

Service
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Service



Service Manual



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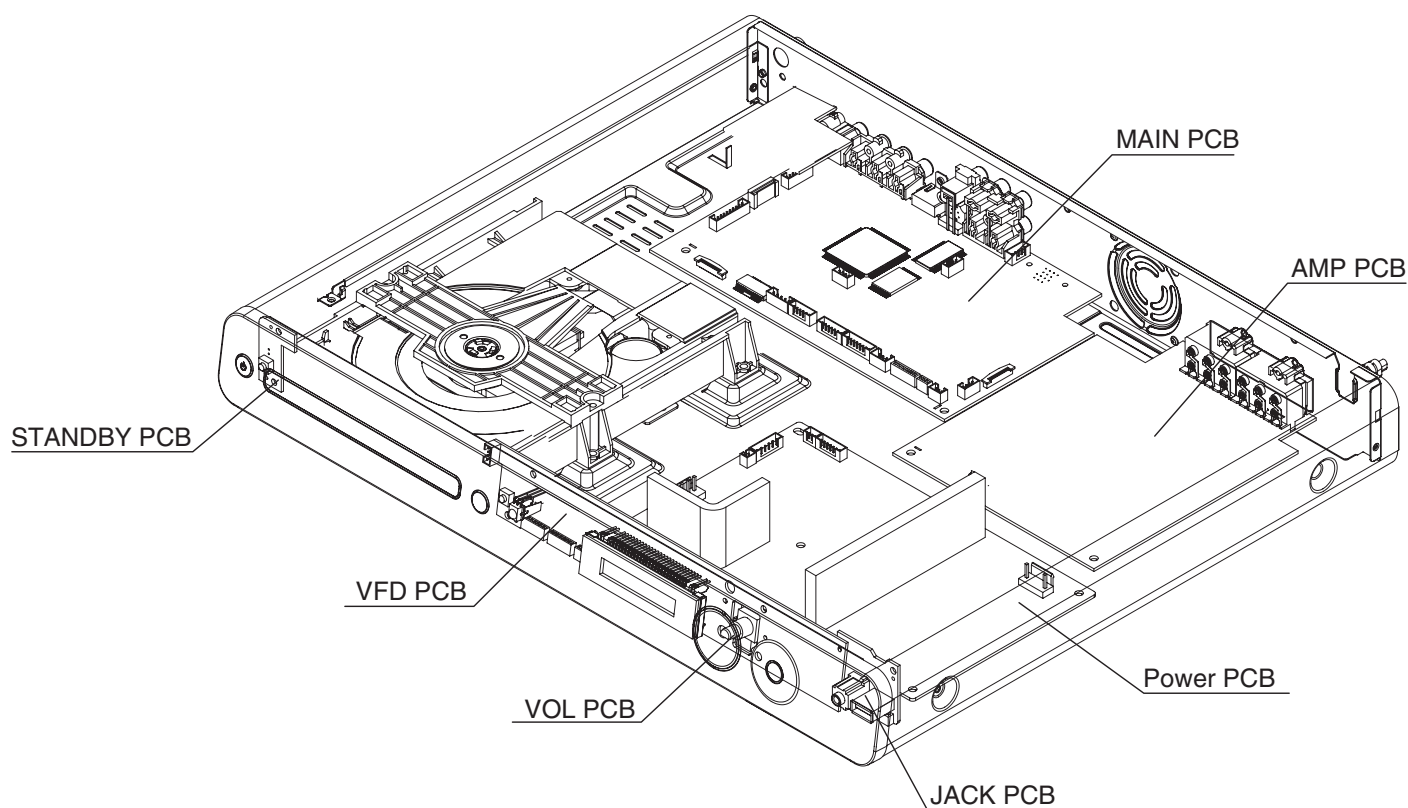
GB 3139 785 34240

Version 1.0



PHILIPS

LOCATION OF PCB BOARDS



VERSION VARIATION:

Type/Versions Features	HTS3366
	/51
Main(Power Output-600W)	X
S-video out	X
Power Voltage (120V/230V)	X
WMA	X

SERVICE SCENARIO MATRIX:

Type/Versions Boards in used	HTS3366
	/51
Main Board	Bd
Power Board	Bd
AMP Board	Bd
VFD+JACK+VOL+STANDBY Board	Bd

* Bd= Board Level Repair

SPECIFICATIONS

Amplifier

Total output power 600W
 Home Theatre mode..... 600W
 Frequency response..... 180 Hz~18 kHz / ± 3 dB
 Signal-to-noise ratio..... > 60 dB (A-weighted)
 Input sensitivity
 AUX 400 mV
 MP3 LINK 400 mV

Disc

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

Radio

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

USB

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

Main unit

Power supply 110-127 V / 220-240 V
 ~50-60 Hz switchable
 Power consumption 100W
 Dimensions (WxHxD) 435 x 58 x 360 (mm)
 Weight 3.7 kg

Speakers

System..... full range satellite
 Speaker impedance..... 6 ohm (centre),
 3 ohm (Front/Rear)
 Speaker drivers:
 Centre..... 2x 2.5" woofer + 1 x 2" tweeter
 Front/Rear 3" full range
 Frequency response..... 150 Hz - 20 kHz
 Dimensions (WxHxD):
 Centre..... 440 x 105 x 75 (mm)
 Front..... 103 x 203 x 71 (mm)
 Rear..... 262 x 1199 x 264 (mm)
 Weight:
 Centre..... 1.39 kg
 Front..... 0.54 kg
 Rear..... 3.53 kg

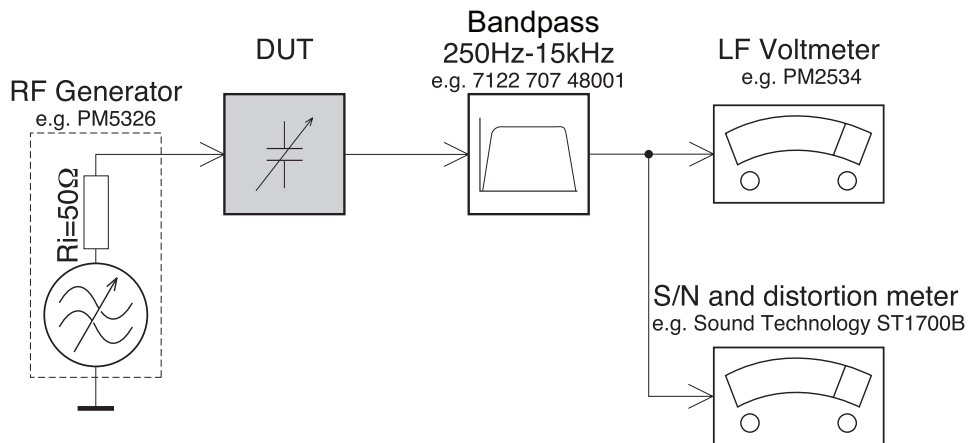
Subwoofer

Impedance 6 ohm
 Speaker drivers 165 mm (6.5") woofer
 Frequency response..... 40 Hz - 150 Hz
 Dimensions (WxHxD) 163 x 363 x 369 (mm)
 Weight 5.08 kg

Specifications subject to change without prior notice.

MEASUREMENT SETUP

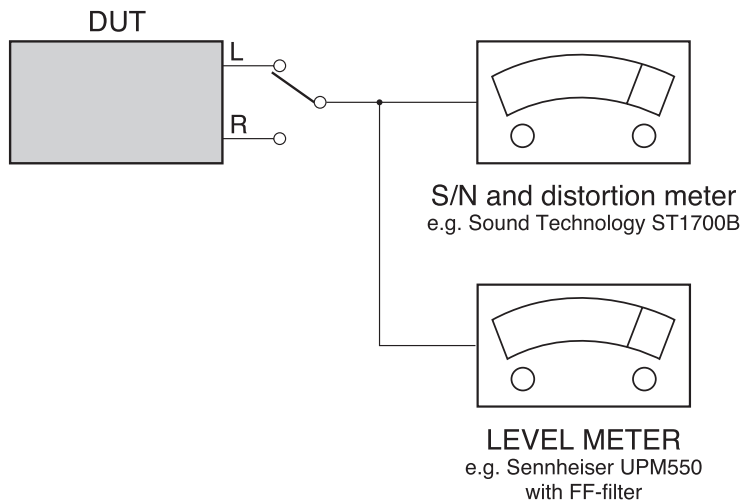
Tuner FM



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

CD

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



SERVICE AIDS

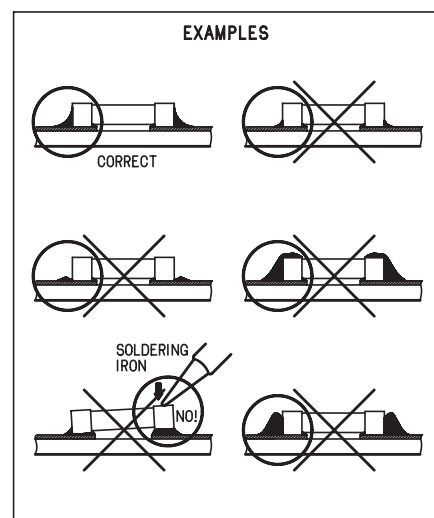
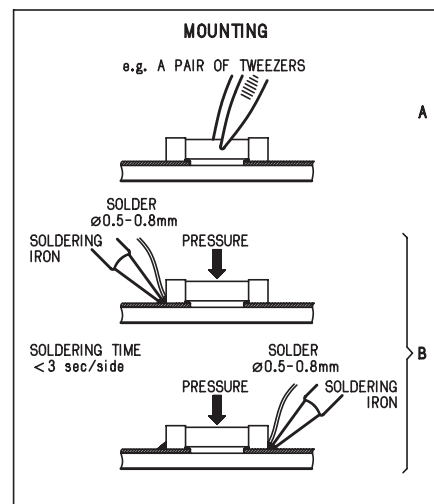
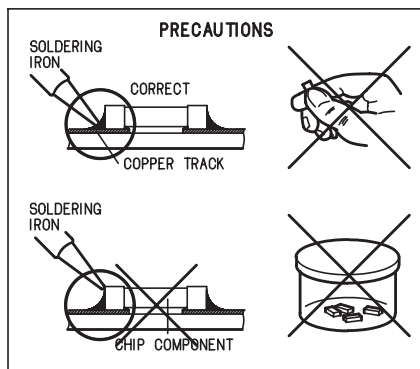
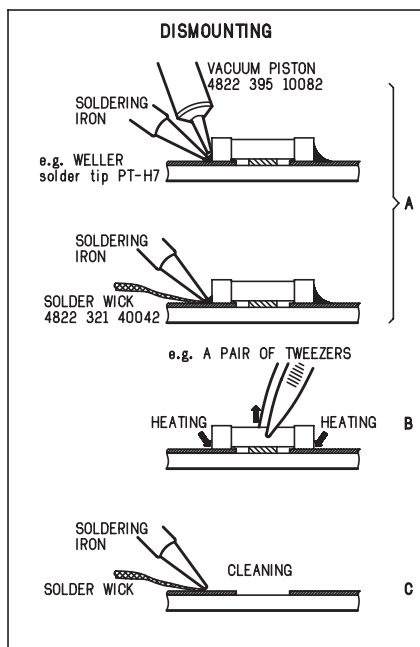
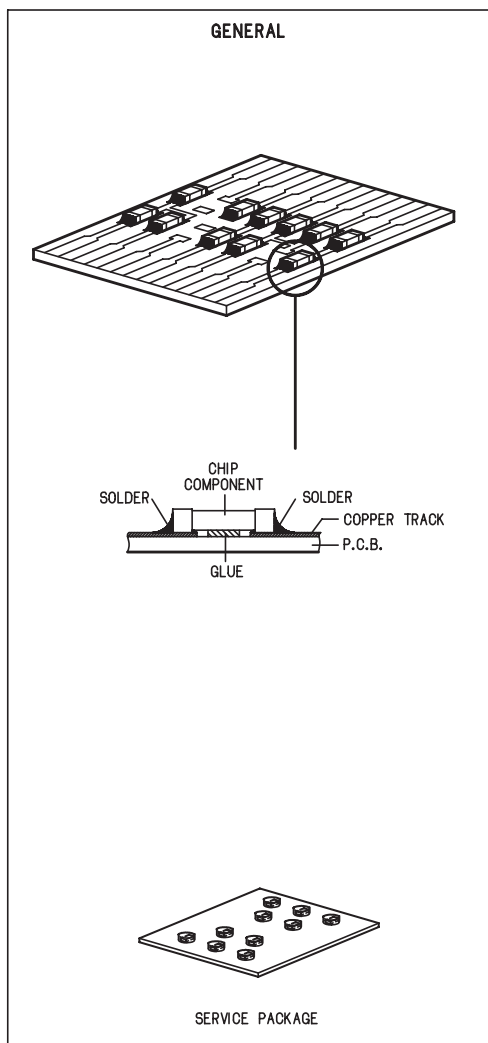
Service Tools:

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

Compact Disc:

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

HANDLING CHIP COMPONENTS



ESD**(GB) WARNING**

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

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

(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).

Unvorsichtige 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.

(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 dit zelfde potentiaal.

(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 Δ .

(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 Δ .

(F)

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 .

(D)

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

Sicherheitsbauteile sind durch das Symbol Δ 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.

Componenti di sicurezza sono marcati con Δ .

(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) Advarsel !

Usynlig laserstråling ved åbning når sikkerhedsafbrydere er ude af funktion. Undgå udsættelse 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.

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 (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 Prochure

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" 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:

Current model

HTS3366/51

Version: 00.12.01_1

Release: 2007.12.19

region : 5

Servo: 5B.61.00.00

8032: 05.00.04.06

RISC:00.00.02.00

MCU: V04.08

IF current model does not match you set use down arrow key on the remote to change

OK

4>Password Change

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

5)Check on the Sofeware Version

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

6)Trade model

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

7) Upgrading new sofeware

- a) copy "sofeware files" into a CD-R 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:

upgrade file detected

Do you wish to continue with the sofeware upgrade?

OK

Cancel

- f) select "OK", OSD will show:

upgrade in process...

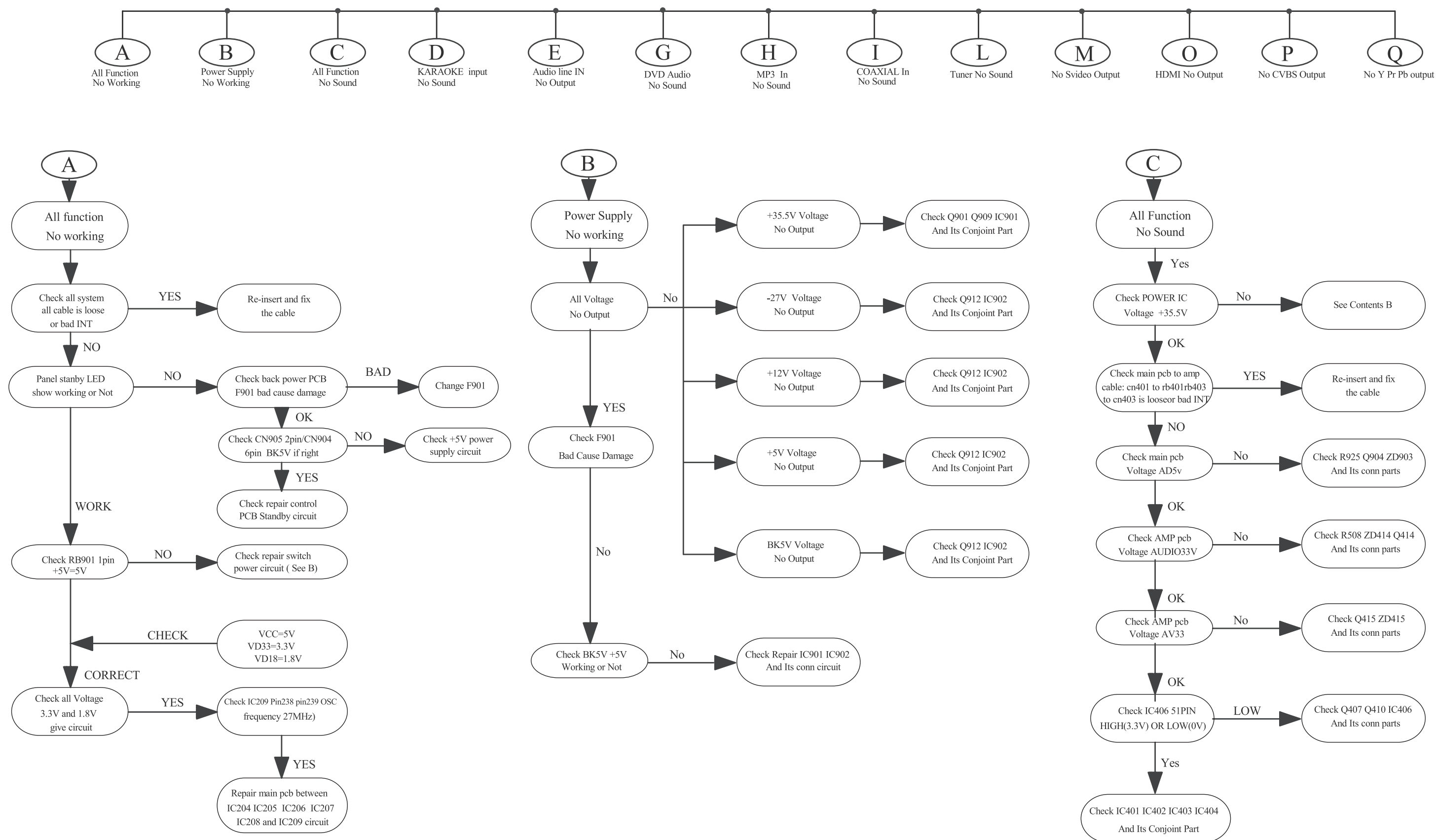
V336X

please do not unplug or switch off the device.

CAUTION!

