DVD Home Theatre System

HTS3377/12/05/51

Service
Service
Service

Service Manual

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CLASS 1
LASER PRODUCT

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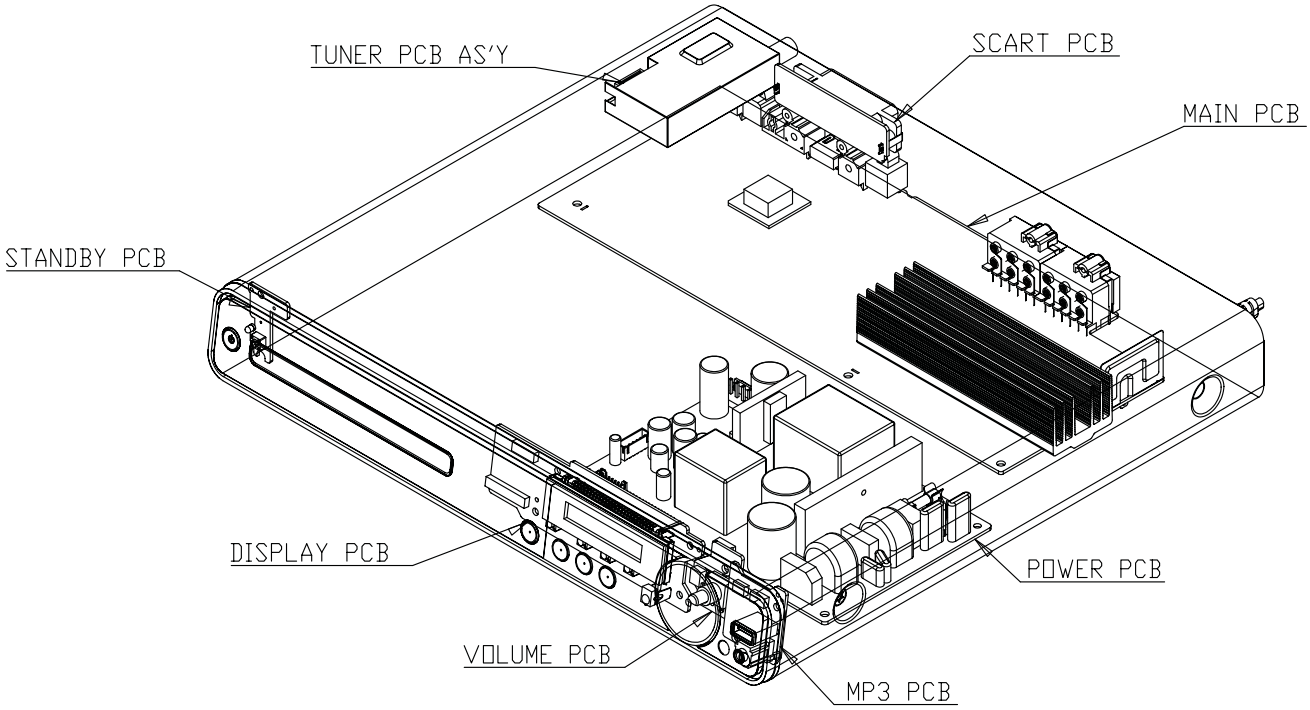
Version 1.1

PHILIPS

LOCATION OF PCB BOARDS



VERSION VARIATION:

Type/Versions / Features	HTS3377 /12/05/51
Output Power - 1000W	X
Voltage (220~240V)	X
MP3 Link	X

SERVICE SCENARIO MATRIX:

Type/Versions / Board in used	HTS3377 /12/05/51
MAIN Board	M
Power Board	M
DISP+LED+VOL Board	M
Scart Board	M
MP3 IN Board	M

*M = Module Level Repair

SPECIFICATIONS

Playback media

DVD-Video, DVD+R/+RW, DVD-R/-RW, DVD+R DL, CD-R/ CD-RW, Audio CD, Video CD/SVCD, Picture CD, MP3-CD, WMA-CD, DivX-CD, USB flash drive

Amplifier

Total output power.....
Home Theatre mode..... 1000 W(6 X 167)
Frequency response.....40 Hz ~ 20 kHz
Signal-to-noise ratio..... > 60 dB
..... (A-weighted)
Input sensitivity.....
AUX ..... 400 mV
SCART TO TV..... 250 mV
MP3 LINK ..... 250 mV

Disc

Laser Type..... Semiconductor
Disc diameter.....12cm / 8cm
Video decording.....MPEG1/ MPEG2 / DivX
..... / DivX Ultra
Video DAC..... 12 bits, 108 MHz
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 ..... IEC 60958, IEC 61937
DTS ..... IEC 60958, IEC 61937

Radio

Tuning range ..... FM 87.5–108 MHz (50 kHz)
2 6 dB quieting sensitivity.....FM 22 dBf
IF rejection ratio.....FM 60 dB
Signal-to-noise ratio.....FM 50 dB
Harmonic distortion.....FM 3%
Frequency response.....FM 180 Hz~10 kHz
...../ ±6dB
Stereo separation ..... FM 26 dB (1 kHz)
Stereo Threshold.....FM 29 dB

USB

C ompatibility.....Hi-Speed USB (2.0)
Class support..... UMS (USB Mass Storage Class)
File system FAT12, FAT16, FAT32

Main Unit

Power supply.....220–240 V; ~ 50 Hz
Power consumption..... 180 W
Standby power consumption ..... < 1 W
Dimensions (WxHxD) ..... 360 x 57 x 331 (mm)
Weight .....2.87 kg

Speakers

System..... full range satellite
Speaker impedance..... 4 ohm (centre), 4 ohm (Front/Rear)
Speaker drivers .....
Centre/Front/Rear..... 3” full range
Frequency response.....150 Hz ~ 20 kHz
Dimensions (WxHxD) .....
- Centre..... 244 x 103 x 74 (mm)
- Front..... 103 x 203 x 71 (mm)
- Rear..... 262 x 1199 x 264 (mm)

Weight .....
- Centre.....0.79 kg
- Front.....0.54 kg
- Rear.....3.38 kg

Subwoofer

Impedance..... 4 ohm
Speaker drivers .....165 (6.5”) woofer
Frequency response.....40 Hz ~ 150 Hz
Dimensions (WxHxD) ..... 163 x 363 x 369 (mm)
Weight .....4.85 kg

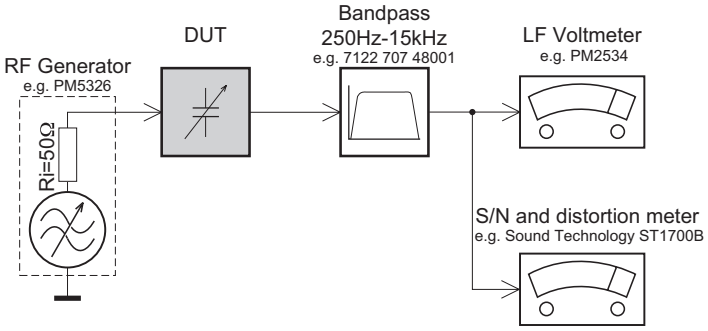
Laser specification

Type..... Semiconductor laser GaAIAs (CD)
Wave length..... 645 - 665 nm (DVD),770 - 800 nm (CD)
Output power.....6 mW (DVD),7 mW (VCD/CD)
Beam divergence..... 60 degrees.

Specifications subject to change without prior notice.

MEASUREMENT SETUP

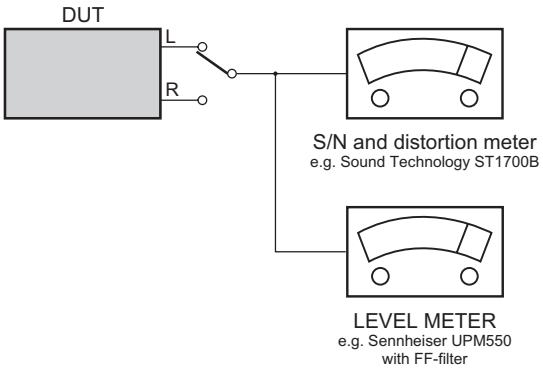
Tuner FM



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

CD

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



SERVICE AIDS

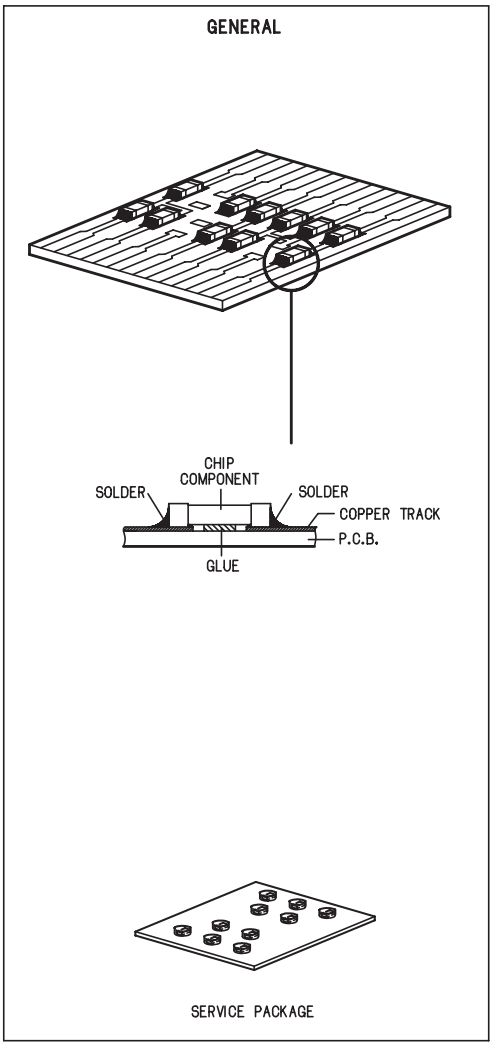
Service Tools:

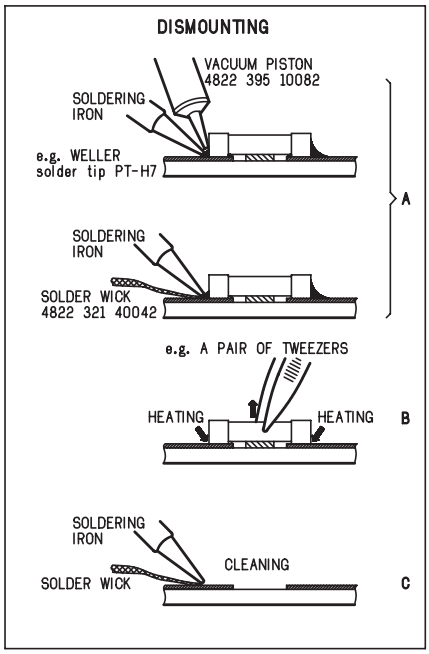
Universal Torx driver holder 4822 395 91019
Torx bit T10 150mm 4822 395 50456
Torx driver set T6-T20 .....4822 395 50145
Torx driver T10 extended 4822 395 50423

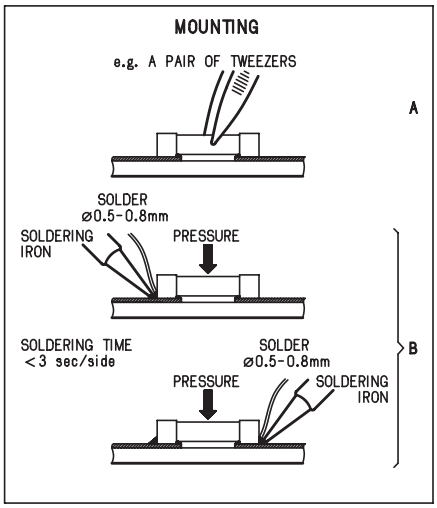
Compact Disc:

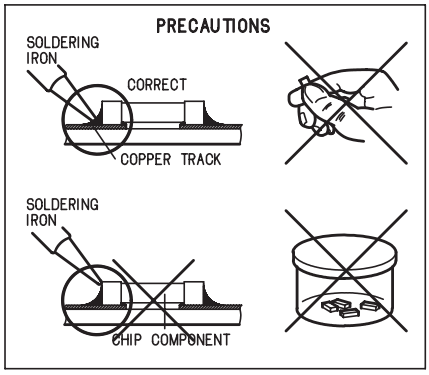
SBC426/426A Test disc 5 + 5A 4822 397 30096
SBC442 Audio Burn-in test disc 1kHz 4822 397 30155
SBC429 Audio Signals disc 4822 397 30184
Dolby Pro-logic Test Disc 4822 395 10216

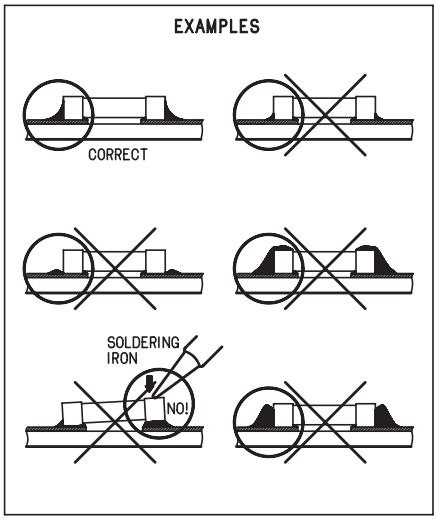
HANDLING CHIP COMPONENTS











ESD

(GB) WARNING

All ICs and many other semi-conductors are susceptible to electrostatic discharges (ESD). Careless handling during repair can reduce life drastically.
When repairing, make sure that you are connected with the same potential as the mass of the set via a wrist wrap with resistance.
Keep components and tools also at this potential.

(NL) WAARSCHUWING

Alle IC's en vele andere halfgeleiders zijn gevoelig voor electrostatische ontladingen (ESD).
Onzorgvuldig behandelen tijdens reparatie kan de levensduur drastisch doen verminderen.
Zorg ervoor dat u tijdens reparatie via een polsband met weerstand verbonden bent met hetzelfde potentiaal als de massa van het apparaat.
Houd componenten en hulpmiddelen ook op ditzelfde potentiaal.

(F) ATTENTION

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

(D) WARNUNG

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

(I) AVVERTIMENTO

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

(GB) ESD PROTECTION EQUIPMENT

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

(GB)

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

Safety components are marked by the symbol ⚠ .

(NL)

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

De Veiligheidsonderdelen zijn aangeduid met het symbol ⚠ .

(F)

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

Less composants de sécurité sont marqués ⚠ .

(D)

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

Sicherheitsbauteile sind durch das Symbol ⚠ markiert.

(I)

Le norme di sicurezza esigono che l'apparecchio venga rimesso nelle condizioni originali e che siano utilizzati i pezzi di ricambio identici a quelli specificati.

Componenty di sicurezza sono marcati con ⚠ .

(GB)

After servicing and before returning set to customer perform a leakage current measurement test from all exposed metal parts to earth ground to assure no shock hazard exist, The leakage current must not exceed 0.5mA.

(GB) Warning !

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

(S) Varning !

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

(SF) Varoitus !

Avatussa laitteessa ja suojalukituksen ohitettaessa olet alttiina näkymättömälle laserisäteilylle. Älä katso säteeseen!

(DK) Advarse !

Usynlig laserstråling ved åbning når sikkerhedsafbrydere er ude af funktion. Undgå udsaettelse for stråling.

(F)

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

Pb(Lead) Free Solder

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

INDENTIFICATION:
Regardless of special logo (not always indicated) 

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

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

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

- Use only lead-free solder alloy Philips SAC305 with order code 0622 149 00106. If lead-free solder-paste is required, please contact the manufacturer of your solder-equipment. In general use of solder-paste within workshops should be avoided because paste is not easy to store and to handle.
- Use only adequate solder tools applicable for lead-free solder alloy. The solder tool must be able
  - To reach at least a solder-temperature of 400?C,
  - To stabilize the adjusted temperature at the solder-tip
  - To exchange solder-tips for different applications.
- Adjust your solder tool so that a temperature around 360?C – 380?C is reached and stabilized at the solder joint. Heating-time of the solder-joint should not exceed ~ 4 sec. Avoid temperatures above 400?C otherwise wear-out of tips will rise drastically and flux-fluid will be destroyed. To avoid wear-out of tips switch off unused equipment, or reduce heat.
- Mix of lead-free solder alloy / parts with leaded solder alloy / parts is possible but PHILIPS recommends strongly to avoid mixed solder alloy types (leaded and lead-free).
  If one cannot avoid or does not know whether product is lead-free, clean carefully the solder-joint from old solder alloy and re-solder with new solder alloy (SAC305).
- Use only original spare-parts listed in the Service-Manuals. Not listed standard-material (commodities) has to be purchased at external companies.
- Special information for BGA-ICs:
- Always use the 12nc-recognizable soldering temperature profile of the specific BGA (for de-soldering always use the lead-free temperature profile, in case of doubt)
- Lead free BGA-ICs will be delivered in so-called 'dry-packaging' (sealed pack including a silica gel pack) to protect the IC against moisture. After opening, dependent of MSL-level seen on indicator-label in the bag, the BGA-IC possibly still has to be baked dry. (MSL=Moisture Sensitivity Level). This will be communicated via AYS-website.
  Do not re-use BGAs at all.
- For sets produced before 1.1.2005 (except products of 2004), containing leaded solder-alloy and components, all needed spare-parts will be available till the end of the service-period. For repair of such sets nothing changes.
- On our website **www.atyourservice.ce.Philips.com** you find more information to:

  - BGA-de-/soldering (+ baking instructions)
  - Heating-profiles of BGAs and other ICs used in Philips-sets

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

  For additional questions please contact your local repair-helpdesk.

2 - 1

System , Region Code , etc. Setting Produre

1)System Reset

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

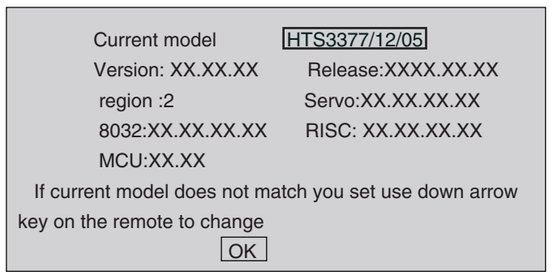
2)Region Code Change

a) In open mode, 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 mode, 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 “SETUP“ button on R/C,TV will show setup menu
b) Select the menu using the▼ and ► on R/C
c) Go preference page select “password“ to change
* 000000 is default password supplied.

5)Check on the Software Version

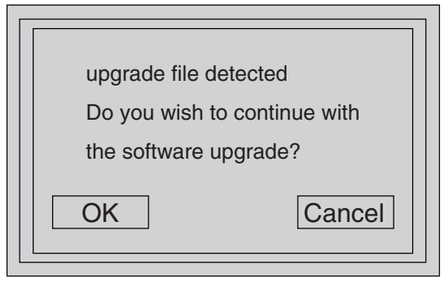
a) Open the CD Door
b) Press “INFO“ button on R/C
c) TV will show the version on screen

6)Trade model

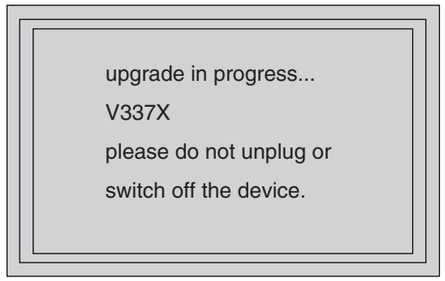
a) Press “Open/Close “ button on R/C
b) Press “2” “5” “9” on R/C,VFD will display “TRA ON “ or “TRA OFF“

7) Upgrading new software

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



f) Select “OK”, OSD will show:



CAUTION!

