

Service
Service
Service



Service Manual

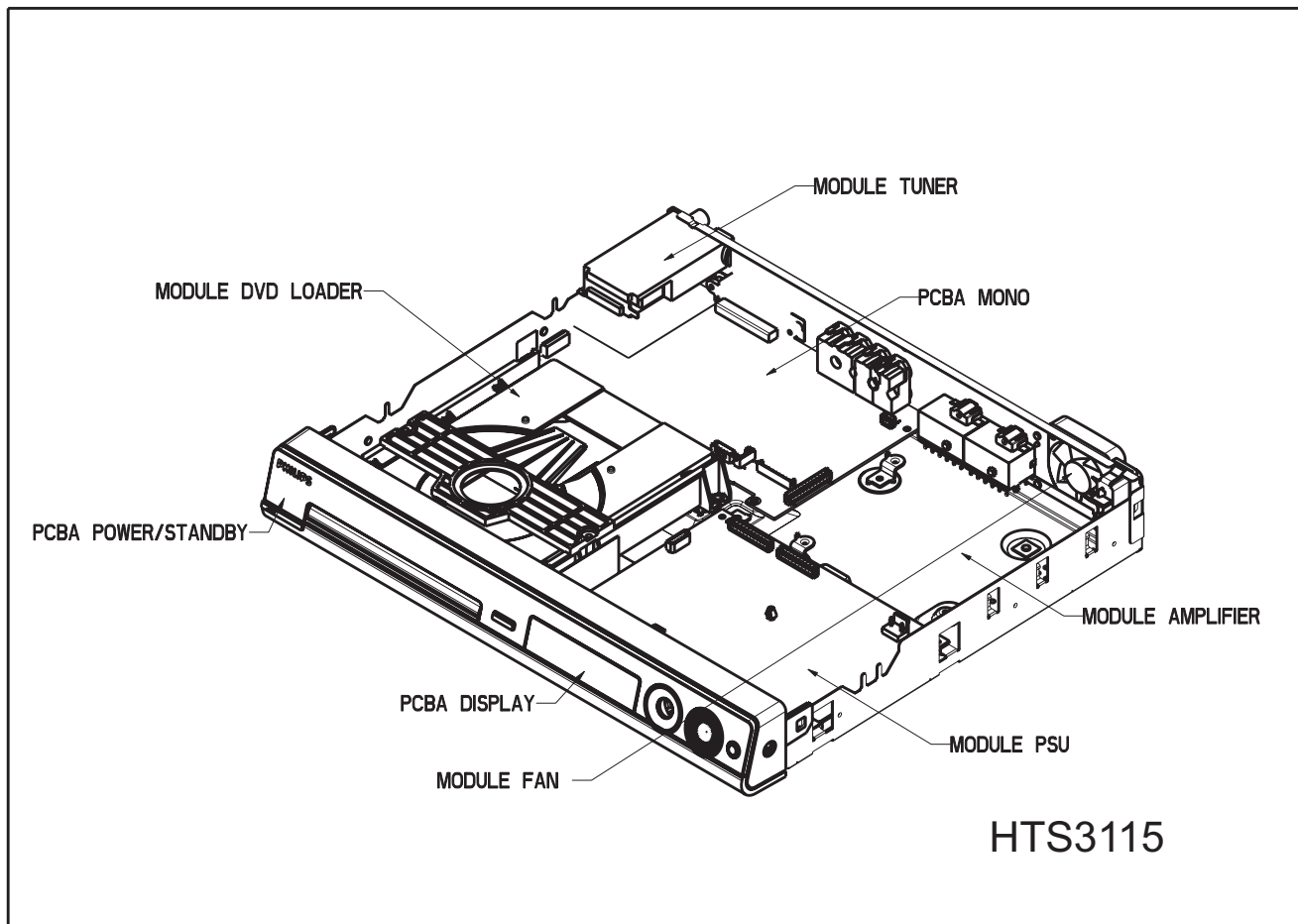


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LOCATION OF PC BOARDS



VERSION VARIATIONS:

Features &	Type /Versions:	HTS3115	
		/05	/12
Progressive Scan		—	—
Line-Out		x	x
TV-In		—	—
Aux-In		x	x
Y/Pb/Pr (YUV) Component Video Output		—	—
CVBS		—	—
SCART		x	x
USB		x	x

1. Specifications

1.1 General:

Mains voltage	: 230V for /05, /12, /51 120V/230V for /55 /98
Mains frequency	: 50/60Hz for /98, /55, 50Hz for /12, /05, /51
Power consumption	: 70W < 1W Eco standby power < 70W at 1/8 P _{rated} (For main unit)
Dimension main unit	: 360 x 54 x 324mm

1.2 Tuner FM

Tuning range	: 87.5-108MHz
Grid	: 50kHz for /12, /05, /51 100kHz for /98, /55
IF frequency	: 10.7MHz ± 25kHz
Aerial input	: 75Ω coaxial
Sensitivity at 26dB S/N	: < 7μV
Selectivity at 600kHz bandwidth	: > 25dB
IF rejection	: > 60dB
Image rejection	: > 25dB
Distortion at RF=1mV, dev. 75kHz	: < 3%
-3dB Limiting point	: 8μV
Crosstalk at RF=1mV, dev. 67.5kHz	: > 28dB
Crosstalk at RF=1mV, dev. 40kHz	: > 18dB

MW

Tuning range	: 531-1602kHz for /12, /05, /51, /98, /93, /55 530-1700kHz for /98, /55
Grid	: 9kHz for /12, /05, /51, /98, /55 10kHz for /98, /55
IF frequency	: 450kHz ± 1kHz
Aerial input	: Frame aerial
Sensitivity at 26dB S/N	: < 4.0mV/M
Selectivity at 18kHz bandwidth	: > 20dB
IF rejection	: > 45dB
Image rejection	: > 28dB
Distortion at RF=50mV, m=80%	: < 5%

1.3 AMPLIFIER:

Output power	
Front	: 25W RMS / channel
Rear	: 25W RMS / channel
Center	: 50W RMS
Subwoofer	: 50W RMS
Frequency response ±0.5dB	: 20Hz-20kHz
Hum (Volume Minimum)	: 200nW
Residual noise (Volume Minimum)	: 40nW
Input sensitivity	
Aux In	: 1V ± 3dB at 22kΩ
Scart In	: 0.5V ± 3dB at 22kΩ
Output sensitivity	
Line Out (Left/Right)	: 1V ± 2dB at 10kΩ
Scart Out (Left/Right)	: 1V ± 2dB at 10kΩ

1.4 COMPACT DISC/VCD/DVD:

Video Decoding	: MPEG-1/MPEG-2/ DivX 3/4/5/6 Vitra,
Video DAC	: 12 Bits
Signal System	: PAL / NTSC
Video Format	: 4:3 / 16:9

CVBS Out ¹⁾

CVBS level	: 1.0 ± 0.1V _{p-p}
Luminance S/N	: >= 60dB

RGB/YUV Out ¹⁾

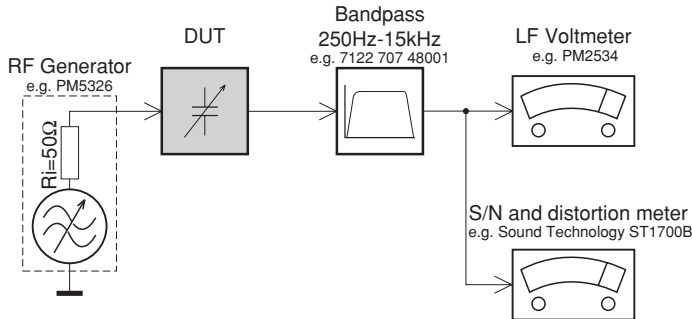
Amplitude	: 1.0 ± 0.1V _{p-p}
S/N	: >= 60dB

¹⁾ Output terminals to be terminated with 75Ω

2. Measurements Setup, Service Aid & Lead Free Requirements

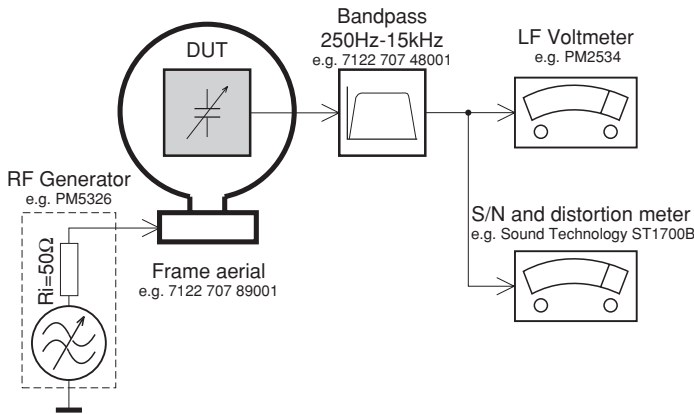
MEASUREMENT SETUP

Tuner FM



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

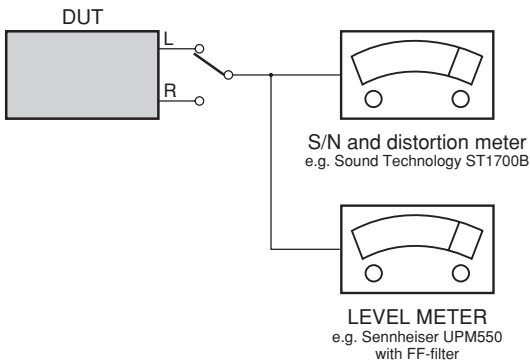
Tuner AM (MW,LW)



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

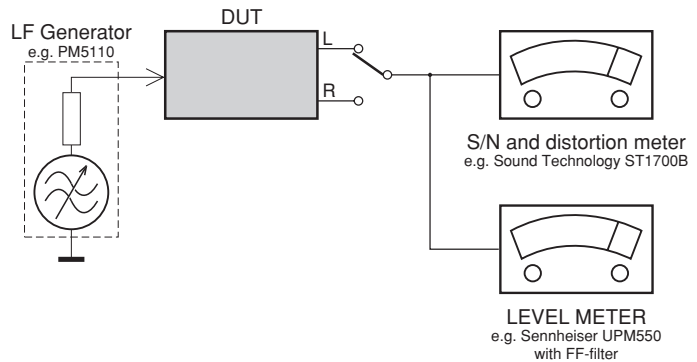
CD

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



Recorder

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



SERVICE AIDS

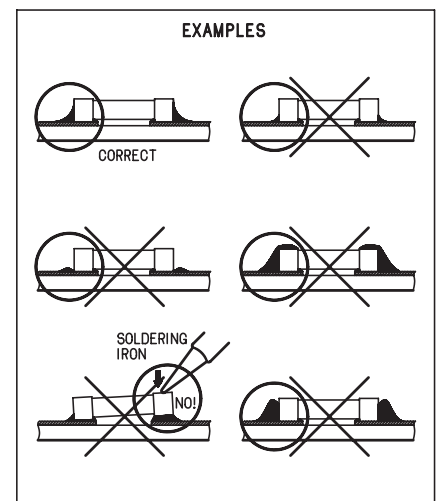
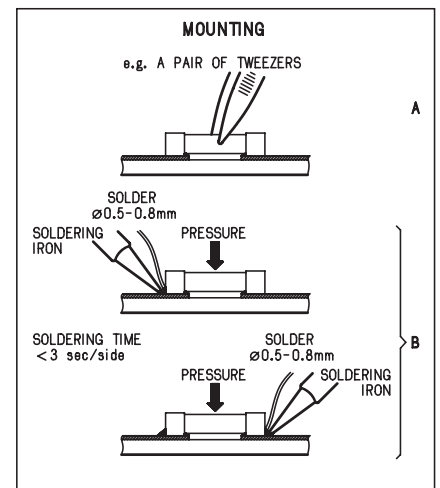
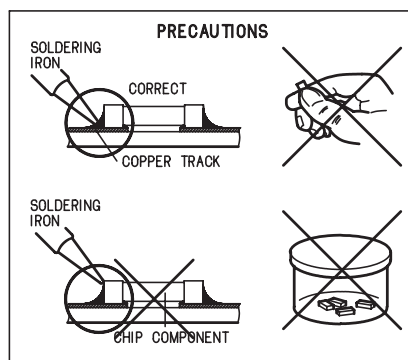
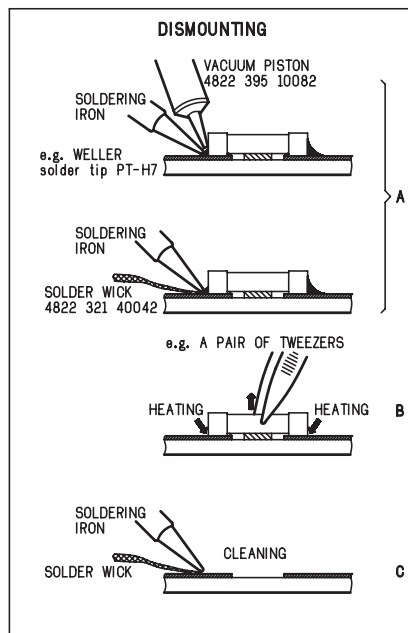
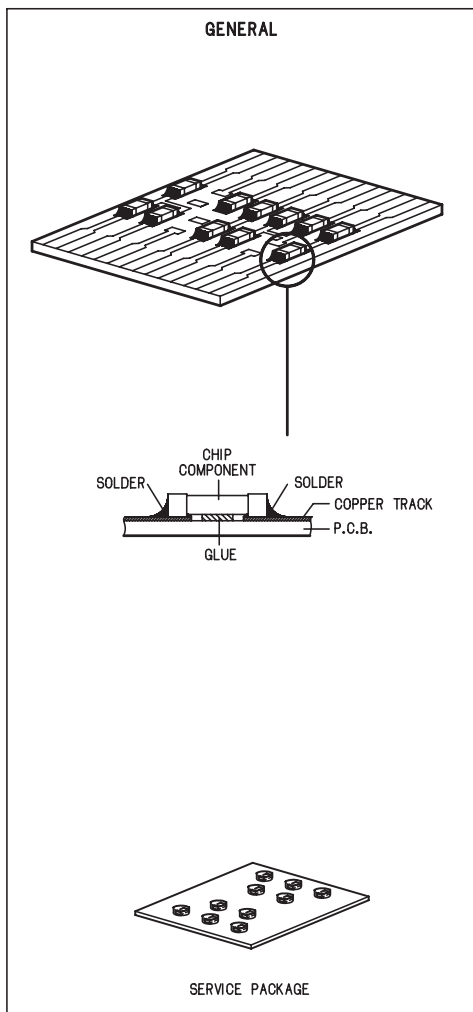
Service Tools:

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



(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.

ESD**(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 hetzelfde 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).

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.

(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 \triangle .

(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 \triangle .

(F)

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

Less composants de sécurité sont marqués \triangle .

(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 \triangle 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 \triangle .

(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 spårren är urkopplad. Betrakta ej strålen.

(SF) Varoitus !

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

(DK) Advarse !

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

(F)

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

2.1 Lead Free Requirements

Pb(Lead) Free Solder

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

IDENTIFICATION:



Regardless of special logo (not always indicated)

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

Important note: In fact also products of year 2004 must be treated in this way as long as you avoid mixing solder-alloys (lead-ed/ 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
 - o To reach at least a solder-temperature of 400°C,
 - o To stabilize the adjusted temperature at the solder-tip
 - o 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 un-used equipment, or reduce heat.
 - Mix of lead-free solder alloy / parts with lead-ed solder alloy / parts is possible but PHILIPS recommends strongly to avoid mixed solder alloy types (lead-ed 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 lead-ed 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.

2.2 Service Hints

CAUTION

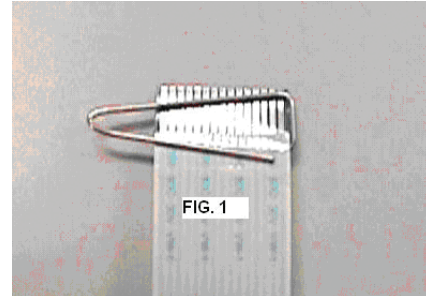
CHARGED CAPACITORS ON THE SERVO BOARD MAY DAMAGE THE DRIVE ELECTRONICS WHEN CONNECTING A NEW DRIVE. THAT'S WHY, BESIDES THE SAFETY MEASURES LIKE

- SWITCH OFF POWER SUPPLY
- ESD PROTECTION

ADDITIONAL ACTIONS MUST BE TAKEN BY THE REPAIR TECHNICIAN.

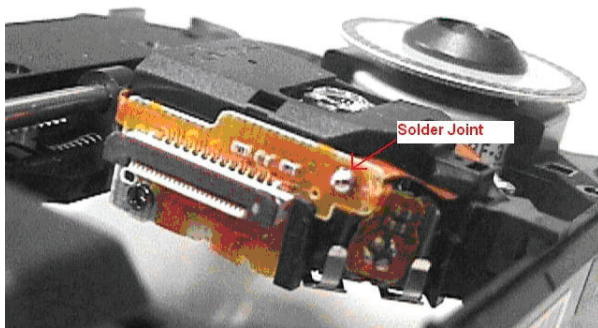
The following steps have to be done when replacing the defective loader :

1. Dismantling of the loader to access the ESD protection point if necessary.
2. **Solder the ESD protection point***.
3. Disconnect flexfoil cable from the defective loader.
4. Put a paper clip on the flexfoil to short-circuit the contacts (fig.1)
5. Replace the defective loader with a new loader.
6. Remove paperclip from the flexfoil and connect it to the new loader.
7. Remove solder joint on the ESD protection point.



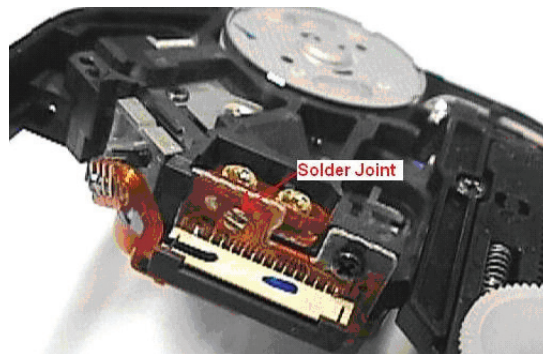
ATTENTION: The laser diode of this loader is protected against ESD by a solder joint which shortcircuits the laserdiode to ground. For proper functionality of the loader this solder joint must be remove **after** connection loader to the set.

Type 1



(ESD protection point is accessible from top of loader)

Type 2



(ESD protection point is accessible from bottom of the loader)

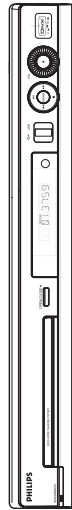
***Only applicable for defective loader needed to be sent back to supplier for failure analysis and to support backcharging evidence.**

This is also applicable for all partnership workshops.

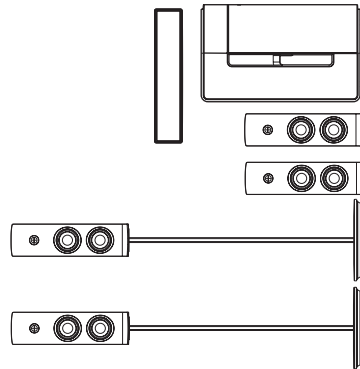
Quick Start Guide



What's in the box?

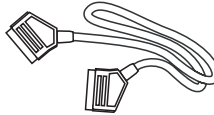


DVD system

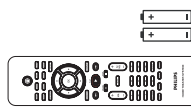


1 centre, 2 front, 2 rear speakers with stands and subwoofer

- 1 Connect
- 2 Set up
- 3 Enjoy



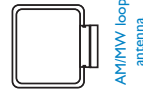
Scart cable



Remote Control and 2 batteries



FM wire antenna



AM/MW loop antenna



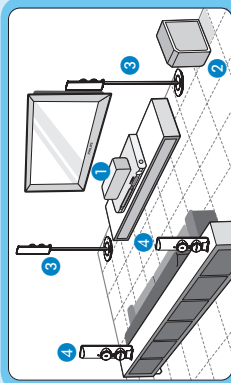
User Manual

PHILIPS

I Connect

A Placement

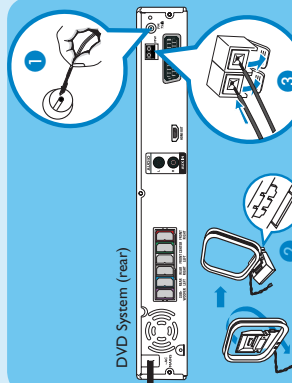
Proper speakers system placement is important to ensure optimum sound performance.



- 1 Place the centre speaker above or close to the TV.
- 2 Place the subwoofer on the floor, at least one metre away from the TV.
- 3 Place the front speakers at equal distances from the TV.
- 4 Place the rear speakers at normal listening ear level.