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

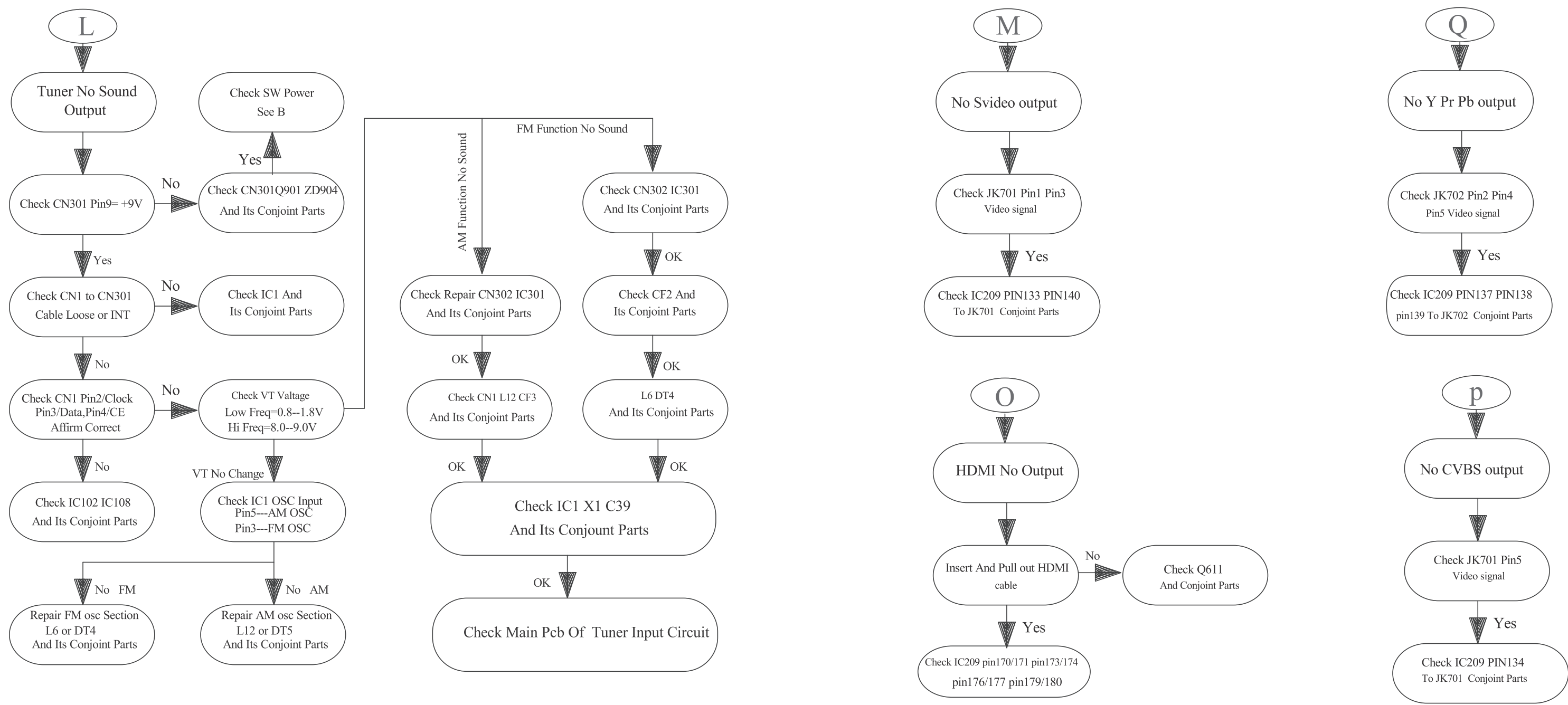
MAIN UNIT REPAIR CHART 1/3



MAIN UNIT REPAIR CHART 2/3



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.

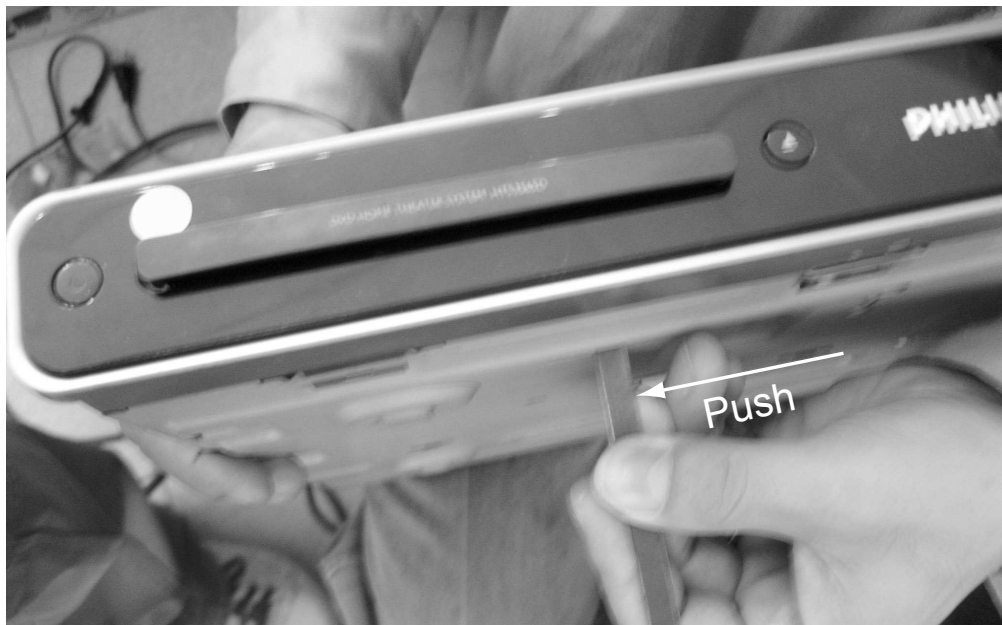


Figure 1



Figure 2

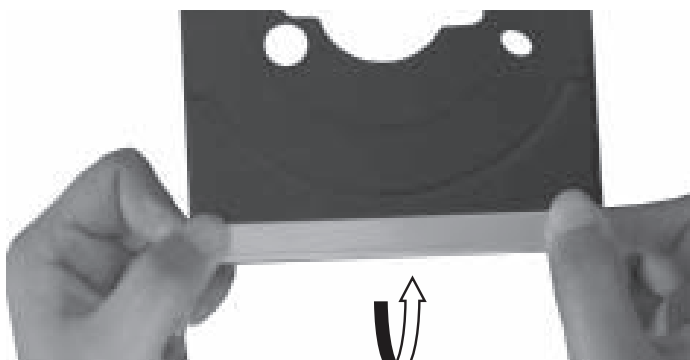


Figure 3

- 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

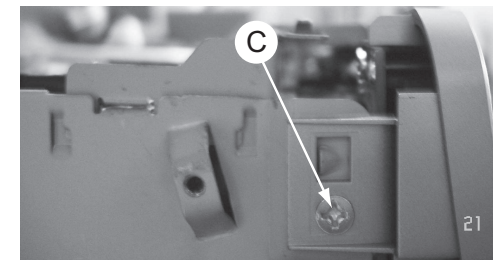


Figure 6

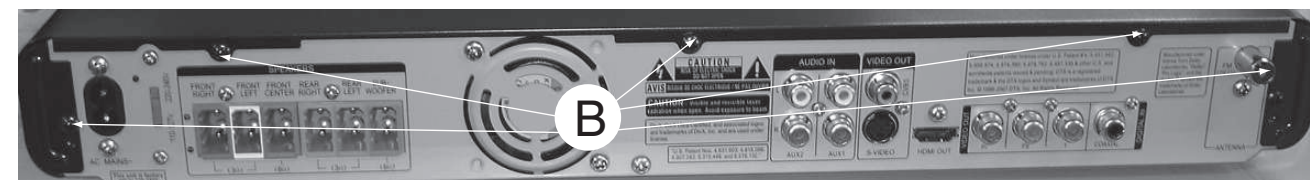


Figure 5

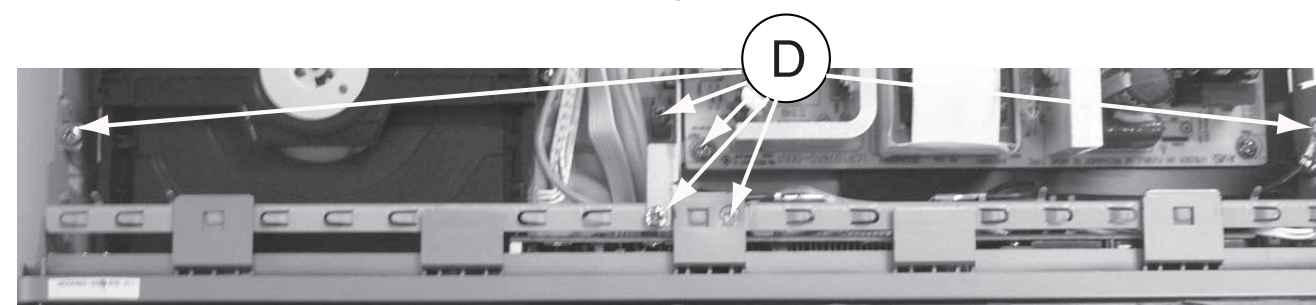


Figure 7

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

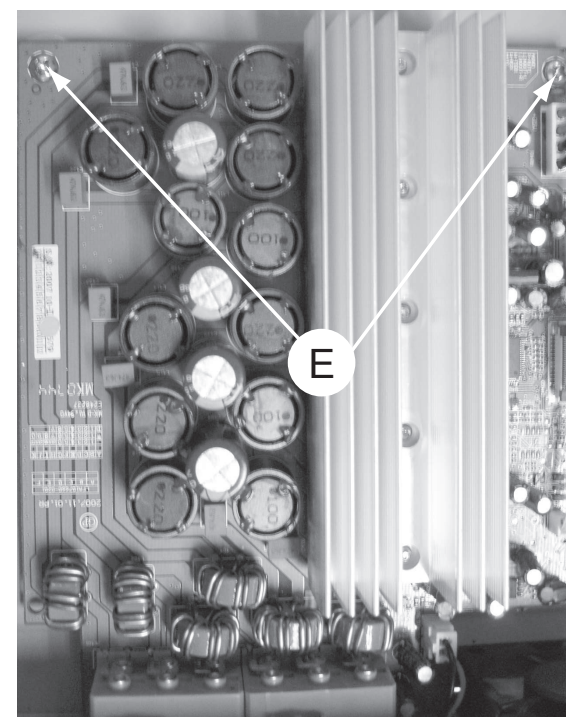


Figure 8

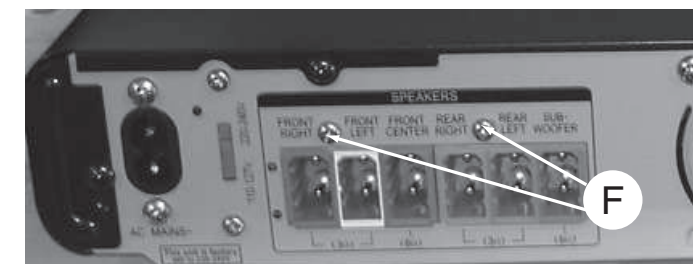


Figure 9

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

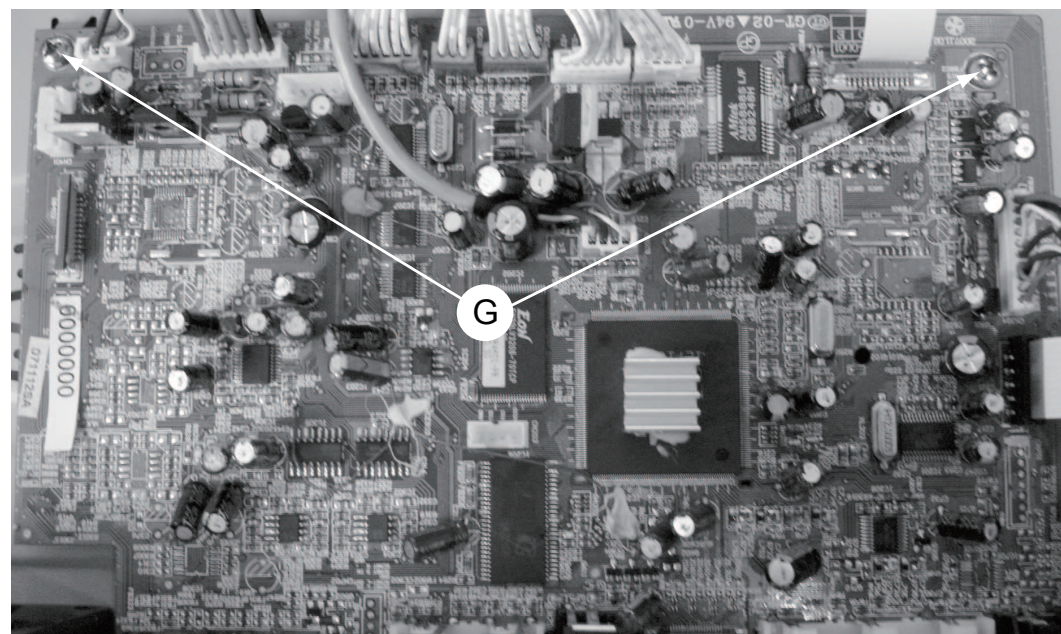


Figure 10

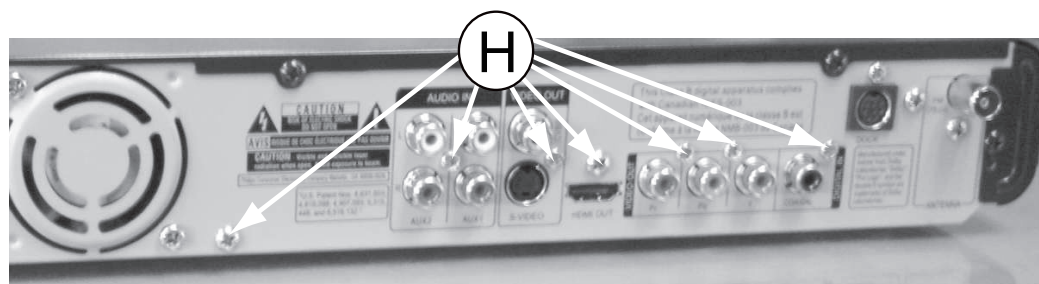


Figure 11

Dismantling of the Power Board

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

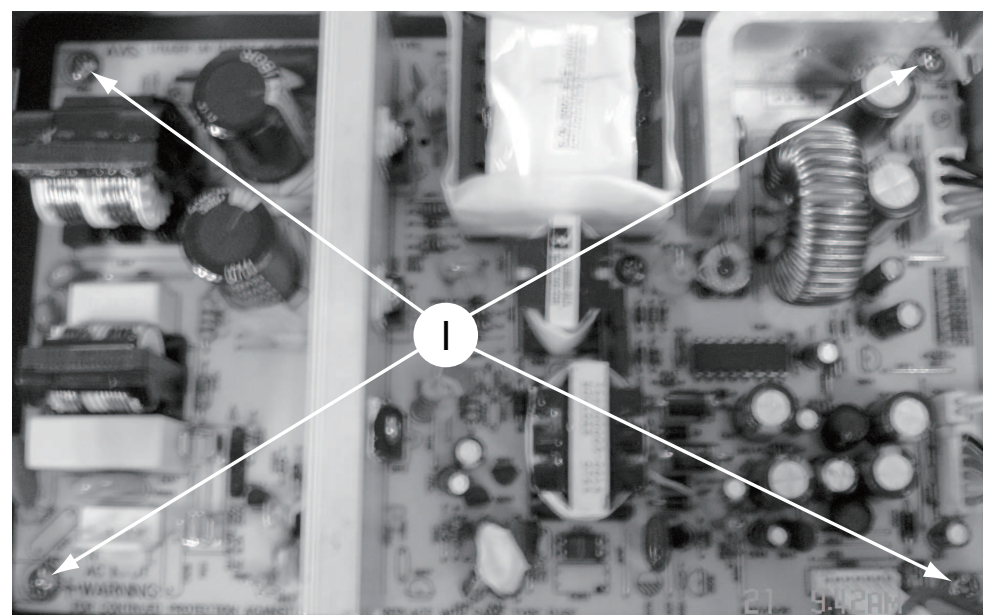


Figure 12

Dismantling of the VFD+JACK+VOL+STANDBY Board

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

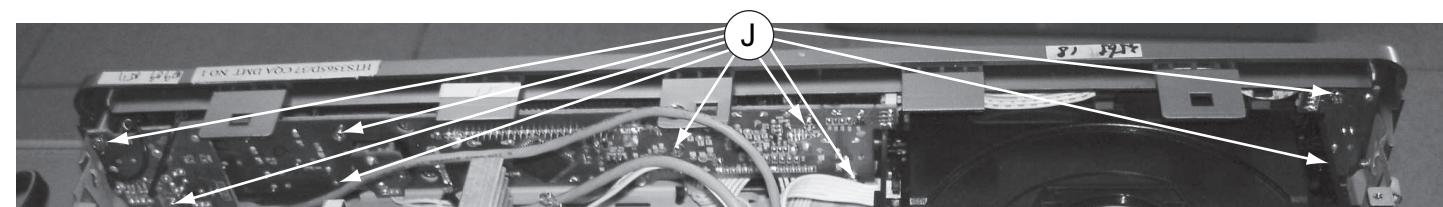


Figure 13

Dismantling of the DVD Module

- 1) Loosen 4 screws “K” as shown in figure 14.

