DVD Micro System

MCM710

Service
Service
Service

Service Manual

TABLE OF CONTENTS

**CLASS 1
LASER PRODUCT**

Version 1.1

PHILIPS

LOCATION OF PC BOARDS

DISPLAY BOARD
HEADPHONE BOARD
DECODER BOARD
VOLUME BOARD
POWER BOARD
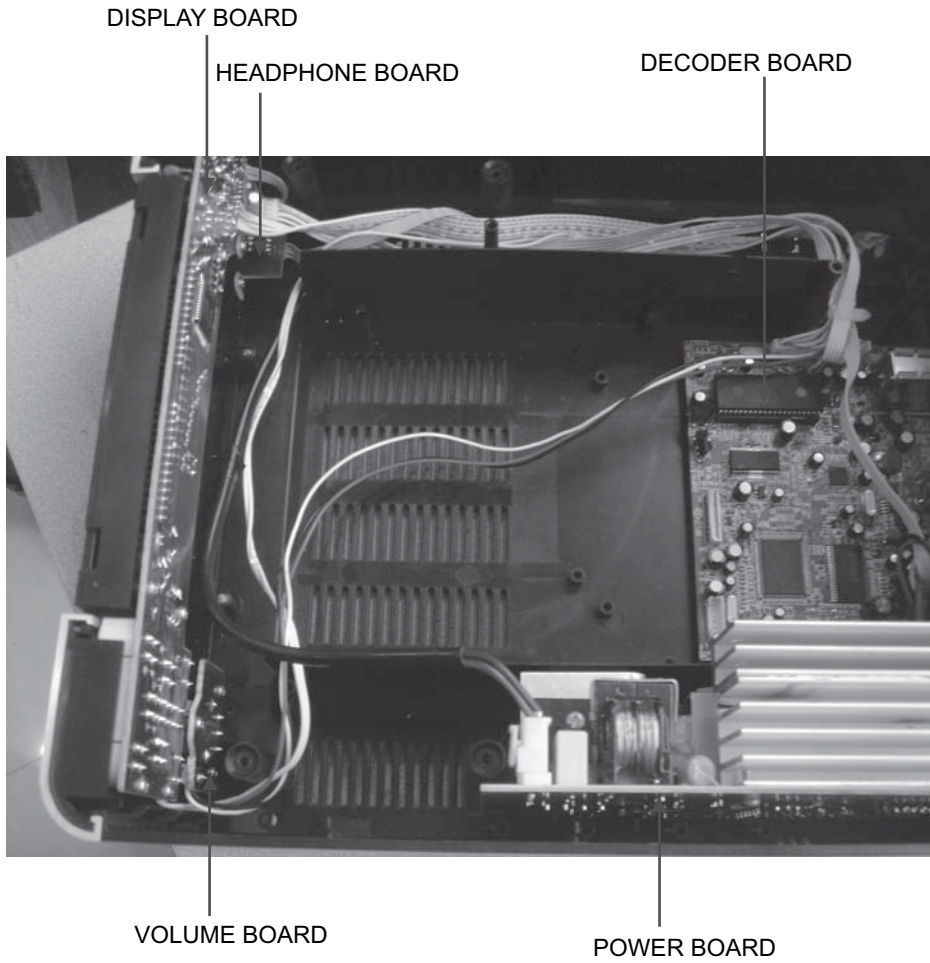
VERSION VARIATIONS:

Type /Versions: Features & Board in used:	Service policy	MCM710								
		/12								
VFD BOARD	C									
TUNER BOARD	M									
LAMP BOARD	M									
HEADPHONE BOARD	M									
VOLUME BOARD	M									
USB BOARD	M									
USB LAMP BOARD	M									
POWER BOARD	M									
DECODE BOARD	M									

```
* TIPS :  C  -- Component Lever Repair.
          M  -- Module Lever Repair
          X  -- Not used
```

SPESIFICATION

AMPLIFIER

Rated Output Power .... 2 x 45 W RMS

Signal-to-noise ratio .... ≥ 65 dBA

Frequency response .... 20 Hz – 20 KHz, ± 3 dB

Aux Input .... 1V RMS 20kohm

DISC

Laser Type .... Semiconductor

Disc Diameter 12cm/8cm

Support Disc ....
.... CD-DA,CD-R,CD-RW,MP3-CD,WMA-CD

Audio DAC .... 24Bits / 44.1kHz

Total Harmonic Distortion .... <0.1%(1kHz)

Frequency Response .... 4Hz - 20kHz (44.1kHz)

S/N Ration .... >65dBA

TUNER

FM Tuning Range .... 87.5 – 108 MHz

Tuning grid 50KHz

Sensitivity

– Mono, 26dB S/N Ratio 5uV

– Stereo, 46dB S/N Ratio 100uV

Selectivity .... >28dB

Image Rejection .... >25dB

Total Harmonic Distortion .... <3%

Signal to Noise Ration .... >55dBA

SPEAKERS

Speaker Impedance 4ohm

Speaker Driver, base .... 5"

Speaker Driver, tweeter .... 0.2"

Frequency Response .... 60 - 20 KHz

GENERAL INFORMATION

Total Output power .... 2 x 50 W RMS

AC Power .... 220-230 V / 50Hz/60Hz

Operation Power Consumption 52W

Standby Power Consumption .... <7W

Eco Standby Power Consumption 1W

Headphone Output 2X15mW 32ohm

USB Direct .... Version 1.1

Dimensions

– Main unit (w x h x d) 248x110x307mm

– Speaker box (w x h x d) 170x270x220mm

Weight

– With Packing .... 10 KG

– Main Unit .... 2.3 KG

– Speaker box .... 2.6 KG

Specifications and external appearance are
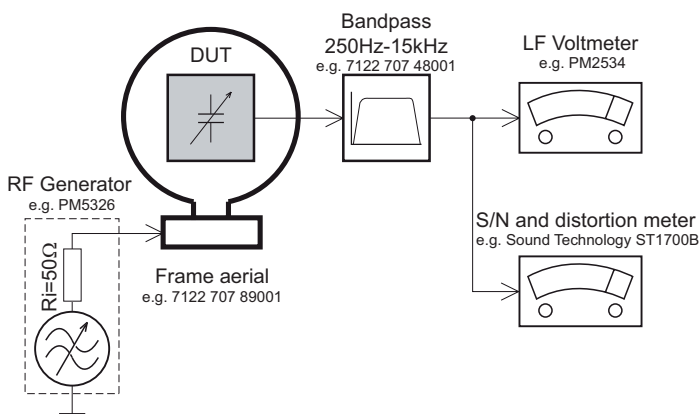subject to change without notice.

MEASUREMENT SETUP

Tuner FM
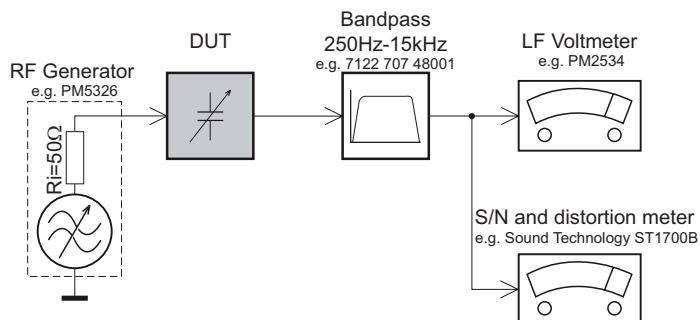
Use a bandpass filter to eliminate hum (50Hz, 100Hz) and disturbance from the pilottone (19kHz, 38kHz).
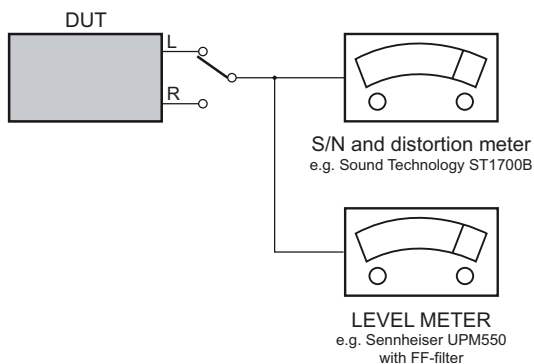
Tuner AM (MW,LW)

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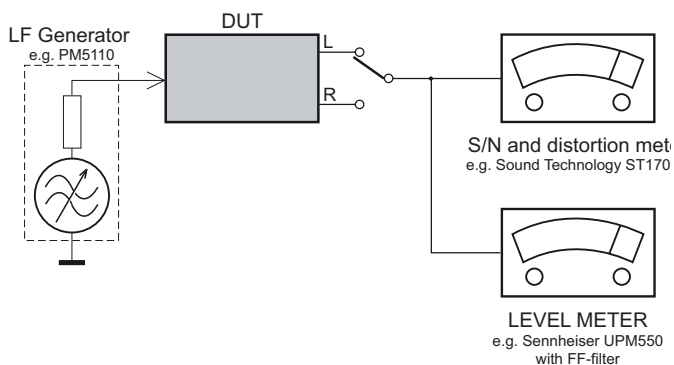Use a bandpass filter (or at least a high pass filter with 250Hz) to eliminate hum (50Hz, 100Hz).

CD

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

Recorder

Use Universal Test Cassette **CrO2**   SBC419   4822 397 30069
or Universal Test Cassette **Fe**   SBC420   4822 397 30071

SERVICE AIDS

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.

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 ⚠ .

ESD

CLASS 1 LASER PRODUCT

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:

- 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
  * Lead free

 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.

INSTRUCTIONS ON CD PLAYABILITY

For flap loaders (= access to CD drive possible)
cleaning method ④ is recommended
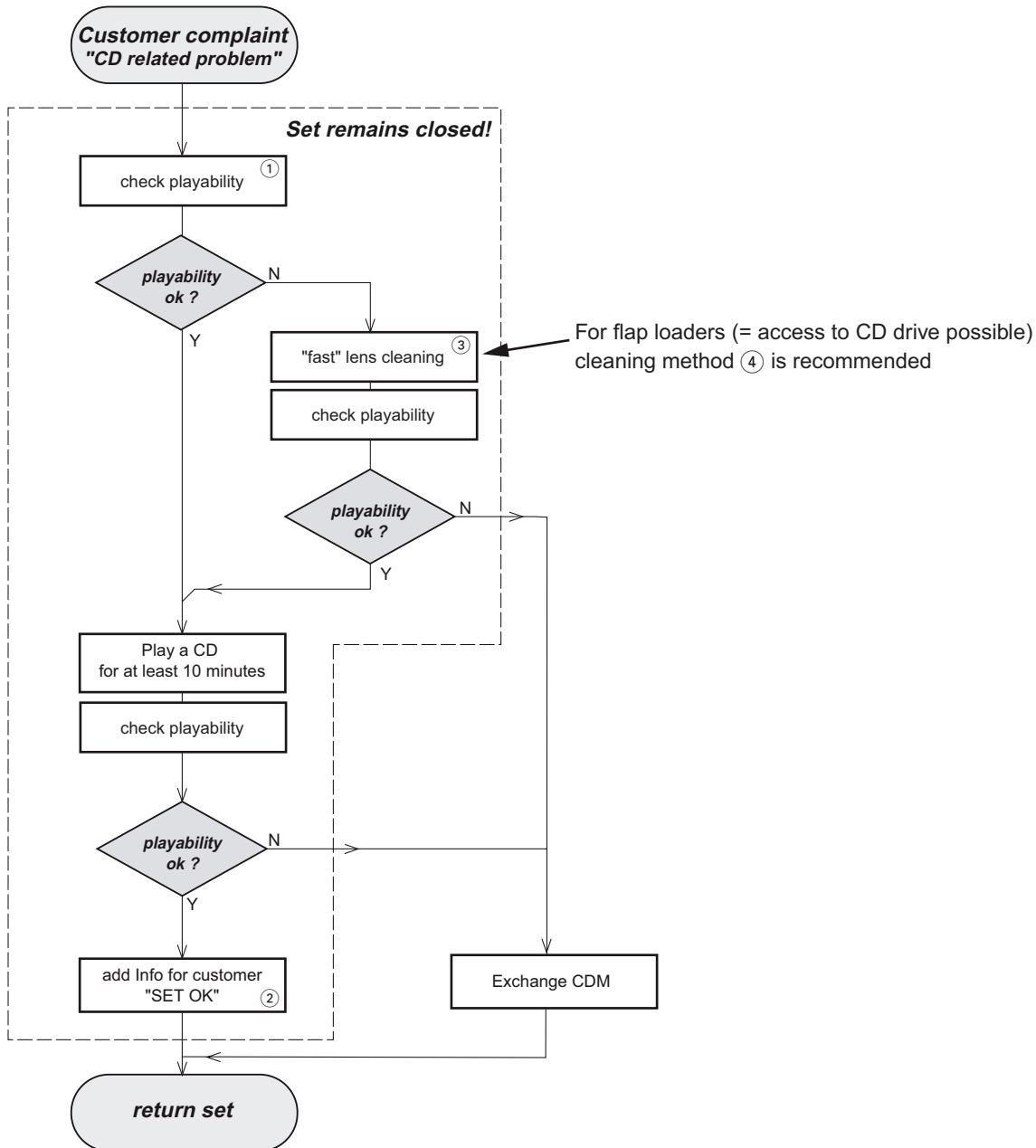
① - ④ For description - see following pages

INSTRUCTIONS ON CD PLAYABILITY

①

PLAYABILITY CHECK

For sets which are compatible with **CD-RW** discs
use CD-RW Printed Audio Disc 7104 099 96611
    TR 3 (Fingerprint)
    TR 8 (600μ Black dot) **maximum at 01:00**

• playback of these two tracks without audible disturbance
  playing time for: Fingerprint ≥10seconds
                      Black dot from 00:50 to 01:10
• jump forward/backward (search) within a reasonable time

For all other sets
use CD-DA SBC 444A..................................4822 397 30245
    TR 14 (600μ Black dot) **maximum at 01:15**
    TR 19 (Fingerprint)
    TR 10 (1000μ wedge)

• playback of all these tracks without audible disturbance
  playing time for: 1000μ wedge ≥10seconds
                      Fingerprint ≥10seconds
                      Black dot from 01:05 to 01:25
• jump forward/backward (search) within a reasonable time

②

CUSTOMER INFORMATION

It is proposed to add an addendum sheet to the set which
informs the customer that the set has been checked
carefully - but no fault was found.
The problem was obviously caused by a scratched, dirty or
copy-protected CD. In case problems remain, the customer
is requested to contact the workshop directly.
The lens cleaning (method ③) should be mentioned in the
addendum sheet.

The final wording in national language as well as the printing
is under responsibility of the Regional Service Organizations.

④

LIQUID LENS CLEANING

> **Before touching the lens it is advised to clean the
> surface of the lens by blowing clean air over it.
> This to avoid that little particles make scratches on
> the lens.**

Because the material of the lens is synthetic and coated
with a special anti-reflectivity layer, cleaning must be done
with a non-aggressive cleaning fluid. It is advised to use
"Cleaning Solvent

The actuator is a very precise mechanical component and
may not be damaged in order to guarantee its full function.
Clean the lens gently (don't press too hard) with a soft and
clean cotton bud moistened with the special lens cleaner.

