DVD Receiver

HTS3300MKII/05/12/51/98/55

Service
Service
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Service Manual

CLASS 1
LASER PRODUCT

MP3-CD PLAYBACK

DVD VIDEO

COMPACT disc DIGITAL VIDEO

COMPACT disc DIGITAL AUDIO

Contents

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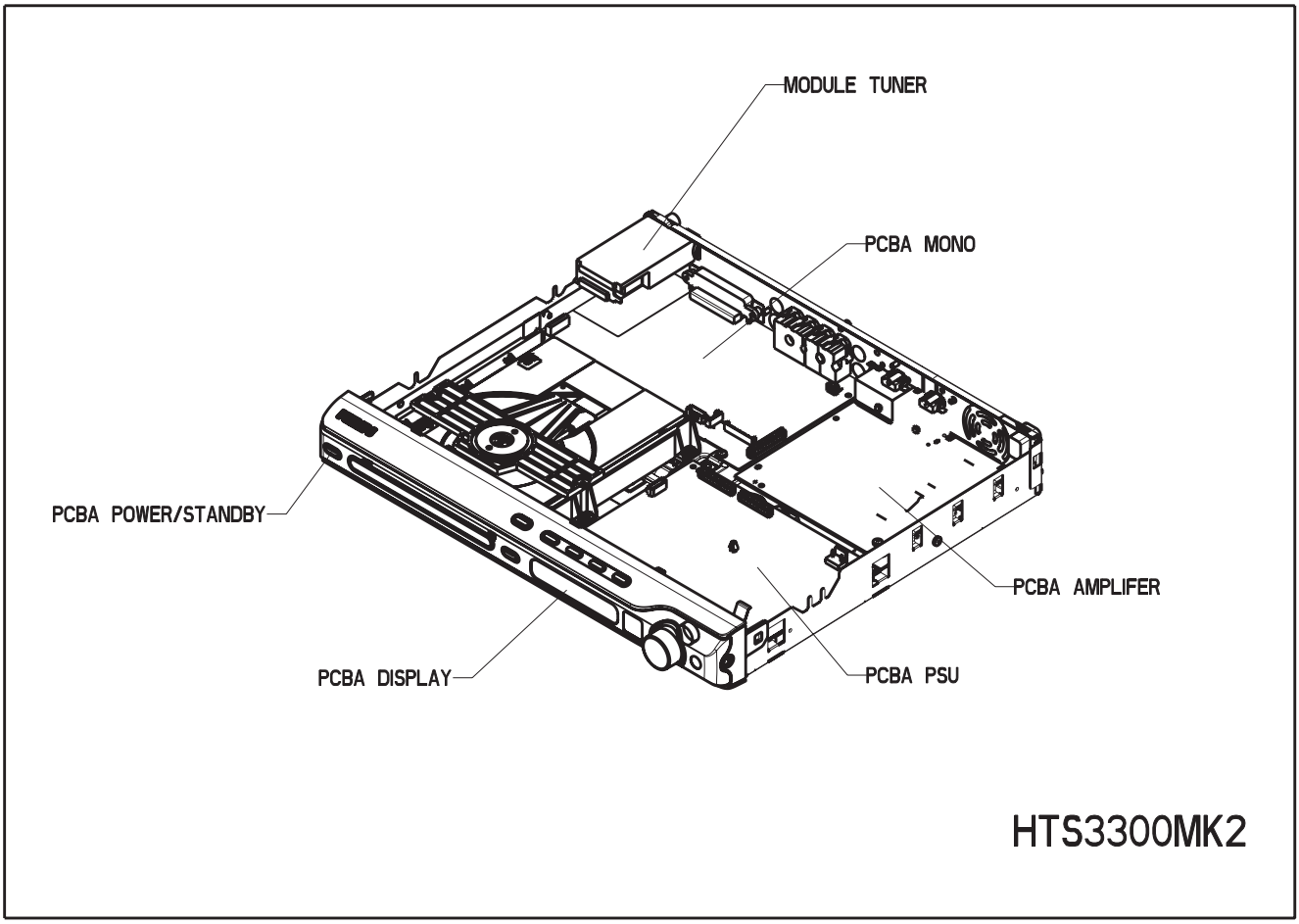
Version 1.0

PHILIPS

LOCATION OF PC BOARDS



VERSION VARIATIONS:

Type /Versions: / Features &	HTS3300MK2				
	/98	/55	/51	/12	/05
Progressive Scan					
Line-Out					
TV-In	x	x			
Aux-In	x	x	x	x	x
Y/Pb/Pr (YUV) Component Video Output	x	x			
Coax	x	x	x	x	x
CVBS	x	x			
S-Video Output					
SCART			x	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 < 0.5W 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	:	100W RMS / channel
Rear	:	75W RMS / channel
Center	:	100W RMS
Subwoofer	:	150W 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:

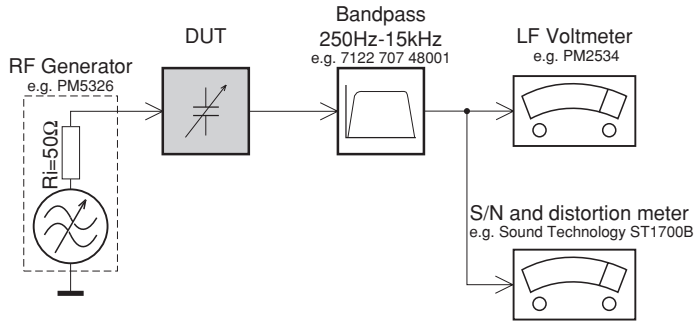
Video Decoding	:	MPEG-1/MPEG-2/ MPEG-4/DivX 3.11, 4.x & 5.x
Video DAC	:	12 Bits
Signal System	:	PAL / NTSC
Video Format	:	4:3 / 16:9
CVBS Out [1)]		
CVBS level	:	1.0 ± 0.1 V_{p-p}
Luminance S/N	:	>= 60dB
S-Video Out [1)]		
Y level	:	1.0 ± 0.1 V_{p-p}
Y S/N	:	>= 60dB
C level (burst)	:	286 mV_{pp} +1/-4 dB
RGB/YUV Out [1)]		
Amplitude	:	0.7 ± 0.1 V_{p-p}
S/N	:	>= 60dB

[1)] Output terminals to be terminated with 75Ω

2. Measurements Setup, Service Aid & Lead Free Requirements

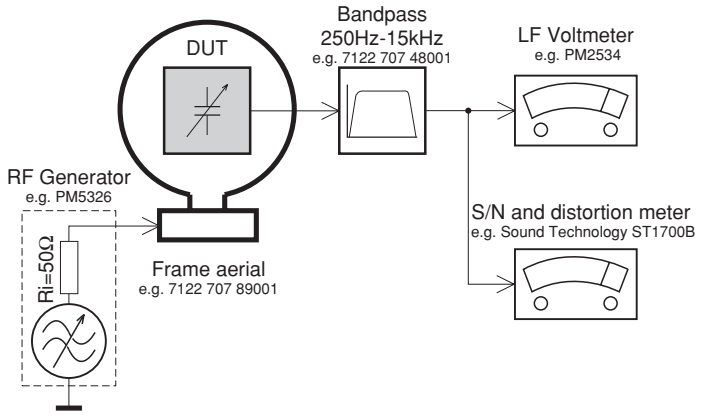
MEASUREMENT SETUP

Tuner FM



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

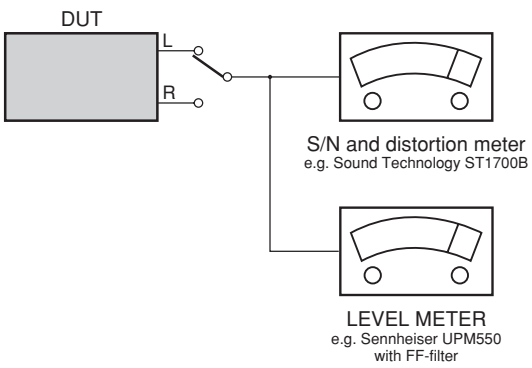
Tuner AM (MW,LW)



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

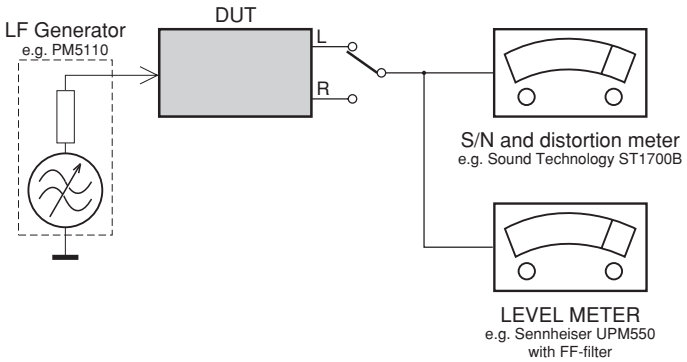
CD

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



Recorder

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



SERVICE AIDS

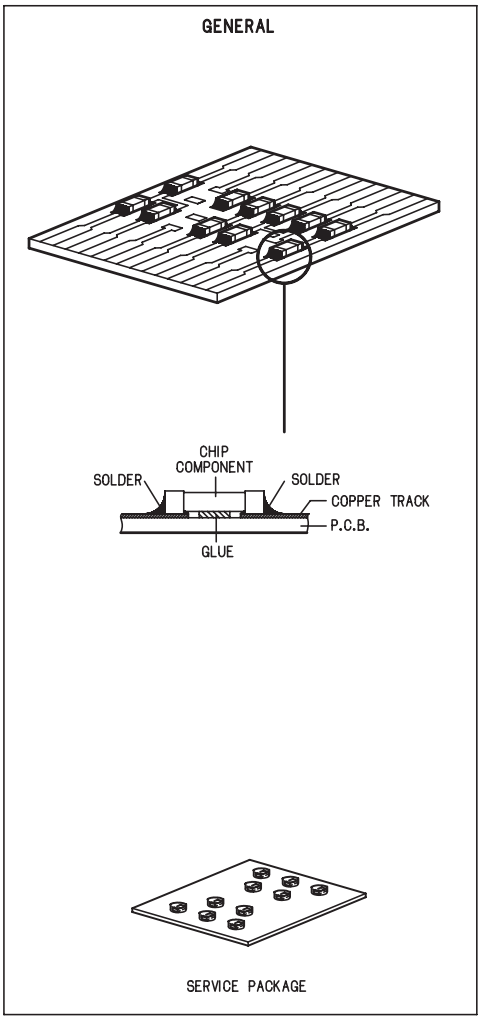
Service Tools:

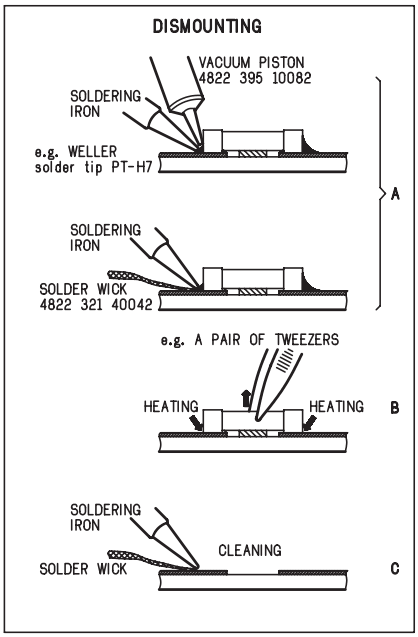
Universal Torx driver holder 4822 395 91019
Torx bit T10 150mm 4822 395 50456
Torx driver set T6 - T20 ..... 4822 395 50145
Torx driver T10 extended 4822 395 50423

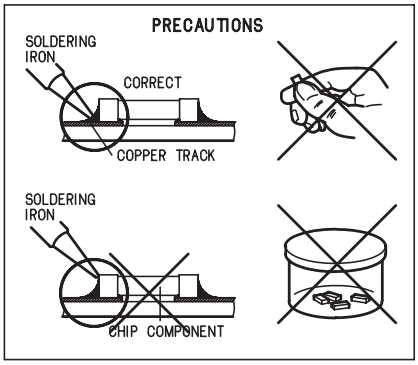
Compact Disc:

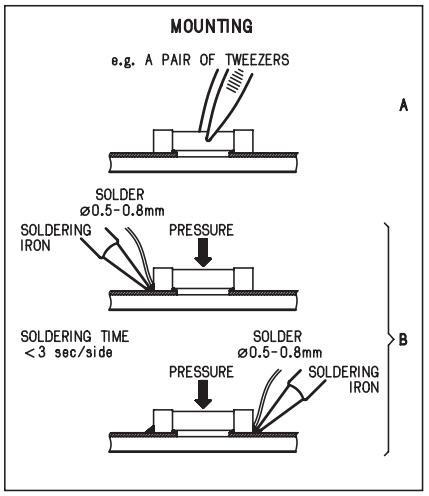
SBC426/426A Test disc 5 + 5A 4822 397 30096
SBC442 Audio Burn-in Test disc 1kHz 4822 397 30155
SBC429 Audio Signals disc 4822 397 30184
Dolby Pro-logic Test Disc 4822 395 10216

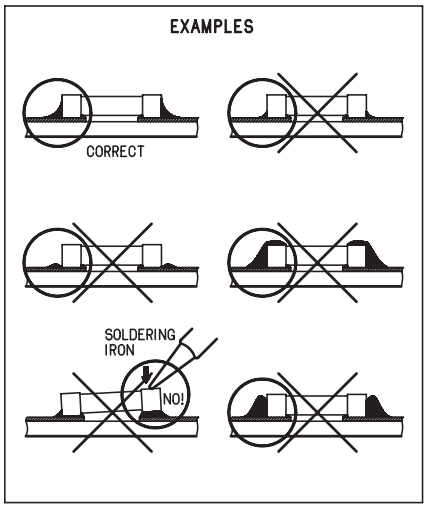
HANDLING CHIP COMPONENTS











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.

NL WAARSCHUWING

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

F ATTENTION

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

D WARNUNG

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

I AVVERTIMENTO

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

GB ESD PROTECTION EQUIPMENT:

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

GB

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

Safety components are marked by the symbol ⚠.

NL

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

De Veiligheidsonderdelen zijn aangeduid met het symbool ⚠

F

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

Less composants de sécurité sont marqués ⚠

D

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

Sicherheitsbauteile sind durch das Symbol ⚠ markiert.

I

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

Componenty di sicurezza sono marcati con ⚠

GB

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

CLASS 1
LASER PRODUCT

GB Warning !

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

S Varning !

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

SF Varoitus !

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

DK Advarse !

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

F

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

2.1 Lead Free Requirements

Pb(Lead) Free Solder

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

INDENTIFICATION:

Regardless of special logo (not always indicated)

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

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

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

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

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

For additional questions please contact your local repair-helpdesk.

2.2 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.

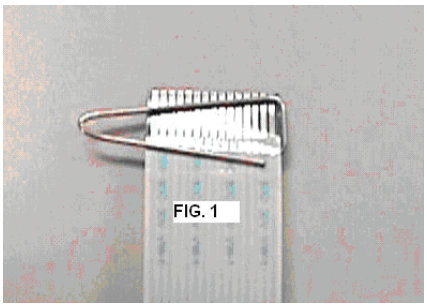
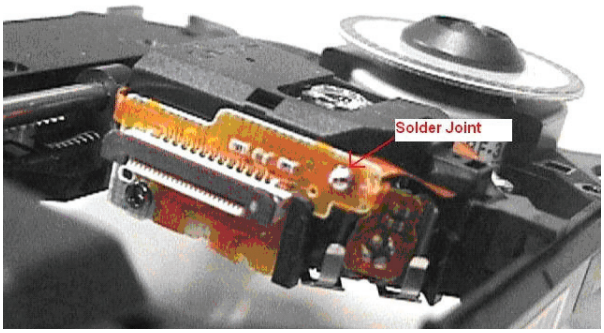


FIG. 1

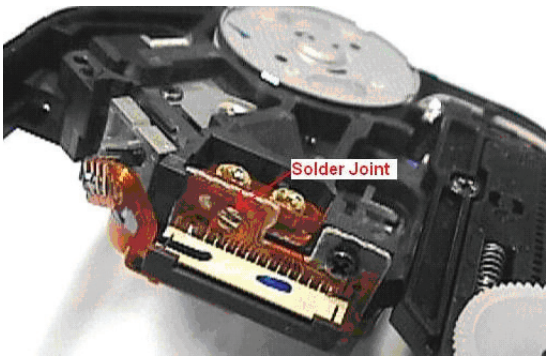
ATTENTION: The laser diode of this loader is protected against ESD by a solder joint which shortcircuits the laserdiode to ground. For proper functionality of the loader this solder joint must be remove **after** connection loader to the set.

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.

IMPORTANT: For HTS3300MKII /55, /98 only, please select the correct voltage before switching on.

Figure 2-1

3. Mechanical Instructions

3.1 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 3-1) to remove the PSU Module.

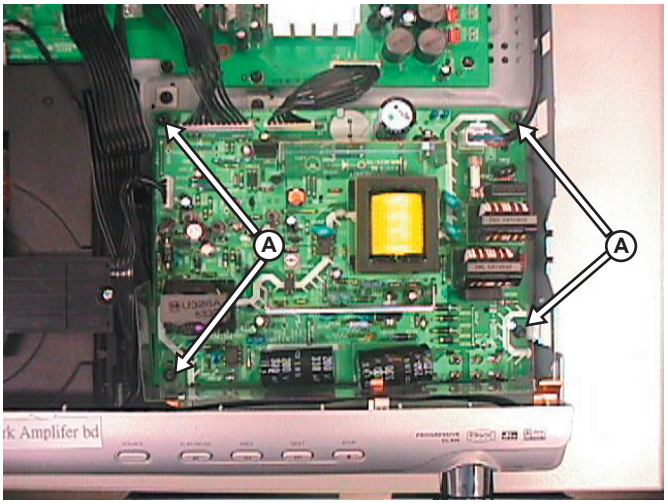


Figure 3-1

3) Loosen 4 screws B (See Figure 3-2) to remove the DVD Loader.