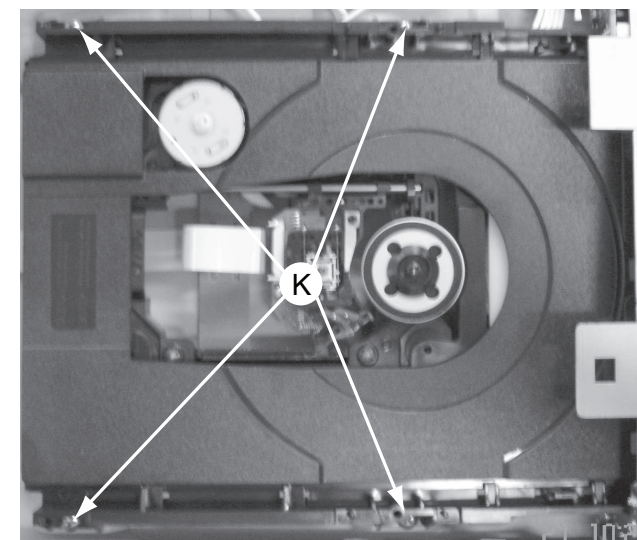
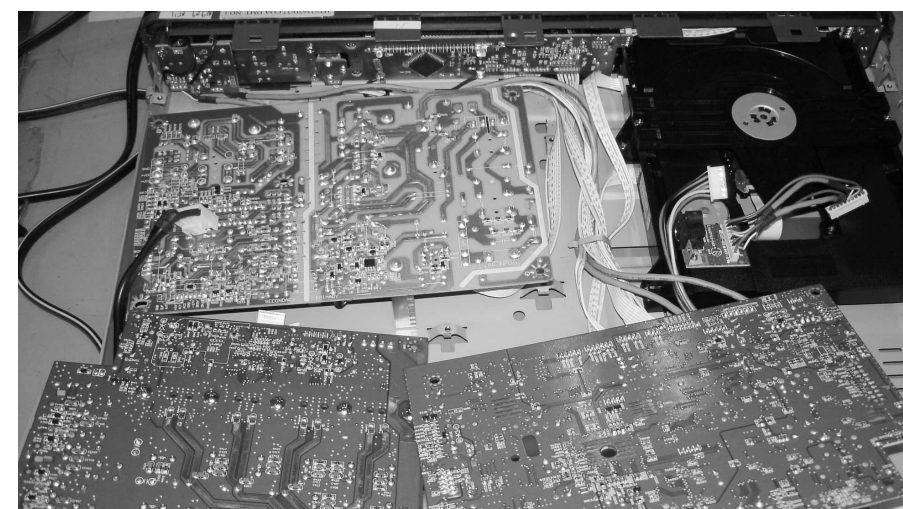


Figure 14

SERVICE POSITIONS

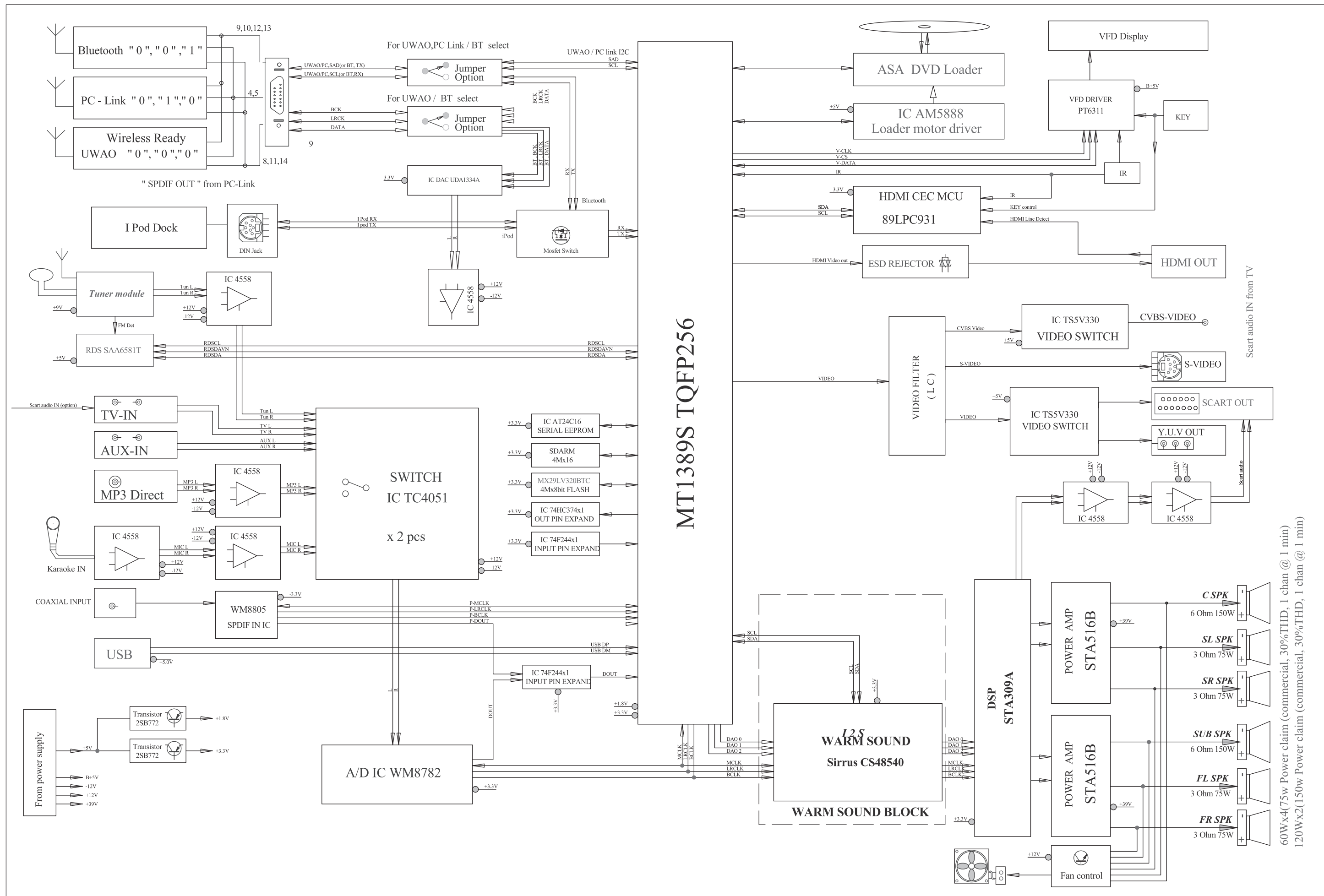
service position A (main unit)



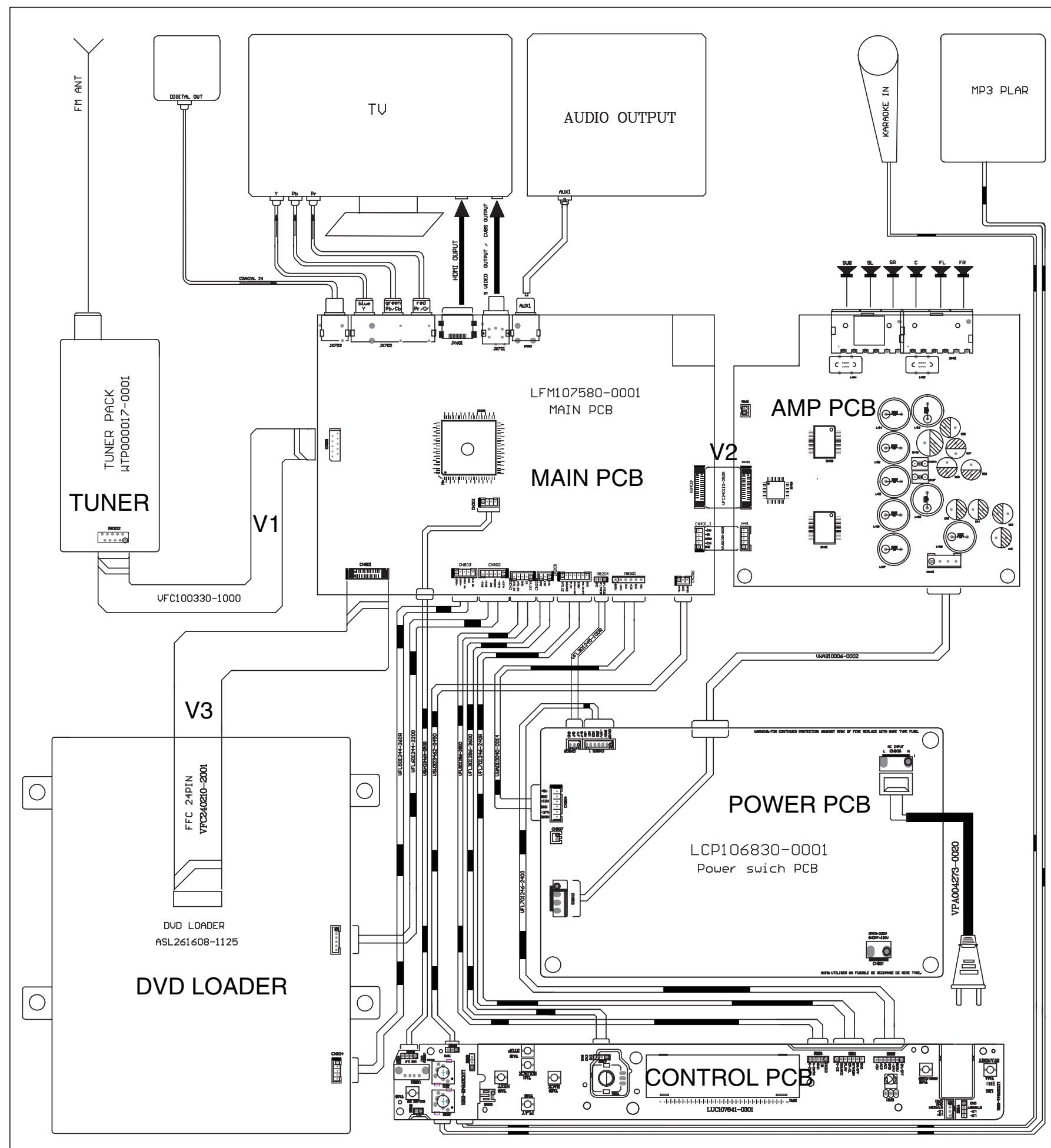
Note: In some service positions the components or copper patterns of one board may risk touching its neighbouring pc boards or metallic parts. To prevent such short-circuit use a piece of hard paper or other insulating material between them.

BLOCK DIAGRAM

4 - 1



60Wx4(75w Power claim (commercial, 30%THD, 1 chan @ 1 min)
120Wx2(150w Power claim (commercial, 30%THD, 1 chan @ 1 min)



CONTROL BOARD

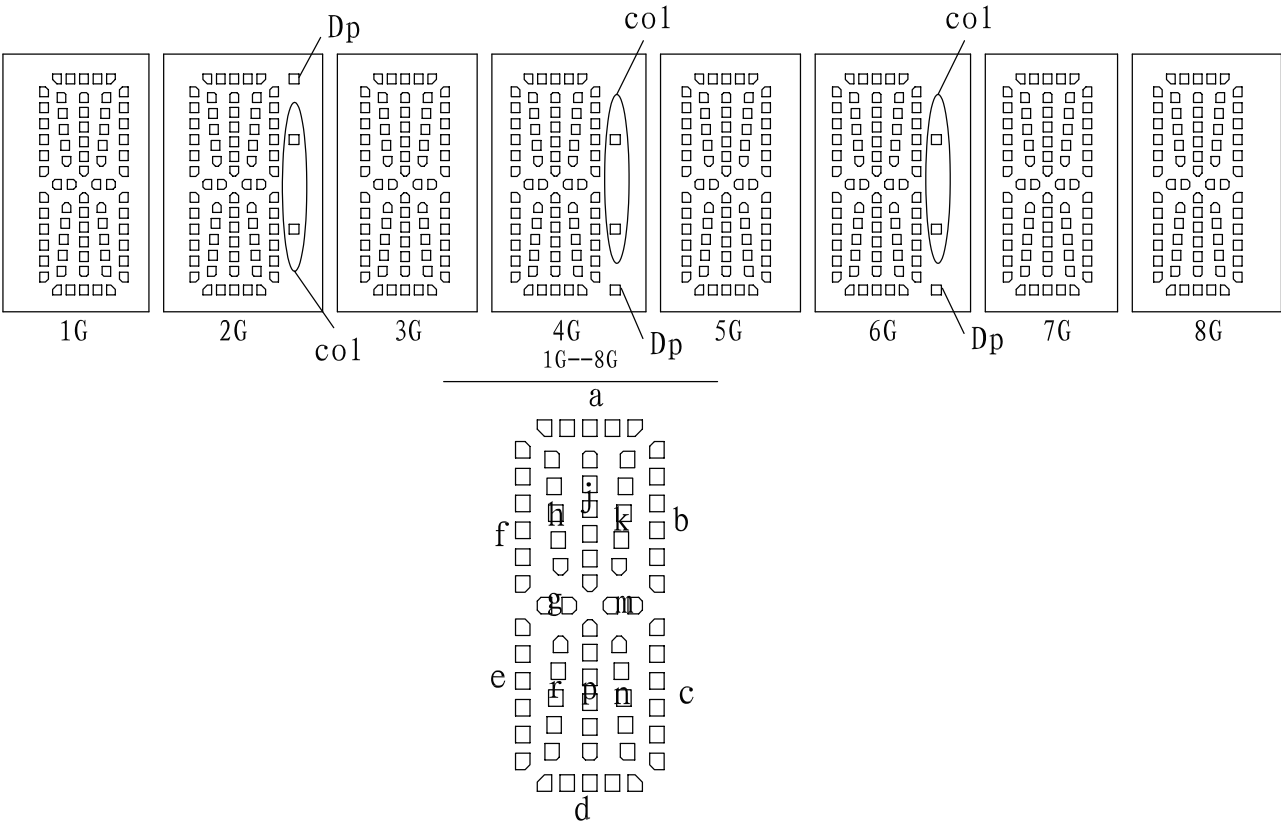
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FTD DISPLAY PIN ASSIGNMENT



	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

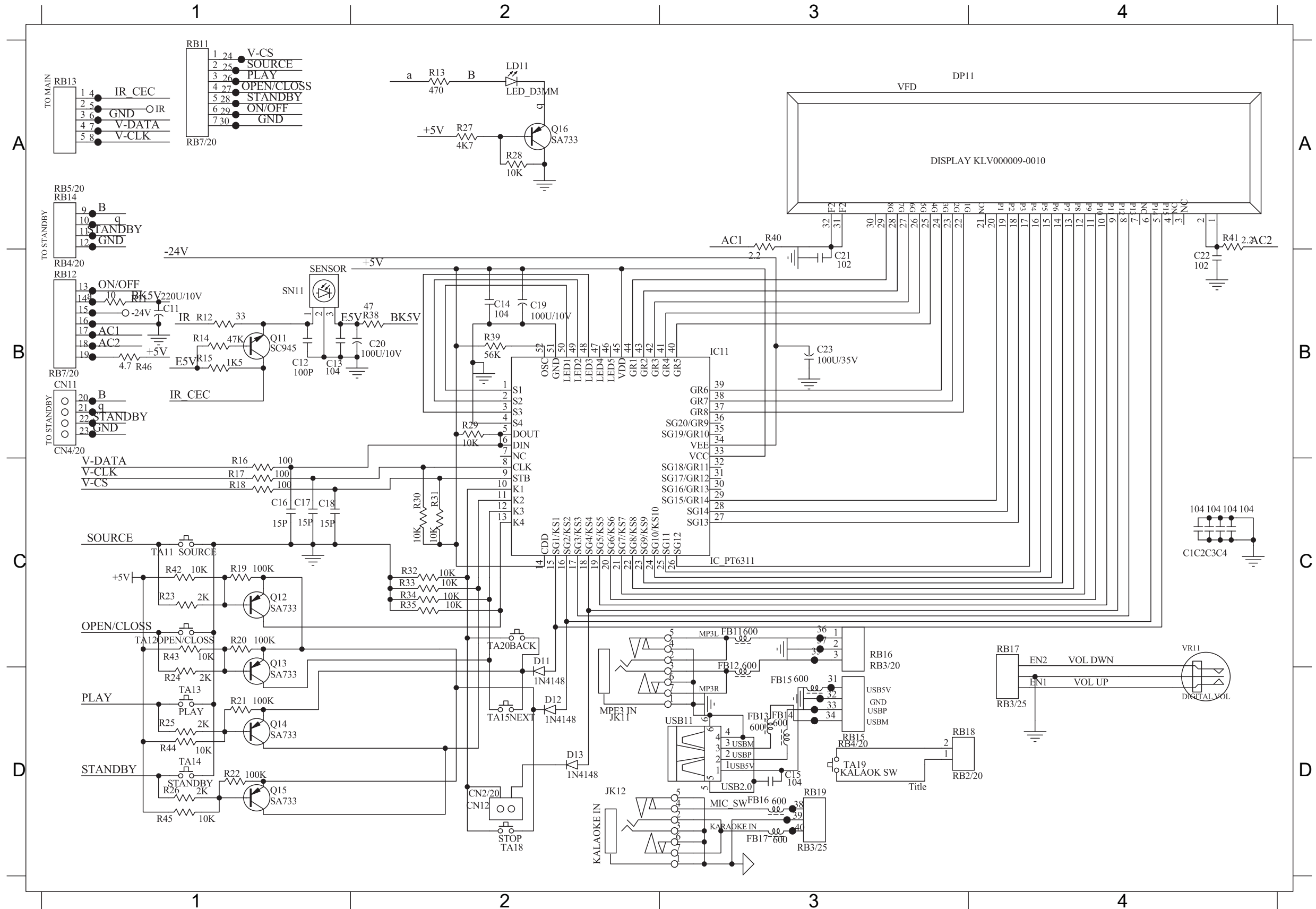
注 (Notes) : Fn : 灯丝 (Filament Pin) nG : 栅极 (Grid Pin)
Pn : 阳极 (Anode Pin) NP : 无引出脚 (No Pin)
NC : 无功能 (No connection Pin)

