



Schwalbe

Service & Versand GmbH

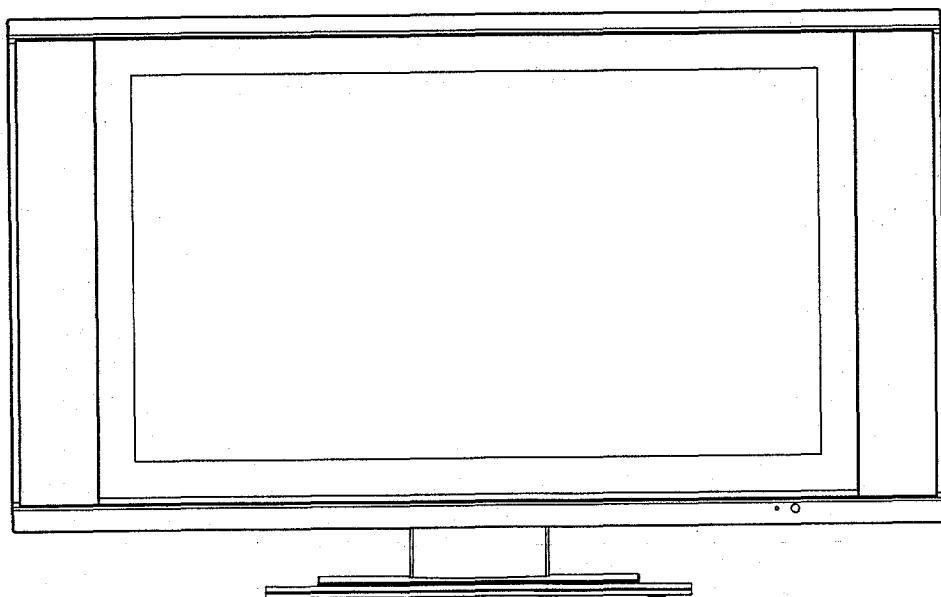
SERVICE MANUAL

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ORION

TV-32300 / TV-32300SI

32" LCD COLOR TELEVISION



Best. Nr. SM32300

Design and specifications are subject to change without notice.

Attention: This service manual is only for service personnel to take reference with. Before servicing please read the following points carefully.

Safety instructions

1. Instructions

Be sure to switch off the power supply before replacing or welding any components or inserting/plugging in connection wire Anti static measures to be taken (throughout the entire production process!):

- a) Do not touch here and there by hand at will;
- b) Be sure to use anti static electric iron;
- c) It's a must for the welder to wear anti static gloves.

Please refer to the detailed list before replacing components that have special safety requirements. Do not change the specs and type at will.

2. Points for attention in servicing of LCD

2.1 Screens are different from one model to another and therefore not interchangeable. Be sure to use the screen of the original model for replacement.

2.2 The operation voltage of LCD screen is 700-825V. Be sure to take proper measures in protecting yourself and the machine when testing the system in the course of normal operation or right after the power is switched off. Please do not touch the circuit or the metal part of the module that is in operation mode. Relevant operation is possible only one minute after the power is switched off.

2.3 Do not use any adapter that is not identical with the TV set. Otherwise it will cause fire or damage to the set.

2.4 Never operate the set or do any installation work in bad environment such as wet bathroom, laundry, kitchen, or nearby fire source, heating equipment and devices or exposure to sunlight etc. Otherwise bad effect will result.

2.5 If any foreign substance such as water, liquid, metal slices or other matters happens to fall into the module, be sure to cut the power off immediately and do not move anything on the module lest it should cause fire or electric shock due to contact with the high voltage or short circuit.

2.6 Should there be smoke, abnormal smell or sound from the module, please shut the power off at once. Likewise, if the screen is not working after the power is on or in the course of operation, the power must be cut off immediately and no more operation is allowed under the same condition.

2.7 Do not pull out or plug in the connection wire when the module is in operation or just after the power is off because in this case relatively high voltage still remains in the capacitor of the driving circuit. Please wait at least one minute before the pulling out or plugging in the connection wire.

2.8 When operating or installing LCD please don't subject the LCD components to bending, twisting or extrusion, collision lest mishap should result.

2.9 As most of the circuitry in LCD TV set is composed of CMOS integrated circuits, it's necessary to pay attention to anti statics. Before servicing LCD TV make sure to take anti static measure and ensure full grounding for all the parts that have to be grounded.

2.10 There are lots of connection wires between parts behind the LCD screen. When servicing or moving the set please take care not to touch or scratch them. Once they are damaged the screen

would be unable to work and no way to get it repaired.

