DVD Home Theater System HTS3365X/78

Service
Service
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Service Manual

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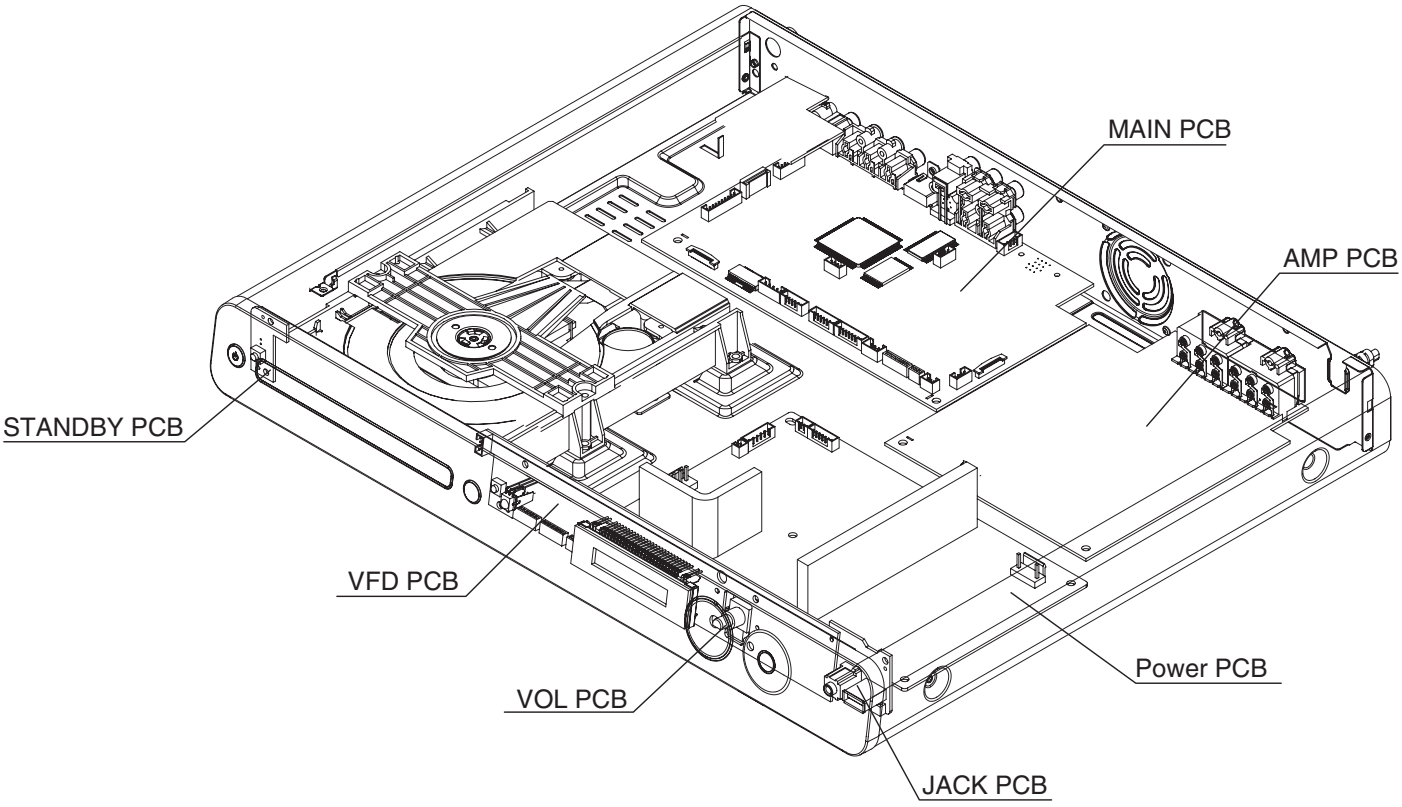
GB 3139 785 34450

Version 1.0

PHILIPS

LOCATION OF PCB BOARDS



VERSION VARIATION:

Features \ Type/Versions	HTS3365X
	/78
Main(Power Output-600W)	X
S-video out	X
Power Voltage (120V/230V)	X
WMA	X

SERVICE SCNARIO MATRIX:

Boards in used \ Type/Versions	HTS3365X
	/78
Main Board	C
Power Board	C
AMP Board	C
VFD+JACK+VOL+STANDBY Board	C

* C= Component

SPECIFICATIONS

AMPLIFIER

Total output power
Home Theatre mode.....600 W
Frequency Response ..... 180 Hz – 18 kHz / ±3 dB
Signal-to-Noise Ratio:..... > 60 dB (A-weighted)
Input Sensitivity
AUX 1 ..... 400 mV
AUX 2 .....400 mV
MP3 LINK ..... 400 mV

RADIO

Tuning Range ..... FM 87.5-108 MHz
.....(50/100 kHz)
..... AM/MW 530-1700 kHz
.....(10 kHz)
.....531-1602 kHz
.....(9 kHz)
26 dB Quieting
Sensitivity .....FM 22 dBf,
..... AM/MW 5000µV/m
IF Rejection Ratio .....FM 60 dB, AM/MW 24 dB
Signal-to-Noise Ratio.....FM 50 dB, AM/MW 30 dB
AM/MW Suppression Ratio ..... FM 30 db
Harmonic Distortion .....FM Mono 3%
..... FM Stereo 3%
..... AM/MW 5%
Frequency Response ... FM 180 Hz–10 kHz / ±6 dB
Stereo Separation ..... FM 26 dB (1 kHz)
Stereo Threshold .....FM 29 dB

DISC

Laser Type ..... Semiconductor
Disc Diametre..... 12cm / 8cm
Video Decoding ..... MPEG-1 / MPEG-2 /
...../ DivX 3/4/5/6, Ultra
Video DAC ..... 12 Bits
Signal System .....PAL / NTSC
Video Format..... 4:3 / 16:9
Video S/N ..... 56 dB
Composite Video
Output ..... 1.0 Vp-p, 75Ω
Frequency Response ..... 4 Hz–20 kHz (44.1 kHz)
..... 4 Hz–22 kHz (48 kHz)
..... 4 Hz–44 kHz (96 kHz)
PCM..... IEC 60958
Dolby Digital ..... IEC 60958, IEC 61937
DTS ..... IEC 60958, IEC 61937

USB

Compatibility .....Hi-Speed USB (2.0)
Class Support..... UMS (USB MassStorage Class)
MTP .....(Media TransferProtocol)

MAIN UNIT

Power Supply Rating..... 110-127 V / 220-240 V~;
.....50-60 Hz
Power Consumption .....100 W
Dimensions..... 435 x 58 x 360 (mm)
.....(w x h x d)
Weight 4kg

FRONT AND REAR SPEAKERS

System..... Full range satellite
Impedance.....3 Ω
Speaker drivers ..... 3” full range speaker
Frequency response.....150 Hz – 20 kHz
Dimensions..... 103 x 203 x 71 (mm)
.....(w x h x d)
Weight .....0.54 kg/each

CENTRE SPEAKER

System..... Full range satellite
Impedance..... 6 Ω
Speaker drivers: .....2 x 2.5” full range speaker+
..... 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

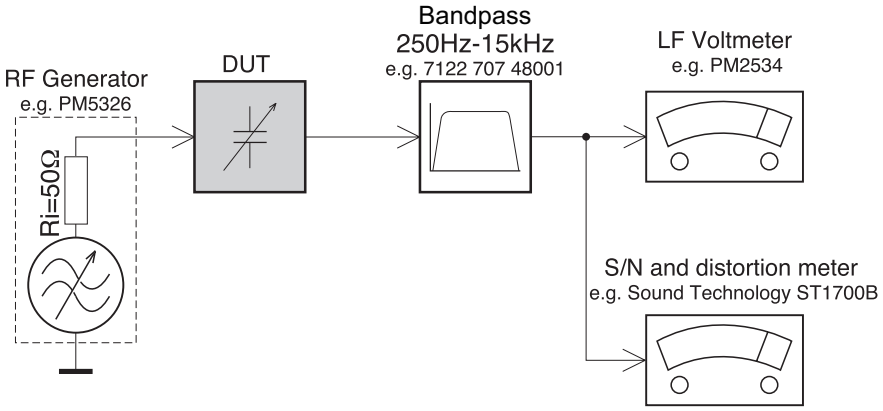
SUBWOOFER

Impedance.....6 Ω
Speaker drivers .....165mm (6.5”) woofer
Frequency response..... 40 Hz – 150 Hz
Dimensions..... 163 x 363 x 369 (mm)
.....(w x h x d)
Weight ..... 5.08 kg

Specifications subject to change without prior notice.

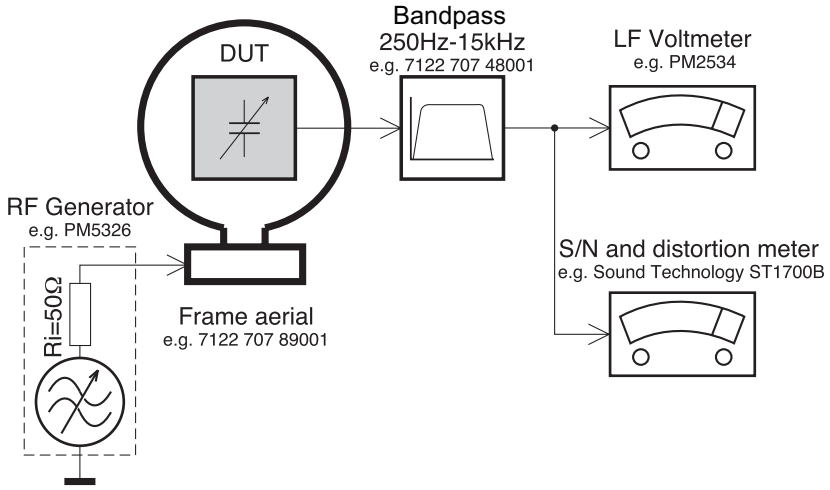
MEASUREMENT SETUP

Tuner FM



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

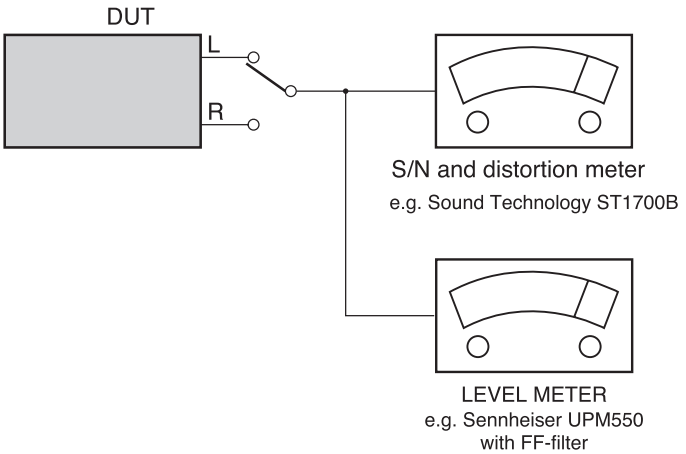
Tuner AM (MW,LW)



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

CD

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



SERVICE AIDS

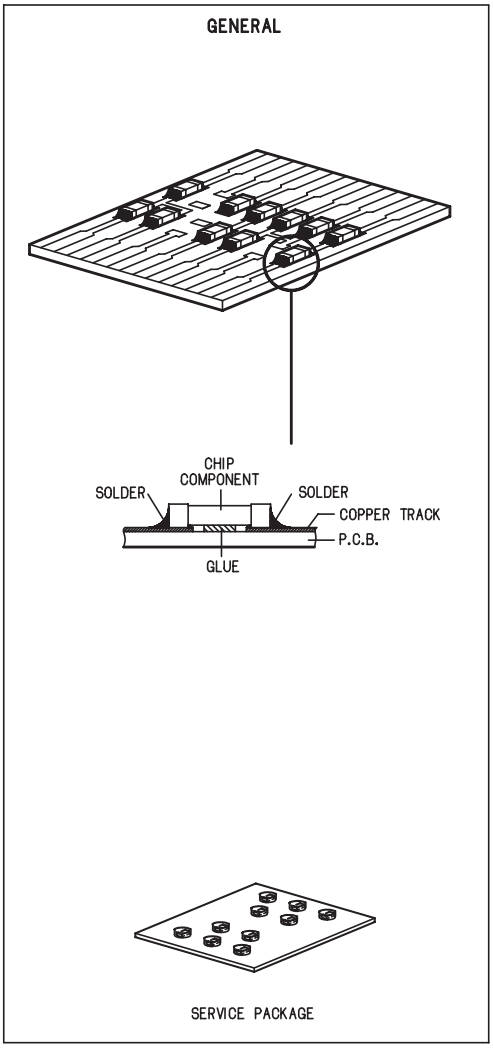
Service Tools:

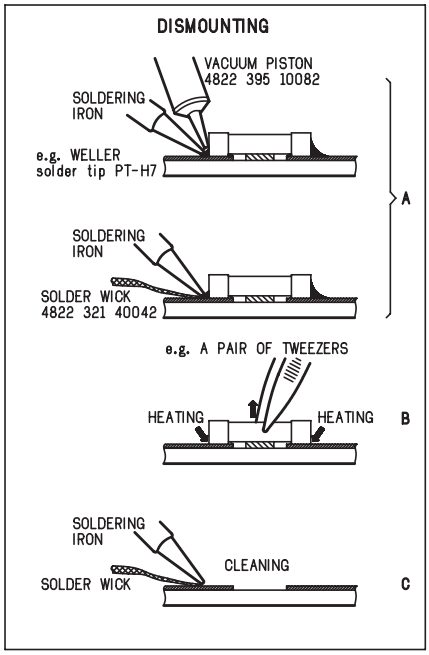
Universal Torx driver holder 4822 395 91019
Torx bit T10 150mm 4822 395 50456
Torx driver set T6-T20 .....4822 395 50145
Torx driver T10 extended 4822 395 50423

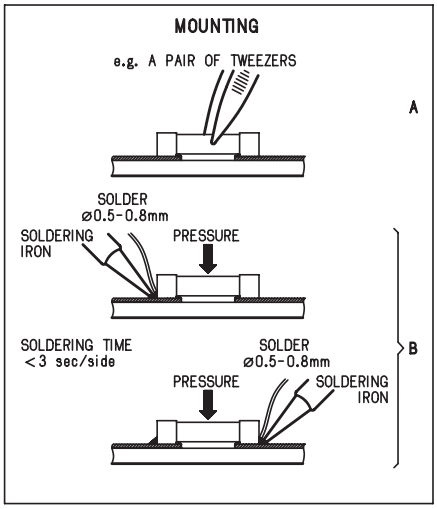
Compact Disc:

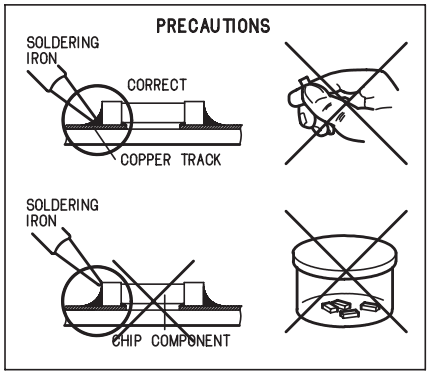
SBC426/426A Test disc 5 + 5A 4822 397 30096
SBC442 Audio Burn-in test disc 1kHz 4822 397 30155
SBC429 Audio Signals disc 4822 397 30184
Dolby Pro-logic Test Disc 4822 395 10216

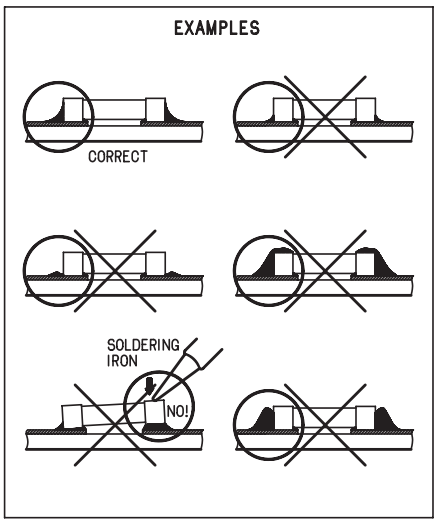
HANDLING CHIP COMPONENTS











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

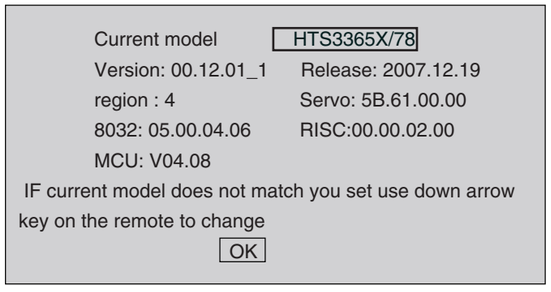
2)Region Code Change

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“

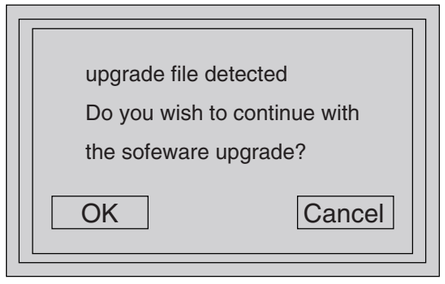
8) Produce to Change Tuner Grid

(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).

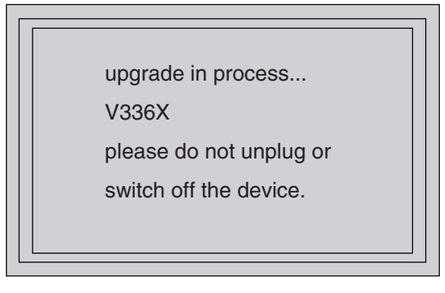
a) press “source” to select “FM” or “AM”
b) In “FM” or “AM” playback mode, press & hold “play/pause” button until “Grid 9” or “Grid 10” appears
Note: repeating the same action will toggle back to it previous tuning grid setting.
* “Grid 10” is default for/78 version.

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:



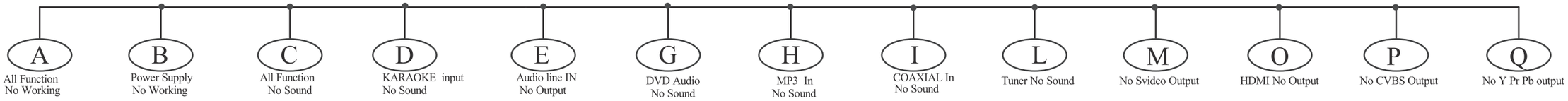
CAUTION!

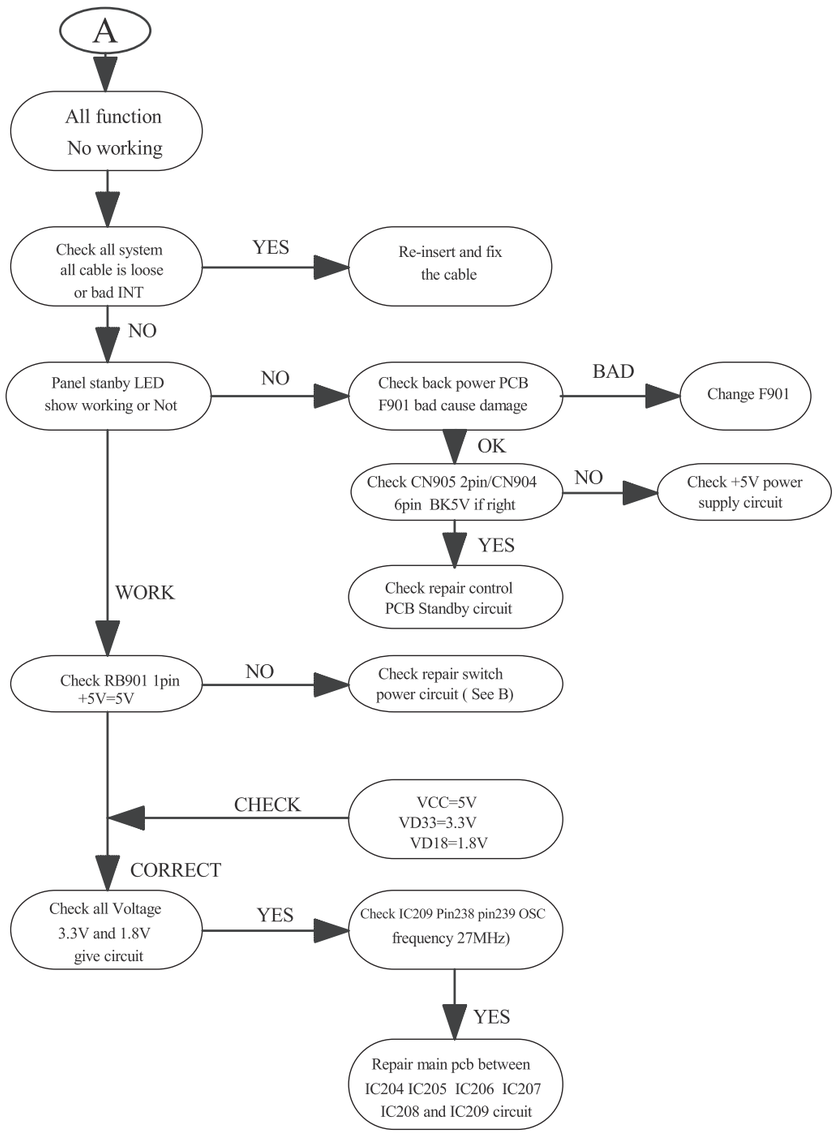
This information is confidential and may not be distributed.Only a qualified service person should reprogram the Region Code.

