

Service
Service
Service



Service Manual

TABLE OF CONTENTS

	Page
Handling chip components	1-1
Technical Specifications	2-1
Service Tool	2-1
Measurement setup	2-2
Connections and Controls	3-1..3-2
Set Block diagram	4-1
Set Wiring diagram	4-2
Disassembly diagram	5-1
Main board (only for -/37)	
Circuit diagram	6-1..6-2
Layout diagram	6-3..6-4
Main board (not for -/37)	
Circuit diagram	6-5..6-6
Layout diagram	6-7..6-8
Display board - Circuit diagram	7-1
Display board - Layout diagram	7-2 .. 7-3
MP3 board - Circuit diagram	8-1
MP3 board - Layout diagram	8-2 .. 8-3
Set Mechanical Exploded view	9-1
Mechanical Service parts list	9-2
Electrical Service parts list	10-1 .. 10-5
Revision list	11-1



© Copyright 2006 Philips Consumer Electronics B.V. Eindhoven, The Netherlands
 All rights reserved. No part of this publication may be reproduced, stored in a retrieval system or transmitted, in any form or by any means, electronic, mechanical, photocopying, or otherwise without the prior permission of Philips.

Published by LX 0639- Service Audio Printed in The Netherlands Subject to modification

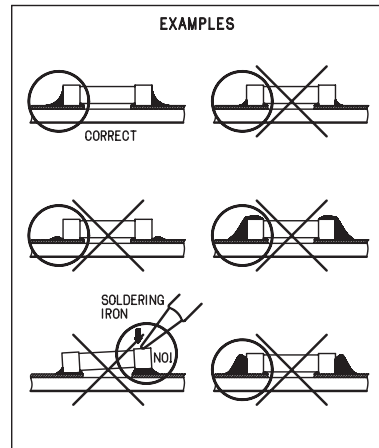
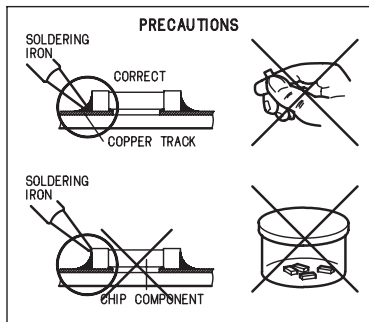
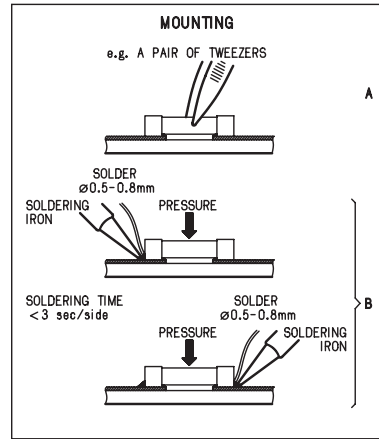
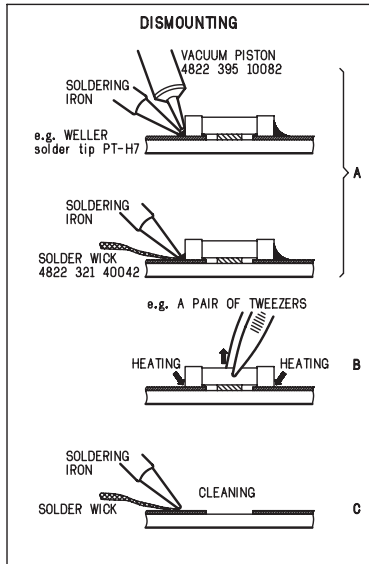
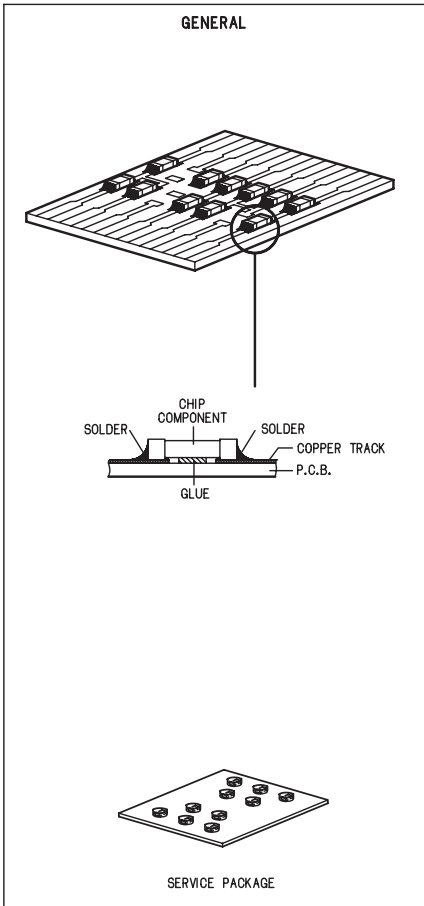
GB 3141 785 31132

Version 1.2



PHILIPS

HANDLING CHIP COMPONENTS



GB WARNING

All ICs and many other semiconductors 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 wristband with resistance. Keep components and tools at this potential.

ESD



NL WAARSCHUWING

Alle IC's en vele andere halfgeleiders zijn gevoelig voor electrostatische ontladingen (ESD). Onzorgvuldig behandelen tijdens reparatie kan de levensduur drastisch doen verminderen. Zorg ervoor dat u tijdens reparatie via een polsband met weerstand verbonden bent met hetzelfde potentiaal als de massa van het apparaat. Houd componenten en hulpmiddelen ook op 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 enfilez le bracelet seré d'une résistance de sécurité. Veiller à ce que les composants ainsi que les outils que l'on utilise soient également à ce potentiel.

D WARNUNG

Alle ICs und viele andere Halbleiter sind empfindlich gegenüber elektrostatischen Entladungen (ESD). Unvorsichtige Behandlung im Reparaturfall kann die Lebensdauer drastisch reduzieren. Sorgen Sie dafür, daß Sie im Reparaturfall über ein Pulsarmband mit Widerstand mit dem Massepotential des Gerätes verbunden sind. Halten Sie Bauteile und Hilfsmittel ebenfalls auf diesem Potential.

I AVVERTIMENTO

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

GB

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

F

Les normes de sécurité exigent que l'appareil soit remis à l'état d'origine et que soient utilisées les pièces de rechange identiques à celles spécifiées. Les composants de sécurité sont marqués

SAFETY



D

Bei jeder Reparatur sind die geltenden Sicherheitsvorschriften zu beachten. Der Originalzustand des Gerätes darf nicht verändert werden. Für Reparaturen sind Originalersatzteile zu verwenden. Sicherheitsbauteile sind durch das Symbol markiert.

NL

Veiligheidsbepalingen vereisen, dat het apparaat in zijn oorspronkelijke toestand wordt teruggebracht en dat onderdelen, identiek aan de gespecificeerde, worden toegepast. De Veiligheidsonderdelen zijn aangeduid met het symbool

I

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

GB

DANGER: Invisible laser radiation when open. AVOID DIRECT EXPOSURE TO BEAM.

S

Varning ! Osynlig laserstrålning när apparaten är öppnad och spårer är urkopplad. Betrakta ej strålen.

NL

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



Varoitus !

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

GB

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

F

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

TECHNICAL SPECIFICATIONS

AMPLIFIER

Output power 2 x 2W RMS
 4W total power
 Signal-to-noise ratio ≥ 62 dBA (IEC)
 Frequency response 60 – 16000 Hz, ± 3 dB
 Impedance loudspeakers 8 Ω
 Impedance headphones 32 Ω – 1000 Ω

CD PLAYER

Frequency range 20 – 20000 Hz
 Signal-to-noise ratio 75 dBA

TUNER

FM wave range 87.5 – 108 MHz
 AM wave range 530 – 1700 kHz
 Sensitivity at 75 Ω
 – mono, 26 dB signal-to-noise ratio 2.8 μ V
 – stereo, 46 dB signal-to-noise ratio 61.4 μ V
 Selectivity ≥ 28 dB
 Total harmonic distortion $\leq 5\%$
 Frequency response 63 – 12500 Hz (± 3 dB)
 Signal-to-noise-ratio ≥ 50 dB

SPEAKERS

Bass reflex system
 Dimensions (w x h x d) .. 150 x 150 x 200 (mm)

GENERAL INFORMATION

AC Power - / 3 7 120V / 60 Hz
 - / 1 2 230V / 50 Hz
 - / 5 5 / 9 6 / 9 8 1 2 0 - 230V
 6 0 / 5 0 Hz
 Dimensions (w x h x d) .. 150 x 150 x 220 (mm)
 Weight (with/without speakers)
 approx. 4.9 / 2.3 kg
 Standby power consumption < 3 W

Subject to modification

SERVICE TOOLS

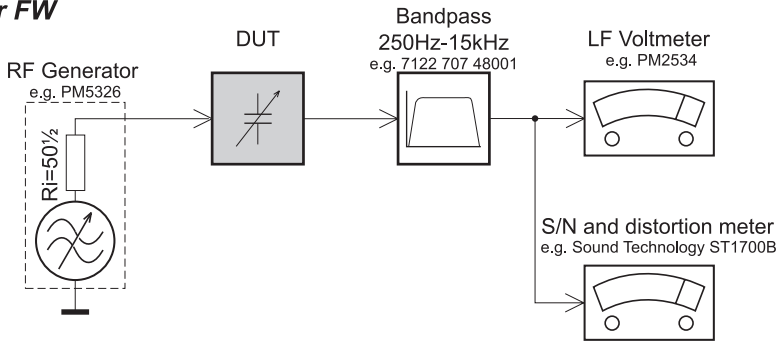
TORX T10 screwdriver with shaftlength 150mm.....4822 395 50423
TORX screwdriver set SBC 163.....4822 295 50145
Audio signal disc SBC 429.....4822 397 30184
Playability test disc SBC 444.....4822 397 30245
Test disc 5 (disc without errors) +
Test disc 5A (disc with dropout errors, black spots and fingerprints)
 SBC 426/426A.....4822 397 30096
Burn in test disc (65 min. 1kHz signal at -30 dB level without "pause")4822 397 30155
Universal test cassette Fe SBC 420.....4822 397 30071

AVAILABLE ESD PROTECTION EQUIPMENT

anti-static table mat large 1200x650x1.25mm 4822 466 10953
 small 600x650x1.25mm 4822 466 10958
anti-static wristband 4822 395 10223
connection box (3 press stud connections, 1M Ω) 4822 320 11307
extendible cable (2m, 2M Ω , to connect wristband to connection box) 4822 320 11305
connecting cable (3m, 2M Ω , to connect table mat to connection box) 4822 320 11306
earth cable (1M Ω , to connect any product to mat or to connection box) 4822 320 11308
KIT ESD3 (combining all 6 prior products - small table mat) 4822 310 10671
wristband tester 4822 344 13999

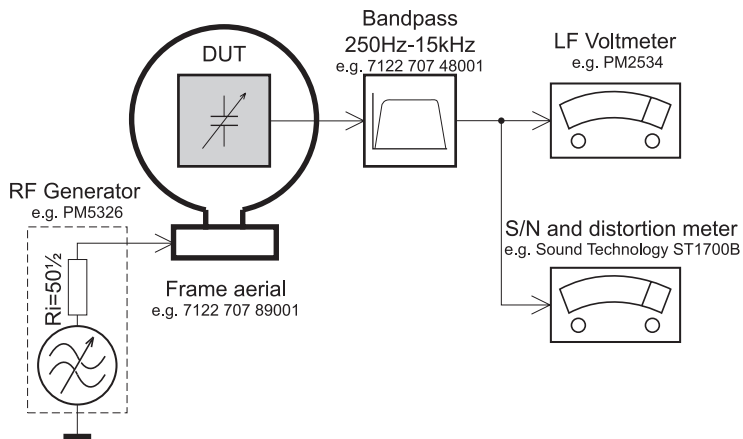
SERVICE MEASUREMENT

Tuner FW



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

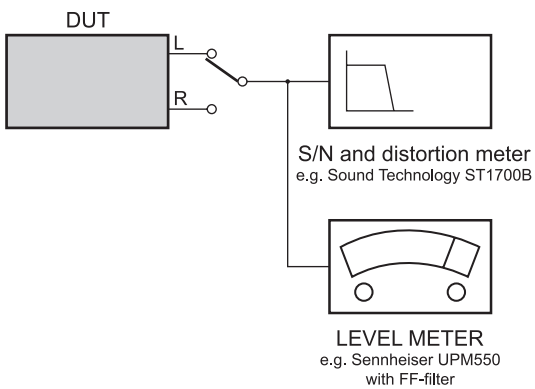
Tuner AM (MW,LW)



