

Service
Service
Service



Service Manual



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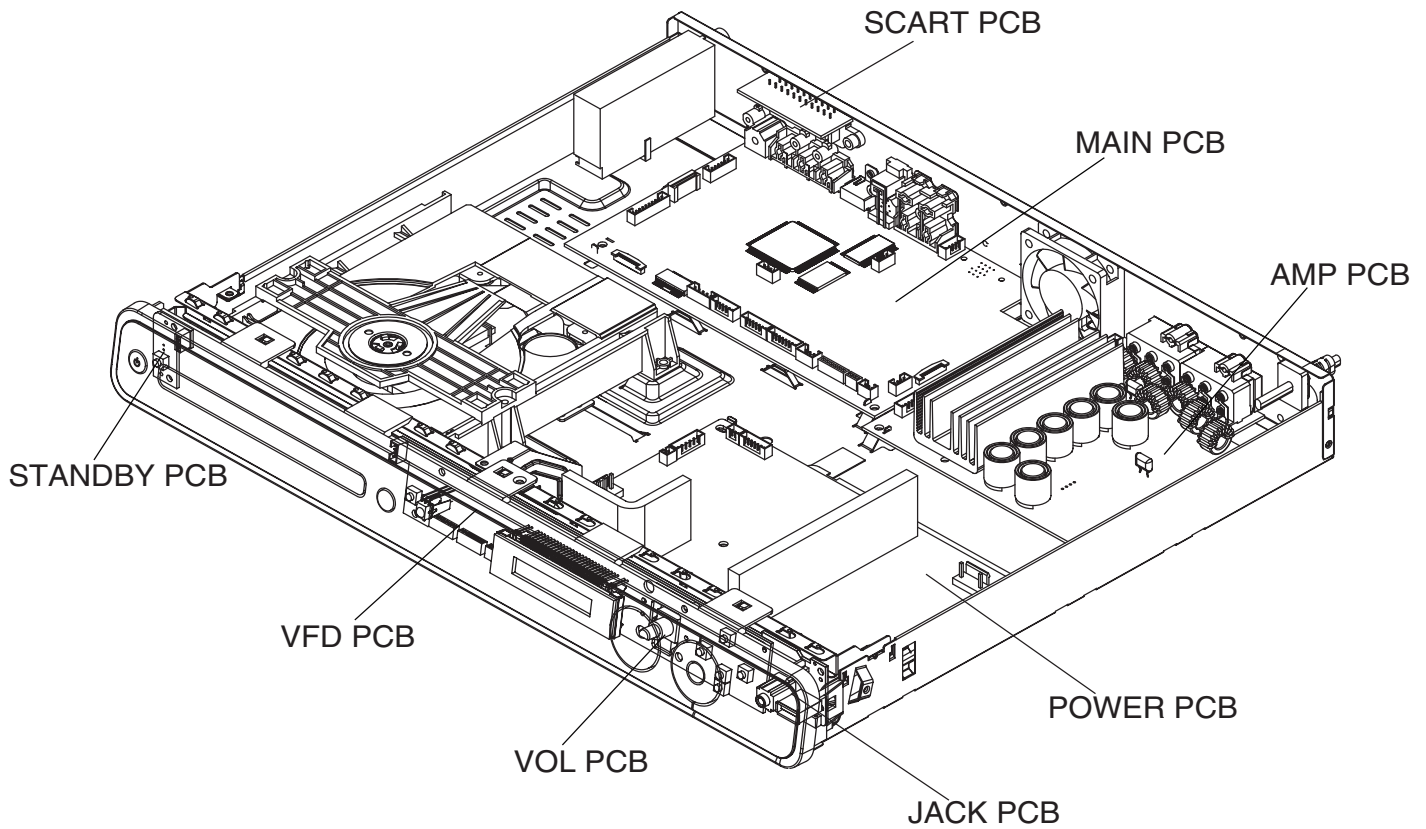
GB 3139 785 33520

Version 1.0



PHILIPS

LOCATION OF PCB BOARDS



VERSION VARIATION:

| Type/Versions \ Features | HTS3367 | |
|--------------------------|---------|-----|
| | /12 | /05 |
| Main (Output Power-600W) | X | X |
| S-Video Out | X | X |
| Power Voltage (230V) | X | X |
| Power Cord (fixed) | X | X |

SERVICE SCENARIO MATRIX:

| Type/Versions \ Boards in used | HTS3367 | |
|--------------------------------|---------|-----|
| | /12 | /05 |
| Main Board | Bd | Bd |
| Power Board | Bd | Bd |
| AMP Board | Bd | Bd |
| Scart Board | Bd | Bd |
| VFD+JACK +VOL+STANDBY Board | Bd | Bd |

* Bd= Board Level Repair

SPECIFICATIONS

AMPLIFIER

Total output power :
 - Home Theatre mode: 600 W
 Frequency Response: 180 Hz – 18 kHz / ± 3 dB
 Signal-to-Noise Ratio:..... > 60 dB (A-weighted)
 Input Sensitivity
 - AUX: 400 mV
 - SCART TO TV:..... 200 mV
 - MP3 LINK: 400 mV

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 Mono 3%
 FM Stereo 3%
 Frequency Response FM 180 Hz–10 kHz / ± 6 dB
 Stereo Separation FM 26 dB (1 kHz)
 Stereo Threshold FM 29 dB

DISC

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

USB

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

MAIN UNIT

Power Supply Rating: 220 - 240V; 50Hz
 Power Consumption: 100 W
 Dimensions: 435 x 57 x 360 (mm)
 (w x h x d)
 Weight: 3.7 kg

FRONT SPEAKERS

System: Full range satellite
 Impedance: 3 Ω
 Speaker drivers: 3" full range speaker
 Frequency response: 150 Hz – 20 kHz
 Dimensions: 103 x 202 x 71 (mm)
 (w x h x d)
 Weight: 0.45 kg

REAR SPEAKERS

System: Full range satellite
 Impedance: 3 Ω
 Speaker drivers: 3" full range speaker
 Frequency response: 150 Hz – 20 kHz
 Dimensions: 261 x 1200 x 260 (mm)
 (w x h x d)
 Weight: 3.29 kg

CENTRE SPEAKER

System: Full range satellite
 Impedance: 6 Ω
 Speaker drivers: 2 x 2.5" full range speaker+
 1 x 2" tweeter
 Frequency response: 150 Hz – 20 kHz
 Dimensions: 438 x 102 x 74 (mm)
 (w x h x d)
 Weight: 1.29 kg

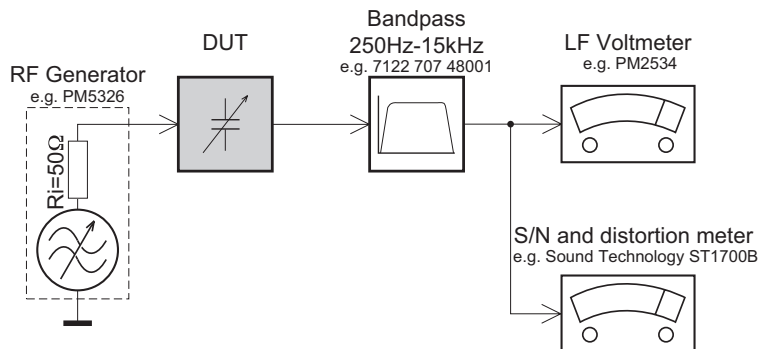
SUBWOOFER

Impedance: 6 Ω
 Speaker drivers: 165mm (6.5") woofer
 Frequency response: 40 Hz – 150 Hz
 Dimensions: 160 x 360 x 369 (mm)
 (w x h x d)
 Weight: 4.98 kg

Specifications subject to change without prior notice.

MEASUREMENT SETUP

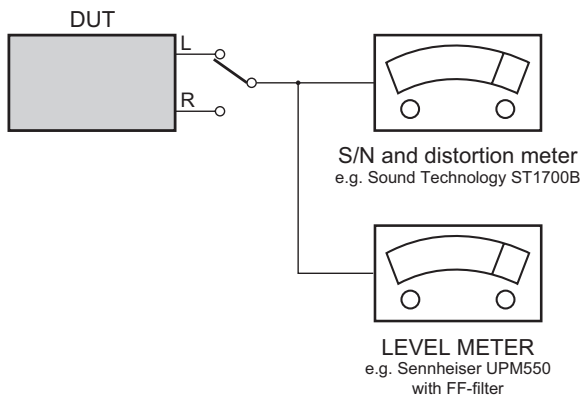
Tuner FM



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

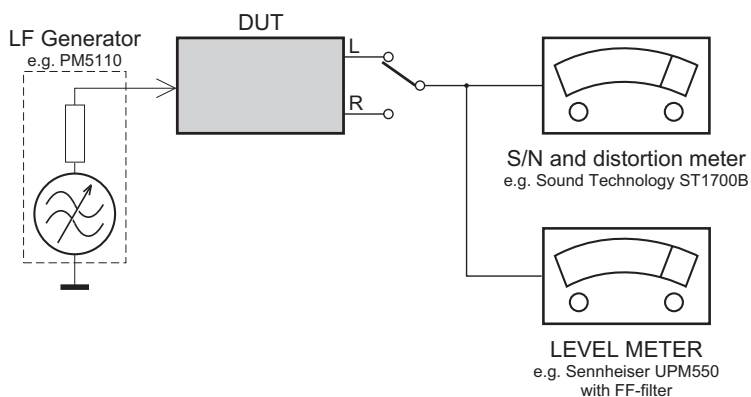
CD

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



Recorder

Use Universal Test Cassette **CrO2** SBC419 4822 397 30069
or Universal Test Cassette **Fe** SBC420 4822 397 30071



SERVICE AIDS

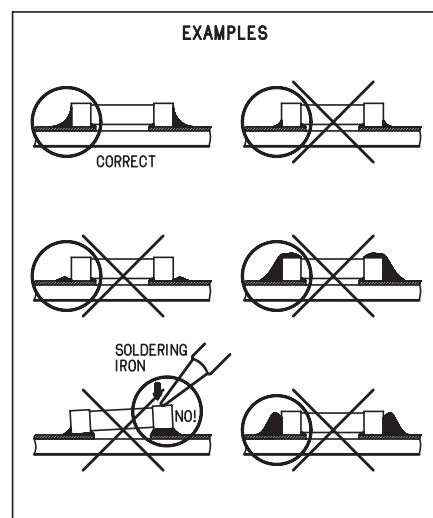
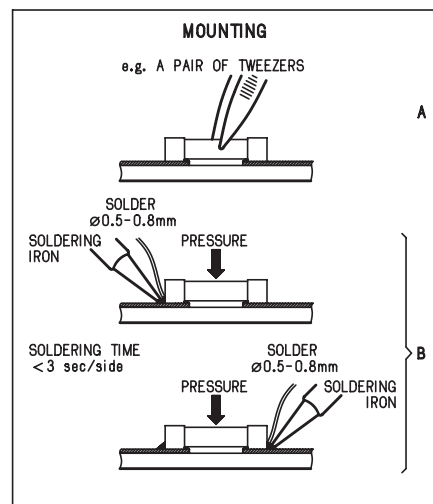
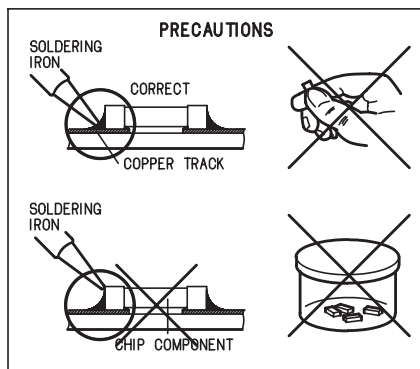
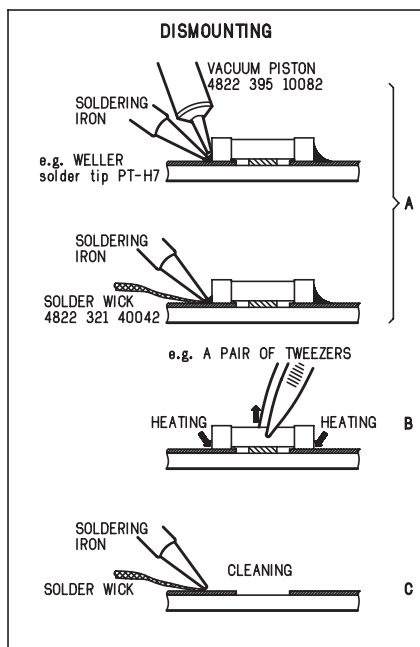
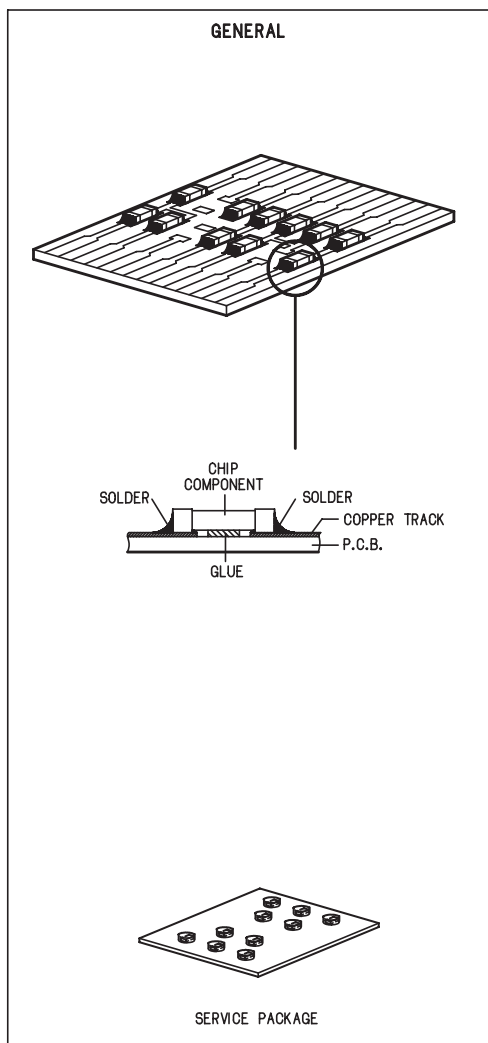
Service Tools:

| | |
|------------------------------------|----------------|
| 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 ridotta in caso di non osservazione della più grande cauzione alla loro manipolazione.

Durante le riparazioni occorre quindi essere collegato allo stesso potenziale che quello della massa dell'apparecchio tramite un braccialetto a resistenza.

Assicurarsi che i componenti e anche gli utensili con quali si lavora siano anche a questo potenziale.

(GB) ESD PROTECTION EQUIPMENT

Complete Kit ESD3 (small tablemat, wristband, connection box, extension 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 symbool 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.

Les 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.

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 (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

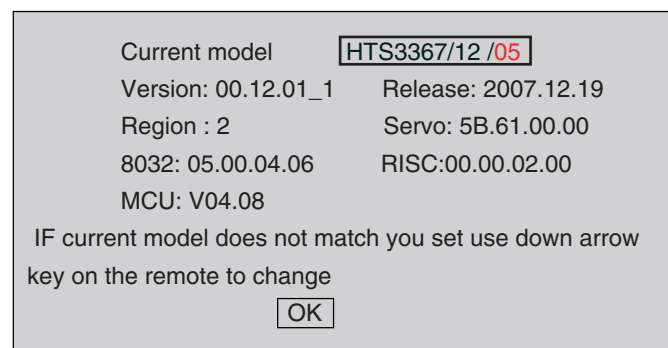
2)Region Code Change

- a) press”9” “9” “9” “9” on R/C,then input desired number to change region code :

- | | |
|---|-----------------------|
| 1 | USA |
| 2 | EU |
| 3 | AP |
| 4 | Australia ,NZ , Latam |
| 5 | Russia , INDIA |
| 6 | CHINA |

3)Version Control Change

- a) In open model, press “1” “5” “9” on R/C
- b) press “ok” button to confirm
- c) TV will show message as below:



4)Password Change

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

5)Check on the Sofeware Version

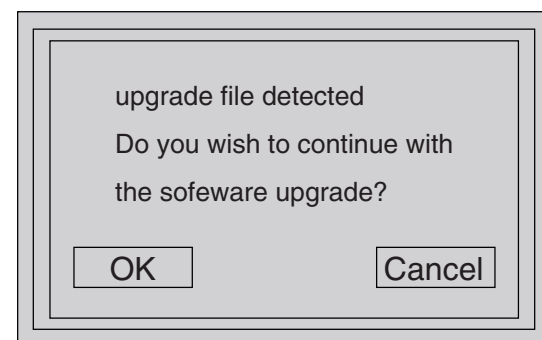
- a) open the CD Door
- b) press “INFO“ button on R/C
- c) TV will show the version on screen

6)Trade model

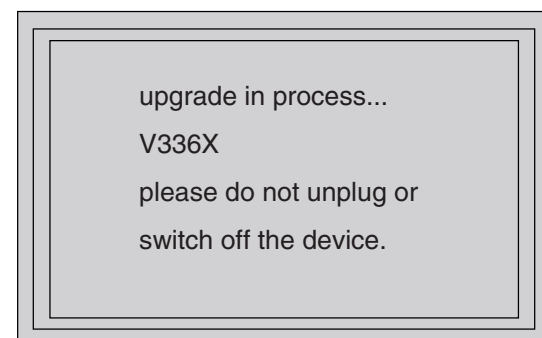
- a) press “Open/Close “ button on R/C
- b) Press “2” “5” “9” on R/C,VFD will display “TRA ON “ or “TRA OFF“

7) Upgrading new sofeware

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



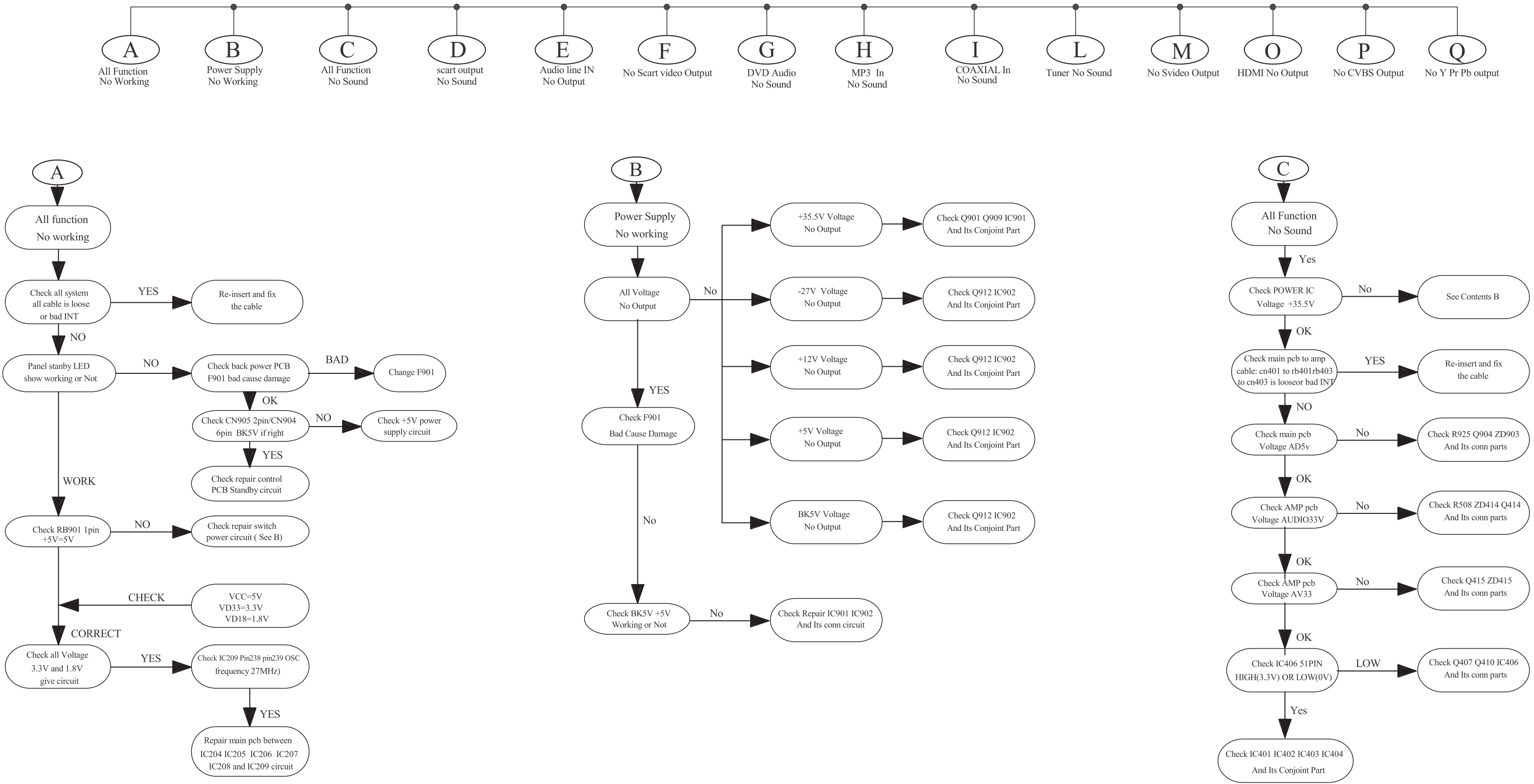
- f) select “OK”, OSD will show:



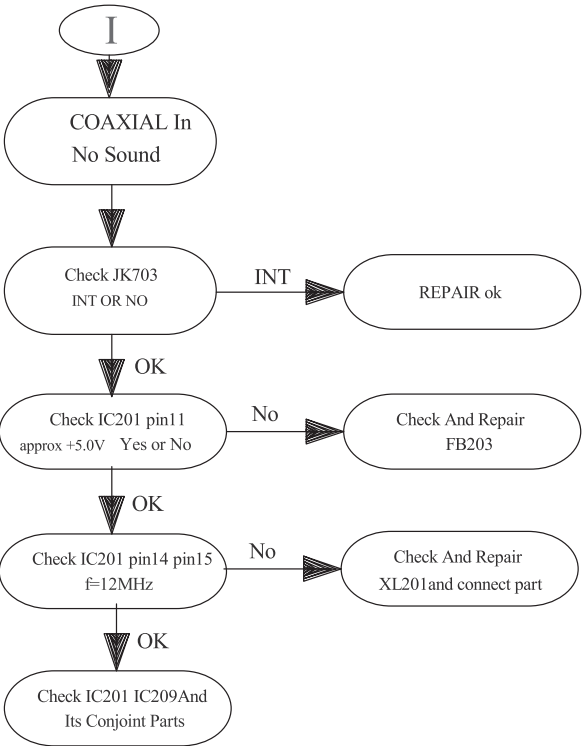
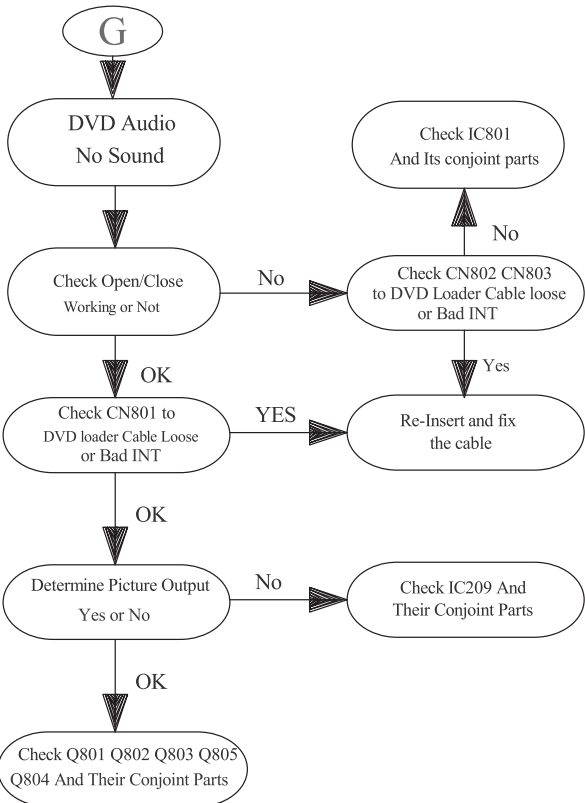
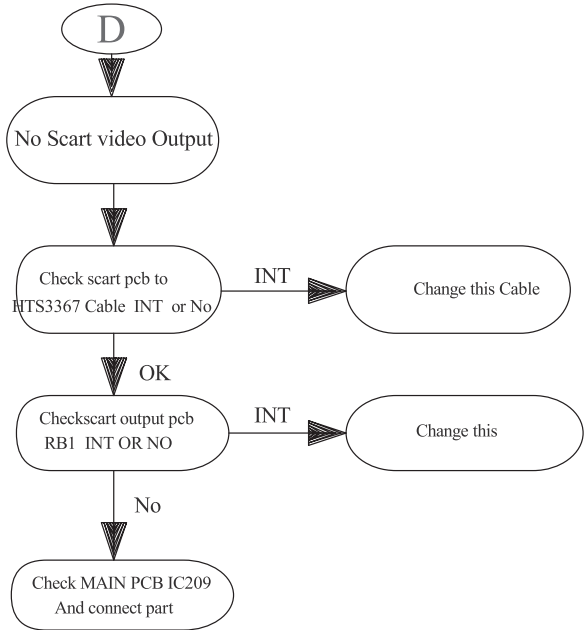
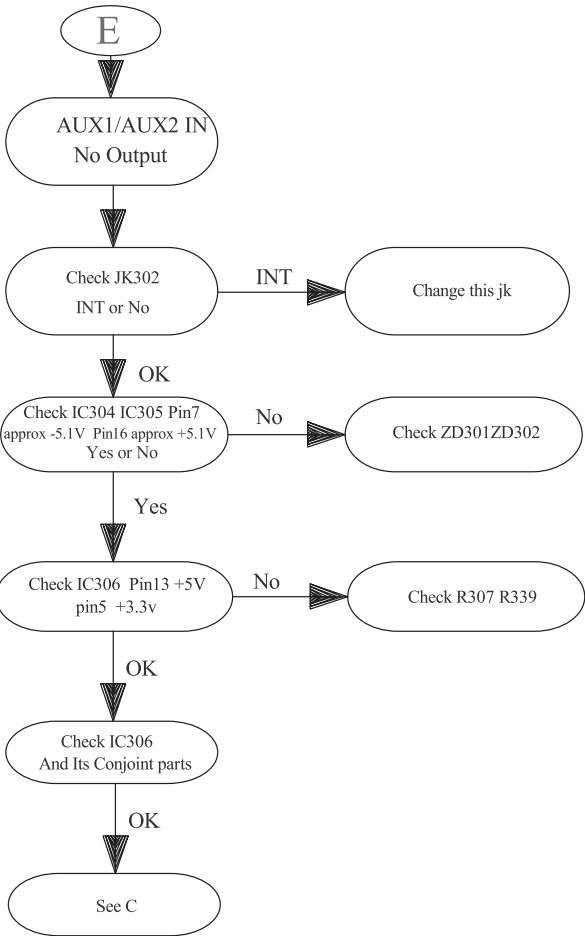
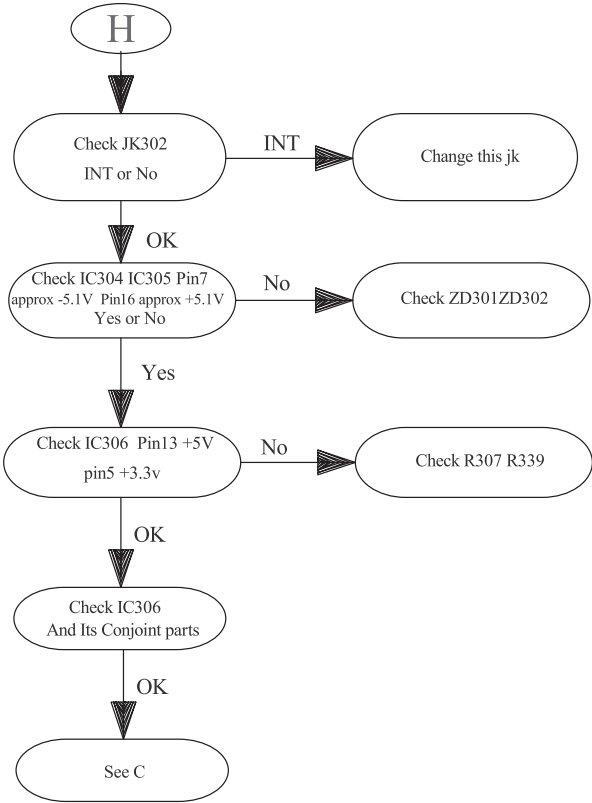
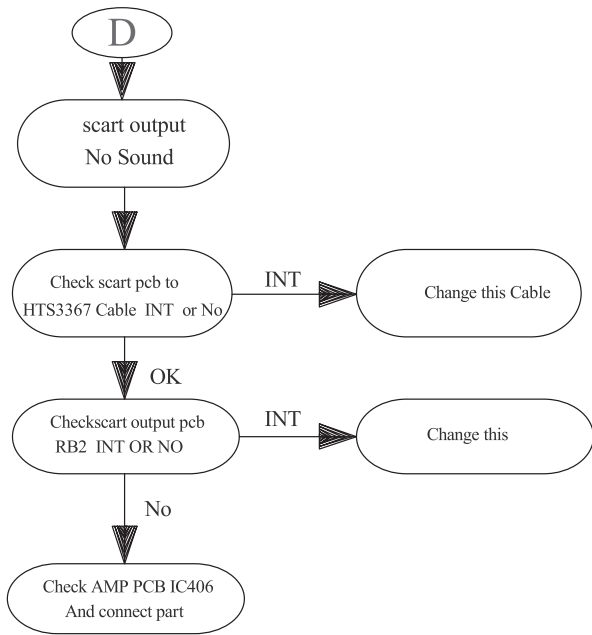
CAUTION!

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

MAIN UNIT REPAIR CHART 1/3



MAIN UNIT REPAIR CHART 2/3



DISASSEMBLY INSTRUCTIONS

3 - 1

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.

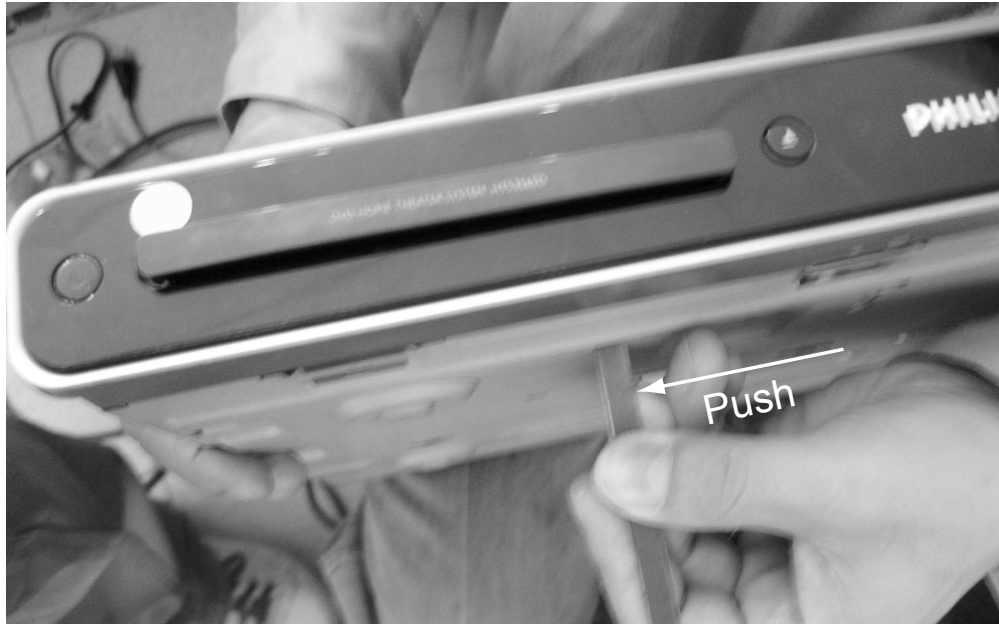


Figure 1

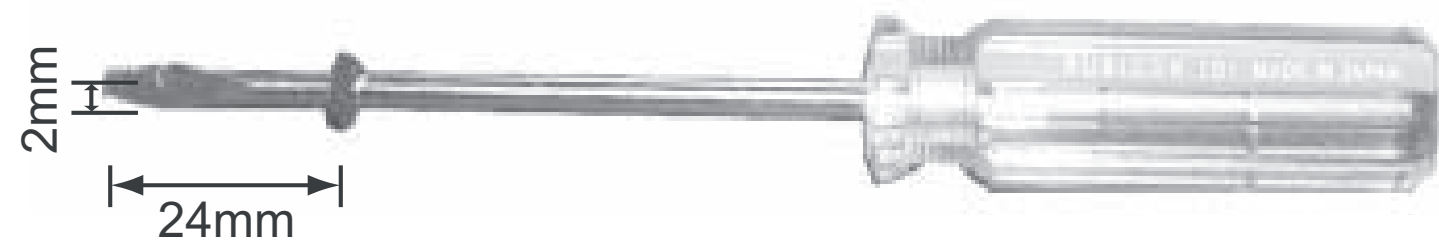


Figure 2

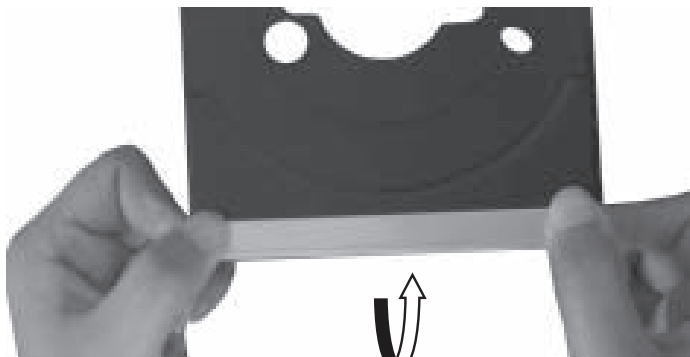


Figure 3

3 - 1

- 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.

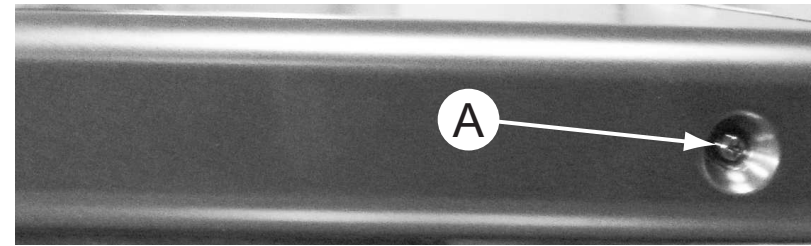


Figure 4

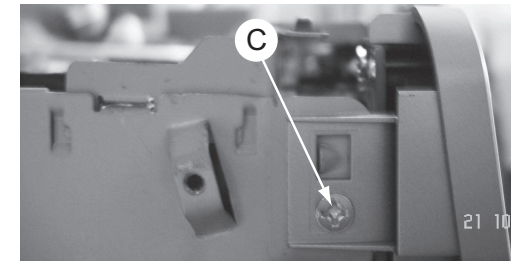


Figure 6

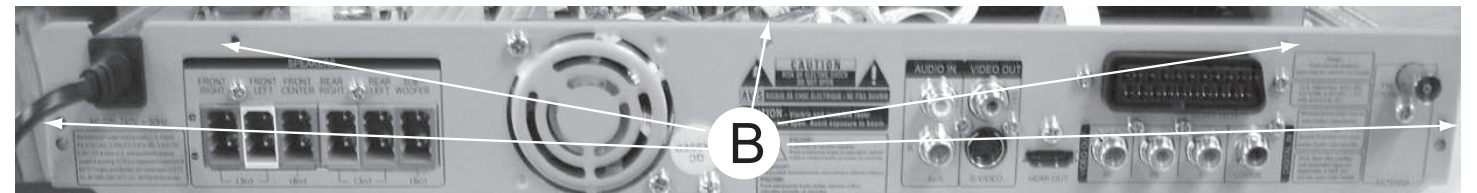


Figure 5

Dismantling of the AMP Board

- 1) Loosen 4 screws to remove the AMP Board.
 - 2 screws "D" on the top of AMP board as shown in figure 7
 - 2 screws "E" at the back panel as shown in figure 8

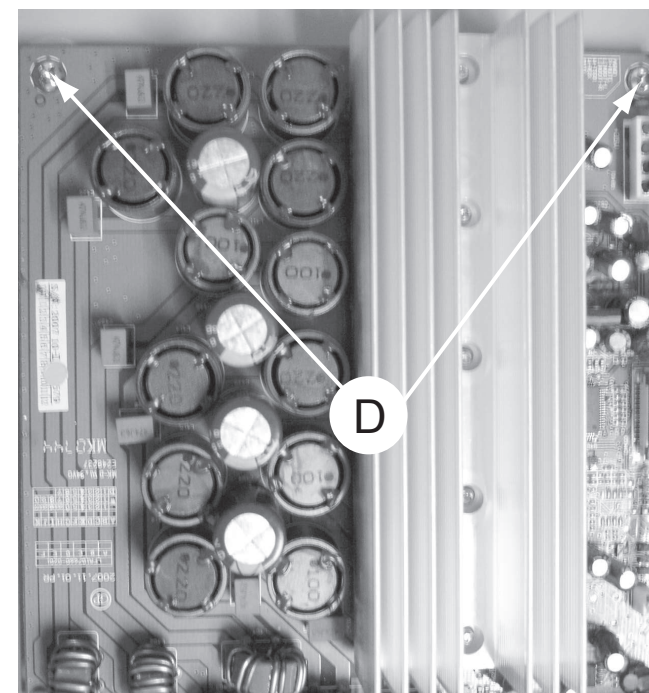


Figure 7

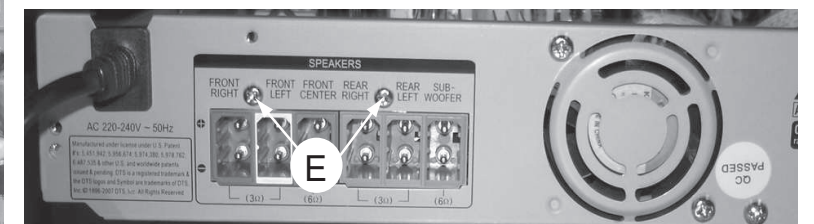


Figure 8

Dismantling of the Main Board

- 1) Loosen 2 screws “F” on the top of main board as shown in figure 9
- 2) Loosen 7 screws “G” at the back panel as shown in figure 10

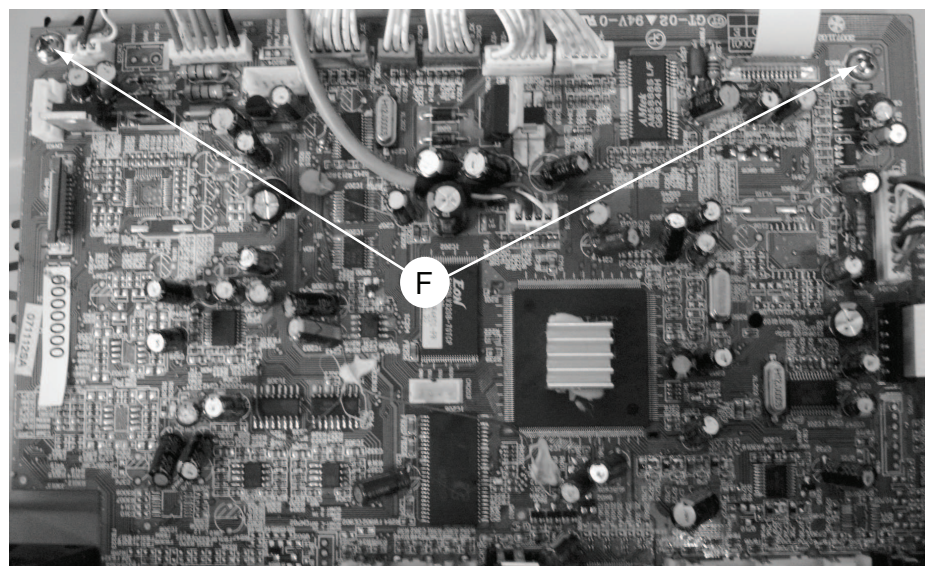


Figure 9



Figure 10

Dismantling of the Power Board

- 1) Loosen 4 screws “H” on the top of power board as shown in figure 11

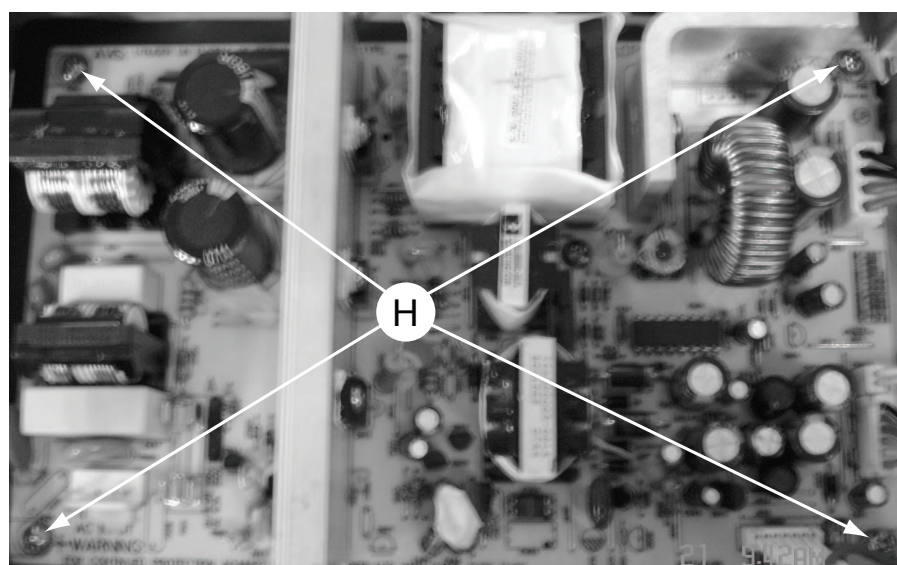


Figure 11

Dismantling of the Scart Board

- 1) Loosen 2 screws “I” at the back panel as shown in figure 12



Figure 12

Dismantling of the VFD+JACK+VOL+STANDBY Board

- 1) Loosen 5 screws “J” at bracket of front panel as shown in figure 13
- 2) Loosen 9 screws “K” on the top of control board as shown in 14

