

# DVD Player

DVP3000K, DVP3005K, DVP3005, DVP3010

Service

DVP3000K/69/93

Service

DVP3005K/03/13/69/75/93

Service

DVP3005/00/02/04/05/78

DVP3010/00/02/04/05



# Service Manual

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Version 1.0

**CLASS 1  
LASER PRODUCT**

(GB)

3139 785 30950

**PHILIPS**

# Technical Specifications

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## TV standard (PAL/50Hz) (NTSC/60Hz)

Number of lines	625	525
Playback	Multi standard	(PAL/NTSC)

## Video performance

Video DAC	12 bit, 108mH
PbPr:	0.7Vpp ---- 75ohm
Video output	1Vpp ----- 75ohm

## Video format

Digital Compression	MPEG 2 for DVD,SVD
	MPEG 1 for VCD

<b>DVD</b>	<b>50Hz</b>	<b>60Hz</b>
Horiz. resolution	720 pixels	720 pixels
Vertical resolution	576lines	480 lines

<b>VCD</b>	<b>50Hz</b>	<b>60Hz</b>
Horiz. resolution	352 pixels	352 pixels
Vertical resolution	288lines	240 lines

## Audio format

Digital	MPEG/AC-3/ PCM	Compressed Digital 16, 20, 24bits fs, 44.1, 48, 96kHz
	MP3(ISO 9660)	96,112,128,256kbps & variable bit rate fs,32, 44.1,48 kHz

Analogue Sound Stereo

Dolby surround-compatible downmix from Dolby Digital multi-channel sound

## Audio performance

DA converter	24bits, 192KHz
DVD	fs 96kHz 4Hz----44kHz fs 48kHz 4Hz----22kHz
SVCD	fs 48kHz 4Hz----22kHz fs 44.1kHz 4Hz----20kHz
CD/VCD	fs 44.1kHz 4Hz----20kHz
Signal-Noise (1kHz)	>95dB
Dynamic Range (1kHz)	>85dB
Cross talk (1kHz)	>90dB
Distortion/Noise (1kHz)	>80dB
MPEG MP3	MPEG Audio L3
Audio L+R output:	1.0~2.0 Vpp into 10K ohm

## Connections

YpbPr	Cinch 3x
Video output	Cinch( yellow)
Audio L+R output	Cinch (white/red)
Digital output	1 coaxial IEC60958 for CDDA/LPCM IEC61937 for MPEG1/2, Dolby Digital

## Cabinet

Dimensions (w X h X d)	360 X 43 X 265mm
Weight	Approximately 2.0 kg

## Power consumption

Power supply	230V for 00/02/03/04/05/13/69/75/93 120~230V for /78
Power consumption in standby mode	< 0.8W
Power consumption	<10W

Specifications subjects to change without prior notice.

# Safety instructions, Warnings, Notes

## Safety instructions

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### 1. General safety

Safety regulations require that during a repair:

- . Connect the unit to the mains via an isolation transformer.
- . Replace safety components indicated by the symbol ▲, only by components identical to the original ones. Any other component substitution (other than original type) may increase risk of fire or electrical shock hazard.

Safety regulations require that after a repair, you must return the unit in its original condition. Pay, in particular, attention to the following points:

- . Route the wires/cables correctly, and fix them with the mounted cable clamps.
- . Check the insulation of the mains lead for external damage.
- . Check the electrical DC resistance between the mains plug and the secondary side:
  - 1) Unplug the mains cord, and connect a wire between the two pins of the mains plug.
  - 2) Set the mains switch the "on" position (keep the mains cord unplug).
  - 3) Measure the resistance value between the mains plug and the front panel, controls, and chassis bottom.
  - 4) Repair or correct unit when the resistance measurement is less than 1M .
  - 5) Verify this, before you return the unit to the customer/user (ref. UL-standard no. 1492).
  - 6) Switch the unit "off", and remove the wire between the two pins of the mains plug.

### 2. Laser safety

This unit employs a laser. Only qualified service personnel may remove the cover, or attempt to service this device (due to possible eye injury).

Laser device unit

Type	: Semiconductor laser GaAIAs
Wavelength	: 650nm (DVD)
	: 780nm (VCD/CD)
Output power	: 7mW (DVD)
	: 10mW (DVD /CD)

Beam divergence: 60 degree

Note: Use of controls or adjustments or performance of procedure other than those specified herein, may result in hazardous radiation exposure. Avoid direct exposure to beam.

## Warnings

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### 1. General

. All ICs and many other semiconductors are susceptible to electrostatic discharges (ESD). Careless handling during repair can reduce life drastically. Make sure that, during repair, you are at the same potential as the mass of the set by a wristband with resistance. Keep components and tools at this same potential. Available ESD protection equipment:

- 1) Complete kit ESD3 (small tablemat, wristband, connection box, extension cable and earth cable) 4822 310 10671.
- 2) Wristband tester 4822 344 13999.

. Be careful during measurements in the live voltage section. The primary side of the power supply, including the heat sink, carries live mains voltage when you connect the player to the mains (even when the player is "off"! ). It is possible to touch copper tracks and/or components in this unshielded primary area, when you service the player. Service personnel must take precautions to prevent touching this area or components in this area. A "lighting stroke" and a stripe-marked printing on the printed wiring board, indicate the primary side of the power supply.

. Never replace modules, or components, while the unit is "on".

### 2. Laser

. The use of optical instruments with this product, will increase eye hazard.

. Only qualified service personnel may remove the cover or attempt to service this device, due to possible eye injury.

. Repair handling should take place as much as possible with a disc loaded inside the player.

. Text below is placed inside the unit, on the laser cover shield:

CAUTION: VISIBLE AND INVISIBLE LASER RADIATION WHEN OPEN, AVOID EXPOSURE TO BEAM.
--

Notes: Manufactured under licence from Dolby Laboratories. The double-D symbol is trademarks of Dolby Laboratories, Inc. All rights reserved.

## Warnings, Notes

### Lead-Free requirement for service

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#### IDENTIFICATION:

Regardless of special logo (not always indicated)



One must treat all sets from **1.1.2005** onwards, according next rules.

***Important note:** In fact also products a little older can also be treated in this way as long as you avoid mixing solder-alloys (leaded/ lead-free). So best to always use SAC305 and the higher temperatures belong to this.*

Due to lead-free technology some rules have to be respected by the workshop during a repair:

- Use only lead-free solder alloy Philips SAC305 with order code 0622 149 00106. If lead-free solder-paste is required, please contact the manufacturer of your solder-equipment. In general use of solder-paste within workshops should be avoided because paste is not easy to store and to handle.
  - Use only adequate solder tools applicable for lead-free solder alloy. The solder tool must be able
    - To reach at least a solder-temperature of 400°C,
    - To stabilize the adjusted temperature at the solder-tip
    - To exchange solder-tips for different applications.
  - Adjust your solder tool so that a temperature around 360°C – 380°C is reached and stabilized at the solder joint. Heating-time of the solder-joint should not exceed ~ 4 sec. Avoid temperatures above 400°C otherwise wear-out of tips will rise drastically and flux-fluid will be destroyed. To avoid wear-out of tips switch off un-used equipment, or reduce heat.
  - Mix of lead-free solder alloy / parts with leaded solder alloy / parts is possible but PHILIPS recommends strongly to avoid mixed solder alloy types (leaded and lead-free). If one cannot avoid, 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 highest 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. This will be communicated via AYS-website. Do not re-use BGAs at all.
  - For sets produced before 1.1.2005, containing leaded soldering-tin 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](http://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.

## Mechanical and Dismantling Instructions

### Dismantling Instruction

The following guidelines show how to dismantle the player.  
**Step1:** Remove 5 screws around the Top Cover. And remove it (Figure 1)

**Step2:** If it is necessary to dismantle Loader or Front Panel, It should be remove the front door assembly first. (Figure 2)  
 If the trace can't open in normal way, you can make it by

pushing the guider manually using the slot below the bottom chassis with a tool. (Figure 3)

Note: Make sure to operate gently otherwise the guider would be damaged.



Figure 1



Figure 2



Figure 3

**Step3:** Dismantling Loader, First, disconnect the 3 connectors aiming in the figure, and then remove the 2 screws at both sides of the loader, (Figure 4)

**Step4:** Dismantling Front Panel: disconnect the 2 connectors aiming in the figure then Release the snaps on the both sides of Front Panel and gently pull the Panel out from the set. (Figure5& 6)

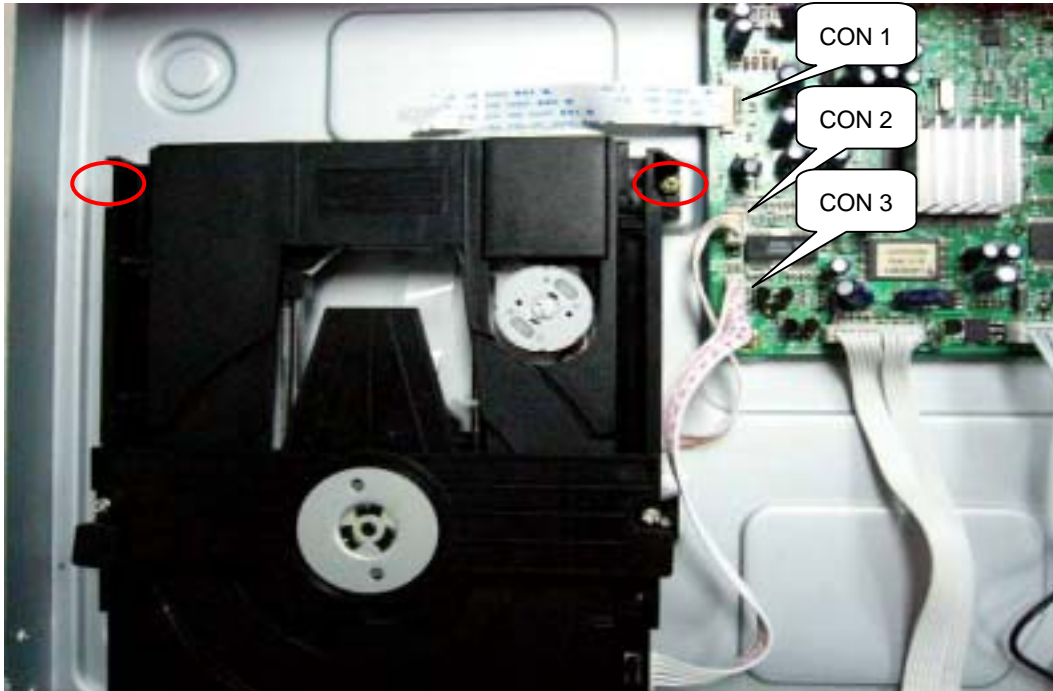


Figure4

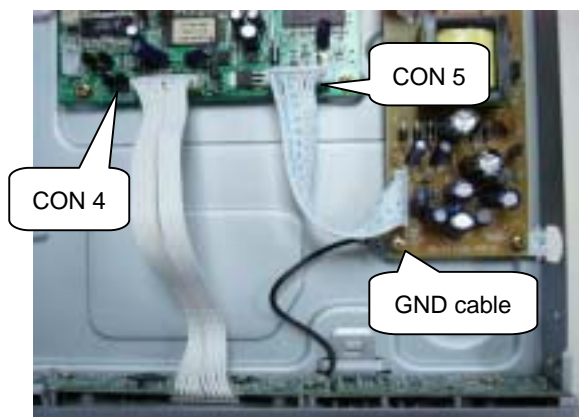


Figure 5

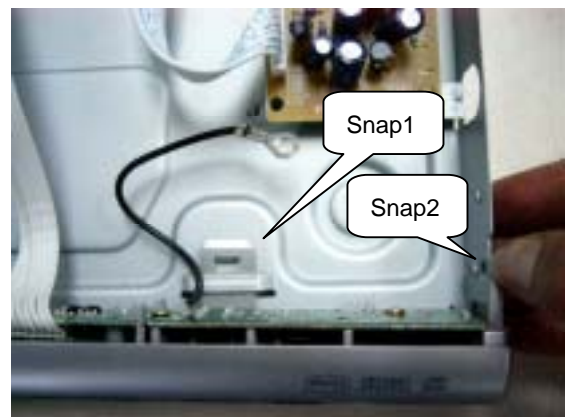


Figure 6



**Step6:** Dismantling Main Board, first disconnect the connector, and then remove the relative screws, (Figure 7)

**Step7:** Remove the 3 screws on power board to dismantle the power board. (Figure8)

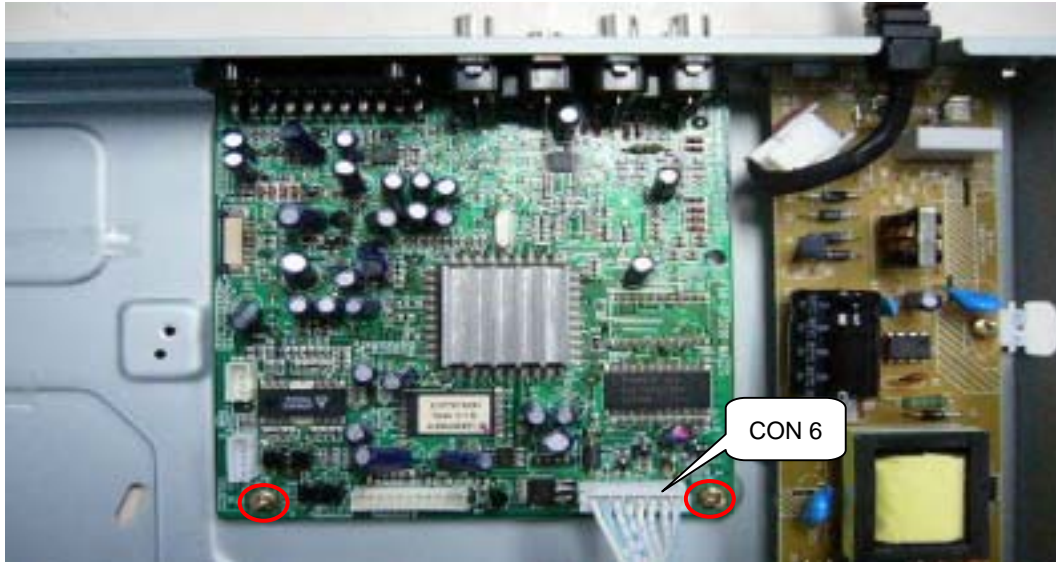


Figure 7

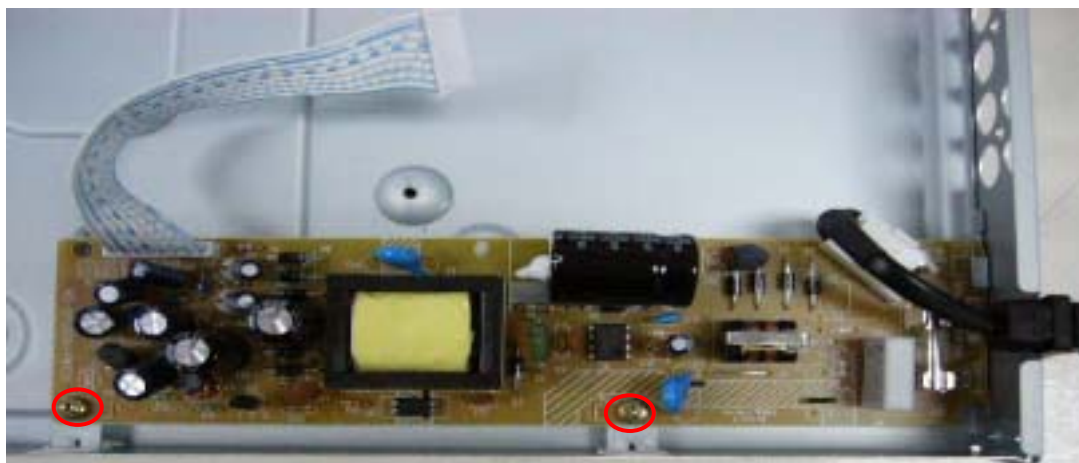


Figure 8



**ATTENTION OF REPAIRING**

Make sure adding silicon glue to fix the capacitor C4 after repairing, ( Avoid the hazard of C4 touching the Top Cover.)



Figure 9

## Software upgrade

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### A. Preparation to upgrade software

- 1) Start the CD Burning software and create a new CD project (Data Disc) with the following setting:

Label: **DVP3XXX** (For all DVP3XXX/xx model)

File Name: **DVP3005\_78.BIN** (for DVP3005/78)

**DVP305K\_78.BIN** (for DVP3005K/78)

**DVP3010\_00.BIN** (for DVP3010/00/05)

**DVP3010\_02.BIN** (for DVP3010/02/04)

.....

Other version's File Name is un-know at present, should be noticed later.

**Note: It is required capital letter for the Label name & the File Name.**

- 2) Burn the data onto a blank CDR

### B. Procedure for software upgrade:

- 1) Power up the set and insert the prepared Upgrade CDR.
- 2) The set will starts reading disc & response with the following display TV screen:  
Upgrade File DETECTED  
Upgrade?  
Press Play TO START
- 3) Press <OK> button to confirm, then screen will display :  
Files coping...  
UPGRADING...
- 3) The upgraded disc will automatically out when files coping complete, then take out the disc.
- 4) About 1 minute later, the trace will automatically close when upgrading complete.

### C. Read out the software versions to confirm upgrading

- 1) Power up the set and press <system menu> button on the remote control.

- 2) Press <1><3><7><9> button.

The software version and other information are display on the TV screen as follows:

Version        XX.XX.XX.XX (Main version)

SUB-VER       XX.XX.XX.XX ( software version of application software)

8032           XX.XX.XX.XX

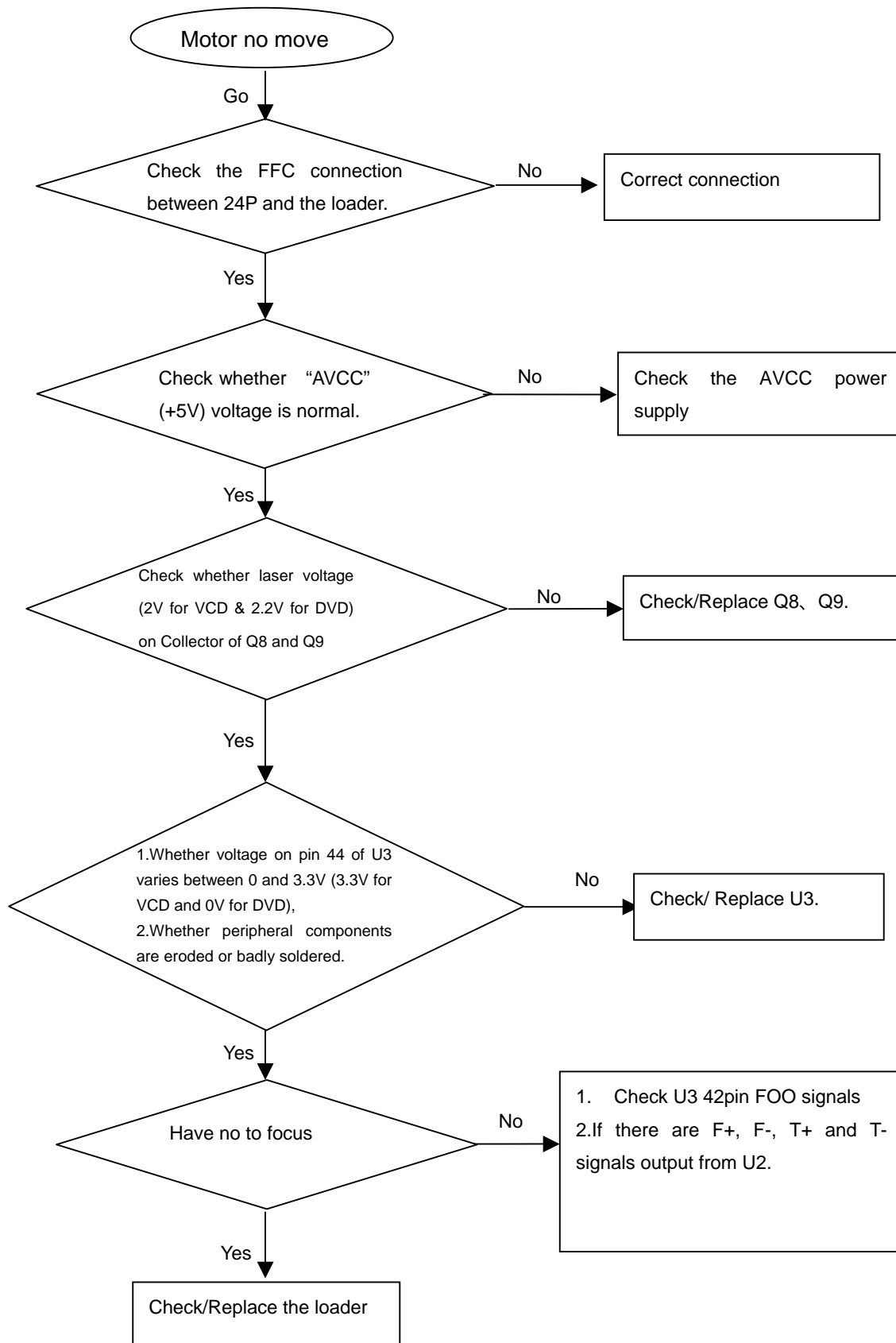
Servo          XX.XX.XX.XX (software version of Servo)

