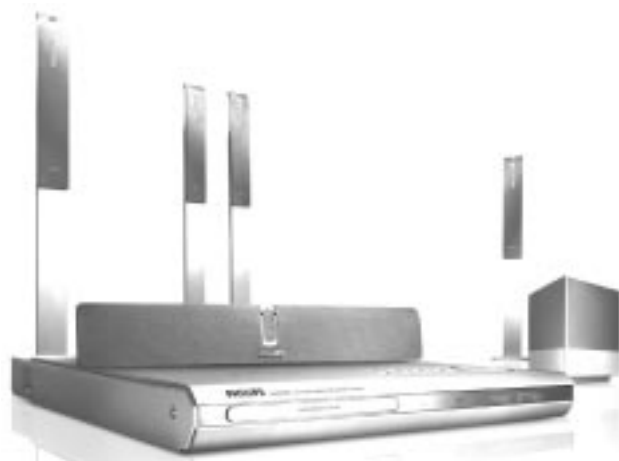


Service Service Service



Service Manual



TABLE OF CONTENTS

	Page
Location of pc boards & Version variations	1-2
Technical Specifications	1-3
Measurement setup	1-4
Service Aids, Safety Instruction, etc.	1-5
Disassembly Instructions & Service positions	2
Service Test Program	3-1
Region code, Software version & upgrades	3-2
Set Block diagram	4-1
Set Wiring diagram	5-1
Panel Front Boards	6
AV Board	7
Box Spk Assy SW8320LX	8
Module SD6.3 ST AV2	9
Set Mechanical Exploded view & parts list	10
Speaker Box Exploded view & parts list	11-1
Speaker Box Disassembly Instructions	11-2

© Copyright 2004 Philips Consumer Electronics B.V. Eindhoven, The Netherlands
All rights reserved. No part of this publication may be reproduced, stored in a retrieval system or transmitted, in any form or by any means, electronic, mechanical, photocopying, or otherwise without the prior permission of Philips.

Published by BB0436 Service AV Systems Printed in The Netherlands Subject to modification

**CLASS 1
LASER PRODUCT**



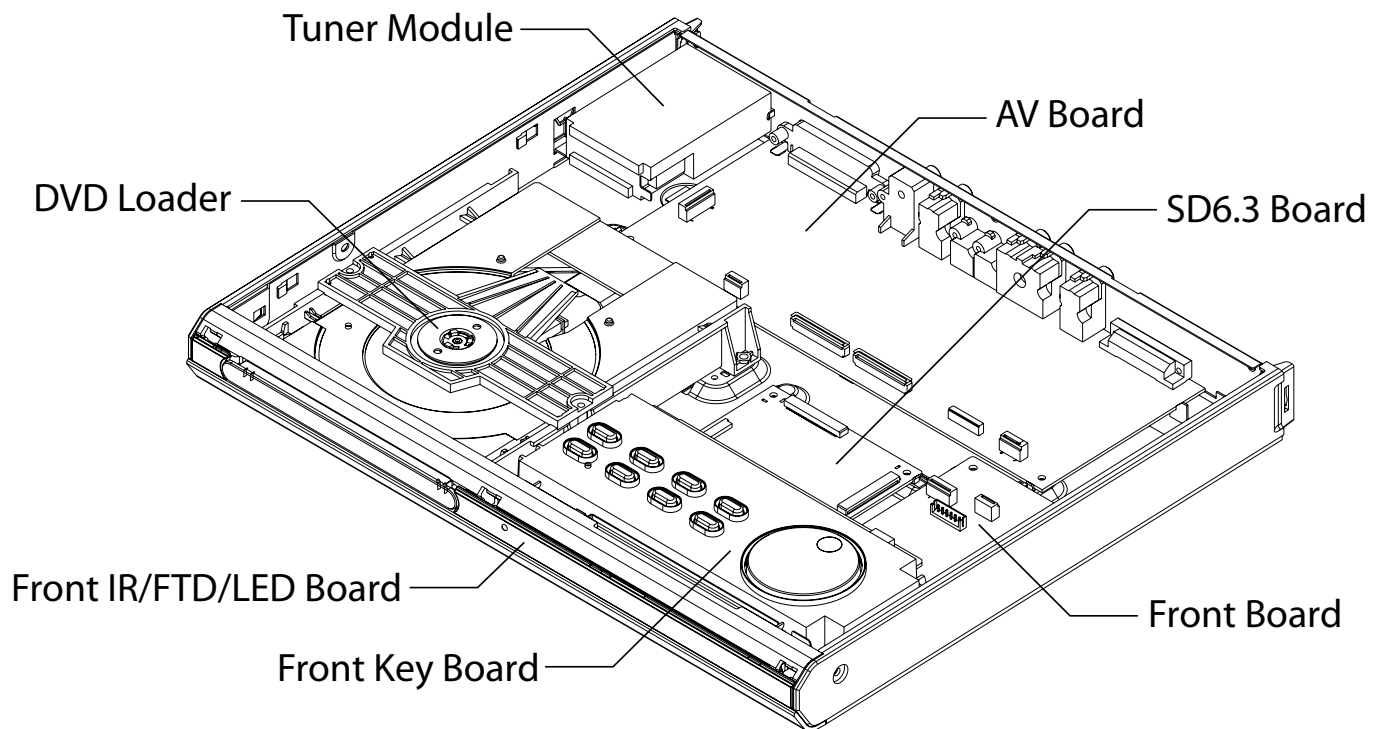
3139 785 30830

Version 1.0



PHILIPS

LOCATION OF PC BOARDS



VERSION VARIATIONS:

[illegible]

SPECIFICATIONS

GENERAL:

Mains voltage : 120V for /17
 220-240V for /01/04/05
 110-127V/220-240V Switchable for /69/93
 Mains frequency : 50/60Hz
 Power consumption : < 1W at Standby
 < 160W at 1/8 P_{rated}
 Dimension main unit : 360 x 40 x 305mm

TUNER:

FM

Tuning range : 87.5-108MHz
 Grid : 50kHz
 100kHz for /17/69
 IF frequency : 10.7MHz $\pm$ 25kHz
 Aerial input : 75 Ω coaxial
 Sensitivity at 26dB S/N : < 7 μ V
 Selectivity at 600kHz bandwidth : > 25dB
 IF rejection : > 60dB
 Image rejection : > 25dB
 Distortion at RF=1mV, dev. 75kHz : < 3%
 -3dB Limiting point : 8 μ V
 Crosstalk at RF=1mV, dev. 67.5kHz : > 28dB
 Crosstalk at RF=1mV, dev. 40kHz : > 18dB /17/69

MW

Tuning range : 531-1602kHz
 530-1700kHz for /17/69
 Grid : 9kHz
 10kHz for /17/69
 IF frequency : 450kHz $\pm$ 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%

AMPLIFIER:

Output power
 Front : 100W RMS / channel
 Rear : 75W RMS / channel
 Center : 100W RMS
 Subwoofer : 150W RMS

Frequency response $\pm$ 3dB : 20Hz-50kHz
 Hum (Volume Minimum) : 200nW
 Residual noise (Volume Minimum) : 40nW

Input sensitivity

Aux In : 1V $\pm$ 3dB at 47k Ω
 Scart In : 500mV $\pm$ 3dB at 47k Ω

Output sensitivity

Line Out (Left/Right) : 1V $\pm$ 1.5dB at 4.7k Ω
 Scart Out (Left/Right) : 1V $\pm$ 1.5dB at 4.7k Ω

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 $\pm$ 0.1V_{p-p}
 Luminance S/N : $\geq$ 55dB

S-Video Out ¹⁾

Y level : 1.0 $\pm$ 0.1V_{p-p}
 Y S/N : $\geq$ 60dB
 C level (burst) : 286mV_{p-p} +1/-4 dB

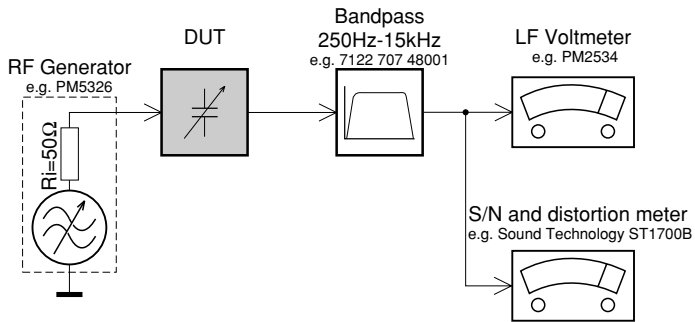
RGB/YUV Out ¹⁾

Amplitude : 0.7 $\pm$ 0.1V_{p-p}
 S/N : $\geq$ 60dB

¹⁾ Output terminals to be terminated with 75 Ω

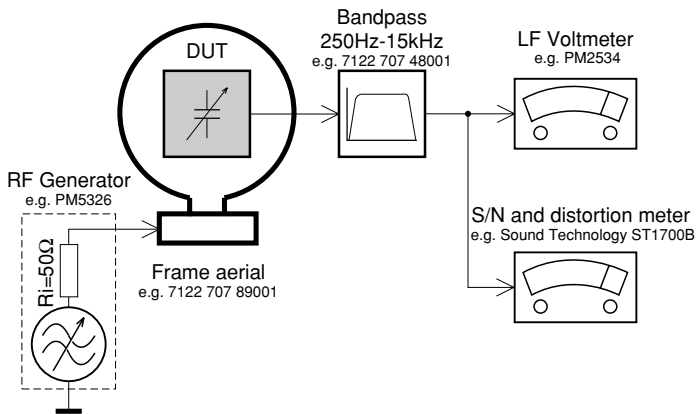
MEASUREMENT SETUP

Tuner FM



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

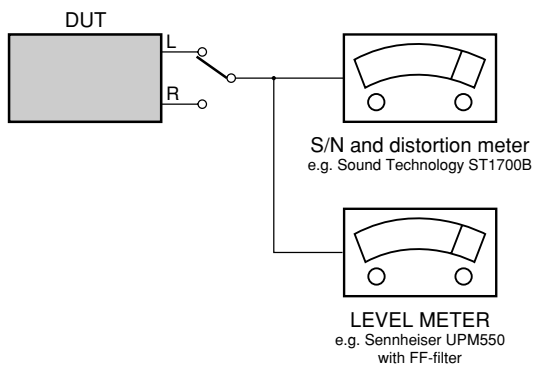
Tuner AM (MW,LW)



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).

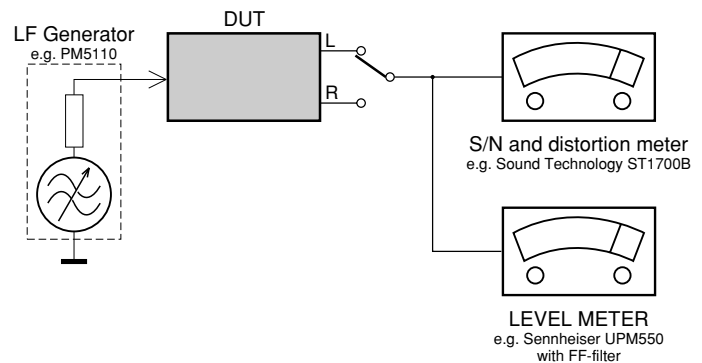
CD

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

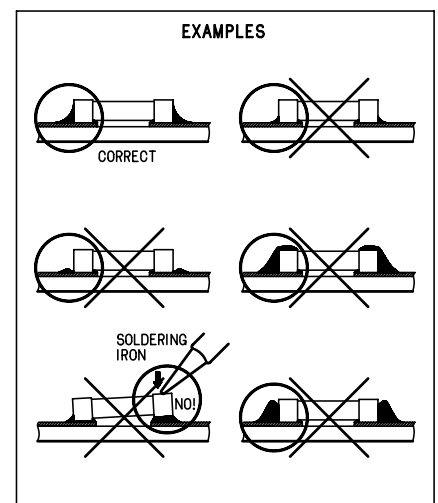
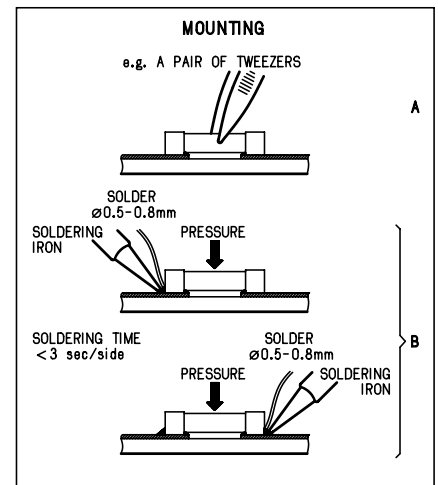
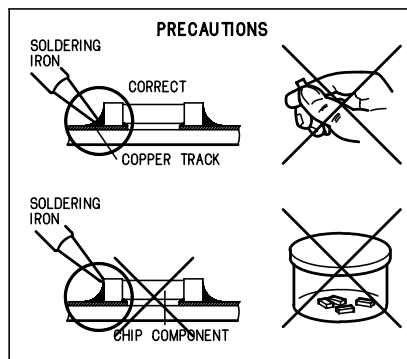
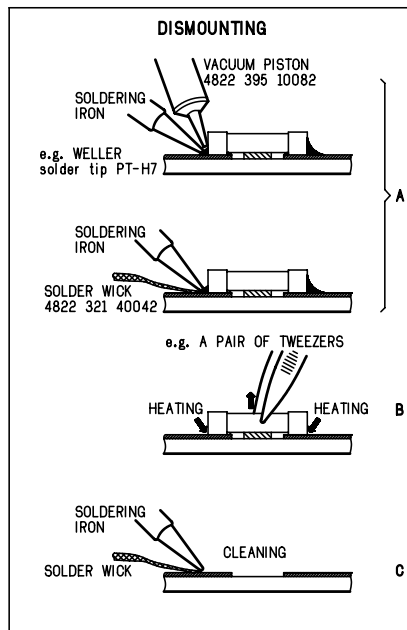
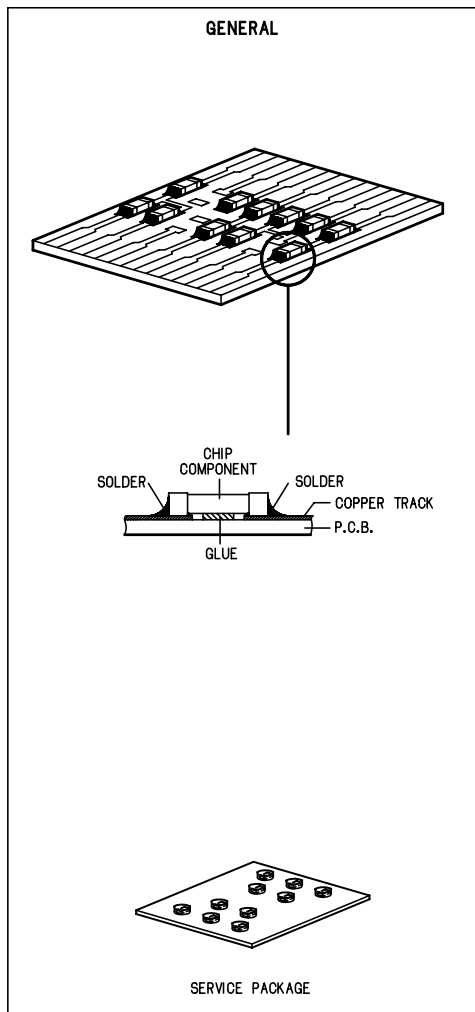
Service Tools:

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 .

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 utilisés les pièces de rechange identiques à celles spécifiées.

Less composants de sécurité sont marqués .

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  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 .

GB

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

**GB Warning !**

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

S Varning !

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

SF Varoitut !

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

DK Advarse !

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

F

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

DISMANTLING INSTRUCTIONS

Dismantling of the DVD Loader

- 1) The tray can be manually open by inserting a minus screw driver and push the lever in the direction as shown in Figure 1 to unlock the tray before sliding it out.
- 2) Slide out the tray and remove the Cover Tray (pos 110) as shown in Figure 2.
- 3) Loosen 2 screws each to remove the Panel Cover Left (pos 231) and Panel Cover Right (pos 232).



Figure 1

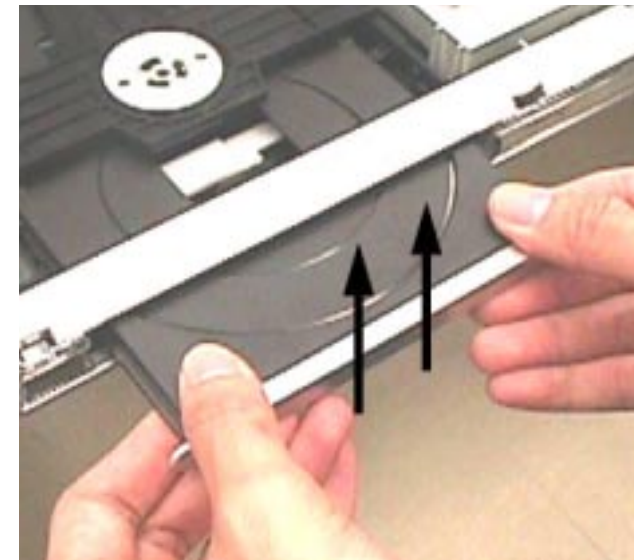


Figure 2

Dismantling of the Front Key Board

- 1) Loosen 4 screws C (see Figure 3) to remove the Bracket Support Control (pos 130) and the Front Key Board (pos 1401).

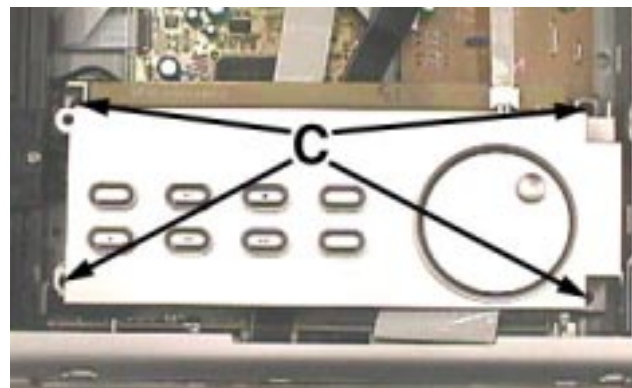


Figure 3

- 2) Loosen 6 screws D (see Figure 4) to remove the Front Key Board (pos 1401) from the Bracket Support Control (pos 130).

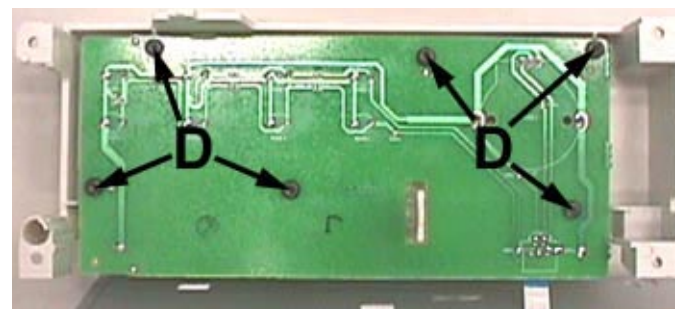


Figure 4

Dismantling of the Tuner Module, AV Board, Front Board and SD6.3 ST AV2 Board

- 1) Loosen 2 screws A (see Figure 5) to remove the Tuner Module (pos 1801).
- 2) Loosen 9 screws B (see Figure 5) and 2 screws H (see Figure 6) to remove the AV Board (pos 1501).
- 3) Loosen 2 screws E (see Figure 6) to remove the Front Board (pos 1201).
- 4) Loosen 2 screws F (see Figure 6) to remove the SD6.3 ST AV2 Board (1601).

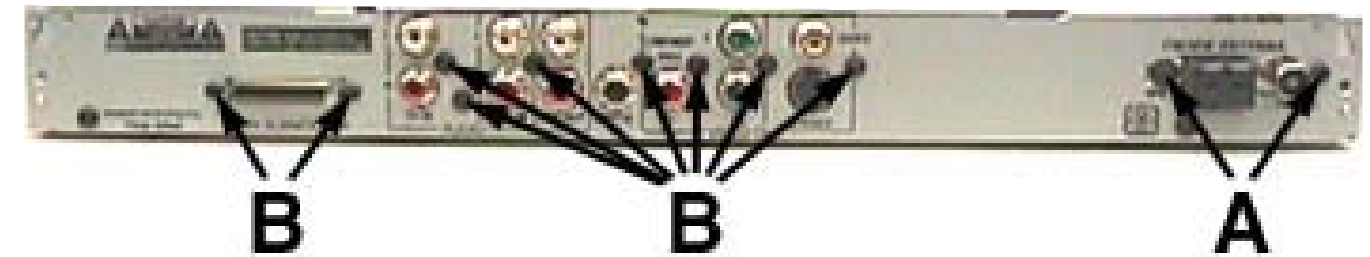


Figure 5

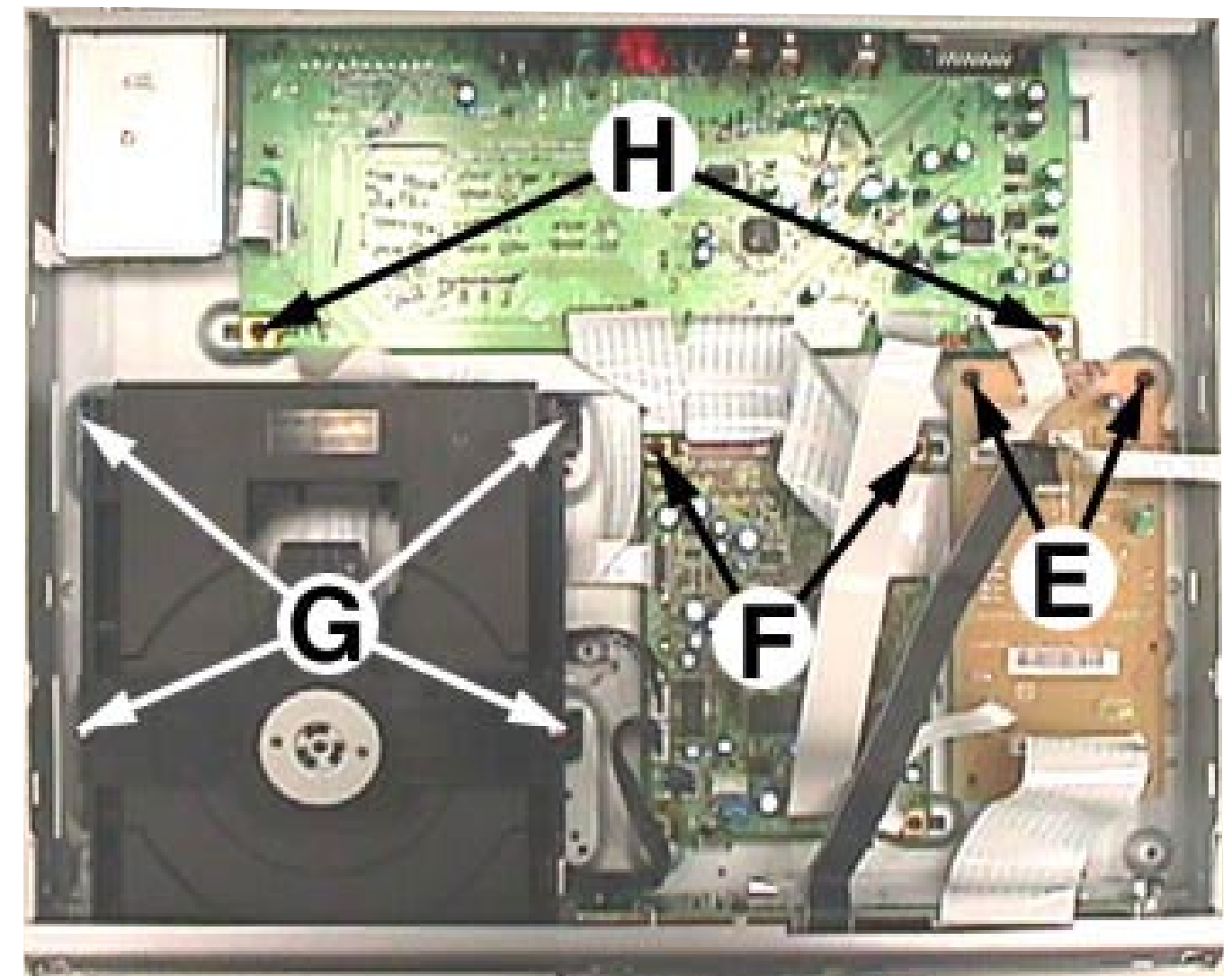
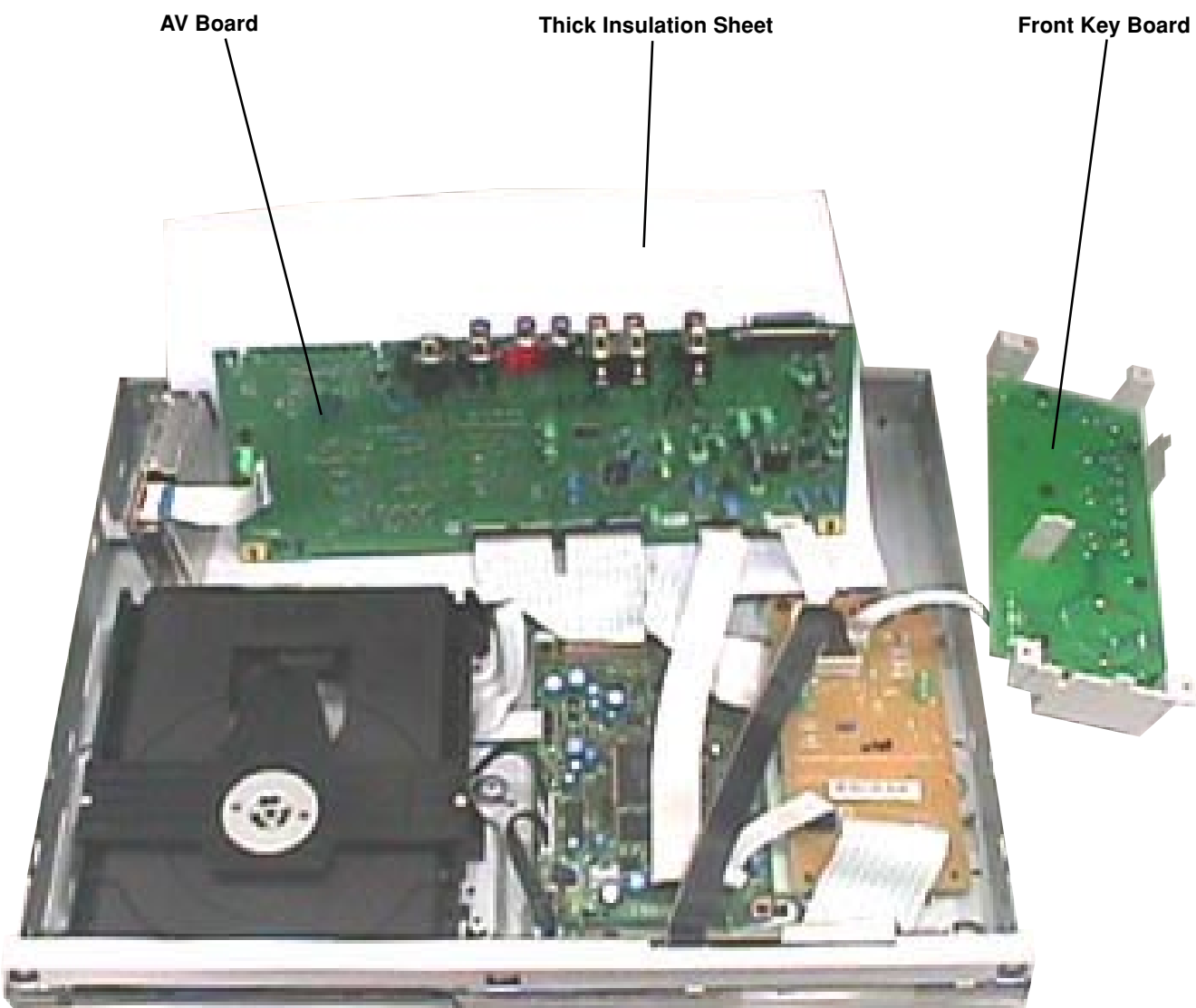
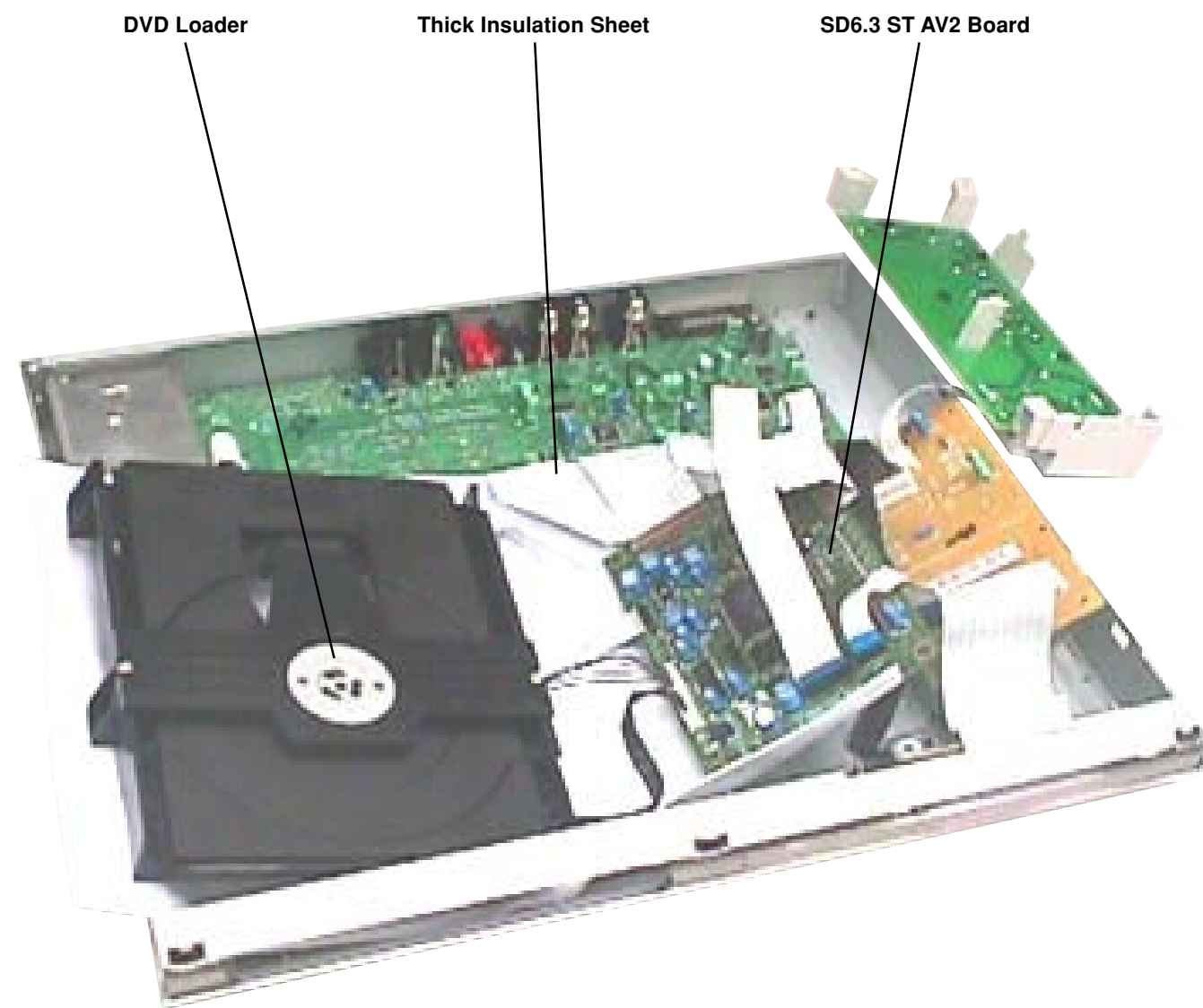
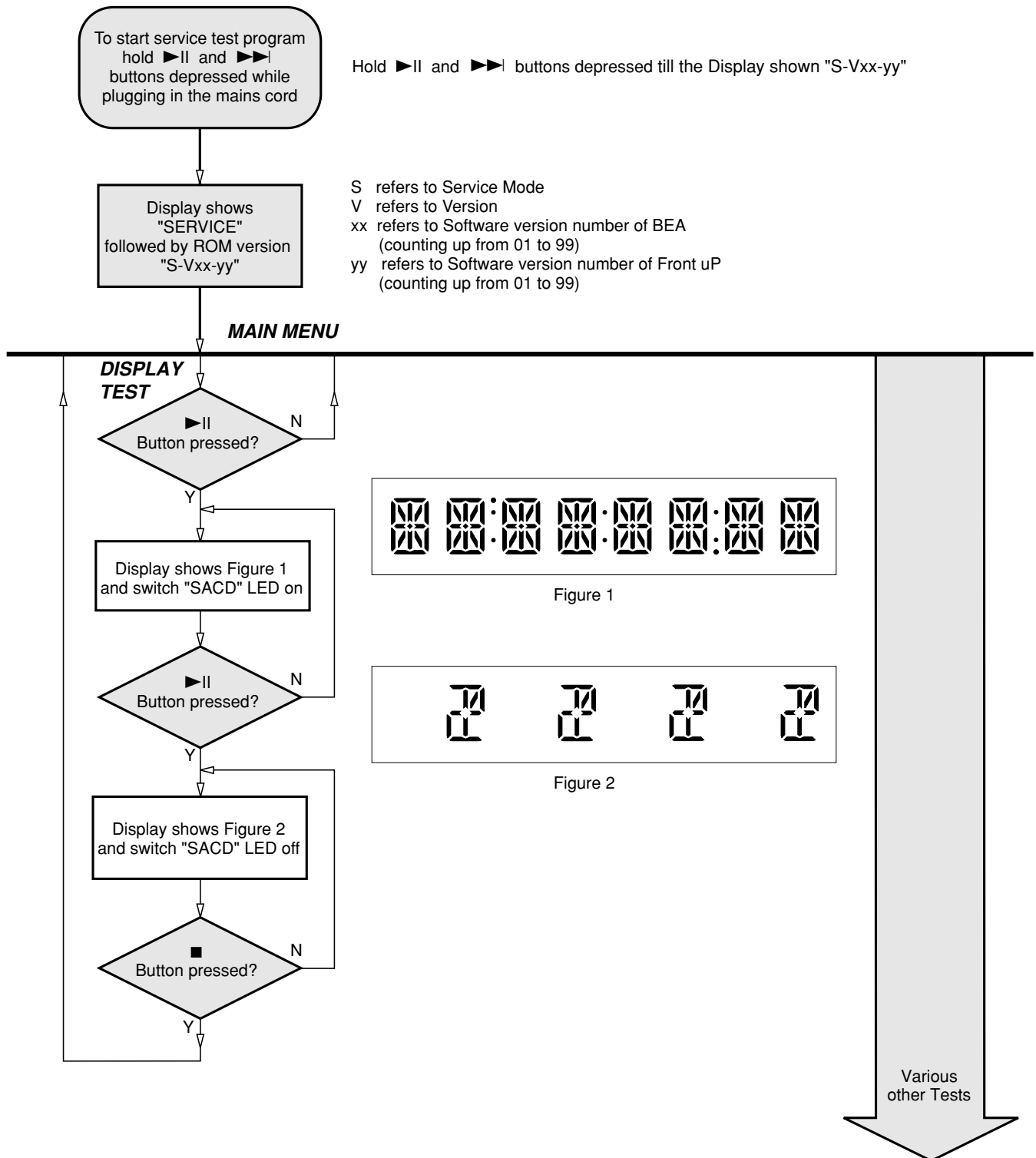


