DVD Hometheatre System

HTS3357/12/05

Service
Service
Service

Service Manual

PROGRESSIVE SCAN

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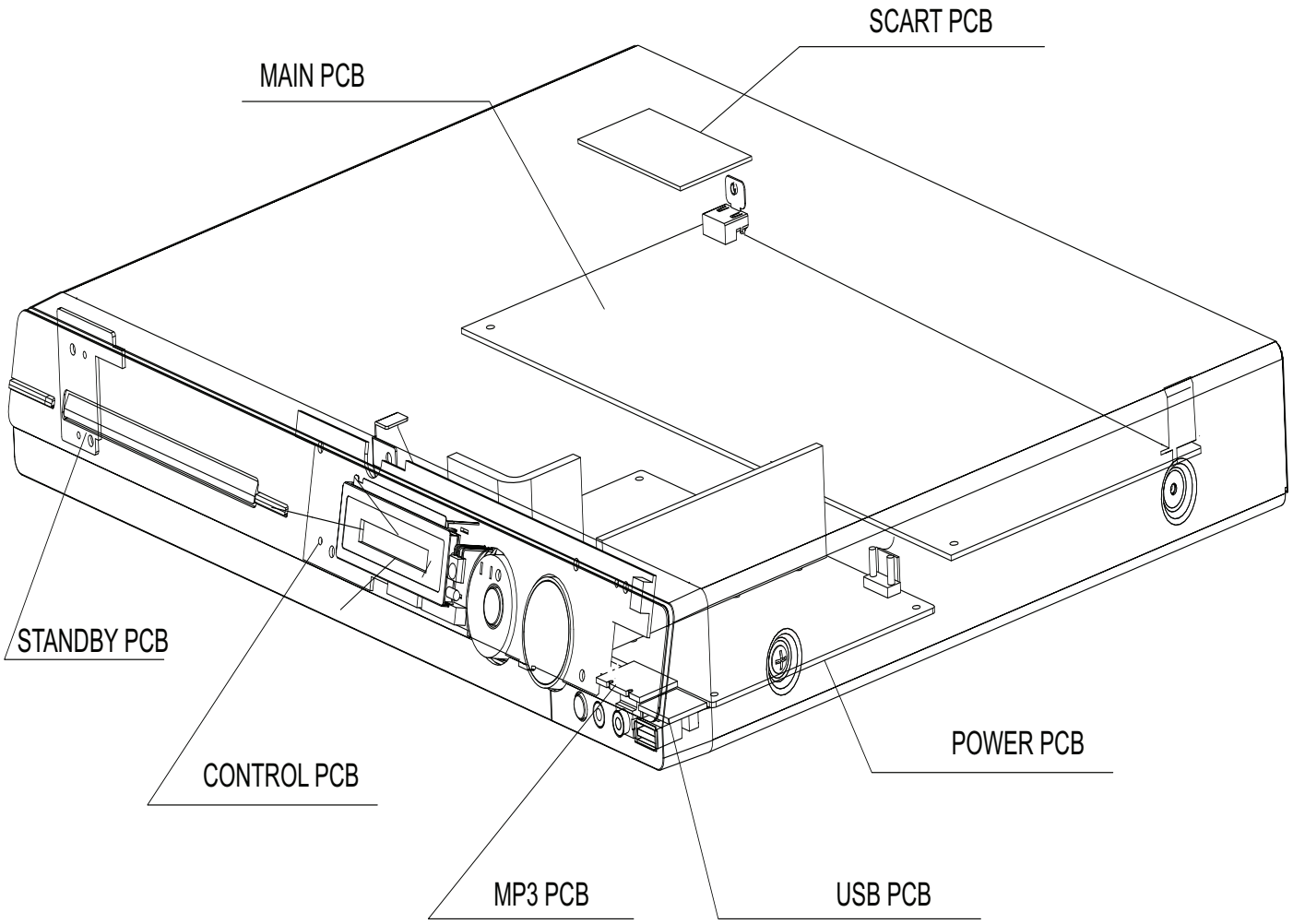
Published by KC-ET741 Service Audio Printed in The Netherlands Subject to modification

GB 3139 785 32711

Version 1.1

PHILIPS

LOCATION OF PCB BOARDS



VERSION VARIATION:

Type/Versions / Features & Board in used	HTS3357	
	/05	/12
Main (Output Power-600W)	X	X
Composite Video Out	X	X
Power Voltage (230V)	X	X
AC Cord (Fix)	X	X

Specifications

AMPLIFIER

Total output power ..... 600 W RMS
Frequency Response ..... 150 Hz – 18 kHz / ±3 dB
Signal-to-Noise Ratio ..... > 60 dB (A-weighted)
Input Sensitivity
- AUX In ..... 500 mV
- TV In ..... 250 mV
- MP3 Line-In ..... 500 mV

RADIO

Tuning Range ..... FM 87.5–108 MHz (50kHz)
..... MW 531–1602 kHz (9kHz)
26 dB Quieting Sensitivity ..... FM 22 dBf, MW 5000µV/m
IF Rejection Ratio ..... FM 60 dB, MW 24 dB
Signal-to-Noise Ratio ..... FM 50 dB, MW 30 dB
AM Suppression Ratio ..... FM 30 dB
Harmonic Distortion ..... FM Mono 3%
..... FM Stereo 3%
..... MW 5%
Frequency Response ..... FM 180 Hz–10 kHz / ±6 dB
Stereo Separation ..... FM 26 dB (1 kHz)
Stereo Threshold ..... FM 23.5 dB

DISC

Laser Type ..... Semiconductor
Disc Diametre ..... 12cm / 8cm
Video Decoding ..... MPEG-1 / MPEG-2 / DivX 3/4/5/6, Ultra
Video DAC ..... 12 Bits
Signal System ..... PAL / NTSC
Video Format ..... 4:3 / 16:9
Video S/N ..... 56 dB (minimum)
Audio DAC ..... 24 Bits / 96 kHz
Composite Video Output ..... 1.0 Vp-p, 75Ω
S-Video Output ..... Y - 1.0 Vp-p, 75Ω C - 0.286 Vp-p, 75Ω
Frequency Response ..... 4 Hz–20 kHz (44.1 kHz)
..... 4 Hz–22 kHz (48 kHz)
..... 4 Hz–44 kHz (96 kHz)
PCM ..... IEC 60958
Dolby Digital ..... IEC 60958, IEC 61937
DTS ..... IEC 60958, IEC 61937

MAIN UNIT

Power Supply Rating ..... 220~240 V; 50 Hz
Power Consumption ..... 100 W
Dimensions ..... 340.4 x 48.5 x 435 (mm) (w x h x d)
Weight ..... 4.04 kg

FRONT AND REAR SPEAKERS

System ..... Full range
Impedance ..... 3 Ω
Speaker drivers ..... 3” full range speaker
Frequency response ..... 120 Hz – 20 kHz
Dimensions ..... 95.6 x 198.3 x 75 (mm) (w x h x d)
Weight ..... 0.62 kg/each

REAR SPEAKERS

System ..... Full range satellite
Impedance ..... 3 Ω
Speaker drivers ..... 3” full range speaker
Frequency response ..... 120 Hz – 20 kHz
Dimensions ..... 95 x 1184 x 73.7 (mm) (w x h x d)
Weight ..... 5.99 kg/each

CENTRE SPEAKER

System ..... 2-way satellite
Impedance ..... 6 Ω
Speaker drivers ..... 2 x 2.5” full range speaker+ 2” tweeter
Frequency response ..... 120 Hz – 20 kHz
Dimensions ..... 435 x 93.5 x 67 (mm) (w x h x d)
Weight ..... 1.34 kg

SUBWOOFER

Impedance ..... 6 Ω
Speaker drivers ..... 203 mm (8”) woofer
Frequency response ..... 40 Hz – 120 Hz
Dimensions ..... 159.5 x 355.5 x 370 (mm) (w x h x d)
Weight ..... 4.75 kg

Specifications subject to change without prior notice.

SERVICE AIDS

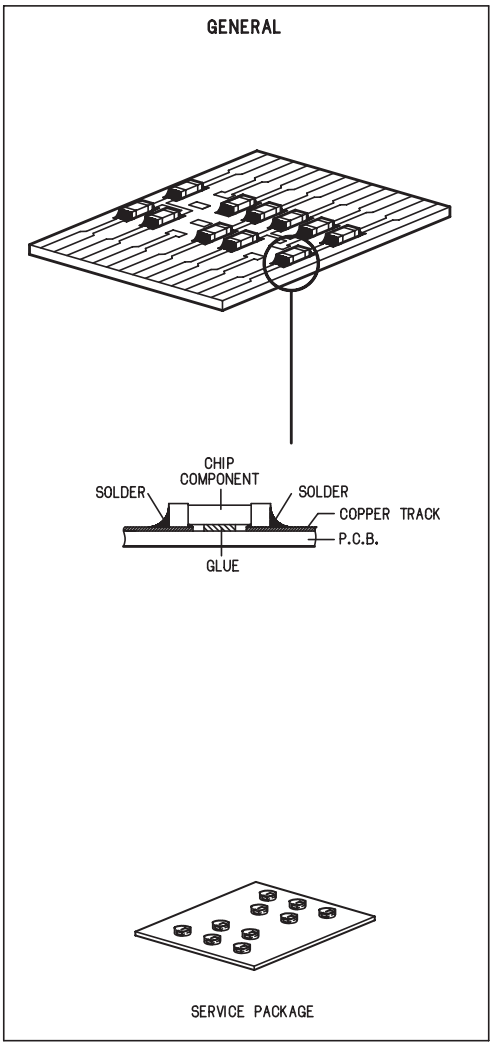
Service Tools:

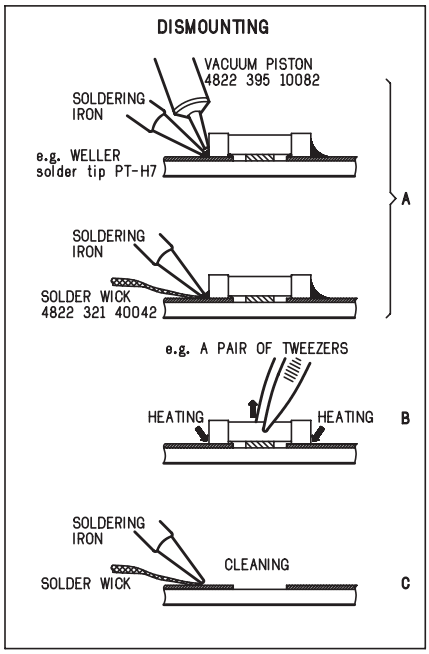
Universal Torx driver holder 4822 395 91019
Torx bit T10 150mm 4822 395 50456
Torx driver set T6-T20 .....4822 395 50145
Torx driver T10 extended 4822 395 50423

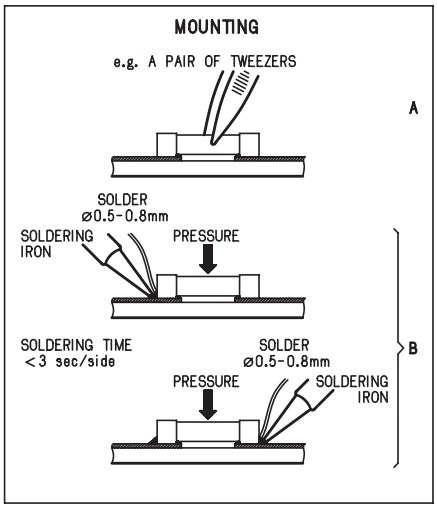
Compact Disc:

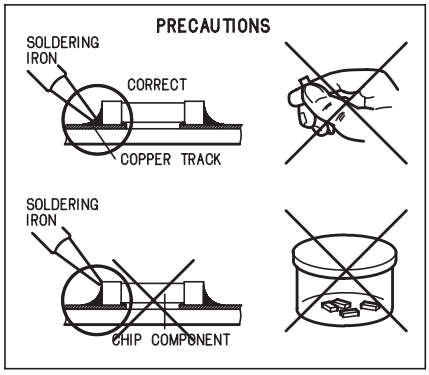
SBC426/426A Test disc 5 + 5A 4822 397 30096
SBC442 Audio Burn-in test disc 1kHz 4822 397 30155
SBC429 Audio Signals disc 4822 397 30184
Dolby Pro-logic Test Disc 4822 395 10216

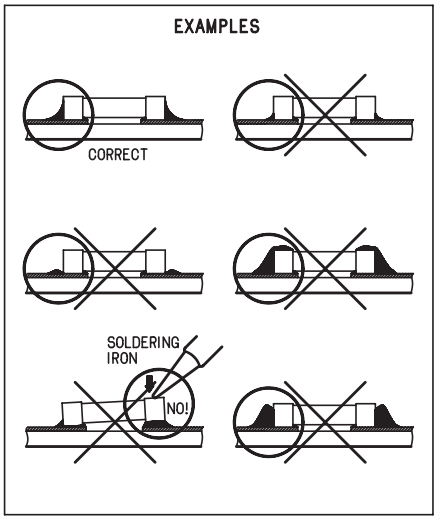
HANDLING CHIP COMPONENTS











ESD

GB **WARNING**

All ICs and many other semi-conductors are susceptible to electrostatic discharges (ESD). Careless handling during repair can reduce life drastically.
When repairing, make sure that you are connected with the same potential as the mass of the set via a wrist wrap with resistance.
Keep components and tools also at this potential.

NL **WAARSCHUWING**

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

F **ATTENTION**

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

D **WARNUNG**

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

I **AVVERTIMENTO**

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

GB **ESD PROTECTION EQUIPMENT**

Complete Kit ESD3 (small tablemat, wristband, connection box, estention 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 symbol ⚠ .

F

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

Less composants de sécurité sont marqués ⚠ .

D

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

Sicherheitsbauteile sind durch das Symbol ⚠ markiert.

I

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

Componenty di sicurezza sono marcati con ⚠ .

GB

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

GB **Warning !**

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

S **Varning !**

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

SF **Varoitus !**

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

DK **Advarse !**

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

F

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

Pb(Lead) Free Solder

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

INDENTIFICATION:
Regardless of special logo (not always indicated) 

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

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

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

- Use only lead-free solder alloy Philips SAC305 with order code 0622 149 00106. If lead-free solder-paste is required, please contact the manufacturer of your solder-equipment. In general use of solder-paste within workshops should be avoided because paste is not easy to store and to handle.
- Use only adequate solder tools applicable for lead-free solder alloy. The solder tool must be able
  - To reach at least a solder-temperature of 400?C,
  - To stabilize the adjusted temperature at the solder-tip
  - To exchange solder-tips for different applications.
- Adjust your solder tool so that a temperature around 360?C – 380?C is reached and stabilized at the solder joint. Heating-time of the solder-joint should not exceed ~ 4 sec. Avoid temperatures above 400?C otherwise wear-out of tips will rise drastically and flux-fluid will be destroyed. To avoid wear-out of tips switch off un-used equipment, or reduce heat.
- Mix of lead-free solder alloy / parts with leaded solder alloy / parts is possible but PHILIPS recommends strongly to avoid mixed solder alloy types (leaded and lead-free).
  If one cannot avoid or does not know whether product is lead-free, clean carefully the solder-joint from old solder alloy and re-solder with new solder alloy (SAC305).
- Use only original spare-parts listed in the Service-Manuals. Not listed standard-material (commodities) has to be purchased at external companies.
- Special information for BGA-ICs:

– Always use the 12nc-recognizable soldering temperature profile of the specific BGA (for de-soldering always use the lead-free temperature profile, in case of doubt)

– Lead free BGA-ICs will be delivered in so-called 'dry-packaging' (sealed pack including a silica gel pack) to protect the IC against moisture. After opening, dependent of MSL-level seen on indicator-label in the bag, the BGA-IC possibly still has to be baked dry. (MSL=Moisture Sensitivity Level). This will be communicated via AYS-website.
Do not re-use BGAs at all.

- For sets produced before 1.1.2005 (except products of 2004), containing leaded solder-alloy and components, all needed spare-parts will be available till the end of the service-period. For repair of such sets nothing changes.
- On our website **www.atyourservice.ce.Philips.com** you find more information to:

  - BGA-de-/soldering (+ baking instructions)
  - Heating-profiles of BGAs and other ICs used in Philips-sets

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

  For additional questions please contact your local repair-helpdesk.

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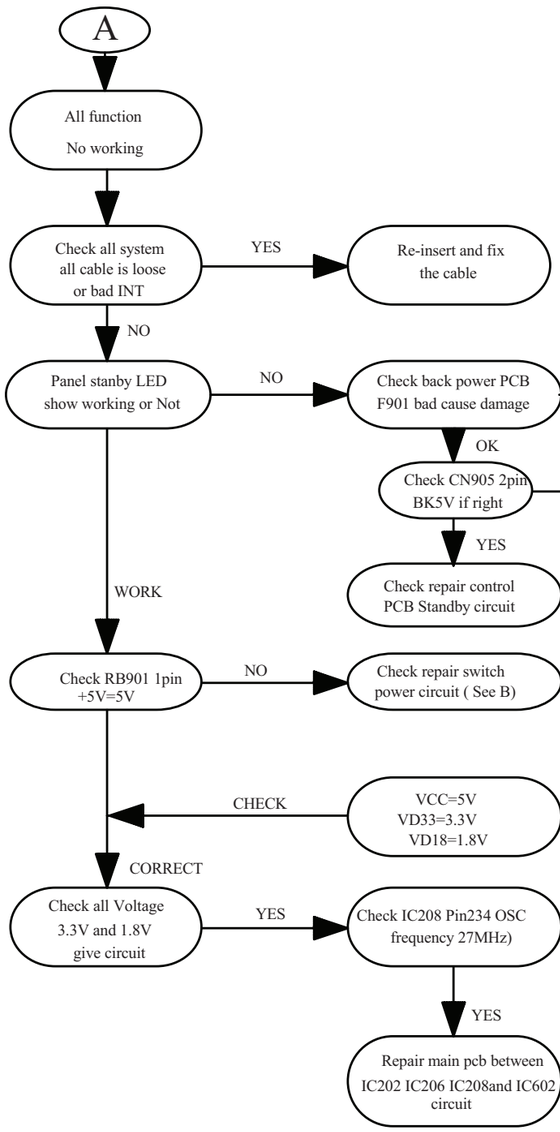
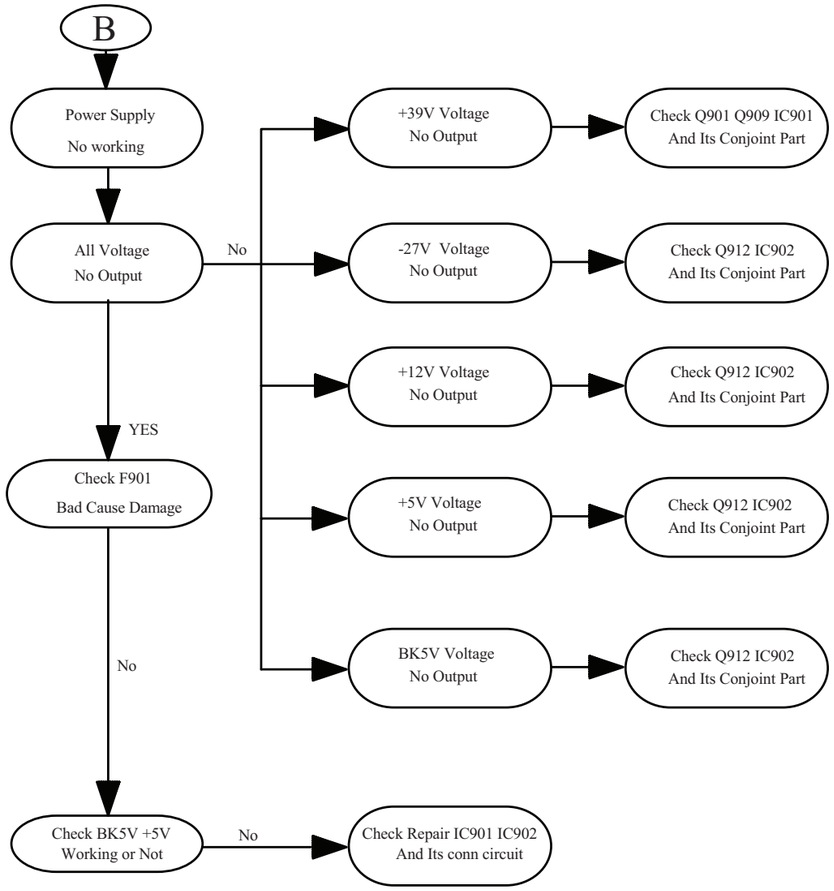
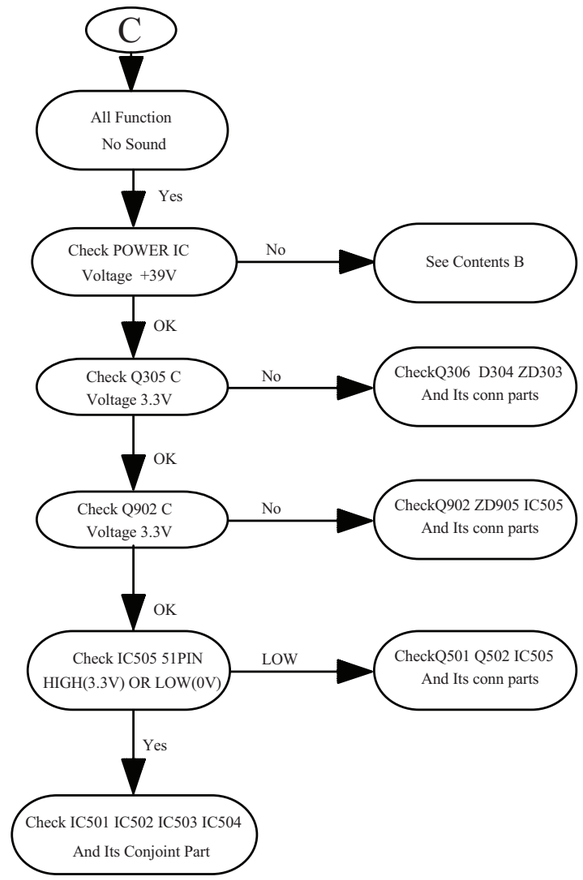
REPAIR INSTRUCTION (Part One)

