

Service
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Service



Service Manual



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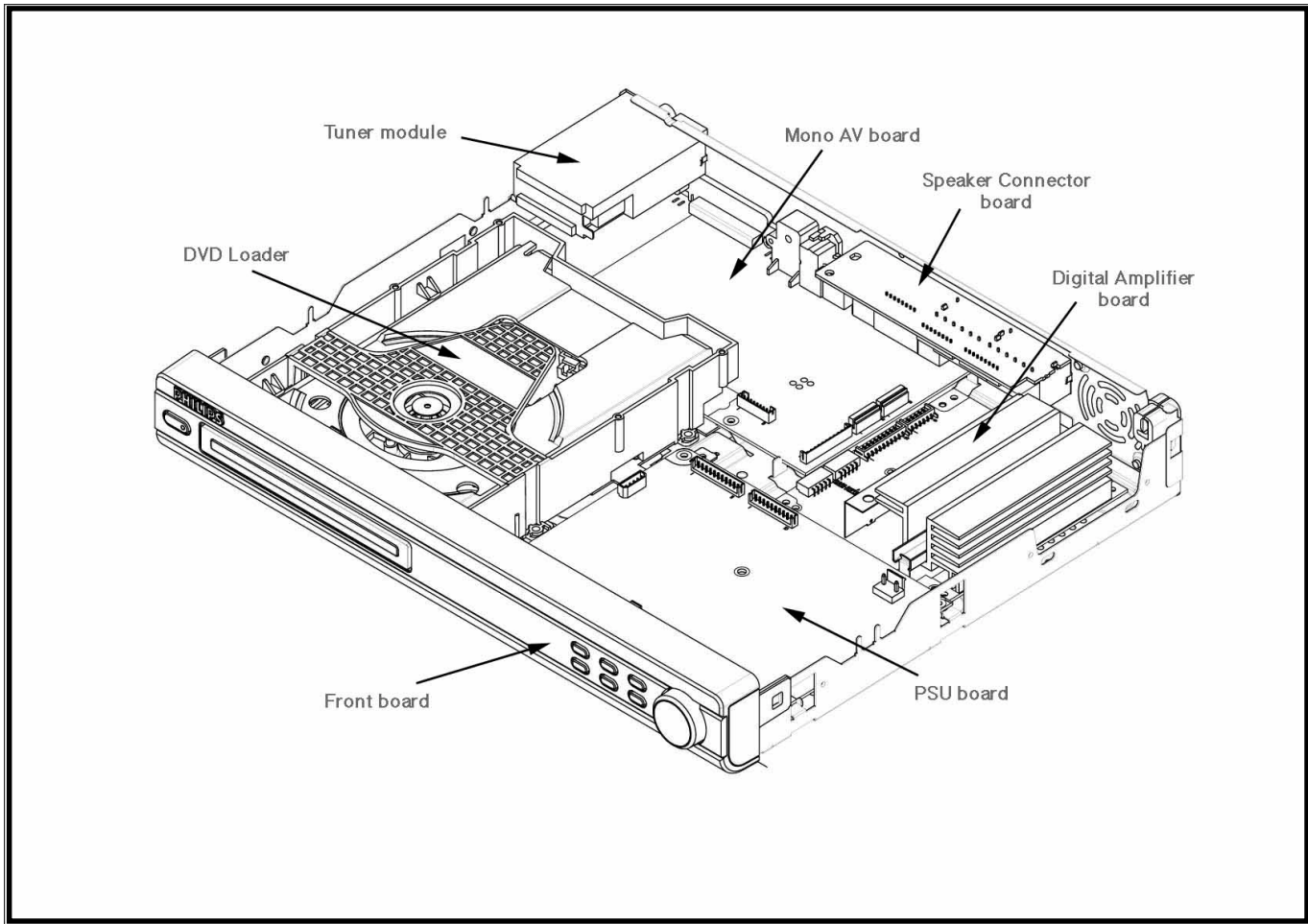
3139 785 30370

Version 1.0



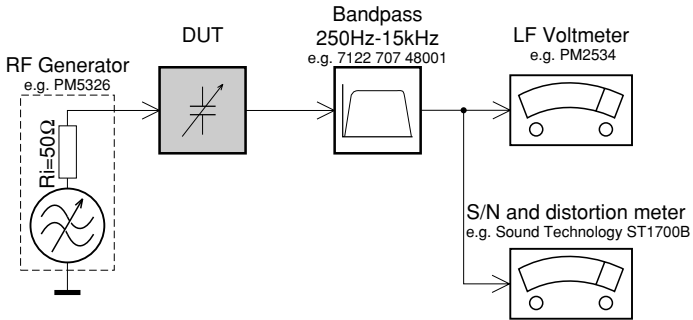
PHILIPS

LOCATION OF PC BOARDS



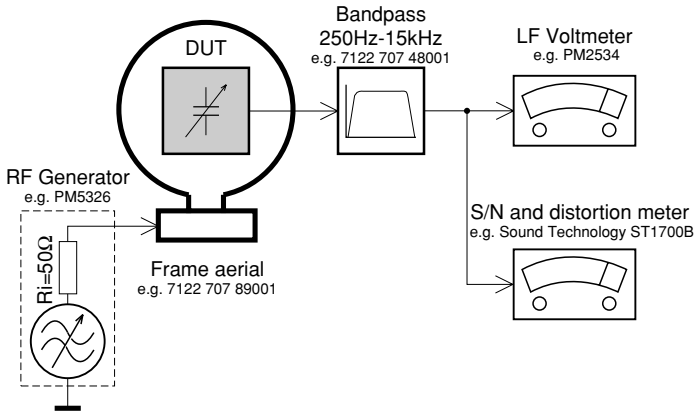
MEASUREMENT SETUP

Tuner FM



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

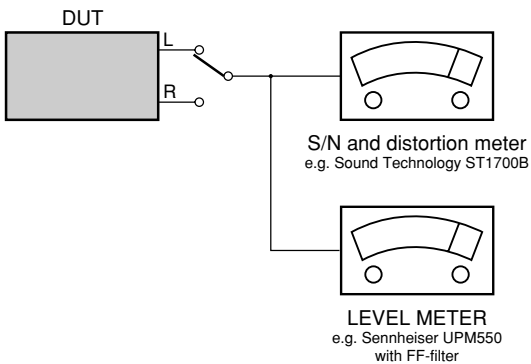
Tuner AM (MW,LW)



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).

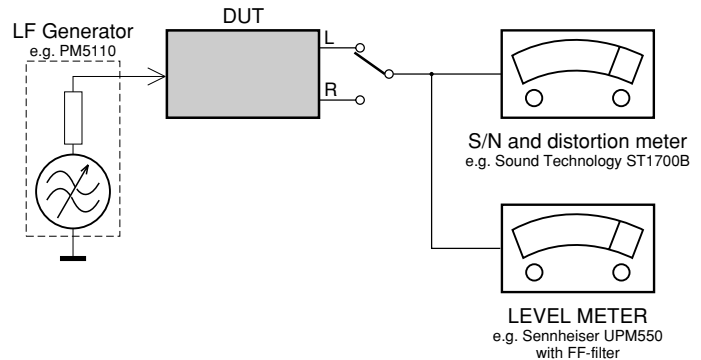
CD

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
Allen key set (1.5, 2, 2.5, 3, 4, 5, 6, 8mm)	5322 395 10754

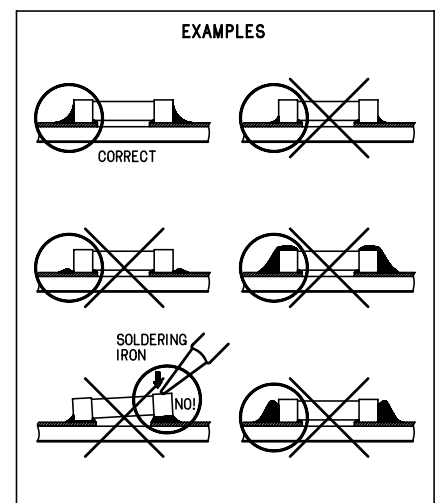
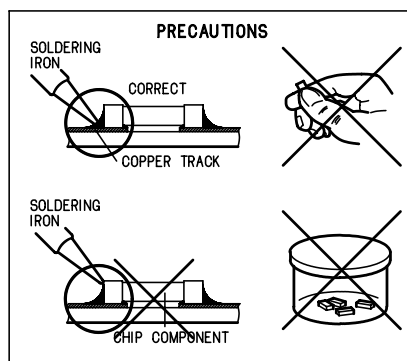
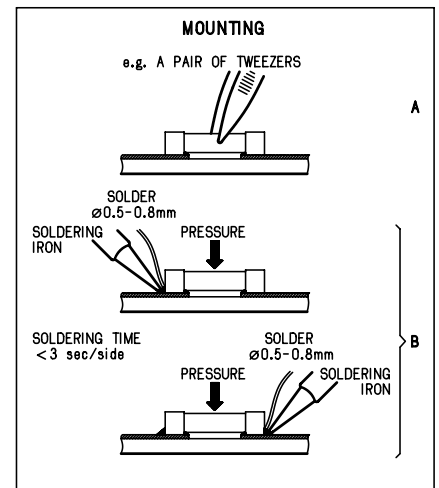
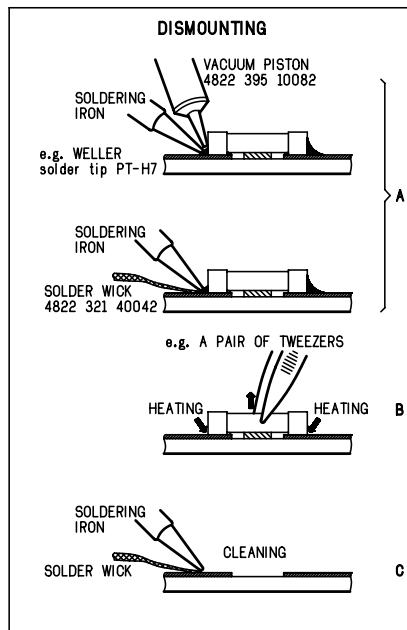
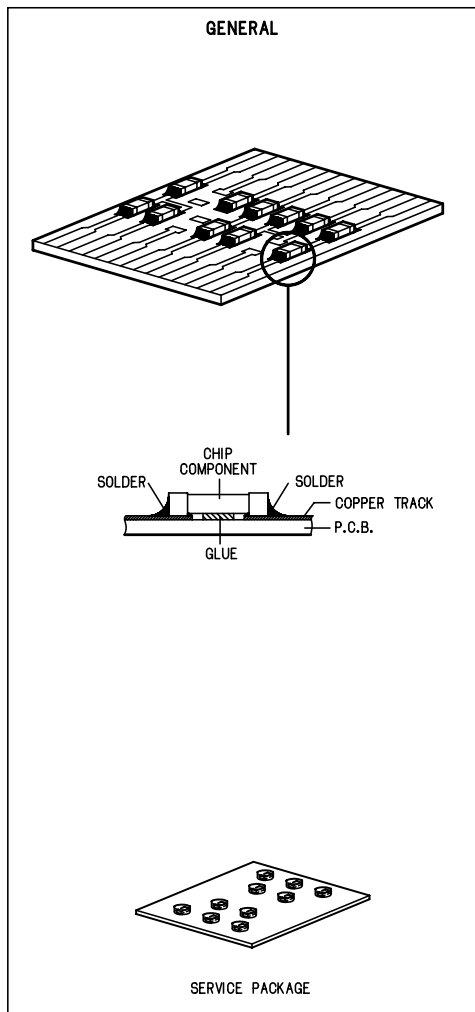
Compact Disc:

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
SBC444/444A	4822 397 30245
CD-RW Printed Audio Test Disc	7104 099 96611
Dolby Pro-logic Test Disc	4822 395 10216

ESD Equipment:

Anti-static table mat - large 1200x650x1.25mm ...	4822 466 10953
Anti-static table mat - small 600x650x1.25mm	4822 466 10958
Anti-static wristband	4822 395 10223
Connector box (1MΩ)	4822 320 11307
Extension cable (to connect wristband to conn. box)	4822 320 11305
Connecting cable (to connect table mat to conn. box)	4822 320 11306
Earth cable (to connect product to mat or box)	4822 320 11308
Complete kit ESD3 (combining all above products)	4822 320 10671
Wristband tester	4822 344 13999

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 enfilez 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).

Unvorsorgfältige 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)

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

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

(NL)

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

(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.

(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.

(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.

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

**(GB) Warning !**

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

(S) Varning !

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

(SF) Varoitus !

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

(DK) Advarse !

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

DISMANTLING INSTRUCTIONS

Dismantling of the Front Panel assembly

- 1) Open the Tray and remove the tray cover assy (pos 5 + 7) and remove it as shown in figure 1.

Note: The Tray can be manually open by inserting a minus screw driver (approximately 9mm) and push lever in the direction shown in figure 2.



Figure 1

- 2) Loosen the 5 screws to dismantle the Top Cover (pos 252)
 - 2 screws on each side
 - 3 screws on the Rear Panel (pos 251).
- 3) Uncatch 4 catches C2 (2x on side & 2x on the bottom) to slide the Front Panel assembly (pos 101) as per figure 4.



Figure 2

Dismantling of the Tuner Module, Loader Mechanism & Mono AV board

- 1) Loosen 2 screws A to remove the Tuner Module (pos 1216) as per figure 3.
- 2) With the tray cover assembly (pos 5 + 7) already removed, loosen 4 screws D to remove the Loader Mechanism (pos 1210) as per figure 4.
- 3) Loosen 4 screws C on the rear and 2 screws G (see figure 3 and 4) to remove the Mono AV board (pos 1212).

Dismantling of the PSU, Speaker Connector and Amplifier boards

- 1) Loosen 4 screws E and 1 catch C1 to remove the PSU board (pos 1215) as per figure 4.
- 2) Loosen 2 screws B to remove the Speaker Connector board (pos 1211) as per figure 3.
- 3) Loosen 4 screws F to remove the Amplifier board (pos 1214) as per figure 4.

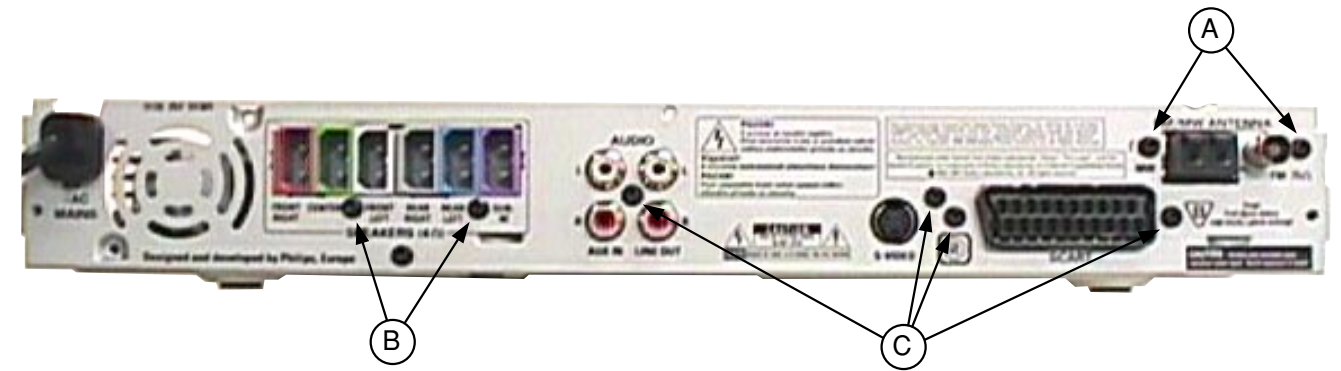


Figure 3

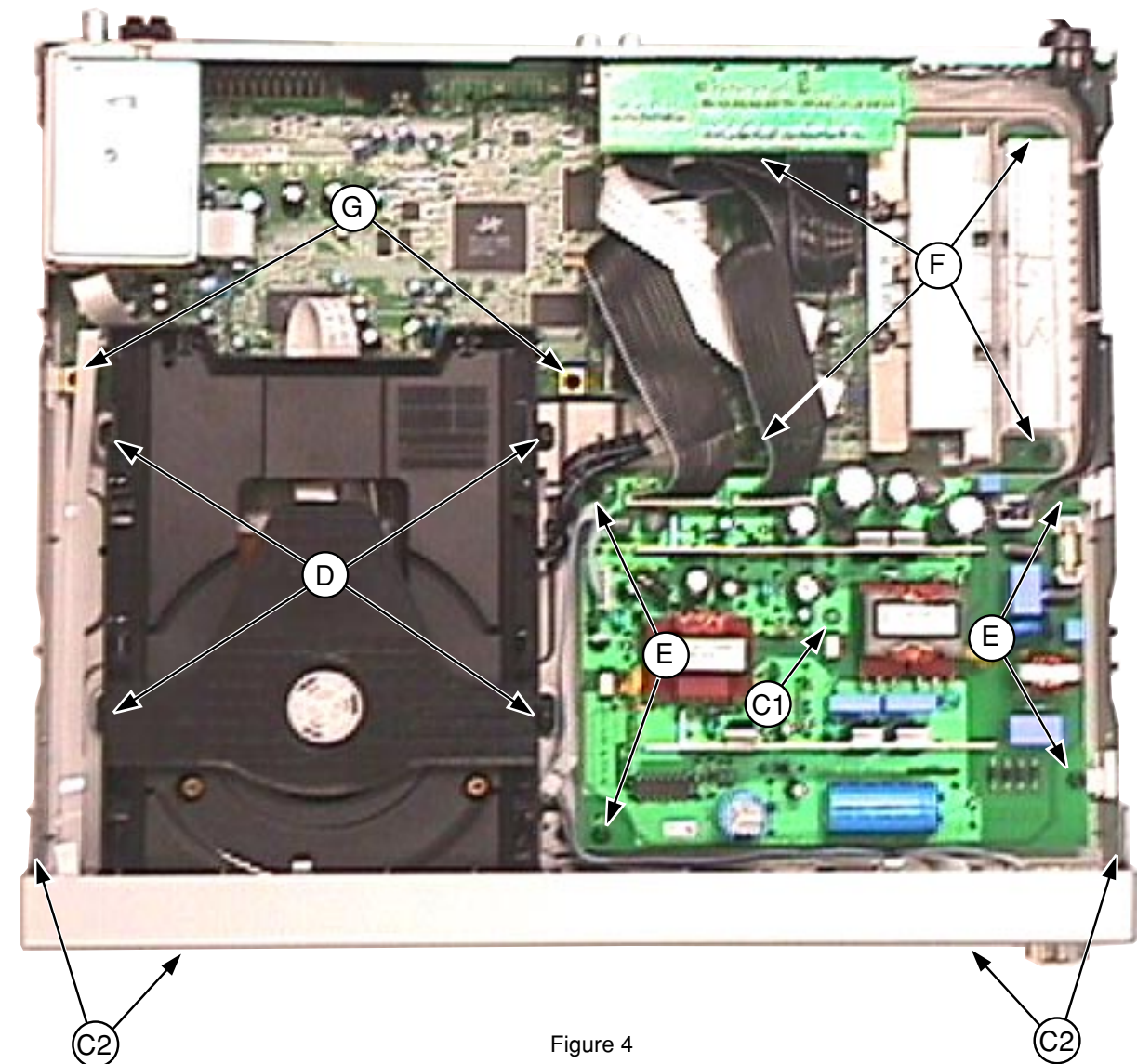
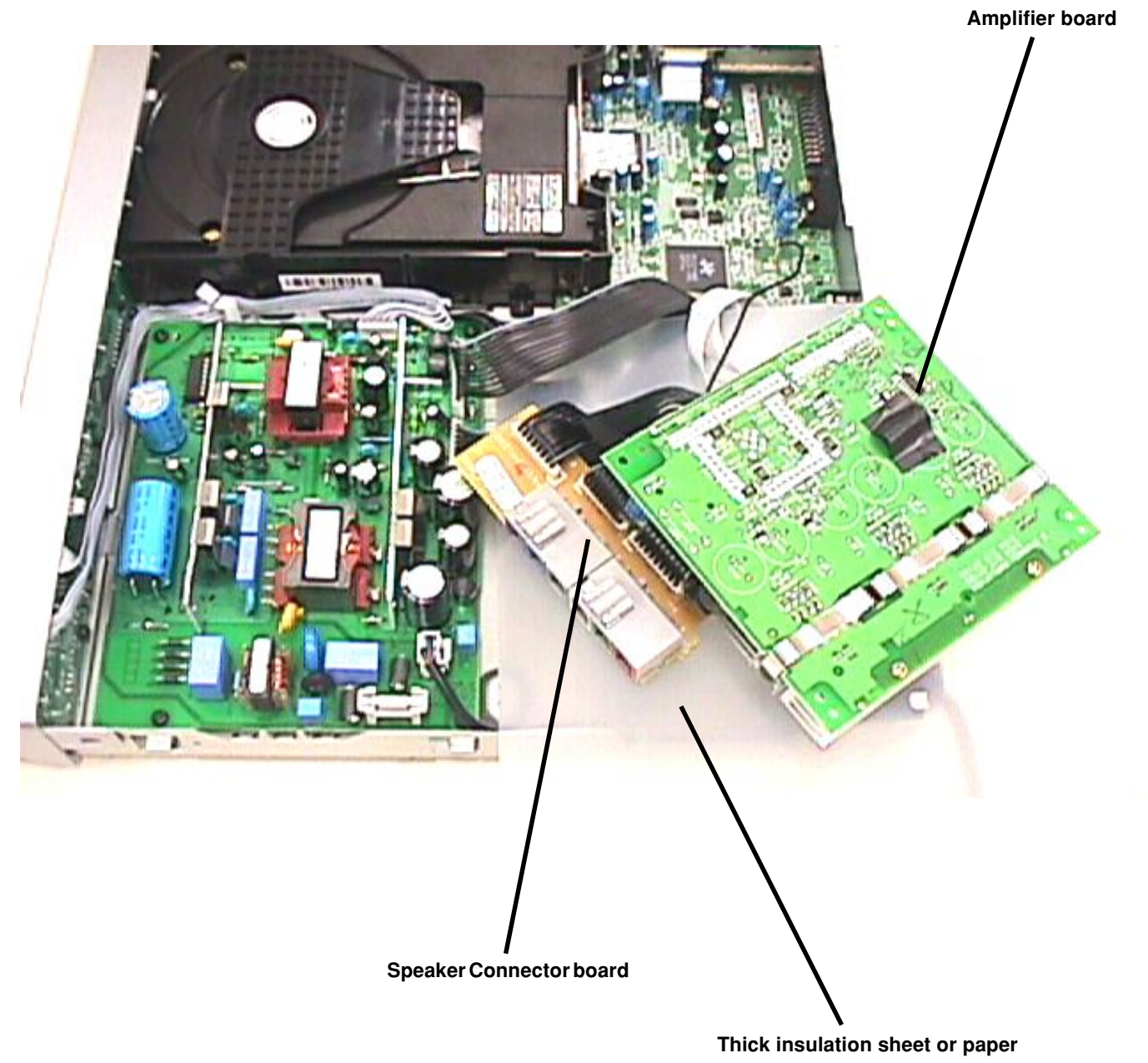
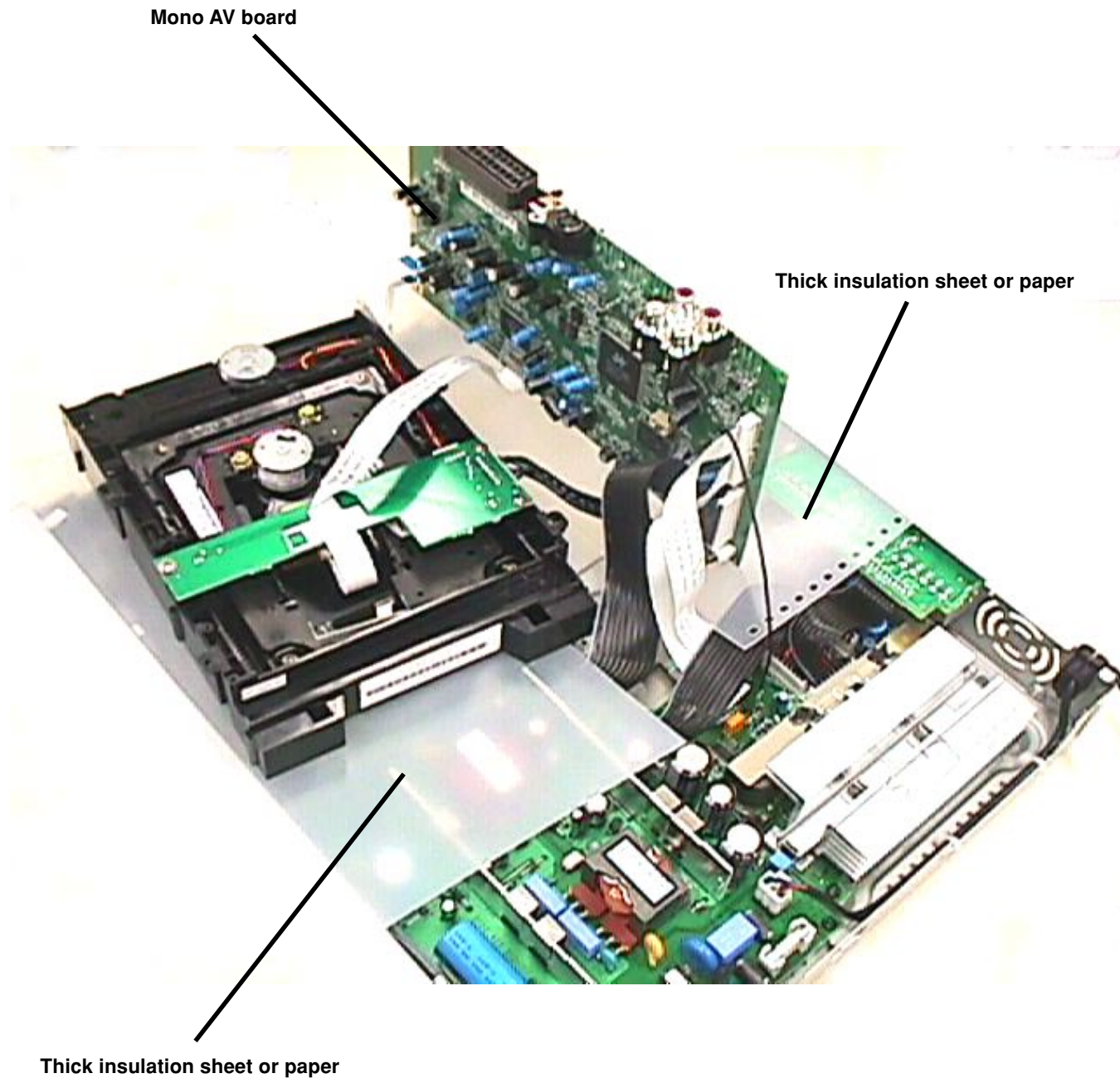
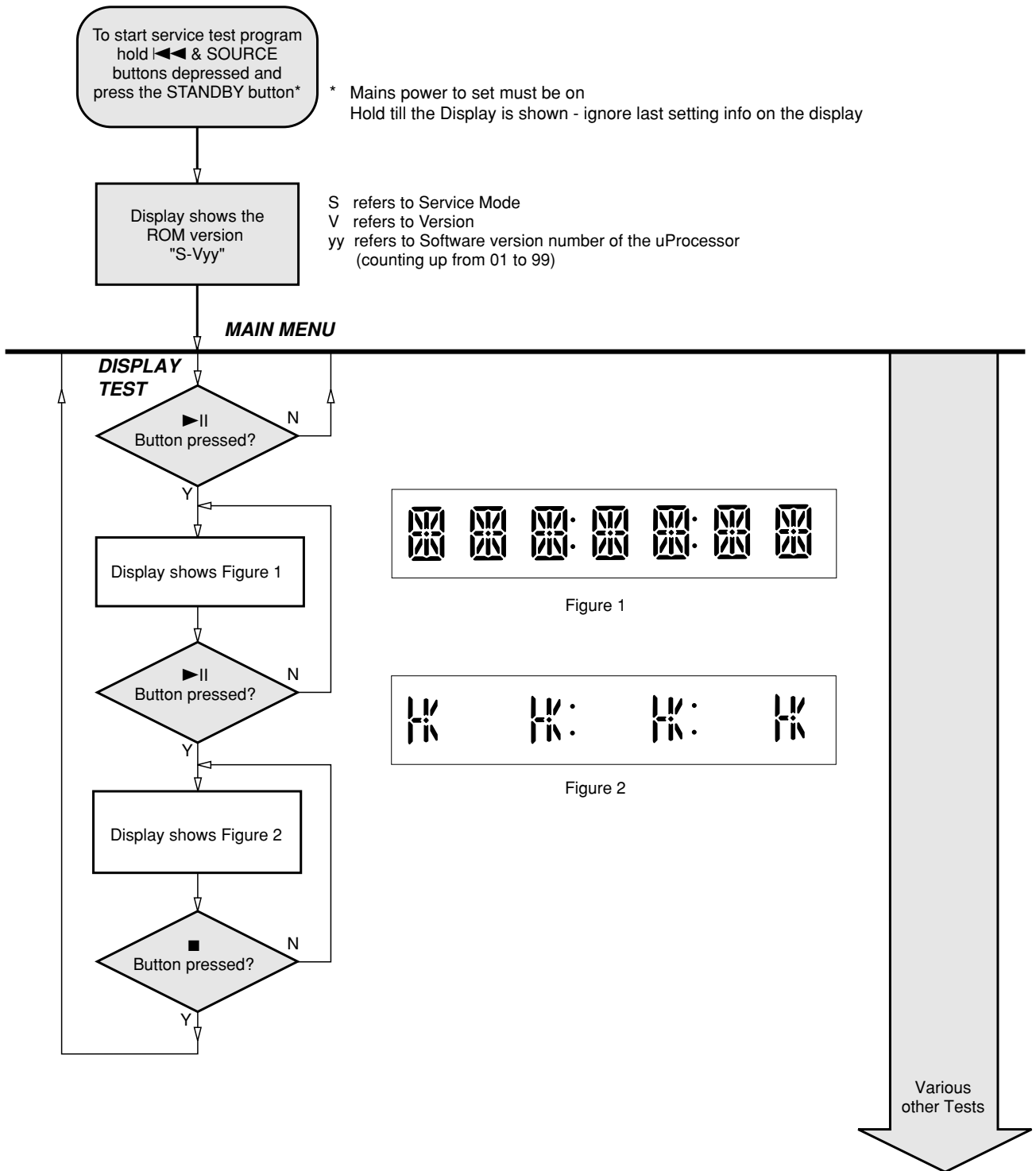


Figure 4

Service positions



SERVICE TEST PROGRAM



TEST	Activated with	ACTION
EEPROM FORMAT TEST	◀◀	Load default data. Display shows "NEW" for 1 second. Caution! All presets from the customer will be lost!!
ROTARY ENCODER TEST	SOURCE / VOLUME Knob	Display shows value for 2 seconds. Values increases or decreases in steps of 1 until 0 (Min.) or 40 (Max.) is reached.
LEAVE SERVICE TEST PROGRAM	Disconnect mains cord	

DVD Region code

There is only 1 version of software (for region 2) in this range, therefore no special re-programming is required. However, it is possible to change the region code but do note that selecting a different region code will not change the existing setting like TV system, output format, etc.