Figure 6

SERVICE POSITIONS



SERVICE TEST PROGRAM



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	

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
LX8300SA/01	Europe	2	PAL
LX8300SA/05	Europe	2	PAL
LX8320SA/69	AP	3	PAL
LX8300SA/04	Russia	5	PAL
LX8320SA/93	China	6	PAL
LX8500W/01	Europe	2	PAL
LX8500W/04	Russia	5	PAL
LX8500W/69	AP	3	PAL
LX8500W/93	China	6	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> <1> for LX8300SA/01
 <9> <9> <9> <9> <AUDIO> <2> for LX8300SA/05
 <9> <9> <9> <9> <AUDIO> <3> for LX8320SA/69
 <9> <9> <9> <9> <AUDIO> <4> for LX8300SA/04
 <9> <9> <9> <9> <AUDIO> <5> for LX8320SA/93
 <9> <9> <9> <9> <AUDIO> <6> for LX8500W/01
 <9> <9> <9> <9> <AUDIO> <7> for LX8500W/04
 <9> <9> <9> <9> <AUDIO> <8> for LX8500W/69
 <9> <9> <9> <9> <AUDIO> <9> for LX8500W/93
- 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.)

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:

SD6.3 Vxx YYYY-ZZ A BB

SERVO: nnnnnnnn REG:A

xx = version number
 YYYY = model number (eg. 8300, 8500, etc.)
 ZZ = slash stroke version (eg. 01, 69, etc.)
 A = region code
 BB = Front uP software version number
 nnnnnnnn = servo version number

Procedure to upgrade software

- 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) Place upgrade CD-ROM onto tray and close.
- 4) The set will response and display the following:
 - **LOAD** [After the disc is read, the tray will open for you to remove the disc]
 - **ERASE** [Erasing disc]
 - **WRITE** [Writing disc]
 - **ERROR** [if upgrade is unsuccessful]
 - **UPG END** [if upgrade is successful]
 - **DISC->CLOSE->LOAD** [Tray will close indicating that the upgrade process is completed]
- 5) The whole process should not take more than 5 minutes.

Caution: Do not unplug the set until upgrade is completed.

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:

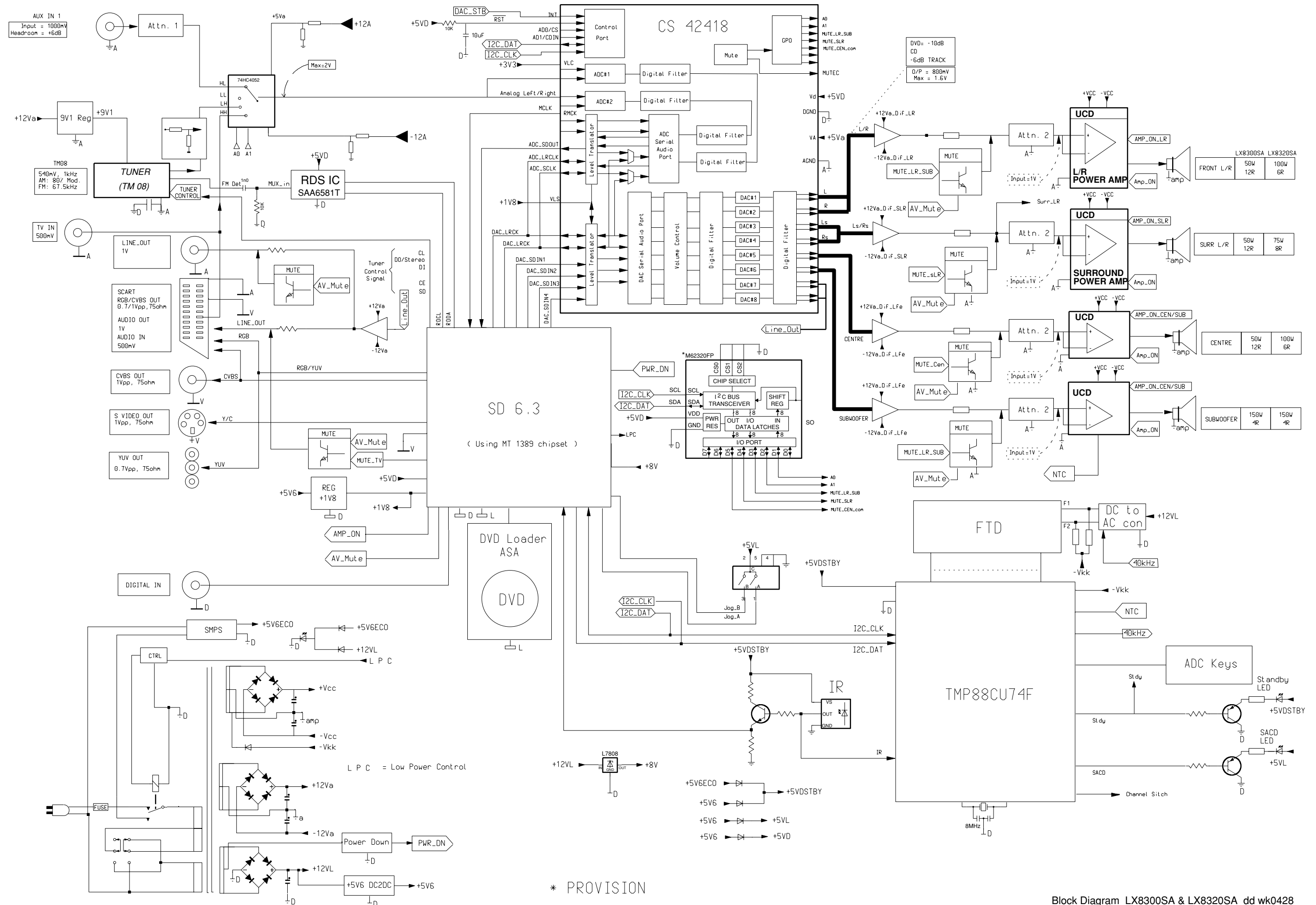
- 1) Power up the set and select **DISC** source.
- 2) Open tray by press and hold "STOP" button on the RC.
- 3) Then press buttons <2> <5> <9> on the RC.
- 4) The display shows '**TRA OFF**' and the tray will close.
Trade Mode is now disabled.

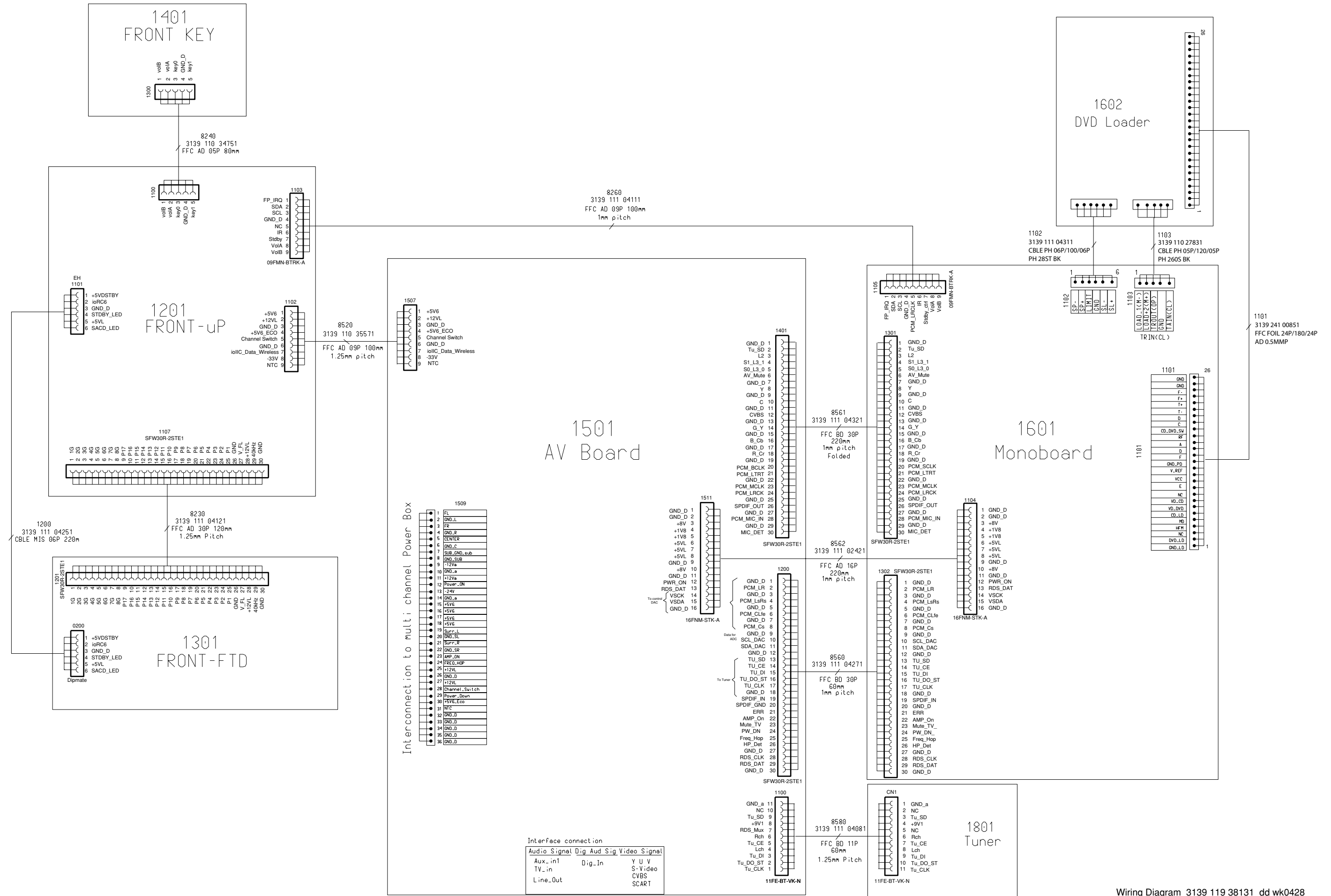
Procedure to change Tuner Grid (not for all versions)

- 1) By holding "SOURCE" and "PREV" buttons depressed while switching on the mains supply, the tuning grid frequency is toggled between 9kHz and 10kHz.
- 2) Hold the "SOURCE" and "PREV" buttons depressed until the display shown the new tuning grid '**GRID 9**' or '**GRID 10**'.

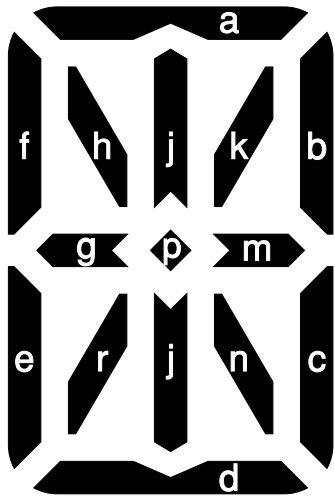
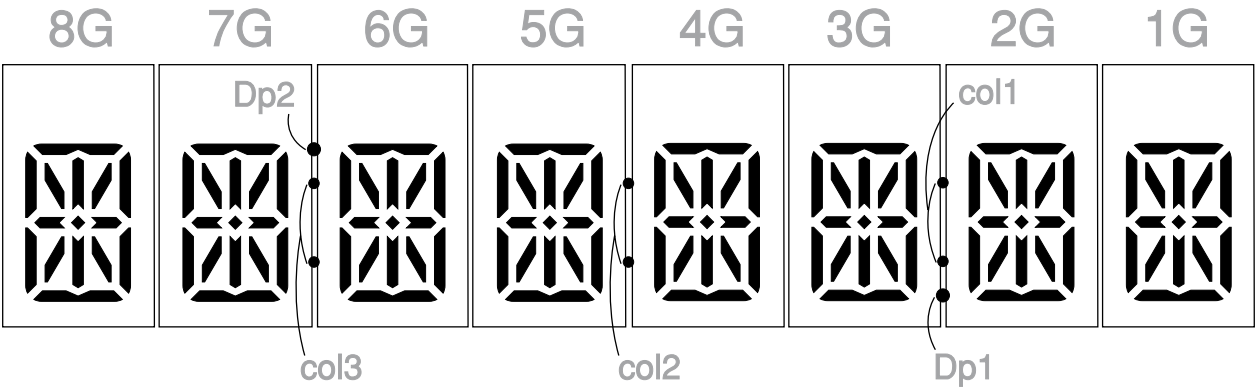
Note: Repeating the same action will toggle back to its previous tuning grid setting.

SET BLOCK DIAGRAM





FTD DISPLAY PIN CONNECTION



(1G - 8G)

PANEL FRONT BOARDS

TABLE OF CONTENTS

FTD Display Pin Connection 6-1

Front Board - Component & Chip Layout 6-2

Front Board - Circuit Diagram 6-3

IR/FTD/LED Board - Component & Chip Layout 6-4

IR/FTD/LED Board - Circuit Diagram 6-5

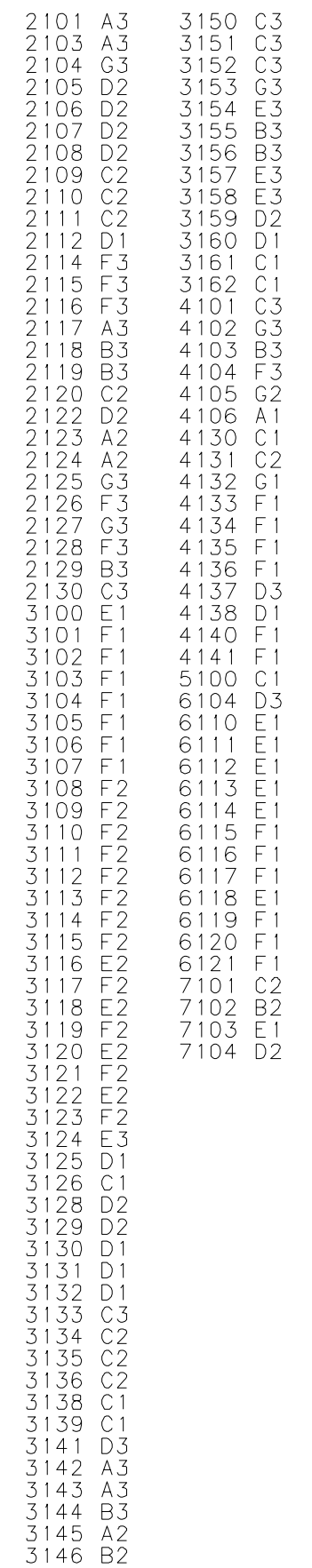
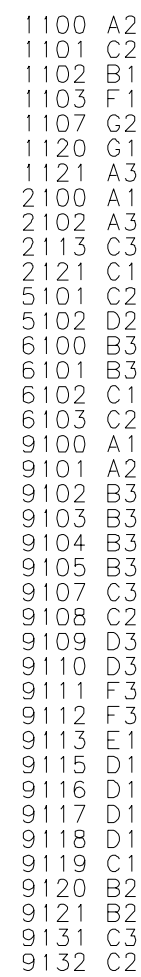
Front Key Board - Component & Chip Layout 6-6

Front Key Board - Circuit Diagram 6-7

Electrical parts list..... 6-7

	8G	7G	6G	5G	4G	3G	2G	1G
P1	a	a	a	a	a	a	a	a
P2	k	k	k	k	k	k	k	k
P3	j	j	j	j	j	j	j	j
P4	h	h	h	h	h	h	h	h
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	p	p	p	p	p	p	p	p
P9	g	g	g	g	g	g	g	g
P10	c	c	c	c	c	c	c	c
P11	e	e	e	e	e	e	e	e
P12	n	n	n	n	n	n	n	n
P13	r	r	r	r	r	r	r	r
P14	-	col3		col2		col1		-
P15	d	d	d	d	d	d	d	d
P16	-	-	-	-	-	-	-	-
P17	-	Dp2		-	-	Dp1		-

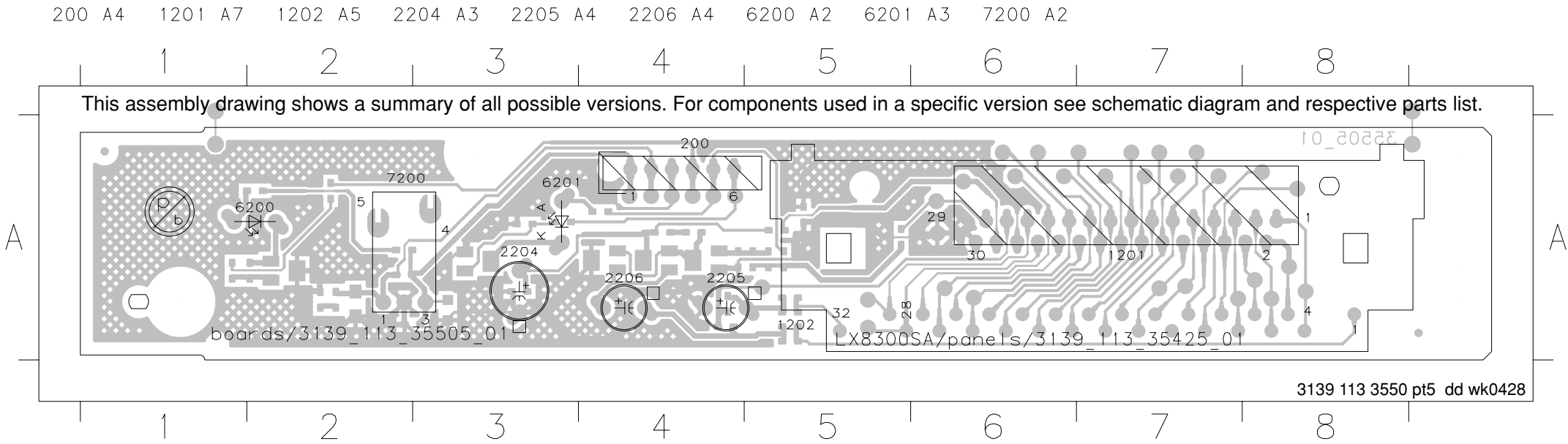
FRONT BOARD - CHIP LAYOUT



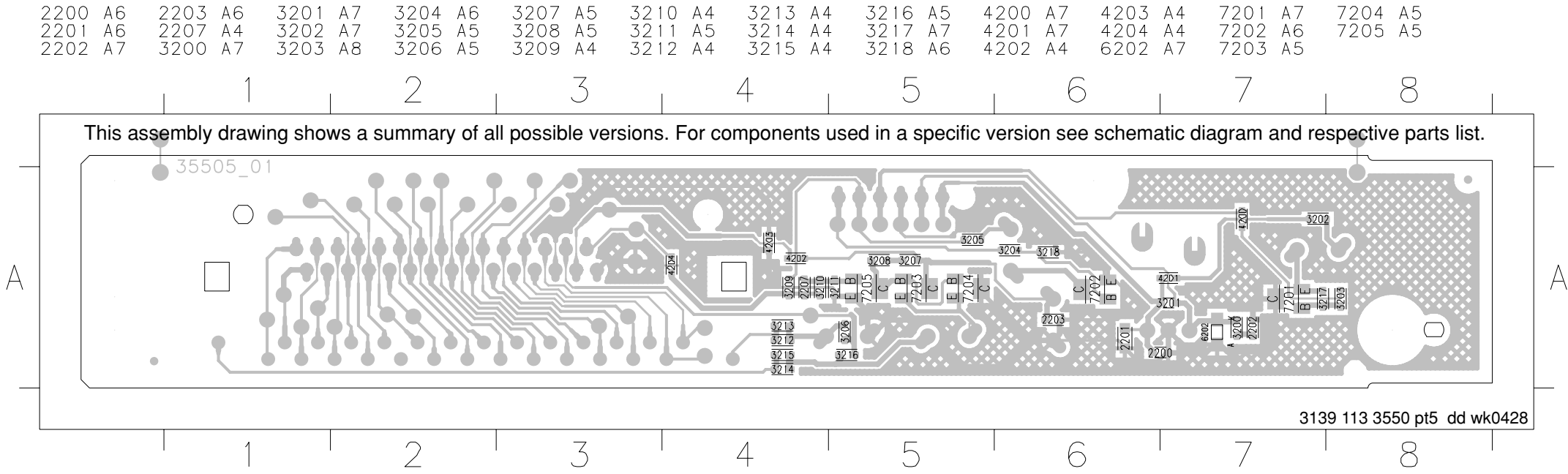
[illegible]

1100 B1	6114 D9
1101 C1	6115 D9
1102 D1	6116 C9
1103 G2	6117 C10
1107 A9	6118 C10
1120 B11	
1121 B11	
2100 E4	6121 D9
2101 E4	7101 I10
2102 D3	7102 B13
2103 D3	7103 D7
2104 H4	7104 I8
2105 G6	9131 F11
2106 H8	9132 F11
2108 H8	
2109 I9	
2110 I10	
2111 I10	
2112 E11	
2113 E12	
2114 G2	
2115 G2	
2116 G2	
2117 C11	
2118 C12	
2119 F1	
2120 H9	
2121 G7	
2122 H9	
2123 B4	
2124 B3	
2125 B3	
2126 C2	
2127 H1	
2128 H2	
2129 E2	
2130 F2	
3100 D10	
3101 C10	
3102 C10	
3103 C10	
3104 C10	
3105 C10	
3106 D10	
3107 D9	
3108 D8	
3109 D8	
3110 D8	
3111 D8	
3112 D8	
3113 D7	
3114 D7	
3115 D7	
3116 E7	
3117 E7	
3118 E7	
3119 E6	
3120 E7	
3121 E6	
3122 E6	
3123 F6	
3124 F6	
3125 F11	
3126 F11	
3128 G8	
3129 G9	
3130 H10	
3131 H10	
3132 H10	
3133 G10	
3134 H9	
3135 I10	
3136 I10	
3138 F12	
3139 F12	
3141 G6	
3142 B11	
3143 C12	
3144 C12	
3145 C12	
3146 C13	
3150 G4	
3151 G4	
3152 G4	
3153 G3	
3154 G4	
3155 H4	
3156 I4	
3157 H3	
3158 H3	
3159 I8	
3160 F11	
3161 F11	
3162 G10	
4101 E2	
4102 H4	
4103 E2	
5100 H11	
5101 H9	
5102 H8	
6100 D2	
6101 D2	
6102 E3	
6103 H11	
6104 G6	
6110 D10	
6111 D10	
6112 D10	
6113 D9	

IR/FTD/LED BOARD - COMPONENT LAYOUT



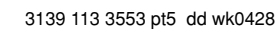
IR/FTD/LED BOARD - CHIP LAYOUT



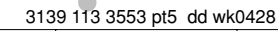
[illegible]

200 A1
1201 E6
1202 B8
2200 A4
2201 A4
2202 B4
2203 D2
2204 D2
2205 E1
2206 D2
2207 D4
3200 A4
3201 A5
3202 A6
3203 A6
3204 A8
3205 A8
3206 D1
3207 D3
3208 D3
3209 D4
3210 D4
3211 E4
3212 C5
3213 D5
3214 C8
3215 D8
3216 D2
3217 A6
3218 B8
6200 A6
6201 A8
6202 B5
7200 A3
7201 A6
7202 A8
7203 D3
7204 E3
7205 D4

1300 A7 1301 D7 1302 C1 1303 C2 1304 C3 1305 C5 1306 D1 1307 D2 1308 D3 1309 D5 1310 A8 1311 A1



2300 C8 2301 D7 3300 D5 3301 D6 3302 D5 3303 D6 3304 D7 3305 C8



ELECTRICAL PARTS LIST - FRONT BOARD



6113	4822 130 11397	BAS316
6114	4822 130 11397	BAS316
6115	4822 130 11397	BAS316
6116	4822 130 11397	BAS316
6117	4822 130 11397	BAS316
6118	4822 130 11397	BAS316
6119	4822 130 11397	BAS316
6120	4822 130 11397	BAS316
6121	4822 130 11397	BAS316

TRANSISTORS & INTEGRATED CIRCUITS

7101	5322 130 60159	BC847B
7102	5322 130 60159	BC847B
7103	3139 240 50941	TMP87CM74AF - 'LX8300S50941'
7104	5322 130 60159	BC847B

ELECTRICAL PARTS LIST - IR/FTD/LED BOARD

7201	4822 130 60373	BC857B
7202	5322 130 60159	BC847B
7203	4822 130 42804	BC817-25
7204	4822 130 60373	BC857B
7205	4822 130 42804	BC817-25

Note : Only the parts mentioned in this list are normal service spare parts.

Note : Only the parts mentioned in this list are normal service spare parts.

Note : Only the parts mentioned in this list are normal service spare parts.

Note : Only the parts mentioned in this list are normal service spare parts.

1307	4822 276 13775	TACT SWITCH
1308	4822 276 13775	TACT SWITCH
1309	4822 276 13775	TACT SWITCH

Note : Only the parts mentioned in this list are normal service spare parts.

AV BOARD

TABLE OF CONTENTS

Brief Introduction of the AV Board 7-1

Top View Layout 7-2

Bottom View Layout 7-3

Circuit Diagram (Part 1) 7-4

Circuit Diagram (Part 2) 7-5

Circuit Diagram (Part 3) 7-6

Circuit Diagram (Part 4) 7-7

Circuit Diagram (Part 5) 7-8

Circuit Diagram (Part 6) 7-9

Electrical parts list 7-10

BRIEF INTRODUCTION OF THE AV BOARD

The AV Board consists of the following features :

- a. IC CS42418

IC CS42418 acts as both DAC and ADC. It accepts PCM data at sample rate from 4kHz to 192kHz audio data. The analog output is then fed into the Op-Amps which are used to filter and amplify the 6-channel signals before passing them onto the Power-Amp module.

