

S/M NO. : DLP26H1001

# Service Manual LCD TV

**CHASSIS : MST9E88**

**Model : DLP-26H1**

**DLP-32H1**



**Caution**

: In this Manual, some parts can be changed for improving. their performance without notice in the parts list. So, if you need the latest parts information, please refer to PPL(Parts Price List)in Service Information Center.

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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.



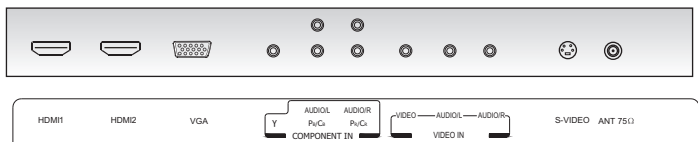
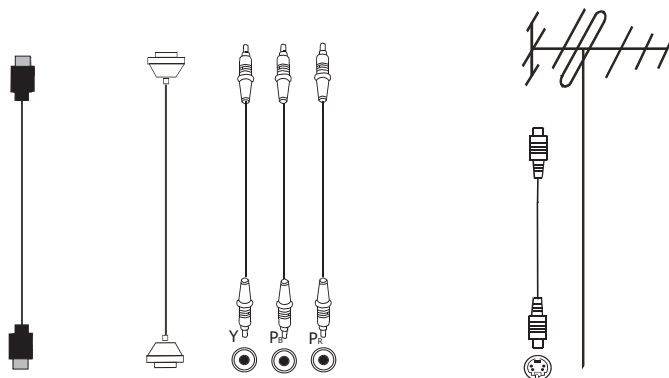
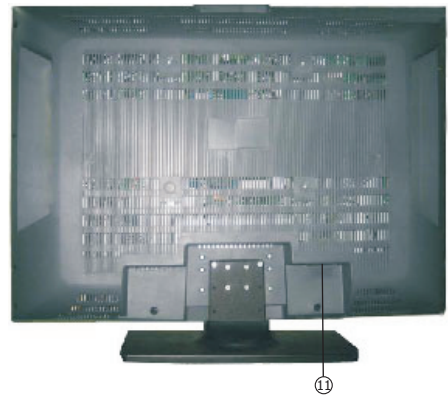
The exclamation point within an equilateral triangle is

intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the set.

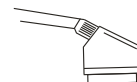
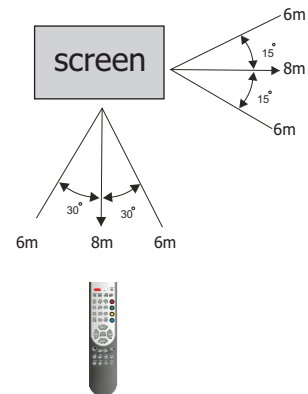
Many electrical and mechanical parts in the chassis have special safety-related characteristics. These characteristics are often passed unnoticed by a visual inspection. When replacement parts are required, be sure the service technician uses replacement parts specified by us that have the same characteristics 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 and Specifications

2-1 Product Function



IR angle for the remote control



- |                   |                            |                          |
|-------------------|----------------------------|--------------------------|
| ① Power indicator | ⑤ Volume down/cursor left  | ⑨ Power button (standby) |
| ② IR Sensor       | ⑥ Volume up/cursor right   | ⑩ Power Switch (ON/OFF)  |
| ③ Menu button     | ⑦ Channel down/cursor down | ⑪ AC input socket        |
| ④ Source select   | ⑧ Channel up/cursor up     |                          |

**Note:** The above figures are for reference only, please refer to the actual units to determine the appearances.

## 2-2 Specifications

Screen Size:	32-inch (81 cm) TFT LCD TV
Native Resolution:	1366 x 768 Pixels (corresponding to WXGA)
Colour System:	PAL/SECAM
Sound System:	B/G, D/K, I, L/L'
Tuner:	VHF/UHF: 48.25~863.25MHz
Antenna:	75Ω VHF/UHF input
Stereo:	NICAM/A2
<b>VIDEO INPUT:</b>	
SCART-1 (Video and RGB)	Video: 1 Vp-p, negative sync, 75Ω input RGB: 0.7 Vp-p, 75Ω input
SCART-2 (Video )	Video: 1 Vp-p, negative sync, 75Ω input
Audio in	Stereo audio input for SCART1 and SCART2
YPbPr(Component)	RCA, 0.7 Vp-p/75Ω input (480I/60Hz, 480P/60Hz, 576I/50Hz, 576P/50Hz, 720P/50Hz, 720P/60Hz, 1080I/50Hz, 1080I/60Hz)
Audio in	RCA Stereo audio input
<b>PC INPUT:</b>	
VGA	15 Pin , Analog RGB signal, 0.7Vp-p, 75Ω input (VGA, SVGA, XGA)
Audio in	RCA Stereo audio input
<b>MONITOR OUT</b>	
Speaker Output	6W+6W
Power Requirement	Refer to rating label.
Power Consumption	Refer to rating label.
Dimensions(mm)	820(L)X240(D)X628(H)
Weight (gross)	22.5kg

**Allowable temperature of operation environment**  
.....0°C to 40°C

<b>ACCESSORIES</b>	
Operating Instructions	1
Remote Control Unit	1
Power Lead	1
Dry Cell Battery	2

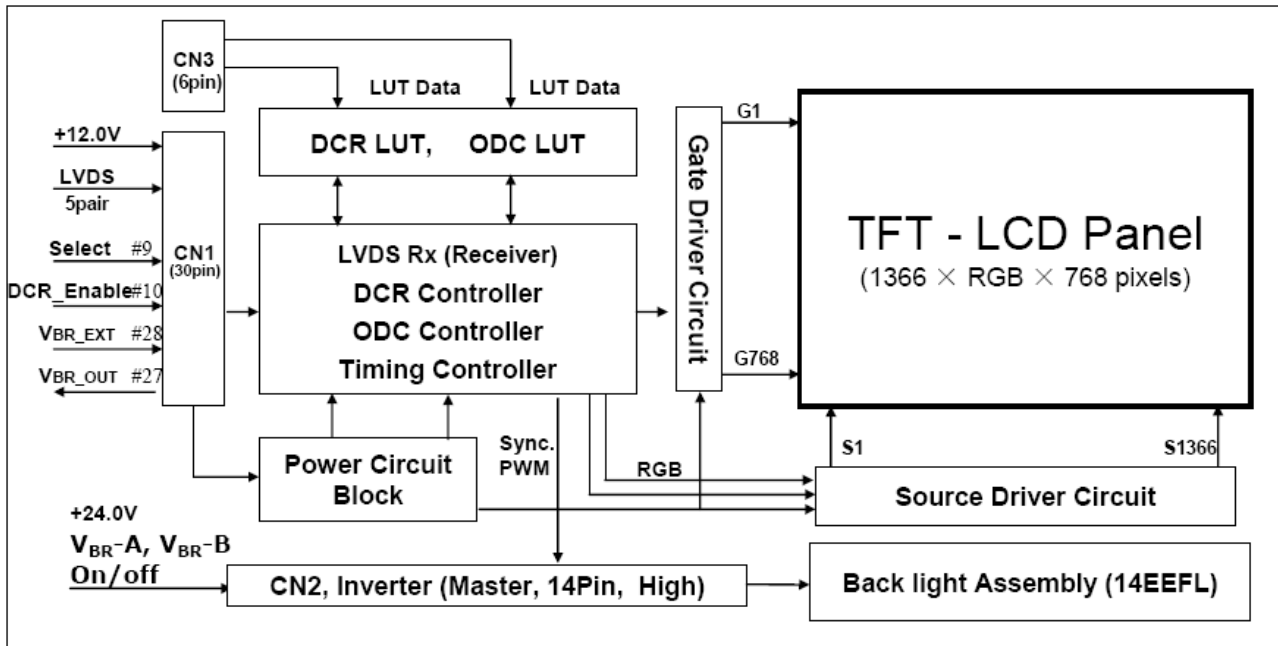
**Note:** Specifications and design are subject to possible modifications without notice due to improvements.

### 3. LCD Panel Spec

#### 3-1 General Description

LCD3206NEU' S LCD Panel is a 32" TFT Liquid Crystal Display module with 18-EEFL Backlight unit and 1ch-LVDS interface. This module supports 1366 x 768 WXGA format and can display true 16.7M colors (8-bit colors).

The inverter module for backlight is built-in.

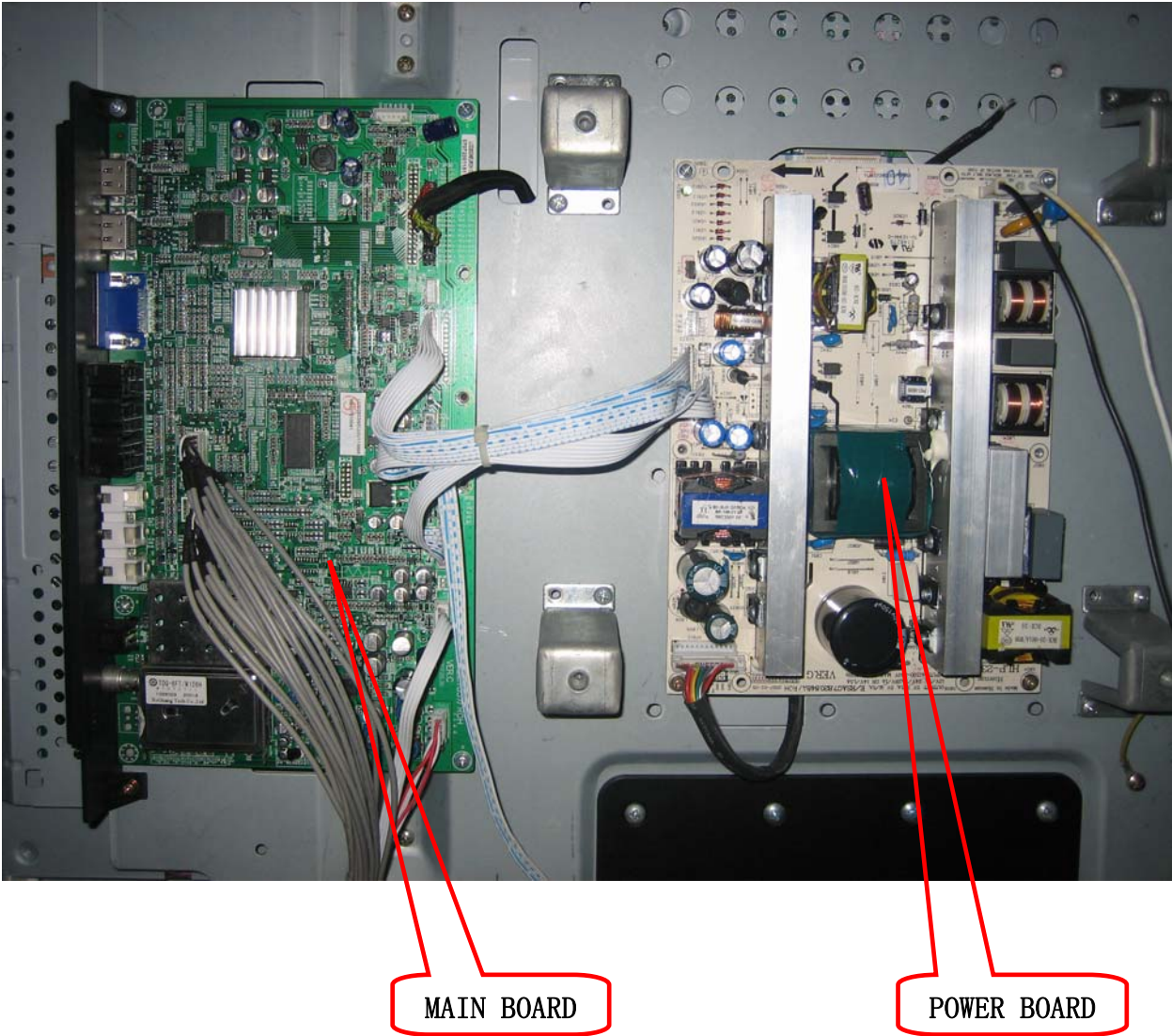


#### 3-2 General Features

Active Screen Size	31.51 inches(800.4mm) diagonal
Outline Dimension	760.0 mm(H) x 450.0 mm(V) x 48.0 mm(D) (Typ.)
Pixel Pitch	170.25 $\mu$ m x 510.75 $\mu$ m x RGB
Pixel Format	1366 horiz. by 768 vert. pixels RGB stripe arrangement
Color Depth	8bit, 16,7 M colors
Luminance, White	400 cd/m <sup>2</sup> (Center 1 point) (Typ.)
Viewing Angle (CR>10)	Viewing angle free ( R/L 178(Typ.), U/D 178(Typ.))
Power Consumption	Total 87.72Watt (Typ.) (Logic= 3.72W, Lamp=84W [I <sub>BL</sub> =84mA] )
Weight	6150 g (Typ.)
Display Operating Mode	Transmissive mode, normally black
Surface Treatment	Hard coating(3H), anti-glare treatment of the front polarizer

