

LCD2601EU/LCD2602EU/LCD2603EU CHASSIS SERVICE MANUAL (V1.1)

FEB. 13 2005

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SAFETY PRECAUTION

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.

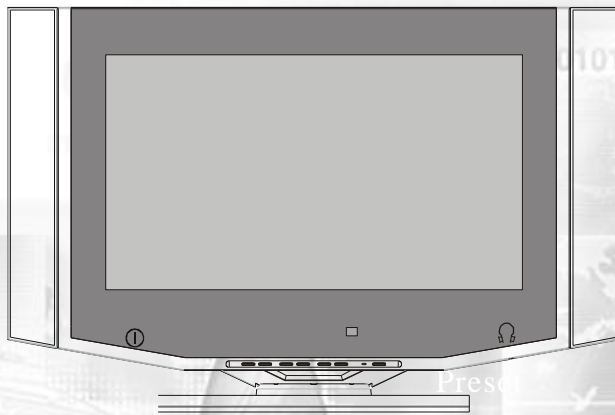
1. Since the power supply circuit of this receiver is directly connected to the AC power line, an Isolation transformer should be used during any dynamic service to avoid possible shock hazard.
2. When replacing a chassis in the cabinet, always be certain that all the protective devices are put back 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.
6. Connection wires must be kept away from components with high voltage or high temperature.
7. If any fuse in this LCD TV receiver is blown , replace it with the FUSE specified in the chassis part list.



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PRODUCT SAFETY NOTICE

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, 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 .

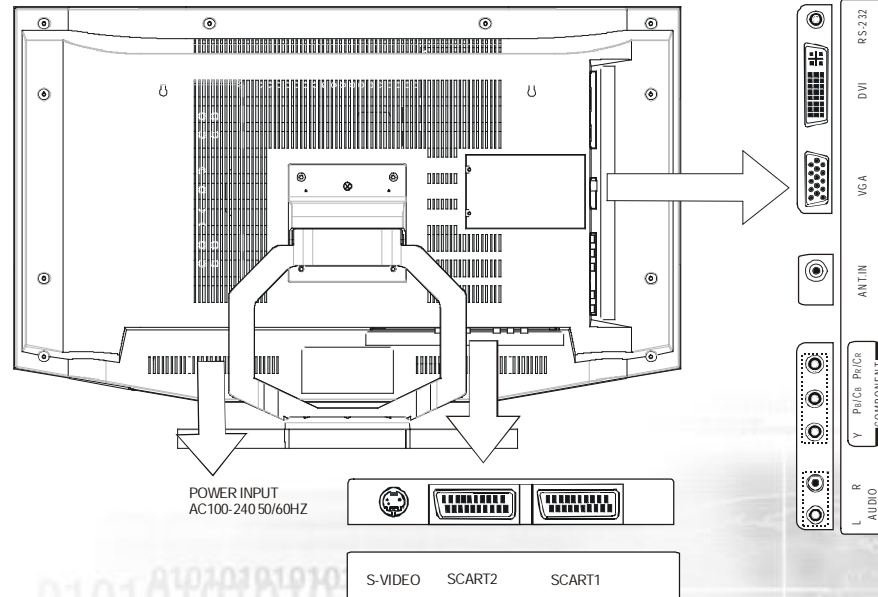


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PRODUCT FUNCTION

- Back connections



Output connections

- SCART CVBS output X2
- Mini-jack for stereo X1

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

Input connections

- RS232 X1 (for software updating)
- Digital RGB(DVI-D) input X 1
- Analog RGB 15pin input X 1
- Cable/antenna RF X 1
- Component input X 1
- S-Video input X 1
- SCART (CVBS+RGB in) X1
- SCART Video in X1
- AV audio input X1

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PRODUCT FUNCTION

LCD-TV features

- **Multimedia - TV receiver, Video monitor and PC display, all in one.**
- **Wider viewing angle, over 170 view angle**
- **Digital display device - truthfully reproducing the images, without distortion or blurring, irrespective of magnetic or geomagnetic effect.**
- **200 channels storage**
- **Sleep timer**
- **Teletext with 252 pages memory and fastext feature**
- **NICAM/A2 sound**
- **Dual SCART interface**
- **Multi-language OSD**

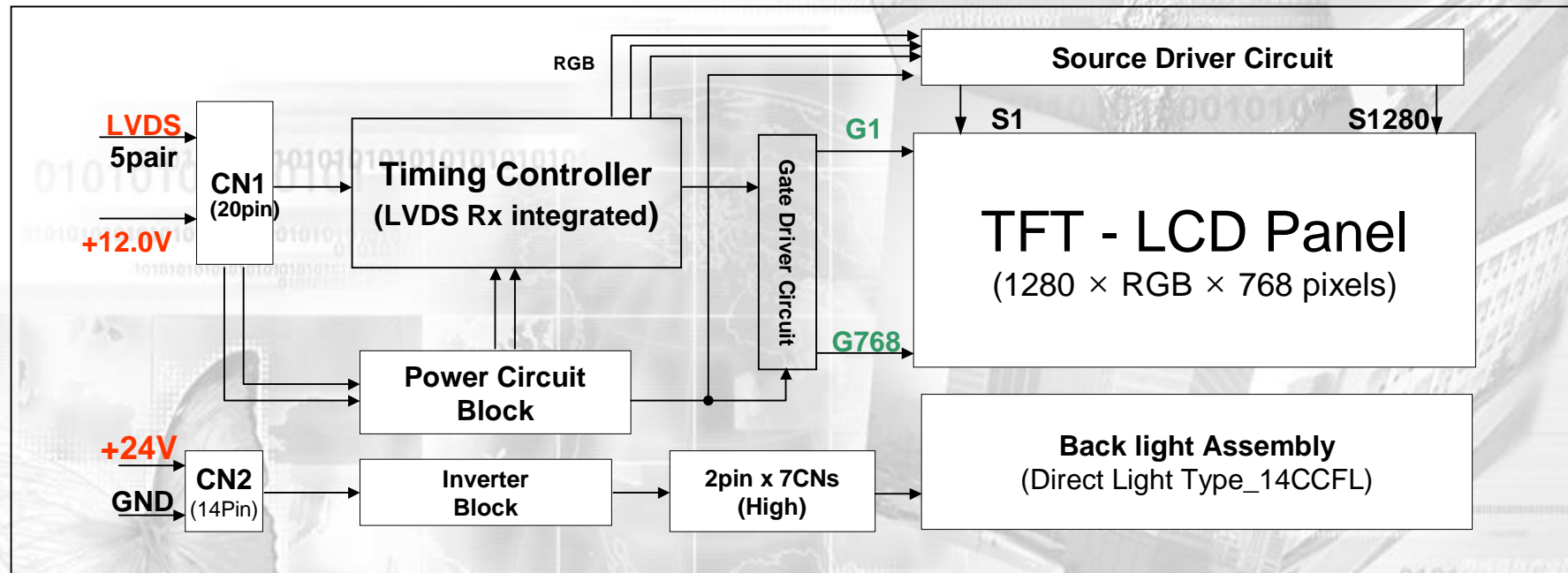
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LCD PANEL SPEC.