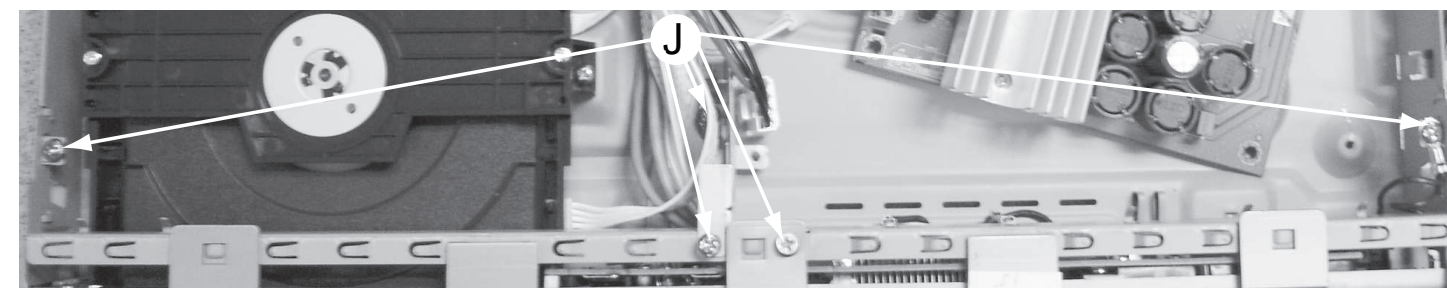


Figure 13

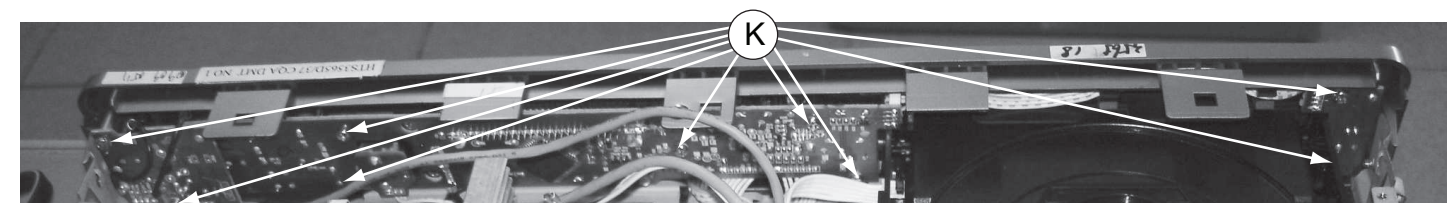


Figure 14

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

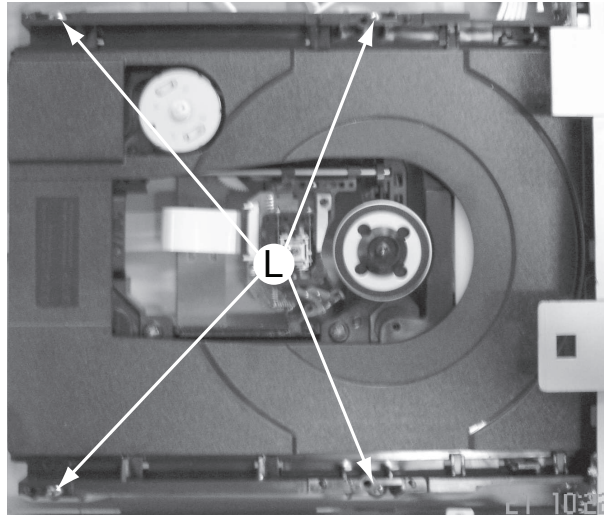


Figure 15

SERVICE POSITIONS

Service position A (main unit)

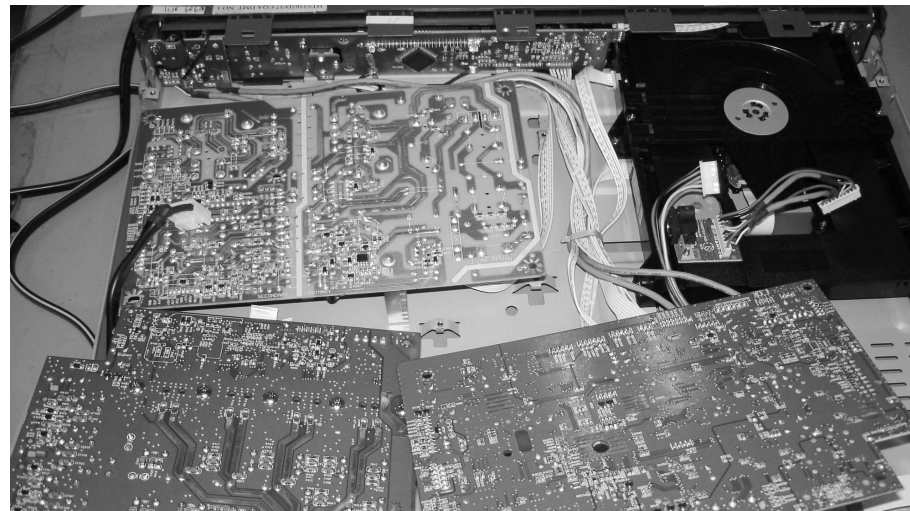


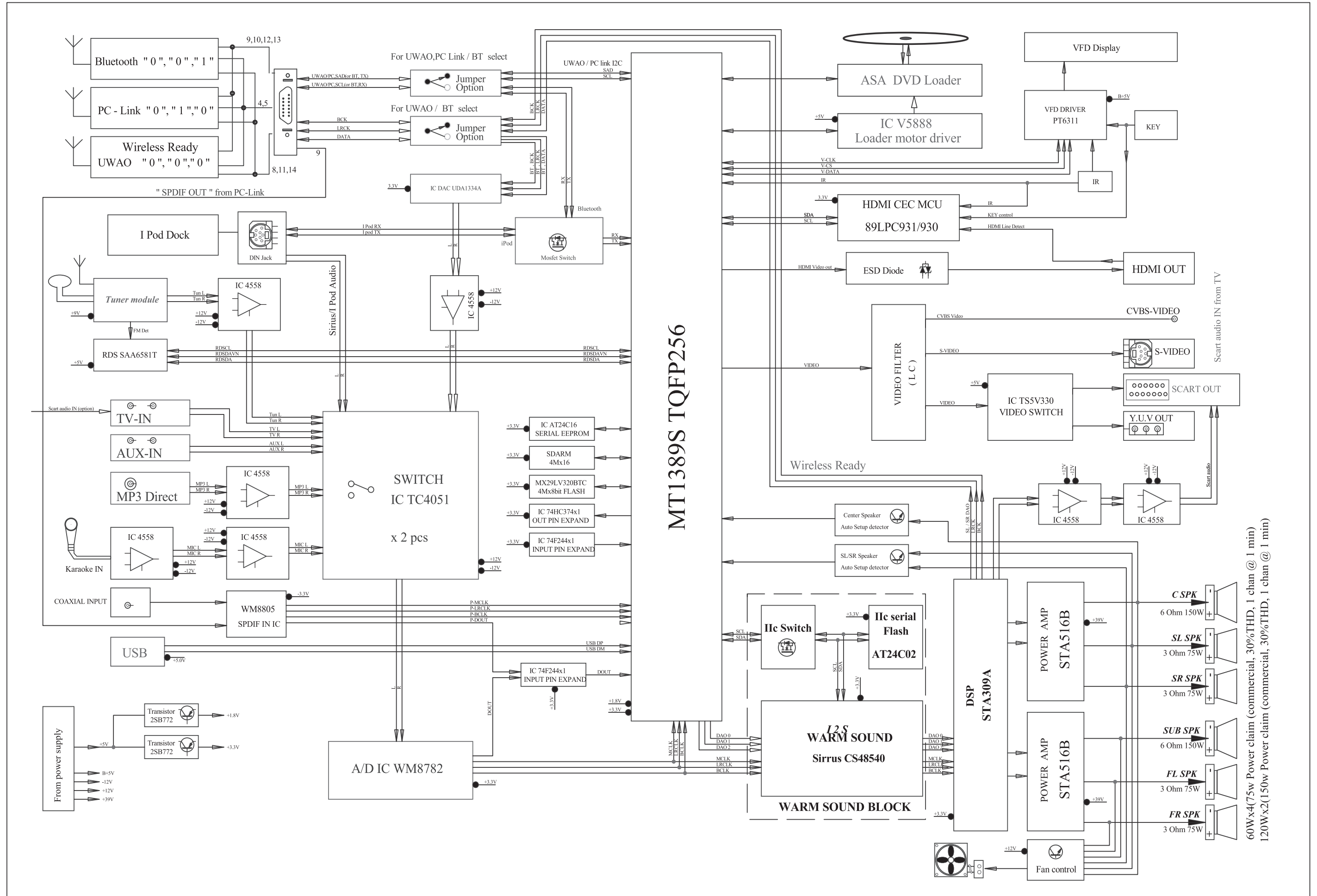
Figure 1

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

4 - 1



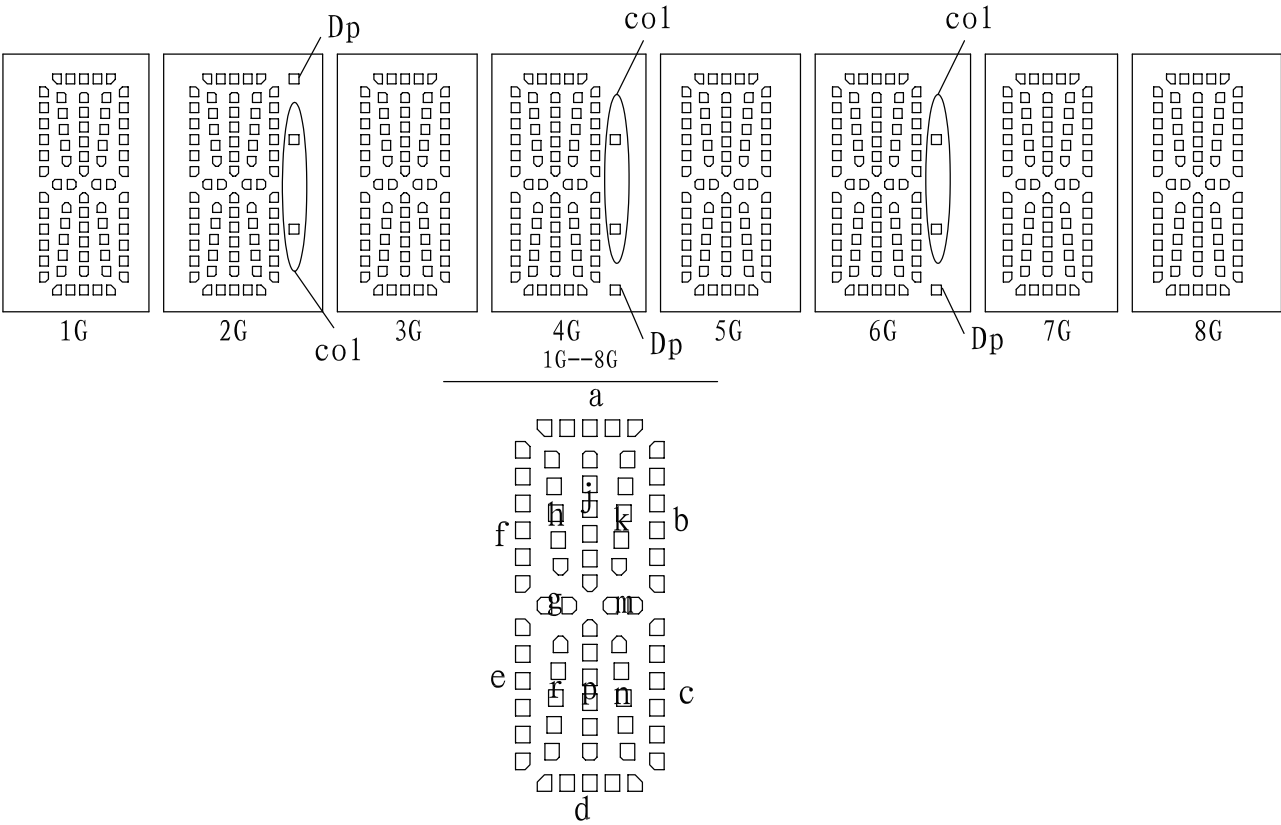
60Wx4(75w Power claim (commercial, 30%THD, 1 chan @ 1 min)
120Wx2(150w Power claim (commercial, 30%THD, 1 chan @ 1 min)

CONTROL BOARD

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| Circuit Diagram | 5-2 |
| PCB Layout Top & Bottom View..... | 5-3 |

FTD DISPLAY PIN ASSIGNMENT



| | 1G | 2G | 3G | 4G | 5G | 6G | 7G | 8G |
|-----|------|------|------|------|------|------|------|------|
| P1 | a | a | a | a | a | a | a | a |
| P2 | j, p | 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 |

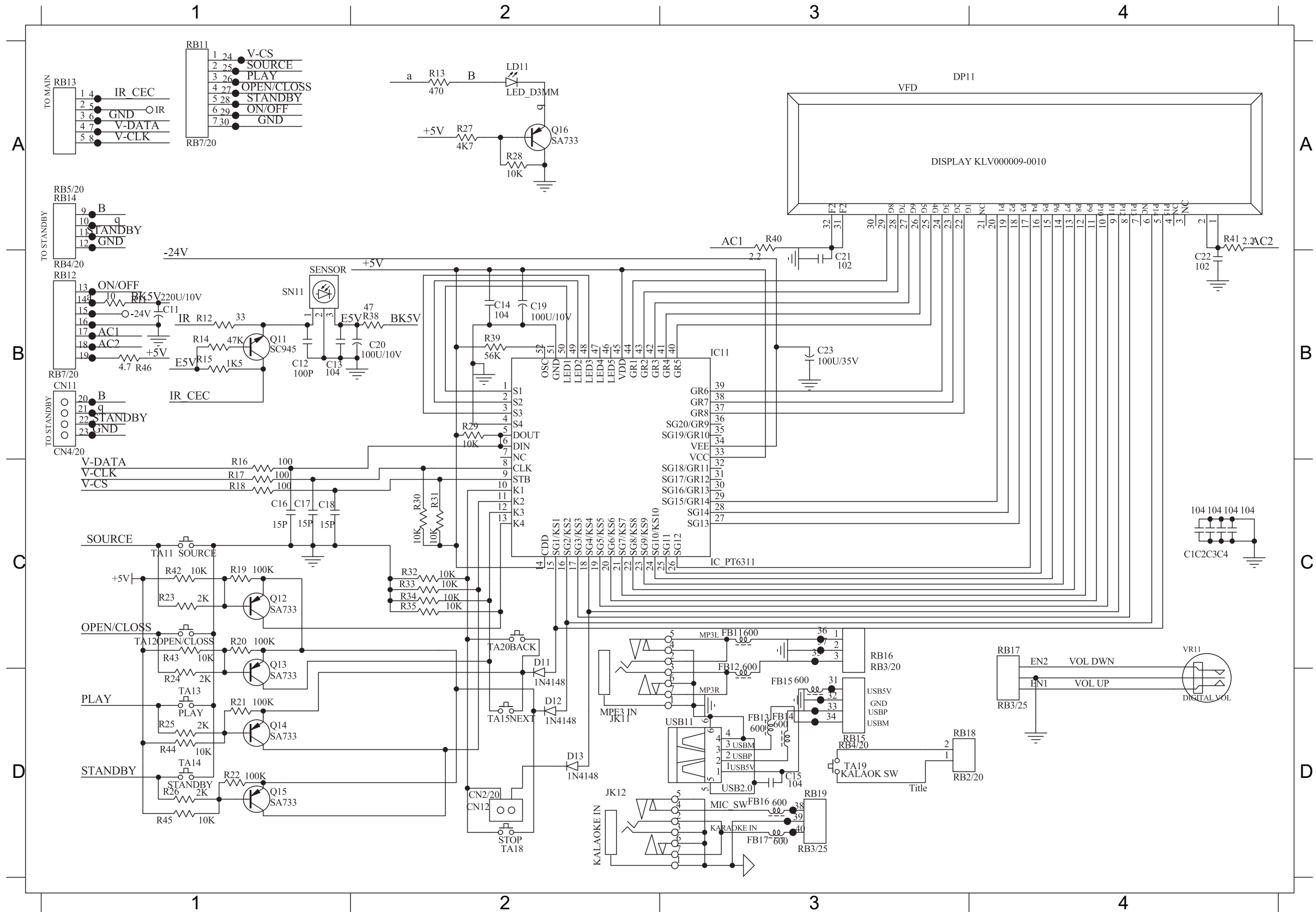
注 (Notes) : Fn : 灯丝 (Filament Pin) nG : 栅极 (Grid Pin)
Pn : 阳极 (Anode Pin) NP : 无引出脚 (No Pin)
NC : 无功能 (No connection Pin)

