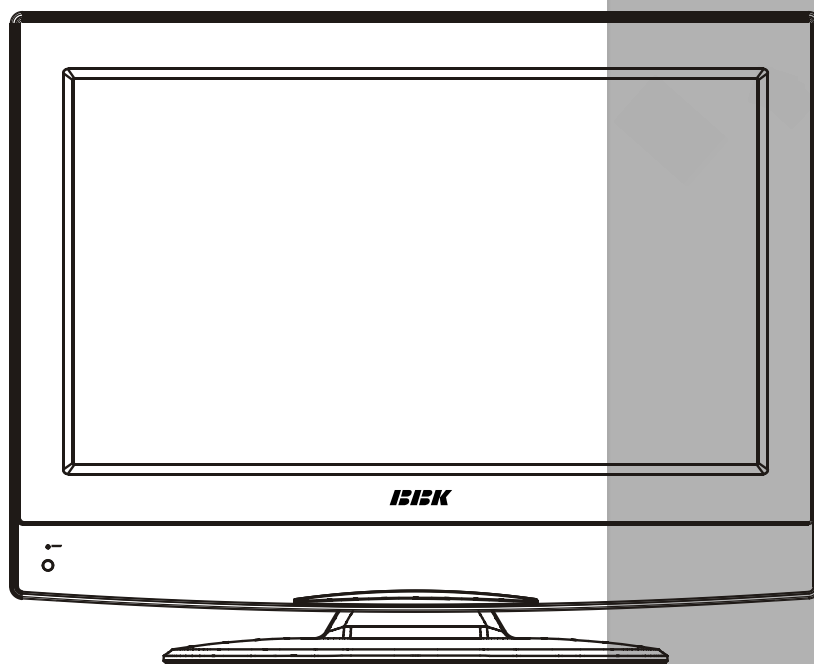


IBBK

LD2216K(RU)

Service Manual



**Model version:V1B1V2.00/2.10
V1B2V2.00/2.10**

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Chapter One About Maintenance

1.1 Safety precautions

1.1.1 Power supply

When maintenance personnel are repairing DVD TV, he should pay special attention to the power with 220V 800V AC and 330V DC which will cause hurt and damage to persons!

1.1.2 Precautions for antistatic

Movement and friction will both bring static electricity which causes serious damages to integrated IC. Though static charge is little, when a limited quantity of electric charge is added to large scale integrated IC, as the capacitance is very small in the meantime, now the integrated IC is very much easy to be struck through by static electricity or the performance will decrease. Thus static electricity prevention is of extraordinary importance. The following are several measures to prevent static electricity:

1. Use a piece of electric conduction metal with the length of about 2 metres to insert into the earth, and Fetch the lead wire from the top of the surplus metal and connect to the required static electricity device. The length and depth of the metal embedded under the earth should be determined according to the wettability of the local soil. For humid places, it may be shorter, and longer and deeper for dry places. If possible, it can be distributed and layed in terms of “#” shape.
2. On operating table-board, the antistatic table cushion should be covered and grounded.
3. All devices and equipments should be placed on the antistatic table cushion and grounded.
4. Maintenance personnel should wear antistatic wrist ring which should be grounded.
5. Places around the operating position should also be covered with electric conduction cushion or Painted with antistatic paint.

1.1.3 Precautions for display screen

1. Display screen is breakable article, so please protect carefully when carrying and prevent fingers or hard objects striking the screen to damage structure of the screen.
2. When cleaning screen, do not use organic chemicals. You should use cloth and use small amount of special cleaning liquid in places difficult to clean.

1.1.4 Precautions for laser head

1. Do not stare at laser head directly, for laser emission will occur when laser head is working, which will Hurt your eyes!
2. Do not use wiping water or alcohol to clean laser head, and you may use cotton swab.

1.1.5 About placement position

1. Never place TV in positions with high temperature and humidity.
2. Avoid placing near high magnetic fields, such as loudspeaker or magnet.
3. Positions for placement should be stable and secure.

1.2 Maintenance method

1.2.1 Electric resistance method

Set the multimeter in resistance position and test whether the numerical value of resistance of each point in the circuit has difference from the normal value to judge the trouble spot. But in the circuit the tested numerical value of resistance is not accurate, and the tested numerical value of integrated IC's pins can only be used for reference, so the elements should be broken down for test.

1.2.2 Voltage method

Voltage method is relatively convenient, quick and accurate. Set the multimeter in voltage position and test power supply voltage of the player and voltage of a certain point to judge the trouble spot according to the tested voltage variation.

1.2.3 Current method

Set the multimeter in current position and test current of the player of a certain point to judge the trouble spot. But when testing in current method, the multimeter should be series connected in the circuit, which makes this method too trivial and troublesome, so it is less frequently used in reality.

1.2.4 Element substitution method

When some elements cannot be judged good or bad, substitution method may be adopted directly.

1.2.5 Cutting method

Cutting method should be combined with electric resistance method and voltage method to use. This method is mainly used in phenomena of short circuit and current leakage of the circuit. When cutting the input terminal voltage of a certain level, if voltage of the player rises again, it means that the trouble lies in this level.

1.2.6 Visualized method

Directly view whether abnormalities of collision, lack of element, joint welding, shedding welding, rosin joint, copper foil turning up, lead wire disconnection and elements burning up among pins of Elements appear. Check power supply of the machine and then use hands to touch the casing of part of elements and check whether they are hot to judge the trouble spot. You should pay more attention when using this method to check in high voltage parts.

1.2.7 Comparison method

A same good PC board is usually used to test the correct voltage and waveform. Compared these data with those tested through fault PC board, the cause of troubles may be found.

Through the above maintenance method, theoretical knowledge and maintenance experience, all difficulties and troubles will be readily solved.

1.3 Required device for maintenance

- ◆ Audio Generator
- ◆ Digital oscillograph ($\geq 100\text{MHE}$)
- ◆ SMD rework station
- ◆ Multimeter
- ◆ Soldering iron
- ◆ Pointed-month pincers
- ◆ Cutting nippers
- ◆ Forceps
- ◆ Electric screw driver
- ◆ Terminals connecting cord
- ◆ Headphone
- ◆ Microphone

Chapter Two

Functions and Operation Instructions

2.1 Section One TV SEGMENT

2.1.1 Features

Technical Features

- #High quality color TFT panel
- #Maximum resolution 1366x768 for LD2216K.
- #Built-in DVD player with Slot-in mechanism
- #Multisystem TV tuner with NICAM decoding
- #Built-in stereo audio system
- #USB port to playback compatible files stored on flash memory of external devices
- #Composite video ,audio input
- #Component, RGB/SCART and VGA video inputs
- #Integrated HDMI/HDCP compliant receiver
- #Digital coaxial output for multi-channel sound playback
- #Headphones output
- #Universal holder for furniture or wall fixation with 270° rotation angle

TV Channels Receiving and External Signal Playback

- #Automatic and fine tuning functions with 100 channels memory
- #Adjustable brightness, contrast, saturation, hue and 4 preset image settings
- #Tone and sound balance adjustment and 4 preset audio settings

Disc playback mode

- #Digital video playback: DVD-Video, Super VCD, VCD compatibility
- #MPEG-4 standard support
- #Digital audio playback: CD-DA, and HDCD WMA compatibility
- #Digital graphic albums playback: Kodak Picture CD and JPEG
- #Compatible disc types: CD-R/CD-RW, DVD-R,/DVD-RW, DVD+R/DVD+RW
- #Russia, CIs and Baltic States adaptation interface and filenames ID3-tags and CD-Text support simplifies device operation
- #"Q-Play" function provides direct playback and allows to skip commercial that is not possible to rewind
- #"Browser" function provides easy access to playback control
- #Automatic screensaver function
- #Parental control function to protect children from watching inappropriate discs
- #Super wide range of operating power supplies(~100-240V) automatic short circuit protection

PC monitor mode

- #Wide resolutions range
- #RGB setting and 4 presets of color temperature
- #Tone and sound balance adjustment and 4 preset audio settings
- #External audio signal playback.

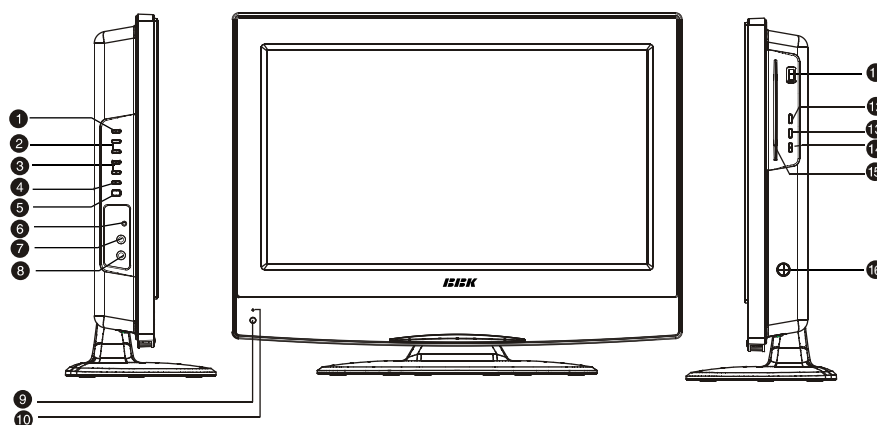
2.1.2 Set list

LCD TV.....	1pcs
Remote Control	1pcs
AAA Battery	2pcs
RCA-RCA cord	1pcs
2XRCA-2XRCA cord	1pcs
Power cable	1pcs
Microphone.....	2pcs
Microphone cable	2pcs
User manual	1pcs
Warranty Card	1pcs
Album with track list	1pcs

2.1.3 CONTROLS AND FUNCTIONS

(1) Panel controls and indication

For LD2216k



Left panel

- ① SETUP button**
Press to switch to setup mode
- ② VOL+/-button**
Press to adjust the volume.
- ③ CH+/-button**
Press to switch between channels/to choose menu item.
- ④ SOURCE button**
Press to choose the playback mode.
- ⑤ STANDBY button**
Press to switch on the device/into standby mode.
- ⑥ Headphones output**
- ⑦ Microphone input 1**
- ⑧ Microphone input 2**

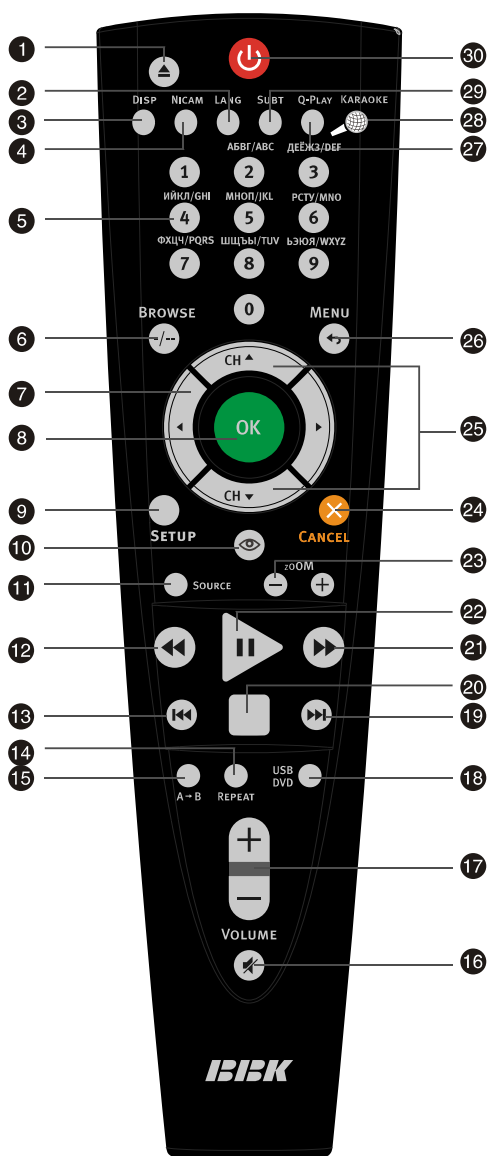
Front panel

- ⑨ Remote control sensor**
- ⑩ Power supply indicator**

Right panel

- ⑪ USB port**
- ⑫ PLAY/PAUSE button**
Press to playback/pause.
- ⑬ STOP button**
Press to stop the playback.
- ⑭ EJECT button**
Press to open/close the disc tray.
- ⑮ Disc tray**
- ⑯ POWER button**
Turn on/off the power.

(2) Remote control general view

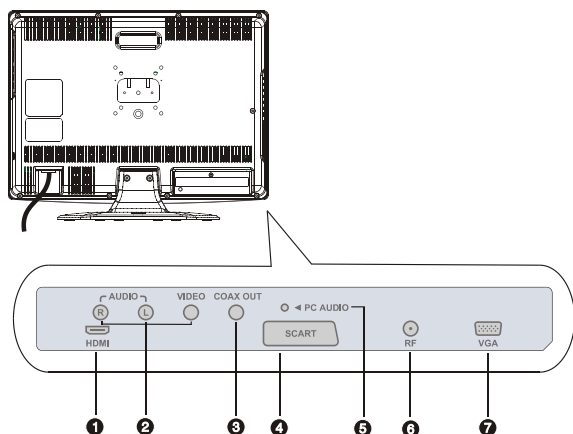


- 1 EJECT button**
Press to open/close the disc tray.
- 2 LANG button**
Press to change language.
- 3 DISP button**
Press to display the disc information.
- 4 NICAM button**
Press to choose audio mode.
- 5 Numeric buttons**
- 6 BROWSE button**
Press to turn on/off the browser function.
- 7 CURSOR buttons (UP/ DOWN/ LEFT /RIGHT)**
- 8 OK button**
- 9 SETUP button**
Press to switch to setup mode.
- 10 Button**
Press to turn on/off the "Virtual Keyboard" function.
- 11 SOURCE button**
Press to change the TV /DVD /AV/ SCART/ HDMI/VGA/ mode.
- 12 Button**
Press to start rewind/rewind scanning.
- 13 Button**
Press to skip backward.
- 14 REPEAT button**
Press to repeat.
- 15 A-B button**
Press to repeat the selected section.
- 16 Button**
Press to turn on/off the sound.
- 17 VOLUME+/-button**
Press to adjust the volume.
- 18 USB/DVD button**
Press to select USB/DVD mode.
- 19 Button**
Press to skip forward.
- 20 Button**
Press to stop the playback.
- 21 Button**
Press to forward scanning.
- 22 Button**
Press to playback/pause.
- 23 ZOOM+/-button**
Press to zoom in/out.
- 24 CANCEL button**
Press to go one level back/cancel current operation.
- 25 CH button**
Press to switch between channels /to choose menu item.
- 26 MENU / button**
DVD disk menu/PBC function/Press to return to the previous channel.
- 27 Q-PLAY button**
Press to turn the Q-PLAY mode on.
- 28 KARAOKE button**
Press to set karaoke function..
- 29 SUBT button**
Press to change the subtitles language.
- 30 Button**
Press to switch on the device/into standby mode.

2.1.4 CONNECTION AND STARTING

(1)Switching interfaces

For LD2216k



- ❶ **HDMI IN**
- ❷ **AUDIO VIDEO IN**
Used for external signal source connection
- ❸ **COAXIAL OUT**
- ❹ **SCART socket**
Meant for multi-channel sound playback.
- ❺ **PC AUDIO IN**
Meant for external audio video signal source connection. There is no need to use additional audiocord.
- ❻ **PC AUDIO IN**
Meant for PC stereo audio output connection.
- ❼ **RF input**
- ❼ **Meant for antenna connection.**
- ❼ **VGA port**
Meant for PC connection.

2.1.5 TV MODE

This LCD TV can store up to 100 channels and enables to scan channels thought automatic, manual and fine tuning scanning mode. Built-in TV tuner supports stereo audio playback in NICAM system.

(1) Adjusted channels selection

- #Press +CH-buttons on the left panel or CH▲/▼ buttons on the remote control each time, when you want to change a channel.
- #Use numeric buttons to enter the number of the channel.
- #Press  button to return to the previous channel.

(2) Default picture settings

selection

- #You may select one of the default picture settings:
USER, STANDARD, DYNAMIC and SOFT.
- #You may adjust necessary parameters in the device menu.
- #Turn to PICTURE item on this page for details.



(3) Default sound settings

selection

- #You may select one of the default sound settings:
USER, MUSIC, FILM and NEWS.
- #You may adjust necessary parameters in the device menu.
- #Turn to SOUND item on this page for details.



(4)Accompanying sound type

- #Only some of the TV channels have stereo accompanying sound in NICAM system.
- #Press NICAM button to select accompanying sound.

(5) TV settings

- #Press SETUP button to display the menu.
- #Use cursor buttons on the remote control or +CH-buttons on the left panel to select the item. Use ◀/▶ buttons to adjust selected parameter. Use OK button for confirmation. Press SETUP button again to return to the main menu or to exit TV SETUP.



(6) Picture

- #Select PICTURE item to adjust picture parameters.
- #You may adjust BRIGHTNESS, CONTRAST, SATURATION, TINT, SHARPNESS and COLOR TEMP.

NOTE:

You can't adjust TINT while watching TV channels.

**(7) Sound**

#Select SOUND item to adjust sound parameters.

#You may adjust BALANCE, BASS, TREBLE and NICAM.

ATTENTION! We recommend watching TV at half of maximum level of the sound. Continuous listening at higher level may lead to hearing reduction.

**(8) TV setup**

Select TV SETUP item to adjust channels. You may select CHANNEL, COLOR SYSTEM, SOUND SYSTEM, FINE TUNING, AUTO SEARCH, MANUAL SEARCH and CHANNEL EDIT.

#CHANNEL item enables to select the number of adjustable channel.

#COLOR SYSTEM item can be changed between: AUTO, PAL and SECAM. We recommend to set this item to AUTO.

#SOUND SYSTEM item can be changed between B/G, D/K, and L.

#FINE TUNING item enables to adjust the channel frequency accurately.

#MANUAL SEARCH item enables to scan channels manually.

#AUTO SEARCH item enables to adjust channel setting automatically.

#CHANNEL EDIT submenu enables to select, skip and swap, the channel.

#CHANNEL parameter enables to select current channel.

#SKIP function enables to make current channel inaccessible while using CH+/- button to browse channels.

#SWAP function enables to select the channel number to swap with current channel.

#SAVE parameter enables to confirm the swap function.

**(9) OSD setup**

You may select LANGUAGE, OSD H-POSITION, OSD V-POSITION, OSD DURATION and TRANSPARENCY.

#LANGUAGE item enables to select the OSD language.

#OSD H-POSITION item enables to adjust OSD horizontal position.

#OSD V-POSITION item enables to adjust OSD vertical position.

#OSD DURATION item enables to adjust the main menu display duration time.

#TRANSPARENCY item enables to adjust transparency of OSD.

**(10) Function**

You may select SCALE, NOISE REDUCE, SLEEP and RESET.

#SCALE item enables to switch the video format between "FULL", "ZOOM1", "ZOOM2", "NORMAL" and "PANORAMA". Between "16:9" and "4:3".

#NOISE REDUCE item enables to reduce the noise of TV image.

#SLEEP item enables to set the sleep time.

#RESET item enables to reset all values to default.



(11) Video settings

#Press SETUP button to display interrelated setting menu.

#The setting menu in the external video signal playback mode is much the same as that of TV MODE. It is not repeated here. You can refer to page 10 and 11.

NOTE

In external video signal playback mode TV SETUP item is inaccessible.

2.1.6 PC MONITOR MODE

(1)Picture

Select PICTURE item to adjust picture parameters.

You may adjust BRIGHTNESS, CONTRAST, COLOR TEMPERARURE and AUTO CONFIG.

#Select COLOR TEMPERATURE subment to adjust color temperature of the picture.

#COLOR TEMP. Item can be set to :USER, NORMAL, WARM and COOL.

#RED, GREEN and BLUE items enables to adjust RGB value of color temperature.

#Use AUTOCONFIG to configure display parameters automatically.



NOTE:

The picture can be displayed incorrectly while adjusting.



(2)Sound

Select SOUND item to adjust sound parameters.

You may adjust BALANCE, BASS, TREBLE and NICAM.



(3)Monitor setup

Select MONITOR SETUP item to adjust such parameters as H-POSITION, V-POSITION, FREQUENCY and PHASE.



(4)OSD setup

Select OSD SETUP item to adjust LANGUAGE, OSD H-POSITION, OSD V-POSITION, OSD DURATION, TRANSPARENCY.



(5)Function

You may select SCALE, NOISE REDUCE, SLEEP and RESET.

#SCALE item enables to switch the video format between "FULL", "CENTER".

#NOISE REDUCE item enables to reduce the noise of TV image.

#SLEEP item enables to set the sleep time.

#RESET item enables to reset all values to default.

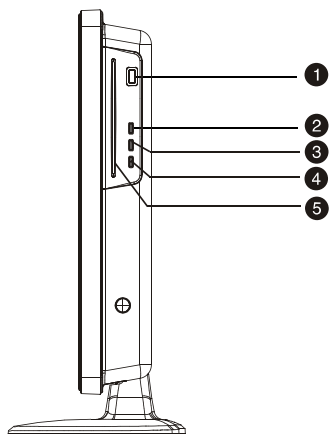


2.2 Section Two DVD SEGMENT

2.2.1 Controls and functions

Front panel controls

For LD2216K



1 USB port

2 PLAY/PAUSE button

Press to playback/pause.

3 STOP button

Press to stop the playback.

4 EJECT button

Press to open/close the disc tray.

5 Disc tray

Note:

This model does not support the 8cm disc. Do not insert that type of disc into this device to avoid disc jam.

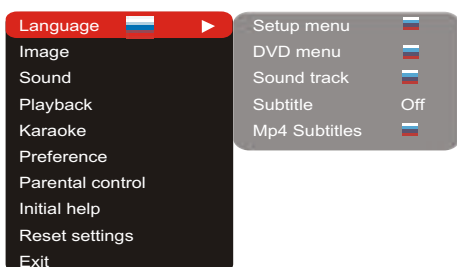
2.2.2 FUNCTION SETTINGS

(1) Function selection and change

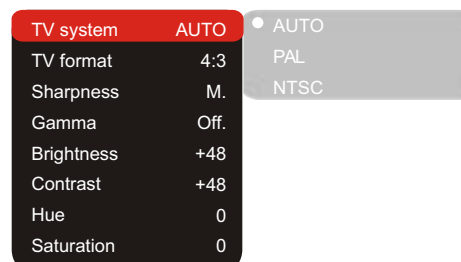
#Press the SETUP key to show the setup menu.

You will see the following image on the screen, as show on the figure:

#Select the desired menu item using the UP/DOWN buttons button; press the OK key for confirmation.



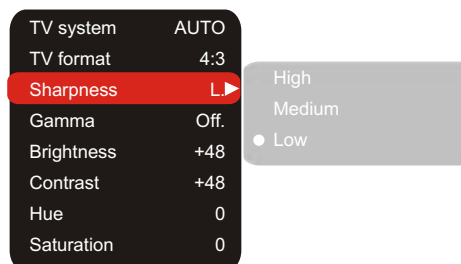
1.For example, if you wish to change the image settings, you have to select the image item and press the OK or RIGHT key.



2.Using the UP/DOWN buttons, select the desired item and press OK or RIGHT button. For example, select the Sharpness item. Settings will appear on the screen. Then select the desired sharpness level and press OK for confirmation.

3. Press LEFT for exit to previous menu level.

4. Press SETUP to exit setup menu.



(2) Language settings

1. Setup menu: interface language set-up

#Options: Russian, English, Ukrainian, Romanian.

#Default option: English.



2.DVD menu: selection of disc menu language

3. Sound: selection of translation language

#Disc menu/translation language options:

Russian, English, Estonian, Lithuanian, Kazakh, Romanian, Belarusian, Ukrainian, Chinese, Others.

#Default menu/translation language option: English.

#Selection of other languages: select the OTHERS item using the wheel and press OK. Enter the language code using the numeric buttons and press OK.

#If the language you selected is not recorded on the DVD disc, another available language will be used.

4. Subtitles: selection of subtitles language

#Options: Off, Russian, English, Estonian, Latvian, Kazakh, Romanian, Belarusian, Ukrainian, and Chinese and Others.

#Default option: off.

#Selection of other languages: select the OTHERS item using the wheel and press OK. Enter the language code using numeric buttons and press OK.

#If the language you selected is not recorded on the DVD disc, another available language will be displayed.

5.MP4 Subtitles: selection of subtitles language

#Options: Russian, English, Ukrainian and Romanian.

#Default option: English.

(3) Image settings menu

1. TV system: TV system selection

#Options: Auto, PAL, NTSC.

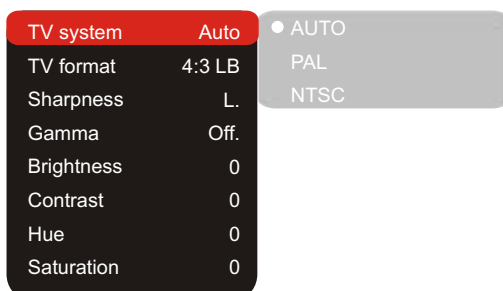
#Default option: PAL.

2.TV Format: image ratio settings

#Options: 4:3 pan& scan, 4:3 letterbox and 16:9 TV.

#Default option: 4:3 LB.

#Some discs are recorded with support of only one ratio. The selected ratio must comply with the TV screen.



3.Sharpness: image sharpness adjustment

#Options: High, Medium, Low.

#Default option: Medium.

4. Gamma: adjustment of image color temperature

#Options: High, Medium, Low, Off.

#Default option: Off.

5.Brightness: adjustment of image brightness

6.contrast: adjustment of image contrast

7.Hues: adjustment of image hues

8.Saturation: adjustment of image saturation

Adjustment of image brightness, contrast, hues and saturation:

#Select the desired item of the image adjustment section using the UP/DOWN buttons. Press OK or RIGHT key to start adjusting the relevant option.

#Change the option value using the wheel.

#Upon completion press the LEFT button of the UP/DOWN buttons to return to image setup menu.

(4) Sound settings menu

1.Digital audio output

a).SPDIF format: set-up of digital audio output options.

#Options: RAW, PCM.

#Default options: RAW.

#When you select the RAW option, the not decoded signal is transferred to the LCD TV's digital outputs, the decoded signal is transferred to analog outputs. Decoding is performed by the built-in decoder of the LCD TV. This feature is meant to ensure that signal decoding at digital outputs is performed by an external device(e.g.an amplifier).

#If you select the PCM option, a PCM coded signal will be transferred to the LCD TV's digital outputs.



B)LPCM:set-up of digital audio output options to comply with different amplifiers and receivers.

#Options: 48kHz 16 bit, 96 KHz 24 bit, 192kHz 24 bit.

#Default option: 48kHz 16 bit.

2. Sound correction

A)Equalizer: equalizer modes

#Options: Off, rock, pop, live dance, techno, classics, soft.

#Default option: off.

B)Echo: echo effects

#Options: Off, concert, living room, hall, Bathroom, cave, arena, church.

#Default option: off.

C)Tone balance: adjustment of tone balance level.

#Adjust the tone balance level using the cursor buttons.

#Press the LEFT button to return to sound correction set-up menu.

(5) Playback settings

1. DVD

Advertisement skip: skip the unskippable block while playing a DVD disc.

#Options: Yes, No.

#Default option: Number

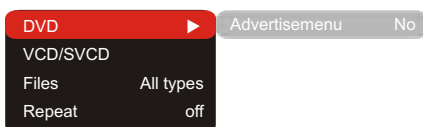
2. VCD/SVCD

PBS menu: PBC menu on/off

#Options: On, Off.

#Default option: On.

#If On option is set, while reproducing discs, a menu will appear, in which you can select the order of playing the disc content. If the Off option is set, the reproducing of content is performed in the order, in which it is recorded on the disc.



3.Files: selection of reproduced files on the disc

#Options: Audio, Pictures, Video, All types.

#Default option: All types.

4.Repeat: file repeat mode

#Options: Off, Single, All.

#Default option: Off.

(6) Karaoke settings menu

1.Microphone: microphone on/off

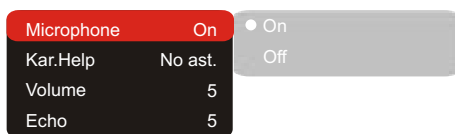
#Options: On, Off.

#Default option: On.

2.Kar.help: karaoke -disc playback mode

#Options: L Channel, R Channel, No ast, No voc.

#Default option: No voc assist.



3.Volume:

Microphone: microphone sound volume level

#Using the UP/DOWN buttons adjust the microphone volume level.

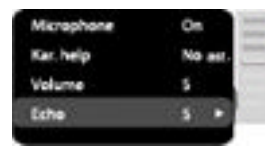
#Press LEFT key of the UP/DOWN buttons to return to karaoke settings menu.



4.Echo:echo level while playing the karaoke-disc

#Adjust the echo level Using the UP/DOWN buttons.

#Press LEFT key of the UP/DOWN buttons to return to karaoke settings menu.



(7) Preference settings

1.Screensaver: screen saver on/off

#Options: On, Off.

#Default option: Off.

2.Gr.equalizer: spectrum analyzer

#Options: On, Off.

#Default option: Off.

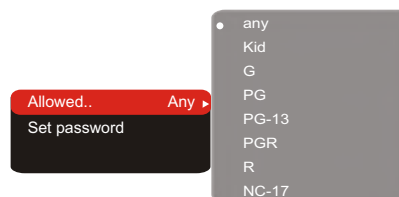


(8) Parental control settings

1.Category: set-up of age restrictions to prevent children from seeing undesirable discs.

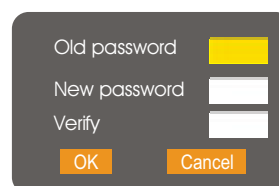
#Options: Any, Kid, G,PG, PG-13, PGR, R, NC-17.

#Default option: Any.



2.Change password: set-up of a four-digit password to change the level of age restrictions.

#Default option: 7890



(9) Initial setup menu

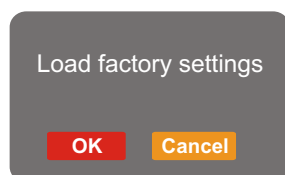
#Press the RIGHT key to enter the initial settings menu, then select the desired item using the cursor buttons and press OK key for confirmation.

#While being in this menu section, you cannot return to the previous level by pressing the LEFT key.



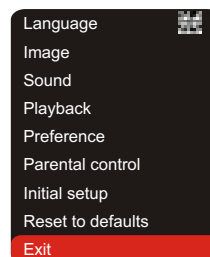
(10) Reset settings to default

#Resetting all settings and restoring default options, except age restrictions level and Password.



(11) Exit settings menu

#Select the exit item using the UP/DOWN buttons and press the OK key to exit the menu.



2.2.3 OTHERS

(1) Useful notes

#To extend the service life of your LCD TV make pauses of not less than 30 seconds between switching off and repeatedly switching on the LCD TV.

#Disconnect the LCD TV from the wall outlet after shutdown.

#Some LCD TV'S functions may not be applied to some discs.

#Use supply sources of rated voltage, otherwise the LCD TV may not function or be damaged.

#In case of the LCD TV's occasional stops, please switch the power supply off and then on again.

(2) Trouble shooting

Please check probable causes of malfunction before addressing the service center.

Sign of trouble	Cause of trouble	Actions to eliminate the trouble
No sound	1. Poor audio cable connection. 2. Disc dirty or damaged. 3. Sound disabled by the MUTE button.	1. Make proper connection. 2. Clean the disc. 3. Press the MUTE button.
No image	1. Poor video cable connection. 2. Incorrect settings of your TV set. 3. The TV is in the progressive scan mode while your TV set does not support this mode.	1. Make proper connection. 2. Correct the settings of your TV set. 3. Place the TV in the interlaced scan mode through the TV's menu.
Black and white image	1. Incorrect TV color system selected. 2. Color level on the TV set adjusted incorrectly.	1. Set the appropriate color system via the menu: SETUP>Image>TV scan. 2. Readjust the color system of your TV set.
Discs cannot be read	1. Disc not inserted. 2. Disc inserted incorrectly. 3. Condensate on the DVD player's laser head.	1. Insert the disc. 2. Install the disc with the label side facing up. 3. Switch the TV on without disc for an hour.
Microphone does not operate	1. Microphone is unplugged. 2. Low level of the microphone's sound volume.	1. Connect the microphone. 2. Adjust the level of the microphone's sound volume.
Remote control does not operate	1. Remote control is incorrectly directed at the TV's screen. 2. Distance to the TV is in excess of 8 meters. 3. Run out batteries.	1. Use the remote control according to the manual. 2. Decrease the distance to the TV. 3. Replace both batteries.
Some functions do not work	1. Disc is recorded incorrectly. 2. Incorrect key sequence. 3. Static voltage on the housing.	1. Wait 5-10 seconds and the device will automatically return to normal state. 2. Repeat the operation one more time. 3. Switch the device off for 1-2 minutes and then switch it on again.
Ustable image or abnormal picture color	1. Incorrect TV set setting 2. There is something wrong with the data in the E PROM.	1. Correct the TV set settings. 2. Reset the TV set to default setting.

(3) Technical characteristics

		LD2216K
Display	Type Class	TFT, colored II (ISO 13406-2)
	Size (") Height (mm) Width (mm) Dot Pitch (H mm x V mm) Viewing Angle (H)	21.6 477.4 268.4 0.1165x0.3495 170°
Frequency	Vertical (Hz) Horizontal (kHz) Display color	50-75 30-75 16 700 000
Maximum Display Mode	Resolution Vertical frequency (Hz)	1366x768 75
Inputs	Video Composite Component VGA RGB/SCART	1 1 1 1
	Audio Stereo PC audio Others HDMI Karaoke USB RF	1 1 1 1 2 1 1
Audio outputs	Headphone	1
	Digital coaxial	1
Color system	TV tuner Video inputs	PAL, SECAM PAL, SECAM, NTSC 3.58, NTSC 4.43, PAL60
Sound system	TV tuner	DK, I, BG, L
Built-in DVD player	Disc types	CD-R/RW, DVD-R/RW, DVD+R/RW
	Formats	DVD-Video, DivX, XviD, SVCD, VCD, CD-DA, HDCD, WMA, Kodak Picture CD, JPEG
Power	Voltage and frequency (V, Hz)	~ 100–240, 50/60
Power supply	Power Consumption (Maximum) (W)	70
	Power Consumption (Power Saving) (W)	<3
Environmental consideration	Operating temperature (°, C)	+5...+35
	Operating humidity (%)	10–80
	Storing temperature (°, C)	–20...+45
	Storing humidity (%)	5–95
Dimensions (mm)		567x183x456
Weight	Net weight (kg)	8.6

#We are permanently improving the quality of our products; hence the product's design, functionality and technical characteristics may be modified without prior notice.

