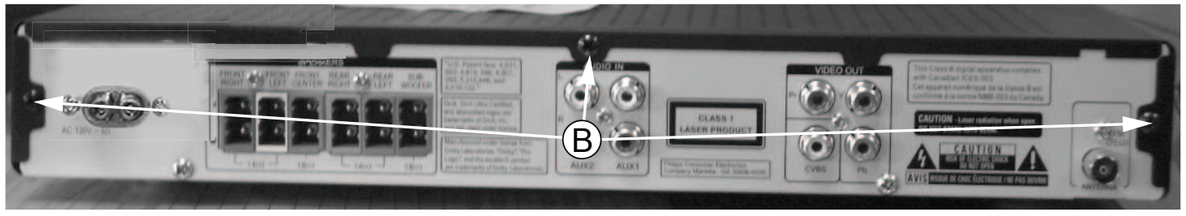


Figure 5

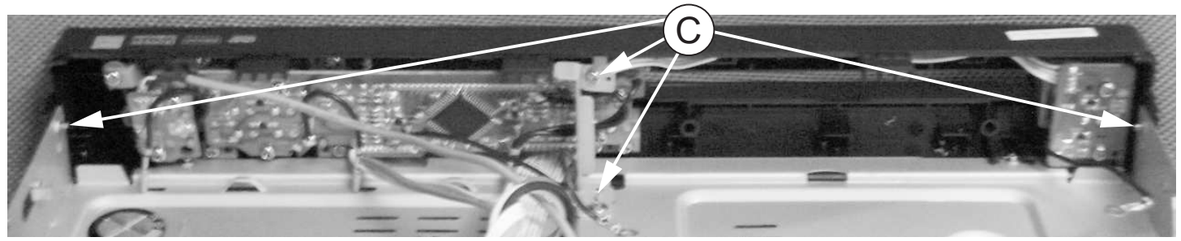


Figure 6

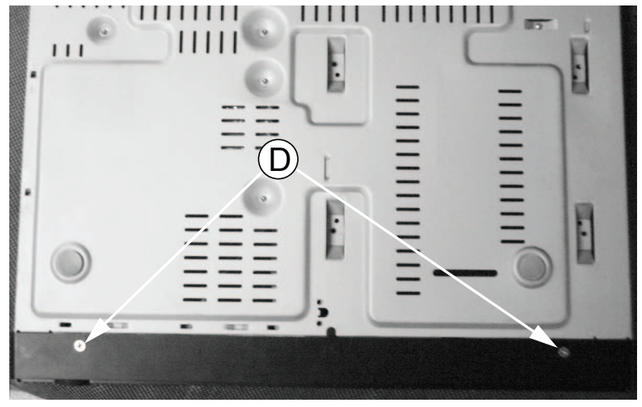


Figure 7

Dismantling of the DVD Module

1) Loosen 4 screws " E " at the DVD Module as shown in figure 8.

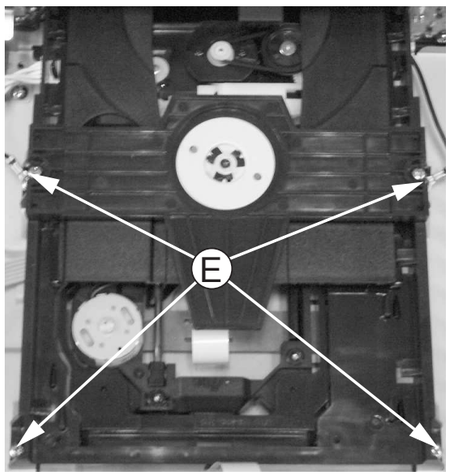


Figure 8

Dismantling of the VFD+JACK+STANDBY Board

1) Loosen 12 screws "F" on the top of VFD+JACK+STANDBY Board as shown in figure 9.

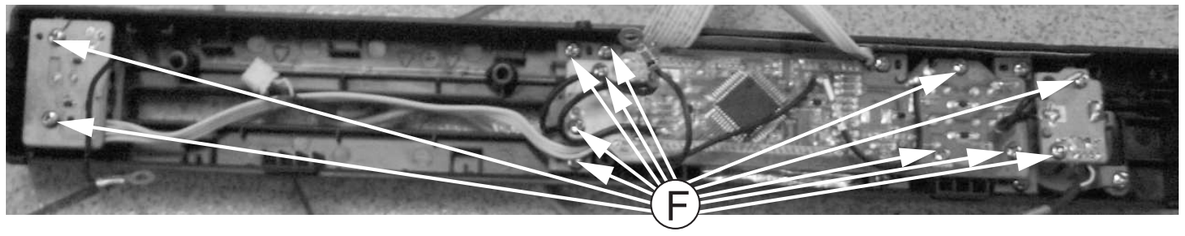


Figure 9

Dismantling of the Power Board

1) Loosen 4 screws "G" on the top of Power Board as shown in figure 10.

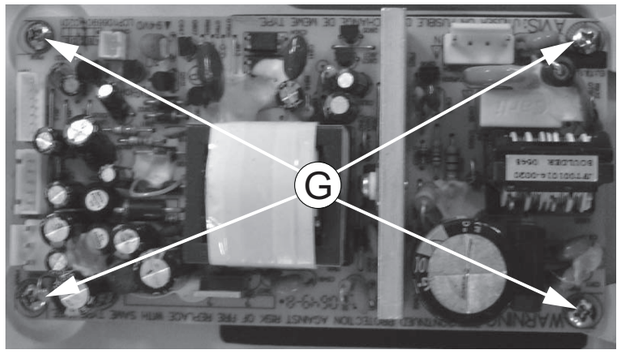


Figure 10

3 - 2

Dismantling of the Main Board

1) Loosen 4 screws "H" on the top of Main Board as shown in figure 11.
2) Loosen 4 screws "I" at the back panel as shown in figure 12.

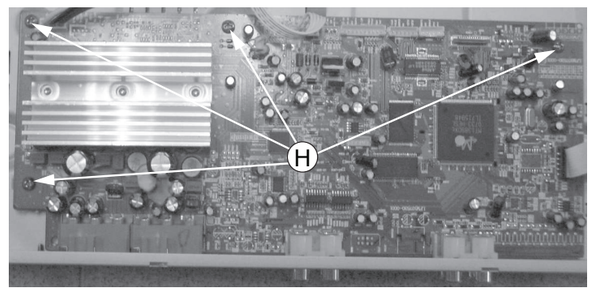


Figure 11

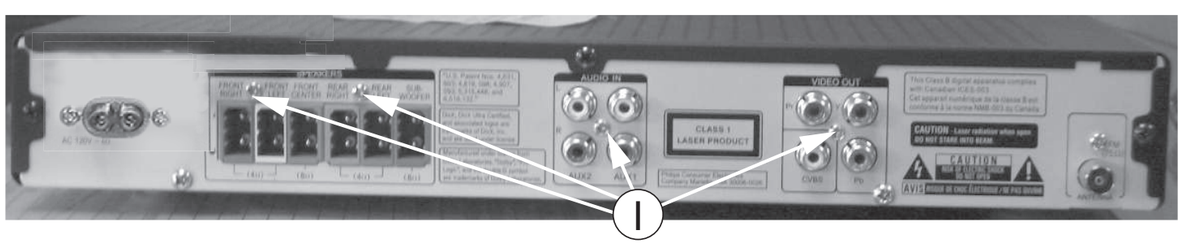
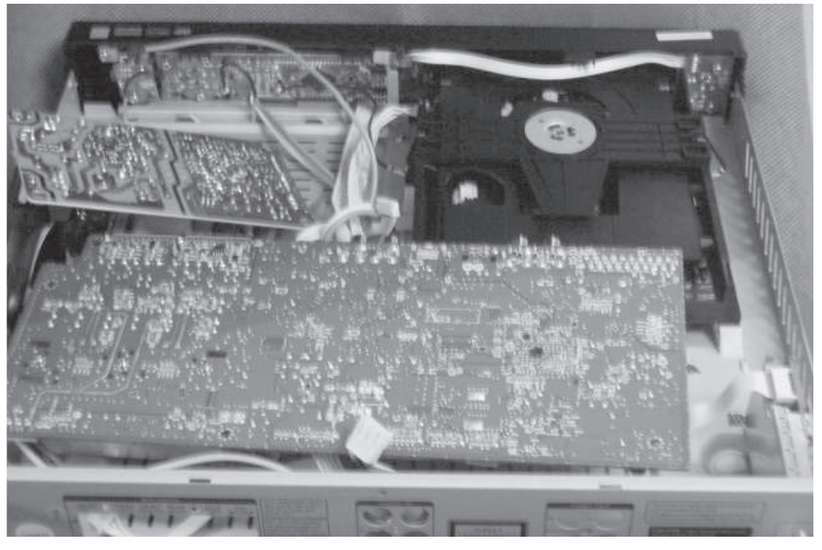


Figure 12

SERVICE POSITIONS

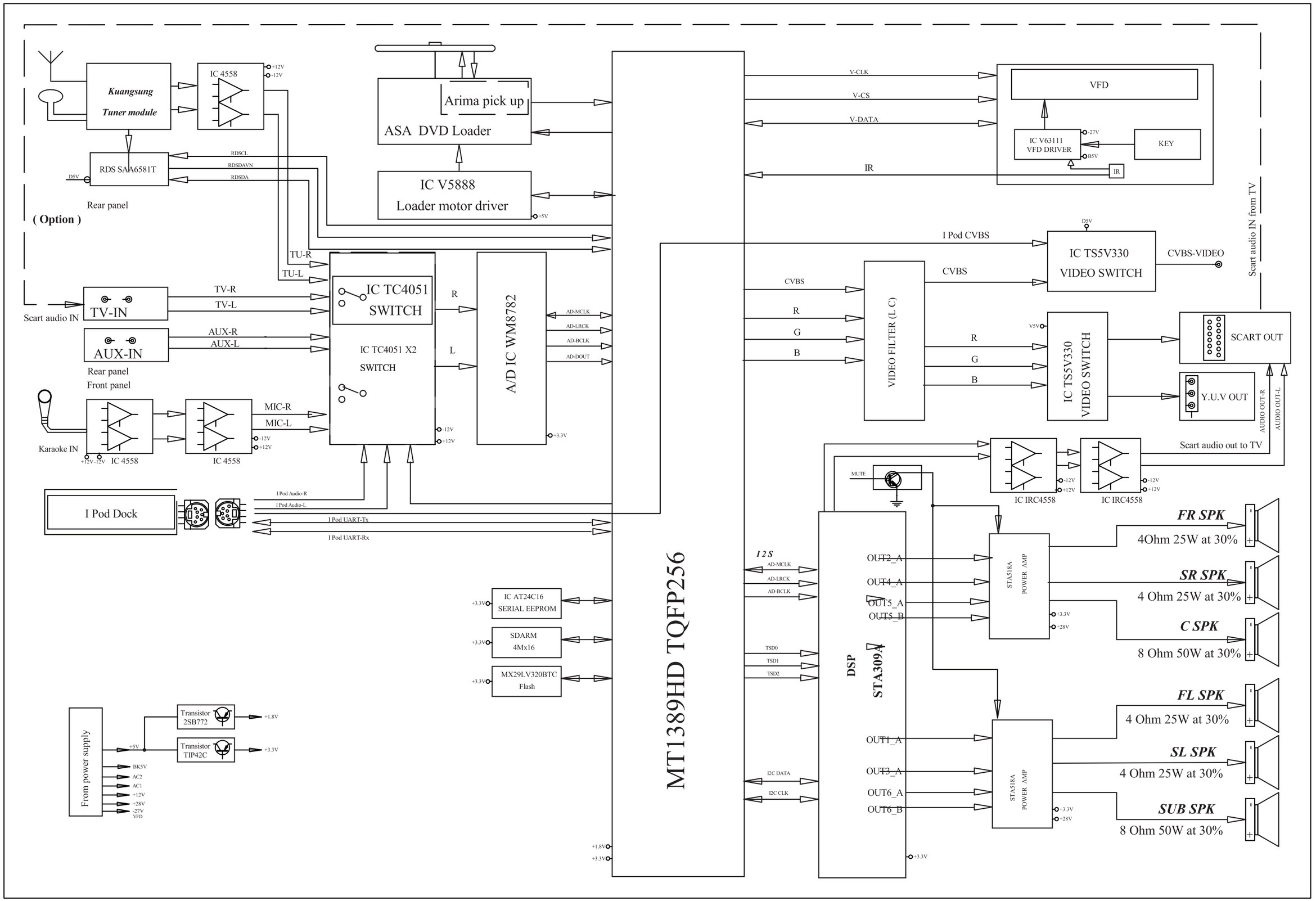
Service position A



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.