4. Block Diagram

4-1 Chassis Block Diagram

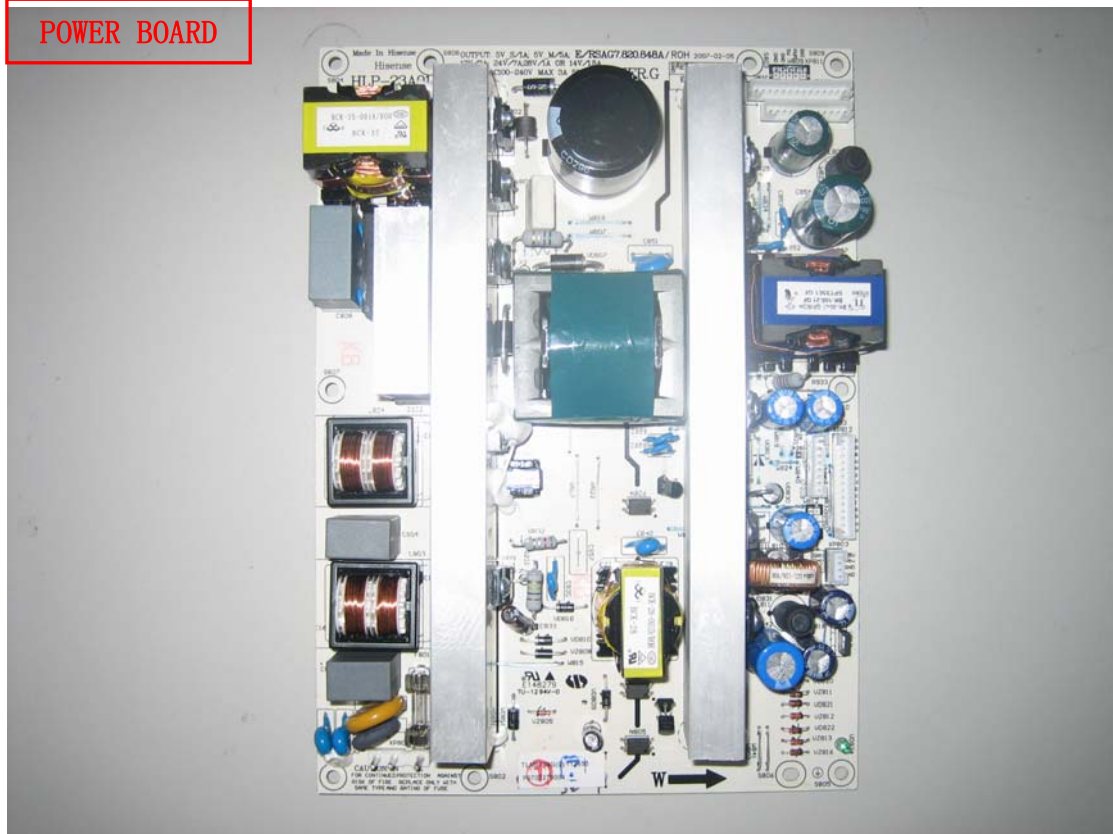




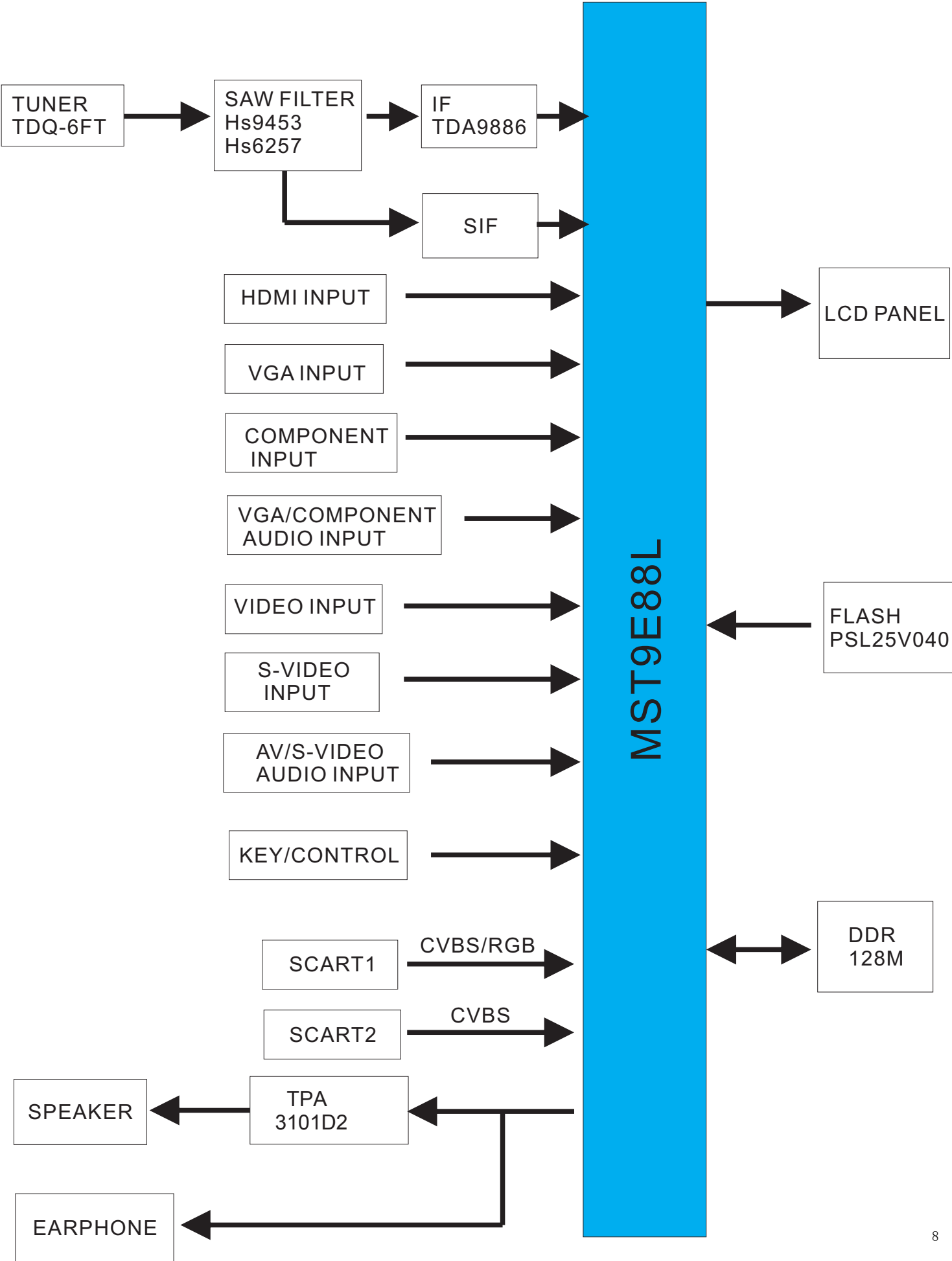
MAIN BOARD



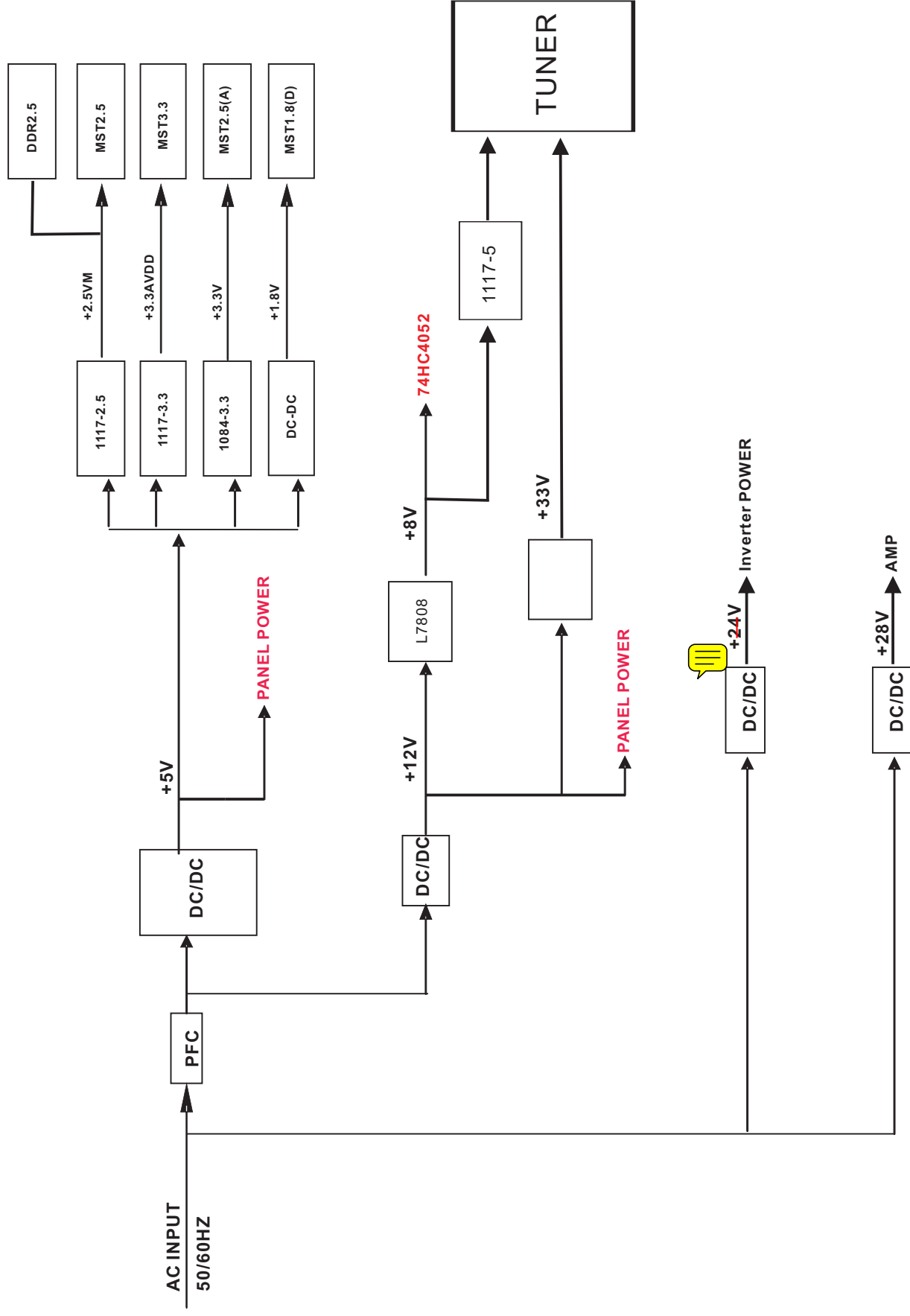
POWER BOARD



4-2 Signal Processing Part



## 4-3 Power Part



# 5. Service Mode And Adjustment

## 5-1 Service Mode

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.

### 5-1-1、Fac. Menu

<div><div>Factory Menu</div><div>White Balance</div><div>Auto Test</div><div>Auto Calibration</div><div>LOGO</div><div>OSD Language</div><div>Country</div><div>Option</div><div>Factory Init</div><div>Test Pattern</div><div>Version:</div></div>	<div><div>White Balance</div><div>R DRV10</div><div>G DRV10</div><div>B DRV10</div><div>R CUT130</div><div>G CUT138</div><div>B CUT140</div><div>BRIGHT_H80</div><div>CONTRAST_H80</div><div>BRIGHT_L40</div><div>CONTRAST_L40</div></div>
<div><div>Auto Calibration</div><div>Auto Color</div><div><div>Color Temp.</div><div>Standard</div></div><div>RED COLOR130</div><div>GREEN COLOR138</div><div>BLUE COLOR140</div></div>	<div><div>LOGO</div><div>NULL</div><div>HISENSE</div><div>WELCOME</div></div>

### **Option**

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

### **Factory Init**

**QingDao**  
**HuangDao**  
**Guiyang**  
**Hungary**  
**France**  
**Austria**  
**CLEAR PROTECTLY**  
**CLEAR UNPROTECTLY**

### **Test Pattern**

**BLUE**

### **Version**

**Version:**  
**LCD3206NEU(1)\_VER1.10.200708**  
**31**  
**Panel Type:**  
**LG 32 (1366\*768)**  
**FLASH :**  
**PS25LV040**

## Design Menu

**Picture Mode**

**Sound Mode**

**Sound Settings**

**Power Save**

**PIP Option**

**EMI**

**MOVESHARPNESS**

**LipSync**

## Picture Mode

<b>Standard</b>	<b>Brightness</b>	<b>50</b>
	<b>Contrast</b>	<b>50</b>
	<b>Colour</b>	<b>50</b>
<b>Bright</b>	<b>Brightness</b>	<b>60</b>
	<b>Contrast</b>	<b>60</b>
	<b>Colour</b>	<b>55</b>
<b>Soft</b>	<b>Brightness</b>	<b>45</b>
	<b>Contrast</b>	<b>45</b>
	<b>Colour</b>	<b>45</b>

## Sound Mode

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

## Sound Settings

<b>VOLUME 0</b>	<b>128</b>
<b>VOLUME 1</b>	<b>79</b>
<b>VOLUME 20</b>	<b>27</b>
<b>VOLUME 40</b>	<b>23</b>
<b>VOLUME 100</b>	<b>18</b>
<b>TVPRE SCALER</b>	<b>6</b>
<b>VOLUME SCALER</b>	<b>0</b>

## 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.



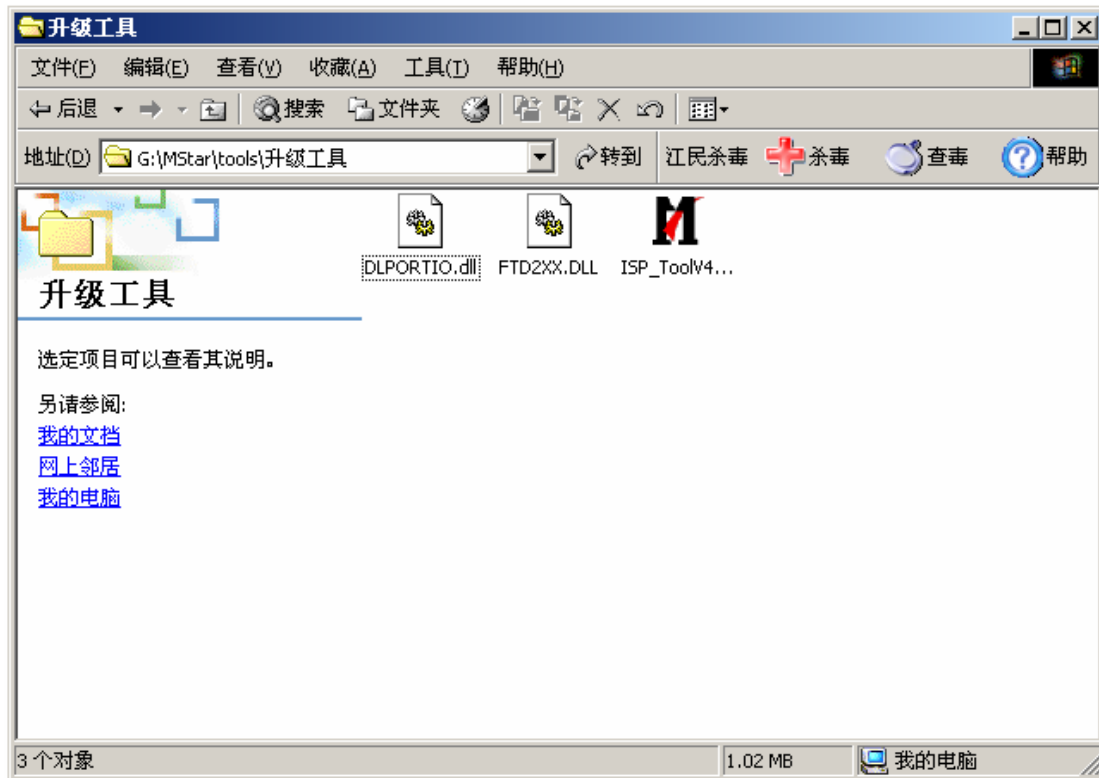


2. Set the ISP\_TOOL4.0.9 -----only for the first time update.

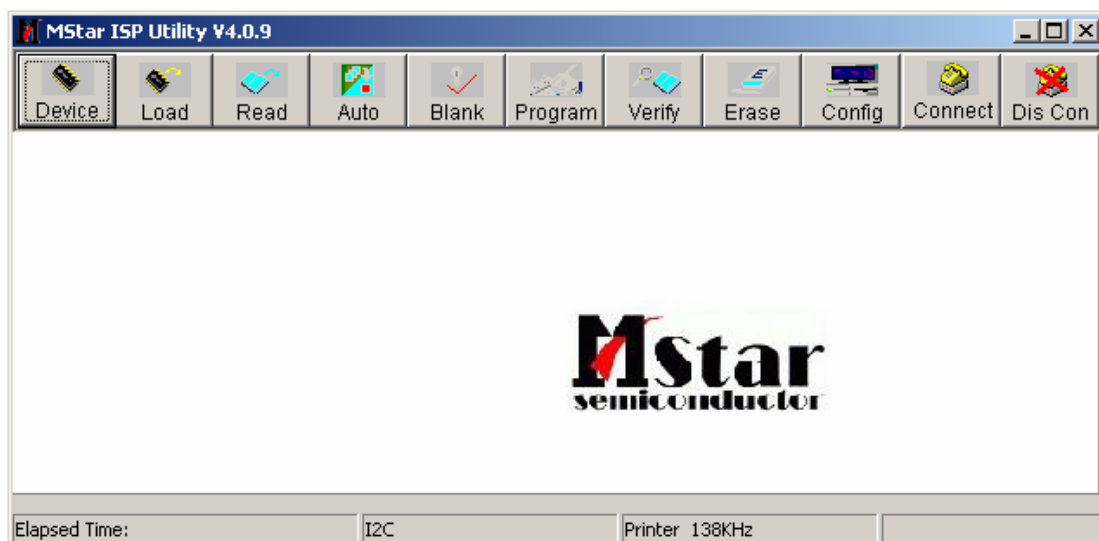
DLPORTIO.dll and FTD2XX.DLL must be in the same folder

1) Find the folder where the ISP\_TOOL4.0.9 lies in.

