Service
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Service Manual

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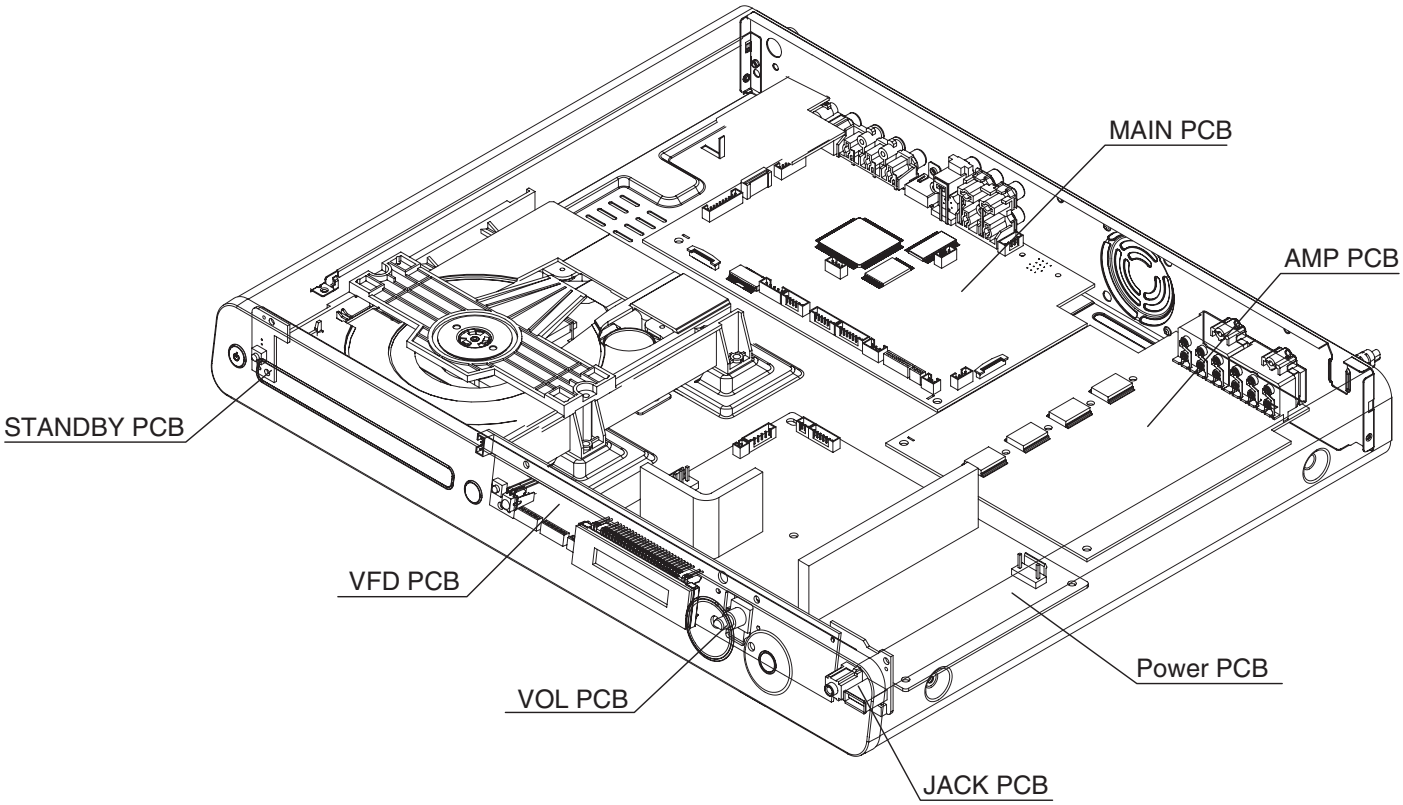
Published by LM0810 Service Audio Printed in The Netherlands Subject to modification

GB 3139 785 33620

Version 1.0

PHILIPS

LOCATION OF PCB BOARDS



VERSION VARIATION:

Type/Versions / Features	HTS3565 /98	HTS3569 /98
Main(Power Output-1000W)	X	X
S-video out	X	X
Power Voltage (120V/230V)	X	X
WMA	X	X

SERVICE SCNARIO MATRIX:

Type/Versions / Boards in used	HTS3565 /98	HTS3569 /98
Main Board	C	C
Power Board	C	C
AMP Board	C	C
VFD+JACK+VOL+STANDBY Board	C	C

* C= Component

SPECIFICATIONS (red colour only for hts3569/98)

AMPLIFIER

Total output power
Home Theatre mode..... 1000W
Frequency response..... 180 Hz~18 kHz / ±3dB
Signal-to-noise ratio..... 60 dB (A-weighted)
Input sensitivity
AUX ..... 400 mV
MP3 LINK ..... 400 mV

Disc

Laser Type..... Semiconductor
Disc diameter..... 12cm / 8cm
Video decording.....
..... MPEG1/ MPEG2 / DivX / DivX Ultra
Video DAC..... 12 bits
Signal system ..... PAL / NTSC
Video S/N ..... 56 dB
Audio DAC..... 24 bits / 96 kHz
Frequency response..... 4 Hz - 20 kHz (44.1 kHz)
..... 4 Hz - 22 kHz (48 kHz)
..... 4 Hz - 44 kHz (96 kHz)
PCM..... IEC 60958
Dolby Digital IEC60958, IEC61937

Radio

Tuning range ..... FM 87.5-108 MH50z/ 1(00 kHz)
26 dB quieting sensitivity ..... FM 22 dBf
IF rejection ratio..... FM 60 dB
Signal-to-noise ratio..... FM 50 dB
Harmonic distortion..... FM 3%
Frequency response..... FM 180 Hz~10 kHz / ±6dB
Stereo separation ..... FM 26 dB (1 kHz)
Stereo Threshold..... FM 29 dB

USB

Compatibility ..... Hi-Speed USB (2.0)
Class support..... UMS (USB Mass Storage Class), MTP
..... Media Transfer Protocol

Main unit

Power supply ..... 110-127 V / 220-240 V
..... 50~60 Hz
Power consumption1 ..... 80W
Dimensions..... 435 x 58 x 360 (mm)
..... (w x h x d)
Weight ..... 4.04 kg

FRONT AND REAR SPEAKERS

System..... Full range satellite
Impedance..... 6 ohm
Speaker drivers ..... 3” full range speaker
Frequency response..... 150 Hz~20 kHz
Dimensions ..... 103 x 203 x 71(mm)
..... 261 x 1200 x 260 (mm)
..... (w x h x d)
Weight ..... 0.56 kg
..... 3.29 kg

CENTER SPEAKER

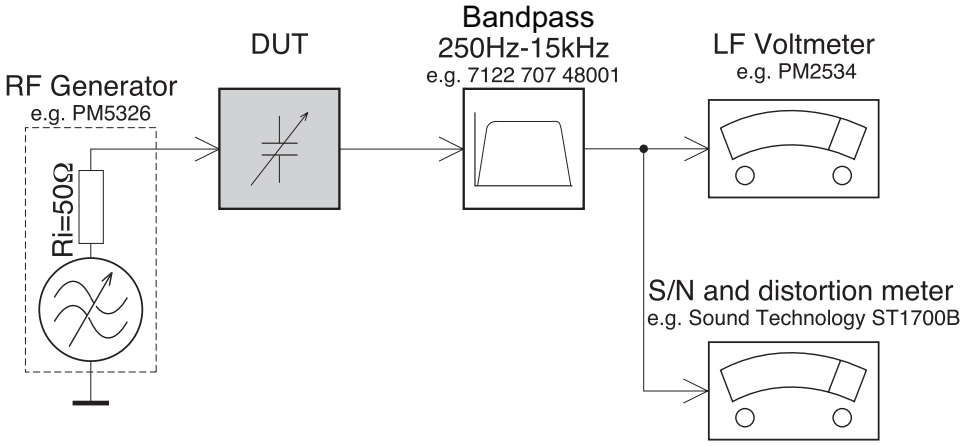
System..... Full range satellite
Impedance 3ohm
Speaker drivers ..... 2x 2.5” woofer + 1 x 2” tweeter
Frequency response..... 150 Hz – 20 kHz
Dimensions ..... 440 x 105 x 75 (mm)
..... (w x h x d)
Weight ..... 1.39 kg
..... 1.43 kg

SUBWOOFER
Impedance..... 3ohm
Speaker drivers ..... 203 mm (8”) woofer
Frequency response ..... 40 Hz – 150 Hz
Dimensions ..... 163 x 363 x 369 (mm)
..... 240 x 352 x 360 (mm)
..... (w x h x d)
Weight ..... 5.08 kg

Specifications subject to change without prior notice.

MEASUREMENT SETUP

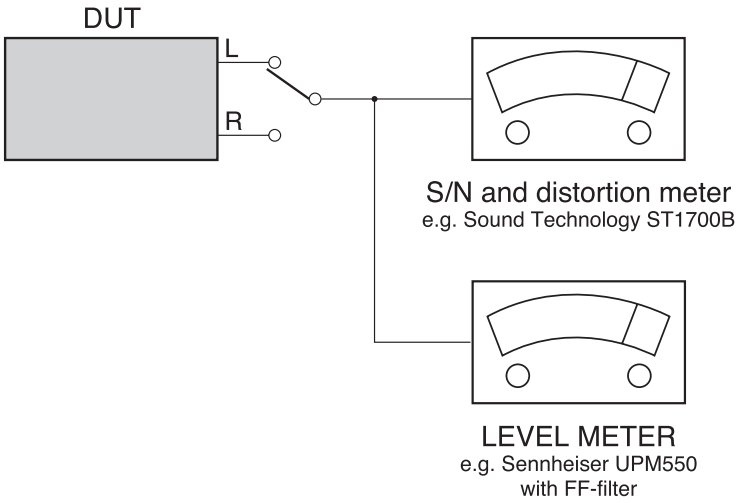
Tuner FM



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

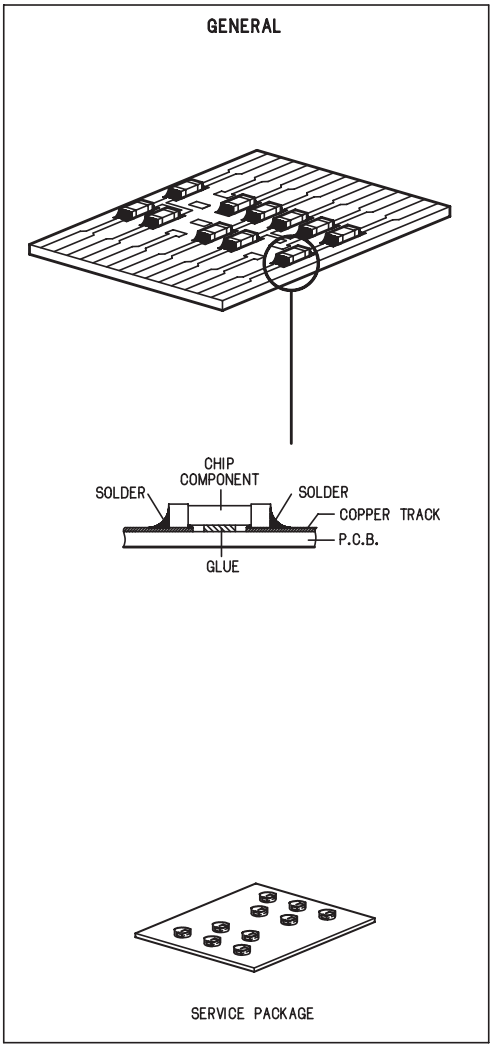
Service Tools:

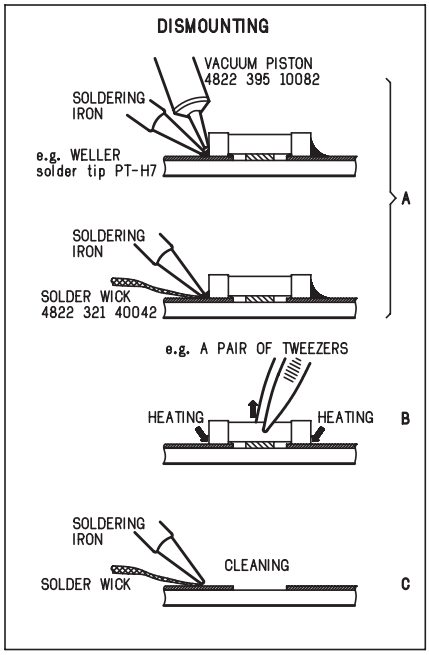
Universal Torx driver holder 4822 395 91019
Torx bit T10 150mm 4822 395 50456
Torx driver set T6-T20 .....4822 395 50145
Torx driver T10 extended 4822 395 50423

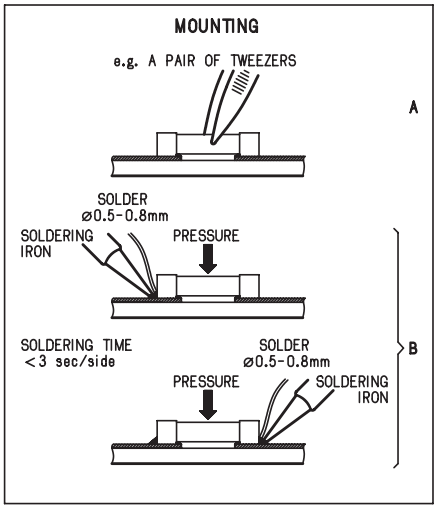
Compact Disc:

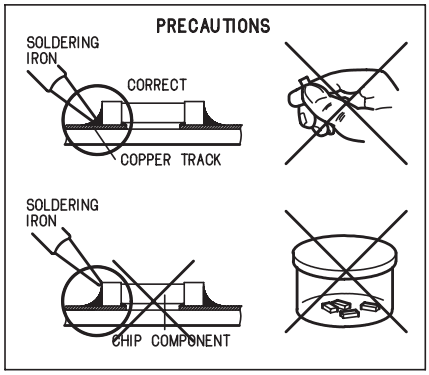
SBC426/426A Test disc 5 + 5A 4822 397 30096
SBC442 Audio Burn-in test disc 1kHz 4822 397 30155
SBC429 Audio Signals disc 4822 397 30184
Dolby Pro-logic Test Disc 4822 395 10216

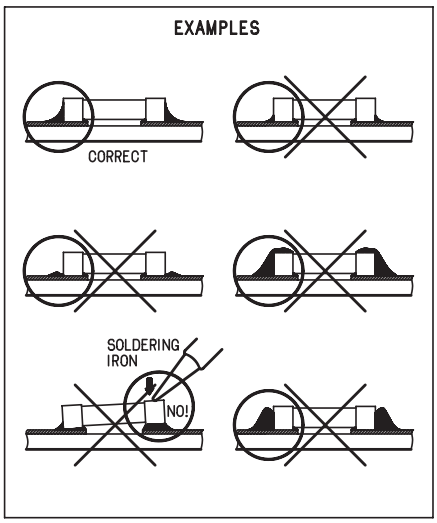
HANDLING CHIP COMPONENTS











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 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.

2 - 1

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 sysytem reset

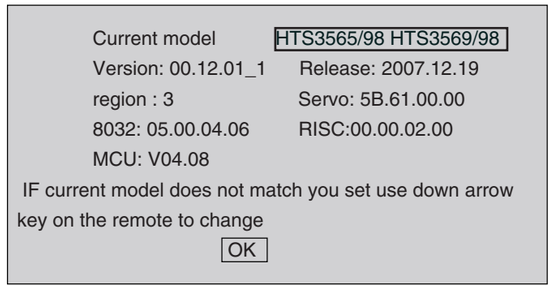
2)Region Code Change

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“

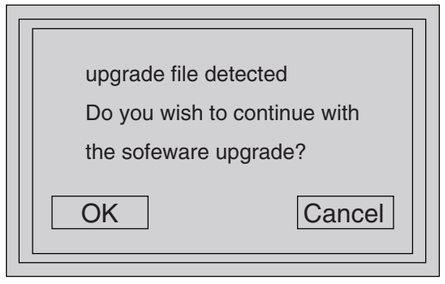
8) Produce to Change Tuner Grid

(only applicable for certain regions)
In some countries, the frequency step between adjacent channels in the (AM/MW)/FM band is 9kHz/50kHz(10kHz/100kHz in some areas).

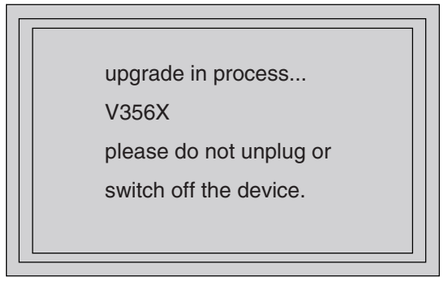
a) press “source” to select “FM” or “AM”
b) In “FM” or “AM” playback mode, press & hold “play/pause” button until “Grid 9” or “Grid 10” appears
Note: repeating the same action will toggle back to it previous tuning grid setting.
* “Grid 10” is default for/98 version.

8) Upgrading new sofeware

a) copy “sofeware files” into a CD-R disc
b) open the CD Door,then insert 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:



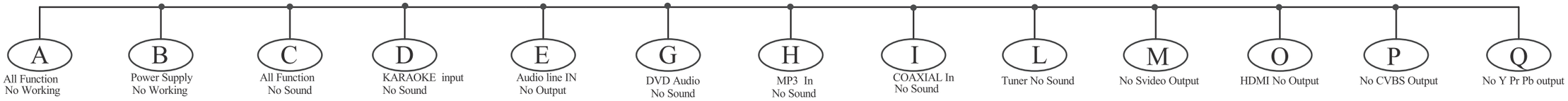
CAUTION!

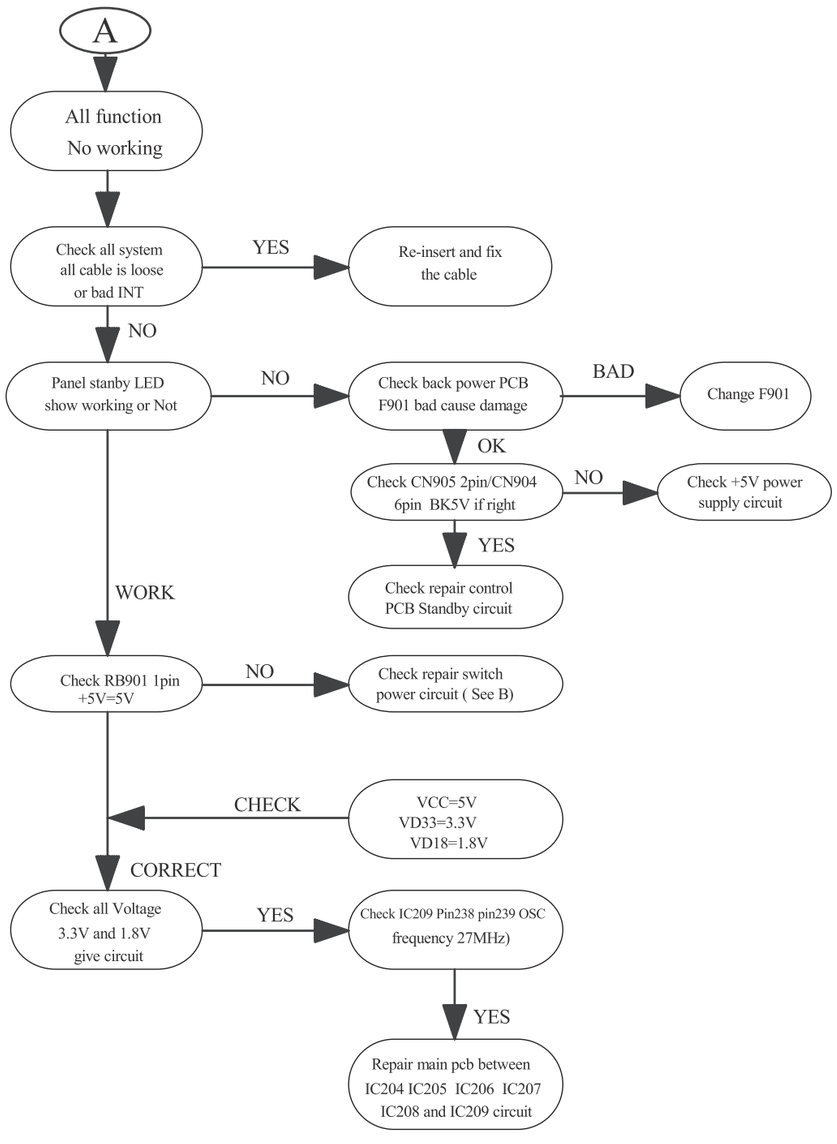
This information is confidential and may not be distributed.Only a qualified service person should reprogram the Region Code.