4 - 1

BLOCK DIAGRAM



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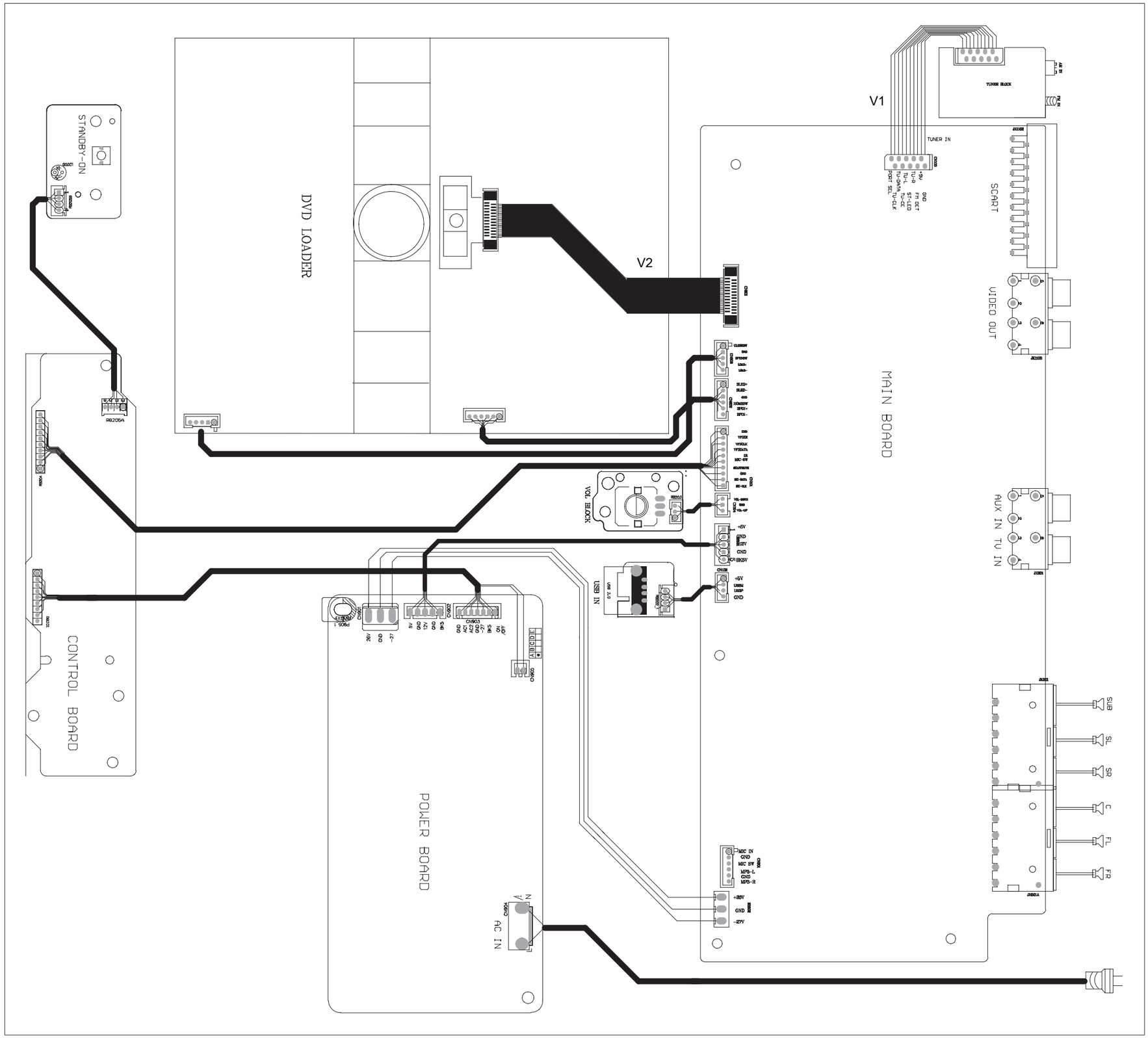
WIRING DIAGRAM



CONTROL BOARD

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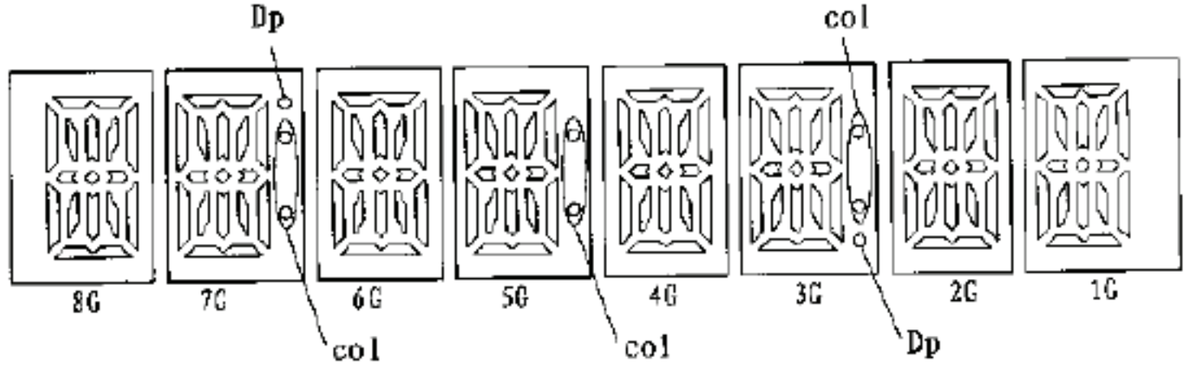
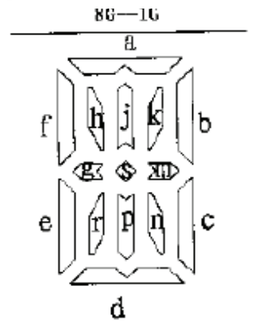
FTD DISPLAY PIN ASSIGNMENT





	8G	7G	6G	5G	4G	3G	2G	1G
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		Dp		col		col		
P15	s	s	s	s	s	s	s	s
P16		col				Dp		

PIN CONNECTION

管脚序号（Pin No.）	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
連接（Connection）	F1	F1	NP	P1	P2	P3	P4	P5	P6	P7	P8	P9	P10	P11	P12
管脚序号（Pin No.）	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
連接（Connection）	P13	P14	P15	P16	8G	7G	6G	5G	4G	3G	2G	1G	NP	F2	F2

注（Note）：Fn：燈絲（Filament Pin） nG：柵極（Grid Pin）
Fn：陽極（Anode Pin） NP：無引出腳（No Pin）

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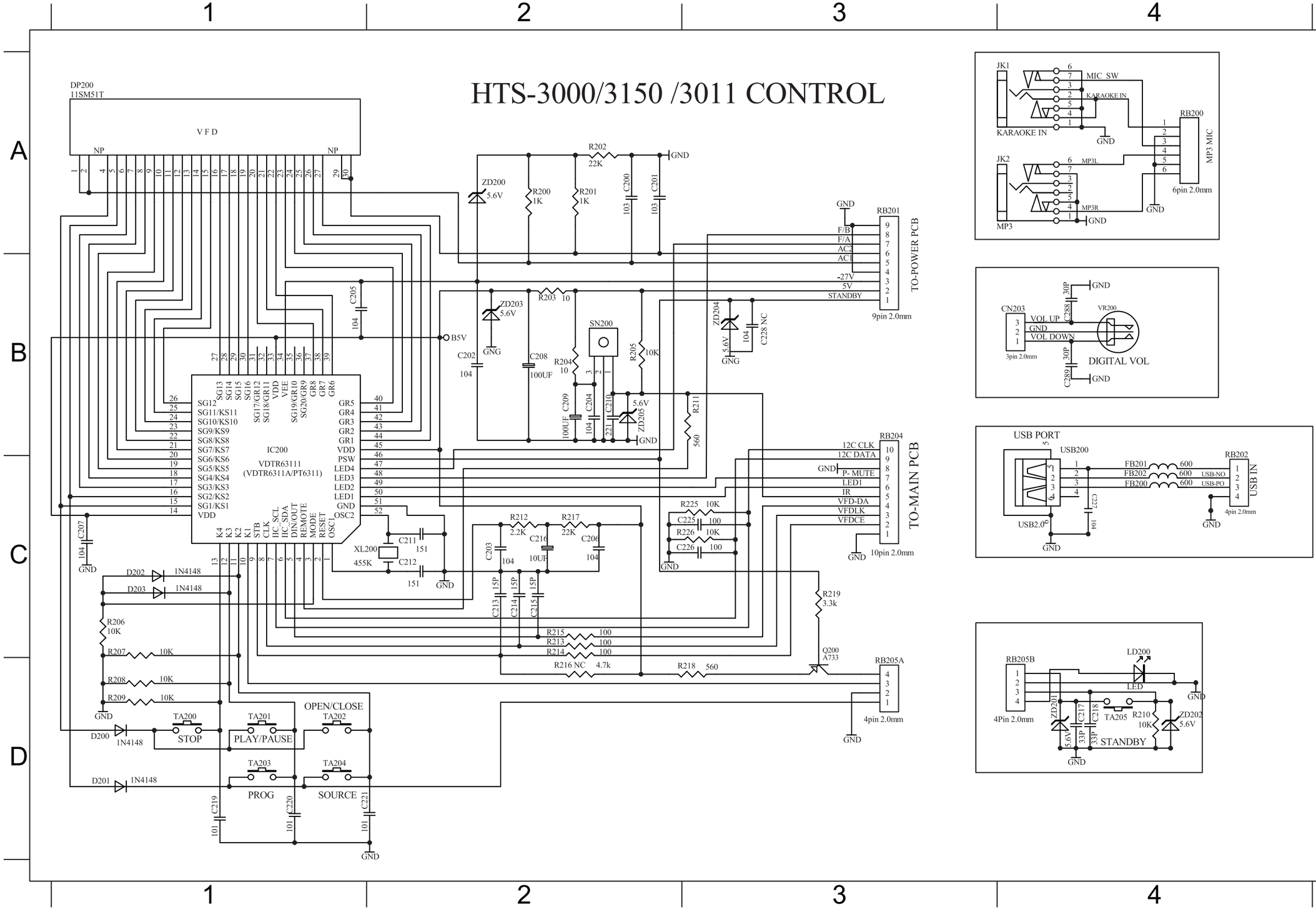
CIRCUIT DIAGRAM

HTS-3000/3150 /3011 CONTROL



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C201	A2	R203	B2
C202	B2	R204	B2
C203	C2	R205	B2
C204	B2	R206	C1
C205	B1	R207	C1
C206	C2	R208	D1
C207	C1	R209	D1
C208	B2	R210	D4
C209	B2	R211	B3
C210	B2	R212	C2
C211	C2	R213	C2
C212	C2	R214	C2
C213	C2	R215	C2
C214	C2	R217	C2
C215	C2	R218	D2
C216	C2	R219	C3
C217	D4	R225	C3
C218	D4	R226	C2
C219	D1	RB200A	D4
C220	D1	RB201	A3
C221	D1	RB204	B3
C225	C2	SN200	B2
C226	C2	TA200	D1
C288	B4	TA201	D1
C289	B4	TA202	D1
D200	D1	TA203	D1
D201	D1	TA204	D1
D202	C1	TA205	D4
D203	C1	VR200	B4
DP200	A1	XL200	C1
IC200	B1	ZD200	A2
JK1	A4	ZD201	D4
LD200	D4	ZD202	D4
Q200	C3	ZD203	B2
R200	A2	ZD204	B3
R201	A2	ZD205	B2

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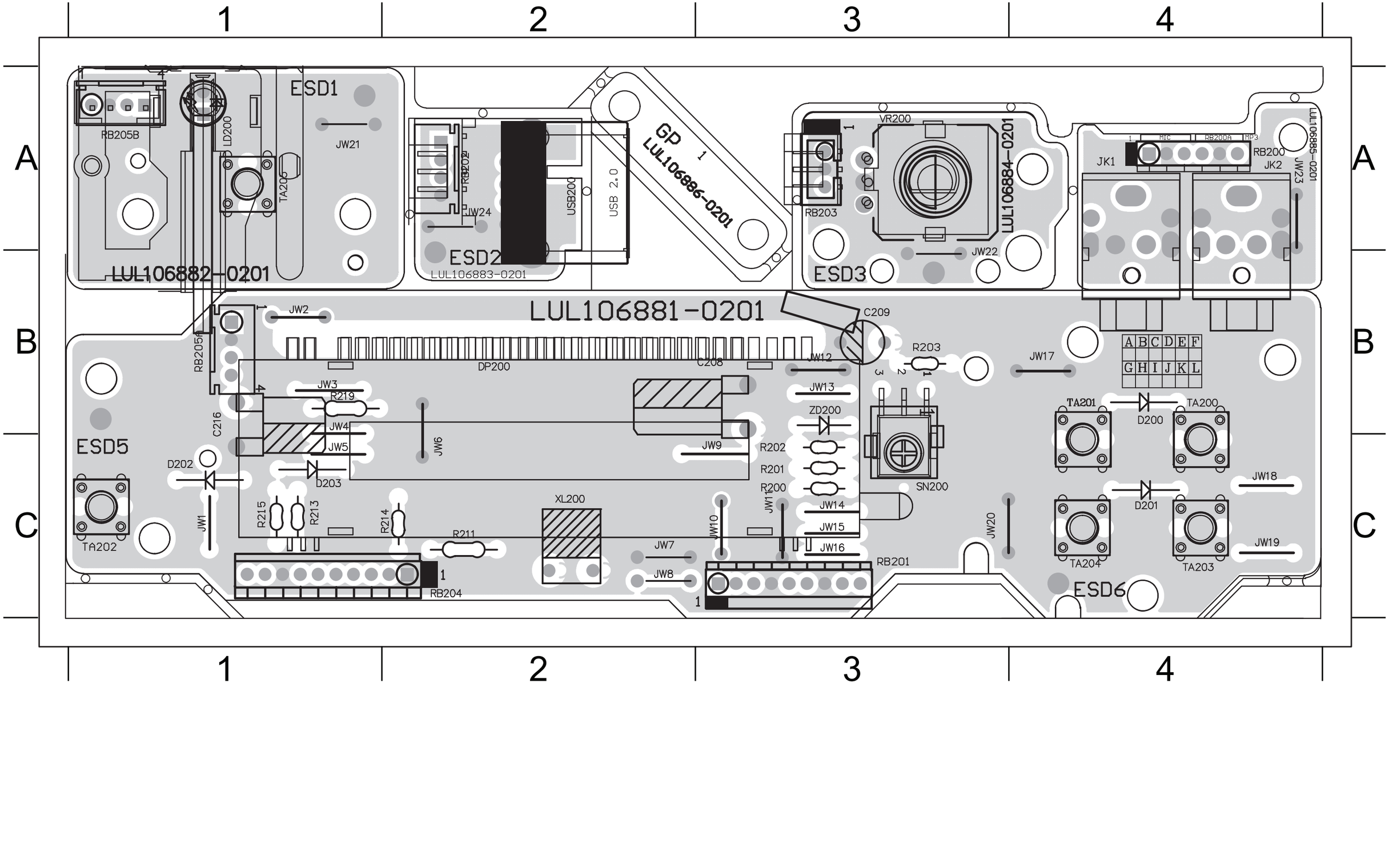
PCB LAYOUT - TOP VIEW