2.11 Special care must be taken in transporting or handling it. Exquisite shock vibration may lead to breakage of screen glass or damage to driving circuit. Therefore it must be packed in a strong case before the transportation or handling.

2.12 For the storage make sure to put it in a place where the environment can be controlled so as to prevent the temperature and humidity from exceeding the limits as specified in the manual. For prolonged storage, it is necessary to house it in an anti-moisture bag and put them altogether in one place. The ambient conditions are tabulated as follows:

Temperature	Scope for operation	0 ~ +50 °C
	Scope for storage	-20 ~ +60 °C
Humidity	Scope for operation	20% ~ 85%
	Scope for storage	10% ~ 90%

2.13 Display of a fixed picture for a long time may result in appearance of picture residue on the screen, as commonly called "ghost shadow". The extent of the residual picture varies with the maker of LCD screen. This phenomenon doesn't represent failure. This "ghost shadow" may remain in the picture for a period of time (several minutes). But when operating it please avoid displaying still picture in high brightness for a long time.

3. Points for attention during installation

3.1 The front panel of LCD screen is of glass. When installing it please make sure to put it in place.

3.2 For service or installation it's necessary to use specified screw lest it should damage the screen.

3.3 Be sure to take anti dust measures. Any foreign substance that happens to fall down between the screen and the glass will affect the receiving and viewing effect

3.4 When dismantling or mounting the protective partition plate that is used for anti vibration and insulation please take care to keep it in intactness so as to avoid hidden trouble.

3.5 Be sure to protect the cabinet from damage or scratch during service, dismantling or mounting.

Alignment instruction

1 Alignment equipment

PM5518 (video signal generator)
K-7253 (VGA signal generator)
PM54200 (SCART signal generator)
VG-848 (YUV, VGA and DVI signal generator)
CA210 (white balancer)

2 Alignment flow-chart

The alignment flow-chart is shown as fig-1

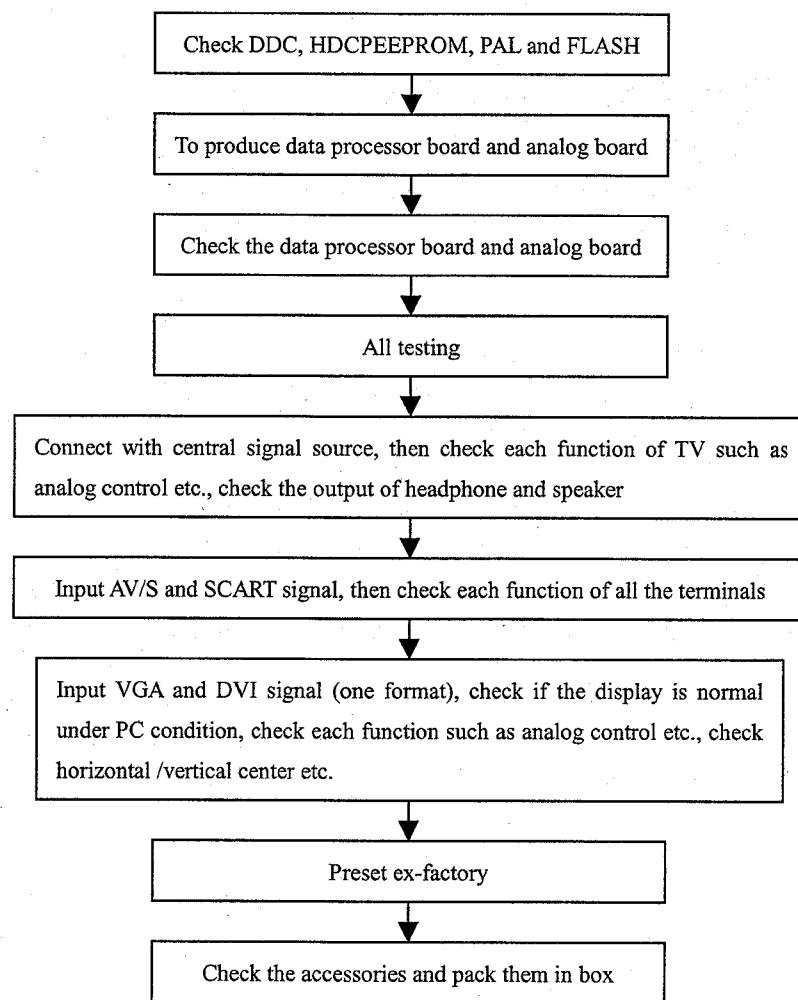


Fig-1 adjustment flow-chart

3 Unit adjustments

Connect data processing board, sound board, TV board, button board, remote board and update processing board according to wiring diagram of 203-L27M60-02JL, connect with power and observe the display.

