LCD Television
Service Manual

Chassis： MT5303C

Product Type： LEDN24K15PUK、LEDN32K15UK、
LEDN42K15PUK.....

Ver 1.0

Hisense Electric Co.， Ltd.

September，2010

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Service Manual

1. Precautions and notices

BEFORE SERVICING THE LCD TV, READ THE SAFETY PRECAUTIONS IN THIS MANUAL.

USE ONLY MANUFACTURER SPECIFIED REPLACEMENT PARTS WHEN SERVICING.

USE OF NON-AUTHORIZED PARTS WILL VOID THE MANUFACTURE'S WARRANTY

Proper service and repair is important to the safe, reliable operation of all Hisense Electric Co., Ltd Equipment. The service procedures recommended by Hisense and described in this Service Guide are effective methods of performing service operations. Some of these service operations require the use of tools specially designed for the purpose. The special tools should be used when and as recommended.

It is important to note that this manual contains various CAUTIONS and NOTICES which should be carefully read in order to minimize the risk of personal injury to service personnel. The possibility exists that improper service methods may damage the equipment and pose risk of personal injury

. It is also important to understand that these CAUTIONS and NOTICES ARE NOT EXHAUSTIVE. Service should only be performed by an experienced electronics

techician trained in the proper Television safety and service methods and procedures Hereafter throughout this manual, Hisense Electric Co., Ltd will be referred to as Hisense.

1.1 Warning

1.1.1

Critical components having special safety characteristics are identified with a ⚠ by the Ref. No. in the parts list. Use of non-manufacturer's recommended parts may create shock, fire, or other hazards.Under no circumstances should the original design be modified or altered without written permission from Hisense. Hisense assumes no liability, express or implied, arising out of any unauthorized modification of design. Servicetech assumes all liability.

DANGER CAUTION

TO ENSURE THE CONTINUED RELIABILITY OF THIS PRODUCT, USE ONLY ORIGINAL MANUFACTURER'S REPLACEMENT PARTS, WHICH ARE LISTED WITH THEIR PART NUMBERS IN THE PARTS LIST SECTION OF THIS SERVICE GUIDE.

1.1.2.

All ICs and many other semiconductors are susceptible to electrostatic discharges (ESD). Careless handling during repair can reduce life drastically. When repairing, be sure to use anti-static table mats and properly use a grounding wrist stra. Keep components and tools also at this same potential.

IMPORTANT:

Always disconnect the power cord from AC outlet before replacing parts or modules.

1.1.3

To prevent electrical shock, use only a properly grounded 3 prong outlet or extension cord.

1.1.4

When replacement parts are required, be sure to use replacement parts specified by the manufacturer or have the same characteristics as the original part. Unauthorized substitutions may result in fire, electric shock, or other hazards and will void the manufacturer's warranty.

1.1.5

Safety regulations require that after a repair the set must be returned in its original condition. In addition, prior to closing set, check that:

-Note:

>All wire harnesses and flex cables are properly routed and secured with factory tape and/or mounted cable clamps.

> All cables and connectors are properly insulated and do not have any bare wires/lead exposed.

1.1.6

(1) Do not supply a voltage higher than that specified to this product. This may damage the product and may cause a fire.

(2) Do not use this product:

> High humidity areas

> In an area where any water could enter or splash into the unit.

High humidity and water could damage the product and cause fire.

(3) If a foreign substance (such as water, metal, or liquid) gets inside the panel module, immediately turn off the power. Continuing to use the product may cause fire or electric shock.

(4) If the product emits smoke, and abnormal smell, or makes an abnormal sound, immediately turn off the power. Continuing to use the product, it may cause fire or electric shock.

(5) Do not pull out or insert the power cable from/to an outlet with wet hands. It may cause electric shock.

(6) Do not damage or modify the power cable. It may cause fire or electric shock.

(7) If the power cable is damaged, or if the connector is loose, do not use the product: otherwise, this can lead to fire or electric shock.

(8) If the power connector or the connector of the power cable becomes dirty or dusty, wipe it with a dry cloth. Otherwise, this can lead to fire.

(9) Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.

1.2 Notes

Notes on Safe Handling of the LCD panel and during service

The work procedures shown with the Note indication are important for ensuring the safety of the product and the servicing work. Be sure to follow these instructions.

• Before starting the work, secure a sufficient working space.

• At all times other than when adjusting and checking the product, be sure to turn OFF the POWER Button and disconnect the power cable from the power source of the TV during servicing.

• To prevent electric shock and breakage of PC board, start the servicing work at least 30 seconds after the main power has been turned off. Especially when installing and removing the power board, start servicing at least 2 minutes after the main power has been turned off.

• While the main power is on, do not touch any parts or circuits other than the ones specified. If any connection other than the one specified is made between the measuring equipment and the high voltage power supply block, it can result in electric shock or may trip the main circuit breaker When installing the LCD module in, and removing it from the packing carton, be sure to have at least two persons perform the work.

• When the surface of the panel comes into contact with the cushioning materials, be sure to confirm that there is no foreign matter on top of the cushioning materials before the surface of the panel comes into contact with the cushioning materials. Failure to observe this precaution may result in, the surface of the panel being scratched by foreign

matter.

• Be sure to handle the circuit board by holding the large parts as the heat sink or transformer. Failure to observe this precaution may result in the occurrence of an abnormality in the soldered areas.

• Do not stack the circuit boards. Failure to observe this precaution may result in problems resulting from scratches on the parts, the deformation of parts, and short-circuits due to residual electric charge.

• Perform a safety check when servicing is completed. Verify that the peripherals of the serviced points have not undergone any deterioration during servicing. Also verify that the screws, parts and cables removed for servicing purposes have all been returned to their proper locations in accordance with the original setup.

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.

2. Product Function Specifications

Product Function

Specifications

Model Name		LEDN24K15PUK	LEDN32K15UK
Dimension (W×H×D)(mm)	Without stand	564×370×44	772.3×495×46.5
	With stand	564×471×207	772.3×560.2×220.6
Weight(kg)	Without stand	4.4	8.7
	With stand	4.6	9.2
LCD Panel Minimum size(diagonal)		60	81
Screen† resolution		1920×1080	1366×768
Power consumption		Refer to rating label	
Audio power		2W+2W	8W+8W
Power supply		Refer to rating label	
Receiving systems	RF	PAL, SECAM, B/G/D/K/L/L'	
	AV	PAL, SECAM, NTSC	
Component Input		480I、480P、576I、576P 720P/50Hz、720P/60Hz、1080I/50Hz、1080I/60Hz	
VGA Input		VGA（640×480 60Hz）、SVGA（800×600 60Hz） XGA（1024×768 60Hz）	
HDMI Input		RGB/60Hz（640×480、800×600、1024×768） YUV/50Hz（576P、720P、1080I） YUV/60Hz（480I、480P、720P、1080I）	

3. Factory/Service OSD Menu and Adjustment

3.1 To enter the Factory OSD Menu

a. With factory RC (remote control)

1. Press “M” button and enter factory mode.
2. Press “Menu” button and enter factory OSD menu.
3. Press “CH+”/“CH-” button select the function menu, press “VOL+”/“VOL-” enter the selected function menu. Press “VOL+”/“VOL-” button adjust values in the menu.
4. Press “M” button exit factory mode in the factory OSD menu.

When TV outgoing factory, user can not enter factory OSD menu with Factory Remote

b. With user’s RC

1. Power TV On
2. Press Menu button and call up User OSD Menu
3. Select Sound-> Balance
4. When Balance value is “0”, Enter 1->9->6 ->9 in sequence.
   Note: If necessary, re-do number keys.
5. Factory OSD appears.
6. Press the standby button then AC turn off and restart the TV, which can exit factory OSD menu.

3.2 Factory OSD Menu

The Factory OSD Menu comprises Factory Menu and Design Menu .

3.2.1、Factory Menu

Factory Menu
White Balance
Set Channel
Auto Color
Factory Option
LOGO Option
Pattern Test
Clean Protected
Clean All
Version information

White Balance	
Col Temp	standard
R Grain	126
G Grain	128
B Grain	128
R Offest	32
G Offest	32
B Offest	32

Auto Color

Only in component and VGA Source

LOGO

HISENSE
WELCOME
HOTEL LOGO
……

Factory Option

SOURCE TV
TOFAC M

Set channel

QingDao
HuangDao
Hungary
France
Australia

Pattern Test

Test pattern NULL

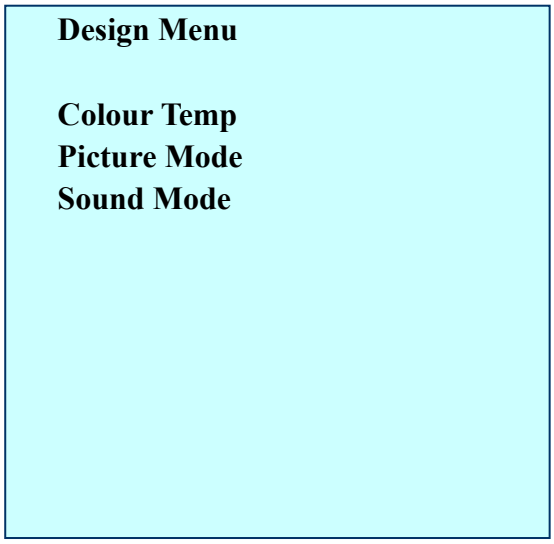
Version

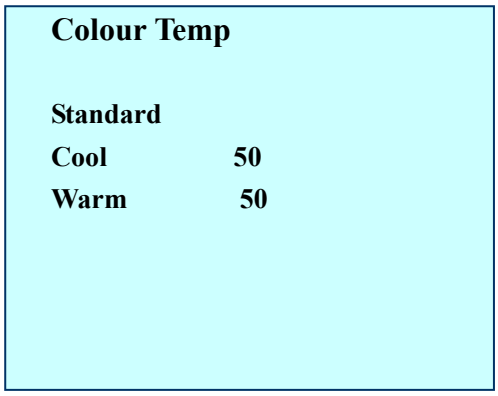
Version:
Panel Type:
FLASH :

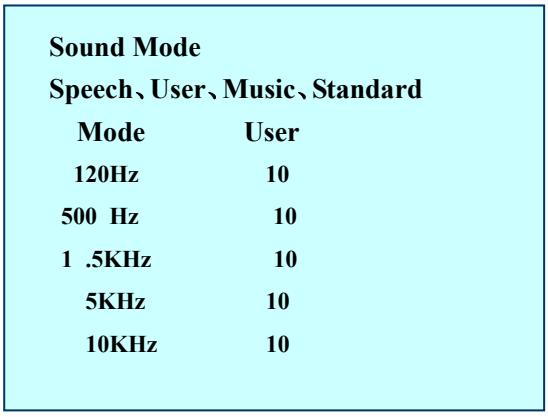
Clean Protected
Clean the user data(keep the factory data)

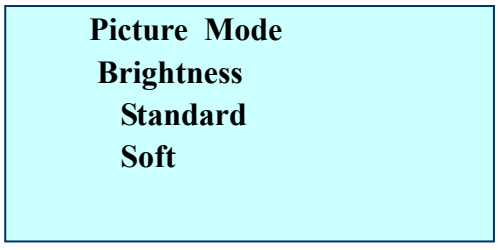
Clean All
(Clean the factory data-EEPROM data)

3.2.2、Design Menu









Note：

The above “Factory/Service OSD Menu” are reference only, please refer to the actual units to determine the appearances.

4. Software Upgrading

The software is upgraded by a burning toll-MtkTool, which can burn the program file *.bin to the main board of the unit.

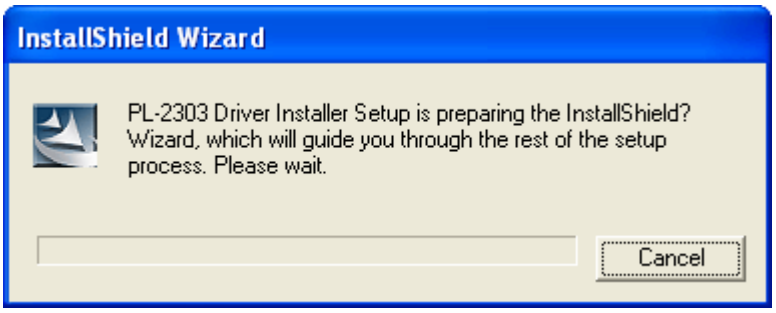
MTKTool2.48.01+PL-2303 Driver Installer.rar

4.1 Get ready for upgrading

4.1.1 Install the driver

Double click the icon

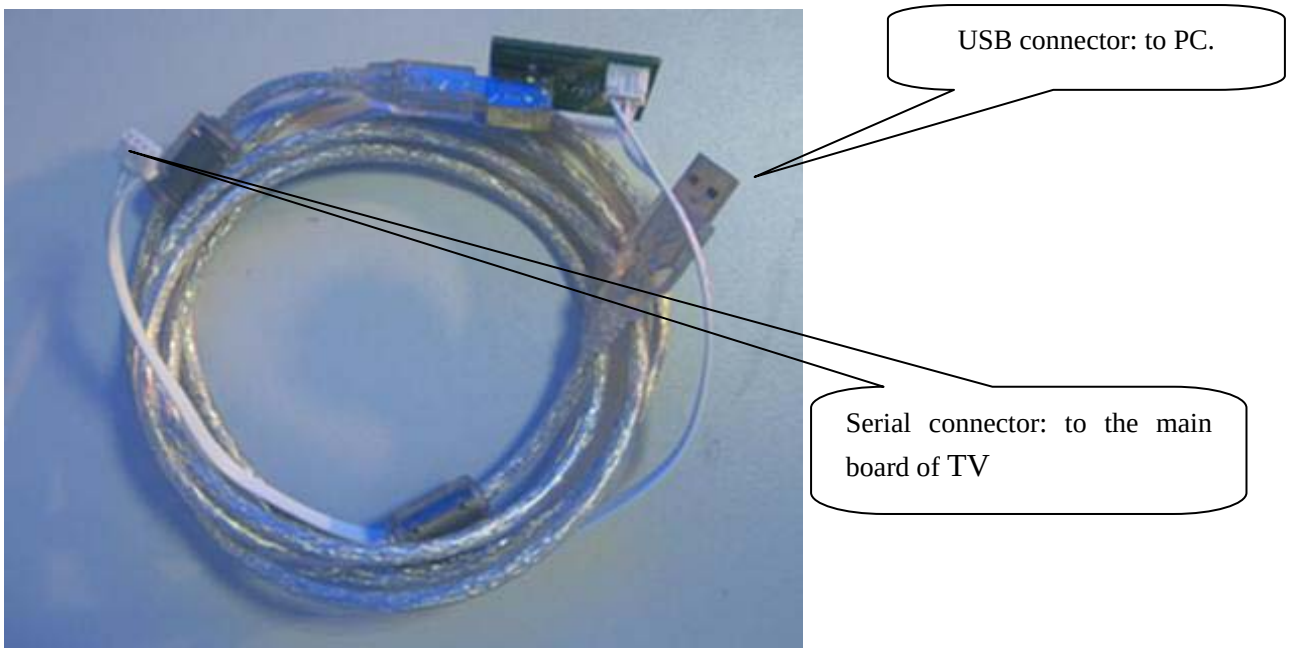
, install the driver.



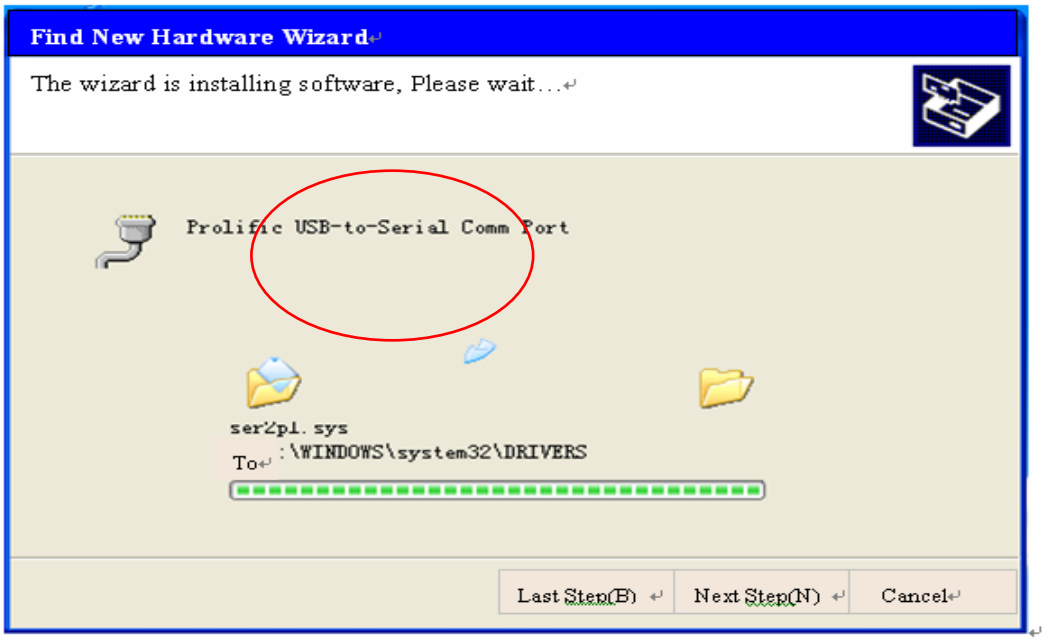
Select the default value, the driver will be installed step by step.

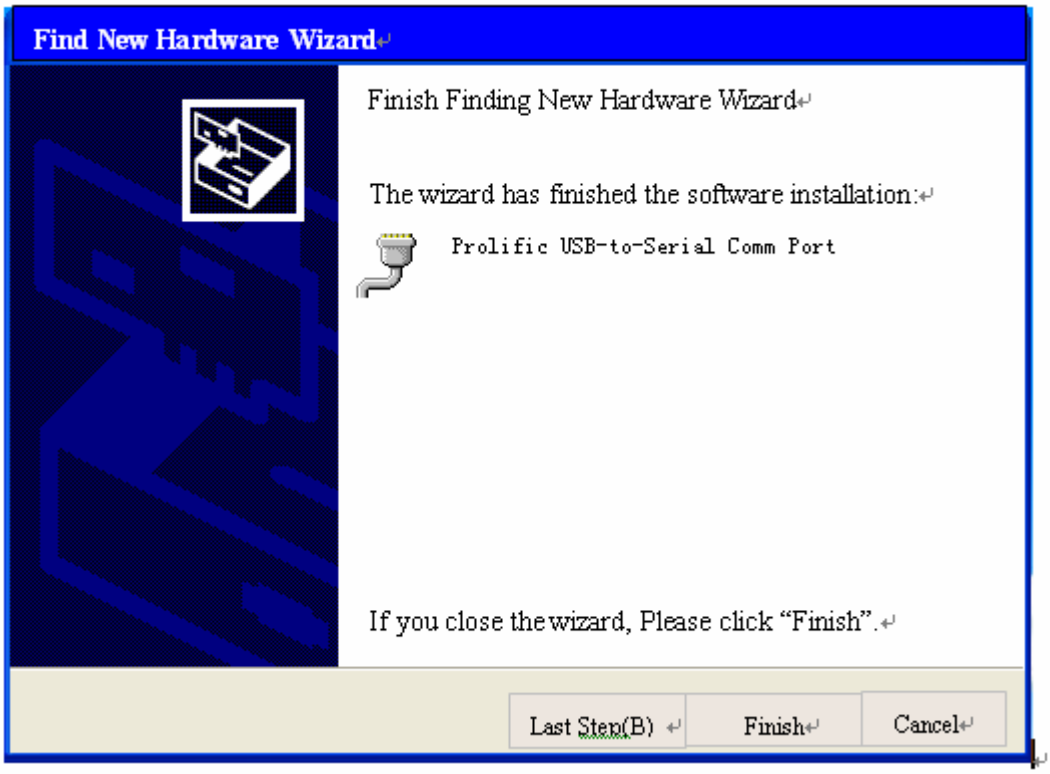
4.1.2 Hardware connecting

Connect the unit to your pc with a USB-to-serial port cable. USB port connects to your pc, and serial port to the TV's RS232 port.