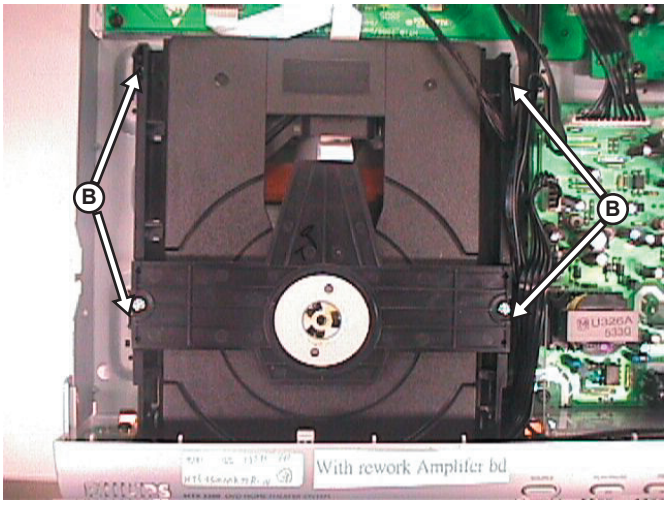


Figure 3-2

3.2 Dismantling of the Tuner Module & Mono Board.

1) Loosen 1 screw C (See Figure 3-3) to remove the Tuner Module.

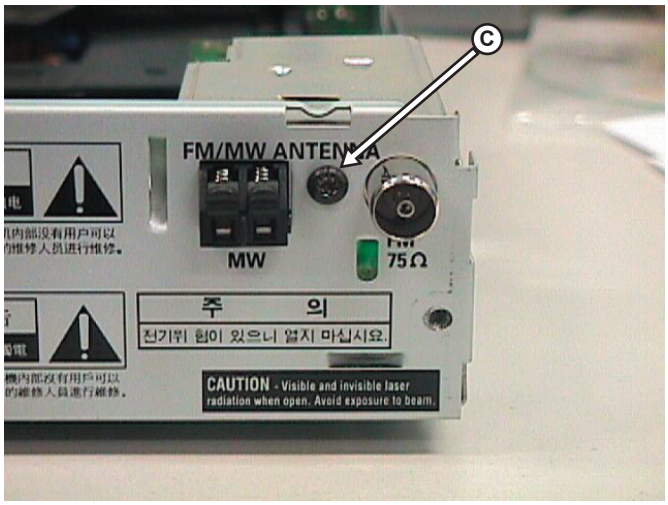


Figure 3-3

2) Loosen 2 screws D and E (See Figure 3-4 & Figure 3-5) to remove the Mono Board.

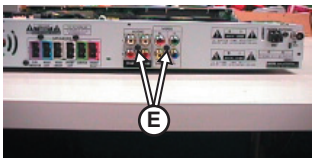


Figure 3-4(AP)

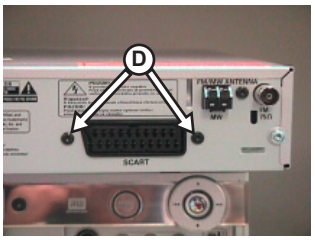


Figure 3-4(Europe)

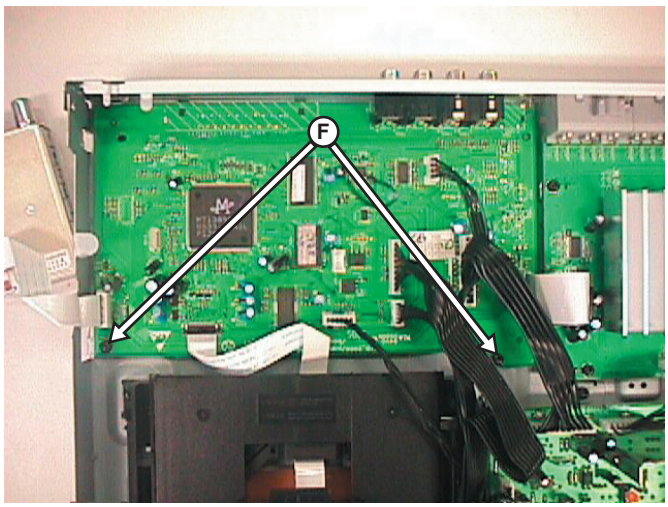


Figure 3-5

3.3 Dismantling of the Amp-module Board

1) Loosen 4 screws F and 2 screws G (See Figure 3-6 & Figure 3-7) to remove Amp-Module Board

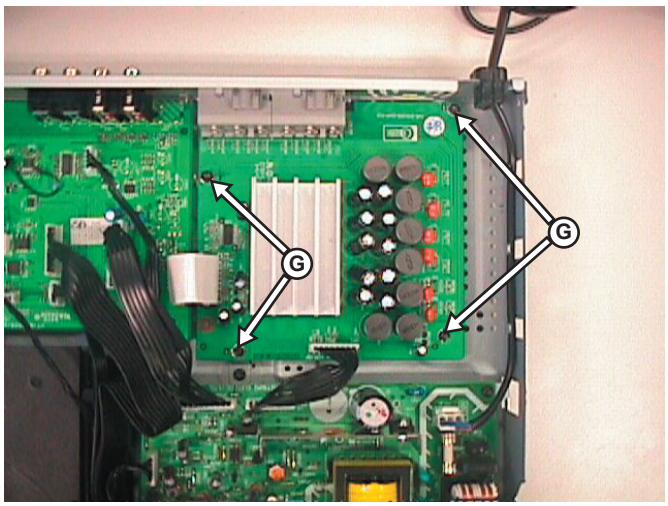
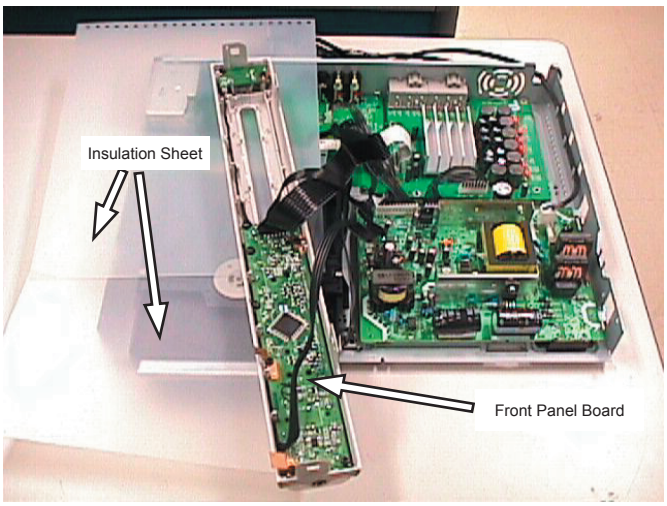
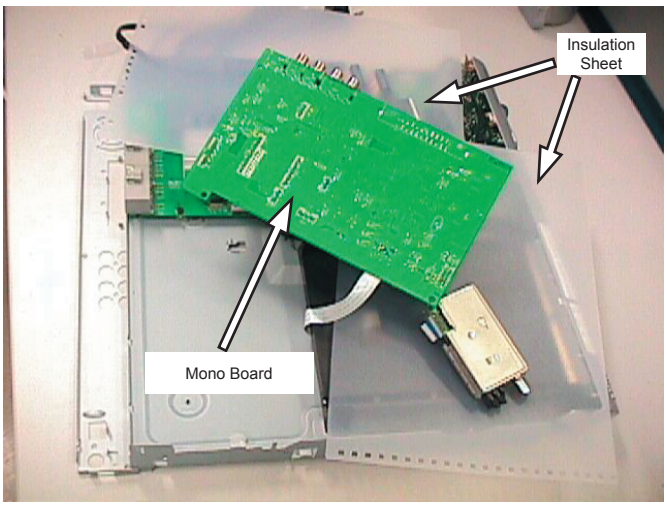


Figure 3-6



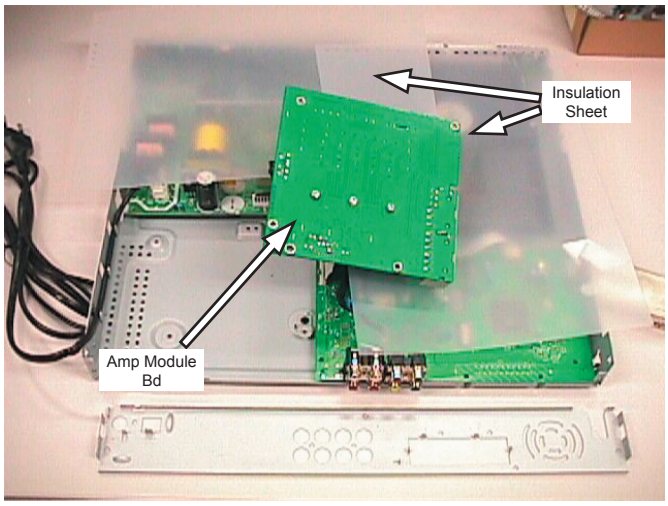
Service Position - Front Panel

Figure 3-7

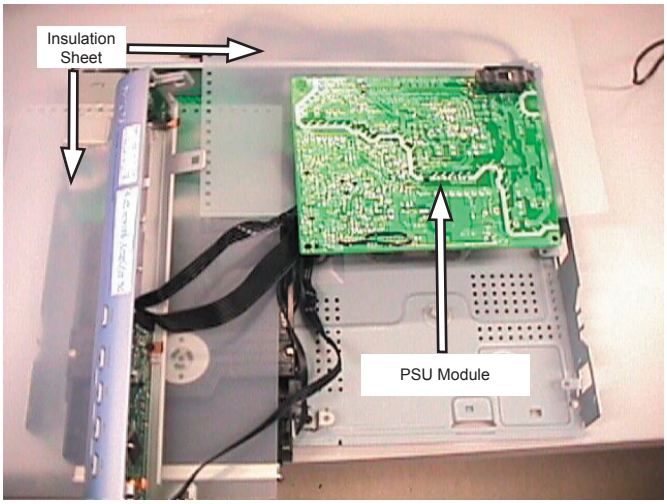


Service Position - Mono Board

3.4 Service Positions

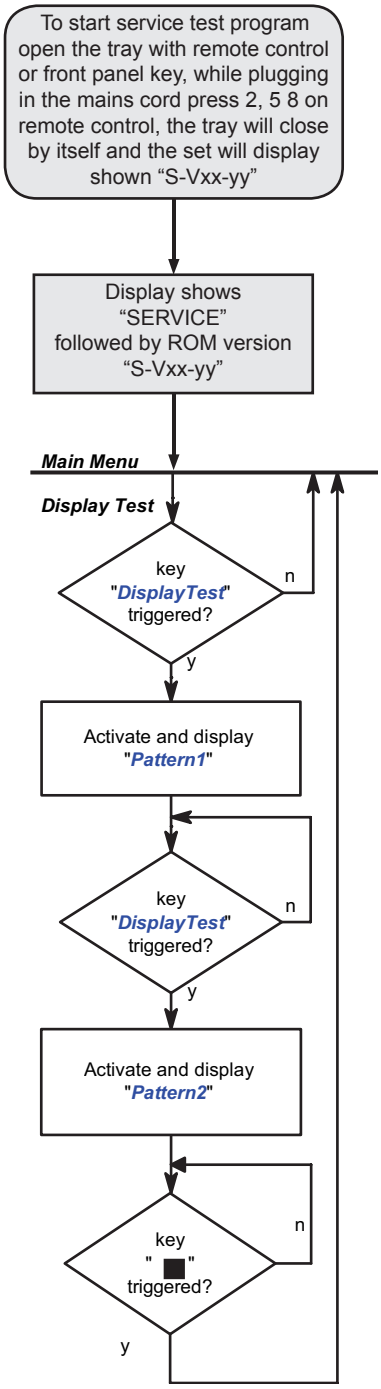


Service Position - Amp Module Bd



Service Position - PSU Module

4. Service Test Program



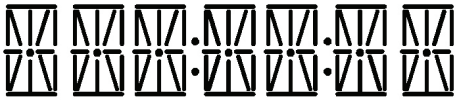
S refers to Service Mode
V refers to Version
xx refers to Software version number of BEA (counting up from 01 to 99)
yy refers to Software version number of Front uP (counting up from 01 to 99)

4.1 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:

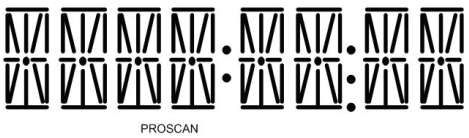
Following display patterns are used to test the display and its connections to µP.
Pattern 1: *Default: All display control pins are ON*
- to check the open-circuits



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

Receiver:

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

TEST	Activated with	ACTION
EEPROM FORMAT TEST	⏮ ⏮ to Exit	Load default data. Display shows “NEW”. Caution! All presets from the customer will be lost!!
ROTARY ENCODER TEST	Volume Knob	Display shows value for 2 seconds. Volume values increases or decreases in steps of 1 until 0 (VOL MIN) or 40 (VOL MAX) is reached.
LEAVE SERVICE TEST PROGRAM	Disconnect mains cord	

4.1.1 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 3300MK2/05	UK, Ireland	2	PAL
HTS 3300MK2/12	Europe	2	PAL
HTS 3300MK2/51	Russia	5	PAL
HTS 3300MK2/55	Latam	4	NTSL
HTS 3500MK2/98	AP	3	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> <AUDIO> <0> .....for HTS 3300MK2/12
   <9> <9> <9> <9> <AUDIO> <1> .....for HTS 3300MK2/51
   <9> <9> <9> <9> <AUDIO> <2> .....for HTS 3300MK2/05
   <9> <9> <9> <9> <AUDIO> <3> .....for HTS 3300MK2/98
   <9> <9> <9> <9> <AUDIO> <6> .....for HTS 3300MK2/55
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.)

4.1.2 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 3300MKII
xx = version number
YYYYY = model # - 3300D
ZZ = stroke version (12, 51, 05, 98, 55, 51K)
GGGGGGGG = version for servo code

4.1.3 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.

4.1.4 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 -> MULTICH ->…… ->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.

4.1.5 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.

4.1.6 Trade Mode

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

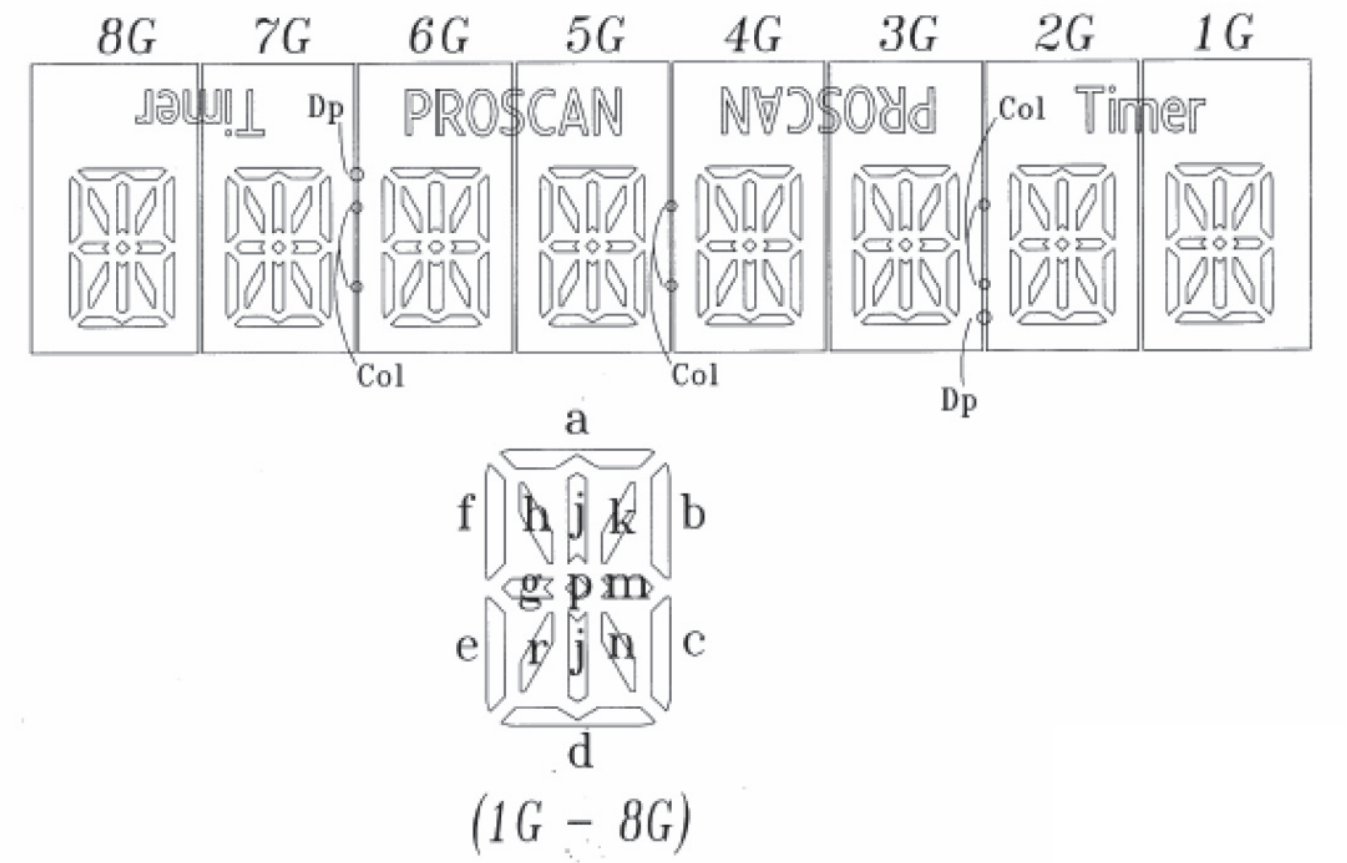
4.1.7 Procedure to change Tuner Grid (/98, /55 only)

1. Press **SOURCE** to select “FM” or “MW”.
2. Press **STANDBY ON** to switch the DVD system to standby mode.
3. Press **STANDBY ON** again to turn on the DVD system and hold down |◄◄ button on the front panel.
   ➜ The display will show "GRID 9" or "GRID 10".

