

Service
Service
Service



Service Manual



TABLE OF CONTENTS

	Chapter
Location of PCB Boards	1-2
Versions Variation	1-2
Specifications	1-3
Measurement setups.....	1-4
Service Aids.....	1-5
ESD & Safety instruction	1-6
Lead-tree soldering information	1-7
Setting procedure & Repair instructions.....	2
Disassembly instruction & Service Postion	3
Block & Wring Diagram	4
VFD+JACK+VOL+STANDBY Board	5
Main Board	6
Power Board.....	7
AMP Board	8
IPOD Board	9
Mechanical Exploded View & Parts.....	10
Revision List	11

© Copyright 2008 Philips Consumer Electronics B.V. Eindhoven, The Netherlands
All rights reserved. No part of this publication may be reproduced, stored in a retrieval system or
transmitted, in any form or by any means, electronic, mechanical, photocopying, or otherwise
without the prior permission of Philips.

Published by LM0815 Service Audio Printed in The Netherlands Subject to modification

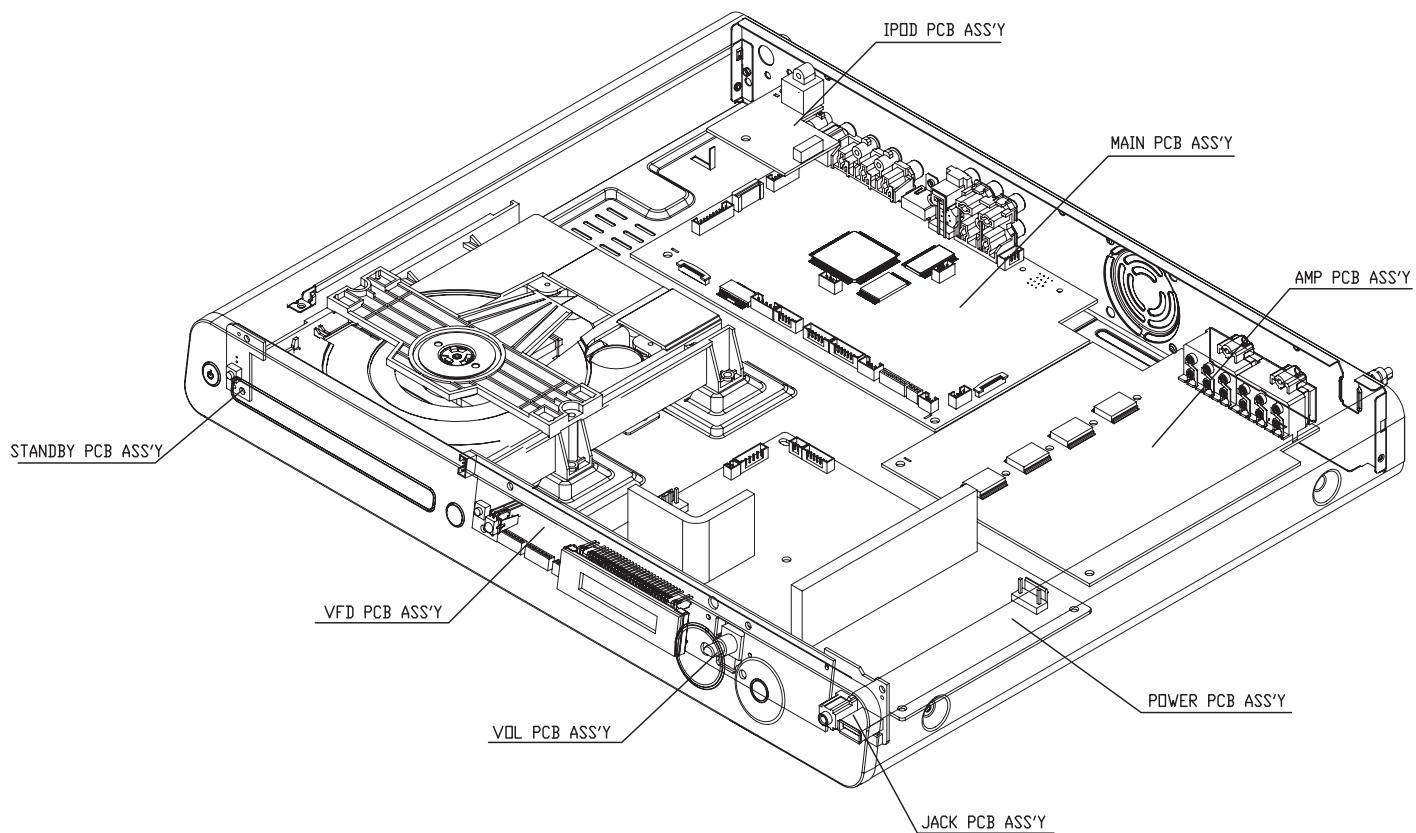
(GB) 3139 785 33292

Version 1.2



PHILIPS

LOCATION OF PCB BOARDS



VERSION VARIATION:

Features	Type/Versions	
	HTS3565D	HTS3566D
/37	/37	
Main (Output Power-1000W)	X	X
S-Video out	X	X
Power Voltage (120V)	X	X
IPOD Dock	X	X

SERVICE SCENARIO MATRIX:

Boards in used	Type/Versions	
	HTS3565D	HTS3566D
/37	/37	
Main board	Bd	Bd
Power board	Bd	Bd
AMP board	Bd	Bd
IPOD board	Bd	Bd
VFD+JACK +VOL+STANDBY board	Bd	Bd

* Bd= Board Level Repair

SPECIFICATIONS(red colour only for hts3566d/37)

AMPLIFIER

Total output power:	
- Home Theater mode	1000 W
- FTC* output power	640 W
Frequency Response	180 Hz – 14 kHz / ±3 dB
Signal-to-Noise Ratio.....	> 60 dB (A-weighted)
Input Sensitivity	
- AUX 1	400 mV
- AUX 2.....	400mV
- MP3 LINK.....	400mV

* (Main Ch @1 kHz Sub Ch 60 Hz within 10% THD)

RADIO

Tuning Range	FM 87.5–108 MHz (100kHz)
26 dB Quieting	
Sensitivity	FM 22dBf
IF Rejection Ratio.....	FM 60 dB
Signal-to-Noise Ratio.....	FM 50 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, DivX Ultra
Video DAC.....	12 Bits
Signal System.....	NTSC / Multi
Video Format.....	4:3 / 16:9
Video S/N	56 dB
Composite Video Output.....	1.0 Vp-p, 75Ω
S-Video Output.....	Y - 1.0 Vp-p, 75Ω
.....	C - 0.286 Vp-p, 75Ω
Audio DAC.....	24 Bits / 96 kHz
Frequency Response	4Hz–20 kHz (44.1 kHz)
.....	4Hz–22kHz (48 kHz)
.....	4Hz–44kHz (96 kHz)
PCM.....	IEC 60958
Dolby Digital	IEC 60958,
.....	IEC 61937

MAIN UNIT

Power Supply Rating.....	120 V; 60 Hz
Power Consumption	180 W
Dimensions.....	435 x 57 x 360 (mm)
.....	(w x h x d)
Weight	4.04 kg

IPOD DOCK

Dimensions.....	34.6 x 103.8 (mm)
.....	(h x d)
Weight	163.5 g

FRONT AND REAR SPEAKERS

System.....	Full range satellite
Impedance.....	6 Ω
Speaker drivers	3" full range speaker
Frequency response.....	150 Hz – 20 kHz
Dimensions(front & rear)	103 x 203 x 71 (mm)
.....	(w x h x d)
Weight	0.56 kg/each
Dimensions(front)	103 x 203 x 71 (mm)
Dimensions(rear).....	262x1199x264(mm)
.....	(w x h x d)
Weight(front).....	0.54 kg/each
Weight(rear).....	3.53 kg/each

CENTER SPEAKER

System.....	Full range satellite
Impedance.....	3Ω
Speaker drivers	2x 2.5" full range woofer, 1 x 2" tweeter
Frequency response.....	150 Hz – 20 kHz
Dimensions.....	438 x 101 x 73.5 (mm)
.....	(w x h x d)
Weight	1.43 kg
System.....	Full range satellite
Impedance.....	6Ω
Frequency response.....	150 Hz – 20 kHz
Dimensions.....	244 x 105 x 74 (mm)
.....	(w x h x d)
Weight	0.84 kg

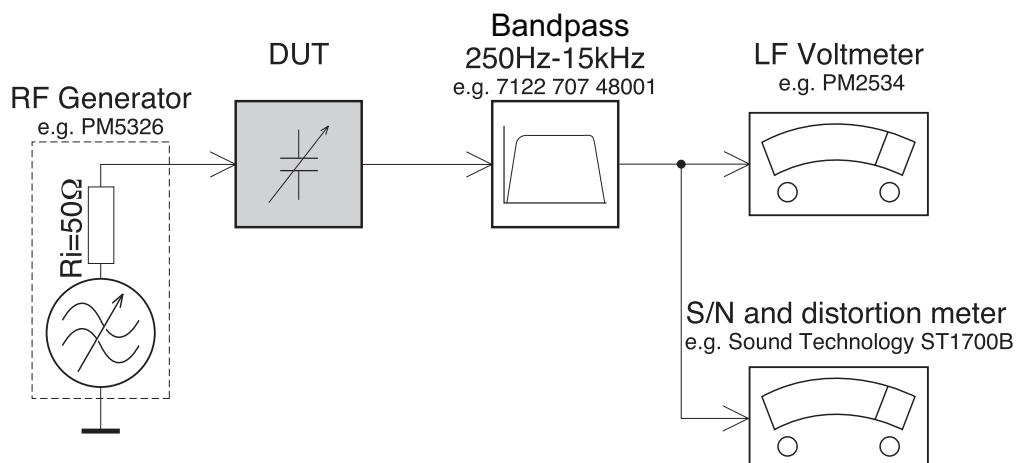
SUBWOOFER

Impedance.....	3Ω
Speaker drivers	203 mm (8") woofer
Frequency response.....	40 Hz – 150 Hz
Dimensions.....	162.5 x 362.5 x 369 (mm)
.....	(w x h x d)
Weight	4.98 kg

Specifications subject to change without prior notice.

MEASUREMENT SETUP

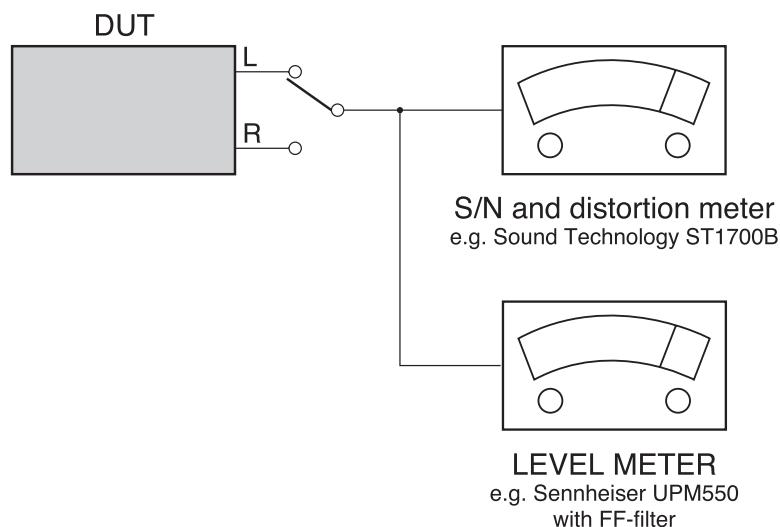
Tuner FM



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

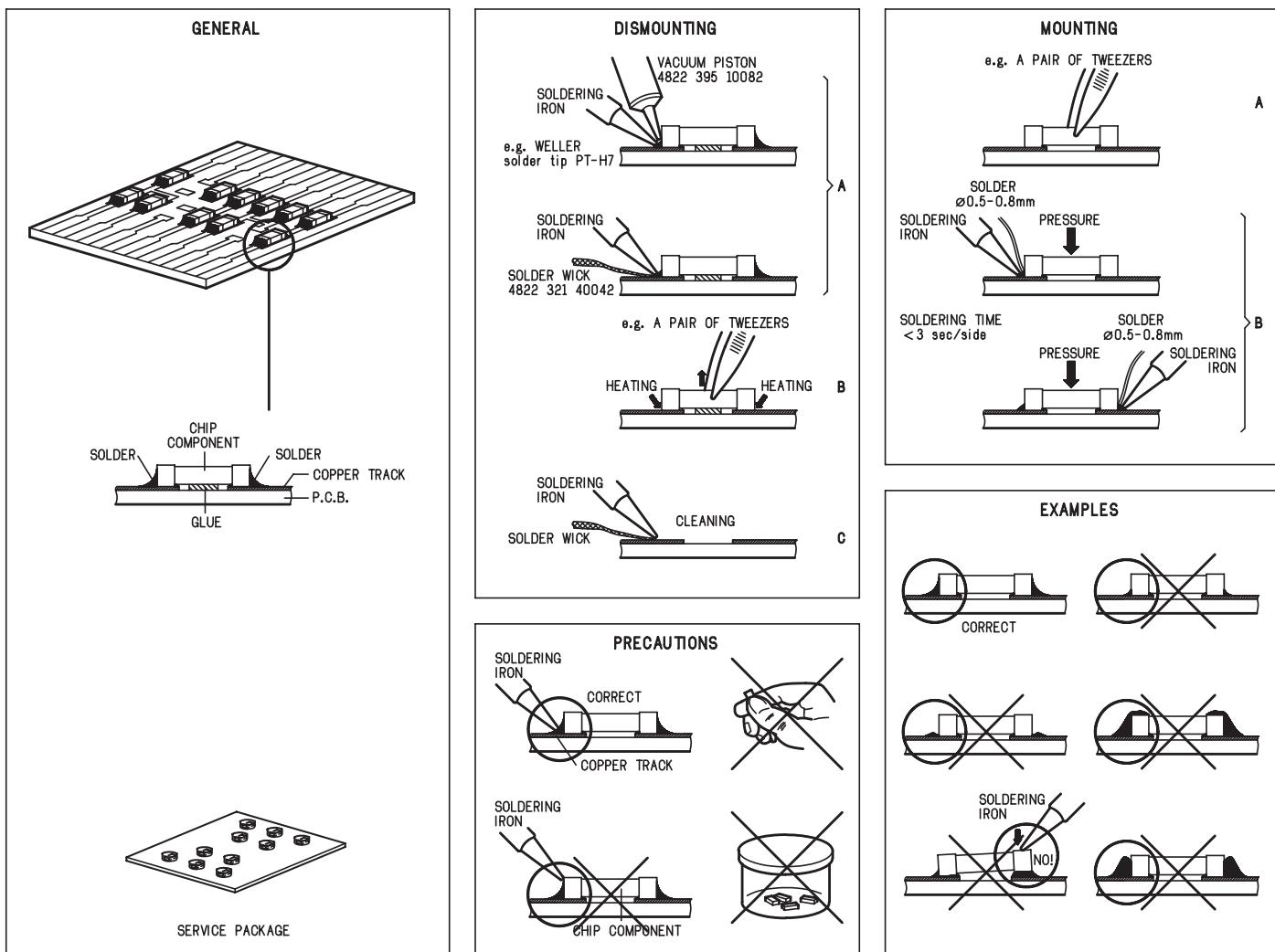
Service Tools:

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





WARNING

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

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



WAARSCHUWING

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

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

Houd componenten en hulpmiddelen ook op ditzelfde potentiaal.



ATTENTION

Tous les IC et beaucoup d'autres semi-conducteurs sont sensibles aux décharges statiques (ESD). Leur longévité pourrait être considérablement écourtée par le fait qu'aucune précaution n'est prise à leur manipulation. Lors de réparations, s'assurer de bien être relié au même potentiel que la masse de l'appareil et enfiler le bracelet serti d'une résistance de sécurité. Veiller à ce que les composants ainsi que les outils que l'on utilise soient également à ce potentiel.



WARNUNG

Alle ICs und viele andere Halbleiter sind empfindlich gegenüber elektrostatischen Entladungen (ESD). Unsorgfältige Behandlung im Reparaturfall kann die Lebensdauer drastisch reduzieren. Veranlassen Sie, dass Sie im Reparaturfall über ein Pulsarmband mit Widerstand verbunden sind mit dem gleichen Potential wie die Masse des Gerätes. Bauteile und Hilfsmittel auch auf dieses gleiche Potential halten.



AVVERTIMENTO

Tutti IC e parecchi semi-conduttori sono sensibili alle scariche statiche (ESD). La loro longevità potrebbe essere fortemente ridotta in caso di non osservazione della più grande cauzione alla loro manipolazione. Durante le riparazioni occorre quindi essere collegato allo stesso potenziale che quello della massa dell'apparecchio tramite un braccialetto a resistenza. Assicurarsi che i componenti e anche gli utensili con quali si lavora siano anche a questo potenziale.



ESD PROTECTION EQUIPMENT

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



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

Safety components are marked by the symbol Δ .



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

De Veiligheidsonderdelen zijn aangeduid met het symbool Δ .



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

Less composants de sécurité sont marqués Δ .

Warning !

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

Varoitus !

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

Varoitus !

Avatussa laitteessa ja suojalukiukseen ohittaa olet alttiina näkymättömälle laserisäteilylle. Älä katso säteeseen!

Advarse !

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



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



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.

Pb(Lead) Free Solder

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

IDENTIFICATION:

Regardless of special logo (not always indicated)



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

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

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

- Use only lead-free solder alloy Philips SAC305 with order code 0622 149 00106. If lead-free solder-paste is required, please contact the manufacturer of your solder-equipment. In general use of solder-paste within workshops should be avoided because paste is not easy to store and to handle.
- Use only adequate solder tools applicable for lead-free solder alloy. The solder tool must be able
 - To reach at least a solder-temperature of 400°C,
 - To stabilize the adjusted temperature at the solder-tip
 - To exchange solder-tips for different applications.
- Adjust your solder tool so that a temperature around 360°C – 380°C is reached and stabilized at the solder joint. Heating-time of the solder-joint should not exceed ~ 4 sec. Avoid temperatures above 400°C otherwise wear-out of tips will rise drastically and flux-fluid will be destroyed. To avoid wear-out of tips switch off unused equipment, or reduce heat.
- Mix of lead-free solder alloy / parts with leaded solder alloy / parts is possible but PHILIPS recommends strongly to avoid mixed solder alloy types (leaded and lead-free).

If one cannot avoid or does not know whether product is lead-free, clean carefully the solder-joint from old solder alloy and re-solder with new solder alloy (SAC305).

- Use only original spare-parts listed in the Service-Manuals. Not listed standard-material (commodities) has to be purchased at external companies.
- Special information for BGA-ICs:
 - Always use the 12nc-recognizable soldering temperature profile of the specific BGA (for de-soldering always use the lead-free temperature profile, in case of doubt)
 - Lead free BGA-ICs will be delivered in so-called 'dry-packaging' (sealed pack including a silica gel pack) to protect the IC against moisture. After opening,

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

Do not re-use BGAs at all.

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

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

For additional questions please contact your local repair-helpdesk.

System , Region Code , etc. Setting Procedure

1) System Reset

- a) press "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

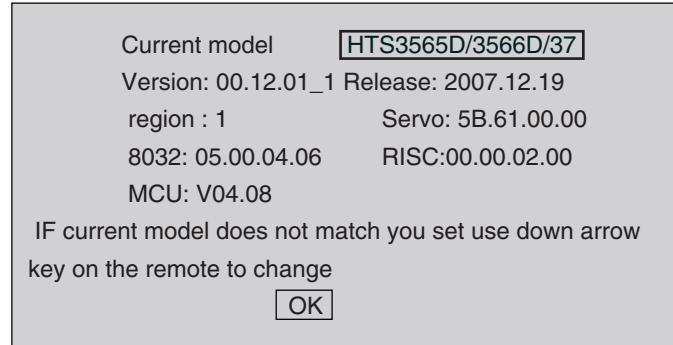
2) Region Code Change

- a) In open model, press "9" "9" "9" 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 Software Version

- a) open the CD Door
- b) press "INFO" button on R/C
- c) TV will show the version on screen

6) Trade mode

- 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 software

- a) copy "software 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"

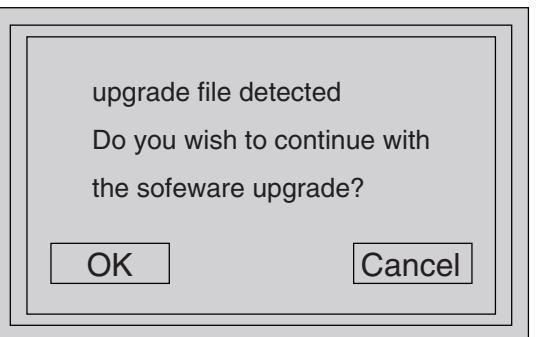
"Erase" -- erase the flash memory

"Writing" about 1 minute

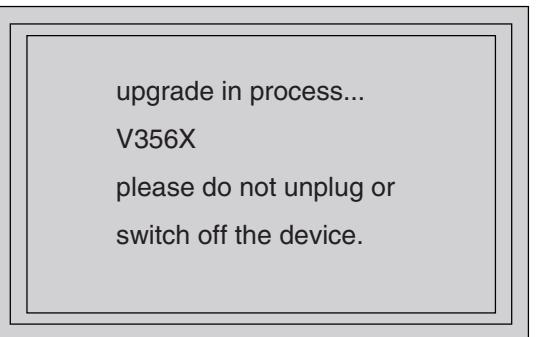
"done"

* the system will switch off and on again automatically.

e) OSD will show:

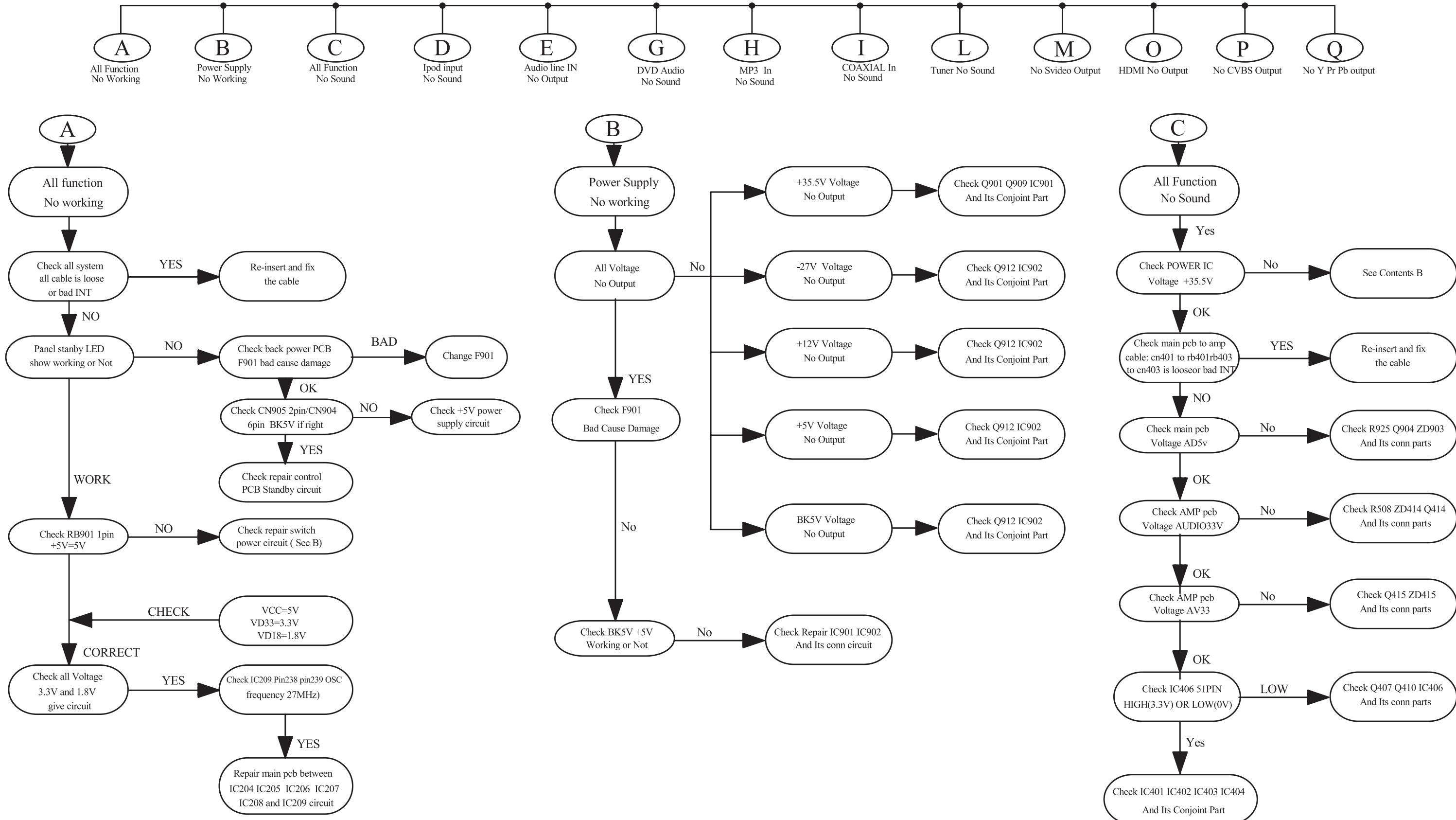


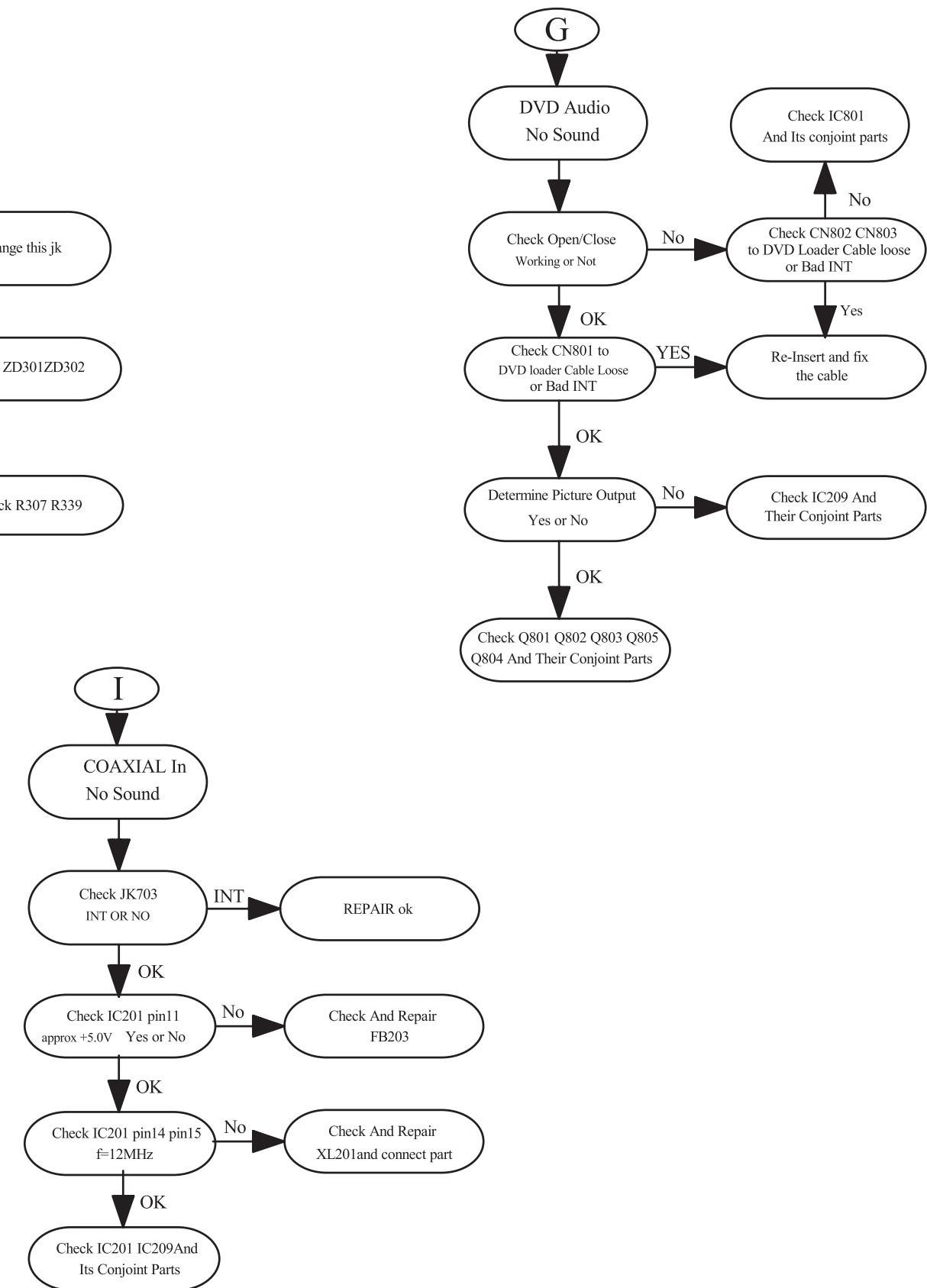
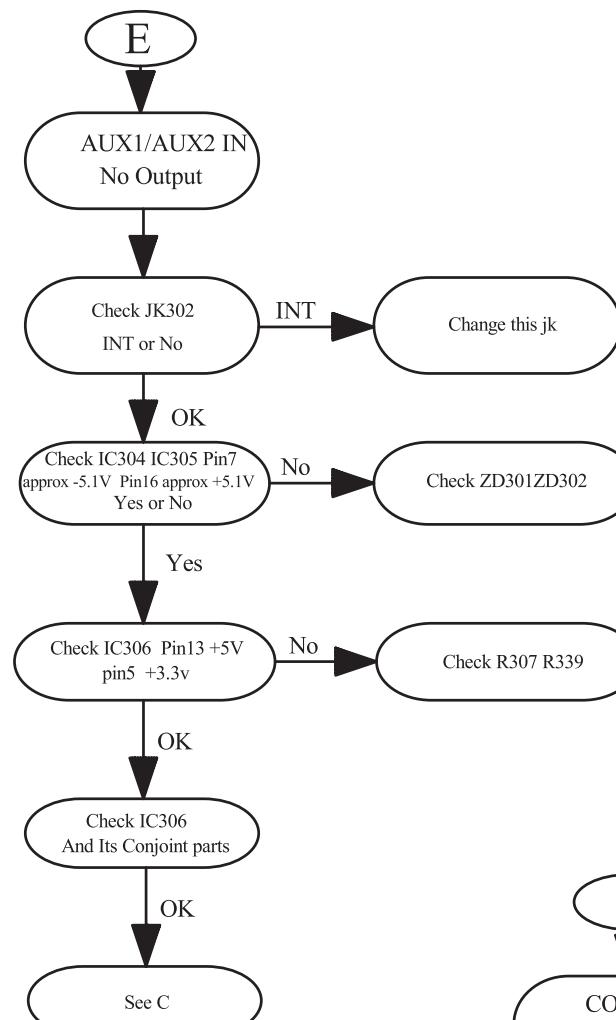
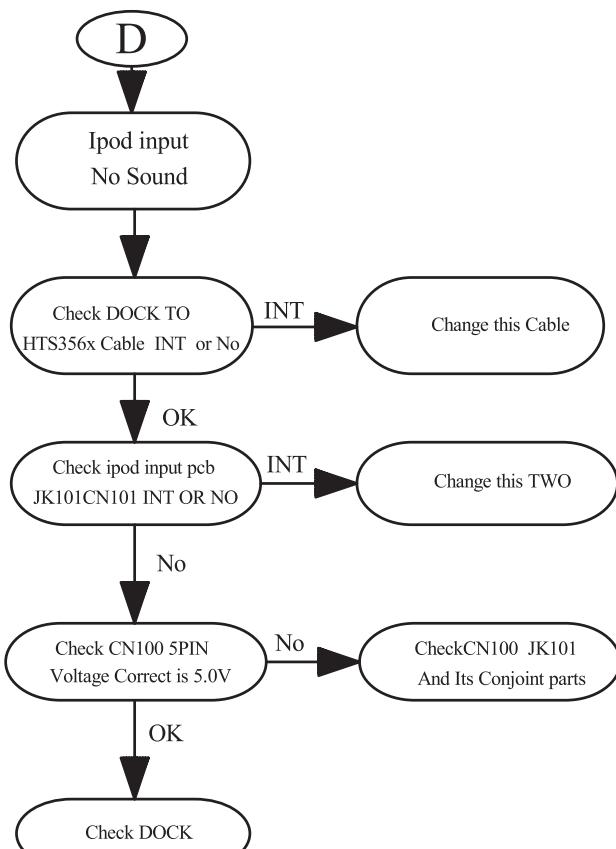
f) select "OK", OSD will show:

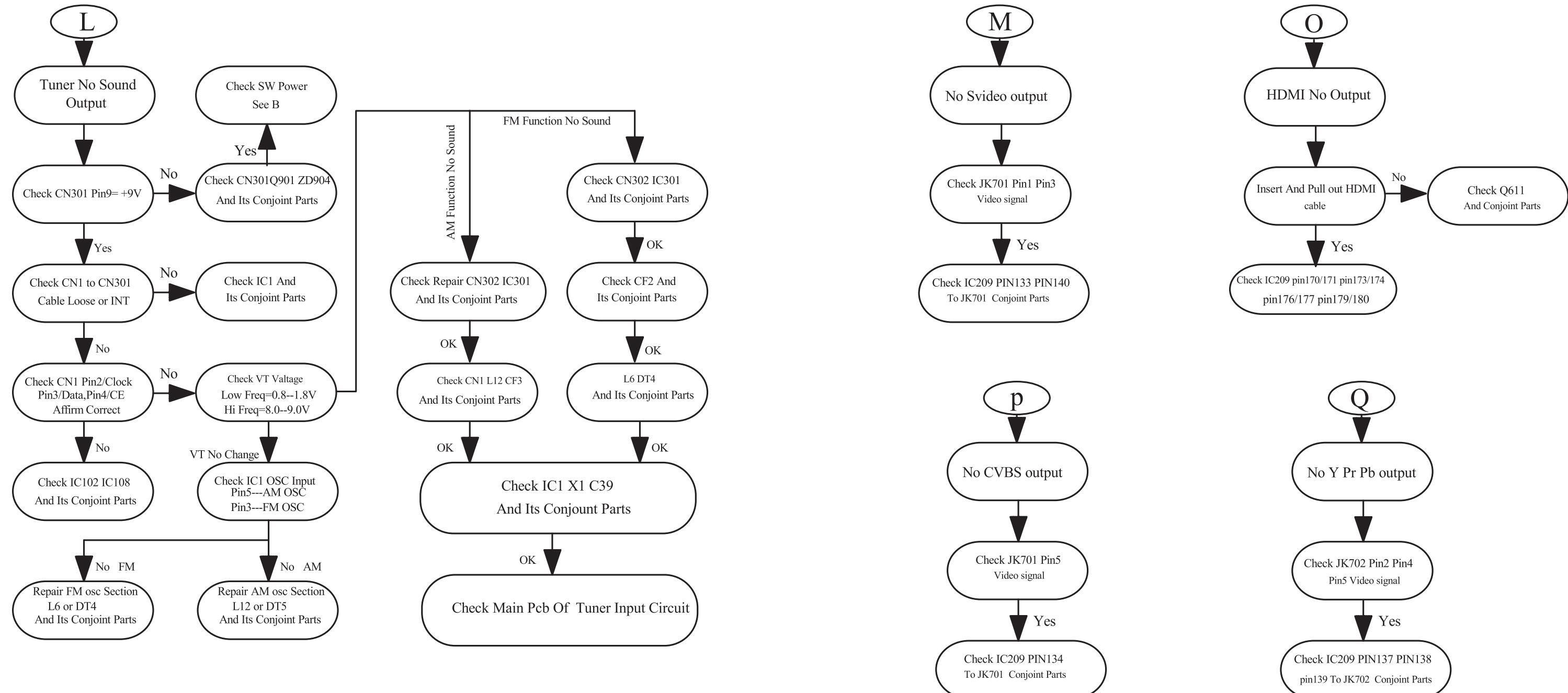


CAUTION!

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

REPAIR INSTRUCTIONS (part one)**MAIN UNIT REPAIR CHART 1/3**

REPAIR INSTRUCTIONS (part two)**MAIN UNIT REPAIR CHART 2/3**

REPAIR INSTRUCTIONS (part three)
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.