For the first connecting, the pc will recognize and automatically install the USB device. The process is just like the installation of a mini disk, see the following picture.





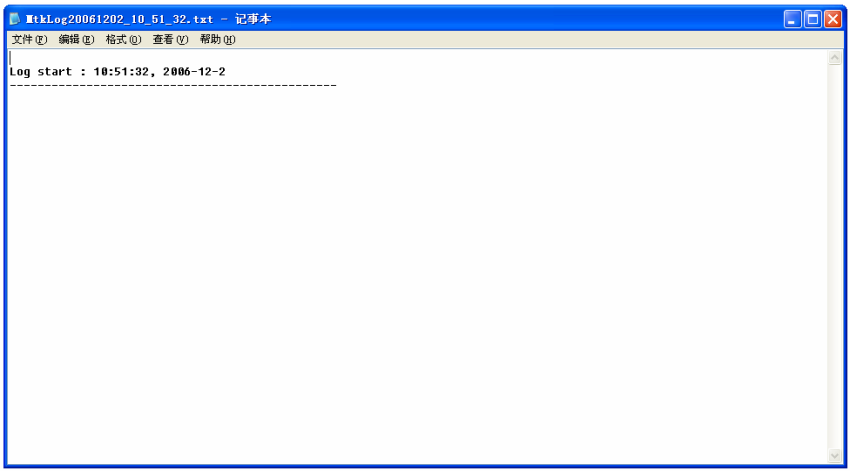
4.2 Upgrading with the MtkTool

MTKtool is a green program needing no installation. It is saved in the folder

MTKTOOL_20061027

. There are five folders/files in this folder altergether.

The MtkTool using log is restored in the MtkLog folder. It records the running time and date whenever the tool is used. The log will be a txt file named by the date and time.



After connecting the TV with your PC, double click

icon, open the MtkTool.

If following error appears, it means the related port is not be set properly.

Ignore these errors, click “Confirm” and enter the MtkTool main interface, see the following picture.

Flash chip model

Please refer to follow steps to update the software:

1—Select mode of Flash chip to MT536X as the below picture.

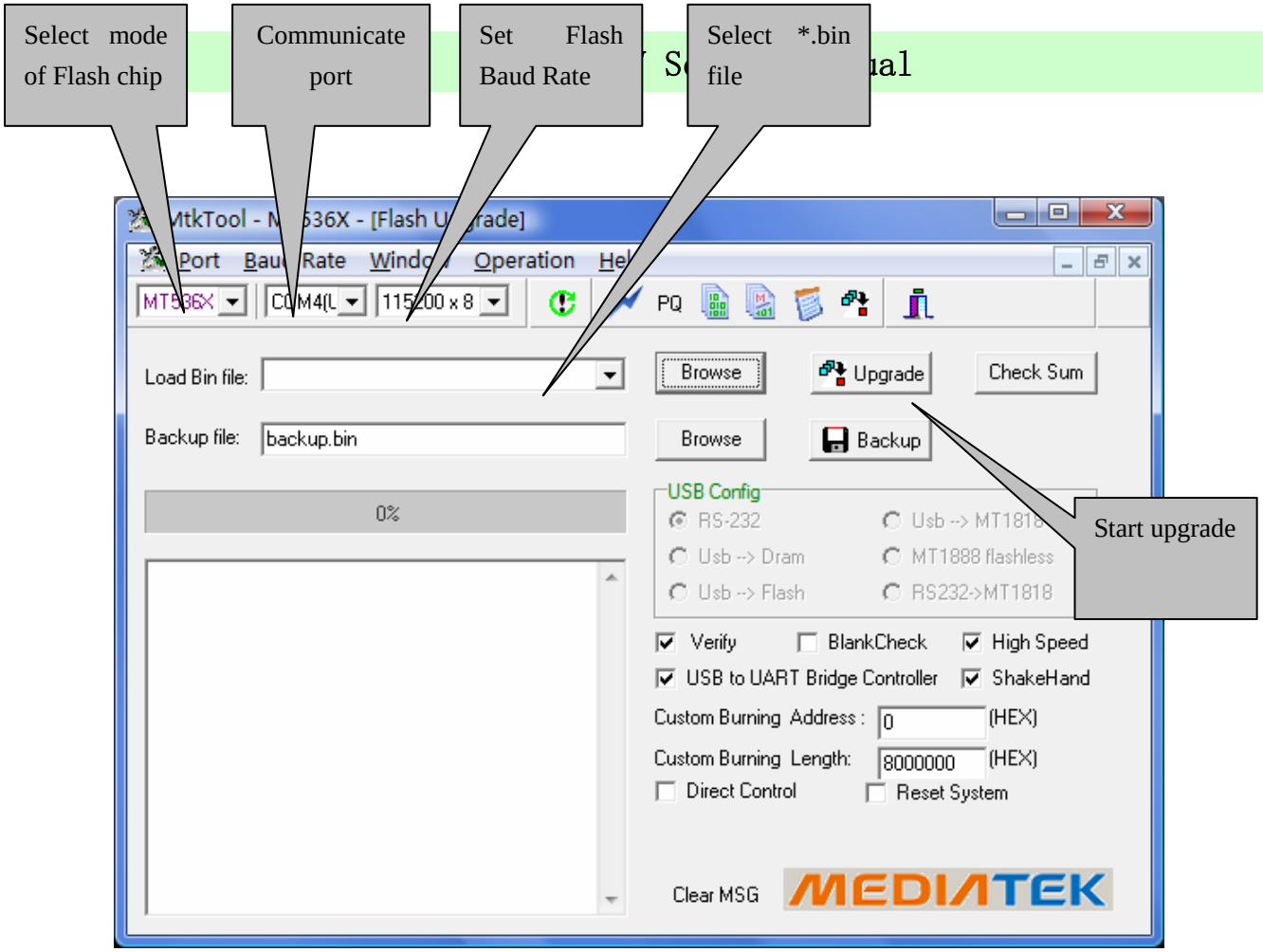
2—Refer to the next page instruction to select the communicate port.

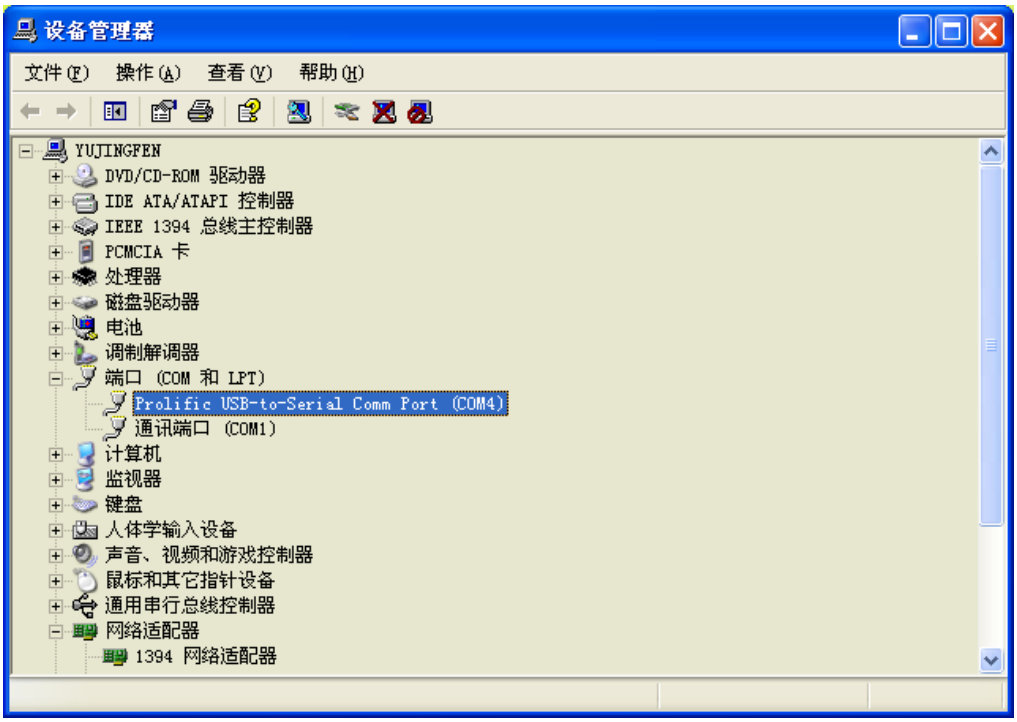
3—Press the icon beside the baud rate and make sure it is green as the below picture.

4—Set the flash baud rate to 115200 as the below picture.

5—Click the browse button to select the *.bin file that will be updated.

6—Click the “start” button to update software.

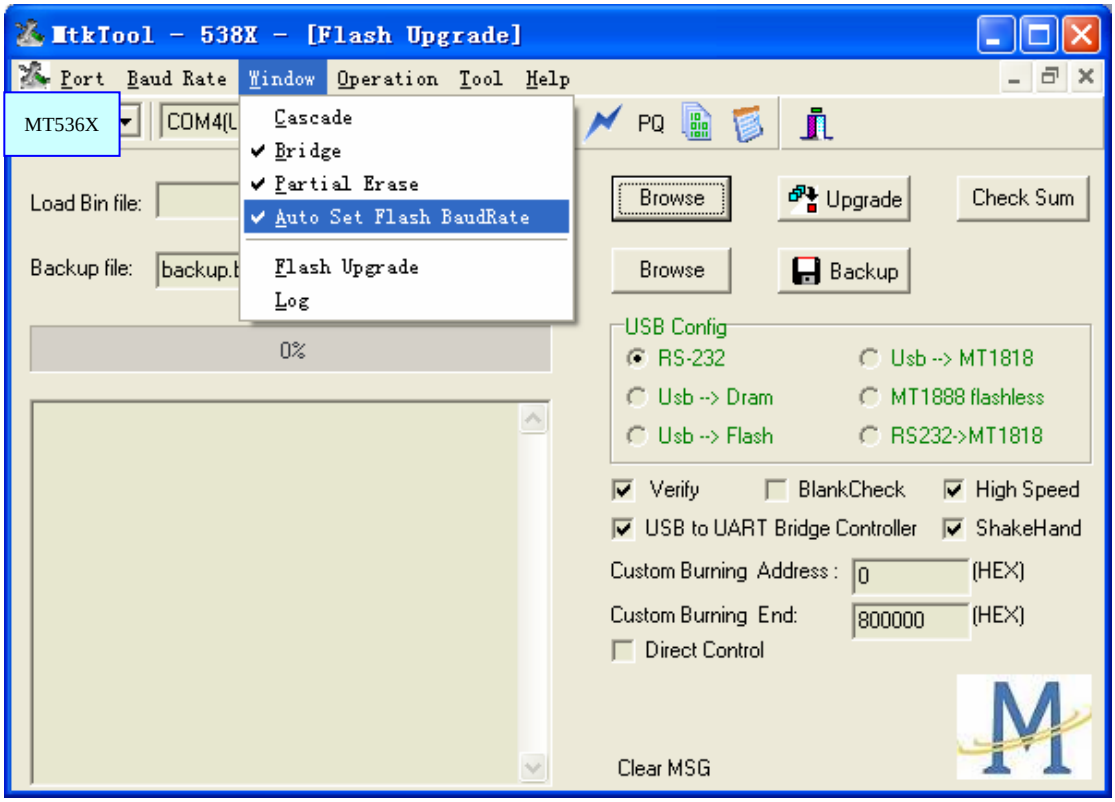




Open “Device Manager” and find which port is connected with the TV. In above picture, COM4 is connected to the TV; so, select “COM4” in the MtkTool main interface. Select the right baud rate according to chip model. For this unit(chip model is MT536X), select 115200.*8。 “Auto Set Flash

BaudRate”

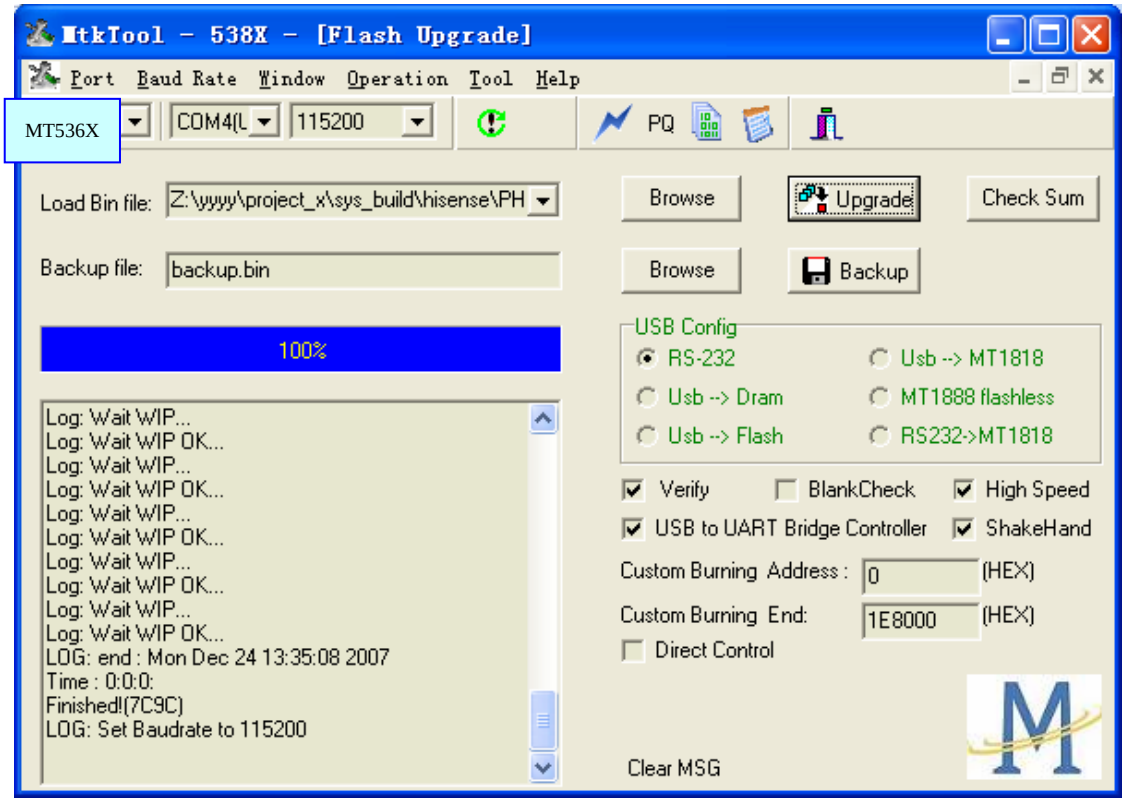
Note: Where or not click the “Auto Set Flash Baud Rate” in the “window” menu depends on the chip type. If the flash chip does not support high speed transport, do not select this option; otherwise, reserve the selected mood.



Click “Browse” button, find the upgrading program file, and select it. Press “Upgrade” button and start upgrading.

The following interface appears on the screen, indicating upgrading successfully.

MT536X

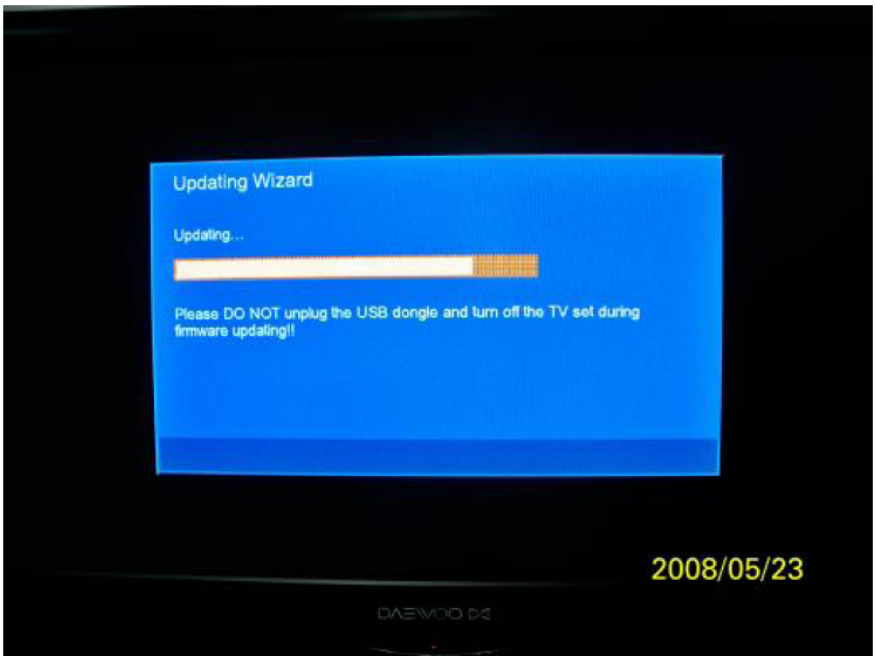

MtkTool - 538X - [Flash Upgrade]
Port Baud Rate Window Operation Tool Help
COM4(L
115200
PQ
Load Bin file:
Z:\yyyy\project_x\sys_build\hisense\PH
Browse
Upgrade
Check Sum
Backup file:
backup.bin
Browse
Backup
100%
Log: Wait WIP...
Log: Wait WIP OK...
Log: Wait WIP...
Log: Wait WIP OK...
Log: Wait WIP...
Log: Wait WIP OK...
Log: Wait WIP...
Log: Wait WIP OK...
Log: Wait WIP...
Log: Wait WIP OK...
LOG: end : Mon Dec 24 13:35:08 2007
Time : 0:0:0:
Finished!(7C9C)
LOG: Set Baudrate to 115200
USB Config
RS-232
Usb --> MT1818
Usb --> Dram
MT1888 flashless
Usb --> Flash
RS232->MT1818
Verify
BlankCheck
High Speed
USB to UART Bridge Controller
ShakeHand
Custom Burning Address :
0
(HEX)
Custom Burning End:
1E8000
(HEX)
Direct Control
Clear MSG

4.3 Upgrading with the USB

MT5303C Series can update with USB directly, the Main software should named his_upgrade.pkg。Turn on the TV then Insert the USB .

The following appear:

Choose “YES”on the screen and press the ‘OK’button on the remote control, Starting upgrade About 40 seconds.