General Description

- The LC260W01 is a Color Active Matrix Liquid Crystal Display with an integral Cold Cathode Fluorescent Lamp(CCFL) backlight system. The matrix employs a-Si Thin Film Transistor as the active element. It is a transmissive type display operating in the normally black mode. This TFT-LCD has a 26.0 inch diagonally measured active display area with WXGA resolution (768 vertical by 1280 horizontal pixel array). Each pixel is divided into Red, Green and Blue sub-pixels or dots which are arranged in vertical stripes. Gray scale or the brightness of the sub-pixel color is determined with a 8-bit gray scale signal for each dot, thus, presenting a palette of more than 16.7M(true) colors with 8Bit.
- The LC260W01 has been designed to apply the 8Bit LVDS interface.
- It is intended to support LCD TV, PCTV where high brightness, wide viewing angle, high color saturation, and high color are important.



LCD PANEL SPEC.

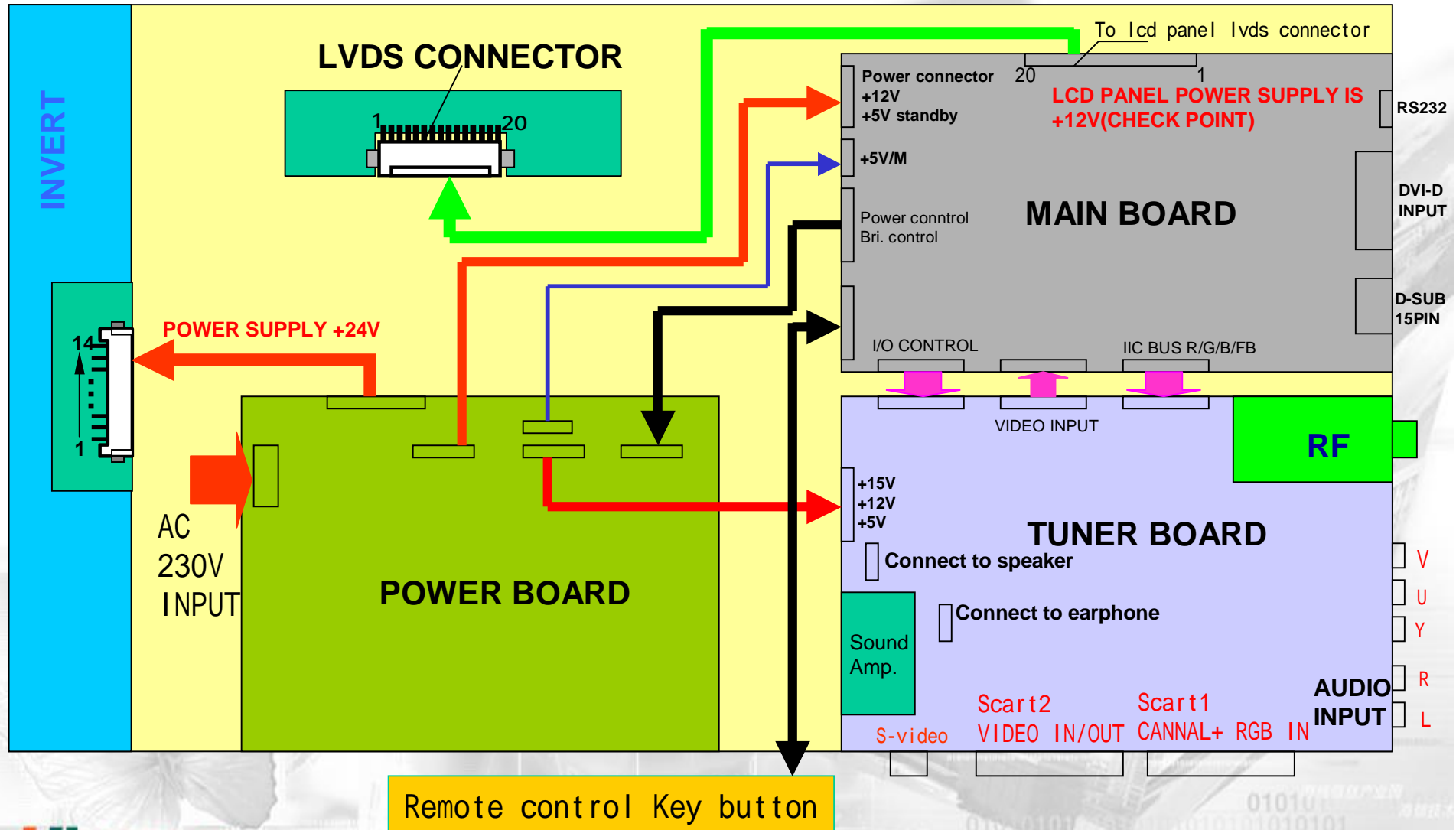
General Features

Active Screen Size	26.0 inches(660.40mm) diagonal
Outline Dimension	622.0(H) x 389.0(V) x 53.0(D) mm(Typ.)
Pixel Pitch	0.1475mm x 0.4425mm x RGB
Pixel Format	1280 horiz. By 768 vert. Pixels RGB strip arrangement
Color Depth	16.7M colors
Luminance, White	450 cd/m² (Center 1 points typ.)
Contrast Ratio	400:1
Viewing Angle(CR>10)	View Angle Free (R/L 176(Typ.), U/D 176(Typ.))
Power Consumption	Total 79.5 Watt (Typ.) [LCM 3.6W / Inverter 75.9W]
Response Time	16ms
Display Operating Mode	Transmissive mode, Normally Black
Surface Treatment	Hard coating(3H), Anti-glare treatment of the front polarizer,