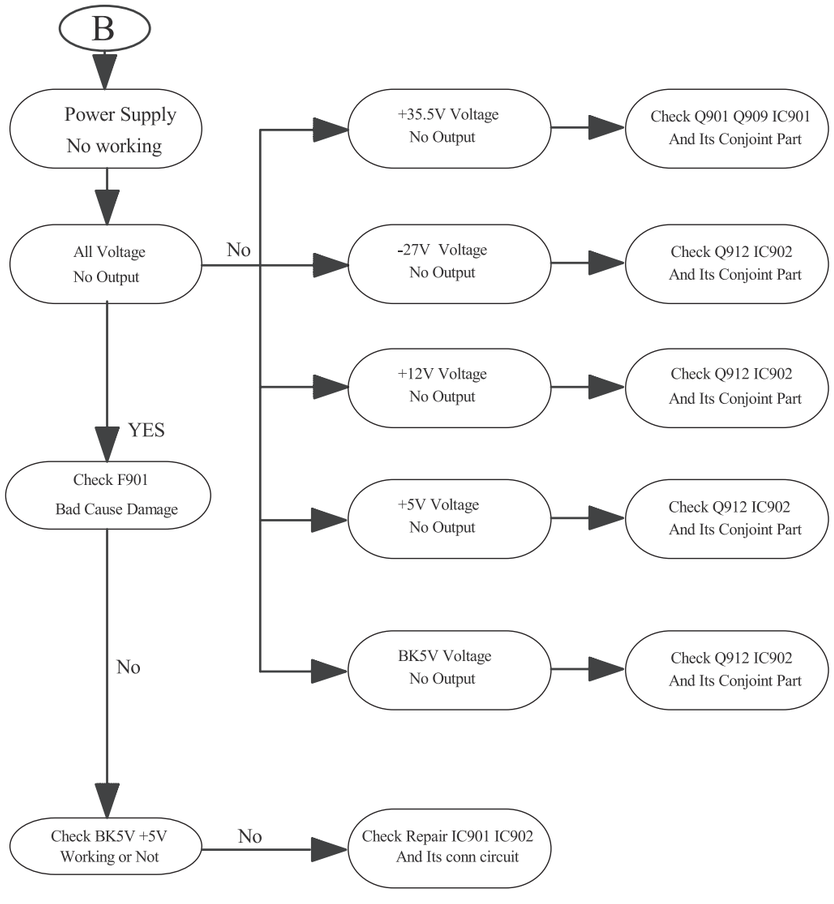
2 - 2

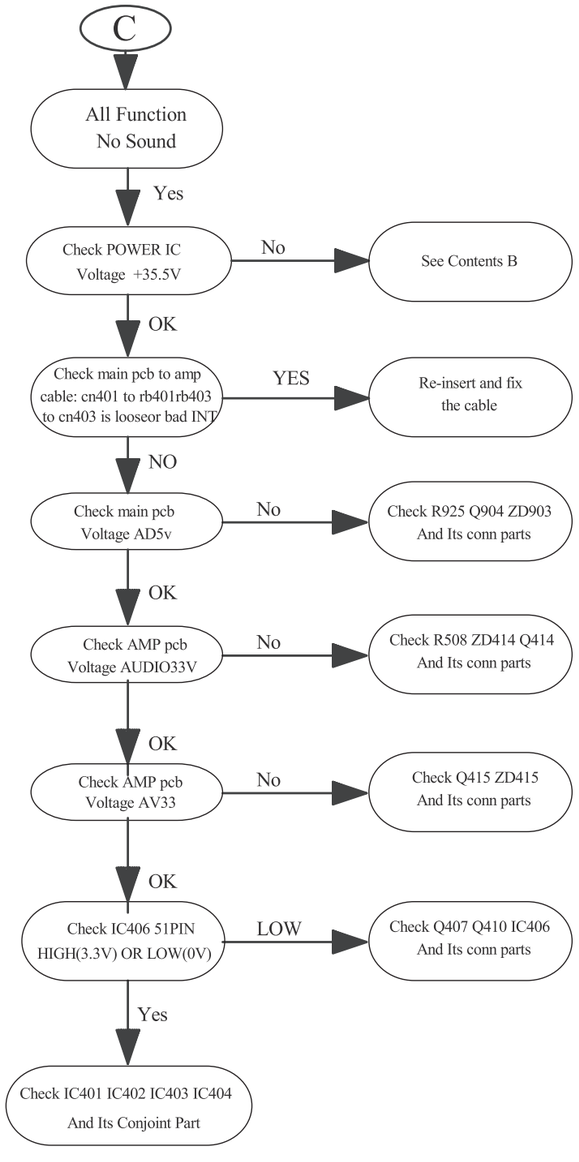
REPAIR INSTRUCTIONS (part one)

MAIN UNIT REPAIR CHART 1/3





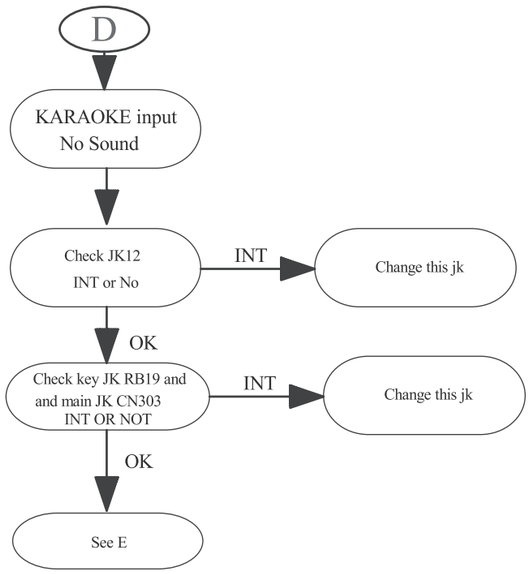


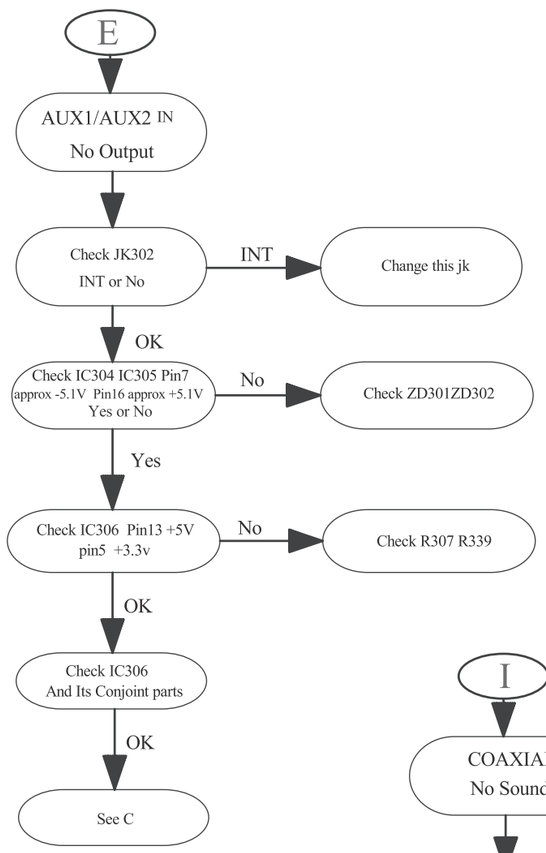


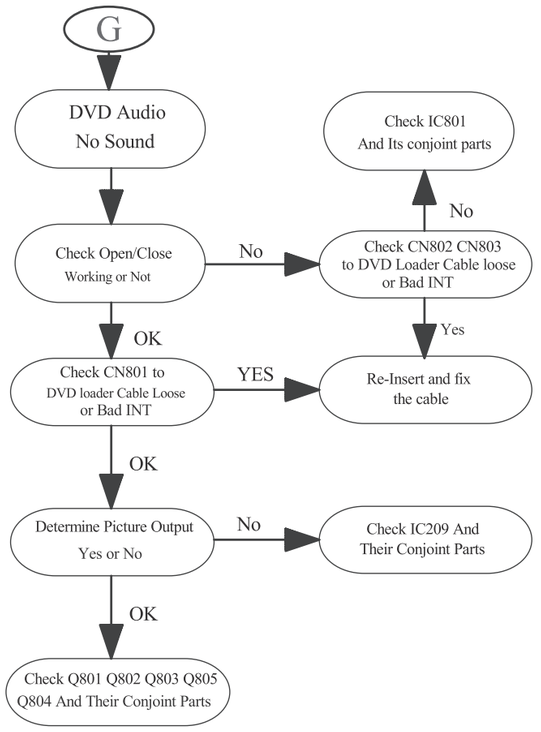
REPAIR INSTRUCTIONS (part two)

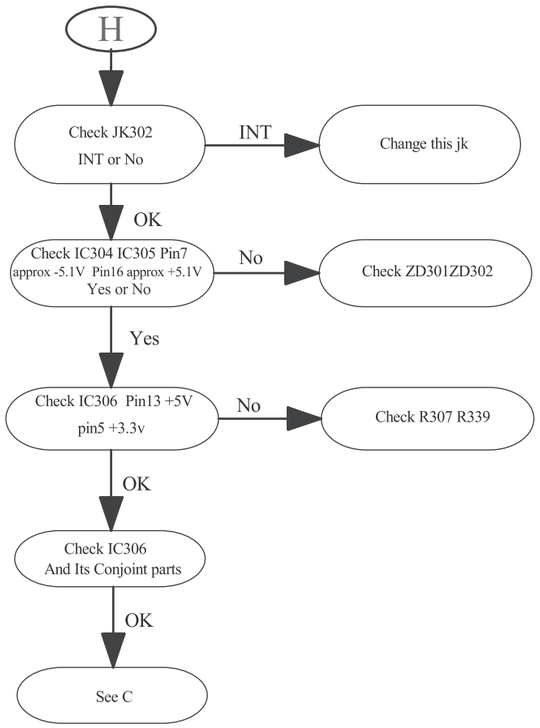
2 - 3

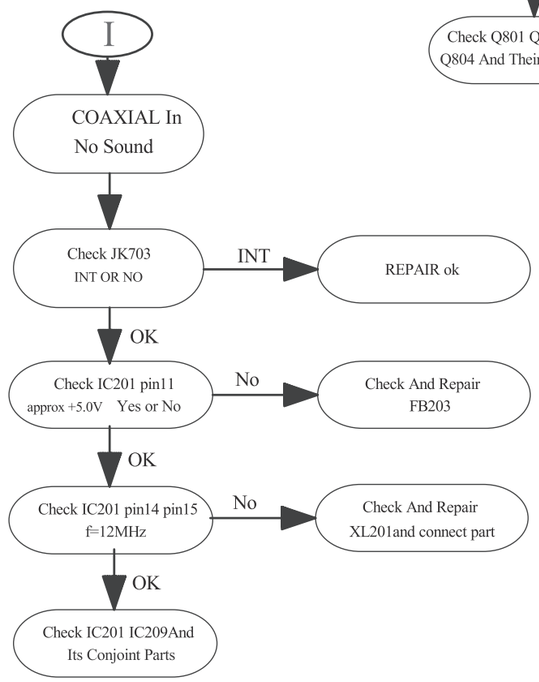
MAIN UNIT REPAIR CHART 2/3





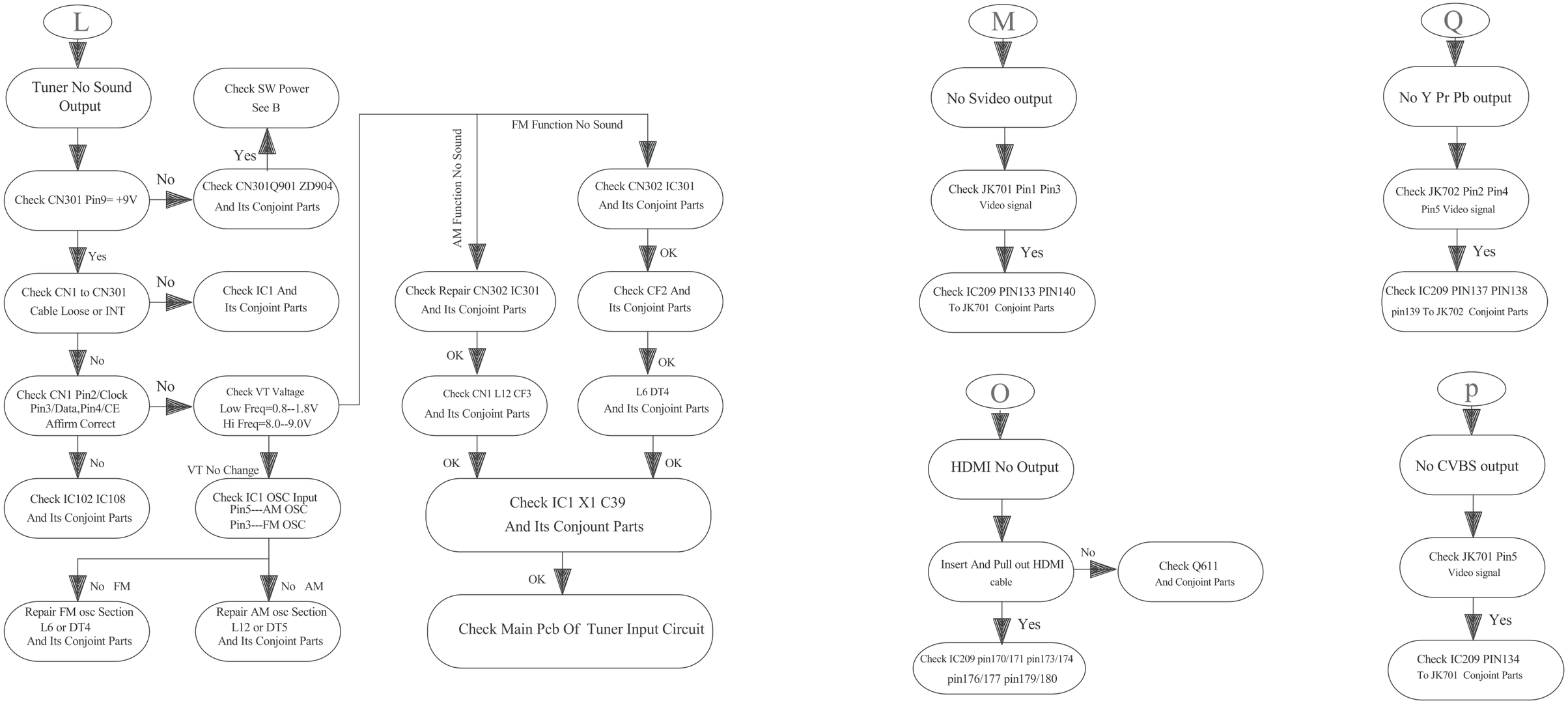






2 - 4

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.