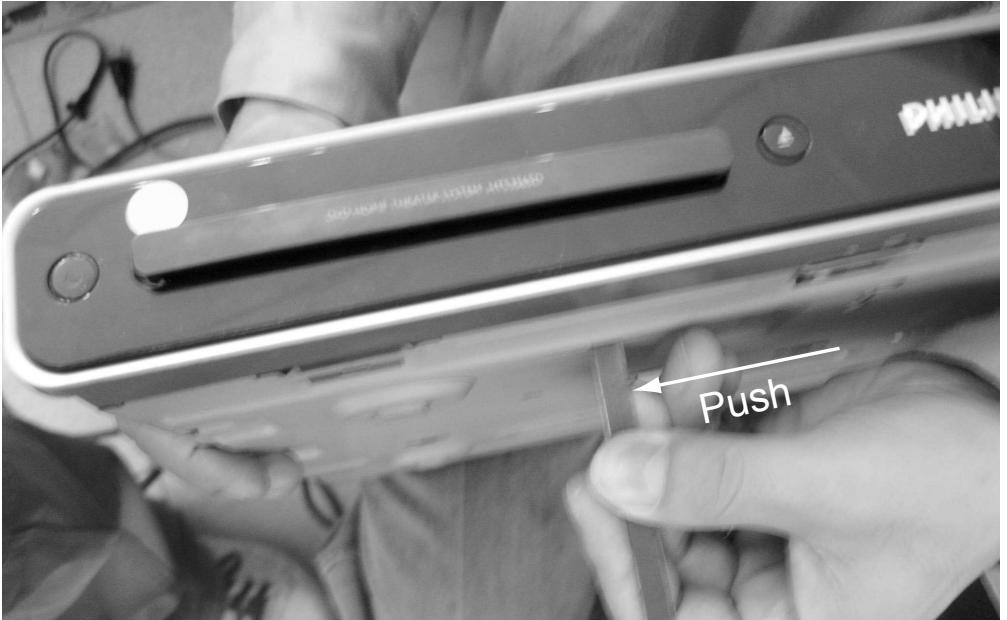


Figure 1



Figure 2

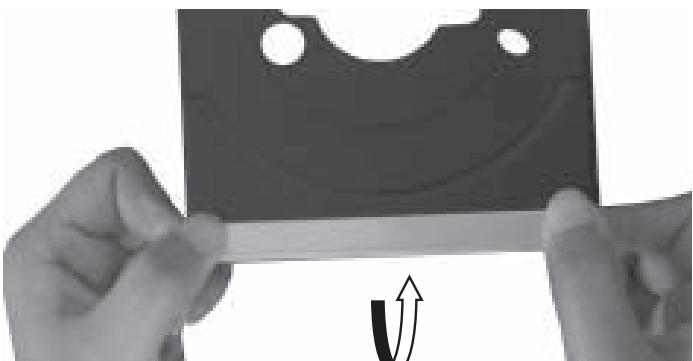


Figure 3

- 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

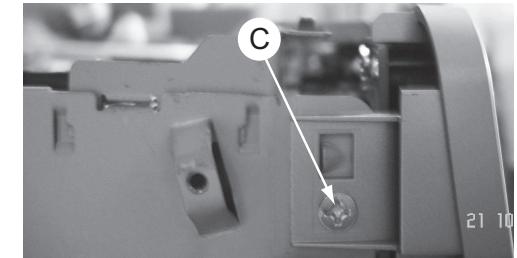


Figure 6

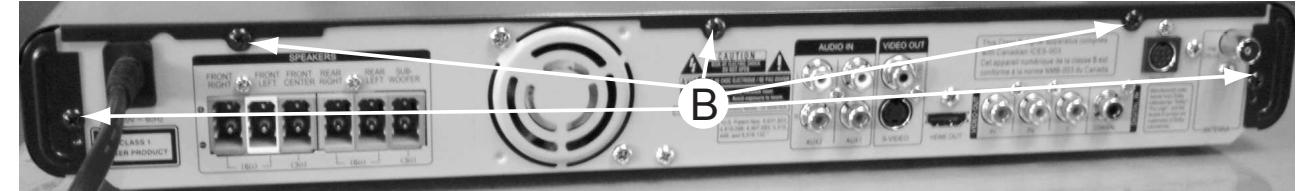


Figure 5

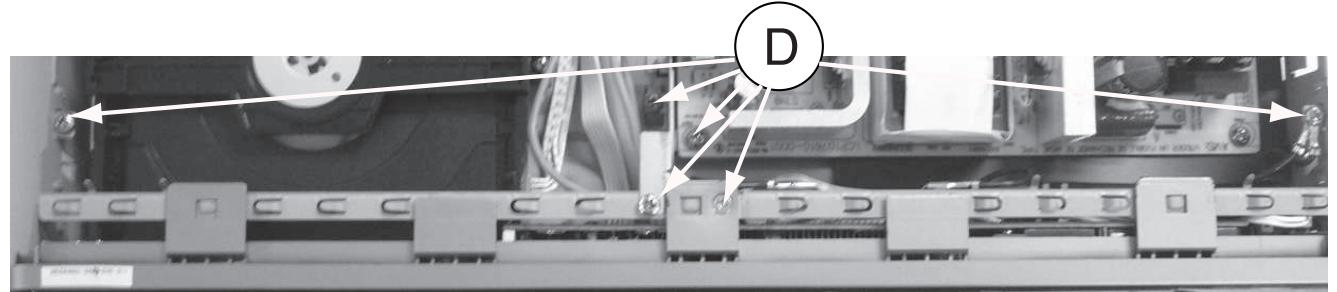


Figure 7

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

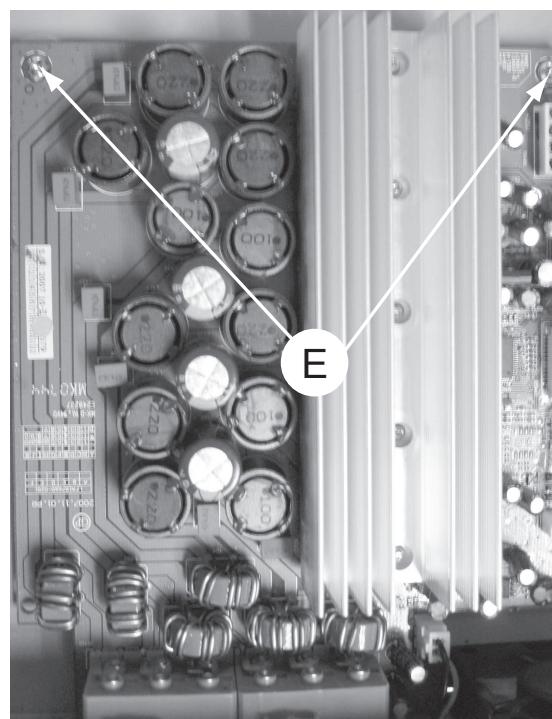


Figure 8

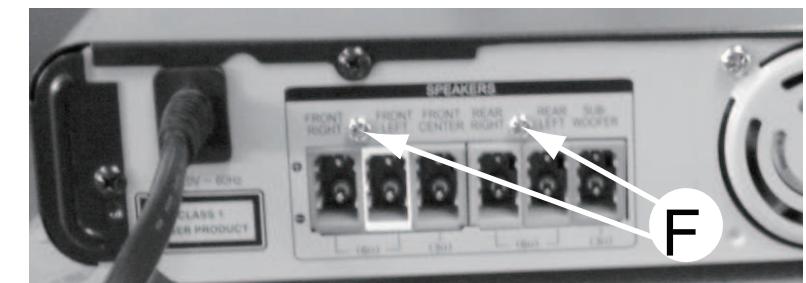


Figure 9

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

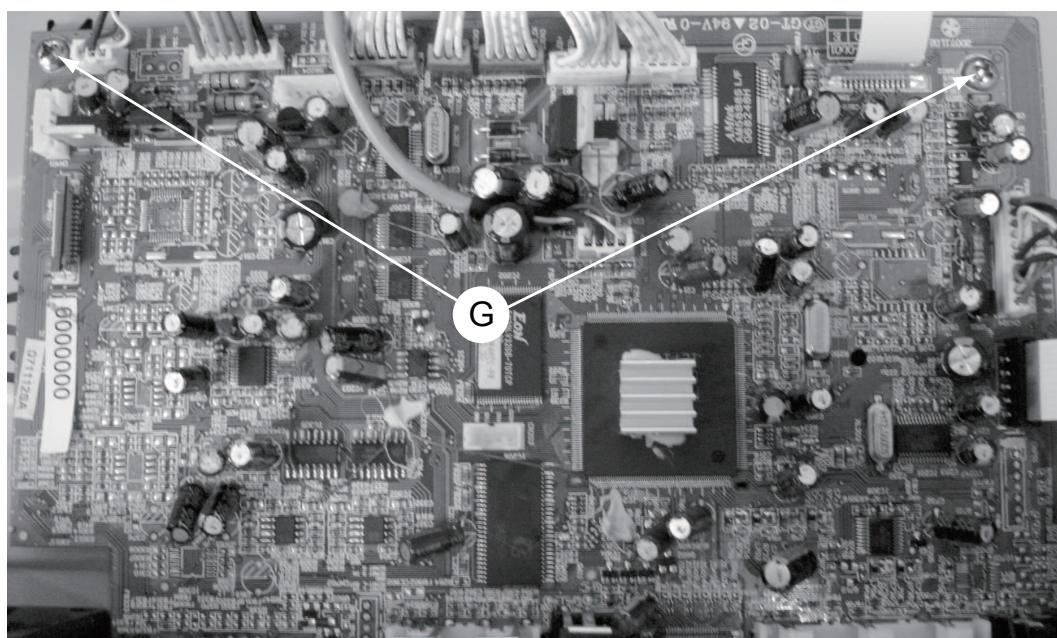


Figure 10

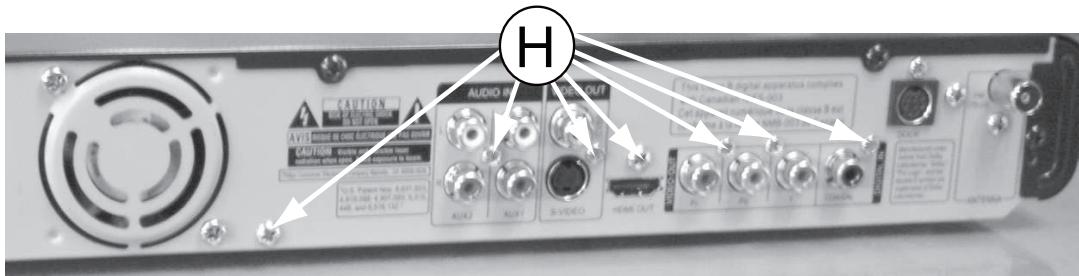


Figure 11

Dismantling of the Power Board

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

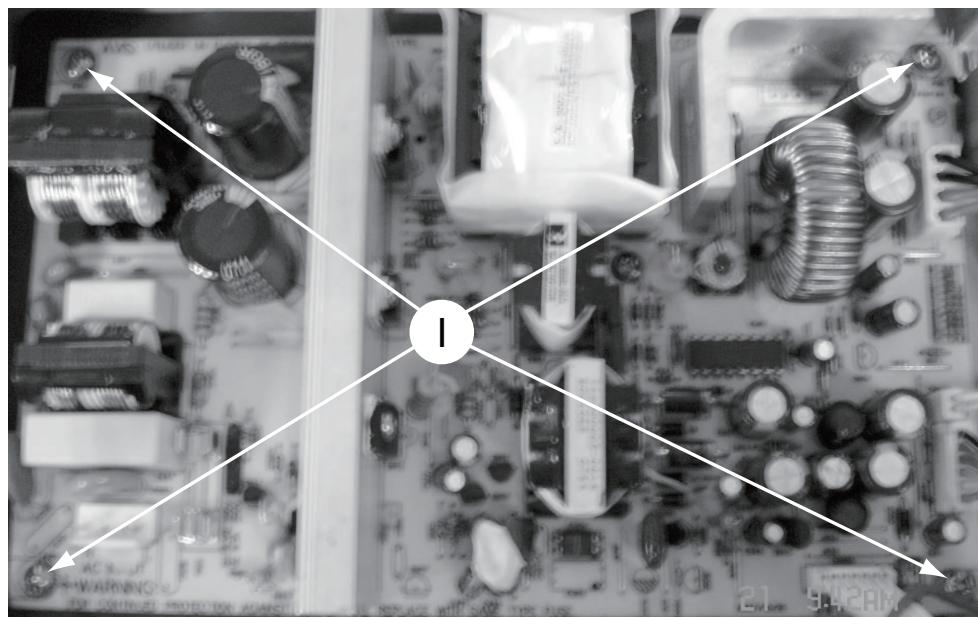


Figure 12

Dismantling of the VFD+JACK+VOL+STANDBY Board

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

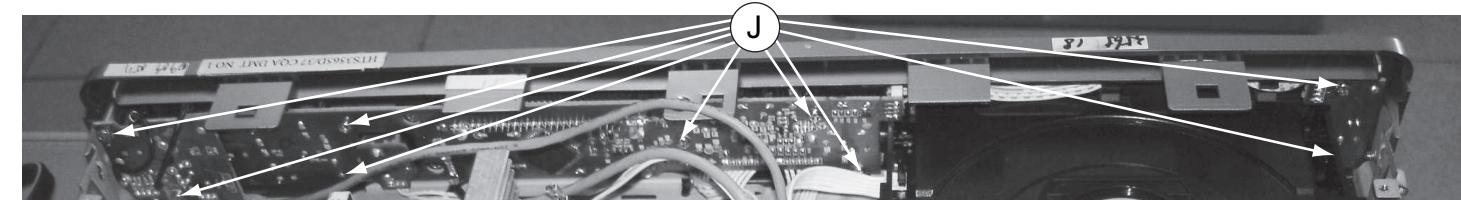


Figure 13

Dismantling of the IPOD Board

- 1) Loosen 2 screws "K" at the back panel as shown in figure 14



Figure 14

Dismantling of the DVD Module

- 1) Loosen 4 screws "L" as shown in figure 15.

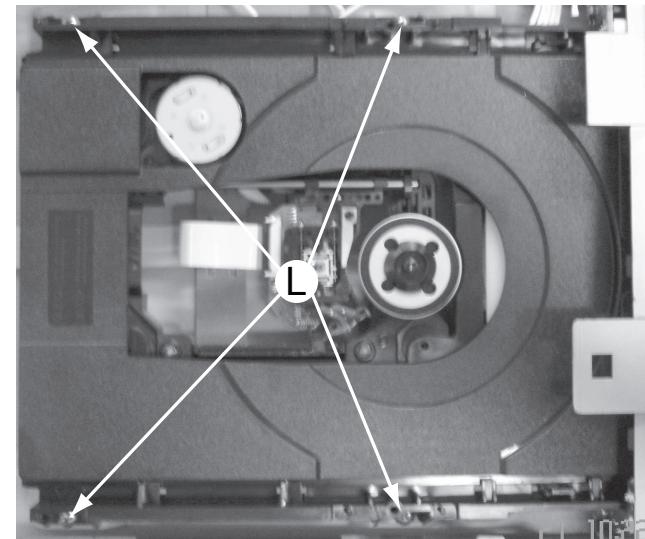


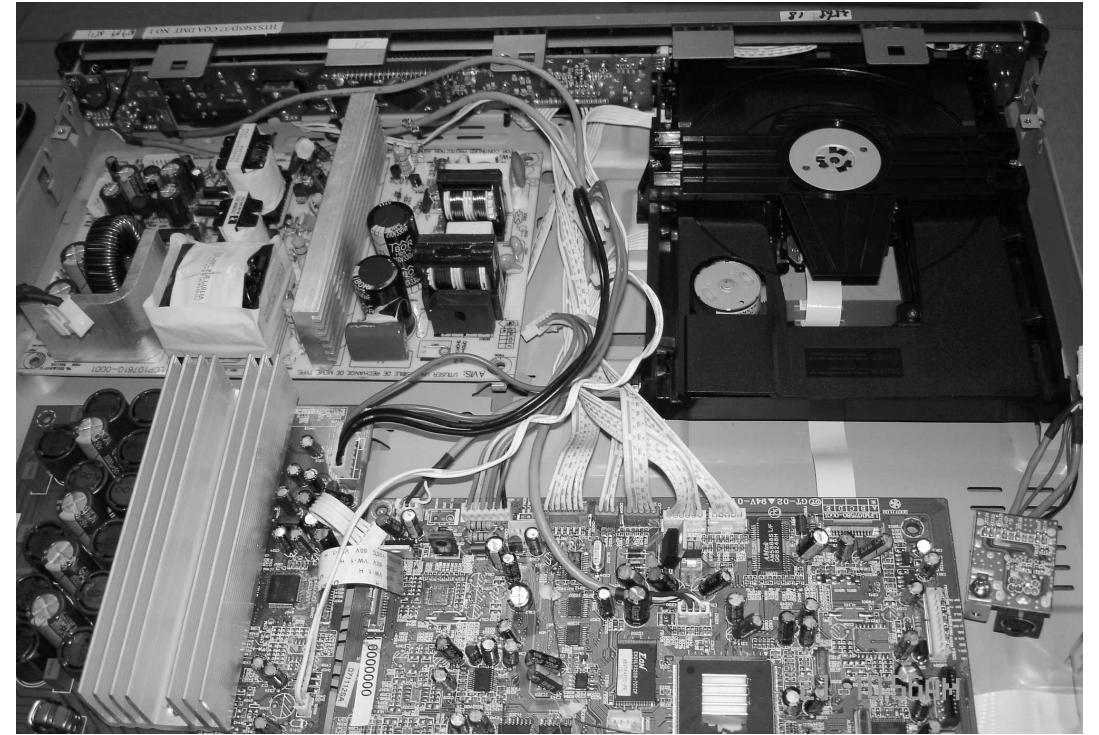
Figure 15

SERVICE POSITIONS

service position A (main unit)

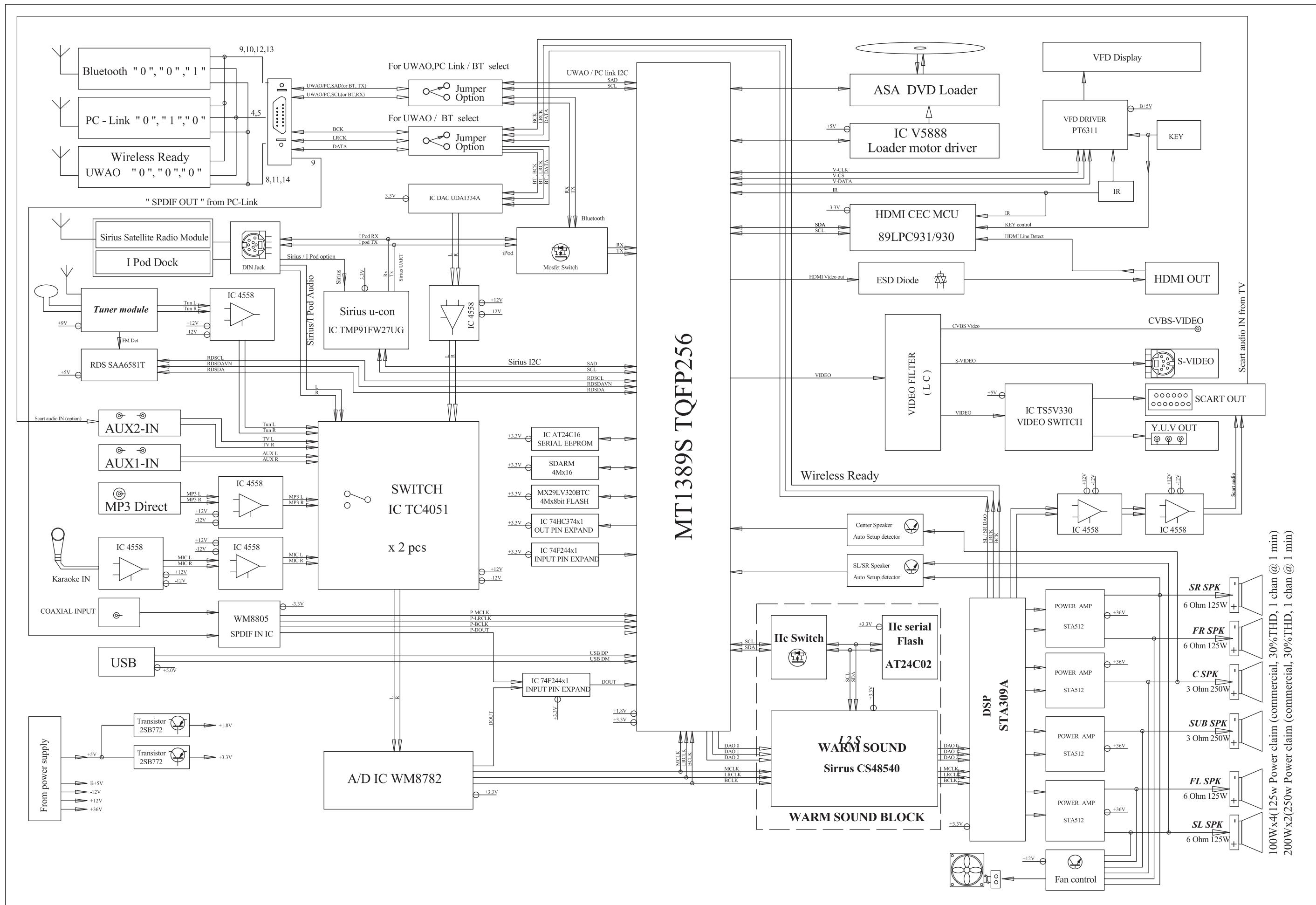


service position B (main unit)

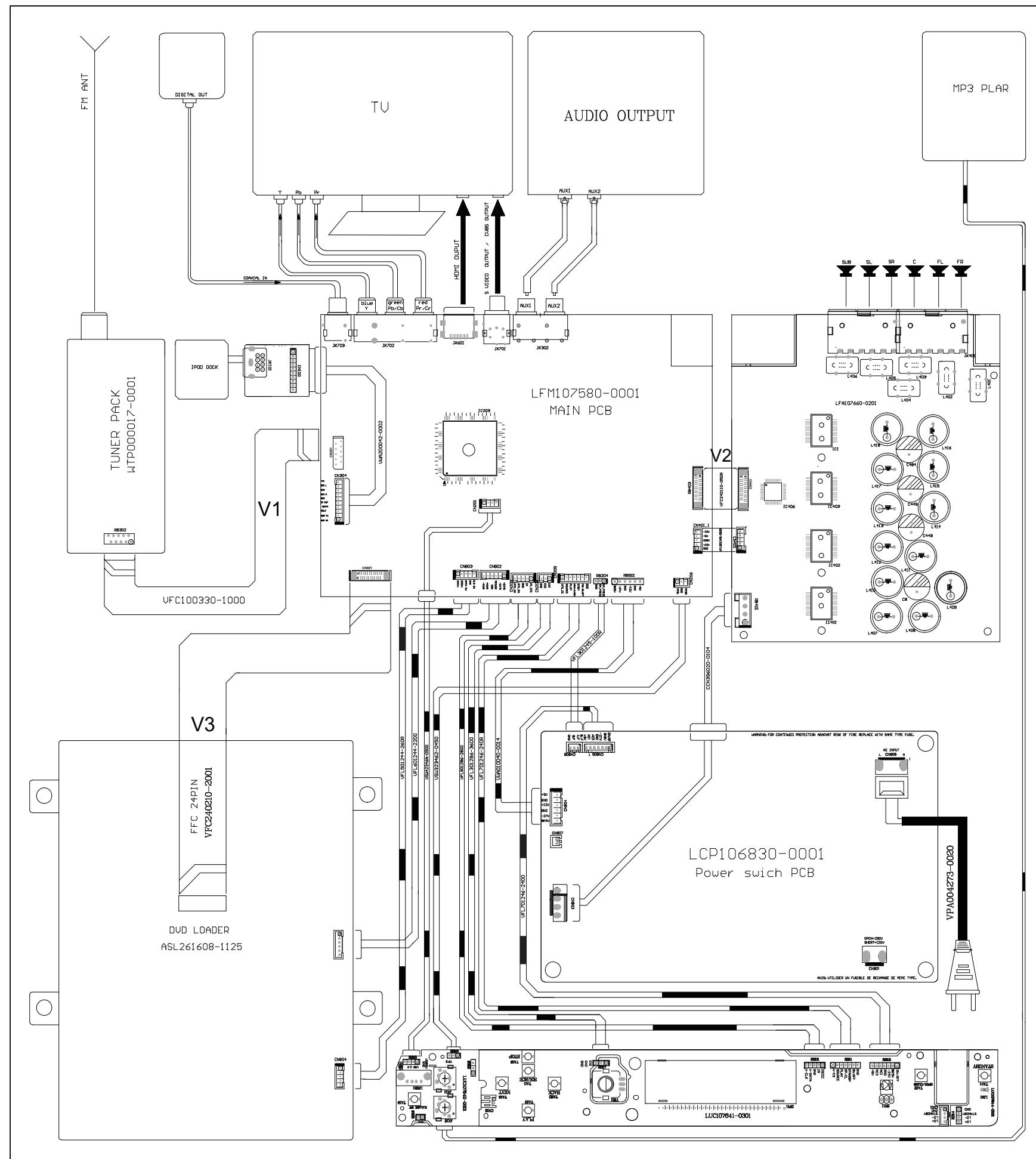


Note: In some service positions the components or copper patterns of one board may risk touching its neighbouring pc boards or metallic parts. To prevent such short-circuit use a piece of hard paper or other insulating material between them.

BLOCK DIAGRAM



WIRING DIAGRAM

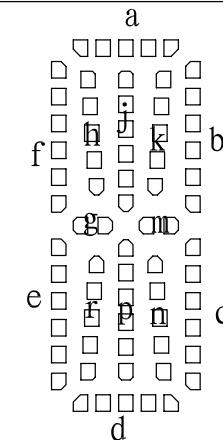
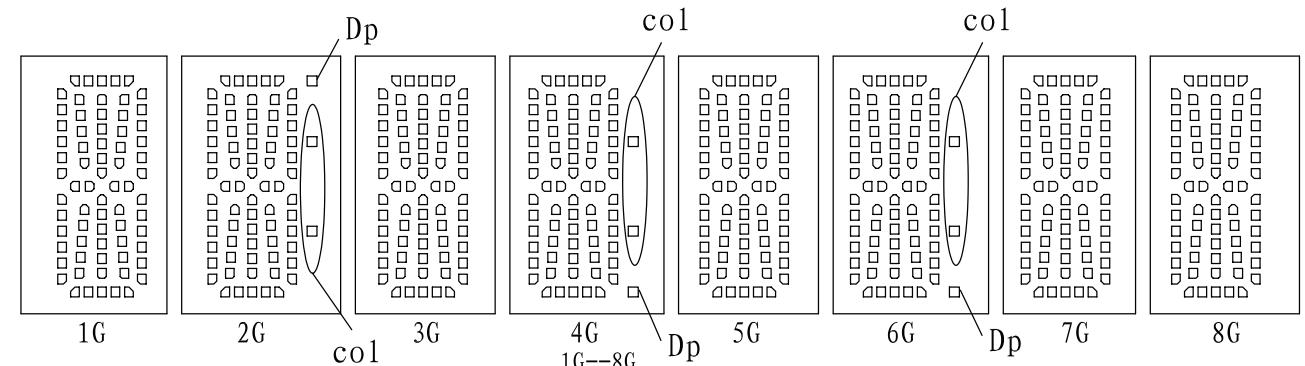


CONTROL BOARD

TABLE OF CONTENTS

FTD Display Pin Assignment.....	5-1
Circuit Diagram	5-2
PCB Layout Top & Bottom View.....	5-3

FTD DISPLAY PIN ASSIGNMENT



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

PIN CONNECTION

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

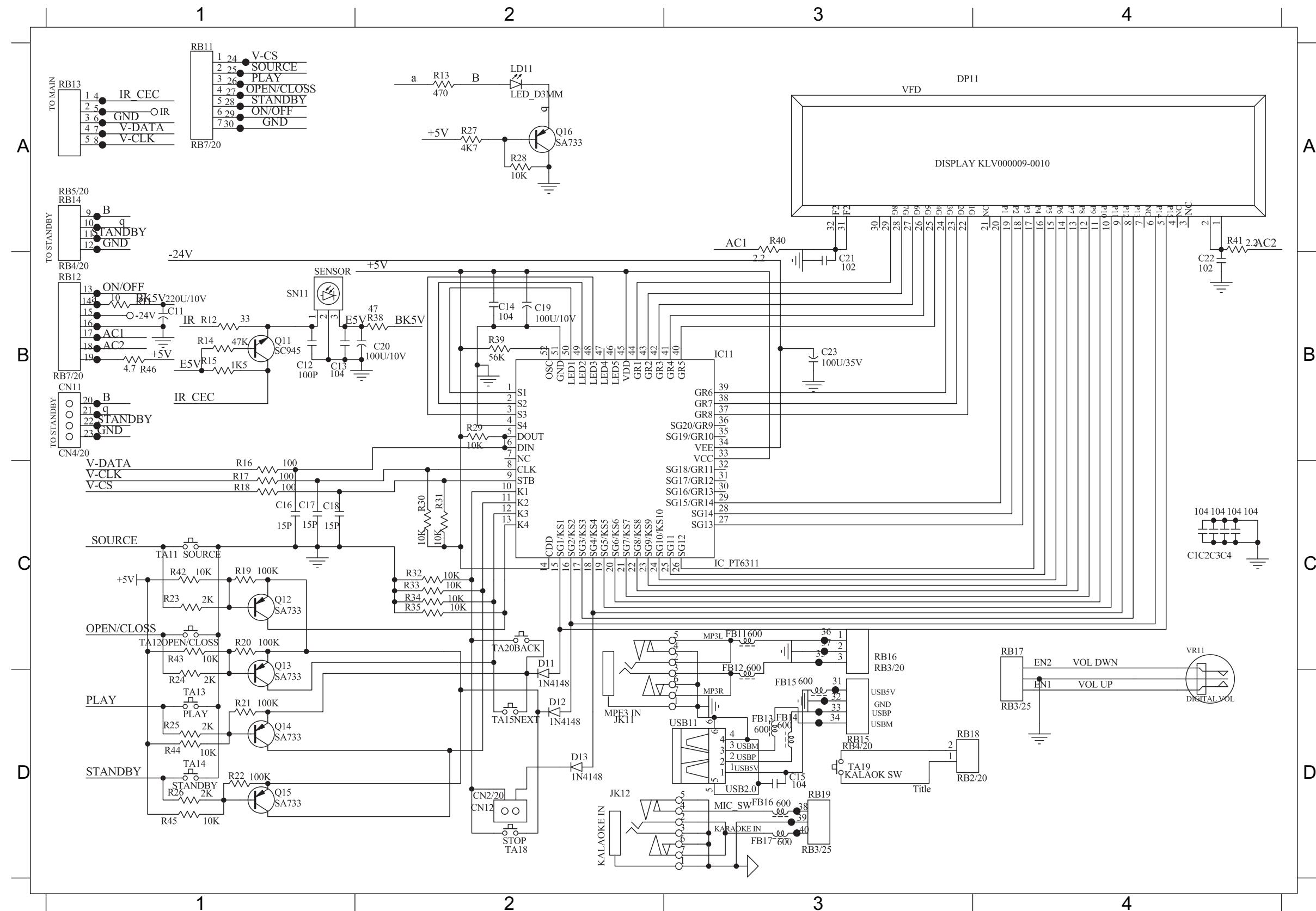
注 (Notes) : Fn : 灯丝 (Filament Pin) nG : 栅极 (Grid Pin)

Pn : 阳极 (Anode Pin) NP : 无引出脚 (No Pin)

NC : 无功能 (No connection Pin)