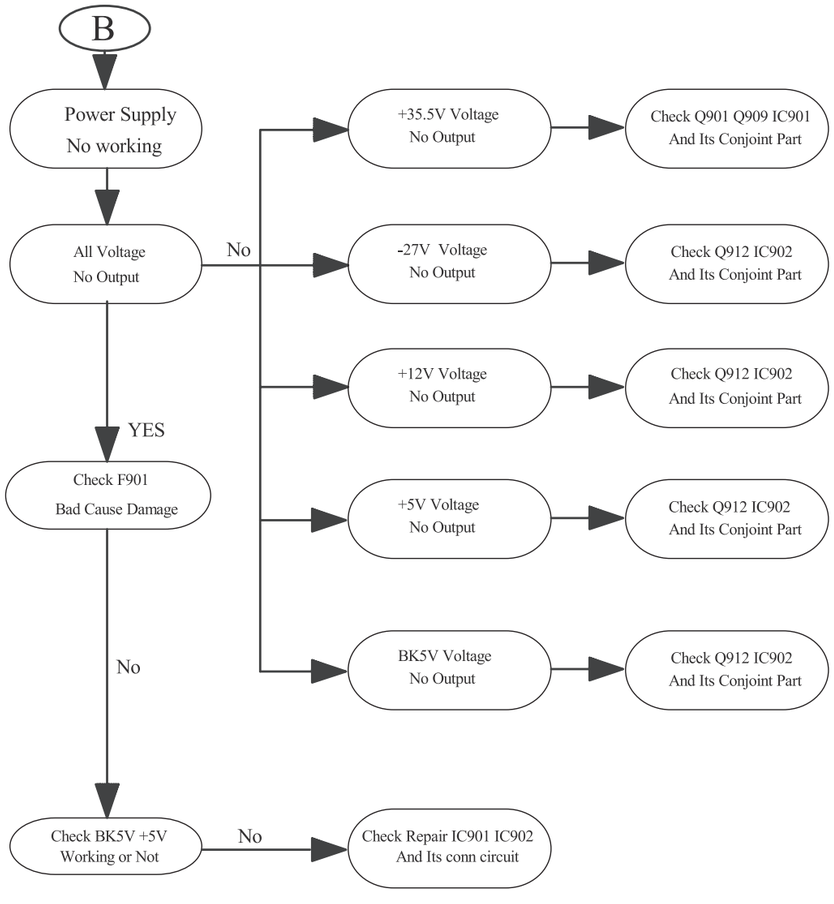
2 - 2

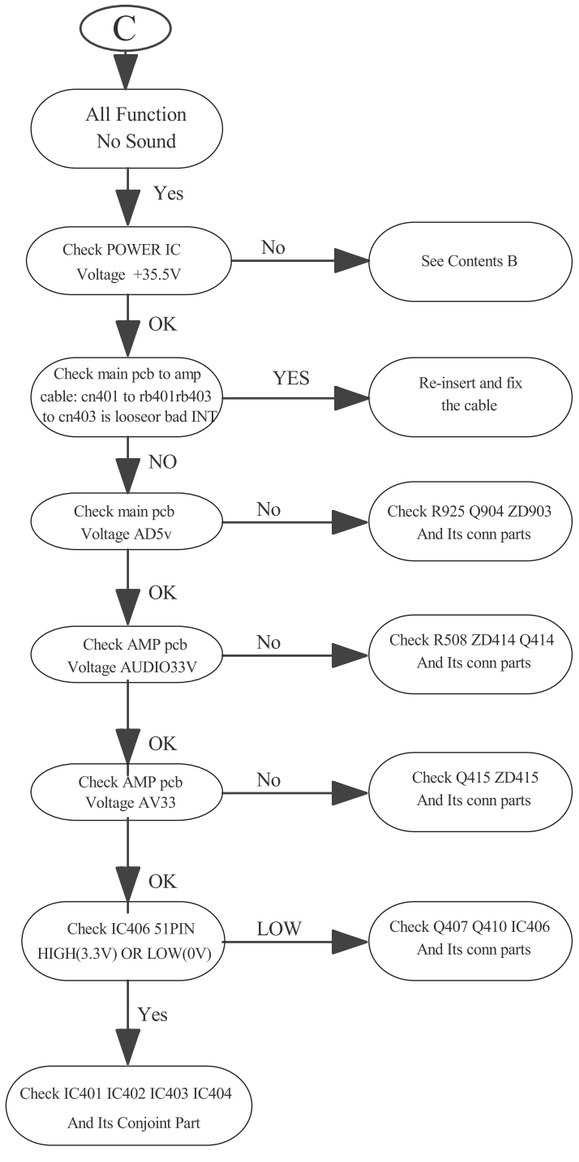
REPAIR INSTRUCTIONS (part one)

MAIN UNIT REPAIR CHART 1/3





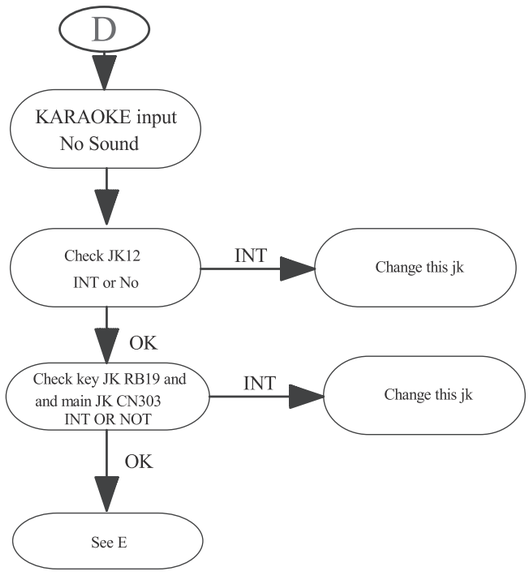


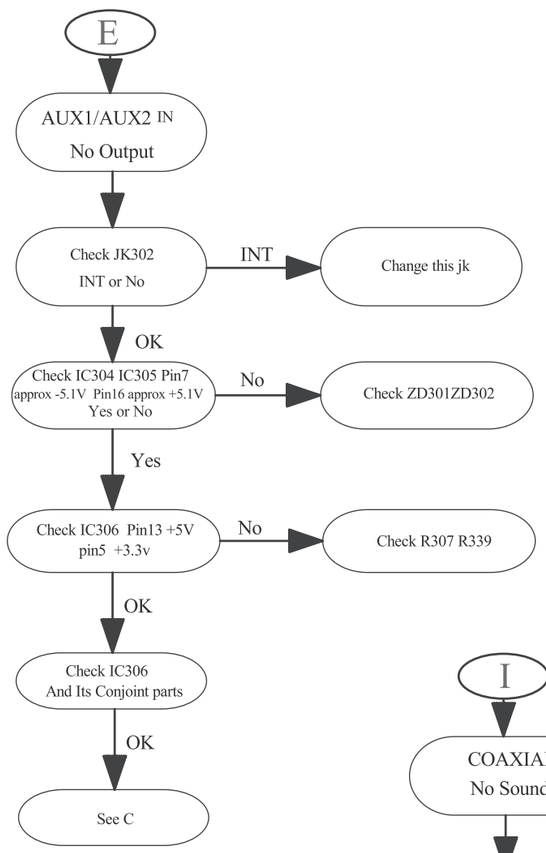


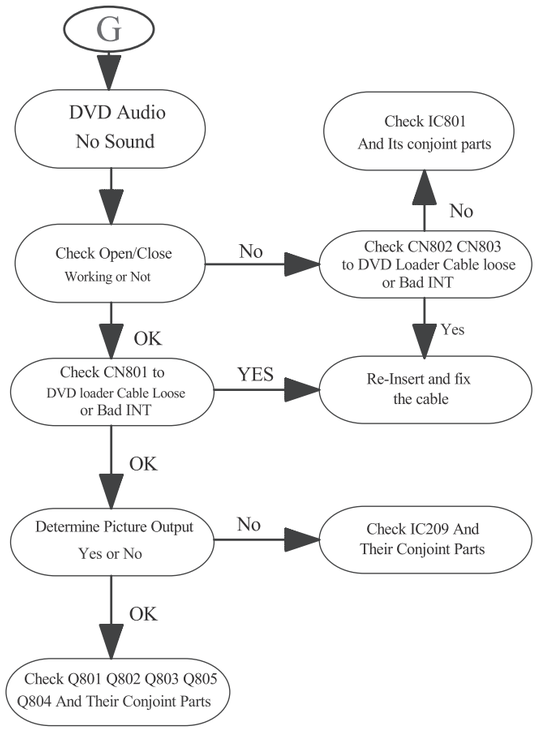
REPAIR INSTRUCTIONS (part two)

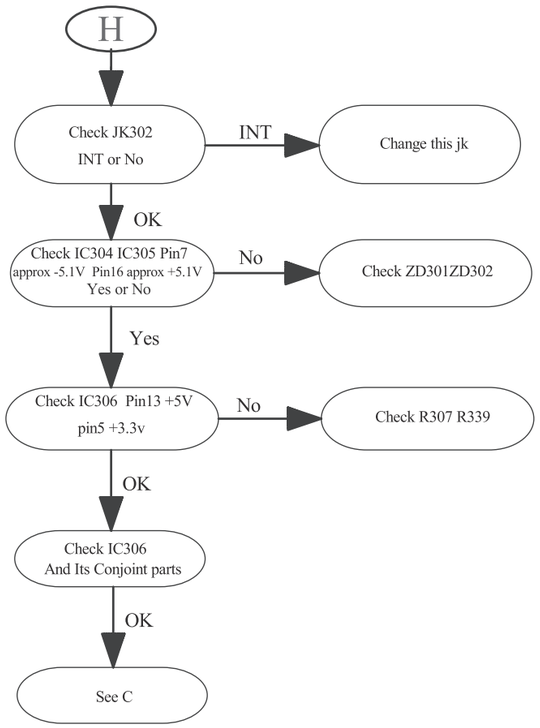
2 - 3

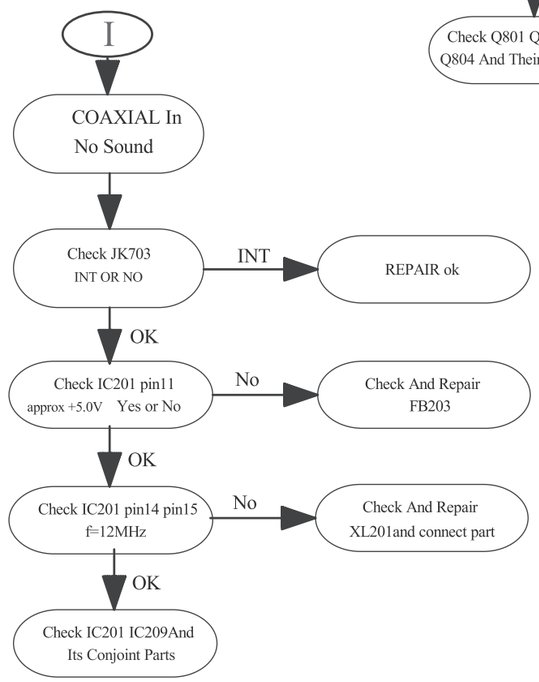
MAIN UNIT REPAIR CHART 2/3





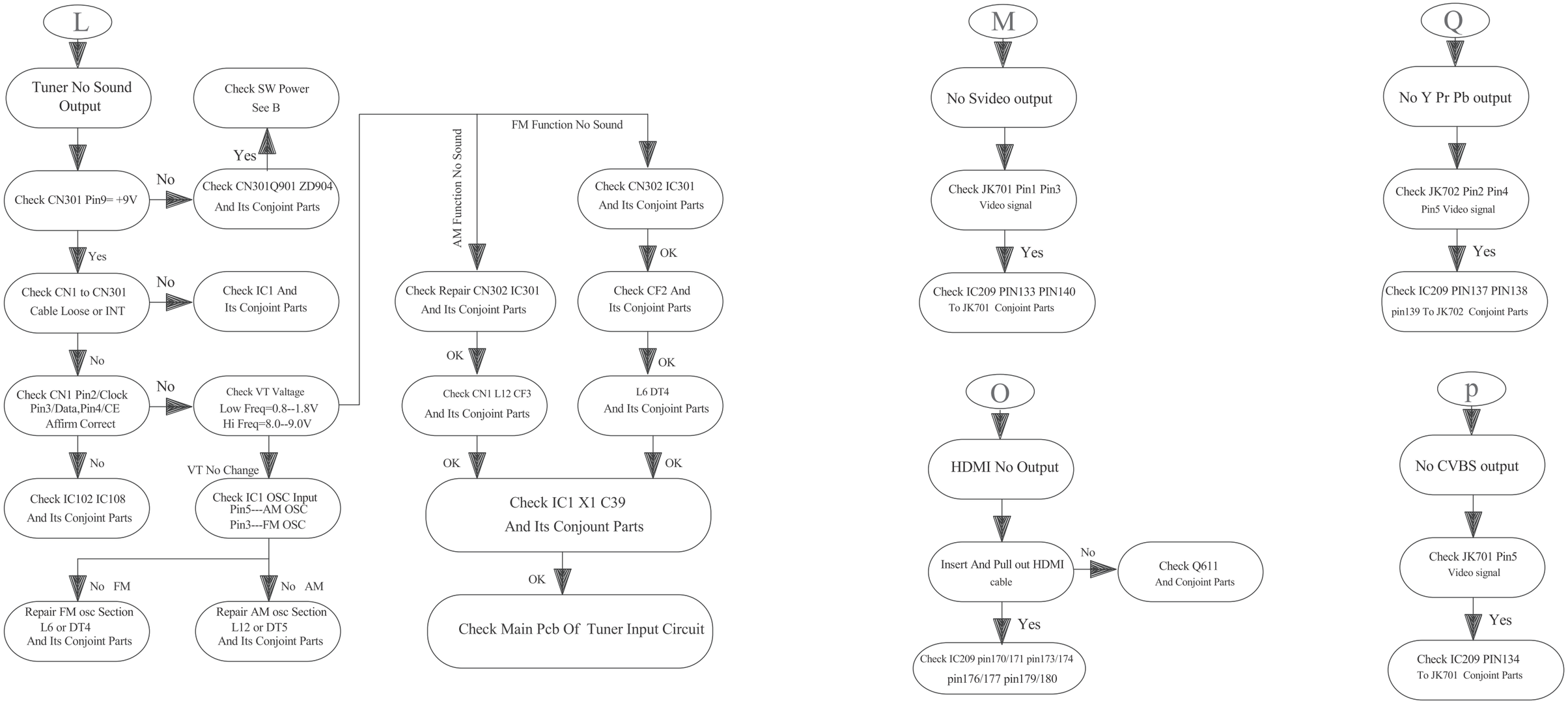






2 - 4

MAIN UNIT REPAIR CHART 3/3



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 right as shown in figure 1 until the Tray moves out of the Front Panel.
2) Return the set to its upright position and remove the Tray Cover as shown in Figure 3 and close the tray manually by pushing it back in.

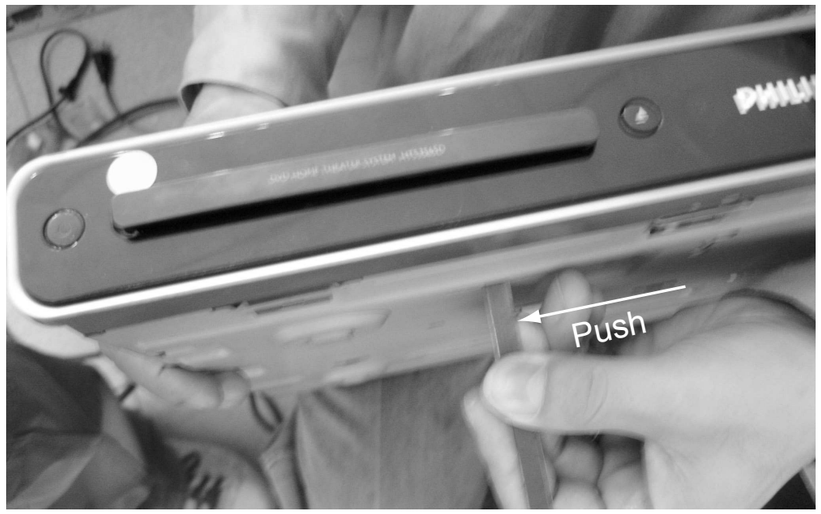


Figure 1

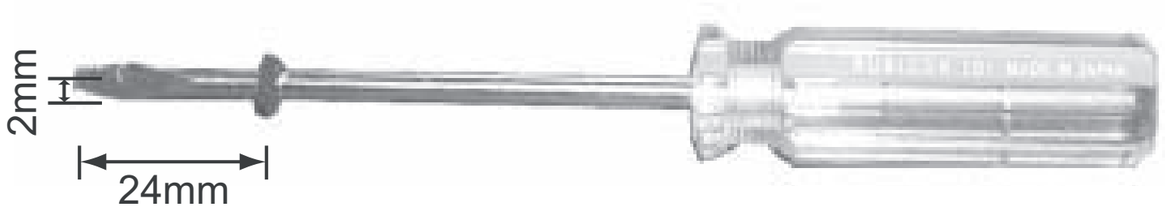


Figure 2

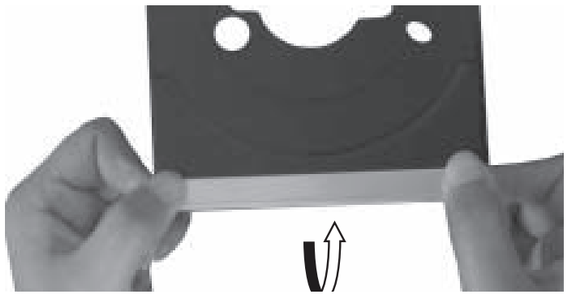


Figure 3

3) Loosen 7 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
   - 5 screws “B” at the back panel as shown in figure 5
4) Loosen 1 screw “C“ each left & right side on the front panel after move the top panel as shown in figure 6.
5)Loosen 6 screws “D” at bracket of front panel as shown in figure 7

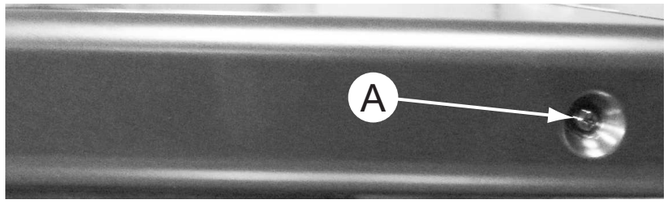


Figure 4

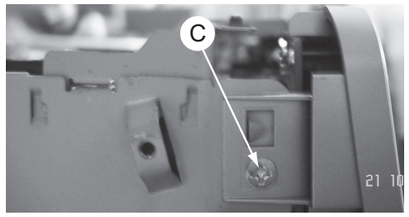


Figure 6

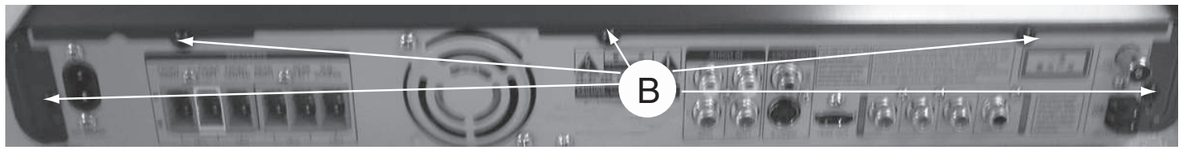


Figure 5

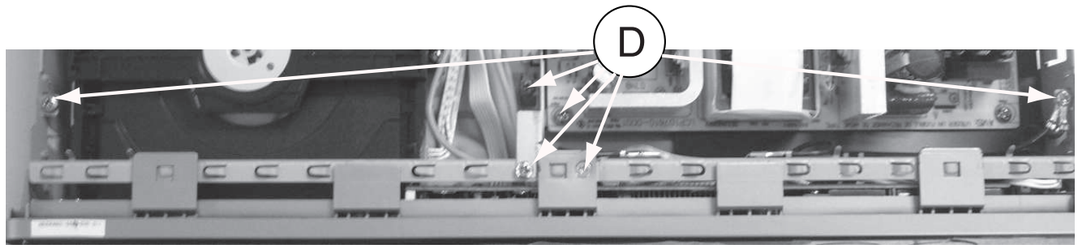


Figure 7

Dismantling of the AMP Board

1) Loosen 4 screws to remove the AMP Board.
   - 2 screws “ E “ on the top of AMP board as shown in figure 8
   - 2 screws “ F “ at the back panel as shown in figure 9

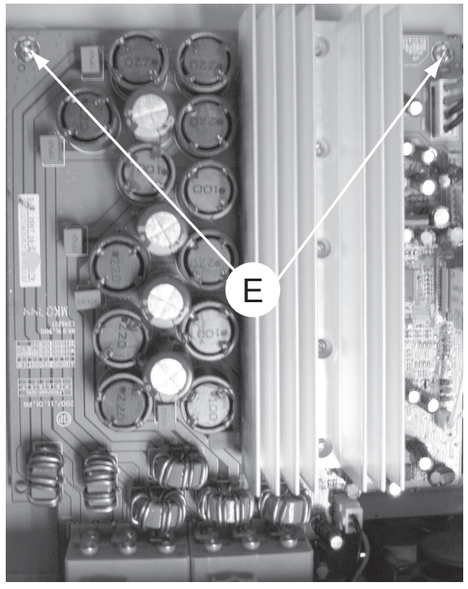


Figure 8

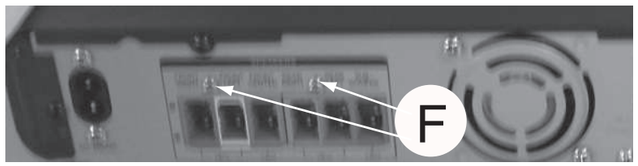


Figure 9

Dismantling of the Main Board

1) Loosen 2 screws " G " on the top of main board as shown in figure10
2) Loosen 7 screws "H" at the back panel as shown in figure 11

