

Service
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Service Manual



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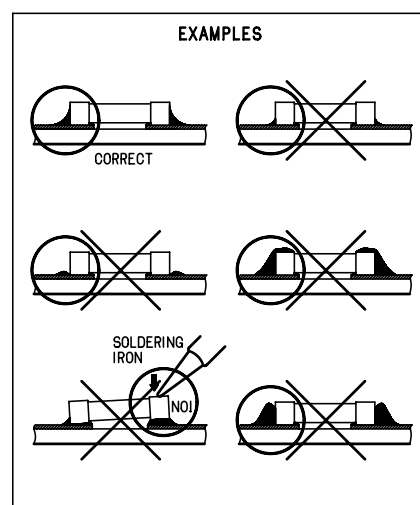
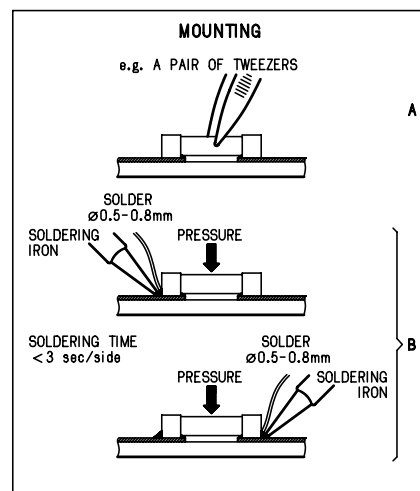
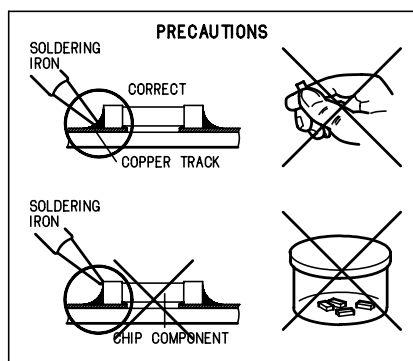
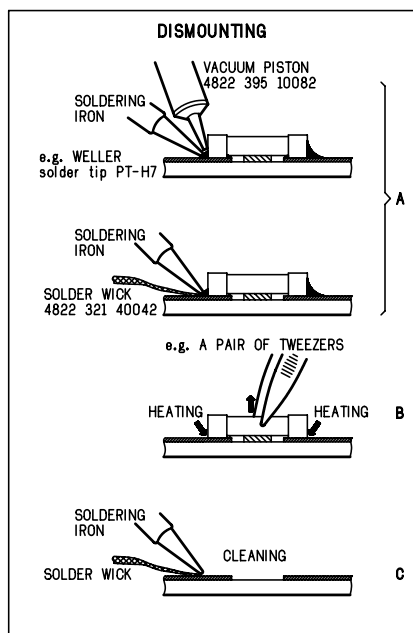
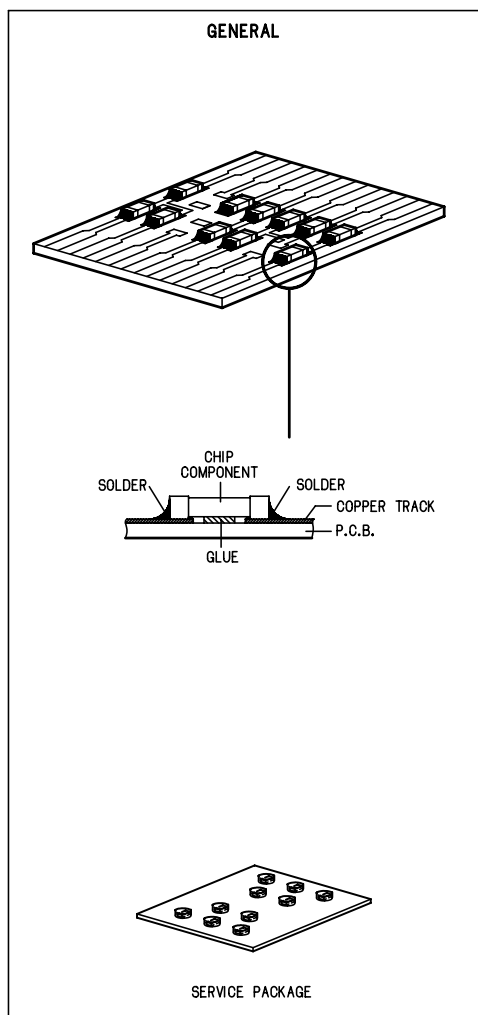
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HANDLING CHIP COMPONENTS



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, 1MΩ) 4822 320 11307
- extendible cable (2m, 2MΩ, to connect wristband to connection box) 4822 320 11305
- connecting cable (3m, 2MΩ, to connect table mat to connection box) 4822 320 11306
- earth cable (1MΩ, 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

INFORMATION ABOUT LEAD-FREE SOLDERING

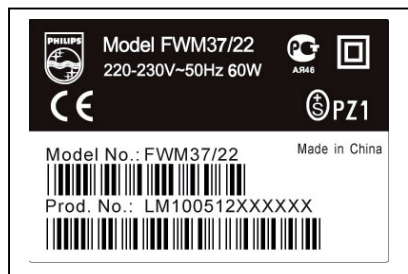
Philips CE is producing lead-free sets from 1.1.2005 onwards.

IDENTIFICATION:

Regardless of special logo (not always indicated) one must treat all sets from 1 Jan 2005 onwards, according next rules:



Example S/N:



Bottom line of typeplate gives a 14-digit S/N. Digit 5&6 is the year, digit 7&8 is the week number, so in this case 2005 wk12

So from 0501 onwards = from 1 Jan 2005 onwards

Important note: In fact also products of year 2004 must be treated in this way as long as you avoid mixing solder-alloys (lead/ 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.

SERVICE INSTRUCTION

Safety regulations require that after a repair, the set must be returned in its original condition. Pay in particular attention to the following points:

- Route the wire trees correctly and fix them with the mounted cable clamps.
- Check the insulation of the AC Power lead for external damage.
- Check the strain relief of the AC Power cord for proper function.
- Check the electrical DC resistance between the AC Power Plug and the secondary side (only for sets which have a AC Power isolated power supply):
 1. Unplug the AC Power cord and connect a wire between the two pins of the AC Power plug.
 2. Set the AC Power switch to the "on" position (keep the AC Power cord unplugged!).
 3. Measure the resistance value between the pins of the AC Power plug and the metal shielding of the tuner or the aerial connection on the set. The reading should be larger than 4.5 Mohm (For U.S. it should be between 4.2 Mohm and 12 Mohm).
 4. Switch "off" the set, and remove the wire between the two pins of the AC Power plug.
- Check the cabinet for defects, to avoid touching of any inner parts by the customer.

SPECIFICATION

GENERAL

Mains voltage	/05	: 230V
Mains frequency	/05	: 50 Hz
Battery	for remote	: 3V (R03, AAA x 2)
Power consumption	Max.	: < 35 W (max.)
	Standby	: < 4 W
	ECO Standby	: < 1 W
Dimension (W x H x D)	CD Part	: 208 x 62 x 244 mm
	AMP Part	: 208 x 57 x 244 mm
Weight	CD Part	: 1.4 Kg
	AMP Part	: 2.4 Kg

MP3 / CD

Laser Type	:	Semiconductor
Disc Diameter	:	12cm / 8cm
Frequency Response	:	20Hz - 20 kHz (+0.5/-2.0dB)
Outband Attenuation	:	35dB
THD Noise	:	0.5% dB
Signal-to-noise ratio	:	≥ 70 dBA
Channel separation	:	≥ 40 dB (1 kHz)
Emphasis(switched automatically by CD 10)	:	15 / 50 uS
MP3 Bit Rates	:	8K - 320Kps
Sampling Rates	:	8/11.025/16/22.05/32/44.1/48KHz
MP3 Multisession	:	Directory resting Max 8 level, Max directory 32

AMPLIFIER

Output power	:	2 x 25 W RMS
	:	1000 W PMPO
Speaker impedance	:	2 x 8 ohm
Frequency response	:	20 Hz - 20 kHz (±3dB)
Aux input sensitivity	:	500 mV (47Kohm)

TFT LCD PANEL

Number of pixels(HXV)	:	280x220
Brightness	dark room	: >150cd/m ²
Contrast	dark room	: 150 :1

TUNER - FM SECTION

Tuning range	:	87.5 – 108 MHz
IF frequency	:	10.7 MHz ± 0.2 MHz
Sensitivity	:	26 dBf at 46dB S/N
Selectivity	:	25 dB at 300kHz
IF rejection	:	50 dB
Image rejection	:	20 dB

LOUDSPEAKERS

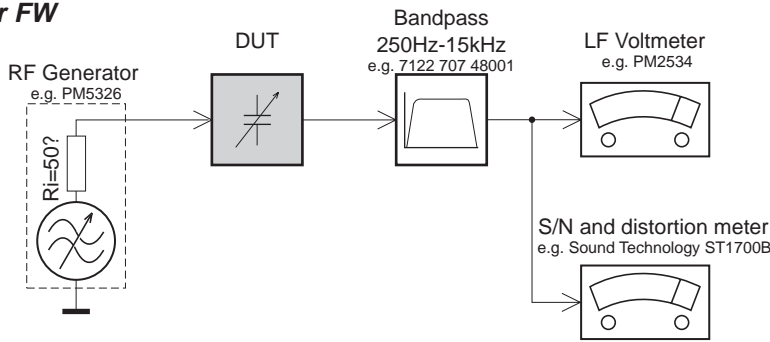
2-way bass reflex system	
Dimension (W x H x D)	: 145 x 230 x 210 mm
Weight	: 2.4 Kg each

TUNER - DAB SECTION

Tuning range (Band III)	:	174 - 240 MHz
DAB Modes	:	Supports Modes I, II, III
Max In Signal	:	-15 dBm
Sensitivity	:	-90 dBm
Adjacent Channel Selectivity	:	35 dB
Far-off Selectivity	:	45 dB
Signal to Noise(A-Weight)	:	65 dB
Channel Separation	:	45 dB
Overall Distortion	:	1%
Max Data Bit Rate	:	320Kbit/S
Acquisition Time after Synchronization Loss	:	2 Sec

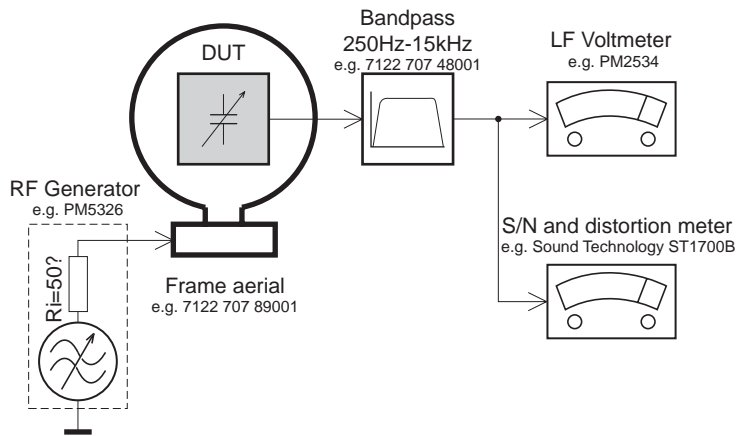
SERVICE MEASUREMENT

Tuner FW



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

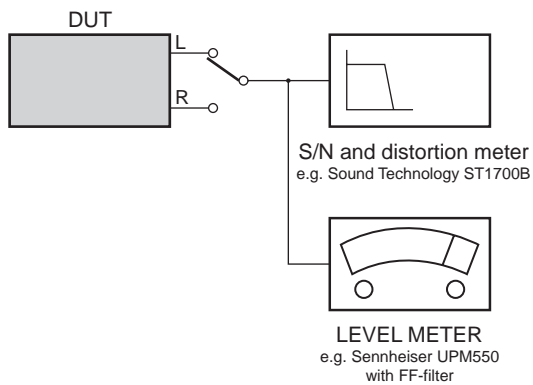
Tuner AM (MW,LW)



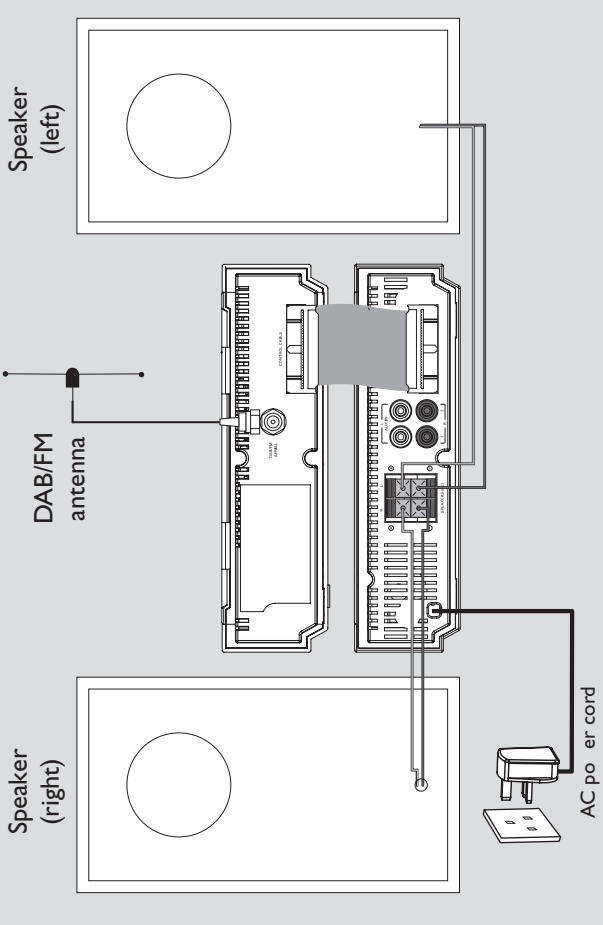
To avoid atmospheric interference all AM-measurements have to be carried out in a Faraday's cage.
Use a bandpass filter (or at least a high pass filter with 250kHz) to eliminate hum (50Hz, 100Hz).

CD

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



Preparations



Rear connections

The type plate is located at the rear of the system.
For users in the U.K.: please follow the instructions on page 2.

(A) Power

Before connecting the AC power cord to the wall outlet, ensure that all other connections have been made.

Warning!

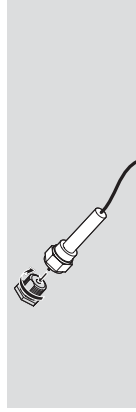
- For optimal performance, use only the original power cable.
- Never make or change any connections with the power switched on.

To avoid overheating of the system, a safety circuit has been built in. Therefore, your system may switch to Standby mode automatically under extreme conditions. If this happens, let the system cool down before reusing it (not available for all versions).

(B) Connecting the control cable

Connect the serial port marked **CONTROL CABLE** at the rear of the CD player to the same port at the rear of the power amplifier with the supplied flat control cable.

(C) DAB/FM antenna Connection



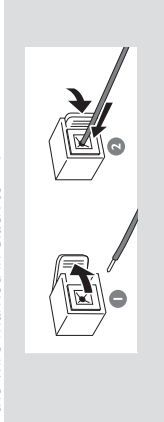
- 1 Connect the supplied DAB/FM antenna to the **DAB/FM AERIAL** port on the rear of the CD player.
 - 2 Fasten the nut on the connector of the antenna to ensure firm connection.
- Position the antenna as far as possible from a TV, VCR or other radiation source.

Note:

- The pin on the connector of the antenna should be in alignment with the hole in the "DAB/FM AERIAL" port.

(C) Speakers Connection

Connect the speaker wires to the **SPEAKERS** (8Ω) terminals, right speaker to "R" and left speaker to "L", the wire marked in red "+" and the wire marked in black to "-".



- Fully insert the stripped portion of the speaker wire into the terminal as shown.

Notes:

- For optimal sound performance, use the supplied speakers.
- Do not connect more than one speaker to any one pair of +/- speaker terminals.
- Do not connect speakers with an impedance lower than the speakers supplied. Please refer to the SPECIFICATIONS section of this manual.

(D) Optional connection

The optional equipment and connecting cords are not supplied. Refer to the operating instructions of the connected equipment for details.

Connecting other equipment to your system

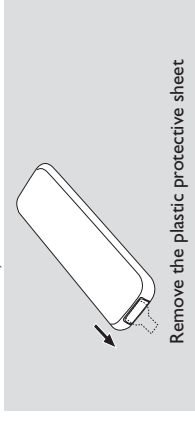
Connect the audio left and right **OUT** terminals of a TV/VCR, Laser Disc player, DVD player or CD Recorder to the **AUX IN** (1 or 2) terminals.

Note:

- If you are connecting equipment with a mono output (a single audio out terminal), connect it to the **AUX IN** (1 or 2) left terminal. Alternatively, you can use a "single to double" cinch cable (the output sound still remain mono).

Before using the remote control

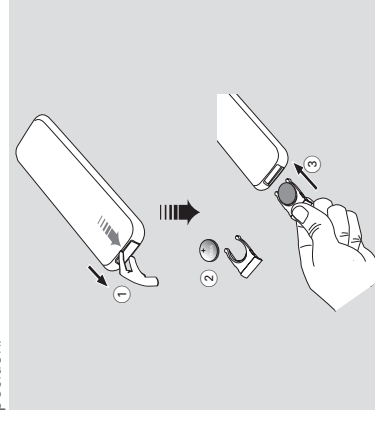
- 1 Pull out the plastic protective sheet.
- 2 Select the source you wish to control by pressing one of the source select keys on the remote control (for example DISC, FM).
- 3 Then select the desired function (for example ► II, ◀◀, ▶▶).