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

CD

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



CONNECTION AND CONTROLS

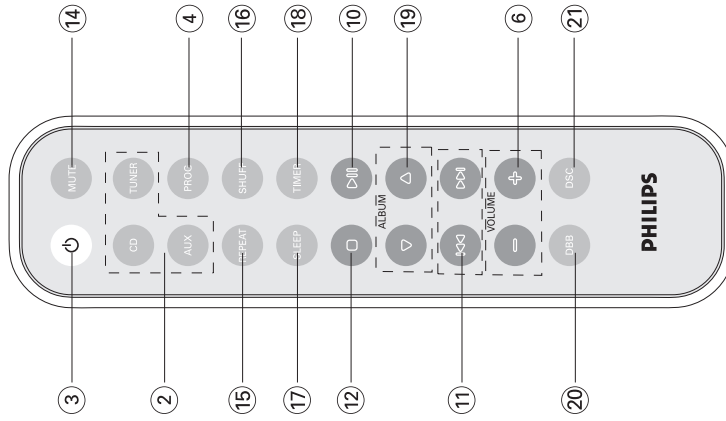
English

Controls on the system and remote control

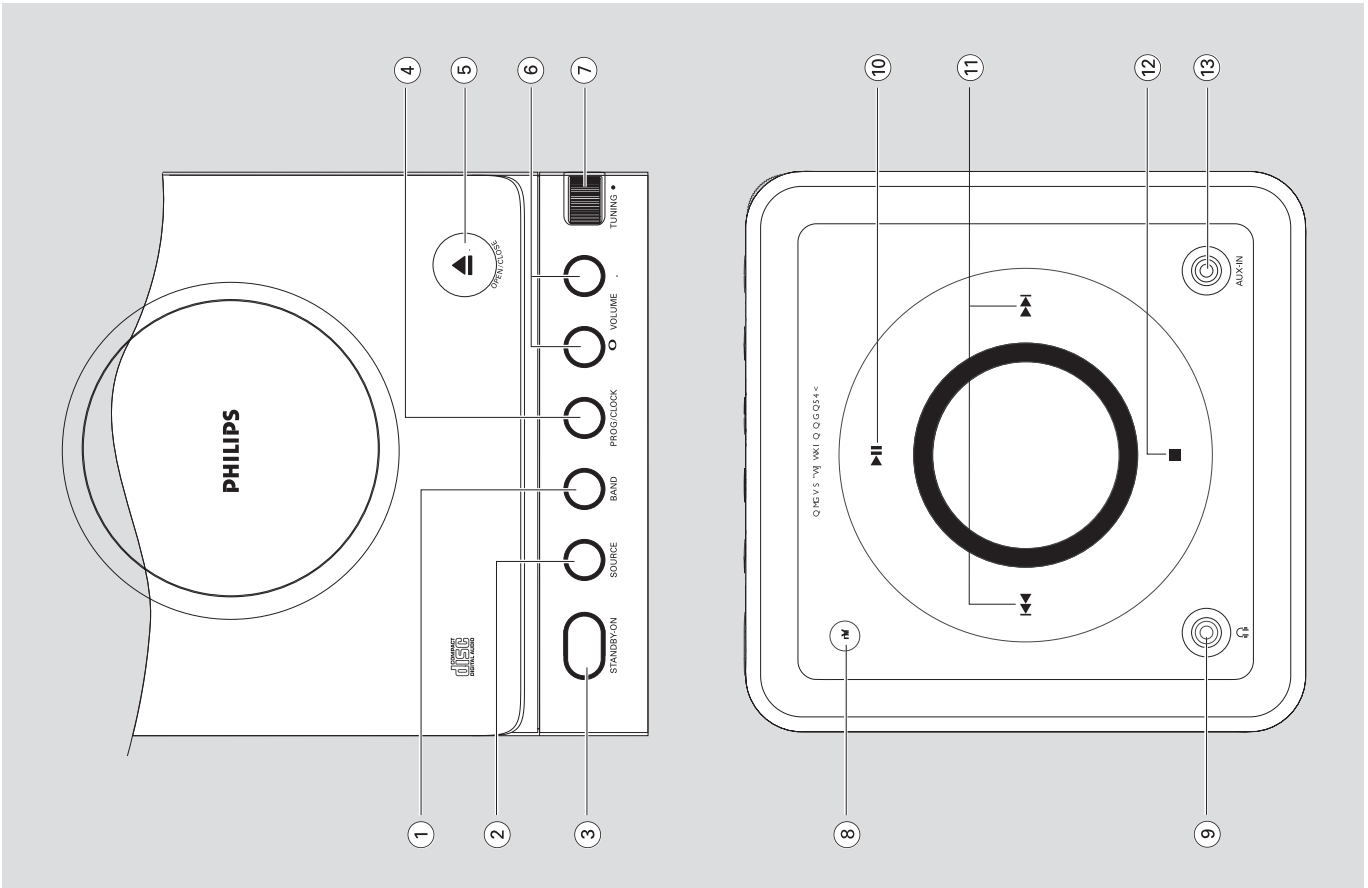
- 1 **BAND**
 - for Tuner (on the set only) selects waveband.
- 2 **SOURCE (CD/TUNER/AUX)**
 - switches on the system.
 - selects the respective sound source for CD/FM/AM/AUX.
- 3 **STANDBY-ON / ⏻**
 - switches the system to standby/on.
- 4 **PROG/CLOCK**
 - for CD programs tracks and reviews the program.
 - for clock..... sets the clock function.
- 5 **OPEN•CLOSE**
 - opens/closes the CD door.
- 6 **VOLUME - / +**
 - adjusts volume level.
- 7 **TUNING ●**
 - tunes to radio stations.
- 8 **IR SENSOR**
 - infrared sensor for remote control.
- 9 **📶**
 - connect headphones.
- 10 **▶ ||**
 - for CD starts or pauses CD playback.
- 11 **◀◀ / ▶▶**
 - skips to the beginning of a current track/previous/ next track.
 - fast searches back and forward within a track/ CD.
- 12 **STOP ■**
 - stops CD playback or erase a CD program.
- 13 **AUX IN**
 - connects to external audio source.
- 14 **MUTE**
 - switches playback sound off and on.
- 15 **REPEAT**
 - repeats a track/disc/all programmed tracks.
- 16 **SHUFF (SHUFFLE)**
 - plays CD/MP3 tracks in random order.
- 17 **SLEEP**
 - activates/deactivates or selects the sleeper time.

Controls

- 18 **TIMER**
 - activates/deactivates or sets the timer function.
- 19 **ALBUM ▼ ▲**
 - for MP3 disc selects an album.
- 20 **DBB**
 - (Dynamic Bass Boost) enhances the bass.
- 21 **DSC**
 - (Digital Sound Control) selects sound characteristics: JAZZ/POP/CLASSIC/ROCK.



- Notes for remote control:**
- First select the source you wish to control by pressing one of the source select keys on the remote control (for example CD, TUNER).
 - Then select the desired function (for example ▶, ◀, ▲, ▼).



CONNECTION AND CONTROLS

Troubleshooting

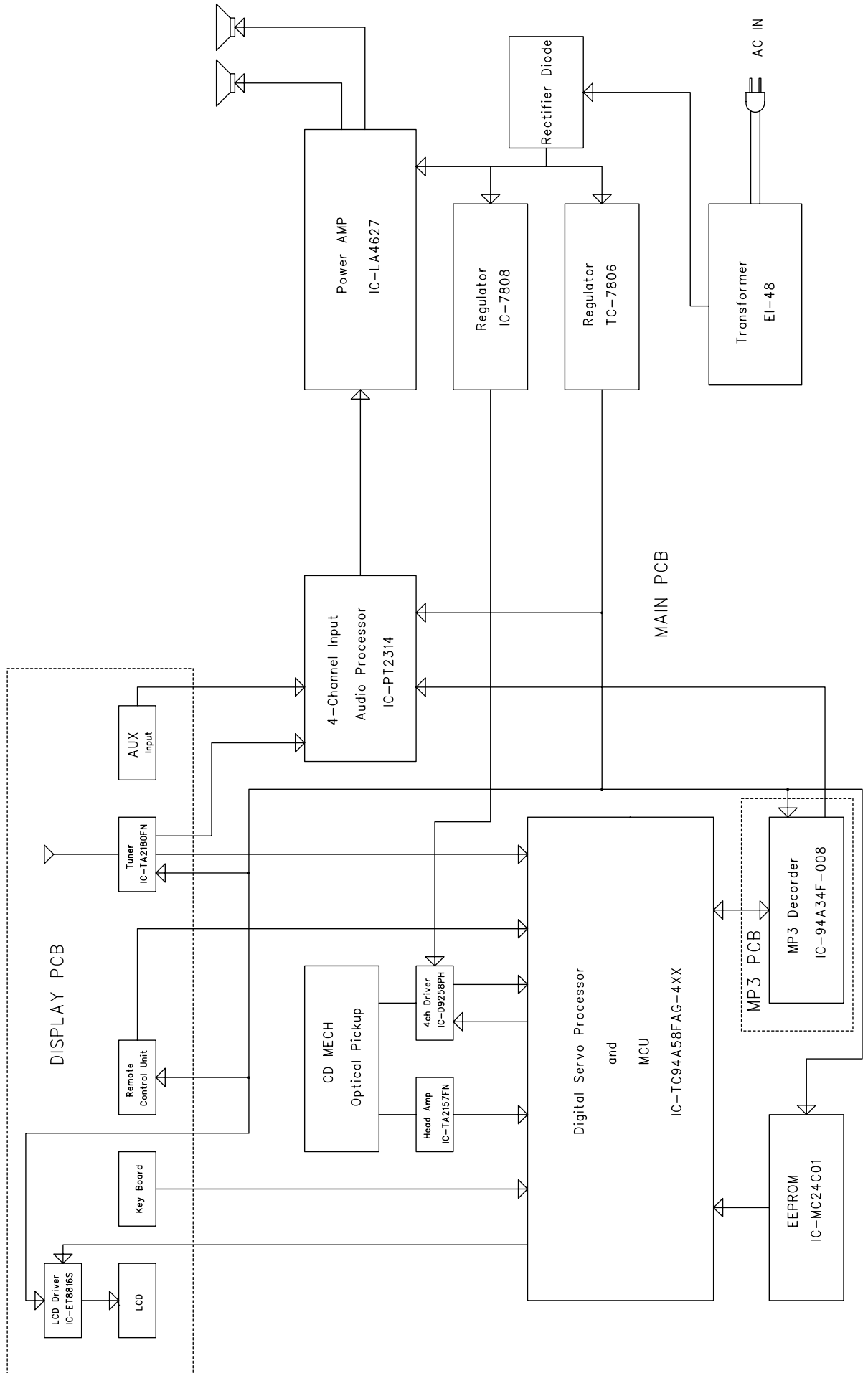
WARNING

Under no circumstances should you try to repair the system yourself, as this will invalidate warranty. Do not open the system as there is a risk of electric shock.

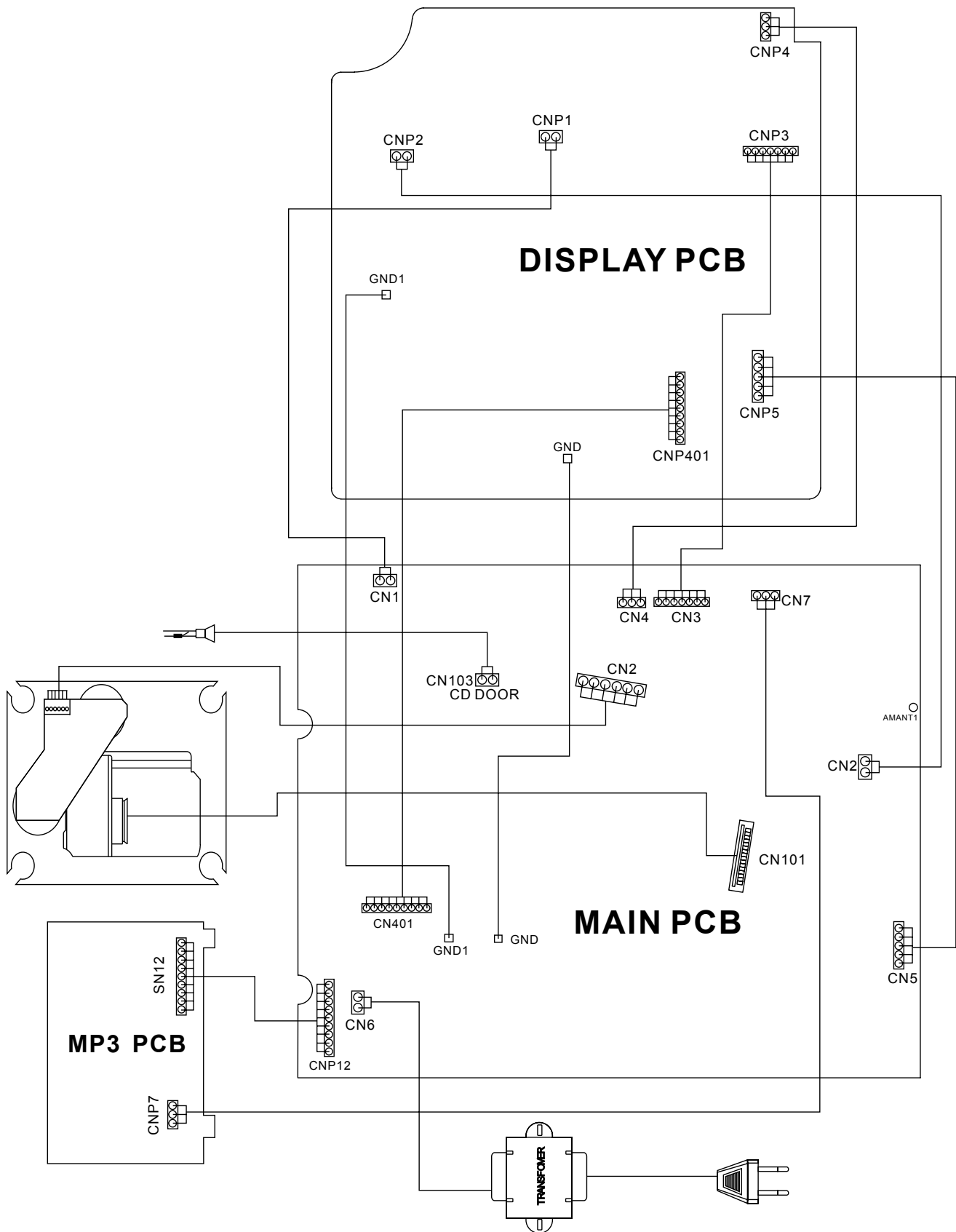
If a fault occurs, first check the points listed below before taking the system for repair. If you are unable to remedy a problem by following these hints, consult your dealer or service centre.