Region code change is done as follows:

- 1) Power up the set and open tray in DVD mode.
- 2) Press <9999> follow by <X> buttons on the Remote control.
where x = numeric 1 to 6 denoting the regions below:
 - 1 = USA
 - 2 = Europe
 - 3 = Asia Pacific
 - 4 = Australia, New Zealand, Latam
 - 5 = Russia, India
 - 6 = China

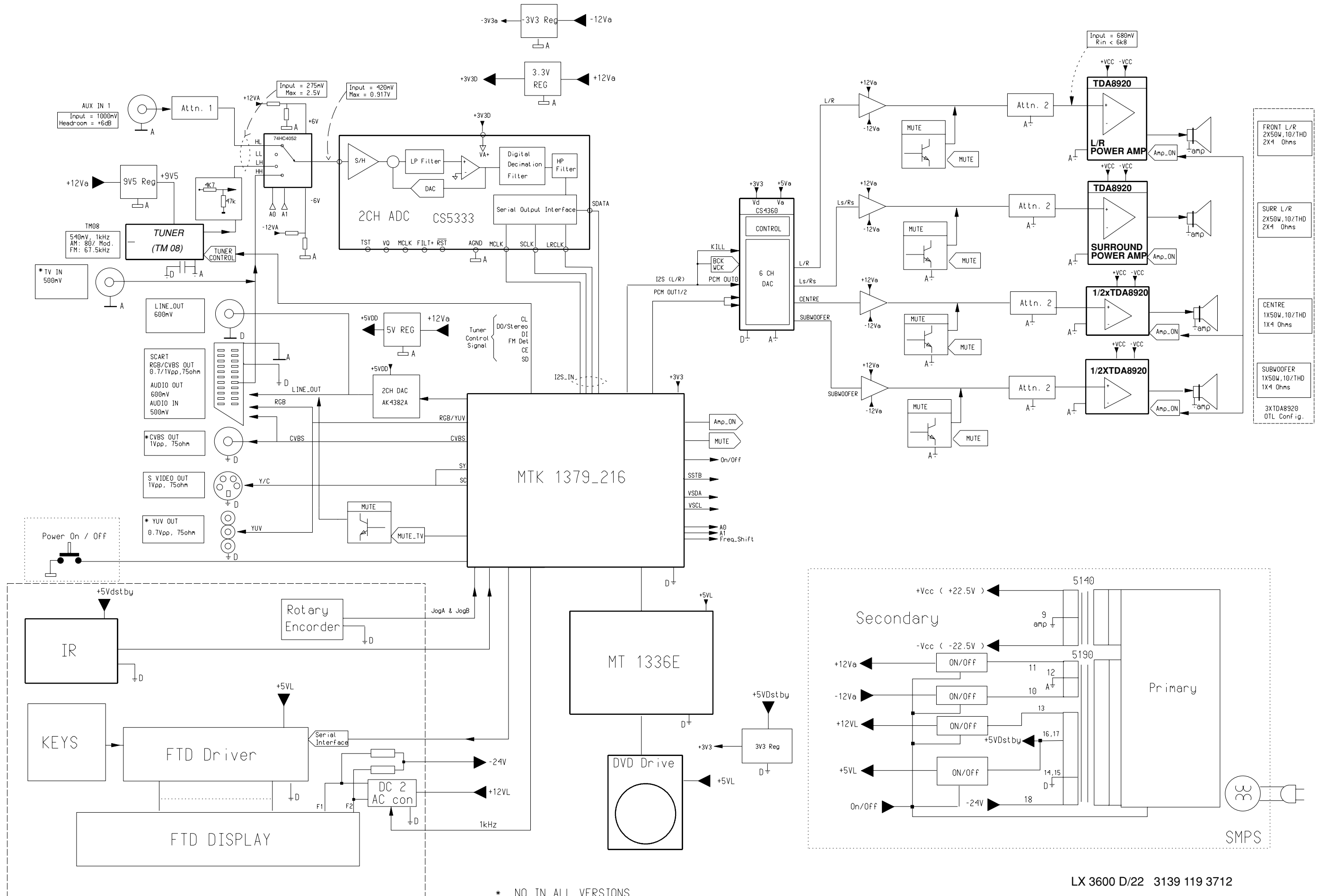
Procedure for check Software version

- 1) Power up the set and open tray in DVD mode.
- 2) Press OSD button on the Remote control.
- 3) The TV screen will shows:
SERVO:nnnnnnnn REG:r
LX3600D-yymmdd-Vxx
where
 - nnnnnnnn = servo version number
 - r = region number
 - yymmdd = software date in year, month, day format
 - xx = version number

Procedure to upgrade software

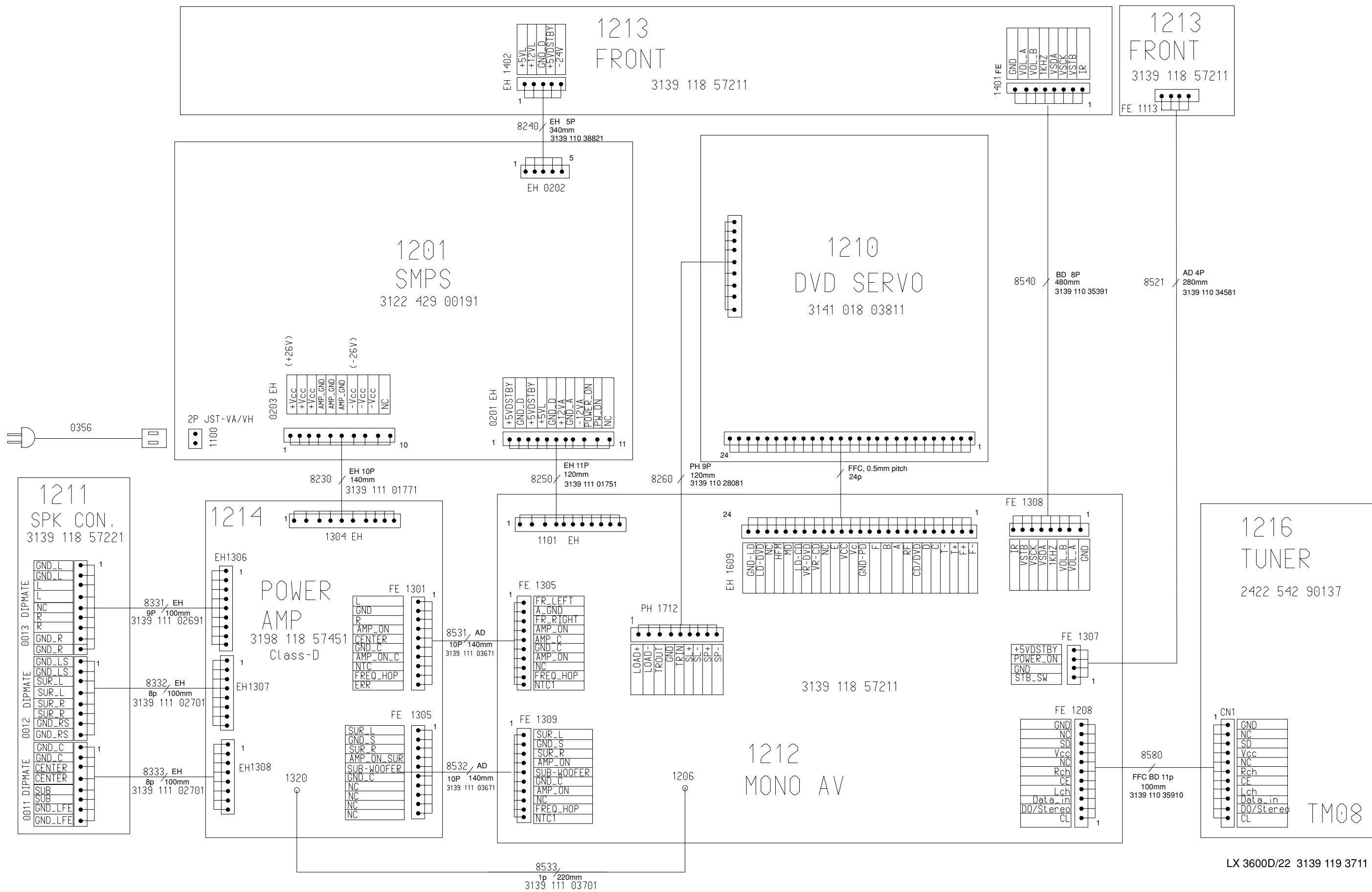
- 1) Power up the set and open tray in DVD mode.
- 2) Place upgrade CD-ROM onto tray and close.
- 3) The set will response and display the following:
 - LOAD [After the disc is read, the tray will open for you to remove the disc]
 - ERASE 0 -> ERASE F -> ERASE 0
 - WRITE F -> WRITE 0
 - UPG END [only for a short moment, if unsuccessful ERROR is displayed]
 - DISC
 - LOAD [Tray will close indicating that the upgrade process is completed]
- 4) Unplug the set to disconnect the mains supply.
- 5) The whole process should last for about 5 minutes. Remove the upgrade CD-ROM and unplug the Mains supply.

SET BLOCK DIAGRAM

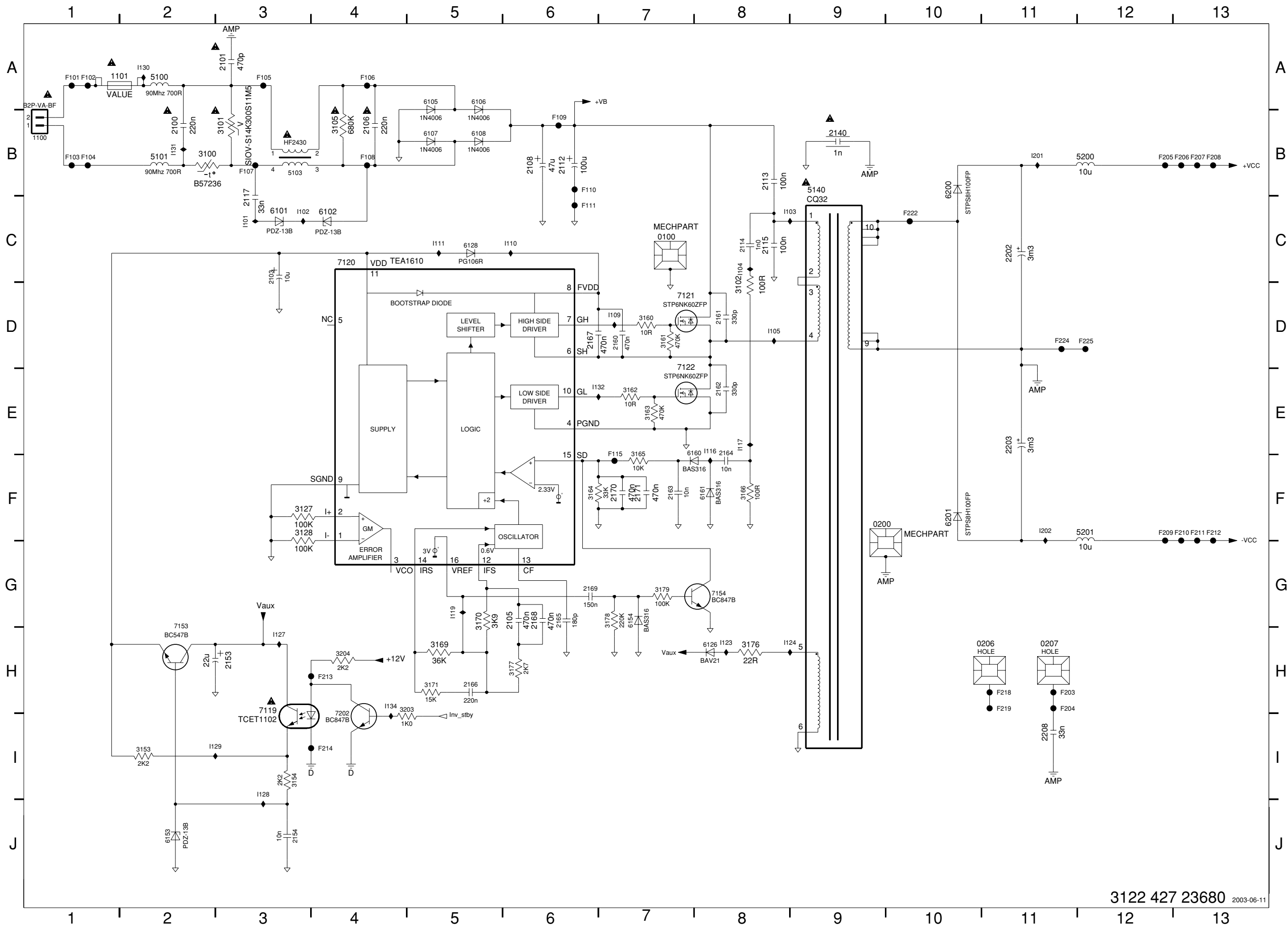


* NO IN ALL VERSIONS

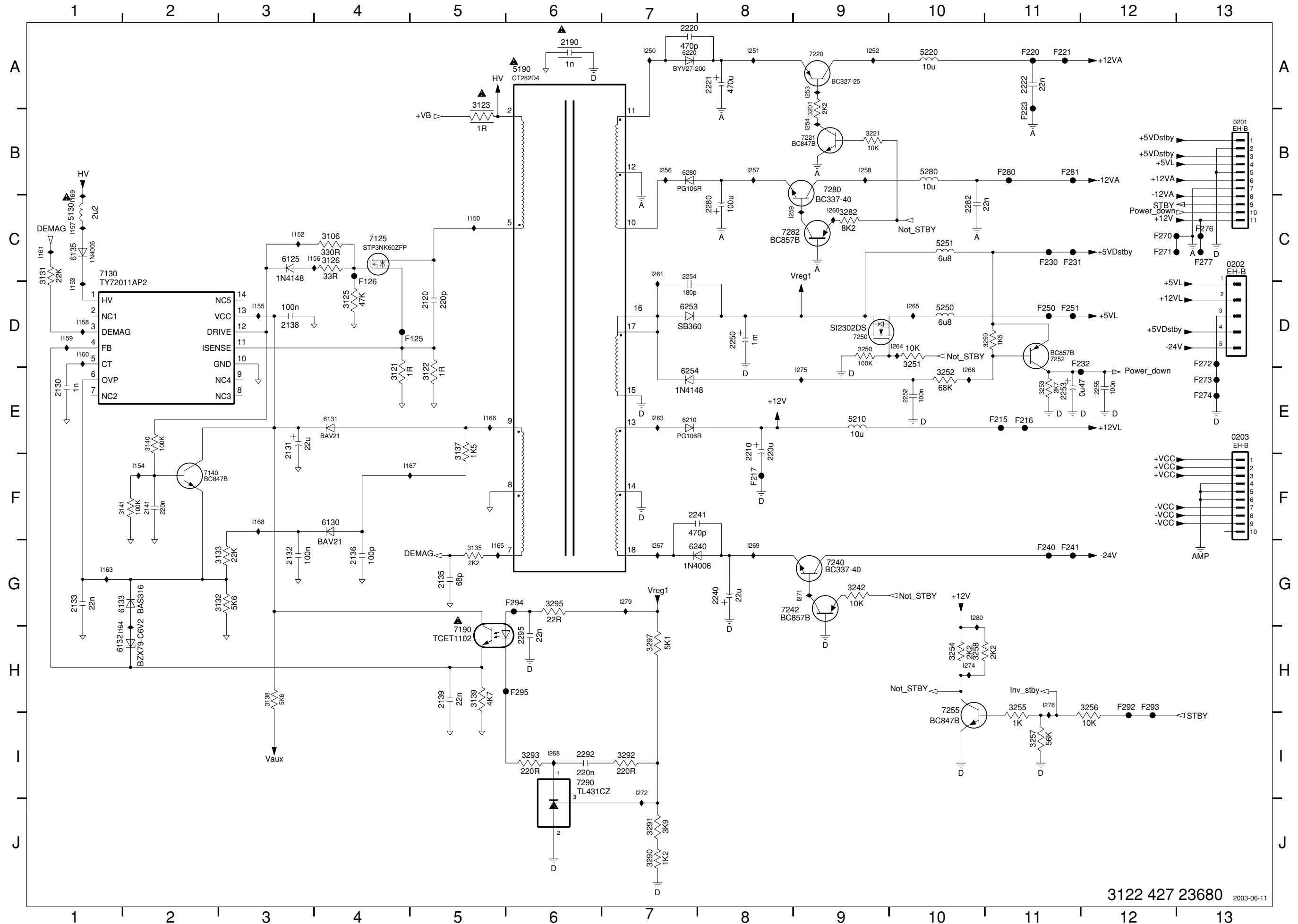
WIRING DIAGRAM



CIRCUIT 1 (FOR INFORMATION ONLY)



CIRCUIT 2 (FOR INFORMATION ONLY)

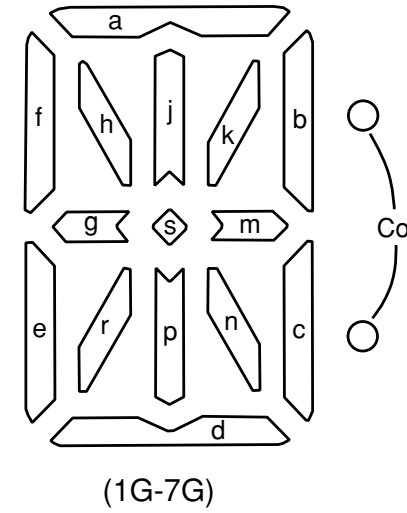
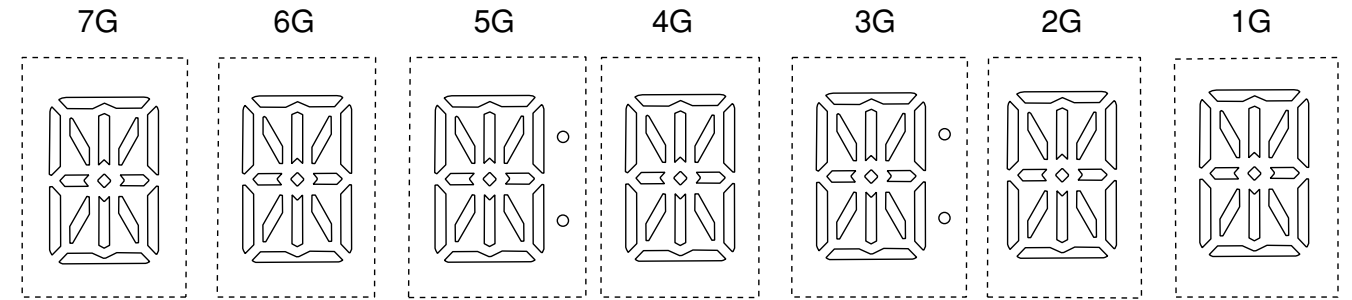


FRONT BOARDS

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FTD DISPLAY PIN CONNECTIONS

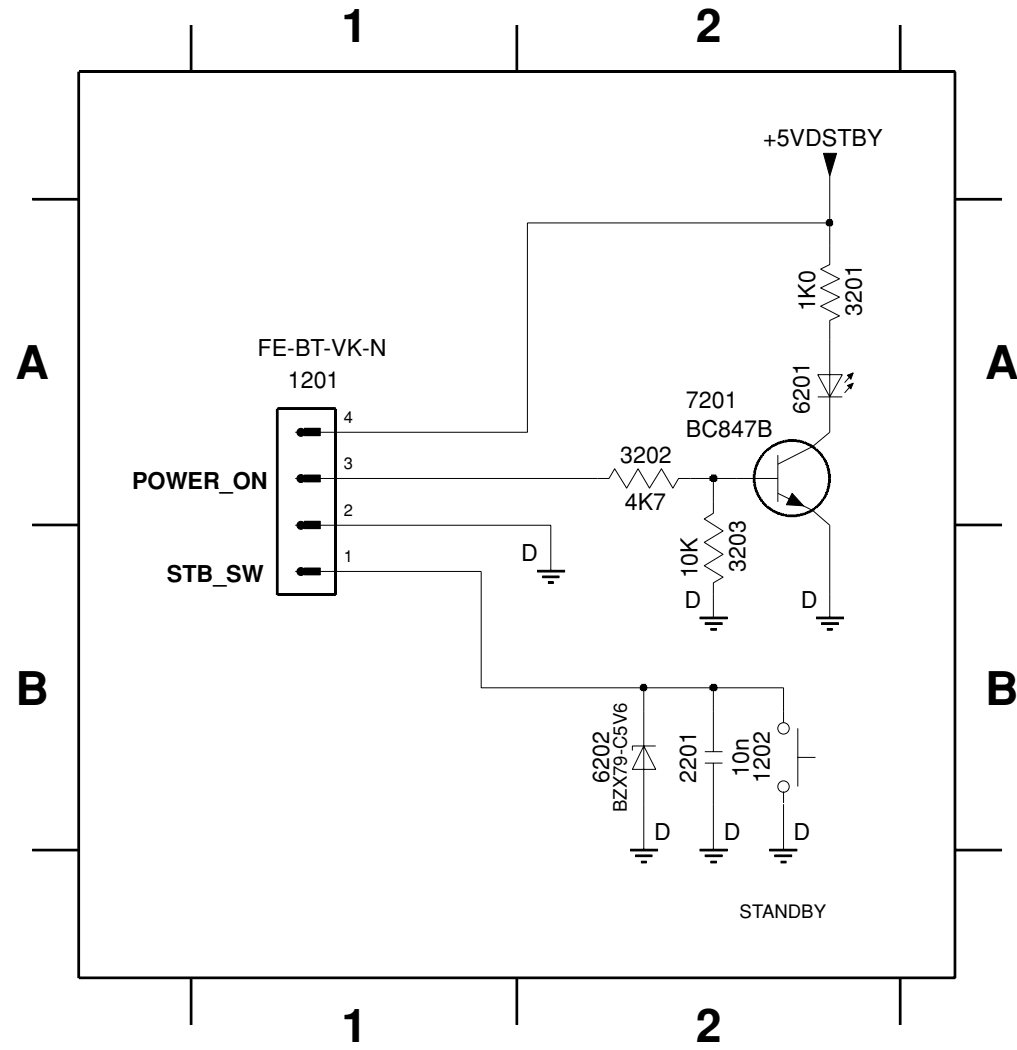


	7G	6G	5G	4G	3G	2G	1G
P1	a	a	a	a	a	a	a
P2	j, p	j, p	j, p	j, p	j, p	j, p	j, p
P3	h	h	h	h	h	h	h
P4	k	k	k	k	k	k	k
P5	b	b	b	b	b	b	b
P6	f	f	f	f	f	f	f
P7	m	m	m	m	m	m	m
P8	g	g	g	g	g	g	g
P9	c	c	c	c	c	c	c
P10	e	e	e	e	e	e	e
P11	r	r	r	r	r	r	r
P12	n	n	n	n	n	n	n
P13	d	d	d	d	d	d	d
P14	-	-	col	-	col	-	-
P15	s	s	s	s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

FTD DISPLAY PIN NO.	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	3
FUNCTION	F	F	N	P	P	P	P	P	P	P	P	P	P	P	P	P	N	N	N	N	N	7	6	5	4	3	2	1	N	F	F	F	F	
	1	2	P	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	C	C	C	C	C	G	G	G	G	G	G	P	2	2	2	2

FRONT STANDBY PART - CIRCUIT DIAGRAM

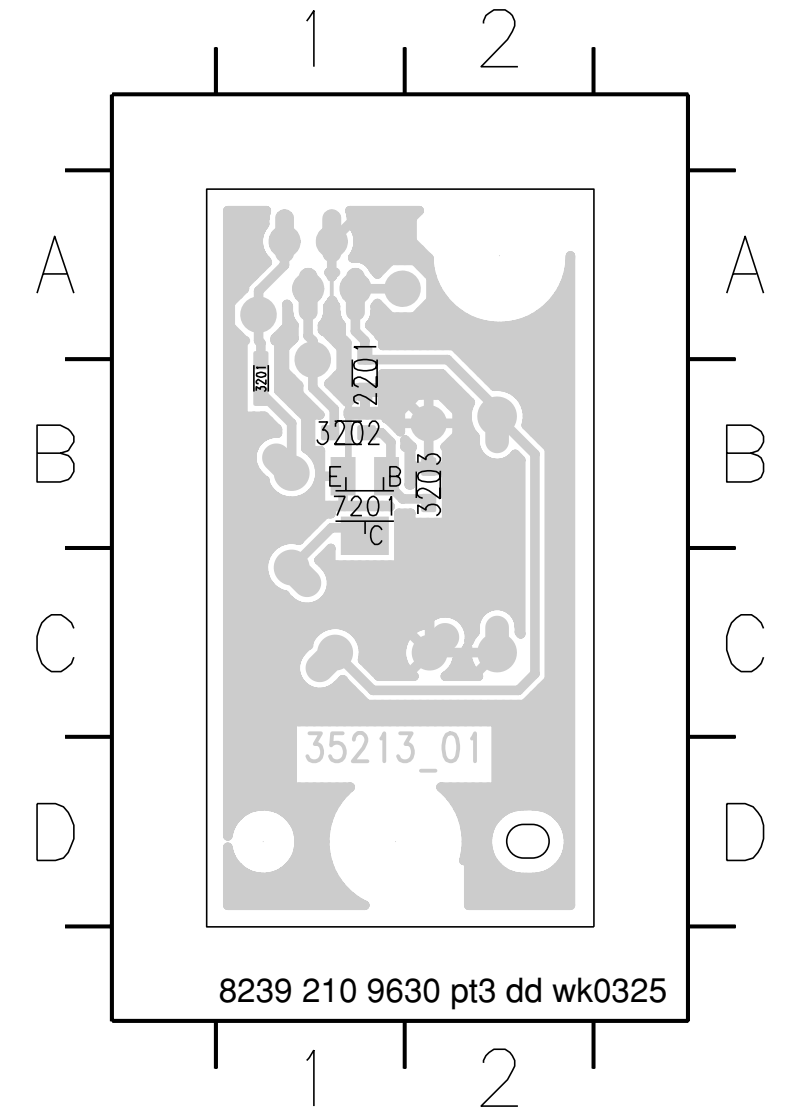
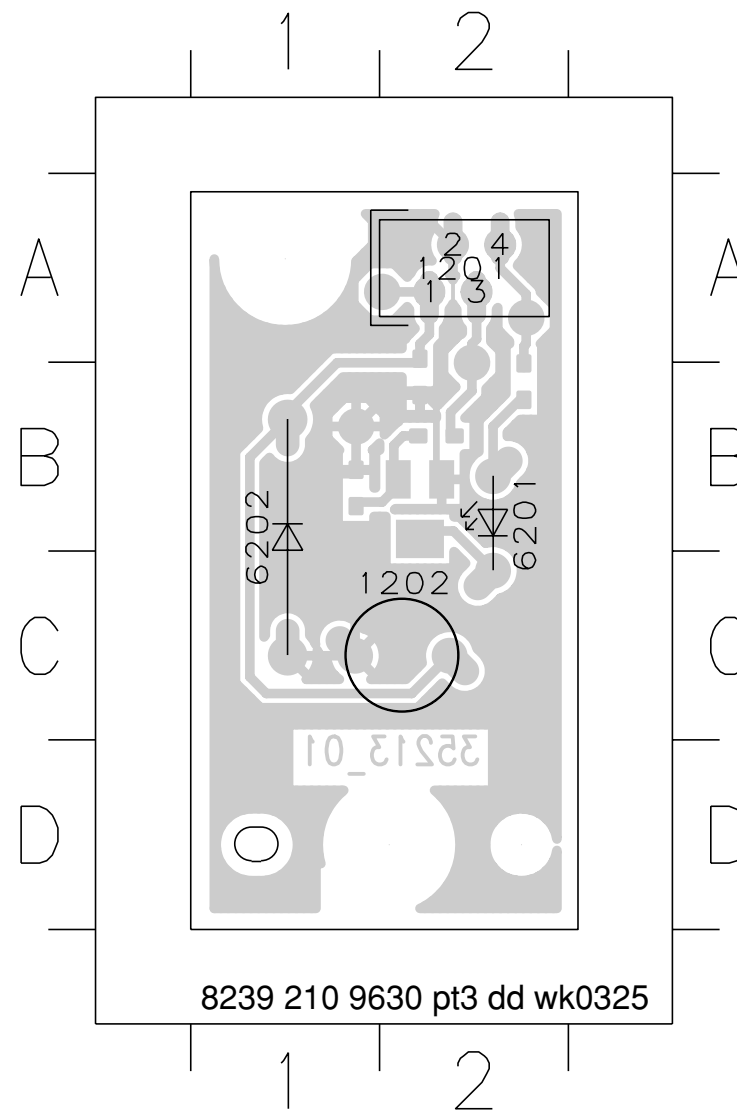
1201 A1 2201 B2 3202 A2 6201 A2 7201 A2
 1202 B2 3201 A2 3203 B2 6202 B2