   Helpful Hint:
   – GRID 9 and GRID 10 indicate that the tuning grid is in step of 9 kHz and 10 kHz respectively.

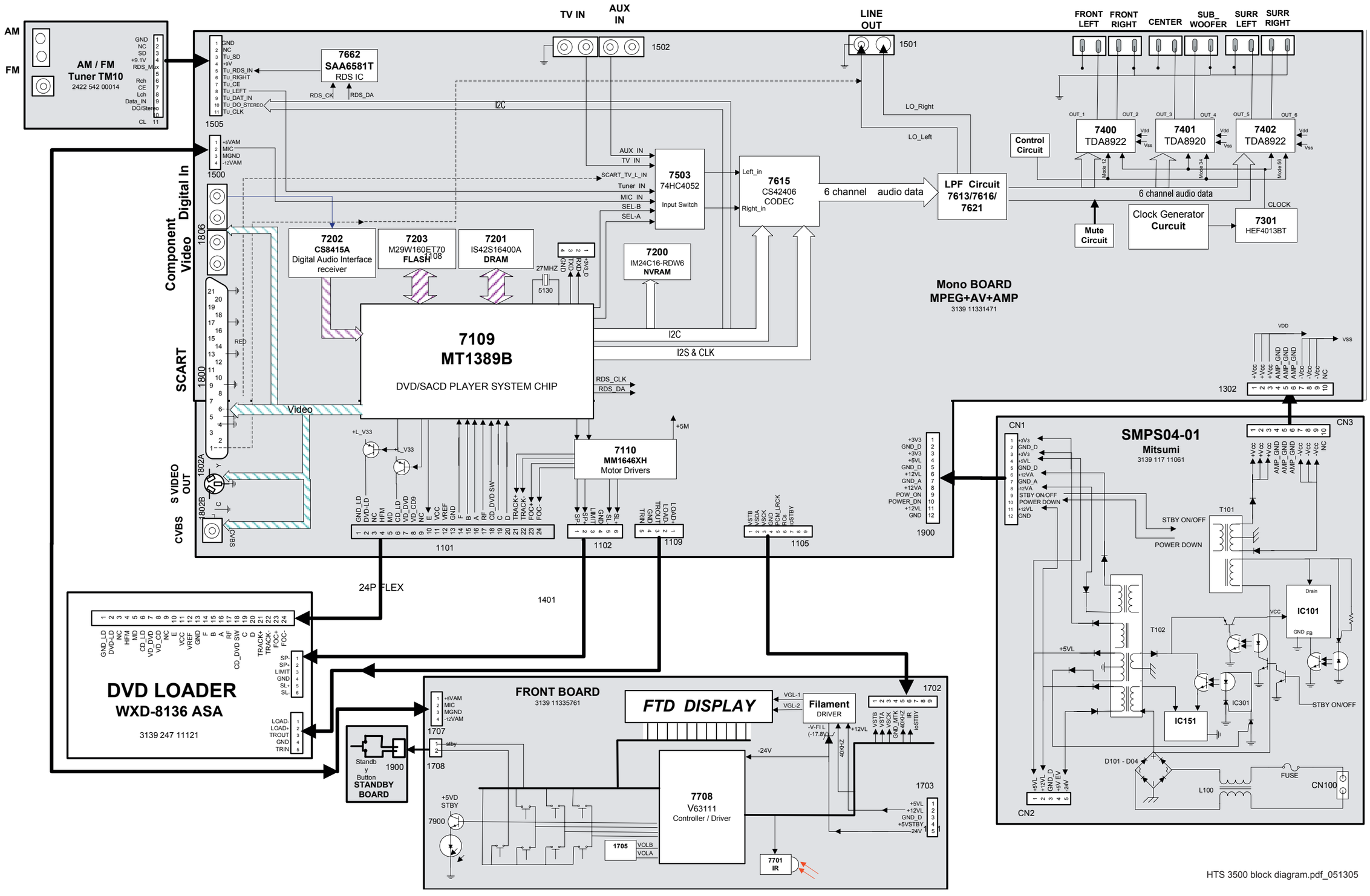
Note: Repeating the same action will toggle back to its previous tuning grid setting.

5. FTD Display Pin Connection



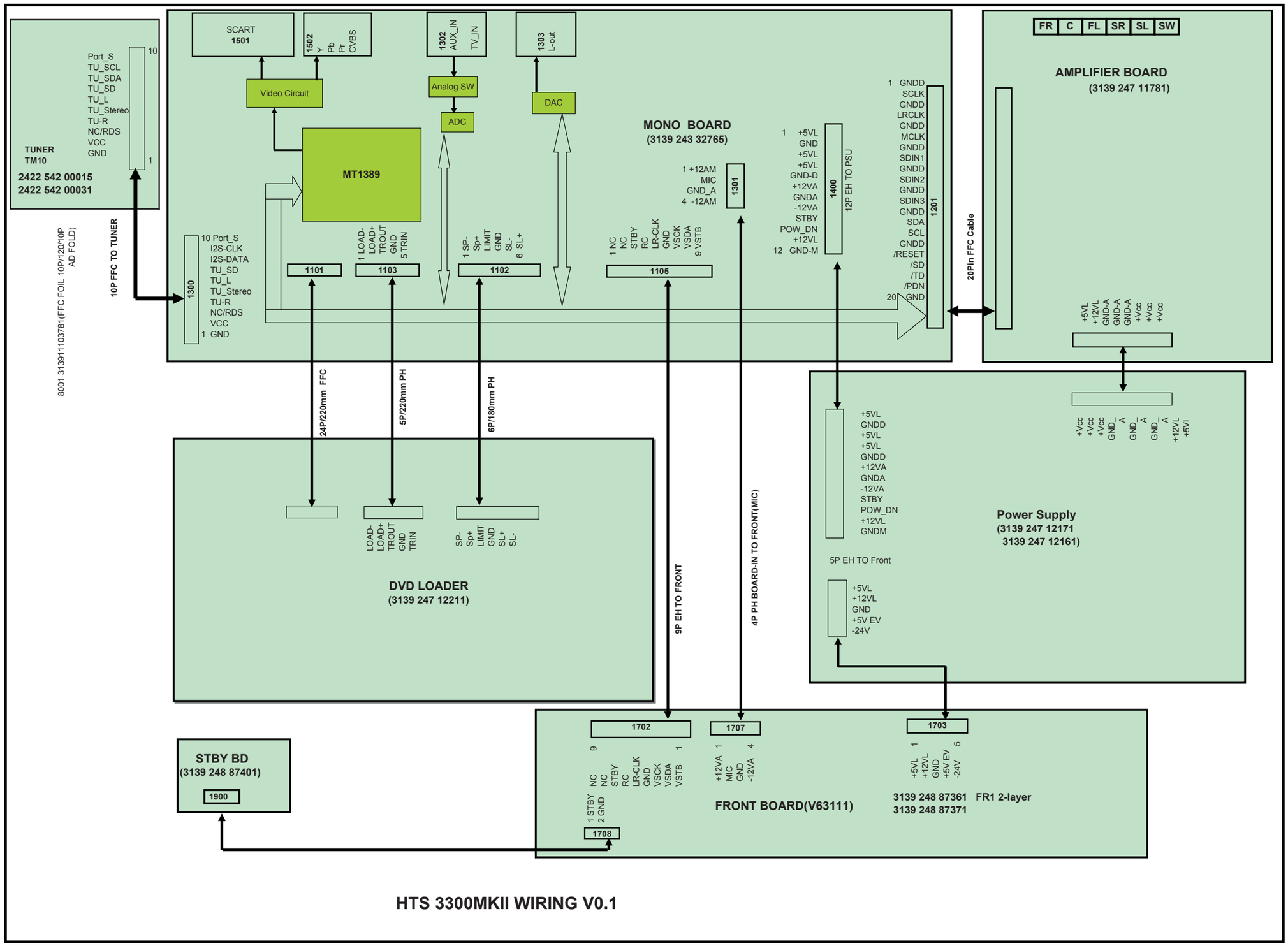
	8G	7G	6G	5G	4G	3G	2G	1G
P1	a	a	a	a	a	a	a	a
P2	j	j	j	j	j	j	j	j
P3	h	h	h	h	h	h	h	h
P4	k	k	k	k	k	k	k	k
P5	b	b	b	b	b	b	b	b
P6	f	f	f	f	f	f	f	f
P7	m	m	m	m	m	m	m	m
P8	g	g	g	g	g	g	g	g
P9	c	c	c	c	c	c	c	c
P10	e	e	e	e	e	e	e	e
P11	r	r	r	r	r	r	r	r
P12	n	n	n	n	n	n	n	n
P13	d	d	d	d	d	d	d	d
P14		col		col		col		
P15	p	p	p	p	p	p	p	p
P16	Timer		PROSCAN		PROSCAN		Timer	
P17		dp				dp		