After Upgrading, the following appear:

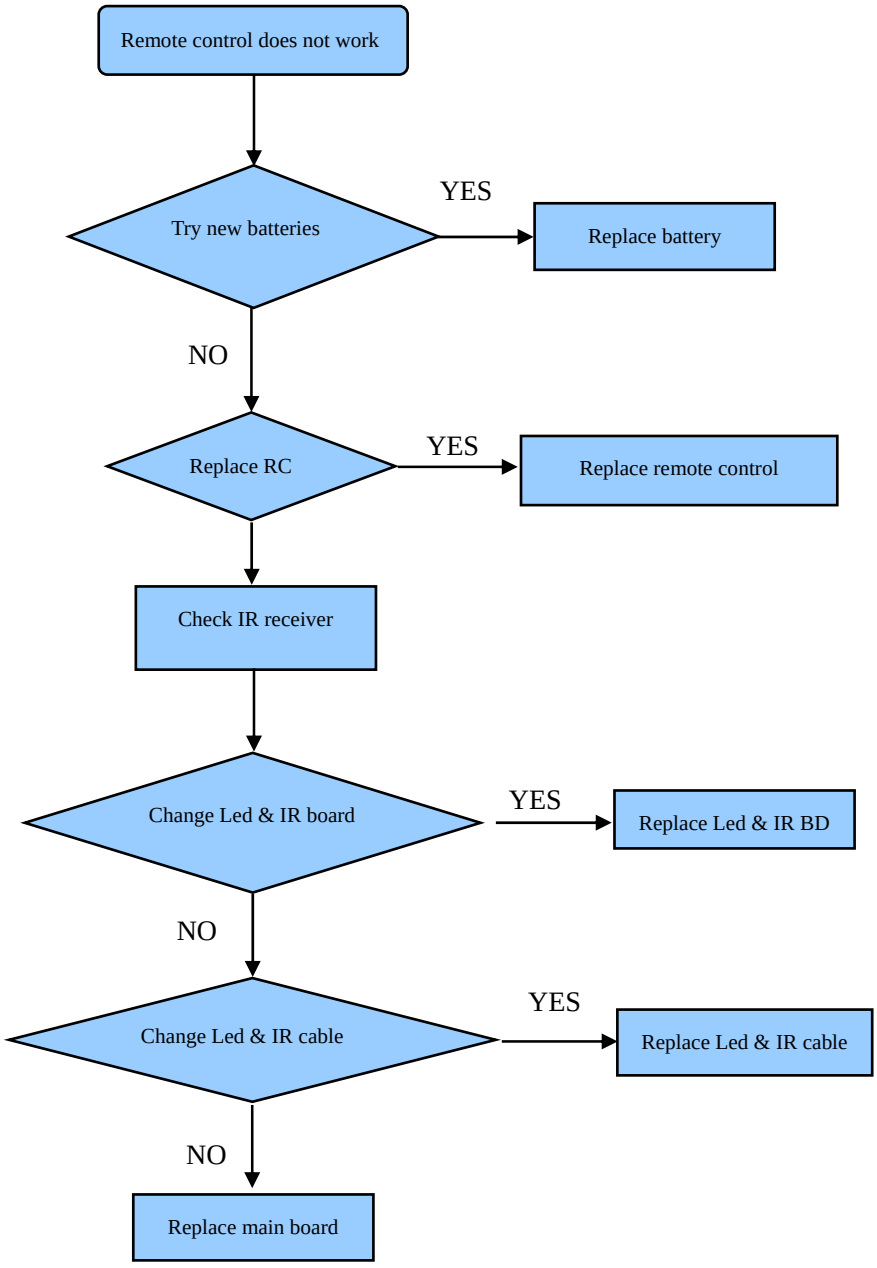
Power off the TV and pull out the USB then restart the TV. The new software start working.

If software upgrading defeated, First turn off the TV.insert the USB and restart the TV.

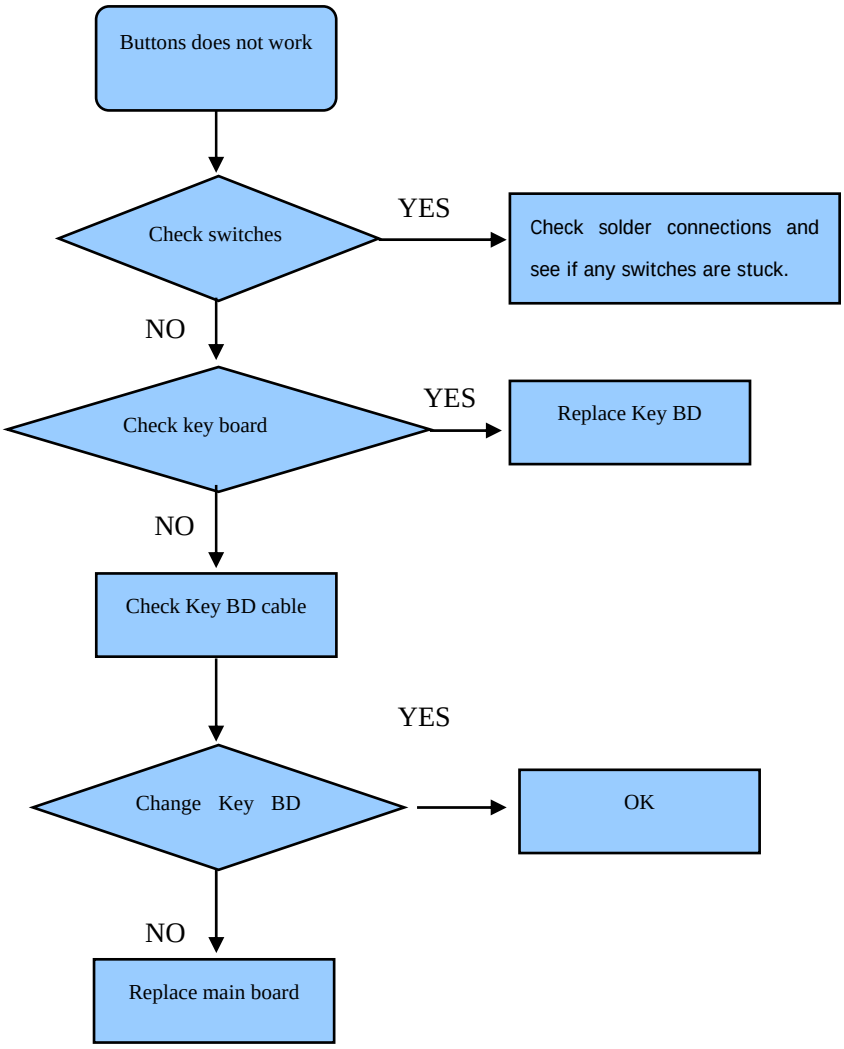
It can automatic upgrade. nothing on the screen ,The indicator led is red. When upgrading is successful ,the indicator led turns blue. The system auto start up.

5. Troubleshooting

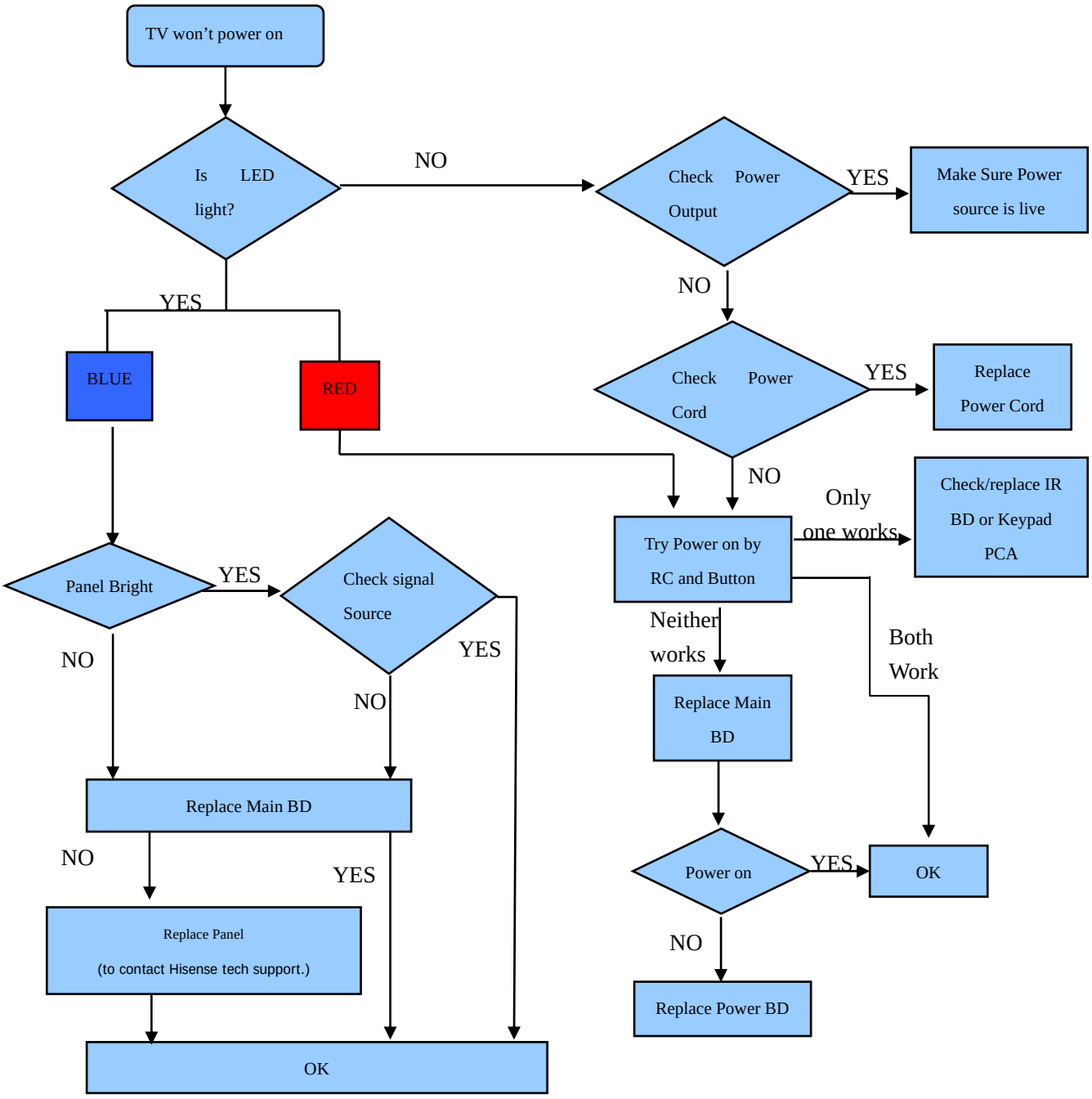
5.1 Troubleshooting for Remote Control



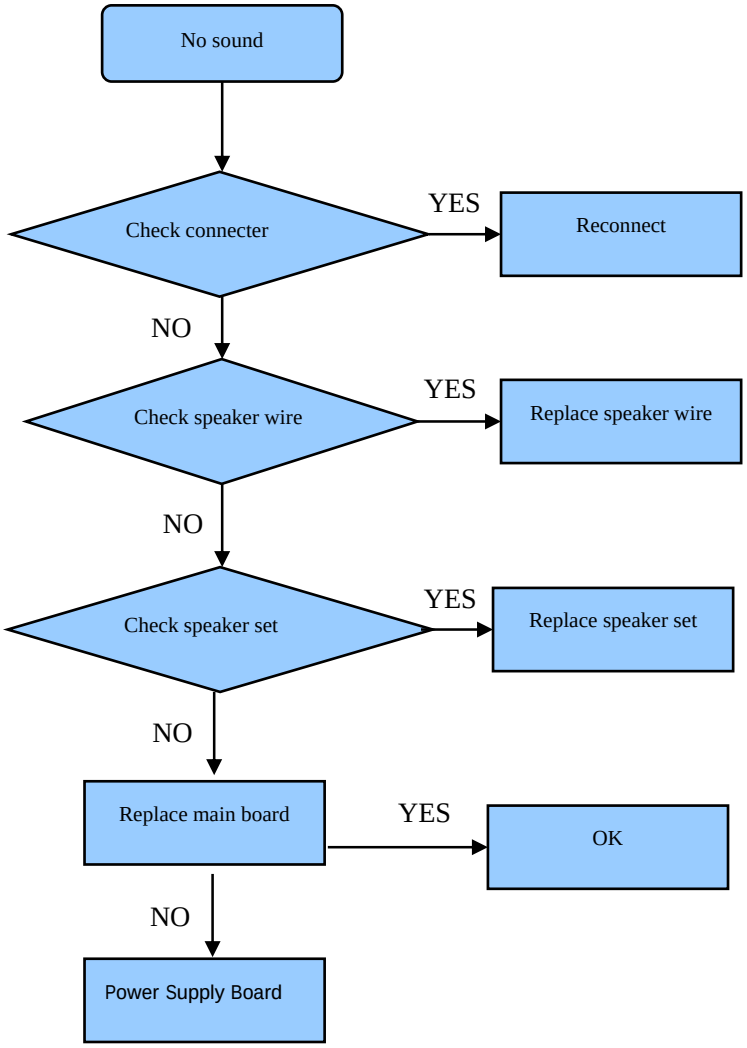
5.2 Troubleshooting for Function Key



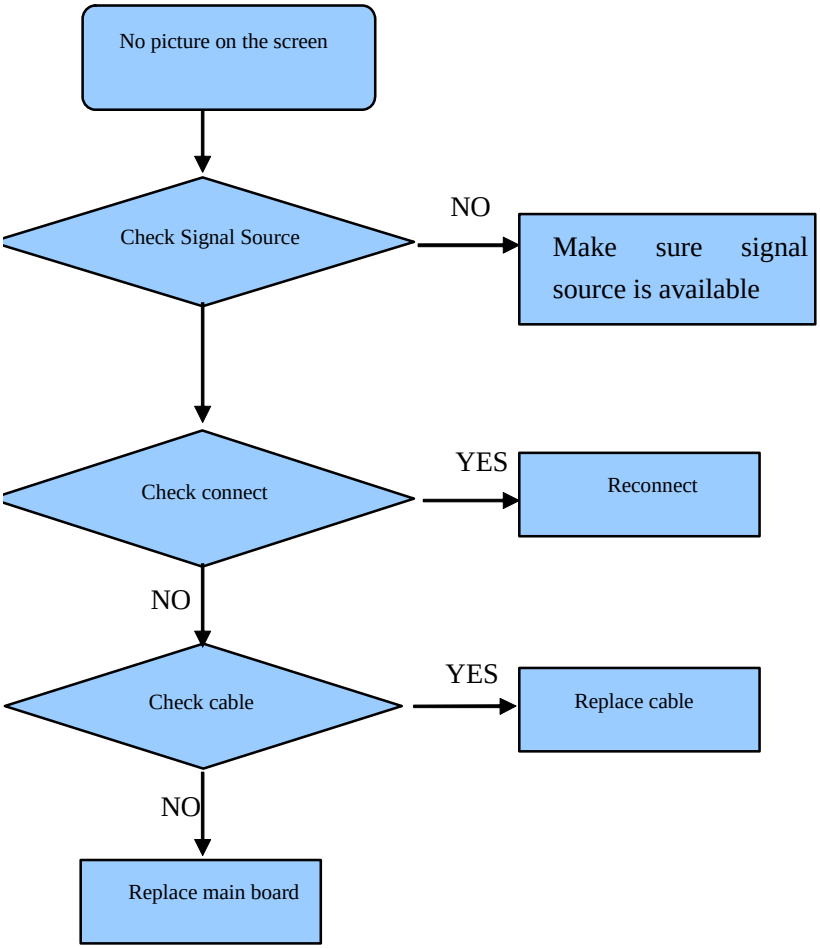
5.3 TV won't Power On



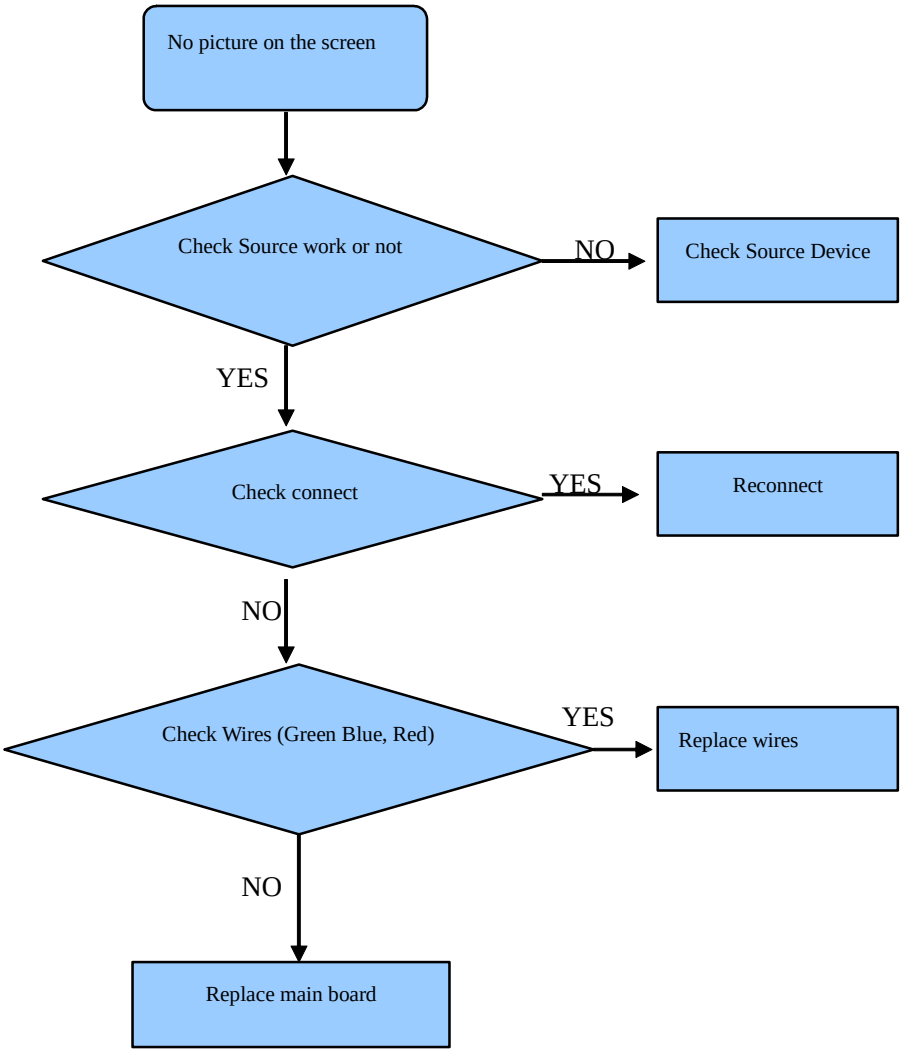
5.4 Troubleshooting for Audio



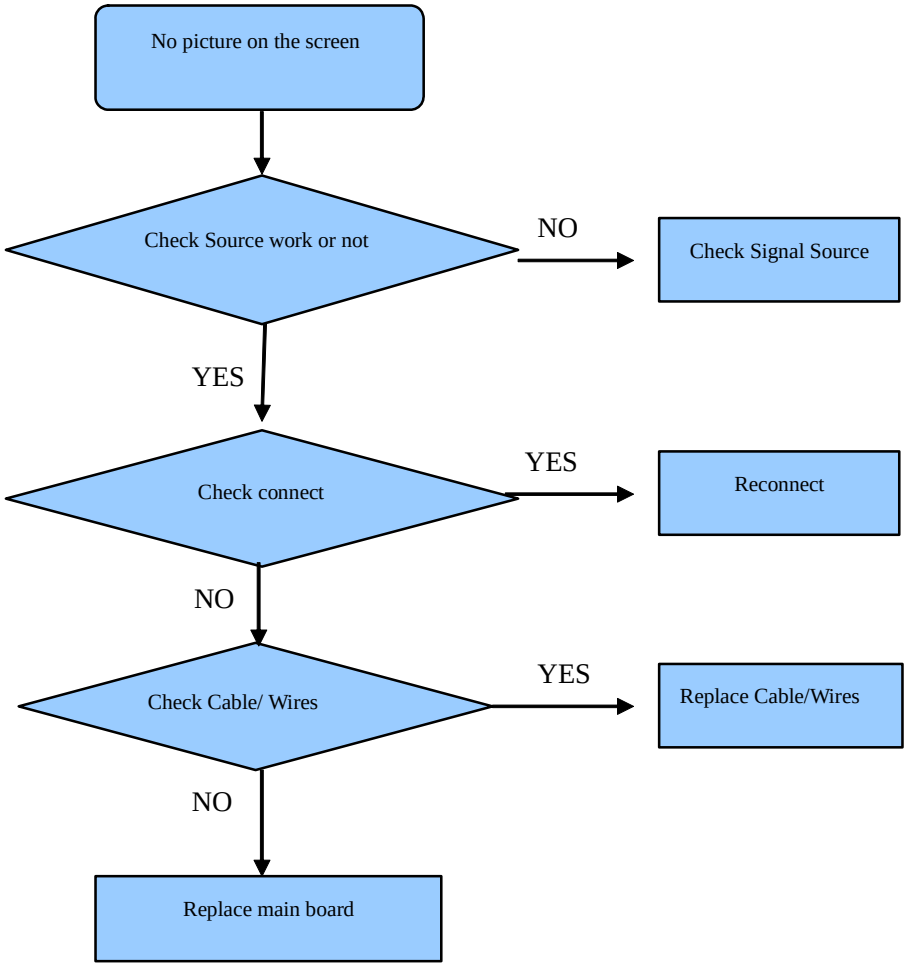
5.5 Troubleshooting for TV/VGA/HDMI input



