

Service
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Service Manual



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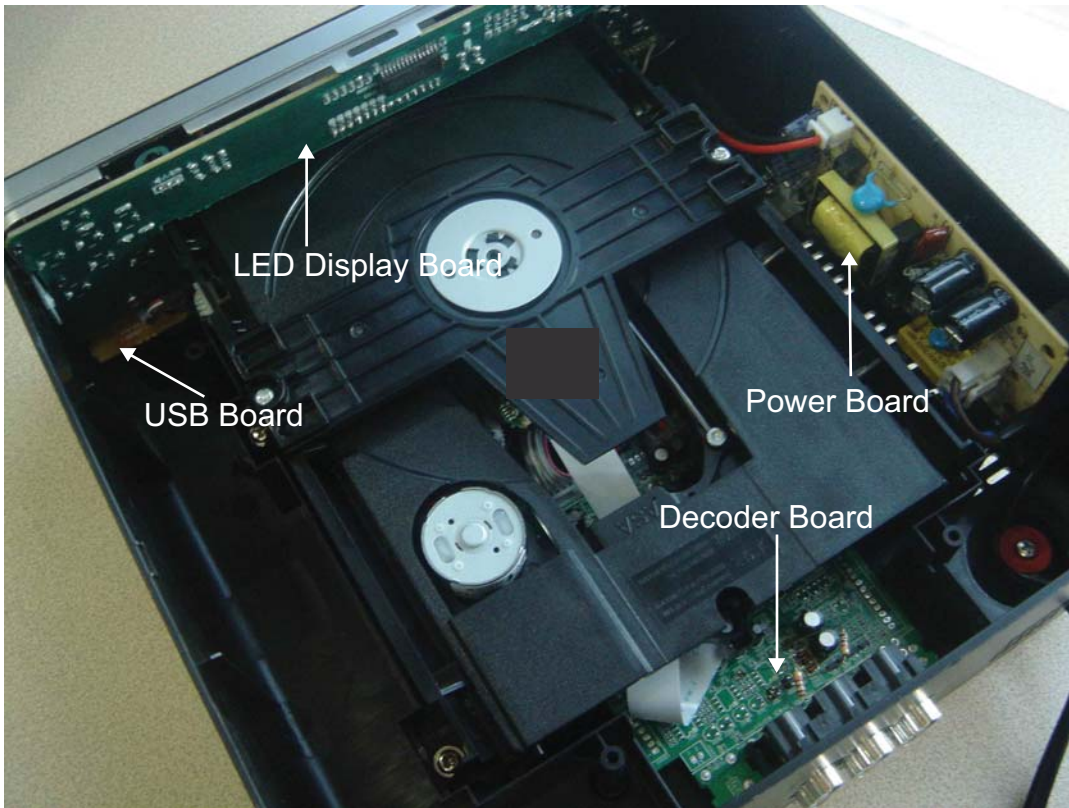
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Version 1.0



PHILIPS

Location of PC Boards



VERSION VARIATIONS :

Type /Versions:		MCD110										
Board in used:	Service policy	/05	/12	/37	/55	/58	/61	/79	/93	/94	/96	/98
LED DISPLAY BOARD										C		
USB BOARD										C		
POWER BOARD										M		
DECODER BOARD										M		
Type /Versions:		MCD110										
Features	Feature difference	/05	/12	/37	/55	/58	/61	/79	/93	/94	/96	/98
RDS												
VOLTAGE SELECTOR												
ECO STANDBY - DARK												
TDS												
* TIPS : C -- Component Lever Repair. M -- Module Lever Repair √ -- Used												

Electronic Specification

AMPLIFIER

Rated Output Power	NA
Signal-to-noise ratio	NA
Frequency response	NA
Aux Input	NA

DISC

Laser Type	Simeconductor
Disc Diameter	12cm/8cm
Support Disc	CD-DA, CD-R,CD-RW,MP3,DVD,DVD-RW,DVD+RW
Audio DAC	1KHz
Total Harmonic Distortion	< 1%
Frequency Response	20Hz ~ 20KHz
S/N Ration	>65dBA

TUNER

FM Tuning Range	NA
Tuning grid	NA

Sensitivity

– Mono, 26dB S/N Ratio	NA
– Stereo, 46dB S/N Ration	NA
Selectivity	NA
Image Rejection	NA
Total Harmonic Distortion	1%
Signal to Noise Ration	≥65dBA

SPEAKERS

Speaker Impedance	NA
Speaker Driver, base	NA
Speaker Driver, tweeter	NA
Frequency Response	NA

GENERAL INFORMATION

Total Output power	NA
AC Power	220V / 50Hz
Operation Power Consumption	6W
Standby Power Consumption	NA
Eco Standby Power Consumption	<0.5W
Headphone Output	NA
USB Direct	Version 2.0

Dimensions

– Main unit (w x h x d)	220x90x240mm
– Speaker box (w x h x d)	NA
– SUBwoofer(w x h x d)	NA

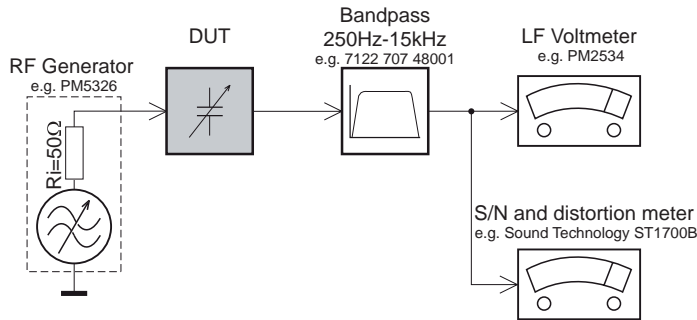
Weight

– With Packing	1.8KG
– Main Unit	1.2 KG
– Speaker box	NA
– SUBwoofer.....	NA

Specifications and external appearance are subject to change without notice.

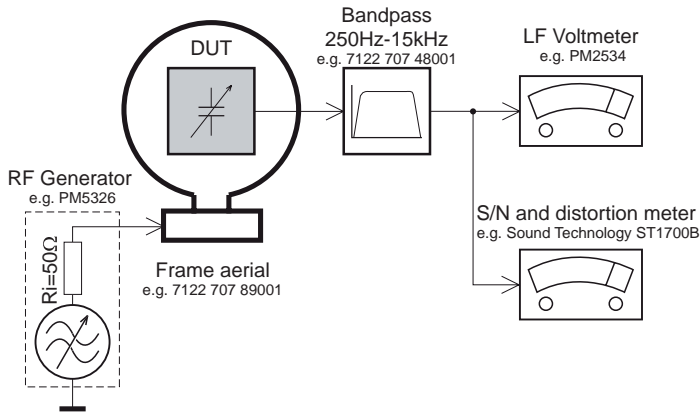
Measurement Setup

Tuner FM



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

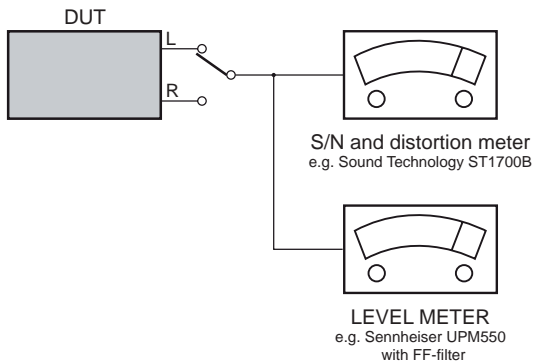
Tuner AM (MW,LW)



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 250Hz) to eliminate hum (50Hz, 100Hz).

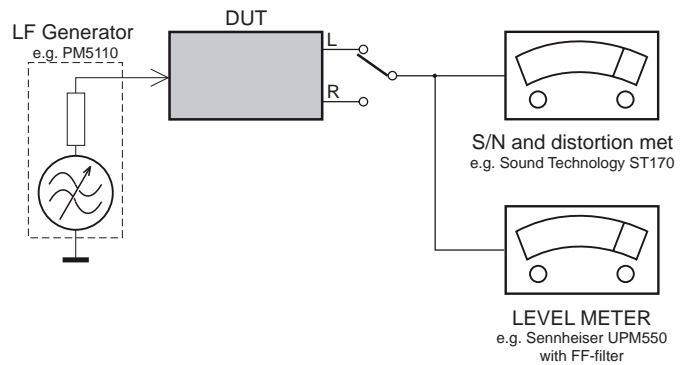
CD

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



Recorder

Use Universal Test Cassette **Cr02** 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.

ESD



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 \triangle .

**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.

Items of Safety Attention

Maintenance Attention

Attention: Please read Items of Safety Attention carefully. If there are unexpected conflicts between safety attention and maintenance attention, please abide to safety attention Safety first.

Common Maintenance Attention

- ① Before operating, please unplug the AC power cord from the outlet.
 - a) Disassemble any parts.
 - b) Cut-off or re-connect plug and other inserting parts.
 - c) When electrolysis capacitance and test parts is parallel connected, anti-polarity and wrong replace will cause explosion.
- ② Do not spray chemical on the component system, surroundings and any parts.
- ③ Clean the electric junction with a cotton stick which is with cleaning mixture, except there is other demand in this manual.

Please notes:

Mixture is a kind of inflammable mixture.

 - ▶ Do not use lubricant to the soldering point, except there is
 - ▶ other demand in this manual

Common Controlling

During maintenance, please take common controlling to protect component system and electronic parts and prevent damages to the circuit due to improper operation.

Led out wire should be kept away from high-pressure or high-temperature parts.

ES

Some semi-conductor parts are easily damaged by static charges, these parts are called ES. They are mainly the cores of transistor lead identification. The following technical ways can be used to reduce the damages by static charges.

Before connecting semi-conductor or the parts. Let off the

- ① static charges of the body by connection the earth. On the other hand, to prevent potential electric shock hazard, please use industrial static handle before connecting power for checking the equipment.
- ② After unsoldering the ES parts, put the parts on a electric surface such as aluminum foil to prevent accumulating static charges to damage the parts.
 - ③ Only use anti-static charges grounded soldering irons to unsolder the parts or solder ES parts.
- ③ Some soldering tin called Anti-static charges can also generate charges to damage ES parts.
- ④ Do not use poisonous and caustic agent which these kinds of chemicals can generate static charges to damage the ES parts.
- ⑤ Do not take ES parts out of conductive packages until they are used (mostly replacing ES parts is packed with aluminum foil or similar conductive materials making a short circuit).
- ⑥ After taking replaceable ES parts from Anti-static charges cone, please insert the ES parts in the correctly location soon as possible.
- ⑦ During handing sealed ES parts, reduce the movement of the body (clothes rubbing and moving on the rug can generate static charge to damage the ES parts.)
- ⑧

Common Soldering Rules

- ① Use only grounded low-voltage soldering iron, and proper size and shape which can sustain the temperature of soldering horn to range from 350 to 390.
- ② Use rosin flux which is demanded by RMA include 60 Tin 40 lead.
- ③ To maintain soldering iron and its tin very well.
- ④ Use the wire brush but not spray cleaners such as Freon to clean the soldering surface.
- ⑤ Adopt the melting ways
 - a) The temperature of soldering horn range from 350 to 390.
 - b) Heat up the parts pin, until soldering tin is molten.
 - c) Use the desoldering pump to suck out the molten soldering tin quickly.

Note: Quickly operating can prevent superheating the electronic-plating copper.
- ⑥ Adopt the following soldering ways.
 - a) The temperature of soldering horn range from 350 to 390.
 - b) Hold the soldering iron and welding rod pointed to the parts pin, until soldering tin is molten. Then move the soldering horn quickly to the location that you want to solder.

Note: Quickly operating can prevent superheating electronic-plating copper of printed circuit board.
 - c) Check the wetting zone carefully, then brush the unwanted soldering tin away with a wire brush.

Unsolder/Replace IC

Notes:

- ① Do not touch the IC body directly with soldering iron.
- ② Pre-heating soldering iron at about 130 for some seconds avoid the damages caused by IC heated suddenly.
- ③ For normal IC, the temperature of the solder horn is about 350, and can increase to 390 for some bigger IC.
- ④ Use the filamentous welding rod and solder which thickness is about 0.3mm to solder thin IC and add the solder as needed.
- ⑤ Replace the IC carefully and solder it quickly.
- ⑥ After unsoldering the IC, clean the basic board carefully to ensure the board is usable.
- ⑦ Prevent the molten soldering tin dripping on the board which will engender a short circuit.
- ⑧ Aim at the first terminal and fix it, then aim at other terminals for correctly inserting IC. You can solder quickly just like this.
- ⑨ Before operating, please make sure the IC is unusable. Do not unsolder repeatedly.
- ⑩ During soldering especially soldering a thin IC with many pins, check the weld carefully.
- ⑪ After replacing, check that there is not soldering leak, rosin point, short circuit and so on.

Unsolder:

 - ① Use the soldering iron to melt the soldering tin.
 - ② Before unsoldering IC, suck out the molten solder tin.

Replace:

 - ① Make sure all the IC pins are on their correct location, then solder.
 - ② Use a wire brush to clean the wetting zone.

Items of Safety Attention

U

- ① After unsoldering the unusable diode, nip its body and take it out.
- ② Bend the two pins and the diode is vertical to circuit board.
- ③ Check the polarity of the diode, then place its pins to the correct location.
- ④ Pin the joint and solder it.
- ⑤ Check the weld carefully. If the surface of the weld is not smooth, please solder it again.

R -

- ① Repair the warpage copper as following:
- ② Use a sharp knife to scrape the unusable copper and the unwanted solder off.
- ③ Make one side of the lead bent like a small "U", then put the "U" to IC pins and solder. Another side of the lead is extended until overlap with the well copper then solder. Cut the unwanted lead.

T D D

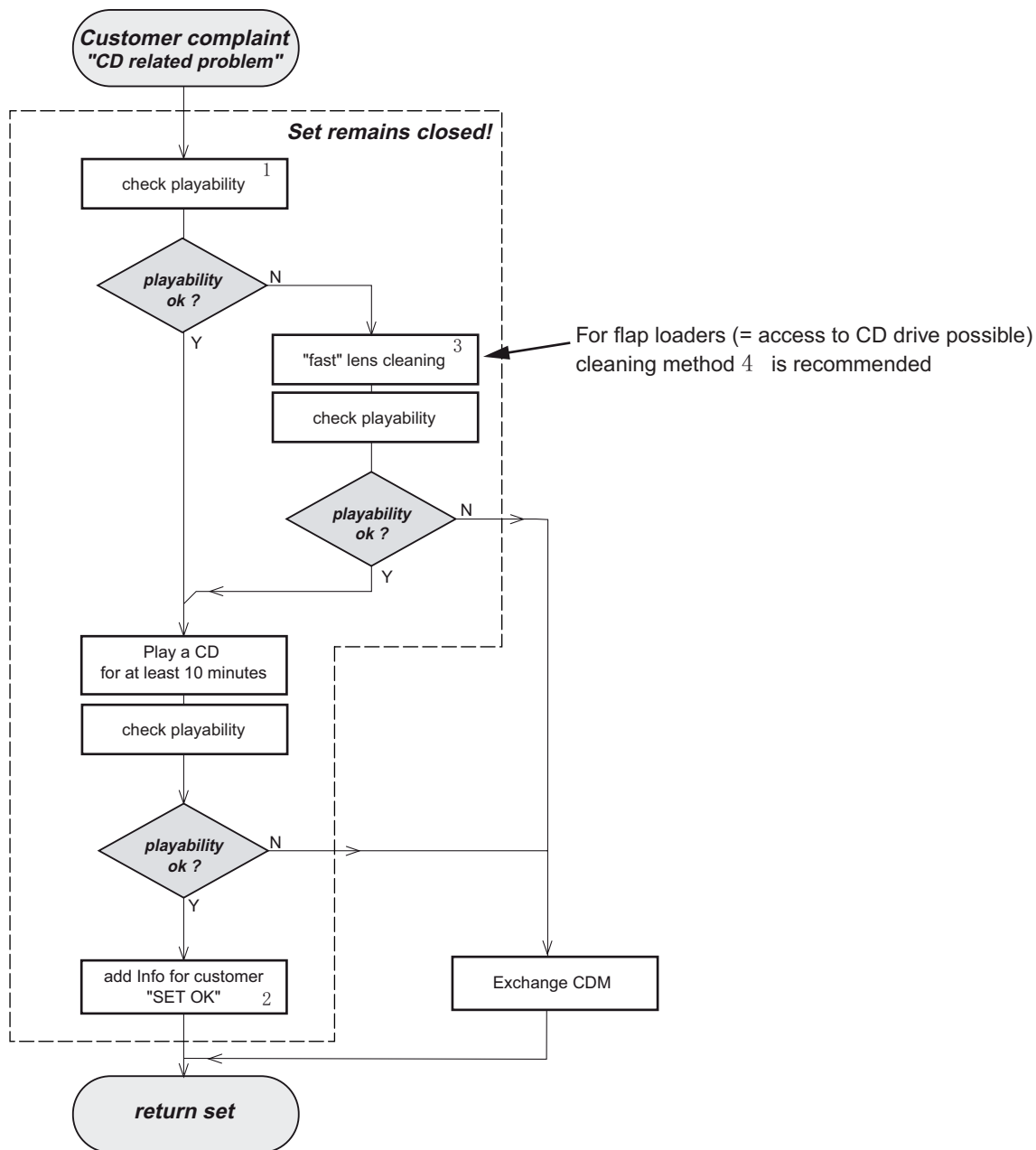
No sound or sound distorted when playing, please check the DVD part.