CIRCUIT DIAGRAM

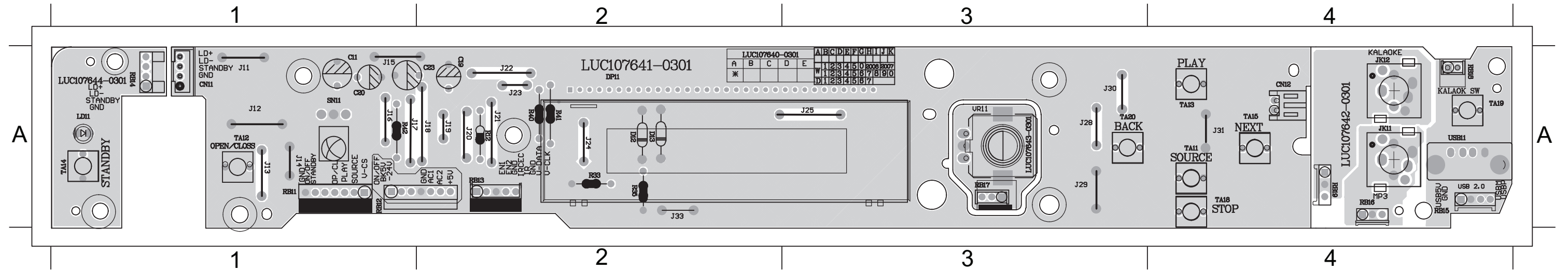
5 - 2

5 - 2

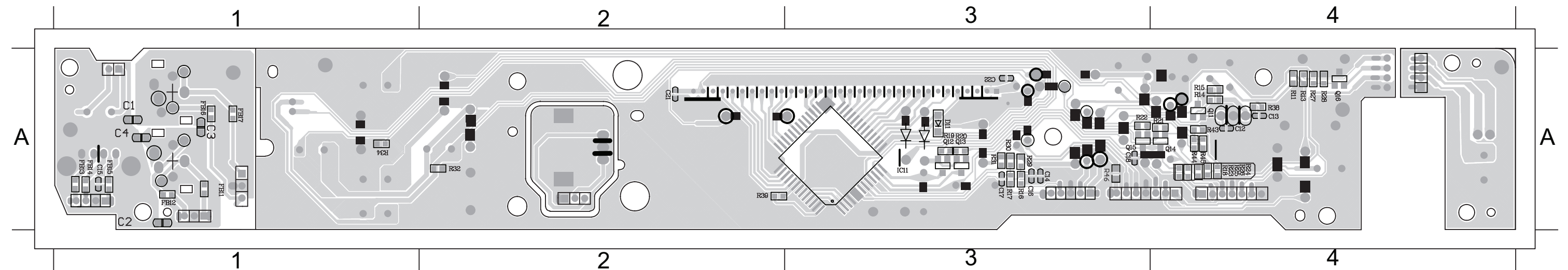
C11	B1	C17	C1	C23	B3	FB11	C3	FB17	D3	Q12	C1	R12	B1	R18	C1	R24	D1	R30	C2	R38	B2	R44	D1	RB14	A1	SN11	B1	TA18	D2
C12	B1	C18	C1	CN12	D2	FB12	D3	IC11	B3	Q13	C1	R13	A2	R19	C1	R25	D1	R31	C2	R39	B2	R45	D1	RB15	D3	TA11	C1	TA19	D3
C13	B1	C19	B2	D11	D2	FB13	D3	JK11	D2	Q14	D1	R14	B1	R20	C1	R26	D1	R32	C2	R40	A3	R46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



C11	A1	CN12	A2	J11	A1	J15	A1	J19	A2	J23	A2	J29	A3	JK11	A4	R33	A2	R42	A1	RB14	A1	RB18	A4	TA12	A1	TA18	A4	VR11	A3
C19	A2	D12	A2	J12	A1	J16	A1	J20	A2	J24	A2	J30	A3	JK12	A4	R35	A2	RB11	A1	RB15	A4	RB19	A4	TA13	A4	TA19	A4		
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C13	A4	C17	A3	D11	A3	FB14	A1	IC11	A3	Q14	A4	R13	A4	R17	A3	R21	A4	R25	A4	R29	A3	R34	A1	R44	A4
C14	A3	C18	A3	FB11	A1	FB15	A1	Q11	A4	Q15	A3	R14	A4	R18	A4	R22	A3	R26	A4	R30	A3	R38	A4	R45	A4
C15	A1	C21	A2	FB12	A1	FB16	A1	Q12	A3	Q16	A4	R15	A4	R19	A3	R23	A4	R27	A4	R31	A3	R39	A2	R46	A3

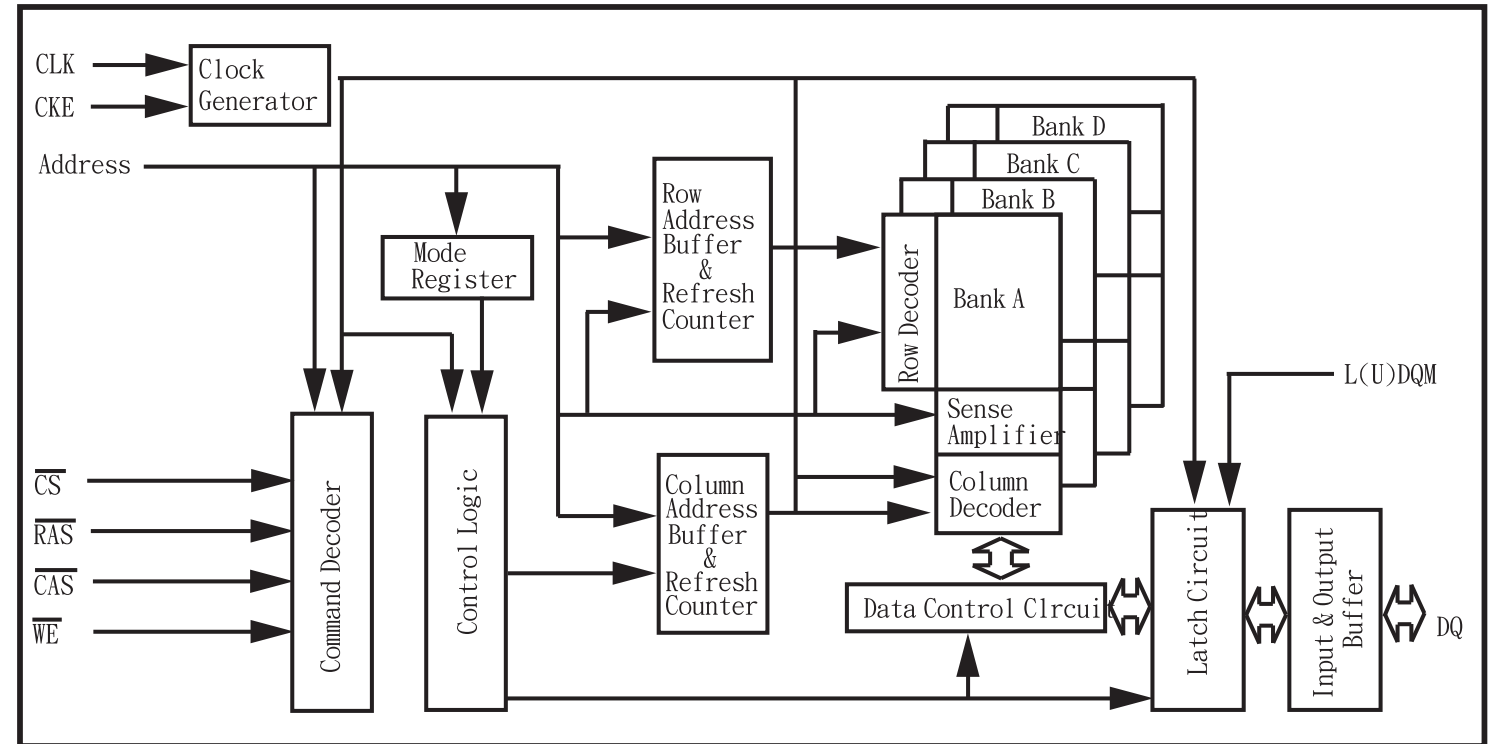


MAIN BOARD

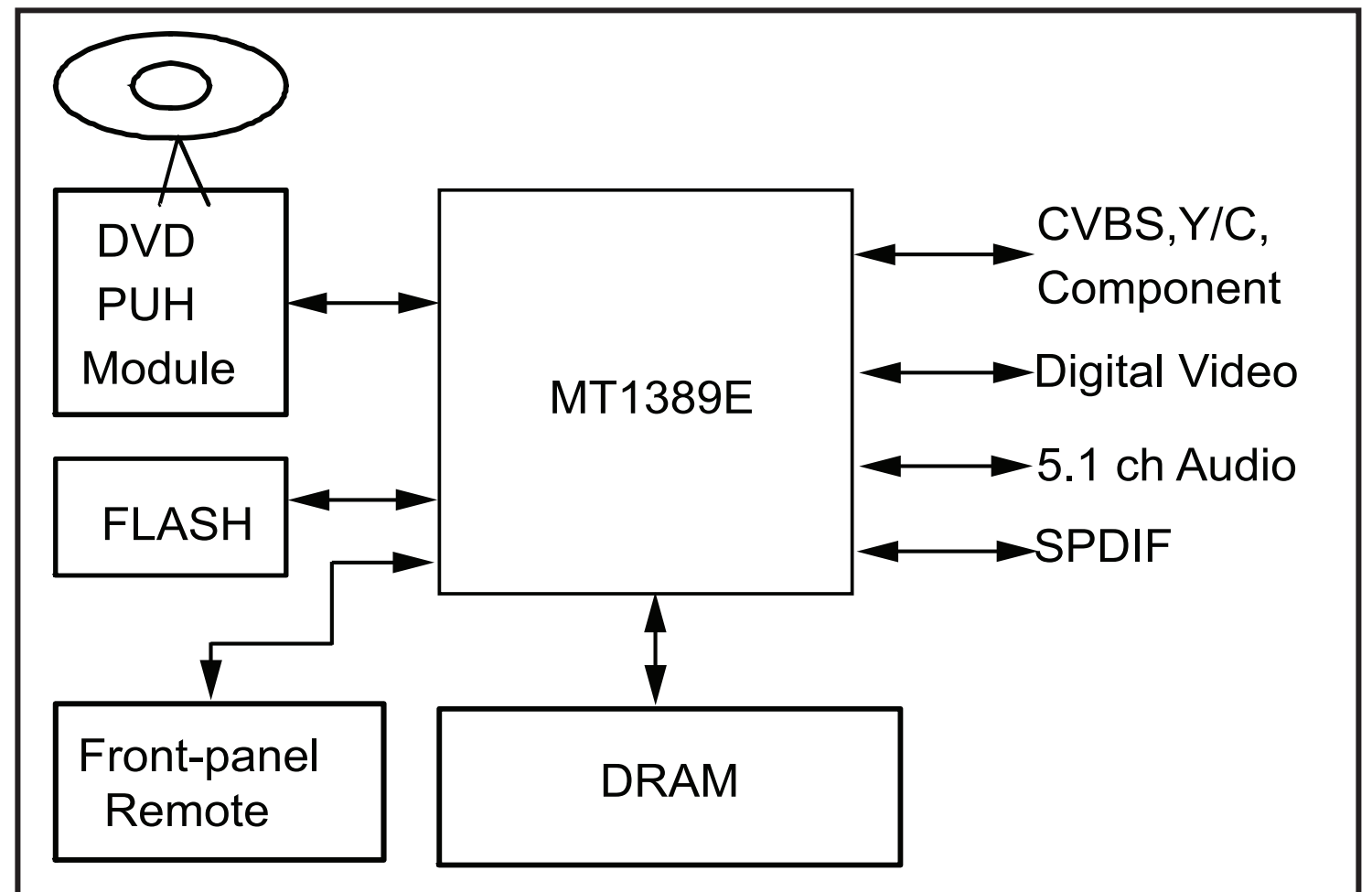
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INTERNAL IC DIAGRAM - AS81F641642C



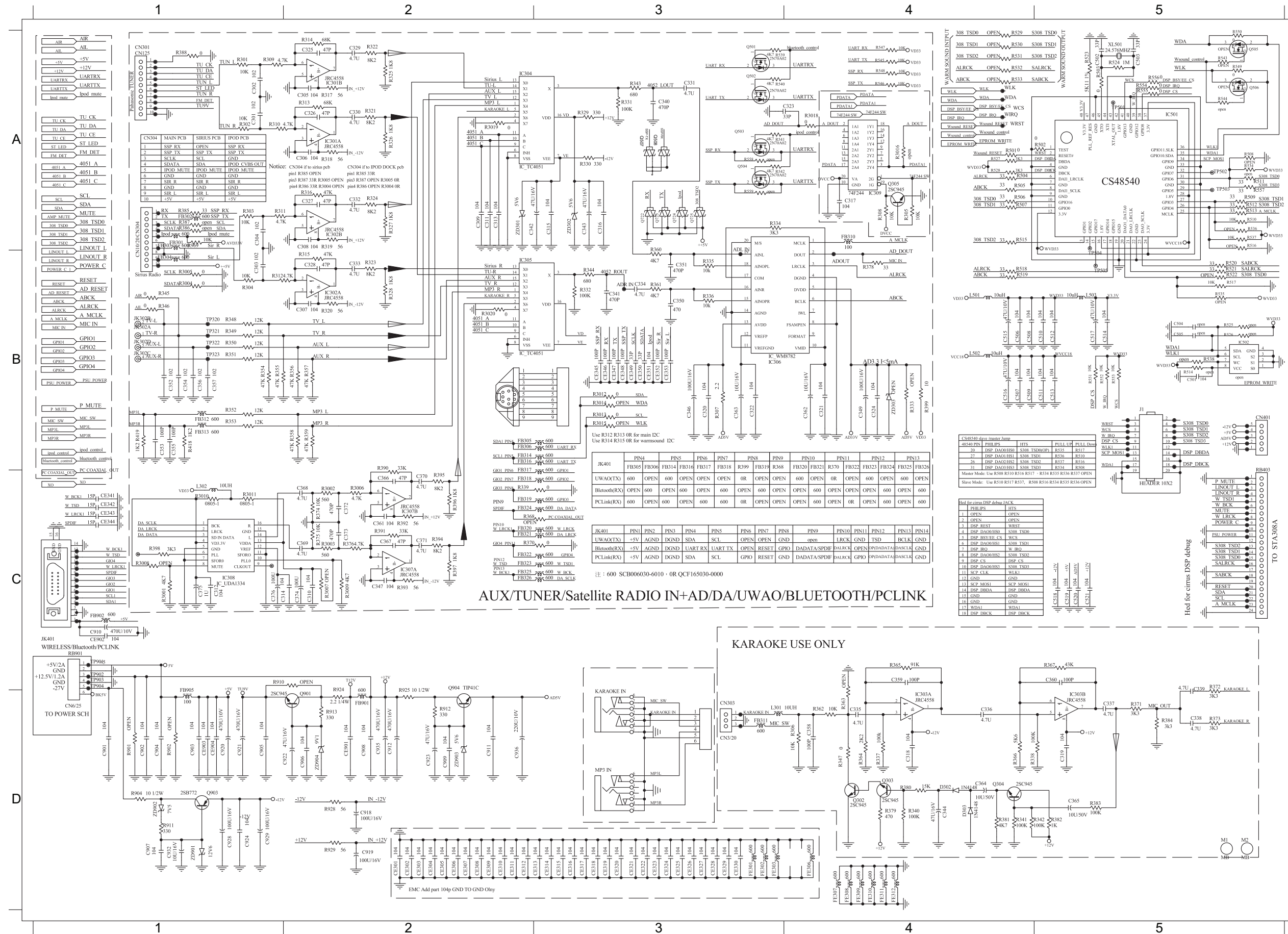
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CIRCUIT DIAGRAM - part one

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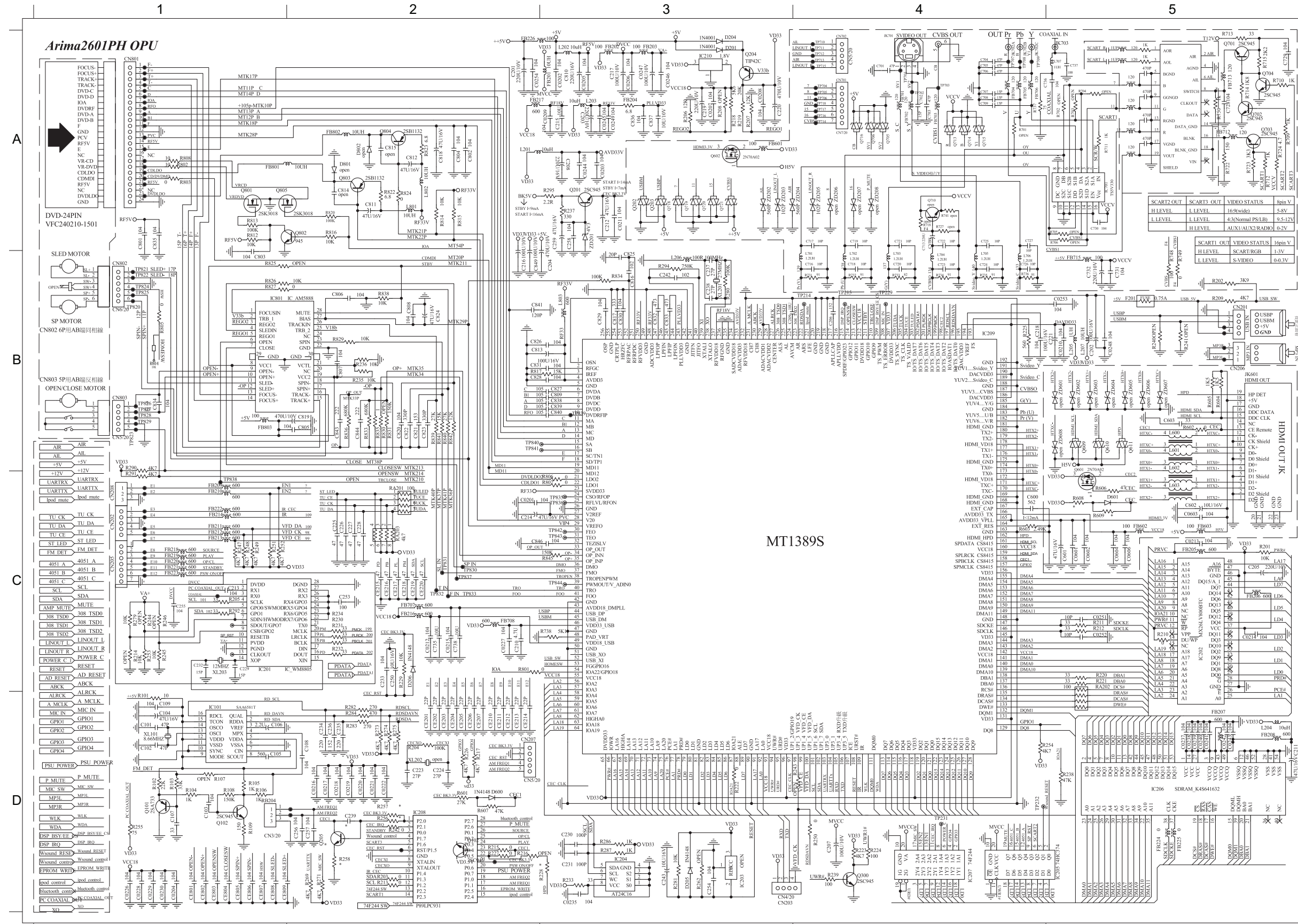