6. Block Diagram



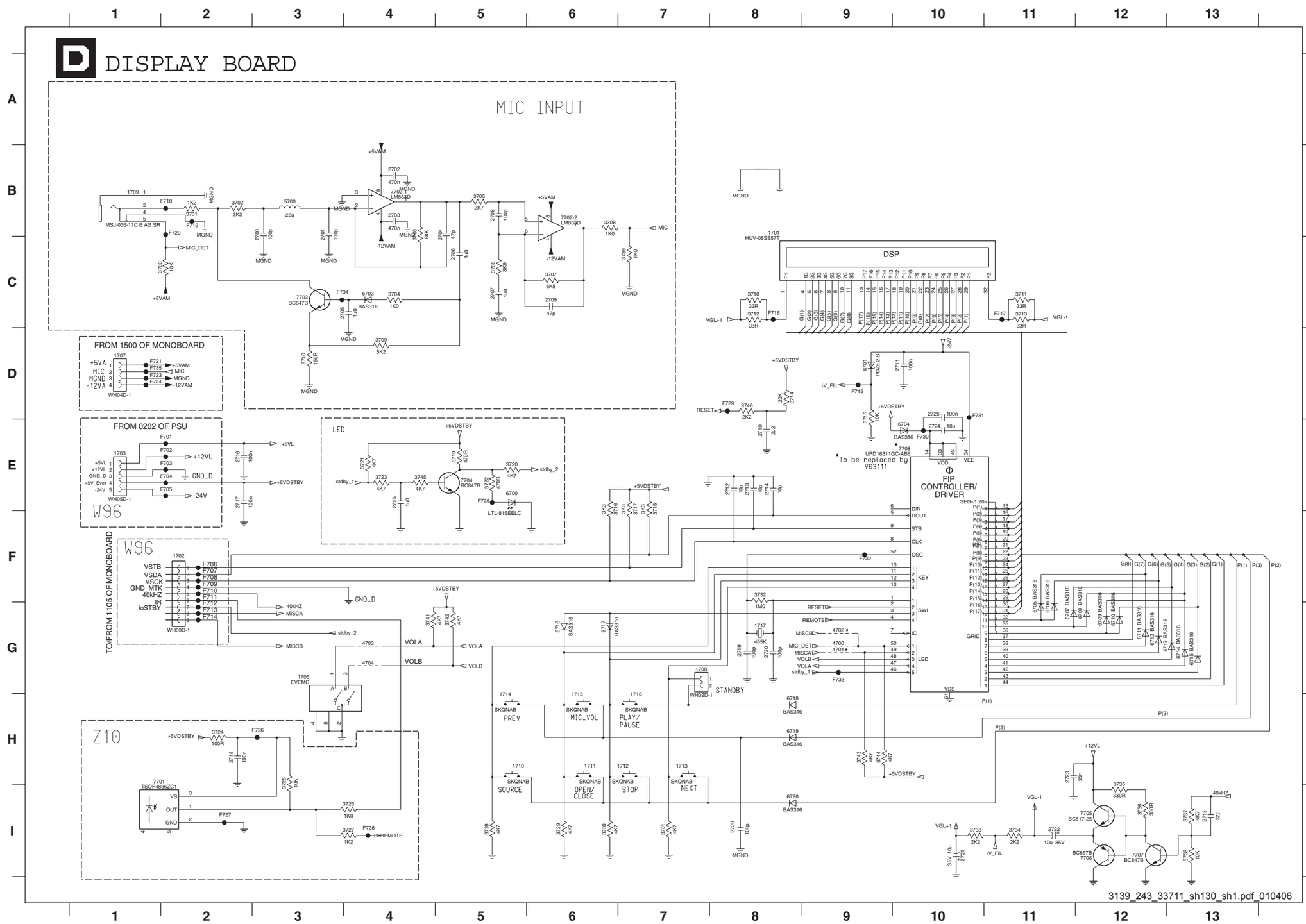
HTS 3500 block diagram.pdf_051305

Wiring Diagram



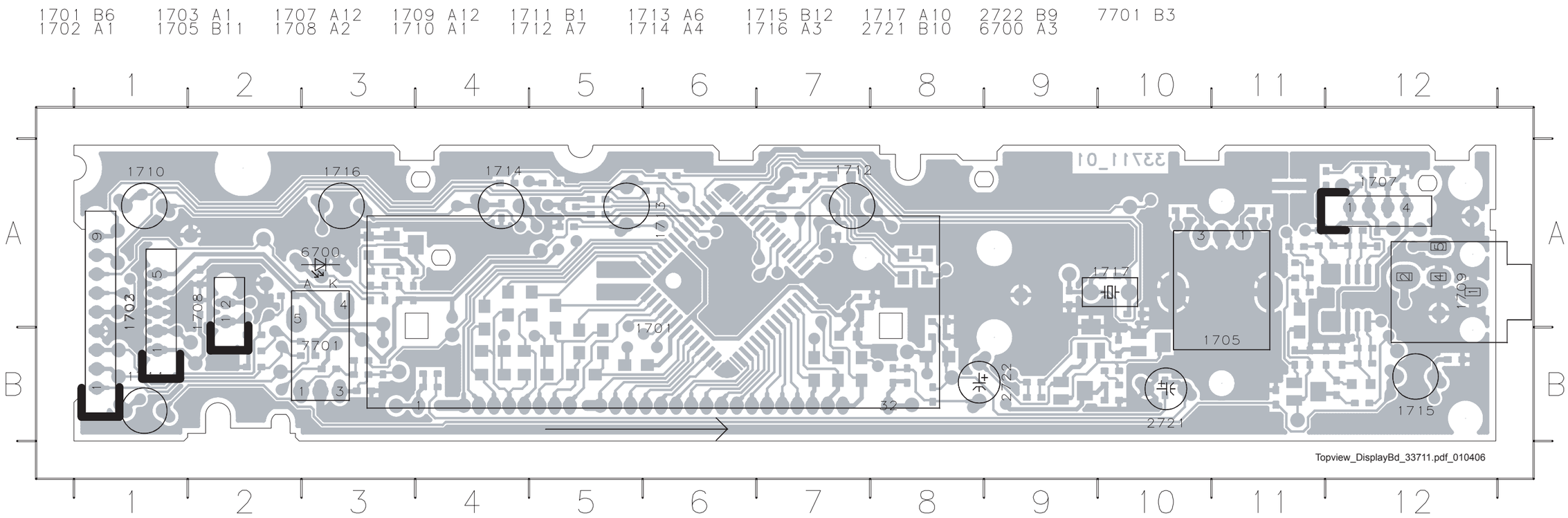
3300MKII wiring diagram.pdf _010506

7. Front: Display



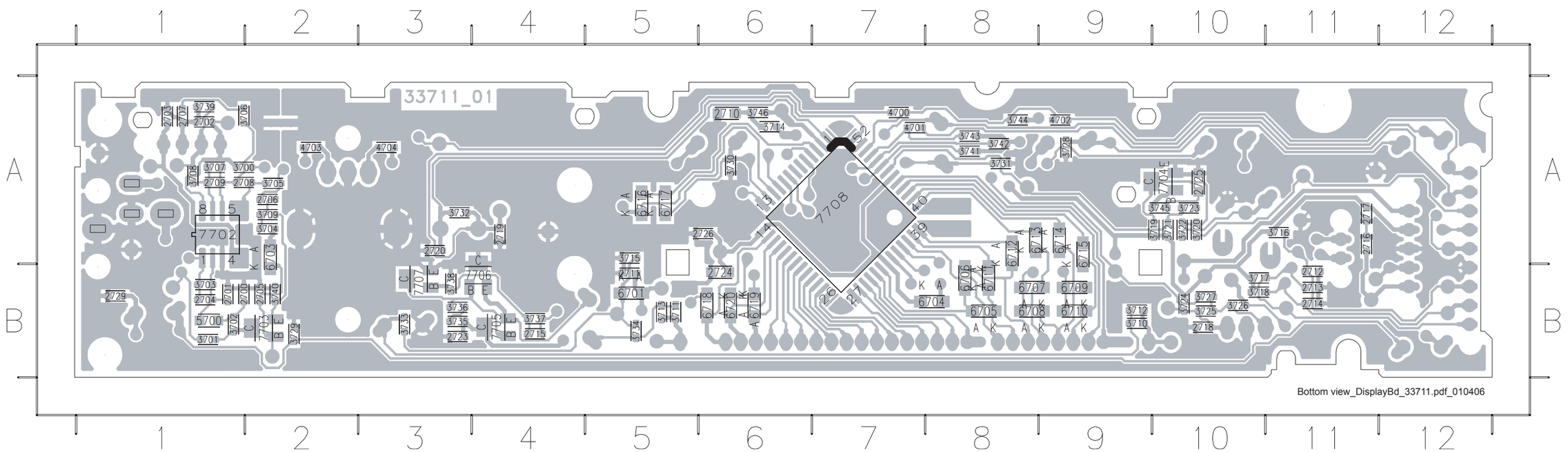
1701 B8
1702 F2
1703 E1
1705 G3
1707 D1
1708 G7
1709 B1
1710 H5
1711 H6
1712 H7
1713 H7
1714 H5
1715 H6
1716 H7
1717 G8
2700 B3
2701 B3
2702 B4
2703 B4
2704 B5
2705 C4
2706 C5
2707 C5
2708 B5
2709 C6
2710 E8
2711 D10
2712 E8
2713 E8
2714 E8
2715 I13
2716 E2
2717 E2
2718 H2
2719 G8
2720 G8
2721 I10
2722 I11
2723 H11
2724 E10
2725 E4
2726 D10
2729 I8
3700 C2
3701 B2
3702 B2
3703 B4
3704 C4
3705 B5
3706 C5
3707 C6
3708 B6
3709 D4
3710 C8
3711 C11
3712 C8
3713 C11
3714 D8
3715 D9
3716 E6
3717 E7
3718 E7
3719 E5
3720 E5
3721 E4
3722 E5
3723 E4
3724 H2
3725 H3
3726 I4
3727 I4
3728 I5
3729 I6
3730 I6
3731 I7
3732 F8
3733 I10
3734 I11
3735 I12
3736 I12
3737 I13
3738 I13
3739 C7
3740 D3
3741 G4
3742 G5
3743 H9
3744 H9
3745 E4
3746 D8
4700 G9
4701 G9
4702 G9
4703 G4
4704 G4
5700 B3
6700 E5
6701 D9
6703 C4
6704 E10
6705 G11
6706 G11
6707 G11
6708 G12
6709 G12
6710 G12
6711 G12
6712 G12
6713 G13
6714 G13
6715 G13
6716 G6
6717 G6
6718 H8
6719 H8
6720 I8
7701 H1
7702-1 B4
7702-2 B6
7703 C3
7704 E5
7705 I12
7706 I12
7707 I12
7708 E10
F701 E2
F702 E2
F703 E2
F704 E2
F705 E2
F706 F2
F707 F2
F708 F2
F709 F2
F710 F2
F711 F2
F712 G2
F713 G2
F714 G2
F715 D9
F716 C8
F717 C11
F718 B2
F719 B2
F720 B2
F721 D1
F723 D1
F724 D1
F725 E5
F726 H3
F727 I2
F728 I4
F729 D8
F730 E10
F731 D10
F732 F9
F733 G9
F734 C3
F735 D1

Front: Display (topview)

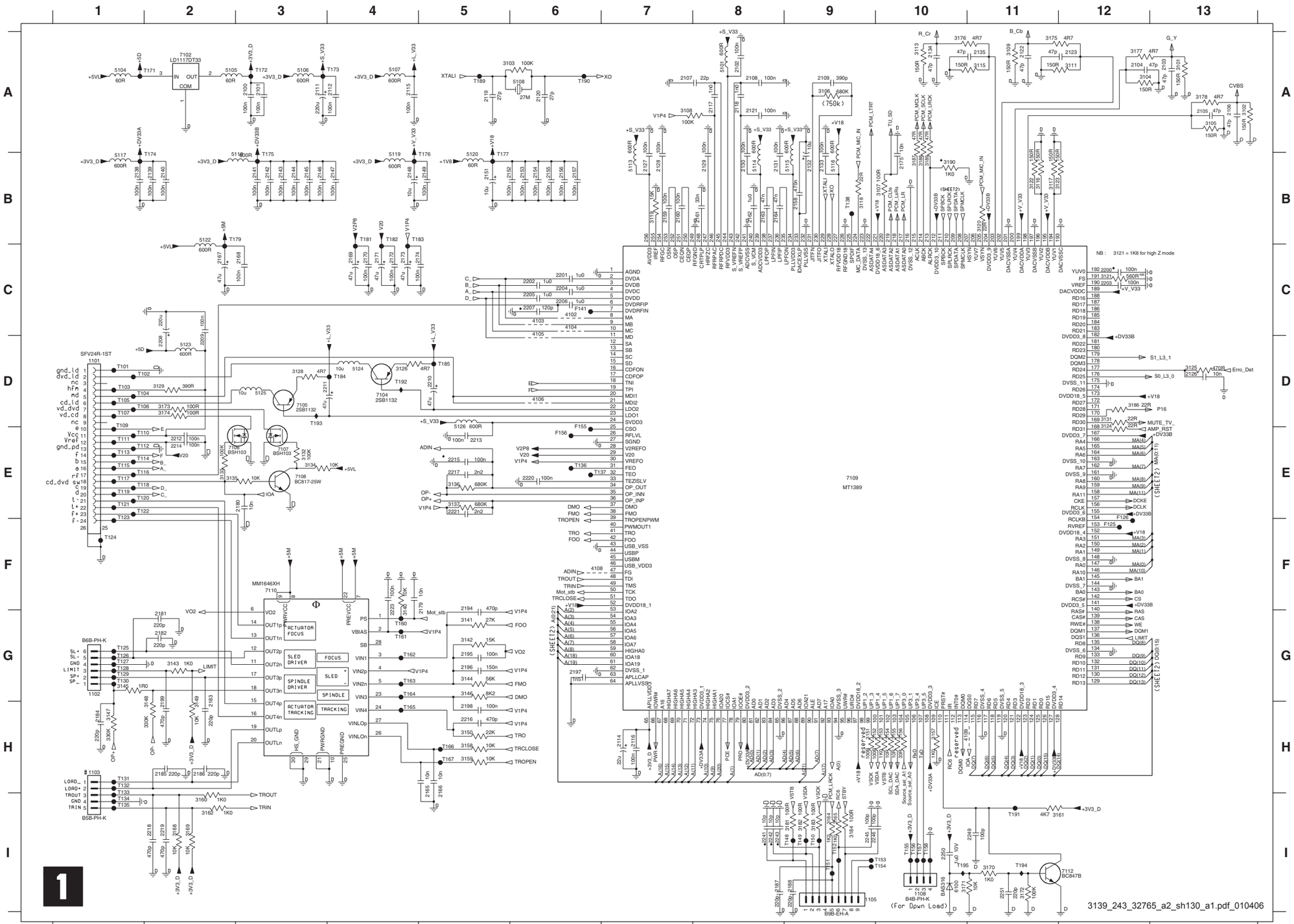


Front: Display (Bottom view)

2700 B1	2709 A1	2718 B10	3701 B1	3710 B9	3719 A10	3728 A9	3737 B4	3746 A6	6704 B8	6713 A8	7703 B2
2701 B1	2710 A6	2719 A4	3702 B1	3711 B5	3720 A10	3729 B2	3738 B3	4700 A7	6705 B8	6714 A9	7704 A10
2702 A1	2711 B5	2720 A3	3703 B1	3712 B9	3721 A10	3730 A6	3739 A1	4701 A7	6706 B8	6715 A9	7705 B4
2703 A1	2712 B11	2723 B3	3704 A2	3713 B5	3722 A10	3731 A8	3740 B2	4702 A9	6707 B8	6716 A5	7706 B4
2704 B1	2713 B11	2724 B6	3705 A2	3714 A6	3723 A10	3732 A3	3741 A8	4703 A2	6708 B8	6717 A5	7707 B3
2705 B2	2714 B11	2725 A10	3706 A1	3715 A5	3724 B10	3733 B3	3742 A8	4704 A3	6709 B9	6718 B6	7708 A7
2706 A2	2715 B4	2726 A6	3707 A1	3716 A11	3725 B10	3734 B5	3743 A8	5700 B1	6710 B9	6719 B6	
2707 A1	2716 A11	2729 B1	3708 A1	3717 B10	3726 B10	3735 B3	3744 A8	6701 B5	6711 B8	6720 B6	
2708 A1	2717 A11	3700 A1	3709 A2	3718 B10	3727 B10	3736 B3	3745 A10	6703 A2	6712 A8	7702 A1	



Mono Board: Circuit Diagram (Part 1)



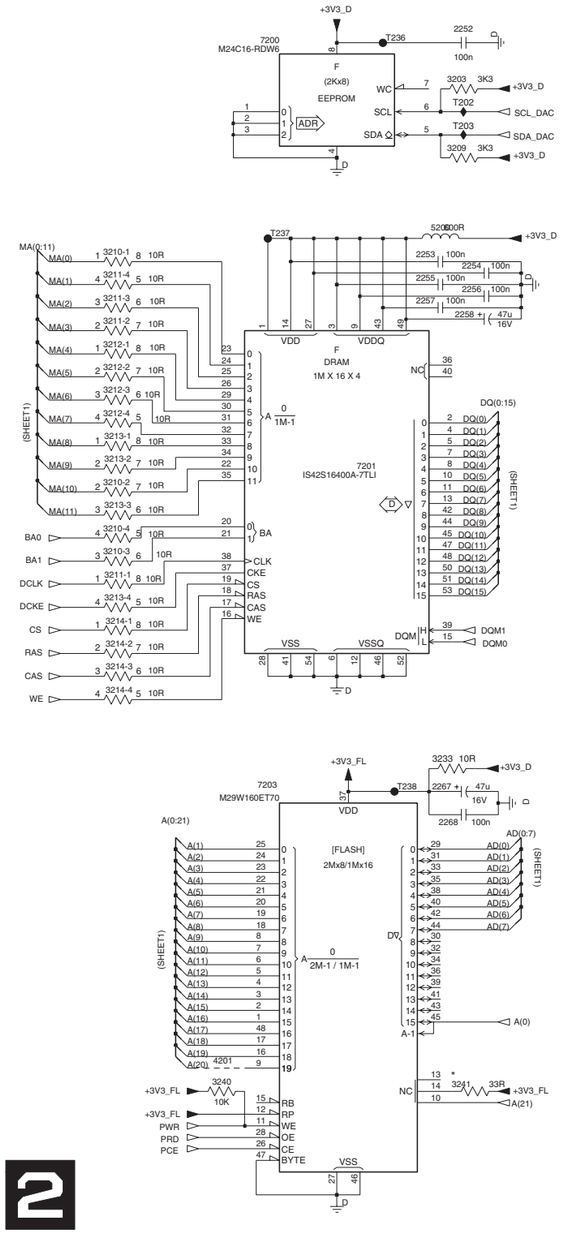
1101 D1	2246 I9	F125 F12
1102 G1	2249 I11	F126 F12
1103 H1	2250 I10	F141 C6
1105 I9	2251 I11	F155 E6
1108 I10	3101 A13	F156 E6
2100 A3	3102 A13	T101 D1
2101 A3	3103 A5	T102 D1
2102 A8	3104 A12	T103 D1
2103 A13	3105 A13	T104 D1
2104 A12	3106 A9	T105 D1
2105 A13	3107 B10	T106 D1
2106 A13	3108 A7	T107 D1
2107 A7	3109 A11	T109 E1
2108 A8	3111 A12	T110 E1
2109 A9	3113 A10	T111 E1
2111 A3	3115 A11	T112 E1
2112 A4	3116 B11	T113 E1
2114 H7	3117 B11	T114 E1
2115 A4	3118 B9	T115 E1
2116 H7	3119 B7	T116 E1
2117 A8	3120 B11	T117 E1
2118 A8	3121 C12	T118 E1
2119 A5	3122 B11	T119 E1
2120 A6	3123 B12	T120 E1
2121 A8	3124 D12	T121 E1
2122 A11	3125 D13	T122 E1
2123 A12	3126 D4	T123 F1
2126 D13	3128 D3	T124 F1
2127 B7	3129 D2	T125 G1
2128 B7	3131 D12	T126 G1
2129 B8	3132 E3	T127 G1
2130 B8	3133 E2	T128 G1
2131 B8	3134 E3	T129 G1
2132 B9	3135 E2	T130 G1
2133 B9	3136 E5	T131 H1
2134 A10	3137 E5	T132 H1
2135 A11	3140 F4	T133 I1
2138 B1	3141 G5	T134 I1
2139 B2	3142 G5	T135 I1
2140 B2	3143 G2	T136 E6
2141 B3	3144 G5	T137 E6
2142 B3	3145 G1	T138 B9
2143 B3	3146 G5	T148 I9
2144 B3	3147 H1	T149 I9
2145 B3	3148 H2	T150 I9
2146 B3	3149 H2	T151 I9
2147 B4	3150 H5	T152 I9
2148 B4	3151 H9	T153 I10
2149 B5	3152 H9	T154 I10
2151 B5	3153 H10	T155 I10
2152 B6	3154 H10	T156 I10
2153 B6	3155 H10	T157 I10
2154 B6	3156 H10	T158 I10
2155 B6	3157 H10	T160 G4
2156 B6	3158 H5	T161 G4
2157 B6	3159 H5	T162 G4
2158 B9	3160 I2	T163 G4
2159 B7	3161 I12	T164 G4
2160 B7	3162 I2	T165 H4
2161 B8	3164 I9	T166 H5
2162 B8	3165 I9	T167 H5
2163 B8	3168 I2	T171 A2
2164 B8	3169 I2	T172 A3
2165 H5	3170 I11	T173 A4
2166 H5	3171 I10	T174 B2
2167 C2	3172 I11	T175 B3
2168 C3	3173 D2	T176 B5
2169 C4	3174 D2	T177 B5
2170 C4	3175 A11	T179 B2
2171 C4	3176 A10	T181 B4
2172 C4	3177 A12	T182 B4
2173 C4	3178 A13	T183 B4
2174 C5	3181 I9	T184 D4
2175 B10	3182 I9	T185 D5
2179 F5	3183 I9	T189 A5
2180 E3	3184 I9	T190 A6
2181 G2	3186 D12	T191 I11
2182 G2	3187 B10	T192 D4
2183 G2	3188 B10	T193 D3
2184 H1	3189 B10	T194 I11
2185 H2	3190 B10	T195 I10
2186 H2	4102 C6	
2187 I8	4103 C6	
2188 I9	4104 C6	
2194 G5	4105 C6	
2195 G5	4106 D6	
2196 G5	4108 F6	
2197 G6	4109 H10	
2198 H5	5101 A8	
2199 H2	5104 A1	
2200 C12	5105 A2	
2201 C6	5106 A3	
2202 C6	5107 A4	
2203 C12	5108 A6	
2204 C6	5113 B7	
2205 C6	5114 B8	
2206 C6	5115 B9	
2207 C6	5116 B9	
2208 D2	5117 B1	
2209 D2	5118 B3	
2210 D5	5119 B4	
2211 D3	5120 B5	
2212 E2	5122 B2	
2213 E5	5123 D2	
2214 E2	5124 D4	
2215 E5	5125 D3	
2216 H5	5126 E5	
2217 E5	6100 I10	
2218 I2	7102 A2	
2219 I2	7104 D4	
2220 E6	7105 D3	
2221 E5	7106 E2	
2223 F4	7107 E3	
2241 I8	7108 E3	
2242 I8	7109 E9	
2243 I8	7110 F3	
2245 I9	7112 I12	

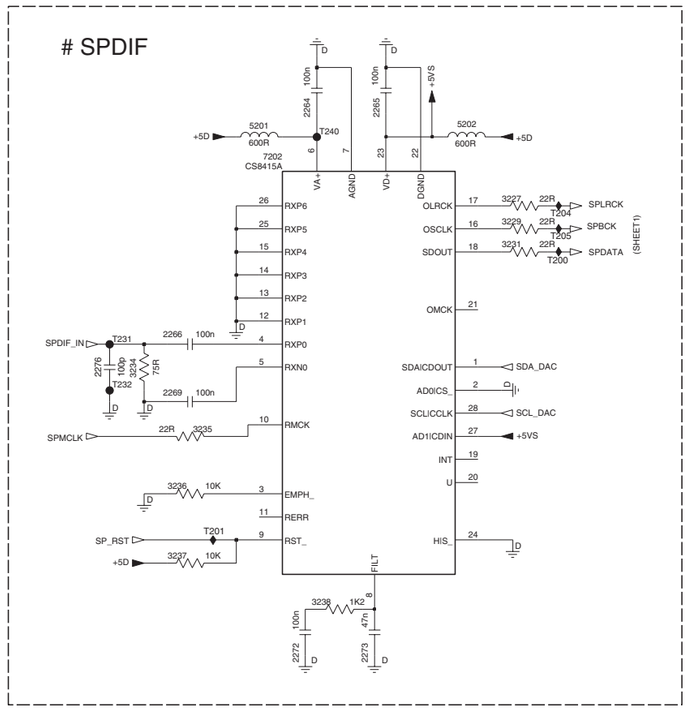
Mono Board: Circuit Diagram (Part 2)