N

Before operating, read these notes as following to prevent the static charges damageing the laser head when reading the laser led.

- ① Lay an electric rug on the working table and the replaced parts are packed in black package.
- ② The electric rug is grounding by put on the electric base. Then put your hand on the electric rug and connect the static handle with the electric rug. Make sure the electric rug and the working table are grounding.
- ③ During the operating, do something such as operating on the electric rug to avoid the static charges touching the laser parts. After that, you can begin to take the laser parts down.
- ④ When replace the laser parts, please do something to make a short circuit and remember to cut the short circuit off after replacing.

Instruction On CD Playability



1 - 4 For description - see following pages

Instruction On CD Playability

PLAYABILITY CHECK

For sets which are compatible with **CD-RW** discs
 use CD-RW Printed Audio Disc7104 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 ≥ 10 seconds
 Black dot from 00:50 to 01:10
- jump forward/backward (search) within a reasonable time

For all other sets
 use CD-DA SBC 444A4822 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 ≥ 10 seconds
 Fingerprint ≥ 10 seconds
 Black dot from 01:05 to 01:25
- jump forward/backward (search) within a reasonable time

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.

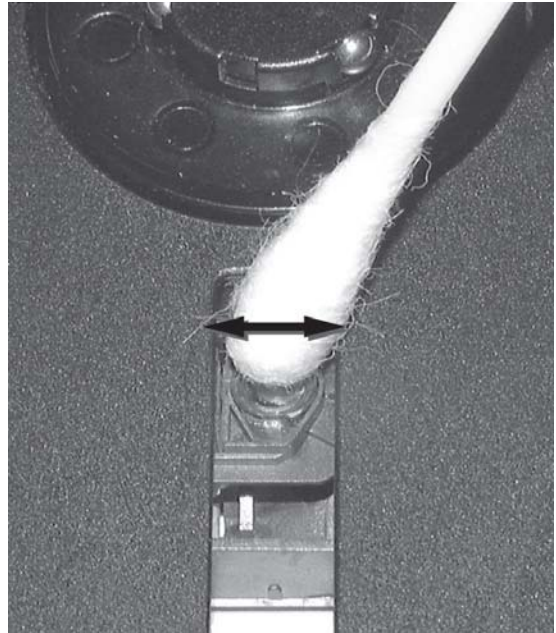
LIQUID LENS CLEANING

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

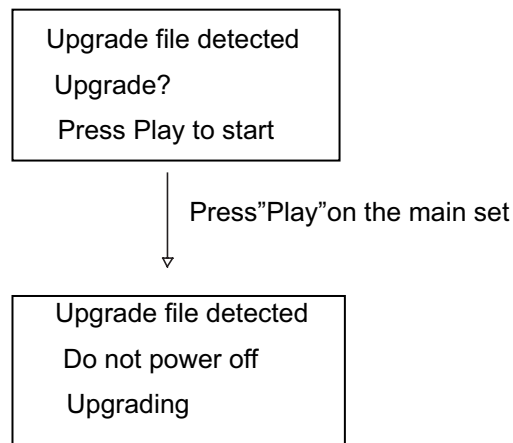
Upgrade software

1. Download the software from Philips support website:

<http://www.philips.com/support>

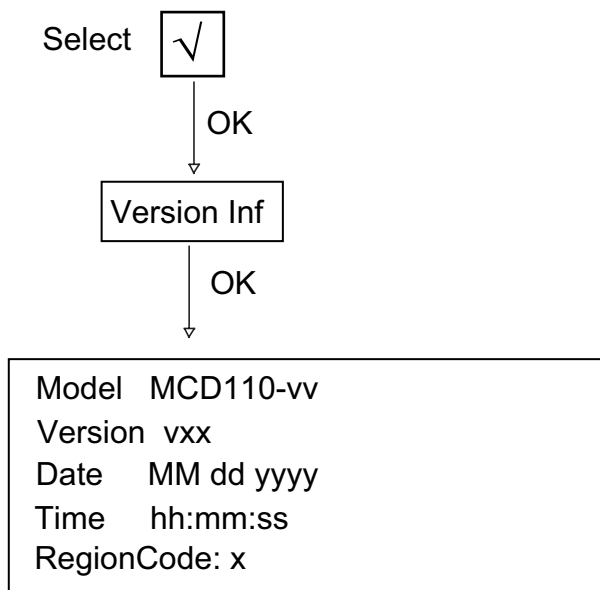
2. Load the CD Disc or USB device with software, Software upgrade procedure starts automatically

TV Screen Display:

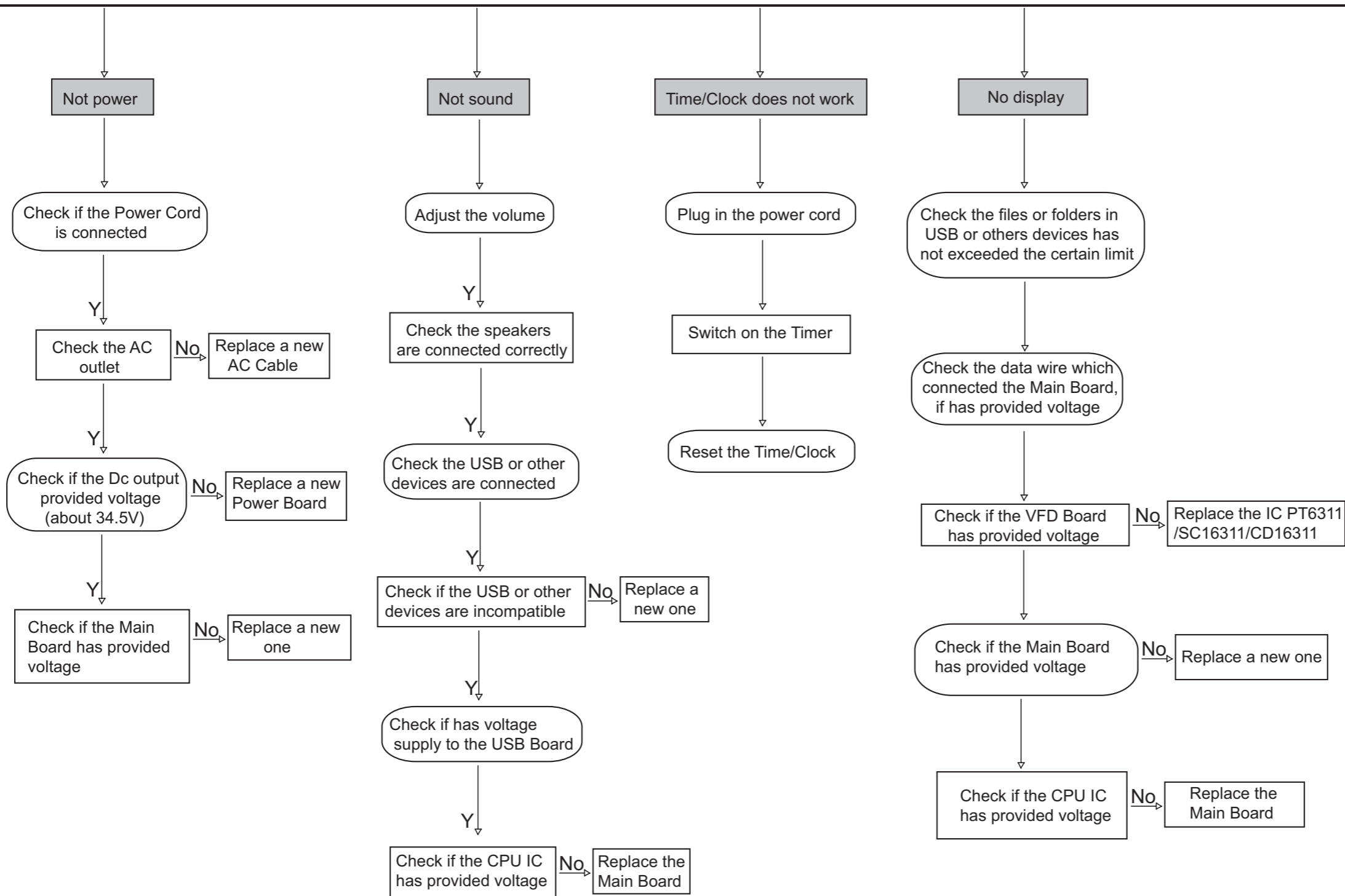


Software version and date check

1, In the absence of USB/DISC state or STOP status at the next, press the "SYSTEM/MENU" on remote control, TV Screen Display:

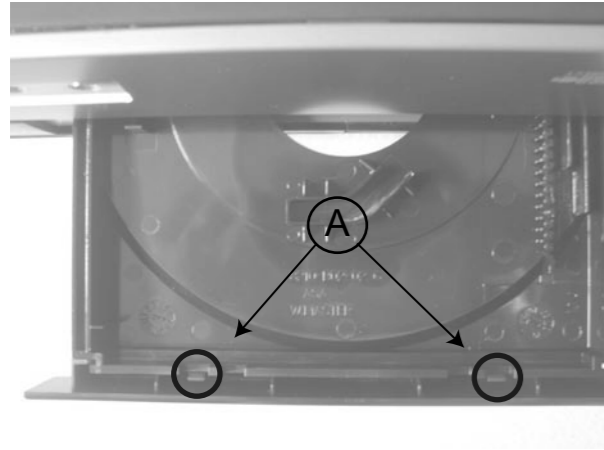


Malfunction Follow Check Chart

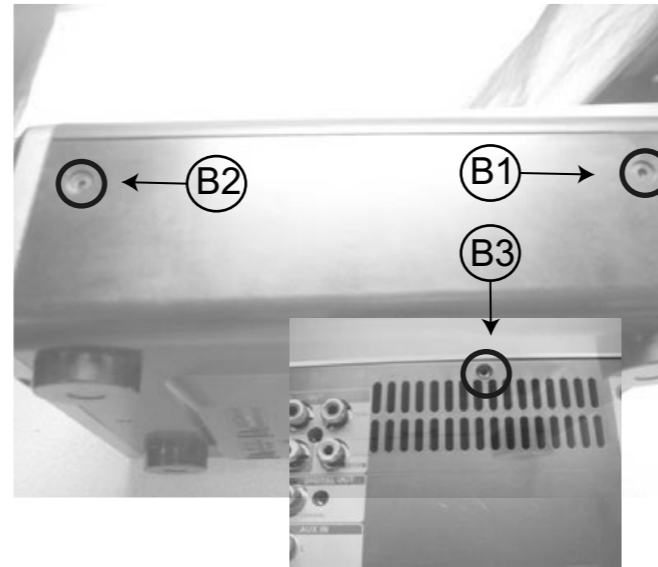


Disassembly Diagram

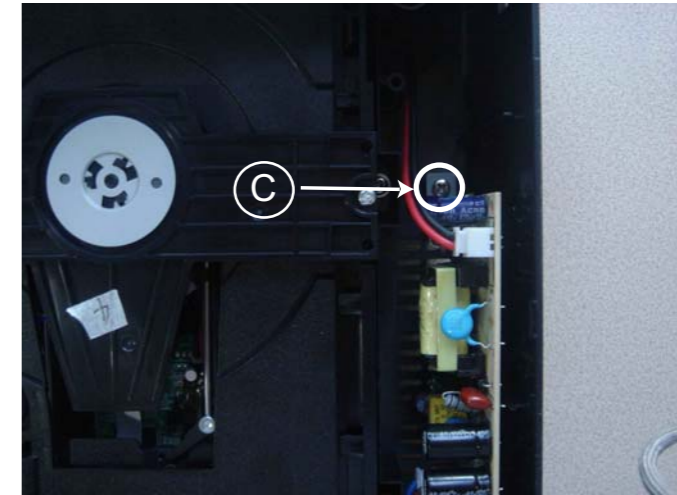
A. Open the DVD Door and loose 2 clips to remove the door



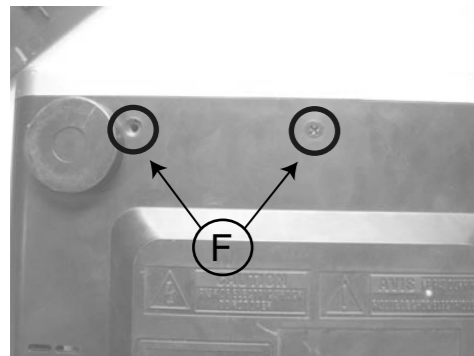
B. Remove the Top-cabinet
B1. Loose 2pcs screws(3 x 6 KB) of both side near to the back side.
B2. Loose 2pcs screws(3 x 8 Km) of both side near to the front cabinet.
B3. Loose 1pc screw(3 x10 FA) of the back side.



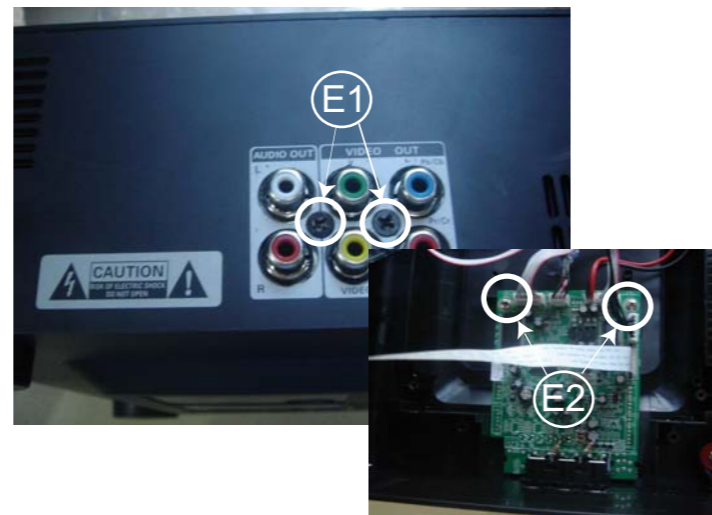
C. Loose 1pc screw(3 x 8 BA) to remove the Power Board



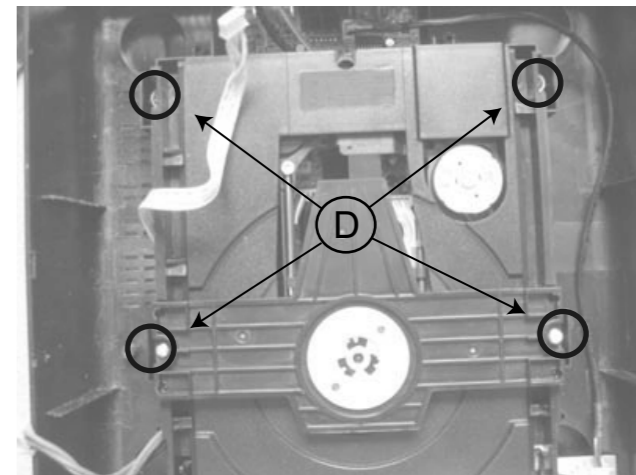
F. Loose 2pcs screws(3 x 8 FT) to remove the Front Cabinet



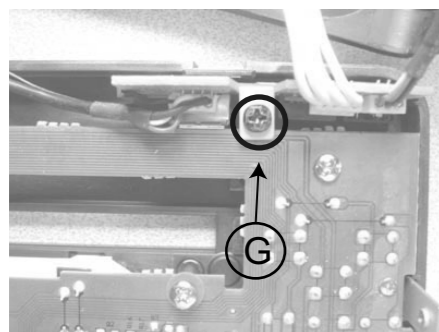
E. Remove Decoder Board
E1. Loose 2pcs screws(3 x 10 FA) of the back side.
E2. Loose 2pcs screws(3 x 8 BA) of the decoder board.



