DVD Hometheater System HTS3548W/55

Service
Service
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Service Manual

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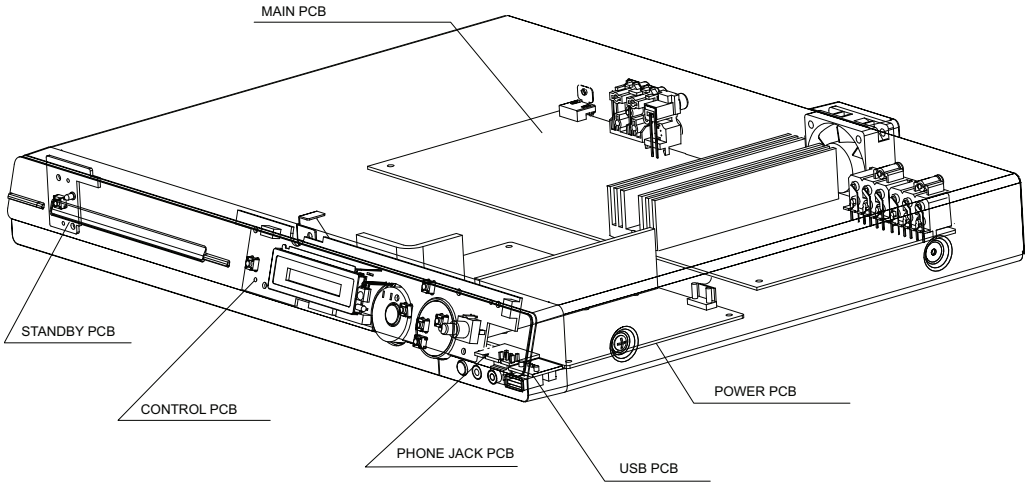
GB 3139 785 32980

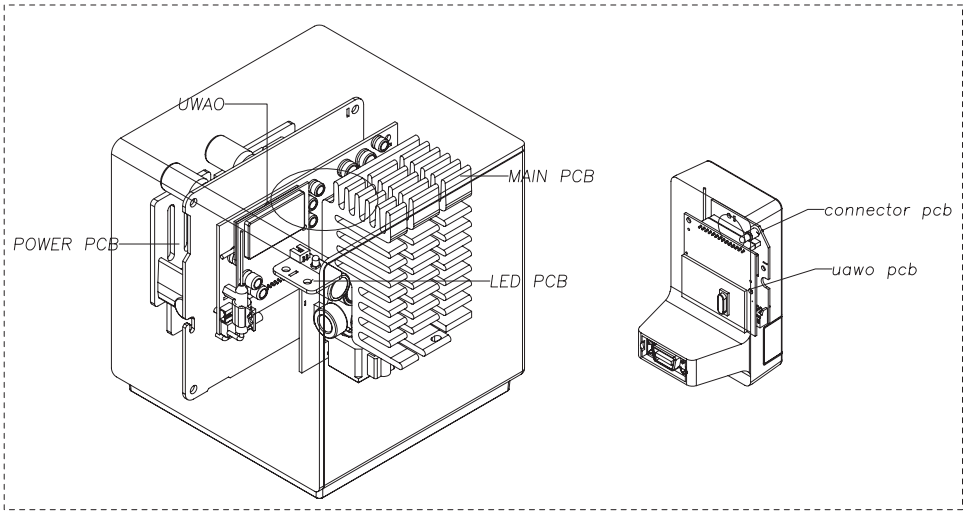
Version 1.0

PHILIPS

LOCATION OF PCB BOARDS



main unit



wireless

VERSION VARIATION:

Type/Versions / Features & Board in used	HTS3548W
	/55
Main (Output Power-1000W)	X
S-Video out	X
Power Voltage (120/230V)	X
Power cord (fixed)	X
Wireless	X

SPECIFICATIONS

AMPLIFIER

Total output power,
Home Theatre mode: ..... 1000 W
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/100kHz)
AM ..... 531–1602 kHz (9kHz)
AM .....530–1700 kHz (10kHz)
26 dB Quieting
Sensitivity: .....FM 22 dBf, AM 5000µV/m
IF Rejection Ratio: .....FM 60 dB, AM 24 dB
Signal-to-Noise Ratio: .....FM 50 dB, AM 30 dB
AM Suppression Ratio: .....FM 30 dB
Harmonic Distortion: ..... FM Mono 3%
..... FM Stereo 3%
.....AM 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)
Composite Video
Output ..... 1.0 Vp-p, 75Ω
S-Video Output .....Y - 1.0 Vp-p, 75Ω
..... C - 0.286 Vp-p, 75Ω
Audio DAC .....24 Bits / 96 kHz
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 I ..... EC 60958, IEC 61937
DTS ..... IEC 60958, IEC 61937

MAIN UNIT

Power Supply Rating: ..... 110-127 V / 220-240 V~
.....50-60 Hz switchable
Power Consumption: .....180 W
Dimensions:..... 435 x 55 x 367 (mm)
.....(w x h x d)
Weight: .....4.04 kg

FRONT AND REAR SPEAKERS

System: ..... Full range satellite
Impedance:..... 6 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: .....3 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:..... 3 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

WIRELESS module

Power Consumption: .....50 W
Frequency Response: .....6000 Hz
Low Standby power:..... < 1 W
S/N Ratio: .....65 dB (A-Weighted)
Input Sensitivity: .....400-600 mV
Distortion: 0.5%
Dimensions .....(w x h x d):
Transmitter ..... 48x 88x 49 (mm)
Receiver ..... 126 x 130.5 x 126 (mm)
Weight:
Transmitter .....0.08 kg
Receiver .....1.19 kg

Specifi cations subject to change without prior notice.

SERVICE AIDS

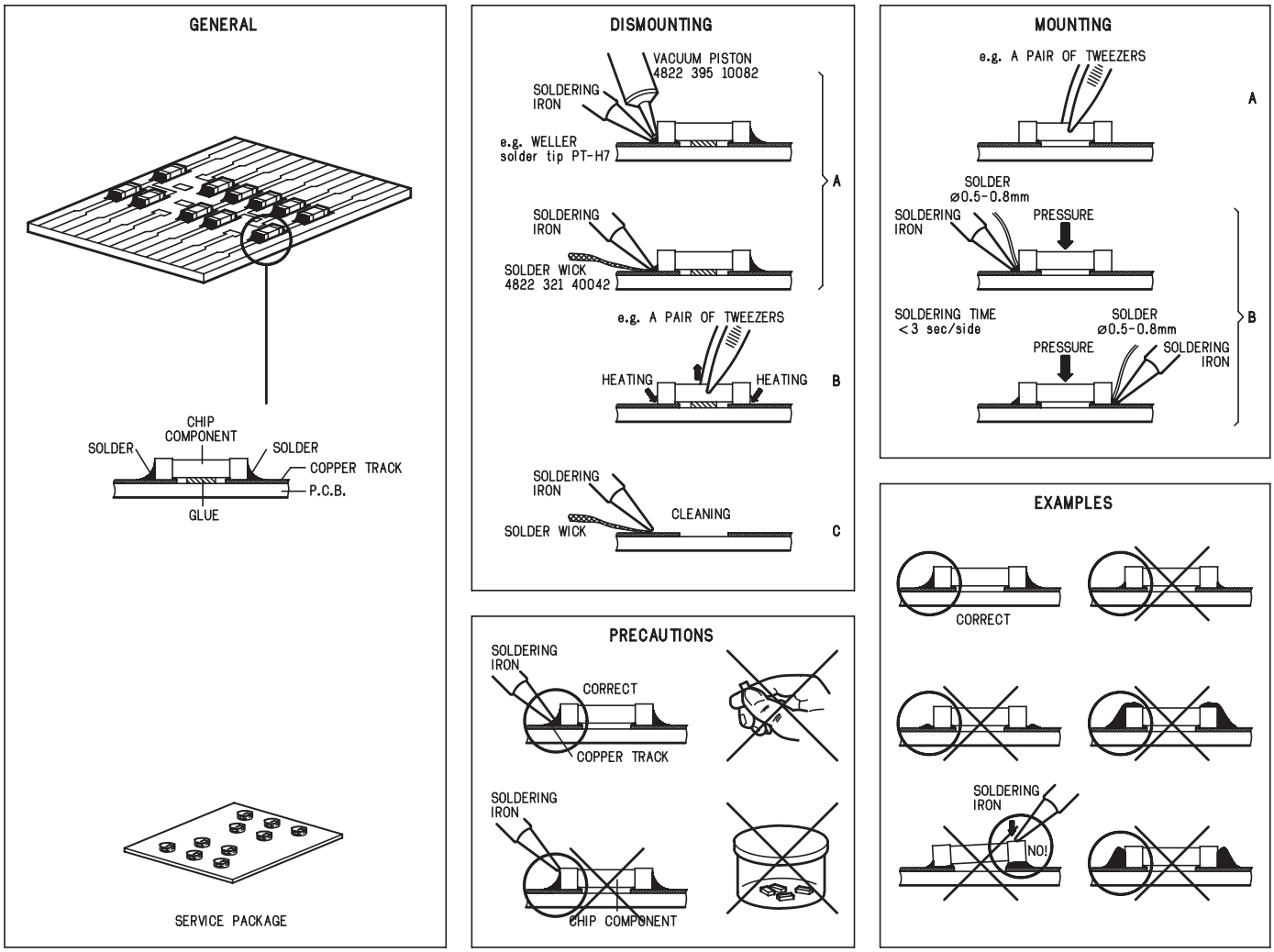
Service Tools:

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.

2 - 1

System , Region Code , etc. Setting Produre

1)System Reset

a) press “setup “ button on R/C,TV will show preference page
b) select the menu using the ▼and ▶ on R/C
c) go preference page to do sysytem reset

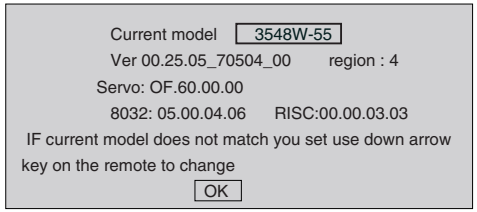
2)Region Code Change

a) press the “stop” button on R/C in open model
c) press”7” “3“ “4“ “4“ “6“ “6“ on R/C,then input desired number to change region code :

1	USA
2	EU
3	AP
4	Australia ,NZ , Latam
5	Russia , INDIA
6	CHINA

3)Version Control Change

a) In open model, press “1“ “5“ “9“ on R/C
b) press “ok” button to confirm
c) TV will show message as below:



4)Password Change

a) press “setup “ button on R/C,TV will show preference page
b) select the menu using the ▼and ▶ on R/C
c) go preference page select “password“ to change
* 000000 is default password supplied.

5)Check on the Sofeware Version

a) open the CD Door
b) press “display“ buttom on R/C
c) TV will show the version on screen

6)Upgrading new sofeware

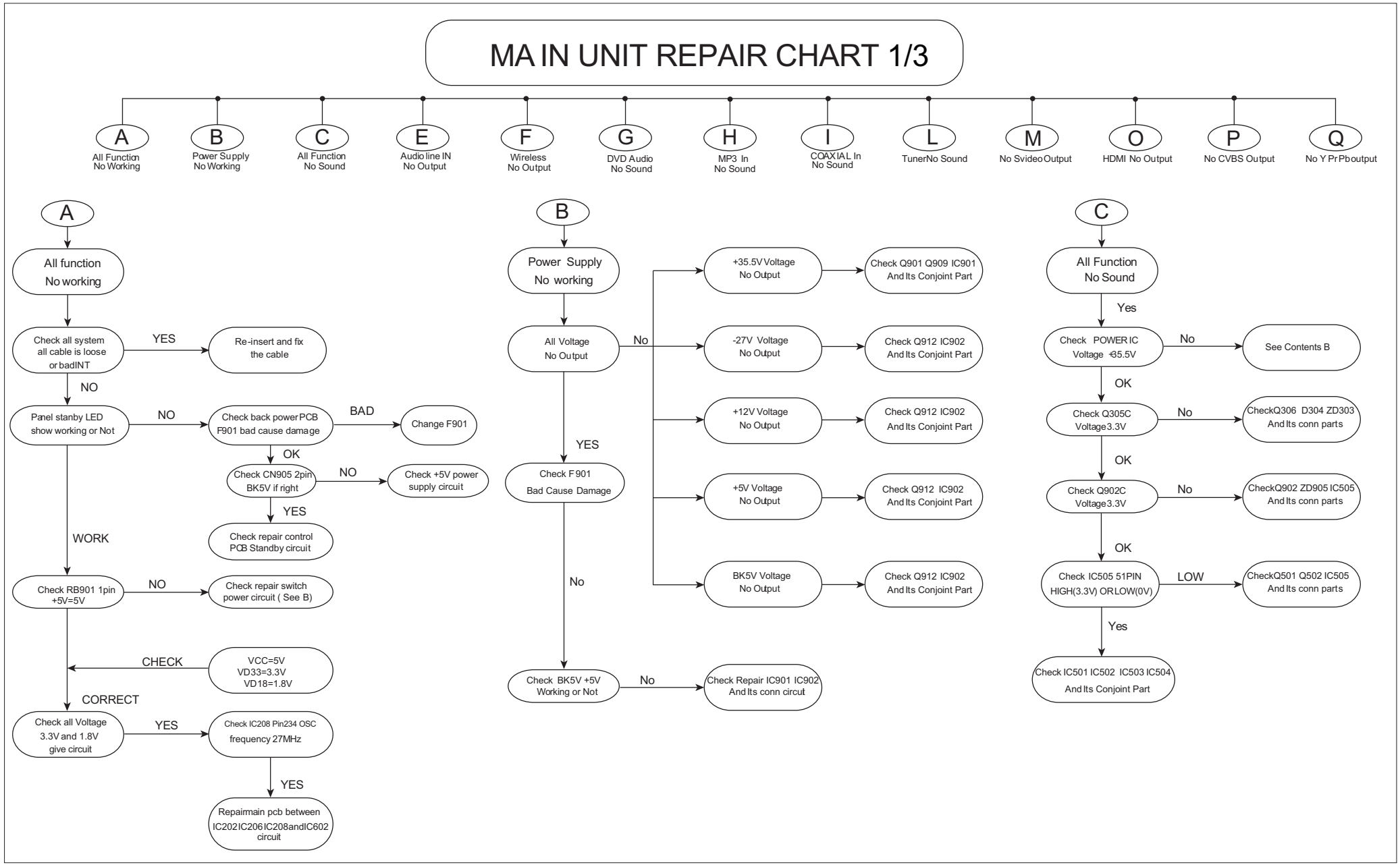
a) open the CD Door,then insert the CD-R program disc
b) close the CD Door.
c) VFD will show:
“Loading“
“Erase” -- erase the flash memory
“Writing” about 2 minutes
“done “
* the latest upgraded is in version VER 00.25.05_70504_00

CAUTION!

This information is confidential and may not be distributed.Only a qualified service person should reprogram the Region Code.

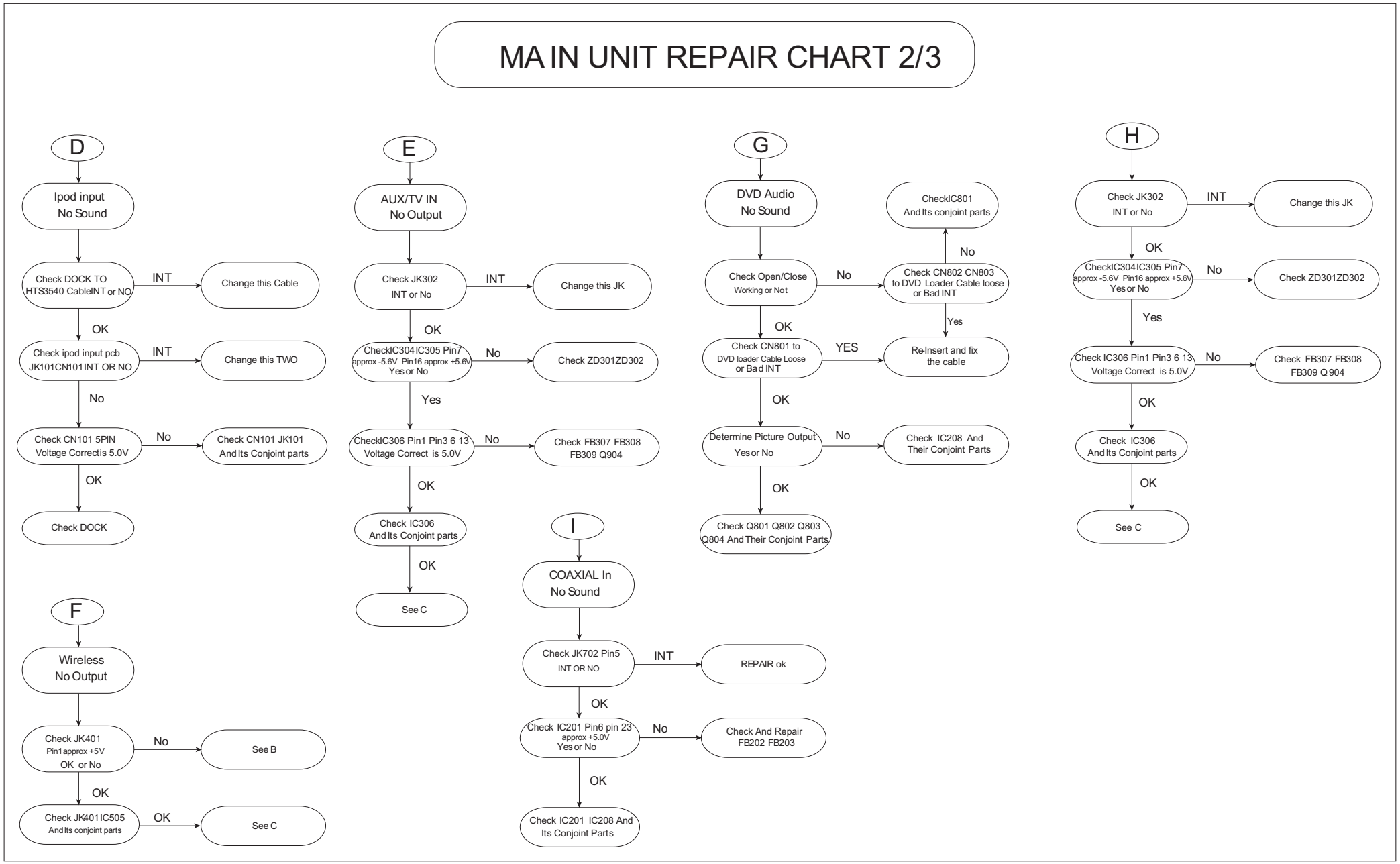
2 - 2

REPAIR INSTRUCTIONS (part one)-Main Unit



2 - 3

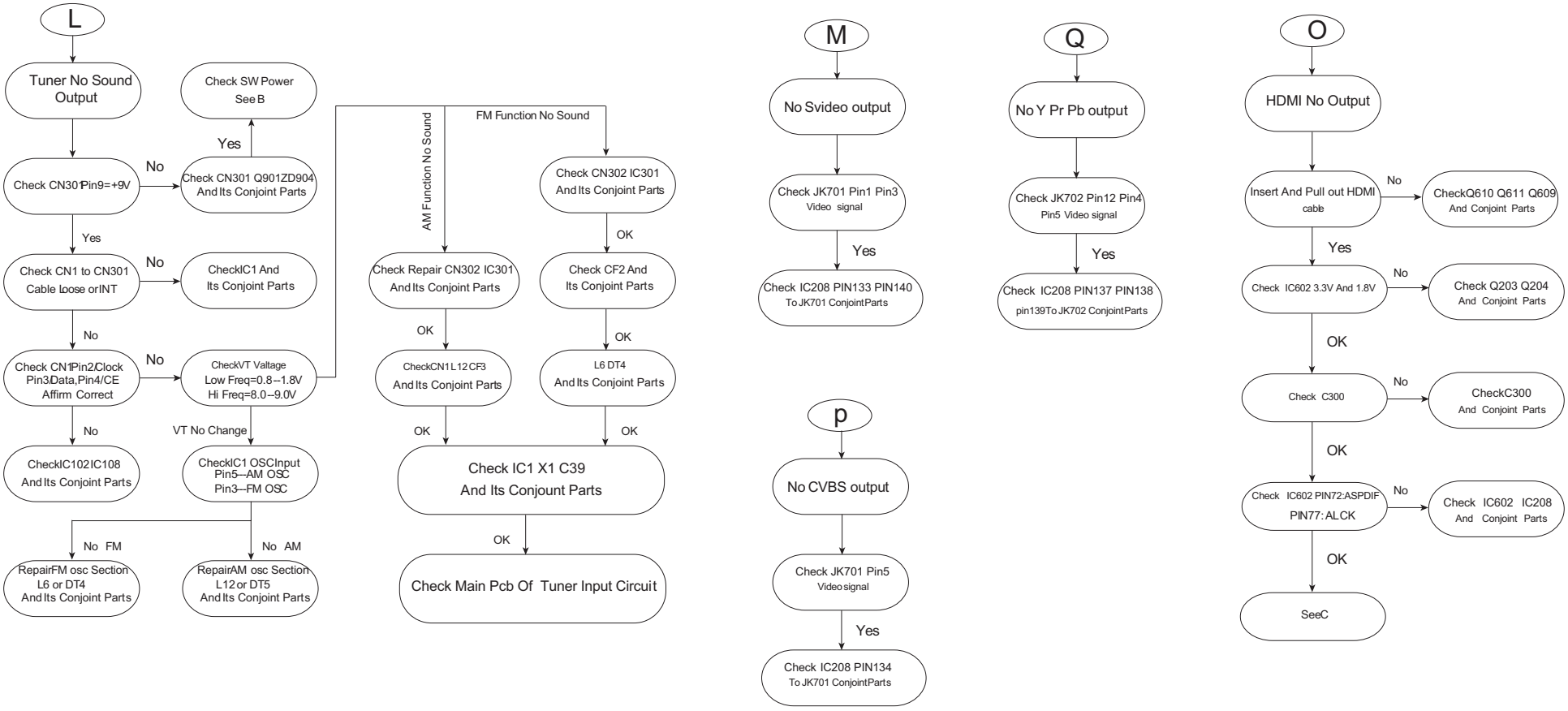
REPAIR INSTRUCTIONS (part two)-Main Unit



2 - 4

REPAIR INSTRUCTIONS (part three)-Main Unit

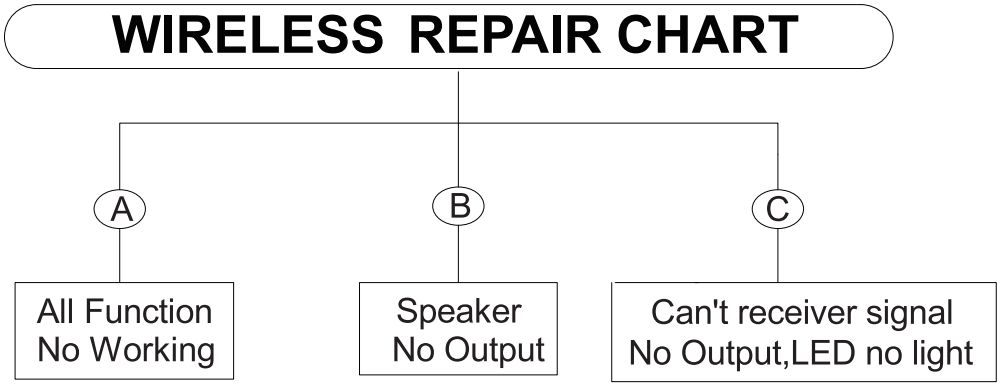
MA IN UNIT REPAIR CHART 3/3

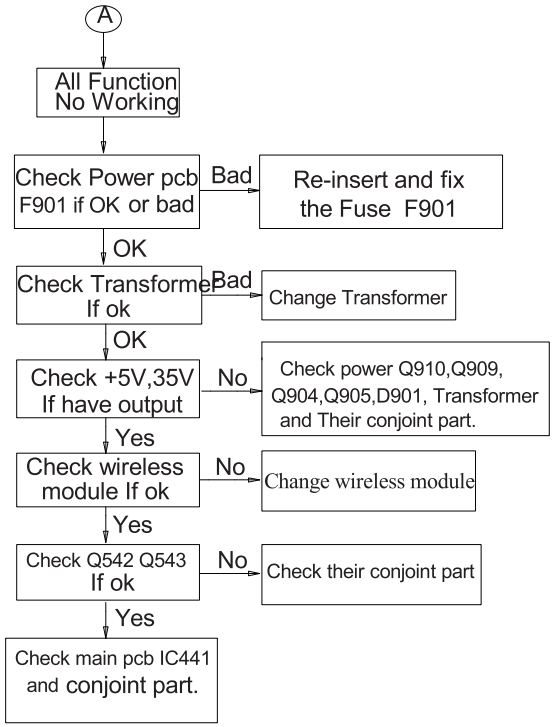


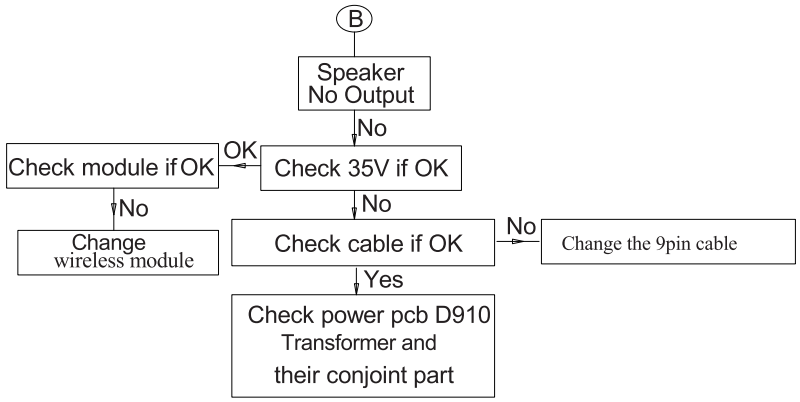
2 - 5

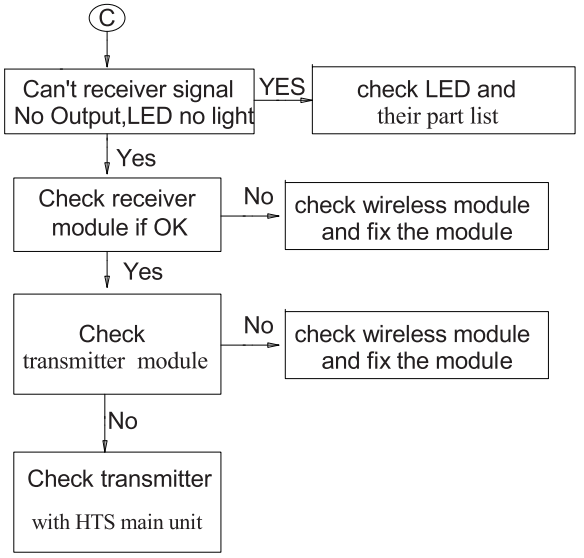
REPAIR INSTRUCTIONS-Wireless

WIRELESS REPAIR CHART









DISASSEMBLY INSTRUCTIONS (part one--main unit)

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.