Problem	Solution
CD OPERATION	
"NO cd " is displayed.	<ul style="list-style-type: none"> - Insert a disc. - Check if the disc is inserted upside down. - Wait until the moisture condensation at the disc has cleared. - Replace or clean the disc, see "Maintenance". - Use a finalised CD-RW or CD-R, or a correct MP3-CD format disc.
RADIO RECEPTION	
Radio reception is poor.	<ul style="list-style-type: none"> - If the signal is too weak, adjust the antenna or connect an external antenna for better reception. - Increase the distance between the Micro H System and your TV or VCR.
GENERAL	
The system does not react when buttons are pressed.	<ul style="list-style-type: none"> - Remove and reconnect the AC power plug switch on the system again.
Sound cannot be heard or is of poor quality.	<ul style="list-style-type: none"> - Adjust the volume. - Disconnect the headphones. - Check that the speakers are connected correctly. - Check if the stripped speaker wire is clamped. - Make sure the MP3-CD was recorded with a 32-256 kbps bit rate with sampling frequency at 48 kHz, 44.1 kHz or 32 kHz.
The left and right sound outputs are reversed.	<ul style="list-style-type: none"> - Check the speaker connections and location.
The remote control does not function properly.	<ul style="list-style-type: none"> - Select the source (CD or TUNER, for example) before pressing the function button (▶, ◀). - Reduce the distance between the remote control and the system.

SET BLOCK DIAGRAM



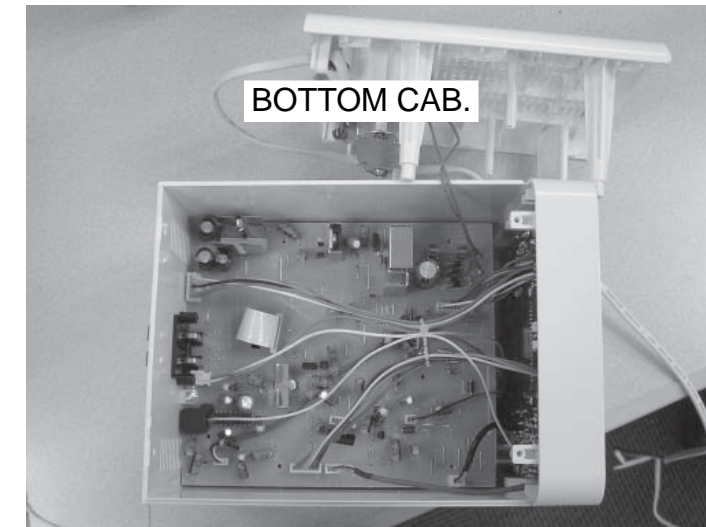
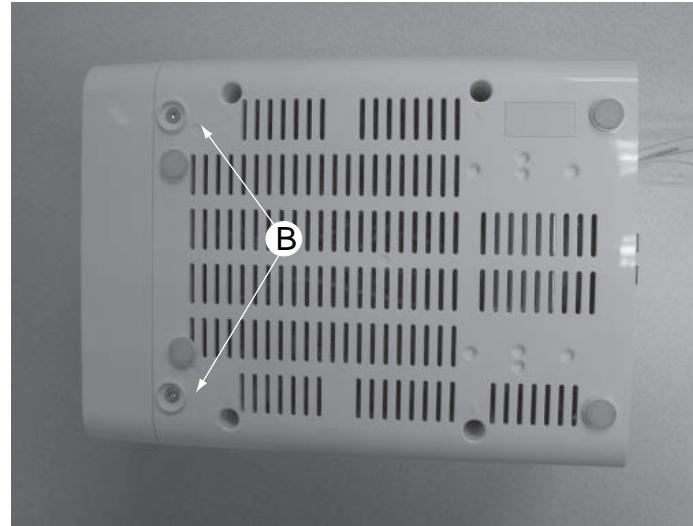
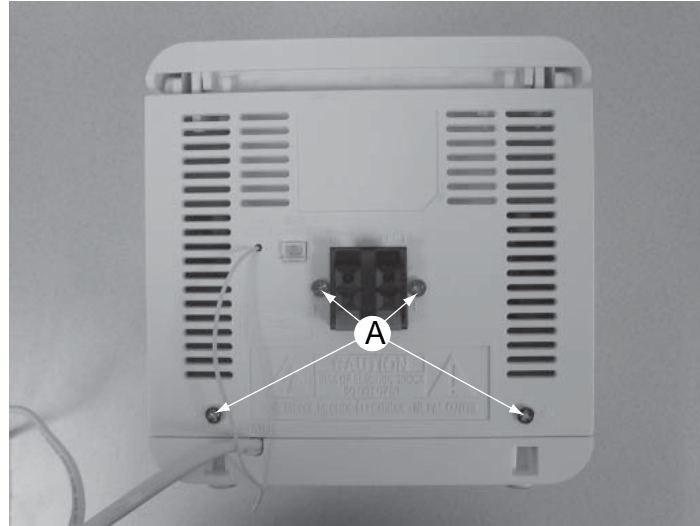
SET WIRING DIAGRAM



DISASSEMBLY DIAGRAM

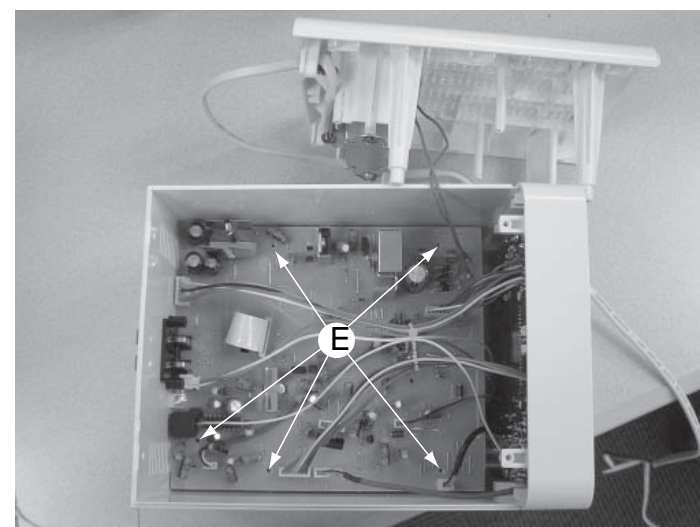
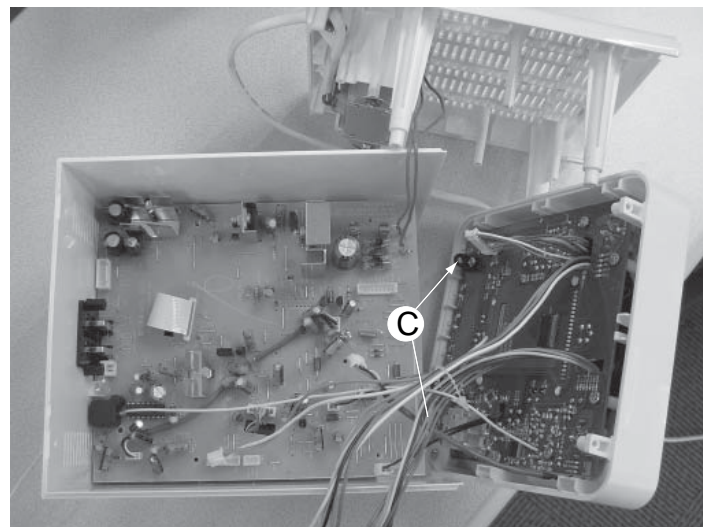
Dismantling of the Bottom Cabinet

- 1) Remove 4 screws A as indicated to loosen the Rear Cabinet.
- 2) Remove 2 screws B as indicated to loosen the Bottom Cabinet.

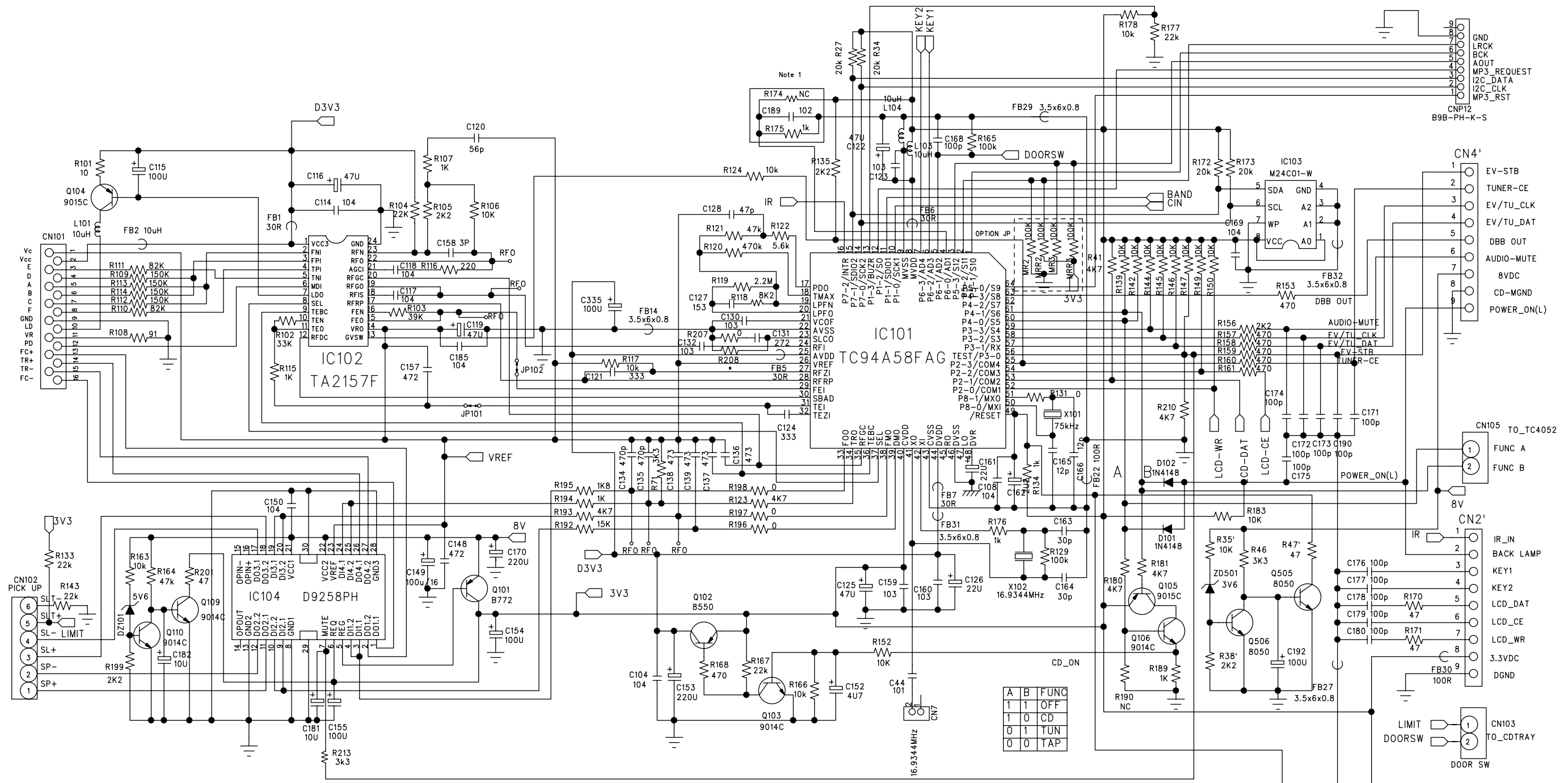


Dismantling of the Front Cabinet and Main Board

- 1) Remove 2 screws C as indicated to loosen the Front Cabinet.
- 2) Remove 5 screws D as indicated to loosen the Main Board.