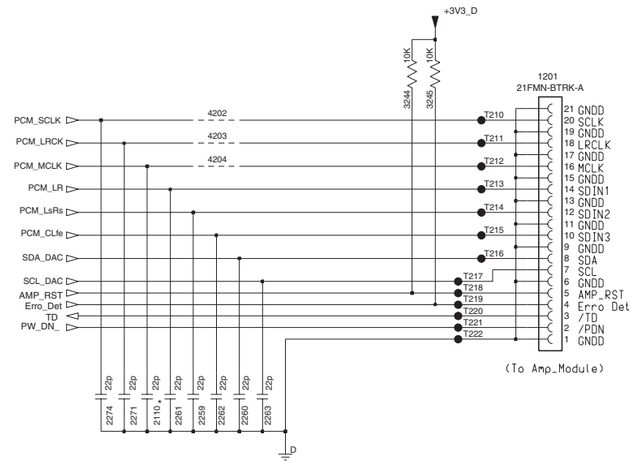
* OPTIONAL
\# Refer to Table

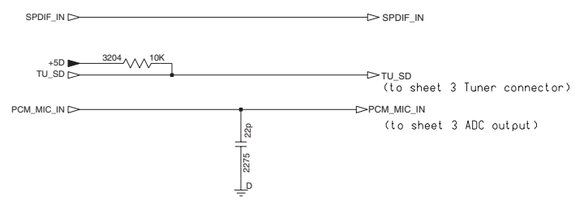
		SPDIF	3200 3201
HTS2000	EU		
	ROW		
HTS3000	EU	X	X
	ROW	X	X
HTS5000	EU	X	X
	ROW	X	X

SPDIF





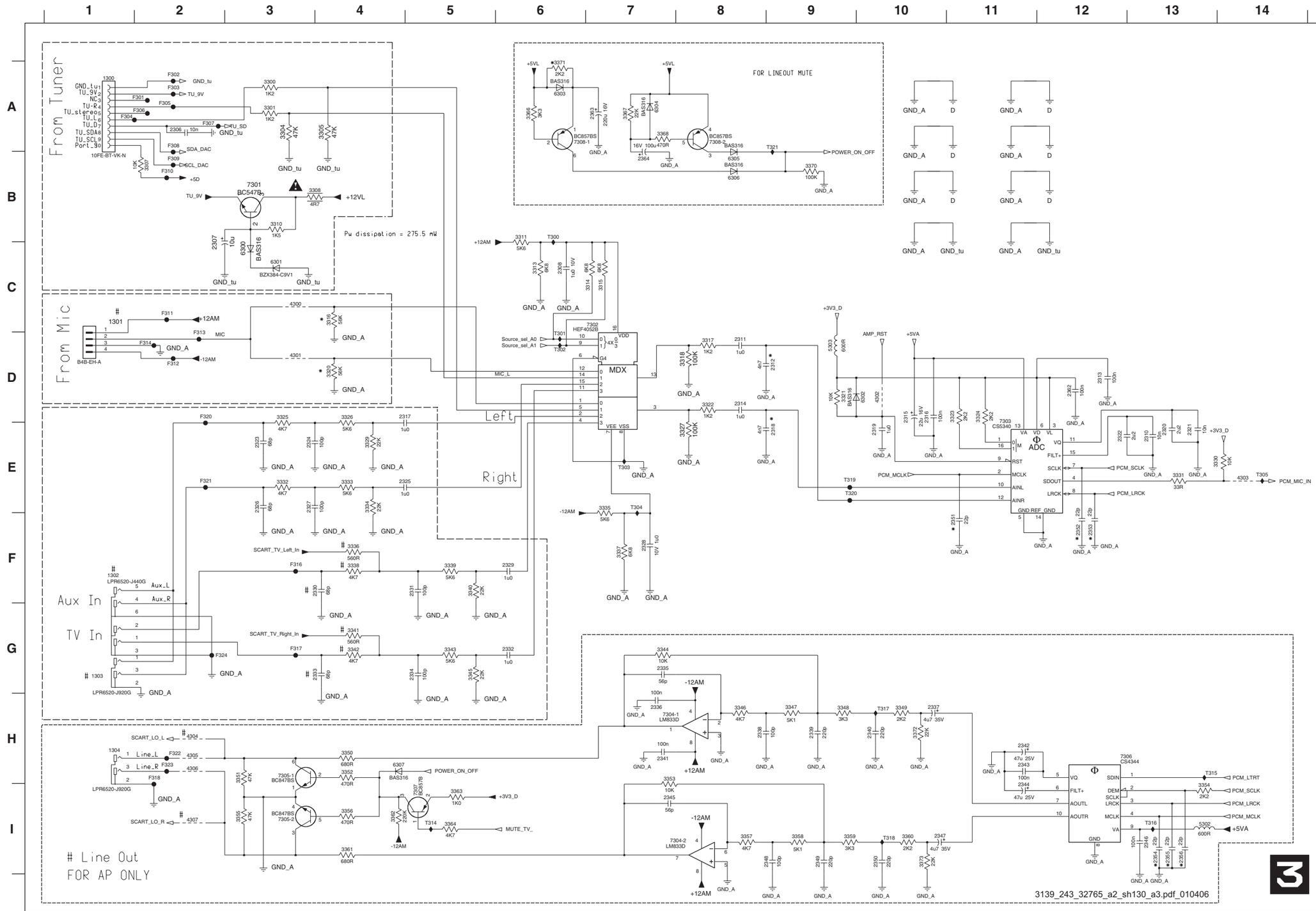




3139_243_32765_a2_sh130_a2.pdf_010406

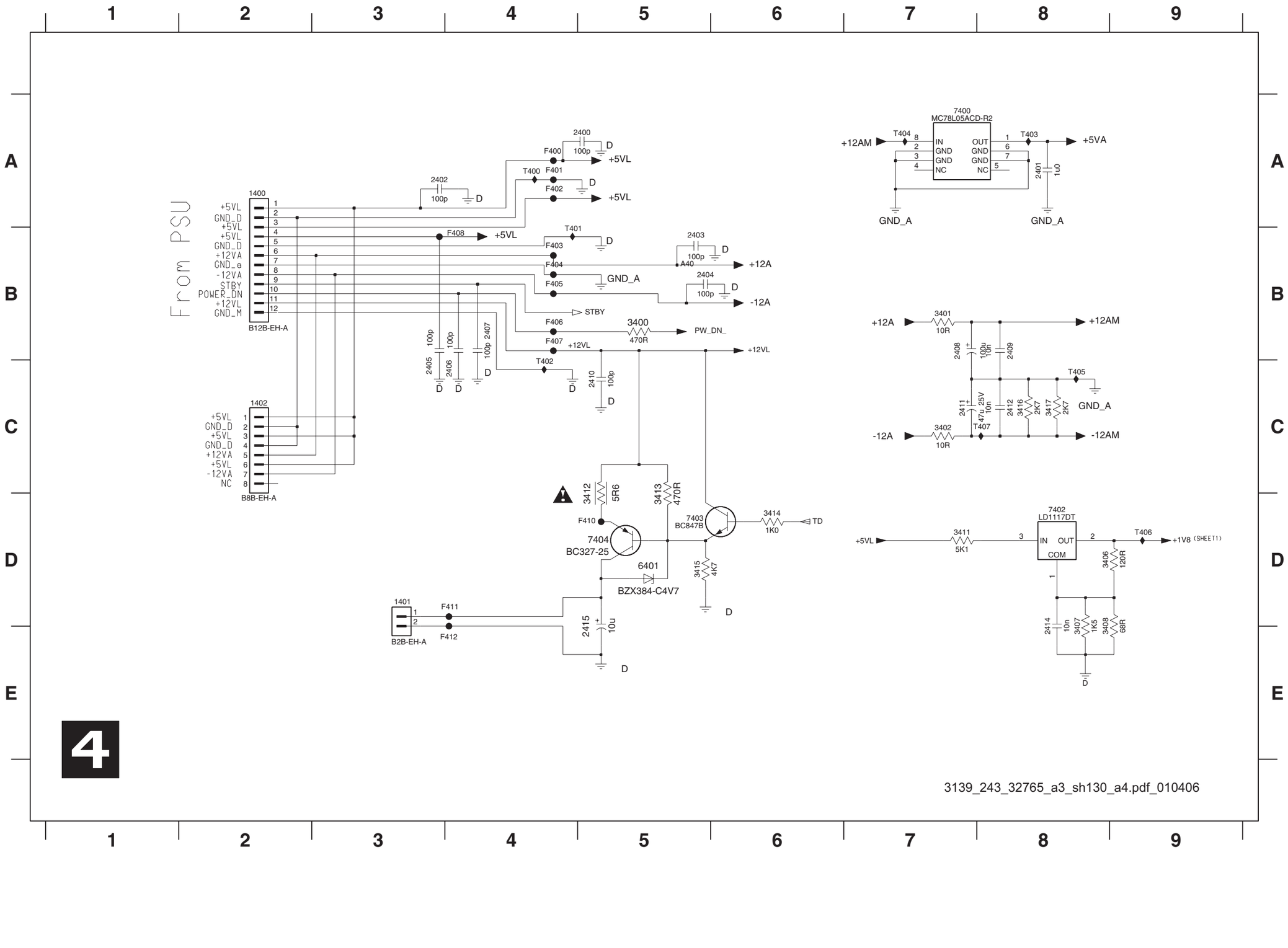
1201 B12
2110 E10
2252 A3
2253 B3
2254 C3
2255 C3
2256 C3
2257 C3
2258 C3
2259 E10
2260 E10
2261 E10
2262 E10
2263 E10
2264 D6
2265 D7
2266 F5
2267 F3
2268 F3
2269 F5
2271 E9
2272 H6
2273 H7
2274 E9
2275 G11
2276 F5
3203 A3
3204 G10
3209 B3
3210-1 B1
3210-2 D1
3210-3 D1
3210-4 D1
3211-1 D1
3211-2 C1
3211-3 C1
3211-4 C1
3212-1 C1
3212-2 C1
3212-3 C1
3212-4 C1
3213-1 D1
3213-2 D1
3213-3 D1
3213-4 E1
3214-1 E1
3214-2 E1
3214-3 E1
3214-4 E1
3227 E8
3229 E8
3231 E8
3233 F3
3234 F5
3235 F6
3236 G5
3237 G5
3238 G6
3240 H2
3241 H3
3244 C11
3245 C11
4201 G2
4202 C10
4203 C10
4204 C10
5200 B3
5201 D6
5202 D7
7200 A2
7201 D3
7202 E6
7203 F2
T200 E8
T201 G6
T202 B3
T203 B3
T204 E8
T205 E8
T210 C12
T211 C12
T212 C12
T213 C12
T214 C12
T215 C12
T216 D12
T217 D12
T218 D12
T219 D12
T220 D12
T221 D12
T222 D12
T231 F5
T232 F5
T236 A3
T237 B2
T238 F3
T240 D6

Mono Board: Circuit Diagram (Part 3)



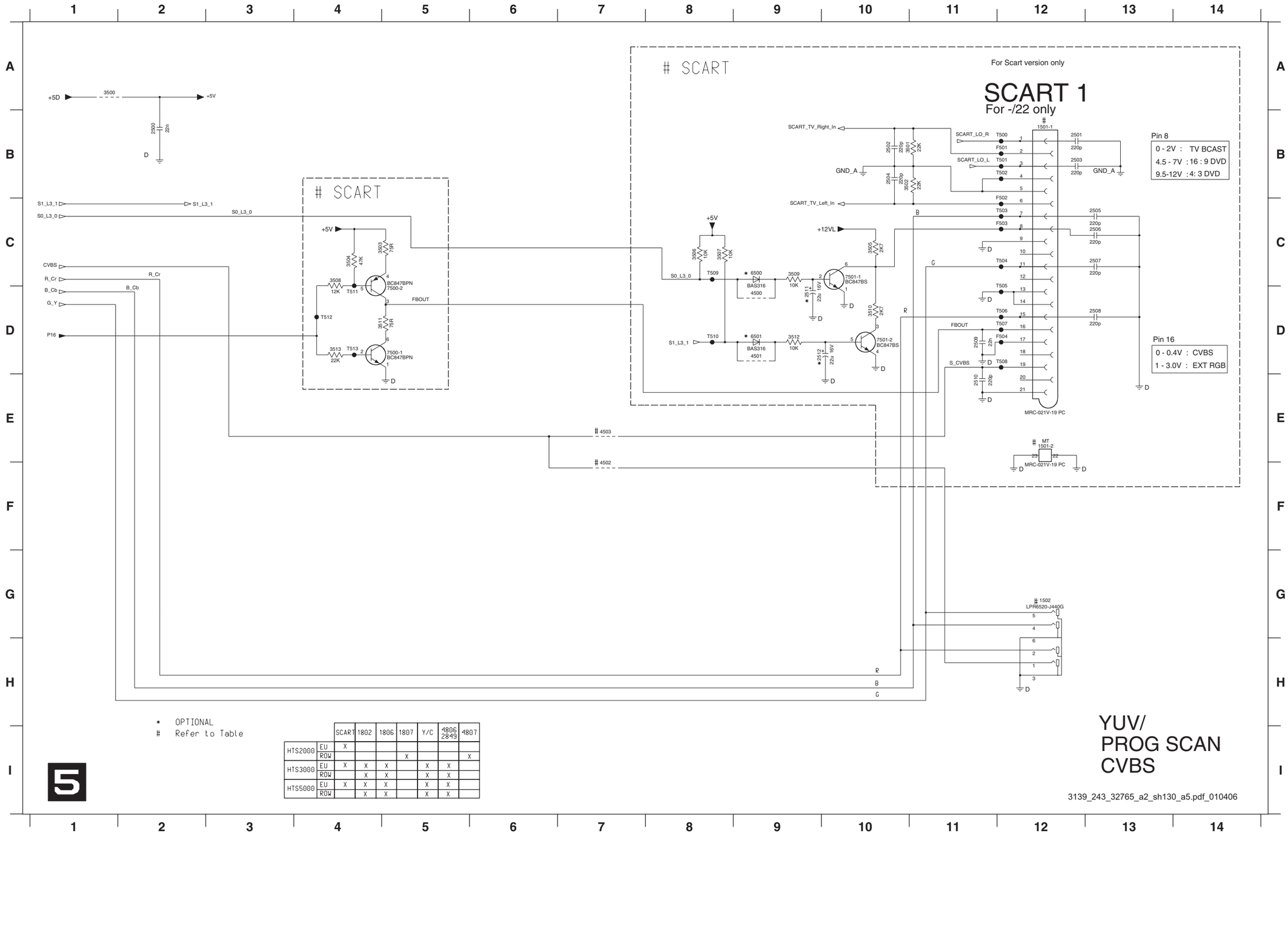
1300 A1
1301 C1
1302 F1
1303 G1
1304 H1
2306 A2
2307 C2
2308 C6
2310 E13
2311 D8
2312 D9
2313 D12
2314 D8
2315 D10
2316 D10
2317 D4
2318 E9
2319 E10
2320 E13
2321 E13
2322 E12
2323 E3
2324 E3
2325 E4
2326 E3
2327 E3
2328 F7
2329 F6
2330 F4
2331 F5
2332 G6
2333 G4
2334 G5
2335 G7
2336 H7
2337 H10
2338 H8
2339 H9
2340 H10
2341 H7
2342 H11
2343 H11
2344 I11
2345 I7
2346 I13
2347 I10
2348 I9
2349 I9
2350 I10
2351 F11
2352 F12
2353 F12
2354 I13
2355 I13
2356 I13
2362 D12
2363 A7
2364 B7
3300 A3
3301 A3
3304 A3
3305 A4
3307 B2
3308 B3
3310 B3
3311 B6
3313 C6
3314 C7
3315 C7
3316 C4
3317 D8
3318 D8
3320 D4
3321 D9
3322 D8
3323 D11
3324 D11
3325 D3
3326 D4
3327 E8
3329 E4
3330 E13
3331 E13
3332 E3
3333 E4
3334 E4
3335 E7
3336 F4
3337 F7
3338 F4
3339 F5
3340 F5
3341 G4
3342 G4
3343 G5
3344 G7
3345 G5
3346 H8
3347 H9
3348 H9
3349 H10
3350 H4
3351 H3
3352 H4
3353 H7
3354 I13
3355 I3
3356 I4
3357 I8
3358 I9
3359 I9
3360 I10
3361 I4
3362 I4
3363 I5
3364 I5
3366 A6
3367 A7
3368 A7
3370 B9
3371 A6
3372 H10
3373 I10
4300 C3
4301 D3
4302 D10
4303 E14
4304 H2
4305 H2
4306 H2
4307 I2
5302 I13
5303 D9
6300 C3
6301 C3
6302 D10
6303 A6
6304 A7
6305 B8
6306 B8
6307 H4
7301 B3
7302 C7
7303 E11
7304-1 H8
7304-2 I8
7305-1 H3
7305-2 I3
7306 H12
7307 I5
7308-1 A6
7308-2 A8
F301 A2
F302 A2
F303 A2
F304 A1
F305 A2
F306 A2
F307 A2
F308 A2
F309 B2
F310 B2
F311 C2
F312 D2
F313 D2
F314 D2
F316 F3
F317 G3
F318 H2
F320 D2
F321 E2
F322 H2
F323 H2
F324 G2
T300 B6
T301 D6
T302 D6
T303 E7
T304 E7
T305 E14
T314 I5
T315 H13
T316 I13
T317 H10
T318 I10
T319 E9
T320 E9
T321 A9

Mono Board: Circuit Diagram (Part 4)



1400 A2
1401 D3
1402 C2
2400 A5
2401 A8
2402 A3
2403 B5
2404 B5
2405 C3
2406 C4
2407 B4
2408 B7
2409 B8
2410 C5
2411 C7
2412 C8
2414 D8
2415 D5
3400 B5
3401 B7
3402 C7
3406 D8
3407 D8
3408 D8
3411 D7
3412 D5
3413 D5
3414 D6
3415 D5
3416 C8
3417 C8
6401 D5
7400 A7
7402 D8
7403 D5
7404 D5
F400 A4
F401 A4
F402 A4
F403 B4
F404 B4
F405 B4
F406 B4
F407 B4
F408 B4
F410 D5
F411 D4
F412 E4
T400 A4
T401 B4
T402 C4
T403 A8
T404 A7
T405 C8
T406 D9
T407 C8