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

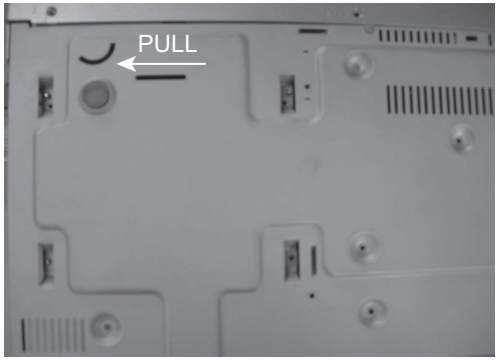


Figure 1

Figure 2

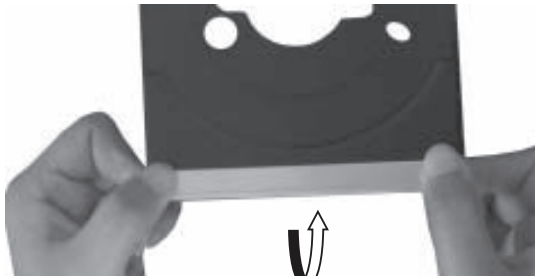


Figure 3

3 - 1

Dismantling of the Main PCB

2) Loosen 3 screw " A " on the top of main board as shown in figure 4.
1) Loosen 6 screw "B" at the back panel as shown in figure 5.

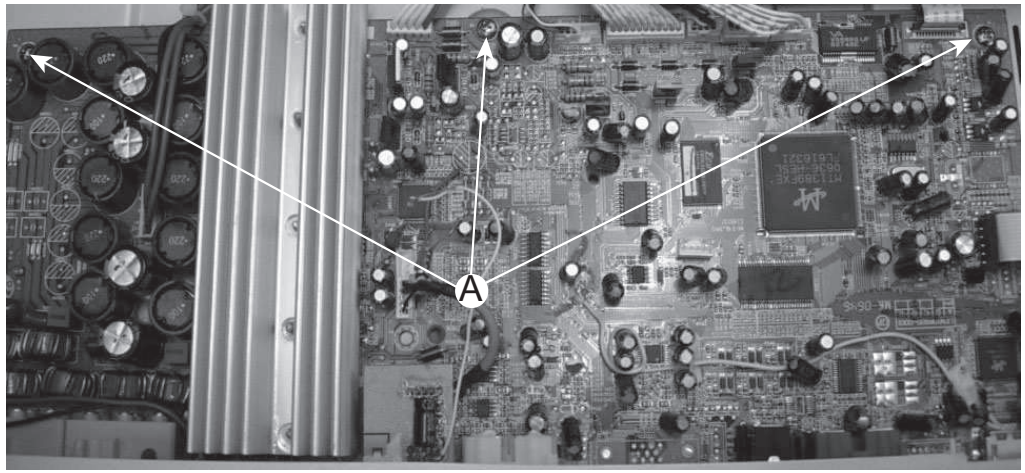


Figure 4

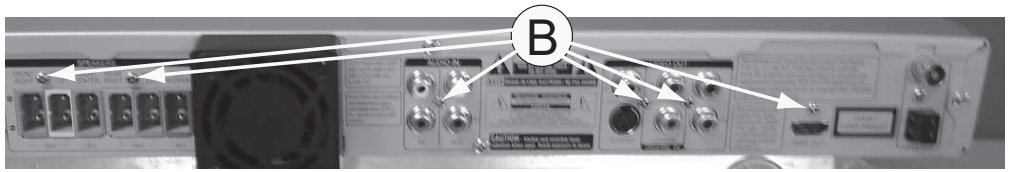


Figure 5

Dismantling of the Control Board

1) Loosen 12 screws “E” on the top of control board as shown in figure 6

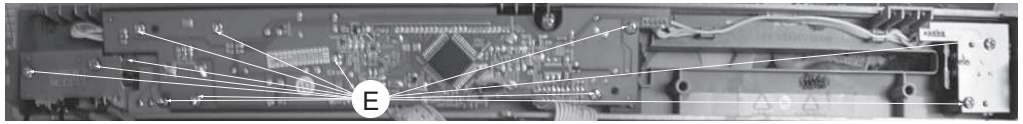


Figure 6

Dismantling of the Power Board

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

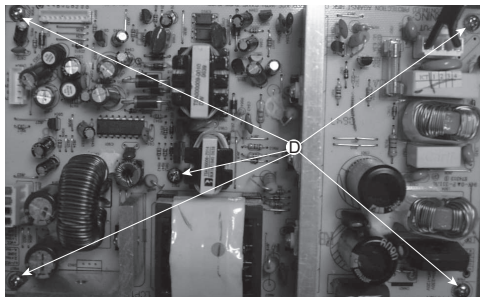


Figure 7

Dismantling of the DVD Module

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

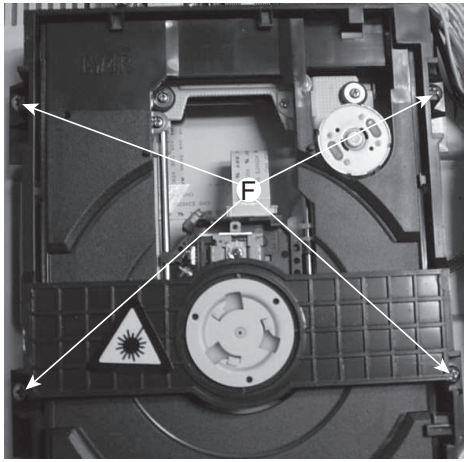


Figure 8

3 - 2

DISASSEMBLY INSTRUCTIONS (part two--wireless)

Dismantling of the Receiver module outer cover Assembly

1) Loosen 4 screws “A “on the bottom and remove the front & top Cover by lifting the panel upwards before sliding it from the set as shown in figure 1
4) Loosen 6 screws to remove the side & back & bottom panel
   - 3 screws “B“on the bottom as shown in figure 2
   - 2 screws “C“ as shown in figure 3
   - 1 screw “D“ as shown in figure 4

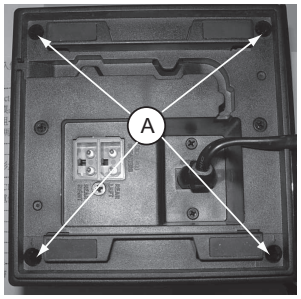


Figure 1

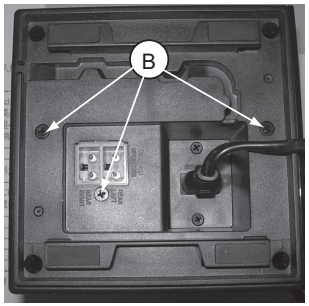


Figure 2

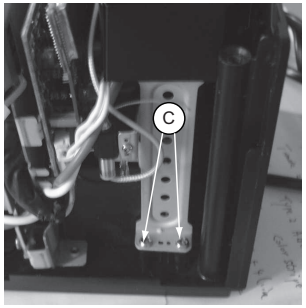


Figure 3

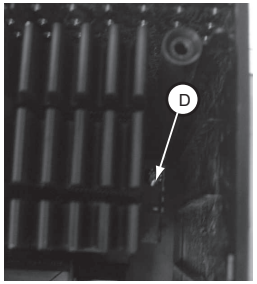


Figure 4

Dismantling of LED Board Assembly

1) Loosen two screws “E“ to remove LED Board as shown in figure 5

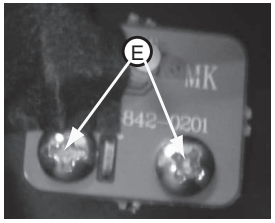


Figure 5

Dismantling of the Heat Sink Board Assembly

1) Loosen two screws “F“ to remove Heat Sink Board as shown in figure 6

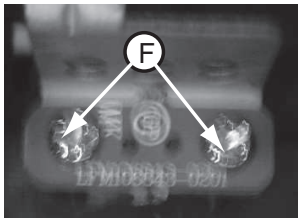


Figure 6

Dismantling of Power Board Assembly

1) Loosen 3 screws “G“ as shwon in figure 7
2) Loosen 4 screws “H“ on the top of power Board as shown in figure 8

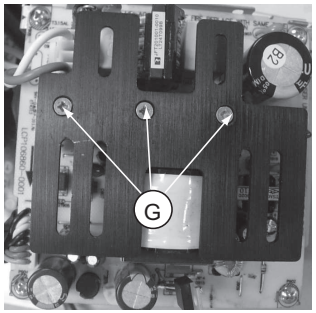


Figure 7

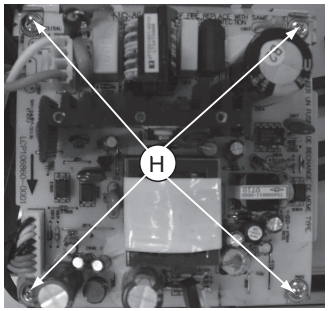


Figure 8

Dismantling of Main Board Assembly

1) Loosen 2 screws “I“ to move the Receiver module Board as shwon in figure 9
2) Loosen 2 screws “J“ as shown in figure 10
3) With a pincers to remove the bolt as shown in figure 11

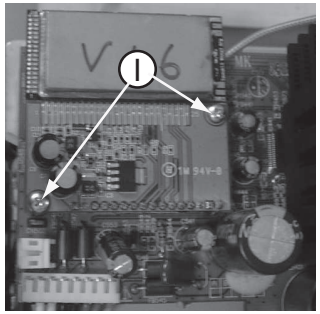


Figure 9

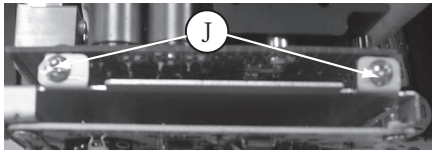


Figure 10

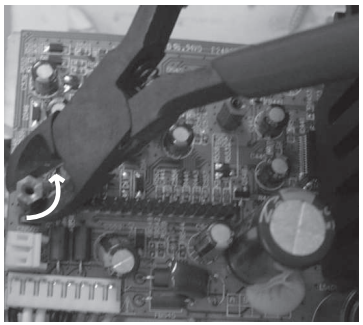


Figure 11

Dismantling of Transmitter Module outer cover Assembly

1) Press the module both sides as shown ① & ② and pull the outer cover as shown ③ in figure 12

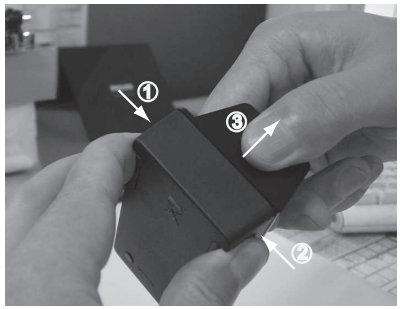


Figure 12

Dismantling of Transmitter Module Board Assembly

1) Loosen 3 screws “K“ as shown in figure 12

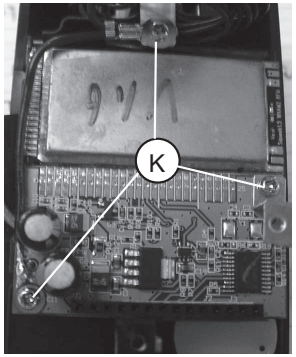


Figure 13

Dismantling of Connection Board Assembly

1) Loosen 3 screws “L“ as shown in figure 13

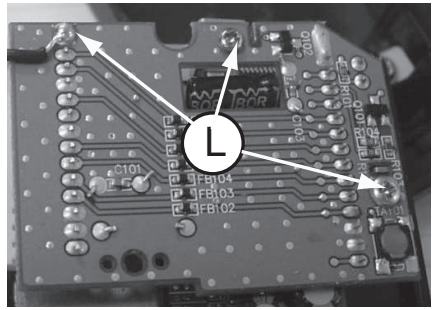


Figure 14

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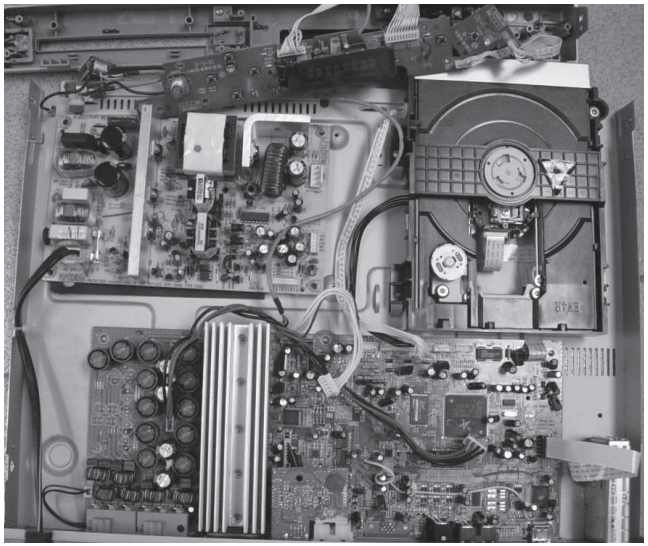
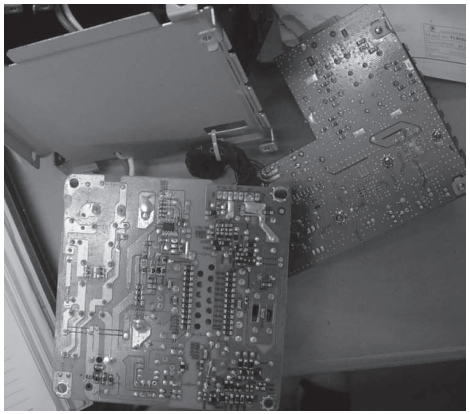
SERVICE POSITIONS

Service position A (main unit)

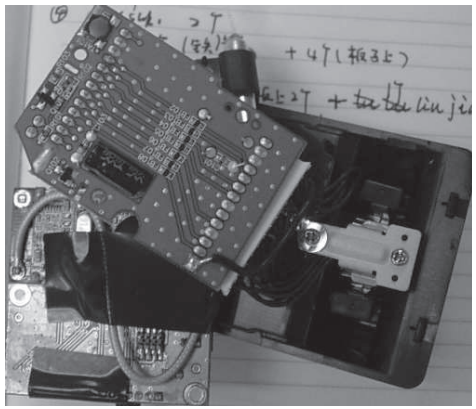


Note:In some service positions the components or copper patterns of one board may risk touching its neighbouring pc boards or metallic parts. To prevent such short-circuit use a piece of hard paper or other insulating material between them.

Service position B (wireless)