The direction of cleaning must be in the way as indicated in
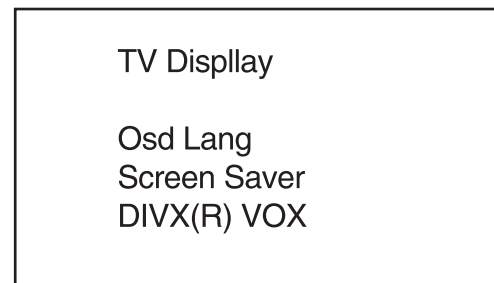the picture below.
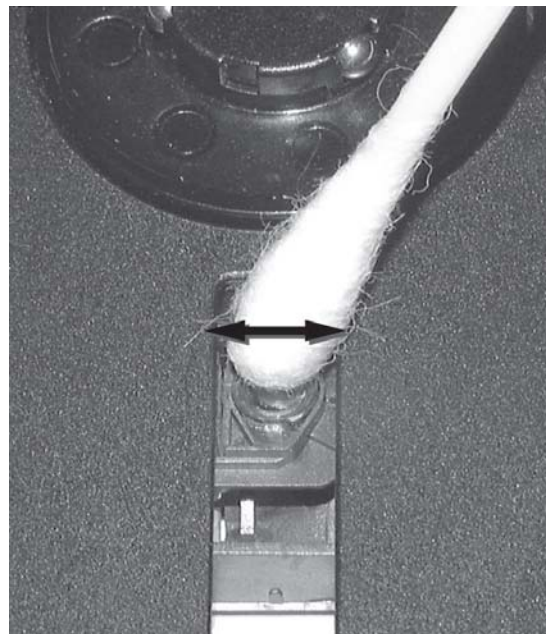
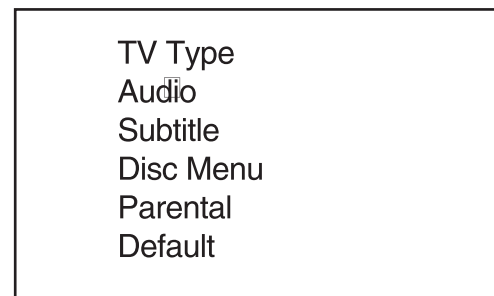SOFTWARE VERSION CHECK & UPGRADE

A.MPEG SOFTWARE VERSION CHECK

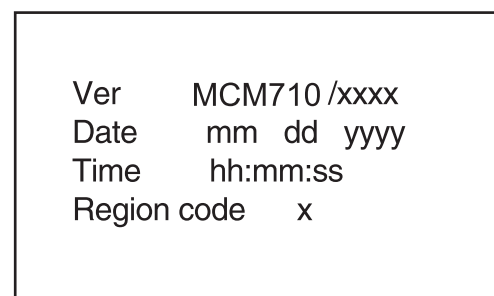1.Press SYSTEM key to open setup page,

TV Screen shows:

```
TV Displlay

Osd Lang
Screen Saver
DIVX(R) VOX
```

2.Press REMOVAL key to the original setup page,

TV Screen shows:

```
TV Type
Audio
Subtitle
Disc Menu
Parental
Default
```

3.Enter the password "811502"

TV Screen shows:

```
Ver       MCM710 /xxxx
Date       mm  dd  yyyy
Time       hh:mm:ss
Region code     x
```

4.Press ▲ or ▼ button (on the remote control) to change region.
    Press OK to confirm.

B.CPU VERSION CHECK

Keep PLAY/PAUSE and STOP buttons (on the set) depressed while pressing POWER on.
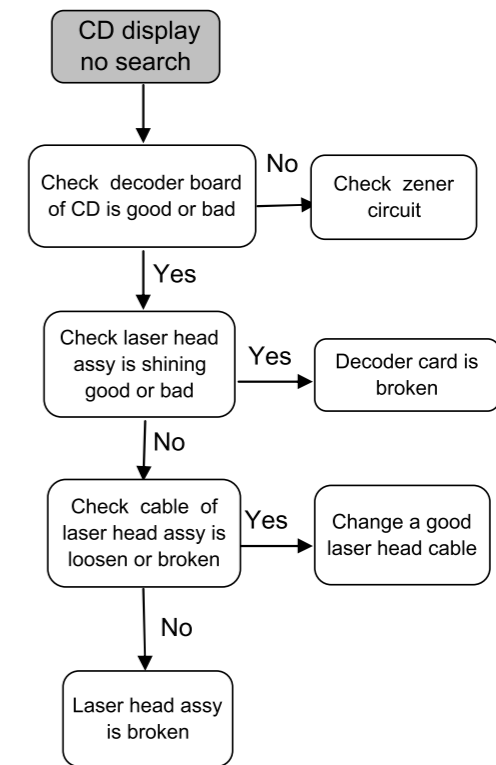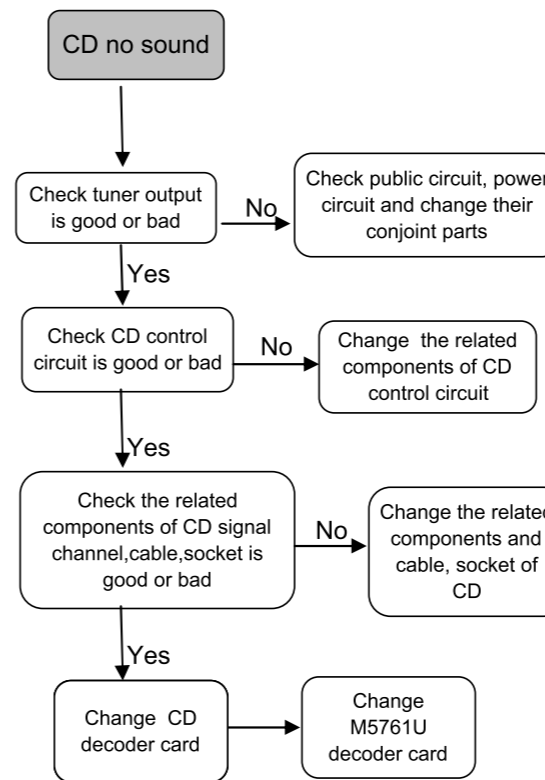
TV screen shows
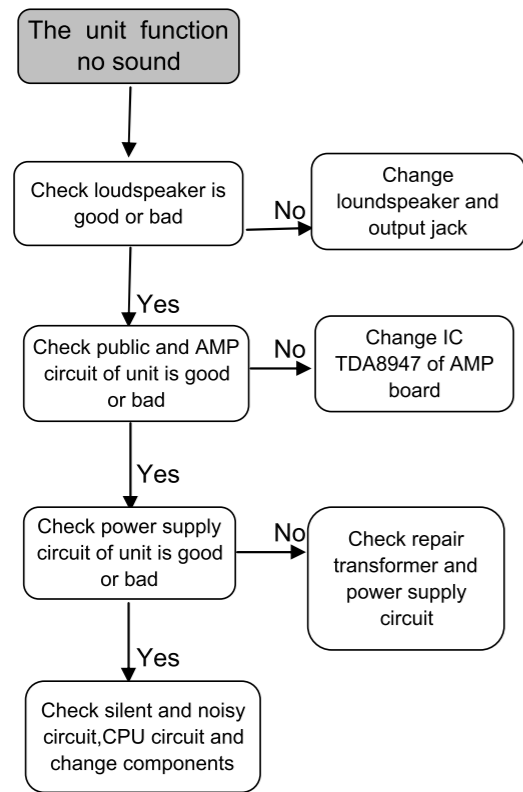
```
MCM710/  Vxx
```
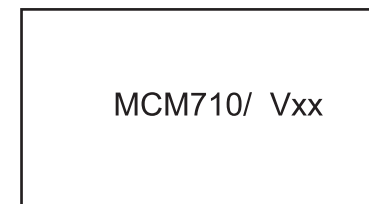
C. MPEG SOFTWARE UPGRADING

1. download the firmware from Philips support website
    http://www.philips.com/support

2. Prepare a uploading CD

3. Put the CD in the CD tray

4. TV Screen shows

```
Upgade file deteced
Upgade?
Press PLAY to start
upgrading
```

MALFUCTION CHECK CHART

The unit function no sound

Check loudspeaker is good or bad →No→ Change loundspeaker and output jack

↓Yes

Check public and AMP circuit of unit is good or bad →No→ Change IC TDA8947 of AMP board

↓Yes

Check power supply circuit of unit is good or bad →No→ Check repair transformer and power supply circuit

↓Yes

Check silent and noisy circuit,CPU circuit and change components

Tuner function no sound

Check CD output is good or bad →No→ Check pulic and power circuit

↓Yes

Check tuner control circuit is good or bad →No→ Change the related components of tuner circuit

↓Yes

Check power supply of tuner circuit is good or bad →No→ Change the relaged components of power board

↓Yes

Check IC5766 of tuner circuit and its conjoint part is good or bad →No→ Change the top of tuner

CD no sound

Check tuner output is good or bad →No→ Check public circuit, power circuit and change their conjoint parts

↓Yes

Check CD control circuit is good or bad →No→ Change the related components of CD control circuit

↓Yes

Check the related components of CD signal channel,cable,socket is good or bad →No→ Change the related components and cable, socket of CD

↓Yes

Change CD decoder card → Change M5761U decoder card

CD display no search

Check decoder board of CD is good or bad →No→ Check zener circuit

↓Yes

Check laser head assy is shining good or bad →Yes→ Decoder card is broken

↓No

Check cable of laser head assy is loosen or broken →Yes→ Change a good laser head cable

↓No

Laser head assy is broken

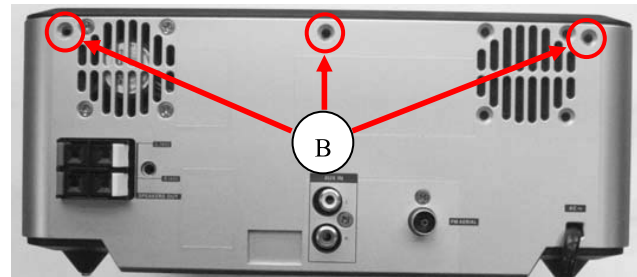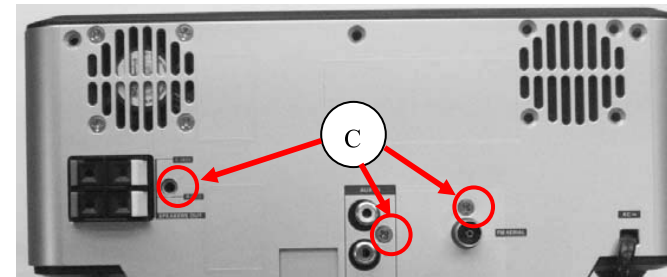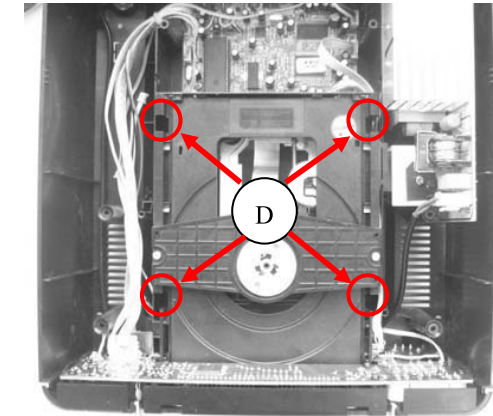# DISASSEMBLY DIAGRAM

A.Loosen screws 3×12PA(4PCS)
to remove top cover
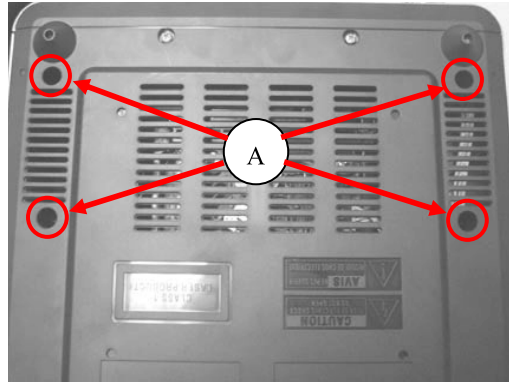
B.Loosen screws3×10PA(3PCS)
to remove top cover
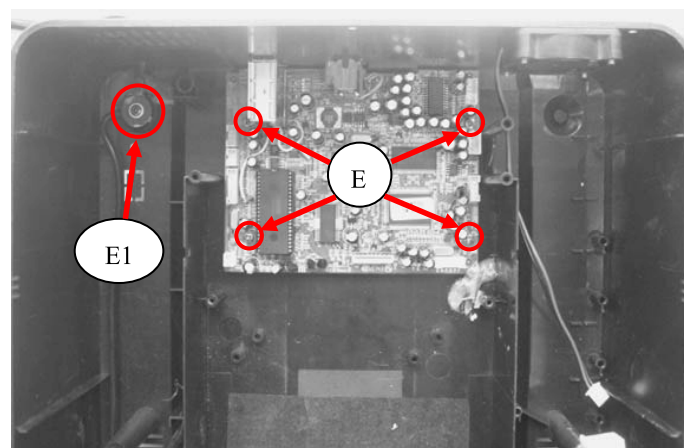

C.Loosen screws3×10PA(2PCS) to
remove terminal of back plate
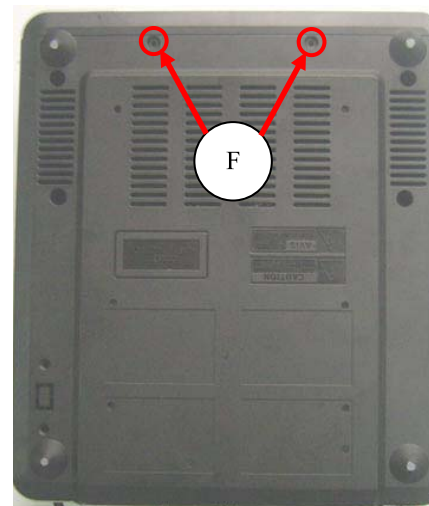Loosen screws3×6FMTT(1PCS)
to remove tuner board

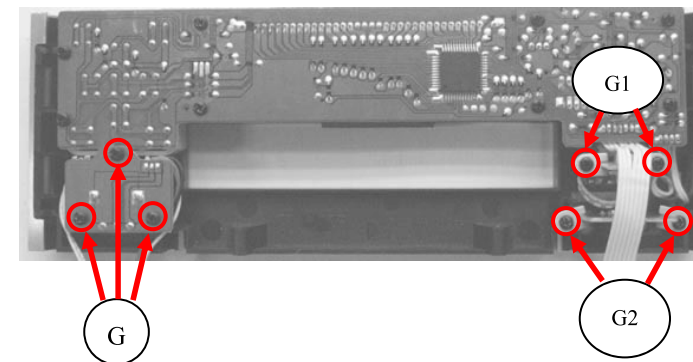

D.Loosen screws3×15BA(4PCS)
to remove mechanism core

E.Loosen screws 3×6PT(4PCS) to
remove decoder board
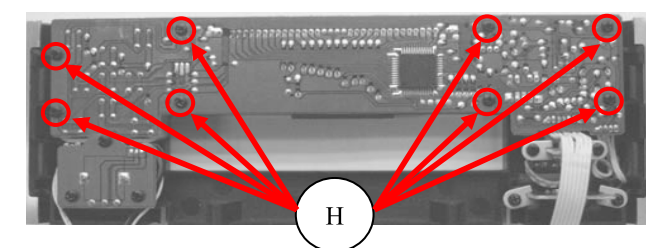E1.Loosen screws3×10PWA (1PCS)
which fixed the power wire
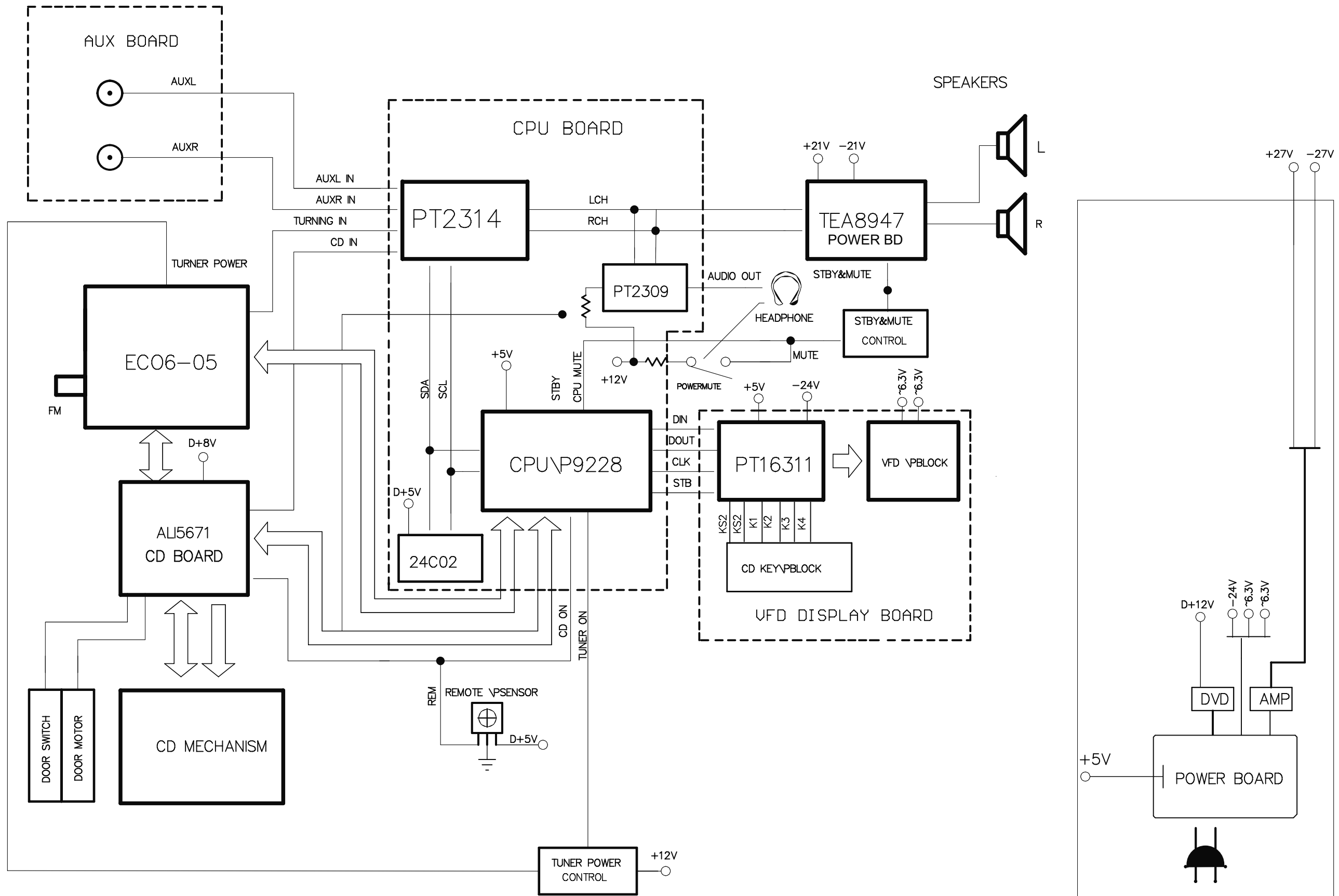