B Connect the radio antennas

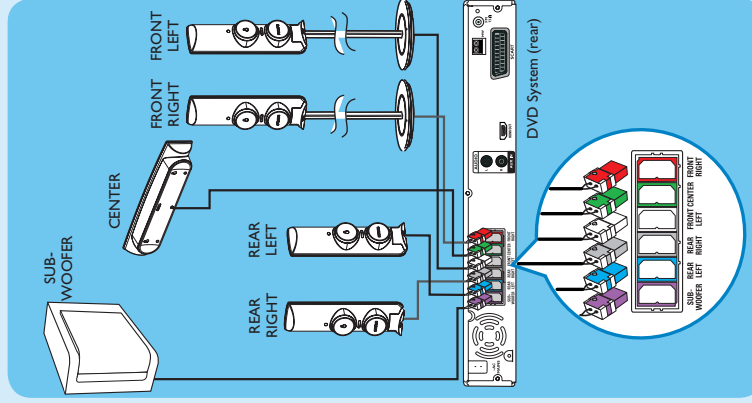
Keep the antennas away from the electronic devices to prevent unwanted interference.



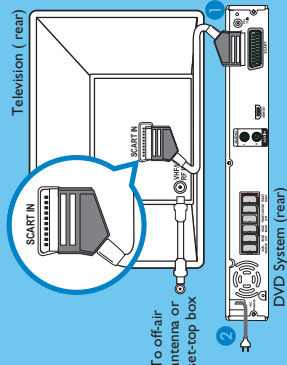
- 1 Connect the FM antenna to the FM socket. Extend the wire and fix its end to the wall.
- 2 Unfold the AM/MW loop antenna and fix the claw into the slot.
- 3 Push the tabs and insert the wires into the AM/MW sockets.

C Connect the speakers and subwoofer

Connect the various coloured plugs from the speakers and subwoofer to the same coloured sockets at the rear of the DVD system.



D Connect the DVD system to TV



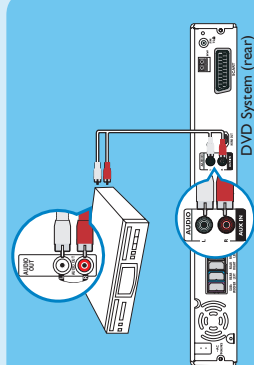
To off-air antenna or set-top box

- 1 Use the supplied scart cable to connect the SCART socket on this DVD system to the SCART IN socket on your TV.
- 2 Plug in the power cable from the DVD system to an AC power outlet.

Note It is important to connect the DVD system directly to your TV. When watching the TV programmes, you can press **TV** on the remote control to get the sound output from the speakers system.

E Connect the audio from other device to DVD system (optional)

Use the red and white audio cables (not supplied) to connect the AUX IN (R/L) sockets on this DVD system to the AUDIO output sockets on your Audio/Video device (for example, DVD recorder, VCR).



Note Press **AUX/IDI** on the remote control to get the sound output from the speakers system when watching the TV programme.

A Finding the viewing channel

- 1 Press **STANDBY ON** on the DVD system.
- 2 Press **SOURCE** on the DVD system until "DISC" appears on the display panel.



- 3 Turn on the TV. Use the TV's remote control to select the correct viewing channel for the DVD system. You should see the blue DVD background on the TV.

Note To search for the correct viewing channel, press the Channel Down button on the TV's remote control repeatedly (or AV, SELECT, ◀ button) until you see the blue DVD background.

B Select the display language on the screen

- 1 Press **SETUP**. The { General Setup Page } appears.



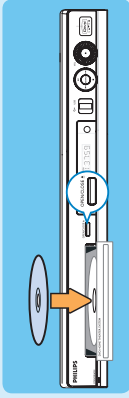
- 2 Press **▶** to select { OSD Language } and press **▶**.
- 3 Use **▶** keys to select a language option in the menu and press **OK** to confirm.
- 4 Press **SETUP** to exit.

Note The language set here is only for the menus that are shown on the TV while operating this DVD system, not for the DVD disc menu.

There are various setup options (Audio Setup, Video Setup, Preference Setup) available on this DVD system. Refer to the user manual for more information.

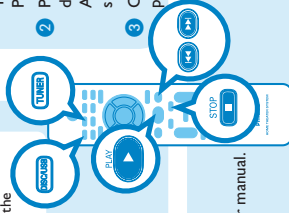
Start disc playback

- 1 Press **OPEN CLOSE** to open the disc tray. Load a disc and close the disc tray.



- 2 Playback will start automatically.
- 3 If the disc menu appears, use **▶** keys to select an option in the menu and press **PLAY ▶** to start playback.
- 4 Press **STOP ■** to stop playback.

Note When you press **PLAY** button again, the playback will resume from its last stopped point. To start playback from the beginning, you have to press **STOP** button two times to cancel the resume mode, then press **PLAY** button.



Troubleshooting

For more troubleshooting tips, see the user manual.

No picture.

- Press **DISCUSB** button on the remote control.
- Check the connection to the TV and ensure the plugs are firmly in place.

No sound.

- Adjust the volume.
- Check the speaker connections and settings.
- Check the audio connections and press **SOURCE** button to select the correct input source.
- The centre and rear speakers operate only in multi-channel surround mode. Press **SURR** button to select multi-channel surround output.

The DVD system does not work.

- Disconnect the power cord from the power outlet for a few minutes. Reconnect the power cord and try again.

Need help?

User Manual
See the user manual that comes with your Philips DVD System

Online

Go to www.philips.com/support



Playback from the USB

- 1 Insert your USB device into the USB port and wait for the message to appear on the screen.



- 2 Press **DISCUSB** to access the contents on your USB device.
- 3 Press **OK** to start playback.
- 4 To stop playback, press **DISCUSB** again to switch to 'DISC' mode. You can unplug your USB device now.

Listen to radio

- 1 Press **TUNER**. The display panel will show "AUTO INSTALL PRESS PLAY."
- 2 Press **PLAY ▶** until "START ..." appears on the display panel. All the available radio stations with strong reception signal will be stored automatically.
- 3 Once complete, use **◀▶** keys to select a preset radio station.

4. Dismantling Instructions

4.1 Dismantling of the DVD Loader Tray Cover

- 1) Insert a minus screwdriver and push the lever in the direction as shown in Figure 4-1 to unlock the tray before sliding it out.



Figure 4-1

- 2) Remove the Tray Cover as shown in Figure 4-2

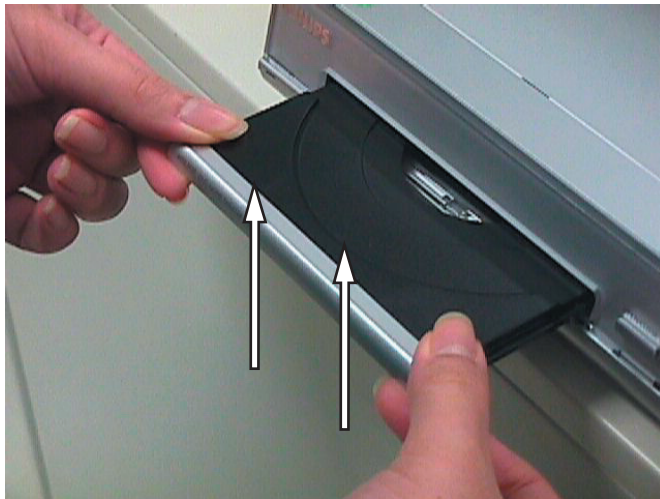


Figure 4-2

4.2 Dismantling of the Front Board, PSU Module & DVD Loader.

- 1) Release 4 snap hooks to remove the Front Board.
 - 1 snap hook each on the left & right side
 - 2 snap hooks on the bottom side
- 2) Loosen 4 screws A (See Figure 4-3) to remove the PSU Module.

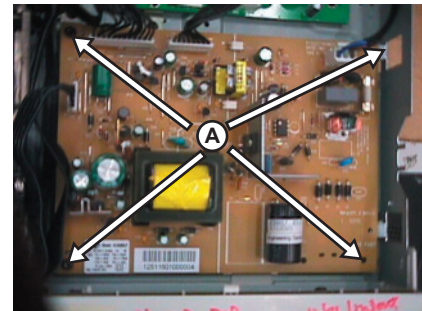


Figure 4 3

- 3) Loosen 4 screws B (See Figure 4-4) to remove the DVD Loader.

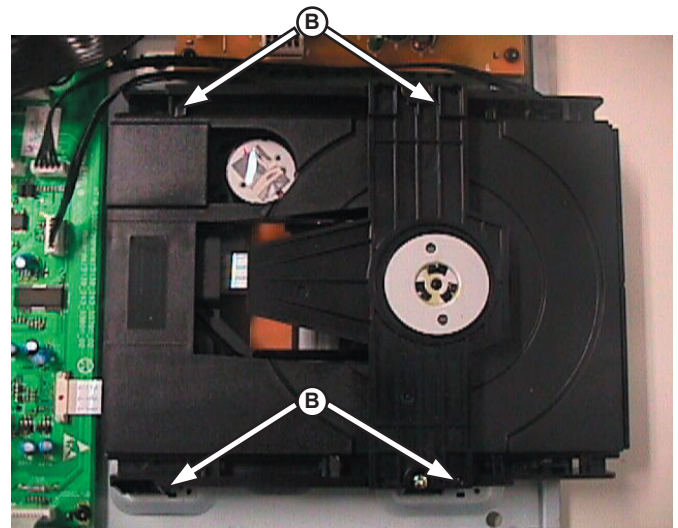


Figure 4-4

4.3 Dismantling of the Tuner Module & Mono Board.

- 1) Loosen 1 screw C (See Figure 4-5) to remove the Tuner Module.



Figure 4-5

- 2) Loosen 2 screws D and E (See Figure 4-6 & Figure 4-7) to remove the Mono Board.

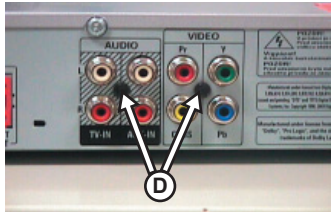


Figure 4-6(AP)

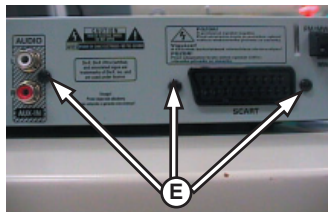


Figure 4-6(Europe)

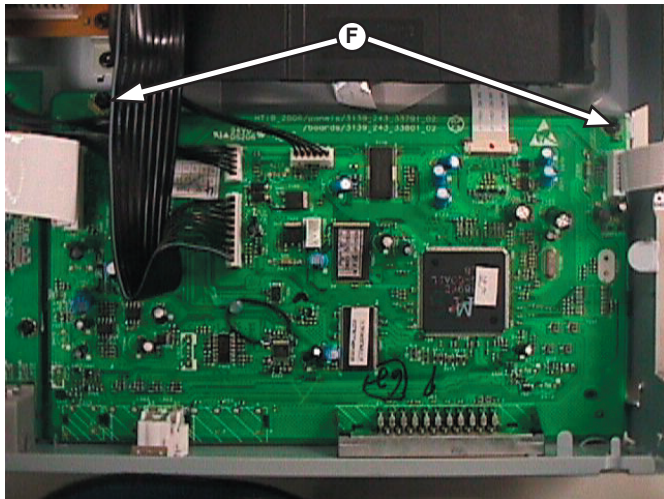


Figure 4-7

4.4 Dismantling of the Amp-module Board

- 1) Loosen 4 screws F and 2 screws G (See Figure 4-8 & Figure 4-9) to remove Amp-Module Board.

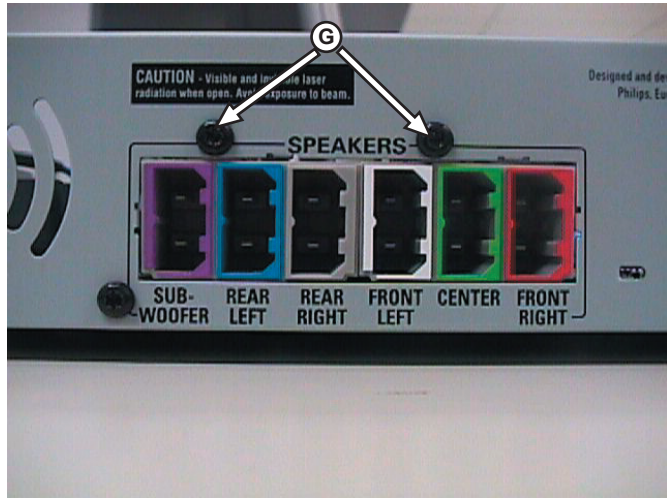


Figure 4-8

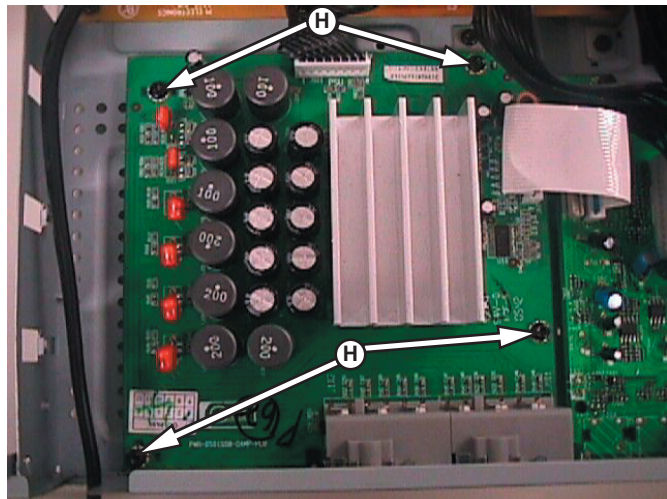
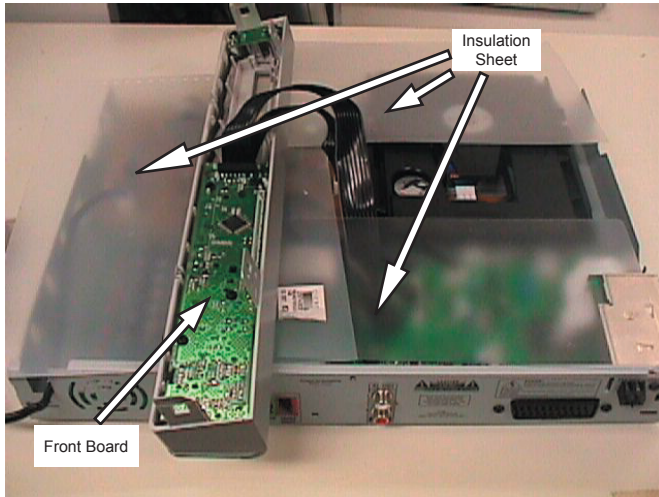
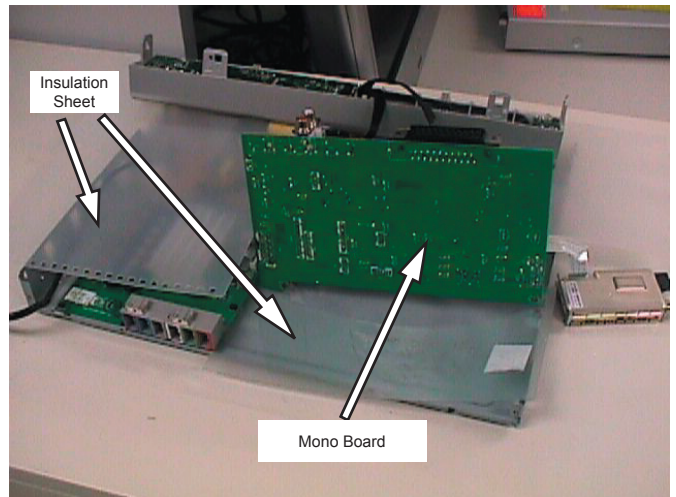


Figure 4-9

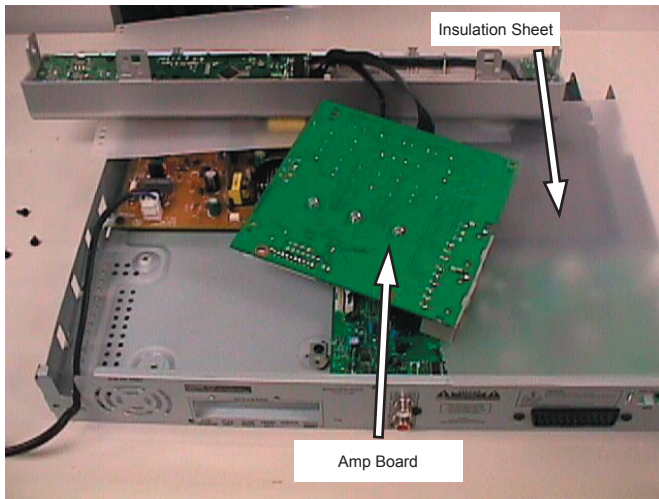
4.5 Service Positions



Service Position - Front Board



Service Position - Mono Board



Service Position -Amp-Board

5. Service Test Program

To start service test program open the tray with remote control or front panel key, while plugging in the mains cord press 2, 5 8 on remote control, the tray will close by itself and the set will display shown "S-Vxx-yy"

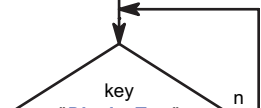
Display shows "SERVICE" followed by ROM version "S-Vxx-yy"

Main Menu

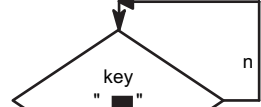
Display Test



Activate and display "Pattern1"



Activate and display "Pattern2"



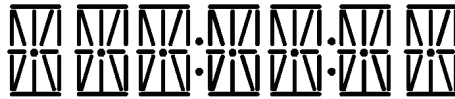
- S refers to Service Mode
- V refers to Version
- xx refers to Software version number of BEA (counting up from 01 to 99)
- yy refers to Software version number of Front uP (counting up from 01 to 99)

5.1 Display Test

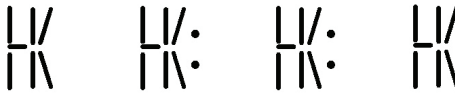
Purpose:
 This test is used to check the driving circuits, the display and whether there are any short-circuits, open-circuits or any other defects.

Player:
 Following display patterns are used to test the display and its connections to μP.

Pattern 1: *Default: All display control pins are ON*
 - to check the open-circuits



Pattern 2: *Alternate display control pins are on (Test Pattern: 0x55)*
 - to check the short-circuits on Data port

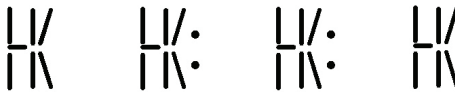


Receiver: (HTS3100/3105):
 Following display patterns are used to test the display and its connections to μP.

Pattern 1: *Default: All display control pins are ON*
 - to check the open-circuits



Pattern 2: *Alternate display control pins are on (Test Pattern: 0x55)*
 - to check the short-circuits on Data port



5.1.1 Reprogramming of DVD version Matrix

After repair, the customer setting and region code may be lost. Reprogramming will put the set back in the state in which it has left the factory, ie. with the default setting and the allowed region code.

Model	Region	Region Code	TV Type
HTS 3115/05	UK, Ireland	2	PAL
HTS 3115/12	Europe	2	PAL

To reprogram do as follows:

- 1) Power up the set and select DISC source.
- 2) Open tray by press "OPEN/CLOSE" button on the set or press and hold "STOP" button on the RC.
- 3) Press the following buttons on the Remote Control:
 <9> <9> <9> <9> <Subtitle> <2>for HTS 3115/05
 <9> <9> <9> <9> <Subtitle> <0>for HTS 3115/12
- 4) The display shows 'YYYY-ZZ' and the tray will close.
 YYYY = model number (eg. 8300, 8500, etc.)
 ZZ = slash stroke version (eg. 01, 69, etc.)

5.1.2 Procedure for check Software version

- 1) Power up the set and select DISC source.
- 2) Open tray by press "OPEN/CLOSE" button on the set or press and hold "STOP" button on the RC.
- 3) Press "DISPLAY" button on the Remote control.
- 4) The TV screen will shows:

PPPP-Vxx YYYYY-ZZ
SERVO: GGGGGGGG REG:DD

PPPP = HTS 3115
 xx = version number
 YYYYY = model # - 3300D
 ZZ = stroke version (12, 51, 05, 98, 55, 51K)
 GGGGGGGG = version for servo code

5.1.3 Burning of firmware

1. Unzip the zip-archive attached with this service information.
2. Start the CD burning software and create a new CD Project (Data disc) with the following settings:
 - a. File System: ISO9660
 - b. Format: MODE 2/XA
 - c. Recording format: Single Session (Track at once), Finalized CD
3. Place the content of the zip-archive into the root directory of the new CD project.
4. Burn the data onto a blank CDR or CDRW.

Note: ISO9660 is mandatory, UDF discs are not supported!
 The final CDROM must not contain any other data except the file from the zip-archive.

5.1.4 Procedure to upgrade the firmware

1. Power up the set and open tray.
2. Insert the prepared Upgrade CDROM and close the tray.
3. The set will display:

LOAD -> Firmware Version ->.....->UPG END.
 The whole process takes less than 2 minutes.

Note: Do not press any button or interrupt the main supply upgrading process, Otherwise the set may become defective.

4. When the upgrade is completed, the tray will close automatic.
5. The tray will close and the set will go to Standby mode automatically when the upgrade process is completed.

5.1.5 Procedure to check the firmware version to confirm upgrading

1. Power up the set and open tray.
2. Press the <Menu Display> button on the Remote Control.
3. The firmware version will be displayed on the top left hand corner of the OSD.