CIRCUIT DIAGRAM - MAIN BOARD(only for -/37) CD PART



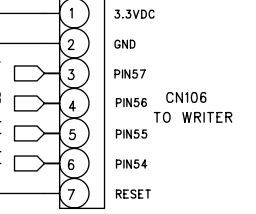
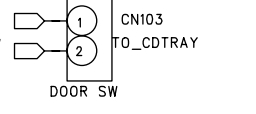
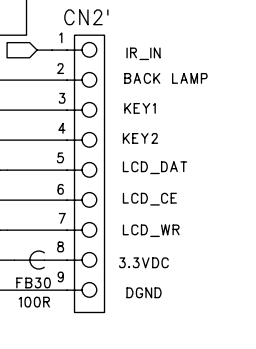
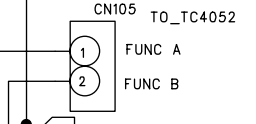
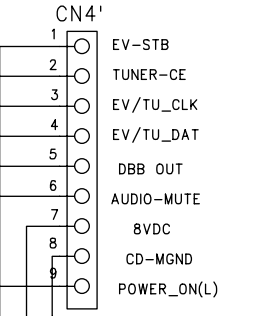
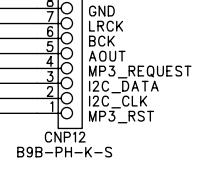
AREA	HOUR	MR3	MRR3
USA	12H	4K7	X
EUR	24H	X	4K7

AREA	BAND	FR.RANGE(Hz)	STEP	IF(Hz)
USA	FM	87.50-108.00M	100K	10.7M
	AM	530-1700K	10K	450K
EUR	FM	87.50-108.00M	50K	10.7M
	MW	531-1602K	9K	450K

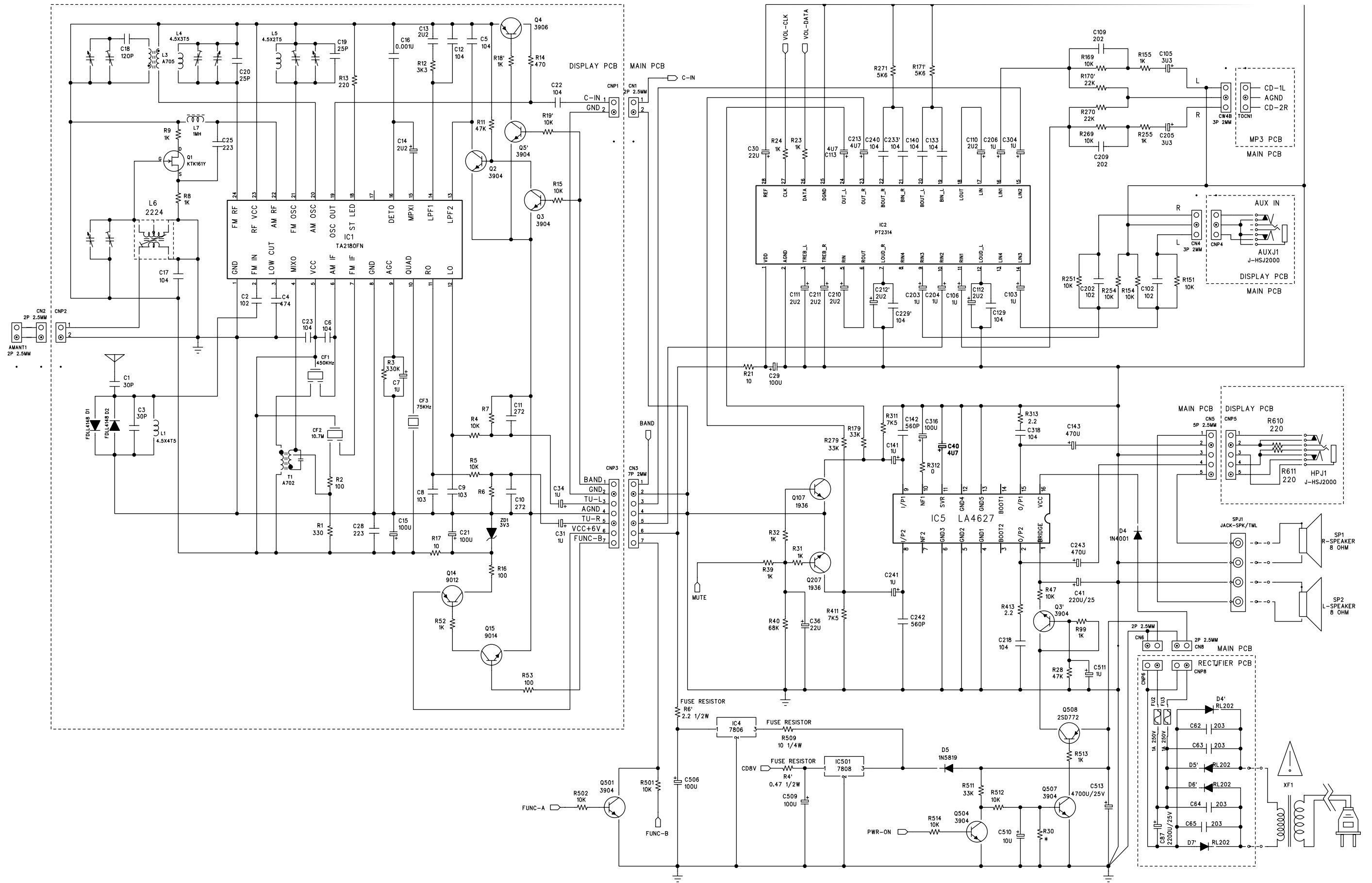
NOTES:PIN4 PUH&CLK SELECT (R174,R175)

A/D VAULE	PICKUP MECHANISM	AREA	R174	R175
0.00-0.28V	SONY KSS-213C	EURO	OPEN	1K
0.28-0.70V	SONY KSS-213C	USA	10K	1K8
0.70-1.11V	SONY KSS-213C	APEC	10K	3K9
1.13-1.57V	SONY KSS-213C	APEC	10K	6K8
1.57-2.04V	SANYO DA11	EURO	4K7	5K6
2.04-2.50V	SANYO DA11	USA	4K7	22K
2.50-2.96V	SANYO DA11	APEC	10K	47K
2.96-3.30V	SANYO DA11	APEC	1K	OPEN

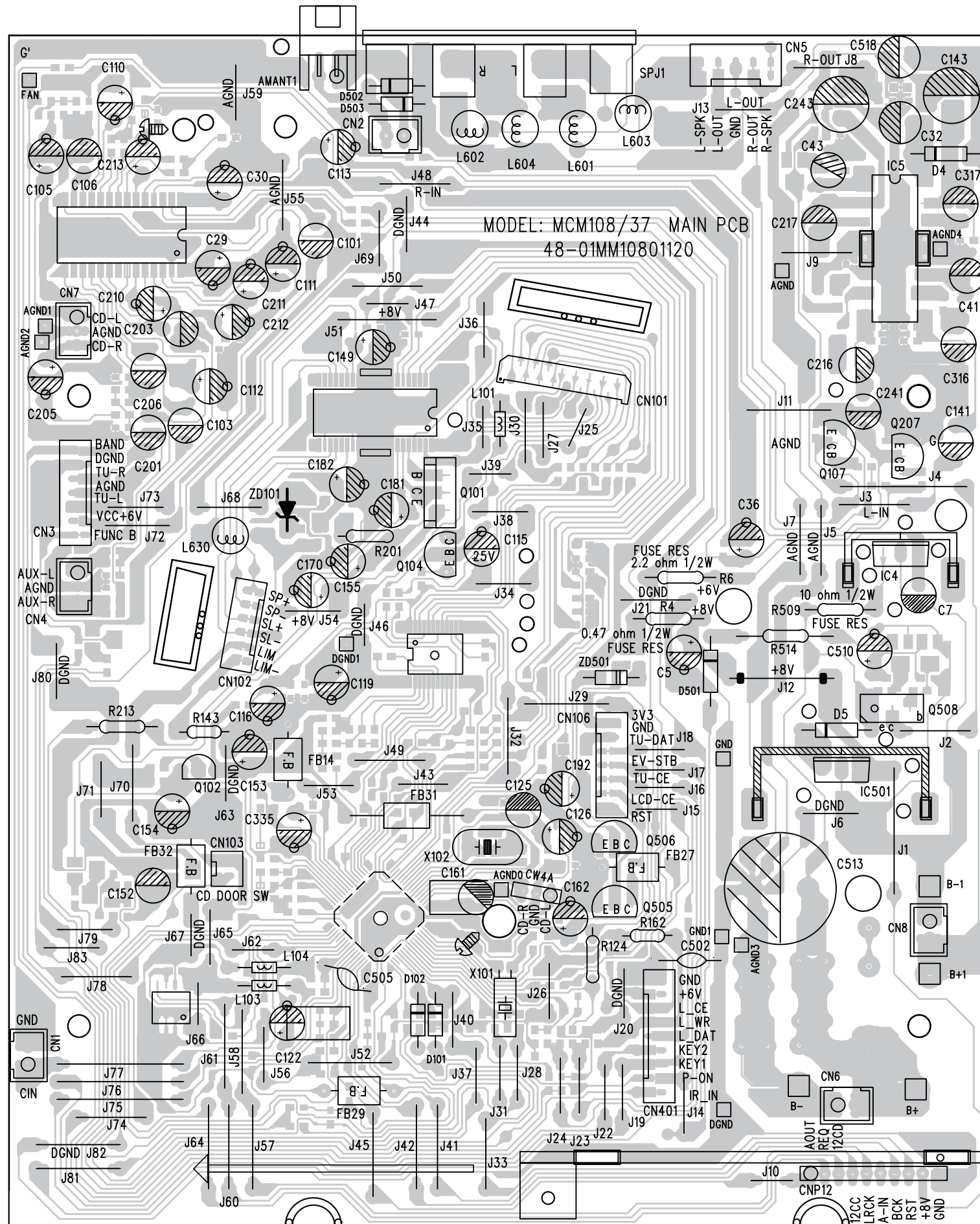
A	B	FUNC
1	1	OFF
1	0	CD
0	1	TUN
0	0	TAP



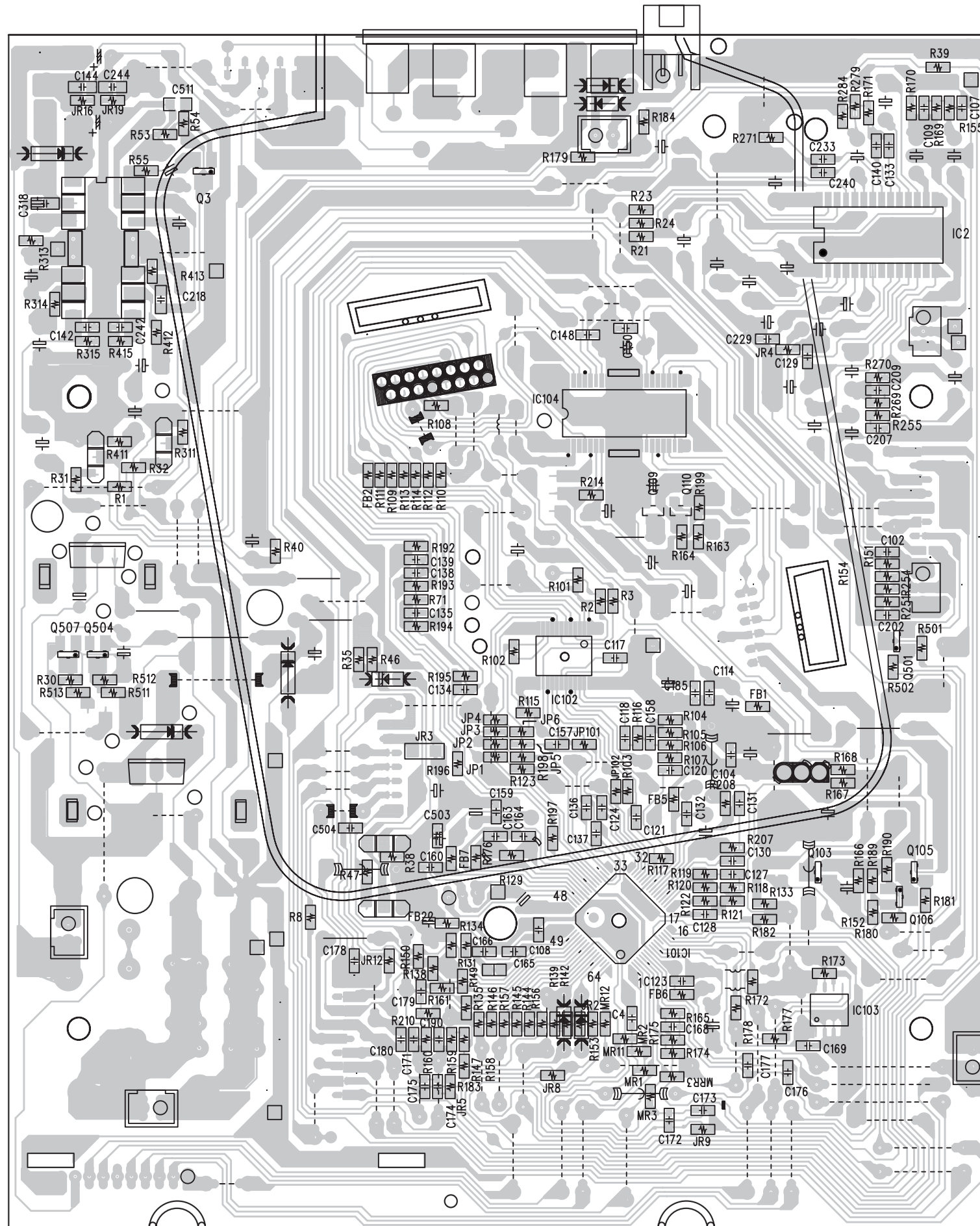
CIRCUIT DIAGRAM - MAIN BOARD (only for -/37) TUNER & POWER AMP PART