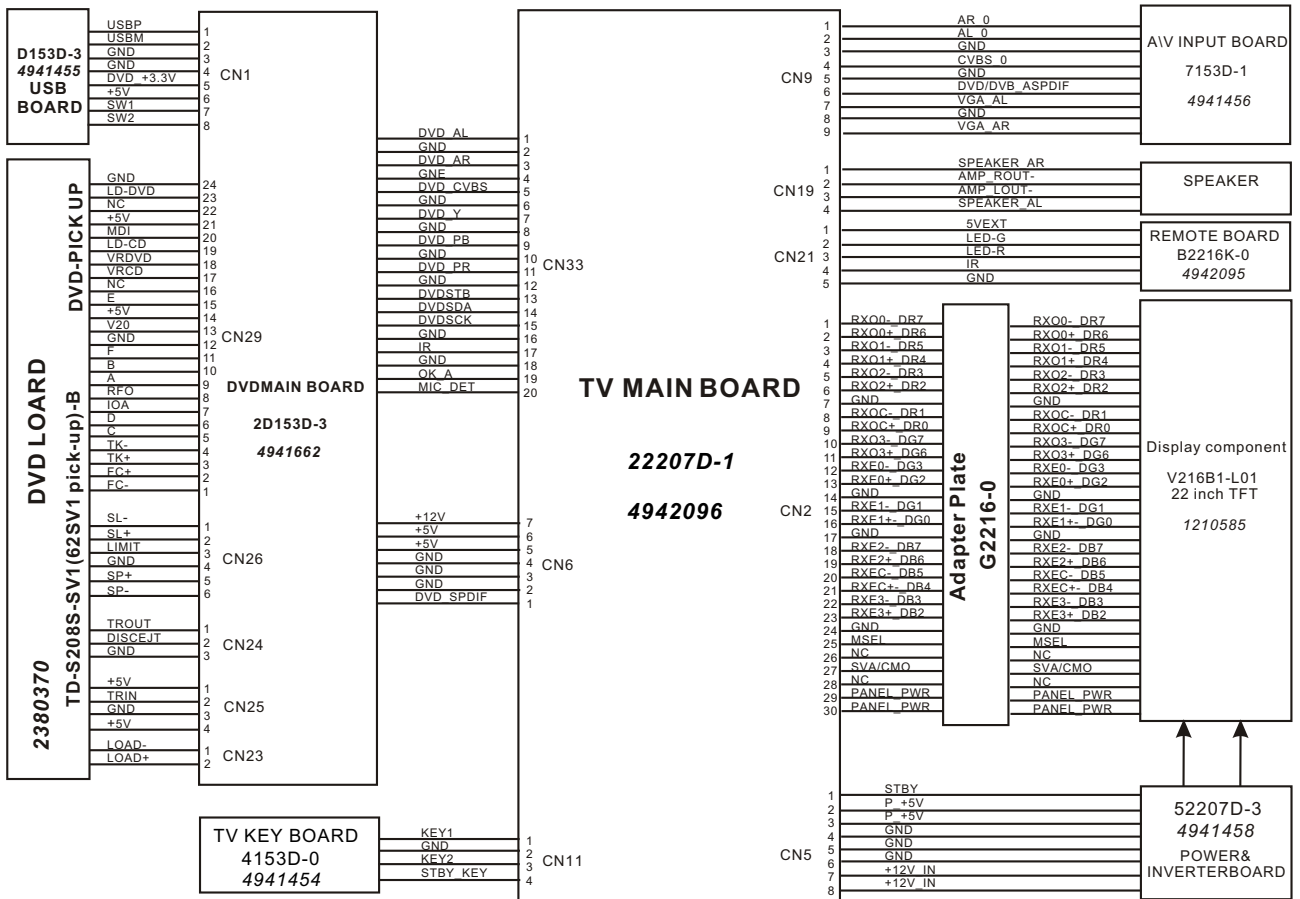
#We do not guarantee that all discs can be played smoothly due to the disc quality, disc recording quality and recording format.

Chapter Three Principle and Servicing

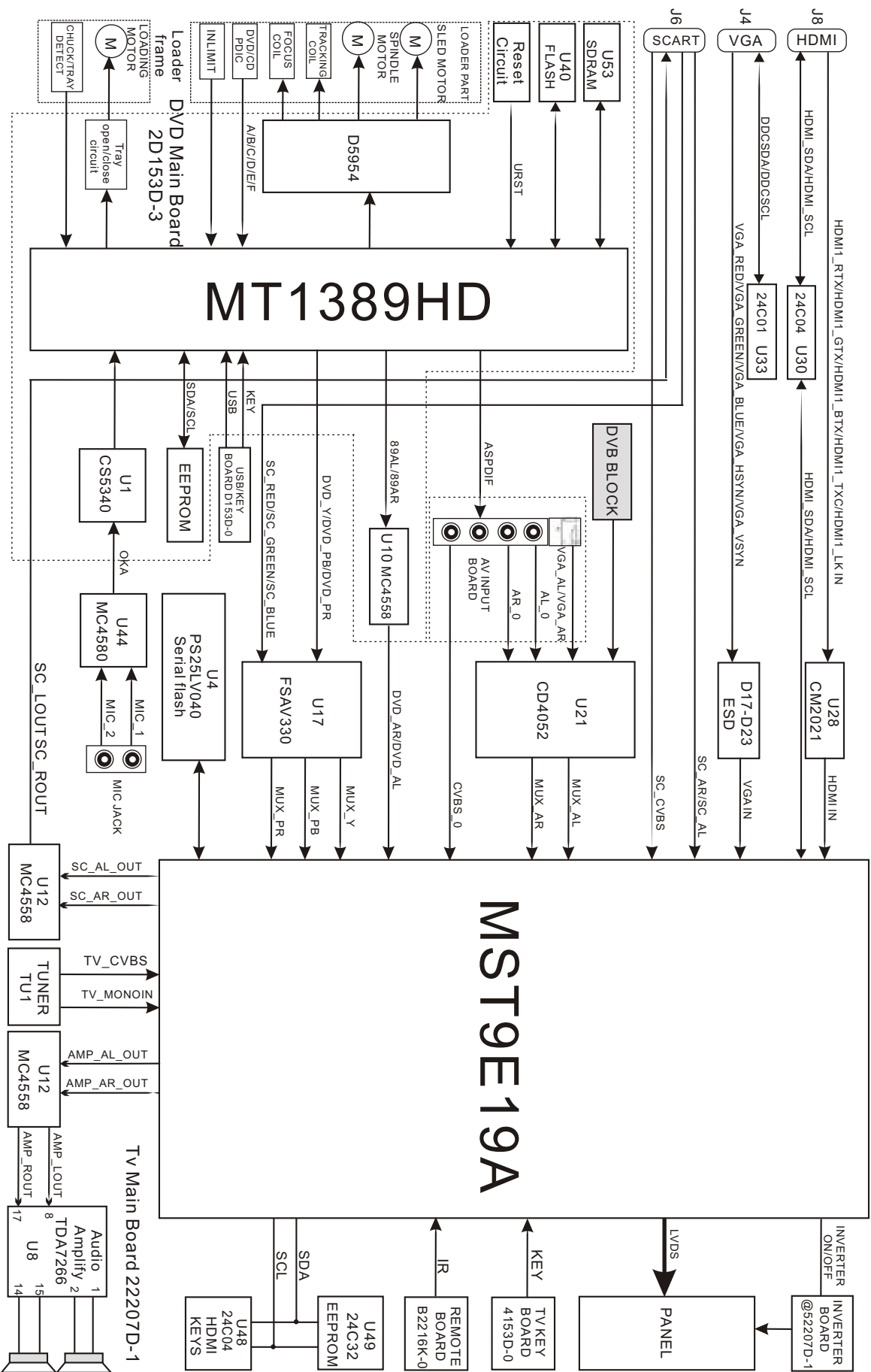
Part One TV

Section One Principle of the player

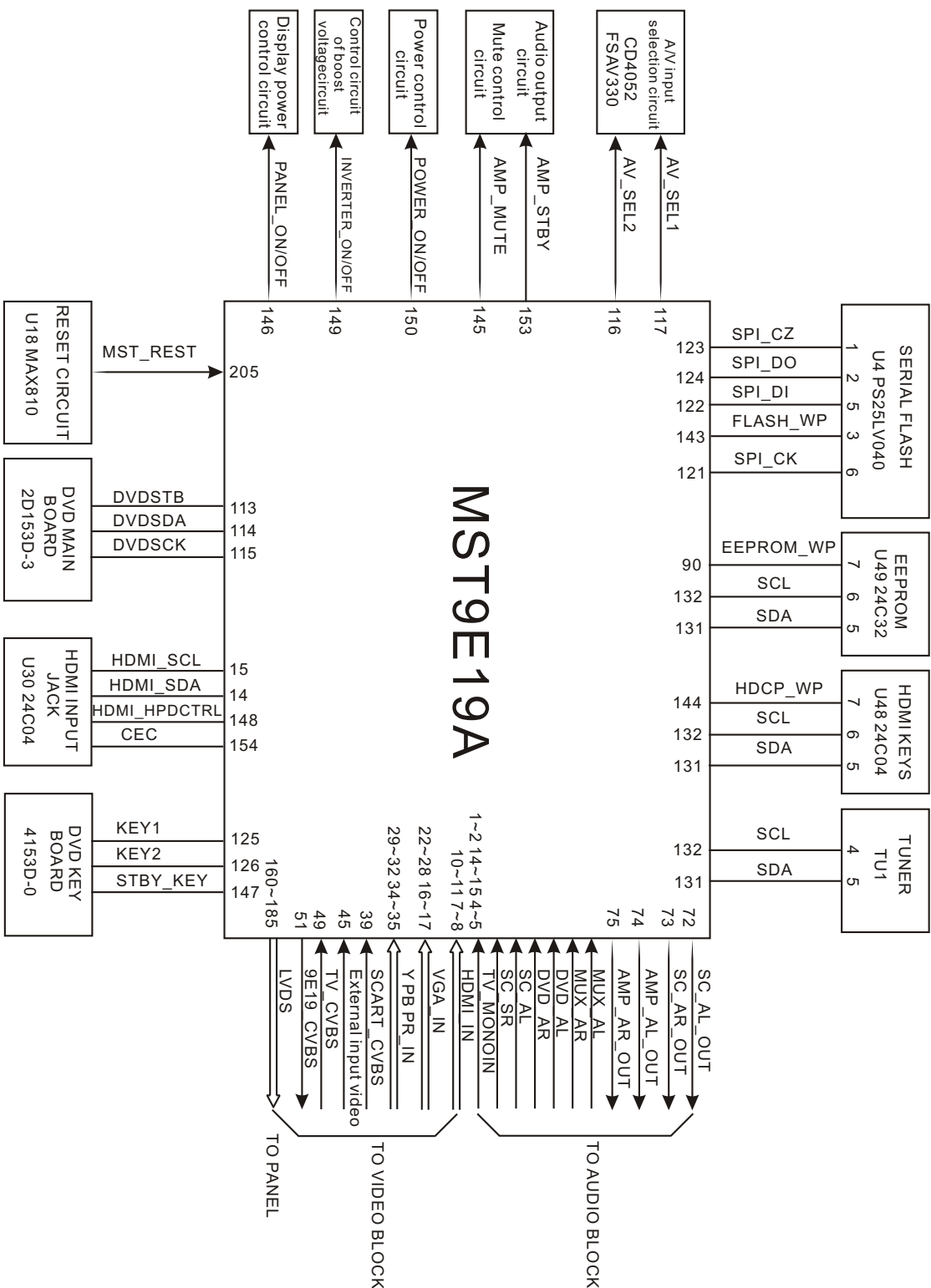
3.1.1 Wiring Diagram.



3.1.2 Over all block diagram.

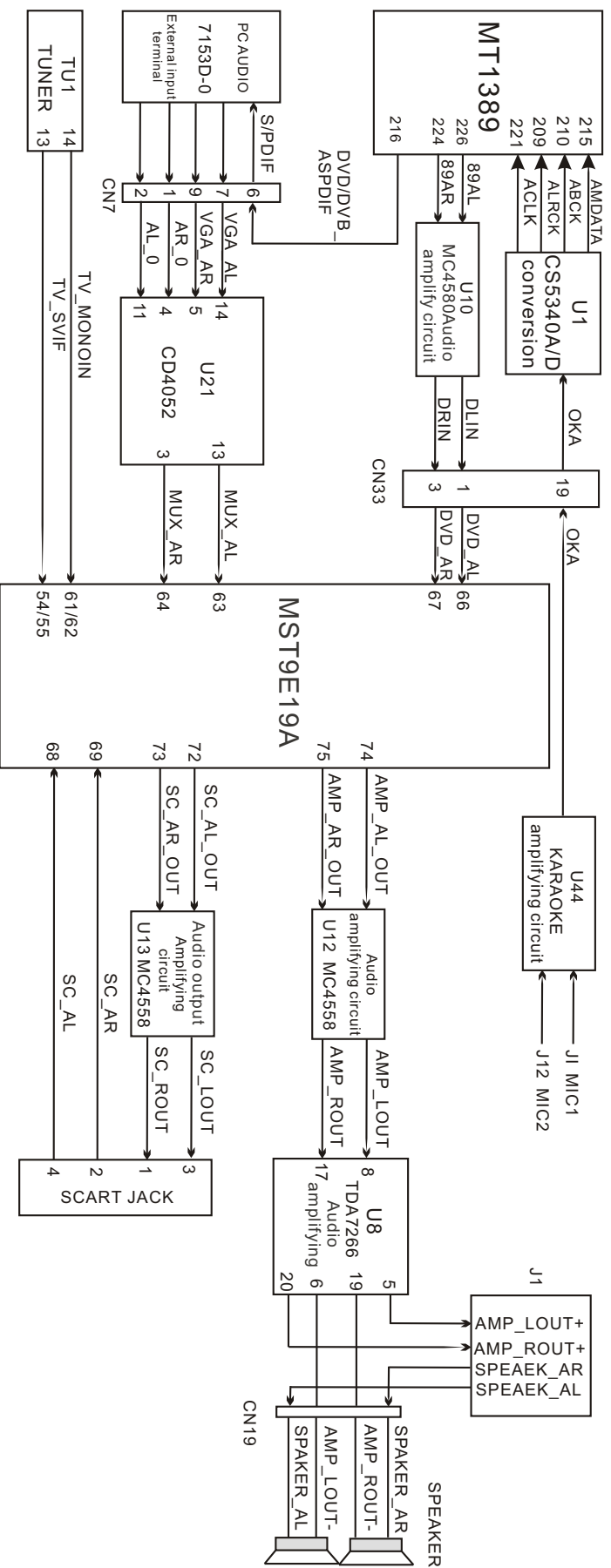


3.1.3 System control/signal processor block diagram.



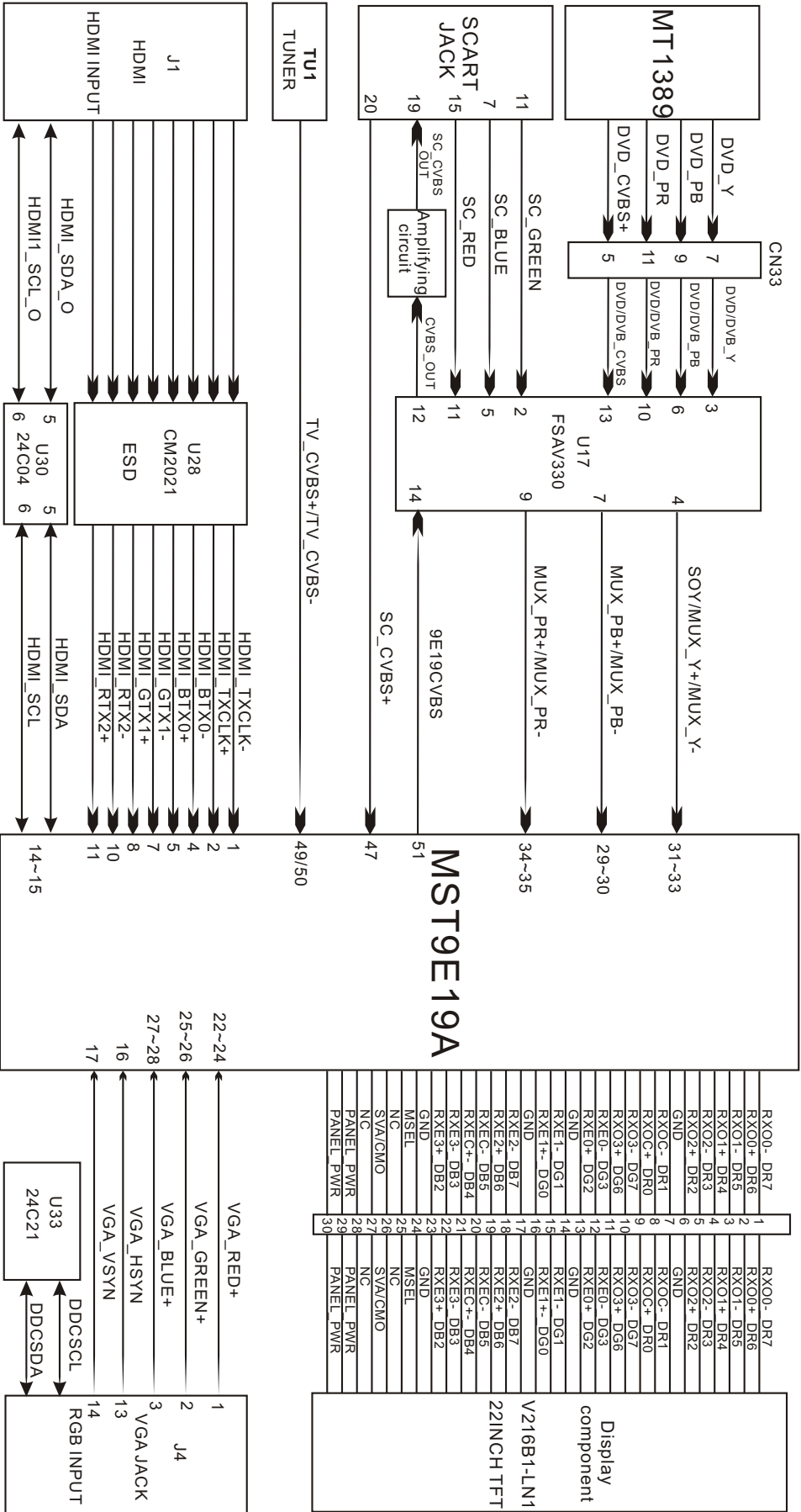
3.1.4 Audio block diagram.

Audio processing circuit is mainly responsible for the switch, amplifying and restore of audio and composed of audio source input selection and NICAM processing circuit, audio amplifying circuit and mute control circuit.



3.1.5 Video block diagram.

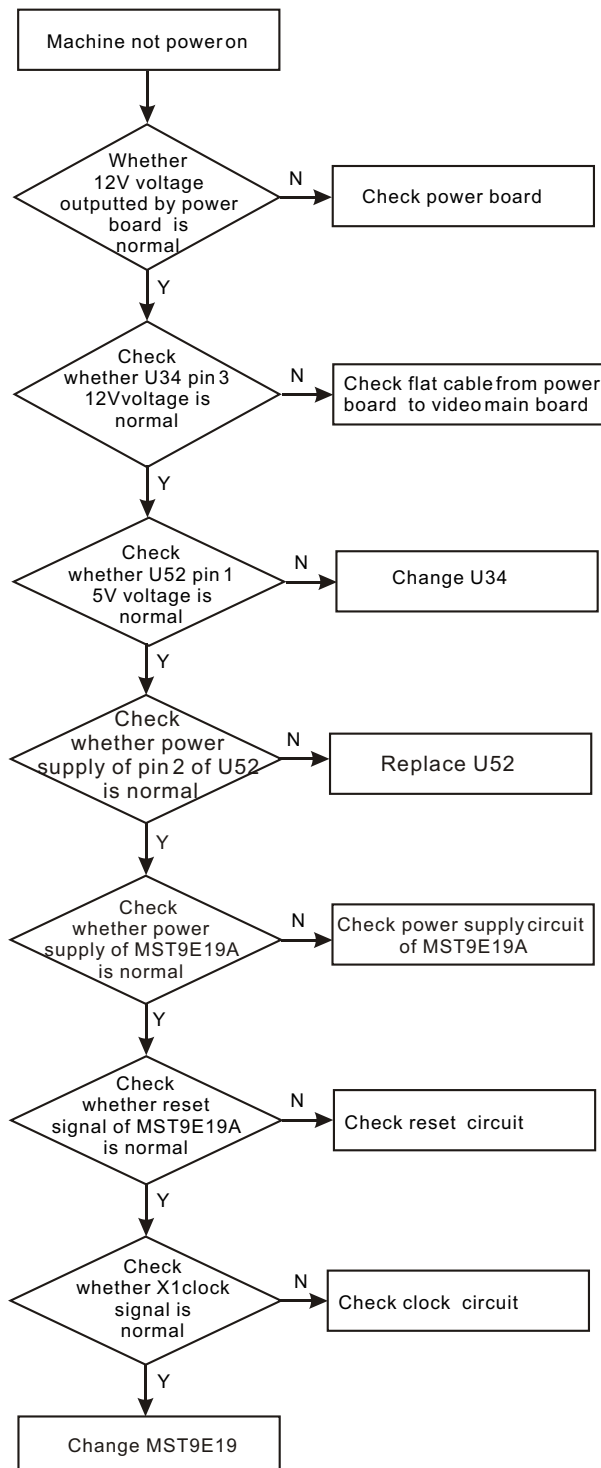
Video circuit is mainly responsible for the input of external video signals, the processing of video signals send from tuner, and the drive processing of LCD screen, including video input selection, video A/D conversion circuit, LCD picture processing circuit and video output circuit.



Section Two Troubleshooting flow chart

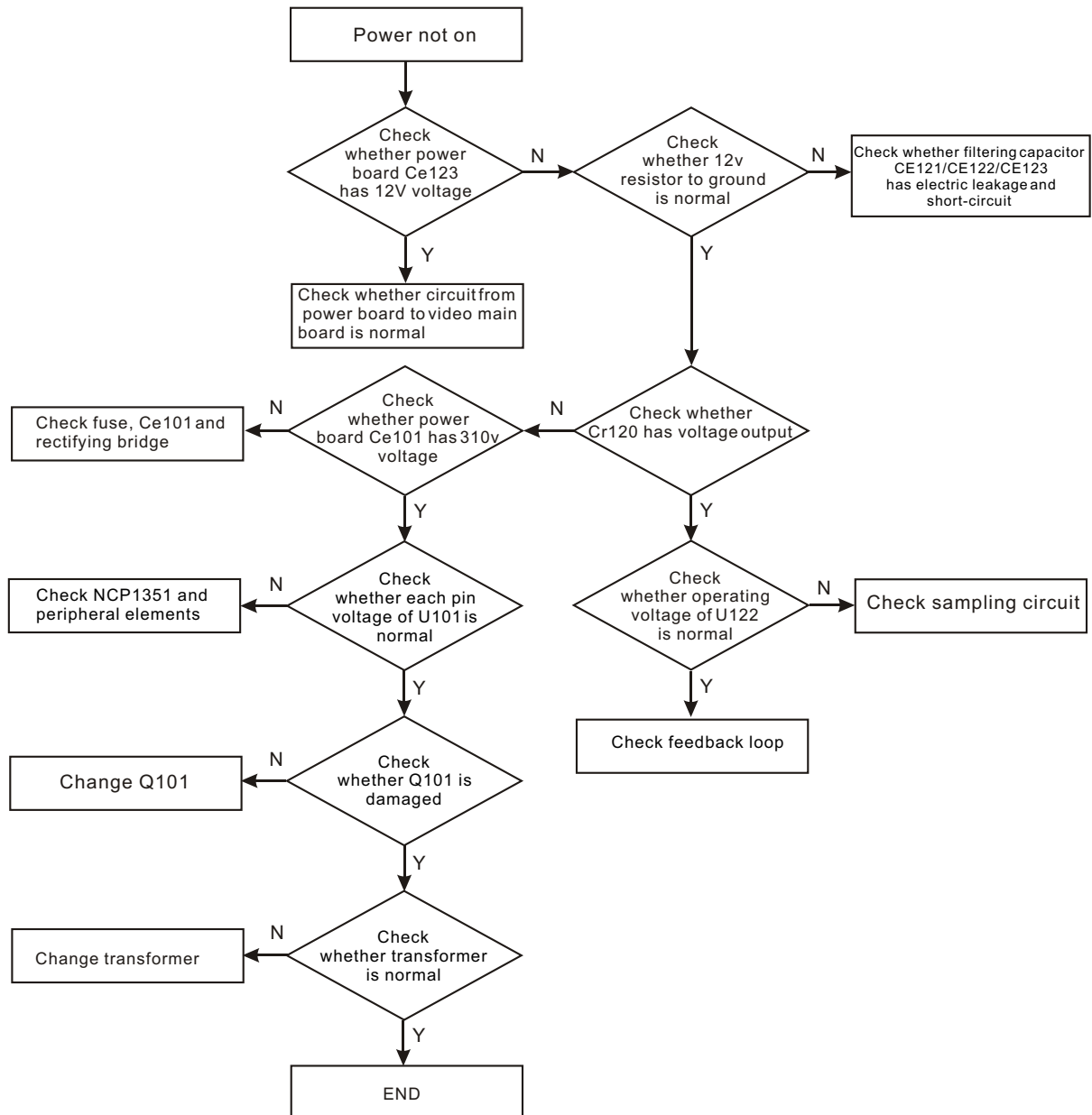
[Flow chart 1] Trouble symptom: standby light is not on

Trouble description: connect with power, standby indicator light is not on, machine has no response and buttons have no function.



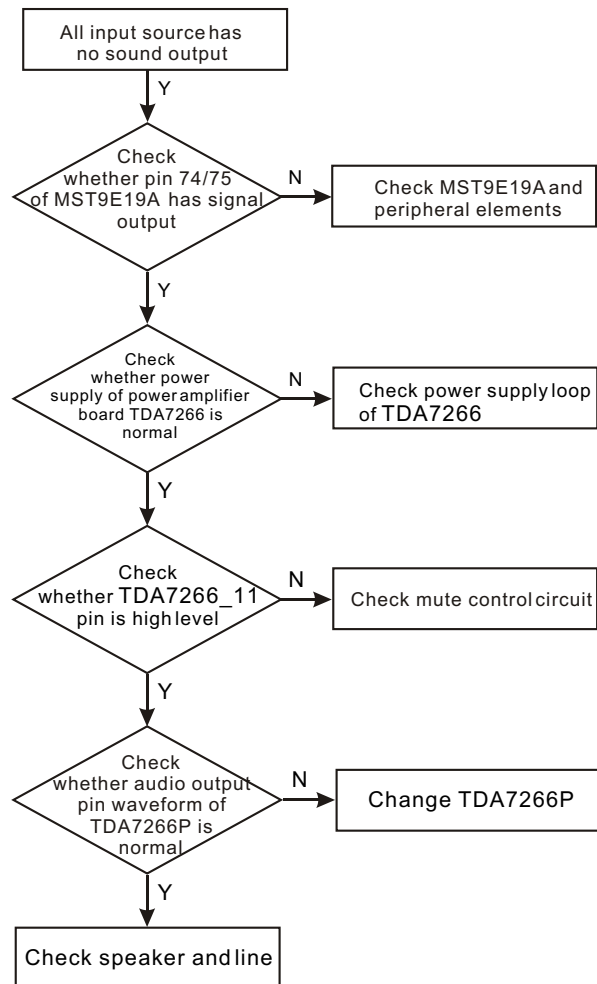
[Flow chart 2] Symptom: power not on

Trouble description: test after machine power on, standby indicator light is not on and +12V power outputted by power board is abnormal.



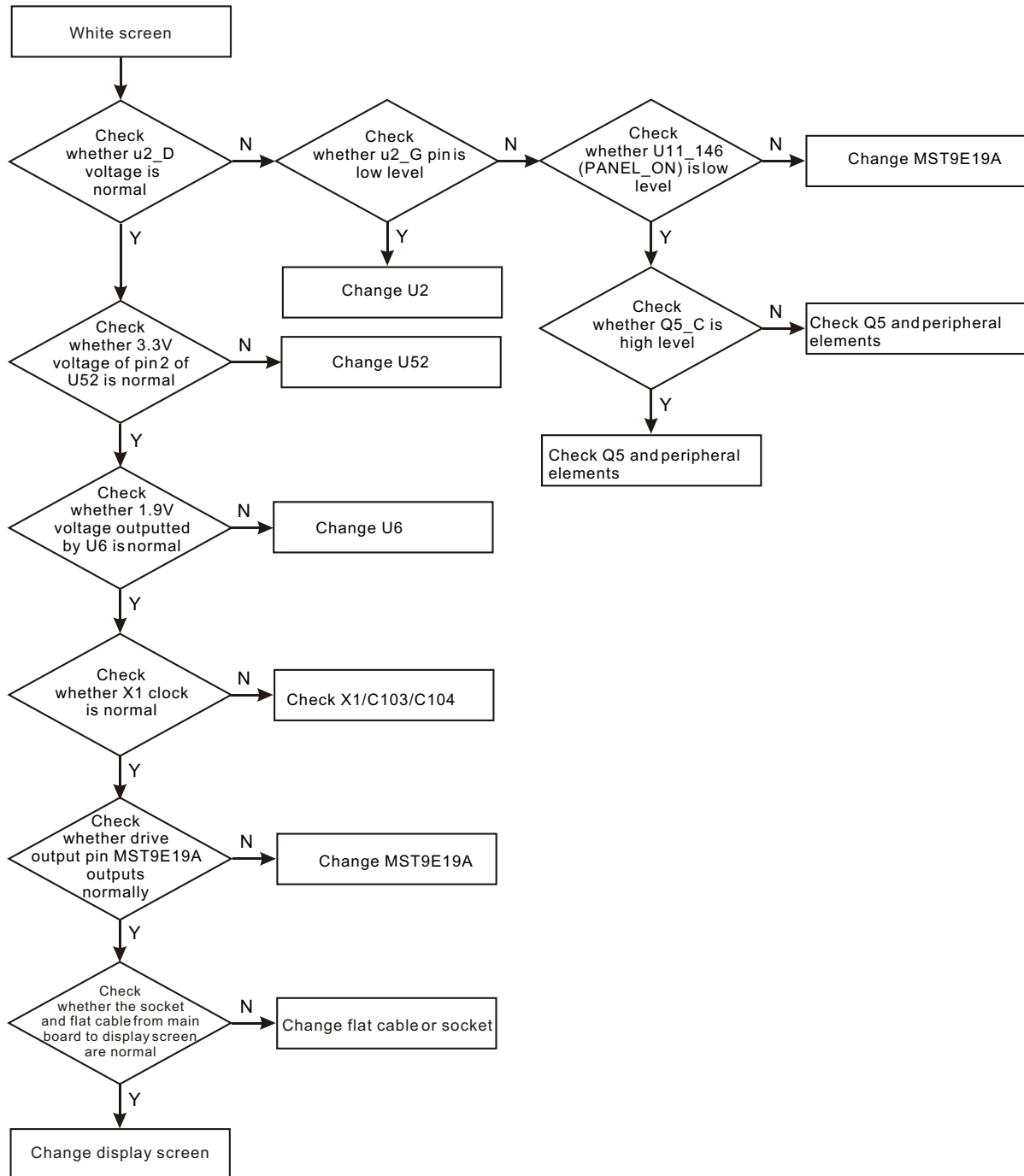
[Flow chart 3] Symptom: no sound

Description: there is image, but no audio output.



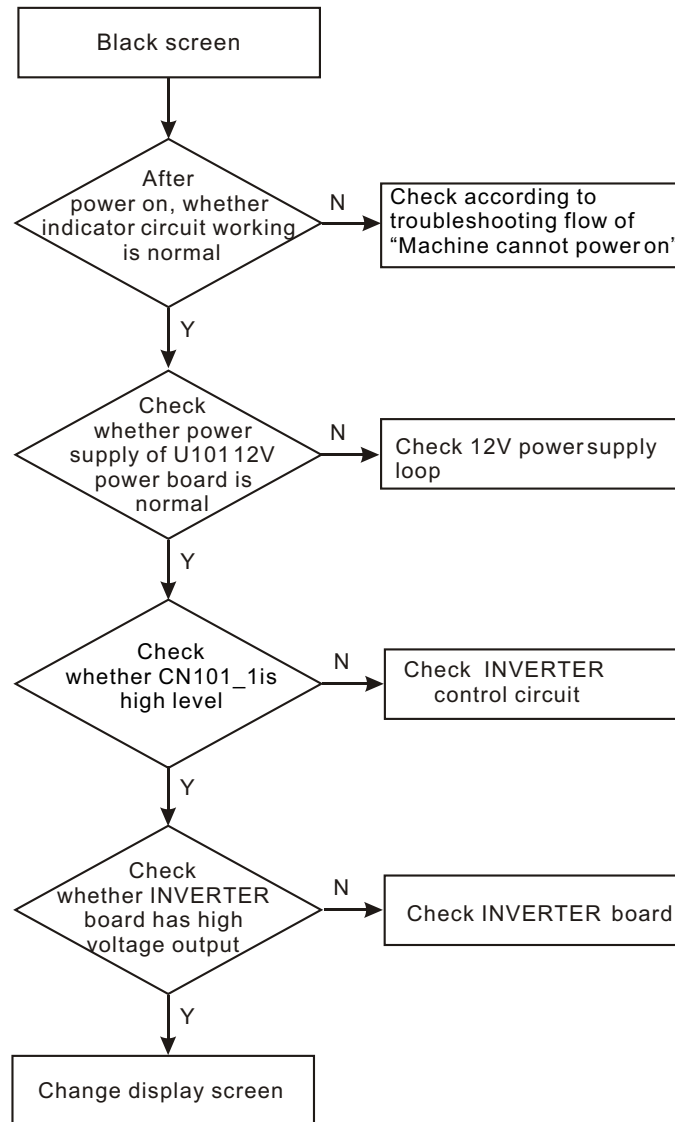
[Flow chart 4] Symptom: white screen

Description: screen is white and indicator on.



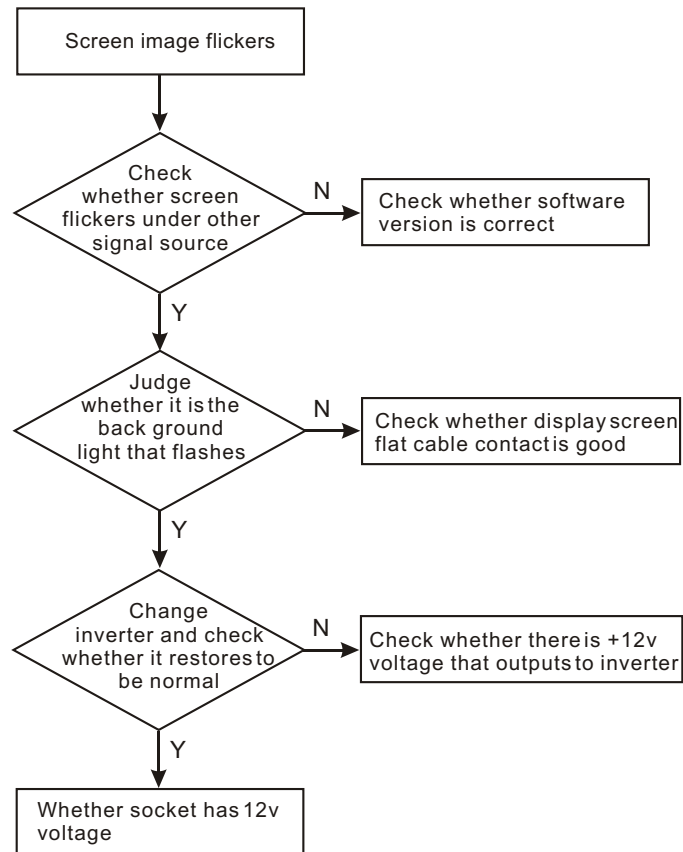
[Flow chart 5] Symptom: black screen

Trouble description: after power on, screen has no display and backlight cannot be on.



