



LCD TV

Service Manual

Chassis: MST9E19

Hisense Electric Co., Ltd.

Note: This Specification is subject to change without notice.



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1. Product Safety Servicing Guidelines

WARNING:

Service should not be attempted by anyone unfamiliar with the necessary precaution on this receiver. The following are the necessary precaution to be observed before serving this chassis.

1. Since the power supply circuit of this receiver is directly connected to the AC power line, an Isolation transformer should be used during any dynamic service to avoid possible shock hazard.
2. When replacing a chassis in the cabinet, always be certain that all the protective devices are put back in place, such as:
non-metallic control knobs, insulating cover, shields, isolation resistor-capacitor network etc.
3. When replacing parts or circuit boards, disconnect the power cord.
4. When replacing a high wattage resistor (oxide metal film resistor) on the circuit board, keep the resistor (1/2in) away from circuit board.
5. Connection wires must be kept away from components with high voltage or high temperature.
6. If any fuse in this LCD TV receiver is blown, replace it with the FUSE specified in the chassis part list.



The lightning flash with arrowhead symbol, within an equilateral triangle is intended to alert the user to the presence of uninsulated dangerous voltage within the products enclosure that may be of sufficient magnitude to constitute a risk of electric shock.



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the set.

Many electrical and mechanical parts in the chassis have special

safety-related characteristics. These characteristics are often passed unnoticed by a visual inspection. When replacement parts are required, be sure the service technician uses replacement parts specified by us that have the same characteristics as the original part. Unauthorized substitutions may result in fire, electric shock and injury to persons or other hazards. This LCD TV product should be situated away from heat source such as radiation, stoves, or other product that produce heat.

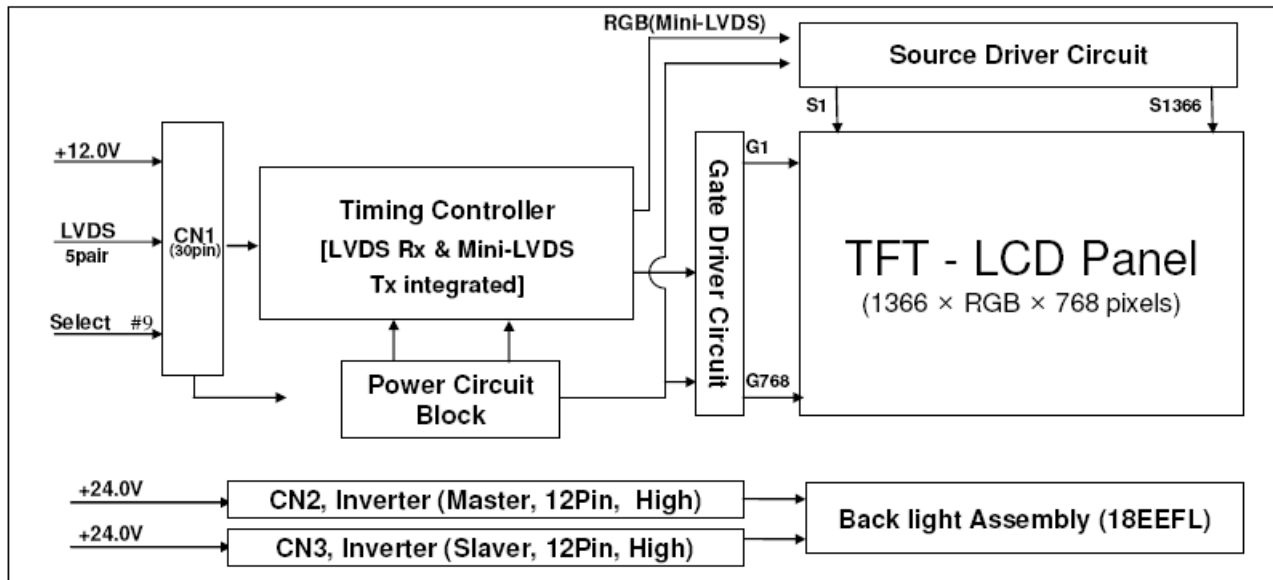
2 Product Function Specifications

Refer to the User's manual

3. LCD Panel Spec

3-1 General Description

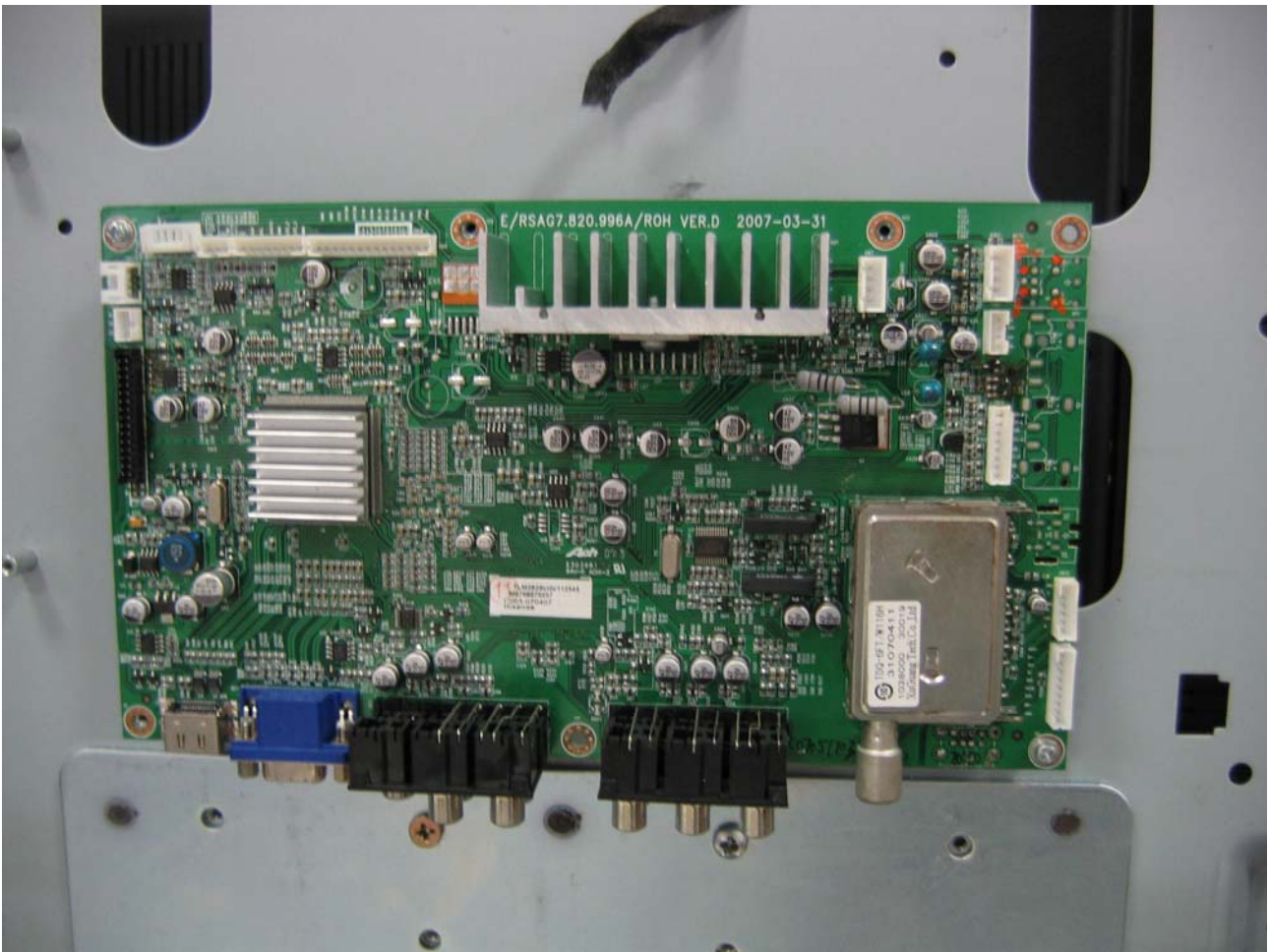
These Panel is a TFT LCD module supports 1366 x 768 WXGA format and can display true 16.7M colors (8-bit colors).