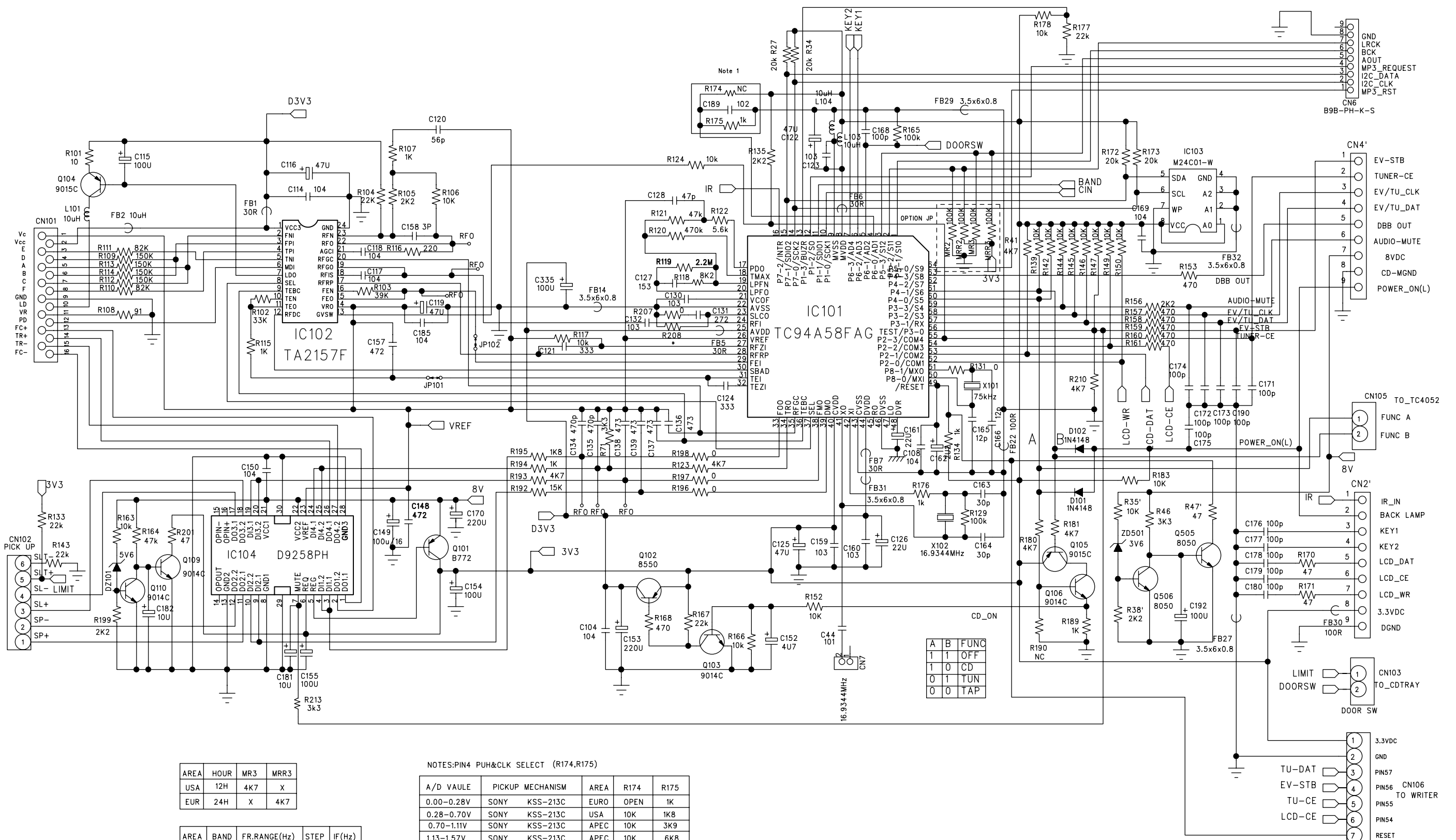
LAYOUT DIAGRAM - MAIN BOARD(only for -/37) COMPONENT SIDE



LAYOUT DIAGRAM - MAIN BOARD (only for -/37) COPPER SIDE



CIRCUIT DIAGRAM - MAIN BOARD(not for -/37) CD PART



AREA	HOUR	MR3	MRR3
USA	12H	4K7	X
EUR	24H	X	4K7

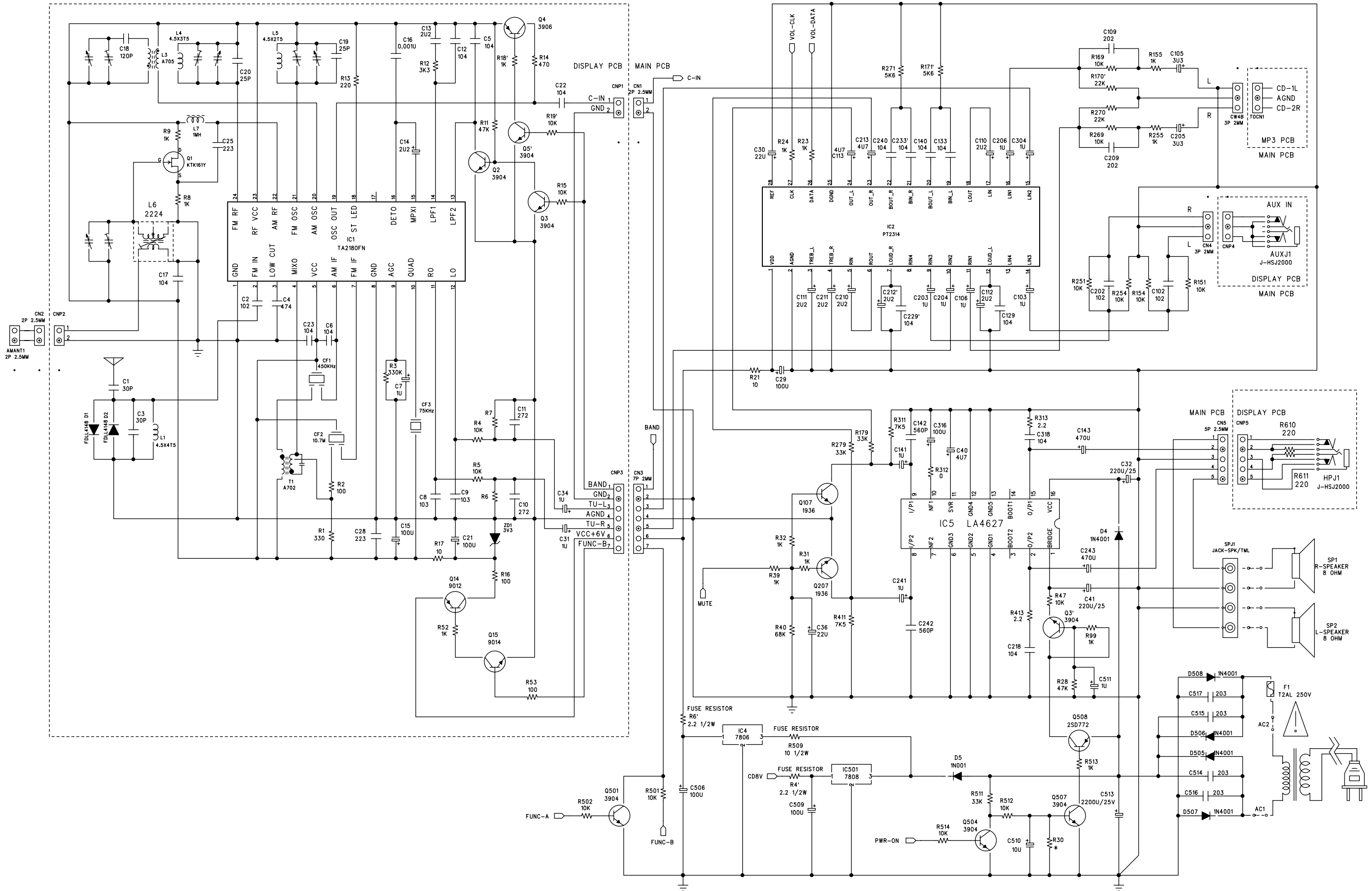
AREA	BAND	FR.RANGE(Hz)	STEP	IF(Hz)
USA	FM	87.50-108.00M	100K	10.7M
	AM	530-1700K	10K	450K
EUR	FM	87.50-108.00M	50K	10.7M
	MW	531-1602K	9K	450K

NOTES:PIN4 PUH&CLK SELECT (R174,R175)

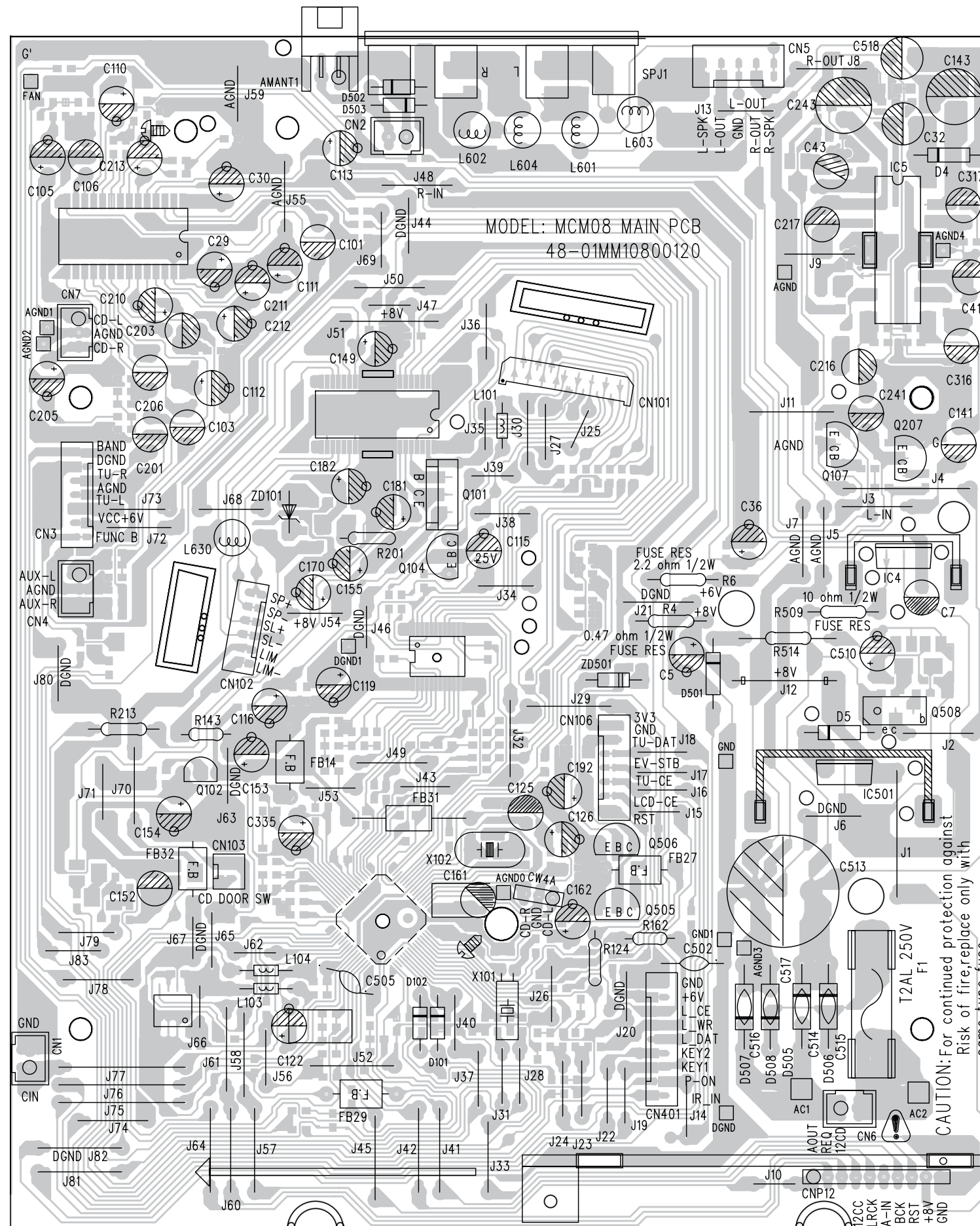
A/D VAULE	PICKUP MECHANISM	AREA	R174	R175
0.00-0.28V	SONY KSS-213C	EURO	OPEN	1K
0.28-0.70V	SONY KSS-213C	USA	10K	1K8
0.70-1.11V	SONY KSS-213C	APEC	10K	3K9
1.13-1.57V	SONY KSS-213C	APEC	10K	6K8
1.57-2.04V	SANYO DA11	EURO	4K7	5K6
2.04-2.50V	SANYO DA11	USA	4K7	22K
2.50-2.96V	SANYO DA11	APEC	10K	47K
2.96-3.30V	SANYO DA11	APEC	1K	OPEN

A	B	FUNC
1	1	OFF
1	0	CD
0	1	TUN
0	0	TAP

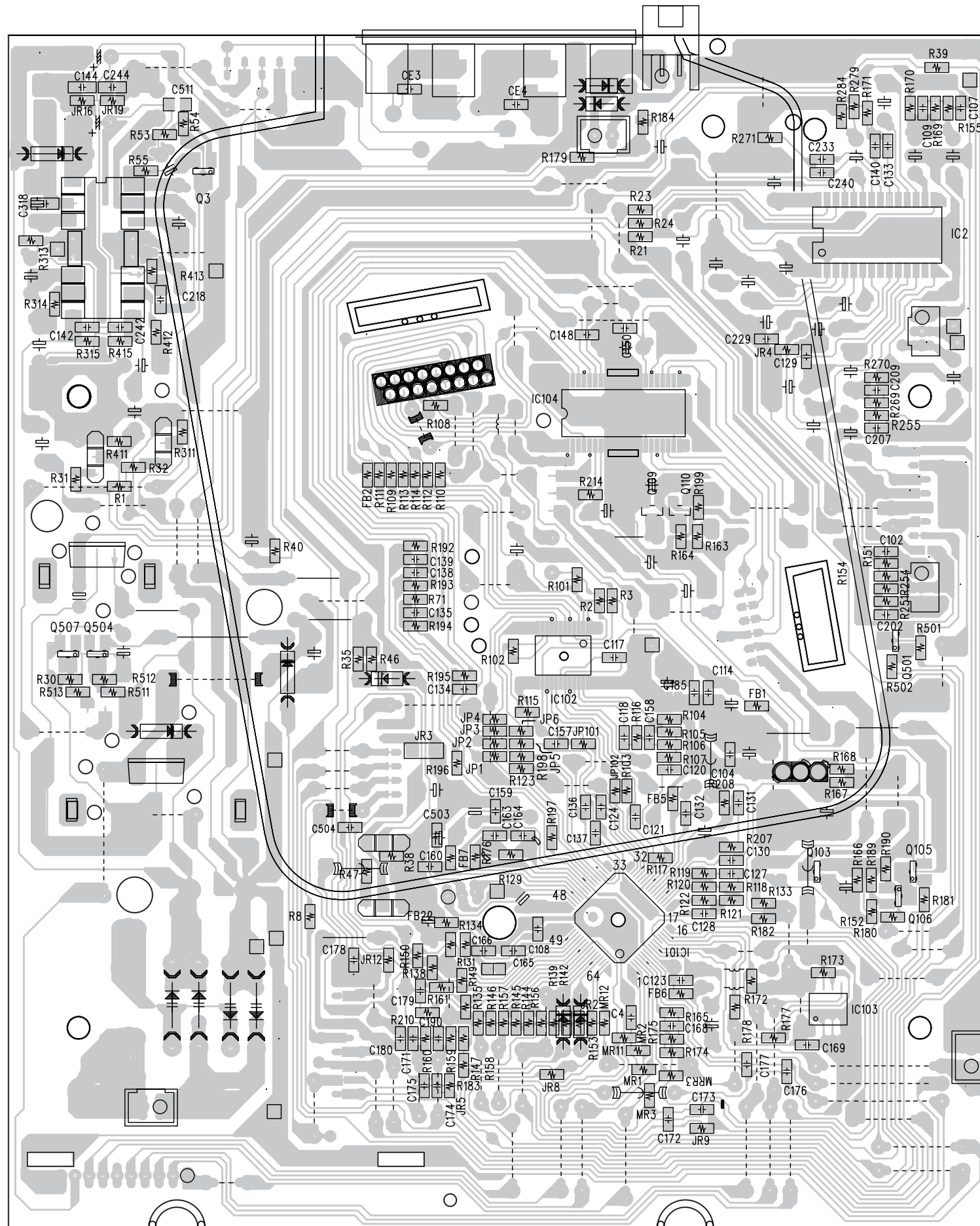
CIRCUIT DIAGRAM - MAIN BOARD (not for -/37) TUNER & POWER AMP PART