C208	B3	D203	C1	JW10	C3	JW15	C3	JW19	C4	JW22	B3	JW5	C1	JW9	C3	R202	C3	R214	C2	RB201	C3	TA201	B4	TA205	A1
C209	B3	DP200	B2	JW12	B3	JW16	C3	JW2	B1	JW23	A4	JW6	C2	LD200	A1	R203	B3	R215	C1	RB204	C2	TA202	C1	VR200	A3
C216	B1	JK1	A4	JW13	B3	JW17	B4	JW20	C3	JW3	B1	JW7	C2	R200	C3	R211	C2	R219	B1	SN200	C3	TA203	C4	XL200	C2
D202	C1	JW1	C3	JW14	C3	JW18	C4	JW21	A1	JW4	B1	JW8	C2	R201	C3	R213	C1	RB200A	A4	TA200	B4	TA204	C4	ZD200	B3



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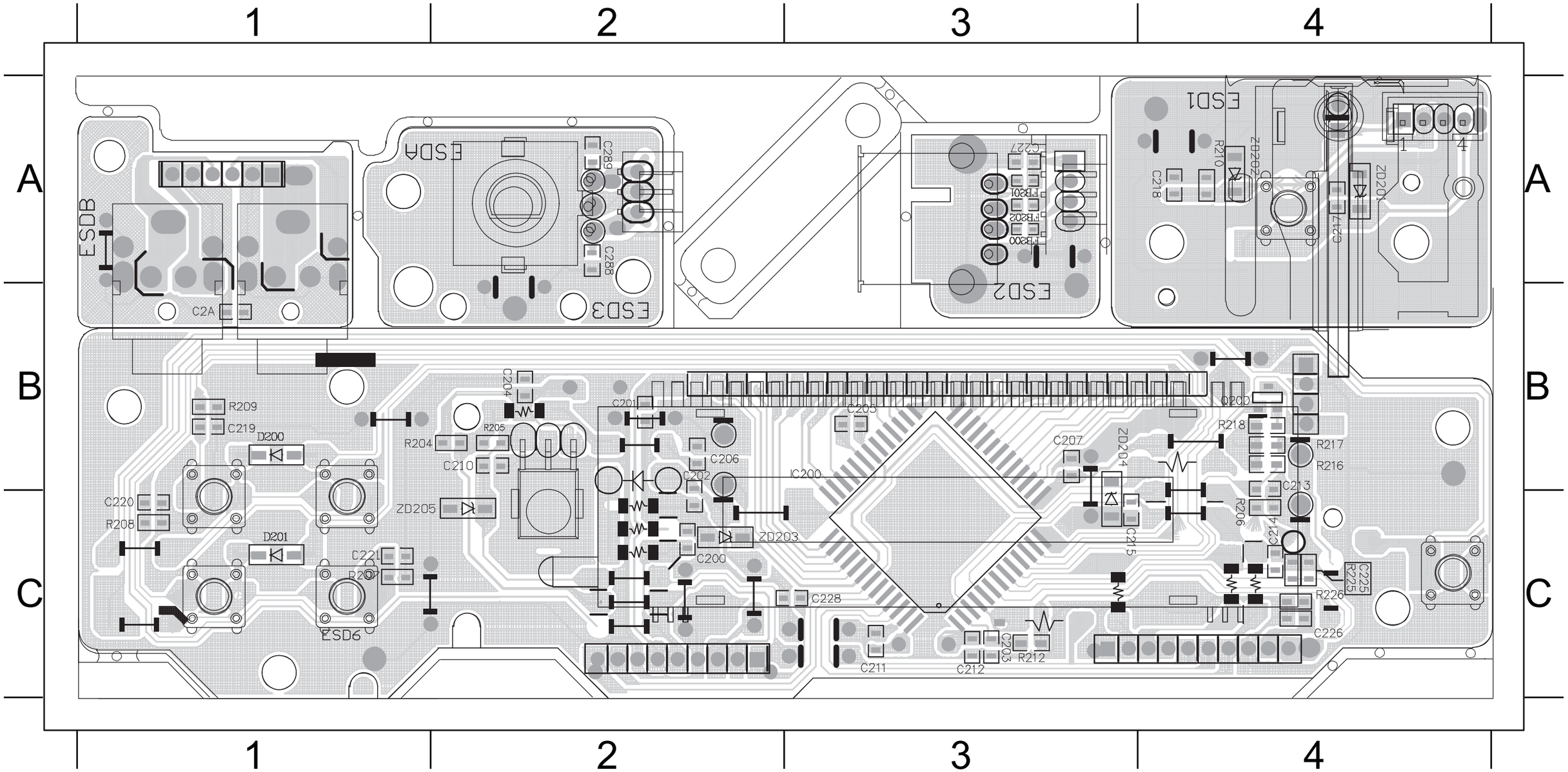
PCB LAYOUT - BOTTOM VIEW

C200	C2	C204	C4	C210	B2	C214	C4	C219	B1	C226	C4	D201	C1	R205	B2	R209	B1	R218	A4	ZD202	A4
C201	B2	C205	B2	C211	C3	C215	C3	C220	C1	C288	A2	IC200	B3	R206	C4	R210	A4	R225	C4	ZD203	C2
C202	B2	C206	B2	C212	C3	C217	A4	C221	C1	C289	A2	Q200	B4	R207	C1	R212	C3	R226	C4	ZD204	B2
C203	C3	C207	B2	C213	A4	C218	A4	C225	C4	D200	B1	R204	B1	R208	C1	R217	A4	ZD201	A4	ZD205	C1



MAIN BOARD

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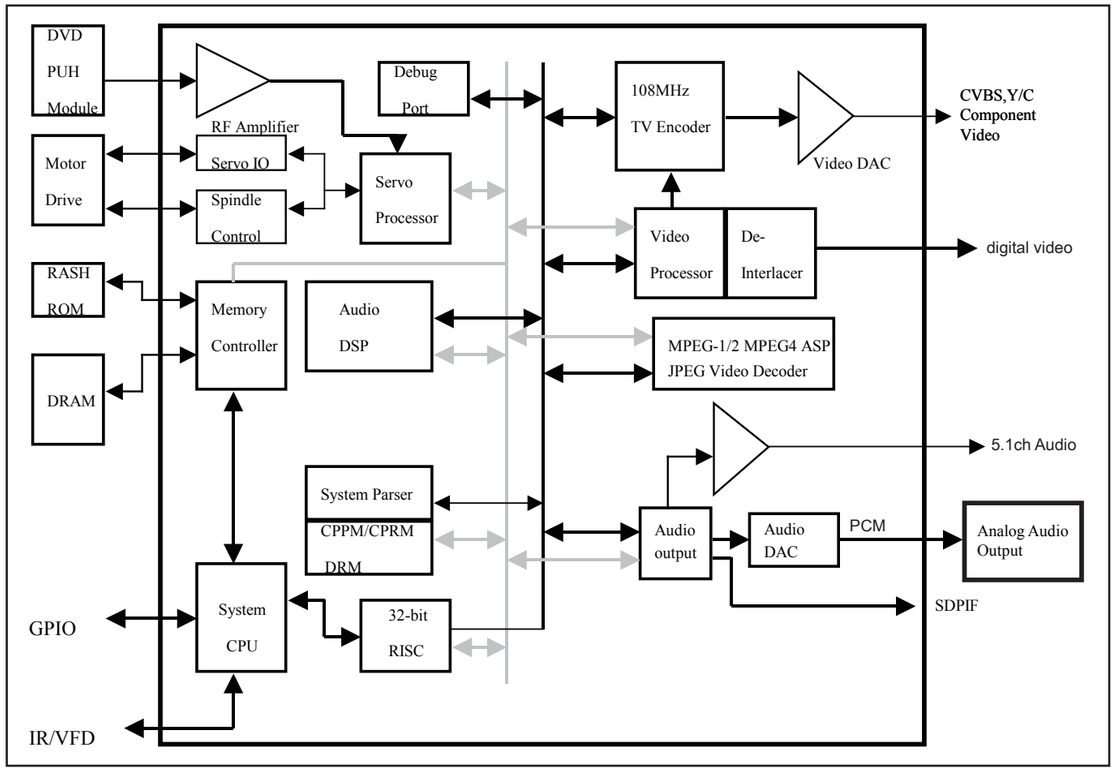
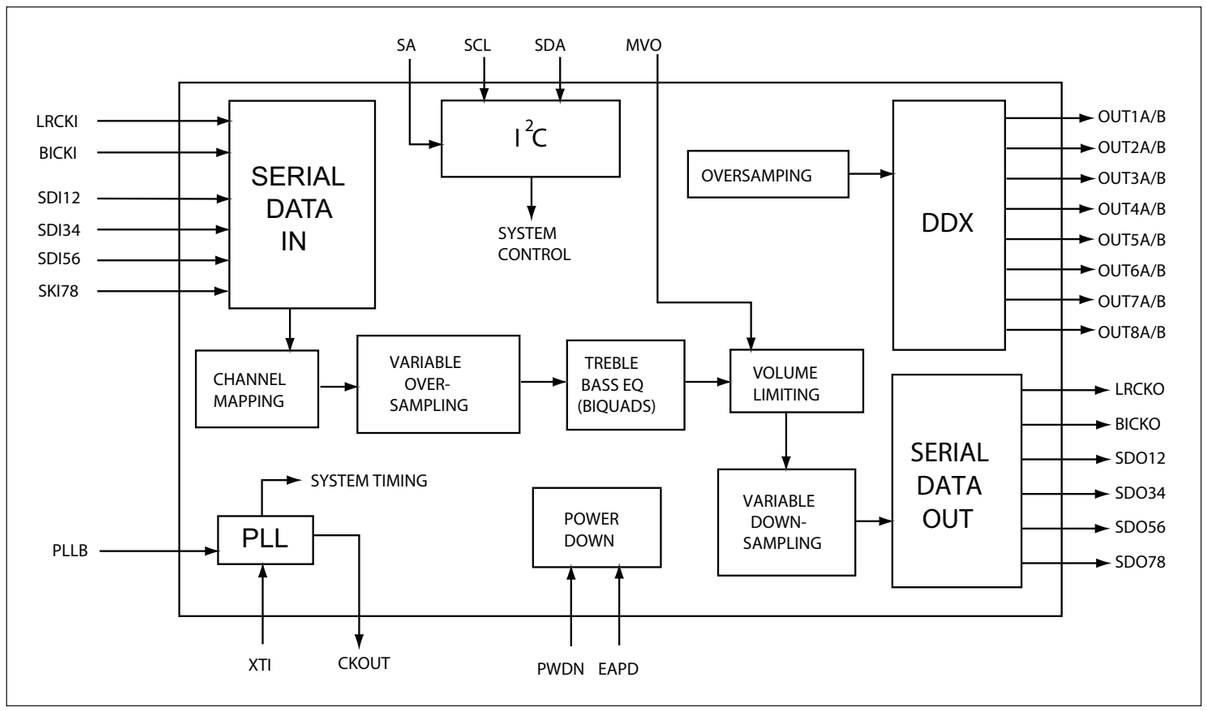
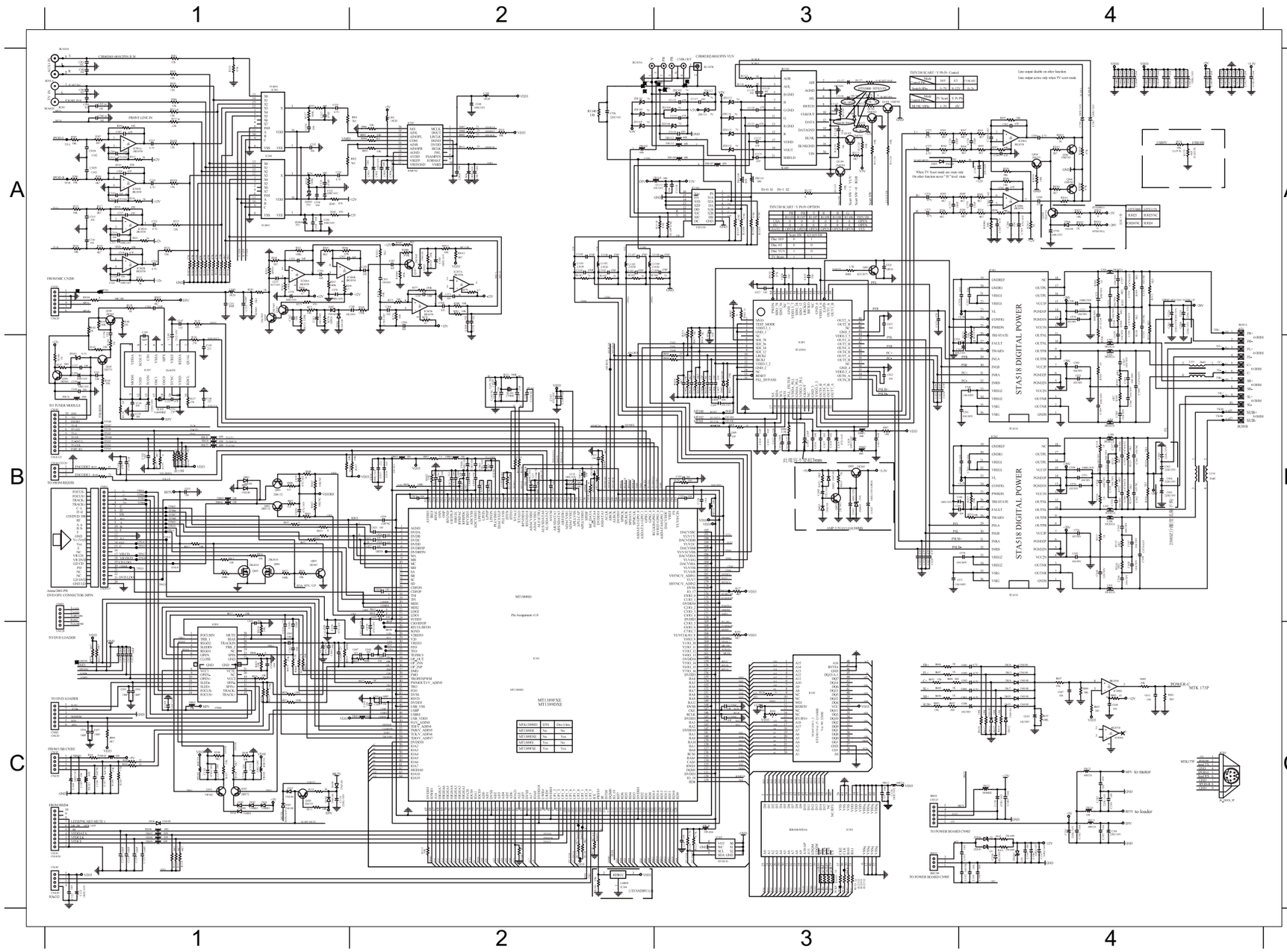
INTERNAL IC DIAGRAM - MT1389HD