BLOCK DIAGRAM

Chassis Block Diagram

LCD PANEL

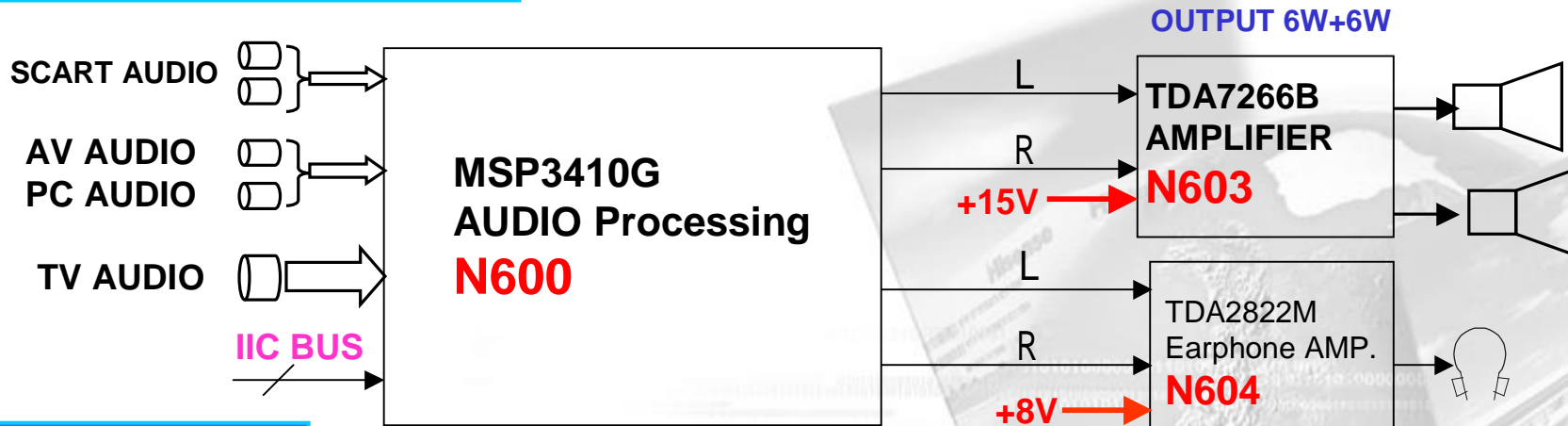


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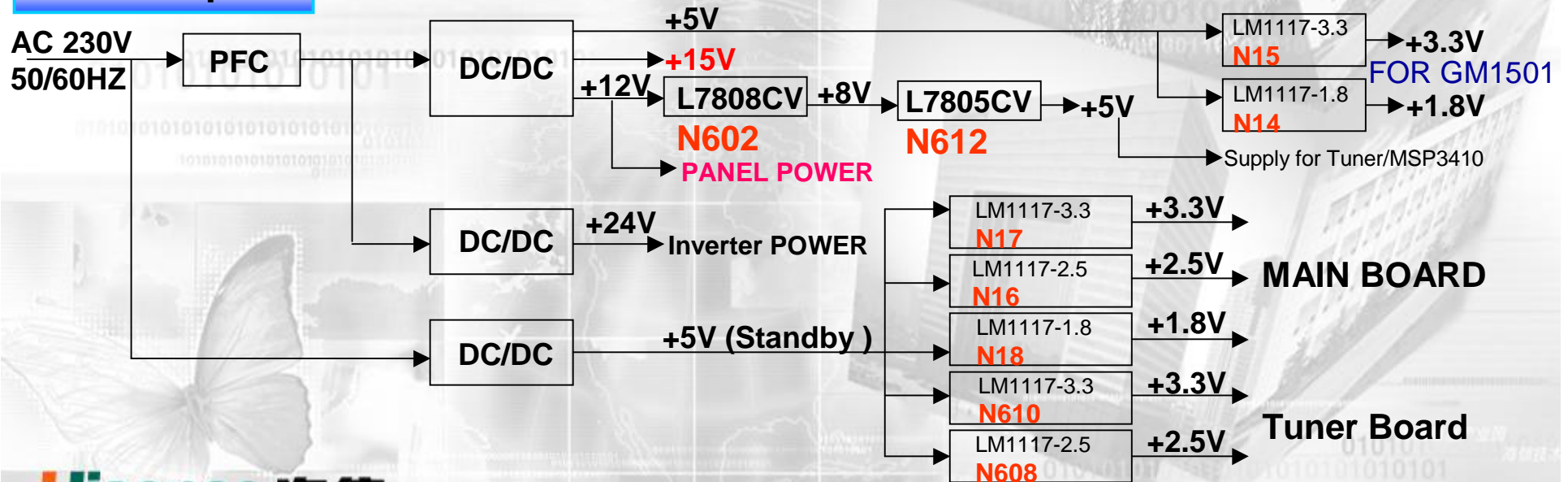
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BLOCK DIAGRAM