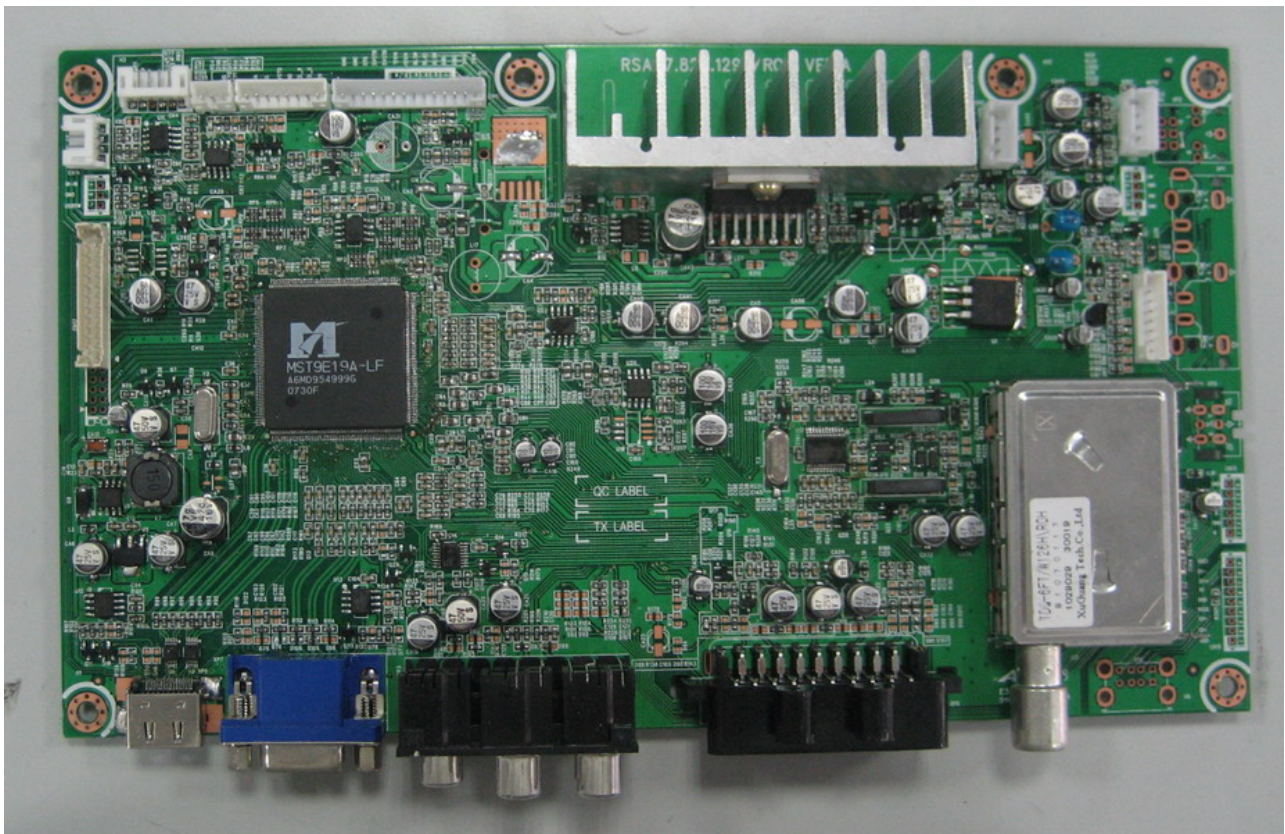
4. Block Diagram

4-1 Main board

1) 26" and 32" with AV2 in/AV out interface

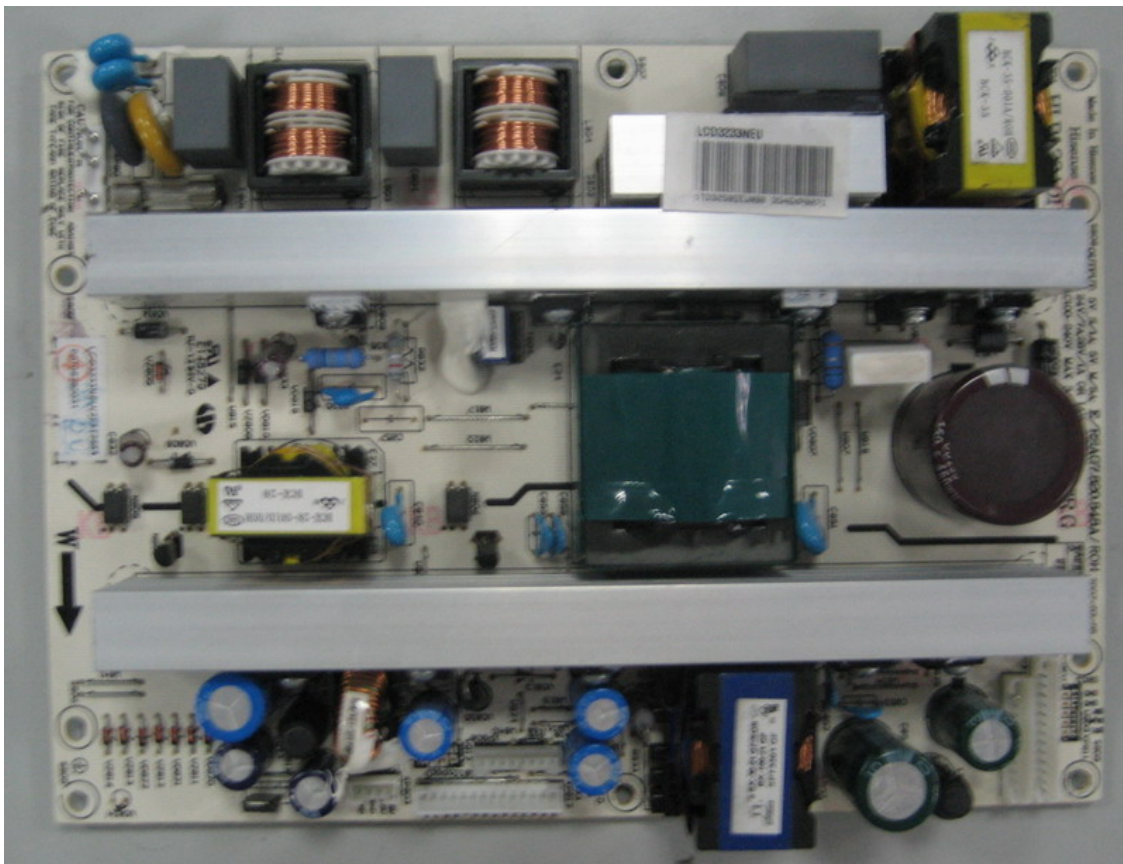


2) 26" and 32" with SCART interface



4-2 Power board

1) Power board of 26" and 32



2) Another Power board of 26" and 32



5. Service Mode And Adjustment

LCD***: Use the remote control, first open **MAIN MENU** with **MENU** button, and choose **PICTURE** with the **CHANNEL UP/DOWN** button, then choose the **Brightness** with **VOLUME UP**, while Brightness value is 50, press 0、5、3、2,you can enter factory menu.

LCD***EU: Use the remote control, first open **MAIN MENU** with **MENU** button, and choose **SOUND** with the **CHANNEL UP/DOWN** button, then choose the **Balance** with **VOLUME UP**, while Balance value is 0, press 0、5、3、2,you can enter factory menu.

Fac. Menu

Note:

- 1) We have set the best value before delivery.
- 2) Do not change any item except the following sheets.

Factory Menu

White Balance
Auto Test
Auto Calibration
LOGO
OSD Language
Country
Option
Factory Init
Test Pattern
Version:

White Balance

R DRV	10
G DRV	10
B DRV	10
R CUT	128
G CUT	128
B CUT	128
BRIGHT_H	80
CONTRAST_H	80
BRIGHT_L	40
CONTRAST_L	40

White Balance: To change white balance

Auto Calibration

Auto Color	
Color Temp.	Standard
RED COLOR	128
GREEN COLOR	128
BLUE COLOR	128

LOGO

NULL
HISENSE
WELCOME

Option

SOURCE	TV
BRIGHT 0	10
BRIGHT 50	100
BRIGHT 100	135
CONTRAST 0	60
CONTRAST 50	125
CONTRAST 100	155
TOFAC	M
HDMI Cable	Standard

Factory Init

QingDao
HuangDao
Guiyang
Hungary
France
Austria
CLEAR PROTECTLY
CLEAR UNPROTECTLY

Design Menu

Picture Mode

Sound Mode

Sound Settings

Power Save

PIP Option

EMI

MOVESHARPNESS

LipSync

Picture Mode

Standard	Brightness	50
	Contrast	50
	Colour	50
Bright	Brightness	60
	Contrast	60
	Colour	55
Soft	Brightness	45
	Contrast	45
	Colour	45

Sound Mode

Standard	120Hz	12
	500Hz	10
	1.5KHz	11
	5KHz	8
	10KHz	15
Music	120Hz	19
	500Hz	11
	1.5KHz	12
	5KHz	14
	10KHz	20
Speech	120Hz	4
	500Hz	10
	1.5KHz	12
	5KHz	7
	10KHz	5

Sound Settings

VOLUME 0	128
VOLUME 1	79
VOLUME 20	36
VOLUME 40	31
VOLUME 100	17
TVPRE SCALER	2
VOLUME SCALER	0

6. Software Updating

6-1、Updating Tool

- You can update the software through a special tool (show as below)



6-2、 Software Updating Operation

1、 Connect the Debug board to the TV use VGA interface, then connect the Debug board to the computer, just as the pictures showing.