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

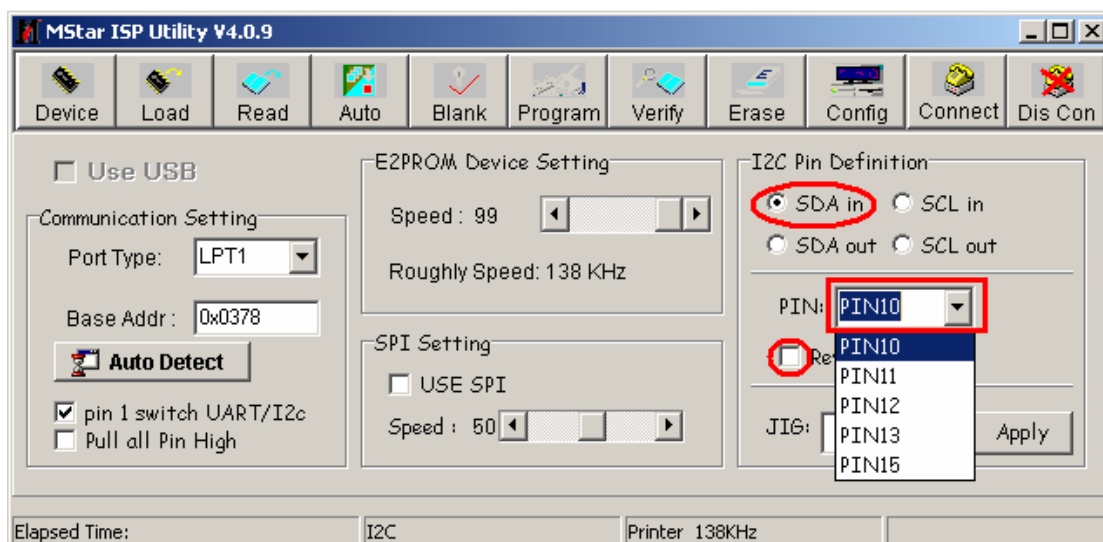
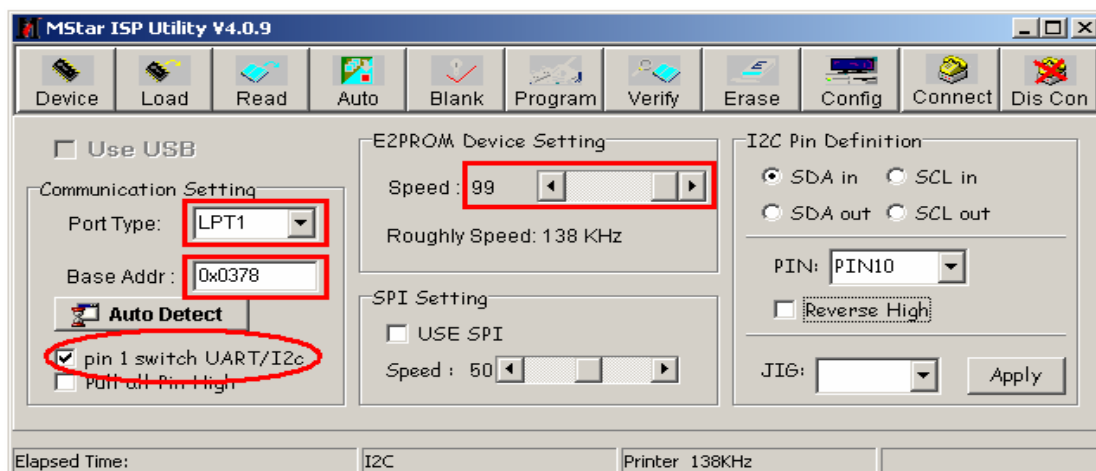
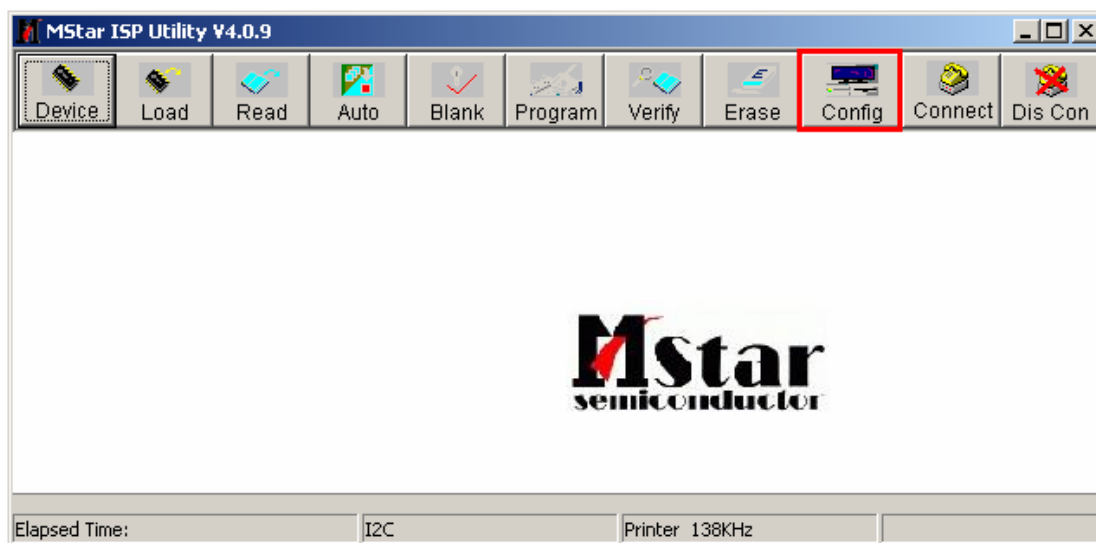


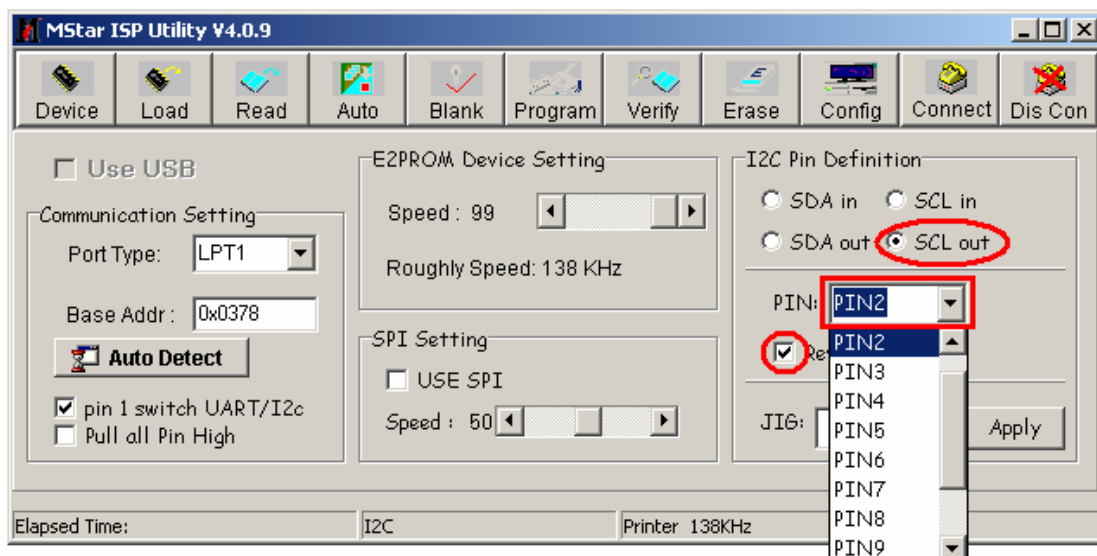
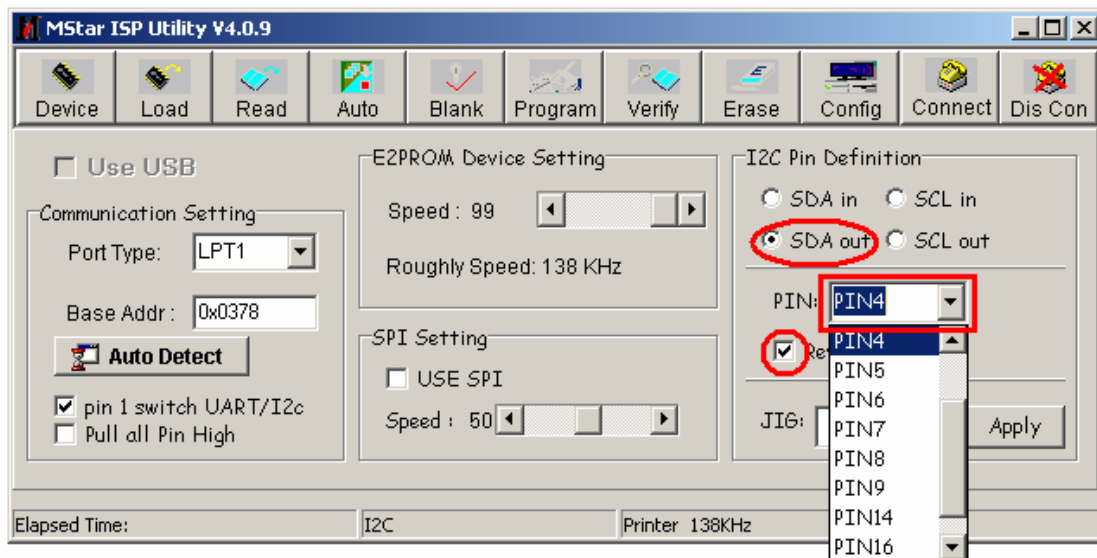
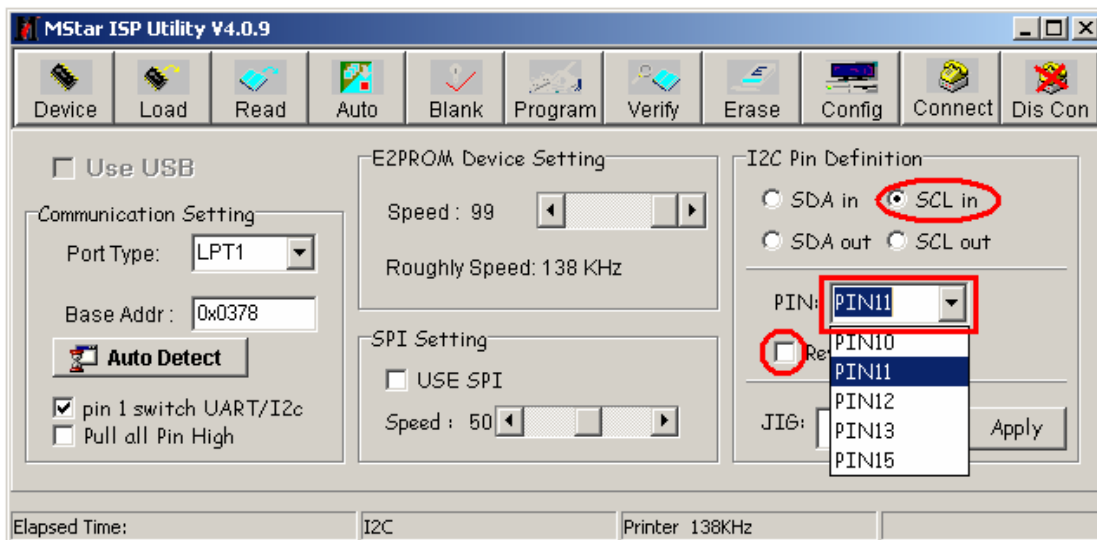
2) Double click the ISP\_TOOL4.0.9 icon, and then a dialog will show as below.



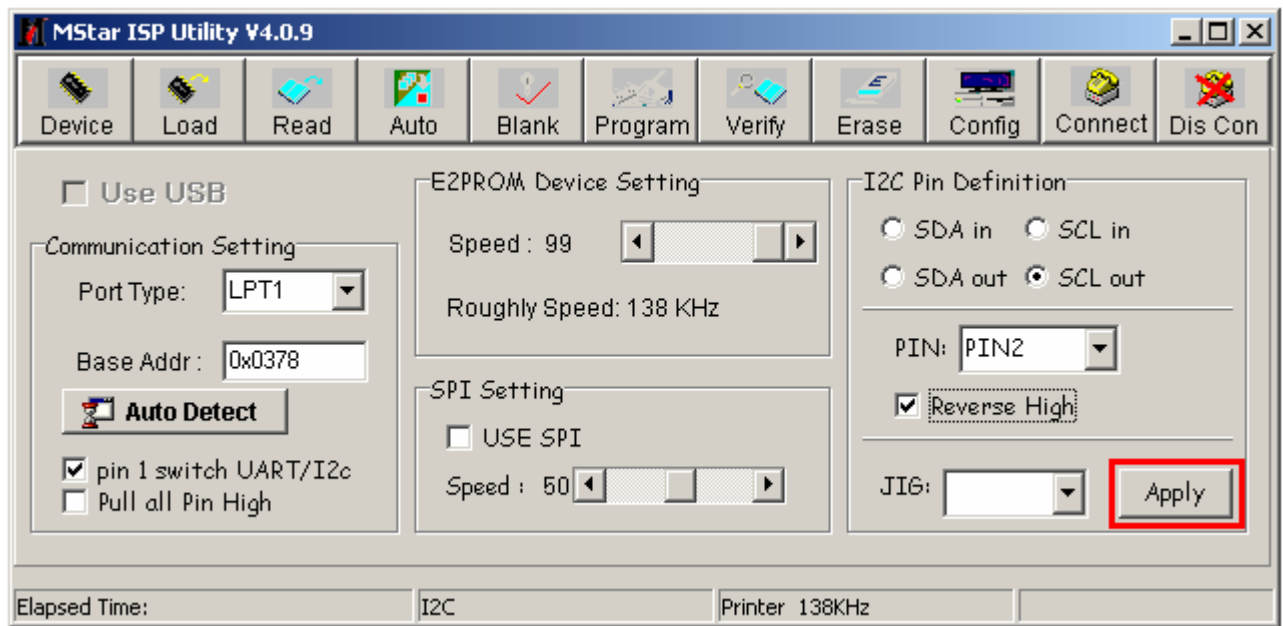
3) Click the **Config** button. And then a dialog will show as below.

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.