Remove the plastic protective sheet

Replacing battery (lithium CR2025) into the remote control

- 1 Press the slot on the battery compartment.
- 2 Pull out the battery compartment.
- 3 Replace a new battery and fully insert the battery compartment back to the original position.



CAUTION!

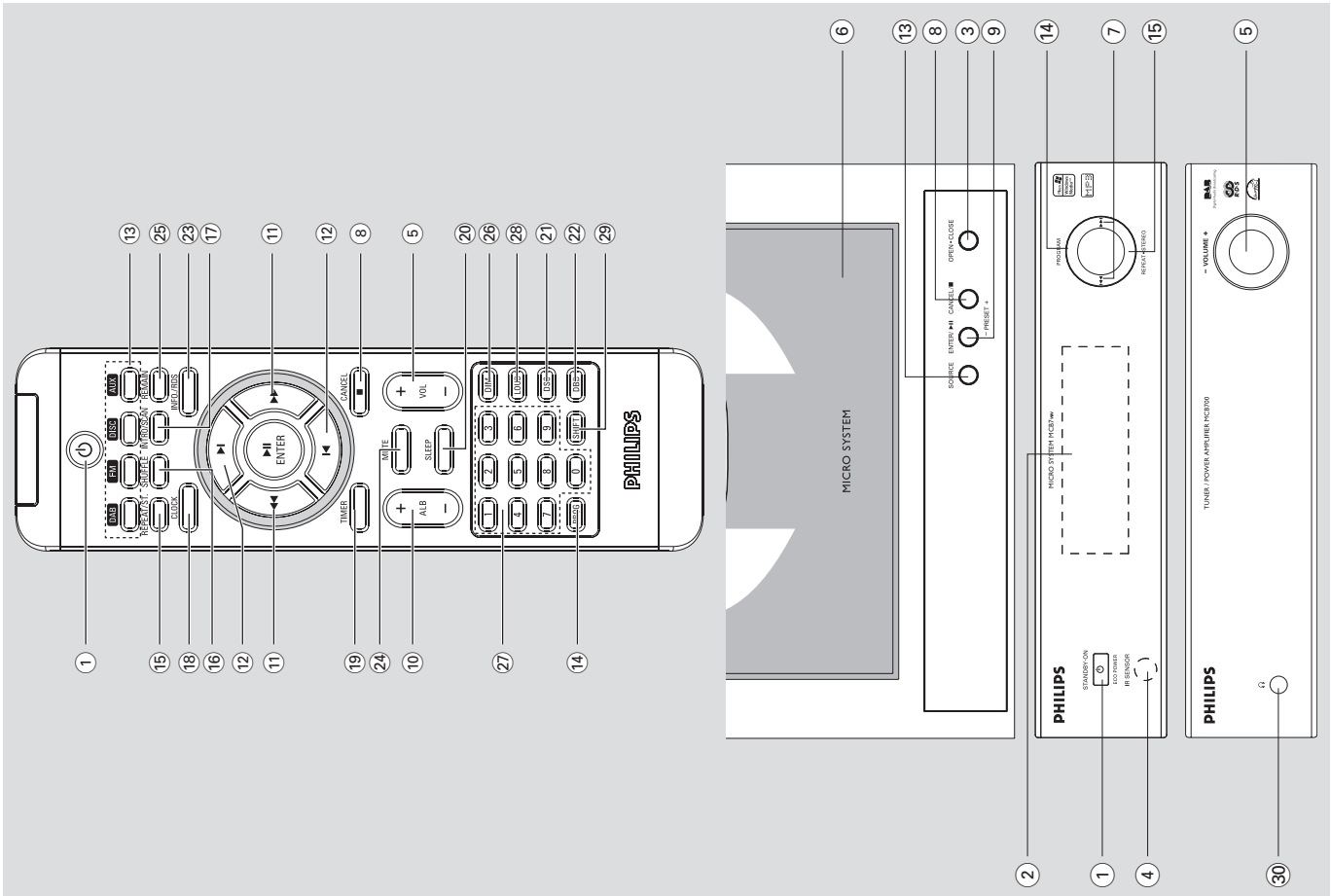
Batteries contain chemical substances, so they should be disposed of properly.

CONTROLS

Controls

Controls on the system and remote control

- 1 **STANDBY-ON/ECO POWER** switches the system on or to Eco Power standby/normal standby with clock display.
- 2 **Display screen** shows the status of the system.
- 3 **OPEN CLOSE** opens/closes the CD door.
- 4 **IR SENSOR** remote sensor
- 5 **VOLUME +/- (VOL +/-)** adjusts the volume level.
- 6 **CD Door**
- 7 **◀▶** for CD/MP3-CD/WMA fast searches back and forward within a track/disc (press and hold).
- 8 **CANCEL/■/PRESET +** stops disc playback or erases a disc program. (for FM/DAB; on the system only) selects a preset radio station.
- 9 **ENTER ▶ II /PRESET -** starts or interrupts playback. (for FM/DAB; on the system only) selects a preset radio station. press to select an option (DAB only).
- 10 **ALB +/-** skips to the beginning of a current/previous/subsequent album.
- 11 **◀◀ /▶▶** for CD/MP3-CD/WMA fast searches back and forward within a track/disc (press and hold).
- 12 **Display screen** shows the status of the system.
- 13 **CANCEL/■/PRESET +** stops disc playback or erases a disc program. (for FM/DAB; on the system only) selects a preset radio station.
- 14 **PROGRAM (PROG)** for CD/MP3 programs tracks. for FM/DAB programs radio stations.
- 15 **REPEAT/STEREO (REPEAT/ST.)** for CD/MP3/WMA selects a repeat playback mode. for FM sets stereo or mono sound mode.
- 16 **S• UFFLE** plays disc tracks randomly.
- 17 **INTRO/SCAN** for CD/MP3/WMA starts scanning of all tracks in a disc. for DAB starts DAB service scanning.
- 18 **CLOCK** sets the clock function.
- 19 **TIMER** sets the timer function.
- 20 **SLEEP** selects the sleeper time.
- 21 **DSC (Digital Sound Control)** selects sound characteristics: POP/JAZZ/CLASSIC/ROCK/FLAT.
- 22 **ENTER ▶ II /PRESET -** starts or interrupts playback. (for FM/DAB; on the system only) selects a preset radio station. press to select an option (DAB only).
- 23 **STANDBY-ON/ECO POWER** switches the system on or to Eco Power standby/normal standby with clock display.
- 24 **IR SENSOR** remote sensor
- 25 **◀ /▶** for CD/MP3-CD/WMA skips to the beginning of a current/previous/subsequent track.
- 26 **TIMER**
- 27 **ALB +/-**
- 28 **REPEAT/STEREO (REPEAT/ST.)**
- 29 **INTRO/SCAN**
- 30 **TUNER / POWER AMP/LIBER +/CD/MP3**



Controls

- 22 **DBB (Dynamic Bass Boost)**
 - enhances the bass.
 - 23 **INFO./RDS**
 - for FM, displays RDS information.
 - for DAB, displays DAB information.
 - for MP3, displays ID-3 information if available.
 - 24 **MUTE**
 - interrupts and resumes sound reproduction.
 - 25 **REMAIN**
 - for CD, selects different disc information display modes during playback.
 - 26 **DIM**
 - selects different levels of brightness for the display screen.
 - 27 **Numerical Keypad (0-9)**
 - (for CD/MP3) selects a track directly.
 - (for DAB) selects a preset DAB radio station directly.
 - 28 **LOUD**
 - enables or disables automatic loudness adjustment.
 - 29 **S•IFT**
 - inputs a number larger than 10 (used together with the Numerical Keypad).
 - 30 **f**
 - connects a headphone.
- 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 DISC, FM).
 - Then select the desired function (for example ► II, ◀◀, ►►).

Troubleshooting

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

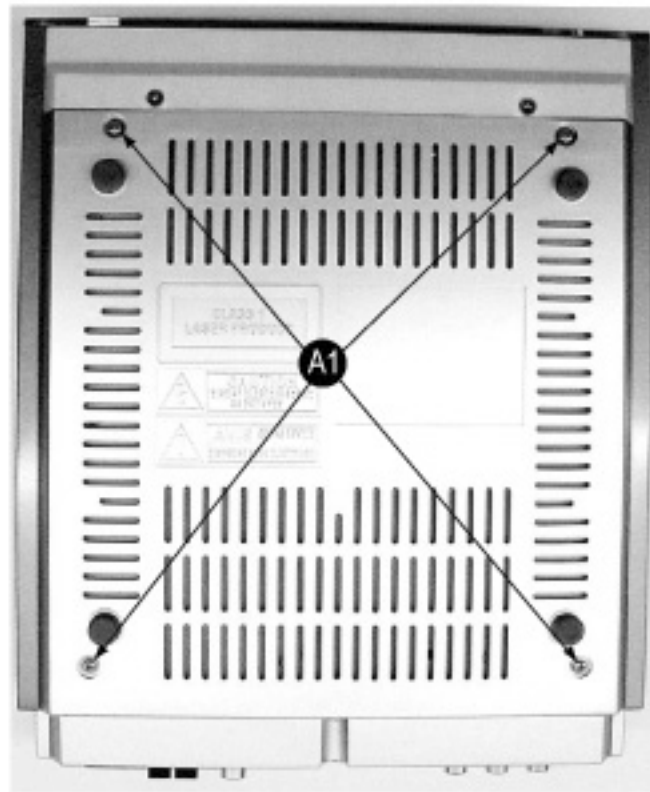
If a fault occurs, first check the points listed below before taking the system for repair. If you are unable to remedy a problem by following these hints, consult your dealer or Philips for help.

Problem	Solution
“NO DISC” 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 lens has cleared. ✓ Replace or clean the disc, see “Maintenance”. ✓ Use a finalised CD-RW or correct format disc. ✓ Increase the distance between the Micro HiFi System and your TV or VCR. ✓ Hang up one end of the T-shape antenna and keep the other end at horizontal angle to it.
Radio reception is poor.	<ul style="list-style-type: none"> ✓ Remove and reconnect the AC power plug and switch on the system again. ✓ Adjust the volume. ✓ Disconnect the headphones. ✓ Check that the speakers are connected correctly. ✓ Check if the stripped speaker wire is clamped. ✓ Check the speaker connections and location.
The system does not react when buttons are pressed.	<ul style="list-style-type: none"> ✓ Select the source (DISC or FM, for example) before pressing the function button (► III, ◀◀ / ►►). ✓ Reduce the distance between the remote control and the system. ✓ Insert the battery with its polarities (+/- signs) aligned as indicated. ✓ Replace the battery. ✓ Point the remote control directly toward IR sensor on the front of the system.
Sound cannot be heard or is of poor quality.	<ul style="list-style-type: none"> ✓ Set the clock correctly. ✓ Switch on the timer.
The left and right sound outputs are reversed.	<ul style="list-style-type: none"> ✓ Power has been interrupted or the power cord has been disconnected. Reset the clock/timer.
The remote control does not function properly.	
The timer is not working.	
The Clock/Timer setting is erased.	

DISASSEMBLY INSTRUCTION - CD PART

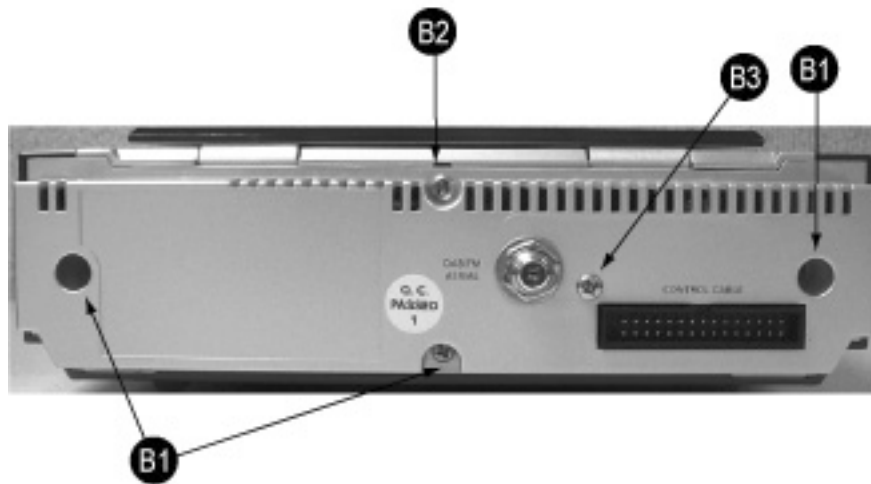
A. Remove Bottom Cover

A1 remove screws M2.5x4 (washer head) - 4 pcs.



B. Remove Back Panel

B1 remove screws M3x6 - 3 pcs.
 B2 remove screw ST 3x10 - 1 pc.
 B3 remove screws ST 3x10 - 1 pcs. (for jacks)



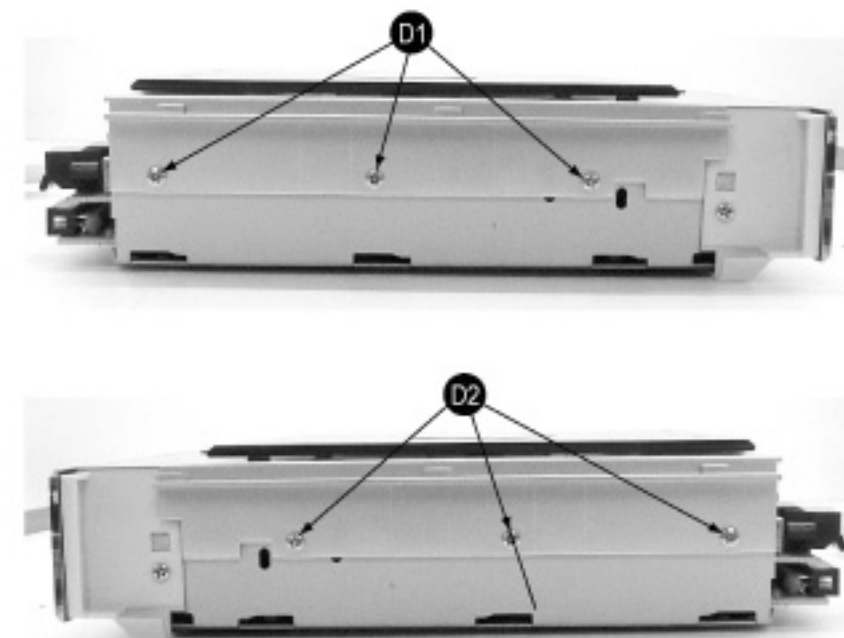
C. Remove Side Panel (L & R)

C1 Slide out the Side Panels.



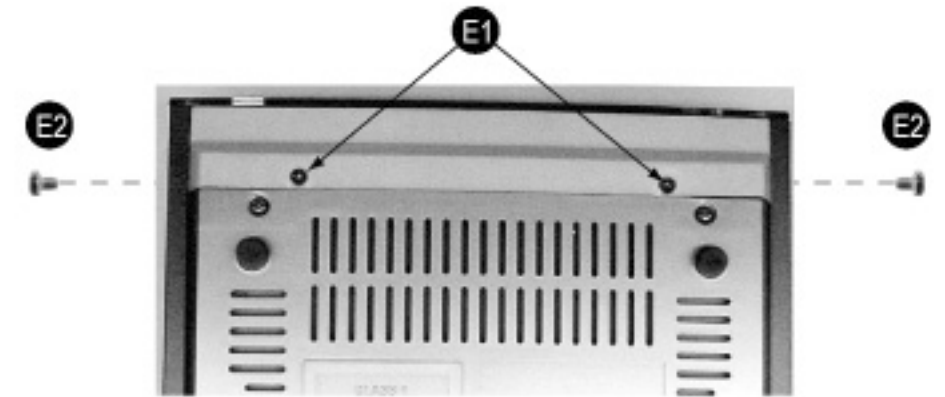
D. Remove Top Cabinet

D1 remove screws M3x6 - 3 pcs.
 D2 remove screws M3x6 - 3 pcs.



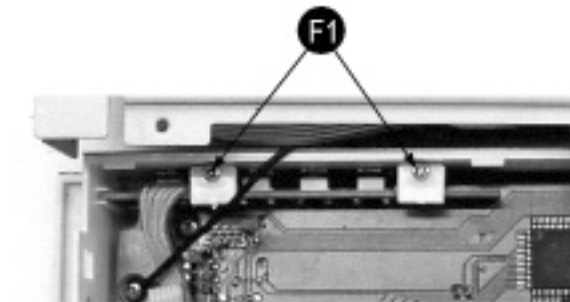
E. Remove Front Cabinet

E1 remove screws MK3x10 - 2 pcs.
 E2 remove screws M3x4 - 2 pcs.