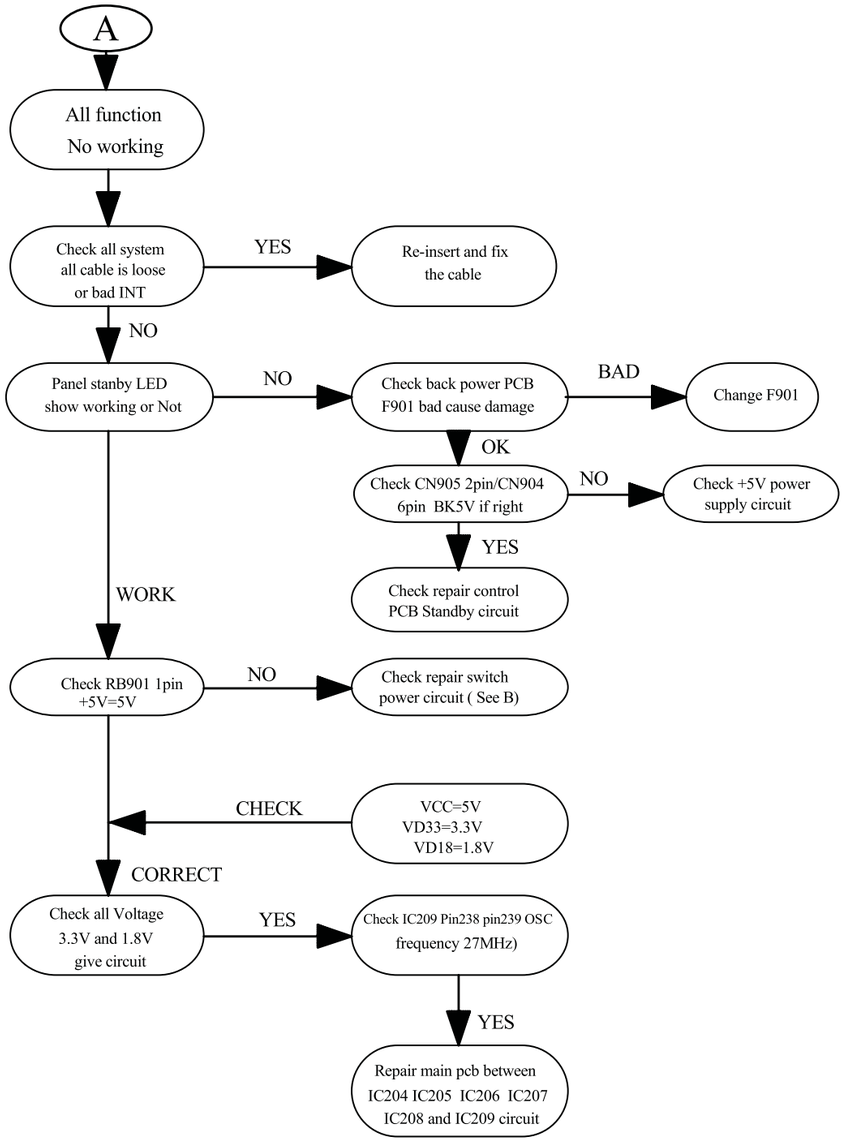
This information is confidential and may not be distributed.Only a qualified service person should reprogram the Region Code.

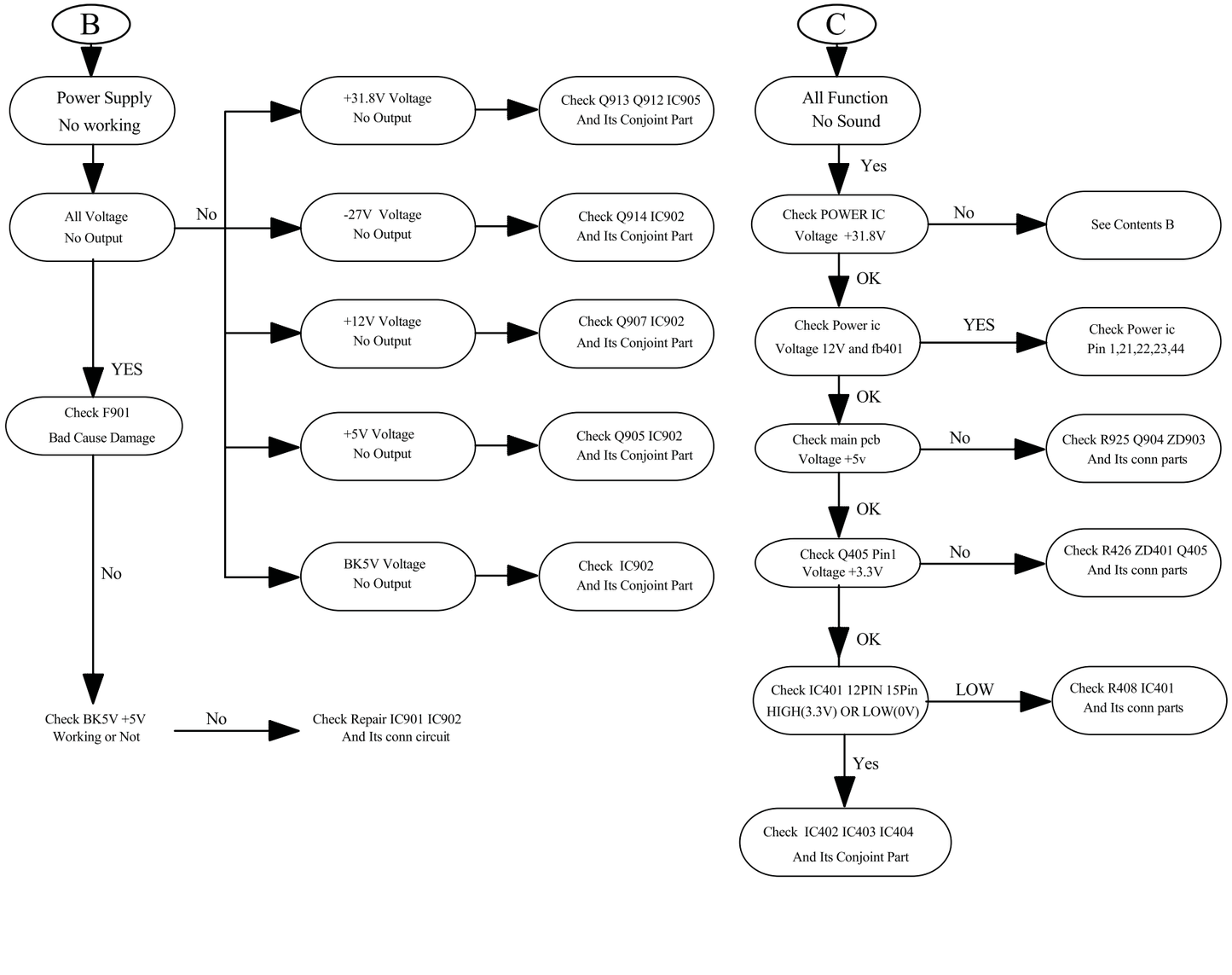
2 - 2

REPAIR INSTRUCTIONS (ONE)

MAIN UNIT REPAIR CHART 1/3

A All Function No Working
B Power Supply No Working
C All Function No Sound
E Audio line IN No Output
G DVD Audio No Sound
H MP3 In No Sound
I COAXIAL In No Sound
L Tuner No Sound
M HDMI No Output
N No CVBS Output
O No SCART output

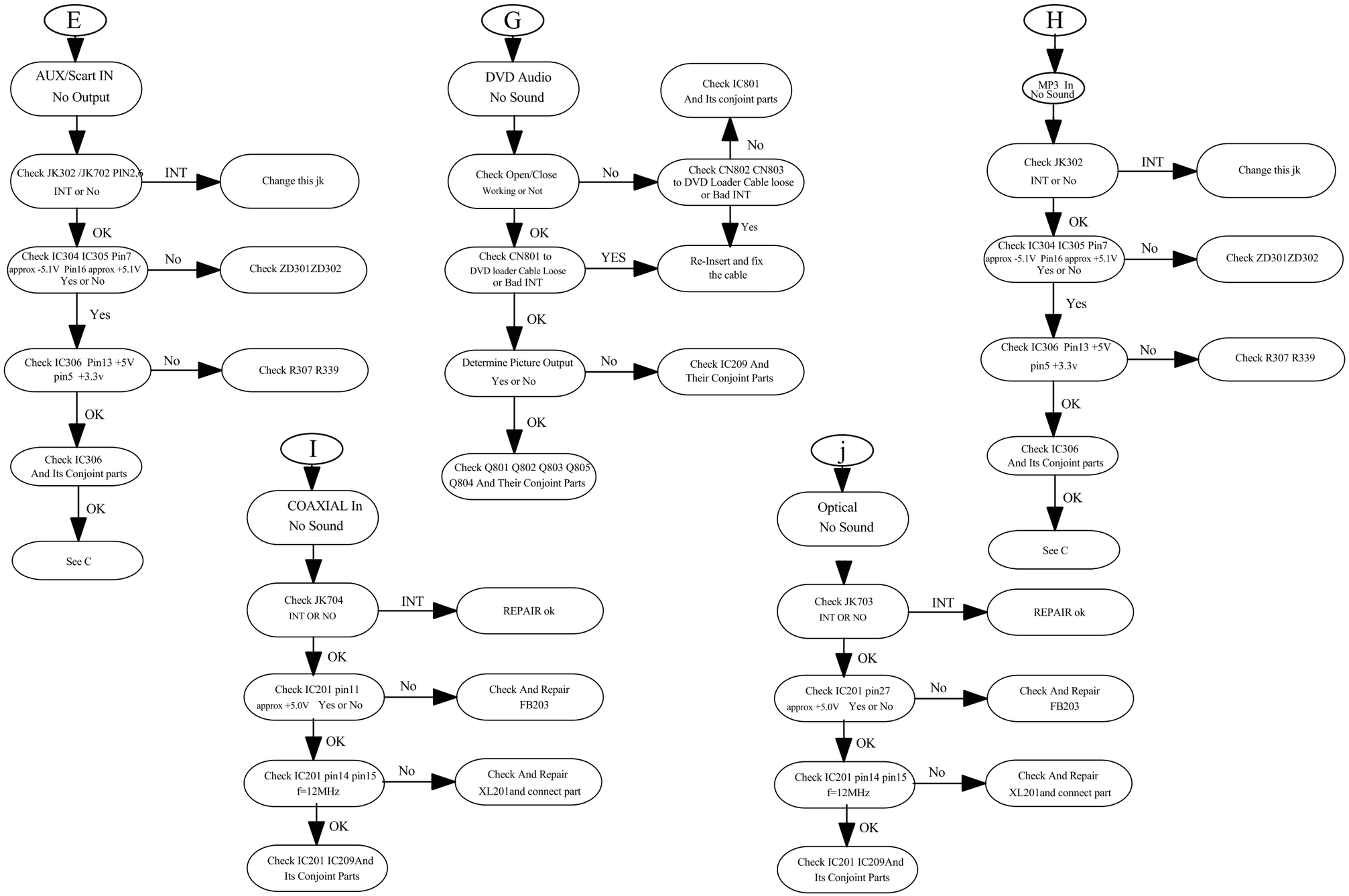




2 - 3

REPAIR INSTRUCTIONS (TWO)

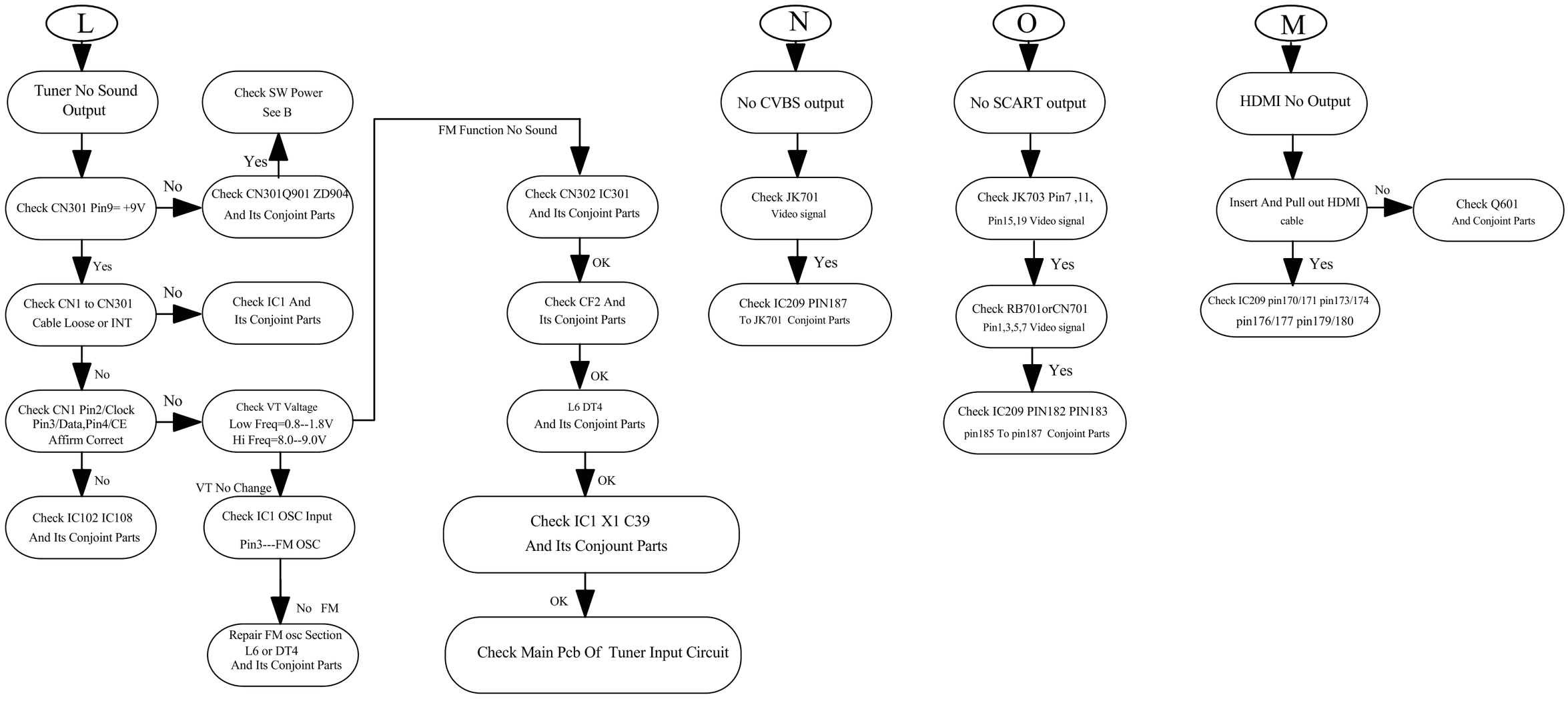
MAIN UNIT REPAIR CHART 2/3



2 - 4

REPAIR INSTRUCTIONS (THREE)

MAIN UNIT REPAIR CHART 3/3



DISASSEMBLY INSTRUCTIONS

Dismantling of the Front Panel Assemble

1) Open the DVD Tray by using the Open/Close Button while the Set is ON and disconnect the mains supply after removing the Tray Cover.
   Note: If this is not possible, the DVD Tray has to be open manually.
   Take a mini screw driver about 2mm diameter and make a marking 24mm from the tip as shown in figure 2 . Place the set on its side, insert the mini screw driver till the marking and slide it towards the left as shown in figure 1 until the Tray moves out of the Front Panel.
2) Return the set to its upright position and remove the Tray Cover as shown in Figure 3 and close the tray manually by pushing it back in.

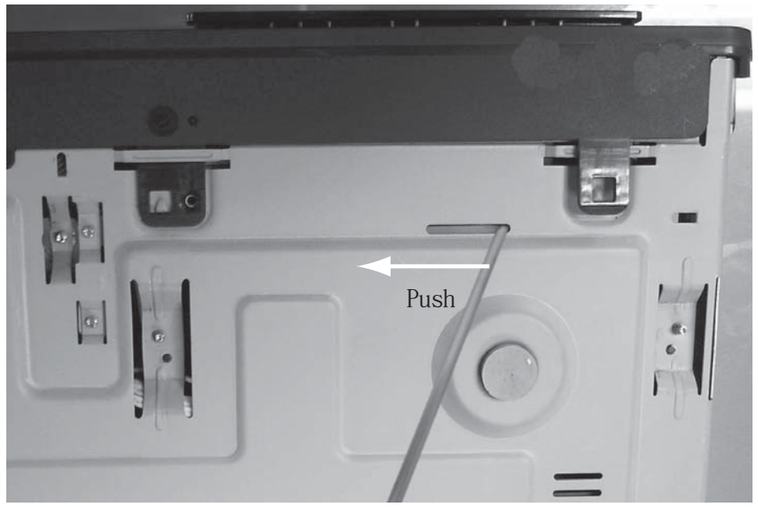


Figure 1

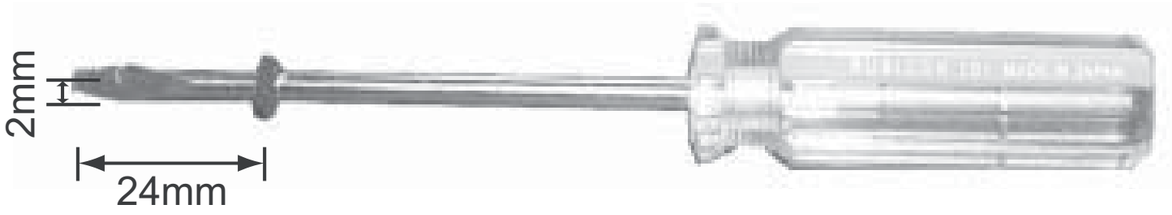


Figure 2

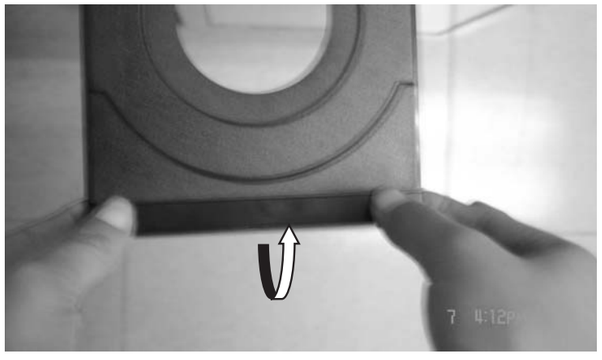


Figure 3

3 - 1

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

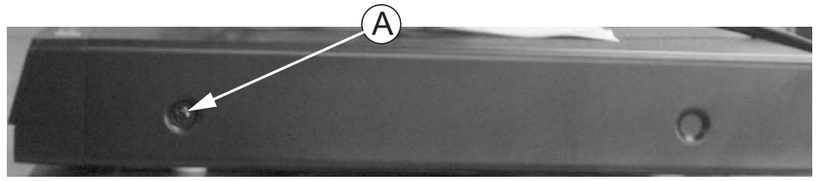


Figure 4

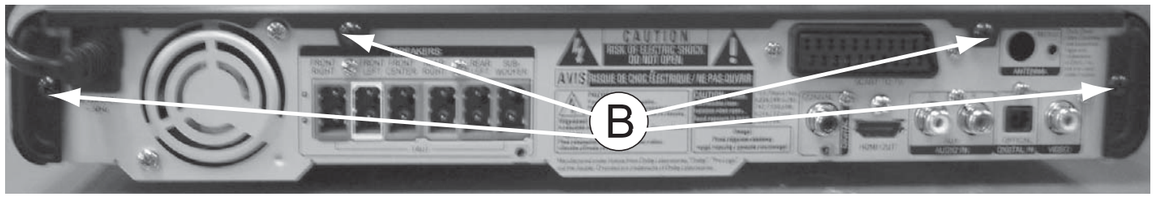


Figure 5

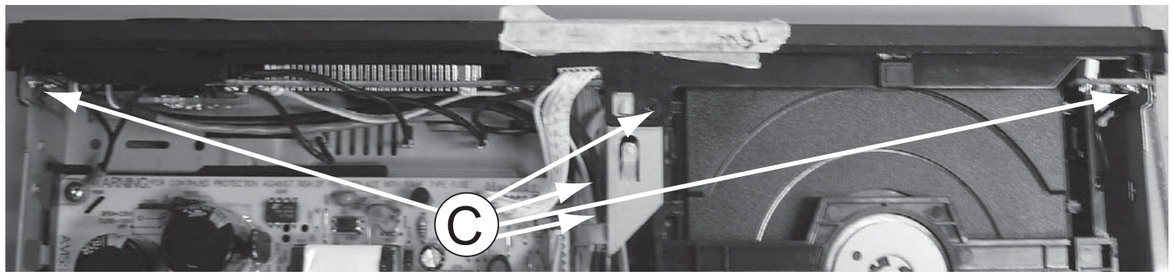


Figure 6

Dismantling of the DVD Module

1) Loosen 4 screws “ D “ at the DVD Module as shown in figure 7.

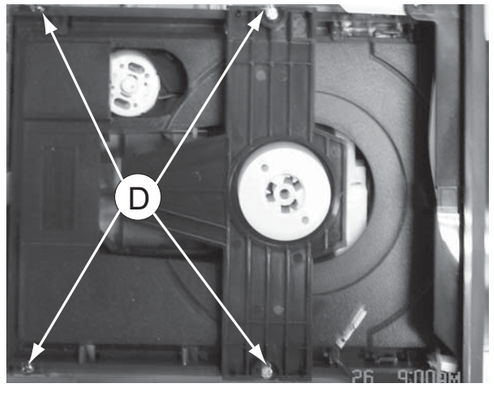


Figure 7

Dismantling of the DISP+LED+VOL&MP3 IN Board

1) Loosen 10 screws “E” on the top of DISP+LED+VOL&MP3 IN Board as shown in figure 8.

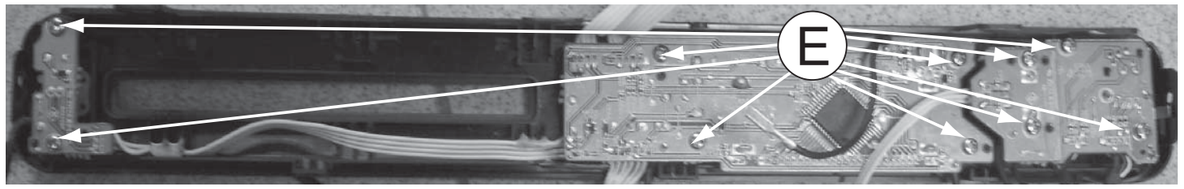


Figure 8

Dismantling of the Power Board

1) Loosen 4 screws “F” on the top of Power Board as shown in figure 9.
2) With a pincers to nip this space as shown in figurer 10 and to take up the power board.