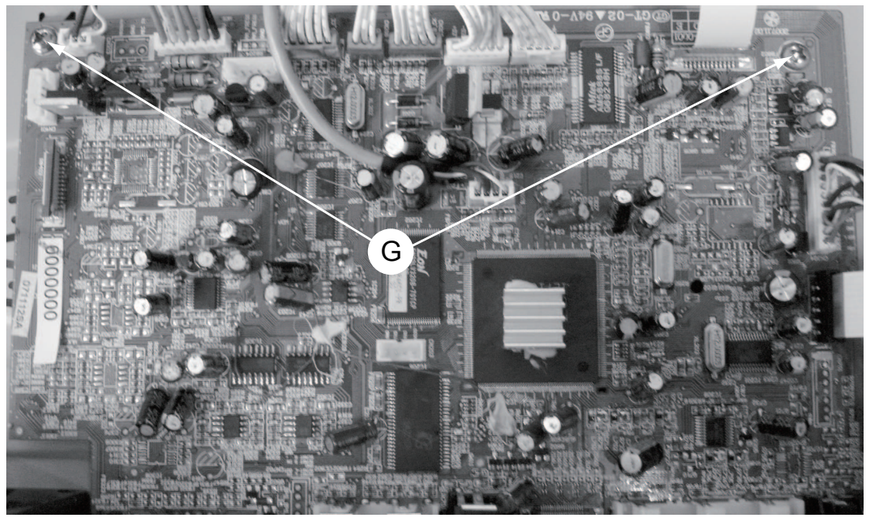


Figure 10

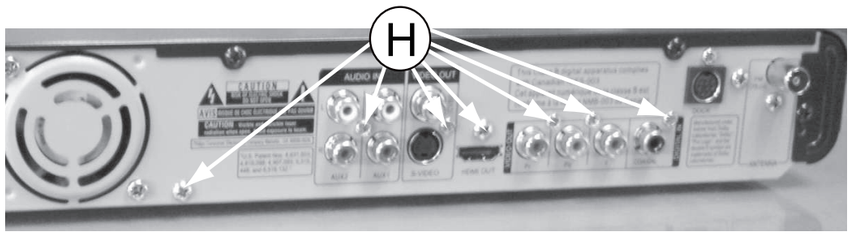


Figure 11

Dismantling of the Power Board

1) Loosen 4 screws " I" on the top of power board as shown in figure 12

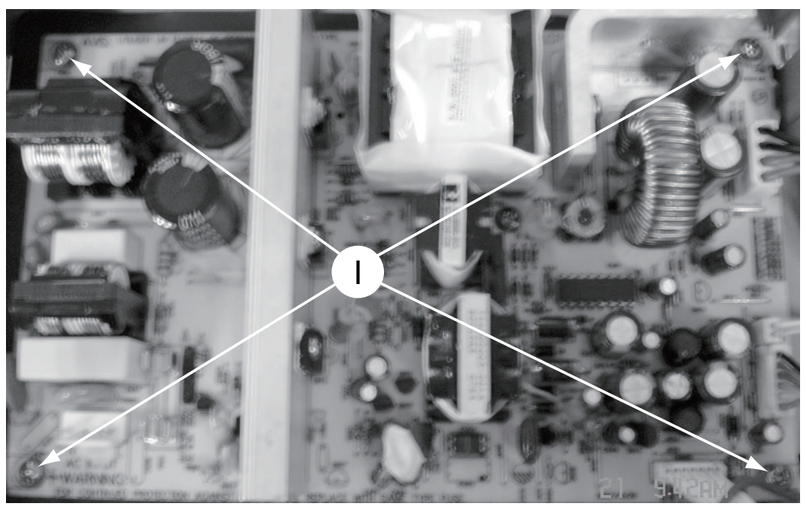


Figure 12

Dismantling of the VFD+JACK+VOL+STANDBY Board

1) Loosen 9 screws "J" on the top of control board as shown in 13

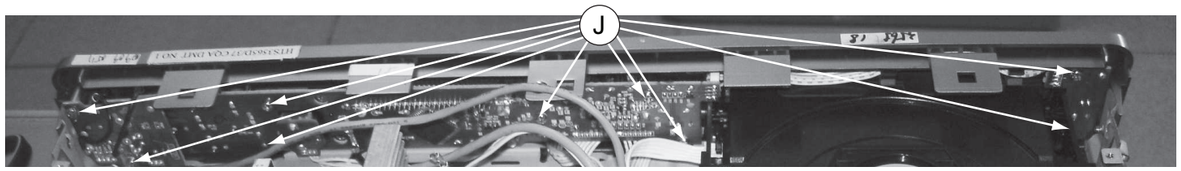


Figure 13

Dismantling of the DVD Module

1) Loosen 4 screws "K" as shown in figure 14.

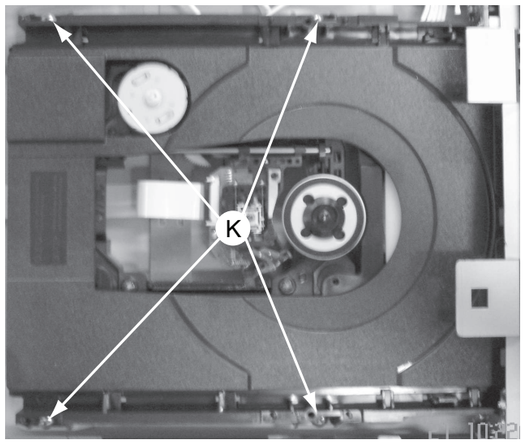
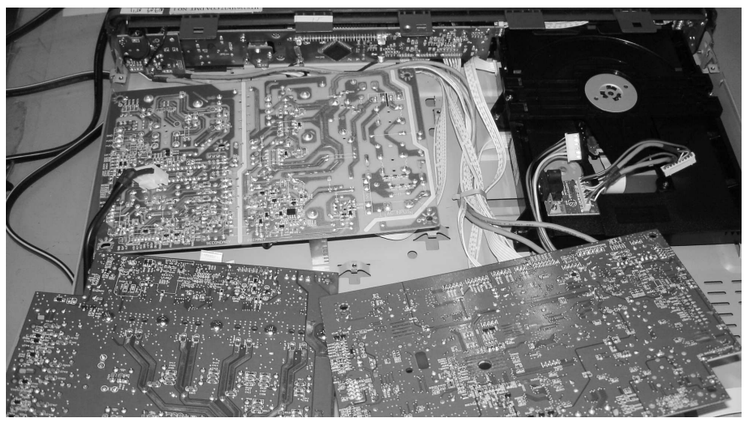


Figure 14

SERVICE POSITIONS

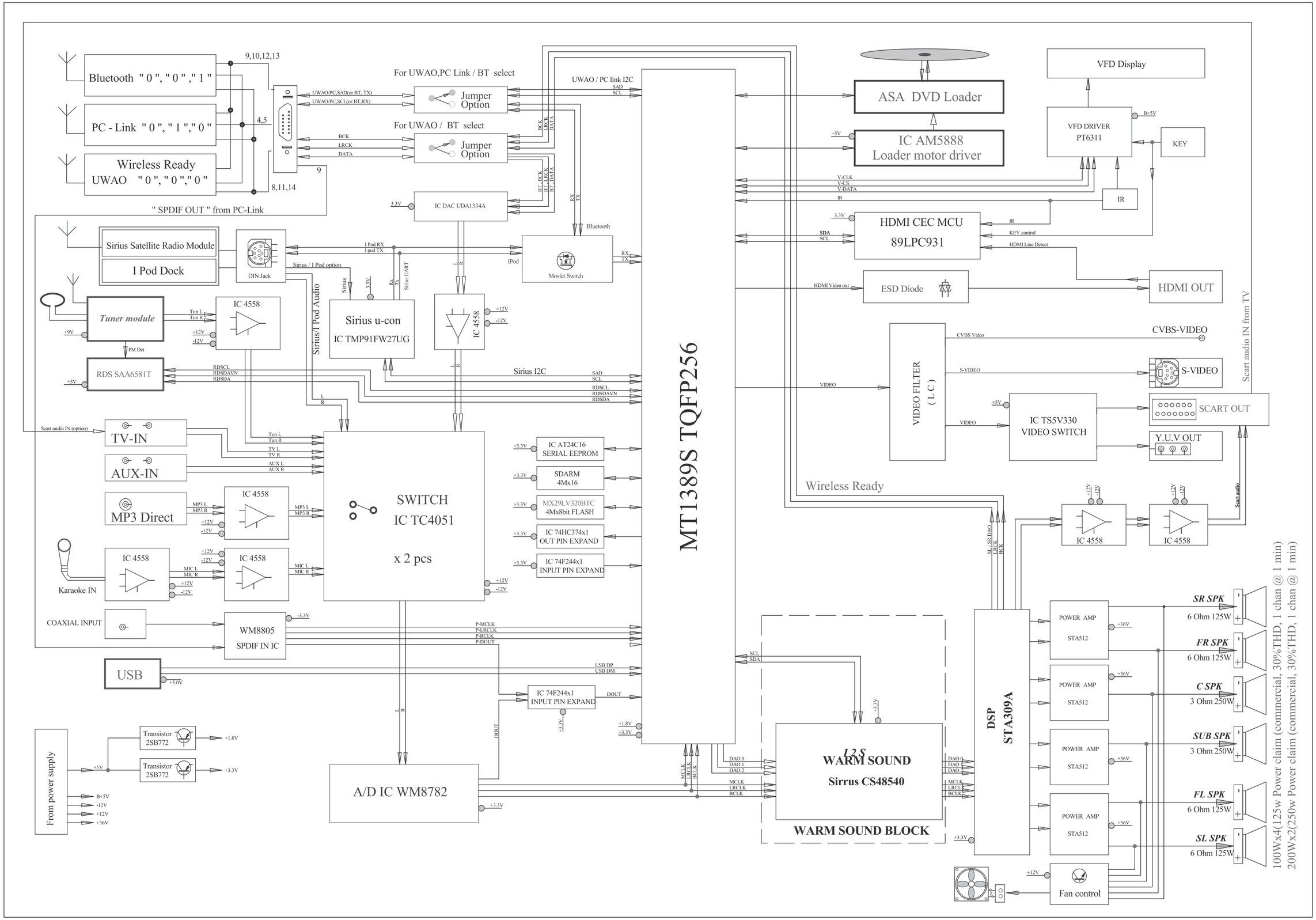
service position A (main unit)



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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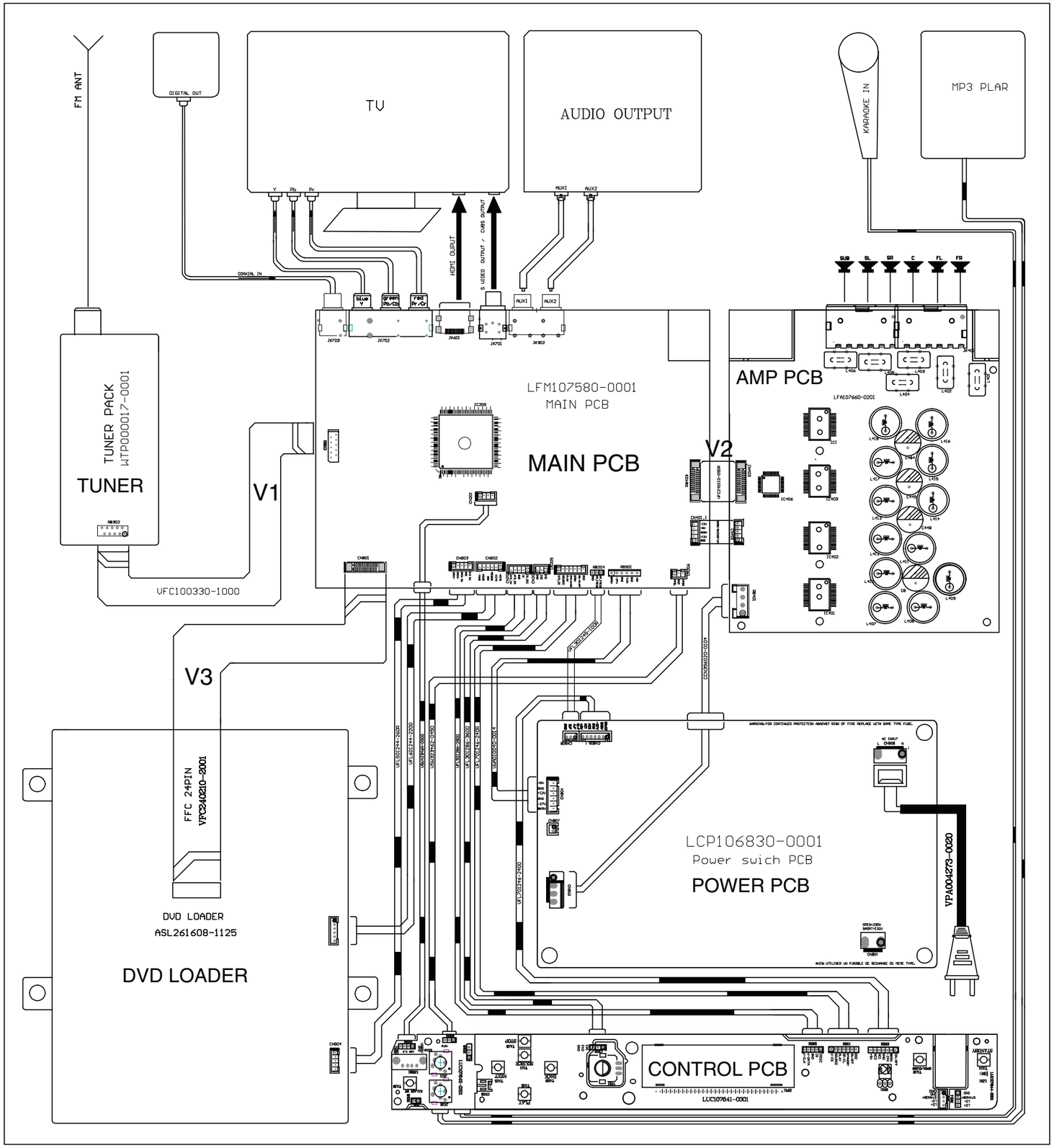
WIRING DIAGRAM



CONTROL BOARD

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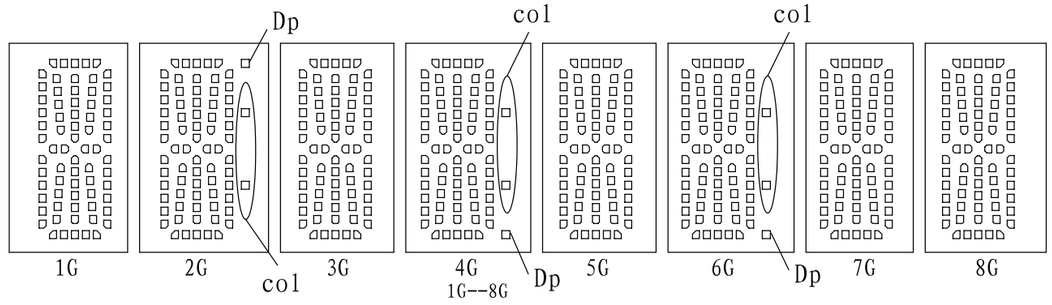
FTD DISPLAY PIN ASSIGNMENT



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

PIN CONNECTION

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

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

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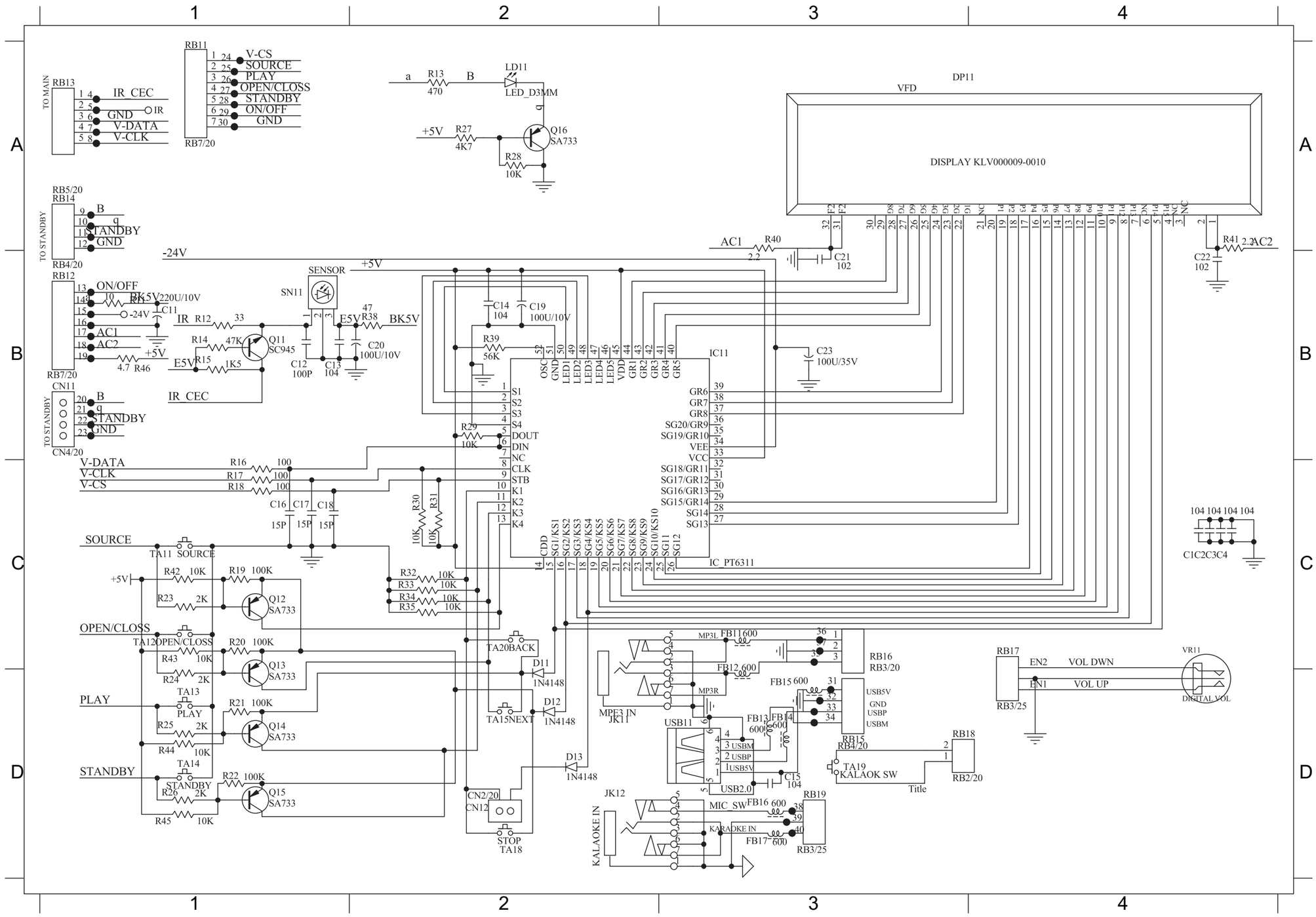
CIRCUIT DIAGRAM

C11	B1	C17	C1	C23	B3	FB11	C3	FB17	D3	Q12	C1	R12	B1	R18	C1	R24	D1	R30	C2	R38	B2	R44	D1	RB14	A1	SN11	B1	TA18	D2
C12	B1	C18	C1	CN12	D2	FB12	D3	IC11	B3	Q13	C1	R13	A2	R19	C1	R25	D1	R31	C2	R39	B2	R45	D1	RB15	D3	TA11	C1	TA19	D3
C13	B1	C19	B2	D11	D2	FB13	D3	JK11	D2	Q14	D1	R14	B1	R20	C1	R26	D1	R32	C2	R40	A3	R46	B1	RB16	C3	TA12	C1	TA20	C2
C14	B2	C20	B2	D12	D2	FB14	D3	JK12	D2	Q15	D1	R15	B1	R21	D1	R27	A2	R33	C2	R41	A4	RB11	A1	RB17	C4	TA13	D1	USB11	D3
C15	D3	C21	B3	D13	D2	FB15	D3	LD11	A2	Q16	A2	R16	C1	R22	D1	R28	A2	R34	C2	R42	C1	RB12	B1	RB18	D3	TA14	D1	VR11	D4
C16	C1	C22	B4	DP11	A3	FB16	D3	Q11	B1	R11	B1	R17	C1	R23	C1	R29	B2	R35	C2	R43	C1	RB13	A1	RB19	D3	TA15	D2		



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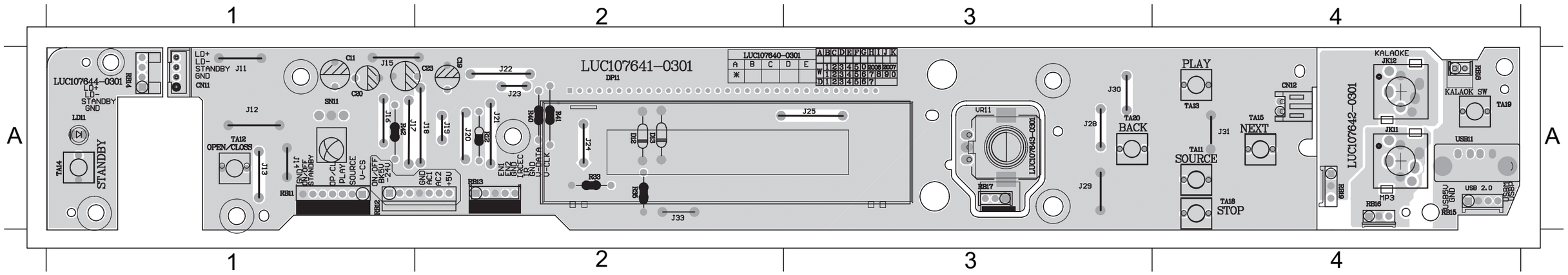
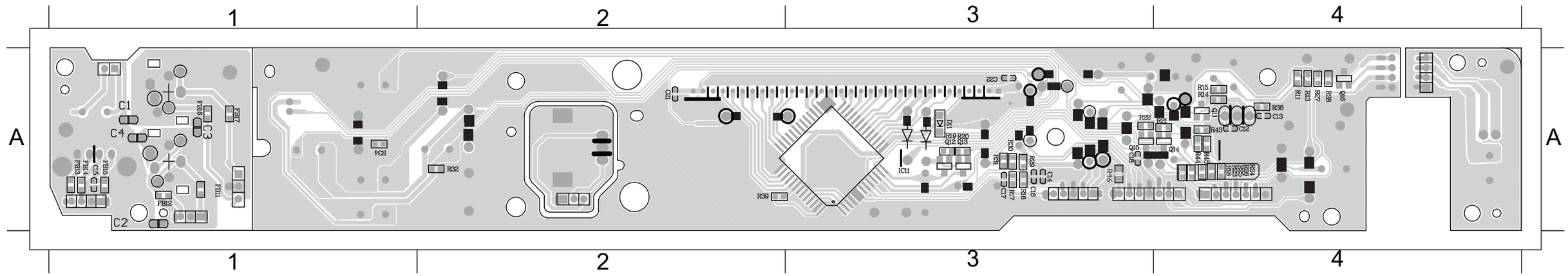
PCB LAYOUT - TOP VIEW