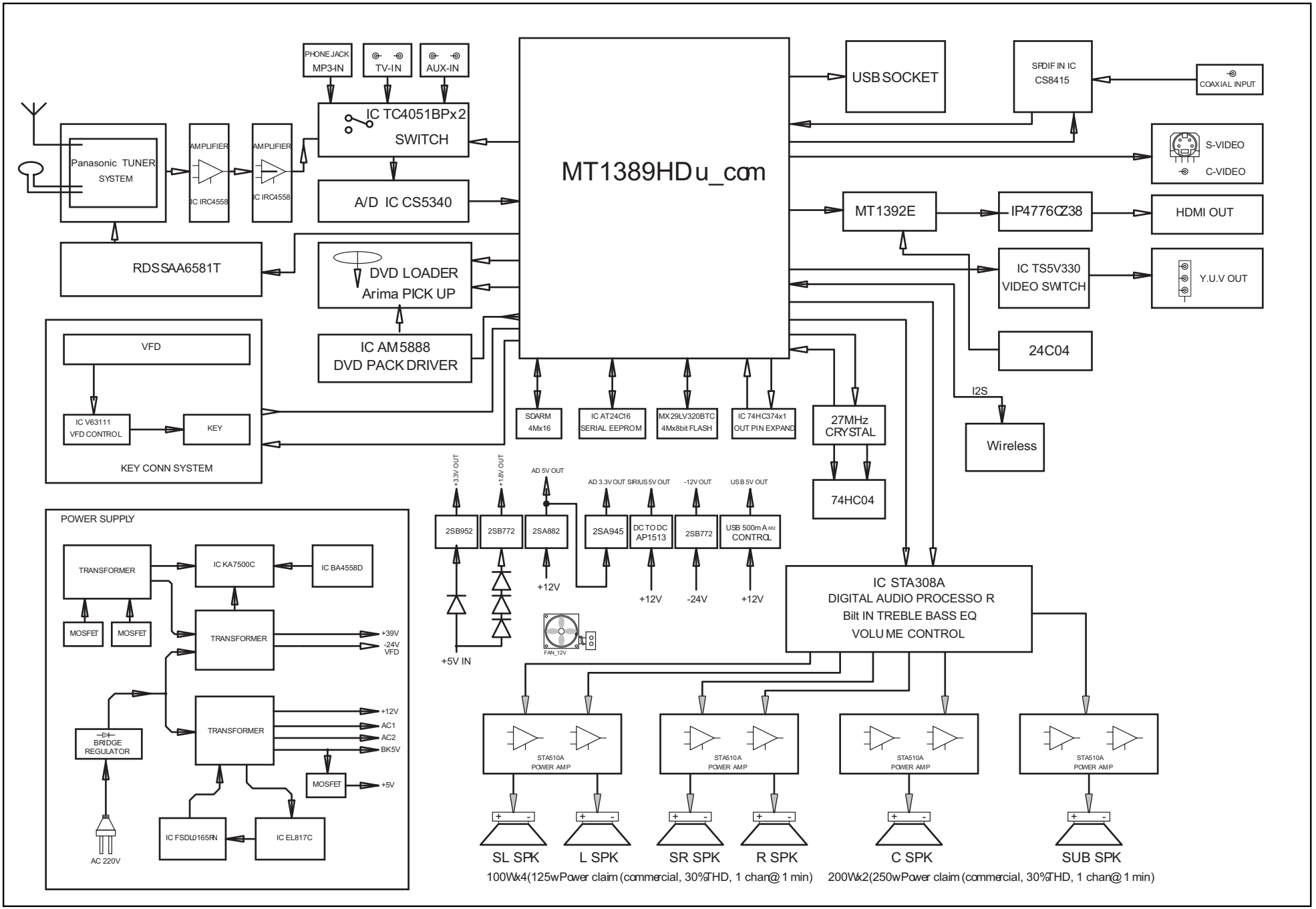
Receiver



Transmitter

4 - 1

BLOCK DIAGRAM-Main Unit



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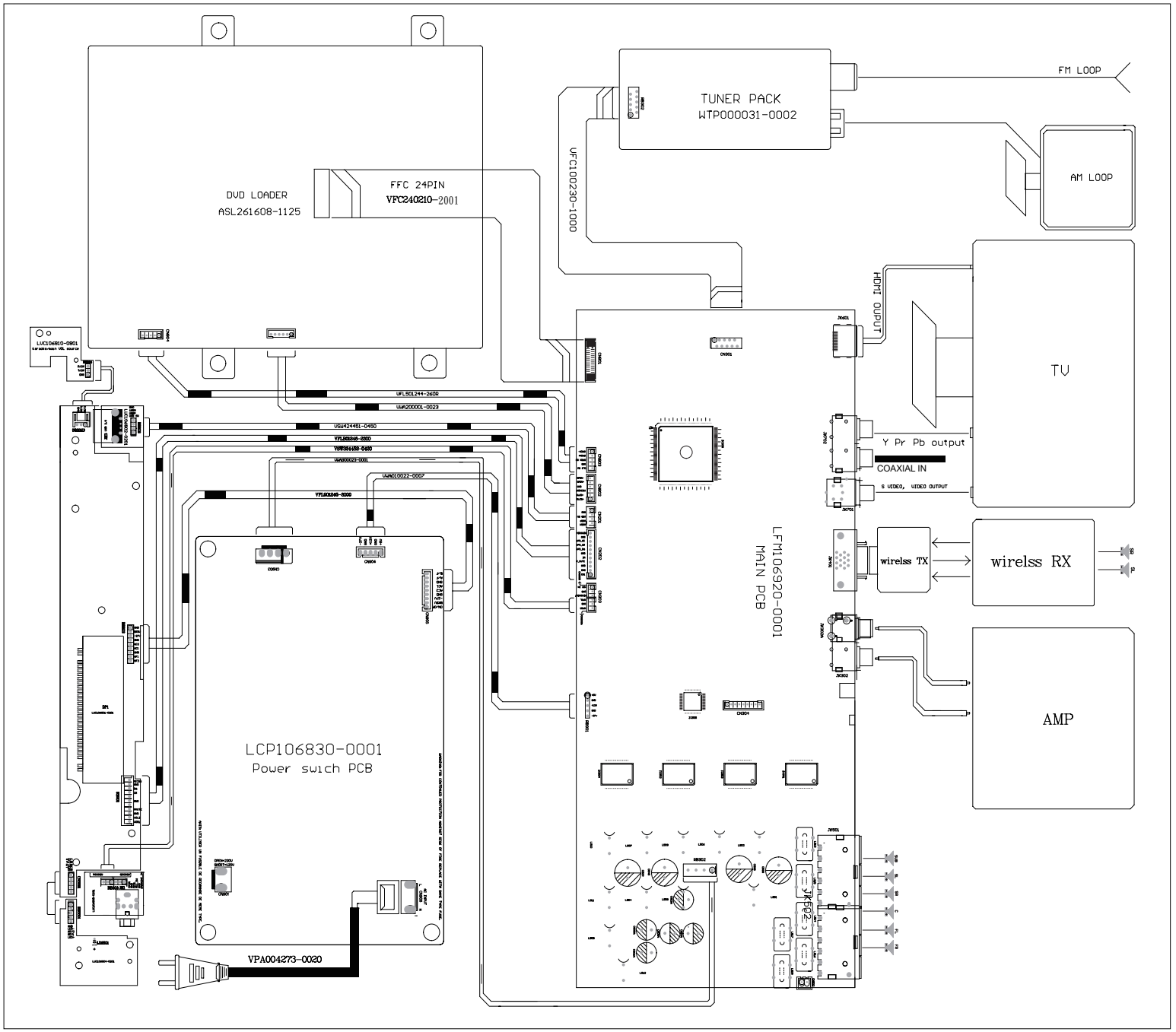
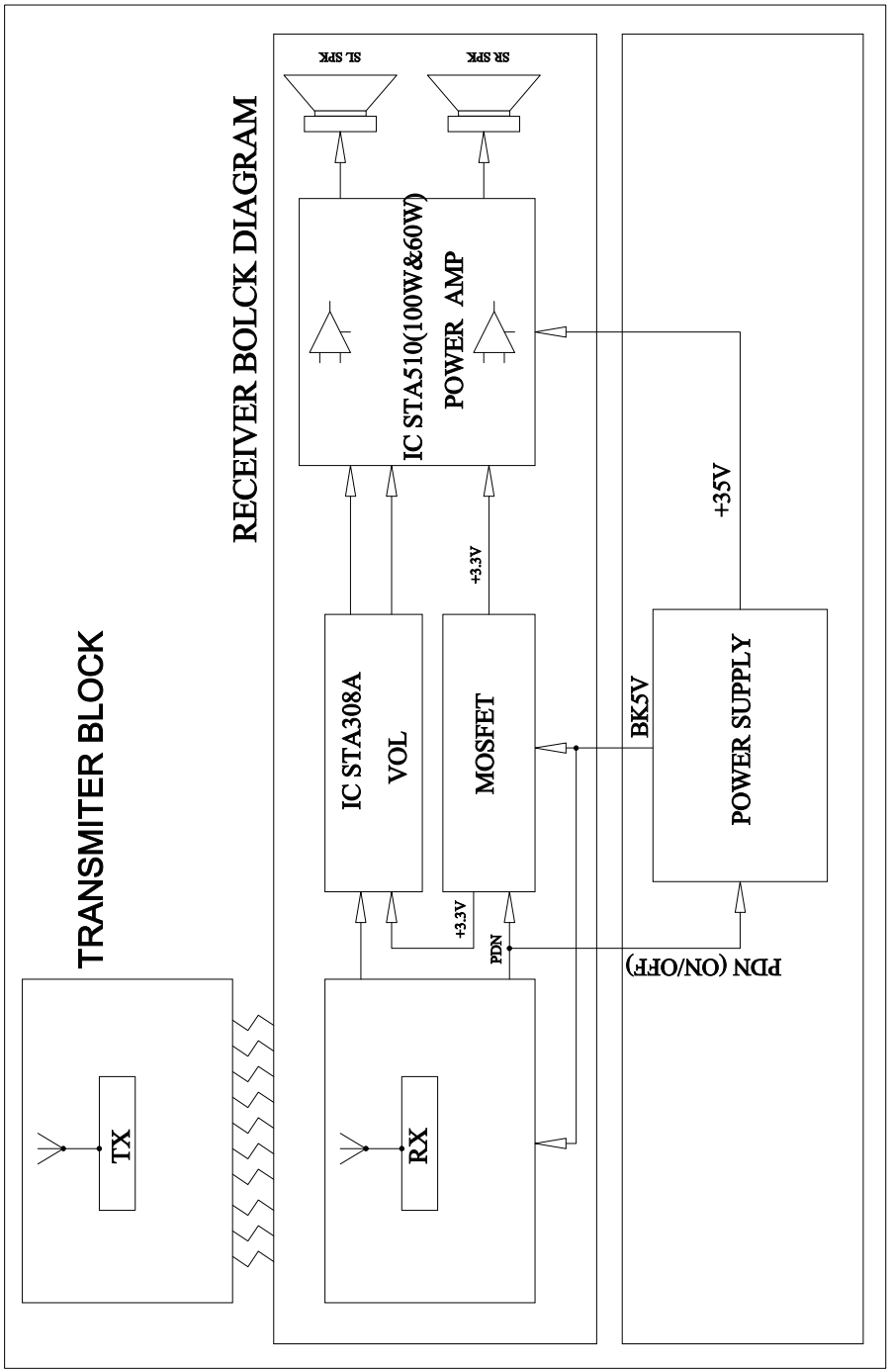
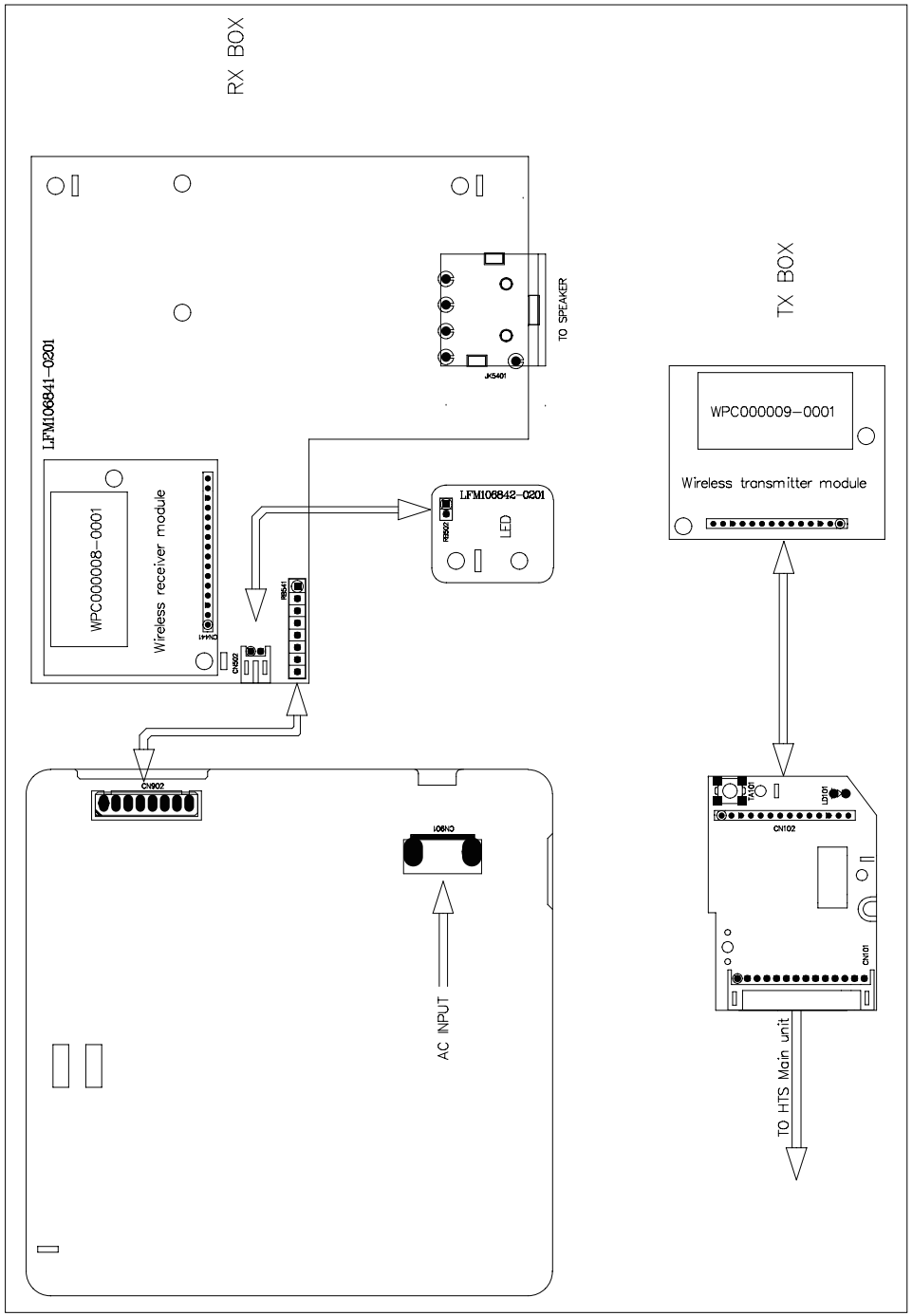
WIRING DIAGRAM-Main Unit



BLOCK DIAGRAM-Wireless



WIRING DIAGRAM-Wireless



CONTROL BOARD

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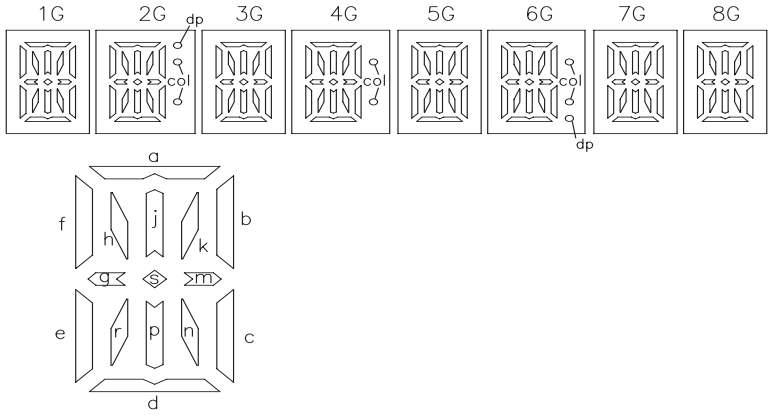
FTD DISPLAY PIN ASSIGNMENT



	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								

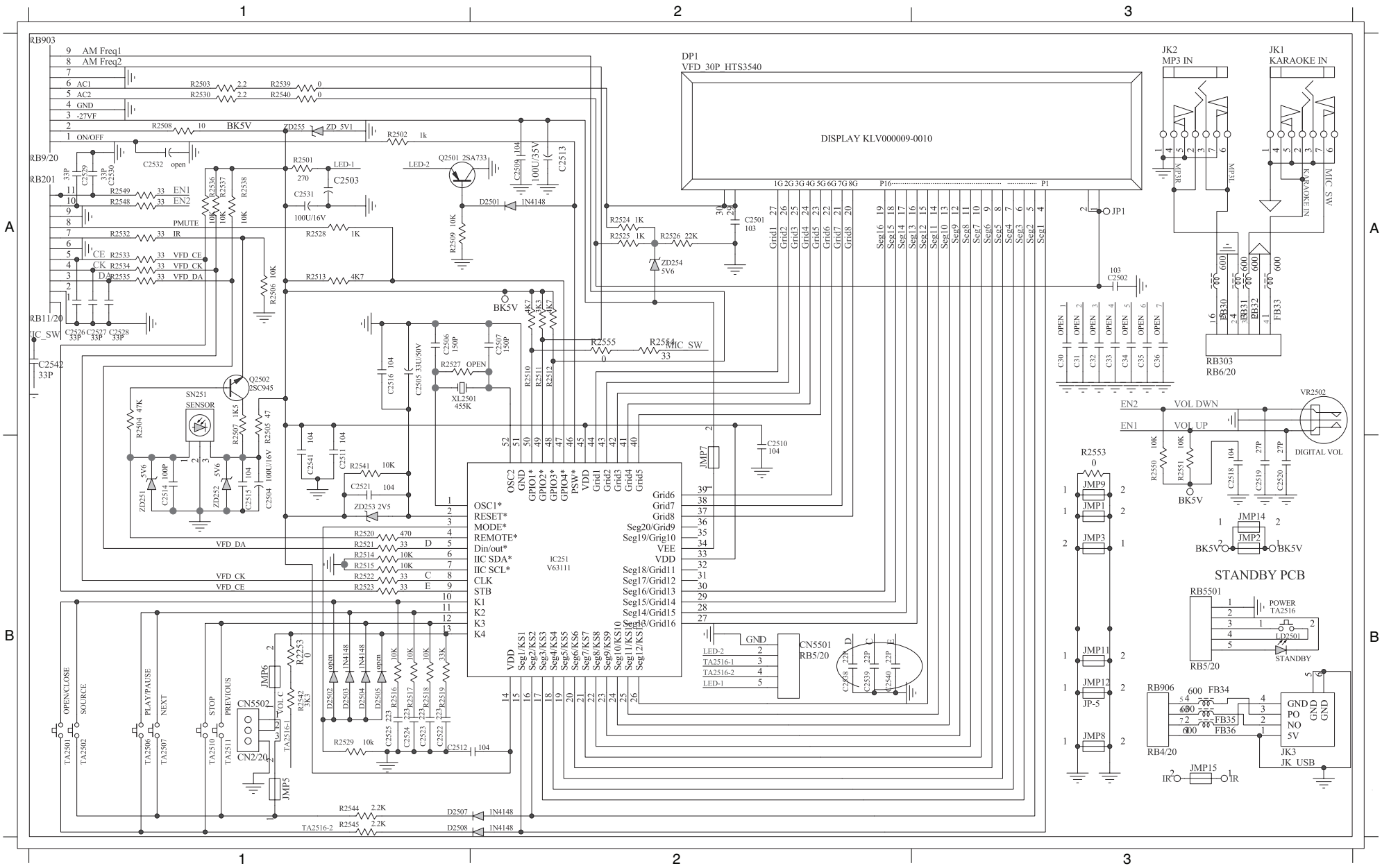
Q2501			
Pin NO	b	c	e
Voltage	4.10	0.00	3.60

Q2502			
Pin NO	b	c	e
Voltage	4.30	4.10	3.70

5 - 3

CIRCUIT DIAGRAM -main unit

C2501	A2	C2509	A2	C2515	B1	C2522	B1	C2531	A1	D2501	A2	FB30	A3	JK2	A3	JMP15	B3	JMP8	B3	R2253	B1	R2506	A1	R2515	B1	R2521	B1	R2528	A1	R2535	A1	R2541	B1	R2553	B3	RB903	A1	TA2507	B1	ZD251	C1
C2502	A3	C2510	B2	C2516	A1	C2523	B1	C2538	B2	D2503	D1	FB31	A3	JK3	B3	JMP2	B3	JMP9	B3	R2501	A1	R2507	A1	R2516	B1	R2522	B1	R2529	B1	R2536	A1	R2542	B1	R2554	A2	RB906	B1	TA2510	B1	ZD252	C1
C2504	B1	C2511	B1	C2518	B3	C2524	A2	C2539	B2	D2504	D1	FB34	B3	JMP1	B3	JMP3	B3	JP1	A3	R2502	A1	R2508	A1	R2517	B1	R2523	B1	R2530	A1	R2537	A1	R2544	B1	R2555	A2	SN251	B1	TA2511	B1	ZD253	C1
C2505	A1	C2512	B1	C2519	B3	C2525	A2	C2540	B2	D2507	D1	FB35	B3	JMP11	B3	JMP5	B1	LD2501	B3	R2503	A1	R2509	A1	R2518	B1	R2524	A2	R2532	A1	R2538	A1	R2545	B1	RB201	A1	TA2501	B1	TA2516	B3	ZD254	A2
C2506	A1	C2513	A2	C2520	B3	C2529	A1	C2541	B1	D2508	D1	FB36	B3	JMP12	B3	JMP6	B1	Q2501	A1	R2504	A1	R2513	A1	R2519	B1	R2525	A2	R2533	A1	R2539	A1	R2548	A1	RB303A	A3	TA2502	B1	VR2502	A3	ZD255	A1
C2507	A2	C2514	B1	C2521	B1	C2530	A1	C2542	A1	DP1	A1	IC251	B2	JMP14	B3	JMP7	B2	Q2502	A1	R2505	A1	R2514	B1	R2520	B1	R2526	A2	R2534	A1	R2540	A1	R2549	A1	RB5501	A1	TA2506	B1	XL2501	A1		



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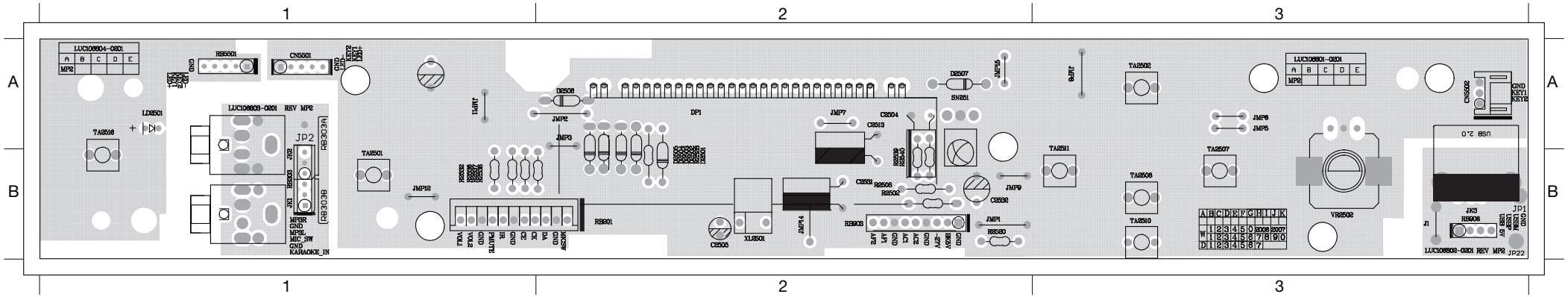
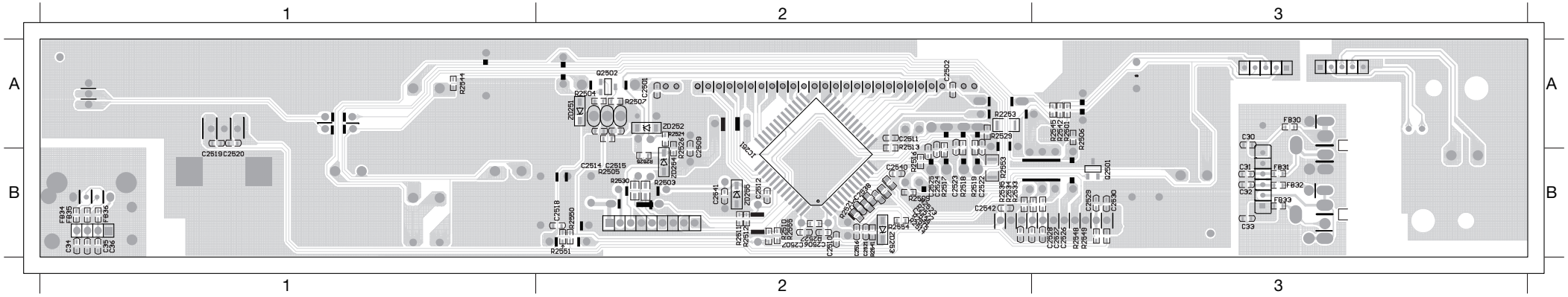
PCB LAYOUT - TOP VIEW -main unit

C2504	A2	C2531	B2	D2504	B2	DP1	A2	JMP1	A2	JMP14	B2	JMP3	A2	JMP7	A2	JP1	B3	R2520	B2	R2536	B1	R2539	B2	RB303A	B1	RB906	B3	TA2502	A3	TA2510	B3	VR2502	B3
C2505	B2	D2501	B2	D2507	A2	JK2	B1	JMP11	A1	JMP15	A2	JMP5	A3	JMP8	A3	LD2501	A1	R2528	B2	R2537	B1	R2540	B2	RB5501	A1	SN251	A2	TA2506	B3	TA2511	B3	XL2501	B2
C2513	A2	D2503	B2	D2508	A2	JK3	B3	JMP12	B1	JMP2	A2	JMP6	A3	JMP9	B2	R2502	B2	R2532	B1	R2538	B1	RB201	B2	RB903	B2	TA2501	B1	TA2507	B3	TA2516	A1		



PCB LAYOUT - BOTTOM VIEW- main unit

C2501	A2	C2509	B2	C2514	B2	C2519	B1	C2523	B2	C2530	B3	C2541	B2	FB34	B1	Q2501	B3	R2503	B2	R2507	A2	R2514	B1	R2518	B2	R2523	B2	R2529	A2	R2535	B2	R2545	A3	R2554	B2	ZD253	B2
C2502	A2	C2510	B2	C2515	B2	C2520	B1	C2524	B2	C2538	B2	C2542	B2	FB35	B1	Q2502	A2	R2504	A2	R2508	B2	R2515	B2	R2519	B0	R2524	A2	R2530	B2	R2541	B2	R2548	B3	R2555	B2	ZD254	B2
C2506	B2	C2511	A2	C2516	B2	C2521	B2	C2525	B2	C2539	B2	FB30	A3	FB36	B1	R2253	A2	R2505	B2	R2509	B2	R2516	A2	R2521	B2	R2525	B2	R2533	B2	R2542	A3	R2549	B3	ZD251	A2	ZD255	B2
C2507	B2	C2512	B2	C2518	B2	C2522	B2	C2529	A3	C2540	B2	FB31	B2	IC251	A2	R2501	A3	R2506	B2	R2513	A2	R2517	B2	R2522	B2	R2526	A2	R2534	B2	R2544	A1	R2553	B2	ZD252	A2		



MAIN BOARD

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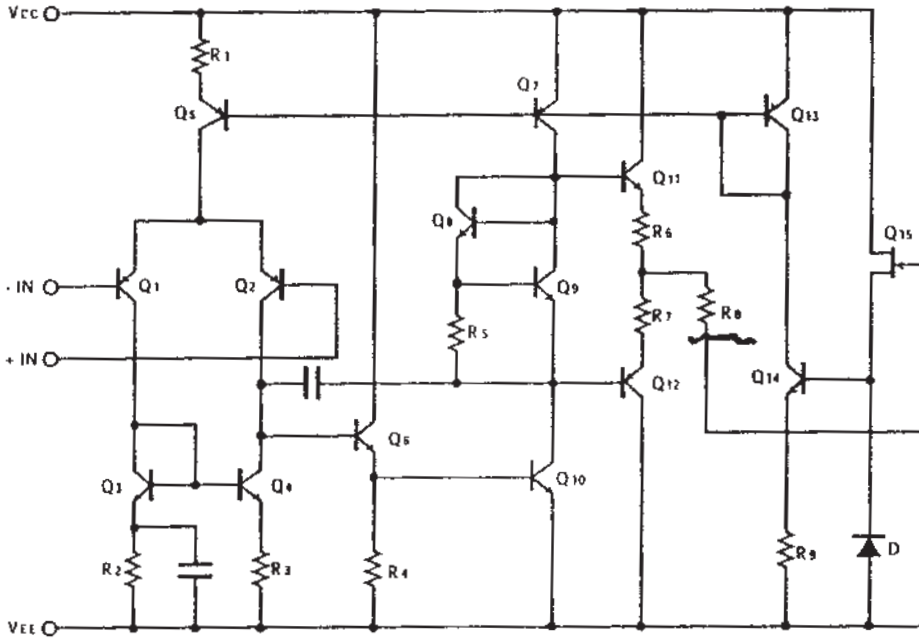
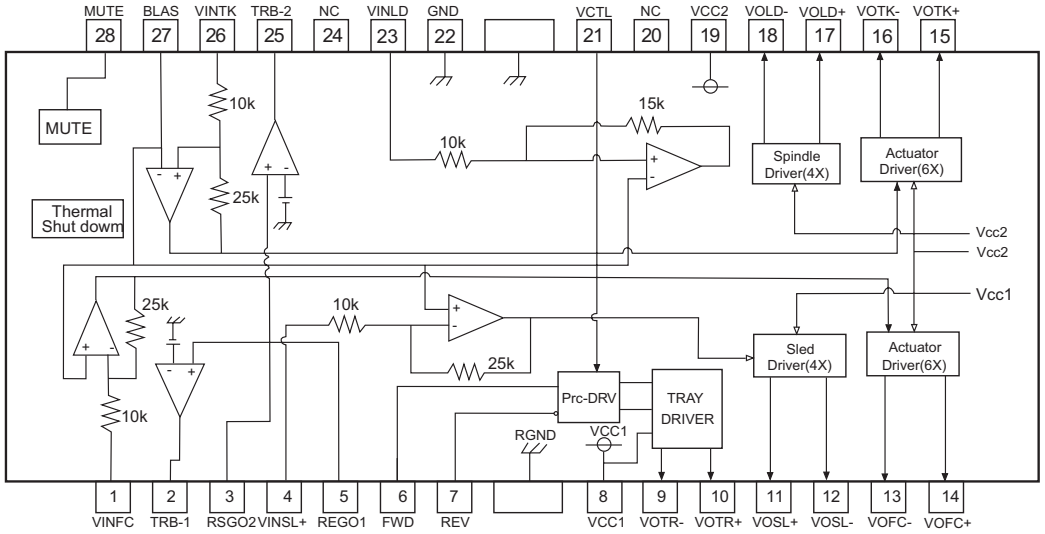
INTERNAL IC DIAGRAM - CO4558A HOSP