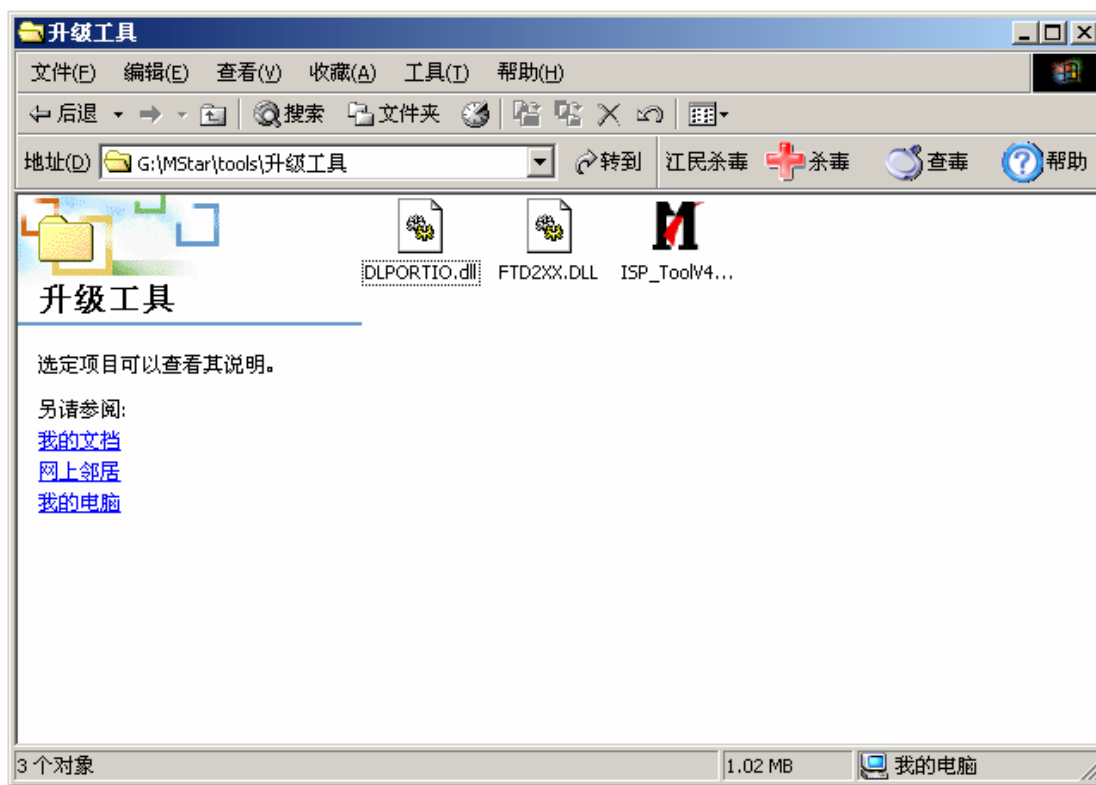


2. Set the ISP_TOOL4.0.9 -----only for the first time update.

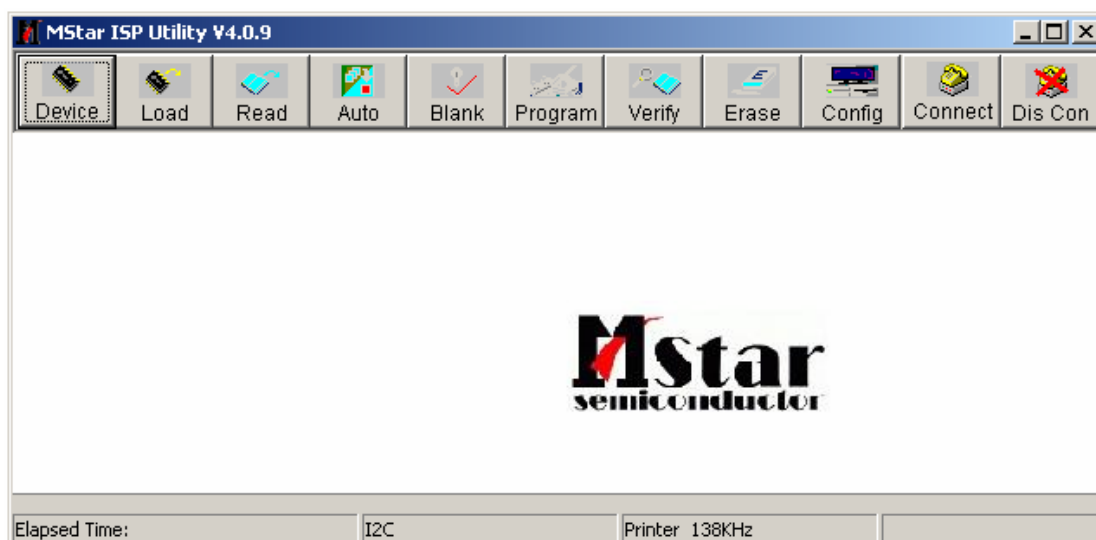
DLPORTIO.dll and FTD2XX.DLL must be in the same folder

1) Find the folder where the ISP_TOOL4.0.9 lies in.

Note: DLPORTIO.dll and FTD2XX.DLL must be in the same folder.

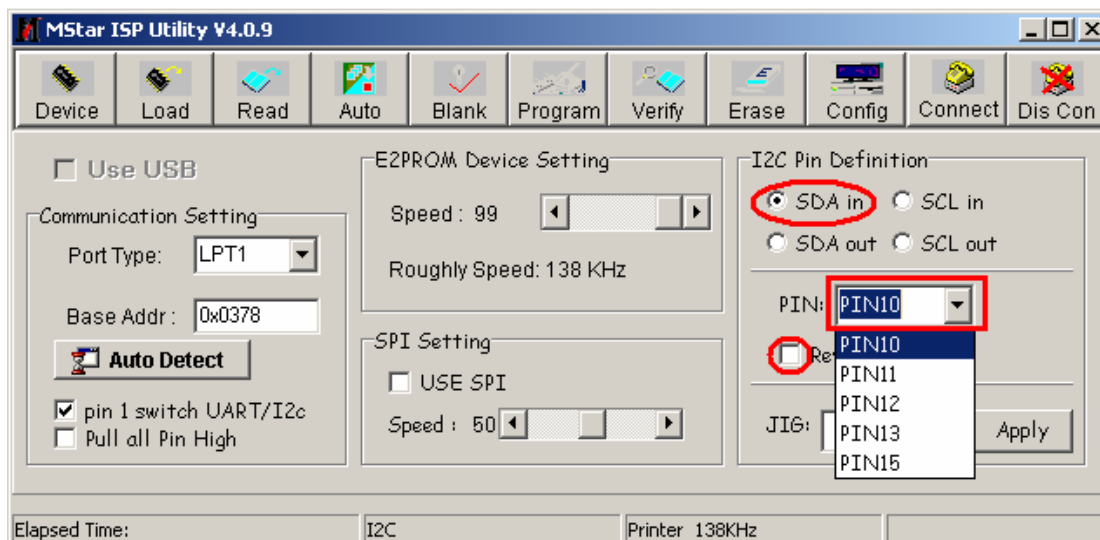
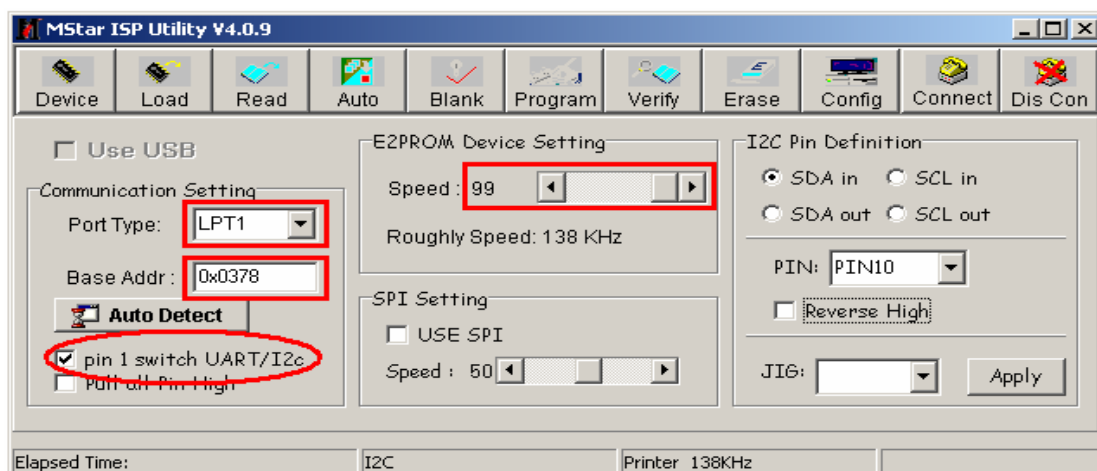
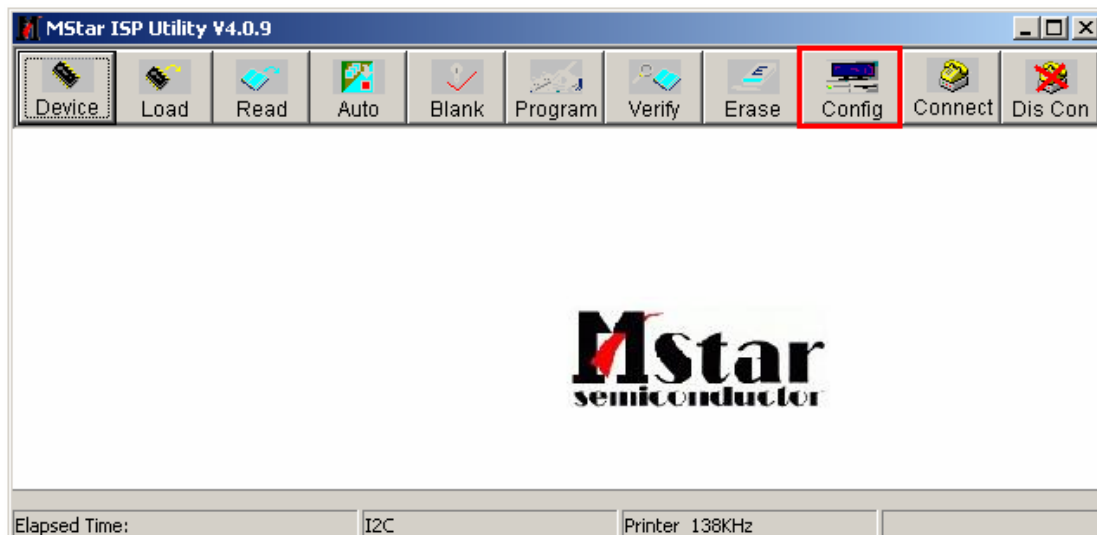