There are eight 24 bit DAC within this chip, 6 of those are dedicated to the 6-channel output, the other 2 are used for LINE OUT signal.

This chip has 24 bit ADC. The internal stereo ADC is capable of independent gain control for single ended or differential analog input. The digital output line ADC_SDOUT is then passed on to the MTK of the SD6.3 module. CS42418 is controlled by the SD6.3 module via the I²C bus.
- b. IC HEF4052BT

The selection of TUNER, TV INPUT, AUX INPUT is made by IC HEF4052BT which acts as a multiplexer.
- c. Video signals are buffered (not for all versions) before connecting to the TV.
- d. YUV OUT

YUV OUT with cinch socket for connection to TV. Progressive Y Pb Pr is selected through RC.
- e. LINE OUT

LINE OUT with cinch socket for connection to external amplifier.
- f. SCART

SCART output for audio/video connection to TV (not for all versions).
- g. S-Video and CVBS

S-Video and CVBS are used for video connection to the TV.
- h. DIGITAL IN

DIGITAL IN with cinch socket for connection to DIGITAL OUT of other audio equipments.

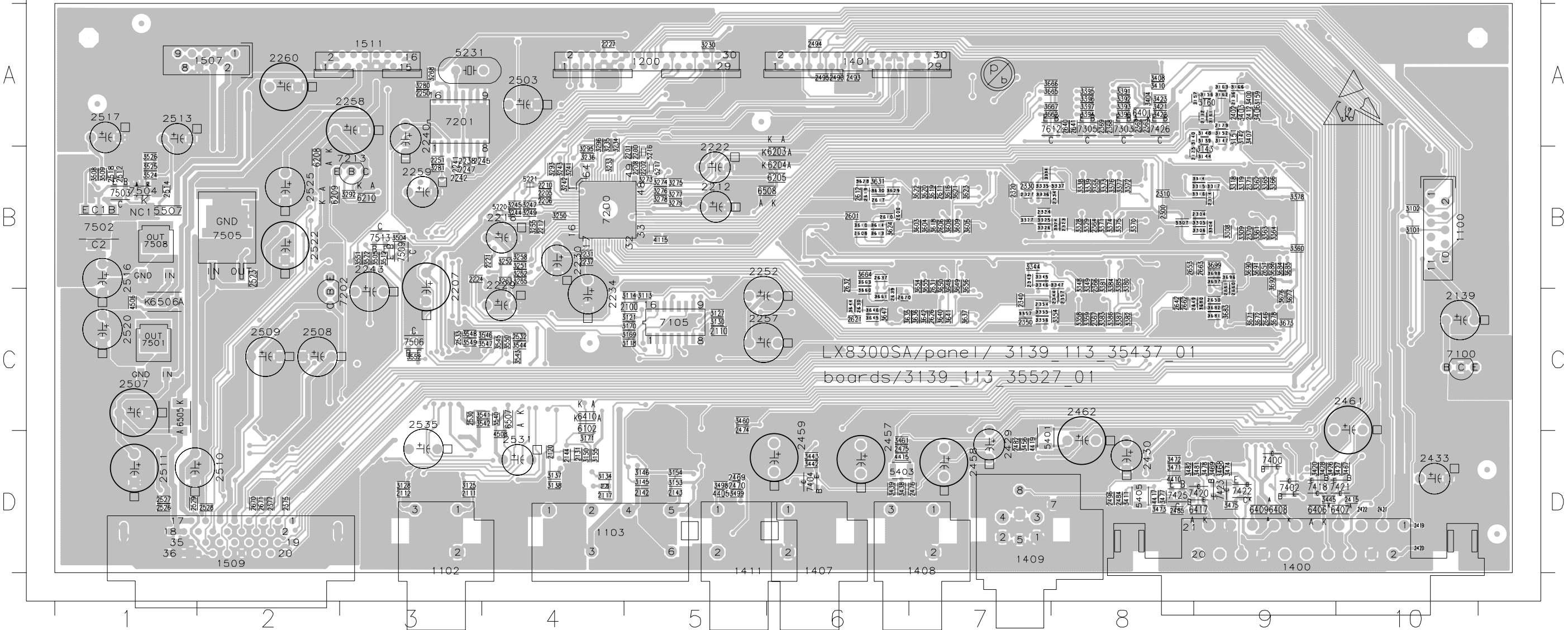
The Digital_in source is fed to the SD6.3 module for audio decoding.

AV BOARD - TOP VIEW LAYOUT

1100 B10	2200 B5	2251 B3	2368 A8	2485 D8	2532 C4	2660 C9	3148 A9	3247 B4	3308 B9	3356 C7	3390 A8	3456 D7	3542 C4	3629 B6	3672 C9	5217 B5	7200 B4
1102 D3	2201 B5	2252 B5	2369 A8	2490 A6	2533 C3	2661 C9	3150 D4	3249 B4	3309 B9	3357 C7	3391 A8	3460 C5	3543 C4	3630 B6	3673 C9	5220 B4	7201 A3
1103 D4	2202 B5	2257 C5	2370 B9	2493 A6	2535 C3	2662 C8	3151 A9	3250 B4	3314 B9	3358 C8	3392 A8	3461 D6	3544 C4	3631 B6	3676 C9	5221 B4	7202 C3
1200 A5	2205 B4	2258 A3	2371 B9	2494 A6	2600 B6	2663 B9	3152 A9	3251 B4	3315 B9	3359 C8	3393 A8	3467 D10	3545 C4	3635 C6	3677 C9	5231 A3	7213 B3
1400 D9	2206 B4	2259 B3	2375 D2	2495 A6	2601 B6	2670 D2	3153 D5	3252 B4	3316 B9	3360 B9	3394 A8	3468 D9	3546 C4	3636 C7	3678 C9	5401 D7	7303 A8
1401 A6	2207 B3	2260 A2	2377 D2	2496 D8	2606 B7	2671 D2	3154 D5	3255 B4	3317 B9	3361 B9	3395 A8	3469 D9	3547 C7	3637 C7	3680 C9	5403 D6	7305 A8
1407 D6	2208 B5	2300 B8	2402 A9	2503 A4	2608 B6	3101 B10	3155 D4	3258 B4	3318 B9	3362 B9	3396 A8	3471 D8	3548 C3	3640 C7	3681 C9	5405 D8	7400 D9
1408 D7	2210 B4	2304 B9	2412 A9	2507 C1	2610 B6	3102 B10	3156 A9	3262 B4	3319 B9	3363 B9	3397 A8	3472 D8	3549 C3	3641 C7	3682 C9	5507 B1	7402 D9
1409 D7	2212 B5	2310 B8	2415 D10	2508 C2	2611 B7	3113 C5	3157 A9	3263 B4	3324 B8	3364 B9	3400 A9	3473 D8	3550 C4	3642 C7	3683 C9	6102 C4	7404 D6
1411 D5	2217 B4	2314 B9	2419 D10	2509 C2	2612 B6	3114 C5	3159 A9	3265 B4	3325 B7	3365 B9	3403 A9	3474 D9	3551 B3	3644 C6	3684 B9	6203 B6	7418 D9
1507 A2	2218 B4	2320 B7	2420 D10	2510 D2	2617 B6	3118 C5	3160 A9	3268 A3	3326 B7	3366 B9	3404 A8	3475 D9	3552 C3	3645 C6	3685 B9	6204 B6	7420 D9
1509 D2	2221 B4	2323 B8	2421 D10	2511 D1	2619 B6	3121 C5	3161 A9	3273 B5	3327 B7	3370 B8	3406 A9	3477 D8	3553 B7	3646 C6	3686 B9	6205 B6	7421 D10
1511 A3	2222 B5	2324 B7	2422 D10	2512 B1	2620 C6	3125 D3	3162 A9	3274 B5	3328 B8	3371 B8	3407 A9	3478 D9	3554 B7	3647 C6	3690 B9	6208 B2	7422 D9
2100 C5	2224 B3	2327 B7	2429 D7	2513 A1	2621 C6	3127 C5	3163 A9	3275 B5	3329 B8	3372 B8	3408 A8	3481 D9	3555 B7	3648 B7	3691 B9	6209 B2	7423 D9
2110 C5	2227 A4	2330 B7	2430 D8	2514 B1	2626 C7	3128 D3	3166 A9	3276 B5	3334 B7	3373 B8	3410 A8	3482 D8	3556 B7	3649 B7	3692 B9	6210 B3	7425 D8
2111 D3	2229 B4	2334 B8	2433 D10	2516 B1	2630 C6	3130 C5	3169 C5	3277 B5	3335 B7	3374 B8	3411 D8	3498 D5	3557 B7	3650 B7	3696 B9	6401 A8	7426 A8
2112 D3	2230 B4	2340 C7	2457 D6	2517 A1	2631 B7	3134 D4	3170 C5	3278 B5	3336 B7	3375 B8	3420 D9	3499 D5	3558 B6	3654 B7	3697 B9	6406 D9	7501 C1
2117 D4	2231 B4	2343 B7	2458 D7	2518 B1	2632 B6	3135 D4	3171 D4	3279 B5	3337 B8	3376 B8	3421 A8	3504 B3	3559 B7	3655 B7	3698 B9	6407 D10	7502 B1
2120 D4	2234 C4	2344 C8	2459 D6	2520 C1	2637 B6	3137 D4	3230 A5	3280 A3	3338 B8	3377 B8	3422 A8	3505 B3	3560 B6	3656 B7	3699 B9	6408 D9	7503 B1
2125 B8	2237 B4	2350 C7	2461 C10	2522 B2	2639 C6	3138 D4	3233 B4	3281 B3	3339 B8	3378 B9	3423 A8	3508 B1	3561 B7	3660 C6	4115 B5	6409 D9	7504 B1
2129 A9	2238 B3	2354 C7	2462 C8	2523 B2	2640 A8	3139 A9	3234 A4	3292 B3	3344 B7	3380 B8	3426 D9	3509 B1	3562 B7	3661 C6	4405 D5	6410 C4	7505 B2
2131 D4	2240 A3	2357 C8	2469 D5	2525 B2	2641 A8	3140 A8	3235 A4	3293 B4	3345 B7	3381 B8	3427 D10	3512 B3	3563 B7	3662 A7	4410 D8	6417 D9	7506 C3
2132 A9	2241 B3	2362 A8	2470 D5	2526 D1	2642 C8	3142 A9	3236 B4	3295 B4	3346 B7	3382 C8	3428 D9	3522 B3	3564 B7	3663 B6	4415 D6	6505 C1	7508 B1
2136 A9	2242 B3	2363 A8	2474 C5	2527 D1	2646 C9	3143 B9	3241 B4	3296 A4	3347 B8	3383 C8	3438 D6	3524 B1	3565 B6	3664 B6	4417 D8	6506 C1	7509 B3
2139 C10	2243 B3	2364 B8	2475 D6	2528 D2	2649 C9	3144 B9	3242 B4	3304 B9	3348 B8	3384 B8	3439 D6	3525 B1	3566 B7	3665 A7	4419 D7	6507 C4	7513 B3
2142 D5	2245 B3	2365 B8	2476 D7	2529 D1	2650 C9	3145 D5	3243 B4	3305 B9	3349 B8	3385 B8	3442 D6	3526 B1	3567 B7	3666 A7	4506 C1	6508 B6	7612 A7
2143 D5	2247 B3	2366 B8	2482 D7	2530 C3	2651 B9	3146 D5	3244 B4	3306 B9	3354 C8	3386 C8	3443 D6	3540 C4	3568 B6	3667 A7	4508 D4	7100 C10	
2144 D4	2250 A3	2367 C8	2484 D8	2531 D4	2653 B8	3147 A9	3245 B4	3307 B8	3355 C7	3387 C8	3445 D9	3541 C4	3569 B6	3671 C9	5216 B5	7105 C5	

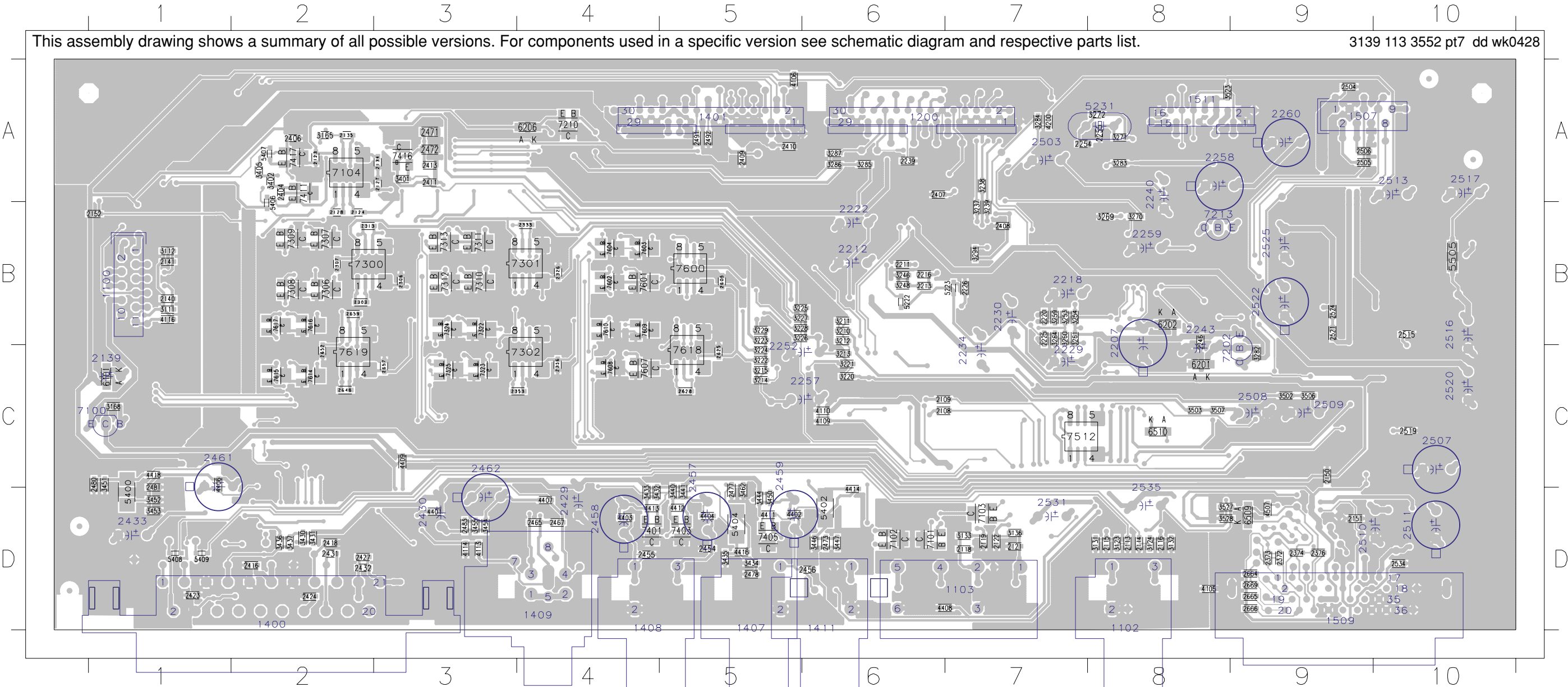
This assembly drawing shows a summary of all possible versions. For components used in a specific version see schematic diagram and respective parts list.

3139 113 3552 pt7 dd wk0428



AV BOARD - BOTTOM VIEW LAYOUT

1100 B1	1200 A6	1407 D5	1411 D6	1511 A8	2212 B6	2229 B7	2240 A8	2257 C6	2260 A9	2433 D1	2459 D5	2503 A7	2509 C9	2513 A10	2520 C10	2531 D7	7100 C1
1102 D8	1400 D2	1408 D4	1507 A9	2139 C1	2218 B7	2230 B7	2243 B8	2258 A8	2429 D4	2457 D5	2461 C1	2507 C10	2510 D9	2516 B10	2522 B9	2535 C8	7202 C8
1103 D7	1401 A5	1409 D4	1509 D9	2207 B8	2222 B6	2234 C7	2252 B6	2259 B8	2430 D3	2458 D4	2462 C3	2508 C9	2511 D10	2517 A10	2525 B9	5231 A8	7213 B8
2108 C6	2134 A3	2246 B8	2376 D9	2431 D2	2483 D3	2648 C2	3133 D7	3224 C5	3260 B7	3401 A3	3446 D6	3527 D8	4406 C1	5402 D6	7102 D6	7313 B3	7602 B4
2109 C6	2135 A2	2254 A7	2404 A2	2432 D2	2491 A5	2652 C2	3136 D7	3225 B5	3261 B7	3402 A2	3447 D6	3528 D8	4407 D4	5404 D5	7103 D7	7322 B3	7603 B4
2113 D8	2140 B1	2255 A8	2406 A2	2454 D5	2492 A5	2657 C3	3165 A2	3226 B5	3264 B7	3405 A2	3450 D5	4105 D8	4408 D6	5406 B2	7104 A2	7323 C3	7604 B4
2114 D8	2141 B1	2303 B2	2407 A6	2455 D4	2504 A9	2659 B2	3168 C1	3227 B5	3269 B8	3430 D2	3451 C1	4106 A5	4409 C3	5407 A2	7210 A4	7324 B3	7607 C4
2115 D8	2150 C9	2306 B3	2408 B7	2456 D6	2505 A9	2664 D9	3210 B6	3228 B5	3270 B8	3431 D2	3452 D1	4109 C6	4411 D5	5408 D1	7300 B2	7325 C3	7608 C4
2116 D8	2151 D9	2307 B2	2409 A5	2465 D4	2506 A9	2665 D9	3211 B6	3229 B5	3271 A8	3432 D4	3453 D1	4110 C6	4412 D5	5409 D1	7301 B4	7401 D4	7609 B4
2118 D7	2152 B1	2313 B2	2410 A5	2467 D4	2515 B10	2666 D9	3212 B6	3237 B7	3272 A8	3433 D4	3454 D3	4113 D3	4413 D4	5505 B10	7302 C4	7403 D5	7610 B4
2119 D7	2211 B6	2326 B4	2411 A3	2471 A3	2519 C10	2669 D9	3213 C6	3238 A7	3282 C9	3434 D5	3455 D3	4114 D3	4414 D6	6101 C1	7306 B2	7405 D5	7614 C2
2121 D7	2213 B6	2333 B4	2413 A3	2472 A3	2521 B9	3111 B1	3214 C5	3239 B7	3283 A8	3435 D5	3462 D5	4116 B1	4416 D5	6201 C8	7307 B2	7411 A2	7615 C2
2122 D7	2216 B6	2353 C4	2416 D2	2473 D6	2524 B9	3112 B1	3215 C5	3246 B6	3284 A7	3436 D2	3502 C9	4200 A7	4418 C1	6202 B8	7308 B2	7416 A3	7616 B2
2123 A2	2220 B7	2356 C4	2418 D2	2477 D5	2534 D10	3123 D8	3220 C6	3248 B6	3285 A6	3437 D2	3503 C8	4401 D3	4507 D9	6206 A4	7309 B2	7417 A2	7617 B2
2124 B2	2225 B7	2372 D9	2423 D1	2478 D5	2605 B5	3124 D8	3221 C6	3253 B7	3286 A6	3440 D5	3506 C9	4402 D5	5222 B6	6509 D9	7310 B3	7512 C7	7618 C5
2127 A3	2226 B7	2373 D9	2424 D2	2480 C1	2625 C5	3131 D8	3222 C5	3254 B7	3287 A6	3441 D5	3507 C8	4403 D4	5223 B7	6510 C8	7311 B3	7600 B5	7619 C2
2128 B2	2239 A6	2374 D9	2427 D2	2481 D1	2628 C5	3132 D8	3223 B5	3259 B7	3294 B7	3444 D5	3523 A8	4404 D5	5400 D1	7101 D6	7312 B3	7601 B4	



From Tuner

CL 1 TU_CLK (1200)

DO/Stereo 2 TU_DO_STEREO (1200)

Data_in 3 TU_Data_In (1200)

LCH 4 TU_CE (1200)

Rch 5 TU_CE (1200)

RDS_Mux 6 TU_RDS_IN (2242)

+9V1 7 TU_RDS_IN (2242)

SD 8 TU_SD (1200)

NC 9

GND 10

FE-BT-VK-N 11

10V 7100 BC368 11.76V +12VA (1509)

10.2V 3168 100k 25V

GND_a GND_a

3102 560R

3101 560R

3111 150K

2140 100p

3112 150K

2141 100p

GND_sel GND_sel GND_sel GND_sel

2152 100n

4116

GND_a GND_sel

For -/01 & -/05 only

(1400) SCART_TV_Left_In

(1400) SCART_TV_Right_In

3123 3K3

3124 3K3

2113 68p

2114 68p

GND_sel GND_sel

For -/69 & -/17 only

1102 1

3125 3K3

2111 68p

2112 68p

3128 3K3

2

LPR6520-J920G

GND_sel GND_sel GND_sel

2115 100p

2116 100p

3121 470K

3122 470K

GND_sel GND_sel GND_sel GND_sel

2108 1u0

2109 1u0

3125 3K3

3134 6R

2117 1u0

2118 68p

2119 100p

3135 68K

GND_sel GND_sel GND_sel

3136 3K3

3137 6R

2120 1u0

2121 68p

2122 100p

3138 68K

GND_sel GND_sel GND_sel

* 4105

GND_sel

D

Aux In

Line Out

1103 3

GND_sel

1

2

6

GND_a

4

5

LPR6520-J440G

2142 100p

3145 47K

0V BC847B 7101 -0.4V 3146 1K5

0V BC847B 7102 -0.4V 3154 1K5

2143 100p

3153 47K

0V BC847B 7103 4.8V 3150 47K

0V BC847B 7104 4.8V 3151 47K

2131 63V

2144 63V

3155 82K

* 3171 82K

* 6102 BAS316

MUTE_FRONT

3142 4K7

0V 1

(3229) -12Va_LO -7.9V

100n 2123

7.7V (3225) +12Va_LO

7104-A LM833D

3139 15K

3140 10K

3143 12K

3144 8K2

3145 470p

GND_a

3147 15K

3148 10K

2129 470p

GND_a

7.7V (3225) +12Va_LO

7104-B LM833D

5 1.86V

3156 15K

3157 10K

3160 12K

3161 8K2

3162 15K

3163 10K

2132 470p

GND_a

2135 82p

3155 12K

3166 8K2

2136 470p

GND_a

3159 4K7

0V 7

(3229) -12Va_LO -7.9V

100n 2128

7.7V (3225) +12Va_LO

7104-B LM833D

8 1.93V

3139 15K

3140 10K

3143 12K

3144 8K2

3145 470p

GND_a

3147 15K

3148 10K

2129 470p

GND_a

7.7V (3225) +12Va_LO

7104-A LM833D

5 1.86V

3156 15K

3157 10K

3160 12K

3161 8K2

3162 15K

3163 10K

2132 470p

GND_a

2135 82p

3155 12K

3166 8K2

2136 470p

GND_a

3159 4K7

0V 7

(3229) -12Va_LO -7.9V

100n 2128

7.7V (3225) +12Va_LO

7104-A LM833D

8 1.93V

3139 15K

3140 10K

3143 12K

3144 8K2

3145 470p

GND_a

3147 15K

3148 10K

2129 470p

GND_a

7.7V (3225) +12Va_LO

7104-B LM833D

5 1.86V

3156 15K

3157 10K

3160 12K

3161 8K2

3162 15K

3163 10K

2132 470p

GND_a

2135 82p

3155 12K

3166 8K2

2136 470p

GND_a

3159 4K7

0V 7

(3229) -12Va_LO -7.9V

100n 2128

7.7V (3225) +12Va_LO

7104-A LM833D

8 1.93V

3139 15K

3140 10K

3143 12K

3144 8K2

3145 470p

GND_a

3147 15K

3148 10K

2129 470p

GND_a

7.7V (3225) +12Va_LO

7104-B LM833D

5 1.86V

3156 15K

3157 10K

3160 12K

3161 8K2

3162 15K

3163 10K

2132 470p

GND_a

2135 82p

3155 12K

3166 8K2

2136 470p

GND_a

3159 4K7

0V 7

(3229) -12Va_LO -7.9V

100n 2128

7.7V (3225) +12Va_LO

7104-A LM833D

8 1.93V

3139 15K

3140 10K

3143 12K

3144 8K2

3145 470p

GND_a

3147 15K

3148 10K

2129 470p

GND_a

7.7V (3225) +12Va_LO

7104-B LM833D

5 1.86V

3156 15K

3157 10K

3160 12K

3161 8K2

3162 15K

3163 10K

2132 470p

GND_a

2135 82p

3155 12K

3166 8K2

2136 470p

GND_a

3159 4K7

0V 7

(3229) -12Va_LO -7.9V

100n 2128

7.7V (3225) +12Va_LO

7104-A LM833D

8 1.93V

3139 15K

3140 10K

3143 12K

3144 8K2

3145 470p

GND_a

3147 15K

3148 10K

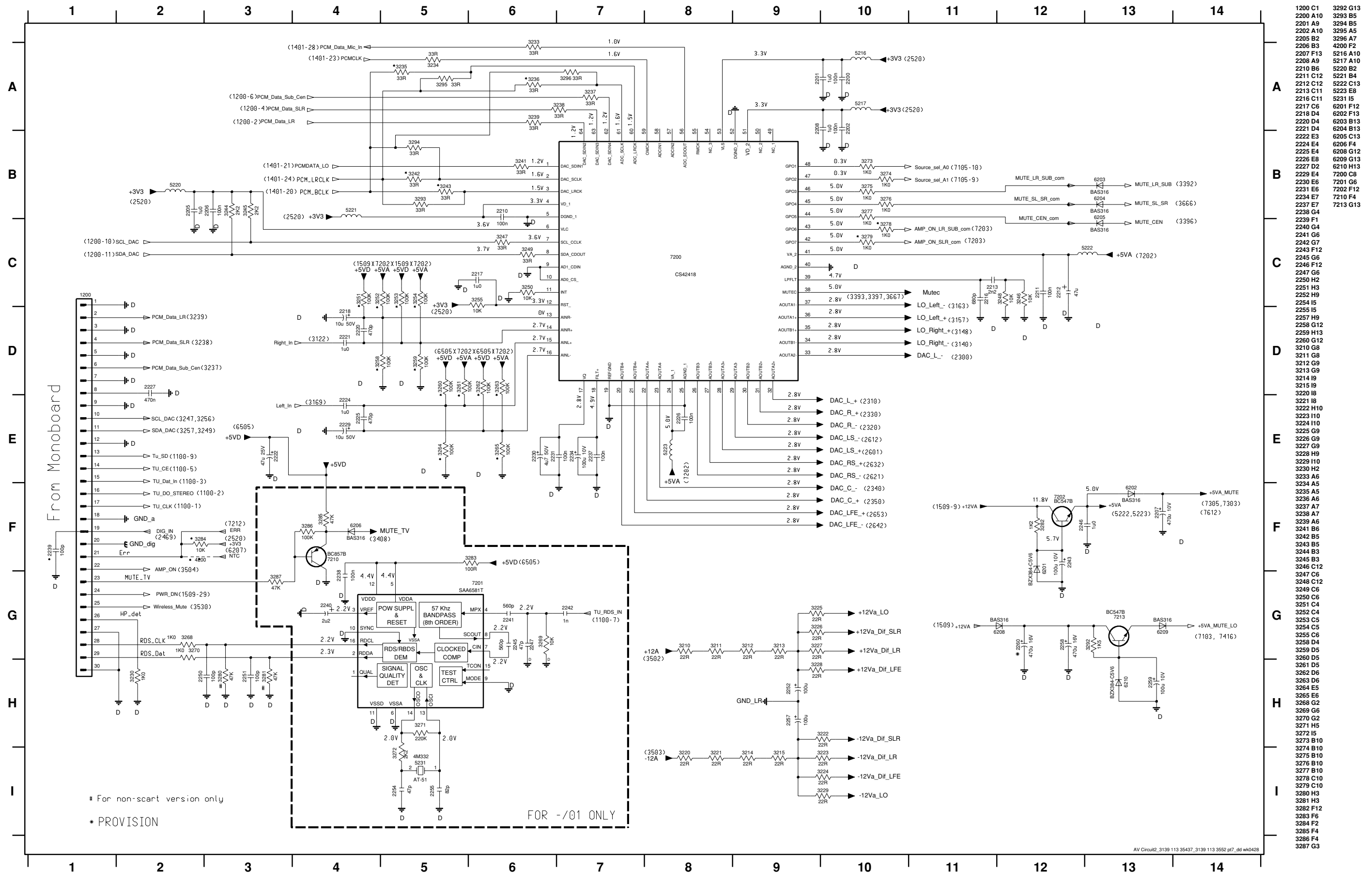
2129 470p

GND_a

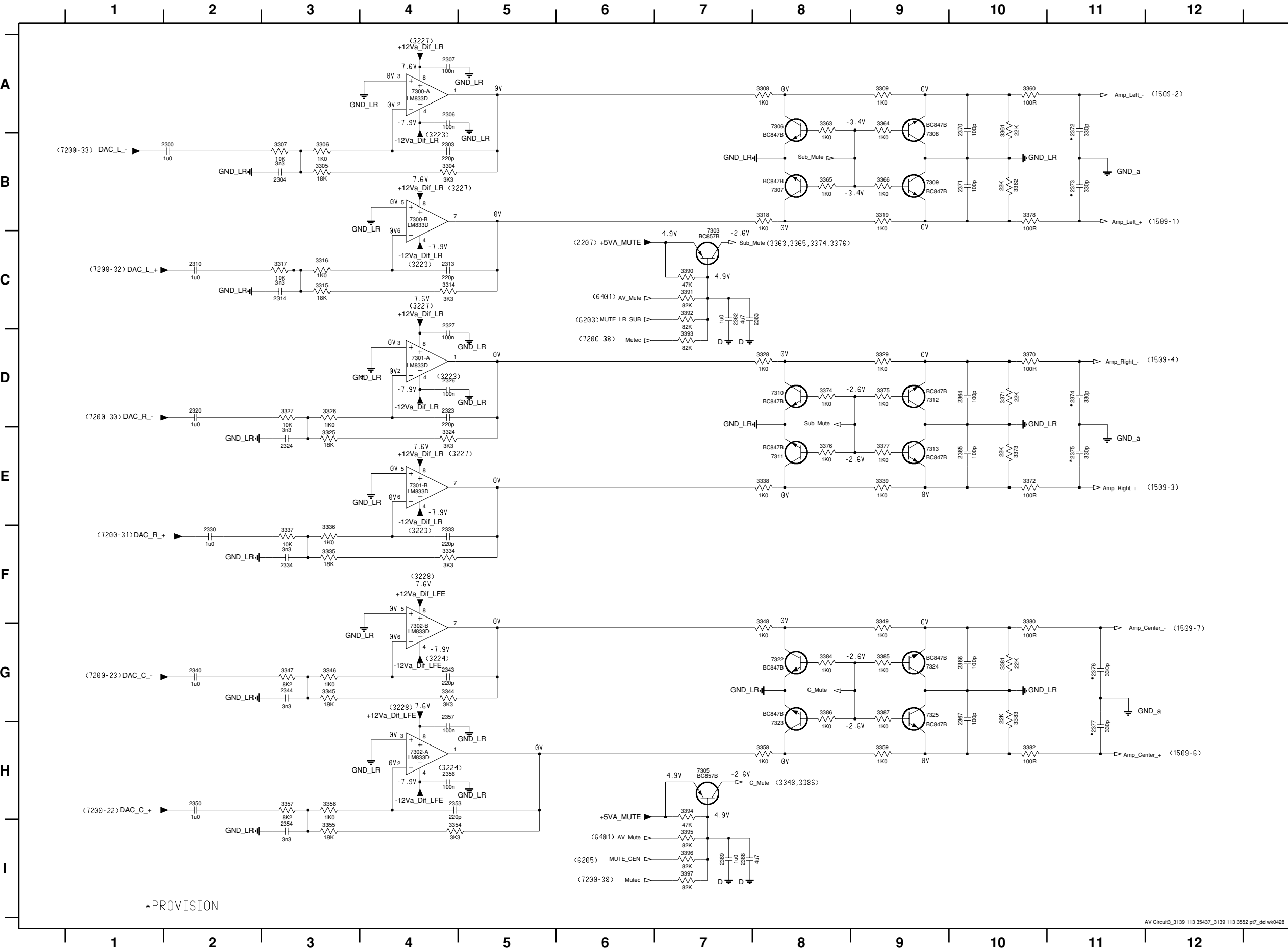
7.7V (3225) +

1100 B2
1102 D1
1103 F2
2100 B10
2108 D6
2109 D6
2110 E8
2111 D2
2112 D2
2113 C4
2114 C4
2115 D4
2116 D4
2117 E5
2118 F4
2119 F4
2120 F5
2121 F4
2122 F4
2123 G8
2124 G8
2125 G10
2127 G8
2128 H8
2129 H9
2131 H5
2132 H10
2134 I8
2135 I8
2136 I9
2139 B3
2140 B5
2141 B6
2142 G3
2143 H3
2144 H5
2150 E12
2151 E12
2152 C6
3115 A5
3102 A5
3111 B5
3112 B6
3113 A10
3114 B10
3118 C9
3121 D9
3123 C3
3124 C3
3125 D2
3127 E9
3128 D2
3130 E9
3131 D5
3132 D5
3133 E4
3134 E5
3135 F5
3136 F4
3137 F5
3138 F5
3139 G9
3140 G10
3142 G7
3143 G9
3144 G9
3145 G4
3146 G4
3147 H9
3148 H9
3150 H5
3151 H8
3152 H9
3153 H4
3154 H4
3155 H6
3156 H9
3157 H10
3159 H7
3160 I9
3161 I9
3162 I9
3163 I9
3165 I8
3166 I9
3167 A3
3169 C9
3170 D9
3171 H6
4105 E2
4106 D12
4109 E13
4110 E13
4113 E11
4114 D11
4115 E12
4116 C6
6101 B3
6102 H6
7100 B3
7101 G4
7102 H4
7103 G5
7104 A G8
7104-B H8
7105 B8