F.Loosen screws 3×12BA(2PCS) which
fixed bottom cover

G.Loosen screws2.6×8BA(3PCS) to
remove volume board
G1.Loosn screws2.6×8BA(2PCS) to
remove USB board
G2.Loosen screws2.6×8BA(2PCS) to
remove headphone board

H.Loosen screws 2.6×8BA(8PCS) to
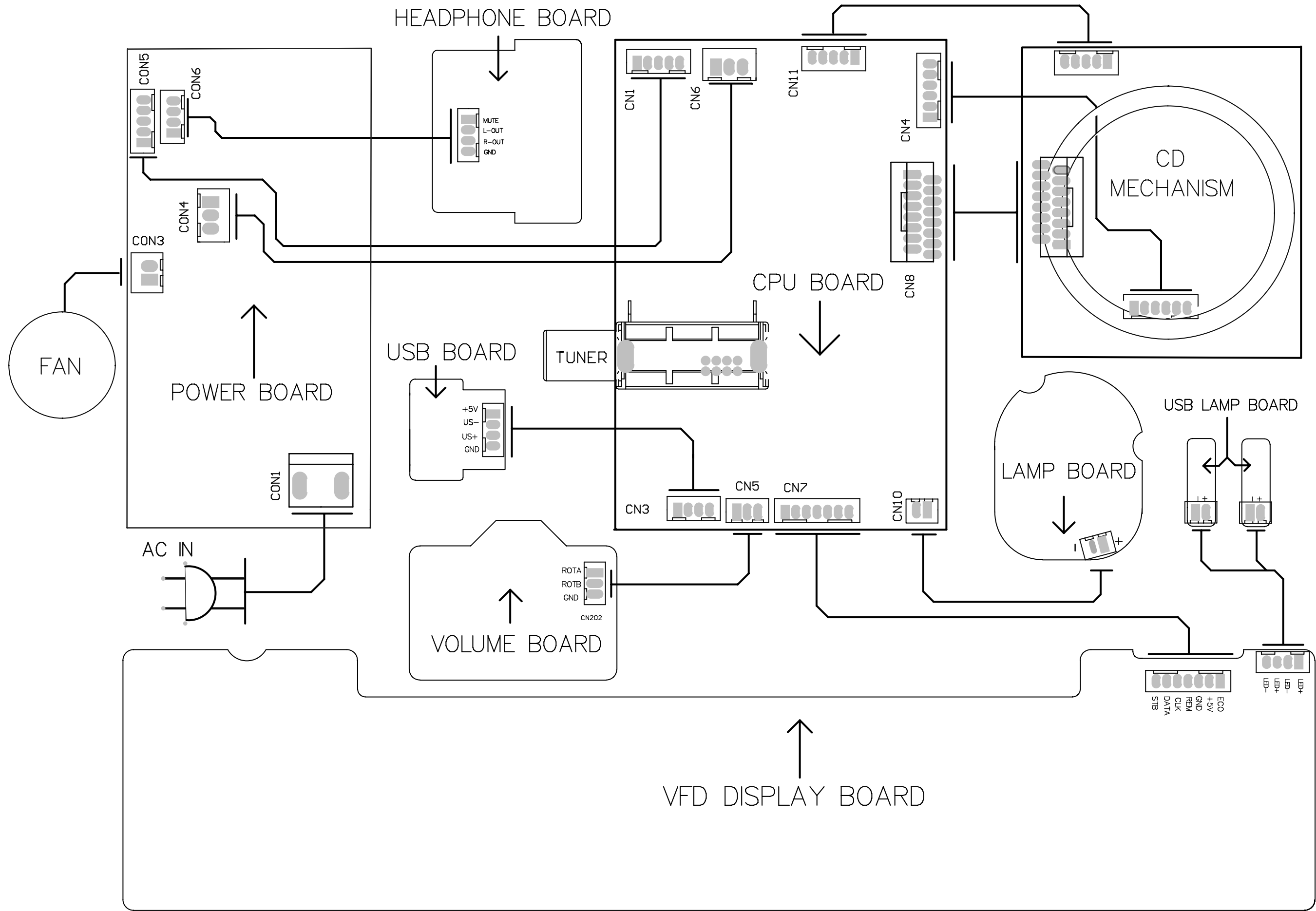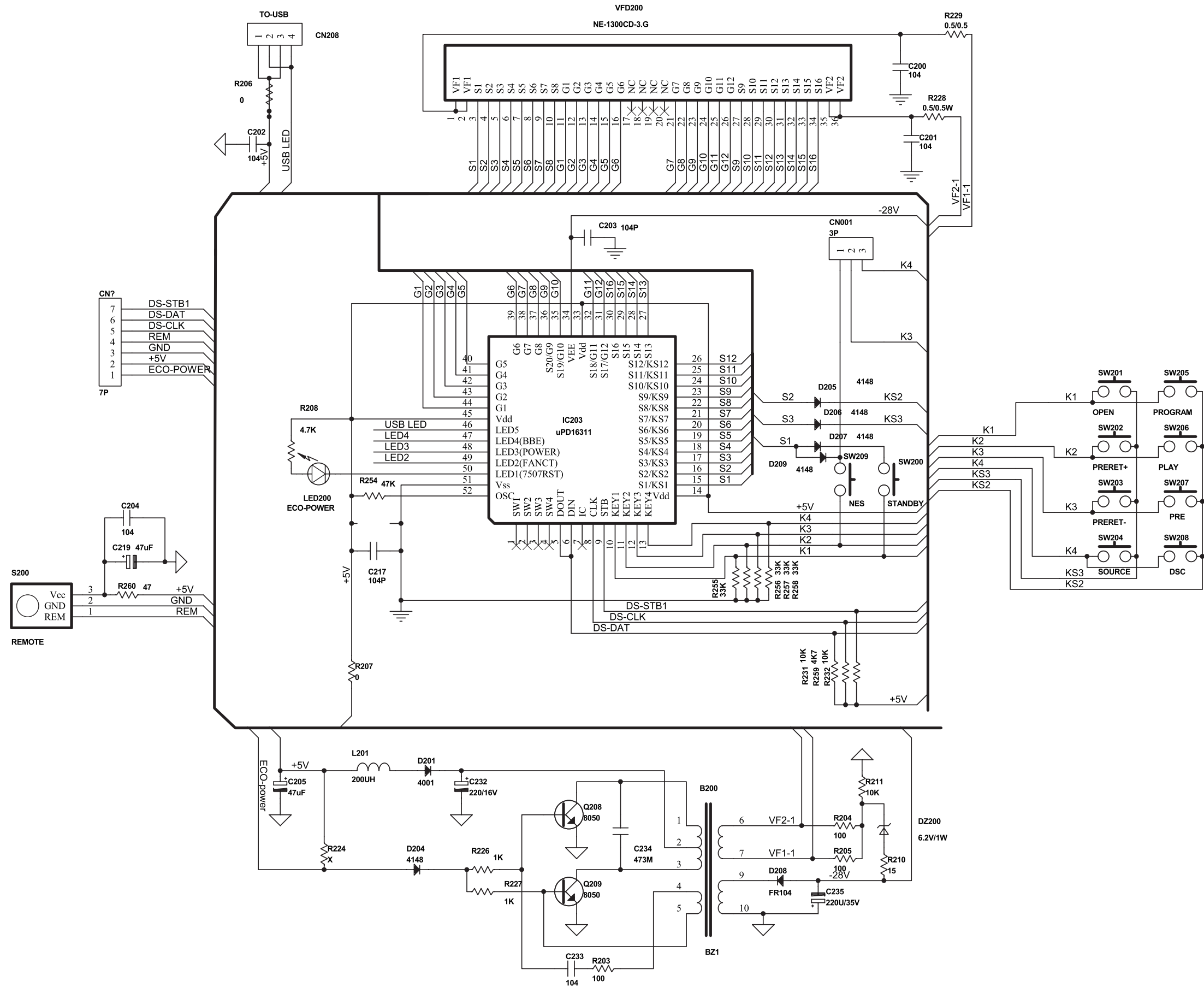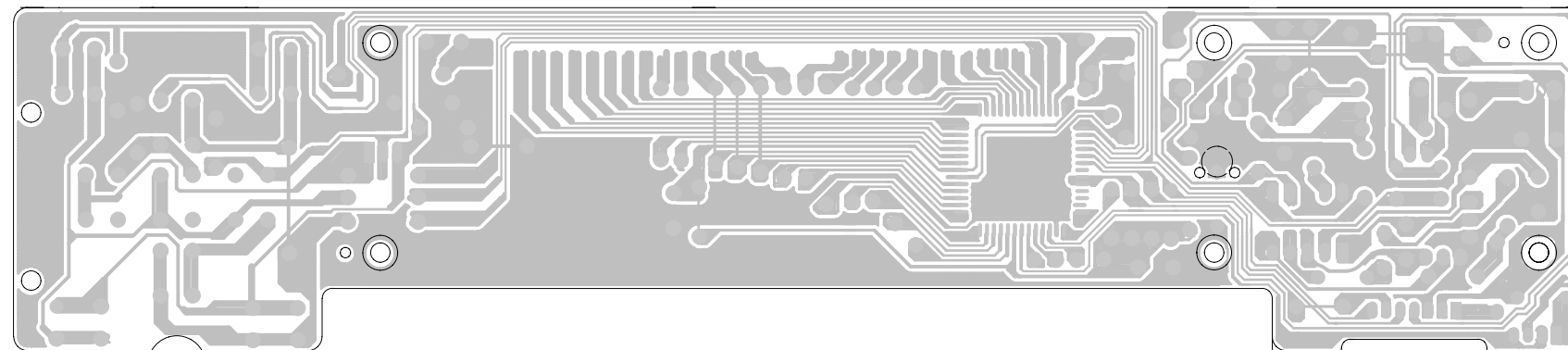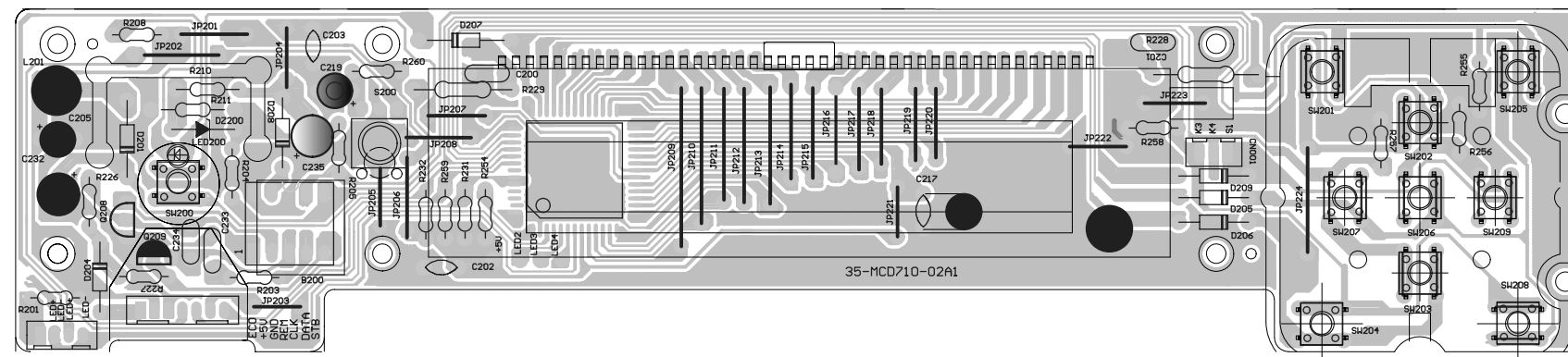remove display board