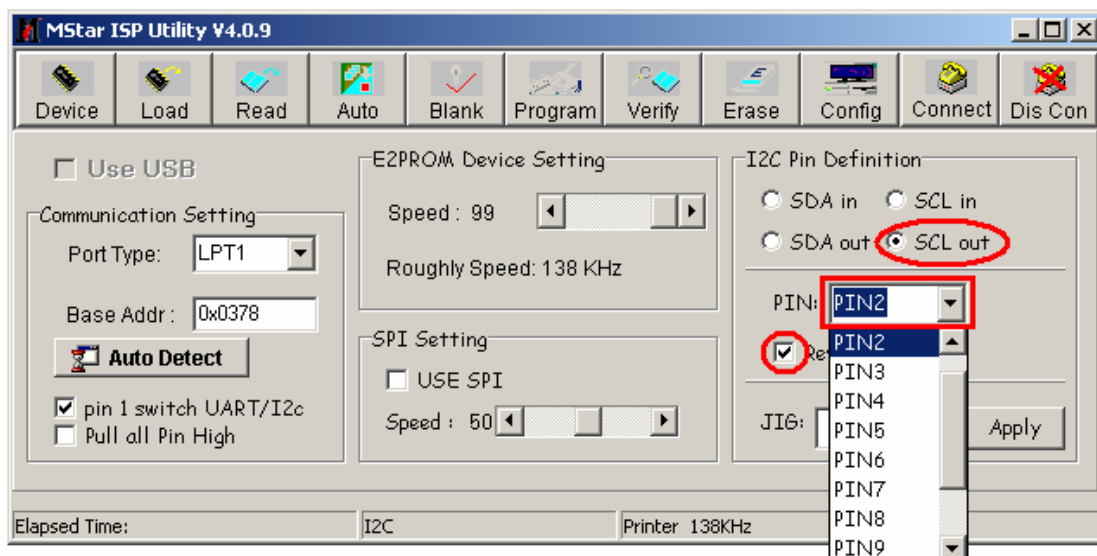
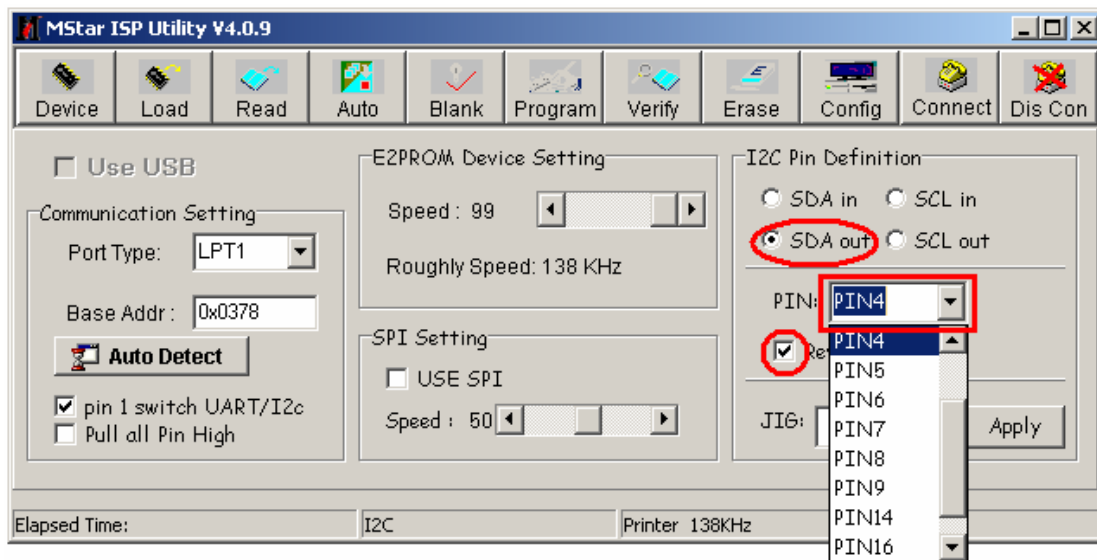
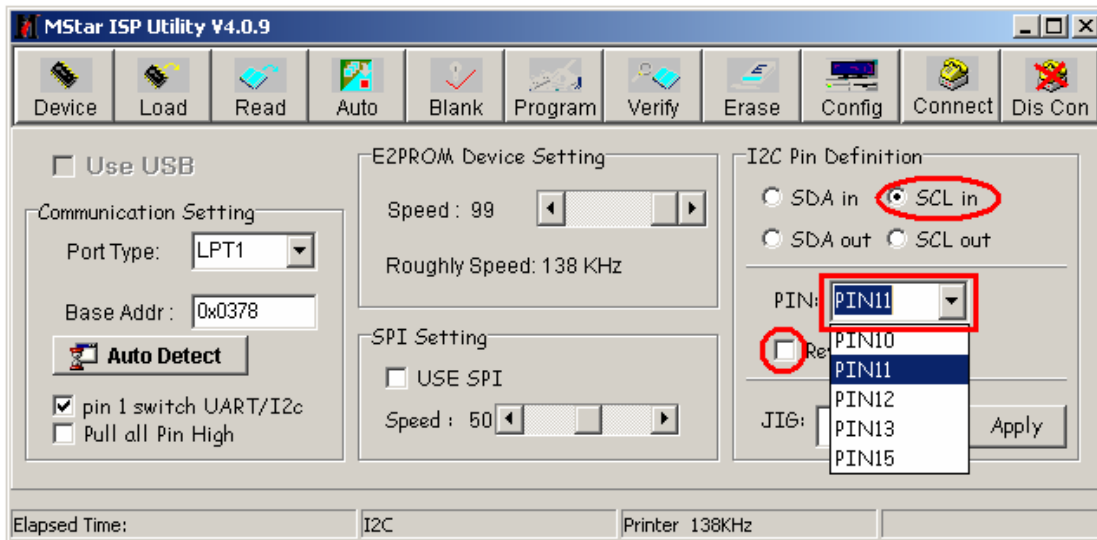
2) Double click the ISP_TOOL4.0.9 icon, and then a dialog will show as below.



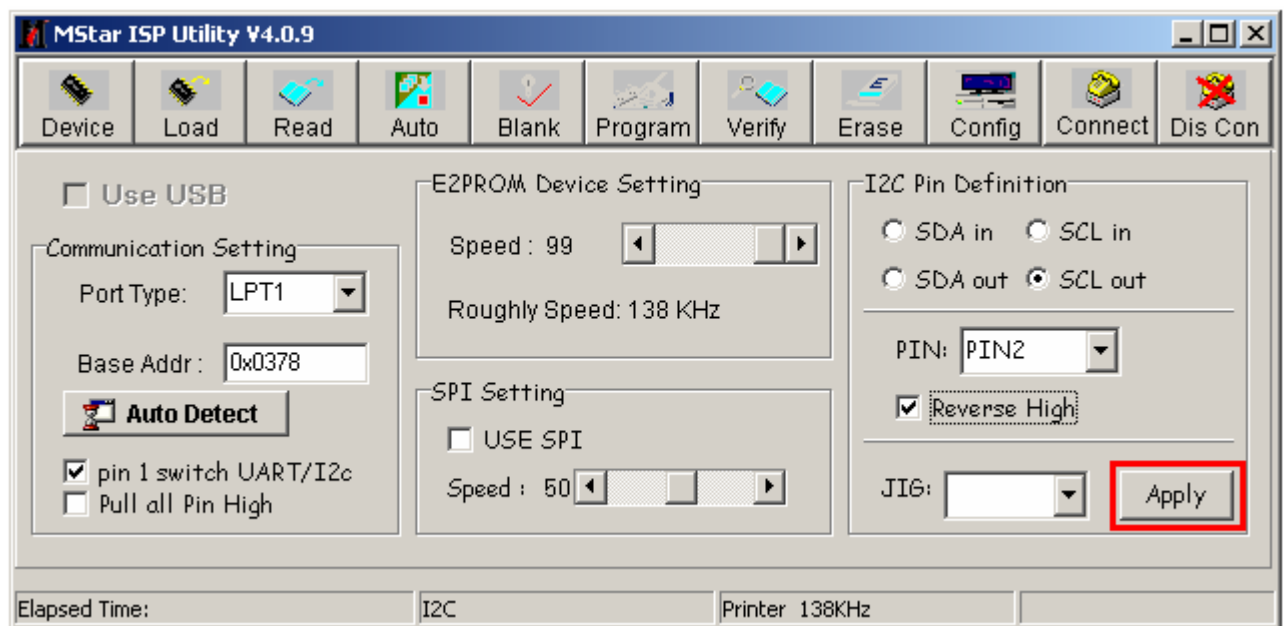
3) Click the **Config** button. And then a dialog will show as below.

You should set the **Config** like what the picture shows.



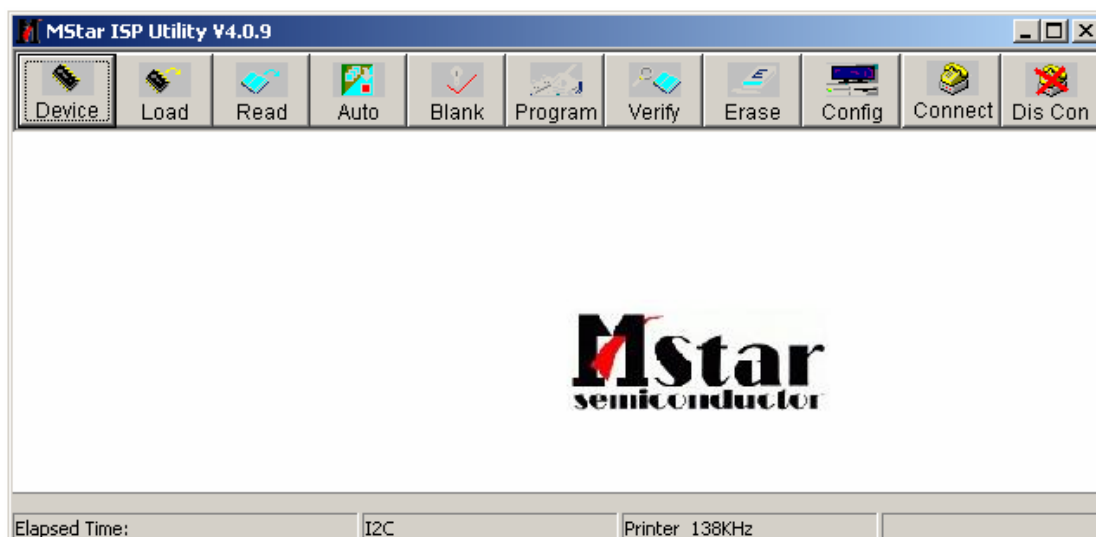


4) After you have finished all above, you should click the Apply button to complete the configuration.