INTERNAL IC DIAGRAM - STA308A



CIRCUIT DIAGRAM - part one



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C1001	A4	C182	C4	C421	B3	C801	B2	D614	C4
C1002	A4	C183	C4	C422	B3	C802	B2	D615	C4
C1003	A4	C184	C4	C423	A3	C803	B2	D616	C4
C1004	A4	C185	C4	C425	A3	C804	B2	D617	C4
C1005	A4	C186	C4	C426	A3	C805	B2	D618	C4
C1006	A4	C188	C4	C427	A3	C806	B2	D619	C4
C1007	A4	C189	C1	C431	A3	C807	B2	D801	B1
C1008	A4	C190	C4	C432	B3	C808	B2	D802	B1
C1009	A4	C191	C4	C433	B3	C809	B2	FB101	C2
C101	C2	C193	C4	C434	B3	C810	B2	FB104	C1
C1010	A4	C194	C4	C435	B3	C811	B2	FB105	C1
C1011	A4	C195	C4	C436	B3	C812	B2	FB106	C1
C1012	A4	C196	C4	C437	B3	C813	B2	FB107	C1
C1013	A4	C197	C4	C438	B3	C814	B2	FB108	C1
C1015	A4	C301	A1	C439	B3	C815	B2	FB109	C1
C1016	A4	C302	A1	C440	B3	C816	B2	FB110	C3
C1017	A4	C303	A1	C441	B3	C817	B2	FB1101	A3
C1018	A4	C304	A1	C502	B4	C818	B2	FB1102	A2
C1019	A4	C315	A1	C504	B4	C819	B1	FB111	C3
C102	A1	C316	A1	C505	B4	C820	B1	FB1111	A3
C1020	A4	C317	A1	C506	B4	C823	B2	FB1112	A3
C1021	A4	C318	A1	C507	B4	C824	B2	FB112	B3
C1022	A4	C319	A1	C508	B4	C825	B2	FB113	B2
C1023	A4	C320	A1	C509	B4	C826	B2	FB114	B2
C1024	A4	C321	A1	C520	A4	C827	B2	FB115	B2
C1025	A4	C322	A1	C521	A4	C828	B2	FB116	B1
C1026	A4	C323	A1	C523	A4	C829	B2	FB121	C4
C1027	A4	C324	A1	C524	A4	C830	C2	FB122	C4
C103	C2	C325	A1	C525	A4	C831	C2	FB123	C4
C110	C1	C326	A1	C526	A4	C833	B1	FB124	C4
C1101	A2	C327	A1	C527	A4	C835	C1	FB125	B1
C1102	A2	C328	A1	C528	A4	C836	C1	FB126	B1
C1103	A2	C329	A1	C529	A4	C838	C1	FB127	B1
C1104	A2	C330	A1	C530	A4	C839	C1	FB401	B3
C1105	A2	C332	A1	C533	A4	C840	C1	FB402	B3
C1106	A2	C334	A1	C534	A4	C841	C1	FB801	B2
C1107	A2	C335	A1	C537	A4	C842	C1	FB802	B2
C1108	A2	C336	A1	C538	A4	C843	C1	FB803	B1
C111	C1	C348	A2	C539	B3	C844	C1	FB804	B1
C1110	A3	C351	A1	C540	B4	C845	C1	FB805	C1
C1111	A3	C352	A1	C541	B4	C846	C1	IC101	C2
C1112	A3	C353	A1	C542	B4	C847	C2	IC102	C3
C1113	A3	C354	A1	C544	B4	C848	C2	IC103	C3
C1114	A3	C355	A1	C545	B4	C849	C2	IC104	C2
C1117	A3	C356	A1	C546	B4	C850	C1	IC105	C3
C112	C1	C357	A1	C547	B4	C851	C1	IC302	A1
C113	C1	C358	A1	C548	B4	C852	C1	IC303	A1
C114	C1	C359	A2	C549	B4	C853	C1	IC304	A1
C118	C1	C360	A2	C550	B4	C854	C1	IC305	A2
C119	C1	C361	A1	C551	B4	C855	C1	IC306	A1
C120	C1	C362	A1	C553	B4	C856	C1	IC307	A2
C121	C1	C363	A2	C554	B4	C857	C1	IC309	C4
C122	C1	C364	A2	C555	B4	C901	A2	IC401	B3
C123	C1	C365	A2	C556	B4	C902	A2	IC501	A4
C124	C3	C366	A2	C557	B4	C903	A2	IC502	B4
C125	C3	C367	A2	C558	B4	C904	A2	IC801	C1
C126	C3	C368	A2	C559	B4	C905	A2	JK1103	AA2
C127	C3	C369	A2	C560	B4	C906	A2	JK301	A1
C128	B3	C370	A2	C563	B4	C907	A2	JK501	A4
C129	B3	C371	A2	C564	B4	CN101	C1	JK501	AA4
C130	B3	C387	A2	C567	B4	CN103	B1	L1101	A2
C131	B2	C388	A2	C568	B4	CN104	B1	L1102	A2
C132	B2	C396	B4	C569	B4	CN105	C1	L1103	A2
C133	B2	C397	B3	C570	B4	CN301	A1	L1104	A2
C134	B2	C401	A3	C571	B4	CN801	B1	L3001	A1
C135	B2	C402	B3	C572	B4	CN802	C1	L302	A2
C136	B2	C403	B3	C574	A4	CN803	B1	L308	A2
C137	B2	C404	B3	C576	B4	D101	C1	L501	B4
C139	B2	C405	B3	C578	B4	D102	C1	L502	B4
C140	B2	C406	B3	C580	A4	D103	C1	L503	B4
C142	B2	C407	B3	C581	A4	D104	C1	L504	A4
C143	B2	C408	B3	C582	B4	D105	C1	L505	B4
C144	B2	C409	B3	C583	B4	D106	C1	L506	B4
C154	B1	C410	B3	C601	C4	D107	C1	L507	B4
C157	B1	C411	B3	C602	C4	D108	C1	L508	B4
C158	B1	C412	B3	C603	C4	D109	C1	L511	B4
C159	B1	C413	B3	C604	C4	D301	A1	L514	B4
C160	B1	C414	B3	C605	C4	D302	A1	Q101	C1
C162	B1	C415	B3	C606	C4	D303	A2	Q102	C1
C165	B1	C416	B3	C607	C4	D401	B3	Q103	C1
C166	B1	C417	B3	C608	C4	D402	B3	Q104	B1
C179	C4	C418	B3	C610	C4	D403	B3	Q302	A1
C180	C4	C419	B3	C611	C4	D612	C4	Q303	A1
C181	C4	C420	B3	C706	A2	D613	C4	Q307	A2

Q401	A3	R325	A1	R617	C4
Q402	B3	R326	A1	R618	C4
Q403	B3	R328	A1	R619	C4
Q801	B1	R329	A1	R686	C3
Q802	B1	R330	A1	R687	C3
Q803	B1	R332	A1	R688	C3
Q804	B1	R333	A1	R689	C3
Q805	B1	R334	A1	R690	C3
R106	C1	R335	A1	R691	C3
R107	C1	R336	A1	R692	C3
R108	C1	R337	A1	R693	C3
R109	C1	R338	A1	R801	B2
R110	C1	R340	A1	R802	B2
R1101	A2	R342	A1	R803	B2
R1102	A2	R359	A1	R804	C1
R1103	A2	R360	A1	R806	B1
R1104	A2	R362	A1	R807	B1
R1105	A3	R363	A1	R808	B2
R1107	A3	R364	A1	R812	B1
R1140	A2	R371	A1	R818	C1
R111	C1	R365	A1	R813	B1
R1110	A3	R366	A1	R814	B1
R112	C3	R367	A1	R815	B2
R113	C1	R368	A1	R816	B2
R114	C1	R369	A2	R817	B1
R115	C2	R372	A1	R819	C1
R117	C2	R373	A1	R820	C1
R118	C2	R374	A2	R821	C1
R119	C1	R375	A2	R822	C1
R120	C3	R376	A2	R823	C1
R121	C3	R377	A2	R824	C2
R122	C3	R378	A2	R825	C1
R123	C3	R379	A2	R826	C1
R124	C3	R380	A2	R828	C1
R125	C3	R381	A2	R830	C1
R126	C3	R401	A3	R831	C1
R127	B3	R402	A3	R832	C1
R128	B3	R403	B3	R833	C1
R129	B2	R404	B3	R836	B1
R130	B2	R405	B3	R837	B1
R131	B2	R406	B3	R838	B1
R133	B2	R407	B3	R840	B1
R134	B2	R408	A3	R841	B1
R146	B1	R410	A3	R844	C1
R147	B1	R416	B3	R851	B1
R151	B1	R418	B3	R852	B1
R152	B1	R419	B3	R853	B1
R153	B1	R421	B3	R854	B1
R155	B1	R422	B3	R901	A2
R156	B1	R423	B3	R902	A2
R157	B1	R501	B4	R903	A2
R158	B1	R502	B4	R904	A2
R159	C3	R503	B4	R905	A2
R160	C3	R505	A4	R906	A2
R162	C4	R506	A4	R907	A2
R163	C4	R507	A4	R908	A2
R166	B2	R508	A4	R909	A2
R167	B2	R509	A4	R910	A2
R182	C2	R510	A4	R911	A2
R183	C2	R511	A4	RA101	C3
R3003	A1	R512	A4	RB101	C3
R3007	A2	R514	A4	RB102	C3
R3008	A2	R515	B4	XL101	B2
R3009	A2	R516	B4	ZD101	B1
R3010	A2	R519	B4	ZD102	C4
R3011	A2	R520	B4	ZD104	C4
R3012	A2	R521	B4	ZD105	C4
R3021	A2	R522	B4	ZD1101	A2
R3026	A1	R523	B4	ZD1102	A3
R3027	A1	R524	B4	ZD1103	A2
R302	A1	R525	B4	ZD1104	A3
R303	A1	R526	A4	ZD1105	A2
R304	A1	R527	B4	ZD1106	A3
R315	A1	R532	A4	ZD1111	A3
R316	A1	R533	B4	ZD1112	A3
R317	A1	R601	C4	ZD303	A1
R318	A1	R602	C4	ZD304	A1
R319	A1	R603	C4	ZD401	B3
R320	A1	R605	C4		
R321	A1	R606	C4		
R322	A1	R607	C4		
R323	A1	R614	C4		
R324	A1	R615	C4		