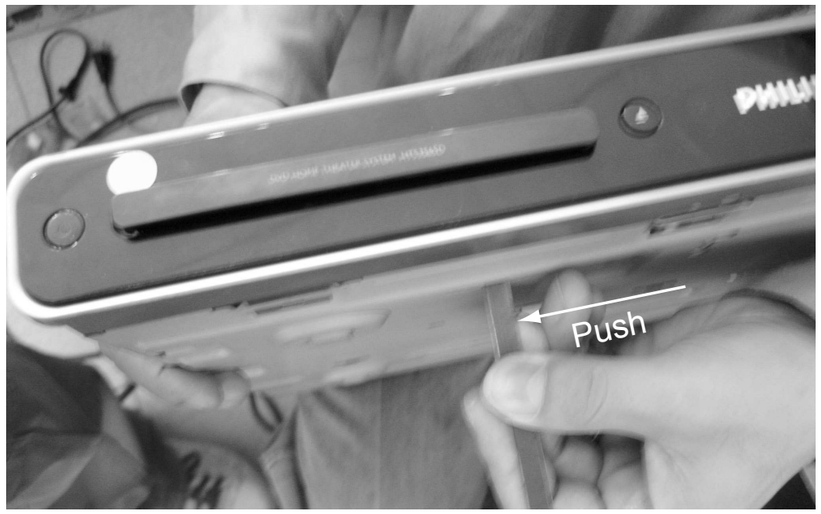


Figure 1

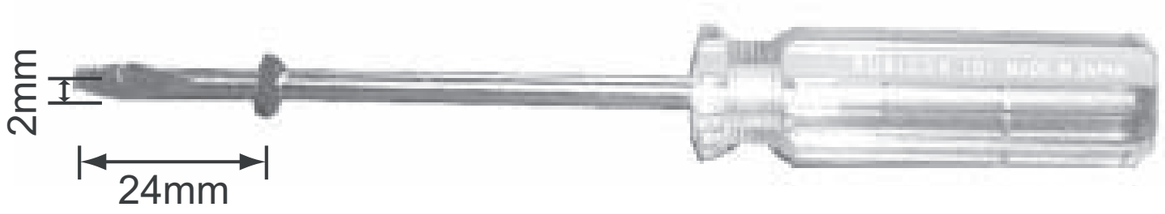


Figure 2

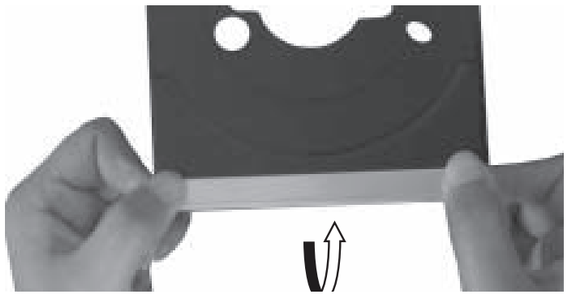


Figure 3

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

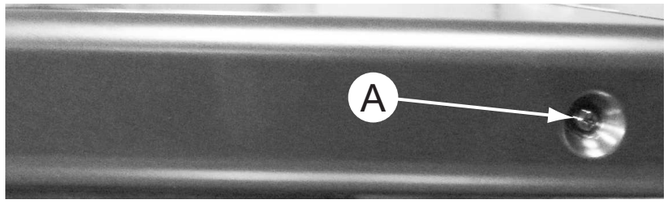


Figure 4

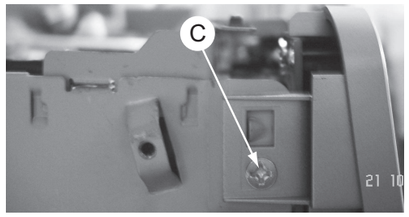


Figure 6

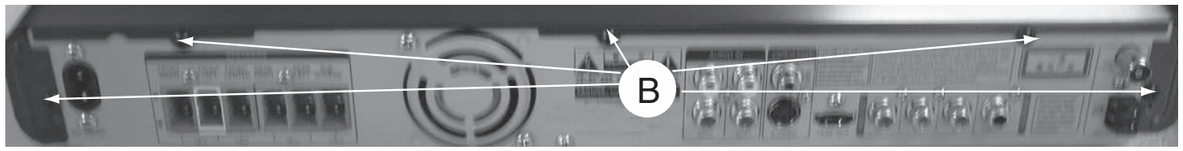


Figure 5

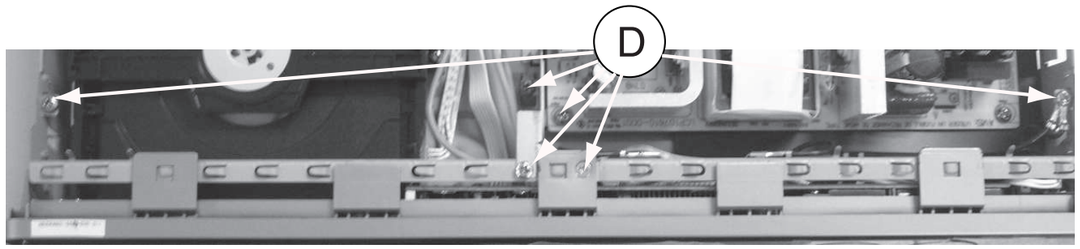


Figure 7

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

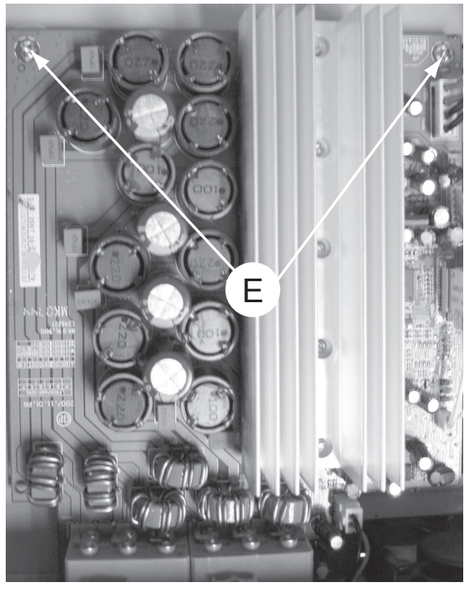


Figure 8

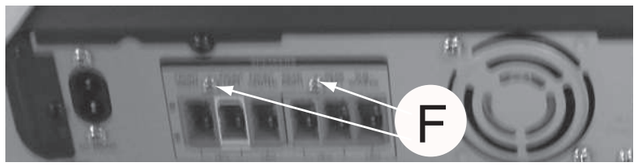


Figure 9

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

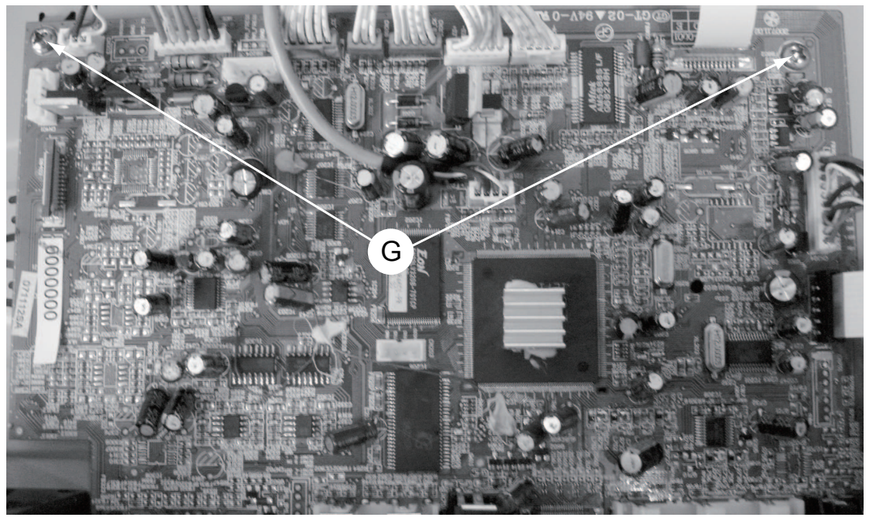


Figure 10

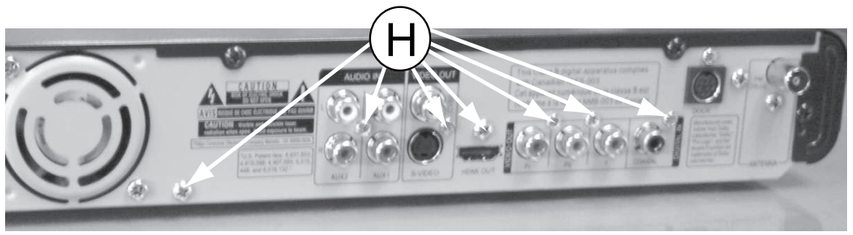


Figure 11

Dismantling of the Power Board

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

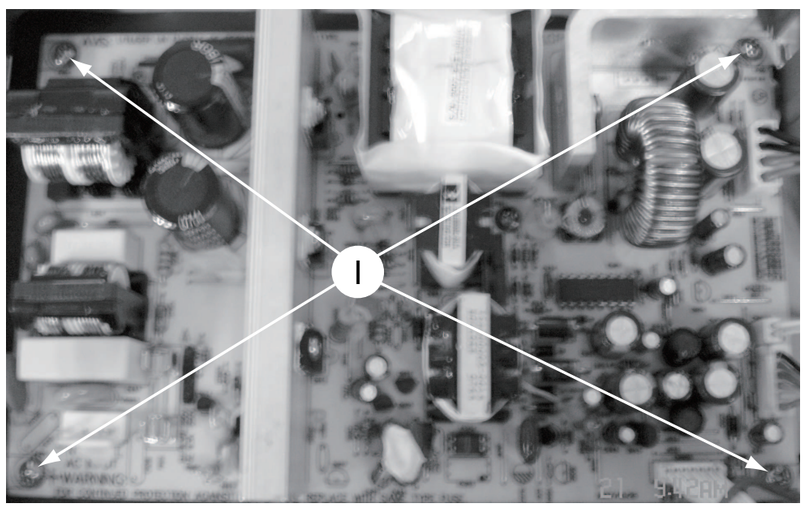


Figure 12

Dismantling of the VFD+JACK+VOL+STANDBY Board

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

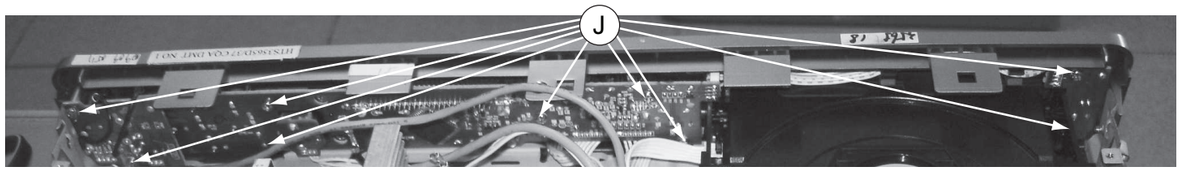


Figure 13

Dismantling of the DVD Module

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

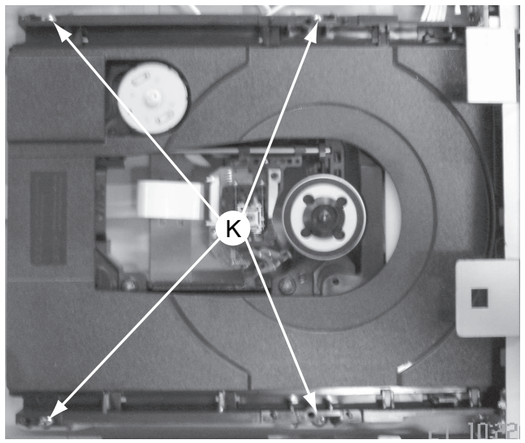
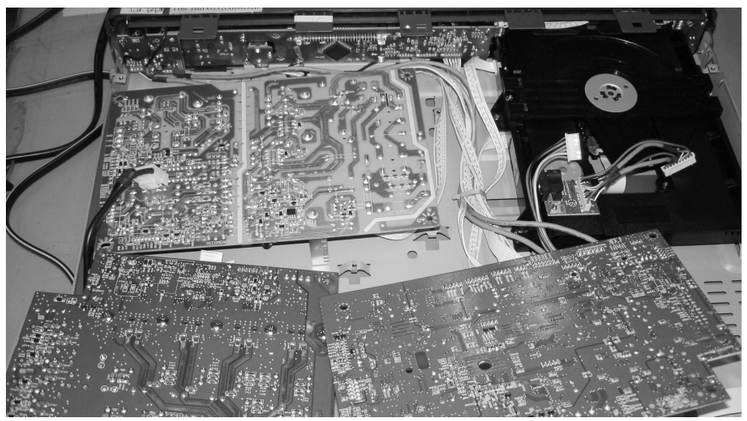


Figure 14

SERVICE POSITIONS

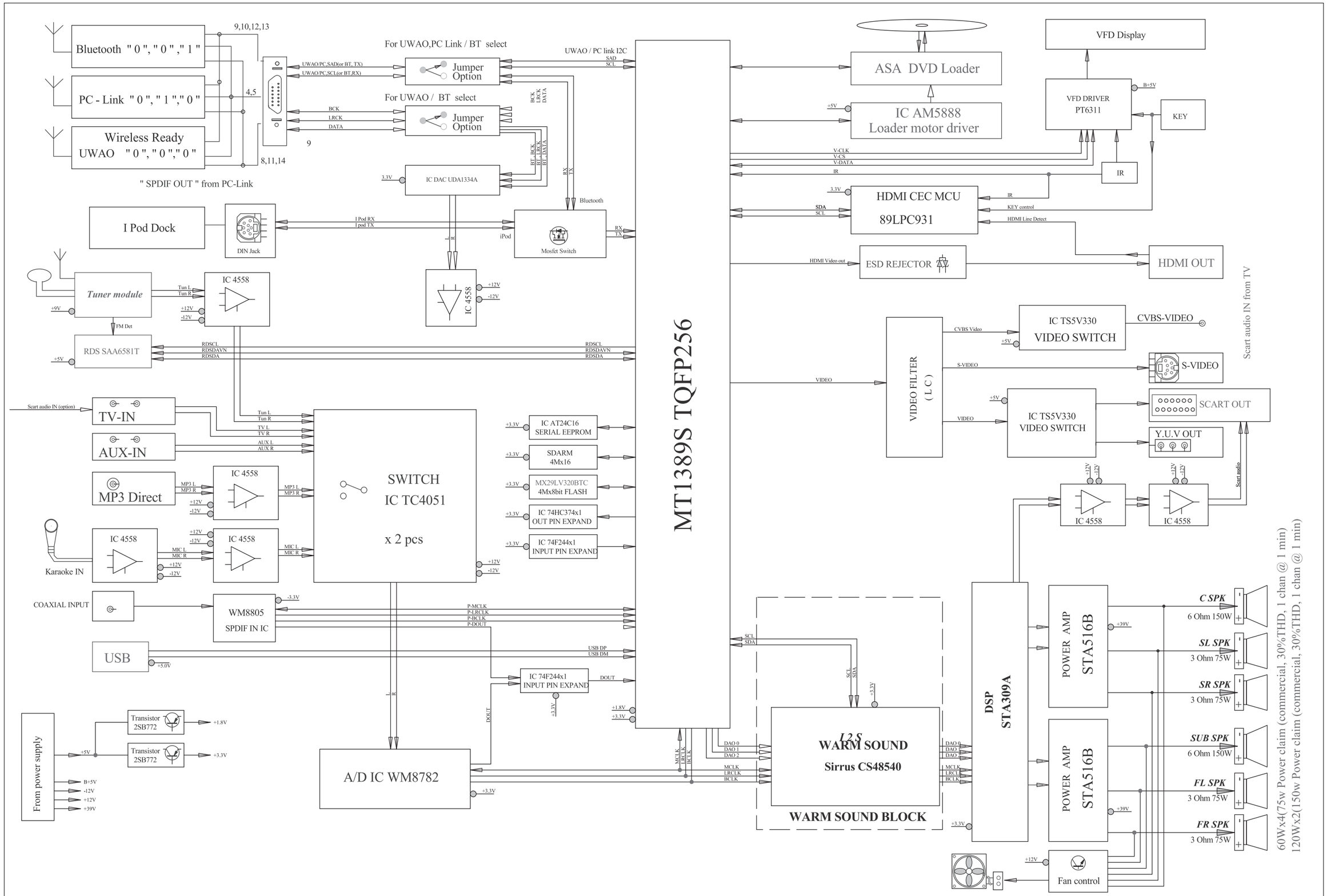
service position A (main unit)



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.

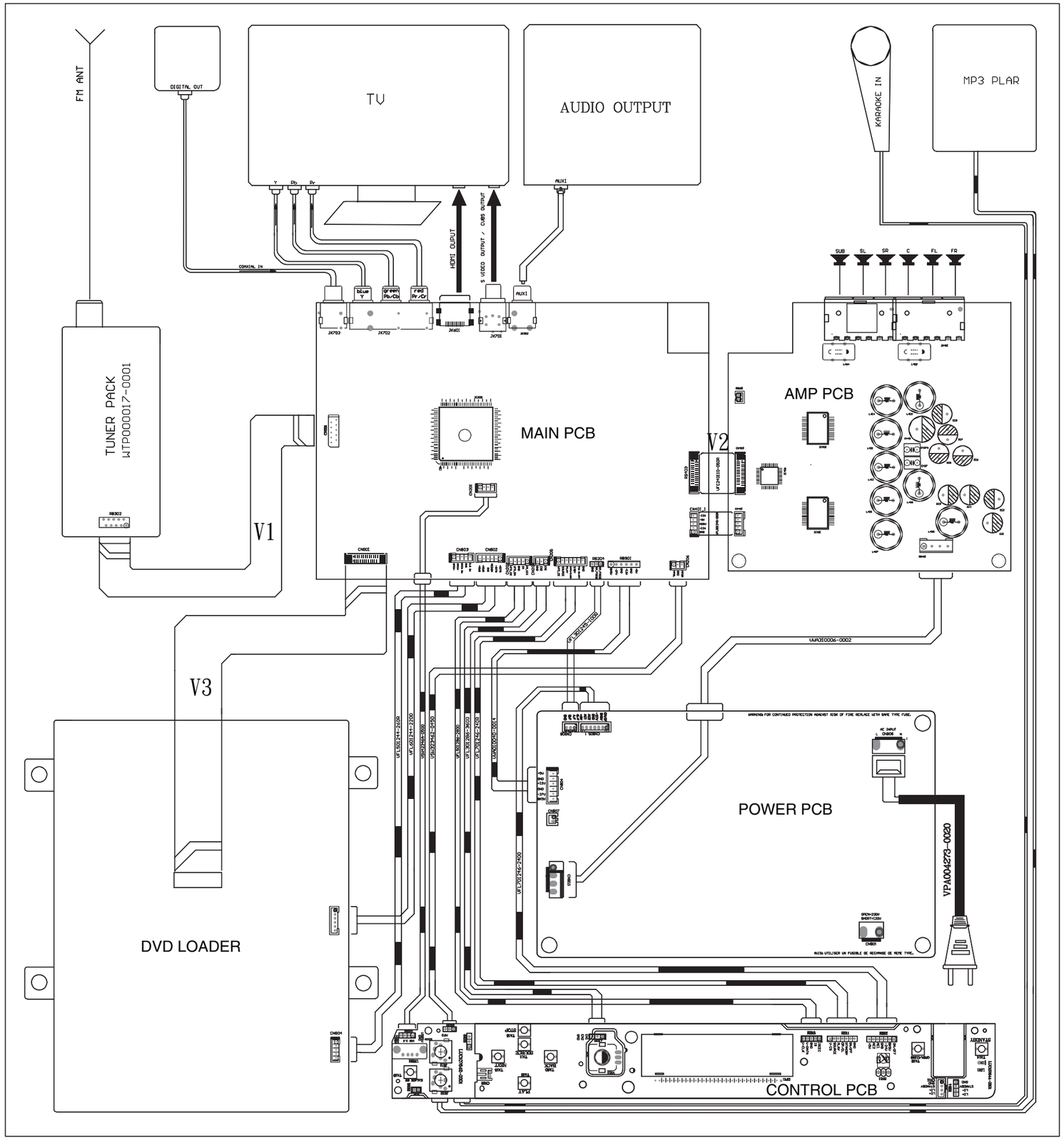
4 - 1

BLOCK DIAGRAM



4 - 2

WIRING DIAGRAM



CONTROL BOARD

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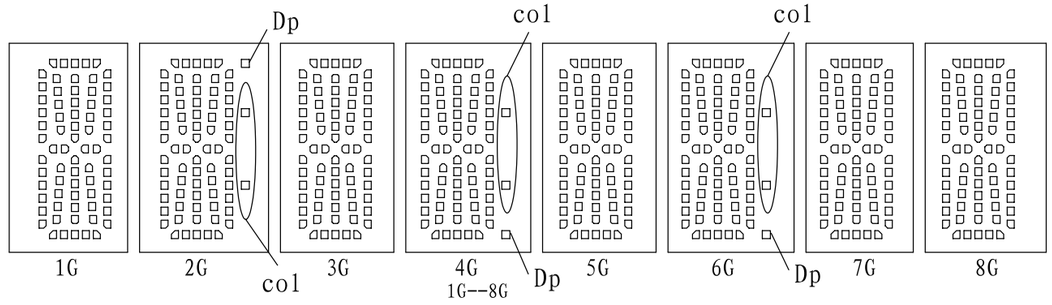
FTD DISPLAY PIN ASSIGNMENT



	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

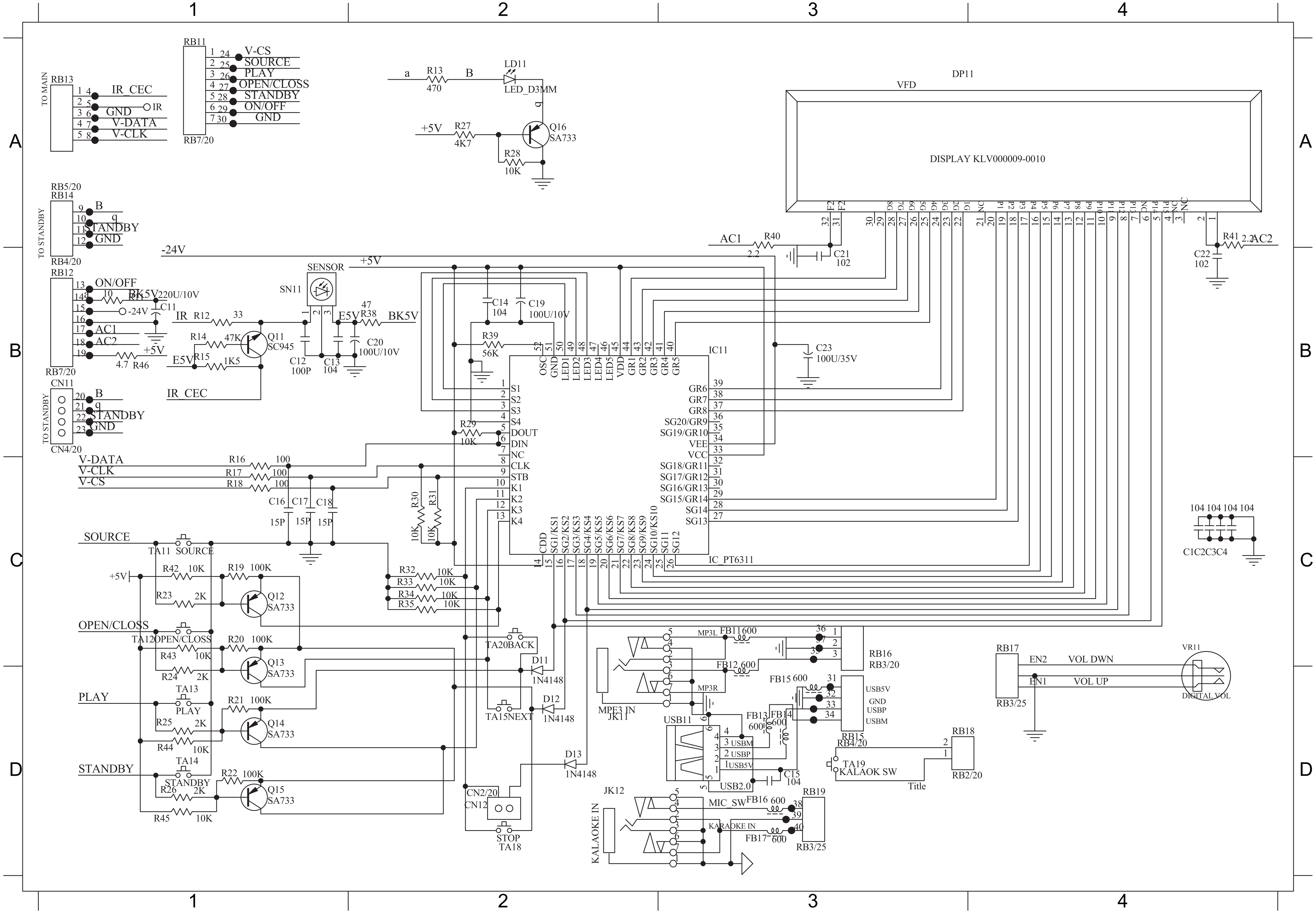
管脚序号(Pin NO.)	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
连接(Connection)	F1	F1	NP	NC	P15	P14	NC	P13	P12	P11	P10	P9	P8	P7	P6	P5
管脚序号(Pin NO.)	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
连接(Connection)	P4	P3	P2	P1	NC	1G	2G	3G	4G	5G	6G	7G	8G	NP	F2	F2

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)