AV BOARD - CIRCUIT DIAGRAM (PART 2)



AV BOARD - CIRCUIT DIAGRAM (PART 3)



*PROVISION

2300 B2	7301-A D4
2303 B4	7301-B E4
2304 B3	7302-A H4
2306 A4	7302-B G4
2307 A4	7303 C7
2310 C2	7305 H7
2313 C4	7306 A8
2314 C3	7307 B8
2320 D2	7308 A9
2323 D4	7309 B9
2324 E3	7310 D8
2326 D4	7311 E8
2327 C4	7312 D9
2330 F2	7313 E9
2333 F4	7322 G8
2334 F3	7323 G8
2340 G2	7324 G9
2343 G4	7325 G9
2344 G3	
2350 H2	
2353 H4	
2354 I3	
2356 H4	
2357 G4	
2362 C7	
2363 C8	
2364 D10	
2365 E10	
2366 G10	
2367 G10	
2368 I7	
2369 I7	
2370 A10	
2371 B10	
2372 A11	
2373 B11	
2374 D11	
2375 E11	
2376 G11	
2377 H11	
3304 B4	
3305 B3	
3306 B3	
3307 B3	
3308 A8	
3309 A9	
3314 C4	
3315 C3	
3316 C3	
3317 C3	
3318 B8	
3319 B9	
3324 E4	
3325 E3	
3326 D3	
3327 D3	
3328 D8	
3329 D9	
3334 F4	
3335 F3	
3336 E3	
3337 F3	
3338 E8	
3339 E9	
3344 G4	
3345 G3	
3346 G3	
3347 G3	
3348 F8	
3349 F9	
3354 I4	
3355 I3	
3356 H3	
3357 H3	
3358 H8	
3359 H9	
3360 A10	
3361 A10	
3362 B10	
3363 A8	
3364 A9	
3365 B8	
3366 B9	
3370 D10	
3371 D10	
3372 E10	
3373 E10	
3374 D8	
3375 D9	
3376 E8	
3377 E9	
3378 B10	
3380 F10	
3381 G10	
3382 H10	
3383 G10	
3384 G8	
3385 G9	
3386 G8	
3387 G9	
3390 C7	
3391 C7	
3392 C7	
3393 D7	
3394 H7	
3395 I7	
3396 I7	
3397 I7	
7300-A A4	
7300-B B4	

[illegible]

1400 A12	3471 D6
1401 A2	3472 D6
1402 D13	3473 D5
1403 E13	3474 D8
1407 F14	3475 D9
1408 F14	3477 D6
1409-A H14	3478 D8
1409-B H14	3481 C7
1411 F1	3482 C7
2404 A8	3498 F2
2404 A8	3498 F2
2406 A8	4401 H2
2407 E3	4402 F13
2408 E2	4403 F13
2409 C2	4404 G12
2410 B2	4405 F2
2411 B7	4406 H12
2412 B8	4407 H12
2414 B6	4408 G2
2415 B11	4408 I8
2416 C13	4410 E6
2418 D13	4411 H5
2419 A13	4412 G7
2420 A13	4413 G10
2421 B13	4414 F4
2422 B13	4415 F7
2423 B13	4416 F9
2424 C13	4417 C6
2425 D13	4418 H10
2429 H2	4419 I10
2430 H3	5400 H10
2431 D12	5401 I10
2432 D11	5402 F4
2433 C10	5403 F7
2454 G13	5404 F10
2455 G13	5405 C6
2456 F13	5406 A9
2457 H12	5407 A9
2458 H11	5408 A11
2459 F13	5409 B11
2461 H12	6401 B4
2462 H12	6406 B13
2465 H12	6407 B11
2467 H13	6408 C13
2469 F3	6409 C13
2470 F2	6410 A6
2471 B6	6411 D13
2472 B7	7400 F11
2473 F4	7401 G10
2474 F4	7402 F8
2475 F7	7403 G8
2476 F6	7404 F6
2477 E9	7405 G5
2478 F9	7411 A8
2480 F9	7416 A7
2481 H11	7417 A8
2482 H11	7418 C10
2483 H11	7420 D7
2484 C5	7421 D11
2485 D5	7422 D9
2490 C5	7423 D9
2491 E4	7425 D7
2492 F6	7426 B4
2493 E9	
2494 F9	
2495 B9	
2496 H12	
3400 A7	
3401 A7	
3402 A7	
3403 A8	
3404 A6	
3405 B7	
3406 B8	
3407 B7	
3408 B7	
3409 A8	
3410 A7	
3411 C5	
3420 C10	
3421 B4	
3422 B4	
3423 B3	
3426 B9	
3427 B9	
3428 C10	
3431 F10	
3432 F10	
3433 F10	
3434 F9	
3435 F9	
3436 F8	
3437 F8	
3438 F7	
3439 F7	
3440 F8	
3441 F8	
3442 F5	
3443 F5	
3444 F5	
3445 C10	
3446 F4	
3447 F4	
3450 G5	
3451 H10	
3452 H11	
3453 H11	
3454 H11	
3455 H11	
3456 H10	
3460 E4	
3461 F6	
3462 E9	
3467 D10	
3468 C8	
3469 C9	

AV Circuit5_3139 113 35437_3139 113 3552 pt7_dd wk0428

15097 A13
 15098 A1
 1511 E12
 25003 B10
 25004 B11
 25005 B11
 25006 B11
 25007 C3
 2508 C4
 2509 C3
 2510 D2
 2511 C4
 2512 E6
 2513 D6
 2514 D6
 2515 A5
 2516 A6
 2517 E4
 2518 E5
 2519 B5
 2521 G5
 2522 G5
 2523 G5
 2524 G6
 2525 G6
 2526 A4
 2527 C3
 2528 D3
 2530 G8
 2531 G9
 2533 E8
 2534 E1
 2535 G2
 3502 A2
 3503 A2
 3504 C9
 3505 B10
 3506 A2
 3507 A2
 3508 D5
 3509 D5
 3511 C10
 3522 F11
 3523 C3
 3524 D7
 3525 E7
 3526 E7
 3527 E2
 3528 G2
 3534 G7
 3535 G8
 3544 G9
 3545 E10
 3546 E10
 3547 E9
 3548 E9
 3549 E8
 3550 E8
 3551 C9
 3552 D10
 4506 A5
 4507 H2
 4508 F8
 4505 C4
 4506 A5
 4507 G8
 4508 F2
 4510 F2
 7501 A6
 7502 C5
 7503 D6
 7504 D6
 7505 G6
 7506 C11
 7509 C10
 7510-12 A G9
 7512 B E9
 7513 C9

The PCB layout is organized into a grid with columns numbered 1 to 12 and rows lettered A to H. The design includes the following components and connections:

- Input Stage (Columns 1-4):** Four DAC inputs are shown: (7200-28) DAC_LS_+, (7200-29) DAC_LS_-, (7200-26) DAC_RS_-, and (7200-27) DAC_RS_+. Each input is connected to a network of resistors (e.g., 2601, 3610, 3613) and capacitors (e.g., 2605, 2608) leading to the non-inverting inputs of op-amps (7600-A, 7600-B, 7618-A, 7618-B).
- Op-Amp Stages (Columns 4-5):** Four LM833D op-amps are used in a differential configuration. Each op-amp has its non-inverting input connected to a DAC input and its inverting input connected to a feedback network of resistors (e.g., 2605, 2608, 2609, 2610, 2611, 2612, 2613, 2614, 2615, 2616, 2617, 2618, 2619, 2620, 2621, 2622, 2623, 2624, 2625, 2626, 2627, 2628, 2629, 2630, 2631, 2632, 2633, 2634, 2635, 2636, 2637, 2638, 2639, 2640, 2641, 2642, 2643, 2644, 2645, 2646, 2647, 2648, 2649, 2650, 2651, 2652, 2653, 2654, 2655, 2656, 2657, 2658, 2659, 2660, 2661, 2662, 2663, 2664, 2665, 2666, 2667, 2668, 2669, 2670, 2671, 2672, 2673, 2674, 2675, 2676, 2677, 2678, 2679, 2680, 2681, 2682, 2683, 2684, 2685, 2686, 2687, 2688, 2689, 2690, 2691, 2692, 2693, 2694, 2695, 2696, 2697, 2698, 2699, 2700, 2701, 2702, 2703, 2704, 2705, 2706, 2707, 2708, 2709, 2710, 2711, 2712, 2713, 2714, 2715, 2716, 2717, 2718, 2719, 2720, 2721, 2722, 2723, 2724, 2725, 2726, 2727, 2728, 2729, 2730, 2731, 2732, 2733, 2734, 2735, 2736, 2737, 2738, 2739, 2740, 2741, 2742, 2743, 2744, 2745, 2746, 2747, 2748, 2749, 2750, 2751, 2752, 2753, 2754, 2755, 2756, 2757, 2758, 2759, 2760, 2761, 2762, 2763, 2764, 2765, 2766, 2767, 2768, 2769, 2770, 2771, 2772, 2773, 2774, 2775, 2776, 2777, 2778, 2779, 2780, 2781, 2782, 2783, 2784, 2785, 2786, 2787, 2788, 2789, 2790, 2791, 2792, 2793, 2794, 2795, 2796, 2797, 2798, 2799, 2800, 2801, 2802, 2803, 2804, 2805, 2806, 2807, 2808, 2809, 2810, 2811, 2812, 2813, 2814, 2815, 2816, 2817, 2818, 2819, 2820, 2821, 2822, 2823, 2824, 2825, 2826, 2827, 2828, 2829, 2830, 2831, 2832, 2833, 2834, 2835, 2836, 2837, 2838, 2839, 2840, 2841, 2842, 2843, 2844, 2845, 2846, 2847, 2848, 2849, 2850, 2851, 2852, 2853, 2854, 2855, 2856, 2857, 2858, 2859, 2860, 2861, 2862, 2863, 2864, 2865, 2866, 2867, 2868, 2869, 2870, 2871, 2872, 2873, 2874, 2875, 2876, 2877, 2878, 2879, 2880, 2881, 2882, 2883, 2884, 2885, 2886, 2887, 2888, 2889, 2890, 2891, 2892, 2893, 2894, 2895, 2896, 2897, 2898, 2899, 2900, 2901, 2902, 2903, 2904, 2905, 2906, 2907, 2908, 2909, 2910, 2911, 2912, 2913, 2914, 2915, 2916, 2917, 2918, 2919, 2920, 2921, 2922, 2923, 2924, 2925, 2926, 2927, 2928, 2929, 2930, 2931, 2932, 2933, 2934, 2935, 2936, 2937, 2938, 2939, 2940, 2941, 2942, 2943, 2944, 2945, 2946, 2947, 2948, 2949, 2950, 2951, 2952, 2953, 2954, 2955, 2956, 2957, 2958, 2959, 2960, 2961, 2962, 2963, 2964, 2965, 2966, 2967, 2968, 2969, 2970, 2971, 2972, 2973, 2974, 2975, 2976, 2977, 2978, 2979, 2980, 2981, 2982, 2983, 2984, 2985, 2986, 2987, 2988, 2989, 2990, 2991, 2992, 2993, 2994, 2995, 2996, 2997, 2998, 2999, 3000).
- Output Stage (Columns 8-11):** Four BC847B output transistors are used in a differential configuration. Each transistor is connected to a network of resistors (e.g., 3603, 3604, 3605, 3606, 3607, 3608, 3609, 3610, 3611, 3612, 3613, 3614, 3615, 3616, 3617, 3618, 3619, 3620, 3621, 3622, 3623, 3624, 3625, 3626, 3627, 3628, 3629, 3630, 3631, 3632, 3633, 3634, 3635, 3636, 3637, 3638, 3639, 3640, 3641, 3642, 3643, 3644, 3645, 3646, 3647, 3648, 3649, 3650, 3651, 3652, 3653, 3654, 3655, 3656, 3657, 3658, 3659, 3660, 3661, 3662, 3663, 3664, 3665, 3666, 3667, 3668, 3669, 3670, 3671, 3672, 3673, 3674, 3675, 3676, 3677, 3678, 3679, 3680, 3681, 3682, 3683, 3684, 3685, 3686, 3687, 3688, 3689, 3690, 3691, 3692, 3693, 3694, 3695, 3696, 3697, 3698, 3699, 3700, 3701, 3702, 3703, 3704, 3705, 3706, 3707, 3708, 3709, 3710, 3711, 3712, 3713, 3714, 3715, 3716, 3717, 3718, 3719, 3720, 3721, 3722, 3723, 3724, 3725, 3726, 3727, 3728, 3729, 3730, 3731, 3732, 3733, 3734, 3735, 3736, 3737, 3738, 3739, 3740, 3741, 3742, 3743, 3744, 3745, 3746, 3747, 3748, 3749, 3750, 3751, 3752, 3753, 3754, 3755, 3756, 3757, 3758, 3759, 3760, 3761, 3762, 3763, 3764, 3765, 3766, 3767, 3768, 3769, 3770, 3771, 3772, 3773, 3774, 3775, 3776, 3777, 3778, 3779, 3780, 3781, 3782, 3783, 3784, 3785, 3786, 3787, 3788, 3789, 3790, 3791, 3792, 3793, 3794, 3795, 3796, 3797, 3798, 3799, 3800).
- Control and Mute Stages (Columns 6-7):** A central control stage includes a BC857B transistor (7612) and a network of resistors (e.g., 3662, 3663, 3664, 3665, 3666, 3667, 3668, 3669, 3670, 3671, 3672, 3673, 3674, 3675, 3676, 3677, 3678, 3679, 368

2600 A5	7600-A A4
2601 A2	7600-B B4
2605 A5	7601 A8
2606 A10	7602 A9
2608 A5	7603 B8
2610 A3	7604 B9
2611 B10	7607 D8
2612 B2	7608 D9
2617 B5	7609 D8
2619 C3	7610 D9
2620 C5	7612 E7
2621 D2	7614 G8
2625 D5	7615 G9
2626 D10	7616 G8
2628 D5	7617 G9
2630 D3	7618-A C4
2631 D10	7618-B E4
2632 E2	7619-A F4
2637 E5	7619-B H4
2639 E3	
2640 F7	
2641 F7	
2642 G2	
2646 G10	
2648 G5	
2649 G2	
2650 G3	
2651 G10	
2652 G5	
2653 H2	
2657 H5	
2659 H5	
2660 H2	
2661 H3	
2662 F2	
2663 H2	
2664 A11	
2665 B11	
2666 D11	
2669 D11	
2670 G11	
2671 G11	
3603 A8	
3604 A9	
3605 A10	
3608 A8	
3609 A9	
3610 A3	
3613 A3	
3614 A3	
3616 B8	
3618 A10	
3619 B10	
3620 B9	
3621 B9	
3622 B8	
3623 B10	
3624 A5	
3628 B3	
3629 B3	
3630 C3	
3631 C5	
3635 C8	
3636 C9	
3637 C10	
3640 D8	
3641 D9	
3642 D10	
3644 D3	
3645 D3	
3646 D3	
3647 D5	
3648 D8	
3649 D9	
3650 D10	
3654 E8	
3655 E9	
3656 E10	
3660 E3	
3661 E3	
3662 E7	
3663 E3	
3664 E5	
3665 F7	
3666 F7	
3667 F7	
3671 F8	
3672 F9	
3673 F10	
3676 G8	
3677 G9	
3678 G10	
3680 G3	
3681 G3	
3682 G3	
3683 G5	
3684 G8	
3685 G9	
3686 G10	
3690 H8	
3691 H9	
3692 H10	
3696 H3	
3697 H3	
3698 H3	
3699 H5	

ELECTRICAL PARTS LIST - AV BOARD**MISCELLANEOUS**

1100	4822 267 11039	Flex Connector 11P
1102	2422 026 04754	Socket Cinch 2P (TV in)
1103	2422 026 05462	Soc. Cinch 4P (Aux-in/Line-out)
1200	2422 025 17433	Flex Connector 30P
1200	2422 025 17509	Flex Connector 30P
1401	2422 025 17509	Flex Connector 30P
1401	2422 025 17433	Flex Connector 30P
1407	2422 026 05531	Socket Cinch 1P (Pr)
1408	2422 026 05529	Socket Cinch 2P (Y/Pb)
1409	2422 033 00468	Socket 2P (Video/S-Video)
1411	2422 026 05427	Socket Cinch 1P (Digital in)
1507	2422 025 14518	Flex Connector 9P
1509	2422 025 05561	Socket MDR 36P
1509	2422 025 18466	Socket MDR 36P
1511	2422 025 16525	Flex Connector 16P

COILS & FILTERS

5216	2422 549 43062	IND FXD SM 100MHZ 600R
5217	2422 549 43062	IND FXD SM 100MHZ 600R
5220	2422 549 43062	IND FXD SM 100MHZ 600R
5221	2422 549 43062	IND FXD SM 100MHZ 600R
5222	2422 549 43062	IND FXD SM 100MHZ 600R
5223	2422 549 43062	IND FXD SM 100MHZ 600R
5400	3198 018 41880	FXD IND SM 1210 1U8 5%
5401	3198 018 41880	FXD IND SM 1210 1U8 5%
5402	3198 018 41880	FXD IND SM 1210 1U8 5%
5403	3198 018 41880	FXD IND SM 1210 1U8 5%
5404	3198 018 41880	FXD IND SM 1210 1U8 5%
5405	3198 018 41880	FXD IND SM 1210 1U8 5%
5505	4822 157 11717	IND FXD 1206 100MHZ 50R
5507	4822 157 11717	IND FXD 1206 100MHZ 50R

DIODES

6101	4822 130 11551	BZX384-C10
6201	3198 020 55680	BZX384-C5V6
6202	4822 130 11397	BAS316
6203	4822 130 11397	BAS316
6204	4822 130 11397	BAS316
6205	4822 130 11397	BAS316
6208	4822 130 11397	BAS316
6209	4822 130 11397	BAS316
6210	3198 020 55680	BZX384-C5V6
6401	4822 130 11397	BAS316
6505	3198 010 10720	DIO REC SS24
6506	9322 128 69685	DIO REC SM S1D
6508	4822 130 11397	BAS316
6509	4822 130 11397	BAS316

TRANSISTORS & INTEGRATED CIRCUITS

7100	5322 130 44647	BC368
7101	5322 130 60159	BC847B

7102	5322 130 60159	BC847B
7103	4822 130 60373	BC857B
7104	4822 209 30095	LM833D
7105	5322 209 11102	HEF4052BT
7200	9322 203 36668	IC SM CS42418-CQ
7202	4822 130 40959	BC547B
7213	4822 130 40959	BC547B
7300	4822 209 30095	LM833D
7301	4822 209 30095	LM833D
7302	4822 209 30095	LM833D
7303	4822 130 60373	BC857B
7305	4822 130 60373	BC857B
7306	5322 130 60159	BC847B
7307	5322 130 60159	BC847B
7308	5322 130 60159	BC847B
7309	5322 130 60159	BC847B
7310	5322 130 60159	BC847B
7311	5322 130 60159	BC847B
7312	5322 130 60159	BC847B
7313	5322 130 60159	BC847B
7322	5322 130 60159	BC847B
7323	5322 130 60159	BC847B
7324	5322 130 60159	BC847B
7325	5322 130 60159	BC847B
7426	4822 130 60373	BC857B
7501	4822 209 17398	LD1117DT33
7501	4822 209 17398	LD1117DT33
7502	5322 130 62804	BCP53
7503	5322 130 60159	BC847B
7504	9322 146 75685	IC SM TS431L
7505	9322 199 24668	IC SM L7808CD2T
7505	9322 113 71668	IC SM MC7808CD2T
7506	4822 130 60373	BC857B
7508	4822 209 17398	LD1117DT33
7508	4822 209 17398	LD1117DT33
7509	5322 130 60159	BC847B
7512	4822 209 30095	LM833D
7513	5322 130 60159	BC847B
7600	4822 209 30095	LM833D
7601	5322 130 60159	BC847B
7602	5322 130 60159	BC847B
7603	5322 130 60159	BC847B
7604	5322 130 60159	BC847B
7607	5322 130 60159	BC847B
7608	5322 130 60159	BC847B
7609	5322 130 60159	BC847B
7610	5322 130 60159	BC847B
7612	4822 130 60373	BC857B
7614	5322 130 60159	BC847B
7615	5322 130 60159	BC847B
7616	5322 130 60159	BC847B

ELECTRICAL PARTS LIST - AV BOARD

7617	5322 130 60159	BC847B
7618	4822 209 30095	LM833D
7619	4822 209 30095	LM833D

Note : Only the parts mentioned in this list are normal service spare parts.

BOX SPK ASSY SW8320LX

(Subwoofer & Module PWR308)