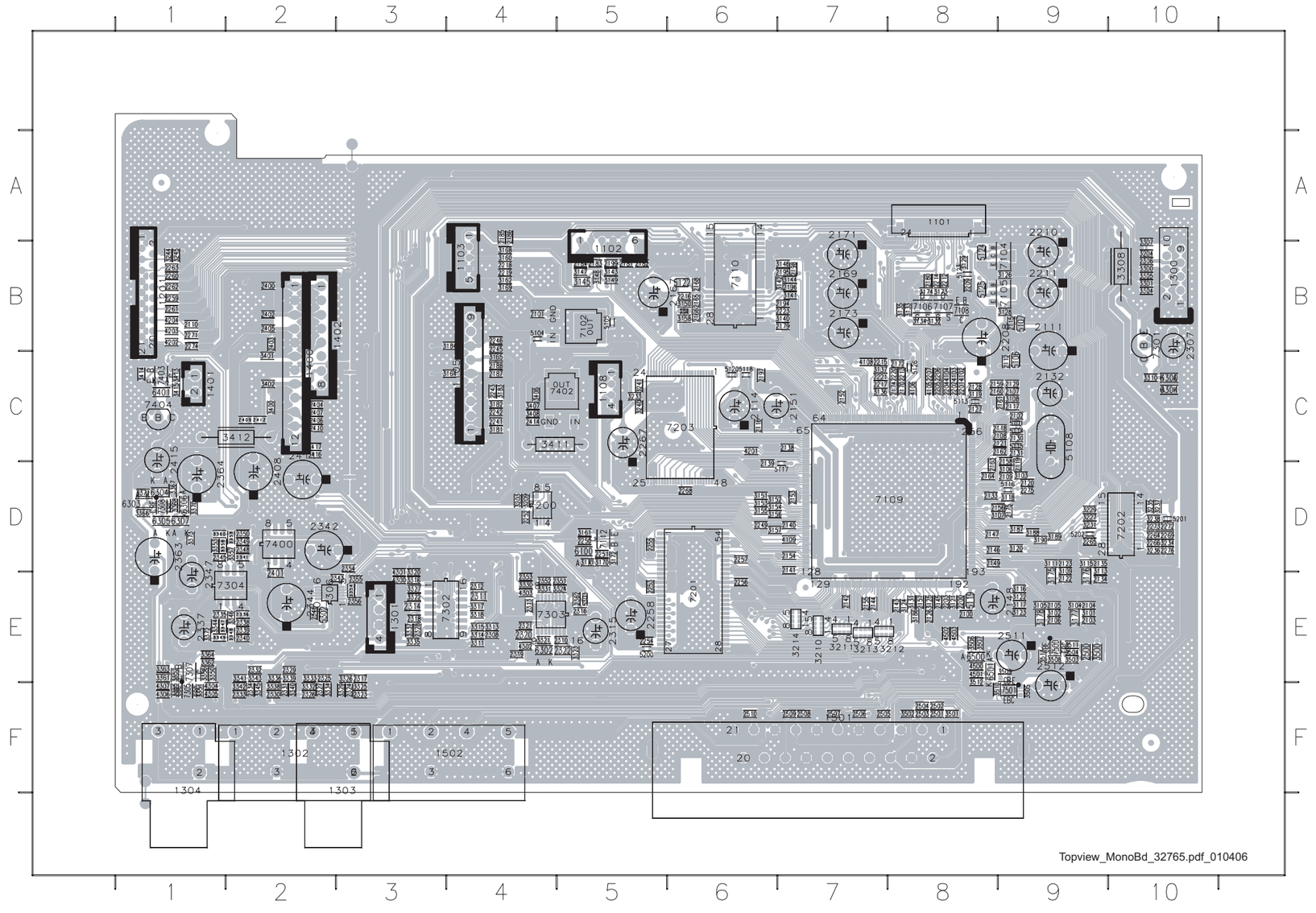
Mono Board: Circuit Diagram (Part 5)



		SCART	1802	1806	1807	Y/C	4806 2849	4807
HTS2000	EU	X						
	ROW				X			X
HTS3000	EU	X	X	X		X	X	
	ROW		X	X		X	X	
HTS5000	EU	X	X	X		X	X	
	ROW		X	X		X	X	

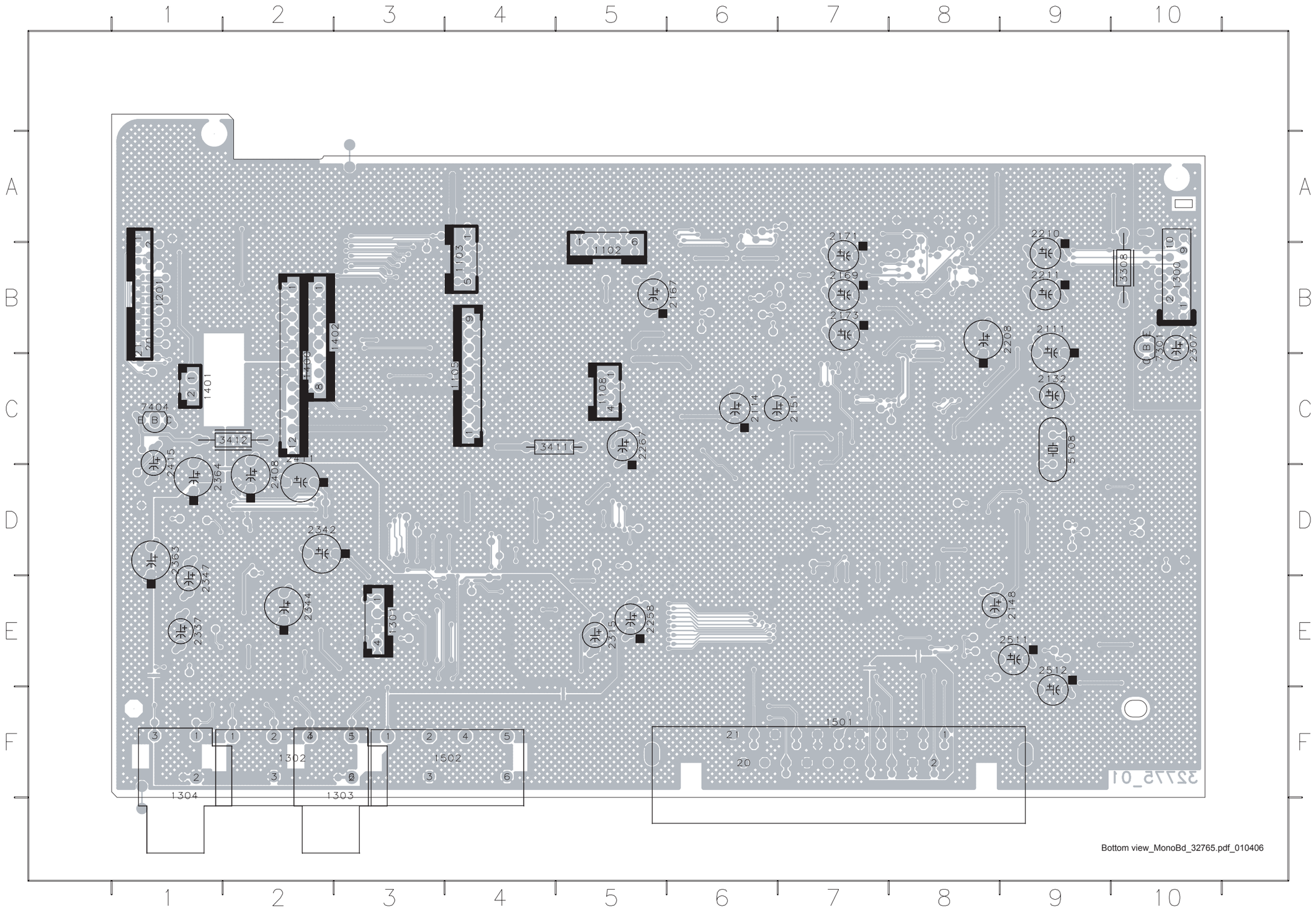
1501-1 B12
1501-2 E12
1502 G12
2500 B2
2501 B12
2502 B10
2503 B12
2504 B10
2505 C13
2506 C13
2507 C13
2508 D13
2509 D11
2510 E11
2511 D9
2512 D9
3500 A1
3501 B11
3502 B10
3503 C5
3504 C4
3505 C10
3506 C8
3507 C8
3508 C4
3509 C9
3510 D10
3511 D5
3512 D9
3513 D4
4500 D9
4501 D9
4502 E7
4503 E7
6500 C9
6501 D9
7500-1 D5
7500-2 D5
7501-1 C10
7501-2 D10
F501 B12
F502 C12
F503 C12
F504 D12
T500 B12
T501 B12
T502 B12
T503 C12
T504 C12
T505 D12
T506 D12
T507 D12
T508 D12
T509 C8
T510 D8
T511 D4
T512 D4
T513 D4

Layout: Mono Board (Topview)



1101	A8	2180	B8	2324	F3	3128	B9	3317	E4	4201	C6
1102	B5	2181	B5	2325	E2	3129	B8	3318	E4	4202	B1
1103	B4	2182	B5	2326	F2	3131	E8	3320	E3	4203	B1
1105	C4	2183	B5	2327	F2	3132	B8	3321	E4	4204	B1
1108	C5	2184	B5	2328	E3	3133	B8	3322	E3	4300	F3
1201	B1	2185	A4	2329	E2	3134	B8	3323	E5	4301	F3
1300	B10	2186	A4	2330	E2	3135	B9	3324	E3	4302	F4
1301	F3	2187	C4	2331	F2	3136	C7	3325	E3	4303	F4
1302	F2	2188	C4	2332	F2	3137	C7	3326	E3	4304	F1
1303	F3	2194	B7	2333	F2	3140	B7	3327	E3	4305	F1
1304	F1	2195	B7	2334	F2	3141	B7	3329	F3	4306	F1
1400	C2	2196	B7	2335	E1	3142	B7	3330	E4	4307	F1
1401	C1	2197	C6	2336	E2	3143	B5	3331	E4	4500	E8
1402	B3	2198	B7	2337	E1	3144	B7	3332	F2	4501	E8
1501	F4	2199	B5	2338	F2	3145	B5	3333	F2	4502	E8
1502	F4	2200	E8	2339	F2	3146	B7	3334	F2	4503	E8
2100	E8	2201	C8	2340	F2	3147	B5	3335	E3	5101	C9
2101	B4	2202	C8	2341	D2	3148	B5	3336	E2	5104	B4
2102	C9	2203	F8	2342	D2	3149	B5	3337	E3	5105	B5
2103	F9	2204	C8	2343	E3	3150	B6	3338	F2	5106	C9
2104	F9	2205	C8	2344	E2	3151	D6	3339	E2	5107	B9
2105	F9	2206	C8	2345	D1	3152	D6	3340	F2	5108	C9
2106	F9	2207	C8	2346	E2	3153	D6	3341	E2	5113	C8
2107	C9	2208	B9	2347	D2	3154	D6	3342	F2	5114	C8
2108	C9	2209	B8	2348	D2	3155	D6	3343	E2	5115	C9
2109	D9	2210	A9	2349	D2	3156	D6	3344	E1	5116	D9
2110	B1	2211	B9	2350	D2	3157	D6	3345	F2	5117	D7
2111	B9	2212	B8	2351	E5	3158	B6	3346	E2	5118	C6
2112	C9	2213	C8	2352	E4	3159	B6	3347	E1	5119	E8
2114	C6	2214	B8	2353	E4	3160	B4	3348	E2	5120	C6
2115	B9	2215	C7	2354	D3	3161	D5	3349	E1	5122	B8
2116	C6	2216	B6	2355	E3	3162	B4	3350	E1	5123	B8
2117	C6	2217	C7	2356	E3	3163	D1	3351	E1	5124	B8
2118	C9	2218	B4	2362	F5	3165	C4	3352	E1	5125	B8
2119	D9	2219	B4	2363	D1	3168	B4	3353	D1	5126	C8
2120	D9	2220	C8	2364	D1	3169	B4	3354	E3	5200	E5
2121	C9	2221	C7	2400	B2	3170	D5	3355	F1	5201	D10
2122	F9	2223	B7	2401	E2	3171	D5	3356	E1	5202	D9
2123	D9	2241	C4	2402	B2	3172	D5	3357	D2	5302	E2
2126	E8	2242	C4	2403	B2	3173	B8	3358	D1	5303	E5
2127	C8	2243	C4	2404	B2	3174	B8	3359	D2	6100	E5
2128	C8	2245	B4	2405	B2	3175	B8	3360	D1	6300	C10
2129	C9	2246	B4	2406	C2	3176	E9	3361	E1	6301	C10
2130	C9	2249	D6	2407	C2	3177	E9	3362	E1	6302	F4
2131	C9	2250	D5	2408	D2	3178	E9	3363	E1	6303	D1
2132	C9	2251	D5	2409	C2	3181	C4	3364	E1	6304	D1
2133	D8	2252	D4	2410	C2	3182	C4	3366	D1	6305	D1
2134	E9	2253	E5	2411	C2	3183	C4	3367	D1	6306	D1
2135	D9	2254	E5	2412	C2	3184	B4	3368	D1	6307	D1
2138	C7	2255	D5	2414	C4	3186	E8	3370	D1	6401	C1
2139	D6	2256	E6	2415	C1	3187	D9	3371	D1	6500	E8
2140	D7	2257	D6	2500	E9	3188	D9	3372	E1	6501	E8
2141	D7	2258	E5	2501	F8	3189	D9	3373	D1	7102	B5
2142	E7	2259	B1	2502	F8	3190	D9	3400	C2	7104	B5
2143	E8	2260	B1	2503	F8	3203	D4	3401	C2	7105	B9
2144	E7	2261	B1	2504	F8	3204	B10	3402	C2	7106	B8
2145	E8	2262	B1	2505	F7	3209	D4	3406	C4	7107	B8
2146	D8	2263	B1	2506	F7	3210	E7	3407	C4	7108	B8
2147	D8	2264	D10	2507	F7	3211	E7	3408	C4	7109	D8
2148	E9	2265	D9	2508	F7	3212	E8	3411	C4	7110	B6
2149	D6	2266	D10	2509	F7	3213	E7	3412	C2	7112	D5
2151	C7	2267	C5	2510	F6	3214	E7	3413	C1	7200	D4
2152	C7	2268	D6	2511	F6	3227	D9	3414	C2	7201	C6
2153	D7	2269	D10	2512	F6	3229	D9	3415	C1	7202	D10
2154	D7	2271	B10	3101	F9	3231	D9	3416	C2	7203	C6
2155	E7	2272	D10	3102	F9	3233	C5	3417	C2	7301	B10
2156	D8	2273	D10	3103	D9	3234	D10	3500	E9	7302	E3
2157	E8	2274	B1	3104	E9	3235	D10	3501	F8	7303	E4
2158	C9	2275	D9	3105	E9	3236	D10	3502	F8	7304	E2
2159	C8	2276	D10	3106	D9	3237	D10	3503	E9	7305	F1
2160	C8	2306	B10	3107	D9	3238	D10	3504	E9	7306	E2
2161	C8	2307	B10	3108	D9	3240	C5	3505	F9	7307	F1
2162	C9	2308	E4	3109	D9	3241	C5	3506	E8	7308	D1
2163	D8	2310	E5	3111	D9	3244	B1	3507	E8	7400	D2
2164	D8	2311	E4	3113	D9	3245	B1	3508	E9	7402	C5
2165	B6	2312	E4	3115	D9	3300	B10	3509	E9	7403	C1
2166	B6	2313	E4	3116	E9	3301	B10	3510	F8	7404	C1
2167	B6	2314	E3	3117	E9	3304	B10	3511	E9	7500	E9
2168	B6	2315	E5	3118	D9	3305	B10	3512	E8	7501	F9
2169	B7	2316	E3	3119	D9	3307	B10	3513	E9		
2170	C8	2317	E3	3120	D9	3308	B10	4102	C8		
2171	A7	2318	E3	3121	E8	3310	C10	4103	C8		
2172	C8	2319	E4	3122	E9	3311	E4	4104	C8		
2173	B7	2320	E4	3123	E9	3313	E4	4105	C8		
2174	C8	2321	E4	3124	E8	3314	E4	4106	C8		
2175	D9	2322	E5	3125	E8	3315	E4	4108	C7		
2179	B7	2323	F3	3126	B9	3316	E3	4109	D7		