CIRCUIT DIAGRAM

5 - 2

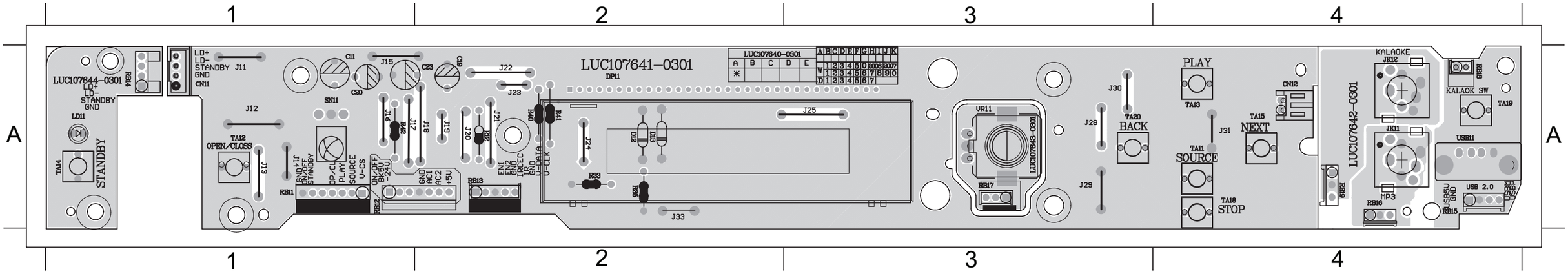
C11	B1	C15	D3	C19	B2	C23	B3	D12	D2	FB12	D3	FB16	D3	JK12	D2	Q13	C1	R11	B1	R15	B1	R19	C1	R23	C1	R27	A2	R31	C2	R35	C2	R41	A4	R45	D1	RB13	A1	RB17	C4	TA11	C1	TA15	D2	USB11	D3
C12	B1	C16	C1	C20	B2	CN11	B1	D13	D2	FB13	D3	FB17	D3	LD11	A2	Q14	D1	R12	B1	R16	C1	R20	C1	R24	D1	R28	A2	R32	C2	R38	B2	R42	C1	R46	B1	RB14	A1	RB18	D3	TA12	C1	TA18	D2		
C13	B1	C17	C1	C21	B3	CN12	D2	DP11	A3	FB14	D3	IC11	B3	Q11	B1	Q15	D1	R13	A2	R17	C1	R21	D1	R25	D1	R29	B2	R33	C2	R39	B2	R43	C1	RB11	A1	RB15	D3	RB19	D3	TA13	D1	TA19	D3		
C14	B2	C18	C1	C22	B4	D11	D2	FB11	C3	FB15	D3	JK11	D2	Q12	C1	Q16	A2	R14	B1	R18	C1	R22	D1	R26	D1	R30	C2	R34	C2	R40	A3	R44	D1	RB12	B1	RB16	C3	SN11	B1	TA14	D1	TA20	C2		



5 - 3

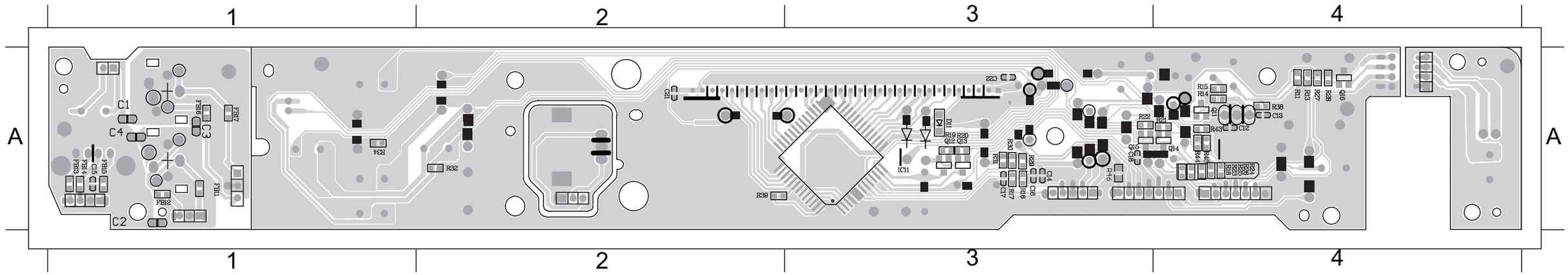
PCB LAYOUT - TOP VIEW

C11	A1	C23	A1	D12	A2	J11	A1	J14	A1	J17	A1	J20	A2	J23	A2	J28	A3	J31	A4	JK12	A4	R33	A2	R41	A2	RB12	A1	RB15	A4	RB18	A4	TA11	A4	TA14	A1	TA19	A4
C19	A2	CN11	A1	D13	A2	J12	A1	J15	A1	J18	A2	J21	A2	J24	A2	J29	A3	J33	A2	LD11	A1	R35	A2	R42	A1	RB13	A2	RB16	A4	RB19	A4	TA12	A1	TA15	A4	TA20	A3
C20	A1	CN12	A2	DP11	A2	J13	A1	J16	A1	J19	A2	J22	A2	J25	A3	J30	A3	JK11	A4	R12	A2	R40	A2	RB11	A1	RB14	A1	RB17	A3	SN11	A1	TA13	A4	TA18	A4	USB11	A4



PCB LAYOUT - BOTTOM VIEW

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



MAIN BOARD

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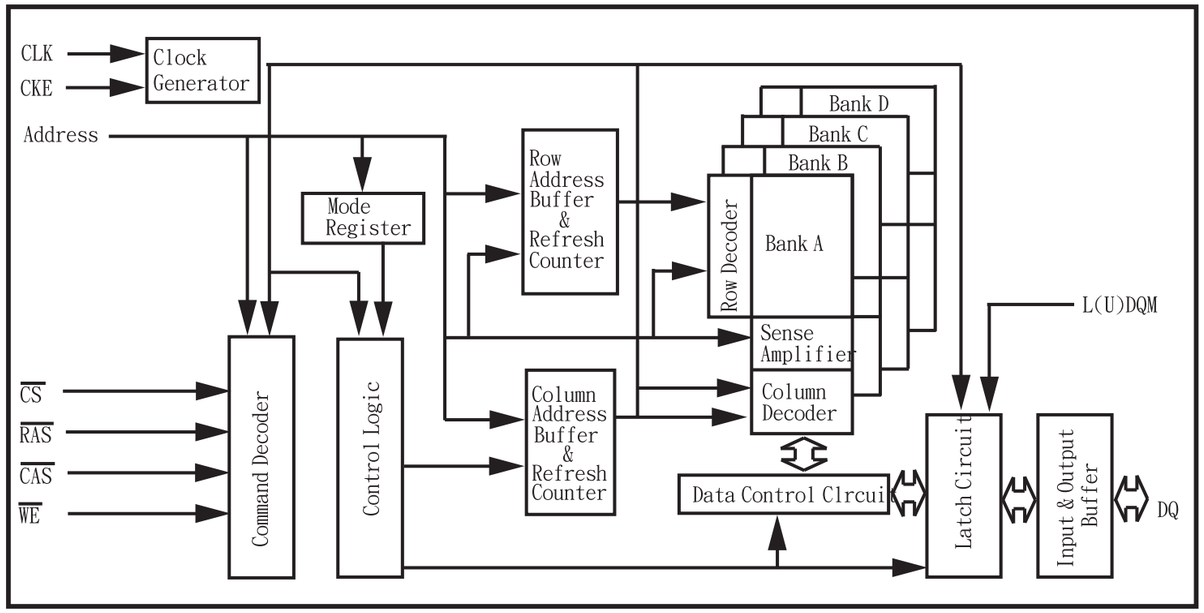
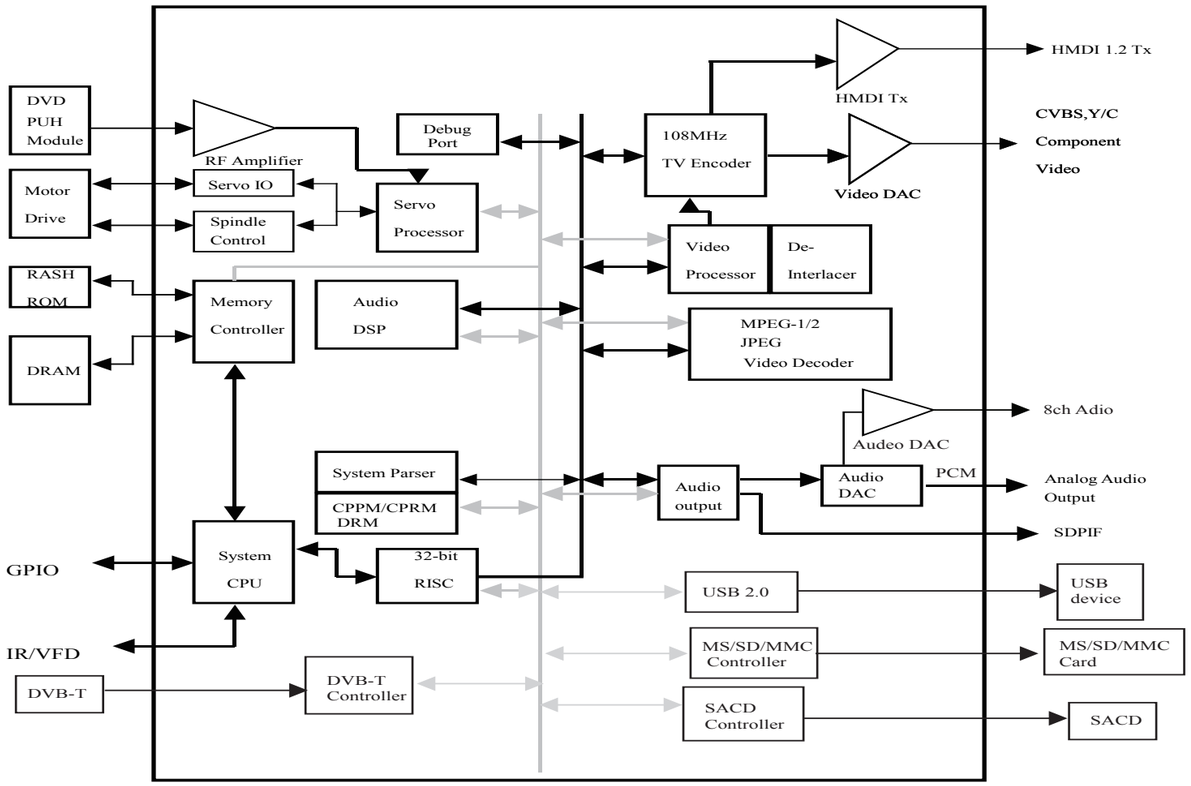
INTERNAL IC DIAGRAM - AS81F641642C



INTERNAL IC DIAGRAM - MT1389FXE



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CIRCUIT DIAGRAM - part one

AUX/TUNER/Satellite RADIO IN+AD/DA/UWAO/BLUETOOTH/PCLINK

KARAOKE USE ONLY

CN304	MAIN PCB	SIRIUS PCB	IPOD PCB
1	SSP_RX	OPEN	SSP_RX
2	SSP_TX	SSP_TX	SSP_TX
3	SCLK	SCL	GND
4	SDATA	SDA	IPOD_CVBS OUT
5	IPOD MUTE	IPOD MUTE	IPOD MUTE
6	GND	GND	GND
7	SIR_R	SIR_R	SIR_R
8	GND	GND	GND
9	SIR_L	SIR_L	SIR_L
10	+5V	+5V	+5V

Notice: CN304 if to sirius pcb pin1 R385 OPEN pin3 R387 33R R3005 OPEN pin4 R386 33R R3004 OPEN
CN304 if to IPOD DOCK pcb pin1 R385 33R pin3 R387 OPEN R3005 0R pin4 R386 OPEN R3004 0R

JK401	PIN1	PIN2	PIN3	PIN4	PIN5	PIN6	PIN7	PIN8	PIN9	PIN10	PIN11	PIN12	PIN13	PIN14
UWAO(TX)	+5V	AGND	DGND	SDA	SCL	OPEN	OPEN	GND	open	LRCK	GND	TSD	BCLK	GND
Bletooth(RX)	+5V	AGND	DGND	UART RX	UART TX	OPEN	RESET	GPIO	DADATA/SPDIF	DALRCK	OPEN	DP(DADATA)	DASCLK	GND
PCLink(RX)	+5V	AGND	DGND	SDA	SCL	GPIO	RESET	GND	DADATA/SPDIF	DALRCK	GPIO	DP(DADATA)	DASCLK	GND

JK401	PIN4		PIN5		PIN6	PIN7	PIN8		PIN9		PIN10		PIN11	PIN12		PIN13	
	FB305	FB306	FB314	FB316	FB317	FB318	R399	FB319	R368	FB320	FB321	R370	FB322	FB323	FB324	FB325	FB326
UWAO(TX)	600	OPEN	600	OPEN	OPEN	OPEN	0R	OPEN	OPEN	600	OPEN	0R	OPEN	600	OPEN	600	OPEN
Bletooth(RX)	OPEN	600	OPEN	600	OPEN	600	OPEN	600	OPEN	OPEN	600	OPEN	0R	OPEN	600	OPEN	600
PCLink(RX)	600	OPEN	600	OPEN	600	600	0R	OPEN	OPEN	OPEN	600	OPEN	0R	OPEN	600	OPEN	600

CS48540 slave /master Jump				
48540 PIN	PHILIPS	HTS	PULL UP	PULL Down
20	DSP_DAO3/HS0	S308_TSD0/OP1	R535	R517
27	DSP_DAO1/HS1	S308_TSD1	R536	R510
26	DSP_DAO2/HS2	S308_TSD2	R537	R516
31	DSP_DAO3/HS3	S308_TSD3	R534	R508

Master Mode: Use R508 R510 R516 R517 - R534 R535 R536 R537 OPEN

Slave Mode: Use R510 R517 R537, R508 R516 R534 R535 R536 OPEN

Hed for cirrus DSP debug JACK	
1	PHILIPS / HTS
2	OPEN / OPEN
3	DSP_RESET / WRST
4	DSP_DAO3/HS0 / S308_TSD0
5	DSP_BSY/EE_CS / WCS
6	DSP_DAO1/HS1 / S308_TSD1
7	DSP_IRQ / W_IRQ
8	DSP_DAO3/HS3 / S308_TSD2
9	DSP_CS / DSP_CS
10	DSP_DAO3/HS3 / S308_TSD3
11	SCP_CLK / WLK1
12	GND / GND
13	SCP_MOS1 / SCP_MOS1
14	DSP_DBDA / DSP_DBDA
15	GND / GND
16	GND / GND
17	WDA1 / WDA1
18	DSP_DBCK / DSP_DBCK

Hed for cirrus DSP debug

TO STA308A

注：600 SCB006030-6010 · 0R QCF165030-0000

EMC Add part 104p GND TO GND Olny

C301	A1	CE311	D2	R317	A2		
C302	A1	CE312	D2	R318	A1		
C305	A2	CE313	D3	R321	A2		
C306	A1	CE314	D3	R322	A2		
C309	A2	CE315	D3	R325	A2		
C311	A2	CE316	D3	R326	A2		
C313	A2	CE317	D3	R329	A3		
C315	A3	CE318	D3	R330	A3		
C316	A3	CE319	D3	R331	A3		
C317	A4	CE320	D3	R332	B3		
C318	D4	CE321	D3	R334	A3		
C319	D5	CE322	D3	R335	B3		
C320	B3	CE323	D3	R336	B3		
C321	B4	CE324	D3	R337	D4		
C322	B3	CE325	D3	R338	D5		
C323	A3	CE326	D3	R340	D4		
C324	B4	CE327	D3	R341	D4		
C325	A2	CE328	D3	R342	D4		
C326	A2	CE329	D3	R343	A3		
C329	A2	CE330	D3	R344	B3		
C330	A2	CE341	C1	R345	B1		
C331	A3	CE342	C1	R346	B1		
C334	B3	CE343	C1	R347	D4		
C335	D4	CE344	C1	R348	B1		
C336	D4	CE345	B3	R349	B1		
C337	D5	CE346	B3	R350	B1		
C338	D5	CE347	B3	R351	B1		
C339	D5	CE348	B3	R352	B1		
C340	A3	CE351	B3	R353	B1		
C341	B3	CE352	B3	R354	B1		
C342	A3	CE353	B3	R355	B1		
C343	A3	CE901	D2	R356	B2		
C344	D4	CE903	D1	R357	B2		
C346	B3	CE904	D1	R358	B2		
C349	B4	CN301	A1	R359	B2		
C350	B3	CN303	D3	R360	B3		
C351	B3	CN401	B5	R361	B3		
C352	B1	D302	D4	R362	D4		
C353	B1	D303	D4	R364	D4		
C354	B1	FB310	A4	R365	C4		
C355	B1	FB311	D3	R366	D4		
C356	B1	FB312	B1	R367	C5		
C357	B1	FB313	B1	R368	C3		
C358	D4	FB901	D2	R371	D5		
C359	C4	FB905	D1	R372	D5		
C360	C5	FE301	D3	R373	D5		
C362	B4	FE302	D3	R378	B4		
C363	B3	FE303	D3	R379	D4		
C364	D4	FE306	D4	R380	D4		
C365	D5	FE307	D4	R381	D4		
C518	C5	FE308	D4	R382	D5		
C519	C5	FE309	D4	R383	D5		
C520	C5	FE310	D4	R384	D5		
C521	C5	FE311	D4	R388	A1		
C901	D1	FE312	D4	R399	B4		
C902	D1	IC301	A2	R418	B1		
C903	D1	IC303	D4	R419	B1		
C904	D1	IC304	A2	R529	A4		
C905	D1	IC305	B2	R530	A4		
C906	D2	IC306	B3	R531	A4		
C907	D1	IC309	A4	R532	A4		
C908	D2	IC801	A5	R533	A4		
C909	D2	JK302	B1	R904	D1		
C911	D2	L301	D3	R911	D1		
C912	D2	Q302	D4	R912	D2		
C918	D2	Q303	D4	R913	D2		
C919	D2	Q304	D4	R924	D2		
C920	D1	Q305	A4	R925	D2		
C921	D1	Q722	A3	R928	D2		
C922	D2	Q723	A3	R929	D2		
C923	D2	Q724	A3	RB403	C5		
C924	D1	Q901	D2	RB901	C1		
C928	D1	Q903	D1	ZD301	A2		
C929	D1	Q904	D2	ZD302	A3		
C932	D1	R301	A1	ZD901	D1		
C935	D2	R3018	A4	ZD902	D1		
C936	D2	R3019	A2	ZD903	D2		
CE301	D2	R302	A1	ZD904	D2		
CE302	D2	R3020	B2				
CE303	D2	R305	A4				
CE304	D2	R306	D4				
CE305	D2	R307	B3				
CE306	D2	R308	A4				
CE307	D2	R309	A1				
CE308	D2	R310	A1				
CE309	D2	R313	A2				
CE310	D2	R314	A2				

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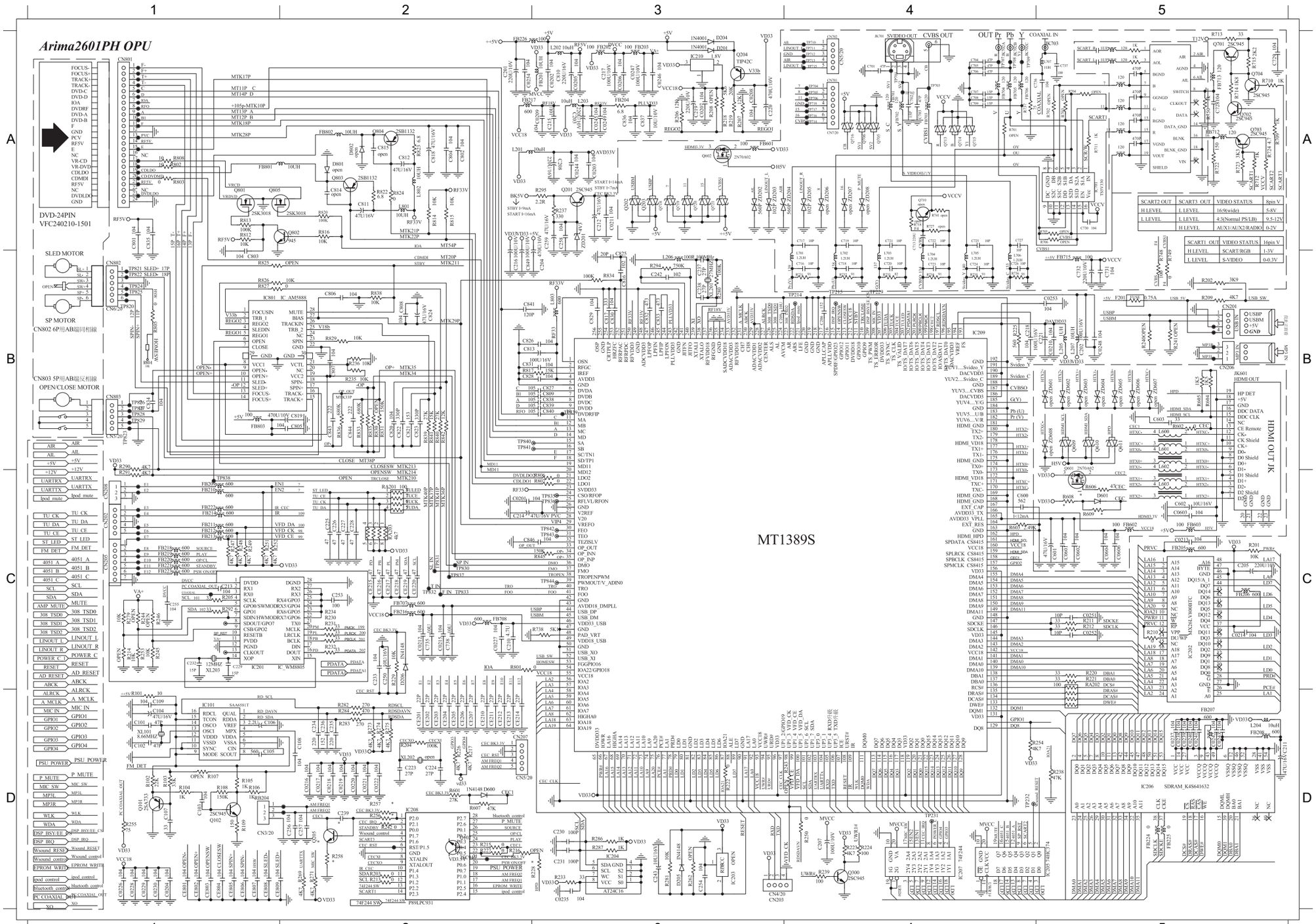
CIRCUIT DIAGRAM - part two