FRONT STANDBY PART - COMPONENT & CHIP LAYOUT

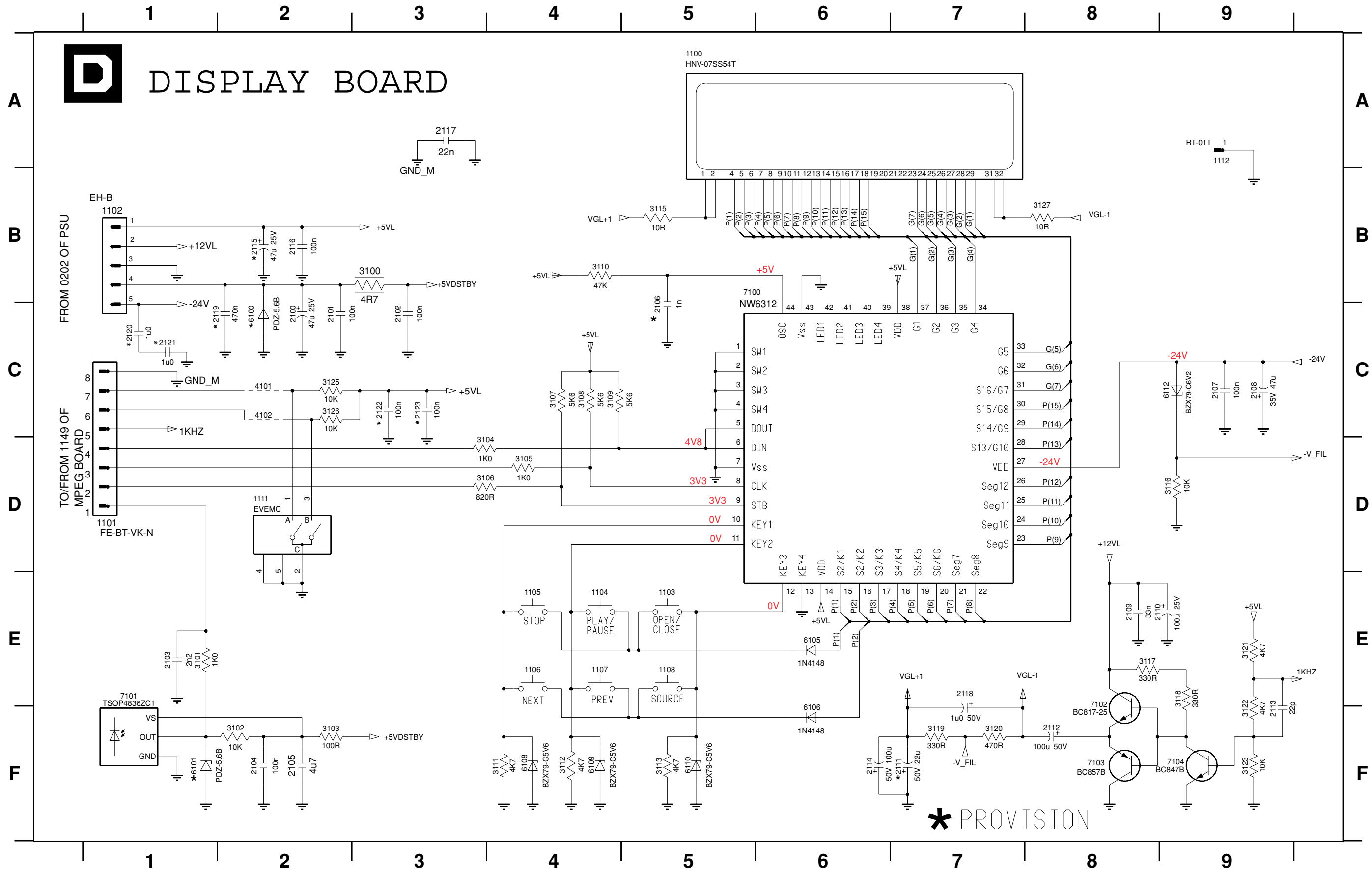
1201 A2 6201 B2
 1202 C2 6202 B1

2201 B1 3203 B2
 3201 B1 7201 B1
 3202 B1



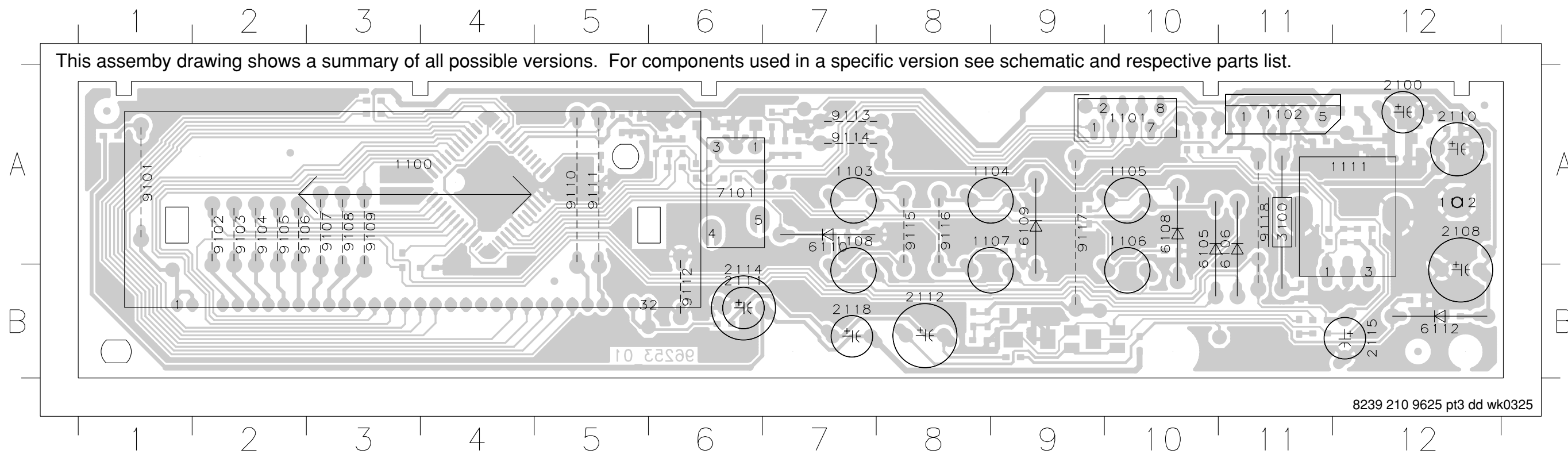
FRONT DISPLAY PART - CIRCUIT DIAGRAM

1100 A5	1103 E5	1106 E4	1111 D2	2101 C2	2104 F2	2107 C9	2110 E9	2113 F9	2116 B2	2119 C2	2122 C3	3101 E1	3104 D3	3107 C4	3110 B4	3113 F5	3117 E8	3120 F7	3123 F9	3127 B8	6100 C2	6106 F6	6110 F5	7101 E1	7104 F9
1101 D1	1104 E4	1107 E4	1112 A9	2102 C3	2105 F2	2108 C9	2111 F7	2114 F6	2117 A3	2120 C1	2123 C3	3102 F2	3105 D4	3108 C4	3111 F4	3115 B5	3118 E9	3121 E9	3125 C2	4101 C2	6101 F1	6108 F4	6112 C9	7102 F8	
1102 B1	1105 E4	1108 E5	2100 C2	2103 E1	2106 C5	2109 E8	2112 F8	2115 B2	2118 E7	2121 C1	3100 B3	3103 F2	3106 D3	3109 C4	3112 F4	3116 D9	3119 F7	3122 F9	3126 C2	4102 C2	6105 E6	6109 F4	7100 B6	7103 F8	

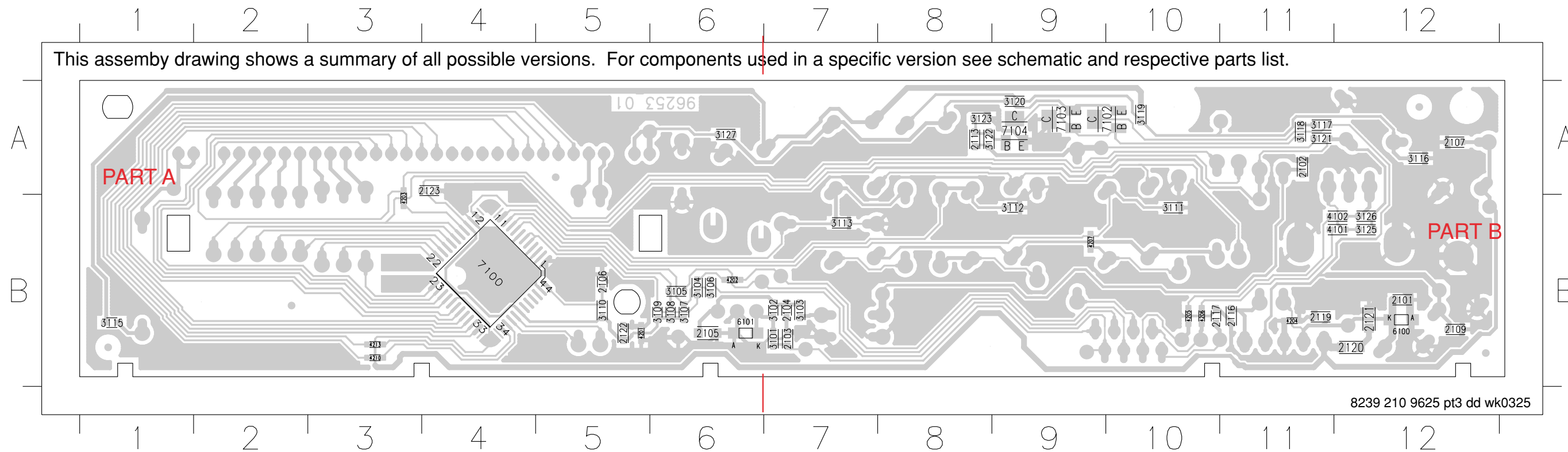


FRONT DISPLAY PART - COMPONENT & CHIP LAYOUT

1100	A3	1105	A10	1112	A12	2112	B8	6105	A10	6112	B12	9104	A2	9109	A3	9114	A7
1101	A10	1106	A10	2100	A12	2114	B6	6106	A11	7101	A6	9105	A2	9110	A5	9115	A8
1102	A11	1107	A8	2108	A12	2115	B12	6108	A10	9101	A1	9106	A2	9111	A5	9116	A8
1103	A7	1108	A7	2110	A12	2118	B7	6109	A9	9102	A2	9107	A3	9112	B6	9117	A9
1104	A8	1111	A12	2111	B6	3100	A11	6110	A7	9103	A2	9108	A3	9113	A7	9118	A11

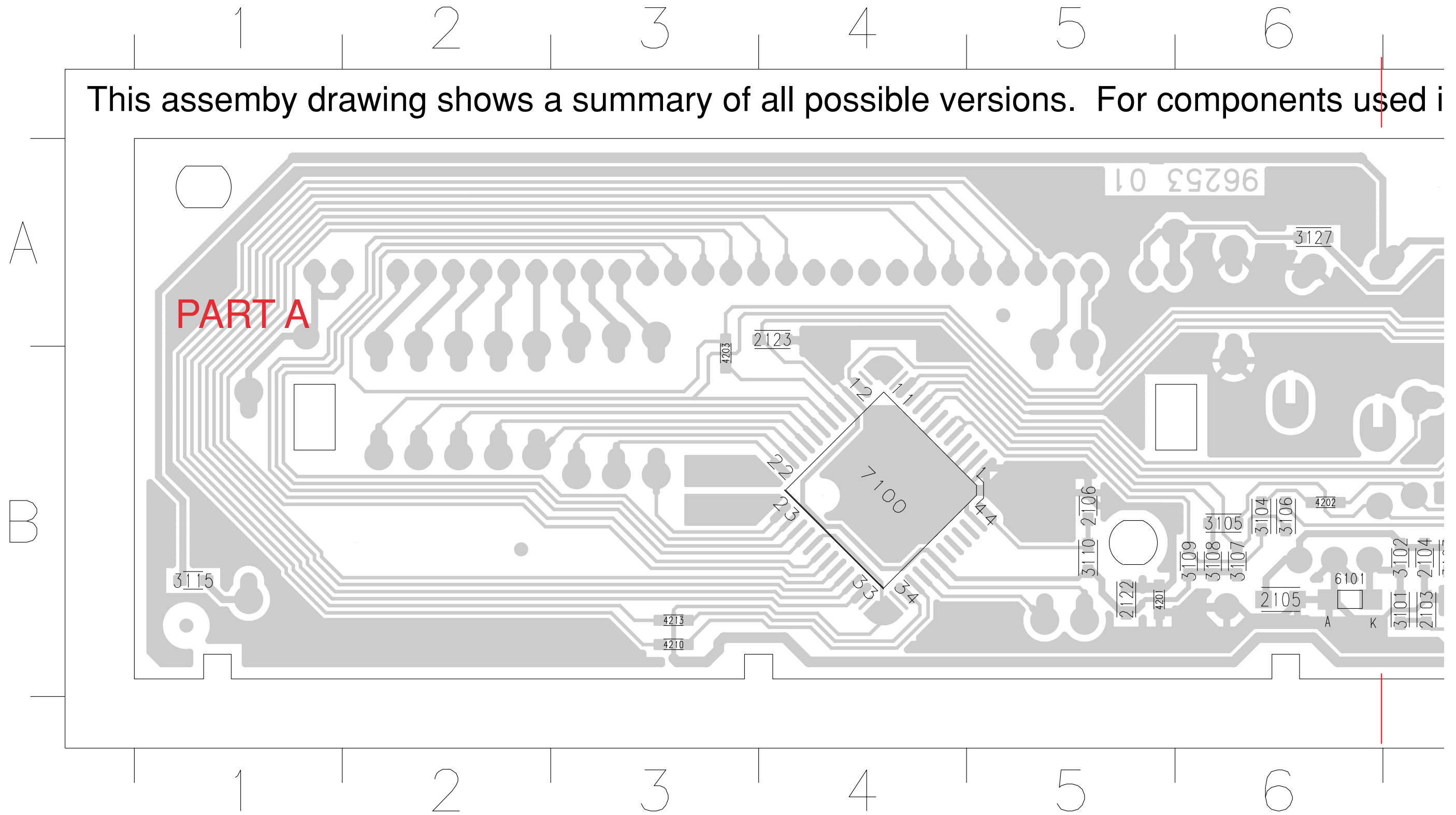


2101	B12	2106	B5	2117	B10	2123	A4	3105	B6	3110	B5	3116	A12	3121	A11	3127	A6	4203	B3	4210	B3	7102	A1C
2102	A11	2107	A12	2119	B11	3101	B7	3106	B6	3111	B10	3117	A11	3122	A8	4101	B12	4204	B11	4213	B3	7103	A9
2103	B7	2109	B12	2120	B12	3102	B7	3107	B6	3112	B9	3118	A11	3123	A8	4102	B12	4205	B1C	6100	B12	7104	A9
2104	B7	2113	A8	2121	B12	3103	B7	3108	B6	3113	B7	3119	A1C	3125	B12	4201	B5	4206	B1C	6101	B6		
2105	B6	2116	B11	2122	B5	3104	B6	3109	B6	3115	B1	3120	A9	3126	B12	4202	B6	4207	B9	7100	B4		



FRONT DISPLAY PART - CHIP LAYOUT PART A

This assembly drawing shows a summary of all possible versions. For components used i



FRONT DISPLAY PART - CHIP LAYOUT PART B

7

8

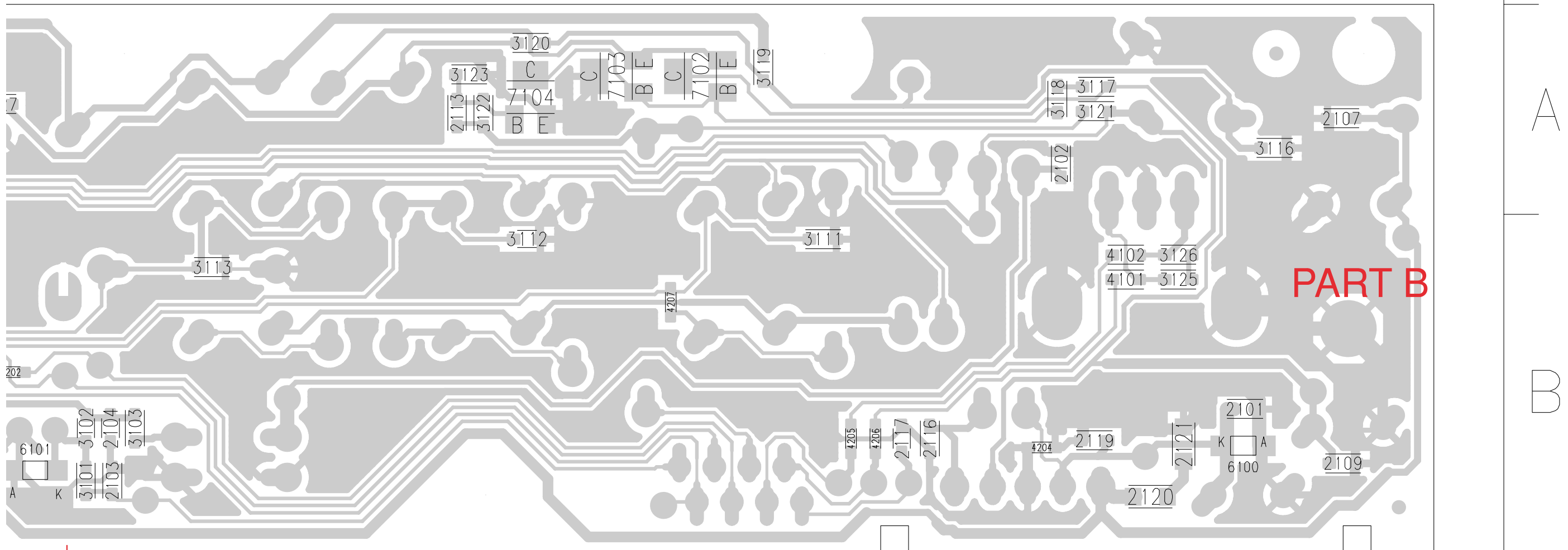
9

10

11

12

parts used in a specific version see schematic and respective parts list.



8239 210 9625 pt3 dd wk0325

7

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12

ELECTRICAL PARTS LIST - FRONT BOARDS**MISCELLANEOUS**

1100	3141 010 50311	VFD Display HNV-07SS54T
1101	4822 265 11515	Flex Socket 8P Vert
1103	4822 276 13775	Tact Switch
1104	4822 276 13775	Tact Switch
1105	4822 276 13775	Tact Switch
1106	4822 276 13775	Tact Switch
1107	4822 276 13775	Tact Switch
1108	4822 276 13775	Tact Switch
1111	2422 129 16975	Rotary Encoder 12P
1201	4822 267 10733	Flex Socket 4P Vert
1202	4822 276 13775	Tact Switch

CAPACITORS

2100	4822 124 80483	47uF 20% 6,3V
2101	2238 586 59812	100nF +80/-20% 50V
2102	2238 586 59812	100nF +80/-20% 50V
2103	4822 126 14238	2,2nF 50V
2104	2238 586 59812	100nF +80/-20% 50V
2105	2020 552 96305	4,7uF +80/-20% 10V
2107	2238 586 59812	100nF +80/-20% 50V
2108	3198 028 44790	47uF 20% 35V
2109	4822 126 14549	33nF 16V
2110	4822 124 23052	100uF 20% 16V
2112	4822 124 40207	100uF 20% 25V
2113	4822 122 33761	22pF 5% 50V
2114	4822 124 40207	100uF 20% 25V
2116	2238 586 59812	100nF +80/-20% 50V
2117	2238 916 15641	22nF 10% 25V
2201	5322 126 11583	10nF 10% 50V

RESISTORS

3100	4822 052 10478	4R7 5% 0,33W
3101	4822 051 30102	1k 5% 0,062W
3102	4822 051 30103	10k 5% 0,062W
3103	4822 051 30101	100R 5% 0,062W
3104	4822 051 30101	100R 5% 0,062W
3105	4822 051 30101	100R 5% 0,062W
3106	4822 051 30101	100R 5% 0,062W
3107	4822 051 30103	10k 5% 0,062W
3108	4822 051 30103	10k 5% 0,062W
3109	4822 051 30103	10k 5% 0,062W
3110	4822 117 12925	47k 1% 0,063W
3111	4822 051 30472	4k7 5% 0,062W
3112	4822 051 30472	4k7 5% 0,062W
3113	4822 051 30472	4k7 5% 0,062W
3115	4822 051 30109	10R 5% 0,062W
3116	4822 051 30103	10k 5% 0,062W
3117	4822 051 30331	330R 5% 0,062W
3118	4822 051 30331	330R 5% 0,062W
3119	4822 051 30331	330R 5% 0,062W
3120	4822 051 30471	470R 5% 0,062W
3121	4822 051 30472	4k7 5% 0,062W

3122	4822 051 30472	4k7 5% 0,062W
3123	4822 051 30103	10k 5% 0,062W
3125	4822 051 30103	10k 5% 0,062W
3126	4822 051 30103	10k 5% 0,062W
3127	4822 051 30109	10R 5% 0,062W
3201	4822 051 30102	1k 5% 0,062W
3202	4822 051 30472	4k7 5% 0,062W
3203	4822 051 30103	10k 5% 0,062W
4101	4822 051 30008	0R Jumper 0603
4102	4822 051 30008	0R Jumper 0603
4201	4822 051 30008	0R Jumper 0603
4202	4822 051 30008	0R Jumper 0603
4203	4822 051 30008	0R Jumper 0603
4204	4822 051 30008	0R Jumper 0603
4205	4822 051 30008	0R Jumper 0603
4206	4822 051 30008	0R Jumper 0603
4207	4822 051 30008	0R Jumper 0603
4210	4822 051 30008	0R Jumper 0603
4213	4822 051 30008	0R Jumper 0603

DIODES

6105	4822 130 30621	1N4148
6106	4822 130 30621	1N4148
6108	4822 130 34173	BZX79-C5V6
6109	4822 130 34173	BZX79-C5V6
6110	4822 130 34173	BZX79-C5V6
6112	4822 130 34167	BZX79-B6V2
6201	9322 179 76676	LTL-816EELC
6202	4822 130 34173	BZX79-C5V6

TRANSISTORS & INTEGRATED CIRCUITS

7100	9322 186 03671	UPD16312GB-3B4
7101	9322 185 95667	IR RECEIVER TSOP4836
7102	4822 130 42804	BC817-25
7103	4822 130 60373	BC857B
7104	5322 130 60159	BC847B
7201	5322 130 60159	BC847B

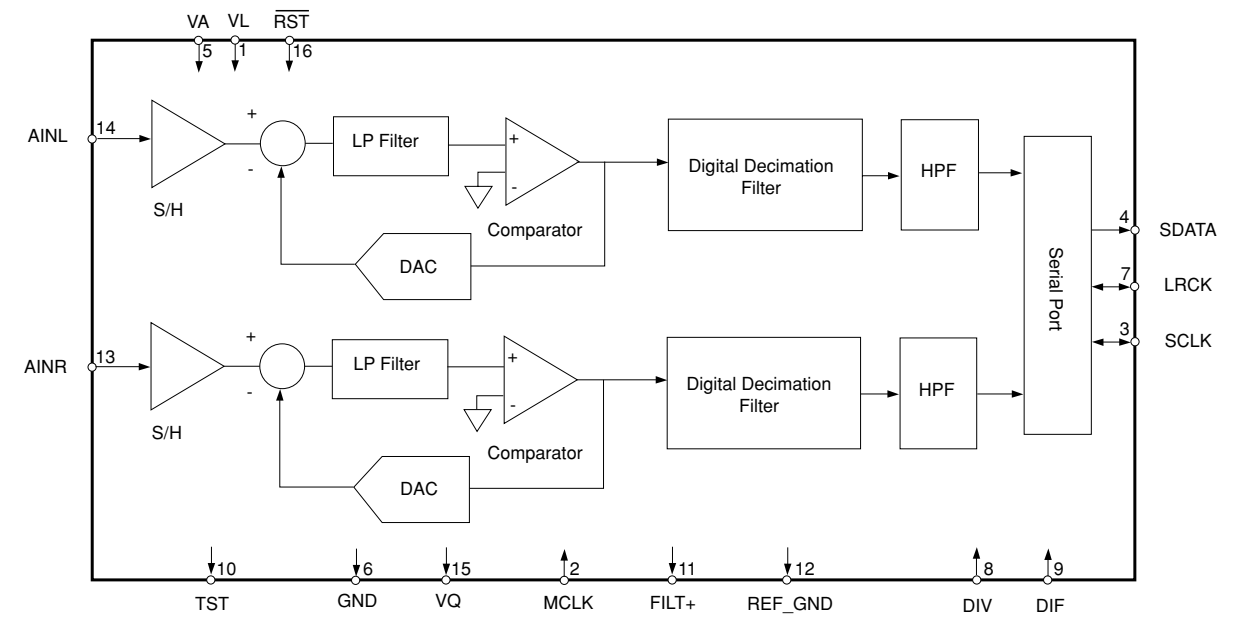
Note: Only the parts mentioned in this list are normal service spare parts.

AV BOARD

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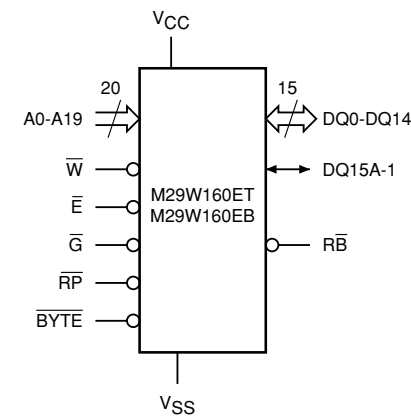
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CS5333 Internal Block diagram



M29W160ET Internal Block diagram

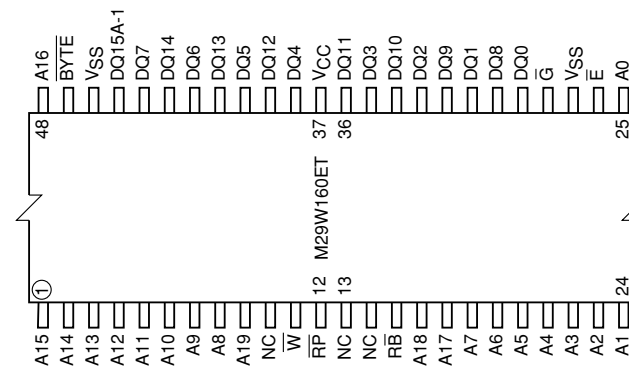
Logic Diagram



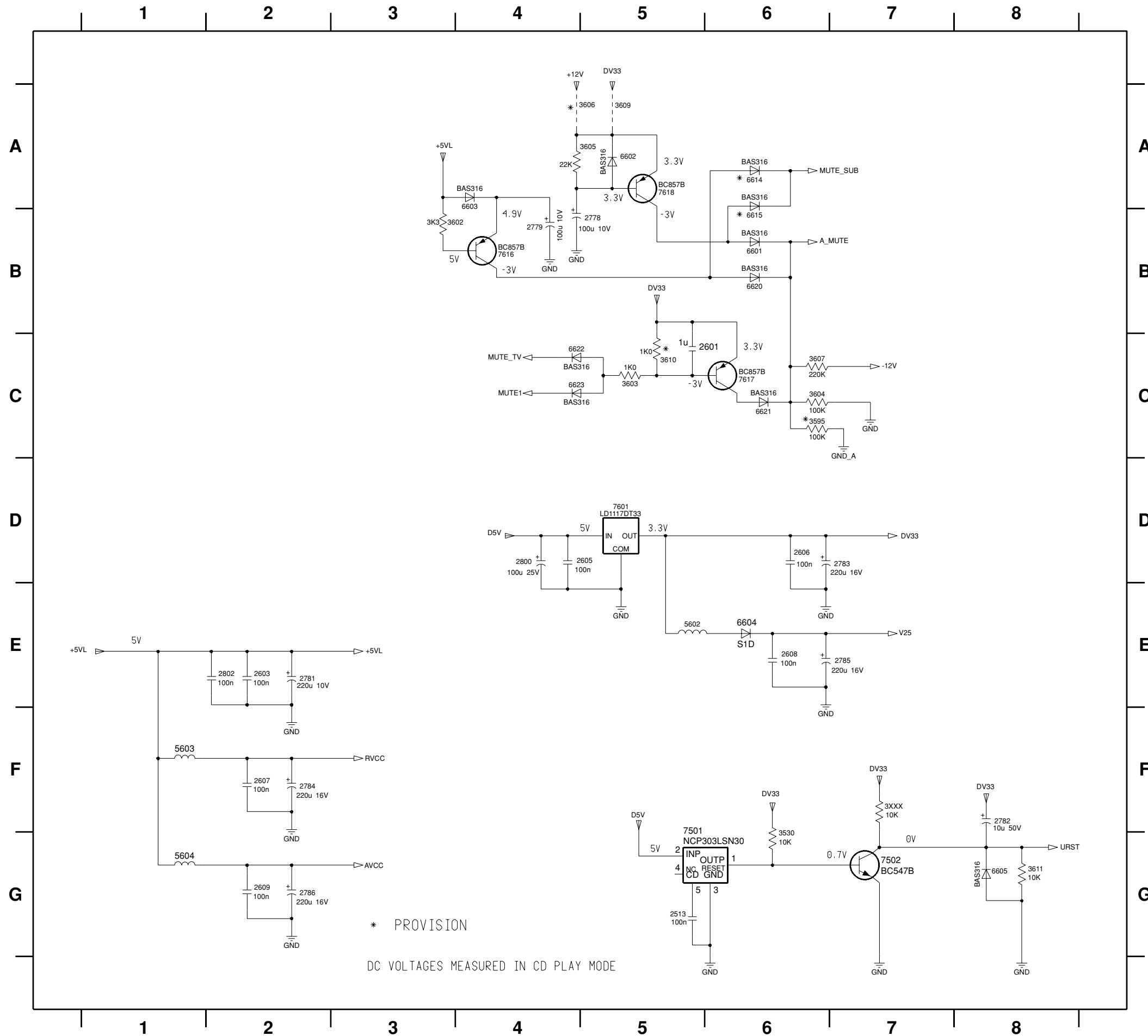
Signal Name

A0-A19	Address Inputs
DQ0-DQ7	Data Inputs/Outputs
DQ8-DQ14	Data Inputs/Outputs
DQ15A-1	Data Input/Output or Address Input
\bar{E}	Chip Enable
\bar{G}	Output Enable
\bar{W}	Write Enable
\bar{RP}	Reset/Block Temporary Unprotect
\bar{RB}	Ready/Busy Output
\bar{BYTE}	Byte/Word Organization Select
V _{CC}	Supply Voltage
V _{SS}	Ground
NC	Not Connected Internally

Pin Connection



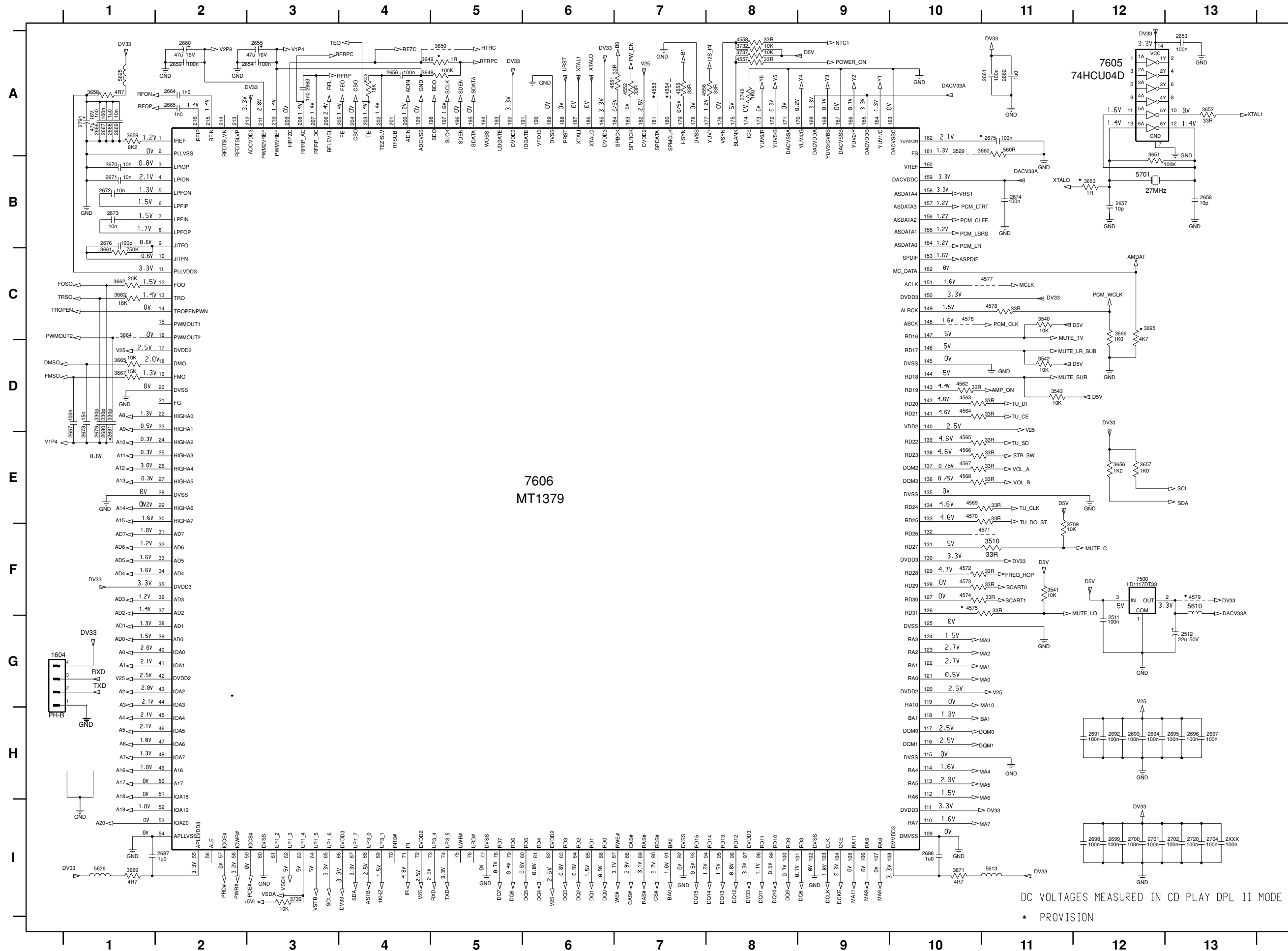
RESET, POWER SUPPLY & LINE-OUT MUTING CIRCUIT



- 2513 G5
- 2601 C6
- 2603 E2
- 2605 D5
- 2606 D6
- 2607 F2
- 2608 E6
- 2609 G2
- 2778 B5
- 2779 B4
- 2781 E2
- 2782 F8
- 2783 D7
- 2784 F2
- 2785 E7
- 2786 G2
- 2800 D4
- 2802 E2
- 3530 F6
- 3595 C6
- 3602 B3
- 3603 C5
- 3604 C6
- 3605 A5
- 3606 A5
- 3607 C6
- 3609 A5
- 3610 C5
- 3611 G8
- 3XXX F7
- 5602 E5
- 5603 F1
- 5604 G1
- 6601 B6
- 6602 A5
- 6603 A4
- 6604 E6
- 6605 G8
- 6614 A6
- 6615 B6
- 6620 B6
- 6621 C6
- 6622 C4
- 6623 C4
- 7501 G5
- 7502 G7
- 7601 D5
- 7616 B4
- 7617 C6
- 7618 A5