MAIN UNIT REPAIR CHART 1/3

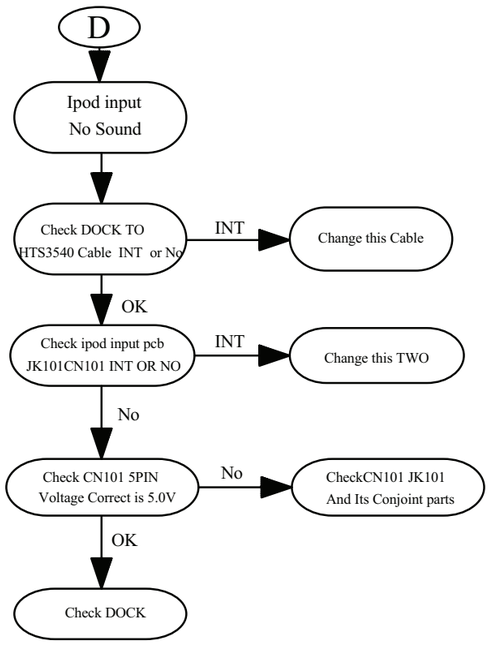
A All Function No Working
B Power Supply No Working
C All Function No Sound
D Ipod input No Sound
E Audio line IN No Output
F Wireless No Output
G DVD Audio No Sound
H MP3 In No Sound
I COAXIAL In No Sound
L Tuner No Sound
M No Svideo Output
O HDMI No Output
P No CVBS Output
Q No Y Pr Pb output
R KARAOKE In No Sound
S NO SCART OUTPUT

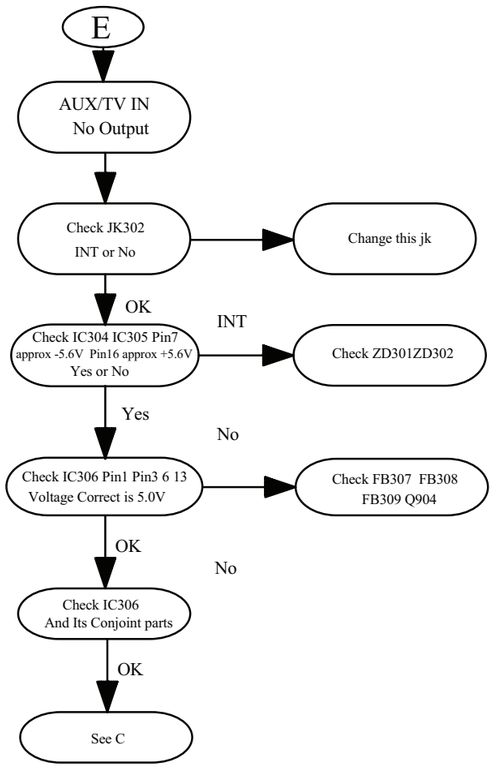


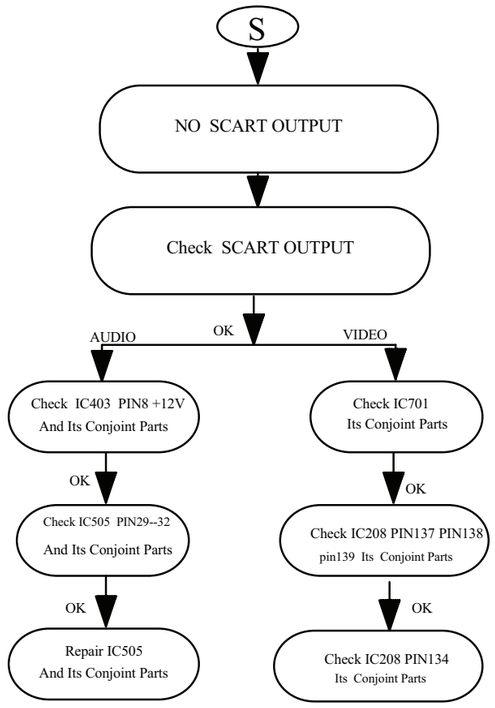


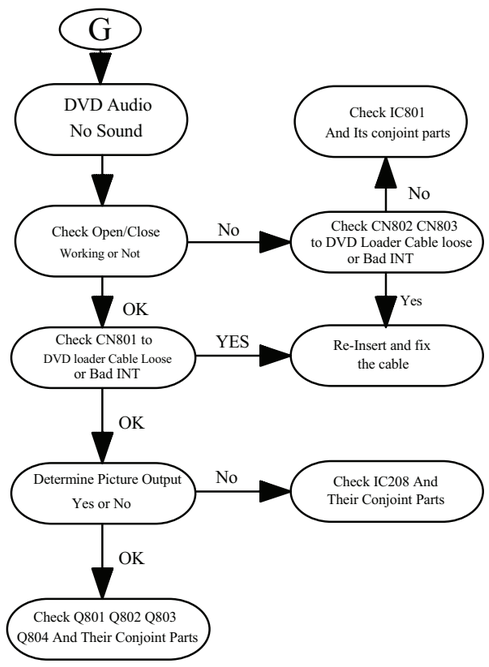


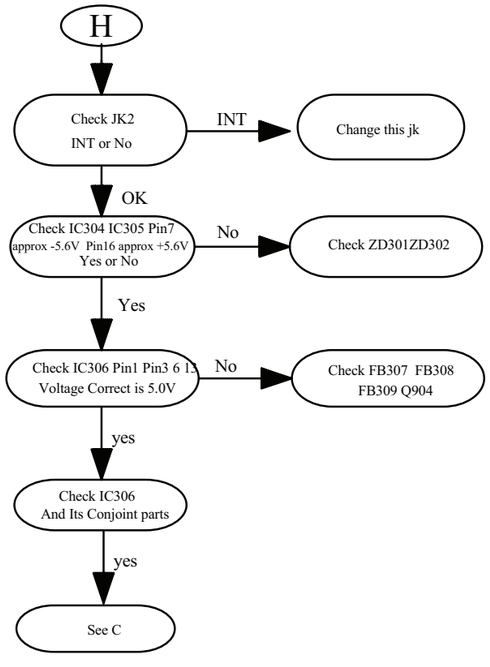
MAIN UNIT REPAIR CHART 2/3

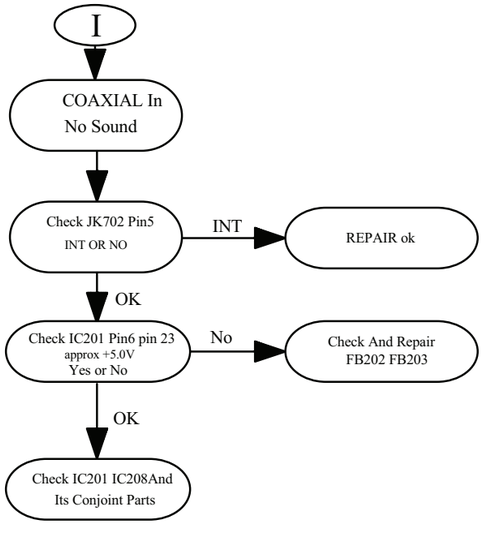


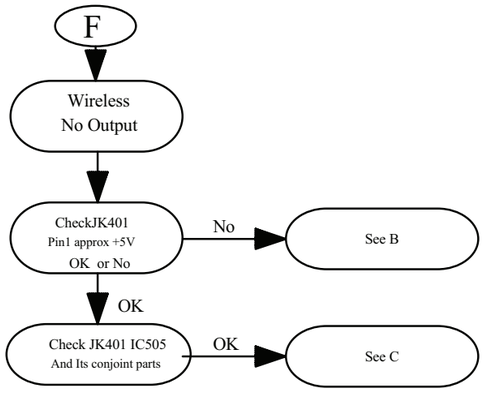












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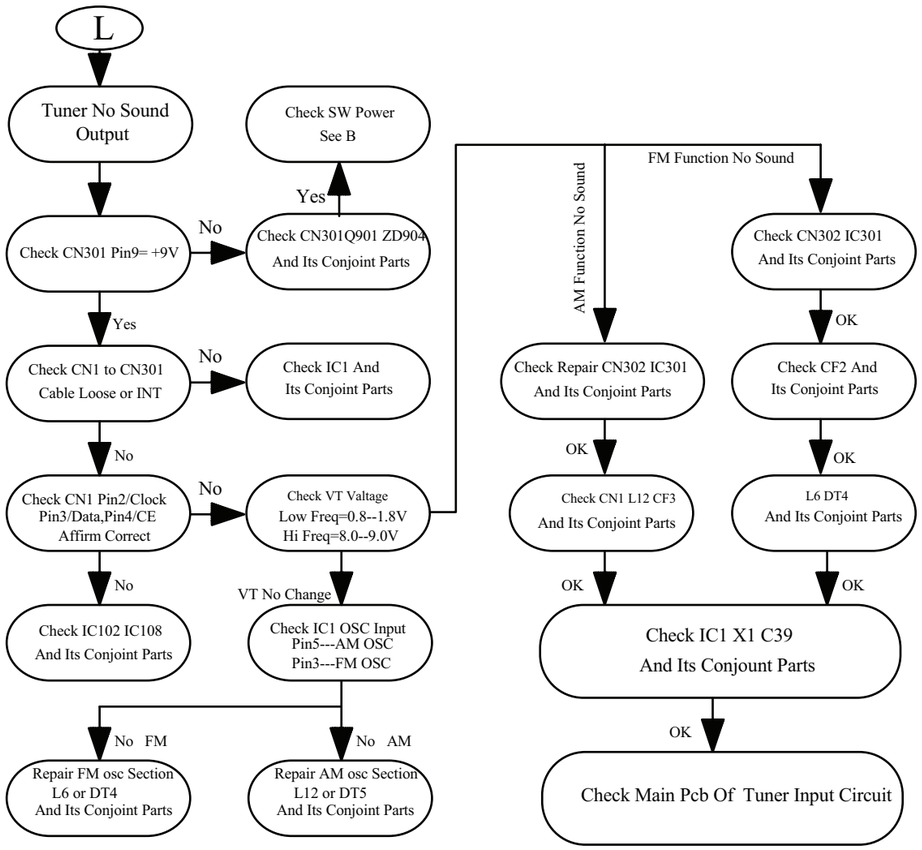
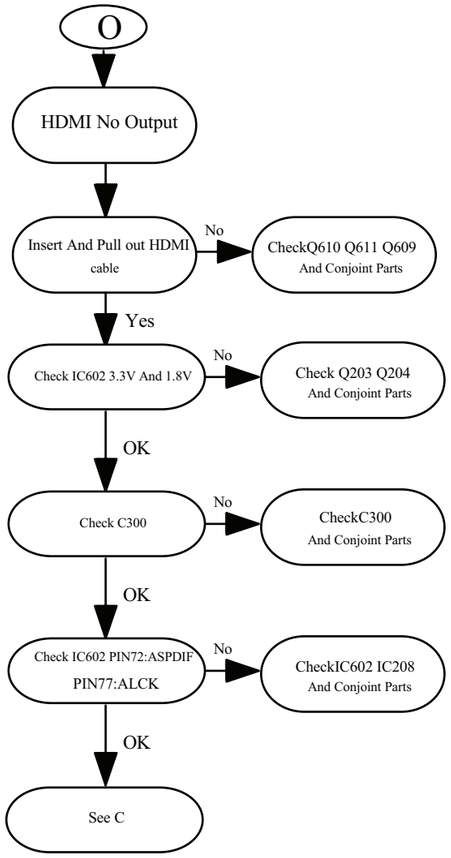
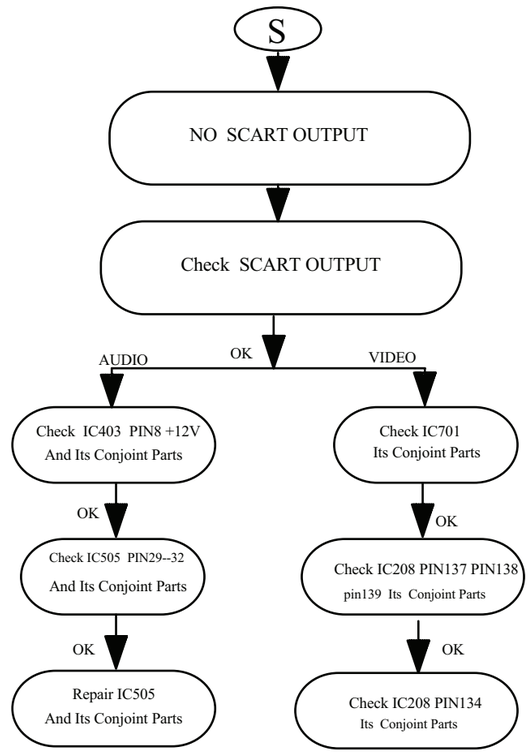
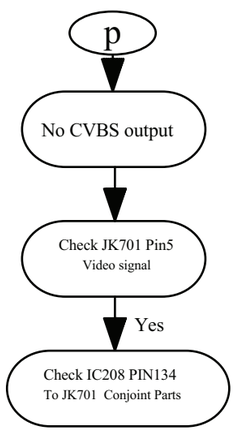
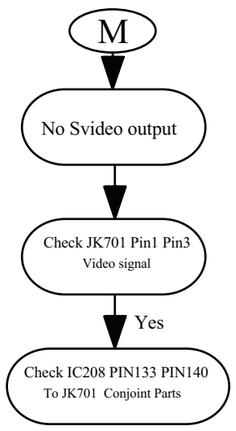
MAIN UNIT REPAIR CHART 3/3

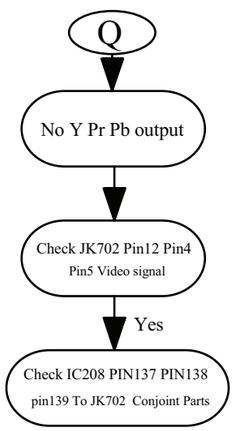












DISASSEMBLY INSTRUCTIONS

Dismantling of the Front Panel Assembly

1) Open the DVD Tray by using the Open/Close Button while the Set is ON and disconnect the mains supply after removing the Tray Cover.

   Note: If this is not possible, the DVD Tray has to be open manually.
   Take a mini screw driver about 2mm diameter and make a marking 24mm from the tip as shown in figure 2 . Place the set on its side, insert the mini screw driver till the marking and slide it towards the right as shown in figure 1 until the Tray moves out of the Front Panel.

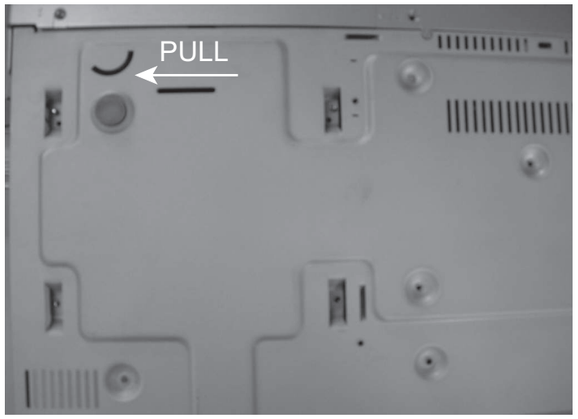


Figure 1

Figure 2

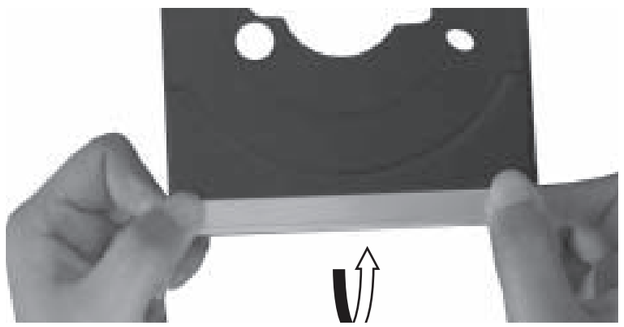


Figure 3

2) Return the set to its upright position and remove the Tray Cover as shown in Figure 3 and close the tray manually by pushing it back in.

3) Loosen 5 screws and remove the Top Cover by lifting the rear portion upwards before sliding it out towards the rear.
   - 3 screws on the back
   - 1 screws each on the left & right side

4) Loosen 5 screws & lift up the top edge of Front Panel assembly to free some catches before sliding it out towards the front.
   - 3 screws on the bottom
   - 1 screw each on the left & right side

Dismantling of the Main PCB

2) Loosen 3 screw " A " on the top of main board as shown in figure 4.
1) Loosen 7 screw "B" at the back panel as shown in figure 5.

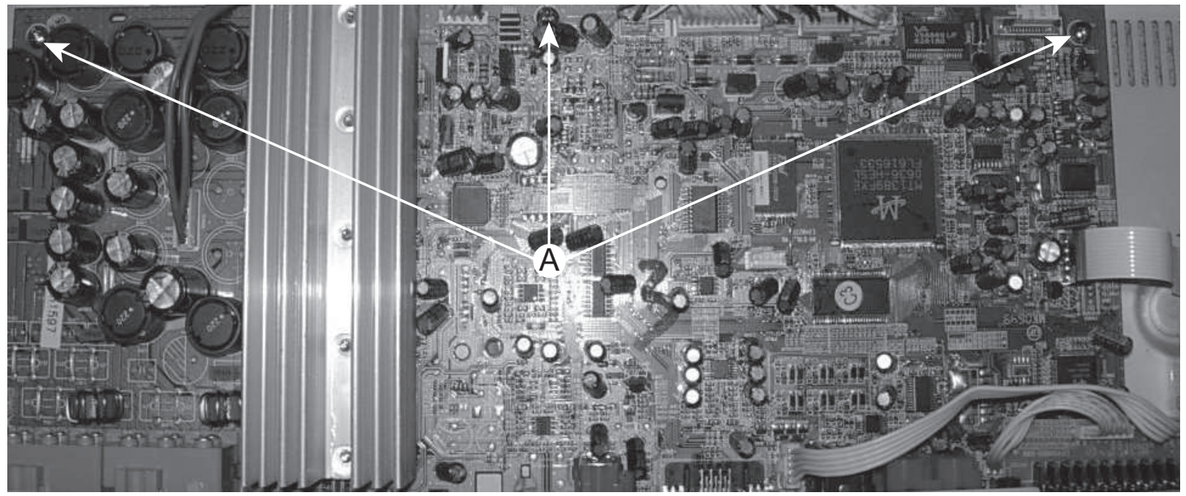


Figure 4

Dismantling of the SCART Board

1) Loosen 3 screws "C" at the back pancle as shown in figure5

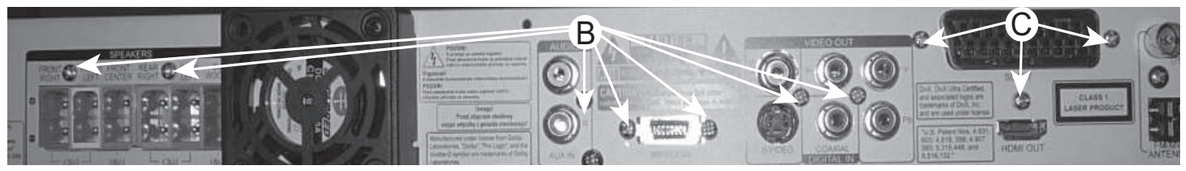


Figure 5

Dismantling of the Control Board

1) Loosen 10 screws “E” on the top of control board as shown in figure 6

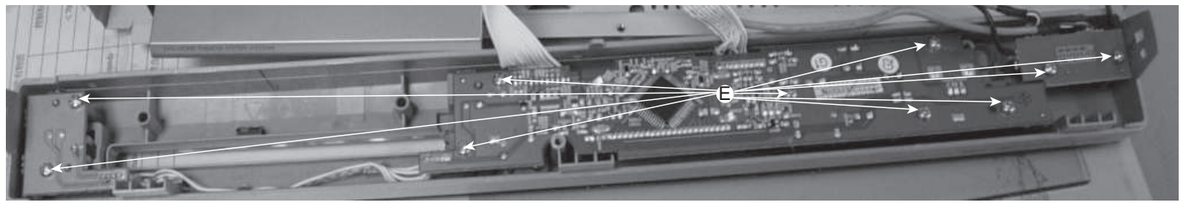


Figure 6

Dismantling of the Power Board

1) Loosen 5 screws “D” at the top of the Power Board as shown in figure 7

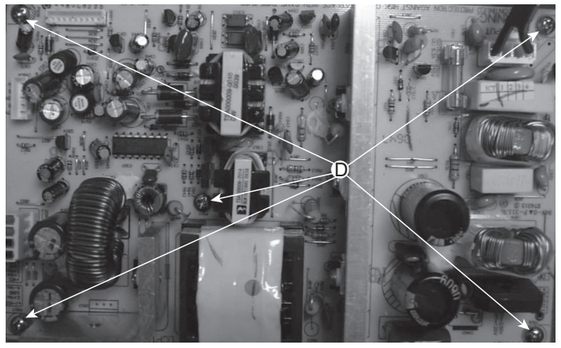


Figure 7

Dismantling of the DVD Module

1) Loosen 4 screws “F” to remove the DVD Module as shown in figure 8.