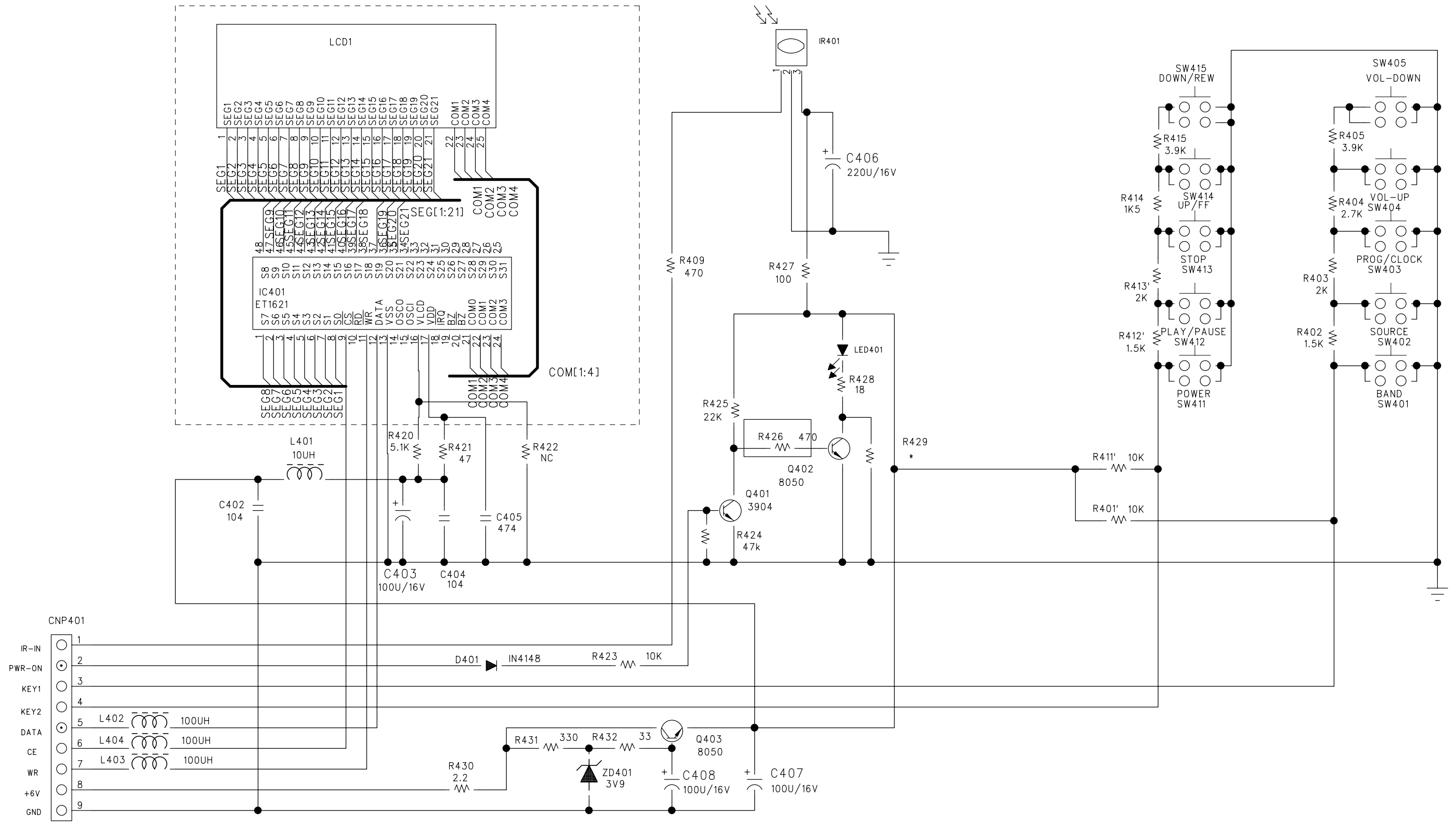
LAYOUT DIAGRAM - MAIN BOARD(not for -J37) COMPONENT SIDE



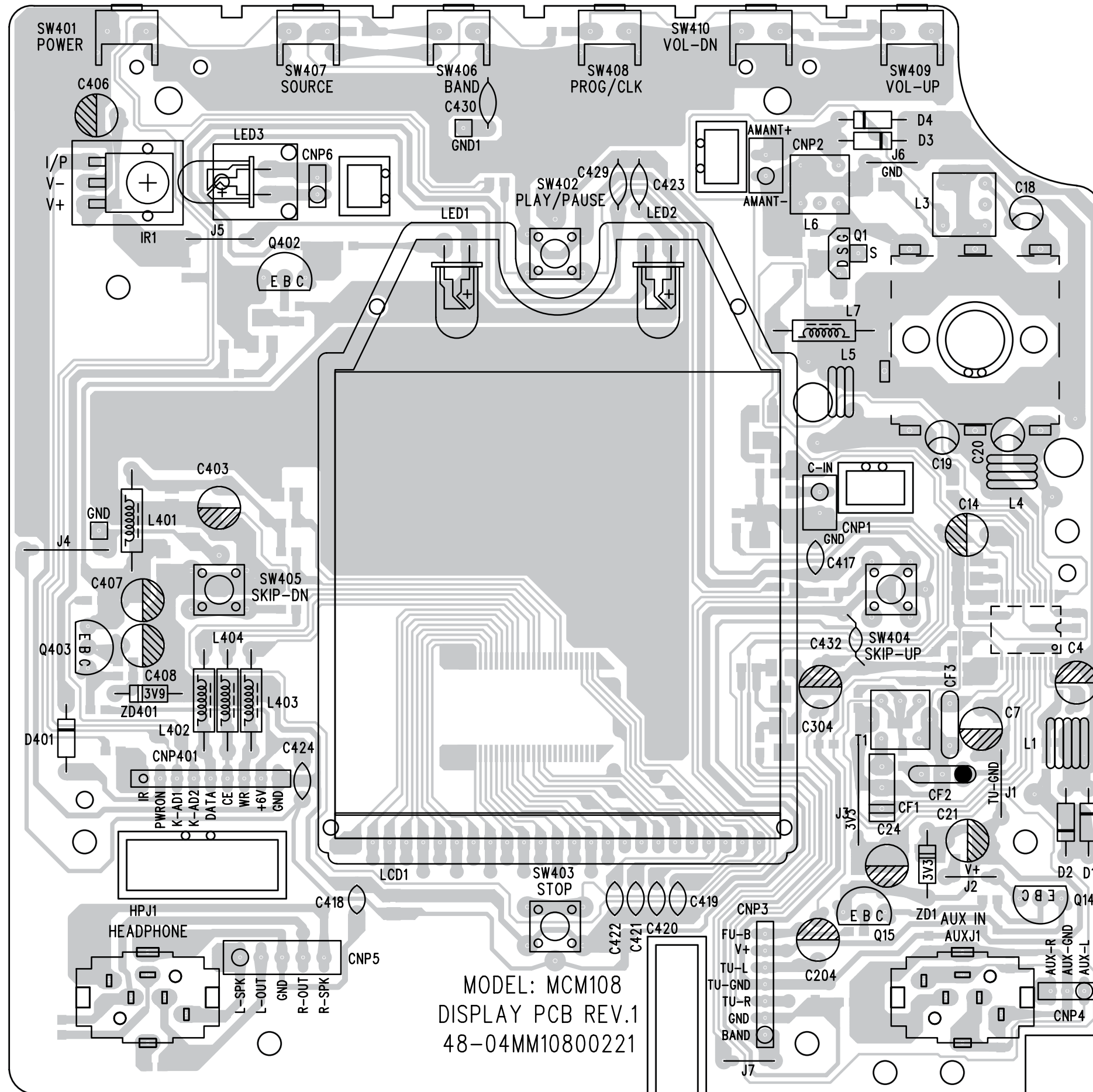
LAYOUT DIAGRAM - MAIN BOARD(not for -/37) COPPER SIDE