5.1.6 Trade Mode

Trade mode is a feature that will block all set keys when enabled. It is for dealers to prevent customers from removing disc, changing source etc using the set keys. Rotary and Remote Control (RC) keys are still allowed in Trade mode.

To activate Trade Mode:

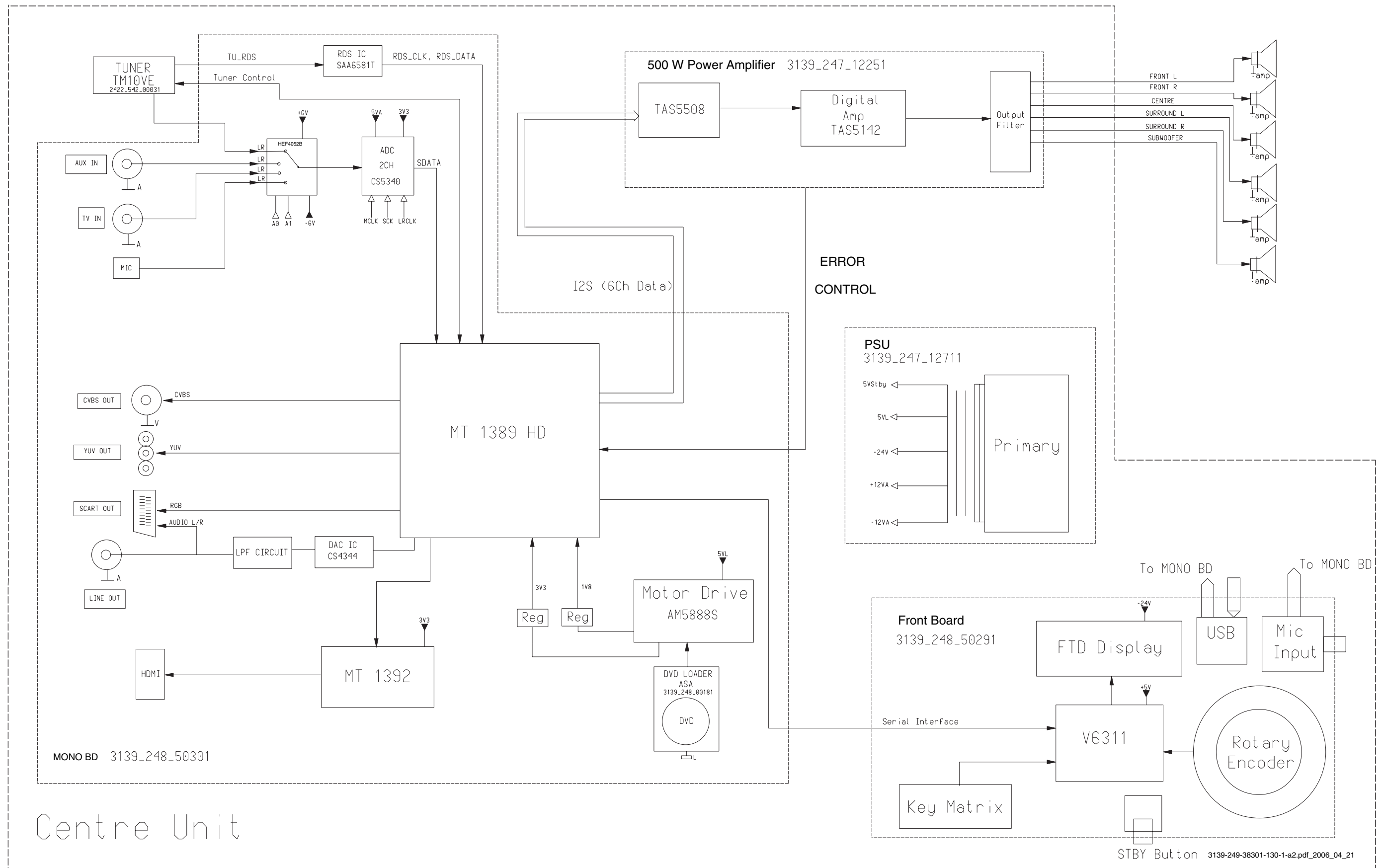
- 1) Power up the set and select DISC source.
- 2) Open tray by press "OPEN/CLOSE" button on the set or press and hold "STOP" button on the RC.
- 3) Then press buttons <2> <5> <9> on the RC.
- 4) The display shows 'TRA ON' and the tray will close. Trade Mode is now enabled.

To deactivate Trade Mode:

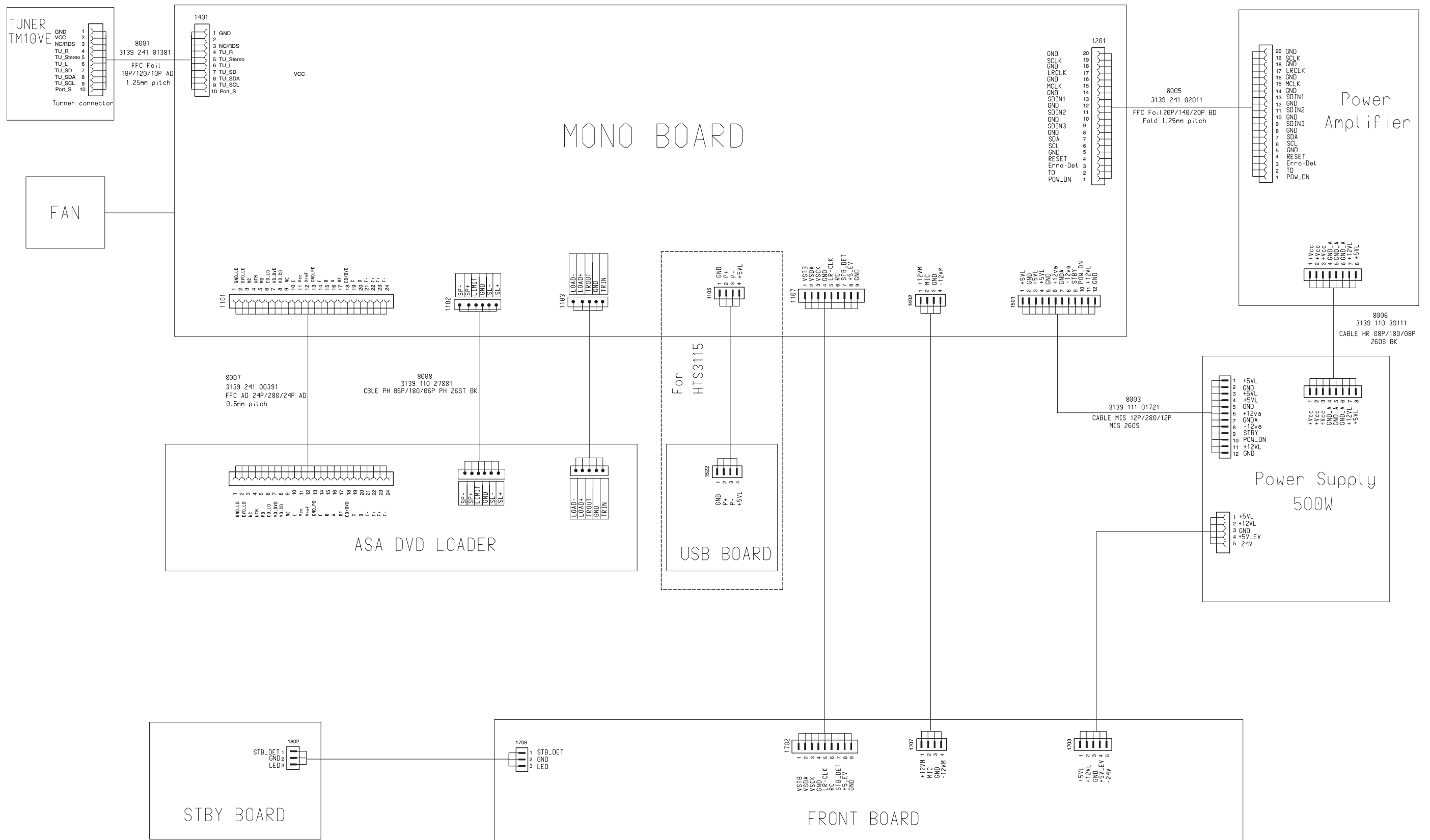
- 1) Power up the set and select DISC source.
- 2) Open tray by press and hold "STOP" button on the RC.
- 3) Then press buttons <2> <5> <9> on the RC.
- 4) The display shows 'TRA OFF' and the tray will close. Trade Mode is now disabled.

Notes:

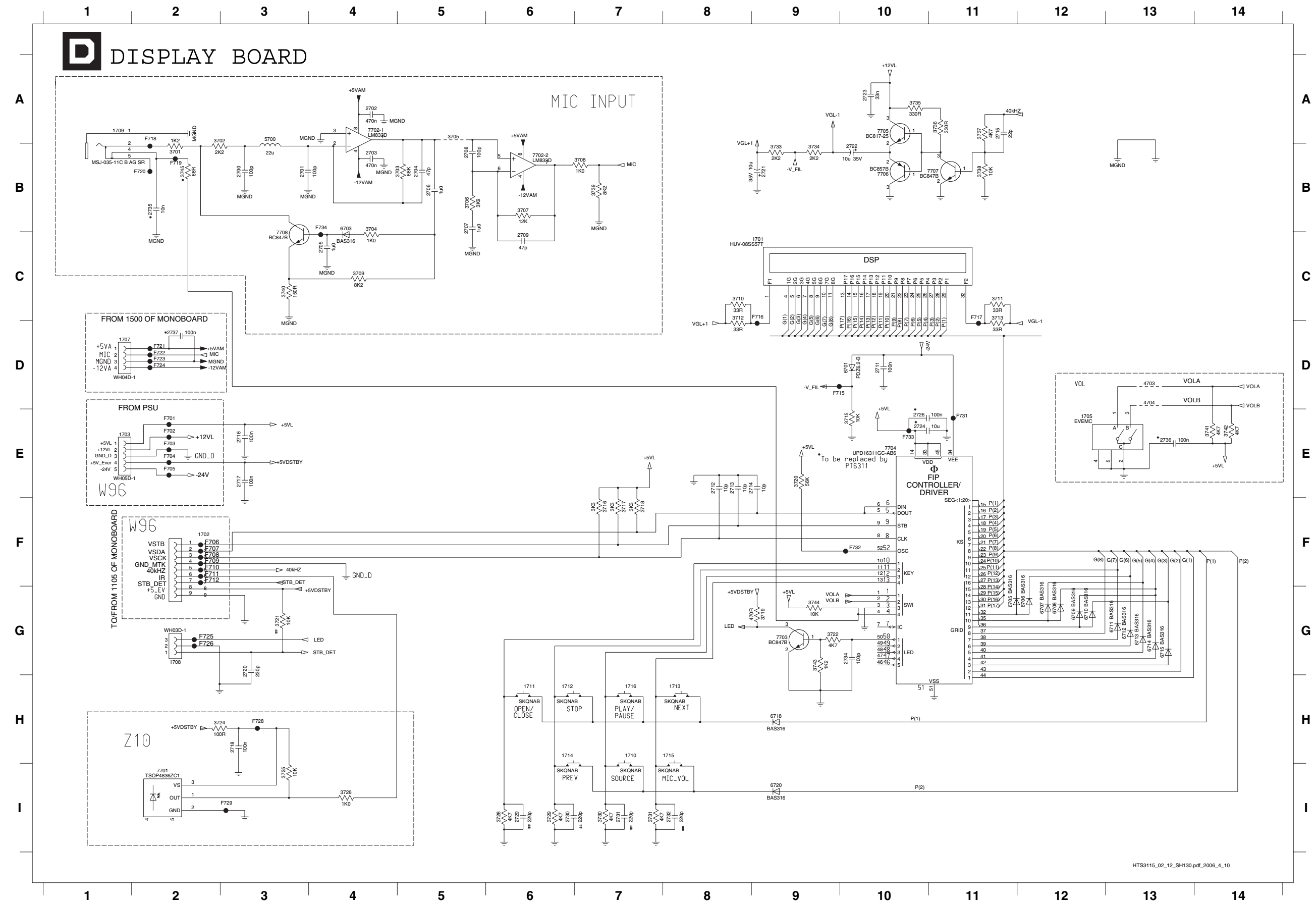
Block Diagram



Wiring Diagram

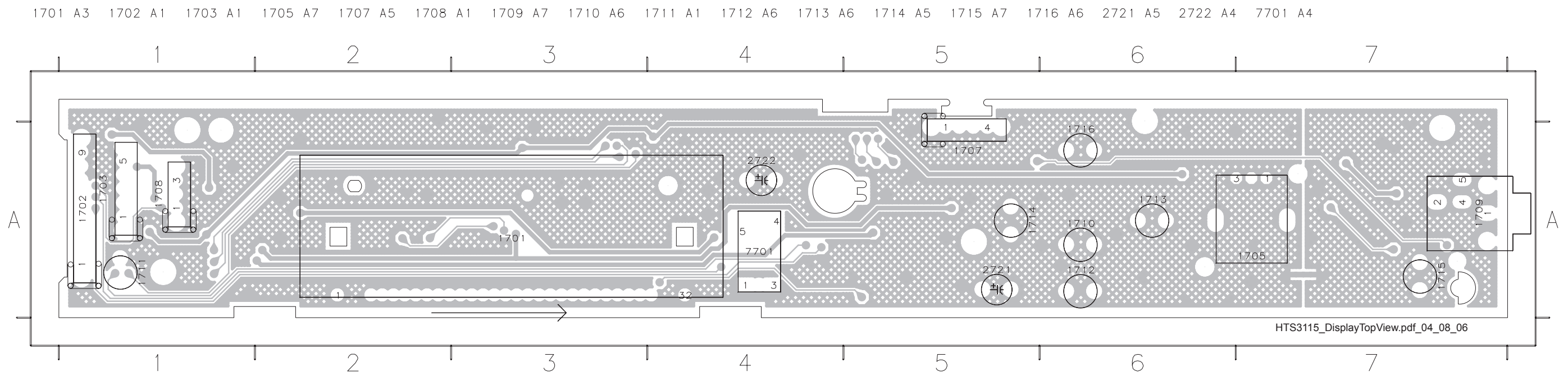


Front: Display



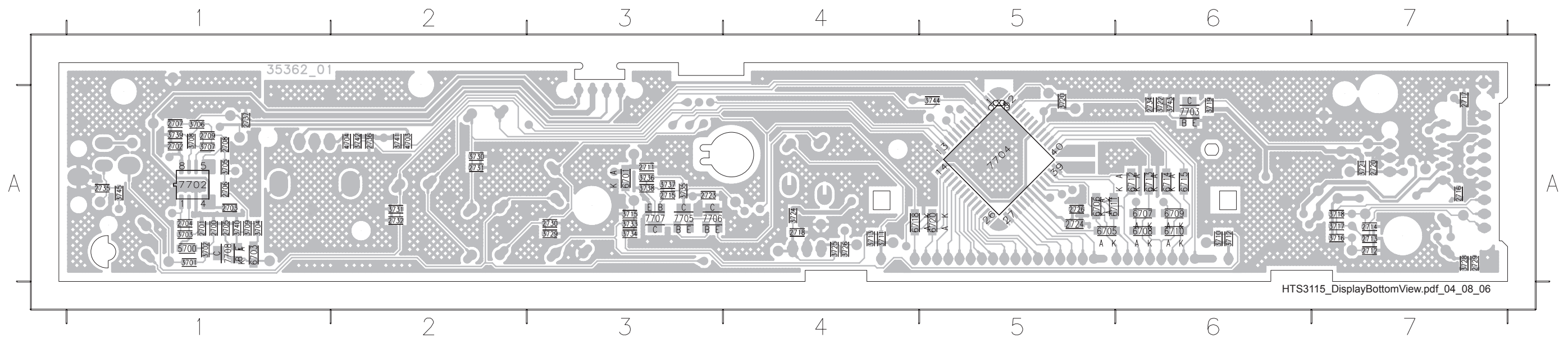
- 1701 C9
- 1702 F2
- 1703 E1
- 1705 E12
- 1707 D1
- 1708 G2
- 1709 A1
- 1710 H7
- 1711 H6
- 1712 H6
- 1713 H8
- 1714 H6
- 1715 H8
- 1716 H7
- 2700 B3
- 2701 B3
- 2702 A4
- 2703 B4
- 2704 B5
- 2705 C4
- 2706 B5
- 2707 B5
- 2708 B5
- 2709 C6
- 2711 D10
- 2712 E8
- 2713 E8
- 2714 E9
- 2715 A11
- 2716 E3
- 2717 E3
- 2718 H3
- 2720 G3
- 2721 B9
- 2722 B10
- 2723 A10
- 2724 E10
- 2726 E10
- 2729 I6
- 2730 I6
- 2731 I7
- 2732 I8
- 2734 G10
- 2735 B2
- 2736 E13
- 2737 D2
- 3701 B2
- 3702 A2
- 3703 B5
- 3704 B4
- 3705 A5
- 3706 B5
- 3707 B6
- 3708 B7
- 3709 C4
- 3710 C8
- 3711 C11
- 3712 C8
- 3713 C11
- 3715 E10
- 3716 F7
- 3717 F7
- 3718 F7
- 3719 G9
- 3720 E9
- 3721 G3
- 3722 G9
- 3724 H2
- 3725 I3
- 3726 I4
- 3728 I6
- 3729 I6
- 3730 I7
- 3731 I7
- 3733 B9
- 3734 B9
- 3735 A10
- 3736 A11
- 3737 A11
- 3738 B11
- 3739 B7
- 3740 C3
- 3741 E14
- 3742 E14
- 3743 G9
- 3744 G9
- 3745 B2
- 4703 D13
- 4704 D13
- 5700 A3
- 6701 D10
- 6703 B4
- 6705 G11
- 6706 G12
- 6707 G12
- 6708 G12
- 6709 G12
- 6710 G12
- 6711 G13
- 6712 G13
- 6713 G13
- 6714 G13
- 6715 G13
- 6718 H9
- 6720 I9
- 7701 I2
- 7702-1 A4
- 7702-2 B6
- 7703 G9
- 7704 E10
- 7705 A10
- 7706 B10
- 7707 B11
- 7708 C3
- F701 E2
- F702 E2
- F704 E2
- F705 E2
- F706 F2
- F707 F2
- F708 F2
- F709 F2
- F710 F2
- F711 F2
- F712 F2
- F715 D9
- F716 C9
- F717 C11
- F718 A2
- F719 B2
- F720 B2
- F721 D2
- F722 D2
- F723 D2
- F724 D2
- F725 G2
- F726 G2
- F728 H3
- F729 I3
- F731 E11
- F732 F10
- F733 E10
- F734 B4

Front: Display (topview)

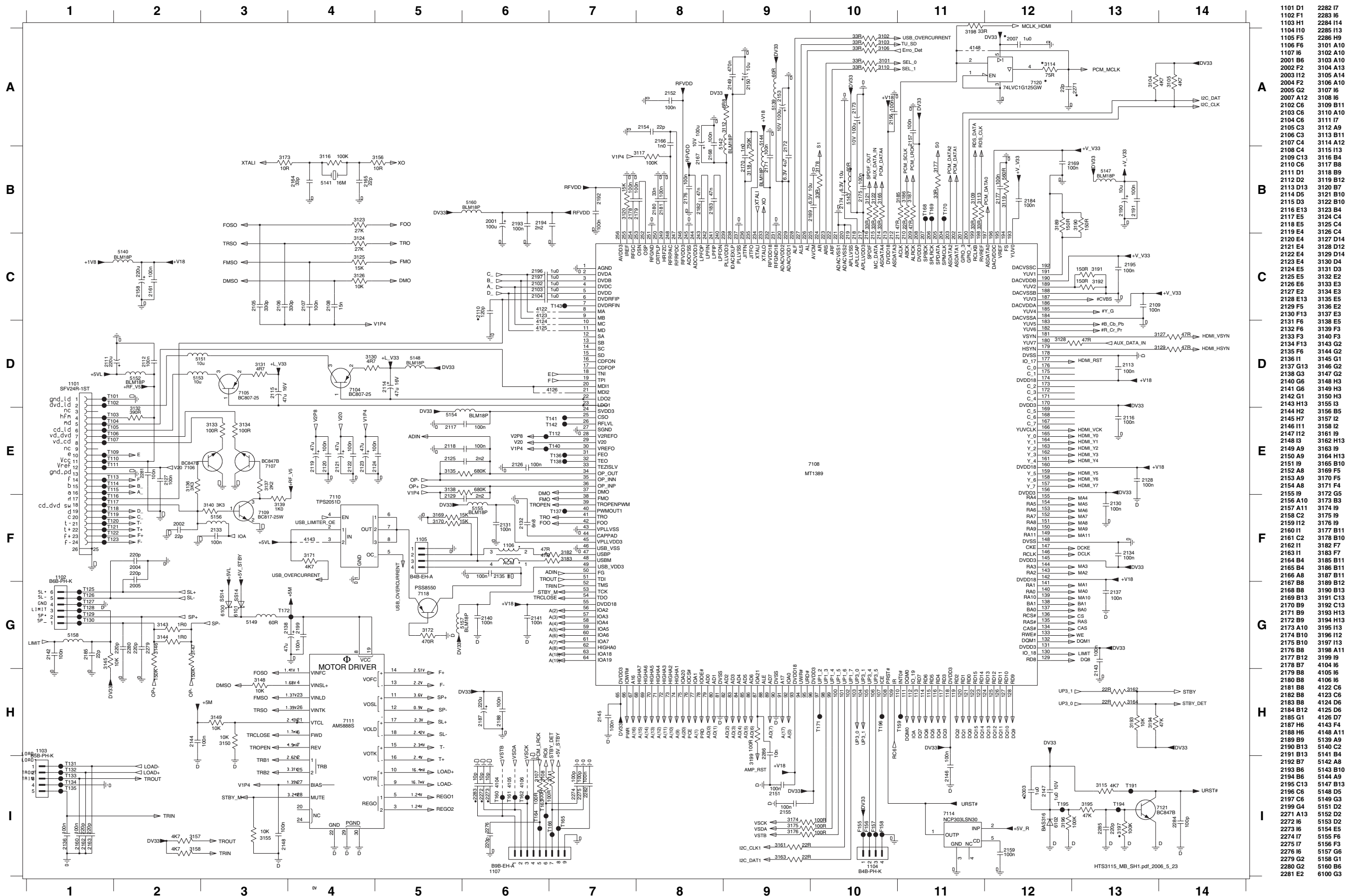


Front: Display (Bottom view)