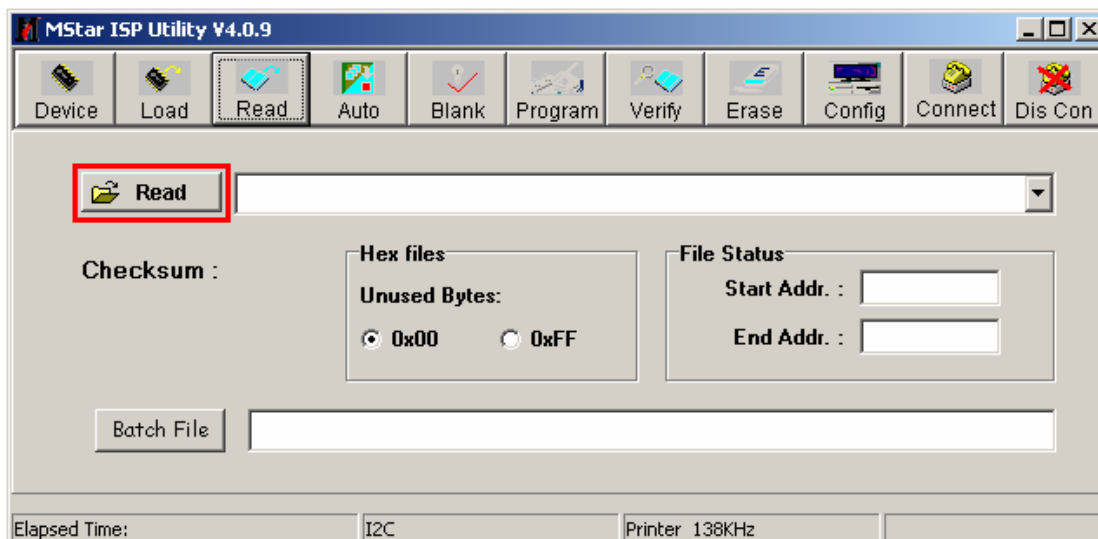
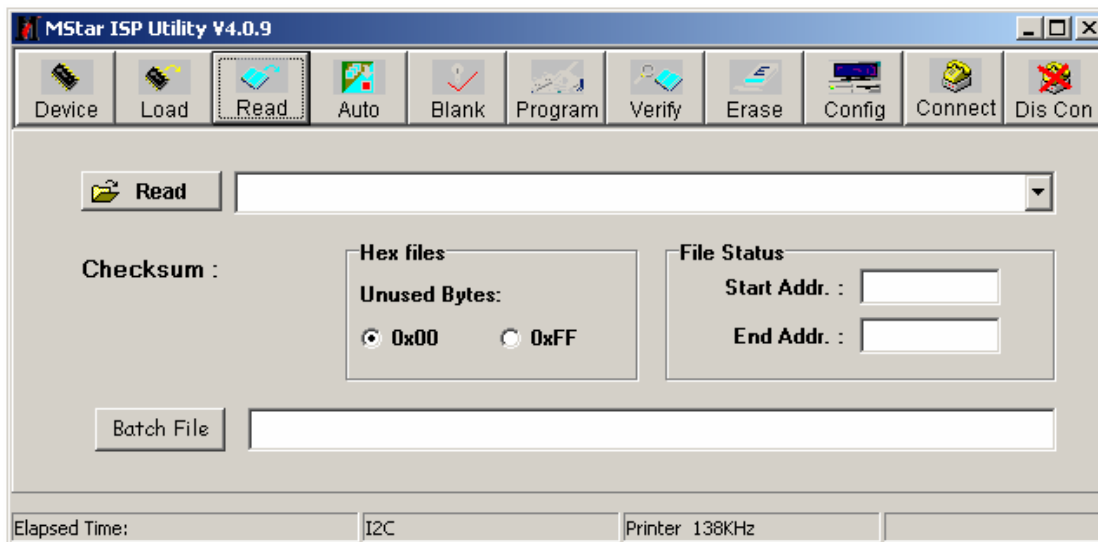
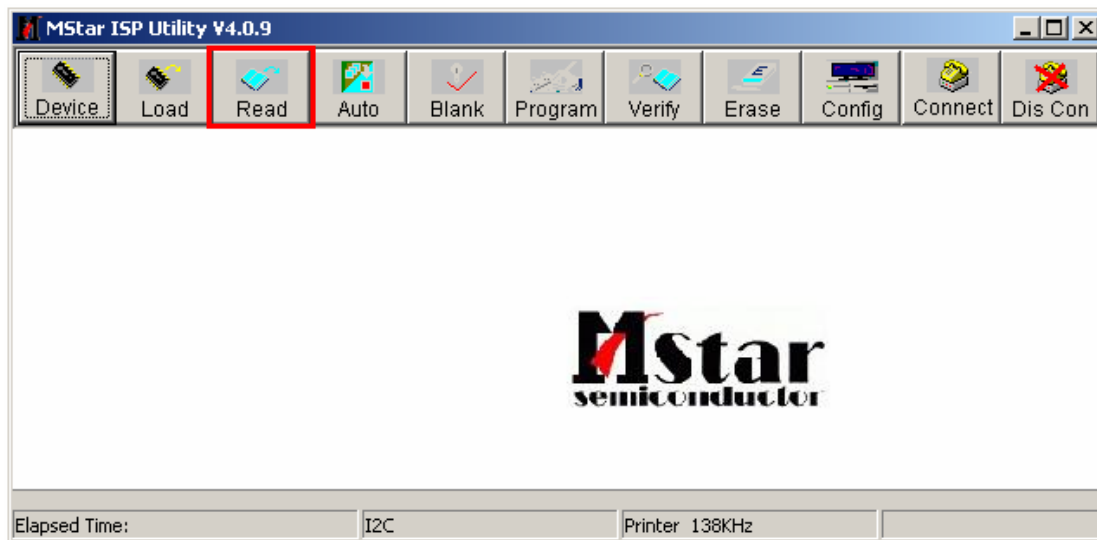


3. Turn on the TV, then we can update.

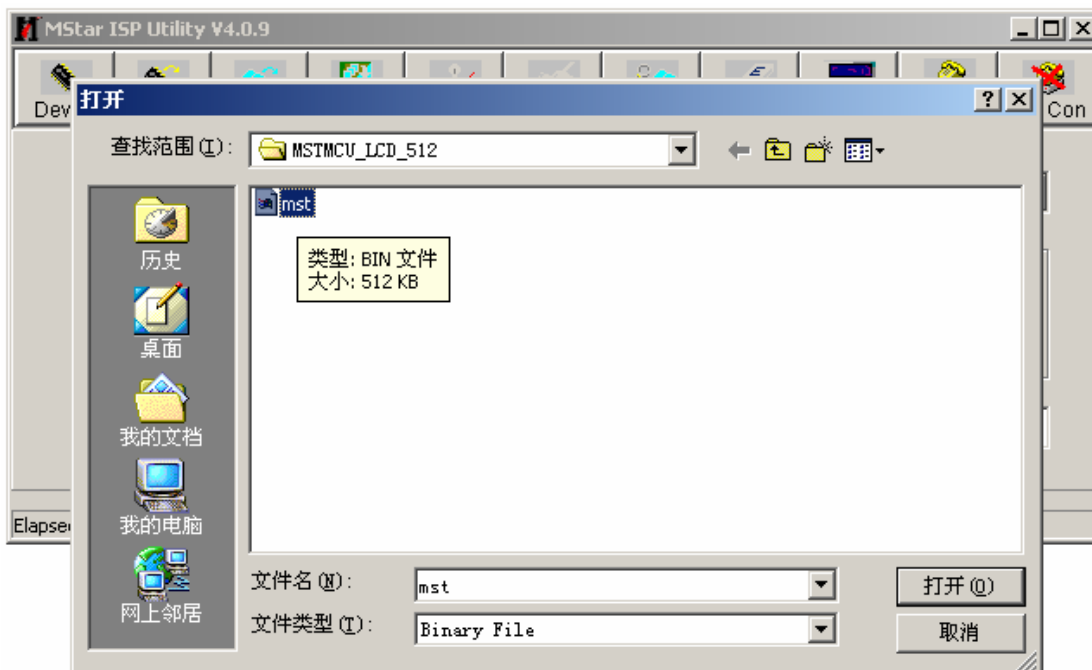
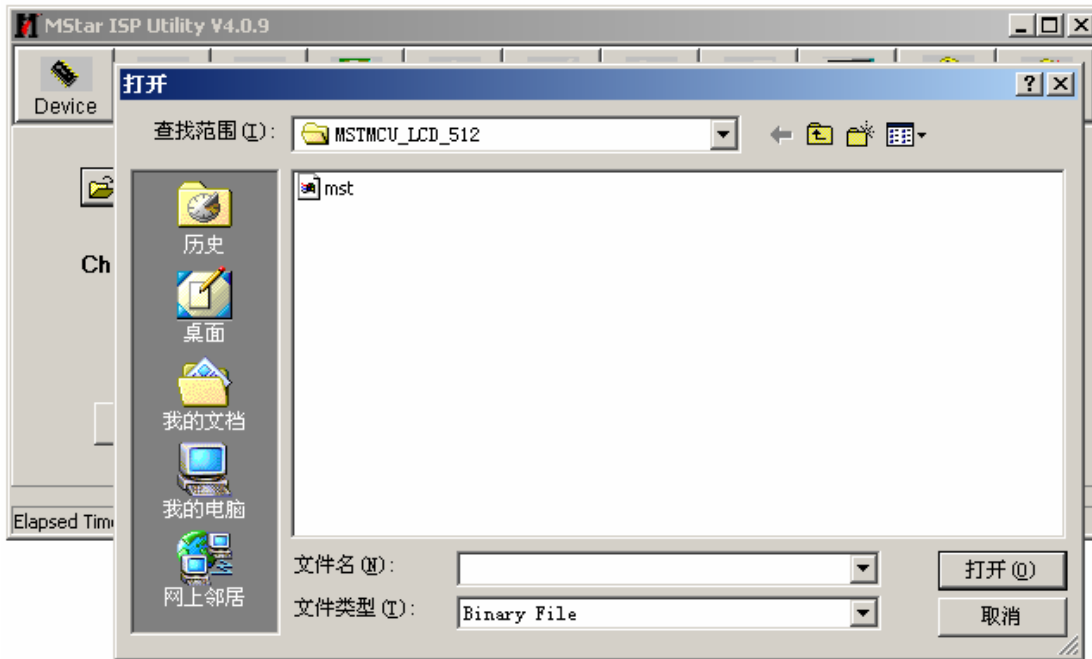
4. Double click the **ISP_TOOL4.0.9** icon, and then a dialog will show as below.