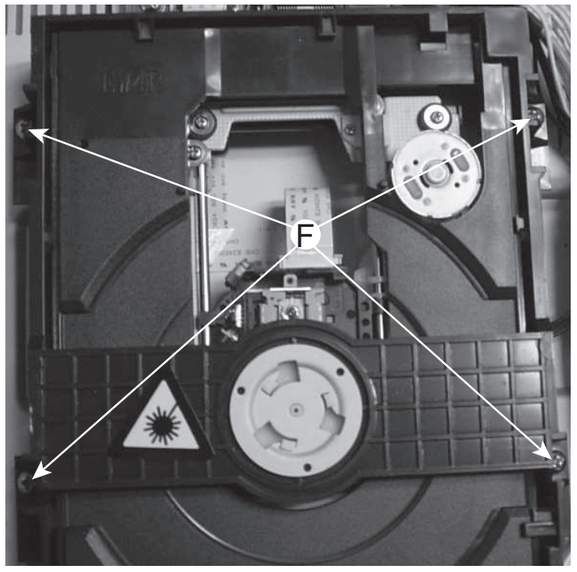
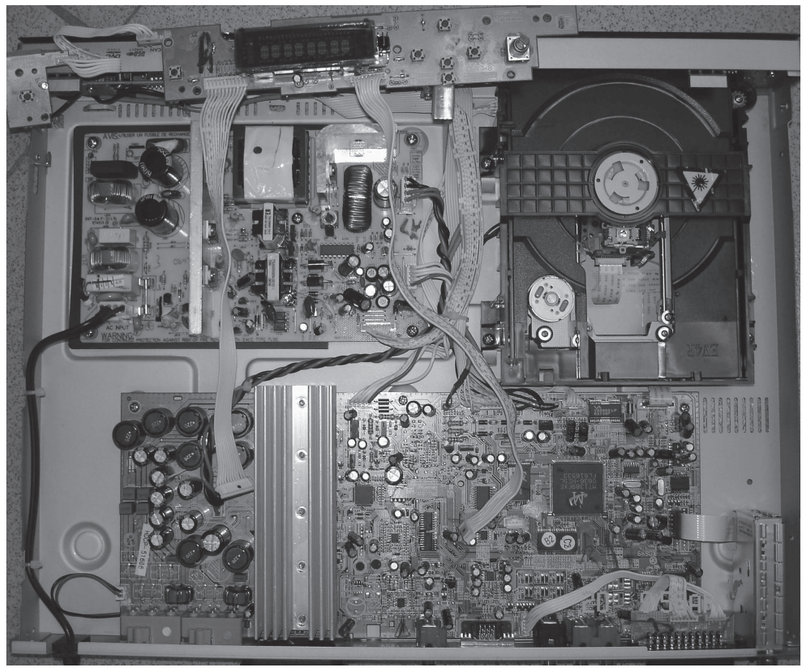


Figure 8

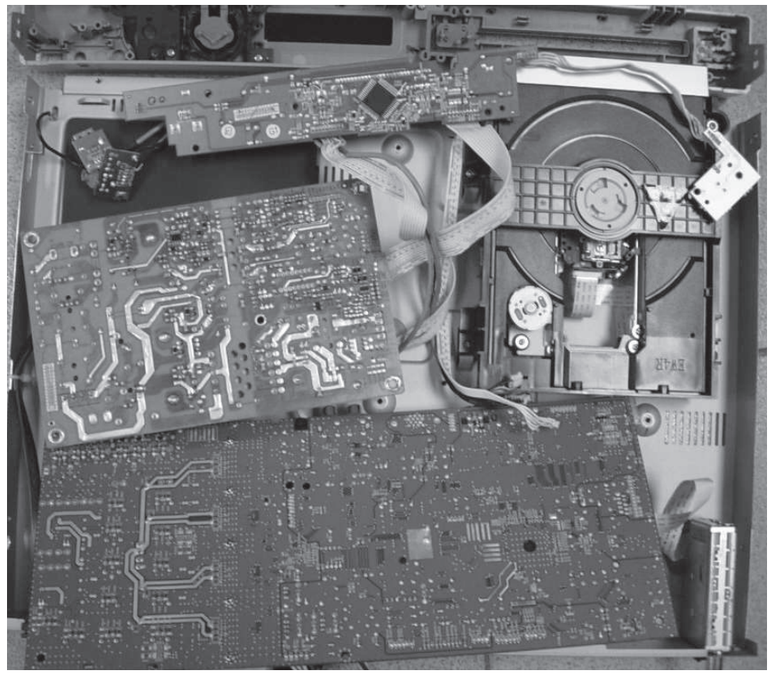
SERVICE POSITIONS

Service position A



Note:In some service positions the components or copper patterns of one board may risk touching its neighbouring pc boards or metallic parts. To prevent such short-circuit use a piece of hard paper or other insulating material between them.

Service position B



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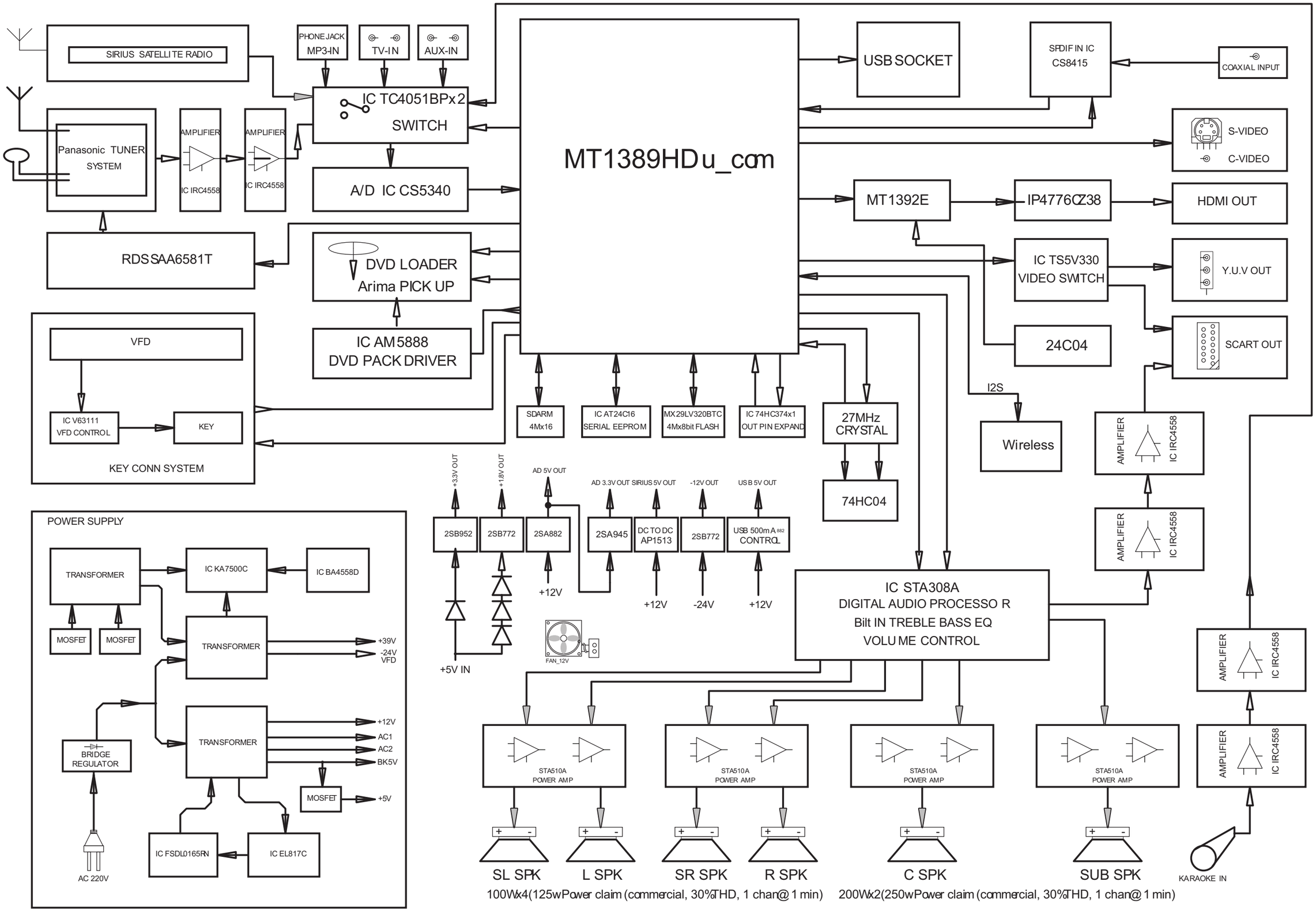
BLOCK DIAGRAM



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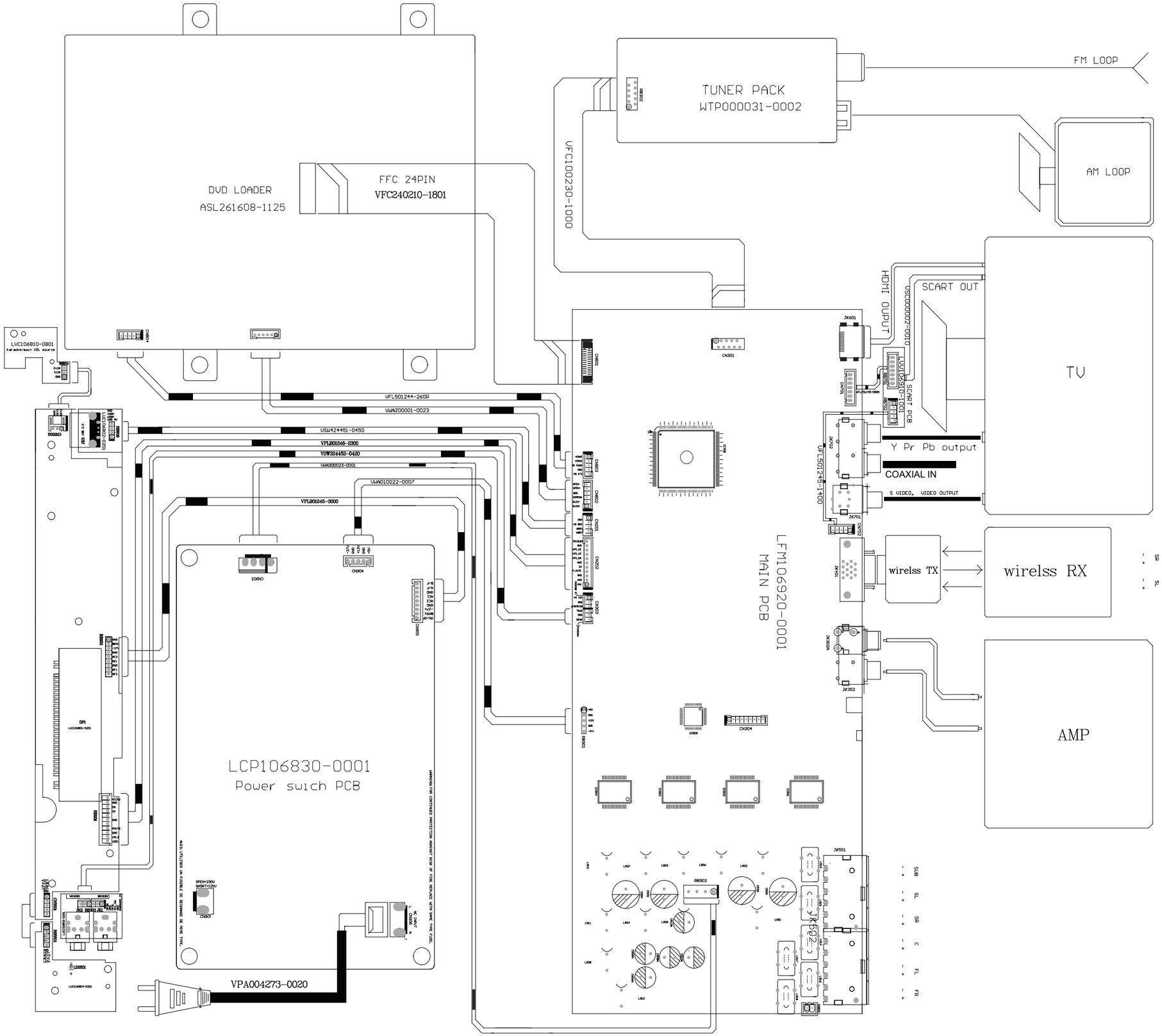
WIRING DIAGRAM



SCART BOARD

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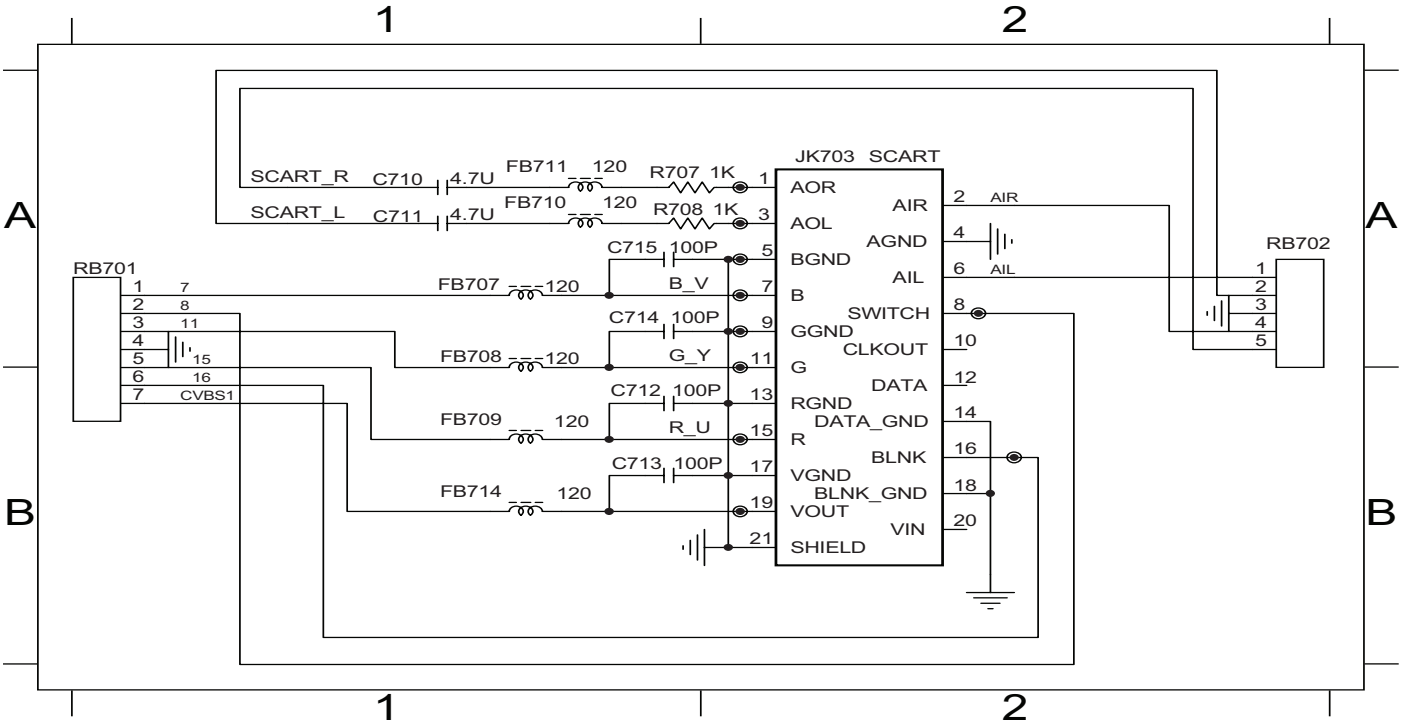
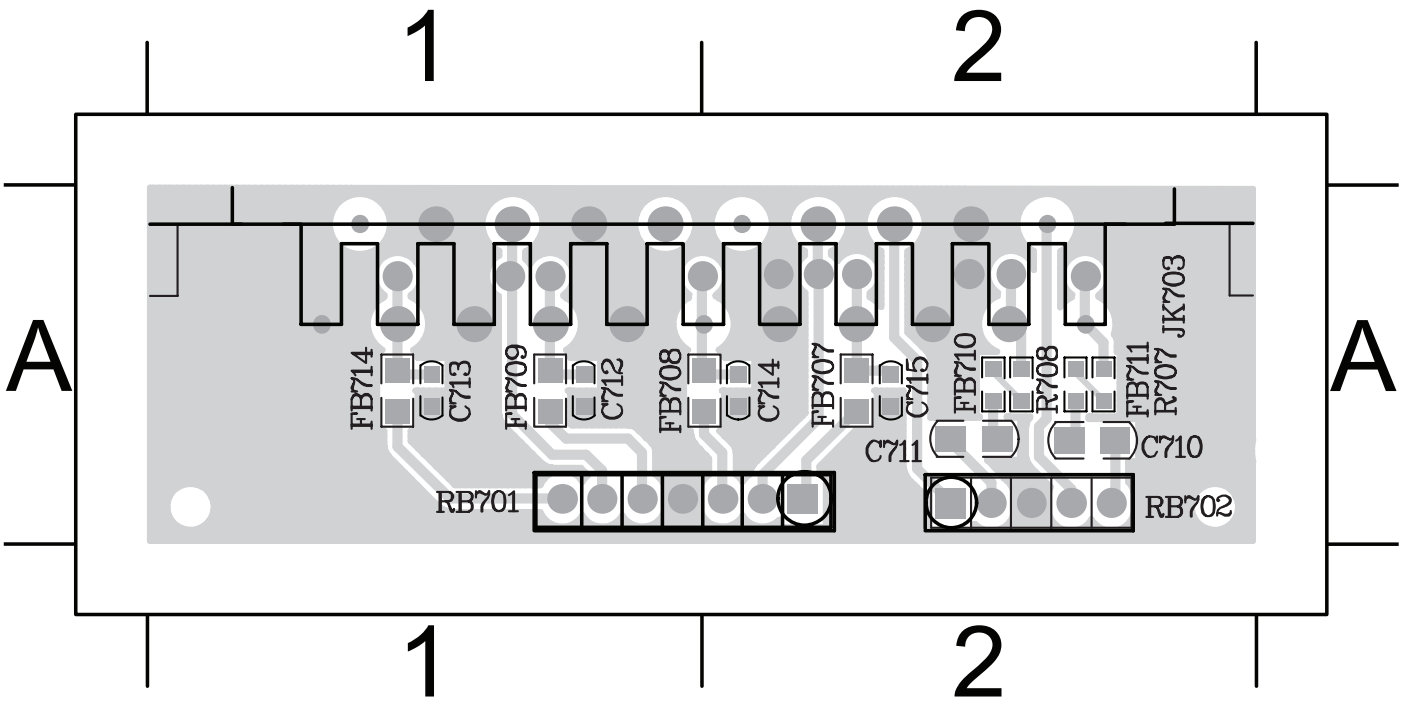
CIRCUIT DIAGRAM

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



PCB LAYOUT TOP VIEW

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



CONTROL BOARD

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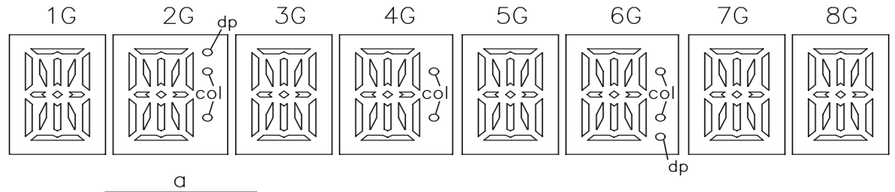
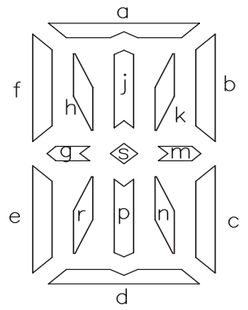
FTD DISPLAY PIN ASSIGNMENT