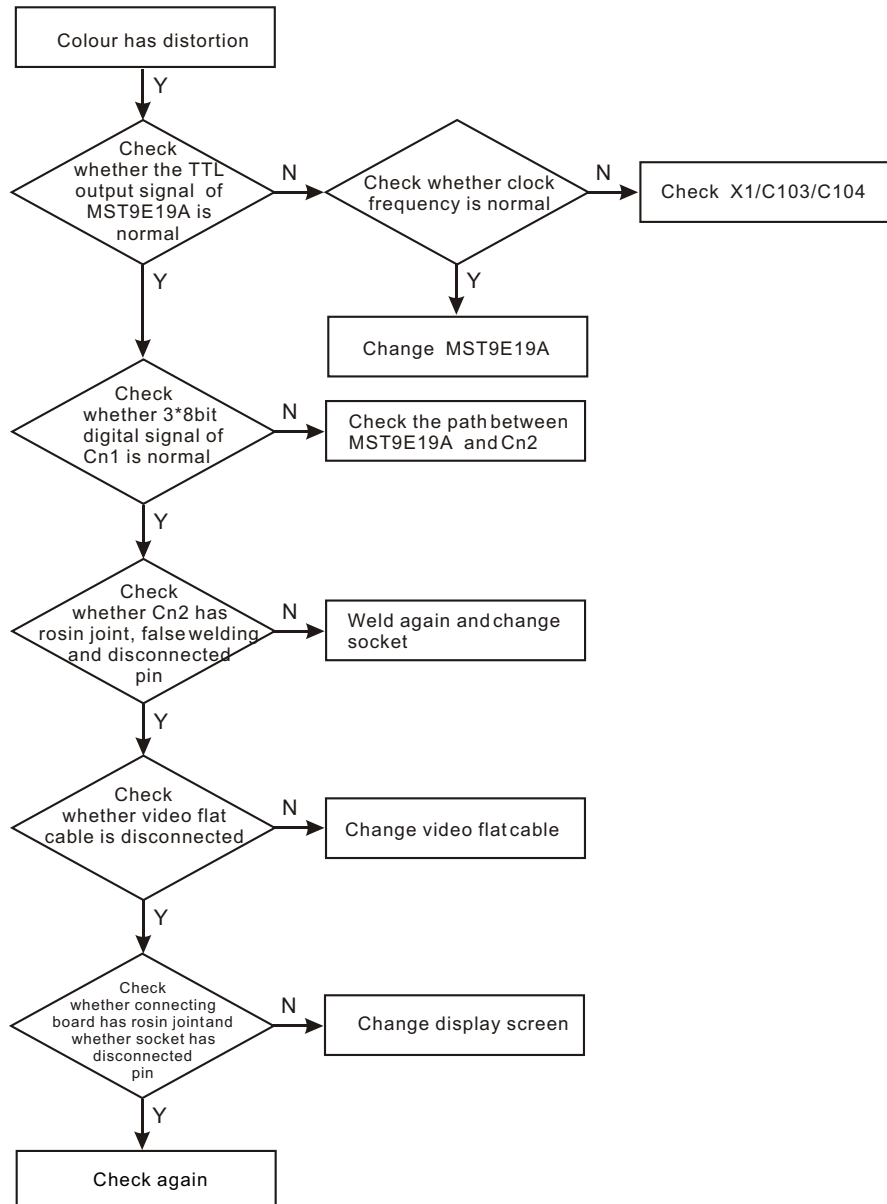
[Flow chart 6] Symptom: screen image flickers

Description: screen image flickers and sound is normal.

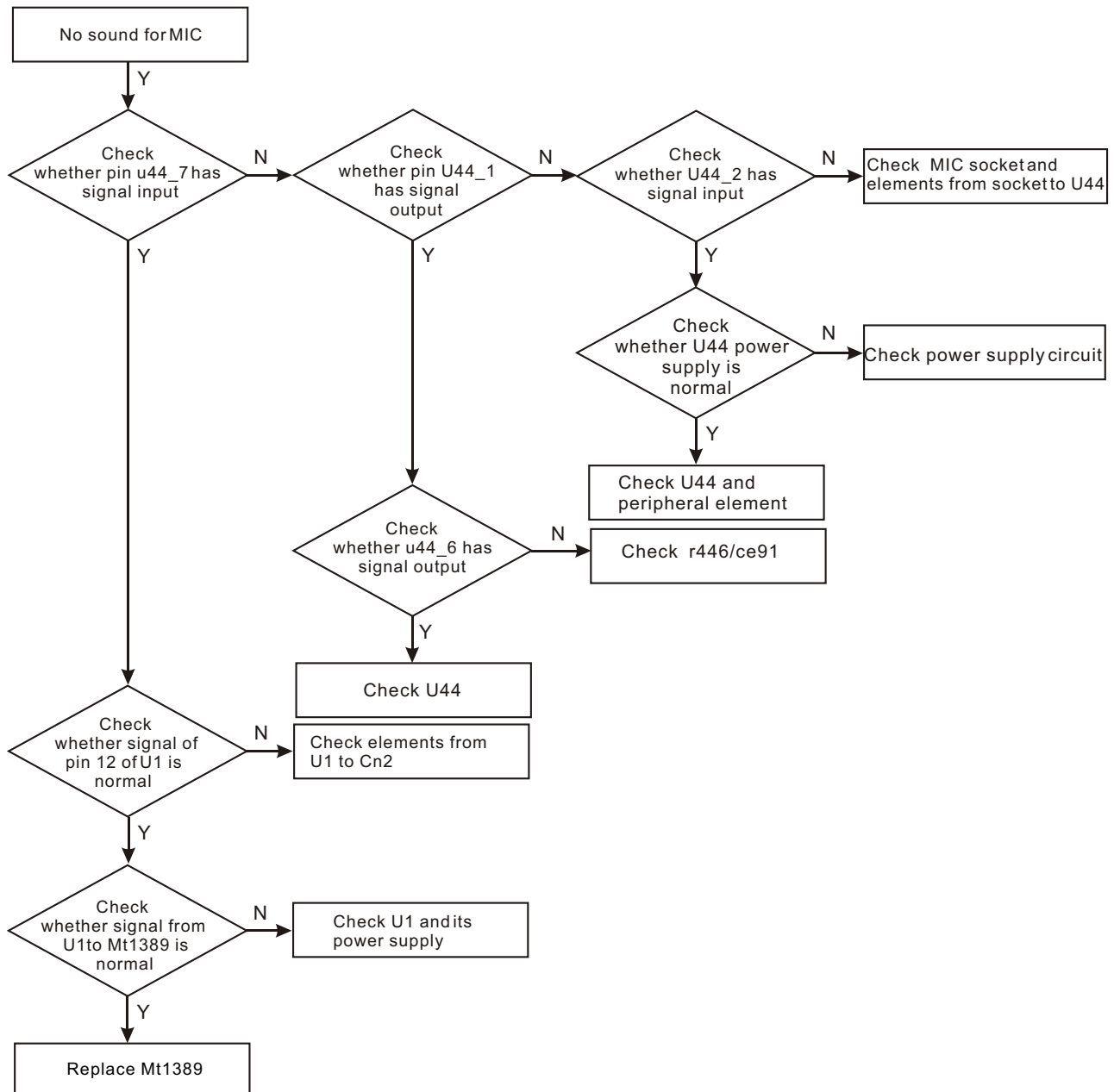


[Flow chart 7] Symptom: colour has distortion

Description: picture colour has distortion.



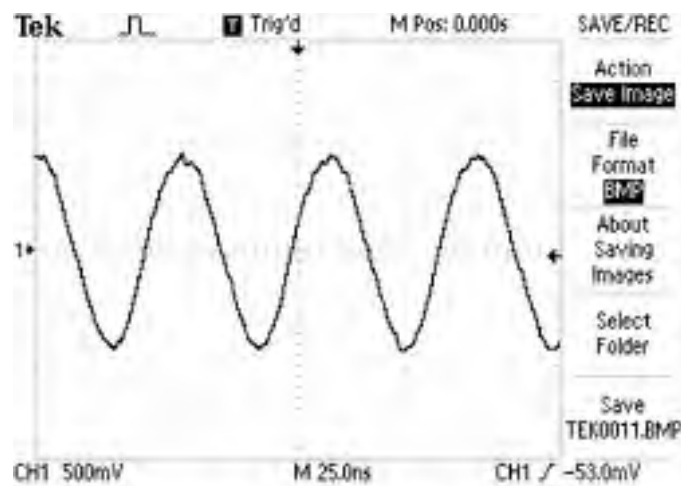
[Flow chart 8] Symptom: Troubleshooting flow chart of no sound for MIC(check whether MIC is on before detecting, whether player outputs sound normally).



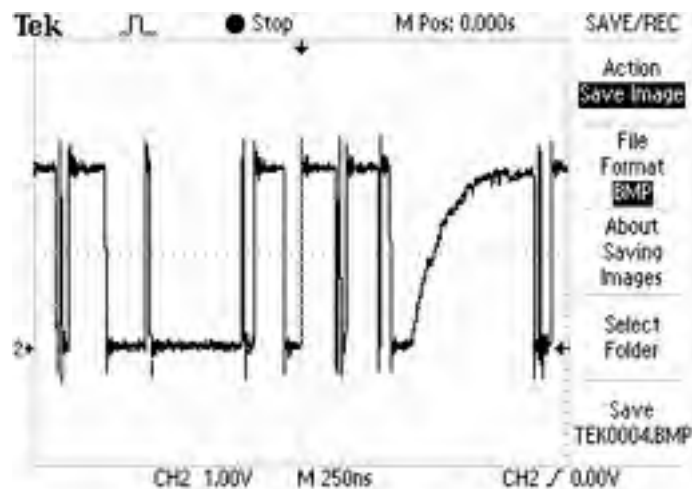
Section Three Waveform diagram

This section collects signal waveform diagram of audio, video and each unit circuit with the purpose to help servicing personnel to judge where trouble lies in accurately and quickly to improve servicing skills. For the difference of oscillograph's type, model and tuner, a certain difference may exist, so the servicing personnel are expected to pay more attention to check in daily operation.

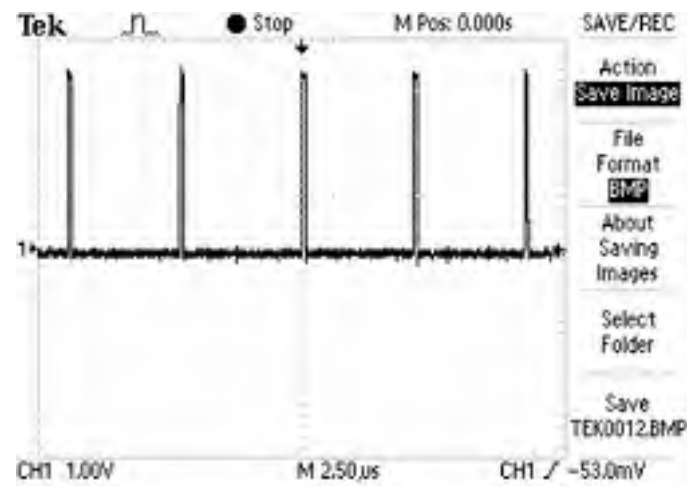
1.MST718 clock signal waveform diagram: waveform diagram when X1is working (frequency 14.318MHZ).



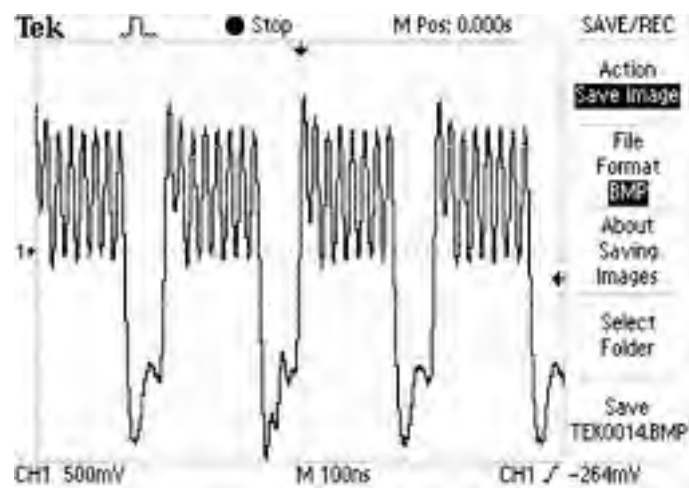
2. U4_2(SPI_DO) waveform diagram.



3. U4_1 (SPI_CZ) gating signal waveform diagram.



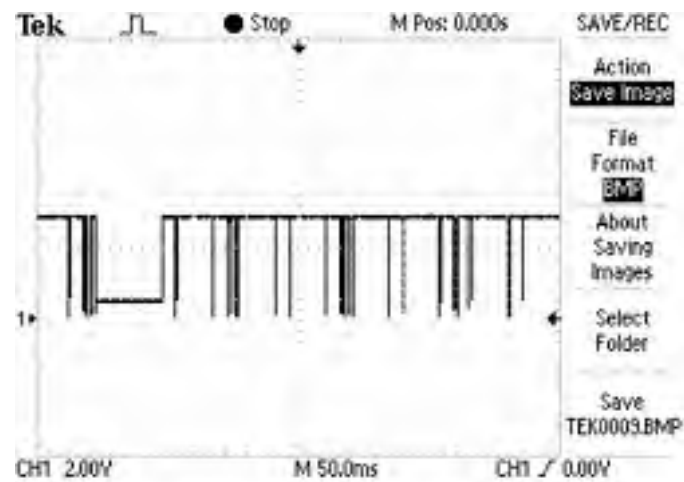
4. U4_6 (SPI_CK) clock signal input waveform diagram.



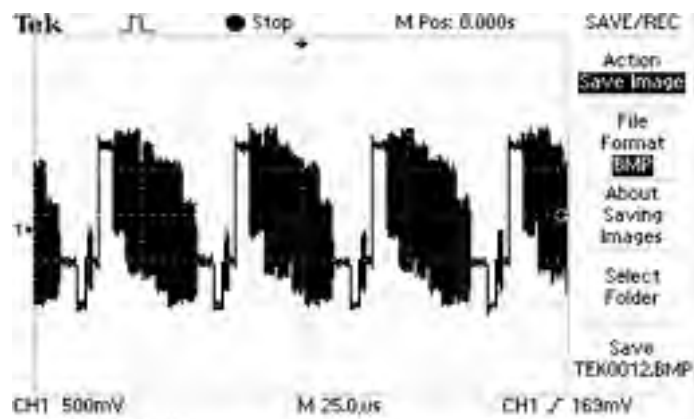
5. U4_5 (SPI_DI) data input pin waveform diagram.



6. U49_5: waveform diagram of SDA in IIC bus.



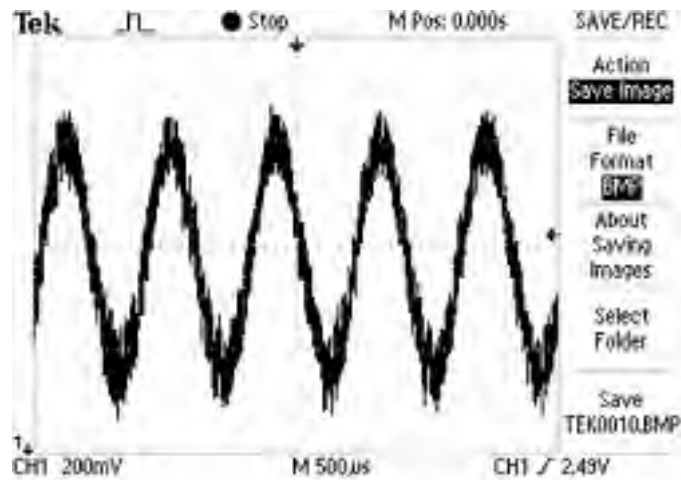
7. U11_51: video signal waveform diagram for pin when machine is receiving U11_51 standard signal source in TV mode.



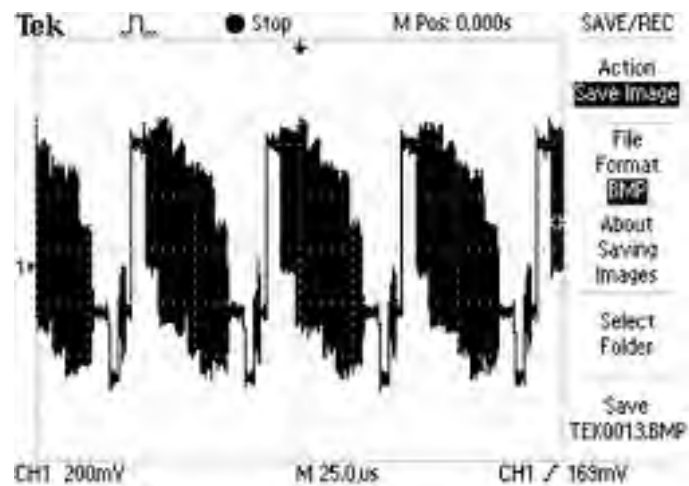
8. U49_6: waveform diagram of SCL in IIC bus.



9. TV audio signal waveform diagram: waveform diagram for audio signals outputted by TU1_14 pin when machine is receiving standard signal source in TV mode.



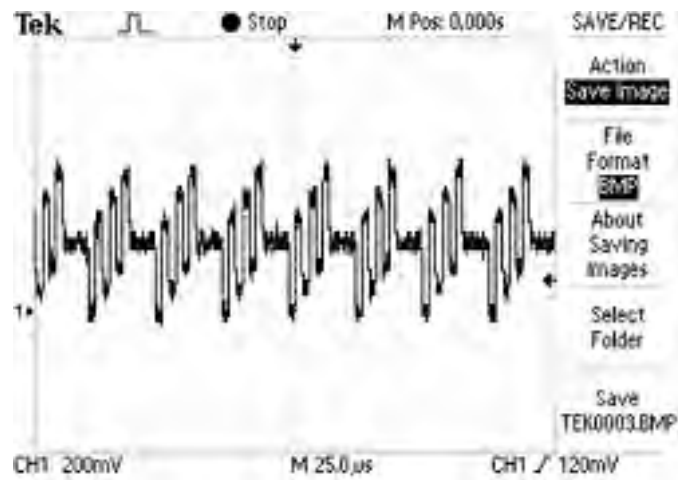
10. TV video signal waveform diagram: waveform diagram for video signals outputted by TU1_12 pin when machine is receiving standard signal source in TV mode.



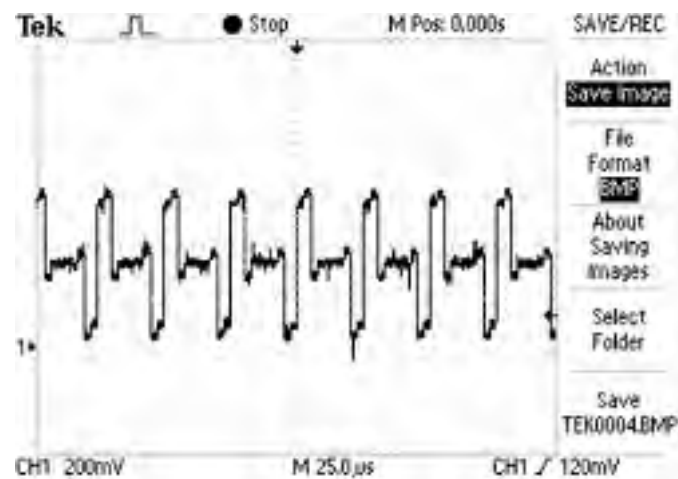
11. Y signal: U17_3 waveform diagram in DVD state



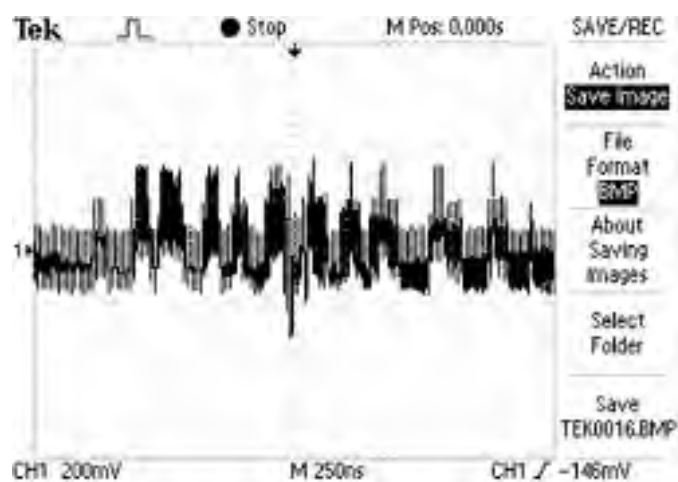
12. PB signal: U17_6 waveform diagram in DVD state.



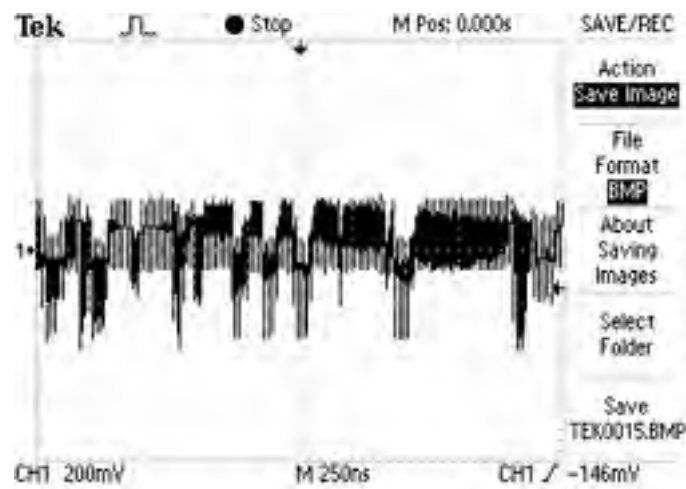
13. PR signal : U17_10 waveform diagram in DVD state.



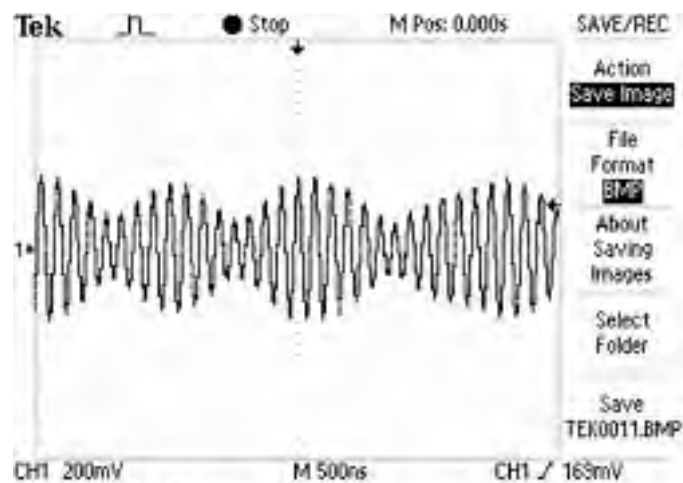
14. Waveform of RXE2+ signal outputted by MST9E19A in LVDS output mode. (MST9E19A_166).



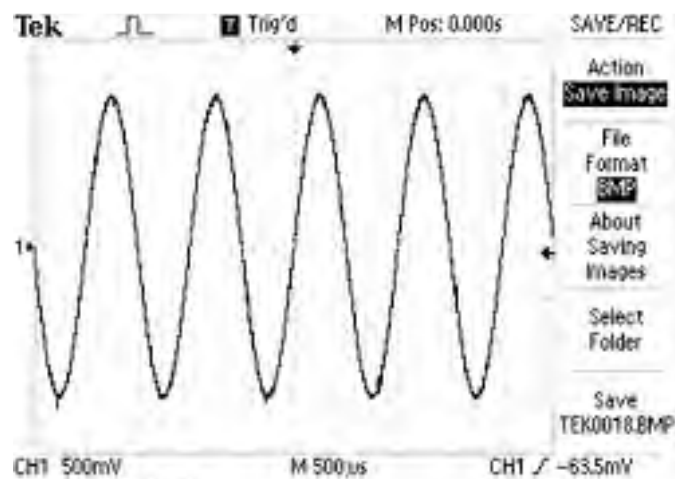
15. Waveform of RXE2- signal outputted by MST9E19A8 in LVDS output mode. (MST9E19A_167).



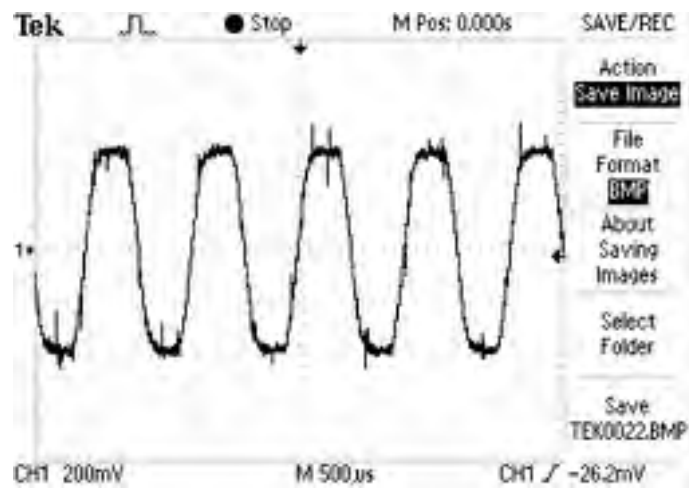
16. TU1_11:output waveform diagram of NICAM output pin.



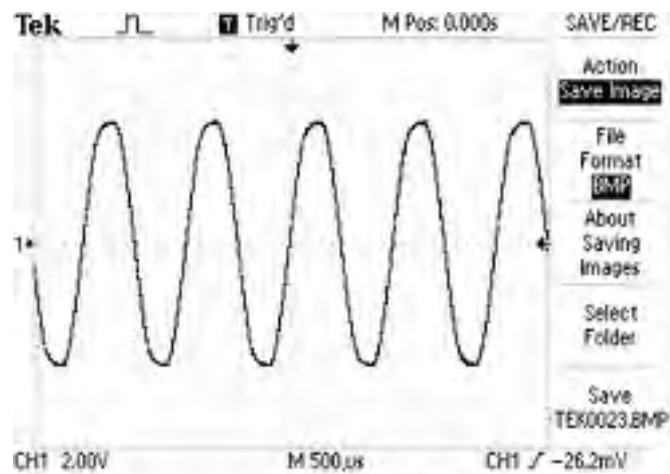
17. U21_13: U11_67 input waveform diagram when player plays DVD disc.



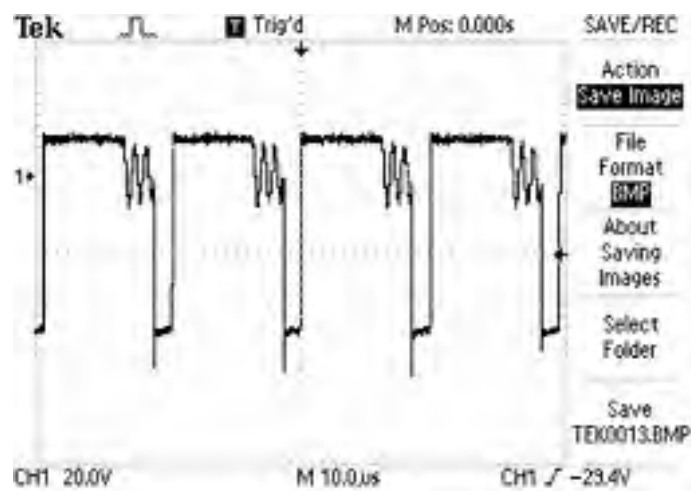
18.U12_1: output waveform of standard signal source in DVD mode.



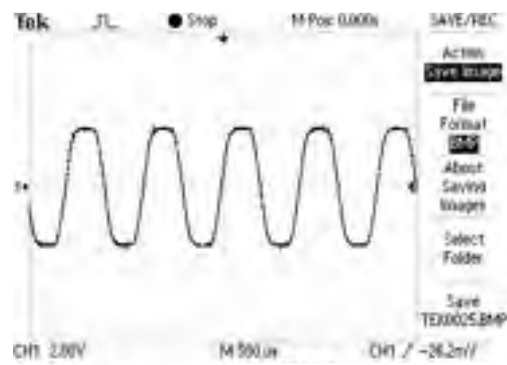
19.U13_1: output waveform of standard signal source in DVD mode.



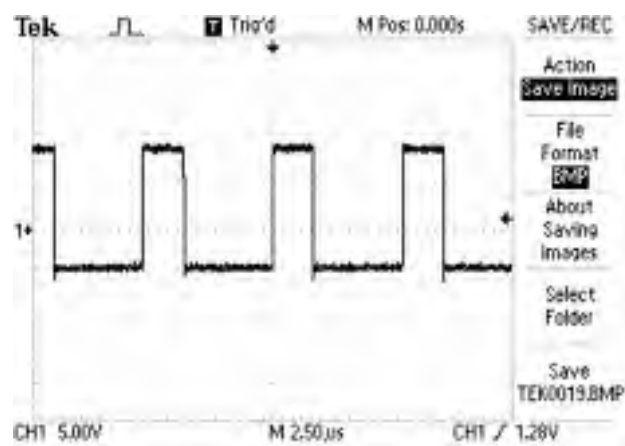
20. CR120_A waveform diagram of power board.