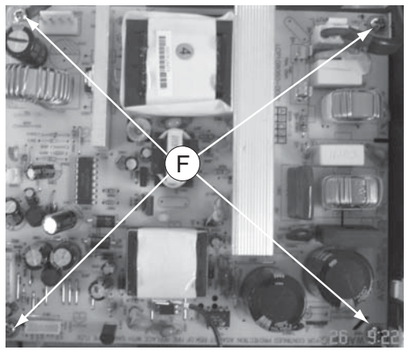


Figure 9

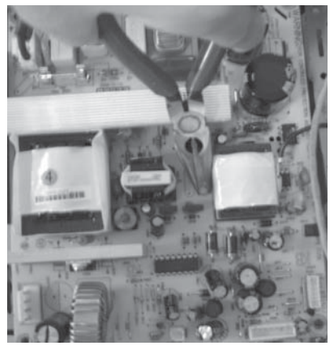


Figure 10

Dismantling of the MAIN+SCART Board

1) Loosen 4 screws “G” on the top of Main Board as shown in figure 11.
2) At the back panel, loosen 9 screws to remove MAIN Board and loosen 2 screw to remove Scart Board as shown in figure 12.

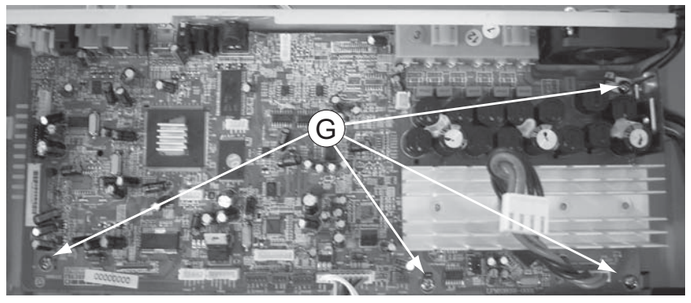


Figure 11

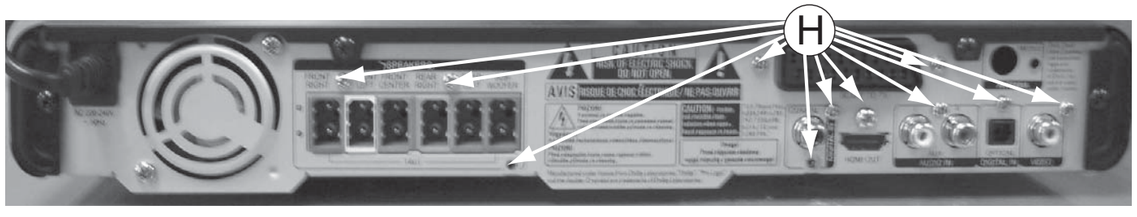
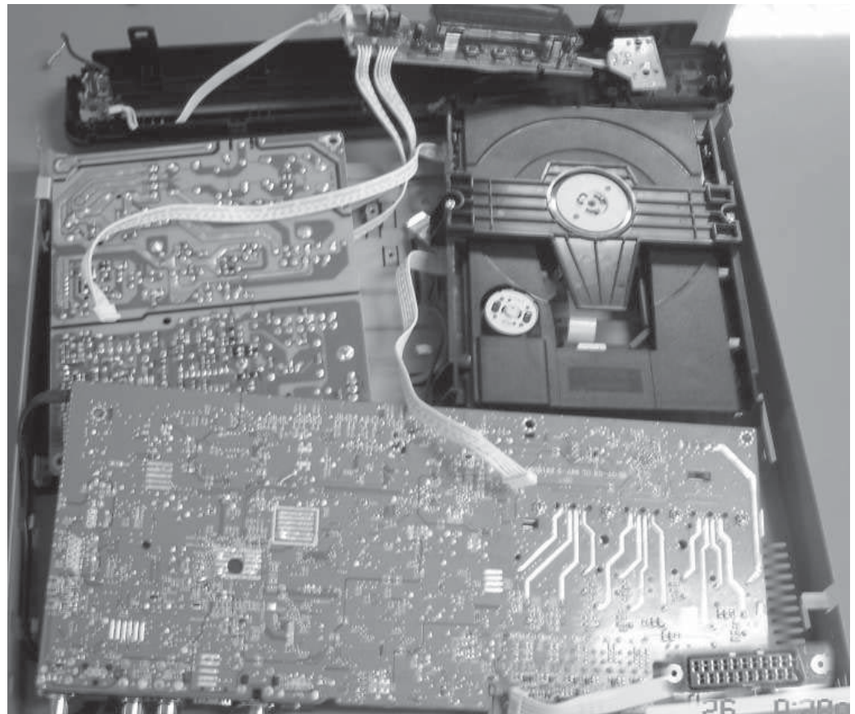


Figure 12

SERVICE POSITIONS

Service position A



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

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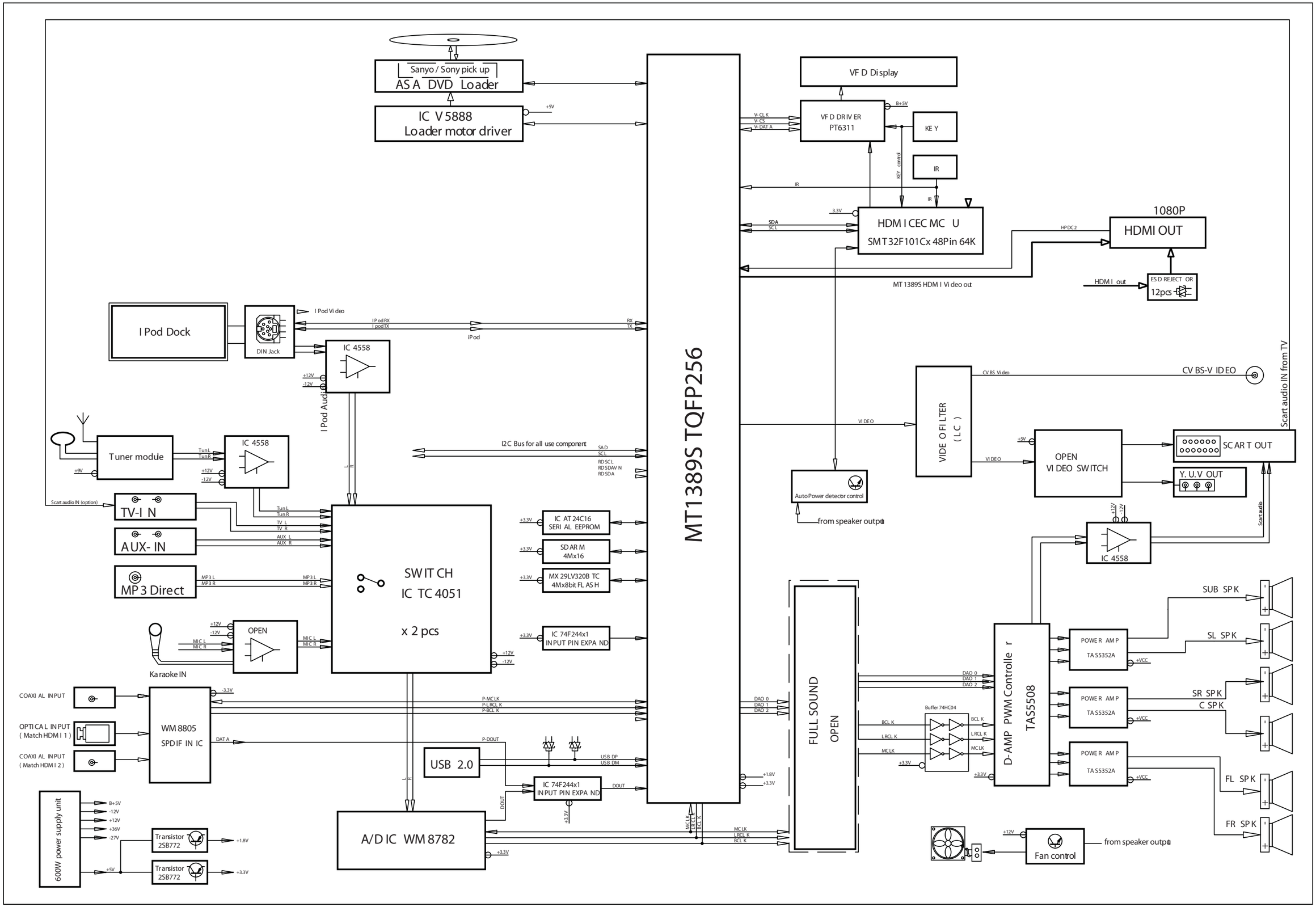
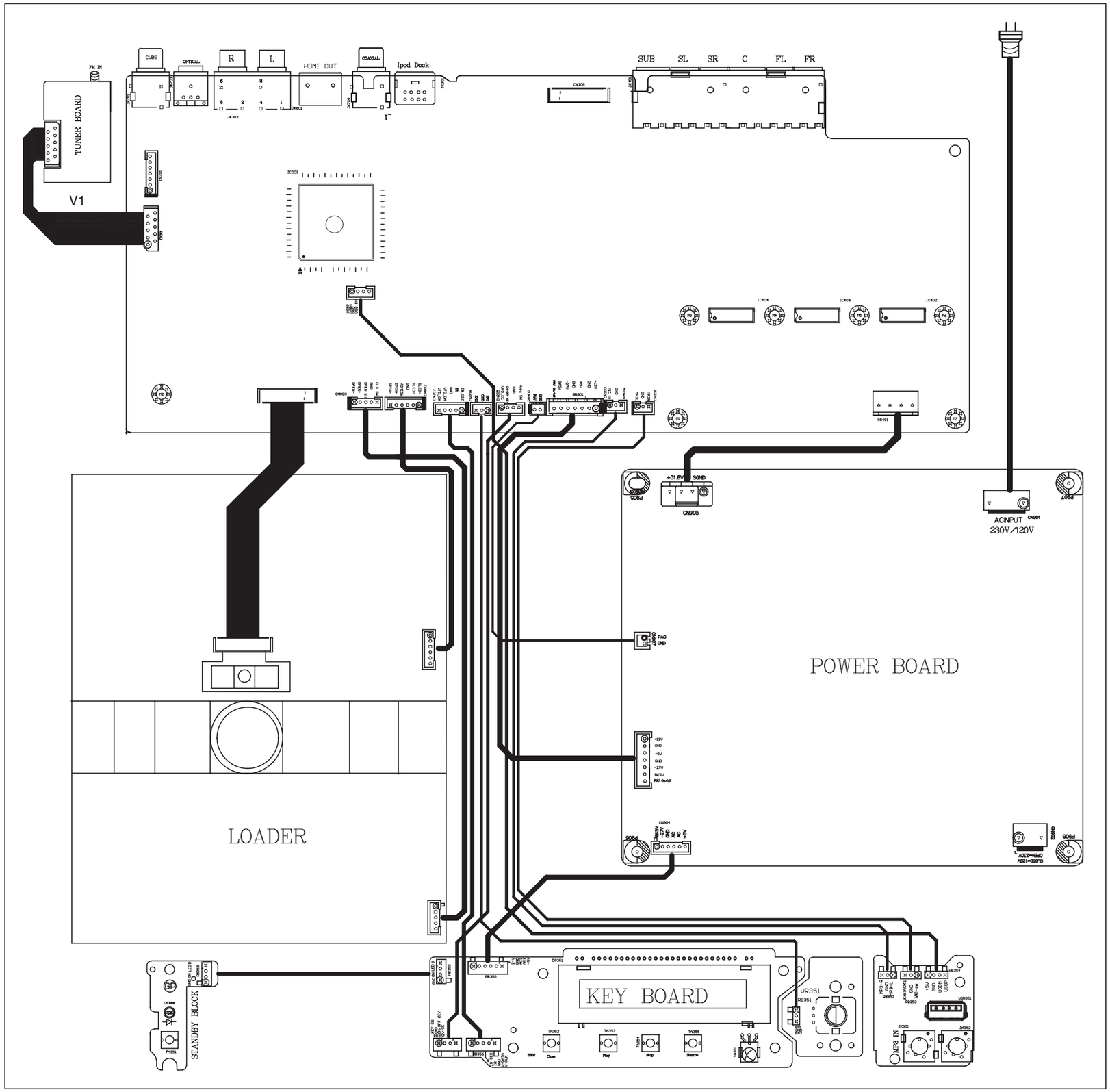
BLOCK DIAGRAM



42

WIRING DIAGRAM



DISP+LED+VOL BOARD

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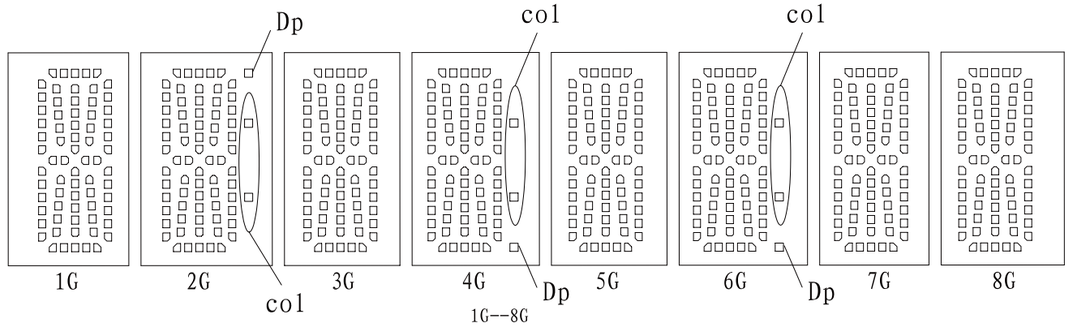
FTD DISPLAY PIN ASSIGNMENT



	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

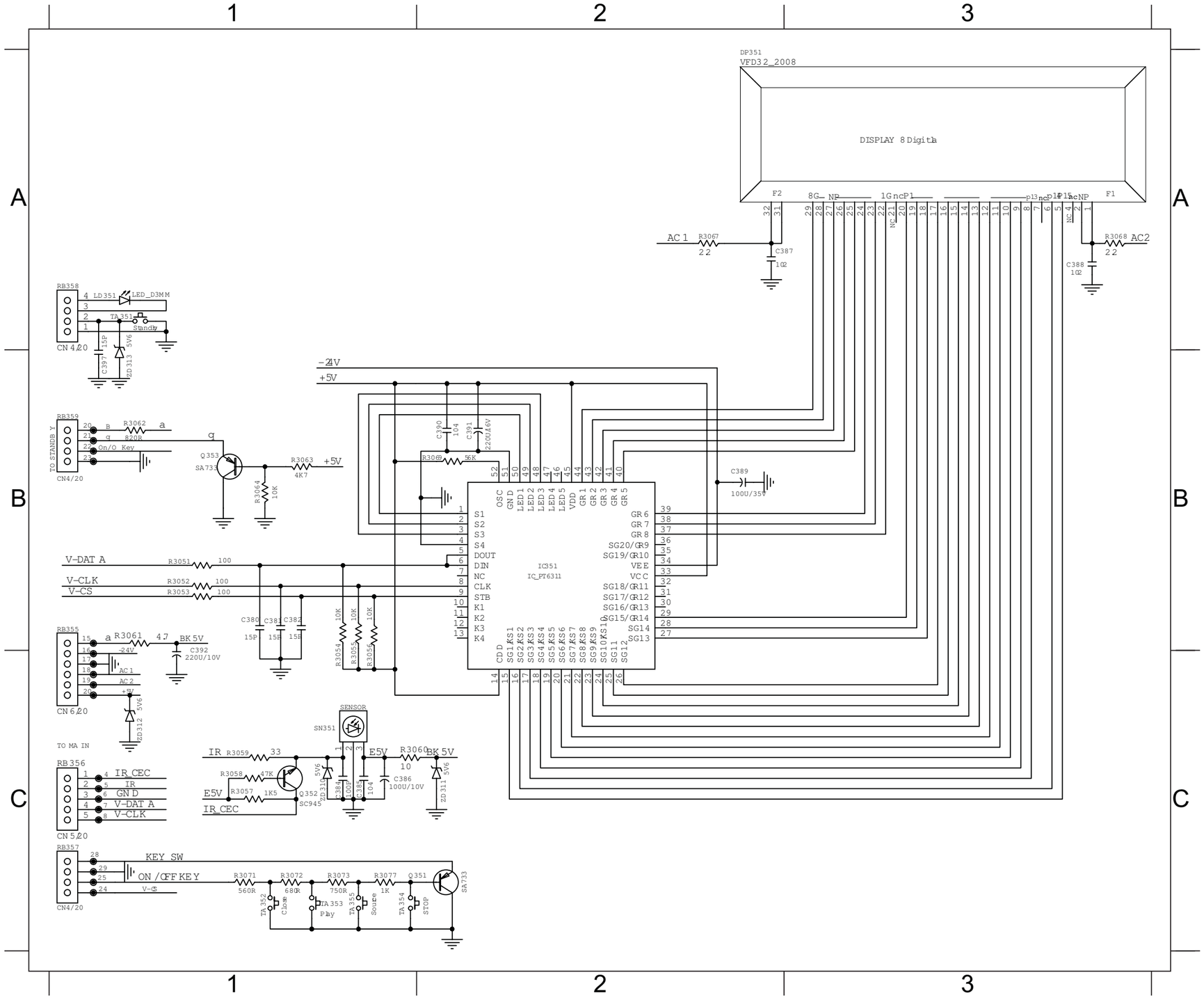
管脚序号(Pin NO.)	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
连接(Connection)	F1	F1	NP	NC	P15	P14	NC	P13	P12	P11	P10	P9	P8	P7	P6	P5
管脚序号(Pin NO.)	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
连接(Connection)	P4	P3	P2	P1	NC	1G	2G	3G	4G	5G	6G	7G	8G	NP	F2	F2

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)

5 - 2

CIRCUIT DIAGRAM

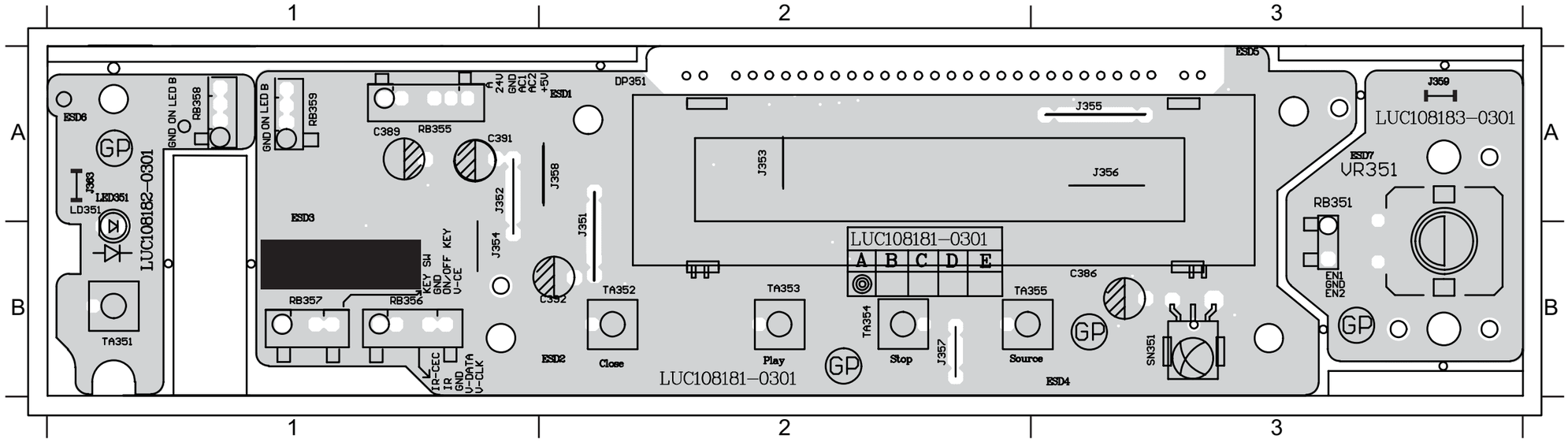
C380 B1 C384 C1 C387 A2 C390 B2 C395 C4 DP351 A2 Q351 C1 R3051 B1 R3054 B1 R3057 C1 R3060 C1 R3063 B1 R3068 A3 R3072 C1 RB351 C4 RB357 C1 TA351 A1 TA354 C1 ZD310 C1 ZD313 B1
C381 B1 C385 C1 C388 A3 C391 B2 C396 C4 IC351 B2 Q352 C1 R3052 B1 R3055 B1 R3058 C1 R3061 B1 R3064 B1 R3069 B2 R3073 C1 RB355 B1 RB359 B1 TA352 C1 TA355 C1 ZD311 C2
C382 B1 C386 C1 C389 B2 C392 B1 C397 B1 LD351 A1 Q353 B1 R3053 B1 R3056 B1 R3059 C1 R3062 B1 R3067 A2 R3071 C1 R3077 C1 RB356 C1 SN351 C1 TA353 C1 VR351 C4 ZD312 C1