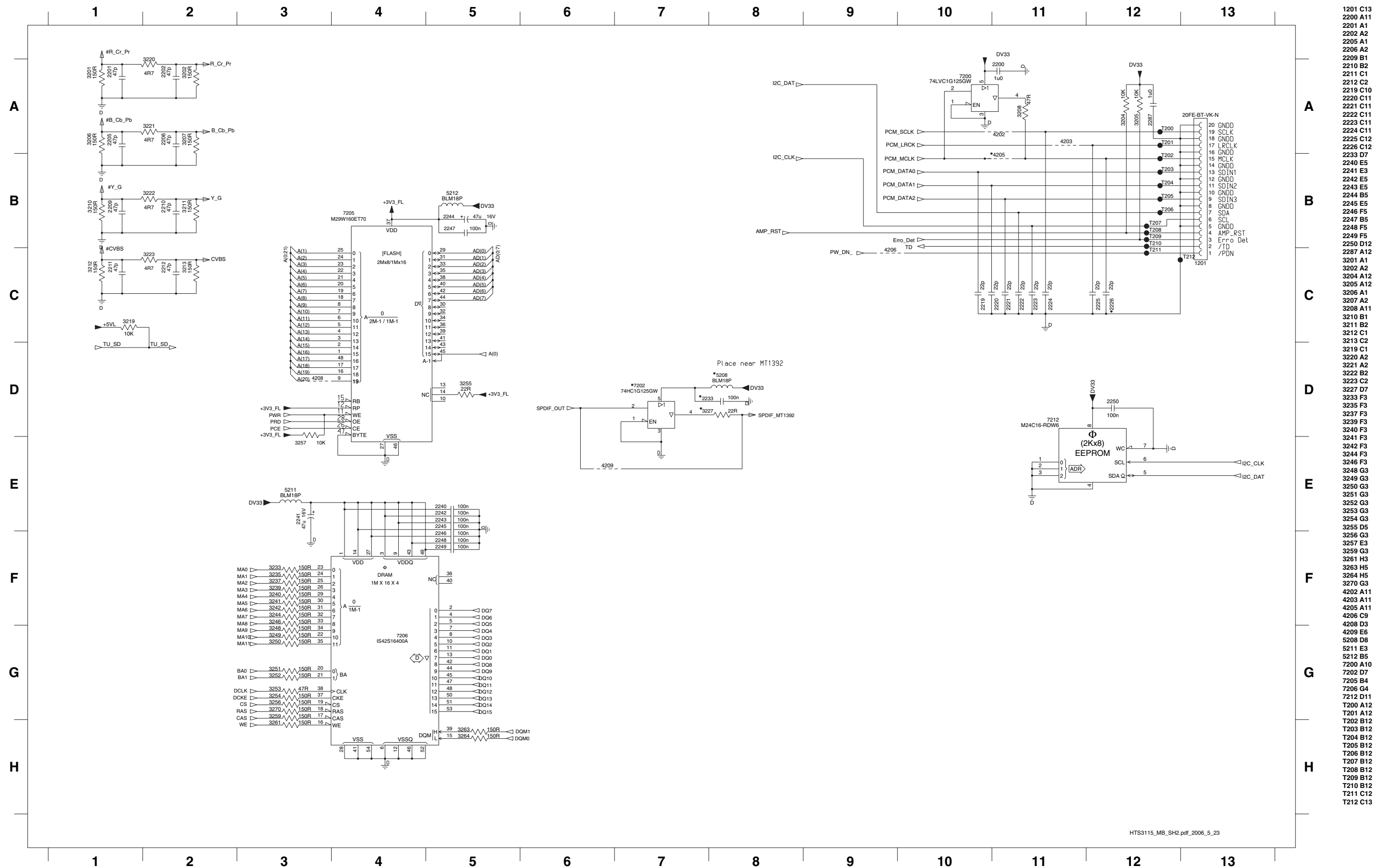
2700	A1	2705	A1	2711	A3	2716	A7	2724	A5	2732	A2	3701	A1	3706	A1	3711	A4	3717	A7	3722	A6	3729	A3	3735	A3	3740	A1	3745	A1	6703	A1	6709	A6	6714	A6	7703	A6	7708	A1
2701	A1	2706	A1	2712	A7	2717	A7	2726	A5	2734	A6	3702	A1	3707	A1	3712	A6	3718	A7	3724	A4	3730	A2	3736	A3	3741	A2	3746	A2	6704	A2	6710	A6	6715	A6	7704	A5		
2702	A1	2707	A1	2713	A7	2718	A4	2729	A7	2735	A1	3703	A1	3708	A1	3713	A4	3719	A6	3725	A4	3731	A2	3737	A3	3742	A2	4703	A2	6705	A5	6711	A5	6716	A4	7705	A3		
2703	A1	2708	A1	2714	A7	2720	A7	2730	A3	2736	A2	3704	A1	3709	A1	3715	A3	3720	A5	3726	A4	3733	A3	3738	A3	3743	A6	4704	A2	6706	A5	6712	A6	6717	A4	7706	A3		
2704	A1	2709	A1	2715	A3	2723	A3	2731	A2	2737	A1	3705	A1	3710	A6	3716	A7	3721	A7	3728	A7	3734	A3	3739	A1	3744	A5	6701	A3	6707	A6	6713	A6	7702	A1	7707	A3		



Mono Board: Circuit Diagram (Part 1)



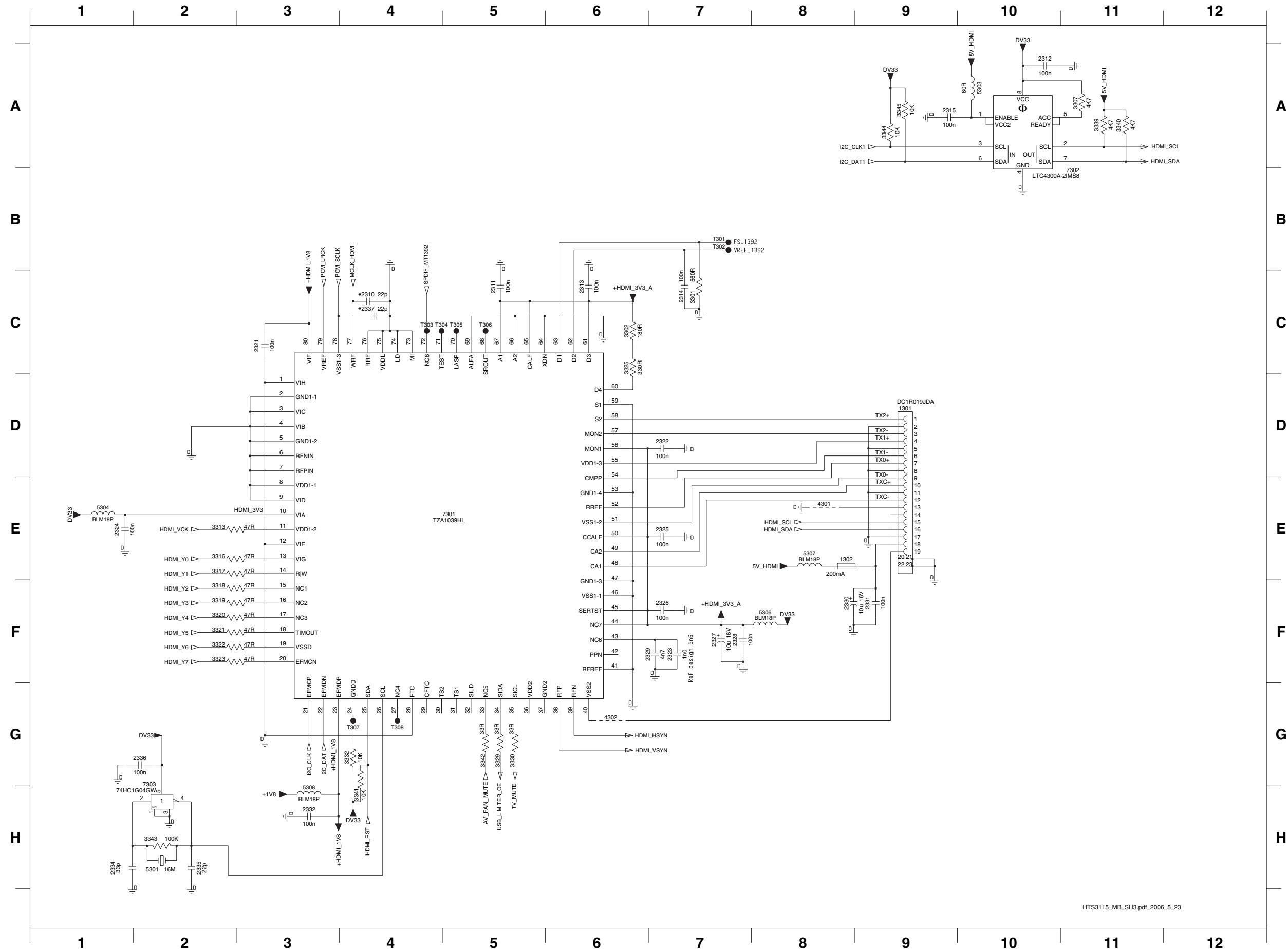
Mono Board: Circuit Diagram (Part 2)



- 1201 C13
- 2200 A11
- 2201 A1
- 2202 A2
- 2205 A1
- 2206 A2
- 2209 B1
- 2210 B2
- 2211 C1
- 2212 C2
- 2219 C10
- 2221 C11
- 2222 C11
- 2223 C11
- 2224 C11
- 2225 C12
- 2226 C12
- 2233 D7
- 2240 E5
- 2241 E3
- 2242 E5
- 2243 E5
- 2244 B5
- 2245 E5
- 2246 F5
- 2247 B5
- 2248 F5
- 2249 F5
- 2250 D12
- 2287 A12
- 3201 A1
- 3202 A2
- 3204 A12
- 3205 A12
- 3206 A1
- 3207 A2
- 3210 B1
- 3211 B2
- 3212 C1
- 3213 C2
- 3219 C1
- 3220 A2
- 3221 A2
- 3222 B2
- 3223 C2
- 3227 D7
- 3233 F3
- 3235 F3
- 3237 F3
- 3239 F3
- 3240 F3
- 3241 F3
- 3242 F3
- 3244 F3
- 3246 F3
- 3248 G3
- 3249 G3
- 3250 G3
- 3251 G3
- 3252 G3
- 3253 G3
- 3254 G3
- 3255 D5
- 3256 G3
- 3257 E3
- 3259 G3
- 3261 H3
- 3263 H5
- 3264 H5
- 3270 G3
- 4202 A11
- 4203 A11
- 4205 A11
- 4206 C9
- 4208 D3
- 4209 E6
- 5208 D8
- 5211 E3
- 5212 B5
- 7200 A10
- 7202 D7
- 7206 G4
- 7212 D11
- T200 A12
- T201 A12
- T202 B12
- T203 B12
- T204 B12
- T205 B12
- T206 B12
- T207 B12
- T208 B12
- T209 B12
- T210 B12
- T211 C12
- T212 C13

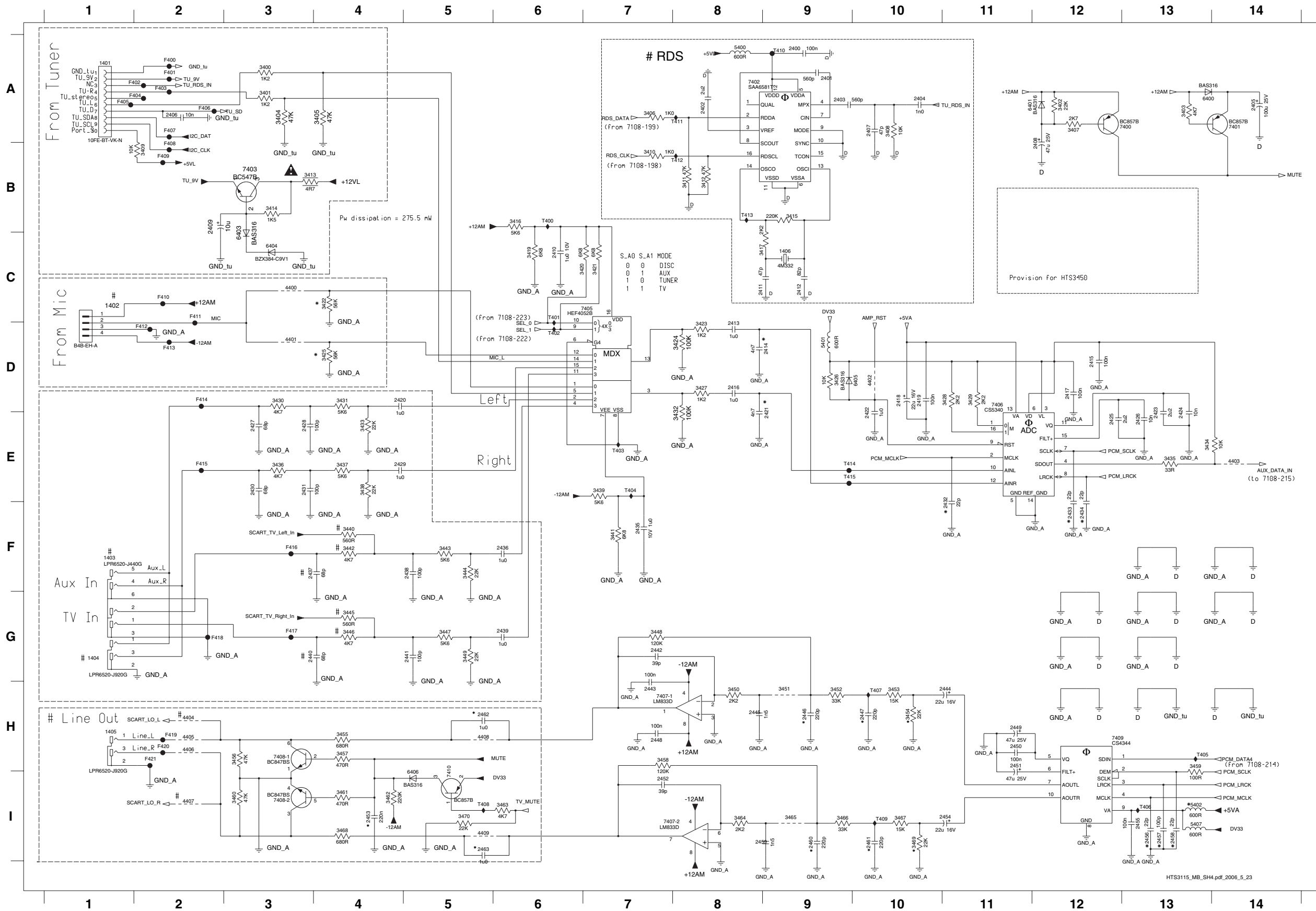
HTS3115_MB_SH2.pdf_2006_5_23

Mono Board: Circuit Diagram (Part 3)



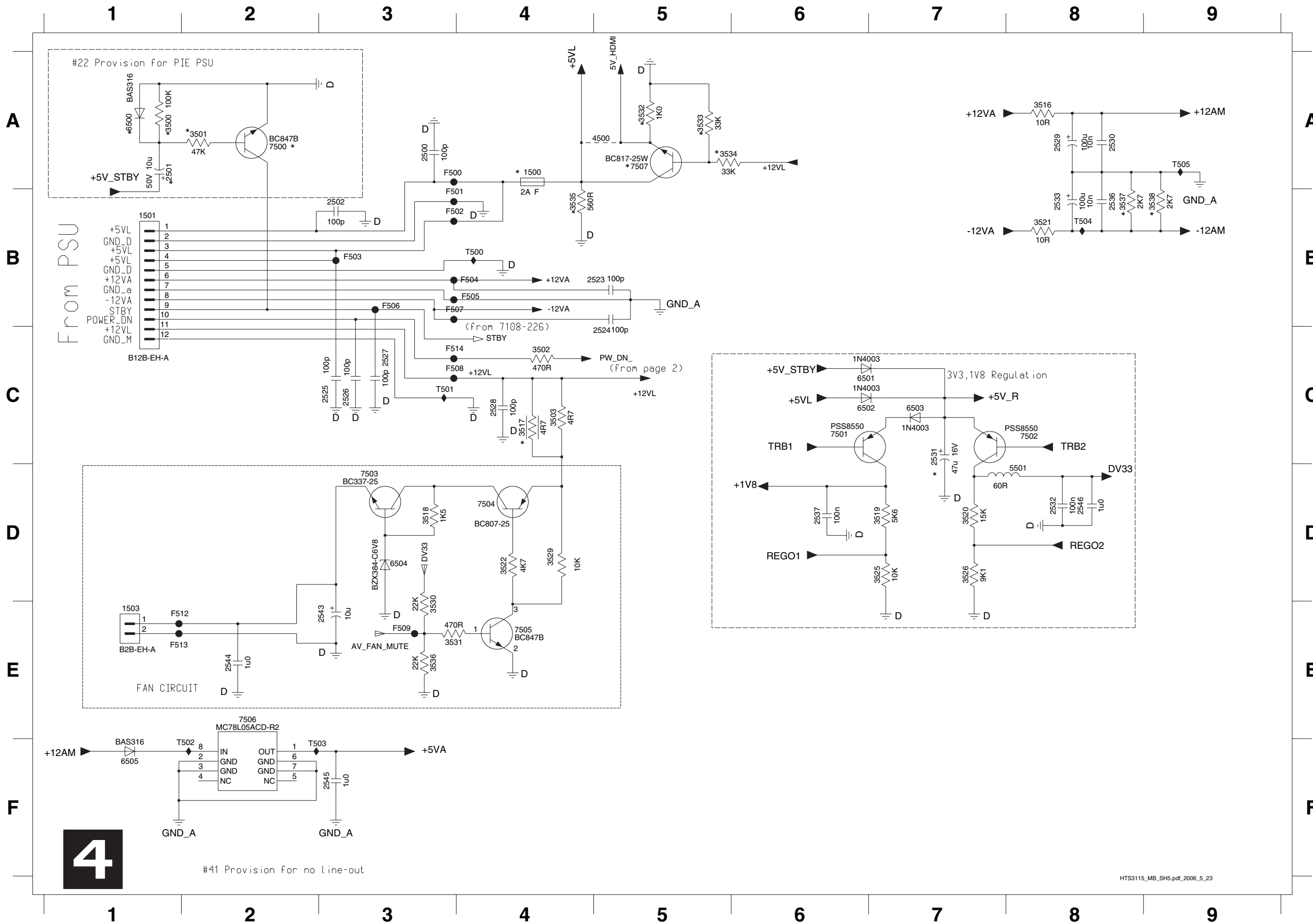
- 1301 D9
- 1302 E8
- 2310 C4
- 2311 C5
- 2312 A10
- 2313 C6
- 2314 C7
- 2315 A9
- 2321 C3
- 2322 D7
- 2323 F7
- 2324 E1
- 2325 E7
- 2326 F7
- 2327 F7
- 2328 F7
- 2329 F7
- 2330 F8
- 2331 F9
- 2332 H3
- 2334 H1
- 2335 H2
- 2336 G2
- 2337 C4
- 3301 C7
- 3302 C6
- 3307 A11
- 3313 E2
- 3316 E2
- 3317 E2
- 3318 F2
- 3319 F2
- 3320 F2
- 3321 F2
- 3322 F2
- 3323 F2
- 3325 C6
- 3329 G5
- 3330 G5
- 3332 G4
- 3339 A11
- 3340 A11
- 3341 H4
- 3342 G5
- 3343 H2
- 3344 A9
- 3345 A9
- 4301 E8
- 4302 G6
- 5301 H2
- 5303 A10
- 5304 E1
- 5306 F8
- 5307 E8
- 5308 H3
- 7301 E5
- 7302 B11
- 7303 H2
- T301 B7
- T302 B7
- T303 C4
- T304 C4
- T305 C5
- T306 C5
- T307 G4
- T308 G4