CIRCUIT DIAGRAM

5 - 2

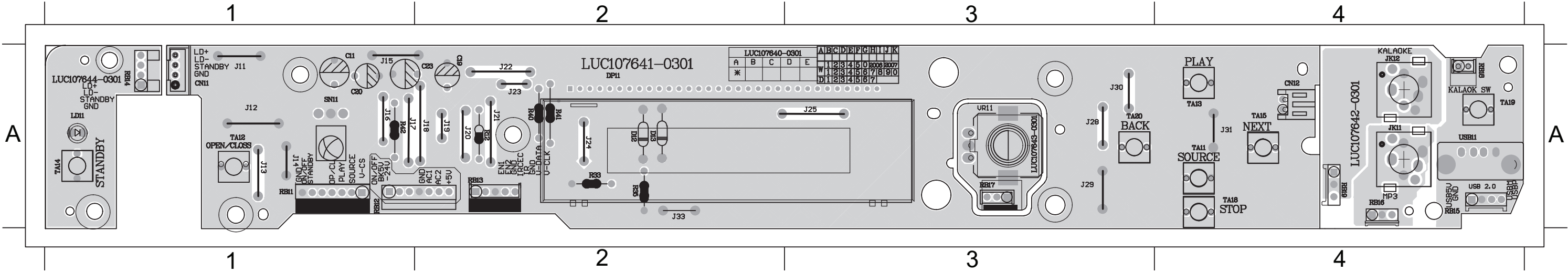
5 - 2

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



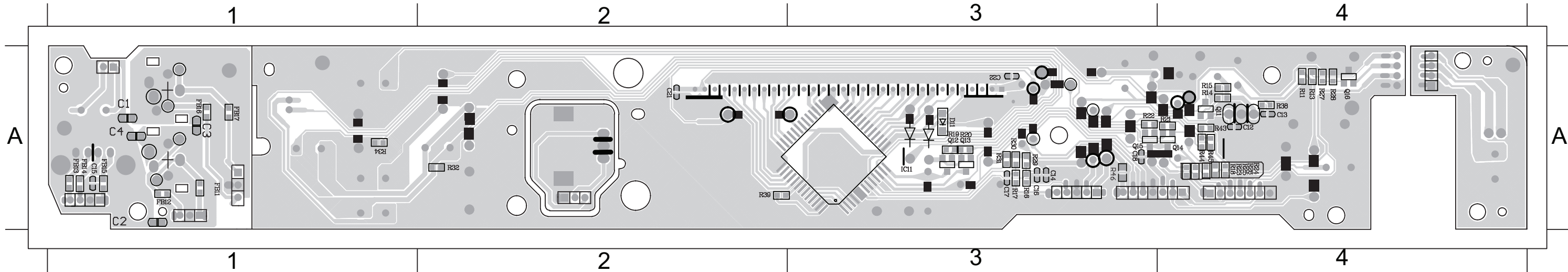
PCB LAYOUT - TOP VIEW

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



PCB LAYOUT - BOTTOM VIEW

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

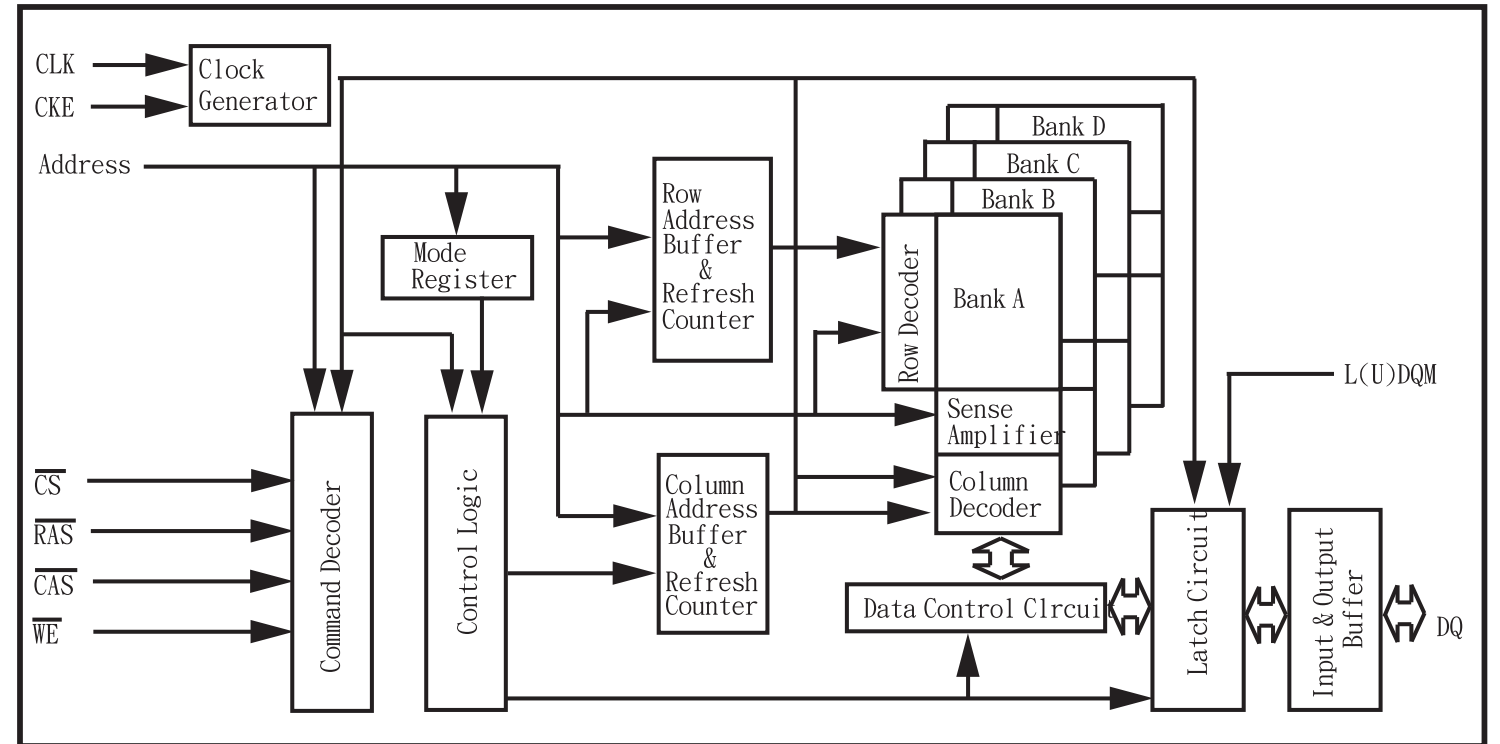


MAIN BOARD

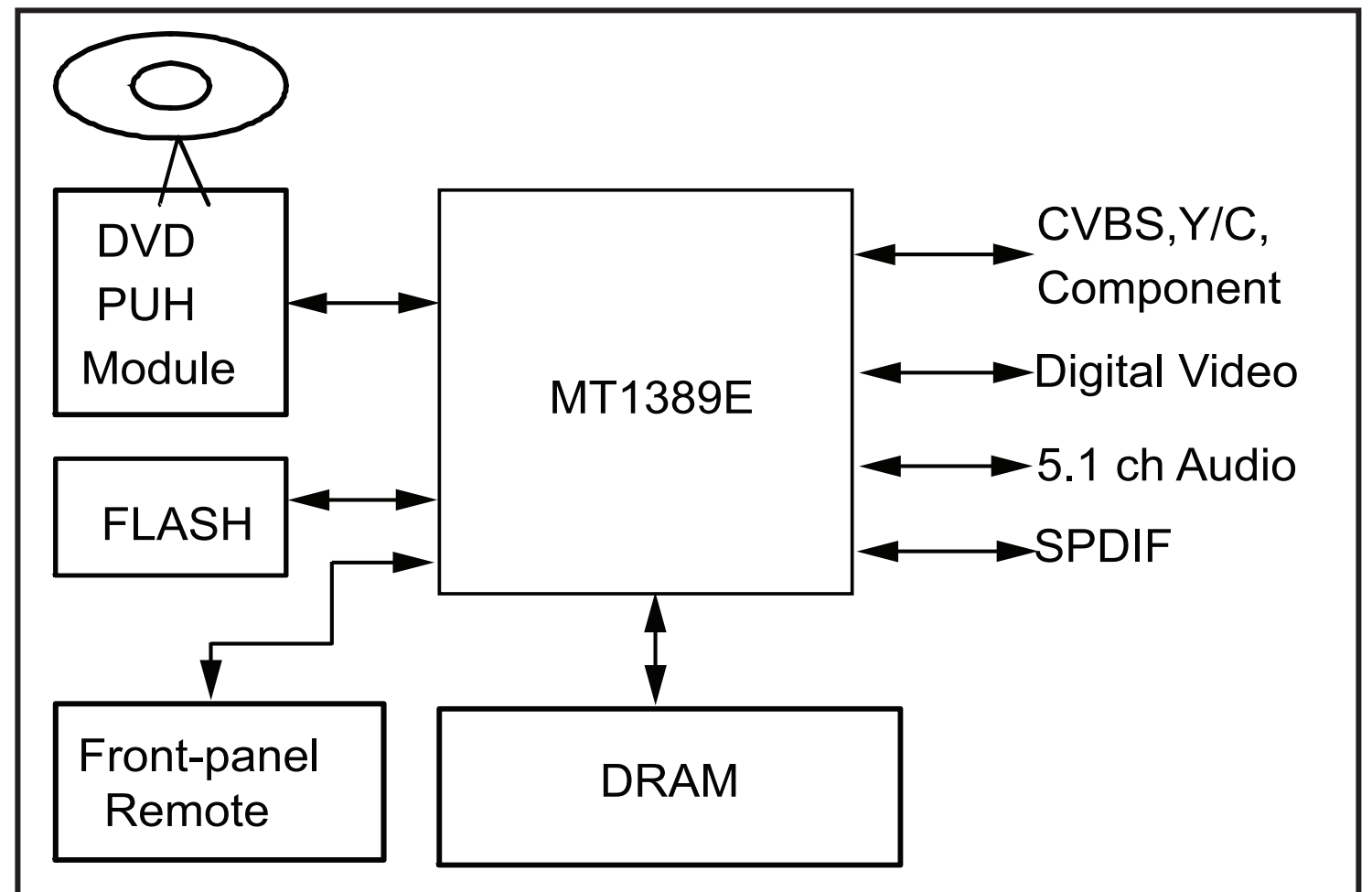
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| PCB Layout Top View | 6-4 |
| PCB Layout Bottom View | 6-5 |

INTERNAL IC DIAGRAM - AS81F641642C



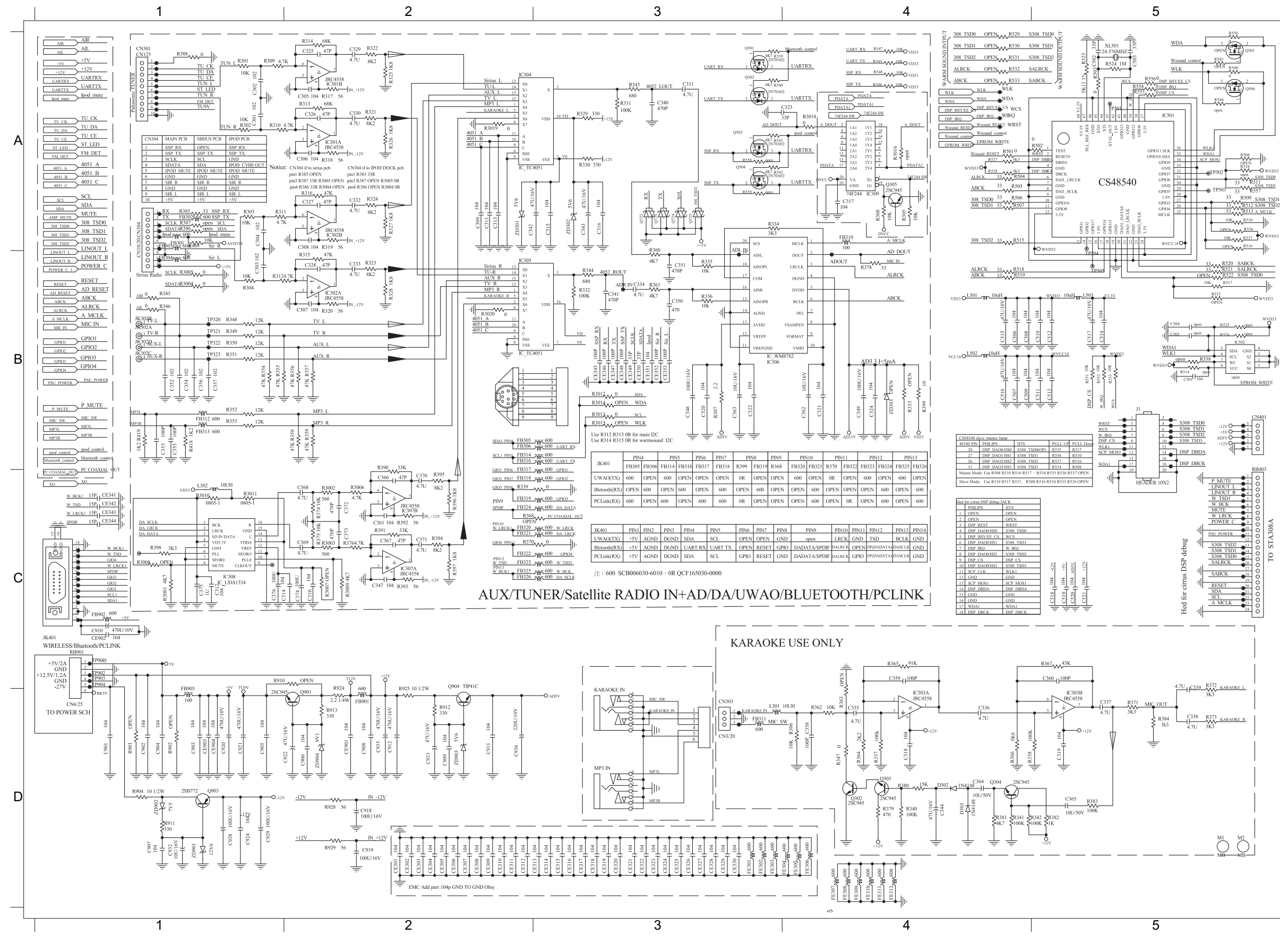
INTERNAL IC DIAGRAM - MT1389E



CIRCUIT DIAGRAM - part one

6 - 2

6 - 2



| | | | | | | | |
|------|----|-------|----|-------|----|-------|----|
| C301 | A1 | C920 | D1 | FE309 | D4 | R353 | B1 |
| C302 | A1 | C921 | D1 | FE310 | D4 | R354 | B1 |
| C303 | B1 | C922 | D2 | FE311 | D4 | R355 | B1 |
| C304 | A1 | C923 | D2 | FE312 | D4 | R356 | B2 |
| C305 | A2 | C924 | D1 | IC301 | A2 | R357 | B2 |
| C306 | A1 | C928 | D1 | IC302 | A2 | R358 | B2 |
| C307 | B2 | C929 | D1 | IC304 | A2 | R359 | B2 |
| C308 | A2 | C932 | D1 | IC305 | B2 | R360 | B3 |
| C309 | A2 | C935 | D2 | IC306 | B3 | R361 | B3 |
| C311 | A2 | C936 | D2 | IC309 | A4 | R368 | C3 |
| C313 | A2 | CE301 | D2 | JK302 | B1 | R385 | A1 |
| C315 | A3 | CE302 | D2 | Q305 | A4 | R388 | A1 |
| C316 | A3 | CE303 | D2 | Q901 | D2 | R399 | B4 |
| C317 | A4 | CE304 | D2 | Q903 | D1 | R418 | B1 |
| C320 | B3 | CE305 | D2 | Q904 | D2 | R419 | B1 |
| C321 | B4 | CE306 | D2 | R3005 | B1 | R523 | A5 |
| C322 | B3 | CE307 | D2 | R301 | A1 | R529 | A4 |
| C323 | A3 | CE308 | D2 | R3018 | A4 | R530 | A4 |
| C324 | B4 | CE309 | D2 | R3019 | A2 | R531 | A4 |
| C325 | A2 | CE310 | D2 | R302 | A1 | R532 | A4 |
| C326 | A2 | CE311 | D2 | R3020 | B2 | R533 | A4 |
| C327 | A2 | CE312 | D2 | R303 | A1 | R558 | A3 |
| C328 | B2 | CE313 | D3 | R304 | B1 | R559 | A3 |
| C329 | A2 | CE314 | D3 | R305 | A4 | R904 | D1 |
| C330 | A2 | CE315 | D3 | R307 | B3 | R911 | D1 |
| C331 | A3 | CE316 | D3 | R308 | A4 | R912 | D2 |
| C332 | A2 | CE317 | D3 | R309 | A1 | R913 | D2 |
| C333 | B2 | CE318 | D3 | R310 | A1 | R924 | D2 |
| C334 | B3 | CE319 | D3 | R311 | A1 | R925 | D2 |
| C340 | A3 | CE320 | D3 | R312 | B1 | R928 | D2 |
| C341 | B3 | CE321 | D3 | R313 | A2 | R929 | D2 |
| C342 | A3 | CE322 | D3 | R314 | A2 | R969 | A1 |
| C343 | A3 | CE323 | D3 | R315 | B2 | RB403 | C5 |
| C346 | B3 | CE324 | D3 | R316 | A2 | RB901 | C1 |
| C349 | B4 | CE325 | D3 | R317 | A2 | ZD301 | A2 |
| C350 | B3 | CE326 | D3 | R318 | A1 | ZD302 | A3 |
| C351 | B3 | CE327 | D3 | R319 | A2 | ZD901 | D1 |
| C352 | B1 | CE328 | D3 | R320 | B2 | ZD902 | D1 |
| C353 | B1 | CE329 | D3 | R321 | A2 | ZD903 | D2 |
| C354 | B1 | CE330 | D3 | R322 | A2 | ZD904 | D2 |
| C355 | B1 | CE341 | C1 | R323 | B2 | | |
| C356 | B1 | CE342 | C1 | R324 | A2 | | |
| C357 | B1 | CE343 | C1 | R325 | A2 | | |
| C362 | B4 | CE344 | C1 | R326 | A2 | | |
| C363 | B3 | CE901 | D2 | R327 | A2 | | |
| C518 | C5 | CE903 | D1 | R328 | B2 | | |
| C519 | C5 | CE904 | D1 | R329 | A3 | | |
| C520 | C5 | CN301 | A1 | R330 | A3 | | |
| C521 | C5 | CN401 | B5 | R331 | A3 | | |
| C901 | D1 | FB310 | A4 | R332 | B3 | | |
| C902 | D1 | FB312 | B1 | R334 | A3 | | |
| C903 | D1 | FB313 | B1 | R335 | B3 | | |
| C904 | D1 | FB901 | D2 | R336 | B3 | | |
| C905 | D1 | FB905 | D1 | R343 | A3 | | |
| C906 | D2 | FE301 | D3 | R344 | B3 | | |
| C907 | D1 | FE302 | D3 | R345 | B1 | | |
| C908 | D2 | FE303 | D3 | R346 | B1 | | |
| C909 | D2 | FE304 | D4 | R348 | B1 | | |
| C911 | D2 | FE305 | D4 | R349 | B1 | | |
| C912 | D2 | FE306 | D4 | R350 | B1 | | |
| C918 | D2 | FE307 | D4 | R351 | B1 | | |
| C919 | D2 | FE308 | D4 | R352 | B1 | | |

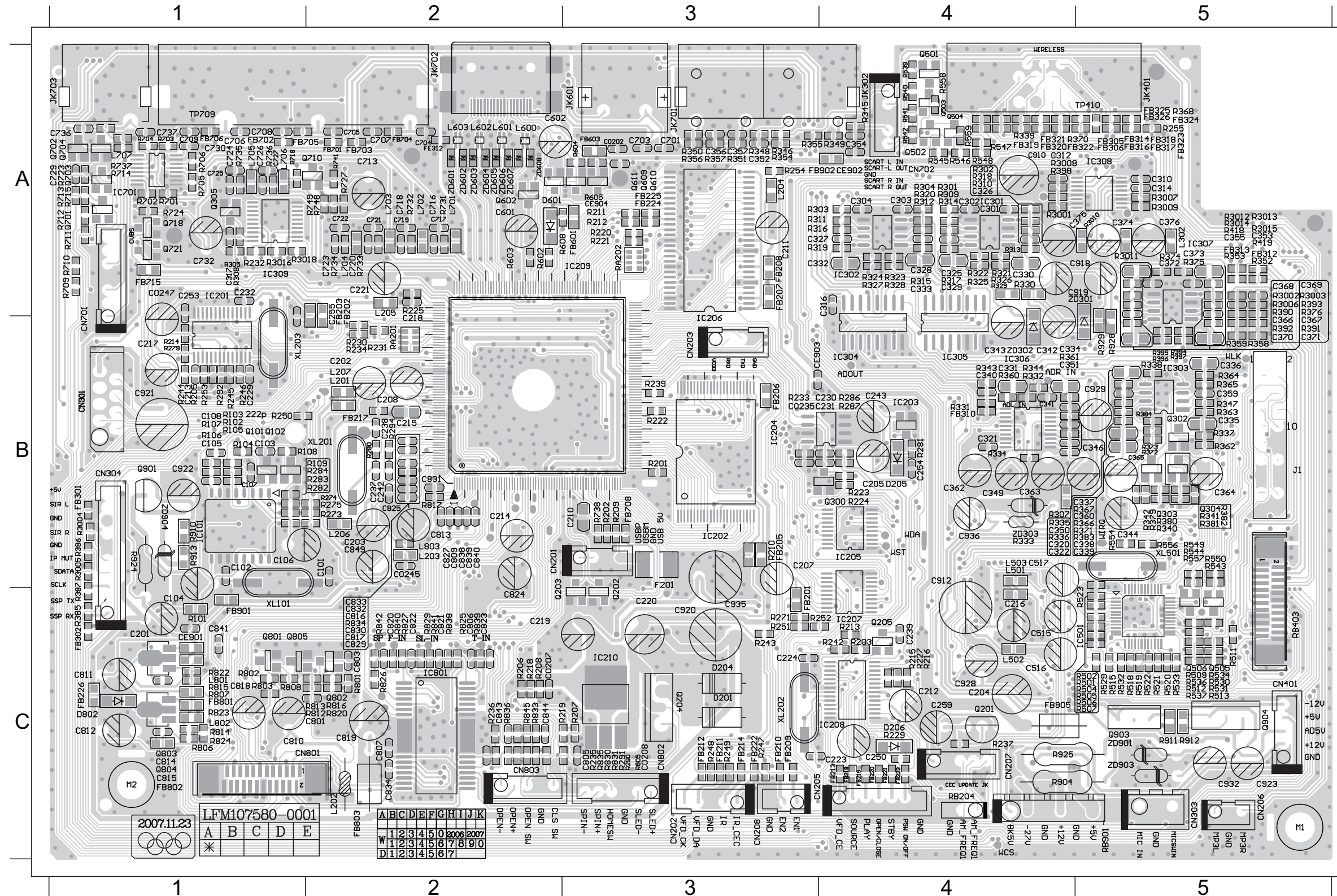


| | | | | | | | | | | | | |
|-------|-------|------|------|-------|-------|-------|-------|------|------|------|-------|----|
| A | C0201 | C2 | C224 | D2 | C827 | B3 | FB218 | C1 | Q720 | A3 | R603 | C4 |
| | C0202 | A3 | C225 | C2 | C828 | B3 | FB219 | C1 | Q721 | A3 | R604 | B5 |
| | C0203 | A3 | C226 | C2 | C829 | B3 | FB220 | C1 | Q801 | A1 | R605 | B5 |
| | C0204 | D1 | C227 | C2 | C830 | B3 | FB221 | C1 | Q802 | A2 | R606 | C5 |
| | C0205 | A3 | C228 | C2 | C831 | B3 | FB222 | C1 | Q803 | A2 | R709 | A4 |
| | C0206 | A3 | C229 | C1 | C832 | B3 | FB223 | C1 | Q804 | A2 | R710 | A5 |
| | C0207 | A3 | C230 | D3 | C833 | B3 | FB224 | D5 | Q805 | A1 | R711 | A5 |
| | C0208 | A3 | C231 | D3 | C834 | B1 | FB225 | D5 | R101 | D1 | R712 | A5 |
| | C0209 | A3 | C232 | C1 | C835 | A1 | FB226 | A2 | R102 | D1 | R713 | A5 |
| | C0210 | B5 | C234 | D2 | C836 | A3 | FB601 | A3 | R103 | D1 | R714 | A5 |
| C0211 | A3 | C235 | D2 | C837 | A3 | FB602 | C5 | R104 | D1 | R715 | A5 | |
| C0212 | C2 | C236 | D2 | C838 | B3 | FB603 | C5 | R105 | D1 | R722 | A5 | |
| C0213 | C5 | C237 | B3 | C839 | B3 | FB701 | A4 | R106 | D1 | R723 | A5 | |
| C0214 | C5 | C238 | B3 | C840 | B3 | FB702 | A4 | R108 | D1 | R724 | A5 | |
| C0215 | C2 | C242 | B3 | C841 | B2 | FB703 | A4 | R109 | D1 | R731 | B4 | |
| C0216 | D2 | C243 | D3 | C843 | B2 | FB704 | A4 | R201 | C5 | R732 | B4 | |
| C0217 | D2 | C253 | C2 | C844 | B2 | FB705 | A4 | R202 | B5 | R733 | B4 | |
| C0218 | D2 | C254 | D3 | C846 | C3 | FB706 | A4 | R203 | D2 | R734 | B4 | |
| C0219 | D2 | C255 | C1 | C849 | B2 | FB707 | C2 | R204 | D2 | R735 | B4 | |
| C0220 | D2 | C259 | A3 | CE201 | D2 | FB708 | C2 | R205 | C1 | R736 | B4 | |
| C0221 | D2 | C600 | C4 | CE202 | D2 | FB712 | A5 | R206 | A3 | R737 | A4 | |
| C0222 | D2 | C601 | C5 | CE203 | D2 | FB713 | A5 | R207 | A3 | R738 | C3 | |
| C0226 | D1 | C602 | C5 | CE204 | D2 | FB715 | B5 | R209 | B5 | R748 | B5 | |
| C0227 | C2 | C603 | B5 | CE205 | D2 | FB801 | A1 | R210 | C5 | R749 | B5 | |
| C0228 | D1 | C701 | A4 | CE206 | D2 | FB802 | A2 | R211 | C5 | R750 | A5 | |
| C0229 | D1 | C702 | A4 | CE207 | D2 | FB803 | B1 | R212 | C5 | R801 | C2 | |
| C0230 | D1 | C703 | A4 | CE210 | D2 | IC101 | D1 | R213 | D2 | R802 | A1 | |
| C0235 | D3 | C704 | A4 | CE211 | D2 | IC201 | C1 | R215 | D2 | R803 | A1 | |
| C0237 | D5 | C705 | A4 | CE212 | D2 | IC203 | D3 | R217 | D2 | R804 | B1 | |
| C0238 | D5 | C706 | A4 | CE213 | D2 | IC204 | D3 | R218 | A3 | R805 | B1 | |
| C0239 | D5 | C707 | A4 | CE214 | D2 | IC205 | D4 | R219 | A3 | R806 | C3 | |
| C0240 | D5 | C708 | A4 | CE215 | C2 | IC206 | D5 | R220 | C5 | R807 | C3 | |
| C0241 | D5 | C709 | A4 | CE216 | C2 | IC207 | D4 | R221 | C5 | R808 | A1 | |
| C0242 | D5 | C713 | B5 | CE217 | C2 | IC208 | D2 | R222 | D3 | R812 | A1 | |
| C0243 | D5 | C716 | B4 | CE218 | C2 | IC209 | B4 | R223 | D4 | R813 | A1 | |
| C0244 | A3 | C717 | A4 | CE219 | C2 | IC210 | A3 | R224 | D4 | R814 | A2 | |
| C0245 | A3 | C718 | B4 | CE220 | C2 | IC701 | A5 | R225 | B4 | R815 | A2 | |
| C0246 | A3 | C719 | A4 | CE801 | D1 | IC801 | B1 | R226 | D2 | R816 | A2 | |
| C0247 | A3 | C720 | B4 | CE802 | D1 | JK601 | B5 | R227 | D2 | R817 | B2 | |
| C0248 | B5 | C721 | A4 | CE803 | D1 | JK701 | A4 | R228 | D3 | R820 | A2 | |
| C0249 | A3 | C722 | A4 | CE804 | D1 | JK702 | A4 | R230 | C2 | R822 | A2 | |
| C0251 | C5 | C723 | B4 | CE805 | D1 | JK703 | A5 | R231 | C2 | R823 | A2 | |
| C0252 | C5 | C724 | B4 | CE806 | D1 | L201 | A2 | R232 | C2 | R824 | A2 | |
| C0253 | B5 | C725 | A4 | CE807 | D1 | L202 | A3 | R233 | D3 | R826 | B1 | |
| C0254 | A2 | C726 | B4 | CE808 | D1 | L203 | A3 | R234 | C2 | R827 | B1 | |
| C | C0601 | C5 | C727 | A4 | CE809 | D1 | L204 | D5 | R235 | B2 | R829 | B2 |
| C | C0602 | C5 | C728 | A5 | CN201 | B5 | L205 | B5 | R236 | B2 | R831 | B2 |
| C | C0603 | C5 | C729 | A5 | CN202 | C1 | L206 | B3 | R237 | A3 | R833 | B2 |
| C | C0604 | C5 | C730 | A5 | CN203 | D3 | L207 | B5 | R238 | D5 | R834 | B3 |
| C | C0606 | C5 | C731 | B5 | CN205 | C1 | L701 | B4 | R239 | D4 | R835 | B2 |
| C | C101 | D1 | C732 | B5 | CN206 | B5 | L702 | B4 | R242 | D2 | R836 | B2 |
| C | C102 | D1 | C735 | C2 | CN207 | D2 | L703 | B4 | R245 | C1 | R838 | B2 |
| C | C103 | D1 | C736 | A4 | CN208 | C1 | L704 | B4 | R247 | C1 | R839 | B2 |
| C | C104 | D1 | C737 | A5 | CN701 | A4 | L705 | B4 | R248 | C1 | R840 | B2 |
| C | C105 | D1 | C738 | C2 | CN702 | A4 | L706 | B4 | R249 | C1 | R841 | B2 |
| C | C106 | D1 | C801 | A1 | CN801 | A1 | L707 | A5 | R250 | D4 | R842 | B2 |
| C | C107 | D1 | C802 | A2 | CN802 | B1 | L801 | A2 | R251 | C1 | R845 | C3 |
| C | C108 | D2 | C803 | B1 | CN803 | B1 | L802 | A2 | R252 | C1 | RA201 | C2 |
| C | C109 | D1 | C804 | A2 | D201 | A3 | L803 | B3 | R253 | C1 | RA202 | C5 |
| C | C201 | A2 | C805 | B2 | D204 | A3 | Q201 | A3 | R269 | D2 | RA203 | C2 |
| C | C202 | B5 | C806 | B2 | D205 | D3 | Q202 | A3 | R271 | D2 | XL101 | D1 |
| C | C203 | A3 | C807 | B2 | D600 | D2 | Q203 | A3 | R273 | D2 | XL201 | B3 |
| C | C204 | B3 | C808 | B2 | F201 | B5 | Q204 | A3 | R274 | D2 | XL203 | C1 |
| C | C205 | C5 | C809 | B3 | FB201 | A3 | Q300 | D4 | R275 | D2 | ZD201 | A3 |
| D | C206 | B4 | C810 | A3 | FB202 | A3 | Q601 | C5 | R279 | C1 | ZD202 | A3 |
| D | C207 | D4 | C811 | A2 | FB203 | A3 | Q602 | A3 | R280 | B3 | ZD203 | A3 |
| D | C208 | A3 | C812 | A2 | FB204 | A3 | Q611 | B5 | R281 | D3 | ZD204 | A4 |
| D | C209 | B3 | C813 | B3 | FB205 | C5 | Q701 | A5 | R282 | D2 | ZD205 | A4 |
| D | C210 | C2 | C816 | B3 | FB206 | C5 | Q702 | A5 | R283 | D2 | | |
| D | C211 | D5 | C817 | B3 | FB207 | D5 | Q703 | A5 | R286 | D3 | | |
| D | C213 | C1 | C818 | A2 | FB208 | D5 | Q704 | A5 | R287 | D3 | | |
| D | C214 | C2 | C819 | B2 | FB209 | C1 | Q705 | A4 | R290 | B1 | | |
| D | C215 | A3 | C820 | B2 | FB210 | C1 | Q706 | A4 | R291 | C1 | | |
| D | C217 | A3 | C821 | B2 | FB211 | C1 | Q713 | A4 | R292 | C1 | | |
| D | C218 | B4 | C822 | B2 | FB212 | C1 | Q714 | A4 | R294 | B3 | | |
| D | C219 | A3 | C823 | B2 | FB213 | B5 | Q715 | A4 | R295 | A3 | | |
| D | C220 | A3 | C824 | B2 | FB214 | C1 | Q716 | A4 | R385 | C1 | | |
| D | C221 | B5 | C825 | B3 | FB216 | C2 | Q718 | A3 | R601 | D2 | | |
| D | C223 | D2 | C826 | B3 | FB217 | A2 | Q719 | A3 | R602 | B5 | | |