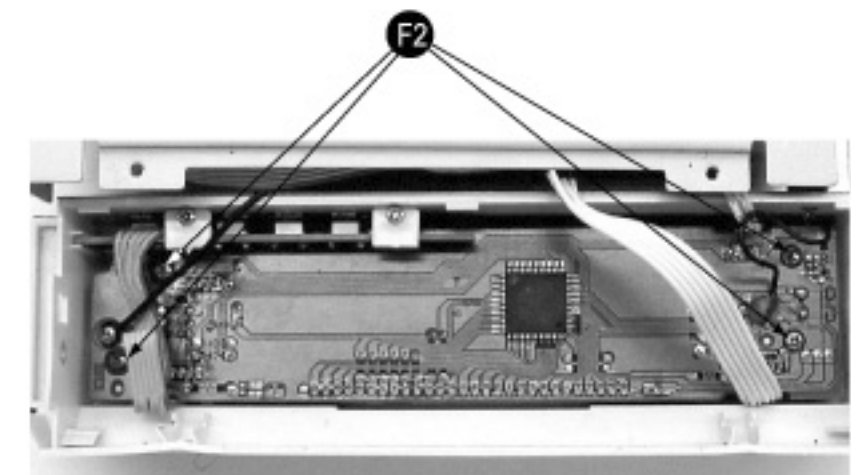
F. Remove Display Board Assembly

F1 remove screws ST 2.5x8 - 2 pcs.
 (take out Push Key PCB Assy)



F. Remove Display Board Assembly

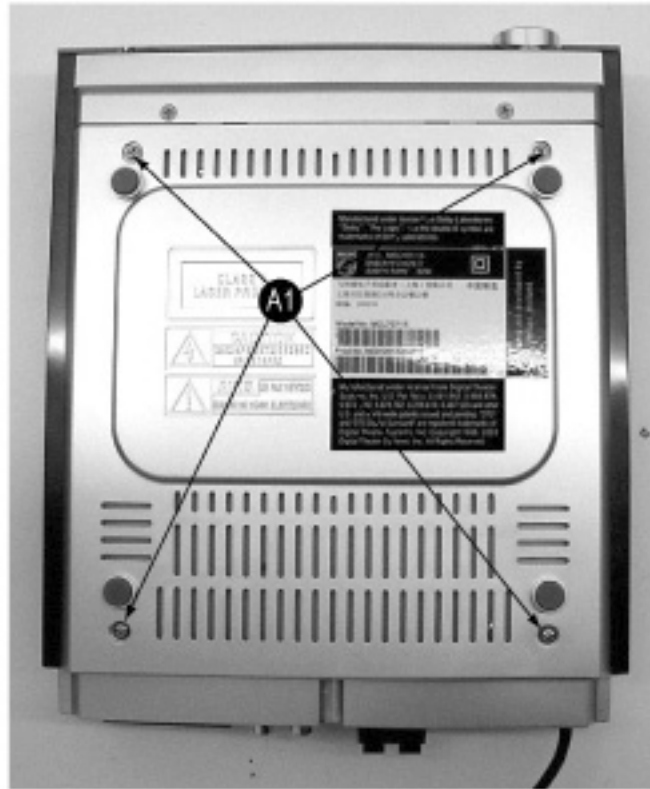
F2 remove screws ST 2.5x8 - 4 pcs.



DISASSEMBLY INSTRUCTION - TUNER & AMP PART

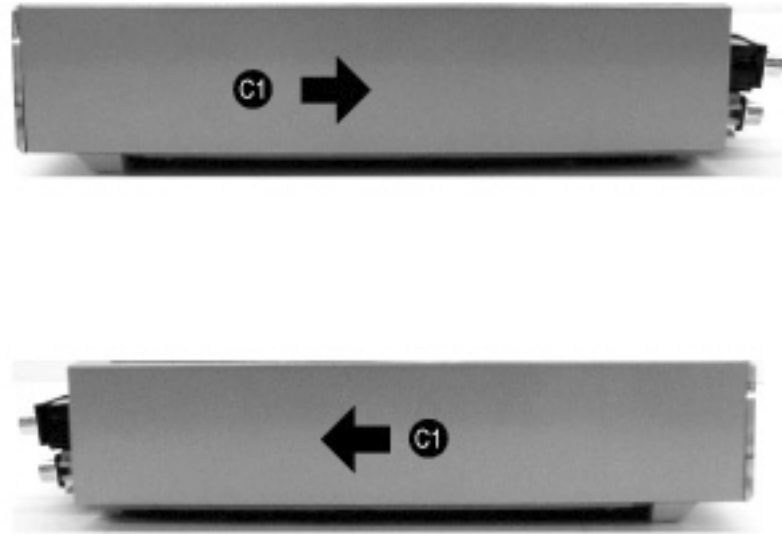
A. Remove Bottom Cover

A1 remove screws M2.5x4 (washer head) - 4 pcs.



C. Remove Side Panel (L & R)

C1 Slide out the Side Panels.



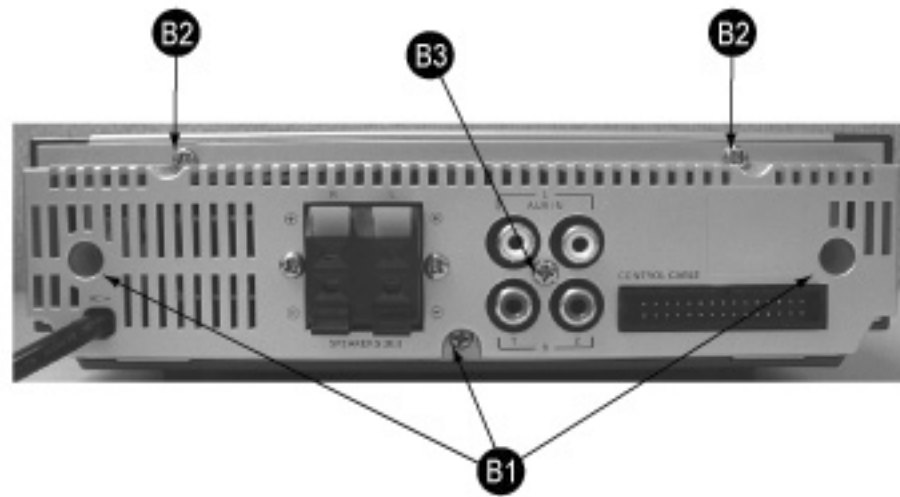
E. Remove Front Cabinet

E1 remove screws MK3x10 - 2 pcs.
E2 remove screws M3x4 - 2 pcs.



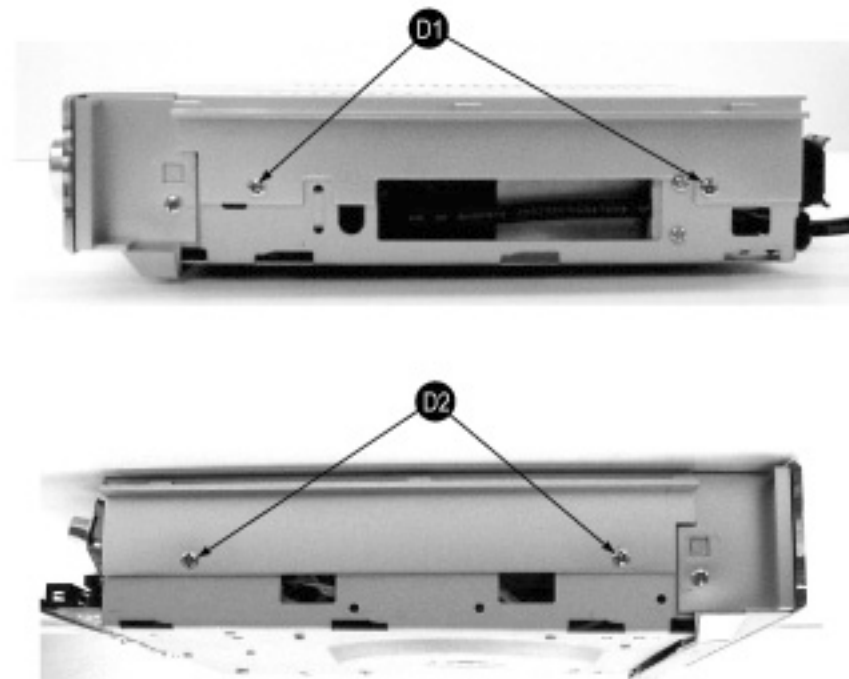
B. Remove Back Panel

B1 remove screws M3x6 - 3 pcs.
B2 remove screw ST 3x10 - 2 pc.
B3 remove screws ST 3x10 - 1 pcs. (for jacks)



D. Remove Top Cabinet

D1 remove screws M3x6 - 2 pcs.
D2 remove screws M3x6 - 2 pcs.

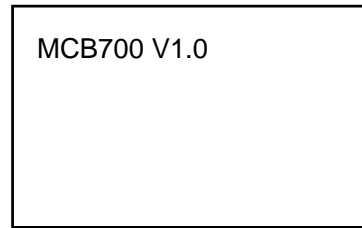


SOFTWARE VERSION CHECKING

A. CPU VERSION CHECK

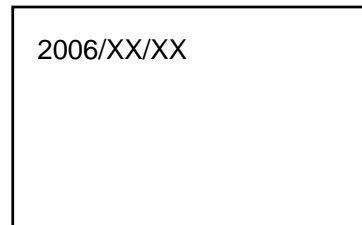
1. Press PLAY and STOP buttons (on the set) while plug in the power cord.

VFD Screen shows

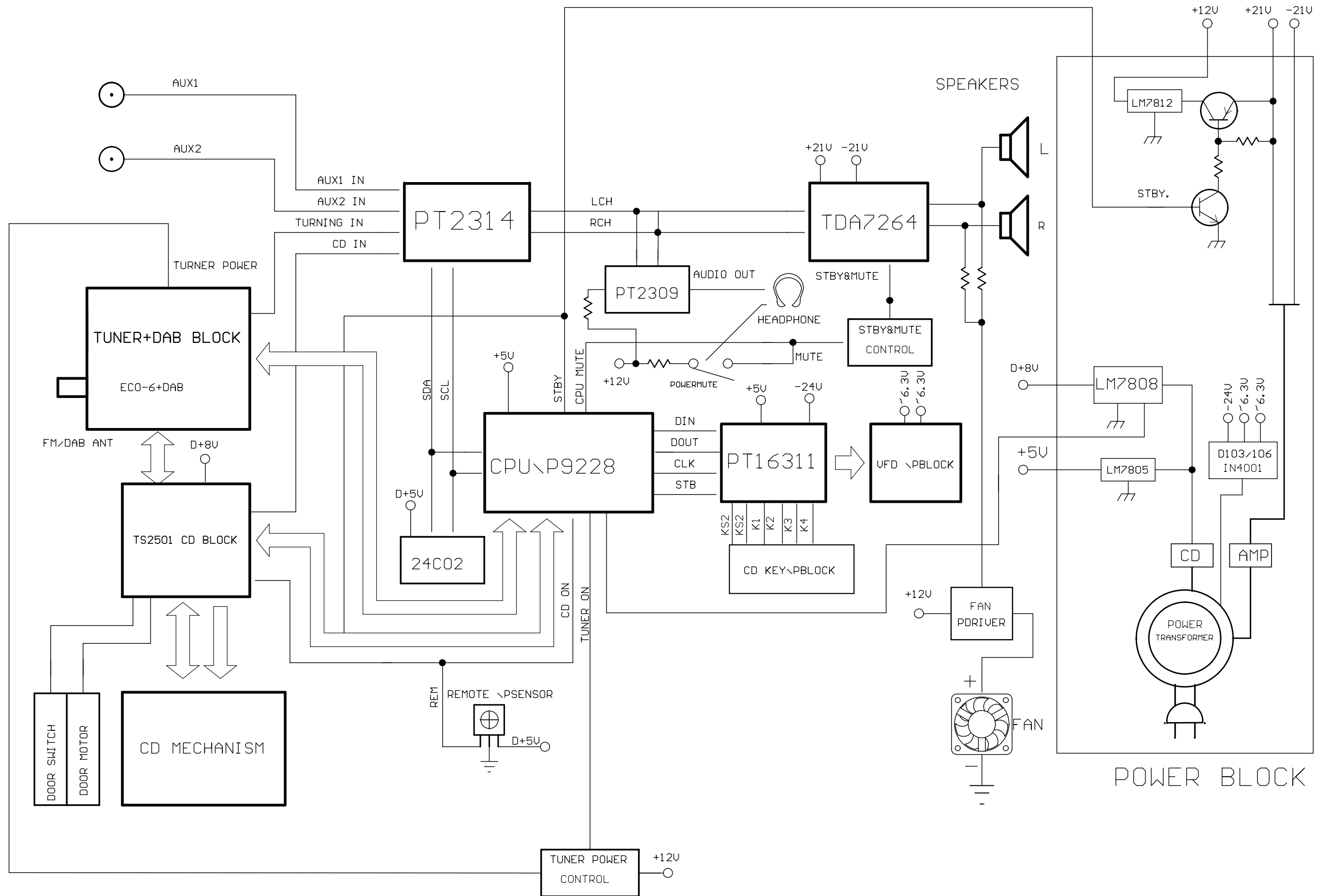


2. Press STOP button (on the set).

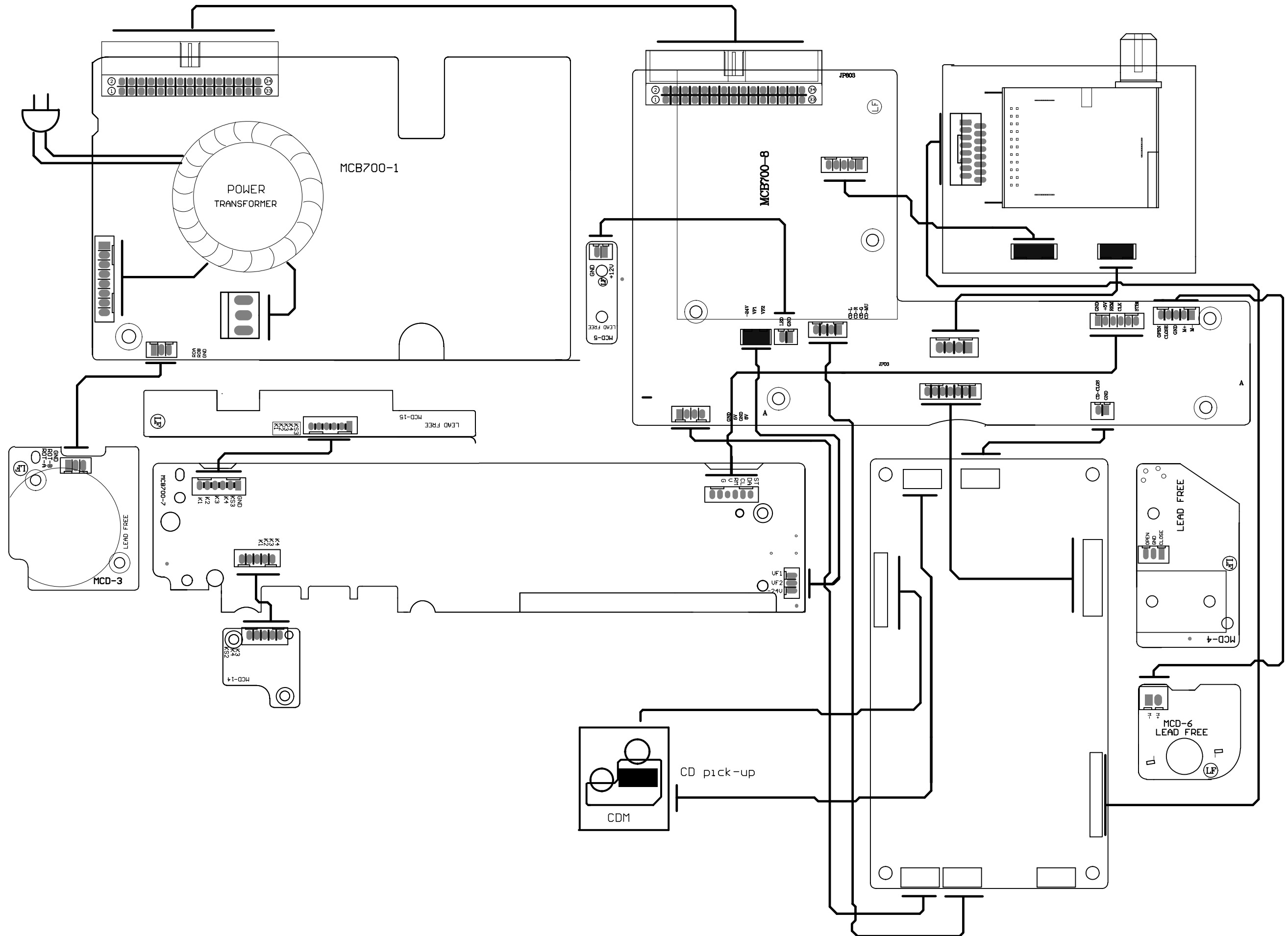
VFD Screen shows the
Production Date.