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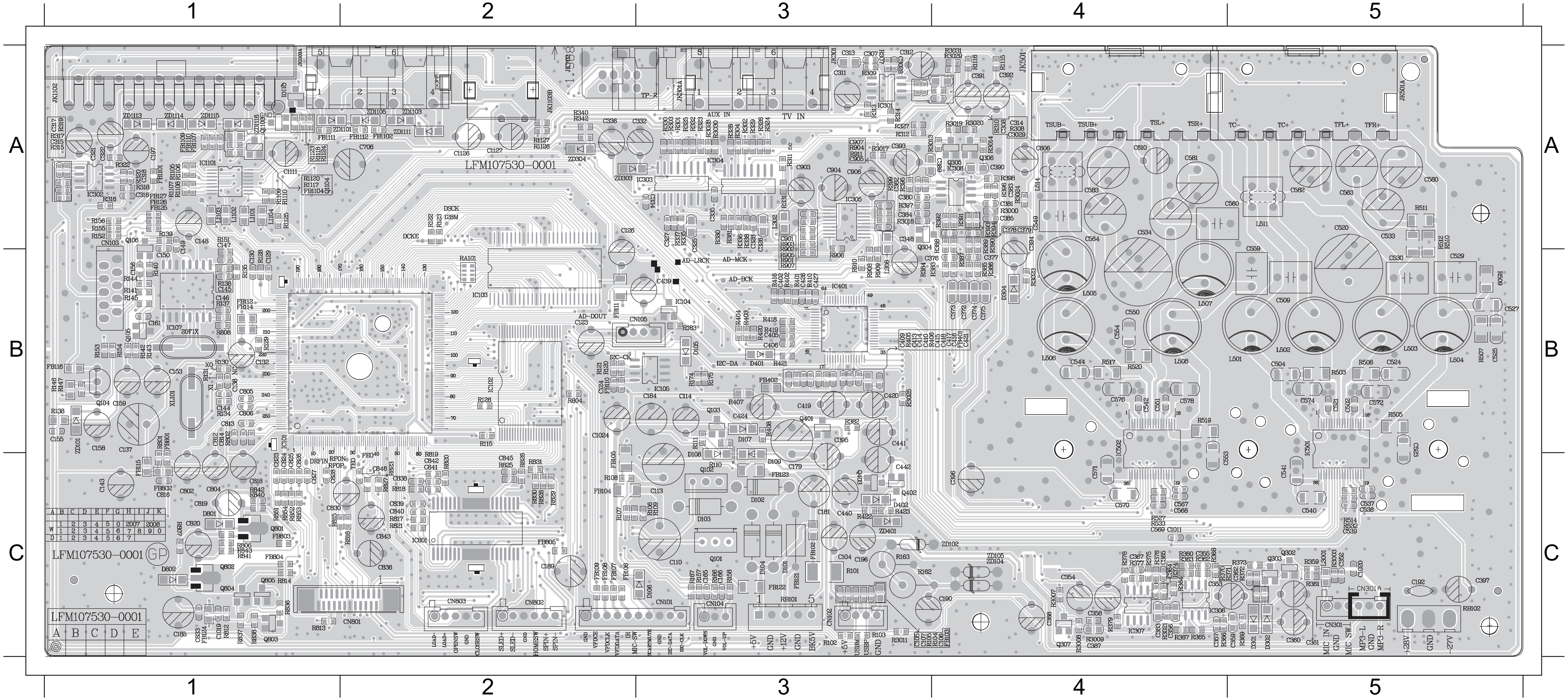
PCB LAYOUT - TOP VIEW

C1011	C4	C159	B1	C332	A2	C367	C4	C439	B3	C538	C5
C1019	C1	C165	C3	C334	A3	C396	C4	C440	C3	C539	C5
C1020	C5	C166	C3	C335	A3	C397	C5	C441	B3	C540	C5
C1024	B2	C179	C3	C336	A2	C402	B3	C502	B5	C541	C5
C110	C3	C181	C3	C348	A3	C405	B3	C504	B5	C542	B4
C1111	A1	C184	B3	C352	C5	C406	B3	C505	B5	C544	B4
C113	C3	C185	C1	C353	C4	C409	B3	C506	B5	C549	A4
C114	B5	C189	C2	C354	C4	C410	B3	C509	B5	C550	B4
C123	B2	C190	C4	C355	C4	C413	B3	C520	A4	C551	B4
C124	B2	C315	A1	C356	C4	C414	B3	C521	B5	C553	C4
C126	A2	C316	A1	C357	C4	C415	B4	C523	B5	C554	B4
C128	B1	C317	A1	C358	C4	C416	B4	C524	B5	C559	B5
C129	B1	C318	A1	C359	C5	C417	B4	C525	B5	C560	A4
C130	B1	C321	A1	C360	C5	C418	B4	C527	B5	C563	A4
C132	B1	C322	A1	C361	C5	C419	B3	C529	B5	C564	A4
C137	B1	C325	A3	C362	C5	C420	B3	C530	B5	C567	C4
C143	C1	C326	A3	C363	C4	C421	B4	C533	A4	C568	C4
C144	B1	C327	A3	C364	C4	C426	B3	C534	A4	C569	C4
C158	B1	C328	A3	C365	C4	C427	B3	C537	C5	C570	C4

C571	C4	C816	C1	C845	C2	D104	C3	FB1101	A1	FB802	C3
C572	B5	C818	C1	C846	C2	D105	B3	FB1102	A2	FB803	C1
C574	B5	C819	C1	C901	A3	D106	C3	FB111	B2	FB804	C1
C576	B4	C820	C1	C903	A3	D107	B3	FB1111	A1	FB805	C2
C578	B4	C823	C1	C904	A3	D108	B3	FB1112	A2	IC101	B1
C580	A4	C824	C1	C905	A3	D109	C3	FB112	B1	IC102	B2
C581	A4	C825	C1	C906	A3	D301	C5	FB114	B1	IC103	B2
C582	A4	C826	C1	C907	A3	D302	C5	FB115	C1	IC104	B3
C583	A4	C827	C1	CN101	C3	D401	B3	FB116	B1	IC105	B3
C606	A4	C828	C1	CN103	A1	D402	C3	FB121	C3	IC302	A1
C610	A4	C830	C1	CN104	C3	D801	C1	FB122	C3	IC303	A3
C706	A2	C833	C1	CN105	B2	D802	C1	FB123	C3	IC304	A3
C802	C1	C836	C2	CN301	C5	FB104	C2	FB124	C3	IC305	A3
C804	C1	C838	C2	CN801	C2	FB105	C2	FB125	A1	IC306	C4
C805	B1	C839	C2	CN802	C2	FB106	C2	FB126	A1	IC307	C4
C806	B1	C840	C2	CN803	C2	FB107	C2	FB127	A1	IC401	B3
C812	B1	C841	C2	D101	C3	FB108	C2	FB401	B4	IC501	B5
C813	B1	C842	C2	D102	C3	FB109	C2	FB402	B3	IC502	B4
C814	B1	C843	C2	D103	C3	FB110	B2	FB801	B1	IC801	C2

JK1103A	A3	L511	A4	R108	C2	R147	B1	R302	A3	R335	A3
JK301	A3	L514	A4	R109	C3	R151	A1	R3021	C4	R336	A3
JK501	A3	Q101	A3	R110	C3	R152	A1	R303	A3	R337	A3
JK501A	A4	Q102	C3	R1105	A1	R153	B1	R304	A3	R338	A3
L1101	A1	Q103	B3	R1107	A1	R155	A1	R315	A1	R340	A2
L1102	A1	Q104	B1	R111	B3	R156	A1	R316	A1	R342	A2
L1103	A1	Q302	C5	R1110	A1	R157	C3	R317	A1	R359	C5
L1104	A1	Q303	C5	R115	B2	R158	C3	R318	A1	R360	C4
L3001	C5	Q307	C4	R120	B2	R162	C3	R319	A1	R362	C4
L302	A3	Q401	B3	R121	B2	R163	C3	R320	A1	R363	C4
L308	B3	Q402	C3	R122	A2	R166	C3	R322	A1	R364	C4
L501	B5	Q403	C3	R123	A2	R167	C3	R323	A3	R365	C4
L502	B5	Q801	C1	R126	B2	R183	B3	R324	A3	R366	C4
L503	B5	Q802	C1	R128	B1	R3003	C5	R325	A3	R367	C4
L504	B5	Q803	C1	R129	B1	R3007	C4	R326	A3	R368	C4
L505	B4	Q804	C1	R130	B1	R3008	C4	R328	A3	R369	C5
L506	B4	Q805	C1	R131	B1	R3009	C4	R329	A3	R371	C4
L507	B4	R106	C3	R134	B1	R301	A3	R330	A3	R372	C5
L508	B4	R107	C2	R146	B1	R3011	C3	R332	A3	R373	C5

R374	C4	R419	B3	R533	C4	R826	C2	R907	A3	ZD401	C3
R375	C4	R421	B3	R801	B1	R828	C2	R908	B3		
R376	C4	R422	C3	R802	B1	R830	C2	R909	B3		
R377	C4	R423	C3	R804	B2	R831	C2	R910	B3		
R378	C4	R503	B4	R806	C1	R836	C1	R911	A3		
R379	C4	R505	B4	R807	C1	R837	C1	RA101	B2		
R380	A3	R506	B4	R808	B1	R838	C1	RB101	C3		
R381	A3	R507	B5	R812	C1	R840	C1	RB102	C5		
R401	B3	R509	B5	R813	C1	R841	C1	XL101	B1		
R402	B3	R510	A4	R814	C1	R851	C1	ZD101	B1		
R403	B3	R511	A4	R815	C1	R852	C1	ZD102	C4		
R404	B3	R512	A4	R816	C2	R853	C1	ZD104	C4		
R405	B3	R514	C5	R817	C2	R854	C1	ZD105	C4		
R406	B4	R517	B4	R818	C2	R901	B3	ZD1101	A2		
R407	B3	R519	B4	R819	C2	R902	B3	ZD1103	A2		
R408	B3	R520	B4	R820	C2	R903	A3	ZD1105	A2		
R410	B3	R525	B5	R821	C2	R904	A3	ZD1111	A2		
R416	B3	R527	C4	R823	C2	R905	B3	ZD303	A2		
R418	B3	R532	C5	R825	C2	R906	B3	ZD304	A2		



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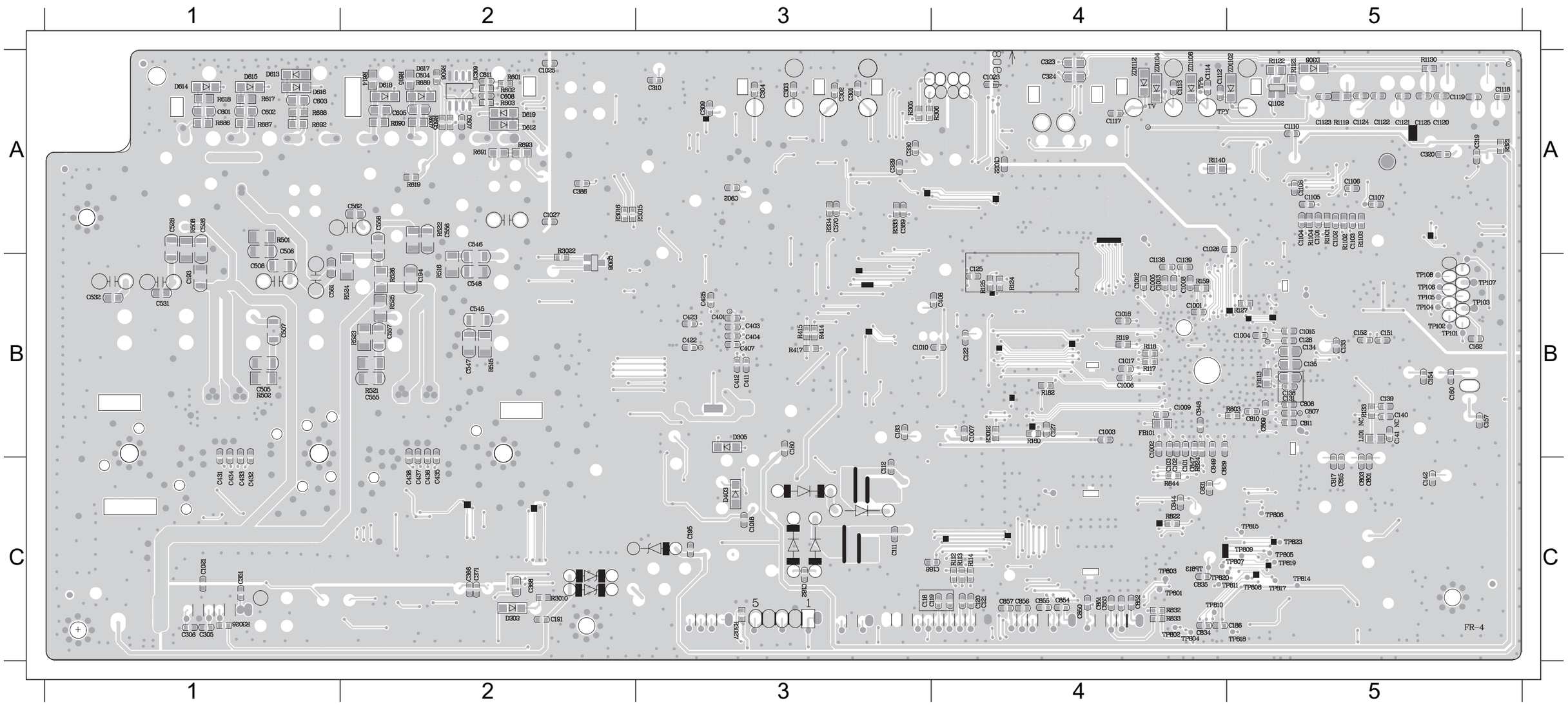
PCB LAYOUT - BOTTOM VIEW