AUDIO Processing part



POWER part

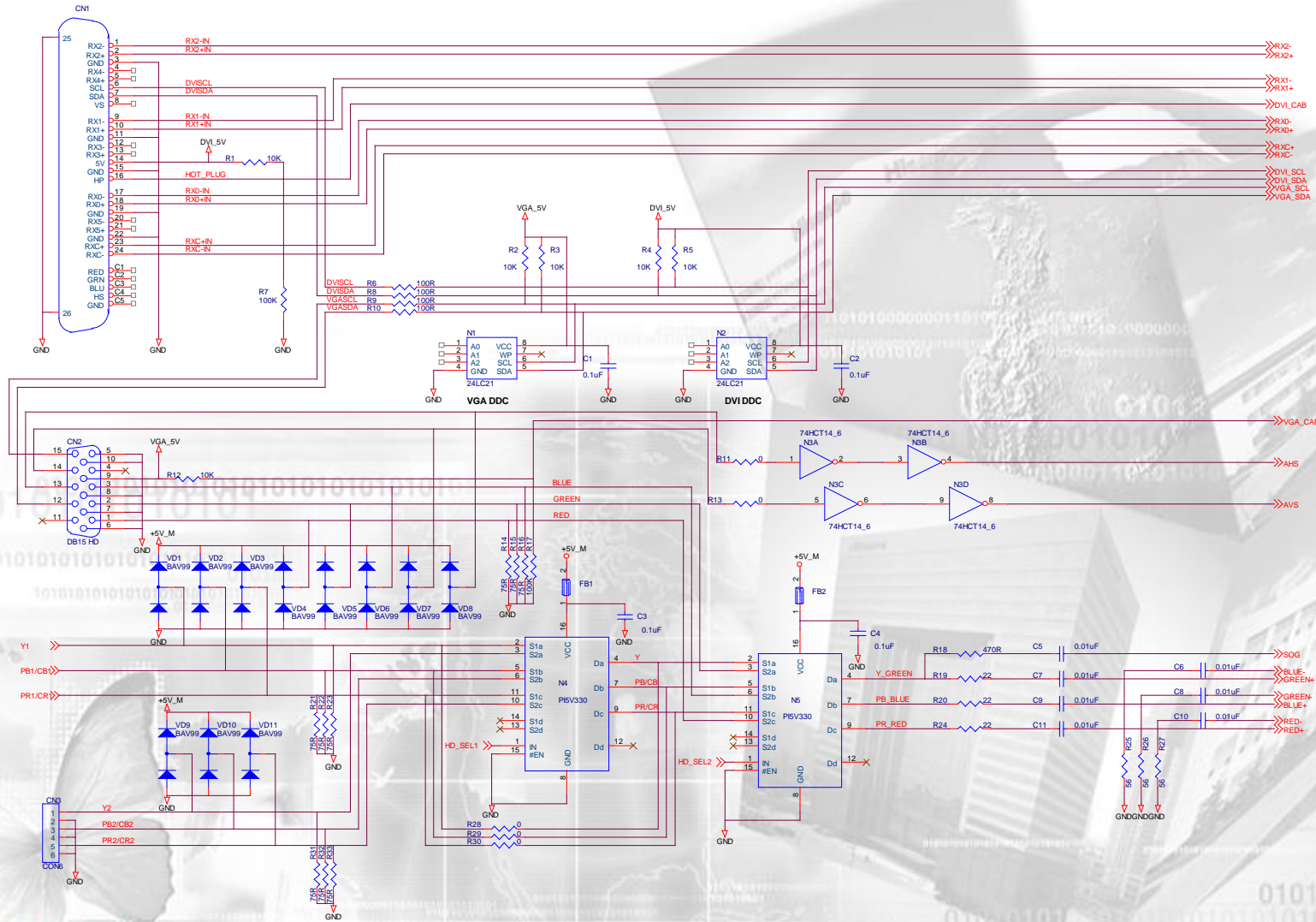


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CIRCUIT DIAGRAM

Main Board:Graphic input Part

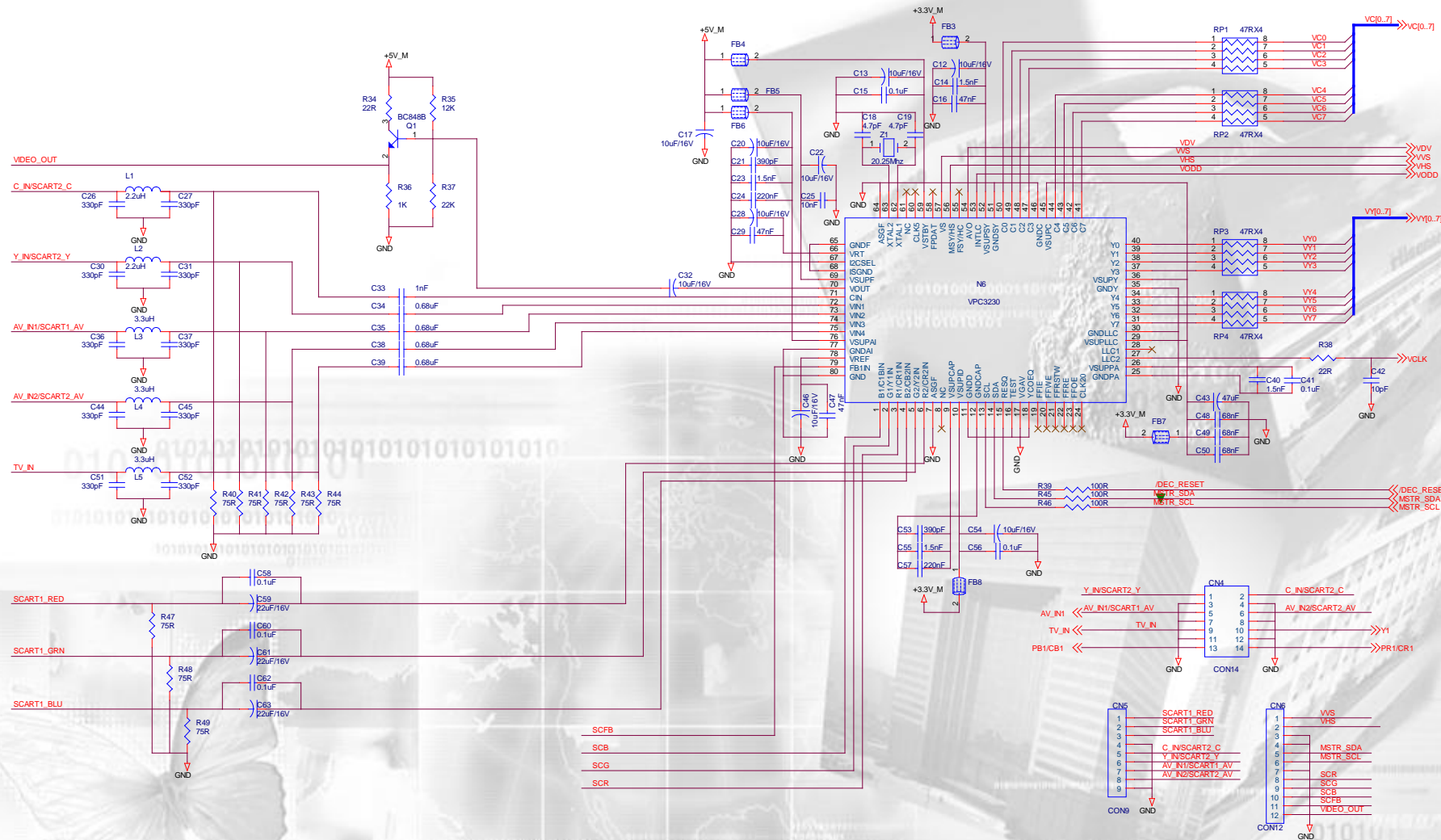


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CIRCUIT DIAGRAM