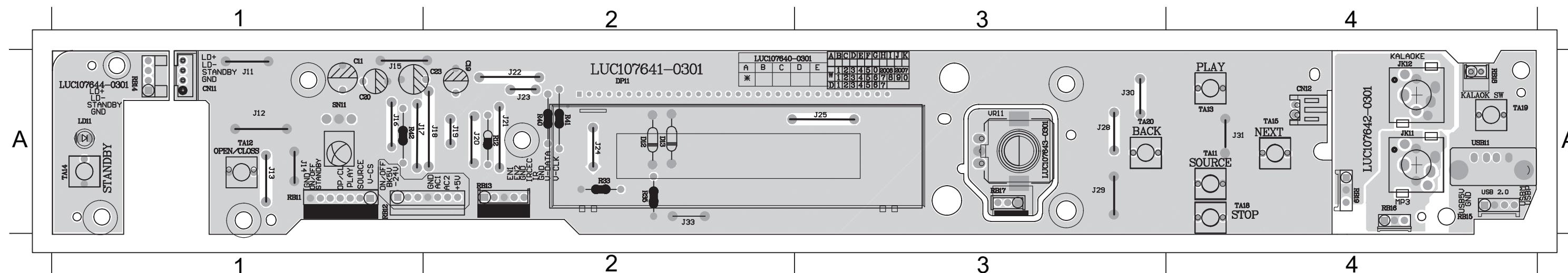
CIRCUIT DIAGRAM

C11	B1	C17	C1	C23	B3	FB12	D3	LD11	A2	Q16	A2	R16	C1	R22	D1	R28	A2	R34	C2	R42	C1	RB12	B1	SN11	B1	TA18	D2
C12	B1	C18	C1	D11	D2	FB13	D3	Q11	B1	R11	B1	R17	C1	R23	C1	R29	B2	R35	C2	R43	C1	RB13	A1	TA11	C1	TA20	C2
C13	B1	C19	B2	D12	D2	FB14	D3	Q12	C1	R12	B1	R18	C1	R24	D1	R30	C2	R38	B2	R44	D1	RB14	A1	TA12	C1	USB11D3	
C14	B2	C20	B2	D13	D2	FB15	D3	Q13	C1	R13	A2	R19	C1	R25	D1	R31	C2	R39	B2	R45	D1	RB15	D3	TA13	D1	VR11	D4
C15	D3	C21	B3	DP11	A3	IC11	B3	Q14	D1	R14	B1	R20	C1	R26	D1	R32	C2	R40	A3	R46	B1	RB16	C3	TA14	D1		
C16	C1	C22	B4	FB11	C3	JK11	D2	Q15	D1	R15	B1	R21	D1	R27	A2	R33	C2	R41	A4	RB11	A1	RB17	C4	TA15	D2		

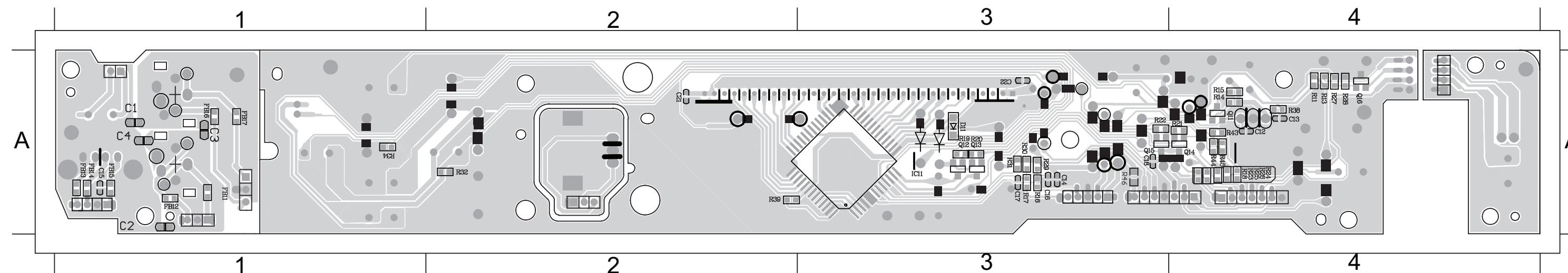


PCB LAYOUT - TOP VIEW

C11 A1	D12 A2	J12 A1	J16 A1	J20 A2	J24 A2	J30 A3	LD11 A1	R40 A2	RB12 A1	RB16 A4	TA12 A1	TA18 A4
C19 A2	D13 A2	J13 A1	J17 A1	J21 A2	J25 A3	J31 A4	R12 A2	R41 A2	RB13 A2	RB17 A3	TA13 A4	TA20 A3
C20 A1	DP11 A2	J14 A1	J18 A2	J22 A2	J28 A3	J33 A2	R33 A2	R42 A1	RB14 A1	SN11 A1	TA14 A1	USB11A4
C23 A1	J11 A1	J15 A1	J19 A2	J23 A2	J29 A3	JK11 A4	R35 A2	RB11 A1	RB15 A4	TA11 A4	TA15 A4	VR11 A3

**PCB LAYOUT - BOTTOM VIEW**

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



6 - 1
INTERNAL IC DIAGRAM - AS81F641642C

MAIN BOARD

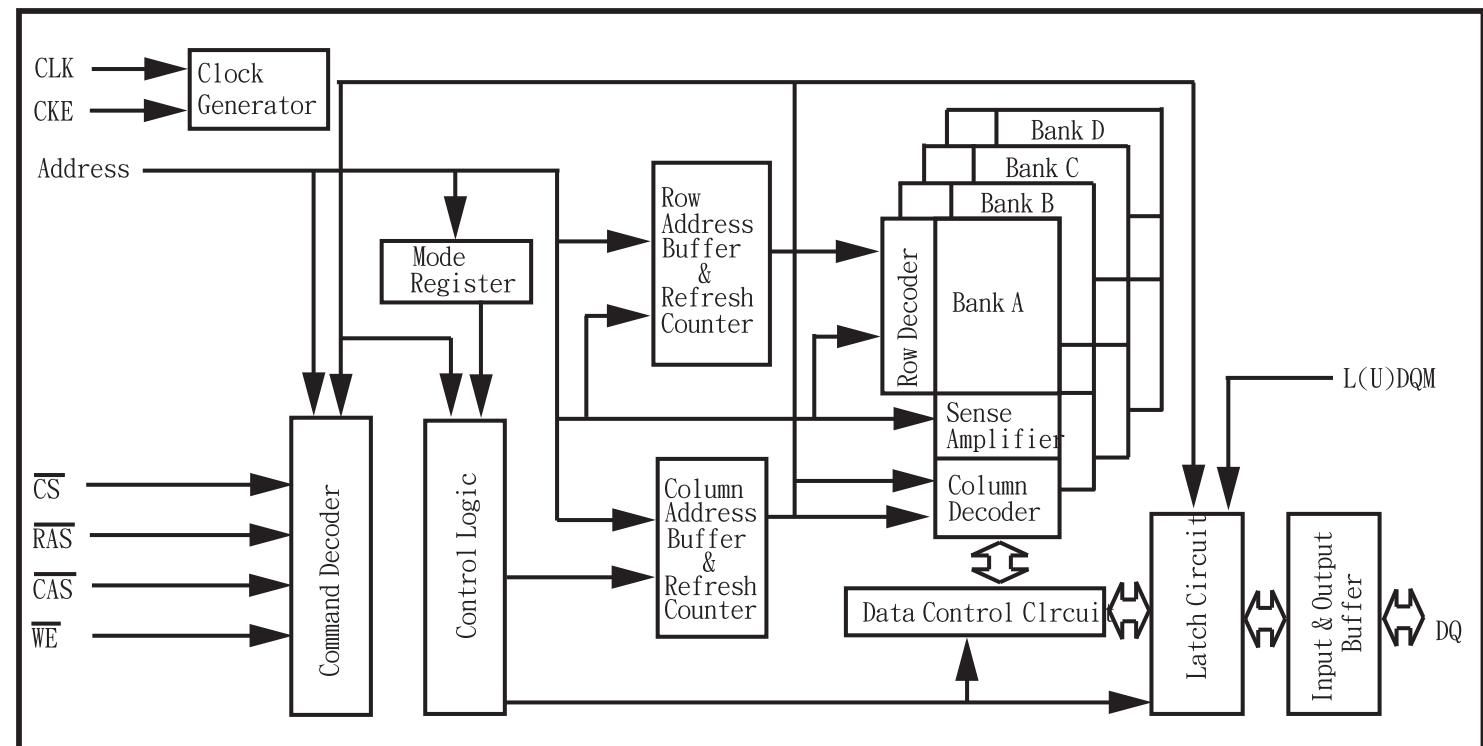
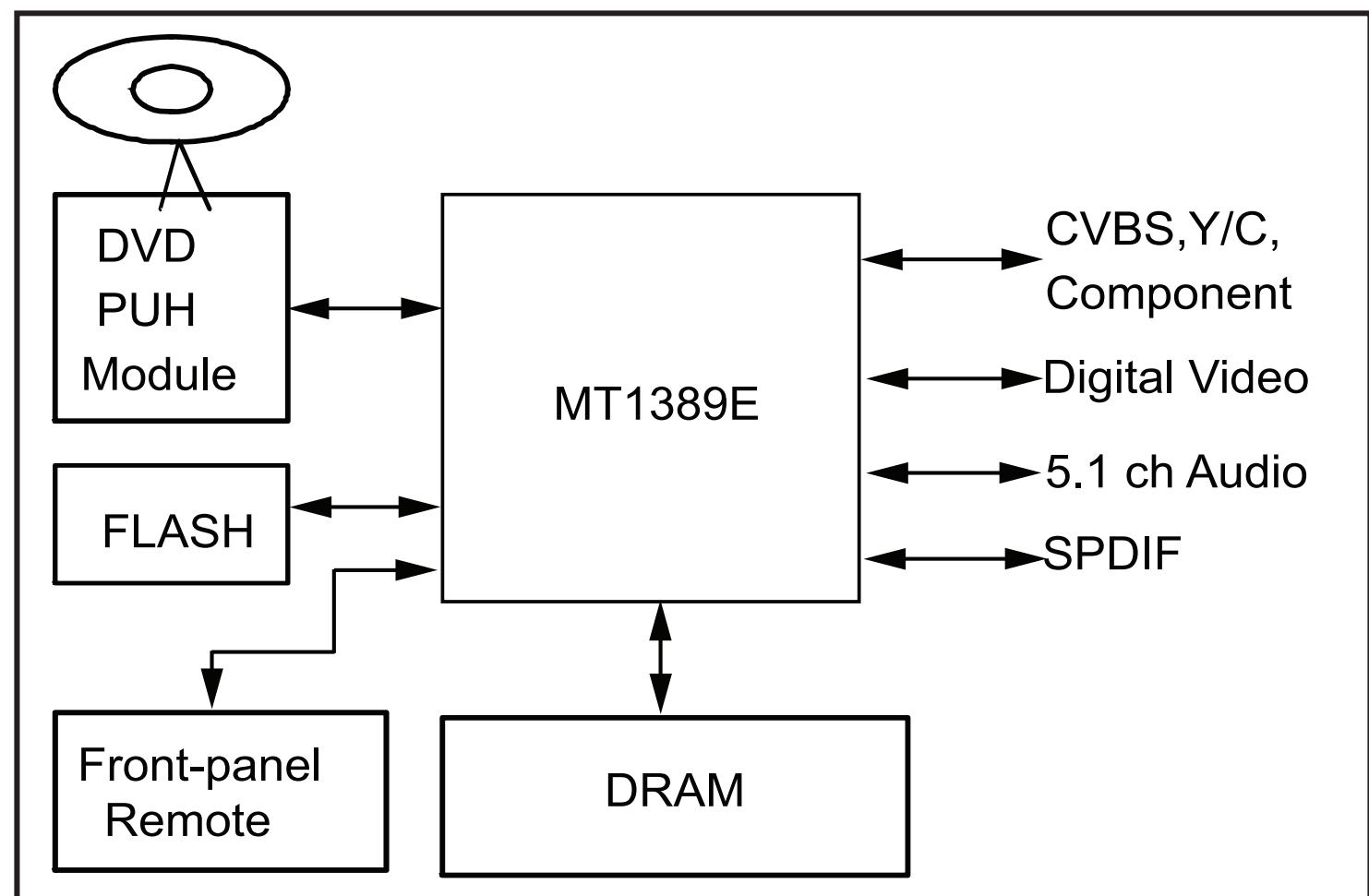


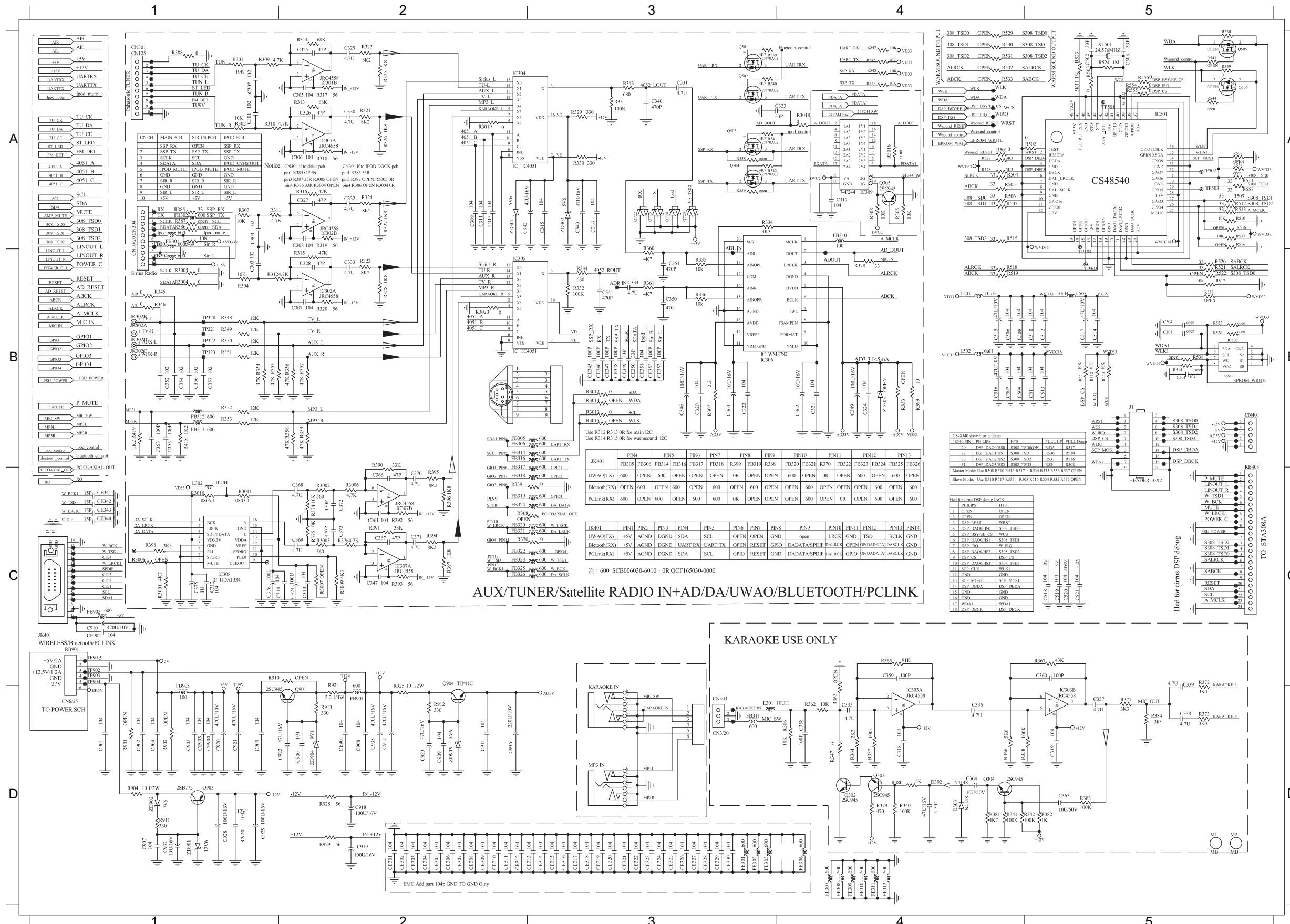
TABLE OF CONTENTS

Internal IC Diagram	6-1
Circuit Diagram (part one)	6-2
Circuit Diagram (part two)	6-3
PCB Layout Top View	6-4
PCB Layout Bottom View	6-5