C0201	C2	C706	A4	CN205	C1	Q713	A4	R814	A2
C0202	A3	C707	A4	CN206	B5	Q714	A4	R815	A2
C0203	A3	C708	A4	CN208	C1	Q715	A4	R816	A2
C0204	D1	C709	A4	CN801	A1	Q716	A4	R817	B2
C0205	A3	C713	B5	CN802	B1	Q801	A1	R820	A2
C0206	A3	C716	B4	CN803	B1	Q802	A2	R822	A2
C0207	A3	C717	A4	CO254	A2	Q803	A2	R823	A2
C0208	A3	C718	B4	D201	A3	Q804	A2	R824	A2
C0209	A3	C719	A4	D204	A3	Q805	A1	R826	B1
C0210	B5	C720	B4	D205	D3	R201	C5	R827	B1
C0211	A3	C721	A4	D600	D2	R202	B5	R829	B2
C0212	C2	C722	A4	F201	B5	R203	D2	R831	B2
C0213	C5	C723	B4	FB201	A3	R205	C1	R833	B2
C0214	C5	C724	B4	FB202	A3	R206	A3	R834	B3
C0215	C2	C725	A4	FB203	A3	R207	A3	R835	B2
C0216	D2	C726	B4	FB204	A3	R209	B5	R836	B2
C0217	D2	C727	A4	FB205	C5	R210	C5	R838	B2
C0218	D2	C732	B5	FB206	C5	R211	C5	R839	B2
C0219	D2	C735	C2	FB207	D5	R212	C5	R840	B2
C0220	D2	C736	A4	FB208	D5	R213	D2	R841	B2
C0221	D2	C737	A5	FB209	C1	R215	D2	R842	B2
C0222	D2	C738	C2	FB210	C1	R217	D2	R845	C3
C0226	D1	C801	A1	FB211	C1	R218	A3	RA201	C2
C0227	C2	C802	A2	FB212	C1	R219	A3	RA202	C5
C0228	D1	C803	B1	FB213	B5	R220	C5	RA203	C2
C0229	D1	C804	A2	FB214	C1	R221	C5	RB204	D1
C0230	D1	C805	B2	FB216	C2	R222	D3	XL201	B3
C0235	D3	C806	B2	FB217	A2	R223	D4	XL203	C1
C0237	D5	C807	B2	FB218	C1	R224	D4	ZD201	A3
C0238	D5	C808	B2	FB219	C1	R225	B4		
C0239	D5	C809	B3	FB220	C1	R226	D2		
C0240	D5	C810	A3	FB221	C1	R227	D2		
C0241	D5	C811	A2	FB222	C1	R228	D3		
C0242	D5	C812	A2	FB223	C1	R230	C2		
C0243	D5	C813	B3	FB224	D5	R231	C2		
C0244	A3	C816	B3	FB225	D5	R232	C2		
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C0246	A3	C818	A2	FB601	A3	R234	C2		
C0247	A3	C819	B2	FB602	C5	R235	B2		
C0248	B5	C820	B2	FB603	C5	R236	B2		
C0249	A3	C821	B2	FB701	A4	R237	A3		
C0251	C5	C822	B2	FB702	A4	R238	D5		
C0252	C5	C823	B2	FB703	A4	R239	D4		
C0253	B5	C824	B2	FB704	A4	R242	D2		
C0601	C5	C825	B3	FB705	A4	R245	C1		
C0602	C5	C826	B3	FB706	A4	R247	C1		
C0603	C5	C827	B3	FB707	C2	R248	C1		
C0604	C5	C828	B3	FB708	C2	R249	C1		
C0606	C5	C829	B3	FB715	B5	R250	D4		
C201	A2	C830	B3	FB801	A1	R251	C1		
C202	B5	C831	B3	FB802	A2	R252	C1		
C203	A3	C832	B3	FB803	B1	R253	C1		
C204	B3	C833	B3	IC201	C1	R269	D2		
C205	C5	C834	B1	IC202	C5	R271	D2		
C206	B4	C835	A1	IC203	D3	R274	D2		
C207	D4	C836	A3	IC204	D3	R279	C1		
C208	A3	C837	A3	IC205	D4	R280	B3		
C209	B3	C838	B3	IC206	D5	R281	D3		
C210	C2	C839	B3	IC207	D4	R286	D3		
C211	D5	C840	B3	IC208	D2	R287	D3		
C213	C1	C841	B2	IC209	B4	R290	B1		
C214	C2	C843	B2	IC210	A3	R291	C1		
C215	A3	C844	B2	IC801	B1	R292	C1		
C216	B2	C846	C3	JK601	B5	R294	B3		
C217	A3	C849	B2	JK701	A4	R295	A3		
C218	B4	CE201	D2	JK702	A4	R601	D2		
C219	A3	CE202	D2	JK703	A5	R602	B5		
C220	A3	CE203	D2	L201	A2	R603	C4		
C221	B5	CE204	D2	L202	A3	R604	B5		
C225	C2	CE205	D2	L203	A3	R605	B5		
C226	C2	CE206	D2	L204	D5	R606	C5		
C227	C2	CE207	D2	L205	B5	R701	A4		
C228	C2	CE210	D2	L206	B3	R703	A5		
C229	C1	CE211	D2	L207	B5	R706	A5		
C230	D3	CE212	D2	L701	B4	R731	B4		
C231	D3	CE213	D2	L702	B4	R732	B4		
C232	C1	CE214	D2	L703	B4	R733	B4		
C237	B3	CE215	C2	L704	B4	R734	B4		
C238	B3	CE216	C2	L705	B4	R735	B4		
C242	B3	CE217	C2	L706	B4	R736	B4		
C243	D3	CE218	C2	L707	A5	R737	A4		
C253	C2	CE219	C2	L801	A2	R738	C3		
C254	D3	CE220	C2	L802	A2	R748	B5		
C255	C1	CE801	D1	L803	B3	R749	B5		
C259	A3	CE802	D1	Q201	A3	R801	C2		
C600	C4	CE803	D1	Q202	A3	R802	A1		
C601	C5	CE804	D1	Q203	A3	R803	A1		
C602	C5	CE805	D1	Q204	A3	R804	B1		
C603	B5	CE806	D1	Q300	D4	R805	B1		
C701	A4	CE807	D1	Q601	C5	R806	C3		
C702	A4	CE808	D1	Q602	A3	R807	C3		
C703	A4	CE809	D1	Q611	B5	R808	A1		
C704	A4	CN201	B5	Q705	A4	R812	A1		
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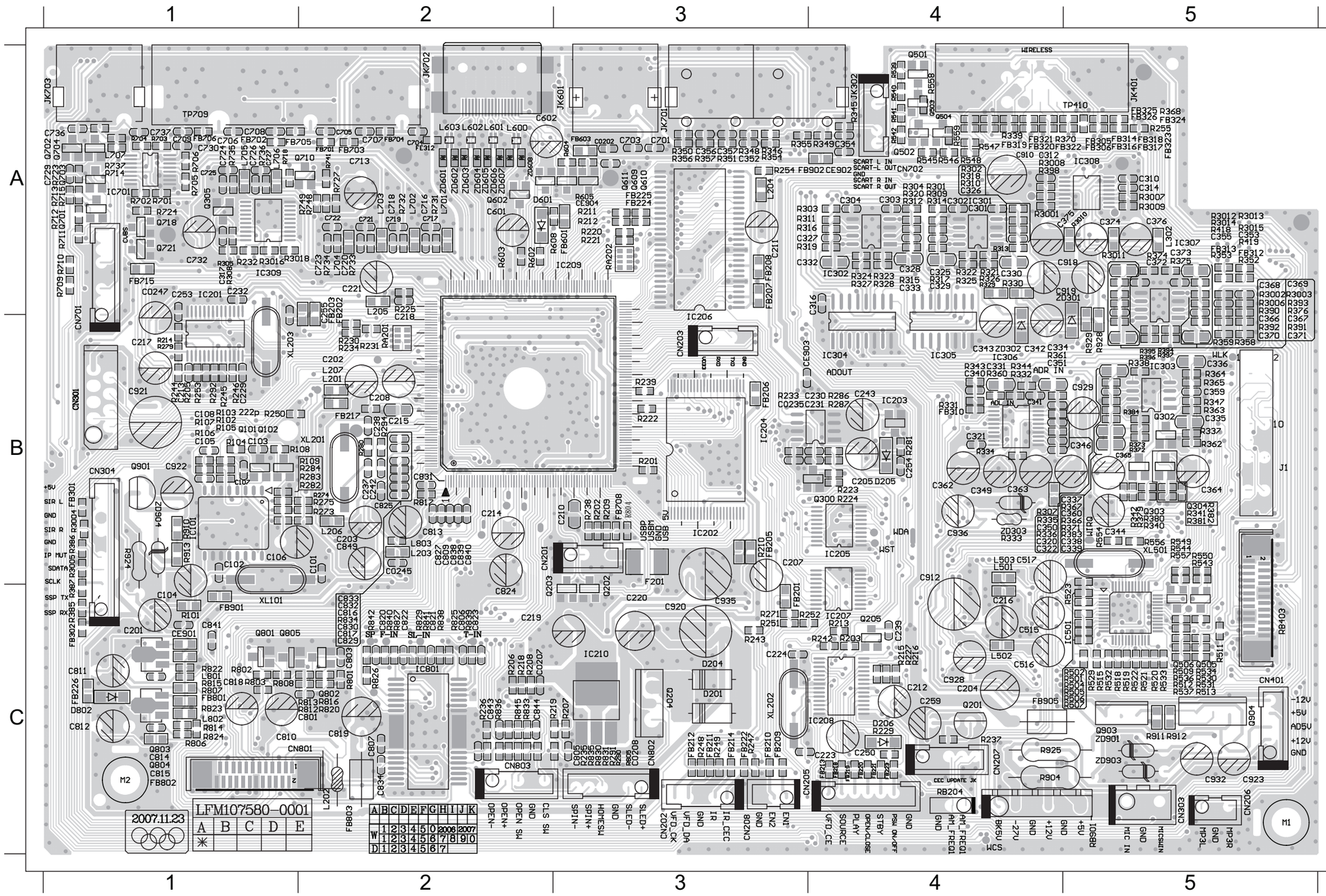
PCB LAYOUT - TOP VIEW



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C0208	C3	C719	A2	FB213	C4	Q901	B1	R350	A3	R925	C4
C0235	B3	C720	A2	FB214	C3	Q903	C5	R351	A3	R928	B5
C0245	B2	C721	A2	FB217	B2	Q904	C5	R352	A5	R929	B5
C0247	A1	C722	A2	FB218	C4	R201	B3	R353	A5	RA201	B2
C201	C1	C723	A2	FB219	C4	R202	B3	R354	A3	RA202	A3
C202	B2	C724	A1	FB220	C4	R203	C4	R355	A3	RB204	C4
C203	B2	C725	A1	FB221	C4	R205	B1	R356	A3	RB403	C5
C204	C4	C726	A1	FB222	C3	R206	C2	R357	A3	RB901	C5
C205	B4	C727	A1	FB223	C4	R207	C3	R358	B5	XL201	B2
C207	B3	C732	A1	FB224	A3	R209	B3	R359	B5	XL203	B1
C208	B2	C736	A1	FB225	A3	R210	B3	R360	B5	ZD301	A5
C210	B3	C737	A1	FB226	C1	R211	A3	R361	B5	ZD302	B4
C211	A3	C801	C2	FB310	B5	R212	A3	R362	B5	ZD901	C5
C213	B1	C803	C2	FB312	A5	R213	C4	R364	B5	ZD903	C5
C214	B2	C805	C3	FB313	A5	R215	C4	R365	B5	ZD904	B1
C215	B2	C806	C2	FB601	A3	R218	C2	R366	B5		
C216	C4	C807	C2	FB603	A3	R219	C2	R367	B5		
C217	B1	C809	B2	FB701	A2	R220	A3	R368	A5		
C218	A2	C810	C1	FB702	A1	R221	A3	R371	B5		
C219	C2	C811	C1	FB703	A2	R222	B3	R372	B5		
C220	C3	C812	C1	FB704	A2	R223	B4	R373	B5		
C221	A2	C813	B2	FB705	A1	R224	B4	R379	B5		
C229	B1	C816	C2	FB706	A1	R225	A2	R380	B5		
C230	B4	C817	C2	FB708	B3	R227	C4	R381	B5		
C231	B4	C818	C1	FB715	A1	R230	B2	R382	B5		
C232	A1	C819	C2	FB801	C1	R231	B2	R383	B5		
C237	B2	C820	C2	FB802	C1	R232	A1	R384	B5		
C238	B2	C821	C2	FB803	C2	R233	B3	R418	A5		
C242	B2	C822	C2	FB901	C1	R234	B2	R419	A5		
C243	B4	C823	C2	FB905	C4	R235	C3	R529	C5		
C253	A1	C824	B2	FE312	A2	R236	C2	R530	C5		
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C255	A2	C827	B2	IC202	B3	R239	B3	R532	C5		
C259	C4	C829	C2	IC203	B4	R242	C4	R533	C5		
C301	A4	C830	C2	IC204	B3	R245	B1	R602	A2		
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C316	A4	C832	C2	IC206	A3	R248	C3	R604	A3		
C317	A1	C833	C2	IC207	C4	R249	C3	R605	A3		
C320	B5	C834	C2	IC208	C4	R250	B1	R701	A1		
C321	B5	C838	B2	IC209	B2	R251	C3	R703	A1		
C322	B5	C839	B2	IC210	C3	R252	C3	R706	A1		
C325	A4	C840	B2	IC301	A4	R253	B1	R731	A2		
C326	A4	C841	C1	IC303	B5	R271	C3	R732	A2		
C329	A4	C843	C2	IC304	B4	R274	B2	R733	A2		
C330	A4	C844	C2	IC305	B4	R279	B1	R734	A2		
C331	B5	C849	B2	IC306	B4	R280	B2	R735	A1		
C334	A4	C912	C4	IC309	A1	R281	B4	R736	A1		
C335	B5	C918	A5	IC801	C2	R286	B4	R737	A1		
C336	B5	C919	A5	IC801	C5	R287	B4	R738	B3		
C337	B5	C920	C3	JK302	A4	R290	C3	R748	A2		
C338	B5	C921	B1	JK601	A3	R291	C3	R749	A2		
C339	B5	C922	B1	JK701	A3	R292	B1	R801	C2		
C340	B5	C923	C5	JK702	A2	R301	A4	R802	C1		
C341	B5	C928	C4	JK703	A1	R3018	A1	R803	C1		
C342	B4	C929	B5	L201	B2	R302	A4	R805	C3		
C343	B4	C932	C5	L202	C2	R305	A1	R806	C1		
C344	B5	C935	C3	L203	B2	R307	B5	R807	C1		
C346	B5	C936	B5	L204	A3	R308	A1	R808	C1		
C349	B5	CE901	C1	L205	A2	R309	A4	R812	C2		
C350	B5	CE903	B3	L206	B2	R310	A4	R813	C2		
C351	B5	CE904	A3	L207	B2	R313	A4	R814	C1		
C352	A3	CN201	B3	L701	A2	R314	A4	R815	C1		
C353	A5	CN202	C3	L702	A2	R317	A4	R816	C2		
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C356	A3	CN208	C3	L705	A1	R322	A4	R822	C1		
C357	A3	CN301	B1	L706	A1	R325	A4	R823	C1		
C359	B5	CN303	C5	L707	A1	R326	A4	R824	C1		
C360	B5	CN401	C5	L801	C1	R329	A4	R826	C2		
C362	B5	CN801	C1	L802	C1	R330	A4	R827	C2		
C363	B5	CN802	C3	L803	B2	R331	B4	R829	C2		
C364	B5	CN803	C2	Q201	C4	R332	B4	R831	C3		
C365	B5	D201	C3	Q202	C3	R334	B4	R833	C2		
C601	A2	D204	C3	Q203	C3	R335	B4	R834	C2		
C602	A2	D205	B4	Q204	C3	R336	B4	R835	C3		
C701	A3	F201	B3	Q300	B5	R337	B5	R836	C2		
C703	A3	FB201	C3	Q302	B5	R338	B5	R838	C2		
C704	A2	FB202	A2	Q303	B5	R340	B5	R839	C2		
C705	A2	FB203	A2	Q304	B5	R341	B5	R840	C2		
C706	A1	FB205	B3	Q305	A1	R342	B5	R841	C2		
C707	A2	FB206	B3	Q602	A2	R343	B4	R842	C2		
C708	A1	FB207	A3	Q611	A3	R344	B4	R845	C2		
C709	A1	FB208	A3	Q801	C1	R345	A4	R904	C4		
C713	A2	FB209	C3	Q802	C2	R346	A3	R911	C5		
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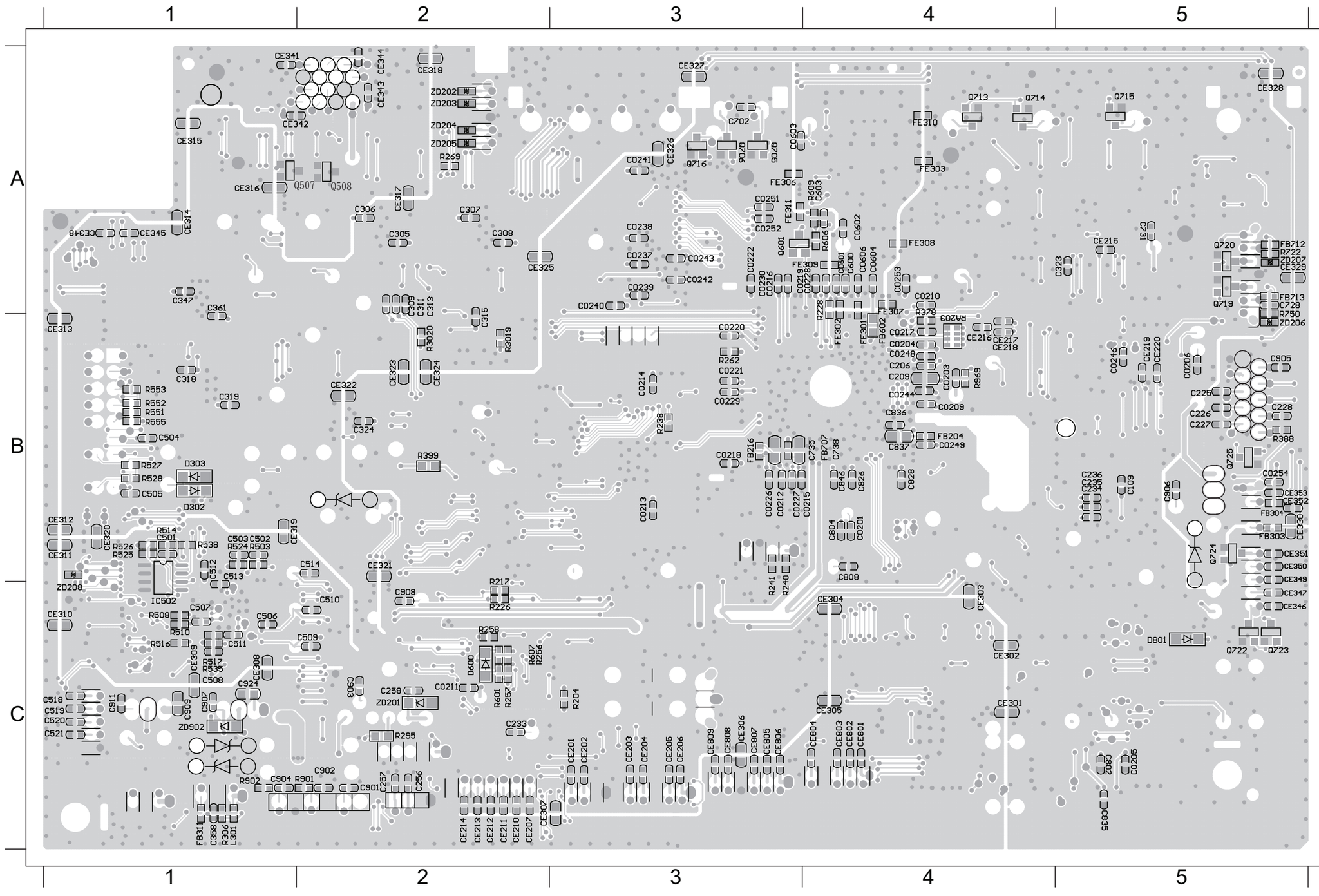
PCB LAYOUT - BOTTOM VIEW