5.6 Troubleshooting for YPbPr input

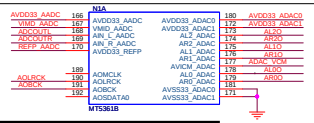


5.7 Troubleshooting for Video/S-Video input

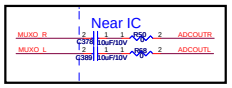


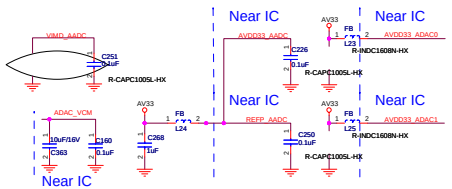
6. Explode View and Explode Bom List

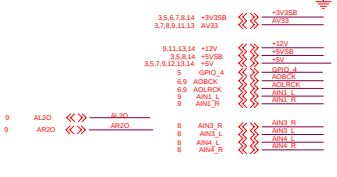
7. Schematic circuit diagram

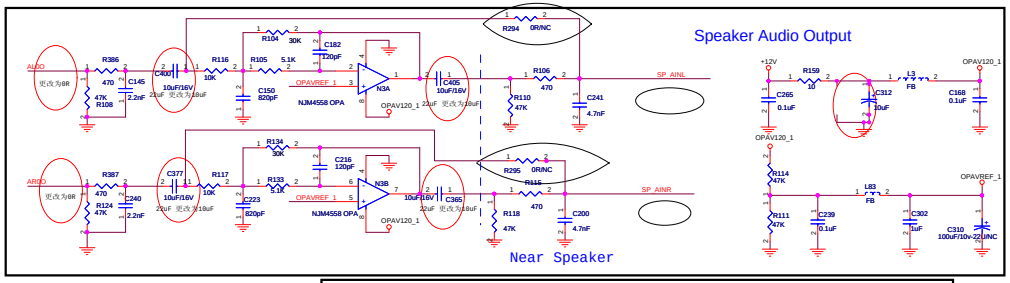


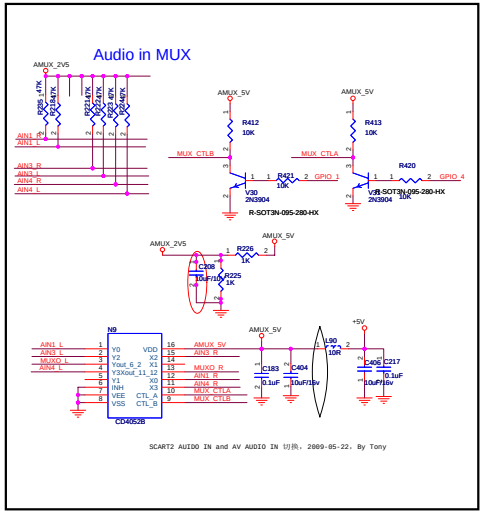
	Output Path 1
A10	Head Phone
A20	SCART
A00	Speaker out







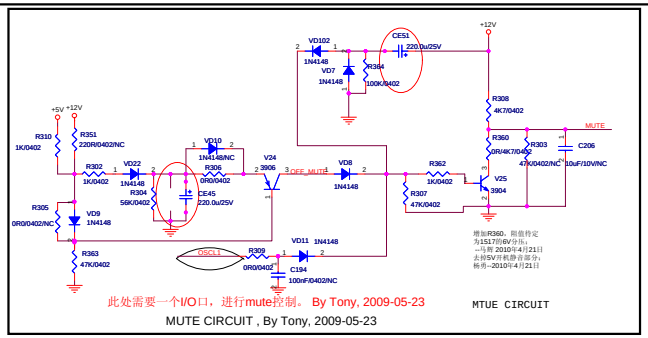


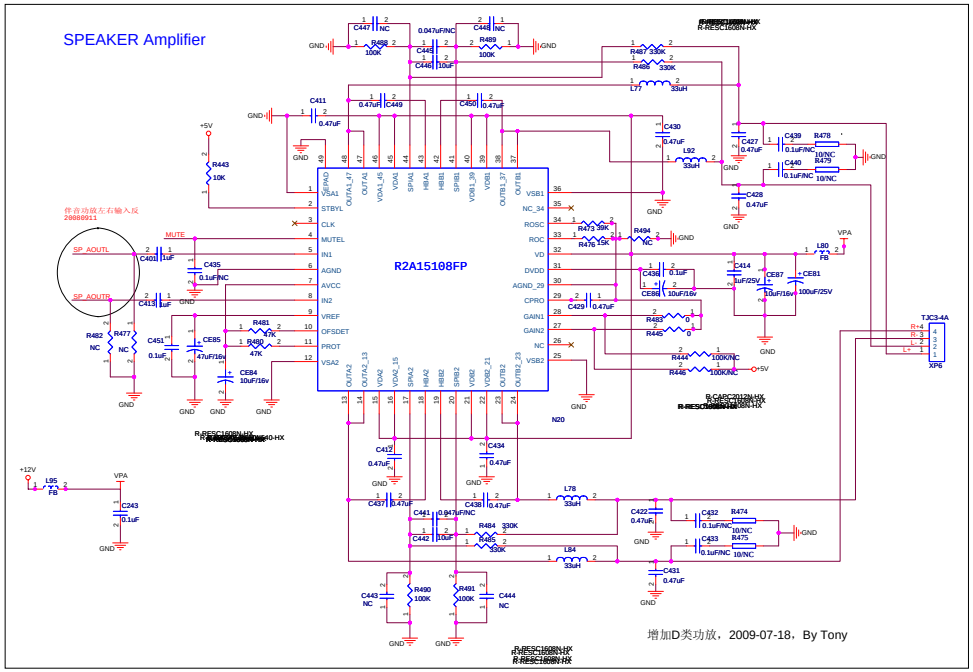


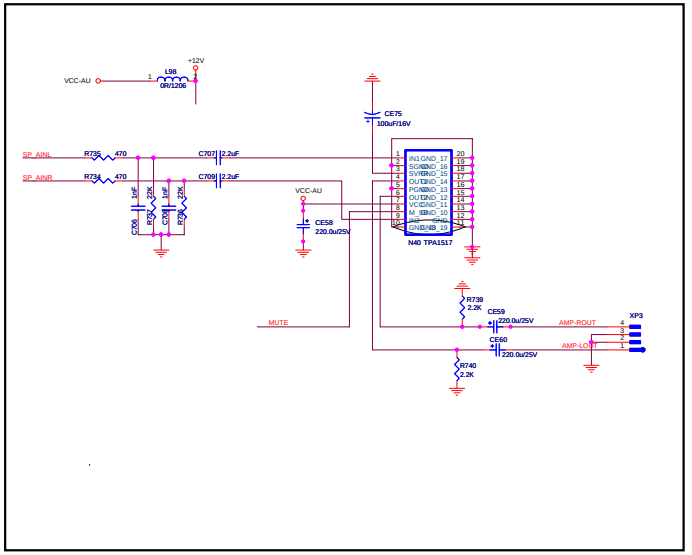
Near Speaker

SP_AINL SP_AOUTL
SP_AINR SP_AOUTR

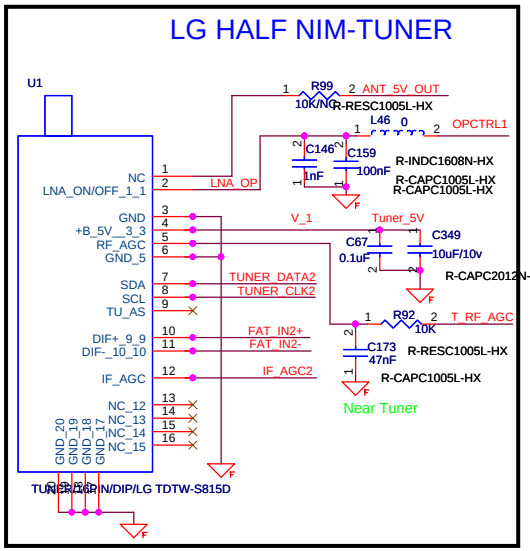
Amplifier Gain_dB_	AGAIN1	AGAIN0
20	0	0
26	0	1
32	1	0
36	1	1

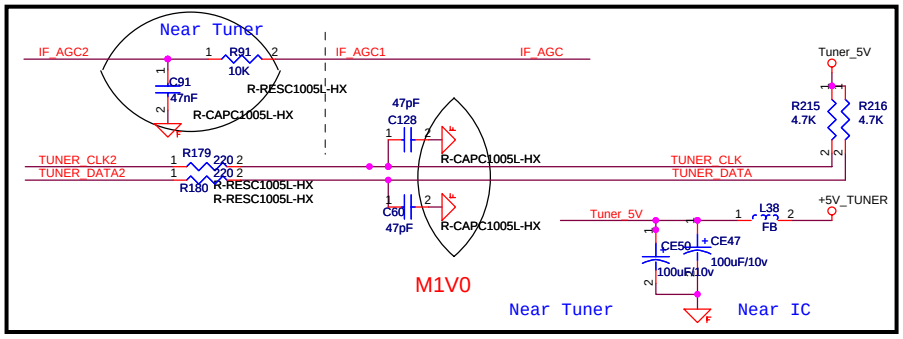


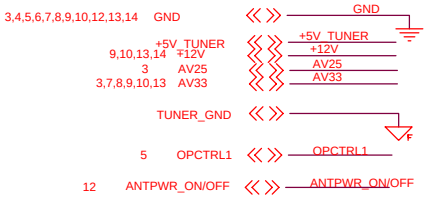


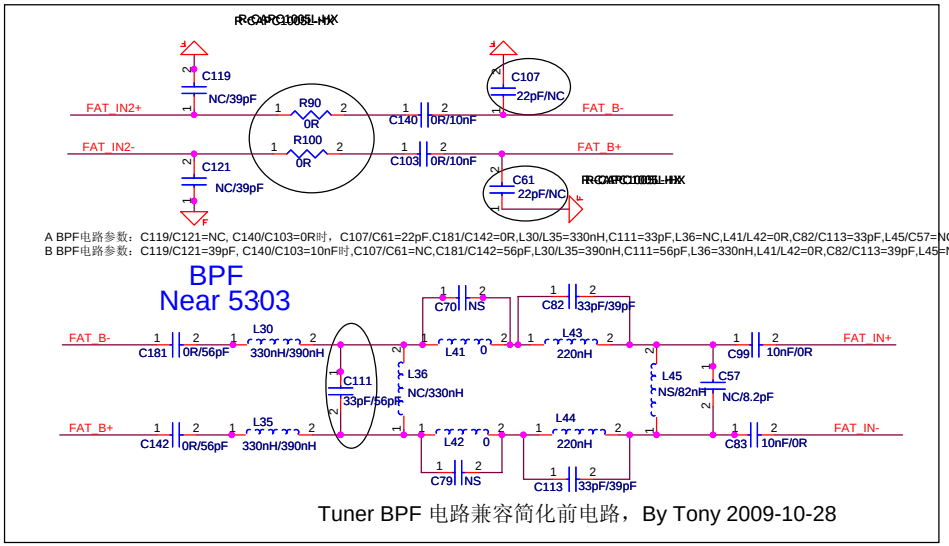


ROUTE SYMMETRICALLY

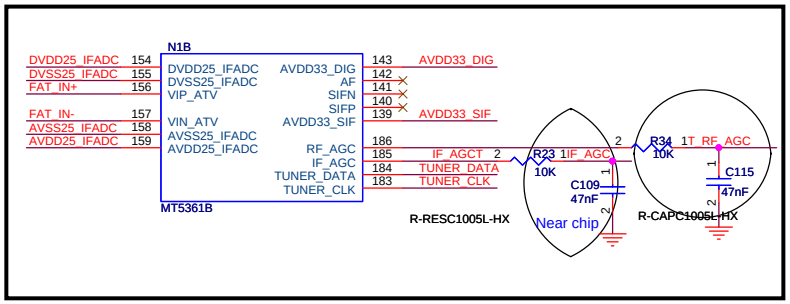


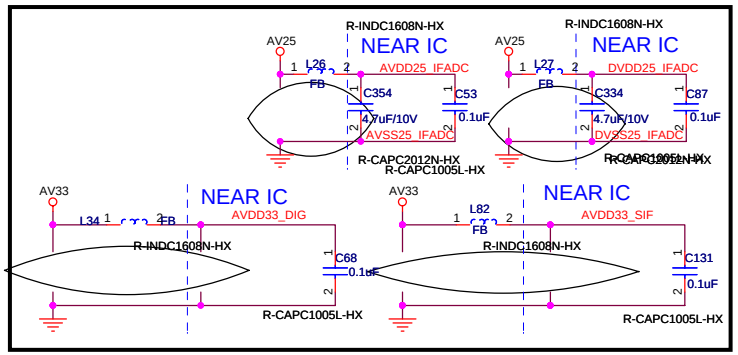




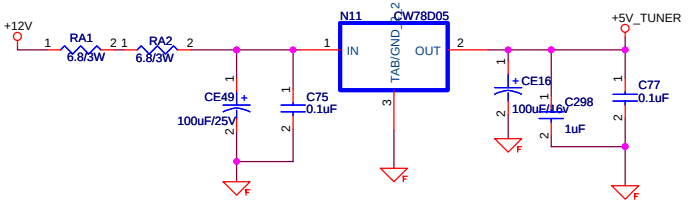


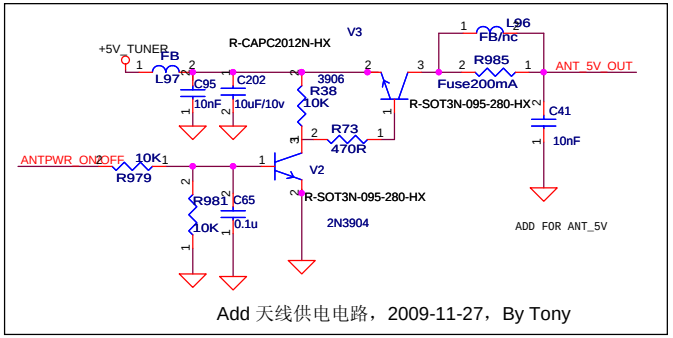
Tuner BPF 电路兼容简化前电路，By Tony 2009-10-28





TUNER POWER +5V_TUNER





Add 天线供电电路，2009-11-27，By Tony

tuner不分地，去掉 L39 L40 L61 L62 L63 L64 L65 L66 L74 L76，2009-08-12，By Tony

MT5361 _LQFP_ _DDR1_- 2 LAYERS
MODEL NAME:MT5361 M6-V1

5360 GPIO Definition

PIN NAME	NET NAME	Function define
GPIO_0	GPIO_0	CI_INT / monitor[5]
GPIO_1	GPIO_1	4052 MUX control
GPIO_2	GPIO_2	USB OC TAG / monitor[7]
GPIO_3	GPIO_3	Back_Light_ON/OFF / monitor[8]
GPIO_4	GPIO_4	4052 MUX control
GPIO_5	GPIO_5	HDMI SWTICH
GPIO_6	GPIO_6	8295 RESET
GPIO_7	GPIO_7	CI-8295 chip select
ADIN0	PWRDET	Power Detection
ADIN1	KEYPAD	KEYPAD1
ADIN2	ADIN2	SCART2 FS
ADIN3	ADIN3	SCART1_Fast_Switch1
ADIN4	ADIN4	LED use
ADIN5	ADIN5	KEYPAD2
OPCTRL0	OPCTRL0	uP Debug_8032_TX_ / monitor[25]
OPCTRL1	OPCTRL1	uP Debug_8032_RX_ / monitor[26]
OPCTRL2	OPCTRL2	strap/HDMI_HPD / monitor[27]
OPCTRL3	OPCTRL3	strap/VGA/HDMI_EEPROM_WP / monitor[28]
OPCTRL4	OPCTRL4	strap / USB PWR ENABLE / monitor[29]
OPCTRL5	OPCTRL5	strap/SYSTEM_EEPROM_WP / monitor[30]
OPWM0	OPWM0	strap / PCR / monitor[2]
OPWM1	OPWM1	strap / Dimming / monitor[3]
OPWM2	OPWM2	strap / LVDS POWER ON/OFF / monitor[4]
OSDA0_I/O_	OSDA0	SYSTEM_I2C_SDA / monitor[0]
OSCL0_O_	OSCL0	SYSTEM_I2C_SCL / monitor[1]
OSDA1_I/O_	OSDA1	HDMI MUX source select
OSCL1_O_	OSCL1	Audio Amp. MUTE / Test-in[3]
TUNER_DATA	TUNER_DATA	TUNER_I2C_SDA / monitor[13]
TUNER_CLK	TUNER_CLK	TUNER_I2C_SCL / monitor[12]
IF_AGC	IF_AGCT	Tuner_IF_AGC / monitor[14]
RF_AGC	RF_AGC	Tuner_RF_AGC / monitor[15]
OIRI_I_	OIRI	IR_Input
U0TX_O_	U0TX	UTX0 / VGA_I2C_SDA
U0RX_I_	U0RX	URX0 / VGA_I2C_SCL
OPWRSB_O_	OPWRSB	Power Module ON/OFF
ORESET__I_	ORESET#	Reset
HDMI_SDA0	HDMI_SDA0	HDMI_I2C_SDA
HDMI_SCL0	HDMI_SCL0	HDMI_I2C_SCL
PWR5V_0	PWR5V_0	HDMI Power / monitor[24]
HDMI_CEC	CEC_T	CEC
VCXO	VCXO	Reserved
ALIN	ALIN	Digital Audio IN / monitor[9]
ASPDIF	ASPDIF	Digital Audio OUT / monitor[10]
AOMCLK_I/O_	AOMCLK	I2S
AOLRCK_O_	AOLRCK	strap/I2S
AOBCK_O_	AOBCK	strap/I2S
AOSDATA0_O_	AOSDATA0	I2S / monitor[11]
JTDO _O_	JTDO	
JTMS _I_	JTMS	
JTDI _I_	JTDI	
JTCK _I_	JTCK	
JTRST_ _I_	JTRST#	