Mains pt5 / Reg pt6 / Amp UCD pt4 / Spk pt5 - 31 August 04

TABLE OF CONTENTS

Box Spk Assy SW8320LX

Exploded View & parts list 8-2

Module PWR308

Exploded View & parts list 8-3

Wiring Diagram 8-4

Regulator Board - Component Layout 8-5

Regulator Board - Chip Layout 8-6

Regulator Board - Circuit Diagram 8-7

Amplifier UCD Board - Top View Layout 8-8

Amplifier UCD Board - Bottom View Layout 8-9

Amplifier UCD Board - Circuit Diagram (Part 1) 8-10

Amplifier UCD Board - Circuit Diagram (Part 2) 8-11

Mains Board - Component Layout 8-12

Mains Board - Circuit Diagram 8-13

Mains Socket Board - Component Layout 8-14

Mains Socket Board - Circuit Diagram 8-14

Speaker Board - Component Layout 8-14

Speaker Board - Circuit Diagram 8-14

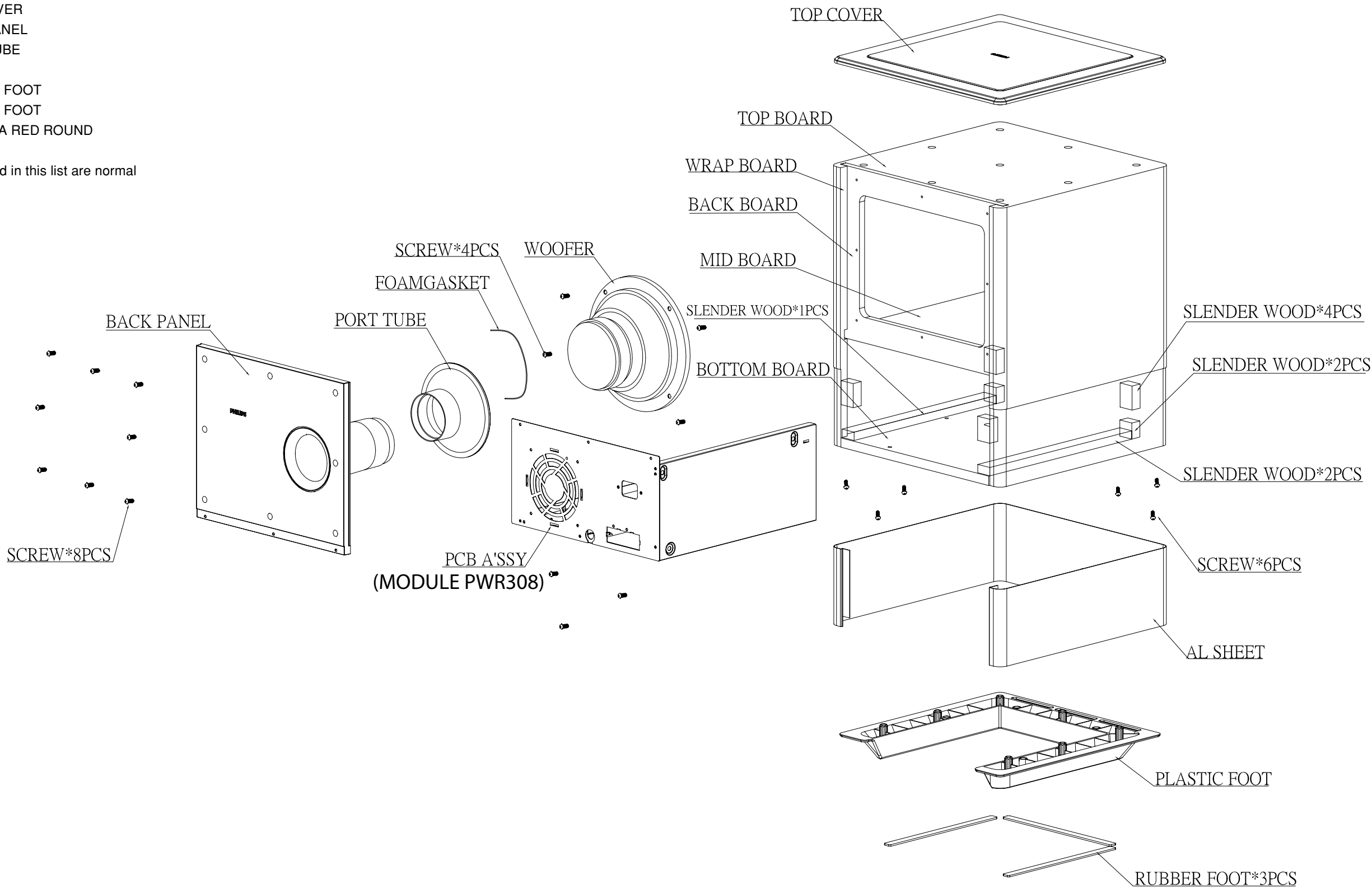
Electrical parts list 8-15

EXPLODED VIEW - BOX SPK ASSY SW8320LX

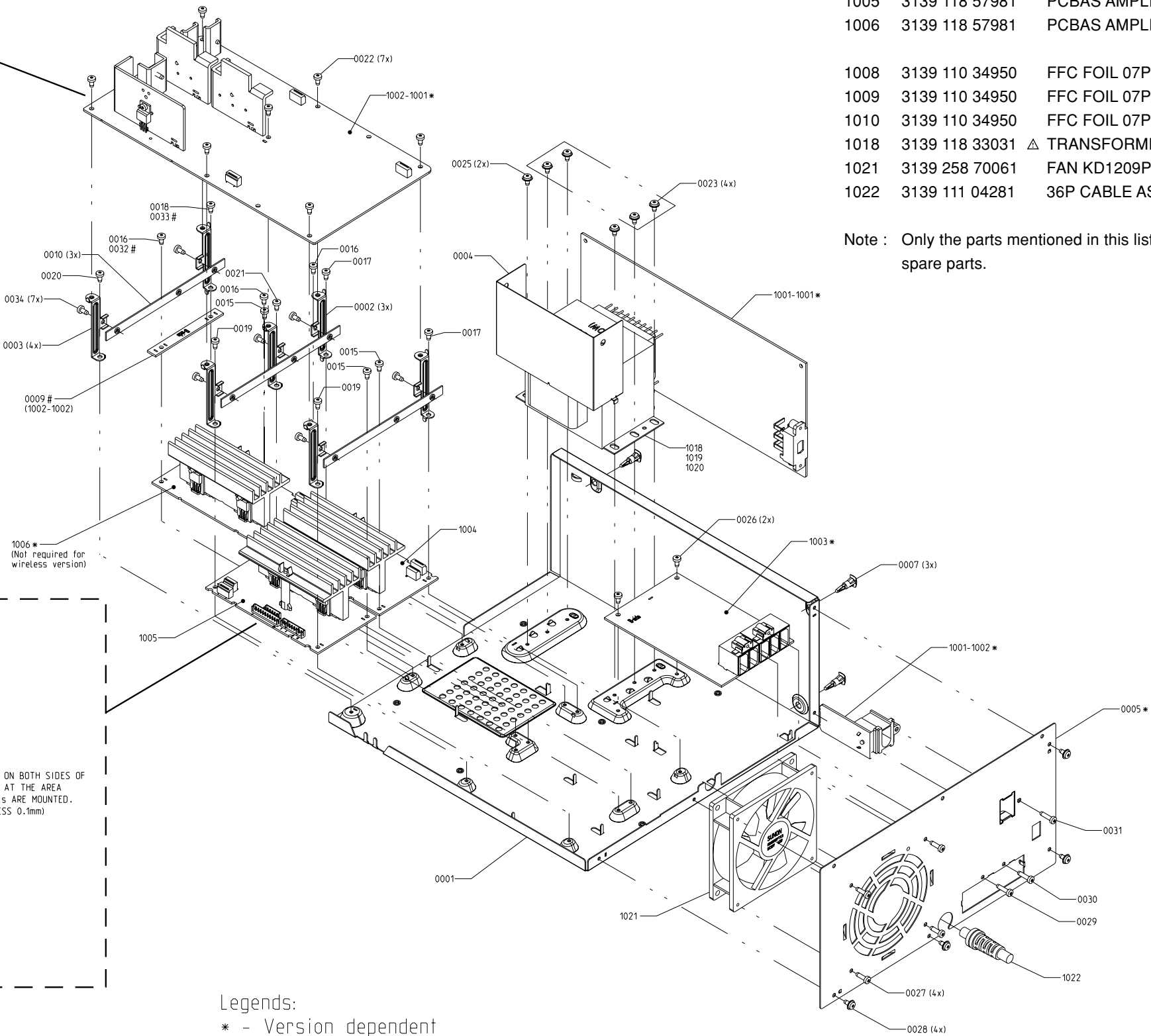
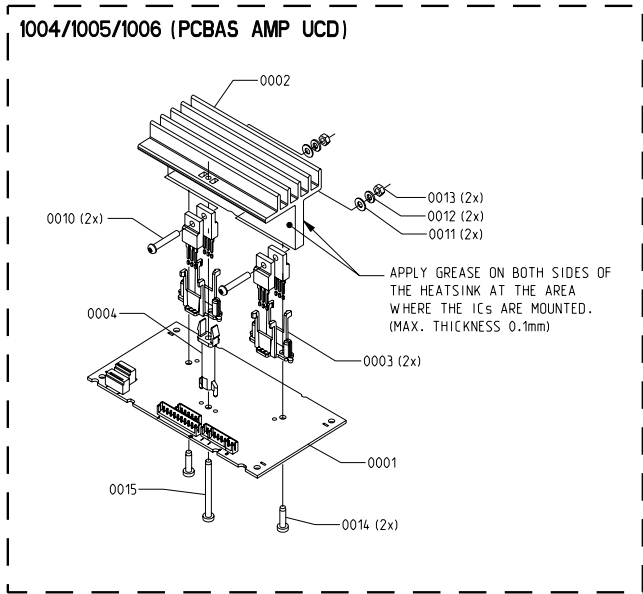
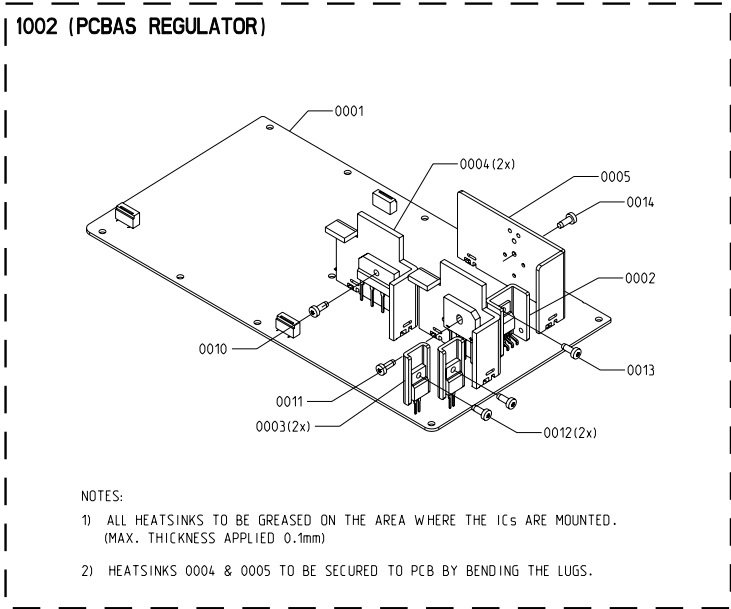
PARTS LIST - BOX SPK ASSY SW8320LX

3139 119 02521	BOX SPK ASSY SW8320LX/69
9965 000 25359	WF 6.5" 150W 4R (16L80EHC3495)
9965 000 25360	TOP COVER
9965 000 25361	BACK PANEL
9965 000 25362	PORT TUBE
9965 000 25363	PLASTIC FOOT
9965 000 25364	RUBBER FOOT
9965 000 25365	LED 3 DIA RED ROUND

Note : Only the parts mentioned in this list are normal service spare parts.



EXPLODED VIEW - MODULE PWR308



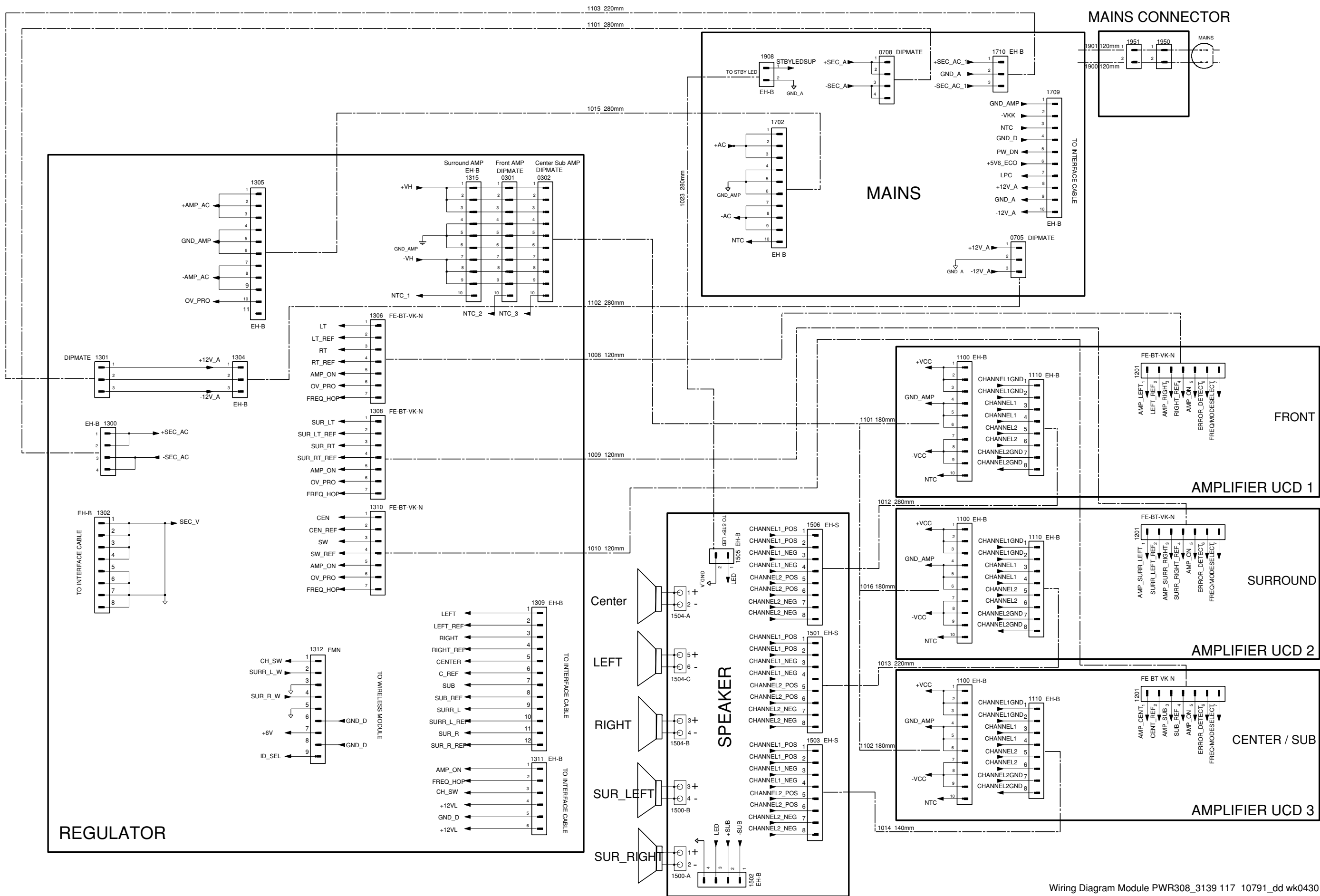
Legends:
* - Version dependent
- For wireless version only

PARTS LIST - MODULE PWR308

0007	3139 240 40061	SPACER - 8MM
1001	3139 118 57961	PCBAS MAINS & MAINS SOCKET
1002	3139 118 57921	PCBAS REGULATOR
1003	3139 118 57931	PCBAS SPEAKER
1004	3139 118 57981	PCBAS AMPLIFIER UCD
1005	3139 118 57981	PCBAS AMPLIFIER UCD
1006	3139 118 57981	PCBAS AMPLIFIER UCD
1008	3139 110 34950	FFC FOIL 07P/120/07P AD
1009	3139 110 34950	FFC FOIL 07P/120/07P AD
1010	3139 110 34950	FFC FOIL 07P/120/07P AD
1018	3139 118 33031	△ TRANSFORMER MAINS
1021	3139 258 70061	FAN KD1209PTS3
1022	3139 111 04281	36P CABLE ASSY

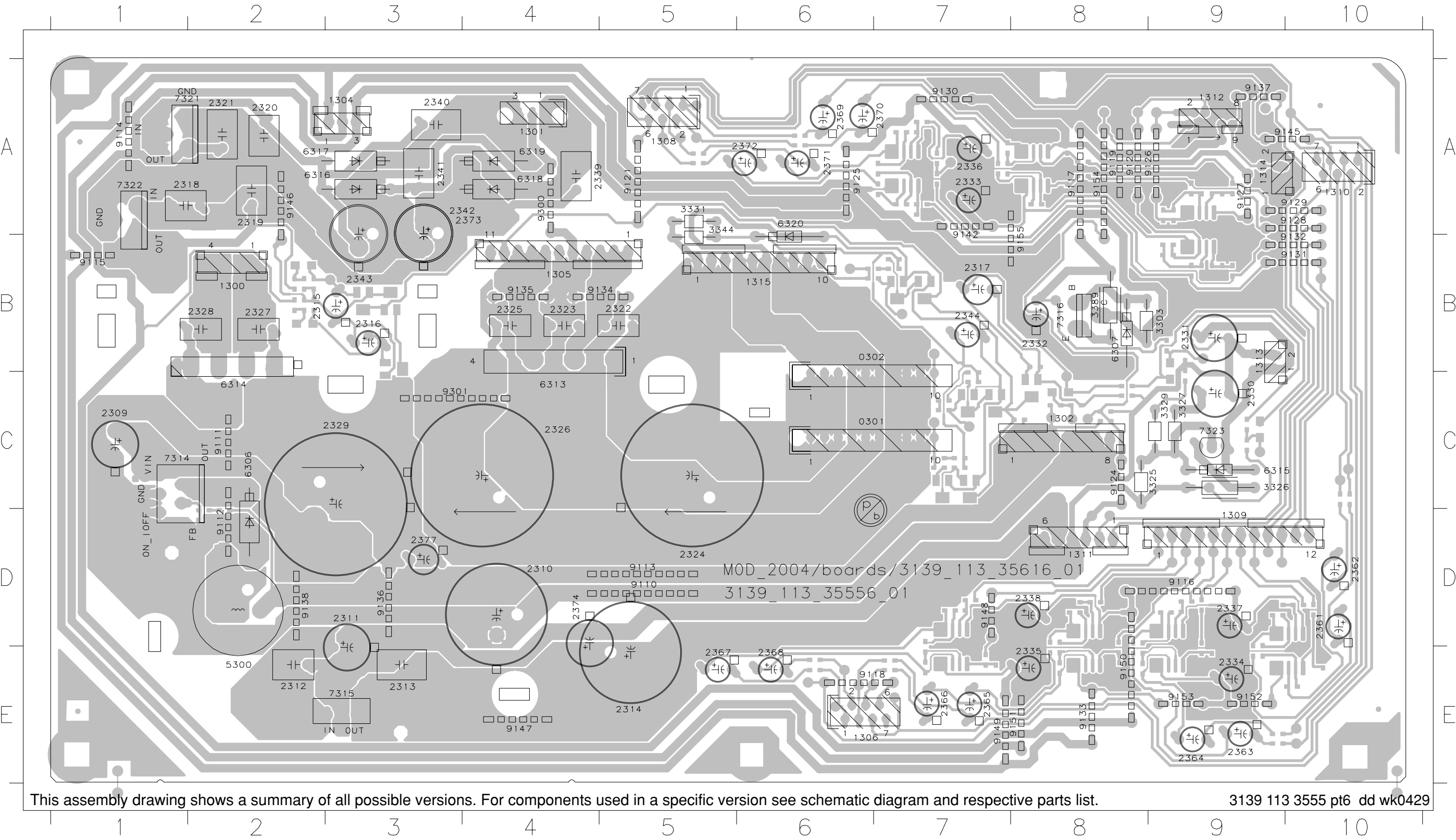
Note : Only the parts mentioned in this list are normal service spare parts.

WIRING DIAGRAM - MODULE PWR308

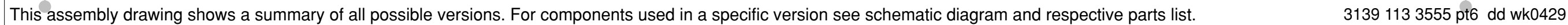


REGULATOR BOARD - COMPONENT LAYOUT

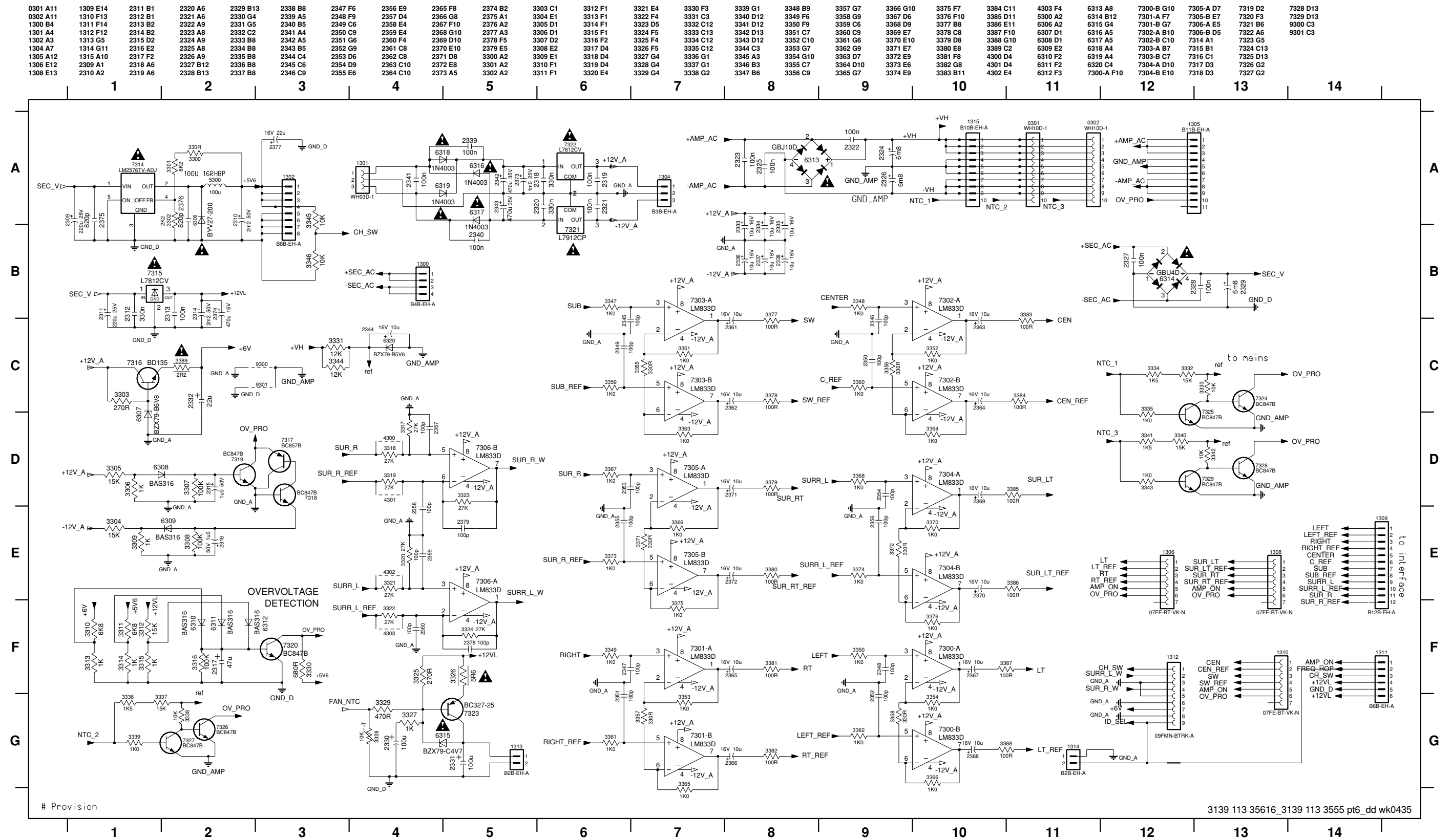
0301	C6	1308	A5	2309	C1	2317	B7	2325	B4	2333	A7	2341	A3	2365	E7	2373	A4	3331	A5	6315	C9	7316	B8	9114	A1	9124	C8	9132	B10	9145	A10	9153	E9
0302	B6	1309	D9	2310	D4	2318	A1	2326	C4	2334	E9	2342	A3	2366	E7	2374	D4	3344	A5	6316	A2	7321	A1	9115	B1	9125	A6	9133	E8	9146	A2	9154	A8
1300	B2	1310	A10	2311	D3	2319	A2	2327	B2	2335	E8	2343	B3	2367	E5	2377	D3	3389	B8	6317	A2	7322	A1	9116	D9	9126	A8	9134	B5	9147	E4	9155	B8
1301	A4	1311	D8	2312	E2	2320	A2	2328	B2	2336	A7	2344	B7	2368	E6	3303	B9	5300	E2	6318	A4	7323	C9	9117	A8	9127	A9	9135	B4	9148	D7	9300	A4
1302	C8	1312	A9	2313	E3	2321	A2	2329	C3	2337	D9	2361	D10	2369	A6	3325	C9	6306	C2	6319	A4	9110	D5	9118	E6	9128	A10	9136	D3	9149	E7	9301	C3
1304	A3	1313	B9	2314	E5	2322	B5	2330	C9	2338	D8	2362	D10	2370	A7	3326	C9	6307	B8	6320	A6	9111	C2	9119	A8	9129	A10	9137	A9	9150	E8		
1305	B4	1314	A9	2315	B2	2323	B4	2331	B9	2339	A4	2363	E9	2371	A6	3327	C9	6313	C4	7314	C1	9112	D2	9120	A8	9130	A7	9138	D2	9151	E8		
1306	E6	1315	B6	2316	B3	2324	D5	2332	B8	2340	A3	2364	E9	2372	A6	3329	C9	6314	C2	7315	E3	9113	D5	9121	A5	9131	B10	9142	B7	9152	E9		



2345	D2	2354	A3	2378	A2	3308	B9	3317	B2	3330	C3	3340	C4	3350	D4	3359	D1	3368	A3	3377	C1	3386	A5	4116	E2	6309	B9	7305	A4	7327	C4
2346	D2	2355	A4	2379	B2	3309	B9	3318	B2	3332	B4	3341	C4	3351	D2	3360	E2	3369	A4	3378	C1	3387	E5	4117	A4	6310	B2	7306	A2	7328	C4
2347	D3	2356	A3	3300	D9	3310	B2	3319	B2	3333	B4	3342	C4	3352	D2	3361	E3	3370	A4	3379	A6	3388	E5	4118	E3	6311	C3	7317	B8	7329	C4
2348	D4	2357	B2	3301	D9	3311	C3	3320	A2	3334	B5	3343	C4	3353	D3	3362	E4	3371	A4	3380	A6	4110	A4	4119	E3	6312	C2	7318	B8		
2349	E1	2358	B2	3302	D9	3312	C2	3321	A2	3335	B5	3345	C3	3354	D4	3363	E1	3372	A4	3381	E4	4111	C3	4300	B2	7300	E4	7319	B8		
2350	E2	2359	A2	3304	B9	3313	B2	3322	A2	3336	C4	3346	C3	3355	E2	3364	E3	3373	A4	3382	E4	4112	A4	4301	B2	7301	E3	7320	C3		
2351	E3	2360	A2	3305	B9	3314	C3	3323	B2	3337	C4	3347	D1	3356	E3	3365	E3	3374	A3	3383	E2	4113	C3	4302	A2	7302	E2	7324	B4		
2352	E4	2375	C10	3306	B9	3315	C2	3324	A2	3338	C4	3348	D2	3357	E3	3366	E4	3375	A4	3384	E2	4114	A4	4303	A2	7303	E1	7325	B4		
2353	A4	2376	D9	3307	B9	3316	B3	3328	C2	3339	C4	3349	D3	3358	E4	3367	A4	3376	A3	3385	A5	4115	D2	6308	B9	7304	A3	7326	C4		



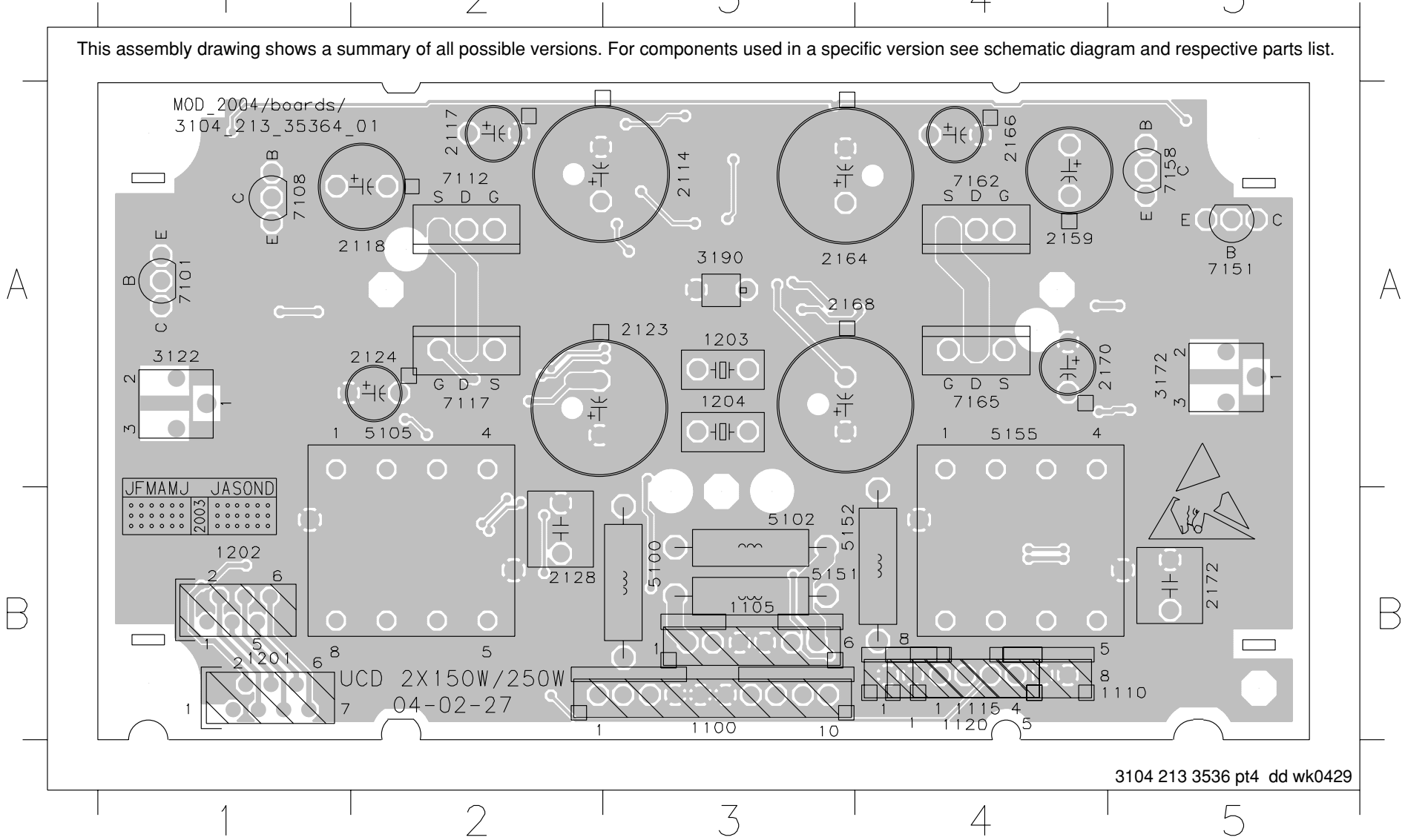
REGULATOR BOARD - CIRCUIT DIAGRAM



AMPLIFIER UCD BOARD - TOP VIEW LAYOUT

1100 B3	1201 B1	2117 A2	2159 A4	2172 B5	5102 B3	7101 A1	7158 A5
1105 B3	1202 B1	2118 A2	2164 A3	3122 A1	5105 B2	7108 A1	7162 A4
1110 B4	1203 A3	2123 A2	2166 A4	3172 A5	5151 B3	7112 A2	7165 A4
1115 B4	1204 A3	2124 A2	2168 A3	3190 A3	5152 B4	7117 A2	
1120 B4	2114 A2	2128 B2	2170 A4	5100 B3	5155 B4	7151 A5	

This assembly drawing shows a summary of all possible versions. For components used in a specific version see schematic diagram and respective parts list.