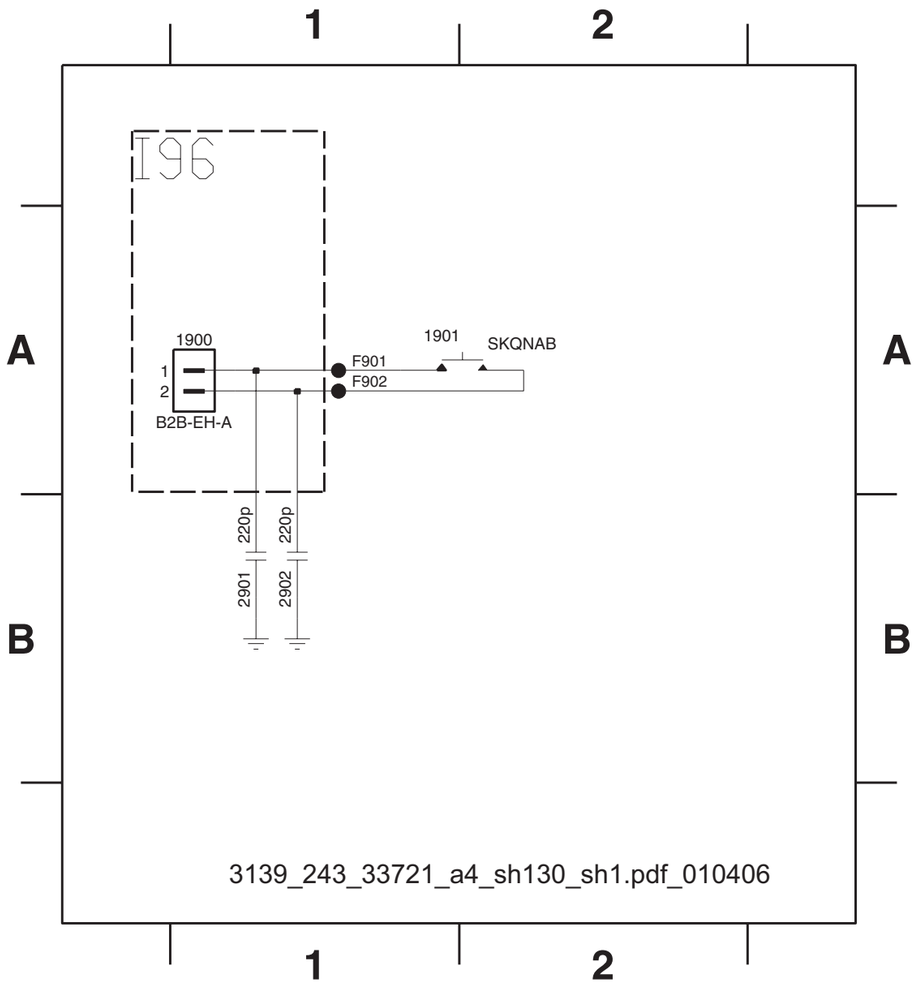
Layout: Mono Board (Bottom view)



Bottom view_MonoBd_32765.pdf_010406

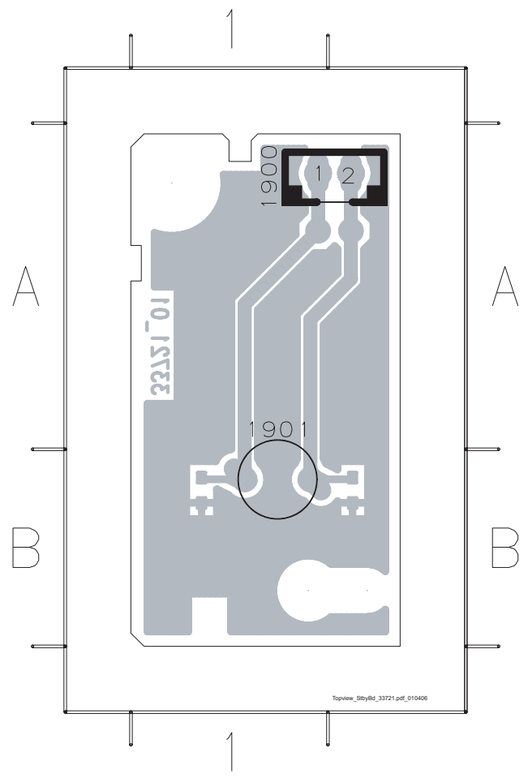
1102 B5
1103 B4
1105 C4
1108 C5
1201 B1
1300 B10
1301 F3
1302 F2
1303 F3
1304 F1
1400 C2
1401 C1
1402 B3
1501 F7
1502 F4
2111 B9
2114 C6
2132 C9
2148 E9
2151 C7
2167 B6
2169 B7
2171 A7
2173 B7
2208 B9
2210 A9
2211 B9
2258 E5
2267 C5
2307 B10
2315 E5
2337 F1
2342 D2
2344 E2
2347 E1
2363 D1
2364 D1
2408 D2
2411 C2
2415 C1
2511 E9
2512 E9
3308 B10
3411 C4
3412 C2
5108 C9
7301 B10
7404 C1

Front: Standby

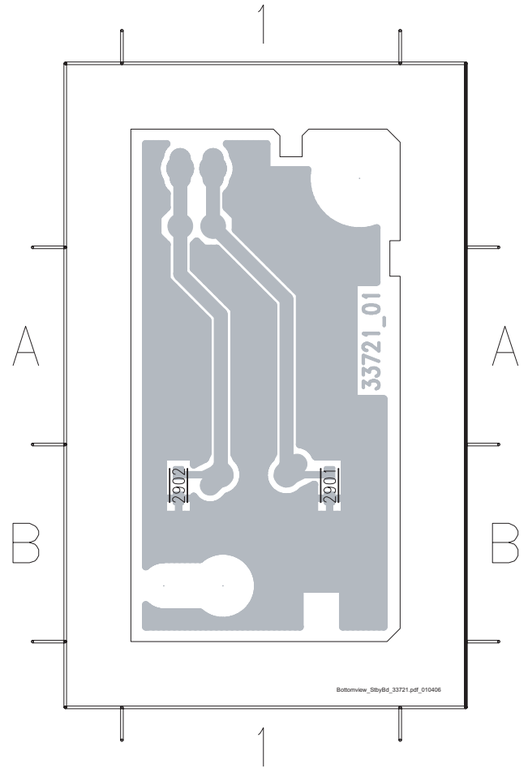


1900 A1
1901 A1
2901 B1
2902 B1
F901 A1
F902 A1

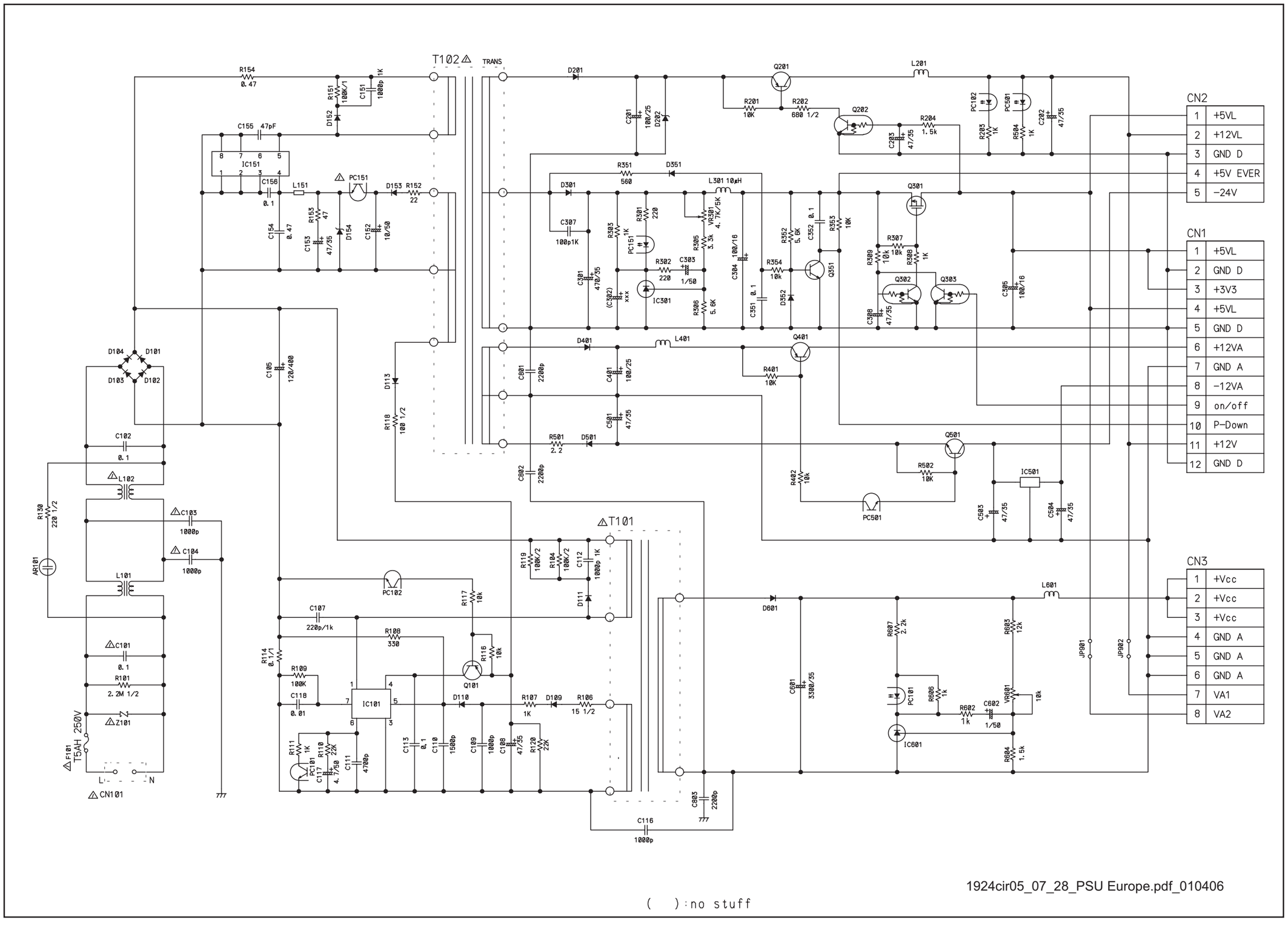
1900 A1
1901 A1



2901 B1
2902 B1



PSU Circuit Diagram (For information only) For HTS3300MKII /05/12/51



PSU Circuit Diagram (For information only) For HTS3300MKII /55/98

( ) of ( )

CN2
1	+5VL
2	+12VL
3	GND D
4	+5V EVER
5	−24V

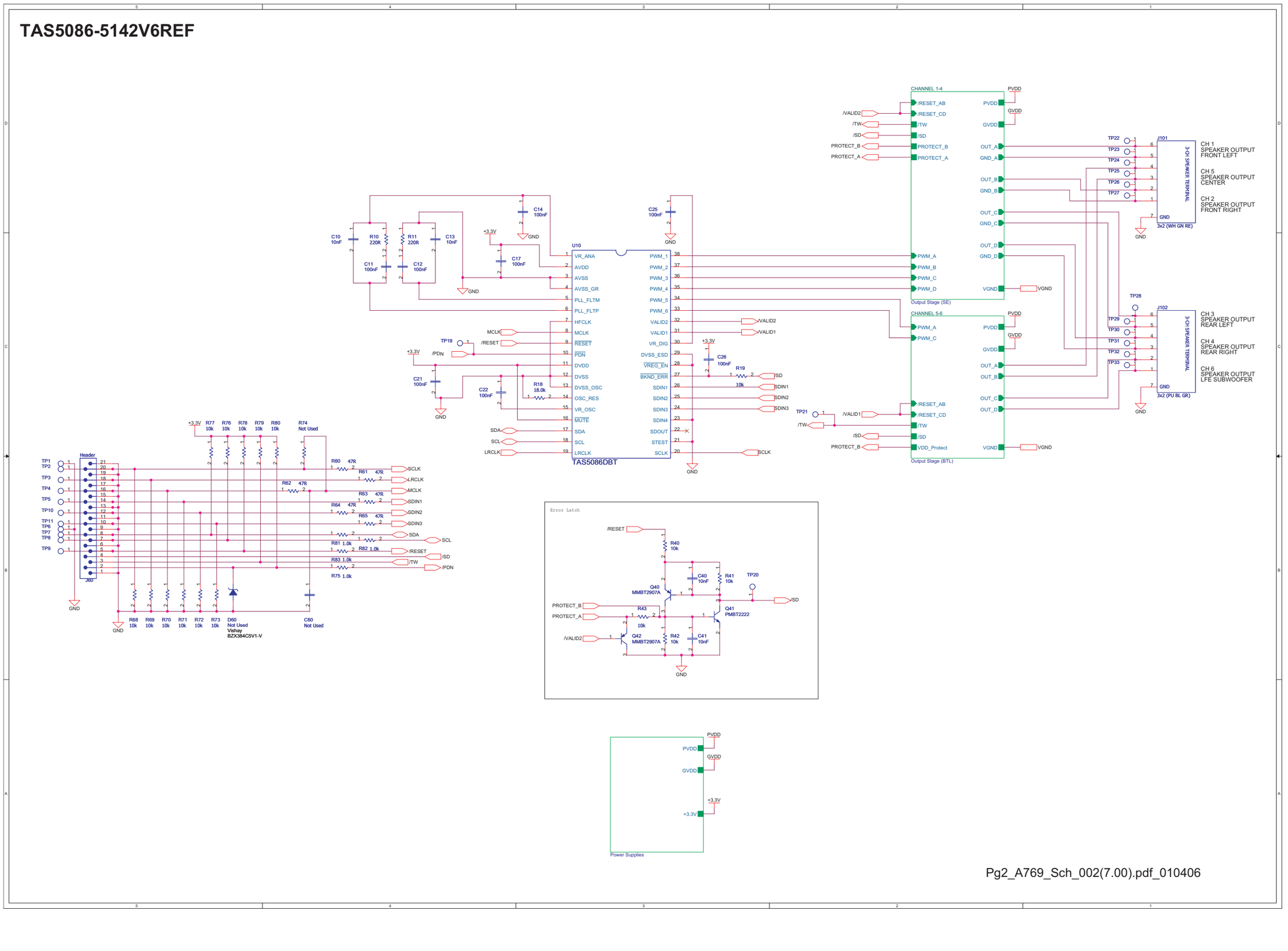
CN1
1	+5VL
2	GND D
3	+3V3
4	+5VL
5	GND D
6	+12VA
7	GND A
8	−12VA
9	on/off
10	P-Down
11	+12V
12	GND D