21. The maximum volume output waveform diagram U6_5 in DVD state.



22. Output waveform diagram of pin U52_2 when machine power on .



Section Three Servicing and Principle

Part Two DVD

Section One Principle of the player

3.1.1 Audio circuit

1. Audio signal process block diagram is shown in the figure 3.1.1.1:

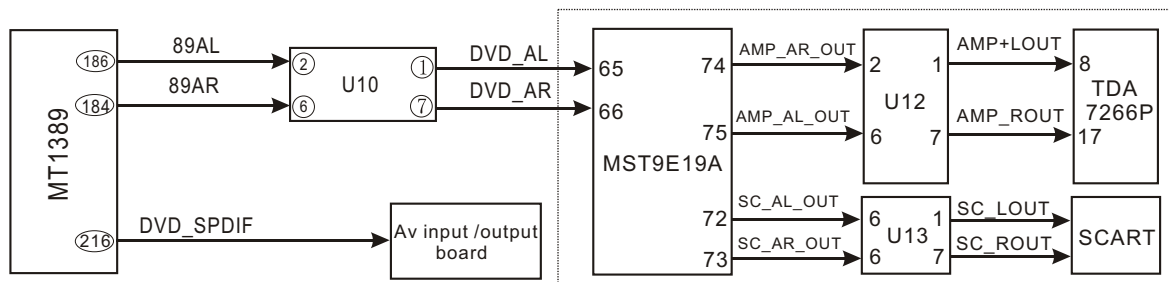


Figure 3.1.1.1 Audio signal flow chart block diagram

3.1.2 Video circuit

1. Video signal flow chart diagram is shown as in the following figure 3.1.2.1 :

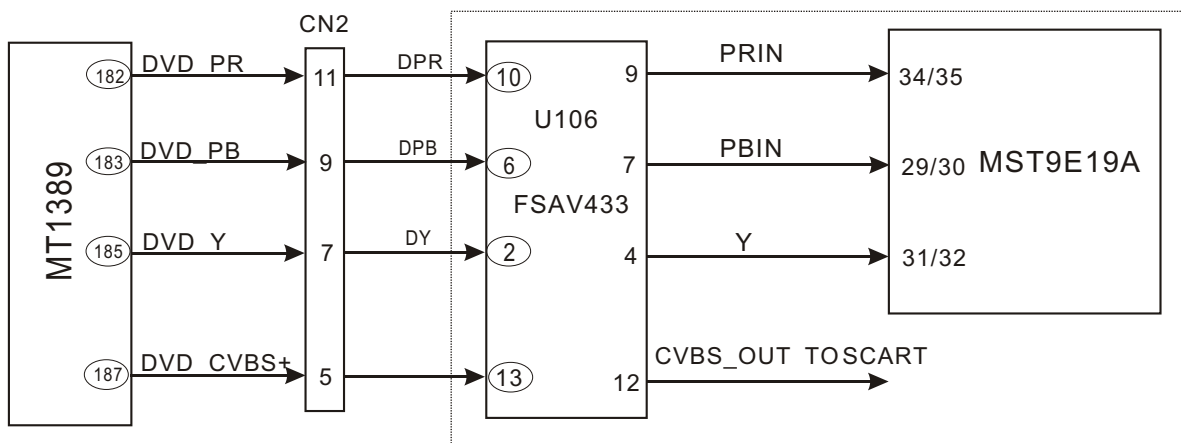


Figure 3.1.2.1 Video signalflow chart

3.1.3 Servo circuit

1. Servo circuit block diagram is shown as in the following figure 3.1.3.1:

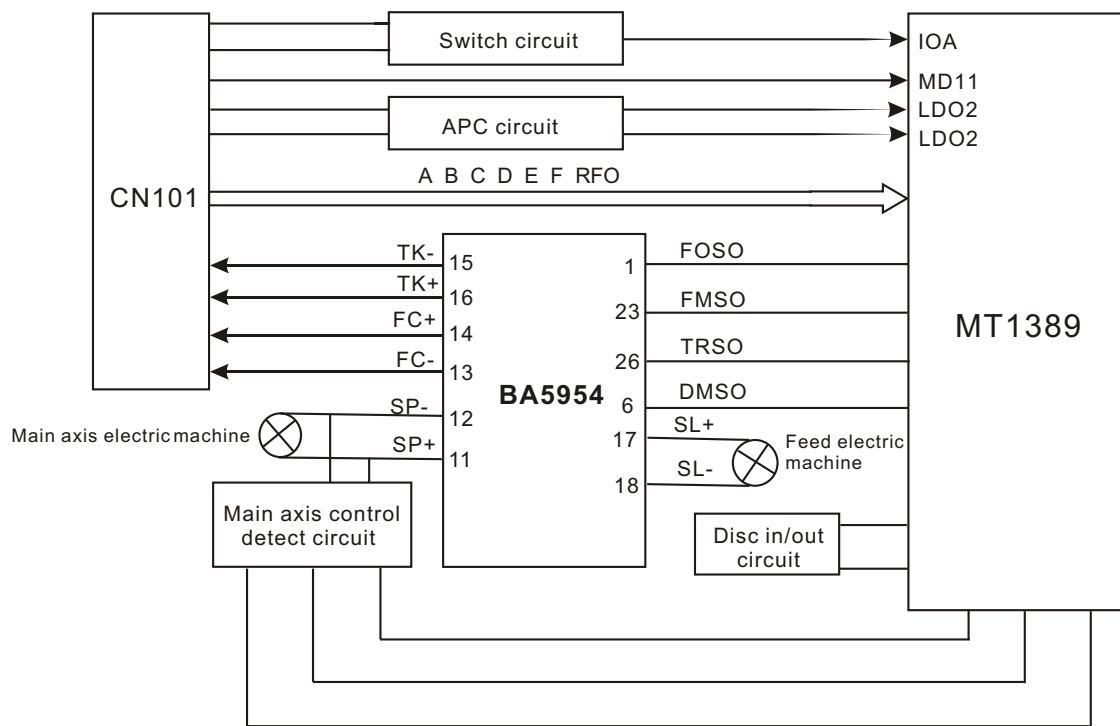


Figure 3.1.3.1 Servo circuit block diagram

3.1.4 USB/KEY circuit

1. USB/KEY circuit is shown as in the following figure 3.1.4.1:

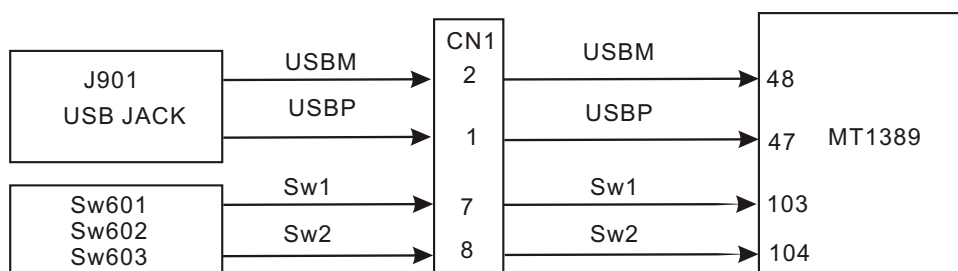


Figure 3.1.4.1 USB/KEY circuit diagram

3.1.5 Decode circuit

1. Decode circuit block diagram is shown as in the following figure 3.1.5.1:

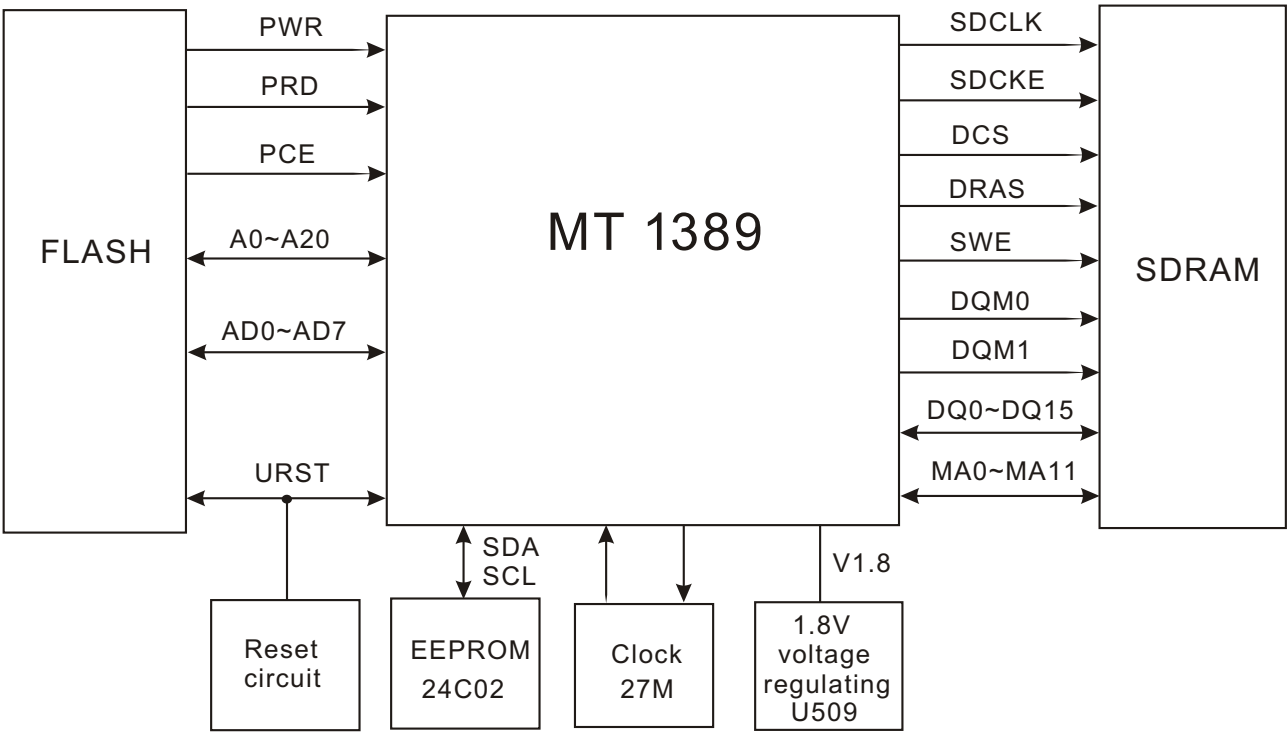
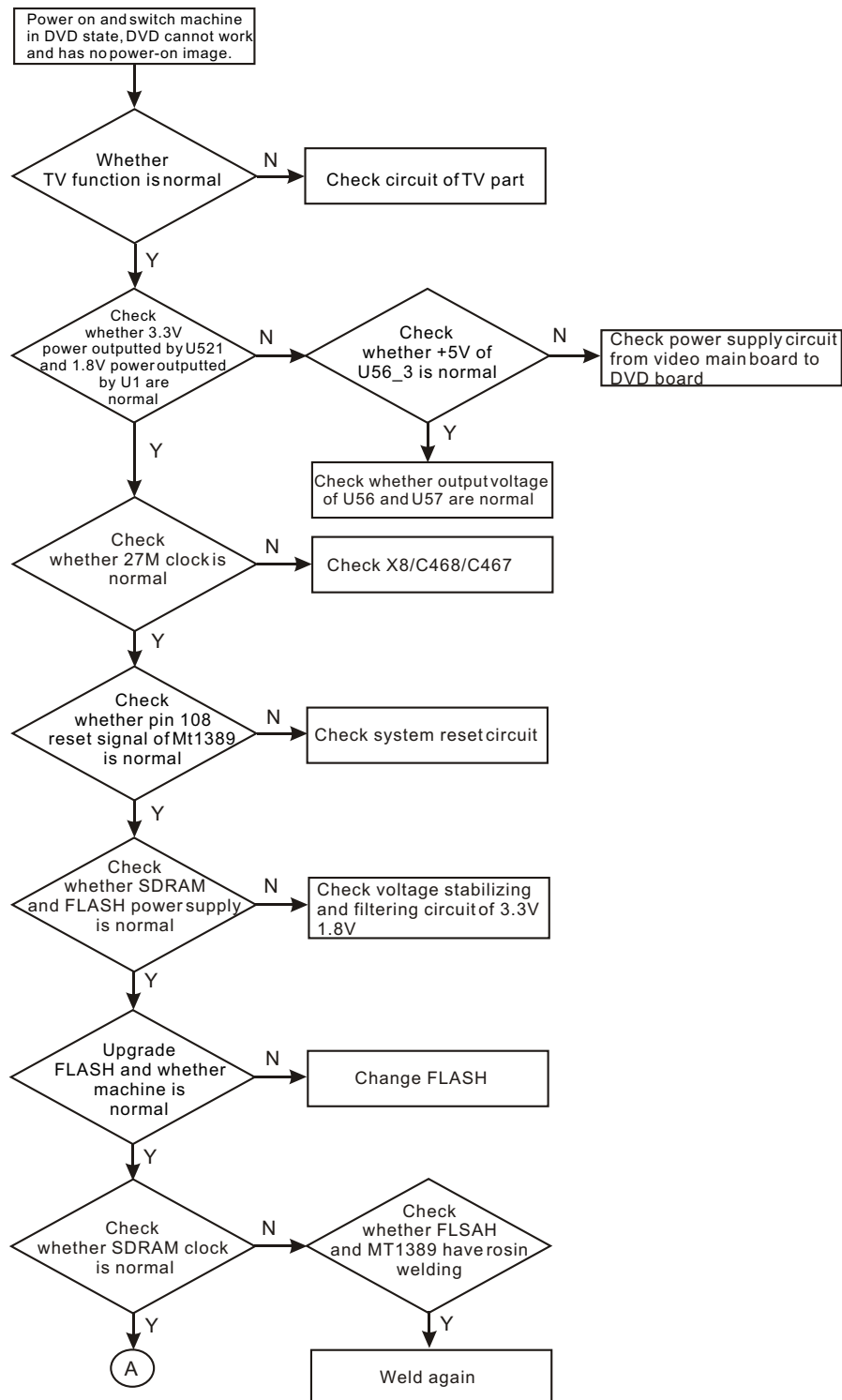


Figure 3.1.5.1 Decode circuit block diagram

Section Two Troubleshooting flow chart

1. Troubleshooting process for "DVD has no output" is shown in the figure 3.2.1.1:

Trouble description: when switching in DVD state, there is no DVD image and loader has no action of drawing in disc.



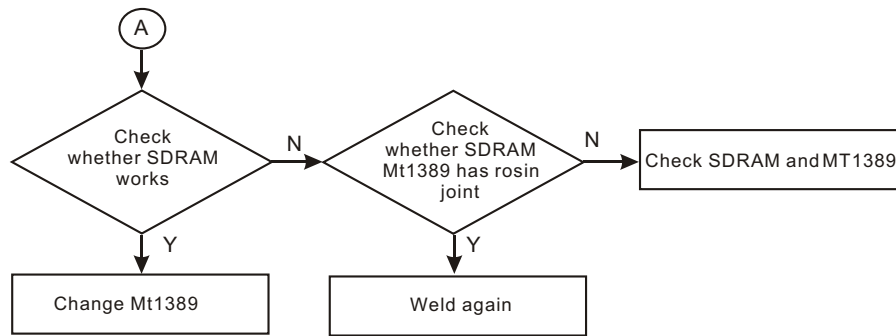
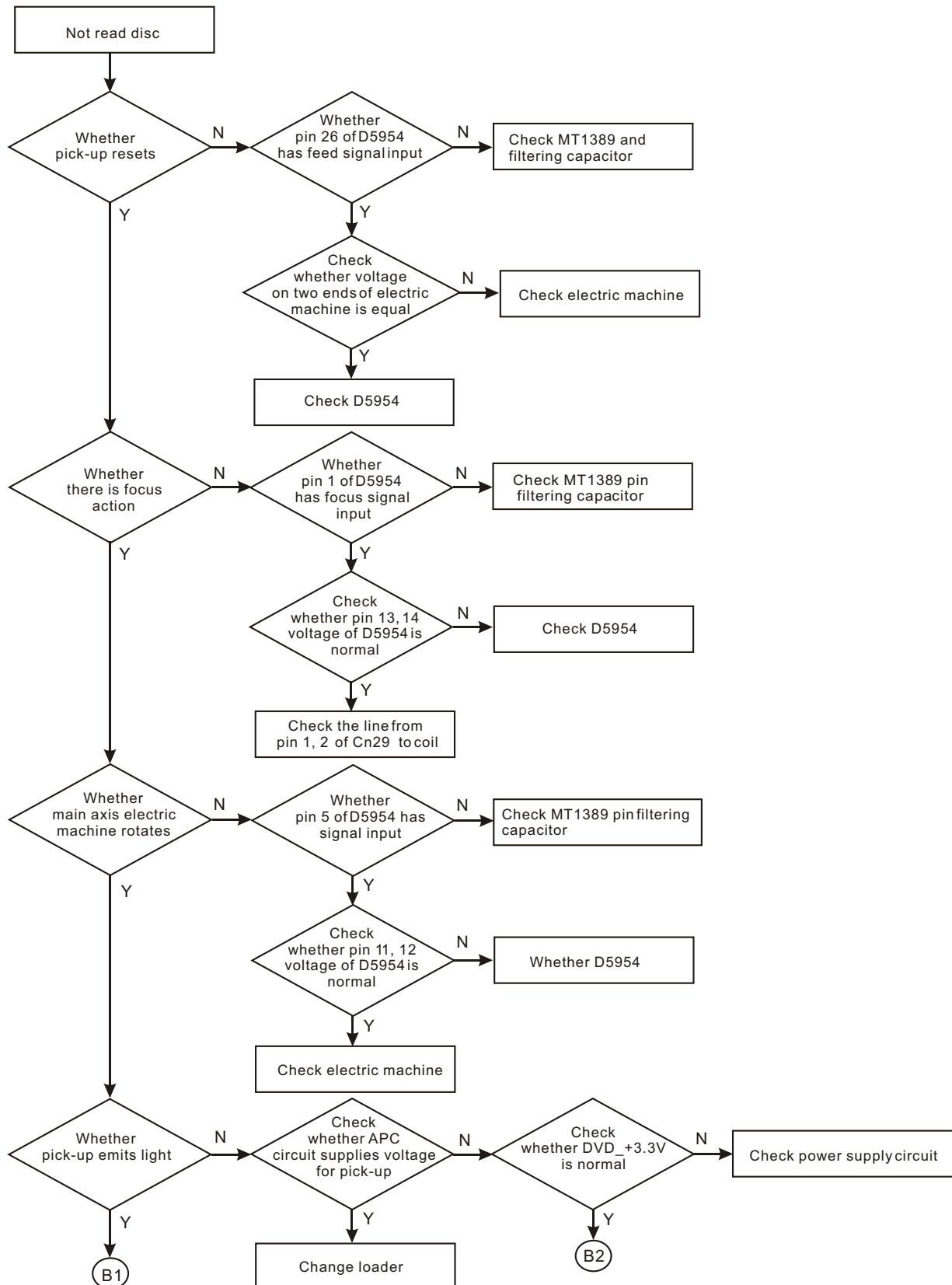


Figure 3.2.1.1 Troubleshooting flow chart for “DVD has no output”

2. Troubleshooting process for “Not read disc” is shown in the figure 3.2.2.1:

Trouble description: switch machine in DVD state, load disc and machine displays that there is no disc or cannot read disc for a long time.



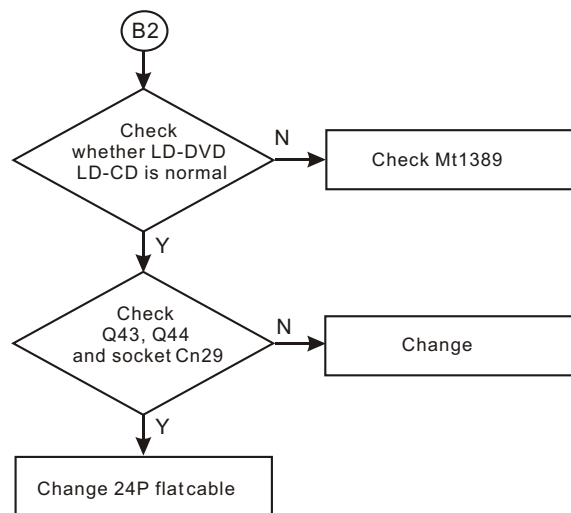
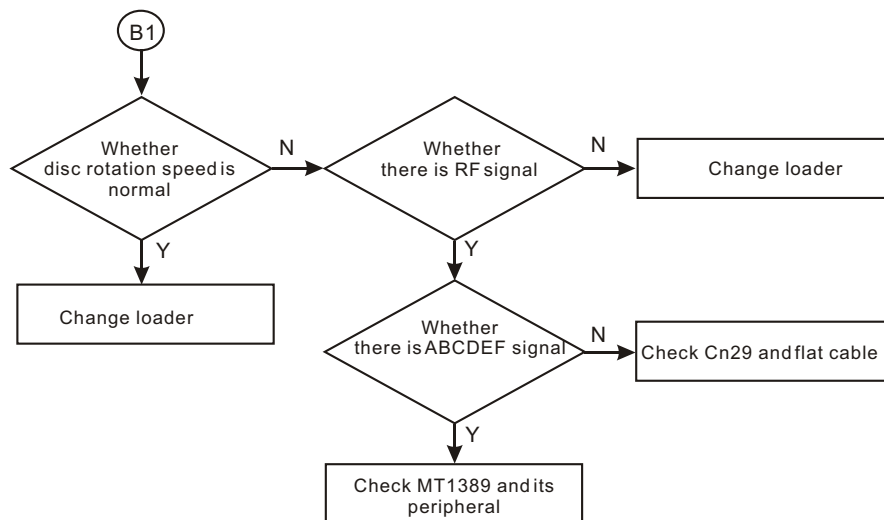


Figure 3.2.2.1 Troubleshooting flow chart for “Not read disc”

3. Troubleshooting process for “DVD has no video output” is shown in the figure 3.2.3.1:

Trouble description: machine works normally in other state; when switching in DVD state, there is sound output but no image output.

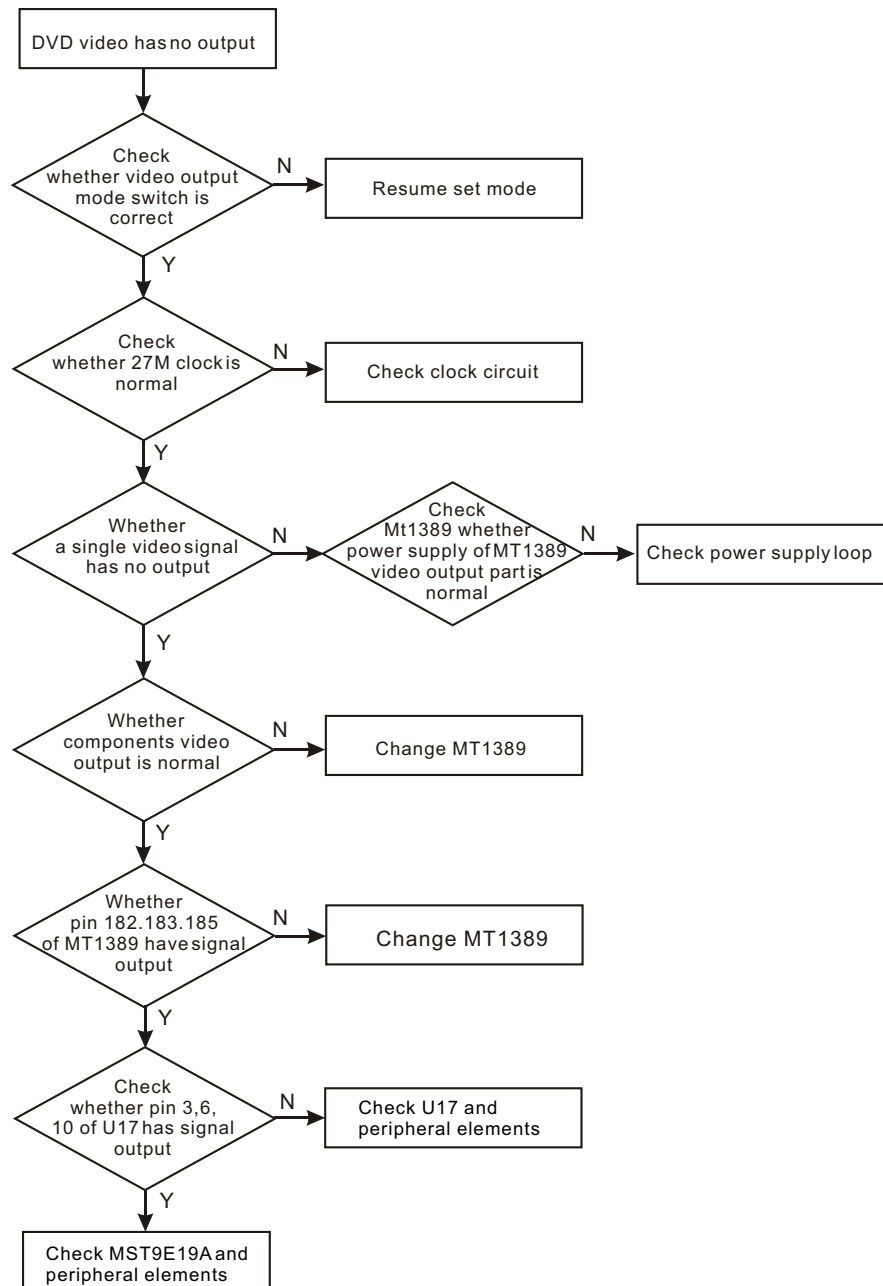


Figure 3.2.3.1 Troubleshooting flow chart for “DVD has no video output”

4. Troubleshooting process for “DVD has no sound output” is shown in the figure 3.2.4.1:

Trouble description: when machine switches in DVD state, disc read is normal, image is normal, no sound output and external sound input is normal.

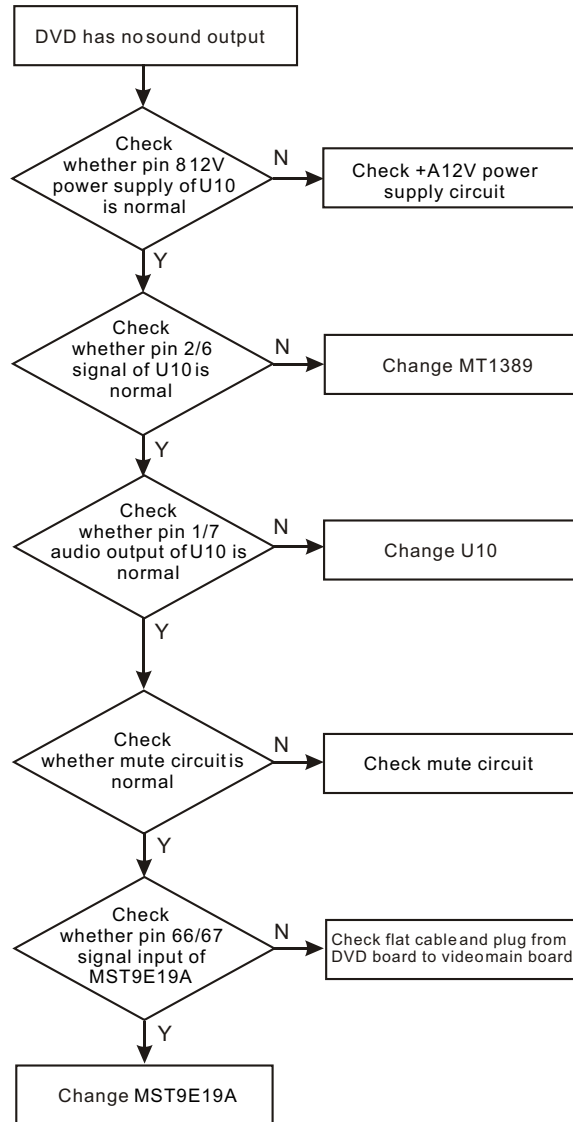
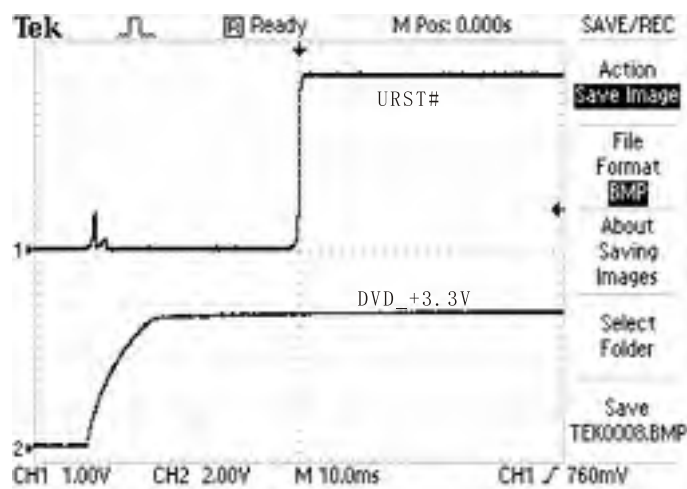


Figure 3.2.4.1 Troubleshooting flow chart for “DVD has no sound output”

Section Three Waveform diagram

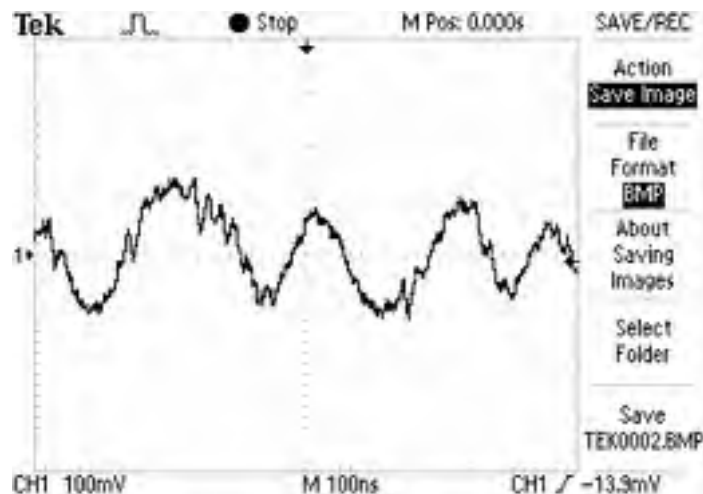
This section collects signal waveform diagram of audio, video and each unit circuit with the purpose to help servicing personnel to judge where trouble lies in accurately and quickly to improve servicing skills. For the difference of oscillograph's type, model and tuner, a certain difference may exist, so the servicing personnel are expected to pay more attention to check in daily operation.

1. Reset waveform diagram.

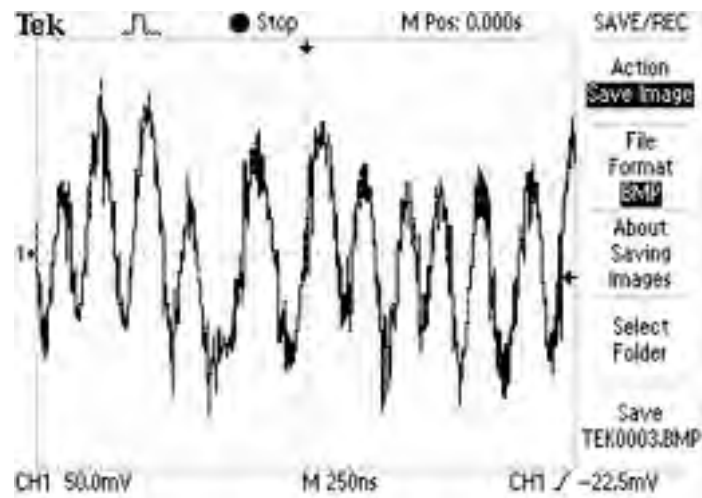


2. Decode board.

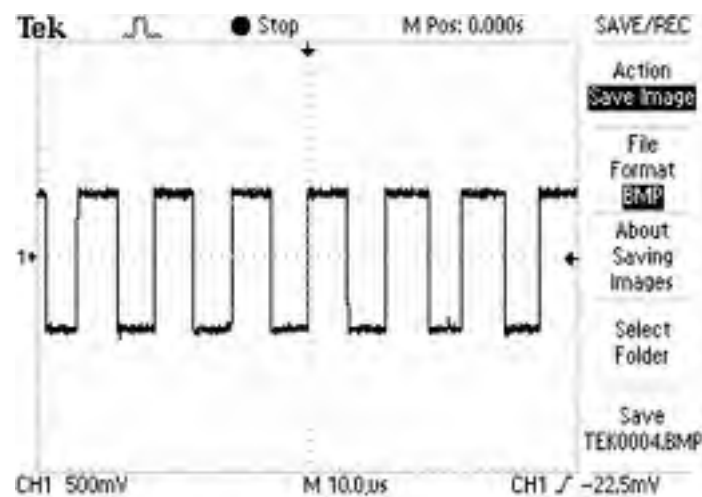
(1) RFO signal waveform diagram of pin 8 of Cn29.



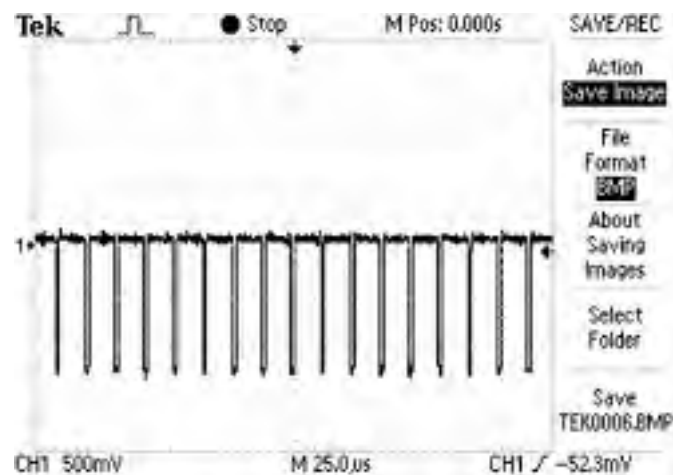
(2) A signal waveform diagram of pin 9 of Cn29 (B、C、D、E、F) .



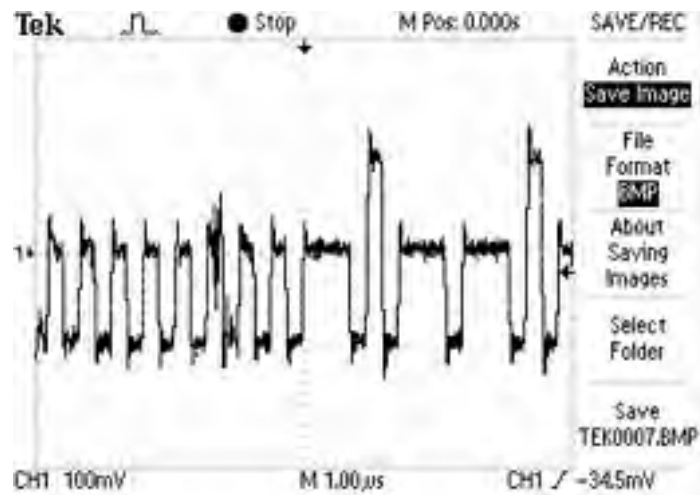
(3) DMO signal (when there is main axis rotation) waveform diagram of pin 37 of U3 (Mt1389).



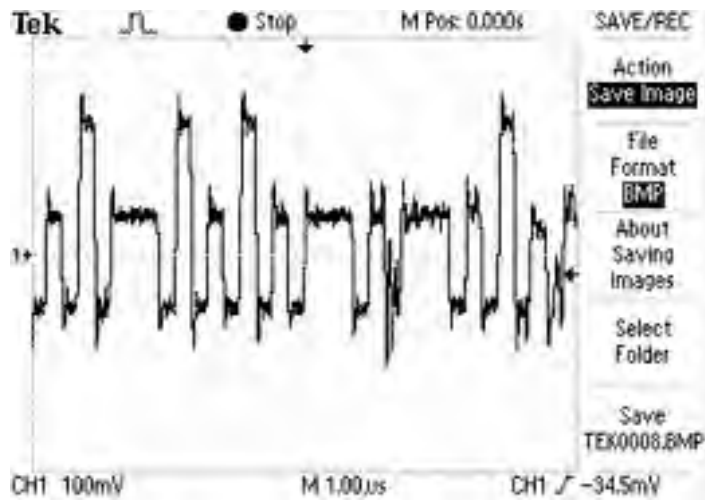
(4) FMO signal (when there is feed) waveform diagram of pin 38 of U3 (Mt1389).



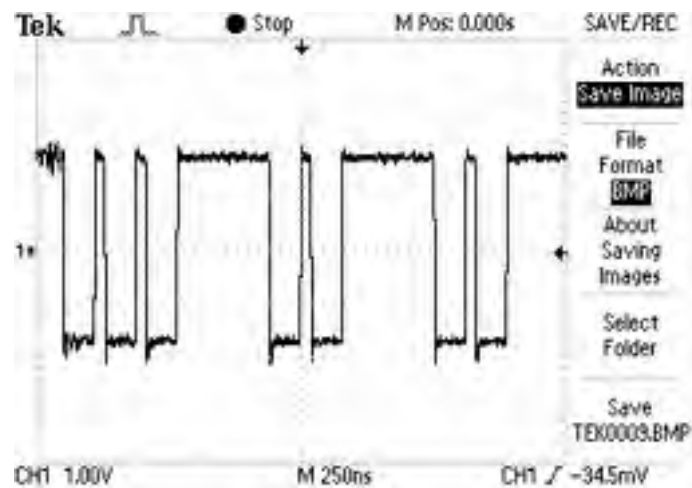
(5) TRO signal (when there is trace) waveform diagram of pin 41 of U3 (Mt1389).



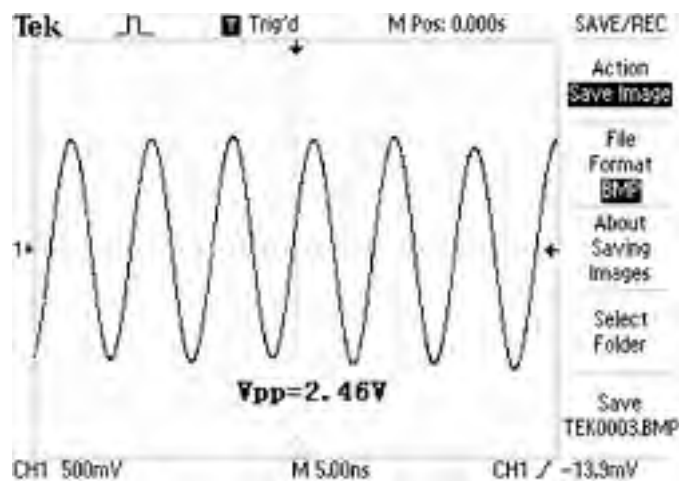
(6) FOO signal (when there is focus) waveform diagram of pin 42 of U3 (MT1389) .



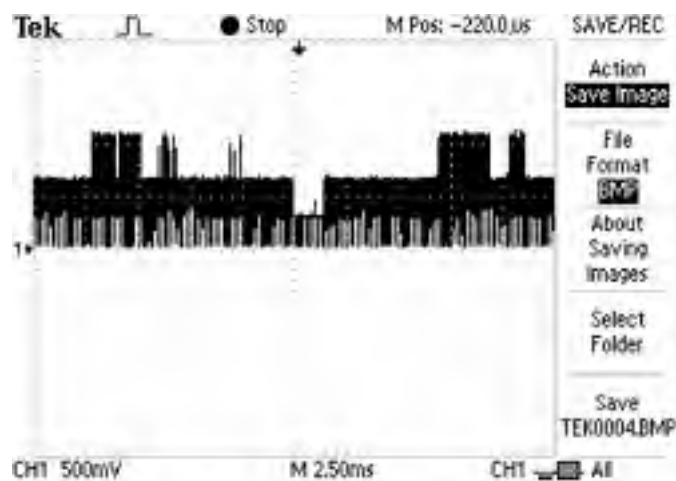
(7) Waveform diagram of pin 29 (when no disc in) of U53 (FLASH) .



(8) Waveform diagram of pin 38 of U40 (SDRAM).

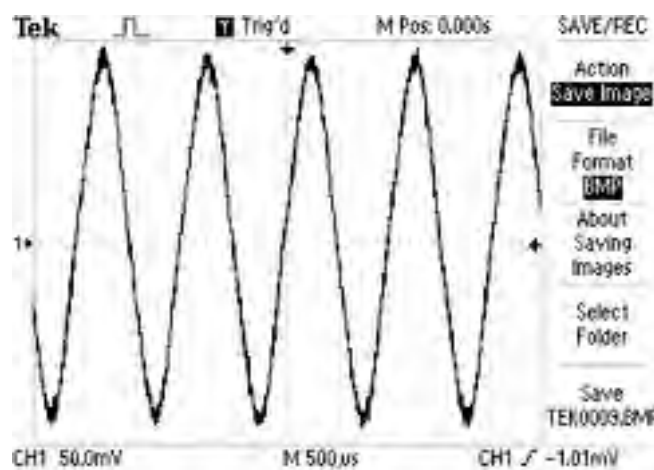


3. Video signal waveform diagram of CN2_5.

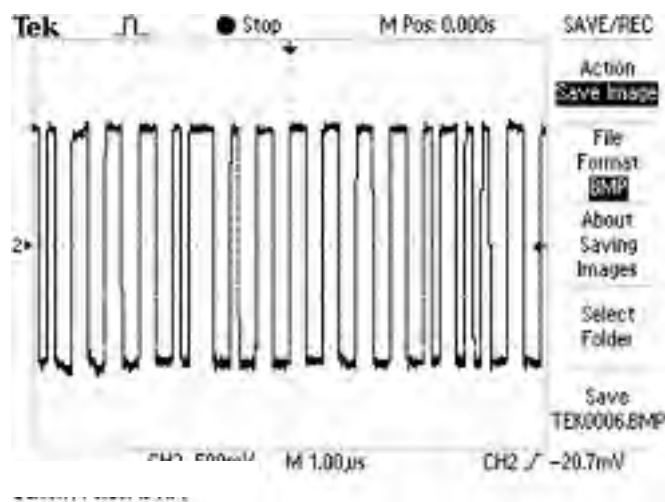


4. Waveform diagram for audio signal.

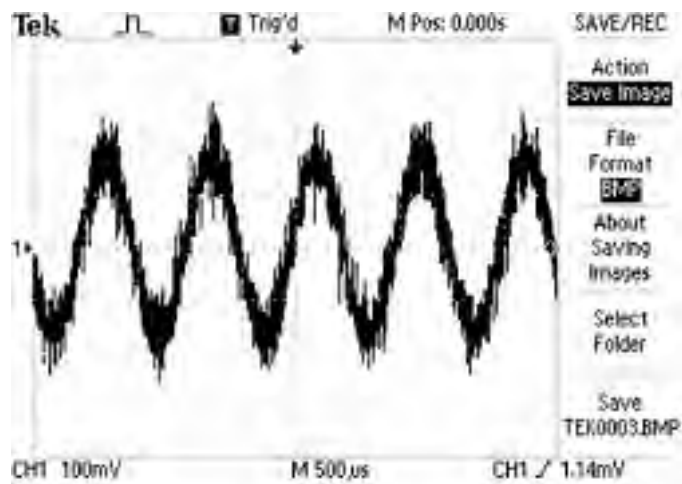
(1) 1KHZ analog audio signal waveform diagram (you are recommended to use test disc, if not, the tested waveform will change at any time to affect judgment), waveform of other channels is the same except subwoofer.