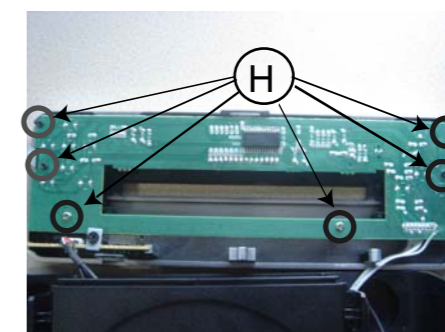
D. Loose 4pcs screws(3 x 10 PWA) to remove DVD Loader Driver



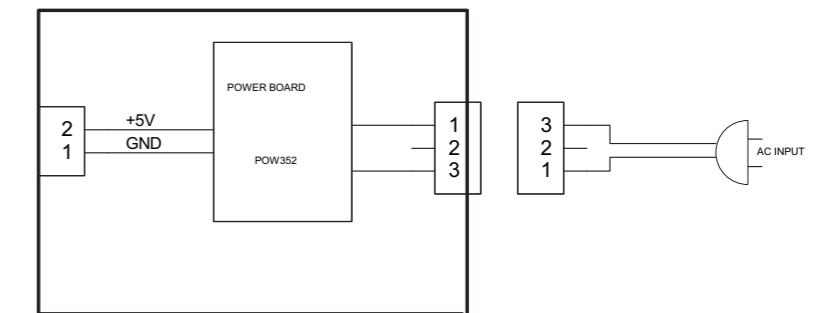
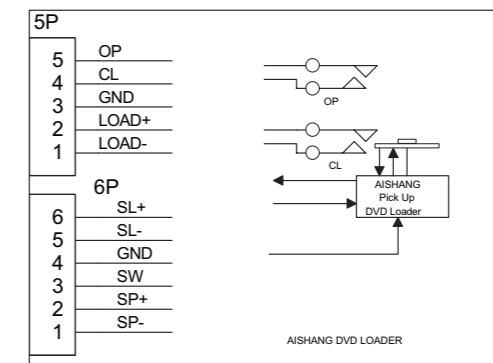
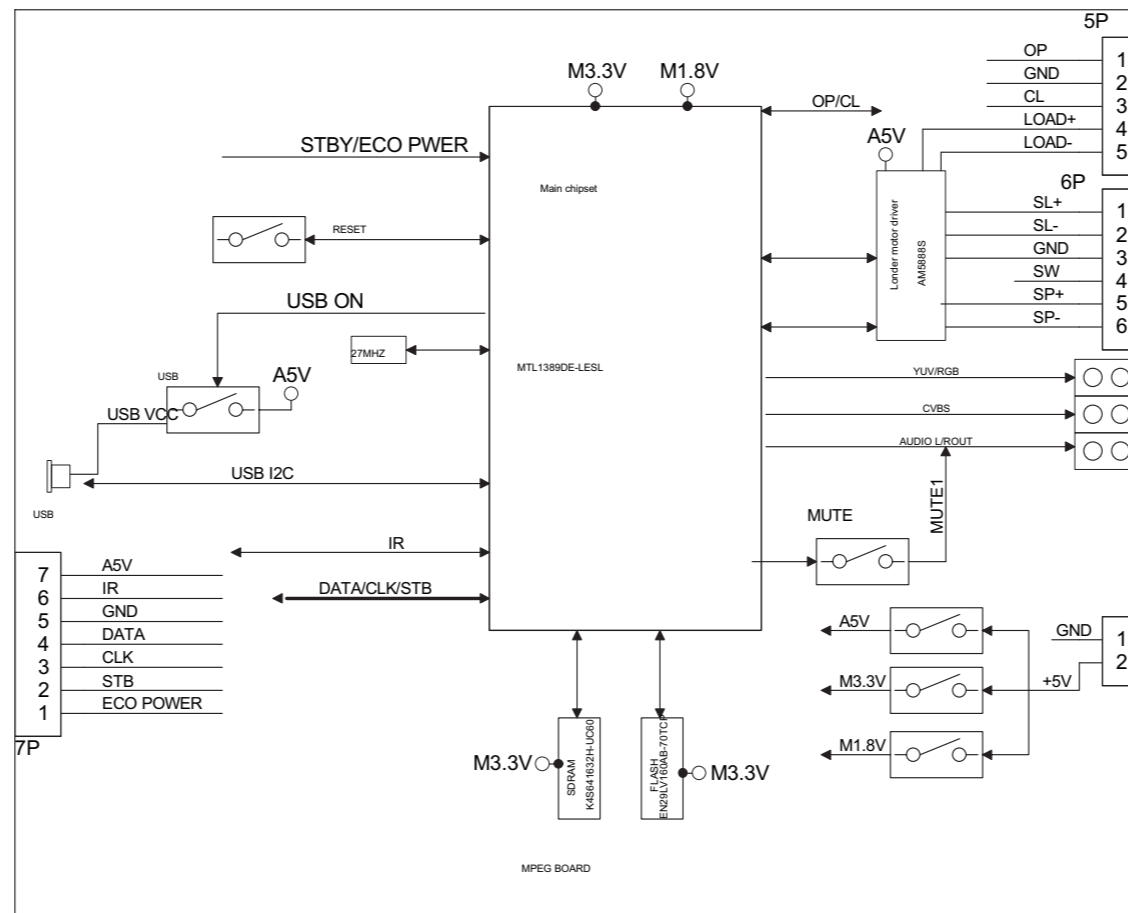
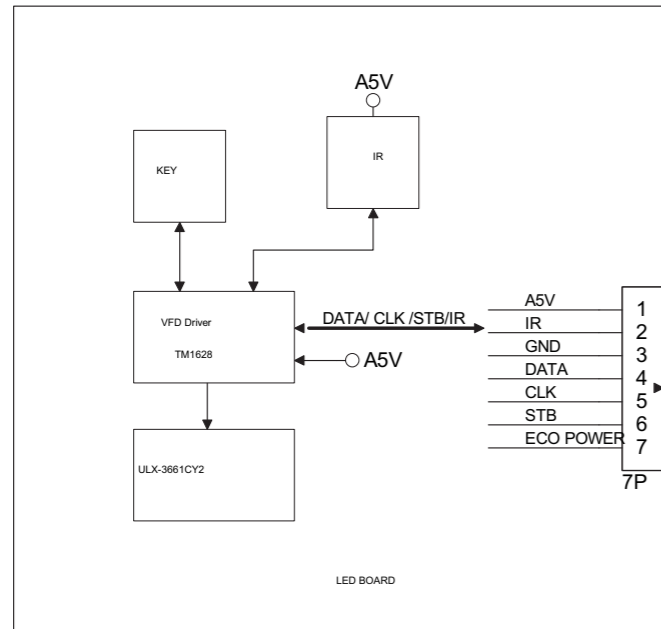
G. Loose 1pc screw(3 x 8 BA) to remove the Headphone Board



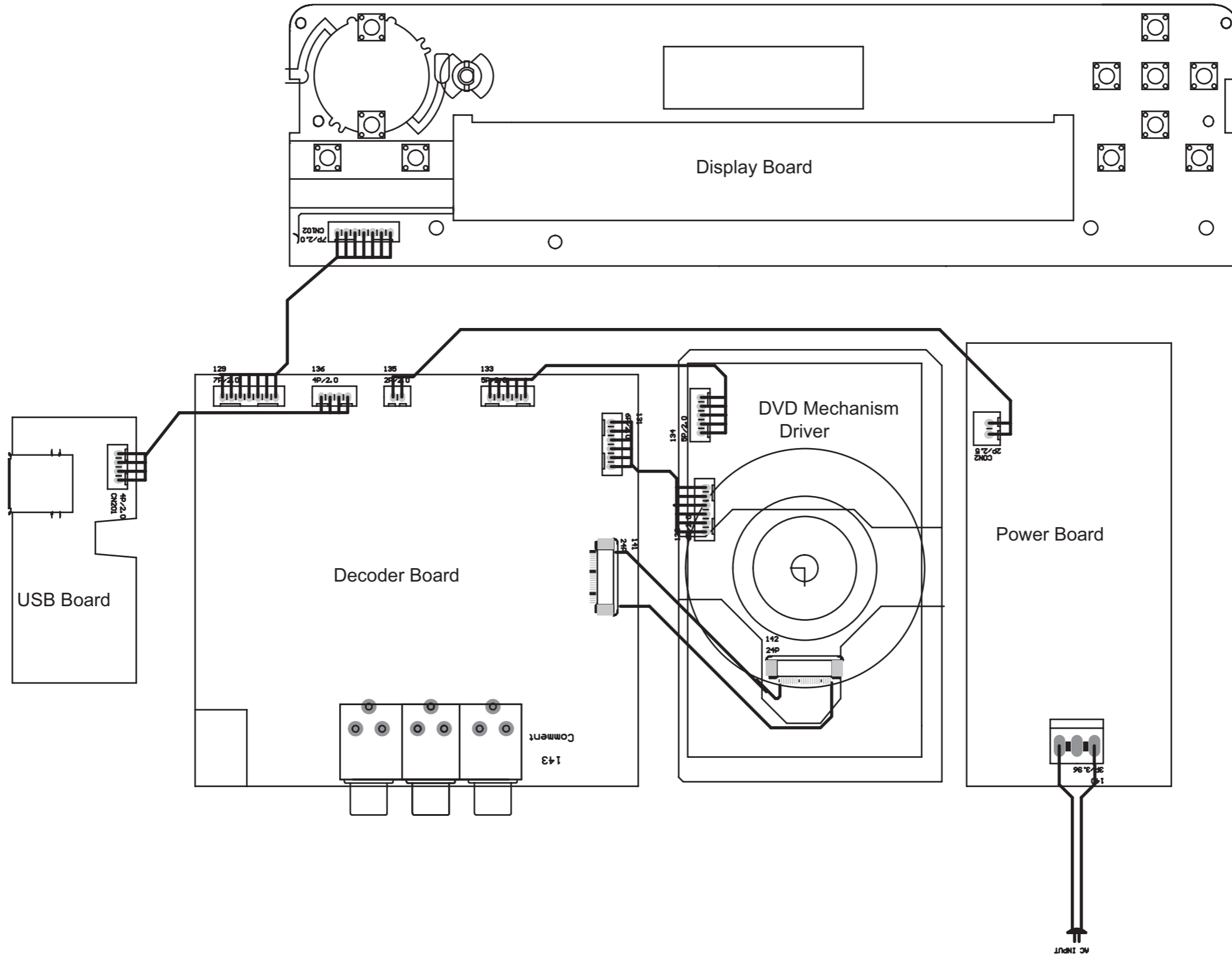
H. Loose 6pcs screws(2 x 8 PA) to remove the Display Board

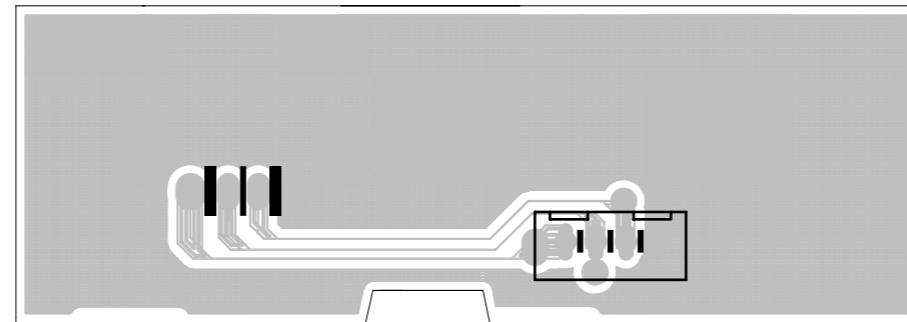
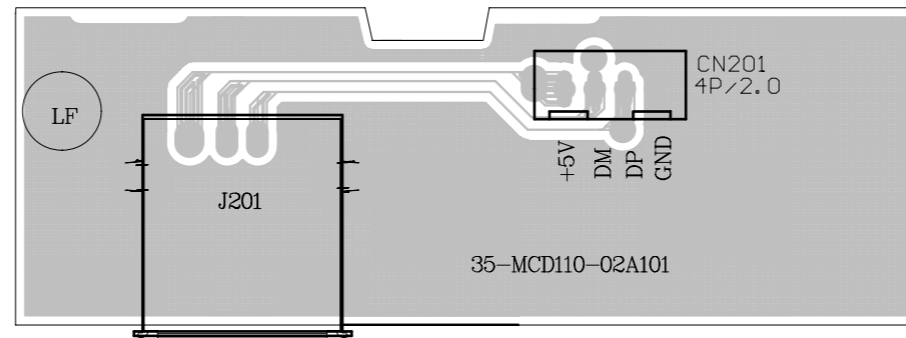
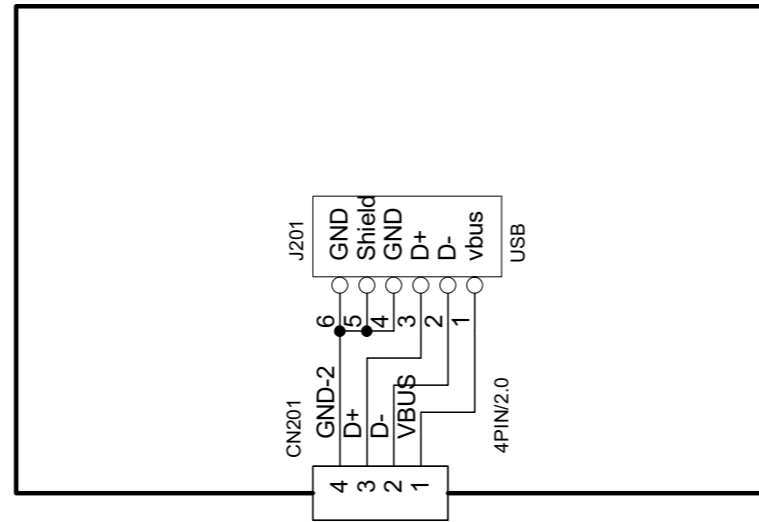