INTERNAL IC DIAGRAM - MT1389E

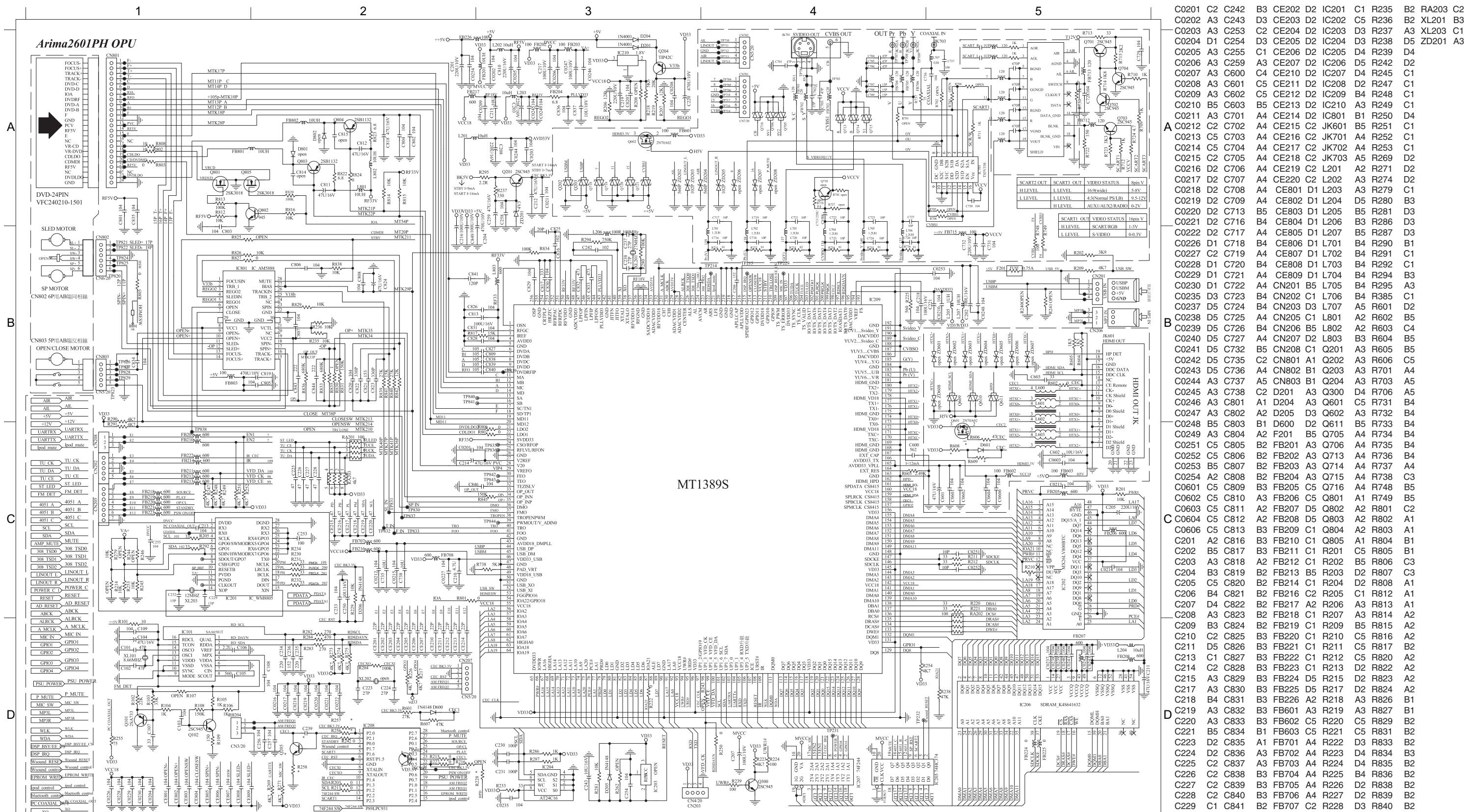


CIRCUIT DIAGRAM - part one



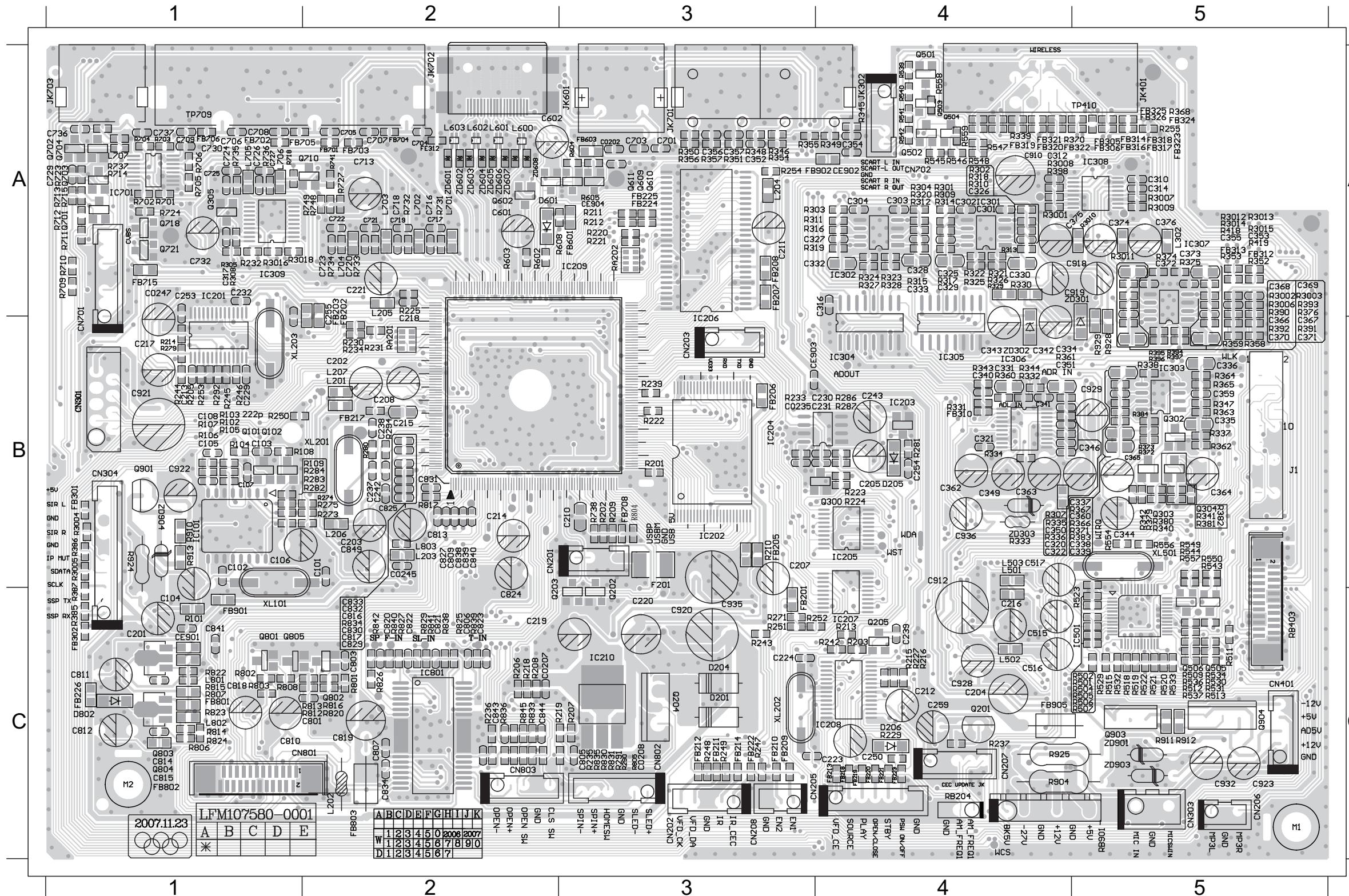
C301	A1 C919	D2 FB304	B1 R326	A2
C302	A1 C920	D1 FB310	A4 R327	A2
C303	B1 C921	D1 FB312	B1 R328	B2
C304	A1 C922	D2 FB313	B1 R329	A3
C305	A2 C923	D2 FB901	D2 R330	A3
C306	A1 C924	D1 FB905	D1 R331	A3
C307	B2 C928	D1 FE301	D3 R332	B3
C308	A2 C929	D1 FE302	D3 R334	A3
C309	A2 C932	D1 FE303	D3 R335	B3
C311	A2 C935	D2 FE306	D4 R336	B3
C313	A2 C936	D2 FE307	D4 R343	A3
C315	A3 CE301	D2 FE308	D4 R344	B3
C316	A3 CE302	D2 FE309	D4 R345	B1
C317	A4 CE303	D2 FE310	D4 R346	B1
C320	B3 CE304	D2 FE311	D4 R348	B1
C321	B4 CE305	D2 FE312	D4 R349	B1
C322	B3 CE306	D2 IC301	A2 R350	B1
C323	A3 CE307	D2 IC302	A2 R351	B1
C324	B4 CE308	D2 IC304	A2 R352	B1
C325	A2 CE309	D2 IC305	B2 R353	B1
C326	A2 CE310	D2 IC306	B3 R354	B1
C327	A2 CE311	D2 IC309	A4 R355	B1
C328	B2 CE312	D2 JK302	B1 R356	B2
C329	A2 CE313	D3 Q305	A4 R357	B2
C330	A2 CE314	D3 Q503	A3 R358	B2
C331	A3 CE315	D3 Q504	A3 R359	B2
C332	A2 CE316	D3 Q722	A3 R360	B3
C333	B2 CE317	D3 Q723	A3 R361	B3
C334	B3 CE318	D3 Q724	A3 R368	C3
C340	A3 CE319	D3 Q901	D2 R385	A1
C341	B3 CE320	D3 Q903	D1 R388	A1
C342	A3 CE321	D3 Q904	D2 R399	B4
C343	A3 CE322	D3 R3004	B1 R418	B1
C346	B3 CE323	D3 R3005	B1 R419	B1
C349	B4 CE324	D3 R301	A1 R523	A5
C350	B3 CE325	D3 R3018	A4 R529	A4
C351	B3 CE326	D3 R3019	A2 R530	A4
C352	B1 CE327	D3 R302	A1 R531	A4
C353	B1 CE328	D3 R3020	B2 R532	A4
C354	B1 CE329	D3 R303	A1 R533	A4
C355	B1 CE330	D3 R304	B1 R541	A3
C356	B1 CE341	C1 R305	A4 R542	A3
C357	B1 CE342	C1 R307	B3 R904	D1
C362	B4 CE343	C1 R308	A4 R911	D1
C363	B3 CE344	C1 R309	A1 R912	D2
C518	C5 CE345	B3 R310	A1 R913	D2
C519	C5 CE346	B3 R311	A1 R924	D2
C520	C5 CE347	B3 R312	B1 R925	D2
C521	C5 CE348	B3 R313	A2 R928	D2
C901	D1 CE351	B3 R314	A2 R929	D2
C902	D1 CE352	B3 R315	B2 R969	A1
C903	D1 CE353	B3 R316	A2 RB403	C5
C904	D1 CE901	D2 R317	A2 RB901	C1
C905	D1 CE903	D1 R318	A1 ZD301	A2
C906	D2 CE904	D1 R319	A2 ZD302	A3
C907	D1 CN301	A1 R320	B2 ZD901	D1
C908	D2 CN304	A1 R321	A2 ZD902	D1
C909	D2 CN401	B5 R322	A2 ZD903	D2
C911	D2 FB301	A1 R323	B2 ZD904	D2
C912	D2 FB302	A1 R324	A2	
C918	D2 FB303	A1 R325	A2	

CIRCUIT DIAGRAM - part two



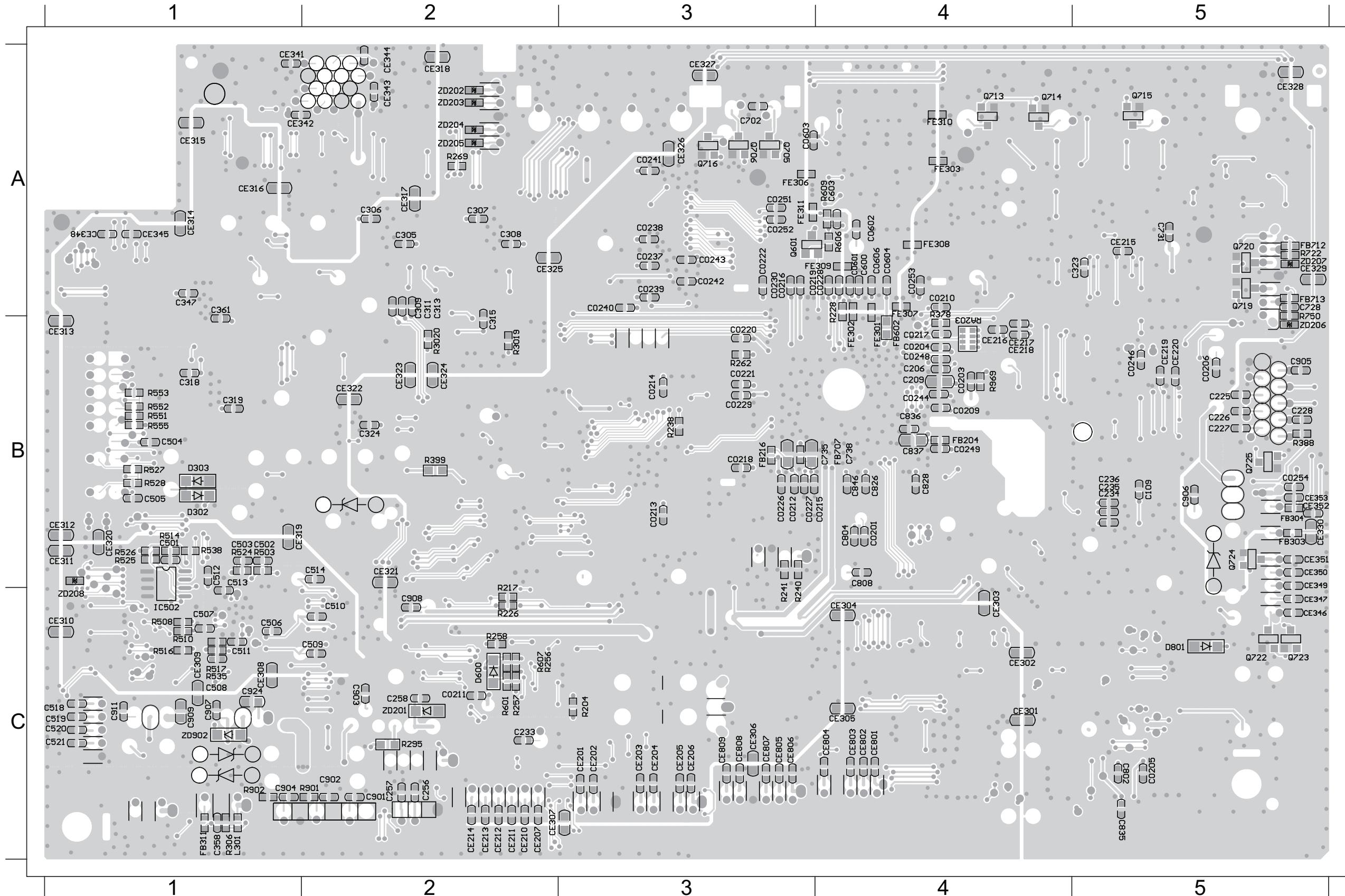
C0201	C2	C242	B3	CE202	D2	IC201	C1	R235	B2	RA203	C2
C0202	A3	C243	D3	CE203	D2	IC202	C5	R236	B2	XL201	B3
C0203	A3	C253	C2	CE204	D2	IC203	D3	R237	A3	XL203	C1
C0204	D1	C254	C0205	A3	C255	C0206	A3	C259	C0207	A3	C600
C0206	A3	C256	C0207	A3	C260	C0208	A3	C601	C5	CE211	D2
C0209	A3	C602	C0210	A3	C603	C0211	A3	C701	A4	CE214	D2
C0212	C2	C702	A4	CE215	C2	JK601	B5	R249	C1	CE216	C2
C0213	C5	C703	A4	CE216	C2	JK701	A4	R252	C1	CE217	C2
C0214	C5	C704	A4	CE217	C2	JK703	A5	R269	D2	CE218	C2
C0215	C2	C705	A4	CE218	C2	L201	A2	R271	D2	CE219	D2
C0216	D2	C706	A4	CE219	C2	L202	A3	R274	D2	CE220	D2
C0217	D2	C707	A4	CE220	D1	L203	A3	R279	C1	CE221	D2
C0218	D2	C708	A4	CE221	D1	L204	D5	R280	B3	CE222	D2
C0219	D2	C709	A4	CE222	D1	L205	D3	R281	D3	CE223	D2
C0220	D2	C713	B5	CE223	D1	L206	B3	R286	D3	CE224	D2
C0221	D2	C716	B4	CE224	D1	L207	B5	R287	D3	CE225	D1
C0222	D2	C717	A4	CE225	D1	L701	B4	R290	B1	CE226	D1
C0223	C2	C719	A4	CE226	D1	L702	B4	R291	C1	CE227	D1
C0224	D1	C720	B4	CE227	D1	L703	B4	R292	C1	CE228	D1
C0225	D1	C721	A4	CE228	D1	L704	B5	R294	B3	CE229	D1
C0226	D1	C722	A4	CE229	D1	L705	B4	R295	A3	CE230	D1
C0227	D3	C723	B4	CE230	C1	L706	B4	R298	C1	CE231	D1
C0228	D5	C724	B4	CE231	D3	L707	A5	R601	D2	CE232	D5
C0229	D5	C725	B4	CE232	D5	L801	A2	R602	B5	CE233	D5
C0230	D5	C726	B4	CE233	D5	L802	A2	R603	C4	CE234	D5
C0231	D5	C727	A4	CE234	D5	L803	A3	R605	A5	CE235	D5
C0232	D5	C728	A4	CE235	D5	L804	A3	R606	A5	CE236	D5
C0233	D5	C729	A4	CE236	D5	L805	A3	R607	A5	CE237	D5
C0234	D5	C730	A4	CE237	D5	L806	A3	R608	A5	CE238	D5
C0235	D5	C731	A4	CE238	D5	L807	A3	R609	A5	CE239	D5
C0236	D5	C732	A4	CE239	D5	L808	A3	R610	A5	CE240	D5
C0237	D5	C733	A4	CE240	D5	L809	A3	R611	A5	CE241	D5
C0238	D5	C734	A4	CE241	D5	L810	A3	R612	A5	CE242	D5
C0239	D5	C735	A4	CE242	D5	L811	A3	R613	A5	CE243	D5
C0240	D5	C736	A4	CE243	D5	L812	A3	R614	A5	CE244	A3
C0241	A3	C737	A1	CE244	A3	S030	A3	R706	A5	CE245	A3
C0242	A3	C801	A1	CE245	A3	Q601	C5	R731	B4	CE246	A3
C0243	A3	C802	B1	CE246	A3	Q602	A3	R732	B4	CE247	A3
C0244	A3	C803	B1	CE247	A3	Q603	A3	R733	B4	CE248	A3
C0245	A3	C804	B1	CE248	A3	Q604	A3	R734	B4	CE249	A3
C0246	A3	C805	B1	CE249	A3	Q605	A3	R735	B4	CE250	A3
C0247	A3	C806	B1	CE250	A3	Q606	A3	R736	B4	CE251	A3
C0248	B5	C803	B1	CE251	B5	Q607	B1	R737	A4	CE252	B5
C0249	A3	C804	B1	CE252	A3	Q608	A3	R738	C3	CE253	A3
C0250	A2	C805	B1	CE253	A2	Q609	A3	R739	A4	CE254	A2
C0251	C5	C806	B1	CE254	C5	Q610	A3	R740	B5	CE255	C5
C0252	C5	C807	B2	CE255	C5	Q611	B2	R741	B2	CE256	C5
C0253	B5	C808	B2	CE256	B5	Q612	B2	R742	B2	CE257	B5
C0254	A2	C809	B2	CE257	A2	Q613	B2	R743	B2	CE258	A2
C0255	C5	C810	B2	CE258	C5	Q614	B2	R744	B2	CE259	C5
C0256	C5	C811	B2	CE259	C5	Q615	B2	R745	B2	CE260	C5
C0257	C5	C812	B2	CE260	C5	Q616	B2	R746	B2	CE261	C5
C0258	C5	C813	B2	CE261	C5	Q617	B2	R747	B2	CE262	C5
C0259	C5	C814	B2	CE262	C5	Q618	B2	R748	B2	CE263	C5
C0260	C5	C815	B2	CE263	C5	Q619	B2	R749	B2	CE264	C5
C0261	C5	C816	B2	CE264	C5	Q620	B2	R750	B2	CE265	C5
C0262	C5	C817	B2	CE265	C5	Q621	B2	R751	B2	CE266	C5
C0263	C5	C818	B2	CE266	C5	Q622	B2	R752	B2	CE267	C5
C0264	C5	C819	B2	CE267	C5	Q623	B2	R753	B2	CE268	C5
C0265	C5	C820	B2	CE268	C5	Q624	B2	R754	B2	CE269	C5
C0266	C5	C821	B2	CE269	C5	Q625	B2	R755	B2	CE270	C5
C0267	D4	C822	B2	CE270	A3	R813	A3	R814	A2	CE271	D4
C0268	D4	C823	B2	CE271	D4	Q626	B2	R815	B2	CE272	D4
C0269	D4	C824	B2	CE272	D4	Q627	B2	R816	B2	CE273	D4
C0270	D4	C825	B2	CE273	D4	Q628	B2	R817	B2	CE274	D4
C0271	D4	C826	B2	CE274	D4	Q629	B2	R818	B2	CE275	D4
C0272	D4	C827	B2	CE275	D4	Q630	B2	R819	B2	CE276	D4
C0273	D4	C828	B2	CE276	D4	Q631	B2	R820	B2	CE277	D4
C0274	D4	C829	B2	CE277	D4	Q632	B2	R821	B2	CE278	D4
C0275	D4	C830	B2	CE278	D4	Q633	B2	R822	B2	CE279	D4
C0276	D4	C831	B2	CE279	D4	Q634	B2	R823	B2	CE280	D4
C0277	D4	C832	B2	CE280	D4	Q635	B2	R824	B2	CE281	D4
C0278	D4	C833	B2	CE281	D4	Q636	B2	R825	B2	CE282	D4
C0279	D4	C834									

PCB LAYOUT - TOP VIEW



C0202 A3	C703 A3	CN205C3	JK302 A4	R250 B1	R531 C5
C0207 C2	C704 A2	CN206C5	JK601 A3	R251 C3	R532 C5
C0208 C3	C705 A2	CN207C4	JK701 A3	R252 C3	R533 C5
C0235 B3	C706 A1	CN208C3	JK702 A2	R253 B1	R541 A4
C0245 B2	C707 A2	CN301B1	JK703 A1	R271 C3	R542 A4
C0247 A1	C708 A1	CN304B1	L201 B2	R274 B2	R602 A2
C201 C1	C709 A1	CN401C5	L202 C2	R279 B1	R603 A2
C202 B2	C713 A2	CN801C1	L203 B2	R280 B2	R604 A3
C203 C2	C716 A2	CN802C3	L204 A3	R281 B4	R605 A3
C204 C4	C717 A2	CN803C2	L205 A2	R286 B4	R701 A1
C205 B4	C718 A2	D201 C3	L206 B2	R287 B4	R703 A1
C207 B3	C719 A2	D204 C3	L207 B2	R290 C3	R706 A1
C208 B2	C720 A2	D205 C4	L701 A2	R291 C3	R731 A2
C210 B3	C721 A2	F201 B3	L702 A2	R292 B1	R732 A2
C211 A3	C722 A2	FB201 C3	L703 A2	R3004 B1	R733 A2
C213 B1	C723 A2	FB202 A2	L704 A2	R3005 B1	R734 A2
C214 B2	C724 A1	FB203 A2	L705 A1	R301 A4	R735 A1
C215 B2	C725 A1	FB205 B3	L706 A1	R3018 A1	R736 A1
C217 B1	C726 A1	FB206 B3	L707 A1	R302 A4	R737 A1
C218 A2	C727 A1	FB207 A3	L801 C1	R303 A4	R738 B3
C219 C2	C732 A1	FB208 A3	L802 C1	R304 A4	R748 A2
C220 C3	C736 A1	FB209 C3	L803 B2	R305 A1	R749 A2
C221 A2	C737 A1	FB210 C3	Q201 C4	R307 B5	R801 C2
C223 C4	C801 C2	FB211 C3	Q202 C3	R308 A1	R802 C1
C224 C3	C803 C2	FB212 C3	Q203 C3	R309 A4	R803 C1
C229 B2	C805 C2	FB213 C4	Q204 C3	R310 A4	R805 C3
C230 B4	C806 C2	FB214 C3	Q300 B5	R311 A4	R806 C1
C231 B4	C807 C2	FB217 B2	Q305 A1	R312 A4	R807 C1
C232 A1	C809 B2	FB218 C4	Q503 A4	R313 A4	R808 C1
C237 B2	C810 C1	FB219 C4	Q504 A4	R314 A4	R812 C2
C238 B2	C811 C1	FB220 C4	Q602 A2	R315 A4	R813 C2
C242 B2	C812 C1	FB221 C4	Q611 A3	R316 A4	R814 C1
C243 B4	C813 B2	FB222 C3	Q801 C1	R317 A4	R815 C1
C253 A1	C816 C2	FB223 C4	Q802 C2	R318 A4	R816 C2
C254 B4	C817 C2	FB224 A3	Q803 C1	R319 A4	R817 B2
C255 A2	C818 C1	FB225 A3	Q804 C1	R320 A4	R820 C2
C259 C4	C819 C2	FB226 C1	Q805 C1	R321 A4	R822 C1
C301 A4	C820 C2	FB301 B1	Q901 B1	R322 A4	R823 C1
C302 A4	C821 C2	FB302 C1	Q903 C5	R323 A4	R824 C1
C303 A4	C822 C2	FB310 B5	Q904 C5	R324 A4	R826 C2
C304 A4	C823 C2	FB312 A5	R201 B3	R325 A4	R827 C2
C316 A4	C824 B2	FB313 A5	R202 B3	R326 A4	R829 C2
C317 A1	C825 B2	FB601 A3	R203 C4	R327 A4	R831 C3
C320 B5	C827 B2	FB603 A3	R205 B1	R328 A4	R833 C2
C321 B5	C829 C2	FB701 A2	R206 C2	R329 A4	R834 C2
C322 B5	C830 C2	FB702 A1	R207 C3	R330 A4	R835 C3
C325 A4	C831 B2	FB703 A2	R209 B3	R331 B5	R836 C2
C326 A4	C832 C2	FB704 A2	R210 B3	R332 B5	R838 C2
C327 A4	C833 C2	FB705 A1	R211 A3	R334 B5	R839 C2
C328 A4	C834 C2	FB706 A1	R212 A3	R335 B5	R840 C2
C329 A4	C835 B2	FB708 B3	R213 C4	R336 B5	R841 C2
C330 A4	C839 B2	FB715 A1	R215 C4	R343 B5	R842 C2
C331 B5	C840 B2	FB801 C1	R218 C2	R344 B5	R845 C2
C332 A4	C841 C1	FB802 C1	R219 C2	R345 A4	R904 C4
C333 A4	C843 C2	FB803 C2	R220 A3	R346 A3	R911 C5
C334 A4	C844 C2	FB901 C1	R221 A3	R348 A3	R912 C5
C340 B5	C849 B2	FB905 C4	R222 B3	R349 A4	R913 B1
C341 B5	C912 C4	FE312 A2	R223 B4	R350 A3	R924 B1
C342 B4	C918 A5	IC201 A1	R224 B4	R351 A3	R925 C4
C343 B4	C919 A5	IC202 B3	R225 A2	R352 A5	R928 B5
C346 B5	C920 C3	IC203 B4	R227 C4	R353 A5	R929 B5
C349 B5	C921 B1	IC204 B3	R230 B2	R354 A3	RA201 B2
C350 B2	C922 B1	IC205 B5	R231 B2	R355 A3	RA202 A3
C351 B5	C923 C5	IC206 A3	R232 A1	R356 A3	RB403 C5
C352 A3	C928 C4	IC207 C4	R233 B3	R357 A3	RB901 C5
C353 A5	C929 B5	IC208 C4	R234 B2	R358 B5	XL201 B2
C354 A4	C930 B5	IC209 B2	R235 C3	R359 B5	XL203 B1
C355 A5	C935 C3	IC210 C3	R236 C2	R360 B5	ZD301 A5
C356 A3	C936 B5	IC301 A4	R237 C4	R361 B5	ZD302 B4
C357 A3	C937 A1	IC302 A4	R239 B3	R368 A5	ZD901 C5
C362 B5	C938 B3	IC304 B4	R242 C4	R418 A5	ZD903 C5
C363 B5	C939 A3	CE904 A3	IC305 B4	R245 B1	ZD904 B1
C601 A2	CN201B3	IC306 B4	R247 C3	R523 C5	
C602 A2	CN202C3	IC309 A1	R248 C3	R529 C5	
C701 A3	CN203B3	IC801 C2	R249 C3	R530 C5	