Method for entering factory menu: press "power" and "VIDEO" repeatedly to enter factory menu; press "S.M" to enter adjustment factory menu.

3.1 EEPROM initialization

Enter the first page of factory menu, select "EEPROM erase" and then press "enter", shut down the unit after "ok" appears.

3.2 white balance adjustment YPbPr channel

Input 480I (968 model) signal of VG-848 to YPbPr terminal, input 16 level gray-scale signal, set the fixed-value of R Gain to 80H, G Gain to 80H and B Gain to 80H for white balance adjust. Adjust offset_R, offset_G and offset_B, to let color coordinate of the fourth level be 254 and 250 and its brightness be about 3.5nit.

Input 8 level gray-scale signal of TIME392 (480p), TIME394 (720p) and TIME396 (1080i) separately, repeat the above operations to let color coordinate of the third level be 285 and 290 and its brightness be about 12.5nit.

4 Performance check

4.1 TV function

Enter searching menu → auto search, connect RF-TV terminal with central signal source and check if there are channels be skipped.

4.2 AV/S terminals

Input AV/S signal, check if it is normal.

Receive of YUV signal format

NO.	H-frequency (kHz)	V-frequency(Hz)	signal
1	15.734	59.94	SDTV 480i
2	31.469	59.94	HDTV 480p
4	44.955	59.94	HDTV 720p
6	33.716	59.94	HDTV 1080i
7	15.625	50	SDTV 576i
8	31.25	50	SDTV 576p
9	33.75	50	HDTV 1080i
10	37.50	50	HDTV 720p

Receive of VGA signal format

NO.	resolution	H-frequency(kHz)	V-frequency(Hz)	Point pulse frequency(MHz)	note
1	720 x 400	31.469	70.086	28.322	IBM
2	640 x 480	31.469	59.94	25.175	IBM
3	640 x 480	37.861	72.809	31.5	VESA
4	640 x 480	37.5	75.0	31.5	VESA
5	640 x 480	43.269	85.008	36	VESA
6	800 x 600	35.156	56.25	36	VESA
7	800 x 600	37.879	60.317	40	VESA
8	800 x 600	48.077	72.188	50	VESA
9	800 x 600	46.875	75.0	49.5	VESA
10	800 x 600	53.674	85.061	56.25	VESA
11	1024 x 768	48.363	60.004	65	VESA

12	1024 x 768	56.476	70.069	75	VESA
13	1024 x 768	60.023	75.029	78.75	VESA

Factory Option Menu set

Items	Ex-factory set
EEPROM Erase	Off
Backlight Adjustable	Off
Back Light	00
Menu Timeout	15
Blank switch enable	Off
Show Logo	On
Auto Channel Label	On
Disable SRS active	Stereo
TT Char Group	West Europe
PIP Clock Delay	On

Video Min/Max set

Items	Ex-factory set
Bright Min	C0H
Bright Middle	00H
Bright Max	10H
Contrast Min	10H
Contrast Middle	20H
Contrast Max	28H
Sharpness Min	00H
Sharpness Middle	10H
Sharpness Max	1FH
Color Min	00H
Color Middle	32H
Color Max	63H
Hue Min	CEH
Hue Middle	00H
Hue Max	32H

Factory Audio Setting

Items	Ex-factory set
Volume Min	37H
Volume 30	5FH

Volume 50	68H
Volume Max	76H
Prescale Scart	73H
Prescale FM/AM	2FH
Prescale Nicam	6AH
Scart1 Volume	20H
Scart2 Volume	20H
D/K select HDEV3	Off
Equalizer Bands Max	60H
Spatial Mode	Off
AVC	Off

White Balance Adjust

Items	Ex-factory set
R Offset	00H
G Offset	00H
B Offset	00H
R Gain	FFH
G Gain	FFH
B Gain	FFH
Brightness	50
Contrast	50

Picture analog set

	Vivid	Standard	Mild	Custom
Contrast	80	70	50	50
Brightness	50	45	40	50
Color	50	45	40	50
Hue	00	00	00	00
Sharpness	50	50	50	50

Sound balance set

	Live	Pop	Rock	Custom
120Hz	50	50	65	50
500Hz	50	50	55	50
1.5KHz	50	60	55	50
5KHz	80	70	55	50
10KHz	85	70	55	50

4.3 user menu of ex-factory

- 1) Set TV channel
- 2) AV menu Mode: Standard, NR: Auto;
- 3) Sound menu model, Volume: 20,Balance:00,Equalizer: Custom, HP Volume: 20;
- 4) Edit menu model, Color System: Auto, Sound System: DK;
- 5) Option menu model, Default Zoom: Auto, Child Lock: Off, Menu Language: English, Country: UK, WSS:OFF, Blue Screen: On.