C1001B4 C1010B3 C1023A4 C1106A5 C118 C3 C135 B5 C182 C3 C303 A3 C368 A2 C408 B4 C435 C2 C545 B2 C603 A1 C809 B5 C848 B4 C902 A3 D619 A2 R114 C4 R160 B4 R502 B1 R601 A2 R619 A2 R822 C4
C1002B4 C1012B4 C1025A2 C1107A5 C119 C4 C136 B5 C183 B3 C304 A3 C369 A3 C411 B3 C436 C2 C546 A2 C604 A2 C810 B5 C849 C4 D303 C2 FB101B4 R1140A4 R182 B4 R508 A1 R602 A2 R686 A1 R824 C4
C1003B4 C1013B4 C1026A4 C1108A5 C120 C4 C139 B5 C186 C5 C319 A5 C370 A3 C412 B3 C437 C2 C547 B2 C605 A2 C811 B5 C850 C4 D403 C2 FB113B5 R117 B4 R3010C2 R515 B2 R603 A2 R687 A1 R832 C4
C1004B5 C1015B5 C1027A2 C111 C3 C121 C4 C140 B5 C188 C3 C320 A5 C371 A2 C422 B3 C438 C2 C548 B2 C607 A2 C815 C5 C851 C4 D612 A2 IC309 A2 R118 B4 R3012B4 R516 B2 R605 A2 R688 A1 R833 C4
C1005B4 C1016B4 C103 C4 C1110A5 C122 B4 C142 C5 C191 C2 C323 A3 C387 C4 C423 B3 C505 B1 C555 B2 C608 A2 C817 C5 C852 C4 D613 A1 R1101A5 R119 B4 R3026C1 R521 B2 R606 A2 R689 A2 R844 C4
C1006B4 C1017B4 C1101A5 C1112A4 C125 B4 C154 B5 C193 B1 C324 A3 C388 C4 C425 B3 C506 A1 C556 A2 C611 A2 C829 C4 C853 C4 D614 A1 R1102A5 R124 B4 R3027C3 R522 A2 R607 A2 R690 A2 ZD1102A5
C1007B4 C1018C3 C1102A5 C1113A4 C127 B4 C157 B5 C194 B2 C329 A3 C401 B3 C431 C1 C507 B1 C557 B2 C801 C5 C831 C4 C854 C4 D615 A1 R1103A5 R125 B4 R321 A5 R523 B2 R614 A2 R691 A2 ZD1104A4
C1008B4 C102 C4 C1103A5 C1114A4 C131 B5 C160 B5 C195 C3 C330 A3 C403 B3 C432 C1 C508 B1 C558 A2 C803 C5 C835 C4 C855 C4 D616 A1 R1104A5 R127 B5 R333 A3 R524 B2 R615 A2 R692 A1 ZD1106A4
C1009B4 C1021C1 C1104A5 C1117A4 C133 B5 C162 B5 C301 A3 C351 C1 C404 B3 C433 C1 C526 A1 C601 A1 C807 C5 C844 C4 C856 C4 D617 A2 R112 C4 R133 B5 R334 A3 R525 B2 R617 A1 R693 A2 ZD1112A4
C101 C4 C1022A4 C1105A5 C112 C3 C134 B5 C180 B3 C302 A3 C366 A2 C407 B3 C434 C1 C528 A1 C602 A1 C808 B5 C847 C4 C857 C4 D618 A2 R113 C4 R159 B4 R501 A1 R526 B2 R618 A1 R803 B5



POWER BOARD

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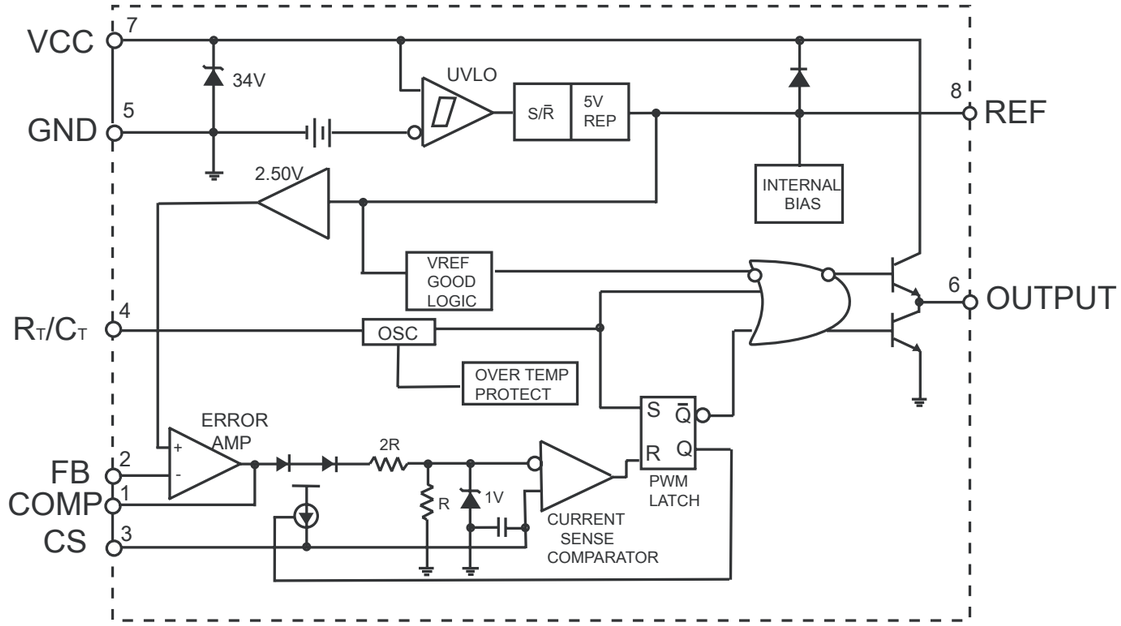
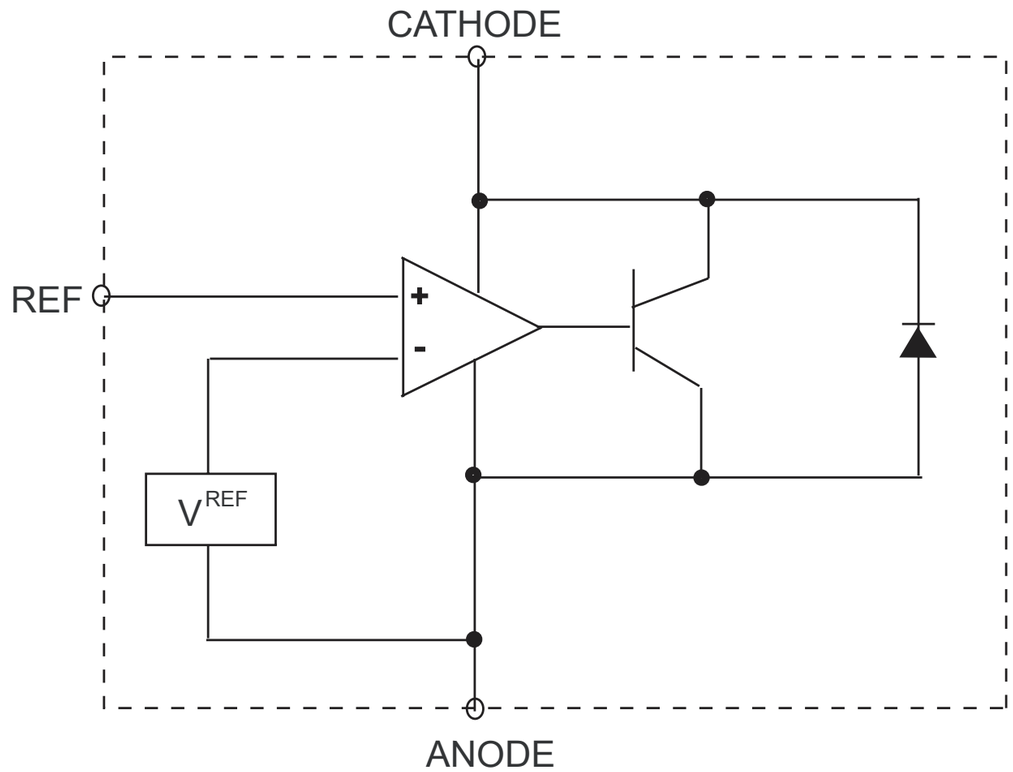
INTERNAL IC DIAGRAM - AP3843GMTR



INTERNAL IC DIAGRAM - AZ431



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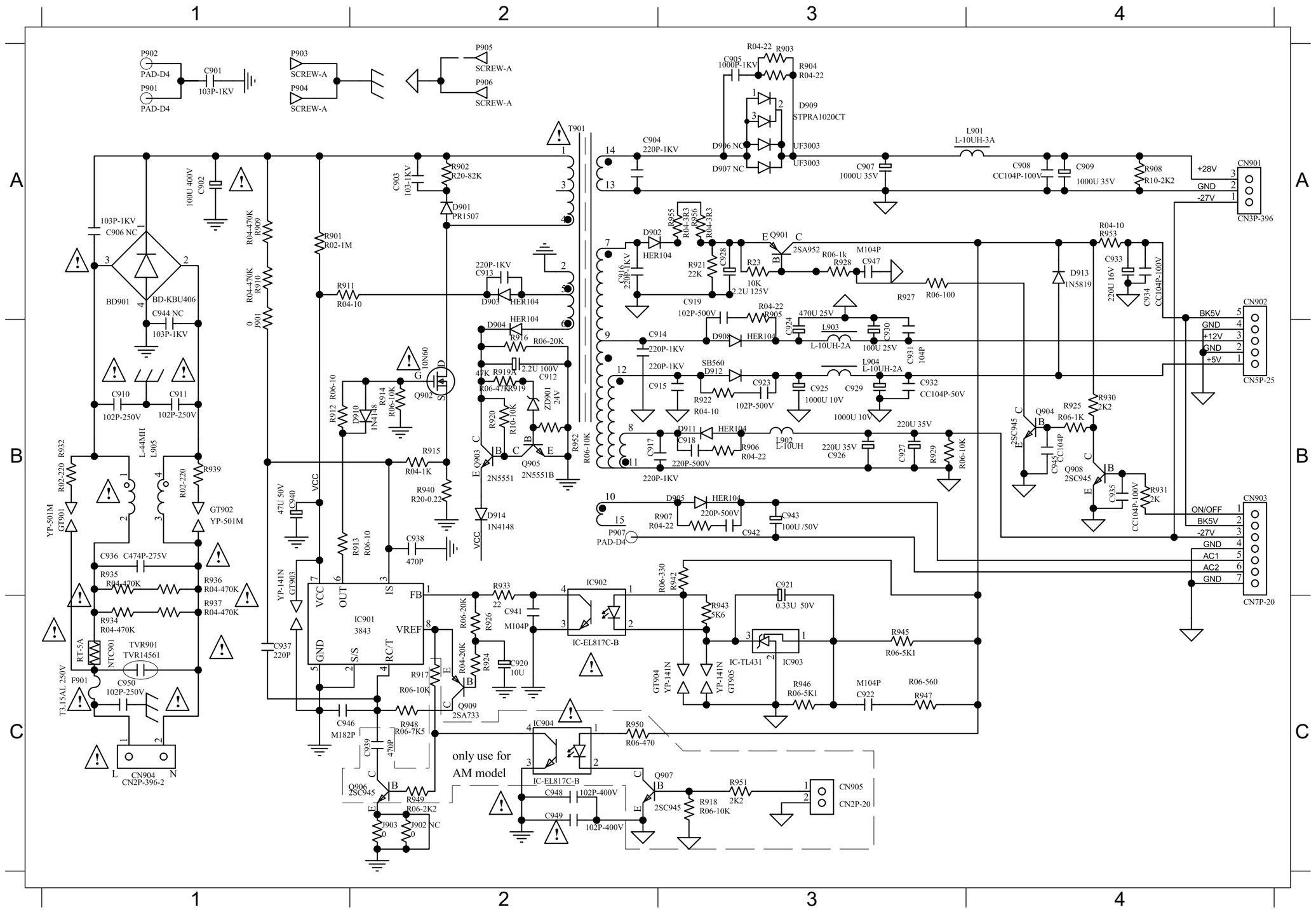
CIRCUIT DIAGRAM