PCB LAYOUT - TOP VIEW

6 - 4

6 - 4

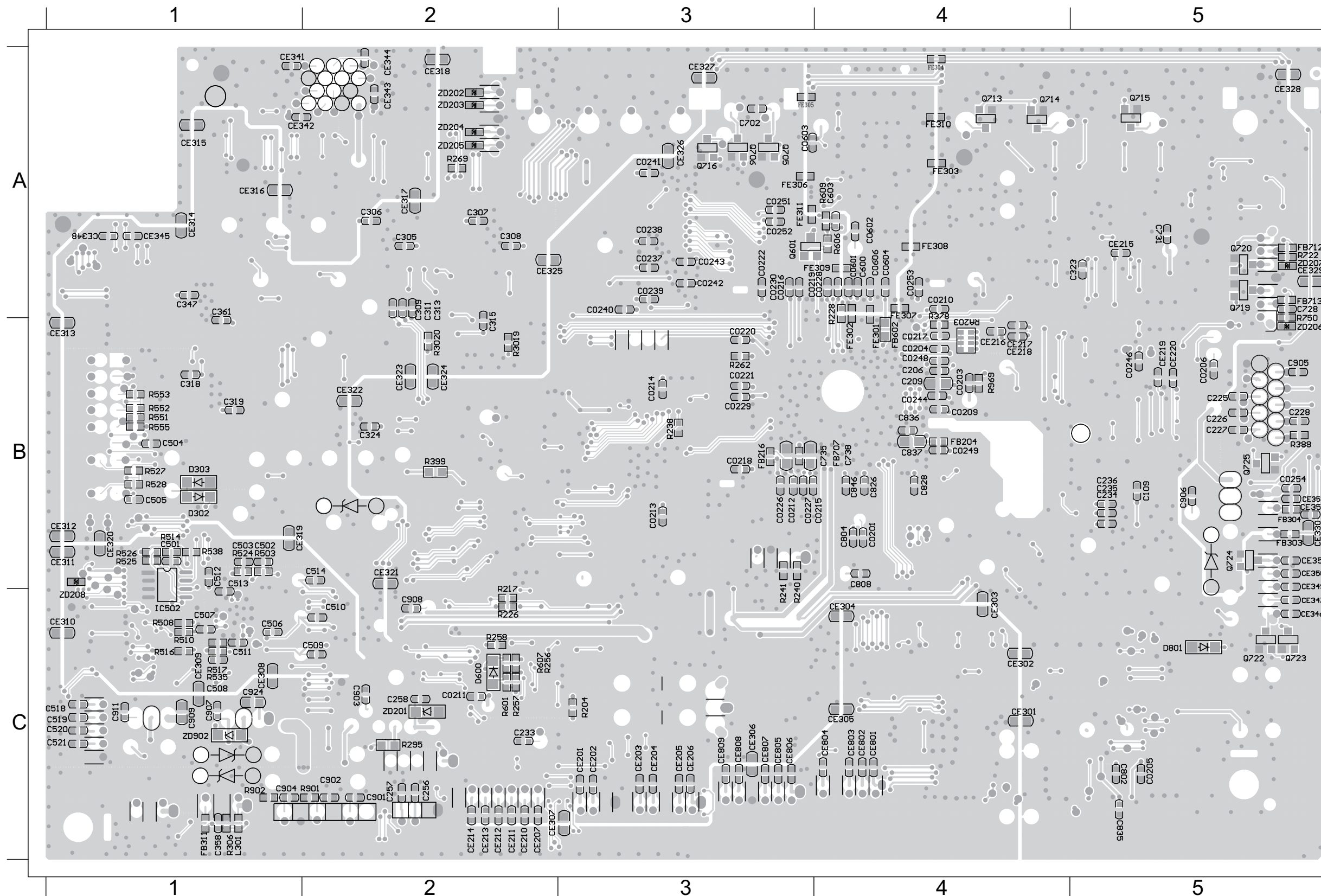


| | | | | | | | | | | | |
|-------|----|-------|----|-------|----|------|----|-------|----|-------|----|
| C0202 | A3 | C601 | A2 | CN205 | C3 | L201 | B2 | R248 | C3 | R530 | C5 |
| C0207 | C2 | C602 | A2 | CN206 | C5 | L202 | C2 | R249 | C3 | R531 | C5 |
| C0208 | C3 | C701 | A3 | CN207 | C4 | L203 | B2 | R250 | B1 | R532 | C5 |
| C0235 | B3 | C703 | A3 | CN208 | C3 | L204 | A3 | R251 | C3 | R533 | C5 |
| C0245 | B2 | C704 | A2 | CN301 | B1 | L205 | A2 | R252 | C3 | R558 | A4 |
| C0247 | A1 | C705 | A2 | CN401 | C5 | L206 | B2 | R253 | B1 | R559 | A4 |
| C101 | B2 | C706 | A1 | CN701 | A1 | L207 | B2 | R271 | C3 | R602 | A2 |
| C102 | B1 | C707 | A2 | CN702 | A4 | L701 | A2 | R273 | B2 | R603 | A2 |
| C103 | B1 | C708 | A1 | CN801 | C1 | L702 | A2 | R274 | B2 | R604 | A3 |
| C104 | C1 | C709 | A1 | CN802 | C3 | L703 | A2 | R275 | B2 | R605 | A3 |
| C105 | B1 | C713 | A2 | CN803 | C2 | L704 | A2 | R279 | B1 | R709 | A1 |
| C106 | B1 | C716 | A2 | D201 | C3 | L705 | A1 | R280 | B2 | R710 | A1 |
| C107 | B1 | C717 | A2 | D204 | C3 | L706 | A1 | R281 | B4 | R711 | A1 |
| C108 | B1 | C718 | A2 | D205 | B4 | L707 | A1 | R282 | B2 | R712 | A1 |
| C201 | C1 | C719 | A2 | F201 | B3 | L801 | C1 | R283 | B2 | R713 | A1 |
| C202 | B2 | C720 | A2 | FB201 | C3 | L802 | C1 | R286 | B4 | R714 | A1 |
| C203 | B2 | C721 | A2 | FB202 | A2 | L803 | B2 | R287 | B4 | R715 | A1 |
| C204 | C4 | C722 | A2 | FB203 | A2 | Q201 | C4 | R290 | C3 | R723 | A1 |
| C205 | B4 | C723 | A2 | FB205 | B3 | Q202 | C3 | R291 | C3 | R724 | A1 |
| C207 | B3 | C724 | A1 | FB206 | B3 | Q203 | C3 | R292 | B1 | R731 | A2 |
| C208 | B2 | C725 | A1 | FB207 | A3 | Q204 | C3 | R294 | B2 | R732 | A2 |
| C210 | B3 | C726 | A1 | FB208 | A3 | Q300 | B5 | R3005 | B1 | R733 | A2 |
| C211 | A3 | C727 | A1 | FB209 | C3 | Q305 | A1 | R301 | A4 | R734 | A2 |
| C213 | B1 | C729 | A1 | FB210 | C3 | Q602 | A2 | R3018 | A1 | R735 | A1 |
| C214 | B2 | C730 | A1 | FB211 | C3 | Q611 | A3 | R302 | A4 | R736 | A1 |
| C215 | B2 | C732 | A1 | FB212 | C3 | Q701 | A1 | R303 | A4 | R737 | A1 |
| C217 | B1 | C736 | A1 | FB213 | C4 | Q702 | A1 | R304 | A4 | R738 | B3 |
| C218 | A2 | C737 | A1 | FB214 | C3 | Q703 | A1 | R305 | A1 | R748 | A2 |
| C219 | C2 | C801 | C2 | FB217 | B2 | Q704 | A1 | R307 | B5 | R749 | A2 |
| C220 | C3 | C803 | C2 | FB218 | C4 | Q718 | A1 | R308 | A1 | R801 | C2 |
| C221 | A2 | C805 | C3 | FB219 | C4 | Q721 | A1 | R309 | A4 | R802 | C1 |
| C223 | C4 | C806 | C2 | FB220 | C4 | Q801 | C1 | R310 | A4 | R803 | C1 |
| C224 | C3 | C807 | C2 | FB221 | C4 | Q802 | C2 | R311 | A4 | R805 | C3 |
| C229 | B1 | C809 | B2 | FB222 | C3 | Q803 | C1 | R312 | A4 | R806 | C1 |
| C230 | B4 | C810 | C1 | FB223 | C4 | Q804 | C1 | R313 | A4 | R807 | C1 |
| C231 | B4 | C811 | C1 | FB224 | A3 | Q805 | C1 | R314 | A4 | R808 | C1 |
| C232 | A1 | C812 | C1 | FB225 | A3 | Q901 | B1 | R315 | A4 | R812 | C2 |
| C237 | B2 | C813 | B2 | FB226 | C1 | Q903 | C5 | R316 | A4 | R813 | C2 |
| C238 | B2 | C816 | C2 | FB310 | B5 | Q904 | C5 | R317 | A4 | R814 | C1 |
| C242 | B2 | C817 | C2 | FB312 | A5 | R101 | C1 | R318 | A4 | R815 | C1 |
| C243 | B4 | C818 | C1 | FB313 | A5 | R102 | B1 | R319 | A4 | R816 | C2 |
| C253 | A1 | C819 | C2 | FB601 | A3 | R103 | B1 | R320 | A4 | R817 | B2 |
| C254 | B4 | C820 | C2 | FB603 | A3 | R104 | B1 | R321 | A4 | R820 | C2 |
| C255 | A2 | C821 | C2 | FB701 | A2 | R105 | B1 | R322 | A4 | R822 | C1 |
| C259 | C4 | C822 | C2 | FB702 | A1 | R106 | B1 | R323 | A4 | R823 | C1 |
| C301 | A4 | C823 | C2 | FB703 | A2 | R108 | B1 | R324 | A4 | R824 | C1 |
| C302 | A4 | C824 | B2 | FB704 | A2 | R109 | B1 | R325 | A4 | R826 | C2 |
| C303 | A4 | C825 | B2 | FB705 | A1 | R201 | B3 | R326 | A4 | R827 | C2 |
| C304 | A4 | C827 | B2 | FB706 | A1 | R202 | B3 | R327 | A4 | R829 | C2 |
| C316 | A4 | C829 | C2 | FB708 | B3 | R203 | C4 | R328 | A4 | R831 | C3 |
| C317 | A1 | C830 | C2 | FB715 | A1 | R205 | B1 | R329 | A4 | R833 | C2 |
| C320 | B5 | C831 | B2 | FB801 | C1 | R206 | C2 | R330 | A4 | R834 | C2 |
| C321 | B5 | C832 | C2 | FB802 | C1 | R207 | C3 | R331 | B5 | R835 | C3 |
| C322 | B5 | C833 | C2 | FB803 | C2 | R209 | B3 | R332 | B5 | R836 | C2 |
| C325 | A4 | C834 | C2 | FB901 | C1 | R210 | B3 | R334 | B5 | R838 | C2 |
| C326 | A4 | C838 | B2 | FB905 | C4 | R211 | A3 | R335 | B5 | R839 | C2 |
| C327 | A4 | C839 | B2 | FE312 | A2 | R212 | A3 | R336 | B5 | R840 | C2 |
| C328 | A4 | C840 | B2 | IC101 | B1 | R213 | C4 | R343 | B5 | R841 | C2 |
| C329 | A4 | C841 | C1 | IC201 | A1 | R215 | C4 | R344 | B5 | R842 | C2 |
| C330 | A4 | C843 | C2 | IC203 | B4 | R218 | C2 | R345 | A4 | R845 | C2 |
| C331 | B5 | C844 | C2 | IC204 | B3 | R219 | C2 | R346 | A3 | R904 | C4 |
| C332 | A4 | C849 | B2 | IC205 | B5 | R220 | A3 | R348 | A3 | R911 | C5 |
| C333 | A4 | C912 | C4 | IC206 | A3 | R221 | A3 | R349 | A4 | R912 | C5 |
| C334 | A4 | C918 | A5 | IC207 | C4 | R222 | B3 | R350 | A3 | R913 | B1 |
| C340 | B5 | C919 | A5 | IC208 | C4 | R223 | B4 | R351 | A3 | R924 | B1 |
| C341 | B5 | C920 | C3 | IC209 | B2 | R224 | B4 | R352 | A5 | R925 | C4 |
| C342 | B4 | C921 | B1 | IC210 | C3 | R225 | A2 | R353 | A5 | R928 | B5 |
| C343 | B4 | C922 | B1 | IC301 | A4 | R227 | C4 | R354 | A3 | R929 | B5 |
| C346 | B5 | C923 | C5 | IC302 | A4 | R230 | B2 | R355 | A3 | RA201 | B2 |
| C349 | B5 | C928 | C4 | IC304 | B4 | R231 | B2 | R356 | A3 | RA202 | A3 |
| C350 | B5 | C929 | B5 | IC305 | B4 | R232 | A1 | R357 | A3 | RB403 | C5 |
| C351 | B5 | C932 | C5 | IC306 | B4 | R233 | B3 | R358 | B5 | RB901 | C5 |
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| C355 | A5 | CE903 | B3 | JK302 | A4 | R237 | C4 | R368 | A5 | ZD301 | A5 |
| C356 | A3 | CE904 | A3 | JK601 | A3 | R239 | B3 | R418 | A5 | ZD302 | B4 |
| C357 | A3 | CN201 | B3 | JK701 | A3 | R242 | C4 | R419 | A5 | ZD901 | C5 |
| C362 | B5 | CN202 | C3 | JK702 | A2 | R245 | B1 | R523 | C5 | ZD903 | C5 |
| C363 | B5 | CN203 | B3 | JK703 | A1 | R247 | C3 | R529 | C5 | ZD904 | B1 |