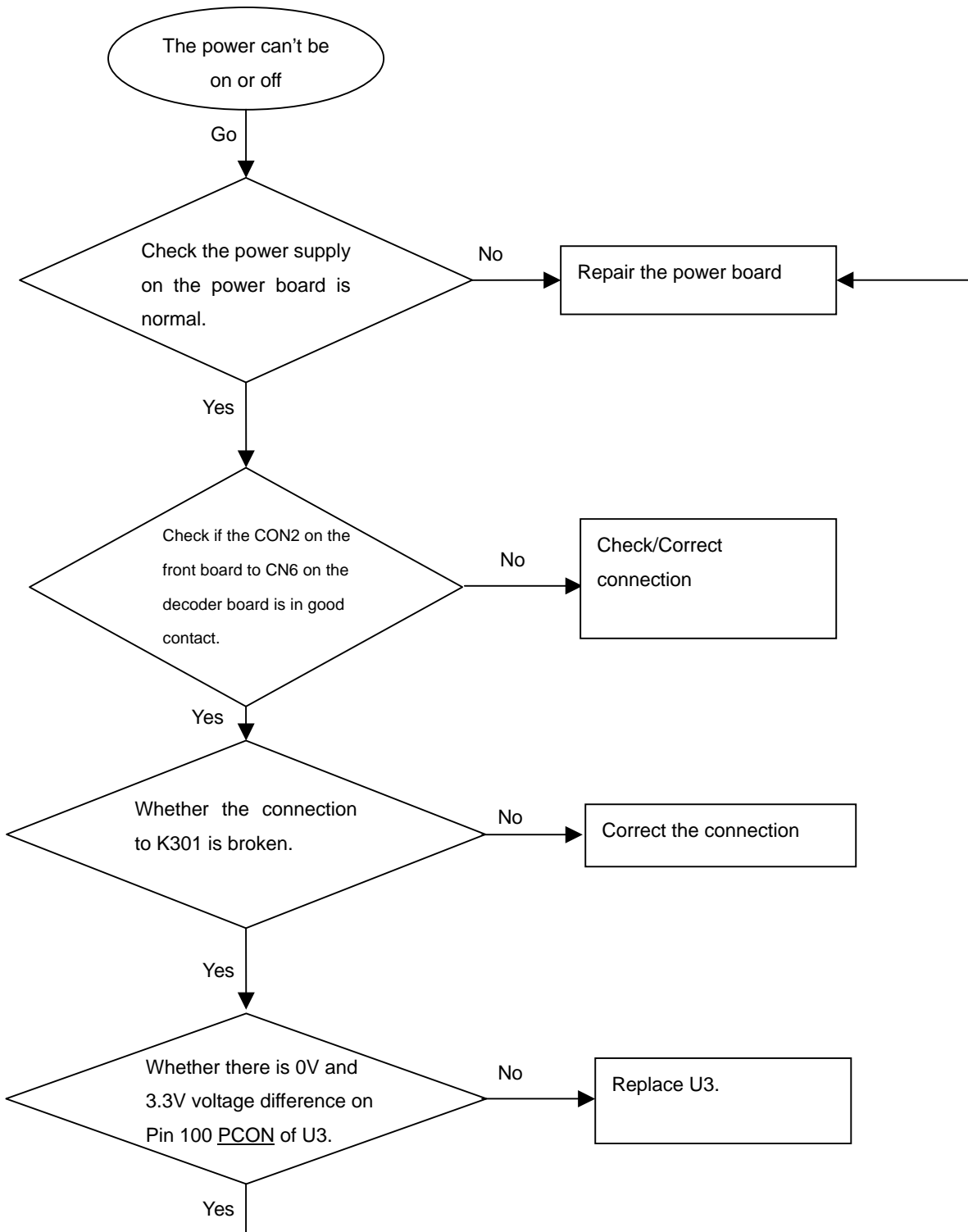
RISC           XX.XX.XX.XX

DSP            XX.XX.XX.XX

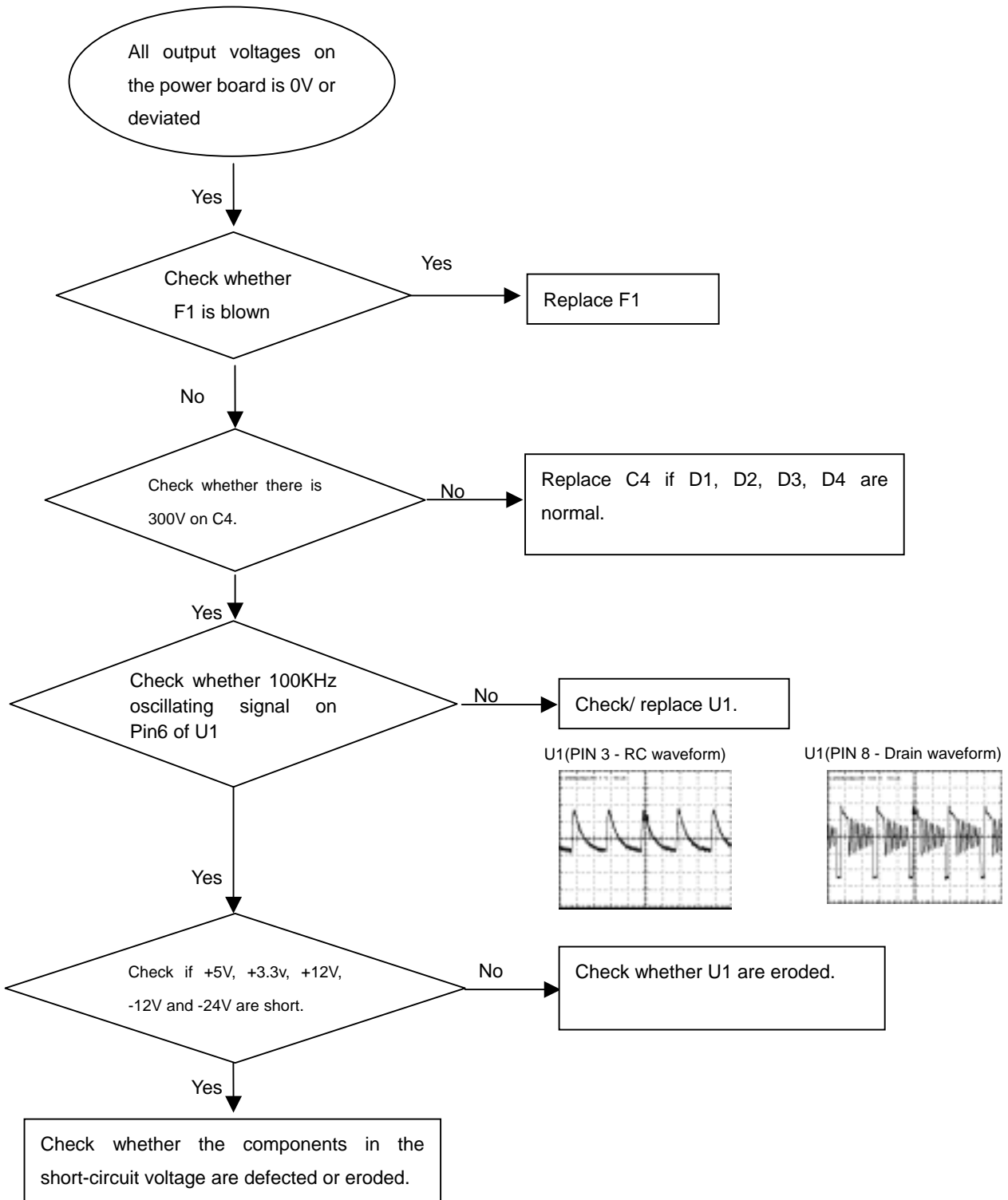
Region Code    X

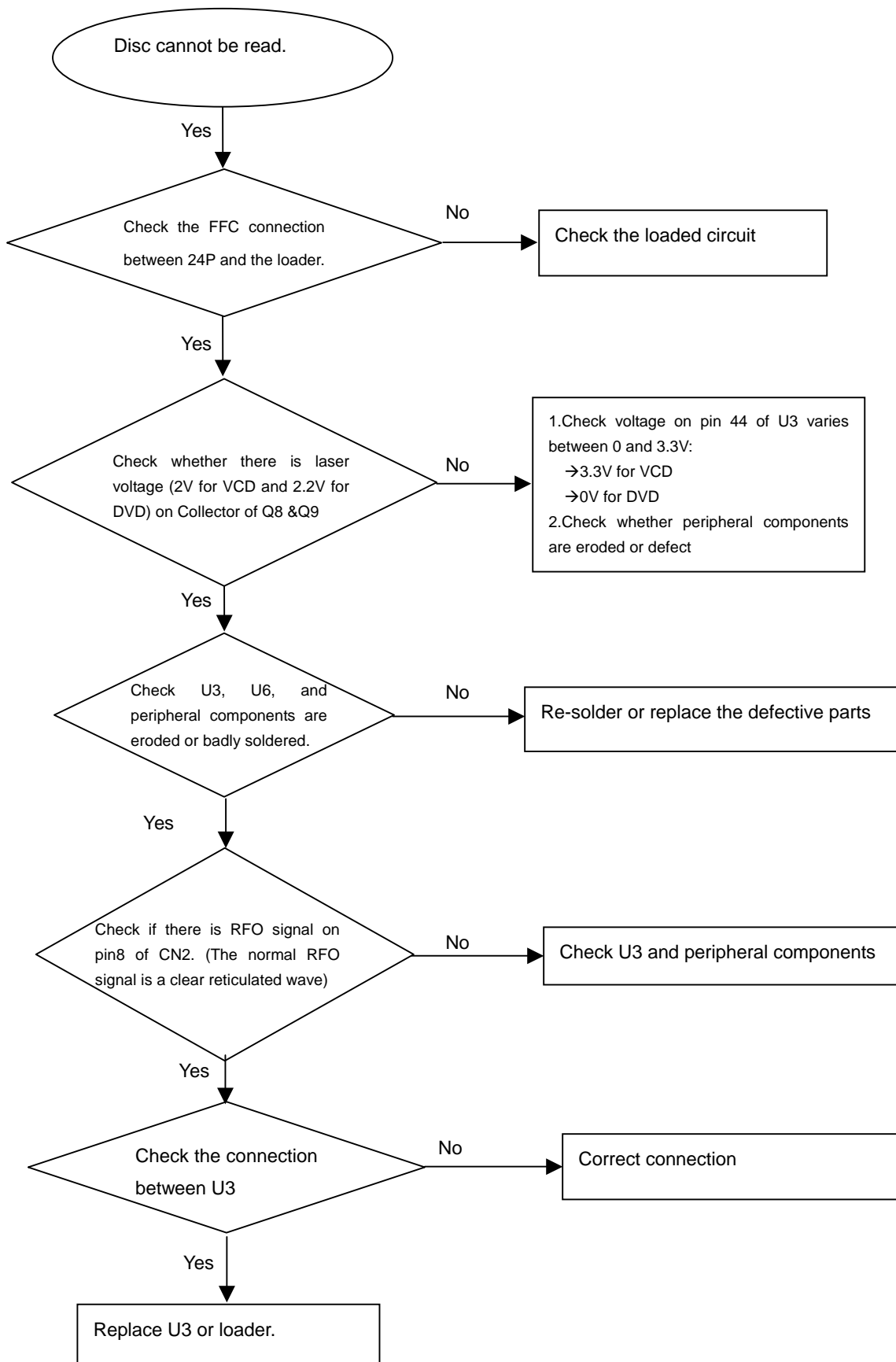
**Caution: The set must not be power off during upgrading, in that case the decoder board will be damaged entirely.**

**Spindle motor does not move**

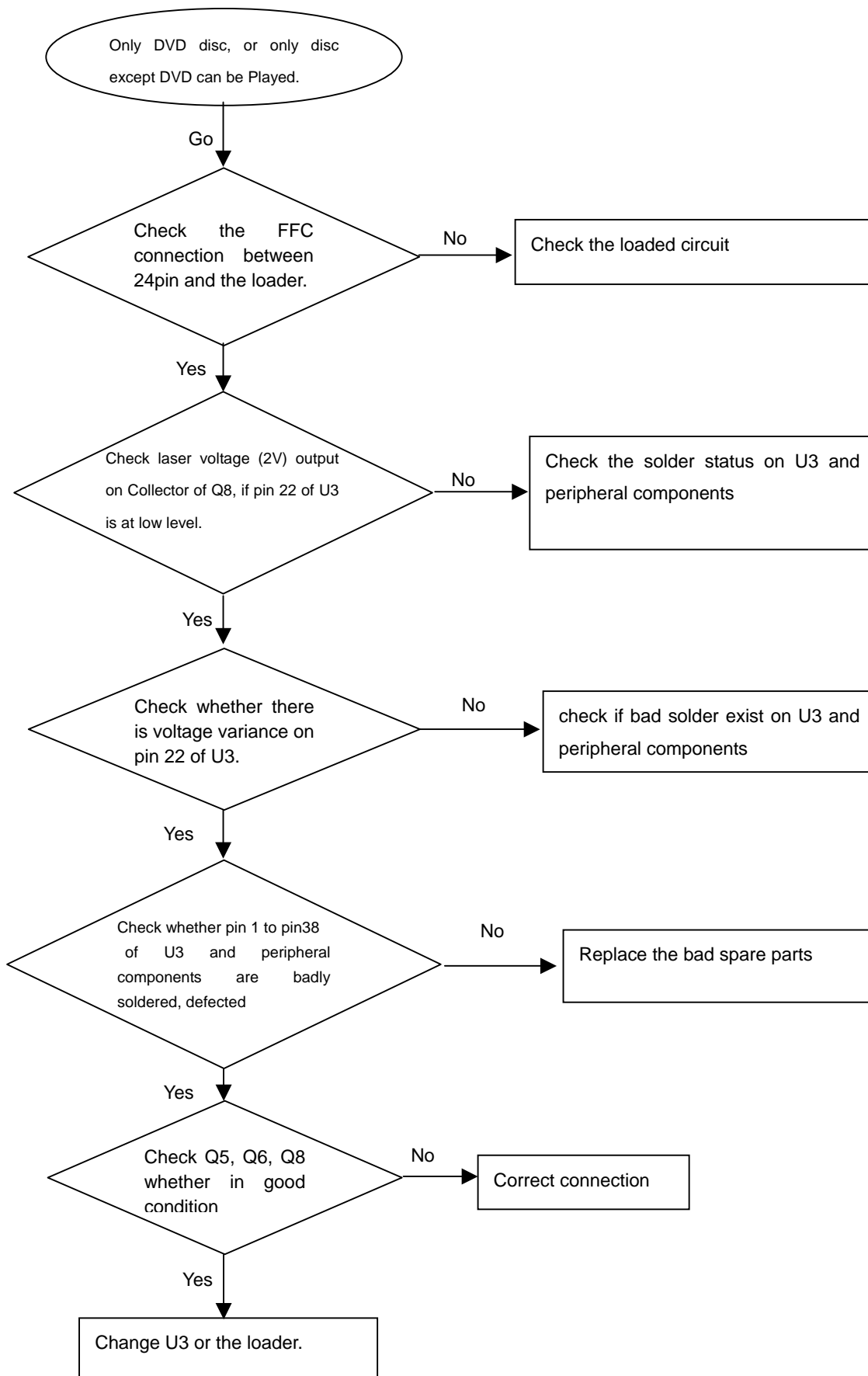
**The power can not be on or off**

**All output voltages on the power board is 0V or deviated.**



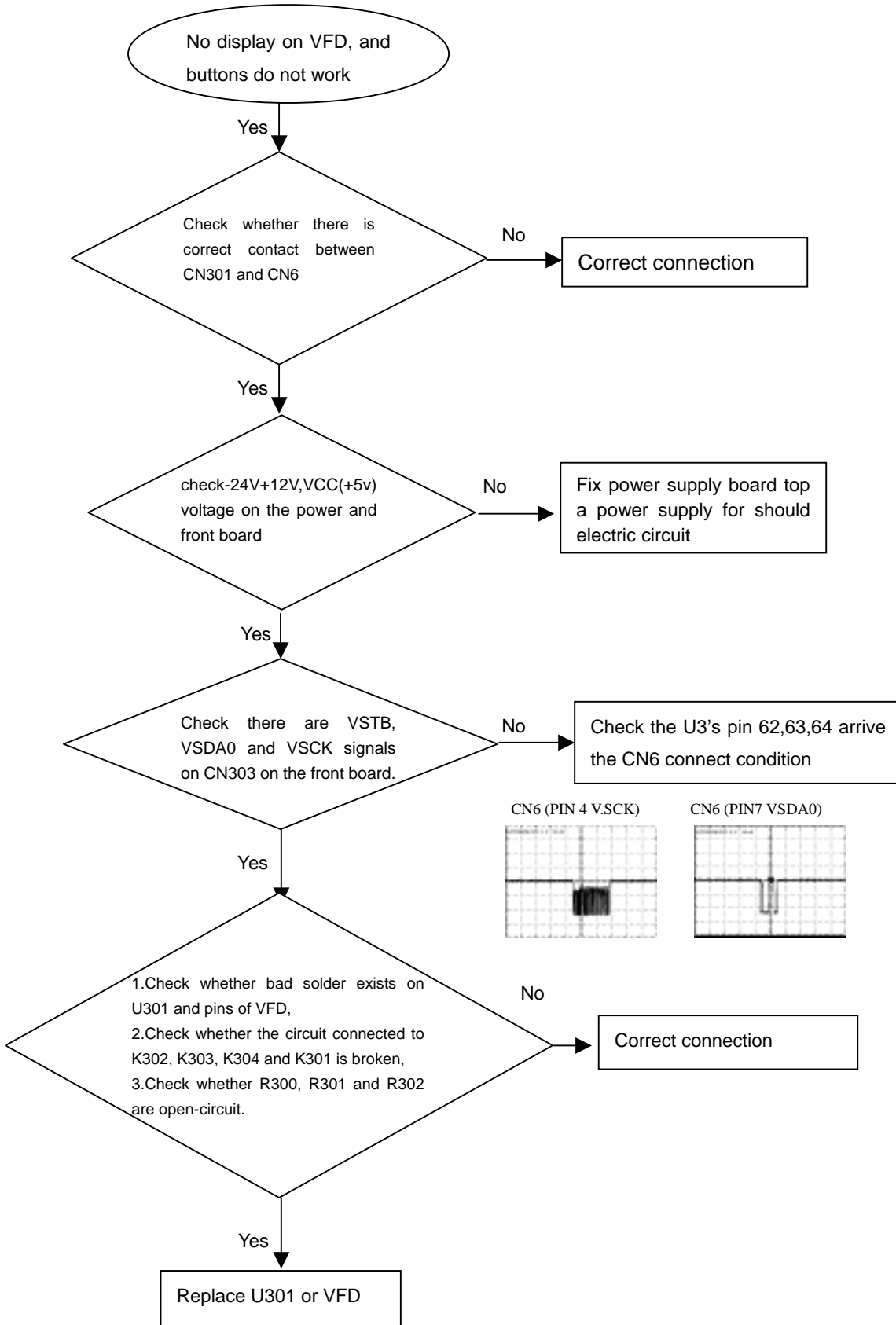
**Disc cannot be read.**

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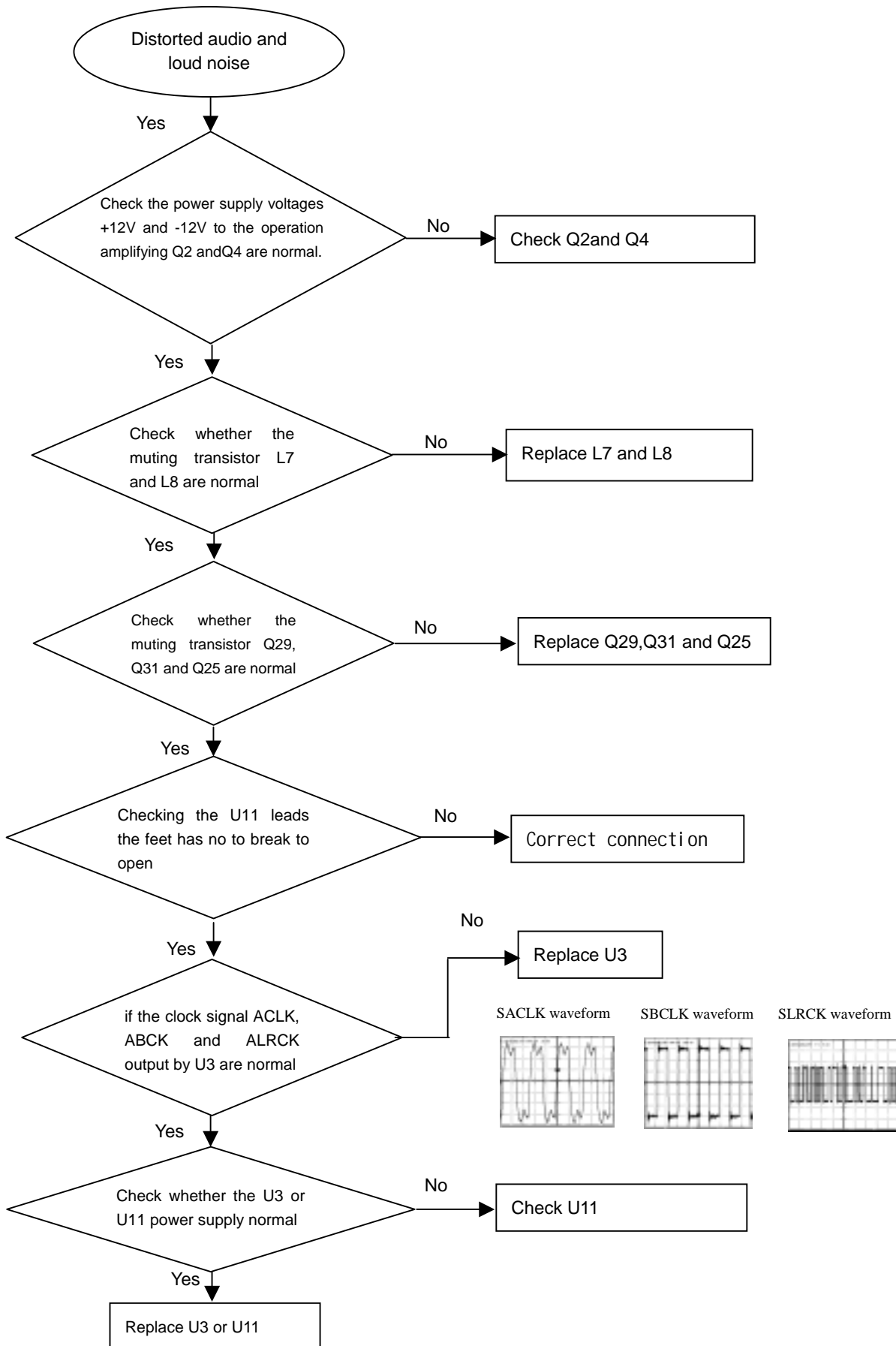
**Only DVD disc or only disc except DVD can be played**