Trouble shooting

Before servicing please check to find the possible causes of the troubles according to the table below.

1. Antenna (signal):

Picture is out of focus or jumping	<ul style="list-style-type: none"> ● Bad status in signal receiving ● Poor signal ● Check if there are failures with the electrical connector or the antenna. ● Check if the antenna is properly connected.
Fringe in picture	<ul style="list-style-type: none"> ● Check if the antenna is correctly oriented. ● Maybe there is electric wave reflected from hilltop or building.
Picture is interfered by stripe shaped bright spots	<ul style="list-style-type: none"> ● Possibly due to interference from automobile, train, high voltage transmission line, neon lamp etc. ● Maybe there is interference between antenna and power supply line. Please try to separate them in a longer distance. ● Maybe the shielded-layer of signal wire is not connected properly to the connector.
There appear streaks or light color on the screen	<ul style="list-style-type: none"> ● Check if interfered by other equipment and if interfered possibly by the equipment like transmitting antenna, non-professional radio station and cellular phone.

2. TV set:

Symptoms	Possible cause
Unable to switch the power on	<ul style="list-style-type: none"> ● Check to see if the power plug has been inserted properly into the socket.
No picture and sound	<ul style="list-style-type: none"> ● Check to see if the power supply of liquid crystal TV has been switched on. (As can be indicated by the red LED at the front of the TV set) ● See if it's receiving the signal that is transmitted from other source than the station ● Check if it's connected to the wrong terminal or if the input mode is correct. ● Check if the signal cable connection between video frequency source and the liquid crystal TV set is

	correct.
Deterioration of color phase or color tone	<ul style="list-style-type: none"> Check if all the picture setups have been corrected.
Screen position or size is not proper	<ul style="list-style-type: none"> Check is the screen position and size is correctly set up.
Picture is twisted and deformed	<ul style="list-style-type: none"> Check to see if the picture-frame ratio is properly set up.
Picture color changed or colorless	<ul style="list-style-type: none"> Check the "Component" or "RGB" settings of the liquid crystal TV set and make proper adjustment according to the signal types.
Picture too bright and there is distortion in the brightest area	<ul style="list-style-type: none"> Check if the contrast setting is too high. Possibly the output quality of DVD broadcaster is set too high. It maybe also due to improper terminal connection of the video frequency signal in a certain position of the system.
Picture is whitish or too bright in the darkest area of the picture	<ul style="list-style-type: none"> Check if the setting for the brightness is too high Possibly the brightness grade of DVD player (broadcaster) is set too high.
No picture or signal produced from the displayer if "XXX in search" appears.	<ul style="list-style-type: none"> Check if the cable is disconnected. Check if it's connected to the proper terminal or if the input mode is correct.
There appears an indication - "outside the receivable scope)	<ul style="list-style-type: none"> Check if the TV set can receive input signal. The signal is not correctly identified and VGA format is beyond the specified scope.
Remote control cannot work properly	<ul style="list-style-type: none"> Check if the batteries are installed in the reverse order. Check if the battery is effective. Check the distance or angle from the monitor. Check if there is any obstruct between the remote control and the TV set. Check if the remote control signal-receiving window is exposed to strong fluorescence.
No picture and sound, but only hash.	<ul style="list-style-type: none"> Check if the antenna cable is correctly connected, or if it has received the video signal correctly.
Blur picture	<ul style="list-style-type: none"> Check if the antenna cable is correctly connected. Or if it has received the right video signal.
No sound	<ul style="list-style-type: none"> Check if the "mute" audio frequency setting is selected. Check if the sound volume is set to minimum. Make sure the earphone is not connected. Check if the cable connection is loose.
When playing VHS picture search tape, there are lines at the top or	<ul style="list-style-type: none"> When being played or in pause VHS picture search tape sometimes can't provide stable picture, which

bottom of the picture.	may lead to incorrect display of the liquid crystal TV, In this case please press "auto" key on the remote control so as to enable the liquid crystal TV set to recheck the signal and then to display correct picture signal
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Method of software upgrading

Steps of software upgrading are as follows:

1.guidance for software installation

Open the compressed files to obtain the "LoadDriver", running the "IAPWriter.exe" and soon it will enter into IAP program.