Main Board:Video decode Part

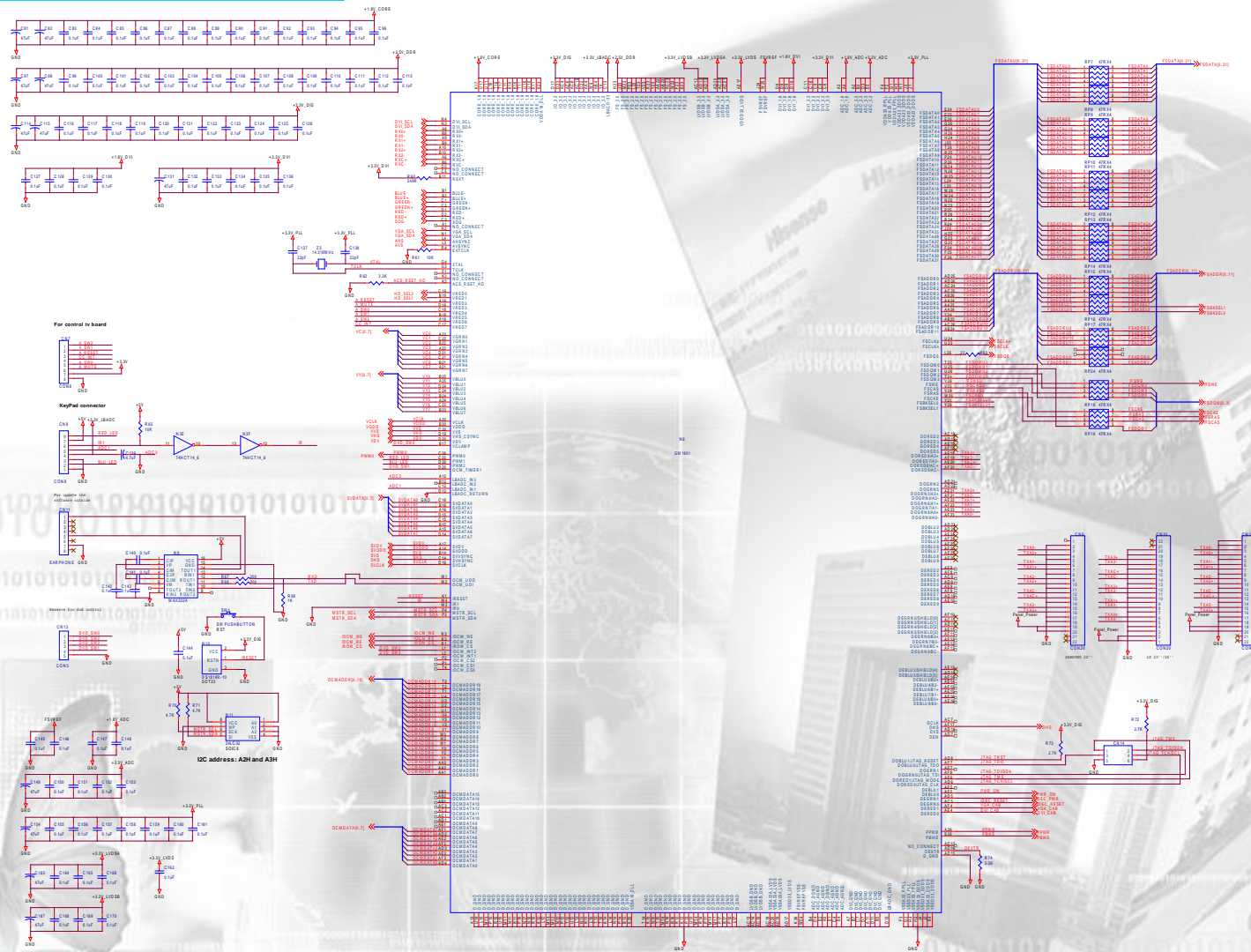


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CIRCUIT DIAGRAM

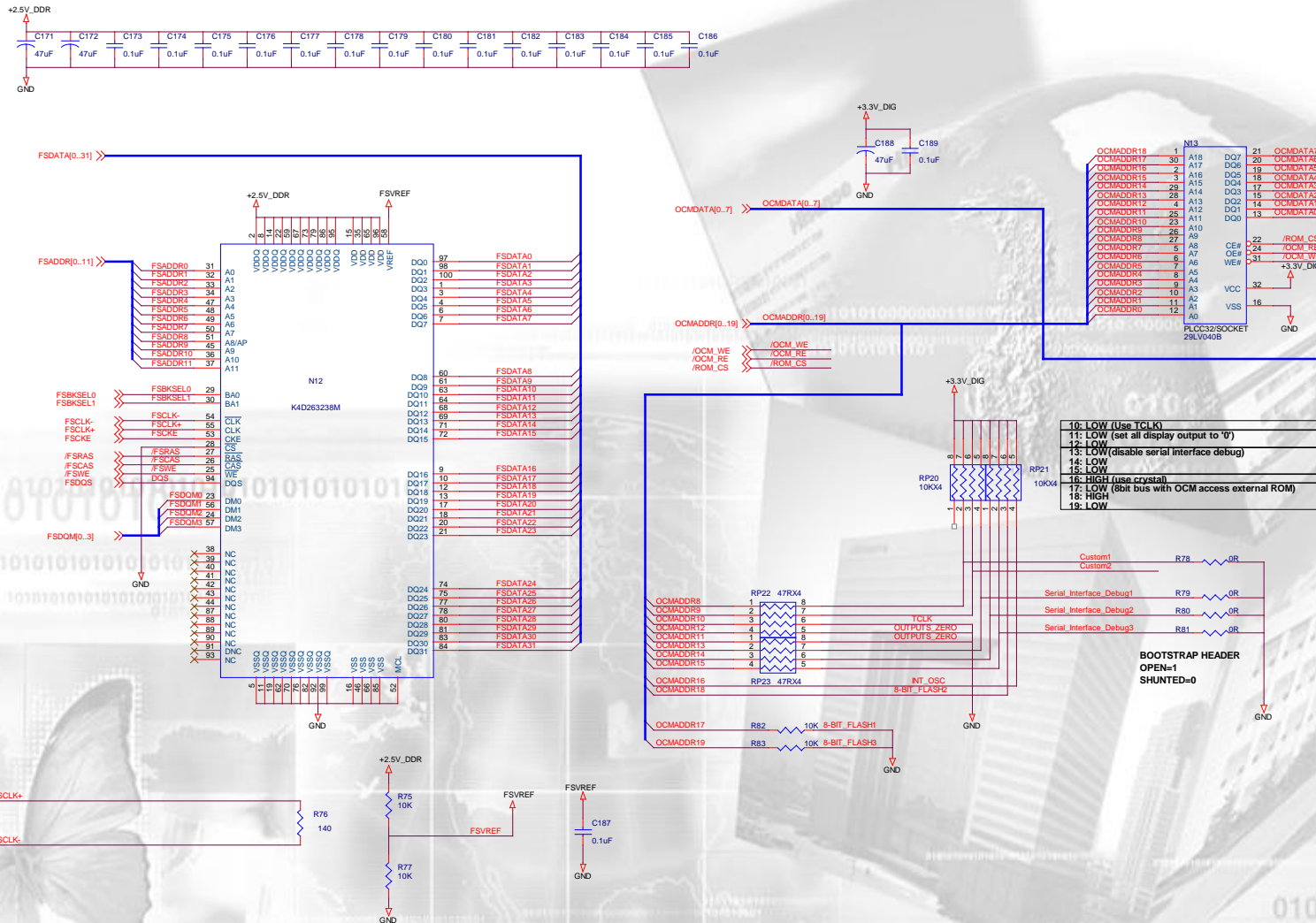
Main Board:GM1501 Part



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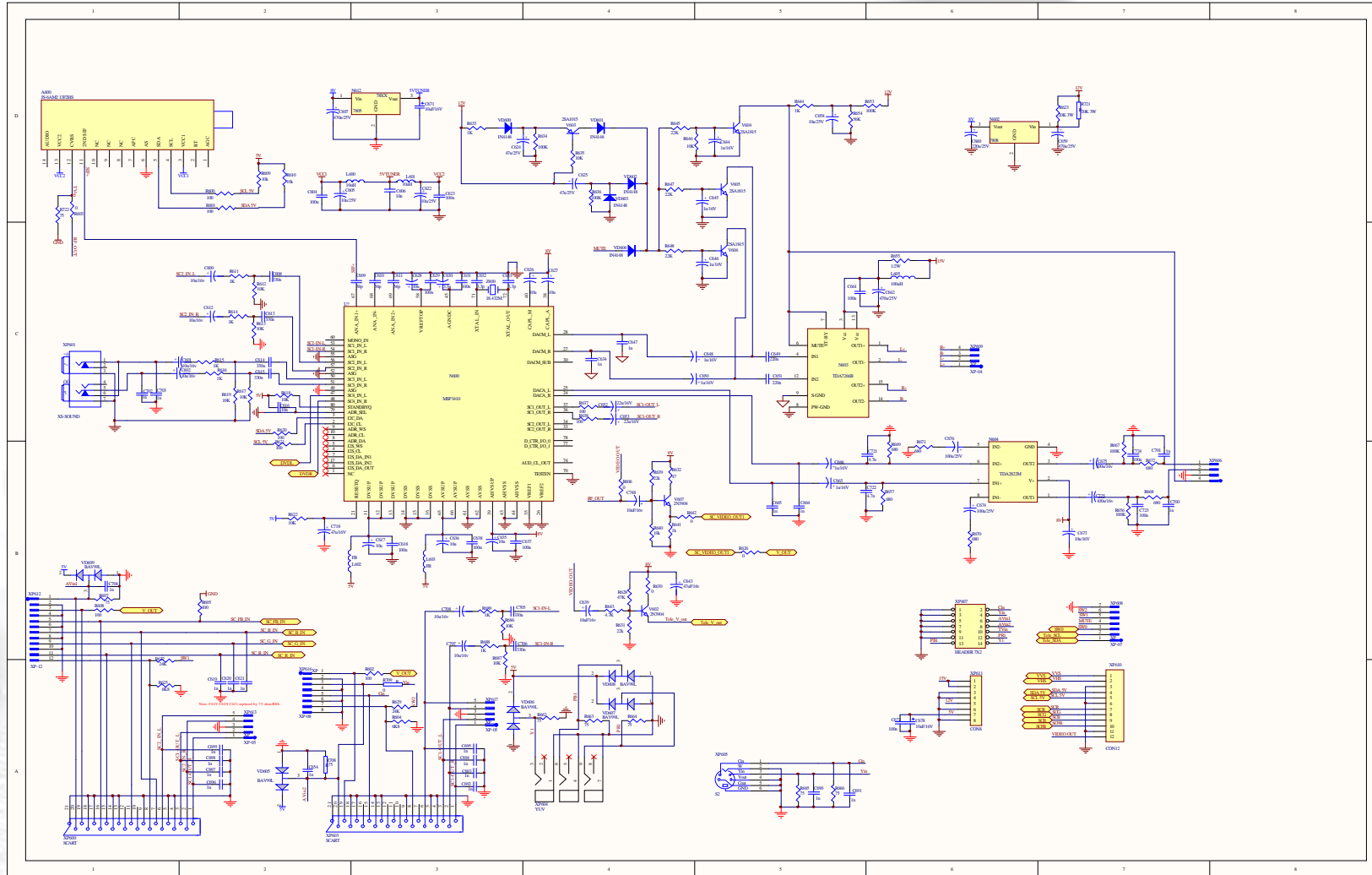
CIRCUIT DIAGRAM