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C0209	B4	C837	B4	CE352	B5
C0210	A4	C846	B4	CE353	B5
C0211	C2	C901	C2	CE801	C4
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C0213	B3	C903	C2	CE803	C4
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C0216	A3	C906	B5	CE806	C3
C0217	B4	C907	C1	CE807	C3
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C0220	B3	C911	C1	CO254	B5
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C0222	A3	CE201	C3	D303	B1
C0226	B3	CE202	C3	D600	C2
C0227	B3	CE203	C3	FB204	B4
C0228	A4	CE204	C3	FB216	B3
C0229	B3	CE205	C3	FB311	C1
C0230	A3	CE206	C3	FB602	B4
C0237	A3	CE207	C2	FB707	B4
C0238	A3	CE210	C2	FE301	B4
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C0240	A3	CE212	C2	FE303	A4
C0241	A3	CE213	C2	FE306	A3
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C227	B5	CE312	B1	R228	A4
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C315	A2	CE319	B1	R378	B4
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C319	B1	CE321	B2	R399	B2
C323	A5	CE322	B2	R601	C2
C324	B2	CE323	B2	R606	A4
C518	C1	CE324	B2	R804	B3
C519	C1	CE325	A2	RA203	B4
C520	C1	CE326	A3	ZD201	C2
C521	C1	CE327	A3	ZD902	C1
C600	A4	CE328	A5		
C603	A4	CE329	A5		
C702	A3	CE330	B5		
C735	B4	CE341	A1		
C738	B4	CE342	A1		
C802	C5	CE343	A2		
C804	B4	CE344	A2		

POWER BOARD

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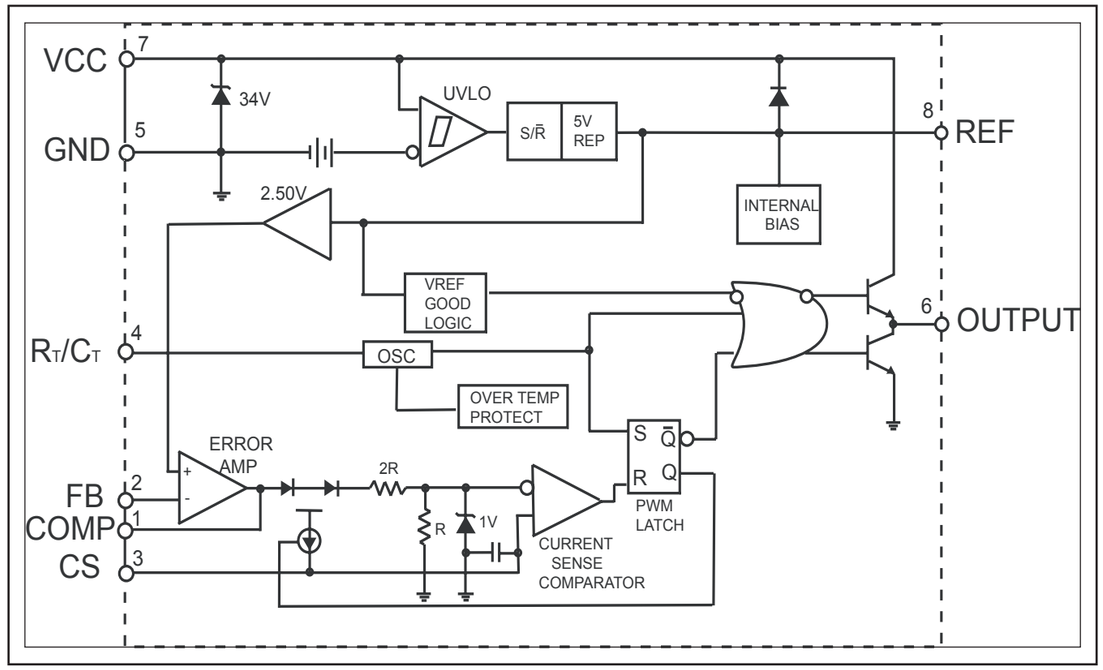
INTERNAL IC DIAGRAM - AP3843GMTR



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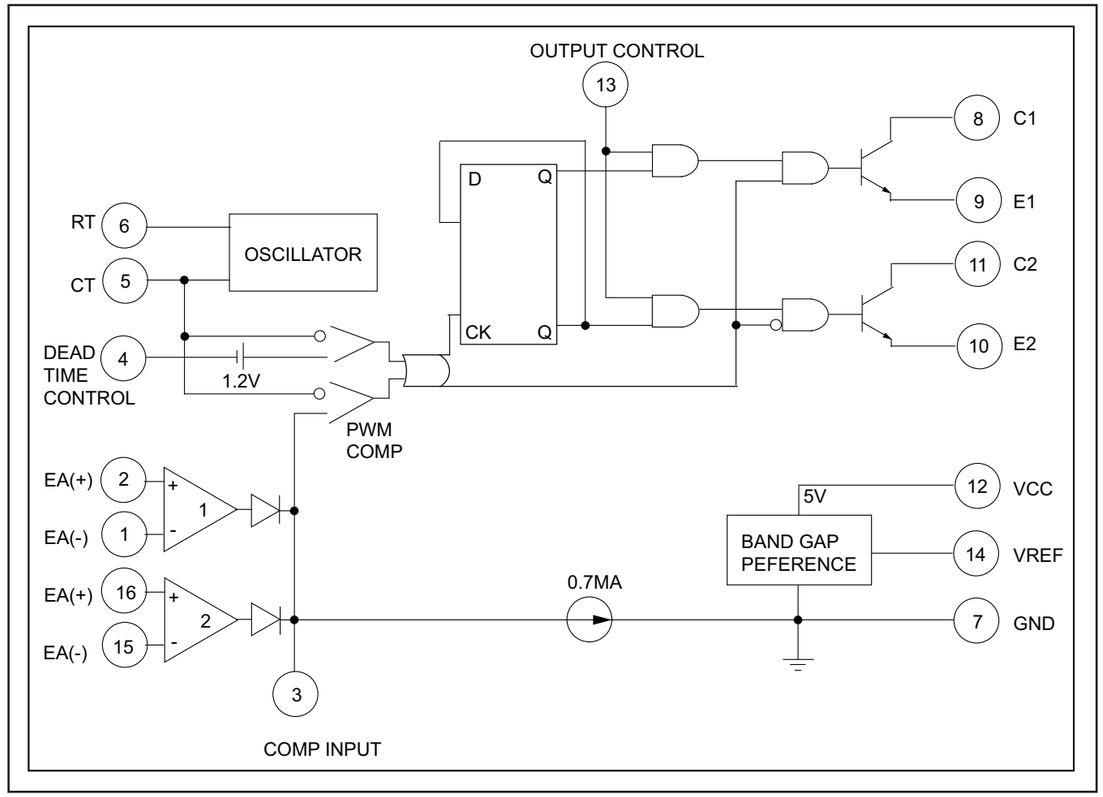

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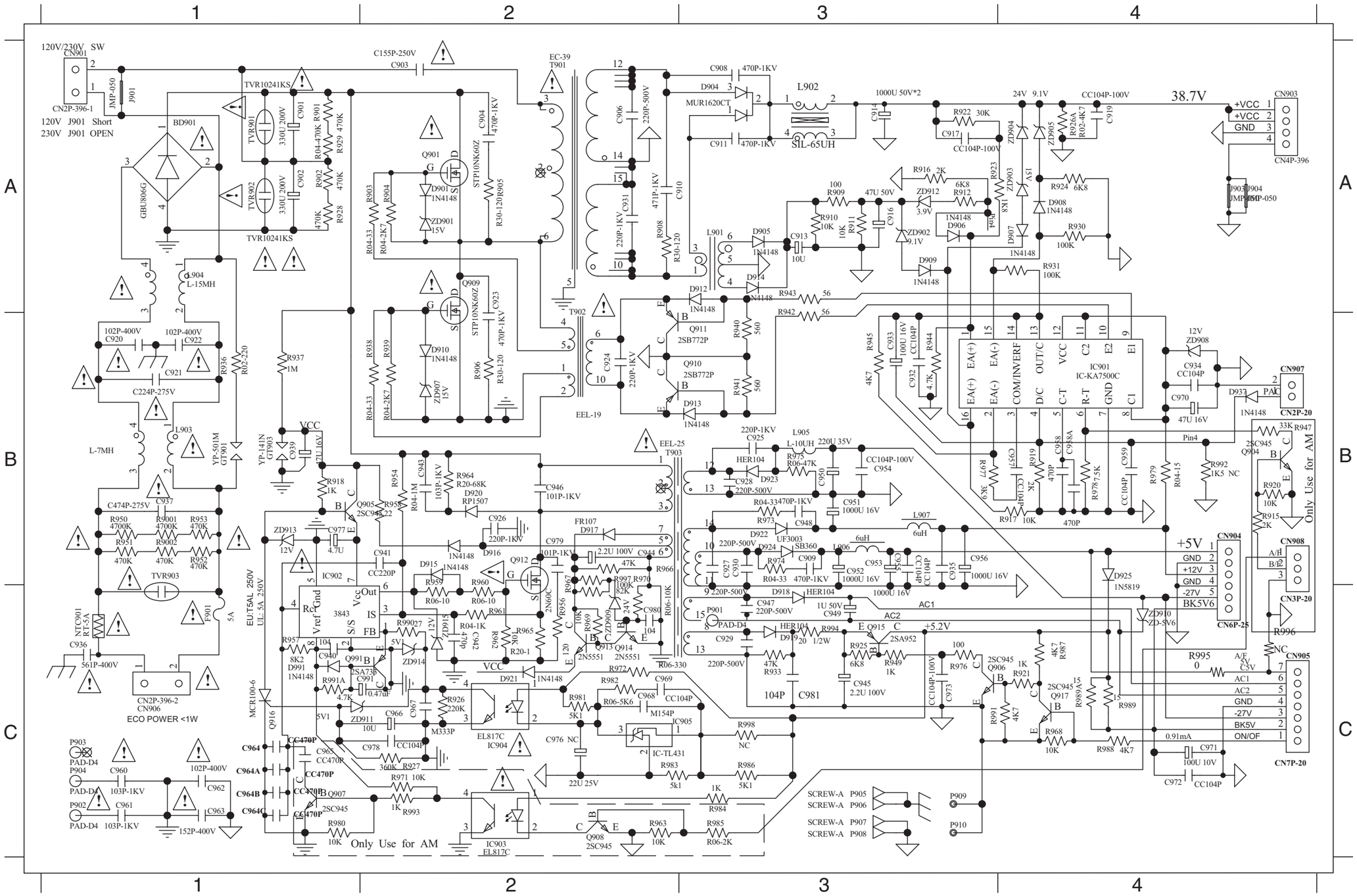
CIRCUIT DIAGRAM

BD901	A1	C914	A3	C927	B3	C940	C1	C952	B3	C962	C1	C970	B4	CN905	C4	D912	A3	D923	B3	IC904	C2	NTC901	C1	Q913	C2	R904	A2	R918	B1	R926D	A4	R940	B3	R953	B1	R965	C2	R976	C3	R987	C4	T901	A2	ZD905	A4
C901	A1	C916	A3	C928	B3	C941	B2	C953	B3	C963	C1	C971	C4	CN906	C1	D913	B3	D924	B3	IC905	C2	Q901	A2	Q914	C2	R905	A2	R919	B4	R927	C2	R941	B3	R954	B2	R966	B2	R977	B4	R988	C4	T901	B2	ZD907	B2
C902	A1	C917	A3	C929	C3	C942	C2	C954	B3	C964	C1	C972	C4	CN907	B4	D914	A3	D925	B4	J903	A4	Q904	B4	Q915	C3	R906	B2	R920	B4	R928	A1	R942	A3	R955	C4	R967	B2	R978	B4	R989	C4	T902	B2	ZD908	B4
C903	A2	C919	A4	C930	B3	C943	B2	C955	B3	C964A	C1	C973	C3	CN908	B4	D915	B2	D937	B4	J904	A4	Q905	B1	Q916	C1	R908	A2	R921	C4	R929	A1	R943	A3	R957	C1	R968	C4	R979	B4	R989A	C4	T903	B2	ZD909	C2
C904	A2	C920	B1	C931	A2	C944	B2	C956	B3	C964B	C1	C977	B1	D901	A2	D916	B2	D991	C1	L901	A3	Q906	C3	Q917	C4	R909	A3	R922	A3	R930	A4	R944	B3	R958	B2	R969	C2	R980	C1	R990	C2	TVR901	A1	ZD910	C4
C906	A2	C921	B1	C932	B3	C945	C4	C957	B4	C964C	C1	C978	C2	D904	A3	D917	B2	F901	C1	L902	A3	Q907	C1	Q991	C1	R910	A3	R923	A4	R931	A4	R945	B3	R959	C2	R970	C2	R981	C2	R991	C4	TVR902	A1	ZD911	C1
C908	A3	C922	B1	C933	B3	C946	B2	C958	B4	C965	C1	C980	C2	D905	A3	D918	C3	GT901	B1	L903	B1	Q908	C2	R9001	B1	R911	A3	R924	A4	R933	C3	R947	B4	R960	C2	R971	C2	R982	C2	R991A	C1	TVR903	B1	ZD912	A3
C909	B3	C923	A2	C934	B4	C948	B3	C958A	B4	C966	C2	C991	C1	D907	A4	D919	C3	GT903	B1	L904	A1	Q909	A2	R9002	B1	R912	A3	R925	C3	R936	B1	R949	C3	R961	C2	R972	C2	R983	C2	R993	C2	ZD901	A2	ZD913	B1
C910	A2	C924	B2	C935	B3	C949	C3	C959	B4	C967	C2	CN901	A1	D908	A4	D920	B2	IC901	B4	L905	B3	Q910	B3	R901	A1	R915	B4	R926A	A4	R937	B1	R950	B1	R962	C2	R973	B3	R984	C3	R994	C3	ZD902	A3	ZD914	C2
C911	A3	C925	B3	C937	B1	C950	B3	C960	C1	C968	C2	CN903	A4	D909	A3	D921	C2	IC902	B1	L906	B3	Q911	B3	R902	A1	R916	A3	R926B	A4	R938	B2	R951	B1	R963	C2	R974	B3	R985	C3	R995	C4	ZD903	A4		
C913	A3	C926	B2	C939	B1	C951	B3	C961	C1	C969	C2	CN904	B4	D910	B2	D922	B3	IC903	C2	L907	B3	Q912	B2	R903	A2	R917	B4	R926C	A4	R939	B2	R952	B1	R964	B2	R975	B3	R986	C3	R997	B2	ZD904	A4		



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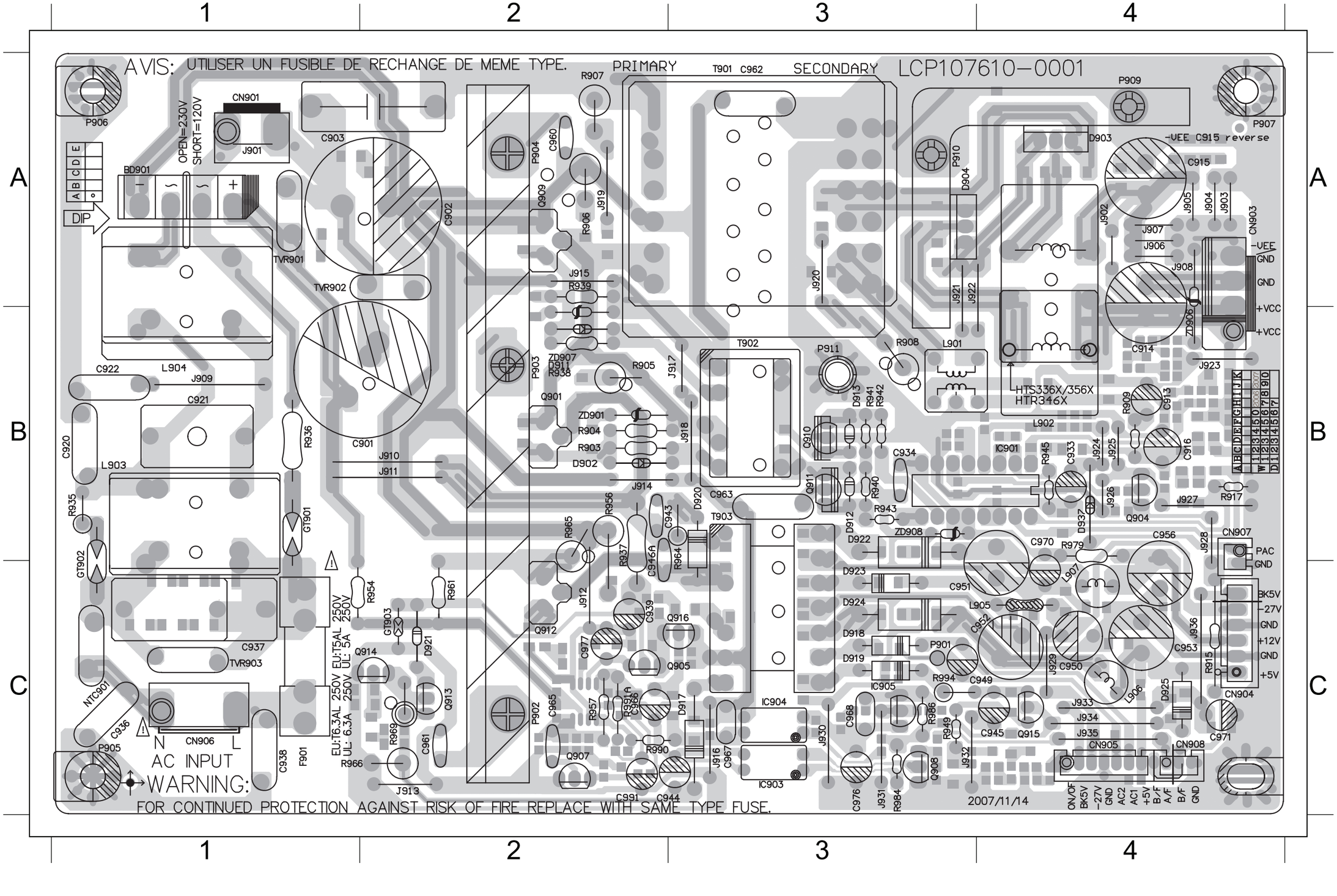
PCB LAYOUT - TOP VIEW

BD901	A1	C921	B1	C945	C4	C960	A2	C970	B4	CN906	C1	D919	C3	F901	C1	J904	A4	J916	C3	J925	B4	J933	C4	L905	C4	Q908	C3	Q916	C3	R917	B4	R943	B3	R966	C1	T901	A3	ZD907	B2
C901	B2	C922	B1	C946	B2	C961	C2	C971	C4	CN907	B4	D920	B3	GT901	B1	J909	B1	J917	B3	J926	B4	J934	C4	L906	C4	Q909	A2	R903	B2	R936	B1	R945	B4	R969	C2	T901	B3	ZD908	B3
C902	A2	C933	B4	C949	C3	C962	A3	C977	C2	CN908	C4	D921	C2	GT903	C2	J910	B2	J918	B3	J927	B4	J935	C4	L907	C4	Q910	B3	R904	B2	R937	B2	R949	C3	R979	B4	T902	B3		
C903	A1	C934	B3	C950	C4	C963	B3	C991	C2	D904	A3	D922	B3	IC901	B4	J911	B2	J920	A3	J928	B4	J936	C4	NTC901	C1	Q911	B3	R905	B2	R938	B2	R954	C1	R984	C3	T903	B3		
C913	B4	C937	C1	C951	C4	C965	C2	CN901	A1	D912	B3	D923	C3	IC903	C3	J912	C2	J921	A3	J929	C4	L901	B3	Q901	B2	Q912	C2	R906	A2	R939	A2	R957	C2	R986	C3	TVR901	A1		
C914	B4	C939	C2	C952	C4	C966	C2	CN903	A4	D913	B3	D924	C3	IC904	C3	J913	C2	J922	A3	J930	C3	L902	B4	Q904	B4	Q913	C2	R908	B3	R940	B3	R961	C2	R990	C2	TVR902	A1		
C916	B4	C943	B2	C953	C4	C967	C3	CN904	C4	D917	C3	D925	C4	IC905	C3	J914	B2	J923	B4	J931	C3	L903	B1	Q905	C2	Q914	C2	R909	B4	R941	B3	R964	B3	R991A	C2	TVR903	C1		
C920	B1	C944	C2	C956	B4	C968	C3	CN905	C4	D918	C3	D937	B4	J903	A4	J915	A2	J924	B4	J932	C3	L904	B1	Q907	C2	Q915	C4	R915	C4	R942	B3	R965	B2	R994	C3	ZD901	B2		