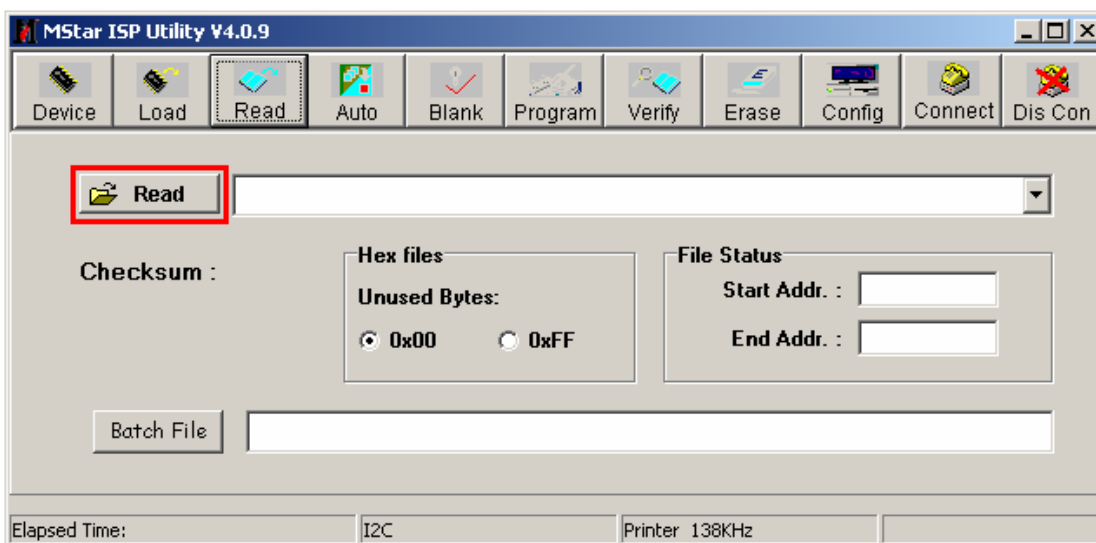
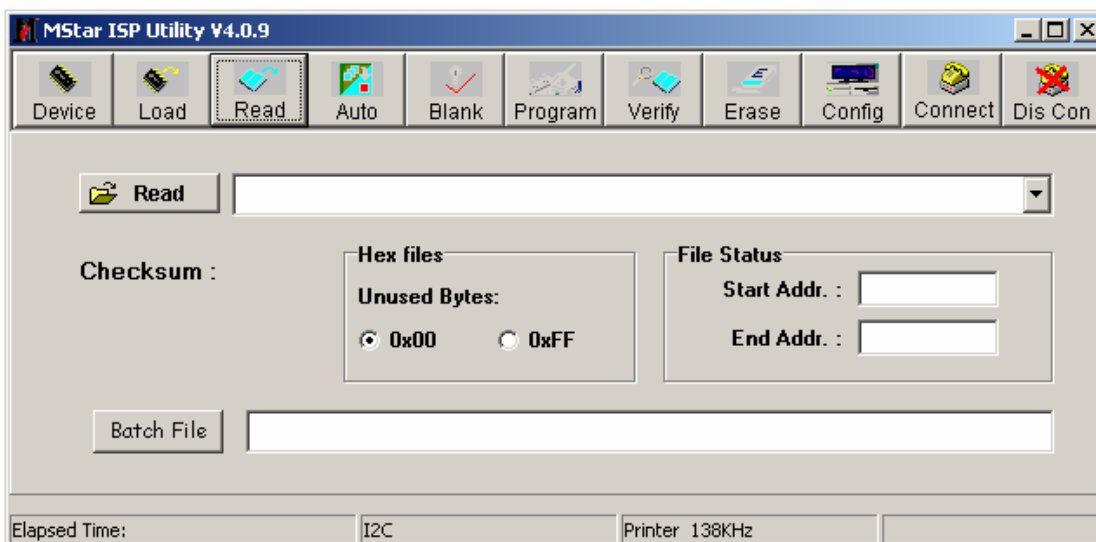
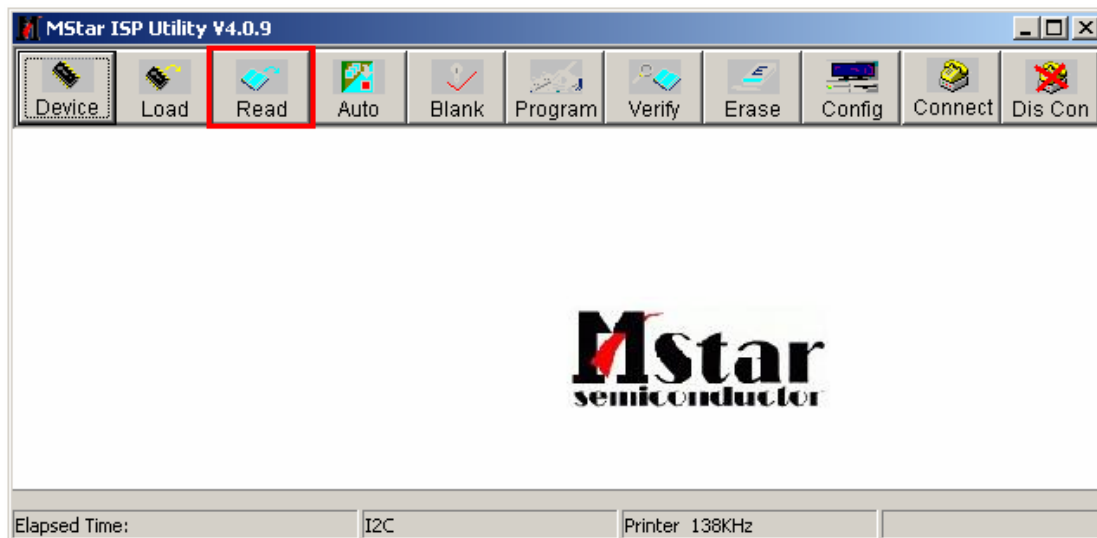


3. Turn on the TV, then we can update.

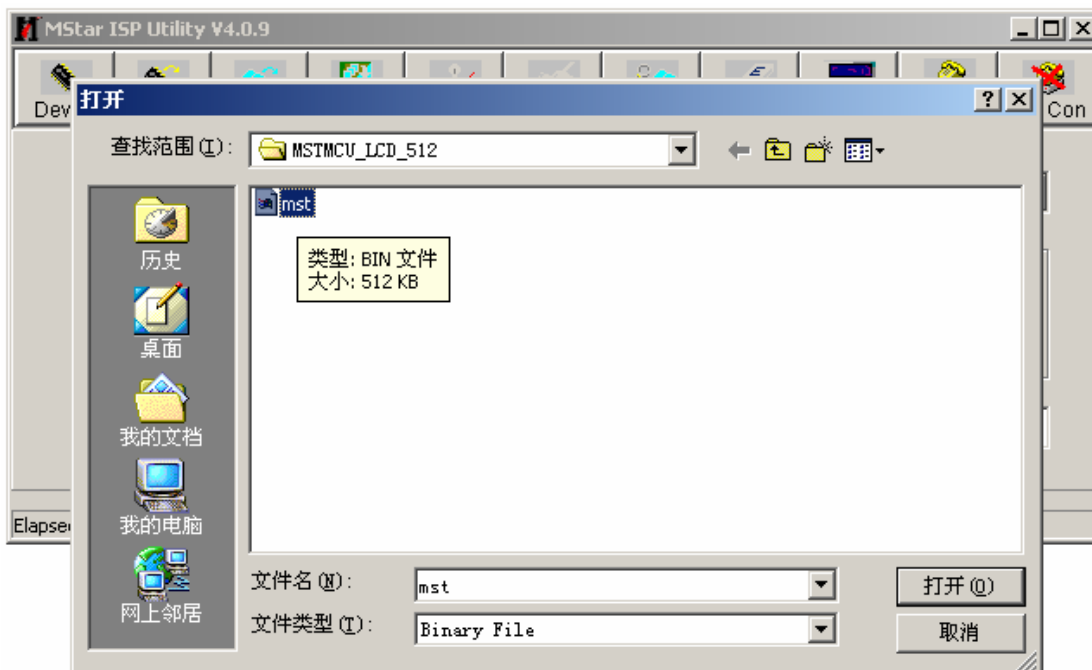
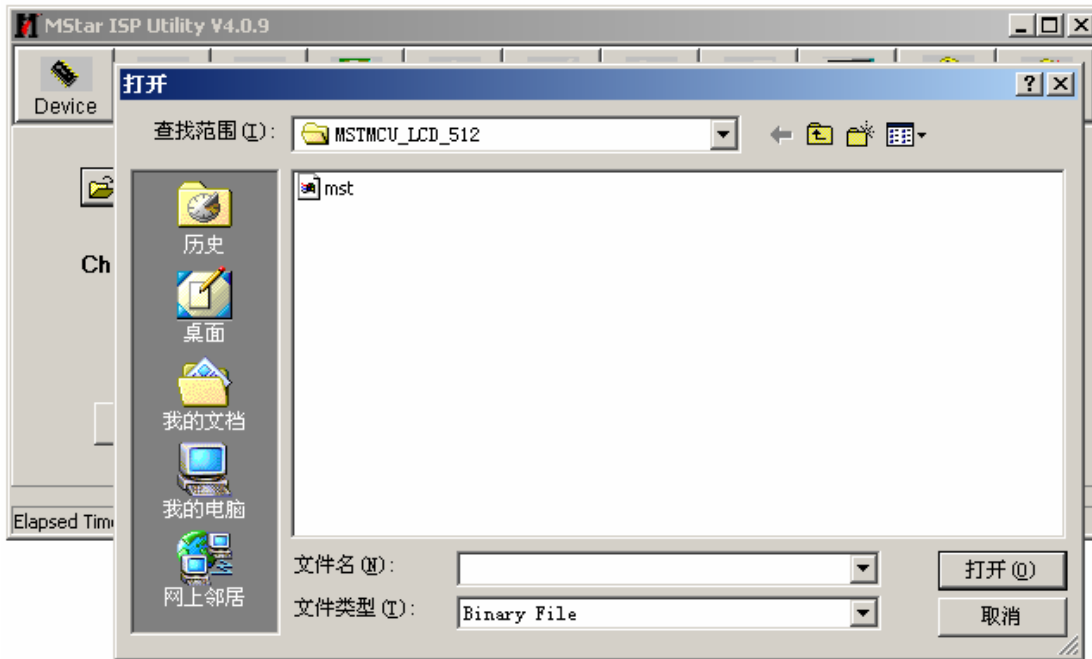
4. Double click the ISP\_TOOL4.0.9 icon, and then a dialog will show as below.



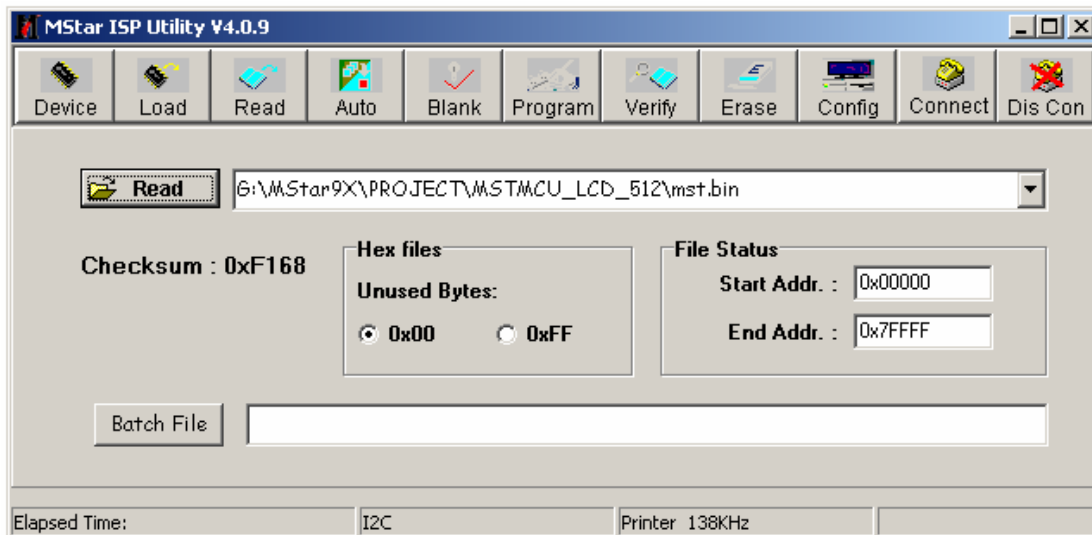
5. Click the **Read** button. And then do as shown below.



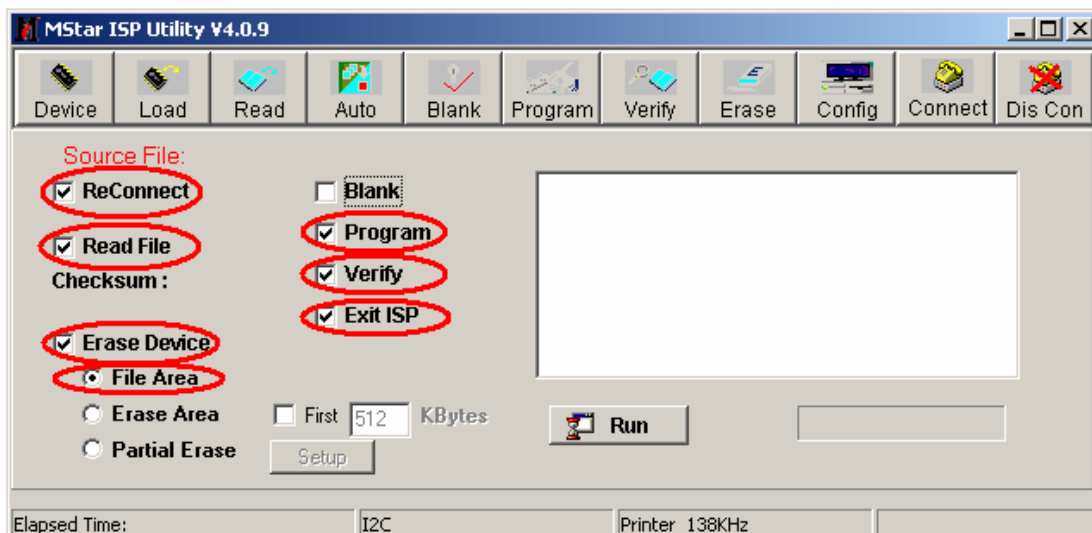
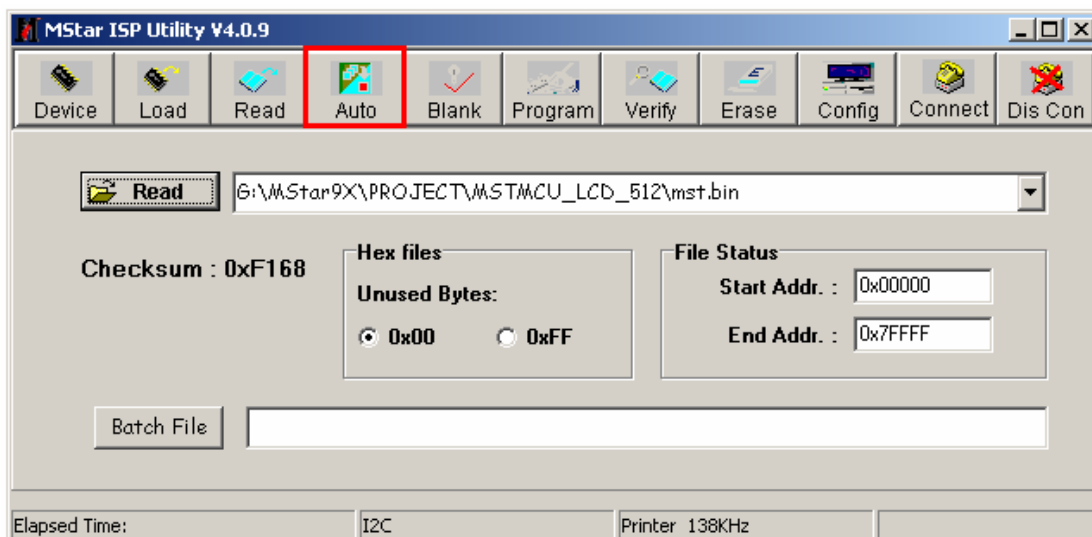
6. Find the update file in your computer.