5 - 3

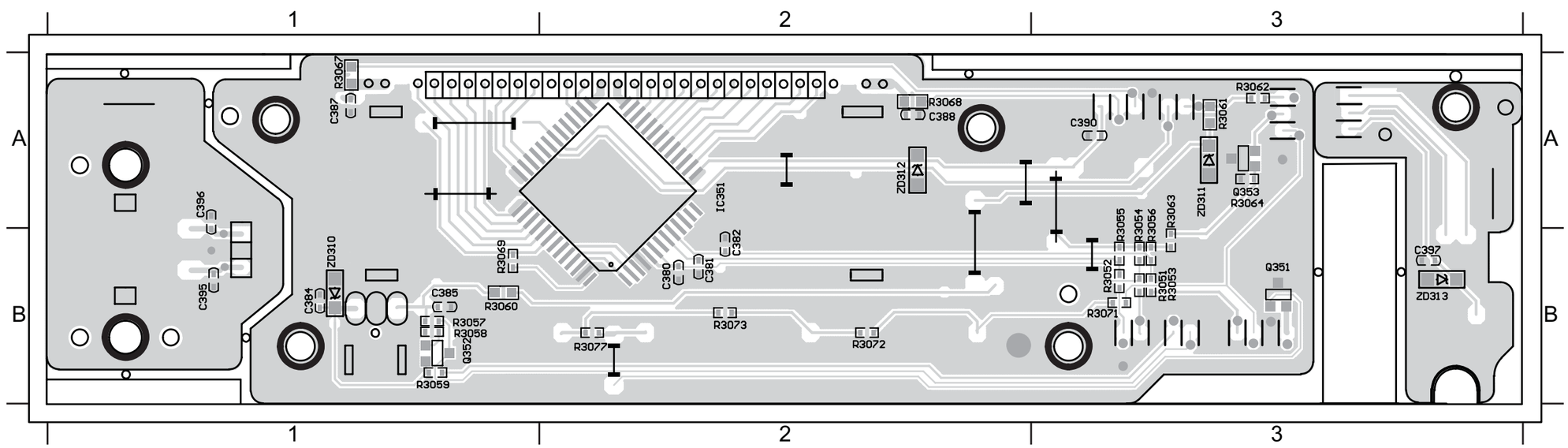
PCB LAYOUT - TOP VIEW

C386 A3 C391 A1 DP351 A2 ESD4 A3 ESD6 A1 J351 A2 J353 A2 J355 A3 J357 B2 J359 A3 LD351 A1 RB355 A1 RB357 B1 SN351 B3 TA352 B2 TA354 B2 VR351 A3
C389 A1 C392 B2 ESD1 A2 ESD5 B3 ESD7 A3 J352 B1 J354 B1 J356 A3 J358 A2 J363 A1 RB351 A3 RB356 B1 RB359 A1 TA351 B1 TA353 B2 TA355 B2



PCB LAYOUT - BOTTOM VIEW

C380 B2 C382 B2 C387 A1 C390 A3 C396 A1 IC351 A2 Q352 B1 R3051 B3 R3053 B3 R3055 A3 R3057 B1 R3059 B1 R3061 A3 R3063 A3 R3067 A1 R3069 B1 R3072 B2 R3077 B2 ZD311 A3 ZD313 B3
C381 B2 C385 B1 C388 A2 C395 B1 C397 B3 Q351 B3 Q353 A3 R3052 B3 R3054 A3 R3056 A3 R3058 B1 R3060 B1 R3062 A3 R3064 A3 R3068 A2 R3071 B3 R3073 B2 ZD310 B1 ZD312 A2



MAIN BOARD

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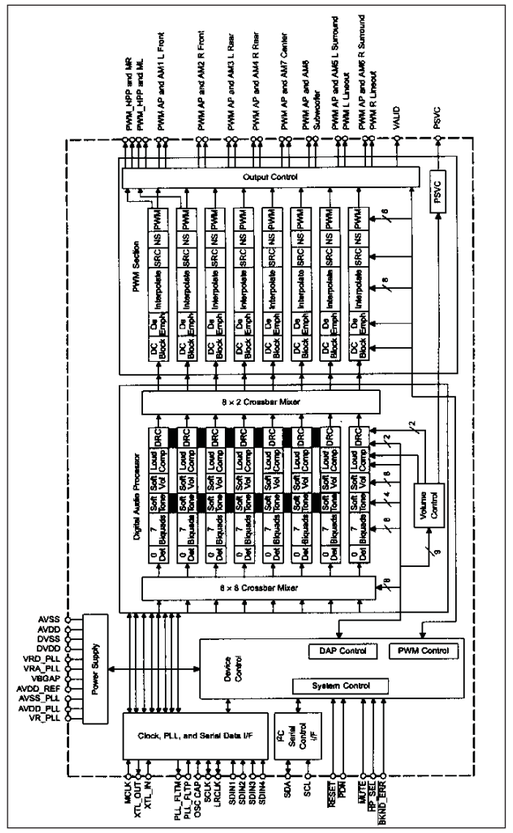
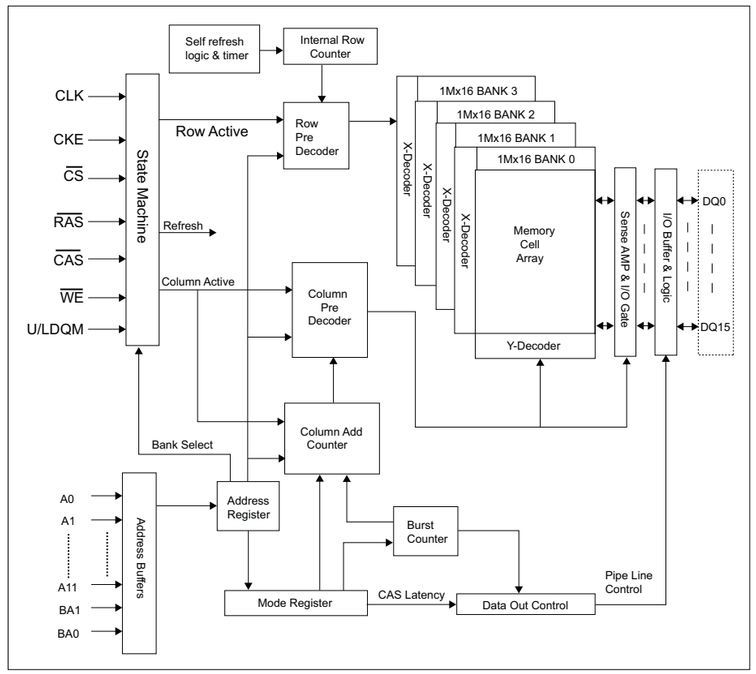
INTERNAL IC DIAGRAM - TAS5



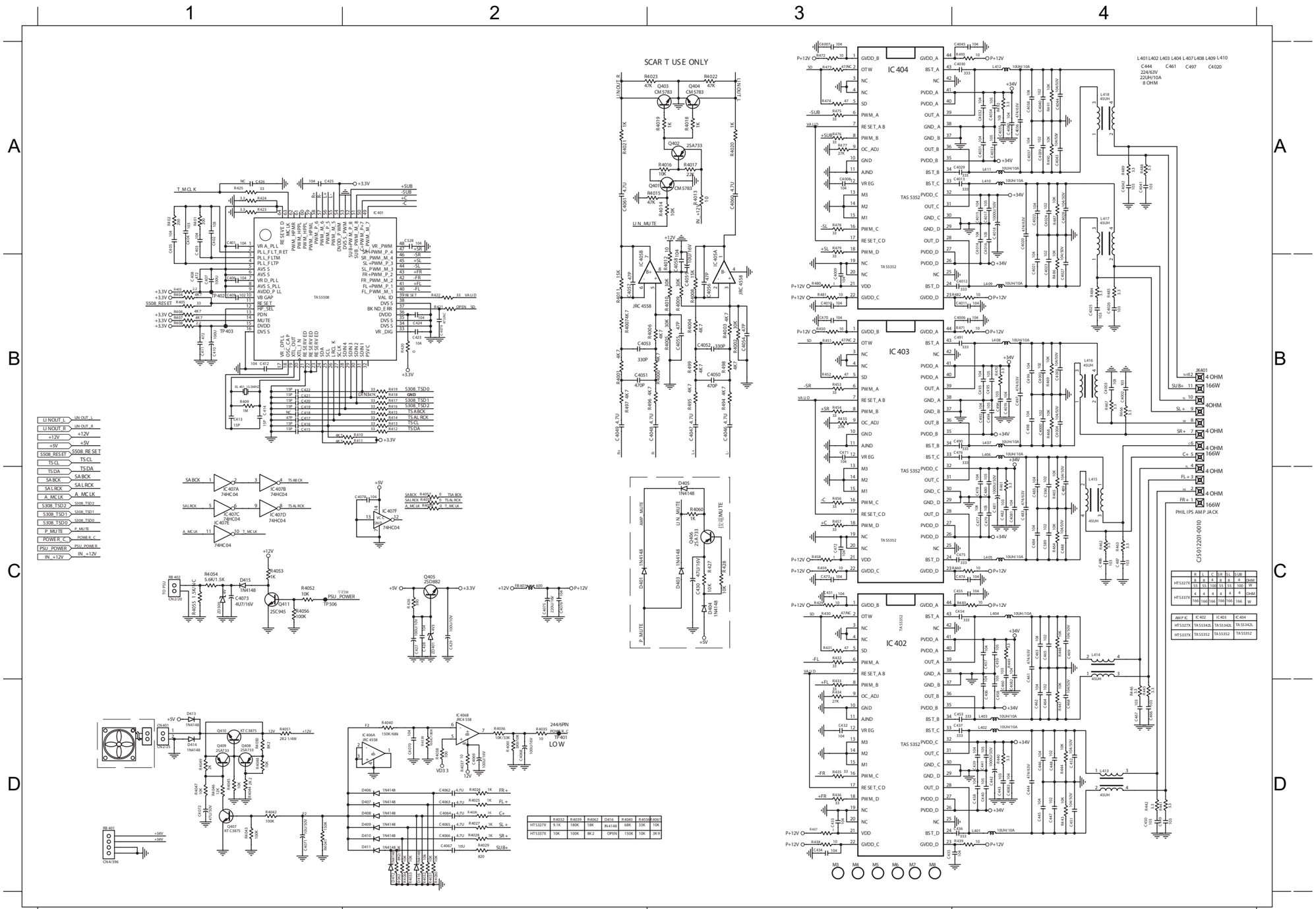
INTERNAL IC DIAGRAM - M97



6 - 2

CIRCUIT DIAGRAM - part one

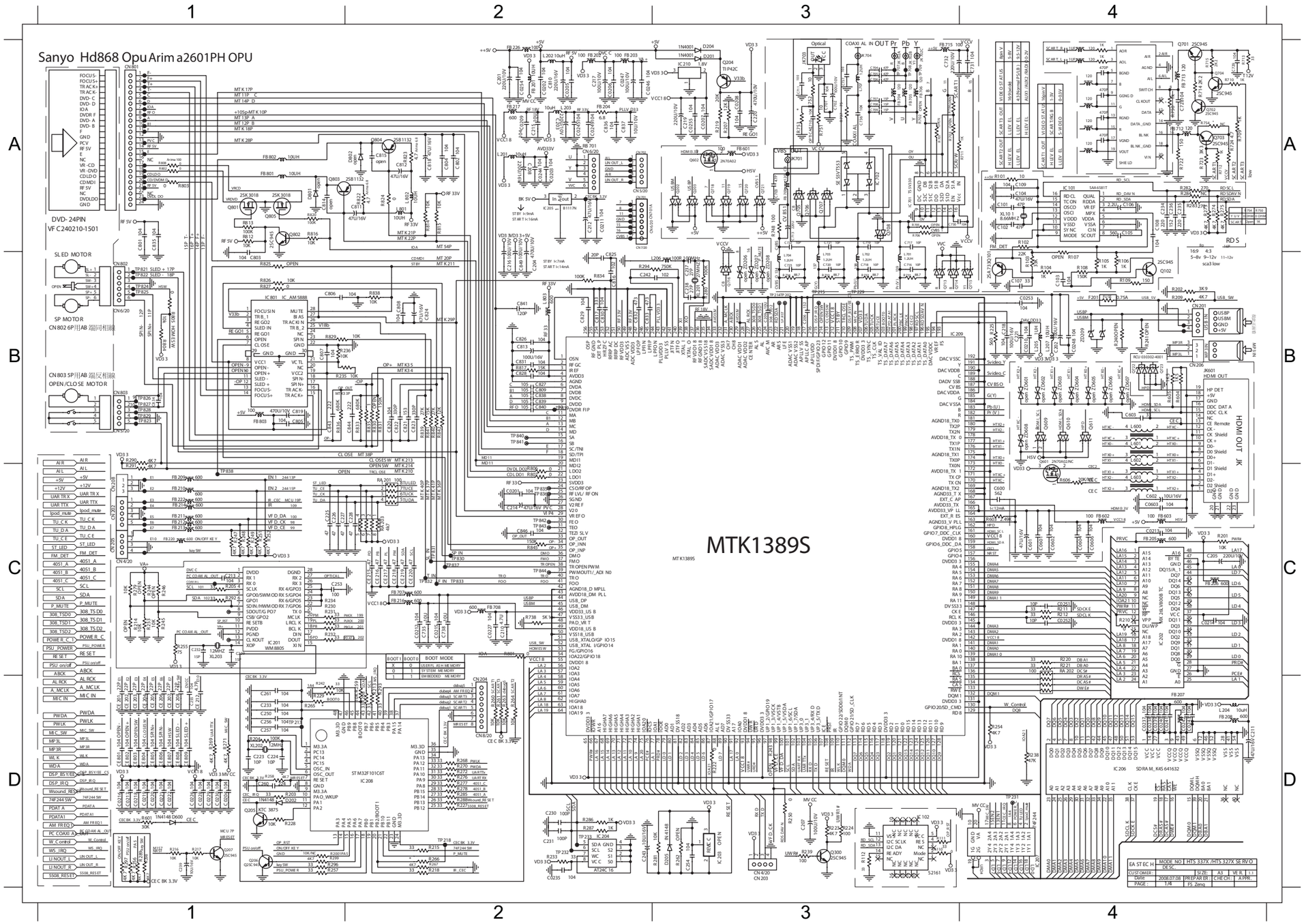
C401 A1 R425 A1 Q402 A3 R4020 A3 C4013 A4 C4031 A4 C4043 A4 R488 A4 C410 B1 C421 B1 C4049 B2 R411 B2 R421 B2 C4054 B3 R4002 B3 R452 B3 R499 B3 C4021 B4 C496 B4 R466 B4 C4073 C1 RB402 C1 Q405 C2 IC402 C3 R459 C3 C474 C4 C487 C4 R449 C4 CN401 D1 R4044 D1 C4063 D2 D408 D2 R4028 D2 R4038 D2 R435 D3 C443 D4 C453 D4 L413 D4
C402 A1 C4061 A2 Q403 A3 R4022 A3 C4014 A4 C4032 A4 C4044 A4 R489 A4 C411 B1 C422 B1 C4051 B2 R412 B2 R422 B2 C4055 B3 R4003 B3 R453 B3 C4000 B4 C4023 B4 C497 B4 R467 B4 D415 C1 ZD309 C1 R426 C2 Q406 C3 C4081 C4 C475 C4 C488 C4 R460 C4 D413 D1 R4045 D1 C4064 D2 D409 D2 R4029 D2 R4039 D2 R436 D3 C444 D4 C456 D4 R439 D4
C403 A1 C528 A2 Q404 A3 R4023 A3 C4015 A4 C4035 A4 C4045 A4 R490 A4 C412 B1 R403 B1 C4053 B2 R413 B2 R497 B2 C4056 B3 R4004 B3 R454 B3 C4001 B4 C4025 B4 C498 B4 R468 B4 IC407 C1 C4075 C2 ZD401 C2 R427 C3 C454 C4 C477 C4 C489 C4 R461 C4 D414 D1 R4046 D1 C4065 D2 D410 D2 R4030 D2 R4040 D2 R437 D3 C445 D4 C460 D4 R440 D4
C404 A1 IC401 A2 R4013 A3 R472 A3 C4018 A4 C4036 A4 C4080 A4 R491 A4 C413 B1 R404 B1 C4057 B2 R414 B2 C4009 B3 C4058 B3 R4005 B3 R455 B3 C4002 B4 C4026 B4 C499 B4 R469 B4 Q411 C1 C4076 C2 C430 C3 R428 C3 C455 C4 C478 C4 C589 C4 R462 C4 Q407 D1 R4047 D1 C4066 D2 D411 D2 R4031 D2 R4061 D2 R438 D3 C446 D4 C462 D4 R441 D4
C405 A1 R4021 A2 R4014 A3 R474 A3 C4020 A4 C4037 A4 L410 A4 R492 A4 C414 B1 R405 B1 C423 B2 R415 B2 C4010 B3 C4059 B3 R4006 B3 R480 B3 C4003 B4 C4027 B4 JK401 B4 R470 B4 R4052 C1 C4078 C2 C431 C3 R429 C3 C457 C4 C481 C4 C590 C4 R463 C4 Q408 D1 R4048 D1 C4067 D2 D412 D2 R4032 D2 R4062 D2 C435 D4 C447 D4 C466 D4 R442 D4
C425 A1 C4007 A3 R4015 A3 R475 A3 C4022 A4 C4038 A4 L411 A4 R493 A4 C415 B1 R406 B1 C424 B2 R416 B2 C4046 B3 C470 B3 R4008 B3 R481 B3 C4004 B4 C476 B4 L406 B4 R471 B4 R4053 C1 C427 C2 C472 C3 R431 C3 C461 C4 C482 C4 L404 C4 R464 C4 Q409 D1 R4049 D1 C4068 D2 IC406 D2 R4033 D2 C432 D3 C436 D4 C448 D4 C467 D4 R443 D4
R401 A1 C4008 A3 R4016 A3 R476 A3 C4024 A4 C4039 A4 L412 A4 C406 B1 C416 B1 R407 B1 R4001 B2 R417 B2 C4047 B3 C471 B3 R4009 B3 R494 B3 C4005 B4 C490 B4 L407 B4 R482 B4 R4054 C1 C428 C2 C473 C3 R432 C3 C463 C4 C483 C4 L405 C4 R465 C4 Q410 D1 R4050 D1 C4069 D2 R4024 D2 R4034 D2 C433 D3 C437 D4 C449 D4 C468 D4 R444 D4
R402 A1 C4060 A3 R4017 A3 R477 A3 C4028 A4 C4040 A4 L417 A4 C407 B1 C417 B1 R408 B1 R4007 B2 R418 B2 C4048 B3 IC403 B3 R4010 B3 R495 B3 C4006 B4 C491 B4 L408 B4 R484 B4 R4055 C1 C429 C2 D403 C3 R456 C3 C464 C4 C484 C4 L414 C4 R483 C4 R4041 D1 R4051 D1 C4070 D2 R4025 D2 R4035 D2 C434 D3 C438 D4 C450 D4 L401 D4 R445 D4
R423 A1 IC404 A3 R4018 A3 R478 A3 C4029 A4 C4041 A4 L418 A4 C408 B1 C419 B1 R409 B1 R4011 B2 R419 B2 C4050 B3 IC405 B3 R4012 B3 R496 B3 C4011 B4 C492 B4 L409 B4 R485 B4 R4056 C1 D401 C2 D404 C3 R457 C3 C465 C4 C485 C4 L415 C4 C4071 D1 R4042 D1 RB401 D1 D406 D2 R4026 D2 R4036 D2 R433 D3 C439 D4 C451 D4 L402 D4 R446 D4
R424 A1 Q401 A3 R4019 A3 R479 A3 C4030 A4 C4042 A4 R487 A4 C409 B1 C420 B1 XL401 B1 R410 B2 R420 B2 C4052 B3 R4000 B3 R450 B3 R498 B3 C4012 B4 C493 B4 L416 B4 R486 B4 R4060 C1 FB401 C2 D405 C3 R458 C3 C469 C4 C486 C4 R448 C4 C4072 D1 R4043 D1 C4062 D2 D407 D2 R4027 D2 R4037 D2 R434 D3 C442 D4 C452 D4 L403 D4 R447 D4