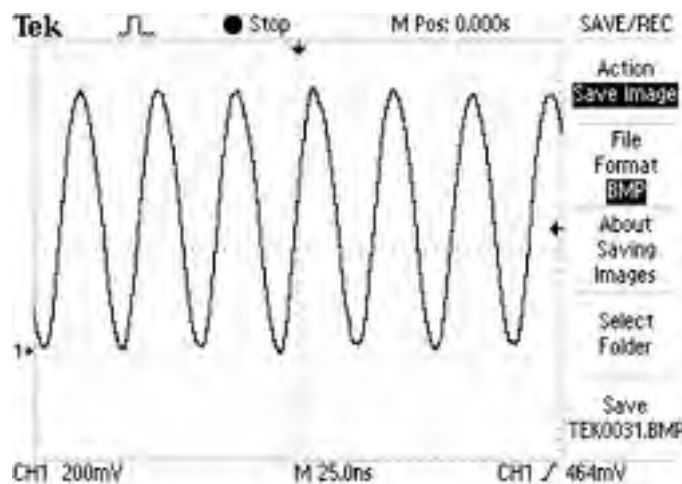
(2) SPDIF: waveform diagram for optical/coaxial digital audio signal.



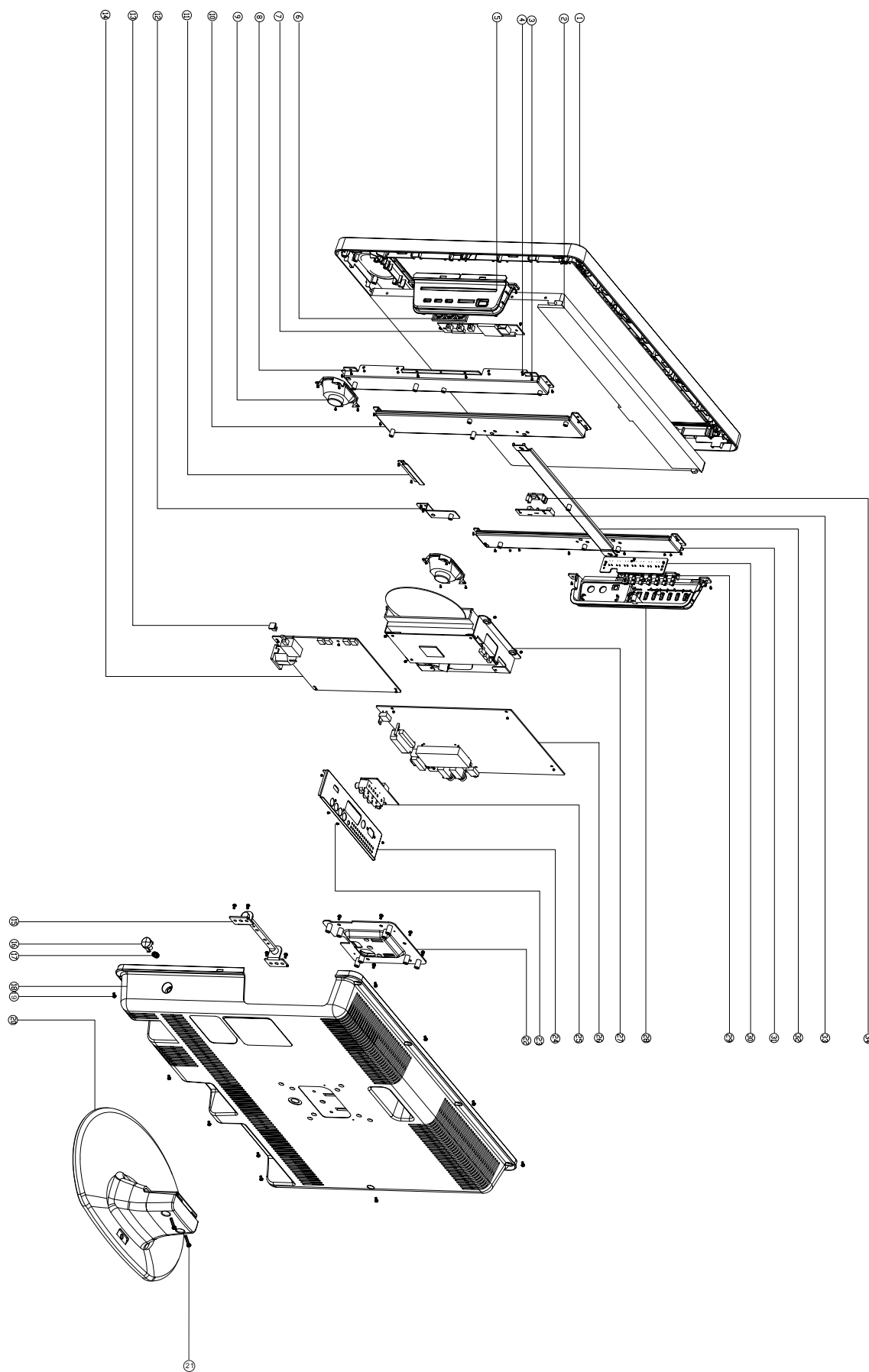
5. Waveform diagram for audio signal without filtering or amplifying (audio input port of test point is C509 or C510).



6.27M clock signal waveform diagram,X8.



Chapter Four Explosion Flow Chart



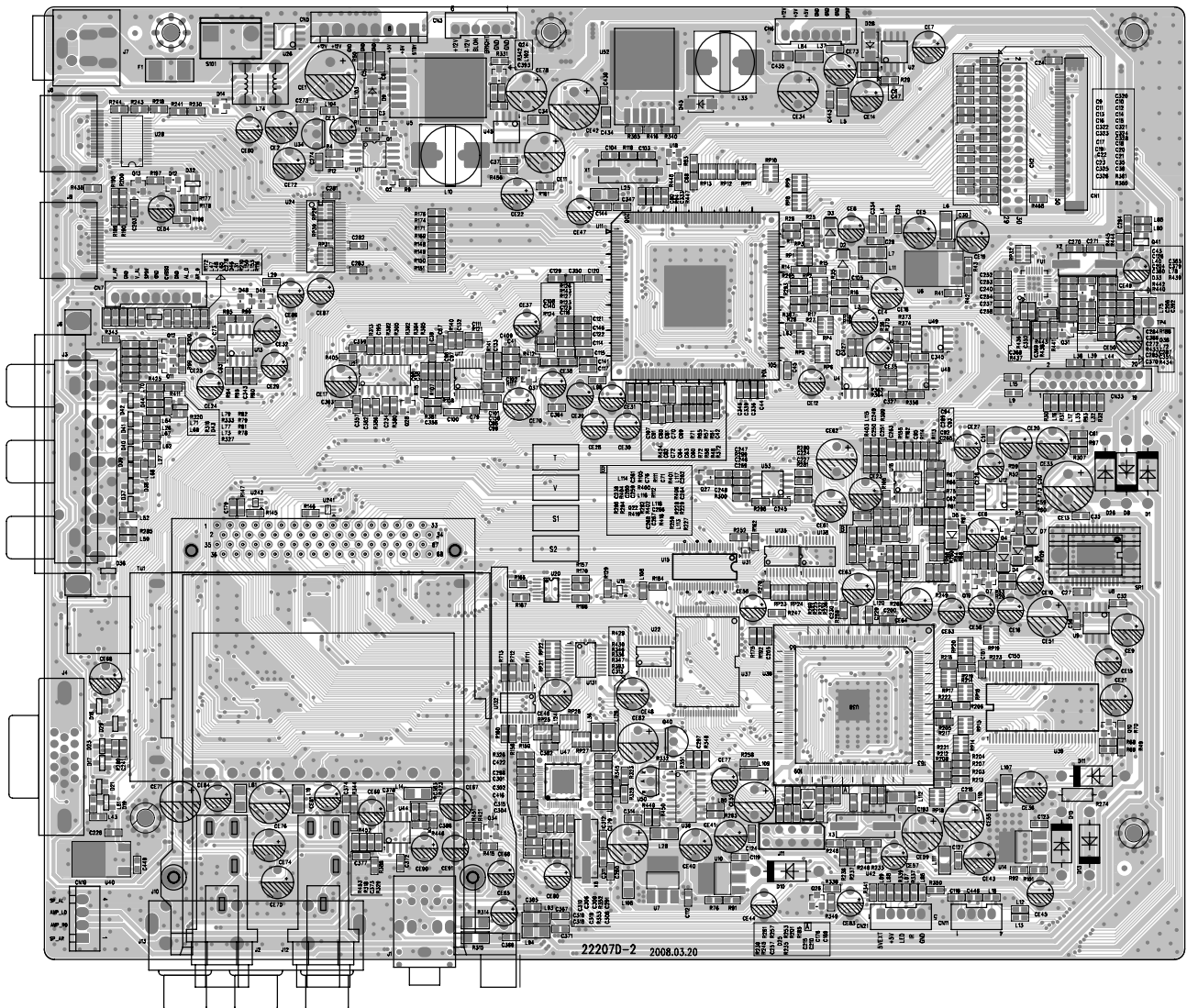
Serial Number	Material Code	Material Name	Specification Model	Unit
1	3006012	Front case	LD2216K(RU) black with decorative stripe	PCS
2	1210585	Display screen component	V216B1-L01 22 inches TFT	PCS
3	4000439	Self-tapping screw	BT 3×10H black	PCS
4	4210151	Machine-tapping screw	BM 3×6H white nickel	PCS
5	3076718	Cover board for DVD button	LD2216DX(RU) black	PCS
6	3076715	DVD button	LD2216DX(RU) silvery gray	PCS
8	3872938	Display screen bracket 1	LD2216DX(RU)	PCS
9	1100650	Loudspeaker	3W 8Ω internal magnetism 71×41×25 LT1509-3	PCS
10	3872685	Display screen bracket 2	LT-2207D	PCS
11	3872240	Screen block	LT1903	PCS
12	3872688	Display screen bracket 5	LT-2207D	PCS
13	3073520	Connecting head of power switch	LT1903	PCS
14	4941458	Power board	52207D-0 LD2206X(RU)	PCS
15	3872696	Shaft	LT-2207D	PCS
16	3076720	Power button	LD2216DX(RU) silvery gray	PCS
17	3810068	Spring	Φ9×12 Φ0.5	PCS
18	3013278	Rear case	LD2216DX(RU) black	PCS
19	4000616	Self-tapping screw	BB 4×10H black	PCS
20	3076714	Pedestal	LD2216DX(RU) black	PCS
21	4210319	Machine-tapping screw	PM 4×20H white nickel with pad+spring pad	PCS
22	3872419	Support board	LT1903 3#	PCS
23	4040076	Self-tapping screw	FT 3×8H white nickel	PCS
24	3872682	Cover board of terminal (lower)	LD2206X(RU) gray	PCS
25	4941456	AV board	7153D-0 LD2206X(RU)	PCS
26	4942096	Main PCB board	22207D-2 LD2216K(RU)	PCS
27	2380370	DVD loader	TD-S208S-SV1(62SV1 pick-up)-B	PCS
28	3076717	Cover board of terminal	LD2216DX(RU) black	PCS
29	3076716	Function button	LD2216DX(RU) silvery gray	PCS
30	4941454	TV button board	4153D-0 LD2206X(RU)	PCS
31	3872939	Display screen bracket 3	LD2216DX(RU)	PCS
32	3872687	Display screen bracket 4	LT-2207D	PCS
33	4942095	PCB board of remote control	B2216K-0 LD2216K(RU)	PCS
34	3073597	Lens of remote control	LT1903 transparent	PCS

Chapter Cinque

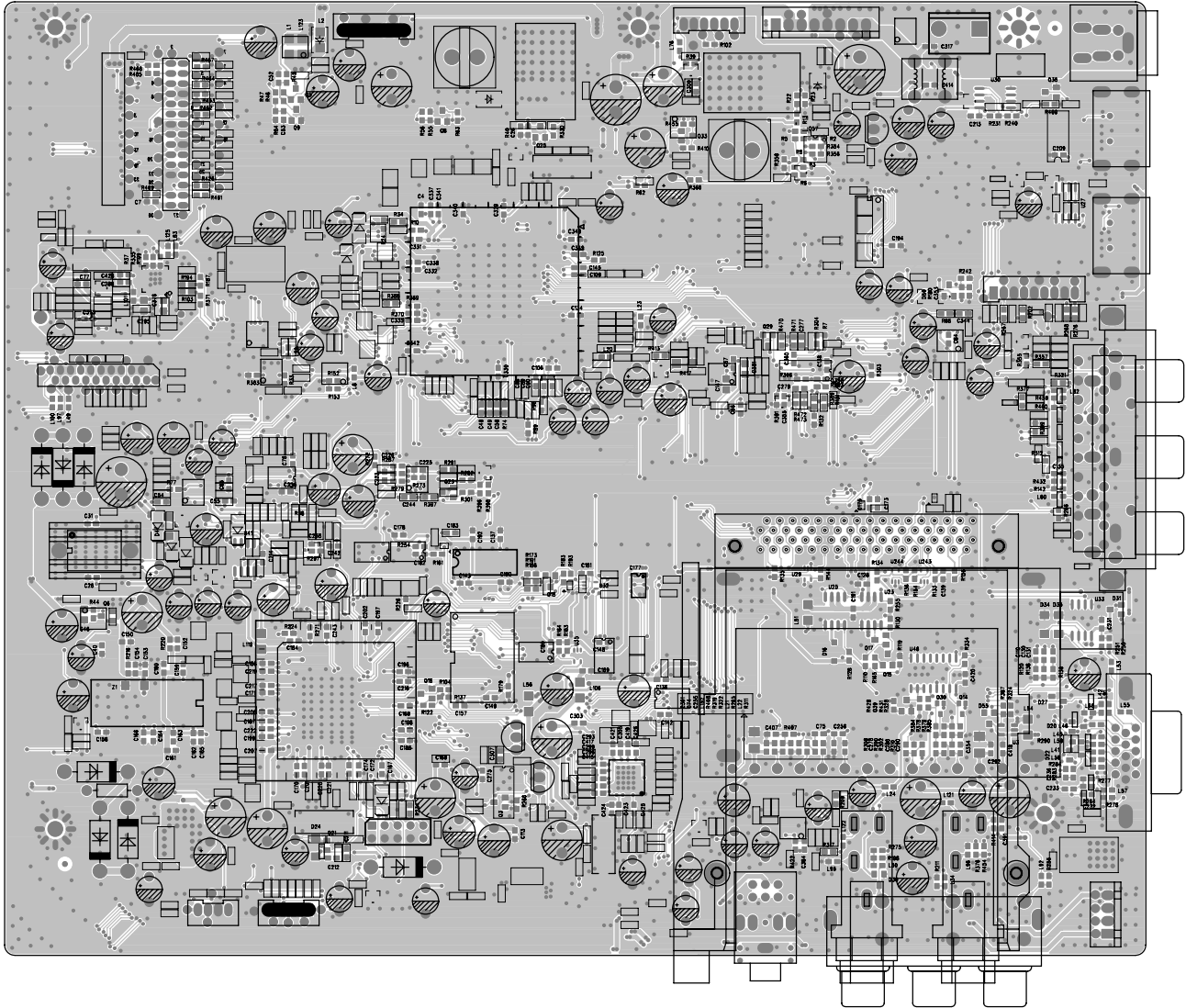
PCB Board&Circuit Diagram

Section One PCB Board

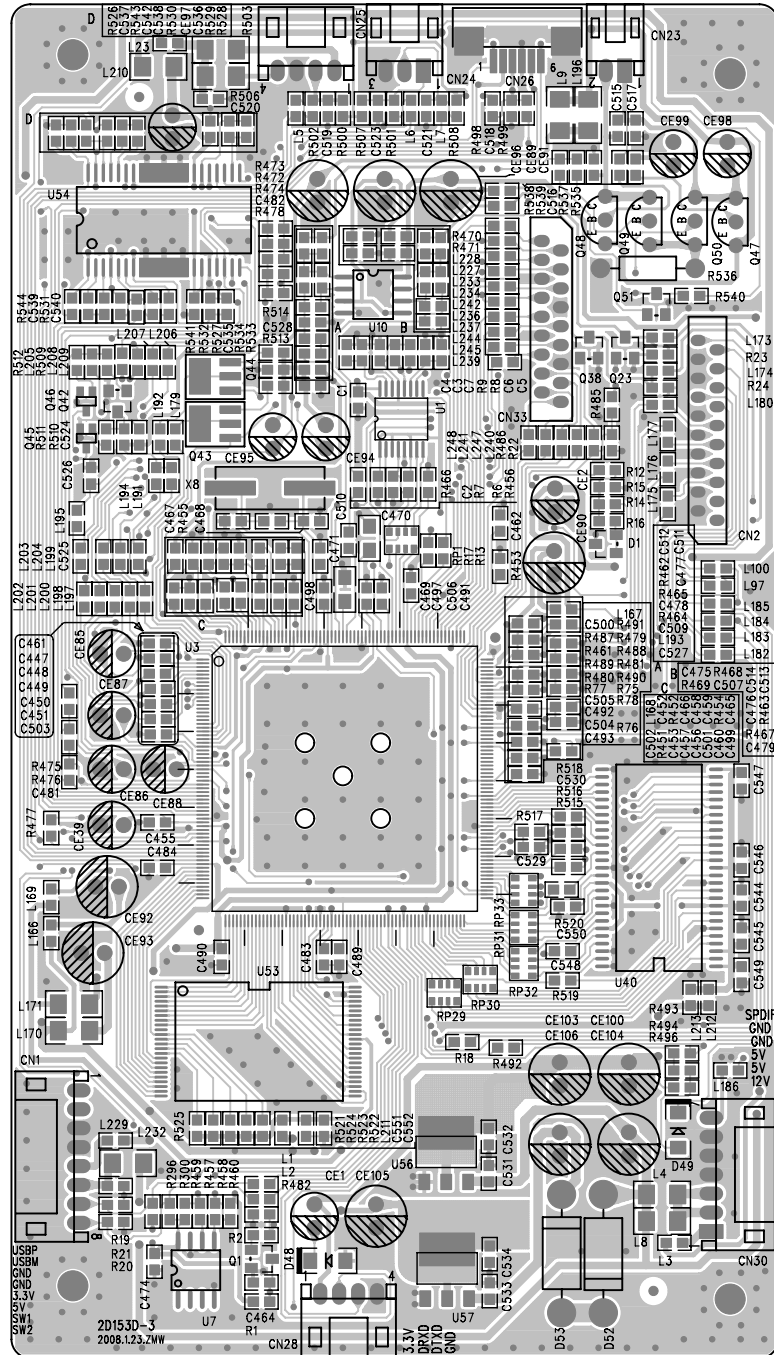
5.1.1 TOP layer of TV Main Board(22207D-2)4942096.



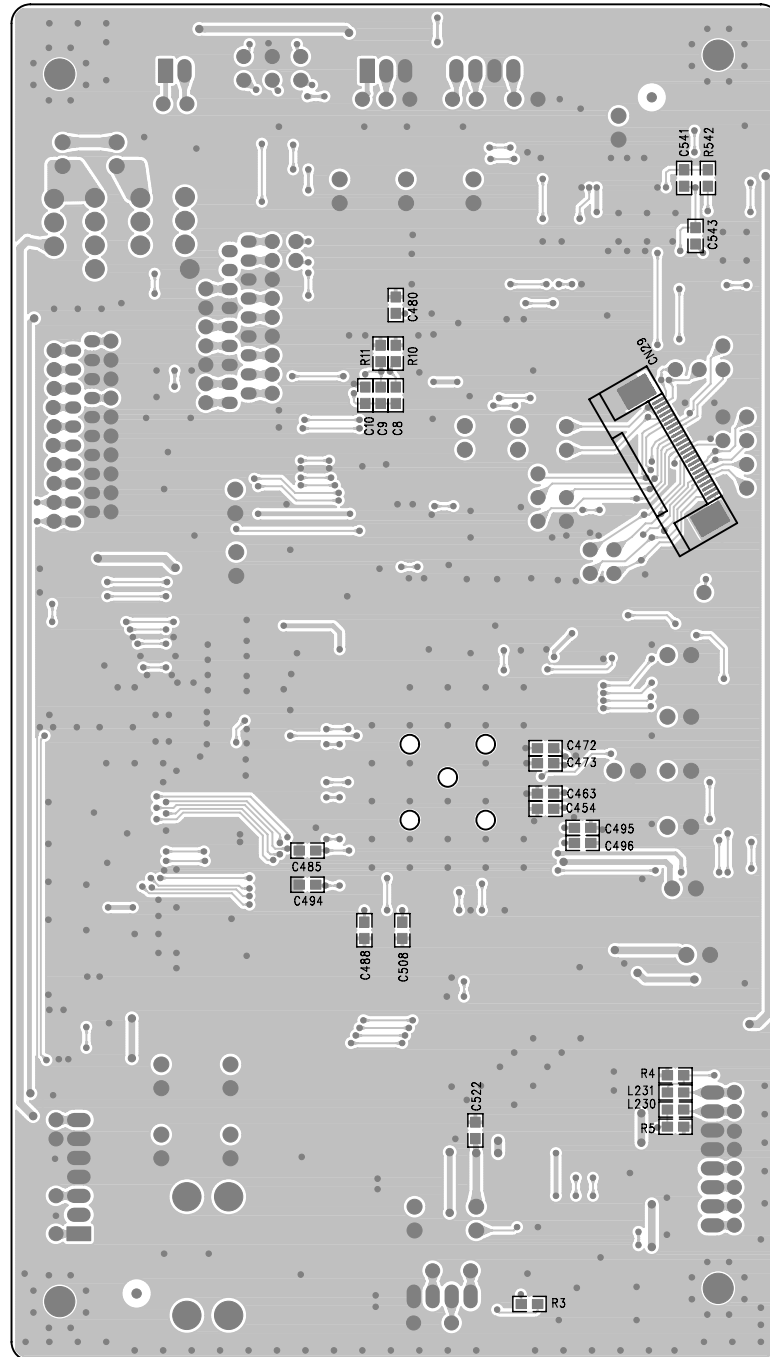
5.1.2 Bottom layer of TV Main Board(22207D-2)4942096.



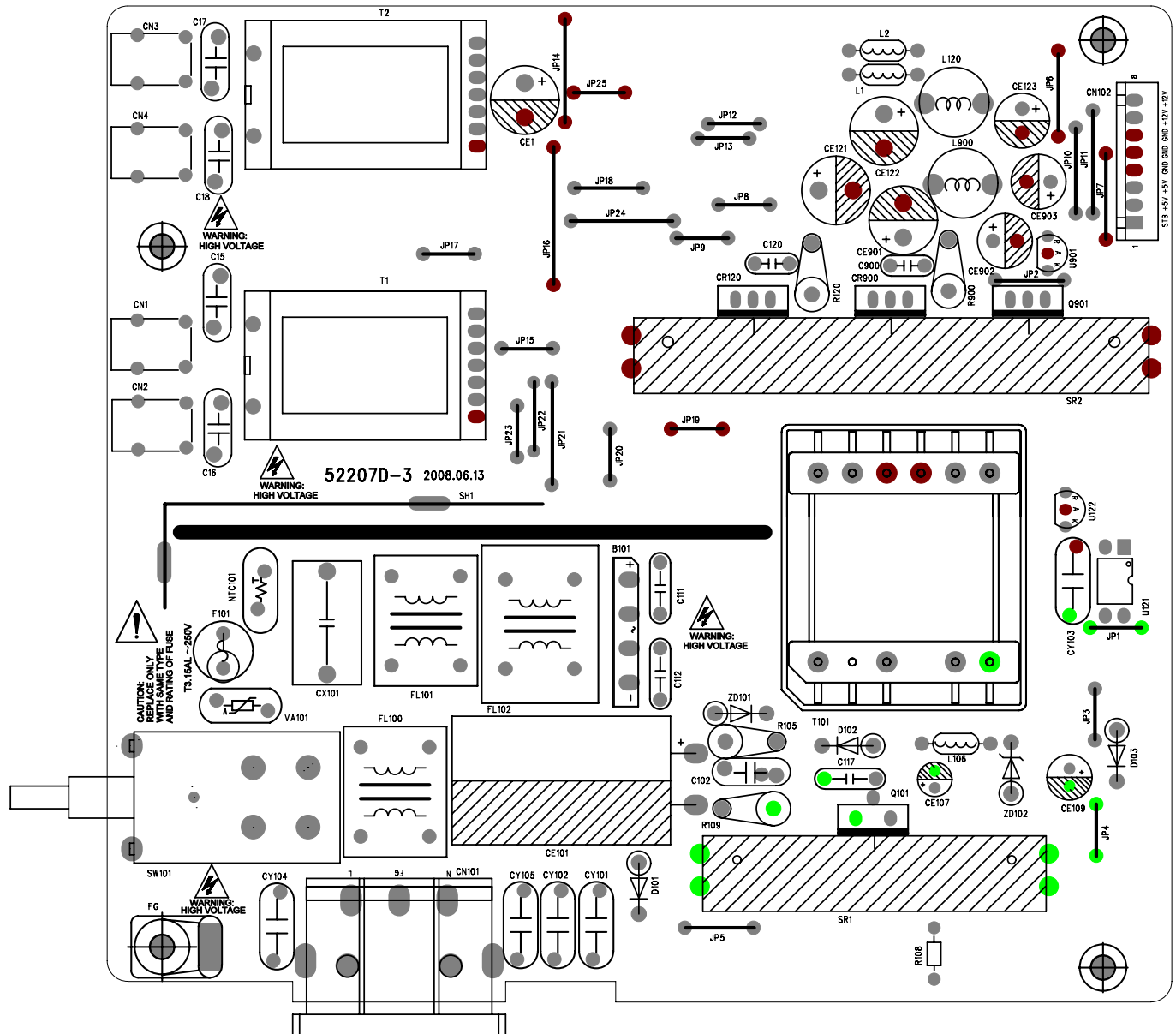
5.1.3 TOP layer of DVD Board(2D153D-3)4941662.



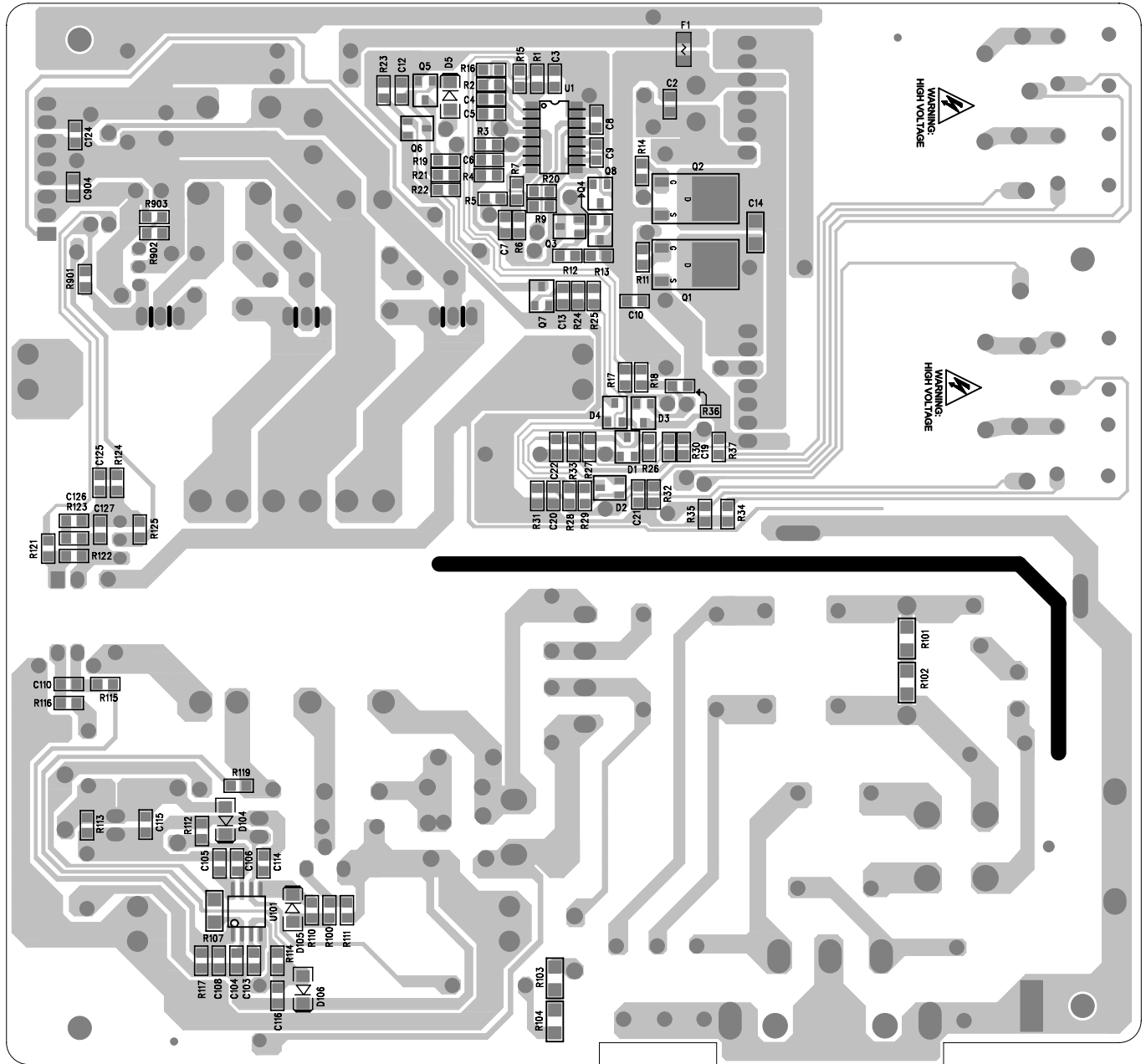
5.1.4 Bottom layer of DVD Board(2D153D-3)4941662.



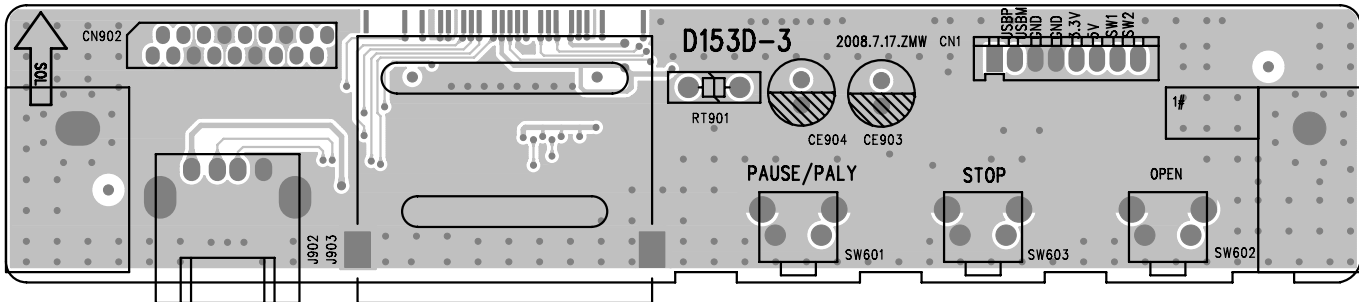
5.1.5 TOP layer of Power\$Inverter Board(52207D-3)4941458.



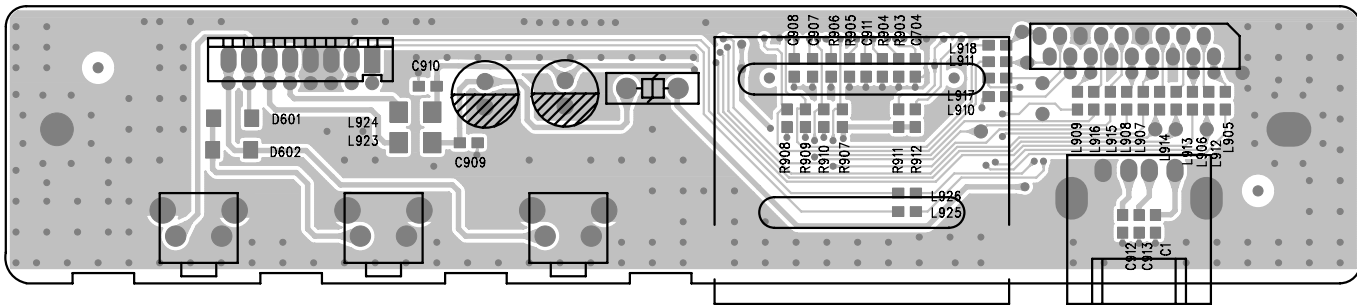
5.1.6 Bottom layer of Power\$Inverter Board(52207D-3)4941458.



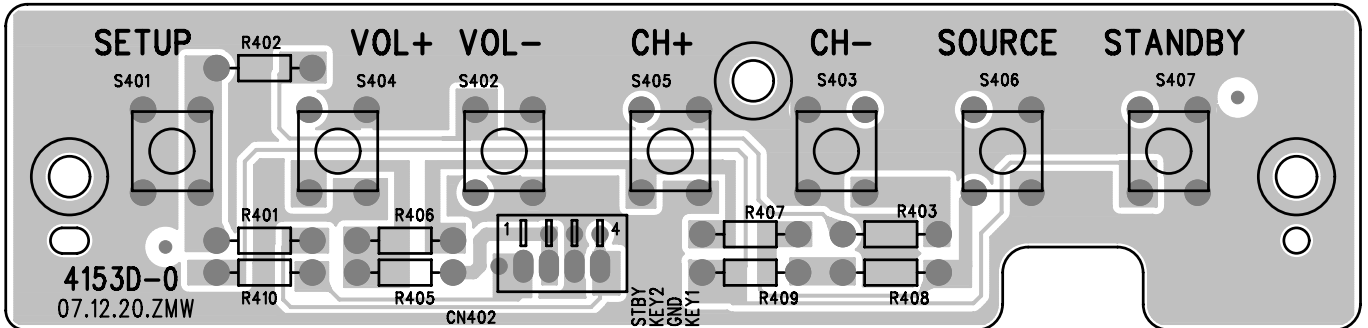
5.1.7 TOP layer of USB Board(D153D-3)4941455.