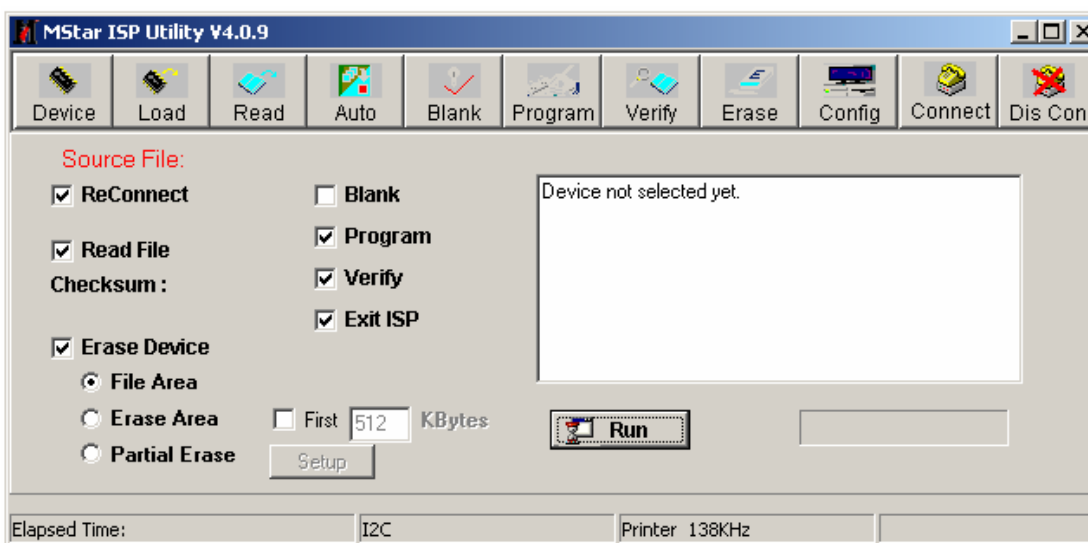
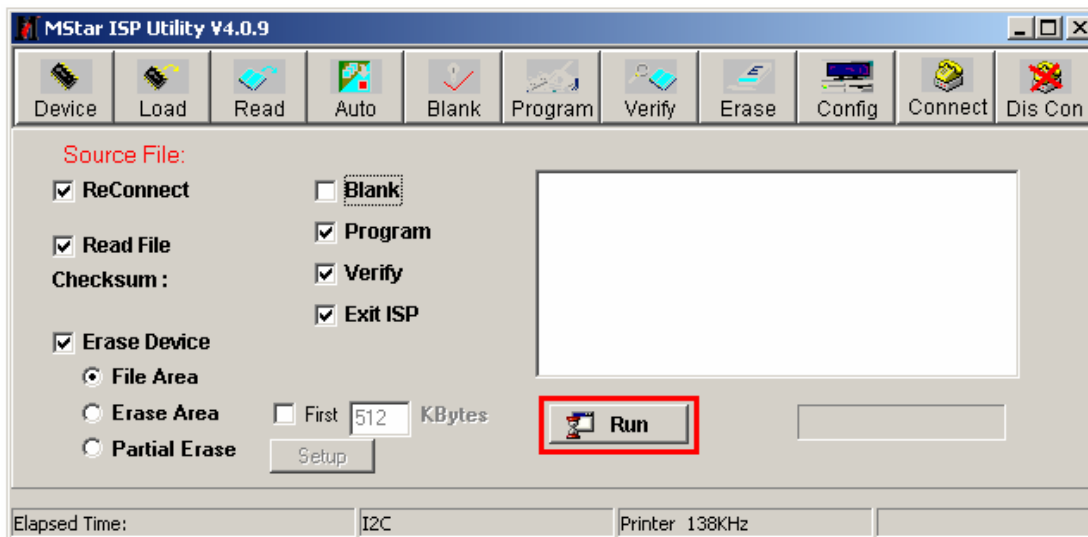


7. Double click the update file. A dialog will show as below.

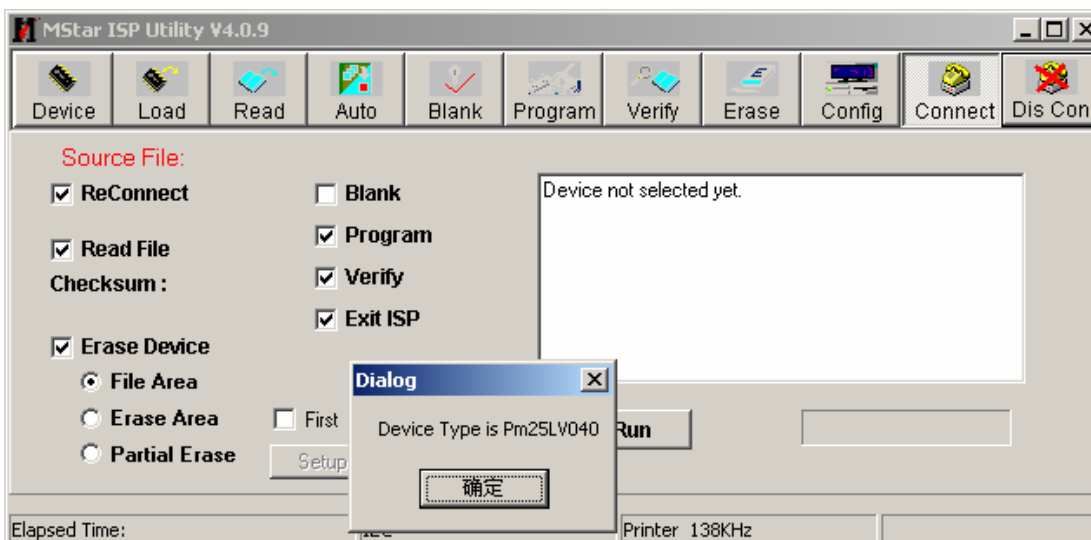


8. Click the Auto button. And then do as shown below.



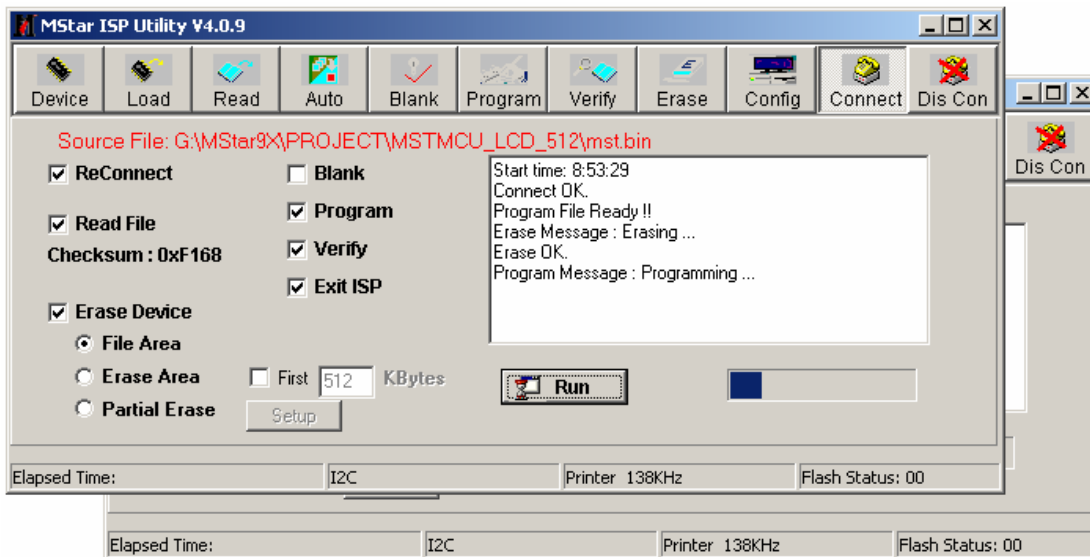


9. Click the **Connect** button. And then do as shown below.

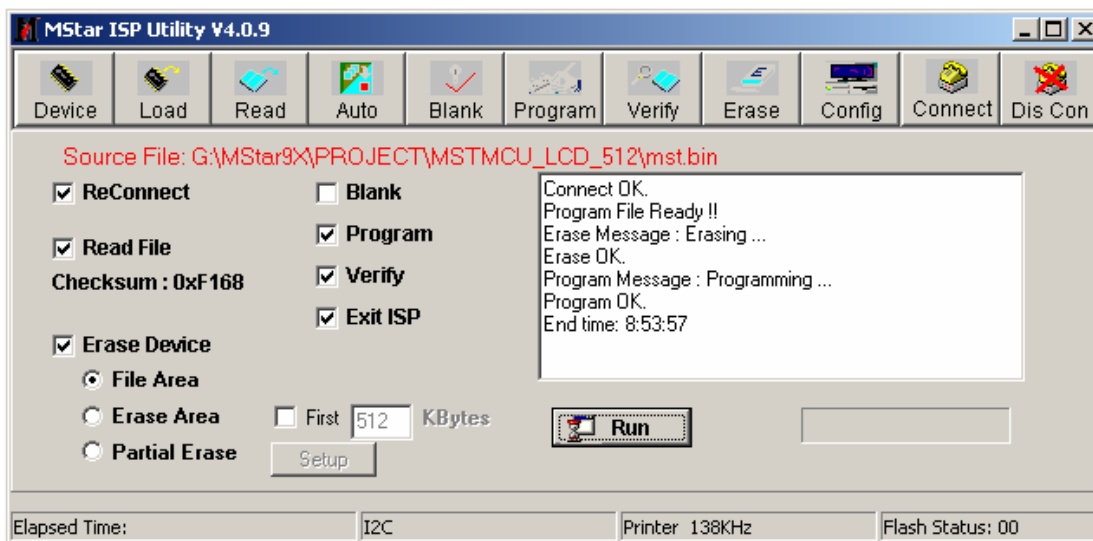




10. Click the **Run** button.



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



## 7. Bill Of Materials

10	1043771	PCB	RSAG7. 820. 1037\VER. C	MAIN BOARD	
20	1026739	RESISTOR	RC0603JR-07-0R0	R87 R88 R462 R463 R490 R495 R288	
30	1026739	RESISTOR	RC0603JR-07-0R0	R89 R84 R208 R209 R210 R249 R481 R486	
40	1026739	RESISTOR	RC0603JR-07-0R0	R261 R268 R320 R321 R352 R428 R429	
50	1026739	RESISTOR	RC0603JR-07-0R0	R459 R467 R468 L12 L13 R658	
60	1026739	RESISTOR	RC0603JR-07-0R0	L14 L15 L16 L17 L18 L23 L26	
70	1026739	RESISTOR	RC0603JR-07-0R0	L30 L54 L55 L58 L59 L60	
80	1026739	RESISTOR	RC0603JR-07-0R0	C42 L78 L79 L28	
90	1026739	RESISTOR	RC0603JR-07-0R0	L21 L20 L19 R414 L61 R370 R371 L77	
100	1026739	RESISTOR	RC0603JR-07-0R0	R46 R47 R353 R298 R634 R635	
110	1026739	RESISTOR	RC0603JR-07-0R0	R700 R701	
120	1026742	RESISTOR	RC0603JR-07-10R	R90 R91 R101 R102 R130 R136 R140 R146	
130	1026742	RESISTOR	RC0603JR-07-10R	R147 R150 R212 R214 R215 R216 R217	
140	1026742	RESISTOR	RC0603JR-07-10R	R326 R342 R327 R328 R378 R379 R380	
150	1026742	RESISTOR	RC0603JR-07-10R	R124 R123 R122 R410 R409 R411	
160	1029177	RESISTOR	RC0603JR-07-33R	R231 R232	
170	1026771	RESISTOR	RC0603JR-07-47R	R104 R125 R152 R338 R339 R340	
180	1026760	RESISTOR	RC0603JR-07-75R	R491	
190	1026760	RESISTOR	RC0603JR-07-75R	R85 R86 R133 R141 R142 R335	
200	1026760	RESISTOR	RC0603JR-07-75R	R143 R144 R145 R148 R149 R151 R334	
210	1026760	RESISTOR	RC0603JR-07-75R	R115 R114 R113 R417 R407 R336 R343	
220	1026760	RESISTOR	RC0603JR-07-75R	R406 R405 R496 R497 R498 C392	
230	1026744	RESISTOR	RC0603JR-07-100R	R154 R158 R191 R192 R193 R194	
240	1026744	RESISTOR	RC0603JR-07-100R	R196 R197 R200 R201 R202 R203 R230	
250	1026744	RESISTOR	RC0603JR-07-100R	R222 R224 R225 R255 R269 R350	
260	1026744	RESISTOR	RC0603JR-07-100R	R59 R198 R199 R55 R56 R57 R63 R195	
270	1026744	RESISTOR	RC0603JR-07-100R	R218 R220 R221 R256 R469 R472	
280	1026744	RESISTOR	RC0603JR-07-100R	R38 R39 R40 R41 R42 R489 R351	
290	1026746	RESISTOR	RC0603JR-07-150R	R233	
300	1029175	RESISTOR	RC0603JR-07-220R	R98	
310	1029176	RESISTOR	RC0603JR-07-330R	R82 R134 R337 R408	
320	1026778	RESISTOR	RC0603JR-07-390R	R229	
330	1038004	RESISTOR	RC0603JR-07-820R	R103	
340	1026749	RESISTOR	RC0603JR-07-1K0	R43 R92 R93 R94 R95 R204 R205 R206	
350	1026749	RESISTOR	RC0603JR-07-1K0	R207 R211 R251 R258 R311 R323	