INTERNAL IC DIAGRAM - V5888S HOSP



CIRCUIT DIAGRAM (Amplifier-mian unit)

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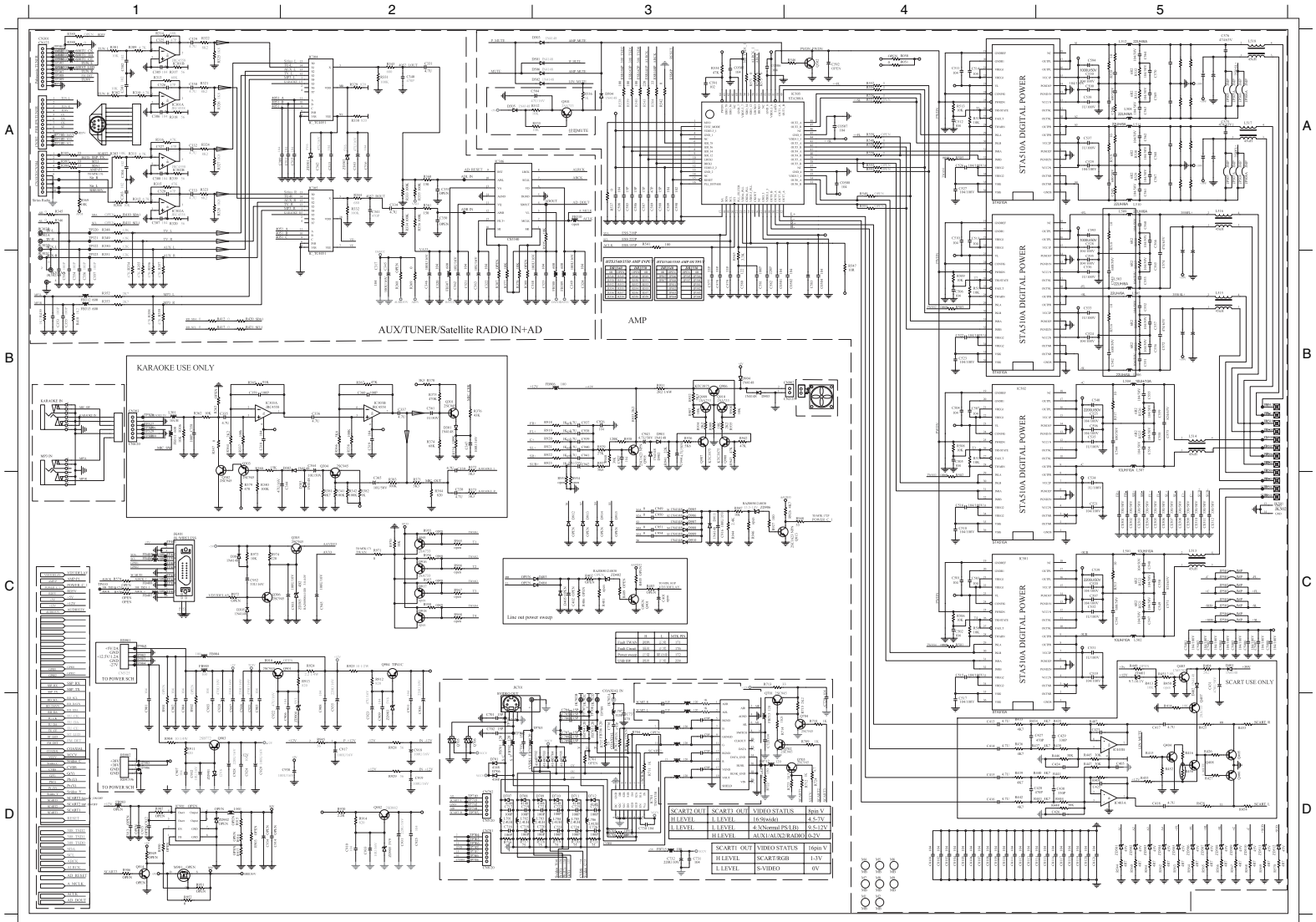

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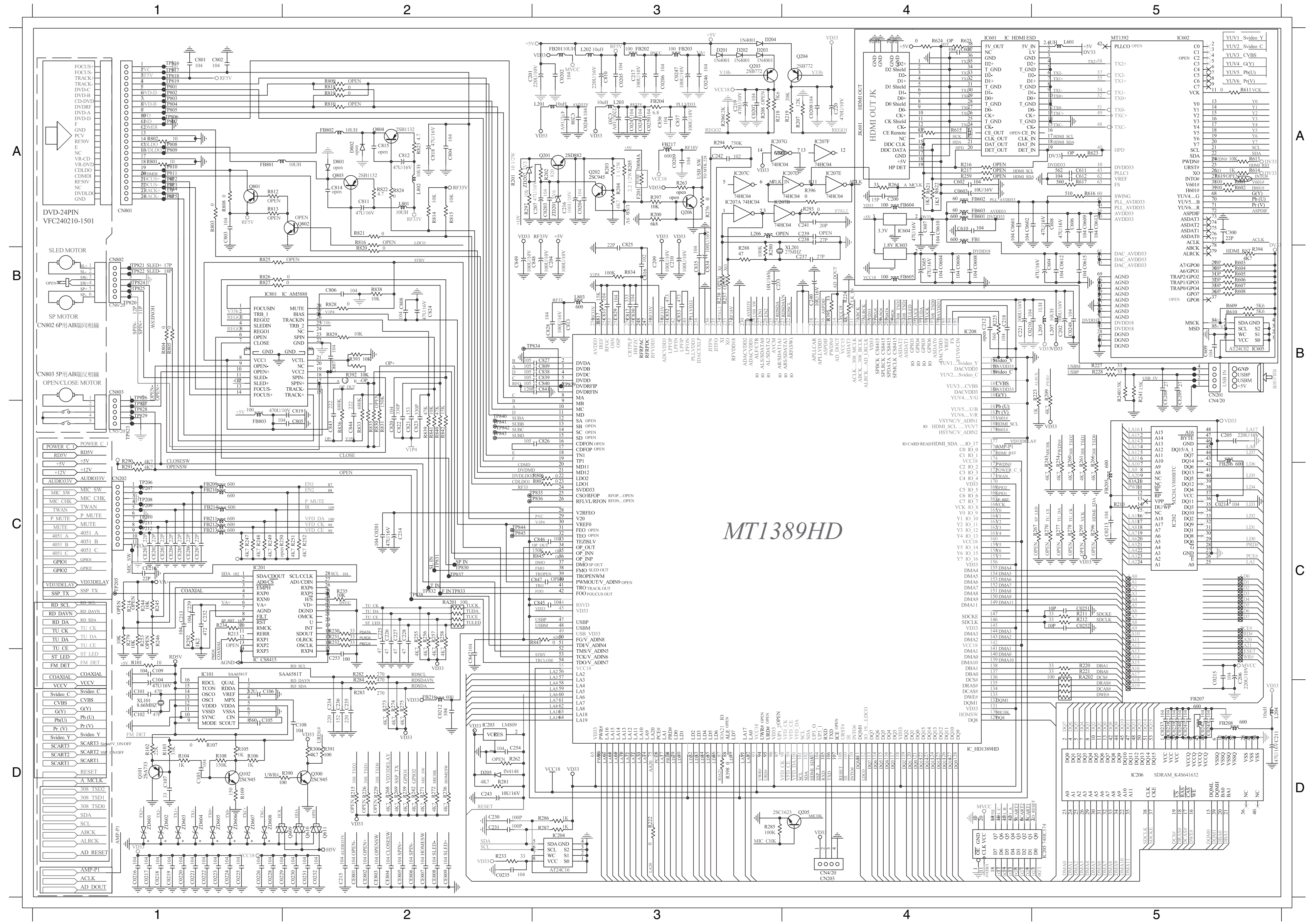
C0102	D4	C507	B4	C594	A5	CE509	C5	L506	B5	R360	A2	R923	B3
C0103	D4	C508	A3	C595	B5	CE510	C5	L507	B5	R361	A2	R924	C2
C0104	D4	C509	A3	C596	B5	CE511	C5	L508	A5	R369	B2	R925	C2
C0105	D4	C510	A4	C597	C5	CE512	C5	L509	A5	R377	B2	R926	C4
C0106	D4	C511	A4	C701	D2	CN301	A1	L510	A5	R378	B2	R927	C3
C0107	D4	C512	A4	C702	D2	CN303	AB1	L511	A5	R385	A1	R928	D2
C0109	D4	C513	A4	C703	D2	CN304	A1	L512	A5	R386	A1	R929	D2
C0110	D4	C514	A4	C704	D3	CN902	B4	L513	C5	R387	A1	R930	D2
C0111	D4	C515	C4	C705	D3	D304	A1	L514	B5	R388	A1	R931	B3
C0112	D4	C516	C4	C706	D3	D305	A1	L515	B5	R410	A1	R932	B3
C0113	D4	C517	D4	C707	D3	D501	A3	L516	A5	R411	A1	R933	B3
C0114	D5	C518	C4	C708	D3	D503	A2	L517	A5	R418	B1	R934	B3
C0115	D5	C519	C4	C709	D3	D504	A3	L518	A5	R419	B1	R935	B3
C0116	D5	C520	A5	C716	D2	D505	A2	L701	D2	R504	A3	R936	B3
C0117	D5	C521	C5	C717	D2	D506	A3	L702	D2	R506	C4	R937	B3
C0118	D5	C522	B4	C718	D3	D701	D2	L703	D3	R507	C4	R938	B3
C0119	D5	C523	B4	C719	D2	D702	D3	L704	D3	R508	B4	R939	B3
C0120	D5	C524	B5	C720	D3	D703	D3	L705	D3	R509	B4	R940	B3
C0121	D5	C525	B5	C721	D3	D704	D3	L706	D3	R510	B4	R941	B2
C0501	A3	C526	A4	C722	D3	D705	D3	L707	D3	R511	B4	R942	B3
C0502	A4	C527	A4	C723	D3	D706	D2	Q305	C2	R512	A3	R943	B3
C0504	A4	C528	A5	C724	D3	D707	D2	Q306	C1	R513	A4	R944	C3
C0505	A3	C529	A5	C725	D3	D708	D2	Q705	D2	R514	A4	R945	D2
C0506	A3	C530	A5	C726	D3	D709	D3	Q706	D2	R515	C5	R947	C3
C0507	A4	C531	C5	C727	D3	D710	D3	Q901	C2	R516	A5	R948	C4
C0508	A4	C532	C5	C730	D3	D711	D3	Q902	D2	R517	A5	R949	D2
C301	A1	C533	B5	C731	D3	D712	D3	Q903	D1	R518	A5	R952	D2
C302	A1	C534	C5	C731	D3	D901	B3	Q904	C2	R519	A5	R959	C2
C303	A1	C535	B5	C736	D3	D902	B3	Q905	B3	R520	A5	R969	A1
C304	A1	C536	B5	C737	D3	D903	B3	Q906	B3	R521	A5	R970	C2
C305	A1	C537	A5	C901	D1	D904	B3	Q907	B3	R522	A5	R971	C2
C306	A1	C538	A5	C902	D1	D905	C3	Q908	B3	R523	A5	R973	C2
C307	A1	C539	C5	C903	D1	D906	C3	Q909	B3	R524	A5	R974	C2
C308	A1	C540	B5	C904	D1	D907	C3	Q910	B3	R525	A5	RB901	A1
C309	A2	C541	C5	C905	D1	D908	C3	Q913	C4	R526	B5	RB902	D1
C311	A2	C542	B5	C906	D2	D909	C3	Q914	D1	R527	A5	ZD301	A2
C313	A2	C543	B5	C907	D1	D910	C3	R051	A4	R528	A5	ZD302	A2
C315	A2	C544	B5	C908	D2	D911	C3	R301	A1	R529	A5	ZD303	C2
C316	A2	C545	A5	C909	D2	FB301	A1	R302	A1	R530	A5	ZD901	D2
C317	B2	C546	A5	C910	D2	FB302	A1	R303	A1	R531	A5	ZD903	D2
C320	B2	C547	C5	C911	D2	FB303	A1	R304	A1	R532	A5	ZD904	D2
C321	B2	C548	C5	C916	C3	FB304	A1	R305	A3	R534	A3	ZD905	D2
C322	B2	C549	C5	C917	D2	FB307	B2	R309	A1	R535	A3	ZD906	C3
C323	B3	C550	C5	C918	D2	FB308	B3	R310	A1	R537	A3		
C324	B3	C551	A4	C919	D2	FB309	B3	R311	A1	R538	A3		
C325	A1	C552	B5	C920	D1	FB312	B1	R312	A1	R539	A3		
C326	A1	C553	B5	C921	D1	FB313	B1	R313	A1	R540	A3		
C327	A1	C554	B5	C922	D1	FB405	C1	R314	A1	R541	A3		
C328	A1	C555	B5	C923	D2	FB406	C1	R315	A1	R542	A3		
C329	A1	C556	B5	C924	D1	FB407	C1	R316	A1	R543	A3		
C330	A1	C557	B5	C925	D2	FB408	C1	R317	A1	R545	B3		
C331	A2	C558	B5	C926	B3	FB701	D2	R318	A1	R546	A4		
C332	A1	C559	B5	C927	B3	FB702	D2	R319	A1	R547	B4		
C333	A1	C560	A5	C928	D1	FB703	D2	R320	A1	R548	A4		
C334	A2	C561	A5	C929	D1	FB704	D3	R321	A1	R550	A4		
C340	A2	C562	A5	C930	D2	FB705	D3	R322	A1	R552	A4		
C341	A2	C563	A5	C931	D2	FB706	D3	R323	A1	R554	A4		
C342	A2	C564	A5	C932	D1	FB715	D3	R324	A1	R556	A4		
C343	A2	C565	B5	C933	D2	FB904	C1	R325	A1	R558	A4		
C345	B2	C566	A5	C935	D2	FB905	C1	R326	A1	R571	A3		
C346	B2	C567	A6	C936	D2	FB906	B3	R327	A1	R572	A3		
C348	B2	C568	A5	C937	B3	IC301	A1	R328	A1	R573	A3		
C349	B1	C569	A5	C938	B3	IC302	A1	R329	A2	R701	D3		
C352	B1	C570	A5	C939	B3	IC304	A2	R330	A2	R703	D3		
C353	B1	C571	C5	C940	B3	IC305	A2	R331	A2	R706	D3		
C354	B1	C572	B5	C941	B3	IC306	A2	R332	A2	R716	D2		
C355	B1	C573	B5	C942	B3	IC501	C4	R333	A2	R717	D2		
C356	B1	C574	B5	C943	B3	IC502	B4	R334	A2	R718	D3		
C357	B1	C575	A5	C944	B3	IC503	A4	R335	A2	R719	D3		
C362	B2	C576	A5	C945	C2	IC504	A4	R336	A2	R720	D3		
C363	B2	C577	B3	C947	D1	IC505	A4	R343	A2	R721	D3		
C500	A5	C578	B3	C949	C3	JK302	A1	R344	A2	R737	D3		
C5001	C5	C579	B3	C950	C3	JK401	C1	R345	A1	R904	D1		
C5002	C5	C580	B3	C951	C3	JK501	C5	R346	A1	R906	D1		
C5003	C5	C581	B3	C952	C1	JK502	C5	R348	A1	R907	B3		
C5004	C5	C582	B3	C953	C2	JK701	C2	R349	A1	R908	B3		
C5005	C5	C583	B4	C954	C3	JK702	D3	R350	A1	R909	B3		
C5006	C5	C584	A3	C955	D1	JP505	B3	R351	B1	R911	D1		
C5007	C5	C585	A3	CE501	C5	JP505	AB3	R352	B1	R912	D2		
C5008	C5	C586	A3	CE502	C5	JP507	B3	R353	B1	R913	D2		
C501	C4	C587	A3	CE503	C5	JP507	AB3	R354	B1	R914	D2		
C502	C4	C588	A3	CE504	C5	L501	C5	R355	B1	R918	B3		
C503	C4	C589	A3	CE505	C5	L502	C5	R356	B1	R919	B3		
C504	B4	C590	A3	CE506	C5	L503	B5	R357	B1	R920	B3		
C505	B4	C591	A3	CE507	C5	L504	B5	R358	B1	R921	B3		

CIRCUIT DIAGRAM (Servo-main unit)



C0201	C2	C232	C1	CE806	D2	R212	C5	R804	B1
C0202	A3	C233	B3	CE808	D2	R216	A4	R805	B1
C0203	A3	C237	B4	CE809	D2	R217	A4	R806	C3
C0204	A3	C238	A4	CN201	C1	R218	A3	R807	C3
C0205	A3	C240	B4	CN202	C1	R219	A4	R808	A1
C0206	A3	C241	A4	CN203	C1	R220	C5	R814	A2
C0208	A4	C242	A3	CN801	A1	R221	C5	R815	A2
C0210	B5	C243	D2	CN802	B1	R222	D3	R817	B3
C0212	D2	C253	C2	CN803	B1	R223	B5	R818	A2
C0213	C5	C254	D2	D201	A3	R224	B4	R819	A2
C0214	C5	C300	A5	D202	A3	R225	B5	R820	B2
C0215	C5	C601	A4	D203	A3	R227	B5	R821	A2
C0216	D1	C602	A4	D204	A3	R228	B5	R822	A2
C0217	D1	C604	B5	D205	D2	R230	C2	R823	A2
C0218	D1	C605	B4	FB1	A4	R231	C2	R824	A2
C0219	D1	C606	A5	FB201	A3	R232	C2	R826	B1
C0220	D1	C607	A4	FB202	A3	R233	D2	R827	B1
C0221	D1	C608	A5	FB203	A3	R234	C1	R828	B2
C0222	D1	C609	B5	FB204	A3	R235	C2	R829	B2
C0223	D1	C610	A4	FB205	C5	R239	D2	R830	B2
C0224	D1	C611	A5	FB206	C5	R240	B5	R831	B2
C0225	D1	C612	A5	FB207	D5	R241	B5	R833	B2
C0226	D1	C801	A1	FB208	D5	R242	D2	R834	B3
C0228	D1	C802	A1	FB209	C1	R243	C5	R836	B2
C0229	D2	C803	A1	FB210	C1	R245	C1	R838	B2
C0230	D2	C804	A5	FB211	C1	R247	C1	R839	B2
C0231	D2	C805	B2	FB212	C1	R248	C1	R840	B2
C0232	D2	C806	B2	FB213	C1	R249	C1	R841	B2
C0235	D2	C807	B2	FB214	C1	R251	C2	R842	B2
C0237	D5	C808	B2	FB216	D2	R252	C2	R843	C3
C0238	D5	C809	B3	FB217	A3	R253	C1	R845	C3
C0239	D5	C810	A3	FB601	A4	R255	C2	RA201	C2
C0240	D5	C811	A2	FB602	A4	R256	C2	RA202	C5
C0241	D5	C812	A2	FB603	A4	R257	C2	XL201	B4
C0242	D5	C813	B3	FB604	A4	R258	C2	ZD201	A3
C0243	D5	C816	B3	FB605	B4	R259	A4	ZD202	A3
C0244	A3	C817	B3	FB801	A1	R260	B5	ZD203	D1
C0245	A3	C818	A2	FB802	A2	R261	B5		
C0246	A3	C819	B2	FB803	B1	R264	A4		
C0247	A3	C820	B2	IC201	C1	R266	B5		
C0248	B5	C821	B2	IC202	C5	R269	D2		
C0249	A3	C822	B2	IC203	D2	R271	D2		
C0250	A3	C823	B2	IC204	D3	R272	D2		
C0251	C5	C824	B2	IC205	D5	R276	A3		
C0252	C5	C825	B3	IC206	D5	R279	C1		
C0601	A4	C826	B3	IC207	A3	R280	B3		
C0602	A4	C827	B3	IC208	B4	R281	D2		
C0603	A4	C828	B3	IC602	A5	R282	C2		
C0604	B4	C829	B3	IC801	A1	R283	D2		
C0606	B4	C830	B3	JK601	A4	R284	D2		
C0608	B4	C831	B3	L201	A3	R286	D3		
C0609	A5	C832	B3	L202	A3	R287	D3		
C0610	A4	C833	B3	L203	A3	R288	B3		
C0612	B5	C834	B3	L204	D5	R290	C1		
C0613	A5	C835	B3	L205	B5	R291	C1		
C0615	B5	C836	A3	L207	B5	R292	C1		
C201	A3	C837	A3	L601	A5	R293	A4		
C202	B5	C838	B3	L801	A2	R294	A3		
C203	A3	C839	B3	L802	A2	R297	A2		
C204	B3	C840	B3	L803	B3	R300	D2		
C205	B5	C841	B3	Q201	A3	R390	D2		
C206	C5	C842	D2	Q202	A3	R391	D2		
C207	A3	C843	B2	Q203	A3	R392	B2		
C208	A3	C844	B2	Q204	A4	R393	B2		
C209	B3	C845	C3	Q300	D2	R394	B5		
C210	B3	C846	C3	Q501	A3	R395	B4		
C211	D5	C848	B3	Q502	A4	R397	A3		
C213	C1	C849	B2	Q609	D2	R398	D3		
C214	C2	CE201	C1	Q610	D2	R601	A5		
C215	D2	CE202	C1	Q611	D2	R602	A5		
C216	A3	CE203	C1	Q803	A2	R609	B5		
C217	A3	CE204	C1	Q804	A2	R610	B5		
C218	B4	CE205	C1	R200	A3	R611	A5		
C219	A3	CE206	C1	R201	A2	R613	A5		
C220	A4	CE207	C1	R202	A3	R614	A5		
C221	B4	CE208	B5	R203	A3	R616	A5		
C225	C2	CE209	B5	R204	A3	R617	A5		
C226	C2	CE210	C1	R205	A3	R621	A4		
C227	C2	CE801	D2	R206	A3	R622	A4		
C228	C2	CE802	D2	R207	A4	R624	A4		
C229	C1	CE803	D2	R209	B5	R801	A1		
C230	D2	CE804	D2	R210	C5	R802	A1		
C231	D2	CE805	D2	R211	C5	R803	A1		

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PCB LAYOUT TOP VIEW (main unit)