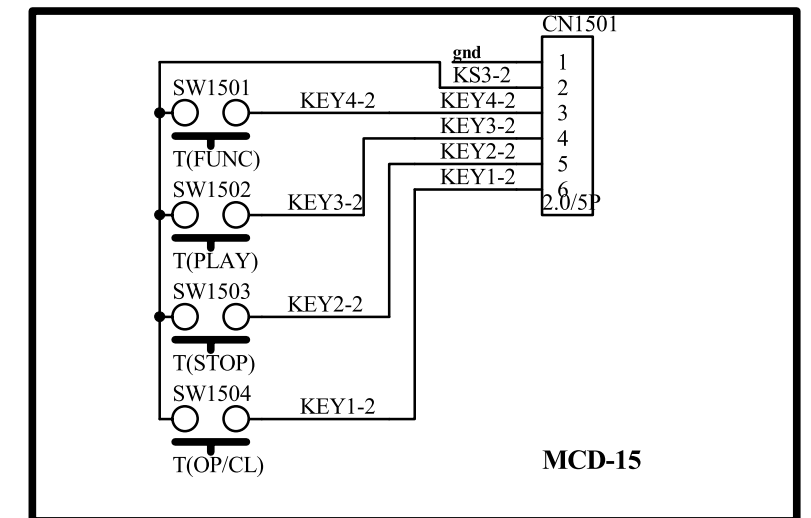
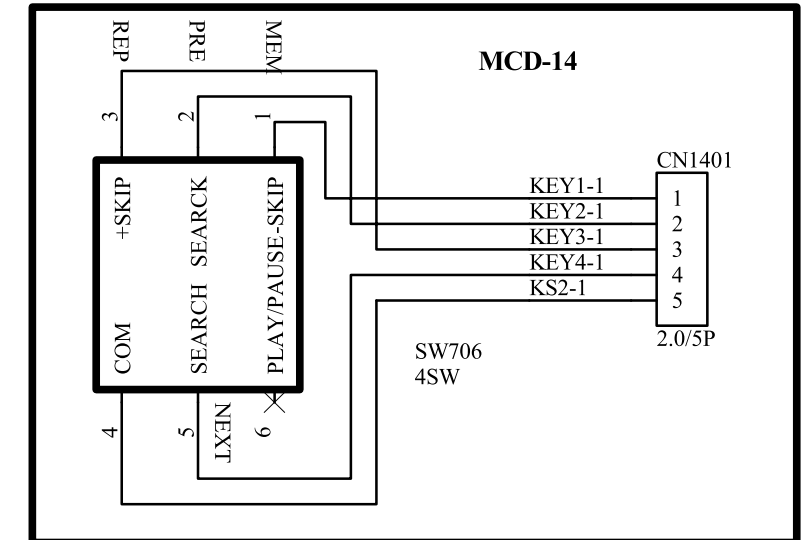
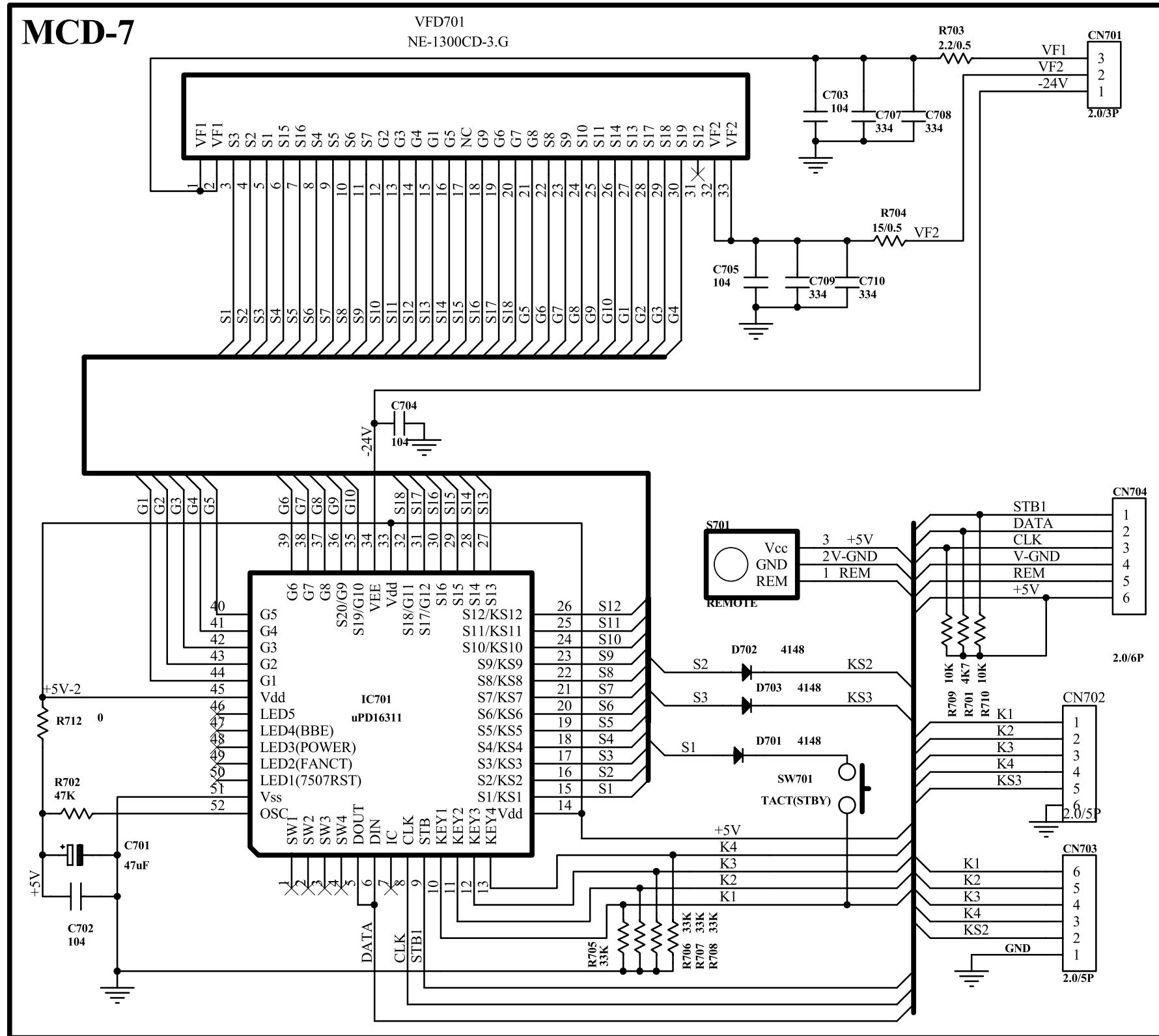
SET BLOCK DIAGRAM



SET WIRING DIAGRAM



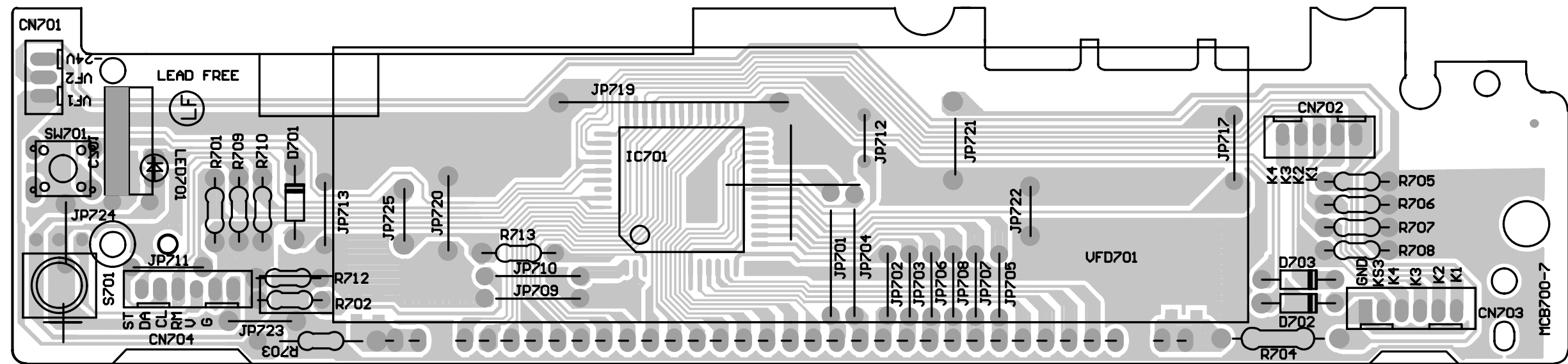
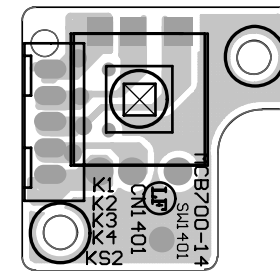
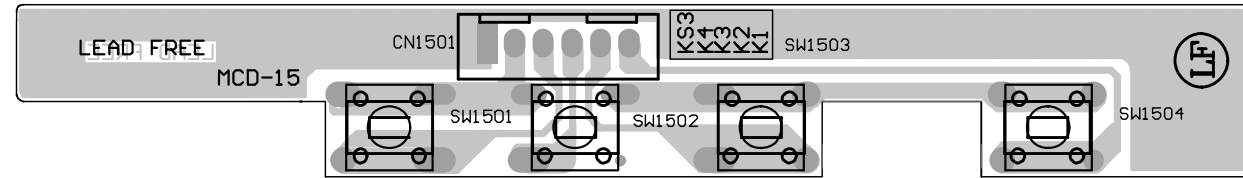
CIRCUIT DIAGRAM - VFD / KEY BOARD ASSEMBLY



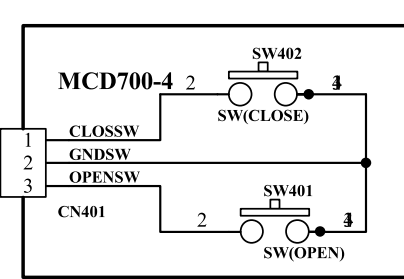
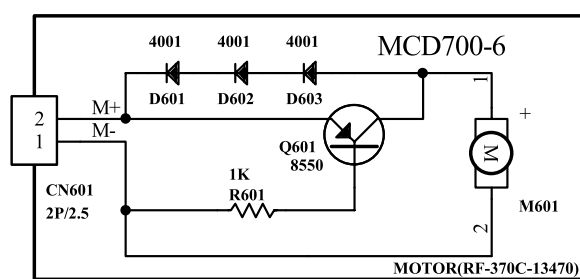
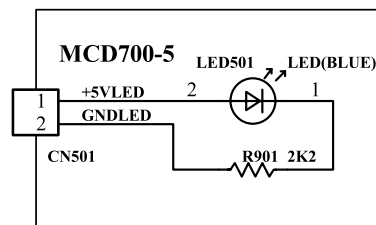
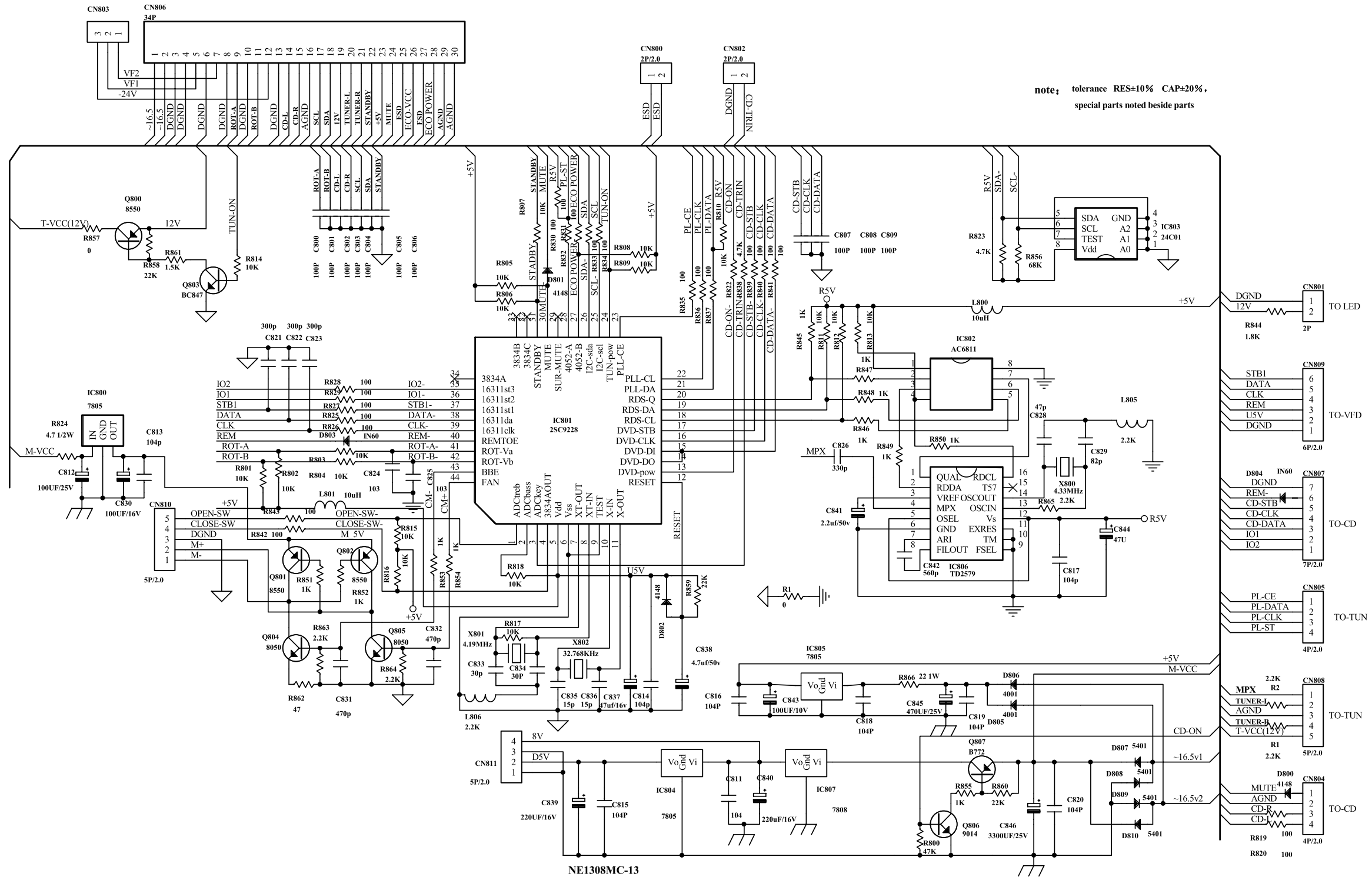
note: tolerance RES±10% CAP±20%,
special parts noted beside parts

LAYOUT DIAGRAM - VFD / KEY BOARD ASSEMBLY

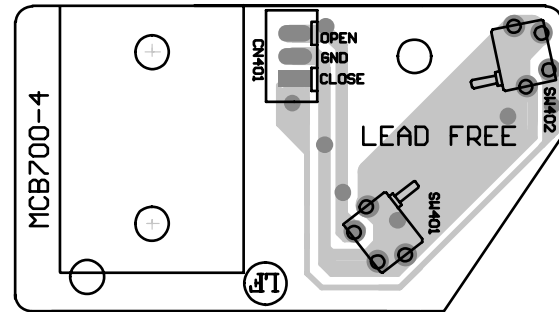
COMPONENT SIDE



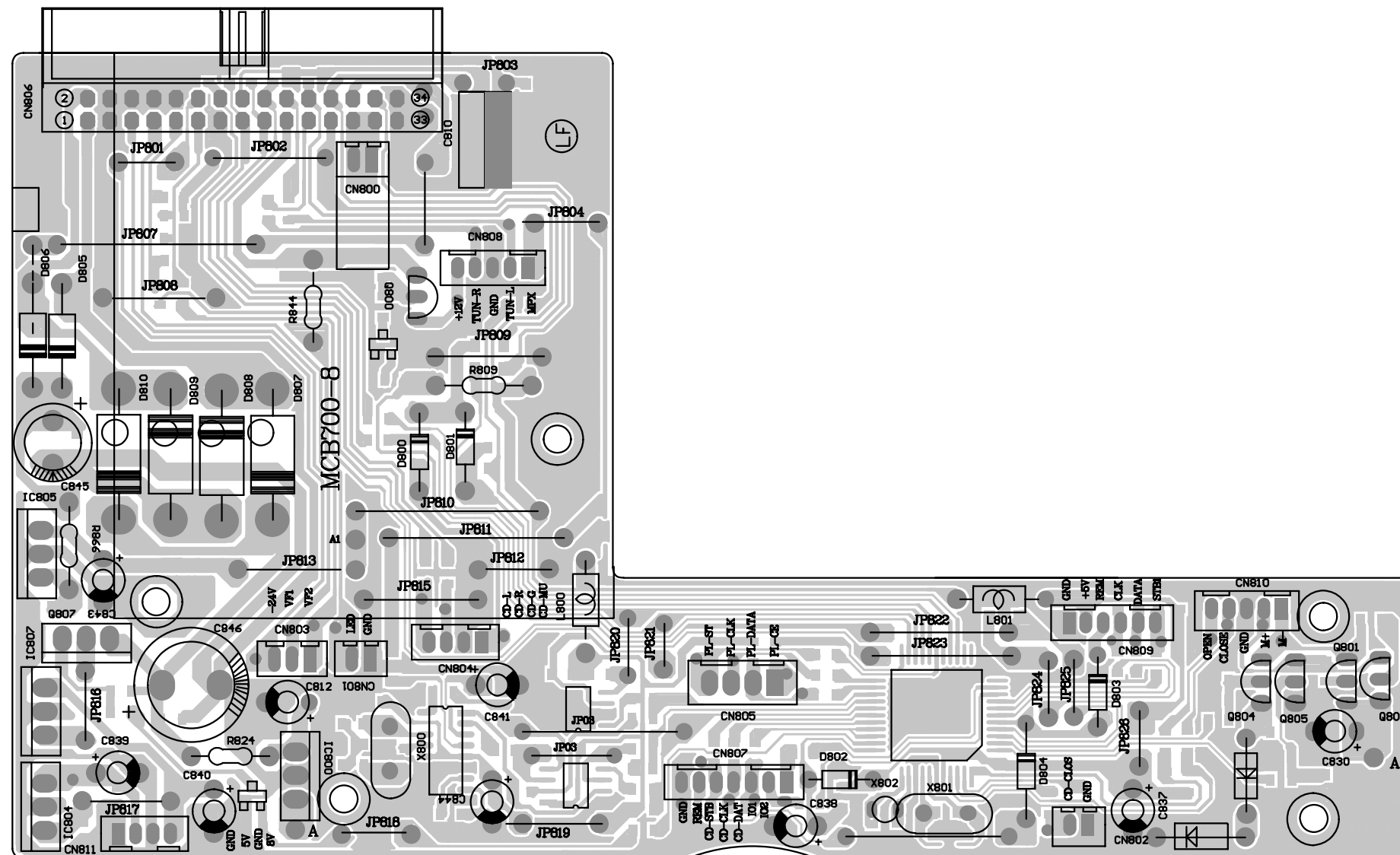
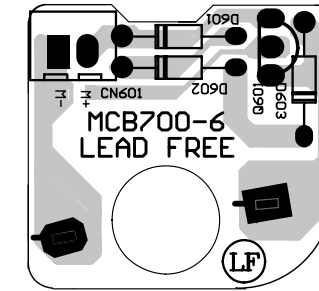
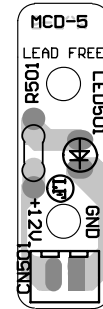
CIRCUIT DIAGRAM - CD BLOCK