360	1026749	RESISTOR	RC0603JR-07-1K0	R324 R449 R471 R474 R44 R45 R492	
370	1026783	RESISTOR	RC0603JR-07-1K5	C393 C394	
380	1026785	RESISTOR	RC0603JR-07-2K2	R65 R157 R227 R228 R444	
390	1031009	RESISTOR	RC0603JR-07-3K0	R358 R361	
400	1029178	RESISTOR	RC0603JR-07-3K9	R360	
410	1026751	RESISTOR	RC0603JR-07-4K7	R68 R69 R70 R71 R457 R184 R185 R186	
420	1026751	RESISTOR	RC0603JR-07-4K7	R240 R242 R243 R244 R245 R247	
430	1026751	RESISTOR	RC0603JR-07-4K7	R331 R347 R348 R51 R52 R53 R54	
440	1026751	RESISTOR	RC0603JR-07-4K7	R349 R442 R446 R453 R454 R639	
450	1029183	RESISTOR	RC0603JR-07-5K6	R99	
460	1026789	RESISTOR	RC0603JR-07-6K8	R445	
470	1026790	RESISTOR	RC0603JR-07-8K2	R415 R416	
480	1026752	RESISTOR	RC0603JR-07-10K	R106 R107 R126 R129 R135 R139 R162	
490	1026752	RESISTOR	RC0603JR-07-10K	R612 R631 R616 R619 R60	
500	1026752	RESISTOR	RC0603JR-07-10K	R163 R166 R167 R168 R169 R241 R260	
510	1026752	RESISTOR	RC0603JR-07-10K	R272 R275 R319 R354 R355 R359 R470	
520	1026752	RESISTOR	RC0603JR-07-10K	R2 R6 R15 R16 R164 R165 R318 R476	
530	1026755	RESISTOR	RC0603JR-07-12K	R110 R111 R127 R128 R137 R138 R76	
540	1026755	RESISTOR	RC0603JR-07-12K	R356 R357	
550	1029172	RESISTOR	RC0603JR-07-15K	R458	
560	1026756	RESISTOR	RC0603JR-07-22K	R11 R13 R61 R62 R171 R174 R250	
570	1026756	RESISTOR	RC0603JR-07-22K	R75 R607	
580	1026757	RESISTOR	RC0603JR-07-33K	R277 R278 R280 R281 R161	
590	1026758	RESISTOR	RC0603JR-07-47K	R284 R285 R286 R465 R466	
600	1029181	RESISTOR	RC0603JR-07-56K	R279 R282	
610	1026801	RESISTOR	RC0603JR-07-100K	R83 R96 R295 R296 R273 R274	
620	1026801	RESISTOR	RC0603JR-07-100K	R640 R617 R641	
630	1033251	RESISTOR	RC0603JR-07-680K	R97	
640	1031004	RESISTOR	RC0603JR-07-1M0	R226	
650	1029191	RESISTOR	YC164JR-07-33R	RP18	
660	1028581	RESISTOR	YC164JR-07-47R	RP10	
670	1037878	RESISTOR	YC164JR-07-100R	RP11 RP12 RP13 RP14	
680	1029193	RESISTOR	YC164JR-07-4K7	RP2 RP3 RP4 RP5 RP6 RP7 RP9	
690	1030184	RESISTOR	YC164JR-07-1K0	RP8	
700	1026705	CAPACITOR	CC0603JRNPO9BN470	C360	
710	1028456	CAPACITOR	CC0603JRNPO9BN220	C53 C60 C61 C62 C169 C170	
720	1029111	CAPACITOR	CC0603JRNPO9BN101	C147 C148 C149 C150 C283 C284	

730	1028457	CAPACITOR	CC0603JRNPO9BN391	C68 C171 C220 C225 C227	
740	1038005	CAPACITOR	CC0603JRNPO9BN561	C72 C85 C86 C91 C92 C83 C84 C350	
750	1038005	CAPACITOR	CC0603JRNPO9BN561	C351	
760	1026829	CAPACITOR	CC0603KRX7R9BB102	C65	
770	1026829	CAPACITOR	CC0603KRX7R9BB102	C40 C64 C88 C277 C279	
780	1026829	CAPACITOR	CC0603KRX7R9BB102	C312 C416 C67 C66	
790	1028455	CAPACITOR	CC0603KRX7R9BB152	C49	
800	1026696	CAPACITOR	CC0603KRX7R9BB103	C43 C44 C45 C46 C47 C48 C152 C154	
810	1026696	CAPACITOR	CC0603KRX7R9BB103	C157 C158 C159 C160 C161 C162 C163 C164	
820	1026696	CAPACITOR	CC0603KRX7R9BB103	C165 C166 C167 C414 C155 C156 C636	
830	1027339	CAPACITOR	CC0603KRX7R7BB473	C63 C87 C90 C93 C94 C97 C98 C315	
840	1027339	CAPACITOR	CC0603KRX7R7BB473	C316 C317 C318 C319 C320	
850	1027339	CAPACITOR	CC0603KRX7R7BB473	C383 C382 C384 C378 C379 C380	
860	1026703	CAPACITOR	CC0603KRX7R7BB104	C32 C34 C35 C36 C37 C38 C54 C55	
870	1026703	CAPACITOR	CC0603KRX7R7BB104	C56 C57 C58 C106 C107 C109 C282	
880	1026703	CAPACITOR	CC0603KRX7R7BB104	C110 C111 C112 C113 C114 C115 C116 C117	
890	1026703	CAPACITOR	CC0603KRX7R7BB104	C118 C119 C120 C121 C122 C123 C124 C125	
900	1026703	CAPACITOR	CC0603KRX7R7BB104	C146 C177 C180 C181 C182 C186 C187 C188	
910	1026703	CAPACITOR	CC0603KRX7R7BB104	C189 C190 C191 C192 C200 C201 C205 C206	
920	1026703	CAPACITOR	CC0603KRX7R7BB104	C207 C208 C209 C210 C211 C212 C213 C214	
930	1026703	CAPACITOR	CC0603KRX7R7BB104	C215 C216 C217 C218 C219 C221 C222 C223	
940	1026703	CAPACITOR	CC0603KRX7R7BB104	C224 C226 C228 C229 C230 C231 C232 C233	
950	1026703	CAPACITOR	CC0603KRX7R7BB104	C234 C235 C236 C237 C238 C239 C258	
960	1026703	CAPACITOR	CC0603KRX7R7BB104	C291 C308 C309	
970	1026703	CAPACITOR	CC0603KRX7R7BB104	C310 C345 C346 C446 C59	
980	1026703	CAPACITOR	CC0603KRX7R7BB104	C1 C105 C108	
990	1026703	CAPACITOR	CC0603KRX7R7BB104	C20 C21 C22 C23 C24 C25 C26 C27	
1000	1026703	CAPACITOR	CC0603KRX7R7BB104	C28 C29 C30 C31 C19 C421 C359	
1010	1028465	CAPACITOR	CC0805KRX7R9BB104	C623 C624 C627 C630	
1020	1027438	CAPACITOR	CC0603KRX7R6BB224	C50	
1030	1027439	CAPACITOR	CC0603ZRY5V7BB474	C51 C52	
1040	1029125	CAPACITOR	CC0805ZKY5V8BB105	C620 C632 C626	
1050	1028466	CAPACITOR	CC0805KRX7R7BB224	C634 C635 C622 C617	
1060	1027442	CAPACITOR	CC0805KRX7R7BB105	C628 C629 C633	
1070	1038246	CAPACITOR	LMK212BJ225KD-T	C39 C127 C130 C134 C135 C136	
1080	1038246	CAPACITOR	LMK212BJ225KD-T	C137 C138 C139 C140 C141 C142 C185	
1090	1038246	CAPACITOR	LMK212BJ225KD-T	C453 C4 C7 C6 C9 C132 C133	

1100	1038008	CAPACITOR	LMK212BJ475KG-T	C243 C245 C248 C249 C250 C251 C252 C253	
1110	1038008	CAPACITOR	LMK212BJ475KG-T	C254 C333 C356 C357 C358 C178 C179	
1120	1038008	CAPACITOR	LMK212BJ475KG-T	C417 C274 C275 C450 C451	
1130	1039628	CAPACITOR	LMK212BJ106MG-T	C344 C349 C353 C354 C355 C33	
1140	1028465	CAPACITOR	CC0805KRX7R9BB104	C616 C621 C637 C639	
1150	1043435	CAPACITOR	GRM21BR71H474KA88	C618 C638	
1160	1028454	CAPACITOR	RV3-16V470ME55-R	C183 C257 C327 C328 C329 C330 C332 C352	
1170	1027430	CAPACITOR	RV2-16V101MF55-R	C443 C444 C448 C449 C422 C447	
1180	1027430	CAPACITOR	RV2-16V101MF55-R	C184 C240 C241 C246 C247 C255 C256 C445	
1190	1029140	CAPACITOR	RV3-25V470MF55-R	C307	
1200	1029135	CAPACITOR	RV2-25V221MG10-R	C625 C619 C631 C198	
1210	1029137	CAPACITOR	RV2-50V010MD55-R	C334 C342	
1220	1029032	CAPACITOR	CD110-16V-470u-M\C3F5	C194 C195 C196 C197 C292 C348	
1230	1026442	CAPACITOR	CD110-25V-470U-M\C4F5	C295	
1240	1029194	DIODE	1N4148W	D8 D25 D27 D28 D29 D58 D59	
1250	1029194	DIODE	1N4148W	D60 D21	
1260	1026718	DIODE	BAV99LT1	D10 D20 D35 D36 D37	
1270	1031016	DIODE	BAV70L	D6 D5	
1280	1029195	DIODE	LM3Z5V6T1G	D3 D4 D11 D30 D33 D1 D2	
1290	1038009	DIODE	STZ6. 2N	D38 D39 D40 D41 D42 D43 D44 D45	
1300	1038009	DIODE	STZ6. 2N	D46 D47 D48 D49 D53	
1310	1038009	DIODE	STZ6. 2N	D16 D15 D14 D55	
1320	1038009	DIODE	STZ6. 2N	D68 D69 D70 D64 D65	
1330	1031017	DIODE	RB060L-40	D22 D23 D54 D63	
1340	1026827	DIODE	RB160M-30TR	D26	
1350	1040614	DIODE	LM3Z10VT1G	D88	
1360	1026826	TRANSISTOR	MMBT3904LT1	V1 V6 V7 V8 V10 V19 V21 V605 V606	
1370	1026826	TRANSISTOR	MMBT3904LT1	V20 V28 V31 V34 V35 V36 V30	
1380	1026826	TRANSISTOR	MMBT3904LT1	V44	
1390	1026833	TRANSISTOR	MMBT3906LT1	V38 V39	
1400	1026833	TRANSISTOR	MMBT3906LT1	V16 V29	
1410	1029898	TRANSISTOR	2N7002	V27	
1420	1034194	INDUCTOR	BLM18PG181SN1	L3 L5 L6 L7 L34 L36 L37 L38	
1430	1034194	INDUCTOR	BLM18PG181SN1	L39 L40 L41 L42 L43 L44 L45 L46	
1440	1034194	INDUCTOR	BLM18PG181SN1	L47 L2 L72	
1450	1029127	INDUCTOR	BLM31PG121SN1	L33 L48 L73 L74 L75	
1460	1029127	INDUCTOR	BLM31PG121SN1	L603 L605 L606	

1470	1029127	INDUCTOR	BLM31PG121SN1	L32	
1480	1037268	INDUCTOR	SLF10145T-150M2R2-PF	L65	
1490	1029982	INDUCTOR	SLF10145T-330M1R6-PF	L602 L604 L607 L608	
1500	1040729	INDUCTOR	LGB0606-100u-J\C1F5	L10 L11	
1510	1029981	IC	CW574CS\UPC574J	D9	
1520	1028818	IC	LD1117A-3.3\AZ1117H-3.3	N10	
1530	1038010	IC	AP1520S\TP\JK	N14	
1540	1029983	IC	SPX1117M3-5\LD1117A-5	U6	
1550	1028818	IC	LD1117A-3.3\AZ1117H-3.3	N7 N20	
1560	1028592	IC	LD1117A-2.5\AZ1117H-2.5	N8	
1570	1028815	IC	IRF7314	N6	
1580	1029156	IC	L7808CD2T-TR	N5	
1590	1036426	IC	TDA9886TS	U5	
1600	1041422	IC	MST9E88L-LF	U8	
1610	1038789	IC	HY5DU281622FTP-5	U9	
1620	1038012	IC	EN25B40\EN25F40-100GCP	U10	
1630	1036597	IC	AT24C32N-10SI-2.7	U11	
1640	1037918	IC	LM833MX\TP\JK	N11	
1650	1037353	IC	51U019S-339N-A3R	P1 P2	
1660	1031397	IC	CM1213-04MR	N15 N16 N2 N3	
1670	1029141	IC	24LC02B-I/SN	N13 N4	
1680	1038024	IC	AT24C04N-10SU-2.7	U12	
1690	1035364	IC	PACDN044YB5R	U14	
1700	1036218	IC	CS4344CZ	U7	
1710	1039948	IC	TMDS341A	N1	
1720	1041656	IC	TPA3101D2	U800	
1730	1035823	CERAMIC OSC	JAS14C	Y2	
1740	1038013	CERAMIC OSC	JAS4K	Y1	
1750	1029213	SAW FILTER	HS9453	Z1	
1760	1029211	SAW FILTER	HS6257	Z2	
1770	1029029	TUNER	TDQ-6FT/W126H	U4 (EMC)	
1780	1029018	PLUG	TJC10-3A	XP3	
1790	1028546	PLUG	TJC10-4A	XP17	
1800	1028547	PLUG	TJC10-5A	XP4	
1810	1026698	PLUG	TJC10-6A	XP18	
1820	1026697	PLUG	TJC10-8A	XP26	
1830	1029017	PLUG	TJC10-14A	XP27	

1840	1026406	PLUG	TJC3-4A	XP10 XP24	
1850	1029013	PLUG	A2600WS0-2X9P	XP1	
1860	1029012	PLUG	A2600WS0-2X11P	XP2	
1870	1041050	PLUG	FF-HX19-10	XP15	
1880	1026699	SOCKET	DR-15A	P3	
1890	1034394	SOCKET	AV5-LYA	XS1	
1900	1026420	SOCKET	AV3-W-Z	XS2	
1910	1026709	SOCKET	S2	XS3	
1920	1043027	PCB	E/RAG7. 820. 848A	POWER BOARD	
1930	1028503	RESISTOR	RC0805JR-07-0R0	R807 R861 R885 R928	
1940	1038979	RESISTOR	RC0805JR-07-5R1	R809 R818 R819	
1950	1026763	RESISTOR	RC0805JR-07-22R	R823 R829 R845 R849 R850	
1960	1038980	RESISTOR	RC0805JR-07-68R	R817	
1970	1026805	RESISTOR	RC0805JR-07-100R	R859	
1980	1028520	RESISTOR	RC0805JR-07-680R	R858	
1990	1029188	RESISTOR	RC0805JR-07-820R	R830	
2000	1026807	RESISTOR	RC0805JR-07-1K0	R847 R852 R857 R864 R915 R916	
2010	1026807	RESISTOR	RC0805JR-07-1K0	R879 R920 R924	
2020	1038976	RESISTOR	RC0805JR-07-2K0	R815 R816 R880 R881 R867 R868 R869 R894	
2030	1028510	RESISTOR	RC0805JR-07-2K4	R855 R856	
2040	1031199	RESISTOR	RC0805JR-07-2K7	R808 R853	
2050	1031207	RESISTOR	RC0805JR-07-5K1	R810 R820 R821 R826 R831 R836 R837 R862	
2060	1034401	RESISTOR	RC0805JR-07-5K6	R882 R900	
2070	1026808	RESISTOR	RC0805JR-07-10K	R838 R844 R866 R923	
2080	1028513	RESISTOR	RC0805JR-07-33K	R840 R872 R870	
2090	1028517	RESISTOR	RC0805JR-07-47K	R883	
2100	1038978	RESISTOR	RC0805JR-07-51K	R863 R865 R898 R899	
2110	1038981	RESISTOR	RC0805JR-07-82K	R811 R927	
2120	1028504	RESISTOR	RC0805JR-07-100K	R839 R893 R911 R913 R922	
2130	1038977	RESISTOR	RC0805FR-07-200K	R921 R909 R926	
2140	1039109	RESISTOR	RC0805JR-07-470K	R803	
2150	1038974	RESISTOR	RC0805JR-07-560K	R806	
2160	1038973	RESISTOR	RC0805JR-07-680K	R804 R805 R904 R906 R910 R918	
2170	1038975	RESISTOR	RC0805JR-07-1M0	R801 R802 R813 R843 R905 R925	
2180	1028509	RESISTOR	RC0805JR-07-2M2	R825 R841 R907 R908	
2190	1029189	RESISTOR	RC1206JR-07-0R0	R851	
2200	1039110	RESISTOR	RC1206JR-07-10R	R834 R834A	