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

PIN CONNECTION

PIN NO.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
CONNECTION	F	F	NP	P1	P2	P3	P4	P5	P6	P7	P8	P9	P10	P11	P12
PIN NO.	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
CONNECTION	P13	P14	P15	P16	1G	2G	3G	4G	5G	6G	7G	8G	NP	F	F

Note: F: Filament P: Anode G: Grid NP: No pin

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VOLTAGE

IC251																				
Pin NO	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Voltage	4.70	-23.00	-26.00	-23.00	-23.00	-21.00	-21.00	-23.00	-23.00	-21.00	-21.00	-23.00	-23.00	-23.00	-26.00	-21.00	-26.00	-26.00	-23.00	4.70
Pin NO	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
Voltage	-26.00	-23.00	-23.00	-22.00	-22.00	-24.00	-24.00	-24.00	-24.00	-24.00	-24.00	4.70	4.70	0.00	0.00	0.00	4.70	0.00	2.30	2.30
Pin NO	41	42	43	44	45	46	47	48	49	50	51	52								
Voltage	4.70	0.00	4.00	3.20	0.00	0.00	3.20	3.20	0.00	0.00	0.00	0.00								

Q2501			
Pin NO	b	c	e
Voltage	4.10	0.00	3.60

Q2502			
Pin NO	b	c	e
Voltage	4.30	4.10	3.70

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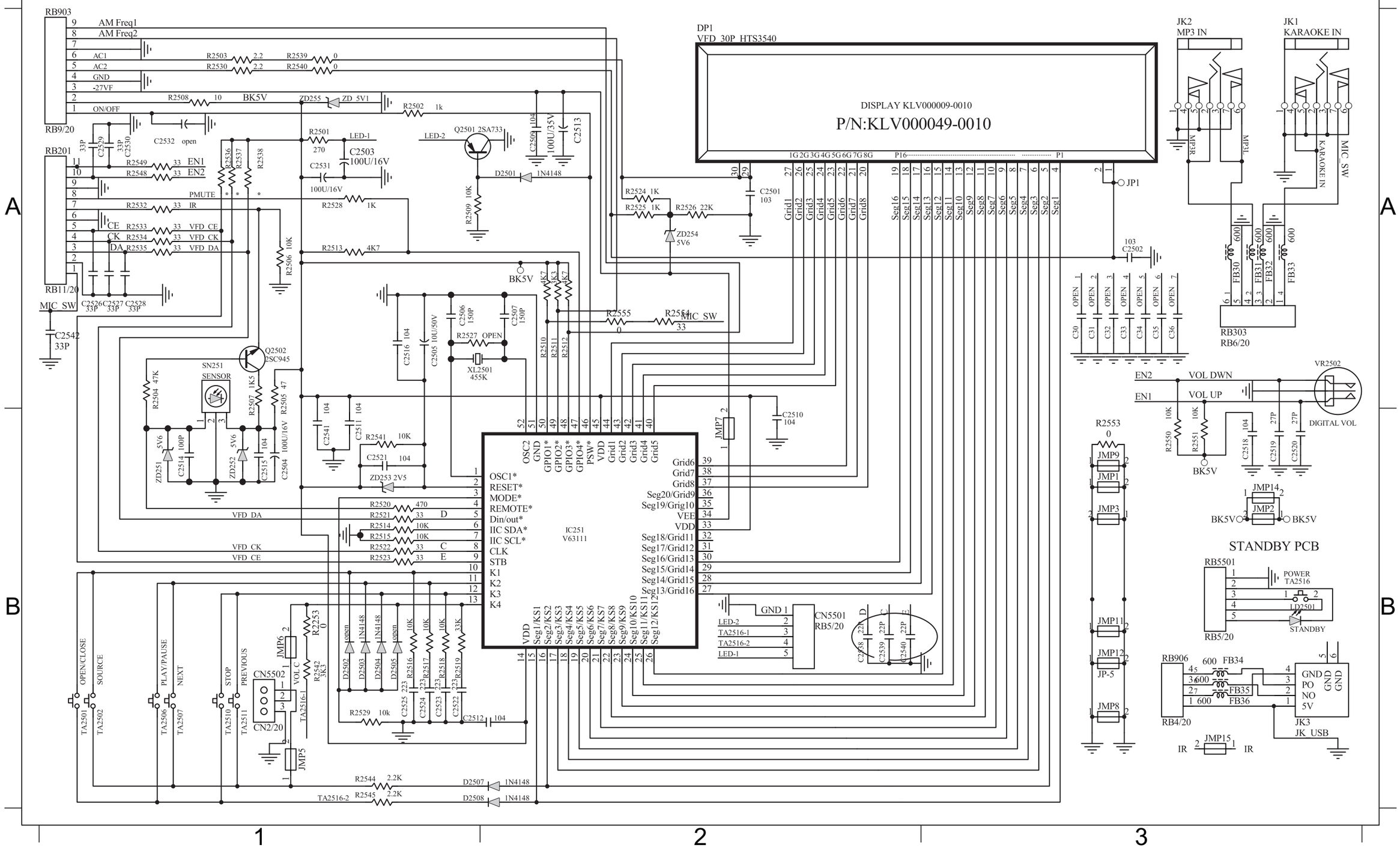
CIRCUIT DIAGRAM

C2501	A3	C2509	A2	C2515	B1	C2522	B1	C2528	A1	C2540	B2	D2507	B1	FB35	B3	JMP11	B3	JMP5	B1	LD2501	B3	R2503	A1	R2509	A1	R2517	B1	R2523	B1	R2530	A1	R2540	A1	R2549	A1	RB903	A1	TA2507	B1	ZD251	B1
C2502	A3	C2510	B2	C2516	A1	C2523	B1	C2529	A1	C2541	B1	D2508	B1	FB36	B3	JMP12	B3	JMP6	B1	Q2501	A1	R2504	A1	R2510	A2	R2518	B1	R2524	A2	R2532	A1	R2541	B1	R2553	B3	RB906	B3	TA2510	B1	ZD252	B1
C2504	B1	C2511	B1	C2518	B3	C2524	B1	C2530	A1	C2542	A1	DP1	A2	IC251	B2	JMP14	B3	JMP7	B2	Q2502	A1	R2505	A1	R2513	A1	R2519	B1	R2525	A2	R2533	A1	R2542	B1	R2554	A2	SN251	A1	TA2511	B1	ZD253	B1
C2505	A1	C2512	B1	C2519	B3	C2525	B1	C2531	A1	D2501	A2	FB30	A3	JK2	A3	JMP15	B3	JMP8	B3	R2253	B1	R2506	A1	R2514	B1	R2520	B1	R2526	A2	R2534	A1	R2544	B1	RB201	A1	TA2501	B1	TA2516	B1	ZD254	A2
C2506	A1	C2513	A2	C2520	B3	C2526	A1	C2538	B2	D2503	B1	FB31	A3	JK3	B3	JMP2	B3	JMP9	B3	R2501	A1	R2507	A1	R2515	B1	R2521	B1	R2528	A1	R2535	A1	R2545	B1	RB303	AA3	TA2502	B1	VR2502	A3	ZD255	A1
C2507	A2	C2514	B1	C2521	B1	C2527	A1	C2539	B2	D2504	B1	FB34	B3	JMP1	B3	JMP3	B3	JP1	A3	R2502	A1	R2508	A1	R2516	B1	R2522	B1	R2529	B1	R2539	A1	R2548	A1	RB5501	B3	TA2506	B1	XL2501	A2		



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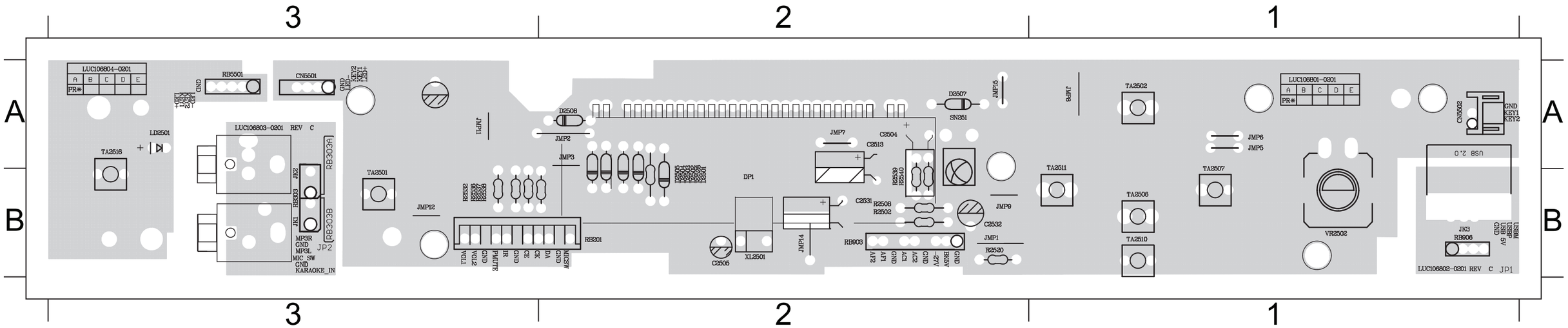
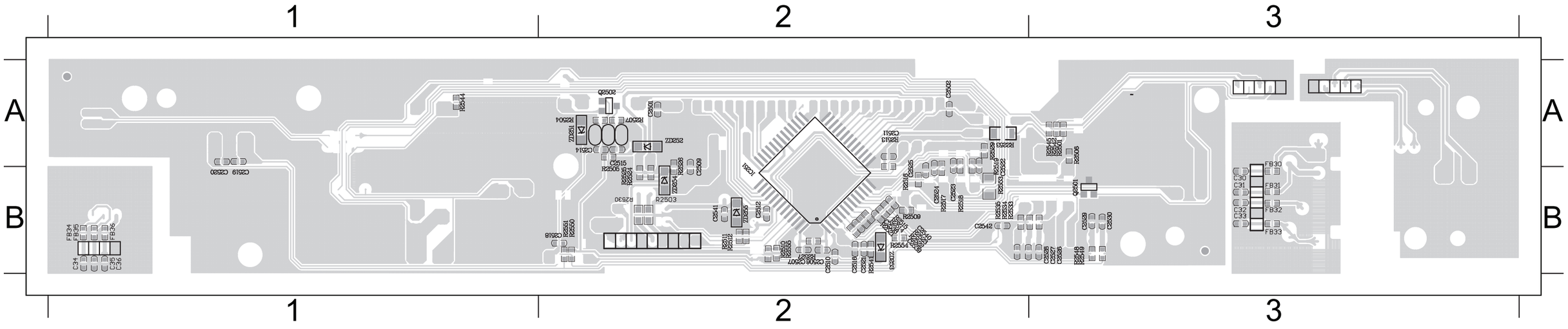
PCB LAYOUT - TOP VIEW

C2504	A2	C2531	B2	D2504	B2	DP1	B2	JMP1	B2	JMP14	B2	JMP3	A2	JMP7	A2	JP1	B1	R2502	B2	R2528	B2	R2540	B2	RB5501	A3	SN251	A2	TA2506	B1	TA2511	B1	XL2501	B2
C2505	B2	D2501	B2	D2507	A2	JK2	B3	JMP11	A3	JMP15	A2	JMP5	A1	JMP8	A1	JP2	B3	R2508	B2	R2532	B3	RB201	B2	RB903	B2	TA2501	A3	TA2507	B1	TA2516	A3		
C2513	A2	D2503	B2	D2508	A2	JK3	B1	JMP12	B3	JMP2	A2	JMP6	A1	JMP9	B2	LD2501	A3	R2520	B2	R2539	B2	RB303A	B3	RB906	B1	TA2502	A1	TA2510	B1	VR2502	B1		



PCB LAYOUT - BOTTOM VIEW

C2501	A2	C2509	B2	C2514	A2	C2519	B1	C2523	B2	C2527	B3	C2538	B2	C2542	B2	FB35	B1	Q2502	A2	R2504	A2	R2509	B2	R2515	B2	R2519	B2	R2524	B2	R2530	B2	R2541	B2	R2548	B3	ZD251	A2	ZD255	B2
C2502	A2	C2510	B2	C2515	A2	C2520	B1	C2524	B2	C2528	B3	C2539	B2	FB30	B3	FB36	B1	R2253	A2	R2505	B2	R2510	B2	R2516	B2	R2521	B2	R2525	B2	R2533	B2	R2542	A3	R2549	B3	ZD252	A2		
C2506	B2	C2511	A2	C2516	B2	C2521	B2	C2525	A2	C2529	B3	C2540	B2	FB31	B3	IC251	B2	R2501	A3	R2506	A3	R2513	A2	R2517	B2	R2522	B2	R2526	B2	R2534	B2	R2544	A1	R2553	B2	ZD253	B2		
C2507	B2	C2512	B2	C2518	B2	C2522	B2	C2526	B3	C2530	B3	C2541	B2	FB34	B1	Q2501	B3	R2503	B2	R2507	A2	R2514	B2	R2518	B2	R2523	B2	R2529	A2	R2535	B2	R2545	A3	R2554	B2	ZD254	B2		



MAIN BOARD

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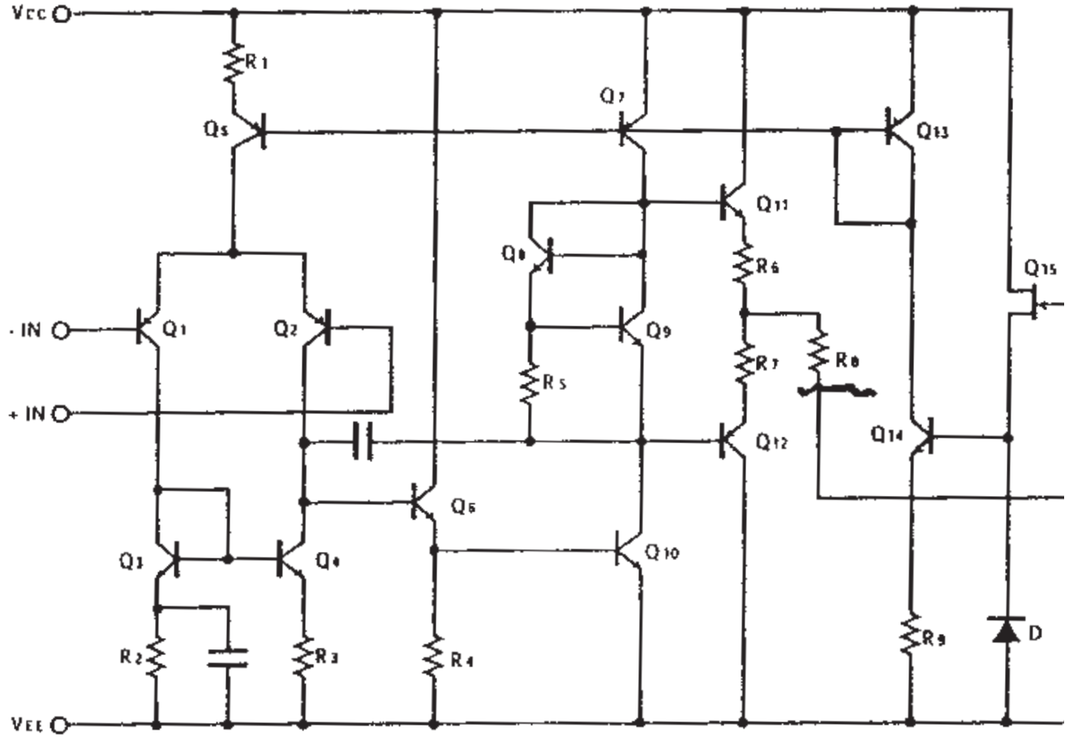
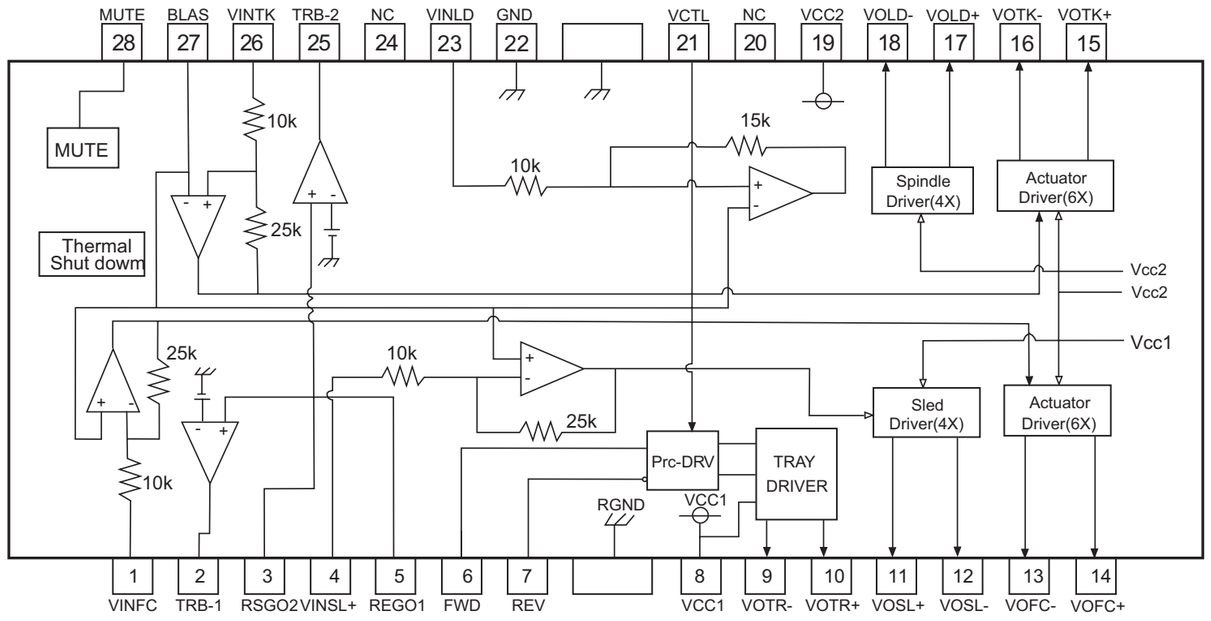
INTERNAL IC DIAGRAM - CO4558A HOSP



INTERNAL IC DIAGRAM - V5888S HOSP



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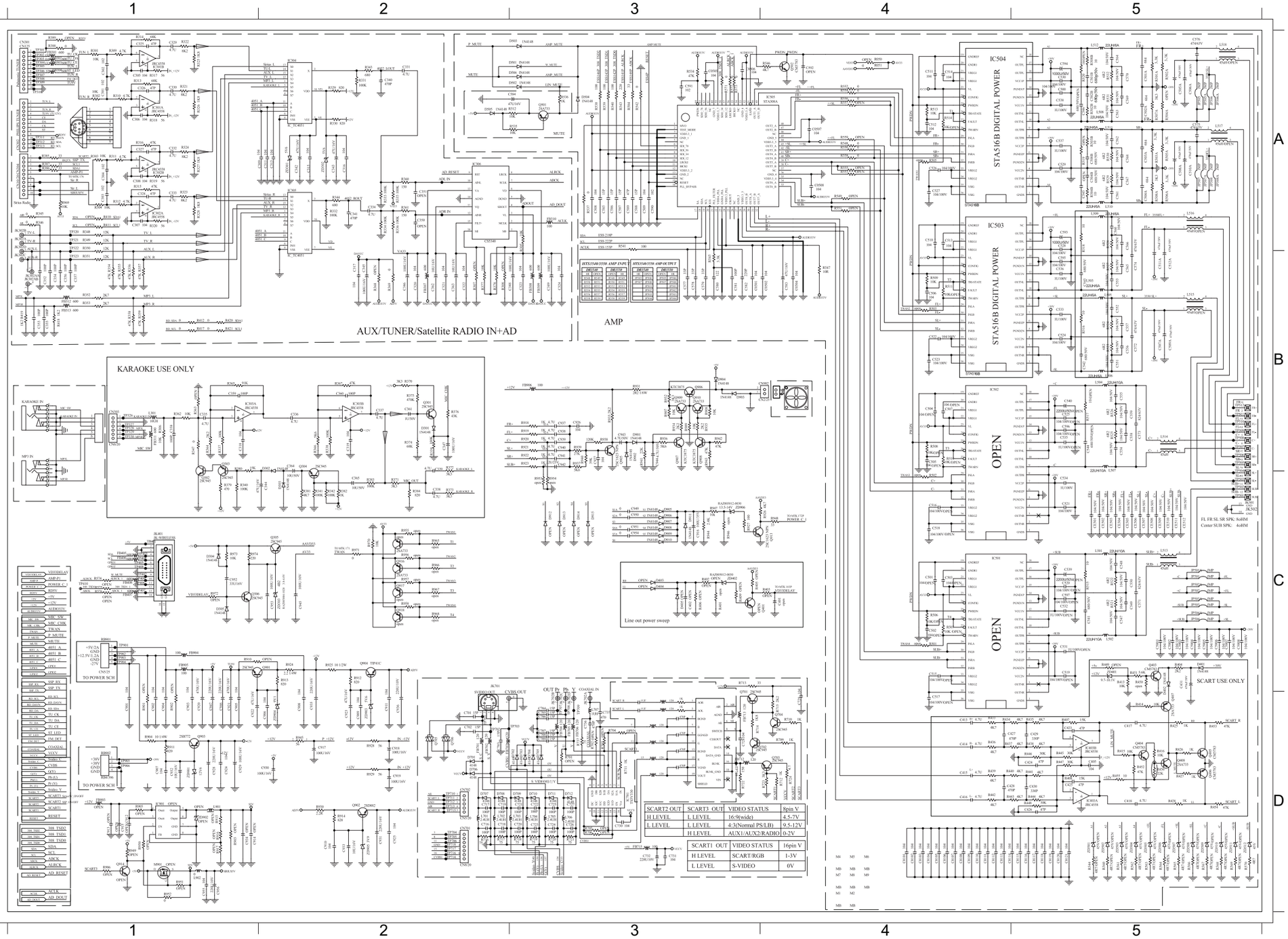
Circuit Diagram (Amplifier)