BLOCK DIAGRAM

AUX BOARD

AUXL

AUXR

SPEAKERS

CPU BOARD

AUXL IN
AUXR IN
TURNING IN
CD IN

TURNER POWER

PT2314

LCH
RCH

+21V −21V

TEA8947
POWER BD

L

R

PT2309

AUDIO OUT

HEADPHONE

STBY&MUTE

STBY&MUTE
CONTROL

ECO6−05

FM

MUTE

CPU MUTE

POWERMUTE

MUTE

+5V

D+8V

+5V

STBY

+12V

DIN
DOUT
CLK
STB

+5V   −24V

~6.3V ~6.3V

SDA
SCL

PT16311

VFD \PBLOCK

D+5V

CPU\P9228

KS2
KS2
K1
K2
K3
K4

ALI5671
CD BOARD

24C02

CD KEY\PBLOCK

VFD DISPLAY BOARD

CD ON

TUNER ON

DOOR SWITCH
DOOR MOTOR

CD MECHANISM

REM

REMOTE \PSENSOR

D+5V

TUNER POWER
CONTROL

+12V

+27V   −27V

D+12V   −24V ~6.3V ~6.3V

DVD

AMP

+5V

POWER BOARD

WIRING DIAGRAM

HEADPHONE BOARD

MUTE
L-OUT
R-OUT
GND

CON5
CON6
CON4
CON3
CON1

FAN

POWER BOARD

AC IN

CN1
CN6
CN11
CN4
CN8

CPU BOARD

TUNER

USB BOARD

+5V
US-
US+
GND

CN3
CN5
CN7
CN10

VOLUME BOARD

ROTA
ROTB
GND
CN202

CD
MECHANISM

LAMP BOARD

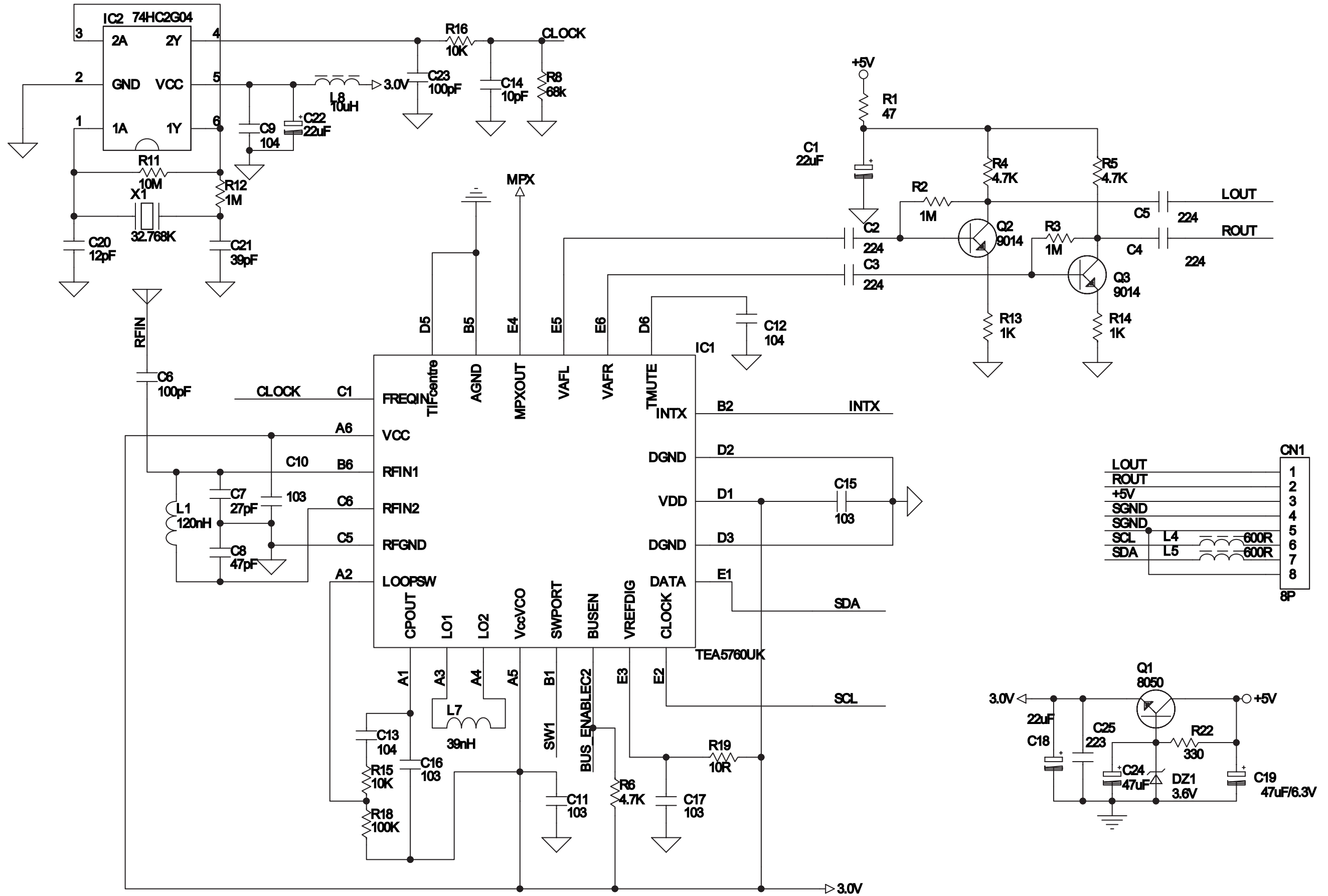USB LAMP BOARD

LED-
LED-
LED+
LED+

ECO
+5V
REM
GND
CLK
DATA
STB

VFD DISPLAY BOARD
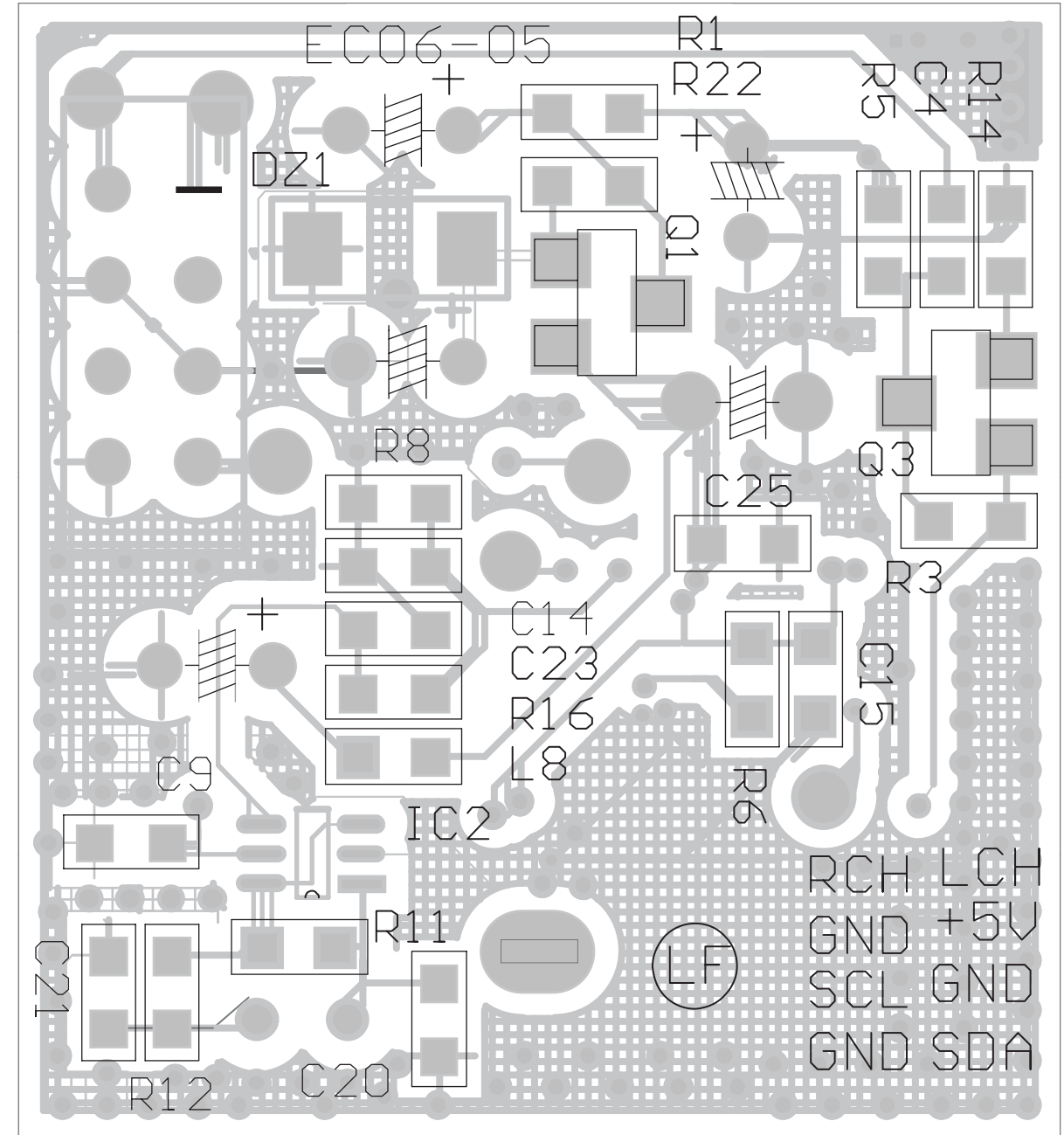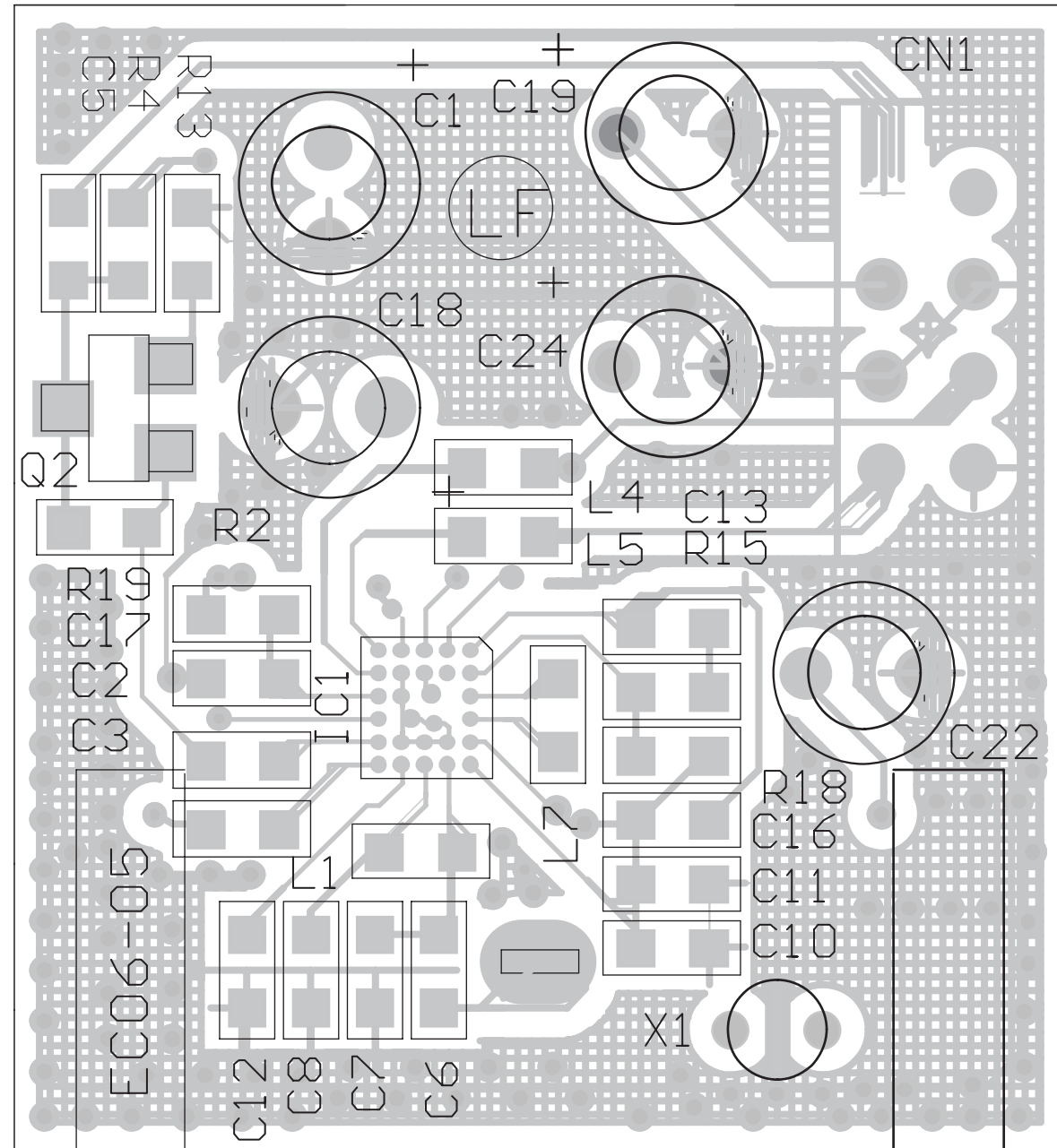
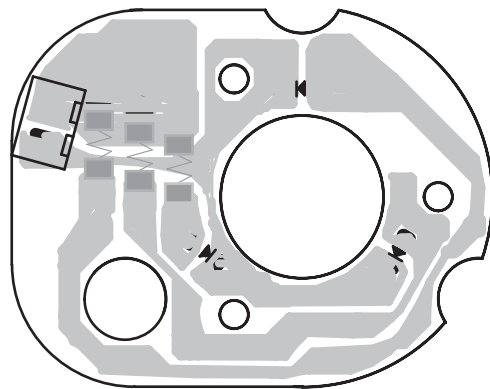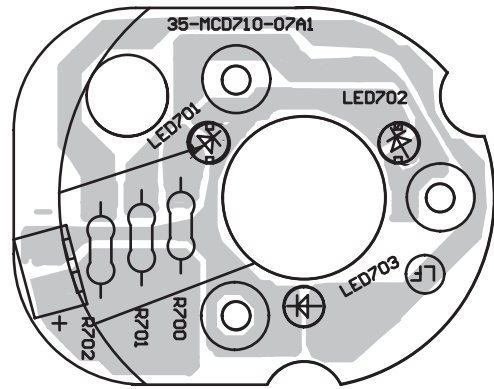# VFD BOARD - CIRCUIT DIAGRAM

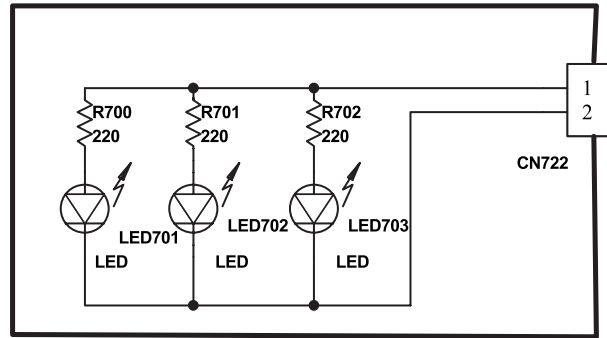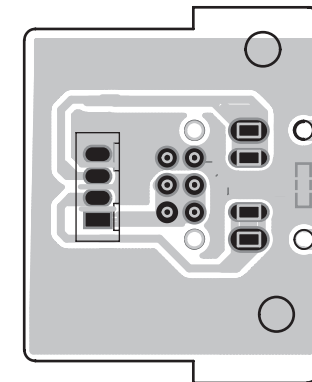VFD BOARD - LAYOUT DIAGRAM

35-MCD710-02A1

TUNER BOARD - CIRCUIT DIAGRAM
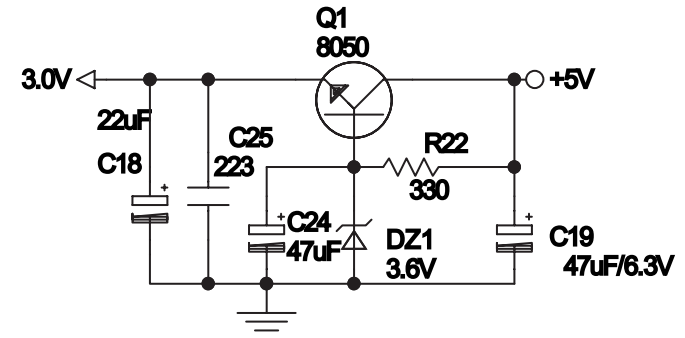
TUNER BOARD - LAYOUT DIAGRAM

LAMP AND HEADPHONE BOARD

Lamp Block

Headphone Block
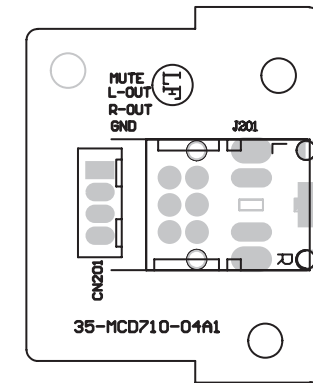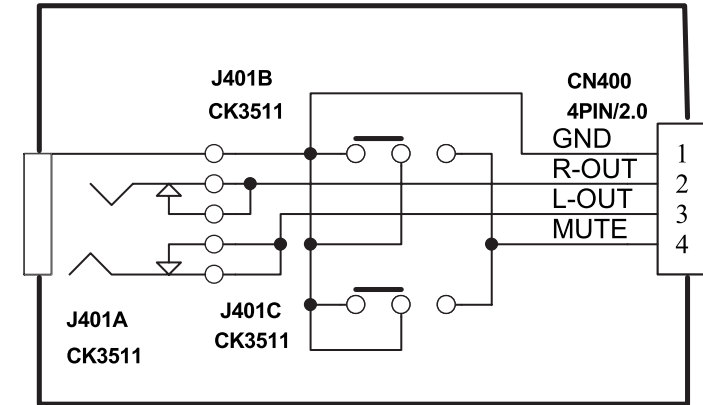
VOLUME AND USB AND USB LAMP BOARD