2210	1039114	RESISTOR	RC1206JR-07-27R	R827	
2220	1039114	RESISTOR	RC1206JR-07-27R	R860 R887 R888 R889 R890 R895 R896 R897	
2230	1038982	RESISTOR	RC1206JR-07-75R	R833 R833A	
2240	1002825	RESISTOR	RC1206JR-07-100R	R842	
2250	1039186	RESISTOR	RC1206JR-07-680K	R901 R902 R903	
2260	1028507	RESISTOR	RC0805JR-07-20K	R824	
2270	1035808	RESISTOR	NTC5D-15	RT802	
2280	1025554	RESISTOR	TVR14561KSC4AG9W	△RV801	
2290	1040706	RESISTOR	RY27-2W-2K2-J	R933	
2300	1038992	RESISTOR	RY26-1W-0R82-J	R832	
2310	1039755	RESISTOR	RY27-2W-0R51-J	R822	
2320	1036139	RESISTOR	RY27-2W-100K-J	R835	
2330	1039184	RESISTOR	RX27-6-3W-0R15-K	R812	
2340	1029185	RESISTOR	RC0805JR-07-15K	R828	
2350	1031207	RESISTOR	RC0805JR-07-5K1	C807	
2360	1031202	CAPACITOR	CC0805JRNPO9BN102	C811 C814 C815 C825 C826 C870 C871	
2370	1038983	CAPACITOR	CC0805KRX7R9BB222	C856	
2380	1028465	CAPACITOR	CC0805KRX7R9BB104	C810 C812 C816 C817 C818 C819 C821 C822	
2390	1028465	CAPACITOR	CC0805KRX7R9BB104	C824 C834 C835 C836 C837 C838	
2400	1028465	CAPACITOR	CC0805KRX7R9BB104	C875 C883	
2410	1028465	CAPACITOR	CC0805KRX7R9BB104	C860 C861 C867	
2420	1039146	CAPACITOR	CC0805ZRY5V9BB224	C850	
2430	1028474	CAPACITOR	CC0805KKX7R7BB474	C841	
2440	1027442	CAPACITOR	CC0805KRX7R7BB105	C845 C839 C874 C876 C879	
2450	1028462	CAPACITOR	CC0805JRNPO9BN101	C820	
2460	1028471	CAPACITOR	CC0805JRNPO9BN471	C866	
2470	1028459	CAPACITOR	CC0805KRX7R9BB223	C828 C829	
2480	1034509	CAPACITOR	CT81-1KV-B-1000p-K	C805 C806 C852 C853 C858 C859	
2490	1026425	CAPACITOR	CT7-AC400V-E-1000p-M	△(EMC)C840	
2500	1034513	CAPACITOR	CT7-AC400V-E-2200p-M	△(EMC)C851	
2510	1026424	CAPACITOR	CT7-AC400V-B-470p-K	△(EMC) C801 △(EMC) C802	
2520	1037236	CAPACITOR	MKP62-AC275V-470N-K	△(EMC) C803 △(EMC) C804	
2530	1039113	CAPACITOR	MKP61-AC250V-1U0-M	C808	
2540	1028607	CAPACITOR	CD288H-16V-1000U-M	C843 C844	
2550	1029045	CAPACITOR	CD263-25V-1000u-M	C862 C864 C865	
2560	1028447	CAPACITOR	CD288H-35V-2200u-M	C854	
2570	1028608	CAPACITOR	CD117H-50V-22u-M	C832 C833	



2580	1029050	CAPACITOR	CD296-450V-150u-M	C809	
2590	1028444	CAPACITOR	CD263-25V-2200u-M	C842	
2600	1028446	CAPACITOR	CD288H-35V-1000u-M	C855	
2610	1028466	CAPACITOR	CC0805KRX7R7BB224	C882	
2620	1038533	DIODE	05W33B\R1F7.5	VZ805	
2630	1037226	DIODE	1N5929BRL	VZ808	
2640	1038986	DIODE	UF4007	VD818	
2650	1036157	DIODE	FR104	VD809 VD810	
2660	1026627	DIODE	RU4AM	VD801	
2670	1037224	DIODE	MUR460G	VD807 VD808	
2680	1041499	DIODE	BYC10X-600	VD802	
2690	1040704	DIODE	1N5822	VD830	
2700	1039777	DIODE	MURF1620CTG	VD815 VD816 VD817	
2710	1041874	DIODE	MBRF2545CTG	VD812	
2720	1037244	DIODE	MMSZ15T1G	VZ801 VZ802 VZ803 VZ804 VZ806 VZ807	
2730	1037244	DIODE	MMSZ15T1G	VZ809 VZ810 VZ814	
2740	1029194	DIODE	1N4148W	VD827 VD828 VD829	
2750	1038100	DIODE	MBR0520LT1	VD804 VD806 VD823	
2760	1028539	DIODE	5SB60	VB801	
2770	1039375	DIODE	05W30A	VZ811	
2780	1038318	DIODE	05W18B	VZ812	
2790	1027034	DIODE	1N4148	VD820 VD821 VD822	
2800	1026650	DIODE	RM11C	VD811	
2810	1026639	DIODE	05W3.6B	VZ816	
2820	1026644	DIODE	05W15B	VZ813	
2830	1037231	TRANSISTOR	BCP56-10T1G	V807 V820	
2840	1037230	TRANSISTOR	BCP53-10T1G	V821	
2850	1037913	TRANSISTOR	MMBT2222A	V811 V812 V816 V819	
2860	1029197	TRANSISTOR	MMBT2907ALT1	V803 V804 V808 V810 V817 V822 V823	
2870	1027209	JUMPER	5MM	W838 W809 W837	
2880	1027209	JUMPER	7.5MM	W812 W819 W833 W824	
2890	1027209	JUMPER	10MM	W804 W805 W808 W821	
2900	1027209	JUMPER	12.5MM	W831 W811 VD813 W830 W834	
2910	1027209	JUMPER	15MM	W806 W813 W839	
2920	1027209	JUMPER	15MM	W826 W836	
2930	1027209	JUMPER	17.5MM	W828 W801 W807 W818 W820 W829	
2940	1027209	JUMPER	20MM	W802 W814 W832	

2950	1027209	JUMPER	20MM	W810 W815 W835	
2960	1027209	JUMPER	12. 5MM	W803 W841	
2970	1038989	JUMPER	20MM	W817 W822	
2980	1038989	JUMPER	20MM	W827	
2990	1028568	FUSE	618-4A	△F801	
3000	1026919	FUSE SUPPOTER	RSR7. 736. 0102		
3010	1038535	MOS	FQPF10N60C	V805 V806	
3020	1038573	MOS	FQPF3N80C	V809	
3030	1040993	MOS	SPA20N60C3	V801	
3040	1037228	MOS	NTD4809N-1G	V813	
3050	1032959	IC	PC817B\HS817B\H11A817B	N804 N805 N806	
3060	1037222	IC	NCP1207ADR2G	N803	
3070	1037221	IC	NCP1217AD65R2G	N802	
3080	1037220	IC	NCP1653ADR2G	N801	
3090	1038536	IC	KA431AZ\v1\utctl431	N807 N808	
3100	1039112	IC	LM2576TV-ADJG\JK	N811	
3110	1039099	TRANSFORMER	BCT-10B	T804	
3120	1039095	TRANSFORMER	BCK-28-001D	△ (EMC) T803	
3130	1039097	TRANSFORMER	SPT4001SE	△ (EMC) T801	
3140	1039096	TRANSFORMER	BCK-35-001A	(EMC) L806	
3150	1039098	TRANSFORMER	BK-30-01GD	(EMC) L807	
3160	1028614	INDUCTOR	LCL-2420H	(EMC) L803 (EMC) L804	
3170	1039101	INDUCTOR	LE0-21	L808 L811	
3180	1029055	INDUCTOR	ZZ0008\L2F15	L812	
3190	1038990	INDUCTOR	L533003		
3200	1039108	INDUCTOR	LCL-12A	L810	
3210	1028544	PLUG	TJC2-3A	XP801	
3220	1028546	PLUG	TJC10-4A	XP803	
3230	1026697	PLUG	TJC10-8A	XP808	
3240	1029017	PLUG	TJC10-14A	XP812 XP809	
3250	1028552	PLUG	TJC10-12A	XP810	
3260	1044134	PCB	20RSAG7. 820. 1061	KEY BOARD	
3270	1026530	RESISTOR	RT13-1/6W-2K2-J\JC	RK1 RK2	
3280	1035579	RESISTOR	RT13-1/6W-1K5-J\JC	RK3	
3290	1026526	RESISTOR	RT13-1/6W-1K0-J\JC	RK4	
3300	1043016	RESISTOR	RT13-1/6W-620R-J\JC	RK5	
3310	1035584	RESISTOR	RT13-1/6W-300R-J\JC	RK6	

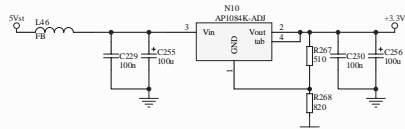
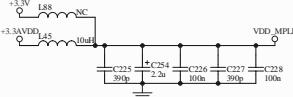
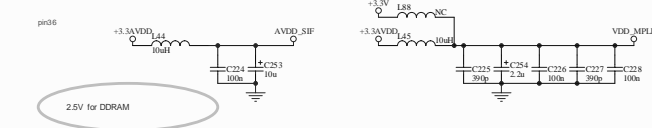
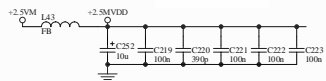
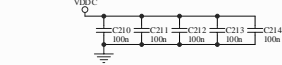
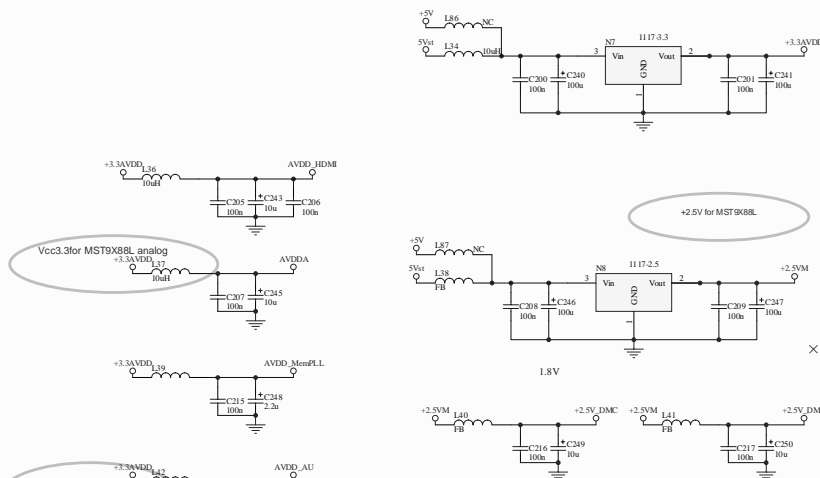
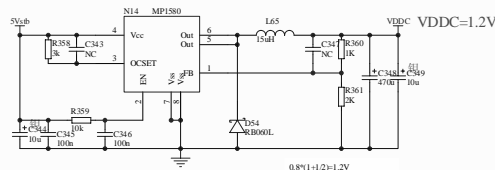
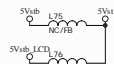
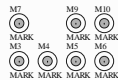
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3330	1026416	TOUCH SWITCH	KAN-C202-5	SWK1 SWK2 SWK3 SWK4 SWK5 SWK6 SWK7	
3340	1029019	PLUG	TJC10-3AW	XP01	
3350	1041502	PCB	20RSAG7. 820. 975	REMOTE BOARD	
3360	1026518	RESISTOR	RT13-1/6W-100R-J\JC	RR02	
3370	1029214	RESISTOR	RT13-1/6W-470R-J\JC	RR06 RR07	
3380	1026536	RESISTOR	RT13-1/6W-10K-J\JC	RR01 RR03 RR04 RR05	
3390	1028571	TRANSISTOR	2SC1815Y\V3	VR01 VR02	
3400	1026727	CAPACITOR	CD110-50V-4u7-M\C3F5	CR01	
3410	1029035	CAPACITOR	CD110-50V-10u-M\C3F5	CR02	
3420	1032541	DIODE	BT-H643RBW-31	VDR01	
3430	1027036	IC	HS0038A2	NR01	
3440	1029020	PLUG	TJC10-5AW	XPR01	
3450	1044133	PCB	5E/RSAG7. 820. 985A	SCART BOARD	
3460	1029009	SOCKET	BW1-2	XS001 XS002	
3470	1026716	SOCKET	CK3-3. 5-3AK	XS003	
3480	1029013	PLUG	A2600WS0-2X9P	XP001	
3490	1029012	PLUG	A2600WS0-2X11P	XP002	
3500	1026406	PLUG	TJC3-4A	XP24	