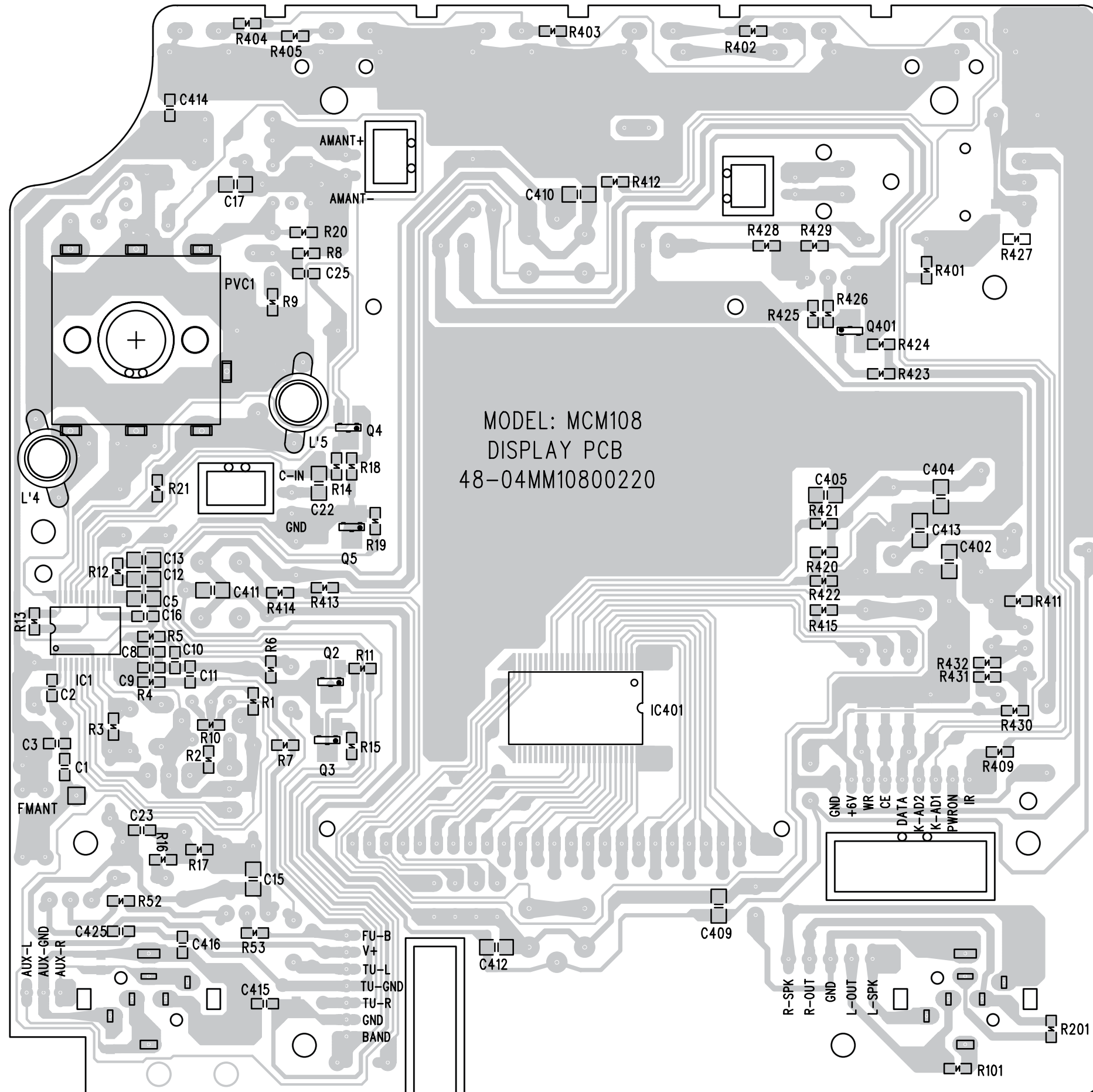
CIRCUIT DIAGRAM - DISPLAY BOARD



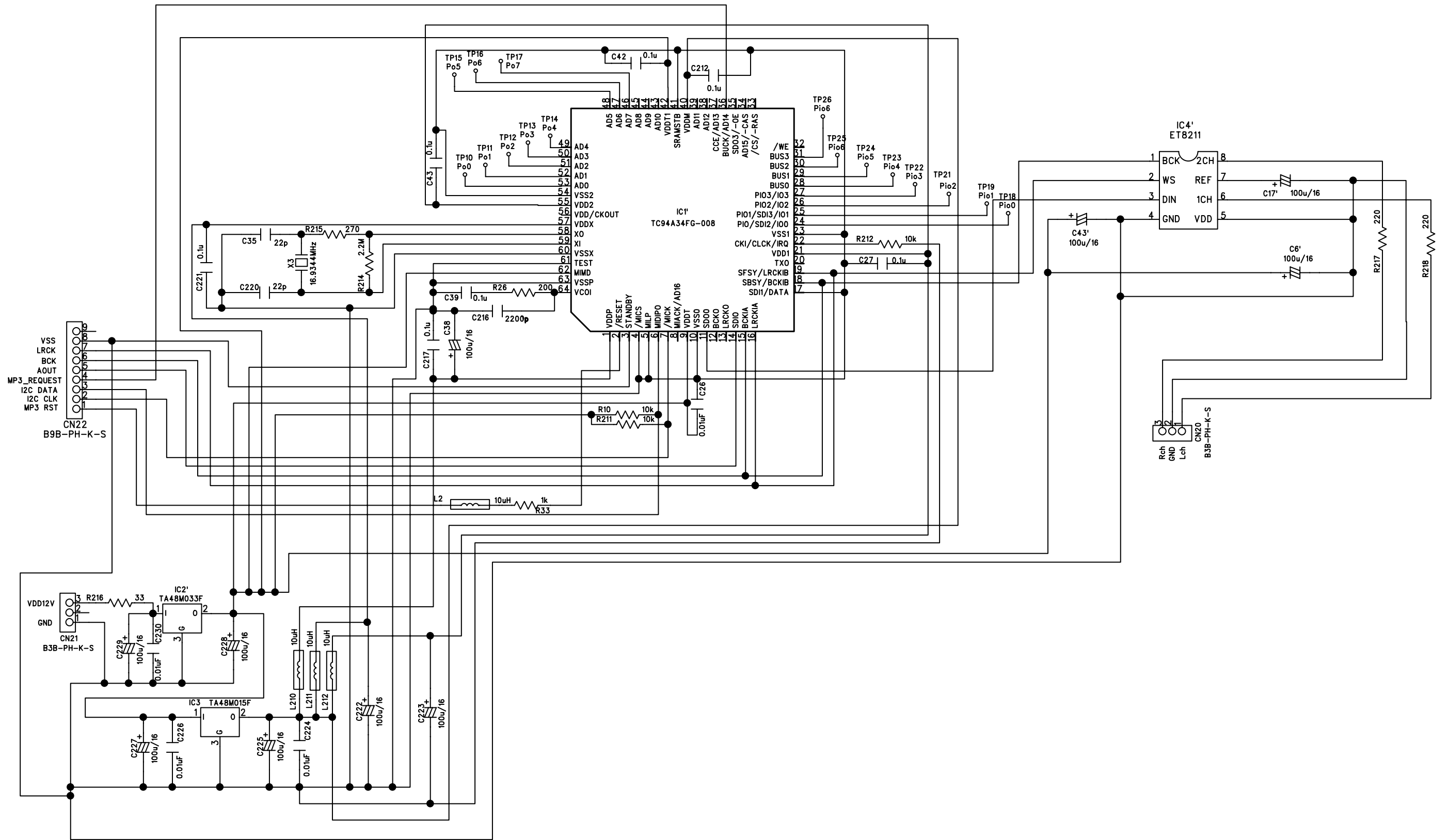
LAYOUT DIAGRAM - DISPLAY BOARD
COMPONENT SIDE



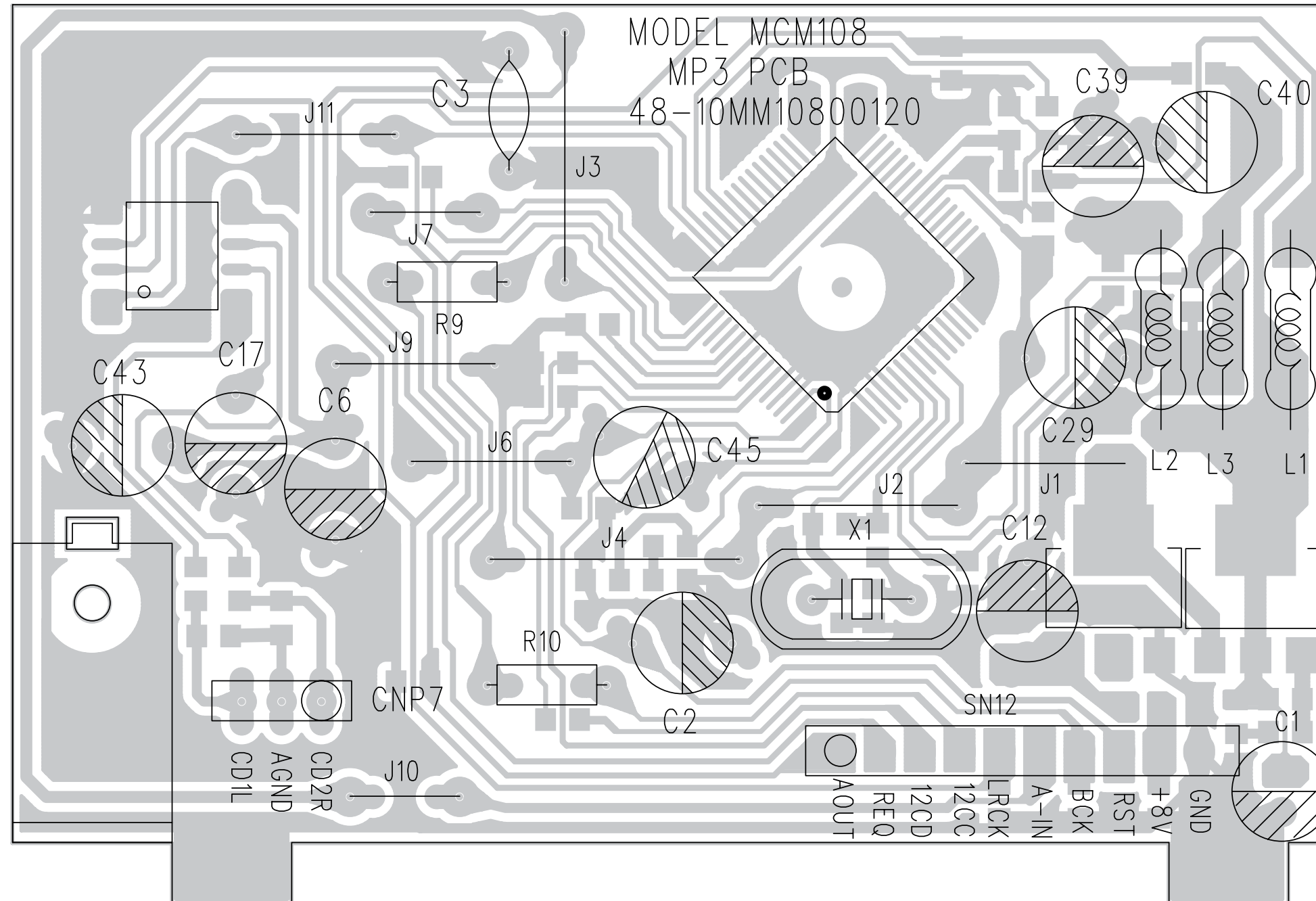
LAYOUT DIAGRAM - DISPLAY BOARD COPPER SIDE



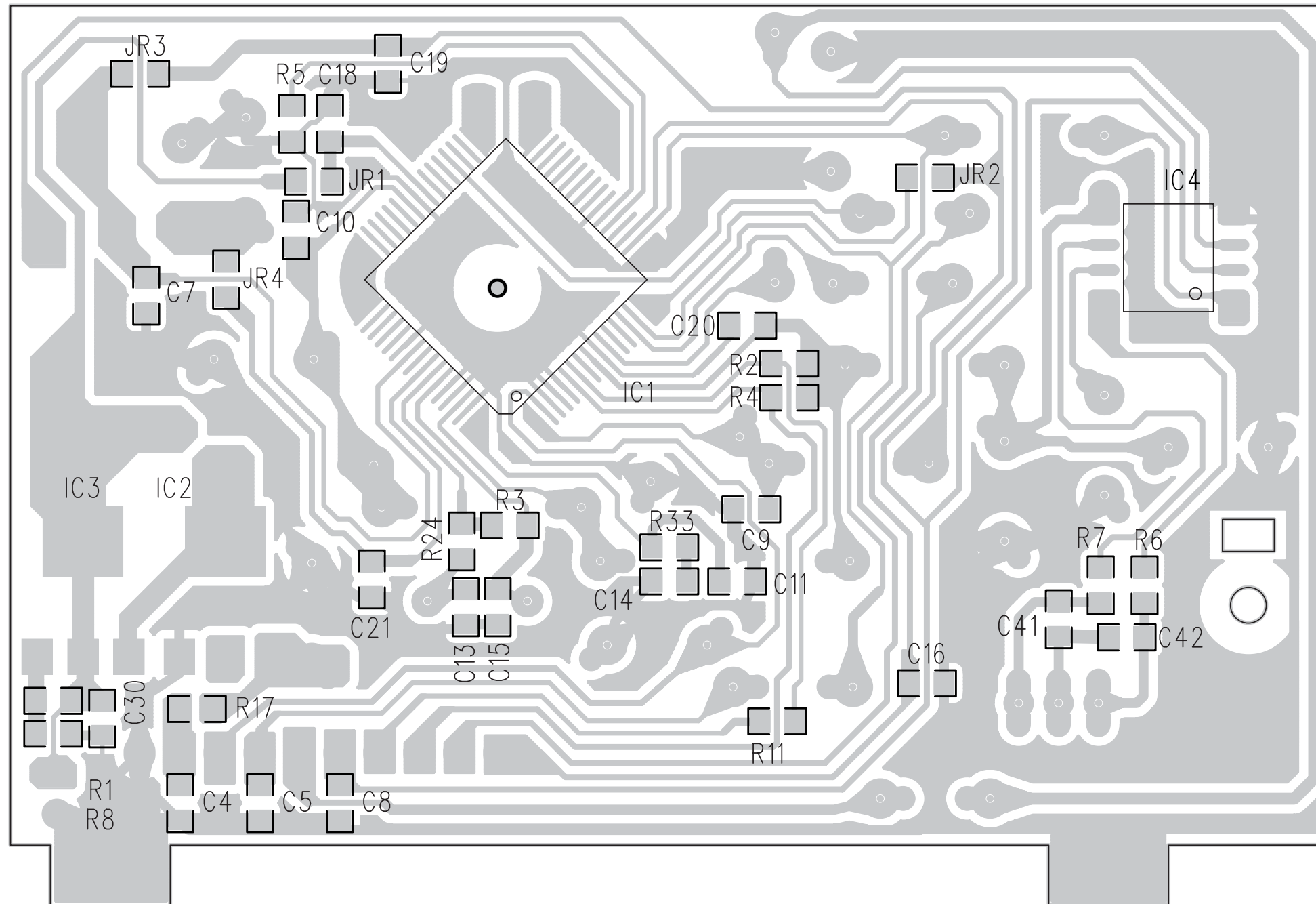
CIRCUIT DIAGRAM - MP3 BOARD



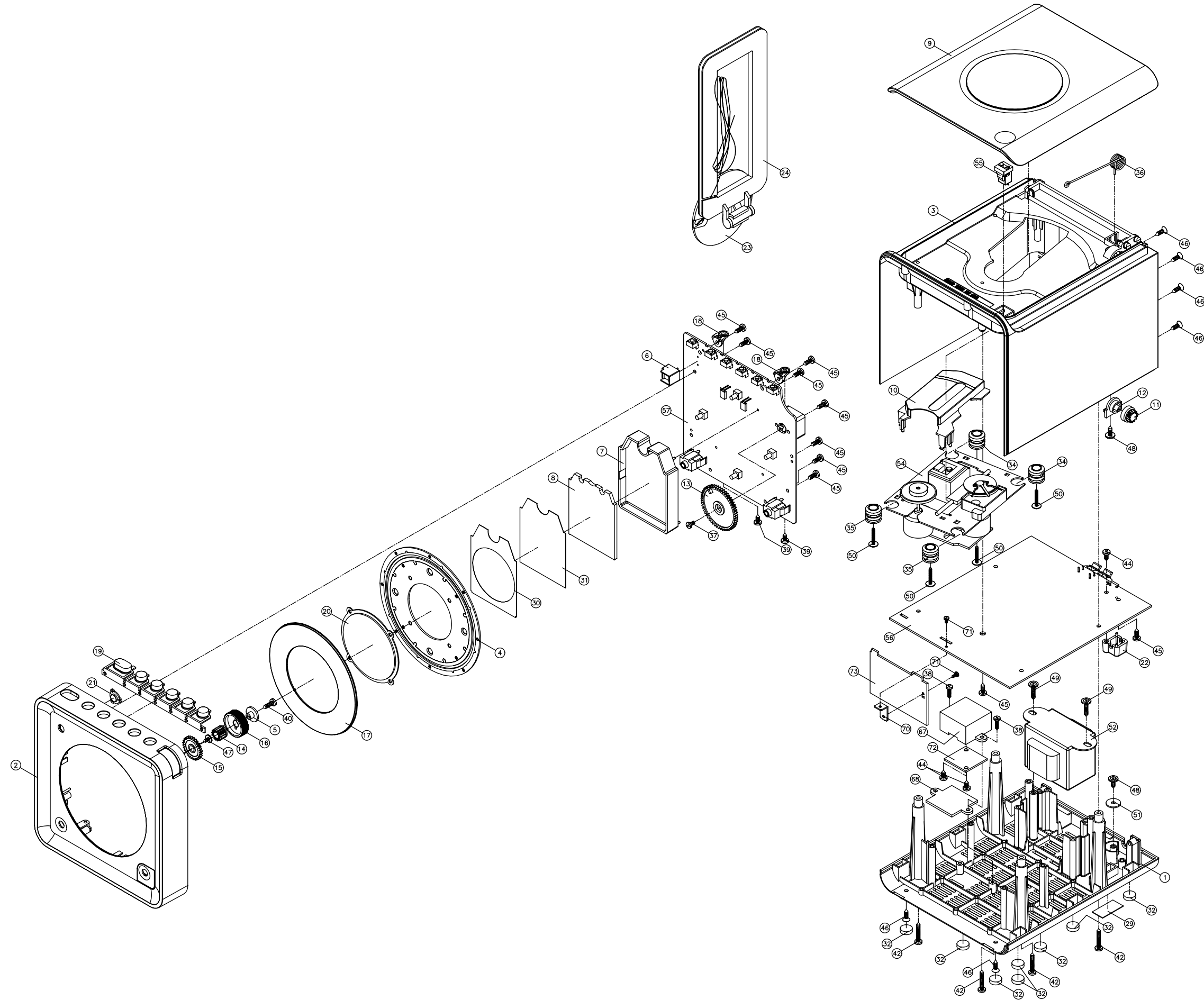
LAYOUT DIAGRAM - MP3 BOARD
COMPONENT SIDE