6 - 3

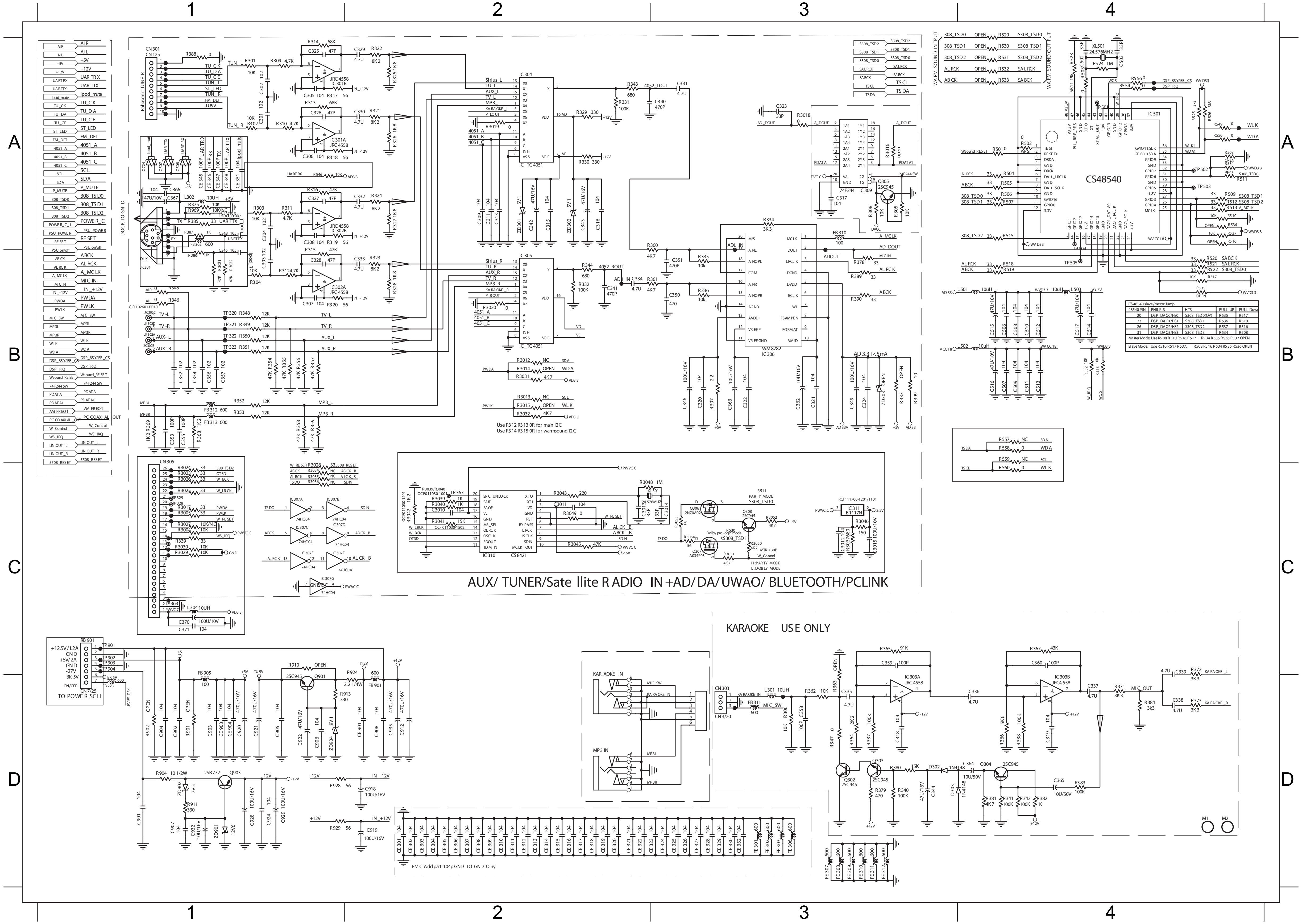
CIRCUIT DIAGRAM - part two

C0201 C2 C0214 C4 C0230 D1 C0248 B4 C104 A4 C208 A2 C223 D1 C236 A4 C261 D1 C718 B3 C737 A3 C812 A2 C827 B2 C840 B2 CE212 D1 CE807 D1 CN802 B1 FB205 C4 FB222 C1 FB803 B1 JK601 B4 L703 B3 Q601 B4 Q803 A1 R203 D1 R218 D2 R232 C1 R252 C1 R270 D2 R282 A4 R297 D1 R714 A4 R752 A3 R816 A1 R836 B1 XL203 C1
C0202 A2 C0215 C2 C0235 D2 C0249 A2 C105 A4 C209 B3 C224 D1 C237 B3 C600 C4 C719 A3 C738 C2 C813 B2 C828 B2 C841 B2 CE215 C2 CE808 D1 CN803 B1 FB206 C4 FB226 A2 IC101 A4 JK701 A3 L704 B3 Q602 A3 Q804 A2 R204 D1 R219 A3 R233 D2 R253 C1 R271 D1 R283 A4 R298 D1 R715 A4 R801 C2 R817 B2 R838 B2 ZD209 B4
C0203 A2 C0216 D1 C0237 D4 C0251 C4 C106 A4 C210 C2 C225 C1 C238 B3 C601 C4 C720 B3 C801 A1 C816 B2 C829 B2 C843 B1 CE216 C2 CE809 D1 CO254 A2 FB207 D4 FB601 A3 IC201 D3 JK703 A3 L707 A3 Q611 B4 Q805 A1 R205 C1 R220 C4 R234 C1 R254 D4 R272 D2 R285 D2 R299 D1 R722 A4 R802 A1 R820 A1 R839 B2
C0204 D1 C0217 D1 C0238 D4 C0252 C4 C107 B4 C211 D4 C226 C1 C239 D1 C602 C4 C721 A3 C802 A2 C817 B2 C830 B2 C844 B2 CE217 C2 CN201 B4 D201 A3 FB208 D4 FB602 C4 IC202 C4 JK704 A3 L801 A2 Q701 A4 R101 A4 R207 A3 R221 C4 R235 B1 R256 D1 R273 A4 R286 D2 R601 D1 R724 A4 R803 A1 R822 A2 R840 B2
C0205 A2 C0218 D1 C0239 D4 C0253 B4 C108 A4 C213 C1 C227 C1 C242 B2 C603 B4 C722 A3 C803 B1 C818 A2 C831 B2 C846 C2 CE218 C2 CN202 C1 D202 D1 FB209 C1 FB603 C4 IC203 D3 L201 A2 L802 A2 Q702 A4 R102 A4 R208 D2 R222 D3 R236 B1 R257 D1 R274 A4 R287 D2 R603 C4 R731 B3 R804 B1 R823 A2 R841 B2
C0206 A2 C0219 D1 C0240 D4 C0601 C4 C109 A4 C214 C2 C228 C2 C243 D2 C701 A3 C723 B3 C804 A2 C819 B1 C832 B2 C849 B2 CE219 C2 CN203 D3 D204 A3 FB210 C1 FB703 A3 IC204 D2 L202 A2 L803 B2 Q703 A4 R103 B4 R209 B4 R223 D3 R238 D4 R258 D1 R274 A4 R288 D2 R604 B4 R732 B3 R805 B1 R824 A2 R842 B2
C0207 A3 C0220 D1 C0241 D4 C0602 C4 C201 A2 C215 A2 C229 C1 C250 D1 C702 A3 C728 A4 C805 B1 C820 B2 C833 B2 CE201 D1 CE220 C2 CN204 D2 D205 D3 FB211 C1 FB707 C2 IC205 A2 L203 A2 Q101 B4 Q704 A4 R104 B4 R210 C4 R224 D3 R239 D3 R259 D2 R275 A4 R289 D1 R605 B4 R733 B3 R806 C2 R826 B1 R845 C2
C0208 A3 C0221 D1 C0242 D4 C0603 C4 C202 B4 C216 B2 C230 D2 C253 C1 C703 A3 C729 A4 C806 B1 C821 B2 C834 B1 CE202 D1 CE801 D1 CN205 C1 D600 D1 FB212 C1 FB708 C2 IC206 D4 L204 D4 Q102 B4 Q705 A3 R105 B4 R211 C4 R225 B4 R242 D1 R260 D2 R276 D2 R290 B1 R606 C4 R734 B3 R807 C2 R827 B1 RA201 C2
C0209 A2 C0222 D1 C0243 D4 C0604 C4 C203 A2 C217 A2 C231 D2 C254 D3 C710 A3 C730 A3 C807 B1 C822 B2 C835 A1 CE203 D1 CE802 D1 CN206 B4 F201 B4 FB213 C1 FB712 A4 IC207 D4 L205 B4 Q204 A3 Q706 A3 R106 B4 R212 C4 R227 D2 R245 C1 R261 D2 R277 D2 R291 C1 R702 A3 R737 A3 R808 A1 R829 B1 RA202 C4
C0210 B4 C0226 D1 C0244 A2 C0606 C4 C204 B2 C218 B4 C232 C1 C255 D1 C711 A3 C731 A4 C808 B2 C823 B2 C836 A2 CE204 D1 CE803 D1 CN208 C1 FB201 A2 FB214 C1 FB713 A4 IC208 D2 L206 B3 Q205 D1 Q707 A3 R108 B4 R213 D2 R228 D1 R248 C1 R263 D2 R278 D2 R292 C1 R704 A3 R738 C2 R812 A1 R831 B2 RA203 C2
C0211 A2 C0227 C2 C0245 A2 C101 A4 C205 C4 C219 A3 C233 D1 C256 D1 C713 A3 C732 A3 C809 B2 C824 B2 C837 A2 CE205 D1 CE804 D1 CN701 A3 FB202 A2 FB216 C2 FB715 A3 IC209 B3 L207 B4 Q206 D1 Q708 A3 R109 B4 R215 D2 R229 D1 R249 C1 R267 D2 R279 C1 R293 D2 R705 A3 R748 A3 R813 A1 R833 B2 XL101 A4
C0212 C2 C0228 D1 C0246 A2 C102 A4 C206 B3 C220 A3 C234 A4 C257 D1 C716 B3 C735 C2 C810 A2 C825 A2 C838 B2 CE206 D1 CE805 D1 CN702 A2 FB203 A2 FB217 A2 FB801 A1 IC210 A3 L701 B3 Q207 D1 Q801 A1 R201 C4 R216 D1 R230 C1 R250 D3 R268 D2 R280 B3 R294 B2 R712 A4 R750 A4 R814 A2 R834 B2 XL201 B3
C0213 C4 C0229 D1 C0247 A2 C103 B4 C207 D3 C221 B4 C235 A4 C260 D1 C717 A3 C736 A3 C811 A2 C826 B2 C839 B2 CE207 D1 CE806 D1 CN801 A1 FB204 A2 FB220 C1 FB802 A1 IC801 B1 L702 B3 Q300 D3 Q802 A1 R202 B4 R217 D1 R231 C1 R251 C1 R269 D1 R281 D3 R296 D1 R713 A4 R751 A3 R815 A2 R835 B2 XL202 D1



CIRCUIT DIAGRAM - part three

C301 A1	C317 A3	C326 A1	C346 B3	C357 B1	C511 B4	C903 D1	C920 D1	CE302 D2	CE311 D2	CE320 D2	CE329 D3	FB312 B1	FE309 D3	JK302A B1	R3019 A2	R314 A1	R328 B2	R344 B2	R354 B1	R369 B1	R530 A4	R710 A4	ZD301 A2
C302 A1	C318 D3	C329 A2	C349 B3	C360 C4	C512 B4	C904 D1	C921 D1	CE303 D2	CE312 D2	CE321 D2	CE330 D3	FB313 B1	FE310 D3	L501 B4	R302 A1	R316 A1	R329 A2	R345 B1	R355 B1	R378 B3	R531 A4	R711 A3	ZD302 A2
C305 A1	C319 D4	C330 A2	C350 B3	C362 B3	C513 B4	C905 D1	C922 D1	CE304 D2	CE313 D2	CE322 D2	CE352 D3	FB901 D1	FE311 D3	L502 B4	R3020 B2	R317 A1	R330 A2	R346 B1	R356 B1	R380 D3	R532 A4	R904 D1	ZD901 D1
C306 A1	C320 B3	C331 A3	C351 B3	C363 B3	C514 B4	C906 D1	C924 D1	CE305 D2	CE314 D2	CE323 D2	CE901 D2	FB905 C1	FE312 D3	L503 B4	R305 A3	R318 A1	R331 A3	R348 B1	R357 B1	R388 A1	R533 A4	R911 D1	ZD902 D1
C309 A2	C321 B3	C334 B2	C352 B1	C506 B4	C515 B4	C907 D1	C928 D1	CE306 D2	CE315 D2	CE324 D3	CE903 D1	FE301 D3	IC301 A1	Q305 A3	R307 B3	R321 A2	R332 B2	R349 B1	R358 B1	R389 B3	R552 B4	R913 D1	ZD904 D1
C311 A2	C322 B3	C340 A3	C353 B1	C507 B4	C516 B4	C908 D2	C929 D1	CE307 D2	CE316 D2	CE325 D3	CE904 D1	FE302 D3	IC304 A2	Q901 D1	R308 A3	R322 A2	R334 A3	R350 B1	R359 B1	R390 B3	R553 B4	R924 C2	
C313 A2	C323 A3	C341 B2	C354 B1	C508 B4	C517 B4	C912 D2	C932 D1	CE308 D2	CE317 D2	CE326 D3	CN301 A1	FE306 D3	IC305 B2	Q903 D1	R309 A1	R325 A2	R335 B3	R351 B1	R360 A2	R399 B3	R558 B4	R928 D1	
C315 A2	C324 B3	C342 A2	C355 B1	C509 B4	C901 D1	C918 D2	C935 D2	CE309 D2	CE318 D2	CE327 D3	FB223 D1	FE307 D3	IC306 B3	R301 A1	R310 A1	R326 A2	R336 B3	R352 B1	R361 B3	R523 A4	R560 C4	R929 D1	
C316 A2	C325 A1	C343 A2	C356 B1	C510 B4	C902 D1	C919 D2	CE301 D2	CE310 D2	CE319 D2	CE328 D3	FB310 A3	FE308 D3	IC309 A3	R3018 A3	R313 A1	R327 A2	R343 A2	R353 B1	R368 B1	R529 A4	R709 A4	RB901 C1	



CS48540 slave/master Jump				
48540 PIN	PHILIP S	HTS	PULL UP	PULL Down
20	DSP_DAO0/HS0	S308_TSD0(OP)	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				

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PCB LAYOUT - TOP VIEW

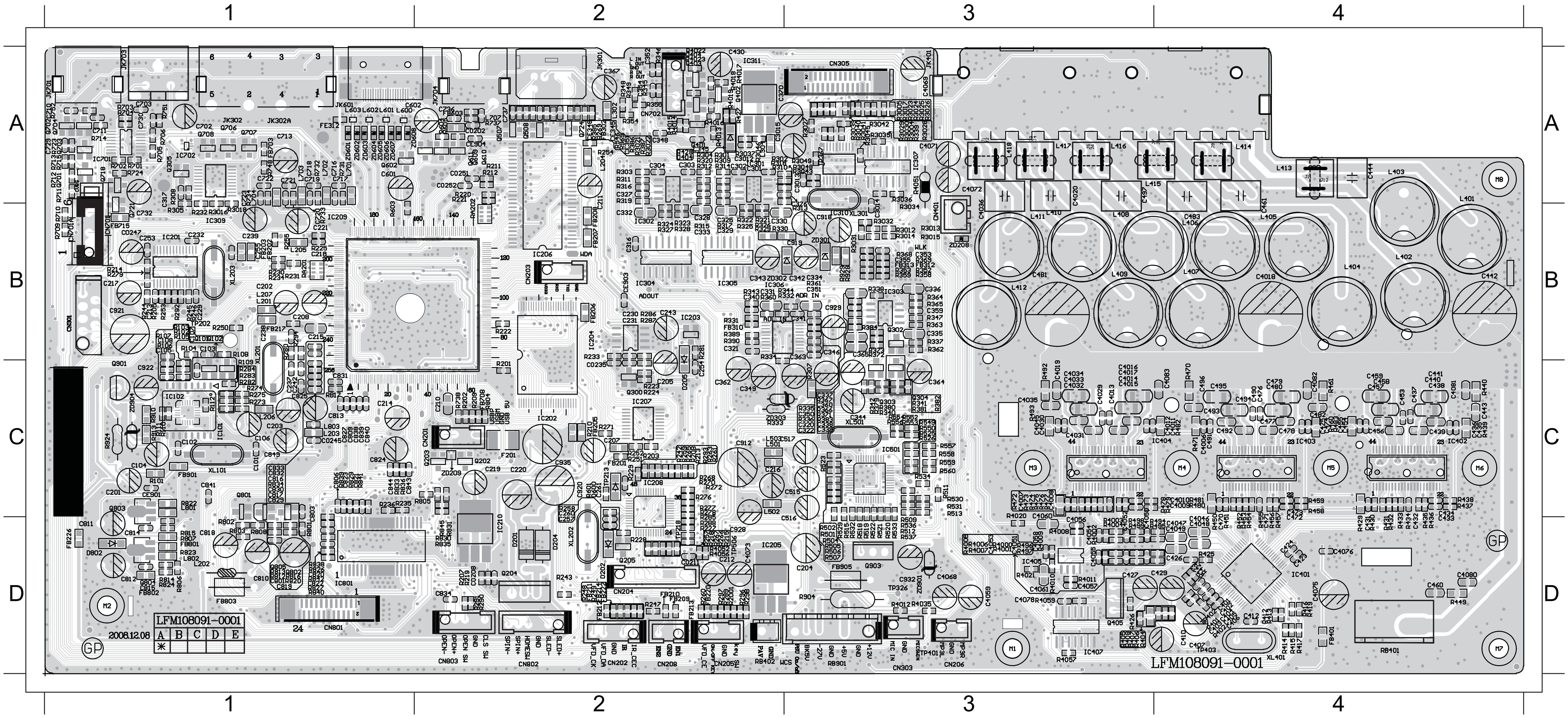
C317	A1	JK701	A1	R711	A1	C736	A2	R254	A2	R4018	A2	L416	A3
C601	A1	JK703	A1	R712	A1	C737	A2	R269	A2	R4019	A2	L417	A3
C602	A1	L701	A1	R714	A1	CE904	A2	R301	A2	R4022	A2	L418	A3
C702	A1	L702	A1	R724	A1	CN702	A2	R302	A2	R4023	A2	R4051	A3
C703	A1	L703	A1	R731	A1	D404	A2	R309	A2	R427	A2	C444	A4
C710	A1	L704	A1	R732	A1	FB603	A2	R310	A2	R428	A2	L401	A4
C711	A1	Q305	A1	R734	A1	IC301	A2	R314	A2	R604	A2	L403	A4
C713	A1	Q602	A1	R748	A1	JK302A	A2	R316	A2	R605	A2	L413	A4
C716	A1	Q701	A1	R751	A1	JK704	A2	R318	A2	R737	A2	L414	A4
C717	A1	Q702	A1	R752	A1	L204	A2	R345	A2	RA202	A2	Q705	A4
C718	A1	Q703	A1	C0202	A2	L707	A2	R346	A2	C4020	A3	C0247	B1
C719	A1	Q704	A1	C0251	A2	Q401	A2	R348	A2	C4036	A3	C103	B1
C721	A1	Q706	A1	C0252	A2	Q402	A2	R349	A2	C4069	A3	C105	B1
C722	A1	Q707	A1	C211	A2	Q403	A2	R354	A2	C4071	A3	C107	B1
C723	A1	Q708	A1	C301	A2	Q404	A2	R355	A2	C4072	A3	C108	B1
C729	A1	R308	A1	C302	A2	Q611	A2	R4013	A2	C461	A3	C202	B1
C730	A1	R603	A1	C326	A2	R211	A2	R4014	A2	C497	A3	C208	B1
FB703	A1	R702	A1	C352	A2	R212	A2	R4015	A2	CN401	A3	C213	B1
FE312	A1	R704	A1	C354	A2	R220	A2	R4016	A2	JK401	A3	C215	B1
JK601	A1	R705	A1	C430	A2	R221	A2	R4017	A2	L415	A3	C217	B1

C218	B1	L201	B1	R292	B1	C331	B2	R286	B2	C342	B3	R352	B3
C221	B1	L205	B1	R294	B1	C340	B2	R287	B2	C346	B3	R353	B3
C229	B1	L207	B1	R3018	B1	C343	B2	R317	B2	C351	B3	R358	B3
C232	B1	Q101	B1	R305	B1	CE903	B2	R321	B2	C353	B3	R359	B3
C238	B1	Q102	B1	R709	B1	CN203	B2	R322	B2	C355	B3	R361	B3
C239	B1	R102	B1	R710	B1	FB206	B2	R325	B2	C363	B3	R368	B3
C253	B1	R103	B1	R713	B1	FB207	B2	R326	B2	C481	B3	R369	B3
C255	B1	R104	B1	R715	B1	FB208	B2	R327	B2	C918	B3	R928	B3
C720	B1	R105	B1	R733	B1	FB310	B2	R328	B2	C919	B3	R929	B3
C732	B1	R106	B1	RA201	B1	IC203	B2	R329	B2	C929	B3	ZD301	B3
C921	B1	R108	B1	XL201	B1	IC204	B2	R330	B2	FB312	B3	C4014	B4
CN301	B1	R205	B1	XL203	B1	IC206	B2	R331	B2	FB313	B3	C4015	B4
CN701	B1	R225	B1	C230	B2	IC304	B2	R334	B2	L408	B3	C4018	B4
FB202	B1	R231	B1	C231	B2	IC305	B2	R343	B2	L409	B3	C442	B4
FB203	B1	R232	B1	C243	B2	IC306	B2	R360	B2	L410	B3	C483	B4
FB217	B1	R245	B1	C316	B2	R222	B2	R389	B2	L411	B3	L402	B4
FB715	B1	R250	B1	C321	B2	R230	B2	R390	B2	L412	B3	L404	B4
IC201	B1	R253	B1	C325	B2	R233	B2	ZD302	B2	R313	B3	L405	B4
IC209	B1	R279	B1	C329	B2	R234	B2	C334	B3	R332	B3	L406	B4
IC309	B1	R280	B1	C330	B2	R281	B2	C341	B3	R344	B3	L407	B4