## 8. 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

## 9. Circuit Diagram

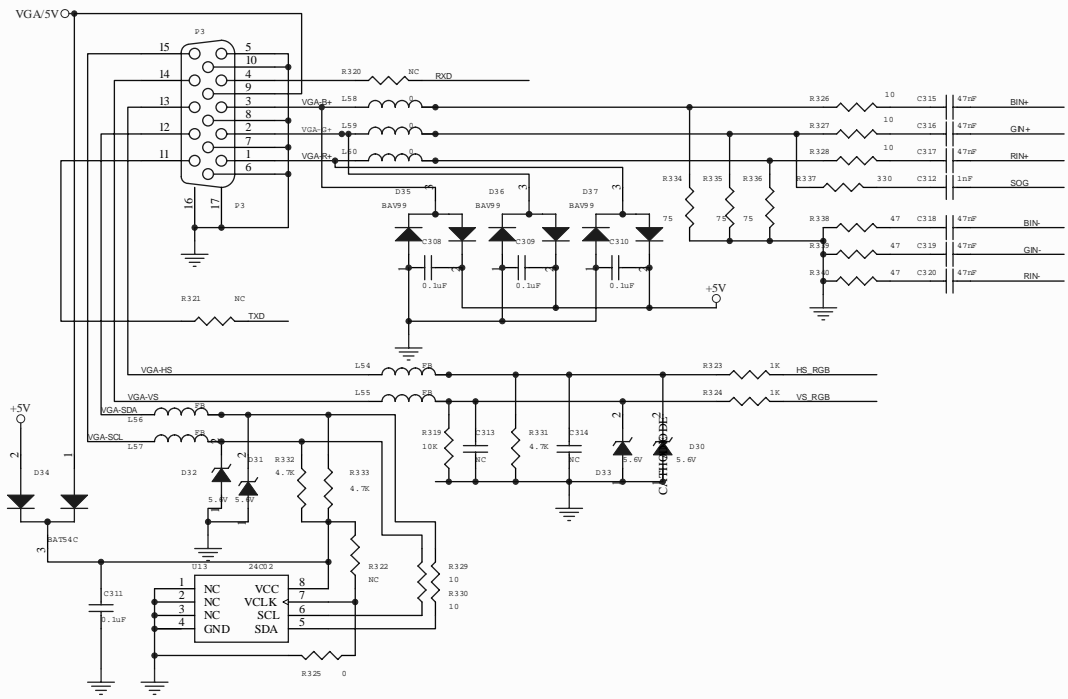




1.25\*(1+Rdown/Rup)=3.3V—Rup=510, Rdown=820

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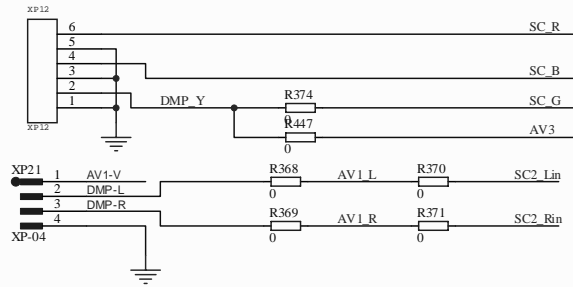
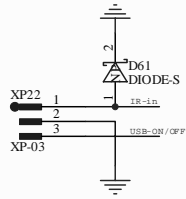
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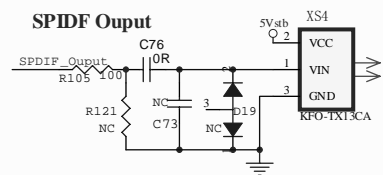
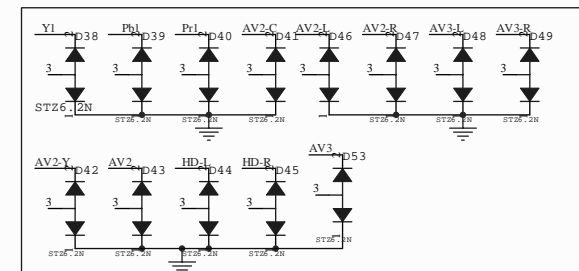
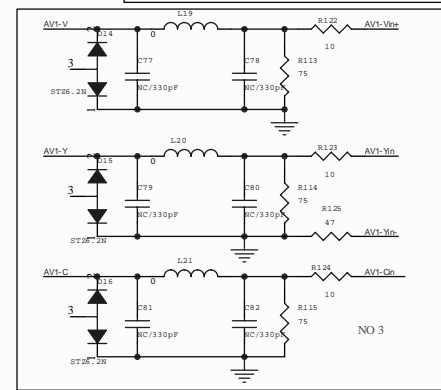
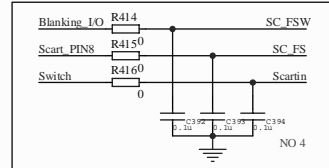
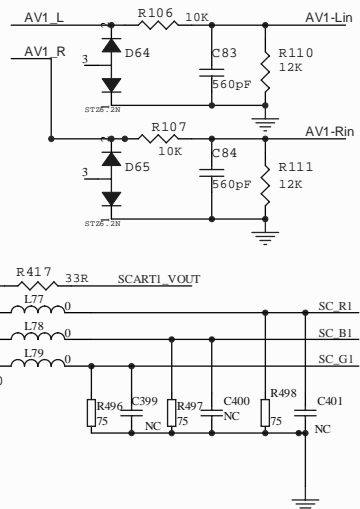
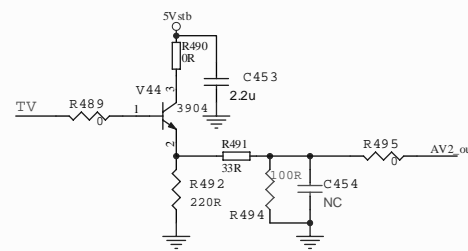
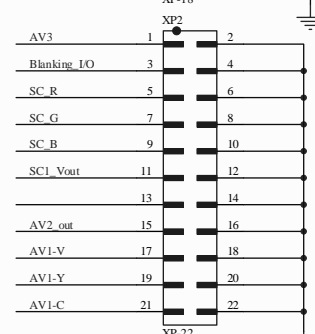
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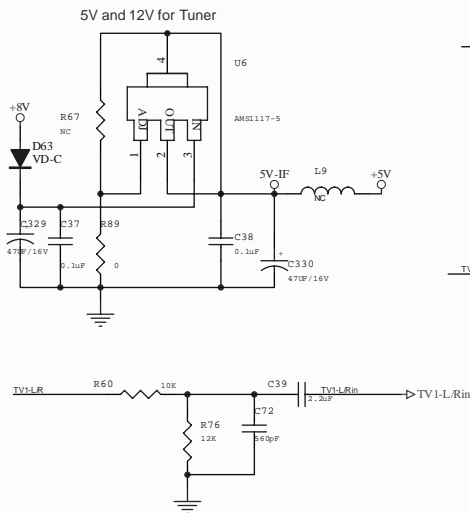
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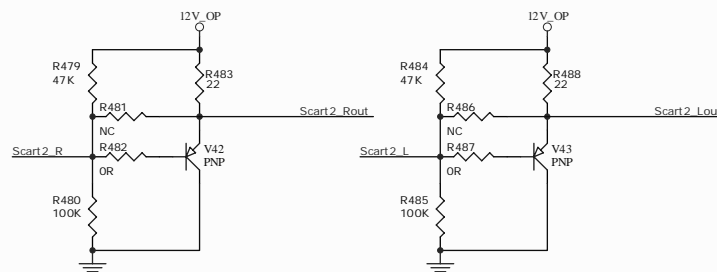
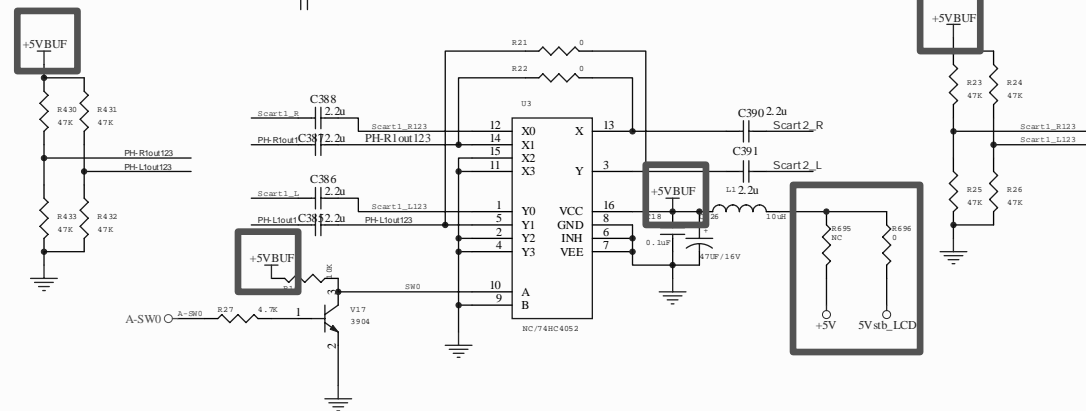
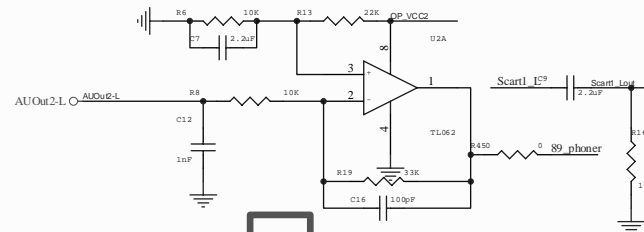
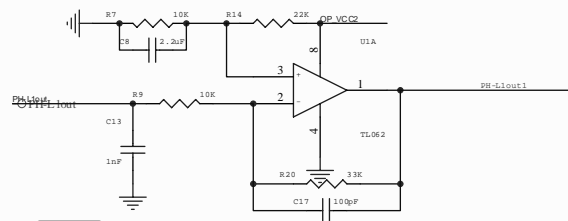
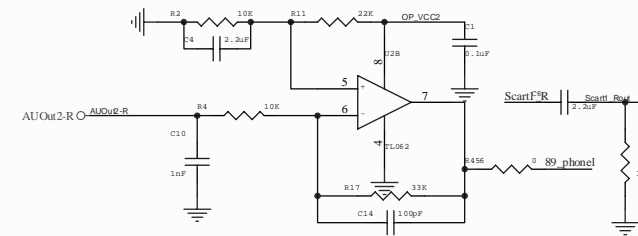
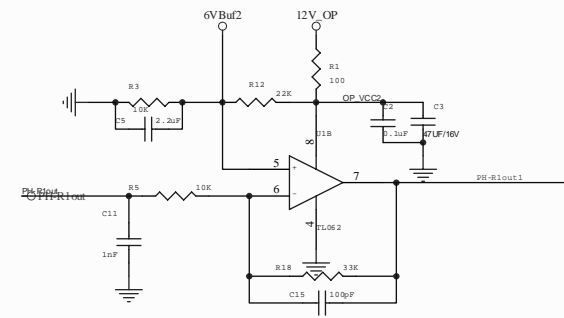


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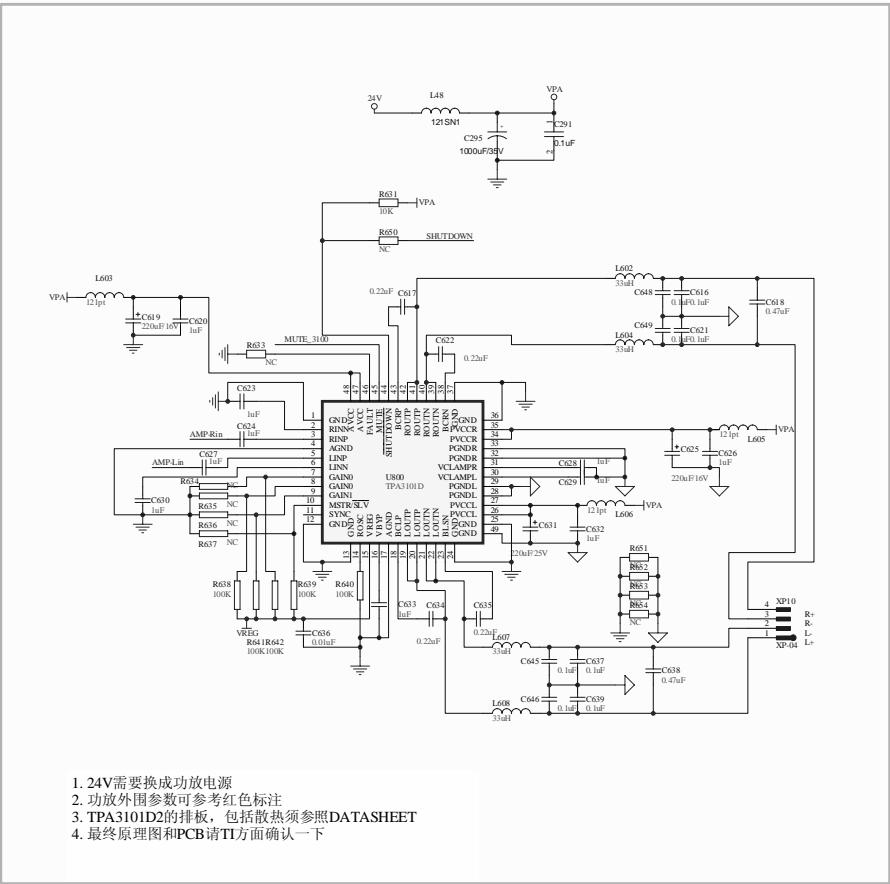
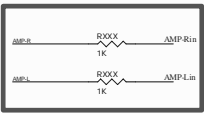
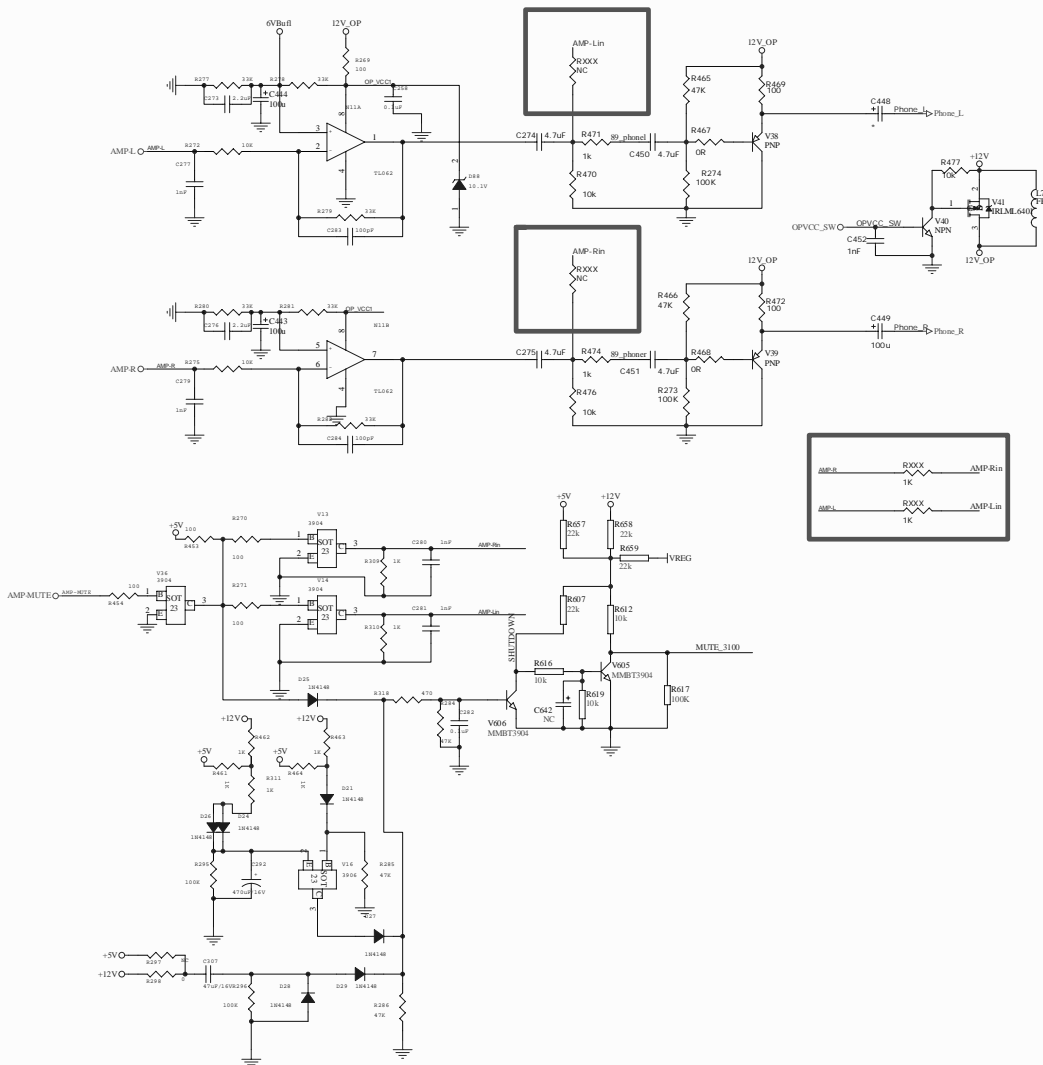
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1. 24V需要换成功放电源
2. 功放外围参数可参考红色标注
3. TPA3101D2的排板，包括散热须参照DATASHEET
4. 最终原理图和PCB请TI方面确认一下

旧底图总号

底图总号

签名 日期

格式(3)



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09\_4052  
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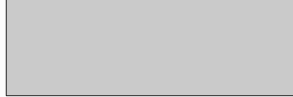
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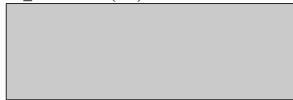
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