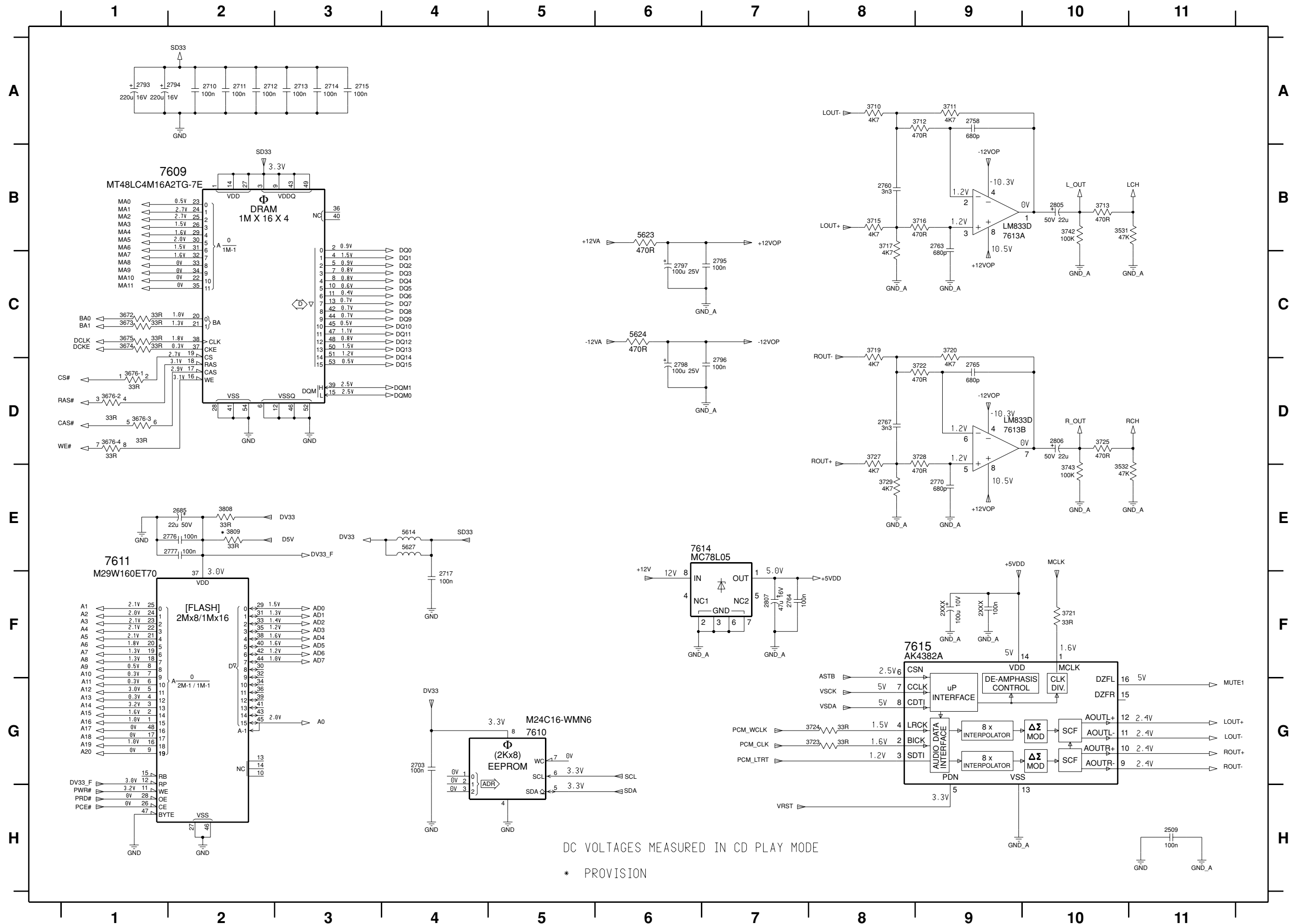
* PROVISION
DC VOLTAGES MEASURED IN CD PLAY MODE

MPEG DECODER CIRCUIT



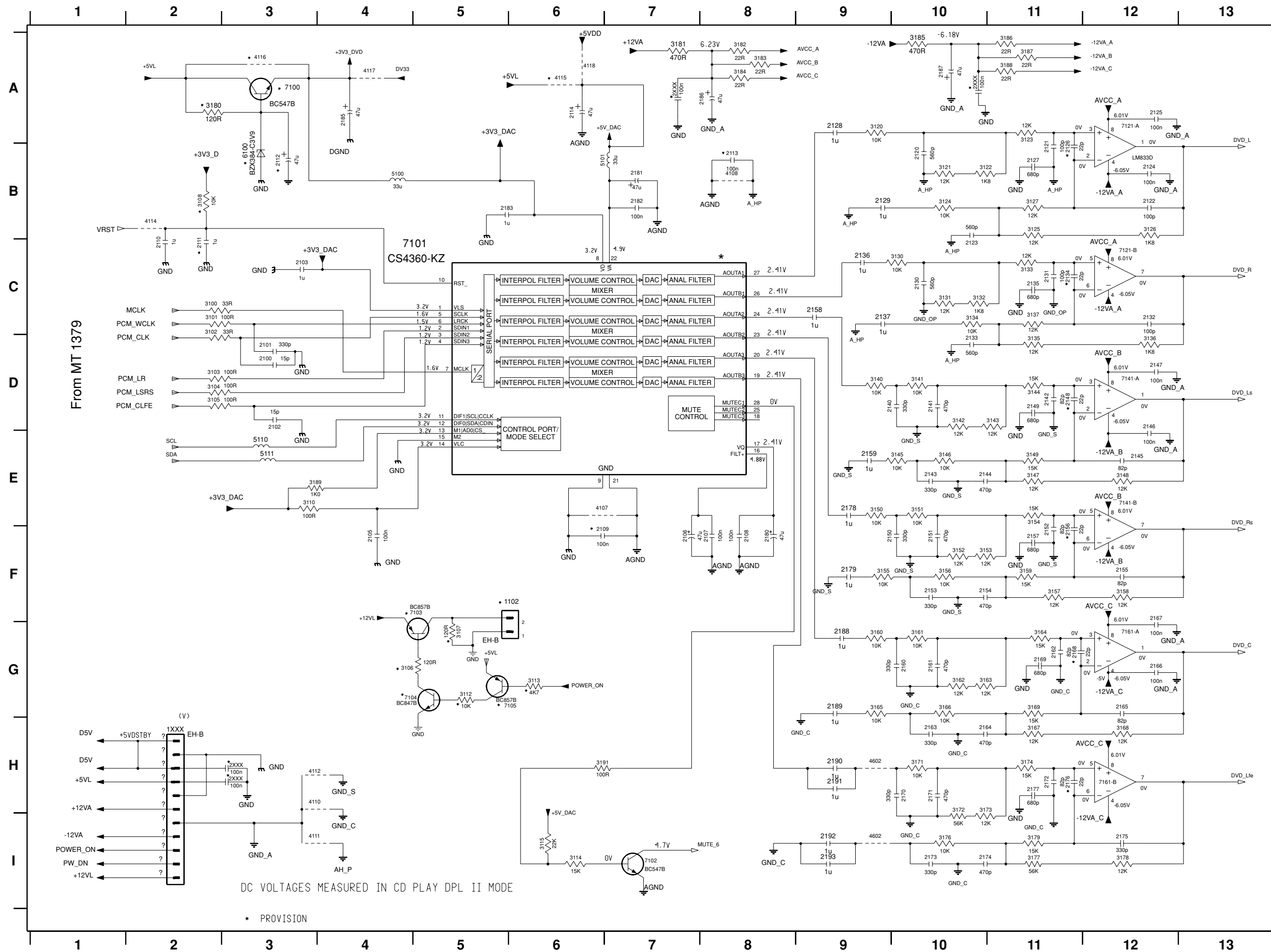
- 1604 G1
- 2511 G12
- 2512 G13
- 2653 A13
- 2654 A3
- 2655 A3
- 2656 A4
- 2657 B12
- 2658 B13
- 2659 A2
- 2660 A2
- 2661 A11
- 2662 A11
- 2663 A3
- 2664 A2
- 2665 A2
- 2666 A1
- 2667 A1
- 2668 A1
- 2669 A1
- 2670 B1
- 2671 B1
- 2672 B1
- 2673 B1
- 2674 B11
- 2675 A11
- 2676 B1
- 2678 E1
- 2679 E1
- 2680 E1
- 2681 E1
- 2686 I10
- 2687 I2
- 2691 H12
- 2692 H12
- 2693 H12
- 2694 H12
- 2695 H13
- 2696 H13
- 2698 H12
- 2699 H12
- 2700 H12
- 2701 H12
- 2702 H13
- 2704 H13
- 2720 H13
- 2791 A1
- 2XXX I13
- 3510 F11
- 3529 A10
- 3540 C11
- 3541 F11
- 3542 D11
- 3543 D11
- 3648 A4
- 3649 A4
- 3650 A5
- 3651 B12
- 3652 A13
- 3653 B12
- 3655 A4
- 3656 E12
- 3657 E12
- 3658 A1
- 3659 A1
- 3660 A11
- 3661 C1
- 3662 C1
- 3663 C1
- 3664 C1
- 3665 D1
- 3666 C12
- 3667 D1
- 3669 I1
- 3671 H10
- 3695 C12
- 3709 E11
- 3732 A8
- 3737 A8
- 3739 I3
- 3740 A8
- 4551 A6
- 4552 A7
- 4553 A7
- 4554 A7
- 4555 A7
- 4556 A7
- 4557 A8
- 4558 A8
- 4562 D10
- 4563 D10
- 4564 D10
- 4565 E10
- 4566 E10
- 4567 E10
- 4568 E10
- 4569 E10
- 4570 F10
- 4571 F10
- 4572 F10
- 4573 F10
- 4574 F10
- 4575 F10
- 4576 C10
- 4577 C11
- 4578 C11
- 4579 F13
- 5625 A1
- 5626 H1
- 5701 B12
- 7500 F12
- 7605 A12
- 7606 E6

FLASH, DRAM, LINE-OUT DAC & PRE-AMPLIFIER CIRCUIT



- 2509 H11
- 2685 E2
- 2703 G4
- 2710 A2
- 2711 A2
- 2712 A2
- 2713 A3
- 2714 A3
- 2715 A3
- 2717 F4
- 2758 A9
- 2760 B8
- 2763 B9
- 2764 F7
- 2765 D9
- 2767 D8
- 2770 E9
- 2776 E2
- 2777 E2
- 2793 A1
- 2794 A2
- 2795 C7
- 2796 D7
- 2797 C6
- 2798 D6
- 2805 B10
- 2806 D10
- 2807 F7
- 2XXX F9
- 2XXX F9
- 3531 B10
- 3532 E10
- 3672 C1
- 3673 C1
- 3674 C1
- 3675 C1
- 3676-1 D1
- 3676-2 D1
- 3676-3 D1
- 3676-4 D1
- 3710 A8
- 3711 A9
- 3712 A9
- 3713 B10
- 3715 B8
- 3716 B9
- 3717 B8
- 3719 C8
- 3720 C9
- 3721 F10
- 3722 D9
- 3723 G8
- 3724 G8
- 3725 D10
- 3727 D8
- 3728 D9
- 3729 E8
- 3742 B10
- 3743 E10
- 3808 E2
- 3809 E2
- 5614 E4
- 5623 B6
- 5624 C6
- 5627 E4
- 7609 B2
- 7610 G5
- 7611 E1
- 7613A B9
- 7613B D9
- 7614 E6

DAC & PRE-AMPLIFIER CIRCUIT



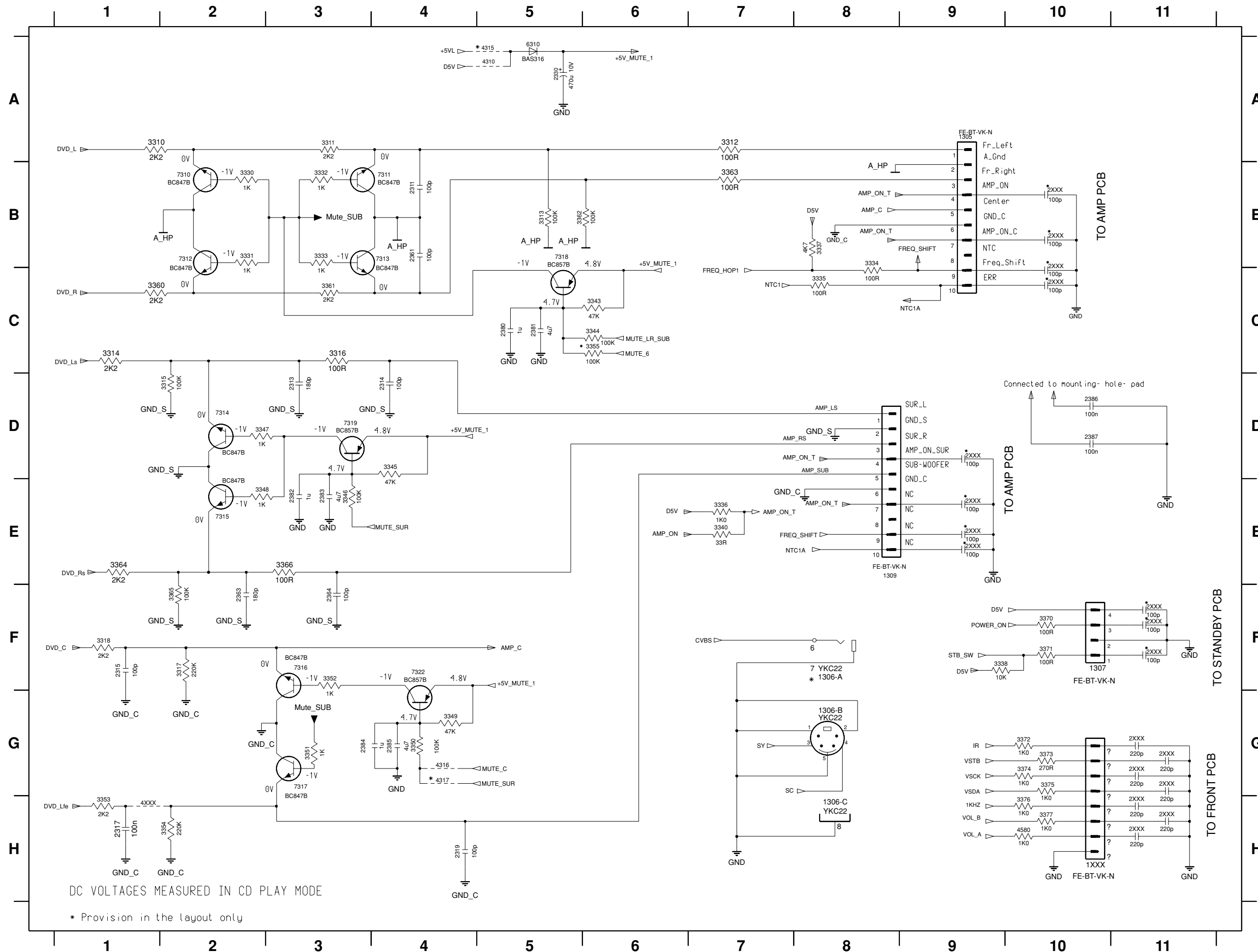
From MT 1379

DC VOLTAGES MEASURED IN CD PLAY DPL II MODE

* PROVISION

1102 F6	3130 C10
1XXX H2	3131 C10
2100 D3	3132 C10
2101 D3	3133 C11
2102 D3	3134 C10
2103 C3	3135 D11
2105 F4	3136 D12
2106 F7	3137 C11
2107 F8	3140 D9
2108 F8	3141 D10
2109 F6	3142 D10
2110 C2	3143 D11
2111 C2	3144 D11
2112 B3	3145 E10
2113 B8	3146 E10
2114 A6	3147 E11
2120 B10	3148 E12
2121 B11	3149 E11
2122 B12	3150 E9
2123 C10	3151 E10
2124 B12	3152 F10
2125 A12	3153 F10
2126 B11	3154 E11
2127 B11	3155 F9
2128 A9	3156 F10
2129 B9	3157 F11
2130 C10	3158 F12
2131 C11	3159 F11
2132 C12	3160 G9
2133 D10	3161 G10
2134 C11	3162 G10
2135 C11	3163 G10
2136 C9	3164 G11
2137 C9	3165 G9
2140 D9	3166 G10
2141 D10	3167 H11
2142 D11	3168 H12
2143 E10	3169 G11
2144 E10	3171 H10
2145 E12	3172 H10
2146 D12	3173 H10
2147 D12	3174 H11
2148 D11	3176 I10
2149 D11	3177 I11
2150 F9	3178 I12
2151 F10	3179 I11
2152 F11	3180 A2
2153 F10	3181 A7
2154 F10	3182 A8
2155 F12	3183 A8
2156 F11	3184 A8
2157 F11	3185 A10
2158 C9	3186 A11
2159 E9	3187 A11
2160 G10	3188 A11
2161 G10	3189 E3
2162 G11	3191 H6
2163 H10	4107 E6
2164 H10	4108 B8
2165 G12	4110 H3
2166 G12	4111 I3
2167 F12	4112 H3
2168 G11	4114 B2
2169 G11	4115 A6
2170 H10	4116 A3
2171 H10	4117 A4
2172 H11	4118 A6
2173 I10	4602 H9
2174 I10	4602 I9
2175 I12	5100 B4
2176 H11	5101 B6
2177 H11	5110 E3
2178 E9	5111 E3
2179 F9	6100 B3
2180 F8	7100 A3
2181 B7	7102 I7
2182 B7	7103 F4
2183 B5	7104 F5
2185 A4	7105 G6
2186 A8	7121-A A12
2187 A10	7121-B C12
2188 G9	7141-A D12
2189 G9	7141-B E12
2190 H9	7161-A G12
2191 H9	7161-B H12
2192 I9	
2193 I9	
2XXX H3	
2XXX H3	
2XXX H3	
2XXX A7	
3100 C2	
3101 C2	
3102 C2	
3103 D2	
3104 D2	
3105 D2	
3106 G4	
3107 G5	
3108 B2	
3110 E3	
3112 G5	
3113 G6	
3114 I6	
3115 I6	
3120 A9	
3121 B10	
3122 B10	
3123 A11	
3124 B10	
3125 B11	
3126 B12	
3127 B11	

MUTING (6-CHANNEL) & S-VIDEO OUT CIRCUIT



DC VOLTAGES MEASURED IN CD PLAY MODE

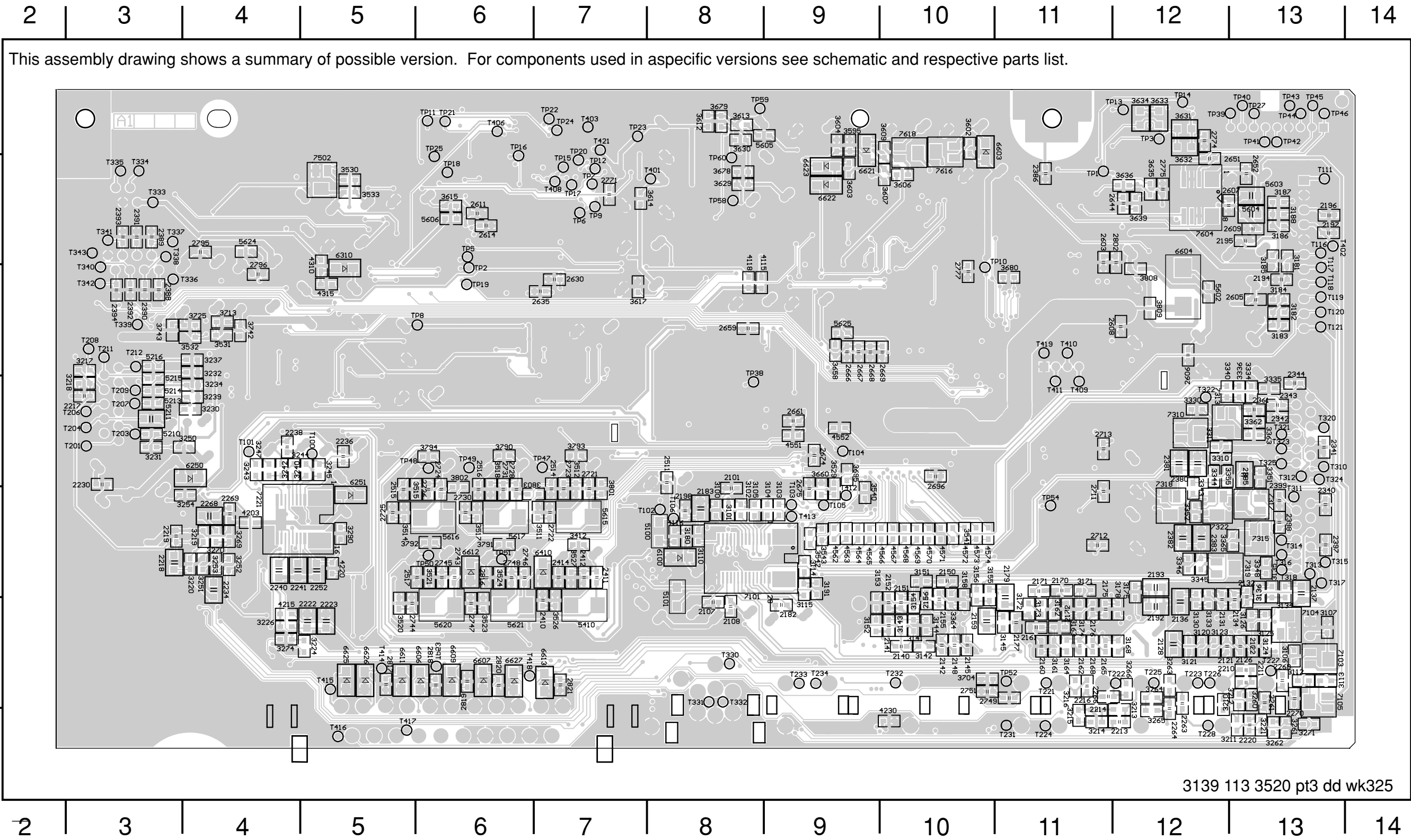
* Provision in the layout only

- 1305 A9
- 1306-A F8
- 1306-B G8
- 1306-C H8
- 1307 F10
- 1309 E8
- 1XXX H10
- 2311 B4
- 2313 D3
- 2314 D4
- 2315 F1
- 2317 H1
- 2319 H4
- 2330 A5
- 2361 B4
- 2363 F2
- 2364 F3
- 2380 C5
- 2381 C5
- 2382 E3
- 2383 E3
- 2384 G3
- 2385 G4
- 2386 D10
- 2387 D10
- 2XXX B10
- 2XXX B10
- 2XXX C10
- 2XXX C10
- 2XXX F11
- 2XXX F11
- 2XXX G11
- 2XXX G11
- 2XXX G11
- 2XXX H11
- 2XXX H11
- 2XXX H11
- 2XXX D9
- 2XXX E9
- 2XXX E9
- 310 A1
- 311 A3
- 312 A7
- 313 B5
- 314 C1
- 315 D2
- 316 C3
- 317 F2
- 318 F1
- 330 B2
- 331 B2
- 332 B3
- 333 B3
- 334 B8
- 335 C8
- 336 E7
- 337 B8
- 338 F9
- 340 E7
- 343 C6
- 344 C6
- 345 D4
- 346 E3
- 347 D2
- 348 E2
- 349 G4
- 350 G4
- 351 G3
- 352 F3
- 353 H1
- 354 H2
- 355 C6
- 360 C1
- 361 C3
- 362 B5
- 363 B7
- 364 E1
- 365 F2
- 366 E3
- 370 F10
- 371 F10
- 372 G10
- 373 G10
- 374 G10
- 375 G10
- 376 H10
- 377 H10
- 430 A5
- 431 A5
- 436 G4
- 437 G4
- 480 H10
- 4XX H1
- 630 A5
- 730 B2
- 731 B4
- 732 B2
- 733 B4
- 734 D2
- 735 E2
- 736 F3
- 737 G3
- 738 B5
- 739 D3
- 732 F4

COMPONENT & CHIP LAYOUT MAPPING

1101 C2	2167 G4	2601 C6	2673 C6	2791 D6	3257 F12	3623 D9	3724 E10	5607 C8	7631 C9
1104 G2	2169 G4	2610 D9	2676 C6	2793 E3	3258 F11	3624 D9	3727 E12	5608 C8	7632 C9
1201 G2	2173 G3	2612 C9	2677 C5	2794 F3	3267 E12	3625 D9	3728 D12	5609 B8	7637 G10
1202 G4	2174 G3	2613 C8	2678 D7	2797 D11	3268 E12	3626 D9	3729 E12	5610 E6	7638 G10
1203 G5	2178 F5	2615 C9	2679 D7	2798 D11	3272 G11	3637 C8	3732 F6	5613 F5	7653 G9
1204 G6	2180 G7	2616 E9	2680 C5	2799 D11	3273 G11	3638 C3	3733 C10	5614 D4	7654 G8
1205 G6	2181 G6	2617 D9	2681 C10	2800 D2	3312 E2	3640 C9	3734 C10	5623 C3	
1206 F6	2185 C8	2618 E9	2685 D3	2803 C9	3313 E2	3642 D7	3735 C9	5626 D5	
1208 E12	2186 D2	2619 E9	2686 E5	2805 D11	3314 F3	3643 B9	3736 C9	5627 D3	
1305 E2	2187 C2	2620 D9	2687 D5	2806 D11	3315 F2	3644 B9	3737 F7	5701 E7	
1306 G7	2188 G4	2621 D9	2691 F6	2807 C11	3316 F2	3645 B3	3739 C3	6601 C5	
1307 C12	2189 G3	2622 D9	2692 D5	2810 E8	3317 F3	3646 D10	3740 E6	6602 C5	
1308 D12	2190 F4	2623 D9	2693 E6	2811 E9	3318 F3	3647 C5	3795 G10	6605 C10	
1309 F2	2191 F4	2624 C9	2694 E5	2812 E9	3331 E3	3648 E9	3796 G10	6614 C5	
1604 D4	2212 F12	2625 C7	2695 E5	2813 F9	3332 E3	3649 E9	3797 G10	6615 C5	
1609 C9	2215 F11	2626 C9	2697 D6	2824 F9	3333 E3	3650 E9	3798 G10	6620 C5	
1612 G9	2224 F10	2627 C9	2698 D6	2825 G10	3337 F12	3651 E7	3813 G9	7100 F7	
1712 B2	2231 E12	2628 D9	2699 F5	2826 G10	3338 F6	3652 E7	3814 G9	7102 F6	
2100 F7	2232 E12	2629 D10	2700 E6	3108 F7	3347 F3	3653 E7	3816 G8	7121 G3	
2102 F7	2233 F12	2631 D9	2701 F5	3122 G3	3349 F3	3655 D9	3817 G8	7141 G5	
2103 F6	2235 F12	2632 E9	2702 E5	3127 G3	3350 F3	3656 D4	3818 G9	7161 G4	
2105 F7	2237 E10	2633 E10	2703 D4	3131 G3	3353 F2	3657 D4	3819 G9	7201 E12	
2106 G7	2239 E11	2634 C7	2704 D5	3132 F3	3354 F2	3659 D6	3820 G9	7202 G11	
2109 F7	2250 G10	2636 C9	2710 E4	3137 F3	3360 E2	3661 C6	3825 G9	7203 G11	
2110 F7	2251 G11	2637 C8	2714 E4	3140 G5	3361 E3	3662 C6	4107 F7	7204 G11	
2111 F7	2262 F11	2638 C8	2715 E4	3146 G5	3366 F2	3663 D6	4108 G6	7205 F10	
2112 F7	2265 F11	2639 C8	2717 E4	3147 G5	3370 C12	3664 C6	4110 G6	7220 F11	
2113 G6	2267 E12	2640 C8	2720 E5	3148 G5	3371 C12	3665 C5	4111 G6	7311 E3	
2114 F8	2311 E2	2641 D8	2758 D11	3149 G5	3372 D12	3666 F6	4112 G6	7312 E3	
2120 G3	2313 F2	2642 D8	2760 D11	3150 F5	3373 D12	3667 C6	4114 F6	7314 F2	
2123 G2	2314 F2	2643 C3	2763 D11	3157 F5	3374 D12	3669 D5	4117 E8	7316 E3	
2124 G3	2315 F3	2645 C8	2764 C11	3159 F5	3375 D12	3671 F5	4200 E10	7500 E7	
2125 G2	2317 F2	2646 D8	2765 D12	3160 G4	3376 D12	3672 E4	4201 F10	7501 C10	
2127 G3	2318 F2	2647 C8	2767 D12	3165 G3	3377 D12	3673 F5	4202 F11	7590 G9	
2129 G2	2319 E2	2648 C2	2770 E12	3166 G3	3378 D12	3674 F4	4316 F5	7591 G9	
2130 F3	2330 D10	2649 C4	2772 C9	3167 G4	3510 F5	3675 F4	4317 F5	7601 D3	
2133 F2	2345 C12	2653 E7	2773 C9	3169 G4	3590 G9	3676 E4	4553 E8	7602 D9	
2135 F3	2363 F2	2654 D9	2776 D5	3170 F4	3591 G9	3703 F6	4554 E8	7603 C3	
2143 G5	2364 F2	2655 C10	2778 B5	3176 G3	3592 G9	3709 F5	4555 E8	7605 E7	
2144 G5	2384 F3	2656 D9	2779 B5	3177 G4	3593 G9	3710 D11	4556 E8	7606 E5	
2146 G5	2387 C12	2657 E7	2781 B6	3179 F4	3594 G9	3711 D11	4557 F6	7609 F4	
2147 G5	2395 C12	2658 E7	2782 C10	3189 F7	3605 C5	3712 D11	4558 F7	7610 D4	
2149 G5	2396 C12	2660 D7	2783 D3	3222 G11	3610 C6	3715 D11	4576 F6	7611 D4	
2153 G5	2413 F8	2662 D4	2784 C7	3223 G11	3611 C10	3716 D11	4577 F6	7613 D11	
2154 G5	2509 D10	2663 E9	2785 D3	3225 G10	3616 D10	3717 D11	4578 F6	7614 C11	
2157 F5	2510 G10	2664 D6	2786 C7	3227 E10	3618 C10	3719 D12	4579 F6	7615 E10	
2158 G5	2512 E7	2665 D6	2787 D8	3246 F11	3619 C10	3720 D12	5110 F7	7617 C6	
2163 G3	2513 C10	2670 C6	2788 D8	3248 F11	3620 D10	3721 D10	5111 F7	7620 C7	
2164 G3	2518 D10	2671 C6	2789 C10	3255 F12	3621 D10	3722 D12	5217 F10	7621 C7	
2166 G4	2519 F6	2672 C6	2790 C5	3256 F12	3622 D9	3723 D10	5218 F11	7630 C9	