R722	B4	C825	C1	L501	C1	R834	C1	C912	C2	R209	C2	R601	C2
C0245	C1	C827	C1	L801	C1	R836	C1	C920	C2	R210	C2	R738	C2
C101	C1	C829	C1	L803	C1	R839	C1	C935	C2	R213	C2	R804	C2
C102	C1	C830	C1	Q801	C1	R841	C1	CN201	C2	R223	C2	R805	C2
C104	C1	C831	C1	Q803	C1	R913	C1	D205	C2	R224	C2	ZD209	C2
C106	C1	C832	C1	Q901	C1	R924	C1	D600	C2	R229	C2	C320	C3
C201	C1	C833	C1	R101	C1	XL101	C1	F201	C2	R242	C2	C322	C3
C203	C1	C838	C1	R109	C1	ZD904	C1	FB201	C2	R251	C2	C350	C3
C214	C1	C839	C1	R235	C1	C0235	C2	FB205	C2	R252	C2	C360	C3
C237	C1	C840	C1	R236	C1	C205	C2	FB708	C2	R258	C2	C4007	C3
C242	C1	C841	C1	R273	C1	C207	C2	IC202	C2	R259	C2	C4008	C3
C803	C1	C843	C1	R274	C1	C210	C2	IC207	C2	R261	C2	C4013	C3
C806	C1	C844	C1	R274	C1	C216	C2	IC208	C2	R263	C2	C4029	C3
C809	C1	C849	C1	R275	C1	C219	C2	L502	C2	R270	C2	C4030	C3
C813	C1	C922	C1	R282	C1	C220	C2	L503	C2	R271	C2	C4031	C3
C816	C1	CE901	C1	R283	C1	C254	C2	Q300	C2	R272	C2	C4032	C3
C817	C1	FB901	C1	R817	C1	C260	C2	R201	C2	R276	C2	C4035	C3
C821	C1	IC101	C1	R822	C1	C261	C2	R202	C2	R277	C2	C4045	C3
C823	C1	L203	C1	R829	C1	C349	C2	R203	C2	R278	C2	C515	C3
C824	C1	L206	C1	R833	C1	C362	C2	R208	C2	R293	C2	C517	C3

IC404	C3	C4006	C4	C470	C4	R433	C4	R471	C4	IC801	D1	R826	D1
R268	C3	C4009	C4	C471	C4	R434	C4	R478	C4	L202	D1	R827	D1
R307	C3	C4010	C4	C472	C4	R435	C4	R479	C4	L802	D1	R838	D1
R335	C3	C4011	C4	C473	C4	R436	C4	R480	C4	Q802	D1	R840	D1
R336	C3	C4012	C4	C474	C4	R437	C4	R481	C4	Q804	D1	R842	D1
R380	C3	C4081	C4	C475	C4	R438	C4	R482	C4	Q805	D1	C0208	D2
R472	C3	C431	C4	C476	C4	R439	C4	R483	C4	R801	D1	C0211	D2
R474	C3	C432	C4	C477	C4	R440	C4	C801	D1	R802	D1	C257	D2
R475	C3	C434	C4	C478	C4	R450	C4	C810	D1	R803	D1	C4073	D2
R476	C3	C435	C4	C482	C4	R452	C4	C811	D1	R806	D1	C834	D2
R477	C3	C436	C4	C490	C4	R453	C4	C812	D1	R807	D1	C928	D2
R492	C3	C437	C4	C491	C4	R454	C4	C818	D1	R808	D1	CN202	D2
R493	C3	C438	C4	C492	C4	R455	C4	C819	D1	R812	D1	CN204	D2
R523	C3	C439	C4	C493	C4	R456	C4	C820	D1	R813	D1	CN205	D2
R530	C3	C443	C4	C496	C4	R457	C4	C822	D1	R814	D1	CN208	D2
R531	C3	C453	C4	IC402	C4	R458	C4	CN801	D1	R815	D1	CN802	D2
R552	C3	C454	C4	IC403	C4	R459	C4	FB226	D1	R816	D1	CN803	D2
R553	C3	C455	C4	R429	C4	R460	C4	FB801	D1	R820	D1	D201	D2
R558	C3	C456	C4	R431	C4	R461	C4	FB802	D1	R823	D1	D202	D2
R560	C3	C457	C4	R432	C4	R470	C4	FB803	D1	R824	D1	D204	D2

FB209	D2	R257	D2	C4051	D3	IC407	D3	R405	D3	C4046	D4	R412	D4
FB210	D2	R260	D2	C4052	D3	Q405	D3	R406	D3	C4047	D4	R413	D4
FB211	D2	R267	D2	C4053	D3	Q903	D3	R407	D3	C4048	D4	R414	D4
FB212	D2	R285	D2	C4054	D3	R4000	D3	R408	D3	C4049	D4	R415	D4
FB213	D2	R288	D2	C4055	D3	R4001	D3	R494	D3	C405	D4	R416	D4
FB214	D2	R289	D2	C4056	D3	R4002	D3	R495	D3	C406	D4	R417	D4
FB220	D2	R290	D2	C4057	D3	R4003	D3	R496	D3	C407	D4	R419	D4
FB222	D2	R291	D2	C4058	D3	R4004	D3	R497	D3	C4075	D4	R423	D4
IC205	D2	R296	D2	C4059	D3	R4005	D3	R498	D3	C4076	D4	R424	D4
IC210	D2	R297	D2	C4060	D3	R4006	D3	R499	D3	C4080	D4	R425	D4
Q204	D2	R298	D2	C4061	D3	R4007	D3	R529	D3	C410	D4	R426	D4
Q205	D2	R4052	D2	C4068	D3	R4008	D3	R532	D3	C412	D4	R449	D4
R207	D2	R4056	D2	C4078	D3	R4009	D3	R533	D3	C423	D4	RB401	D4
R215	D2	R831	D2	C427	D3	R4010	D3	R904	D3	C424	D4	XL401	D4
R218	D2	R835	D2	C429	D3	R4011	D3	RB901	D3	C433	D4		
R219	D2	R845	D2	C516	D3	R4012	D3	ZD901	D3	C460	D4		
R227	D2	RB402	D2	C932	D3	R4020	D3	C401	D4	FB401	D4		
R228	D2	XL202	D2	CN206	D3	R4021	D3	C402	D4	IC401	D4		
R248	D2	C204	D3	FB905	D3	R4035	D3	C403	D4	R401	D4		
R249	D2	C4050	D3	IC405	D3	R404	D3	C404	D4	R402	D4		



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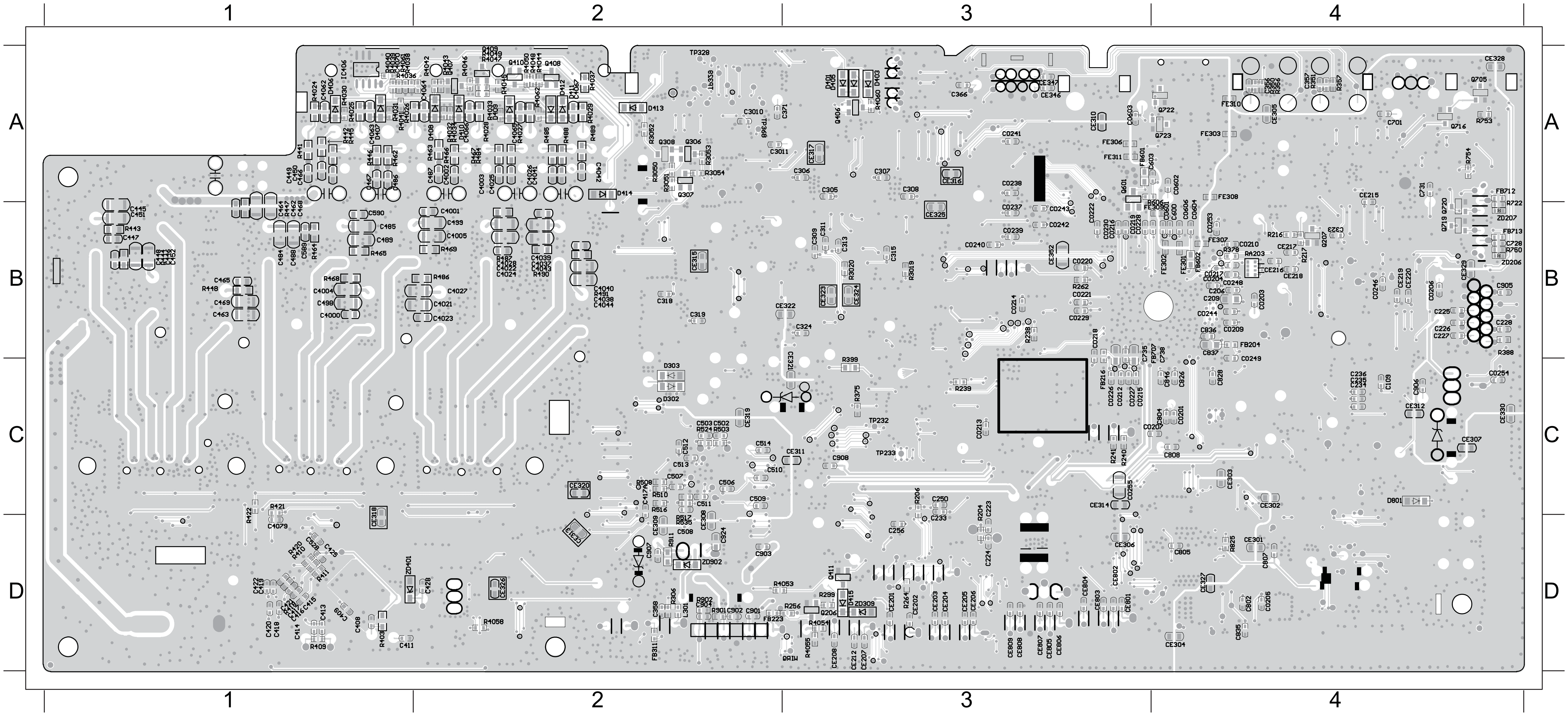
PCB LAYOUT - BOTTOM VIEW

C0241	A1	R4030	A1	C4025	A2	D414	A2	R4045	A2	C0603	A3	R4060	A3	C4000	B1
C4062	A1	R4031	A1	C4026	A2	Q407	A2	R4046	A2	C305	A3	C356	A4	C4004	B1
C4063	A1	R4036	A1	C4041	A2	Q408	A2	R4047	A2	C306	A3	C357	A4	C445	B1
C4070	A1	R4038	A1	C4042	A2	Q409	A2	R4048	A2	C603	A3	C701	A4	C446	B1
C449	A1	R4039	A1	C4064	A2	Q410	A2	R4049	A2	CE310	A3	C731	A4	C447	B1
C450	A1	R4040	A1	C4065	A2	R4027	A2	R4050	A2	CE316	A3	CE215	A4	C448	B1
C466	A1	R4041	A1	C4066	A2	R4028	A2	R4062	A2	CE317	A3	CE305	A4	C451	B1
C467	A1	R4061	A1	C4067	A2	R4029	A2	R463	A2	D401	A3	CE328	A4	C452	B1
C486	A1	R441	A1	C487	A2	R4032	A2	R466	A2	D403	A3	FB712	A4	C462	B1
D406	A1	R442	A1	D408	A2	R4033	A2	R467	A2	D405	A3	FE308	A4	C463	B1
D407	A1	R445	A1	D409	A2	R4034	A2	R484	A2	FB601	A3	FE310	A4	C464	B1
IC406	A1	R446	A1	D410	A2	R4037	A2	R485	A2	FE306	A3	R350	A4	C465	B1
R4024	A1	R462	A1	D411	A2	R4042	A2	R488	A2	FE311	A3	R351	A4	C468	B1
R4025	A1	C4002	A2	D412	A2	R4043	A2	R489	A2	Q406	A3	R356	A4	C469	B1
R4026	A1	C4003	A2	D413	A2	R4044	A2	C0602	A3	Q601	A3	R357	A4	C484	B1

C485	B1	C4001	B2	CE315	B2	C0230	B3	CE323	B3	C0246	B4	C728	B4	FE301	B4
C488	B1	C4005	B2	R469	B2	C0237	B3	CE324	B3	C0248	B4	C738	B4	FE302	B4
C489	B1	C4021	B2	R486	B2	C0238	B3	CE325	B3	C0249	B4	C836	B4	FE307	B4
C498	B1	C4022	B2	R487	B2	C0239	B3	CE352	B3	C0253	B4	C837	B4	FE309	B4
C589	B1	C4023	B2	R490	B2	C0240	B3	R238	B3	C0601	B4	C905	B4	Q207	B4
C590	B1	C4024	B2	R491	B2	C0242	B3	R3019	B3	C0604	B4	CE216	B4	R216	B4
R443	B1	C4027	B2	C0214	B3	C0243	B3	R3020	B3	C0606	B4	CE217	B4	R217	B4
R444	B1	C4028	B2	C0216	B3	C309	B3	R399	B3	C206	B4	CE218	B4	R378	B4
R447	B1	C4037	B2	C0218	B3	C311	B3	C0203	B4	C209	B4	CE219	B4	R388	B4
R448	B1	C4038	B2	C0219	B3	C313	B3	C0204	B4	C225	B4	CE220	B4	R606	B4
R464	B1	C4039	B2	C0220	B3	C315	B3	C0206	B4	C226	B4	CE329	B4	R750	B4
R465	B1	C4040	B2	C0221	B3	C324	B3	C0209	B4	C227	B4	FB204	B4	RA203	B4
R468	B1	C4043	B2	C0222	B3	C735	B3	C0210	B4	C228	B4	FB602	B4	CE318	C1
C318	B2	C4044	B2	C0228	B3	CE321	B3	C0217	B4	C323	B4	FB707	B4	R421	C1
C319	B2	C499	B2	C0229	B3	CE322	B3	C0244	B4	C600	B4	FB713	B4	R422	C1

C506	C2	C0215	C3	C236	C4	C413	D1	R418	D1	R4053	D2	CE801	D3	R4055	D3
C507	C2	C0226	C3	C804	C4	C414	D1	R420	D1	R911	D2	CE802	D3	C0205	D4
C509	C2	C0227	C3	C808	C4	C415	D1	ZD401	D1	ZD902	D2	CE803	D3	C802	D4
C510	C2	C223	C3	C826	C4	C416	D1	C428	D2	C224	D3	CE804	D3	C805	D4
C511	C2	C250	C3	C828	C4	C417	D1	C508	D2	C233	D3	CE805	D3	C807	D4
C512	C2	C908	C3	C846	C4	C419	D1	C901	D2	C256	D3	CE806	D3	C835	D4
C513	C2	CE314	C3	C906	C4	C420	D1	C902	D2	CE201	D3	CE807	D3	CE301	D4
C514	C2	FB216	C3	CE302	C4	C421	D1	C903	D2	CE202	D3	CE808	D3	CE304	D4
CE308	C2	R204	C3	CE303	C4	C422	D1	C904	D2	CE203	D3	CE809	D3	CE327	D4
CE311	C2	R239	C3	CE307	C4	C425	D1	C907	D2	CE204	D3	D415	D3		
CE319	C2	ZD309	C3	CE312	C4	C528	D1	C924	D2	CE205	D3	Q206	D3		
CE320	C2	C0201	C4	CE330	C4	R403	D1	CE309	D2	CE206	D3	Q411	D3		
C0207	C3	C109	C4	C408	D1	R409	D1	CE313	D2	CE207	D3	R256	D3		
C0212	C3	C234	C4	C409	D1	R410	D1	CE326	D2	CE212	D3	R299	D3		
C0213	C3	C235	C4	C411	D1	R411	D1	FB223	D2	CE306	D3	R4054	D3		



POWER BOARD

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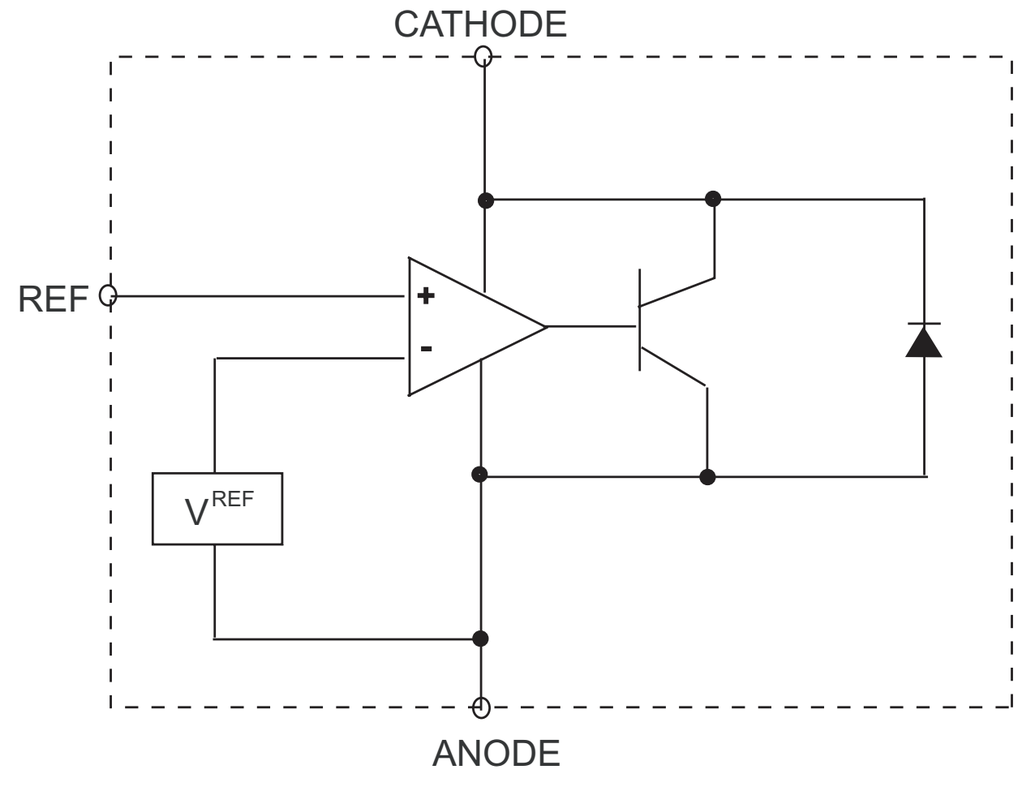
INTERNAL IC DIAGRAM - AZ431