Mono Board: Circuit Diagram (Part 4)



1401 A1	3446 G4
1402 C1	3447 G5
1403 F1	3448 F7
1404 G1	3449 G5
1405 H1	3450 H8
1406 C9	3451 H9
2400 A9	3452 H9
2401 A9	3453 H10
2402 A8	3454 H10
2403 A9	3455 H4
2404 A10	3456 H3
2405 A14	3457 H4
2406 A2	3458 H7
2407 A10	3459 H13
2408 B12	3460 I3
2409 B2	3461 I4
2410 C6	3462 I4
2411 C8	3463 I6
2412 C9	3464 I8
2413 D8	3465 I9
2414 D9	3466 I9
2415 D12	3467 I10
2416 D8	3468 I4
2417 D12	3469 I10
2418 I5	3470 I5
2419 D10	4400 C3
2420 D4	4401 D3
2421 E9	4402 D10
2422 E10	4403 E14
2423 E13	4404 H2
2424 E13	4405 H2
2425 E12	4406 H2
2426 E13	4407 I2
2427 E3	4408 H5
2428 E3	4409 I5
2429 E4	5400 A8
2430 E3	5401 D9
2431 E3	5402 I13
2432 F11	5403 I13
2433 F12	6400 A12
2434 F12	6401 A11
2435 F7	6403 C3
2436 F6	6404 C3
2437 F3	6405 D10
2438 F5	6406 I5
2439 G6	7400 A12
2440 G3	7401 A14
2441 G5	7402 H8
2442 G7	7403 B3
2443 H7	7405 C7
2444 H11	7406 D11
2445 H8	7407-1 H7
2446 H9	7407-2 I8
2447 H10	7408-1 H3
2448 H7	7409-2 I3
2449 H11	7409 H12
2450 H11	7410 I5
2451 H11	F400 A2
2452 I7	F401 A2
2453 I4	F402 A2
2454 I11	F403 A2
2455 I13	F404 A2
2456 I13	F405 A1
2457 I13	F406 A2
2458 I13	F407 A2
2459 I8	F408 B2
2460 I9	F409 B2
2461 H0	F410 C2
2462 H5	F411 C2
2463 I5	F412 D2
3400 A3	F413 D2
3401 A3	F414 D2
3402 A12	F415 E2
3403 A13	F416 F3
3404 A3	F417 G3
3405 A4	F418 G2
3406 A7	F419 H2
3407 A12	F420 H2
3408 A10	F421 H2
3409 B7	T400 B6
3410 B7	T401 C6
3411 B8	T402 D6
3412 B8	T403 E7
3413 B3	T404 E7
3414 B3	T405 H13
3415 B9	T406 H13
3416 B6	T407 H10
3417 C9	T408 I5
3419 C6	T409 I10
3420 C7	T410 A9
3421 C7	T411 A8
3422 C4	T412 B8
3423 D8	T413 B8
3424 D8	T414 E9
3425 D4	T415 E9
3426 D9	
3427 D8	
3428 D11	
3429 D11	(From 7108-214)
3430 D3	PCM_SCLK
3431 D4	PCM_LRCK
3432 E8	PCM_MCLK
3433 E4	
3434 E13	
3435 E3	
3436 E3	
3437 E4	
3438 E4	
3439 E7	
3440 F4	
3441 F7	
3442 F4	
3443 F5	
3444 F5	
3445 G4	

Mono Board: Circuit Diagram (Part 5)



- 1500 A4
- 1501 B1
- 1503 E1
- 2500 A3
- 2501 A1
- 2502 B3
- 2523 B5
- 2524 C5
- 2525 C3
- 2526 C3
- 2527 C3
- 2528 C4
- 2529 A8
- 2530 A8
- 2531 C7
- 2532 D8
- 2533 B8
- 2536 B8
- 2537 D6
- 2543 E3
- 2544 E2
- 2545 F3
- 2546 D8
- 3500 A1
- 3501 A2
- 3502 C4
- 3503 C4
- 3516 A8
- 3517 C4
- 3518 D3
- 3519 D7
- 3520 D7
- 3521 B8
- 3522 D4
- 3525 D7
- 3526 D7
- 3529 D4
- 3530 E3
- 3531 E3
- 3532 A5
- 3533 A5
- 3534 A5
- 3535 B4
- 3536 E3
- 3537 B8
- 3538 B9
- 4500 A5
- 5501 D8
- 6500 A1
- 6501 C6
- 6502 C6
- 6503 C7
- 6504 D3
- 6505 F1
- 7500 A2
- 7501 C6
- 7502 C8
- 7503 D3
- 7504 D4
- 7505 E4
- 7506 E2
- 7507 A5
- F500 A3
- F501 B3
- F502 B3
- F503 B3
- F504 B4
- F505 B4
- F506 B3
- F507 B3
- F508 C3
- F509 E3
- F512 E1
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- F514 C3
- T500 B4
- T501 C3
- T502 F2
- T503 F2
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- T505 A9

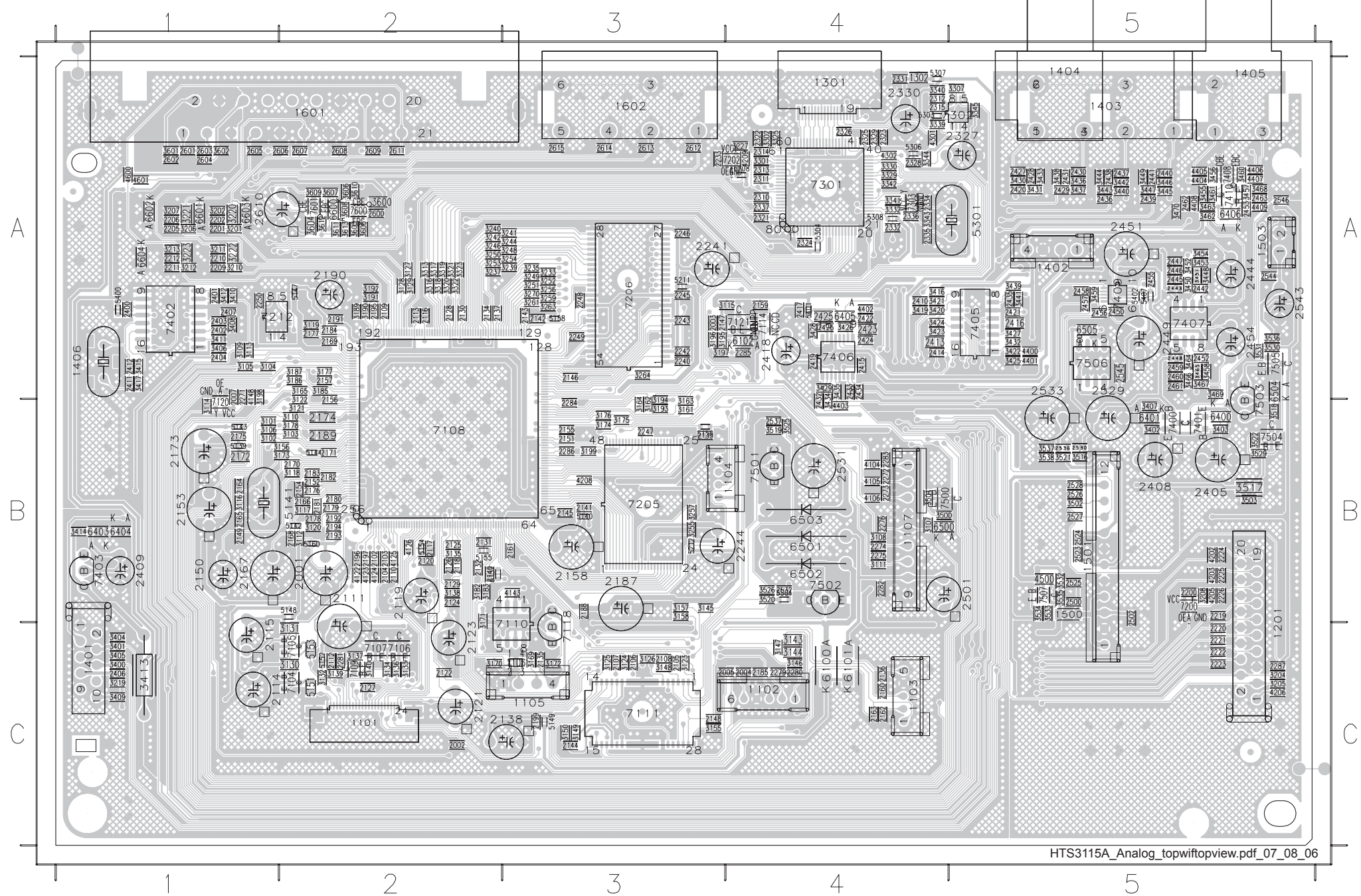
4

#41 Provision for no line-out

Layout: Mono Board (Top view)

1101 C2	2004 C4	2123 C2	2148 C3	2172 B1	2197 B2	2244 B4	2312 A4	2404 A1	2428 A5	2452 A5	2532 B4	3101 B1	3125 C3	3155 C3	3189 A2	3414 B1	3610 A2	7106 C2
1102 C4	2005 C4	2124 B2	2149 B1	2173 B1	2199 C3	2245 A3	2313 A4	2405 B5	2429 A5	2453 A5	2533 A5	3102 B1	3126 C3	3156 B2	3190 A2	3415 A1	3611 A2	7107 C2
1103 C4	2007 A1	2125 B2	2150 B1	2174 B2	2200 B5	2246 A3	2314 A4	2406 C1	2430 A5	2454 A5	2536 B5	3103 B2	3127 A2	3157 B3	3191 A2	3416 A1	3612 A2	7108 B2
1104 B4	2102 B2	2126 B2	2151 B3	2175 B1	2201 A1	2247 A3	2315 A4	2407 A1	2431 A5	2455 A5	2537 B4	3104 A1	3128 A2	3158 B3	3192 A2	3417 A1	3613 A2	7109 C2
1105 C3	2103 B2	2127 C2	2152 B2	2176 B2	2202 A1	2248 A3	2321 A4	2408 B5	2432 B4	2456 A5	2543 A5	3105 A1	3129 A2	3161 B3	3193 B3	3419 A4	4104 B4	7110 C3
1106 C3	2104 B2	2128 A2	2153 B1	2177 A2	2205 A1	2249 A3	2322 A4	2409 B1	2433 A4	2457 A5	2544 A5	3106 B1	3130 C2	3162 B3	3194 B3	3420 A4	4105 B4	7111 C3
1107 B4	2105 C3	2129 B2	2154 B2	2178 B2	2206 A1	2250 A1	2323 A4	2410 A4	2434 A4	2458 A5	2545 A5	3107 B4	3131 C2	3163 B3	3195 A3	3421 A4	4106 B4	7114 A4
1201 C5	2106 C3	2130 A2	2155 B3	2179 B2	2209 A1	2271 A1	2324 A4	2411 A1	2435 A5	2459 A5	2546 A5	3108 B4	3132 C2	3164 A2	3196 A3	3422 A5	4122 B2	7118 C3
1301 A4	2107 C3	2131 B2	2156 B2	2180 B2	2210 A1	2272 B4	2325 A4	2412 A1	2436 A5	2460 A5	2600 A2	3109 A1	3133 C2	3165 A3	3197 A3	3423 A4	4123 B2	7120 B1
1302 A4	2108 C3	2132 B2	2157 A2	2181 B2	2211 A1	2273 B4	2326 A4	2413 A4	2437 A5	2461 A5	2601 A1	3110 B2	3134 C2	3169 C3	3198 A1	3424 A4	4124 B2	7121 A4
1401 C1	2109 A2	2133 B3	2158 B3	2182 B2	2212 A1	2274 B4	2327 A5	2414 A4	2438 A5	2462 A5	2602 A1	3111 B4	3135 B2	3170 B2	3199 B3	3425 A5	4125 B2	7200 B5
1402 A5	2110 B2	2134 A2	2159 A4	2183 B2	2219 B5	2275 B4	2328 A4	2415 A4	2439 A5	2463 A5	2603 A1	3112 B2	3136 C2	3171 B2	3201 A1	3426 A4	4126 B2	7202 A4
1403 A5	2111 B2	2135 C3	2160 C4	2184 A2	2220 C5	2276 B4	2329 A4	2416 A5	2440 A5	2500 B5	2604 A1	3113 A1	3137 C2	3172 C3	3202 A1	3427 A5	4143 B3	7205 B3
1404 A5	2112 C2	2136 C4	2161 B3	2185 C4	2221 C5	2277 A4	2330 A4	2417 A4	2441 A5	2501 B5	2605 A1	3114 B1	3138 B2	3173 B2	3204 C5	3428 A4	4148 A1	7206 A3
1405 A5	2113 A2	2137 A2	2162 C4	2187 B3	2222 C5	2280 C4	2331 A4	2418 A4	2442 A5	2502 B5	2606 A2	3115 A4	3139 C2	3174 B3	3205 C5	3429 A4	4202 B5	7212 A1
1406 A1	2114 C1	2138 C3	2163 C4	2188 B3	2223 C5	2281 C2	2332 A4	2419 A4	2443 A5	2523 B5	2607 A2	3116 B1	3140 C2	3175 B3	3206 A1	3430 A5	4203 B5	7301 A4
1500 B5	2115 C1	2140 B2	2164 B1	2189 B2	2224 B5	2282 B4	2334 A4	2420 A5	2444 A5	2524 B5	2608 A2	3117 B2	3143 C4	3176 B3	3207 A1	3431 A5	4205 B5	7302 A5
1501 B5	2116 A2	2141 B3	2165 B1	2190 A2	2225 B5	2283 B4	2335 A4	2421 A5	2445 A5	2525 B5	2609 A2	3118 B2	3144 C4	3177 A2	3208 B5	3432 A5	4206 C5	7303 A4
1503 A5	2117 B2	2142 A3	2166 B2	2191 A2	2226 B5	2284 B3	2336 A4	2422 A4	2446 A5	2526 B5	2610 A1	3119 A2	3145 B3	3178 B2	3210 A1	3433 A5	4208 B3	7400 B5
1601 A2	2118 B2	2143 A3	2167 B1	2192 B2	2233 A3	2285 A4	2337 A4	2423 A4	2447 A5	2527 B5	2611 A2	3120 B2	3146 C4	3182 B2	3211 A1	3434 B4	4209 A4	7401 B5
1602 A3	2119 B2	2144 C3	2168 B2	2193 B2	2240 A3	2286 B3	2400 A1	2424 A4	2448 A5	2528 B5	2612 A3	3121 B2	3147 C4	3183 B3	3212 A1	3435 A4	4301 A4	7402 A1
2001 B2	2120 B2	2145 B3	2169 A2	2194 B2	2241 A3	2287 C5	2401 A1	2425 A4	2449 A5	2529 A5	2613 A3	3122 B2	3148 C3	3185 A2	3213 A1	3436 A5	4302 A4	7403 B1
2002 C2	2121 C2	2146 A3	2170 B2	2195 A2	2242 A3	2310 A4	2402 A1	2426 A4	2450 A5	2530 B5	2614 A3	3123 C3	3149 C3	3186 A2	3219 C1	3437 A5	4400 A5	7405 A5
2003 A3	2122 C2	2147 A3	2171 B2	2196 B2	2243 A3	2311 A4	2403 A1	2427 A5	2451 A5	2531 B4	2615 A3	3124 C3	3150 C3	3187 A2	3220 A1	3438 A5	4401 A5	7406 A4

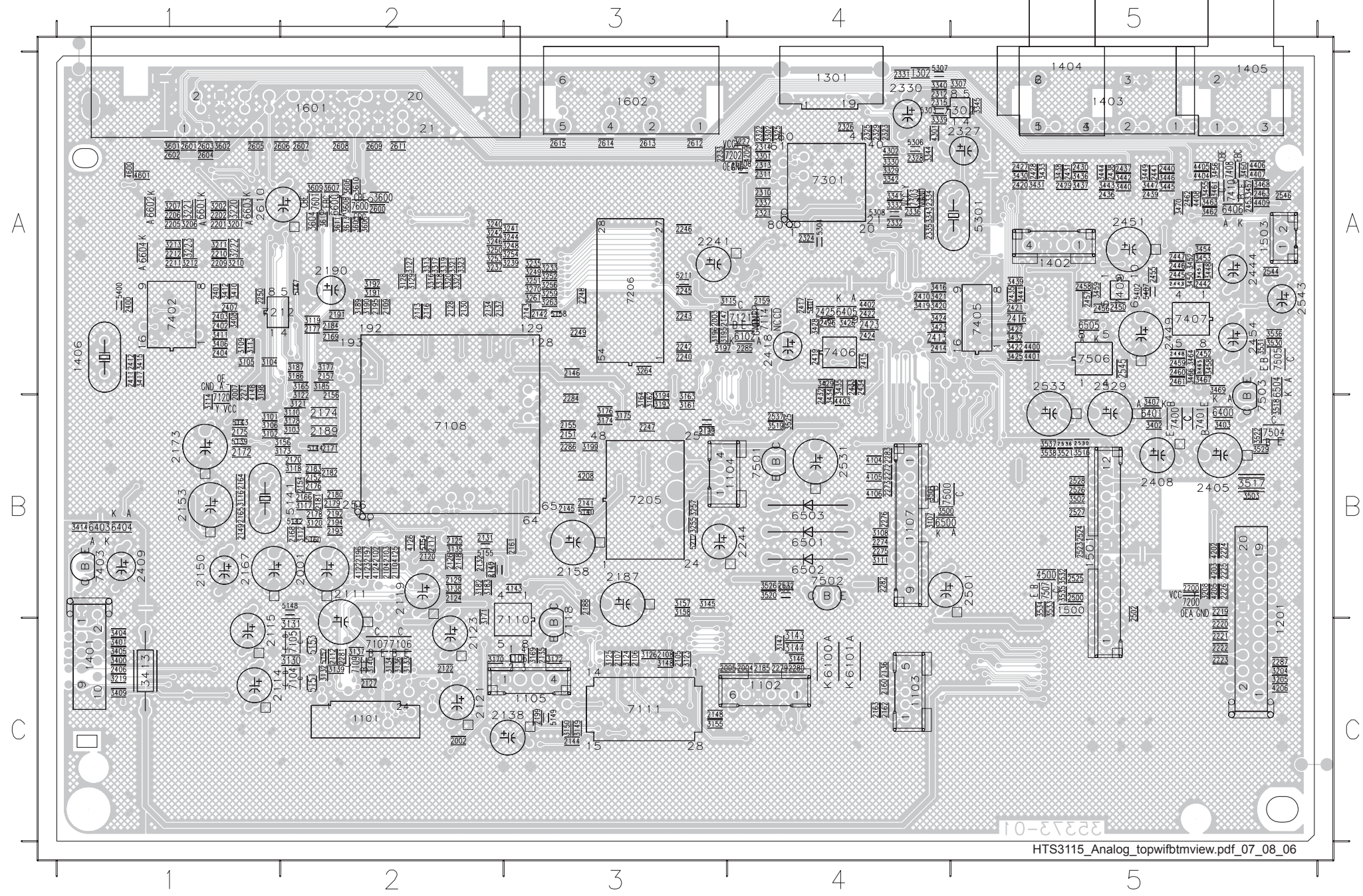
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3227 A4	3442 A5	4405 A5	7410 A5
3233 A3	3443 A5	4406 A5	7500 B4
3235 A3	3444 A5	4407 A5	7501 B4
3237 A2	3445 A5	4408 A5	7502 B4
3239 A3	3446 A5	4409 A5	7503 B5
3240 A2	3447 A5	4500 B5	7504 B5
3241 A3	3448 A5	4600 A1	7505 A5
3242 A2	3449 A5	4601 A1	7506 A5
3244 A3	3450 A5	5139 B1	7507 B5
3246 A2	3451 A5	5140 B3	7600 A2
3248 A3	3452 A5	5141 B2	7601 A2
3249 A3	3453 A5	5142 B2	
3250 A2	3454 A5	5143 B1	
3251 A3	3455 A5	5144 B2	
3252 A3	3456 A5	5147 A2	
3253 A2	3457 A5	5148 B2	
3254 A3	3458 A5	5149 C3	
3255 B3	3459 A5	5151 C2	
3256 A3	3460 A5	5152 C2	
3257 B3	3461 A5	5153 C2	
3259 A3	3462 A5	5154 B2	
3261 A3	3463 A5	5155 B2	
3263 A3	3464 A5	5156 B3	
3264 A3	3465 A5	5157 B2	
3270 A3	3466 A5	5158 A3	
3301 A4	3467 A5	5160 B2	
3302 A4	3468 A5	5208 A4	
3307 A5	3469 A5	5211 A3	
3313 A2	3470 A5	5212 B3	
3316 A2	3500 B4	5301 A5	
3317 A2	3501 B4	5303 A4	
3318 A2	3502 B5	5304 A4	
3319 A2	3503 B5	5306 A4	
3320 A2	3516 B5	5307 A4	
3321 A2	3517 B5	5308 A4	
3322 A2	3518 B5	5400 A1	
3323 A2	3519 B4	5401 A4	
3325 A4	3520 B4	5402 A5	
3329 A4	3521 B5	5407 A5	
3330 A4	3522 B5	5501 B4	
3332 A4	3525 B4	6100 C4	
3339 A4	3526 B4	6101 C4	
3340 A4	3529 B5	6102 A4	
3341 A4	3530 A5	6400 B5	
3342 A4	3531 A5	6401 B5	
3343 A4	3532 B5	6403 B1	
3344 A4	3533 B5	6404 B1	
3345 A5	3534 B5	6405 A4	
3400 C1	3535 B5	6406 A5	
3401 C1	3536 A5	6500 B4	
3402 B5	3537 B5	6501 B4	
3403 B5	3538 B5	6502 B4	
3404 C1	3600 A2	6503 B4	
3405 C1	3601 A1	6504 A5	
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3407 B5	3603 A2	6600 A2	
3408 A1	3604 A2	6601 A1	
3409 C1	3605 A2	6602 A1	
3410 A1	3606 A2	6603 A1	
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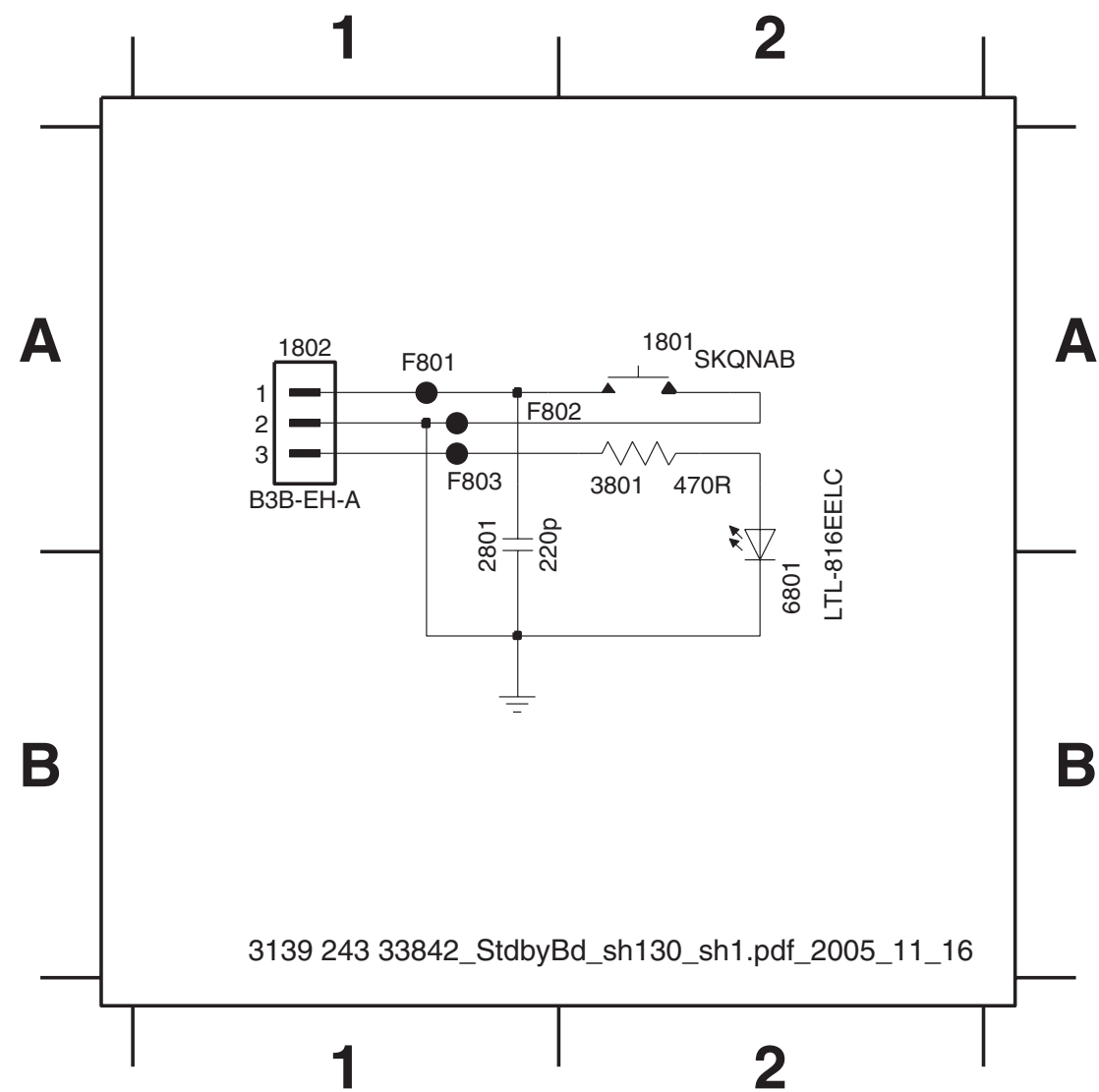
Layout: Mono Board (Top Component with Bottom view)