CHIP LAYOUT - BOTTOM VIEW



CHIP LAYOUT MAPPING

2101 E8	2218 F3	2517 F5	2816 F6	3174 G11	3266 G12	3604 C9	4562 F9	6625 G5
2107 F8	2219 F3	2603 D11	2817 G5	3175 F12	3269 F4	3606 C10	4563 F9	6626 G5
2108 G8	2220 H13	2605 D13	2818 G6	3178 G11	3270 F4	3607 C9	4564 F9	6627 G6
2121 G12	2222 G5	2606 D12	2819 G6	3180 F8	3271 H13	3609 C9	4565 F9	7101 F8
2122 G13	2223 G5	2607 C12	2820 G6	3181 D13	3274 G4	3612 B8	4566 F9	7103 G13
2126 G13	2230 E3	2608 D11	2821 G7	3182 D13	3290 F5	3613 B8	4567 F10	7104 G13
2128 G12	2234 F4	2609 C13	3100 F8	3183 D13	3310 E12	3614 C7	4568 F10	7105 G13
2131 F12	2236 E5	2611 C6	3101 F8	3184 D13	3311 E12	3615 C6	4569 F10	7221 F4
2132 F13	2238 E4	2614 C6	3102 F8	3185 D13	3330 E12	3617 D7	4570 F10	7310 E12
2134 F12	2240 F4	2630 D7	3103 F9	3186 C13	3334 E13	3629 C8	4571 F10	7313 E12
2136 F12	2241 F4	2635 D7	3104 F8	3187 C13	3335 E13	3630 C8	4572 F10	7315 F13
2137 F13	2252 F5	2644 C12	3105 F8	3188 C13	3336 E13	3631 B12	4573 F10	7317 F13
2140 G10	2260 G13	2651 C12	3106 G13	3191 F9	3340 E12	3632 C12	4574 F10	7318 F12
2141 G9	2261 G13	2652 C13	3107 G13	3210 G12	3343 E12	3633 B12	5100 F8	7319 F12
2142 G10	2263 G12	2659 D8	3110 F8	3211 H12	3344 E12	3634 B12	5101 F8	7322 F12
2145 G10	2264 G12	2661 E9	3112 G13	3212 G13	3345 F12	3635 C12	5210 E3	7502 C5
2148 G10	2266 G11	2666 D9	3113 G13	3213 G11	3346 F12	3636 C12	5211 E3	7604 C12
2150 F10	2268 F4	2667 D9	3114 F9	3214 G11	3348 F13	3639 C12	5213 E3	7616 C10
2151 F10	2269 F4	2668 D9	3115 F9	3215 G11	3351 E13	3658 D9	5214 E3	7618 C10
2152 F9	2270 G13	2669 D9	3120 G12	3216 G11	3352 F12	3660 E9	5215 E3	
2155 F10	2340 F13	2674 E9	3121 G12	3217 D3	3355 E12	3678 C8	5216 D3	
2156 F10	2341 E13	2675 E9	3123 G12	3218 E3	3362 E13	3679 B8	5410 F7	
2159 G10	2342 E13	2696 E10	3124 G13	3219 F4	3363 E13	3680 D11	5602 D12	
2160 G11	2343 E13	2711 F11	3125 G13	3220 F3	3364 F10	3695 E9	5603 C13	
2161 G11	2344 E13	2712 F11	3126 G13	3221 H13	3365 F12	3704 G10	5604 C13	
2162 G11	2361 E13	2713 E11	3130 F12	3224 G4	3412 F7	3713 D4	5605 B8	
2165 G11	2380 E12	2721 E7	3133 F12	3226 G4	3511 F6	3725 D3	5606 C6	
2168 G11	2381 E12	2722 F7	3134 F13	3230 E4	3512 E7	3742 D4	5615 F7	
2170 F11	2382 F12	2723 E7	3135 F13	3231 E3	3514 F5	3743 D3	5616 F6	
2171 F11	2383 F12	2724 F6	3136 F13	3232 E4	3515 F5	3790 E6	5617 F6	
2172 G11	2385 E13	2725 F5	3141 G10	3234 E4	3517 F6	3791 F6	5620 F6	
2175 G11	2386 C11	2726 F6	3142 G10	3237 D4	3518 F6	3792 F6	5621 F6	
2176 G11	2388 D3	2728 F6	3143 G10	3239 E4	3520 F5	3793 E7	5624 C4	
2177 G11	2389 C3	2730 F6	3144 G10	3240 E4	3521 F6	3794 E6	5625 D9	
2179 F10	2390 D3	2731 F6	3145 G10	3242 E4	3523 F6	3801 E7	6100 F8	
2182 F9	2391 C3	2743 F6	3151 F10	3243 E4	3524 F6	3802 E6	6250 E4	
2183 F8	2392 D3	2744 F5	3152 G9	3244 E5	3526 F7	3803 F6	6251 F5	
2192 G12	2393 C3	2745 F6	3153 F9	3245 E5	3527 F7	3808 D12	6310 D5	
2193 F12	2394 D3	2746 F6	3154 F10	3247 E4	3529 E9	3809 D12	6410 F7	
2194 D13	2397 F13	2747 F6	3155 F10	3250 E3	3530 C5	4115 D8	6603 C10	
2195 C13	2398 F13	2748 F6	3156 F10	3251 F4	3531 D4	4116 F8	6604 D12	
2196 C13	2399 F13	2749 G11	3158 F10	3252 F4	3532 D4	4118 D8	6606 G5	
2197 C13	2410 F7	2751 G10	3161 G11	3253 F4	3533 C5	4203 F4	6607 G6	
2198 F8	2411 F7	2771 C7	3162 G11	3254 F3	3540 F9	4215 G4	6609 G6	
2210 G13	2412 F7	2774 C12	3163 G11	3260 G13	3541 F10	4220 F5	6611 G5	
2211 G13	2414 F7	2775 C12	3164 G11	3261 H13	3542 F9	4230 G9	6612 F6	
2213 G11	2511 E8	2777 D10	3168 G11	3262 H13	3543 F9	4310 D5	6613 G7	
2214 G11	2514 E7	2795 C4	3171 F11	3263 G12	3595 C9	4315 D5	6621 C9	
2216 G11	2515 F5	2796 D4	3172 G11	3264 G12	3602 C10	4551 E9	6622 C9	
2217 E3	2516 F6	2802 D11	3173 G11	3265 G12	3603 C9	4552 E9	6623 C9	

ELECTRICAL PARTS LIST - MONO AV BOARD

MISCELLANEOUS

1102	3139 241 21102	EMC Spring
1103	3139 241 21102	EMC Spring
1202	2422 026 05462	Socket Cinch Aux-in/Line-out
1208	4822 267 11039	Flex Socket 11P Vert
1305	4822 267 10729	Flex Socket 10P Vert
1306	2422 026 05495	Socket S-Video
1307	4822 267 10733	Flex Socket 04P Vert
1308	4822 265 11515	Flex Socket 8P Vert
1309	4822 267 10729	Flex Socket 10P Vert
1609	2422 025 17075	Flex Socket 24P Hort
1612	2422 025 12352	Socket Scart 21P

CAPACITORS

2100	4822 122 33752	15pF 5% 50V
2101	4822 126 14241	330pF 50V
2102	4822 122 33752	15pF 5% 50V
2103	4822 126 14472	1uF 10%
2105	2238 586 59812	100nF +80/-20% 50V
2106	4822 124 40433	47uF 20% 25V
2107	2238 586 59812	100nF +80/-20% 50V
2108	2238 586 59812	100nF +80/-20% 50V
2110	4822 126 14472	1uF 10% 10V
2113	2238 586 59812	100nF +80/-20% 50V
2114	4822 124 40433	47uF 20% 25V
2120	4822 126 14249	560pF 10% 50V
2121	2020 552 94427	100pF 5% 50V
2122	2020 552 94427	100pF 5% 50V
2123	4822 126 14249	560pF 10% 50V
2124	2238 586 59812	100nF +80/-20% 50V
2125	2238 586 59812	100nF +80/-20% 50V
2127	4822 126 13909	680pF 10% 50V
2128	4822 126 14472	1uF 10% 10V
2129	4822 126 14472	1uF 10% 10V
2130	4822 126 14249	560pF 10% 50V
2131	2020 552 94427	100pF 5% 50V
2132	2020 552 94427	100pF 5% 50V
2133	4822 126 14249	560pF 10% 50V
2135	4822 126 13909	680pF 10% 50V
2136	4822 126 14472	1uF 10% 10V
2137	4822 126 14472	1uF 10% 10V
2140	4822 126 14241	330pF 50V
2141	4822 126 13881	470pF 5% 50V
2142	4822 126 14226	82pF 5% 50V
2143	4822 126 14241	330pF 50V
2144	4822 126 13881	470pF 5% 50V
2145	4822 126 14226	82pF 5% 50V
2146	2238 586 59812	100nF +80/-20% 50V
2147	2238 586 59812	100nF +80/-20% 50V
2149	4822 126 13909	680pF 10% 50V
2150	4822 126 14241	330pF 50V
2151	4822 126 13881	470pF 5% 50V
2152	4822 126 14226	82pF 5% 50V

2153	4822 126 14241	330pF 50V
2154	4822 126 13881	470pF 5% 50V
2155	4822 126 14226	82pF 5% 50V
2157	4822 126 13909	680pF 10% 50V
2158	4822 126 14472	1uF 10% 10V
2159	4822 126 14472	1uF 10% 10V
2160	4822 126 14241	330pF 50V
2161	4822 126 13881	470pF 5% 50V
2162	4822 126 14226	82pF 5% 50V
2163	4822 126 14241	330pF 50V
2164	4822 126 13881	470pF 5% 50V
2165	4822 126 14226	82pF 5% 50V
2166	2238 586 59812	100nF +80/-20% 50V
2167	2238 586 59812	100nF +80/-20% 50V
2169	4822 126 13909	680pF 10% 50V
2170	4822 126 14241	330pF 50V
2171	4822 126 13881	470pF 5% 50V
2172	4822 126 14241	330pF 50V
2173	4822 126 14241	330pF 50V
2174	4822 126 13881	470pF 5% 50V
2175	4822 126 14241	330pF 50V
2177	4822 126 13909	680pF 10% 50V
2178	4822 126 14472	1uF 10% 10V
2179	4822 126 14472	1uF 10% 10V
2180	4822 124 40433	47uF 20% 25V
2181	4822 124 40433	47uF 20% 25V
2182	2238 586 59812	100nF +80/-20% 50V
2183	4822 126 14472	1uF 10% 10V
2185	4822 124 40433	47uF 20% 25V
2186	4822 124 40433	47uF 20% 25V
2187	4822 124 40433	47uF 20% 25V
2188	4822 126 14472	1uF 10% 10V
2189	4822 126 14472	1uF 10% 10V
2190	4822 126 14472	1uF 10% 10V
2191	4822 126 14472	1uF 10% 10V
2192	4822 126 14472	1uF 10% 10V
2193	4822 126 14472	1uF 10% 10V
2211	2020 552 94427	100pF 5% 50V
2212	4822 126 14472	1uF 10% 10V
2213	4822 126 13956	68pF 5% 63V
2214	2020 552 94427	100pF 5% 50V
2215	4822 126 14472	1uF 10% 10V
2216	4822 126 13956	68pF 5% 63V
2217	2020 552 94427	100pF 5% 50V
2218	2020 552 96684	470nF 10% 25V
2219	4822 126 13883	220pF 5% 50V
2220	4822 126 13956	68pF 5% 63V
2222	4822 126 14472	1uF 10% 10V
2223	2020 552 96305	4,7uF +80/-20% 10V
2224	4822 124 40433	47uF 20% 25V
2230	2238 916 15641	22nF 10% 25V
2231	4822 124 81151	22uF 20% 50V

ELECTRICAL PARTS LIST - MONO AV BOARD

2232	4822 124 40196	220uF 20% 16V
2233	4822 124 81151	22uF 20% 50V
2234	4822 126 14472	1uF 10% 10V
2235	4822 126 14472	1uF 10% 10V
2236	2238 586 59812	100nF +80/-20% 50V
2237	4822 124 81151	22uF 20% 50V
2238	2238 586 59812	100nF +80/-20% 50V
2239	4822 124 40433	47uF 20% 25V
2240	3198 017 41050	1uF 10V
2241	3198 017 41050	1uF 10V
2250	2238 586 59812	100nF +80/-20% 50V
2251	2238 586 59812	100nF +80/-20% 50V
2252	3198 017 41050	1uF 10V
2261	2020 552 94427	100pF 5% 50V
2262	4822 126 14472	1uF 10% 10V
2263	4822 126 13956	68pF 5% 63V
2264	2020 552 94427	100pF 5% 50V
2265	4822 126 14472	1uF 10% 10V
2266	4822 126 13956	68pF 5% 63V
2267	2020 552 94427	100pF 5% 50V
2268	2020 552 96684	470nF 10% 25V
2269	4822 126 13883	220pF 5% 50V
2270	4822 126 13956	68pF 5% 63V
2311	2020 552 94427	100pF 5% 50V
2313	4822 126 14508	180pF 5% 50V
2314	2020 552 94427	100pF 5% 50V
2315	2020 552 94427	100pF 5% 50V
2317	2238 586 59812	100nF +80/-20% 50V
2318	4822 051 30008	0R Jumper 0603
2319	2020 552 94427	100pF 5% 50V
2330	4822 124 80503	470uF 20% 10V
2361	2020 552 94427	100pF 5% 50V
2363	4822 126 14508	180pF 5% 50V
2364	2020 552 94427	100pF 5% 50V
2380	4822 126 14472	1uF 10% 10V
2381	2020 552 96305	4,7uF +80/-20% 10V
2382	4822 126 14472	1uF 10% 10V
2383	2020 552 96305	4,7uF +80/-20% 10V
2384	4822 126 14472	1uF 10% 10V
2385	2020 552 96305	4,7uF +80/-20% 10V
2386	2238 586 59812	100nF +80/-20% 50V
2387	2238 586 59812	100nF +80/-20% 50V
2410	2020 552 94427	100pF 5% 50V
2412	2020 552 94427	100pF 5% 50V
2414	4822 126 13883	220pF 5% 50V
2509	2238 586 59812	100nF +80/-20% 50V
2510	4822 126 13879	220nF +80/-20% 16V
2511	2238 586 59812	100nF +80/-20% 50V
2512	4822 124 81151	22uF 20% 50V
2513	2238 586 59812	100nF +80/-20% 50V
2514	2020 552 94427	100pF 5% 50V
2515	2020 552 94427	100pF 5% 50V

ELECTRICAL PARTS LIST - MONO AV BOARD

2516	2020 552 94427	100pF 5% 50V
2517	2020 552 94427	100pF 5% 50V
2519	2238 586 59812	100nF +80/-20% 50V
2601	3198 017 41050	1uF 10V
2603	2238 586 59812	100nF +80/-20% 50V
2605	2238 586 59812	100nF +80/-20% 50V
2606	2238 586 59812	100nF +80/-20% 50V
2607	2238 586 59812	100nF +80/-20% 50V
2608	2238 586 59812	100nF +80/-20% 50V
2609	2238 586 59812	100nF +80/-20% 50V
2610	2238 586 59812	100nF +80/-20% 50V
2611	2238 586 59812	100nF +80/-20% 50V
2612	2238 586 59812	100nF +80/-20% 50V
2613	4822 124 23432	100uF 20% 10V
2614	2238 586 59812	100nF +80/-20% 50V
2615	2238 586 59812	100nF +80/-20% 50V
2617	3198 017 31530	15nF 50V
2619	4822 126 14226	82pF 5% 50V
2620	4822 126 14315	390pF 5% 50V
2621	2238 586 59812	100nF +80/-20% 50V
2623	4822 126 14549	33nF 16V
2624	4822 126 13881	470pF 5% 50V
2625	4822 124 40433	47uF 20% 25V
2626	2238 586 59812	100nF +80/-20% 50V
2627	2238 586 59812	100nF +80/-20% 50V
2628	2238 586 59812	100nF +80/-20% 50V
2629	4822 124 40433	47uF 20% 25V
2630	2238 586 59812	100nF +80/-20% 50V
2631	2238 586 59812	100nF +80/-20% 50V
2632	2238 586 59812	100nF +80/-20% 50V
2633	4822 124 40433	47uF 20% 25V
2634	4822 124 81286	47uF 20% 16V
2635	2238 586 59812	100nF +80/-20% 50V
2637	3198 017 41050	1uF 10V
2638	3198 017 41050	1uF 10V
2639	3198 017 41050	1uF 10V
2640	3198 017 41050	1uF 10V
2641	2238 586 59812	100nF +80/-20% 50V
2642	3198 017 31530	15nF 50V
2643	4822 122 33753	150pF 5% 50V
2644	4822 122 33753	150pF 5% 50V
2645	2238 586 59812	100nF +80/-20% 50V
2646	2238 586 59812	100nF +80/-20% 50V
2647	2238 586 59812	100nF +80/-20% 50V
2648	4822 124 40207	100uF 20% 25V
2649	2238 586 59812	100nF +80/-20% 50V
2651	2238 586 59812	100nF +80/-20% 50V
2652	2238 586 59812	100nF +80/-20% 50V
2653	2238 586 59812	100nF +80/-20% 50V
2654	2238 586 59812	100nF +80/-20% 50V
2655	4822 124 40433	47uF 20% 25V
2656	2238 586 59812	100nF +80/-20% 50V

ELECTRICAL PARTS LIST - MONO AV BOARD

CAPACITORS

2657	4822 122 33741	10pF 10% 50V	2730	4822 126 13883	220pF 5% 50V
2658	4822 122 33741	10pF 10% 50V	2731	2020 552 94427	100pF 5% 50V
2659	2238 586 59812	100nF +80/-20% 50V	2744	4822 126 13883	220pF 5% 50V
2660	4822 124 40433	47uF 20% 25V	2745	2020 552 94427	100pF 5% 50V
2661	2238 586 59812	100nF +80/-20% 50V	2747	4822 126 13883	220pF 5% 50V
2662	3198 017 41050	1uF 10V	2748	2020 552 94427	100pF 5% 50V
2663	3198 016 31020	1nF 25V	2749	2238 586 59812	100nF +80/-20% 50V
2664	3198 016 31020	1nF 25V	2751	4822 126 14241	330pF 50V
2665	3198 016 31020	1nF 25V	2758	4822 126 13909	680pF 10% 50V
2666	3198 016 31020	1nF 25V	2760	5322 126 11579	3,3nF 10% 63V
2667	2238 586 59812	100nF +80/-20% 50V	2763	4822 126 13909	680pF 10% 50V
2668	3198 017 41050	1uF 10V	2764	2238 586 59812	100nF +80/-20% 50V
2669	5322 126 11583	10nF 10% 50V	2765	4822 126 13909	680pF 10% 50V
2670	5322 126 11583	10nF 10% 50V	2767	5322 126 11579	3,3nF 10% 63V
2671	5322 126 11583	10nF 10% 50V	2770	4822 126 13909	680pF 10% 50V
2672	5322 126 11583	10nF 10% 50V	2771	2238 586 59812	100nF +80/-20% 50V
2673	5322 126 11583	10nF 10% 50V	2772	2238 586 59812	100nF +80/-20% 50V
2674	2238 586 59812	100nF +80/-20% 50V	2773	2238 586 59812	100nF +80/-20% 50V
2676	2020 552 94427	100pF 5% 50V	2774	2238 586 59812	100nF +80/-20% 50V
2677	2238 586 59812	100nF +80/-20% 50V	2775	2238 586 59812	100nF +80/-20% 50V
2678	3198 017 31530	15nF 50V	2776	2238 586 59812	100nF +80/-20% 50V
2679	4822 126 14241	330pF 50V	2777	2238 586 59812	100nF +80/-20% 50V
2680	4822 126 14241	330pF 50V	2778	4822 124 23432	100uF 20% 10V
2685	4822 124 81151	22uF 20% 50V	2779	4822 124 23432	100uF 20% 10V
2686	3198 017 41050	1uF 10V	2781	4822 124 12245	220uF 20% 10V
2687	3198 017 41050	1uF 10V	2782	4822 124 11947	10uF 20% 16V
2691	2238 586 59812	100nF +80/-20% 50V	2783	4822 124 40196	220uF 20% 16V
2692	2238 586 59812	100nF +80/-20% 50V	2784	4822 124 40196	220uF 20% 16V
2693	2238 586 59812	100nF +80/-20% 50V	2785	4822 124 40196	220uF 20% 16V
2694	2238 586 59812	100nF +80/-20% 50V	2786	4822 124 12245	220uF 20% 10V
2695	2238 586 59812	100nF +80/-20% 50V	2787	4822 124 40207	100uF 20% 25V
2696	2238 586 59812	100nF +80/-20% 50V	2788	4822 124 40433	47uF 20% 25V
2697	2238 586 59812	100nF +80/-20% 50V	2789	4822 124 40433	47uF 20% 25V
2698	2238 586 59812	100nF +80/-20% 50V	2790	4822 124 23432	100uF 20% 10V
2699	2238 586 59812	100nF +80/-20% 50V	2791	4822 124 40433	47uF 20% 25V
2700	2238 586 59812	100nF +80/-20% 50V	2793	4822 124 40196	220uF 20% 16V
2701	2238 586 59812	100nF +80/-20% 50V	2794	4822 124 40196	220uF 20% 16V
2702	2238 586 59812	100nF +80/-20% 50V	2795	2238 586 59812	100nF +80/-20% 50V
2703	2238 586 59812	100nF +80/-20% 50V	2796	2238 586 59812	100nF +80/-20% 50V
2704	2238 586 59812	100nF +80/-20% 50V	2797	4822 124 40207	100uF 20% 25V
2710	2238 586 59812	100nF +80/-20% 50V	2798	4822 124 40207	100uF 20% 25V
2711	2238 586 59812	100nF +80/-20% 50V	2799	2238 586 59812	100nF +80/-20% 50V
2712	2238 586 59812	100nF +80/-20% 50V	2800	4822 124 40207	100uF 20% 25V
2713	2238 586 59812	100nF +80/-20% 50V	2802	2238 586 59812	100nF +80/-20% 50V
2714	2238 586 59812	100nF +80/-20% 50V	2803	5322 122 33861	120pF 10% 50V
2715	2238 586 59812	100nF +80/-20% 50V	2805	4822 124 81151	22uF 20% 50V
2717	2238 586 59812	100nF +80/-20% 50V	2806	4822 124 81151	22uF 20% 50V
2720	2238 586 59812	100nF +80/-20% 50V	2807	4822 124 81286	47uF 20% 16V
2722	4822 126 13883	220pF 5% 50V	2810	4822 124 81044	470uF 20% 6,3V
2723	2020 552 94427	100pF 5% 50V	2811	4822 124 81044	470uF 20% 6,3V
2725	4822 126 13883	220pF 5% 50V	2812	4822 124 81044	470uF 20% 6,3V
2726	2020 552 94427	100pF 5% 50V	2816	2222 867 15339	33pF 5% 50V

ELECTRICAL PARTS LIST - MONO AV BOARD

RESISTORS

2817	4822 126 13883	220pF 5% 50V	3160	4822 051 30103	10k 5% 0,062W
2818	4822 126 13883	220pF 5% 50V	3161	4822 051 30103	10k 5% 0,062W
2819	4822 126 13883	220pF 5% 50V	3162	4822 051 30123	12k 5% 0,062W
2820	4822 126 13883	220pF 5% 50V	3163	4822 051 30123	12k 5% 0,062W
2821	2222 867 15339	33pF 5% 50V	3164	4822 051 30153	15k 5% 0,062W
			3165	4822 051 30103	10k 5% 0,062W
			3166	4822 051 30103	10k 5% 0,062W
			3167	4822 051 30123	12k 5% 0,062W
			3168	4822 051 30123	12k 5% 0,062W
			3169	4822 051 30153	15k 5% 0,062W
			3170	4822 051 30008	0R Jumper 0603
			3171	4822 051 30103	10k 5% 0,062W
			3172	4822 051 30563	56k 5% 0,062W
			3173	4822 051 30123	12k 5% 0,062W
			3174	4822 051 30153	15k 5% 0,062W
			3175	4822 051 30008	0R Jumper 0603
			3176	4822 051 30103	10k 5% 0,062W
			3177	4822 051 30563	56k 5% 0,062W
			3178	4822 051 30123	12k 5% 0,062W
			3179	4822 051 30153	15k 5% 0,062W
			3181	4822 051 30151	150R 5% 0,062W
			3182	4822 117 12139	22R 5% 0,062W
			3183	4822 117 12139	22R 5% 0,062W
			3184	4822 117 12139	22R 5% 0,062W
			3185	4822 051 30151	150R 5% 0,062W
			3186	4822 117 12139	22R 5% 0,062W
			3187	4822 117 12139	22R 5% 0,062W
			3188	4822 117 12139	22R 5% 0,062W
			3189	4822 051 30102	1k 5% 0,062W
			3191	4822 051 30101	100R 5% 0,062W
			3211	4822 051 30008	0R Jumper 0603
			3212	4822 051 30474	470k 5% 0,062W
			3213	4822 051 30332	3k3 5% 0,062W
			3214	4822 051 30183	18k 5% 0,062W
			3215	4822 051 30333	33k 5% 0,062W
			3216	4822 051 30471	470R 5% 0,062W
			3217	4822 051 30472	4k7 5% 0,062W
			3218	4822 117 12925	47k 1% 0,063W
			3219	4822 117 13632	100k 1% 0,062W
			3220	4822 051 30151	150R 5% 0,062W
			3221	4822 051 30472	4k7 5% 0,062W
			3222	4822 051 30223	22k 5% 0,062W
			3223	4822 051 30472	4k7 5% 0,062W
			3224	4822 051 30102	1k 5% 0,062W
			3225	4822 117 12925	47k 1% 0,063W
			3226	4822 051 30474	470k 5% 0,062W
			3227	4822 051 30121	120R 5% 0,062W
			3230	4822 051 30103	10k 5% 0,062W
			3231	4822 051 30101	100R 5% 0,062W
			3232	4822 051 30103	10k 5% 0,062W
			3234	4822 051 30103	10k 5% 0,062W
			3237	4822 051 30103	10k 5% 0,062W
			3100	4822 051 30339	33R 5% 0,062W
			3101	4822 051 30101	100R 5% 0,062W
			3102	4822 051 30339	33R 5% 0,062W
			3103	4822 051 30101	100R 5% 0,062W
			3104	4822 051 30101	100R 5% 0,062W
			3105	4822 051 30101	100R 5% 0,062W
			3110	4822 051 30101	100R 5% 0,062W
			3114	4822 051 30153	15k 5% 0,062W
			3115	4822 051 30223	22k 5% 0,062W
			3120	4822 051 30103	10k 5% 0,062W
			3121	4822 051 30123	12k 5% 0,062W
			3122	4822 117 12903	1k8 1% 0,063W
			3123	4822 051 30123	12k 5% 0,062W
			3124	4822 051 30103	10k 5% 0,062W
			3125	4822 051 30123	12k 5% 0,062W
			3126	4822 117 12903	1k8 1% 0,063W
			3127	4822 051 30123	12k 5% 0,062W
			3130	4822 051 30103	10k 5% 0,062W
			3131	4822 051 30123	12k 5% 0,062W
			3132	4822 117 12903	1k8 1% 0,063W
			3133	4822 051 30123	12k 5% 0,062W
			3134	4822 051 30103	10k 5% 0,062W
			3135	4822 051 30123	12k 5% 0,062W
			3136	4822 117 12903	1k8 1% 0,063W
			3137	4822 051 30123	12k 5% 0,062W
			3140	4822 051 30103	10k 5% 0,062W
			3141	4822 051 30103	10k 5% 0,062W
			3142	4822 051 30123	12k 5% 0,062W
			3143	4822 051 30123	12k 5% 0,062W
			3144	4822 051 30153	15k 5% 0,062W
			3145	4822 051 30103	10k 5% 0,062W
			3146	4822 051 30103	10k 5% 0,062W
			3147	4822 051 30123	12k 5% 0,062W
			3148	4822 051 30123	12k 5% 0,062W
			3149	4822 051 30153	15k 5% 0,062W
			3150	4822 051 30103	10k 5% 0,062W
			3151	4822 051 30103	10k 5% 0,062W
			3152	4822 051 30123	12k 5% 0,062W
			3153	4822 051 30123	12k 5% 0,062W
			3154	4822 051 30153	15k 5% 0,062W
			3155	4822 051 30103	10k 5% 0,062W
			3156	4822 051 30103	10k 5% 0,062W
			3157	4822 051 30123	12k 5% 0,062W
			3158	4822 051 30123	12k 5% 0,062W
			3159	4822 051 30153	15k 5% 0,062W