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C306	A1	C911	D2	FE306	D4	R356	B2
C309	A2	C912	D2	FE307	D4	R357	B2
C311	A2	C918	D2	FE308	D4	R358	B2
C313	A2	C919	D2	FE309	D4	R359	B2
C315	A3	C920	D1	FE310	D4	R360	B3
C316	A3	C921	D1	FE311	D4	R361	B3
C317	A4	C922	D2	FE312	D4	R362	D4
C318	D4	C923	D2	IC301	A2	R364	D4
C319	D5	C924	D1	IC303	D4	R365	C4
C320	B3	C928	D1	IC304	A2	R366	D4
C321	B4	C929	D1	IC305	B2	R367	C5
C322	B3	C932	D1	IC306	B3	R368	C3
C323	A3	C935	D2	IC309	A4	R371	D5
C324	B4	C936	D2	IC501	A5	R372	D5
C325	A2	CE301	D2	JK302	B1	R373	D5
C326	A2	CE302	D2	L301	D3	R378	B4
C329	A2	CE303	D2	L501	B4	R379	D4
C330	A2	CE304	D2	L502	B4	R380	D4
C331	A3	CE305	D2	L503	B5	R381	D4
C334	B3	CE306	D2	Q302	D4	R382	D5
C335	D4	CE307	D2	Q303	D4	R383	D5
C336	D4	CE308	D2	Q304	D4	R384	D5
C337	D5	CE309	D2	Q305	A4	R388	A1
C338	D5	CE310	D2	Q507	A3	R399	B4
C340	A3	CE312	D2	Q723	A3	R419	B1
C341	B3	CE313	D3	Q724	A3	R501	A4
C342	A3	CE314	D3	Q901	D2	R502	A5
C343	A3	CE315	D3	Q903	D1	R503	A5
C344	D4	CE316	D3	Q904	D2	R504	A4
C346	B3	CE317	D3	R301	A1	R505	A4
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C354	B1	CE323	D3	R305	D4	R513	A5
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C356	B1	CE325	D3	R308	A4	R517	B5
C357	B1	CE326	D3	R309	A1	R518	B4
C358	D4	CE327	D3	R310	A1	R519	B4
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C360	C5	CE329	D3	R314	A2	R521	B5
C362	B4	CE330	D3	R317	A2	R522	B5
C363	B3	CE341	C1	R318	A1	R523	A5
C364	D4	CE342	C1	R321	A2	R524	A5
C365	D5	CE343	C1	R322	A2	R525	B5
C502	A5	CE344	C1	R325	A2	R526	B5
C503	A5	CE345	B3	R326	A2	R537	A5
C506	B4	CE346	B3	R329	A3	R549	A5
C507	B4	CE347	B3	R330	A3	R550	A5
C508	B4	CE348	B3	R331	A3	R554	A5
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C514	B5	CE904	D1	R338	D5	R913	D2
C515	B4	CN301	A1	R340	D4	R924	D2
C516	B4	CN303	D3	R341	D4	R925	D2
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C518	C5	D302	D4	R343	A3	R929	D2
C519	C5	D303	D4	R344	B3	RB403	C5
C520	C5	FB310	A4	R345	B1	RB901	C1
C521	C5	FB311	D3	R346	B1	XL501	A5
C901	D1	FB312	B1	R347	D4	ZD301	A2
C902	D1	FB313	B1	R348	B1	ZD302	A3
C903	D1	FB901	D2	R349	B1	ZD901	D1
C904	D1	FB905	D1	R350	B1	ZD902	D1
C905	D1	FE301	D3	R351	B1	ZD903	D2
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CIRCUIT DIAGRAM - part two

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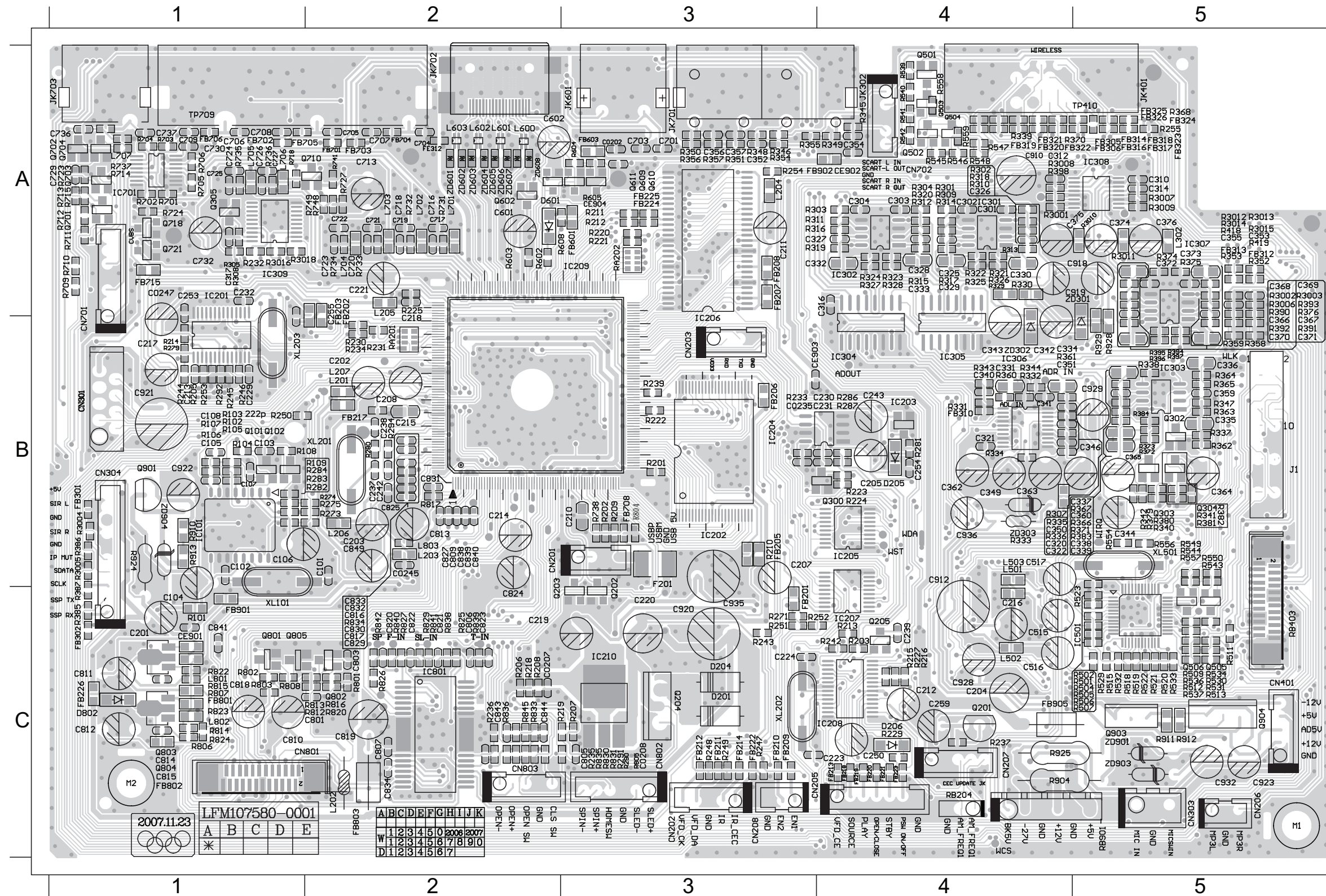


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C0204	D1	C254	D3	CE206	D2	IC205	D4	R242	D2
C0205	A3	C255	C1	CE207	D2	IC206	D5	R245	C1
C0206	A3	C259	A3	CE210	D2	IC207	D4	R247	C1
C0207	A3	C600	C4	CE211	D2	IC208	D2	R248	C1
C0208	A3	C601	C5	CE212	D2	IC209	B4	R249	C1
C0209	A3	C602	C5	CE213	D2	IC210	A3	R250	D4
C0210	B5	C603	B5	CE214	D2	IC801	B1	R251	C1
C0211	A3	C701	A4	CE215	C2	JK601	B5	R252	C1
C0212	C2	C702	A4	CE216	C2	JK701	A4	R253	C1
C0213	C5	C703	A4	CE217	C2	JK702	A4	R269	D2
C0214	C5	C704	A4	CE218	C2	JK703	A5	R271	D2
C0215	C2	C705	A4	CE219	C2	L201	A2	R274	D2
C0216	D2	C706	A4	CE220	C2	L202	A3	R279	C1
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C0227	C2	C719	A4	CE808	D1	L703	B4	R294	B3
C0228	D1	C720	B4	CE809	D1	L704	B4	R295	A3
C0229	D1	C721	A4	CN201	B5	L705	B4	R601	D2
C0230	D1	C722	A4	CN202	C1	L706	B4	R602	B5
C0235	D3	C723	B4	CN203	D3	L707	A5	R603	C4
C0237	D5	C724	B4	CN205	C1	L801	A2	R604	B5
C0238	D5	C725	A4	CN206	B5	L802	A2	R605	B5
C0239	D5	C726	B4	CN207	D2	L803	B3	R606	C5
C0240	D5	C727	A4	CN208	C1	Q201	A3	R701	A4
C0241	D5	C732	B5	CN801	A1	Q202	A3	R703	A5
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C202	B5	C817	B3	FB211	C1	R202	B5	R808	A1
C203	A3	C818	A2	FB212	C1	R203	D2	R812	A1
C204	B3	C819	B2	FB213	B5	R204	D2	R813	A1
C205	C5	C820	B2	FB214	C1	R205	C1	R814	A2
C206	B4	C821	B2	FB216	C2	R206	A3	R815	A2
C207	D4	C822	B2	FB217	A2	R207	A3	R816	A2
C208	A3	C823	B2	FB218	C1	R209	B5	R817	B2
C209	B3	C824	B2	FB219	C1	R210	C5	R820	A2
C210	C2	C825	B3	FB220	C1	R211	C5	R822	A2
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C213	C1	C827	B3	FB222	C1	R213	D2	R824	A2
C214	C2	C828	B3	FB223	C1	R215	D2	R826	B1
C215	A3	C829	B3	FB224	D5	R217	D2	R827	B1
C216	B2	C830	B3	FB225	D5	R218	A3	R829	B2
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C232	C1	C849	B2	FB802	A2	R234	C2	XL201	B3
C237	B3	CE201	D2	FB803	B1	R235	B2	XL203	C1
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PCB LAYOUT - TOP VIEW

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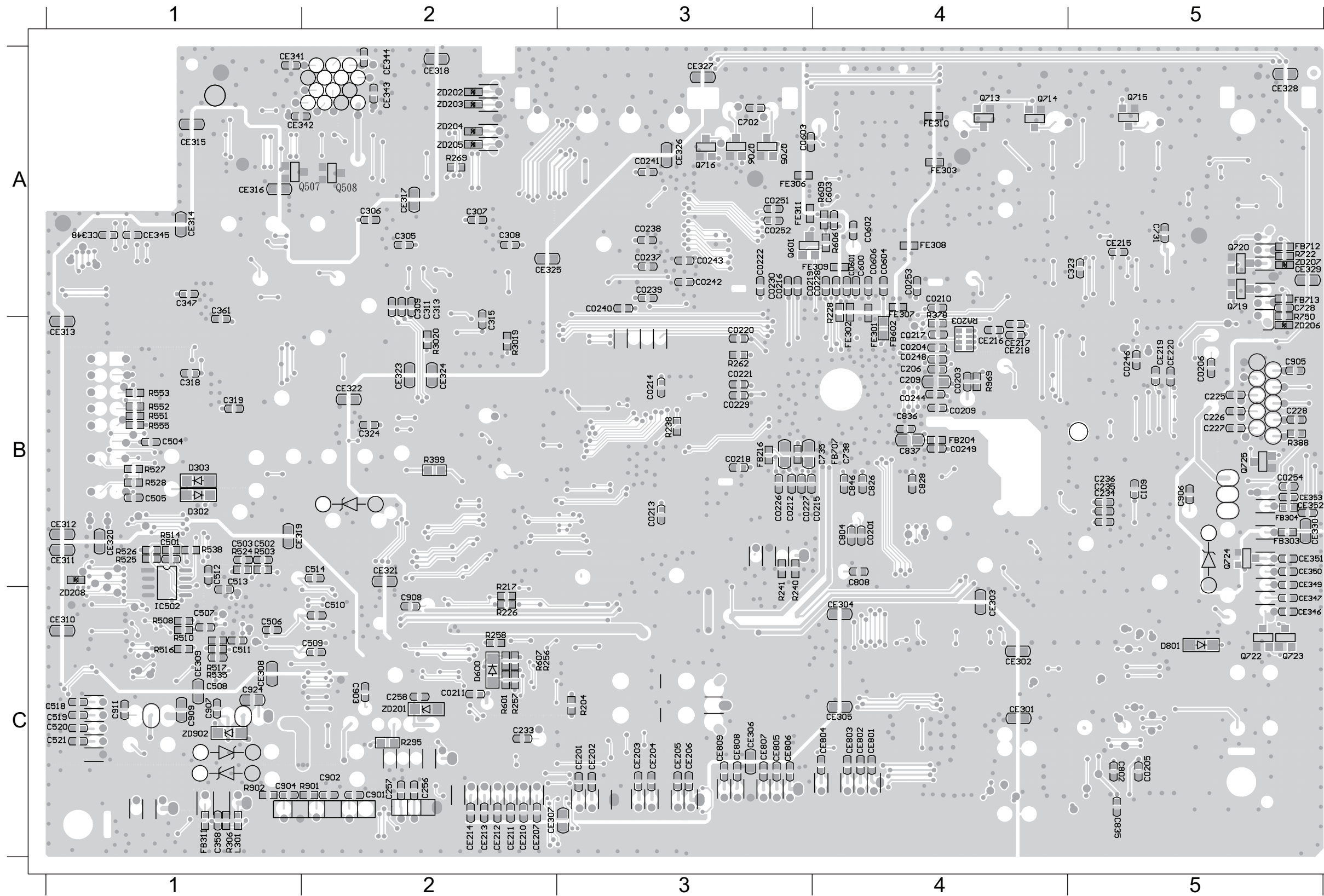