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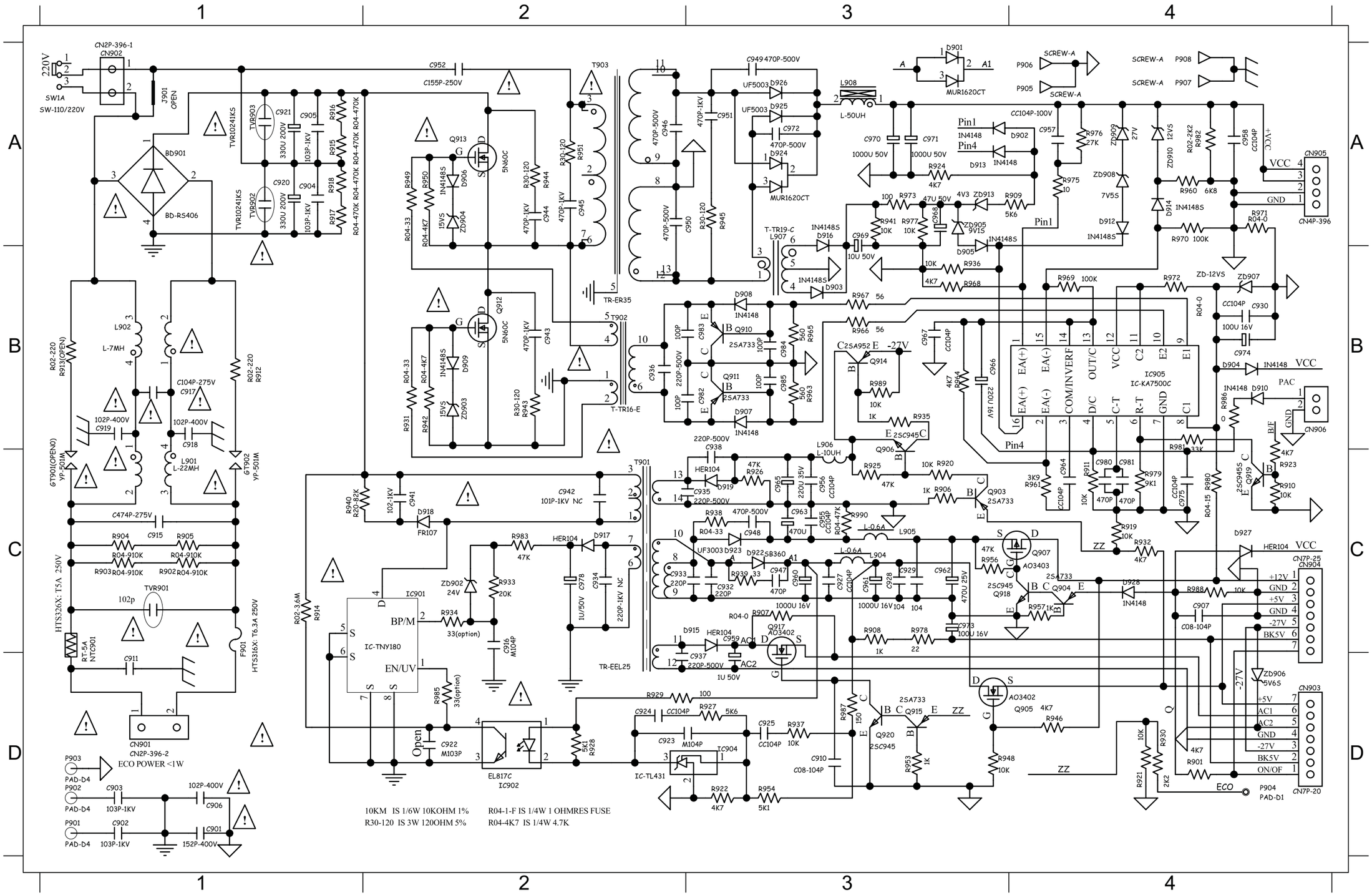
CIRCUIT DIAGRAM

BD901A1 C910 D3 C923 D2 C936 B2 C947 C3 C957 A4 C965 C3 C974 B4 C985 B3 D904 B4 D915 C2 D927 C4 L901 C1 Q903 C3 Q913 A2 R906 C3 R916 A1 R926 C3 R935 B3 R943 B2 R954 D3 R966 B3 R975 A4 R985 D2 TVR902A1 ZD909A4
C901 D1 C915 C1 C924 D2 C938 C3 C948 C3 C958 A4 C966 B3 C975 C4 CN901D1 D906 A2 D916 A3 D928 C4 L902 B1 Q904 C4 Q914 B3 R907 C3 R917 A1 R927 C3 R936 B3 R944 A2 R956 C3 R967 B3 R976 A4 R986 B4 TVR903A1 ZD910A4
C902 D1 C916 C2 C925 D3 C941 C2 C949 A3 C959 C3 C967 B3 C978 C2 CN903D4 D907 B3 D917 C2 F901 C1 L904 C3 Q905 D4 Q918 C3 R908 C3 R918 A1 R928 D2 R937 D3 R945 A3 R957 C4 R968 B3 R977 A3 R987 D3 ZD902C2 ZD913A3
C903 D1 C917 B1 C927 C3 C942 C2 C950 A2 C960 C3 C968 A3 C980 C4 CN904C4 D908 B3 D918 C2 GT902C1 L905 C3 Q906 C3 R901 D4 R909 A3 R919 C4 R929 D2 R938 C3 R946 D4 R960 A4 R969 B4 R978 C3 R989 B3 ZD903B2
C904 A1 C918 B1 C928 C3 C943 B2 C951 A3 C961 C3 C969 A3 C981 C4 CN905A4 D909 B2 D919 C3 IC901 C2 L906 C3 Q907 C4 R902 C1 R911 C4 R920 C3 R931 B2 R939 C3 R948 D3 R961 C4 R970 A4 R979 C4 T901 C2 ZD904A2
C905 A1 C919 B1 C929 C3 C944 A2 C952 A2 C962 C3 C971 A3 C982 B3 CN906B4 D910 B4 D922 C3 IC902 D2 L907 A3 Q910 B3 R903 C1 R912 B1 R922 D3 R932 C4 R940 C1 R949 A2 R963 B3 R971 A4 R980 C4 T902 B2 ZD906D4
C906 D1 C920 A1 C930 B4 C945 A2 C955 C3 C963 C3 C972 A3 C983 B3 D902 A4 D912 A4 D923 C3 IC904 D3 L908 A3 Q911 B3 R904 C1 R914 C1 R924 A3 R933 C2 R941 A3 R950 A2 R964 B3 R972 B4 R982 A4 T903 A2 ZD907B4
C907 C4 C921 A1 C934 C2 C946 A2 C956 C3 C964 C4 C973 C3 C984 B3 D903 B3 D914 A4 D924 A3 IC905 B4 NTC901C1 Q912 B2 R905 C1 R915 A1 R925 C3 R934 C2 R942 B2 R951 A2 R965 B3 R973 A3 R983 C2 TVR901C1 ZD908A4



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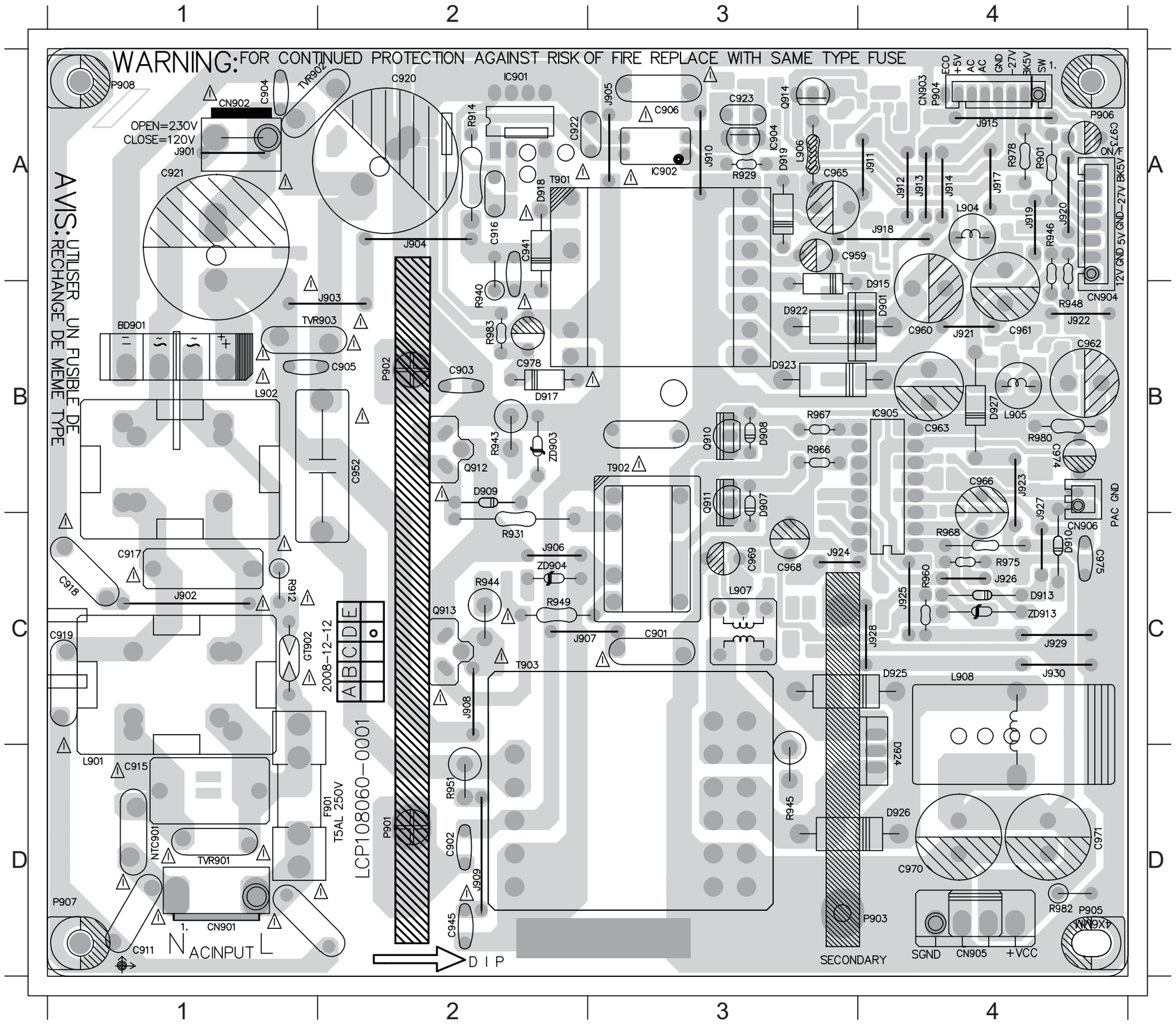
PCB LAYOUT - TOP VIEW

BD901	B1	C906	A3	C920	A2	C959	A3	C966	B4	C975	C4	CN906	C4	D917	B2	D927	B4	IC905	B4	J907	C2	J913	A4	J920	A4	J926	C4	L902	B1	NTC901	D1	R901	A4	R943	B2	R951	D2	R978	A4	T903	C2	ZD913	C4
C901	C3	C915	D1	C921	A1	C960	B4	C968	C3	C978	B2	D907	B3	D918	A1	F901	D2	J902	C1	J908	C2	J914	A4	J921	B4	J927	B4	L904	A4	Q910	B3	R912	C1	R944	C4	R960	C4	R980	B4	TVR901	D1		
C902	D2	C916	A2	C923	A3	C961	B4	C969	C3	CN901	D1	D908	B3	D919	A3	GT902	C1	J903	B1	J909	D2	J915	A4	J922	B4	J928	C4	L905	B4	Q911	B3	R914	A2	R945	D3	R966	B3	R982	D4	TVR902	A1		
C903	B2	C917	C1	C941	A2	C962	B4	C971	D4	CN903	A4	D909	B2	D922	B3	IC901	A2	J904	A2	J910	A3	J917	A4	J923	B4	J929	C4	L906	A3	Q912	B2	R929	A3	R946	A4	R967	B3	R983	B2	TVR903	B1		
C904	A1	C918	C1	C945	D2	C963	B4	C973	A4	CN904	B4	D910	C4	D923	B3	IC902	A3	J905	A3	J911	A4	J918	A4	J924	C3	J930	C4	L907	C3	Q913	C2	R931	C2	R948	B4	R968	C4	T901	A1	ZD903	B2		
C905	B2	C919	C1	C952	B2	C965	A3	C974	B4	CN905	D4	D915	B4	D924	D4	IC904	A3	J906	C2	J912	A4	J919	A4	J925	C4	L901	D4	L908	C4	Q914	A3	R940	B2	R949	C2	R975	C4	T902	B3	ZD904	C2		



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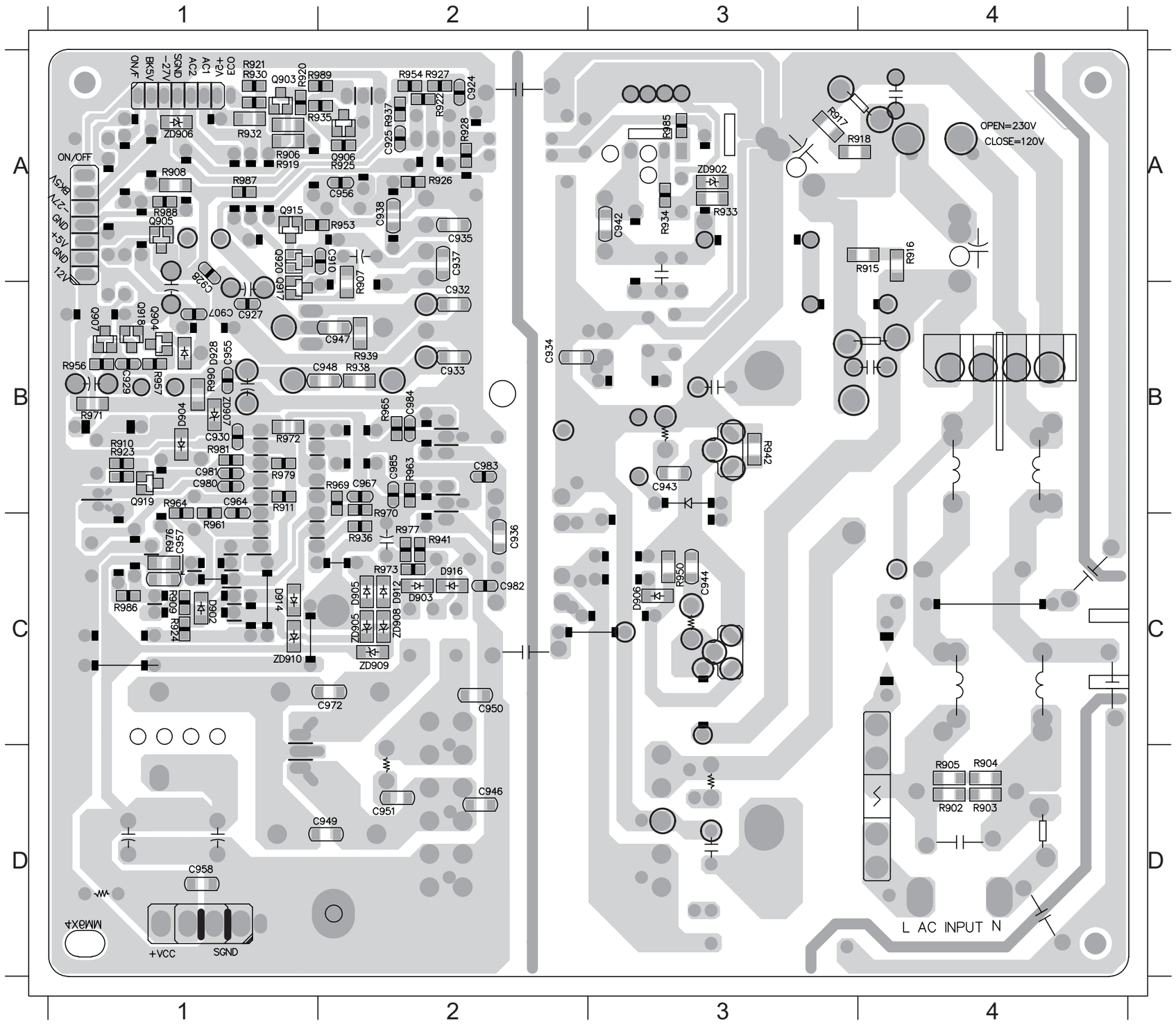
PCB LAYOUT - BOTTOM VIEW

C907 B1 C928 A1 C938 A2 C947 B2 C955 B1 C967 B2 C983 B2 D904 B1 D928 B1 Q907 B1 R905 D4 R911 B1 R919 A1 R926 A2 R934 A3 R939 B2 R956 B1 R965 B2 R973 C2 R986 C1 ZD907 B1
C910 A2 C929 B1 C942 A3 C948 B2 C956 A2 C972 C2 C984 B2 D906 C3 Q903 A1 Q918 B1 R906 A1 R915 A3 R920 A1 R927 A2 R935 A1 R941 C2 R957 B1 R969 B2 R976 C1 R987 A1 ZD908 C2
C924 A2 C930 B1 C943 B3 C949 D2 C957 C1 C980 B1 C985 B2 D912 C2 Q904 B1 R902 D4 R907 A2 R916 A4 R922 A2 R928 A2 R936 C2 R942 B3 R961 C1 R970 B2 R977 C2 R989 A1 ZD909 C2
C925 A2 C934 B2 C944 C3 C950 C2 C958 D1 C981 B1 D902 C1 D914 C1 Q905 A1 R903 D4 R908 A1 R917 A3 R924 C1 R932 A1 R937 A2 R950 C3 R963 B2 R971 B1 R979 B1 ZD902 A3 ZD910 C1
C927 B1 C936 C2 C946 D2 C951 D2 C964 B1 C982 C2 D903 C2 D916 C2 Q906 A2 R904 D4 R909 C1 R918 A3 R925 A2 R933 A3 R938 B2 R954 A2 R964 B1 R972 B1 R985 A3 ZD906 A1



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MP3 IN BOARD

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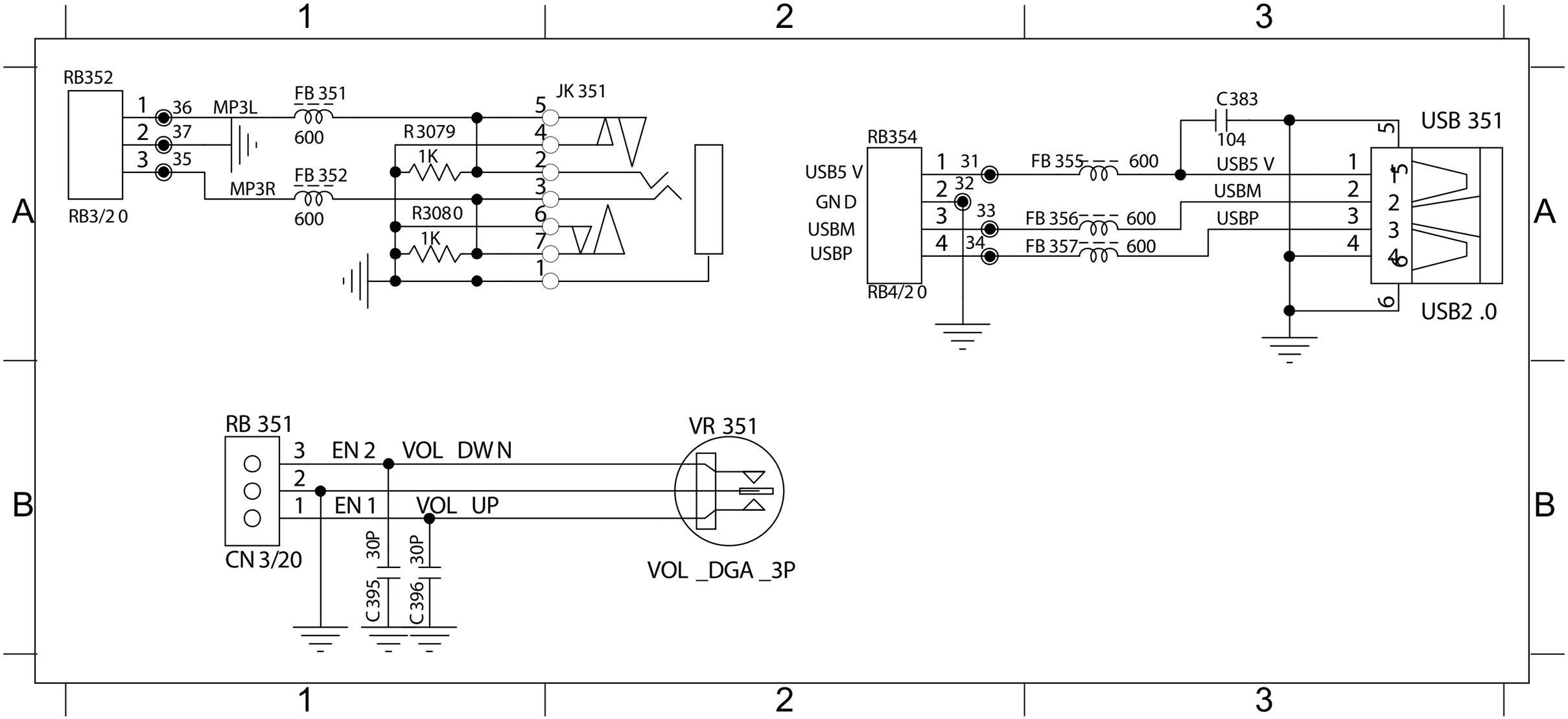
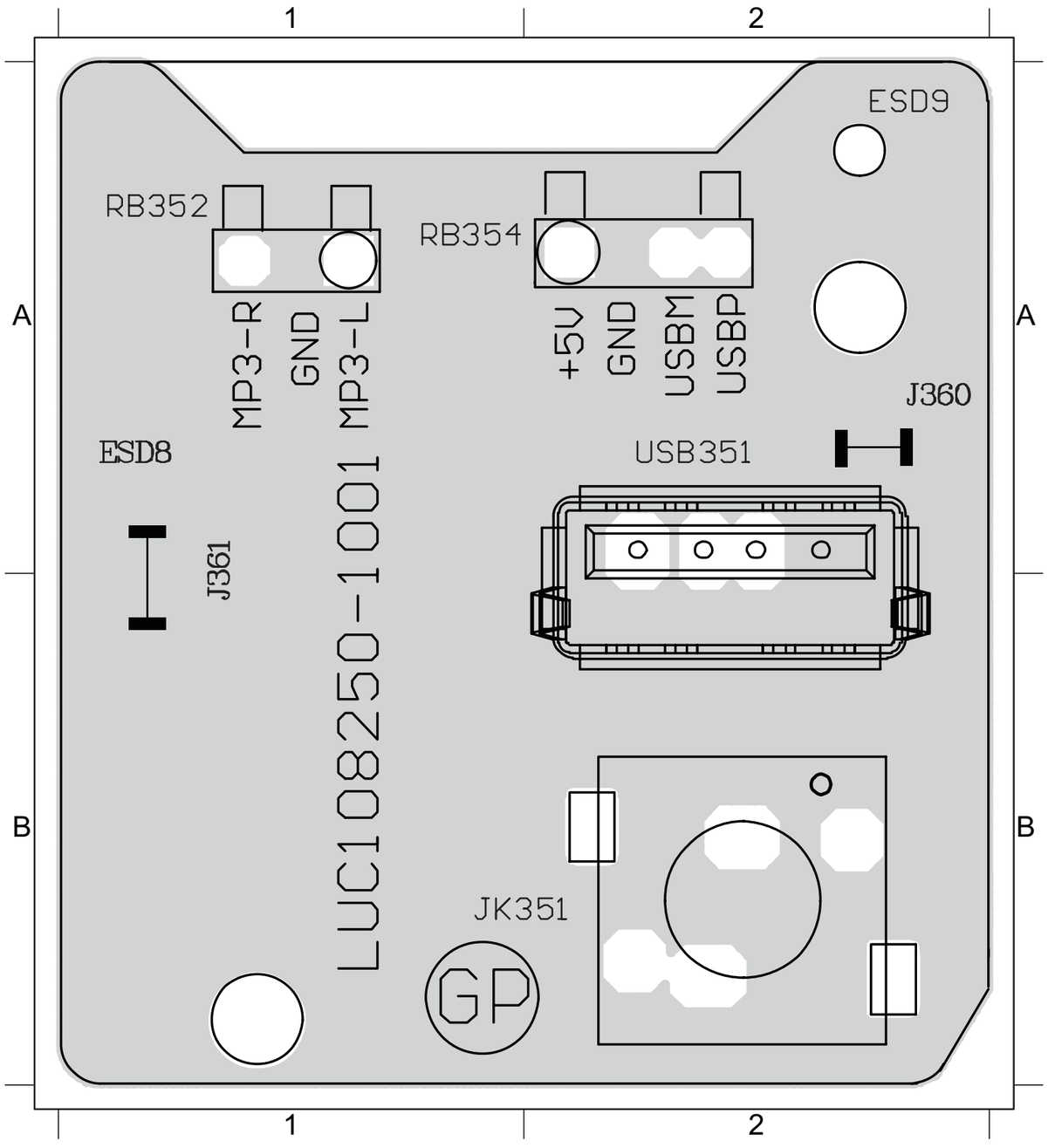
CIRCUIT DIAGRAM