1101	C2	2004	C4	2123	C2	2148	C3	2172	B1	2197	B2	2244	B4	2312	A4	2404	A1	2428	A5	2452	A5	2532	B4	3101	B1	3125	C3	3155	C3
1102	C4	2005	C4	2124	C2	2149	B1	2173	B1	2199	C3	2245	A3	2313	A4	2405	B5	2429	A5	2453	A5	2533	A5	3102	B1	3126	C3	3156	B2
1103	C4	2007	A1	2125	B2	2150	B1	2174	B2	2200	B5	2246	A3	2314	A4	2406	C1	2430	A5	2454	A5	2536	B5	3103	B2	3127	A2	3157	B3
1104	B4	2102	B2	2126	B2	2151	B3	2175	B1	2201	A1	2247	B3	2315	A4	2407	A1	2431	A5	2455	A5	2537	B4	3104	A1	3128	A2	3158	B3
1105	C3	2103	B2	2127	C2	2152	B2	2176	B2	2202	A1	2248	A3	2321	A4	2408	B5	2432	B4	2456	A5	2543	A5	3105	A1	3129	A2	3161	B3
1106	C3	2104	B2	2128	A2	2153	B1	2177	A2	2205	A1	2249	A3	2322	A4	2409	B1	2433	A4	2457	A5	2544	A5	3106	B1	3130	C2	3162	B3
1107	B4	2105	C3	2129	B2	2154	B2	2178	B2	2206	A1	2250	A1	2323	A4	2410	B1	2434	A4	2458	A5	2545	A5	3107	B4	3131	C2	3163	B3
1201	C5	2106	C3	2130	A2	2155	B3	2179	B2	2209	A1	2271	A1	2324	A4	2411	A1	2435	A5	2459	A5	2546	A5	3108	B4	3132	C2	3164	B3
1301	A4	2107	C3	2131	B2	2156	B2	2180	B2	2210	A1	2272	B4	2325	A4	2412	A1	2436	A5	2460	A5	2600	A2	3109	A1	3133	C2	3165	A2
1302	A4	2108	C3	2132	B2	2157	A2	2181	B2	2211	A1	2273	B4	2326	A4	2413	A4	2437	A5	2461	A5	2601	A1	3110	B2	3134	C2	3169	C3
1401	C1	2109	A2	2133	B3	2158	B3	2182	B2	2212	A1	2274	B4	2327	A5	2414	A4	2438	A5	2462	A5	2602	A1	3111	B4	3135	B2	3170	C2
1402	A5	2110	B2	2134	A2	2159	A4	2183	B2	2219	B5	2275	B4	2328	A4	2415	A4	2439	A5	2463	A5	2603	A1	3112	B2	3136	C2	3171	B2
1403	A5	2111	B2	2135	C3	2160	C4	2184	A2	2220	C5	2276	B4	2329	A4	2416	A5	2440	A5	2464	A5	2604	A1	3113	A1	3137	C2	3172	C3
1404	A5	2112	C2	2136	C4	2161	B3	2185	C4	2221	C5	2279	C4	2330	A4	2417	A4	2441	A5	2465	A5	2605	A1	3114	B1	3138	B2	3173	B2
1405	A5	2113	A2	2137	A2	2162	C4	2187	B3	2222	C5	2280	C4	2331	A4	2418	A4	2442	A5	2466	A5	2606	A2	3115	A4	3139	C2	3174	B3
1406	A1	2114	C1	2138	C3	2163	C4	2188	B3	2223	C5	2281	C2	2332	A4	2419	A4	2443	A5	2467	A5	2607	A2	3116	B1	3140	C2	3175	B3
1500	B5	2115	C1	2140	B2	2164	B1	2189	B2	2224	B5	2282	B4	2334	A4	2420	A5	2444	A5	2468	A5	2608	A2	3117	B2	3143	C4	3176	B3
1501	B5	2116	A2	2141	B3	2165	B1	2190	A2	2225	B5	2283	B4	2335	A4	2421	A5	2445	A5	2469	A5	2609	A2	3118	B2	3144	C4	3177	A2
1503	A5	2117	B2	2142	A3	2166	B2	2191	A2	2226	B5	2284	B3	2336	A4	2422	A4	2446	A5	2470	A5	2610	A1	3119	A2	3145	B3	3178	B2
1601	A2	2118	B2	2143	A3	2167	B1	2192	B2	2227	A3	2285	A4	2337	A4	2423	A4	2447	A5	2471	A5	2611	A2	3120	B2	3146	C4	3182	B2
1602	A3	2119	B2	2144	C3	2168	B2	2193	B2	2240	A3	2286	B3	2400	A1	2424	A4	2448	A5	2472	A5	2612	A3	3121	B2	3147	C4	3183	B2
2001	B2	2120	B2	2145	B3	2169	A2	2194	B2	2241	A3	2287	C5	2401	A1	2425	A4	2449	A5	2473	A5	2613	A3	3122	B2	3148	C3	3185	A2
2002	C2	2121	C2	2146	A3	2170	B2	2195	A2	2242	A3	2310	A4	2402	A1	2426	A4	2450	A5	2474	A5	2614	A3	3123	C3	3149	C3	3186	A2
2003	A3	2122	C2	2147	A3	2171	B2	2196	B2	2243	A3	2311	A4	2403	A1	2427	A5	2451	A5	2475	A5	2615	A3	3124	C3	3150	C3	3187	A2

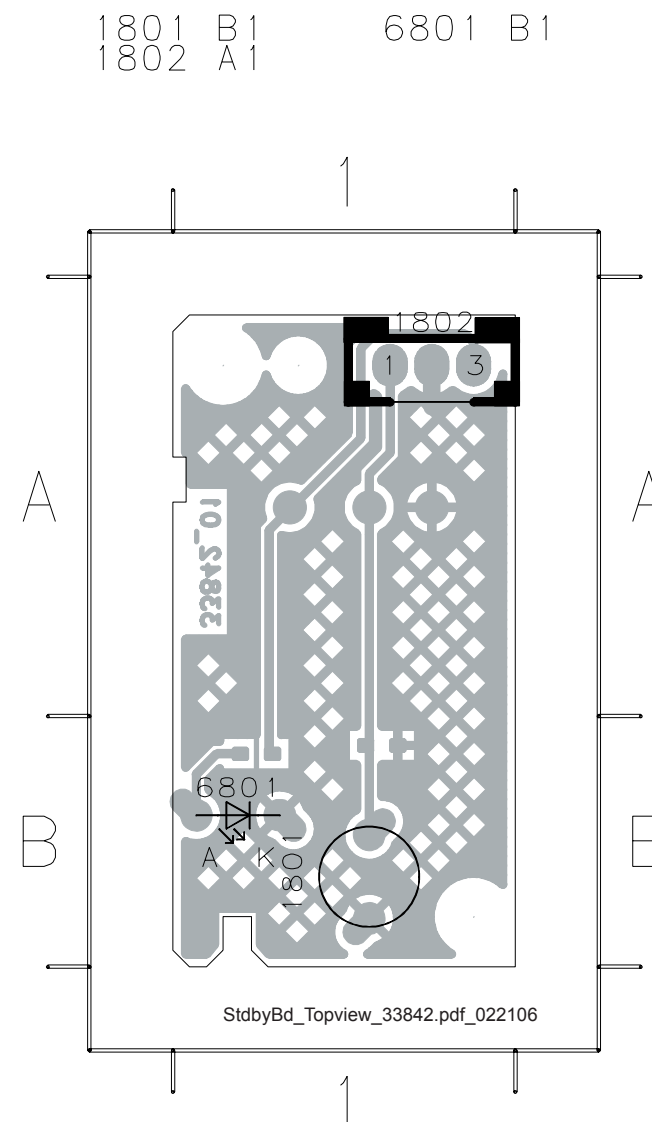
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3192	A2	3417	A1	3613	A2	7109	C2
3193	B3	3419	A4	4104	B4	7110	C3
3194	B3	3420	A4	4105	B4	7111	C3
3195	A3	3421	A4	4106	B4	7114	A4
3196	A3	3422	A5	4122	B2	7118	C3
3197	A3	3423	A4	4123	B2	7120	B1
3198	A1	3424	A4	4124	B2	7121	A4
3199	B3	3425	A5	4125	B2	7200	B5
3201	A1	3426	A4	4126	B2	7202	A4
3202	A1	3427	A5	4143	B3	7205	B3
3204	C5	3428	A4	4148	A1	7206	A3
3205	C5	3429	A4	4202	B5	7212	A1
3206	A1	3430	A5	4203	B5	7301	A4
3207	A1	3431	A5	4205	B5	7302	A5
3208	B5	3432	A5	4206	C5	7303	A4
3210	A1	3433	A5	4208	B3	7400	B5
3211	A1	3434	B4	4209	A4	7401	B5
3212	A1	3435	A4	4301	A4	7402	A1
3213	A1	3436	A5	4302	A4	7403	B1
3219	C1	3437	A5	4400	A5	7405	A5
3220	A1	3438	A5	4401	A5	7406	A4
3221	A1	3439	A5	4402	A4	7407	A5
3222	A1	3440	A5	4403	B4	7408	A5
3223	A1	3441	A5	4404	A5	7409	A5
3227	A4	3442	A5	4405	A5	7410	A5
3233	A3	3443	A5	4406	A5	7500	B4
3235	A3	3444	A5	4407	A5	7501	B4
3237	A2	3445	A5	4408	A5	7502	B4
3239	A3	3446	A5	4409	A5	7503	B5
3240	A2	3447	A5	4500	B5	7504	B5
3241	A3	3448	A5	4600	A1	7505	A5
3242	A2	3449	A5	4601	A1	7506	A5
3244	A3	3450	A5	5139	B1	7507	B5
3246	A2	3451	A5	5140	B3	7600	A2
3248	A3	3452	A5	5141	B2	7601	A2
3249	A3	3453	A5	5142	B2		
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3251	A3	3455	A5	5144	B2		
3252	A3	3456	A5	5147	A2		
3253	A2	3457	A5	5148	B2		
3254	A3	3458	A5	5149	C3		
3255	B3	3459	A5	5151	C2		
3256	A3	3460	A5	5152	C2		
3257	B3	3461	A5	5153	C2		
3259	A3	3462	A5	5154	B2		
3261	A3	3463	A5	5155	B2		
3263	A3	3464	A5	5156	B3		
3264	A3	3465	A5	5157	B2		
3270	A3	3466	A5	5158	A3		
3301	A4	3467	A5	5160	B2		
3302	A4	3468	A5	5208	A4		
3307	A5	3469	A5	5211	A3		
3313	A2	3470	A5	5212	B3		
3316	A2	3500	B4	5301	A5		
3317	A2	3501	B4	5303	A4		
3318	A2	3502	B5	5304	A4		
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3325	A4	3520	B4	5402	A5		
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3332	A4	3525	B4	6100	C4		
3339	A4	3526	B4	6101	C4		
3340	A4	3529	B5	6102	A4		
3341	A4	3530	A5	6400	B5		
3342	A4	3531	A5	6401	B5		
3343	A4	3532	B5	6403	B1		
3344	A4	3533	B5	6404	B1		
3345	A5	3534	B5	6405	A4		
3400	C1	3535	B5	6406	A5		
3401	C1	3536	A5	6500	B4		
3402	B5	3537	B5	6501	B4		
3403	B5	3538	B5	6502	B4		
3404	C1	3600	A2	6503	B4		
3405	C1	3601	A1	6504	A5		
3406	A1	3602	A1	6505	A5		
3407	B5	3603	A2	6600	A2		
3408	A1	3604	A2	6601	A1		
3409	C1	3605	A2	6602	A1		
3410	A1	3606	A2	6603	A1		
3411	A1	3607	A2	6604	A1		
3412	A1	3608	A2	7104	C2		
3413	C1	3609	A2	7105	C2		



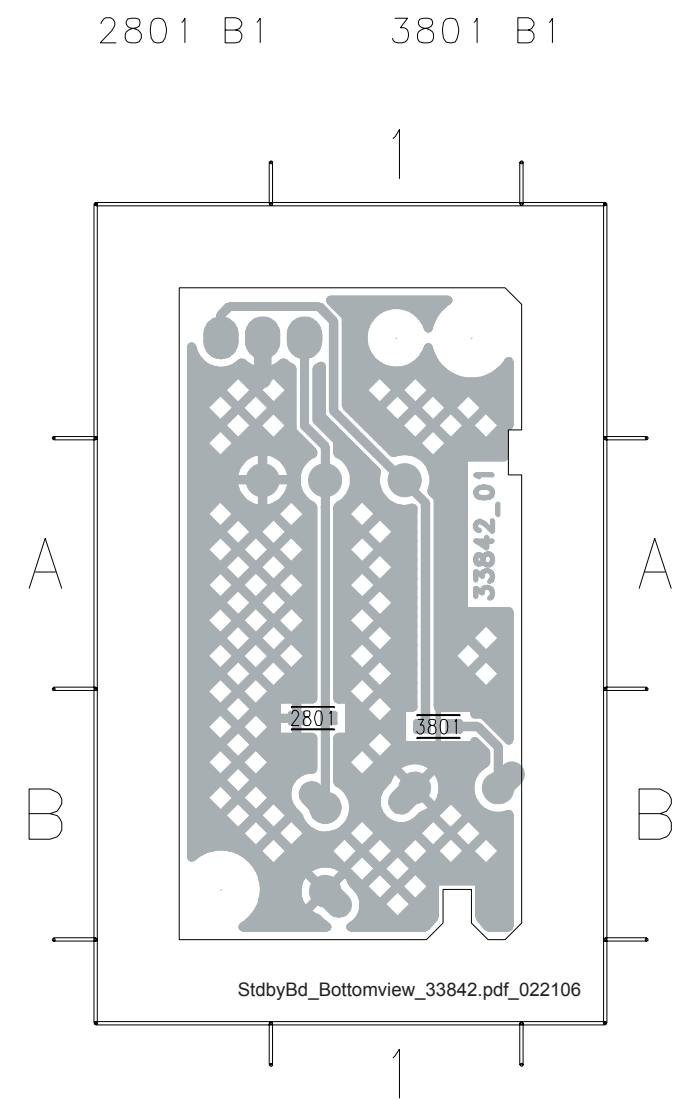
Front: Standby



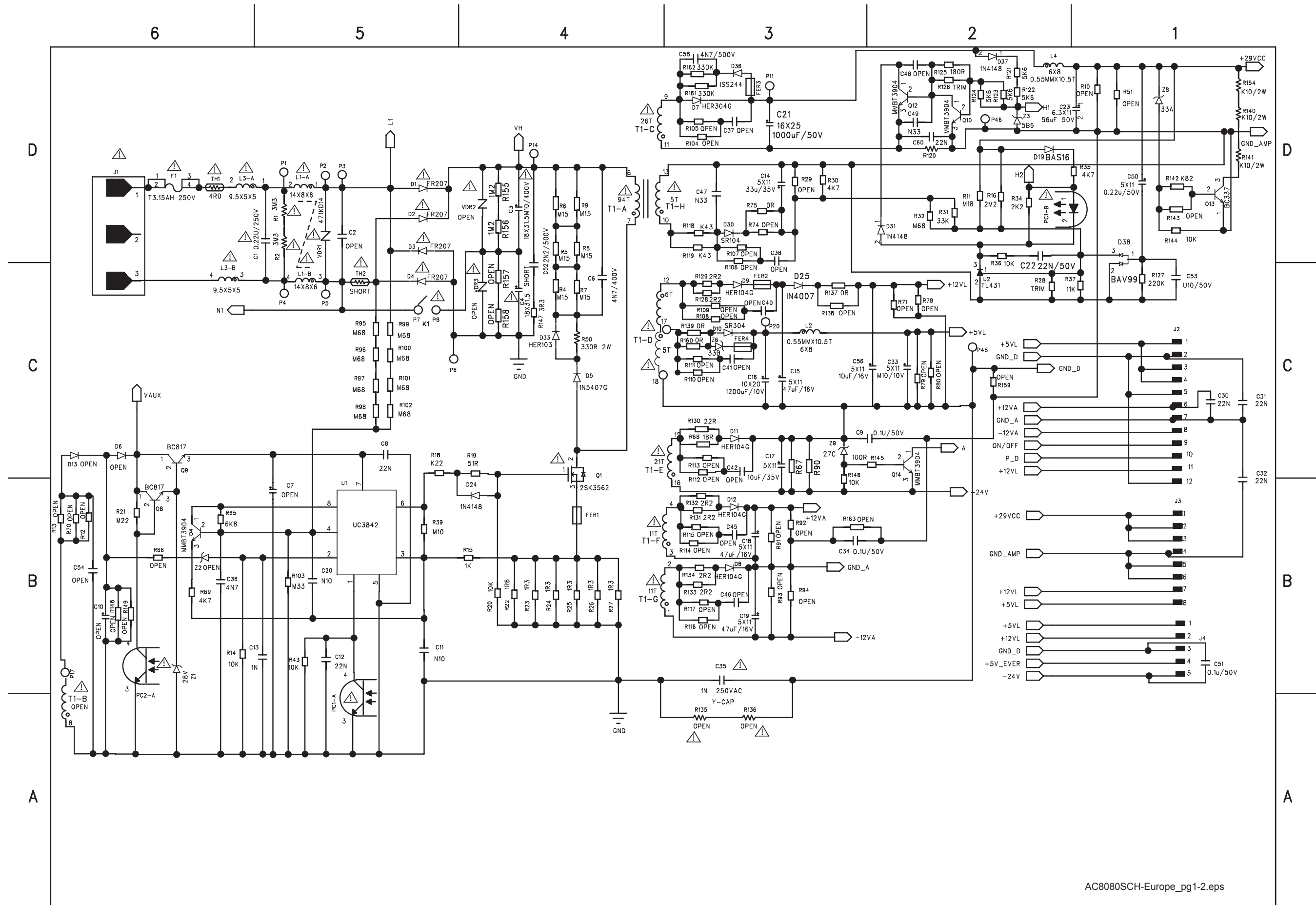
Front: Standby (Top View)