PIN NAME	NET NAME	Function define
POCE0__O_/S0-CE	POCE0#	SerialFlash CE#
POCE1__O_/S1-CE	POCE1#	NANDFlash CE# / Test-in[3]
POOE__O_/S-CLK	POOE#	SerialFlash RE# / NAND Flash RE# / 8295 NAND I/F
PARB_	PARB#	NANDFlash RB# / 8295 NAND I/F / Test-in[14]
POWE__O_	POWE#	NANDFlash WE# / FCI_MS_SCLK / 8295 NAND I/F / Test-in[15]
PAALE _O_	PAALE	NANDFlash ALE / FCI_MS_D0 / 8295 NAND I/F / Test-in[16]
PACLE _O_	PACLE	NANDFlash CLE / FCI_MS_D1 / 8295 NAND I/F / Test-in[17]
PDD0_I/O_/S-Din	PDD0	SerialFlash PDD0 / NAND Flash PDD0 / 8295 NAND I/F
PDD1_I/O_/S-Dout	PDD1	SerialFlash PDD1 / NAND Flash PDD1 / 8295 NAND I/F
PDD2_I/O_	PDD2	NANDFlash PDD2 / FCI_MS_D3[SD_CMD] / 8295 NAND I/F / Test-in[18]
PDD3_I/O_	PDD3	NANDFlash PDD3 / FCI_MS_D2[SD_D3] / 8295 NAND I/F / Test-in[19]
PDD4_I/O_	PDD4	NANDFlash PDD4 / FCI_SD_D2 / 8295 NAND I/F / Test-in[20]
PDD5_I/O_	PDD5	NANDFlash PDD5 / FCI_SD_D1 / 8295 NAND I/F / Test-in[21]
PDD6_I/O_	PDD6	NANDFlash PDD6 / FCI_MS_BS[SD_D0] / 8295 NAND I/F / Test-in[22]
PDD7_I/O_	PDD7	NANDFlash PDD7 / FCI_SD_CLK / 8295 NAND I/F / Test-in[23]
CI_MDO0	TS_D0_OUT	TS DATA Output / monitor[16]
CI_MCLKO	TS_CLK_OUT	TS Clock Output / monitor[17]
CI_MOVAL	TS_VALID_OUT	TS VALID Output / monitor[18]
CI_MOSTRT	TS_SYNC_OUT	TS Sync Output / monitor[19]
CI_MDI0	TS_D0_IN	TS DATA Input / monitor[20]
CI_MCLKI	TS_CLK_IN	TS Clock Input / monitor[21]
CI_MIVAL	TS_VALID_IN	TS VALID Input / monitor[22]
CI_MISTRT	TS_SYNC_IN	TS Sync Input / monitor[23]

8295 GPIO Definition

PIN NAME	NET NAME	Function define
GPIO_0	CI_GPIO0	TRAP
GPIO_1	CI_GPIO1	TRAP
GPIO_2	CI_GPIO2	Head_Phone_DET#
GPIO_3	CI_GPIO3	Audio_AMP_Shutdown#
GPIO_4	CI_GPIO4	AnySource Bypass Sel
GPIO_5		
GPIO_6	CI_GPIO6	Audio_All_MUTE_CTRL
GPIO_7		
GPIO_8	CI_GPIO8	OVC FLG
GPIO_9	CI_GPIO9	5V CI_VCC Control
GPIO_10		
GPIO_11		
GPIO_12		
GPIO_13		
GPIO_14		

Rev	History	P#	DATE
V1	INITIAL VERSION	14	2008/04/11

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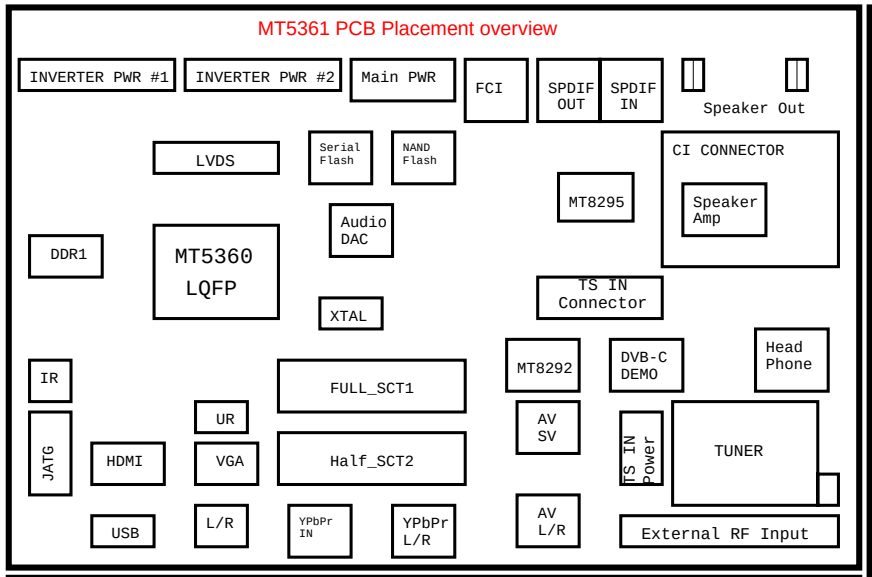
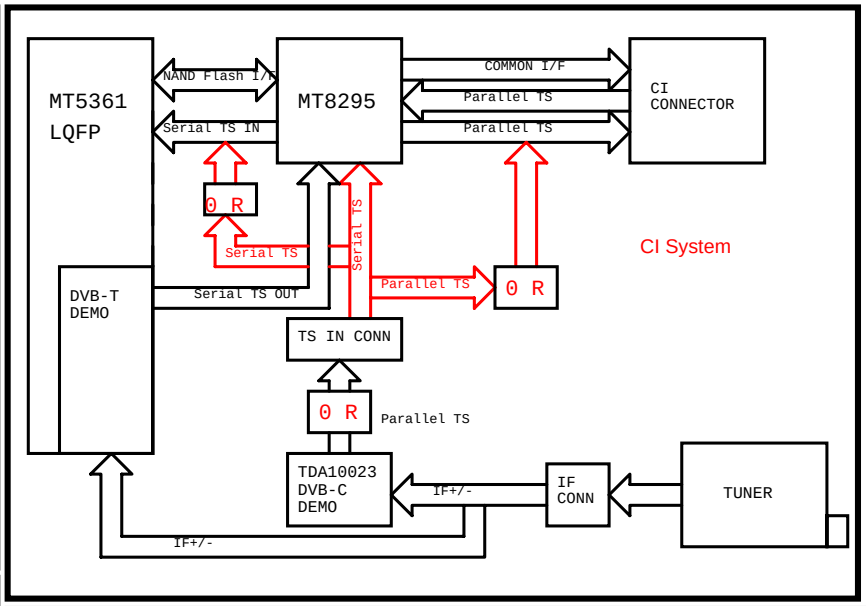
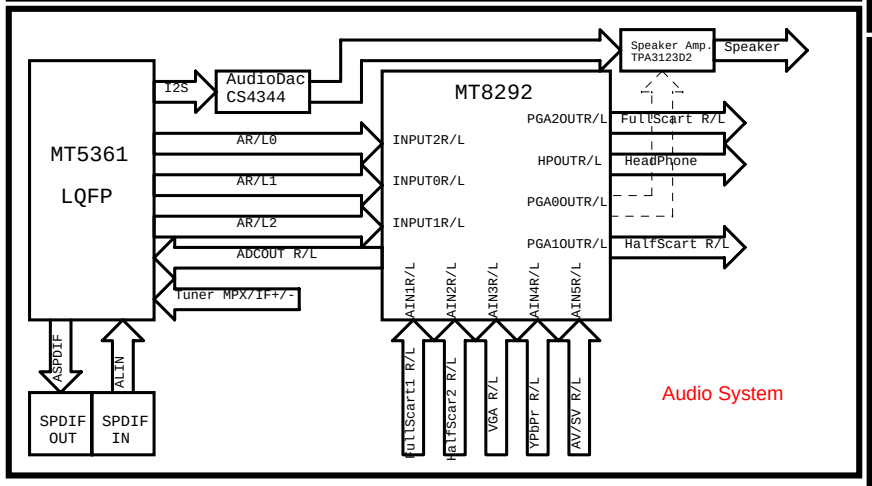
Title: GPIO Config/Modifiy List

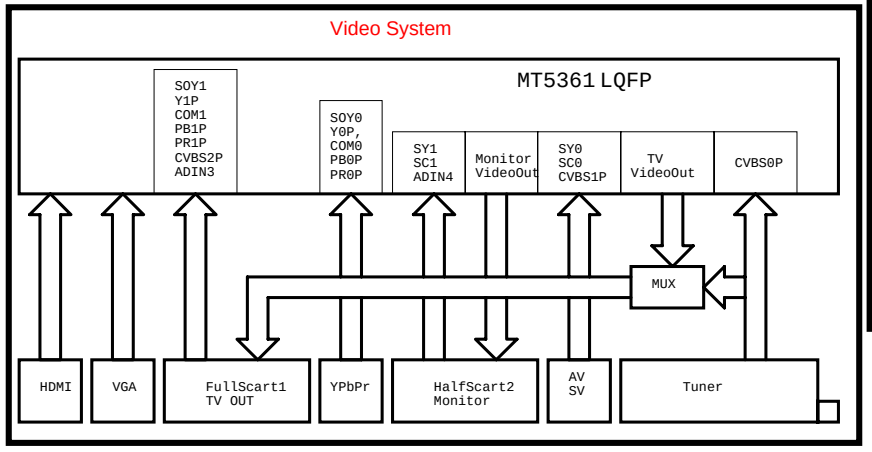
Size: C | Document Number: MT5361 P1V1 | Drawn By: Arda Du <Designer> | Rev: V1

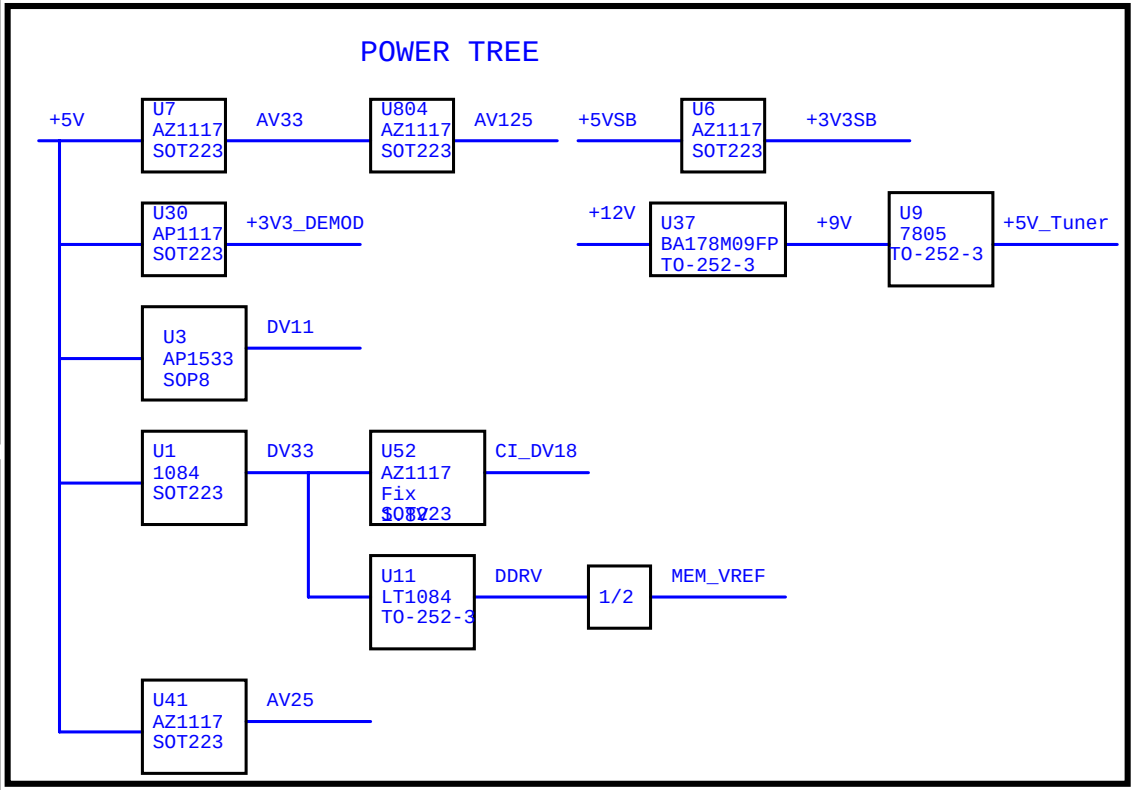
Date: Thursday, May 13, 2010 | Sheet 1 of 14











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Title: Placement/SYS Flow		
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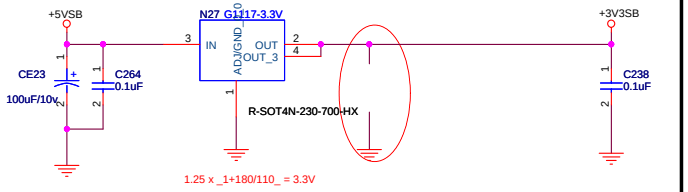
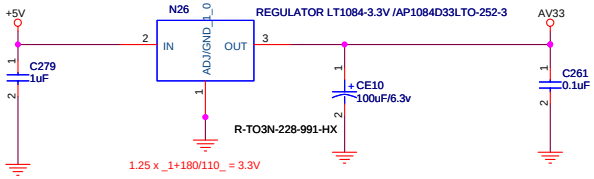
Date: Thursday, May 13, 2010	Drawn: By Ada Du <Designer>	Sheet 2 of 14

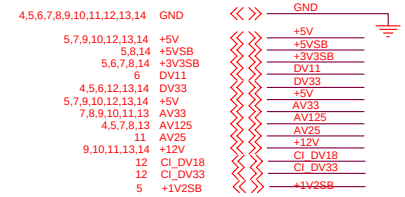
STANDBY POWER +3V3SB



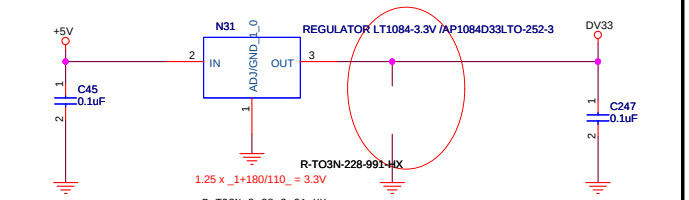
ANALOG POWER AV33



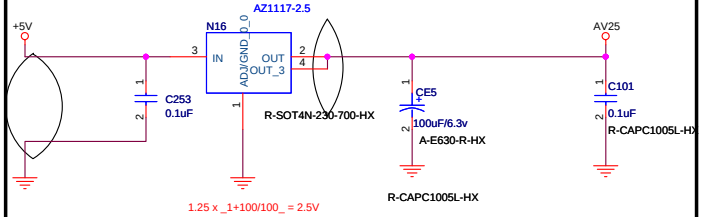
將AV33所使用的LDO由1117更改为1084-3.3，By Tony，2009-10-09



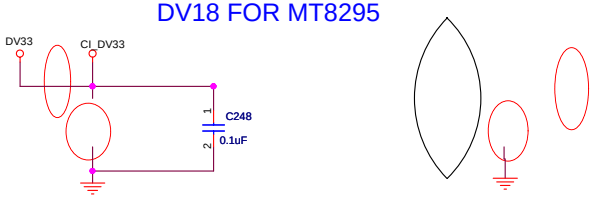
DIGITAL POWER DV33



ANALOG POWER AV25

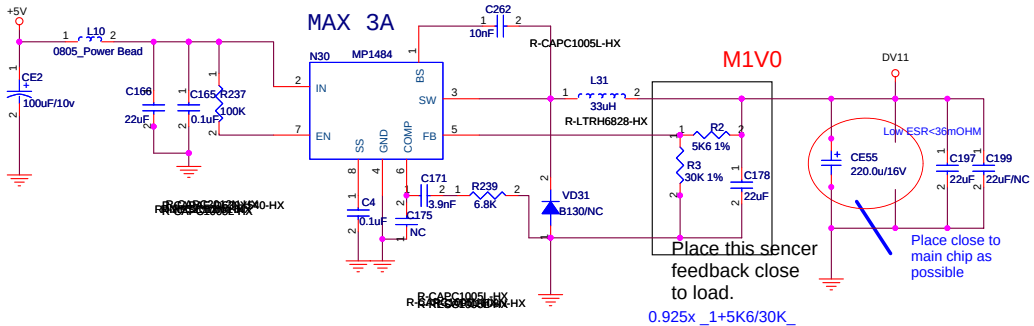


DV18 FOR MT8295



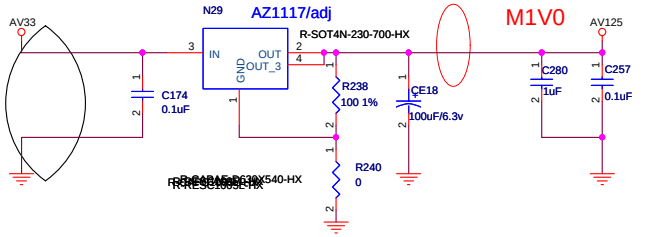
CORE POWER DV11

MAX 3A



use MP1484 for core power supply,2009-06-10,By Tony

ANALOG POWER AV125



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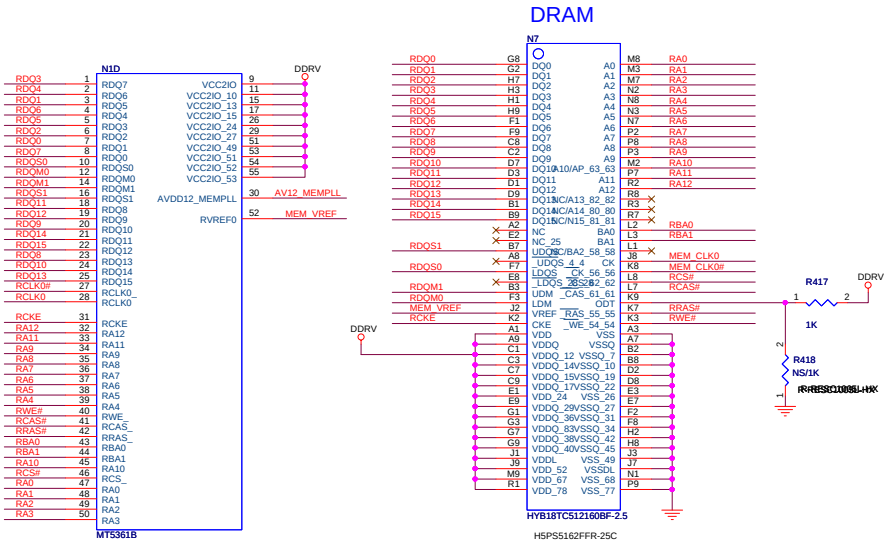
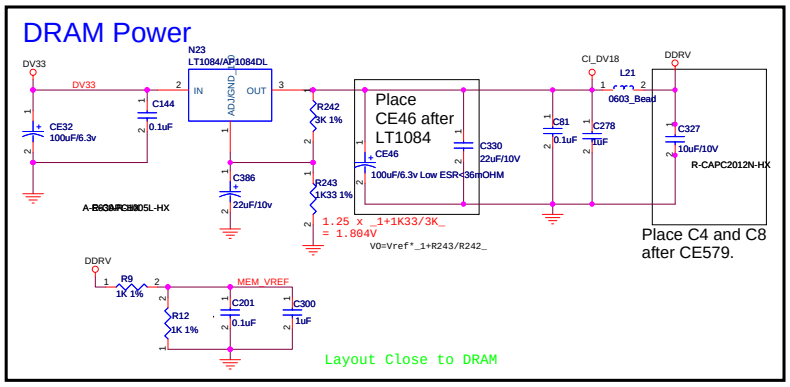
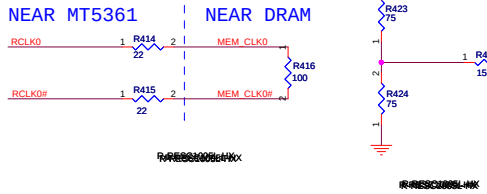
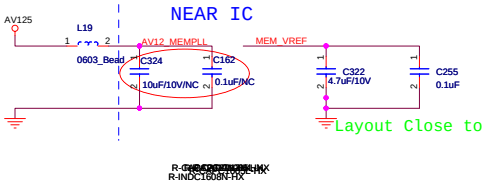
	Size: Custom; Document Number: MT5361 P1-V1	Drawn: <Designer>	Rev: V1
	Date: Thursday, May 13, 2010	Sheet 3 of 14	