CN3
1	+Vcc
2	+Vcc
3	+Vcc
4	GND A
5	GND A
6	GND A
7	VA1
8	VA2

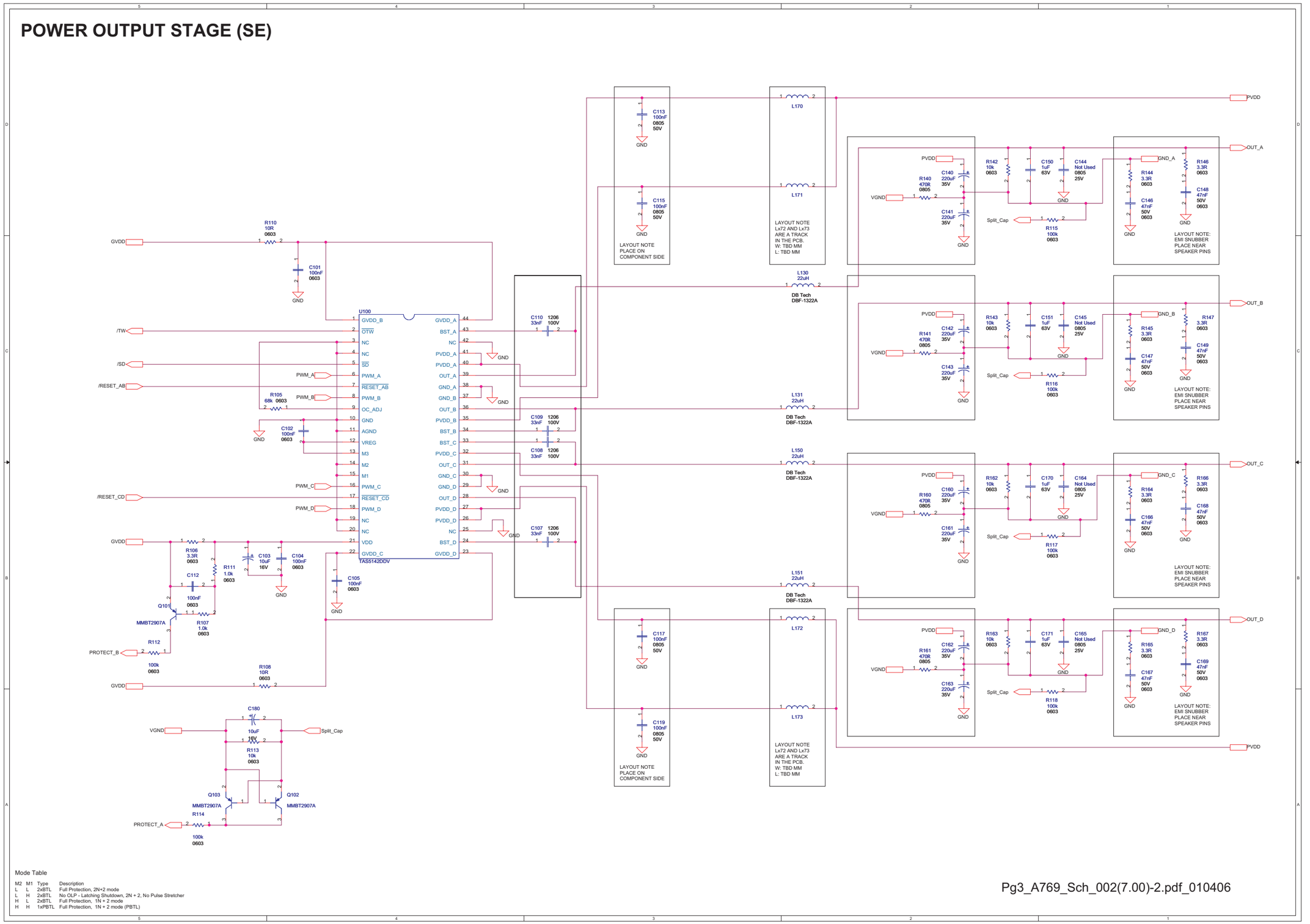
( ):no stuff

1925cir05_07_28_PSU AP.pdf_010406

8. TAS5086-5142V6REF

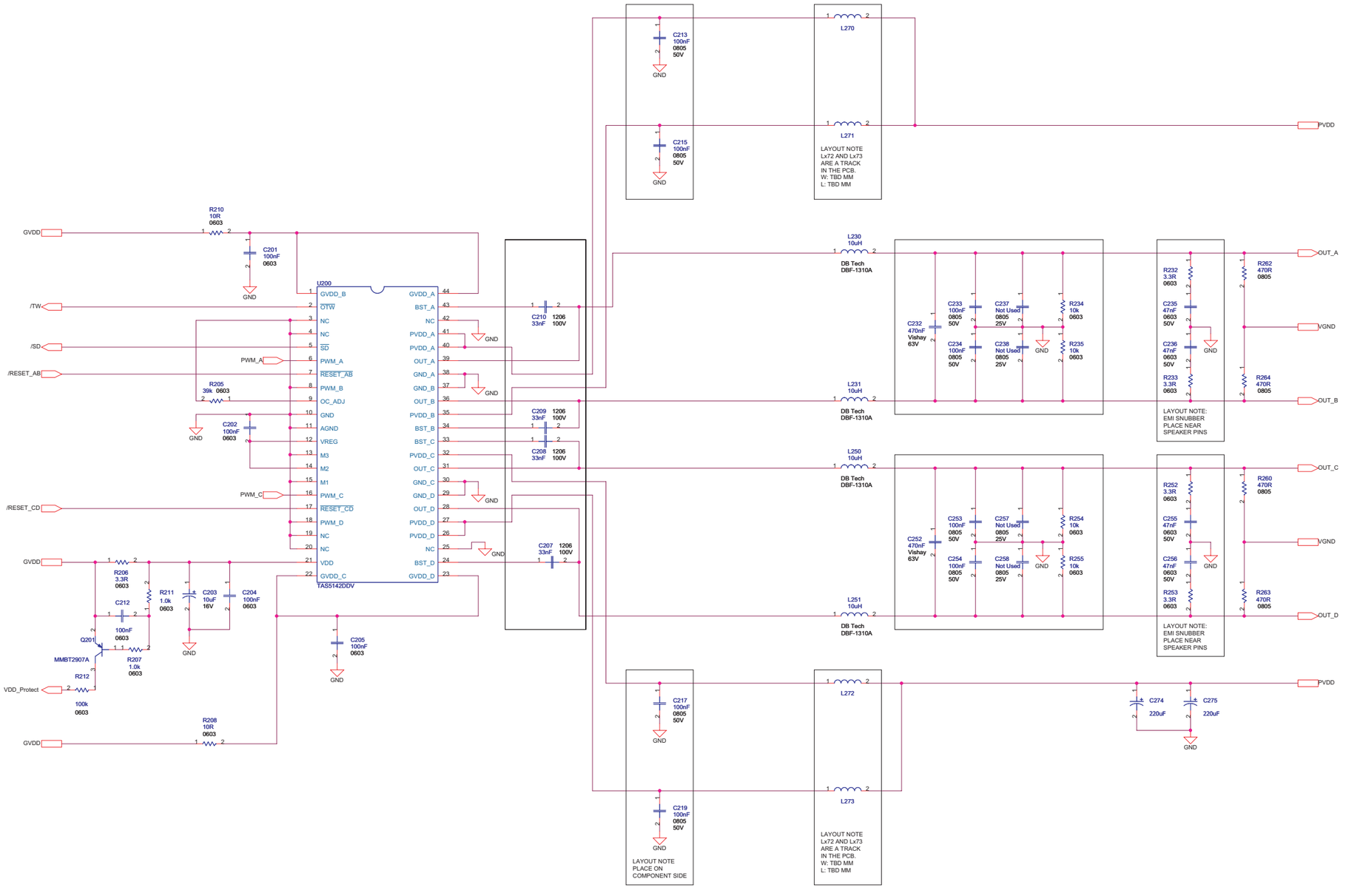


Power Output Stage (SE)



Power Output Stage (BTL)

POWER OUTPUT STAGE (BTL)



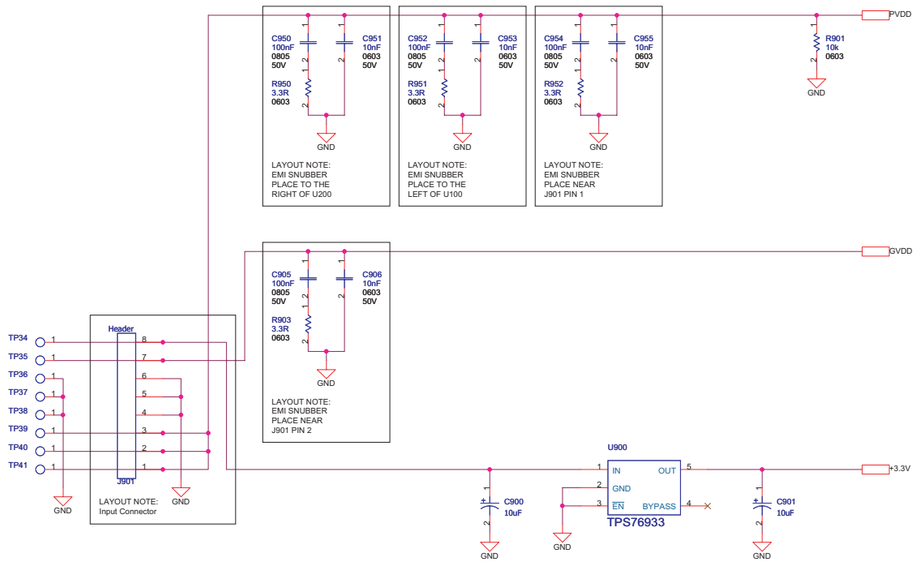
Mode Table

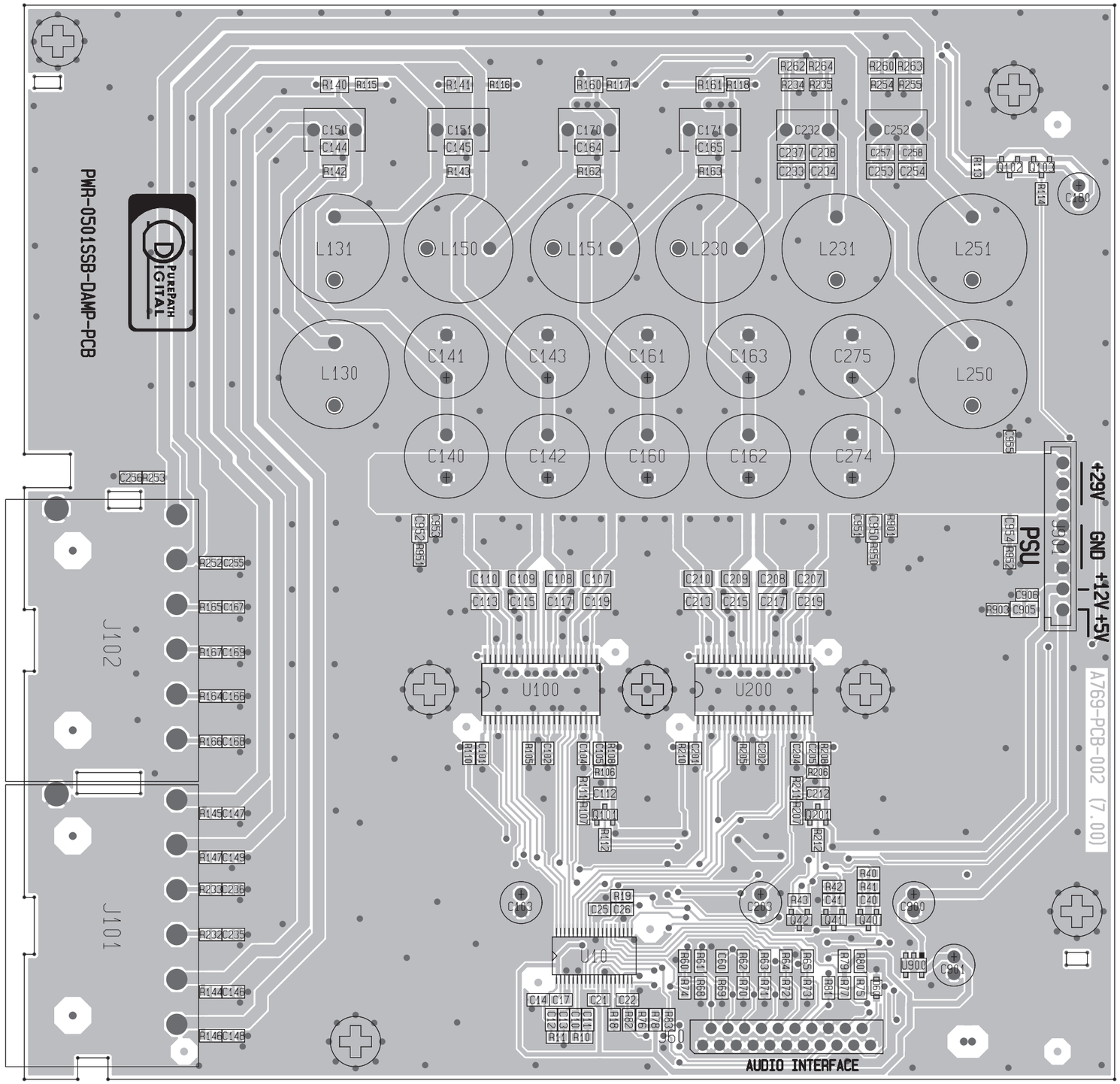
M2	M1	Type	Description
L	L	2xBTL	Full Protection, 2N+2 mode
L	H	2xBTL	No OLP - Latching Shutdown, 2N + 2, No Pulse Stretcher
H	L	2xBTL	Full Protection, 1N + 2 mode
H	H	1xPBTL	Full Protection, 1N + 2 mode (PBTL)

Pg4_A769_Sch_002(7.00)-3.pdf_010406

Power Supplies

POWER SUPPLIES





Pg4_A769_PCB_002(7.00).pdf_010406

9. Exploded View of the Set

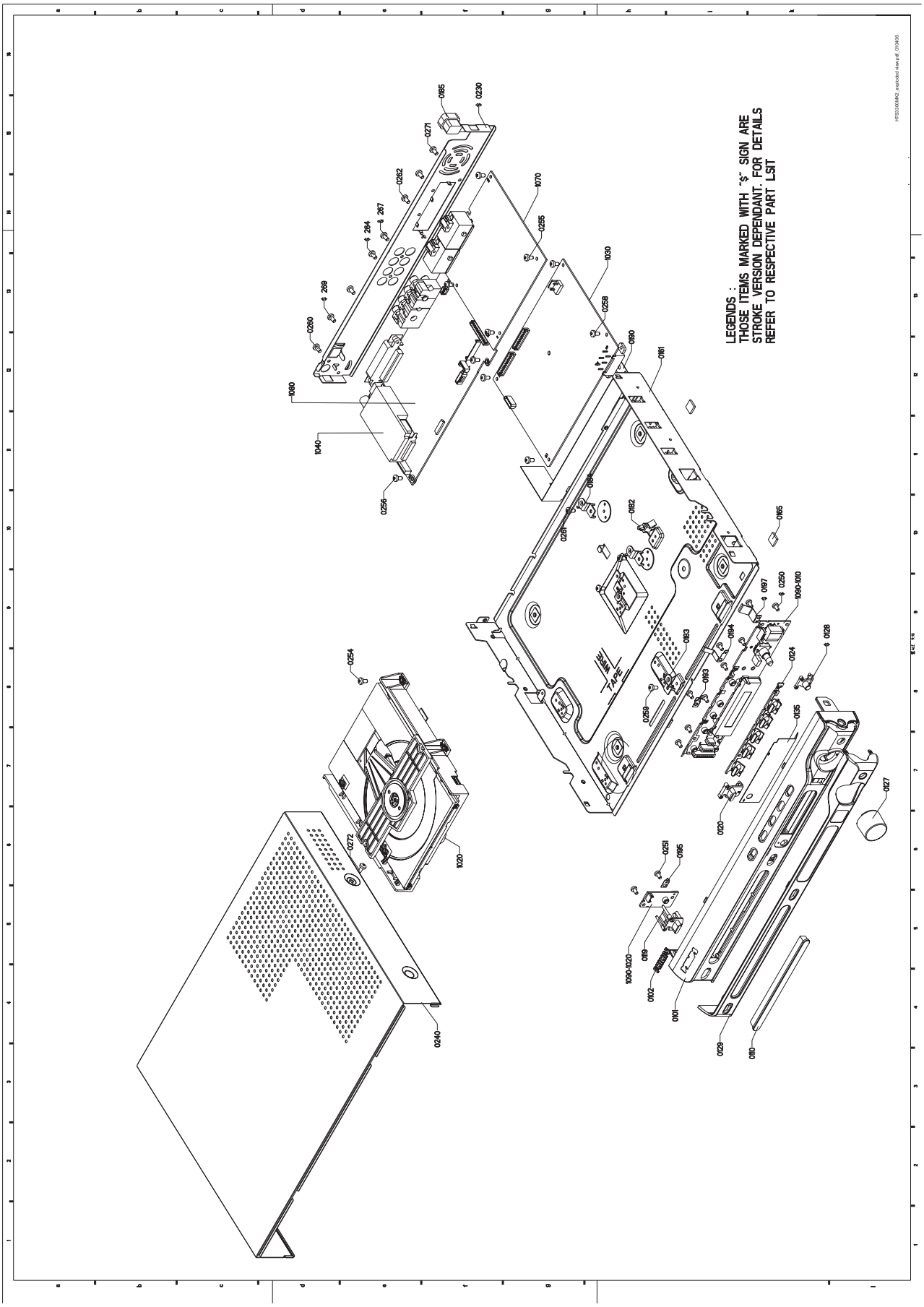


Figure 9-1

HTS3300MKII/05/12/51

MISCELLANEOUS

0127	3139 254 01511		KNOB VOL CHROME
0185	4822 532 60948		BUSH
0400	3143 027 61782		FRONT ASSY HTS3300/12
0420	3143 027 63751		FRAME ASSY HTS3300 MKII
0333	3139 258 70111		REMOTE CONTROL HTS3500S EU
0336	2422 070 98236	⚠	MAINSCORD UK 5A 1M8 VH BK B
0342	2422 076 00468	⚠	CBLE SCART 1M1 SCART 21P BK B
1020	3139 247 12211		LOADER ASSY ST KHM313 RX
1030	3139 247 12171		MODULE PSU 05 T100M EU
1040	2422 542 00031		TUN A F ENG07806QRF EUR B
1070	3139 247 11781		MODULE AMP-05-01 200W (TI)
1080	3139 248 85911		HTS3300 MARKII MONO PCBA EU
1090	3139 248 87381		PCBA FRONT HTS3300MRKII EU
8001	3139 241 01381		FFC FOIL10P/120/10P AD FOLD
8005	3139 241 01561		FFC FOIL 21P/080/21P BD 1MMP

BOX SPK ASSY SW-3300MK2 E

9965 000 33816	HTS3300MKII SUBWOOFER
9965 000 28375	RUBBER FOOT
9965 000 28376	CABLE A'SSY 5.3M PURPLE SMK

BOX SPK ASSY CS-3300MK2 E

9965 000 32684	SPEAKER BOX- FRONT-L
9965 000 32733	SPEAKER BOX - FRONT-R
9965 000 32734	SPEAKER BOX - REAR-L
9965 000 32735	SPEAKER BOX -REAR-R
9965 000 28363	CABLE A'SSY 5.2M WHITE SMK
9965 000 28364	CABLE A'SSY 5.2M RED SMK
9965 000 28365	CABLE A'SSY 5.2M BLUE SMK
9965 000 28366	CABLE A'SSY 5.2M GREY SMK
9965 000 28370	RUBBER FOOT 40LX6WX2.5T
9965 000 32736	SPEAKER BOX CENTER
9965 000 28371	RUBBER FOOT 40.5LX6.0WX1.5T
9965 000 28367	CABLE A'SSY 5.2M GREEN SMK S

HTS3300MKII/55/98

MISCELLANEOUS

0333	3139 258 70101		REMOTE CONTROL HTS3500S AP
0336	2422 070 00026	⚠	MAINSCORD BRZ 10A 1M85 VH B
1020	3139 247 12211		LOADER ASSY ST KHM313 RX
1030	3139 247 12161		MODULE PSU 05 T100M AP
1040	2422 542 00015		TUN A F ENG068VVQF USA B
1070	3139 247 11781		MODULE AMP-05-01 200W (TI)
1080	3139 248 86301		HTS3300 MARKII MONO PCBA ROW
1090	3139 248 87391		PCBA FRONT HTS3300MRKII ROW
8001	3139 241 01381		FFC FOIL10P/120/10P AD FOLD
8005	3139 241 01561		FFC FOIL 21P/080/21P BD 1MMP
P001	3141 079 32271		FRONT ASSY HTS3300/98
P002	3141 079 34281		FRAME ASSY HTS3300 MKII

BOX SPK ASSY SW-3300MK2 E

9965 000 33816	HTS3300MKII SUBWOOFER
9965 000 28375	RUBBER FOOT
9965 000 28376	CABLE A'SSY 5.3M PURPLE SMK

BOX SPK ASSY CS-3300MK2 E

9965 000 32684	SPEAKER BOX- FRONT-L
9965 000 32733	SPEAKER BOX - FRONT-R
9965 000 32734	SPEAKER BOX - REAR-L
9965 000 32735	SPEAKER BOX -REAR-R
9965 000 28363	CABLE A'SSY 5.2M WHITE SMK
9965 000 28364	CABLE A'SSY 5.2M RED SMK
9965 000 28365	CABLE A'SSY 5.2M BLUE SMK
9965 000 28366	CABLE A'SSY 5.2M GREY SMK
9965 000 28370	RUBBER FOOT 40LX6WX2.5T
9965 000 32736	SPEAKER BOX CENTER
9965 000 28371	RUBBER FOOT 40.5LX6.0WX1.5T
9965 000 28367	CABLE A'SSY 5.2M GREEN SMK S