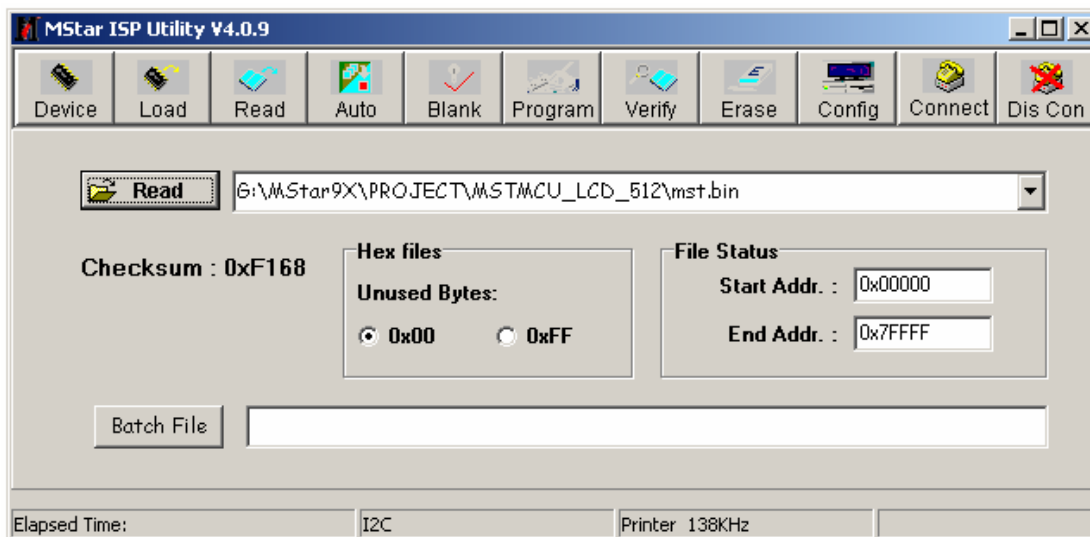
5. Click the **Read** button. And then do as shown below.



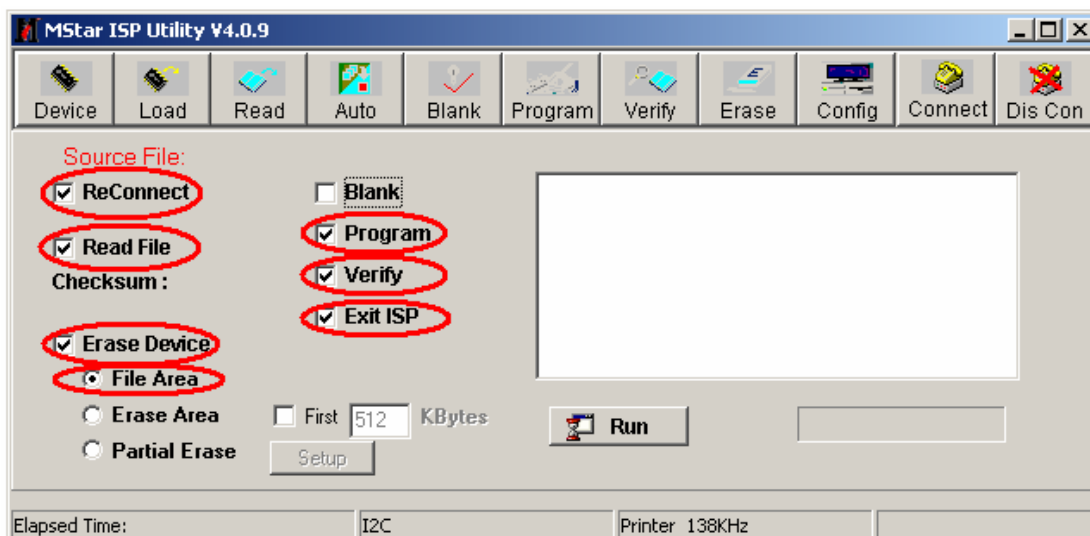
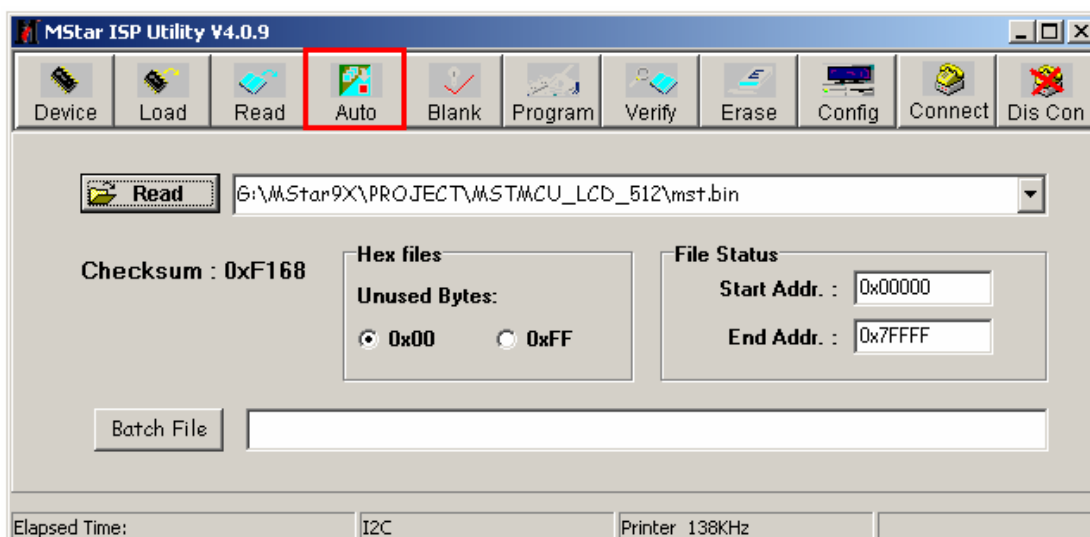
6. Find the update file in your computer.

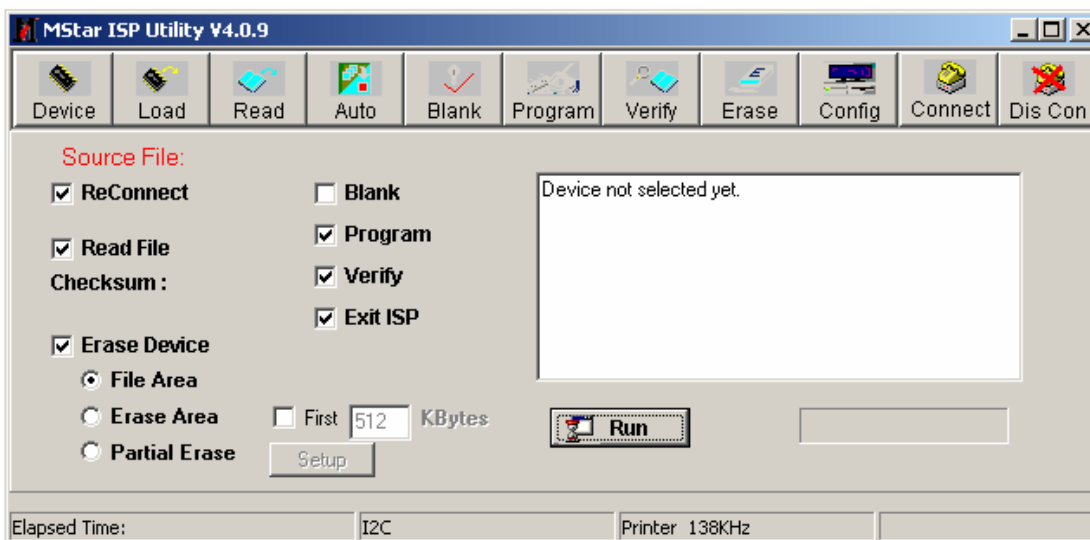
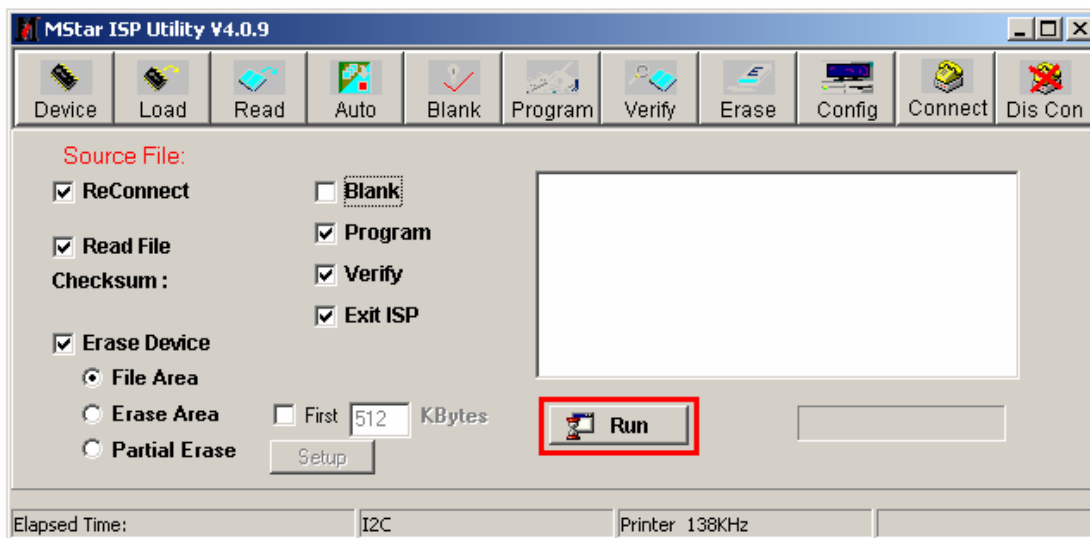