C11	A1	CN12	A2	J11	A1	J15	A1	J19	A2	J23	A2	J29	A3	JK11	A4	R33	A2	R42	A1	RB14	A1	RB18	A4	TA12	A1	TA18	A4	VR11	A3
C19	A2	D12	A2	J12	A1	J16	A1	J20	A2	J24	A2	J30	A3	JK12	A4	R35	A2	RB11	A1	RB15	A4	RB19	A4	TA13	A4	TA19	A4		
C20	A1	D13	A2	J13	A1	J17	A1	J21	A2	J25	A3	J31	A4	LD11	A1	R40	A2	RB12	A1	RB16	A4	SN11	A1	TA14	A1	TA20	A3		
C23	A1	DP11	A2	J14	A1	J18	A2	J22	A2	J28	A3	J33	A2	R12	A2	R41	A2	RB13	A2	RB17	A3	TA11	A4	TA15	A4	USB11	A4		



PCB LAYOUT - BOTTOM VIEW

C12	A4	C16	A3	C22	A3	FB13	A1	FB17	A1	Q13	A3	R11	A4	R16	A3	R20	A3	R24	A4	R28	A4	R32	A2	R43	A4		
C13	A4	C17	A3	D11	A3	FB14	A1	IC11	A3	Q14	A4	R13	A4	R17	A3	R21	A4	R25	A4	R29	A3	R34	A1	R44	A4		
C14	A3	C18	A3	FB11	A1	FB15	A1	Q11	A4	Q15	A3	R14	A4	R18	A4	R22	A3	R26	A4	R30	A3	R38	A4	R45	A4		
C15	A1	C21	A2	FB12	A1	FB16	A1	Q12	A3	Q16	A4	R15	A4	R19	A3	R23	A4	R27	A4	R31	A3	R39	A2	R46	A3		



MAIN BOARD

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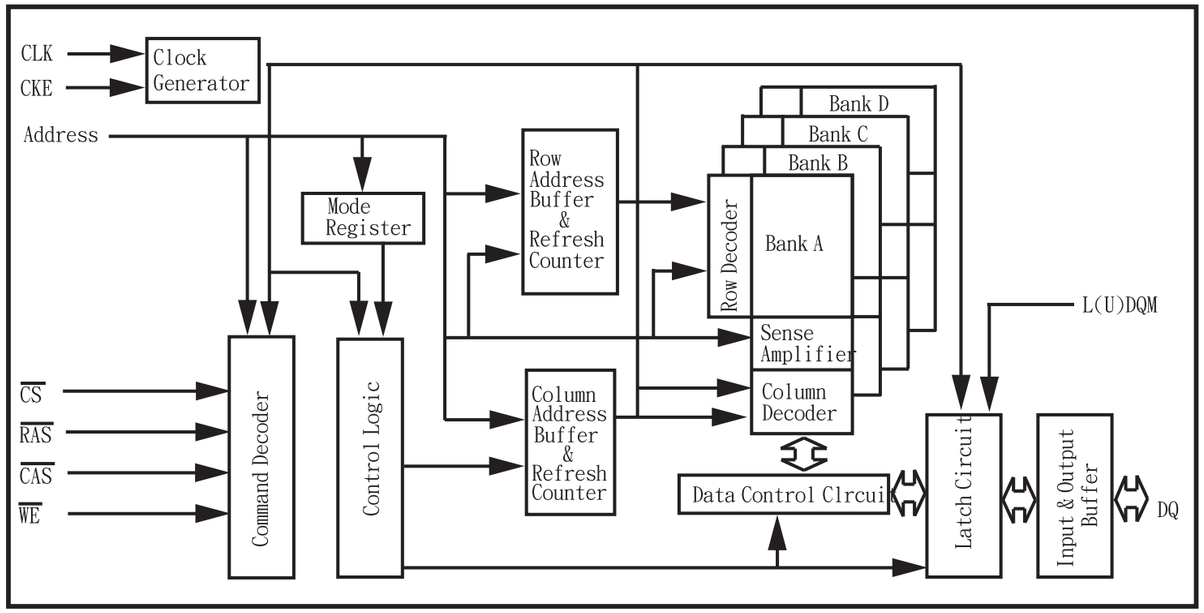
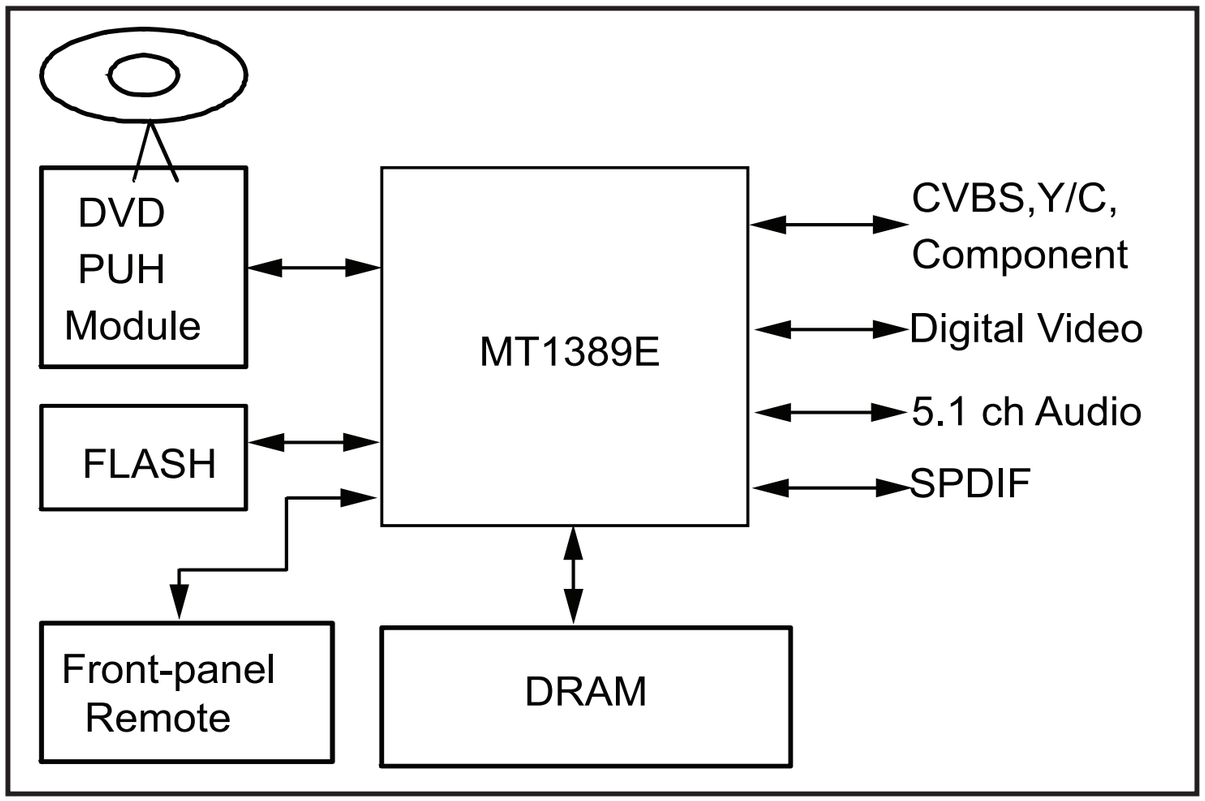
INTERNAL IC DIAGRAM - AS81F641642C



INTERNAL IC DIAGRAM - MT1389E



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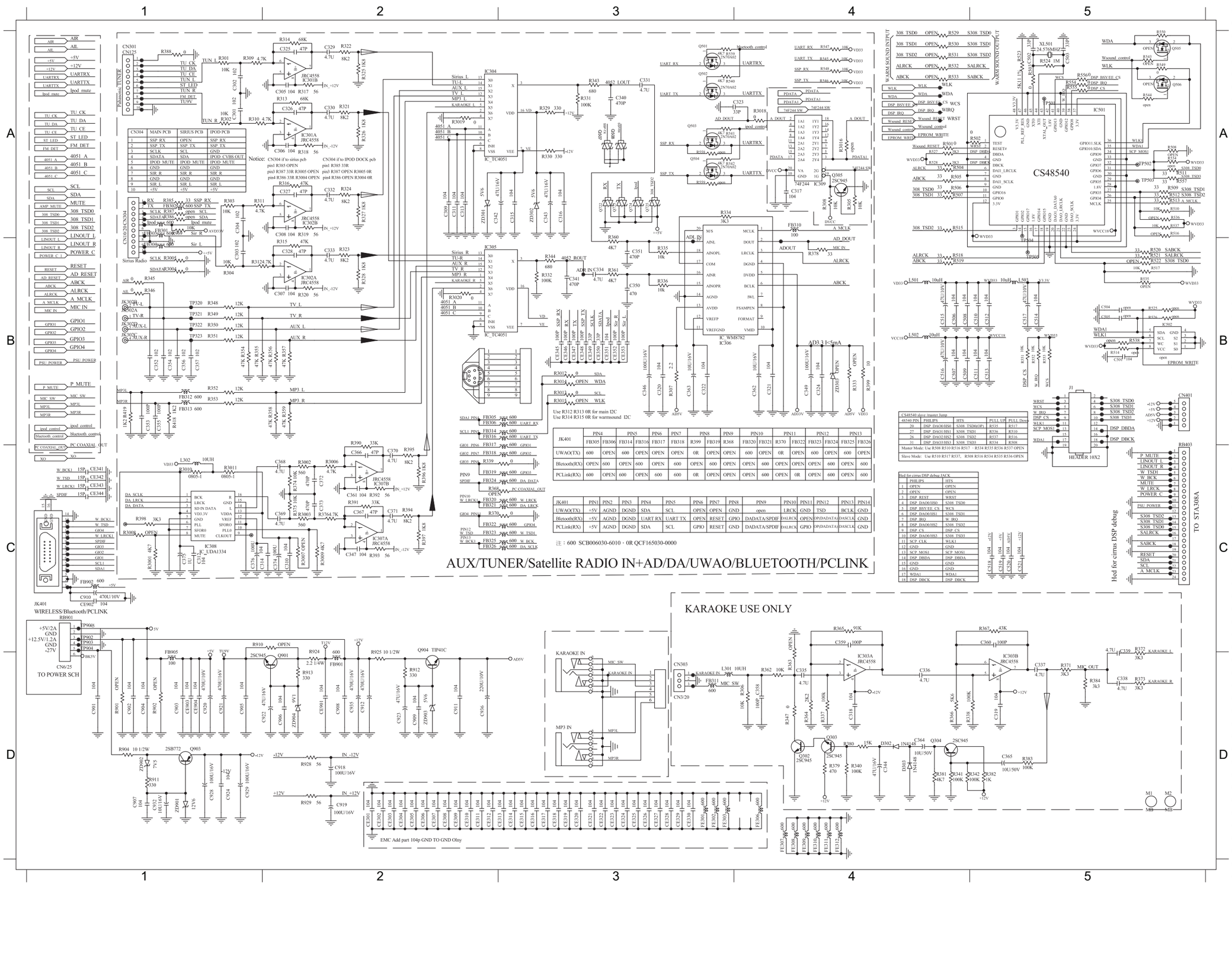
CIRCUIT DIAGRAM - part one



C301	A1	C902	D1	D302	D4	R337	D4
C302	A1	C903	D1	D303	D4	R338	D5
C305	A2	C904	D1	FB310	A4	R340	D4
C306	A1	C905	D1	FB311	D3	R341	D4
C309	A2	C906	D2	FB312	B1	R342	D4
C311	A2	C907	D1	FB313	B1	R343	A3
C313	A2	C908	D2	FB901	D2	R344	B3
C315	A3	C909	D2	FB905	D1	R345	B1
C316	A3	C911	D2	FE301	D3	R346	B1
C317	A4	C912	D2	FE302	D3	R347	D4
C318	D4	C918	D2	FE303	D3	R348	B1
C319	D5	C919	D2	FE304	D4	R349	B1
C320	B3	C920	D1	FE305	D4	R350	B1
C321	B4	C921	D1	FE306	D4	R351	B1
C322	B3	C922	D2	FE307	D4	R352	B1
C323	A3	C923	D2	FE308	D4	R353	B1
C324	B4	C924	D1	FE309	D4	R354	B1
C325	A2	C928	D1	FE310	D4	R355	B1
C326	A2	C929	D1	FE311	D4	R356	B2
C329	A2	C932	D1	FE312	D4	R357	B2
C330	A2	C935	D2	IC301	A2	R358	B2
C331	A3	C936	D2	IC303	D4	R359	B2
C334	B3	CE301	D2	IC304	A2	R360	B3
C335	D4	CE302	D2	IC305	B2	R361	B3
C336	D4	CE303	D2	IC306	B3	R362	D4
C337	D5	CE304	D2	IC309	A4	R364	D4
C338	D5	CE305	D2	IC501	A5	R365	C4
C339	D5	CE306	D2	JK302	B1	R366	D4
C340	A3	CE307	D2	L301	D3	R367	C5
C341	B3	CE308	D2	L501	B4	R368	C3
C342	A3	CE309	D2	L502	B4	R371	D5
C343	A3	CE310	D2	L503	B5	R372	D5
C344	D4	CE311	D2	Q302	D4	R373	D5
C346	B3	CE312	D2	Q303	D4	R378	B4
C349	B4	CE313	D3	Q304	D4	R379	D4
C350	B3	CE314	D3	Q305	A4	R380	D4
C351	B3	CE315	D3	Q507	A3	R381	D4
C352	B1	CE316	D3	Q722	A3	R382	D5
C353	B1	CE317	D3	Q723	A3	R383	D5
C354	B1	CE318	D3	Q724	A3	R384	D5
C355	B1	CE319	D3	Q901	D2	R388	A1
C356	B1	CE320	D3	Q903	D1	R399	B4
C357	B1	CE321	D3	Q904	D2	R418	B1
C358	D4	CE322	D3	R301	A1	R419	B1
C359	C4	CE323	D3	R3018	A4	R501	A4
C360	C5	CE324	D3	R3019	A2	R502	A5
C362	B4	CE325	D3	R302	A1	R503	A5
C363	B3	CE326	D3	R3020	B2	R504	A4
C364	D4	CE327	D3	R305	A4	R505	A4
C365	D5	CE328	D3	R305	D4	R506	A4
C502	A5	CE329	D3	R307	B3	R507	A4
C503	A5	CE330	D3	R308	A4	R509	A5
C506	B4	CE341	C1	R309	A1	R510	A5
C507	B4	CE342	C1	R310	A1	R512	A5
C508	B4	CE343	C1	R313	A2	R513	A5
C509	B4	CE344	C1	R314	A2	R515	A4
C510	B5	CE345	B3	R317	A2	R517	B5
C511	B5	CE346	B3	R318	A1	R518	B4
C512	B5	CE347	B3	R321	A2	R519	B4
C513	B5	CE348	B3	R322	A2	R520	B5
C514	B5	CE351	B3	R325	A2	R521	B5
C515	B4	CE352	B3	R326	A2	R522	B5
C516	B4	CE353	B3	R329	A3	R523	A5
C517	B5	CE901	D2	R330	A3	R524	A5
C518	C5	CE903	D1	R331	A3	R525	B5
C519	C5	CE904	D1	R332	B3	R526	B5
C520	C5	CN301	A1	R334	A3	R537	A5
C521	C5	CN303	D3	R335	B3	R549	A5
C901	D1	CN401	B5	R336	B3	R550	A5

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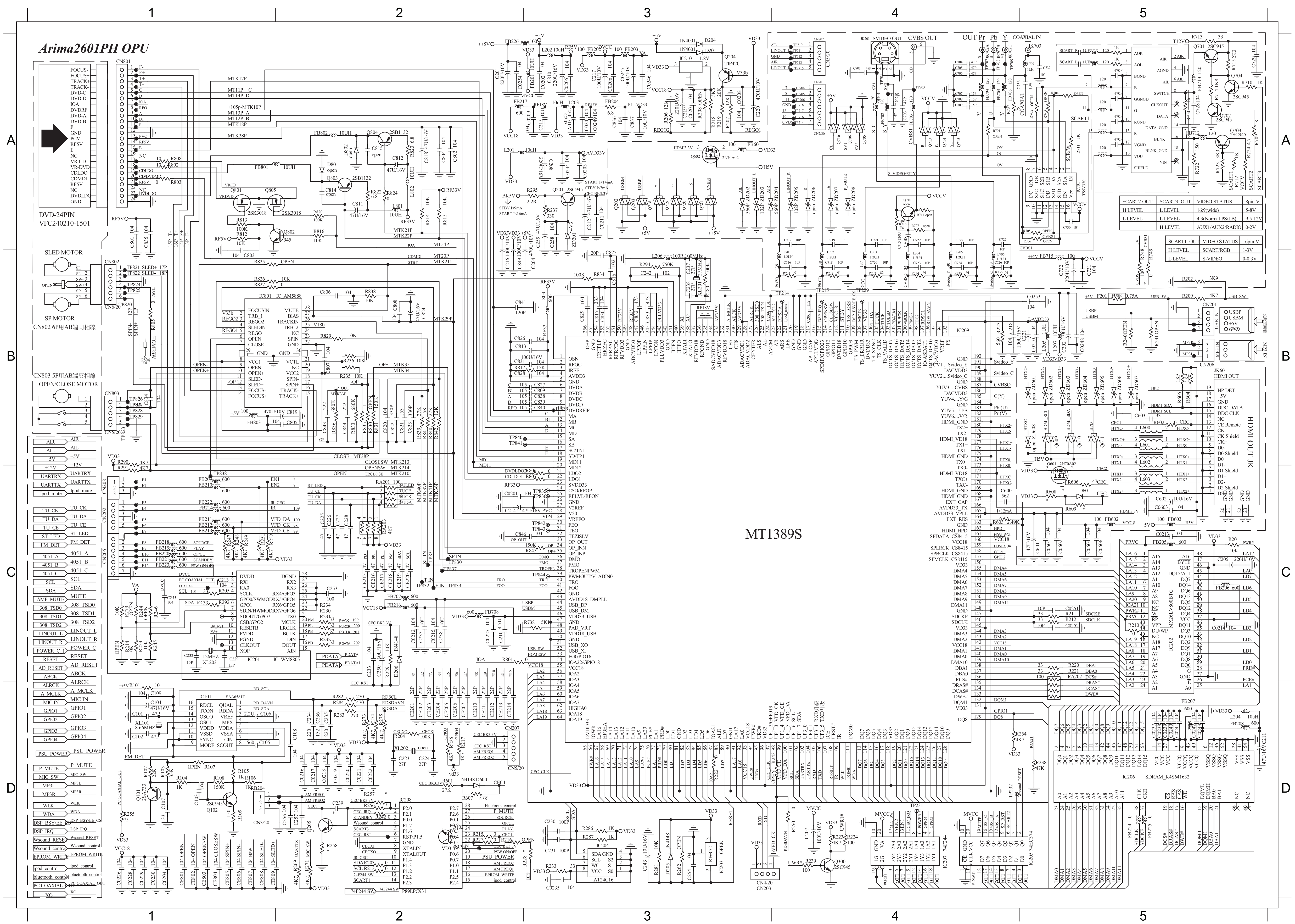
CIRCUIT DIAGRAM - part two