PCB LAYOUT - BOTTOM VIEW

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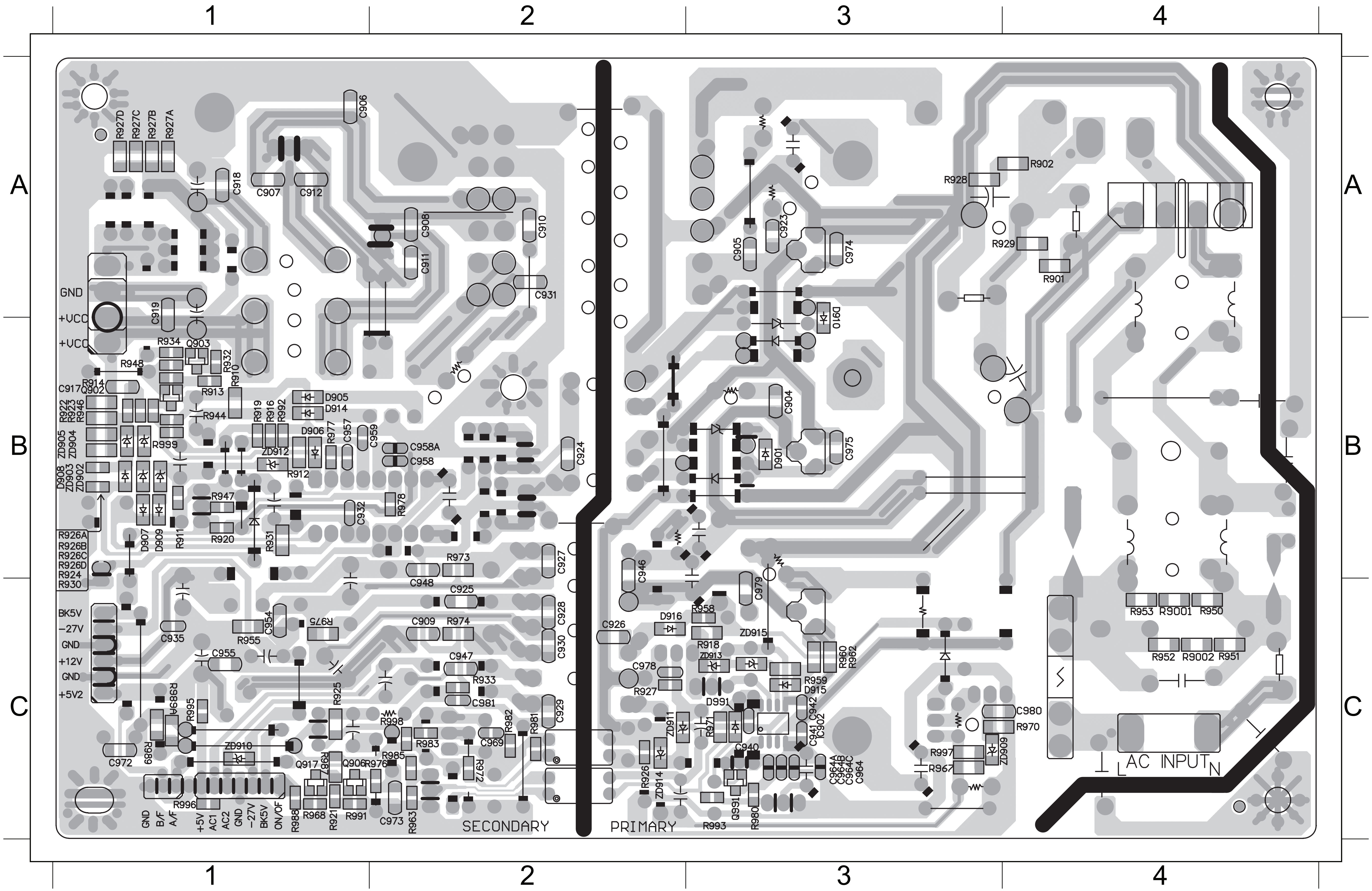
C904	B3	C917	B1	C927	B2	C935	C1	C954	C1	C964	C3	C973	C2	D908	B1	D991	C3	R9002	C4	R916	B1	R923	B1	R926D	B1	R933	C3	R953	C4	R963	C2	R973	B2	R980	C2	R988	C1	R997	C3	ZD910	C1
C906	A1	C919	A1	C928	C2	C940	C3	C955	C1	C964A	C3	C978	C2	D909	B1	IC902	C3	R901	A4	R918	C3	R924	B1	R927	C2	R944	B1	R955	C1	R967	C3	R974	C2	R981	C2	R989	C1	ZD902	B1	ZD911	C2
C908	A2	C923	A3	C929	C2	C941	C3	C957	B1	C964B	C3	C980	C4	D910	A3	Q906	C1	R902	A4	R919	B1	R925	C1	R928	A3	R947	B1	R958	C3	R968	C1	R975	C1	R982	C2	R989A	C1	ZD903	B1	ZD912	B1
C909	C2	C924	B2	C930	C2	C942	C3	C958	B2	C964C	C3	D901	B3	D914	B1	Q917	C1	R910	B1	R920	B1	R926A	B1	R929	A4	R950	C4	R959	C3	R970	C4	R976	C2	R983	C2	R991	C1	ZD904	B1	ZD913	C3
C910	A2	C925	C2	C931	A2	C946	B2	C958A	B2	C969	C2	D905	B1	D915	C3	Q991	C3	R911	B1	R921	C1	R926B	B1	R930	B1	R951	C4	R960	C3	R971	C3	R977	B1	R985	C1	R993	C3	ZD905	B1	ZD914	C2
C911	A2	C926	C2	C932	B1	C948	B2	C959	B2	C972	C1	D907	B1	D916	C2	R9001	C4	R912	B1	R922	B1	R926C	B1	R931	B1	R952	C4	R962	C3	R972	C2	R978	B2	R987	C1	R995	C1	ZD909	C3		



AMP BOARD

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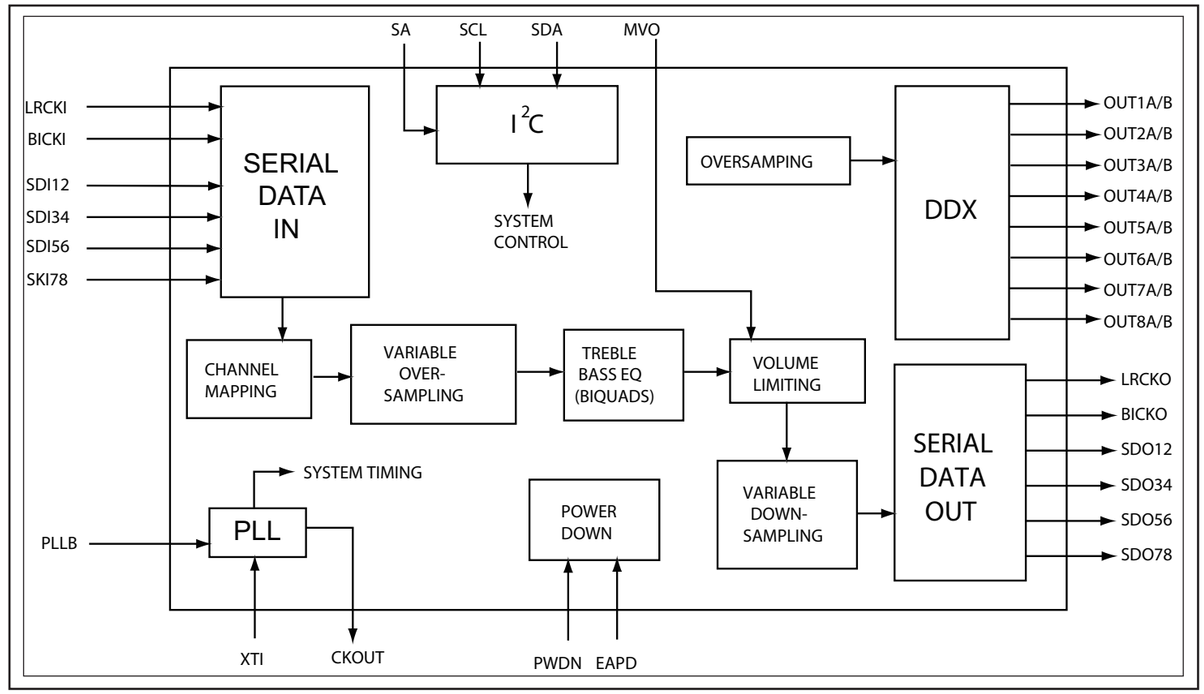
INTERNAL IC DIAGRAM - STA309A



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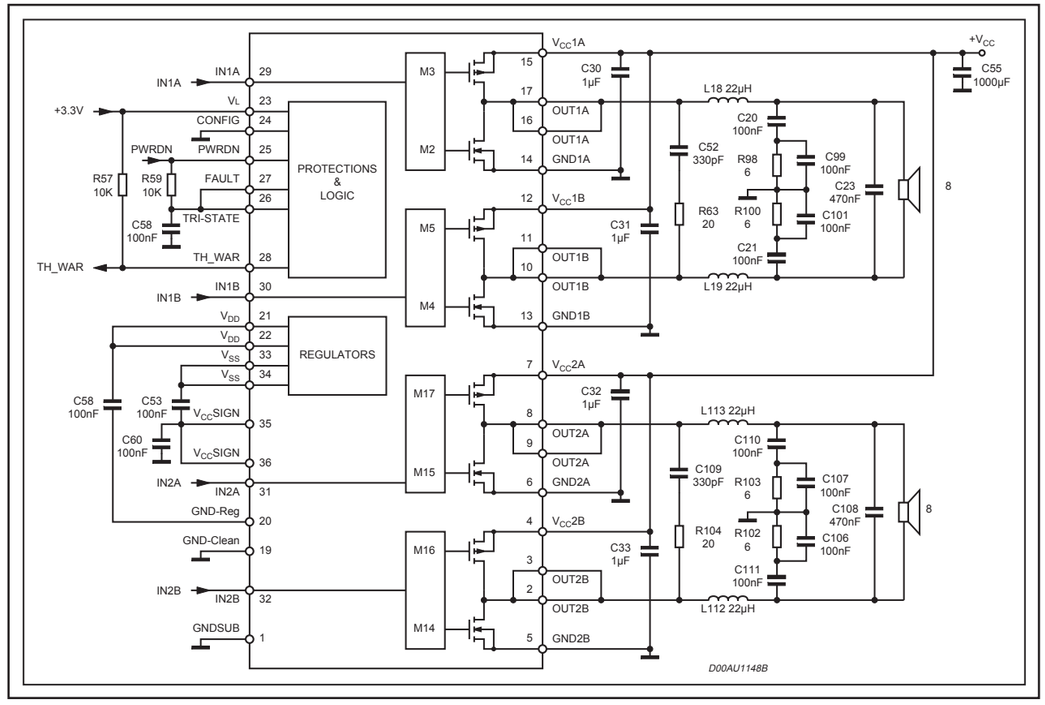

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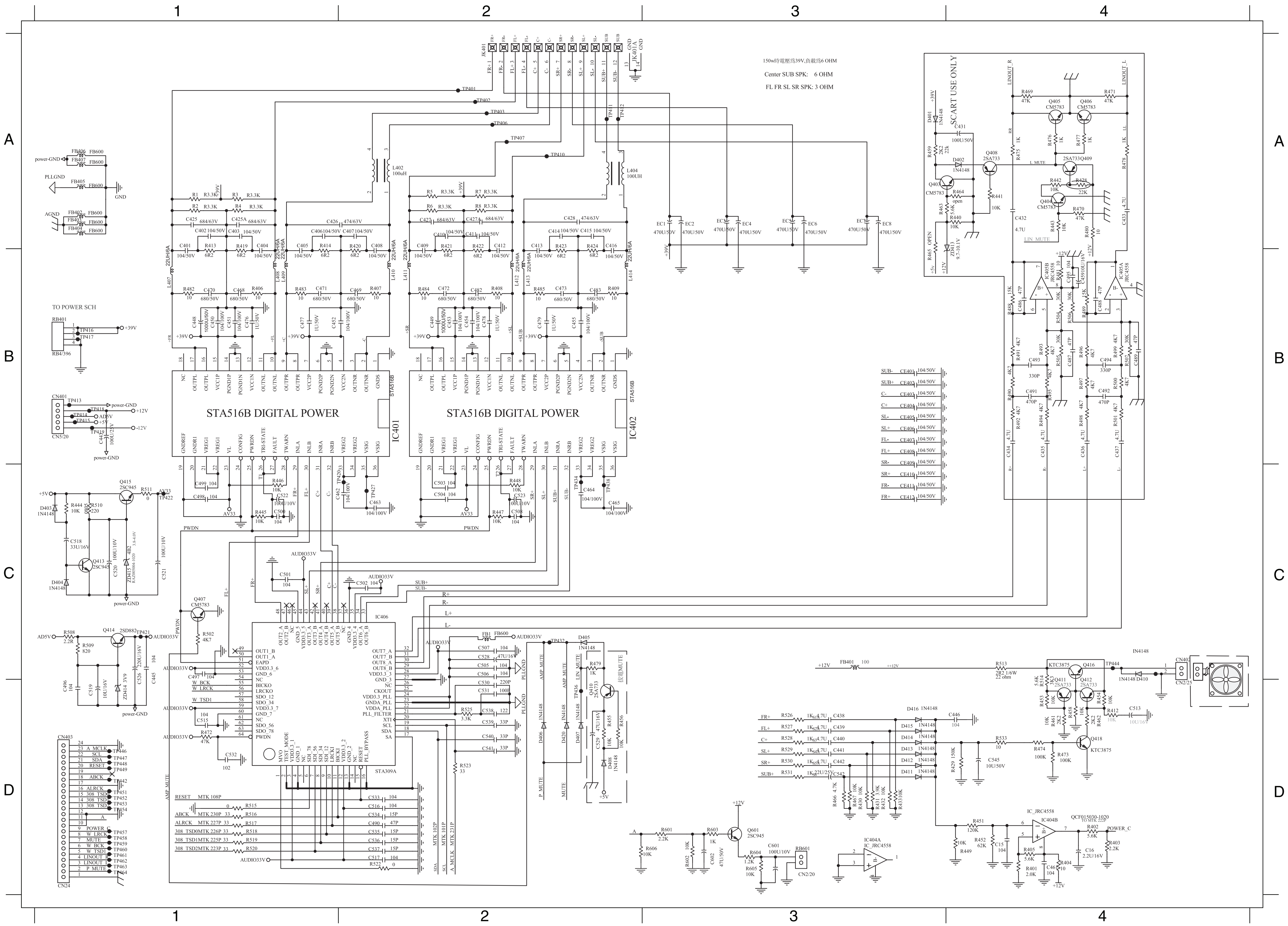
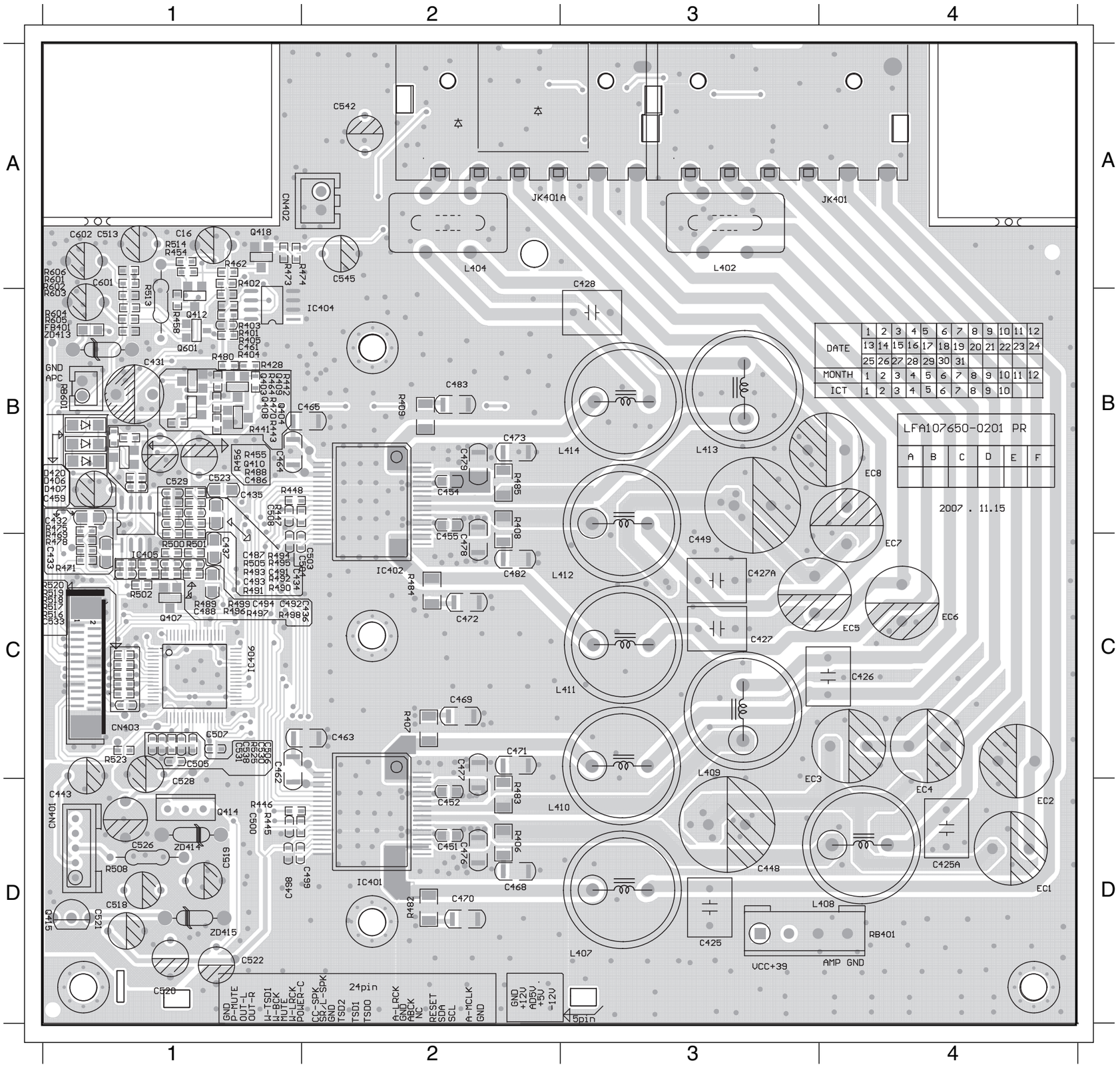
CIRCUIT DIAGRAM

C15	D4	C412	B2	C440	D3	C455	B2	C477	B1	C503	C2	C521	C1	C538	D2	CE406	B3	D404	C1	EC1	A3	FB405	A1	L409	B1	Q416	C4	R407	B2	R430	D3	R455	D2	R484	B2	R514	D4	R529	D3	RB601	D3
C16	D4	C413	B2	C441	D3	C461	D4	C478	B2	C504	C2	C522	C1	C539	D2	CE407	B3	D405	C2	EC2	A3	FB406	A1	L410	B2	Q418	D4	R408	B2	R431	D3	R456	D2	R485	B2	R515	D1	R530	D3	ZD414	D1
C401	B1	C414	A2	C442	D3	C462	C2	C479	B2	C505	C2	C523	C2	C540	D2	CE408	B3	D406	D2	EC3	A3	FB407	A1	L411	B2	Q601	D3	R409	B2	R432	D3	R458	D4	R490	B4	R516	D1	R531	D3	ZD415	C1
C402	A1	C415	A2	C443	B1	C463	C2	C482	B2	C506	C2	C526	C1	C541	D2	CE409	C3	D407	D2	EC4	A3	IC401	B1	L412	B2	R1	A1	R412	D4	R433	D3	R461	D4	R495	B4	R517	D1	R533	D4		
C403	A1	C416	B2	C445	C1	C464	C2	C483	B2	C507	C2	C528	C2	C542	D3	CE410	C3	D408	D2	EC5	A3	IC402	B2	L413	B2	R2	A1	R413	B1	R444	C1	R462	D4	R497	B4	R518	D1	R6	A2		
C404	B1	C425	A1	C446	D4	C465	C2	C490	D2	C508	C2	C529	D2	C545	D4	CE411	C3	D410	C4	EC6	A3	IC404	D3	L414	B2	R3	A1	R414	B1	R445	C1	R466	D3	R5	A2	R519	D1	R601	D3		
C405	B1	C425A	A1	C448	B1	C468	B1	C496	D1	C513	D4	C530	D2	C601	D3	CE412	C3	D411	D3	EC7	A3	IC406	C2	Q407	C1	R4	A1	R419	B1	R446	C1	R467	D3	R501	B4	R520	D1	R602	D3		
C406	A1	C426	A1	C449	B2	C469	B2	C497	C1	C515	D1	C531	D2	C602	D3	CN401	B1	D412	D3	EC8	A3	JK401	A2	Q410	D2	R401	D4	R420	B2	R447	C2	R472	D1	R502	C1	R522	D2	R603	D3		
C407	A2	C427	A2	C450	B1	C470	B1	C498	C1	C516	D2	C533	D2	CE401	B3	CN402	C4	D413	D3	FB1	C2	JK401A	A2	Q411	D4	R402	D4	R421	B2	R448	C2	R473	D4	R508	C1	R523	D2	R604	D3		
C408	B2	C427A	A2	C451	B1	C471	B1	C499	C1	C517	D2	C534	D2	CE402	B3	CN403	D1	D414	D3	FB401	C3	L402	A2	Q412	D4	R403	D4	R422	B2	R451	D4	R474	D4	R509	C1	R525	D2	R605	D3		
C409	B2	C428	A2	C452	B1	C472	B2	C500	C1	C518	C1	C535	D2	CE403	B3	D403	A3	D415	D3	FB402	A1	L404	A2	Q413	C1	R404	D4	R423	B2	R452	D4	R479	C2	R510	C1	R526	D3	R7	A2		
C410	A2	C438	D3	C453	B2	C473	B2	C501	C1	C519	D1	C536	D2	CE404	B3	D403	A4	D416	D3	FB403	A1	L407	B1	Q414	C1	R405	D4	R424	B2	R453	D4	R482	B1	R511	C1	R527	D3	R8	A2		
C411	A2	C439	D3	C454	B2	C476	B1	C502	C2	C520	C1	C537	D2	CE405	B3	D404	C1	D420	D2	FB404	A1	L408	B1	Q415	C1	R406	B1	R429	D4	R454	D4	R483	B1	R513	C4	R528	D3	RB401	B1		