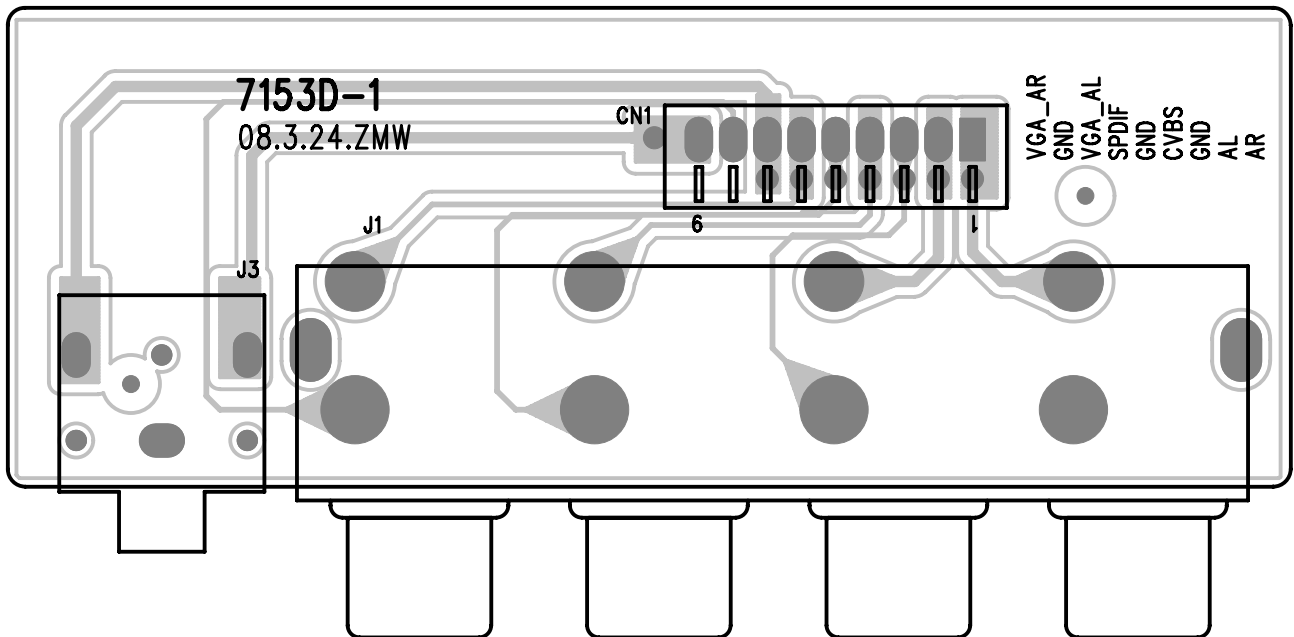
5.1.8 Bottom layer of USB Board(D153D-3)4941455.



5.1.9 TV KET Board(4153D-0)4941454.

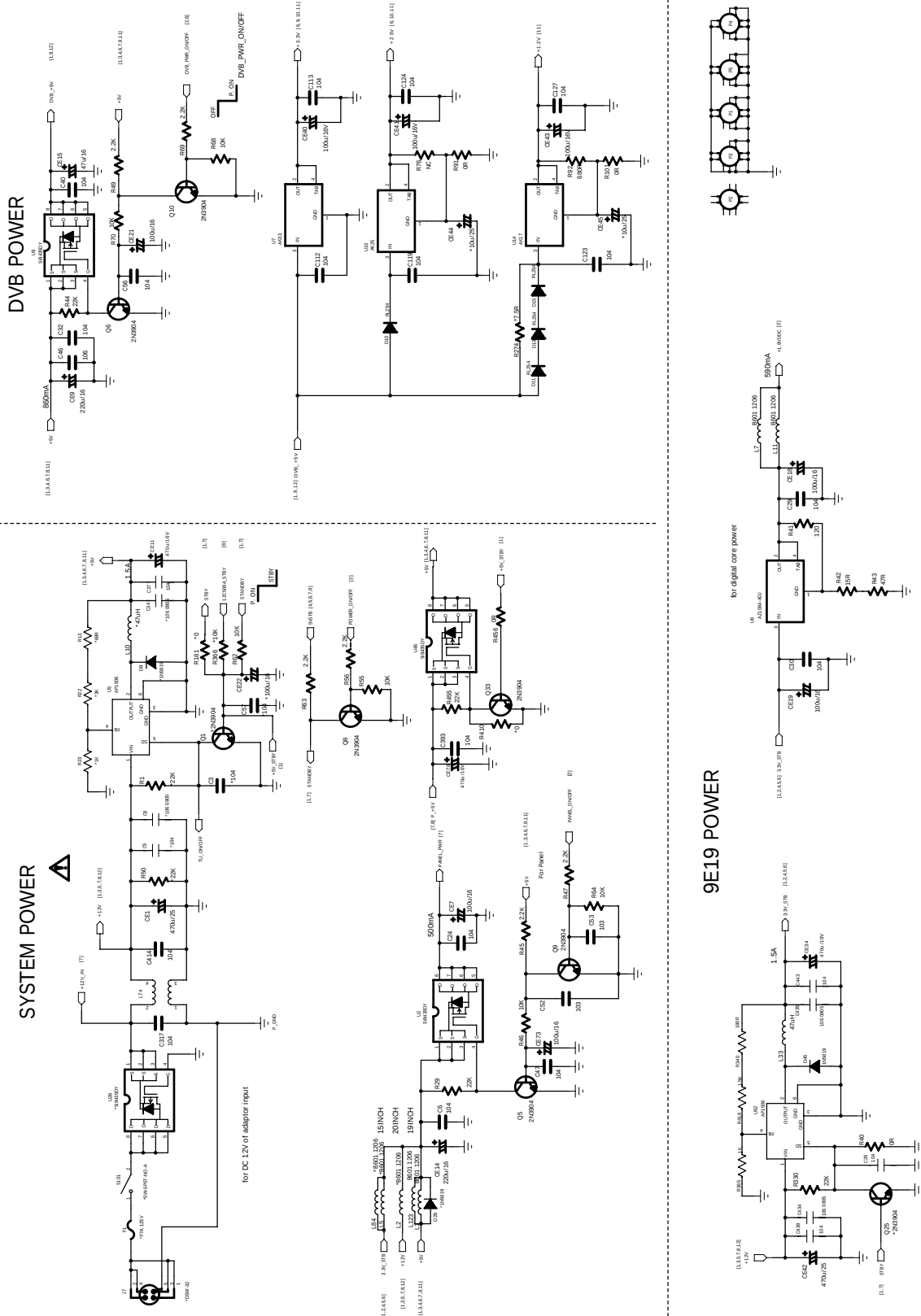


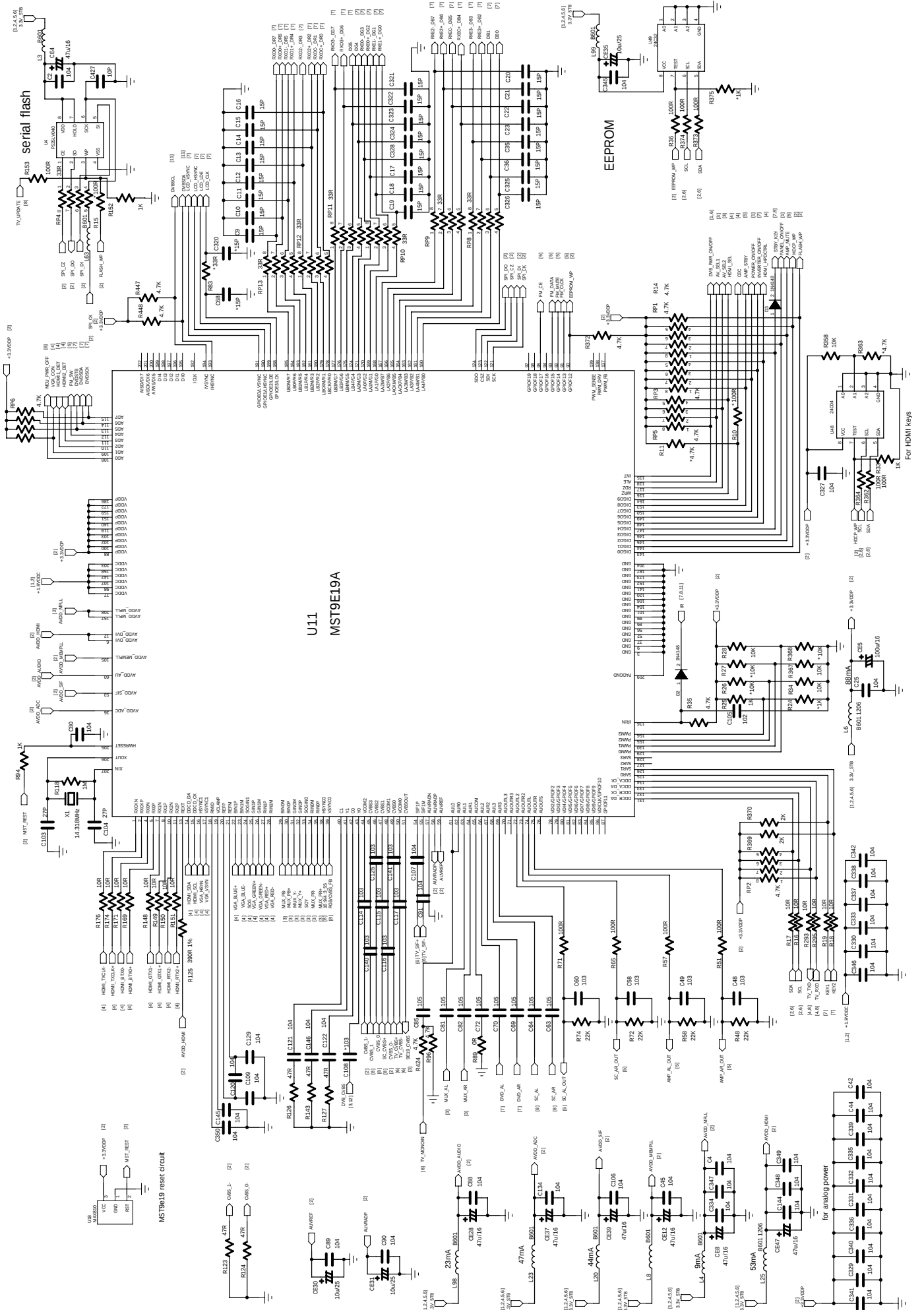
5.1.10 A/V input Board(7153D-1)4941456.

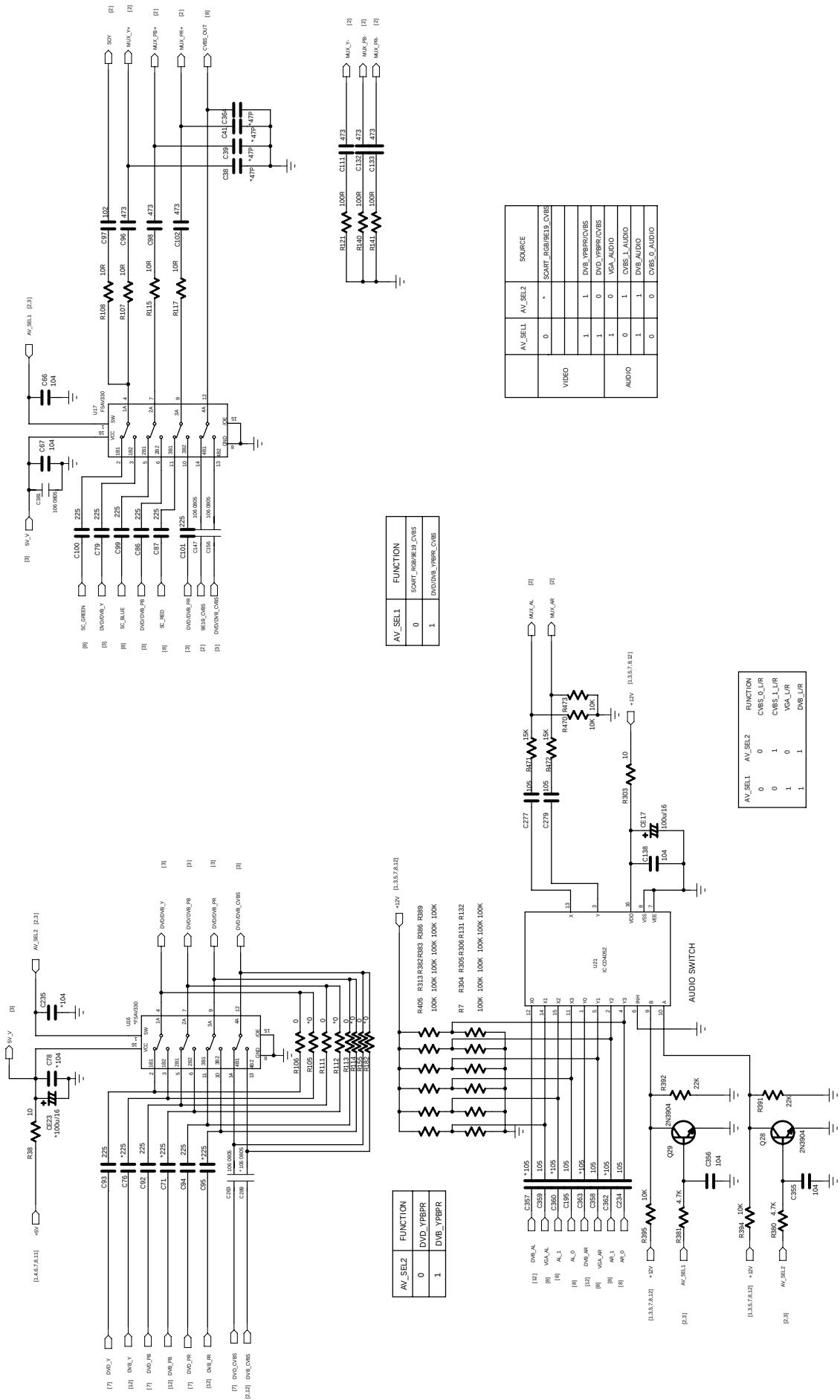


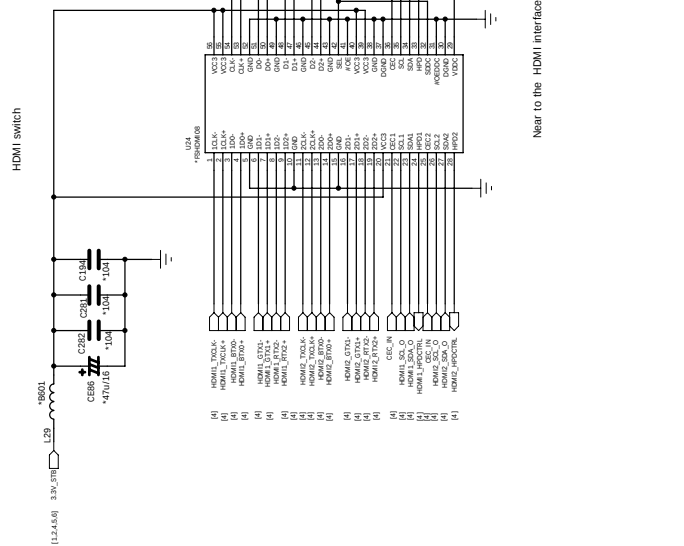
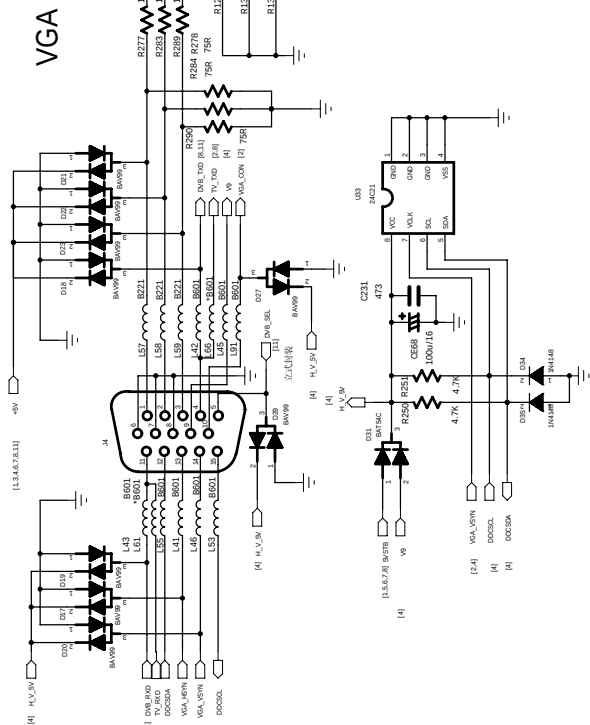
Section Two Circuit Diagram

5.2.1 TV Main Board.

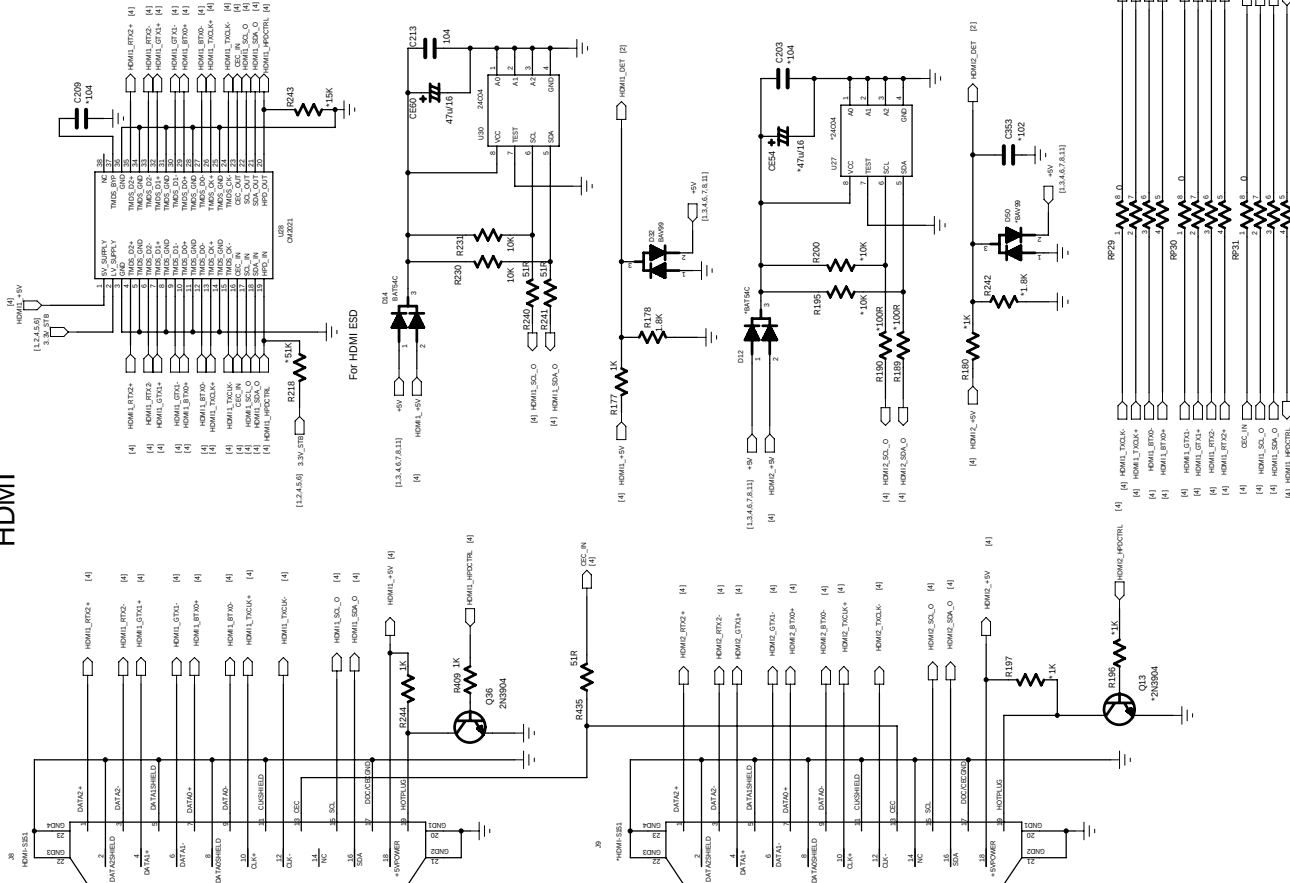
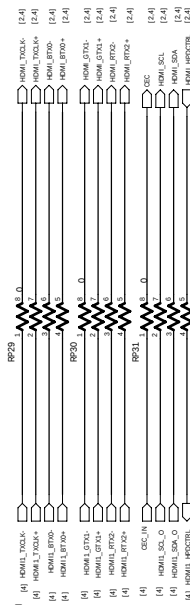


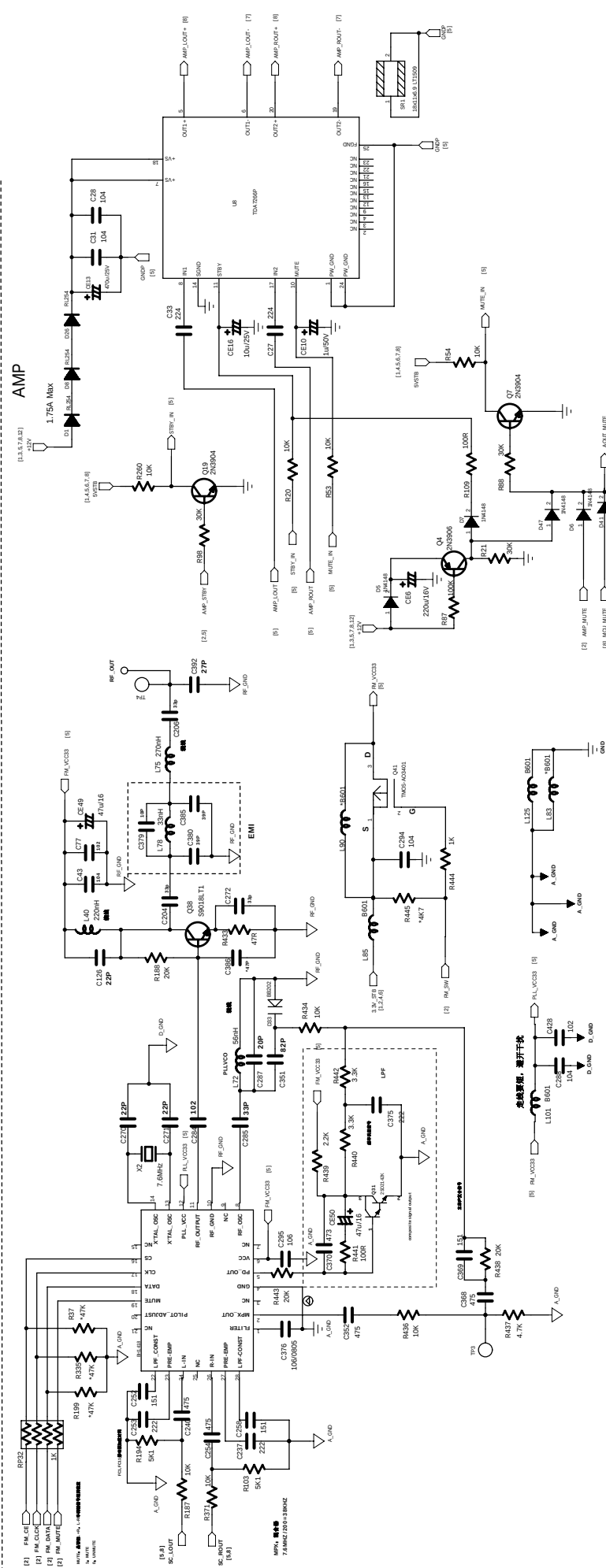
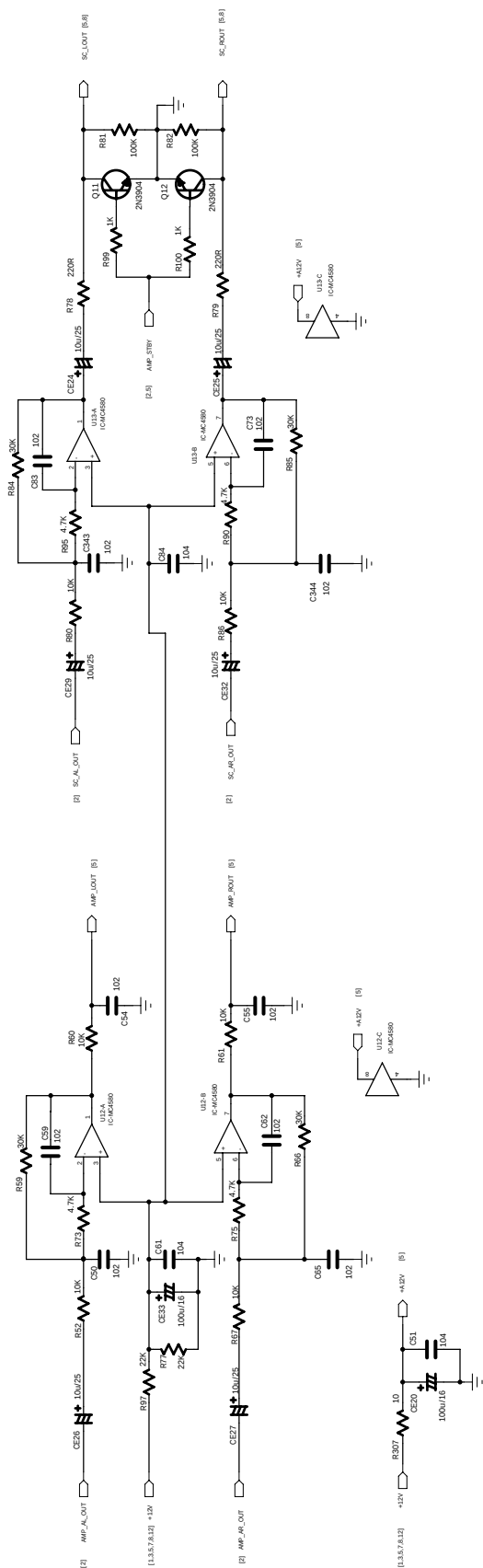




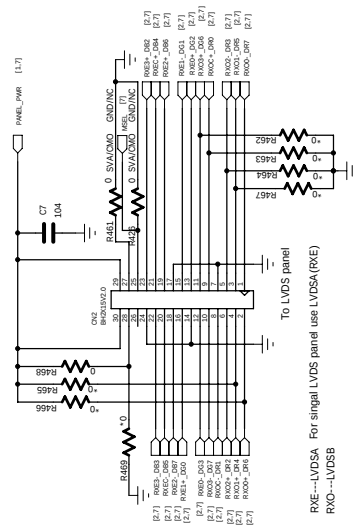


HDMI_SEL	SELECTED
0	HDMI1
1	HDMI2



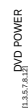
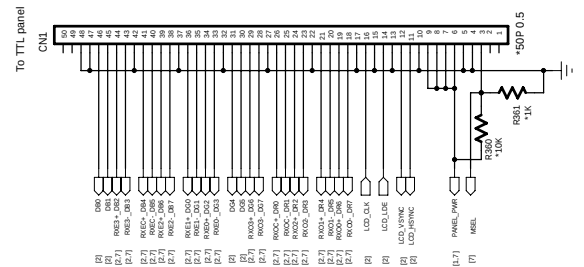


LCD PANEL INTERFACE

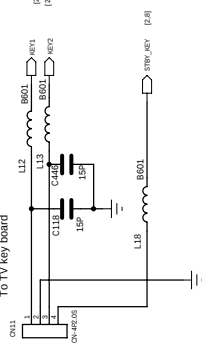
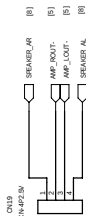
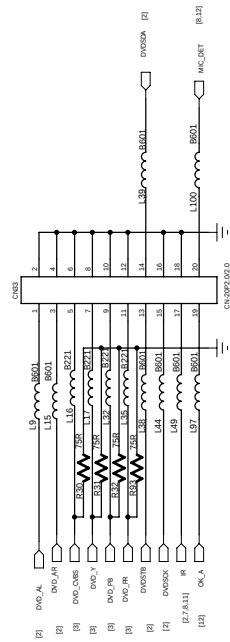


RXE---LVDSA For singal LVDS panel use LVDSA(RXE)

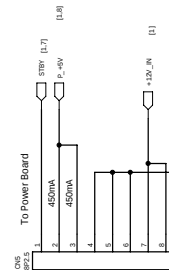
RXO---LVDSB



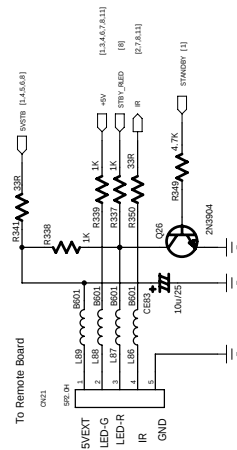
To DVD Board



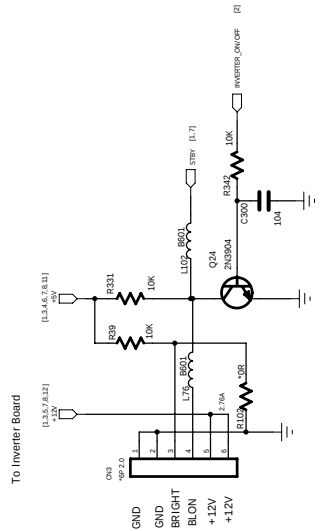
For real standby



45 To Power Board

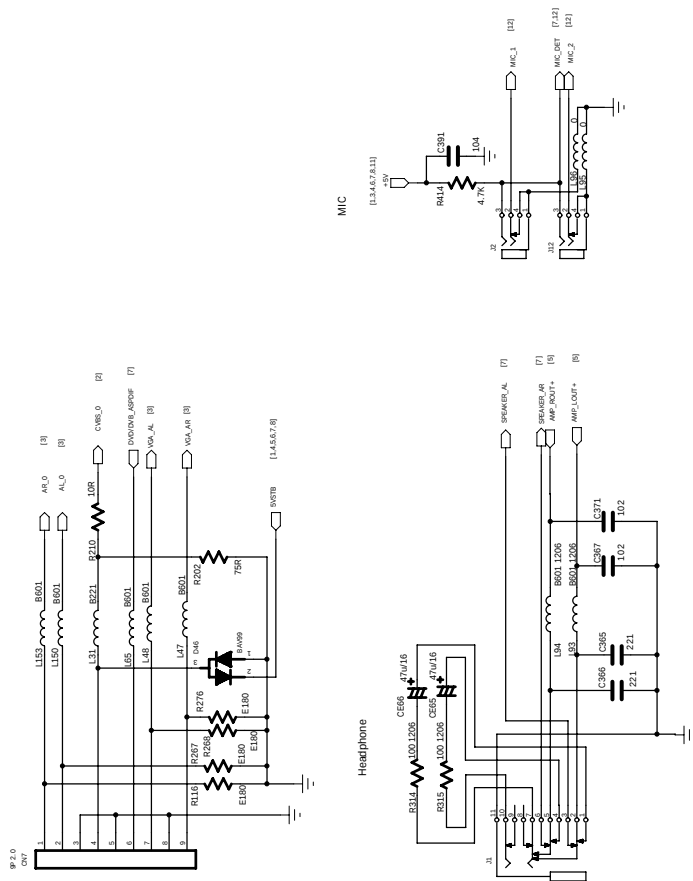
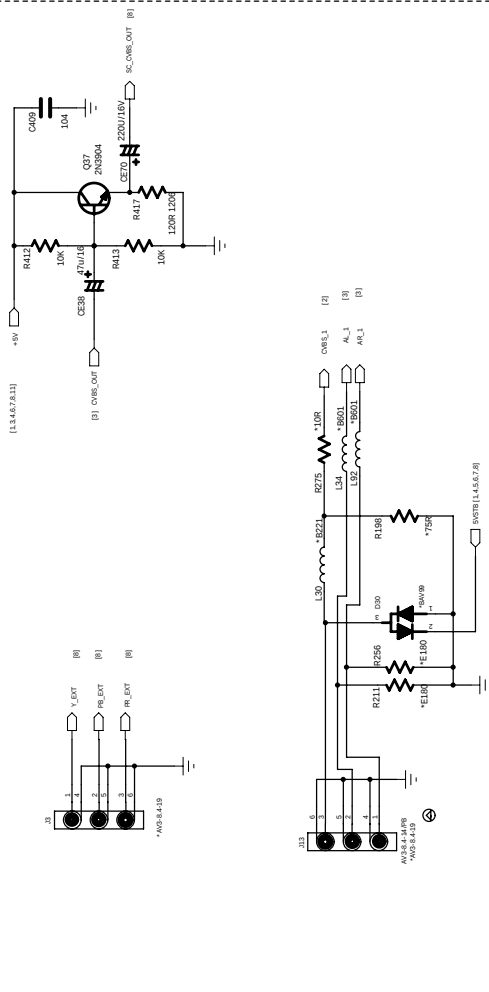