LAYOUT DIAGRAM - CD BLOCK

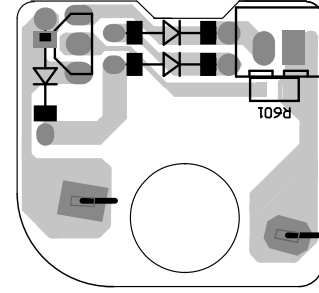
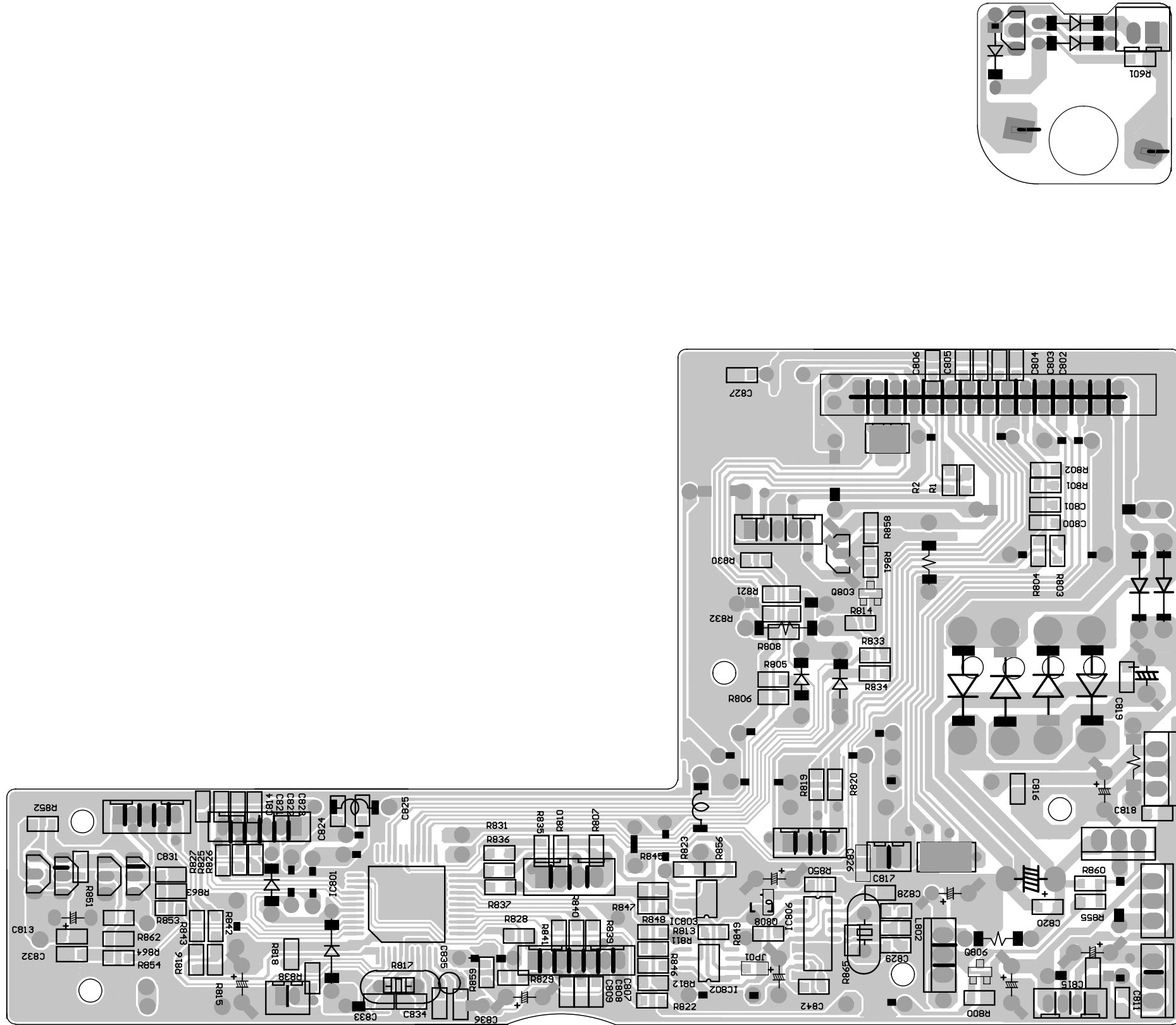


COMPONENT SIDE



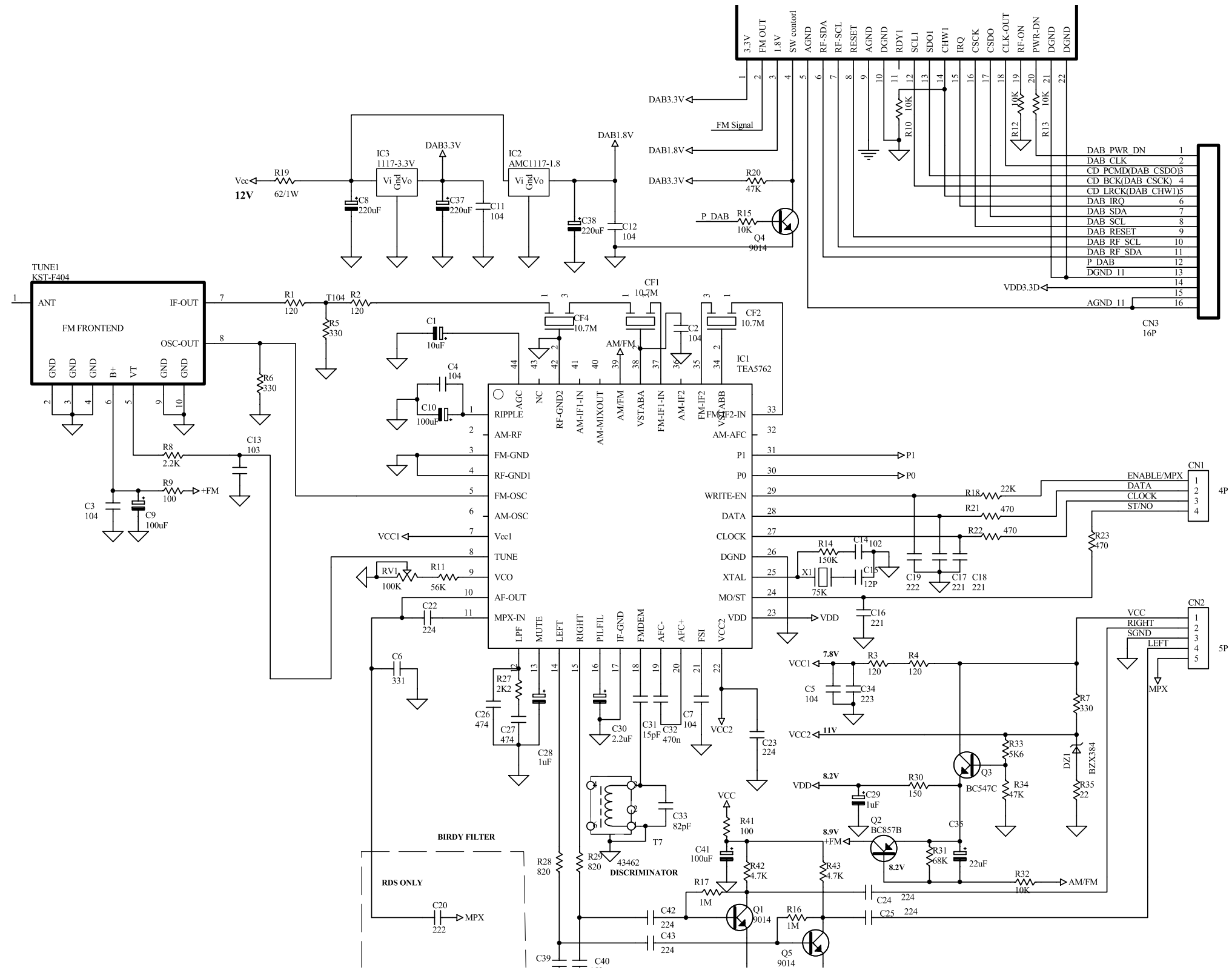
LAYOUT DIAGRAM - CD BLOCK

BOTTOM SIDE



CIRCUIT DIAGRAM - DAB TUNER BOARD

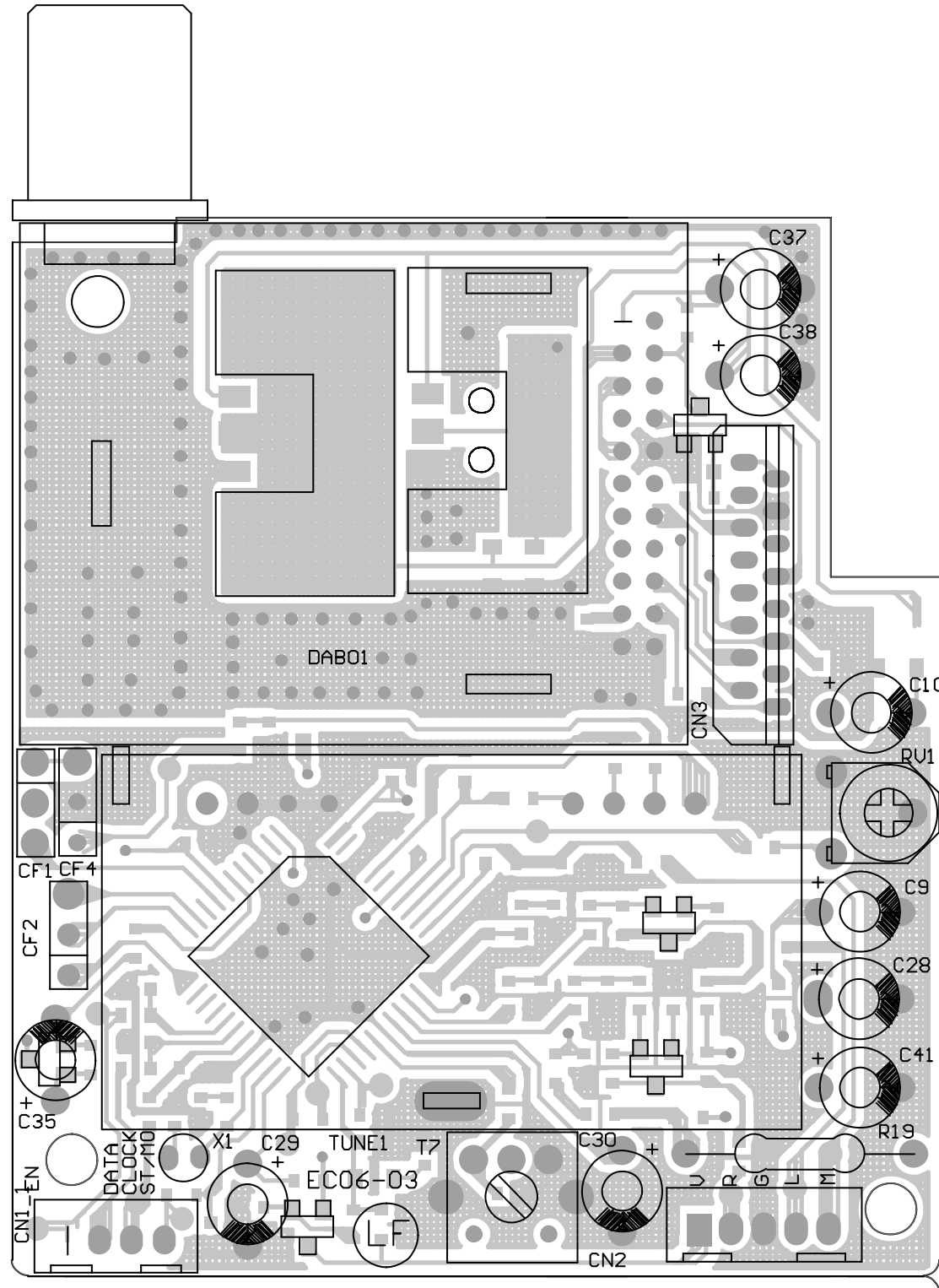
(DAB Tuner board is not repaired. The diagram for reference only)



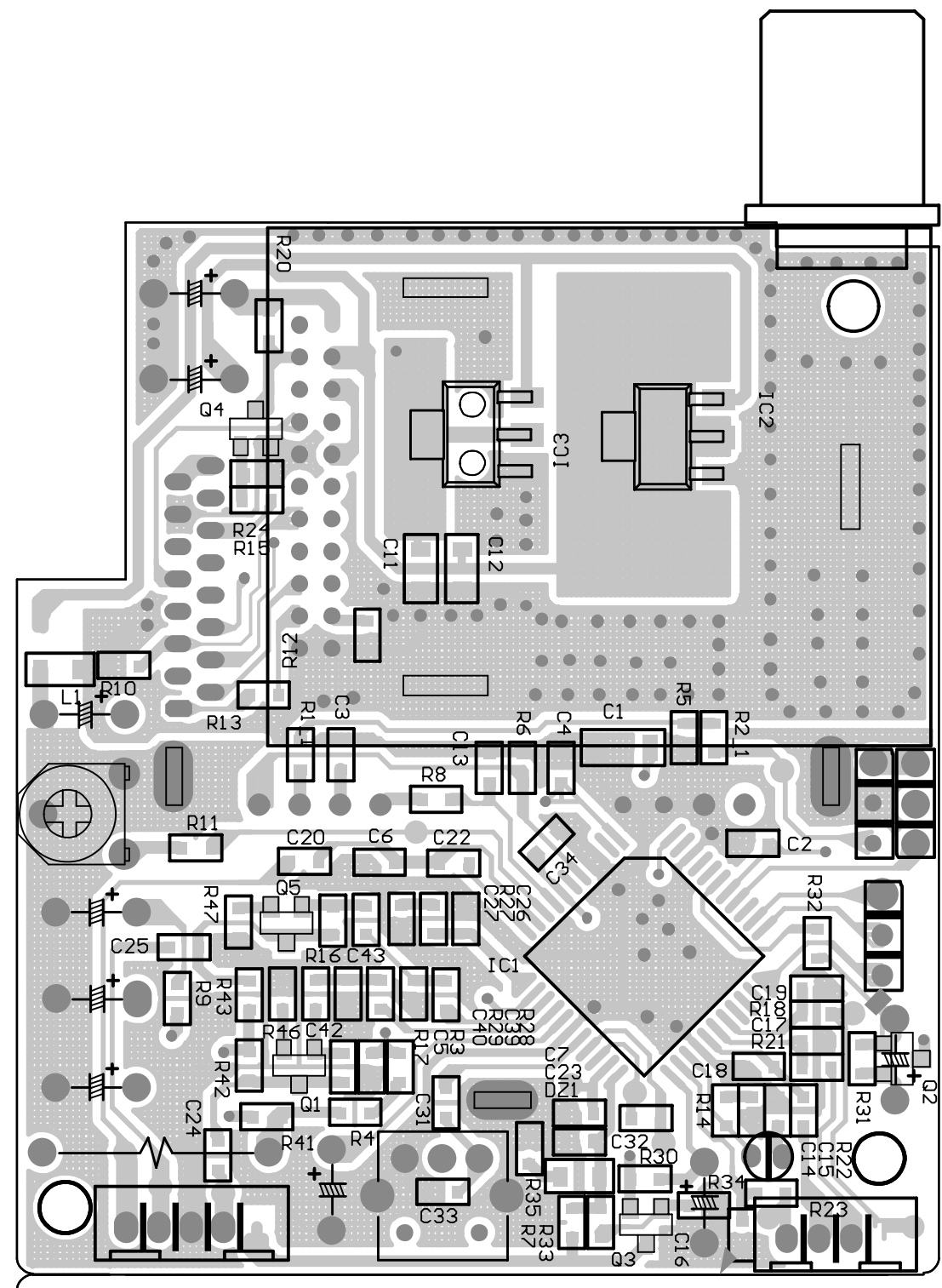
LAYOUT DIAGRAM - DAB TUNER BOARD

(DAB Tuner board is not repaired. The Layout for reference only)