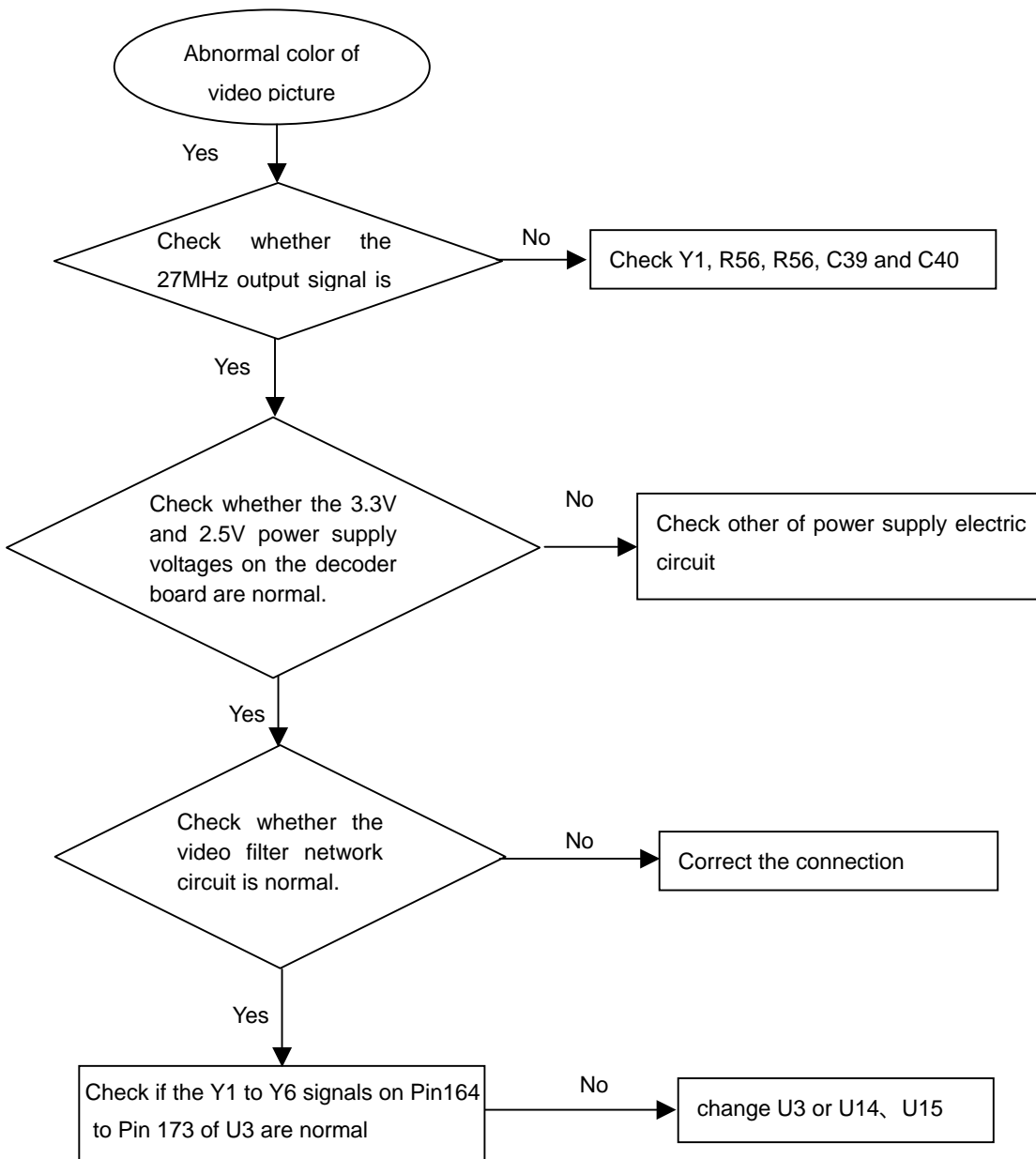


**No display on VFD, and buttons do not work**

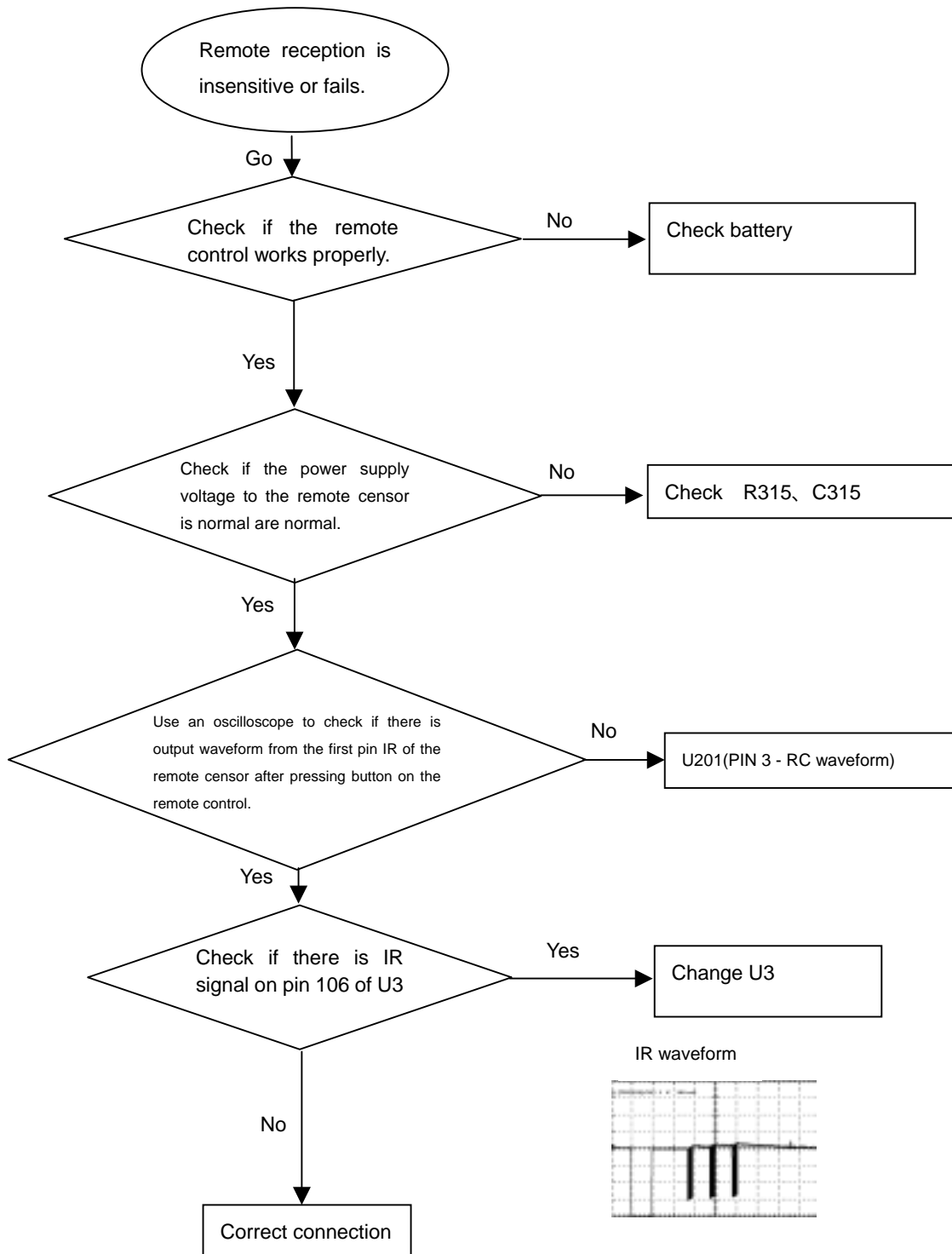


**Distorted audio and loud noise**

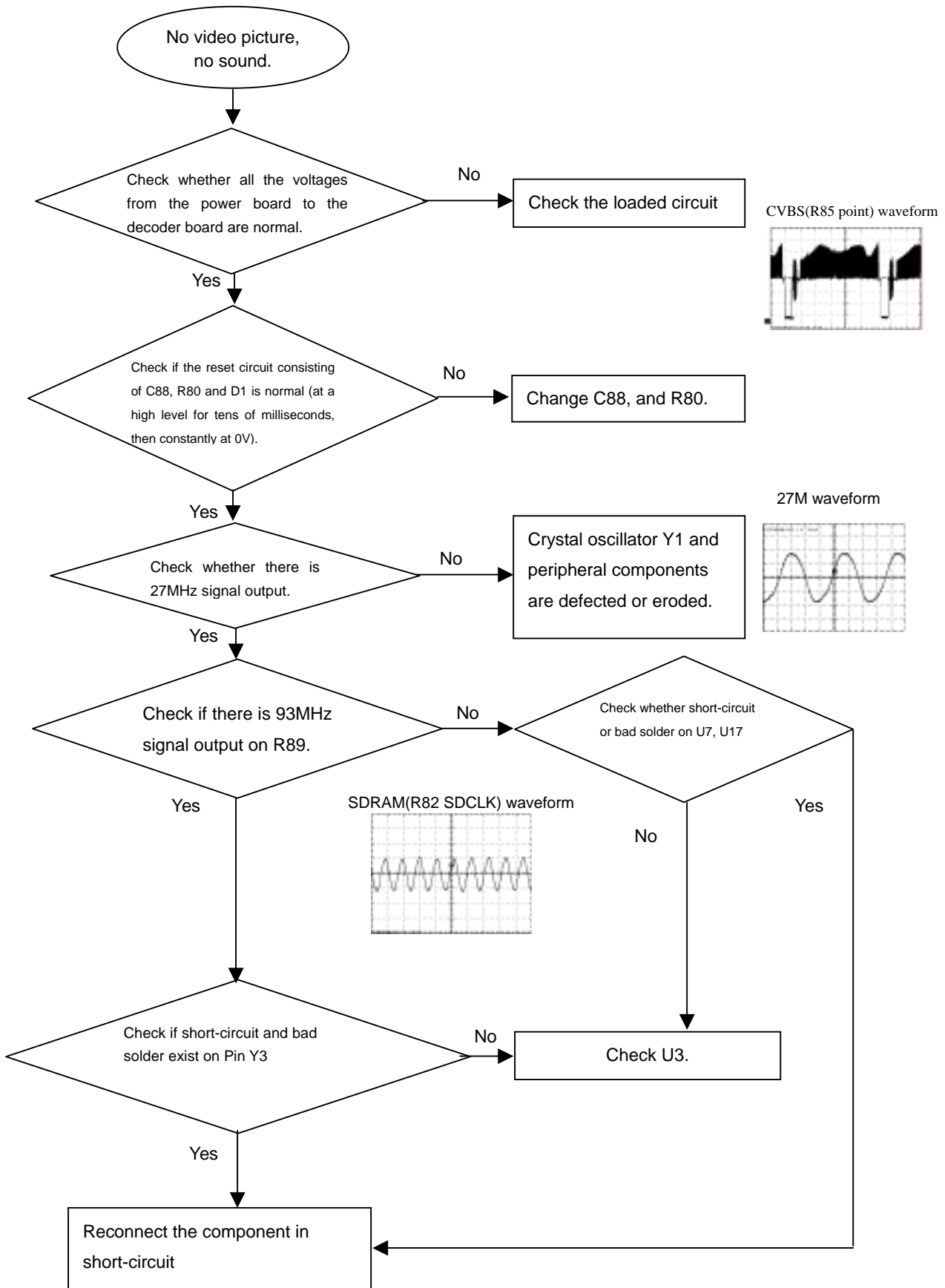


**Abnormal color of video picture**

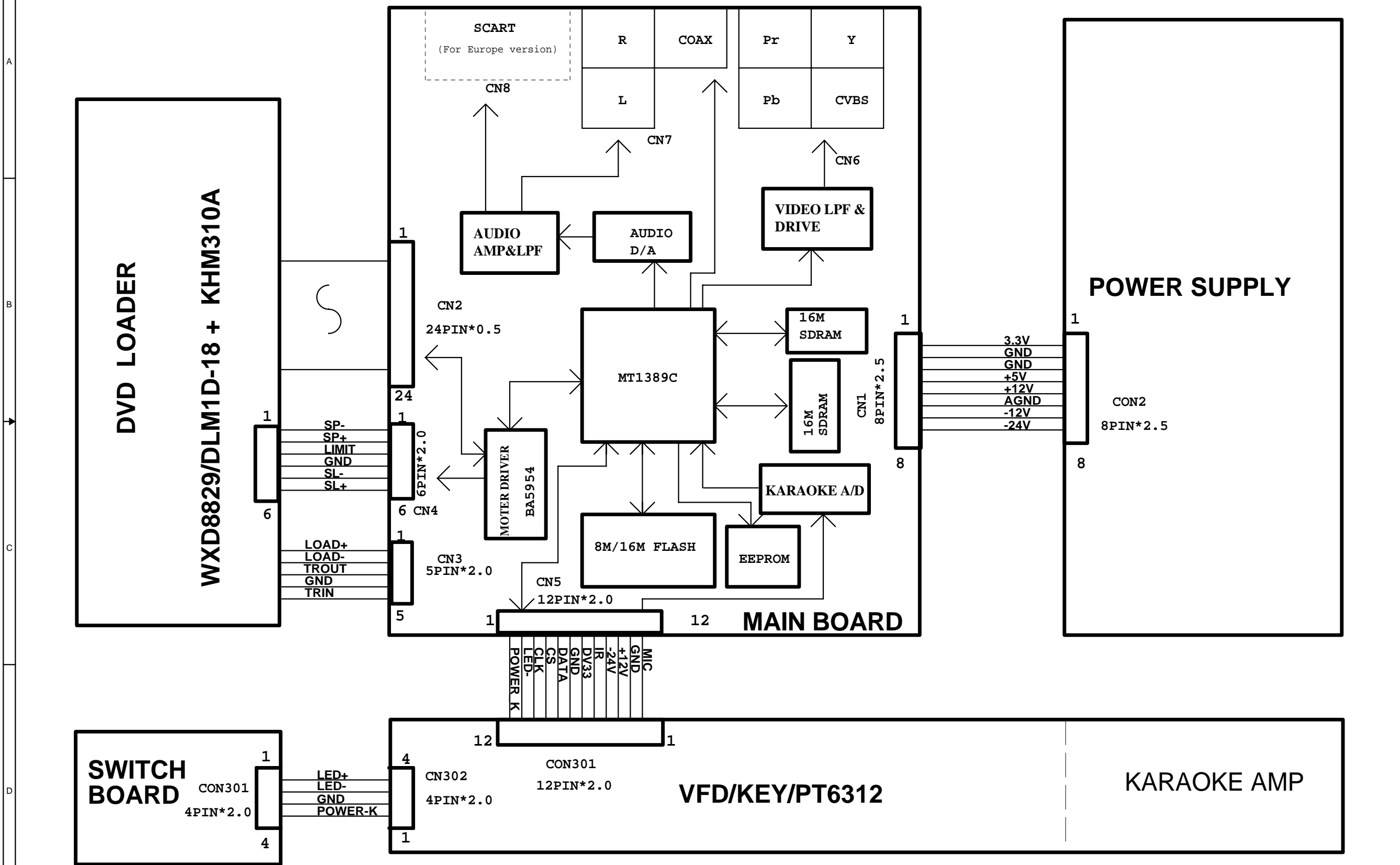
**Remote reception is insensitive or fails.**



**No video picture, no sound.**



# DVP3XXX/XX Wiring & Block Diagram



Remarks: DVP3010, DVP3005 version have no Karaoke output, Only version DVP3010, 3005 (EU) hold the SCART output module.

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# FRONT BOARD

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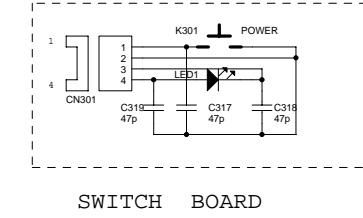
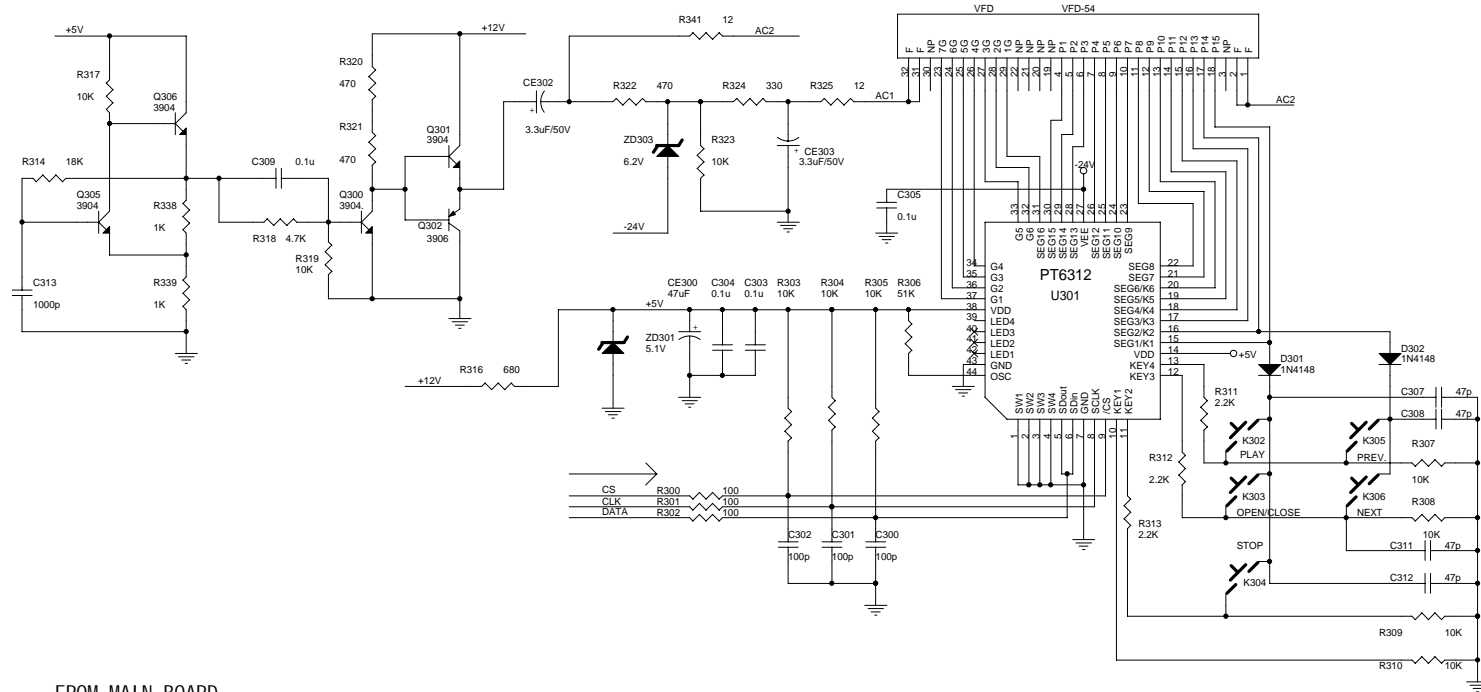
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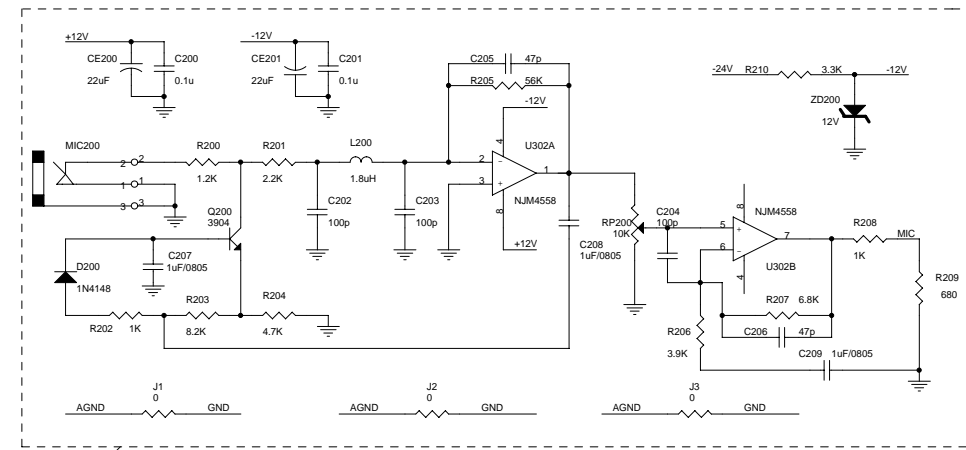
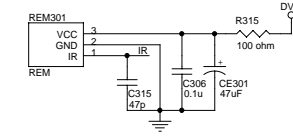
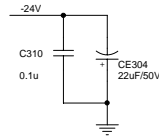
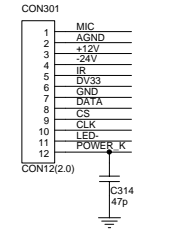