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C224 C3	C737 A1	FB217 B2	Q305 A1	R334 B4	R737 A1
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C230 B4	C803 C2	FB219 C4	Q611 A1	R336 B4	R748 A2
C231 B4	C805 C3	FB220 C4	Q801 C1	R337 B5	R749 A2
C232 A1	C806 C2	FB221 C4	Q802 C2	R338 B5	R801 C2
C237 B2	C807 C2	FB222 C3	Q803 C1	R340 B5	R802 C1
C238 B2	C809 B2	FB223 C4	Q804 C1	R341 B5	R803 C1
C242 B2	C810 C1	FB224 A3	Q805 C1	R342 B5	R805 C3
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C342 B4	C844 C2	IC205 B5	R231 B2	R371 B5	R842 C2
C343 B4	C849 B2	IC206 A3	R232 A1	R372 B5	R845 C2
C344 B5	C912 C4	IC207 C4	R233 B3	R373 B5	R904 C4
C346 B5	C918 A5	IC208 C4	R234 B2	R379 B5	R911 C5
C349 B5	C919 A5	IC209 B2	R235 C3	R380 B5	R912 C5
C350 B5	C920 C3	IC210 C3	R236 C2	R381 B5	R913 B1
C351 B5	C921 B1	IC301 A4	R237 C4	R382 B5	R924 B1
C352 A3	C922 B1	IC303 B5	R239 B3	R383 B5	R925 C4
C353 A5	C923 C5	IC304 B4	R242 C4	R384 B5	R928 B5
C354 A4	C928 C4	IC305 B4	R245 B1	R418 A5	R929 B5
C355 A5	C929 B5	IC306 B4	R247 C3	R419 A5	RA201 B2
C356 A3	C932 C5	IC309 A1	R248 C3	R501 C5	RA202 A3
C357 A3	C935 C3	IC501 C5	R249 C3	R502 C5	RB403 C5
C359 B5	C936 B5	IC801 C2	R250 B1	R504 C5	RB901 C5
C360 B5	CE901 C1	JK302 A4	R251 C3	R505 C5	XL201 B2
C362 B5	CE903 B3	JK601 A3	R252 C3	R506 C5	XL203 B1
C363 B5	CE904 A3	JK701 A3	R253 B1	R507 C5	XL501 B5
C364 B5	CN201 B3	JK702 A2	R271 C3	R509 C5	ZD301 A5
C365 B5	CN202 C3	JK703 A1	R274 B2	R512 C5	ZD302 B4
C515 C4	CN203 B3	L201 B2	R279 B1	R513 C5	ZD901 C5
C516 C4	CN205 C3	L202 C2	R280 B2	R515 C5	ZD903 C5
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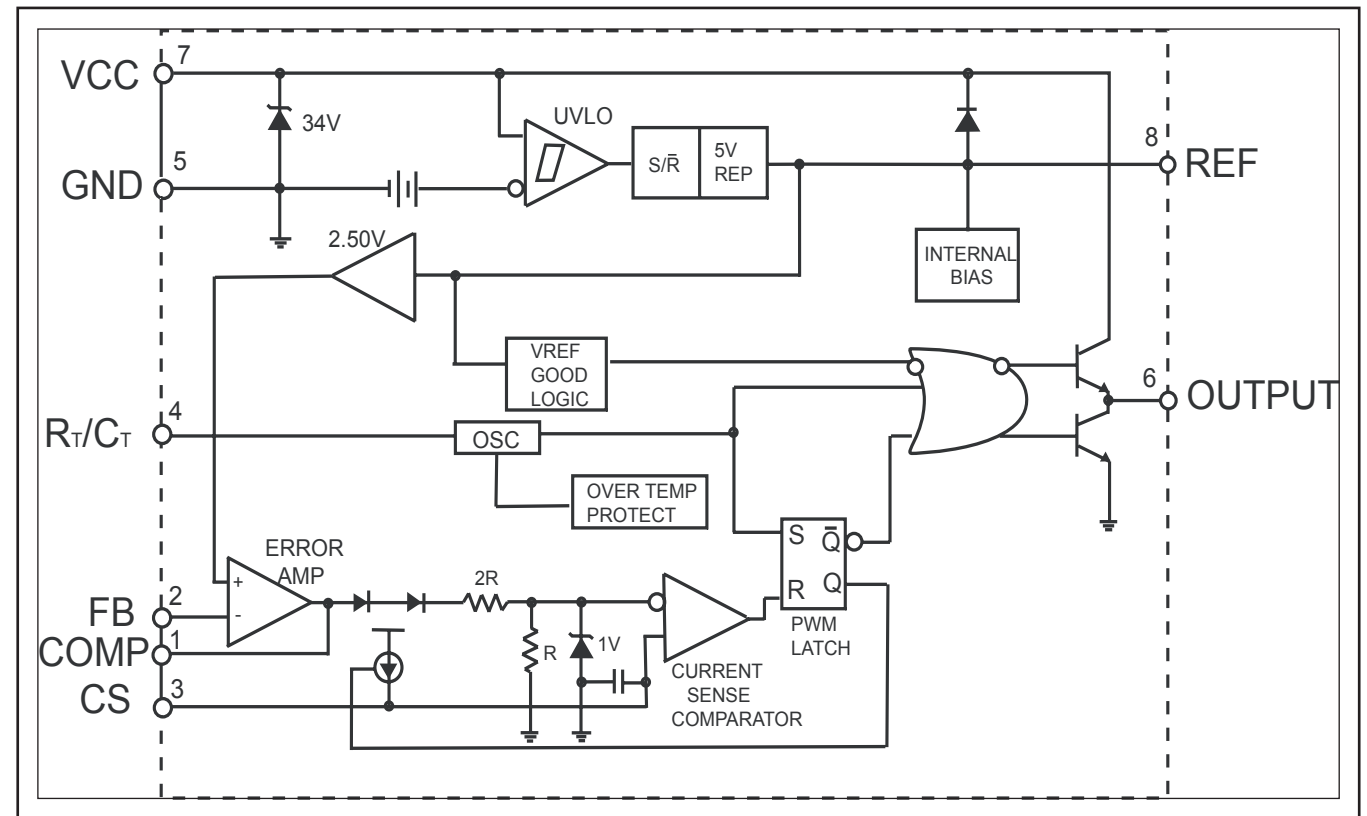
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	C0205	C5	C503	B1	CE303	C4	FE303	A4
	C0206	B5	C506	C1	CE304	C4	FE304	A4
	C0209	B4	C507	C1	CE305	C4	FE305	A3
	C0210	A4	C508	C1	CE306	C3	FE306	A3
	C0211	C2	C509	C2	CE307	C2	FE307	A4
	C0212	B3	C510	C2	CE308	C1	FE308	A4
	C0213	B3	C511	C1	CE309	C1	FE309	A4
	C0214	B3	C512	B1	CE310	C1	FE310	A4
	C0215	B3	C513	B1	CE311	B1	FE311	A3
	C0216	A3	C514	B2	CE312	B1	L301	C1
	C0217	B4	C518	C1	CE313	B1	Q507	A1
	C0218	B3	C519	C1	CE314	A1	Q601	A3
	C0219	A3	C520	C1	CE315	A1	Q705	A3
	C0220	B3	C521	C1	CE316	A1	Q706	A3
	C0221	B3	C600	A4	CE317	A2	Q713	A4
	C0222	A3	C603	A4	CE318	A2	Q714	A4
	B	C0226	B3	C702	A3	CE319	B1	Q715
C0227		B3	C735	B4	CE320	B1	Q716	A3
C0228		A4	C738	B4	CE321	B2	Q722	C5
C0229		B3	C802	C5	CE322	B2	Q723	C5
C0230		A3	C804	B4	CE323	B2	Q724	B5
C0237		A3	C808	B4	CE324	B2	R204	C3
C0238		A3	C826	B4	CE325	A2	R217	C2
C0239		A3	C828	B4	CE326	A3	R226	C2
C0240		A3	C835	C5	CE327	A3	R228	A4
C0241		A3	C836	B4	CE328	A5	R238	B3
C0242		A3	C837	B4	CE329	A5	R269	A2
C0243		A3	C846	B4	CE330	B5	R295	C2
C0244		B4	C901	C2	CE341	A1	R3019	B2
C0246		B5	C902	C2	CE342	A1	R3020	B2
C0248		B4	C903	C2	CE343	A2	R305	C1
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C		C0254	B5	C908	C2	CE348	A1	R510
	C0601	A4	C909	C1	CE351	B5	R524	B1
	C0602	A4	C911	C1	CE352	B5	R525	B1
	C0603	A3	C924	C1	CE353	B5	R526	B1
	C0604	A4	CE201	C3	CE801	C4	R601	C2
	C0606	A4	CE202	C3	CE802	C4	R606	A4
	C206	B4	CE203	C3	CE803	C4	R804	B3
	C209	B4	CE204	C3	CE804	C4	RA203	B4
	C225	B5	CE205	C3	CE805	C3	ZD201	C2
	C226	B5	CE206	C3	CE806	C3	ZD902	C1
	C227	B5	CE207	C2	CE807	C3		
	C228	B5	CE210	C2	CE808	C3		
	C305	A2	CE211	C2	CE809	C3		
	C306	A2	CE212	C2	CO254	B5		
	C309	A2	CE213	C2	D302	B1		
	C311	A2	CE214	C2	D303	B1		
	C313	A2	CE215	A5	D600	C2		
	C315	A2	CE216	B4	FB204	B4		
	C318	B1	CE217	B4	FB216	B3		
	C319	B1	CE218	B4	FB311	C1		
C323	A5	CE219	B5	FB602	B4			

POWER BOARD

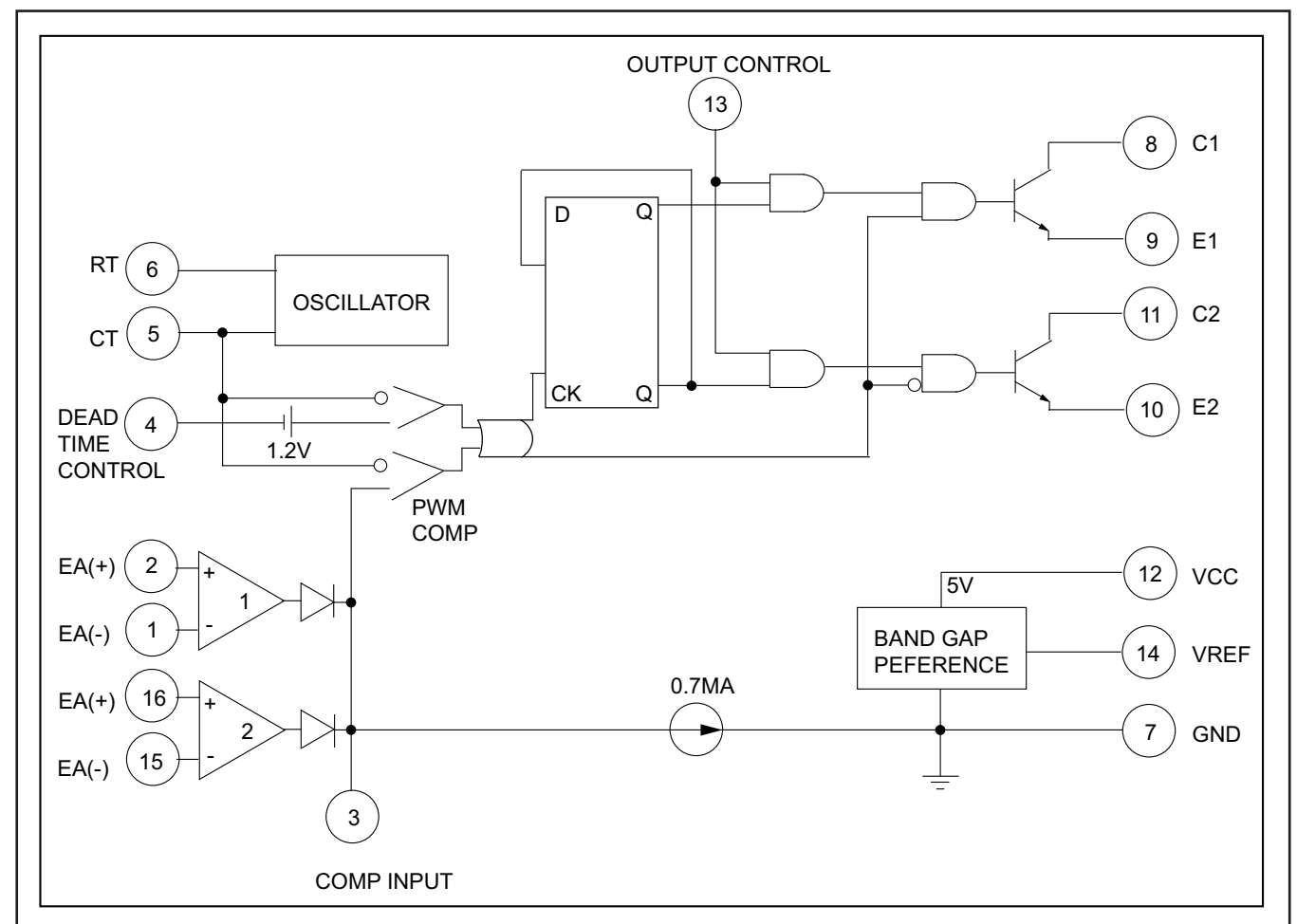
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INTERNAL IC DIAGRAM - AP3843GMTR