SIDE A

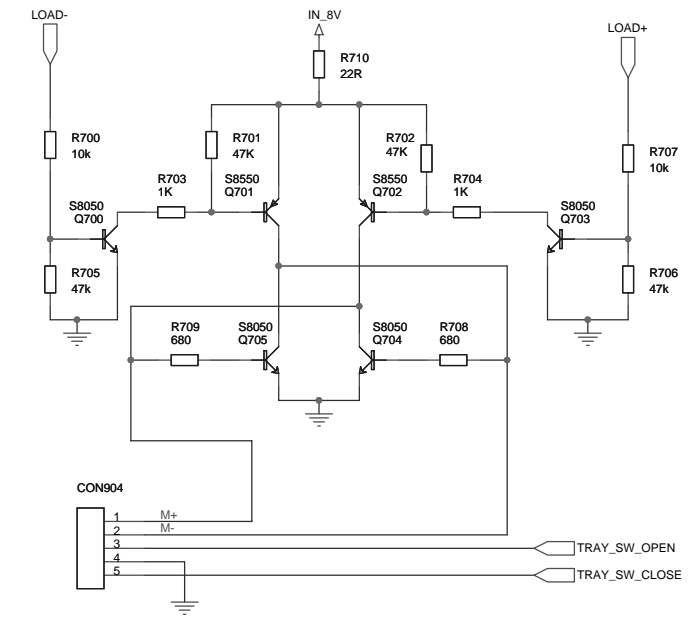
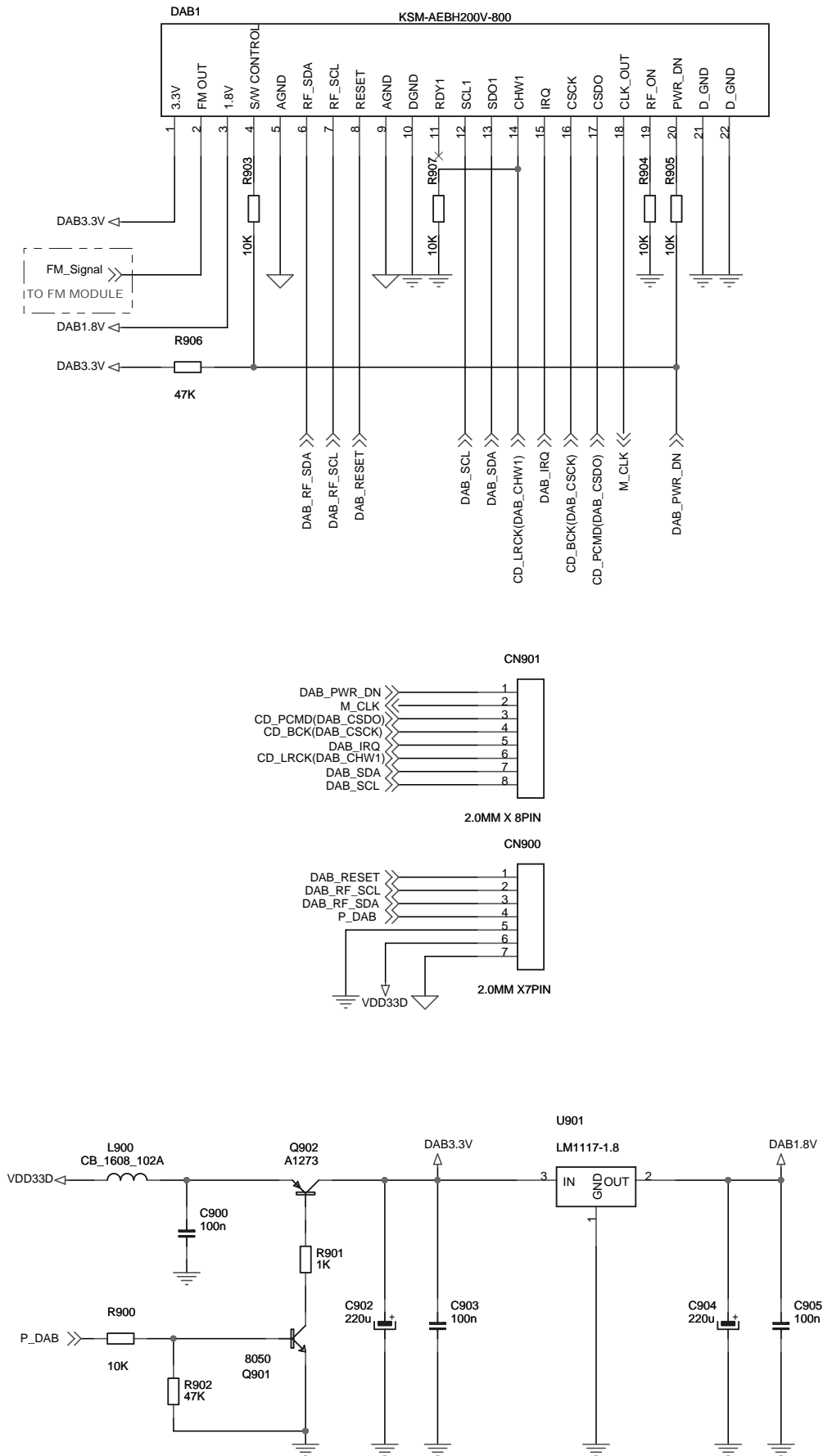


SIDE B



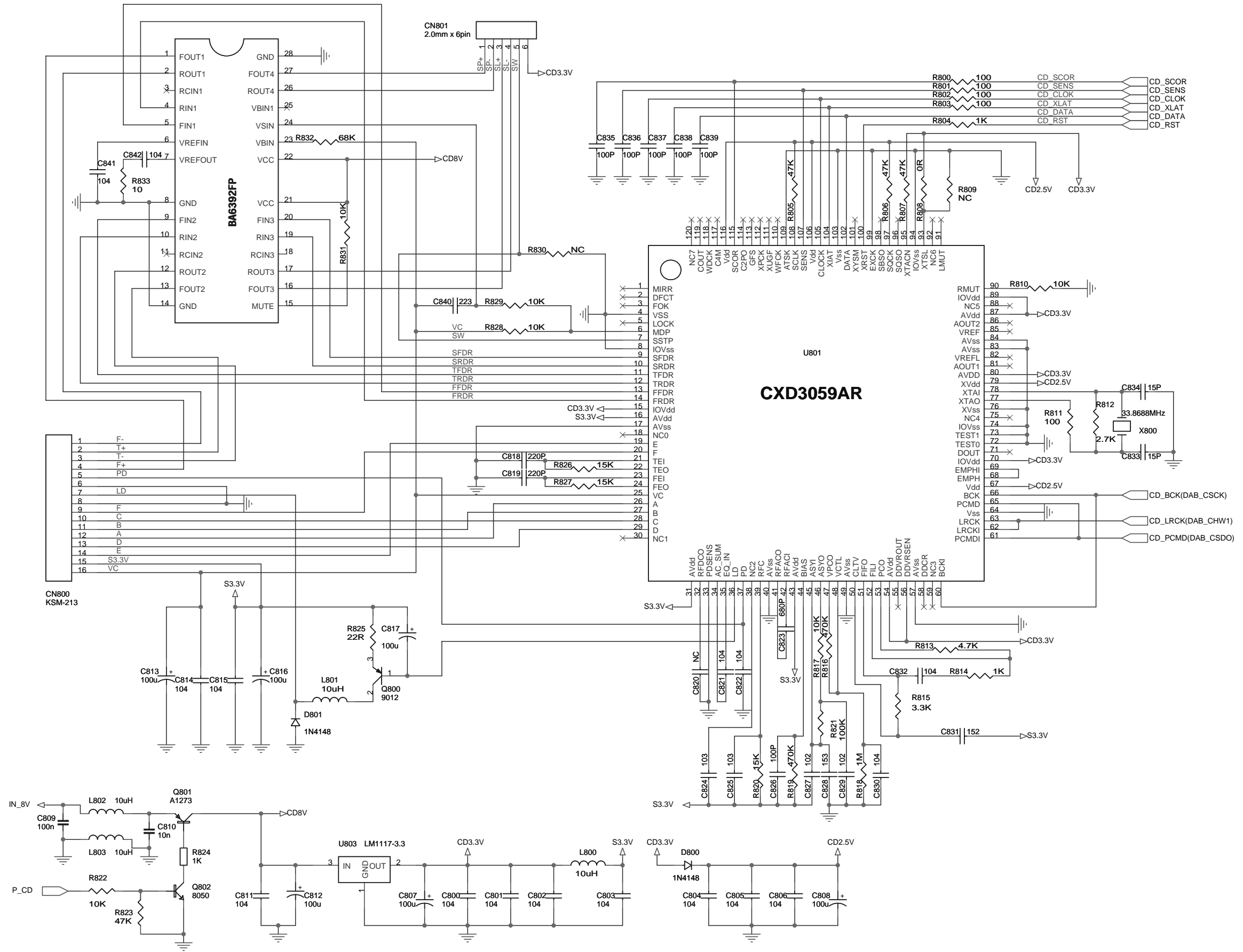
CIRCUIT DIAGRAM - MP3 CD BOARD

(MP3 CD Board is not repaired. The diagram for reference only)



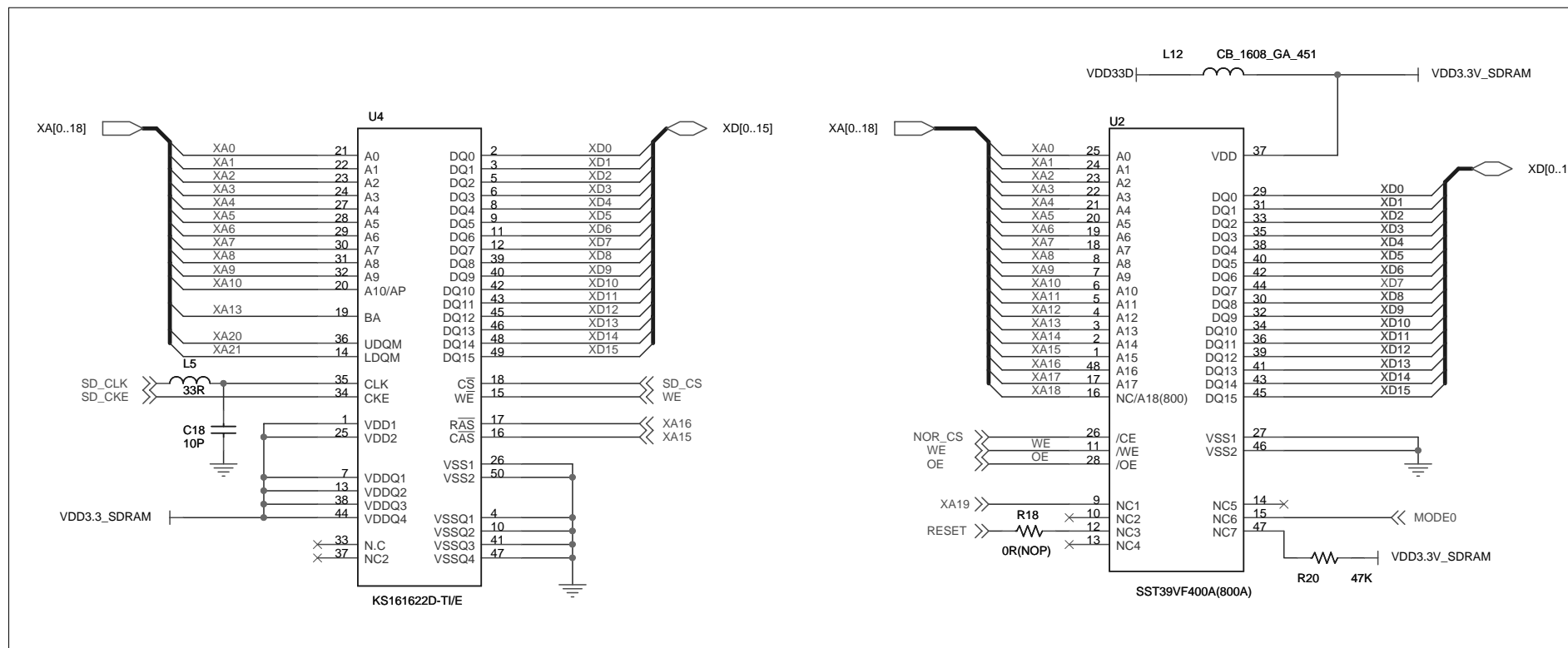
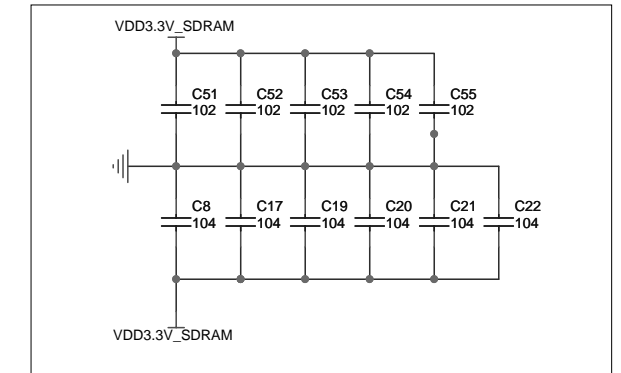
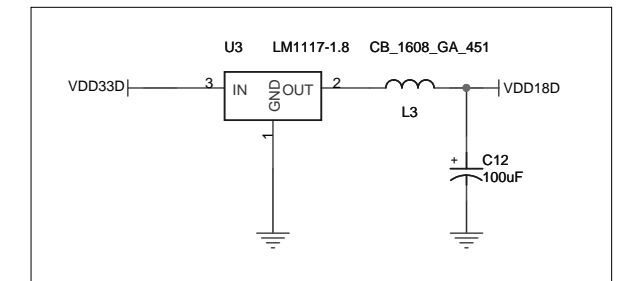
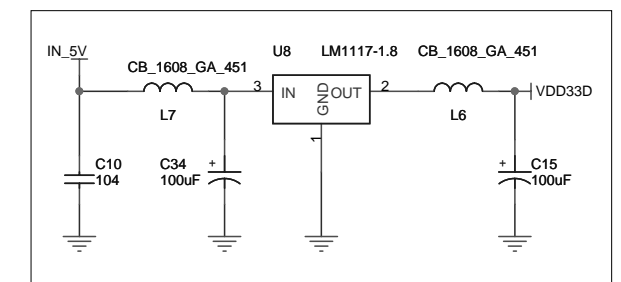
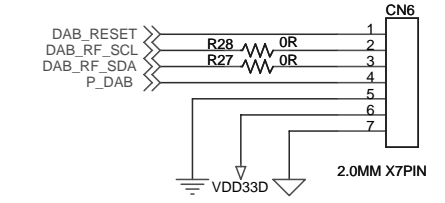
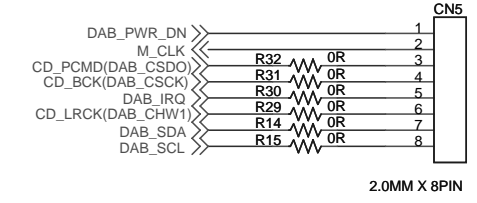
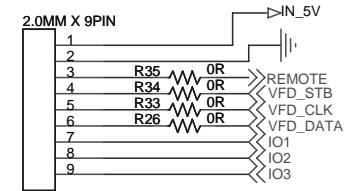
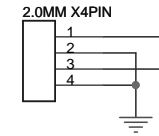
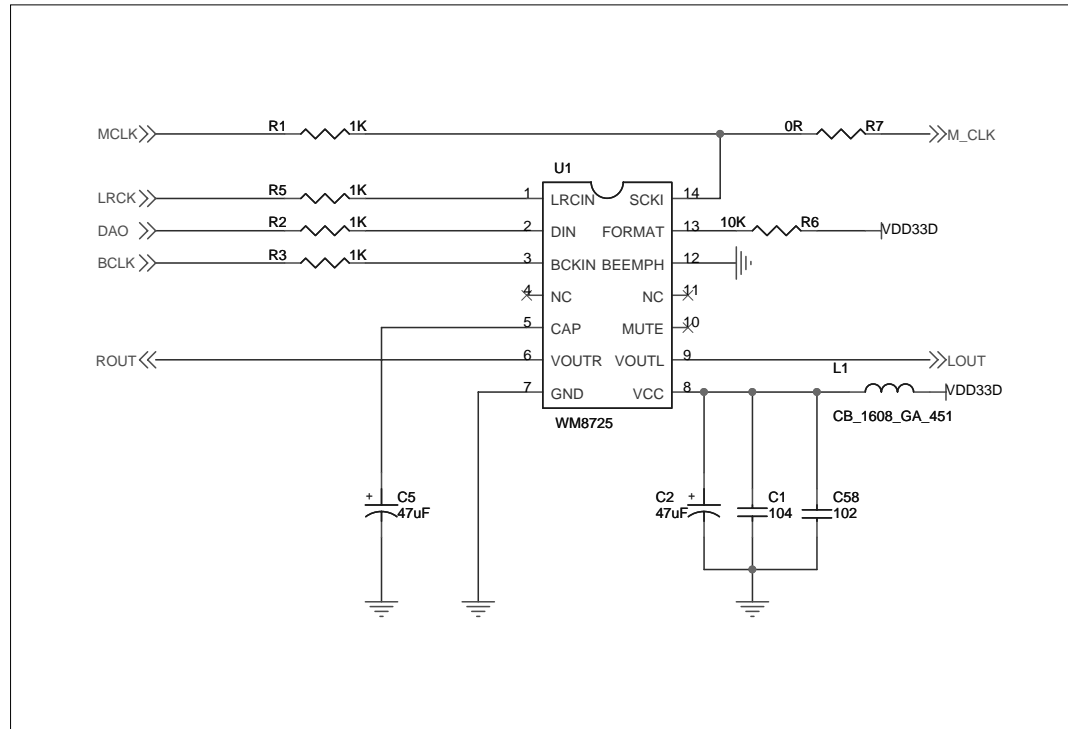
CIRCUIT DIAGRAM - MP3 CD BOARD