**Service Engineer Remarks:**

FRONT BOARD for DVP3010/XX,DVP3005/XX,DVP3005K/XX



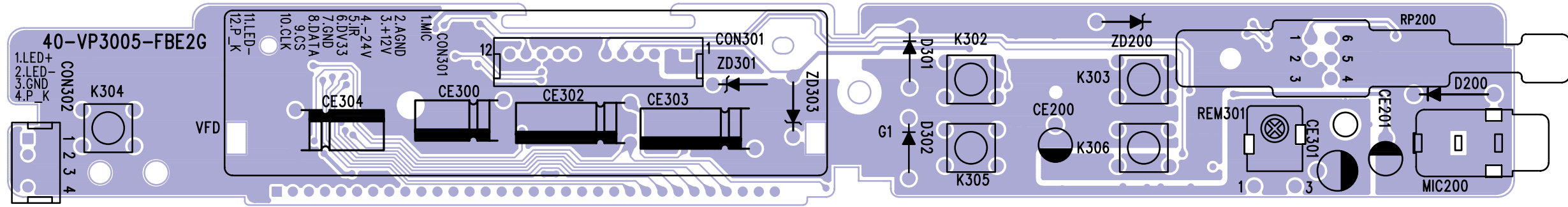
FROM MAIN BOARD



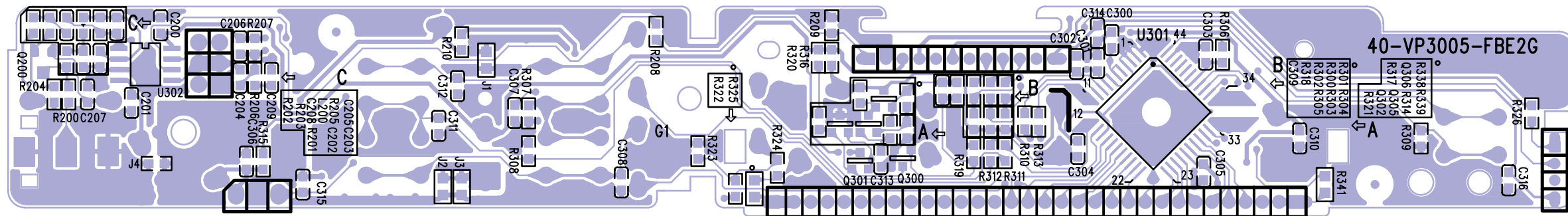
When have no karaoke, this inside of circle a piece is "OPEN"

R200	E1	C305	B3
R201	E2	C306	D4
R202	E1	C307	B4
R203	E1	C308	B4
R204	E2	C309	B1
R205	E2	C310	D2
R206	E2	C311	C4
R207	E3	C312	C4
R208	E3	C313	B1
R209	E3	C314	D1
R210	E3	C315	D4
R300	C2	C316	E4
R301	C2	C317	A5
R302	C2	C318	A5
R303	B3	C319	A5
R304	B3		
R305	B3	CE200	E1
R306	B3	CE201	E2
R307	B4	CE300	B2
R308	C4	CE301	D4
R309	C4	CE302	A2
R310	C4	CE303	A3
R311	B3	CE304	D2
R312	B3	CON301	C1
R313	C3	CON302	E4
R314	B1	J1	F1
R315	D5	J2	F2
R316	B2	J3	F2
R317	A1	LED1	A5
R318	B1	L200	E2
R319	B2	Q200	E1
R320	A2	Q300	B2
R321	A2	Q301	B2
R322	A2	Q302	B2
R323	A2	Q305	B1
R324	A2	Q306	A1
R325	A3	D200	E1
R326	E4	D301	B4
R338	B1	D302	B4
R339	B1	ZD301	E3
REM301	D4	ZD301	B2
RP200	E2	ZD303	A2
C200	E1	U302A	E2
C201	E2	U302B	E3
C202	E2	MIC200	E1
C203	E2		
C204	E2	K301	A5
C205	E2	K302	B4
C206	E3	K303	C4
C207	E1	K304	C4
C208	E2	K305	B4
C209	F3	K306	C4
C300	C3	U301	B3
C301	C3	VFD	A3
C302	C3		
C303	B3		
C304	B2		

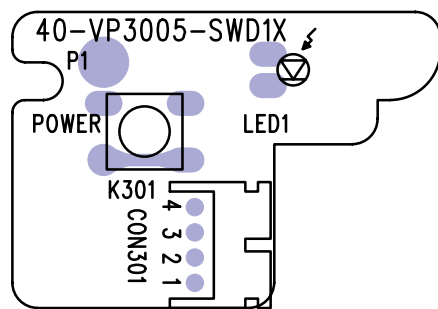
Front Board Top Side



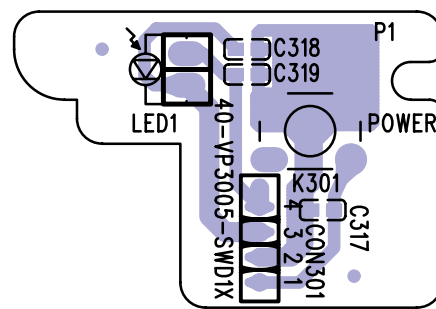
Front Board Bottom Side



Switch Board Top Side



Switch Board Bottom Side



**ELECTRONIC PARTS FOR FRONT BOARD****CAPACITOR**

C11	26-EBP103-ZFX	CAP. CER 0.01UF 50V +80/-20% F
C13	26-EBP103-ZFX	CAP. CER 0.01UF 50V +80/-20% F
C14	26-EBP103-ZFX	CAP. CER 0.01UF 50V +80/-20% F
C16	26-EBP330-JCX	CAP. CER 33PF 50V +/-5% CH
C17	26-EBP330-JCX	CAP. CER 33PF 50V +/-5% CH
C2	25-HEM470-M1X	CAP.ELEC 47UF 35V +/-20%
C22	25-HEM470-M1X	CAP.ELEC 47UF 35V +/-20%
C23	26-EBP103-ZFX	CAP. CER 0.01UF 50V +80/-20% F
C24	26-EBP101-JCX	CAP. CER 100PF 50V +/-5% CH
C25	26-EBP104-ZFX	CAP. CER 0.1UF 50V +80%/-20%
C27	25-HCK100-M1X	CAP. ELEC 10 UF 16V +/-20%
C28	25-HCK100-M1X	CAP. ELEC 10 UF 16V +/-20%
C29	26-EBP101-JCX	CAP. CER 100PF 50V +/-5% CH
C3	26-EBP103-ZFX	CAP. CER 0.01UF 50V +80/-20% F
C38	26-EBP104-ZFX	CAP. CER 0.1UF 50V +80%/-20%
C4	26-EBP330-JCX	CAP. CER 33PF 50V +/-5% CH
C7	26-EBP220-JCX	CAP. CER 22PF 50V +/-5% CH
C8	26-EBP220-JCX	CAP. CER 22PF 50V +/-5% CH
C9	26-EBP103-ZFX	CAP. CER 0.01UF 50V +80/-20% F

**RESISTOR**

R1	18-CB0330-JNX	RES. C.F. 33 OHM 1/6W +/-5%
R10	18-CB0220-JNX	RES. C.F. 22 OHM 1/6W +/-5%
R13	18-CB0274-JNX	RES. C.F. 270K OHM 1/6W +/-5%
R15	18-CB0472-JNX	RES. C.F. 4.7k OHM 1/6W +/-5%
R2	18-CB0330-JNX	RES. C.F. 33 OHM 1/6W +/-5%
R22	18-CB0681-JNX	RES. C.F. 680 OHM 1/6W +/-5%
R23	18-CB0332-JNX	RES. C.F. 3.3k OHM 1/6W +/-5%
R24	18-CB0332-JNX	RES. C.F. 3.3k OHM 1/6W +/-5%
R25	18-CB0681-JNX	RES. C.F. 680 OHM 1/6W +/-5%
R28	18-CB0109-JNX	RES. C.F. 1 OHM 1/6W +/-5%
R29	18-CB0109-JNX	RES. C.F. 1 OHM 1/6W +/-5%
R3	18-CB0103-JNX	RES. C.F. 10K OHM 1/6W +/-5%
R30	18-CB0681-JNX	RES. C.F. 680 OHM 1/6W +/-5%
R31	18-CB0681-JNX	RES. C.F. 680 OHM 1/6W +/-5%
R32	18-CB0103-JNX	RES. C.F. 10K OHM 1/6W +/-5%
R34	18-CB0513-JNX	RES. C.F. 51k OHM 1/6W +/-5%
R35	18-CB0103-JNX	RES. C.F. 10K OHM 1/6W +/-5%
R36	18-CB0103-JNX	RES. C.F. 10K OHM 1/6W +/-5%
R37	18-CB0103-JNX	RES. C.F. 10K OHM 1/6W +/-5%
R38	18-CB0103-JNX	RES. C.F. 10K OHM 1/6W +/-5%
R39	18-CB0103-JNX	RES. C.F. 10K OHM 1/6W +/-5%
R4	18-CE0220-JNX	RES. C.F. 22 OHM 1/2W +/-5%
R40	18-CB0330-JNX	RES. C.F. 33 OHM 1/6W +/-5%
R5	18-CB0103-JNX	RES. C.F. 10K OHM 1/6W +/-5%

**RESISTOR**

R6	18-CB0681-JNX	RES. C.F. 680 OHM 1/6W +/-5%
R8	18-CB0681-JNX	RES. C.F. 680 OHM 1/6W +/-5%
R9	18-CB0331-JNX	RES. C.F. 330 OHM 1/6W +/-5%

**DIODE**

D10	10-1N4148-ABX	DIODE 1N4148 (SWITCHING)
D11	10-1N4148-ABX	DIODE 1N4148 (SWITCHING)
D12	10-79C5V6-DBX	DIODE ZENER 5V6 1/2W 5%
D2	10-1N4001-EBX	DIODE 1N4001 (RECTIFIER)
D3	10-1N4148-ABX	DIODE 1N4148 (SWITCHING)
D4	10-1N4148-ABX	DIODE 1N4148 (SWITCHING)

**TRANSISTORS**

Q2	11-DG9014-CBX	TRANSISTOR 3DG9014-C (NPN)
Q3	11-DG9014-CBX	TRANSISTOR 3DG9014-C (NPN)
Q5	11-DG9014-CBX	TRANSISTOR 3DG9014-C (NPN)
Q6	11-DG9014-CBX	TRANSISTOR 3DG9014-C (NPN)

**NOTE: ONLY THE PARTS MENTIONED IN THIS LIST ARE NORMAL SERVICES SPARE PARTS**

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# POWER BOARD

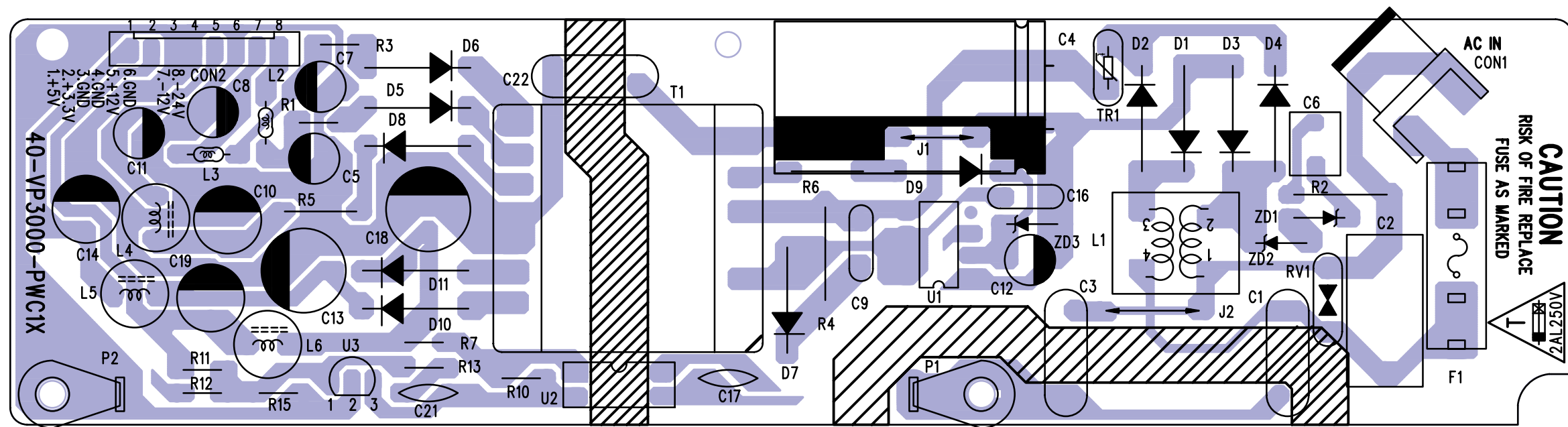
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. Power Board-Component Layout.....	7-3
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Power Board Top Side





**ELECTRICAL PARTS FOR POWER BOARD****CAPACITORS**

C300	28-AB0101-JCX	SMD. CAP 100 pF 50VDC +/-5%
C301	28-AB0101-JCX	SMD. CAP 100 pF 50VDC +/-5%
C302	28-AB0101-JCX	SMD. CAP 100 pF 50VDC +/-5%
C303	28-AB0104-ZFX	SMD. CAP 0.1 UF 50V +80%-20% 0603
C304	28-AB0104-ZFX	SMD. CAP 0.1 UF 50V +80%-20% 0603
C305	28-AB0104-ZFX	SMD. CAP 0.1 UF 50V +80%-20% 0603
C306	28-AB0104-ZFX	SMD. CAP 0.1 UF 50V +80%-20% 0603
C307	28-AB0470-JCX	CAP.SMD 47PF 50V +/-5% 0603
C308	28-AB0470-JCX	CAP.SMD 47PF 50V +/-5% 0603
C309	28-AB0104-ZFX	SMD. CAP 0.1 UF 50V +80%-20% 0603
C310	28-AB0104-ZFX	SMD. CAP 0.1 UF 50V +80%-20% 0603
C311	28-AB0470-JCX	CAP.SMD 47PF 50V +/-5% 0603
C312	28-AB0470-JCX	CAP.SMD 47PF 50V +/-5% 0603
C313	28-AB0102-KBX	SMD. CAP 1000 pF 50V +/-10% B
C314	28-AB0470-JCX	CAP.SMD 47PF 50V +/-5% 0603
C315	28-AB0470-JCX	CAP.SMD 47PF 50V +/-5% 0603
C316	28-AB0470-JCX	CAP.SMD 47PF 50V +/-5% 0603
CE300	25-HCB470-M1X	CAP. ELEC 47 UF 16V +/-20%(SM)
CE301	25-HCB470-M1X	CAP. ELEC 47 UF 16V +/-20%(SM)
CE302	25-BFB339-M1X	CAP. ELEC 3.3 UF 50V +/-20%
CE303	25-BFB339-M1X	CAP. ELEC 3.3 UF 50V +/-20%
CE304	25-BFB220-M1X	CAP. ELEC 22 UF 50V +/-20%

**RESISTANCE**

R300	19-AB0101-JTF	RES SMD 100 OHM 1/10W 0603
R301	19-AB0101-JTF	RES SMD 100 OHM 1/10W 0603
R302	19-AB0101-JTF	RES SMD 100 OHM 1/10W 0603
R303	19-AB0103-JTF	RES SMD 10K OHM 1/10W 0603
R304	19-AB0103-JTF	RES SMD 10K OHM 1/10W 0603
R305	19-AB0103-JTF	RES SMD 10K OHM 1/10W 0603
R306	19-AB0513-JTF	SMD. RES 51k OHM 1/10W +/-5%
R307	19-AB0103-JTF	RES SMD 10K OHM 1/10W 0603
R308	19-AB0103-JTF	RES SMD 10K OHM 1/10W 0603
R309	19-AB0103-JTF	RES SMD 10K OHM 1/10W 0603
R310	19-AB0103-JTF	RES SMD 10K OHM 1/10W 0603
R311	19-AB0222-JTF	RES SMD 2.2K OHM 1/10W 0603
R312	19-AB0222-JTF	RES SMD 2.2K OHM 1/10W 0603
R313	19-AB0222-JTF	RES SMD 2.2K OHM 1/10W 0603
R314	19-AB0183-JTF	SMD. RES 18K OHM 1/10W +/-5% 0603
R315	19-AB0101-JTF	RES SMD 100 OHM 1/10W 0603
R316	19-AB0681-JTF	SMD. RES. 680 OHM 1/10W 0603
R317	19-AB0103-JTF	RES SMD 10K OHM 1/10W 0603
R318	19-AB0472-JTF	RES SMD 4.7K OHM 1/10W 0603

**RESISTANCE**

R319	19-AB0103-JTF	RES SMD 10K OHM 1/10W 0603
R320	19-AB0471-JTF	SMD. RES 470 OHM 1/10W +/-5%
R321	19-AB0471-JTF	SMD. RES 470 OHM 1/10W +/-5%
R322	19-AB0471-JTF	SMD. RES 470 OHM 1/10W +/-5%
R323	19-AB0103-JTF	RES SMD 10K OHM 1/10W 0603
R324	19-AB0331-JTF	RES. SMD 330 OHM 1/10W 0603
R325	19-BC0120-JTF	SMD. RES 12 OHM 1/8W +/-5%
R326	19-AB0471-JTF	SMD. RES 470 OHM 1/10W +/-5%
R338	19-AB0102-JTF	RES SMD 1K OHM 1/10W 0603
R339	19-AB0102-JTF	RES SMD 1K OHM 1/10W 0603
R341	19-BC0120-JTF	SMD. RES 12 OHM 1/8W +/-5%

**TRANSFORMER**

Q300	12-BT3904-0BF	SMD. TRANSISTOR MMBT3904LT1(NPN)
Q301	12-BT3904-0BF	SMD. TRANSISTOR MMBT3904LT1(NPN)
Q302	12-BT3906-0BF	SMD. TRANSISTOR MMBT3906LT1(PNP)
Q305	12-BT3904-0BF	SMD. TRANSISTOR MMBT3904LT1(NPN)
Q306	12-BT3904-0BF	SMD. TRANSISTOR MMBT3904LT1(NPN)

**DIODE**

D301	10-1N4148-ABF	DIODE 1N4148 (SWITCHING)
D302	10-1N4148-ABF	DIODE 1N4148 (SWITCHING)

**CONNECTOR**

CON302	46-FG016T-04K01 HS 4P UL2468#26 160MM
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**IC**

U301	13-OSS312-00B	VFD DRIVER IC S0792GB
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**SWITCH CONNECTOR**

CON302	46-FG016T-04K01 HS 4P UL2468#26 160MM	
K302	48-TAC020-XX0	SWITCH TACT TSAB-1
K303	48-TAC020-XX0	SWITCH TACT TSAB-1
K304	48-TAC020-XX0	SWITCH TACT TSAB-1
K305	48-TAC020-XX0	SWITCH TACT TSAB-1
K306	48-TAC020-XX0	SWITCH TACT TSAB-1

**NOTE: ONLY THE PARTS MENTIONED IN THIS LIST ARE NORMAL SERVICES SPARE PARTS**

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# MPEG BOARD

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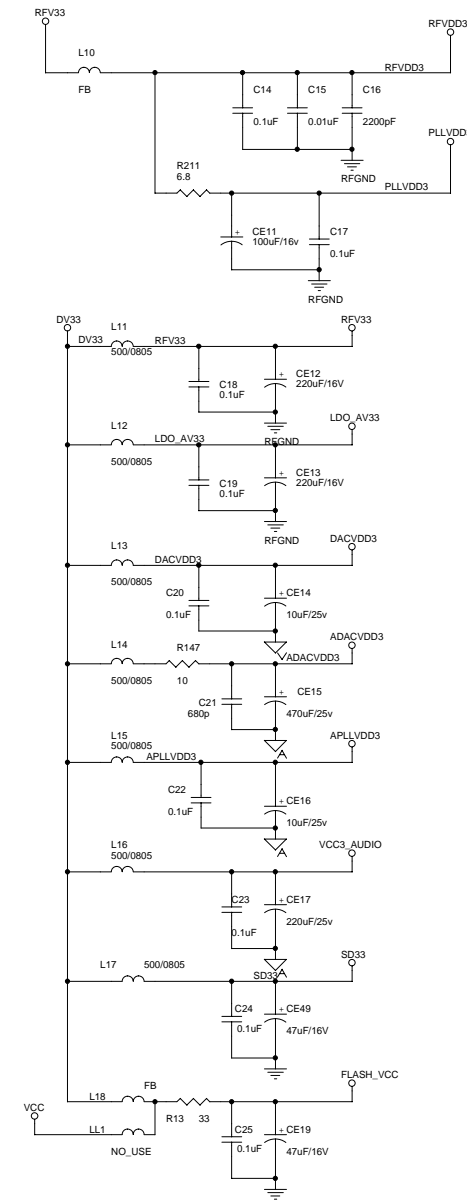
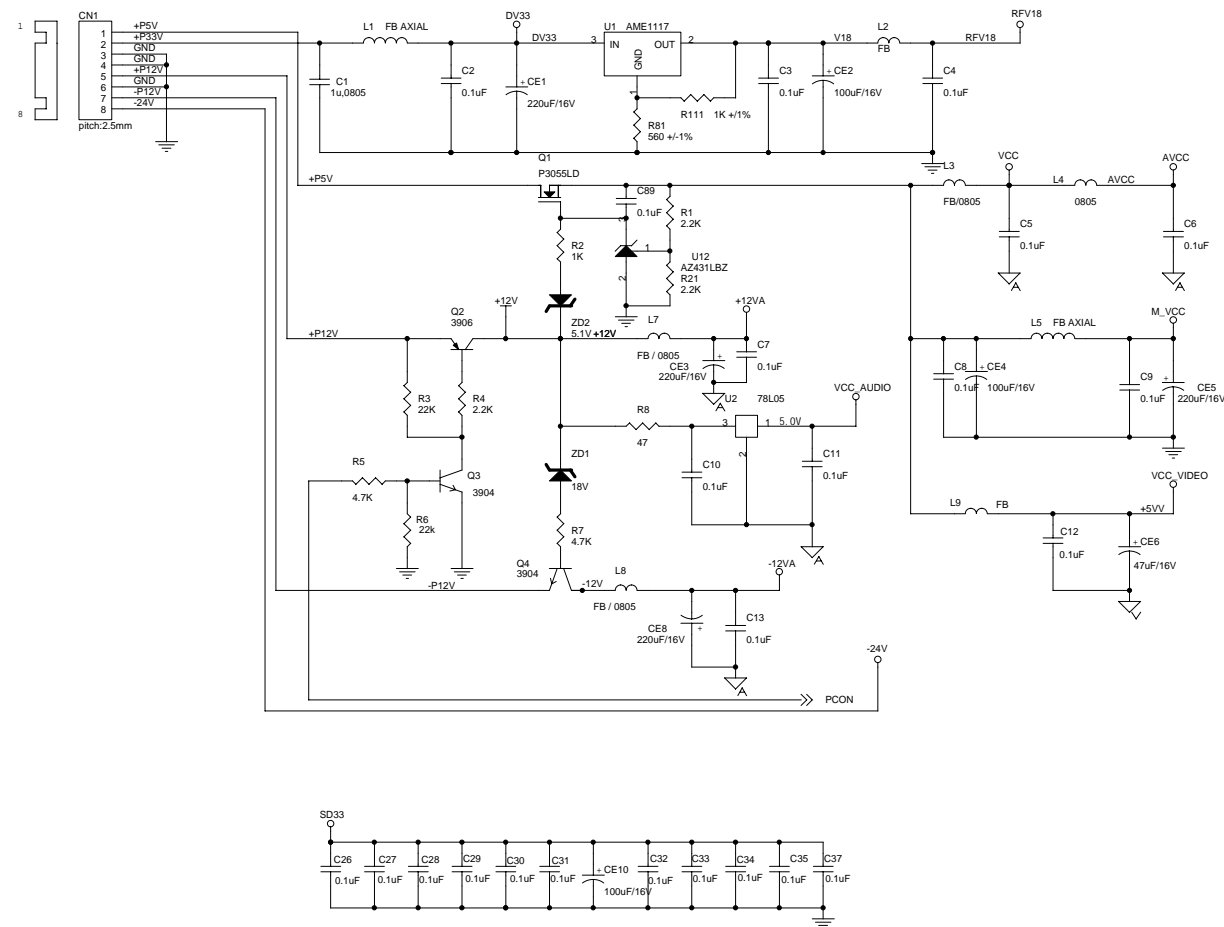
1, INDEX & POWER