BD901	A1	C909	A4	C917	B2	C925	B3	C933	A4	C942	B3	CN902	A4	D908	B3	GT901	B1	L903	B3	Q905	B2	R906	B3	R914	B2	R924	C2	R932	B1	R942	B3	R955	A3
C901	A1	C910	B1	C918	B3	C926	B3	C934	A4	C943	B3	CN903	B4	D909	A3	GT902	B1	L904	B3	Q908	B4	R907	B3	R915	B2	R925	B4	R933	C2	R943	C3	R956	A3
C902	A1	C911	B1	C919	A3	C927	B3	C935	B4	C945	B4	CN904	C1	D910	B2	GT903	B1	L905	B1	Q909	C2	R908	A4	R916	B2	R926	C2	R934	C1	R945	C3	T901	A2
C903	A2	C912	B2	C920	C2	C928	A3	C936	B1	C946	C1	D901	A2	D911	B3	IC901	C2	NTC901	C1	R901	A1	R909	A1	R919	B2	R927	A3	R935	B1	R946	C3	TVR901	C1
C904	A2	C913	A2	C921	B3	C929	B3	C937	C1	C947	A3	D902	A2	D912	B3	IC902	B2	Q901	A3	R902	A2	R910	A1	R920	B2	R928	A3	R936	B1	R947	C3	ZD901	B2
C905	A3	C914	B2	C922	C3	C930	B3	C938	B2	C948	C2	D903	A2	D913	A4	IC903	C3	Q902	B2	R903	A3	R911	A1	R921	A3	R929	B3	R937	C1	R948	C2		
C907	A3	C915	B2	C923	B3	C931	B3	C940	B1	C949	C2	D904	B2	D914	B2	L901	A3	Q903	B2	R904	A3	R912	B1	R922	B3	R930	B4	R939	B1	R952	B2		
C908	A4	C916	A2	C924	B3	C932	B3	C941	C2	CN901	A4	D905	B3	F901	C1	L902	B3	Q904	B4	R905	A3	R913	B2	R923	A3	R931	B4	R940	B2	R953	A4		



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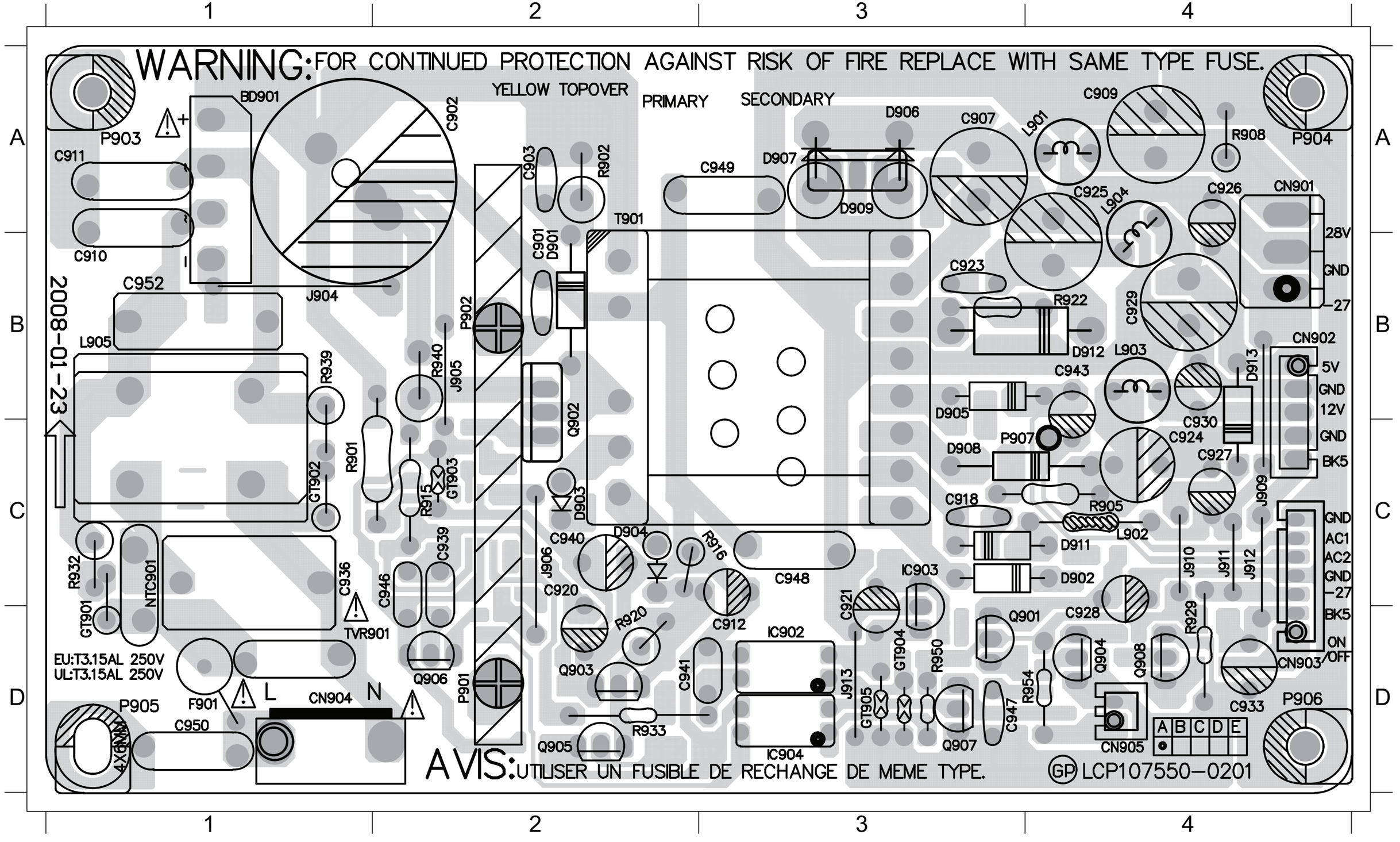
PCB LAYOUT - TOP VIEW

BD901	A1	C910	B1	C923	B3	C929	B4	C943	B4	CN902	B4	D904	C2	D913	B4	IC903	C3	J911	C4	L904	A4	Q904	D4	R908	A4	R932	C1
C901	B2	C911	A1	C924	C4	C930	B4	C946	C2	CN903	D3	D905	B3	F901	D1	J904	B1	J912	C4	L905	B1	Q905	D2	R915	C2	R933	D2
C902	A2	C912	D3	C925	A4	C933	D4	C947	D3	CN904	D1	D908	C3	GT901	C1	J905	B2	J913	D3	NTC901	C1	Q908	D4	R916	C3	R939	B1
C903	A2	C918	C3	C926	A4	C936	C1	C948	C3	D901	B2	D909	A3	GT902	C1	J906	C2	L901	A4	Q901	D3	R901	C1	R920	D2	R940	B2
C907	A3	C920	C2	C927	C4	C940	C2	C949	A3	D902	C4	D911	C4	GT903	C2	J909	C4	L902	C4	Q902	B2	R902	A2	R922	B4	T901	A2
C909	A4	C921	C3	C928	D4	C941	D2	CN901	A4	D903	C2	D912	B4	IC902	D3	J910	C4	L903	B4	Q903	D2	R905	C4	R929	D4	TVR901	D1



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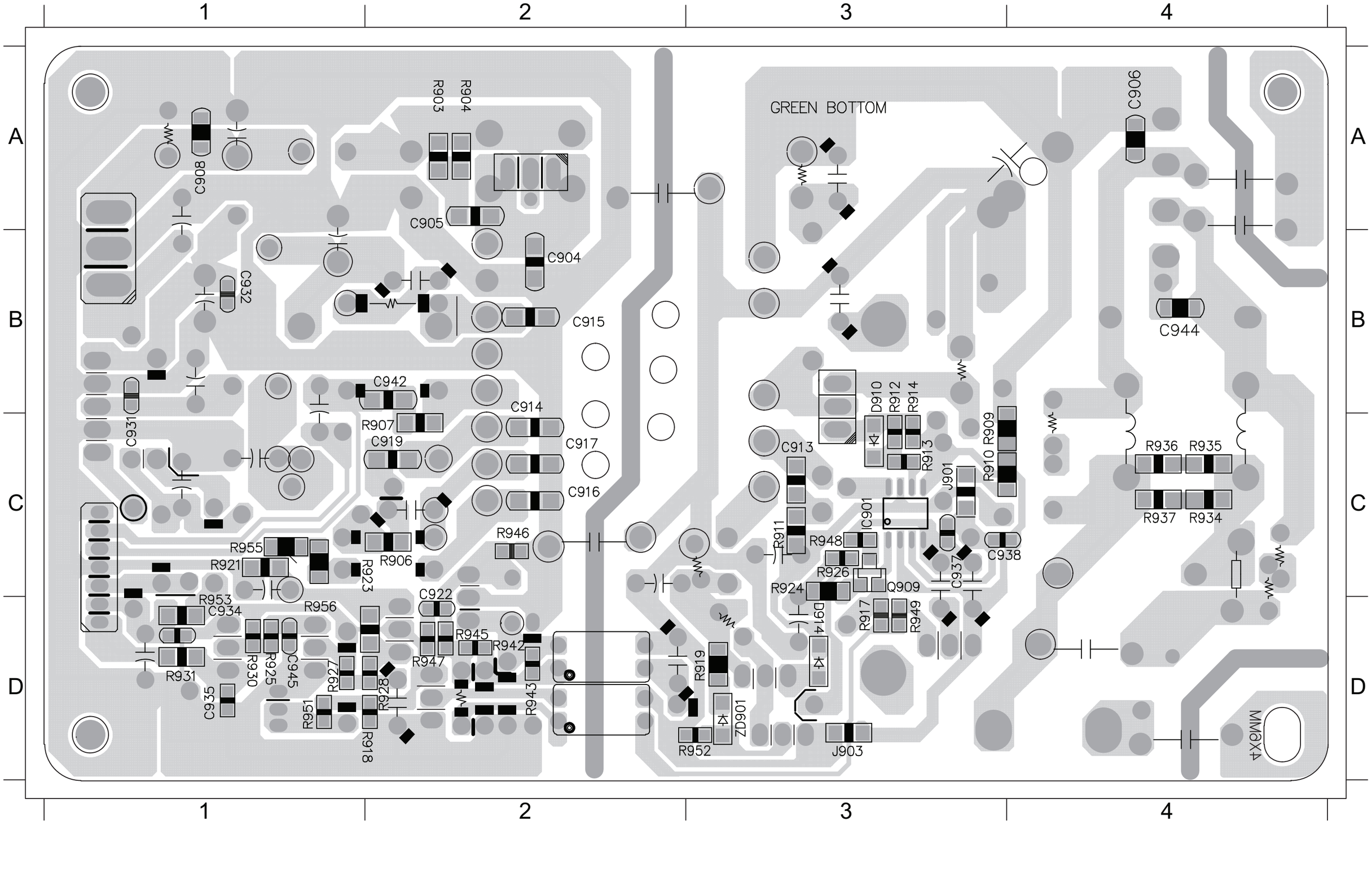
PCB LAYOUT - BOTTOM VIEW

C904	B2	C914	B2	C919	C2	C934	D1	C942	B2	IC901	C3	R903	A2	R909	C3	R913	C3	R923	C1	R927	D1	R934	C4	R942	D2	R947	D2	R955	C1
C905	A2	C915	B2	C922	C2	C935	D1	C945	D1	J901	C3	R904	A2	R910	C3	R914	B3	R924	C3	R928	D2	R935	C4	R943	D2	R948	C3	R956	D1
C908	A1	C916	C2	C931	C1	C937	C3	D910	B3	J903	D3	R906	C2	R911	C3	R919	D3	R925	D1	R930	D1	R936	C4	R945	D2	R952	D2	ZD901	D3
C913	C3	C917	C2	C932	B1	C938	C3	D914	D3	Q909	C3	R907	C1	R912	B3	R921	C1	R926	C3	R931	D1	R937	C4	R946	C2	R953	D1		