C0201	C2	C242	B3	CE203	D2	IC202	C5	R237	A3
C0202	A3	C243	D3	CE204	D2	IC203	D3	R238	D5
C0203	A3	C253	C2	CE205	D2	IC204	D3	R239	D4
C0204	D1	C254	D3	CE206	D2	IC205	D4	R242	D2
C0205	A3	C255	C1	CE207	D2	IC206	D5	R245	C1
C0206	A3	C259	A3	CE210	D2	IC207	D4	R247	C1
C0207	A3	C600	C4	CE211	D2	IC208	D2	R248	C1
C0208	A3	C601	C5	CE212	D2	IC209	B4	R249	C1
C0209	A3	C602	C5	CE213	D2	IC210	A3	R250	D4
C0210	B5	C603	B5	CE214	D2	IC801	B1	R251	C1
C0211	A3	C701	A4	CE215	C2	JK601	B5	R252	C1
C0212	C2	C702	A4	CE216	C2	JK701	A4	R253	C1
C0213	C5	C703	A4	CE217	C2	JK702	A4	R269	D2
C0214	C5	C704	A4	CE218	C2	JK703	A5	R271	D2
C0215	C2	C705	A4	CE219	C2	L201	A2	R274	D2
C0216	D2	C706	A4	CE220	C2	L202	A3	R279	C1
C0217	D2	C707	A4	CE801	D1	L203	A3	R280	B3
C0218	D2	C708	A4	CE802	D1	L204	D5	R281	D3
C0219	D2	C709	A4	CE803	D1	L205	B5	R286	D3
C0220	D2	C713	B5	CE804	D1	L206	B3	R287	D3
C0221	D2	C716	B4	CE805	D1	L207	B5	R290	B1
C0222	D2	C717	A4	CE806	D1	L701	B4	R291	C1
C0226	D1	C718	B4	CE807	D1	L702	B4	R292	C1
C0227	C2	C719	A4	CE808	D1	L703	B4	R294	B3
C0228	D1	C720	B4	CE809	D1	L704	B4	R295	A3
C0229	D1	C721	A4	CN201	B5	L705	B4	R601	D2
C0230	D1	C722	A4	CN202	C1	L706	B4	R602	B5
C0235	D3	C723	B4	CN203	D3	L707	A5	R603	C4
C0237	D5	C724	B4	CN205	C1	L801	A2	R604	B5
C0238	D5	C725	A4	CN206	B5	L802	A2	R605	B5
C0239	D5	C726	B4	CN207	D2	L803	B3	R606	C5
C0240	D5	C727	A4	CN208	C1	Q201	A3	R701	A4
C0241	D5	C732	B5	CN801	A1	Q202	A3	R703	A5
C0242	D5	C735	C2	CN802	B1	Q203	A3	R706	A5
C0243	D5	C736	A4	CN803	B1	Q204	A3	R731	B4
C0244	A3	C737	A5	CO254	A2	Q300	D4	R732	B4
C0245	A3	C738	C2	D201	A3	Q601	C5	R733	B4
C0246	A3	C801	A1	D204	A3	Q602	A3	R734	B4
C0247	A3	C802	A2	D205	D3	Q611	B5	R735	B4
C0248	B5	C803	B1	D600	D2	Q705	A4	R736	B4
C0249	A3	C804	A2	F201	B5	Q706	A4	R737	A4
C0251	C5	C805	B2	FB201	A3	Q713	A4	R738	C3
C0252	C5	C806	B2	FB202	A3	Q714	A4	R748	B5
C0253	B5	C807	B2	FB203	A3	Q715	A4	R749	B5
C0254	A2	C808	B2	FB204	A3	Q716	A4	R801	C2
C0601	C5	C809	B3	FB205	C5	Q801	A1	R802	A1
C0602	C5	C810	A3	FB206	C5	Q802	A2	R803	A1
C0603	C5	C811	A2	FB207	D5	Q803	A2	R804	B1
C0604	C5	C812	A2	FB208	D5	Q804	A2	R805	B1
C0606	C5	C813	B3	FB209	C1	Q805	A1	R806	C3
C201	A2	C816	B3	FB210	C1	R201	C5	R807	C3
C202	B5	C817	B3	FB211	C1	R202	B5	R808	A1
C203	A3	C818	A2	FB212	C1	R203	D2	R812	A1
C204	B3	C819	B2	FB213	B5	R204	D2	R813	A1
C205	C5	C820	B2	FB214	C1	R205	C1	R814	A2
C206	B4	C821	B2	FB216	C2	R206	A3	R815	A2
C207	D4	C822	B2	FB217	A2	R207	A3	R816	A2
C208	A3	C823	B2	FB218	C1	R209	B5	R817	B2
C209	B3	C824	B2	FB219	C1	R210	C5	R820	A2
C210	C2	C825	B3	FB220	C1	R211	C5	R822	A2
C211	D5	C826	B3	FB221	C1	R212	C5	R823	A2
C213	C1	C827	B3	FB222	C1	R213	D2	R824	A2
C214	C2	C828	B3	FB223	C1	R215	D2	R826	B1
C215	A3	C829	B3	FB224	D5	R217	D2	R827	B1
C216	B2	C830	B3	FB225	D5	R218	A3	R829	B2
C217	A3	C831	B3	FB226	A2	R219	A3	R831	B2
C218	B4	C832	B3	FB601	A3	R220	C5	R833	B2
C219	A3	C833	B3	FB602	C5	R221	C5	R834	B3
C220	A3	C834	B1	FB603	C5	R222	D3	R835	B2
C221	B5	C835	A1	FB701	A4	R223	D4	R836	B2
C223	D2	C836	A3	FB702	A4	R224	D4	R838	B2
C224	D2	C837	A3	FB703	A4	R225	B4	R839	B2
C225	C2	C838	B3	FB704	A4	R226	D2	R840	B2
C226	C2	C839	B3	FB705	A4	R227	D2	R841	B2
C227	C2	C840	B3	FB706	A4	R228	D3	R842	B2
C228	C2	C841	B2	FB707	C2	R230	C2	R845	C3
C229	C1	C843	B2	FB708	C2	R231	C2	RA201	C2
C230	D3	C844	B2	FB715	B5	R232	C2	RA202	C5
C231	D3	C846	C3	FB801	A1	R233	D3	RA203	C2
C232	C1	C849	B2	FB802	A2	R234	C2	XL201	B3
C237	B3	CE201	D2	FB803	B1	R235	B2	XL203	C1
C238	B3	CE202	D2	IC201	C1	R236	B2	ZD201	A3

PCB LAYOUT - TOP VIEW

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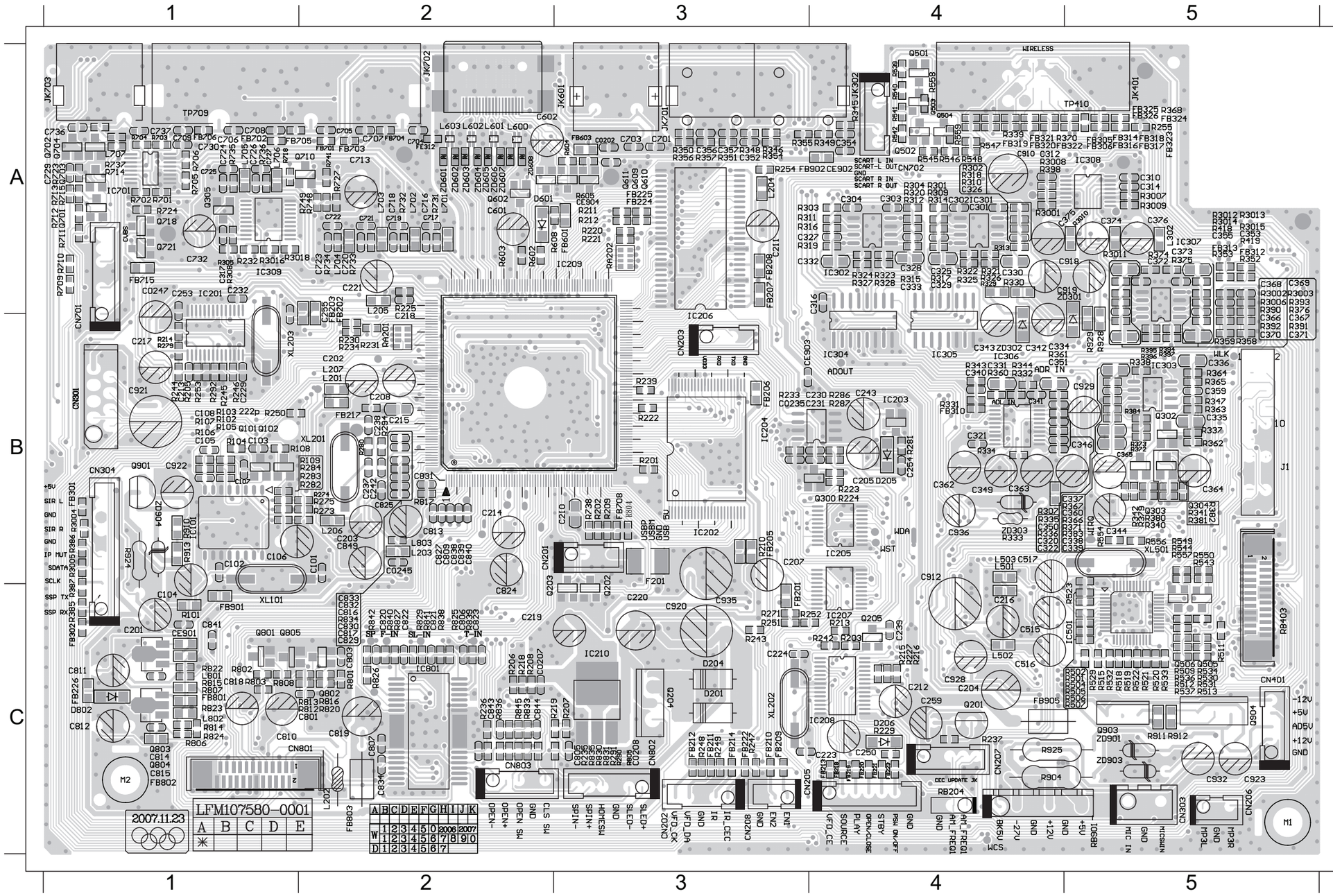

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C0208	C3	C701	A3	CN301	B1	L206	B2	R290	C3	R520	C5
C0235	B3	C703	A3	CN303	C5	L207	B2	R291	C3	R521	C5
C0245	B2	C704	A2	CN401	C5	L501	B4	R292	B1	R522	C5
C0247	A1	C705	A2	CN801	C1	L502	C4	R301	A4	R523	C5
C201	C1	C706	A1	CN802	C3	L503	B4	R3018	A1	R537	C5
C202	B2	C707	A2	CN803	C2	L701	A2	R302	A4	R549	B5
C203	B2	C708	A1	D201	C3	L702	A2	R305	A1	R550	B5
C204	C4	C709	A1	D204	C3	L703	A2	R307	B5	R554	B5
C205	B4	C713	A2	D205	B4	L704	A2	R308	A1	R556	B5
C207	B3	C716	A2	F201	B3	L705	A1	R309	A4	R557	B5
C208	B2	C717	A2	FB201	C3	L706	A1	R310	A4	R602	A2
C210	B3	C718	A2	FB202	A2	L707	A1	R313	A4	R603	A2
C211	A3	C719	A2	FB203	A2	L801	C1	R314	A4	R604	A3
C213	B1	C720	A2	FB205	B3	L802	C1	R317	A4	R605	A3
C214	B2	C721	A2	FB206	B3	L803	B2	R318	A4	R701	A1
C215	B2	C722	A2	FB207	A3	Q201	C4	R321	A4	R703	A1
C216	C4	C723	A2	FB208	A3	Q202	C3	R322	A4	R706	A1
C217	B1	C724	A1	FB209	C3	Q203	C3	R325	A4	R731	A2
C218	A2	C725	A1	FB210	C3	Q204	C3	R326	A4	R732	A2
C219	C2	C726	A1	FB211	C3	Q300	B5	R329	A4	R733	A2
C220	C3	C727	A1	FB212	C3	Q302	B5	R330	A4	R734	A2
C221	A2	C732	A1	FB213	C4	Q303	B5	R331	B4	R735	A1
C223	C4	C736	A1	FB214	C3	Q304	B5	R332	B4	R736	A1
C224	C3	C737	A1	FB217	B2	Q305	A1	R334	B4	R737	A1
C229	B1	C801	C2	FB218	C4	Q602	A2	R335	B4	R738	B3
C230	B4	C803	C2	FB219	C4	Q611	A3	R336	B4	R748	A2
C231	B4	C805	C3	FB220	C4	Q801	C1	R337	B5	R749	A2
C232	A1	C806	C2	FB221	C4	Q802	C2	R338	B5	R801	C2
C237	B2	C807	C2	FB222	C3	Q803	C1	R340	B5	R802	C1
C238	B2	C809	B2	FB223	C4	Q804	C1	R341	B5	R803	C1
C242	B2	C810	C1	FB224	A3	Q805	C1	R342	B5	R805	C3
C243	B4	C811	C1	FB225	A3	Q901	B1	R343	B4	R806	C1
C253	A1	C812	C1	FB226	C1	Q903	C5	R344	B4	R807	C1
C254	B4	C813	B2	FB310	B5	Q904	C5	R345	A4	R808	C1
C255	A2	C816	C2	FB312	A5	R201	B3	R346	A3	R812	C2
C259	C4	C817	C2	FB313	A5	R202	B3	R347	B5	R813	C2
C301	A4	C818	C1	FB601	A3	R203	C4	R348	A3	R814	C1
C302	A4	C819	C2	FB603	A3	R205	B1	R349	A4	R815	C1
C316	A4	C820	C2	FB701	A2	R206	C2	R350	A3	R816	C2
C317	A1	C821	C2	FB702	A1	R207	C3	R351	A3	R817	B2
C320	B5	C822	C2	FB703	A2	R209	B3	R352	A5	R820	C2
C321	B5	C823	C2	FB704	A2	R210	B3	R353	A5	R822	C1
C322	B5	C824	B2	FB705	A1	R211	A3	R354	A3	R823	C1
C325	A4	C825	B2	FB706	A1	R212	A3	R355	A3	R824	C1
C326	A4	C827	B2	FB708	B3	R213	C4	R356	A3	R826	C2
C329	A4	C829	C2	FB715	A1	R215	C4	R357	A3	R827	C2
C330	A4	C830	C2	FB801	C1	R218	C2	R358	B5	R829	C2
C331	B5	C831	B2	FB802	C1	R219	C2	R359	B5	R831	C3
C334	A4	C832	C2	FB803	C2	R220	A3	R360	B5	R833	C2
C335	B5	C833	C2	FB901	C1	R221	A3	R361	B5	R834	C2
C336	B5	C834	C2	FB905	C4	R222	B3	R362	B5	R835	C3
C337	B5	C838	B2	FE312	A2	R223	B4	R364	B5	R836	C2
C338	B5	C839	B2	IC201	A1	R224	B4	R365	B5	R838	C2
C339	B5	C840	B2	IC202	B3	R225	A2	R366	B5	R839	C2
C340	B5	C841	C1	IC203	B4	R227	C4	R367	B5	R840	C2
C341	B5	C843	C2	IC204	B3	R230	B2	R368	A5	R841	C2
C342	B4	C844	C2	IC205	B5	R231	B2	R371	B5	R842	C2
C343	B4	C849	B2	IC206	A3	R232	A1	R372	B5	R845	C2
C344	B5	C912	C4	IC207	C4	R233	B3	R373	B5	R904	C4
C346	B5	C918	A5	IC208	C4	R234	B2	R379	B5	R911	C5
C349	B5	C919	A5	IC209	B2	R235	C3	R380	B5	R912	C5
C350	B5	C920	C3	IC210	C3	R236	C2	R381	B5	R913	B1
C351	B5	C921	B1	IC301	A4	R237	C4	R382	B5	R924	B1
C352	A3	C922	B1	IC303	B5	R239	B3	R383	B5	R925	C4
C353	A5	C923	C5	IC304	B4	R242	C4	R384	B5	R928	B5
C354	A4	C928	C4	IC305	B4	R245	B1	R418	A5	R929	B5
C355	A5	C929	B5	IC306	B4	R247	C3	R419	A5	RA201	B2
C356	A3	C932	C5	IC309	A1	R248	C3	R501	C5	RA202	A3
C357	A3	C935	C3	IC501	C5	R249	C3	R502	C5	RB403	C5
C359	B5	C936	B5	IC801	C2	R250	B1	R504	C5	RB901	C5
C360	B5	CE901	C1	JK302	A4	R251	C3	R505	C5	XL201	B2
C362	B5	CE903	B3	JK601	A3	R252	C3	R506	C5	XL203	B1
C363	B5	CE904	A3	JK701	A3	R253	B1	R507	C5	ZD301	A5
C364	B5	CN201	B3	JK702	A2	R271	C3	R509	C5	ZD302	B4
C365	B5	CN202	C3	JK703	A1	R274	B2	R512	C5	ZD901	C5
C515	C4	CN203	B3	L201	B2	R279	B1	R513	C5	ZD903	C5
C516	C4	CN205	C3	L202	C2	R280	B2	R515	C5	ZD904	B1
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PCB LAYOUT - BOTTOM VIEW

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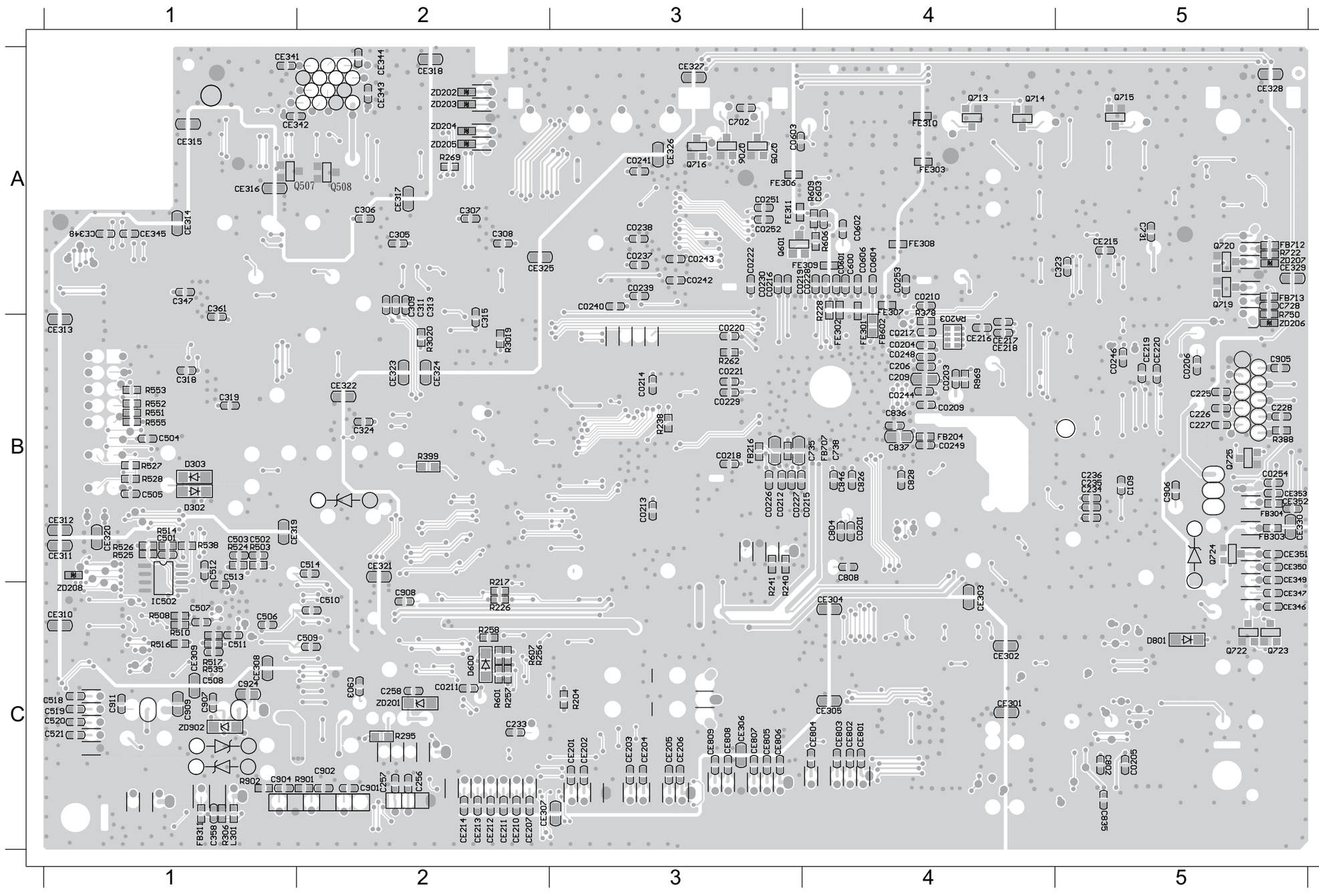

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C0205	C5	C503	B1	CE303	C4	FE303	A4
C0206	B5	C506	C1	CE304	C4	FE304	A4
C0209	B4	C507	C1	CE305	C4	FE305	A3
C0210	A4	C508	C1	CE306	C3	FE306	A3
C0211	C2	C509	C2	CE307	C2	FE307	A4
C0212	B3	C510	C2	CE308	C1	FE308	A4
C0213	B3	C511	C1	CE309	C1	FE309	A4
C0214	B3	C512	B1	CE310	C1	FE310	A4
C0215	B3	C513	B1	CE311	B1	FE311	A3
C0216	A3	C514	B2	CE312	B1	L301	C1
C0217	B4	C518	C1	CE313	B1	Q507	A1
C0218	B3	C519	C1	CE314	A1	Q601	A3
C0219	A3	C520	C1	CE315	A1	Q705	A3
C0220	B3	C521	C1	CE316	A1	Q706	A3
C0221	B3	C600	A4	CE317	A2	Q713	A4
C0222	A3	C603	A4	CE318	A2	Q714	A4
C0226	B3	C702	A3	CE319	B1	Q715	A5
C0227	B3	C735	B4	CE320	B1	Q716	A3
C0228	A4	C738	B4	CE321	B2	Q722	C5
C0229	B3	C802	C5	CE322	B2	Q723	C5
C0230	A3	C804	B4	CE323	B2	Q724	B5
C0237	A3	C808	B4	CE324	B2	R204	C3
C0238	A3	C826	B4	CE325	A2	R217	C2
C0239	A3	C828	B4	CE326	A3	R226	C2
C0240	A3	C835	C5	CE327	A3	R228	A4
C0241	A3	C836	B4	CE328	A5	R238	B3
C0242	A3	C837	B4	CE329	A5	R269	A2
C0243	A3	C846	B4	CE330	B5	R295	C2
C0244	B4	C901	C2	CE341	A1	R3019	B2
C0246	B5	C902	C2	CE342	A1	R3020	B2
C0248	B4	C903	C2	CE343	A2	R305	C1
C0249	B4	C904	C1	CE344	A2	R378	B4
C0251	A3	C905	B5	CE345	A1	R388	B5
C0252	A3	C906	B5	CE346	C5	R399	B2
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C0254	B5	C908	C2	CE348	A1	R510	C1
C0601	A4	C909	C1	CE351	B5	R524	B1
C0602	A4	C911	C1	CE352	B5	R525	B1
C0603	A3	C924	C1	CE353	B5	R526	B1
C0604	A4	CE201	C3	CE801	C4	R601	C2
C0606	A4	CE202	C3	CE802	C4	R606	A4
C206	B4	CE203	C3	CE803	C4	R804	B3
C209	B4	CE204	C3	CE804	C4	RA203	B4
C225	B5	CE205	C3	CE805	C3	ZD201	C2
C226	B5	CE206	C3	CE806	C3	ZD902	C1
C227	B5	CE207	C2	CE807	C3		
C228	B5	CE210	C2	CE808	C3		
C305	A2	CE211	C2	CE809	C3		
C306	A2	CE212	C2	CO254	B5		
C309	A2	CE213	C2	D302	B1		
C311	A2	CE214	C2	D303	B1		
C313	A2	CE215	A5	D600	C2		
C315	A2	CE216	B4	FB204	B4		
C318	B1	CE217	B4	FB216	B3		
C319	B1	CE218	B4	FB311	C1		
C323	A5	CE219	B5	FB602	B4		