for DVP3000K/XX, DVP3005/XX, DVP3005K/XX

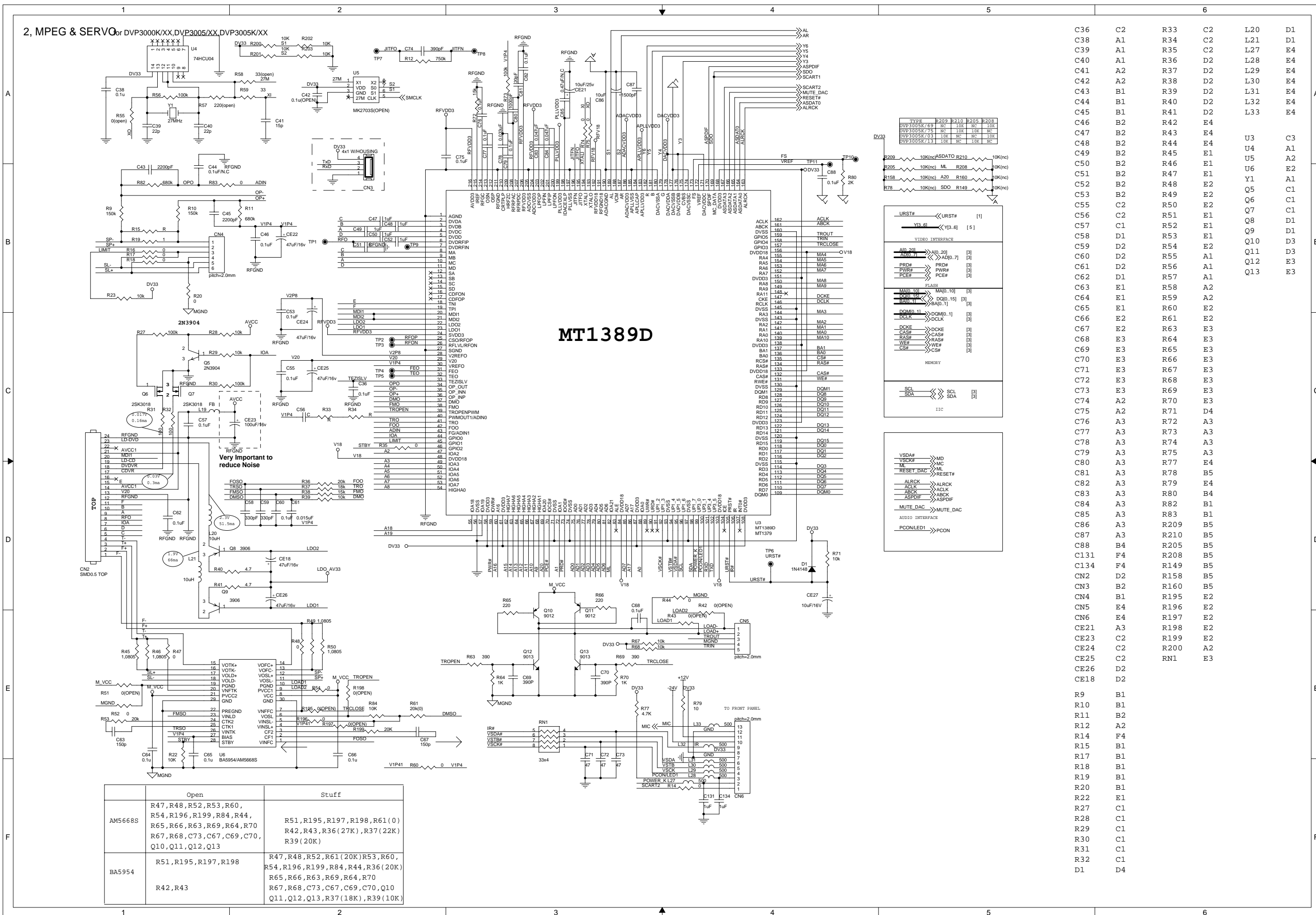
- 1 INDEX & POWER
- 2 RF, SERVO & MPEG - MT1389D
- 3 MEMORY /VIDEO OUT
- 4 AUDIO OUT

NAME	TYPE	DEVICE
VCC	Digital 5V	SUPPLY
DV33	Digital 3.3V	MT1389D
RFV33	Servo 3.3V	MT1389D
LDO_AV33	Laser Diode 3.3V	
AVCC	RF 5V	PICKUP HEADER
V18	Digital 1.8V	MT1389D
SD33	Digital 3.3V	SDRAM
+12V	Audio +12V	OP AMP.
-12V	Audio -12V	OP AMP.
AVDD	Audio 5V	VCC_AUDIO
DVDD	Audio 3V3	VCC3_AUDIO

TO POWER BOARD

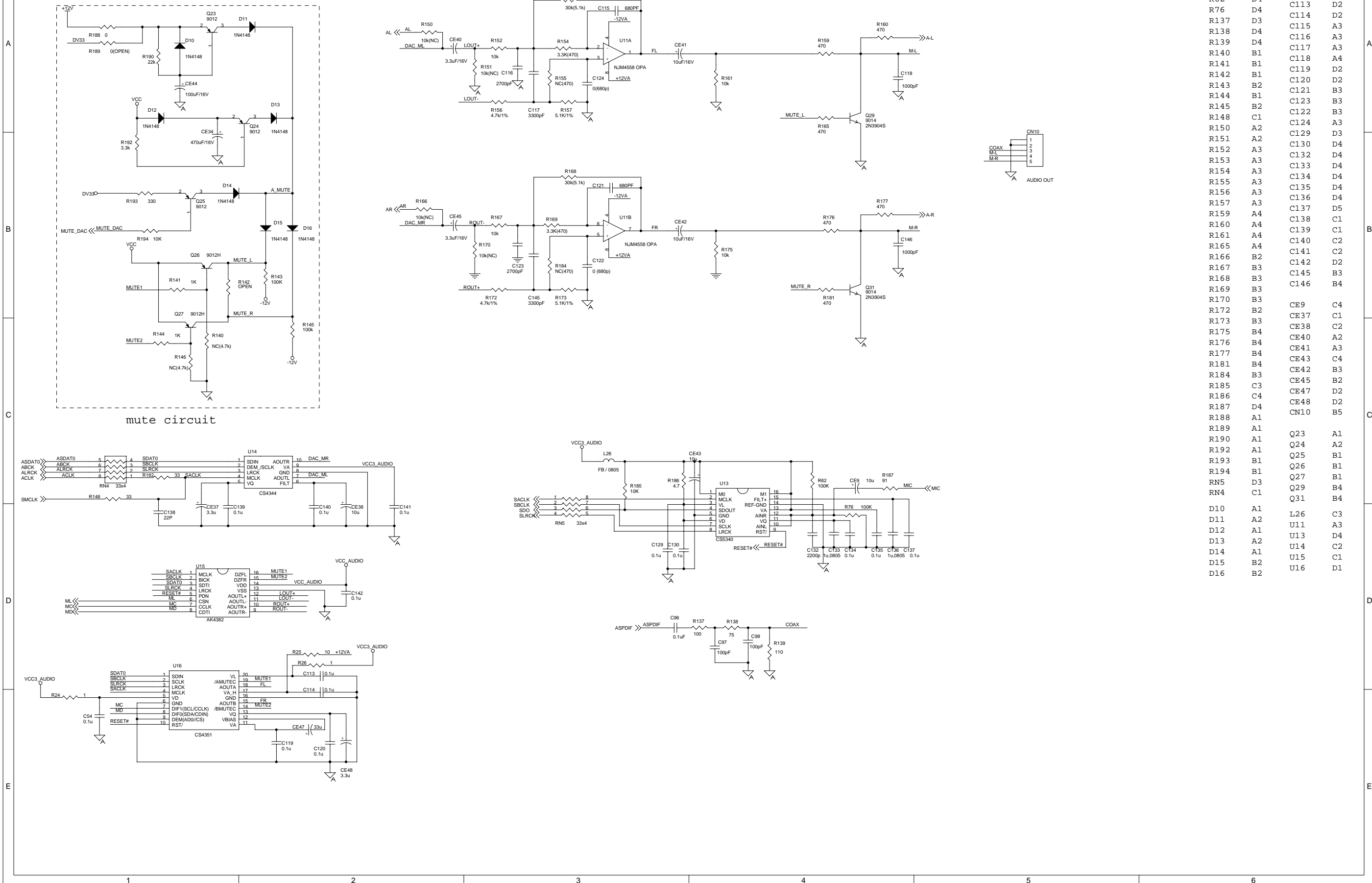


C1	C2	CE1	C2
C2	C2	CE2	C3
C3	C3	CE3	D2
C4	C3	CE4	D3
C5	D3	CE5	D3
C6	D4	CE6	E3
C7	D3	CE8	E2
C8	D3	CE10	F2
C9	D3	CE11	C4
C10	D3	CE12	C5
C11	D3	CE13	C5
C12	E3	CE14	D5
C13	E3	CE15	D5
C14	B4	CE16	D5
C15	B5	CE17	E5
C16	B5	CE49	E5
C17	B5	CN1	C1
C18	C4	R1	D2
C19	E5	R2	D2
C20	C4	R3	D2
C21	D4	R4	D2
C21	D5	R5	D2
C22	D4	R6	E2
C23	D5	R7	E2
C24	E5	R8	D2
C25	E5	R13	E4
C26	F2	R21	D2
C27	F2	R81	C2
C28	F2	R111	C2
C29	F2	R147	D4
C30	F2	R211	B4
C31	F2	Q1	C2
C32	F2	Q2	D2
C33	F2	Q3	D2
C34	F2	Q4	E2
C35	F3	U1	C2
C37	F3	U2	D3
C89	D2	U12	D2
L1	C2	ZD1	D2
L2	C3	ZD2	D2
L3	D3		
L4	D3		
L5	D3		
L7	D2		
L8	E2		
L9	E3		
L10	B4		
L11	C4		
L12	C4		
L13	C4		
L14	D4		
L15	D4		
L16	D4		
L17	E4		
L18	E4		





4, AUDIO FILTER & OUT PUT  
for DVP3000K/XX,DVP3005/XX,DVP3005K/XX

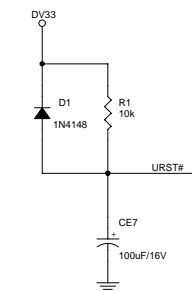
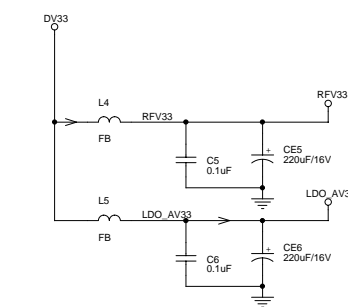
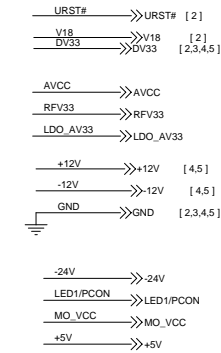
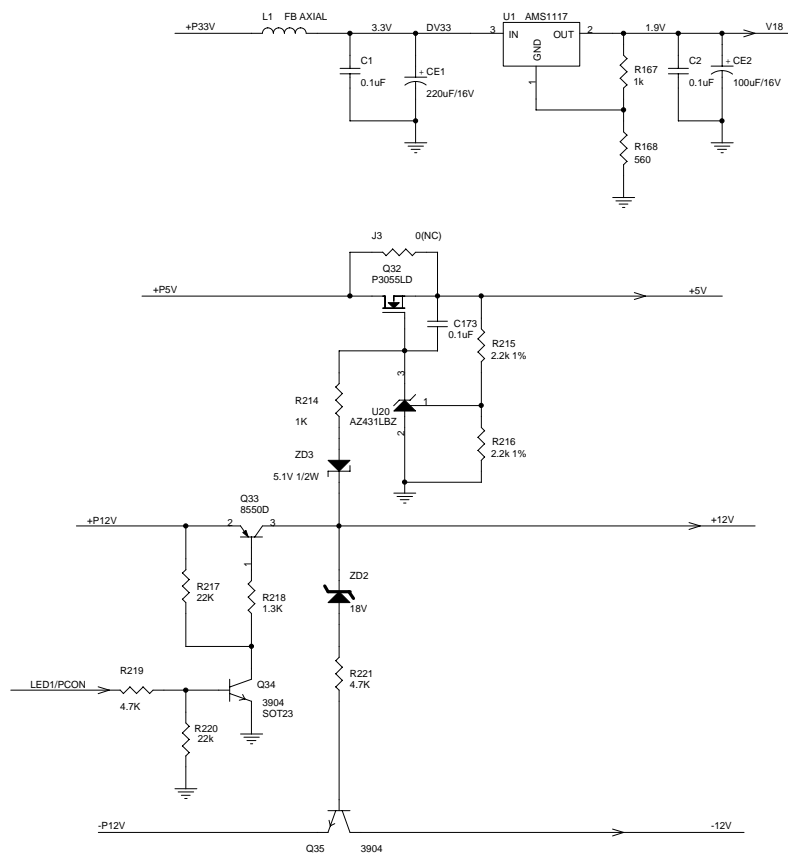
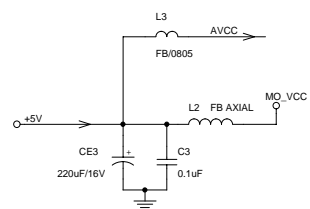
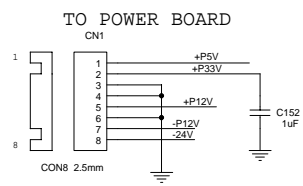


R24	D1	C54	D1
R25	D2	C96	D3
R26	D2	C97	D4
R62	D4	C98	D4
R76	D4	C113	D2
R137	D3	C114	D2
R138	D4	C115	A3
R139	D4	C116	A3
R140	B1	C117	A3
R141	B1	C118	A4
R142	B1	C119	D2
R143	B2	C120	D2
R144	B1	C121	B3
R145	B2	C122	B3
R148	C1	C123	B3
R150	A2	C124	A3
R151	A2	C129	D3
R152	A3	C130	D4
R153	A3	C132	D4
R154	A3	C133	D4
R155	A3	C134	D4
R156	A3	C135	D4
R157	A3	C136	D4
R159	A4	C137	D5
R160	A4	C138	C1
R161	A4	C139	C2
R165	A4	C140	C2
R166	B2	C141	C2
R167	B3	C142	D2
R168	B3	C145	B3
R169	B3	C146	B4
R170	B3	CE9	C4
R172	B2	CE37	C1
R173	B3	CE38	C2
R175	B4	CE38	C2
R176	B4	CE40	A2
R177	B4	CE41	A3
R181	B4	CE43	C4
R184	B3	CE42	B3
R185	C3	CE45	B2
R186	C4	CE47	D2
R187	D4	CE48	D2
R188	A1	CN10	B5
R189	A1	Q23	A1
R190	A1	Q24	A2
R192	A1	Q25	B1
R193	B1	Q26	B1
R194	B1	Q27	B1
RN5	D3	Q29	B4
RN4	C1	Q31	B4
D10	A1	L26	C3
D11	A2	U11	A3
D12	A1	U13	D4
D13	A2	U14	C2
D14	A1	U15	C1
D15	B2	U16	D1
D16	B2		

1、INDEX & POWER,RESET  
For DVP3010/XX

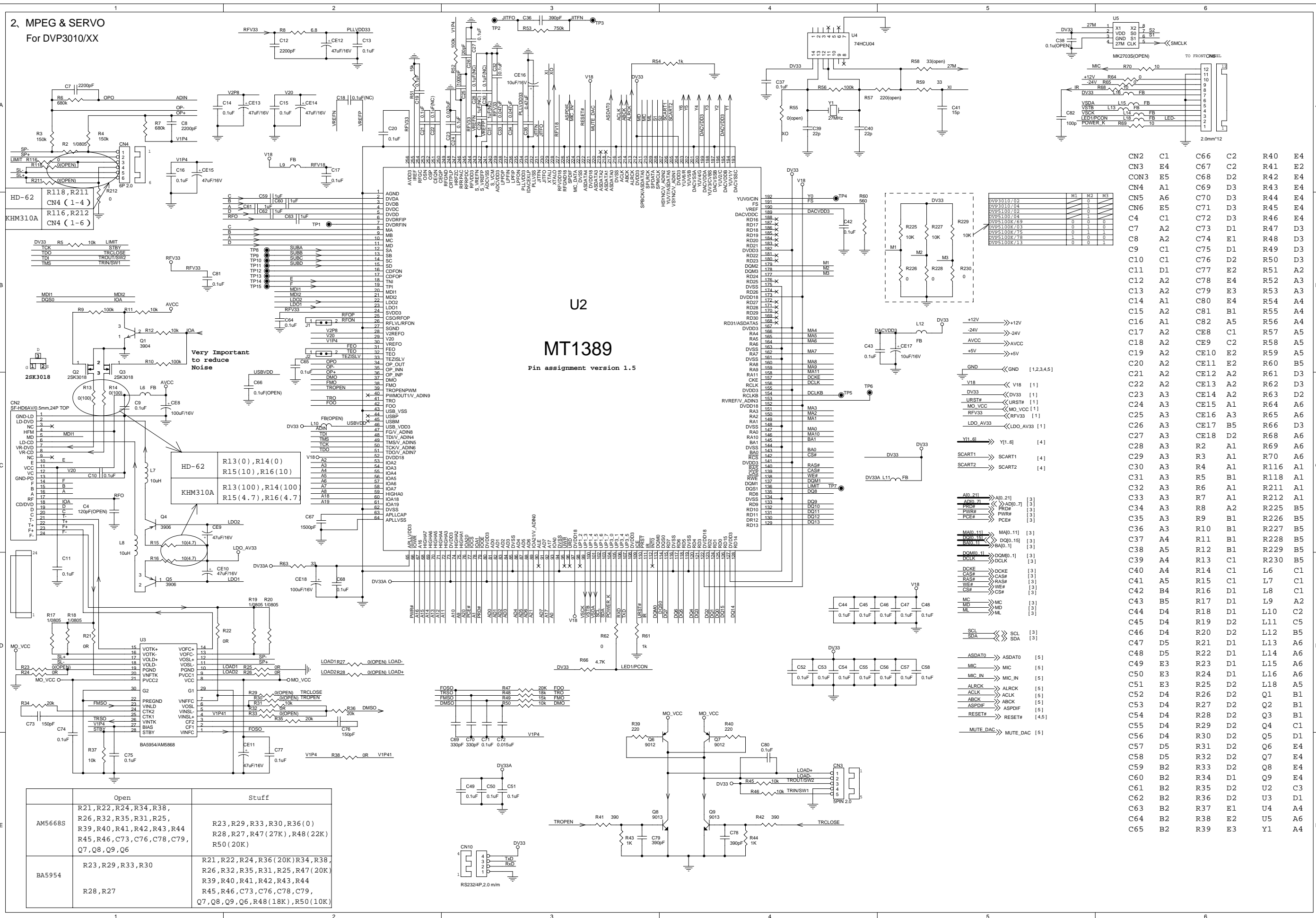
- 1 INDEX & POWER, RESET
- 2 RF, SERVO & MPEG - MT1389C&MT1389EE
- 3 MEMORY - SDRAM, FLASH/EEPROM,VIDEO OUT
- 4 AUDIO DAC & AUDIO OUT
- 5 FRONT BOARD
- 6 POWER SUPPLY

NAME	TYPE	DEVICE
VCC	Digital 5V	SUPPLY
DV33	Digital 3.3V	MT1389E
RFV33	Servo 3.3V	MT1389E
AVCC	RF 5V	PICKUP HEADER
V18	Digital 1.8V	MT1389E
+12V	Audio +12V	OP AMP.
-12V	Audio -12V	OP AMP.
+5V	Servo 5V	Motor drive
-24V	VFD	VFD Drive