C0114 C4 C205 C2 C309 A4 C363 A2 C528 B4 C602 A1 C725 B2 C834 C1 C924 C3 CN802 C2 D712 A2 FB308 A2 IC201 A1 JK702 A2 L516 A5 Q901 B1 R219 C2 R258 B1 R310 A3 R336 A2 R390 C2 R541 B3 R718 A2 R831 C1 R931 A4 XL201 B1
C0115 A3 C206 B3 C311 A4 C501 A4 C529 C4 C604 A1 C726 A2 C836 C1 C925 C3 CN803 C1 D901 A4 FB309 A2 IC202 B2 JP505 B5 L517 A5 Q902 C4 R221 B2 R259 A1 R311 A3 R343 A3 R391 C2 R542 B3 R719 B2 R833 C1 R932 A4 ZD201 D4
C0116 C4 C207 C3 C313 B3 C502 A4 C539 B5 C605 A1 C727 A2 C837 C1 C926 A4 CN902 A5 D902 A4 FB312 C2 IC203 B2 JP505A B5 L518 A5 Q903 C3 R222 B2 R260 A2 R312 A3 R344 A3 R394 A1 R543 B3 R720 B2 R834 C1 R933 A4 ZD301 B3
C0203 C3 C208 B1 C317 A2 C503 A4 C540 C5 C606 A1 C731 A2 C838 C1 C927 A4 D201 C2 D903 A4 FB313 C3 IC204 B2 JP507 B5 L601 A1 Q904 C4 R224 B1 R261 A2 R313 A3 R345 A3 R395 B1 R545 C3 R721 A2 R836 C1 R934 A4 ZD302 B3
C0204 C2 C209 B2 C325 A3 C504 A4 C541 A4 C607 A1 C731 A2 C839 C1 C928 C3 D202 C2 D904 A4 FB405 A2 IC205 B2 JP507A B5 L701 A2 Q905 A4 R225 B1 R266 A2 R314 A3 R346 A3 R397 C2 R546 B3 R737 A1 R838 C2 R935 A4 ZD303 A3
C0205 C1 C210 B2 C326 A3 C505 C5 C542 B4 C608 A1 C736 A1 C840 C1 C929 C3 D203 C2 FB1 A1 FB406 A2 IC206 B2 L201 B1 L702 B2 Q906 A4 R230 A1 R269 B2 R315 A3 R348 A3 R398 B2 R547 B3 R803 C1 R839 C1 R936 A4 ZD901 C3
C0207 C2 C211 B2 C327 A3 C506 B4 C543 B4 C609 A1 C737 A2 C841 C1 C930 A2 D204 C2 FB201 C2 FB407 A3 IC207 B1 L202 C1 L703 A2 Q907 A4 R231 A1 R271 C2 R316 A3 R349 A3 R504 B3 R548 B4 R804 C2 R840 C1 R937 A4 ZD903 C3
C0208 C2 C214 C1 C328 A3 C507 C4 C544 B4 C610 A1 C804 C1 C842 C1 C931 C4 D205 B2 FB202 A2 FB408 A2 IC208 B1 L203 C1 L704 B2 Q908 A4 R232 A1 R272 B3 R317 A3 R350 A3 R506 A4 R550 B4 R805 C2 R841 C1 R938 A4 ZD904 B5
C0212 C2 C216 C2 C329 A3 C510 B4 C545 C4 C701 B2 C808 C2 C843 C1 C932 C3 D304 A3 FB203 A2 FB601 A1 IC301 A3 L204 B2 L705 B2 Q909 A4 R233 B2 R279 A1 R318 A3 R351 A3 R507 A4 R552 B4 R806 C1 R842 C1 R939 A4 ZD905 C3
C0213 B2 C217 A2 C330 A3 C511 B5 C546 C4 C702 A2 C809 C1 C844 C1 C933 C3 D305 A3 FB204 A1 FB602 A1 IC302 A3 L205 B1 L706 A2 Q910 A4 R234 A1 R281 B2 R319 A3 R352 C3 R509 B4 R554 B4 R807 C1 R843 C1 R940 A4 ZD906 A3
C0215 B2 C218 B1 C331 A2 C512 B5 C571 A4 C703 A2 C810 C1 C846 C2 C935 C3 D501 B3 FB205 B2 FB603 A1 IC304 B3 L207 B1 L707 A2 Q913 A3 R235 A1 R282 B1 R320 A3 R353 C3 R510 B4 R556 C4 R808 C1 R845 C1 R941 A4
C0218 B2 C220 C2 C332 A3 C513 B4 C572 A5 C704 A2 C811 C1 C848 C1 C936 C3 D503 B3 FB206 B2 FB604 B1 IC305 B3 L501 A5 L801 C1 Q914 B3 R239 B2 R283 B1 R321 A3 R354 A3 R511 B4 R558 C4 R814 C1 R904 A4 R942 A4
C0221 C2 C221 B1 C333 A3 C514 C4 C573 B5 C705 A2 C812 C1 C849 C1 C942 A4 D504 B2 FB207 B2 FB605 B1 IC306 A2 L502 B4 L802 C1 R051 A3 R240 C2 R284 B1 R322 A3 R355 A3 R512 A4 R601 A1 R815 C1 R906 B3 R943 A4
C0223 C2 C230 B2 C334 A2 C515 A4 C574 B5 C706 A1 C813 C1 C905 B1 C943 B4 D505 A4 FB208 B2 FB701 B2 IC501 A4 L503 C4 L803 C1 R201 C3 R241 C2 R286 B2 R323 A3 R356 A3 R513 C4 R602 A1 R817 C1 R907 A4 R944 A3
C0231 B2 C231 B2 C340 A2 C516 B4 C575 B5 C707 A2 C816 C1 C906 B1 C944 A3 D506 B3 FB209 C2 FB702 A2 IC502 C4 L504 C5 Q201 C3 R202 C3 R242 B2 R287 B2 R324 A3 R357 A3 R514 C4 R609 A1 R818 C1 R908 A4 R945 B3
C0235 B2 C233 B1 C341 A2 C517 A4 C576 B5 C708 A1 C817 C1 C909 C3 C945 B3 D701 A2 FB210 C2 FB703 A2 IC503 B4 L505 B5 Q202 C3 R203 C2 R243 B3 R290 C2 R325 A3 R358 C3 R515 A4 R610 A1 R819 C1 R909 A4 R947 A3
C0247 A1 C240 B1 C342 A4 C518 B4 C578 C3 C709 A1 C818 C1 C910 C3 C947 B1 D702 B2 FB211 C2 FB704 A2 IC504 C4 L506 B4 Q203 C2 R204 C3 R245 A1 R291 C1 R326 A3 R359 C3 R516 B4 R611 A1 R820 C1 R912 C4 R948 A3
C0250 C1 C241 B1 C343 B3 C519 A4 C579 C3 C716 A2 C819 C1 C911 C3 C952 A3 D703 A2 FB212 C2 FB705 A2 IC505 B3 L507 C4 Q204 C2 R205 C2 R247 B2 R293 B1 R327 A3 R360 B2 R517 C4 R613 A1 R821 C1 R913 B1 R949 A4
C0606 A1 C242 B2 C345 A2 C520 A4 C580 C3 C717 A2 C824 C2 C916 A3 C953 A3 D704 B2 FB213 C2 FB706 A1 IC602 A1 L508 C5 Q300 B2 R206 C2 R248 B2 R294 C1 R328 A3 R361 B2 R518 B4 R614 A1 R822 C1 R914 C3 R970 B2
C0608 A1 C243 B2 C346 A2 C521 B4 C581 C3 C718 B2 C826 C1 C917 B3 CN201 C2 D705 A2 FB214 C2 FB715 A2 IC801 C1 L509 C5 Q305 A3 R207 C2 R249 B2 R300 C2 R329 B3 R369 A2 R519 C4 R616 A1 R823 C1 R924 B1 R971 B2
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C201 C2 C301 A3 C352 A3 C524 B4 C584 B4 C721 A2 C830 C1 C920 C3 CN301 B1 D708 B2 FB302 B1 FB803 C1 JK501 A5 L512 C5 Q502 B3 R211 B2 R253 A1 R303 A3 R332 A2 R385 B3 R537 B3 R703 A2 R827 C1 R927 A3 RA201 B1
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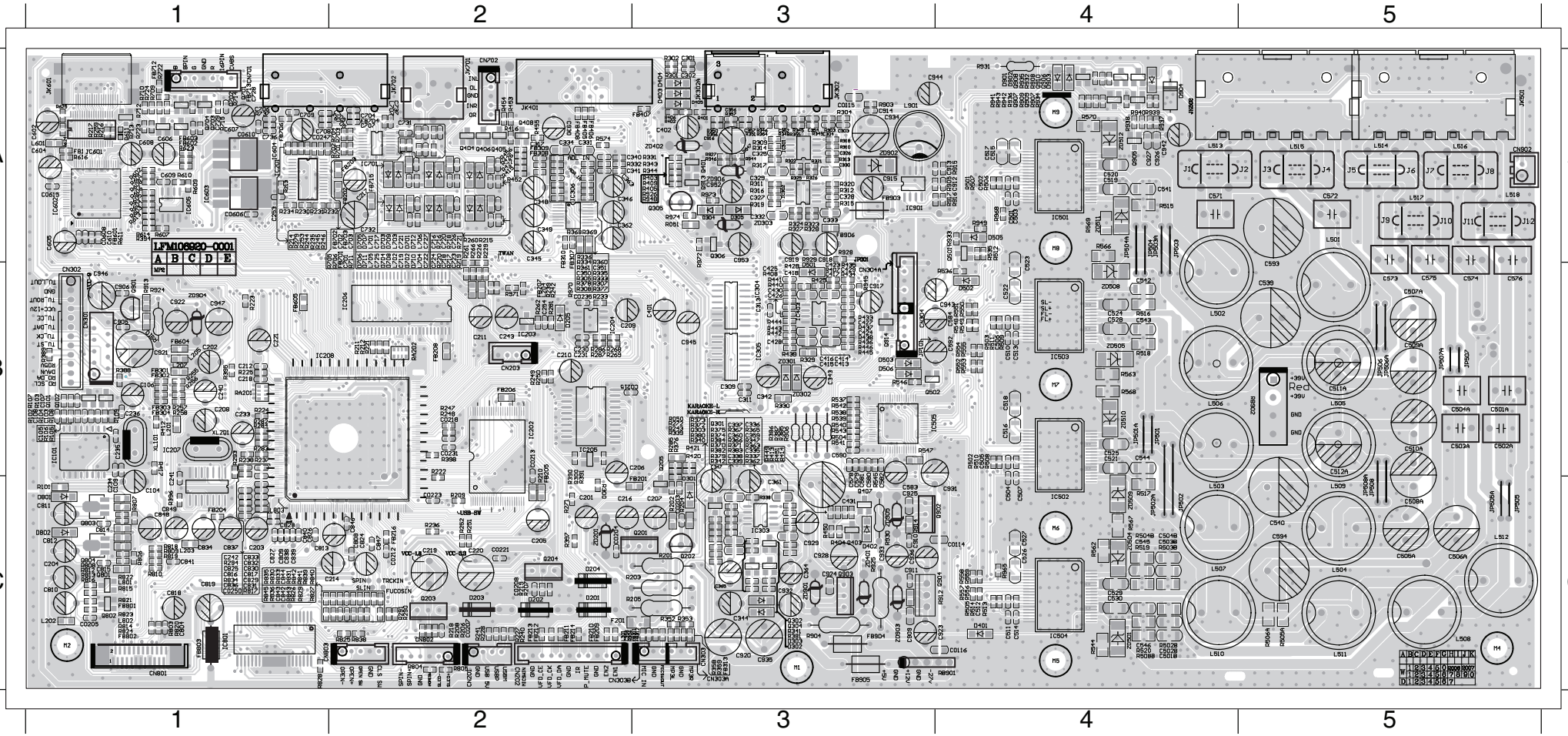
C204 C1 C304 A3 C362 A2 C527 C4 C594 C5 C724 B2 C833 C1 C923 C4 CN801 C1 D711 B2 FB307 A2 FB906 A3 JK701 A2 L515 A5 Q804 C1 R218 C2 R257 B1 R309 A3 R335 B2 R388 B1 R540 B3 R717 B2 R830 C1 R930 C3 RB902 B5



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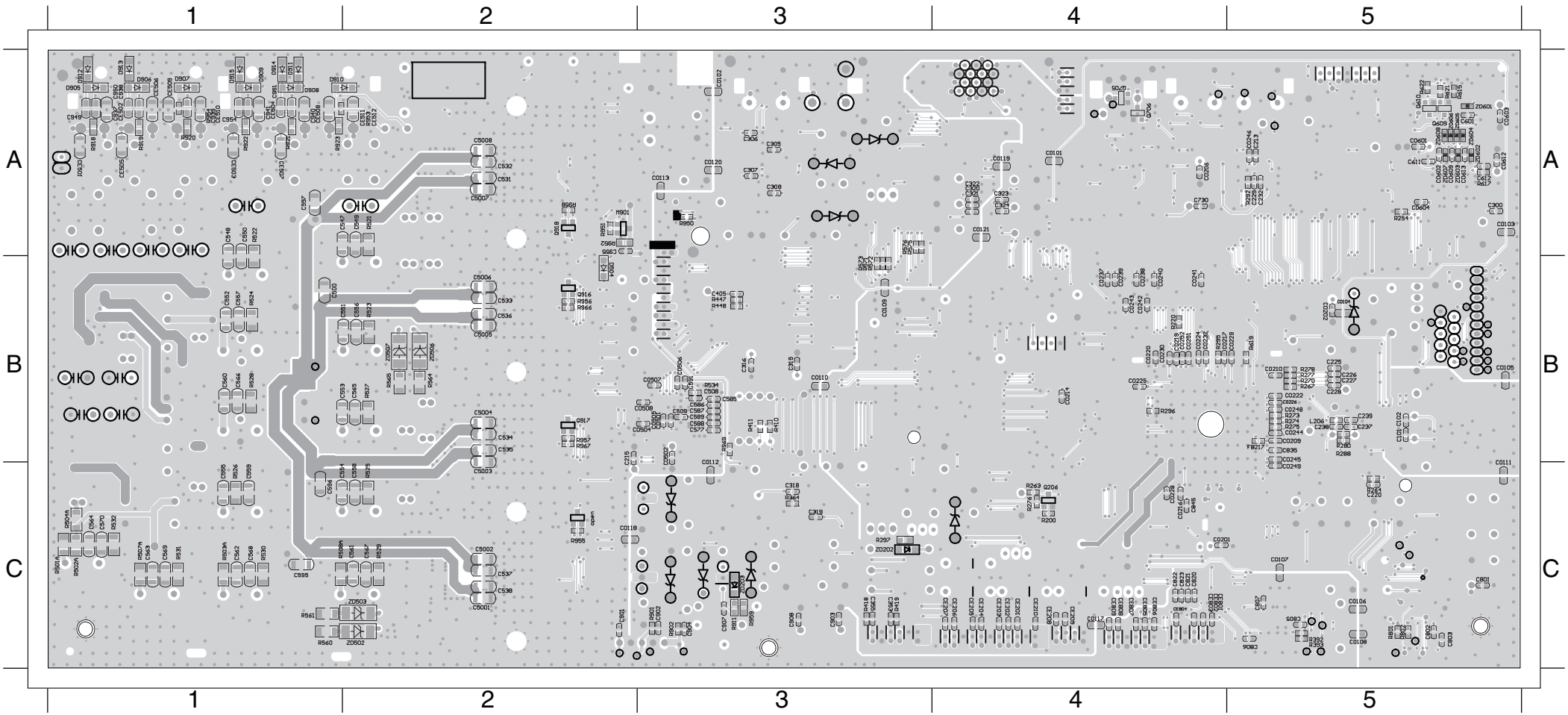
PCB LAYOUT BOTTOM VIEW (main unit)

C0101	A4	C0117	C4	C0217	B4	C0238	B4	C0252	B4	C0609	A5	C238	B5	C324	A4	C508	B3	C548	A1	C560	B1	C585	B3	C803	C5	C903	C3	C955	A2	CE502	A1	CE802	C4	D910	A1	R276	C4	R521	A2	R534	B3	R920	A1
C0102	A3	C0118	C2	C0219	B4	C0239	B4	C0501	B3	C0612	A5	C300	A5	C353	C3	C509	B3	C549	A2	C561	C2	C586	B3	C805	C5	C904	C3	CE201	C4	CE503	A1	CE803	C4	D911	A1	R280	B5	R522	A1	R571	B3	R921	A1
C0103	A5	C0119	A4	C0220	B4	C0240	B4	C0502	B3	C0613	A5	C305	A3	C355	C3	C530	C1	C550	A1	C562	C1	C587	B3	C806	C5	C907	C3	CE202	C4	CE504	A1	CE804	C4	FB217	B5	R288	B5	R523	B2	R572	B3	R922	A1
C0104	B5	C0120	A3	C0222	B5	C0241	B4	C0504	B3	C213	A5	C306	A3	C500	B1	C531	A2	C551	B1	C563	C1	C588	B3	C807	C5	C908	C3	CE203	C4	CE505	A1	CE805	C4	Q609	A5	R292	A5	R524	B1	R573	B3	R923	A1
C0105	B5	C0121	A4	C0224	B4	C0242	B4	C0505	B3	C215	C2	C307	A3	C5001	C2	C532	A2	C552	B1	C564	C1	C589	B3	C820	C4	C937	A1	CE204	C4	CE506	A1	CE806	C4	Q610	A5	R297	C3	R525	C2	R617	A5	R952	A2
C0106	C5	C0201	C4	C0225	B4	C0243	B4	C0506	B3	C225	B5	C308	A3	C5002	C2	C533	B2	C553	B1	C565	B2	C591	B3	C821	C4	C938	A1	CE205	C4	CE507	A1	CE808	C4	Q705	A4	R392	C5	R526	C1	R621	A5	R959	C3
C0107	C5	C0202	B5	C0226	B5	C0244	B5	C0507	B3	C226	B5	C315	B3	C5003	C2	C534	B2	C554	C1	C566	B1	C595	C1	C822	C4	C939	A1	CE206	C4	CE508	A1	CE809	C4	Q706	A4	R393	C5	R527	B2	R622	A5	R969	B3
C0109	B3	C0206	A4	C0228	C4	C0245	B5	C0508	B3	C227	B5	C316	B3	C5004	B2	C535	B2	C555	C1	C567	C2	C596	C1	C823	C4	C940	A1	CE207	C4	CE509	A1	D905	A1	R200	C4	R410	B3	R528	B1	R801	C5	ZD202	C3
C0110	B3	C0209	B5	C0229	B5	C0246	A5	C0601	A5	C228	B5	C320	A4	C5005	B2	C536	B2	C556	B2	C568	C1	C597	A1	C835	B5	C941	A1	CE208	C4	CE510	A1	D906	A1	R220	B4	R411	B3	R529	C2	R802	C5	ZD203	C3
C0111	C5	C0210	B5	C0230	B4	C0248	B5	C0602	A5	C229	A5	C321	A4	C5006	B2	C537	C2	C557	B1	C569	C1	C730	A4	C845	C4	C949	A1	CE209	C4	CE511	A2	D907	A1	R227	B5	R418	C3	R530	C1	R911	C3		
C0112	C3	C0214	B4	C0232	B4	C0249	C5	C0603	A5	C232	A5	C322	A4	C5007	A2	C538	C2	C558	C2	C570	C1	C801	C5	C901	C2	C950	A1	CE210	C4	CE512	A2	D908	A1	R228	B5	R419	C3	R531	C1	R918	A1		
C0113	A3	C0216	C4	C0237	B4	C0251	B4	C0604	A1	C237	B5	C323	A4	C5008	A2	C547	A1	C559	C1	C577	C3	C802	C5	C902	C3	C954	A1	CE501	A1	CE801	C4	D909	A1	R264	C5	R508	C1	R532	C1	R919	A1		



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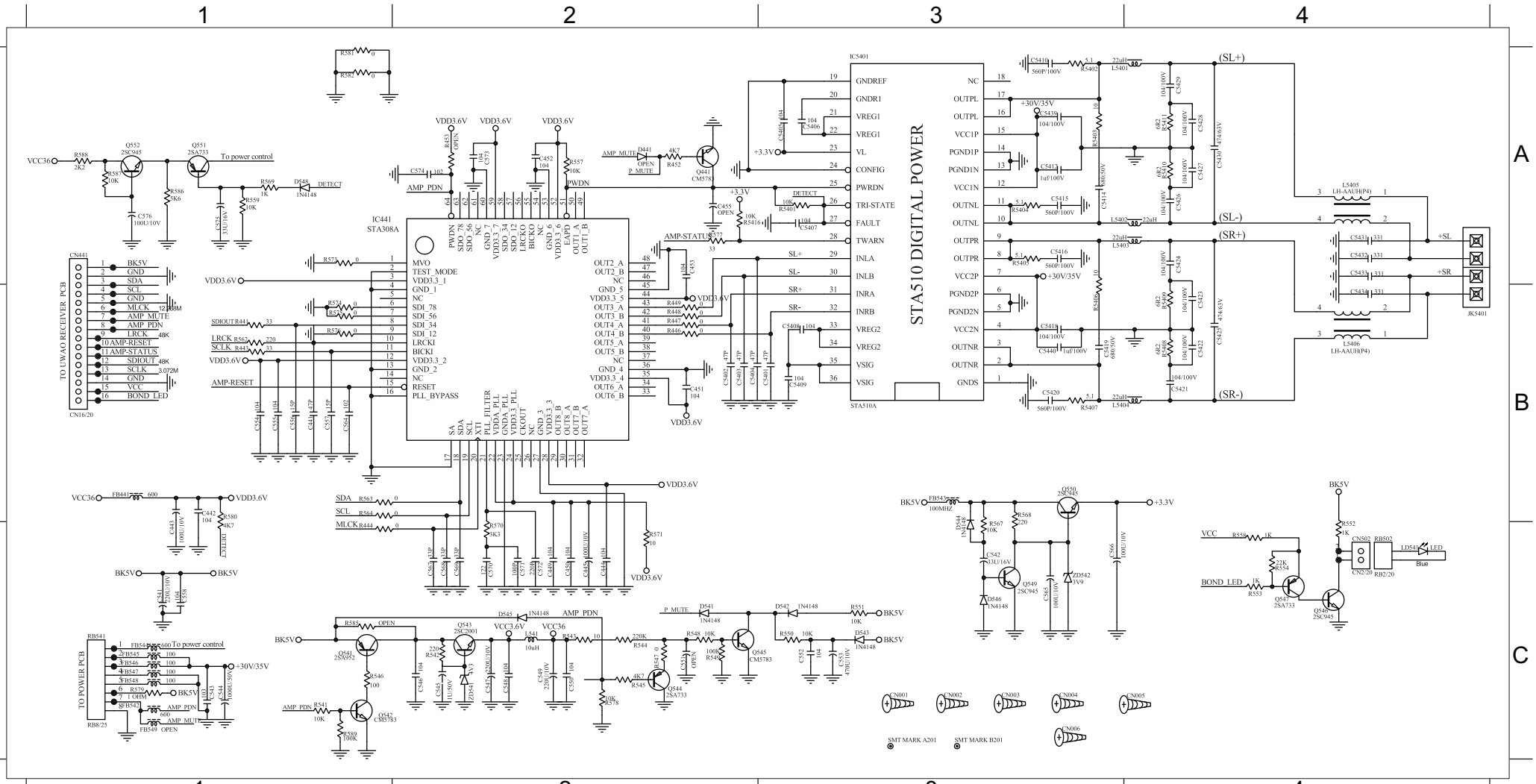
CIRCUIT DIAGRAM (Wireless)

C441	B1	C453	A2	C5409	B3	C542	C3	C5428	A4	C544	C1	C553	C3	C567	C2	C576	A1	D548	A1	IC441	B2	L541	C2	Q547	C4	R447	C2	R5406	B3	R543	C2	R552	C4	R567	B3	R577	A2	R589	C1
C442	B1	C5401	C3	C541	C1	C5420	B3	C5429	A4	C5440	B3	C554	B1	C568	C2	CN441	B1	FB441	B1	IC5401	A3	LD541	C4	Q549	C3	R448	C2	R5407	B3	R544	C2	R553	C4	R568	B3	R578	C2	RB502	C4
C443	B1	C5402	C2	C5410	A3	C5421	B4	C543	C1	C5445	C2	C555	B1	C569	C2	CN502	C4	FB542	C1	JK5401	B4	Q441	A2	Q550	B3	R449	C2	R5408	B4	R545	C2	R554	C4	R569	A1	R579	C1	RB541	C1
C444	C2	C5403	C2	C5412	A3	C5422	B4	C5430	A4	C546	C2	C556	B1	C570	C2	D541	C2	FB543	B3	L5401	A3	Q541	C1	Q551	A1	R452	A2	R5409	B4	R546	C1	R557	A2	R570	C2	R580	B1	ZD541	C2
C445	C2	C5404	C2	C5414	A3	C5423	B4	C5431	A4	C547	C2	C557	B1	C571	C2	D542	C3	FB544	C1	L5402	A3	Q542	C1	Q552	A1	R5401	A3	R541	C1	R547	C2	R558	C4	R571	C2	R581	A1	ZD542	C3
C449	C2	C5405	A3	C5415	A3	C5424	A4	C5432	A4	C548	C2	C558	C1	C572	C2	D543	C3	FB545	C1	L5403	A3	Q543	C2	R441	B1	R5402	A3	R5410	A4	R548	C2	R559	A1	R573	A1	R582	A1		
C450	C2	C5406	A3	C5416	A3	C5425	B4	C5433	A4	C549	C2	C564	B1	C573	A2	D544	C3	FB546	C1	L5404	A4	Q544	C2	R443	B1	R5403	A3	R5411	A4	R549	C2	R562	B1	R574	B1	R586	A1		
C451	C2	C5407	A3	C5418	B3	C5426	A4	C5434	B4	C550	C2	C565	C3	C574	A2	D545	C2	FB547	C1	L5405	A4	Q545	C2	R444	C1	R5404	A3	R5416	A2	R550	C3	R563	B1	R575	B1	R587	A1		
C452	A2	C5408	B3	C5419	B3	C5427	A4	C5439	A3	C552	C3	C566	C3	C575	A1	D546	C3	FB548	C1	L5406	B4	Q546	C4	R446	C2	R5405	A3	R542	C2	R551	C3	R564	B1	R576	B1	R588	A1		