(MP3 CD Board is not repaired. The diagram for reference only)



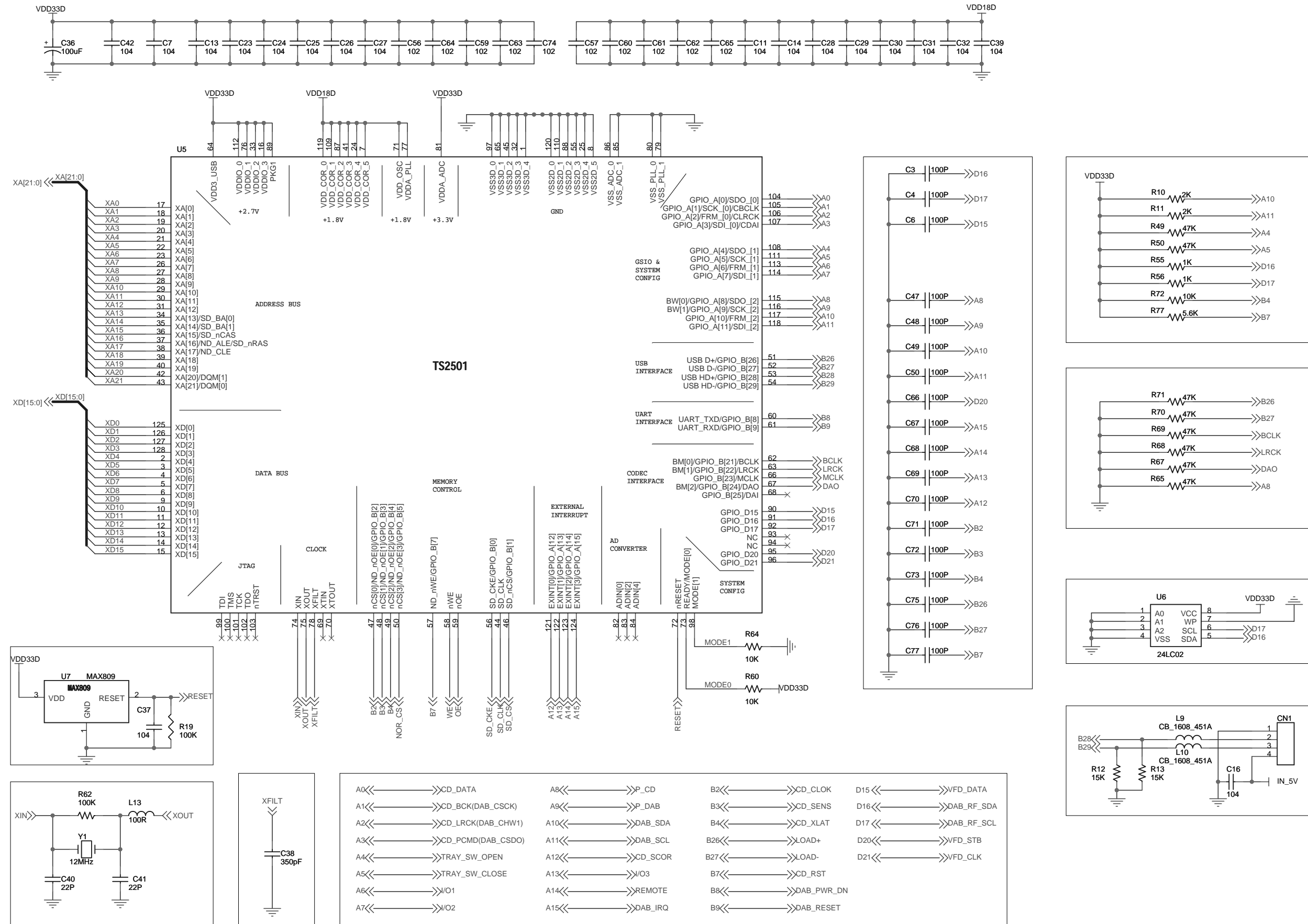
CIRCUIT DIAGRAM - MP3 CD BOARD

(MP3 CD Board is not repaired. The diagram for reference only)



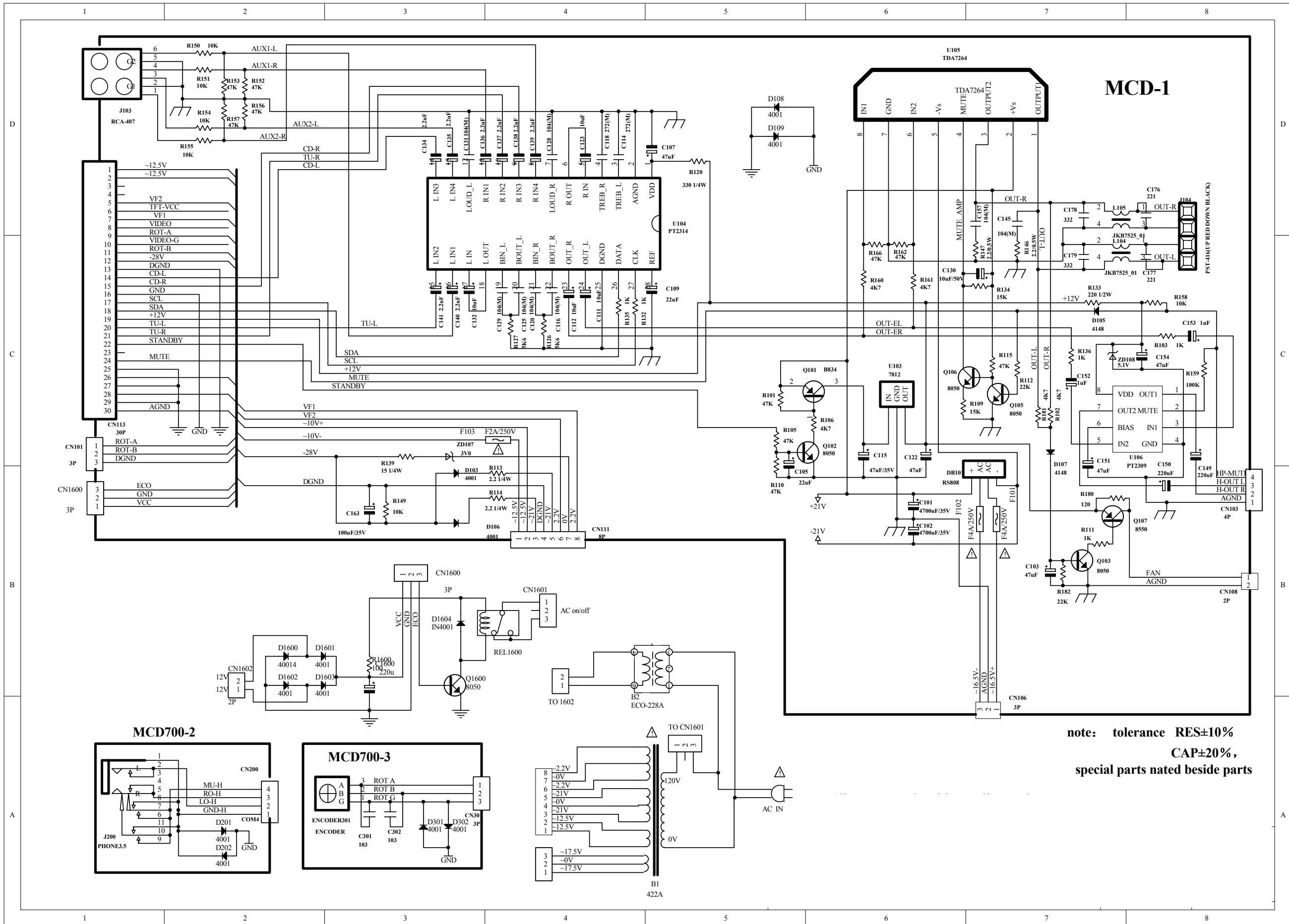
CIRCUIT DIAGRAM - MP3 CD BOARD

(MP3 CD Board is not repaired. The diagram for reference only)

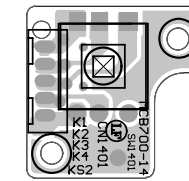
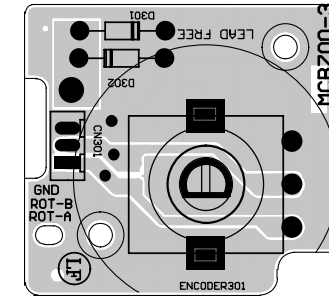
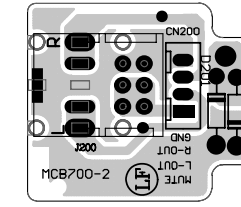
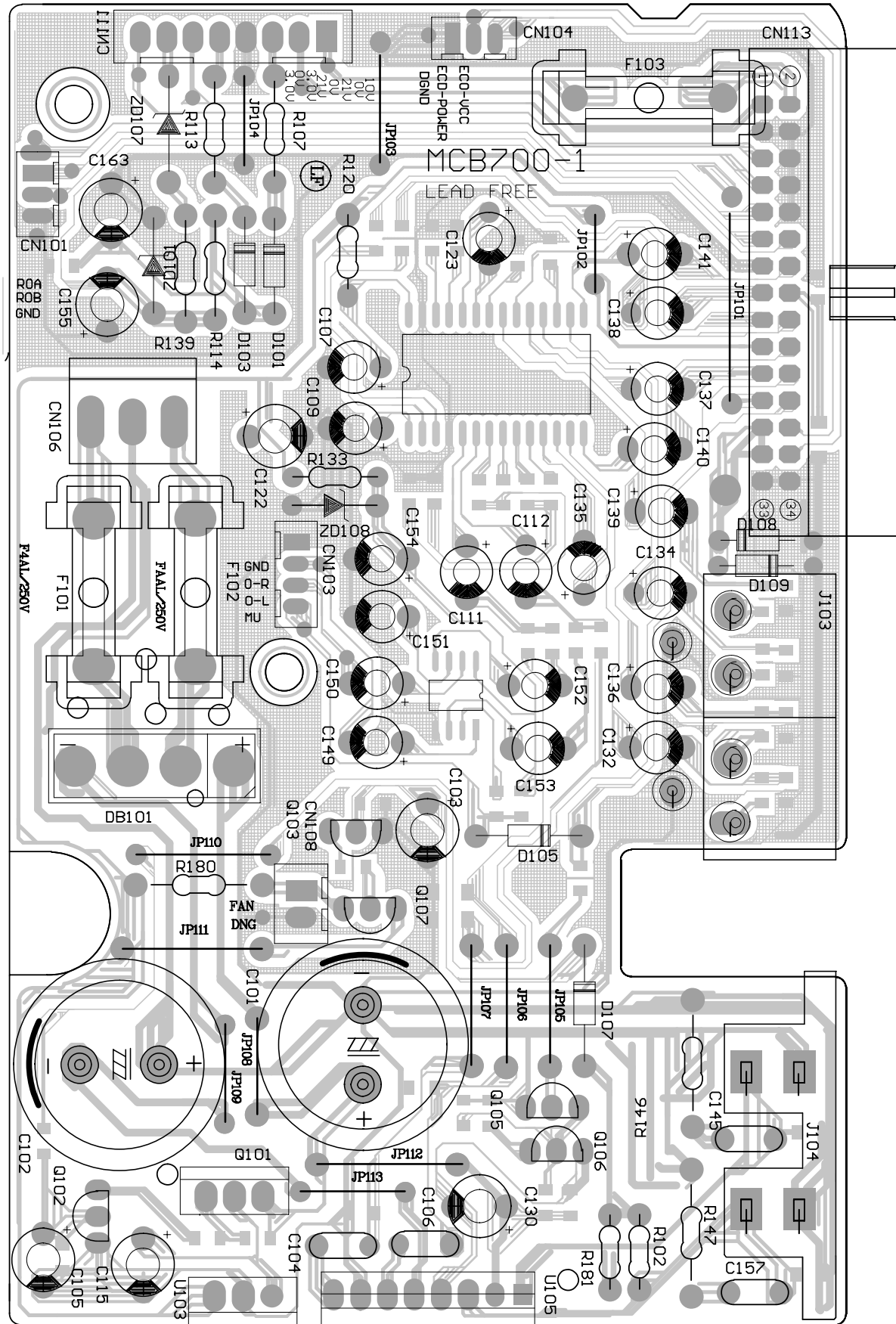


A0<<<>>>CD_DATA	A8<<<>>>P_CD	B2<<<>>>CD_CLOK	D15<<<>>>VFD_DATA
A1<<<>>>CD_BCK(DAB_CSCK)	A9<<<>>>P_DAB	B3<<<>>>CD_SENS	D16<<<>>>DAB_RF_SDA
A2<<<>>>CD_LRCK(DAB_CHW1)	A10<<<>>>DAB_SDA	B4<<<>>>CD_XLAT	D17<<<>>>DAB_RF_SCL
A3<<<>>>CD_PCMD(DAB_CSDO)	A11<<<>>>DAB_SCL	B26<<<>>>LOAD+	D20<<<>>>VFD_STB
A4<<<>>>TRAY_SW_OPEN	A12<<<>>>CD_SCOR	B27<<<>>>LOAD-	D21<<<>>>VFD_CLK
A5<<<>>>TRAY_SW_CLOSE	A13<<<>>>I/O3	B7<<<>>>CD_RST	
A6<<<>>>I/O1	A14<<<>>>I/O3	B8<<<>>>DAB_PWR_DN	
A7<<<>>>I/O2	A15<<<>>>DAB_IRQ	B9<<<>>>DAB_RESET	