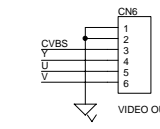
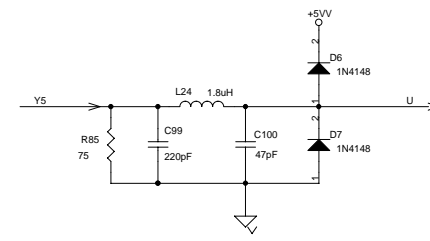
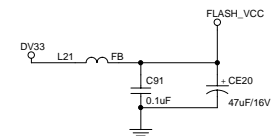
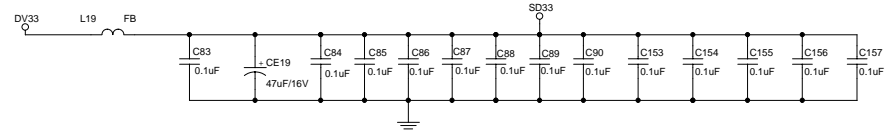
- CN1 D1
- R1 E5
- R167 C3
- R168 C3
- R169 D3
- R214 D3
- R215 D3
- R216 D3
- R217 E3
- R218 E3
- R219 E2
- R220 E3
- R221 E3
- ZD2 E3
- ZD3 E3
- D1 E5
- C1 C3
- C2 C4
- C3 E1
- C5 D5
- C6 D5
- C152 C2
- C173 D3
- CE1 C3
- CE2 C4
- CE3 E1
- CE5 C5
- CE6 D5
- CE7 E5
- L1 C3
- L2 E1
- L3 E1
- L4 C5
- L5 D5
- Q32 D3
- Q33 E3
- Q34 E3
- Q35 F3
- U1 C3
- U20 D3



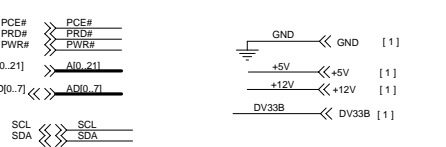
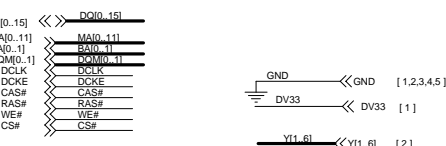
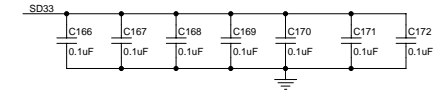
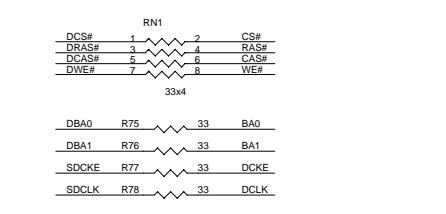
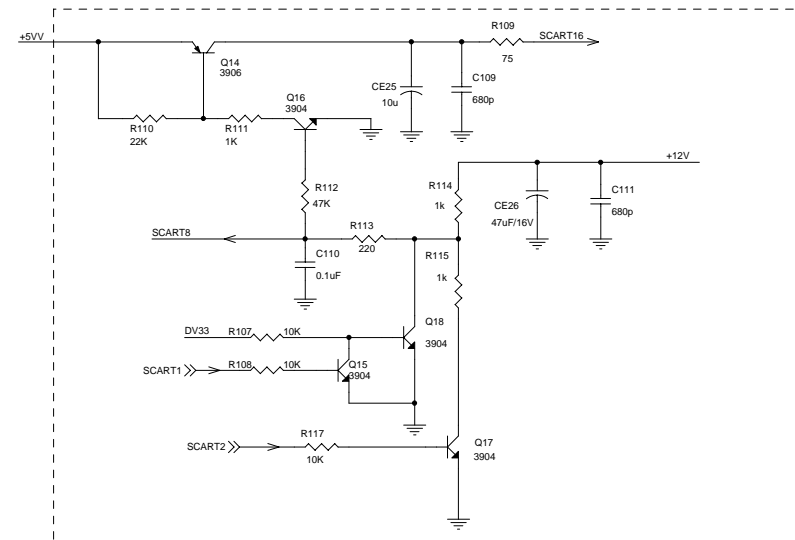
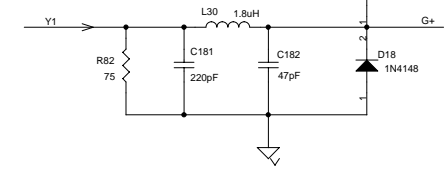
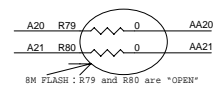
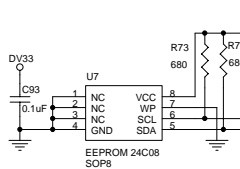
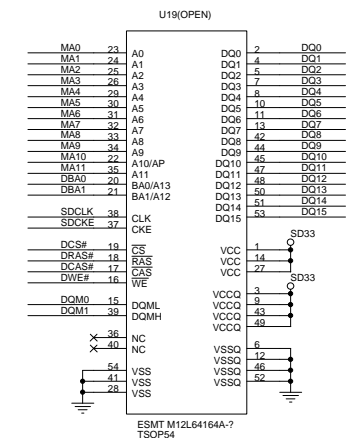
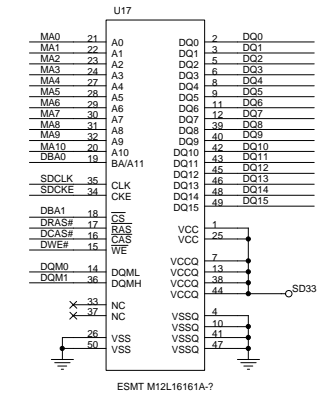
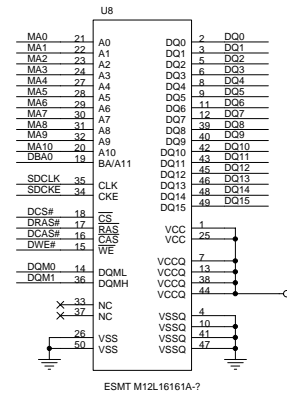
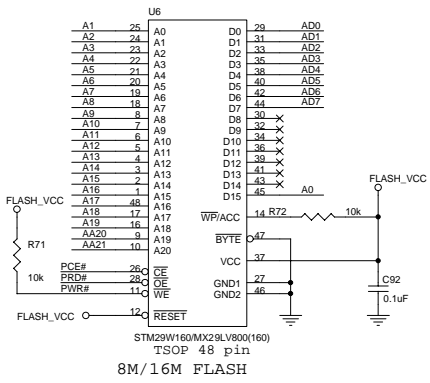


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CON3	E5	C68	D2	R42	E4
CN4	A1	C69	D3	R43	E4
CN5	A6	C70	D3	R44	E4
CN6	E5	C71	D3	R45	E4
C4	C1	C72	D3	R46	E4
C7	A2	C73	D1	R47	D3
C8	A2	C74	E1	R48	D3
C9	C1	C75	D1	R49	D3
C10	C1	C76	D2	R50	D3
C11	D1	C77	E2	R51	A2
C12	A2	C78	E4	R52	A3
C13	A2	C79	E3	R53	A3
C14	A1	C80	E4	R54	A4
C15	A2	C81	B1	R55	A4
C16	A1	C82	A5	R56	A4
C17	A2	C83	C1	R57	A5
C18	A2	C84	C2	R58	A5
C19	A2	C85	E2	R59	A5
C20	A2	C86	E1	R60	B5
C21	A2	C87	A2	R61	D3
C22	A2	C88	A2	R62	D3
C23	A3	C89	A2	R63	D2
C24	A3	C90	A1	R64	A6
C25	A3	C91	A3	R65	A6
C26	A3	C92	B5	R66	D3
C27	A3	C93	D2	R67	A6
C28	A3	C94	A1	R68	A6
C29	A3	C95	A1	R69	A6
C30	A3	C96	A1	R70	A6
C31	A3	C97	B1	R71	A1
C32	A3	C98	A1	R72	A1
C33	A3	C99	A1	R73	A1
C34	A3	C100	A2	R74	B5
C35	A3	C101	B1	R75	B5
C36	A3	C102	B1	R76	B5
C37	A4	C103	B1	R77	B5
C38	A5	C104	B1	R78	B5
C39	A4	C105	C1	R79	B5
C40	A4	C106	C1	R80	B5
C41	A5	C107	C1	R81	C1
C42	B4	C108	D1	R82	C1
C43	B5	C109	D1	R83	A2
C44	D4	C110	D1	R84	C2
C45	D4	C111	D2	R85	C5
C46	D4	C112	D2	R86	B5
C47	D5	C113	D1	R87	A6
C48	D5	C114	D1	R88	A6
C49	E3	C115	D1	R89	A6
C50	E3	C116	D1	R90	A6
C51	E3	C117	D2	R91	A5
C52	D4	C118	D2	R92	B1
C53	D4	C119	D2	R93	B1
C54	D4	C120	D2	R94	B1
C55	D4	C121	D2	R95	C1
C56	D4	C122	D2	R96	D1
C57	D5	C123	D2	R97	E4
C58	D5	C124	D2	R98	E4
C59	B2	C125	D2	R99	E4
C60	B2	C126	D1	R100	E4
C61	B2	C127	D2	R101	C3
C62	B2	C128	D2	R102	D1
C63	B2	C129	E1	R103	A4
C64	B2	C130	E2	R104	A6
C65	B2	C131	E3	R105	A4

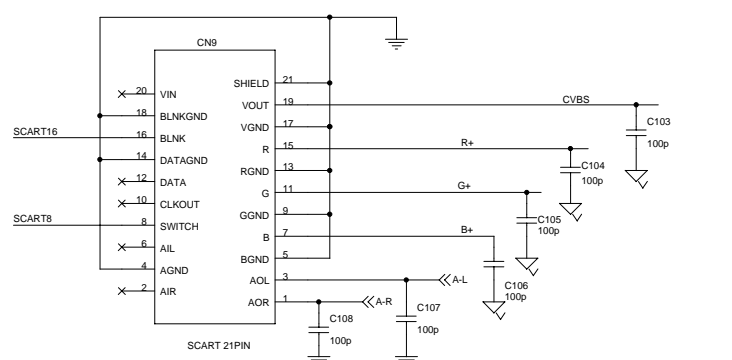
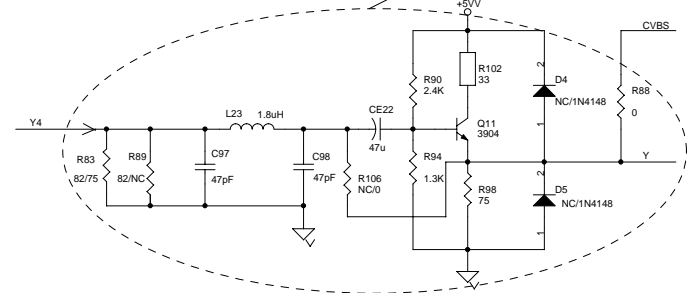
3. SDRAM,FLASH,VIDE FILTER & SCART OUT PUT  
For DVP3010/XX



C83	A1	D2	D3
C84	A1	D3	D3
C85	A2	D4	E3
C86	A2	D5	E3
C87	A2	D6	A5
C88	A2	D7	A5
C89	A2	D8	B5
C90	A2	D9	B5
C91	A3	D17	C3
C92	B2	D18	C3
C93	C2	D19	D3
C94	C2	D20	D3
C95	D3	Q11	E3
C96	D3	Q14	B4
C97	E3	Q15	C5
C98	E3	Q16	C5
C99	A4	Q17	C5
C100	A4	Q18	C5
C101	A4	R71	B1
C102	A4	R72	B2
C103	D5	R73	C3
C104	D5	R74	C3
C105	D5	R75	D1
C106	D5	R76	D1
C107	E5	R77	D1
C108	E5	R78	D1
C109	C5	R79	B3
C110	C5	R80	B3
C111	C5	R81	D2
C153	A2	R82	C2
C154	A2	R83	E2
C155	A2	R84	D2
C156	A2	R85	A4
C157	A2	R87	B4
C166	D1	R89	E2
C167	D1	R90	E3
C168	D1	R94	C3
C169	D1	R98	E3
C170	D1	R102	E3
C171	D2	R109	C5
C172	D2	R110	C4
C181	C3	R111	C4
C182	C3	R112	C5
C183	D3	R113	C5
C184	D3	R114	C5
CE19	A1	R115	C5
CE20	A3	RN1	D1
CE22	E3	CN6	A5
CE25	C5	CN7	D5
CE26	C5	U6	A1
CE27	C2	U7	C2
L19	A1	U8	B2
L20	A3	U17	B3
L21	A3	U19	C1
L22	D2		
L23	E2		
L24	A4		
L25	B4		
L26	C2		
L30	C3		
L31	D3		



	Open	Stuff
DVP3010 (5100) /00/02/04/05	R86, R106, D4, D5	CE22, R90, R94, R98, R102, R88, Q11, R83 (82), R89 (82)
DVP5100K/69/03 /13/75/78/BK	R86, R106, D4, D5	R106, R83 (75), D4, D5

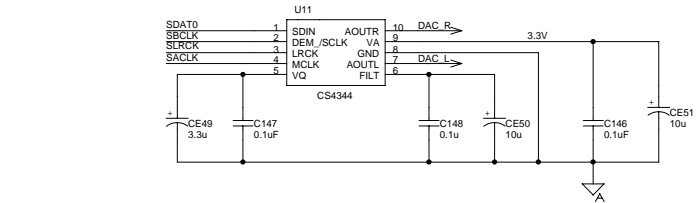
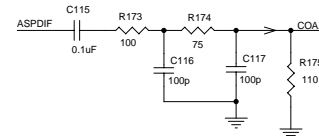
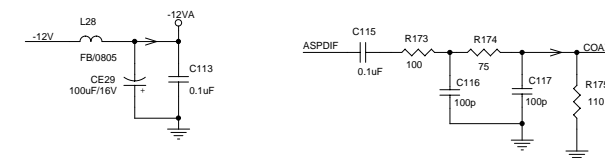
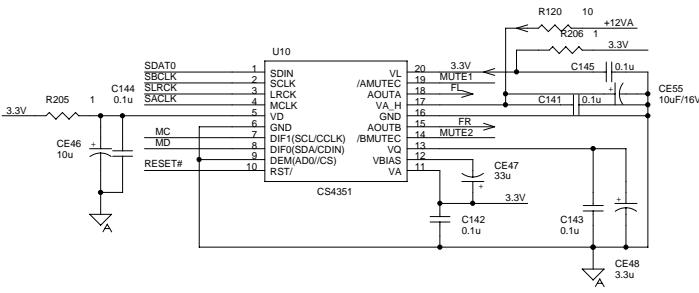
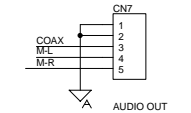
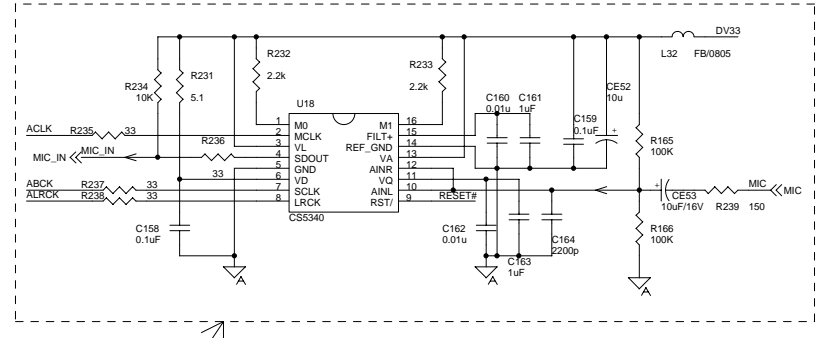
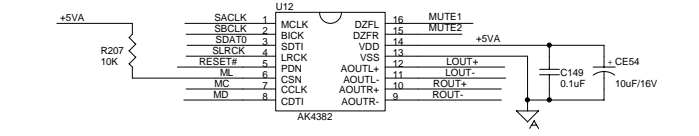
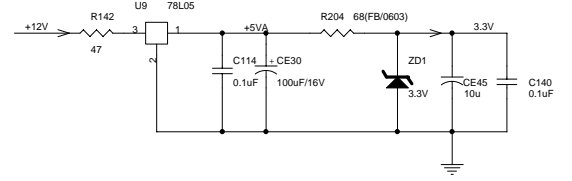
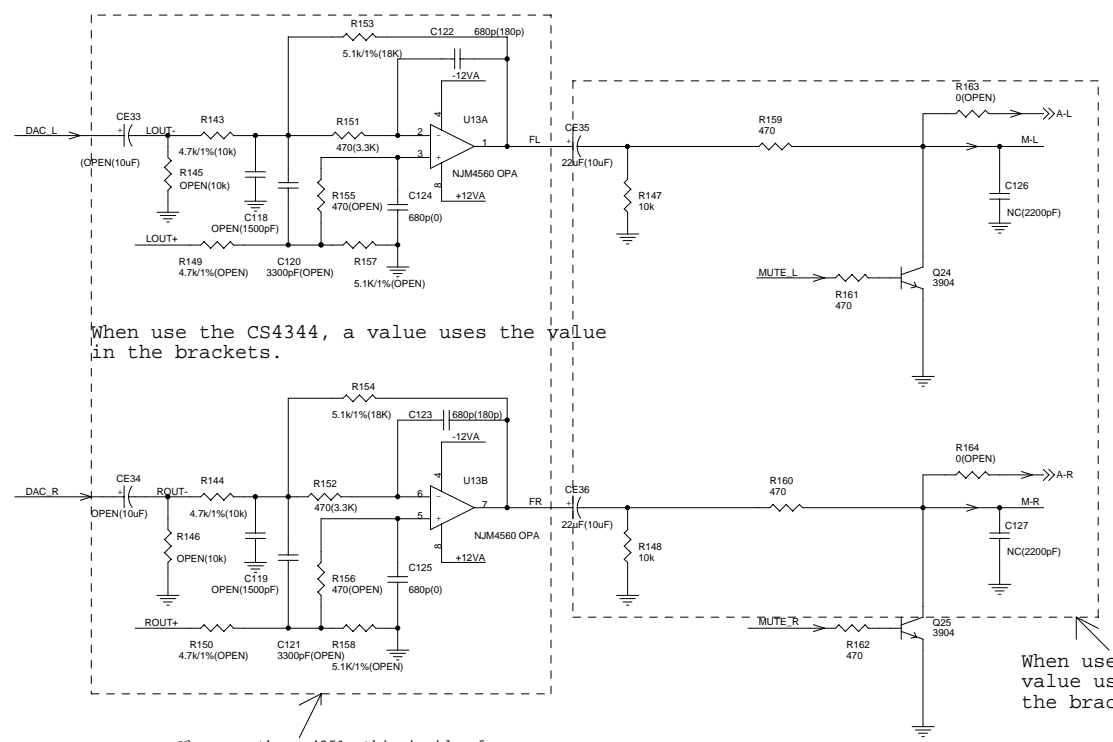
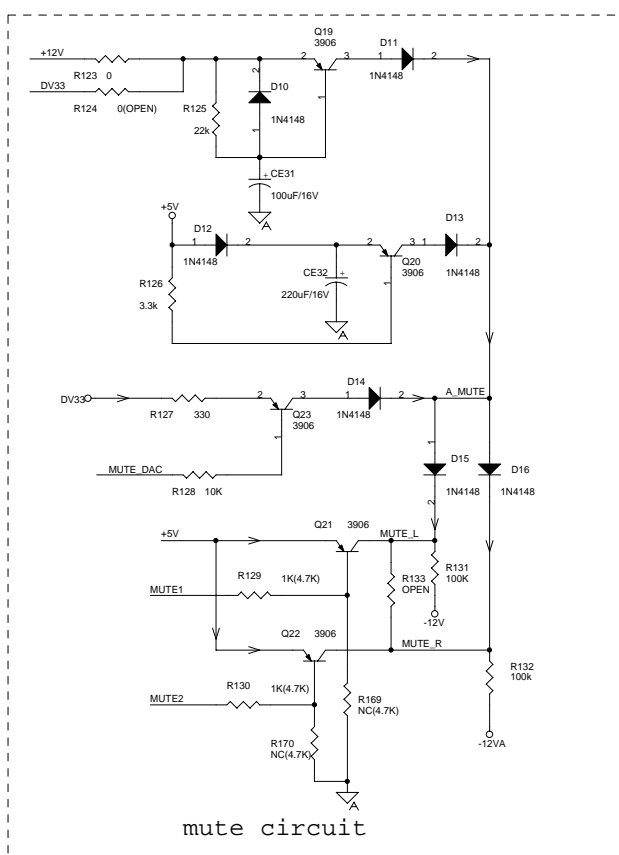
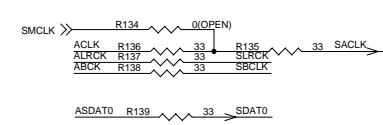
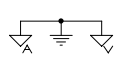


SCART1	SCART2	SCART8	SCART16
1	0	12V (9.5V - 12V 4:3)	3V ( RGB )
1	1	6V ( 5V - 8V 16:9 )	3V ( RGB )
0	0	0V TV MODE	0V ( CVBS )