ELECTRICAL PARTS LIST - MONO AV BOARD

RESISTORS

3239	4822 051 30103	10k 5% 0,062W	3344	4822 117 13632	100k 1% 0,062W
3240	4822 051 30471	470R 5% 0,062W	3345	4822 117 12925	47k 1% 0,063W
3242	4822 117 12925	47k 1% 0,063W	3346	4822 117 13632	100k 1% 0,062W
3243	4822 051 30471	470R 5% 0,062W	3347	4822 051 30102	1k 5% 0,062W
3244	4822 051 30339	33R 5% 0,062W	3348	4822 051 30102	1k 5% 0,062W
3245	4822 051 30339	33R 5% 0,062W	3349	4822 117 12925	47k 1% 0,063W
3246	4822 051 30101	100R 5% 0,062W	3350	4822 117 13632	100k 1% 0,062W
3247	4822 051 30101	100R 5% 0,062W	3351	4822 051 30102	1k 5% 0,062W
3248	4822 051 30101	100R 5% 0,062W	3352	4822 051 30102	1k 5% 0,062W
3250	4822 051 30151	150R 5% 0,062W	3353	4822 051 30222	2k2 5% 0,062W
3251	4822 051 30102	1k 5% 0,062W	3354	4822 117 12891	220k 1% 0,062W
3252	4822 051 30562	5k6 5% 0,063W	3355	4822 117 13632	100k 1% 0,062W
3253	4822 051 30472	4k7 5% 0,062W	3360	4822 051 30222	2k2 5% 0,062W
3254	4822 051 30562	5k6 5% 0,063W	3361	4822 051 30222	2k2 5% 0,062W
3255	4822 051 30472	4k7 5% 0,062W	3362	4822 117 13632	100k 1% 0,062W
3256	4822 051 30102	1k 5% 0,062W	3363	4822 051 30101	100R 5% 0,062W
3257	4822 051 30103	10k 5% 0,062W	3364	4822 051 30222	2k2 5% 0,062W
3258	4822 051 30103	10k 5% 0,062W	3365	4822 117 13632	100k 1% 0,062W
3261	4822 051 30008	OR Jumper 0603	3366	4822 051 30101	100R 5% 0,062W
3262	4822 051 30474	470k 5% 0,062W	3370	4822 051 30101	100R 5% 0,062W
3263	4822 051 30332	3k3 5% 0,062W	3371	4822 051 30101	100R 5% 0,062W
3264	4822 051 30183	18k 5% 0,062W	3372	4822 051 30101	100R 5% 0,062W
3265	4822 051 30333	33k 5% 0,062W	3373	4822 051 30101	100R 5% 0,062W
3266	4822 051 30471	470R 5% 0,062W	3374	4822 051 30101	100R 5% 0,062W
3267	4822 051 30472	4k7 5% 0,062W	3375	4822 051 30101	100R 5% 0,062W
3268	4822 117 12925	47k 1% 0,063W	3376	4822 051 30101	100R 5% 0,062W
3269	4822 117 13632	100k 1% 0,062W	3377	4822 051 30101	100R 5% 0,062W
3270	4822 051 30151	150R 5% 0,062W	3378	4822 051 30101	100R 5% 0,062W
3271	4822 051 30472	4k7 5% 0,062W	3412	4822 051 30008	OR Jumper 0603
3272	4822 051 30223	22k 5% 0,062W	3510	4822 051 30339	33R 5% 0,062W
3273	4822 051 30472	4k7 5% 0,062W	3511	4822 051 30151	150R 5% 0,062W
3274	4822 051 30102	1k 5% 0,062W	3512	4822 051 30151	150R 5% 0,062W
3310	4822 051 30222	2k2 5% 0,062W	3514	4822 051 30151	150R 5% 0,062W
3311	4822 051 30222	2k2 5% 0,062W	3515	4822 051 30151	150R 5% 0,062W
3312	4822 051 30101	100R 5% 0,062W	3517	4822 051 30151	150R 5% 0,062W
3313	4822 117 13632	100k 1% 0,062W	3518	4822 051 30151	150R 5% 0,062W
3314	4822 051 30222	2k2 5% 0,062W	3520	4822 051 30151	150R 5% 0,062W
3315	4822 117 13632	100k 1% 0,062W	3521	4822 051 30151	150R 5% 0,062W
3316	4822 051 30101	100R 5% 0,062W	3523	4822 051 30759	75R 5% 0,062W
3317	4822 117 12891	220k 1% 0,062W	3524	4822 051 30151	150R 5% 0,062W
3318	4822 051 30222	2k2 5% 0,062W	3526	4822 051 30151	150R 5% 0,062W
3330	4822 051 30102	1k 5% 0,062W	3527	4822 051 30151	150R 5% 0,062W
3331	4822 051 30102	1k 5% 0,062W	3529	4822 051 30008	OR Jumper 0603
3332	4822 051 30102	1k 5% 0,062W	3530	4822 051 30103	10k 5% 0,062W
3333	4822 051 30102	1k 5% 0,062W	3531	4822 117 12925	47k 1% 0,063W
3334	4822 051 30101	100R 5% 0,062W	3532	4822 117 12925	47k 1% 0,063W
3335	4822 051 30101	100R 5% 0,062W	3533	4822 051 30103	10k 5% 0,062W
3336	4822 051 30102	1k 5% 0,062W	3540	4822 051 30103	10k 5% 0,062W
3337	4822 051 30472	4k7 5% 0,062W	3541	4822 051 30103	10k 5% 0,062W
3338	4822 051 30103	10k 5% 0,062W	3542	4822 051 30103	10k 5% 0,062W
3340	4822 051 30339	33R 5% 0,062W	3543	4822 051 30103	10k 5% 0,062W
3343	4822 117 12925	47k 1% 0,063W	3590	5322 117 13055	75R 1% 0,063W

ELECTRICAL PARTS LIST - MONO AV BOARD

3591	4822 051 30474	470k 5% 0,062W	3667	4822 051 30153	15k 5% 0,062W
3592	4822 117 12925	47k 1% 0,063W	3669	4822 117 13608	4,7R 5% 0,062W
3593	4822 051 30223	22k 5% 0,062W	3671	4822 117 13608	4,7R 5% 0,062W
3594	4822 051 30569	56R 5% 0,062W	3672	4822 051 30339	33R 5% 0,062W
3602	4822 051 30332	3k3 5% 0,062W	3673	4822 051 30339	33R 5% 0,062W
3603	4822 051 30102	1k 5% 0,062W	3674	4822 051 30339	33R 5% 0,062W
3604	4822 117 13632	100k 1% 0,062W	3675	4822 051 30339	33R 5% 0,062W
3605	4822 051 30223	22k 5% 0,062W	3676	4822 117 13576	Res Network 4x33R 5%
3607	4822 117 12891	220k 1% 0,062W	3680	4822 051 30103	10k 5% 0,062W
3609	4822 051 30008	OR Jumper 0603	3709	4822 051 30103	10k 5% 0,062W
3611	4822 051 30103	10k 5% 0,062W	3710	4822 051 30472	4k7 5% 0,062W
3613	4822 051 30008	OR Jumper 0603	3711	4822 051 30472	4k7 5% 0,062W
3615	4822 051 30008	OR Jumper 0603	3712	4822 051 30471	470R 5% 0,062W
3616	4822 051 30103	10k 5% 0,062W	3713	4822 051 30471	470R 5% 0,062W
3617	4822 051 30103	10k 5% 0,062W	3715	4822 051 30472	4k7 5% 0,062W
3619	4822 051 30008	OR Jumper 0603	3716	4822 051 30471	470R 5% 0,062W
3620	4822 051 30103	10k 5% 0,062W	3717	4822 051 30472	4k7 5% 0,062W
3621	4822 051 30103	10k 5% 0,062W	3719	4822 051 30472	4k7 5% 0,062W
3629	4822 051 30109	10R 5% 0,062W	3720	4822 051 30472	4k7 5% 0,062W
3630	4822 051 30109	10R 5% 0,062W	3721	4822 051 30339	33R 5% 0,062W
3631	4822 051 20108	1R 5% 0,1W	3722	4822 051 30471	470R 5% 0,062W
3632	4822 051 20108	1R 5% 0,1W	3723	4822 051 30339	33R 5% 0,062W
3633	4822 051 20108	1R 5% 0,1W	3724	4822 051 30339	33R 5% 0,062W
3634	4822 051 20108	1R 5% 0,1W	3725	4822 051 30471	470R 5% 0,062W
3635	4822 051 30103	10k 5% 0,062W	3727	4822 051 30472	4k7 5% 0,062W
3636	4822 051 30203	20k 5% 0,062W	3728	4822 051 30471	470R 5% 0,062W
3637	4822 051 30153	15k 5% 0,062W	3729	4822 051 30472	4k7 5% 0,062W
3638	4822 051 30203	20k 5% 0,062W	3732	4822 051 30103	10k 5% 0,062W
3639	4822 051 30203	20k 5% 0,062W	3733	4822 117 13632	100k 1% 0,062W
3640	2322 704 67504	750k 1% 0,062W	3734	4822 051 30103	10k 5% 0,062W
3642	2322 704 67504	750k 1% 0,062W	3735	4822 051 30103	10k 5% 0,062W
3643	4822 051 30334	330k 5% 0,062W	3736	4822 117 13632	100k 1% 0,062W
3644	4822 051 30334	330k 5% 0,062W	3737	4822 051 30103	10k 5% 0,062W
3645	4822 117 12917	1R 5% 0,062W	3739	4822 051 30103	10k 5% 0,062W
3646	4822 051 30103	10k 5% 0,062W	3740	4822 051 30102	1k 5% 0,062W
3647	4822 051 30103	10k 5% 0,062W	3742	4822 117 13632	100k 1% 0,062W
3648	4822 117 13632	100k 1% 0,062W	3743	4822 117 13632	100k 1% 0,062W
3650	4822 051 30008	OR Jumper 0603	3791	4822 051 30008	OR Jumper 0603
3651	4822 117 13632	100k 1% 0,062W	3792	4822 051 30008	OR Jumper 0603
3652	4822 051 30339	33R 5% 0,062W	3795	4822 051 30472	4k7 5% 0,062W
3655	4822 051 30183	18k 5% 0,062W	3796	4822 051 30472	4k7 5% 0,062W
3656	4822 051 30102	1k 5% 0,062W	3797	4822 051 30102	1k 5% 0,062W
3657	4822 051 30102	1k 5% 0,062W	3798	4822 051 30102	1k 5% 0,062W
3658	4822 117 13608	4,7R 5% 0,062W	3801	4822 051 30008	OR Jumper 0603
3659	4822 117 12902	8k2 1% 0,063W	3802	4822 051 30008	OR Jumper 0603
3660	4822 051 30561	560R 5% 0,062W	3803	4822 051 30008	OR Jumper 0603
3661	2322 704 67504	750k 1% 0,062W	3808	4822 051 30339	33R 5% 0,062W
3662	4822 051 30203	20k 5% 0,062W	3813	4822 051 30102	1k 5% 0,062W
3663	4822 051 30183	18k 5% 0,062W	3814	4822 051 30103	10k 5% 0,062W
3664	4822 051 30008	OR Jumper 0603	3817	4822 051 30103	10k 5% 0,062W
3665	4822 051 30103	10k 5% 0,062W	3818	4822 051 30103	10k 5% 0,062W
3666	4822 051 30102	1k 5% 0,062W	3819	4822 051 30471	470R 5% 0,062W

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RESISTORS

3820	4822 051 30471	470R 5% 0,062W
3825	4822 051 30221	220R 5% 0,062W
4107	4822 051 30008	OR Jumper 0603
4108	4822 051 30008	OR Jumper 0603
4110	4822 051 30008	OR Jumper 0603
4111	4822 051 30008	OR Jumper 0603
4112	4822 051 30008	OR Jumper 0603
4114	4822 051 30008	OR Jumper 0603
4117	4822 051 30008	OR Jumper 0603
4118	4822 051 30008	OR Jumper 0603
4201	4822 051 30008	OR Jumper 0603
4202	4822 051 30008	OR Jumper 0603
4220	4822 051 30008	OR Jumper 0603
4230	4822 051 30008	OR Jumper 0603
4310	4822 051 30008	OR Jumper 0603
4316	4822 051 30008	OR Jumper 0603
4551	4822 051 30339	33R 5% 0,062W
4552	4822 051 30339	33R 5% 0,062W
4555	4822 051 30339	33R 5% 0,062W
4556	4822 051 30339	33R 5% 0,062W
4557	4822 051 30339	33R 5% 0,062W
4558	4822 051 30339	33R 5% 0,062W
4562	4822 051 30339	33R 5% 0,062W
4563	4822 051 30339	33R 5% 0,062W
4564	4822 051 30339	33R 5% 0,062W
4565	4822 051 30339	33R 5% 0,062W
4566	4822 051 30339	33R 5% 0,062W
4567	4822 051 30339	33R 5% 0,062W
4568	4822 051 30339	33R 5% 0,062W
4569	4822 051 30339	33R 5% 0,062W
4570	4822 051 30339	33R 5% 0,062W
4572	4822 051 30339	33R 5% 0,062W
4573	4822 051 30339	33R 5% 0,062W
4574	4822 051 30339	33R 5% 0,062W
4576	4822 051 30008	OR Jumper 0603
4577	4822 051 30008	OR Jumper 0603
4578	4822 051 30339	33R 5% 0,062W

COILS & FILTERS

5100	3198 018 63390	Coil 33uH 5% 1008
5101	3198 018 63390	Coil 33uH 5% 1008
5110	4822 157 71206	Fixed Ind 600R 100MHz 0805
5111	4822 157 71206	Fixed Ind 600R 100MHz 0805
5210	2422 549 44607	Fixed Ind 600R 100MHz 0603
5211	4822 157 71206	Fixed Ind 600R 100MHz 0805
5213	2422 549 44607	Fixed Ind 600R 100MHz 0603
5214	2422 549 44607	Fixed Ind 600R 100MHz 0603
5215	2422 549 44607	Fixed Ind 600R 100MHz 0603
5216	2422 549 44607	Fixed Ind 600R 100MHz 0603
5217	3198 018 52280	Coil 2,2uH 10% 0603
5218	3198 018 52280	Coil 2,2uH 10% 0603
5410	4822 157 11414	Coil 1,8uH 5% 1210

5602	4822 157 11499	Fixed Ind 60R 100MHz 0603
5603	2422 549 45186	Fixed Ind 60R 100MHz 0805
5604	2422 549 45186	Fixed Ind 60R 100MHz 0805
5605	4822 051 30008	OR Jumper 0603
5606	4822 051 30008	OR Jumper 0603
5607	4822 157 11414	Coil 1,8uH 5% 1210
5608	2422 549 45186	Fixed Ind 60R 100MHz 0805
5609	4822 157 11414	Coil 1,8uH 5% 1210
5610	2422 549 45186	Fixed Ind 60R 100MHz 0805
5613	4822 157 11499	Fixed Ind 60R 100MHz 0603
5614	4822 157 11499	Fixed Ind 60R 100MHz 0603
5615	4822 157 11414	Coil 1,8uH 5% 1210
5616	4822 157 11414	Coil 1,8uH 5% 1210
5617	4822 157 11414	Coil 1,8uH 5% 1210
5620	4822 157 11414	Coil 1,8uH 5% 1210
5621	4822 157 11414	Coil 1,8uH 5% 1210
5623	4822 051 30151	150R 5% 0,062W
5624	4822 051 30151	150R 5% 0,062W
5625	4822 157 11499	Fixed Ind 60R 100MHz 0603
5626	4822 157 11499	Fixed Ind 60R 100MHz 0603
5627	4822 157 11499	Fixed Ind 60R 100MHz 0603
5701	2422 543 01393	X'tal Resonator 27MHz

DIODES

6250	4822 130 11551	BZX384-C10
6251	4822 130 11564	BZX384-C3V9
6310	4822 130 11397	BAS316
6410	4822 130 11522	PDZ15B
6601	4822 130 11397	BAS316
6602	4822 130 11397	BAS316
6603	4822 130 11397	BAS316
6604	9322 128 69685	S1D
6605	4822 130 11397	BAS316
6606	4822 130 11522	PDZ15B
6607	4822 130 11522	PDZ15B
6609	4822 130 11522	PDZ15B
6611	4822 130 11522	PDZ15B
6612	4822 130 11522	PDZ15B
6613	4822 130 11522	PDZ15B
6620	4822 130 11397	BAS316
6621	4822 130 11397	BAS316
6622	4822 130 11397	BAS316
6623	4822 130 11397	BAS316
6627	4822 130 11522	PDZ15B

TRANSISTORS & INTEGRATED CIRCUITS

7101	9965 000 12490	CS4360KZ
7102	5322 130 60159	BC847B
7121	4822 209 30095	LM833D
7141	4822 209 30095	LM833D
7161	4822 209 30095	LM833D
7201	5322 130 44647	BC368

ELECTRICAL PARTS LIST - MONO AV BOARD

7202	5322 130 60159	BC847B
7203	5322 130 60159	BC847B
7204	4822 130 60373	BC857B
7205	5322 130 60159	BC847B
7220	4822 209 15765	74HC4052D
7221	9322 190 52668	CS5333-KZ
7310	5322 130 60159	BC847B
7311	5322 130 60159	BC847B
7312	5322 130 60159	BC847B
7313	5322 130 60159	BC847B
7314	5322 130 60159	BC847B
7315	5322 130 60159	BC847B
7316	5322 130 60159	BC847B
7317	5322 130 60159	BC847B
7318	4822 130 60373	BC857B
7319	4822 130 60373	BC857B
7322	4822 130 60373	BC857B
7500	4822 209 17398	LD1117DT33
7501	9322 165 15685	NCP303LSN30
7502	5322 130 60159	BC847B
7590	4822 130 60373	BC857B
7591	5322 130 60159	BC847B
7601	4822 209 17398	LD1117DT33
7602	3141 018 51841	MT1336E
7603	9322 187 63668	BA5954FP
7604	3141 018 51660	BA6208F
7605	5322 209 11517	PC74HCU04T
7606	3141 018 51831	MT1379BE
7609	9322 166 67668	MT48LC4M16A2TG-7E
7610	4822 209 17226	M24C08-WMN6
7611	9965 000 20304	M29W160ET70N6 with SW program
7613	4822 209 30095	LM833D
7614	4822 209 33411	MC78L05ACD
7615	9322 177 09685	AK4382AVT
7616	4822 130 60373	BC857B
7617	4822 130 60373	BC857B
7618	4822 130 60373	BC857B
7620	4822 130 11565	2SB1132
7621	4822 130 11565	2SB1132
7630	3141 018 51690	2SK3018
7631	3141 018 51690	2SK3018
7632	5322 130 60159	BC847B
7637	5322 130 60159	BC847B
7638	5322 130 60159	BC847B
7653	5322 130 60159	BC847B
7654	5322 130 60159	BC847B

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

AMPLIFIER BOARD

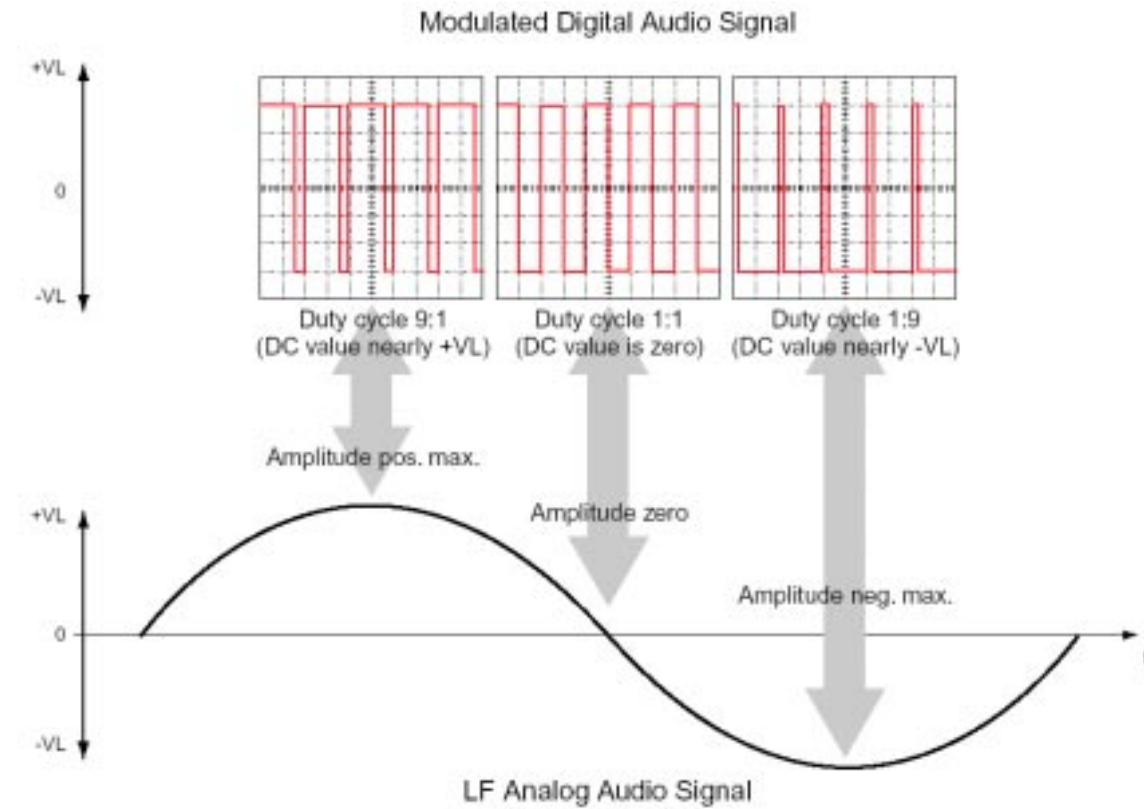
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6-channel class-D amplifier

Basic operation of a class-D amplifier

Basically, the output stage of a class-D amplifier outputs a continuous square wave swinging between positive and negative power supplies with a fixed frequency ("clock" frequency) far beyond the audible range. The duty cycle of this square wave is modulated with the audio signal. The output is followed by a low-pass filter which eliminates the clock frequency and allows only the audio signal going to the speaker. See simplified drawing below.



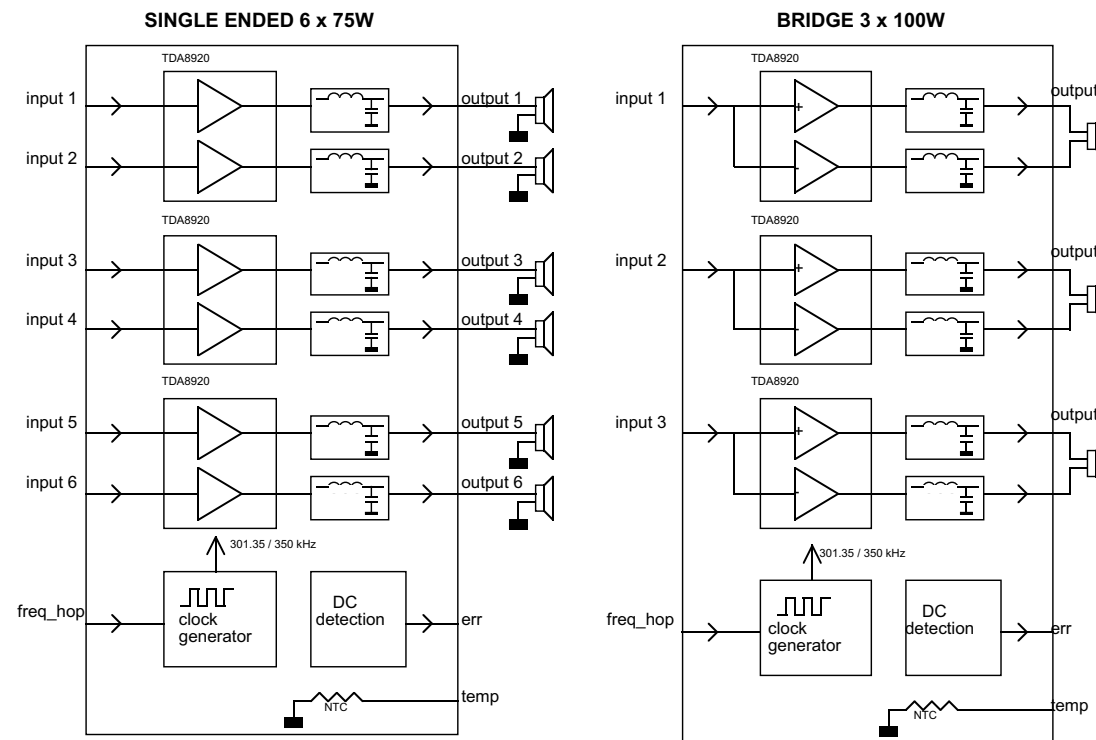
Compared to a conventional power amplifier the benefits of the Class-D amplifier are:

- higher efficiency
- lower power dissipation
- smaller heatsink required
- smaller mains transformer required

The main disadvantage of this concept is:

- The amplifier is operating with a high-frequency square wave at high amplitude and currents. This requires special precautions to prevent excessive electromagnetic radiation (EMC).

Block diagram and operation



• clock oscillator

The clock frequency is generated around IC7600. Using 2 extra transistors (7602 and 7608) and 2 ceramic resonators it can be operated at 2 frequencies: 602.7kHz and 700kHz. The frequency is selected by the signal "FREQ_HOP" coming from connector 1301 pin 9.

When FREQ_HOP is low, the output of 7600-1 will be high. This switches transistor 7602 on, and connects resonator 1600 (602.7kHz) to inverter 7600-3. Similarly, when FREQ_HOP is high, resonator 1601 is connected to 7600-3.

The output frequency is divided by two by IC7607, resulting in 301.35kHz or 350kHz.

The purpose of a selectable clock frequency is related to the disturbance of the tuner which is built-in together with this amplifier. In MW, the software of the set microprocessor will select the other clock frequency in case the amplifier clock interferes with the tuned station.

• Class-D amplifier TDA8920 and low-pass filter

The TDA8920 is a two channel audio power amplifier using class-D technology. The audio input signal is converted into a digital Pulse Width Modulated (PWM) signal via an analog input stage and PWM modulator. It is then fed to the power stage which outputs a high power PWM signal which switches between the main supply lines.

The TDA8920 is followed by a 2nd-order low-pass filter. It has a cut-off frequency around 50kHz and converts the PWM signal into analog audio signal across the loudspeaker.

The TDA8920 has a temperature protection and a current limiter built-in.

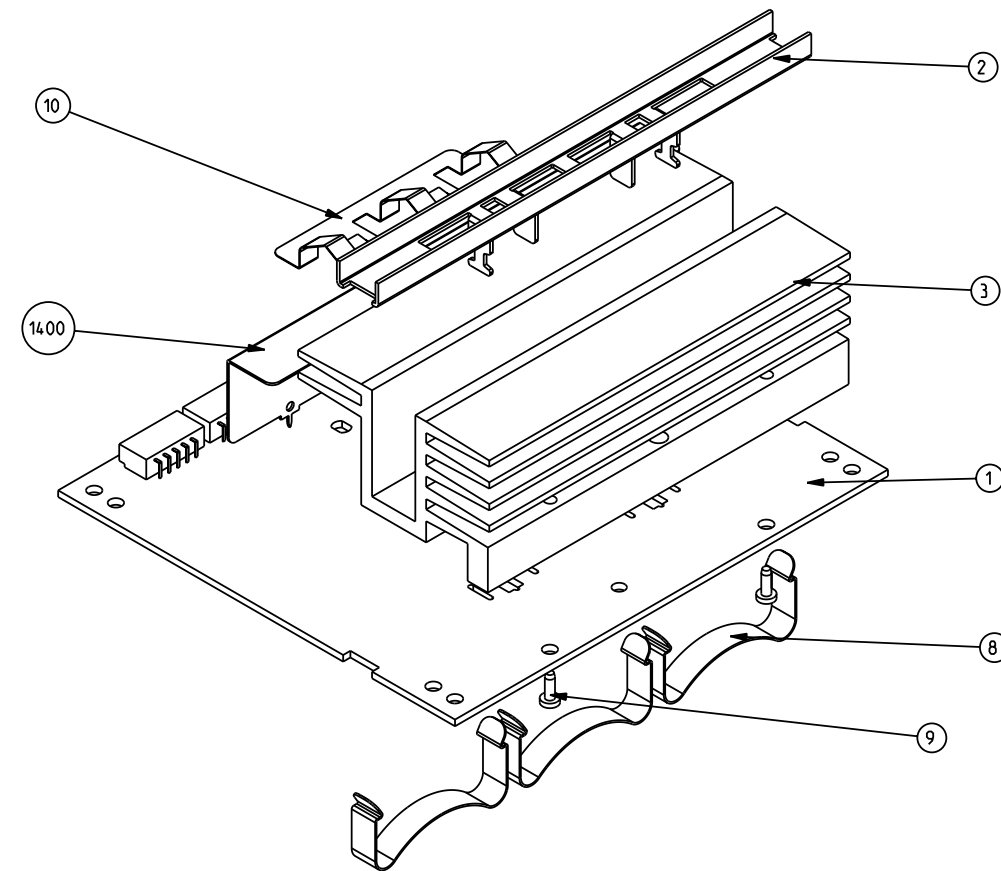
Furthermore, the IC can be put in active, mute and standby mode.

- Active mode (amplifier fully operational) with output signal.
- Mute mode; the amplifiers are operational, but the audio is muted
- Standby mode; with a very low supply current, the output stage is switched off.

• DC-detection

The DC-detection circuit monitors all 6 outputs for DC. Whenever one or more outputs contain DC for more than 1 second, the circuit will be activated. A positive voltage will activate transistor 7710 and pin 10 of connector 1301 will be pulled down. In case of a negative voltage, transistor 7716 will be activated, which in turn activates 7710. The set microprocessor will take further action.