C383 A3 FB351 A1 FB352 A1 FB355 A3 FB356 A3 FB357 A3 JK351 A2 R3079 A1 R3080 A1 RB352 A1 RB354 A2 USB351 A3



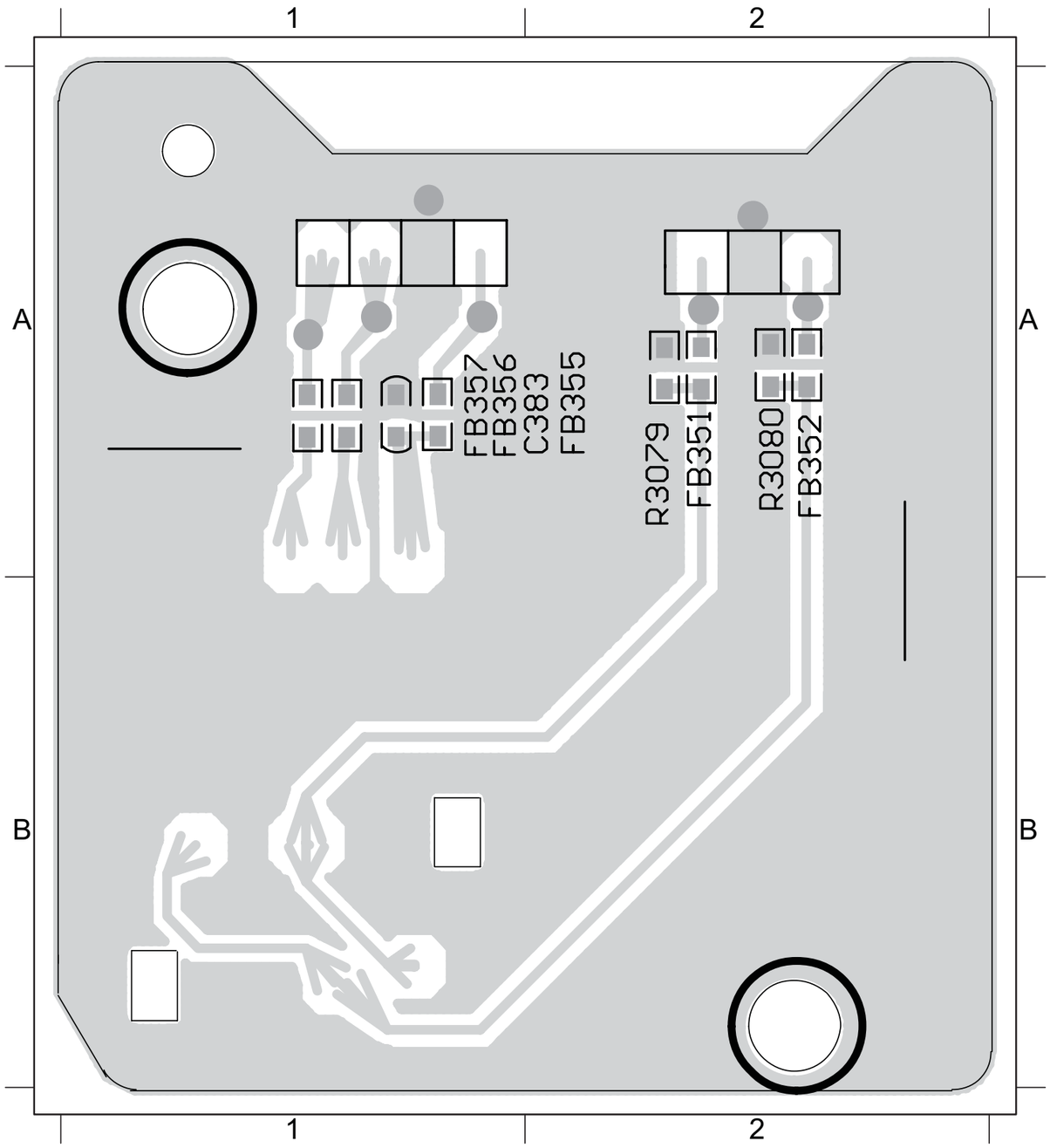
PCB LAYOUT - TOP VIEW

J360 A2 J361 A1 JK351 B1 RB352 A1 RB354 A1 USB351 A2



PCB LAYOUT - BOTTOM VIEW

C383 A2 FB351 A2 FB352 A2 FB355 A2 FB356 A1 FB357 A1 R3079 A2 R3080 A2



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SCART BOARD

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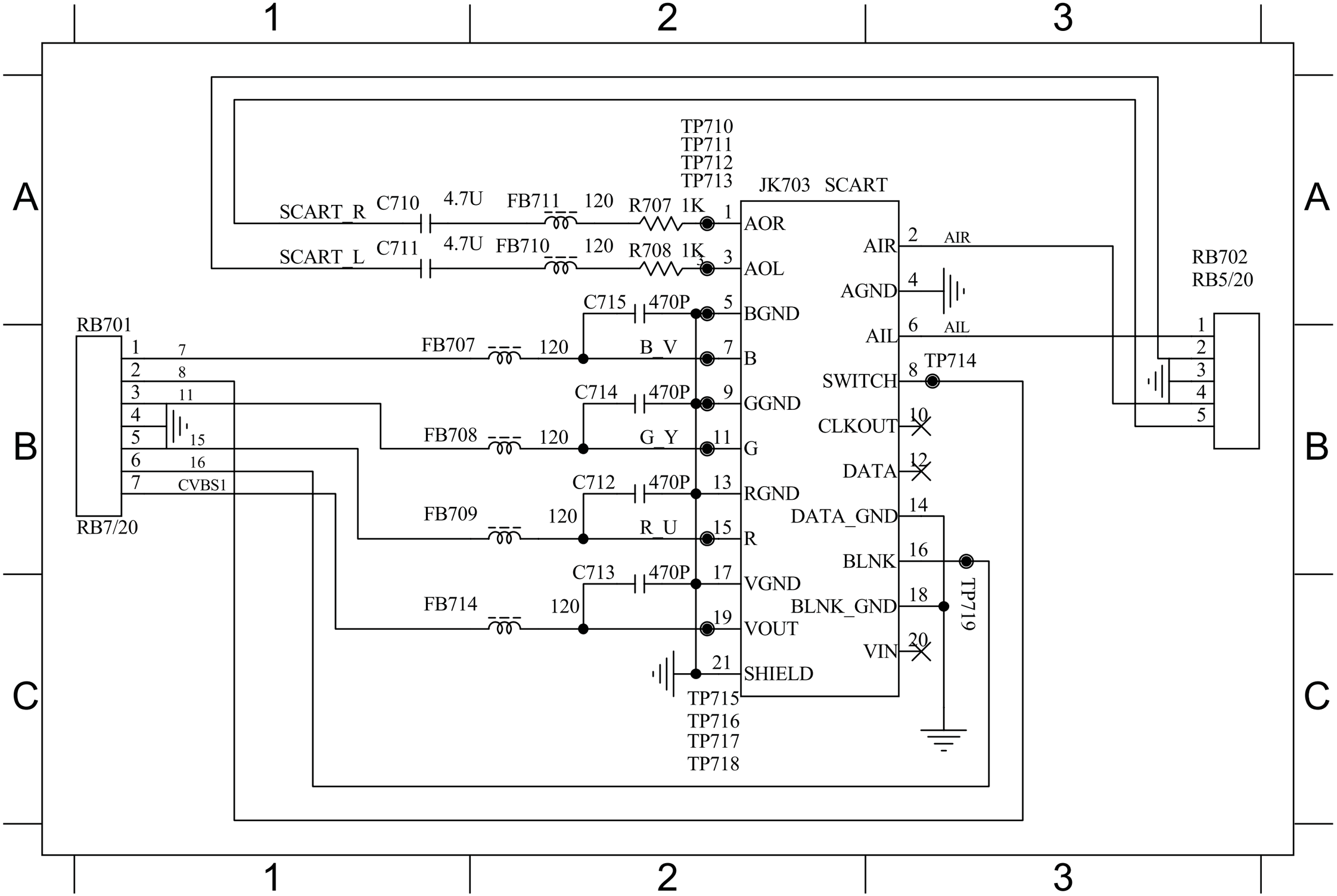
CIRCUIT DIAGRAM

C710 A1 C712 B2 C714 B2 FB707 B1 FB709 B1 FB711 A2 JK703 A2 R708 A2 RB702 A1
C711 A1 C713 B2 C715 A2 FB708 B1 FB710 A2 FB714 C2 R707 A2 RB701 B1



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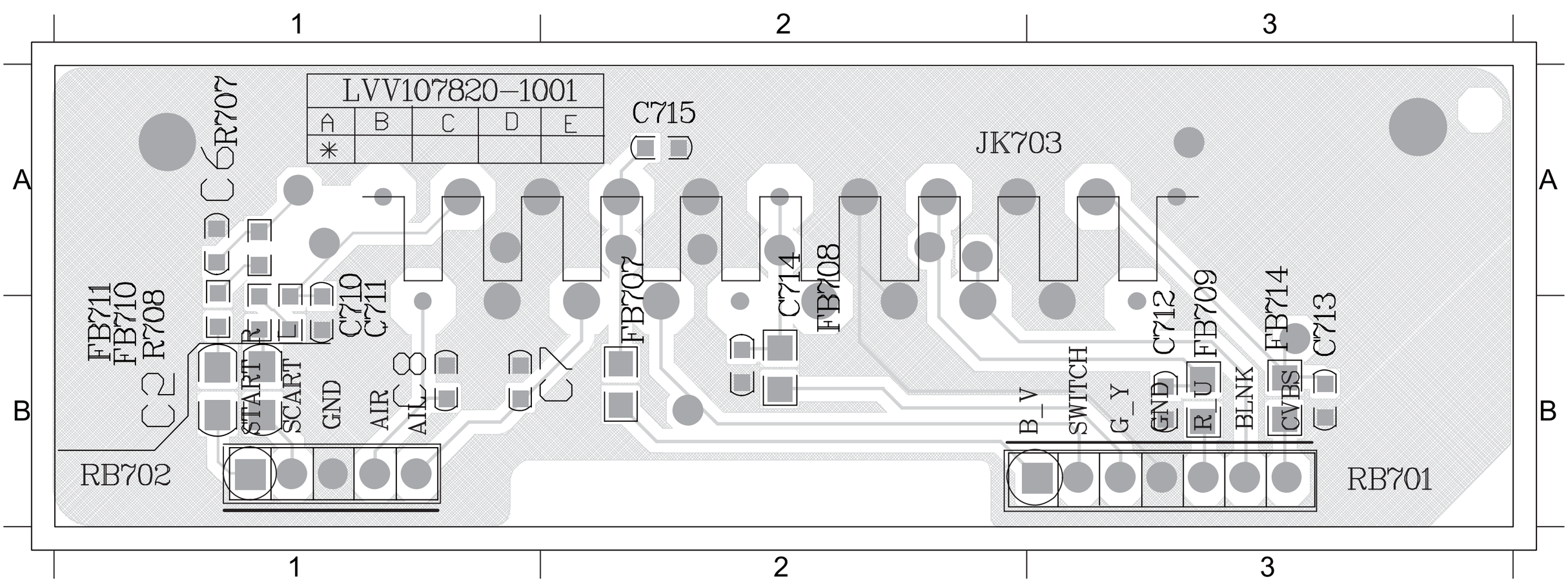
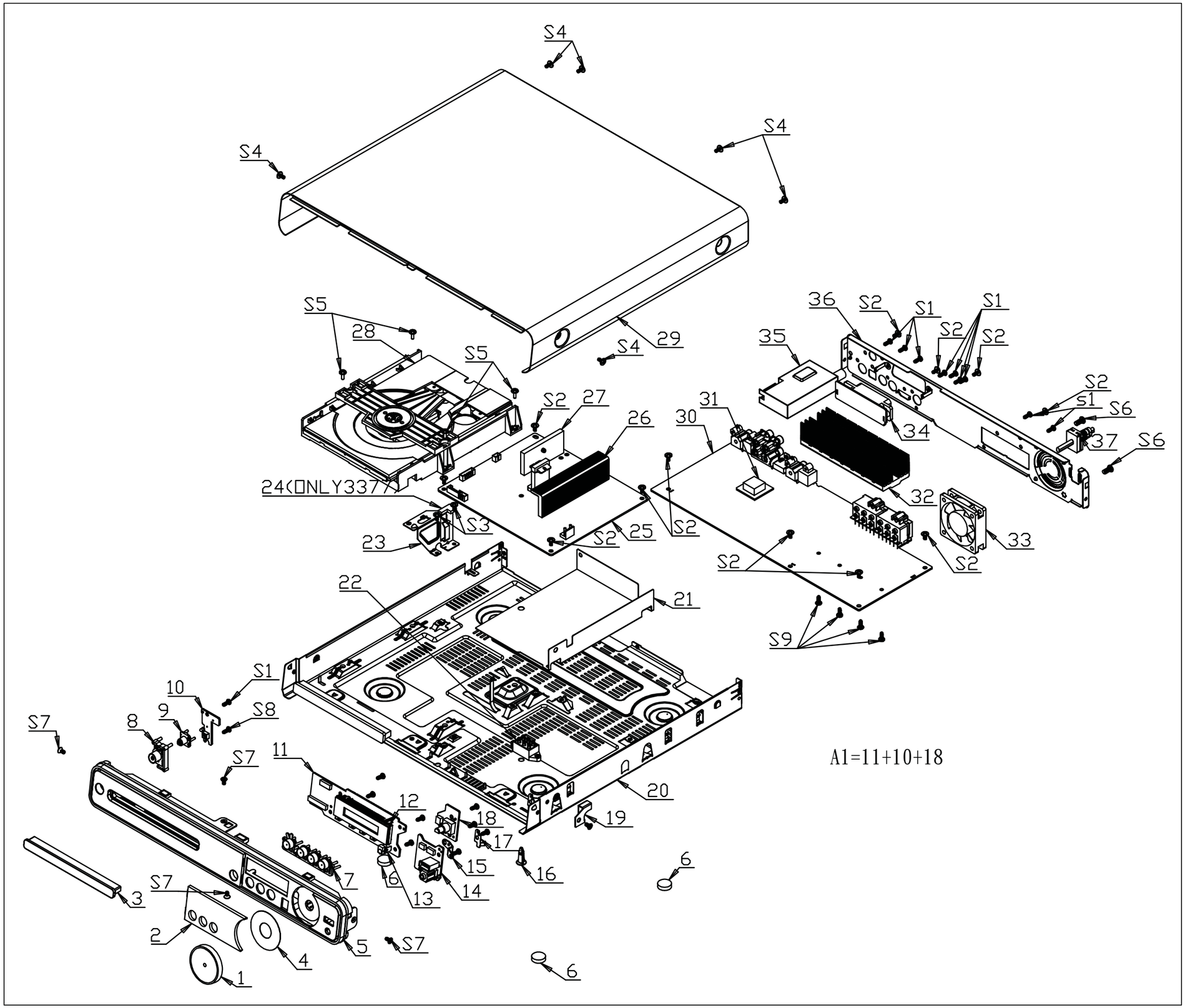
PCB LAYOUT - SCART PCB VIEW

C710	A1	C712	B3	C714	A2	FB707	A2	FB709	B3	FB711	A1	JK703	A2	R708	A1	RB702	B1		
C711	A1	C713	B3	C715	A2	FB708	A1	FB710	A1	FB714	A1	R707	A1	RB701	B3				



10 - 1

Mechanical Exploded View



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MECHANICAL & ACCESSORIES PARTS LIST

Loc.	12NC	Description
MAIN UNIT		
1	996510021087	VOLUME KNOB
2	996510021093	DISPLAY LENS
3	996510021077	DVD DOOR
5	996510021057	FRONT PANEL /12/05
5	996510021245	FRONT PANEL /51
6	996510010842	RUBBER FOOT
7	996510021068	FUNCTION KNOB
8	996510021069	STANDBY KNOB
9	996510021064	STANDBY LENS
14	996510021066	MP3 IN PCB ASSY /12/05
14	996510021203	MP3 IN +MIC PCB ASSY /51
25	⚠ 996510021073	POWER PCB ASSY 850W
28	996510021059	DVD LOADER WXD8829C+SANYO DV38
30	996510021065	MAIN PCB ASSY /12/05
33	996510021076	FAN DC12V 0.55A
34	996510021058	SCART PCB ASSY /12/05
35	996510018486	TUNER PACK KST-MT004FS1-6D
37	⚠ 996510001638	POWER CORD /12/51
37	996510002665	POWER CORD /05
A1	996510021089	DISP+LED+VOL PCB ASSY
A2	996510021259	MAIN+Y.U.V PCB ASSY /51
FM	996510008251	FM ANT
HDMI	996510020159	HDMI CABLE 1500 20276#30 /51
RC	996510021067	REMOTE CONTROL /12/05
RC	996510021186	REMOTE CONTROL /51
Scart	996510001650	SCART CABLE /12/05
Screw	996510017273	SCREW 8.5X60LX11LXM5X0.8P
V1	996510007429	FFC CABLE 10P 100mm UL20798
VIDEO	996500013058	RCA CABLE 2P 1.2M /51
LOUDSPEAKER SYSTEM		
SPKC	996510021048	SPEAKER BOX - REAR LEFT
SPKML	996510021051	SPEAKER BOX - FRONT LEFT
SPKMR	996510021047	SPEAKER BOX - FRONT RIGHT
SPKRL	996510021052	SPEAKER BOX - REAR RIGHT
SPKRR	996510021046	SPEAKER BOX - CENTER
SPKSUB	996510021049	SPEAKER BOX - SUBWOOFER

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REVISION LIST

Version 1.0
*Initial release

Version 1.1
*P10-2 Loudspeaker System List updated.

SPKC 996510021048 SPEAKER BOX - REAR LEFT (was SPEAKER BOX - CENTER)
SPKRL 996510021052 SPEAKER BOX - REAR RIGHT (was SPEAKER BOX - REAR LEFT)
SPKRR 996510021046 SPEAKER BOX - CENTER (was SPEAKER BOX - REAR RIGHT)