When have no SCART, this inside of circle is \*OPEN\*

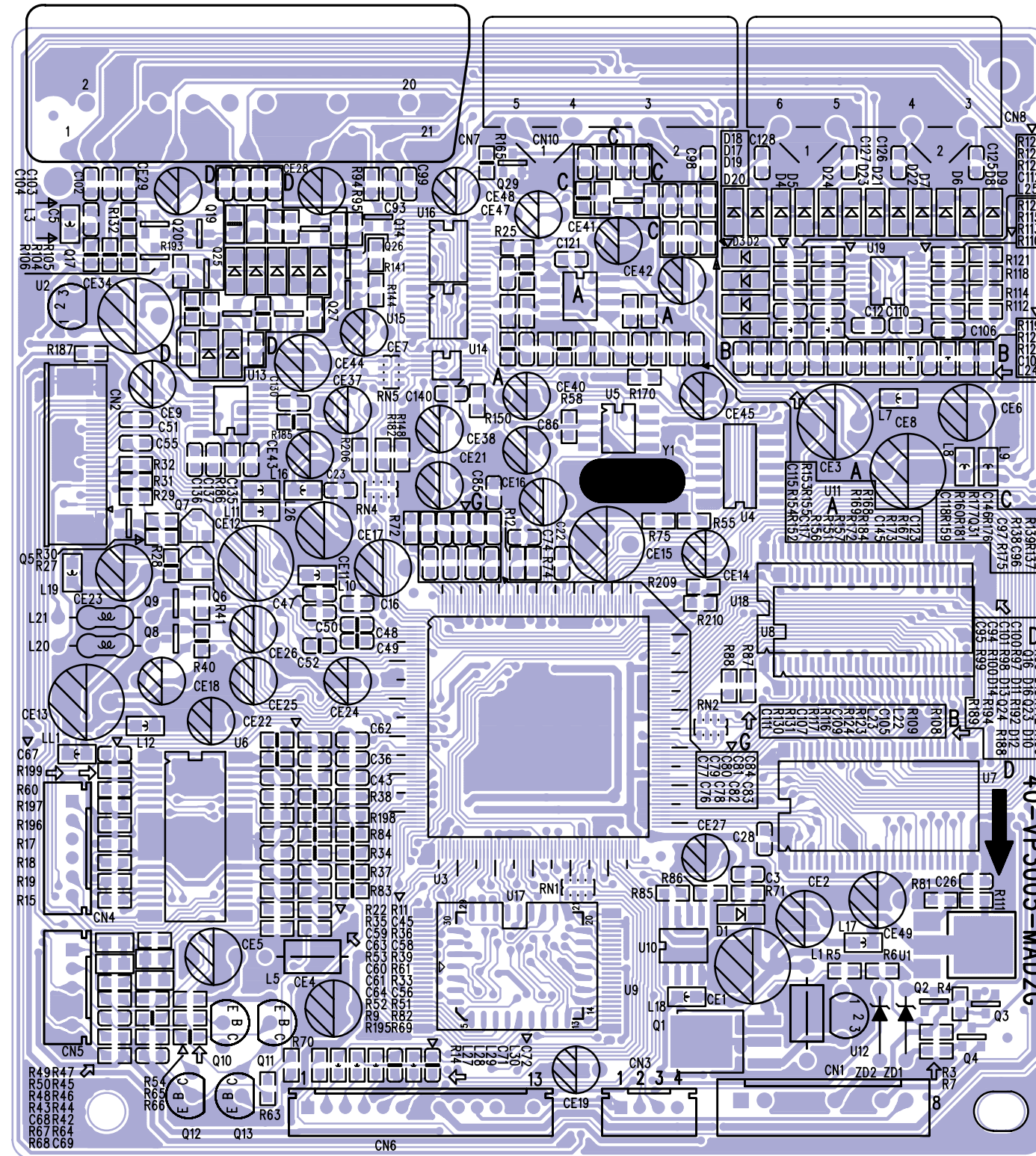
### 4. AUDIO FILTER & OUT PUT For DVP3010/XX

- [2] MD >> MD
- [2] ML >> ML
- [2] MC >> MC
- [1] -12V >> -12V
- [1] +12V >> +12V
- [1] DV33 >> DV33
- [1] +5V >> +5V
- [1,2,3,5] GND >> GND
- [2] ASDAT0 >> ASDAT0
- [2] ASPDF >> ASPDF
- [2] ACLK >> ACLK
- [2] ABCK >> ABCK
- [2] ALRCK >> ALRCK
- [2] MUTE\_DAC >> MUTE\_DAC
- [2] RESET# >> RESET#
- [4] A-L >> A-L
- [4] A-R >> A-R

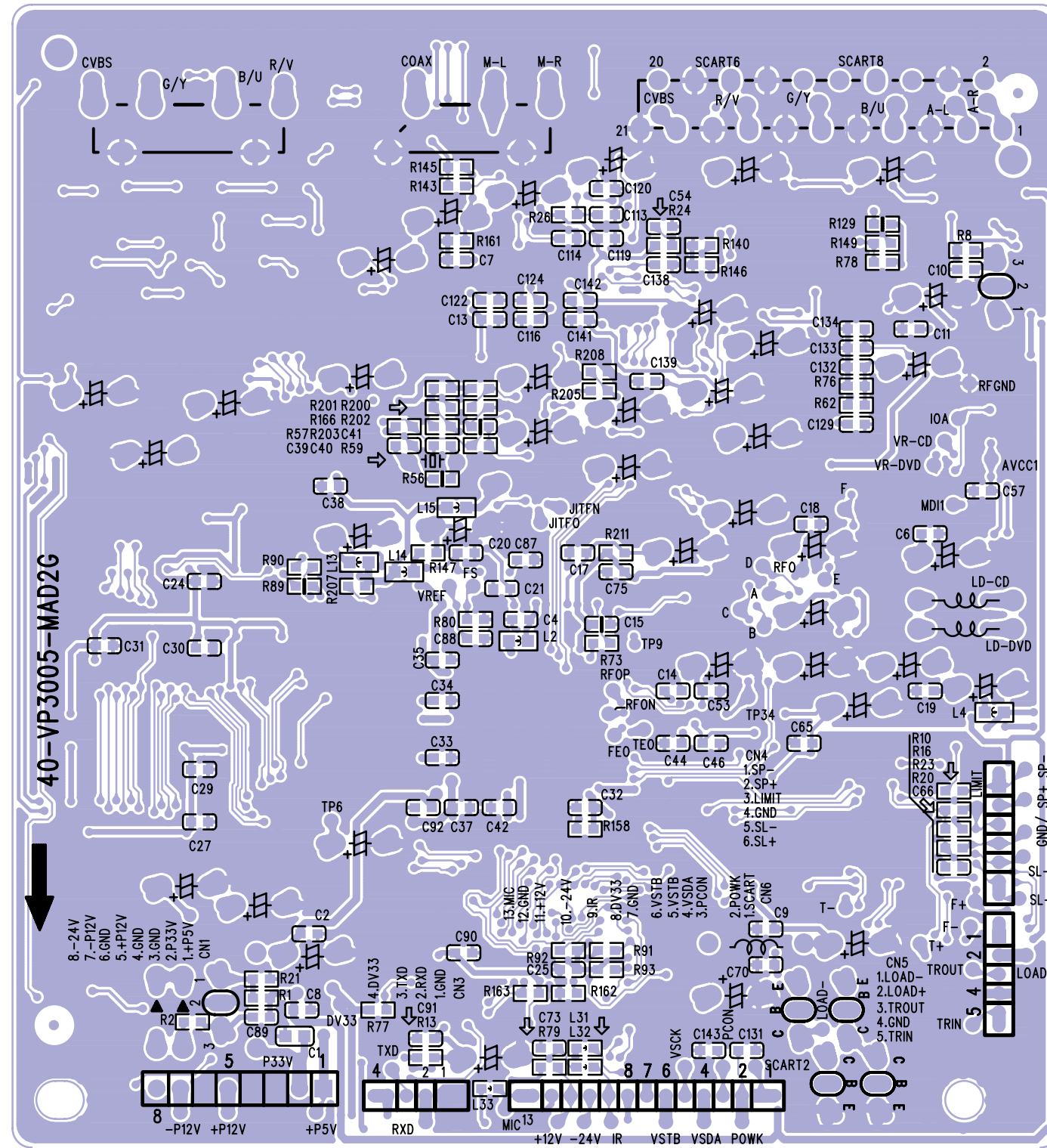


R120	D3	R205	D2	L31	C1
R123	A2	R206	D3	L32	C5
R124	A2	R207	C2	CE28	D1
R125	A2	R231	C4	CE29	E1
R126	A2	R232	C4	CE30	C1
R127	B2	R233	C4	CE31	A3
R128	B2	R234	C4	CE32	A3
R129	B2	R235	C4	CE33	A4
R130	B2	R236	C4	CE34	B4
R131	B3	R237	C4	CE35	A5
R132	B3	R238	C4	CE36	B4
R133	B3	R239	C5	CE46	D2
R134	C1	C112	D1	CE47	D3
R135	C1	C113	E1	CE48	D3
R136	C1	C114	D1	CE49	E2
R137	C1	C115	E1	CE50	E3
R138	C1	C116	E2	CE51	E3
R139	C1	C117	E2	CE52	C5
R142	C1	C118	A4	CE53	C5
R143	A4	C119	B4	CE54	C3
R144	B4	C120	A4	CE55	D3
R145	A4	C121	B4	Q19	A3
R146	B4	C122	A4	Q20	A3
R147	A5	C123	B4	Q21	B3
R148	B5	C124	A4	Q22	B3
R149	A4	C125	B4	Q23	B3
R150	B4	C126	A6	Q24	A5
R151	A4	C127	B6	Q25	B5
R152	B4	C140	D2	D10	A3
R153	A4	C141	D3	D11	A3
R154	B4	C142	D3	D12	A2
R155	A4	C143	D3	D13	A3
R156	B4	C144	D2	D14	B3
R157	A4	C145	D3	D15	B3
R158	B4	C146	E3	D16	B3
R159	A5	C147	E3	U18	C4
R160	B5	C148	E3	U9	C1
R161	A5	C149	C3	U10	D3
R162	B5	C158	D4	U11	E3
R163	A6	C159	C5	U12	C3
R164	B6	C160	C5	U13	A4
R166	D5	C162	C5	U14	C5
R169	B3	C163	C5	CN7	D2
R170	C3	C164	C5		
R173	E1	L27	D1		
R174	E2	L28	E1		
R175	E2	L30	C1		

### Mpeg Board Top Side



### Mpeg Board Bottom Side



**ELECTRICAL PARTS FOR MAIN BOARD****CAPACITORS**

C1	28-AC0105-ZFX	SMD. CAP 1 UF 16VDC +80%/-20%
C105	28-AB0470-JCX	CAP.SMD 47PF 50V +/-5% 0603
C106	28-AB0470-JCX	CAP.SMD 47PF 50V +/-5% 0603
C107	28-AB0470-JCX	CAP.SMD 47PF 50V +/-5% 0603
C108	28-AB0470-JCX	CAP.SMD 47PF 50V +/-5% 0603
C109	28-AB0470-JCX	CAP.SMD 47PF 50V +/-5% 0603
C110	28-AB0470-JCX	CAP.SMD 47PF 50V +/-5% 0603
C111	28-AB0470-JCX	CAP.SMD 47PF 50V +/-5% 0603
C112	28-AB0470-JCX	CAP.SMD 47PF 50V +/-5% 0603
C115	28-AB0181-JCX	SMD. CAP 180 pF 50V +/-5% C
C116	28-AB0272-KBX	CAP.SMD 2700PF 50V +/-10% 0603
C118	28-AB0102-KBX	SMD. CAP 1000 pF 50V +/-10% B
C12	28-AB0104-ZFX	SMD. CAP 0.1 UF 50V +80%-20% 0603
C121	28-AB0181-JCX	SMD. CAP 180 pF 50V +/-5% C
C122	19-AB0000-JTF	RES SMD 0 OHM 1/10W +/-5% 0603
C123	28-AB0272-KBX	CAP.SMD 2700PF 50V +/-10% 0603
C124	19-AB0000-JTF	RES SMD 0 OHM 1/10W +/-5% 0603
C13	28-AB0104-ZFX	SMD. CAP 0.1 UF 50V +80%-20% 0603
C14	28-AB0104-ZFX	SMD. CAP 0.1 UF 50V +80%-20% 0603
C146	28-AB0102-KBX	SMD. CAP 1000 pF 50V +/-10% B
C15	28-AB0103-ZFX	CAP.SMD 10NF 50V +80-20% 0603
C16	28-AB0222-KBX	CAP.SMD 2200PF 50V +/-10% 0603
C17	28-AB0104-ZFX	SMD. CAP 0.1 UF 50V +80%-20% 0603
C18	28-AB0104-ZFX	SMD. CAP 0.1 UF 50V +80%-20% 0603
C19	28-AB0104-ZFX	SMD. CAP 0.1 UF 50V +80%-20% 0603
C2	28-AB0104-ZFX	SMD. CAP 0.1 UF 50V +80%-20% 0603
C20	28-AB0104-ZFX	SMD. CAP 0.1 UF 50V +80%-20% 0603
C21	28-AB0104-ZFX	SMD. CAP 0.1 UF 50V +80%-20% 0603
C22	28-AB0104-ZFX	SMD. CAP 0.1 UF 50V +80%-20% 0603
C23	28-AB0104-ZFX	SMD. CAP 0.1 UF 50V +80%-20% 0603
C24	28-AB0104-ZFX	SMD. CAP 0.1 UF 50V +80%-20% 0603
C25	28-AB0104-ZFX	SMD. CAP 0.1 UF 50V +80%-20% 0603
C26	28-AB0104-ZFX	SMD. CAP 0.1 UF 50V +80%-20% 0603
C27	28-AB0104-ZFX	SMD. CAP 0.1 UF 50V +80%-20% 0603
C28	28-AB0104-ZFX	SMD. CAP 0.1 UF 50V +80%-20% 0603
C29	28-AB0104-ZFX	SMD. CAP 0.1 UF 50V +80%-20% 0603
C3	28-AB0104-ZFX	SMD. CAP 0.1 UF 50V +80%-20% 0603
C30	28-AB0104-ZFX	SMD. CAP 0.1 UF 50V +80%-20% 0603
C31	28-AB0104-ZFX	SMD. CAP 0.1 UF 50V +80%-20% 0603
C32	28-AB0104-ZFX	SMD. CAP 0.1 UF 50V +80%-20% 0603
C33	28-AB0104-ZFX	SMD. CAP 0.1 UF 50V +80%-20% 0603
C34	28-AB0104-ZFX	SMD. CAP 0.1 UF 50V +80%-20% 0603
C35	28-AB0104-ZFX	SMD. CAP 0.1 UF 50V +80%-20% 0603

**CAPACITORS**

C36	28-AB0104-ZFX	SMD. CAP 0.1 UF 50V +80%-20% 0603
C37	28-AB0104-ZFX	SMD. CAP 0.1 UF 50V +80%-20% 0603
C39	28-AB0220-JCX	CAP. SMD 22PF 50V +/-5% C
C4	28-AB0104-ZFX	SMD. CAP 0.1 UF 50V +80%-20% 0603
C40	28-AB0220-JCX	CAP. SMD 22PF 50V +/-5% C
C41	28-AB0150-JCX	CAP.SMD 15P 50V +/-5% 0603
C43	28-AB0222-KBX	CAP.SMD 2200PF 50V +/-10% 0603
C45	28-AB0222-KBX	CAP.SMD 2200PF 50V +/-10% 0603
C46	28-AB0104-ZFX	SMD. CAP 0.1 UF 50V +80%-20% 0603
C47	28-AC0105-ZFX	SMD. CAP 1 UF 16VDC +80%/-20%
C48	28-AC0105-ZFX	SMD. CAP 1 UF 16VDC +80%/-20%
C49	28-AC0105-ZFX	SMD. CAP 1 UF 16VDC +80%/-20%
C5	28-AB0104-ZFX	SMD. CAP 0.1 UF 50V +80%-20% 0603
C50	28-AC0105-ZFX	SMD. CAP 1 UF 16VDC +80%/-20%
C53	28-AB0104-ZFX	SMD. CAP 0.1 UF 50V +80%-20% 0603
C55	28-AB0104-ZFX	SMD. CAP 0.1 UF 50V +80%-20% 0603
C57	28-AB0104-ZFX	SMD. CAP 0.1 UF 50V +80%-20% 0603
C58	28-AB0331-JCX	SMD. CAP 330 pF 50V +/-5% 0603
C59	28-AB0331-JCX	SMD. CAP 330 pF 50V +/-5% 0603
C6	28-AB0104-ZFX	SMD. CAP 0.1 UF 50V +80%-20% 0603
C60	28-AB0104-ZFX	SMD. CAP 0.1 UF 50V +80%-20% 0603
C61	28-AB0153-ZFX	SMD. CAP 0.015 UF 50V 0603 F
C62	28-AB0104-ZFX	SMD. CAP 0.1 UF 50V +80%-20% 0603
C63	28-AB0151-JCX	SMD. CAP 150 pF 50V +/-5% C
C64	28-AB0104-ZFX	SMD. CAP 0.1 UF 50V +80%-20% 0603
C65	28-AB0104-ZFX	SMD. CAP 0.1 UF 50V +80%-20% 0603
C66	28-AB0104-ZFX	SMD. CAP 0.1 UF 50V +80%-20% 0603
C67	28-AB0151-JCX	SMD. CAP 150 pF 50V +/-5% C
C68	28-AB0104-ZFX	SMD. CAP 0.1 UF 50V +80%-20% 0603
C69	28-AB0391-JCX	CAP.SMD 390P 50V +/-5% 0603
C7	28-AB0104-ZFX	SMD. CAP 0.1 UF 50V +80%-20% 0603
C70	28-AB0391-JCX	CAP.SMD 390P 50V +/-5% 0603
C71	28-AB0470-JCX	CAP.SMD 47PF 50V +/-5% 0603
C72	28-AB0470-JCX	CAP.SMD 47PF 50V +/-5% 0603
C73	28-AB0470-JCX	CAP.SMD 47PF 50V +/-5% 0603
C74	28-AB0391-JCX	CAP.SMD 390P 50V +/-5% 0603
C75	28-AB0104-ZFX	SMD. CAP 0.1 UF 50V +80%-20% 0603
C76	28-AB0104-ZFX	SMD. CAP 0.1 UF 50V +80%-20% 0603
C77	28-AB0104-ZFX	SMD. CAP 0.1 UF 50V +80%-20% 0603
C78	28-AB0333-ZFX	CAP.SMD 0.033UF 50V 80-20 0603
C79	28-AB0104-ZFX	SMD. CAP 0.1 UF 50V +80%-20% 0603
C8	28-AB0104-ZFX	SMD. CAP 0.1 UF 50V +80%-20% 0603
C80	28-AB0102-KBX	SMD. CAP 1000 pF 50V +/-10% B

## CAPACITORS

C81	28-AB0200-JCX	CAP.SMD 20P 50V +/-5% 0603
C82	28-AB0104-ZFX	SMD. CAP 0.1 UF 50V +80%-20% 0603
C83	28-AB0473-ZFX	SMD CAP 0.047 UF 50V +80-20%
C84	28-AB0473-ZFX	SMD CAP 0.047 UF 50V +80-20%
C86	25-BCB100-M1X	CAP. ELEC 10 UF 16V +/-20%
C87	28-AB0152-KBX	SMD. CAP 1500 pF 50V +/-10% B
C88	28-AB0104-ZFX	SMD. CAP 0.1 UF 50V +80%-20% 0603
C9	28-AB0105-ZFX	SMD. CAP 0.1 UF 50V +80%-20% 0603
C90	28-AB0106-ZFX	SMD. CAP 0.1 UF 50V +80%-20% 0603
C91	28-AB0107-ZFX	SMD. CAP 0.1 UF 50V +80%-20% 0603
C92	28-AB0108-ZFX	SMD. CAP 0.1 UF 50V +80%-20% 0603
C96	28-AB0109-ZFX	SMD. CAP 0.1 UF 50V +80%-20% 0603
C97	28-AB0110-ZFX	SMD. CAP 100 pF 50VDC +/-5%
C98	28-AB0111-ZFX	SMD. CAP 100 pF 50VDC +/-5%
CE1	28-AB0112-ZFX	CAP. ELEC 220 UF 16V +/-20%
CE11	28-AB0113-ZFX	CAP. ELEC 100 UF 16V +/-20%
CE12	28-AB0114-ZFX	CAP. ELEC 220 UF 16V +/-20%
CE13	28-AB0115-ZFX	CAP. ELEC 220 UF 16V +/-20%
CE14	28-AB0116-ZFX	CAP. ELEC 10 UF 16V +/-20%
CE15	28-AB0117-ZFX	CAP. ELEC 470 UF 16V +/-20%
CE16	28-AB0118-ZFX	CAP. ELEC 10 UF 16V +/-20%
CE17	28-AB0119-ZFX	CAP. ELEC 220 UF 16V +/-20%
CE18	28-AB0120-ZFX	CAP. ELEC 47 UF 16V +/-20%
CE19	28-AB0121-ZFX	CAP. ELEC 47 UF 16V +/-20%
CE2	28-AB0122-ZFX	CAP. ELEC 100 UF 16V +/-20%
CE21	28-AB0123-ZFX	CAP. ELEC 10 UF 16V +/-20%
CE22	28-AB0124-ZFX	CAP. ELEC 47 UF 16V +/-20%
CE23	28-AB0125-ZFX	CAP. ELEC 100 UF 16V +/-20%
CE24	28-AB0126-ZFX	CAP. ELEC 47 UF 16V +/-20%
CE25	28-AB0127-ZFX	CAP. ELEC 47 UF 16V +/-20%
CE26	28-AB0128-ZFX	CAP. ELEC 47 UF 16V +/-20%
CE27	28-AB0129-ZFX	CAP. ELEC 100 UF 16V +/-20%
CE3	28-AB0130-ZFX	CAP. ELEC 220 UF 16V +/-20%
CE34	28-AB0131-ZFX	CAP. ELEC 470 UF 16V +/-20%
CE4	28-AB0132-ZFX	CAP. ELEC 100 UF 16V +/-20%
CE40	28-AB0133-ZFX	CAP. ELEC 3.3 UF 50V +/-20%
CE41	28-AB0134-ZFX	CAP. ELEC 10 UF 16V +/-20%
CE42	28-AB0135-ZFX	CAP. ELEC 10 UF 16V +/-20%
CE44	28-AB0136-ZFX	CAP. ELEC 100 UF 16V +/-20%
CE45	28-AB0137-ZFX	CAP. ELEC 3.3 UF 50V +/-20%
CE49	28-AB0138-ZFX	CAP. ELEC 47 UF 16V +/-20%
CE5	28-AB0139-ZFX	CAP. ELEC 220 UF 16V +/-20%
CE6	28-AB0140-ZFX	CAP. ELEC 47 UF 16V +/-20%
CE8	28-AB0141-ZFX	CAP. ELEC 220 UF 16V +/-20%
CE9	28-AB0142-ZFX	CAP. ELEC 10 UF 16V +/-20%