7. Double click the update file. A dialog will show as below.

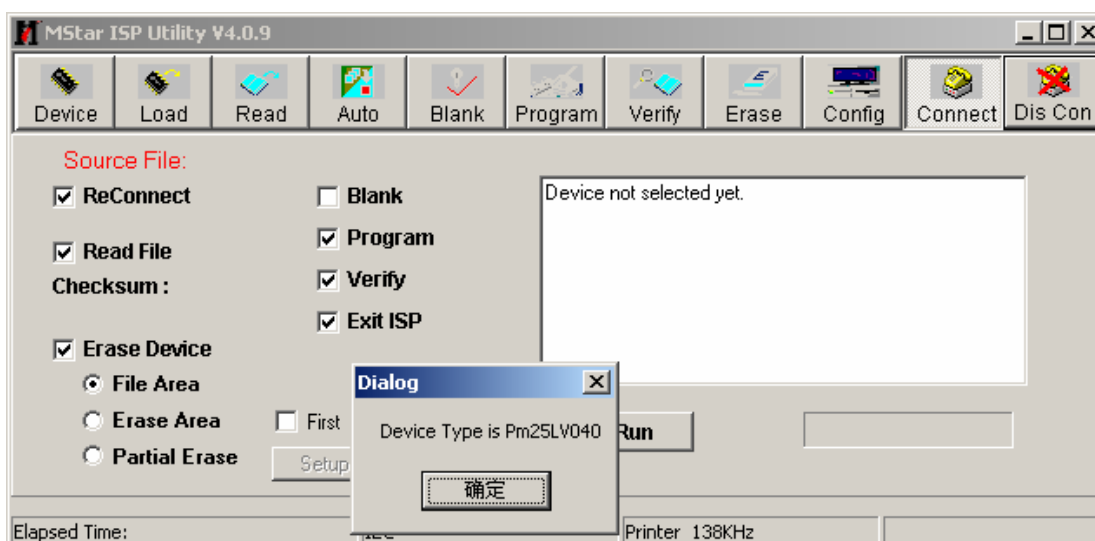


8. Click the **Auto** button. And then do as shown below.

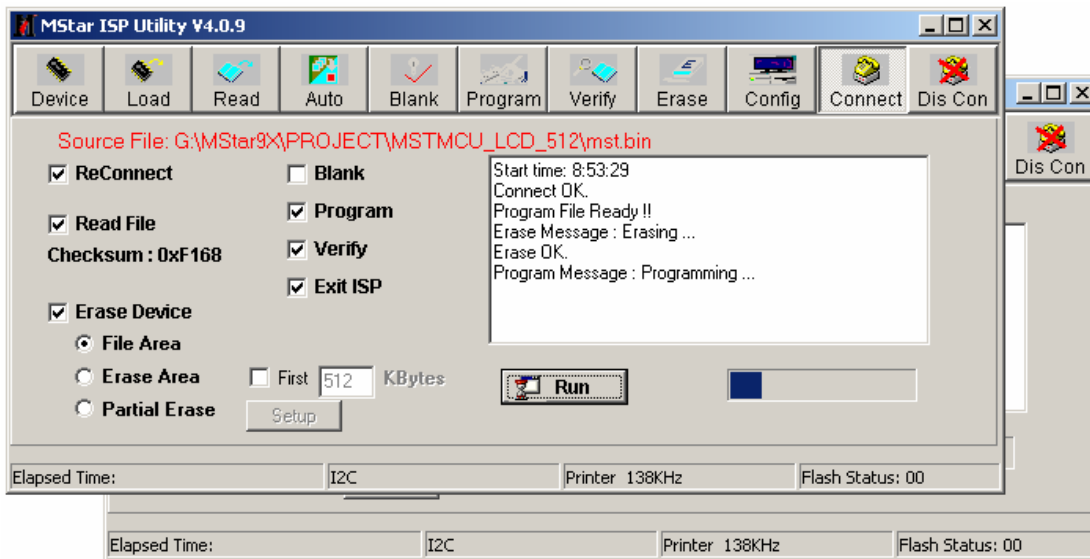




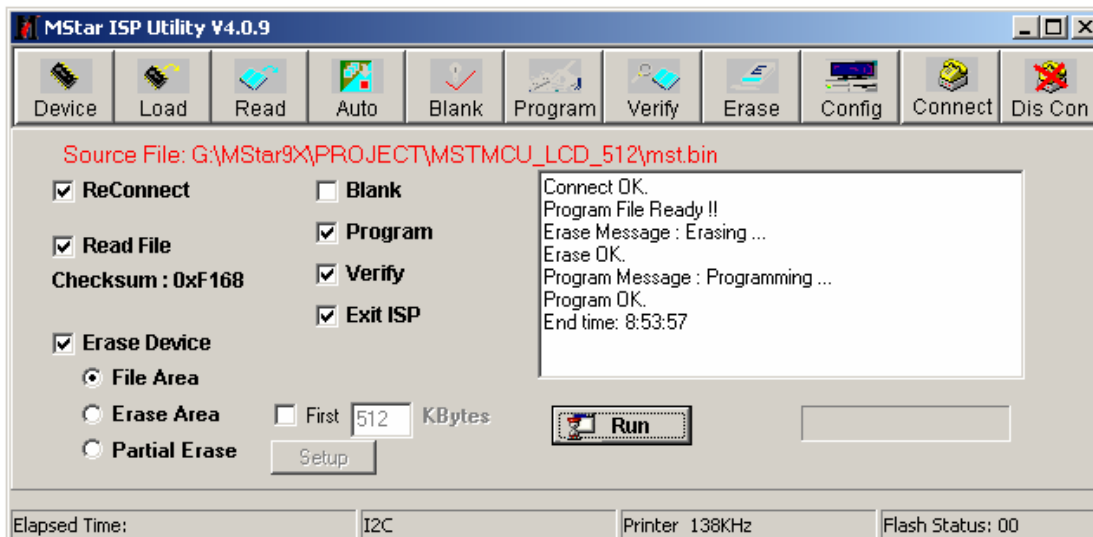
9. Click the **Connect** button. And then do as shown below.



10. Click the **Run** button.



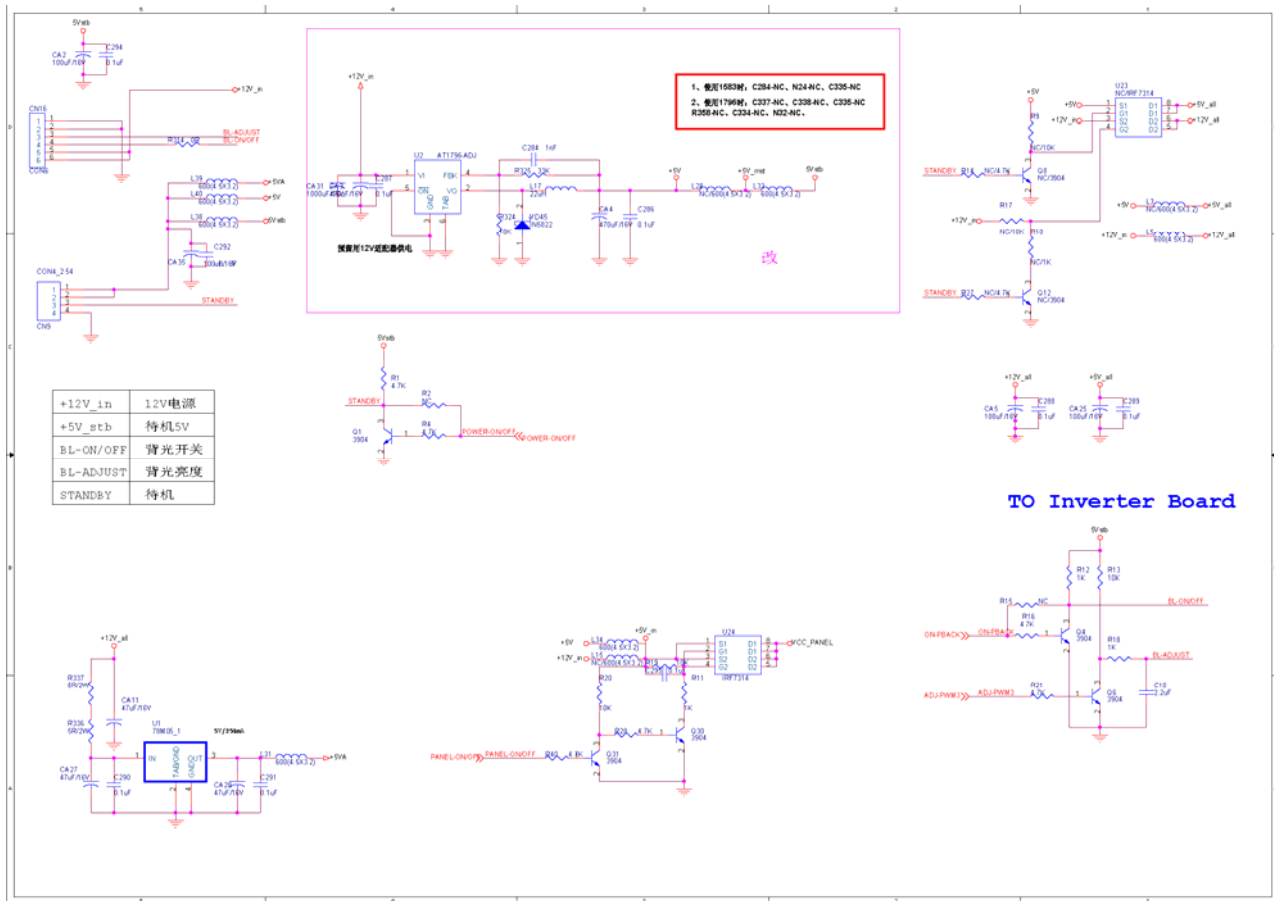
11. When the update is finished, a dialog will show as below.