Volume Block

ENCODER800

	ROTA
A 3	
B 2	ROTB
G 1	VGND

ENCODER

1
2
3
CN202

CN202

ROTA ROTB GND

LF

35-MCD710-08A1

ENCODER800

USB Block

C1002
10uF/16V

J1001

4	+5V	6	GND
3	US-	5	Shield
2	US+	4	GND
1	GND	3	D+
		2	D-
		1	vbus

CN1001   USB

J1001

+5V
US-
US+
GND

35-MCD710-10B1

USB LAMP Block

LED501

R501
1K

CN501
2P/2.0

1
2

35-MCD710-05A1

+
−

LF   LED501
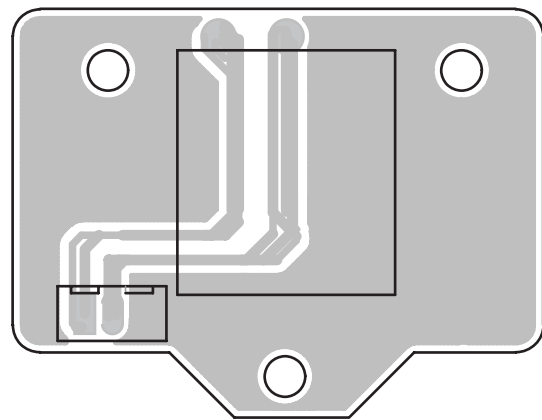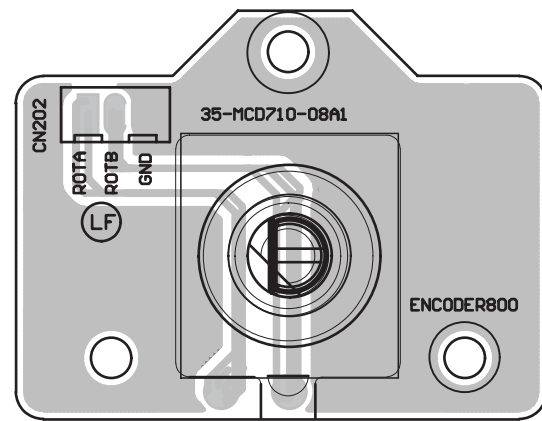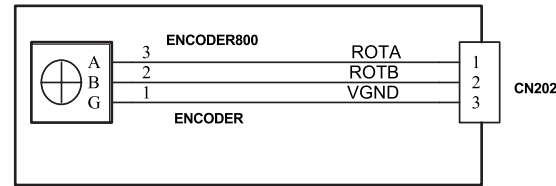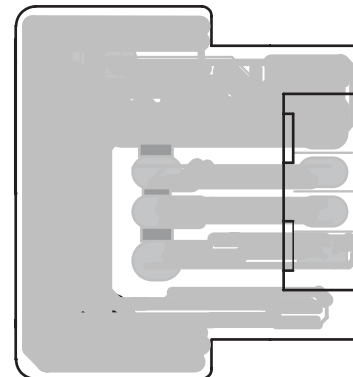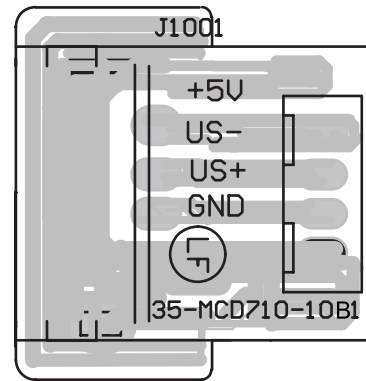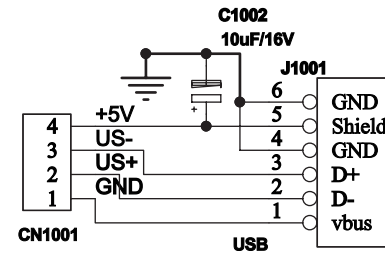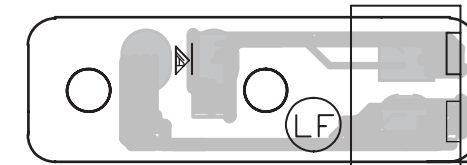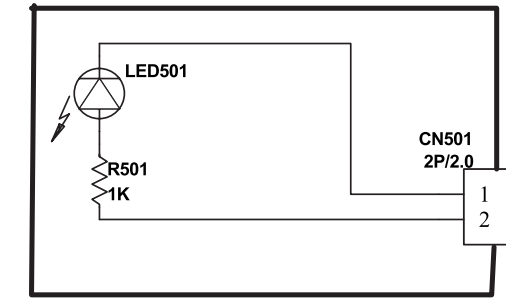
POWER BOARD - CIRCUIT DIAGRAM - PART1
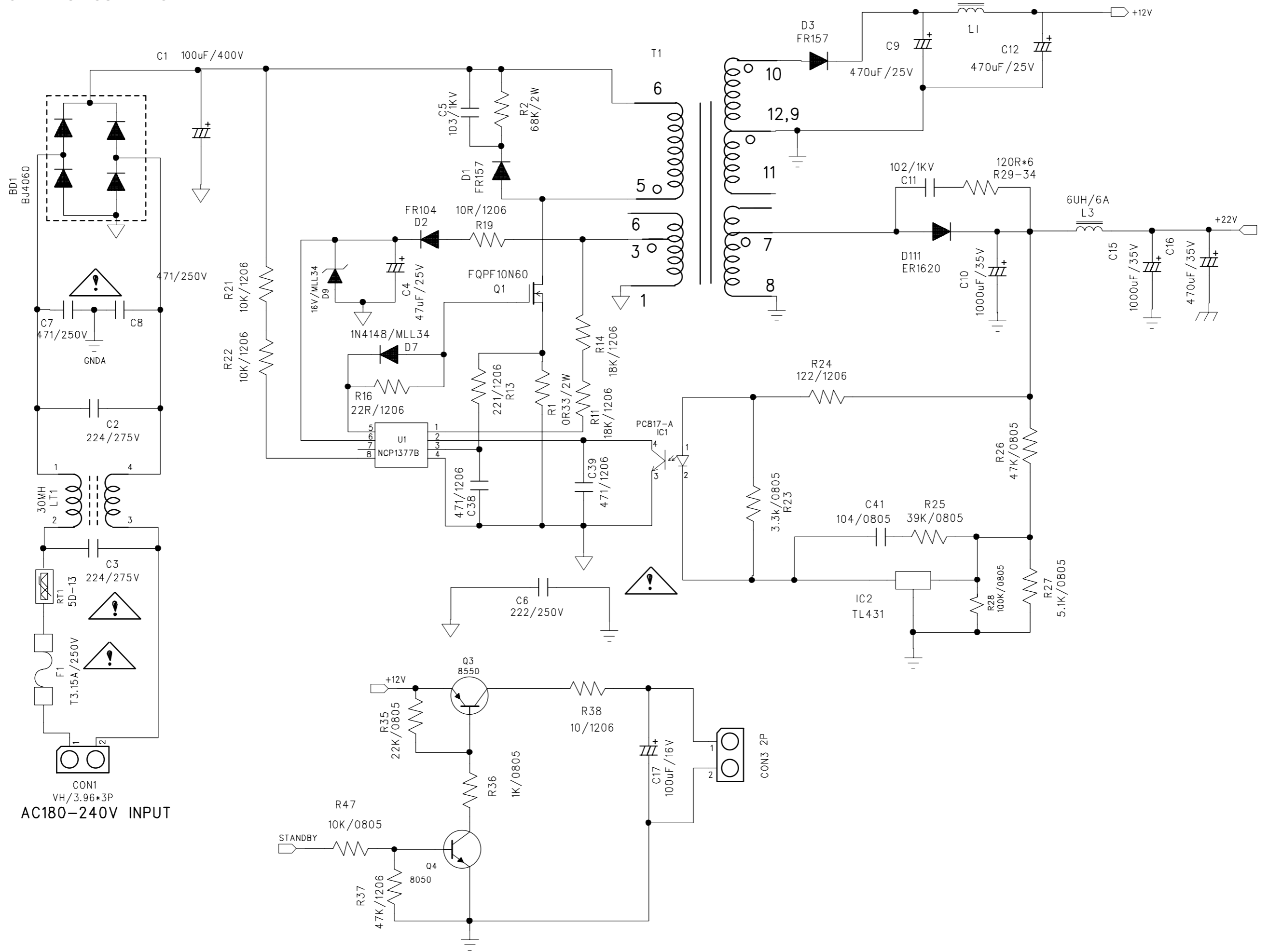
POWER BOARD - CIRCUIT DIAGRAM - PART2