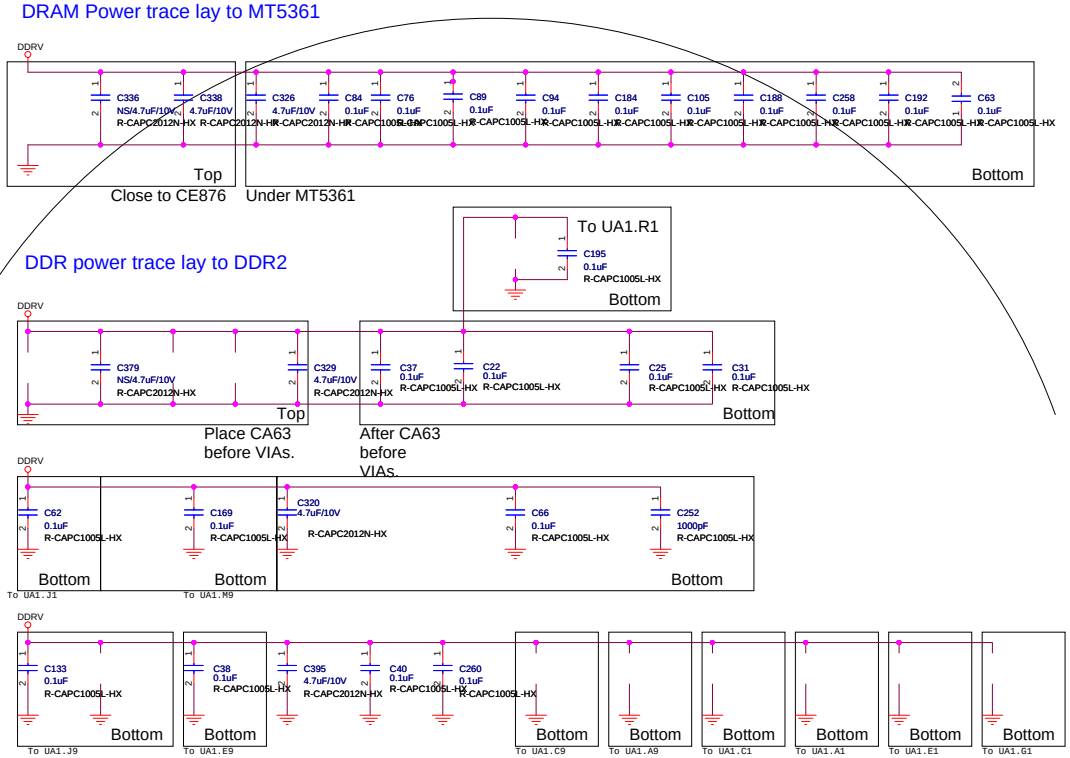
_ DDR2 DRAM Without Termination _











DDR的旁路电容是否可以删除掉一些？2009-05-25

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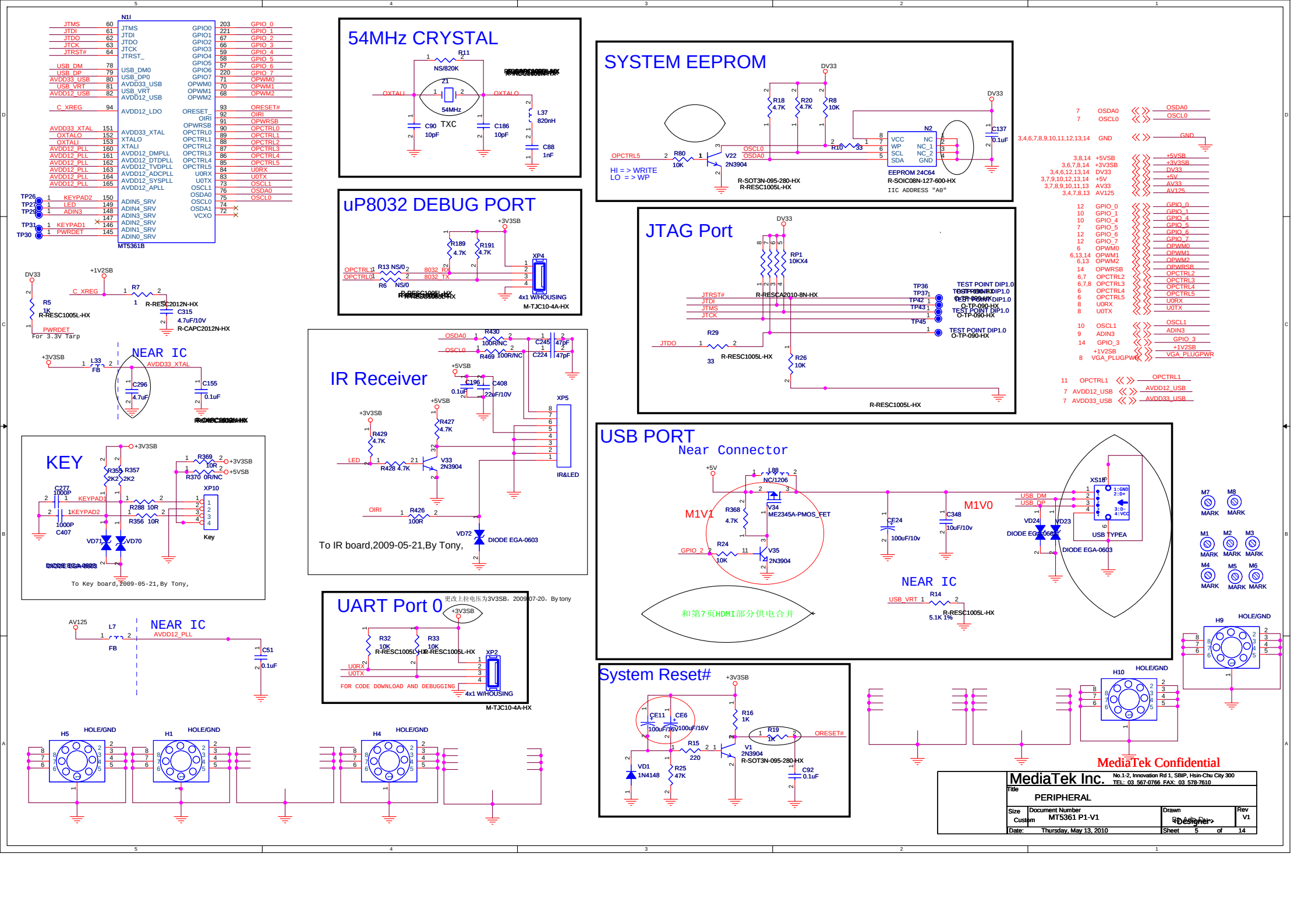
Title: DRAM			
Size: C	Document Number: MT5361 P1-V1	Drawn: By Ada Du <Designer>	Rev: V1
Date: Thursday, May 13, 2010		Sheet 4 of 14	


54MHz CRYSTAL
SYSTEM EEPROM
uP8032 DEBUG PORT
JTAG Port
IR Receiver
To IR board,2009-05-21,By Tony,
USB PORT
Near Connector
KEY
To Key board,2009-05-21,By Tony,
UART Port 0
更改上拉电压为3V3SB，2009-07-20，By tony
FOR CODE DOWNLOAD AND DEBUGGING
System Reset#
和第7页HDMI部分供电合并
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MediaTek Inc.
No.1-2, Innovation Rd 1, SBIP, Hsin-Chu City 300
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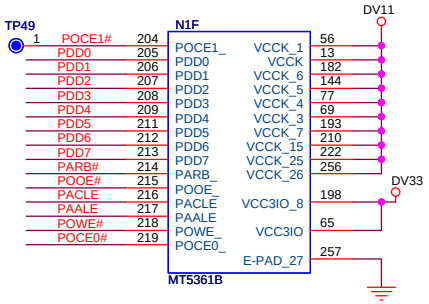
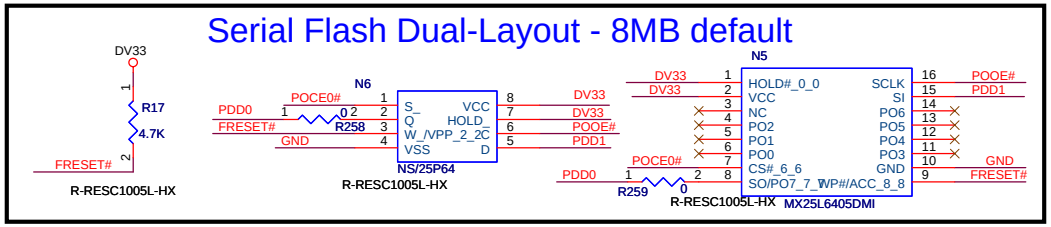
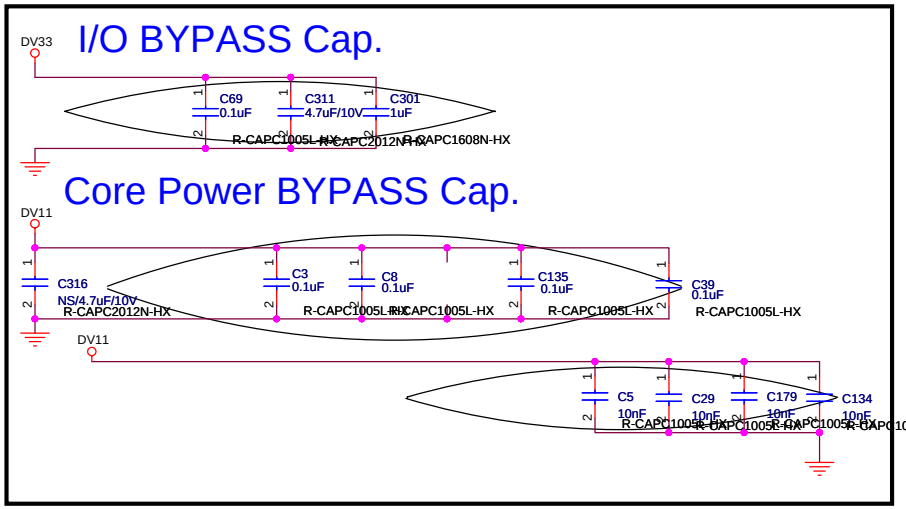
PERIPHERAL
MT5361 P1-V1
Thursday, May 13, 2010
Sheet 5 of 14



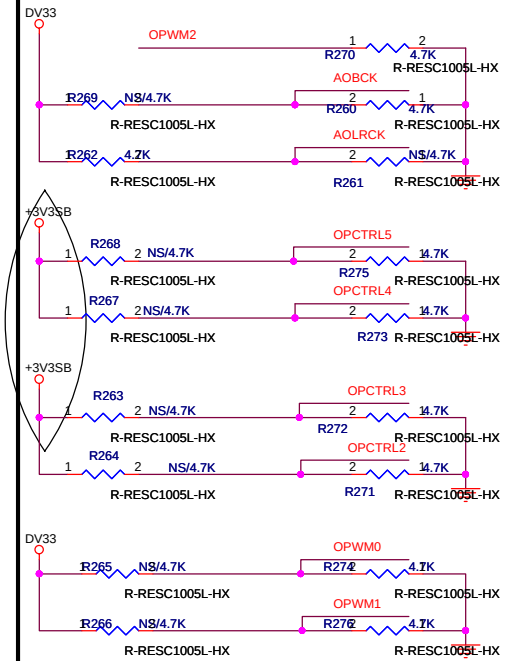
NAND Flash

删除NAND FLASH 2009-08-13 By Tony





MT5361STRAPPING MODE

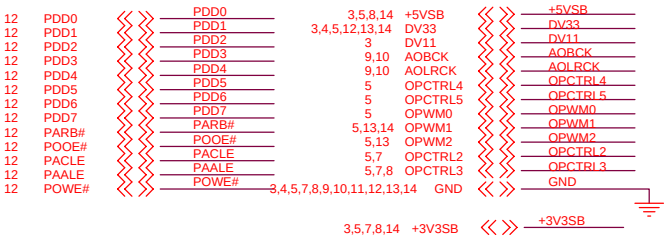


Strapping Mode	OPWM2	AOBCK	AOLRCK
Normal mode	0	0	0
ICE mode	0	0	1
CPU model mode	0	1	0

Trap Mode	OPCTRL5	OPCTRL4
Core Reset 1us	0	0
Core Reset 3.3V	0	1
SCAN mode	1	0
Core Reset 0.9V	1	1

Strapping Mode	OPCTRL3_0_	OPCTRL2_0_
XTAL 54MHz	0	0
XTAL 60MHz	0	1
XTAL 27MHz	1	0
XTAL 30MHz	1	1

Strapping Mode	OPWM0_0_	OPWM1_0_
Nor Boot	0	0
NAND Boot	0	1
large NAND Boot	1	0



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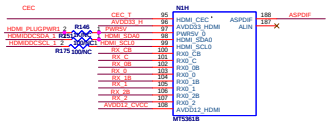
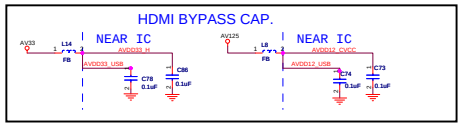
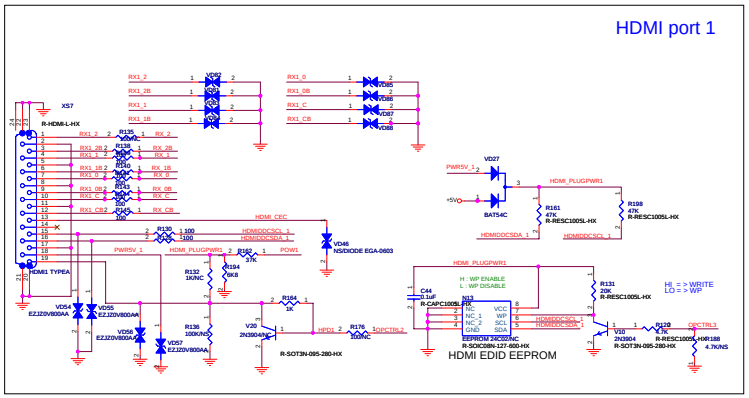
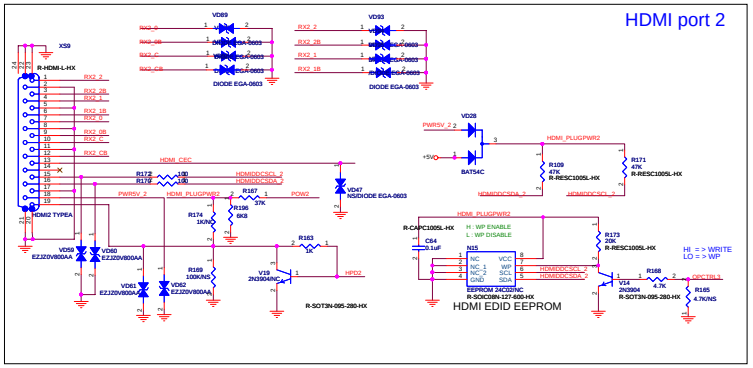
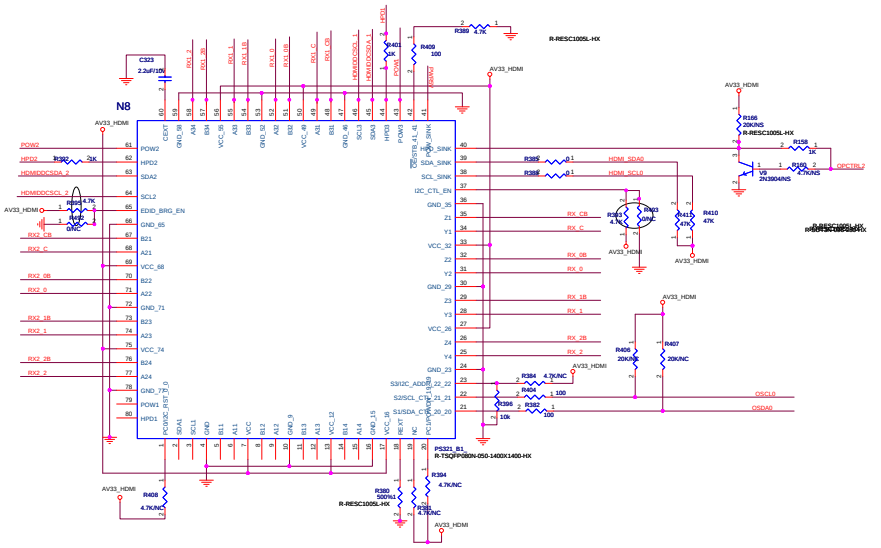
Title: FLASH/TRAP/BYPASS/FCI		
Size: Custom	Document Number: MT5361 P1-V1	Rev: V1
Date: Thursday, May 13, 2010	Drawn: By Ada.Du <Designer>	Sheet 6 of 14