Front: Standby (Bottom View)



PSU Circuit Diagram (For information only) PSU: Europe



PSU Circuit Diagram (For information only) PSU: Europe

6

5

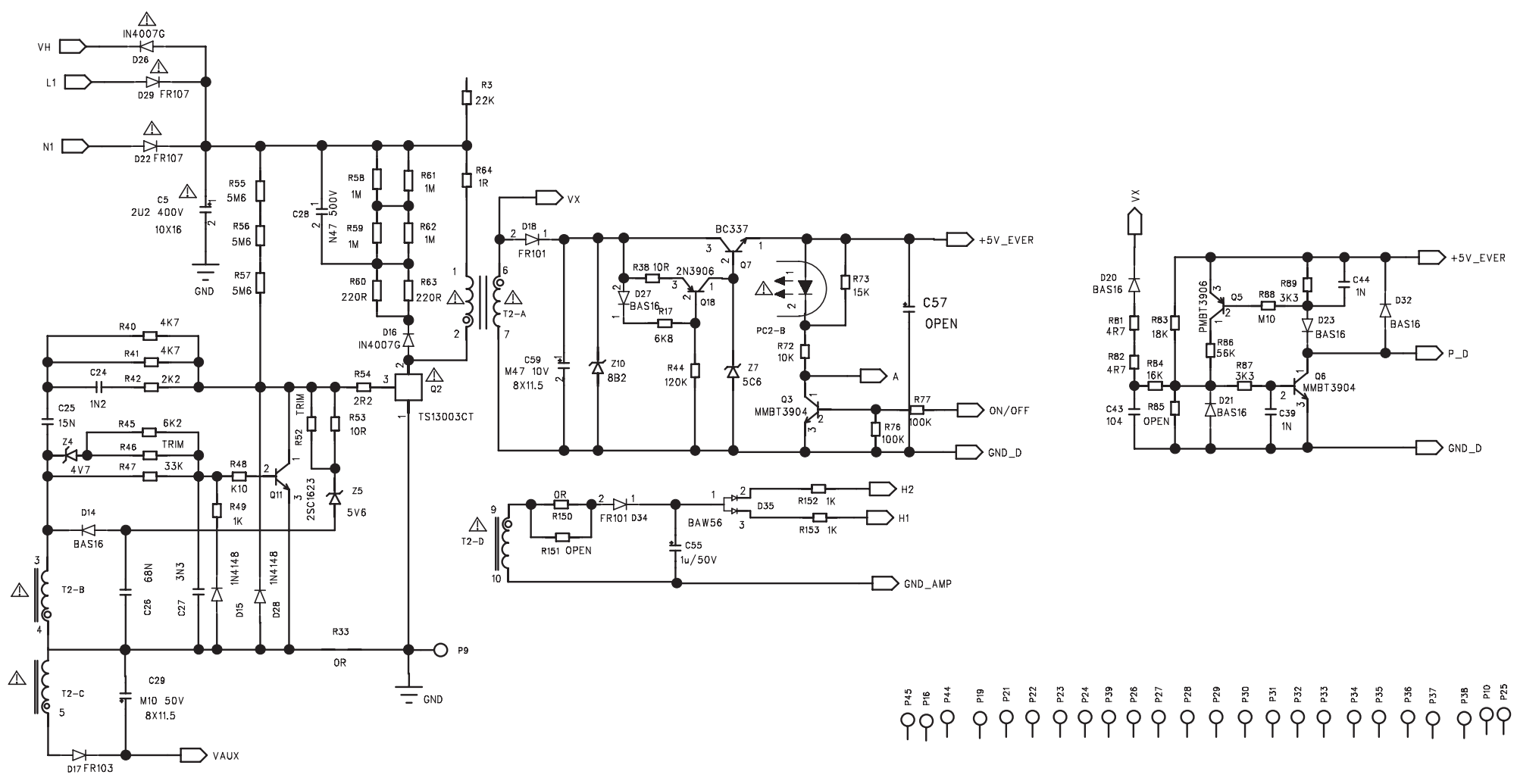
4

3

2

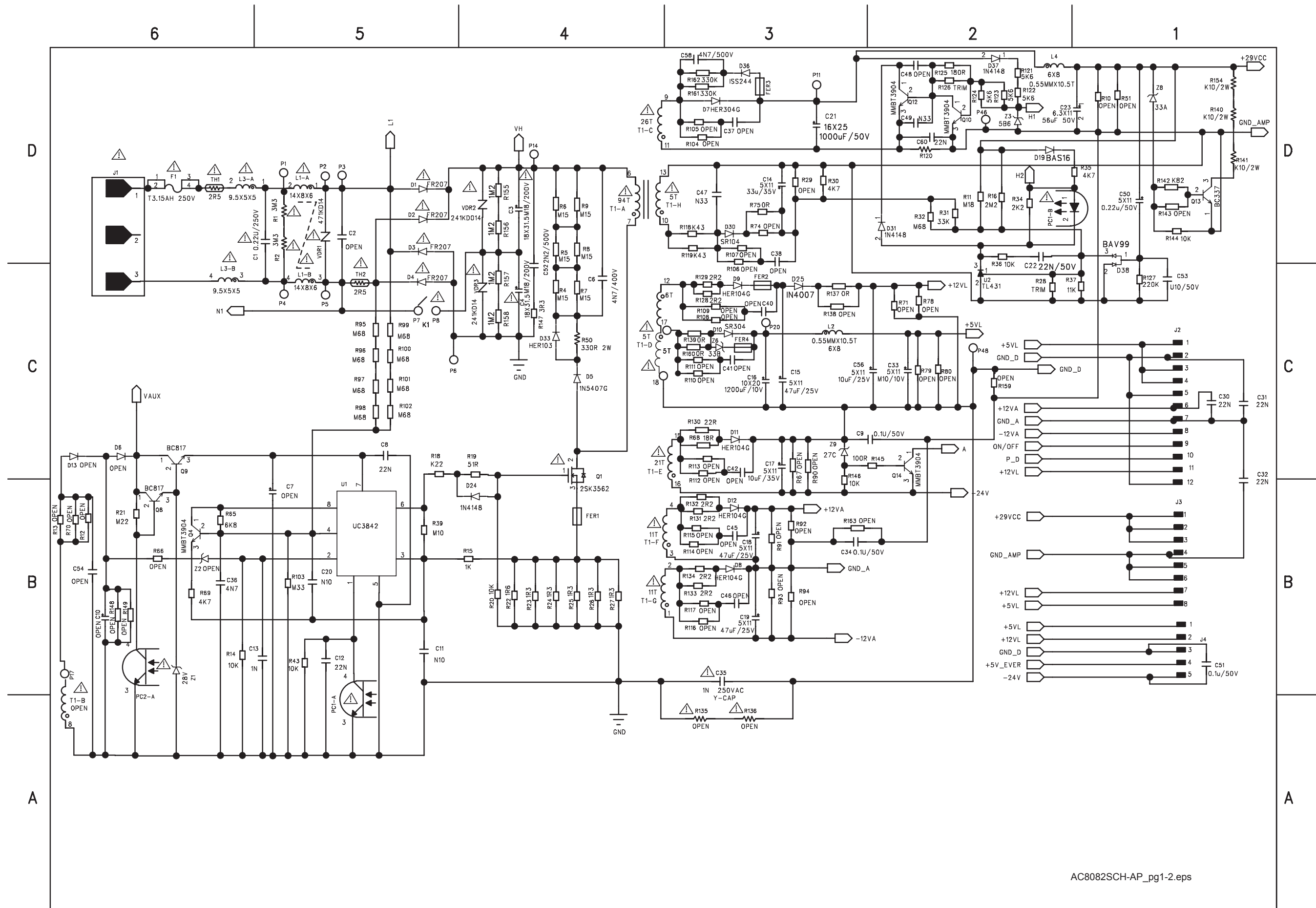
1

REVISION RECORD			
LTR	ECO NO:	APPROVED:	DATE:



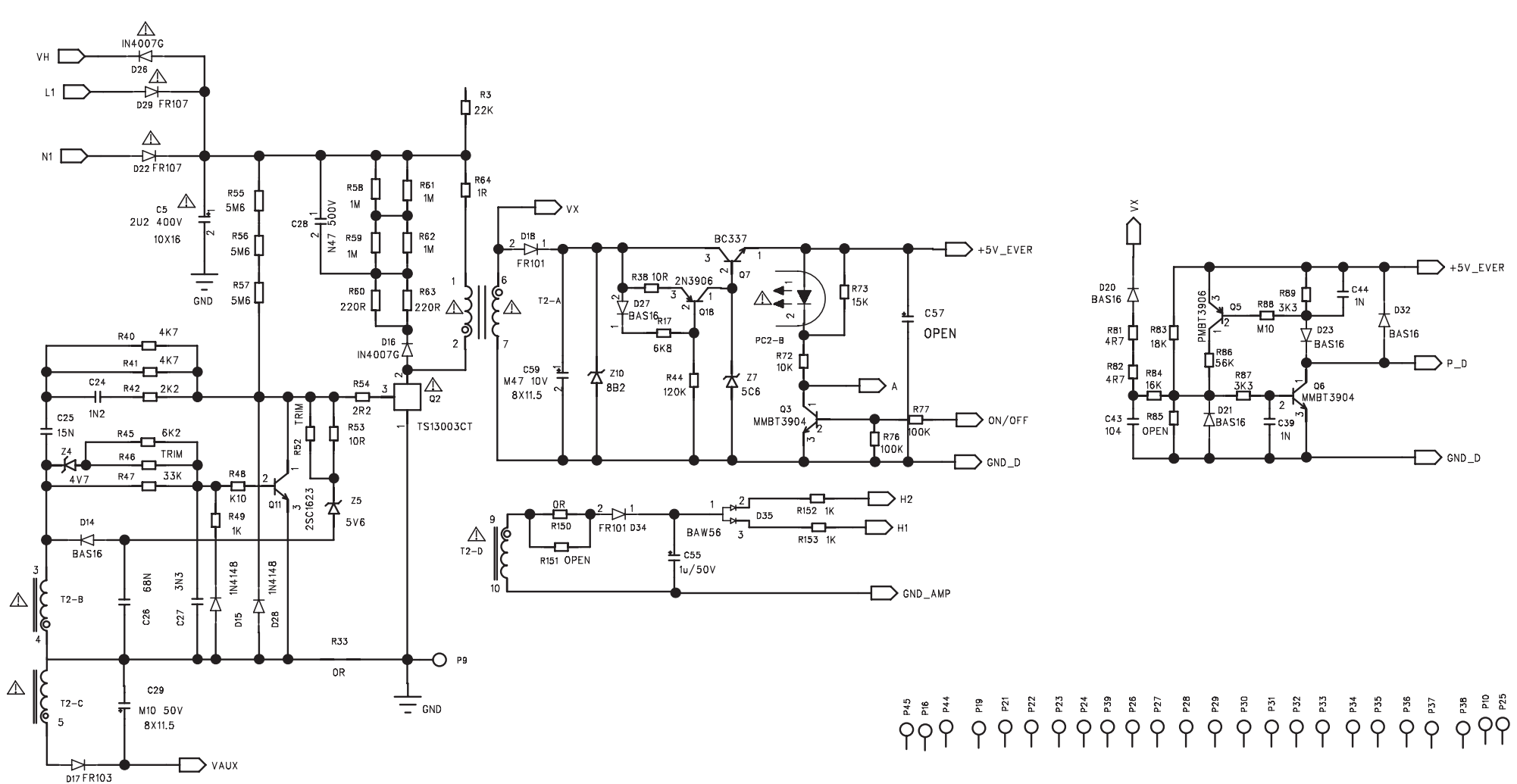
- P45
- P16
- P44
- P19
- P21
- P22
- P23
- P24
- P39
- P26
- P27
- P28
- P29
- P30
- P31
- P32
- P33
- P34
- P35
- P36
- P37
- P38
- P10
- P25
- P40
- P41
- P12
- P13
- P49
- P51
- P42
- P43

PSU Circuit Diagram (For information only) PSU: AP



PSU Circuit Diagram (For information only) PSU: AP

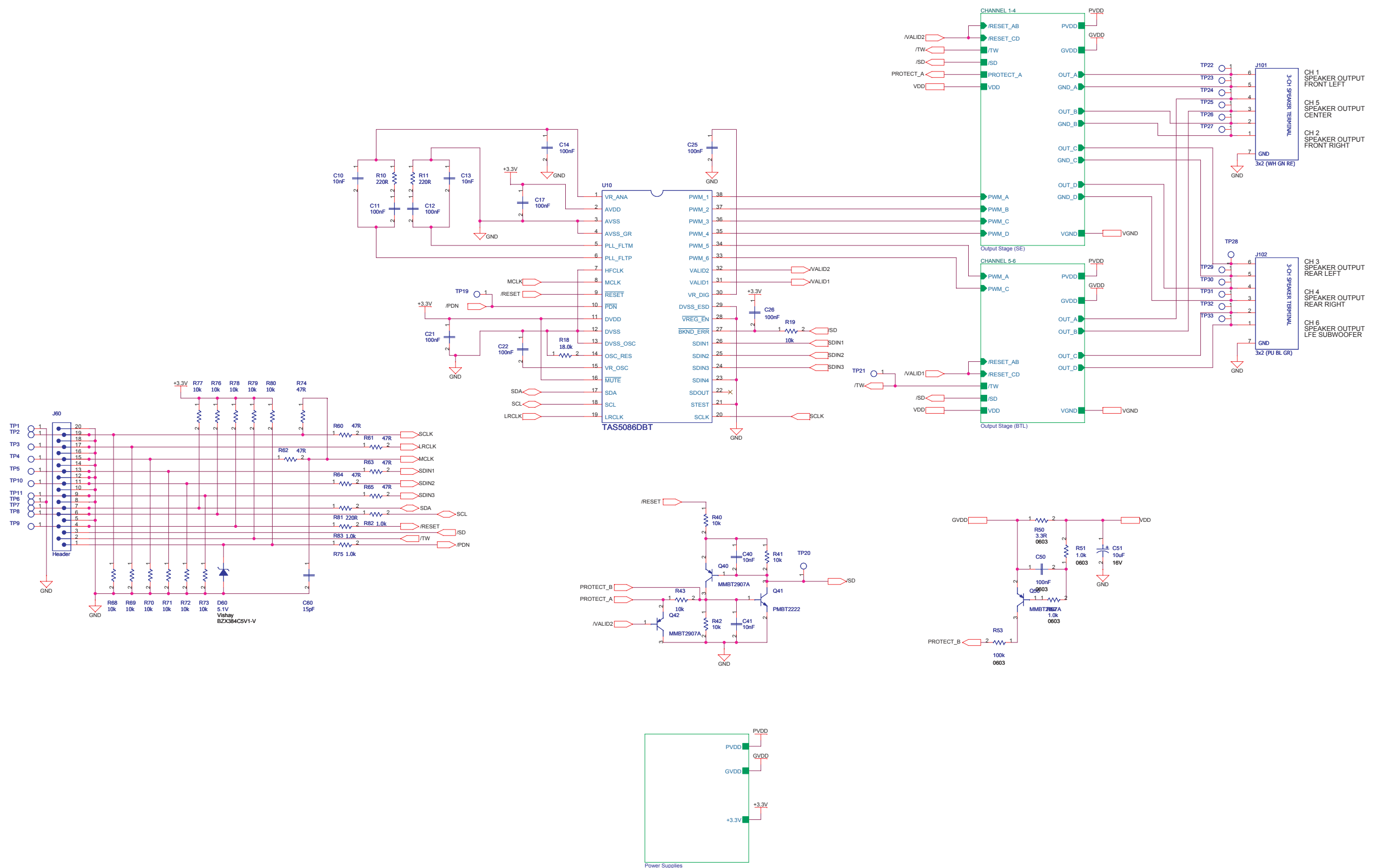
REVISION RECORD			
LTR	ECO NO:	APPROVED:	DATE:



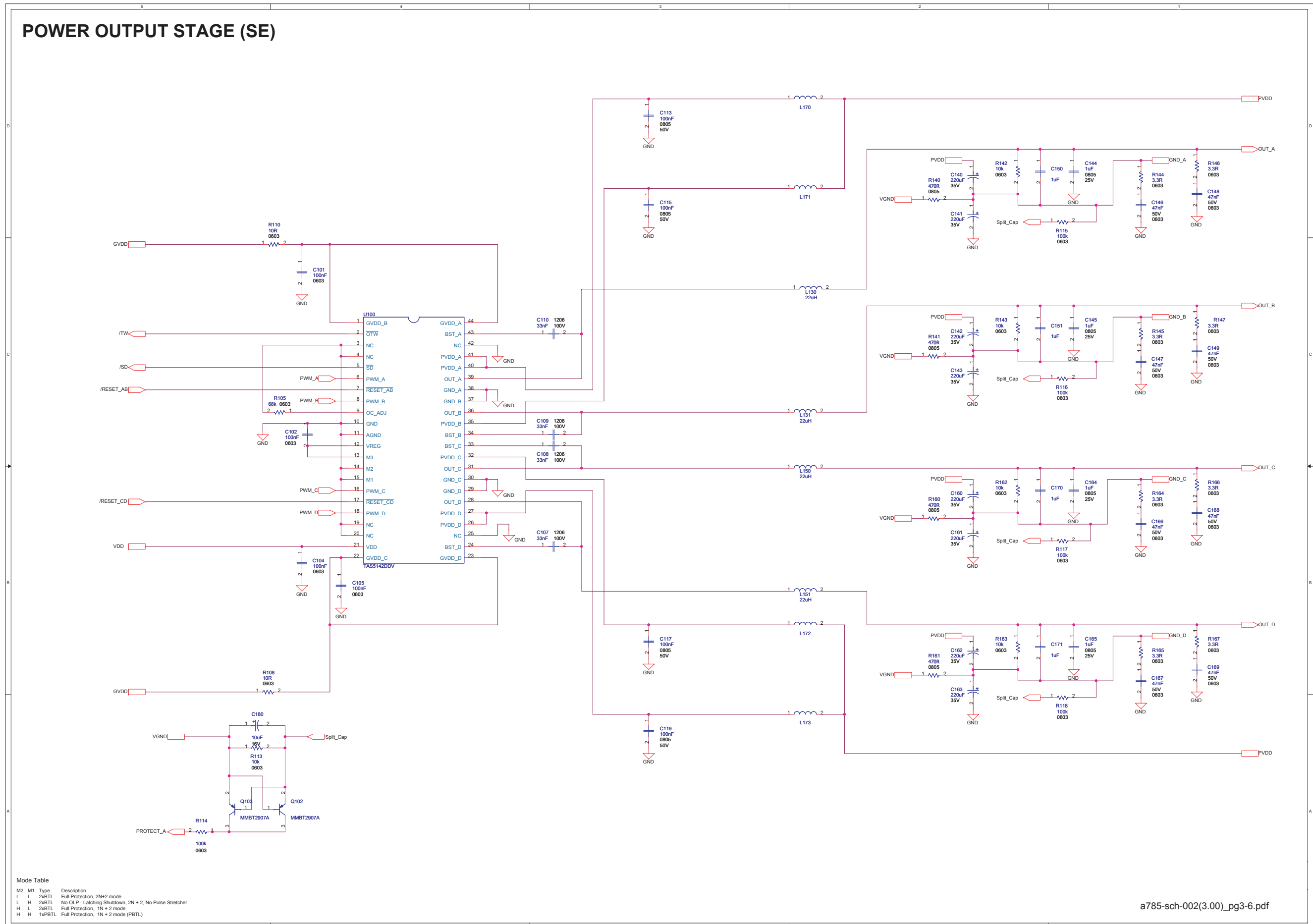
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- P51
- P42
- P43

For information only (Amp Board)