PCB LAYOUT - BOTTOM VIEW



C0201	B4	C735	B4	CE328	A5
C0203	B4	C738	B4	CE329	A5
C0204	B4	C802	C5	CE330	B5
C0205	C5	C804	B4	CE341	A1
C0206	B5	C808	B4	CE342	A1
C0209	B4	C826	B4	CE343	A2
C0210	A4	C828	B4	CE344	A2
C0211	C2	C835	C5	CE345	A1
C0212	B3	C836	B4	CE346	C5
C0213	B3	C837	B4	CE347	C5
C0214	B3	C846	B4	CE348	A1
C0215	B3	C901	C2	CE351	B5
C0216	A3	C902	C2	CE352	B5
C0217	B4	C903	C2	CE353	B5
C0218	B3	C904	C1	CE801	C4
C0219	A3	C905	B5	CE802	C4
C0220	B3	C906	B5	CE803	C4
C0221	B3	C907	C1	CE804	C4
C0222	A3	C908	C2	CE805	C3
C0226	B3	C909	C1	CE806	C3
C0227	B3	C911	C1	CE807	C3
C0228	A4	C924	C1	CE808	C3
C0229	B3	CE201	C3	CE809	C3
C0230	A3	CE202	C3	D600	C2
C0237	A3	CE203	C3	FB204	B4
C0238	A3	CE204	C3	FB216	B3
C0239	A3	CE205	C3	FB303	B5
C0240	A3	CE206	C3	FB304	B5
C0241	A3	CE207	C2	FB602	B4
C0242	A3	CE211	C2	FE307	B4
C0243	A3	CE216	C2	FE308	B4
C0244	A3	CE217	C2	FE309	B4
C0245	A3	CE218	C2	FE310	B4
C0246	A3	CE219	C2	FE311	B4
C0247	A3	CE220	C2	FE312	B4
C0248	A4	CE212	C2	FE313	B4
C0249	A4	CE215	A5	FE307	A4
C0251	A3	CE216	B4	FE308	A4
C0252	A3	CE217	B4	FE309	A4
C0253	A4	CE218	B4	FE310	A4
C0254	B5	CE219	B5	FE311	A3
C0601	A4	CE220	B5	Q601	A3
C0602	A4	CE301	C4	Q705	A3
C0603	A3	CE302	C4	Q706	A3
C0604	A4	CE303	C4	Q713	A4
C0606	A4	CE304	C4	Q714	A4
C206	B4	CE305	C4	Q715	A5
C209	B4	CE306	C3	Q716	A3
C225	B5	CE307	C2	Q722	C5
C226	B5	CE308	C1	Q723	C5
C227	B5	CE309	C1	Q724	B5
C228	B5	CE310	C1	R204	C3
C305	A2	CE311	B1	R217	C2
C306	A2	CE312	B1	R226	C2
C307	A2	CE313	B1	R228	A4
C308	A2	CE314	A1	R238	B3
C309	A2	CE315	A1	R269	A2
C311	A2	CE316	A1	R295	C2
C313	A2	CE317	A2	R309	B2
C315	A2	CE318	A2	R3020	B2
C323	A5	CE319	B1	R388	B5
C324	B2	CE320	B1	R399	B2
C318	C1	CE321	B2	R601	C2
C519	C1	CE322	B2	R606	A4
C520	C1	CE323	B2	R804	B3
C521	C1	CE324	B2	R969	B4
C600	A4	CE325	A2	RA203	B4
C603	A4	CE326	A3	ZD201	C2
C702	A3	CE327	A3	ZD902	C1

POWER BOARD

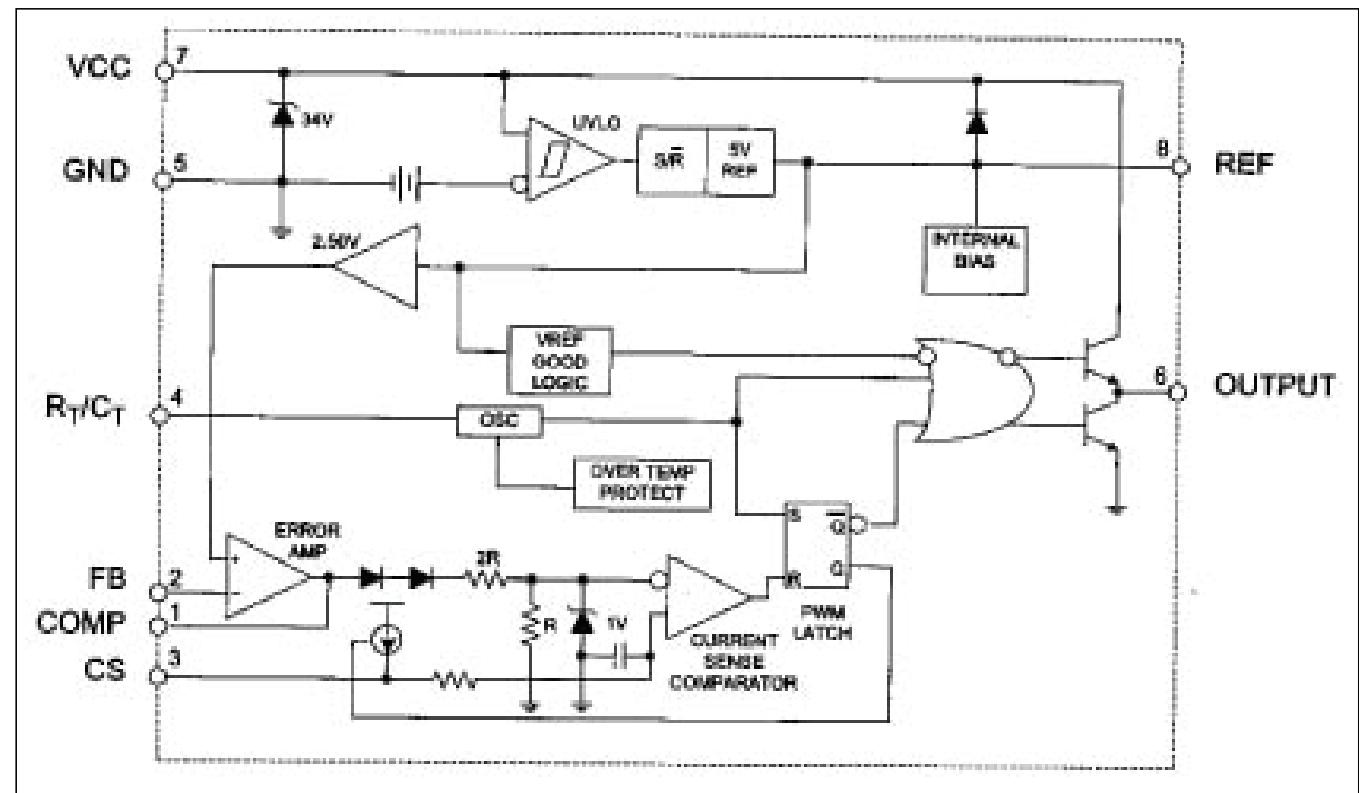
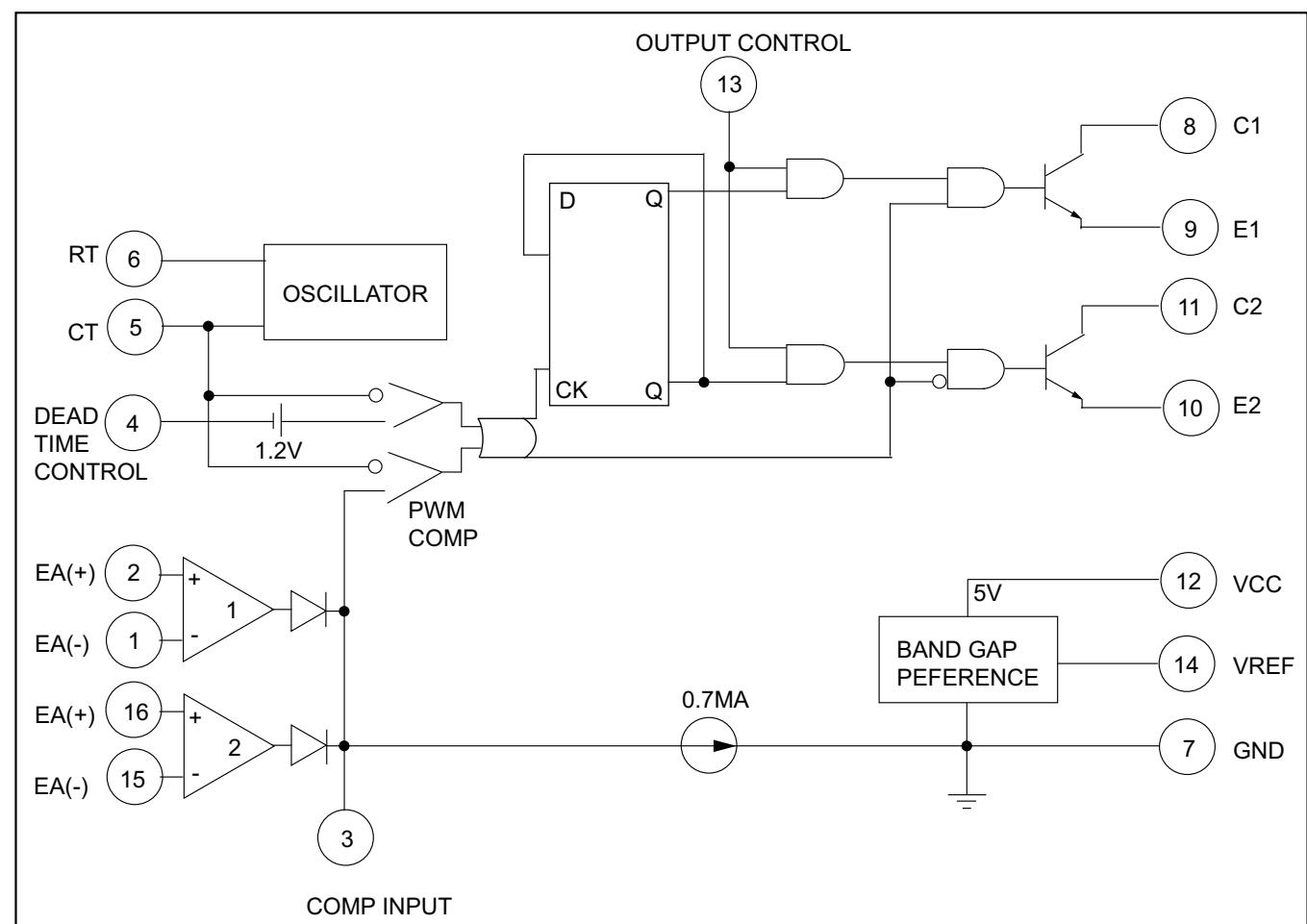


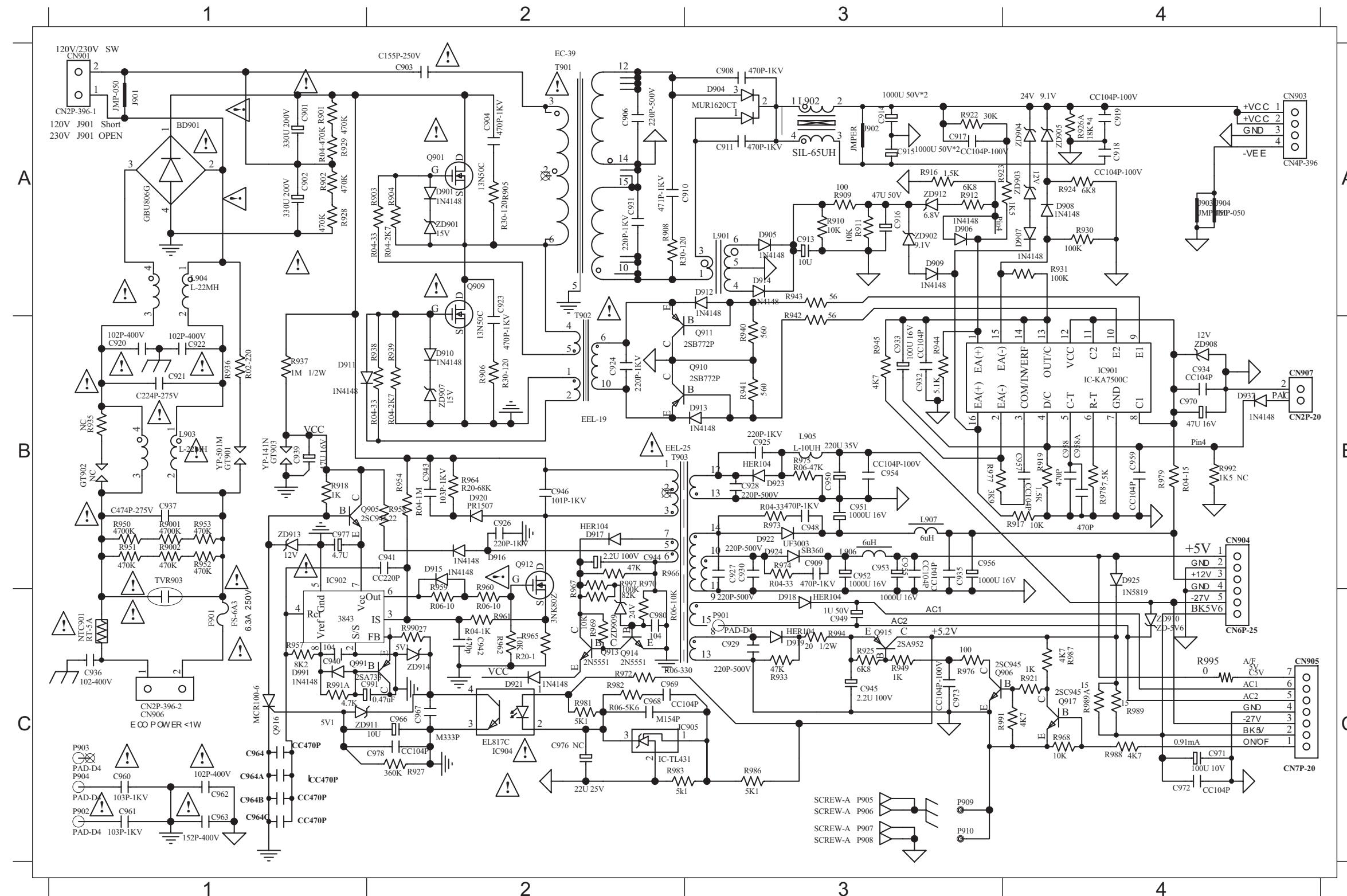
TABLE OF CONTENTS

Internal IC Diagram	7-1
Circuit Diagram.....	7-2
PCB Layout Top View	7-3
PCB Layout Bottom View	7-4



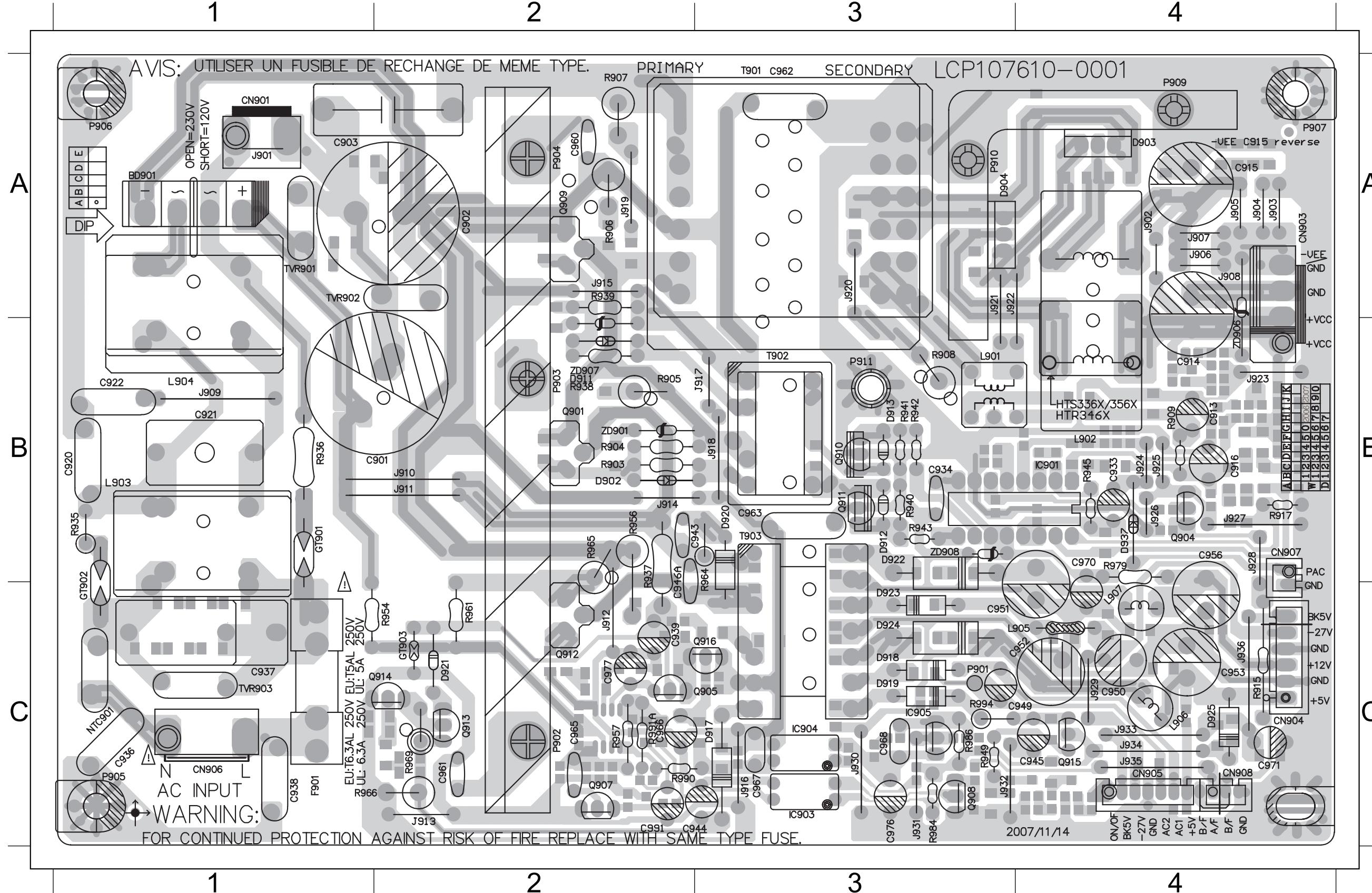
CIRCUIT DIAGRAM

BD901A1	C915	A3	C927	B3	C940	C1	C953	B3	C964	C1	C977	B1	D907	A4	D920	B2	IC904	C2	Q906	C3	R9002	B1	R916	A3	R926DA4	R941	B3	R957	C1	R970	C2	R986	C3	T902	B2	ZD911C1	
C901	A1	C916	A3	C928	B3	C941	B2	C954	B3	C964AC1	C978	C2	D908	A4	D921	C2	IC905	C2	Q909	A2	R901	A1	R917	B4	R927	C2	R942	A3	R958	B2	R972	C2	R987	C4	T903	B2	ZD912A3
C902	A1	C917	A3	C929	C3	C942	C2	C955	B3	C964BC1	C980	C2	D909	A3	D922	B3	L901	A3	Q910	B3	R902	A1	R918	B1	R928	A1	R943	A3	R959	C2	R973	B3	R988	C4	TVR903B1	ZD913B1	
C903	A2	C918	A4	C930	B3	C943	B2	C956	B3	C964CC1	C991	C1	D910	B2	D923	B3	L902	A3	Q911	B3	R903	A2	R919	B4	R929	A1	R944	B3	R960	C2	R974	B3	R989	C4	ZD901A2	ZD914C2	
C904	A2	C919	A4	C931	A2	C944	B2	C957	B4	C966	C2	CN903A4	D912	A3	D924	B3	L903	B1	Q912	B2	R904	A2	R921	C4	R930	A4	R945	B3	R961	C2	R975	B3	R989AC4	ZD902A3			
C906	A2	C920	B1	C932	B3	C945	C4	C958	B4	C967	C2	CN904B4	D913	B3	D925	B4	L904	A1	Q913	C2	R905	A2	R922	A3	R931	A4	R949	C3	R962	C2	R976	C3	R990	C2	ZD903A4		
C908	A3	C921	B1	C933	B3	C946	B2	C958AB4	C968	C2	CN905C4	D914	A3	D937	B4	L905	B3	Q914	C2	R906	B2	R923	A4	R933	C3	R950	B1	R964	B2	R977	B4	R991	C4	ZD904A4			
C909	B3	C922	B1	C934	B4	C948	B3	C959	B4	C969	C2	CN906C1	D915	B2	D991	C1	L906	B3	Q915	C3	R908	A2	R924	A4	R936	B1	R951	B1	R965	C2	R978	B4	R991AC1	ZD905A4			
C910	A2	C923	A2	C935	B3	C949	C3	C960	C1	C970	B4	CN907B4	D916	B2	F901	C1	L907	B3	Q916	C1	R909	A3	R925	C3	R937	B1	R952	B1	R966	B2	R979	B4	R994	C3	ZD907B2		
C911	A3	C924	B2	C936	C1	C950	B3	C961	C1	C971	C4	D901	A2	D917	B2	GT901B1		NTC901C1	Q917	C4	R910	A3	R926AA4	R938	B2	R953	B1	R967	B2	R981	C2	R995	C4	ZD908B4			
C913	A3	C925	B3	C937	B1	C951	B3	C962	C1	C972	C4	D904	A3	D918	C3	IC901	B4	Q901	A2	Q991	C1	R911	A3	R926BA4	R939	B2	R954	B2	R968	C4	R982	C2	R997	B2	ZD909C2		
C914	A3	C926	B2	C939	B1	C952	B3	C963	C1	C973	C3	D905	A3	D919	C3	IC902	B1	Q905	B1	R9001	B1	R912	A3	R926CA4	R940	B3	R955	C4	R969	C2	R983	C2	T901	A2	ZD910C4		