LAYOUT DIAGRAM - MP3 BOARD
COPPER SIDE



SET EXPLODED VIEW DIAGRAM



MECHANICAL PARTSLIST

1	9965 000 39695	BOTTOM CABINET(BLK)	(MCM108B)
1	9965 000 39693	BOTTOM CABINET (WHITE)	(MCM108)
1	9965 000 40366	BOTTOM CABINET (PINK)	(MCM108C)
2	9965 000 39696	FRONT CABINET(BLK)	(MCM108B)
2	9965 000 39333	FRONT CABINET(WHITE)	(MCM108)
2	9965 000 40367	FRONT CABINET(PINK)	(MCM108C)
3	9965 000 39697	REAR CAB ABS (BLACK)	(MCM108B)
3	9965 000 39694	REAR CAB ABS (WHITE)	(MCM108)
3	9965 000 40368	REAR CAB ABS (PINK)	(MCM108C)
4	9965 000 39339	RUBBER RING	
8	9940 000 05397	BACK LIGHT LENS	
9	9965 000 39698	CD DOOR(BLK)	(MCM108B)
9	9965 000 39334	CD DOOR(WHITE)	(MCM108)
9	9965 000 40369	CD DOOR (PINK)	(MCM108C)
10	9940 000 04392	LASER COVER (FOR SANYO CD)	
11	9940 000 05406	CD GEAR	
12	9940 000 05407	CD GEAR BRACKET	
13	9940 000 05408	PVC GEAR	
14	9940 000 05409	TUNING GEAR 1	
15	9940 000 05411	TUNING GEAR 2	
16	9965 000 39699	TUNING KNOB (BLK)	(MCM108B)
16	9965 000 39335	TUNING KNOB (WHITE)	(MCM108)
16	9965 000 40370	TUNING KNOB (PINK)	(MCM108C)
17	9965 000 39358	CD BUTTONS PLATE(BLK)	(MCM108B)
17	9965 000 39340	CD BUTTOMS PLATE (WHITE)	(MCM108)
19	9965 000 39700	FUNCTION KNOB GROUP	(MCM108B)
19	9965 000 39336	FUNCTION KNOB GROUP	(MCM108)
19	9965 000 40371	FUNCTION KNOB GROUP(PINK)	(MCM108C)
20	9965 000 39337	DISPLAY LENS	
21	9965 000 39338	IR LENS	
34	9940 000 00505	CD DAMPER 658 TA 30	
35	9940 000 00506	CD DAMPER 658 TB 40	
36	9940 000 05401	CD DOOR SPRING	
52	9965 000 39366	TRANSFORMER EI48 120V	(MCM108B & MCM108C/37)
52	9965 000 39359	TRANSFORMER EI48 230V	(MCM108B/12)
52	9965 000 39375	TRANSFORMER EI48 117/234V	(MCM108B/96)
52	9965 000 39341	TRANSFORMER EI48 120V	(MCM108/37)
52	9965 000 39371	TRANSFORMER EI48 117/234V	(MCM108/96)
52	9965 000 39374	TRANSFORMER EI48 117/234V	(MCM108/98)
54	9940 000 05398	CD MECHANISM DA11B3VF	
55	9940 000 02354	CD DOOR SWITCH DLS-02-W-1	
	9965 000 39360	RUBBER FOOT(BLK)	(MCM108B)
	9965 000 39342	RUBBER FOOT(WHITE)	(MCM108)
	9965 000 40372	RUBBER FOOT(PINK)	(MCM108C)
	9940 000 01942	16P FFC 1MM L80MM	

ACCESSORIES

9965 000 39367	REMOTE ASS'Y "PHILIPS"(BLK)	(MCM108B/37)
9965 000 39361	REMOTE ASS'Y "PHILIPS"(BLK)	(MCM108B/12/96)
9965 000 39343	REMOTE ASS'Y "PHILIPS"(WHITE)	(MCM108/37)
9965 000 40373	REMOTE ASS'Y "PHILIPS"(PINK)	(MCM108C/37)
9965 000 39368	SPK BOX ASS'Y (2W)(L/R)(BLK)	(MCM108B/37)
9965 000 39362	SPK BOX ASS'Y (2W)(L/R)(BLK)	(MCM108B/12/96)
9965 000 40374	SPK BOX ASS'Y (2W)(L R)(PINK)	(MCM108C/37)
9965 000 39344	SPK BOX ASS'Y (2W)(L/R)(WHITE)	(MCM108/37)
9965 000 39363	AM LOOP ANT ASS'Y	(not for MCM108)
9940 000 05378	AM LOOP ANT ASS'Y(WHITE)	(MCM108)

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

ELECTRICAL PARTSLIST - MAIN BOARD

- IC & TRANSISTORS -

Q107	9940 000 04337	TRANSISTORS 2SD1936T-AC
Q207	9940 000 04337	TRANSISTORS 2SD1936T-AC
Q505	9965 000 39345	TRANSISTORS 2W 8050D
Q506	9965 000 39345	TRANSISTORS 2W 8050D
Q102	9965 000 39346	TRANSISTORS 2W 8550D
Q104	9940 000 04144	PNP TRANSISTORS 9015C
Q101	9940 000 01193	TRANSISTORS KSB772YS
Q508	9940 000 01193	TRANSISTORS KSB772YS
Q3	9940 000 04338	TRANSISTORS PMBT3904
Q103	9940 000 04338	TRANSISTORS PMBT3904
Q106	9940 000 04338	TRANSISTORS PMBT3904
Q504	9940 000 04338	TRANSISTORS PMBT3904
Q507	9940 000 04338	TRANSISTORS PMBT3904
Q501	9940 000 04338	TRANSISTORS PMBT3904
Q105	9940 000 03937	SMD TRANSISTORS PMBT3906
IC104	9940 000 05381	IC D9258PH
IC4	9940 000 04345	IC KA7806E
IC501	9940 000 04532	IC KA7808E (TO-220)
IC5	9940 000 04346	IC POWER AMP LA4627
IC103	9322 131 04668	IC SM M24C01-WMN6 (ST00) R
IC2	9940 000 04607	IC PT2314
IC102	9940 000 02844	IC TA2157FN
IC101	9965 000 39347	IC TC94A58FAG-455

- MISCELLANEOUS -

D5	9940 000 04534	RECTIFIER DIODE 1N5819
X101	9940 000 04352	CRYSTAL 75KHZ 12.5PF DT-381
X102	9940 000 04354	RESONATOR CRA16.93MHZ -5%
SPJ1	9940 000 03661	SPK JACK PT-22V11

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

ELECTRICAL PARTSLIST - DISPLAY BOARD**- IC & TRANSISTORS -**

Q403	9965 000 39345	TRANSISTORS 2W 8050D
Q402	9965 000 39345	TRANSISTORS 2W 8050D
Q14	9965 000 39348	PNP TRANSISTORS 9012G 1W
Q15	9940 000 04143	NPN TRANSISTORS 9014C
Q1	9940 000 05384	TRANSISTOR KTK161GR TO-92M
Q401	9940 000 04338	TRANSISTORS PMBT3904
Q2	9940 000 04338	TRANSISTORS PMBT3904
Q5	9940 000 04338	TRANSISTORS PMBT3904
Q4	9940 000 03937	SMD TRANSISTORS PMBT3906
IC401	9940 000 04366	IC ET8861S
IC1	9940 000 05387	IC TA2180FN

- COILS & FILTERS -




CF1	9940 000 02857	CERAMIC FILTER SFU450B
CF2	9940 000 03642	CER. FILTER LT10.7MA5-A RED
CF3	9940 000 05389	FILTER JT10.7MG33-A
L6	9940 000 04611	I.F.T 7MM #7M1A2224N
L3	9940 000 05391	I.F.T H=6MM 705 (RED)
T1	9940 000 05392	I.F.T 7.6X7.6MM A702 (YELLOW)
L5	9965 000 39350	FM COIL 4.5X2.5T (0.8MM)
L4	9940 000 03655	FM COIL 4.5X3.5T
L1	9965 000 39351	FM COIL 4.5X4.5T (0.8MM)

- MISCELLANEOUS -

LED1	9940 000 05385	LED LAMP (WHITE)
LED2	9940 000 05385	LED LAMP (WHITE)
LCD1	9965 000 39349	LCD DISPLAY
IR1	9940 000 04367	OPTIC SENSER FM-6038TM2-5AN
PVC1	9940 000 04147	P.V.C #T443DF-1DF44Q-JE(A/F)
SW402	9940 000 05393	TACT SWITCH
SW403	9940 000 05393	TACT SWITCH
SW404	9940 000 05393	TACT SWITCH
SW405	9940 000 05393	TACT SWITCH
SW401	9940 000 04167	V/TACT SWITCH
SW406	9940 000 04167	V/TACT SWITCH
SW407	9940 000 04167	V/TACT SWITCH
SW408	9940 000 04167	V/TACT SWITCH
SW409	9940 000 04167	V/TACT SWITCH
SW410	9940 000 04167	V/TACT SWITCH
AUXJ1	9940 000 01244	V/PHONE JACK 3.5MM (MCM108B)
HPJ1	9940 000 01244	V/PHONE JACK 3.5MM (MCM108B)
AUXJ1	9940 000 05394	V/PHONE JACK 3.5MM (not for MCM108B)
HPJ1	9940 000 05394	V/PHONE JACK 3.5MM (not for MCM108B)
	9965 000 39352	LCD BRACKET

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

ELECTRICAL PARTSLIST - RECTIFIER BOARD**- MISCELLANEOUS -**

D4	9940 000 03938	RECTIFIER DIODE RL-202 (-/37)
D5	9940 000 03938	RECTIFIER DIODE RL-202 (-/37)
D6	9940 000 03938	RECTIFIER DIODE RL-202 (-/37)
D7	9940 000 03938	RECTIFIER DIODE RL-202 (-/37)
D1	9965 000 39372	SWITCHING DIODE 1SS133-T-77(-/12/96/98)
D2	9965 000 39372	SWITCHING DIODE 1SS133-T-77(-/12/96/98)
D502	9965 000 39372	SWITCHING DIODE 1SS133-T-77(-/12/96/98)
D503	9965 000 39372	SWITCHING DIODE 1SS133-T-77(-/12/96/98)
FU3	 9940 000 04163	FUSE W/LEAD 4X10MM 1A/250V (-/37)
FU2	 9940 000 04163	FUSE W/LEAD 4X10MM 1A/250V (-/37)
F1	 9940 000 04359	FUSE 5X20MM T2A/250V BS/VDE (-/12/96/98)

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

ELECTRICAL PARTSLIST - MP3 BOARD

- MISCELLANEOUS -

IC4	9940 000 04548	IC ET8211 SOP8
IC2	9940 000 02839	IC H1117SJ-3.3V
IC3	9965 000 39353	IC LM1117SJ-ADJ SOT-223
IC1	9965 000 39354	IC TC94A34FG-008
X1	9940 000 04551	CRYSTAL 16,9344MHZ -20PPM

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

ELECTRICAL PARTSLIST**- MISCELLANEOUS -**

9965 000 39369	MAIN BOARD ASS'Y(BLK)	(MCM108B/37)
9965 000 39364	MAIN BOARD ASS'Y(BLK)	(MCM108B/12/96)
9965 000 39355	MAIN BD ASS'Y(WHITE)	(MCM108/37 & MCM108C/37)
9965 000 39373	MAIN BD ASS'Y(WHITE)	(MCM108/96/98)
9965 000 39370	DISPLAY BD ASS'Y(BLK)	(MCM108B/37)
9965 000 39365	DISPLAY BD ASS'Y(BLK)	(MCM108B/12/96)
9965 000 39356	DISPLAY BD ASS'Y(WHITE)	(MCM108 & MCM108C/37)
9965 000 39357	MP3 BOARD ASS'Y	
9965 000 39376	SWITCH SL14-22AH-5AN	(-/96/98)

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

REVISION LIST

Version 1.0 (3141 785 31130)

- Initial Release

Version 1.1 (3141 785 31131)

- New versions MCM108C/37 is introduced.
- Pages 9-2 : Mechanical parts list adapted.
- Pages 10-1 and 10-5 : Electrical parts list adapted.