Block Diagram

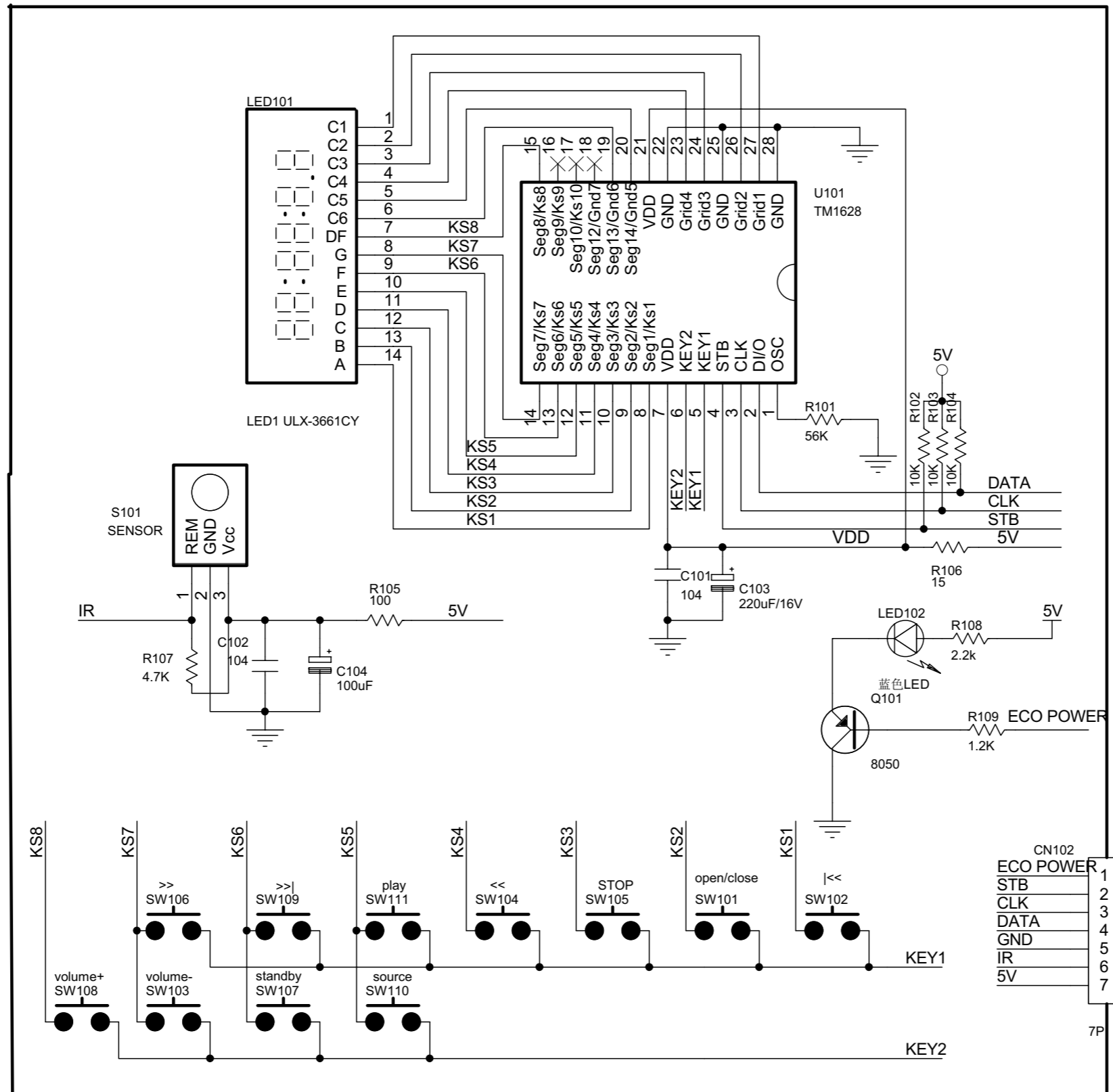


Wiring Diagram

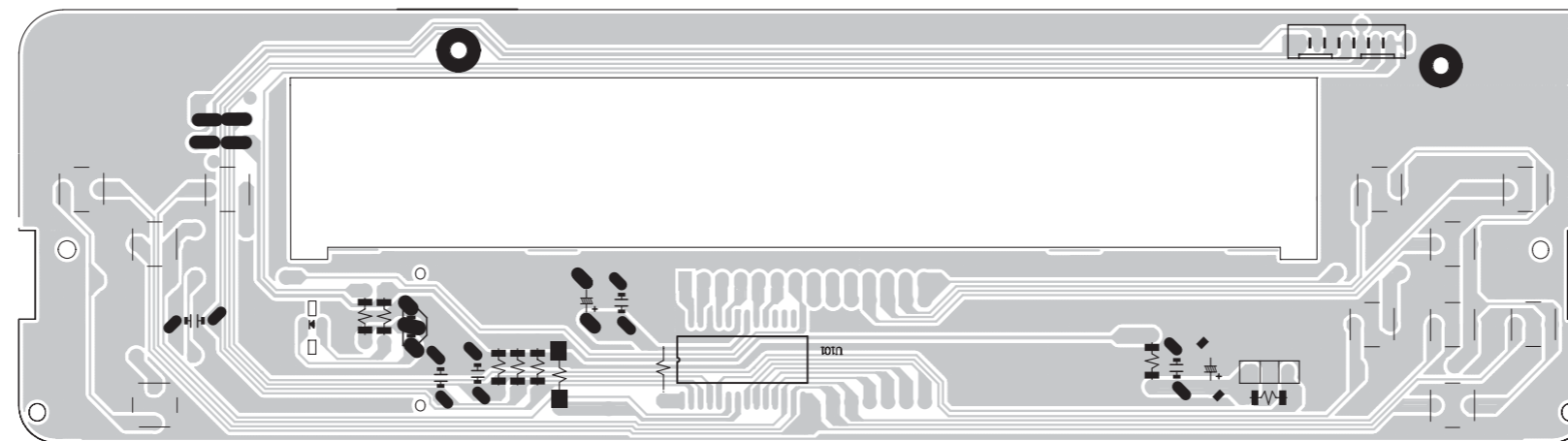
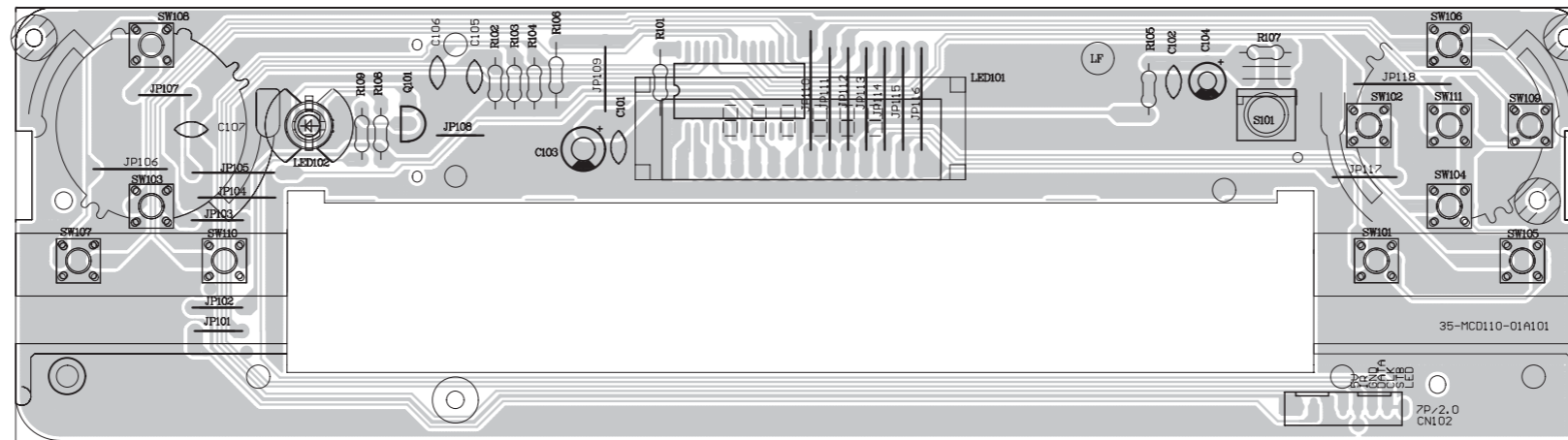