Main Board:Frame & Memory Part



CIRCUIT DIAGRAM

Tuner Board: sound Processing Part



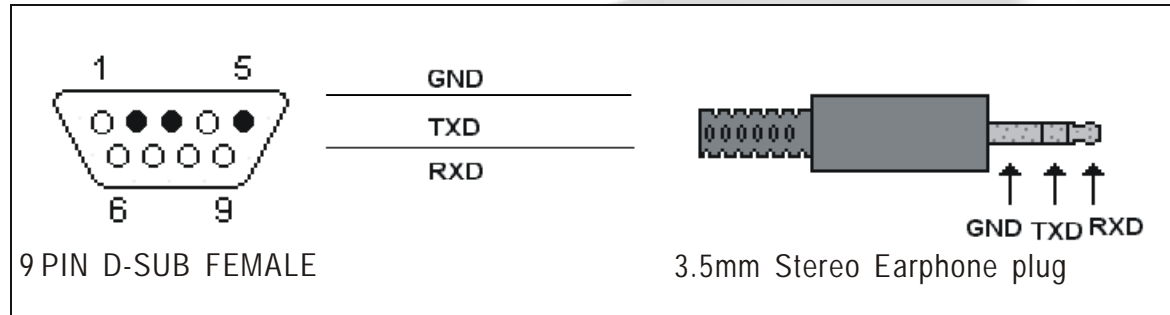
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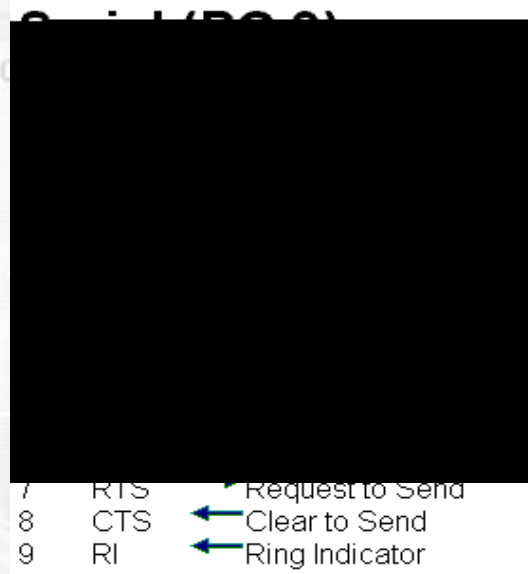
SOFTWARE UPDATING

Updating CABLE

- You can update our LCD's software through a special RS232 cable(show as below)



- This RS232 cable includes a 9 PIN D-SUB FEMALE,a 3.5mm Stereo Earphone plug and 3 wires
Built the cable as show



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SOFTWARE UPDATING

Updating Steps:

1. Gprobe4 is a communication software for update fireware from PC to our LCD. Double-click the Gprobe4.exe to install it. If the installation is completed, The Gprobe4 icon will be produced on the desktop.



SOFTWARE UPDATING

Updating Steps:

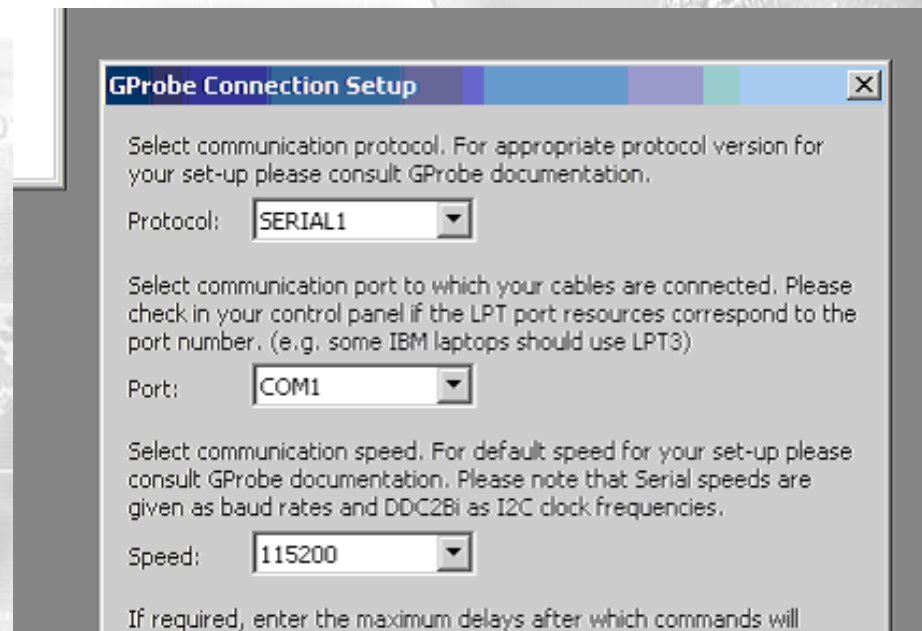
2. When running the Gprobe4 for the first time, there are some parameter need to be set.

Select the OPTIONS item form the menu bar of Gprobe4, then click the Connection Setup item to set up serial communication.