MECHANICAL EXPLODED VIEW



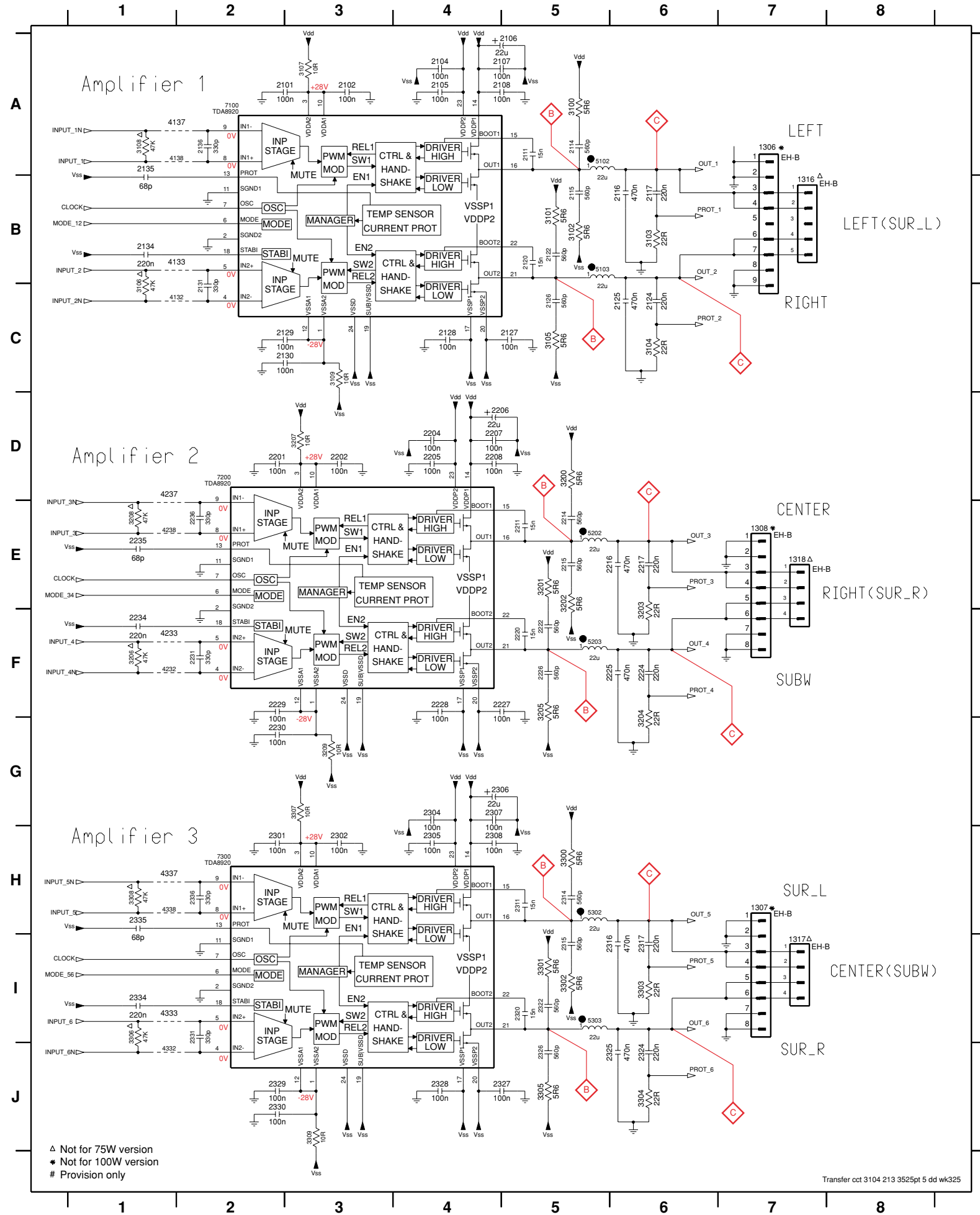
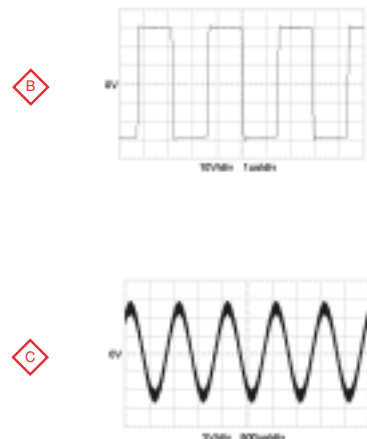
3104 217 07180 bl110

MECHANICAL PARTS LIST & SCREWS

Part No.	Part Description	Part Name
8	4822 492 11735	SPRING, TRANSISTOR
9	-	D2.3 x 8
10	3104 211 29881	EARTH SPRING

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

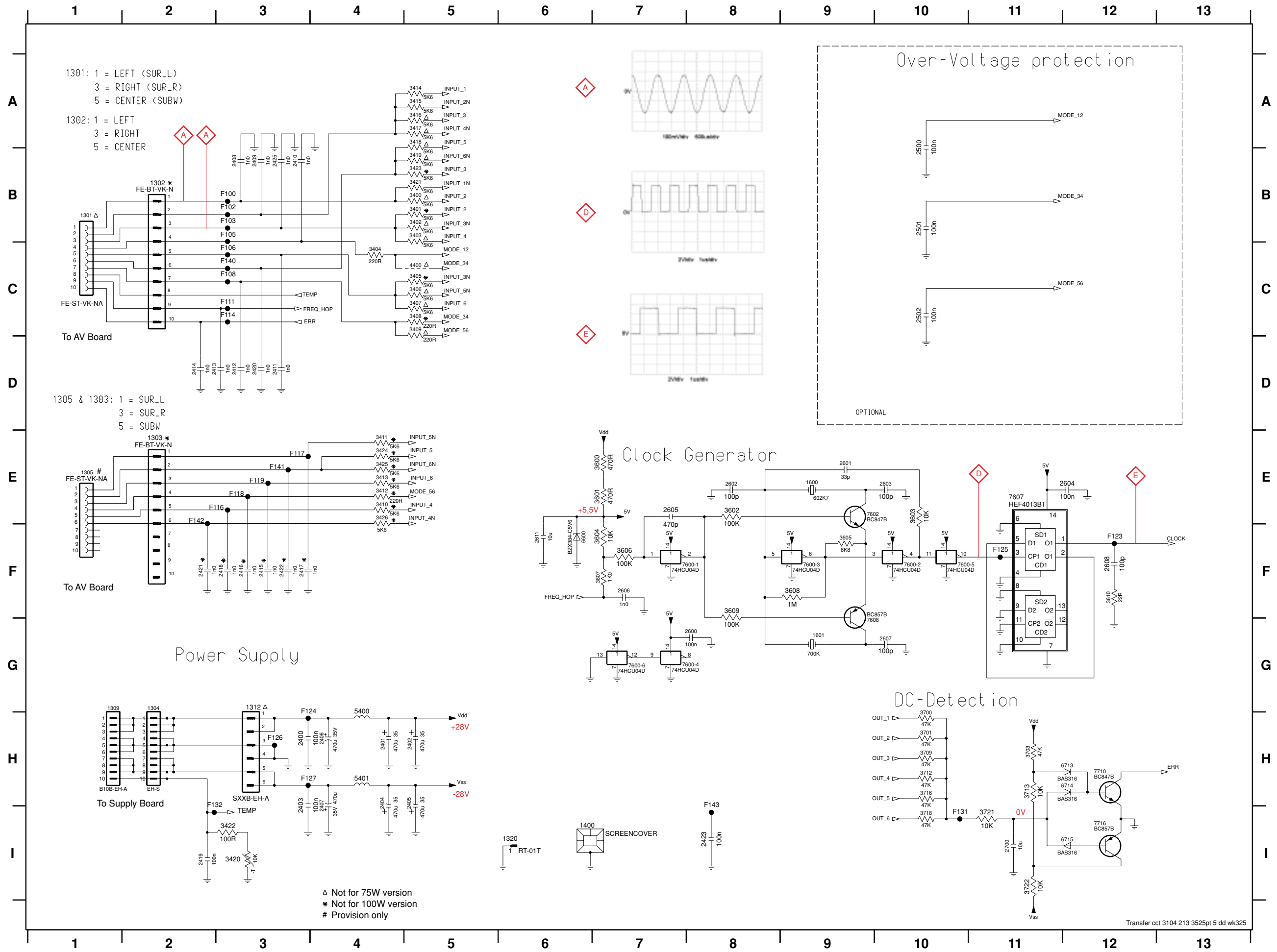
AMPLIFIER CIRCUIT



1306 A7	5303 I5
1307 H7	7100 A2
1308 E7	7200 D2
1316 B7	7300 H2
1317 I7	
1318 E7	
2101 A3	
2102 A3	
2104 A4	
2105 A4	
2106 A5	
2107 A5	
2108 A5	
2111 A5	
2114 A5	
2115 B5	
2116 B6	
2117 B6	
2120 B5	
2122 B5	
2124 C6	
2125 C6	
2126 C5	
2127 C5	
2128 C4	
2129 C3	
2130 C3	
2131 C2	
2134 B1	
2135 A1	
2136 A2	
2201 D2	
2202 D3	
2204 D4	
2205 D4	
2206 D4	
2207 D4	
2208 D4	
2211 E5	
2214 E5	
2215 E5	
2216 E6	
2217 E6	
2220 F5	
2222 F5	
2224 F6	
2225 F6	
2226 F5	
2227 F5	
2228 F4	
2229 F2	
2230 G2	
2231 F2	
2234 F1	
2235 E1	
2236 E2	
2301 H2	
2302 H3	
2304 G4	
2305 H4	
2306 G4	
2307 G4	
2308 H4	
2311 H5	
2314 H5	
2315 I5	
2316 I6	
2317 I6	
2320 I5	
2322 I5	
2324 J6	
2325 J6	
2326 J5	
2327 J5	
2328 J4	
2329 J2	
2330 J2	
2331 I2	
2334 I1	
2335 H1	
2336 H2	
3100 A5	
3101 B5	
3102 B5	
3103 B6	
3104 C6	
3105 C5	
3106 C1	
3107 A3	
3108 A1	
3109 C3	
3200 D5	
3201 E5	
3202 E5	
3203 F6	
3204 G6	
3205 F5	
3206 F1	
3207 D3	
3208 E1	
3209 G3	
3300 H5	
3301 I5	
3302 I5	
3303 I6	
3304 J6	
3305 J5	
3306 I1	
3307 G3	
3308 H1	
3309 J3	
4132 C2	
4133 B2	
4137 A2	
4138 A2	
4232 F1	
4233 F1	
4237 D1	
4238 E1	
4332 J1	
4333 I1	
4337 H1	
4338 H1	
5102 A5	
5103 B5	
5202 E5	
5203 F5	
5302 H5	

Δ Not for 75W version
 * Not for 100W version
 # Provision only

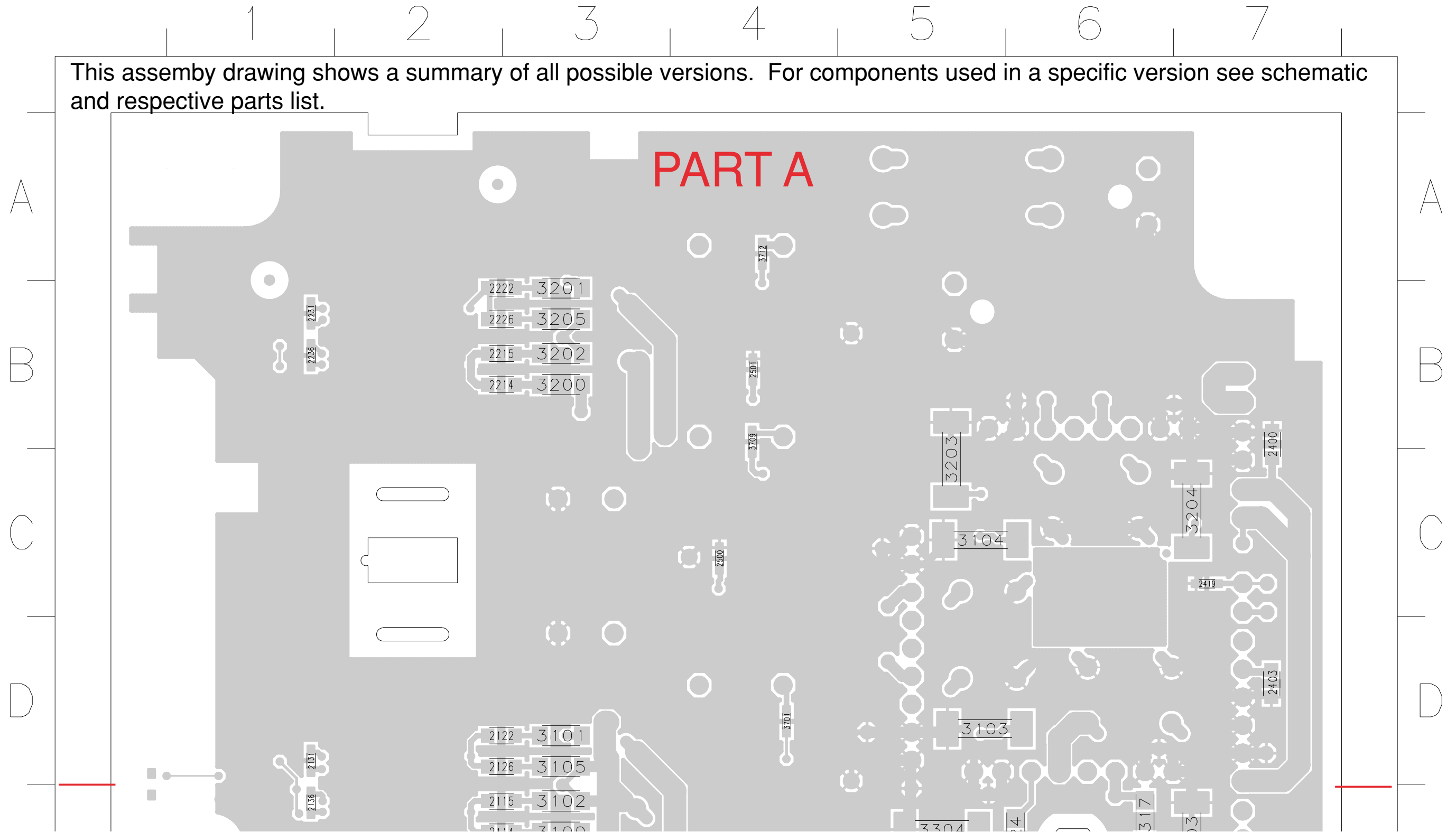
CLOCK GENERATOR & CONNECTOR CIRCUIT



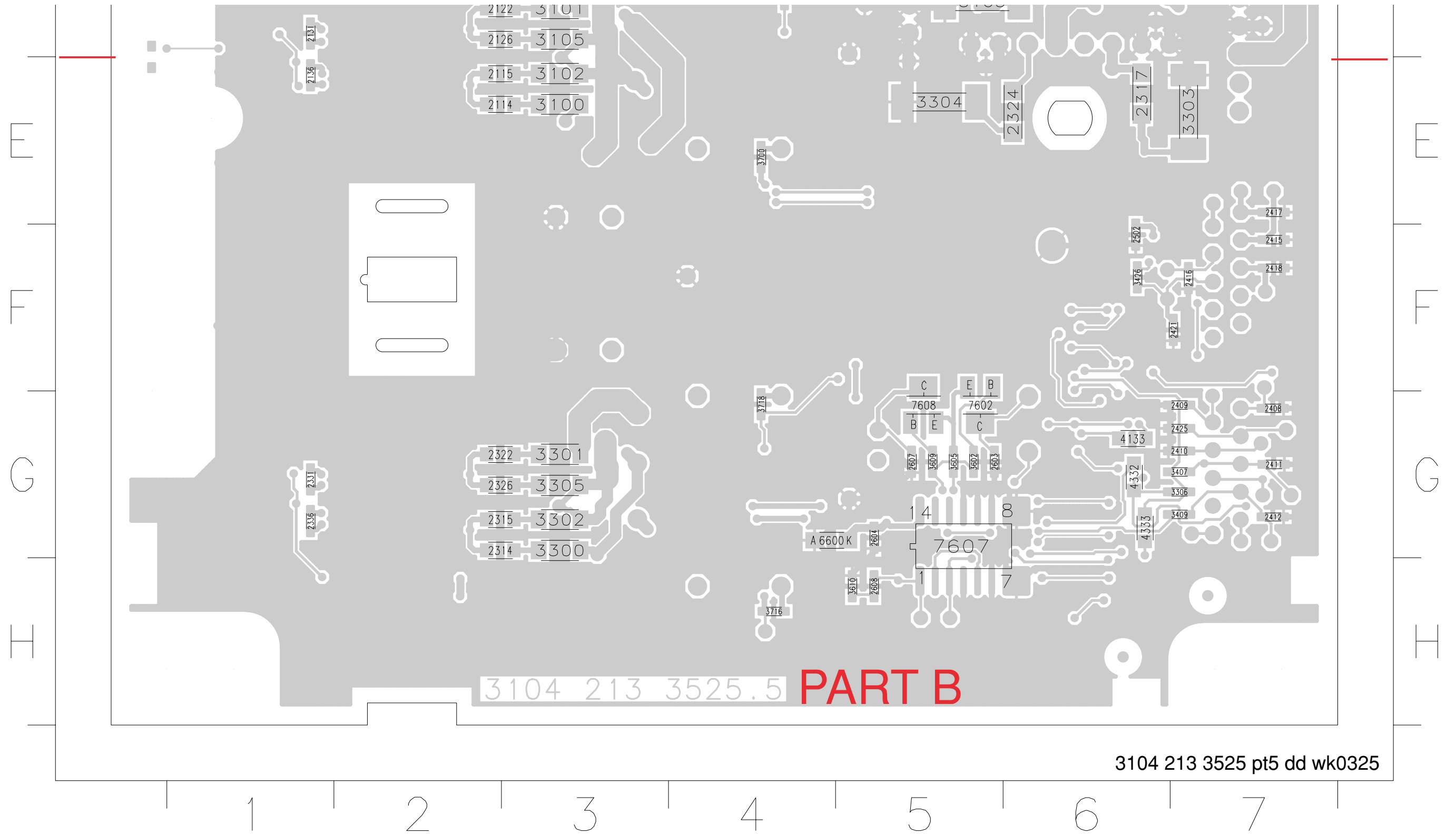
1301 B1	7716 I12
1302 B2	F100 B3
1303 E2	F102 B3
1304 G2	F103 B3
1305 E1	F105 B3
1309 G1	F106 C3
1312 G3	F108 C3
1320 I6	F111 C3
1400 I6	F114 C3
1600 E9	F116 E3
1601 G9	F117 E3
2400 H3	F118 E3
2401 H4	F119 E3
2402 H5	F123 F12
2403 H3	F124 H3
2404 H4	F125 F11
2405 H5	F126 H3
2406 H4	F127 H3
2407 H4	F131 I10
2408 B3	F132 I2
2409 B3	F140 C3
2410 B3	F141 E3
2411 D3	F142 E2
2412 D3	F143 I8
2413 D2	
2414 D2	
2415 F3	
2416 F3	
2417 F3	
2418 F3	
2419 I2	
2420 D3	
2421 F2	
2422 F3	
2423 I8	
2425 B3	
2500 A10	
2501 B10	
2502 C10	
2600 G8	
2601 E9	
2602 E8	
2603 E10	
2604 E12	
2605 E7	
2606 F7	
2607 G10	
2608 F12	
2611 F6	
2700 I11	
3400 B5	
3401 B5	
3402 B5	
3403 B5	
3404 C4	
3405 C5	
3406 C5	
3407 C5	
3408 C5	
3409 C5	
3410 E4	
3411 E4	
3412 E4	
3413 A4	
3414 A5	
3415 A5	
3416 A5	
3417 A5	
3418 A5	
3419 B5	
3420 I3	
3421 B5	
3422 I3	
3423 B5	
3424 E4	
3425 E4	
3426 E4	
3600 E7	
3601 E7	
3602 E8	
3603 E10	
3604 F7	
3605 F9	
3606 F7	
3607 F7	
3608 F9	
3609 F8	
3610 F12	
3700 H10	
3701 H10	
3703 H11	
3709 H10	
3712 H10	
3713 H11	
3716 H10	
3718 H10	
3721 I11	
3722 I11	
4400 C5	
5400 H4	
5401 H4	
6600 F6	
6713 H12	
6714 H12	
6715 I12	
7600-1 F8	
7600-2 F10	
7600-3 F9	
7600-4 G8	
7600-5 F11	
7600-6 G7	
7602 E9	
7607 E11	
7608 G9	
7716 H12	

BOTTOM VIEW LAYOUT - PART A

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

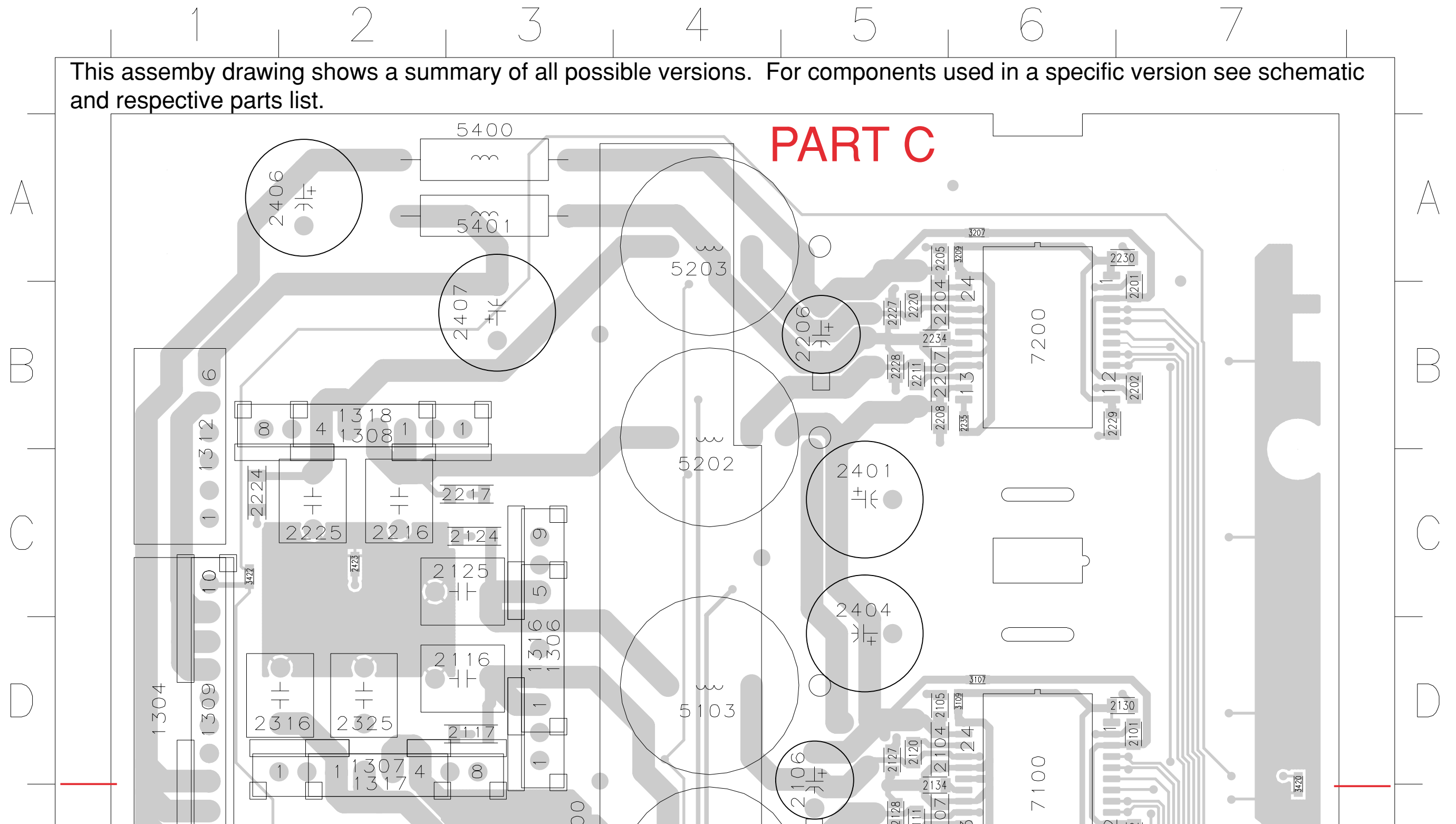


BOTTOM VIEW LAYOUT - PART B

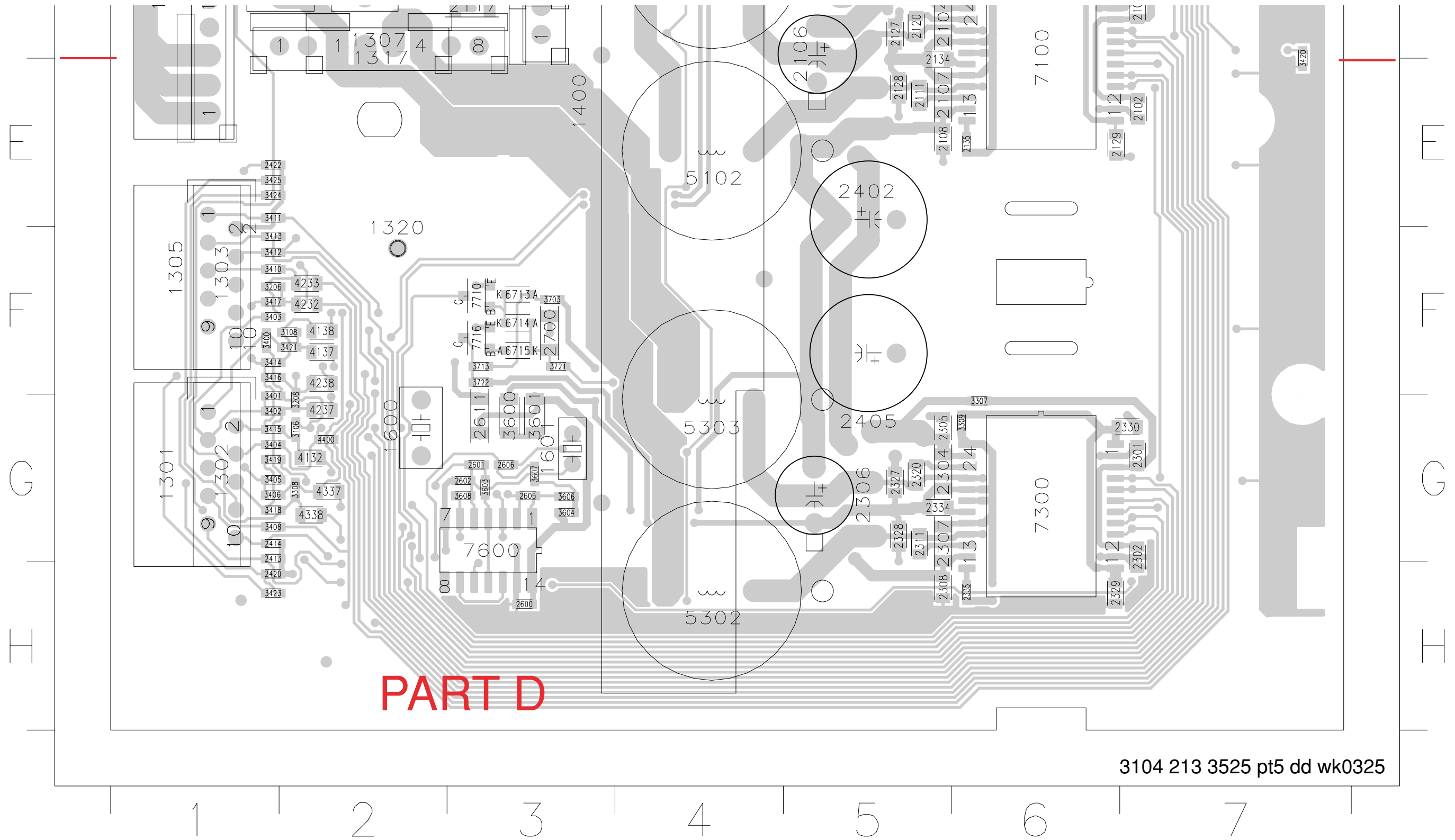


TOP VIEW LAYOUT - PART C

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



TOP VIEW LAYOUT - PART D



PART D

3104 213 3525 pt5 dd wk0325

ELECTRICAL PARTS LIST - AMPLIFIER BOARD**MISCELLANEOUS**

8	3104 211 29861	Spring 6-channel
1302	4822 267 10729	Flex Socket 10P Vert
1303	4822 267 10729	Flex Socket 10P Vert
1600	2422 540 98514	Ceram Resonator 602,7kHz
1601	2422 540 98568	Ceram Resonator 700kHz

CAPACITORS

2101	2222 580 15649	100nF 10% 50V	2230	2222 580 15649	100nF 10% 50V
2102	2222 580 15649	100nF 10% 50V	2231	4822 126 14241	330pF 50V
2104	2222 601 55649	100nF 10% 100V	2234	2238 780 55654	220nF 10% 16V
2105	2222 580 15649	100nF 10% 50V	2235	4822 126 13956	68pF 5% 63V
2106	2020 021 91431	22uF 20% 100V	2236	4822 126 14241	330pF 50V
2107	2222 601 55649	100nF 10% 100V	2301	2222 580 15649	100nF 10% 50V
2108	2222 580 15649	100nF 10% 50V	2302	2222 580 15649	100nF 10% 50V
2111	4822 126 13188	15nF 5% 63V	2304	2222 601 55649	100nF 10% 100V
2114	5322 116 80853	560pF 5% 63V	2305	2222 580 15649	100nF 10% 50V
2115	5322 116 80853	560pF 5% 63V	2306	2020 021 91431	22uF 20% 100V
2116	4822 121 51252	470nF 5% 63V	2307	2222 601 55649	100nF 10% 100V
2117	2222 581 15654	220nF 10% 50V	2308	2222 580 15649	100nF 10% 50V
2120	4822 126 13188	15nF 5% 63V	2311	4822 126 13188	15nF 5% 63V
2122	5322 116 80853	560pF 5% 63V	2314	5322 116 80853	560pF 5% 63V
2124	2222 581 15654	220nF 10% 50V	2315	5322 116 80853	560pF 5% 63V
2125	4822 121 51252	470nF 5% 63V	2316	4822 121 51252	470nF 5% 63V
2126	5322 116 80853	560pF 5% 63V	2317	2222 581 15654	220nF 10% 50V
2127	2222 580 15649	100nF 10% 50V	2320	4822 126 13188	15nF 5% 63V
2128	2222 580 15649	100nF 10% 50V	2322	5322 116 80853	560pF 5% 63V
2129	2222 580 15649	100nF 10% 50V	2324	2222 581 15654	220nF 10% 50V
2130	2222 580 15649	100nF 10% 50V	2325	4822 121 51252	470nF 5% 63V
2131	4822 126 14241	330pF 50V	2326	5322 116 80853	560pF 5% 63V
2134	2238 780 55654	220nF 10% 16V	2327	2222 580 15649	100nF 10% 50V
2135	4822 126 13956	68pF 5% 63V	2328	2222 580 15649	100nF 10% 50V
2136	4822 126 14241	330pF 50V	2329	2222 580 15649	100nF 10% 50V
2201	2222 580 15649	100nF 10% 50V	2330	2222 580 15649	100nF 10% 50V
2202	2222 580 15649	100nF 10% 50V	2331	4822 126 14241	330pF 50V
2204	2222 601 55649	100nF 10% 100V	2334	2238 780 55654	220nF 10% 16V
2205	2222 580 15649	100nF 10% 50V	2335	4822 126 13956	68pF 5% 63V
2206	2020 021 91431	22uF 20% 100V	2336	4822 126 14241	330pF 50V
2207	2222 601 55649	100nF 10% 100V	2400	2222 580 15649	100nF 10% 50V
2208	2222 580 15649	100nF 10% 50V	2401	4822 124 80062	470uF 20% 35V
2211	4822 126 13188	15nF 5% 63V	2402	4822 124 80062	470uF 20% 35V
2214	5322 116 80853	560pF 5% 63V	2403	2222 580 15649	100nF 10% 50V
2215	5322 116 80853	560pF 5% 63V	2404	4822 124 80062	470uF 20% 35V
2216	4822 121 51252	470nF 5% 63V	2405	4822 124 80062	470uF 20% 35V
2217	2222 581 15654	220nF 10% 50V	2406	4822 123 14026	470uH 20% 35V
2220	4822 126 13188	15nF 5% 63V	2407	4822 123 14026	470uH 20% 35V
2222	5322 116 80853	560pF 5% 63V	2408	5322 126 11578	1nF 10% 50V
2224	2222 581 15654	220nF 10% 50V	2409	5322 126 11578	1nF 10% 50V
2225	4822 121 51252	470nF 5% 63V	2410	5322 126 11578	1nF 10% 50V
2226	5322 116 80853	560pF 5% 63V	2411	5322 126 11578	1nF 10% 50V
2227	2222 580 15649	100nF 10% 50V	2412	5322 126 11578	1nF 10% 50V
2228	2222 580 15649	100nF 10% 50V	2413	5322 126 11578	1nF 10% 50V
2229	2222 580 15649	100nF 10% 50V	2414	5322 126 11578	1nF 10% 50V
			2415	5322 126 11578	1nF 10% 50V
			2416	5322 126 11578	1nF 10% 50V
			2417	5322 126 11578	1nF 10% 50V
			2418	5322 126 11578	1nF 10% 50V
			2419	2238 586 59812	100nF +80/-20% 50V
			2420	5322 126 11578	1nF 10% 50V
			2421	5322 126 11578	1nF 10% 50V