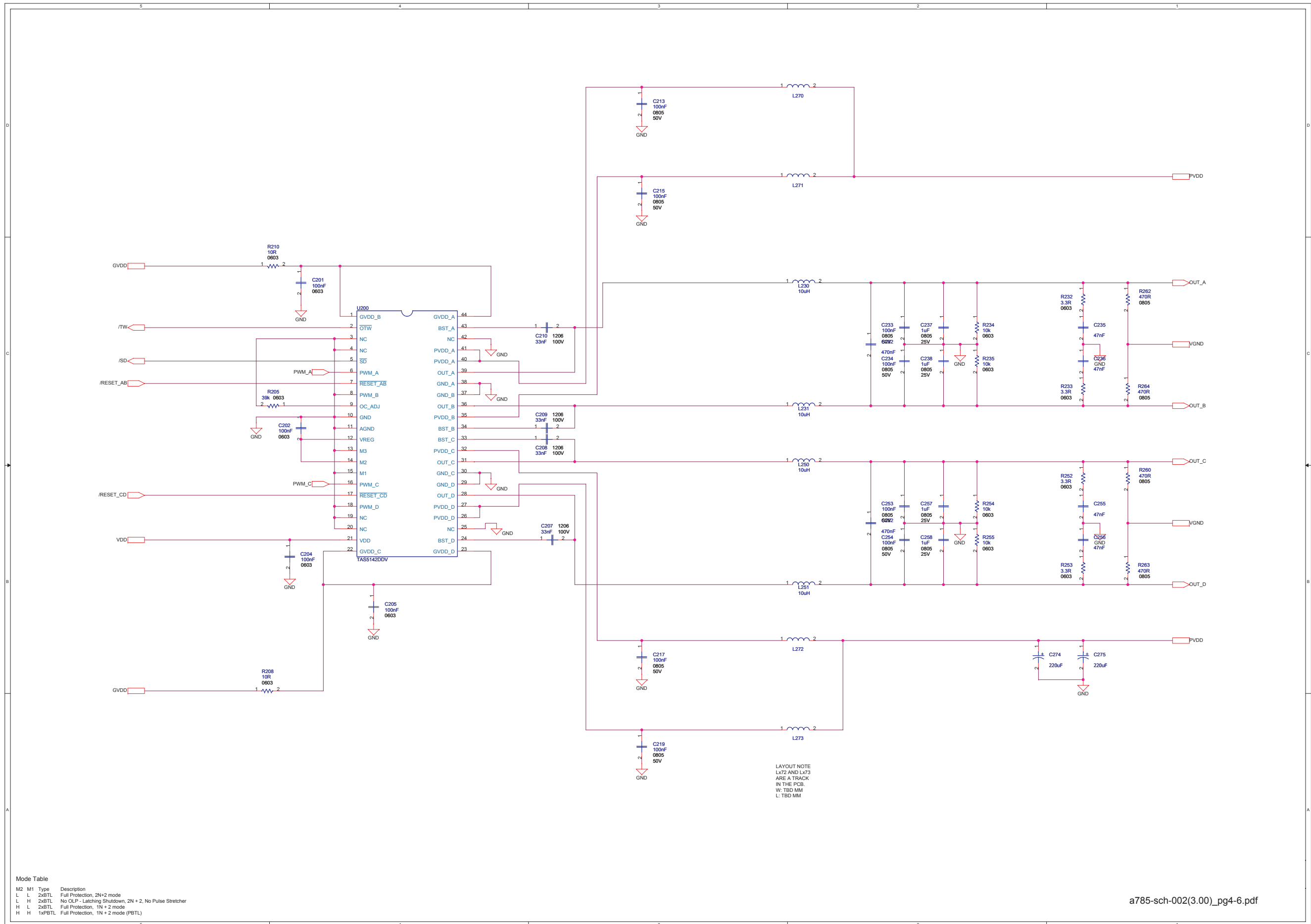
TAS5086-5142V6REF



For information only (Amp Board)



For information only (Amp Board)

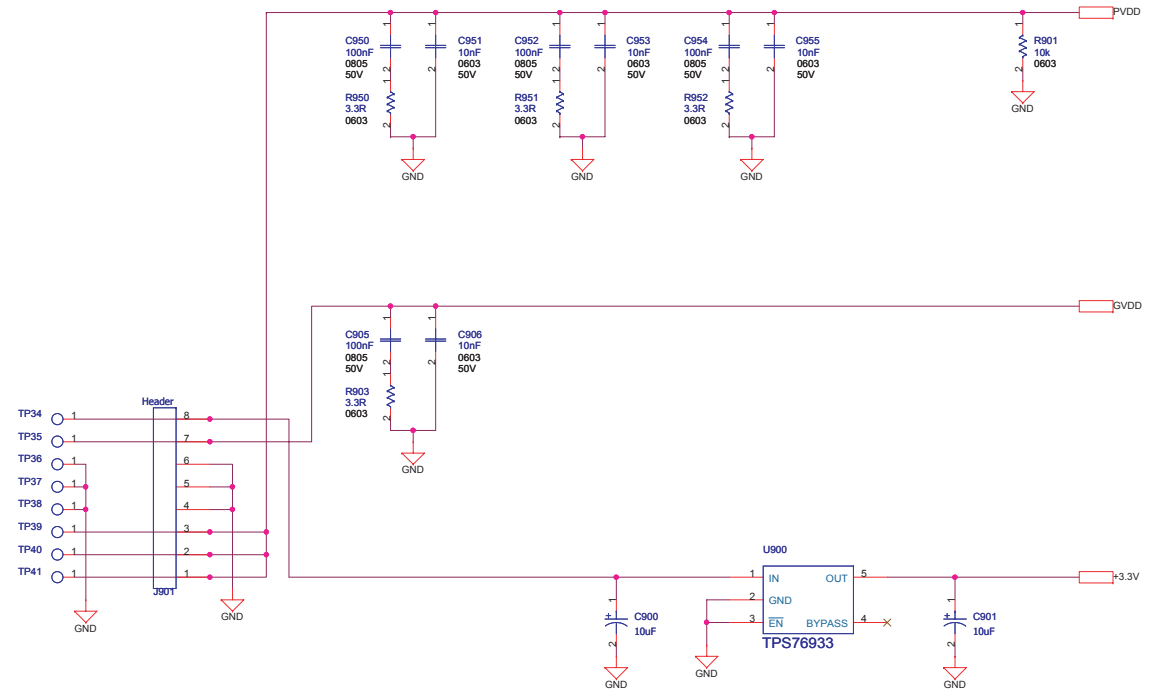


Mode Table

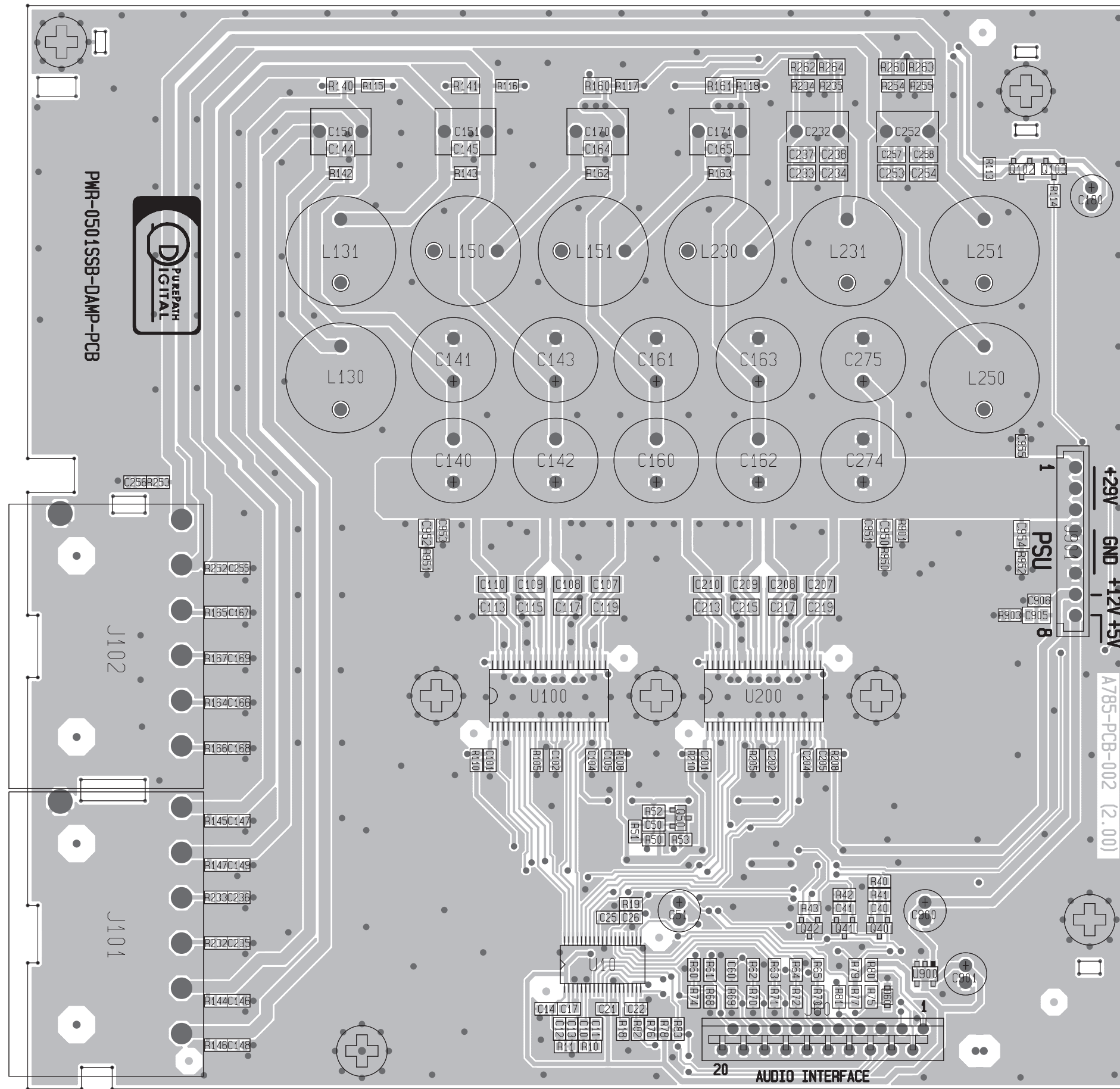
Mz	M1	Type	Description
L	L	2xRTL	Full Protection, 2N+2 mode
L	H	2xRTL	No OLP - Latching Shutdown, 2N + 2, No Pulse Stretcher
H	L	2xRTL	Full Protection, 1N + 2 mode
H	H	1xPRTL	Full Protection, 1N + 2 mode (PRTL)

For information only (Amp Board)

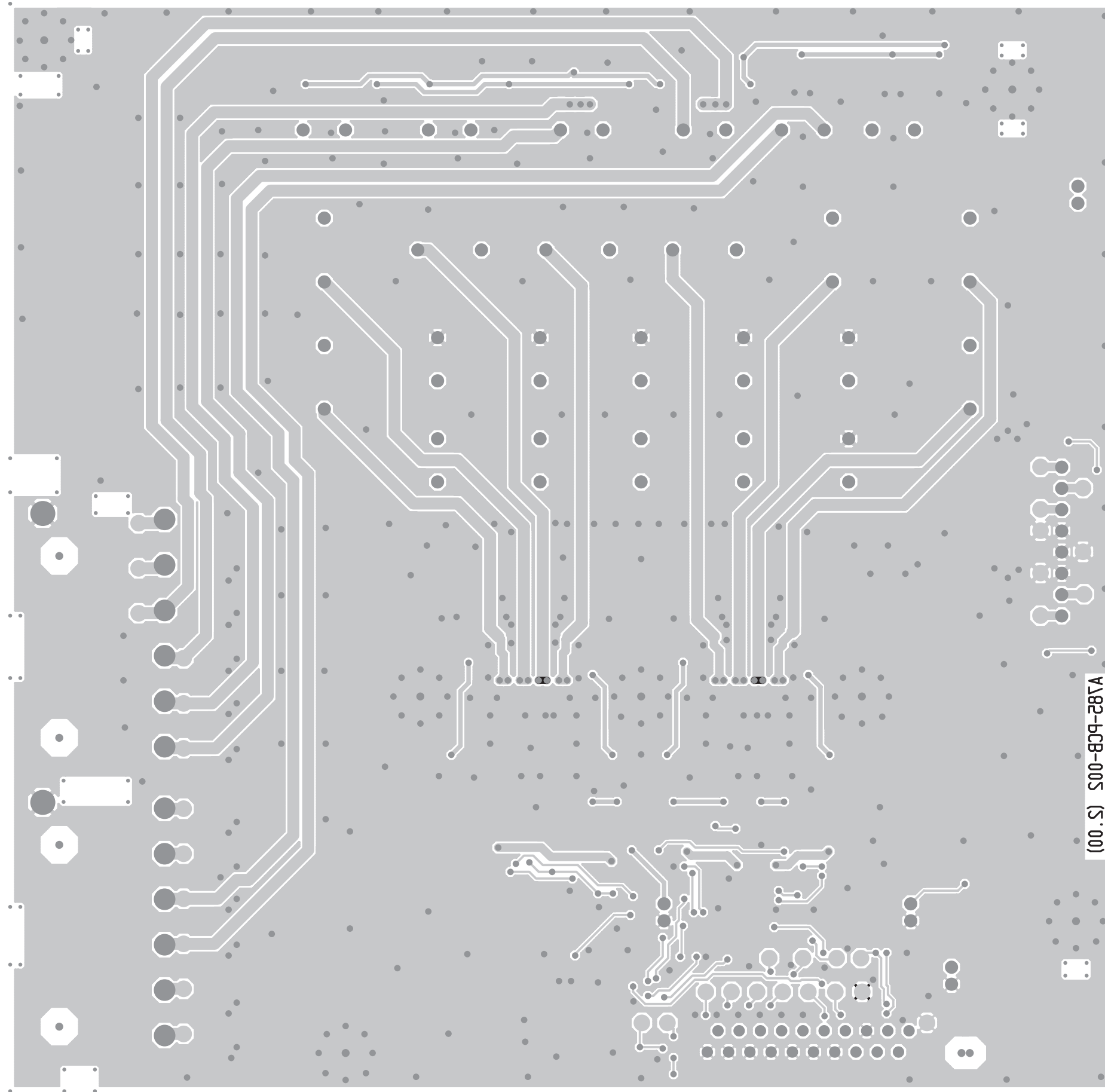
POWER SUPPLIES



Amp Board Layout : Topview



Amp Board Layout : Bottomview



Notes:

9. Exploded View of the Set

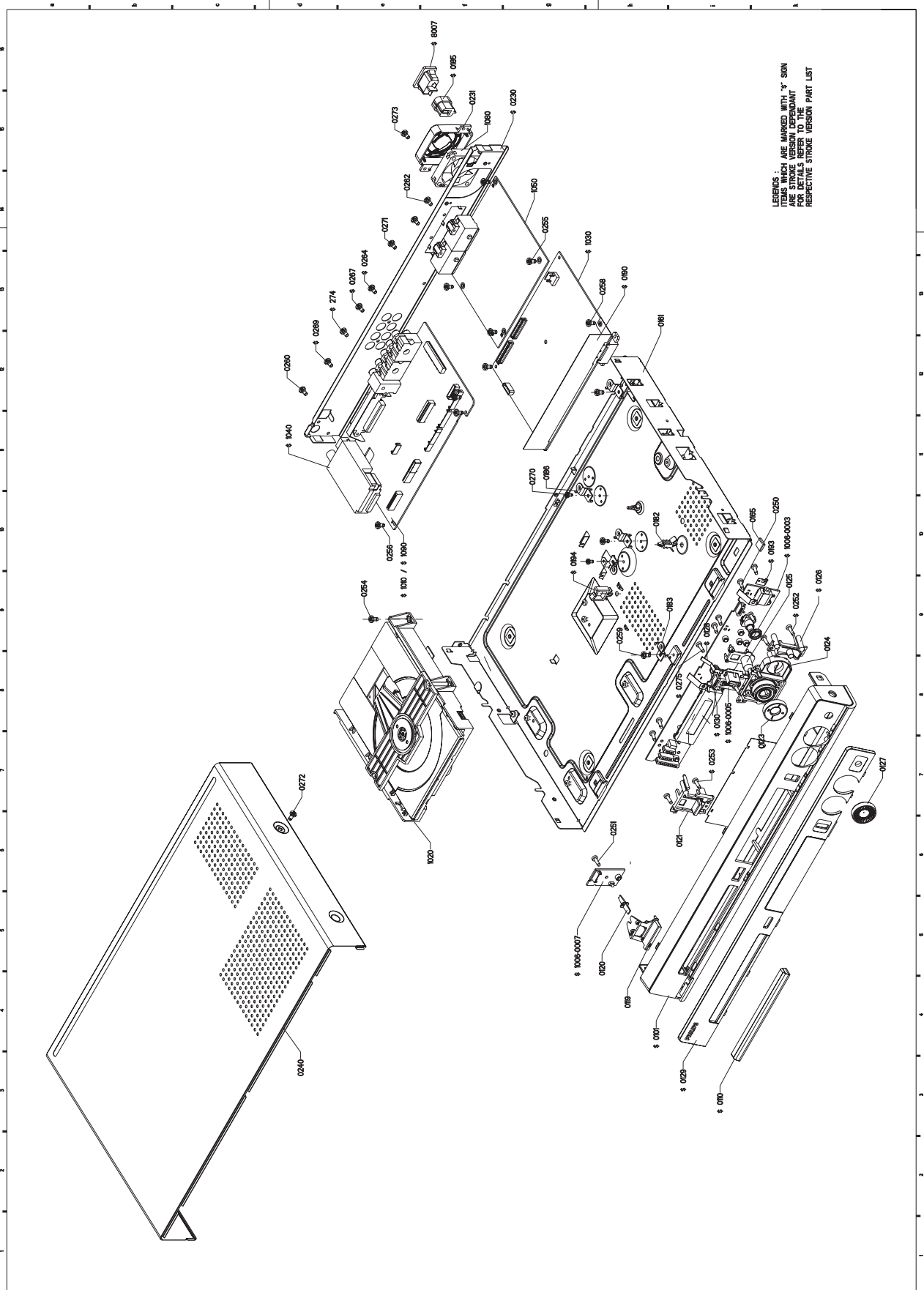


Figure 9-1

HTS3115**MISCELLANEOUS**

0110	3139 244 13501	COVER CD TRAY HTS3115
0127	3139 244 10091	KNOB VOLUME HTS3455 CHROME
0151	2422 549 00493	DVD LOADER WXD-8829(Y) B
0152	2422 549 00629	DVD MECHANISM KHM-313AAA Y
0331	2422 076 00546	FM AERIAL 24AWG BK B
0332	2422 549 45813	ANT AM LOOP 039S20014 B
0333	2422 549 00934	REMOTE CONTR HTS3440/3450 B
0336	2422 070 98236 Δ	MAINSCORD UK 5A 1M8 VH BK B /05
0336	4822 321 11499 Δ	MAINSCORD 2.0M - EU /12
0342	2422 076 00468 Δ	CBLE SCART 1M1 SCART 21P BK B
0900	3143 027 65491	FRONT ASSY HTS3115
0920	3143 027 64021	FRAME ASSY HTS3455
1020	3139 248 00181	LOADER ASSY WXD8829 KHM313 RX
1030	3139 247 12711	MODULE PSU 06T400M EU
1040	2422 542 00031	TUN A F ENG07806QRF EUR B
1050	3139 247 12251	MODULE AMP-05-02 500W
1060	3139 248 50291	PCBAS FRONT HTS3115 EU
1080	2822 031 00048	FAN 12VDC 0.5W 3700RPM B
1090	3139 248 50301	PCBAS MONO HTS3115 EU
1101	3139 241 00341	FFC FOIL 24P/220/24P AD 0.5MMP
8001	3139 241 01381	FFC FOIL10P/120/10P AD FOLD
8005	3139 241 02011	FFC FOIL 20P/140/20P AD

SPK ASSY SW-3110

9965 000 35004	SW3105 SUBWOOFER BOX
9965 000 34997	RUBBER FOOT SW
9965 000 34998	CABLE A'SSY 5.3M PURPLE SMK

SPK ASSY C-3110

9965 000 35003	SPEAKER BOX CENTER
9965 000 34995	RUBBER FOOT 39.5LX5.5WX2T
9965 000 34994	CABLE A'SSY 5.2M GREEN SMK S

FRONT SATELLITE SPEAKER

9965 000 36534	SPEAKER BOX FRONT-L
9965 000 36535	SPEAKER BOX FRONT-R
9965 000 34987	CABLE A'SSY 5.2M WHITE SMK
9965 000 34988	CABLE A'SSY 5.2M RED SMK
9965 000 36536	RUBBER FOOT

REAR SATELLITE SPEAKER

9965 000 35390	SPEAKER BOX REAR-L
9965 000 35391	SPEAKER BOX REAR-R
9965 000 34989	CABLE A'SSY 5.2M BLUE SMK
9965 000 34990	CABLE A'SSY 5.2M GREY SMK
9965 000 35392	RUBBER FOOT
9965 000 35393	RUBBER FOOT