POWER BOARD

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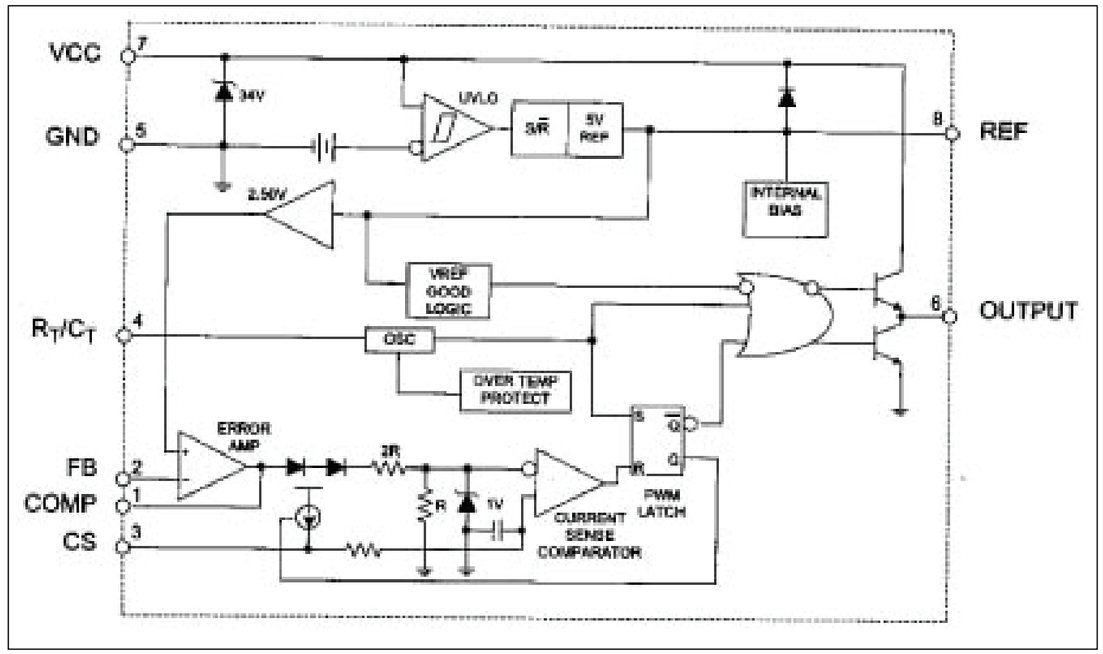

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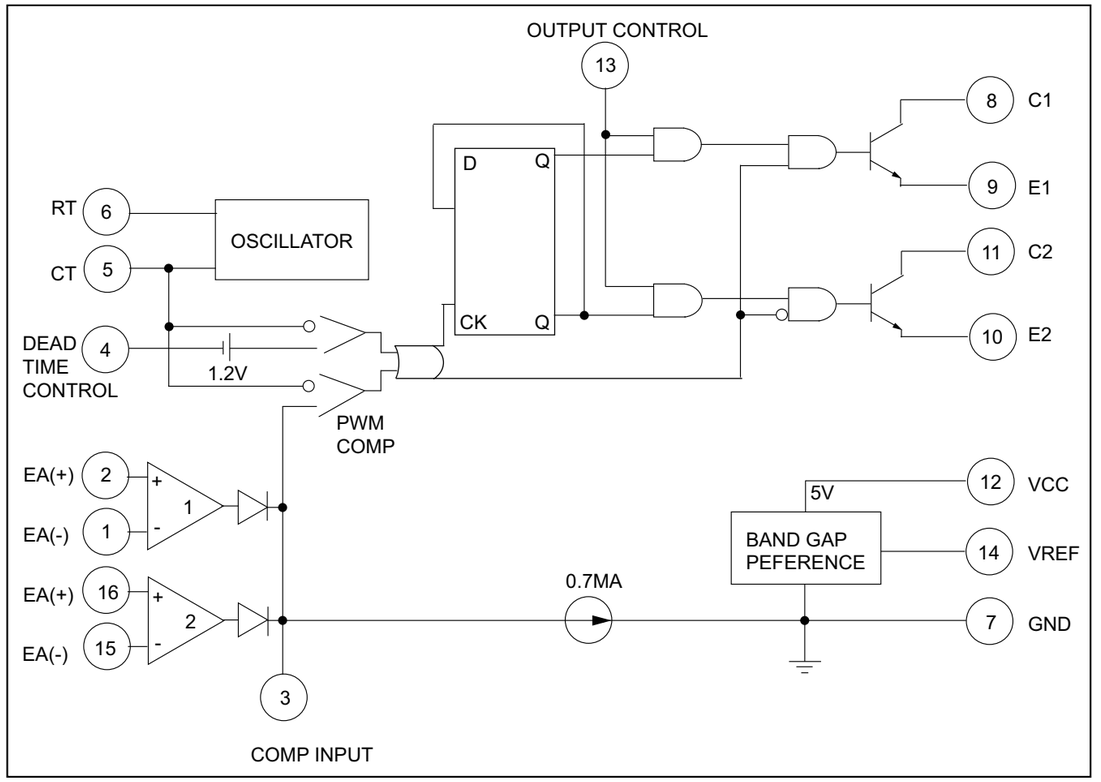

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CIRCUIT DIAGRAM

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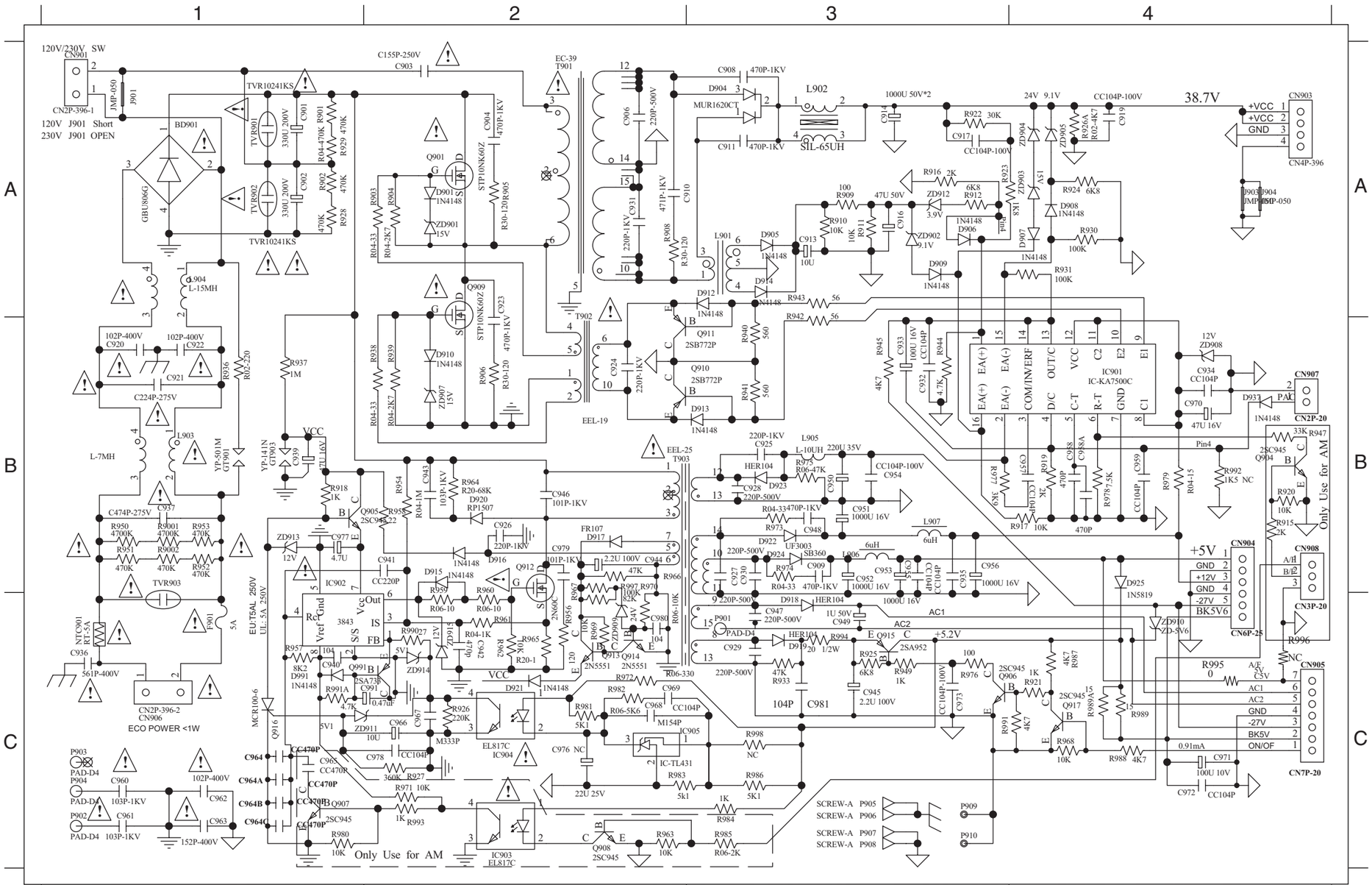
C901	A1	C916	A3	C928	B3	C942	C2	C955	B3	C964B	C1	C980	C2	D908	A4	D921	C2	IC905	C2	Q901	A2	Q991	C1	R911	A3	R926B	A4	R939	B2	R954	B2	R968	C4	R982	C2	R997	B2	ZD907	B2
C902	A1	C917	A3	C929	C3	C943	B2	C956	B3	C964C	C1	C991	C1	D909	A3	D922	B3	J902	A3	Q905	B1	R9001	B1	R912	A3	R926C	A4	R940	B3	R955	C4	R969	C2	R983	C2	T901	A2	ZD908	B4
C903	A2	C918	A4	C930	B3	C944	B2	C957	B4	C966	C2	CN901	A1	D910	B2	D923	B3	J903	A4	Q906	C3	R9002	B1	R916	A3	R926D	A4	R941	B3	R957	C1	R970	C2	R986	C3	T901	B2	ZD909	C2
C904	A2	C919	A4	C931	A2	C945	C4	C958	B4	C967	C2	CN903	A4	D912	A3	D924	B3	J904	A4	Q909	A2	R901	A1	R917	B4	R927	C2	R942	A3	R958	B2	R972	C2	R987	C4	T902	B2	ZD910	C4
C906	A2	C920	B1	C932	B3	C946	B2	C958A	B4	C968	C2	CN904	B4	D913	B3	D925	B4	L901	A3	Q910	B3	R902	A1	R918	B1	R928	A1	R943	A3	R959	C2	R973	B3	R988	C4	TVR901	A1	ZD911	C1
C908	A3	C921	B1	C933	B3	C948	B3	C959	B4	C969	C2	CN905	C4	D914	A3	D937	B4	L902	A3	Q911	B3	R903	A2	R919	B4	R929	A1	R944	B3	R960	C2	R974	B3	R989	C4	TVR902	A1	ZD912	A3
C909	B3	C922	B1	C934	B4	C949	C3	C960	C1	C970	B4	CN906	C1	D915	B2	D991	C1	L903	B1	Q912	B2	R904	A2	R921	C4	R930	A4	R945	B3	R961	C2	R975	B3	R989A	C4	TVR903	B1	ZD913	B1
C910	A2	C923	A2	C935	B3	C950	B3	C961	C1	C971	C4	CN907	B4	D916	B2	GT901	B1	L904	A1	Q913	C2	R905	A2	R922	A3	R931	A4	R949	C3	R962	C2	R976	C3	R990	C2	ZD901	A2	ZD914	C2
C911	A3	C924	B2	C937	B1	C951	B3	C962	C1	C972	C4	D901	A2	D917	B2	GT903	B1	L905	B3	Q914	C2	R906	B2	R923	A4	R933	C3	R950	B1	R964	B2	R977	B4	R991	C4	ZD902	A3		
C913	A3	C925	B3	C939	B1	C952	B3	C963	C1	C973	C3	D904	A3	D918	C3	IC901	B4	L906	B3	Q915	C3	R908	A2	R924	A4	R936	B1	R951	B1	R965	C2	R978	B4	R991A	C1	ZD903	A4		
C914	A3	C926	B2	C940	C1	C953	B3	C964	C1	C977	B1	D905	A3	D919	C3	IC902	B1	L907	B3	Q916	C1	R909	A3	R925	C3	R937	B1	R952	B1	R966	B2	R979	B4	R994	C3	ZD904	A4		



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PCB LAYOUT - TOP VIEW

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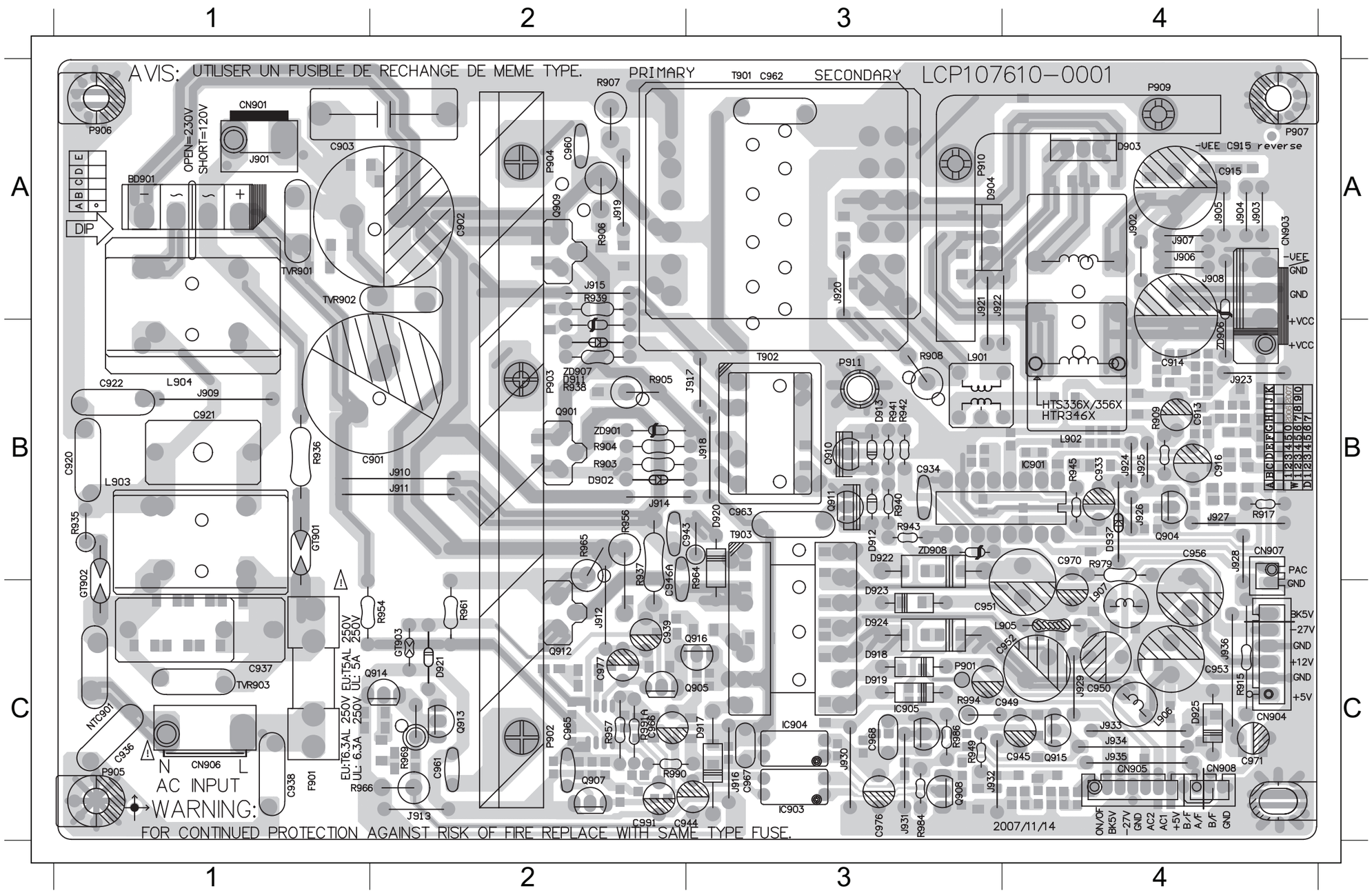
C901	B2	C922	B1	C949	C3	C963	B3	CN903	A4	D918	C3	GT901	B1	J910	B2	J920	A3	J930	C3	L904	B1	Q911	B3	R906	A2	R941	B3	R965	B2	T901	B3
C902	A2	C933	B4	C950	C4	C966	C2	CN904	C4	D919	C3	GT903	C2	J911	B2	J921	A3	J931	C3	L905	C4	Q912	C2	R908	B3	R942	B3	R966	C1	T902	B3
C903	A1	C934	B3	C951	C4	C967	C3	CN905	C4	D920	B3	IC901	B4	J912	C2	J922	A3	J932	C3	L906	C4	Q913	C2	R909	B4	R943	B3	R969	C2	TVR901	A1
C913	B4	C937	C1	C952	C4	C968	C3	CN906	C1	D921	C2	IC904	C3	J913	C2	J923	B4	J933	C4	L907	C4	Q914	C2	R917	B4	R945	B4	R979	B4	TVR902	A1
C914	B4	C939	C2	C953	C4	C970	B4	CN907	B4	D922	B3	IC905	C3	J914	B2	J924	B4	J934	C4	NTC901	C1	Q915	C4	R936	B1	R949	C3	R986	C3	TVR903	C1
C915	A4	C943	B2	C956	B4	C971	C4	D904	A3	D923	C3	J902	A4	J915	A2	J925	B4	J936	C4	Q901	B2	Q916	C3	R937	B2	R954	C1	R990	C2	ZD901	B2
C916	B4	C944	C2	C960	A2	C977	C2	D912	B3	D924	C3	J903	A4	J916	C3	J926	B4	L901	B3	Q905	C2	R903	B2	R938	B2	R957	C2	R991A	C2	ZD907	B2
C920	B1	C945	C4	C961	C2	C991	C2	D913	B3	D925	C4	J904	A4	J917	B3	J927	B4	L902	B4	Q909	A2	R904	B2	R939	A2	R961	C2	R994	C3	ZD908	B3



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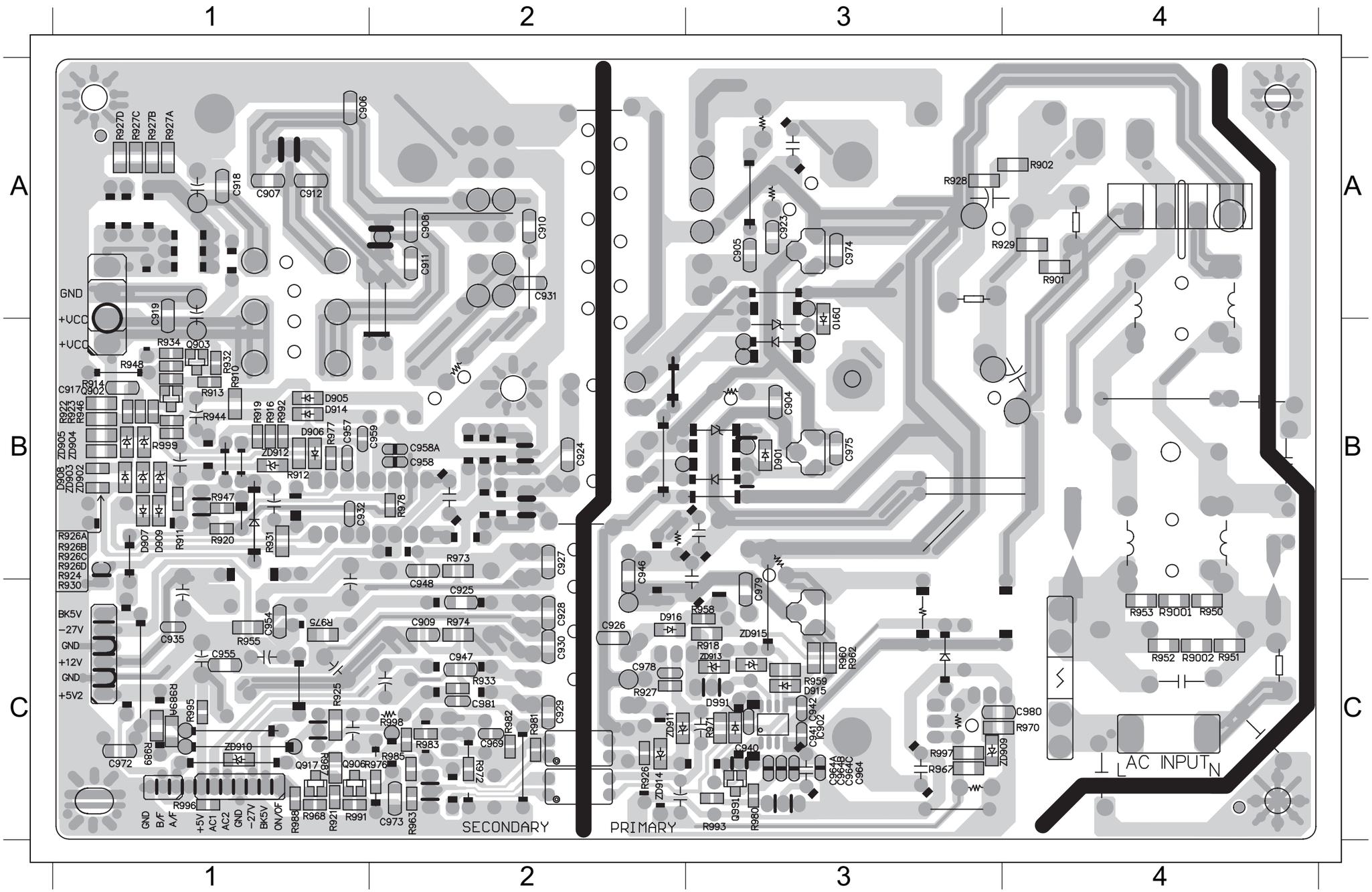
PCB LAYOUT - BOTTOM VIEW