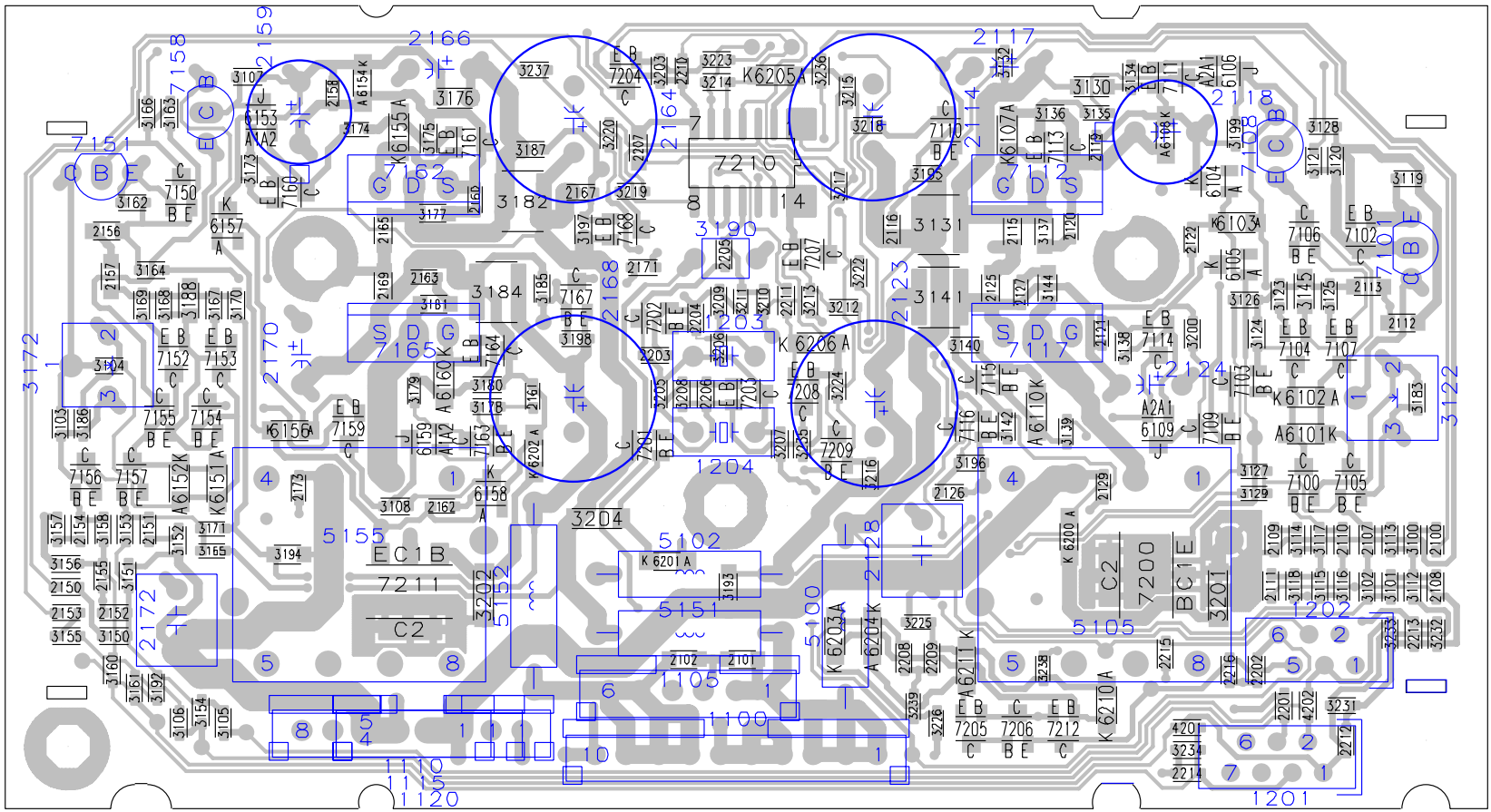


AMPLIFIER UCD BOARD - BOTTOM VIEW LAYOUT

2100	B5	2122	A5	2161	A2	2208	B4	3106	B1	3125	A5	3141	A4	3162	A1	3178	A2
2101	B3	2125	A4	2162	B2	2209	B4	3107	A1	3126	A5	3142	A4	3163	A1	3179	A2
2102	B3	2126	A4	2163	A2	2210	A3	3108	B2	3127	A5	3144	A4	3164	A1	3180	A2
2107	B5	2127	A4	2165	A2	2211	A3	3112	B5	3128	A5	3145	A5	3165	B1	3181	A2
2108	B5	2129	A4	2167	A3	2212	B5	3113	B5	3129	A5	3150	B1	3166	A1	3182	A2
2109	B5	2150	B1	2169	A2	2213	B5	3114	B5	3130	A4	3151	B1	3167	A1	3183	A5
2110	B5	2151	B1	2171	A3	2214	B5	3115	B5	3131	A4	3152	B1	3168	A1	3184	A2
2111	B5	2152	B1	2173	A2	2215	B4	3116	B5	3132	A4	3153	B1	3169	A1	3185	A2
2112	A5	2153	B1	2201	B5	2216	B5	3117	B5	3134	A4	3154	B1	3170	A1	3186	A1
2113	A5	2154	B1	2202	B5	3100	B5	3118	B5	3135	A4	3155	B1	3171	B1	3187	A2
2115	A4	2155	B1	2203	A3	3101	B5	3119	A5	3136	A4	3156	B1	3173	A1	3188	A1
2116	A4	2156	A1	2204	A3	3102	B5	3120	A5	3137	A4	3157	B1	3174	A2	3192	B1
2119	A4	2157	A1	2205	A3	3103	A1	3121	A5	3138	A4	3158	B1	3175	A2	3193	B3
2120	A4	2158	A2	2206	A3	3104	A1	3123	A5	3139	A4	3160	B1	3176	A2	3194	B2
2121	A4	2160	A2	2207	A3	3105	B1	3124	A5	3140	A4	3161	B1	3177	A2	3195	A4

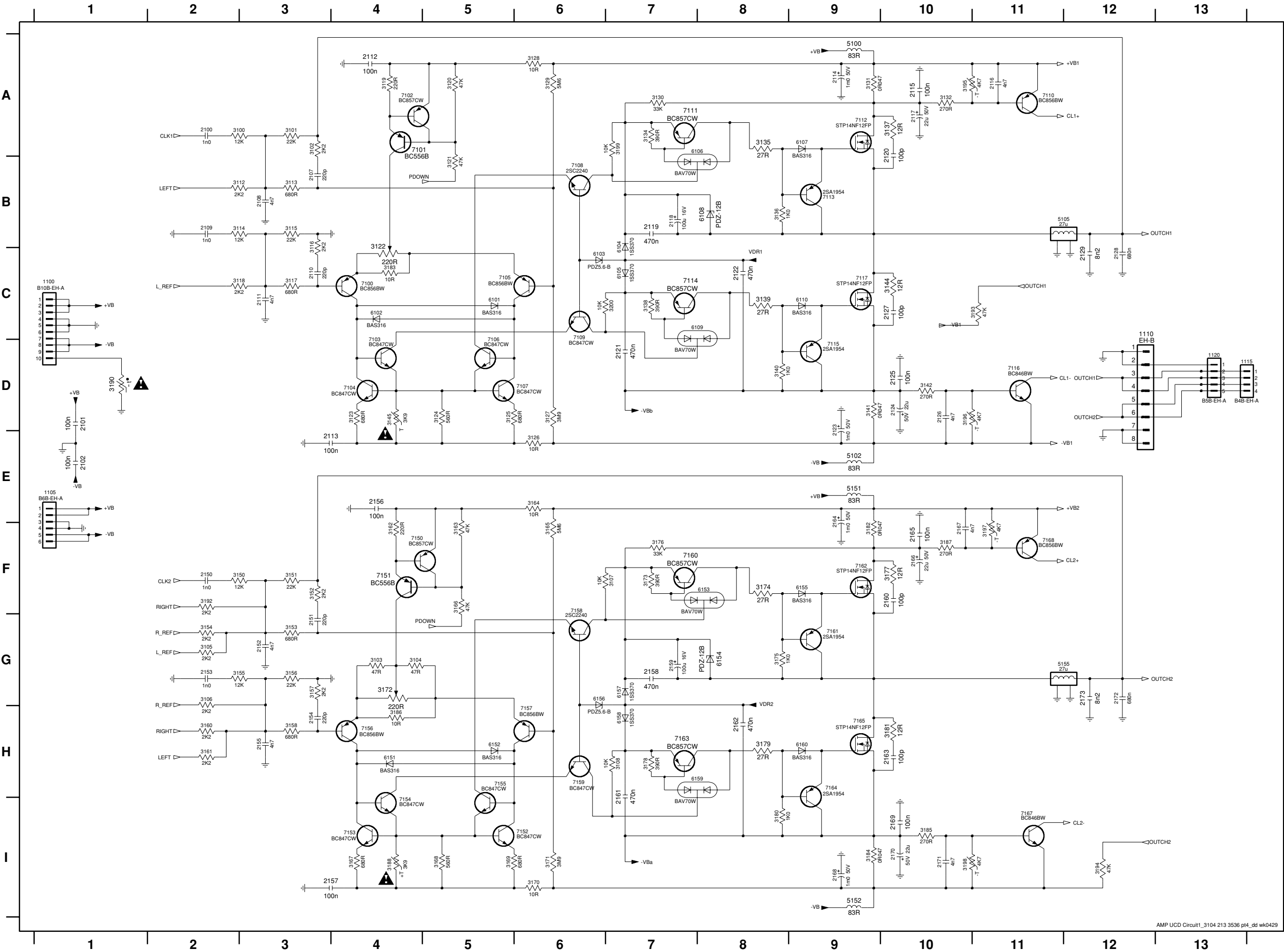
3196	A4	6154	A2	7210	A3	1100	B3
3197	A3	6155	A2	7211	B2	1105	B3
3198	A3	6156	A2	7212	B4	1110	B2
3199	A5	6157	A1	F100	B3	1115	B2
3200	A5	6158	A2	F101	B3	1120	B2
3201	B5	6159	A2	F102	B3	1201	B5
3202	B2	6160	A2	F103	B2	1202	B5
3203	A3	6200	B4	F104	B2	1203	A3
3204	B3	6201	B3	F105	B2	1204	A3
3205	A3	6202	A2	F106	B3	2114	A4
3206	A3	6203	B3	F107	A4	2117	A4
3207	A3	6204	B4	F108	A4	2118	A4
3208	A3	6205	A3	F109	A2	2123	A4
3209	A3	6206	A3	F110	A3	2124	A4
3210	A3	6210	B4	F111	A5	2128	B4
3211	A3	6211	B4	F112	B2	2159	A2
3212	A3	7100	A5	F113	A3	2164	A3
3213	A3	7102	A5	F114	B1	2166	A2
3214	A3	7103	A5	F115	B1	2168	A3
3215	A3	7104	A5	F116	B1	2170	A2
3216	A4	7105	A5	F117	B1	2172	B1
3217	A3	7106	A5	F118	B4	3122	A5
3218	A3	7107	A5	F119	B4	3172	A1
3219	A3	7109	A5	F120	B4	3190	A3
3220	A3	7110	A4	F121	A3	5100	B3
3222	A3	7111	A4	F122	A3	5102	B3
3223	A3	7113	A4			5105	B4
3224	A3	7114	A4			5151	B3
3225	B4	7115	A4			5152	B2
3226	B4	7116	A4			5155	B2
3231	B5	7150	A1			7101	A5
3232	B5	7152	A1			7108	A5
3233	B5	7153	A1			7112	A4
3234	B5	7154	A1			7117	A4
3235	A3	7155	A1			7151	A1
3236	A3	7156	A1			7158	A1
3237	A2	7157	A1			7162	A2
3238	B4	7159	A2			7165	A2
3239	B4	7160	A2				
4201	B5	7161	A2				
4202	B5	7163	A2				
6101	A5	7164	A2				
6102	A5	7167	A3				
6103	A5	7168	A3				
6104	A5	7200	B4				
6105	A5	7201	A3				
6106	A5	7202	A3				
6107	A4	7203	A3				
6108	A4	7204	A3				
6109	A4	7205	B4				
6110	A4	7206	B4				
6151	A1	7207	A3				
6152	A1	7208	A3				
6153	A2	7209	A3				

This assembly drawing shows a summary of all possible versions. For components used in a specific version see schematic diagram and respective parts list.



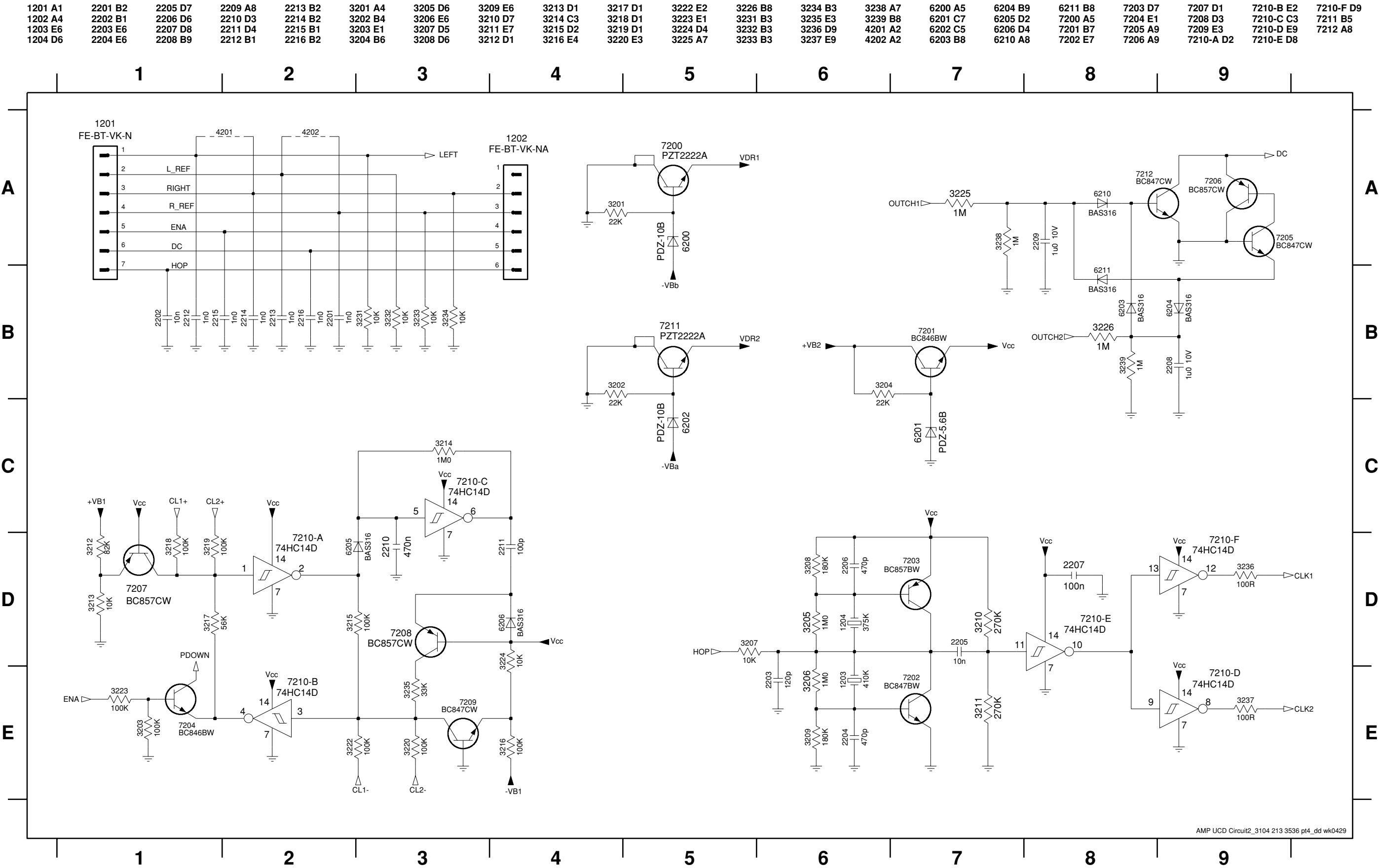
3104 213 3536 pt4 dd wk0429

AMPLIFIER UCD BOARD - CIRCUIT DIAGRAM (PART 1)



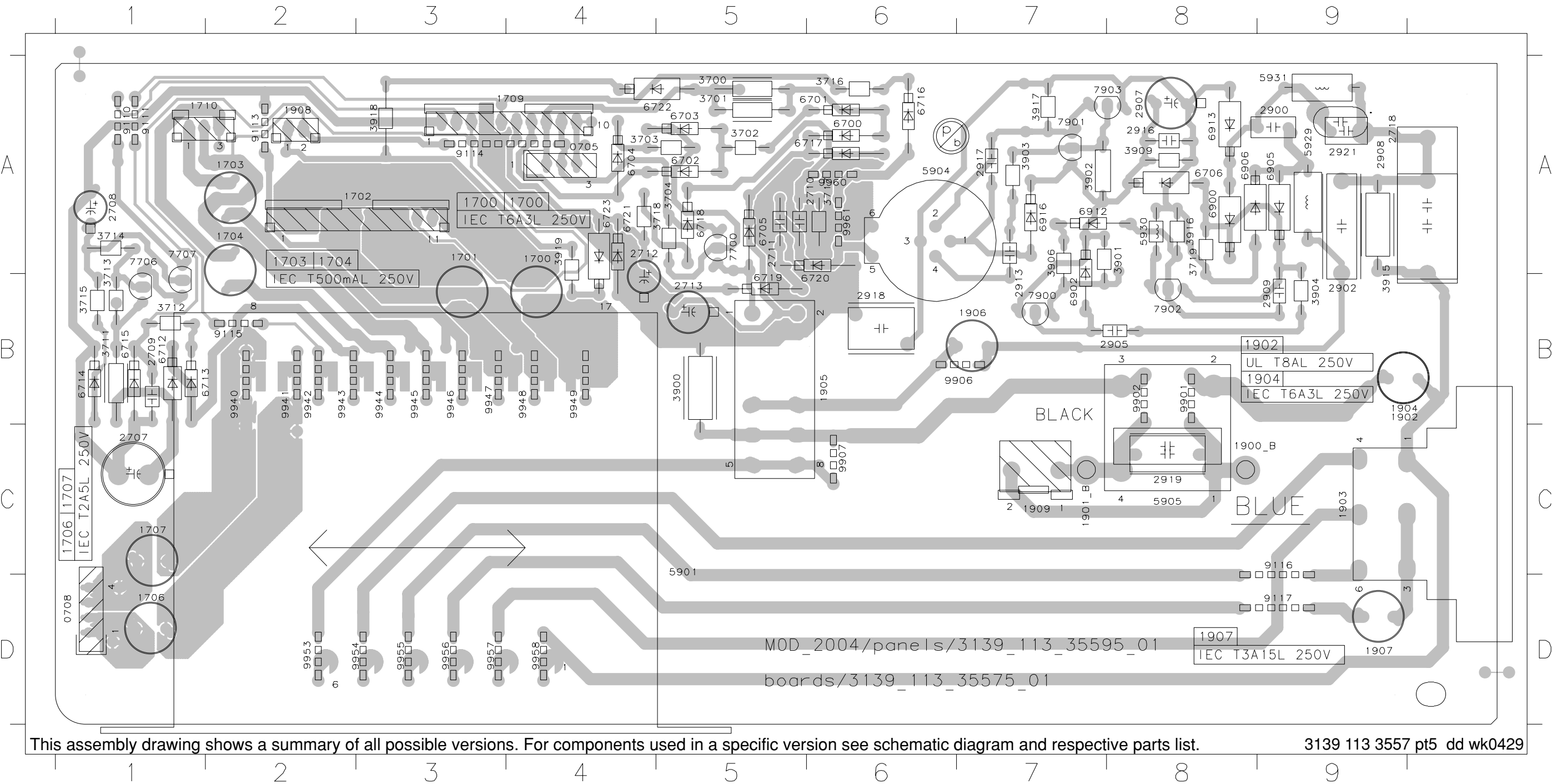
1100 C1	3184 I9
1105 E1	3185 I10
1110 C12	3186 H4
1115 D13	3187 F10
1120 D13	3188 I4
2100 A2	3190 D1
2101 D1	3192 F2
2102 E1	3193 C11
2107 B3	3194 I12
2108 B3	3195 A10
2109 B2	3196 D10
2110 C3	3197 F11
2111 C3	3198 I10
2112 A4	3199 A7
2113 E3	3200 C7
2114 A9	5100 A9
2115 A10	5102 E9
2116 A11	5105 B12
2117 A10	5151 E9
2118 B7	5152 I9
2119 B7	5155 G12
2120 A10	6101 C5
2121 D7	6102 C4
2122 C8	6103 C5
2123 D9	6104 B7
2124 D10	6105 C7
2125 D10	6106 A7
2126 D10	6107 A9
2127 C10	6108 B8
2128 C12	6109 C7
2129 C12	6110 C9
2150 F2	6151 H4
2151 G3	6152 H5
2152 G3	6153 F8
2153 G2	6154 G8
2154 H3	6155 F9
2155 H3	6156 G5
2156 E4	6157 C7
2157 I3	6158 H7
2158 G7	6159 H7
2159 G7	6160 H9
2160 F10	7100 C4
2161 H7	7101 A5
2162 H8	7102 A4
2163 H10	7103 D4
2164 E9	7104 D4
2165 F10	7105 C5
2166 F10	7106 D5
2167 F10	7107 D6
2168 I9	7108 B6
2169 I10	7109 C6
2170 I10	7110 A11
2171 I10	7111 A8
2172 G12	7112 A9
2173 G12	7113 B9
3100 A2	7114 C8
3101 A3	7115 D9
3102 A3	7116 D11
3103 G4	7117 C9
3104 G4	7150 F4
3105 G2	7151 F4
3106 G2	7152 I6
3107 F7	7153 I4
3108 H7	7154 I4
3112 B2	7155 H5
3113 B3	7156 H4
3114 B2	7157 H6
3115 B3	7158 F6
3116 B3	7159 H6
3117 C3	7160 F8
3118 C2	7161 G9
3119 A4	7162 F9
3120 A5	7163 H7
3121 B5	7164 H9
3122 B4	7165 H9
3123 D4	7167 I11
3124 D5	7168 F11
3125 D5	
3126 E6	
3127 D6	
3128 A6	
3129 A6	
3130 A7	
3131 A9	
3132 A10	
3134 A7	
3135 A9	
3136 B8	
3137 A10	
3138 C7	
3139 C8	
3140 D8	
3141 D9	
3142 D10	
3144 C10	
3145 D4	
3150 F2	
3151 F3	
3152 F3	
3153 G3	
3154 G2	
3155 G2	
3156 G3	
3157 G3	
3158 H3	
3160 H2	
3161 H2	
3162 F4	
3163 F5	
3164 E6	
3165 F6	
3166 F5	
3167 I4	
3168 I5	
3169 I5	
3170 I6	
3171 I6	
3172 G4	
3173 F7	
3174 F8	
3175 G8	
3176 F7	
3177 F10	
3178 H7	
3179 H8	
3180 I8	
3181 H10	
3182 F9	
3183 C4	

AMPLIFIER UCD BOARD - CIRCUIT DIAGRAM (PART 2)

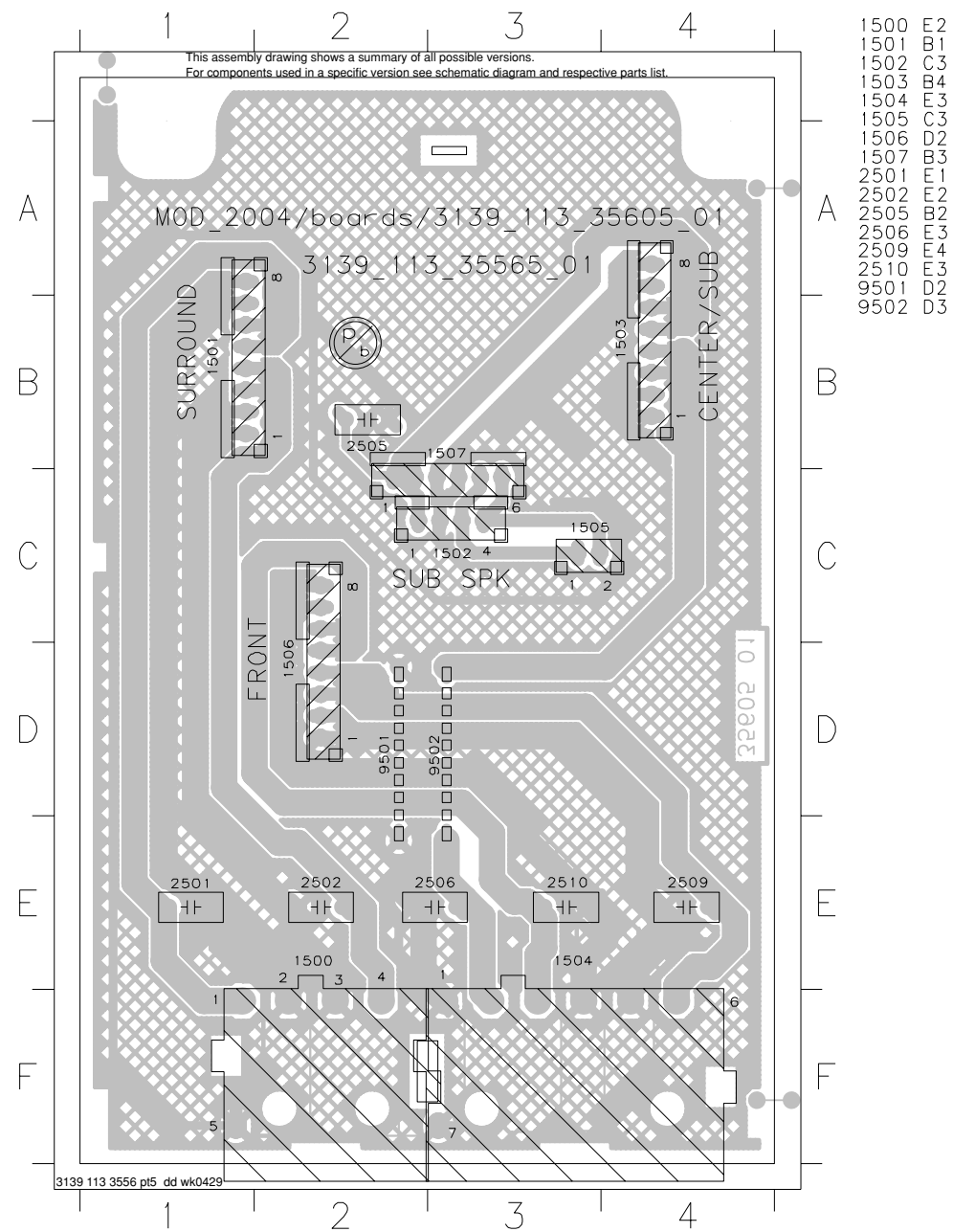


MAINS BOARD - COMPONENT LAYOUT

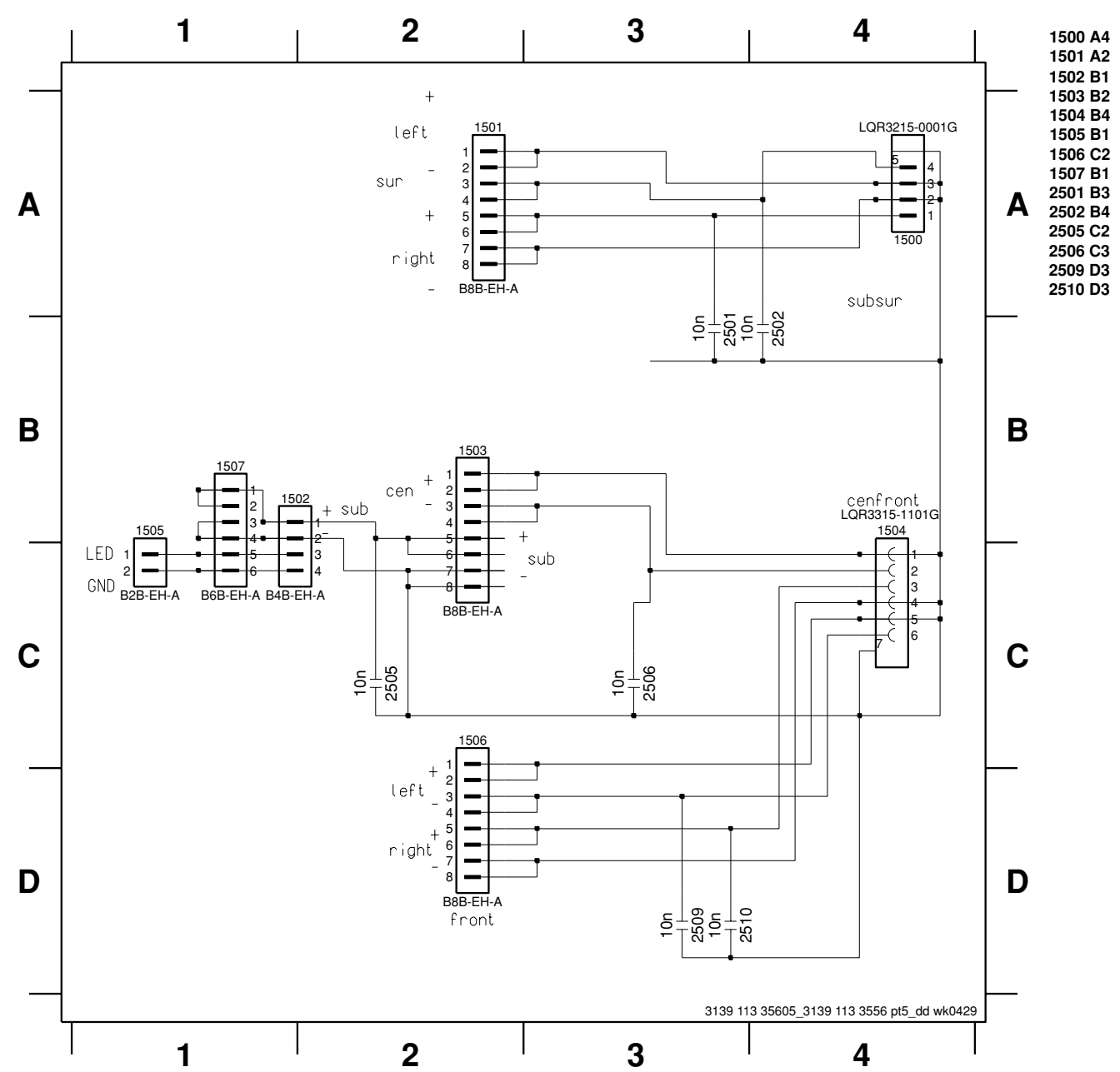
0705 A4	1710 A1	1909 C7	2902 B9	2920 C8	3713 A1	3903 A7	5904 A6	6705 A5	6720 B6	6916 A7	9113 A2	9941 B2	9954 D2
0708 D1	1900_B C8	2707 C1	2905 B8	2921 A9	3714 A1	3904 B9	5905 C8	6706 A8	6721 A4	7700 A5	9114 A3	9942 B2	9955 D3
1700 A4	1901_B C7	2708 A1	2907 A8	2922 A9	3715 B1	3906 A7	5929 A9	6712 B1	6722 A5	7706 A1	9115 B2	9943 B2	9956 D3
1701 A3	1902_B9	2709 B1	2908 A9	3700 A5	3716 A6	3909 A8	5930 A8	6713 B1	6723 A4	7707 A1	9116 C9	9944 B3	9957 D3
1702 A3	1903 C9	2710 A6	2909 B9	3701 A5	3717 A6	3915 B9	5931 A9	6714 B1	6900 A8	7900 B7	9117 D9	9945 B3	9958 D4
1703 A2	1904 B9	2711 A5	2913 B7	3702 A5	3718 A5	3916 A8	6700 A6	6715 B1	6902 B7	7901 A7	9901 B8	9946 B3	9960 A6
1704 A2	1905 B6	2712 A4	2916 A8	3703 A4	3719 A8	3917 A7	6701 A6	6716 A6	6905 A9	7902 B8	9902 B8	9947 B3	9961 A6
1706 D1	1906 B7	2713 B5	2917 A7	3704 A5	3700 B5	3918 A3	6702 A5	6717 A6	6906 A8	7903 A8	9906 B7	9948 B4	
1707 C1	1907 D9	2718 A9	2918 B6	3711 B1	3901 A8	3919 A4	6703 A5	6718 A5	6912 A7	9110 A1	9907 C6	9949 B4	
1709 A4	1908 A2	2900 A9	2919 C8	3712 B1	3902 A7	5901 C5	6704 A4	6719 B5	6913 A8	9111 A1	9940 B2	9953 D2	



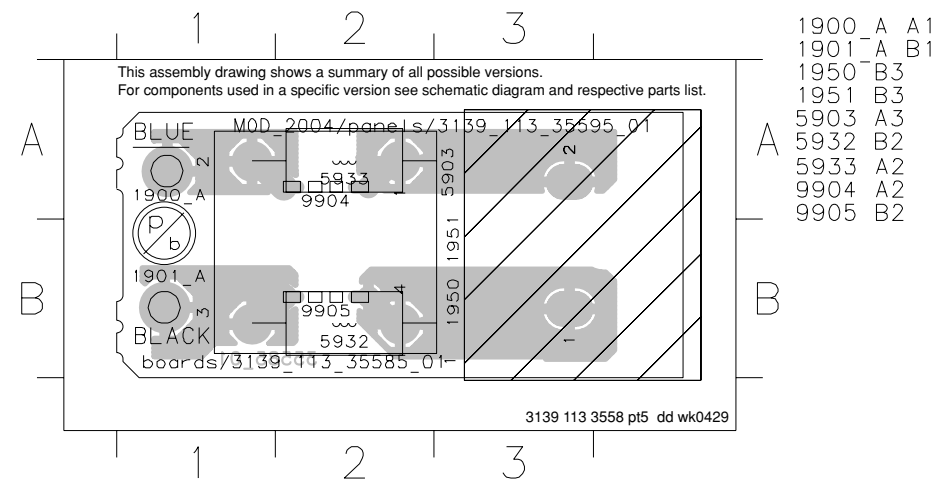
SPEAKER BOARD - COMPONENT LAYOUT



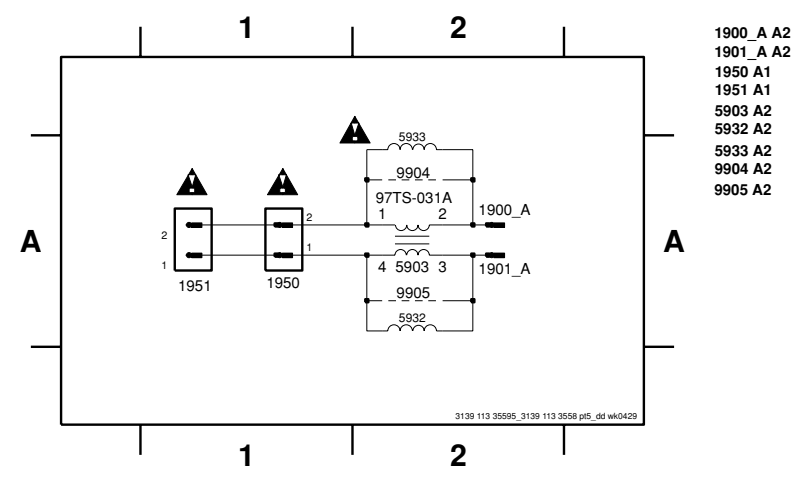
SPEAKER BOARD - CIRCUIT DIAGRAM



MAINS SOCKET BOARD - COMPONENT LAYOUT



MAINS SOCKET BOARD - CIRCUIT DIAGRAM



ELECTRICAL PARTS LIST - MAINS SOCKET BOARD**MISCELLANEOUS**

1002	3139 118 58041	PCBAS MAINS SOCKET
1950	4822 265 31015	△ MAINS SOCKET

COILS & FILTERS

5903	4822 157 11628	△ FIL MAINS 650uH 6A 97TS B
------	----------------	-----------------------------

Note : Only the parts mentioned in this list are normal service spare parts.