PCB LAYOUT - TOP VIEW



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C426	C4	CN401	D1	R462	A1
C427	C3	CN402	A1	R473	A1
C427A	C3	CN403	C1	R474	A1
C428	B3	D406	B1	R482	D2
C443	D1	D407	B1	R483	D2
C448	D3	D420	B1	R484	C2
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C451	D2	EC2	C4	R490	B1
C452	D2	EC3	C4	R495	B1
C454	B2	EC4	C4	R497	C1
C455	B2	EC5	C4	R501	C1
C461	B1	EC6	C4	R502	C1
C462	C1	EC7	C4	R508	D1
C463	C2	EC8	B4	R513	B1
C464	B1	FB401	B1	R514	A1
C465	B1	IC401	D2	R516	C1
C468	D2	IC402	C2	R517	C1
C469	C2	IC404	B1	R518	C1
C470	D2	IC406	C1	R519	C1
C471	C2	JK401	A4	R520	C1
C472	C2	JK401A	A2	R523	C1
C473	B2	L402	A3	R525	C1
C476	D2	L404	A2	R601	A1
C477	C2	L407	D3	R602	B1
C478	C2	L408	D4	R603	B1
C479	B2	L409	D3	R604	B1
C482	C2	L410	D3	R605	B1
C483	B2	L411	C3	RB401	D4
C498	D1	L412	C3	RB601	B1
C499	D1	L413	B3	ZD414	D1
C500	D1	L414	B3	ZD415	D1
C503	C1	Q407	C1		
C504	C1	Q410	B1		
C505	C1	Q412	B1		
C506	C1	Q414	D1		
C507	C1	Q415	D1		
C508	B1	Q418	A1		
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C522	D1	R405	B1		
C523	B1	R406	D2		
C526	D1	R407	C2		
C528	C1	R408	B2		
C529	B1	R409	B2		
C530	C1	R445	D1		
C531	C1	R446	D1		
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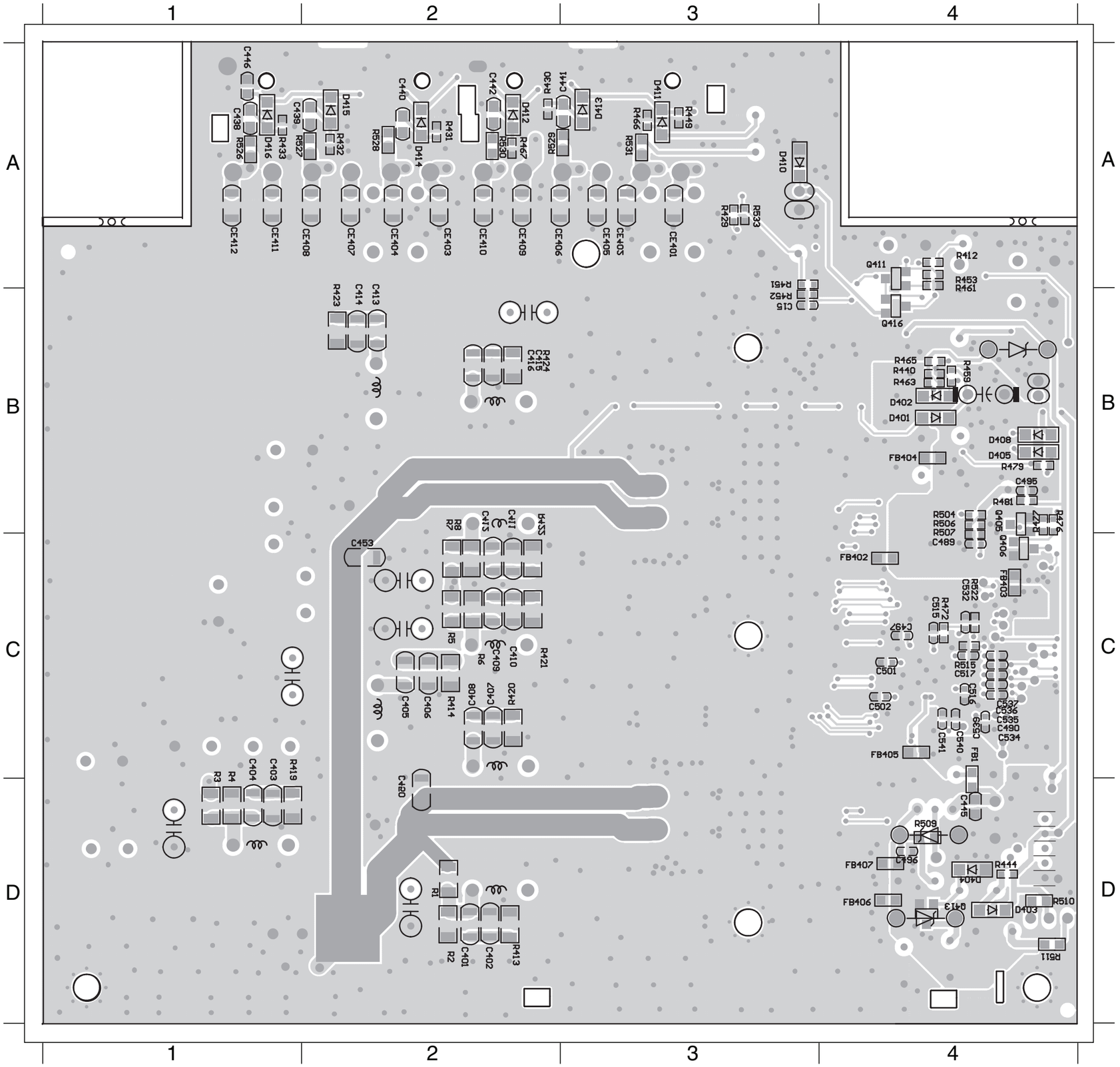
C542	A2	R454	A1		

PCB LAYOUT - BOTTOM VIEW



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C401	D2	D408	B4	R6	C2
C402	D2	D410	A3	R7	C2
C403	D1	D411	A3	R8	C2
C404	D1	D412	A2		
C405	C2	D413	A3		
C406	C2	D414	A2		
C407	C2	D415	A2		
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C414	B2	FB406	D4		
C415	B2	FB407	D4		
C416	B2	Q411	A4		
C438	A1	Q413	D4		
C439	A2	Q416	B4		
C440	A2	R1	D2		
C441	A3	R2	D2		
C442	A2	R3	D1		
C445	D4	R4	D1		
C446	A1	R412	A4		
C450	D2	R413	D2		
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C541	C4	R453	A4		
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CE402	A3	R466	A3		
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CE406	A2	R5	C2		
CE407	A2	R509	D4		
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CE411	A1	R526	A1		
CE412	A1	R527	A2		
D403	B4	R528	A2		
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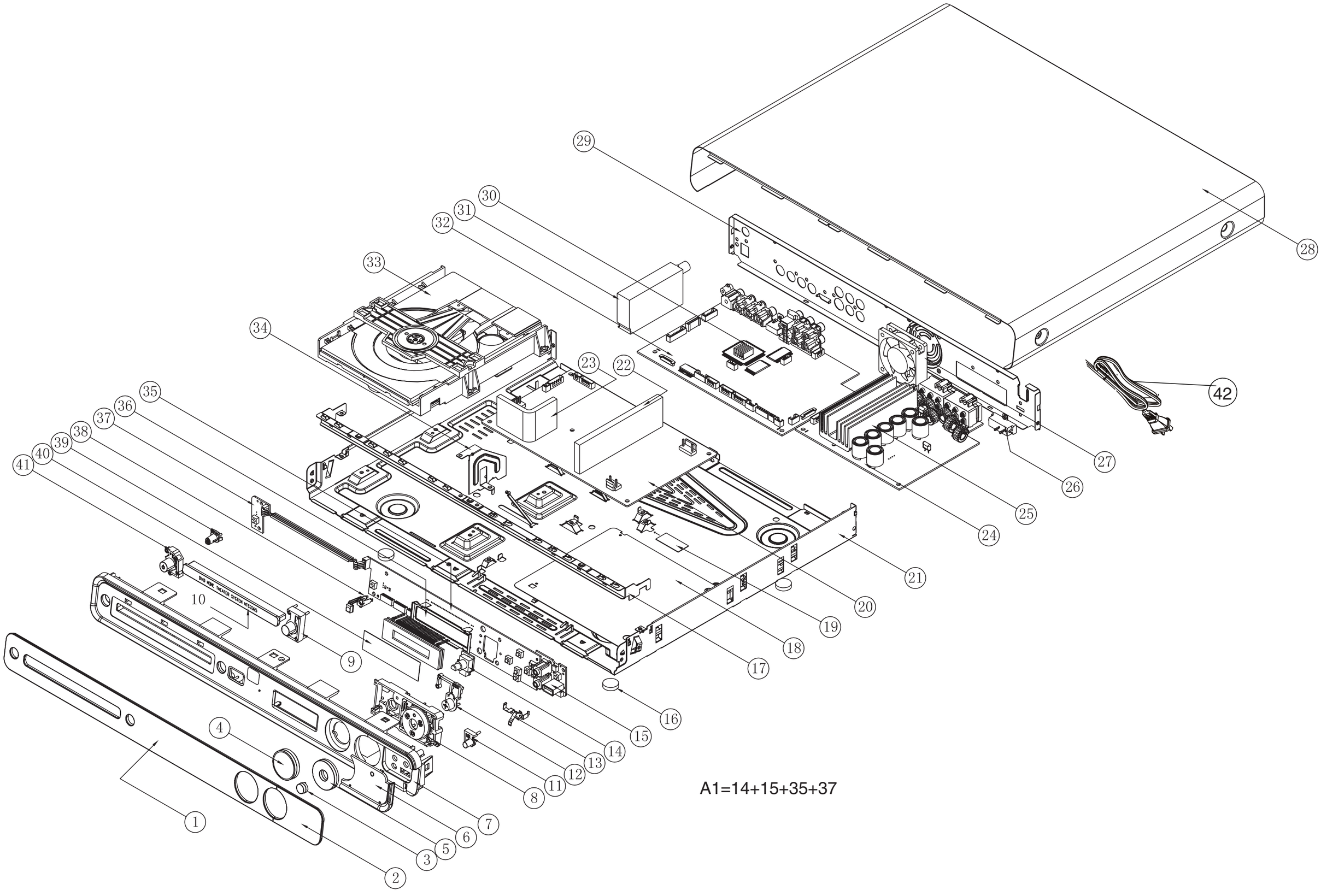
MECHANICAL EXPLODED VIEW



A1=14+15+35+37

MECHANICAL PART LIST

Loc.	12NC.	Description
MECHANICAL PART LIST		
1	996510018287	DISPLAYLENSPMMAL363.2xW39xT3mm
10	996510013383	DVD DOOR ABS
11	996510012488	MIC LEVEL BUTTON
12	996510010838	SOURCE BRACKET
16	996510010842	RUBBER FOOT
18	996510010826	PVC SHEET
19	996510010827	PVC SHEET
2	996510012485	USB DOOR LENS
20	996510018258	POWER PCB
21	996510018292	CKD BOTTOM PANELGSE100784-1001
24	996510015061	AMP PCB ASSY
27	996510010843	FAN
28	996510018285	CKD TOP COVER GSE100783-0002
29	996510018291	CKD REAR PANEL GSE100785-8010
3	996510010835	SOURCE BUTTON PC PMMA
31	996510001690	TUNER PACK
32	996510015349	MAIN PCB
33	996510018288	DVD LOADER ASSY F-8829C+DM68-S
39	996510010840	STANDBY LENS
4	996510010833	VOLUME KNOB PMMA PC
41	996510010836	POWER KEY
42	310630764881	MAIN CORD 02/1800/02
5	996510010832	FUNCTION BUTTON
6	996510018286	USBDOOR L66.4xW38.4xT4.8SILVER
7	996510018290	FRONT PANEL CKD BPF100060-2001
8	996510010837	FUNCTION BRACKET
9	996510010834	EJECT KEY
A1	996510014546	VFD+JACK+VOL+STANDBY PCB
AM	996510001621	LOOP ANT
FM	996510008251	FM ANT
HDMI	996510013544	HDMI CABLE 1500mm
RC	996510012491	REMOTE CONTROL
V1	996510007429	GP FFCCBLE 10P100mmUL20798 P=1
V2	996510011292	FFC CABLE 24P 50mm
V3	996510007319	FFC CABLE 24P 180MM
V3	996510013767	FFC CABLE 24P
Video	996500013058	RCA CABLE 2P 1.2M
Speaker		
RFC	996510001599	RUBBER FOOT -CENTER SPK
RFF	996510001601	RUBBER FOOT - REAR SPK
RFR	996510001601	RUBBER FOOT - REAR SPK
RFS	996510010854	RUBBER FOOT -SUB
SPKC	310630880541	SPEAKER CENTER ASSY
SPKFL	310630880531	SPEAKER FRONT LEFT ASSY
SPKFR	310630880531	SPEAKER FRONT RIGHT ASSY
SPKRL	310630880531	SPEAKER REAR LEFT ASSY
SPKRR	310630880531	SPEAKER REAR RIGHT ASSY
SUBW	310630880521	SUBWOOFER ASSY
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% 105'C D18
C902	996500027123	CAP.E 330UF 200V 20% 105'C D18
C903	996500027124	COND METAL 1.5UF 250V DC /-10
C903	996510018266	COND METAL 1.5uF 250V DC 10%
C920	996500027115	CAP.SAFTY Y1 102PF 250V 20% Y5
C921	994000005343	COND SAFETY 0.22UF 275V 20%
C922	996500027115	CAP.SAFTY Y1 102PF 250V 20% Y5
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
C960	996500018042	COND DISC 0.01UF 1KV 20%
C961	996500018042	COND DISC 0.01UF 1KV 20%
C962	994000005344	CAP.SAFETY Y1 560PF 400V 10%
C963	996500027115	CAP.SAFTY Y1 102PF 250V 20% Y5
C967	996510004633	COND MYLAR 0.1 uF 100V 5%
C968	996510012514	COND MYLAR 0.15uF 100V 5%
CN901	996500017458	CONNECTOR 3P CL3962WVO
CN901	996510018267	CONNECTOR 3P P=3.96mm180' NICK
CN903	996500017360	CONNECTOR 4P CL3962WVO
CN903	996510016729	CONNEC 4P P=3.96mm 180' NICKEL
CN904	996510012515	CONNECTOR B6B-XH-A 6 PIN
CN905	996500017358	CONNECTOR 7P
CN906	996500015936	CONNECTOR 4PIN P=3.96MM
CN906	996510018268	CONNECTOR 4P P=3.96mm180' NICK
CN907	996500015898	CONNECTOR 2 PIN PITCH=2.0MM
CN908	996500015900	CONNECTOR 3 PIN P=2.0MM
D904	994000005346	RECTIFIER UF1602CT TO-220AB 3P
D904	996500041972	DIODE STPR1620CT 3P
D912	996500026949	DIODE SW 1N4148 PB<1000PPM
D913	996500026949	DIODE SW 1N4148 PB<1000PPM
D917	996510012516	DIODEHER105 DO-411A400V50nSFMS
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
IC901	996510008293	IC 16P AZ7500BP-E1
IC902	996510004113	IC 8P AP3843GMTR-E1
IC903	994000000946	OPTICAL SENSOR 4P
IC904	994000000946	OPTICAL SENSOR 4P
IC905	994000000952	IC 3PIN TL431
IC905	996500029312	IC 3 PIN TL431 TO-92 CHANG JI
L901	996500027102	TOROID COIL S1=1TS D0.65MMX2 P
L902	994000005341	COMMON COIL 65UH +/-10% 2XD1.2
L903	996510013776	LINE FILTER ET-24
L903	996510013916	LINER FILTER EI-24 7mH 2UEW D0
L904	996510013747	LINE FILTER ET-28
L904	996510013917	LINER FILTER ET-28 15mH 2UEWD0
Q901	996500038406	MOSFET STP10NK60Z 10A 600V
Q904	996510000615	XISTR NPN 2SC945P
Q905	996510000615	XISTR NPN 2SC945P
Q906	996510004282	XISTR NPN SMT (2SC945)
Q907	996510000615	XISTR NPN 2SC945P
Q908	996510000615	XISTR NPN 2SC945P
Q909	996500038406	MOSFET STP10NK60Z 10A 600V
Q910	996500026946	XISTR PNP 2SB772P/Q NEC PB<10
Q911	996500026946	XISTR PNP 2SB772P/Q NEC PB<10
Q912	994000005348	MOSFET STF3NK80Z N-CH 2.5A
Q913	996510004298	XISTR NPN 2N5551B TO-92
Q913	996510018269	XISTR NPN 2N5551-EEC TO-92 ST
Q914	996510004298	XISTR NPN 2N5551B TO-92
Q914	996510018269	XISTR NPN 2N5551-EEC TO-92 ST
Q915	996500026939	XISTR PNP 2SA952 NEC PB<1000P
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

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T901	996510012522	SWTRANS EC-39DWKB486-8519 600W
T901	996510012523	SW TRANS ER39/40 600W 8+8PIN
T902	994000001057	SW. MODEL TRANSFORMER
T903	996510012524	SWTRANS EEL-25 40WDWKB486-8218
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
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 P=2.0MM
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	996510013913	IC48P EN29LV320B-70TCPTSOP EON
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 TSOPII
IC206	996510009895	IC 54P A641604L-6T TSOP II
IC207	996510012500	IC 20 PIN SN74HC244PWR TSSOPTI
IC208	996510013914	IC 28P P89LPC931FDH TSSOP PHIL
IC209	996510012502	IC 256P MT1389FXE/S LQFP MEDIA
IC210	996500027090	IC 3 PIN AP1117E18LA 1.8V SOT2
IC301	996500029611	IC 8P CO4558A SO8 CERAMATE LF
IC301	996500041286	IC 8P 4558
IC303	996500029611	IC 8P CO4558A SO8 CERAMATE LF
IC303	996500041286	IC 8P 4558
IC304	996510012503	IC 16P CD4051BM SOIC TI ANALOG
IC305	996510012503	IC 16P CD4051BM SOIC TI ANALOG
IC306	996510012504	IC 20P WM8782SEDS SSOP WOLFSON
IC309	996510012500	IC 20 PIN SN74HC244PWR TSSOPTI
IC801	996510010380	Motor Drive IC
IC801	996510012506	IC 28P AM5888S L/F HSOP AMTEK
JK302	996510004283	RCA JACK 4P AUDIO
JK601	996510012507	HDMI JACK 19P PDVBT8-19 FLBS4N
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 ROHM HF
Q804	996500026927	XISTR PNP 2SB1132RT100 ROHM HF
Q805	996510004117	FET 2SK3018 30V/0.1A SC-70
Q901	996510000615	XISTR NPN 2SC945P
Q903	996500026946	XISTR PNP 2SB772P/Q NEC PB<10

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Q904	994000005335	XISTR NPN TIP41C
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 PB<10

AMP PCB

CN401	996510012526	C/W 5P 50mm 2468 26 RAINBOW
CN402	996500015862	CONNECTOR B2B-XH-A 2 PIN
IC401	996510008280	IC 36P STA516B
IC402	996510008280	IC 36P STA516B
IC404	996500029611	IC 8P CO4558A SO8 CERAMATE LF
IC404	996500041286	IC 8P 4558
IC406	996510012527	IC 64P STA309A TQFP ST
JK401&401A	996510013837	GPSPK JAC12P RD-WT-GRN-GRY-BLU
L402	996510011371	COIL 4P 100UH 30% 1KHZ 0.25V
L402	996510012530	TOROIDCOIL4P110uH+/-25uH1KHz
L404	996510011371	COIL 4P 100UH 30% 1KHZ 0.25V
L404	996510012530	TOROIDCOIL4P110uH+/-25uH1KHz
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 2SD882P PB<1000PPM
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

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)
IC11	996500041280	IC 52P ET16311 VFD DRIVER
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