PCB LAYOUT - BOTTOM VIEW

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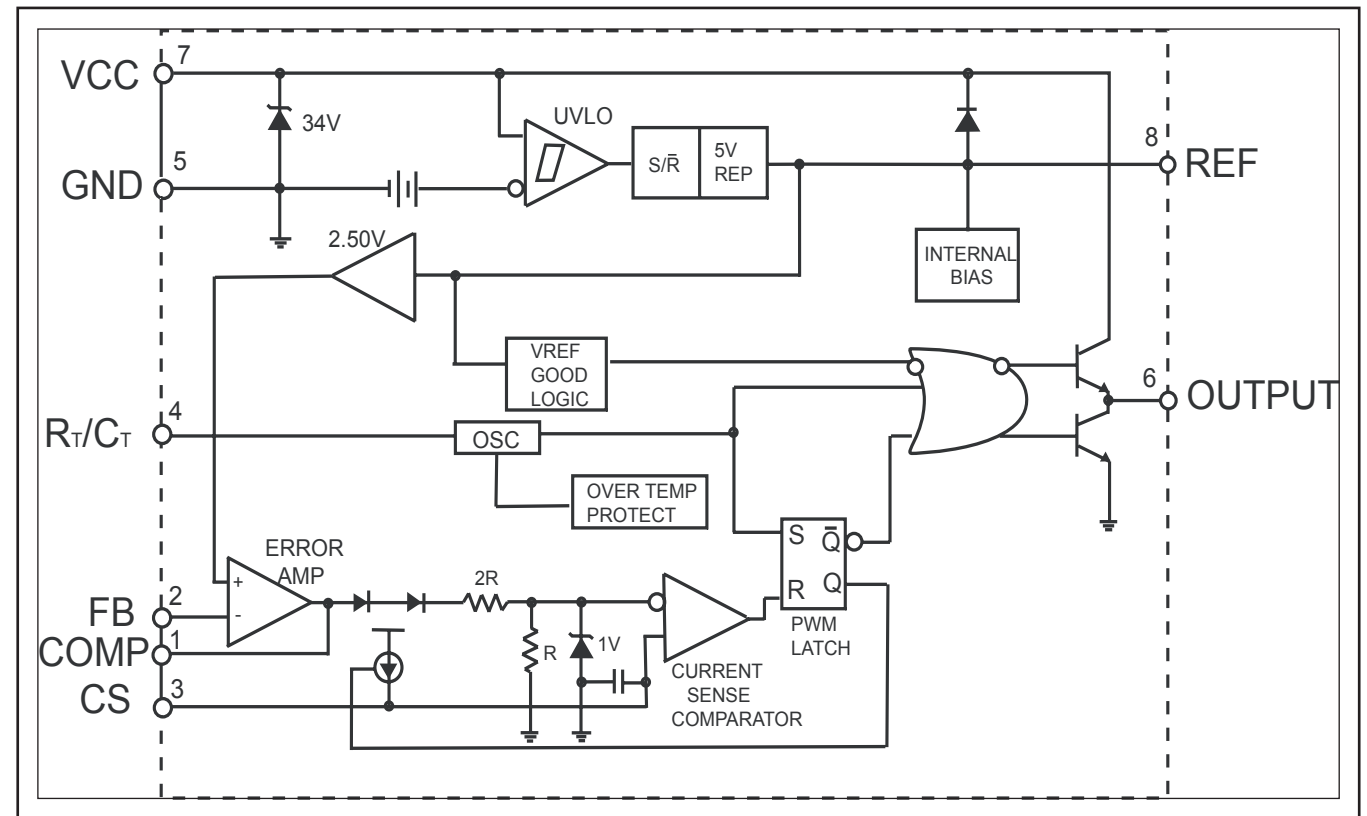
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| A | C0201 | B4 | C518 | C1 | CE316 | A1 | R388 | B5 |
| | C0203 | B4 | C519 | C1 | CE317 | A2 | R399 | B2 |
| | C0204 | B4 | C520 | C1 | CE318 | A2 | R601 | C2 |
| | C0205 | B5 | C521 | C1 | CE319 | B1 | R606 | A4 |
| | C0206 | B5 | C600 | A4 | CE320 | B1 | R722 | A5 |
| | C0209 | B4 | C603 | A4 | CE321 | B2 | R750 | A5 |
| | C0210 | A4 | C702 | A3 | CE322 | B2 | R804 | B3 |
| | C0211 | C2 | C728 | A5 | CE323 | B2 | R969 | B4 |
| | C0212 | B3 | C731 | A5 | CE324 | B2 | RA203 | B4 |
| | C0213 | B3 | C735 | B4 | CE325 | A2 | ZD201 | C2 |
| | C0214 | B3 | C738 | B4 | CE326 | A3 | ZD202 | A2 |
| | C0215 | B3 | C802 | C5 | CE327 | A3 | ZD203 | A2 |
| | C0216 | A3 | C804 | B4 | CE328 | A5 | ZD204 | A2 |
| | C0217 | B4 | C808 | B4 | CE329 | A5 | ZD205 | A2 |
| | C0218 | B3 | C826 | B4 | CE330 | B5 | ZD902 | C1 |
| | C0219 | A3 | C828 | B4 | CE341 | A1 | | |
| | C0220 | B3 | C835 | C5 | CE342 | A1 | | |
| | C0221 | B3 | C836 | B4 | CE343 | A2 | | |
| | C0222 | A3 | C837 | B4 | CE344 | A2 | | |
| | B | C0226 | B3 | C846 | B4 | CE801 | C4 | |
| C0227 | | B3 | C901 | C2 | CE802 | C4 | | |
| C0228 | | A4 | C902 | C2 | CE803 | C4 | | |
| C0229 | | B3 | C903 | C2 | CE804 | C4 | | |
| C0230 | | A3 | C904 | C1 | CE805 | C3 | | |
| C0237 | | A3 | C905 | B5 | CE806 | C3 | | |
| C0238 | | A3 | C906 | B5 | CE807 | C3 | | |
| C0239 | | A3 | C907 | C1 | CE808 | C3 | | |
| C0240 | | A3 | C908 | C2 | CE809 | C3 | | |
| C0241 | | A3 | C909 | C1 | D600 | C2 | | |
| C0242 | | A3 | C911 | C1 | FB204 | B4 | | |
| C0243 | | A3 | C924 | C1 | FB216 | B3 | | |
| C0244 | | B4 | CE201 | C3 | FB602 | B4 | | |
| C0246 | | B5 | CE202 | C3 | FB707 | B4 | | |
| C0248 | | B4 | CE203 | C3 | FB712 | A5 | | |
| C0249 | | B4 | CE204 | C3 | FB713 | A5 | | |
| C0251 | | A3 | CE205 | C3 | FE301 | B4 | | |
| C0252 | | A3 | CE206 | C3 | FE302 | B4 | | |
| C0253 | | A4 | CE207 | C2 | FE303 | A4 | | |
| C0254 | | B5 | CE210 | C2 | FE304 | A4 | | |
| C | C0601 | A4 | CE211 | C2 | FE305 | A3 | | |
| | C0602 | A4 | CE212 | C2 | FE306 | A3 | | |
| | C0603 | A3 | CE213 | C2 | FE307 | A4 | | |
| | C0604 | A4 | CE214 | C2 | FE308 | A4 | | |
| | C0606 | A4 | CE215 | A5 | FE309 | A4 | | |
| | C109 | B5 | CE216 | B4 | FE310 | A4 | | |
| | C206 | B4 | CE217 | B4 | FE311 | A3 | | |
| | C209 | B4 | CE218 | B4 | Q601 | A3 | | |
| | C225 | B5 | CE219 | B5 | Q705 | A3 | | |
| | C226 | B5 | CE220 | B5 | Q706 | A3 | | |
| | C227 | B5 | CE301 | C4 | Q713 | A4 | | |
| | C228 | B5 | CE302 | C4 | Q714 | A4 | | |
| | C234 | B5 | CE303 | C4 | Q715 | A5 | | |
| | C235 | B5 | CE304 | C4 | Q716 | A3 | | |
| | C236 | B5 | CE305 | C4 | Q719 | A5 | | |
| | C305 | A2 | CE306 | C3 | Q720 | A5 | | |
| | C306 | A2 | CE307 | C2 | R204 | C3 | | |
| | C307 | A2 | CE308 | C1 | R217 | C2 | | |
| | C308 | A2 | CE309 | C1 | R226 | C2 | | |
| | C309 | A2 | CE310 | C1 | R228 | A4 | | |
| C311 | A2 | CE311 | B1 | R238 | B3 | | | |
| C313 | A2 | CE312 | B1 | R269 | A2 | | | |
| C315 | A2 | CE313 | B1 | R295 | C2 | | | |
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| C324 | B2 | CE315 | A1 | R3020 | B2 | | | |

POWER BOARD

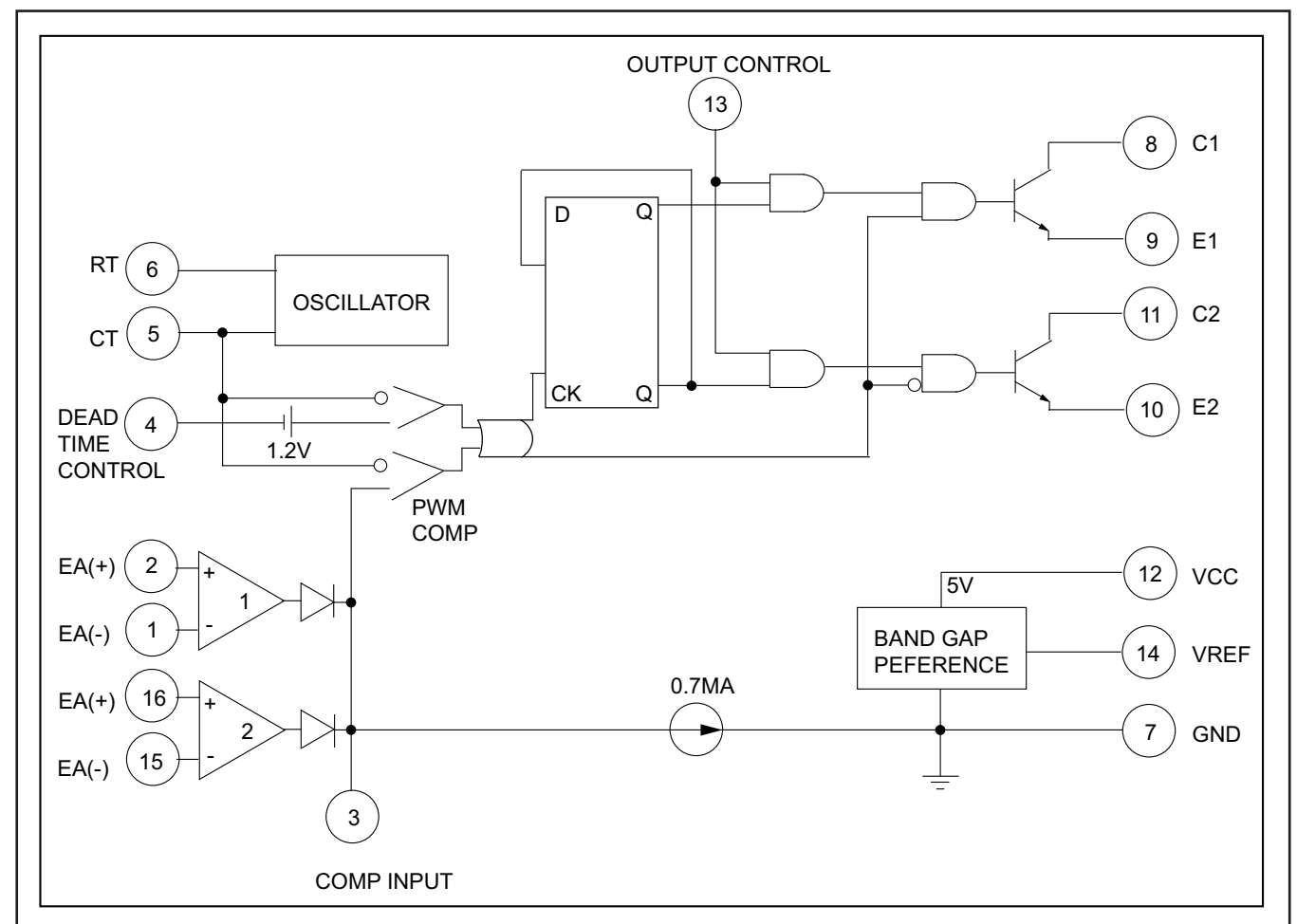
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| Circuit Diagram..... | 7-2 |
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INTERNAL IC DIAGRAM - AP3843GMTR

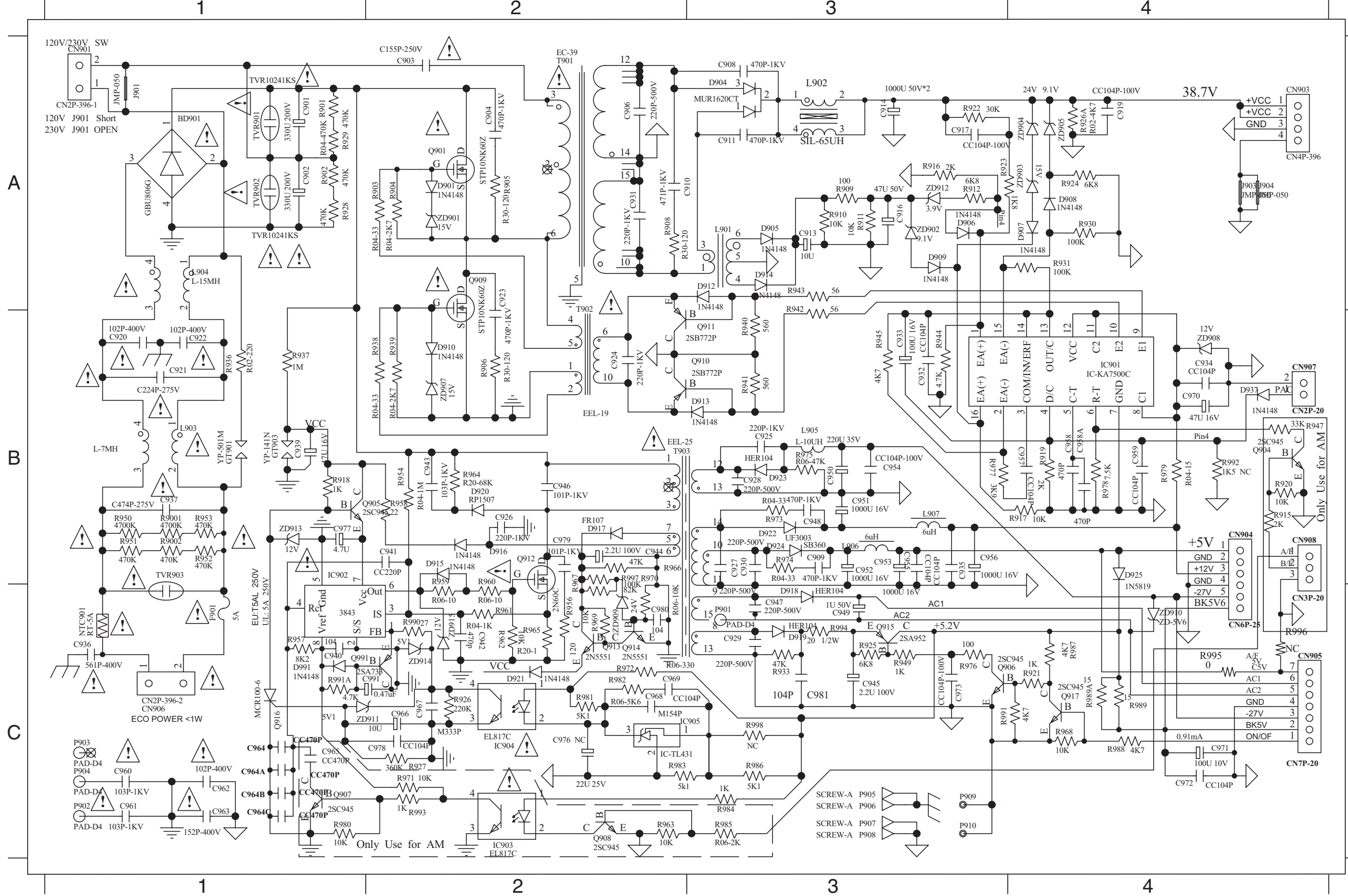


INTERNAL IC DIAGRAM - AZ7500BP



CIRCUIT DIAGRAM

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

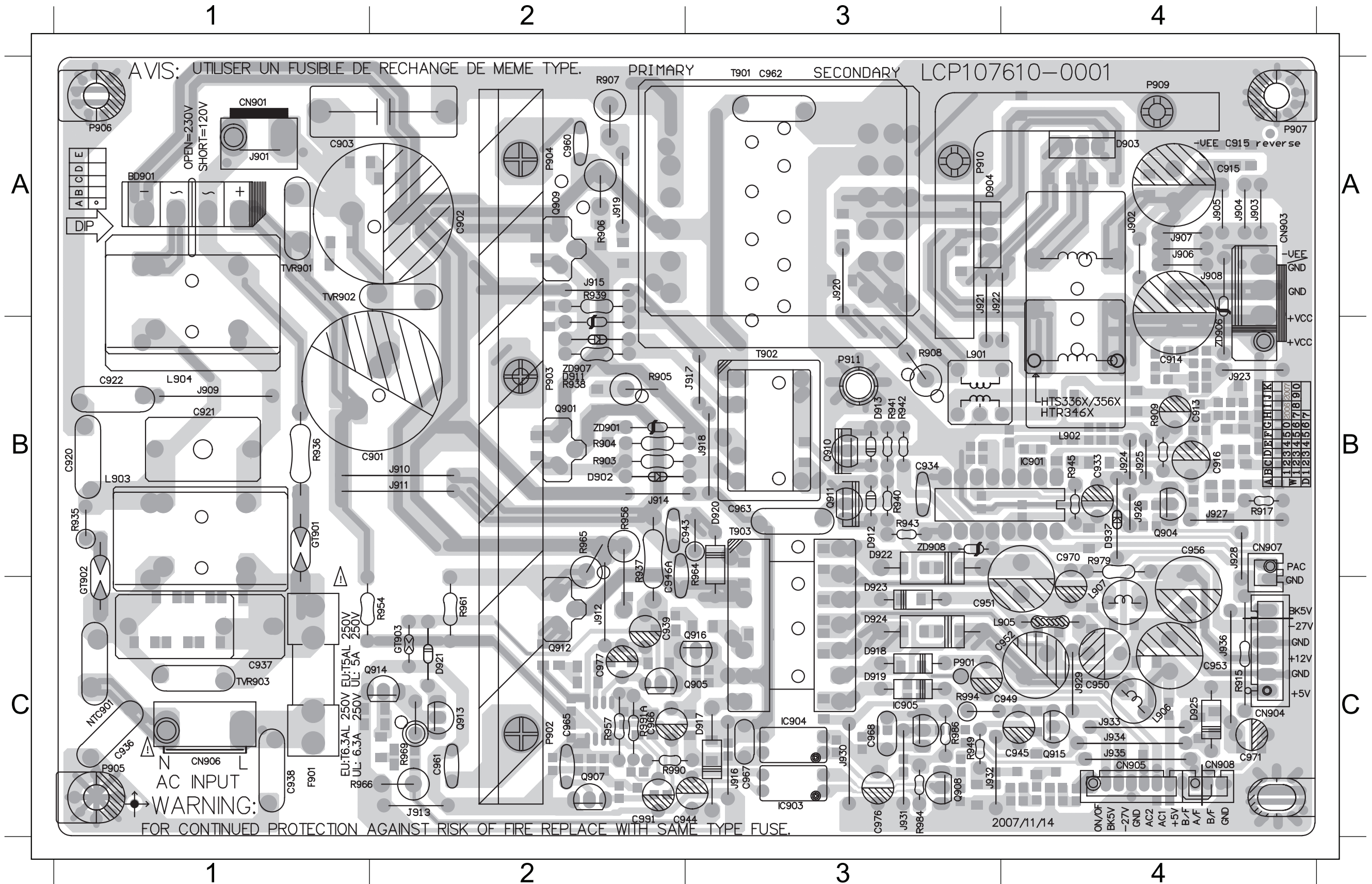


PCB LAYOUT - TOP VIEW

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7 - 3

| | | | | | | | | | | | | | | | | | | |
|-------|---------|---------|---------|----------|----------|----------|----------|---------|---------|---------|-----------|---------|---------|---------|---------|----------|-----------|----|
| BD901 | A1 C921 | B1 C945 | C4 C960 | A2 C971 | C4 CN908 | C4 D921 | C2 GT903 | C2 J911 | B2 J920 | A3 J929 | C4 L902 | B4 Q905 | C2 Q916 | C3 R936 | B1 R945 | B4 R969 | C2 T903 | B3 |
| C901 | B2 C922 | B1 C946 | B2 C961 | C2 C977 | 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 TVR901 | A1 |
| C902 | A2 C933 | B4 C949 | C3 C962 | A3 C991 | C2 D912 | B3 D923 | C3 IC904 | C3 J913 | C2 J922 | A3 J931 | C3 L904 | B1 Q910 | B3 R904 | B2 R938 | B2 R954 | C1 R986 | C3 TVR902 | A1 |
| C903 | A1 C934 | B3 C950 | C4 C963 | B3 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 TVR903 | C1 |
| C913 | B4 C937 | C1 C951 | C4 C966 | C2 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 ZD901 | B2 |
| C914 | B4 C939 | C2 C952 | C4 C967 | 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 ZD907 | B2 |
| C916 | B4 C943 | B2 C953 | C4 C968 | C3 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 ZD908 | B3 |
| C920 | B1 C944 | C2 C956 | B4 C970 | B4 CN907 | B4 D920 | B3 GT901 | B1 J910 | B2 J918 | B3 J927 | B4 L901 | B3 Q901 | B2 Q915 | C4 R917 | B4 R943 | B3 R966 | C1 T902 | B3 | |



PCB LAYOUT - BOTTOM VIEW

7 - 4

7 - 4

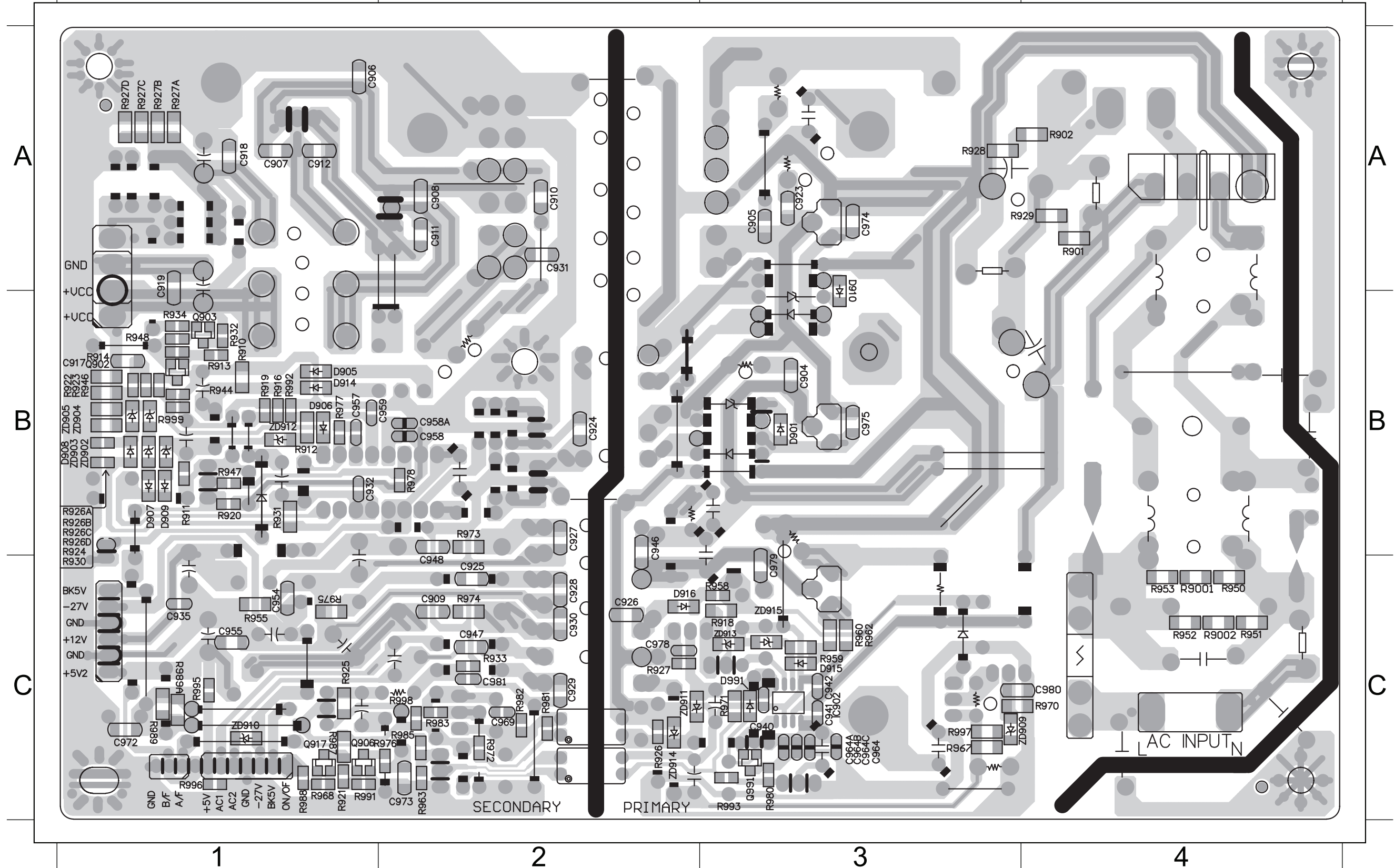
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|------|----|------|----|------|----|------|----|-------|----|------|----|------|----|-------|----|------|----|-------|----|-------|----|------|----|------|----|------|----|-------|----|-------|----|-------|----|
| C904 | B3 | C919 | A1 | C929 | C2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