ELECTRICAL PARTS LIST - MAINS BOARD**MISCELLANEOUS**

1001	3139 118 58071	PCBAS MAINS
1700	2422 086 11109	△ FUSE RAD T 6A3 250V
1701	2422 086 11109	△ FUSE RAD T 6A3 250V
1703	9965 000 07787	△ FUSE RAD LT 500MA 250V
1704	9965 000 07787	△ FUSE RAD LT 500MA 250V
1706	4822 071 52502	△ FUSE RAD LT 2A5 250V
1707	4822 071 52502	△ FUSE RAD LT 2A5 250V
1710	4822 267 10735	CON BM V 3P M 2.50 EH B
1903	9965 000 07789	△ VOLTAGE SELECTOR
1904	2422 086 11109	△ FUSE RAD T 6A3 250V
1905	2422 132 07519	△ RELAY 1P 12V 16A OZ-SS L
1907	4822 071 53152	△ FUSE RAD LT 3A15 250V

CAPACITORS

2707	2020 012 93741	100uF 20% 100V
2718	4822 126 13589	△ 470nF 20% 275V
2900	4822 121 43526	47nF 5% 250V
2902	2222 336 19106	△ 22nF 20% 275V
2918	4822 126 14497	△ 2,2nF 20% 250V
2919	4822 121 10711	100nF 20% 275V
2919	2222 338 22104	100nF 20% 275V

RESISTORS

3700	4822 052 10101	△ 100R 5% 0,33W
3701	4822 052 10101	△ 100R 5% 0,33W
3711	4822 052 10479	△ 47R 5% 0,33W
3902	4822 050 24705	4M7 1% 0,6W
3915	4822 053 21106	△ 10M 5% 0,5W

COILS & FILTERS

5904	2422 549 45157	△ TRAFO STANDBY 3A1631N
5929	4822 157 53473	IND FXD 1000uH 10%
5930	4822 157 52333	IND FXD 100uH 5%
5931	4822 157 53473	IND FXD 1000uH 10%

DIODES

6700	4822 130 30621	1N4148
------	----------------	--------

6701	4822 130 30621	1N4148
6702	4822 130 30621	1N4148
6703	4822 130 30621	1N4148
6704	4822 130 30621	1N4148
6705	4822 130 30621	1N4148
6706	4822 130 31878	1N4003G
6712	4822 130 31878	1N4003G
6713	4822 130 30621	1N4148
6714	4822 130 34142	BZX79-C33
6715	3198 010 55180	BZX79-B5V1
6716	4822 130 30621	1N4148
6717	4822 130 30621	1N4148
6718	4822 130 30621	1N4148
6719	4822 130 30621	1N4148
6720	4822 130 30621	1N4148
6721	4822 130 34173	BZX79-C5V6
6722	4822 130 31878	1N4003G
6723	4822 130 31878	1N4003G
6900	4822 130 31878	1N4003G
6902	4822 130 30621	1N4148
6905	4822 130 31878	1N4003G
6906	4822 130 31878	1N4003G
6912	4822 130 34145	BZX79-C39
6913	4822 130 31878	1N4003G
6916	4822 130 30621	1N4148

TRANSISTORS & INTEGRATED CIRCUITS

7700	4822 130 40981	BC337-25
7706	4822 130 41327	BC327-40
7707	4822 130 41327	BC327-40
7900	4822 130 44568	BC557B
7901	4822 130 40959	BC547B
7902	4822 130 40855	BC337-40
7903	4822 130 44568	BC557B

Note : Only the parts mentioned in this list are normal service spare parts.

ELECTRICAL PARTS LIST - REGUALTOR BOARD**MISCELLANEOUS**

1306	4822 267 10953	FLEX CONNECTOR 7P
1308	4822 267 10953	FLEX CONNECTOR 7P
1310	4822 267 10953	FLEX CONNECTOR 7P

CAPACITORS

2310	3198 038 52220	2200uF 20% 50V
2312	5322 121 42661	330nF 5% 63V
2313	5322 121 42386	100nF 5% 63V
2318	5322 121 42661	330nF 5% 63V
2319	5322 121 42386	100nF 5% 63V
2320	5322 121 42661	330nF 5% 63V
2321	5322 121 42386	100nF 5% 63V
2322	5322 121 42578	100nF 5% 250V
2323	5322 121 42578	100nF 5% 250V
2324	2022 020 00737	6800uF 20% 50V
2325	5322 121 42578	100nF 5% 250V
2326	2022 020 00737	6800uF 20% 50V
2327	5322 121 42578	100nF 5% 250V
2328	5322 121 42578	100nF 5% 250V
2329	2022 020 00782	6800uF 20% 35V
2339	5322 121 42386	100nF 5% 63V
2340	5322 121 42386	100nF 5% 63V
2341	5322 121 42386	100nF 5% 63V
2373	4822 124 80061	1000uF 20% 25V

RESISTORS

3326	4822 052 10568	△ 5R6 5% 0,33W
3328	2322 615 33103	NTC SM 0603 0W125 10K 5%
3331	2322 187 53123	RST MFLM SFR16 A 12K 5%
3344	2322 187 53123	RST MFLM SFR16 A 12K 5%

COILS & FILTERS

5300	2422 536 00838	IND FXD 16RHBP 100uH 10%
------	----------------	--------------------------

DIODES

6306	4822 130 10871	△ BYV27-200
6308	4822 130 11397	BAS316
6309	4822 130 11397	BAS316

6310	4822 130 11397	BAS316
6311	4822 130 11397	BAS316
6312	4822 130 11397	BAS316
6313	9322 197 92682	△ BRIDGE GBJ10D
6314	4822 130 83302	△ BRIDGE GBU4D
6315	4822 130 34174	△ BZX79-C4V7
6316	4822 130 31878	△ 1N4003G
6317	4822 130 31878	△ 1N4003G
6318	4822 130 31878	△ 1N4003G
6319	4822 130 31878	△ 1N4003G
6320	4822 130 83206	BZX79-B5V6

TRANSISTORS & INTEGRATED CIRCUITS

7300	4822 209 30095	LM833D
7301	4822 209 30095	LM833D
7302	4822 209 30095	LM833D
7303	4822 209 30095	LM833D
7304	4822 209 30095	LM833D
7305	4822 209 30095	LM833D
7314	9322 196 34682	△ IC LM2576TV-ADJ
7315	4822 209 81726	△ IC L7812CV
7317	4822 130 60373	BC857B
7318	5322 130 60159	BC847B
7319	5322 130 60159	BC847B
7320	5322 130 60159	BC847B
7321	9322 131 68687	△ IC L7912CP
7322	4822 209 81726	△ IC L7812CV
7323	4822 130 41246	BC327-25
7324	5322 130 60159	BC847B
7325	5322 130 60159	BC847B
7326	5322 130 60159	BC847B
7327	5322 130 60159	BC847B
7328	5322 130 60159	BC847B
7329	5322 130 60159	BC847B

Note : Only the parts mentioned in this list are normal service spare parts.

ELECTRICAL PARTS LIST - SPEAKER BOARD**MISCELLANEOUS**

1500	2422 025 18515	Speaker Socket 4P Grey/Blue
1504	2422 025 18518	Speaker Socket 6P Green/Red/White

CAPACITORS

2501	4822 121 41857	10nF 5% 250V
2502	4822 121 41857	10nF 5% 250V

2505	4822 121 41857	10nF 5% 250V
2506	4822 121 41857	10nF 5% 250V
2509	4822 121 41857	10nF 5% 250V
2510	4822 121 41857	10nF 5% 250V

Note : Only the parts mentioned in this list are normal service spare parts.

ELECTRICAL PARTS LIST - AMPLIFIER UCD BOARD**MISCELLANEOUS**

0003	3104 214 39321	TO-220 HOLDER
0004	3104 214 39331	SPACER
1201	4822 267 10953	FLEX CONNECTOR 7P
1203	2422 540 98578	RES CER 410kHz
1204	2422 540 98552	RES CER 375kHz

CAPACITORS

2114	3198 026 51020	1000uF 20% 50V
2120	2238 606 11536	100pF 5% 100V
2123	3198 026 51020	1000uF 20% 50V
2127	2238 606 11536	100pF 5% 100V
2128	5322 121 42498	680nF 5% 63V
2160	2238 606 11536	100pF 5% 100V
2163	2238 606 11536	100pF 5% 100V
2164	3198 026 51020	1000uF 20% 50V
2168	3198 026 51020	1000uF 20% 50V
2172	5322 121 42498	680nF 5% 63V

RESISTORS

3122	4822 101 11382	RTRM CAR LIN 220R
3131	2122 118 06384	RST SM1218 LPRC201 R047 5%
3141	2122 118 06384	RST SM1218 LPRC201 R047 5%
3145	2122 663 00025	△ PTC SM 0805 40V 3k9 10%
3172	4822 101 11382	RTRM CAR LIN 220R
3182	2122 118 06384	RST SM1218 LPRC201 R047 5%
3184	2122 118 06384	RST SM1218 LPRC201 R047 5%
3188	2122 663 00025	△ PTC SM 0805 40V 3k9 10%
3190	4822 117 12063	△ NTC DC 0W5 S 10k 5%
3195	2120 611 00023	NTC SM 0603 0W1 4k7 5%
3195	2322 615 33472	NTC SM 0603 0W125 4k7 5%
3196	2120 611 00023	NTC SM 0603 0W1 4k7 5%
3196	2322 615 33472	NTC SM 0603 0W125 4k7 5%
3197	2120 611 00023	NTC SM 0603 0W1 4k7 5%
3197	2322 615 33472	NTC SM 0603 0W125 4k7 5%
3198	2120 611 00023	NTC SM 0603 0W1 4k7 5%
3198	2322 615 33472	NTC SM 0603 0W125 4k7 5%

COILS & FILTERS

5100	4822 157 11411	IND FXD BEAD EMI 100MHz 83R
5102	4822 157 11411	IND FXD BEAD EMI 100MHz 83R
5105	3104 218 15671	IND FXD SC4684-145 PM1
5151	4822 157 11411	IND FXD BEAD EMI 100MHz 83R
5152	4822 157 11411	IND FXD BEAD EMI 100MHz 83R
5155	3104 218 15671	IND FXD SC4684-145 PM1

DIODES

6101	4822 130 11397	BAS316
6102	4822 130 11397	BAS316
6103	3198 020 55680	DIO REG SM PDZ5.6B
6104	9322 198 95685	DIO SIG SM 1SS370
6105	9322 198 95685	DIO SIG SM 1SS370
6106	5322 130 34331	DIO SIG SM BAV70W

6107	4822 130 11397	BAS316
6108	9340 548 61115	DIO REG SM PDZ12B
6109	5322 130 34331	DIO SIG SM BAV70W
6110	4822 130 11397	BAS316
6151	4822 130 11397	BAS316
6152	4822 130 11397	BAS316
6153	5322 130 34331	DIO SIG SM BAV70W
6154	9340 548 61115	DIO REG SM PDZ12B
6155	4822 130 11397	BAS316
6156	3198 020 55680	DIO REG SM PDZ5.6B
6157	9322 198 95685	DIO SIG SM 1SS370
6158	9322 198 95685	DIO SIG SM 1SS370
6159	5322 130 34331	DIO SIG SM BAV70W
6160	4822 130 11397	BAS316
6200	4822 130 11551	DIO REG SM PDZ10B
6201	3198 020 55680	DIO REG SM PDZ5.6B
6202	4822 130 11551	DIO REG SM PDZ10B
6203	4822 130 11397	BAS316
6204	4822 130 11397	BAS316
6205	4822 130 11397	BAS316
6206	4822 130 11397	BAS316
6210	4822 130 11397	BAS316
6211	4822 130 11397	BAS316

TRANSISTORS & INTEGRATED CIRCUITS

7100	9340 218 20135	TRA SIG SM BC856BW
7101	4822 130 41691	TRA SIG BC556B
7102	9340 218 60115	TRA SIG SM BC857CW
7103	9340 217 80115	TRA SIG SM BC847CW
7103	9340 217 80115	TRA SIG SM BC847CW
7104	9340 217 80115	TRA SIG SM BC847CW
7104	9340 217 80115	TRA SIG SM BC847CW
7105	9340 218 20135	TRA SIG SM BC856BW
7106	9340 217 80115	TRA SIG SM BC847CW
7106	9340 217 80115	TRA SIG SM BC847CW
7107	9340 217 80115	TRA SIG SM BC847CW
7107	9340 217 80115	TRA SIG SM BC847CW
7108	4822 130 43233	TRA SIG 2SC2240
7109	9340 217 80115	TRA SIG SM BC847CW
7109	9340 217 80115	TRA SIG SM BC847CW
7110	9340 218 20135	TRA SIG SM BC856BW
7111	9340 218 60115	TRA SIG SM BC857CW
7112	9322 173 29687	FET POW STP14NF12FP
7113	9322 198 96685	TRA SIG SM 2SA1954B
7114	9340 218 60115	TRA SIG SM BC857CW
7115	9322 198 96685	TRA SIG SM 2SA1954B
7116	9340 217 40135	TRA SIG SM BC846BW
7117	9322 173 29687	FET POW STP14NF12FP
7150	9340 218 60115	TRA SIG SM BC857CW
7151	4822 130 41691	TRA SIG BC556B
7152	9340 217 80115	TRA SIG SM BC847CW
7152	9340 217 80115	TRA SIG SM BC847CW

ELECTRICAL PARTS LIST - AMPLIFIER UCD BOARD

7153	9340 217 80115	TRA SIG SM BC847CW
7153	9340 217 80115	TRA SIG SM BC847CW
7154	9340 217 80115	TRA SIG SM BC847CW
7154	9340 217 80115	TRA SIG SM BC847CW
7155	9340 217 80115	TRA SIG SM BC847CW
7155	9340 217 80115	TRA SIG SM BC847CW
7156	9340 218 20135	TRA SIG SM BC856BW
7157	9340 218 20135	TRA SIG SM BC856BW
7158	4822 130 43233	TRA SIG 2SC2240
7159	9340 217 80115	TRA SIG SM BC847CW
7159	9340 217 80115	TRA SIG SM BC847CW
7160	9340 218 60115	TRA SIG SM BC857CW
7161	9322 198 96685	TRA SIG SM 2SA1954B
7162	9322 173 29687	FET POW STP14NF12FP
7163	9340 218 60115	TRA SIG SM BC857CW
7164	9322 198 96685	TRA SIG SM 2SA1954B
7165	9322 173 29687	FET POW STP14NF12FP
7167	9340 217 40135	TRA SIG SM BC846BW
7168	9340 218 20135	TRA SIG SM BC856BW
7200	9339 753 30135	TRA POW SM PZT2222A
7201	9340 217 40135	TRA SIG SM BC846BW
7202	3198 010 42310	TRA SIG SM BC847BW
7203	3198 010 42320	TRA SIG SM BC857BW
7204	9340 217 40135	TRA SIG SM BC846BW
7205	9340 217 80115	TRA SIG SM BC847CW
7205	9340 217 80115	TRA SIG SM BC847CW
7206	9340 218 60115	TRA SIG SM BC857CW
7207	9340 218 60115	TRA SIG SM BC857CW
7208	9340 218 60115	TRA SIG SM BC857CW
7209	9340 217 80115	TRA SIG SM BC847CW
7209	9340 217 80115	TRA SIG SM BC847CW
7210	5322 209 11548	IC SM 74HC14D
7211	9339 753 30135	TRA POW SM PZT2222A
7212	9340 217 80115	TRA SIG SM BC847CW
7212	9340 217 80115	TRA SIG SM BC847CW

Note : Only the parts mentioned in this list are normal service spare parts.

MODULE SD6.3 ST AV2

TABLE OF CONTENTS

SD6.3 ST AV2 Board - Top View Layout 9-2

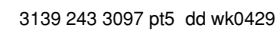
SD6.3 ST AV2 Board - Bottom View Layout 9-3

SD6.3 ST AV2 Board - Circuit Diagram (Part 1) 9-4

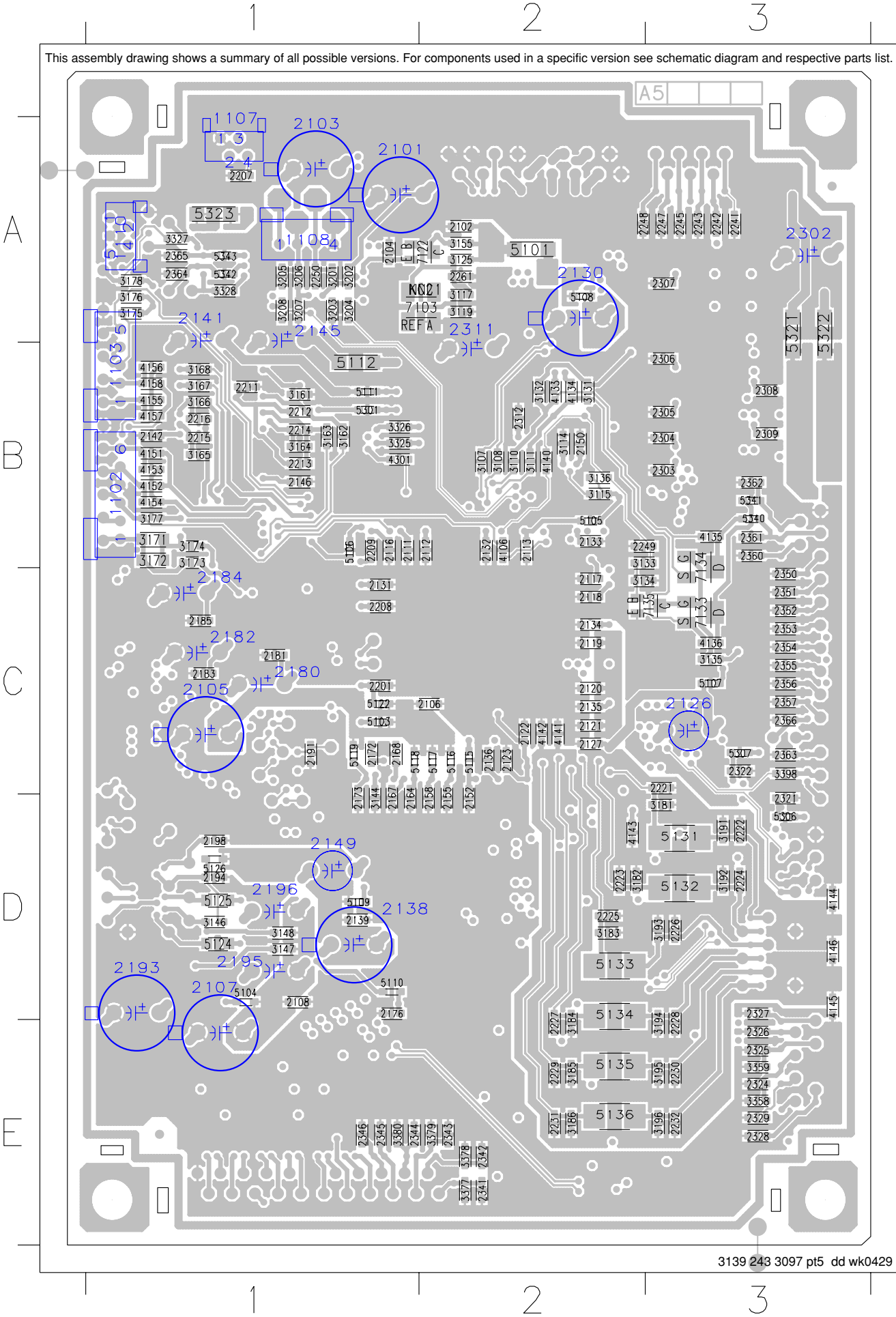
SD6.3 ST AV2 Board - Circuit Diagram (Part 2) 9-5

Exploded View & parts list 9-6

Electrical parts list..... 9-7

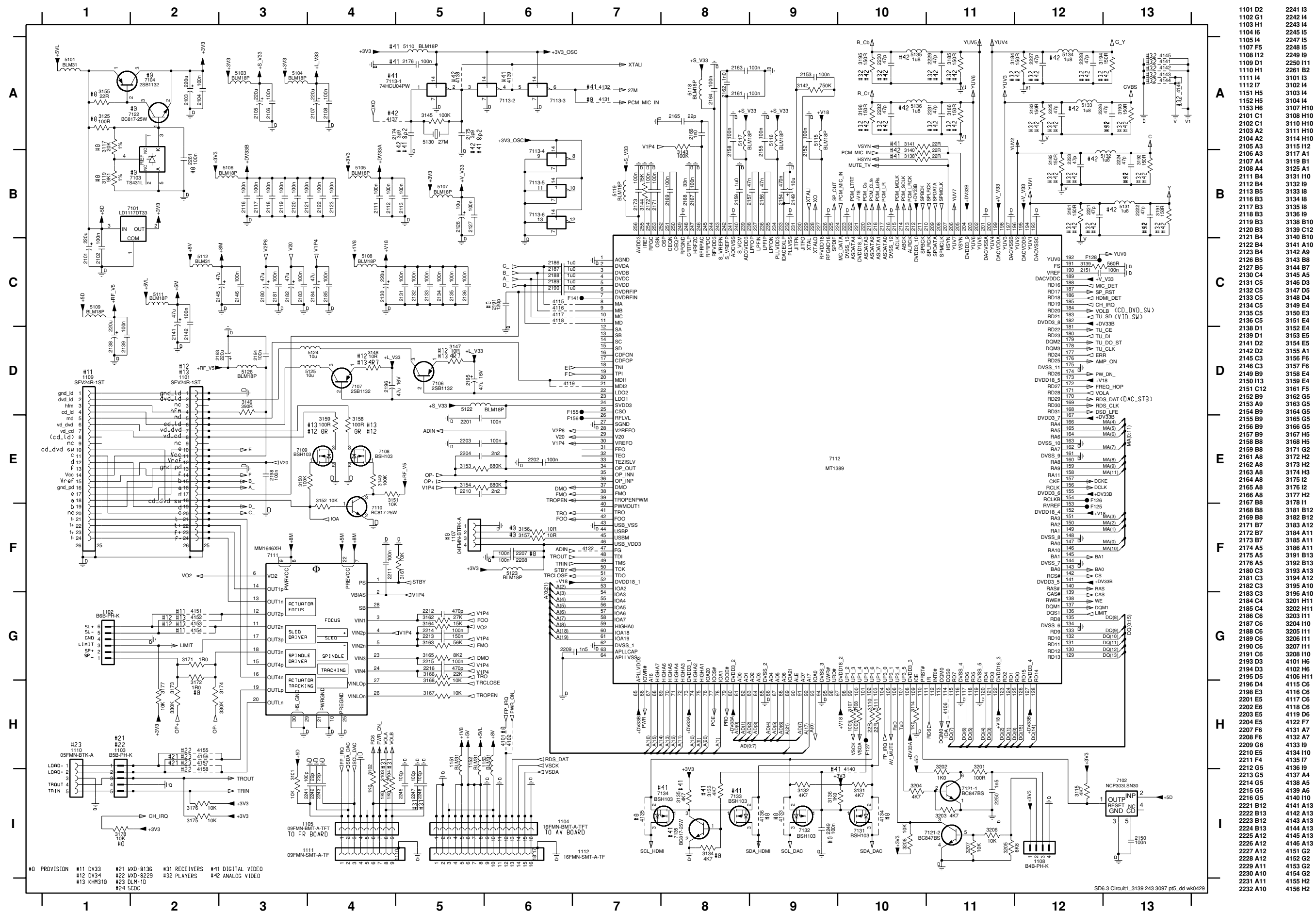


SD6.3 ST AV2 BOARD - BOTTOM VIEW LAYOUT



1102	B1	2102	A2	2242	A3	3155	A2	4155	B1
1103	B1	2104	A1	2243	A3	3161	B1	4156	B1
1107	A1	2106	C2	2245	A3	3162	B1	4157	B1
1108	A1	2108	D1	2247	A3	3163	B1	4158	B1
1110	A1	2111	B1	2248	A2	3164	B1	4301	B1
2101	A1	2112	B2	2249	B2	3165	B1	5101	A2
2103	A1	2113	B2	2250	A1	3166	B1	5103	C1
2105	C1	2116	B1	2261	A2	3167	B1	5104	D1
2107	D1	2117	C2	2303	B3	3168	B1	5105	B2
2126	C3	2118	C2	2304	B3	3171	B1	5106	B1
2130	A2	2119	C2	2305	B3	3172	B1	5107	C3
2138	D1	2120	C2	2306	B3	3173	B1	5108	A2
2141	A1	2121	C2	2307	A3	3174	B1	5109	D1
2145	A1	2122	C2	2308	B3	3175	A1	5110	D1
2149	D1	2123	C2	2309	B3	3176	A1	5111	B1
2180	C1	2127	C2	2312	B2	3177	B1	5112	B1
2182	C1	2131	C1	2321	D3	3178	A1	5115	C2
2184	B1	2132	B2	2322	C3	3181	D3	5116	C2
2193	D1	2133	B2	2324	E3	3182	D2	5117	C2
2195	D1	2134	C2	2325	E3	3183	D2	5118	C1
2196	D1	2135	C2	2326	E3	3184	E2	5119	C1
2302	A3	2136	C2	2327	D3	3185	E2	5122	C1
2311	A2	2139	D1	2328	E3	3186	E2	5124	D1
		2142	B1	2329	E3	3191	D3	5125	D1
		2146	B1	2341	E2	3192	D3	5126	D1
		2150	B2	2342	E2	3193	D3	5131	D3
		2152	D2	2343	E2	3194	E3	5132	D3
		2155	D2	2344	E1	3195	E3	5133	D2
		2158	D2	2345	E1	3196	E3	5134	D2
		2164	D1	2346	E1	3201	A1	5135	E2
		2167	D1	2350	C3	3202	A1	5136	E2
		2168	C1	2351	C3	3203	A1	5301	B1
		2172	C1	2352	C3	3204	A1	5306	D3
		2173	D1	2353	C3	3205	A1	5307	C3
		2176	D1	2354	C3	3206	A1	5321	A3
		2181	C1	2355	C3	3207	A1	5322	A3
		2183	C1	2356	C3	3208	A1	5323	A1
		2185	C1	2357	C3	3325	B1	5340	B3
		2191	C1	2360	B3	3326	B1	5341	B3
		2194	D1	2361	B3	3327	A1	5342	A1
		2198	D1	2362	B3	3328	A1	5343	A1
		2201	C1	2363	C3	3358	E3	7103	A2
		2207	A1	2364	A1	3359	E3	7122	A2
		2208	C1	2365	A1	3377	E2	7133	C3
		2209	B1	2366	C3	3378	E2	7134	B3
		2211	B1	3107	B2	3379	E2	7135	C3
		2212	B1	3108	B2	3380	E1		
		2213	B1	3110	B2	3398	C3		
		2214	B1	3111	B2	4106	B2		
		2215	B1	3114	B2	4133	B2		
		2216	B1	3115	B2	4134	B2		
		2221	C3	3117	A2	4135	B3		
		2222	D3	3119	A2	4136	C3		
		2223	D2	3125	A2	4140	B2		
		2224	D3	3131	B2	4141	C2		
		2225	D2	3132	B2	4142	C2		
		2226	D3	3133	B2	4143	D2		
		2227	E2	3134	C2	4144	D3		
		2228	E3	3135	C3	4145	D3		
		2229	E2	3136	B2	4146	D3		
		2230	E3	3144	D1	4151	B1		
		2231	E2	3146	D1	4152	B1		
		2232	E3	3147	D1	4153	B1		
		2241	A3	3148	D1	4154	B1		

SD6.3 ST AV2 BOARD - CIRCUIT DIAGRAM (PART 1)