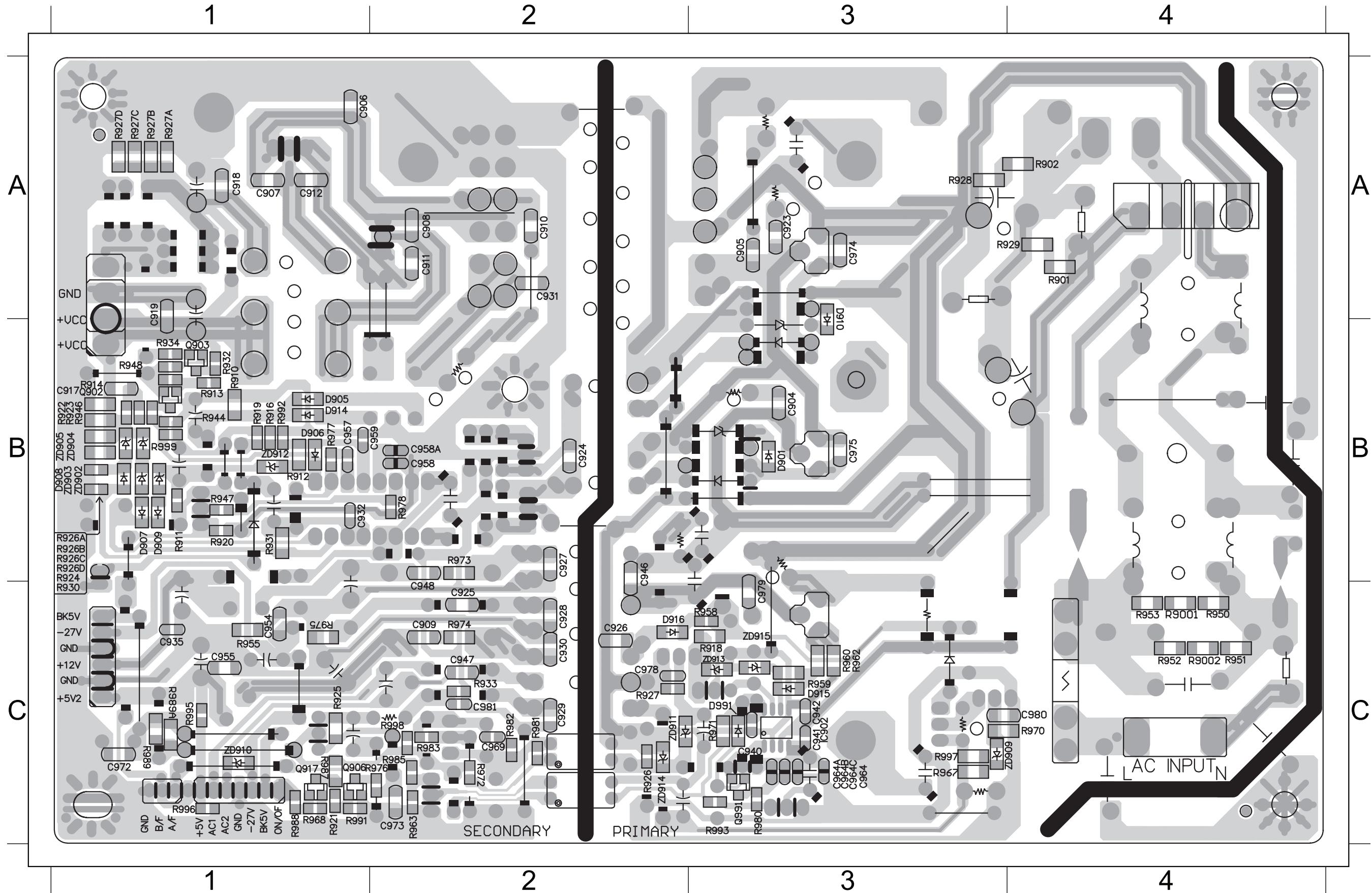
PCB LAYOUT - TOP VIEW

BD901A1	R939 A2	CN903A4	J909 B1	J911 B2	R965 B2	D922 B3	R941 B3	C914 B4	J923 B4	R945 B4	R966 C1	D921 C2	R961 C2	D918 C3	J931 C3	C951 C4	J933 C4
C903 A1	C962 A3	J902 A4	L903 B1	J914 B2	ZD901B2	J917 B3	R942 B3	C916 B4	J924 B4	R979 B4	TVR903C1	J912 C2	R969 C2	D919 C3	J932 C3	C952 C4	J934 C4
J901 A1	D904 A3	J903 A4	L904 B1	Q901 B2	ZD907B2	J918 B3	R943 B3	C933 B4	J925 B4	C936 C1	C939 C2	J913 C2	R990 C2	D923 C3	Q916 C3	C953 C4	J936 C4
C902 A2	J920 A3	J904 A4	R936 B1	R903 B2	C934 B3	L901 B3	R964 B3	C956 B4	J926 B4	C937 C1	C944 C2	Q905 C2	R991AC2	D924 C3	R949 C3	C971 C4	L905 C4
C960 A2	J921 A3	C920 B1	C901 B2	R904 B2	C963 B3	Q910 B3	T902 B3	C970 B4	J927 B4	CN906C1	C961 C2	Q912 C2	C949 C3	IC904 C3	R986 C3	CN904C4	L906 C4
J915 A2	J922 A3	C921 B1	C943 B2	R905 B2	D912 B3	Q911 B3	T903 B3	CN907B4	L902 B4	F901 C1	C966 C2	Q913 C2	C967 C3	IC905 C3	R994C3S	CN905C4	L907 C4
Q909 A2	T901 A3	C922 B1	C946 B2	R937 B2	D913 B3	R908 B3	ZD908B3	D937 B4	R909 B4	NTC901C1	C977 C2	Q914 C2	C968 C3	J916 C3	C945 C4	D925 C4	Q915 C4
R906 A2	C915 A4	GT901B1	J910 B2	R938 B2	D920 B3	R940 B3	IC901 B4	R917 B4	R954 C1	C991 C2	R957 C2	D917 C3	J930 C3	C950 C4	J929 C4		



PCB LAYOUT - BOTTOM VIEW

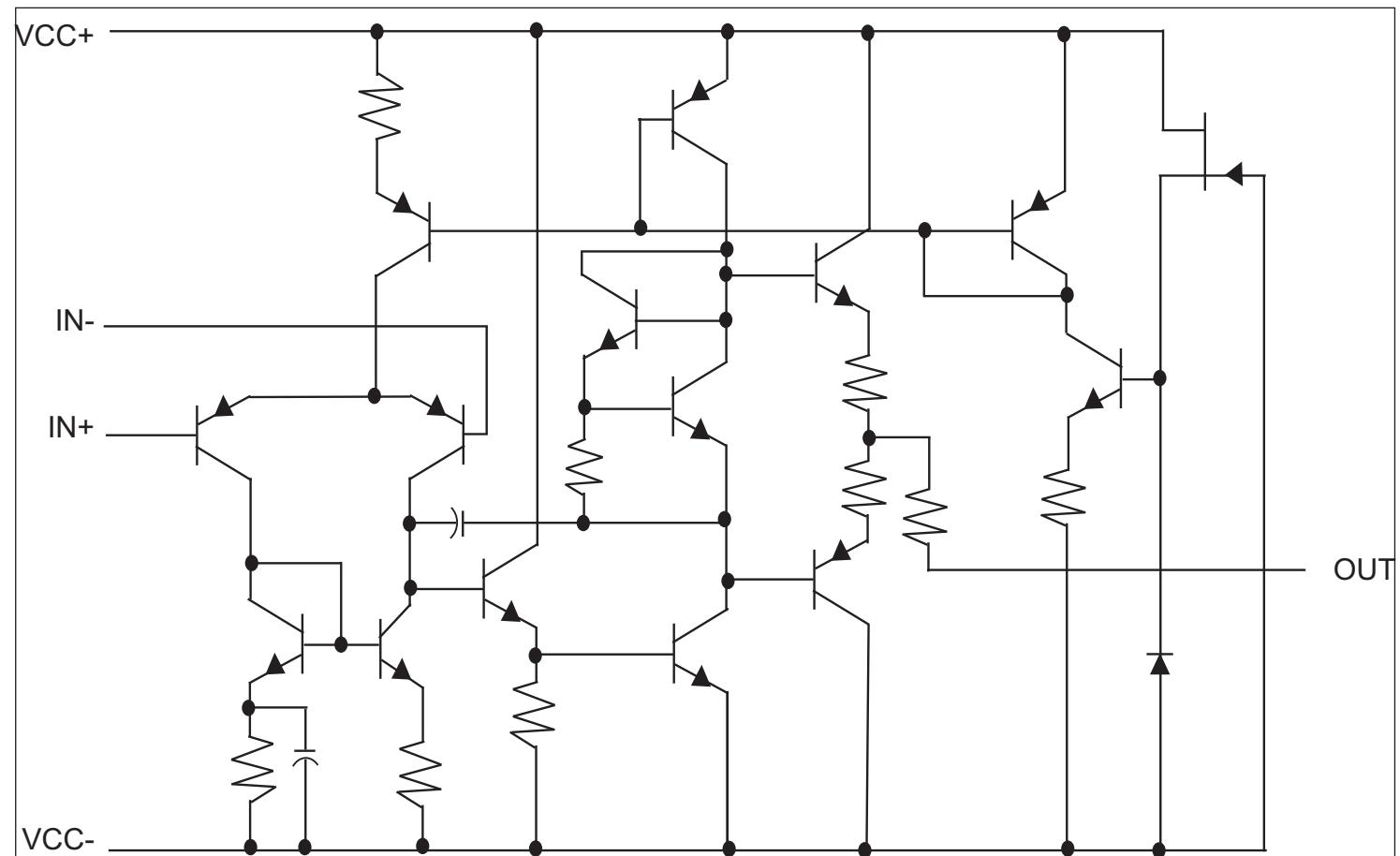
C904	B3	C917	B1	C926	C2	C932	B1	C948	B2	C959	B2	C972	C1	D907	B1	D916	C2	R9001	C4	R912	B1	R923	B1	R926D	B1	R933	C2	R955	C1	R968	C1	R976	C2	R987	C1	R997	C3	ZD910	C1
C906	A1	C918	A1	C927	B2	C935	C1	C954	C1	C964	C3	C973	C2	D908	B1	D991	C3	R9002	C4	R916	B1	R924	B1	R927	C2	R944	B1	R958	C3	R970	C4	R977	B1	R988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



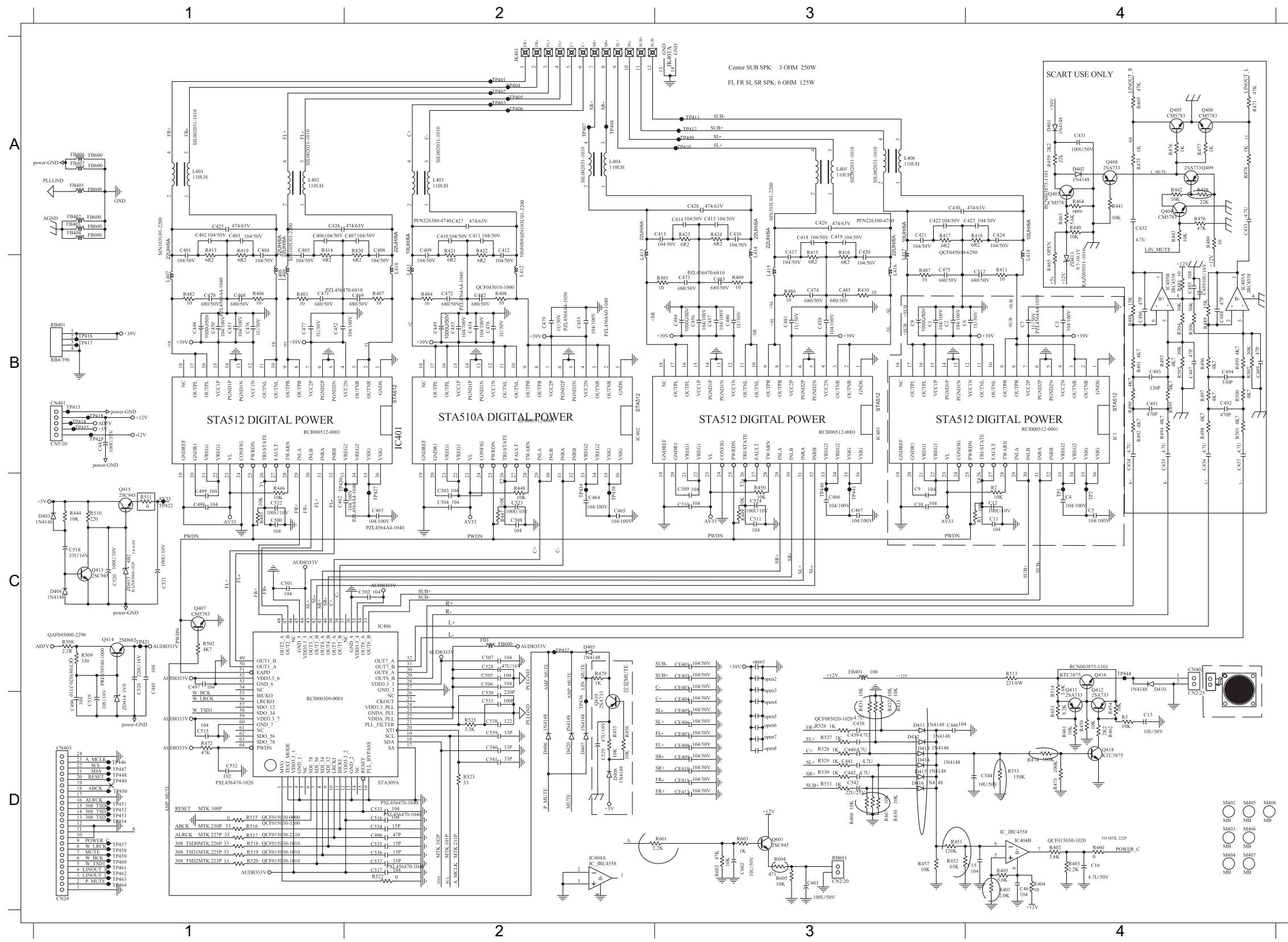
AMP BOARD

TABLE OF CONTENTS

Internal IC Diagram	8-1
Circuit Diagram.....	8-2
PCB Layout Top view.....	8-3
PCB Layout Bottom View	8-4

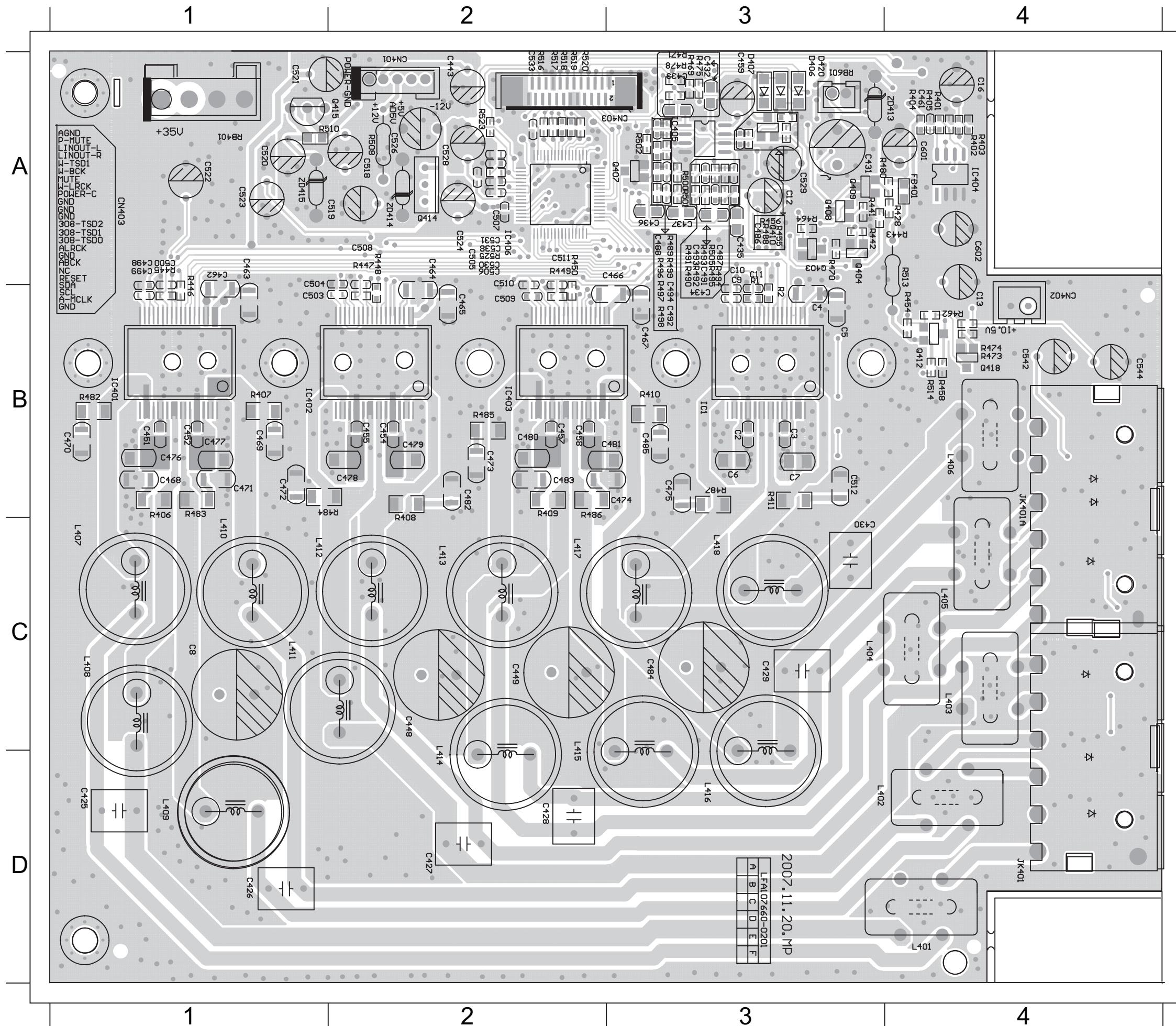


CIRCUIT DIAGRAM



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
C14	D4	C468	B1	C541	D2	L408	B1	R453	D4
C15	D4	C469	B2	C542	D3	L409	B1	R454	D4
C16	D4	C470	B1	C544	D4	L410	B2	R455	D2
C17	B3	C471	B1	C545	D4	L411	B2	R456	D4
C18	C4	C472	B2	C601	D3	L412	B2	R458	D4
C19	A1	C473	B3	C602	D3	L413	A3	R460	D4
C20	A1	C474	B3	C603	D3	L414	A3	R461	D4
C21	A1	C475	B3	C8	B3	L415	B3	R462	D4
C22	A1	C476	B1	C9	C3	L416	B3	R466	D3
C23	A1	C477	B1	C401	C3	L417	A3	R467	D3
C24	A1	C478	B2	CE402	C3	L418	A3	R472	D1
C25	A2	C479	B2	CE403	C3	Q407	C1	R473	D4
C26	A2	C480	B3	CE404	D3	Q410	D2	R474	D4
C27	A2	C481	B3	CE405	D3	Q411	D4	R479	C2
C28	A2	C482	B2	CE406	D3	Q412	D4	R482	B1
C29	A2	C483	B3	CE407	D3	Q413	C1	R483	B1
C30	A2	C484	B3	CE408	D3	Q414	C1	R484	B2
C31	A3	C485	B3	CE409	D3	Q415	C1	R485	B3
C32	A3	C490	D2	CE410	D3	Q416	C4	R486	B3
C33	A3	C495	D1	CE411	D3	Q417	C4	R487	B3
C34	A3	C496	D1	CE412	D3	Q418	C1	R502	C1
C35	A3	C497	C1	CE413	D3	Q419	C1	R508	C1
C36	A3	C498	C1	CN401	B1	R1	C4	R509	C1
C37	A3	C499	C1	CN402	C4	R2	C4	R510	C1
C38	A3	C500	C1	D403	C1	R3	D4	R511	C1
C39	A3	C501	C1	D404	C1	R402	D4	R513	C4
C40	A3	C502	C2	D405	C2	R403	D4	R514	C4
C41	A3	C503	C2	D406	D2	R404	D4	R515	D1
C42	A3	C504	C2	D407	D2	R405	D4	R516	D1
C43	A1	C505	C2	D408	D2	R406	D4	R517	D1
C44	A1	C506	C2	D409	C4	R407	D4	R518	D1
C45	A2	C507	C2	D411	D3	R408	D4	R519	D1
C46	A3	C508	C2	D412	D3	R409	B3	R520	D1
C47	A3	C509	C3	D413	D3	R410	B3	R522	D2
C48	A3	C510	C3	D414	D3	R411	B4	R523	D2
C49	A3	C511	C3	D415	D3	R413	A1	R525	D2
C50	B4	C512	B4	D416	D3	R414	A1	R526	D3
C51	D3	C515	D1	D420	D2	R415	A3	R527	D3
C52	D3	C516	D2	D421	C2	R416	A3	R528	D3
C53	D3	C517	D2	FB1	C2	R417	A3	R529	D3
C54	D3	C518	C1	FB401	C3	R418	A3	R530	D3
C55	C1	C519	D1	FB402	A1	R419	A1	R531	D3
C56	D3	C520	C1	FB403	A1	R420	A1	R532	D4
C57	C1	C521	C1	FB404	A1	R421	A2	R601	D3
C58	C1	C522	C1	FB405	A1	R422	A2	R602	D3
C59	C1	C523	C2	FB406	A1	R423	A3	R603	D3
C60	C2	C524	C3	IC1	B4	R424	A3	R604	D3
C61	C3	C525	C1	IC401	B1	R430	D3	R605	D3
C62	C1	C526	C1	IC402	B2	R431	D3	RB401	B1
C63	C1	C527	C2	IC403	B3	R432	D3	RB601	D3
C64	C3	C528	C2	IC404	B4	R433	D3	ZD414	D1
C65	C2	C529	D2	IC405	B4	R434	D3	ZD415	C1
C66	C4	C530	D2	IC406	C2	R443	D4		