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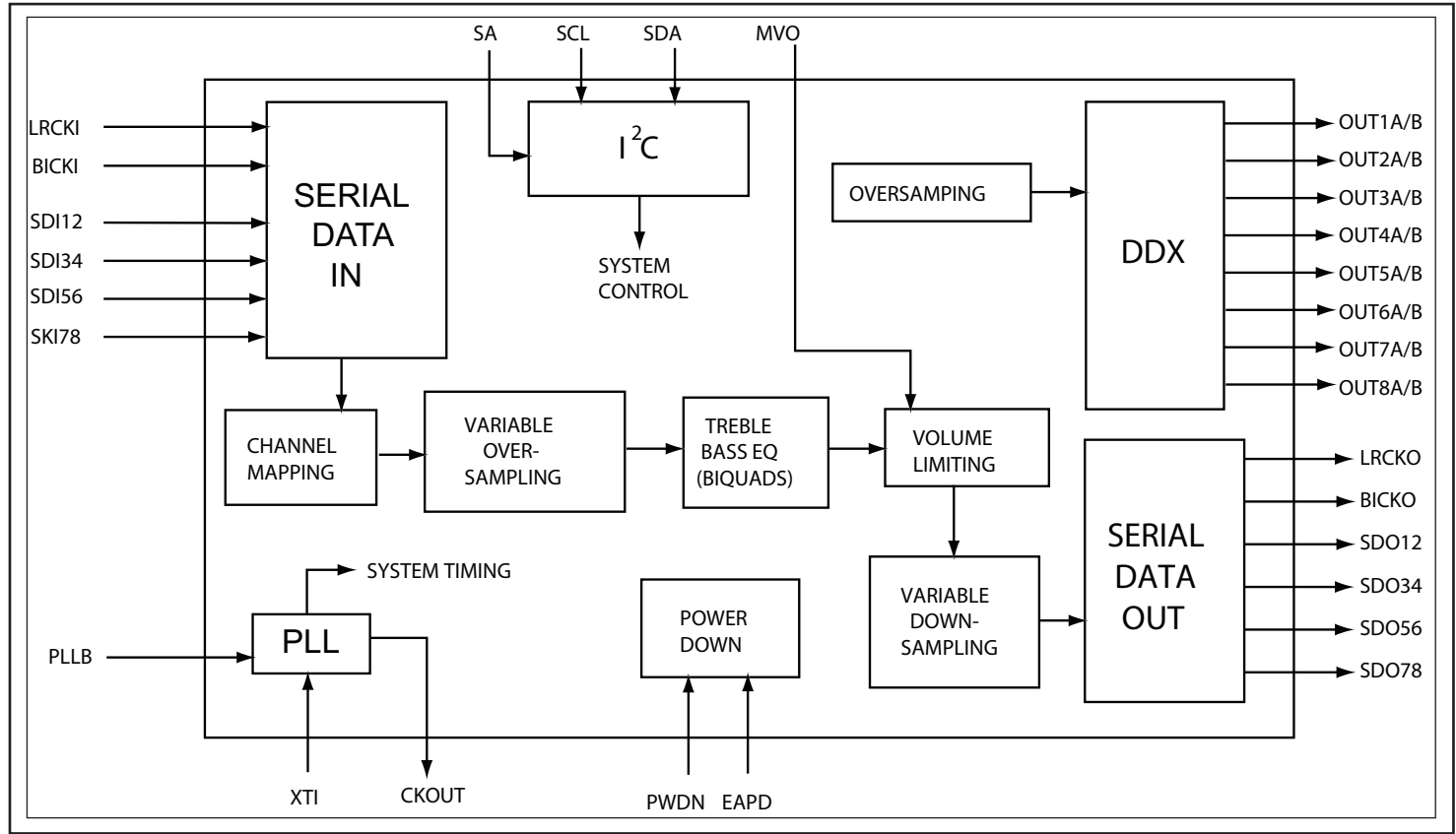


AMP BOARD

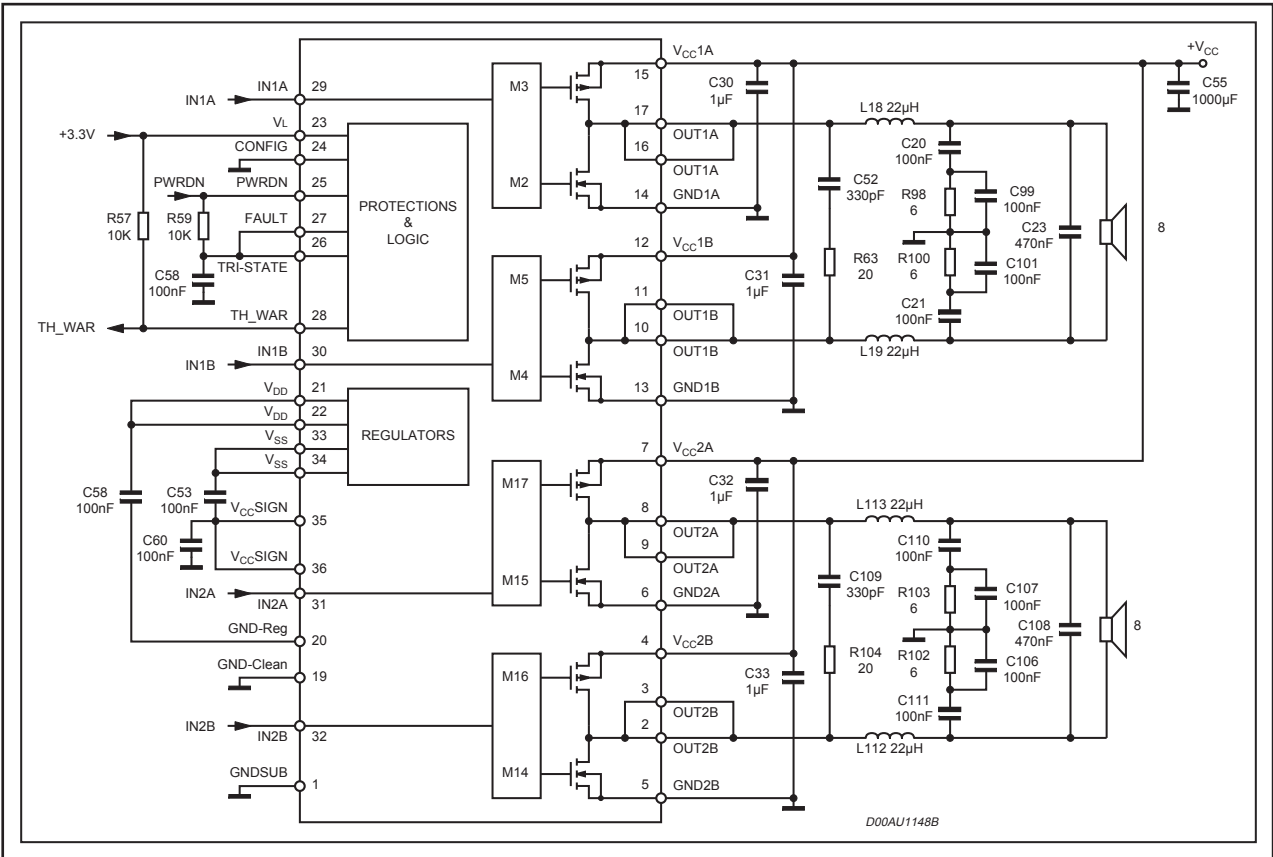
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INTERNAL IC DIAGRAM - STA309A

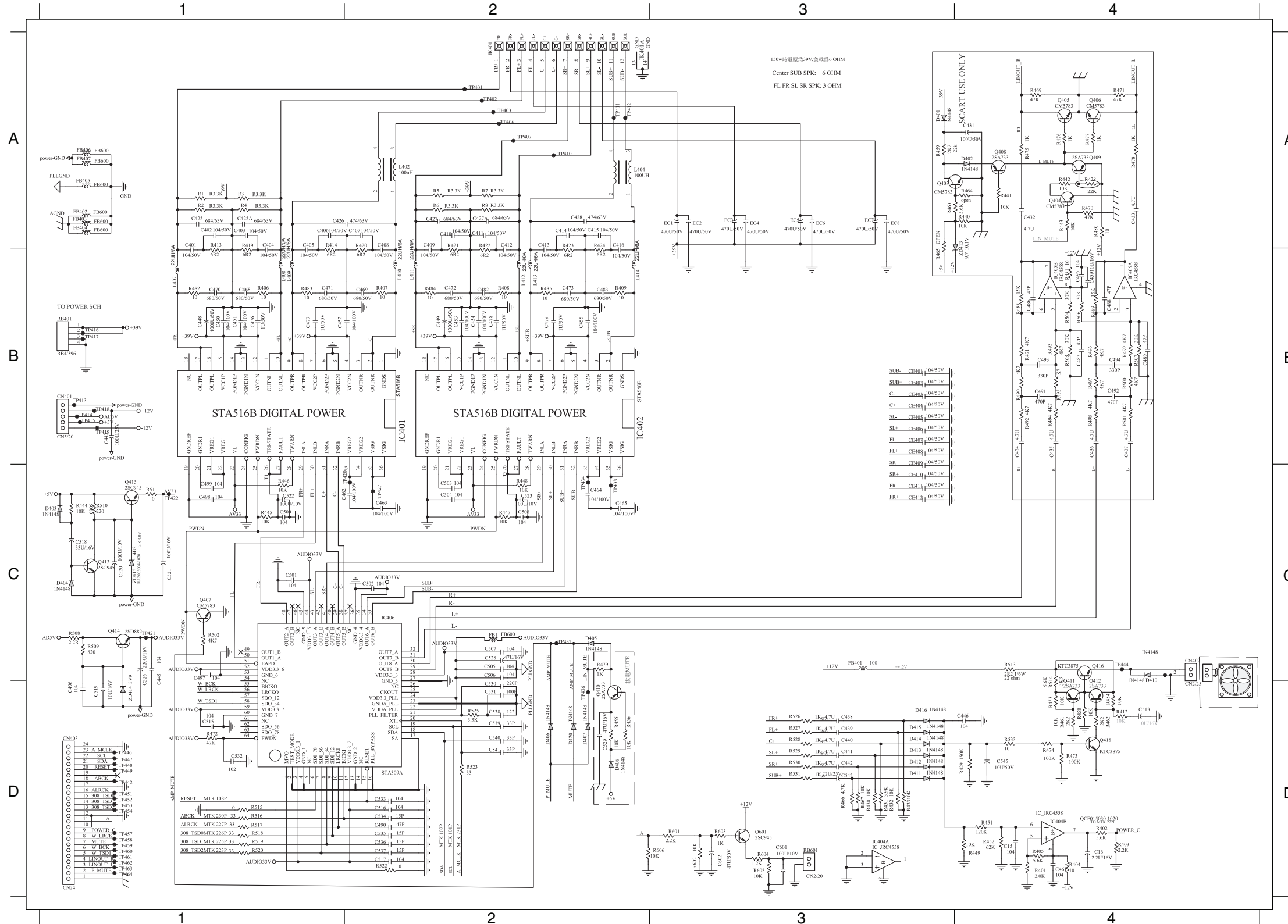


INTERNAL IC DIAGRAM - STA516B



CIRCUIT DIAGRAM

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|------|----|-------|----|------|----|------|-----|------|----|------|----|------|----|------|----|-------|----|-------|----|------|----|-------|----|--------|----|------|----|------|----|------|----|------|----|------|----|------|----|------|----|------|----|------|----|-------|----|
| C15 | D4 | C413 | B2 | C435 | B4 | C451 | B1 | C471 | B1 | C491 | B4 | C505 | C2 | C526 | C1 | C542 | D3 | CE411 | C3 | D411 | D3 | EC8 | A3 | JK401 | A2 | Q405 | A4 | R1 | A1 | R413 | B1 | R440 | A4 | R456 | D2 | R475 | A4 | R491 | B4 | R505 | B4 | R522 | D2 | R604 | D3 |
| C16 | D4 | C414 | A2 | C436 | B4 | C452 | B1 | C472 | B2 | C492 | B4 | C506 | C2 | C528 | C2 | C545 | D4 | CE412 | C3 | D412 | D3 | FB1 | C2 | JK401A | A2 | Q406 | A4 | R2 | A1 | R414 | B1 | R441 | A4 | R458 | D4 | R476 | A4 | R492 | B4 | R506 | B4 | R523 | D2 | R605 | D3 |
| C401 | B1 | C415 | A2 | C437 | B4 | C453 | B2 | C473 | B2 | C493 | B4 | C507 | C2 | C529 | D2 | C601 | D3 | CN401 | B1 | D413 | D3 | FB401 | C3 | L402 | A2 | Q407 | C1 | R3 | A1 | R419 | B1 | R442 | A4 | R459 | A3 | R477 | A4 | R493 | B4 | R507 | B4 | R525 | D2 | R7 | A2 |
| C402 | A1 | C416 | B2 | C438 | D3 | C454 | B2 | C476 | B1 | C494 | B4 | C508 | C2 | C530 | D2 | C602 | D3 | CN402 | C4 | D414 | D3 | FB402 | A1 | L404 | A2 | Q408 | A4 | R4 | A1 | R420 | B2 | R443 | A4 | R461 | D4 | R478 | A4 | R494 | B4 | R508 | C1 | R526 | D3 | R8 | A2 |
| C403 | A1 | C425 | A1 | C439 | D3 | C455 | B2 | C477 | B1 | C495 | B4 | C513 | D4 | C531 | D2 | CE401 | B3 | CN403 | D1 | D415 | D3 | FB403 | A1 | L407 | B1 | Q409 | A4 | R401 | D4 | R421 | B2 | R444 | C1 | R462 | D4 | R479 | C2 | R495 | B4 | R509 | C1 | R527 | D3 | RB401 | B1 |
| C404 | B1 | C425A | A1 | C440 | D3 | C459 | B4 | C478 | B2 | C496 | D1 | C515 | D1 | C533 | D2 | CE402 | B3 | D401 | A3 | D416 | D3 | FB404 | A1 | L408 | B1 | Q410 | D2 | R402 | D4 | R422 | B2 | R445 | C1 | R463 | A3 | R480 | A4 | R496 | B4 | R510 | C1 | R528 | D3 | RB601 | D3 |
| C405 | B1 | C426 | A1 | C441 | D3 | C461 | C16 | C479 | B2 | C497 | C1 | C516 | D2 | C534 | D2 | CE403 | B3 | D402 | A4 | D420 | D2 | FB405 | A1 | L409 | B1 | Q411 | D4 | R403 | D4 | R423 | B2 | R446 | C1 | R466 | D3 | R481 | B4 | R497 | B4 | R513 | C4 | R529 | D3 | ZD413 | A4 |
| C406 | A1 | C427 | A2 | C442 | D3 | C462 | C2 | C482 | B2 | C498 | C1 | C517 | D2 | C535 | D2 | CE404 | B3 | D403 | C1 | EC1 | A3 | FB406 | A1 | L410 | B2 | Q412 | D4 | R404 | D4 | R424 | B2 | R447 | C2 | R467 | D3 | R482 | B1 | R498 | B4 | R514 | D4 | R530 | D3 | ZD414 | D1 |
| C407 | A2 | C427A | A2 | C443 | B1 | C463 | C2 | C483 | B2 | C499 | C1 | C518 | C1 | C536 | D2 | CE405 | B3 | D404 | C1 | EC2 | A3 | FB407 | A1 | L411 | B2 | Q413 | C1 | R405 | D4 | R428 | A4 | R448 | C2 | R469 | A4 | R483 | B1 | R499 | B4 | R515 | D1 | R531 | D3 | ZD415 | C1 |
| C408 | B2 | C428 | A2 | C445 | C1 | C464 | C2 | C486 | B4 | C500 | C1 | C519 | D1 | C537 | D2 | CE406 | B3 | D405 | C2 | EC3 | A3 | IC401 | B1 | L412 | B2 | Q414 | C1 | R406 | B1 | R429 | D4 | R451 | D4 | R470 | A4 | R484 | B2 | R5 | A2 | R516 | D1 | R533 | D4 | | |
| C409 | B2 | C431 | A4 | C446 | D4 | C465 | C2 | C487 | B4 | C501 | C1 | C520 | C1 | C538 | D2 | CE407 | B3 | D406 | D2 | EC4 | A3 | IC402 | B2 | L413 | B2 | Q415 | C1 | R407 | B2 | R430 | D3 | R452 | D4 | R471 | A4 | R485 | B2 | R500 | B4 | R517 | D1 | R6 | A2 | | |
| C410 | A2 | C432 | A4 | C448 | B1 | C468 | B1 | C488 | B4 | C502 | C2 | C521 | C1 | C539 | D2 | CE408 | B3 | D407 | D2 | EC5 | A3 | IC404 | D3 | L414 | B2 | Q416 | C4 | R408 | B2 | R431 | D3 | R453 | D4 | R472 | D1 | R488 | B4 | R501 | B4 | R518 | D1 | R601 | D3 | | |
| C411 | A2 | C433 | A4 | C449 | B2 | C469 | B2 | C489 | B4 | C503 | C2 | C522 | C1 | C540 | D2 | CE409 | C3 | D408 | D2 | EC6 | A3 | IC405 | B4 | Q403 | A3 | Q418 | D4 | R409 | B2 | R432 | D3 | R454 | D4 | R473 | D4 | R489 | B4 | R502 | C1 | R519 | D1 | R602 | D3 | | |
| C412 | B2 | C434 | B4 | C450 | B1 | C470 | B1 | C490 | D2 | C504 | C2 | C523 | C2 | C541 | D2 | CE410 | C3 | D410 | C4 | EC7 | A3 | IC406 | C2 | Q404 | A4 | Q601 | D3 | R412 | D4 | R433 | D3 | R455 | D2 | R474 | D4 | R490 | B4 | R504 | B4 | R520 | D1 | R603 | D3 | | |