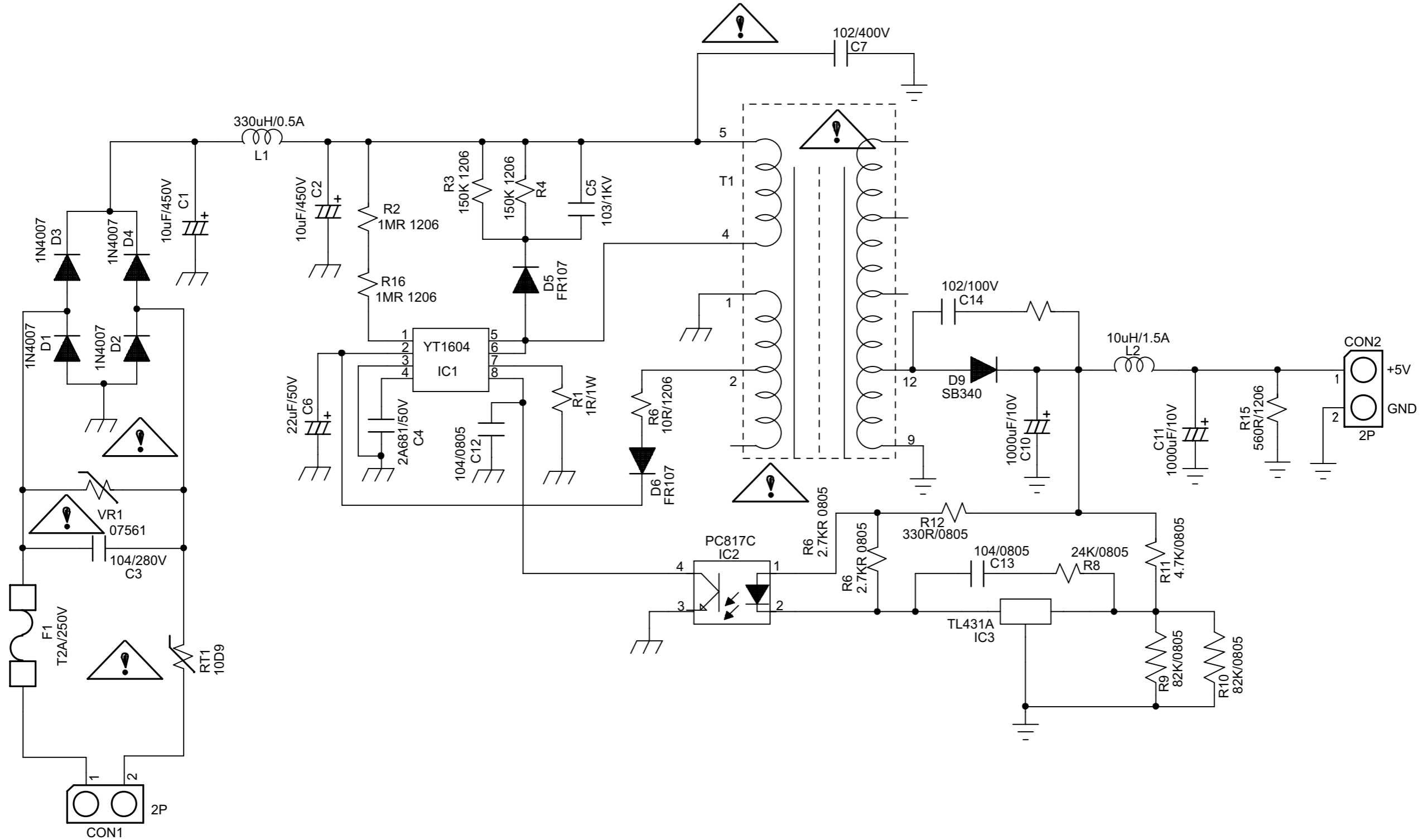
LED Display Board -- Circuit Diagram



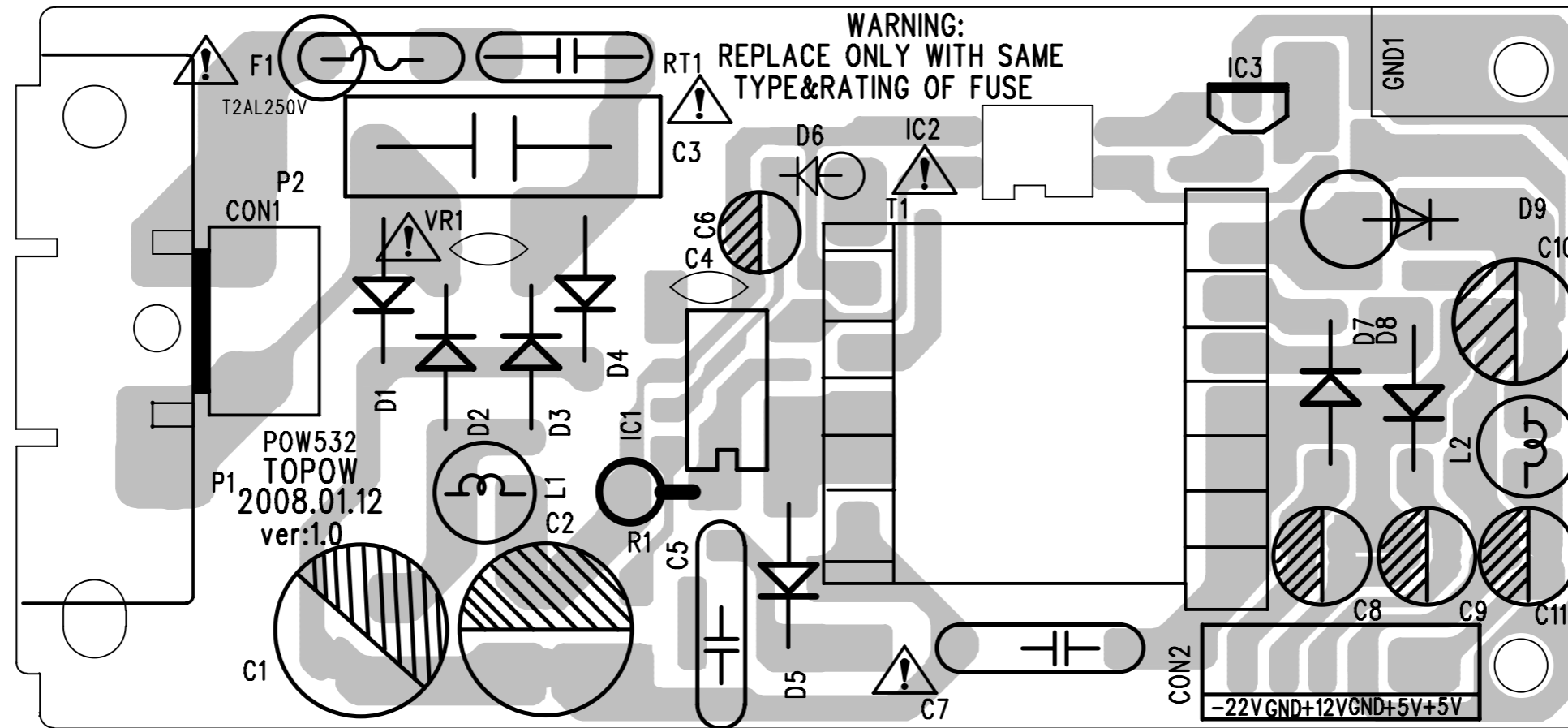
LED Display Board -- Layout Diagram



Power Board -- Circuit Diagram



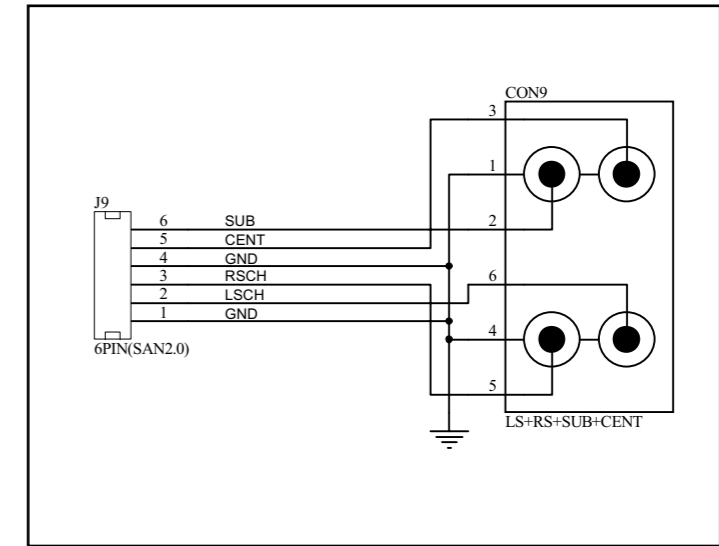
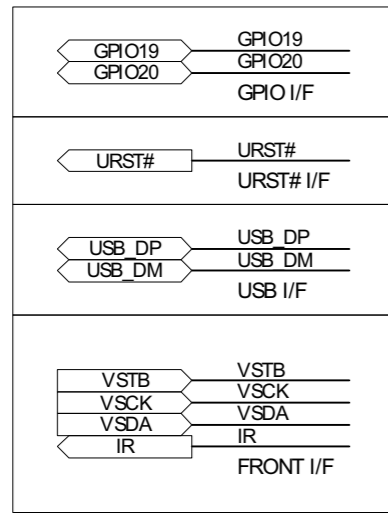
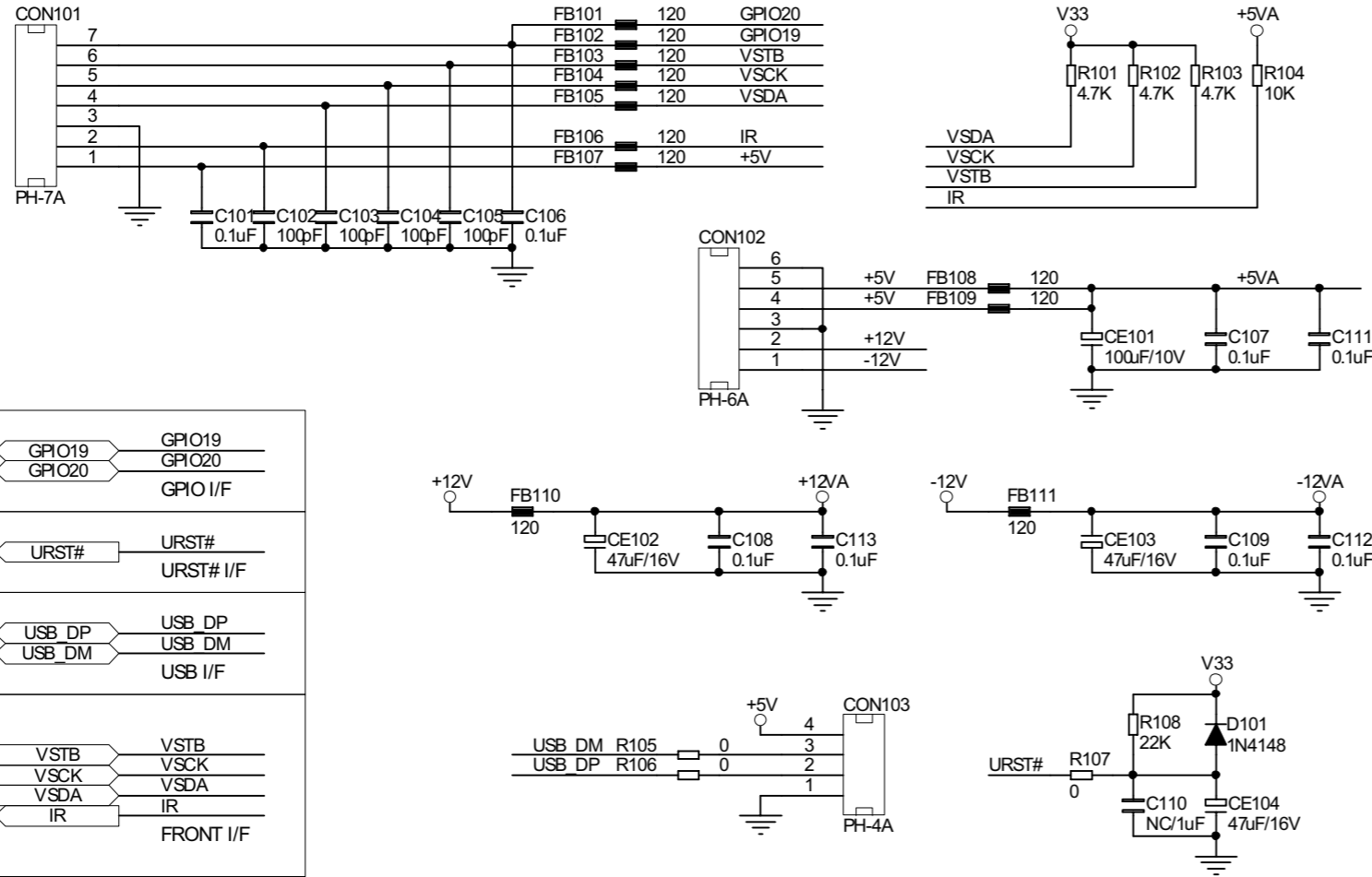
Power Board -- Layout Diagram



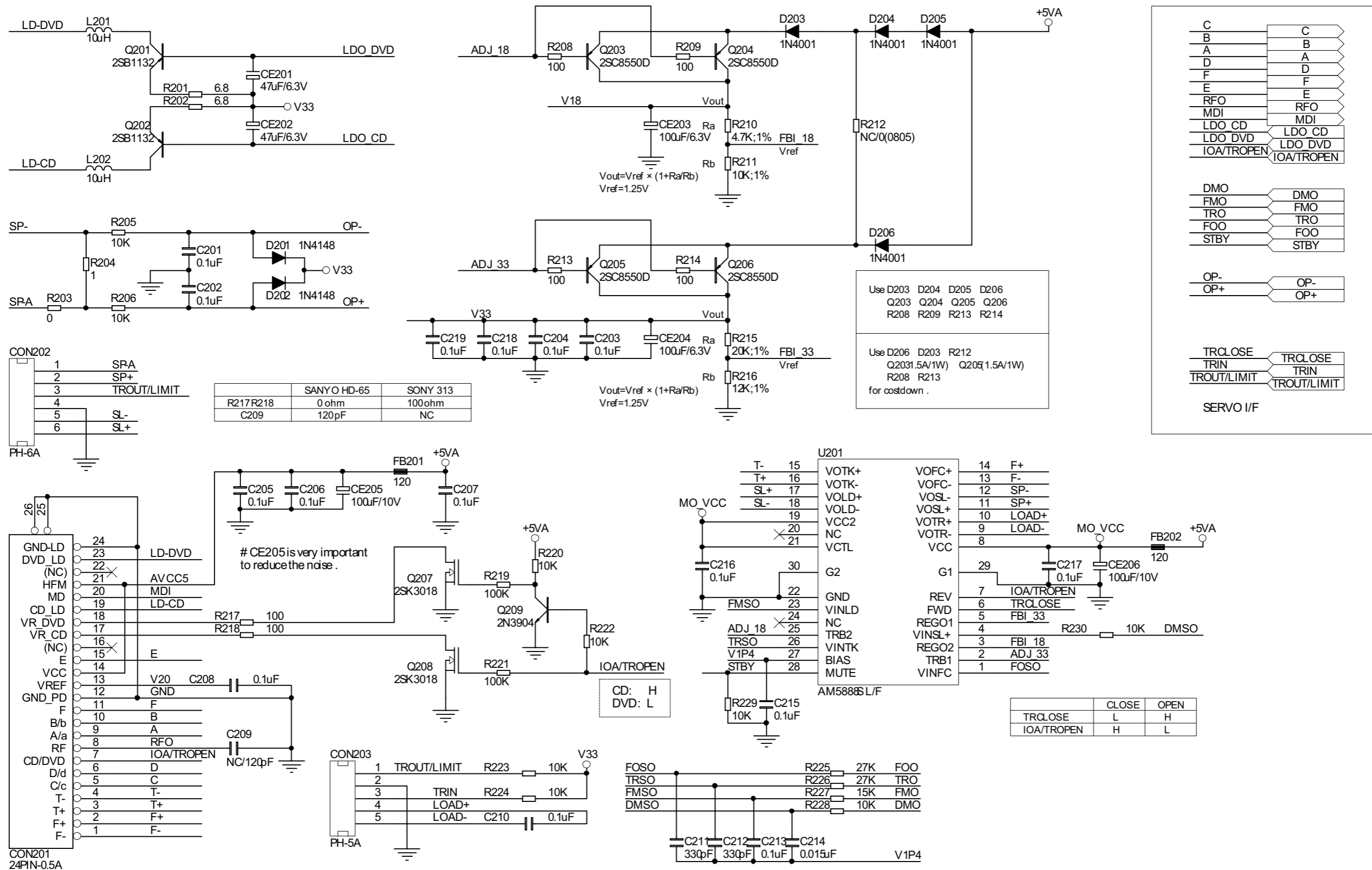
Decoder Board -- Circuit Diagram

DVD Player Main Board (MT1389L/MT1389R & SONY313)		Name	Pin	Card+MIC(ADC)	Card+VGA	Card+Scart	* Card+MIC(ADC)+VGA	* Card+MIC(ADC)+Scart	MIC(ADC)+Scart+VGA	Card+MIC(ADC)+Scart
1. INDEX	FG/GPIO2	26	TRIN	TRIN	TRIN	TRIN	TRIN	TRIN	TRIN	TRIN
2. SERVO PICK-UP & DRIVER	GPIO3/INT# (TXD for 89R Default)	33	VSTB	VSTB	VSTB	VSTB	VSTB	VSTB	VSTB	VSTB
3. MT1389L/MT1389R DECODE	GPIO4	34	TROUT/LIMIT	TROUT/LIMIT	TROUT/LIMIT	TROUT/LIMIT	TROUT/LIMIT	TROUT/LIMIT	TROUT/LIMIT	TROUT/LIMIT
4. SDRAM & FLASH	GPIO6	35	TRCLOSE	TRCLOSE	TRCLOSE	TRCLOSE	TRCLOSE	TRCLOSE	TRCLOSE	TRCLOSE
5. AUDIO & VIDEO OUT	GPIO7/CKE	87	MS_CLK (card)	MS_CLK (card)	MS_CLK (card)	MS_CLK (card)	MS_CLK (card)	MS_CLK (card)	RGB_SW (scart)	MS_CLK (card)
6. AUDIO AV4 & SCART	GPIO8	88	SD_CLK/MS_BS (card)	SD_CLK/MS_BS (card)	SD_CLK/MS_BS (card)	SD_CLK/MS_BS (card)	SD_CLK/MS_BS (card)	SD_CLK/MS_BS (card)	FS1 (scart)	SD_CLK/MS_BS (card)
	GPIO9 (RXD1 for 89L Default)	89	SD_CMD/MS_D0 (card)	SD_CMD/MS_D0 (card)	SD_CMD/MS_D0 (card)	SD_CMD/MS_D0 (card)	SD_CMD/MS_D0 (card)	SD_CMD/MS_D0 (card)	FS0 (scart)	SD_CMD/MS_D0 (card)
	GPIO10 (TXD1 for 89L Default)	91	SD_D0 (card)	SD_D0 (card)	SD_D0 (card)	SD_D0 (card)	SD_D0 (card)	SD_D0 (card)	HSYNC (VGA)	SD_D0 (card)
	GPIO11 (RXD for 89R Default)	92	VSYNC (VGA)	VSYNC (VGA)	VSYNC (VGA)	VSYNC (VGA)	VSYNC (VGA)	FS0 (scart)	VSYNC (VGA)	FS0 (scart)
	SPDIF/GPIO12	93	ASPDIF	ASPDIF	ASPDIF	ASPDIF	ASPDIF	ASPDIF	ASPDIF	ASPDIF
	GPIO13	94	MUTE	MUTE	MUTE	MUTE	MUTE	MUTE	MUTE	RGB_SW (scart)
	AKIN2/GPIO19/Audio_Mute	106	LED_I/O	VSYNC (VGA)	RGB_SW (scart)	HSYNC (VGA)	RGB_SW (scart)	LED_I/O	LED_I/O	LED_I/O
	ADVCM/GPIO20	107	ADVCM	LED_I/O	FS1 (scart)	ADVCM	ADVCM	ADVCM	ADVCM	ADVCM
	AKIN1/GPIO21/Audio_Mute	108	MIC_IN (MIC)	HSYNC (VGA)	FS0 (scart)	MIC_IN (MIC)	MIC_IN (MIC)	MIC_IN (MIC)	MIC_IN (MIC)	MIC_IN (MIC)
	ARF/GPIO	114	Audio_SUB	Audio_SUB	Audio_SUB	Audio_SUB	Audio_SUB	Audio_SUB	Audio_SUB	Audio_SUB
	ARS/GPIO	115	Audio_RSCH	Audio_RSCH	Audio_RSCH	Audio_RSCH	Audio_RSCH	Audio_RSCH	Audio_RSCH	Audio_RSCH
	AR/GPIO0 (RXD2)	116	Audio_RCH	Audio_RCH	Audio_RCH	Audio_RCH	Audio_RCH	Audio_RCH	Audio_RCH	Audio_RCH
	AL/GPIO1 (TXD2)	118	Audio_LCH	Audio_LCH	Audio_LCH	Audio_LCH	Audio_LCH	Audio_LCH	Audio_LCH	Audio_LCH
	ALS/GPIO	119	Audio_LSCH	Audio_LSCH	Audio_LSCH	Audio_LSCH	Audio_LSCH	Audio_LSCH	Audio_LSCH	Audio_LSCH
	ALF/GPIO	120	Audio_CENT	Audio_CENT	Audio_CENT	Audio_CENT	Audio_CENT	Audio_CENT	Audio_CENT	Audio_CENT

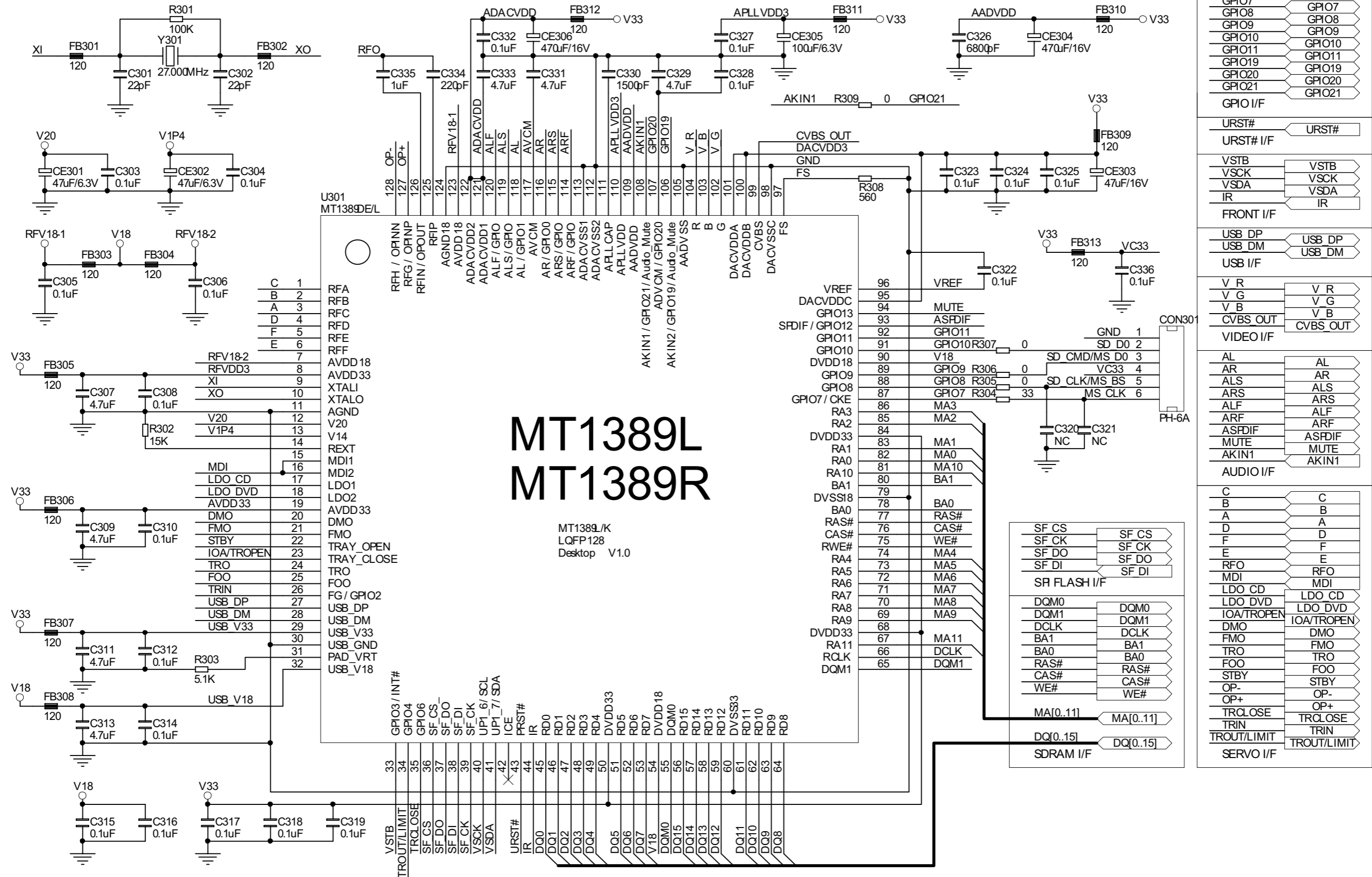
NOTE * : Without LED_I/O Control .