## RESISTANCE

R1	19-AB0222-JTF	RES SMD 2.2K OHM 1/10W 0603
R10	19-AB0154-JTF	SMD. RES 150K 1/10W +/-5% 0603
R108	19-AB0151-JTF	RES SMD 150 OHM 1/10W 0603
R11	19-AB0684-JTF	SMD. RES 680K 1/10W +/-5% 0603
R110	19-AB0000-JTF	RES SMD 0 OHM 1/10W +/-5% 0603
R111	19-AB0102-FTF	RES SMD 1K OHM 1/10W +/-1% 0603
R116	19-AB0151-JTF	RES SMD 150 OHM 1/10W 0603
R118	19-AB0000-JTF	RES SMD 0 OHM 1/10W +/-5% 0603
R12	19-AB0754-JTF	SMD. RES 750K 1/10W +/-5% 0603
R123	19-AB0151-JTF	RES SMD 150 OHM 1/10W 0603
R125	19-AB0000-JTF	RES SMD 0 OHM 1/10W +/-5% 0603
R13	19-AB0330-JTF	RES SMD 33 OHM 1/10W +/-5%0603
R130	19-AB0151-JTF	RES SMD 150 OHM 1/10W 0603
R137	19-BB0101-JTF	SMD. RES 100 OHM 1/10W +/-5%
R138	19-AB0750-JTF	SMD. RES 75 OHM 1/10W 0603
R139	19-AB0111-JTF	RES SMD 110 OHM 1/10W 0603
R143	19-AB0104-JTF	SMD. RES 100K OHM 1/10W 0603
R145	19-AB0104-JTF	SMD. RES 100K OHM 1/10W 0603
R150	19-AB0000-JTF	RES SMD 0 OHM 1/10W +/-5% 0603
R152	19-AB0103-JTF	RES SMD 10K OHM 1/10W 0603
R153	19-AB0303-JTF	RES SMD 30K OHM 1/10W 0603
R154	19-AB0332-JTF	SMD RES 3.3K OHM 1/10W 0603
R159	19-AB0471-JTF	SMD. RES 470 OHM 1/10W +/-5%
R161	19-AB0103-JTF	RES SMD 10K OHM 1/10W 0603
R165	19-AB0471-JTF	SMD. RES 470 OHM 1/10W +/-5%
R166	19-AB0000-JTF	RES SMD 0 OHM 1/10W +/-5% 0603
R167	19-AB0103-JTF	RES SMD 10K OHM 1/10W 0603
R168	19-AB0303-JTF	RES SMD 30K OHM 1/10W 0603
R169	19-AB0332-JTF	SMD RES 3.3K OHM 1/10W 0603
R17	19-AB0000-JTF	RES SMD 0 OHM 1/10W +/-5% 0603
R175	19-AB0103-JTF	RES SMD 10K OHM 1/10W 0603
R176	19-AB0471-JTF	SMD. RES 470 OHM 1/10W +/-5%
R18	19-AB0000-JTF	RES SMD 0 OHM 1/10W +/-5% 0603
R181	19-AB0471-JTF	SMD. RES 470 OHM 1/10W +/-5%
R182	19-AB0330-JTF	RES SMD 33 OHM 1/10W +/-5%0603
R188	19-AB0000-JTF	RES SMD 0 OHM 1/10W +/-5% 0603
R19	19-AB0109-JTF	RES SMD 1 OHM 1/10W +/-5%
R190	19-AB0223-JTF	SMD. RES 22K OHM 1/10W +/-5% 0603
R192	19-AB0332-JTF	SMD RES 3.3K OHM 1/10W 0603
R193	19-AB0331-JTF	RES. SMD 330 OHM 1/10W 0603
R194	19-AB0103-JTF	RES SMD 10K OHM 1/10W 0603
R196	19-AB0000-JTF	RES SMD 0 OHM 1/10W +/-5% 0603
R199	19-AB0203-JTF	RES. SMD 20K OHM 1/10W 0603
R2	19-AB0102-JTF	RES SMD 1K OHM 1/10W 0603
R207	19-AB0103-JTF	RES SMD 10K OHM 1/10W 0603



**RESISTANCE**

R209	19-AB0103-JTF	RES SMD 10K OHM 1/10W 0603
R21	19-AB0222-JTF	RES SMD 2.2K OHM 1/10W 0603
R211	19-AB0689-JTF	SMD. RES. 6.8 OHM 1/10W +/-5%
R22	19-AB0103-JTF	RES SMD 10K OHM 1/10W 0603
R23	19-AB0103-JTF	RES SMD 10K OHM 1/10W 0603
R26	19-AB0104-JTF	SMD. RES 100K OHM 1/10W 0603
R27	19-AB0104-JTF	SMD. RES 100K OHM 1/10W 0603
R28	19-AB0103-JTF	RES SMD 10K OHM 1/10W 0603
R29	19-AB0103-JTF	RES SMD 10K OHM 1/10W 0603
R3	19-AB0223-JTF	SMD. RES 22K OHM 1/10W +/-5% 0603
R30	19-AB0104-JTF	SMD. RES 100K OHM 1/10W 0603
R31	19-AB0000-JTF	RES SMD 0 OHM 1/10W +/-5% 0603
R32	19-AB0000-JTF	RES SMD 0 OHM 1/10W +/-5% 0603
R35	19-AB0000-JTF	RES SMD 0 OHM 1/10W +/-5% 0603
R36	19-AB0203-JTF	RES. SMD 20K OHM 1/10W 0603
R37	19-AB0183-JTF	SMD. RES 18K OHM 1/10W +/-5% 0603
R38	19-AB0153-JTF	RES SMD 15K OHM 1/10W 0603
R39	19-AB0103-JTF	RES SMD 10K OHM 1/10W 0603
R4	19-AB0222-JTF	RES SMD 2.2K OHM 1/10W 0603
R40	19-AB0479-JTF	SMD. RES 4.7 OHM 1/10W 0603
R41	19-AB0479-JTF	SMD. RES 4.7 OHM 1/10W 0603
R44	19-AB0000-JTF	RES SMD 0 OHM 1/10W +/-5% 0603
R45	19-BB0109-JTF	SMD. RES 1 OHM 1/10W +/-5% 0805
R46	19-BB0109-JTF	SMD. RES 1 OHM 1/10W +/-5% 0805
R48	19-AB0000-JTF	RES SMD 0 OHM 1/10W +/-5% 0603
R49	19-BB0109-JTF	SMD. RES 1 OHM 1/10W +/-5% 0805
R5	19-AB0103-JTF	RES SMD 10K OHM 1/10W 0603
R50	19-BB0109-JTF	SMD. RES 1 OHM 1/10W +/-5% 0805
R52	19-AB0000-JTF	RES SMD 0 OHM 1/10W +/-5% 0603
R53	19-AB0203-JTF	RES. SMD 20K OHM 1/10W 0603
R54	19-AB0000-JTF	RES SMD 0 OHM 1/10W +/-5% 0603
R55	19-AB0000-JTF	RES SMD 0 OHM 1/10W +/-5% 0603
R56	19-AB0104-JTF	SMD. RES 100K OHM 1/10W 0603
R57	19-AB0221-JTF	RES SMD 220 OHM 1/10W 0603
R59	19-AB0330-JTF	RES SMD 33 OHM 1/10W +/-5%0603
R6	19-AB0223-JTF	SMD. RES 22K OHM 1/10W +/-5% 0603
R60	19-AB0000-JTF	RES SMD 0 OHM 1/10W +/-5% 0603
R61	19-AB0203-JTF	RES. SMD 20K OHM 1/10W 0603
R63	19-AB0391-JTF	SMD RES 390 OHM 1/10W 0603
R64	19-AB0102-JTF	RES SMD 1K OHM 1/10W 0603
R65	19-AB0221-JTF	RES SMD 220 OHM 1/10W 0603
R66	19-AB0221-JTF	RES SMD 220 OHM 1/10W 0603
R67	19-AB0103-JTF	RES SMD 10K OHM 1/10W 0603
R68	19-AB0103-JTF	RES SMD 10K OHM 1/10W 0603
R69	19-AB0391-JTF	SMD RES 390 OHM 1/10W 0603

**RESISTANCE**

R7	19-AB0472-JTF	RES SMD 4.7K OHM 1/10W 0603
R70	19-AB0102-JTF	RES SMD 1K OHM 1/10W 0603
R71	19-AB0103-JTF	RES SMD 10K OHM 1/10W 0603
R72	19-AB0153-JTF	RES SMD 15K OHM 1/10W 0603
R73	19-AB0104-JTF	SMD. RES 100K OHM 1/10W 0603
R74	19-AB0000-JTF	RES SMD 0 OHM 1/10W +/-5% 0603
R75	19-AB0000-JTF	RES SMD 0 OHM 1/10W +/-5% 0603
R77	19-AB0472-JTF	RES SMD 4.7K OHM 1/10W 0603
R79	19-AB0100-JTF	RES SMD 10 OHM 1/10W +/-5%
R80	19-AB0751-JTF	SMD. RES 750 OHM 1/10W 0603
R81	19-AB0561-FTF	RES SMD 560 OHM 1/10W +/-1% 0603
R82	19-AB0684-JTF	SMD. RES 680K 1/10W +/-5% 0603
R83	19-AB0000-JTF	RES SMD 0 OHM 1/10W +/-5% 0603
R84	19-AB0103-JTF	RES SMD 10K OHM 1/10W 0603
R85	19-AB0681-JTF	SMD. RES. 680 OHM 1/10W 0603
R86	19-AB0681-JTF	SMD. RES. 680 OHM 1/10W 0603
R87	19-AB0330-JTF	RES SMD 33 OHM 1/10W +/-5%0603
R88	19-AB0330-JTF	RES SMD 33 OHM 1/10W +/-5%0603
R89	19-AB0330-JTF	RES SMD 33 OHM 1/10W +/-5%0603
R9	19-AB0154-JTF	SMD. RES 150K 1/10W +/-5% 0603
R90	19-AB0330-JTF	RES SMD 33 OHM 1/10W +/-5%0603
R92	19-AB0103-JTF	RES SMD 10K OHM 1/10W 0603
R93	19-AB0103-JTF	RES SMD 10K OHM 1/10W 0603
RN1	23-A08330-JBX	NETWORK RES. 33 OHM +/-5%
RN2	23-A08330-JBX	NETWORK RES. 33 OHM +/-5%
RN4	23-A08330-JBX	NETWORK RES. 33 OHM +/-5%

**CONNECTOR**

CN1	46-33079W-08X	PIN BASE *8 TJC3-8A
CN10	47-RCA149-XX0	RCA SOCKET AV-8.4-4W-041
CN2	46-37146W-24X	PIN BASE FPC 0.5-SMT-24PW
CN3	46-35199W-04X	CONN.PH-4A 4PIN PITCH=2.0MM
CN5	46-35199W-05X	CONN.PH-5A 5PIN PITCH=2.0MM
CN8	47-RCA150-XX0	RCA SOCKET AV-8.4-4W-042

**IC**

U1	13-AMS111-70B	IC AMS1117(SOT-223)
U10	13-00M24C-08B	IC EEPROM 8K M24C08
U11	13-NJM455-8VB	IC NJM4558V (SMD PKG)
U12	13-AMC431-LPT	IC AMC431LP
U17	13-A2904L-70B	A29L040L-70 4M 3.3V FLASH
U3	13-1389QE-D0B	IC MT1389QE/D
U6	13-BA5954-FPB	IC BA5954FP



**TRANSISTOR**

Q1	12-A03055-0BX	N MOSFET A03055
Q10	11-CG9012-HBF	TRANSISTOR 3CG9012H (PNP)
Q11	11-CG9012-HBF	TRANSISTOR 3CG9012H (PNP)
Q12	11-DG9013-HBF	TRANSISTOR 3DG9013H (NPN)
Q13	11-DG9013-HBF	TRANSISTOR 3DG9013H (NPN)
Q2	12-BT8550-CBX	SMD. TRANSISTOR MMBT8550CLT1
Q23	12-BT3906-0BF	SMD. TRANSISTOR MMBT3906LT1(PNP)
Q24	12-BT3906-0BF	SMD. TRANSISTOR MMBT3906LT1(PNP)
Q25	12-BT3906-0BF	SMD. TRANSISTOR MMBT3906LT1(PNP)
Q29	12-BT3904-0BF	SMD. TRANSISTOR MMBT3904LT1(NPN)
Q3	12-BT3904-0BF	SMD. TRANSISTOR MMBT3904LT1(NPN)
Q31	12-BT3904-0BF	SMD. TRANSISTOR MMBT3904LT1(NPN)
Q4	12-BT3904-0BF	SMD. TRANSISTOR MMBT3904LT1(NPN)
Q5	12-BT3904-0BF	SMD. TRANSISTOR MMBT3904LT1(NPN)
Q6	12-SK3018-0BX	TRANSISTOR 2SK3018T106
Q7	12-SK3018-0BX	TRANSISTOR 2SK3018T106
Q8	12-BT3906-0BF	SMD. TRANSISTOR MMBT3906LT1(PNP)
Q9	12-BT3906-0BF	SMD. TRANSISTOR MMBT3906LT1(PNP)

**INDUCTANCE**

L1	35-339740-008	FERR BEAD BF40TA-3.5X6X1
L10	33-ELN501-NTF	CHIP BEAD 500 OHM +/-25%
L11	33-ELN501-NTF	CHIP BEAD 500 OHM +/-25%
L12	33-ELN501-NTF	CHIP BEAD 500 OHM +/-25%
L13	33-ELN501-NTF	CHIP BEAD 500 OHM +/-25%
L14	33-ELN501-NTF	CHIP BEAD 500 OHM +/-25%
L15	33-ELN501-NTF	CHIP BEAD 500 OHM +/-25%
L16	33-ELN501-NTF	CHIP BEAD 500 OHM +/-25%
L17	33-ELN501-NTF	CHIP BEAD 500 OHM +/-25%
L18	33-ELN501-NTF	CHIP BEAD 500 OHM +/-25%
L19	33-ELN501-NTF	CHIP BEAD 500 OHM +/-25%
L2	33-ELN501-NTF	CHIP BEAD 500 OHM +/-25%
L20	34-A100K0-1IX	COIL CHOKE 10 UH +/-10%
L21	34-A100K0-1IX	COIL CHOKE 10 UH +/-10%
L22	33-KLL189-KTF	SMD. COIL 1.8 UH +/-10% 0603
L23	33-KLL189-KTF	SMD. COIL 1.8 UH +/-10% 0603
L24	33-KLL189-KTF	SMD. COIL 1.8 UH +/-10% 0603
L25	33-KLL189-KTF	SMD. COIL 1.8 UH +/-10% 0603
L27	33-KLN501-NTF	BEAD BGH0603B501LT 500 OHM
L28	33-KLN501-NTF	BEAD BGH0603B501LT 500 OHM
L29	33-KLN501-NTF	BEAD BGH0603B501LT 500 OHM
L3	33-ELN501-NTF	CHIP BEAD 500 OHM +/-25%
L30	33-KLN501-NTF	BEAD BGH0603B501LT 500 OHM
L31	33-KLN501-NTF	BEAD BGH0603B501LT 500 OHM
L32	33-KLN501-NTF	BEAD BGH0603B501LT 500 OHM

**INDUCTANCE**

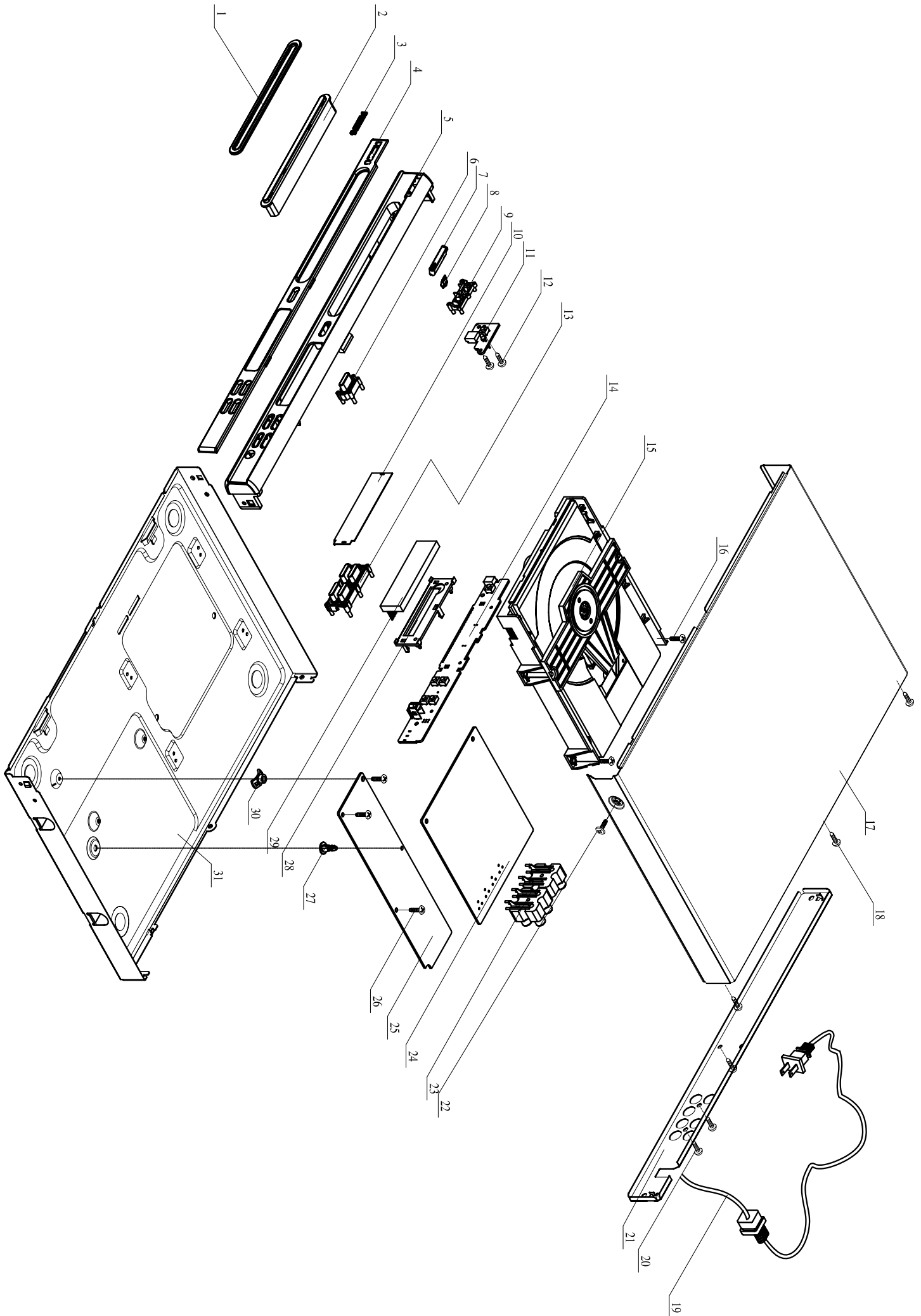
L33	33-KLN501-NTF	BEAD BGH0603B501LT 500 OHM
L4	33-ELN501-NTF	CHIP BEAD 500 OHM +/-25%
L5	35-339740-008	FERR BEAD BF40TA-3.5X6X1
L7	33-ELN501-NTF	CHIP BEAD 500 OHM +/-25%
L8	33-ELN501-NTF	CHIP BEAD 500 OHM +/-25%
L9	33-ELN501-NTF	CHIP BEAD 500 OHM +/-25%

**DIODE**

D1	09-004148-ATX	SMD DIODE 4148
D10	09-004148-ATX	SMD DIODE 4148
D11	09-004148-ATX	SMD DIODE 4148
D12	09-004148-ATX	SMD DIODE 4148
D13	09-004148-ATX	SMD DIODE 4148
D14	09-004148-ATX	SMD DIODE 4148
D15	09-004148-ATX	SMD DIODE 4148
D16	09-004148-ATX	SMD DIODE 4148
D2	09-004148-ATX	SMD DIODE 4148
D3	09-004148-ATX	SMD DIODE 4148
D4	09-004148-ATX	SMD DIODE 4148
D5	09-004148-ATX	SMD DIODE 4148
D6	09-004148-ATX	SMD DIODE 4148
D7	09-004148-ATX	SMD DIODE 4148
D8	09-004148-ATX	SMD DIODE 4148
D9	09-004148-ATX	SMD DIODE 4148

**NOTE: ONLY THE PARTS MENTIONED IN THIS LIST ARE  
NORMAL SERVICES SPARE PARTS**

# Mechanical Exploded view



## ENCASING &amp; ACCESSORIES PARTS LIST

No.	Part No.	Part Name	Qty
1	56-3000L3-0HC	Door len	1
2	56-3000D1-0HC	Front door	1
3	67-L95312-0A0B1	LOGO	1
4	56-3005L1-0HC	Display lens	1
5	56-3005F3-0HN	Front panel	1
6	56-3005K2-0HN	Open/close button	1
7	56-3005K1-0HN	Standby button	1
8	56-3000L1-0HC	Standby light	1
9	56-3000H1-0HN	Standby button bracket	1
10	58-953240-0HI	INLAY(ESD cut sheet)	1
11	08-VP3005-SWY	ASS'Y -Switch BD	1
13	02-3005K3-XX0	Function button	1
14	08-VP3005-FBY	ASS'Y-FRONT CTL BD	1
15	08-LOADER-012	Loader	1
17	67-3000T2-0E0B1	TOP COVER	1
19	51-DC0165-0ANA4	POWER CORD L=1650MM	1
21	67-3000B2-0E0B1	BACK PLATE	1
23	47-RCA149-XX0	RCA SOCKET AV-8.4-4W-041	1
	47-RCA150-XX0	RCA SOCKET AV-8.4-4W-042	1
24	08-VP3005-MA4	ASS'Y - Mpeg BD	1
25	08-VP3000-PWY	ASS'Y - Power BD	1
27	62-954020-0HF	SUPPORT POST	1
28	62-3005H1-0HN	SUPPORTER	1
29	14-VFD520-DX0	VFD VFD20-0707FN	1
30	62-953340-2HD	BRACKET	1

## SCREW LIST

No.	Part No.	Part Name	Qty
12	63-B26080-BF4	S/T SCREW B 2.6 X 8 BF	2
16	64-B30070-304	MACHINE SCREW	2
18	64-B30060-307	TRIANGLE M/C SCREW 3*6.0	1
20	63-B30080-BF7	S/T SCREW B 3 X 8 B	2
22	64-W30060-307	M/C SCREW W3X6	2
26	64-B30060-304	TRIANGLE M/C SCREW B 3 X 6	2

**Service Engineer Remarks:**