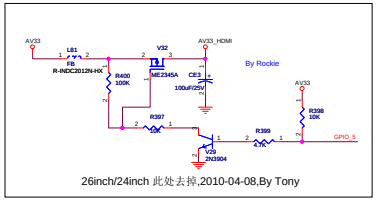




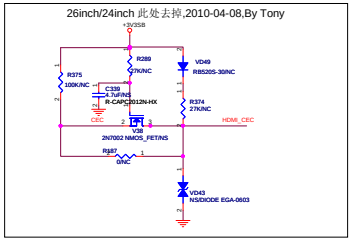




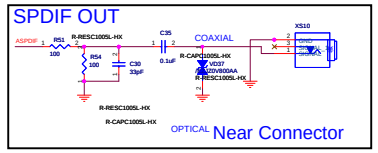




26inch/24inch 此处去掉,2010-04-08,By Tony



增加CEC电路，2009-06-01，By Tony



更改光纤输出，2009-05-22，By Tony_闫轴）

起2个作用：
1、HDMI切timing和Source的时候，切断PS321的供电，以防止屏幕上出现某些暂态的画面异常。
2、HDMI的连接一般有2种测手方式，最常见的是：送5V然后，看HPD的是否出低到高的变化，另外某些HDMI Device，是以侦测TMDS信号上3.3V终端电压的变化来，判断连接OK，是否读取EDID等信息.然后送信号出来。（如Malata 某些型号DVD）

为了兼容以上2种，我们对Switch的供电采用GPIO控制方式。

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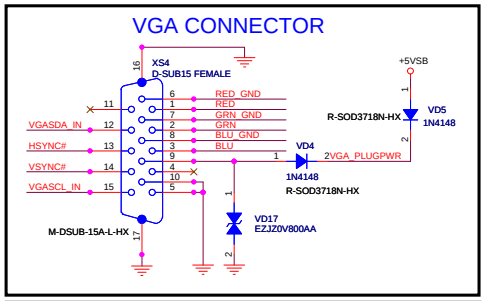
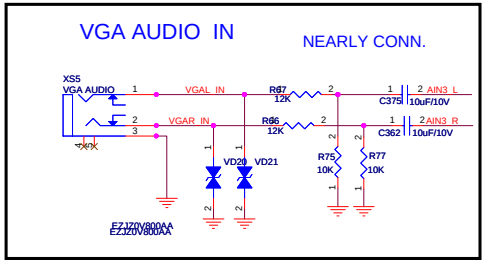
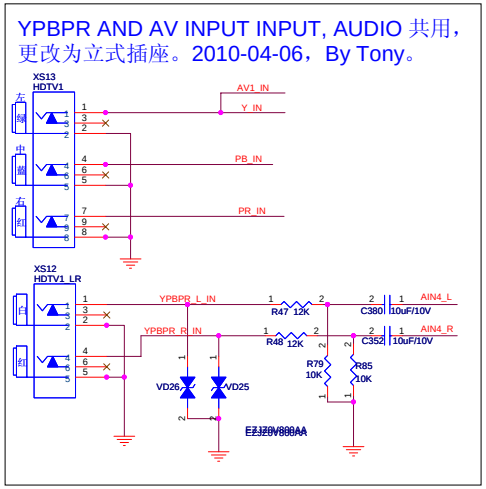
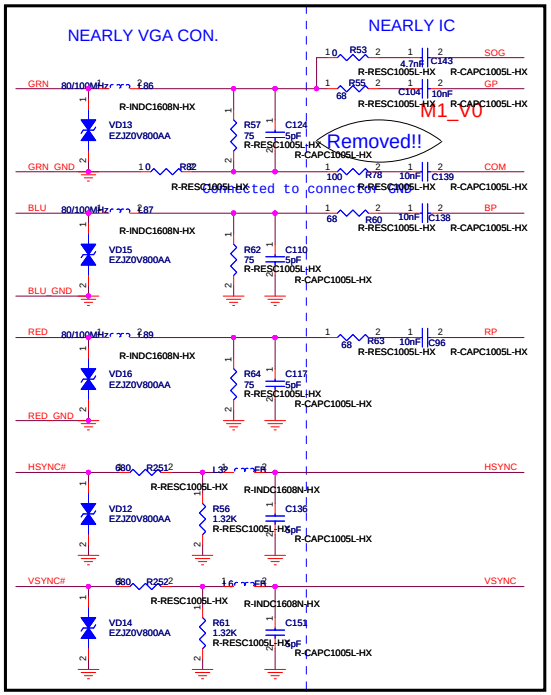
Title: HDMI/AudioDac			
Size: D	Document Number: MTS361 P1-V1	Drawn: <Designer>	Rev: V1
Date: Thursday, May 13, 2010		Sheet 7 of 14	

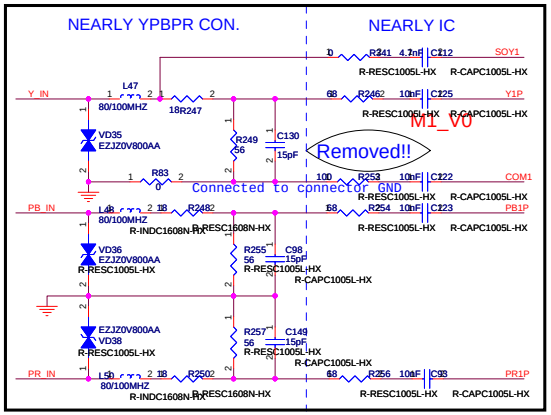


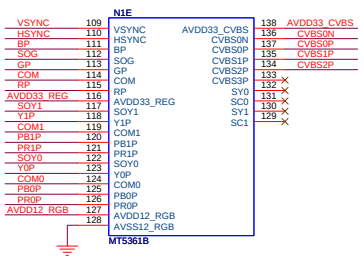


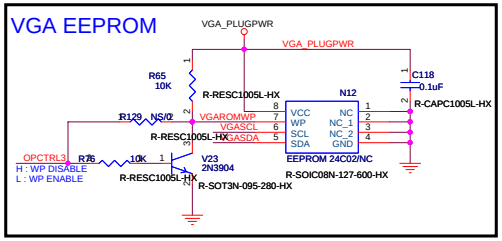


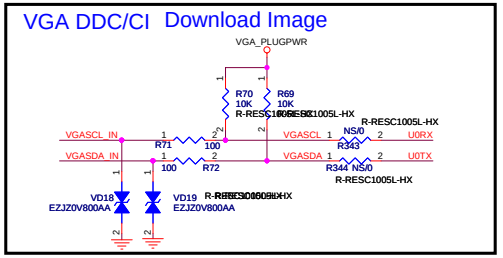
删除S-VIDEO AND AV INPUT

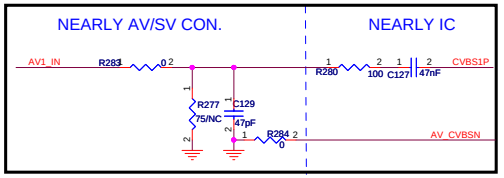


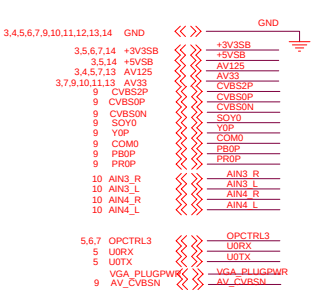


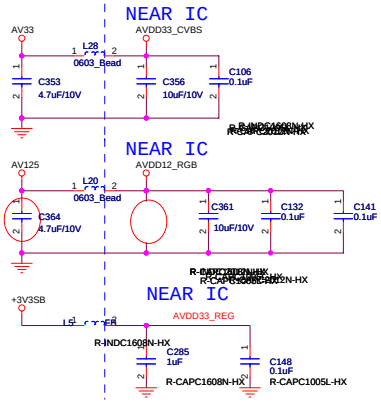












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Title: VGA IN/LR		
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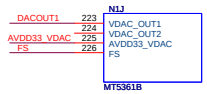

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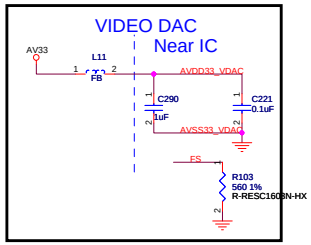
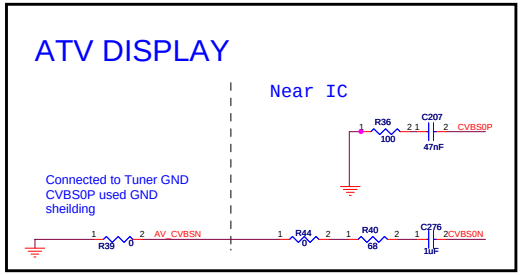
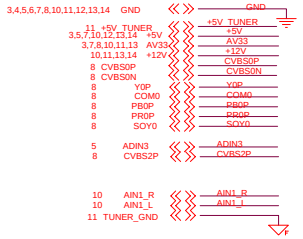
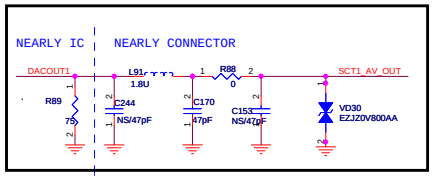
ATV_CVBS_BYPASS	0
DTV_CVBS_BYPASS	1

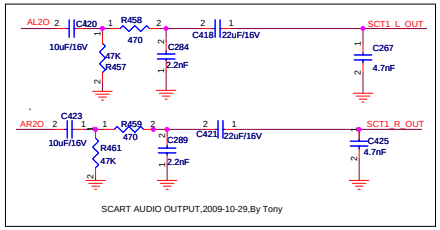




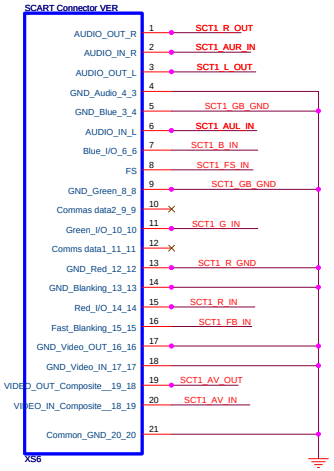


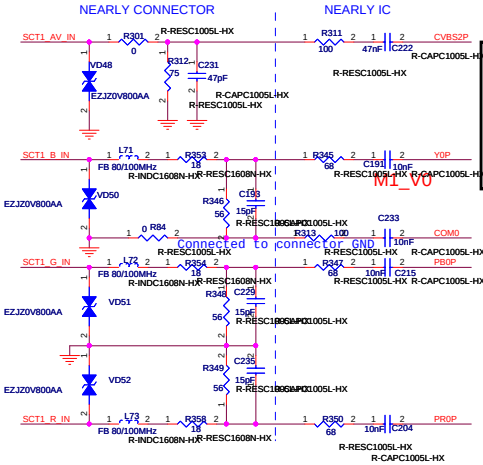
TV SCART CVBS BYPASS MUX

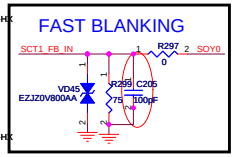


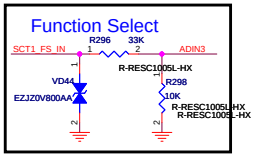


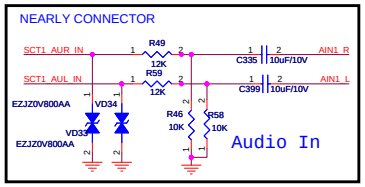
SCART 1_Full SCART_ -- CVBS+RGB -- TV OUT











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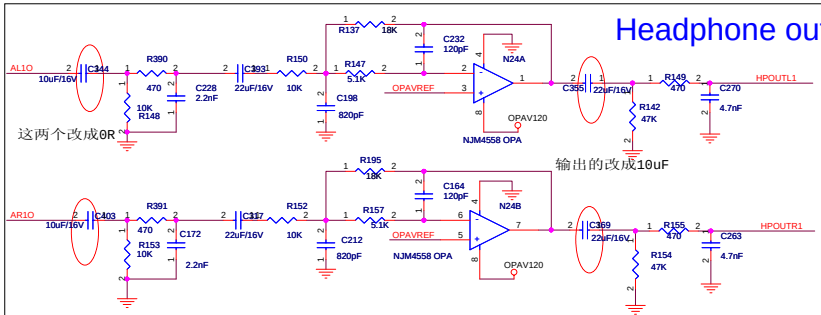

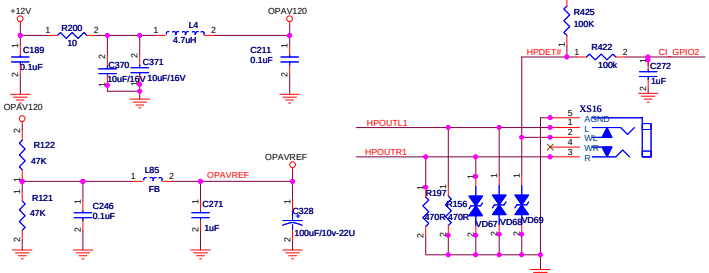

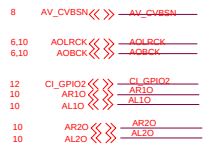

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Title: SCART			
Size: Custom	Document Number: MT5361 P1-V1	Drawn: <Designer>	Rev: V1
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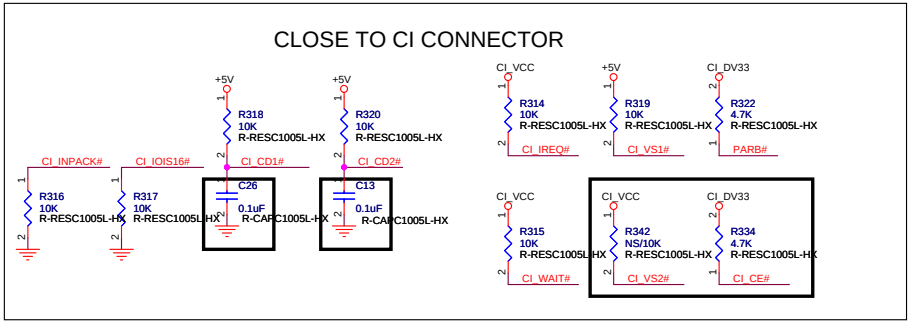