Decoder Board -- Circuit Diagram



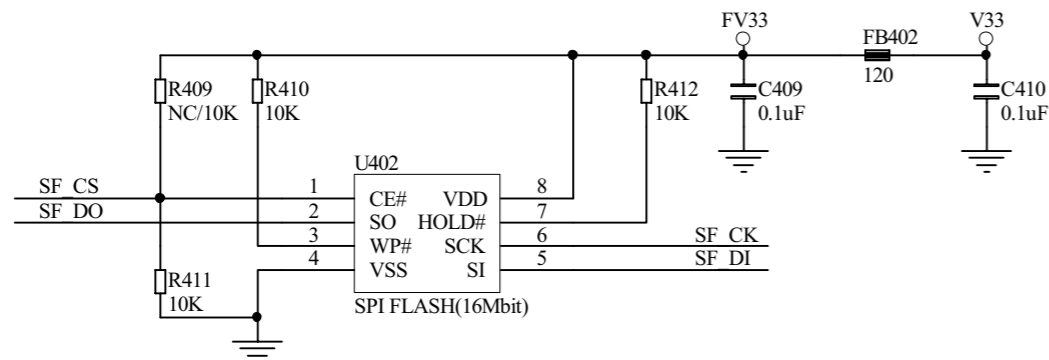
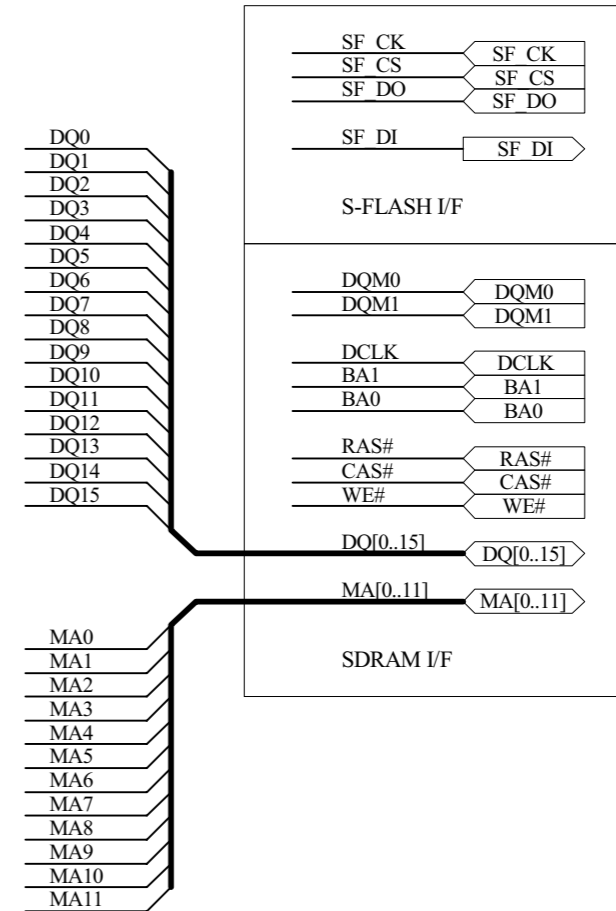
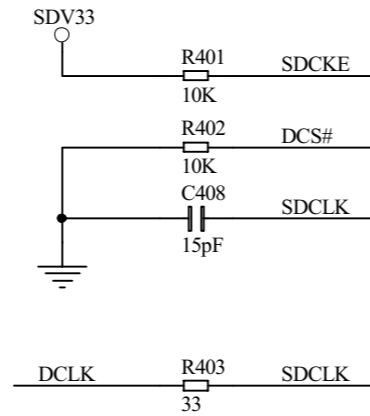
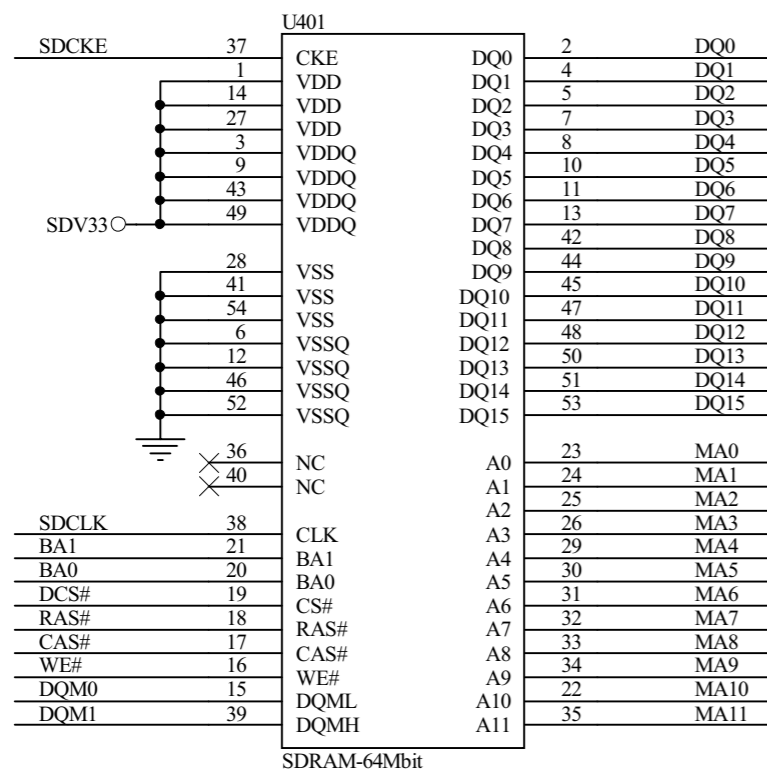
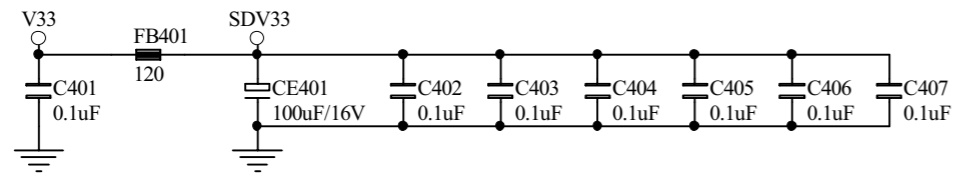
Decoder Board --Circuit Diagram



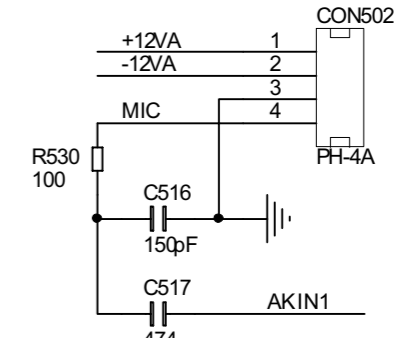
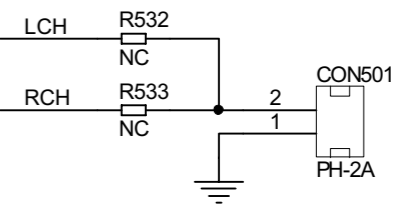
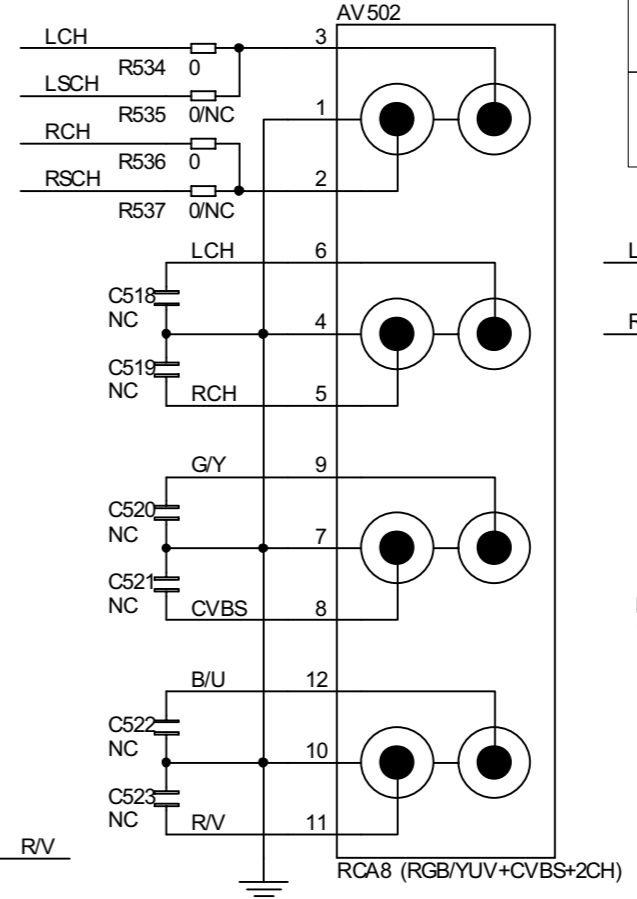
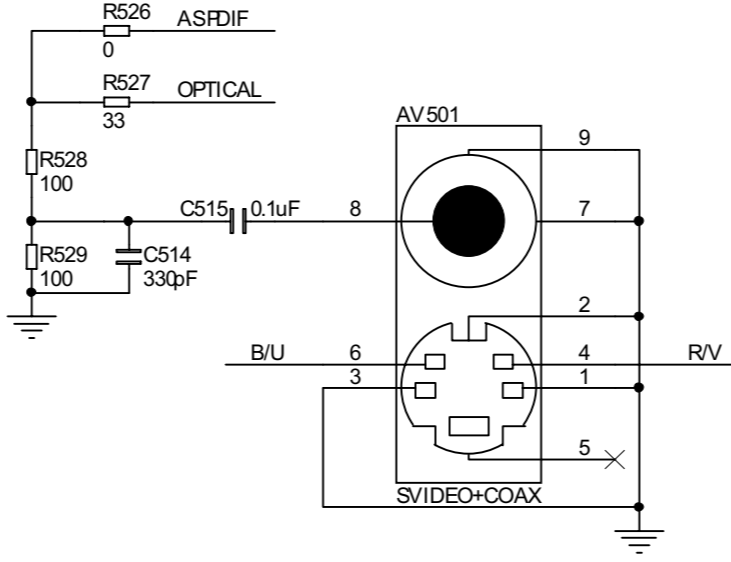
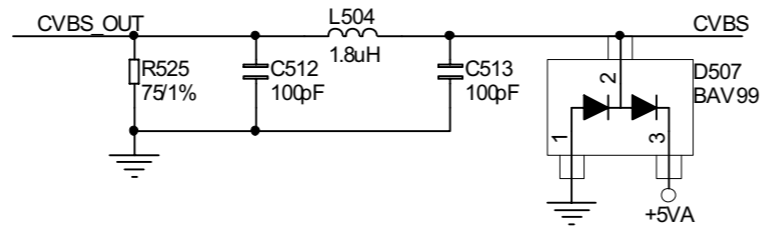
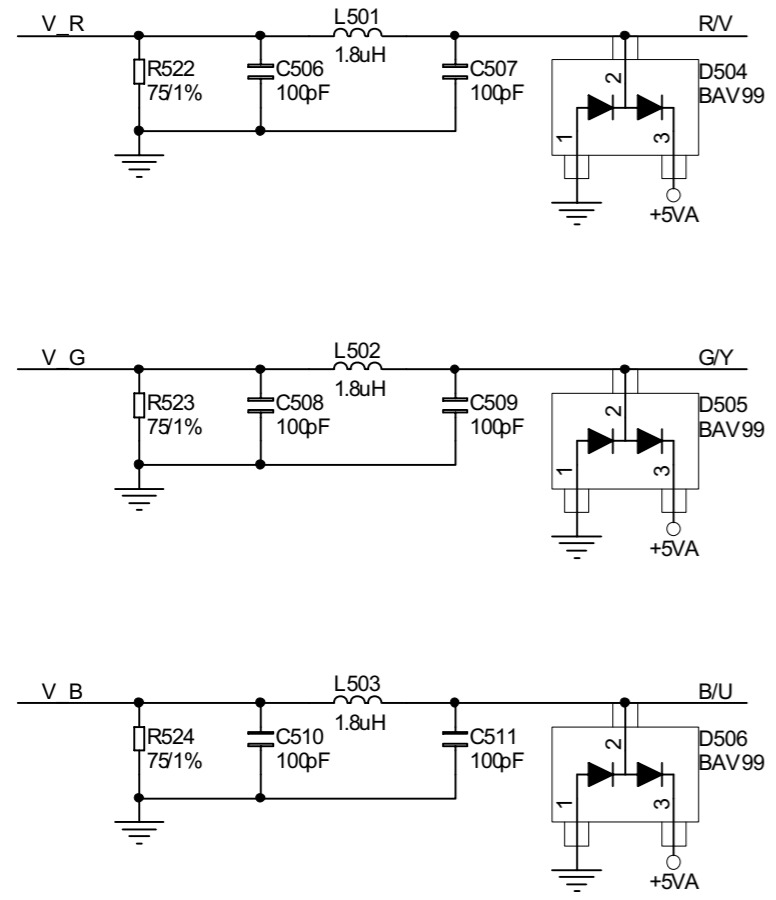
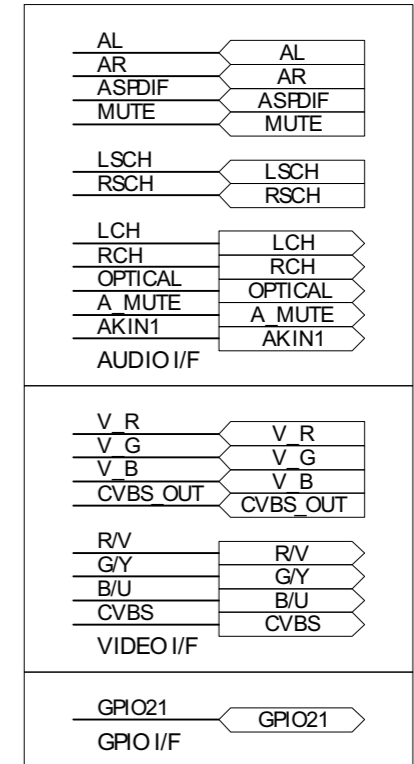
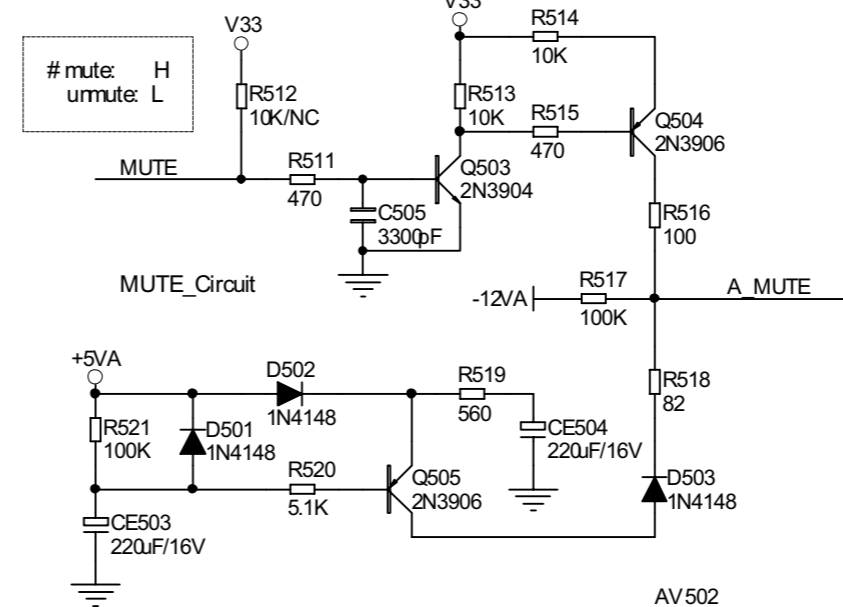
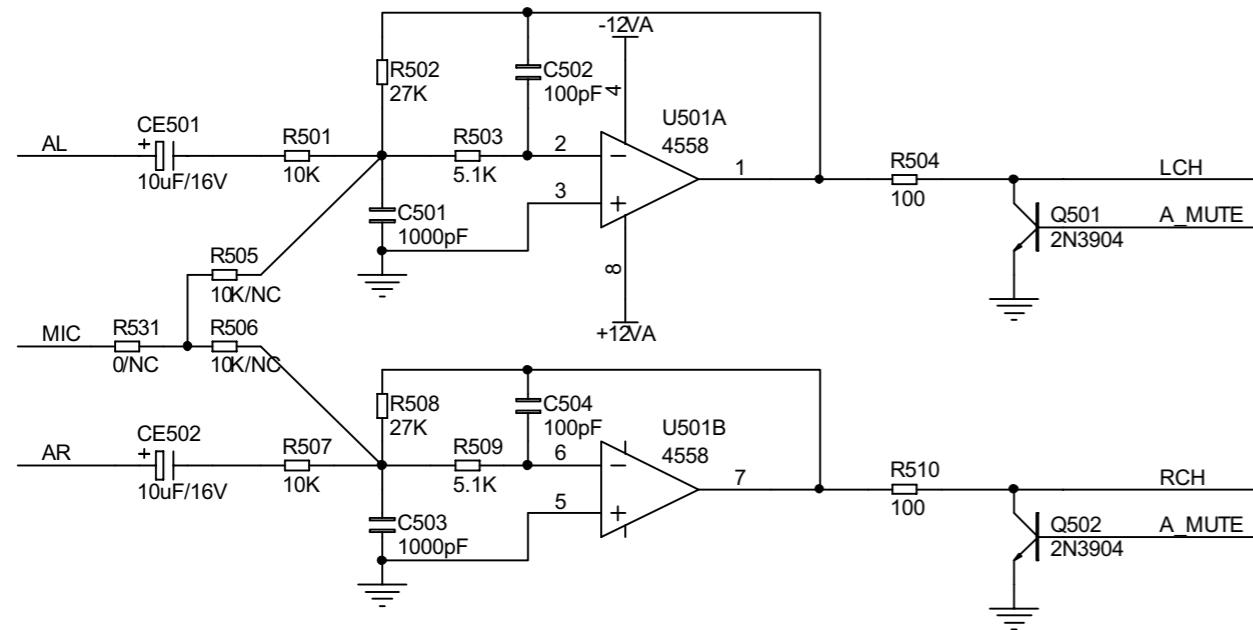
GPIO7	GPIO7
GPIO8	GPIO8
GPIO9	GPIO9
GPIO10	GPIO10
GPIO11	GPIO11
GPIO19	GPIO19
GPIO20	GPIO20
GPIO21	GPIO21
GPIO I/F	
URST#	URST#
URST# I/F	
VSTB	VSTB
VSCK	VSCK
VSDA	VSDA
IR	IR
FRONT I/F	
USB DP	USB DP
USB DM	USB DM
USB I/F	
V R	V R
V G	V G
V B	V B
CVBS OUT	CVBS_OUT
VIDEO I/F	
AL	AL
AR	AR
ALS	ALS
ARS	ARS
ALF	ALF
ARF	ARF
ASPDIF	ASPDIF
MUTE	MUTE
AKIN1	AKIN1
AUDIO I/F	
C	C
B	B
A	A
D	D
F	F
E	E
RFO	RFO
MDI	MDI
LDO CD	LDO CD
LDO DVD	LDO DVD
IOA/TROPEN	IOA/TROPEN
DMO	DMO
FMO	FMO
TRO	TRO
FOO	FOO
STBY	STBY
OP-	OP-
OP+	OP+
TRCLOSE	TRCLOSE
TRIN	TRIN
TROUT/LIMIT	TROUT/LIMIT
SERVO I/F	