To Remote Board

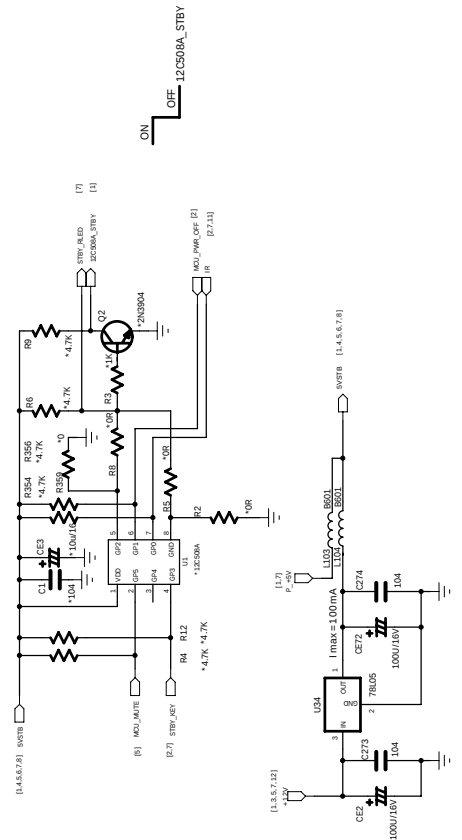


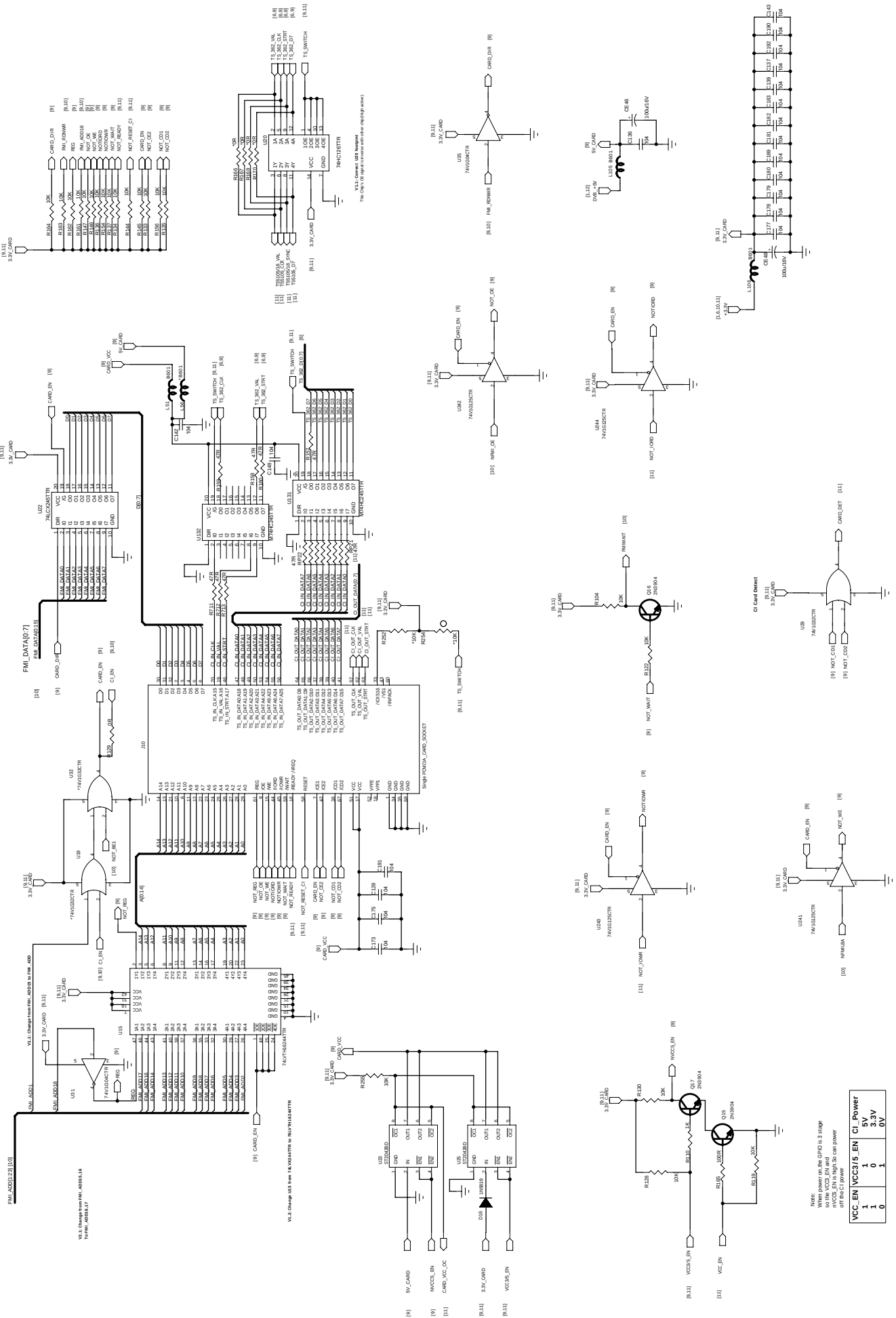
To Inverter Board

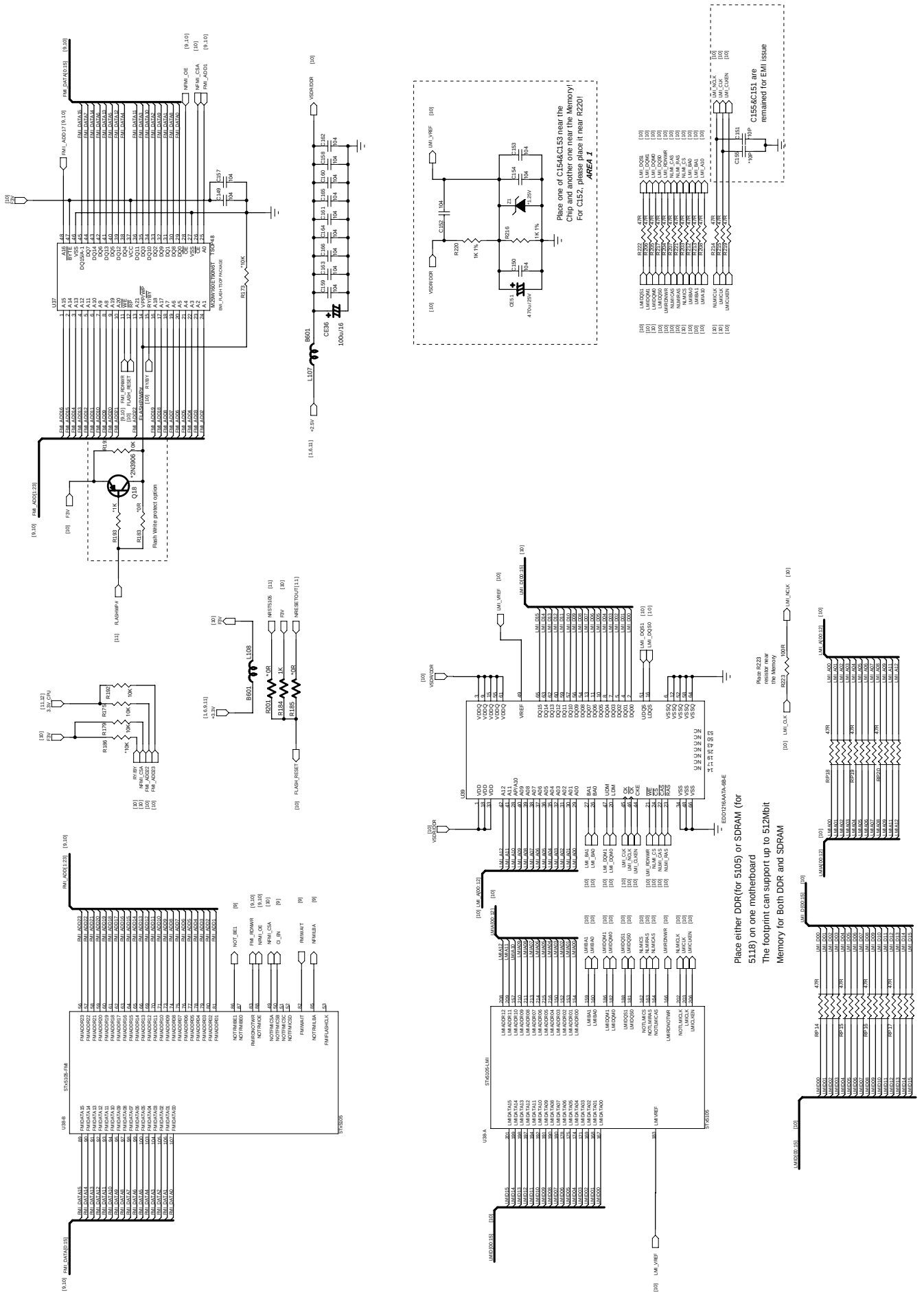
EXT interface



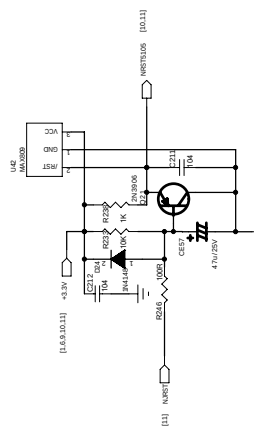
For real standby



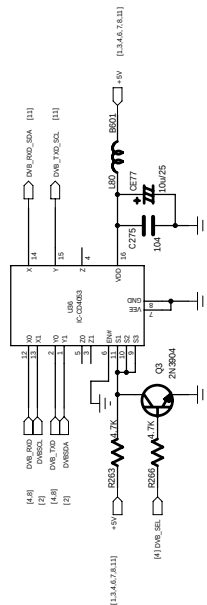


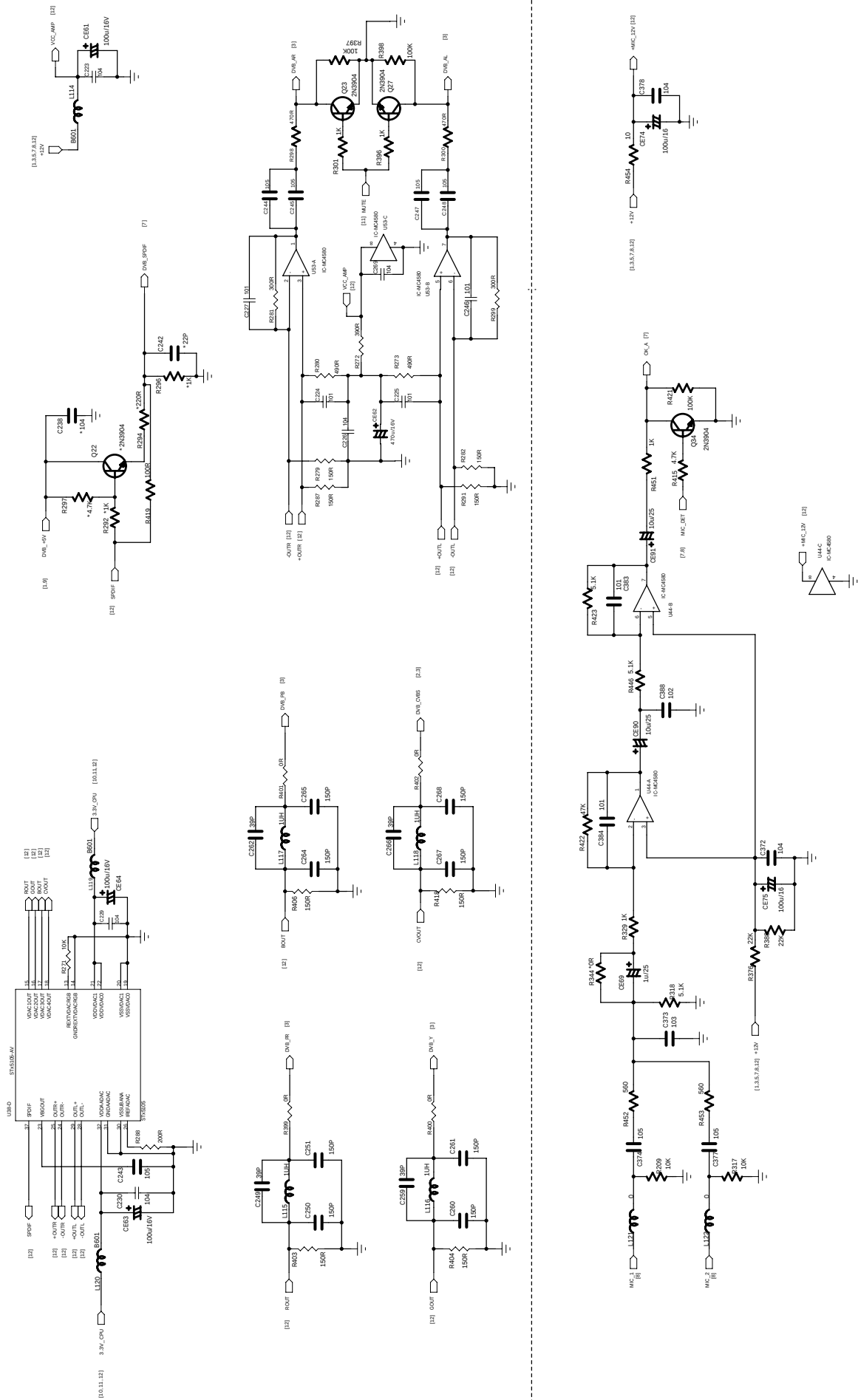


ST5105 POWER

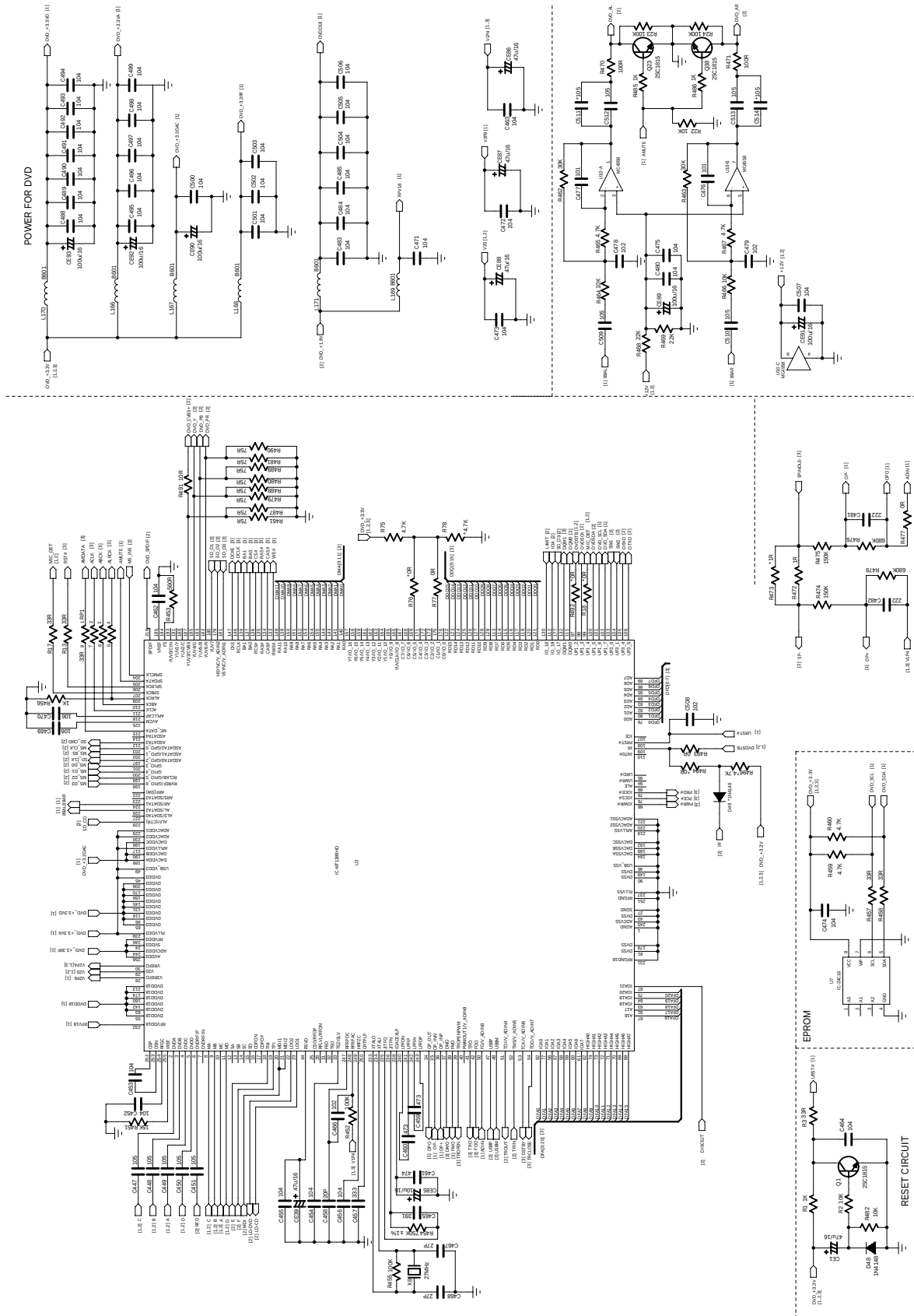


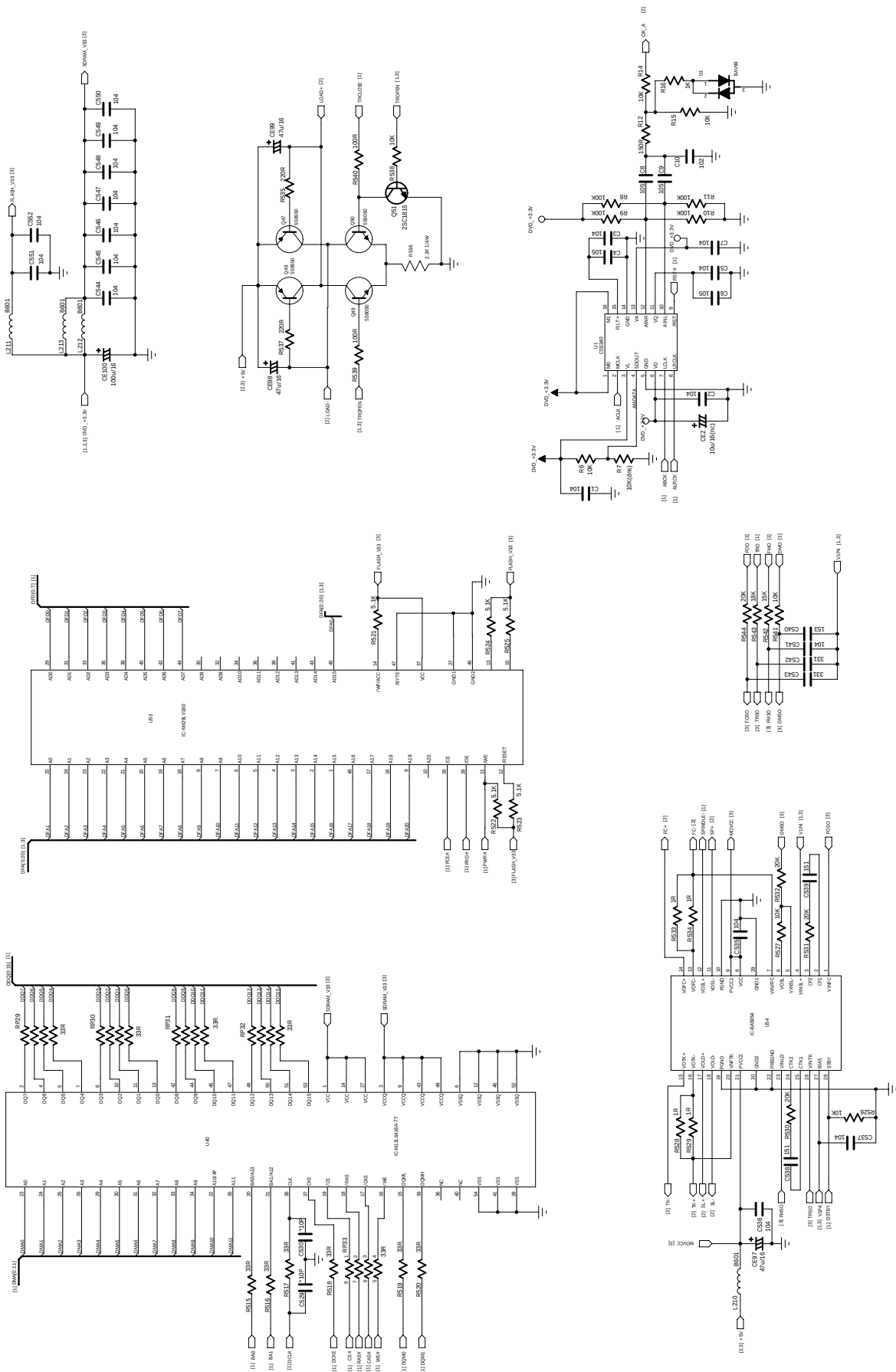
C174	C167	C198	C168
104	104	103	104



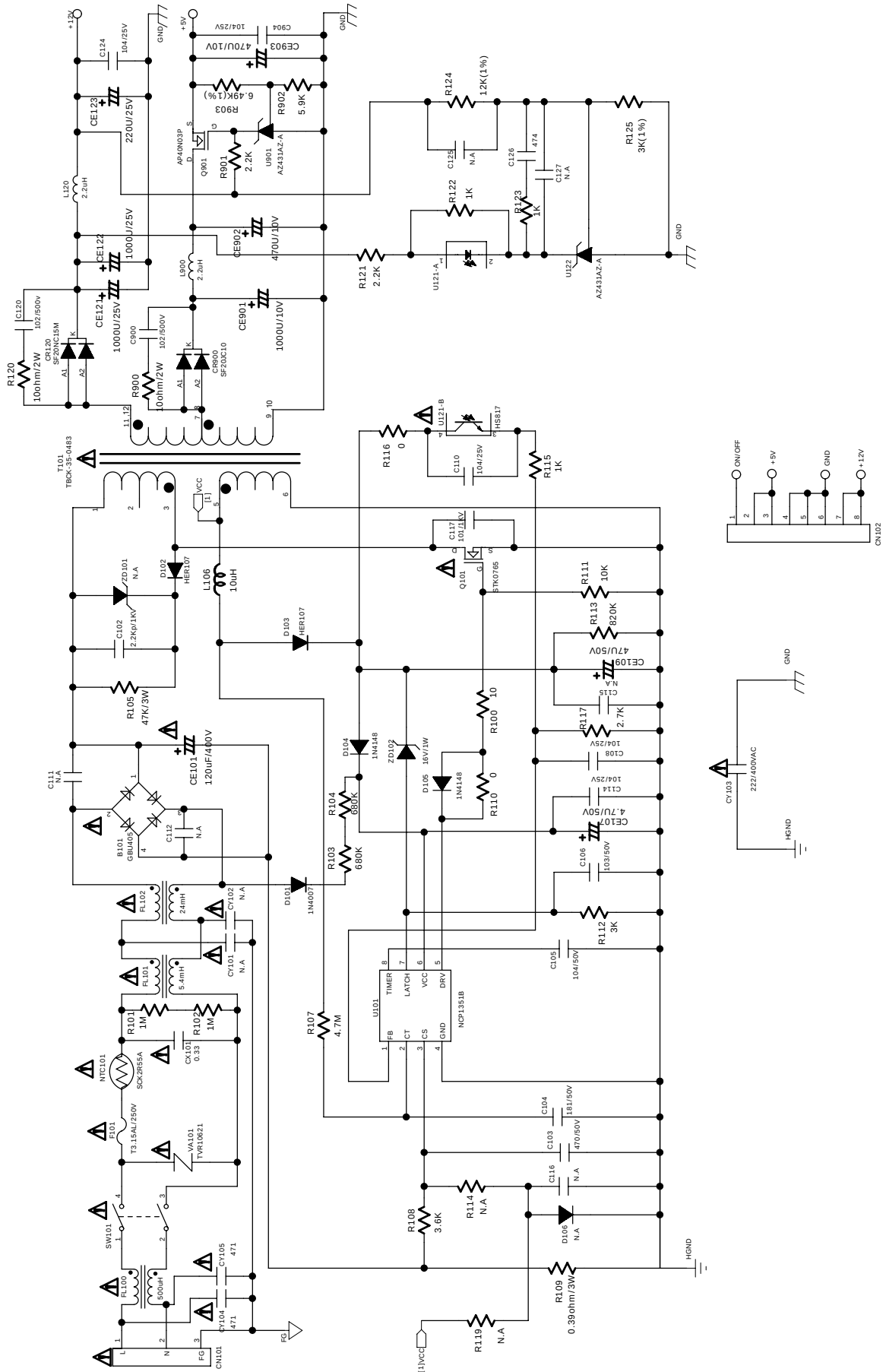


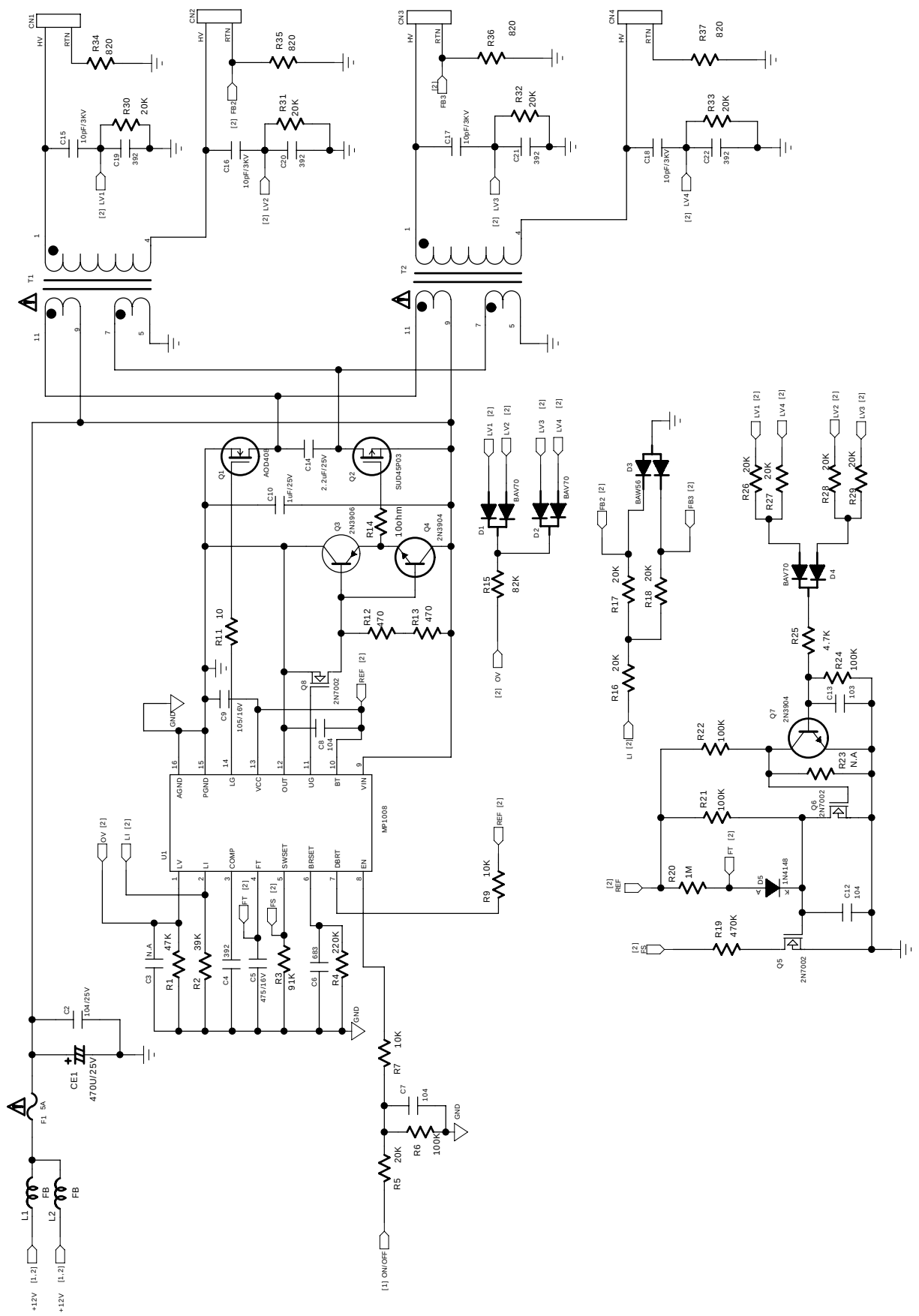
5.2.2 DVD Main Board.



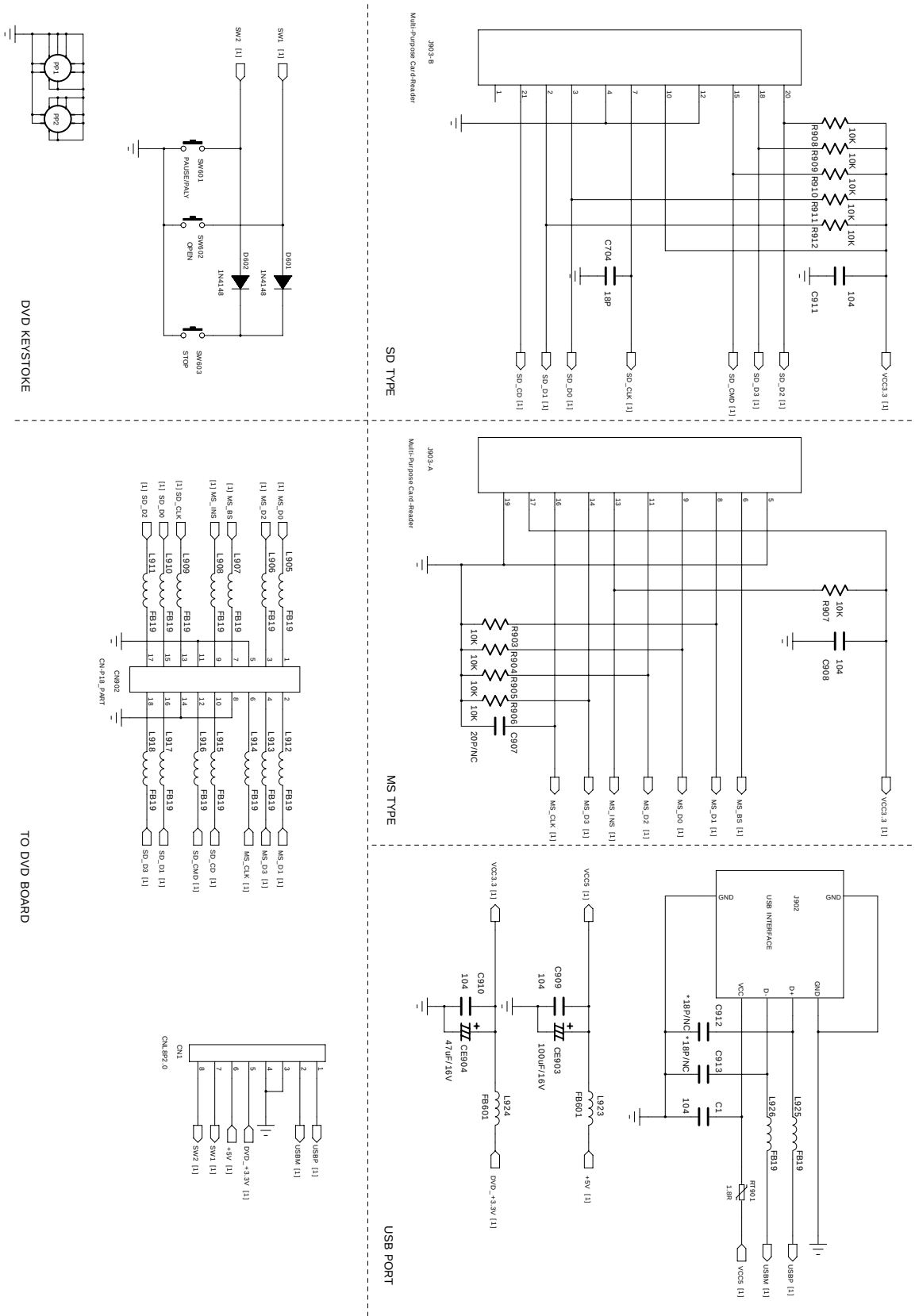


5.2.3 Power Inverter Board.

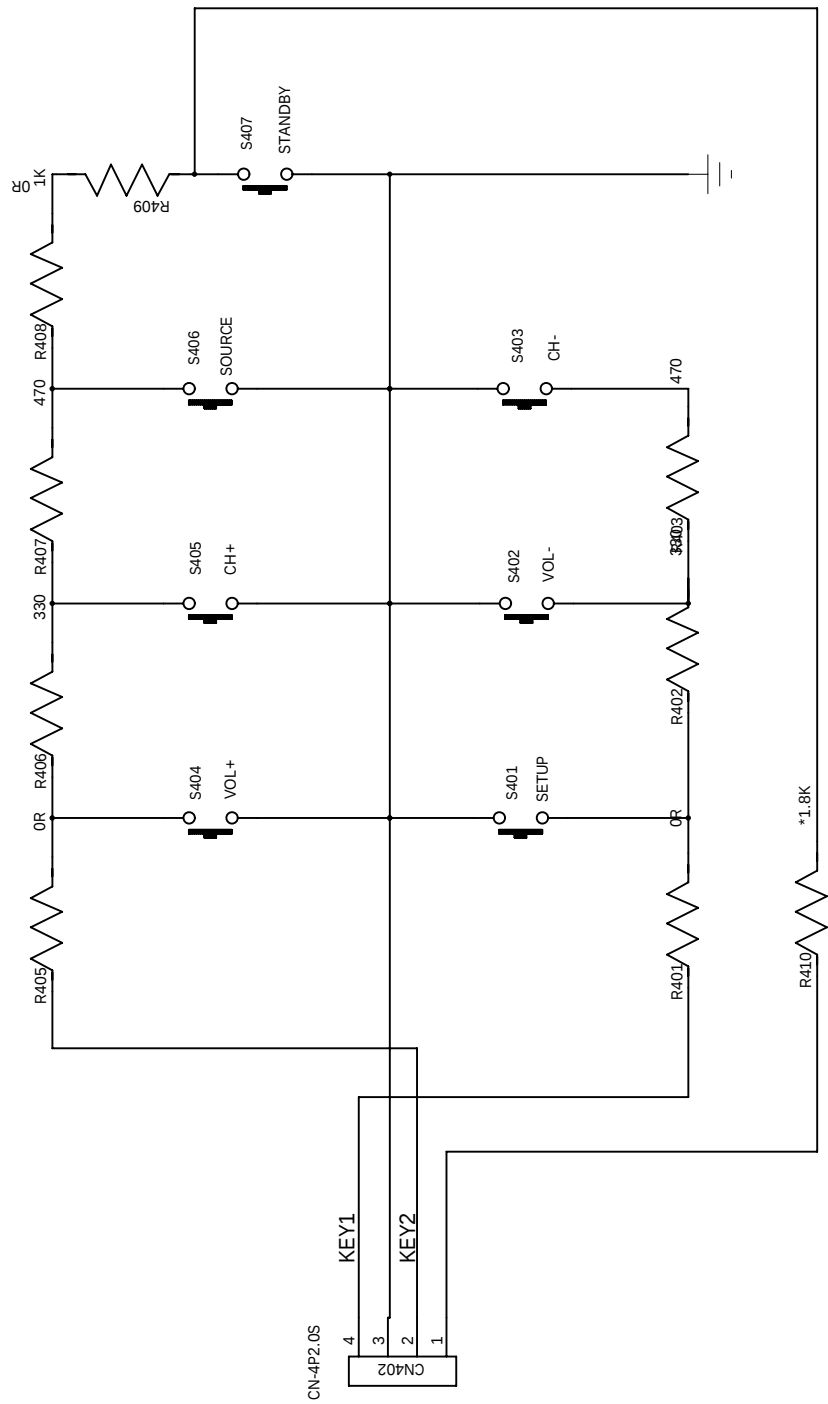




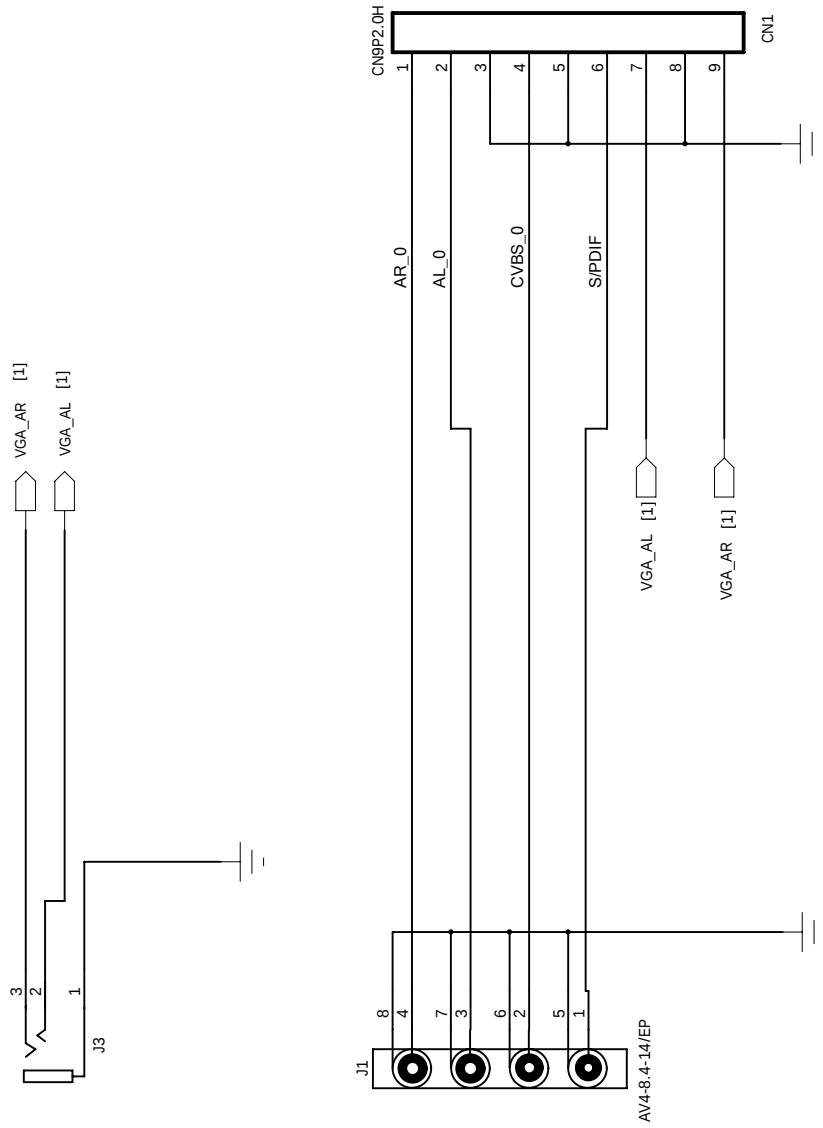
5.2.4 USB Board.