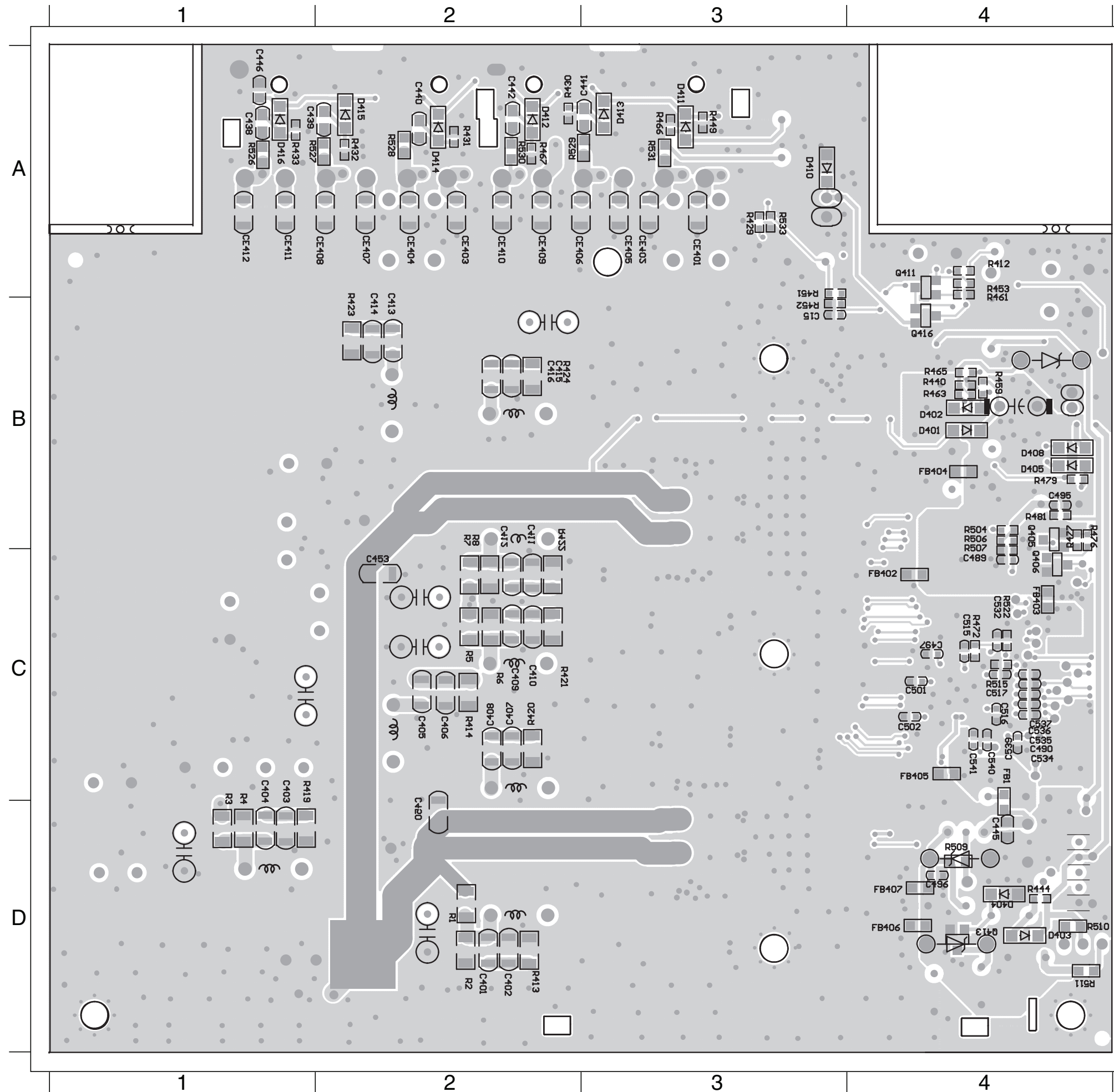
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| | | | | | | | | |
|---|-------|----|--------|----|------|----|-------|----|
| A | C16 | A1 | C507 | C1 | Q404 | B1 | R497 | C1 |
| | C425 | D3 | C508 | B1 | Q407 | C1 | R498 | C1 |
| | C425A | D4 | C513 | A1 | Q408 | B1 | R499 | C1 |
| | C426 | C4 | C518 | D1 | Q409 | B1 | R500 | C1 |
| | C427 | C3 | C519 | D1 | Q410 | B1 | R501 | C1 |
| | C427A | C3 | C520 | D1 | Q412 | B1 | R502 | C1 |
| | C428 | B3 | C521 | D1 | Q414 | D1 | R505 | B1 |
| | C431 | B1 | C522 | D1 | Q415 | D1 | R508 | D1 |
| | C432 | B1 | C523 | B1 | Q418 | A1 | R513 | B1 |
| | C433 | C1 | C526 | D1 | Q601 | B1 | R514 | A1 |
| B | C434 | B1 | C528 | C1 | R401 | B1 | R516 | C1 |
| | C435 | B1 | C529 | B1 | R402 | A1 | R517 | C1 |
| | C436 | C1 | C530 | C1 | R403 | B1 | R518 | C1 |
| | C437 | C1 | C531 | C1 | R404 | B1 | R519 | C1 |
| | C443 | D1 | C533 | C1 | R405 | B1 | R520 | C1 |
| | C448 | D3 | C538 | C1 | R406 | D2 | R523 | C1 |
| | C449 | C3 | C542 | A2 | R407 | C2 | R525 | C1 |
| | C451 | D2 | C545 | A2 | R408 | B2 | R601 | A1 |
| | C452 | D2 | C601 | A1 | R409 | B2 | R602 | B1 |
| | C454 | B2 | C602 | A1 | R428 | B1 | R603 | B1 |
| C | C455 | B2 | CN401 | D1 | R441 | B1 | R604 | B1 |
| | C459 | B1 | CN402 | A1 | R442 | B1 | R605 | B1 |
| | C461 | B1 | CN403 | C1 | R443 | B1 | RB401 | D4 |
| | C462 | C1 | D406 | B1 | R445 | D1 | RB601 | B1 |
| | C463 | C2 | D407 | B1 | R446 | D1 | ZD413 | B1 |
| | C464 | B1 | D420 | B1 | R447 | B1 | ZD414 | D1 |
| | C465 | B1 | EC1 | D4 | R448 | B1 | ZD415 | D1 |
| | C468 | D2 | EC2 | C4 | R454 | A1 | | |
| | C469 | C2 | EC3 | C4 | R455 | B1 | | |
| | C470 | D2 | EC4 | C4 | R456 | B1 | | |
| D | C471 | C2 | EC5 | C4 | R458 | B1 | | |
| | C472 | C2 | EC6 | C4 | R462 | A1 | | |
| | C473 | B2 | EC7 | C4 | R469 | C1 | | |
| | C476 | D2 | EC8 | B4 | R470 | B1 | | |
| | C477 | C2 | FB401 | B1 | R471 | C1 | | |
| | C478 | C2 | IC401 | D2 | R473 | A1 | | |
| | C479 | B2 | IC402 | C2 | R474 | A1 | | |
| | C482 | C2 | IC404 | B1 | R475 | B1 | | |
| | C483 | B2 | IC405 | C1 | R478 | C1 | | |
| | C486 | B1 | IC406 | C1 | R480 | B1 | | |
| E | C487 | B1 | JK401 | A4 | R482 | D2 | | |
| | C488 | C1 | JK401A | A2 | R483 | D2 | | |
| | C491 | B1 | L402 | A3 | R484 | C2 | | |
| | C492 | C1 | L404 | A2 | R485 | B2 | | |
| | C493 | B1 | L407 | D3 | R488 | B1 | | |
| | C494 | C1 | L408 | D4 | R489 | B1 | | |
| | C498 | D1 | L409 | D3 | R490 | B1 | | |
| | C499 | D1 | L410 | D3 | R491 | B1 | | |
| | C500 | D1 | L411 | C3 | R492 | B1 | | |
| | C503 | C1 | L412 | C3 | R493 | B1 | | |
| F | C504 | C1 | L413 | B3 | R494 | B1 | | |
| | C505 | C1 | L414 | B3 | R495 | B1 | | |
| | C506 | C1 | Q403 | B1 | R496 | C1 | | |

PCB LAYOUT - BOTTOM VIEW

8 - 4

8 - 4



| | | | | | |
|-------|----|-------|----|------|----|
| C15 | B3 | D404 | D4 | R507 | B4 |
| C401 | D2 | D405 | B4 | R509 | D4 |
| C402 | D2 | D408 | B4 | R510 | D4 |
| C403 | D1 | D410 | A3 | R515 | C4 |
| C404 | D1 | D411 | A3 | R522 | C4 |
| C405 | C2 | D412 | A2 | R526 | A1 |
| C406 | C2 | D413 | A3 | R527 | A2 |
| C407 | C2 | D414 | A2 | R528 | A2 |
| C408 | C2 | D415 | A2 | R529 | A2 |
| C409 | C2 | D416 | A1 | R530 | A2 |
| C410 | C2 | FB1 | C4 | R531 | A3 |
| C411 | C2 | FB402 | C4 | R533 | A3 |
| C412 | C2 | FB403 | C4 | R6 | C2 |
| C413 | B2 | FB404 | B4 | R7 | C2 |
| C414 | B2 | FB405 | C4 | R8 | C2 |
| C415 | B2 | FB406 | D4 | | |
| C416 | B2 | FB407 | D4 | | |
| C438 | A1 | Q405 | B4 | | |
| C439 | A2 | Q406 | C4 | | |
| C440 | A2 | Q411 | A4 | | |
| C441 | A3 | Q413 | D4 | | |
| C442 | A2 | Q416 | B4 | | |
| C445 | D4 | R1 | D2 | | |
| C446 | A1 | R2 | D2 | | |
| C450 | D2 | R3 | D1 | | |
| C453 | C2 | R4 | D1 | | |
| C489 | C4 | R412 | A4 | | |
| C490 | C4 | R413 | D2 | | |
| C495 | B4 | R414 | C2 | | |
| C496 | D4 | R419 | D1 | | |
| C497 | C4 | R420 | C2 | | |
| C501 | C4 | R421 | C2 | | |
| C502 | C4 | R422 | C2 | | |
| C515 | C4 | R423 | B2 | | |
| C516 | C4 | R424 | B2 | | |
| C517 | C4 | R429 | A3 | | |
| C534 | C4 | R430 | A2 | | |
| C535 | C4 | R431 | A2 | | |
| C536 | C4 | R432 | A2 | | |
| C537 | C4 | R433 | A1 | | |
| C539 | C4 | R440 | B4 | | |
| C540 | C4 | R444 | D4 | | |
| C541 | C4 | R451 | A3 | | |
| CE401 | A3 | R452 | B3 | | |
| CE402 | A3 | R453 | A4 | | |
| CE403 | A2 | R459 | B4 | | |
| CE404 | A2 | R461 | A4 | | |
| CE405 | A3 | R463 | B4 | | |
| CE406 | A2 | R466 | A3 | | |
| CE407 | A2 | R467 | A2 | | |
| CE408 | A2 | R472 | C4 | | |
| CE409 | A2 | R476 | B4 | | |
| CE410 | A2 | R477 | B4 | | |
| CE411 | A1 | R479 | B4 | | |
| CE412 | A1 | R481 | B4 | | |
| D401 | B4 | R5 | C2 | | |
| D402 | B4 | R504 | B4 | | |
| D403 | D4 | R506 | B4 | | |

SCART BOARD

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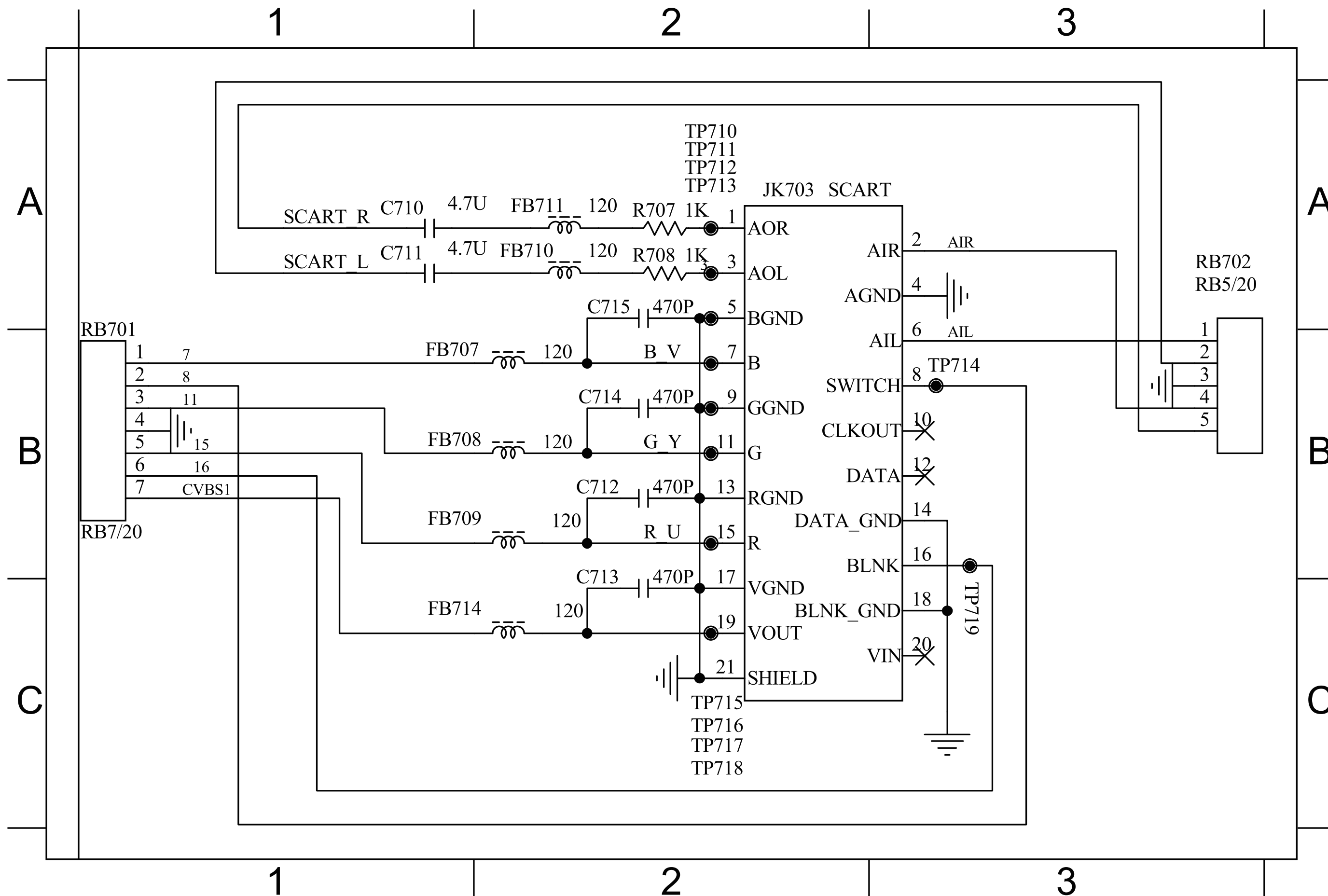
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| Circuit Diagram | 9-2 |
| PCB Layout View..... | 9-3 |

CIRCUIT DIAGRAM

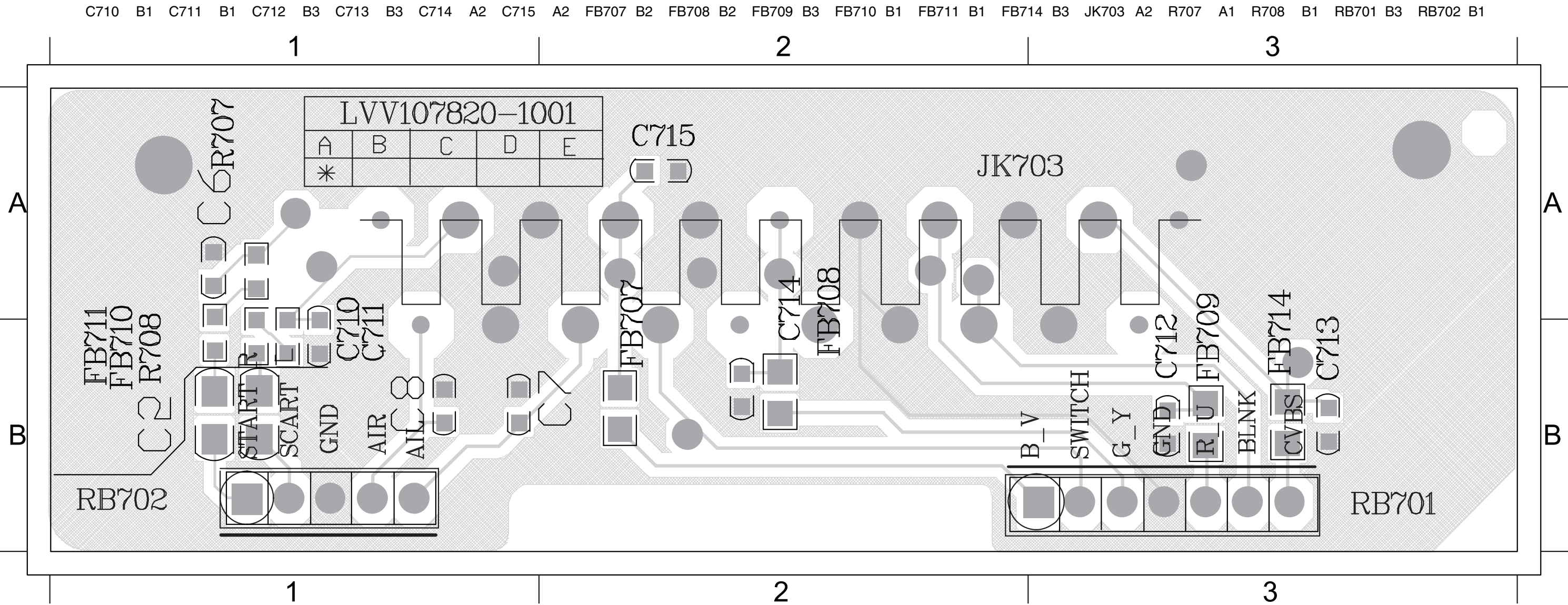
9 - 2

9 - 2

C710 A1 C711 A1 C712 C2 C713 B2 C714 B2 C715 A2 FB707 B2 FB708 B2 FB709 B2 FB710 A2 FB711 A2 FB714 C2 JK703 A2 R707 A2 R708 A2 RB701 B1 RB702 A3



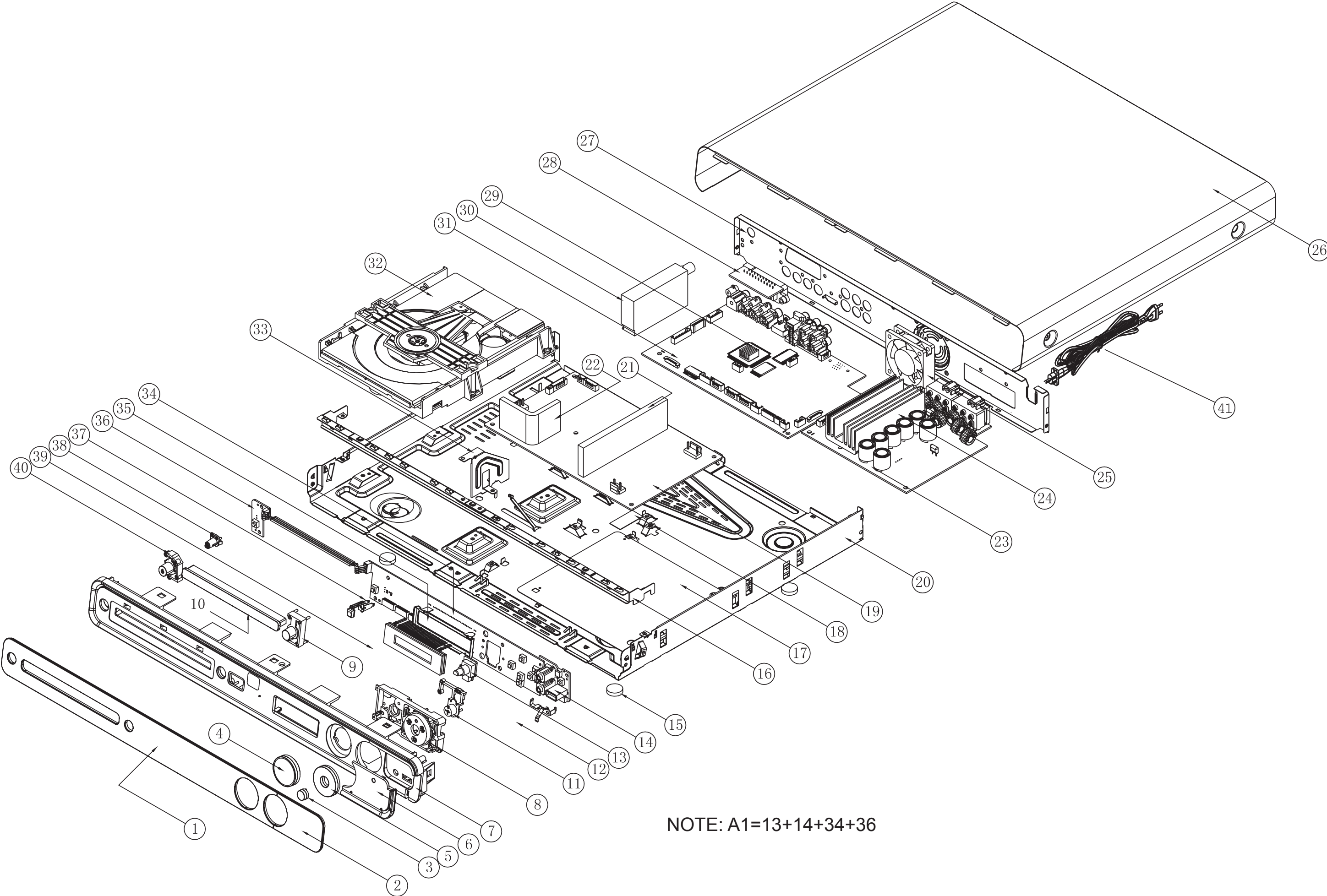
PCB LAYOUT - TOP VIEW



MECHANICAL EXPLODED VIEW

10 - 1

10 - 1



NOTE: A1=13+14+34+36

MECHANICAL PART LIST

| Loc. | 12NC. | Description |
|-------------|--------------|--------------------------|
| 1 | 996510010841 | DISPLAY LENS |
| 2 | 996510010839 | USB DOOR LENS |
| 3 | 996510010835 | SOURCE BUTTON PC PMMA |
| 4 | 996510010833 | VOLUME KNOB PMMA PC |
| 5 | 996510010832 | FUNCTION BUTTON |
| 6 | 996510010829 | USB DOOR |
| 7 | 996510012215 | FRONT PANEL |
| 8 | 996510010837 | FUNCTION BRACKET |
| 9 | 996510010834 | EJECT KEY |
| 10 | 996510012214 | DVD DOOR |
| 11 | 996510010838 | SOURCE BRACKET |
| 15 | 996510010842 | RUBBER FOOT |
| 17 | 996510010826 | PVC SHEET |
| 18 | 996510010827 | PVC SHEET |
| 19 | 996510012212 | POWER PCB |
| 20 | 996510012217 | BOTTOM PANEL |
| 23 | 996510012213 | AMP PCB |
| 25 | 996510010843 | FAN |
| 26 | 996510012216 | TOP COVER |
| 27 | 996510012218 | REAR PANEL (for /05) |
| 27 | 996510012226 | REAR PANEL (for /12) |
| 28 | 996510011274 | SCART PCB ASSY |
| 30 | 996510011275 | TUNER PACK |
| 31 | 996510012211 | MAIN PCB |
| 32 | 996510010819 | DVD LOADER |
| 38 | 996510010840 | STANDBY LENS |
| 40 | 996510010836 | POWER KEY |
| 41 | 996510002665 | POWER CORD (for /05) |
| 41 | 996510001638 | POWER CORD (for /12) |
| V1 | 996510007429 | FFCCBLE 10P100mm |
| V2 | 996510010847 | FFC CABLE 24P |
| V3 | 996510007319 | FFC CABLE 24P 180MM |
| A1 | 996510010822 | VFD JACK VOL STANDBY PCB |
| FM | 996510008251 | FM ANT |
| Scart | 996510001650 | SCART CABL |
| RC | 996510011293 | REMOTE CONTROL 39 KEYS |

SPEAKER

| | | |
|-------|--------------|---------------------------|
| SPKC | 996510012219 | SPEAKER BOX -CENTER |
| RFC | 996510001599 | RUBBER FOOT -CENTER SPK |
| SPKFL | 996510012220 | SPEAKER BOX -FRONT LEFT |
| SPKFR | 996510012221 | SPEAKER BOX - FRONT RIGHT |
| SPKRL | 996510012222 | SPEAKER BOX- REAR LEFT |
| SPKRR | 996510012223 | SPEAKER BOX- REAR RIGHT |
| RFF | 996510001601 | RUBBER FOOT - FRONT |
| RFR | 996510012224 | RUBBER FOOT - REAR |
| SUBW | 996510012225 | SUBWOOFER |
| RFS | 996510010854 | RUBBER FOOT -SUB |

REVISION LIST

Version 1.0
*Initial release