ELECTRICAL PARTS LIST - AMPLIFIER BOARD**CAPACITORS**

2422	5322 126 11578	1nF 10% 50V	3423	4822 051 30562	5k6 5% 0,063W
2423	2238 586 59812	100nF +80/-20% 50V	3424	4822 051 30562	5k6 5% 0,063W
2425	5322 126 11578	1nF 10% 50V	3425	4822 051 30562	5k6 5% 0,063W
2600	2238 586 59812	100nF +80/-20% 50V	3426	4822 051 30562	5k6 5% 0,063W
2602	2020 552 94427	100pF 5% 50V	3600	4822 051 10821	820R 2% 0,25W
2603	2020 552 94427	100pF 5% 50V	3601	4822 051 10821	820R 2% 0,25W
2604	2238 586 59812	100nF +80/-20% 50V	3602	4822 117 13632	100k 1% 0,062W
2605	4822 126 13881	470pF 5% 50V	3604	4822 051 30103	10k 5% 0,062W
2606	5322 126 11578	1nF 10% 50V	3605	4822 051 30682	6k8 5% 0,062W
2607	2020 552 94427	100pF 5% 50V	3606	4822 117 13632	100k 1% 0,062W
2608	2020 552 94427	100pF 5% 50V	3607	4822 051 30102	1k 5% 0,062W
2611	2020 552 96507	10uF +80/-20% 10V	3608	4822 051 30105	1M 5% 0,062W
2700	2020 552 96507	10uF +80/-20% 10V	3609	4822 117 13632	100k 1% 0,062W

RESISTORS

3100	4822 051 10568	5R6 5% 0,25W	3700	4822 117 12925	47k 1% 0,063W
3101	4822 051 10568	5R6 5% 0,25W	3701	4822 117 12925	47k 1% 0,063W
3102	4822 051 10568	5R6 5% 0,25W	3703	4822 117 12925	47k 1% 0,063W
3103	2322 762 60229	22R 5% 2512	3709	4822 117 12925	47k 1% 0,063W
3104	2322 762 60229	22R 5% 2512	3712	4822 117 12925	47k 1% 0,063W
3105	4822 051 10568	5R6 5% 0,25W	3713	4822 051 30103	10k 5% 0,062W
3107	4822 051 30109	10R 5% 0,062W	3716	4822 117 12925	47k 1% 0,063W
3109	4822 051 30109	10R 5% 0,062W	3718	4822 117 12925	47k 1% 0,063W
3200	4822 051 10568	5R6 5% 0,25W	3721	4822 051 30103	10k 5% 0,062W
3201	4822 051 10568	5R6 5% 0,25W	3722	4822 051 30103	10k 5% 0,062W
3202	4822 051 10568	5R6 5% 0,25W	4132	4822 051 20008	0R Jumper 0805
3203	2322 762 60229	22R 5% 2512	4133	4822 051 20008	0R Jumper 0805
3204	2322 762 60229	22R 5% 2512	4137	4822 051 20008	0R Jumper 0805
3205	4822 051 10568	5R6 5% 0,25W	4138	4822 051 20008	0R Jumper 0805
3207	4822 051 30109	10R 5% 0,062W	4232	4822 051 20008	0R Jumper 0805
3209	4822 051 30109	10R 5% 0,062W	4233	4822 051 20008	0R Jumper 0805
3300	4822 051 10568	5R6 5% 0,25W	4237	4822 051 20008	0R Jumper 0805
3301	4822 051 10568	5R6 5% 0,25W	4238	4822 051 20008	0R Jumper 0805
3302	4822 051 10568	5R6 5% 0,25W	4332	4822 051 20008	0R Jumper 0805
3303	2322 762 60229	22R 5% 2512	4333	4822 051 20008	0R Jumper 0805
3304	2322 762 60229	22R 5% 2512	4337	4822 051 20008	0R Jumper 0805
3305	4822 051 10568	5R6 5% 0,25W	4338	4822 051 20008	0R Jumper 0805
3307	4822 051 30109	10R 5% 0,062W			
3309	4822 051 30109	10R 5% 0,062W			
3401	4822 051 30562	5k6 5% 0,063W			
3404	4822 051 30221	220R 5% 0,062W			
3405	4822 051 30562	5k6 5% 0,063W			
3408	4822 051 30221	220R 5% 0,062W			
3410	4822 051 30562	5k6 5% 0,063W			
3411	4822 051 30562	5k6 5% 0,063W			
3412	4822 051 30221	220R 5% 0,062W			
3413	4822 051 30562	5k6 5% 0,063W			
3414	4822 051 30562	5k6 5% 0,063W			
3415	4822 051 30562	5k6 5% 0,063W			
3420	2322 615 23103	NTC 10k 5% 0,125W			
3421	4822 051 30562	5k6 5% 0,063W			
3422	4822 051 30101	100R 5% 0,062W			

COILS & FILTERS

5102	2422 536 00496	Coil 22uH 10%
5103	2422 536 00496	Coil 22uH 10%
5202	2422 536 00496	Coil 22uH 10%
5203	2422 536 00496	Coil 22uH 10%
5302	2422 536 00496	Coil 22uH 10%
5303	2422 536 00496	Coil 22uH 10%
5400	4822 157 11411	Fixed Ind 80R 100MHz
5401	4822 157 11411	Fixed Ind 80R 100MHz

DIODES

6600	3198 020 55680	BZX384-C5V6
6713	4822 130 11397	BAS316
6714	4822 130 11397	BAS316
6715	4822 130 11397	BAS316

ELECTRICAL PARTS LIST - AMPLIFIER BOARD

TRANSISTORS & INTEGRATED CIRCUITS

7100	9352 705 74518	TDA8920TH/N1
7200	9352 705 74518	TDA8920TH/N1
7300	9352 705 74518	TDA8920TH/N1
7600	5322 209 11517	PC74HCU04T
7602	5322 130 60159	BC847B
7607	5322 209 14477	HEF4013BT
7608	4822 130 60373	BC857B
7710	5322 130 60159	BC847B
7716	4822 130 60373	BC857B

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

SPEAKER CONNECTOR BOARD

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ELECTRICAL PARTS LIST - SPEAKER CONNECTOR BOARD

MISCELLANEOUS

1711	2422 025 18178	Speaker Socket 6P Pur/Blue/Gry
1712	2422 025 18179	Speaker Socket 6P Wte/Grn/Red

CAPACITORS

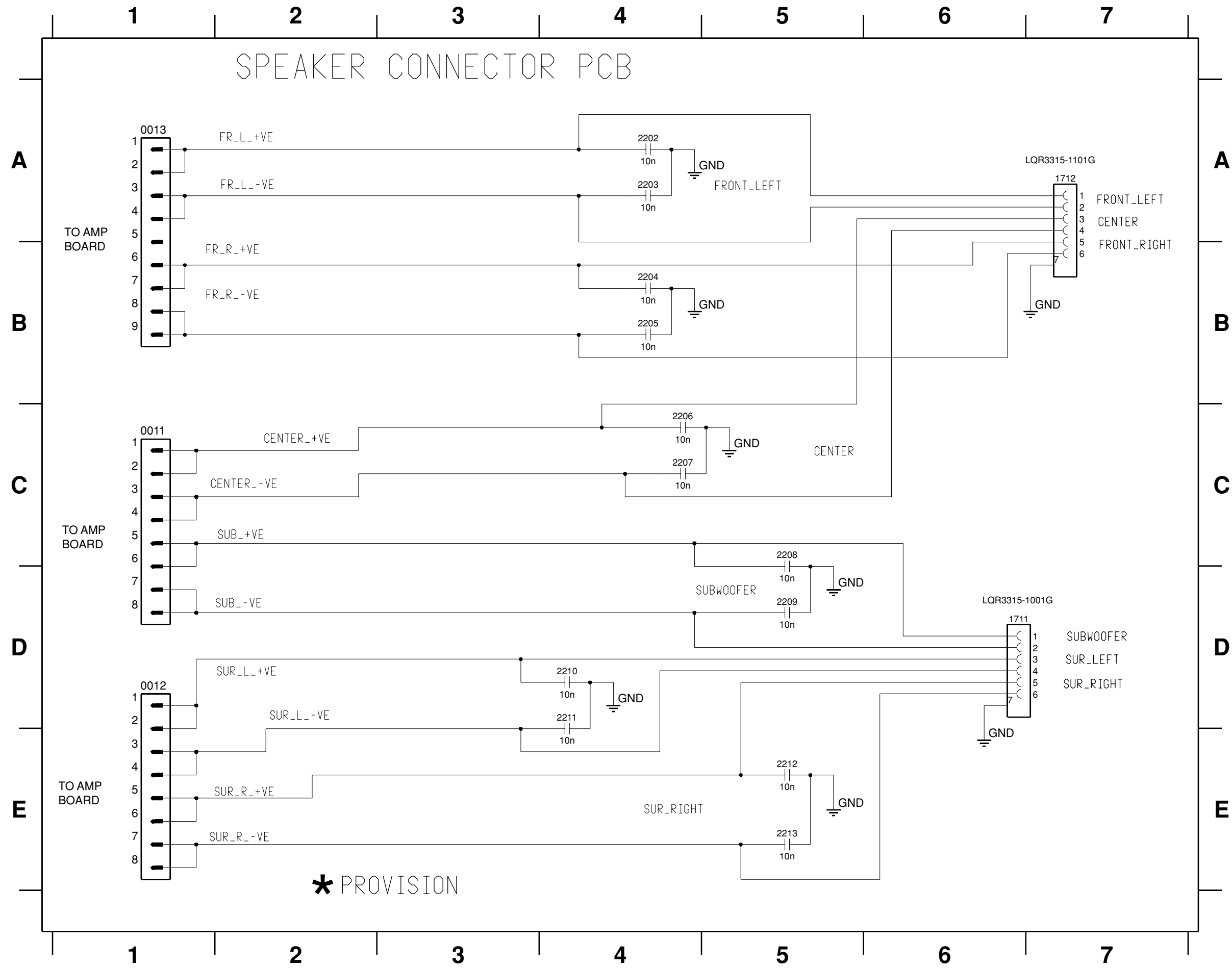
2202	5322 126 11583	10nF 10% 50V
2203	5322 126 11583	10nF 10% 50V
2204	5322 126 11583	10nF 10% 50V
2205	5322 126 11583	10nF 10% 50V
2206	5322 126 11583	10nF 10% 50V
2207	5322 126 11583	10nF 10% 50V
2208	5322 126 11583	10nF 10% 50V
2209	5322 126 11583	10nF 10% 50V
2210	5322 126 11583	10nF 10% 50V
2211	5322 126 11583	10nF 10% 50V
2212	5322 126 11583	10nF 10% 50V
2213	5322 126 11583	10nF 10% 50V

RESISTORS

4221	4822 051 20008	0R Jumper 0805
4222	4822 051 20008	0R Jumper 0805
4223	4822 051 20008	0R Jumper 0805
4224	4822 051 20008	0R Jumper 0805
4225	4822 051 20008	0R Jumper 0805

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

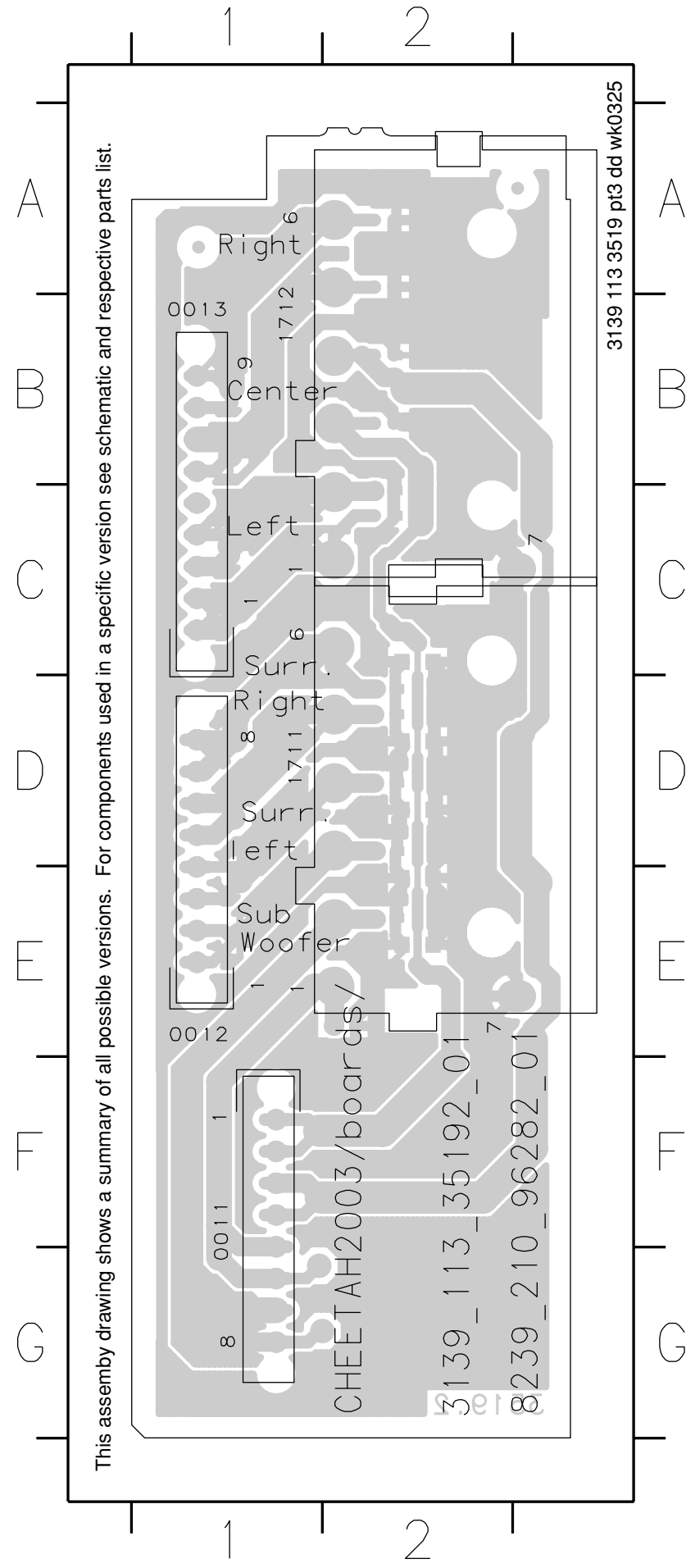
CIRCUIT DIAGRAM



- 0011 C1
- 0012 D1
- 0013 A1
- 1711 D6
- 1712 A7
- 2202 A4
- 2203 A4
- 2204 B4
- 2205 B4
- 2206 C4
- 2207 C4
- 2208 C5
- 2209 D5
- 2210 D4
- 2211 D4
- 2212 E5
- 2213 E5

COMPONENT LAYOUT

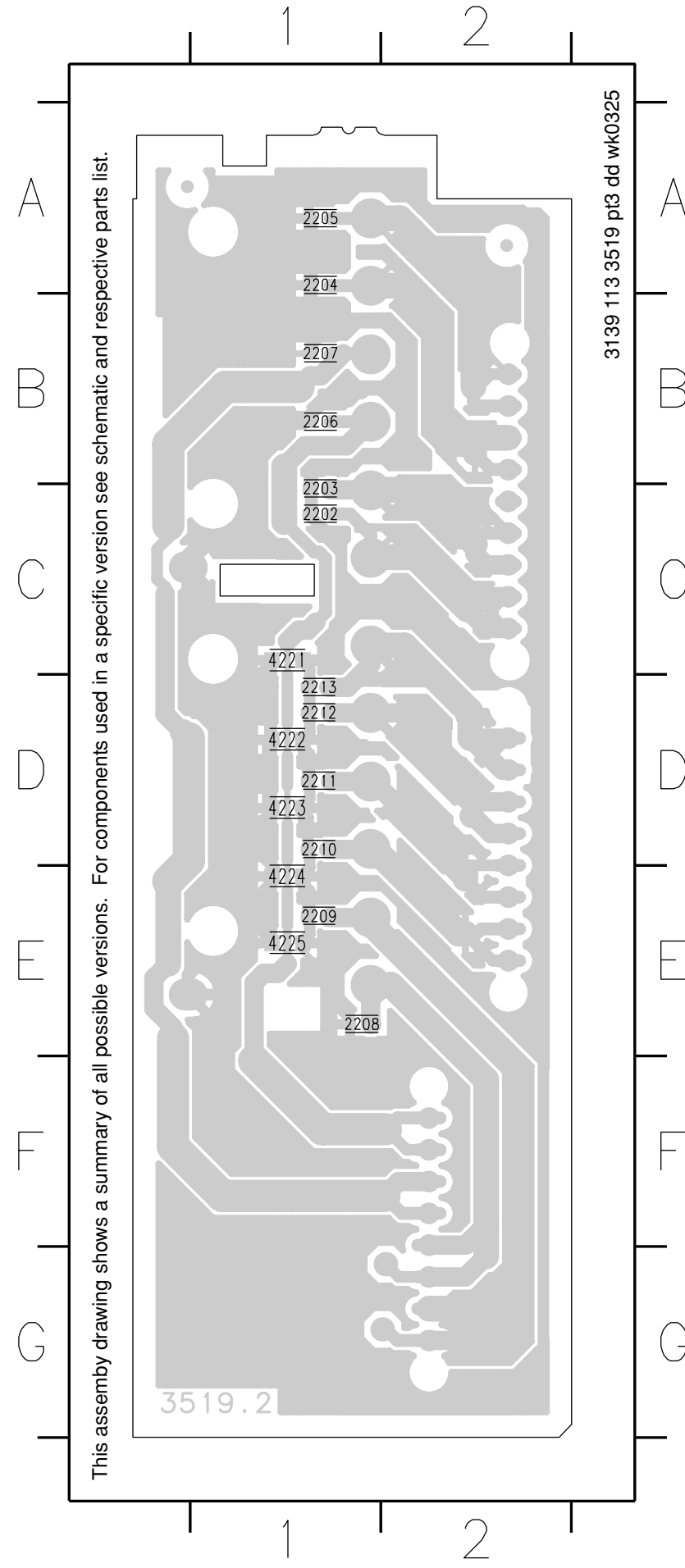
9-3



0011 F 1
 0012 F 1
 0013 F 1
 1711 B 1
 1712 B 1

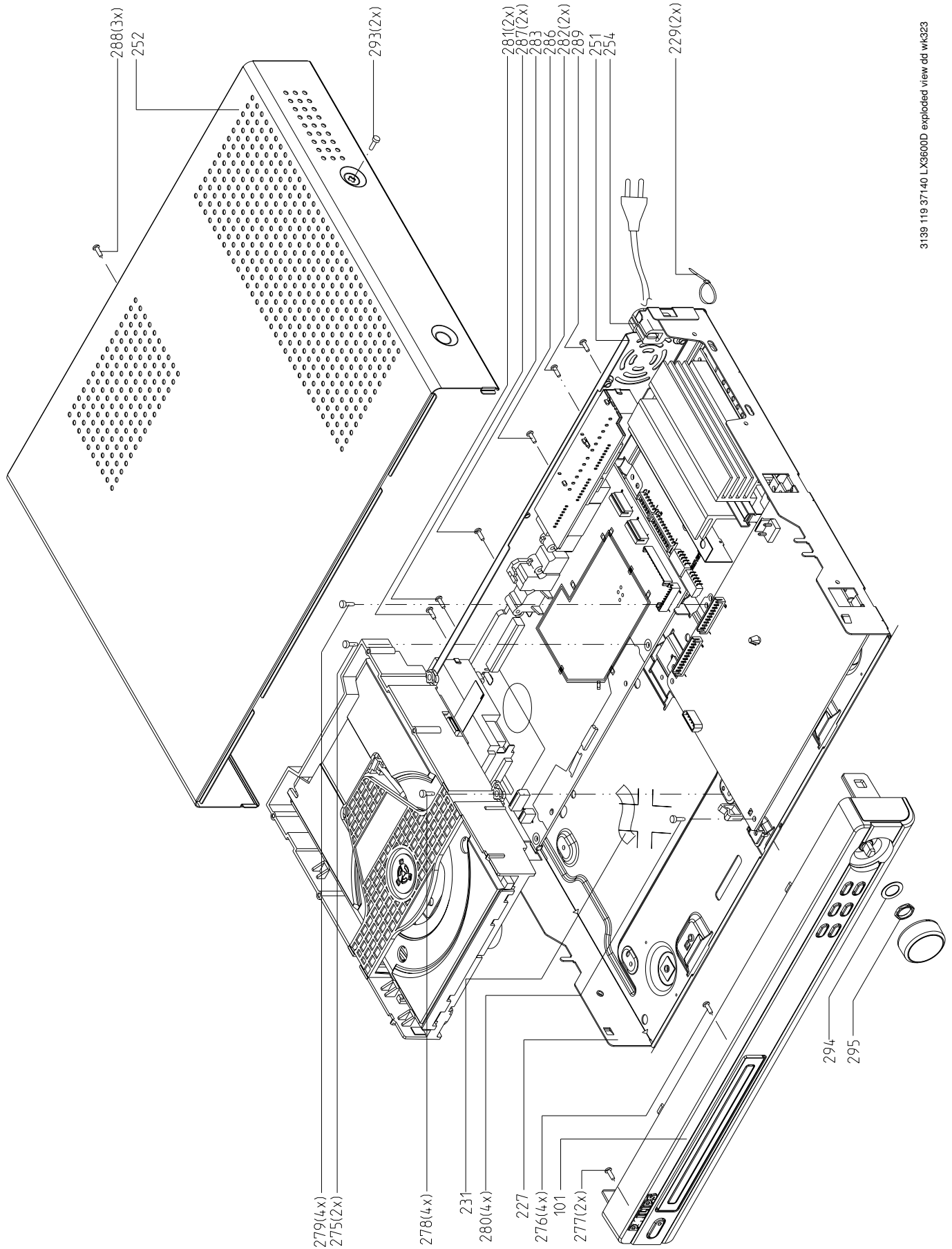
CHIP LAYOUT

9-3

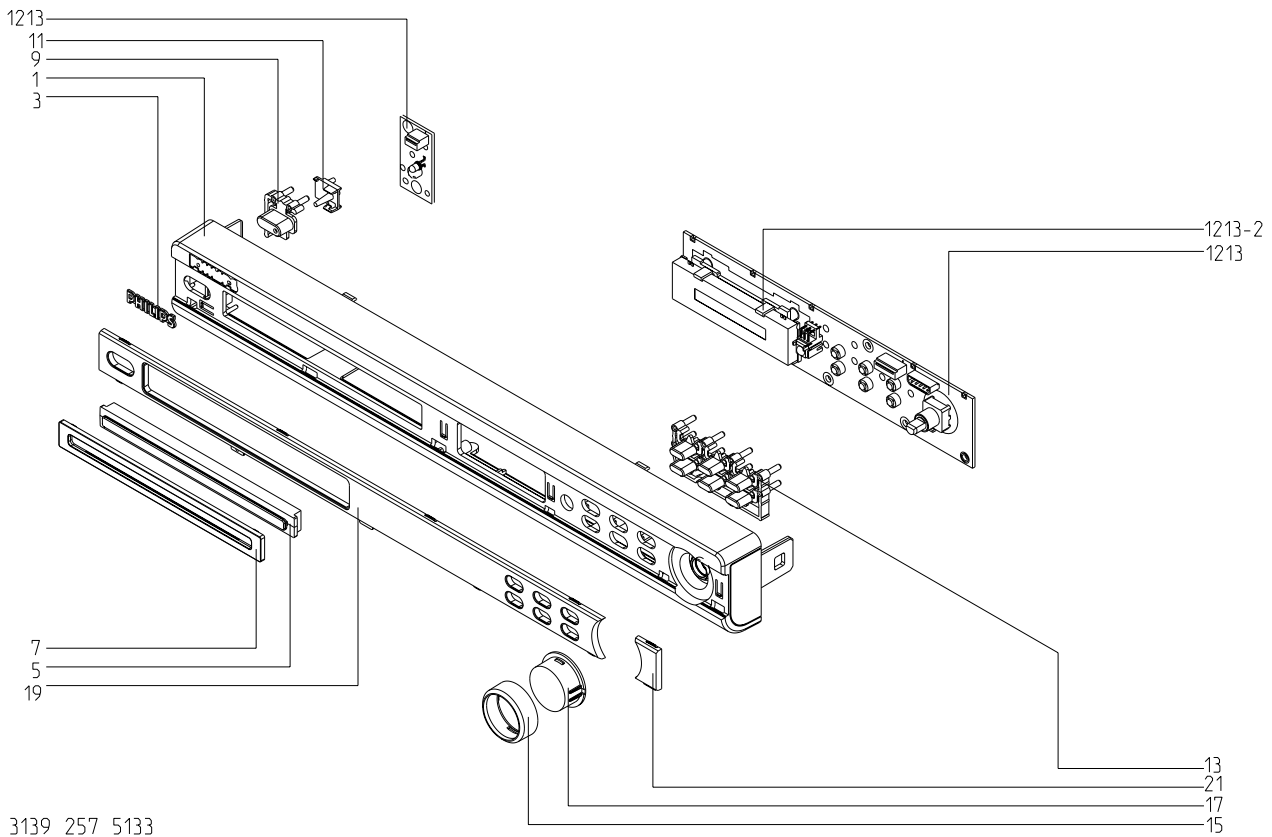


2202 F 1
 2203 F 1
 2204 A 1
 2205 B 1
 2206 B 1
 2207 F 1
 2208 F 1
 2210 F 1
 2211 F 1
 2212 D 1
 2213 D 1
 4221 C 1
 4222 C 1
 4223 D 1
 4224 D 1
 4225 F 1

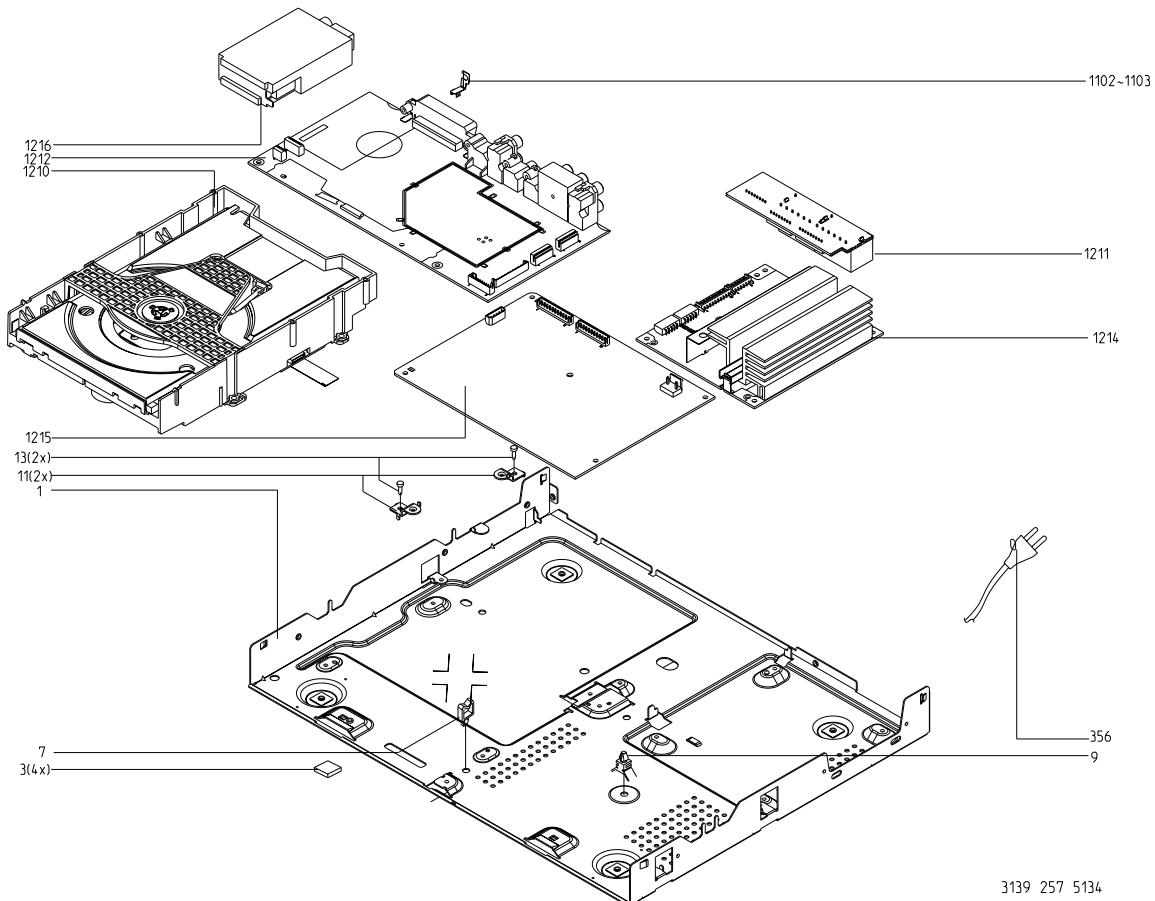
MAIN ENCASING EXPLODED VIEW



FRONT CABINET ASSY EXPLODED VIEW



BOTTOM PLATE ASSY EXPLODED VIEW



MAIN ENCASING & ACCESSORIES PARTS LIST

254	4822 532 60948	Bush, Mains cord
345	3139 119 01421	LS Box Package (CS & Subwoofer)
351	2422 076 00546	FM Antenna Wire
352	2422 549 45386	AM Loop Antenna
353	3139 238 04751	Remote Control RC19245015/01H
363	2422 076 00468	Scart Cable 1,1M 21P
370	3139 115 22611	Instruction For Use /22
370	3139 115 22701	Instruction For Use /25
371	3139 115 22721	Instruction For Use /29
8521	3139 110 34580	Flex Cable 4P 28cm AD
8531	3139 111 03671	Flex Cable 10P 14cm AD
8532	3139 111 03671	Flex Cable 10P 14cm AD
8540	3139 110 35390	Flex Cable 8P 48cm BD
8580	3139 110 35911	Flex Cable 11P 10cm BD

SCREW LIST

275	M3 x 8
276	D3 x 8
277	D3 x 8
278	M3 x 8
279	M3 x 8
280	M3 x 8
281	M3 x 8
282	D3 x 8
283	D3 x 8
286	D3 x 8
287	D3 x 8
288	M3 x 8
289	M3 x 8
293	M3 x 6

FRONT CABINET ASSEMBLY PARTS LIST

1	3139 257 51221	Cabinet Front
3	3139 247 51831	Badge Philips Silver
5	3139 257 51241	Cover Tray DVD
7	3139 114 79611	Lens Orn Cover Tray
9	3139 257 51231	Button Power/Standby
11	3139 114 79541	Lightguide Standby
13	3139 257 51271	Button Set Control
15	3139 114 79591	Knob Volume
17	3139 114 79601	Cap Volume
19	3139 257 51251	Window Display
21	3139 114 79571	Window Display Right

BOTTOM PLATE ASSEMBLY PARTS LIST

3	3139 243 10080	Cushion Foot
9	8204 055 76161	Spacer Locking KGLS-4S
356	2422 070 98231	△ Main Cord IEC 2A5 1,8M /22
356	2422 070 98236	△ Main Cord UK 5A 1,8M /25
1210	3141 018 03810	DVD Loader A97SL
1215	3122 429 00191	PSU Board Euro
1216	2422 542 90137	Tuner Module A+F ENG07703QEUR

LOUDSPEAKER PACKAGE BREAKDOWN PARTS

9965 000 20170	Front Speaker Box Left
9965 000 20171	Front Speaker Box Right
9965 000 20172	Rear Speaker Box Left
9965 000 20173	Rear Speaker Box Right
9965 000 20174	Center Speaker Box
9965 000 20175	Subwoofer Box
9965 000 17047	Mounting Bracket + Screw Pack

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

DOCUMENT HISTORY

Version 1.0

- * Initial release