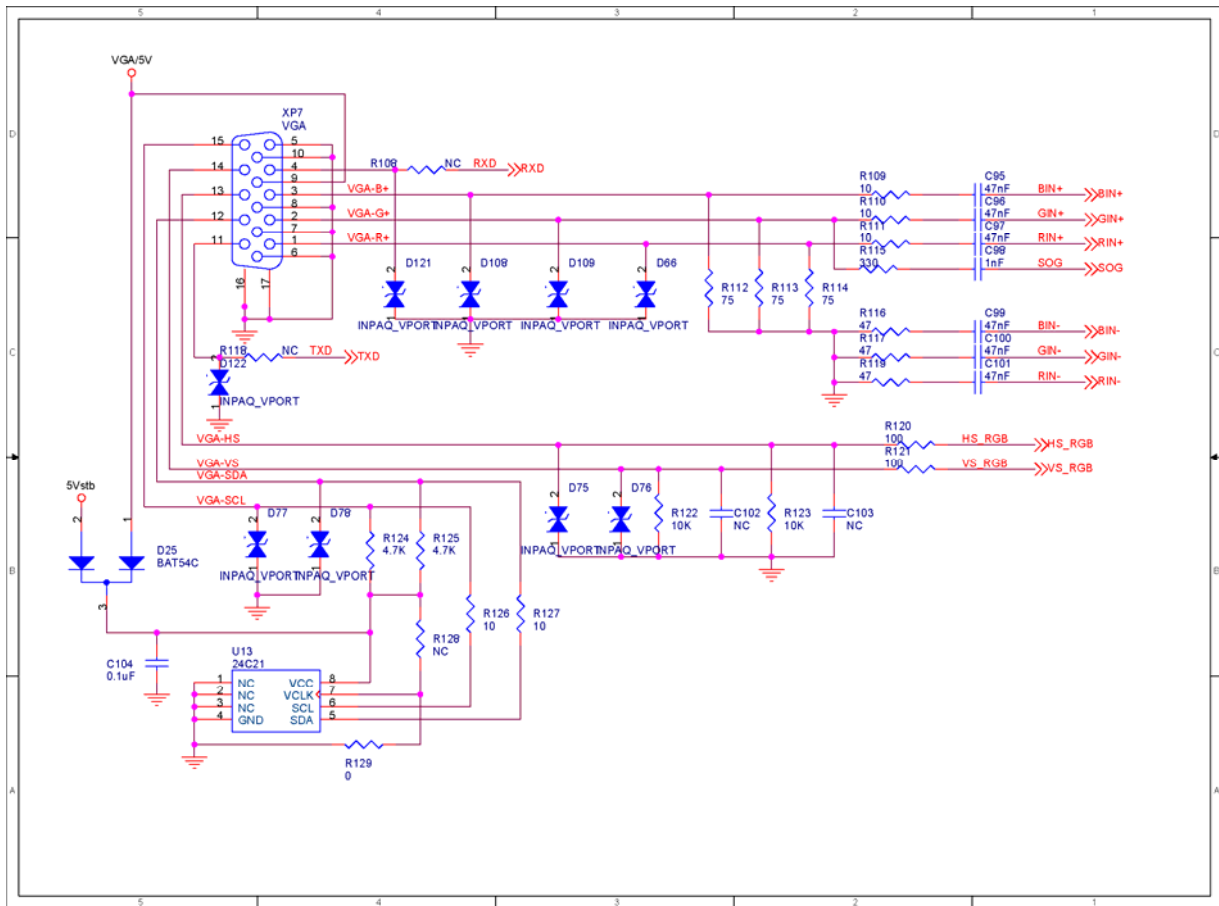
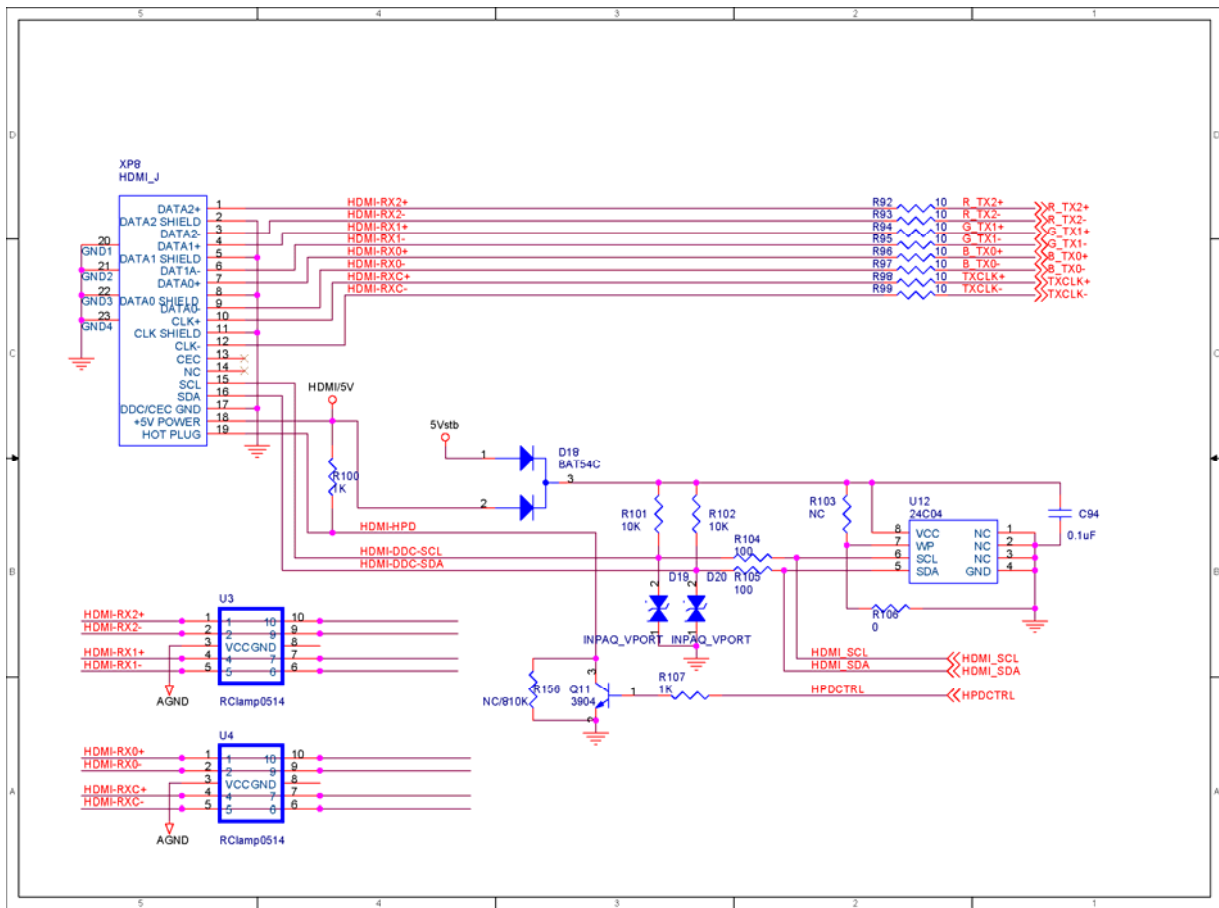


7. Troubleshooting

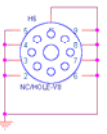
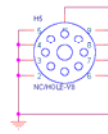
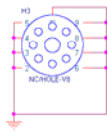
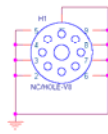
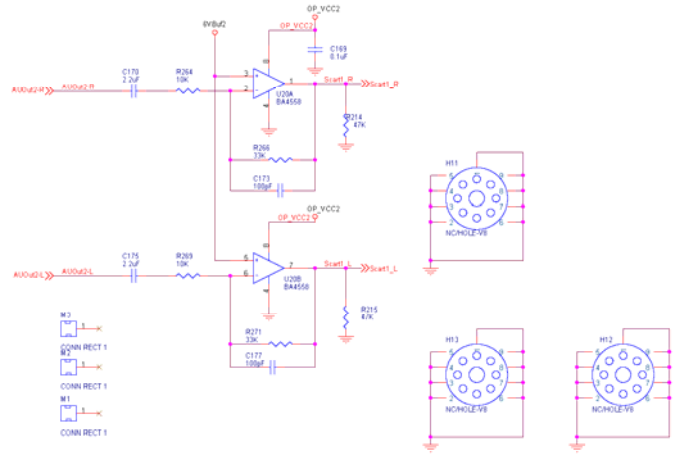
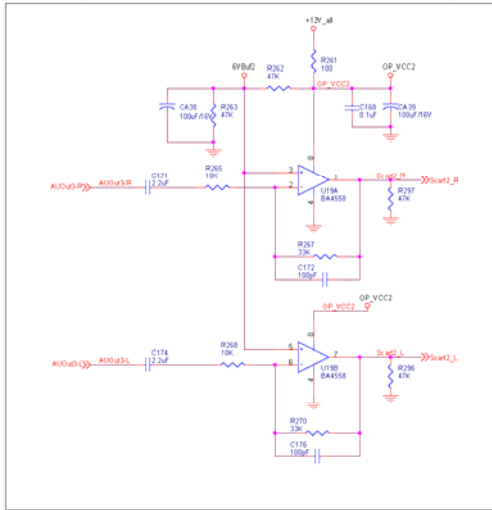
No.	Trouble	Measure
1	Turn on the TV, The LED is red, no display on screen	Replace the main board or updating the software.
2	Turn on the TV, The LED is blue, but no picture or/and no sound	You should replace the main board.
3	In TV state, can not to tuning	You should replace the main board.
4	No teletext	You should replace the main board.
5	No sound	You should replace the main board.
6	can not to updating software	You should replace the main board
7	No reaction with PC	You should replace the main board

8. Circuit Diagram

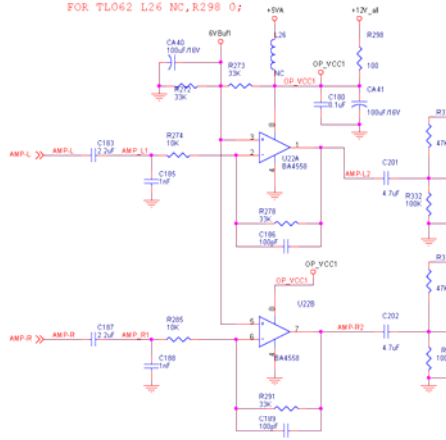




Audio OP(AUOUTL3/AUOUTR3; AUOUTL2/AUOUTR2)



FOR TDA1308/PT2308 L26 FB, R298 NC;
FOR TL062 L26 NC, R298 0;



FOR TDA1308/PT2308 L26 FB, R298 NC;
FOR TL062 L26 NC, R298 0;