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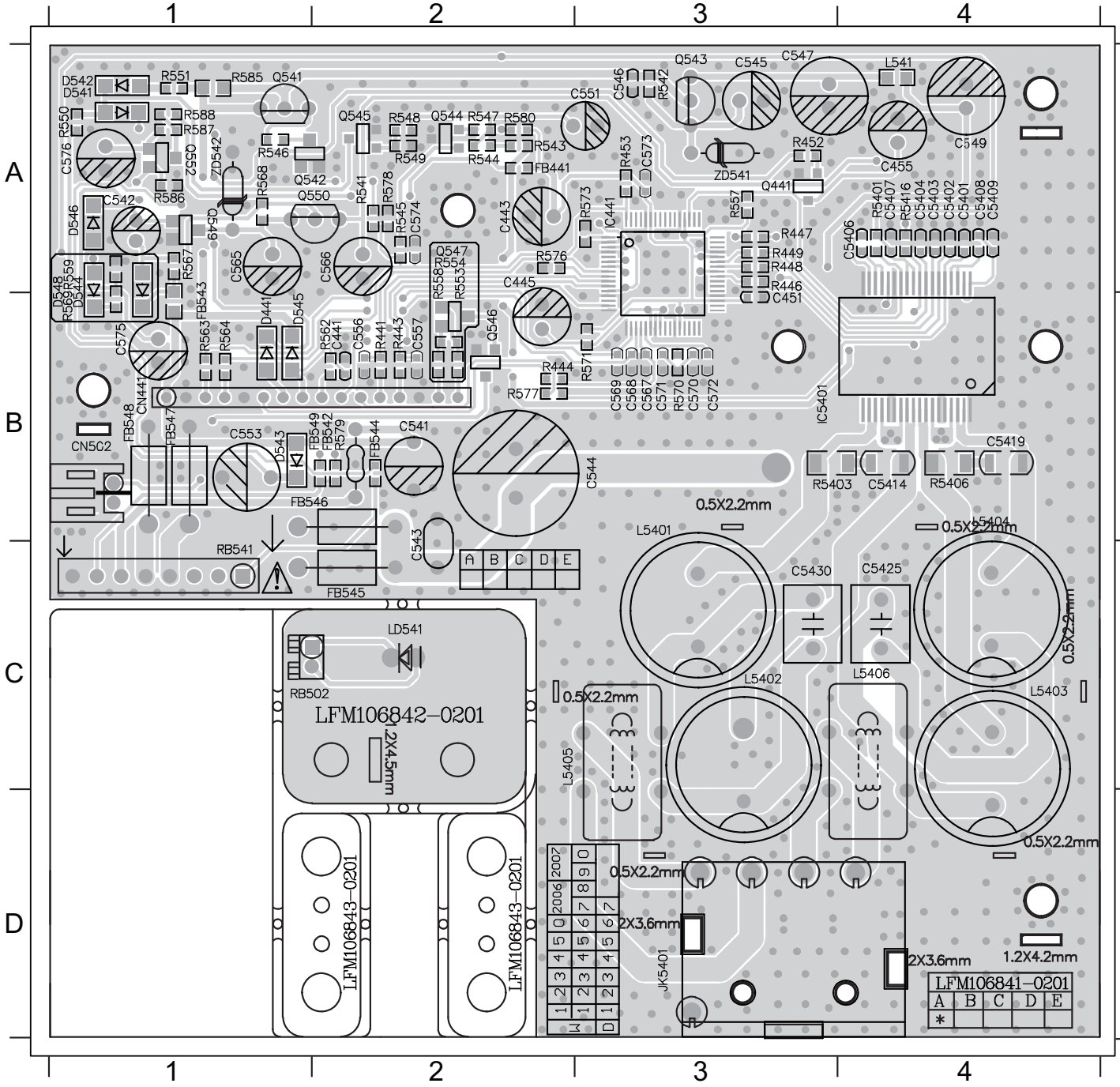
PCB LAYOUT TOP VIEW (Wireless)



C441	B2	L5406	C4
C443	A2	L541	A4
C445	A2	LD541	C2
C451	A3	Q441	A3
C5401	A4	Q541	A1
C5402	A4	Q542	A1
C5403	A4	Q543	A3
C5404	A4	Q544	A2
C5406	A4	Q545	A2
C5407	A4	Q546	B2
C5408	A4	Q547	A2
C5409	A4	Q549	A1
C541	B2	Q550	A1
C5414	B4	Q552	A1
C5419	B4	R441	B2
C542	A1	R443	B2
C5425	C4	R444	B2
C543	B2	R446	A3
C5430	C3	R447	A3
C544	B2	R448	A3
C545	A3	R449	A3
C546	A3	R5401	A4
C547	A3	R5403	B3
C549	A4	R5406	B4
C553	B1	R541	A2
C556	B2	R5416	A4
C557	B2	R542	A3
C565	A1	R543	A2
C566	A2	R544	A2
C567	B3	R545	A2
C568	B3	R546	A1
C569	B3	R547	A2
C570	B3	R548	A2
C571	B3	R549	A2
C572	B3	R550	A1
C573	A3	R551	A1
C574	A2	R553	A2
C575	B1	R554	A2
C576	A1	R557	A3
CN441	B1	R558	A2
CN502	B1	R559	A1
D541	A1	R562	B2
D542	A1	R563	B1
D543	B1	R564	B1
D544	A1	R567	A1
D545	B1	R568	A1
D546	A1	R569	A1
D548	A1	R570	B3
FB441	A2	R571	B3
FB542	B2	R573	A3
FB543	B1	R576	A2
FB544	B2	R577	B2
FB545	C2	R578	A2
FB546	B1	R579	B2
FB547	B1	R580	A2
FB548	B1	R586	A1
IC441	A3	R587	A1
IC5401	B4	R588	A1
JK5401	D3	RB502	C1
L5401	B3	RB541	C1
L5402	C3	ZD541	A3
L5403	C4	ZD542	A1
L5404	B4		
L5405	C2		

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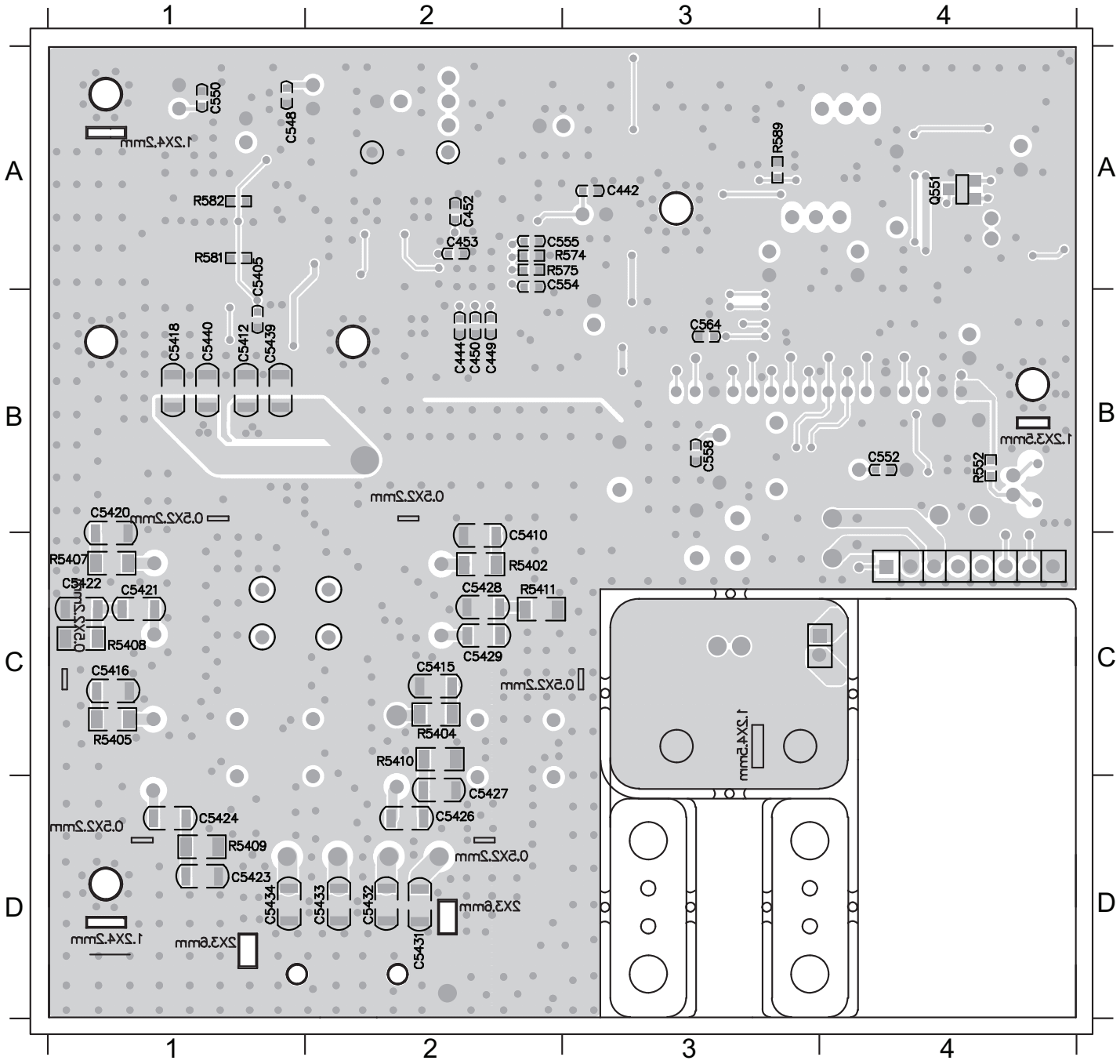
PCB LAYOUT BOTTOM VIEW (Wireless)



C442	A3
C444	B2
C449	B2
C450	B2
C452	A2
C453	A2
C5405	A1
C5410	C2
C5412	B1
C5415	C2
C5416	C1
C5418	B1
C5420	B1
C5421	C1
C5422	C1
C5423	D1
C5424	D1
C5426	D2
C5427	D2
C5428	C2
C5429	C2
C5431	D2
C5432	D2
C5433	D2
C5434	D1
C5439	B1
C5440	B1
C548	A1
C550	A1
C552	B4
C554	A2
C555	A2
C558	B3
C564	B3
Q551	A4
R5402	C2
R5404	C2
R5405	C1
R5407	C1
R5408	C1
R5409	D1
R5410	C2
R5411	C2
R552	B4
R574	A2
R575	A2
R581	A1
R582	A1
R589	A3

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	2.80
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

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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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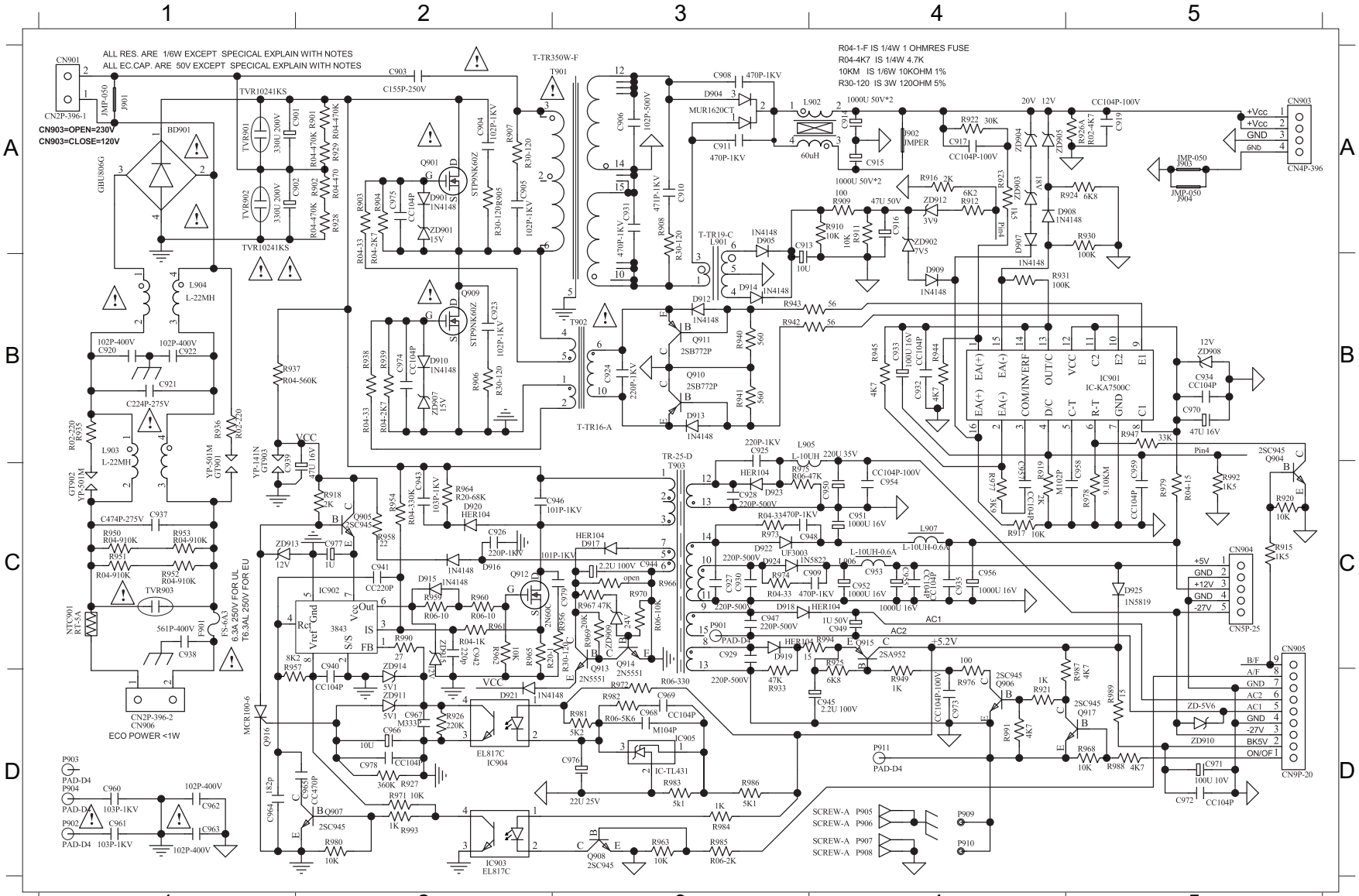
CIRCUIT DIAGRAM (main unit)

BD901	A1	C914	A4	C926	C2	C938	C1	C950	C4	C961	D1	C972	D5	D904	A3	D917	C3	GT902	C1	L903	B1	Q908	D3	R902	A2	R916	A4	R926B	D2	R939	B2	R952	C1	R964	C2	R975	C3	R986	D3	TVR901A1	ZD910	D5
C901	A1	C915	A4	C927	C3	C939	C1	C951	C4	C962	D1	C973	D4	D905	A3	D918	C3	IC901	B5	L904	B1	Q909	B2	R903	A2	R917	C4	R927	D2	R940	B3	R953	C1	R965	C2	R976	D4	R987	D5	TVR902A1	ZD911	D2
C902	A1	C916	A4	C928	C3	C940	C2	C952	C4	C963	D1	C976	D3	D907	A4	D919	C3	IC902	C2	L905	B3	Q910	B3	R904	A2	R918	C2	R928	A2	R941	B3	R954	C2	R966	C3	R977	C4	R988	D5	TVR903C1	ZD912	A4
C903	A2	C917	A4	C929	C3	C941	C2	C953	C4	C964	D1	C977	C2	D908	A4	D920	C2	IC903	D2	L906	C4	Q911	B3	R905	A2	R919	C4	R929	A2	R942	B3	R955	C2	R967	C3	R978	C5	R989	D5	ZD901	A2	ZD913	C1
C904	A2	C919	A5	C930	C3	C942	C2	C954	C4	C965	D2	C978	D2	D909	B4	D921	D2	IC904	D2	L907	C4	Q912	C2	R906	B2	R920	C5	R930	A5	R943	B3	R957	C1	R968	D5	R979	C5	R990	C2	ZD902	A4	ZD914	C2
C906	A3	C920	B1	C931	A3	C943	C2	C955	C4	C966	D2	CN901	A1	D910	B2	D922	C3	IC905	D3	NTC901C1		Q913	D3	R908	A3	R921	D4	R931	B4	R944	B4	R958	C2	R969	C3	R980	D2	R991	D4	ZD903	A4			
C908	A3	C921	B1	C932	B4	C944	C3	C956	C4	C967	D2	CN903	A5	D912	B3	D923	C3	J902	A4	Q901	A2	Q914	C3	R909	A4	R922	A4	R933	D3	R945	B4	R959	C2	R970	C3	R981	D3	R993	D2	ZD904	A4			
C909	C4	C922	B1	C933	B4	C945	D4	C957	C4	C968	D3	CN904	C5	D913	B3	D924	C3	J903	A5	Q904	C5	Q915	C4	R910	A4	R923	A4	R935	B1	R947	B5	R960	C2	R971	D2	R982	D3	R994	C4	ZD905	A4			
C910	A3	C923	B2	C934	B4	C946	C2	C958	C5	C969	D3	CN905	D5	D914	B3	D925	C5	J904	A5	Q905	C2	Q916	D1	R911	A4	R924	A5	R936	B1	R949	D4	R961	C2	R972	D3	R983	D3	T901	A3	ZD907	B2			
C911	A3	C924	B3	C935	C4	C948	C3	C959	C5	C970	B5	CN906	D1	D915	C2	F901	C1	L901	A3	Q906	D4	Q917	D5	R912	A4	R925	C4	R937	B1	R950	C1	R962	C2	R973	C3	R984	D3	T902	B3	ZD908	B5			
C913	A3	C925	B3	C937	C1	C949	C4	C960	D1	C971	D5	D901	A2	D916	C2	GT901	C1	L902	A4	Q907	D2	R901	A2	R915	C5	R926A	A5	R938	B2	R951	C1	R963	D3	R974	C3	R985	D3	T903	C3	ZD909	C3			



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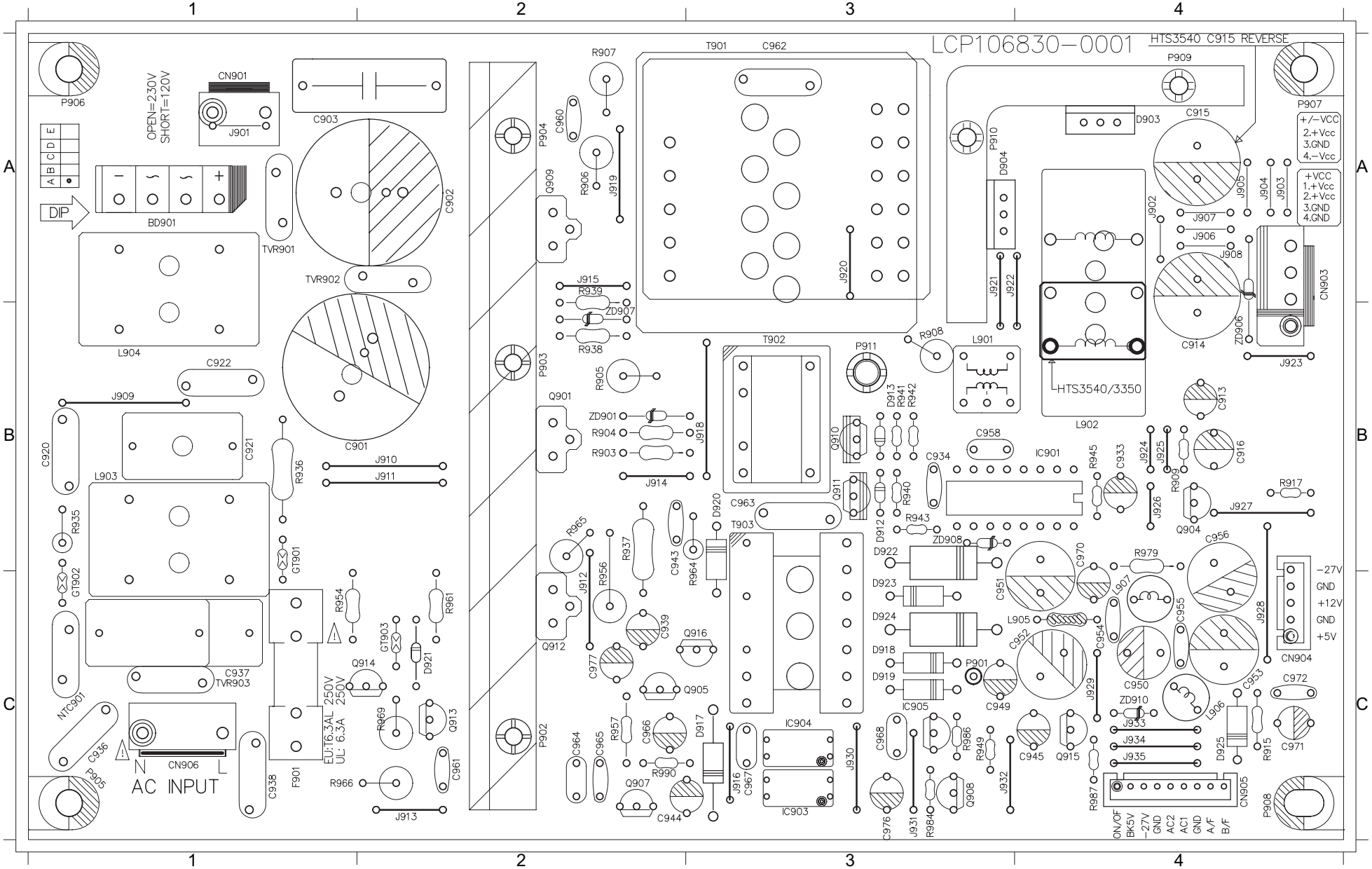
PCB LAYOUT - TOP VIEW (main unit)