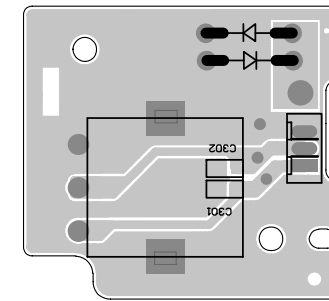
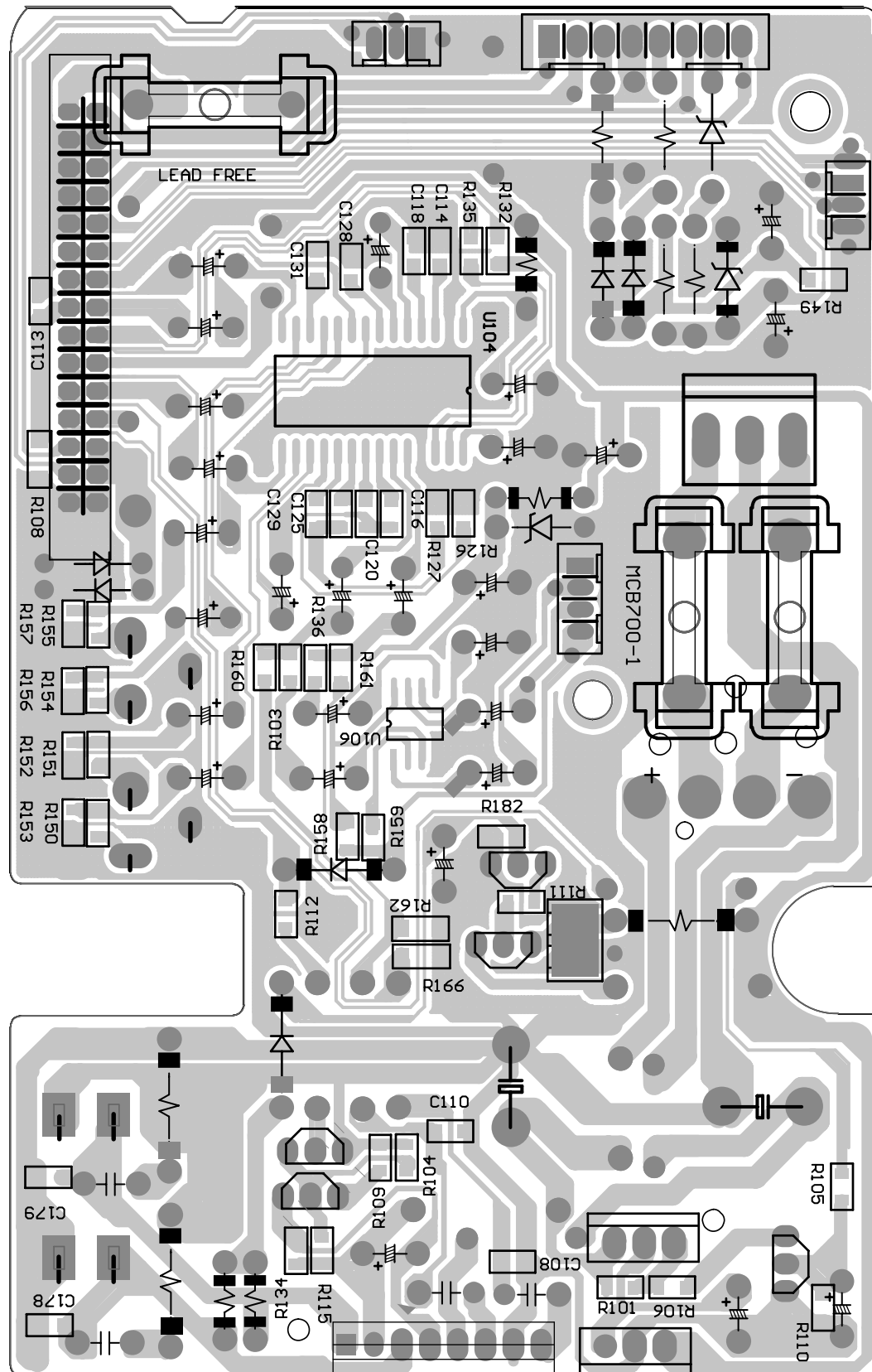
CIRCUIT DIAGRAM - AMP BLOCK



LAYOUT DIAGRAM - AMP BLOCK
TOP VIEW

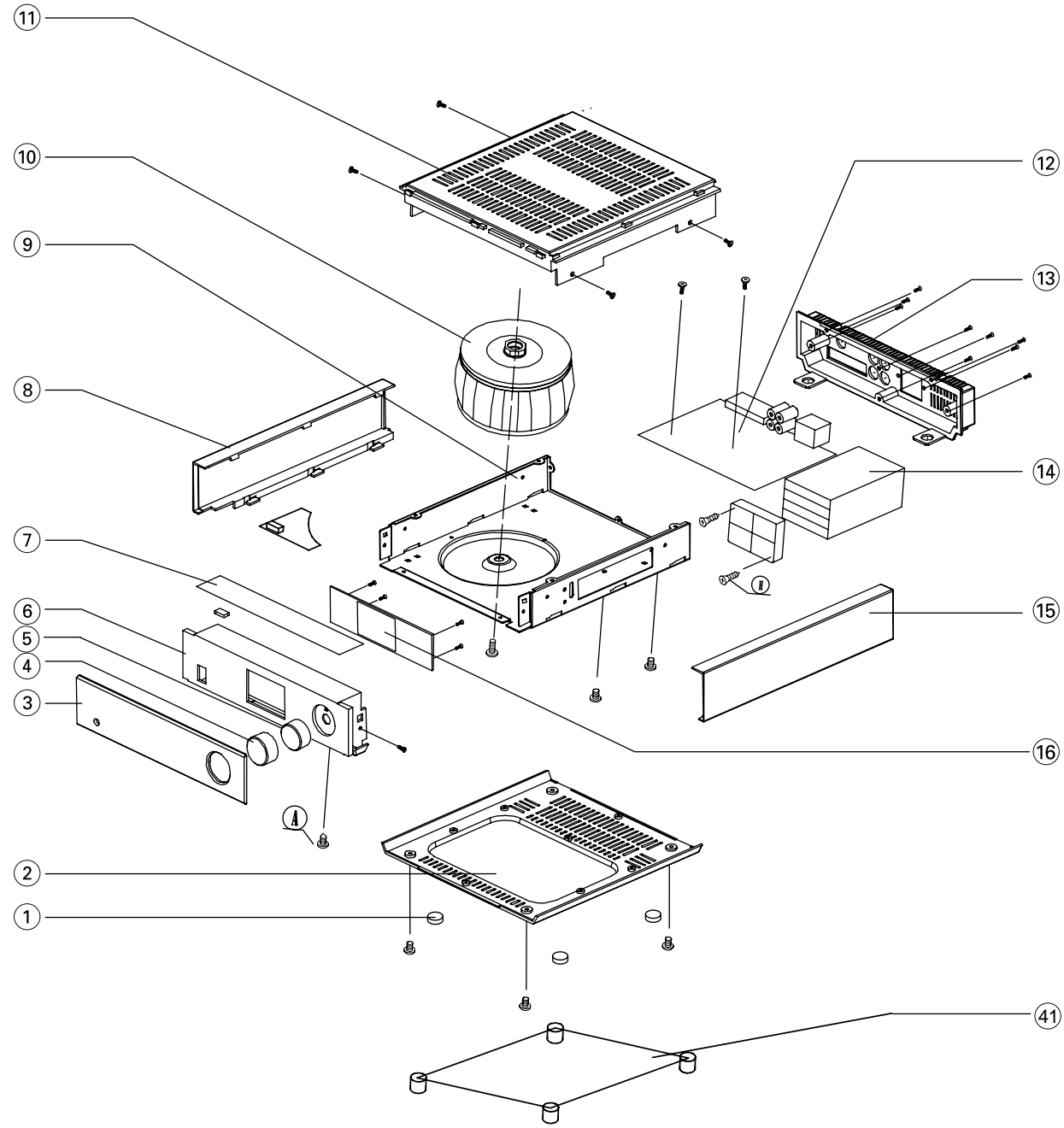


LAYOUT DIAGRAM - AMP BLOCK
BOTTOM VIEW

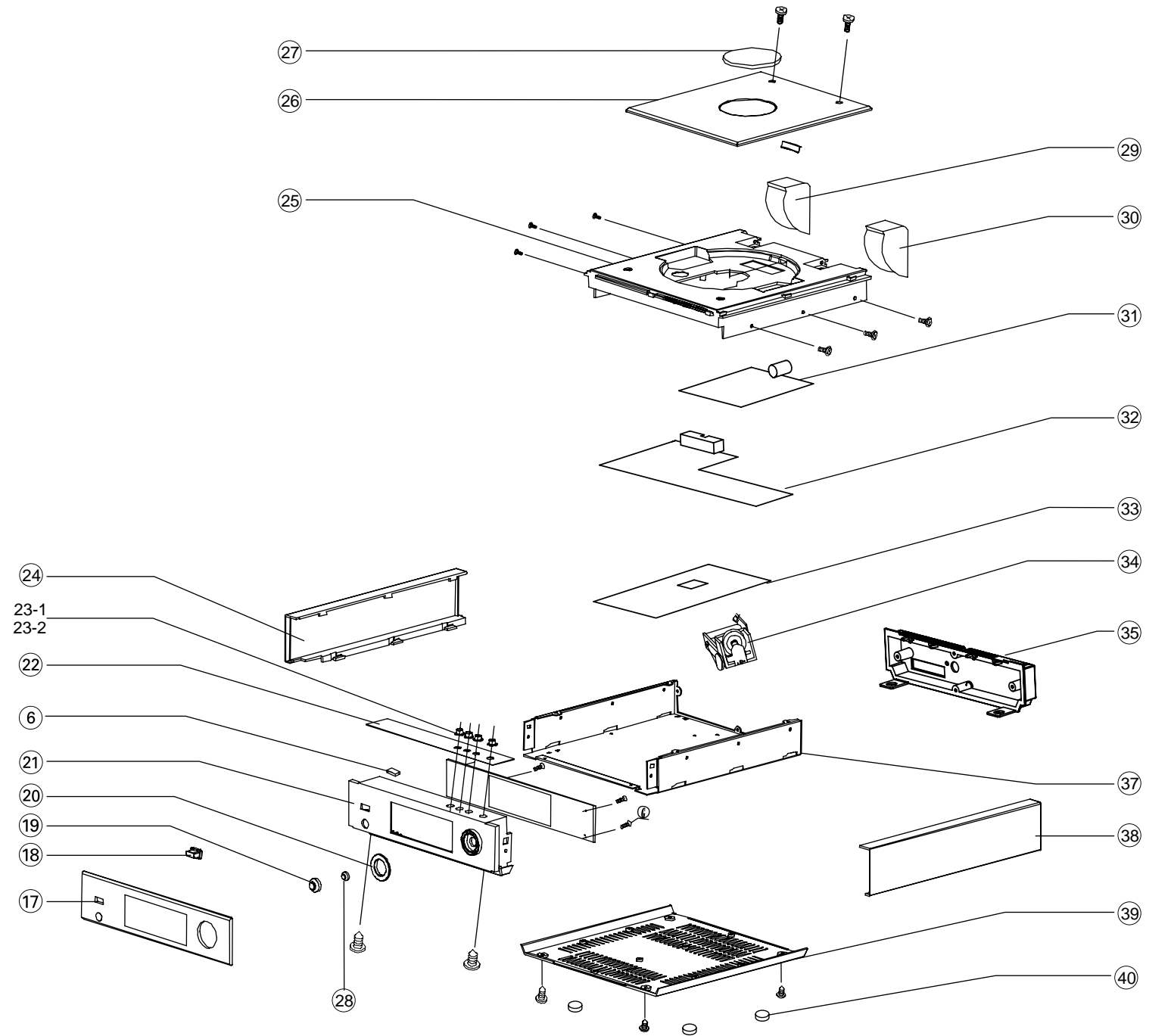


EXPLODED VIEW DIAGRAM

AMP PART



CD PART



MECHANICAL & ACCESSORIES PARTSLIST - CD PART

17	9965 000 41005	CD UNIT DISPLAY LENS
18	9940 000 02497	POWER MULTI BOTTON
19	9940 000 02495	SWITCH PUSH KNOB
21	9940 000 02477	DVD FRONT CABINET
22	9940 000 02503	DVD UNIT PUSH KEY PLATE
23-1	9940 000 02506	OVERLAY FOR FUNC. KNOB
23-2	9940 000 02494	CAB. TOP PUSH KEY KNOB
24	9940 000 02498	SIDE PLATE(L)
25	9965 000 41007	CD TOP CAB.
26	9965 000 41006	CD DOOR
27	9940 000 02504	CD DOOR DECOATIVE SHEET
28	9940 000 02505	FUNCTION KNOB METAL RING
29	9940 000 02488	CD DOOR BRACKET(L)
30	9940 000 02489	CD DOOR BRACKET(R)
31	9965 000 41009	DAB TUNER PCB ASS'Y DAB/FM
34	9940 000 02491	WORM PREFORMING ASS'Y
35	9965 000 41008	BACK CAB.
37	9940 000 02484	CABINET BOTTOM
38	9940 000 02499	SIDE PLATE R
40	9940 000 05081	RUBBER FOOT
	9940 000 02511	LEATHER BELT NE-1300

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

MECHANICAL & ACCESSORIES PARTSLIST - AMP PART

1	9940 000 02509	RUBBER FOOT
2	9940 000 02483	AMP CABINET BOTTOM
3	9965 000 41001	AMP UNIT DISPLAY LENS
4	9940 000 02496	VOLUME KNOB
5	9940 000 02501	OVERLAY FOR KNOB
6	9940 000 02476	AMP CABINET FRONT
7	9940 000 02502	CABINET TOP PLATE
8	9940 000 02498	SIDE PLATE L
10	△ 9965 000 41004	TRASFO 422A-12 230V/50
11	9940 000 02478	AMP CABINET TOP
13	9965 000 41000	AMP CABINET BACK
15	9940 000 02499	SIDE PLATE R
41	9940 000 05075	PEDESTAL
	9965 000 40998	DAB ANTENNA SPEC 1.8M
	9940 000 03069	MCD700 PLASTIC GRILLE
	9965 000 40999	REMOTE CONTROL
	9940 000 02507	MCD700 SPEAKER BOX ASS'Y
	△ 9965 000 38625	POWER PLUG ADAPTOR
	△ 9940 000 03181	AC LINE CORD
	9940 000 03506	SPEAKER CONNECTION WIRE
	9940 000 05078	AUDIO SINGLE WIRE 1.5M
	9940 000 04178	CONTROL CABLE 30P

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

ELECTRICAL PARTSLIST - CD PART

C846	9965 000 41014	ELEC. CAP. 3300UF 25V
CN806	9940 000 02533	PIN CONNECTOR 30P
D804	9940 000 03803	DIODE IN60
IC701	9940 000 02539	IC PT6311
IC800	9940 000 02548	IC LM7805
IC801	9940 000 02549	CPU U252(3P9228 XYZ)
IC802	9940 000 03512	IC AC6811
IC803	9940 000 02547	IC AT24C02-PC27(2.7V)
IC804	9940 000 02548	IC LM7805
IC805	9940 000 02548	IC LM7805
IC806	9940 000 03798	IC PT2579-SN SMALL
IC807	9965 000 41015	IC IC7808
LED	9940 000 02537	LED (BLUE) 3R4CB71D-2B-208
Q800	9940 000 02519	TRANSISTOR 8550C
Q801	9940 000 02519	TRANSISTOR 8550C
Q802	9940 000 02519	TRANSISTOR 8550C
Q804	9940 000 02518	TRANSISTOR 8050C
Q805	9940 000 02518	TRANSISTOR 8050C
Q807	9965 000 41016	TRANSISTOR B834-Y
S701	9940 000 02542	IR SENSOR
SW1501	9940 000 02555	LIGHT TOUCH SWITCH
SW1502	9940 000 02555	LIGHT TOUCH SWITCH
SW1503	9940 000 02555	LIGHT TOUCH SWITCH
SW1504	9940 000 02555	LIGHT TOUCH SWITCH
SW701	9940 000 02543	LIGHT TOUCH SWITCH
X800	9940 000 04962	X'TAL 4.332MHZ /12
X801	9940 000 03152	CERMIC FILTER FREQ. 4.19MH
X802	9940 000 02551	X'TAL FREQ. 32.768KHZ
	9940 000 02538	MOTOR RF-370C-14370
	9940 000 02541	VFD DISPLAY
	9940 000 02557	SWITCH(4-DIRECTIONS)
	9940 000 05068	DOOR SWITCH
	9940 000 05215	LED DIODE RED
	9965 000 41010	MP3 DECODER CARD ASS'Y
	9965 000 41011	CD MECH.

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

ELECTRICAL PARTSLIST - AMP PART

C101	9940 000 03721	ELE. CAP. 3300UF 35V 100-10%
C102	9940 000 03721	ELE. CAP. 3300UF 35V 100-10%
C145	9940 000 03718	CAPACITOR 104J 100V ±10%
C157	9940 000 03718	CAPACITOR 104J 100V ±10%
CDR301	9940 000 02535	VOLUME CODER ED-1612-00-F15
CN109	9965 000 41002	SPEAKER SOCKET DJ-270-DH-03
CN113	9940 000 02533	PIN CONNECTOR 30P
D101	9940 000 02521	THYRISTOR RS406(4A)
F101	△ 994000002531	FUSE F4AL250V
F102	△ 994000002531	FUSE F4AL250V
F103	△ 994000002529	FUSE F2AL250V
J103	9940 000 05067	IC 7812
J104	9940 000 05066	I.C.PT2314 PRINCETON
J200	9940 000 02534	HEADPHONE JACK 3.5MM
Q101	9940 000 02517	TRANSISTOR 2SB772
Q102	9940 000 02518	TRANSISTOR 8050C
Q103	9940 000 02518	TRANSISTOR 8050C
Q105	9940 000 02518	TRANSISTOR 8050C
Q106	9940 000 02518	TRANSISTOR 8050C
Q107	9940 000 02519	TRANSISTOR 8550C
Q1600	9940 000 02518	TRANSISTOR 8050C
RL1600	9940 000 03509	RELAY 10A 240VAC/30VDC
SW401	9940 000 02536	SPECIAL SWITCH TC-V030A
SW402	9940 000 02536	SPECIAL SWITCH TC-V030A
U103	9940 000 02526	IC 7812
U104	9940 000 02525	IC PT2314 PRINCETON
U105	9940 000 04976	IC TDA7264
U106	9940 000 02524	IC PT2309-S(L)
	9965 000 41003	MINI FAN RDM4010S DC12V/0.07A
	9965 000 41012	FM TUNER KST-F404HA-11A
	9965 000 41013	DAB TUNER KSM-AEBH200V-801
	△ 9965 000 41017	TRASFO. EI-228A-12 230V/50

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