C904	B3	C919	A1	C930	C2	C948	B2	C964A	C3	D901	B3	D916	C2	R901	A4	R921	C1	R926D	B1	R950	C4	R962	C3	R976	C2	R989	C1	ZD905	B1
C906	A1	C923	A3	C931	A2	C954	C1	C964B	C3	D905	B1	D991	C3	R902	A4	R922	B1	R927	C2	R951	C4	R967	C3	R977	B1	R989A	C1	ZD909	C3
C908	A2	C924	B2	C932	B1	C955	C1	C964C	C3	D907	B1	IC902	C3	R910	B1	R923	B1	R928	A3	R952	C4	R968	C1	R978	B2	R991	C1	ZD910	C1
C909	C2	C925	C2	C935	C1	C957	B1	C969	C2	D908	B1	Q906	C1	R911	B1	R924	B1	R929	A4	R953	C4	R970	C4	R981	C2	R995	C1	ZD911	C2
C910	A2	C926	C2	C940	C3	C958	B2	C972	C1	D909	B1	Q917	C1	R912	B1	R925	C1	R930	B1	R955	C1	R972	C2	R982	C2	R997	C3	ZD912	B1
C911	A2	C927	B2	C941	C3	C958A	B2	C973	C2	D910	A3	Q991	C3	R916	B1	R926A	B1	R931	B1	R958	C3	R973	B2	R983	C2	ZD902	B1	ZD913	C3
C917	B1	C928	C2	C942	C3	C959	B2	C978	C2	D914	B1	R9001	C4	R918	C3	R926B	B1	R933	C2	R959	C3	R974	C2	R987	C1	ZD903	B1	ZD914	C2
C918	A1	C929	C2	C946	B2	C964	C3	C980	C4	D915	C3	R9002	C4	R919	B1	R926C	B1	R944	B1	R960	C3	R975	C1	R988	C1	ZD904	B1		



AMP BOARD

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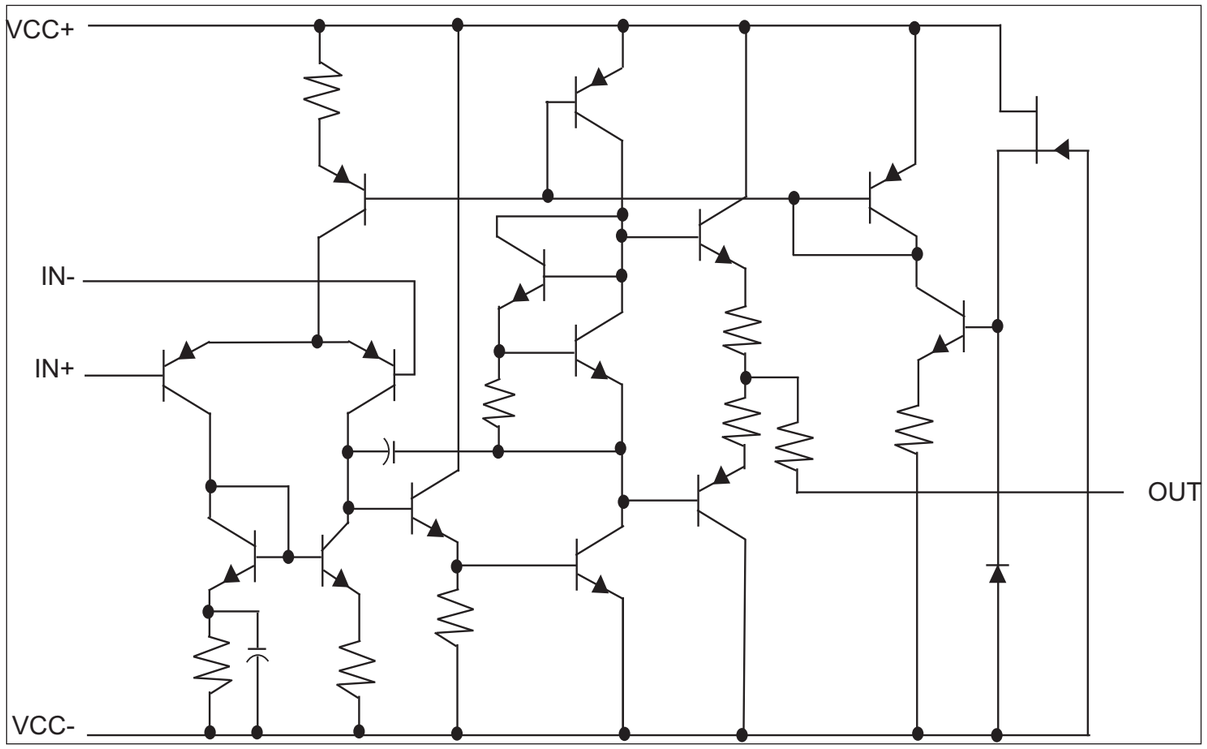
INTERNAL IC DIAGRAM - CO4558A SO8



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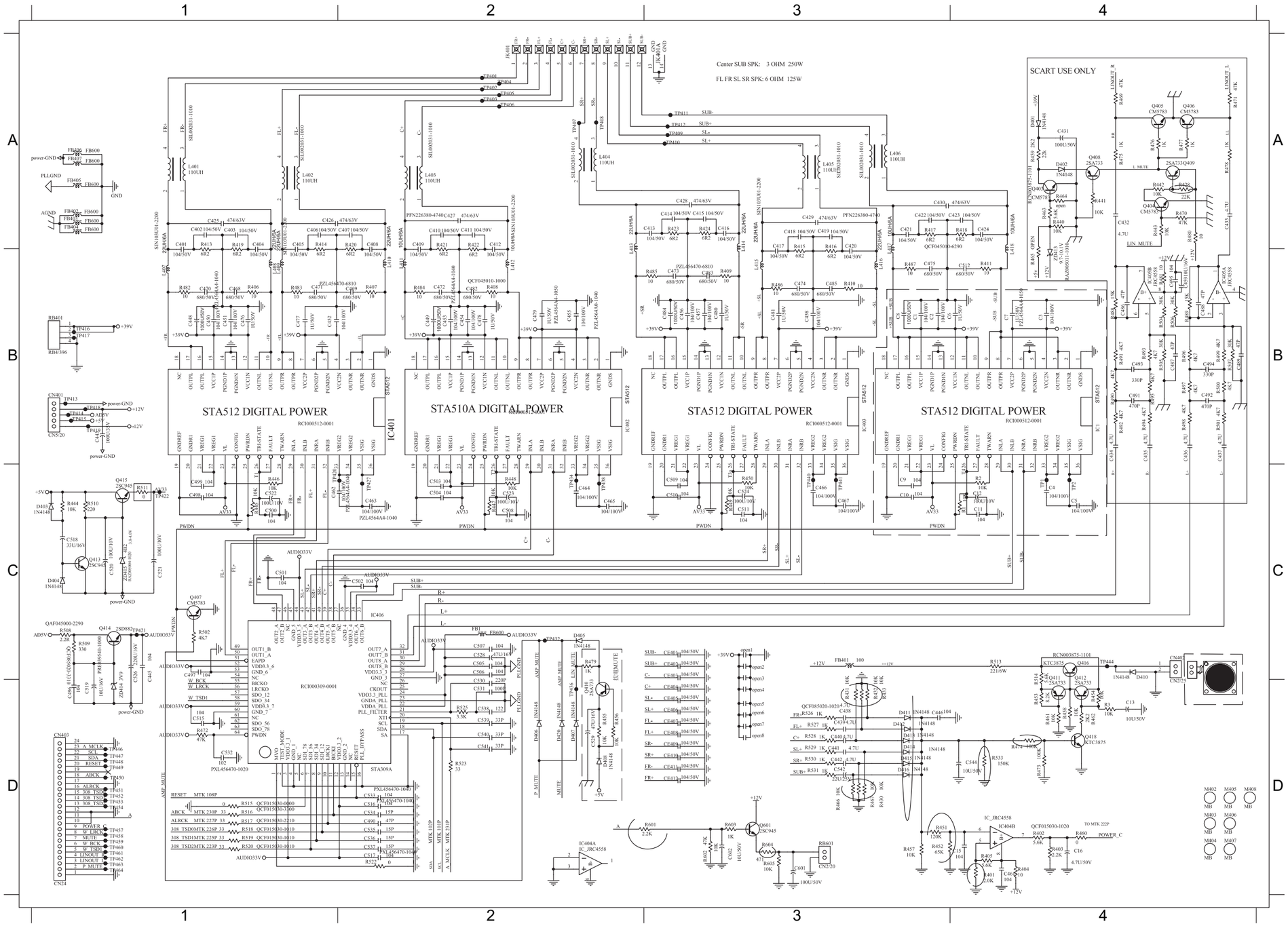
CIRCUIT DIAGRAM



C1	B3	C463	C2	C536	D2	L403	A2	R448	C2
C10	C3	C464	C2	C537	D2	L404	A2	R449	C3
C11	C4	C465	C2	C538	D2	L405	A3	R450	C3
C12	C4	C466	C3	C539	D2	L406	A3	R451	D3
C13	D4	C467	C3	C540	D2	L407	B1	R452	D3
C15	D4	C468	B1	C541	D2	L408	B1	R453	D4
C16	D4	C469	B2	C542	D3	L409	B1	R454	D4
C2	B3	C470	B1	C544	D4	L410	B2	R455	D2
C3	B4	C471	B1	C6	B4	L411	B2	R456	D2
C4	C4	C472	B2	C601	D3	L412	B2	R458	D4
C401	A1	C473	B3	C602	D3	L413	B2	R460	D4
C402	A1	C474	B3	C7	B4	L414	A3	R461	D4
C403	A1	C475	B3	C8	B3	L415	B3	R462	D4
C404	A1	C476	B1	C9	C3	L416	B3	R466	D3
C405	A1	C477	B1	CE401	C3	L417	A3	R467	D3
C406	A1	C478	B2	CE402	C3	L418	A3	R472	D1
C407	A2	C479	B2	CE403	C3	Q407	C1	R473	D4
C408	A2	C480	B3	CE404	D3	Q410	D2	R474	D4
C409	A2	C481	B3	CE405	D3	Q411	D4	R479	C2
C410	A2	C482	B2	CE406	D3	Q412	D4	R482	B1
C411	A2	C483	B3	CE407	D3	Q413	C1	R483	B1
C412	A2	C484	B3	CE408	D3	Q414	C1	R484	B2
C413	A3	C485	B3	CE409	D3	Q415	C1	R485	B3
C414	A3	C490	D2	CE410	D3	Q416	C4	R486	B3
C415	A3	C496	D1	CE411	D3	Q418	D4	R487	B3
C416	A3	C497	C1	CE412	D3	Q601	D3	R502	C1
C417	A3	C498	C1	CN401	B1	R1	C4	R508	C1
C418	A3	C499	C1	CN402	C4	R2	C4	R509	C1
C419	A3	C5	C4	CN403	D1	R3	D4	R510	C1
C420	A3	C500	C1	D403	C1	R401	D4	R511	C1
C421	A3	C501	C1	D404	C1	R402	D4	R513	C4
C422	A3	C502	C2	D405	C2	R403	D4	R514	C4
C423	A4	C503	C2	D406	D2	R404	D4	R515	D1
C424	A4	C504	C2	D407	D2	R405	D4	R516	D1
C425	A1	C505	C2	D408	D2	R406	B1	R517	D1
C426	A1	C506	C2	D410	C4	R407	B2	R518	D1
C427	A2	C507	C2	D411	D3	R408	B2	R519	D1
C428	A3	C508	C2	D412	D3	R409	B3	R520	D1
C429	A3	C509	C3	D413	D3	R410	B3	R522	D2
C430	A3	C510	C3	D414	D3	R411	B4	R523	D2
C438	D3	C511	C3	D415	D3	R413	A1	R525	D2
C439	D3	C512	B4	D416	D3	R414	A1	R526	D3
C440	D3	C515	D1	D420	D2	R415	A3	R527	D3
C441	D3	C516	D2	FB1	C2	R416	A3	R528	D3
C442	D3	C517	D2	FB401	C3	R417	A3	R529	D3
C443	B1	C518	C1	FB402	A1	R418	A4	R530	D3
C445	C1	C519	D1	FB403	A1	R419	A1	R531	D3
C446	D3	C520	C1	FB404	A1	R420	A2	R533	D4
C448	B1	C521	C1	FB405	A1	R421	A2	R601	D3
C449	B2	C522	C1	FB406	A1	R422	A2	R602	D3
C450	B1	C523	C2	FB407	A1	R423	A3	R603	D3
C451	B1	C524	C3	IC1	B4	R424	A3	R604	D3
C452	B1	C526	C1	IC401	B1	R430	D3	R605	D3
C453	B2	C528	C2	IC402	B2	R431	D3	RB401	B1
C454	B2	C529	D2	IC403	B3	R432	D3	RB601	D3
C455	B2	C530	D2	IC404	B4	R433	D3	ZD414	D1
C456	B3	C531	D2	IC406	C2	R443	A4	ZD415	C1
C457	B3	C532	D1	JK401	A2	R444	C1		
C458	B3	C533	D2	JK401A	A3	R445	C1		
C461	D4	C534	D2	L401	A1	R446	C1		
C462	C1	C535	D2	L402	A1	R447	C2		

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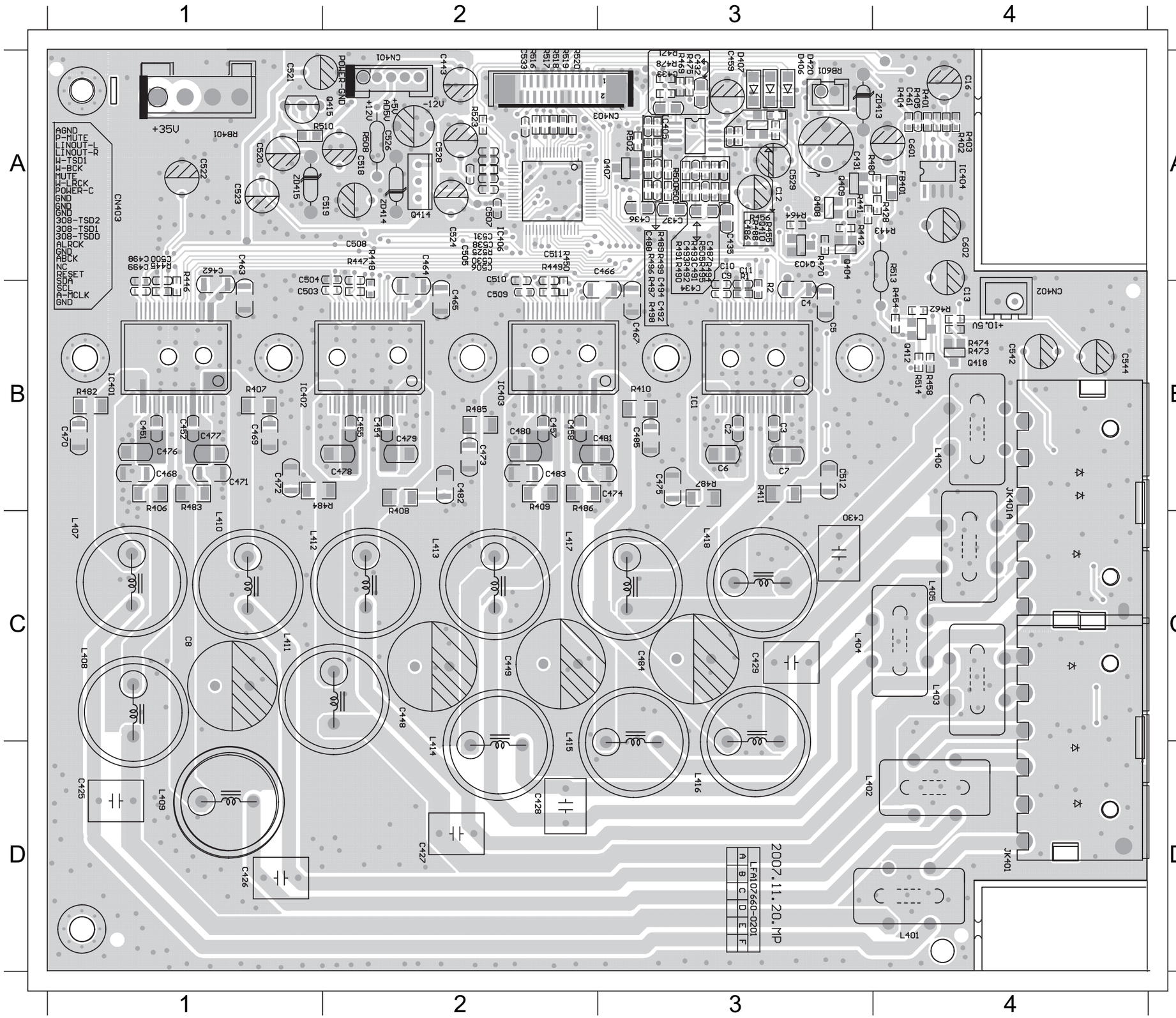
PCB LAYOUT - TOP VIEW



C520	A1	C602	A4	C510	B2	C428	D2
C521	A1	FB401	A4	IC403	B2	JK401	D4
C522	A1	IC404	A4	R408	B2	L401	D4
C523	A1	Q412	A4	R409	B2	L402	D4
R510	A1	R401	A4	R485	B2		
RB401	A1	R402	A4	R486	B2		
ZD415	A1	R403	A4	C1	B3		
C443	A2	R404	A4	C10	B3		
C505	A2	R405	A4	C11	B3		
C506	A2	R443	A4	C2	B3		
C507	A2	R458	A4	C3	B3		
C508	A2	R462	A4	C4	B3		
C511	A2	R473	A4	C467	B3		
C518	A2	R474	A4	C475	B3		
C519	A2	R513	A4	C485	B3		
C524	A2	R514	A4	C5	B3		
C526	A2	C451	B1	C512	B3		
C528	A2	C452	B1	C6	B3		
C530	A2	C462	B1	C9	B3		
C531	A2	C463	B1	IC1	B3		
C533	A2	C468	B1	R1	B3		
C538	A2	C469	B1	R2	B3		
CN401	A2	C470	B1	R410	B3		
CN403	A2	C471	B1	R411	B3		
IC406	A2	C472	B1	R487	B3		
Q414	A2	C476	B1	C542	B4		
Q415	A2	C477	B1	C544	B4		
R447	A2	C498	B1	CN402	B4		
R448	A2	C499	B1	JK401A	B4		
R449	A2	C500	B1	L406	B4		
R450	A2	C503	B1	Q418	B4		
R508	A2	C504	B1	R454	B4		
R516	A2	IC401	B1	C8	C1		
R517	A2	IC402	B1	L407	C1		
R518	A2	R406	B1	L408	C1		
R519	A2	R407	B1	L410	C1		
R520	A2	R445	B1	L411	C1		
R523	A2	R446	B1	L412	C1		
R525	A2	R482	B1	C448	C2		
ZD414	A2	R483	B1	C449	C2		
C12	A3	R484	B1	L413	C2		
C466	A3	C454	B2	L414	C2		
C529	A3	C455	B2	L415	C2		
D406	A3	C457	B2	L416	C2		
D407	A3	C458	B2	C429	C3		
D420	A3	C464	B2	C430	C3		
Q407	A3	C465	B2	C484	C3		
Q410	A3	C473	B2	L404	C3		
R455	A3	C474	B2	L417	C3		
R456	A3	C478	B2	L418	C3		
R502	A3	C479	B2	L403	C4		
RB601	A3	C480	B2	L405	C4		
C13	A4	C481	B2	C425	D1		
C16	A4	C482	B2	C426	D1		
C461	A4	C483	B2	L409	D1		
C601	A4	C509	B2	C427	D2		

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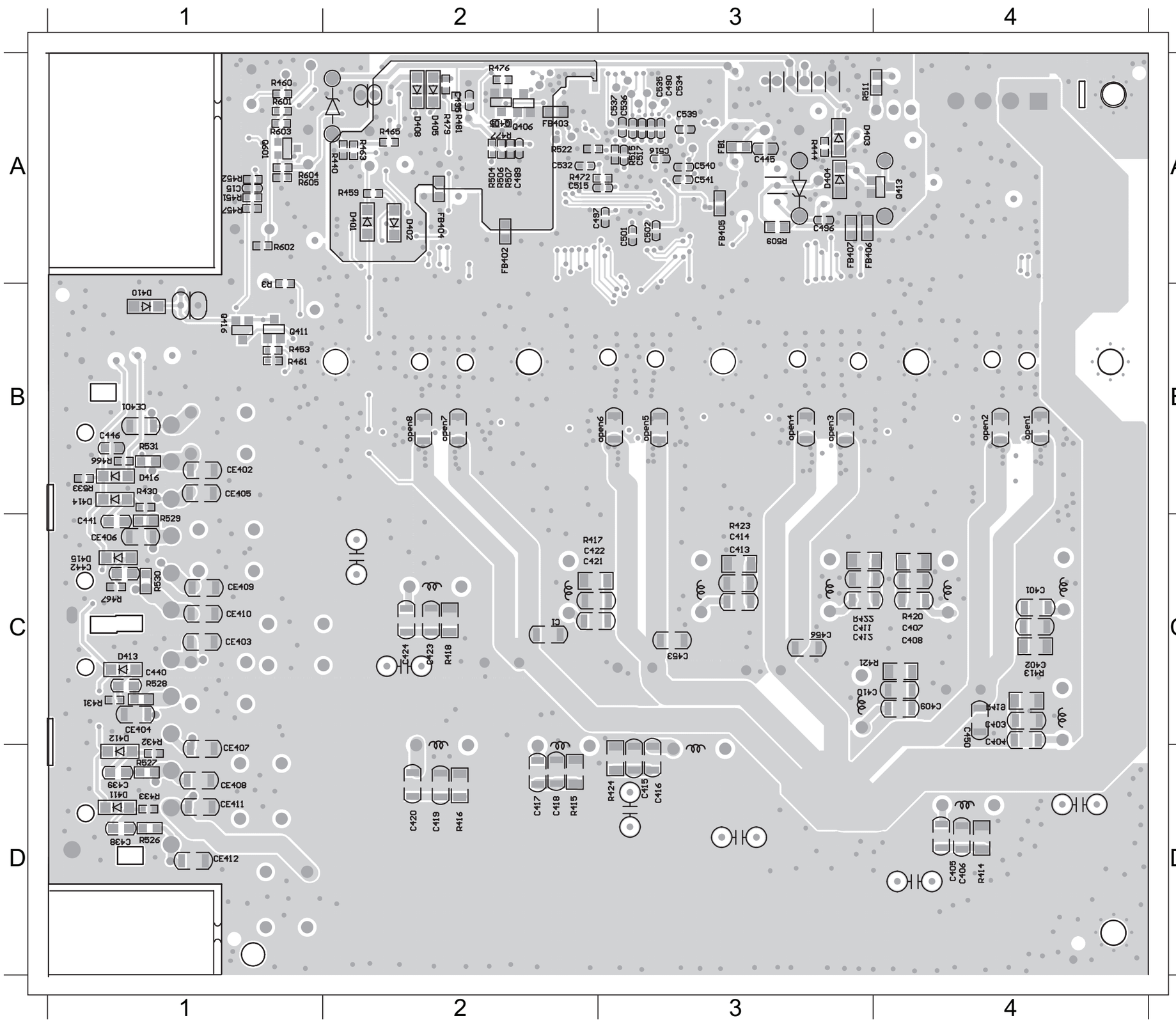
PCB LAYOUT - BOTTOM VIEW