PCB LAYOUT - TOP VIEW



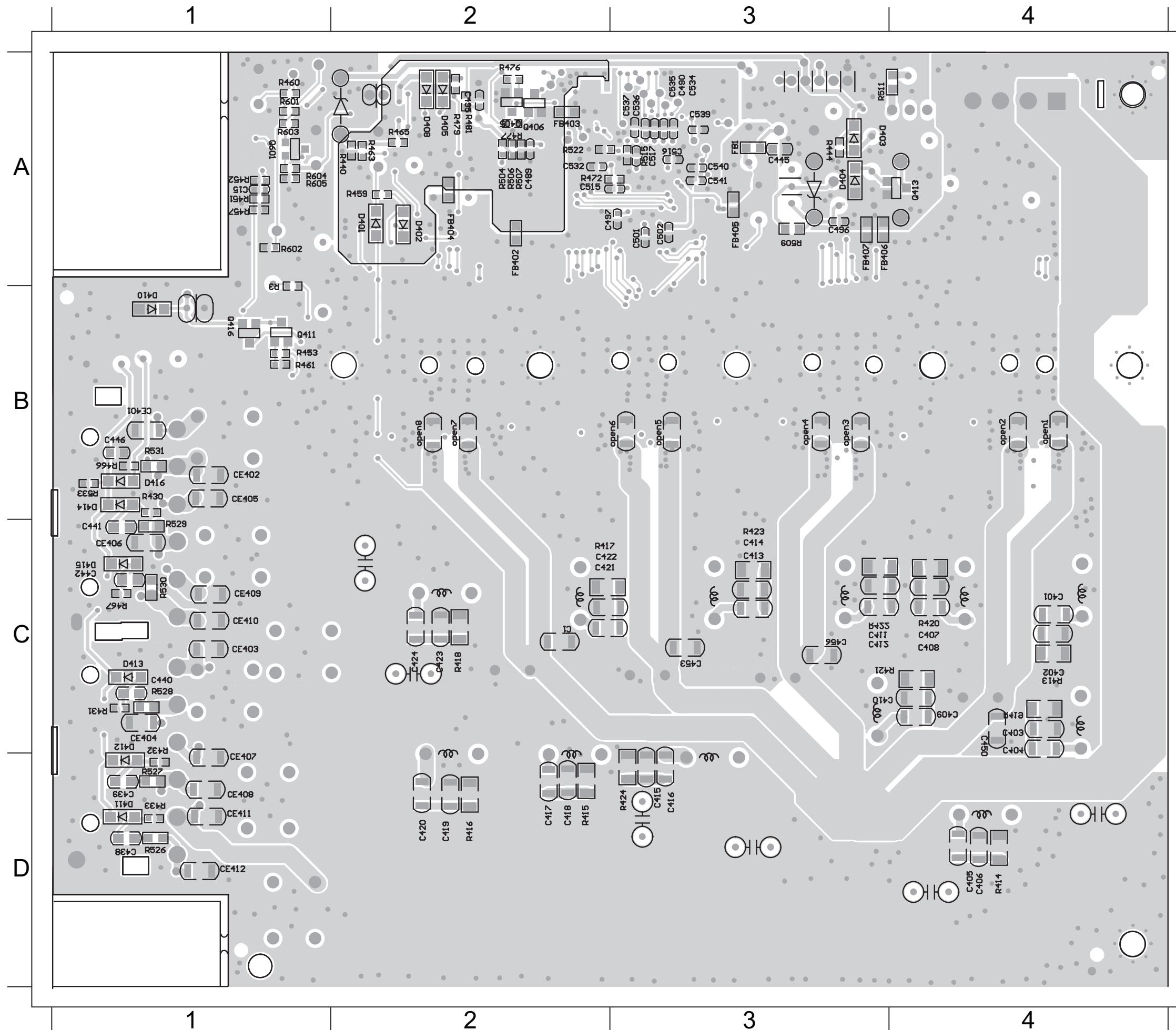
C1	B3	C506	A2	L414	C2	RB401	A1
C10	B3	C507	A2	L415	C2	RB601	A3
C11	B3	C508	A2	L416	C2	ZD414	A2
C12	A3	C509	B2	L417	C3	ZD415	A1
C13	A4	C510	B2	L418	C3		
C16	A4	C511	A2	Q407	A3		
C2	B3	C512	B3	Q410	A3		
C3	B3	C518	A2	Q412	A4		
C4	B3	C519	A2	Q414	A2		
C425	D1	C520	A1	Q415	A2		
C426	D1	C521	A1	Q418	B4		
C427	D2	C522	A1	R1	B3		
C428	D2	C523	A1	R2	B3		
C429	C3	C524	A2	R401	A4		
C430	C3	C526	A2	R402	A4		
C443	A2	C528	A2	R403	A4		
C448	C2	C529	A3	R404	A4		
C449	C2	C530	A2	R405	A4		
C451	B1	C531	A2	R406	B1		
C452	B1	C533	A2	R407	B1		
C454	B2	C538	A2	R408	B2		
C455	B2	C542	B4	R409	B2		
C457	B2	C544	B4	R410	B3		
C458	B2	C6	B3	R411	B3		
C461	A4	C601	A4	R443	A4		
C462	B1	C602	A4	R445	B1		
C463	B1	C8	C1	R446	B1		
C464	B2	C9	B3	R447	A2		
C465	B2	CN401	A2	R448	A2		
C466	A3	CN402	B4	R449	A2		
C467	B3	CN403	A2	R450	A2		
C468	B1	D406	A3	R454	B4		
C469	B1	D407	A3	R455	A3		
C470	B1	D420	A3	R455	A3		
C471	B1	FB401	A4	R458	A4		
C472	B1	IC1	B3	R462	A4		
C473	B2	IC401	B1	R473	A4		
C474	B2	IC402	B1	R474	A4		
C475	B3	IC403	B2	R482	B1		
C476	B1	IC404	A4	R483	B1		
C477	B1	IC406	A2	R484	B1		
C478	B2	JK401	D4	R485	B2		
C479	B2	JK401AB4		R486	B2		
C480	B2	L401	D4	R487	B3		
C481	B2	L402	D4	R502	A3		
C482	B2	L403	C4	R508	A2		
C483	B2	L404	C3	R510	A1		
C484	C3	L405	C4	R513	A4		
C485	B3	L406	B4	R514	A4		
C498	B1	L407	C1	R516	A2		
C499	B1	L408	C1	R517	A2		
C5	B3	L409	D1	R518	A2		
C500	B1	L410	C1	R519	A2		
C503	B1	L411	C1	R520	A2		
C504	B1	L412	C1	R523	A2		
C505	A2	L413	C2	R525	A2		

2007.11.20. MP

LFM107660-0201

A B C D E F

PCB LAYOUT - BOTTOM VIEW



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

IPOD BOARD

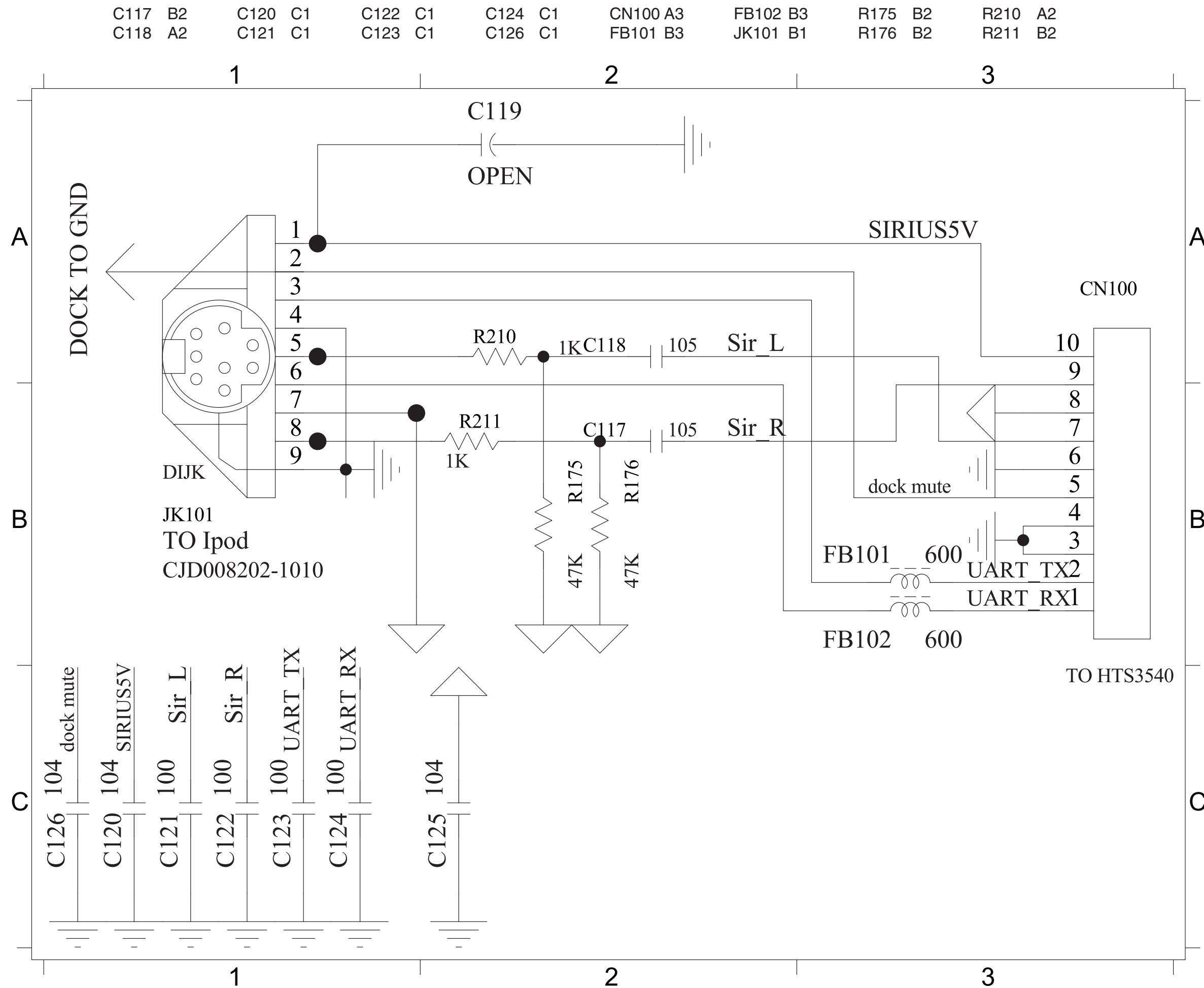
TABLE OF CONTENTS

Circuit Diagram	9-2
PCB Layout View.....	9-3

CIRCUIT DIAGRAM

9 - 2

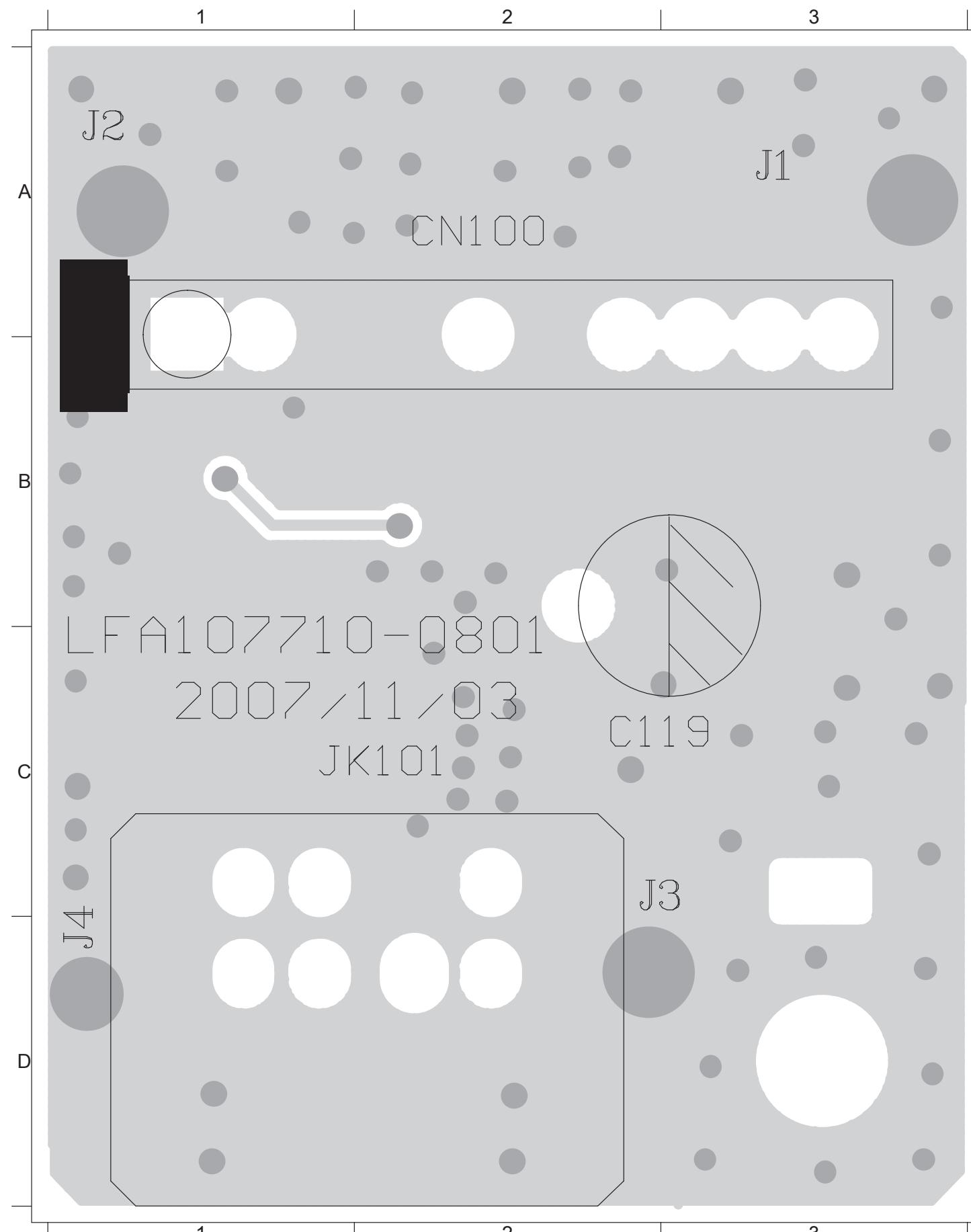
9 -



PCB LAYOUT VIEW

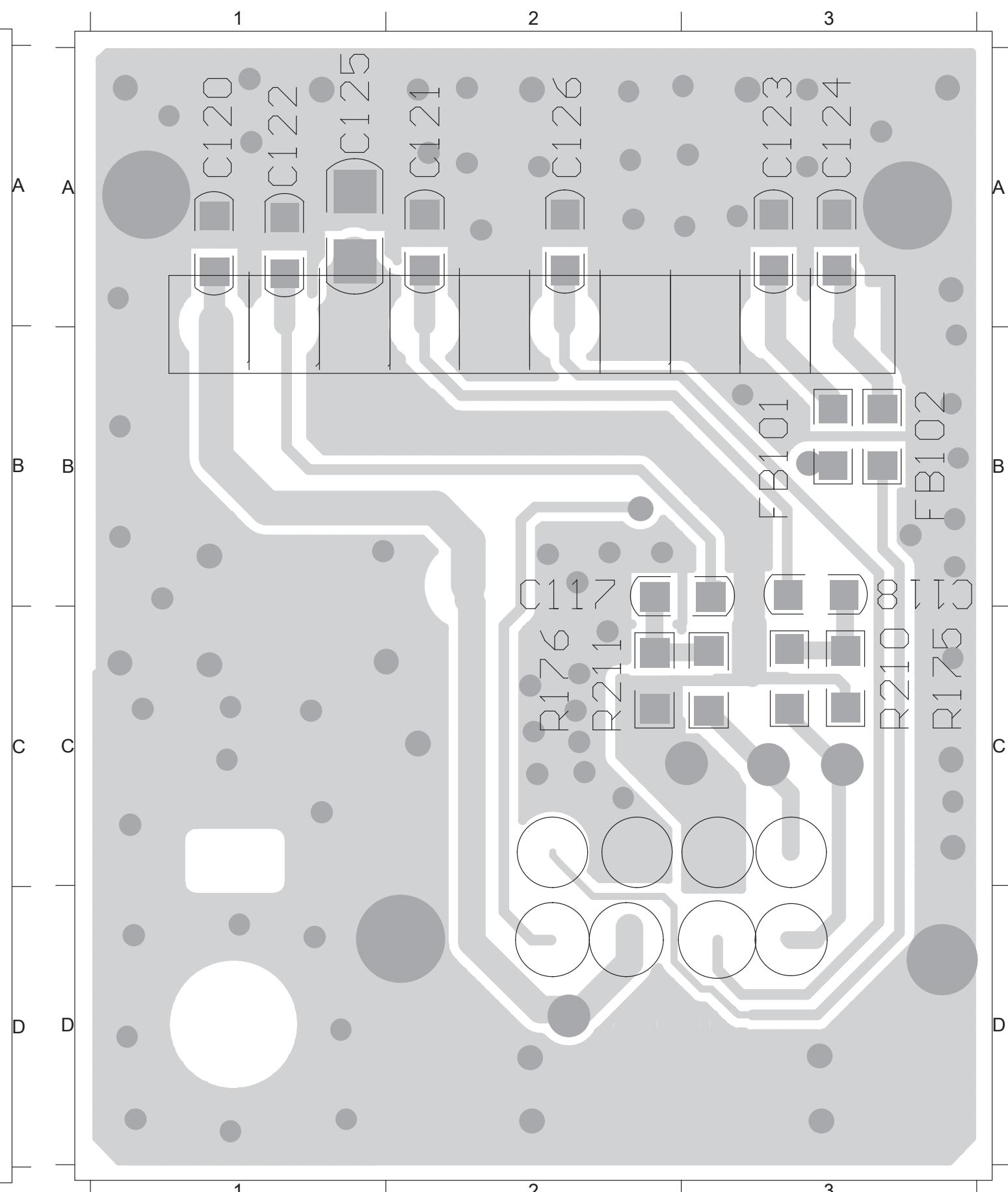
9 - 3

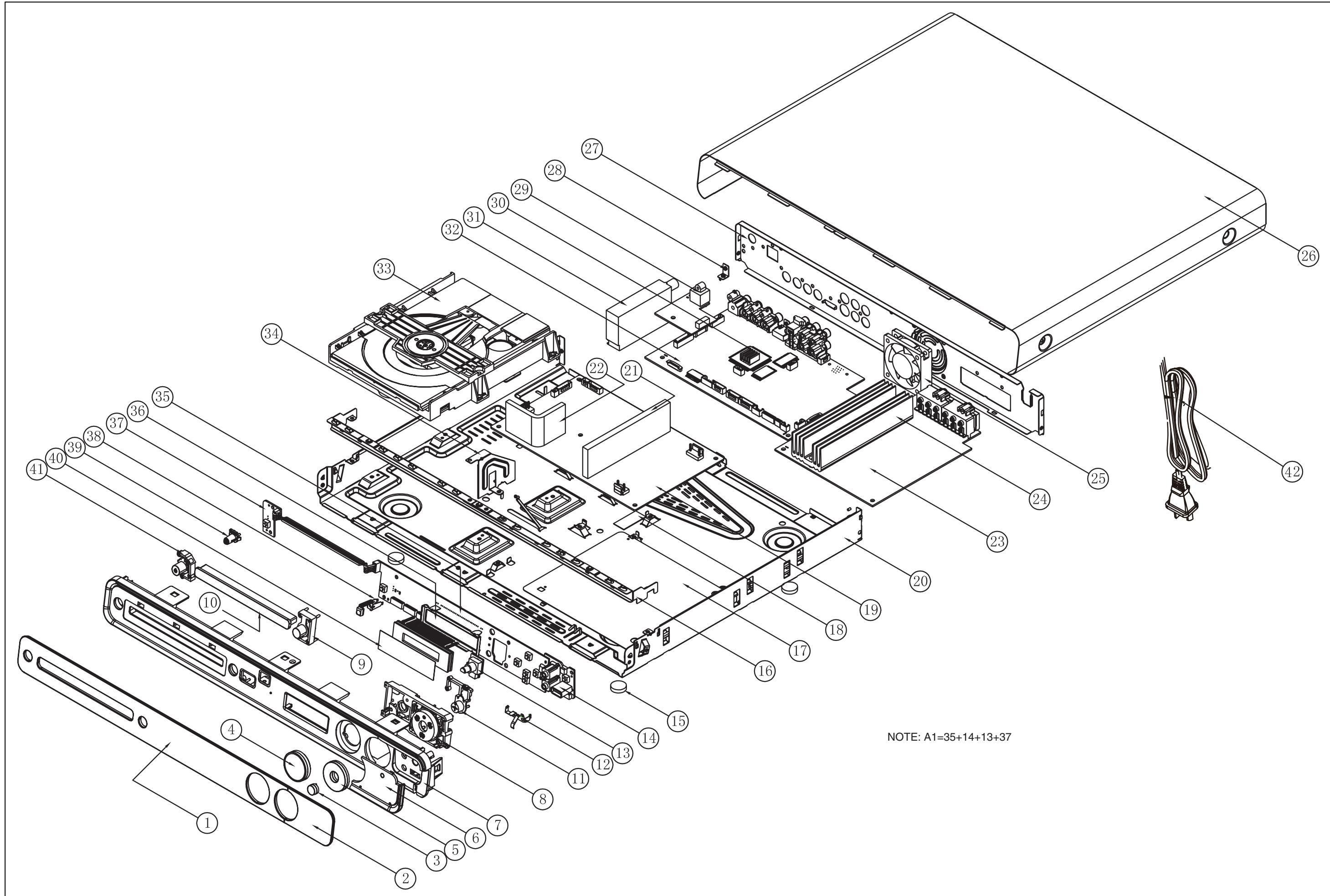
C117 C118	B2 B3	C120 C121	A1 A2	C122 C123	A1 A3	C124 C126	A3 A2
--------------	----------	--------------	----------	--------------	----------	--------------	----------



9 - 3

CN100 FB101	A2 B3	FB102 JK101	B3 C2	R175 R176	C3 C2	R210 R211	C3 C2
----------------	----------	----------------	----------	--------------	----------	--------------	----------



MECHANICAL EXPLODED VIEW

MECHANICAL PART LIST (red colour only for hts3366d_37)

Loc.	12NC.	Description	SPEAKER		
1	996510010841	DISPLAY LENS	RFC	996510001599	RUBBER FOOT -CENTER SPK
1	996510012484	DISPLAY LENS	RFF/R	996510001601	RUBBER FOOT - FONT/REAR SPK
2	996510010839	USB DOOR LENS	RFF	996510001601	RUBBER FOOT - FRONT SPK
2	996510012485	USB DOOR LENS	RFR	996510012224	RUBBER FOOT - REAR
3	996510010835	SOURCE BUTTON PC PMMA	RFS	996510010854	RUBBER FOOT -SUB
4	996510010833	VOLUME KNOB PMMA PC	SPKC	996510010848	SPEAKER BOX -CENTER
5	996510010832	FUNCTION BUTTON	SPKC	996510013897	SPEAKERBOX-CENTER
6	996510010829	USB DOOR	SPKFL	996510010849	SPEAKER BOX -FRONT LEFT
7	996510010831	FRONT PANEL	SPKFL	996510013898	SPEAKERBOX-FRONTLEFT
8	996510010837	FUNCTION BRACKET	SPKF'R	996510010850	SPEAKER BOX - FRONT RIGHT
9	996510010834	EJECT KEY	SPKF'R	996510013899	SPEAKERBOX-FRONTRIGHT
10	996510010830	DVD DOOR	SPKRL	996510010851	SPEAKER BOX- REAR LEFT
10	996510013893	DVD DOOR	SPKRL	996510013900	SPEAKERBOX-REARLEFT
11	996510010838	SOURCE BRACKET	SPKRR	996510010852	SPEAKER BOX- REAR RIGHT
15	996510010842	RUBBER FOOT	SPKRR	996510013901	SPEAKERBOX-REARRIGHT
17	996510010826	PVC SHEET	SUBW	996510010853	SUBWOOFER
18	996510010827	PVC SHEET	SUBW	996510013902	SUBWOOFER
19	996510010821	POWER PCB			
19	996510013894	POWER PCB			
20	996510010845	BOTTOM PANEL			
23	996510010823	AMP PCB			
25	996510010843	FAN			
26	996510010844	TOP COVER			
27	996510010846	REAR PANEL			
27	996510013895	REAR PANEL			
29	996510015580	IPOD PCB			
31	996510010825	TUNER			
32	996510015581	MAIN PCB			
33	996510010819	DVD LOADER			
39	996510010840	STANDBY LENS			
40	996510010828	VFD FILTER PC			
41	996510010836	POWER KEY			
42	996510001252	PWR CORD			
A1	996510015543	VFD JACK VOL STANDBY PCB			
V1	996510007429	FFC CBLE 10P			
V1	996510000673	FFC CBLE 10P			
V2	996510010847	FFC CABLE 24P			
V2	996510011292	FFC CABLE 24P			
V3	996510007319	FFC CABLE 24P			
V3	996510013767	FFC CABLE 24P			
FM	996510008251	FM ANT			
Dock	996510010855	SIMPLE IPOD DOCK			
RC	996510010856	REMOTE CONTROL			
Video	996500013058	RCA CABLE 2P 1.2M			

REVISION LIST

Version 1.0
*Initial release

Version 1.1
*Circuit diagram & Layout updated

Version 1.2
*Combine with HTS3566D/37 & Mechanical part list updated