POWER BOARD - LAYOUT DIAGRAM - TOP VIEW
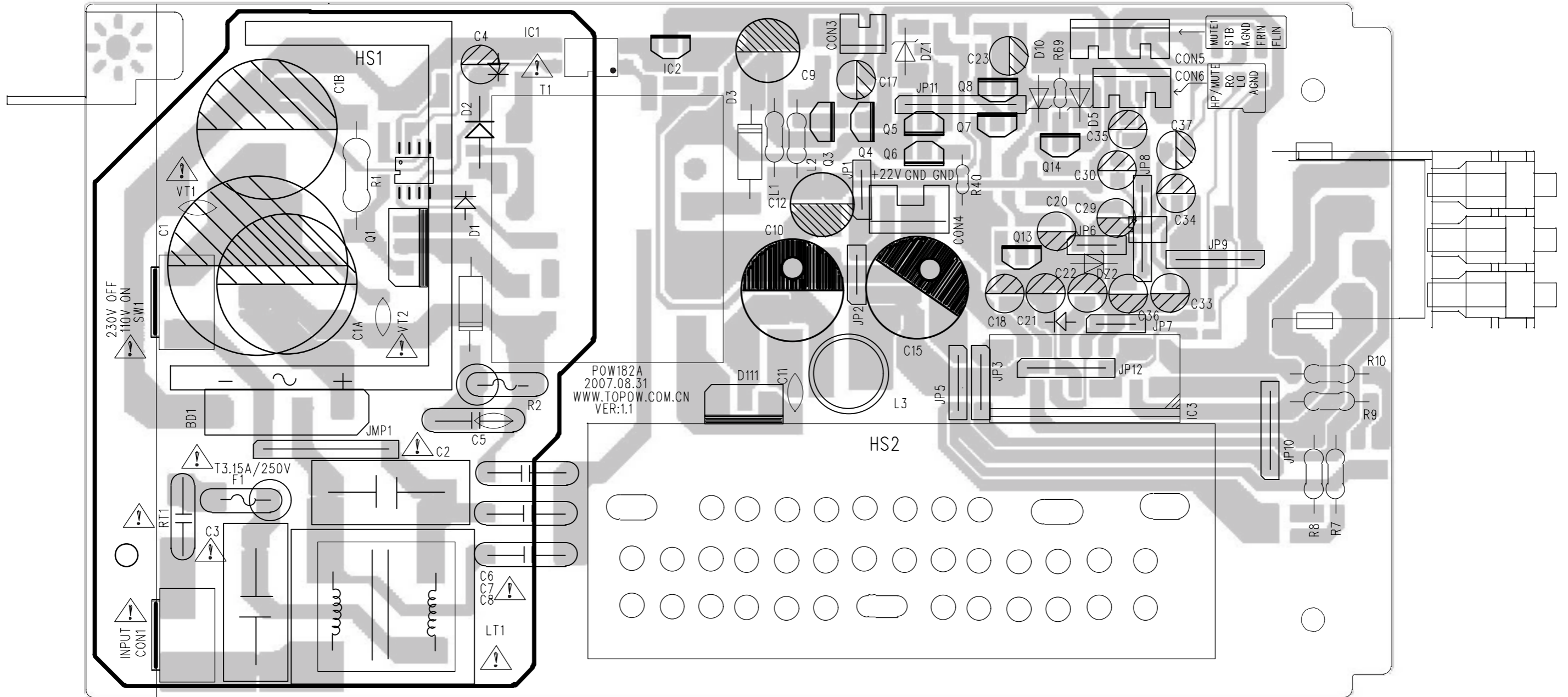
POWER BOARD - LAYOUT DIAGRAM - BOTTOM VIEW
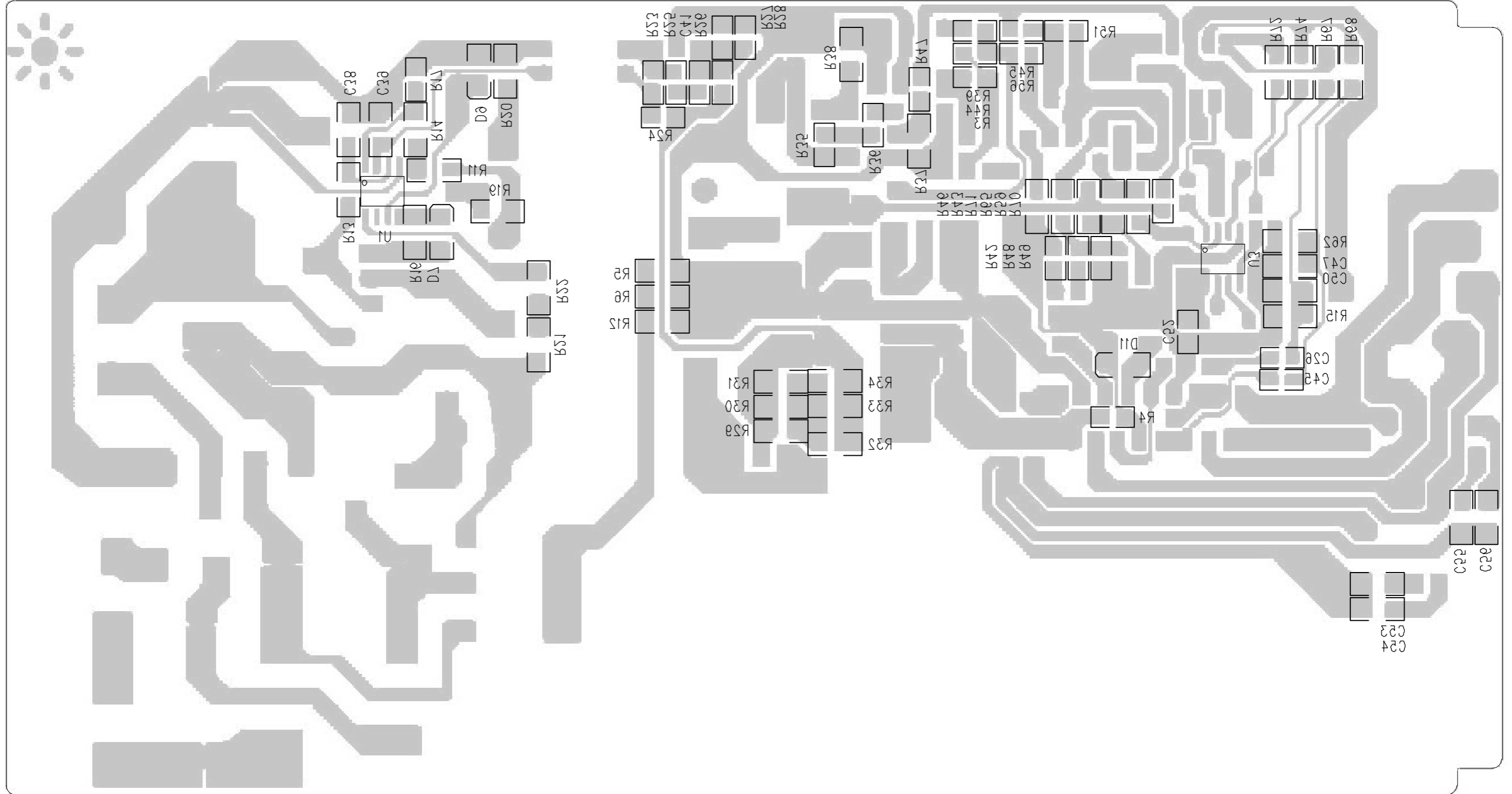
DECODE BOARD - CIRCUIT DIAGRAM - PART1
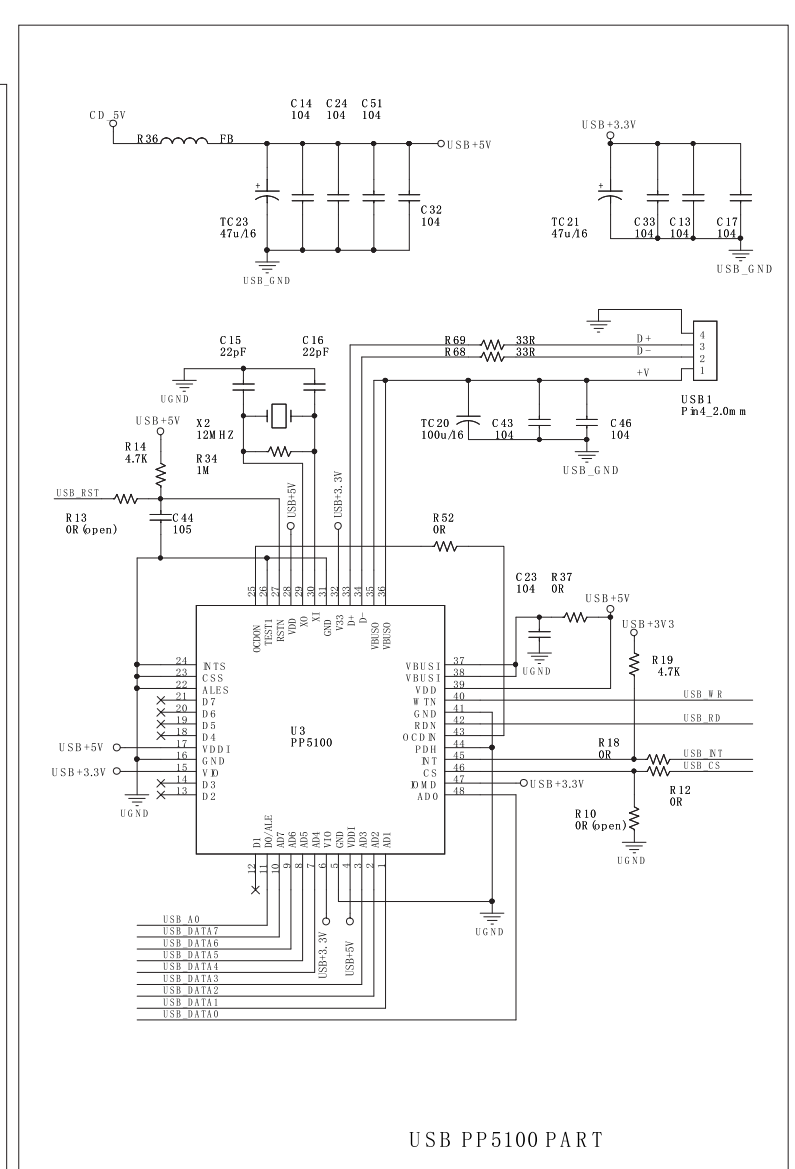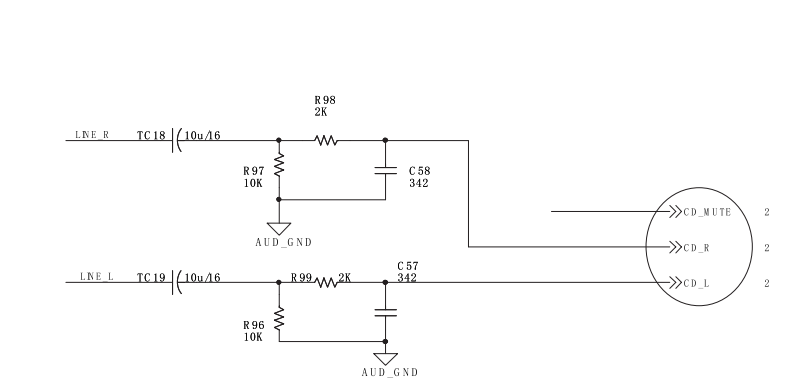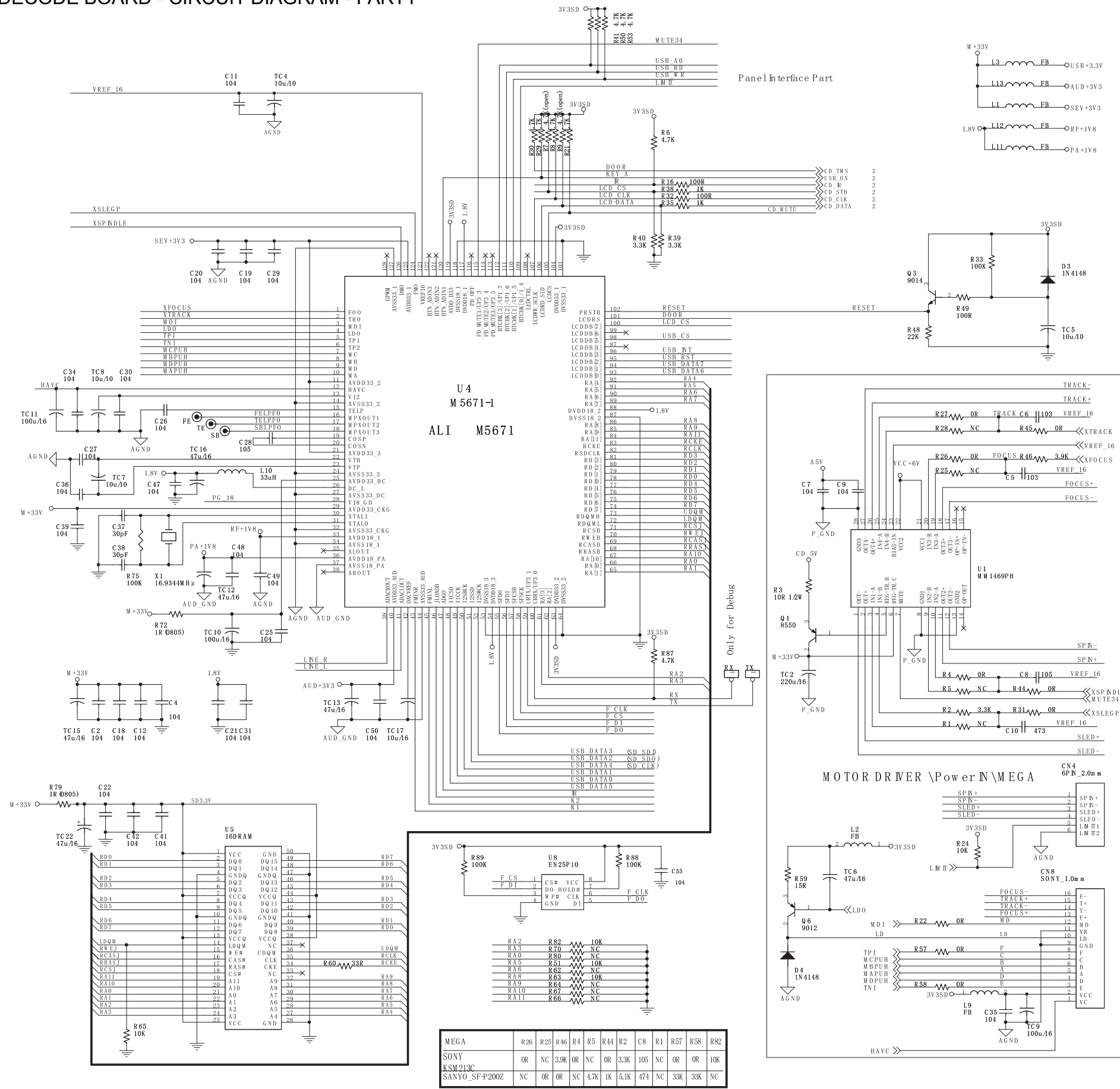
DECODE BOARD - CIRCUIT DIAGRAM - PART2
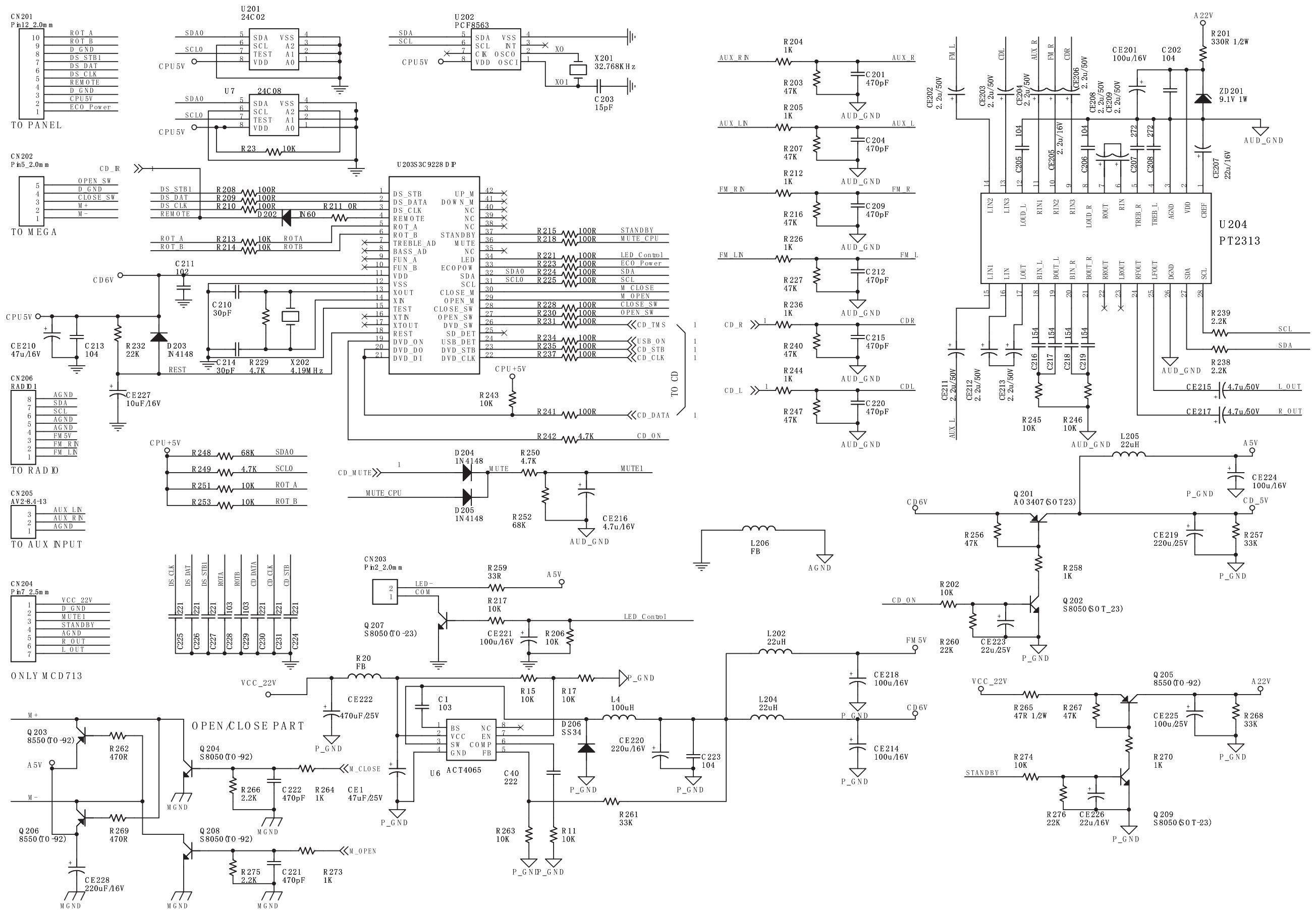
DECODE BOARD - LAYOUT DIAGRAM - TOP VIEW
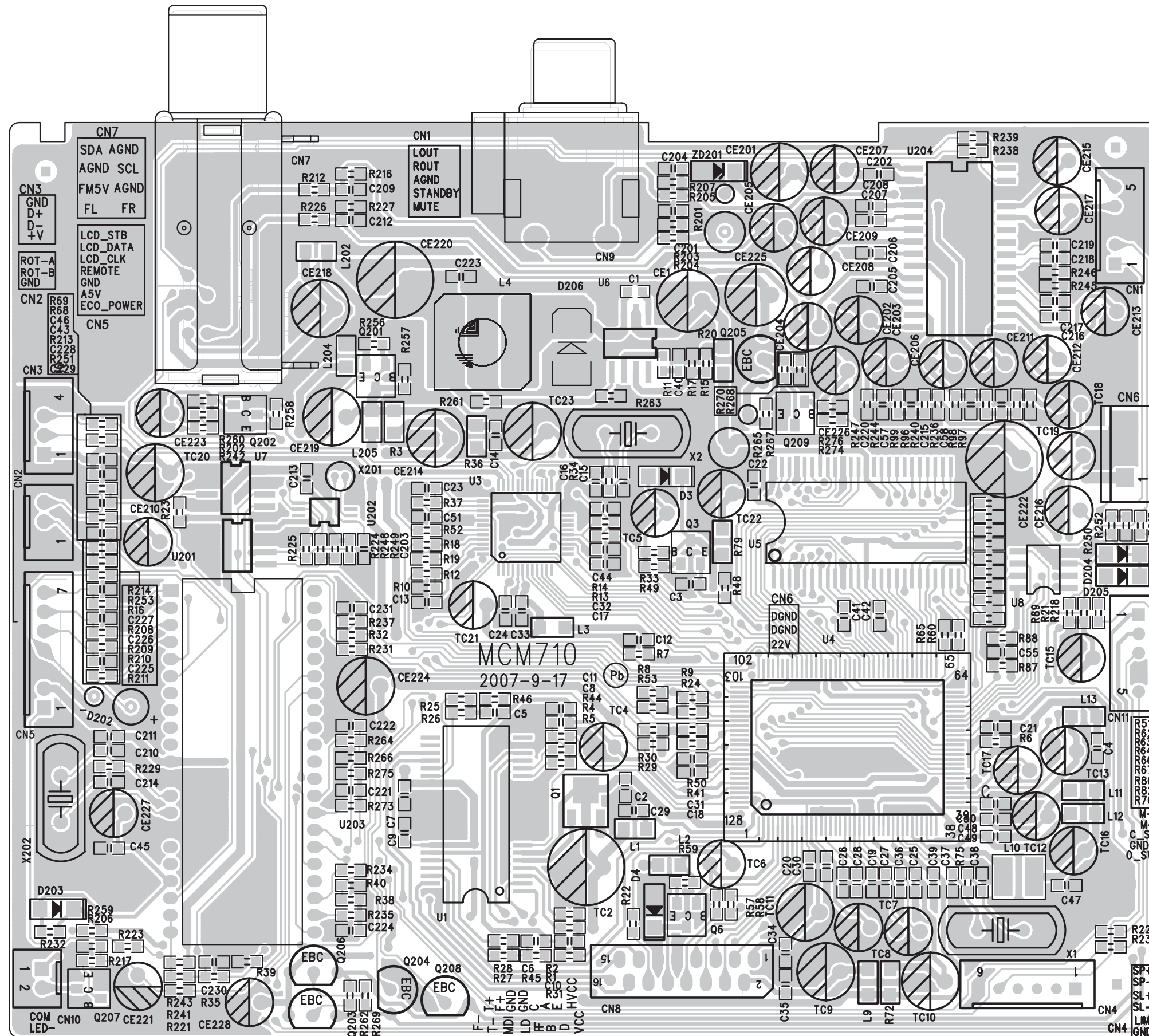
DECODE BOARD - LAYOUT DIAGRAM - TOP VIEW
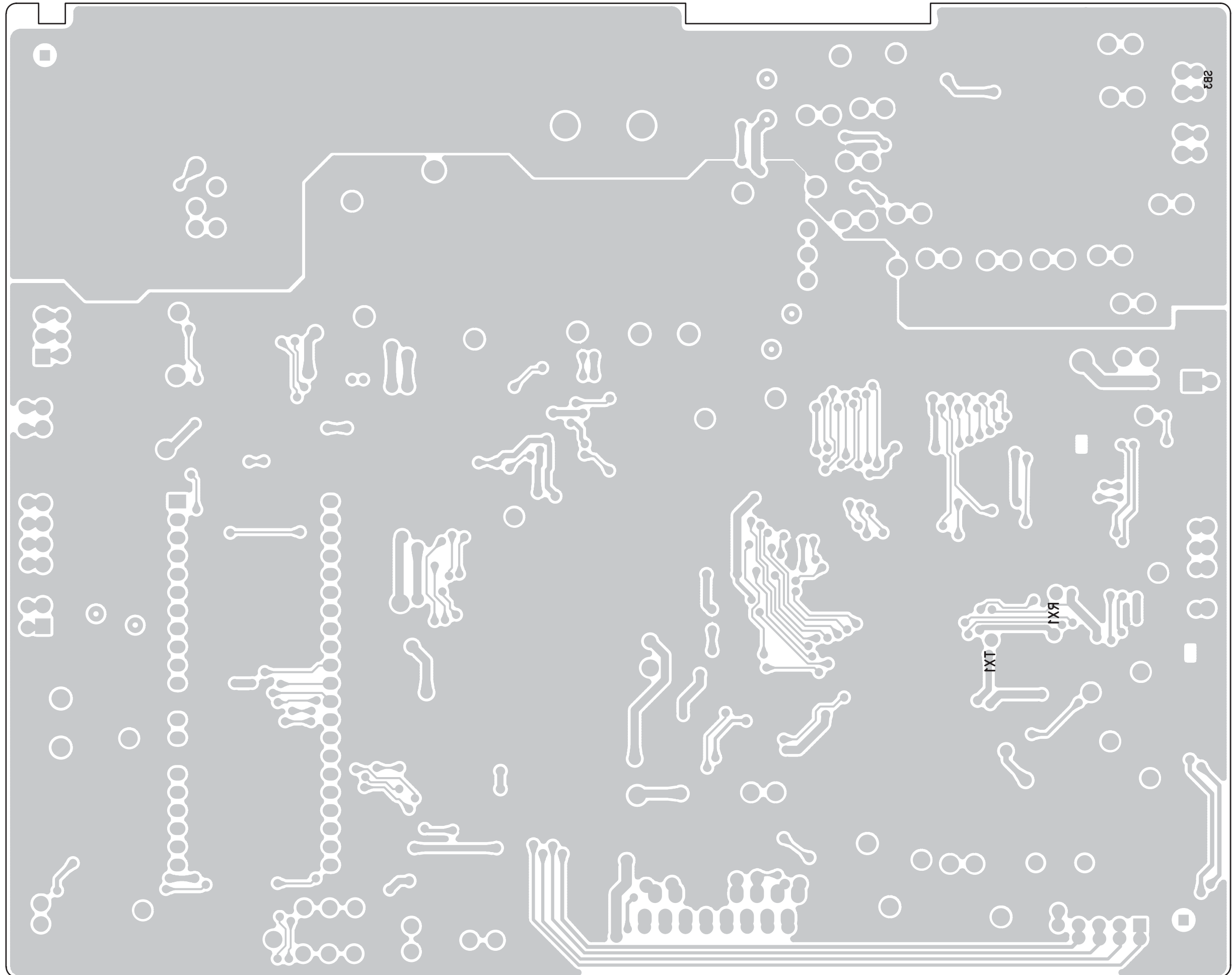
EXPLODE VIEW
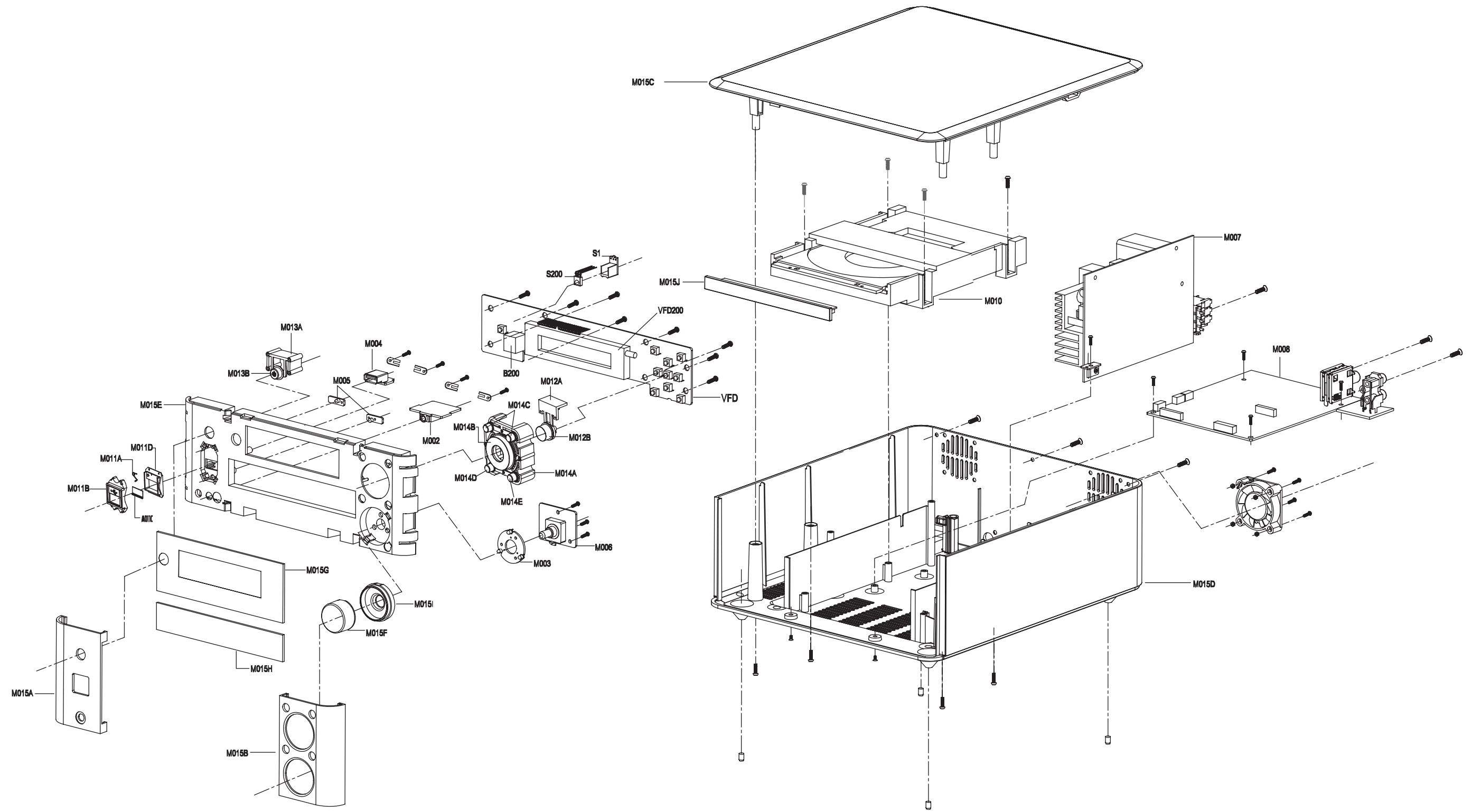
ACCESSORIES PARTS LIST