BD901	A1	C920	B1	C943	B2	C954	C4	C964	C2	C977	C2	D913	B3	D924	C3	IC905	C3	J912	C2	J922	A3	J930	C3	L903	B1	Q905	C2	Q914	C1	R909	B4	R940	B3	R961	C2	R987	C4	ZD901	B2
C901	A1	C921	B1	C944	C2	C955	C4	C965	C2	CN901	A1	D917	C3	D925	C4	J901	A1	J913	C2	J923	B4	J931	C3	L904	B1	Q907	C2	Q915	C4	R915	C4	R941	B3	R964	C2	R990	C2	ZD907	B2
C902	B1	C922	B1	C945	C4	C956	B4	C966	C2	CN903	A4	D918	C3	F901	C1	J902	A4	J914	B2	J924	B4	J932	C3	L905	C4	Q908	C3	Q916	C3	R917	B4	R942	B3	R965	B2	T901	A3	ZD908	B3
C903	A1	C933	B4	C949	C3	C958	B3	C967	C3	CN904	C4	D919	C3	GT901	B1	J903	A4	J915	A2	J925	B4	J933	C4	L906	C4	Q909	A2	R903	B2	R935	B1	R943	B3	R966	C1	T902	B3	ZD910	C4
C913	B4	C934	B3	C950	C4	C960	A2	C970	B4	CN905	C4	D920	B3	GT902	C1	J904	A4	J916	C3	J926	B4	J934	C4	L907	C4	Q910	B3	R904	B2	R936	B1	R945	B4	R969	C2	T903	B3		
C914	B4	C937	C1	C951	C3	C961	C2	C971	C4	CN906	C1	D921	C2	IC901	B4	J909	B1	J918	B3	J927	B4	J935	C4	NTC901	C1	Q911	B3	R905	B2	R937	B2	R949	C3	R979	B4	TVR901	A1		
C915	C4	C938	C1	C952	C4	C962	A3	C972	C4	D904	A3	D922	C3	IC903	C3	J910	B2	J920	A3	J928	C4	L901	B3	Q901	B2	Q912	C2	R906	A2	R938	B2	R954	C1	R984	C3	TVR902	A1		
C916	B4	C939	C2	C953	C4	C963	B3	C976	C3	D912	B3	D923	C3	IC904	C3	J911	B2	J921	A3	J929	C4	L902	B4	Q904	B4	Q913	C2	R908	B3	R939	B2	R957	C2	R986	C3	TVR903	C1		



PCB LAYOUT - BOTTOM VIEW (main unit)

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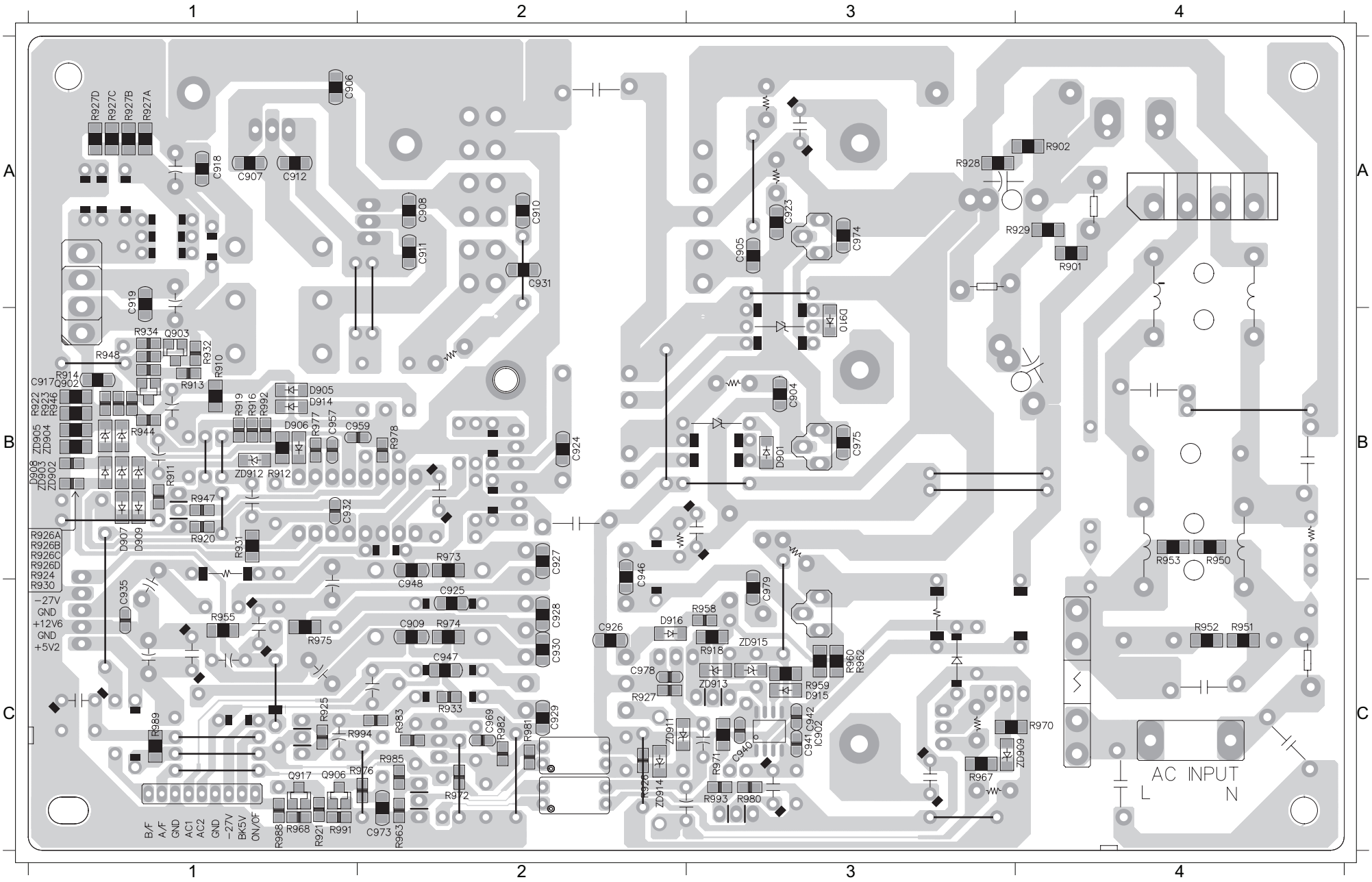
C904	B3	C911	A2	C925	C2	C930	C2	C941	C3	C959	B2	D901	B3	D910	B3	Q906	C1	R911	B1	R920	B1	R925	C1	R927	C2	R933	C2	R952	C4	R960	C3	R970	C4	R975	C1	R981	C2	R989	C1	ZD903	B1	ZD912	B1
C906	A1	C917	A1	C926	C2	C931	A2	C942	C3	C968	C1	D905	B1	D914	B1	Q917	C1	R912	B1	R921	C1	R926A	B1	R928	A3	R944	B1	R953	B4	R962	C3	R971	C3	R976	C2	R982	C2	R991	C1	ZD904	B1	ZD913	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	R929	A4	R947	B1	R955	C1	R963	C2	R972	C2	R977	B1	R983	C2	R993	C3	ZD905	B1	ZD914	C2
C909	C2	C923	A3	C928	C2	C935	C1	C948	B2	C973	C2	D908	B1	D916	C2	R902	A4	R918	C3	R923	B1	R926C	B1	R930	B1	R950	B4	R958	C3	R967	C3	R973	B2	R978	B2	R985	C2	R994	C2	ZD909	C3		
C910	A2	C924	B2	C929	C2	C940	C3	C957	B1	C978	C2	D909	B1	IC902	C3	R910	B1	R919	B1	R924	B1	R926D	B1	R931	B1	R951	C4	R959	C3	R968	C1	R974	C2	R980	C3	R988	C1	ZD902	B1	ZD911	C2		



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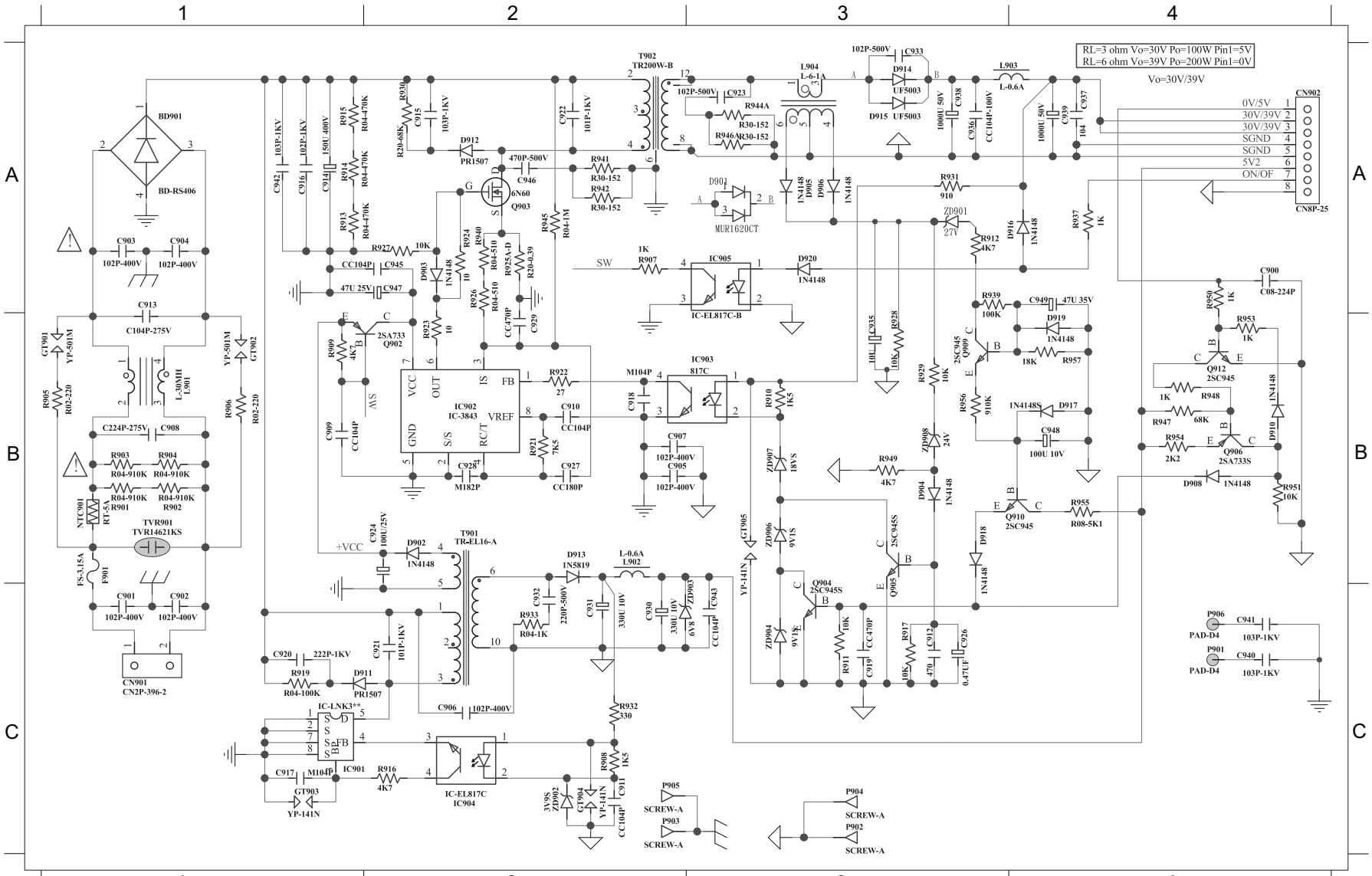
CIRCUIT DIAGRAM (wireless)

BD901	A1	R915	A1	R907	A2	R930	A2	C936	A3	D920	A3	R946	A3	R950	A4	NTC901	B1	TVR901	B1	D903	B2	T901	B2	R929	B3	D910	B4	R951	B4	D911	C1	IC904	C2	C926	C3	C940	C4
C903	A1	C915	A2	R924	A2	R940	A2	C938	A3	IC905	A3	ZD901	A3	C908	B1	R901	B1	C907	B2	D913	B2	C935	B3	R949	B3	D917	B4	R953	B4	IC901	C1	R908	C2	C943	C3	C941	C4
C904	A1	C922	A2	R925A	A2	R941	A2	D901	A3	L903	A3	C900	A4	C909	B1	R902	B1	C918	B2	IC902	B2	D904	B3	R956	B3	D919	B4	R954	B4	C906	C2	R916	C2	Q904	C3		
C914	A1	C945	A2	R925B	A2	R942	A2	D905	A3	L904	A3	C937	A4	C913	B1	R903	B1	C924	B2	L902	B2	D918	B3	ZD906	B3	Q906	B4	R955	B4	C910	C2	R932	C2	Q905	C3		
C916	A1	C946	A2	R925C	A2	R945	A2	D906	A3	R912	A3	C939	A4	F901	B1	R904	B1	C927	B2	Q902	B2	IC903	B3	ZD907	B3	Q910	B4	R957	B4	C911	C2	R933	C2	R911	C3		
C942	A1	C947	A2	R925D	A2	T902	A2	D914	A3	R931	A3	C949	A4	GT901	B1	R905	B1	C928	B2	R921	B2	Q909	B3	ZD908	B3	Q912	B4	C917	C1	C930	C2	ZD902	C2	R917	C3		
R913	A1	D912	A2	R926	A2	C923	A3	D915	A3	R939	A3	CN902	A4	GT902	B1	R906	B1	C929	B2	R922	B2	R910	B3	C948	B4	R947	B4	C920	C1	C931	C2	C912	C3	ZD903	C3		
R914	A1	Q903	A2	R927	A2	C933	A3	D916	A3	R944	A3	R937	A4	L901	B1	R909	B1	D902	B2	R923	B2	R928	B3	D908	B4	R948	B4	CN901	C1	C932	C2	C919	C3	ZD904	C3		



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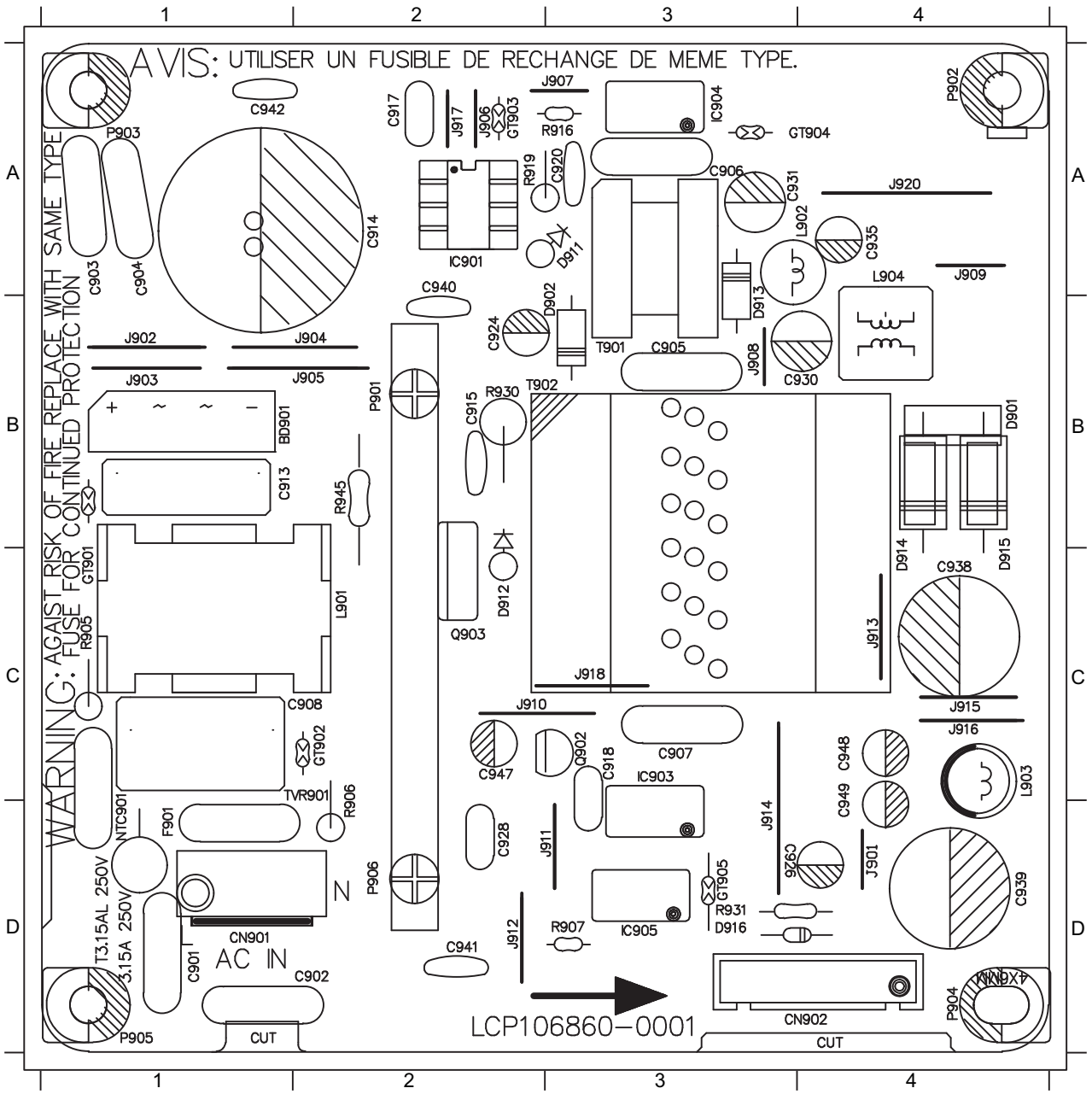
PCB LAYOUT - TOP VIEW (wireless)

BD901	B1	C907	C3	C915	B2	C924	B2	C931	A3	C940	B2	C948	C4	D901	B4	D913	A3	F901	D1	IC903	C3	J902	B1	J906	A2	J910	C2	J914	C3	J918	C3	L903	C4	Q903	C2	R916	A3	T901	B3
C903	A1	C908	C2	C917	A2	C926	D3	C935	A4	C941	D2	C949	C4	D902	B2	D914	B4	GT901	C1	IC904	A3	J903	B1	J907	A2	J911	D2	J915	C4	J920	A4	L904	A4	R905	C1	R930	B2	T902	B2
C904	A1	C913	B1	C918	C3	C928	D2	C938	C4	C942	A1	CN901	D1	D911	A3	D915	B4	GT902	C2	IC905	D3	J904	B2	J908	B3	J912	D2	J916	C4	L901	C2	NTC901	D1	R906	C2	R931	D3	TVR901	C2
C906	A3	C914	A2	C920	A3	C930	B3	C939	D4	C947	C2	CN902	D4	D912	C2	D916	D3	IC901	A2	J901	D4	J905	B2	J909	A4	J913	C4	J917	A2	L902	A4	Q902	C3	R907	D3	R945	B2		



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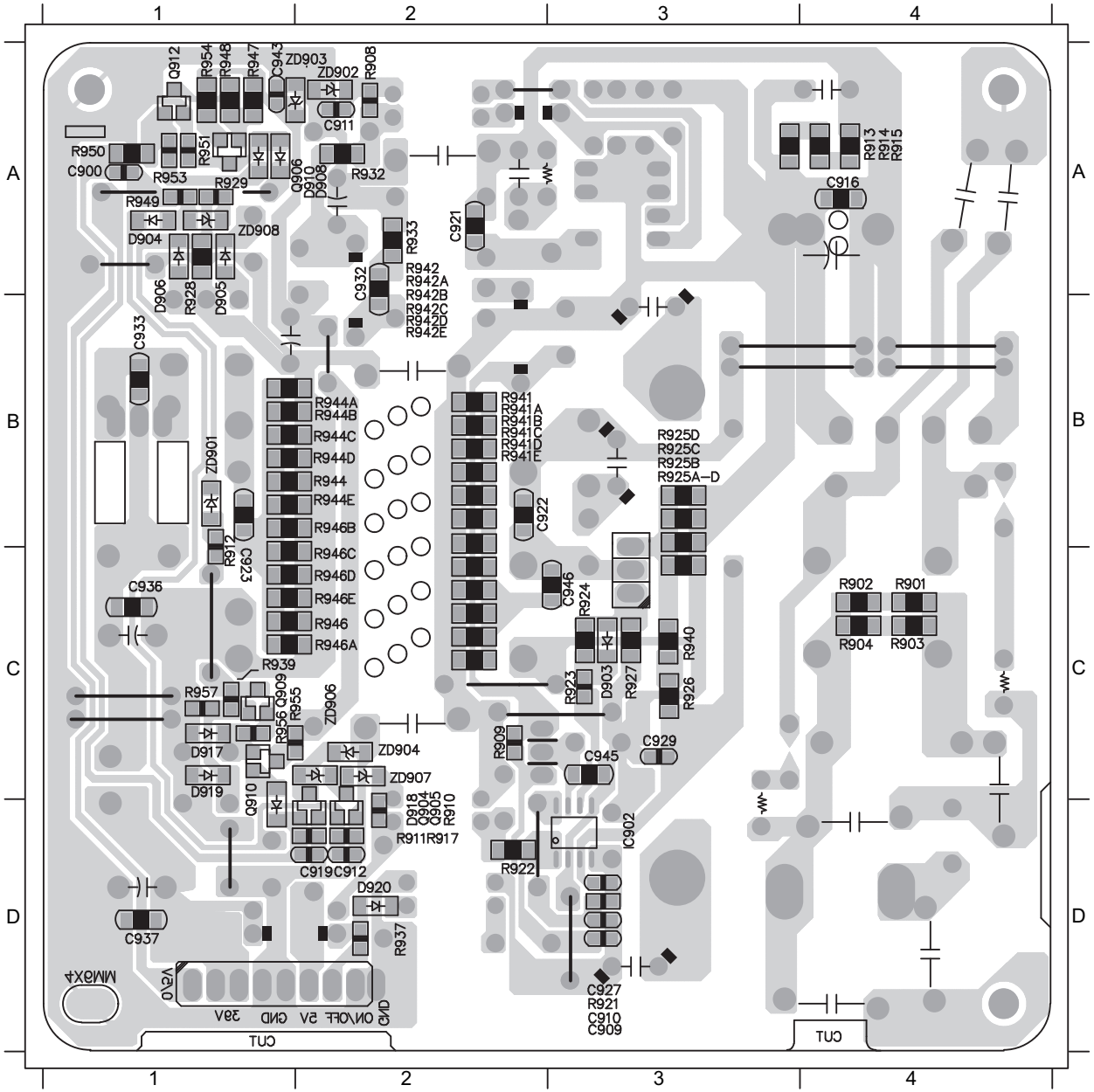
PCB LAYOUT - BOTTOM VIEW (wireless)

C900	A1	C919	D2	C933	B1	D903	C3	D917	C1	Q905	D2	R902	C4	R911	D2	R921	D3	R925C	B3	R932	A2	R941A	B2	R942A	A2	R944A	B2	R946A	C2	R948	A1	R955	C2	ZD904	C2
C909	D3	C922	B2	C936	C1	D904	A1	D918	D2	Q906	A2	R903	C4	R912	B1	R922	D2	R925D	B3	R933	A2	R941B	B2	R942B	A2	R944B	B2	R946B	C2	R949	A1	R956	C1	ZD906	C2
C910	D3	C923	B1	C937	D1	D905	A1	D919	C1	Q909	C1	R904	C4	R913	A4	R923	C3	R926	C3	R937	D2	R941C	B2	R942C	A2	R944C	B2	R946C	C2	R950	A1	R957	C1	ZD907	C2
C911	A2	C927	D3	C943	A1	D906	A1	D920	D2	Q910	C1	R908	A2	R914	A4	R924	C3	R927	C3	R939	C1	R941D	B2	R942D	A2	R944D	B2	R946D	C2	R951	A1	ZD901	B1	ZD908	A1
C912	D2	C929	C3	C945	C3	D908	A2	IC902	D4	Q912	A1	R909	C2	R915	A4	R925A	B3	R928	A1	R940	C3	R941E	B2	R942E	A2	R944E	B2	R946E	C2	R953	A1	ZD902	A2		
C916	A4	C932	A2	C946	C3	D910	A2	Q904	D2	R901	C4	R910	D2	R917	D2	R925B	B3	R929	A1	R941	B2	R942	A2	R944	B2	R946	C2	R947	A1	R954	A1	ZD903	A2		