C0101	D4	C522	B4	C941	B3	L504	B5	R438	D4	R938	B3
C0102	D4	C523	B4	C942	B3	L507	B5	R439	D4	R939	B3
C0103	D4	C524	B5	C943	B3	L508	B5	R440	D4	R940	B3
C0104	D4	C526	A4	C944	B3	L510	A5	R441	D5	R941	B3
C0105	D4	C527	A4	C945	C2	L511	A5	R442	D4	R942	B3
C0106	D4	C528	A5	C947	D1	L512	A5	R443	D4	R943	B3
C0107	D4	C529	A5	C949	C3	L513	C5	R445	D5	R944	C3
C0109	D4	C530	A5	C950	C3	L514	B5	R446	D5	R945	D2
C0110	D4	C533	B5	C951	C3	L701	D2	R447	D5	R947	C3
C0111	D4	C536	B5	C952	C2	L702	D2	R448	D5	R948	C3
C0112	D4	C537	A5	C953	C2	L703	D3	R451	C5	R953	B2
C0113	D4	C538	A5	CE501	C5	L704	D3	R452	D5	R954	B2
C0114	D4	C539	C5	CE502	C5	L705	D3	R453	D5	R969	C2
C0115	D5	C542	B5	CE503	C5	L706	D3	R454	D5	R970	C4
C0116	D5	C543	B5	CE504	C5	L707	D3	R455	D5	R971	C3
C0117	D5	C547	C5	CE505	C5	Q305	C2	R456	D5	R973	C2
C0118	D5	C548	C5	CE506	C5	Q306	C2	R501A	A5	R974	C2
C0119	D5	C549	C5	CE507	C5	Q401	C3	R502A	A5	RB901	C1
C0120	D5	C550	C5	CE508	C5	Q403	C5	R503B	A5	RB902	D1
C0121	D5	C554	B5	CE509	C5	Q404	D5	R504	A3	ZD301	A2
C0501	B3	C555	B5	CE510	C5	Q405	D5	R504A	A5	ZD302	A2
C0502	B4	C558	B5	CE511	C5	Q406	D5	R504B	A5	ZD303	C2
C0504	B4	C559	B5	CE512	C5	Q407	D5	R505A	A5	ZD401	C5
C0505	A3	C561	A5	CN301	A1	Q408	D5	R506A	A5	ZD901	D1
C0506	A3	C562	A5	CN303A	B1	Q501	A3	R507A	A5	ZD903	D2
C0507	A4	C563	A5	CN701	D2	Q502	A4	R508A	A5	ZD904	D2
C0508	A4	C564	A5	CN702	D2	Q701	D3	R508B	A5	ZD905	D2
C301	A1	C567	A5	CN801	A1	Q702	D3	R509	B4	ZD906	C3
C302	A1	C568	A5	CN902	B4	Q703	D4	R511	B4		
C305	A1	C569	A5	D304	C1	Q704	D4	R512	A3		
C306	A1	C570	A5	D305	C2	Q705	D2	R513	A4		
C309	A1	C571	C5	D401	C5	Q706	D2	R514	A4		
C311	A2	C573	B5	D402	C5	Q901	C2	R516	B5		
C313	A2	C577	B3	D403	C2	Q902	D2	R518	A5		
C315	A2	C578	B3	D404	C2	Q903	D1	R521	C5		
C316	A2	C579	B3	D405	C3	Q904	C2	R522	C5		
C317	B2	C580	B3	D501	A3	Q905	B3	R525	B5		
C320	B2	C581	B3	D502	A3	Q906	B3	R526	B5		
C321	B2	C582	B3	D503	A3	Q907	B3	R529	A5		
C322	B2	C583	B4	D504	A3	Q908	B3	R530	A5		
C323	B3	C584	A3	D505	A2	Q909	B3	R531	A5		
C324	B3	C585	A3	D506	A3	Q910	B3	R532	A5		
C325	A1	C586	A3	D701	D2	Q913	C3	R534	A3		
C326	A1	C587	A3	D702	D3	R051	A4	R535	A3		
C329	A1	C588	A3	D703	D3	R301	A1	R536	A3		
C330	A1	C589	A3	D704	D3	R302	A1	R537	A3		
C331	A2	C590	A3	D705	D3	R305	A3	R538	A3		
C334	A2	C591	A3	D706	D2	R309	A1	R539	A3		
C340	A2	C594	A5	D707	D2	R310	A1	R540	A3		
C341	A2	C595	B5	D708	D2	R313	A1	R541	A3		
C342	A2	C704	D3	D709	D3	R314	A1	R542	A3		
C343	A2	C705	D3	D710	D3	R317	A1	R543	A3		
C345	B2	C706	D3	D711	D3	R318	A1	R545	B3		
C346	B2	C707	D3	D712	D3	R321	A1	R546	A4		
C348	B2	C708	D3	D901	B3	R322	A1	R547	B4		
C349	B3	C709	D3	D902	B3	R325	A1	R549	A4		
C352	B1	C716	D2	D903	B4	R326	A1	R551	A4		
C353	B1	C717	D2	D904	B3	R329	A2	R553	A4		
C354	B1	C718	D2	D905	C3	R330	A2	R555	A4		
C355	B1	C719	D2	D906	C3	R331	A2	R557	A4		
C356	B1	C720	D3	D907	C3	R332	A2	R559	A4		
C357	B1	C721	D2	D908	C3	R333	A2	R571	A3		
C362	B2	C722	D2	D909	C3	R334	A2	R572	A3		
C363	B2	C723	D3	D910	C3	R335	A2	R573	A3		
C402	C3	C724	D3	D911	C3	R336	A2	R701	D3		
C405	D5	C725	D3	D912	C2	R343	A2	R709	D4		
C413	D4	C726	D2	D913	C2	R344	A2	R710	D4		
C414	D4	C727	D2	D914	C2	R345	A1	R711	D3		
C415	D4	C728	D3	D915	C2	R346	A1	R712	D4		
C416	D4	C729	D4	FB301	A1	R348	A1	R713	D3		
C417	D5	C730	D3	FB302	A1	R349	A1	R714	D3		
C418	D5	C731	D3	FB303	A1	R350	A1	R715	D4		
C423	D5	C732	D3	FB304	A1	R351	B1	R716	D2		
C424	D5	C736	D3	FB307	B2	R352	B1	R717	D2		
C425	D5	C737	D3	FB308	B3	R353	B1	R718	D3		
C426	D5	C901	D1	FB309	B3	R354	B1	R719	D3		
C427	D4	C902	D1	FB310	A3	R355	B1	R720	D3		
C428	D4	C903	D1	FB312	B1	R356	B1	R721	D3		
C429	D5	C904	D1	FB313	B1	R357	B1	R722	D4		
C430	D4	C905	D1	FB405	C1	R358	B1	R723	D4		
C431	D5	C906	D2	FB406	C1	R359	B1	R724	D4		
C500	A5	C907	D1	FB407	C1	R360	A2	R737	D3		
C5001	C5	C908	D2	FB408	C1	R361	A2	R904	D1		
C5002	C5	C909	D2	FB701	D2	R369	B2	R907	B3		
C5005	C5	C910	D2	FB702	D2	R377	B2	R908	B3		
C5006	C5	C911	D2	FB703	D2	R378	B2	R909	B3		
C501A	A5	C916	C3	FB704	D3	R388	A1	R911	D1		
C501B	A5	C917	D2	FB705	D3	R402	C2	R912	C2		
C502A	A5	C918	D2	FB706	D3	R403	C3	R913	C2		
C502B	A5	C919	D2	FB712	D3	R404	C3	R914	D2		
C503A	A5	C920	D1	FB713	D3	R405	C3	R918	B3		
C503B	A5	C921	D1	FB715	D3	R406	C2	R919	B3		
C504A	A5	C922	D1	FB904	C1	R407	D5	R920	B3		
C504B	A5	C923	D2	FB905	C1	R408	D5	R921	B3		
C505A	A5	C924	D1	FB906	B3	R409	C3	R922	B3		
C506	B4	C925	D2	IC101	D1	R413	C5	R923	B3		
C506A	A5	C926	B3	IC301	A1	R414	D5	R924	C2		
C507A	B5	C927	B3	IC304	A2	R415	D5	R925	C2		
C508	A3	C928	D1	IC305	A2	R416	D5	R926	C3		
C508A	A5	C929	D1	IC306	A2	R418	B1	R927	C3		
C509	A3	C930	D2	IC403	D5	R419	B1	R928	D2		
C509A	B5	C931	D2	IC503	A4	R425	D5	R929	D2		
C510	A4	C932	D1	IC504	A4	R426	D5	R930	D2		
C510A	A5	C933	D2	IC505	A4	R427	D5	R931	B3		
C511	A4	C935	D2	IC701	D3	R428	D5	R932	B3		
C511A	A5	C936	D2	JK501	C5	R433	D4	R933	B3		
C512	B5	C937	B3	JK701	C2	R434	D4	R934	B3		
C512A	B5	C938	B3	JK702	D3	R435	D4	R935	B3		
C513	A4	C939	B3	L501	C5	R436	D4	R936	B3		
C514	A4	C940	B3	L502	C5	R437	D4	R937	B3		

Circuit Diagram (Servo)

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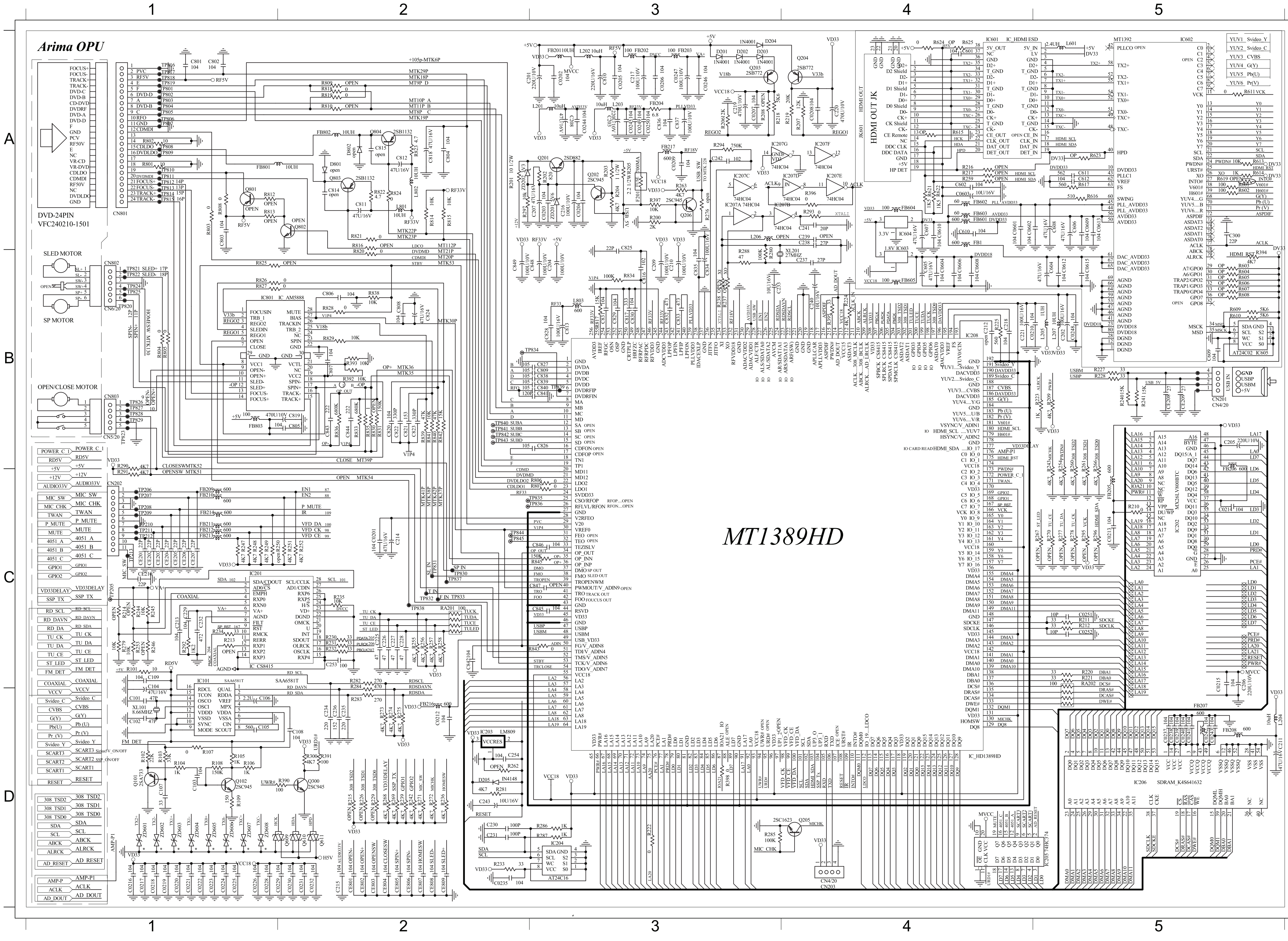

C0201	C2	C231	D2	CN202	C1	R223	B5	R826	B1
C0202	A3	C232	C1	CN203	D4	R224	B4	R827	B1
C0203	A3	C233	B3	CN802	B1	R225	B4	R828	B2
C0204	A3	C234	D2	CN803	B1	R227	B5	R829	B2
C0205	A3	C235	D2	D201	A3	R228	B5	R830	B2
C0206	A3	C236	D2	D202	A3	R230	C2	R831	B2
C0207	A3	C237	B4	D203	A3	R231	C2	R833	B2
C0208	A4	C238	A4	D204	A3	R232	C2	R834	C3
C0209	A3	C240	B4	D205	D2	R233	D2	R836	B2
C0210	B4	C241	A4	FB1	A4	R234	C1	R838	B2
C0212	D2	C242	A3	FB201	A3	R235	C2	R839	B2
C0213	C5	C243	D2	FB202	A3	R239	D2	R840	B2
C0214	C5	C253	C2	FB203	A3	R240	B5	R841	B2
C0215	C5	C254	D2	FB204	A3	R241	B5	R842	B2
C0216	D1	C300	A5	FB205	C5	R242	D2	R843	C3
C0217	D1	C601	A4	FB206	C5	R243	C5	R845	C3
C0218	D1	C602	A4	FB207	D5	R245	C1	RA201	C2
C0219	D1	C604	B5	FB208	D5	R247	C1	RA202	C5
C0220	D1	C605	B4	FB209	C1	R248	C1	XL101	D1
C0221	D1	C606	A4	FB210	C1	R249	C1	XL201	B4
C0222	D1	C607	A4	FB211	C1	R251	C2	ZD201	A3
C0223	D1	C608	A5	FB212	C1	R252	C2	ZD202	A3
C0224	D1	C609	B5	FB213	C1	R253	C1		
C0225	D1	C610	A4	FB214	C1	R255	C2		
C0226	D1	C611	A5	FB216	D2	R256	C2		
C0228	D1	C612	A5	FB217	A3	R257	C2		
C0229	D1	C801	A1	FB601	A4	R258	C2		
C0230	D2	C802	A1	FB602	A4	R259	A4		
C0231	D2	C803	A1	FB603	A4	R260	C5		
C0232	D2	C804	A2	FB604	A4	R261	C5		
C0235	D2	C805	B2	FB605	B4	R266	C5		
C0237	D5	C806	B2	FB801	A1	R268	D2		
C0238	D5	C807	B2	FB802	A2	R269	D2		
C0239	D5	C808	B2	FB803	B1	R271	D2		
C0240	D5	C809	B3	IC201	C1	R272	D2		
C0241	D5	C810	A3	IC202	C5	R273	D2		
C0242	D5	C811	A2	IC203	D2	R274	D2		
C0243	D5	C812	A2	IC204	D3	R275	D2		
C0244	A3	C813	B3	IC205	D5	R279	C1		
C0245	A3	C816	B3	IC206	D5	R280	B3		
C0246	A3	C817	B3	IC207	A3	R281	D2		
C0247	A3	C818	A2	IC208	B4	R282	C2		
C0248	B5	C819	B2	IC602	A5	R283	D2		
C0249	A3	C820	B2	IC801	B1	R284	D2		
C0250	A3	C821	B2	JK601	A4	R286	D3		
C0251	C5	C822	B2	L201	A3	R287	D3		
C0252	C5	C823	B2	L202	A3	R288	B3		
C0601	A4	C824	B2	L203	A3	R290	C1		
C0602	A4	C825	C3	L204	D5	R291	C1		
C0603	A4	C826	B3	L205	B5	R292	C1		
C0604	B4	C827	B3	L207	B5	R293	A4		
C0606	B4	C828	B3	L601	A5	R294	A3		
C0608	B4	C829	B3	L801	A2	R297	A4		
C0609	A5	C830	B3	L802	A2	R300	D2		
C0610	A4	C831	B3	L803	B3	R390	D1		
C0612	B5	C832	B3	Q101	D1	R391	D2		
C0613	A5	C833	B3	Q102	D1	R392	B2		
C0615	B5	C834	B3	Q201	A3	R393	B2		
C101	D1	C835	B3	Q202	A3	R394	A5		
C102	D1	C836	A3	Q203	A3	R395	B4		
C103	D1	C837	A3	Q204	A4	R397	A3		
C104	C1	C838	B3	Q300	D2	R398	D3		
C105	D1	C839	B3	Q609	D2	R399	D1		
C106	D1	C840	B3	Q610	D2	R601	A5		
C107	D1	C841	B3	Q611	D2	R602	A5		
C108	D1	C842	C2	Q803	A2	R609	B5		
C109	C1	C843	B2	Q804	A2	R610	B5		
C201	A3	C844	B2	R101	C1	R611	A5		
C202	B5	C845	C3	R102	D1	R613	A5		
C203	A3	C846	C3	R103	D1	R614	A5		
C204	B3	C848	B3	R104	D1	R616	A5		
C205	C5	C849	B2	R105	D1	R617	A5		
C206	C5	C951	B2	R106	D1	R621	A4		
C207	A2	C954	B2	R108	D1	R622	A4		
C208	A3	CE201	C1	R109	D1	R624	A4		
C209	B3	CE202	C1	R201	A2	R801	A1		
C210	B3	CE203	C1	R202	A3	R802	A1		
C211	D5	CE204	C1	R203	A3	R803	A1		
C213	C1	CE205	C1	R204	A3	R804	B1		
C214	C2	CE206	C1	R205	A3	R805	B1		
C215	D2	CE207	C1	R206	A3	R806	C3		
C216	A3	CE208	B5	R207	A4	R807	C3		
C217	A3	CE209	B5	R209	B5	R808	A1		
C218	B4	CE210	C1	R210	C5	R814	A2		
C219	A3	CE801	D2	R211	C5	R815	A2		
C220	A4	CE802	D2	R212	C5	R817	B3		
C221	B4	CE803	D2	R216	A4	R818	A2		
C225	C2	CE804	D2	R217	A4	R819	A2		
C226	C2	CE805	D2	R218	A3	R820	B2		
C227	C2	CE806	D2	R219	A4	R821	A2		
C228	C2	CE808	D2	R220	C5	R822	A2		
C229	C1	CE809	D2	R221	C5	R823	A2		
C230	D2	CN201	B5	R222	D3	R824	A2		