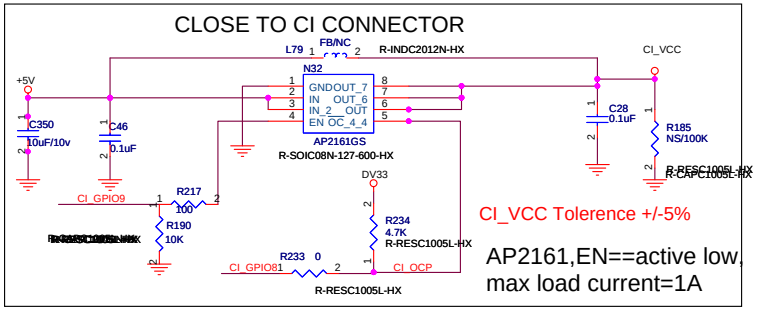

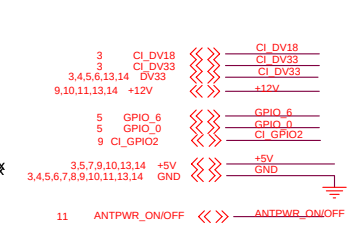

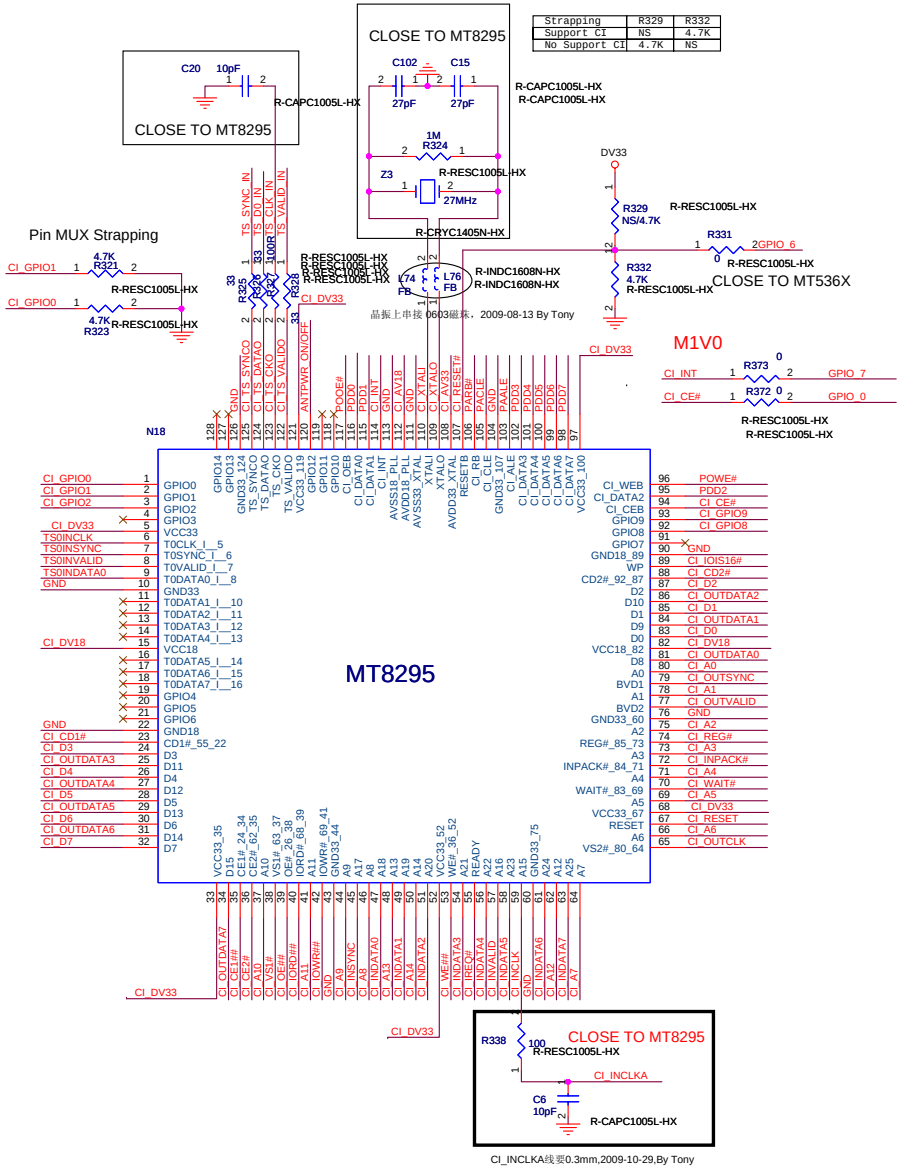

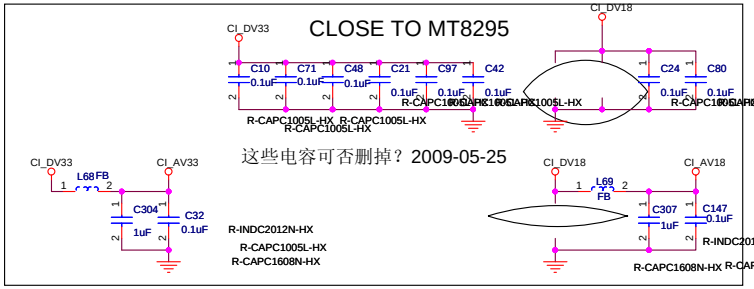

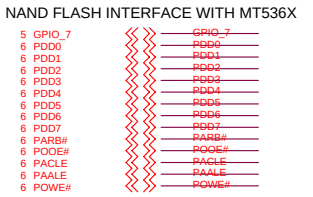

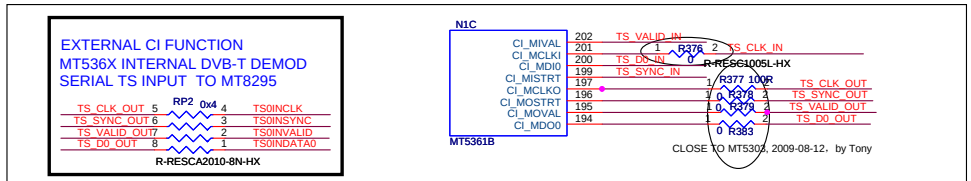

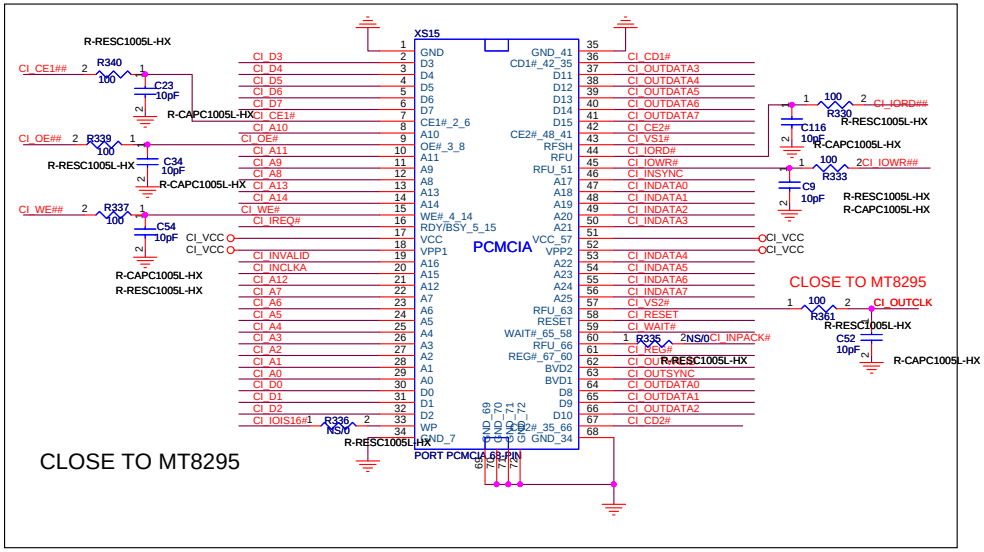

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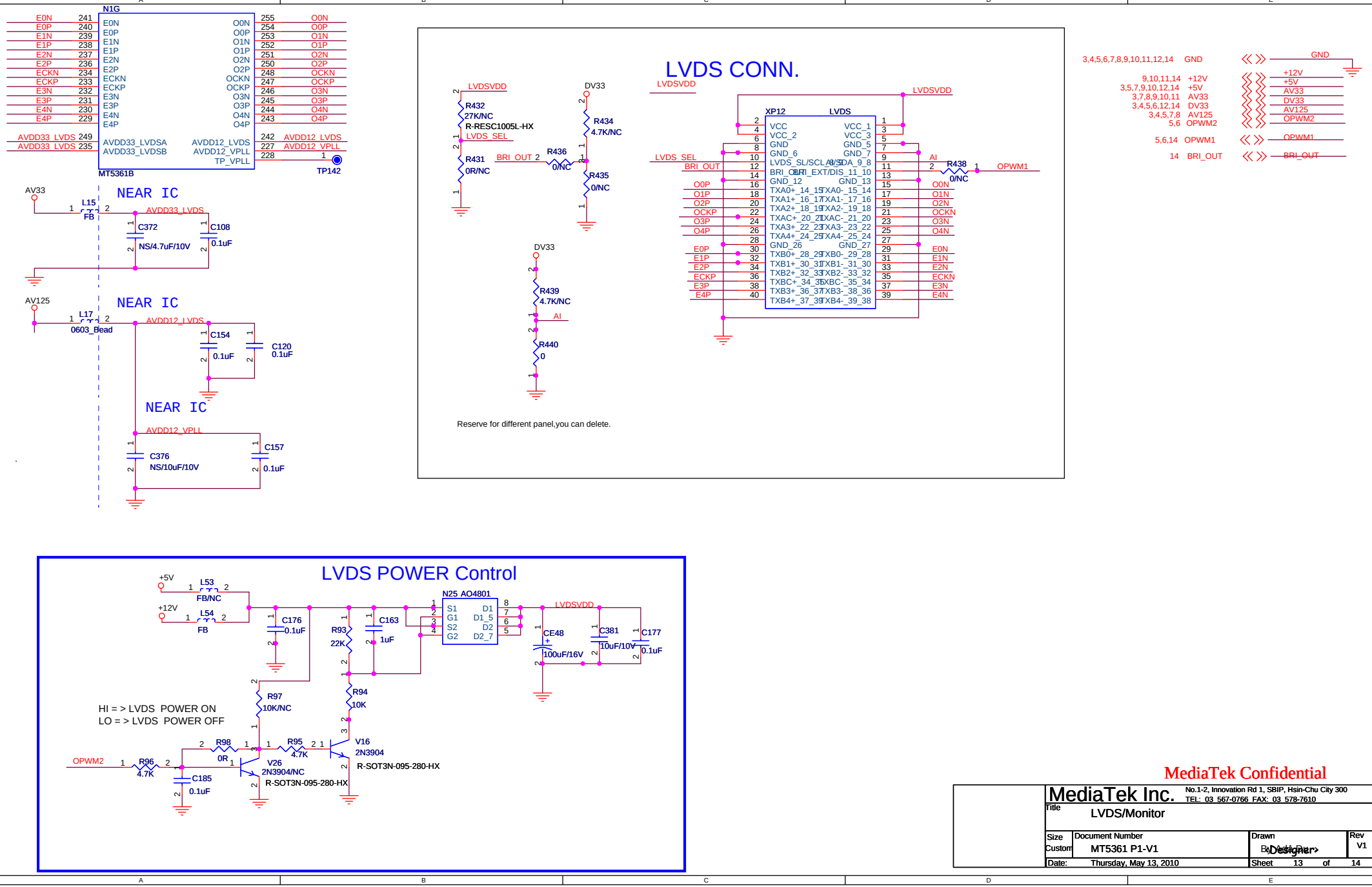
Date: Thursday, May 13, 2010	Sheet 12 of 14	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E4N 230
E4P 229
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AVDD33_LVDS 235
AVDD33_LVDSA
AVDD33_LVDSB
O0N 255
O0P 254
O1N 253
O1P 252
O2N 251
O2P 250
OCKN 248
OCKP 247
O3N 246
O3P 245
O4N 244
O4P 243
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AVDD12_LVDS 227
AVDD12_VPLL 228
TP_VPLL
TP142
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L15
FB
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NS/4.7uF/10V
C108
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AV125
L17
0603_Bead
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C154
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C120
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C376
NS/10uF/10V
C157
0.1uF
LVDS CONN.
LVDSVDD
R432
27K/NC
R-RESC1005L-HX
LVDS_SEL
R431
0R/NC
BRI_OUT
R436
0/NC
DV33
R434
4.7K/NC
R435
0/NC
R439
4.7K/NC
AI
R440
0
Reserve for different panel,you can delete.
XP12
LVDS
VCC
VCC_2
GND
GND_6
LVDS_SL/SCL/A0/SDA_9_8
BRI_OUT
BRI_EXT/DIS_11_10
GND_12
GND_13
TXA0+_14_15
TXA0-_15_14
TXA1+_16_17
TXA1-_17_16
TXA2+_18_19
TXA2-_19_18
TXAC+_20_21
TXAC-_21_20
TXA3+_22_23
TXA3-_23_22
TXA4+_24_25
TXA4-_25_24
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TXB1+_30_31
TXB1-_31_30
TXB2+_32_33
TXB2-_33_32
TXBC+_34_35
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TXB3+_36_37
TXB3-_38_36
TXB4+_37_39
TXB4-_39_38
VCC_1
VCC_3
GND_5
GND_7
AI
R438
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OPWM1
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3,4,5,6,12,14 DV33
3,4,5,7,8 AV125
5,6 OPWM2
5,6,14 OPWM1
14 BRI_OUT
GND
+12V
+5V
AV33
DV33
AV125
OPWM2
OPWM1
BRI_OUT
LVDS POWER Control
+5V
L53
FB/NC
+12V
L54
FB
C176
0.1uF
R93
22K
C163
1uF
N25 AO4801
S1
G1
S2
G2
D1
D1_5
D2
D2_7
LVDSVDD
CE48
100uF/16V
C381
10uF/10V
C177
0.1uF
R97
10K/NC
R94
10K
HI = > LVDS POWER ON
LO = > LVDS POWER OFF
OPWM2
R96
4.7K
R98
0R
R95
4.7K
V26
2N3904/NC
R-SOT3N-095-280-HX
V16
2N3904
R-SOT3N-095-280-HX
C185
0.1uF
MediaTek Confidential
MediaTek Inc.
No.1-2, Innovation Rd 1, SBIP, Hsin-Chu City 300
TEL: 03 567-0766 FAX: 03 578-7610
Title
LVDS/Monitor
Size
Custom
Document Number
MT5361 P1-V1
Drawn
By: <Designer>
Rev
V1
Date:
Thursday, May 13, 2010
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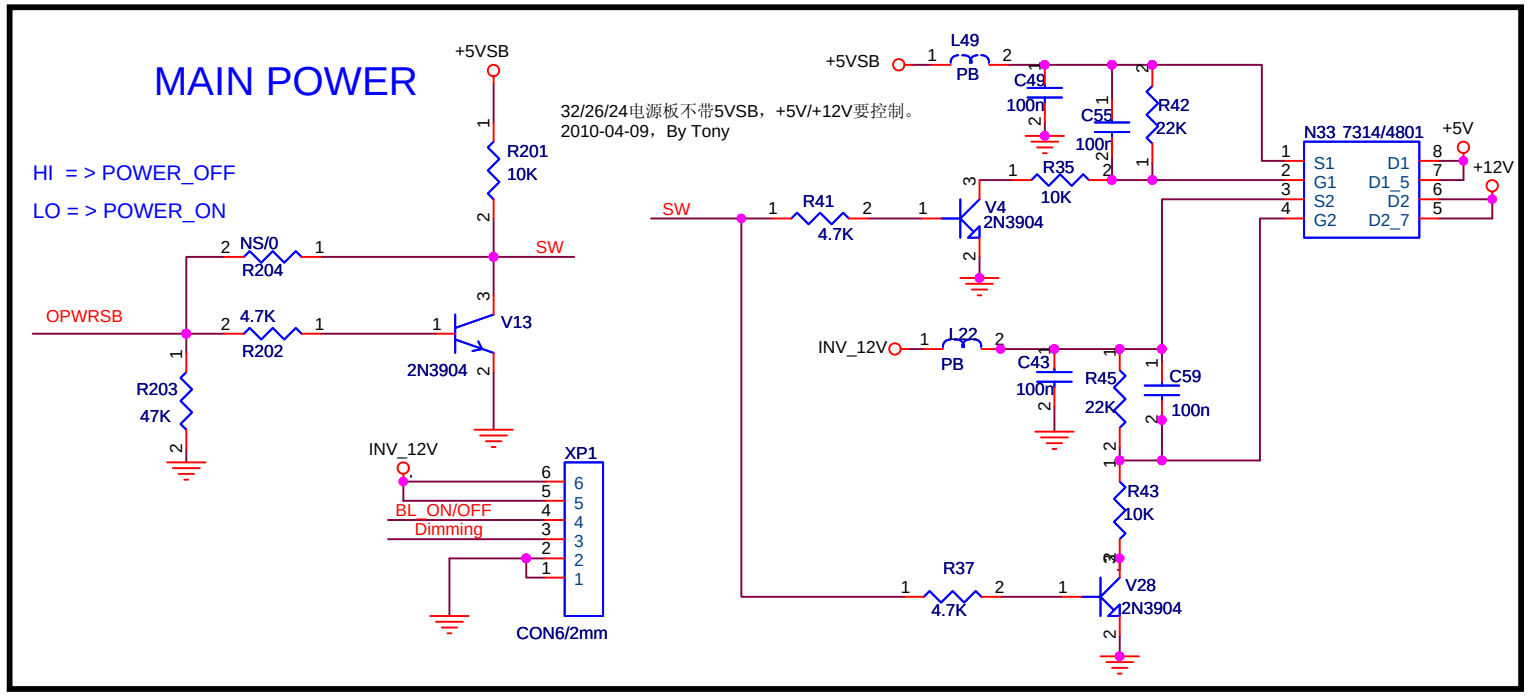

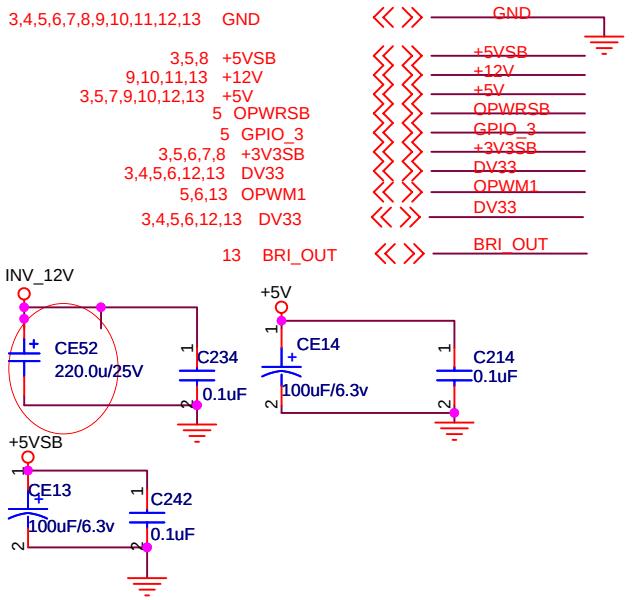

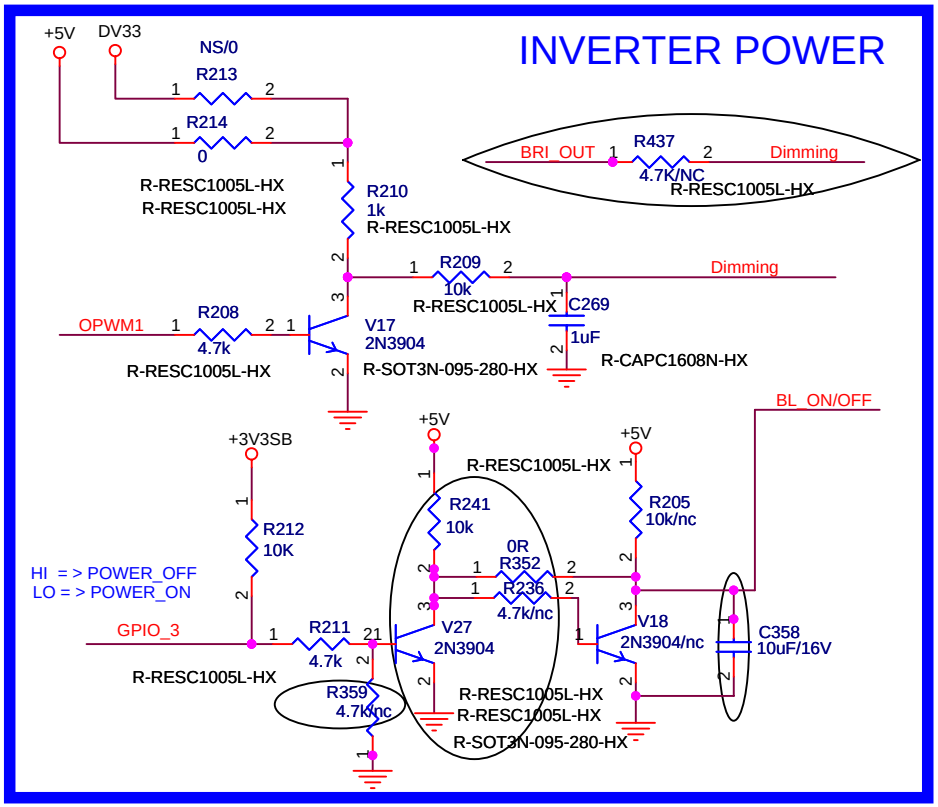

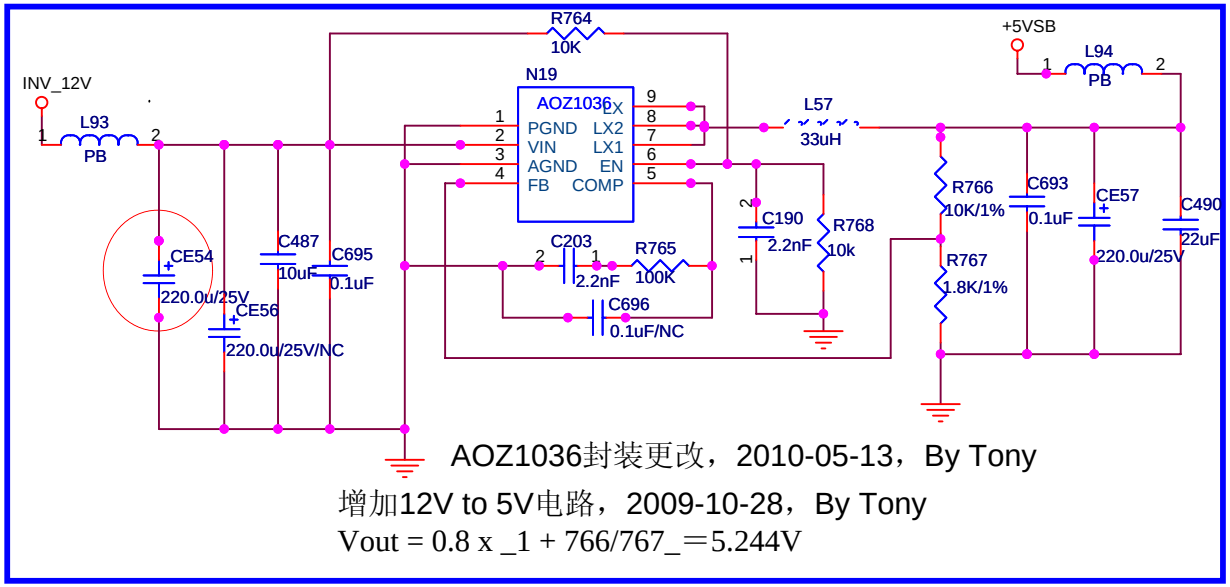

Q1
TJC3-4A

MediaTek Inc.	No.1-2, Innovation Rd 1, SBIP, Hsin-Chu City 300 TEL: 03_567-0766 FAX: 03_578-7610		
Title: BACK LIGHT / MAIN POWER			
Size: A4	Document Number: MT5361 P1-V1	Drawn: By:Ada.Du <Designer>	Rev: V1
	Date: Thursday, May 13, 2010	Sheet 14 of 14	