REMOTE	996510003244	REMOTE CONTROL(/12)
REMOTE	996510015809	REMOTE CONTROL ASS'Y(/61)
SPEAKER1	996510010514	SPEAKER CASING PARTS ASSY(L)(/12)
SPEAKER1	996510015811	SPEAKER CASING PARTS ASS'Y(L)(/61)
SPEAKER2	996510010515	SPEAKER CASING PARTS ASSY®(/12)
SPEAKER2	996510015812	SPEAKER CASING PARTS ASS'Y®(/61)

MECHNICAL&MISCELLANEOUS PARTS

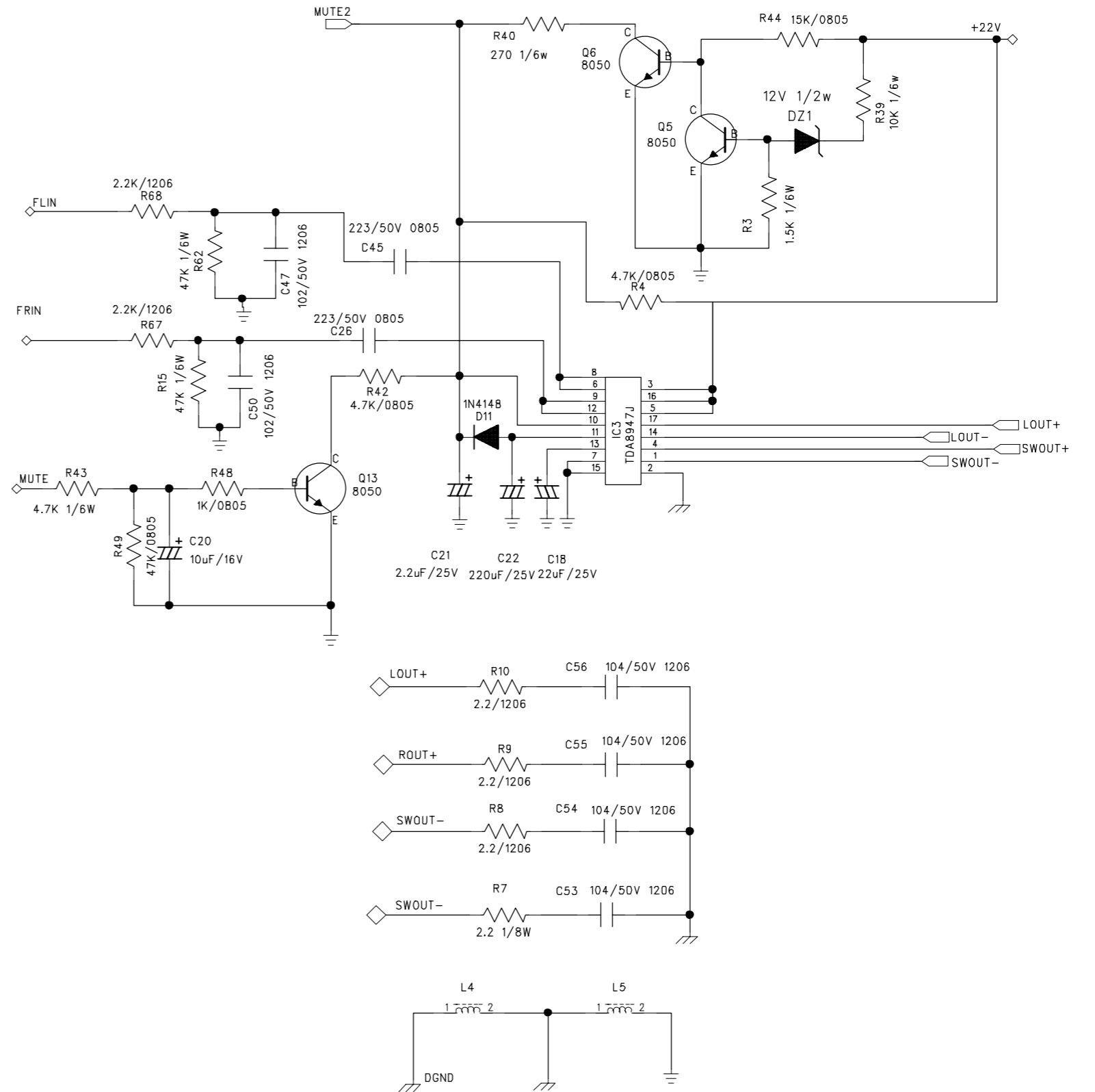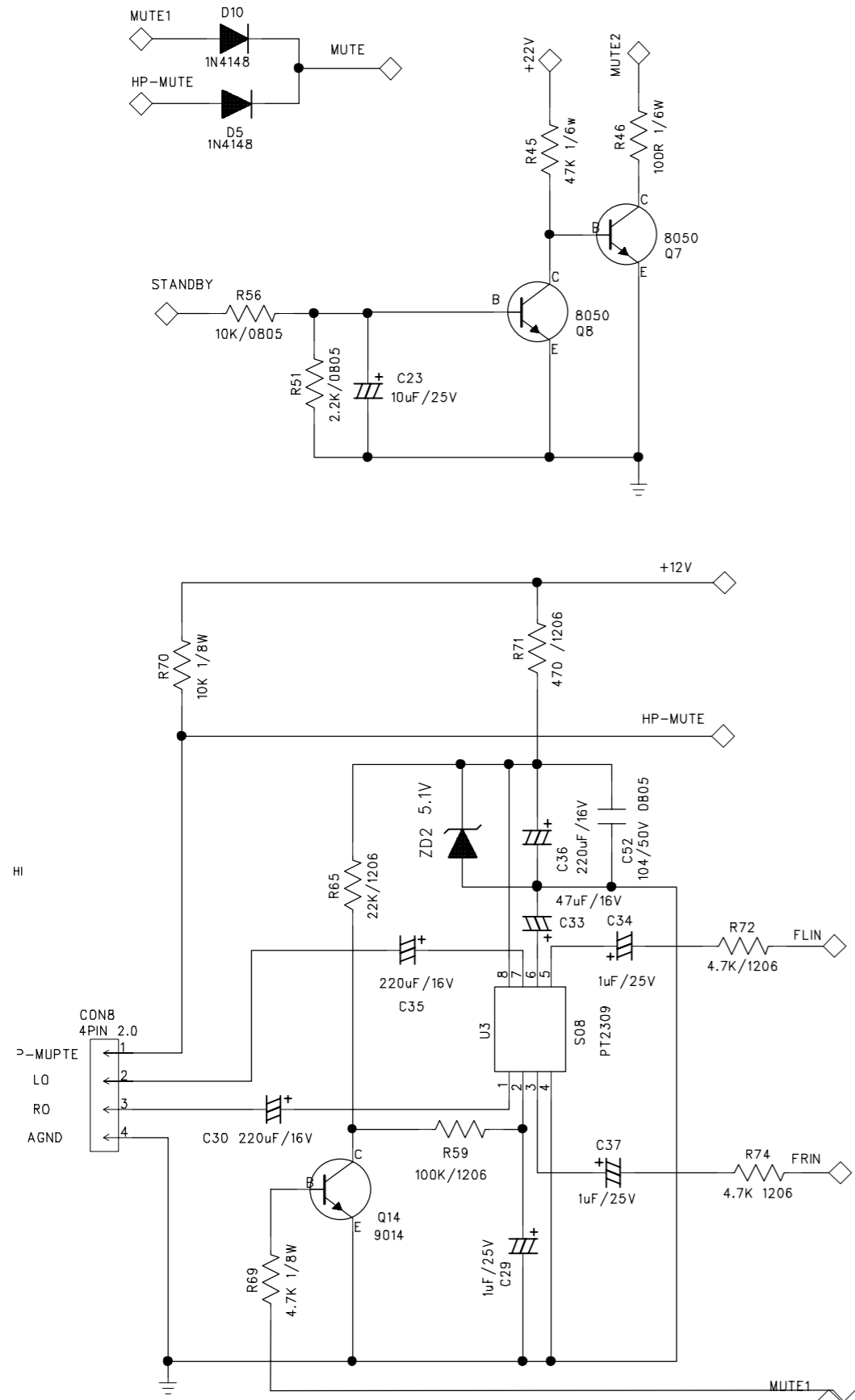|		
M001	996510010383	TUNER PCB ASSY(RDS)(/12)
M001	996510007819	TUNER BOARD PCB ASSY ECO6-05(/61)
M002	996510007820	HEADPHONE PCB ASSY MCD710
M003	996510007821	LAMP PCB ASSY MCD710
M004	996510010500	USB BOARD ASSY
M005	996510007823	USB LAMP PCB ASSY MCD710
M006	996510007824	VOLUME PCB ASSY MCD710
M007	996510010501	POWER BOARD ASSY(/12)
M007	996510013234	AMP/POWER BOARD ASSY(/61)
M008	996510036239	DECODER ASSY + MCU ASSY(/12)
M008	996510015798	DECODER ASS'Y(/61)
M010	996510027913	DA11VZSS CD LOADER MECHANISM
M011	996520032850	USB LIGHT GUIDE ASS'Y
D103A	996510010386	USB DOOR SPRING
D103B	996510010387	USB LIGHT GUIDE
D103C	996510010388	USB DOOR ABS
D103D	996510010389	USB DOOR BRACKET ABS
M012A	996510007829	MCD710 CENTER BUTTON BRACKET
M012B	996510007870	MCD710 KNOB
M013A	996510007831	MCD710 STANDBY BUTTON BRACKET
M013B	996510007832	MCD710 STANDBY BUTTON
M014A	996510007830	MCD710 BUTTON BRACKET
M014B	996510007869	MCD710 BEARING KNOB
M014C	996510007833	MCD710 FUNCTION -BUTTON
M014D	996510007836	MCD710 FUNTION-KNOB OPEN/CLOSE
M014E	996510007837	MCD710 FUNTION-BUTTON(STOP)
M015A	996510010505	AL FRONT-CAB(L)(/12)
M015A	996510015806	AL FRONT-CAB(L)(/61)
M015B	996510010506	AL FRONT-CAB(R)
M015C	996510007826	MCD710 CABINET FRONT HIPS BK(/12)
M015C	996510011821	MCD710 TOP COVER(/61)
M015D	996510010507	BOTTOM CAB. 2.0CH HIPS SILVER
M015E	996510010508	PLASTIC FRONT-PANEL(HIPS)
M015F	996510007871	MCD710 VOLUME KNOB
M015G	996510010509	BIG LENS PMMA
M015H	996510010510	SMALL LENS PMMA
M015I	996510010511	VOLUME KNOB LIGHT GUIDE(PMMA)
M015J	996510010512	DVD DOOR ABS
M015K	996510003237	AC LINE CORD 1.95M(/12)
M015K	996510015807	POWER CORD(/61)
M015L	996510010513	FLAT FLEXIBLE CABLE
M015M	996510004221	JACK VH3.96/3P
FAN	996510008413	MINI FAN RDM4010S DC12V/0.07A(/61)