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PCB Layout Top View

C0114	D2	C109	C5	C243	B4	C363	A4	C507A	B1	C579	C3	C722	B4	C828	C5	C920	D3
C0115	A3	C201	C4	C253	A5	C402	A3	C508	C1	C580	C3	C723	B4	C829	D5	C921	B5
C0116	D2	C202	B5	C254	B4	C413	B3	C508A	D1	C581	C3	C724	B4	C830	D5	C922	B5
C0203	C3	C203	D5	C301	A3	C414	B3	C509	B1	C582	C3	C725	B4	C831	D5	C923	D2
C0204	D4	C204	D5	C302	A3	C415	B3	C509A	C1	C583	C3	C726	B4	C832	D5	C924	D3
C0205	D5	C205	D4	C309	C3	C416	B3	C510	C1	C584	B2	C727	B4	C833	D5	C925	C3
C0207	D4	C206	C4	C311	C3	C417	B3	C510A	C1	C590	C3	C728	A5	C834	D5	C926	A2
C0208	D4	C207	C3	C313	B3	C418	B3	C511	C1	C594	D1	C729	A5	C836	D5	C927	A2
C0212	D4	C208	C5	C317	A4	C423	B3	C511A	C1	C602	A5	C731	A4	C837	D5	C928	D3
C0213	C4	C209	B4	C325	A3	C424	B3	C512	D2	C604	A5	C732	B4	C838	D5	C929	B3
C0215	C4	C210	B4	C326	A3	C425	B3	C512A	C1	C605	B5	C736	A5	C839	D5	C930	A4
C0218	C4	C211	B4	C329	A3	C426	B3	C513	C1	C606	A5	C737	A4	C840	D5	C931	C2
C0221	D4	C214	D4	C330	A3	C427	B3	C514	D2	C607	A5	C804	D5	C841	D5	C932	D3
C0223	C4	C216	C4	C331	A4	C428	B3	C522	B2	C608	A5	C805	D5	C842	D5	C933	D3
C0231	C4	C217	A4	C334	A4	C429	B3	C523	B2	C609	A5	C808	D4	C843	D5	C935	D3
C0235	B4	C218	B5	C340	A4	C430	B3	C524	B2	C610	B5	C809	D5	C844	D5	C936	D3
C0247	A5	C219	D4	C341	A4	C431	C3	C526	D2	C704	A4	C810	D5	C846	C4	C942	A2
C0250	D5	C220	D4	C342	C3	C501A	C1	C527	D2	C705	A4	C811	C5	C848	C5	C943	B2
C0606	A5	C221	B5	C343	C3	C501B	D2	C528	B2	C706	A5	C812	D5	C849	C5	C944	A3
C0608	B5	C230	B4	C345	B4	C502A	C1	C529	D2	C707	A4	C813	D5	C905	B5	C945	B3
C0610	A5	C231	B4	C346	A4	C502B	D2	C530	D2	C708	A5	C816	D5	C906	B5	C947	B5
C0615	A5	C233	C5	C348	A4	C503A	C1	C539	B1	C709	A5	C817	D5	C909	D3	C952	A3
C103	C5	C234	C5	C349	B4	C503B	D2	C542	B2	C716	B4	C818	D5	C910	D3	C953	B3
C104	C5	C235	C5	C352	A3	C504A	C1	C543	B2	C717	B4	C819	D5	C911	D3	CN202	D4
C105	C5	C236	C5	C354	A3	C504B	D2	C567	D2	C718	B4	C824	D4	C916	A3	CN203	B4
C106	C5	C240	C5	C356	A3	C505A	D1	C571	A2	C719	B4	C825	D5	C917	B3	CN301	B5
C107	C5	C241	C5	C357	A3	C506	B2	C573	B1	C720	B4	C826	D5	C918	B3	CN303A	B3
C108	C5	C242	D5	C362	B4	C506A	D1	C578	C3	C721	B4	C827	D5	C919	B3	CN701	A5

CN702	A4	D707	B4	FB302	C5	FB802	D5	J3	A1	L207	B5	Q300	C4	Q910	A2	R224	C5
CN801	D5	D708	B4	FB303	C5	FB803	D5	J4	A1	L501	B1	Q305	A3	Q913	A3	R225	B5
CN802	D4	D709	B4	FB304	C5	FB904	D3	J503A	A1	L502	B2	Q306	B3	R051	B3	R227	D4
CN803	D5	D710	B4	FB307	B4	FB905	D3	J7	A1	L504	D1	Q401	A3	R101	C5	R228	D4
CN902	A2	D711	B4	FB308	A4	FB906	B3	J8	A1	L507	D2	Q403	D3	R102	C5	R230	A5
D201	D4	D712	B4	FB309	A4	IC201	A5	J9	A1	L508	D1	Q404	A4	R103	C5	R231	A5
D202	D4	D901	A2	FB310	B4	IC202	C4	JK302A	A3	L510	D2	Q405	A4	R104	C5	R232	A5
D203	D4	D901	A2	FB312	D3	IC203	B4	JK501	A2	L511	D1	Q406	A4	R106	C5	R233	B4
D204	D4	D902	A2	FB313	D3	IC204	B4	JK502	A2	L512	D1	Q407	A3	R108	C5	R234	A5
D205	B4	D903	A2	FB405	A4	IC205	C4	JK601	A5	L513	A2	Q408	A4	R109	C5	R235	B5
D304	A3	D904	A2	FB406	A4	IC206	B4	JK701	A4	L514	A2	Q501	B2	R201	D3	R239	B4
D305	A3	FB1	A5	FB407	A4	IC206	B4	JK702	A4	L601	A5	Q502	C3	R202	C3	R240	D4
D401	D2	FB201	C3	FB408	A4	IC207	C5	JP501	A1	L701	B4	Q611	A5	R203	D3	R241	D4
D402	D3	FB202	A4	FB601	B5	IC208	B5	JP501A	B2	L702	B4	Q701	A5	R204	C3	R242	B4
D403	A3	FB203	A4	FB602	A5	IC301	A3	JP502	B2	L703	B4	Q702	A5	R205	D3	R243	C3
D404	A3	FB204	C5	FB603	A5	IC304	B3	JP502A	B2	L704	B4	Q703	A5	R206	D4	R245	B5
D405	A3	FB205	C4	FB604	B5	IC305	B3	JP503	B2	L705	B4	Q704	A5	R207	D4	R247	C4
D501	B3	FB206	B4	FB605	B5	IC306	A4	JP504	B2	L706	B4	Q803	C5	R209	C4	R248	C4
D502	B2	FB207	B4	FB701	B4	IC403	B3	JP504A	B2	L707	A4	Q804	D5	R210	C4	R249	C4
D503	B3	FB208	B4	FB702	B4	IC503	B2	JP506	C1	L801	D5	Q901	B5	R211	B4	R251	C4
D505	B2	FB209	D4	FB703	B4	IC504	D2	JP506A	C1	L802	D5	Q902	C3	R212	B4	R252	C4
D506	B3	FB210	D4	FB704	A4	IC505	C3	JP508	C1	L803	C5	Q903	D3	R216	A5	R253	B5
D701	B4	FB211	D4	FB705	A4	IC602	A5	JP508A	C1	Q101	C5	Q904	D2	R217	A5	R255	B5
D702	B4	FB212	D4	FB706	A5	IC701	A4	L201	C5	Q102	C5	Q905	A2	R218	D4	R256	C5
D703	B4	FB213	D4	FB712	A5	IC801	D5	L202	D5	Q201	D3	Q906	A2	R219	D4	R257	C5
D704	B4	FB214	D4	FB713	A5	J10	A1	L203	D5	Q202	D3	Q907	A2	R221	B4	R258	C5
D705	B4	FB216	D4	FB715	A4	J11	A1	L204	B4	Q203	D4	Q908	A2	R222	C4	R259	A5
D706	B4	FB301	B5	FB801	D5	J12	A2	L205	B5	Q204	D4	Q909	A2	R223	B5	R260	B4

R261	B4	R322	A3	R361	B4	R434	B3	R511	B2	R611	B5	R808	D5	R907	A2	R945	B3
R266	B4	R325	A3	R369	B4	R435	B3	R512	B2	R613	B5	R814	D5	R908	A2	R947	A3
R268	B3	R326	A3	R377	B4	R436	B3	R513	D2	R614	B5	R815	D5	R909	A2	R948	A3
R269	B4	R329	B3	R378	B4	R437	B3	R514	D2	R616	A5	R817	D5	R911	D3	R970	B4
R271	C4	R330	C3	R388	B5	R438	B3	R516	B2	R624	A5	R818	D5	R912	D2	R971	B4
R272	C3	R331	A3	R390	C4	R439	B3	R518	B2	R701	A4	R819	D5	R913	B5	R973	A3
R279	B5	R332	A4	R391	C4	R440	B3	R535	B2	R709	A5	R820	D5	R914	C3	R974	B3
R281	B4	R333	B4	R394	B5	R441	B3	R536	B3	R710	A5	R821	D5	R924	B5	RA201	C5
R282	C5	R334	B4	R395	B5	R442	B3	R537	C3	R711	B4	R822	D5	R925	D3	RA202	B4
R283	C5	R335	B4	R397	D4	R443	B3	R538	C3	R712	A5	R823	D5	R926	A3	RB901	D3
R284	C5	R336	B4	R398	C4	R444	B3	R539	C3	R713	A5	R824	D5	R927	A3	RB902	C1
R286	B4	R343	A3	R402	A3	R445	B3	R540	C3	R714	A5	R826	D5	R928	B3	XL101	C5
R287	B4	R344	A3	R403	A3	R446	B3	R541	C3	R715	A5	R827	D5	R929	B3	XL201	C5
R290	D4	R345	A3	R404	D3	R447	B3	R542	C3	R716	B4	R828	D5	R930	D3	ZD201	D4
R291	D4	R346	A3	R405	A3	R448	B3	R543	C3	R717	B4	R829	D5	R931	A2	ZD301	B3
R293	C5	R348	A3	R406	A3	R451	C3	R545	C3	R718	B4	R830	D5	R932	A2	ZD302	C3
R294	D5	R349	A3	R407	B3	R452	A4	R546	C3	R719	B4	R831	D5	R933	B2	ZD303	B3
R300	C4	R350	A3	R408	B3	R453	A4	R547	C3	R720	B4	R833	D5	R934	A2	ZD401	D3
R301	A3	R351	A3	R409	A3	R454	A4	R549	B2	R721	B4	R834	D5	R935	A2	ZD901	D3
R302	A3	R352	D3	R413	C3	R455	A4	R551	B2	R722	A5	R836	D5	R936	A2	ZD903	D3
R305	B4	R353	D3	R414	C3	R456	A4	R553	B2	R723	A5	R838	D4	R937	A2	ZD904	B5
R309	A3	R354	A3	R415	A4	R503B	D1	R555	B2	R724	A5	R839	D5	R938	A2	ZD905	C3
R310	A3	R355	A3	R416	A4	R504	C3	R557	D2	R737	A5	R840	D5	R939	A2	ZD906	A3
R313	A3	R356	A3	R425	B3	R504B	D2	R559	D2	R803	D5	R841	D5	R940	A2		
R314	A3	R357	A3	R426	A4	R505A	D1	R601	A5	R804	D4	R842	D5	R941	A2		
R317	A3	R358	D3	R427	A4	R506A	D1	R602	A5	R805	D4	R843	D5	R942	A2		
R318	A3	R359	D3	R428	B3	R508B	D2	R609	A5	R806	D5	R845	D5	R943	A2		
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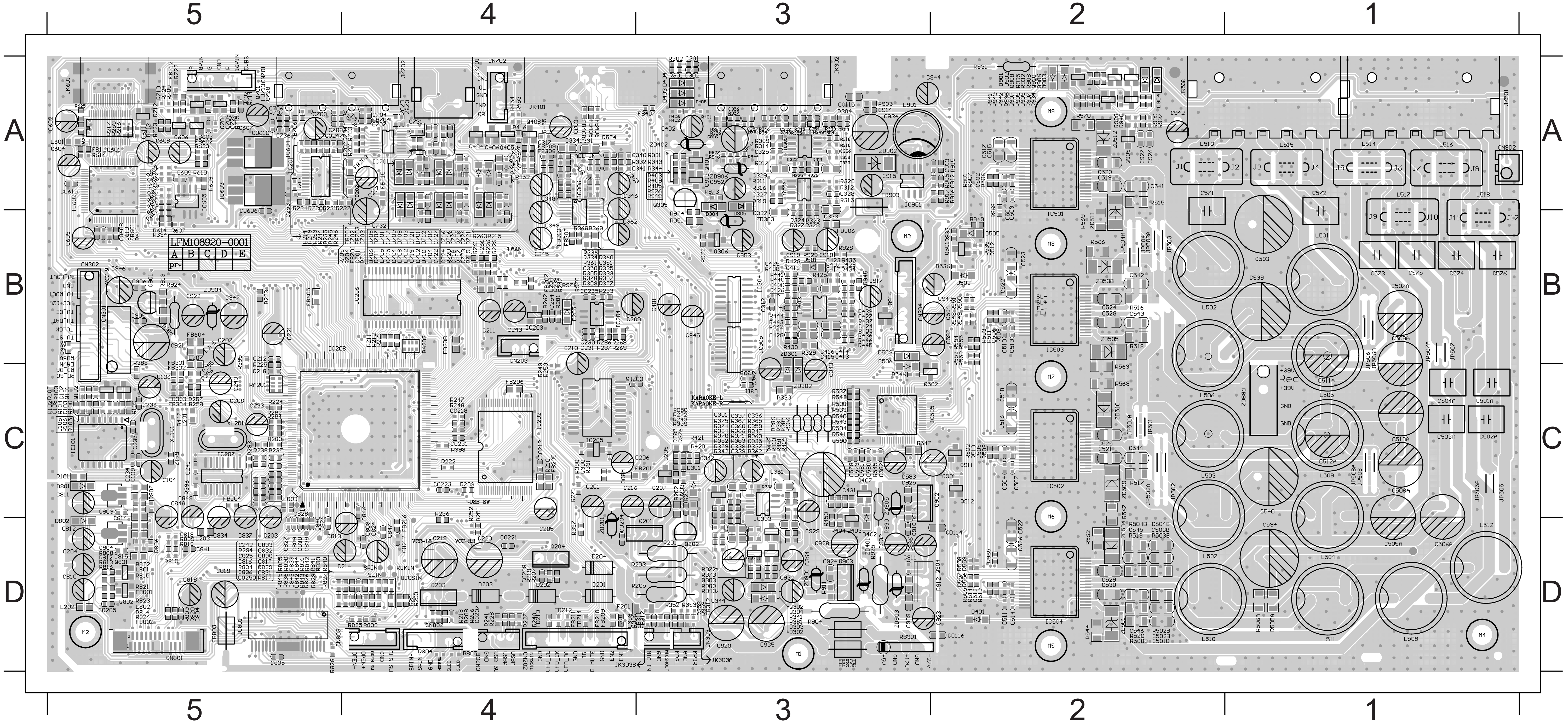

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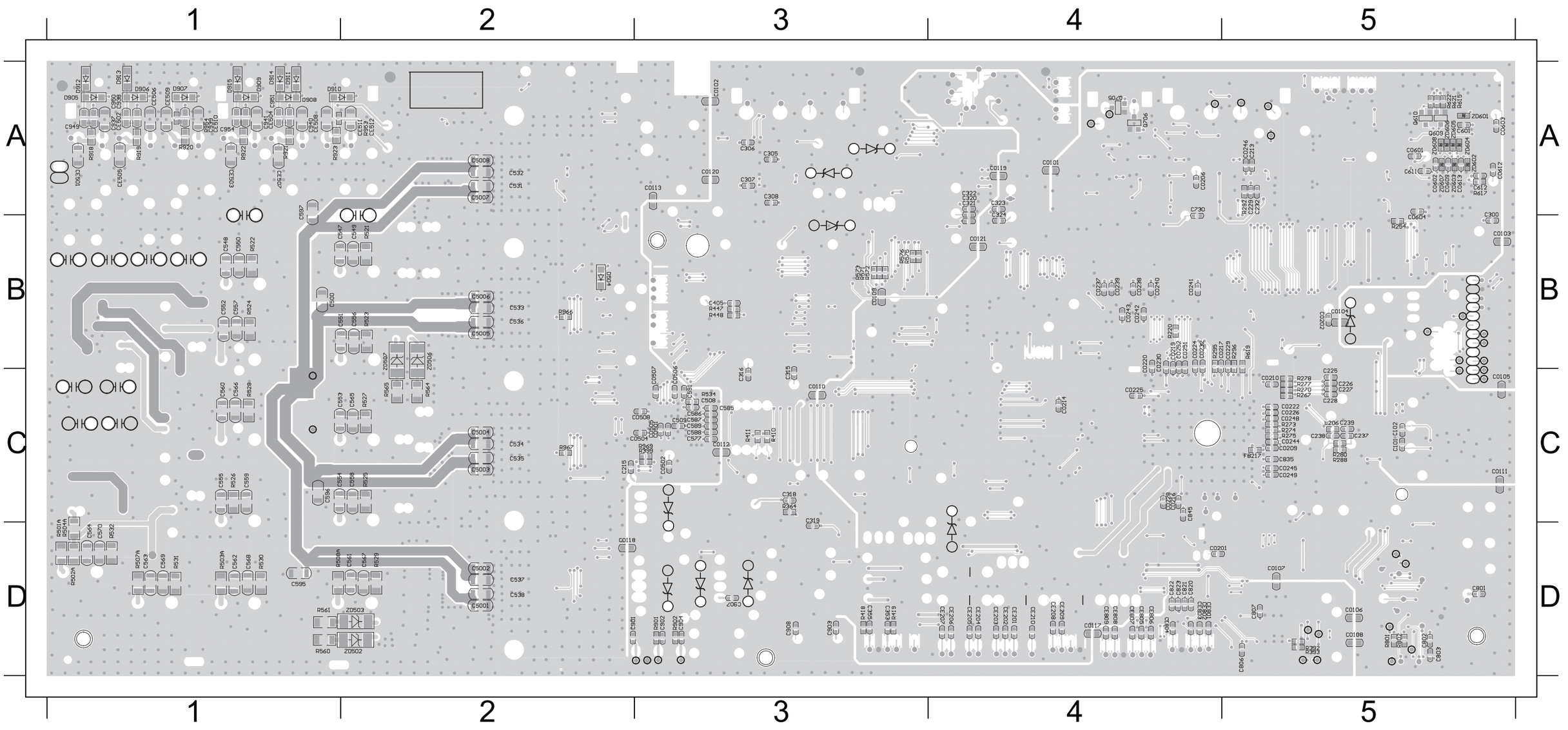
PCB Layout Bottom View

C0101	A4	C0112	C3	C0209	C5	C0226	C5	C0242	B4	C0502	C3	C0609	A5	C228	C5	C320	A4	C5002	D2	C550	B1	C569	D1	C601	A5	C821	D4	C908	D3	CE201	D4	CE501	A1	CE511	A2	CN201	D4	D912	A1	R220	B4	R393	D5	R521	B2	R572	B3	R921	A1
C0102	A3	C0113	A3	C0210	C5	C0228	C4	C0243	B4	C0504	C3	C0612	A5	C229	A5	C321	A4	C5005	C2	C554	C2	C570	D1	C611	A5	C822	D4	C937	A1	CE202	D4	CE502	A1	CE512	A2	D504	B2	D913	A1	R263	B4	R399	C2	R522	B1	R573	B3	R922	A1
C0103	B5	C0117	D4	C0214	C4	C0229	B5	C0244	C5	C0505	C3	C0613	A5	C232	A5	C322	A4	C5006	B2	C555	C1	C577	C3	C612	A5	C823	D4	C938	A1	CE203	D4	CE503	A1	CE801	D4	D905	A1	D914	A1	R273	C5	R418	D3	R525	C2	R617	A5	R923	A1
C0104	B5	C0118	D2	C0216	C4	C0230	B4	C0245	C5	C0506	C3	C101	C5	C237	C5	C323	A4	C533	B2	C558	C2	C585	C3	C730	A4	C835	C5	C939	A1	CE204	D4	CE504	A1	CE802	D4	D906	A1	D915	A1	R274	C5	R419	D3	R526	C1	R621	A5	R953	A1
C0105	C5	C0119	A4	C0217	B4	C0232	B4	C0246	A5	C0507	C3	C102	C5	C238	C5	C324	A4	C536	B2	C559	C1	C586	C3	C801	D5	C845	C4	C940	A1	CE205	D4	CE505	A1	CE803	D4	D906	A1	FB217	C5	R275	C5	R501A	D1	R529	D2	R622	A5	R954	A1
C0106	D5	C0120	A3	C0219	B4	C0237	B4	C0248	C5	C0508	C3	C213	A5	C300	B5	C353	D3	C537	D2	C561	D2	C587	C3	C802	D5	C901	D2	C941	A1	CE206	D4	CE506	A1	CE804	D4	D907	A1	IC101	C5	R280	C5	R502A	D1	R530	D1	R801	D5	R969	C2
C0107	D5	C0121	A4	C0220	B4	C0238	B4	C0249	C5	C0601	A5	C215	C2	C305	A3	C355	D3	C538	D2	C562	D1	C588	C3	C803	D5	C902	D3	C949	A1	CE207	D4	CE507	A1	CE805	D4	D908	A1	Q609	A5	R288	C5	R503A	D1	R531	D1	R802	D5	ZD202	D3
C0109	B3	C0201	D4	C0222	C5	C0239	B4	C0251	B4	C0602	A5	C225	C5	C306	A3	C405	B3	C547	B2	C563	D1	C589	C3	C806	D5	C903	D3	C950	A1	CE208	D4	CE508	A1	CE806	D4	D909	A1	Q610	A5	R292	A5	R504A	D1	R532	D1	R918	A1		
C0110	C3	C0202	B5	C0224	B4	C0240	B4	C0252	B4	C0603	A5	C226	C5	C315	C3	C500	B1	C548	B1	C564	D1	C591	C3	C807	D5	C904	D3	C951	A1	CE209	D4	CE509	A1	CE808	D4	D910	A1	Q705	A4	R297	D3	R507A	D1	R534	C3	R919	A1		
C0111	C5	C0206	A4	C0225	C4	C0241	B4	C0501	C3	C0604	B5	C227	C5	C316	C3	C5001	D2	C549	B2	C568	D1	C595	D1	C820	D4	C907	D3	C954	A1	CE210	D4	CE510	A1	CE809	D4	D911	A1	Q706	A4	R392	D5	R508A	D1	R571	B3	R920	A1		