SF CS	SF CS
SF CK	SF CK
SF DO	SF DO
SF DI	SF DI
SR FLASH I/F	
DQM0	DQM0
DQM1	DQM1
DCLK	DCLK
BA1	BA1
BA0	BA0
RAS#	RAS#
CAS#	CAS#
WE#	WE#
MA[0..11]	MA[0..11]
DQ[0..15]	DQ[0..15]
SDRAM I/F	

Decoder Board -- Circuit Diagram

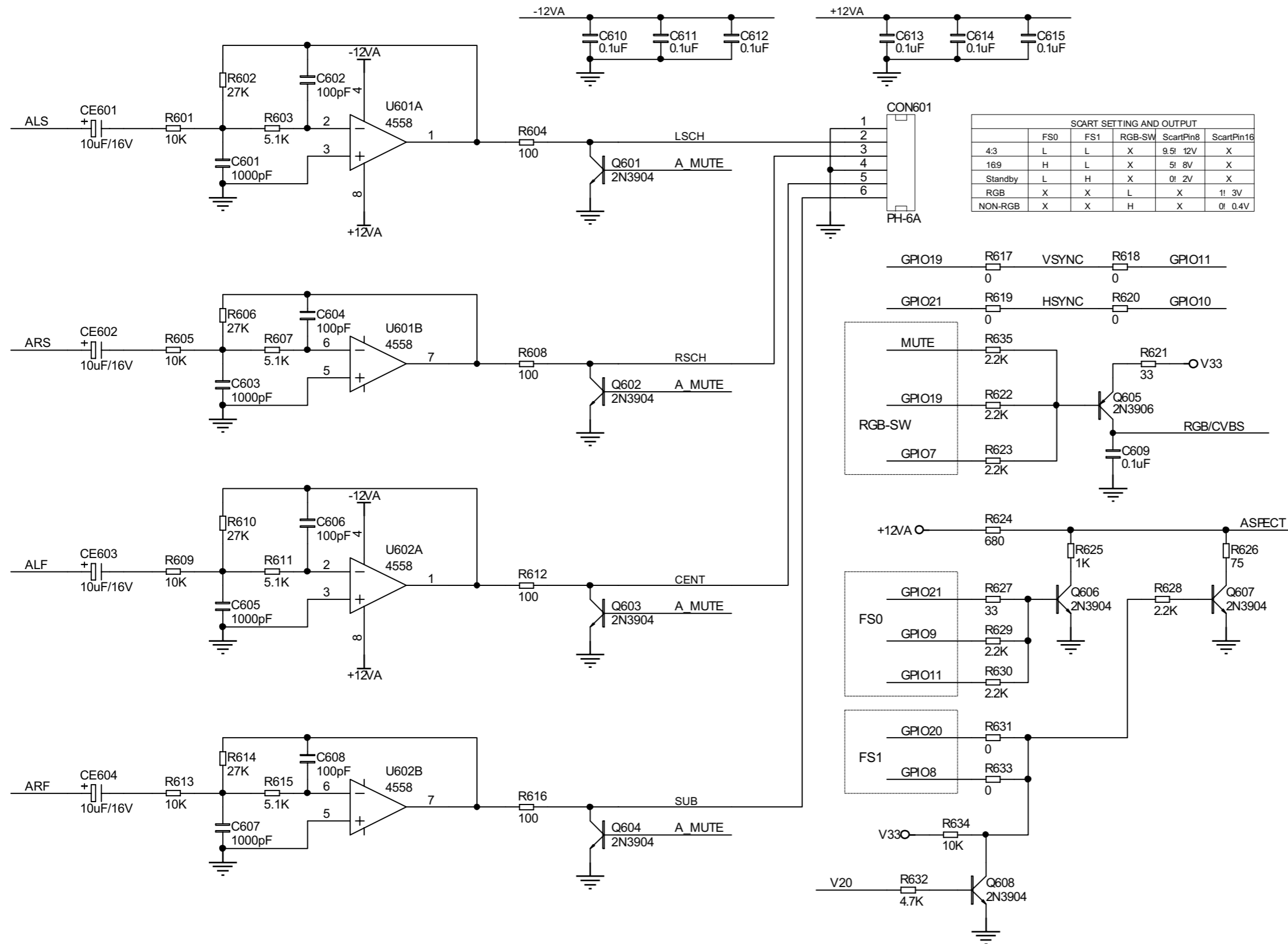


Decoder Board -- Circuit Diagram

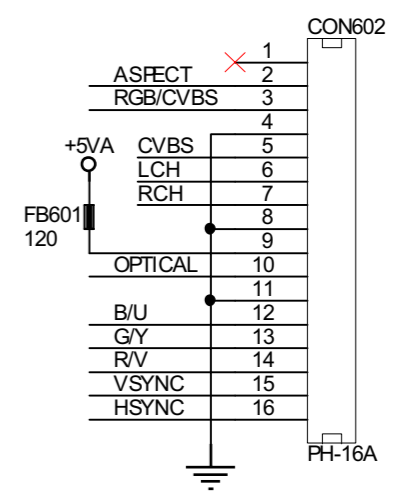
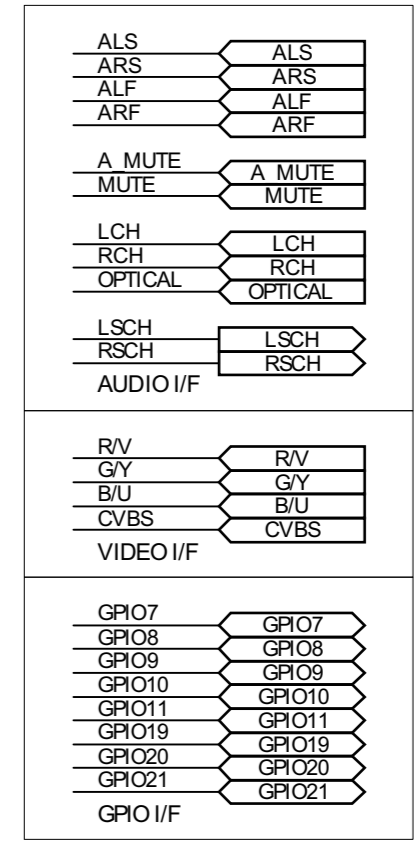


AKIN1 signal: Vp-p <= 700mV ;
R & C closed to MT1389DEL .

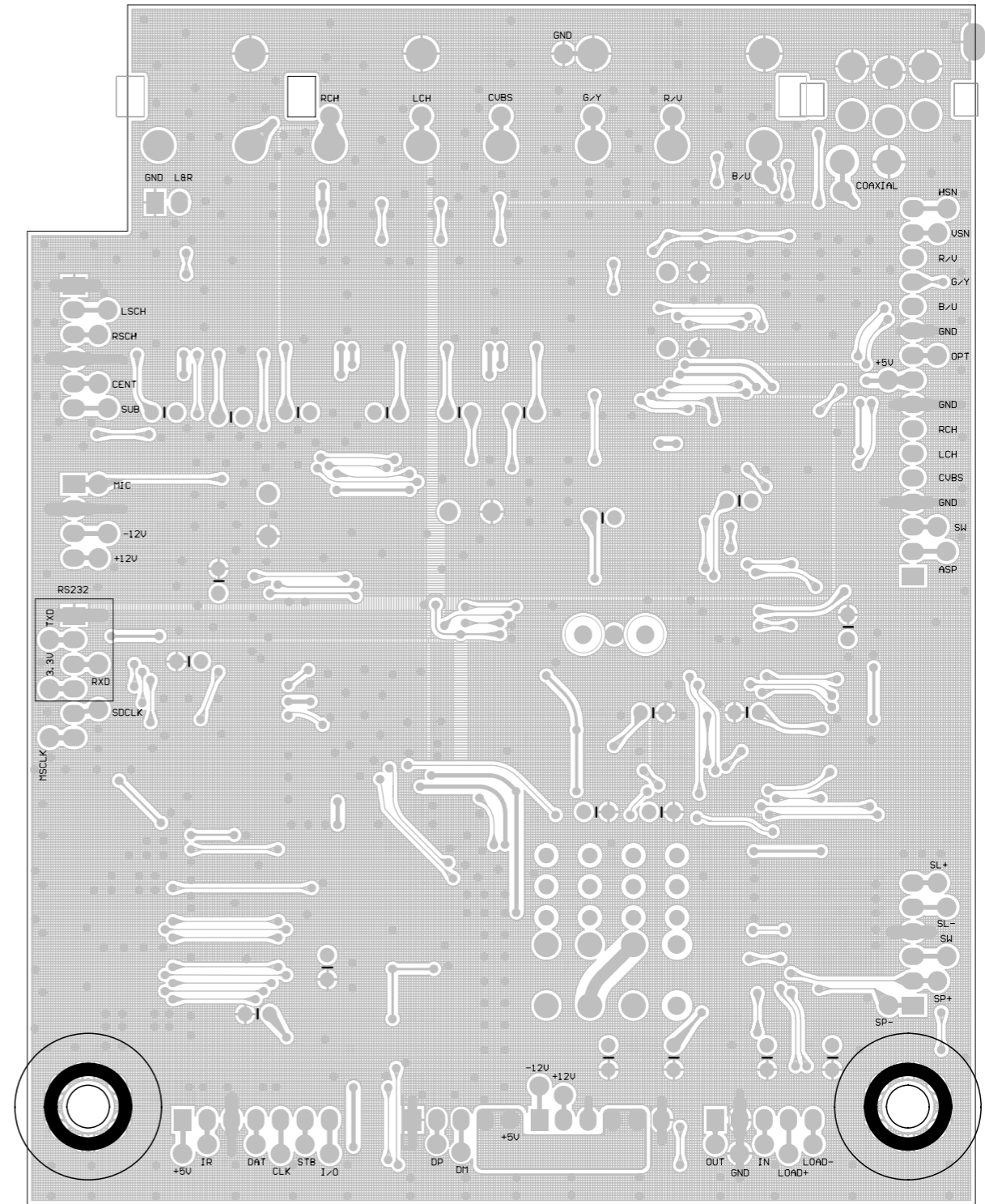
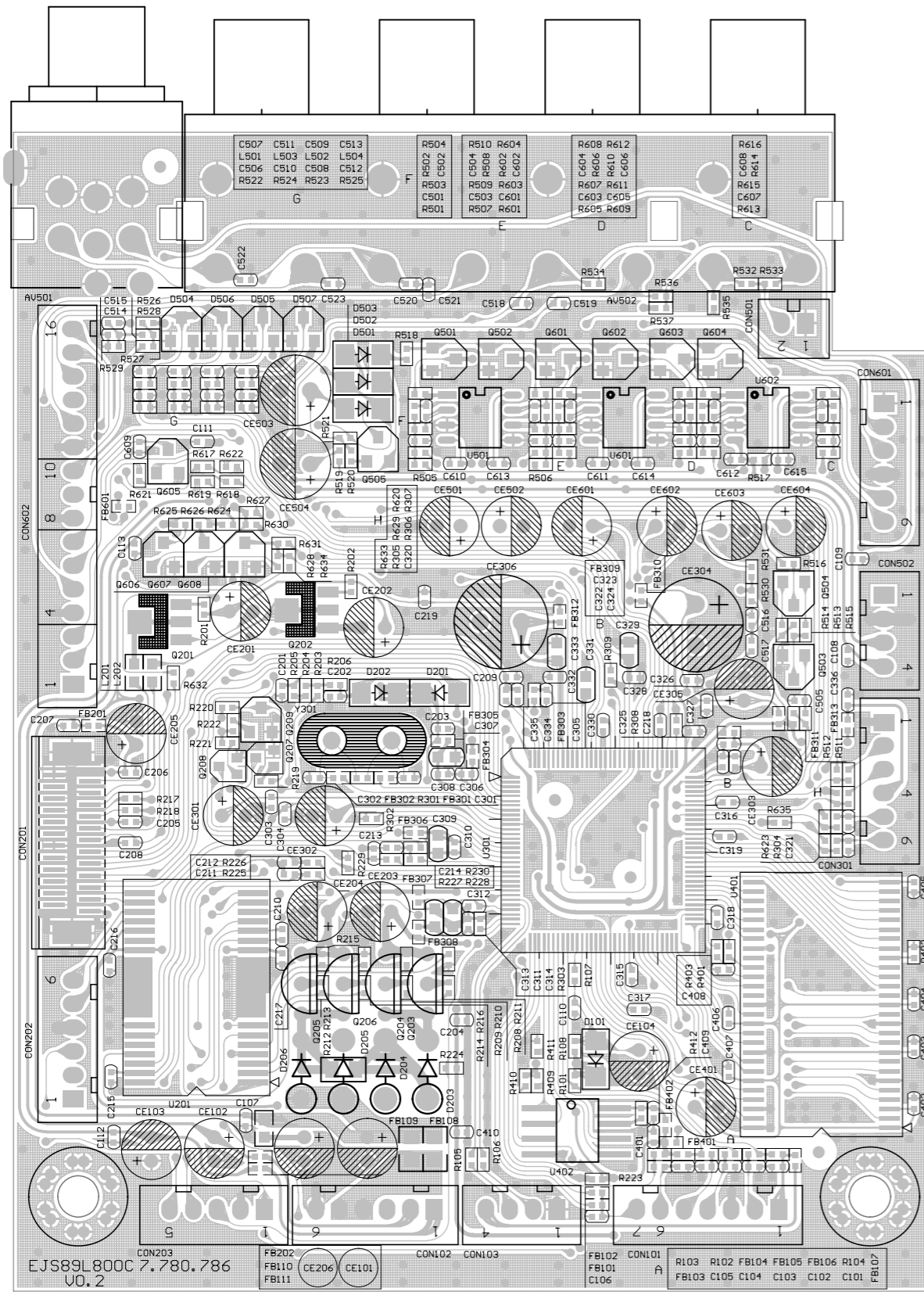
Decoder Board -- Circuit Diagram