Protocol : SERIAL1

Port : select the corresponding serial interface.(for example: com1)

Speed : 115200



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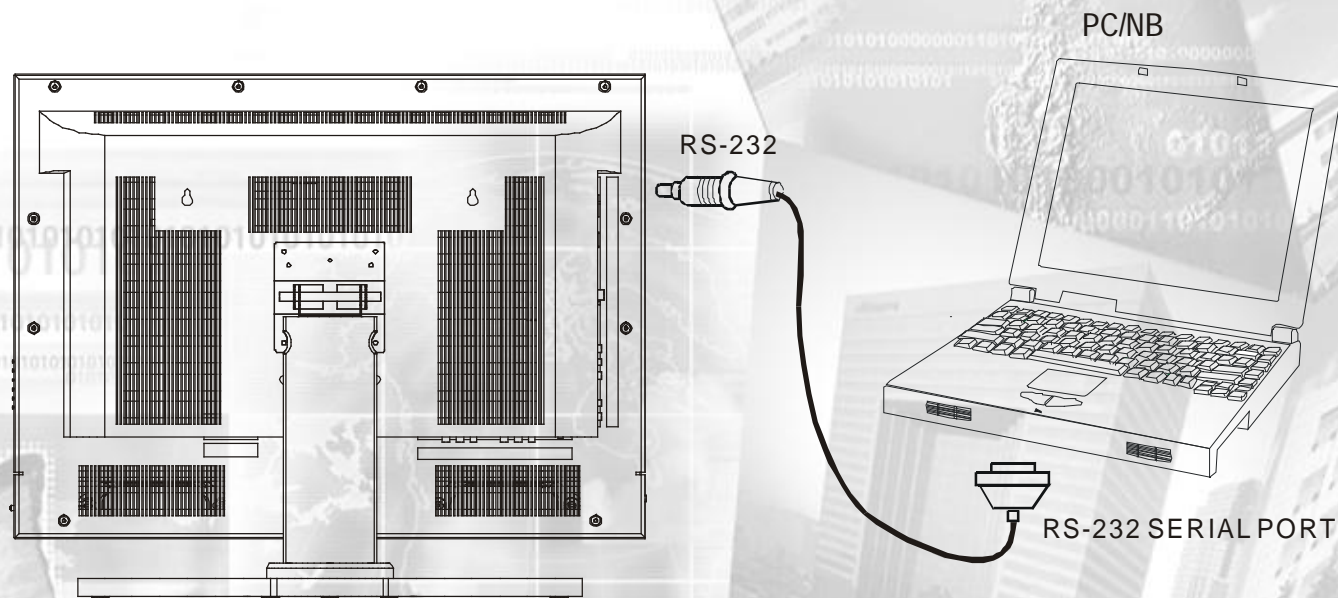
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SOFTWARE UPDATING

Updating Steps:

3. Connecting the cable:

Connecting the cable's 9 pin serial interface(female) to a computer, and connect the cable's headphone plug to RS232 terminal on the side of the LCD TV.



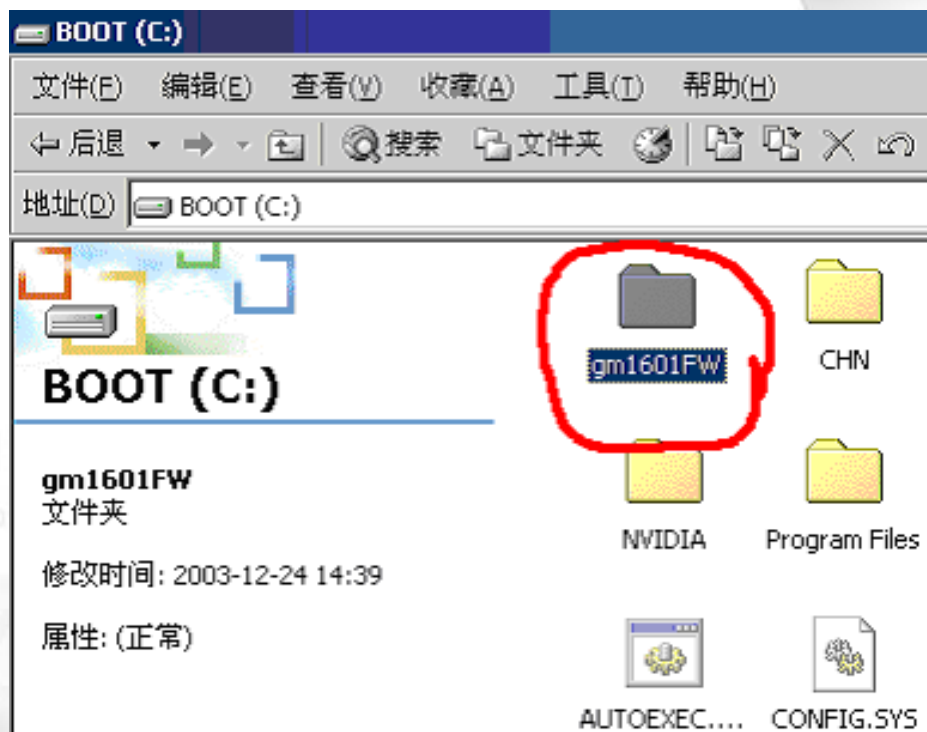
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SOFTWARE UPDATING

Updating Steps:

4. Unzip the firmware file firmware.zip to C:\



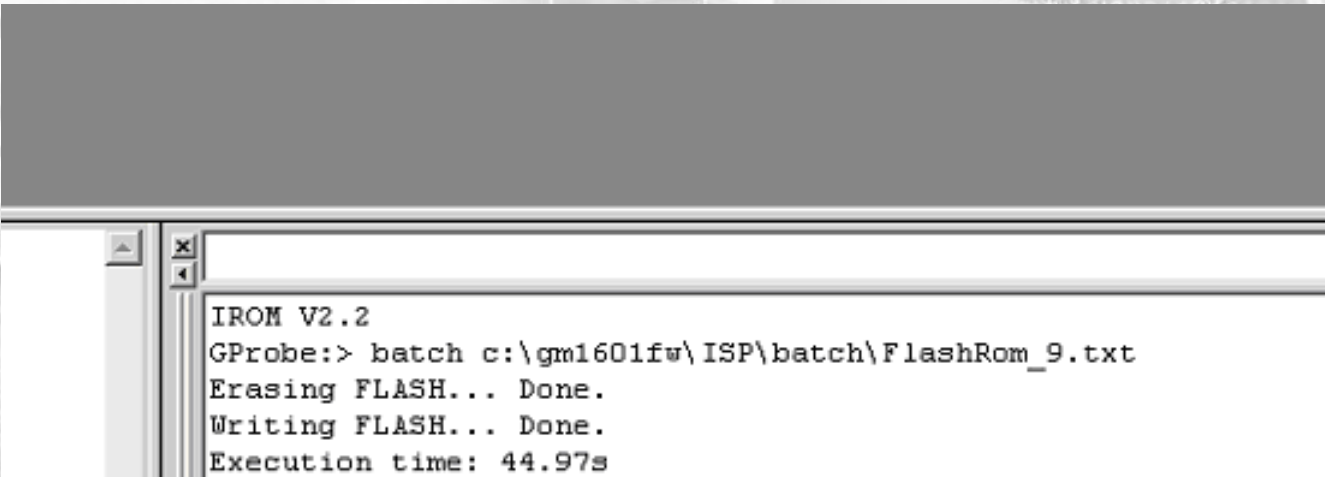
SOFTWARE UPDATING

Updating Steps:

5. Open the folder which the firmware is in, open the file LCD2601EU.txt, copy the content in it (*C:\gm1601FW\FlashROM_LCD2601EU.txt*)
6. Run the Gprobe4 and turn on the LCD TV, copy the content in command.txt to the command line and touch the enter key, the updating is executing.