VOLTAGE

IC201																				
Pin NO	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Voltage	3.30	0.00	0.00	2.50	2.50	5.10	0.00	0.00	3.30	2.50	5.10	1.80	0.00	0.00	0.00	5.00	5.00	0.00	5.00	0.00
Pin NO	21	22	23	24	25	26	27	28												
Voltage	5.00	0.00	5.00	0.00	0.00	0.00	5.00	3.30												

IC202																				
Pin NO	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Voltage	0.35	1.60	2.00	1.90	2.50	1.70	0.70	1.70	0.00	0.00	3.30	3.30	0.00	3.30	0.40	0.00	1.50	1.40	1.50	1.90
Pin NO	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
Voltage	2.10	1.90	1.80	1.95	2.00	0.00	0.00	0.00	0.85	1.65	1.20	1.20	1.20	1.20	0.85	1.70	3.30	1.50	1.65	2.20
Pin NO	41	42	43	44	45	46	47	48												
Voltage	1.40	1.60	1.70	1.70	2.00	0.00	0.00	1.00												

IC203																				
Pin NO	1	2	3																	
Voltage	3.30	3.30	0.00																	

IC204																				
Pin NO	1	2	3	4	5	6	7	8												
Voltage	0.00	0.00	0.00	0.00	3.30	3.30	0.00	3.30												

IC205																				
Pin NO	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Voltage	0.00	3.30	1.50	1.60	0.00	3.30	1.25	1.00	0.00	0.00	0.00	0.00	1.60	1.50	3.30	0.00	1.40	1.50	0.00	3.30

IC206																				
Pin NO	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Voltage	3.20	1.00	3.20	1.10	1.30	0.00	1.30	1.20	3.20	1.30	1.20	0.00	1.30	3.20	2.60	3.20	3.00	3.00	3.00	1.40
Pin NO	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
Voltage	1.20	0.00	0.00	1.40	1.60	1.80	3.20	0.00	1.60	1.80	1.20	0.50	0.00	0.00	0.00	0.00	3.20	1.80	2.30	0.00
Pin NO	41	42	43	44	45	46	47	48	49	50	51	52	53	54						
Voltage	0.00	1.00	3.20	1.40	0.70	0.00	0.70	1.30	3.20	1.30	1.40	0.00	0.80	0.00						

IC207																				
Pin NO	1	2	3	4	5	6	7	8	9	10	11	12	13	14						
Voltage	1.40	1.50	1.50	0.50	0.00	3.30	0.00	1.50	1.50	1.50	1.50	0.00	0.00	3.30						

IC208																				
Pin NO	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Voltage	0.00	0.10	0.10	0.10	0.10	1.60	1.60	2.10	1.90	1.90	1.80	0.00	0.00	0.90	0.90	1.00	1.00	1.90	1.50	0.00
Pin NO	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
Voltage	0.80	3.20	3.20	3.20	2.70	3.10	0.00	2.70	2.00	1.30	1.30	1.50	1.50	2.40	2.40	2.20	1.30	1.30	0.00	1.30
Pin NO	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
Voltage	1.30	1.30	0.00	1.60	3.30	0.00	0.00	0.00	3.30	2.20	3.20	0.00	0.00	3.20	1.90	1.90	1.80	1.90	2.10	1.80
Pin NO	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
Voltage	1.50	1.40	1.60	0.00	3.30	3.30	0.30	1.50	2.00	1.90	2.50	1.70	0.70	1.60	0.00	0.00	2.00	0.00	1.50	1.50
Pin NO	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
Voltage	0.00	1.30	1.20	1.60	1.80	1.70	0.00	1.10	1.80	0.00	1.30	1.90	1.80	0.60	3.20	3.30	0.00	3.10	3.10	3.10
Pin NO	101	102	103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120
Voltage	3.20	3.20	5.00	3.10	2.20	3.30	0.00	3.30	3.80	2.20	2.70	0.00	2.10	0.70	0.50	1.10	1.50	3.30	1.50	1.50
Pin NO	121	122	123	124	125	126	127	128	129	130	131	132	133	134	135	136	137	138	139	140
Voltage	1.60	1.00	1.90	1.70	1.60	0.80	0.80	1.80	0.70	1.60	3.30	2.70	3.20	3.00	3.10	2.90	1.50	1.30	0.10	0.20
Pin NO	141	142	143	144	145	146	147	148	149	150	151	152	153	154	155	156	157	158	159	160
Voltage	1.40	1.80	1.40	1.40	3.00	1.50	3.30	0.00	0.00	0.00	0.00	1.60	2.00	1.90	1.40	3.30	0.50	0.10	0.20	1.80
Pin NO	161	162	163	164	165	166	167	168	169	170	171	172	173	174	175	176	177	178	179	180
Voltage	1.60	0.20	0.20	0.20	1.30	0.50	3.30	2.90	2.90	3.30	2.60	2.90	2.60	1.80	3.30	0.00	1.70	0.00	3.10	3.40
Pin NO	181	182	183	184	185	186	187	188	189	190	191	192	193	194	195	196	197	198	199	200
Voltage	3.10	0.00	0.00	0.00	0.00	3.30	0.00	0.00	3.30	3.30	0.00	0.00	2.00	1.20	1.20	3.30	0.00	3.20	3.20	3.10
Pin NO	201	202	203	204	205	206	207	208	209	210	211	212	213	214	215	216	217	218	219	220
Voltage	3.10	0.00	0.00	2.50	0.00	5.00	5.00	3.30	1.50	1.60	1.50	0.00	1.80	1.90	2.00	0.00	3.30	1.30	0.00	0.10
Pin NO	221	222	223	224	225	226	227	228	229	230	231	232	233	234	235	236	237	238	239	240
Voltage	0.00	0.00	0.00	0.00	1.60	0.00	3.20	3.80	3.30	3.50	0.00	1.80	0.00	0.40	0.90	0.90	0.00	0.00	3.20	3.00
Pin NO	241	242	243	244	245	246	247	248	249	250	251	252	253	254	255	256				
Voltage	0.50	1.60	1.30	3.20	0.00	3.20	0.50	1.30	3.20	1.40	0.00	1.60	1.60	1.10	0.80	3.20				

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IC301																				
Pin NO	1	2	3	4	5	6	7	8												
Voltage	0.00	0.00	0.00	-13.00	0.00	0.00	0.00	12.00												

IC302																				
Pin NO	1	2	3	4	5	6	7	8												
Voltage	0.00	0.00	0.00	-13.00	0.00	0.00	0.00	12.00												

IC304																				
Pin NO	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16				
Voltage	0.00	0.00	0.00	0.00	0.00	0.00	5.70	0.00	0.00	3.30	0.00	0.00	0.00	0.00	0.00	5.70				

IC305																				
Pin NO	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16				
Voltage	0.00	0.00	0.00	0.00	0.00	0.00	5.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.70				

IC306																				
Pin NO	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16				
Voltage	5.30	1.50	5.30	1.90	0.00	5.30	1.65	1.55	3.30	2.60	2.60	2.60	5.30	0.00	5.20	5.30				

IC501																				
Pin NO	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Voltage	0.00	0.50	0.50	35.00	0.00	0.00	35.00	0.50	0.50	0.40	0.40	35.00	0.00	0.00	3.50	0.40	0.40	0.00	0.00	0.00
Pin NO	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36				
Voltage	4.90	4.90	3.20	0.00	3.30	3.30	3.30	3.20	0.20	0.20	0.20	0.20	29.80	29.80	35.00	35.00				

IC502																				
Pin NO	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Voltage	0.00	0.50	0.50	35.00	0.00	0.00	35.00	0.50	0.50	0.40	0.40	35.00	0.00	0.00	3.50	0.40	0.40	0.00	0.00	0.00
Pin NO	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36				
Voltage	4.90	4.90	3.20	0.00	3.30	3.30	3.30	3.20	0.20	0.20	0.20	0.20	29.80	29.80	35.00	35.00				

IC503																				
Pin NO	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Voltage	0.00	0.50	0.50	35.00	0.00	0.00	35.00	0.50	0.50	0.40	0.40	35.00	0.00	0.00	3.50	0.40	0.40	0.00	0.00	0.00
Pin NO	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36				
Voltage	4.90	4.90	3.20	0.00	3.30	3.30	3.30	3.20	0.20	0.20	0.20	0.20	29.80	29.80	35.00	35.00				

IC504																				
Pin NO	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Voltage	0.00	0.50	0.50	35.00	0.00	0.00	35.00	0.50	0.50	0.40	0.40	35.00	0.00	0.00	3.50	0.40	0.40	0.00	0.00	0.00
Pin NO	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36				
Voltage	4.90	4.90	3.20	0.00	3.30	3.30	3.30	3.30	0.20	0.20	0.20	0.20	29.80	29.80	35.00	35.00				

IC505																				
Pin NO	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Voltage	0.00	0.00	3.30	0.00	0.00	0.00	1.20	1.20	1.20	1.50	1.60	3.20	0.00	0.00	3.20	0.00	0.00	3.20	3.20	1.40
Pin NO	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
Voltage	0.80	3.20	0.00	3.20	1.50	0.00	0.00	3.30	0.20	0.20	0.20	0.20	0.20	0.20	3.30	0.00	0.00	0.20	0.20	0.20
Pin NO	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
Voltage	0.20	0.20	0.20	3.30	0.00	0.00	0.20	0.20	0.20	0.20	3.30	3.30	0.00	0.00	1.40	1.60	0.00	1.20	3.30	0.00
Pin NO	61	62	63	64																
Voltage	0.00	1.20	1.20	3.30																

IC602																				
Pin NO	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Voltage	0.00	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	3.20	0.60	0.00	1.30	1.90	1.20	1.30	1.50	1.10	1.30	1.80
Pin NO	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
Voltage	3.30	3.30	1.80	3.30	3.30	1.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.20	3.20	0.00
Pin NO	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
Voltage	0.00	0.00	0.70	3.20	3.20	0.00	0.00	0.00	0.00	3.20	0.00	0.00	0.00	0.00	0.00	3.20	0.00	0.00	0.00	2.80
Pin NO	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
Voltage	3.30	0.00	0.00	0.00	3.30	0.00	3.30	0.00	0.00	0.00	0.00	0.00	2.50	2.50	2.50	2.50	2.50	2.50	2.50	1.80

IC801																				
Pin NO	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Voltage	1.30	3.70	1.20	1.30	1.20	0.00	0.00	0.00	0.00	0.00	2.50	2.50	2.50	2.50	2.50	2.50	1.90	1.90	5.10	0.00
Pin NO	21	22	23	24	25	26	27	28												
Voltage	2.50	0.00	1.30	5.10	2.10	1.30	1.30	0.00												

Q201			
Pin NO	b	c	e
Voltage	5.80	12.00	5.20

Q202			
Pin NO	b	c	e
Voltage	5.20	5.80	5.20

Q203			
Pin NO	b	c	e
Voltage	2.10	1.80	2.80

Q204			
Pin NO	b	c	e
Voltage	3.70	3.30	4.40

Q206			
Pin NO	b	c	e
Voltage	0.70	0.00	0.00

Q300			
Pin NO	b	c	e
Voltage	0.60	0.00	0.00

Q305			
Pin NO	b	c	e
Voltage	4.00	5.20	3.20

Q306			
Pin NO	b	c	e
Voltage	0.30	3.90	0.00

Q501			
Pin NO	b	c	e
Voltage	5.00	0.20	5.00

Q502			
Pin NO	b	c	e
Voltage	0.00	3.30	0.00

Q609			
Pin NO	b	c	e
Voltage	0.00	3.30	5.10

Q610			
Pin NO	b	c	e
Voltage	0.00	5.10	5.10

Q611			
Pin NO	b	c	e
Voltage	5.10	0.00	0.00

Q705			
Pin NO	b	c	e
Voltage	0.00	0.00	5.20

Q706			
Pin NO	b	c	e
Voltage	0.00	0.00	5.20

Q803			
Pin NO	b	c	e
Voltage	3.20	0.00	3.20

Q804			
Pin NO	b	c	e
Voltage	3.20	0.00	3.20

Q901			
Pin NO	b	c	e
Voltage	10.00	12.00	9.30

Q902			
Pin NO	b	c	e
Voltage	3.90	5.00	3.30

Q903			
Pin NO	b	c	e
Voltage	-14.00	-26.00	-13.00

Q904			
Pin NO	b	c	e
Voltage	5.20	11.20	5.70

Q905			
Pin NO	b	c	e
Voltage	0.60	1.90	0.00

Q906			
Pin NO	b	c	e
Voltage	0.00	12.40	4.30

Q907			
Pin NO	b	c	e
Voltage	0.00	12.40	0.00

Q908			
Pin NO	b	c	e
Voltage	0.00	12.40	0.00

Q909			
Pin NO	b	c	e
Voltage	12.40	0.00	12.50

Q910			
Pin NO	b	c	e
Voltage	12.40	0.00	12.50

Q911			
Pin NO	b	c	e
Voltage	0.50	0.00	0.00

Q912			
Pin NO	b	c	e
Voltage	0.50	3.20	0.00

Q913			
Pin NO	b	c	e
Voltage	0.50	3.20	0.00

POWER BOARD

TABLE OF CONTENTS

VOLTAGE

IC901																				
Pin NO	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16				
Voltage	4.80	4.80	2.40	0.00	1.70	3.40	0.00	12.00	2.30	2.30	12.00	12.00	4.90	4.90	2.40	0.00				

IC902																				
Pin NO	1	2	3	4	5	6	7	8												
Voltage	2.70	0.00	0.50	2.10	0.00	1.00	11.00	4.90												

IC903																				
Pin NO	1	2	3	4																
Voltage	4.90	4.20	0.00	1.00																

IC904																				
Pin NO	1	2	3	4																
Voltage	4.60	3.50	0.00	2.60																

IC905																				
Pin NO	1	2	3																	
Voltage	3.50	0.00	2.40																	

Q901			
Pin NO	b	c	e
Voltage	148.00	318.00	148.00

Q907			
Pin NO	b	c	e
Voltage	0.60	0.00	0.00

Q911			
Pin NO	b	c	e
Voltage	1.50	0.00	1.80

Q915			
Pin NO	b	c	e
Voltage	42.00	4.90	42.00

Q904			
Pin NO	b	c	e
Voltage	0.00	3.40	0.00

Q908			
Pin NO	b	c	e
Voltage	0.00	4.30	0.00

Q912			
Pin NO	b	c	e
Voltage	0.00	550.00	0.00

Q916			
Pin NO	b	c	e
Voltage	1.50	0.00	0.00

Q905			
Pin NO	b	c	e
Voltage	11.50	13.50	11.00

Q909			
Pin NO	b	c	e
Voltage	0.00	147.90	0.00

Q913			
Pin NO	b	c	e
Voltage	72.00	0.00	2.50

Q917			
Pin NO	b	c	e
Voltage	0.60	0.00	0.00

Q906			
Pin NO	b	c	e
Voltage	0.00	41.90	0.00

Q910			
Pin NO	b	c	e
Voltage	1.50	0.00	1.80

Q914			
Pin NO	b	c	e
Voltage	0.00	0.60	0.00

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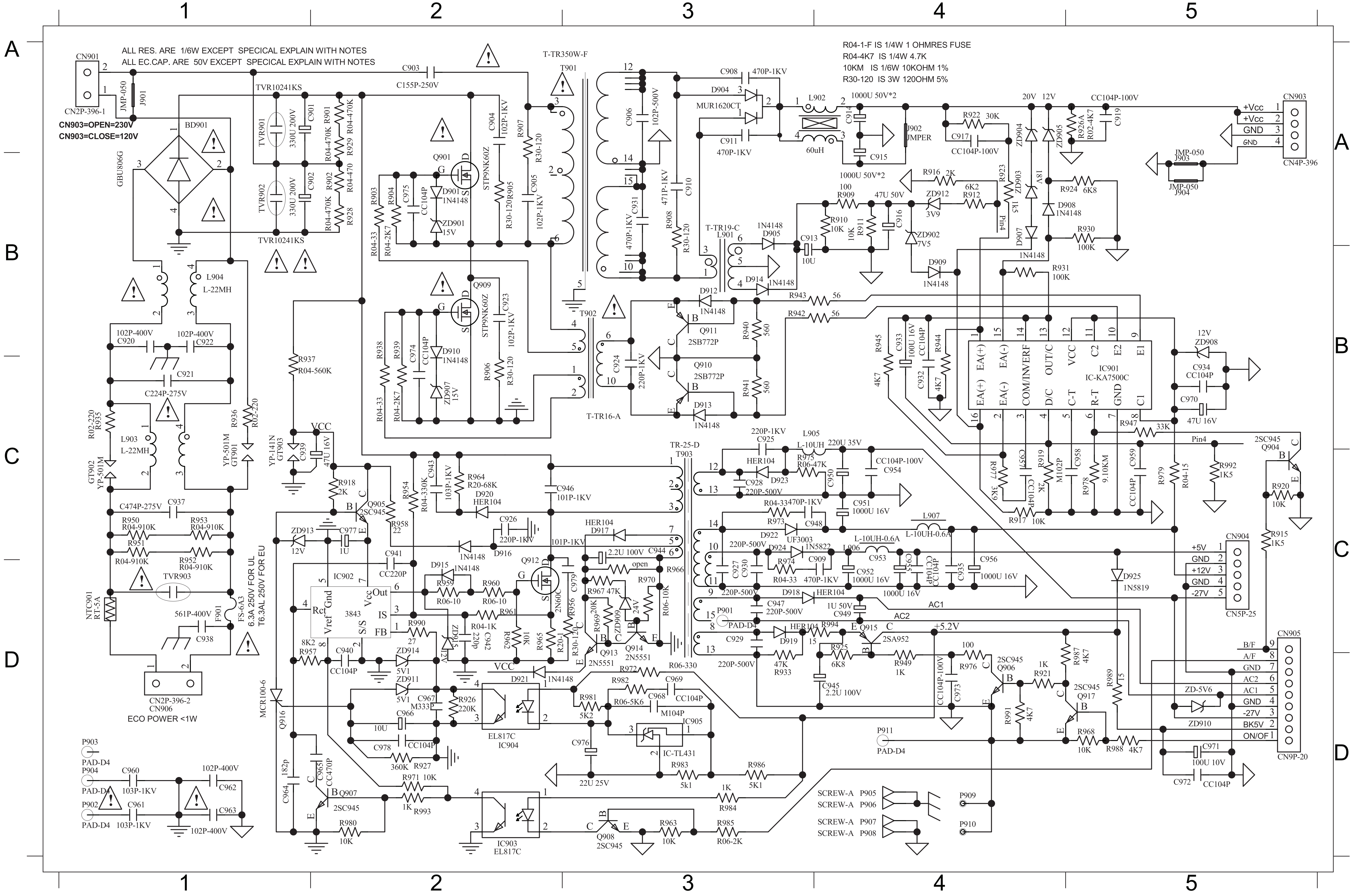
CIRCUIT DIAGRAM