INTERNAL IC DIAGRAM - AZ7500BP

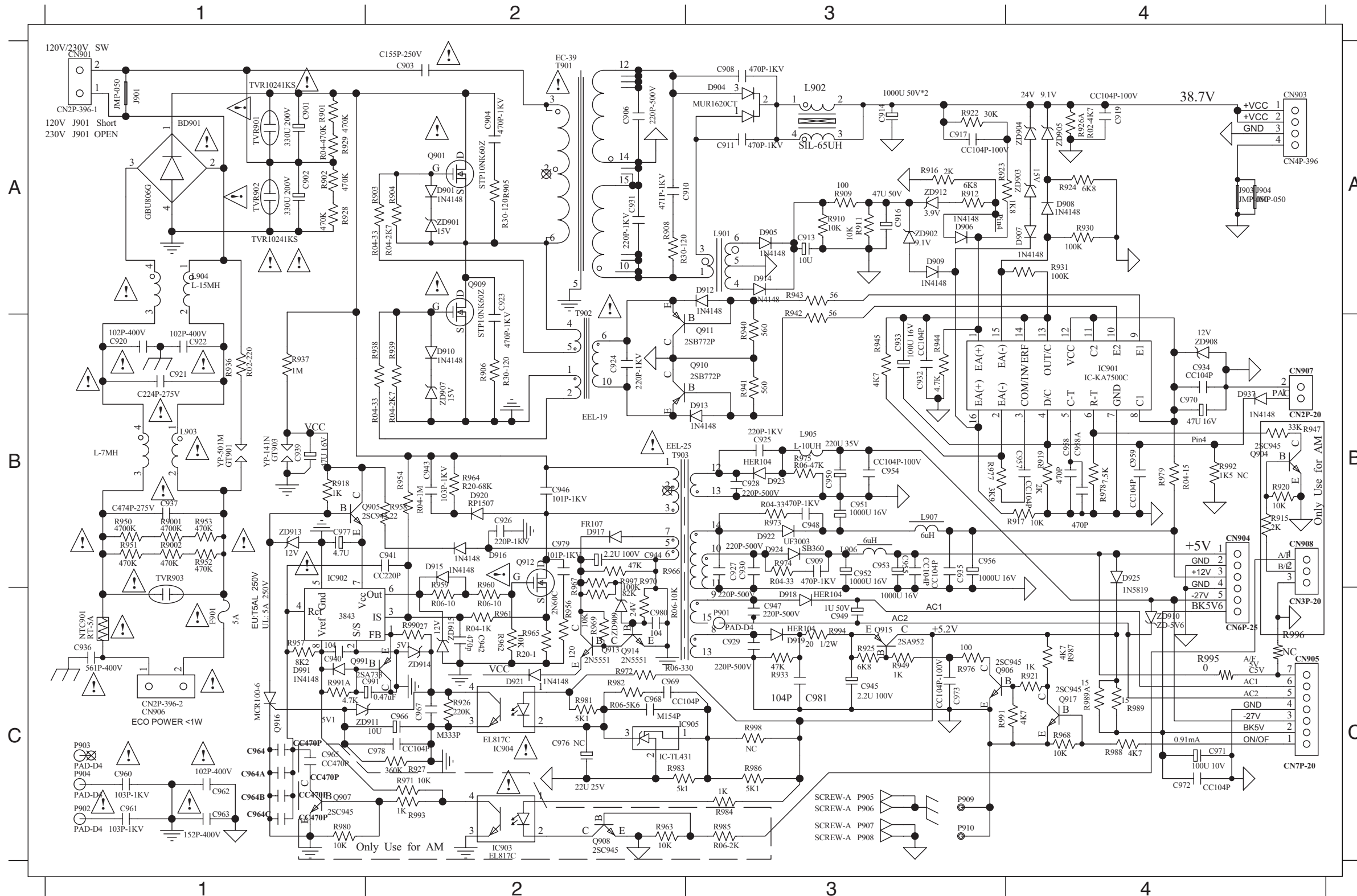


CIRCUIT DIAGRAM

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BD901	A1	C917	A3	C931	A2	C946	B2	C959	B4	C970	B4	CN907	B4	D916	B2	GT901	B1	L906	B3	Q916	C1	R910	A3	R926B	A4	R941	B3	R958	B2	R973	B3	R989	C4	TVR901A1	ZD912	A3
C901	A1	C919	A4	C932	B3	C948	B3	C960	C1	C971	C4	CN908	B4	D917	B2	GT903	B1	L907	B3	Q917	C4	R911	A3	R926C	A4	R942	A3	R959	C2	R974	B3	R989A	C4	TVR902A1	ZD913	B1
C902	A1	C920	B1	C933	B3	C949	C3	C961	C1	C972	C4	D901	A2	D918	C3	IC901	B4	NTC901	C1	Q991	C1	R912	A3	R926D	A4	R943	A3	R960	C2	R975	B3	R990	C2	TVR903B1	ZD914	C2
C903	A2	C921	B1	C934	B4	C950	B3	C962	C1	C973	C3	D904	A3	D919	C3	IC902	B1	Q901	A2	R9001	B1	R916	A3	R927	C2	R944	B3	R961	C2	R976	C3	R991	C4	ZD901	A2	
C904	A2	C922	B1	C935	B3	C951	B3	C963	C1	C977	B1	D905	A3	D920	B2	IC904	C2	Q905	B1	R9002	B1	R917	B4	R928	A1	R945	B3	R962	C2	R977	B4	R991A	C1	ZD902	A3	
C906	A2	C923	A2	C937	B1	C952	B3	C964	C1	C978	C2	D907	A4	D921	C2	IC905	C2	Q906	C3	R901	A1	R918	B1	R929	A1	R949	C3	R964	B2	R978	B4	R993	C2	ZD903	A4	
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C910	A2	C926	B2	C941	B2	C955	B3	C964C	C1	CN901	A1	D910	B2	D924	B3	L901	A3	Q911	B3	R904	A2	R922	A3	R936	B1	R952	B1	R967	B2	R982	C2	R997	B2	ZD907	B2	
C911	A3	C927	B3	C942	C2	C956	B3	C966	C2	CN903	A4	D912	A3	D925	B4	L902	A3	Q912	B2	R905	A2	R923	A4	R937	B1	R953	B1	R968	C4	R983	C2	T901	A2	ZD908	B4	
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C914	A3	C929	C3	C944	B2	C958	B4	C968	C2	CN905	C4	D914	A3	D991	C1	L904	A1	Q914	C2	R908	A2	R925	C3	R939	B2	R955	C4	R970	C2	R987	C4	T902	B2	ZD910	C4	
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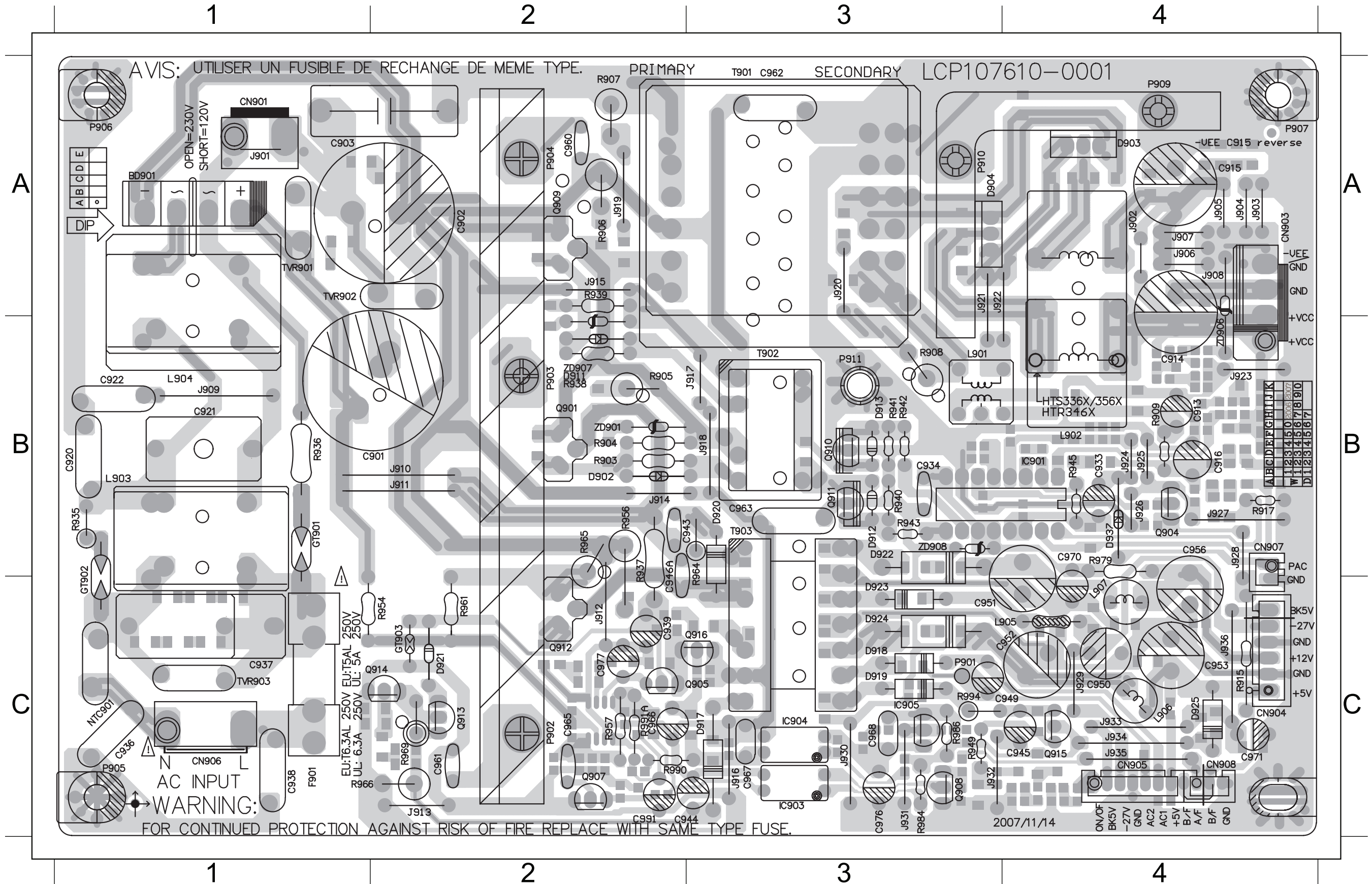


PCB LAYOUT - TOP VIEW

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

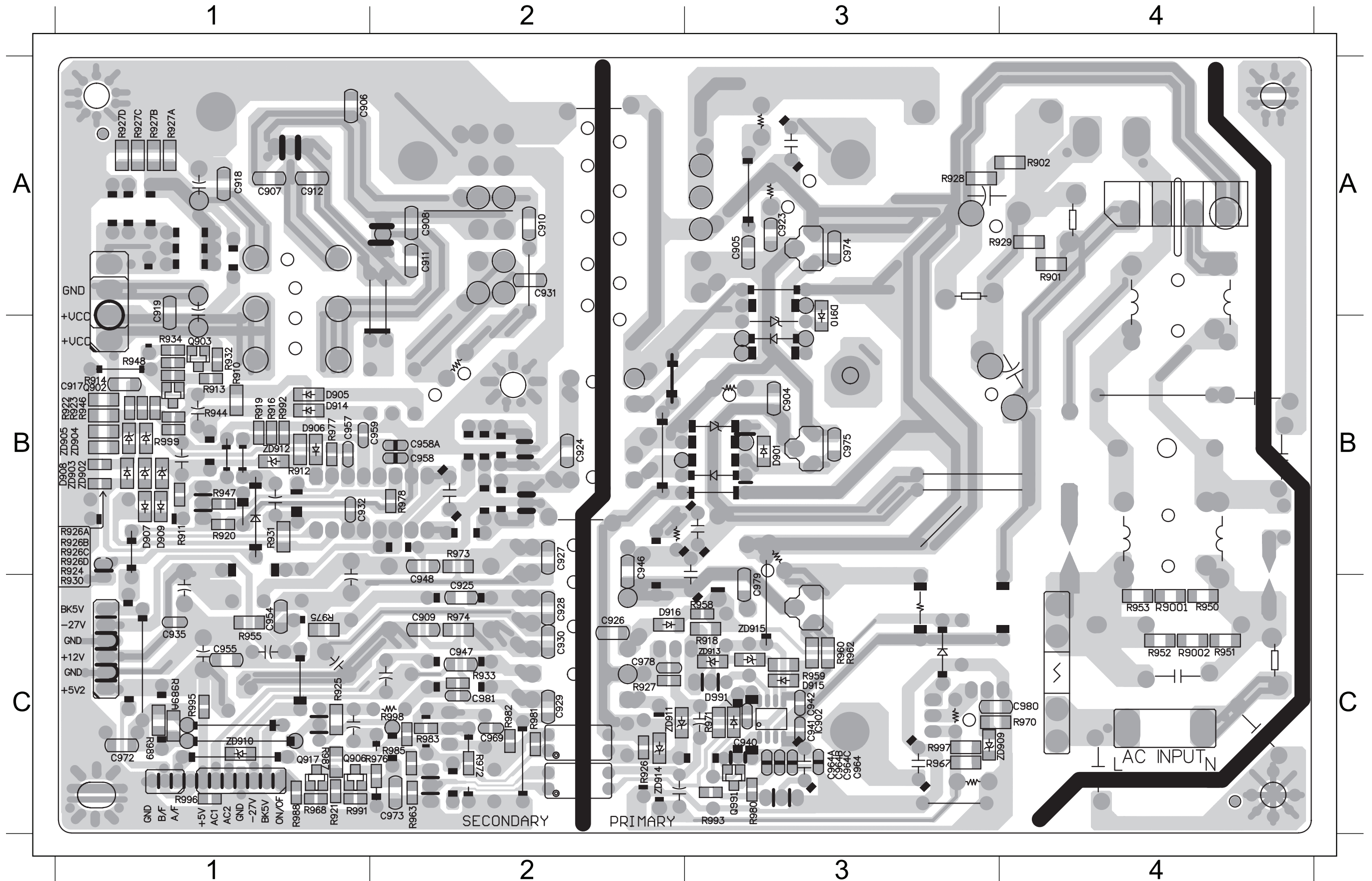


PCB LAYOUT - BOTTOM VIEW

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C906	A1	C923	A3	C917	B1	D909	B1	R919	B1	R926CB1	ZD902	B1	C927	B2	R973	B2	C955	C1	R955	C1	R989AC1	C926	C2	C978	C2	R981	C2	C941	C3	D915	C3	R959	C3	ZD909	C3	R951	C4		
C919	A1	D910	A3	C932	B1	D914	B1	R922	B1	R926DB1	ZD903	B1	C946	B2	R978	B2	C972	C1	R968	C1	R991	C1	C928	C2	D916	C2	R982	C2	C942	C3	D991	C3	R960	C3	ZD913	C3	R952	C4	
C908	A2	R928	A3	C957	B1	R910	B1	R923	B1	R930	B1	ZD904	B1	C948	B2	C904	B3	Q906	C1	R975	C1	R995	C1	C929	C2	R927	C2	R983	C2	C964	C3	IC902	C3	R962	C3	C980	C4	R953	C4
C910	A2	R901	A4	D905	B1	R911	B1	R924	B1	R931	B1	ZD905	B1	C958	B2	D901	B3	Q917	C1	R987	C1	ZD910	C1	C930	C2	R972	C2	ZD911	C2	C964AC3	Q991	C3	R967	C3	R9001	C4	R970	C4	
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C931	A2	R929	A4	D908	B1	R916	B1	R926BB1	R977	B1	C924	B2	C959	B2	C954	C1	R925	C1	R989	C1	C925	C2	C973	C2	R976	C2	C940	C3	C964CC3	R958	C3	R997	C3	R950	C4				

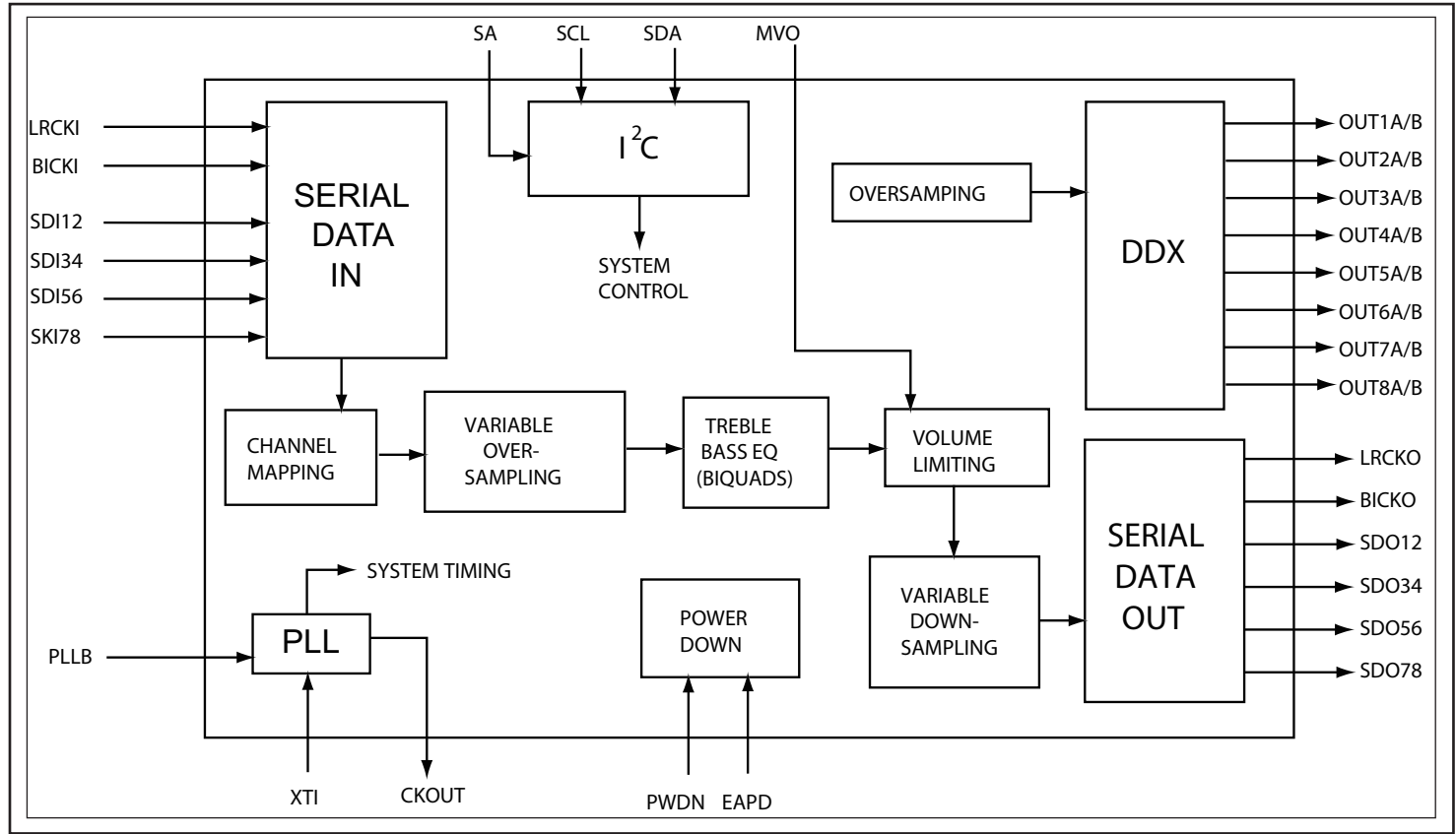


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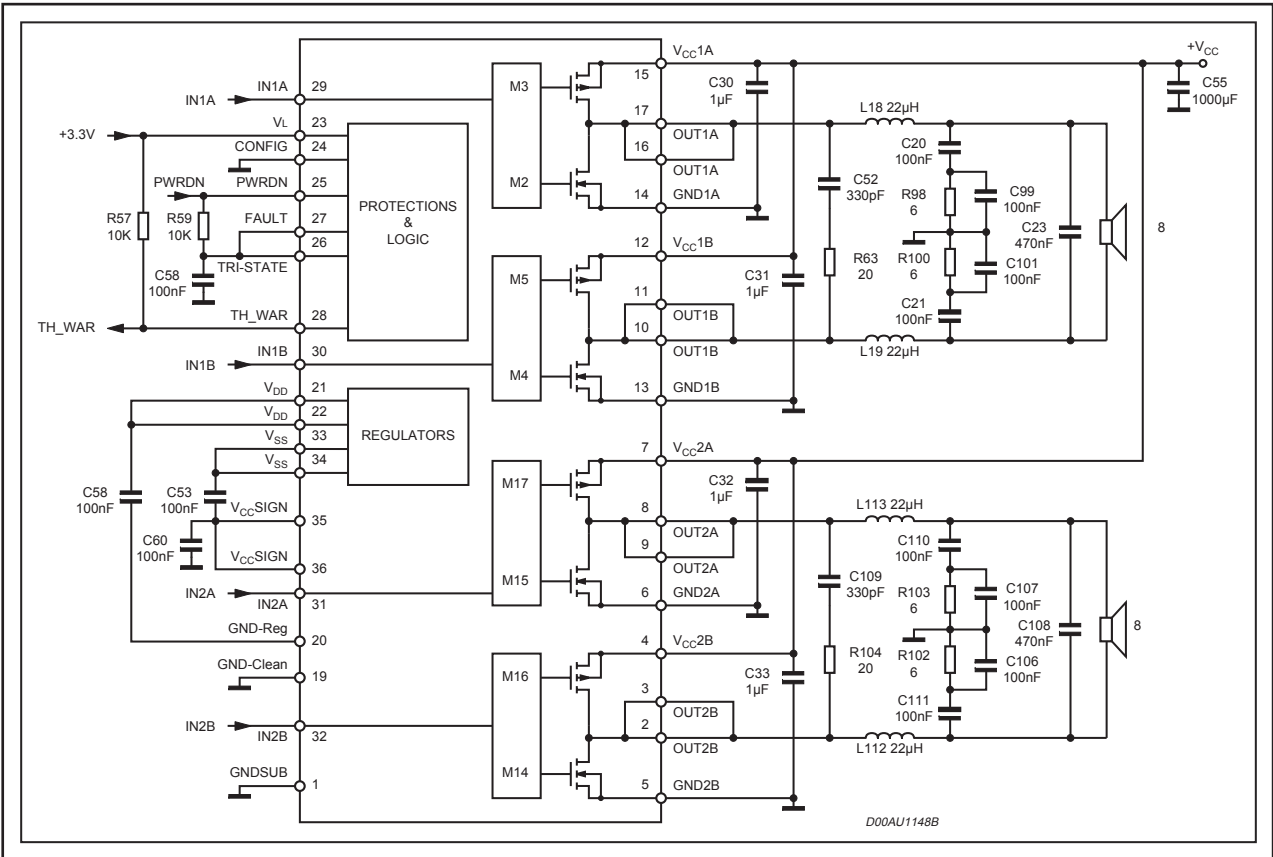
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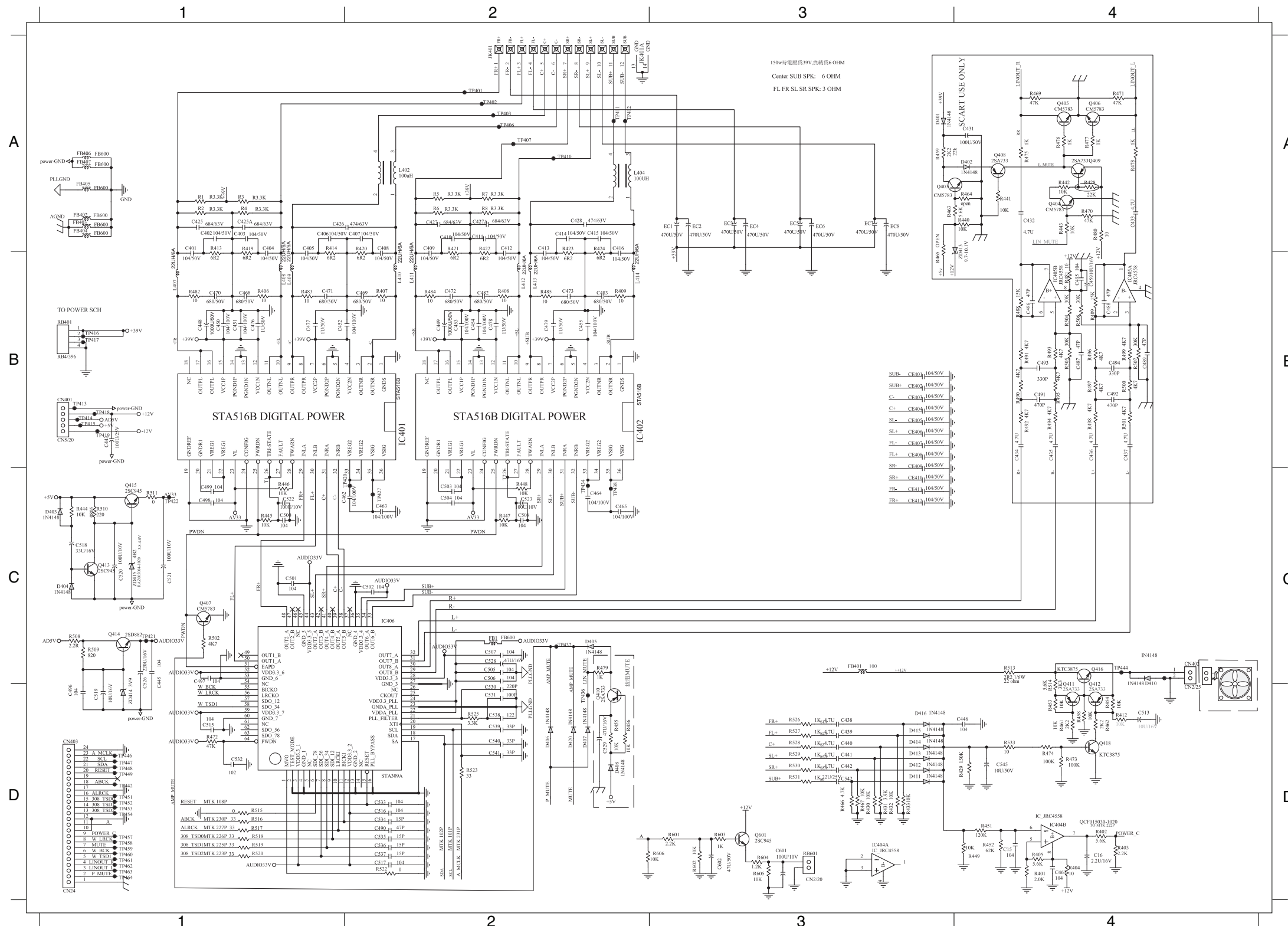
INTERNAL IC DIAGRAM - STA309A