ELECTRICAL PARTS - VFD BOARD

VFD	996510007817	VFD DISPLAY PCB ASSY MCD710(/61)
B200	996510002975	TRANSFORMER EE13 5V
D208	996510002976	DIODE FR104
DZ200	996510006505	ZENER DIODE 6.2V 1W
IC203	996510000500	IC PT6311/SC16311/CD16311
LED200	994000004948	LED LAMP(BLUE) /12
S1	996510010498	IR SENSOR BRACKET ABS
S200	994000004961	IR SENSOR BLACK
SW200	996510000020	LIGHT TOUCH SW.
SW201	996510000020	LIGHT TOUCH SW.
SW202	996510000263	LIGHT TOUCH SWITCH 6X6X5
SW203	996510000263	LIGHT TOUCH SWITCH 6X6X5
SW204	996510000020	LIGHT TOUCH SW.
SW205	996510000020	LIGHT TOUCH SW.
SW206	996510000263	LIGHT TOUCH SWITCH 6X6X5
SW207	996510000263	LIGHT TOUCH SWITCH 6X6X5
SW208	996510000020	LIGHT TOUCH SW.
SW209	996510000263	LIGHT TOUCH SWITCH 6X6X5
VFD200	996510002921	VFD DISPLAY NE-705D-3.GB

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

FACTORY PARTLIST

LOCATION	DESCRIPTION
VFD	LECTRICAL PARTS LIST-VFD DISPLAY BOARD
B200	△TRANSFORMER EE13 5V
R204	CARBON FILM RESISTOR 100 1/8W J-52
R205	CARBON FILM RESISTOR 100 1/8W J-52
R226	CARBON FILM RESISTOR 1K 1/8W J-52
R227	CARBON FILM RESISTOR 1K 1/8W J-52
R211	CARBON FILM RESISTOR 10K 1/8W J-52
R231	CARBON FILM RESISTOR 10K 1/8W J-52
R232	CARBON FILM RESISTOR 10K 1/8W J-52
R255	CARBON FILM RESISTOR 33K 1/8W J-52
R256	CARBON FILM RESISTOR 33K 1/8W J-52
R257	CARBON FILM RESISTOR 33K 1/8W J-52
R258	CARBON FILM RESISTOR 33K 1/8W J-52
R260	CARBON FILM RESISTOR 47 1/8W J-52
R259	CARBON FILM RESISTOR 4.7K 1/8W J-52
R208	CARBON FILM RESISTOR 4.7K 1/8W J-52
R229	CARBON FILM RESISTOR 0.5 1/4W J-52
R203	CARBON FILM RESISTOR 10 1/8W J-52
R210	CARBON FILM RESISTOR 15 1/4W J-52
R254	CARBON FILM RESISTOR 47K 1/8W J-52
R228	CARBON FILM RESISTOR 2.2 1/2W J-52
R201	CARBON FILM RESISTOR 220 1/8W J-52
R202	CARBON FILM RESISTOR 220 1/8W J-52
C234	NONINDUCTIVE CAP.473P 100V K-5
C205	ELECTROLYTIC CAP.47u 16V L-5 5X7
C219	ELECTROLYTIC CAP.47u 16V L-5 5X7
COMBINE WITH 232	CERAMIC CAP. 100p 50V K
C203	CERAMIC CAP. 104P 50V K-5
C217	CERAMIC CAP. 104P 50V K-5
C233	CERAMIC CAP. 104P 50V K-5
C202	CERAMIC CAP. 104P 50V K-5
C232	ELECTROLYTIC CAP.470u 16V L-5 8X11.5/12
C235	ELECTROLYTIC CAP. 100u 35V L-5 6.3X11
L201	FIXED INDUCTOR 200U 6X5
D204	DIODE 4148-52
D205	DIODE 4148-52
D206	DIODE 4148-52
D207	DIODE 4148-52
D209	DIODE 4148-52
DZ200	ZENER DIODE 6.2V 1W
D201	RECTIFIER DIODE 4001-52
D208	DIODE FR104
LED200	LED 3R4CB71D-2B-208 (BLUE)
Q208	TRANSISTOR 8050C-5
Q209	TRANSISTOR 8050C-5
IC203	IC PT6311/SC16311/CD16311
S200	IR SENSOR SMALL BLACK
SW200	LIGHT TOUCH SWITCH 6X6X5 130g
SW201	LIGHT TOUCH SWITCH 6X6X5 130g
SW204	LIGHT TOUCH SWITCH 6X6X5 130g
SW205	LIGHT TOUCH SWITCH 6X6X5 130g
SW208	LIGHT TOUCH SWITCH 6X6X5 130g
SW202	LIGHT TOUCH SWITCH 6X6X5 250g
SW203	LIGHT TOUCH SWITCH 6X6X5 250g
SW2206	LIGHT TOUCH SWITCH 6X6X5 250g

FACTORY PARTLIST

LOCATION	DESCRIPTION
VFD	LECTRICAL PARTS LIST-VFD DISPLAY BOARD
B200	△TRANSFORMER EE13 5V
R204	CARBON FILM RESISTOR 100 1/8W J-52
R205	CARBON FILM RESISTOR 100 1/8W J-52
R226	CARBON FILM RESISTOR 1K 1/8W J-52
R227	CARBON FILM RESISTOR 1K 1/8W J-52
R211	CARBON FILM RESISTOR 10K 1/8W J-52
R231	CARBON FILM RESISTOR 10K 1/8W J-52
R232	CARBON FILM RESISTOR 10K 1/8W J-52
R255	CARBON FILM RESISTOR 33K 1/8W J-52
R256	CARBON FILM RESISTOR 33K 1/8W J-52
R257	CARBON FILM RESISTOR 33K 1/8W J-52
R258	CARBON FILM RESISTOR 33K 1/8W J-52
R260	CARBON FILM RESISTOR 47 1/8W J-52
R259	CARBON FILM RESISTOR 4.7K 1/8W J-52
R208	CARBON FILM RESISTOR 4.7K 1/8W J-52
R229	CARBON FILM RESISTOR 0.5 1/4W J-52
R203	CARBON FILM RESISTOR 10 1/8W J-52
R210	CARBON FILM RESISTOR 15 1/4W J-52
R254	CARBON FILM RESISTOR 47K 1/8W J-52
R228	CARBON FILM RESISTOR 2.2 1/2W J-52
R201	CARBON FILM RESISTOR 220 1/8W J-52
R202	CARBON FILM RESISTOR 220 1/8W J-52
C234	NONINDUCTIVE CAP.473P 100V K-5
C205	ELECTROLYTIC CAP.47u 16V L-5 5X7
C219	ELECTROLYTIC CAP.47u 16V L-5 5X7
COMBINE WITH 232	CERAMIC CAP. 100p 50V K
C203	CERAMIC CAP. 104P 50V K-5
C217	CERAMIC CAP. 104P 50V K-5
C233	CERAMIC CAP. 104P 50V K-5
C202	CERAMIC CAP. 104P 50V K-5
C232	ELECTROLYTIC CAP.470u 16V L-5 8X11.5/12
C235	ELECTROLYTIC CAP. 100u 35V L-5 6.3X11
L201	FIXED INDUCTOR 200U 6X5
D204	DIODE 4148-52
D205	DIODE 4148-52
D206	DIODE 4148-52
D207	DIODE 4148-52
D209	DIODE 4148-52
DZ200	ZENER DIODE 6.2V 1W
D201	RECTIFIER DIODE 4001-52
D208	DIODE FR104
LED200	LED 3R4CB71D-2B-208 (BLUE)
Q208	TRANSISTOR 8050C-5
Q209	TRANSISTOR 8050C-5
IC203	IC PT6311/SC16311/CD16311
S200	IR SENSOR SMALL BLACK
SW200	LIGHT TOUCH SWITCH 6X6X5 130g
SW201	LIGHT TOUCH SWITCH 6X6X5 130g
SW204	LIGHT TOUCH SWITCH 6X6X5 130g
SW205	LIGHT TOUCH SWITCH 6X6X5 130g
SW208	LIGHT TOUCH SWITCH 6X6X5 130g
SW202	LIGHT TOUCH SWITCH 6X6X5 250g
SW203	LIGHT TOUCH SWITCH 6X6X5 250g
SW2206	LIGHT TOUCH SWITCH 6X6X5 250g

FACTORY PARTLIST

SW207	LIGHT TOUCH SWITCH 6X6X5 250g
SW209	LIGHT TOUCH SWITCH 6X6X5 250g
VFD200	VFD DISPLAY NE-705D-3.GB
B200	MCD710 IR SENSOR BRACKET ABS
M001	ELECTRICAL PARTS LIST-TUNER BOARD(RDS)
R18	CHIP RESISTOR 100K 1/16W J(0603)
R151	CHIP RESISTOR 10K 1/16W J(0603)
R16	CHIP RESISTOR 10K 1/16W J(0603)
R8	CHIP RESISTOR 10K 1/16W J(0603)
R19	CHIP RESISTOR 10 1/16W J(0603)
R2	CHIP RESISTOR 1M 1/16W J(0603)
R3	CHIP RESISTOR 1M 1/16W J(0603)
R12	CHIP RESISTOR 1M 1/16W J(0603)
R4	CHIP RESISTOR 4.7K 1/16W J(0603)
R5	CHIP RESISTOR 4.7K 1/16W J(0603)
R6	CHIP RESISTOR 4.7K 1/16W J(0603)
R1	CHIP RESISTOR 47 1/16W J(0603)
R11	CHIP RESISTOR 10M 1/16W J (0603)
R13	CHIP RESISTOR 820 1/16W J(0603)
R14	CHIP RESISTOR 820 1/16W J(0603)
C14	CHIP CAP.10P 50V J (0603) NPO
R22	CHIP RESISTOR 330 1/16W J(0603)
C20	CHIP CAP.12P 50V J(0603)NPO
C25	CHIP CAP.223P 50V M (0603) Y5V
C21	CHIP CAP.39P 50V J (0603) NPO
C8	CHIP CAP.47P 50V J(0603)NPO
C1	TANTALUM CAP. 22uF/6.3V (A) (3216)
C18	TANTALUM CAP. 22uF/6.3V (A) (3216)
C19	TANTALUM CAP. 22uF/6.3V (A) (3216)
C22	TANTALUM CAP. 22uF/6.3V (A) (3216)
C24	TANTALUM CAP. 22uF/6.3V (A) (3216)
C2	CHIP CAP.224P 50V M (0603) Y5V
C3	CHIP CAP.224P 50V M (0603) Y5V
C4	CHIP CAP.224P 50V M (0603) Y5V
C5	CHIP CAP.224P 50V M (0603) Y5V
C7	CHIP CAP.27P 50V J(0603) NPO
C6	CHIP CAP.100P 50V K (0603) X7R
C23	CHIP CAP.100P 50V K (0603) X7R
C10	CHIP CAP.103P 50V K (0603) X7R
C11	CHIP CAP.103P 50V K (0603) X7R
C15	CHIP CAP.103P 50V K (0603) X7R
C16	CHIP CAP.103P 50V K (0603) X7R
C17	CHIP CAP.103P 50V K (0603) X7R
C13	CHIP CAP.104P 50V M (0603) Y5V
C12	CHIP CAP.104P 50V M (0603) Y5V
C9	CHIP CAP.104P 50V M (0603) Y5V
L1	CHIP INDUCTOR 120n (0603)
L7	CHIP INDUCTOR 39n J (0603)
L8	CHIP INDUCTOR 10U (0603)
DZ1	CHIP ZENER DIODE 3.6V 1/2W (LL-34)
Q2	CHIP TRANSISTOR 9014 (SOT-23)
Q3	CHIP TRANSISTOR 9014 (SOT-23)
Q1	CHIP TRANSISTOR 8050(SOT-23)
IC2	IC 74HC2G04
IC1	IC TEA5766UK

FACTORY PARTLIST

X1	CRYSTAL OSCILLATOR 32.768KHZ φ2X6
L4	FERRITE BEAD 601 K (0603)
L5	FERRITE BEAD 601 K (0603)
CN1	PINS CONNECTOR 2.0X2X4P H8
M001	METAL BOX F-8A 28X26X13 NICKEL-PLATE
M002	ELECTRICAL PARTS LIST-HEADPHONE BOARD
JACK FOOT	AXIAL FIXED INDUCTOR 100u
J201	HEADPHONE JACK Φ3.5 TE-03501S-11
M003	ELECTRICAL PARTS LIST-LAMP BOARD
R700	CARBON FILM RESISTOR 220 1/8W J-52
R701	CARBON FILM RESISTOR 220 1/8W J-52
R702	CARBON FILM RESISTOR 220 1/8W J-52
LED701	LED Φ3 H3.6(BLUE-LIGHT)
LED702	LED Φ3 H3.6(BLUE-LIGHT)
LED703	LED Φ3 H3.6(BLUE-LIGHT)
M004	ELECTRICAL PARTS LIST-USB BOARD
J1001	USB A-TYPE 4 P FEmALE 90°DIP TYPE BLACK
M005	ELECTRICAL PARTS LIST-USB LAMP BOARD
LED501	LED Φ3 H3.6(BLUE-LIGHT)
M006	ELECTRICAL PARTS LIST-VOLUME BOARD
ENCODER800	CODER ED-1612-00-F15 40-80G
M007	ELECTRICAL PARTS LIST-POWER BOARD(POW182A)
M008	ELECTRICAL PARTS LIST-MP3 DECODER(M5671U-710)
M010	MECHANICAL PARTS LIST-CD MECHANISM(DA11VZ)
M011	MECHANICAL PARTS LIST-USB LIGHT GUIDE
M011A	MCD716 USB DOOR SPRING
M011B	MCD716 USB LIGHT GUIDE(PMMA SILK-SCREEN)
M011C	MCD716 USB DOOR ABS
M011D	MCD716 USB DOOR BRACKET ABS
M012	MECHANICAL PARTS LIST-CENTER BUTTON
M012A	MCD710 CENTER BUTTON BRACKET ABS
M012B	MCD710 CENTER BUTTON (ABS PLATE)
M013	MECHANICAL PARTS LIST-STANDBY BUTTON
M013A	MCD710 STANDBY BUTTON BRACKET ABS
M013B	MCD710 STANDBY BUTTON ABS
M014	MECHANICAL PARTS LIST-FUNCTION BUTTON
M014A	MCD710 BUTTON BRACKET ABS
M014B	MCD710 DIRECTION BUTTON ABS
M014C	MCD710 FUNCTION -BUTTON ABS
M014D	MCD710 FUNCTION-BUTTON(OPEN/CLOSE) ABS
M014E	MCD710 FUNCTION-BUTTON(STOP) ABS
M015	MECHANICAL PARTS LIST-CASING PARTS
M015A	MCD710 AL FRONT-CAB(L)

FACTORY PARTLIST

M015B	MCD710 AL FRONT-CAB(R)
PRESS PLATE	MCD988 USB PCB PRESS PLATE
M015C	MCD710 TOP COVER(HIPS BLACK)
M015D	MCD710 BOTTOM CAB. 2.0CH HIPS SILVER
M015E	MCD710 PLASTIC FRONT-PANEL(HIPS)
M015F	MCD710 VOLUME KNOB (ABS PLATE)
M015G	MCM710 BIG LENS PMMA
M015H	MCM710 SMALL LENS PMMA
M015I	MCD710 VOLUME KNOB LIGHT GUIDE(PMMA)
M015J	MCD908 DVD DOOR ABS PA718 FOR MCM710
FAN	MINI FAN RDM4010S DC12V/0.07A
FOOT	MCD705 RUBBER-FOOT Φ4X6
POWER CORD	△POWER CORD 1.95M VH3.96 VDE
JACK	JACK VH3.96/3P

	ACCESSORY PARTS LIST
1	SPEAKER BOX PARTS
2	REMOTER CONTROL