BD901	A1	C913	A3	C925	B3	C935	C4	C946	C2	C957	C4	C967	D2	CN903	A5	D910	B2	D921	D2	IC903	D2	L906	C4	Q910	B3	R903	A2	R916	A4	R926A	A5	R937	B1	R949	D4	R961	C2	R971	D2	R981	D3	R991	D4	ZD902	A4	ZD913	C1
C901	A1	C914	A4	C926	C2	C937	C1	C948	C3	C958	C5	C968	D3	CN904	C5	D912	B3	D922	C3	IC904	D2	L907	C4	Q911	B3	R904	A2	R917	C4	R926B	D2	R938	B2	R950	C1	R962	C2	R972	D3	R982	D3	R993	D2	ZD903	A4	ZD914	C2
C902	A1	C916	A4	C927	C3	C938	C1	C949	C4	C959	C5	C969	D3	CN905	D5	D913	B3	D923	C3	IC905	D3	NTC901	C1	Q912	C2	R905	A2	R918	C2	R927	D2	R939	B2	R951	C1	R963	D3	R973	C3	R983	D3	R994	C4	ZD904	A4		
C903	A2	C917	A4	C928	C3	C939	C1	C950	C4	C960	D1	C970	B5	CN906	D1	D914	B3	D924	C3	J903	A5	Q901	A2	Q913	D3	R906	B2	R919	C4	R928	A2	R940	B3	R952	C1	R964	C2	R974	C3	R984	D3	T901	A3	ZD905	A4		
C904	A2	C919	A5	C929	C3	C940	C2	C951	C4	C961	D1	C971	D5	D901	A2	D915	C2	D925	C5	J904	A5	Q904	C5	Q914	C3	R908	A3	R920	C5	R929	A2	R941	B3	R953	C1	R965	C2	R975	C3	R985	D3	T902	B3	ZD907	B2		
C906	A3	C920	B1	C930	C3	C941	C2	C952	C4	C962	D1	C972	D5	D904	A3	D916	C2	F901	C1	L901	A3	Q905	C2	Q915	C4	R909	A4	R921	D4	R930	A5	R942	B3	R954	C2	R966	C3	R976	D4	R986	D3	T903	C3	ZD908	B5		
C908	A3	C921	B1	C931	A3	C942	C2	C953	C4	C963	D1	C973	D4	D905	A3	D917	C3	GT901	C1	L902	A4	Q906	D4	Q916	D1	R910	A4	R922	A4	R931	B4	R943	B3	R957	C1	R967	C3	R977	C4	R987	D5	TVR901	A1	ZD909	C3		
C909	C4	C922	B1	C932	B4	C943	C2	C954	C4	C964	D1	C976	D3	D907	A4	D918	C3	GT902	C1	L903	B1	Q907	D2	Q917	D5	R911	A4	R923	A4	R933	D3	R944	B4	R958	C2	R968	D5	R978	C5	R988	D5	TVR902	A1	ZD910	D5		
C910	A3	C923	B2	C933	B4	C944	C3	C955	C4	C965	D2	C977	C2	D908	A4	D919	C3	IC901	B5	L904	B1	Q908	D3	R901	A2	R912	A4	R924	A5	R935	B1	R945	B4	R959	C2	R969	C3	R979	C5	R989	D5	TVR903	C1	ZD911	D2		
C911	A3	C924	B3	C934	B4	C945	D4	C956	C4	C966	D2	C978	D2	D909	B4	D920	C2	IC902	C2	L905	B3	Q909	B2	R902	A2	R915	C5	R925	C4	R936	B1	R947	B5	R960	C2	R970	C3	R980	D2	R990	C2	ZD901	A2	ZD912	A4		



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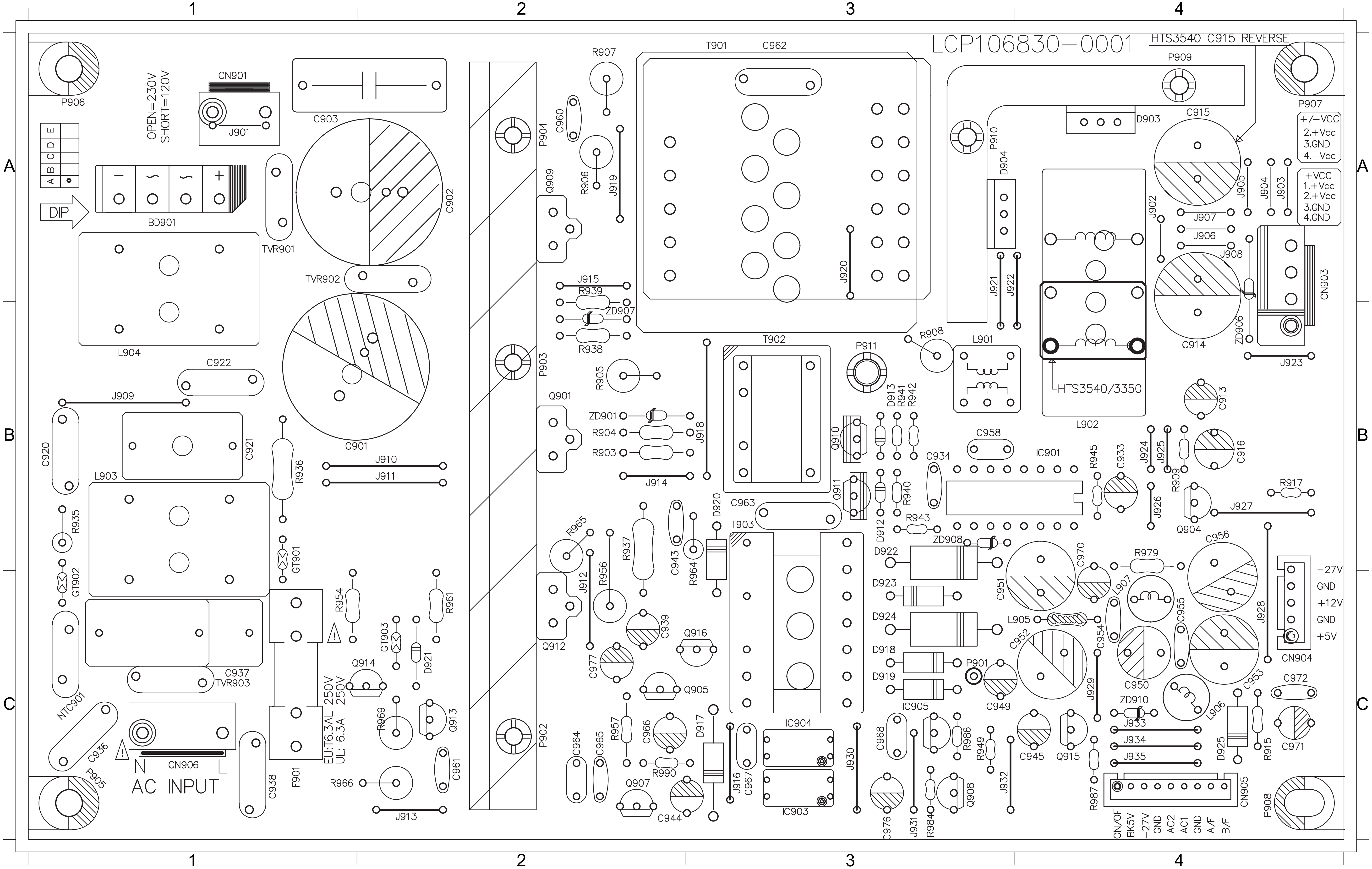
PCB LAYOUT - TOP VIEW

BD901	A1	C916	B4	C937	C1	C949	C3	C955	C4	C963	B3	C971	C4
C901	A1	C920	B1	C938	C1	C950	C4	C956	B4	C964	C2	C972	C4
C902	B1	C921	B1	C939	C2	C951	C3	C958	B3	C965	C2	C976	C3
C903	A1	C922	B1	C943	B2	C952	C4	C960	A2	C966	C2	C977	C2
C913	B4	C933	B4	C944	C2	C953	C4	C961	C2	C967	C3	CN903	A4
C914	B4	C934	B3	C945	C4	C954	C4	C962	A3	C970	B4	CN904	C4

CN905	C4	D918	C3	D924	C3	IC903	C3	J910	B2	J916	C3	J924	B4
CN906	C1	D919	C3	D925	C4	IC904	C3	J911	B2	J918	B3	J925	B4
D904	A3	D920	B3	F901	C1	IC905	C3	J912	C2	J920	A3	J926	B4
D912	B3	D921	C2	GT901	B1	J903	A4	J913	C2	J921	A3	J927	B4
D913	B3	D922	C3	GT902	C1	J904	A4	J914	B2	J922	A3	J928	C4
D917	C3	D923	C3	IC901	B4	J909	B1	J915	A2	J923	B4	J929	C4

J930	C3	L901	B3	L907	C4	Q908	C3	Q914	C1	R906	A2	R936	B1
J931	C3	L902	B4	NTC901	C1	Q909	A2	Q915	C4	R908	B3	R937	B2
J932	C3	L903	B1	Q901	B2	Q910	B3	Q916	C3	R909	B4	R938	B2
J933	C4	L904	B1	Q904	B4	Q911	B3	R903	B2	R915	C4	R939	B2
J934	C4	L905	C4	Q905	C2	Q912	C2	R904	B2	R917	B4	R940	B3
J935	C4	L906	C4	Q907	C2	Q913	C2	R905	B2	R935	B1	R941	B3

R942	B3	R961	C2	R984	C3	T903	B3	ZD908	B3
R943	B3	R964	C2	R986	C3	TVR901	A1	ZD910	C4
R945	B4	R965	B2	R987	C4	TVR902	A1		
R949	C3	R966	C1	R990	C2	TVR903	C1		
R954	C1	R969	C2	T901	A3	ZD901	B2		
R957	C2	R979	C4	T902	B3	ZD907	B2		



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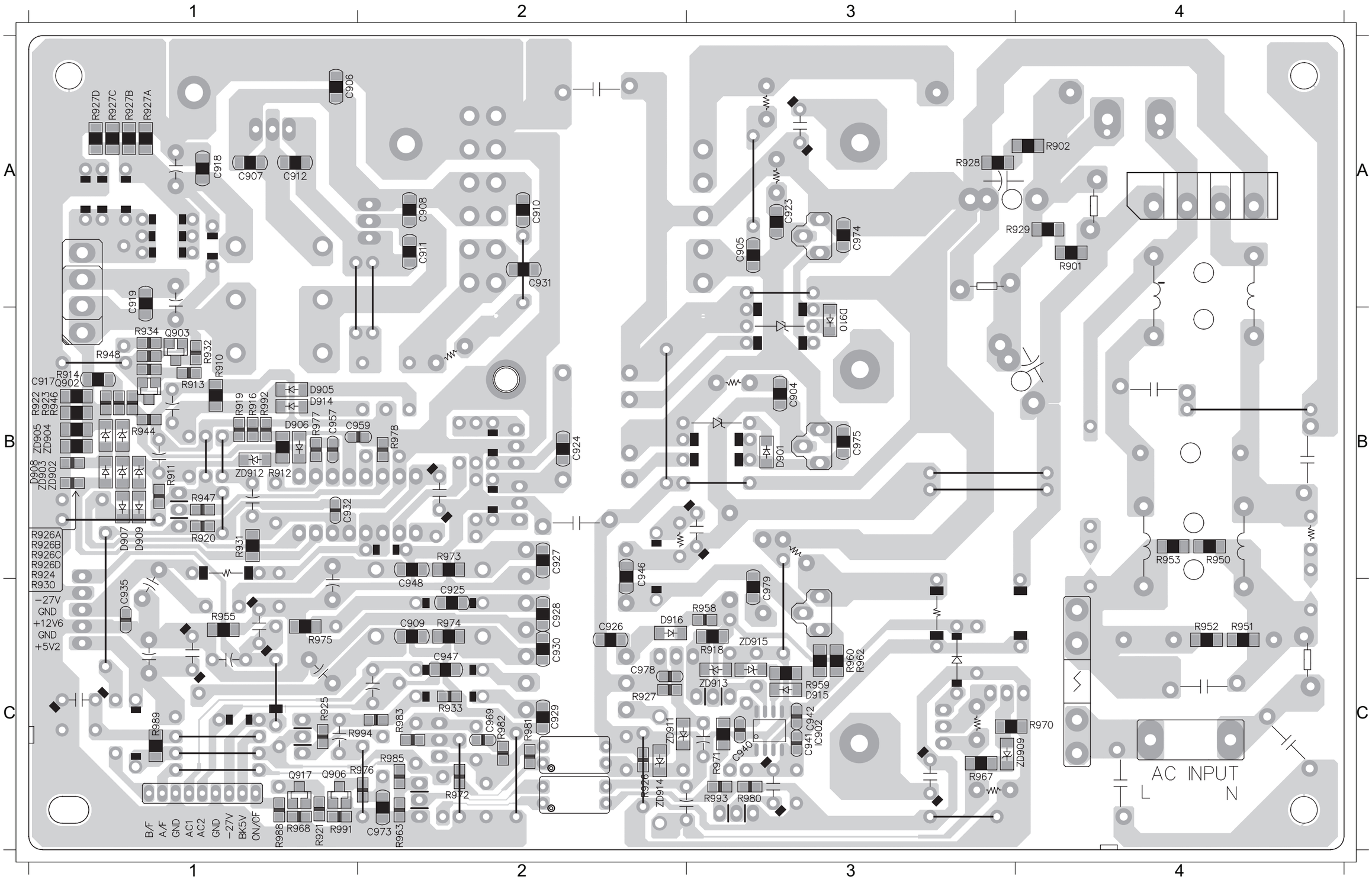
PCB LAYOUT - BOTTOM VIEW

C904 B3	C911 A2	C925 C2	C930 C2	C941 C3	C959 B2	D901 B3	D910 B3	Q906 C1	R911 B1	R920 B1	R925 C1	R929 A4	R947 B1	R955 C1	R963 C2	R972 C2	R977 B1	R983 C2	R993 C3	ZD905 B1	ZD914 C2
C906 A1	C917 A1	C926 C2	C931 A2	C942 C3	C968 C1	D905 B1	D914 B1	Q917 C1	R912 B1	R921 C1	R926A B1	R930 B1	R950 B4	R958 C3	R967 C3	R973 B2	R978 B2	R985 C2	R994 C2	ZD909 C3	
C908 A2	C919 A1	C927 B2	C932 B1	C946 C2	C969 C2	D907 B1	D915 C3	R901 A4	R916 B1	R922 B1	R926B B1	R931 B1	R951 C4	R959 C3	R968 C1	R974 C2	R980 C3	R988 C1	ZD902 B1	ZD911 C2	
C909 C2	C923 A3	C928 C2	C935 C1	C948 B2	C973 C2	D908 B1	D916 C2	R902 A4	R918 C3	R923 B1	R927 C2	R933 C2	R952 C4	R960 C3	R970 C4	R975 C1	R981 C2	R989 C1	ZD903 B1	ZD912 B1	
C910 A2	C924 B2	C929 C2	C940 C3	C957 B1	C978 C2	D909 B1	IC902 C3	R910 B1	R919 B1	R924 B1	R928 A3	R944 B1	R953 B4	R962 C3	R971 C3	R976 C2	R982 C2	R991 C1	ZD904 B1	ZD913 C3	



Mechanical Exploded View

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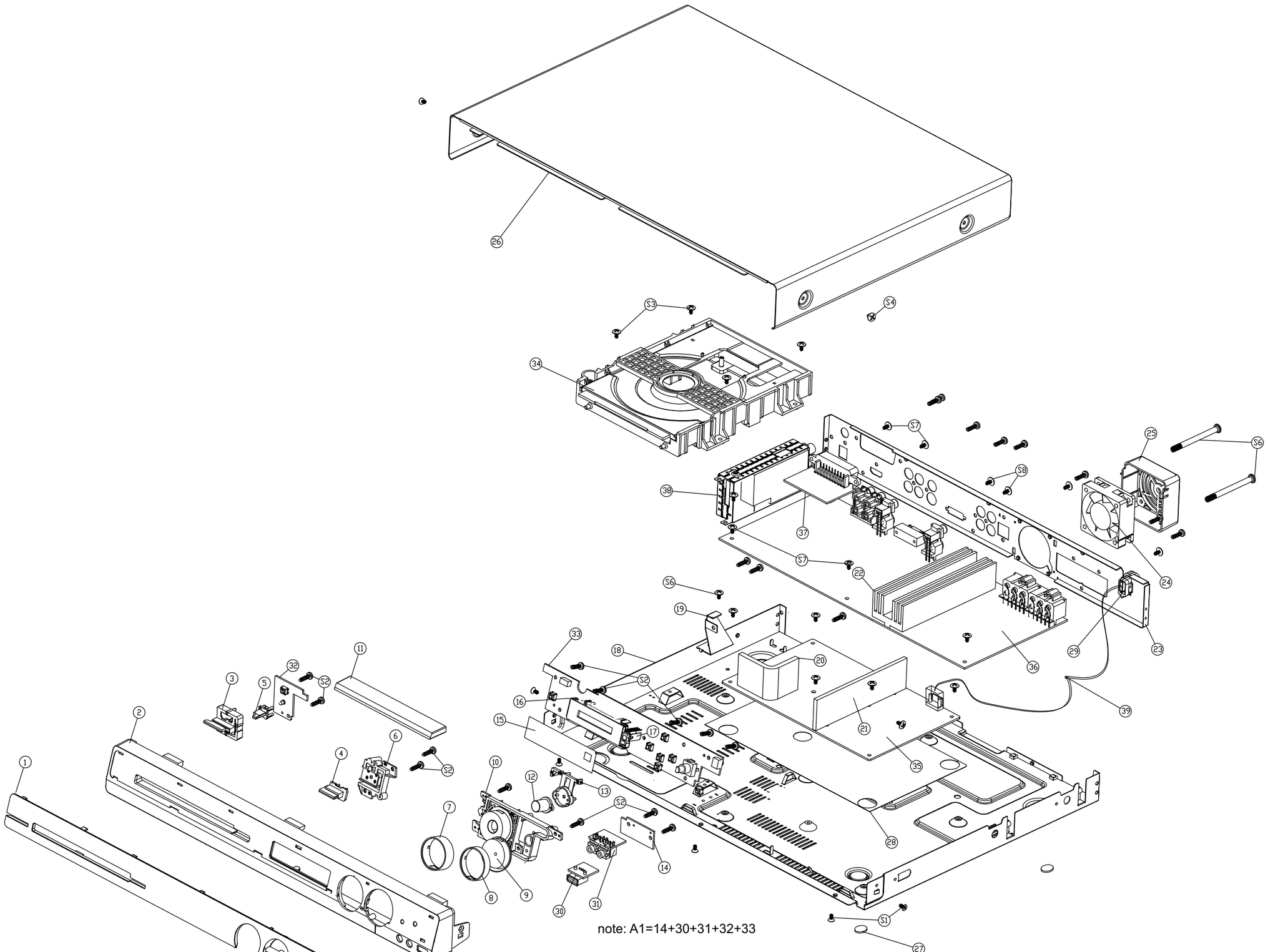

note: A1=14+30+31+32+33

MECHANICAL PART LIST

Main Unit

LOC.	PART NO.	Description
1	996510001254	DISPLAY LENS
2	996510001661	FRONT ASSY
3	996510001256	STANDY BUTTON
4	996510001257	OPEN/CLOSE BUTTON
5	996510001662	STANDY LED LENS
6	996510003834	OPEN /CLOSE BUTTON HOLDER
7	996510001663	FUNCTION BUTTON RING
8	996510001664	VOLUME KNOB RING
9	996510001261	VOLUME KNOB RING
10	996510001262	FUNCTION BUTTON
11	996510003833	DVD DOOR
12	996510003835	SOURCE BUTTON
13	996510003836	SOURCE BUTTON HOLDER
15	996510003837	VFD FILTER
18	996510007181	BOTTOM CAB
23	996510008394	BACK PANEL for /12
23	996510008396	BACK PANEL for /05
25	996510001615	FAN COVER
26	996510008395	TOP CAB
27	994000005305	RUBBER FOOT D14XT3.0MM W/ADV
28	996510003875	PVC SHEET
34	996510007174	DVD LOADER MODULE
35	996510001659	POWER BOARD
36	996510001658	MAIN BOARD
37	996510001660	SCART BOARD
38	996510001607	TUNER PACK
39	996500038338	POWER CORD for /12
39	996510003775	POWER CORD for /05
A1	996510007314	CONTROL+USB+PHJACK+STANDBY+BKT
AM	996510001621	LOOP ANT
FM	996500023583	FM ANTENNA 1000MM 1007#24 TC
CN301	996510000673	FFC CABLE 10P 100MM P1.25MM
CN801	996510007319	FFC CABLE 24P 180MM
RC	996510001649	REMOTE CONTROL
STEREO	996510001598	STEREO CABLE
SCART	996510001650	SCART CABL
LSCREW	996510009092	LINK SCREW

Speaker

LOC.	PART NO.	Description
SPKC	996510009246	SPEAKER BOX -CENTER
SPKFL	996510009247	SPEAKER BOX -FRONT LEFT
SPKFR	996510009248	SPEAKER BOX - FRONT RIGHT
SPKRL	996510009249	SPEAKER BOX- REAR LEFT
SPKRR	996510009250	SPEAKER BOX- REAR RIGHT
SUBW	996510009251	SUBWOOFER
JACKC	996510009240	JACK CONNECTOR PA GREEN center
JACKFL	996510009241	JACK CONNECTOR PA WHITE F-L
JACKFR	996510009242	JACK CONNECTOR PA RED F-R
JACKRL	996510009243	JACK CONNECTOR PA BLUE S-L
JACKRR	996510009244	JACK CONNECTOR PA GREY S-R
JACKS	996510009245	JACK CON PA PURPLE subwoofer
RFC	996510001599	RUBBER FOOT -CENTER SPK
RFF	996510001600	RUBBER FOOT-FRONT SPK
RFFR	996510001601	RUBBER FOOT - REAR SPK
RFR	996510003838	RUBBER FOOT - REAR
RFS	996500028375	RUBBER FOOT