C1	C2	CE404	C1	R466	B1
C15	A1	CE405	B1	R467	C1
C401	C4	CE406	C1	R472	A2
C402	C4	CE407	D1	R479	A2
C403	C4	CE408	D1	R509	A3
C404	C4	CE409	C1	R511	A3
C405	D2	CE410	C1	R515	A3
C406	D2	CE411	D1	R522	A2
C407	C4	CE412	D1	R526	D1
C408	C4	D403	A3	R527	D1
C409	C4	D404	A3	R528	C1
C410	C3	D405	A2	R529	C1
C411	C3	D408	A2	R530	C1
C412	C3	D410	B1	R531	B1
C413	C3	D411	D1	R533	B1
C414	C3	D412	D1	R601	A1
C415	D2	D413	C1	R602	A1
C416	D2	D414	B1	R603	A1
C417	D2	D415	C1	R604	A1
C418	D2	D416	B1	R605	A1
C419	D2	FB1	A3		
C420	D2	FB402	A2		
C421	C2	FB403	A2		
C422	C2	FB404	A2		
C423	C3	FB405	A3		
C424	C2	FB406	A3		
C438	D1	FB407	A3		
C439	D1	Q411	B1		
C440	C2	Q413	A4		
C441	C2	Q416	B1		
C442	C2	Q601	A1		
C445	A3	R3	A1		
C446	B1	R413	C4		
C450	C4	R414	D2		
C453	C3	R415	D2		
C456	C3	R416	D2		
C490	A3	R417	C2		
C496	A3	R418	C2		
C501	A3	R419	C4		
C502	A3	R420	C4		
C515	A2	R421	C3		
C516	A3	R422	C3		
C517	A3	R423	C3		
C532	A2	R424	D2		
C534	A3	R430	B1		
C535	A3	R431	C1		
C536	A3	R432	D1		
C537	A3	R433	D1		
C539	A3	R444	A3		
C540	A3	R451	A1		
C541	A3	R452	A1		
CE401	B1	R453	B1		
CE402	B1	R460	A1		
CE403	C1	R461	B1		

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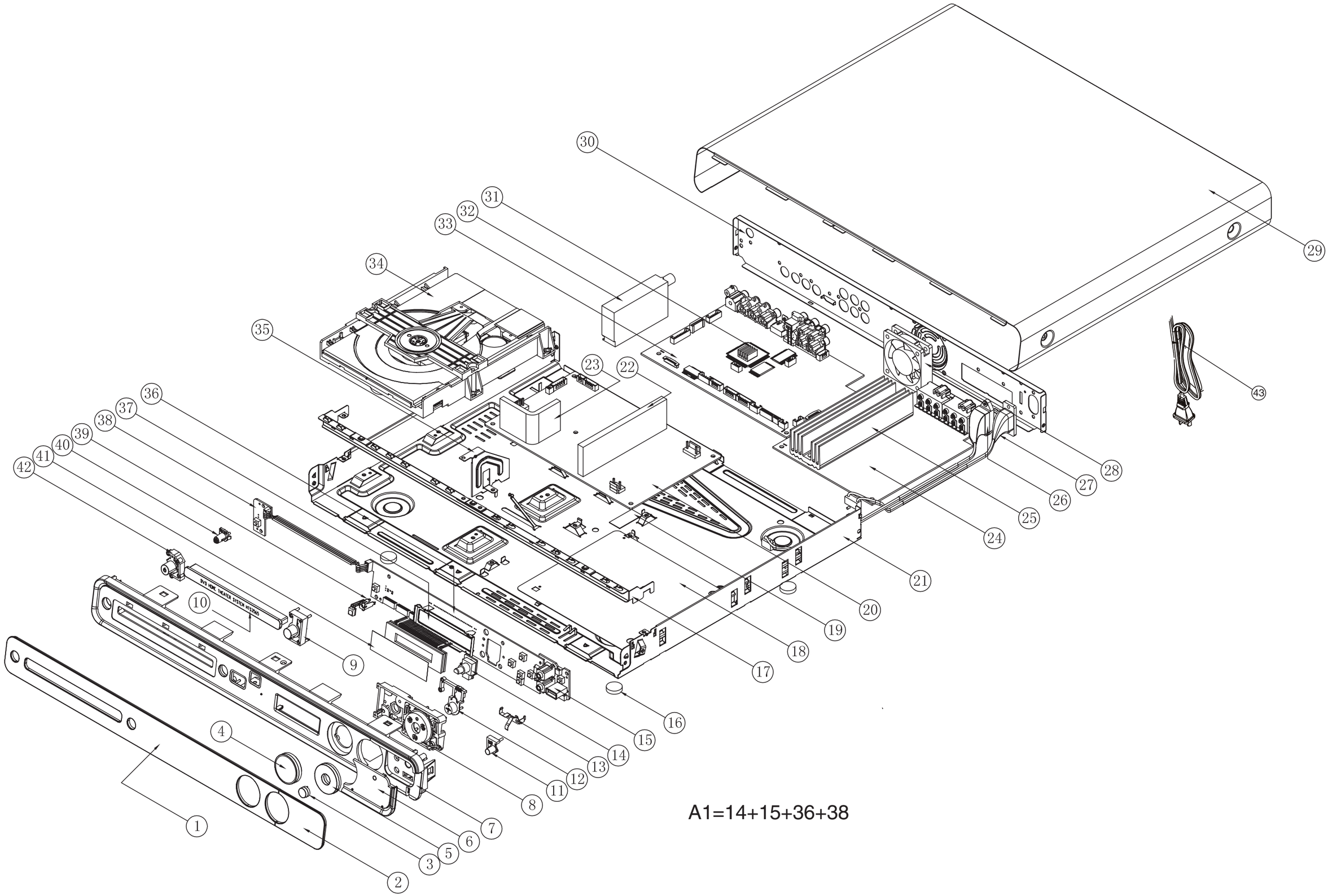
MECHANICAL EXPLODED VIEW



A1=14+15+36+38

MECHANICAL PART LIST(red colour only for hts3569/98)

Loc.	12NC.	Description
MECHANICAL PART LIST		
1	996510012484	DISPLAY LENS PMMA
2	996510012485	USB DOOR LENS
3	996510010835	SOURCE BUTTON PC PMMA
4	996510010833	VOLUME KNOB PMMA PC
5	996510010832	FUNCTION BUTTON
6	996510010829	USB DOOR
7	996510012486	FRONT PANEL
8	996510010837	FUNCTION BRACKET
9	996510010834	EJECT KEY
10	996510012487	DVD DOOR
10	996510012487	DVD DOOR
11	996510012488	MIC LEVEL BUTTON
12	996510010838	SOURCE BRACKET
16	996510010842	RUBBER FOOT
18	996510010826	PVC SHEET
19	996510010827	PVC SHEET
20	996510012509	POWER PCB
21	996510010845	BOTTOM PANEL
24	996510010823	AMP PCB
28	996510010843	FAN
29	996510012489	TOP COVER
30	996510012490	REAR PANEL
32	996510010825	TUNER
33	996510012493	MAIN PCB
34	996510010819	DVD LOADER
40	996510010840	STANDBY LENS
42	996510010836	POWER KEY
43	996510002650	POWER CORD
A1	996510012531	VFD+JACK+VOL+STANDBY PCB
Dock	996510010855	SIMPLE IPOD DOCK
FM	994000002731	FM ANTENNA 1500MM
RC	996510012491	REMOTE CONTROL
V1	996510007429	FFCCBLE 10P100mm
V2	996510011292	FFC CABLE 24P 50mm
Video	996500013058	RCA CABLE 2P 1.2M
LSCREW	996510009092	SCREW8.5X60LX12LXM5X0.8P
SPEAKER		
RFC	996510001599	RUBBER FOOT -CENTER SPK
RFFR	996510001601	RUBBER FOOT - REAR SPK
RFS	996510010854	RUBBER FOOT -SUB
SPKC	996510010848	SPEAKER BOX -CENTER
SPKFL	996510010849	SPEAKER BOX -FRONT LEFT
SPKFR	996510010850	SPEAKER BOX - FRONT RIGHT
SPKRL	996510010851	SPEAKER BOX- REAR LEFT
SPKRR	996510010852	SPEAKER BOX- REAR RIGHT
SUBW	996510010853	SUBWOOFER
RFC	996510010854	RUBBER FOOT -CENTER
RFFR	996510010854	RUBBER FOOT -CENTER
RFS	996510013306	RUBBER FOOT -SUB
SPKC	996510013300	SPEAKER BOX -CENTER
SPKFL	996510013301	SPEAKER BOX -FRONT LEFT
SPKFR	996510013302	SPEAKER BOX - FRONT RIGHT
SPKRL	996510013303	SPEAKER BOX- REAR LEFT
SPKRR	996510013304	SPEAKER BOX- REAR RIGHT
SUBW	996510013305	SUBWOOFER
POWER PCB		
BD901	996500038405	BRIDGE KBU808 8A 800V
BD901	996500041973	BRIDGE KBU808 8A 800V
BD901	996510011372	BRIDGE KBU808 8A 800V
C901	996500027123	CAP.E 330UF 200V 20%
C902	996500027123	CAP.E 330UF 200V 20%
C903	996500027124	COND METAL 1.5UF 250V
C920	996510012510	COND SAFETY 0.001uF 400V
C921	994000005343	COND SAFETY 0.22UF 275V
C922	996510012510	COND SAFETY 0.001uF 400V
C937	994000000932	COND SAFTY 0.47UF 275V 10%
C943	996500018042	COND DISC 0.01UF 1KV 20%
C944	996510012511	COND ELECT 2.2 uF 100V
C945	996510012511	COND ELECT 2.2 uF 100V
C946	996510012512	CHIP CAP 100pF 1000V 5%
C948	996510012513	CHIP CAP 470pF 500V 10%
C960	996500018042	COND DISC 0.01UF 1KV 20%
C961	996500018042	COND DISC 0.01UF 1KV 20%
C962	996510012510	COND SAFETY 0.001uF 400V
C963	996500038398	CAP. SAFTY 152PF 250V 20%
C967	996510004633	COND MYLAR 0.1 uF 100V 5%
C968	996510012514	COND MYLAR 0.15uF 100V 5%
CN901	996500017458	CONNECTOR 3P CL3962WVO
CN903	996500017360	CONNECTOR 4P CL3962WVO
CN904	996510012515	CONNECTOR B6B-XH-A 6 PIN
CN905	996500017358	CONNECTOR 7P
CN906	996500015936	CONNECTOR 4PIN P=3.96MM
CN907	996500015898	CONNECTOR 2 PIN
D904	994000005346	RECTIFIER
D904	996500041972	DIODE STPR1620CT 3P
D912	996500026949	DIODE SW 1N4148 PB<1000PPM
D913	996500026949	DIODE SW 1N4148 PB<1000PPM
D917	996510012516	DIODEHER
D918	994000000941	DIODE HER104 1A 300V 50NS
D919	994000000941	DIODE HER104 1A 300V 50NS
D920	994000000938	DIODE PR1507 1.5A 1000V
D921	996500026949	DIODE SW 1N4148 PB<1000PPM
D922	994000000943	DIODE UF3003 3A 200V
D923	994000000941	DIODE HER104 1A 300V 50NS
D924	994000005249	DIODE SB360 3A 60V DO-201AD
D925	996510004297	IN5819 1A 28V SCHOTTKY
D937	996500026949	DIODE SW 1N4148 PB<1000PPM

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F901	994000001053	FUSE 6.3A 250V
IC901	996510008293	IC 16P AZ7500BP-E1
IC902	996510004113	IC 8P AP3843GMTR-E1
IC904	994000000946	OPTICAL SENSOR 4P
IC905	994000000952	IC 3PIN TL431
IC905	996500029312	IC 3 PIN TL431 TO-92 CHANG JI
L901	996500027102	TOROID COIL
L902	994000005341	COMMON COIL
L903	996510013776	LINE FILTER ET-24
L904	996510013747	LINE FILTER ET-28
L906	996500016694	6UH 13.5TS 2UEW
L907	996500016694	6UH 13.5TS 2UEW
Q901	996510012517	MOSFETFQP
Q905	996510000615	XISTR NPN 2SC945P
Q906	996510004282	XISTR NPN SMT (2SC945)
Q909	996510012517	MOSFETFQP13N50C
Q910	996500026946	XISTR PNP 2SB772P/Q NEC
Q911	996500026946	XISTR PNP 2SB772P/Q NEC
Q912	994000005348	MOSFET STF3NK80Z N-CH 2.5A
Q913	996510004298	XISTR NPN 2N5551B TO-92
Q914	996510004298	XISTR NPN 2N5551B TO-92
Q915	996500026939	XISTR PNP 2SA952 NEC
Q915	996510010356	XISTR PNP 2SB647 TO-92MOD
Q916	996510012518	TRIACS 3P MCR100-6 TO-92 CJ
Q917	996510004282	XISTR NPN SMT (2SC945)
Q991	994000000921	XISTR PNP 2SA812 HFE:200-400
R905	996510012519	RES. 120 OHM 3W 5% MOF
R906	996510012519	RES. 120 OHM 3W 5% MOF
R908	996510012519	RES. 120 OHM 3W 5% MOF
R965	996510012520	RES. 1 OHM 2W 5% MO
R969	996510012521	RES 10K OHM 2W 5%
T901	996510012522	SWTRANS EC-39DWKB486-8519
T901	996510012523	SW TRANS ER39/40 600W
T902	994000001057	SW. MODEL TRANSFORMER
T903	996510012524	SWTRANS EEL-25
T903	996510012525	SW TRANS EEL-25 6+8P
ZD901	994000002067	DIODE ZENR 14.5-15.1V 0.5W
ZD907	994000002067	DIODE ZENR 14.5-15.1V 0.5W
ZD908	996500026940	DIODE ZENR 11.9-12.4V 0.5W
AMP PCB		
CN401	996510012526	C/W 5P 50mm 2468 26 RAINBOW
CN402	996500015862	CONNECTOR B2B-XH-A 2 PIN
CN403	996510012498	CHIP HOUSING 24P
IC1	996510011370	IC 36P STA512 PSO36 45V 6A
IC401	996510011370	IC 36P STA512 PSO36 45V 6A
IC402	996510011370	IC 36P STA512 PSO36 45V 6A
IC403	996510011370	IC 36P STA512 PSO36 45V 6A
IC404	996500029611	IC 8P CO4558A SO8
IC404	996500041286	IC 8P 4558
IC406	996510012527	IC 64P STA309A TQFP ST

JK401	996510012528	SPKJACK6P
JK401&401A	996510013837	SPK JAC12p
JK401A	996510012529	SPKJACK 6
L401	996510012530	TOROIDCOIL4P
L402	996510012530	TOROIDCOIL4P
L403	996510012530	TOROIDCOIL4P
L404	996510012530	TOROIDCOIL4P
L405	996510012530	TOROIDCOIL4P
L406	996510012530	TOROIDCOIL4P
Q407	996510000578	XISTR NPN KTC3875-Y
Q410	994000000921	XISTR PNP 2SA812 HFE:200-400
Q411	994000000921	XISTR PNP 2SA812 HFE:200-400
Q412	994000000921	XISTR PNP 2SA812 HFE:200-400
Q413	994000000915	XISTR NPN 2SC1623
Q414	996500028742	XISTR NPN
Q415	996510000615	XISTR NPN 2SC945P
Q416	996510000578	XISTR NPN KTC3875-Y
Q418	996510000578	XISTR NPN KTC3875-Y
Q601	994000000915	XISTR NPN 2SC1623
ZD414	996500027138	DIODE ZENR 3.8-4.0V 0.5W
ZD415	996500027138	DIODE ZENR 3.8-4.0V 0.5W

MAIN PCB

CN201	996500015859	CONNECTOR 4PIN P2.0MM
CN202	996510012494	CONNECTOR 5 PIN RED
CN203	996510012495	CONNECTOR 4P
CN205	996510012496	CONNECTOR 7P
CN206	996500015900	CONNECTOR 3 PIN P=2.0MM
CN207	996500015895	CONNECTOR 5 PIN P=2.0MM
CN208	996500015897	CONNECTOR 3 PIN RED
CN301	996510012497	FPC/FFC CONN. 10P
CN303	996500018015	CONNECTOR 3P
CN401	996500015895	CONNECTOR 5 PIN P=2.0MM
CN801	996510012498	CHIP HOUSING 24P
CN802	996500015901	CONNECTOR 6 PIN P=2.0MM
CN803	996500015895	CONNECTOR 5 PIN P=2.0MM
D201	996510010358	DIODE 1N4007
D204	996510010358	DIODE 1N4007
IC201	996510012499	IC 28P
IC202	996510004290	IC 48P EN29LV320B-70TCP
IC202	996510004291	IC 48P KH29LV320CBTC-70G
IC203	996500041284	IC 3P STM809SWX6F 3.0V
IC204	996510004289	IC 8P TU24C16CS2 SOIC TURBO
IC205	996500041967	IC 20P SN74HC374PW
IC206	996510004115	IC 54P AS81F641642C-6P
IC206	996510009895	IC 54P A641604L-6T TSOP II
IC207	996510012500	IC 20 PIN SN74HC244PWR
IC208	996510012501	IC 28P P89LPC931FDH
IC209	996510012502	IC 256P MT1389FXE/S
IC210	996500027090	IC 3 PIN AP1117E18LA 1.8V
IC301	996500029611	IC 8P CO4558A SO8

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IC301	996500041286	IC 8P 4558
IC303	996500029611	IC 8P CO4558A SO8
IC303	996500041286	IC 8P 4558
IC304	996510012503	IC 16P CD4051BM SOIC
IC305	996510012503	IC 16P CD4051BM SOIC
IC306	996510012504	IC 20P WM8782SEDS
IC309	996510012500	IC 20 PIN SN74HC244PWR
IC501	996510012505	IC 48P CS48540-CQZ LQFP
IC801	996510010380	Motor Drive IC
IC801	996510012506	IC 28P AM5888S L/F HSOP
JK302	996510004283	RCA JACK 4P AUDIO
JK601	996510012507	HDMI JACK 19P
JK701	996500023599	RCA+DIN JK 1RCA+4P DIN YEL
JK702	996500012609	RCA JACK R/G/B
JK703	996500017363	RCA JACK 1P W/GND P
Q201	996510000615	XISTR NPN 2SC945P
Q204	996510012508	XISTR PNP TIP42C
Q300	994000000915	XISTR NPN 2SC1623
Q302	994000000915	XISTR NPN 2SC1623
Q303	994000000915	XISTR NPN 2SC1623
Q304	994000000915	XISTR NPN 2SC1623
Q305	994000000915	XISTR NPN 2SC1623
Q601	996510008289	FET AO3402 SOT23 30V/4A
Q602	996500041281	FET 2N7002 60V/115MA
Q801	996510004117	FET 2SK3018 30V/0.1A SC-70
Q802	994000000915	XISTR NPN 2SC1623
Q803	996500026927	XISTR PNP 2SB1132RT100
Q804	996500026927	XISTR PNP 2SB1132RT100
Q805	996510004117	FET 2SK3018 30V/0.1A SC-70
Q901	996510000615	XISTR NPN 2SC945P
Q903	996500026946	XISTR PNP 2SB772P/Q NEC
Q904	994000005335	XISTR NPN TIP41C
XL501	996510000566	CRYST 24.576MHZ +/-20PPM
ZD901	994000005204	DIODE ZENR 12.6-13.1V 0.5W
ZD903	996510010364	DIODE ZENER 5.32-5.88V 0.5W
ZD904	996500028741	DIODE ZENR 9.1-9.5V 0.5W

DVD LOADER

DT	996500020250	TRAVERSE MECHANISM
LB	996510012492	LOADER BASE
V3	996510007319	FFC CABLE 24P 180MM

VFD+JACK+VOL+STANDBY PCB

JK11	996510004129	KARAOKE JACK D3.6MM 7P
JK12	996510004129	KARAOKE JACK D3.6MM 7P
USB11	996510013742	USB JACK 4P
CN12	996500018030	CONNECTOR 2P
D12	996500026949	DIODE SW 1N4148 PB<1000PPM
D13	996500026949	DIODE SW 1N4148 PB<1000PPM
DP11	996510012856	VFD 32P
IC11	996500029614	IC 52 PIN PT6311(PTC)

Q11	994000000915	XISTR NPN 2SC1623
Q12	994000000921	XISTR PNP 2SA812 HFE:200-400
Q13	994000000921	XISTR PNP 2SA812 HFE:200-400
Q14	994000000921	XISTR PNP 2SA812 HFE:200-400
Q15	994000000921	XISTR PNP 2SA812 HFE:200-400
Q16	994000000921	XISTR PNP 2SA812 HFE:200-400
SN11	994000005472	IRT RECEIVER IRM-2638AF4
LD11	996510004102	LED 3 DIA RED ROUND

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REVISION LIST

Version 1.0
*Initial release