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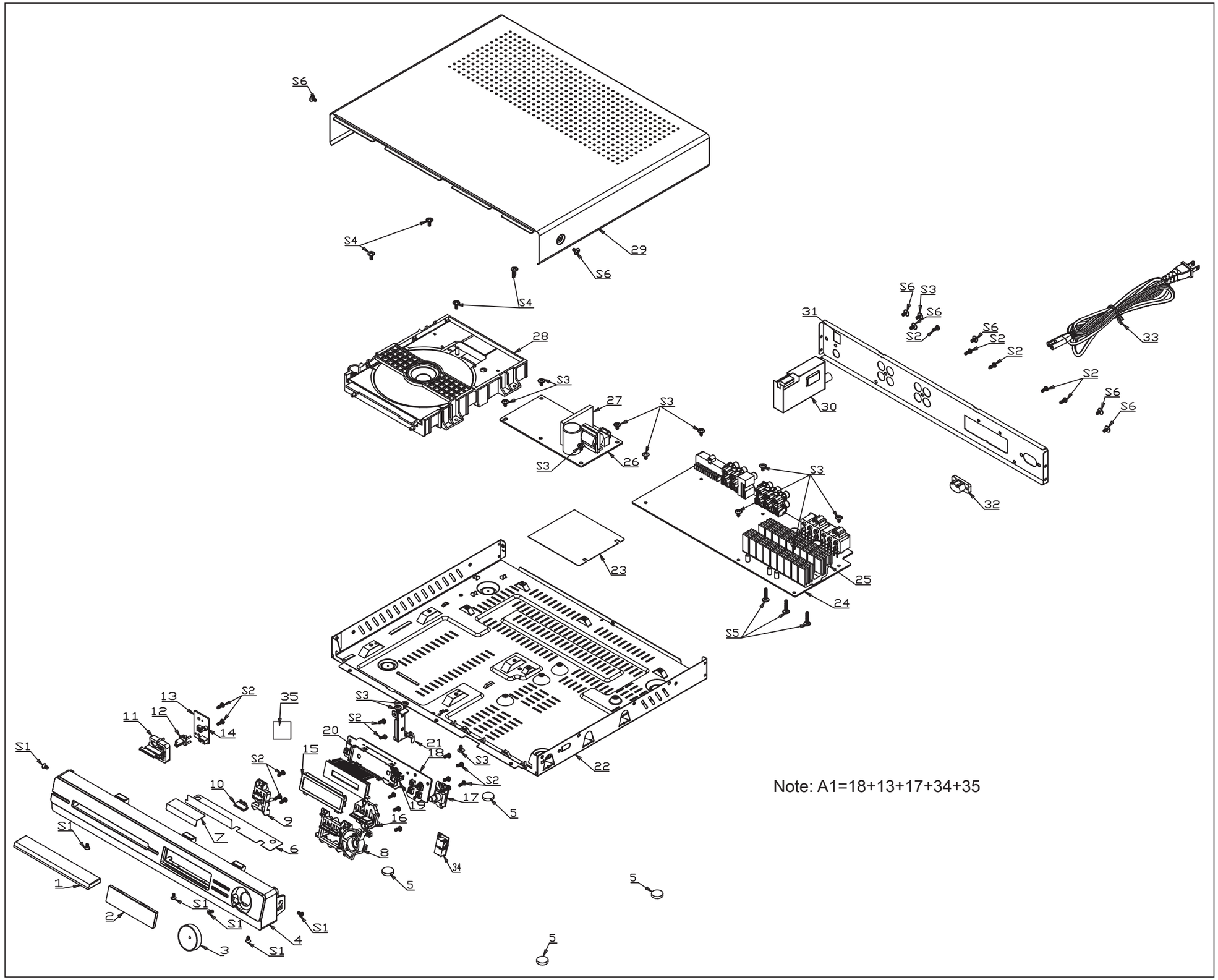
Mechanical Exploded View



Note: A1=18+13+17+34+35

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MECHANICAL PART LIST

Loc.	12NC No.	Description
MAIN		
1	996510012023	DVD DOOR HIPS
2	996510001640	DISPLAY LENS
3	996510012024	VOL KNOB
4	996510012532	FRONT CABINET
5	994000005305	RUBBER FOOT D14XT3.0MM W/ADV
8	996510012026	FUN BUTTON BASE ABS
9	996510001644	EJECT BUTTON BASE
10	996510012027	EJECT BUTTON ABS
11	996510012028	STANDBY BUTTON ABS
12	996510001258	STANDY LED LENS
16	996510012029	FUNCTION BUTTON ABS
22	996510012030	BTM CAB SECC
23	996510012031	PVC SHEET
28	996510010819	DVD LOADER
29	996510008742	TOP COVER
30	996510011275	TUNER PACK
31	996510014049	REAR PANEL SECC
33	996510002650	POWER CORD
A1	--	VFD+STANDBY+VOL+MP3+BRKT PCB
24	--	MAIN PCB ASSY
26	--	POWER PCB ASSY
FM	994000002731	FM ANTENNA 1500MM
RC	996510012534	REMOTE CONTROL
V1	996510001623	FFC CABLE 10P 60MM
VIDEO	996500013058	RCA CABLE 2P 1.2M
SPEAKER		
RFC/F/R	996500036131	RUBBER FOOT - CENTER/FRONT/REAR
RFS	996500028375	RUBBER FOOT
SPKC	996510011246	SPEAKER BOX -CENTER
SPKFL	996510011247	SPEAKER BOX - FRONT LEFT
SPKFR	996510011248	SPEAKER BOX - FRONT RIGHT
SPKRL	996510011249	SPEAKER BOX - REAR LEFT
SPKRR	996510011250	SPEAKER BOX - REAR RIGHT
SUBW	996510011251	SUBWOOFER
MAIN PCB		
CN101	996510012539	CONNECTOR 10 PIN PITCH=2.0mm
CN103	996510012497	FPC/FFC CONN. 10P
CN104	996500015900	CONNECTOR 3 PIN P=2.0MM
CN105	996500015859	CONNECTOR 4PIN P2.0MM
CN301	996500015900	CONNECTOR 3 PIN P=2.0MM
CN802	996500015901	CONNECTOR 6 PIN P=2.0MM
CN803	996500015895	CONNECTOR 5 PIN P=2.0MM
D101	996510010358	DIODE 1N4007
D102	996510010358	DIODE 1N4007
D103	996510010358	DIODE 1N4007
D104	996510010358	DIODE 1N4007
IC101	996510012540	IC256PMT1389DXE/HDLQFPMEDIATEK
IC102	--	IC 48P EN29LV160AB-70TCP TSOP
IC103	996510004115	IC 54P AS81F641642C-6P TSOPII
IC103	996510009895	IC 54P A641604L-6T TSOP II
IC104	994000005209	IC 3P AZ809NSTR-E1 SOT23
IC303	996510012503	IC 16P CD4051BM SOIC TI ANALOG
IC304	996510012503	IC 16P CD4051BM SOIC TI ANALOG
IC305	996510012504	IC 20P WM8782SEDS SSOP WOLFSON
IC306	996500029611	IC 8P CO4558A SO8 CERAMATE LF
IC306	996500041286	IC 8P 4558
IC307	996500029611	IC 8P CO4558A SO8 CERAMATE LF
IC307	996500041286	IC 8P 4558
IC309	996500029611	IC 8P CO4558A SO8 CERAMATE LF
IC401	996510012527	IC 64P STA309A TQFP ST
IC501	996510012541	IC 36P STA518 PSSO ST 40V 3.5A
IC502	996510012541	IC 36P STA518 PSSO ST 40V 3.5A
IC801	996510010380	Motor Drive IC
IC801	996510012506	IC 28P AM5888S L/F HSOP AMTEK
JK1103A	996510012542	RCA JACK4PRED-GRN/YEL-BLUW/GND
JK301	996510004283	RCA JACK 4P AUDIO
JK501501A	996510013837	GPSPK JAC12P RD-WT-GRN-GRY-BLU
L511	996500016692	20UH D0.5MM 4PIN
L514	996500016692	20UH D0.5MM 4PIN
Q101	996510012508	XISTR PNP TIP42C
Q101	996510012543	PNP TRANSISTOR TIP42CTO-220UTC
Q102	996500026946	XISTR PNP 2SB772P/Q NEC PB<10
Q103	994000000921	XISTR PNP 2SA812 HFE:200-400
Q104	996510000615	XISTR NPN 2SC945P
Q302	994000000915	XISTR NPN 2SC1623
Q303	994000000915	XISTR NPN 2SC1623
Q307	994000000915	XISTR NPN 2SC1623
Q401	996510000578	XISTR NPN KTC3875-Y
Q402	994000000915	XISTR NPN 2SC1623
Q403	994000000915	XISTR NPN 2SC1623
Q801	996500026927	XISTR PNP 2SB1132RT100 ROHM HF
Q802	996500026927	XISTR PNP 2SB1132RT100 ROHM HF
Q803	994000000915	XISTR NPN 2SC1623
Q804	996510004117	FET 2SK3018 30V/0.1A SC-70
Q805	996510004117	FET 2SK3018 30V/0.1A SC-70
R162	996510012544	RES. 560 OHM 2W 5% MO
R163	996510012544	RES. 560 OHM 2W 5% MO
ZD102	996500026940	DIODE ZENR 11.9-12.4V 0.5W
ZD104	996510012545	DIODEZENR 5.3-5.5V 0.5WHITACHI
ZD105	996510012545	DIODEZENR 5.3-5.5V 0.5WHITACHI
L501	--	INDUCTOR 30uH 15% 1KHZ 0.25V 2A
L502	--	INDUCTOR 30uH 15% 1KHZ 0.25V 2A
L503	--	INDUCTOR 30uH 15% 1KHZ 0.25V 2A
L504	--	INDUCTOR 30uH 15% 1KHZ 0.25V 2A
L505	--	INDUCTOR 30uH 15% 1KHZ 0.25V 2A
L506	--	INDUCTOR 30uH 15% 1KHZ 0.25V 2A
L507	--	INDUCTOR 30uH 15% 1KHZ 0.25V 2A
L508	--	INDUCTOR 30uH 15% 1KHZ 0.25V 2A
XL101	--	CRYST 27.0000MHZ HC-49US +/-20PPM SMT
VFD+STANDBY+VOL+MP3+BRACKET PCB		
D202	996500026949	DIODE SW 1N4148 PB<1000PPM
D203	996500026949	DIODE SW 1N4148 PB<1000PPM
IC200	994000005266	IC 52P V63111 QFP
Q200	994000000921	XISTR PNP 2SA812 HFE:200-400
SN200	994000005472	IRT RECEIVER IRM-2638AF4
XL200	996510012536	RES CERAMIC 455KHZ ZTB455ET4C
ZD200	996510010364	DIODE ZENER 5.32-5.88V 0.5W
JK1	996510012537	PHONE JACK D3.5 7P LIGHT GREY
DVD LOADER		
28	996510010819	DVD LOADER
DT	996500020250	TRAVERSE MECHANISM
LB	996510012492	LOADER BASE
V3	996510007319	FFC CABLE 24P 180MM
V3	996510013767	FFC CABLE 24P
POWER PCB		
BD901	996500041295	BRIDGE RS406 4A 600V UL
C901	996500018042	COND DISC 0.01UF 1KV 20%
C902	996510004296	ELEC 100UF 400V 20% 22x30x10
C903	996500018042	COND DISC 0.01UF 1KV 20%
C910	996500027115	CAP.SAFTY Y1 102PF 250V 20% Y5
C911	996500027115	CAP.SAFTY Y1 102PF 250V 20% Y5
C912	996510012547	CONDELECT 2.2uF 125V 20% 105'C
C923	996500020261	COND DISC 0.001UF 1KV 20%
C941	996510004633	COND MYLAR 0.1 uF 100V 5%
C946	996510010365	COND MYLAR 0.0018uF 100V 5%
C947	996500020275	COND DISC 0.1UF 100V
C948	996500027115	CAP.SAFTY Y1 102PF 250V 20% Y5
C949	996500027115	CAP.SAFTY Y1 102PF 250V 20% Y5
CN901	996500019399	CONNECTOR 3P CL3962WVO
CN901	996510012549	CONN 3P P=3.96mm 180' NICKEL
CN902	996500015863	CONNECTOR B5B-XH-A 5 PIN
CN903	996500017358	CONNECTOR 7P
CN904	996500015936	CONNECTOR 4PIN P=3.96MM
D901	994000000938	DIODE PR1507 1.5A 1000V
D902	994000000941	DIODE HER104 1A 300V 50NS
D903	994000000941	DIODE HER104 1A 300V 50NS
D904	996510012516	DIODEHER105 DO-411A400V50nSFMS
D905	994000000941	DIODE HER104 1A 300V 50NS
D908	994000000941	DIODE HER104 1A 300V 50NS
D909	994000005459	DIODE STPR1020CT
D911	994000000941	DIODE HER104 1A 300V 50NS
D912	996500041297	DIODE SB560 DO-201AD CTC 5A 60
D913	996510004297	IN5819 1A 28V SCHOTTKY
F901	996510004105	FUSE T3.15AL 250V
IC901	996510004113	IC 8P AP3843GMTR-E1
IC902	994000000946	OPTICAL SENSOR 4P
IC903	994000000952	IC 3PIN TL431
IC903	996500029312	IC 3 PIN TL431 TO-92 CHANG JI
L901	996510012550	CHOKECOILS 10UH 10% P=5 CUT4MM
L902	996500015871	INDUCTOR 10 UH 10%
NTC901	994000005232	THERMIST. NTC 5R 5A
Q901	996510010356	XISTR PNP 2SB647 TO-92MOD
Q902	996500038406	MOSFET STP10NK60Z 10A 600V
Q903	996510004298	XISTR NPN 2N5551B TO-92
Q904	996510000615	XISTR NPN 2SC945P
Q905	996510004298	XISTR NPN 2N5551B TO-92
Q908	996510000615	XISTR NPN 2SC945P
Q909	994000000921	XISTR PNP 2SA812 HFE:200-400
R920	996510012521	RES 10K OHM 2W 5% STANDARD RAD
R940	996510012551	RES. 0.22 OHM 2W 5% MOF
T901	996510012552	SW TRANS EER28/34S 6+6P 60W

REVISION LIST

Version 1.0
*Initial release

Version 1.1
*Mechanical Part List updated

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