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CONNECTION BOARD

TABLE OF CONTENTS

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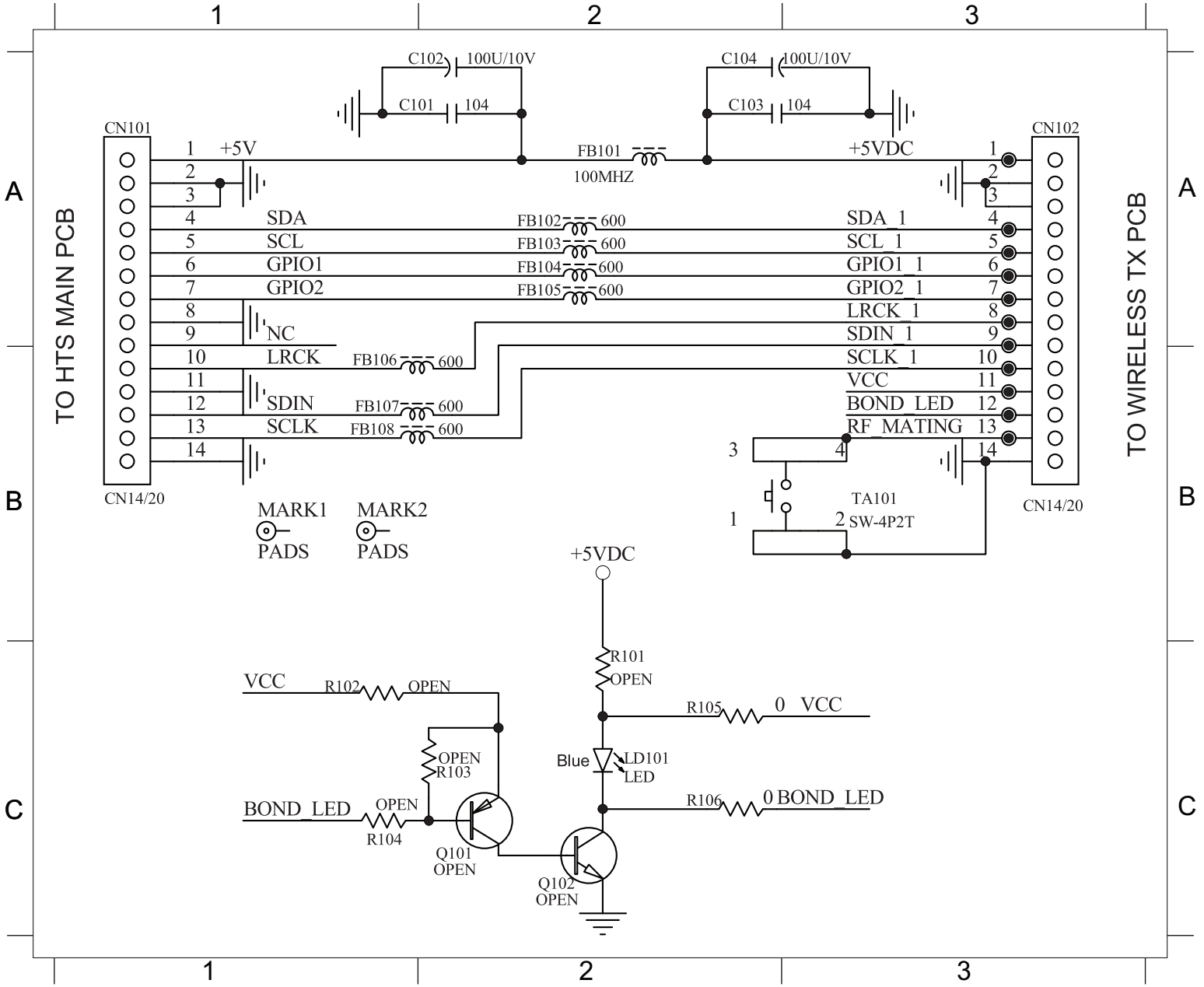
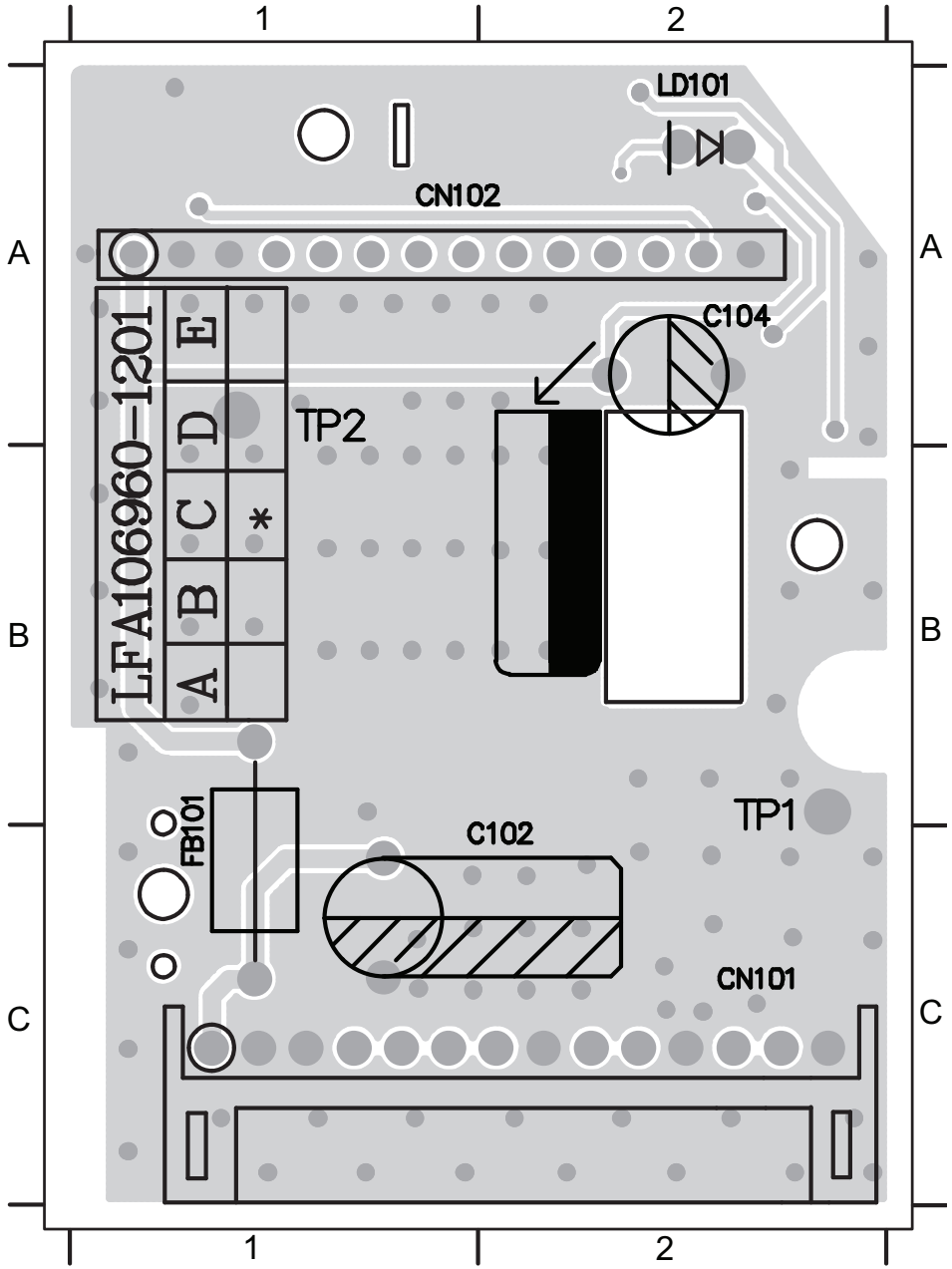
CIRCUIT DIAGRAM (wireless)

C101	A2	C103	A2	CN101	A1	FB101	A2	FB103	A2	FB105	A2	FB107	B1	LD101	C2	R106	C2
C102	A2	C104	A2	CN102	A3	FB102	A2	FB104	A2	FB106	B1	FB108	B1	R105	C2	TA101	B3



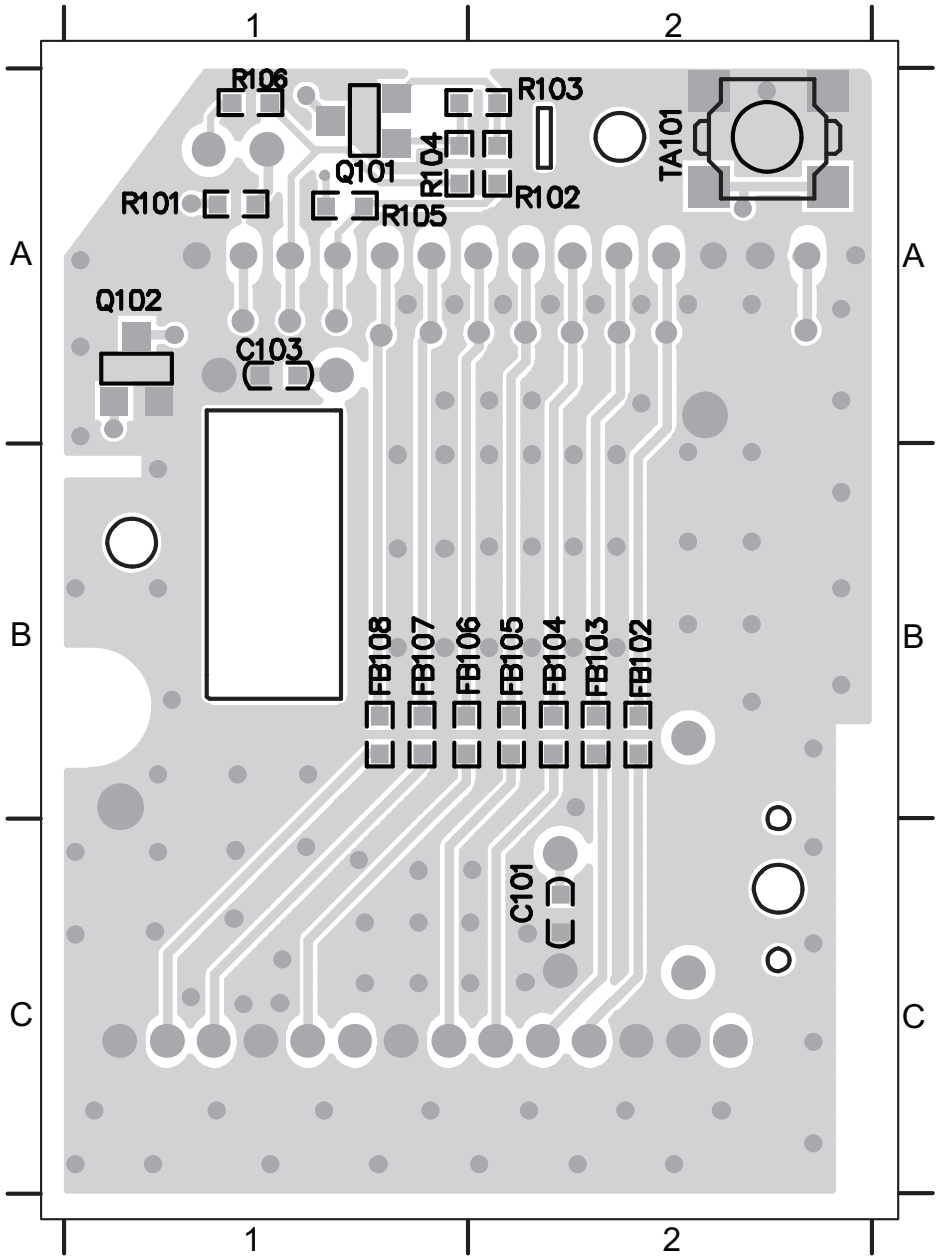
PCB LAYOUT - TOP VIEW (wireless)

CN102	A1	LD101	A2	FB101	C1
C104	A2	C102	C1	CN101	C2



PCB LAYOUT - BOTTOM VIEW (wireless)

C103	A1	FB104	B2	FB107	B1	R106	A1
FB102	B2	FB105	B2	FB108	B1	TA101	A2
FB103	B2	FB106	B1	R105	A1		



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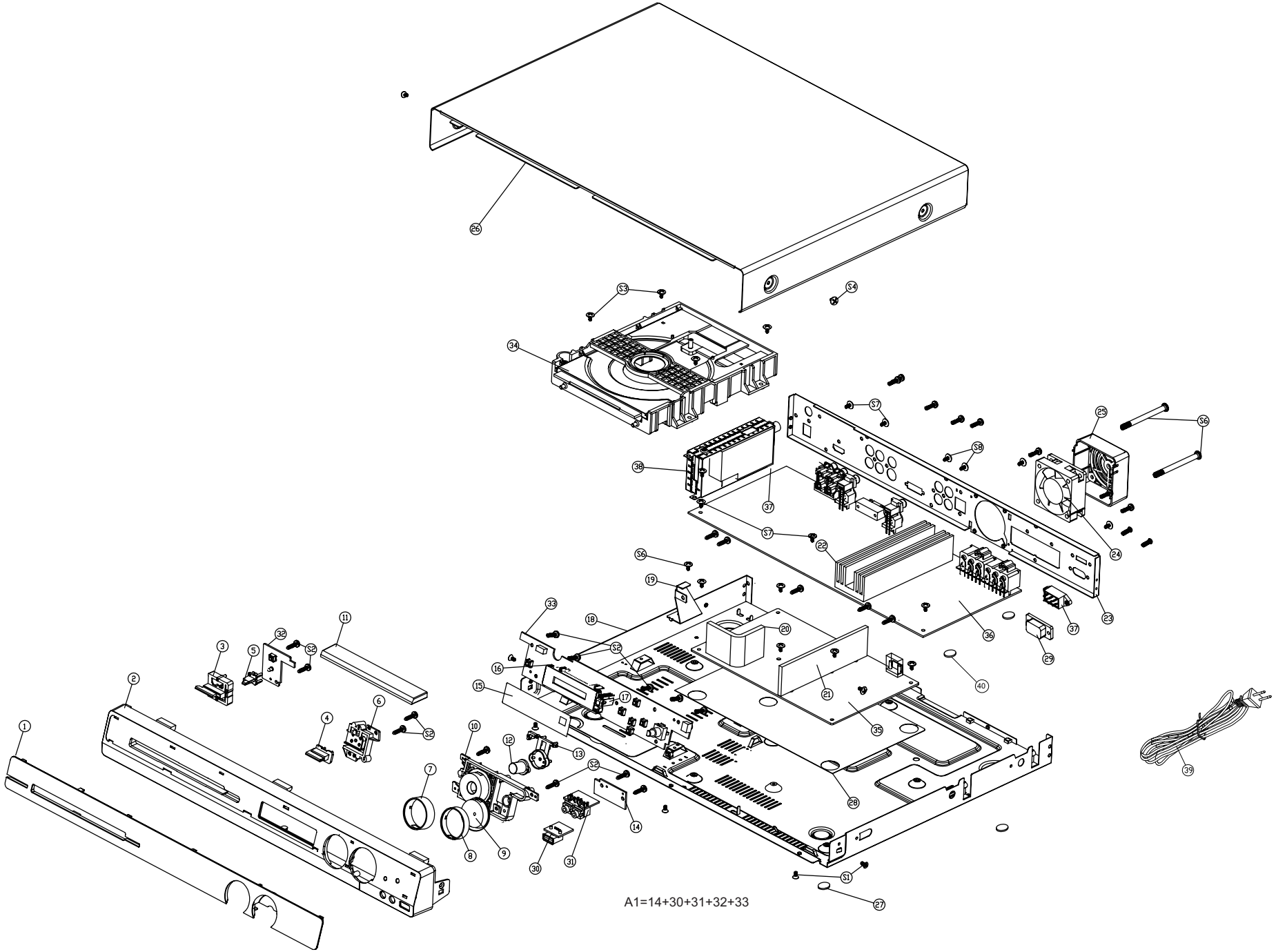
MECHANICAL EXPLODED VIEW (whole set including DVD loader)-main unit



MECHANICAL EXPLODED VIEW-WIRELESS

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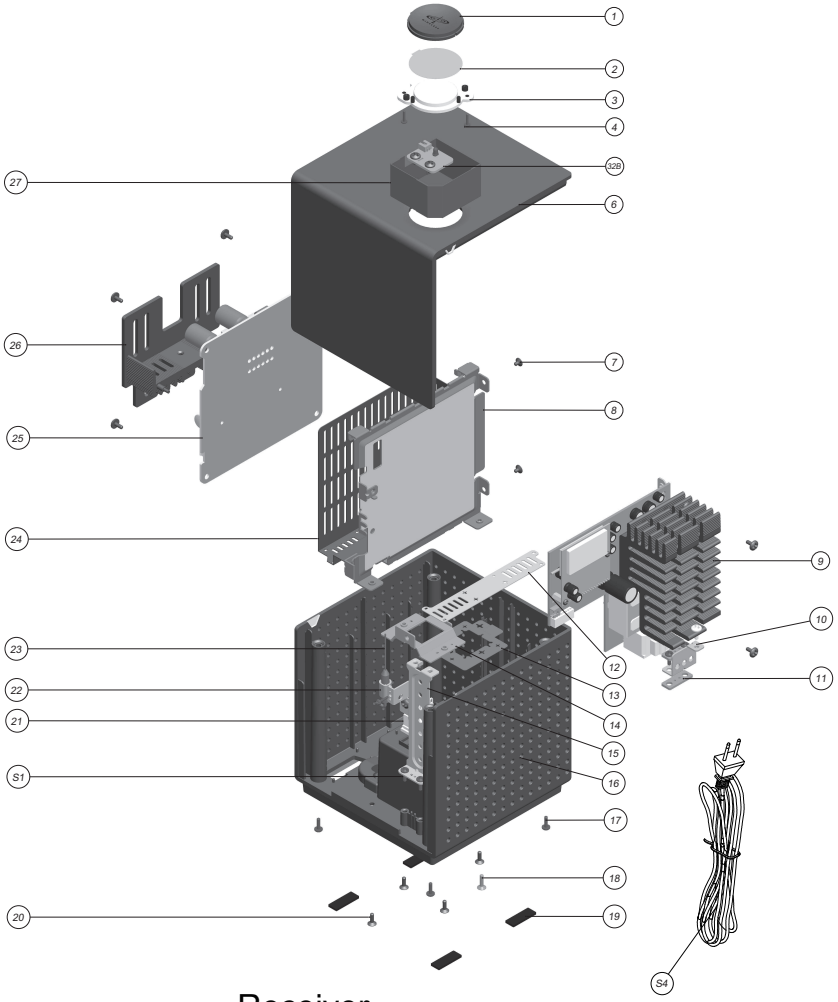
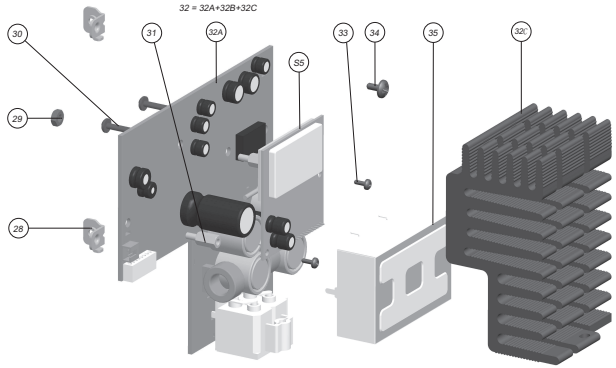
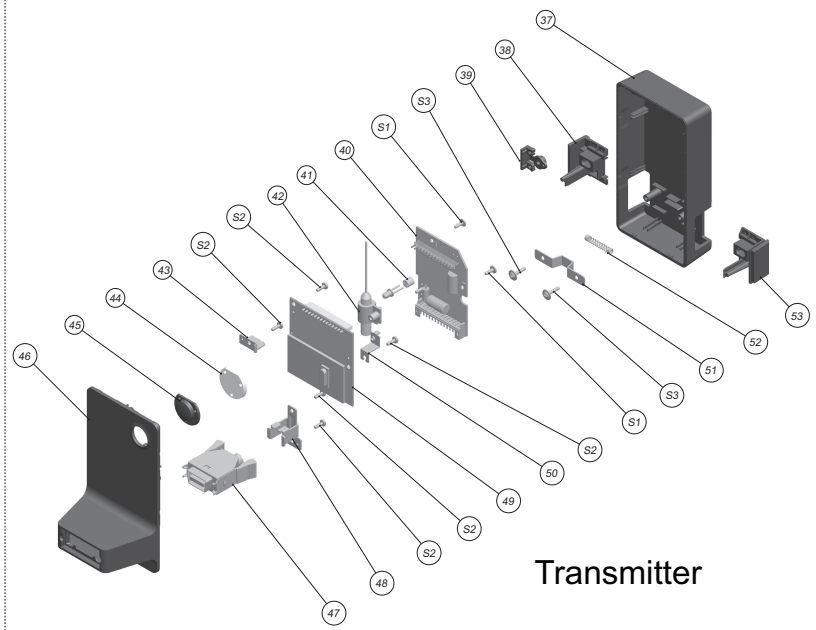


Receiver



MAIN PCB ASS'Y



Transmitter

MECHANICAL PART LIST

MAIN UNIT

Loc.	Part No.	12NC	Description
34	996510007174	DVD LOADER MODULE	
A1	996510007314	CONTROL+USB+PHONE JACK+STANDBY+BKT	
36	996510007315	MAIN PCB	
35	996510003883	POWER PCB	
38	996510001690	TUNER PACK	
39	996510001691	POWER CORD	
11	996510007316	DVD DOOR	
1	996510001254	DISPLAY LENS	
4	996510001257	OPEN /CLOSE BUTTON	
2	996510007317	FRONT CABINET	
5	996510001662	POWER LENS	
6	996510003834	OPEN /CLOSE BUTTON HOLDER	
7	996510001663	FUNCTION BUTTON RING	
12	996510003835	SOURCE BUTTON	
3	996510001256	STANDBY BUTTON	
8	996510001664	VOLUME KNOB RIGN	
9	996510001261	VOLUME KNOB	
10	996510001262	FUNCTION BUTTON	
13	996510003836	SOURCE BUTTON HOLDER	
15	996510003837	VFD FILTER	
25	996510001615	FAN BKT	
28	996510003875	PVC SHEET	
27	994000005305	RUBBER FOOT	
40	996510007318	RUBBER FOOT	
RC	996510001649	REMOTE CONTROL	
AM	996510001621	LOOP ANT	
FM	996500023583	FM ANTENNA	
Stereo	996510001598	STEREO CABLE	
Video	996500013058	RCA CABLE	
CN301	996510000673	FFC CABLE 10P 100MM	
CN801	996510007319	FFC CABLE 24P 180MM	
23	996510007320	BACK PANEL	
26	996510007321	TOP CAB	
18	996510007181	BOTTOM CAB	

SPEAKER

SPKC	996510005044	SPEAKER BOX -CENTER
RFC	996510001599	RUBBER FOOT -CENTER
SPKFL	996510005045	SPEAKER BOX -FRONT LEFT
SPKFR	996510005046	SPEAKER BOX - FRONT RIGHT
SPKRL	996510005047	SPEAKER BOX- REAR LSEFT
SPKRR	996510005048	SPEAKER BOX- REAR RIGHT
RFF,FR	996510003838	RUBBER FOOT-FRONT,REAR
SUBW	996510005049	SUBWOOFER
RFS	996500028375	RUBBER FOOT -SUB
HDMI	996510001693	HDMI CABLE
FAN	996500042571	FAN DC 12V 0.1A 4000RPM

WIRELESS

Loc.	Part No.	Description
W25	996510005050	SMPS PCB
W40	996510005052	CONNECTIONS PCB
W32	996510006939	MAIN + LED PCB
WS5	996510005054	UAWO PCB (RECEIVER)
W49	996510005055	UAWO PCB (TRANSMITTER)
WS4	996510007322	POWER CORD
W27	996510005056	PVC COVER
W2	996520031042	LED FILTER SHEET
W16	996510006940	BOTTOM HOLDER HIPS
W6	996510006941	FRONT CABINET
W22	996510005059	ANT BKT ABS
W1	996520031043	LED LENS TRANSPARENT
W3	996520031044	LENS BASE PMMA
W19	996510005060	RUBBER FOOT
W24	996510005061	PVC SHEET-L
W12	996510005062	PVC SHEET-R
W39	996510005063	SYNC KEY ABS
W38	996510005064	PUSH BUTTON-L
W42	996510005059	ANT BKT ABS
W53	996510005065	PUSH BUTTON-R
W45	996520031041	LOGO LENS TRANSPARENT
W44	996520031045	LOGO BASE PMMA
W37	996510005066	REAR COVER HIPS
W46	996510005067	FRONT COVER
W47	996510005068	D2 JACK

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