The screen will display *Erasing Flash...done*
Writing Flash..

About 50 seconds later, the updating will be completed. The screen will display as below:



```
IROM V2.2
GProbe:> batch c:\gm1601fw\ISP\batch\FlashRom_9.txt
Erasing FLASH... Done.
Writing FLASH... Done.
Execution time: 44.97s
```

SOFTWARE UPDATING

Updating Steps:

7. When the updating finishes, restart (turn off and turn on) the LCD, then the LCD will work with a new version of firmware.\

Note:

Don't turn off the LCD in the updating process!

When there is another model's LCD TV need to be updated, please copy the update firmware to the C:\gm1601FM folder and operate as 5~7



FAQ

- 1、 Turn on the TV,The LED is red, no display on screen
 - pls replace the main board or updating the software.(the software is wrong)
- 2、 Turn on the TV,The LED is blue, but no picture and no sound
 - you should to change the tuner board
- 3、 When turn on the TV, you can hear the “ZI ZI” voice
 - you should to changed the power board
- 4、 In TV state,can not to tuning
 - you should to change the tuner board (I think the xp607 connected wrong or the tuner bad)
- 5、 No teletext
 - You should to change the tuner board (the teletext IC is bad)
- 6、 No sound
 - You should to change the tuner board
- 7、 can not to updating software
 - You should to change the main board
- 8、 In VGA/YPBPR state, the picture colour is wrong
 - You should use the “auto colour“ function to make the colour to be good (press the [MENU] button of RC enter the main menu,and press the [VOL+] button enter the PC PARAMETERS,and press the [CH+] button to select the item AUTO COLOUR,and press the [VOL+] button to enable the AUTO COLOUR.
- 9、 No reaction with RC
 - You should change the main board

SPARE PARTS

MODEL:FS26H(BLUESKY)

	PART NO.	SAP NO.	REMARK
MAIN BOARD	WT2.908.624-3	103318	
SOUND BOARD	RSAG2.908.425-1	103320	
POWER BOARD	RSAG2.908.435-1	103322	
BOX	E/RSR8.865.1418	1019161	
UP GASKET	RSAG8.870.358	1020346	
DOWN GASKET	RSAG8.870.359	1020347	
FRONT COVER	RSAG8.074.120\耳机孔亮银白	1019669	
BACK COVER	RSAG6.170.021	102497	
REMOTE CONTROL	HYDFSR-EP209C1	1020053	
底板组件	WT6.150.004	104611	与底座支架组件共同构成完整底座
底座支架组件	WT6.150.003	104610	

MODEL:LCD2601EU(Hsense)

	PART NO.	SAP NO.	REMARK
MAIN BOARD	WT2.908.624-3	103318	
SOUND BOARD	RSAG2.908.425-1	103320	
POWER BOARD	RSAG2.908.435-1	103322	
BOX	E/RSR8.865.1364	1018027	
UP GASKET	RSAG8.870.358	1020346	
DOWN GASKET	RSAG8.870.359	1020347	
FRONT COVER	RSAG8.074.120\耳机孔亮银白	1019669	
BACK COVER	RSAG6.170.021	102497	
REMOTE CONTROL	HYDFSR-EP209C1	1020053	
底板组件	WT6.150.004	104611	与底座支架组件共同构成完整底座
底座支架组件	WT6.150.003	104610	

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SPARE PARTS

MODEL:LCD2602EU (Hsense)

	PART NO.	SAP NO.	REMARK
MAIN BOARD	WT2.908.624-1	102865	
SOUND BOARD	RSAG2.908.425	102833	
POWER BOARD	RSAG2.908.491	103625	
BOX	E/RSR8.865.1462	1019775	
UP GASKET	E/RSR8.870.167	1019772	
DOWN GASKET	E/RSR8.870.168	1019773	
FRONT COVER	RSAG8.074.142亮银白W9	1019839	
BACK COVER	WTG6.170.169	103624	
REMOTE CONTROL	HYDFSR-EP209C1	1020053	
底板组件	WT6.150.004	104611	与底座支架组件共同构成完整底座
底座支架组件	WT6.150.003	104610	

MODEL:LCD2602EU (Italy)

	PART NO.	SAP NO.	REMARK
MAIN BOARD	WT2.908.624-1	102865	
SOUND BOARD	RSAG2.908.425	102833	
POWER BOARD	RSAG2.908.491	103625	
BOX	E/RSR8.865.1579	1021110	
UP GASKET	E/RSR8.870.167	1019772	
DOWN GASKET	E/RSR8.870.168	1019773	
FRONT COVER	RSAG8.074.142无丝印商标	1021252	
BACK COVER	WTG6.170.169	103624	
REMOTE CONTROL	HYDFSR-EP209C1	1020053	
底板组件	WT6.150.004	104611	与底座支架组件共同构成完整底座
底座支架组件	WT6.150.003	104610	

SPARE PARTS

MODEL:LCD2602EU (Prosonic)

	PART NO.	SAP NO.	REMARK
MAIN BOARD	WT2.908.624-1	102865	
SOUND BOARD	RSAG2.908.425	102833	
POWER BOARD	RSAG2.908.491	103625	
BOX	E/RSR8.865.1631	1022109	
UP GASKET	E/RSR8.870.167	1019772	
DOWN GASKET	E/RSR8.870.168	1019773	
FRONT COVER	前壳\RSAG8.074.114\银白W9黑B2\SYN-149	1022114	
BACK COVER	WTG6.170.169	103624	
REMOTE CONTROL	HYDFSR-EP209C1	1020053	
底板组件	WT6.150.004	104611	与底座支架组件共同构成完整底座
底座支架组件	WT6.150.003	104610	

MODEL:LCD2603EU (HSENSE)

	PART NO.	SAP NO.	REMARK
MAIN BOARD	WT2.908.624-3	103318	
SOUND BOARD	RSAG2.908.493-1	104907	
POWER BOARD	RSAG2.908.435-1	103322	
BOX	E/RSR8.865.1475	1019952	
UP GASKET	RSAG8.870.337	1019828	
DOWN GASKET	RSAG8.870.338	1019829	
FRONT COVER	RSAG8.074.150\银白W9套亚光黑B2	1020381	
BACK COVER	RSAG6.170.038\深灰	103642	
REMOTE CONTROL	HYDFSR-EP209C1	1020053	
底板组件	FA-B03	105061	