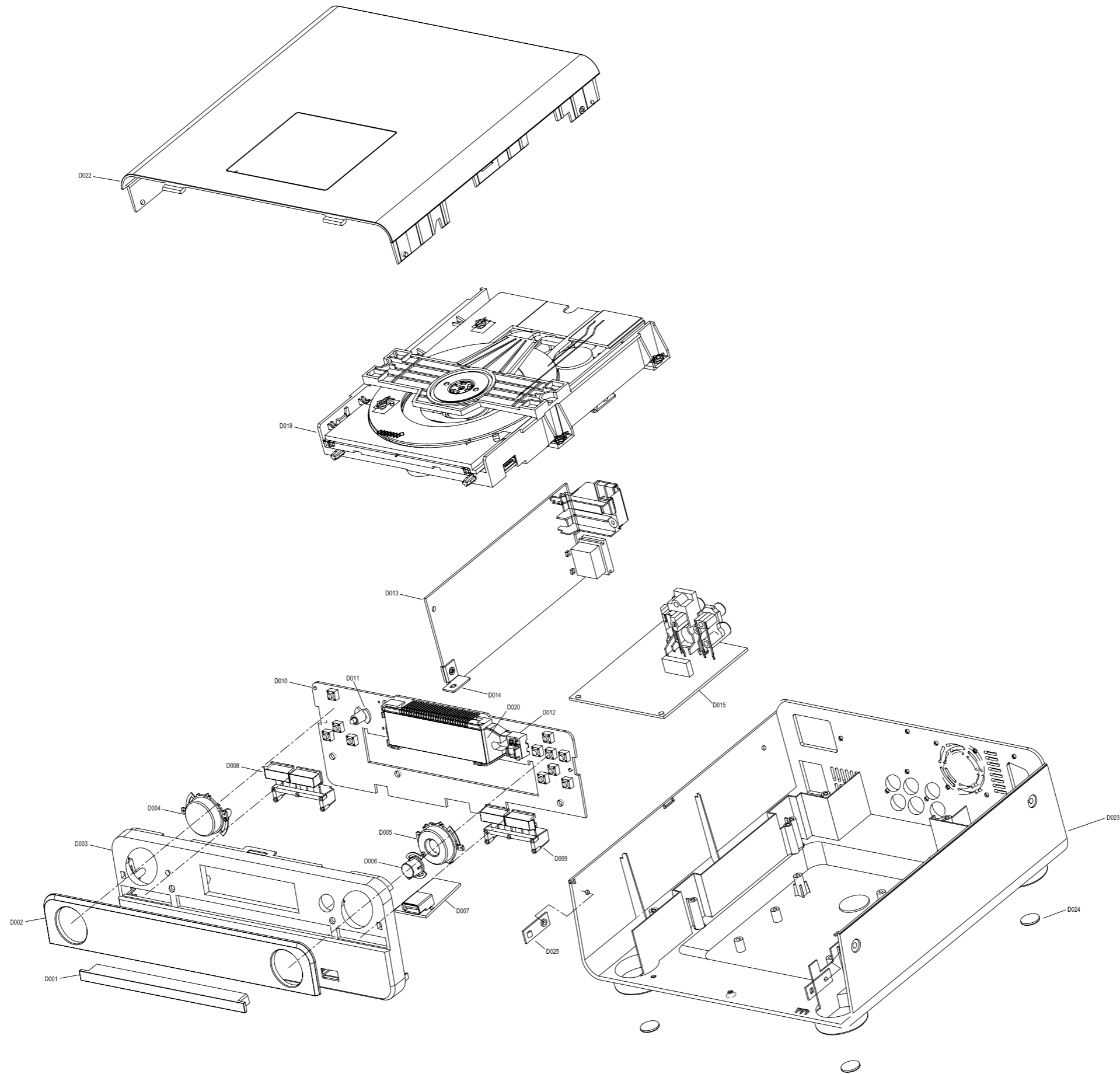
SCART SETTING AND OUTPUT					
	FS0	FS1	RGB-SW	ScartPin8	ScartPin16
4:3	L	L	X	9.5i 12V	X
169	H	L	X	5i 8V	X
Standby	L	H	X	0i 2V	X
RGB	X	X	L	X	1i 3V
NON-RGB	X	X	H	X	0i 0.4V



Decoder Board



Exploded View



Service Parts List**ACCESSORIES PARTS LIST**

ACC1	9965 1003 0559	MCD110/94 REMOTE CONTROL
ACC2	9940 0000 5078	COAXIAL CABLE 1.5m/RCA JACK(YELLOW)
ACC3	9965 1002 6574	AV WIRE 1.5m RCA/2P(RED/WHITE)

MECHANISM & MISCELLANCOUS PARTS LIST

D003	9965 1003 0567	MCD113 DVD FRONT CABINET/HIPS
D023	9965 1003 0561	MCD113 DVD BOTTOM CHASSIS/HIPS
D022	9965 1003 0208	MCD113 DVD TOP COVER/HIPS
D005	9965 1003 0575	MCD113 DIRECTION BUTTON/ABS
D006	9965 1002 5529	MCD113 CENTER BUTTON/ABS
D004	9965 1002 5539	MCD113 FUNCTION BUTTON/ABS
D008	9965 1002 5549	MCD113 FUNCTION BUTTON-L/ABS
D009	9965 1003 0558	MCD113 FUNCTION BUTTON-R/ABS
D001	9965 1003 0565	MCD113 DVD DOOR/ABS
D002	9965 1003 0564	MCD113 DISPLAY LENS/PMMA
1	9965 1003 0568	POWER CORD 2.15mRING PLUG VH3.96 VDE
2	9965 1002 1353	FLAT FLEXIBLE CABLE 24PX180X0.5XA
D015	9965 1003 0209	DVD DECODER EJS89L110-94(EJS89L800C)
D013	9965 1003 0571	AMP/POWER BOARD532-94(POW532)
D019	9965 1002 5536	DVD MECHANISM DRIVER F-8829D+DM3381-0

ELECTRICAL PARTS LIST -- COMPONENT REPAIR

D010		MCD110 LED DISPLAY BOARD
SW101	9965 2003 3923	TACT SWITCH TS-1307-01 6X6X5 170G
SW102	9965 2003 3923	TACT SWITCH TS-1307-01 6X6X5 170G
SW103	9965 2003 3923	TACT SWITCH TS-1307-01 6X6X5 170G
SW104	9965 2003 3923	TACT SWITCH TS-1307-01 6X6X5 170G
SW105	9965 2003 3923	TACT SWITCH TS-1307-01 6X6X5 170G
SW106	9965 2003 3923	TACT SWITCH TS-1307-01 6X6X5 170G
SW107	9965 2003 3923	TACT SWITCH TS-1307-01 6X6X5 170G
SW108	9965 2003 3923	TACT SWITCH TS-1307-01 6X6X5 170G
SW109	9965 2003 3923	TACT SWITCH TS-1307-01 6X6X5 170G
SW110	9965 2003 3923	TACT SWITCH TS-1307-01 6X6X5 170G
SW111	9965 2003 3923	TACT SWITCH TS-1307-01 6X6X5 170G
LED101	9965 1003 0576	LED SCREEN/DIGITAL TUBE/ULX-3661CY2/Y
LED102	9940 0000 4948	LED 3R4CB71D-2B-208(BLUE)
U101	9965 1003 0566	IC TM1628(SOP28)
S101	9965 1001 5840	IR SENSOR 1MA81P36D1TD001(36kHz)
D007		MCD113 HEADPHONE BOARD
J1	9965 1000 5830	USB JACK(A-TYPE 4P FEMALE 90°DIP BLACK)

Factory Parts List

DVD	MCD110/94 DVD MAIN UNIT PARTS
D010	MCD110 LED DISPLAY BOARD
R106	CARBON FILM RESISTOR 15 1/8W J-52
R102	CARBON FILM RESISTOR 10K 1/8W J-52
R103	CARBON FILM RESISTOR 10K 1/8W J-52
R104	CARBON FILM RESISTOR 10K 1/8W J-52
SW101	TACT SWITCH TS-1307-01 6X6X5 170G
SW102	TACT SWITCH TS-1307-01 6X6X5 170G
SW103	TACT SWITCH TS-1307-01 6X6X5 170G
SW104	TACT SWITCH TS-1307-01 6X6X5 170G
SW105	TACT SWITCH TS-1307-01 6X6X5 170G
SW106	TACT SWITCH TS-1307-01 6X6X5 170G
SW107	TACT SWITCH TS-1307-01 6X6X5 170G
SW108	TACT SWITCH TS-1307-01 6X6X5 170G
SW109	TACT SWITCH TS-1307-01 6X6X5 170G
SW110	TACT SWITCH TS-1307-01 6X6X5 170G
SW111	TACT SWITCH TS-1307-01 6X6X5 170G
R109	CARBON FILM RESISTOR 1.2K 1/8W J-52
R105	CARBON FILM RESISTOR 100 1/8W J-52
R108	CARBON FILM RESISTOR 2.2K 1/8W J-52
R101	CARBON FILM RESISTOR 56K 1/8W J-52
R107	CARBON FILM RESISTOR 4.7K 1/8W J-52
C101	CHIP CERAMIC CAP.104p 50V K-5
C102	CHIP CERAMIC CAP.104p 50V K-5
C104	E.CAP.100u 16V L-5 105°C 6.3X7
C103	ELECTROLYTIC CAP. 220u 16V L-5 6.3X5
LED101	LED SCREEN/DIGITAL TUBE/ULX-3661CY2/Y
LED102	LED 3R4CB71D-2B-208(BLUE)
Q101	TRANSISTOR 8050C-5
U101	IC TM1628(SOP28)
S101	IR SENSOR 1MA81P36D1TD001(36kHz)
JP101	JUMPER WIRE Φ 0.6X40mm (375m=1kG)
JP102	JUMPER WIRE Φ 0.6X40mm (375m=1kG)
JP103	JUMPER WIRE Φ 0.6X40mm (375m=1kG)
JP104	JUMPER WIRE Φ 0.6X40mm (375m=1kG)
JP105	JUMPER WIRE Φ 0.6X40mm (375m=1kG)
JP106	JUMPER WIRE Φ 0.6X40mm (375m=1kG)
JP107	JUMPER WIRE Φ 0.6X40mm (375m=1kG)
JP108	JUMPER WIRE Φ 0.6X40mm (375m=1kG)
JP109	JUMPER WIRE Φ 0.6X40mm (375m=1kG)
JP110	JUMPER WIRE Φ 0.6X40mm (375m=1kG)
JP111	JUMPER WIRE Φ 0.6X40mm (375m=1kG)
JP112	JUMPER WIRE Φ 0.6X40mm (375m=1kG)
JP113	JUMPER WIRE Φ 0.6X40mm (375m=1kG)
JP114	JUMPER WIRE Φ 0.6X40mm (375m=1kG)
JP115	JUMPER WIRE Φ 0.6X40mm (375m=1kG)
JP116	JUMPER WIRE Φ 0.6X40mm (375m=1kG)
JP117	JUMPER WIRE Φ 0.6X40mm (375m=1kG)
JP118	JUMPER WIRE Φ 0.6X40mm (375m=1kG)
	28WIRE 200 2.0/7PX1 2.0/7PX1
	DISPLAY PCB 35-MCD110-01A1/214X71
	BLACK SPONGE 15X10X7 40°
	BLACK SPONGE 10X10X8 40°
D007	MCD110 USB BOARD
J1	USB JACK(A-TYPE 4P FEMALE 90°DIP BLACK)
	28WIRE+28SHIELDING 180 2.0/4P 2.0/4P
	USB PCB 35-MCD110-02A1(20.9X60)
	MCD110/94 SOFTWARE
	MCD110/94 CPU SOFTWARE
	MCD110/94 DVD SOFTWARE

Factory Parts List

CASING	MCD110/94 DVD CASING PARTS
D019	DVD MECHANISM DRIVER F-8829D+DM3381-0
D015	DVD DECODER EJS89L110-94(EJS89L800C)
D013	AMP/POWER BOARD532-94(POW532)
CASING1	METAL PLATE 11X7X1 Φ3
D025	MCD113 IRON BRACKET/23.9X9X1
CASING2	MCD113 PCB IRON SUPPORT-L
D003	MCD113 DVD FRONT CABINET/HIPS
D023	MCD113 DVD BOTTOM CABINET/HIPS
D022	MCD113 DVD TOP COVER/HIPS
D005	MCD113 DIRECTION BUTTON/ABS
D006	MCD113 CENTER BUTTON/ABS
D004	MCD113 FUNCTION BUTTON/ABS
D008	MCD113 FUNCTION BUTTON-L/ABS
D009	MCD113 FUNCTION BUTTON-R/ABS
D001	MCD113 DVD DOOR/ABS
D002	MCD113 DISPLAY LENS/PMMA BLACK SPONGE 20X10X1.5 40° FIBRE WASHER Φ3XΦ14X1
D024	MCD770 RUBBER FOOT(Φ12X1.5 BLACK) SCREW 3 X 6 KB/BLACK SCREW 3 X 8 KM/BLACK SCREW 3 X 5 BMTT (PLATING) SCREW 3 X 8 BA (PLATING) SCREW 3 X 12 BA (PLATING) SCREW 3 X 8 BA (PLATING) SCREW 3 X 10 FA/BLACK SCREW 3 X 10 PWA (PLATING) SCREW 3 X 12 FA/Φ6/BLACK SCREW 3 X 10 FA(BLACK) SCREW 2 X 8 PA/BLACK SCREW 3 X 8 BA (PLATING)
1	POWER CORD 2.15mRING PLUG VH3.96 VDE POWER CORD SOCKET /VH3.96/3P 20 MONGLINE 200 2.5/2PX1 2.0/2PX1 28WIRE 180 2.0/6PX2 28WIRE 220 2.0/5PX2
2	FLAT FLEXIBLE CABLE 24PX180X0.5XA
ACC	MCD110/94 ACCESSORIES PART
ACC1	MCD110/94 REMOTE CONTROL WARRANTY CARD(PH 9965 100 15858) MCD110/94 INSTRUCTION MANUAL MCD110/94 QUICK START GUIDE BATTERY MANAGE PAPER SHEET 148X210 PLASTIC BAG(PE) 26X17cm PHILIPS
ACC2	COAXIAL CABLE 1.5m/RCA JACK(YELLOW)
ACC3	AV WIRE 1.5m RCA/2P(RED/WHITE) PLASTIC BAG(PE) 20X10cm/PHILIPS
ACC4	MCD110/94 PACKING PARTS MCD110/94 DISPLAY BOX MCD113 POLYFOAM LASER WARNING LABEL PH Φ15 BLACK PASSED LABEL Φ13 MCD110/94 MAIN LABEL 59.5X39.5 MCD110/94 DISPLAY BOX LABEL 91X111 MCD110/94 POS BILLBOARD MCD302/93 SPECIAL LABEL 59.5X39.5 DRUMBEATING SHEET PHILIPS(250X125) PLASTIC BAG(PE) 40X32cm PHILIPS