5.2.5 TV KEY Board.



5.2.6 A/Vinput Board.



Chapter Six BOM List

LD2216K(RU)BLACK

DVD DECODE BOARD 2D153D-3 4941662

MATERIAL CODE	MATERIAL NAME	SPECIFICATIONS	LOCATION
0000375	CARBON FILM RESISTOR	1/4W2.2Ω±5%	R536
0090001	SMD RESISTOR	1/16W 0Ω±5% 0603	R477,R493,R77
0090003	SMD RESISTOR	1/16W 10Ω±5% 0603	R491
0090005	SMD RESISTOR	1/16W 33Ω±5% 0603	R3,R457,R458,R515~R520,R13,R17
0090006	SMD RESISTOR	1/16W 75Ω±5% 0603	R461,R479~R481
0090008	SMD RESISTOR	1/16W 220Ω±5% 0603	R535,R537
0090009	SMD RESISTOR	1/16W 330Ω±5% 0603	R499,R501,R502
0090012	SMD RESISTOR	1/16W 560Ω±5% 0603	R453
0090014	SMD RESISTOR	1/16W 1K±5% 0603	R1,R456,R485,R486,R16
0090019	SMD RESISTOR	1/16W 4.7K±5% 0603	R78,R459,R460,R465,R467,R496
0090020	SMD RESISTOR	1/16W 5.1K±5% 0603	R521~R525
0090023	SMD RESISTOR	1/16W 10K±5% 0603	R2,R296,R300,R464,R466,R482,R498,R500,R507~R510,R526,R527,R538,R541,R6,R14~R15,R22
0090024	SMD RESISTOR	1/16W 15K±5% 0603	R451,R542,R4,R5
0090025	SMD RESISTOR	1/16W 20K±5% 0603	R530~R532,R544
0090026	SMD RESISTOR	1/16W 22K±5% 0603	R468,R469
0090034	SMD RESISTOR	1/16W 100K±5% 0603	R452,R455,R511,R512,R8~R11
0090106	SMD RESISTOR	1/16W 4.7Ω±5% 0603	R513,R514
0090181	SMD RESISTOR	1/16W 100Ω±5% 0603	R470,R471,R539,R540
0090187	SMD RESISTOR	1/16W 12K±5% 0603	R462,R463
0090188	SMD RESISTOR	1/16W 18K±5% 0603	R543
0090197	SMD RESISTOR	1/16W 150K±5% 0603	R474,R475
0090211	SMD RESISTOR	1/16W 680K±5% 0603	R476,R478
0090232	SMD RESISTOR	1/16W 150Ω±5% 0603	R12
0090272	SMD RESISTOR	1/16W 1Ω±5% 0603	R472,R528,R529,R533,R534

MATERIAL CODE	MATERIAL NAME	SPECIFICATIONS	LOCATION
0090319	PRECISION SMD RESISTOR	1/16W 750K±1% 0603	R454
0090589	SMD RESISTOR	1/4W 100Ω±5% 1206	R503,R506
0100019	SMD RESISTOR NETWORKS	1/16W 33Ω±5% 8P	RP29~RP33,RP1
02602019	CD	CD11C 16V100U±20% 6×7 C2.5BELT	CE89~CE93,CE96,CE100,CE103~CE106
0260569	CD	CD11E 16V10U±20%4×5 1.5	CE85
02606369	CD	CD11E 16V47U±20%5×5 2BELT	CE1,CE39,CE86,CE87,CE88,CE94,CE95,CE97,CE98,CE99
0310047	SMD CAPACITOR	50V 101±5% NPO 0603	C476,C477
0310048	SMD CAPACITOR	50V 151±5% NPO 0603	C538,C539
0310051	SMD CAPACITOR	50V 331±5% NPO 0603	C542,C543
0310052	SMD CAPACITOR	50V 391±5% NPO 0603	C465
0310055	SMD CAPACITOR	16V 333±10% 7R 0603	C457
0310056	SMD CAPACITOR	16V 473±10% 7R 0603	C459,C460
0310066	SMD CAPACITOR	50V 102±10% 7R 0603	C466,C478,C479,C508,C518,C10
0310068	SMD CAPACITOR	50V 222±10% 7R 0603	C481,C482
0310085	SMD CAPACITOR	50V 20P±5% NPO 0603	C458
0310190	SMD CAPACITOR	50V 27P±5% NPO 0603	C467,C468
0310201	SMD CAPACITOR	50V 153±10% 7R 0603	C519,C523,C540
0310234	SMD CAPACITOR	16V 105 +80%-20% Y5V 0603	C447~C451,C509,C510,C512,C513,C4,C6,C8~C9
0310362	SMD CAPACITOR	16V474 +80%-20% Y5V 0603	C461
0310389	SMD CAPACITOR	10V 106 +80%-20% Y5V 0805	C469,C470
0310543	SMD CAPACITOR	50V 104±10% 7R 0603	C452~C456,C462~C464,C471~C475,C480,C483~C485,C488~C507,C515~C517,C520~C522,C524~C528,C531~C537,C541,C544~C552,C1~C3,C5,C7
0390095	SMD MAGNETIC BEADS	FC160822105	L175~L177,L180,L191,L194,L195
0390287	SMD MAGNETIC BEADS	19Ω/100mHZ±25% 1608	L198~L204,L206~L209,L230,L231
0390300	SMD MAGNETIC BEADS	600Ω/100MHZ±25% 1608	L1~L3,L5~L7,L23,L166~L169,L173,L174,L182~L186,L193,L197,L205,L211~L213,L229,L97,L100
0390355	SMD INDUCTOR	4.7UH±10% 1608	L179,L192
0390446	SMD MAGNETIC BEADS	600Ω/100MHZ±25% 1A 3216	L196,L170,L171,L210,L232,L4,L8

MATERIAL CODE	MATERIAL NAME	SPECIFICATIONS	LOCATION
0570019	DIODE	0000254	D52,D53
0680037	SMD SCHOTTKY DIODE	B54C SO23	D1
0700001	SMD DIODE	LS4148	D48
07800499	TRIODE	S8550D BELT	Q47,Q48
07800509	TRIODE	S8050D BELT	Q49,Q50
0780115	SMD TRIODE	2SB1132	Q43,Q44
0780193	SMD TRIODE	2S3018	Q45,Q46
0780197	SMD TRIODE	C1815	Q1,Q23,Q38,Q42,Q51
0880768	IC	C4558 SOP	U10
0881378	IC	B5954FP HSOP	U54 ①
0881405	IC	B5954FM HSOP	U54 ①
0882353	IC	C5340 TSSOP	U1
0882485	IC	AZ11173.3 SO223	U56
0882644	IC	MT1389FE/HD(HD EDITION) QFP	U3
0882953	IC	4641632UC60 TSOP	U40
0883069	IC	AZ11171.8 SO223	U57
0883303	IC	24C16 SOP	U7
0912106	PROGRAM FLASH	ROM2206K-0A(16M)	U53
0960236	SMD CRYSTAL OSCILLATOR	27.00MHz 49-S	X8
1030036	SMD PRESS SENSITIVITY RESISTOR	S1608E180C600NPT 0603	R19~R21
1634813	PCB	2 153D-3 FR4 D1.2 PX	
1940042	SOCKET	8P 2.0mm STRAIGHT CURVING	CN1
1940094	CABLE SOCKET	24P 0.5mm SMD SUBMIT MEET WITH CLASP	CN29
1940141	SOCKET	4P 2.0mm STRAIGHT FLEX	CN25
1940170	SOCKET	2P 2.0mm STRAIGHT CURVING	CN23
1940198	CABLE SOCKET	6P 1.0mm SMD,SUBMIT MEET WITH CLASP	CN26
1940216	SOCKET	3P 2.0mm FLEX INSERT	CN24
1940286	CABLE SOCKET	10P 1.0mm DUAL RANK TOUCH POINT,STRAIGHT INSERT	CN2

MATERIAL CODE	MATERIAL NAME	SPECIFICATIONS	LOCATION
1940314	SOCKET	7P 2.0mm FLEX INSERT,WITH LEAF	CN30
5141826	VERSION LABEL	3.01 SQUARE WHITE	

LD2216K(RU)BLACK

TERMINAL BOARD 7153D-1 4941456

MATERIAL CODE	MATERIAL NAME	SPECIFICATIONS	LOCATION
1565264	PCB	7153D-1 HB D1.6 PX	
1910293	AV SOCKET	4-8.4-14/EP BKYWR FLEX INSERT ,SHIELD	J1
1980090	EARPHONE SOCKET	S219-030-100	J3
2121114	SOFT FLAT CABLE	9P70 2.0 2 PIN,WITH L NEEDLE,THE SAME DIRECTION	J2
5141756	VERSION LABEL	2.01 SQUARE WHITE	

LD2216K(RU)BLACK

USB BOARD D153D-3 4941455

MATERIAL CODE	MATERIAL NAME	SPECIFICATIONS	LOCATION
0260206	CD	CD11C 10V100U±20%5×7 2	CE903
0310543	SMD CAPACITOR	50V 104±10% 7R 0603	C1,C909
0390287	SMD MAGNETIC BEADS	19Ω/100mHZ±25% 1608	L925,L926
0390301	SMD MAGNETIC BEADS	600Ω/100MHZ±25% 3216	L923
0700001	SMD DIODE	LS4148	D601,D602
10500169	HEAT SENSITIVITY RESISTOR	PTC FRU135F-30V BELT	RT901
1340064	LIGHT TOUCH RESTORE SWITCH	KFC-06-2WB L3.8	SW601~SW603
1635322	PCB	153D-3 FR4 D1.6 PX	
1860074	USB SOCKET	2UB-0001000	J902
2121078	FLAT CABLE	8P50 2.0 T2 WITH NEEDLE, THE SAME DIRECTION 28#CORD	CN1
5141758	VERSION LABEL	2.03 SQUARE WHITE	

LD2216K(RU)BLACK

TV BUTTON BOARD 4941454

MATERIAL CODE	MATERIAL NAME	SPECIFICATIONS	LOCATION
00000169	CARBON FILM RESISTOR	1/6W470Ω±5% BELT	R403,R407

MATERIAL CODE	MATERIAL NAME	SPECIFICATIONS	LOCATION
00000229	CARBON FILM RESISTOR	1/6W1K±5% BELT	R408
00006769	CARBON FILM RESISTOR	1/8W330Ω±5% BELT	R402,R406
1340088	LIGHT TOUCH RESTORE SWITCH	VERTICAL 6×6×5	S401~S407
1565180	PCB	4 153D-0 HB D1.6 PX	
2100003	CONNETION CORDS	Φ0.6 SHAPED 7.5mm	R401,R405,R409
2122739	SOFT FLAT CABLE	4P80 2.0 2PIN, WITH L NEEDLE, REVERSE	CN402
5141755	VERSION LABEL	2.00SQUARENESS WHITE	

LD2216K(RU)BLACK

MAIN BOARD 22207D-1 4942096

MATERIAL CODE	MATERIAL NAME	SPECIFICATIONS	LOCATION
0090001	SMD RESISTOR	1/16W 0Ω±5% 0603	R40,R89,R456,R468,R106,R111,R113,R328,R334,R385,R384,R155,L21~L22,L95~L96,L121~L122,L152,C278
0090003	SMD RESISTOR	1/16W 10Ω±5% 0603	R107,R108,R115,R117,R16~R19,R142,R148~R151,R169,R171,R174,R176,R210,R277,R283,R286,R289,R293,R295,R322,R407,R38,R303,R307,R454
0090005	SMD RESISTOR	1/16W 33Ω±5% 0603	R341,R350
0090006	SMD RESISTOR	1/16W 75Ω±5% 0603	R30,R31,R32,R93,R202,R278,R284~R285,R290,R309,R312,R320,R408,R432
0090007	SMD RESISTOR	1/16W 180Ω±5% 0603	R340
0090008	SMD RESISTOR	1/16W 220Ω±5% 0603	R78~R79
0090012	SMD RESISTOR	1/16W 560Ω±5% 0603	R452~R453
0090014	SMD RESISTOR	1/16W 1K±5% 0603	R25,R94,R99~R100,R152,R244,R409,R177,R329,R338~R339,R451,R365,R33
0090016	SMD RESISTOR	1/16W 1.5K±5% 0603	R416
0090017	SMD RESISTOR	1/16W 2.2K±5% 0603	R45,R47,R56,R63
0090019	SMD RESISTOR	1/16W 4.7K±5% 0603	R250,R14,R35,R73,R75,R90,R95,R251,R311,R349,R372,R380~R381,R414~R415,R424,R96
0090020	SMD RESISTOR	1/16W 5.1K±5% 0603	R318,R423,R446
0090023	SMD RESISTOR	1/16W 10K±5% 0603	R20,R28,R34,R46,R52~R55,R60~R62,R64,R67,R80,R86,R230,R231,R209,R260,R317,R331,R342,R358,R367,R394~R395,R412~R413,R470,R473,R411,R355

MATERIAL CODE	MATERIAL NAME	SPECIFICATIONS	LOCATION
0090024	SMD RESISTOR	1/16W 15K±5% 0603	R243,R471,R472,R425,R357
0090026	SMD RESISTOR	1/16W 22K±5% 0603	R29,R48,R58,R72,R74,R77,R97,R330,R376,R388,R391~R392,R455
0090028	SMD RESISTOR	1/16W 33K±5% 0603	R316
0090029	SMD RESISTOR	1/16W 47K±5% 0603	R422
0090034	SMD RESISTOR	1/16W 100K±5% 0603	R81~R82,R421,R87,R405,R382,R305,R7,R383,R306,R389,R132
0090036	SMD RESISTOR	1/10W 0Ω±5% 0805	C147
0090109	SMD RESISTOR	1/16W 1MΩ±5% 0603	R118
0090179	SMD RESISTOR	1/16W 15Ω±5%	R42
0090181	SMD RESISTOR	1/16W 100Ω±5% 0603	R36,R51,R57,R65,R71,R120~R121,R138~R141,R153,R172,R109,R240,R241,R302,R310,R362,R364,R373~R374
0090189	SMD RESISTOR	1/16W 30K±5% 0603	R59,R66,R84~R85,R88,R98,R21
0090192	SMD RESISTOR	1/16W 51K±5% 0603	R218
0090220	SMD RESISTOR	1/16W 51Ω±5% 0603	R435
0090223	SMD RESISTOR	1/16W 2K±5%	R369~R370
0090225	SMD RESISTOR	1/16W 5.6K±5% 0603	R377
0090230	SMD RESISTOR	1/16W 47Ω±5% 0603	R43,R124,R126~R127,R143,R319,R123
0090236	SMD RESISTOR	1/16W 1.8K±5% 0603	R178
0090538	SMD RESISTOR	1/4W 120Ω±5% 1206	R417
0090589	SMD RESISTOR	1/4W 100Ω±5% 1206	R314~R315
0090730	PRECISION SMD RESISTOR	1/16W 390Ω±1% 0603	R125
0090766	PRECISION SMD RESISTOR	1/16W 120Ω±1% 0603	R41
0100005	SMD RESISTANCE NETWORK	4.7K±5% 8P	RP1~RP3,RP5~RP6
0100019	SMD RESISTOR NETWORKS	1/16W 33Ω±5% 8P	RP4,RP8~RP13
0100034	SMD RESISTOR NETWORKS	1/16W 0Ω±5% 0603×4 8P	RP29~RP31
02602059	CD	CD11C 25V10U±20%4×7 C5 BELT	CE16,CE24~CE27,CE29~CE32,CE35,CE83,CE90~CE91
02603859	CD	C11 16V470U±20%8×12 C5 BELT	CE11,CE34,CE76,CE78
02606629	CD	CD288H 25V470U±20%10×16 C5 BELT	CE1,CE42,CE13
02606859	CD	C11T 16V100u±20%6×12 C5 BELT	CE2,CE72,CE5,CE7,CE17~CE20,CE22~CE23,CE33,CE68,CE74~CE75

MATERIAL CODE	MATERIAL NAME	SPECIFICATIONS	LOCATION
02607139	CD	C11T 16V220U±20%6×12 C5 BELT	CE6,CE14,CE67,CE70
02607359	CD	C11T 16V47U±20%5×11 C5 BELT	CE4,CE8,CE12,CE28,CE37~CE39,CE47,CE60,CE65~CE66
02607649	CD	C11T 50V1U±20%5×11 2 BELT	CE10,CE69
0310042	SMD CAPACITOR	50V 15P±5% NPO 0603	C118,C446
0310047	SMD CAPACITOR	50V 101±5% NPO 0603	C286,C290,C383~C384
0310049	SMD CAPACITOR	50V 221±5% NPO 0603	C365,C366
0310056	SMD CAPACITOR	16V 473±10% 7R 0603	C96,C98,C102,C110~C111,C130~C133,C231,C233,C236,C241
0310066	SMD CAPACITOR	50V 102±10% 7R 0603	C50,C54~C55,C59,C62,C65,C73,C83,C97,C105,C343~C344,C388,C367,C371
0310072	SMD CAPACITOR	50V 103±10% 7R 0603	C48~C49,C52~C53,C58,C60,C115~C117,C125,C140~C141,C373
0310112	SMD CAPACITOR	16V 224±10% 0603	C27,C33
0310190	SMD CAPACITOR	50V 27P±5% NPO 0603	C103~C104,C427
0310234	SMD CAPACITOR	16V 105 +80%-20% Y5V 0603	C63~C64,C69~C70,C72,C81~C82,C85,C195,C234,C277,C279,C358~C360,C362,C374,C377
0310389	SMD CAPACITOR	10V 106 +80%-20% Y5V 0805	C34,C434~C435,C156,C263,C381
0310566	SMD CAPACITOR	10V 225 +80%-20% Y5V 0603	C93,C92,C94,C100,C79,C99,C86,C87,C101
0310594	SMD CAPACITOR	25V 104±10% 0603	C2,C4,C6~C7,C24~C25,C28~C31,C42,C44~C45,C47,C51,C57,C61,C66~C67,C74~C75,C80,C84,C88~C91,C106~C107,C109,C120~C122,C129,C134~C135,C138,C144~C146,C209,C276,C213,C256,C292,C300,C317,C327,C329~C342,C345~C350,C355~C356,C372,C378,C391,C393,C409,C414,C26,C37,C439,C443,C273~C274 ②
0310543	SMD CAPACITOR	50V 104±10% 7R 0603	C2,C4,C6~C7,C24~C25,C28~C31,C42,C44~C45,C47,C51,C57,C61,C66~C67,C74~C75,C80,C84,C88~C91,C106~C107,C109,C120~C122,C129,C134~C135,C138,C144~C146,C209,C276,C213,C256,C292,C300,C317,C327,C329~C342,C345~C350,C355~C356,C372,C378,C391,C393,C409,C414,C26,C37,C439,C443,C273~C274 ②
0390095	SMD MAGNETIC BEADS	FC160822105	L16~L17,L31~L32,L35,L50,L52,L57~L60,L67~L68,L71
0390300	SMD MAGNETIC BEADS	600Ω/100MHZ±25% 1608	L82,L65,L3~L4,L8~L9,L12~L13,L15,L18,L20,L23~L24,L37~L39,L41,L44~L49,L53,L55,L62,L64,L69~L70,L73,L77,L79,L86~L89,L91,L97~L100,L102,L104,L150,L153,L63
0390301	SMD MAGNETIC BEADS	600Ω/100MHZ±25% 3216	L1,L6~L7,L11,L25,L123,L14,L19,L93,L94,L81

MATERIAL CODE	MATERIAL NAME	SPECIFICATIONS	LOCATION
0390529	SMD CORES INDUCTOR	47uH ±20% CDH129	L33
0410160	COMMON MODE CHOKE	VERTICAL 90UH 5A Φ9×Φ5×4	L74
0570019	DIODE	0000254	D1,D8,D26
0680028	SMD SCHOTTKY DIODE	MBRS340	D45
0680037	SMD SCHOTTKY DIODE	B54C SO23	D14,D31
0700001	SMD DIODE	LS4148	D2~D7,D34~D35,D47
0700064	SMD TRIODE	B991 SO23	D17~D23,D27,D29,D36~D44,D46,D32
0780040	SMD TRIODE	3904(100-300) SO23	Q5,Q7~Q9,Q11~Q12,Q36,Q19,Q24,Q26, Q28~Q29,Q33~Q34,Q37
0780041	SMD TRIODE	3906(100-300) SO23	Q4
0790097	FIELD EFFECT TRANSISTOR	AO4419 SO8	U2,U45
0880504	IC	24C32N SOP	U49
0880768	IC	C4558 SOP	U12,U13,U44
0882267	IC	FS330 TSSOP	U17
0882515	IC	HE4052BT SOP	U21
0882710	IC	C2021 TSSOP	U28
0882843	IC	AZ1084-ADJ TO-252	U6
0883149	IC	7266P SSO24	U8
0883272	IC	AZ78L05 TO-92	U34
0883606	IC	AIC2511PM5 TO-263-5	U52 ③
0883323	IC	AP1506Adj TO263-5L	U52 ③
0883654	IC	MST9E19A PQFP	U11
0883659	IC	AIC810-29CU SOT-23	U18
0900500	SOFTWARE PROGRAM EPROM	ROM1907T-0A(512B)	U48
0900501	SOFTWARE PROGRAM EPROM	ROM1907T-0B(512B)	U30
0900523	SOFTWARE PROGRAM EPROM	ROM2216KRU-0A(128B)	U33
0912183	PROGRAM FLASH	ROM2216KRU-1A(512K)	U4
0960234	SMD CRYSTAL OSCILLATOR	14.31818MHZ 49-S	X1
1020110	TUNER	JS-6H2/T121A25	TU1

MATERIAL CODE	MATERIAL NAME	SPECIFICATIONS	LOCATION
1030036	SMD PRESS SENSITIVITY RESISTOR	S1608E180C600NPT 0603	R321,R327,R333,R343,R276,R116,R267,R268
1634878	PCB	22207D-1 FR4 D1.6 PX	
1860080	HDMI SOCKET	19P SMD 0406A	J8
1860103	SCART SOCKET	112 FLEX INSERT,BLACK	J6
1860114	VGASOCKET	15P HORIZONTAL WITHOUT BOLT BLACK	J4
1940003	SOCKET	4P 2.5mm	CN19
1940009	SOCKET	8P 2.5mm	CN5
1940022	SOCKET	4P 2.0mm	CN11
1940023	SOCKET	7P 2.0mm	CN6
1940024	SOCKET	5P 2.0mm	CN21
1940044	SOCKET	9P 2.0mm	CN7
1940286	CABLE SOCKET	10P 1.0mm DUAL RANK TOUCH POINT,STRAIGHT INSERT	CN33
1980018	MICROPHONE SOCKET	C3-6.35-24	J2,J12
1980061	EARPHONE SOCKET	C3.5-01K	J1
3580276	HEAT RADIATION PIECE	18×11×6.9 193D BLACK	
5141826	VERSION LABEL	3.01 SQUARE WHITE	

LD2216K(RU)BLACK

RECEIVING BOARD OF REMOTE CONTROL B2216K-1 4942095

MATERIAL CODE	MATERIAL NAME	SPECIFICATIONS	LOCATION
0260515	CD	CD11K 16V10U±20%5×11 2	CE1
0620007	DUAL COLOR LIGHT-EMITTING DIODE	3RG 9HC-A COMMON CATHODE,RED GREEN	LED1
1565376	PCB	B2216K-1 HB D1.6 PX	
2121878	FLAT CABLE	5P360 2.0 2 PIN WITH L NEEDLE,THE SAME DIRECTION	CN801
2360002	IR SENSOR	HS0038B	S801
5141756	VERSION LABEL	2.01 SQUARENESS WHITE	
5238189	SOFT SPONGE SPACER	6×6×2.5 DOUBLE-FACED SOFT	UNDERLAY BOTTOM OF RECEIVING HEAD OF REMOTE CONTROL
5236304	SOFT SPONGE SPACER	Φ8×Φ5×7 SINGLE-FACED,HARD	COVER ON DUAL COLOR LIGHT EMITTING DIODE

LD2216K(RU)BLACK

INTEGRATED INVERTER @52207D-3 4941458

MATERIAL CODE	MATERIAL NAME	SPECIFICATIONS	LOCATION
0000031	CARBON FILM RESISTOR	1/6W3.6K±5%	R108
0010286	METAL OXIDE FILM RESISTOR	3W 47K±5%	R105
0010295	METAL OXIDE FILM RESISTOR	2W10Ω±5% SHAPED VERTICAL 7.5	R120,R900
0020005	THREAD COIL NAUGHT INDUCTOR RESISTOR	3W0.39Ω±5%	R109
0090036	SMD RESISTOR	1/10W 0Ω±5% 0805	R116,R110
0090039	SMD RESISTOR	1/10W 10Ω±5% 0805	R11,R14,R100
0090046	SMD RESISTOR	1/10W 470Ω±5% 0805	R12,R13
0090050	SMD RESISTOR	1/10W 1K±5% 0805	R115,R122,R123
0090052	SMD RESISTOR	1/10W 2.2K±5% 0805	R121,R901
0090053	SMD RESISTOR	1/10W 2.7K±5% 0805	R117
0090054	SMD RESISTOR	1/10W 3K±5% 0805	R112
0090057	SMD RESISTOR	1/10W 4.7K±5% 0805	R25
0090063	SMD RESISTOR	1/10W 10K±5% 0805	R7,R9,R111
0090067	SMD RESISTOR	1/10W 20K±5% 0805	R5,R16~R18,R26~R33
0090072	SMD RESISTOR	1/10W 39K±5% 0805	R2
0090073	SMD RESISTOR	1/10W 47K±5% 0805	R1
0090078	SMD RESISTOR	1/10W 100K±5% 0805	R6,R21,R22,R24
0090084	SMD RESISTOR	1/10W 220K±5% 0805	R4
0090089	SMD RESISTOR	1/10W 1MΩ±5% 0805	R20
0090101	SMD RESISTOR	1/10W 82K±5% 0805	R15
0090138	SMD RESISTOR	1/10W 470K±5% 0805	R19
0090151	SMD RESISTOR	1/10W 820Ω±5% 0805	R34~R37
0090160	SMD RESISTOR	1/10W 91K±5% 0805	R3
0090163	SMD RESISTOR	1/10W 820K±5% 0805	R113
0090496	SMD RESISTOR	1/8W 1MΩ±5% 1206	R101~R102
0090719	PRECISION SMD RESISTOR	1/10W 12K±1% 0805	R124

MATERIAL CODE	MATERIAL NAME	SPECIFICATIONS	LOCATION
0090721	PRECISION SMD RESISTOR	1/10W 3K±1% 0805	R125
0090750	SMD RESISTOR	1/8W 680K±5% 1206	R103~R104
0090904	PRECISION SMD RESISTOR	1/10W5.9K±1% 0805	R902
0090905	PRECISION SMD RESISTOR	1/10W6.49K±1% 0805	R903
0090906	SMD RESISTOR	1/8W4.7M±5% 1206	R107
0200166	PORCELAIN CAPACITOR	500V 103±20% 5mm	C120
0200223	PORCELAIN CAPACITOR	1000V 101 +80%-20% 7.5mm	C117
0200251	PORCELAIN CAPACITOR	500V 102±10% 5mm	C900
0200301	CERAMIC CAPACITOR	3000V10p±10%NPO7.5mm	C15~C18
0200351	CERAMIC CAPACITOR	@250VAC 471±10% 10mmVDE	CY104,CY105
0200402	CERAMIC CAPACITOR	CT81 1kV 222 K Y5P 5mm	C102
0200406	CERAMIC CAPACITOR	@CT7 Y1 400VAC 222 M Y5V 10 B420	CY103
0210197	ANTI-JAMMING CAPACITOR	MPX 2 275VAC 334±10% 15	CX101
0260644	CD	CD11K 400V 120u±20% 18×32 7.5	CE101
0260672	CD	CD288H 50V47U±20%6.3×11 2.5	CE109
0260679	CD	CD288H 10V 470U±20% 8×12 3.5	CE902,CE903
0260711	CD	CD288H 16V2200U±20%10×25 5	CE901
0260755	CD	CD11K 50V4.7U±20%5×11 2	CE107
0260776	CD	CD288Z 25V470U±20%10×12 5	CE1
0260794	CD	CD288H 25V1000U±20%10×16 5	CE121~CE122
0260842	CD	CD288H 25V220U±20%8×12 3.5	CE123
0310033	SMD CAPACITOR	50V 103±10% 7R 0805	C13,C106
0310081	SMD CAPACITOR	50V 47P±5% NPO 0805	C103
0310091	SMD CAPACITOR	50V 181±10% 7R 0805	C104
0310144	SMD CAPACITOR	50V 104±10% 7R 0805	C7,C8,C12,C105
0310150	SMD CAPACITOR	50V 683±10% 7R 0805	C6
0310166	SMD CAPACITOR	50V 392±10% 7R 0805	C4,C19~C22
0310170	SMD CAPACITOR	25V 474±20% 7R 0805	C126

MATERIAL CODE	MATERIAL NAME	SPECIFICATIONS	LOCATION
0310211	SMD CAPACITOR	25V 104±10% 7R 0805	C2,C108,C110,C114,C124,C904
0310644	SMD CAPACITOR	25V 225 K X5R 1206	C14
0310658	SMD CAPACITOR	25V 105±10% 7R 0805	C9,C10
0310875	SMD CAPACITOR	16V 475 K 5R 0805	C5
0390052	MAGNETIC BEADS INDUCTOR	FB	L1,L2
0390291	INDUCTOR	10uH±20% 350mA 0307	L106
0390628	MAGNETISM STICK INDUCTOR	2.2UH ±20% 5A Φ10×21 10mm	L120,L900
0410246	COMMON MODE CHOKE	VERTICAL 5.4mH 3A Φ14×Φ8×7	FL101
0410247	COMMON MODE CHOKE	VERTICAL 24mH 3A Φ18×Φ10×10	FL102
0410249	COMMON MODE CHOKE	500uH 3A Φ12.7×Φ7.92×6.3	FL100
0460697	INVERSION TRANSFORMER	@EEL19 13W B327	T1,T2
0460698	SWITCH POWER TRANSFORMER	@BCK-35-0536 100W SI246	T101
0570005	DIODE	1N4007	D101
05700149	DIODE	HER107 BELT	D102,D103
0580061	VOLTAGE REGULATOR DIODE	16V±5% 1W	ZD102
0670018	SILICON BRIDGE	GBU405 Y336	B101
0680113	SCHOTTKY DIODE	SF20NC15M PLASTIC SEALED FTO-220A	CR120
0680114	SCHOTTKY DIODE	SF20JC10 PLASTIC SEALED FTO-220	CR900
0700001	SMD DIODE	LS4148	D5,D104
0700167	SMD DUAL DIODE	B56 SO23	D3
0700168	SMD DUAL DIODE	B70 SO23	D1,D2,D4
0780040	SMD TRIODE	3904(100-300) SO23	Q4,Q7
0780041	SMD TRIODE	3906(100-300) SO23	Q3
0790025	SMD FIELD EFFECT TRANSISTOR	AP4003P TO-220	Q901
0790044	SMD FIELD EFFECT TRANSISTOR	27002E SO23	Q5,Q6,Q8
0790141	FIELD EFFECT TRANSISTOR	STK0765 PLASTIC SEALED TO-220F	Q101
0790153	SMD FIELD EFFECT TRANSISTOR	CEU4301 TO-252	Q2
0790162	SMD FIELD EFFECT TRANSISTOR	AOD488 TO-252	Q1

MATERIAL CODE	MATERIAL NAME	SPECIFICATIONS	LOCATION
08824629	IC	AZ431AZ-A TO-92 BELT	U122,U901
0883192	IC	1008 TSSOP	U1
0883893	IC	NCP1351BDR2G SOIC	U101
1030047	PRESS SENSITIVITY RESISTOR	TVR10621KSY	VA101
1050027	HEAT SENSITIVITY RESISTOR	NTC 2.5Ω(5A)±20% 10D SHAPED 5mm	NTC101
1080037	PHOTOELECTRIC COUPLER	@HS817 CQC	U121
1350110	POWER SWITCH	@PS5D-12-B-1GP D038	SW101
1570263	PCB	@52207D-3 CEM1 D1.6 SX C043	
1710025	MAGNETISM RING	φ3.5×φ3×1.5 BLACK	D102,D103,CY103
1870087	AC SOCKET	@3P “回”-SHAPED”GRAPHMIC SS-120 D148	CN101
1940085	SOCKET	8P2.5mm 2#	CN102
1940463	SOCKET	2P 3.5mm FLEX INSERT	CN1~CN4
2100003	CONNENTION CORDS	Φ0.6 SHAPED 7.5mm	JP1,JP3,JP4,JP8,JP12,JP13,JP15,JP17,JP20,JP23,JP25,JP9,JP19
2100004	CONNENTION CORDS	Φ0.6 SHAPED 10mm	JP2,JP5,JP18,JP22
2100006	CONNENTION CORDS	Φ0.6 SHAPED 12.5mm	JP6,JP7,JP10
2100007	CONNENTION CORDS	Φ0.6 SHAPEN 15mm	JP11,JP14,JP21,JP24
2100017	CONNENTION CORDS	Φ0.6 SHAPED 20mm	JP16
2110586	LEAD	18# 60MM OLIVINE, WITH WELDING PIECE HOLEΦ4.3	FG GROUND LINE
2300070	SMD FUSE	@5A 32V 1206 UL	F1
2300071	FUSE	@3.15AL 250V WITH CANNULA,CQC	F101
3540320	SHIELD	2207D	SH1
3580275	HEAT RADIATION PIECE	50×10×26.5 SINGLE HOLE 2207D	SR1
3580280	HEAT RADIATION PIECE	75×10×26.5 3HOLE 2207D	SR2
3870115	GROUND CHIP OF POWER BOARD	903	FG
4210151	MACHINE-TAPPING SCREW	B3×6H WHITE NICKEL	Q101,CR120,CR900,Q901
5120014	SILICONE GREASE HEAT CONDUCT OIL	LYCAL304	
5120635	WHITE GLUE	607	
5120642	GREY GLUE	608G	

MATERIAL CODE	MATERIAL NAME	SPECIFICATIONS	LOCATION
5120749	GREEN GLUE	LOCTITE638	
5141759	VERSION LABEL	2.04 SQUARE WHITE	
5230004	PYROCONDENSATION SLEEVE	φ4	FG GROUND LINE
5232540	INSULATED PAD	19×13.2×0.3 HOLE φ3.2	Q901
5232541	INSULATED SPACER SET	HOLE φ3 WHITE 080	Q901

LD2216K(RU)BLACK

PROGRAM FLASH 0912183

MATERIAL CODE	MATERIAL NAME	SPECIFICATIONS	LOCATION
0883900	IC	EN25F40-100GCP SOP	

PROGRAM EPROM 0900500

MATERIAL CODE	MATERIAL NAME	SPECIFICATIONS	LOCATION
08810798	IC	AT24C04 SOP\$	

PROGRAM EPROM 0900501

MATERIAL CODE	MATERIAL NAME	SPECIFICATIONS	LOCATION
08810798	IC	AT24C04 SOP\$	

PROGRAM EPROM 0900523

MATERIAL CODE	MATERIAL NAME	SPECIFICATIONS	LOCATION
0882153	IC	LC21A SOIC	

PROGRAM FLASH 0912106

MATERIAL CODE	MATERIAL NAME	SPECIFICATIONS	LOCATION
0882923	IC	EN29LV160AB-70TCP TSOP	④
08828378	IC	KH29LV160CBTC-70 TSOP\$	④

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TRANSFER BOARD G2216-0 4942241

MATERIAL CODE	MATERIAL NAME	SPECIFICATIONS	LOCATION
1635321	PCB	G2216-0 FR4 D1.2 PX	
1860230	FEMALE HEADER	15P 2.0mm SMD	CN1
1940500	CABLE SOCKET	30P 1.0mm SMD, NEXT MEET WITH CLASP	CN701