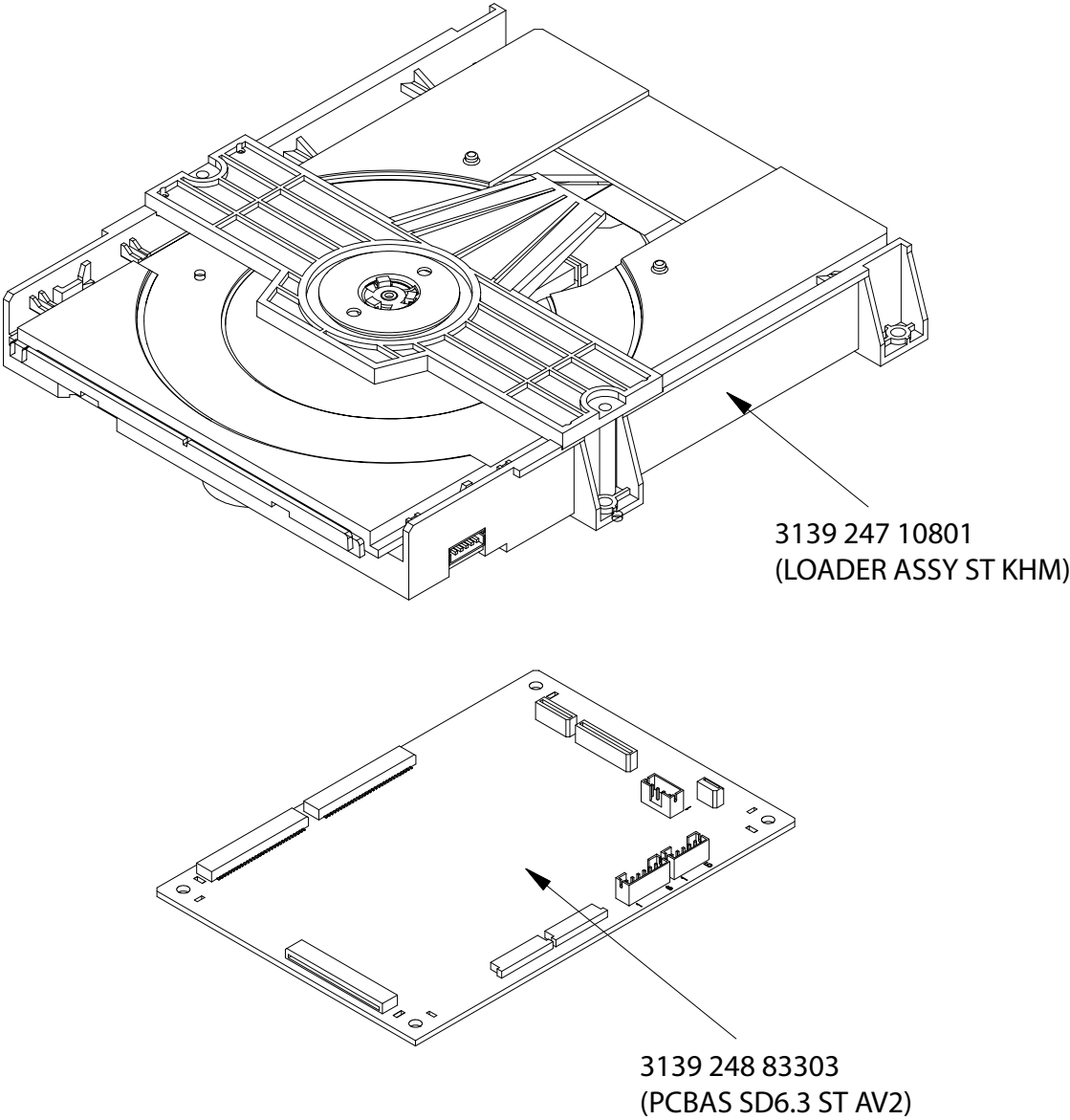
SD6.3 Circuit2_3139 243 3097 pt5.pd wk042

Legend:

- #0 PROVISION
- #11 DV33
- #12 DV34
- #13 KHM310
- #21 WXD-8136
- #22 WXD-8229
- #23 DLM-1D
- #24 5CDC
- #31 RECEIVERS
- #32 PLAYERS
- #41 DIGITAL VIDEO
- #42 ANALOG VIDEO

2301 F13	3358 H12
1302 A13	3359 H12
1303 C13	3361 A11
1304 A9	3362 A11
1305 H9	3363 A11
2301 B2	3364 A11
2302 C2	3365 A11
2303 C4	3366 A11
2304 C4	3367 B11
2305 C4	3368 B11
2306 C4	3369 B11
2307 C4	3370 A11
2308 D4	3371 A11
2309 D4	3372 B11
2310 G3	3373 B11
2312 G3	3374 B11
2315 G5	3375 B11
2316 G5	3376 B11
2317 I5	3377 D11
2318 I6	3378 D11
2319 F5	3379 D11
2320 F6	3380 D12
2321 A6	3381 B11
2322 B6	3391-1 B5
2323 A3	3392-1 B5
2324 H12	3393-1 C5
2325 H12	3394-1 C5
2326 H12	3392-1 B5
2327 H12	3392-2 B5
2328 H11	3392-3 B5
2329 H12	3392-4 B5
2341 D11	3393-1 B6
2342 D11	3393-2 B6
2343 D11	3393-3 C6
2344 D12	3393-4 C6
2345 D12	3394-1 B6
2346 D12	3394-2 B6
2350 C7	3394-3 B6
2351 C7	3394-4 B6
2352 C7	3398 A8
2353 C7	3401 C11
2354 C7	3402 C11
2355 C7	3403 C11
2356 C7	3404 C11
2357 C6	3405 C11
2360 D8	3406 C11
2361 D8	3407 C11
2362 D8	3408 B11
2363 A7	3409 B11
2364 I9	4301 H2
2365 I9	4311 A2
2366 A7	4312 A2
2381 F8	5300 A2
2391 D6	5301 F5
2392 D6	5302 F3
2393 D6	5303 F6
2394 E6	5305 A3
3301-1 E1	5306 A6
3301-2 E1	5307 A6
3301-3 E1	5308 F6
3301-4 E1	5321 B8
3302-1 D1	5322 B8
3302-2 E1	5323 B8
3302-3 E1	5340 D7
3302-4 E1	5341 D7
3303-2 D1	5342 H8
3303-3 D1	5343 H8
3303-4 D1	5344 C11
3304-1 D1	5345 C11
3304-2 D1	7301 B1
3304-3 D1	7302 E3
3304-4 D1	7303 G2
3305-1 D1	7304 F5
3305-2 D1	7306 A2
3305-3 E1	7307 A6
3305-4 E1	7308 B5
3306 E1	7310 E9
3310 B3	
3311 B3	
3312 B2	
3313 B2	
3314 G7	
3315 G7	
3316 E8	
3317 E8	
3324 A11	
3325 H2	
3326 H3	
3327 H8	
3328 H8	
3335 G4	
3336 H5	
3337 I6	
3338 H5	
3340 H11	
3341 G11	
3342 G7	
3343 F7	
3344 F7	
3345 G11	
3346 G11	
3347 G11	
3348 H5	
3349 G11	
3350 G11	
3352 A7	
3353 A5	
3354 A1	
3355 A3	
3356 A6	
3357 D8	

EXPLODED VIEW - MODULE SD6.3 ST AV2

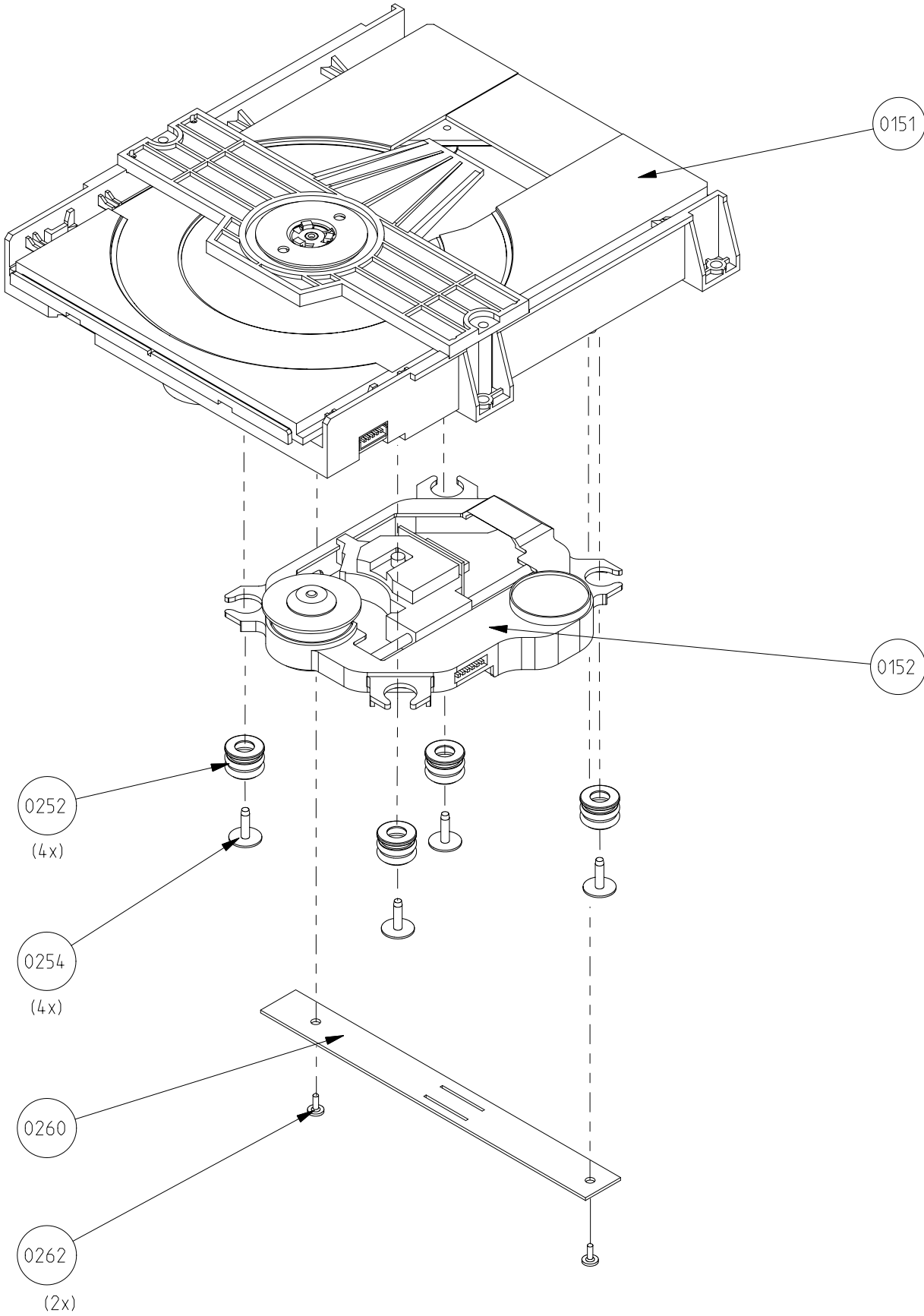


MODULE SD6.3 ST AV2 PARTS LIST

0001	3139 247 10801	LOADER ASSY ST KHM
0002	3139 248 83303	PCBAS SD6.3 ST AV 2
1101	3139 241 00851	FFC FOIL 24P/180/24P AD 0.5MMP

Note : Only the parts mentioned in this list are normal service spare parts.

EXPLODED VIEW - LOADER ASSY ST KHM



ELECTRICAL PARTS LIST - SD6.3 ST AV2 BOARD**MISCELLANEOUS**

1101	2422 025 17529	FLEX CONNECTOR 24P	5308	4822 157 11499	IND FXD 0603 EMI 100MHz 60R
1104	2422 025 16388	FLEX CONNECTOR 16P	5344	4822 157 11499	IND FXD 0603 EMI 100MHz 60R
1105	2422 025 17768	FLEX CONNECTOR 9P	5345	4822 157 11499	IND FXD 0603 EMI 100MHz 60R
1111	2422 025 17201	FLEX CONNECTOR 9P			
1112	4822 267 11027	FLEX CONNECTOR 16P			
1151	4822 157 11717	IND FXD 1206 EMI 100MHz 50R			
1152	4822 157 11717	IND FXD 1206 EMI 100MHz 50R			
1153	4822 157 11717	IND FXD 1206 EMI 100MHz 50R			
1301	2422 025 17451	FLEX CONNECTOR 30P			
1302	2422 025 17451	FLEX CONNECTOR 30P			

RESISTORS

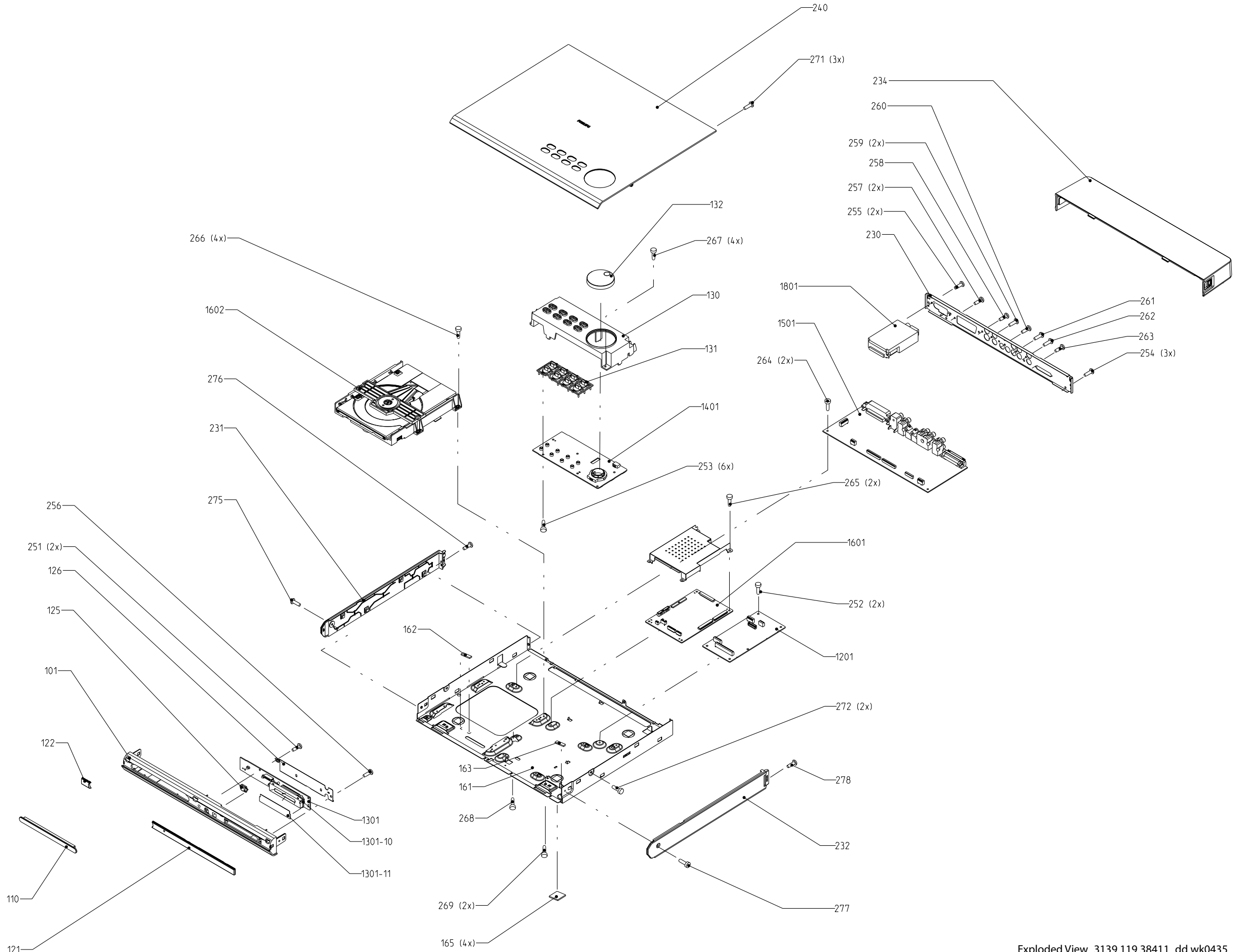
3301	2350 035 10229	RST NETW 1206 4X 22R 5%	7101	4822 209 17398	IC SM LD1117DT33
3302	2350 035 10229	RST NETW 1206 4X 22R 5%	7102	9322 165 15685	IC SM NCP303LSN30
3303	2350 035 10229	RST NETW 1206 4X 22R 5%	7106	4822 130 11565	TRA POW SM 2SB1132
3304	2350 035 10229	RST NETW 1206 4X 22R 5%	7107	4822 130 11565	TRA POW SM 2SB1132
3305	2350 035 10229	RST NETW 1206 4X 22R 5%	7108	9340 547 13215	FET SIG SM BSH103
3346	4822 157 11499	IND FXD 0603 EMI 100MHz 60R	7108	9322 212 30685	FET POW SM TN0200T

COILS & FILTERS

5101	4822 157 11717	IND FXD 1206 EMI 100MHz 50R	7109	9340 547 13215	FET SIG SM BSH103
5103	4822 157 11499	IND FXD 0603 EMI 100MHz 60R	7109	9322 212 30685	FET POW SM TN0200T
5104	4822 157 11499	IND FXD 0603 EMI 100MHz 60R	7110	9340 219 30115	TRA SIG SM BC817-25W
5105	4822 157 11499	IND FXD 0603 EMI 100MHz 60R	7111	9322 201 94668	IC SM MM1646XH
5106	4822 157 11499	IND FXD 0603 EMI 100MHz 60R	7112	9322 203 35671	IC SM MT1389E
5107	4822 157 11499	IND FXD 0603 EMI 100MHz 60R	7121	9340 425 20115	TRA SIG SM BC847BS
5108	4822 157 11499	IND FXD 0603 EMI 100MHz 60R	7131	9322 212 30685	FET POW SM TN0200T
5109	4822 157 11499	IND FXD 0603 EMI 100MHz 60R	7131	9340 547 13215	FET SIG SM BSH103
5111	4822 157 11499	IND FXD 0603 EMI 100MHz 60R	7132	9340 547 13215	FET SIG SM BSH103
5112	4822 157 11717	IND FXD 1206 EMI 100MHz 50R	7132	9322 212 30685	FET POW SM TN0200T
5115	4822 157 11499	IND FXD 0603 EMI 100MHz 60R	7301	9322 189 04668	IC SM M24C16-RDW6
5116	4822 157 11499	IND FXD 0603 EMI 100MHz 60R	7302	9322 199 38671	IC SM IS42S16400A
5117	4822 157 11499	IND FXD 0603 EMI 100MHz 60R	7302	9322 166 67668	IC SM MT48LC4M16A2TG-7E
5118	4822 157 11499	IND FXD 0603 EMI 100MHz 60R	7303	9322 194 74668	IC SM M29W160ET70N6
5119	4822 157 11499	IND FXD 0603 EMI 100MHz 60R	7304	9322 185 10668	IC SM CS8415A-CZ
5122	4822 157 11499	IND FXD 0603 EMI 100MHz 60R	7306	9352 687 20125	IC SM 74LVC1G125GW
5123	4822 157 11499	IND FXD 0603 EMI 100MHz 60R	7310	4822 209 17345	IC SM M62320FP
5124	3198 018 31090	FXD IND SM 0805 10U 10%			
5125	3198 018 31090	FXD IND SM 0805 10U 10%			
5126	4822 157 11499	IND FXD 0603 EMI 100MHz 60R			
5130	2422 543 01393	RES XTL SM 27MHz 10P CX8045			
5131	3198 018 41880	FXDIND SM 1210 1U8 5%			
5132	3198 018 41880	FXDIND SM 1210 1U8 5%			
5133	3198 018 41880	FXDIND SM 1210 1U8 5%			
5134	3198 018 41880	FXDIND SM 1210 1U8 5%			
5135	3198 018 41880	FXDIND SM 1210 1U8 5%			
5136	3198 018 41880	FXDIND SM 1210 1U8 5%			
5300	4822 157 11499	IND FXD 0603 EMI 100MHz 60R			
5301	4822 157 11499	IND FXD 0603 EMI 100MHz 60R			
5302	4822 157 11499	IND FXD 0603 EMI 100MHz 60R			
5303	4822 157 11499	IND FXD 0603 EMI 100MHz 60R			
5305	4822 157 11499	IND FXD 0603 EMI 100MHz 60R			

Note : Only the parts mentioned in this list are normal service spare parts.

SET MECHANICAL EXPLODED VIEW



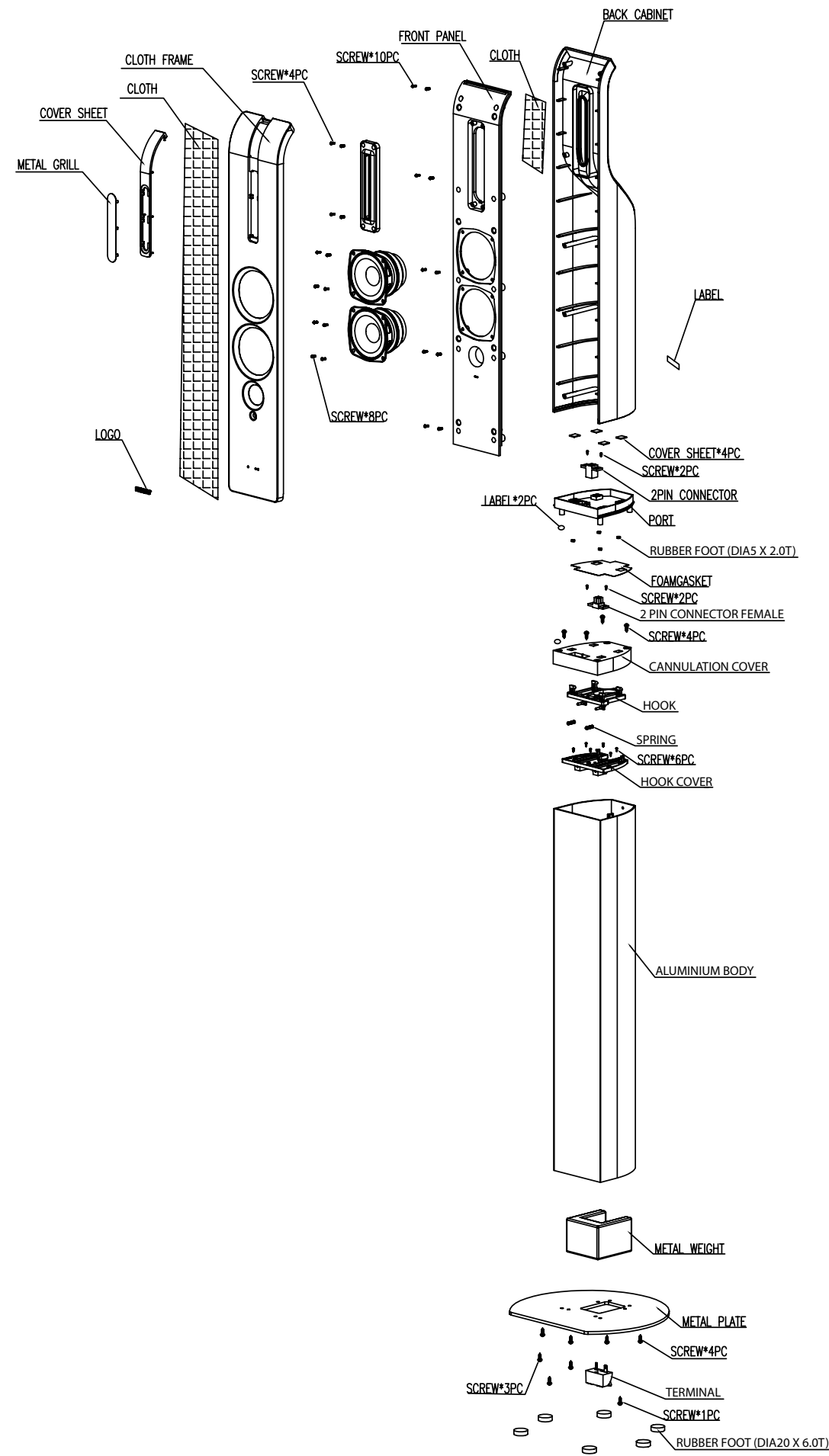
MECHANICAL & ACCESSORIES PARTS LIST - MAIN UNIT**SCREW LISTS - MAIN UNIT**

0101	3139 254 00791	CABINET FRONT
0110	3139 254 00761	COVER TRAY
0121	3139 254 00781	WINDOW DISPLAY RIGHT
0122	3139 254 00771	WINDOW DISPLAY LEFT
0125	3139 254 00841	LIGHTGUIDE IR SENSOR
0130	3139 254 00751	BRACKET SUPPORT CONTROL
0131	3139 254 00741	BUTTON SET FUNC CONTROL
0132	3139 254 00731	KNOB VOLUME ROTARY
0165	3139 243 10080	CUSHION FOOT
0231	3139 254 00721	PANEL COVER LEFT
0232	3139 254 00711	PANEL COVER RIGHT
0234	3139 254 00701	COVER REAR CABLE
0326	3139 119 02581	BOX SPK ASSY RS8320LX/69
0328	3139 119 02521	BOX SPK ASSY SW8320LX/69
0329	3139 119 02671	BOX SPK ASSY FCS8320
0331	2422 076 00546	CABLE FM AERIAL
0332	2422 549 45386	ANTENNA AM LOOP
0332	2422 549 45813	ANTENNA AM LOOP
0333	3139 258 70051	REMOTE CONTROL
0336	2422 070 98151	△ MAINS CORD /69
0336	2422 070 98257	△ MAINS CORD /93
0338	2422 076 00304	CABLE CINCH/CINCH 1M5 YE/RD/WH
0340	3103 308 92610	CABLE AUDIO 2X2RCA MALE 1.5MTR
0341	4822 321 61579	VIDEO CABLE
1501	3139 118 57701	PCBAS AV LX8300SA/69
1801	2422 542 90138	TUN A+F ENG06703Q USA B
8230	3139 111 04121	FFC FOIL 30P/120/30P AD
8240	3139 110 34750	FFC FOIL 05P/080/05P AD
8260	3139 111 04111	FFC FOIL 09P/100/09P AD 1MMP
8520	3139 111 04341	FFC 09P/140/09P AD 1MM FOLDED
8560	3139 111 04271	FFC FOIL 30P/060/30P BD 1MMP
8561	3139 111 04321	FFC 30P/220/30P BD 1MM FOLDED
8562	3139 111 02421	FFC FOIL 16P/220/16P AD 1MMP
8580	3139 111 04081	FFC FOIL 11P/60/11P BD

251	D3 x 8
252	M3 x 6
253	D3 x 8
254	M3 x 4
255	M3 x 6
256	D3 x 8
258	D3 x 8
259	D3 x 8
260	D3 x 8
261	D3 x 8
262	D3 x 8
263	M2.6 x 12
264	M3 x 6
265	M3 x 6
266	M3 x 8
268	M3 x 6
269	M3 x 6
271	M3 x 6
272	M3 x 6
275	D3 x 10
276	M3 x 6
277	D3 x 10
278	M3 x 6

Note : Only the parts mentioned in this list are normal service spare parts.

EXPLODED VIEW - FRONT/REAR SPEAKER BOX



PARTS LIST - BOX SPK ASSY FCS8320

SPEAKER BOX FRONT L/R:	
9965 000 26064	SPEAKER BOX FRONT L
9965 000 26065	SPEAKER BOX FRONT R
9965 000 25740	RUBBER FOOT (DIA5 X 2.0T)
9965 000 25741	2 PIN CONNECTOR FEMALE
9965 000 25742	CANNULATION COVER
9965 000 25749	HOOK
9965 000 25743	SPRING
9965 000 25744	HOOK COVER
9965 000 25764	TERMINAL BLACK/WHITE (FRONT L)
9965 000 25765	TERMINAL BLACK/RED (FRONT R)
9965 000 25752	RUBBER FOOT (DIA20 X 6.0T)

CENTER SPEAKER BOX:

9965 000 26066	CENTER SPEAKER BOX
9965 000 24102	RUBBER FOOT (CENTER)

Note : Only the parts mentioned in this list are normal service spare parts.

PARTS LIST - BOX SPK ASSY RS8320LX/69

SPEAKER BOX REAR L/R:	
9965 000 26061	SPEAKER BOX REAR L
9965 000 26062	SPEAKER BOX REAR R
9965 000 25740	RUBBER FOOT (DIA5 X 2.0T)
9965 000 25741	2 PIN CONNECTOR FEMALE
9965 000 25742	CANNULATION COVER
9965 000 25749	HOOK
9965 000 25743	SPRING
9965 000 25744	HOOK COVER
9965 000 26063	TERMINAL BLACK/BLOCK (REAR L)
9965 000 25745	TERMINAL BLACK/GREY (REAR R)
9965 000 25752	RUBBER FOOT (DIA20 X 6.0T)

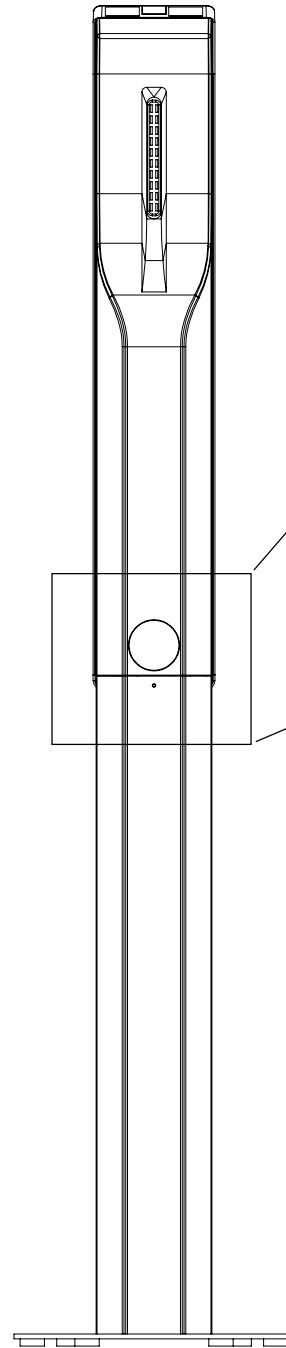
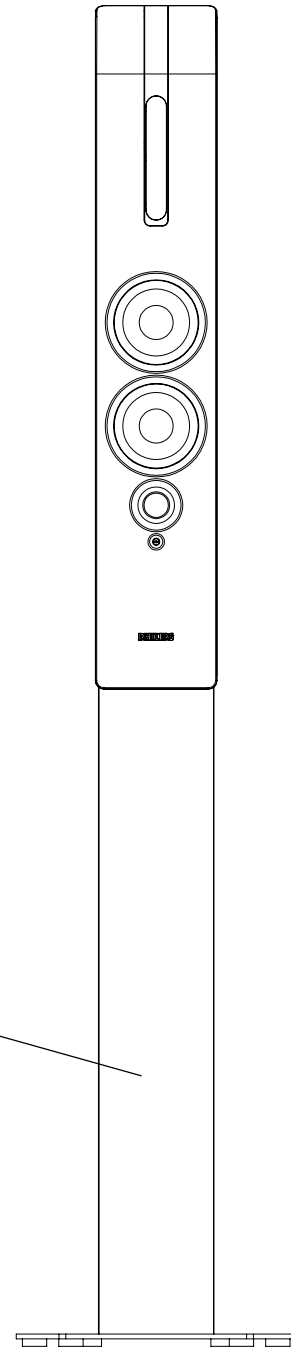
Note : Only the parts mentioned in this list are normal service spare parts.

DISMANTLING INSTRUCTIONS (SPEAKER BOX)

Dismantling of the Front/Rear Speaker Box

- 1) The Speaker Box can be separated from the Aluminium Body by using a screw driver as shown in Step 1.
- 2) Use the screw driver and push in the direction as shown in Step 2 to unlock the Hook.
- 3) Lift the Speaker Box upward in the direction as shown in Step 3 to detach it from the Aluminium Body.

Aluminium Body



Step 1



Step 2



Step 3