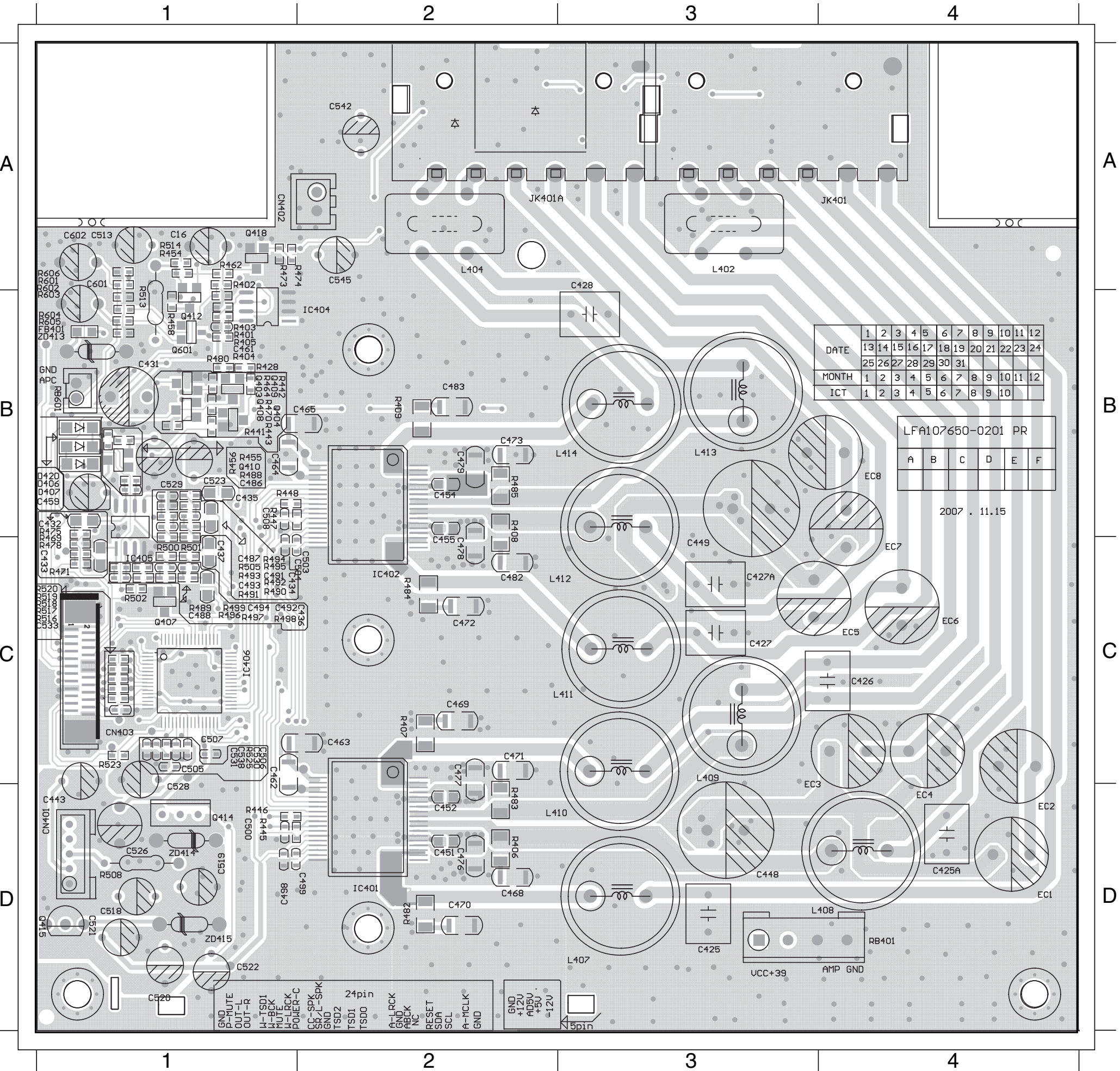
INTERNAL IC DIAGRAM - STA516B



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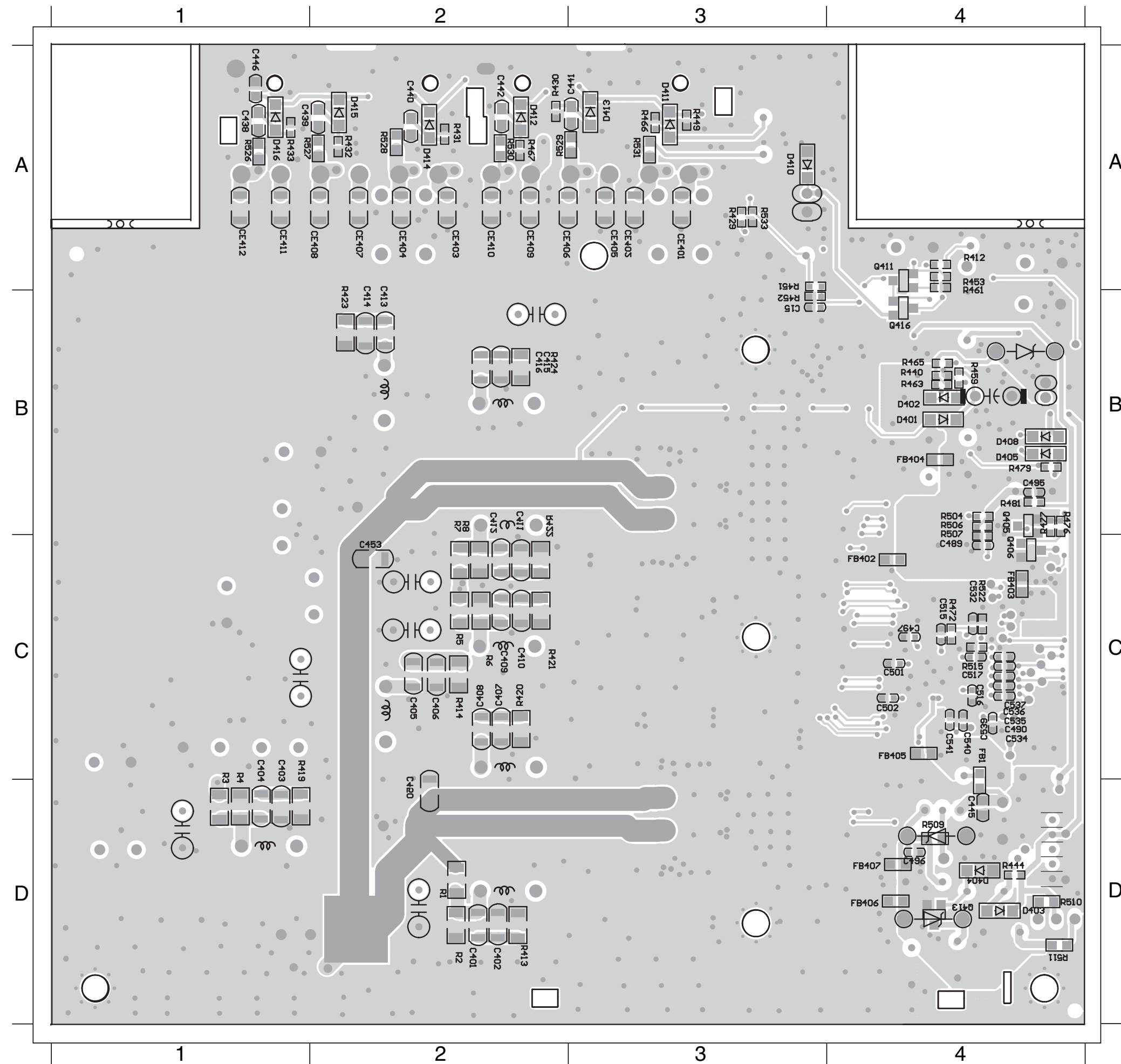
PCB LAYOUT - TOP VIEW



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C425	D3	C601	A1	R456	B1
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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
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C504	C1	Q410	B1		
C505	C1	Q412	B1		
C506	C1	Q414	D1		
C507	C1	Q415	D1		
C508	B1	Q418	A1		
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C518	D1	R401	B1		
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C521	D1	R404	B1		
C522	D1	R405	B1		
C523	B1	R406	D2		
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C528	C1	R408	B2		
C529	B1	R409	B2		
C530	C1	R445	D1		
C531	C1	R446	D1		
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PCB LAYOUT - BOTTOM VIEW

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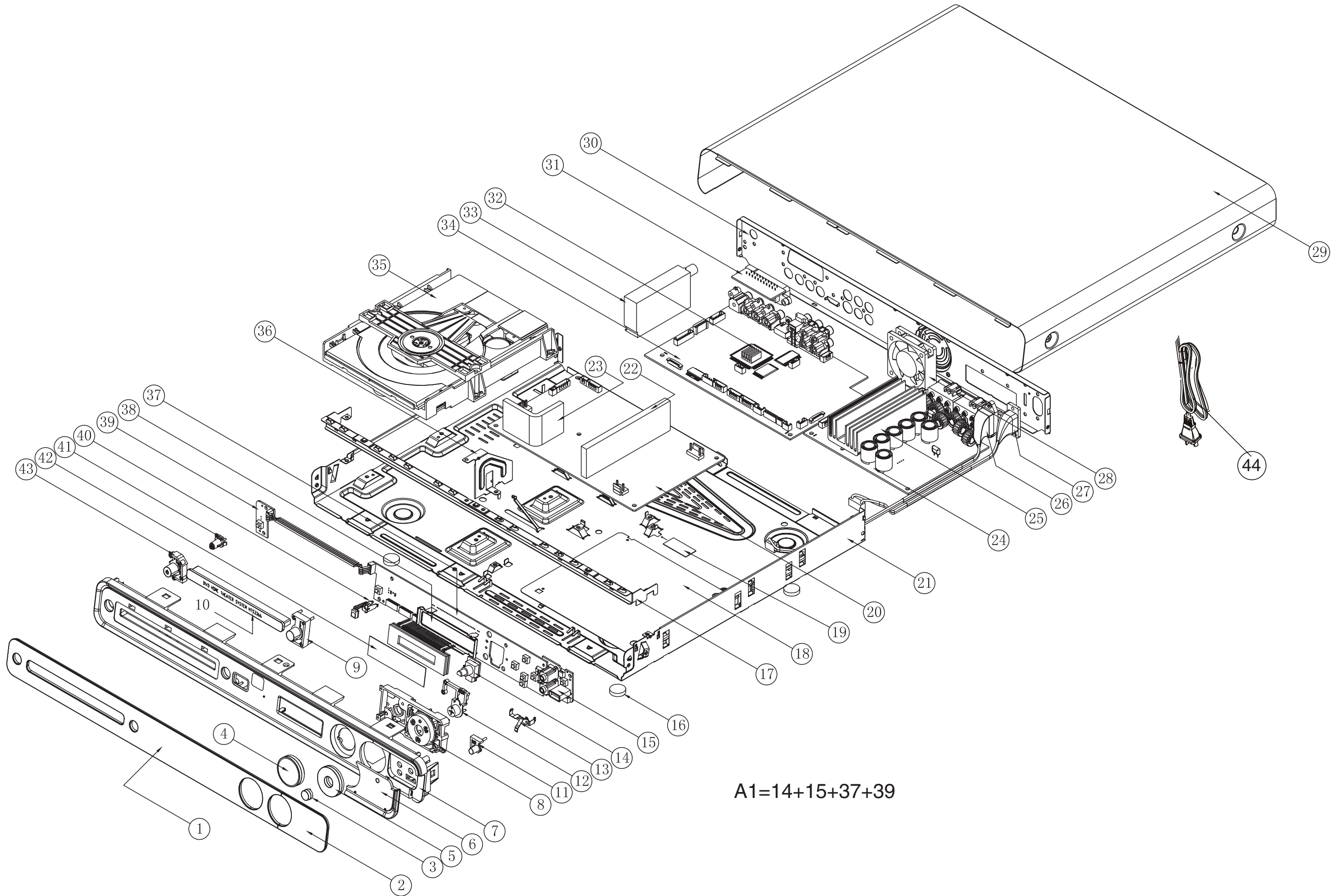
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C15	B3	D405	B4	R531	A3
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C403	D1	D411	A3	R7	C2
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C405	C2	D413	A3		
C406	C2	D414	A2		
C407	C2	D415	A2		
C408	C2	D416	A1		
C409	C2	FB1	C4		
C410	C2	FB402	C4		
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C415	B2	FB407	D4		
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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		
C453	C2	R414	C2		
C490	C4	R419	D1		
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C501	C4	R422	C2		
C502	C4	R423	B2		
C515	C4	R424	B2		
C516	C4	R429	A3		
C517	C4	R430	A2		
C534	C4	R431	A2		
C535	C4	R432	A2		
C536	C4	R433	A1		
C537	C4	R444	D4		
C539	C4	R451	A3		
C540	C4	R452	B3		
C541	C4	R453	A4		
CE401	A3	R461	A4		
CE402	A3	R466	A3		
CE403	A2	R467	A2		
CE404	A2	R472	C4		
CE405	A3	R479	B4		
CE406	A2	R5	C2		
CE407	A2	R509	D4		
CE408	A2	R510	D4		
CE409	A2	R511	D4		
CE410	A2	R515	C4		
CE411	A1	R522	C4		
CE412	A1	R526	A1		
D403	B4	R527	A2		
D403	B4	R528	A2		
D404	D4	R529	A2		
D404	D4	R530	A2		

MECHANICAL EXPLODED VIEW

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MECHANICAL PART LIST

Loc.	12NC.	Description
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MECHANICAL PART LIST

1	996510012484	DISPLAY LENS PMMA
10	996510012857	DVD DOOR
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	996510015350	POWER PCB
21	996510012217	BOTTOM PANEL
24	996510015061	AMP PCB ASSY
28	996510010843	FAN
29	996510012858	TOP COVER
3	996510010835	SOURCE BUTTON PC PMMA
30	996510012859	REAR PANEL
33	996510011275	TUNER PACK
34	996510017272	MAIN PCB ASSY
35	996510010819	DVD LOADER
V3	996510007319	FFC CABLE 24P 180MM
4	996510010833	VOLUME KNOB PMMA PC
41	996510010840	STANDBY LENS
43	996510010836	POWER KEY
44	996510002650	POWER CORD
5	996510010832	FUNCTION BUTTON
6	996510010829	USB DOOR
7	996510012486	FRONT PANEL
8	996510010837	FUNCTION BRACKET
9	996510010834	EJECT KEY
A1	996510014546	VFD+JACK+VOL+STANDBY PCB
FM	994000002731	FM ANTENNA 1500MM
LSCREW	996510017273	SCREW
RC	996510012491	REMOTE CONTROL
V1	996510000673	FFC CABLE 10P 100MM P1.25MM
V2	996510011292	FFC CABLE 24P 50mm
VIDEO	996500013058	RCA CABLE 2P 1.2M

Speaker

RFC	996510001599	RUBBER FOOT -CENTER SPK
RFF	996510001601	RUBBER FOOT - REAR SPK
RFR	996510012224	RUBBER FOOT - REAR
RFS	996510010854	RUBBER FOOT -SUB
SPKC	996510017274	SPEAKER BOX -CENTER
SPKFL	996510017275	SPEAKER BOX -FRONT LEFT
SPKFR	996510017276	SPEAKER BOX - FRONT RIGHT
SPKRL	996510017277	SPEAKER BOX- REAR LEFT
SPKRR	996510017278	SPEAKER BOX- REAR RIGHT
SUBW	996510017279	SUBWOOFER

REVISION LIST

Version 1.0
*Initial release