2.TV enter into IAP state (automatic software upgrading)

One method: press constantly the "vol -" button, turn on

Another method: enter into the factory menu to select the "IAP" item, press the "enter" button

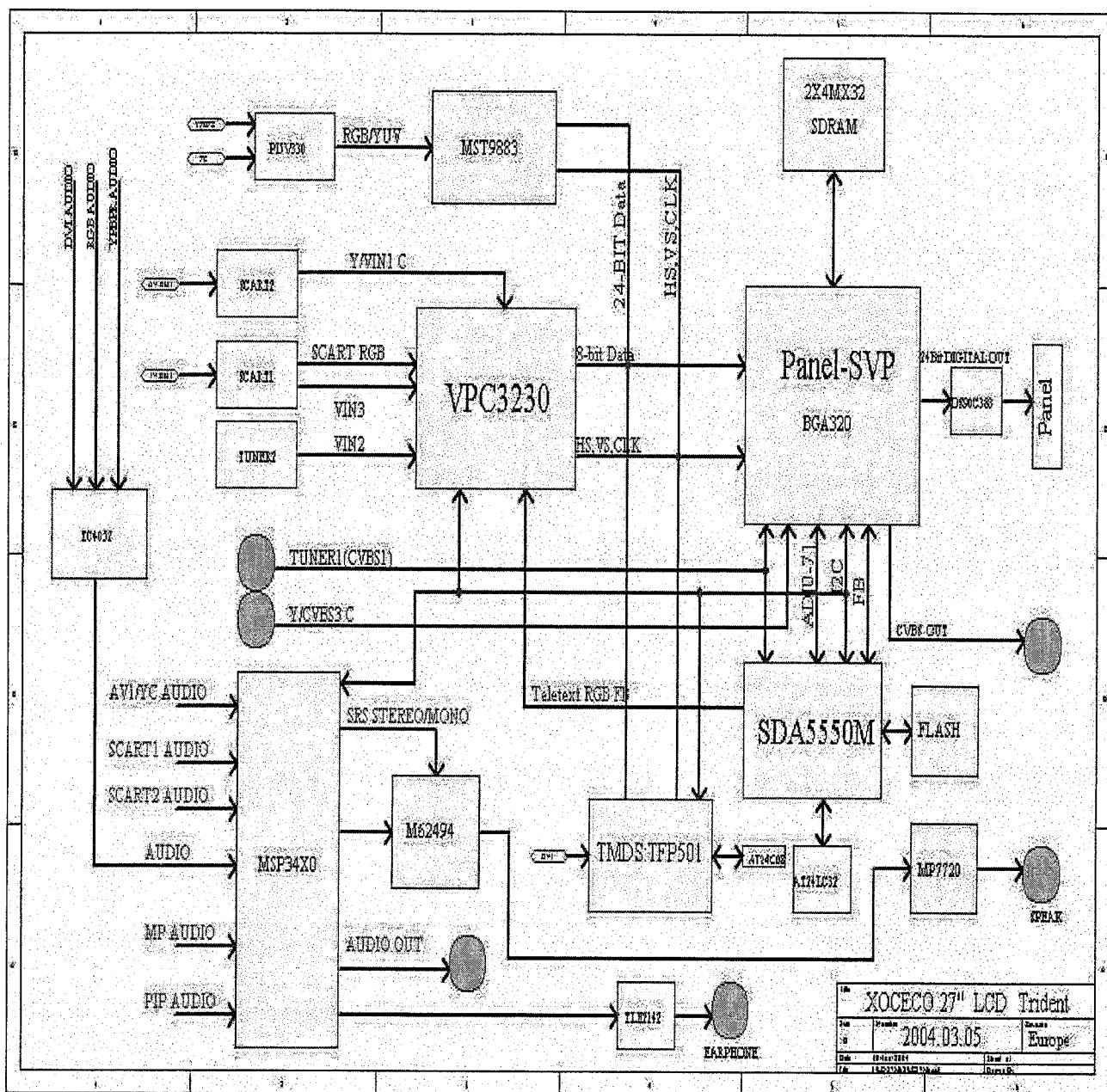
3.connect the "IICtools" of computer with the upgrading interface of TV.

4.running "IAPWriter" to enter into the upgrading state (if there are failure between the computer and TV's IIC communication, the indication that can't enter into the next step will appear. you need to check the wiring at this moment.

5.after selecting "files" menu and obtaining the software which requires upgraded, selecting the "Device" menu: "write"→ "device", until the indication of "success" appears at the down-left corner, turn off the power, unplug the tool and turn on the TV again.

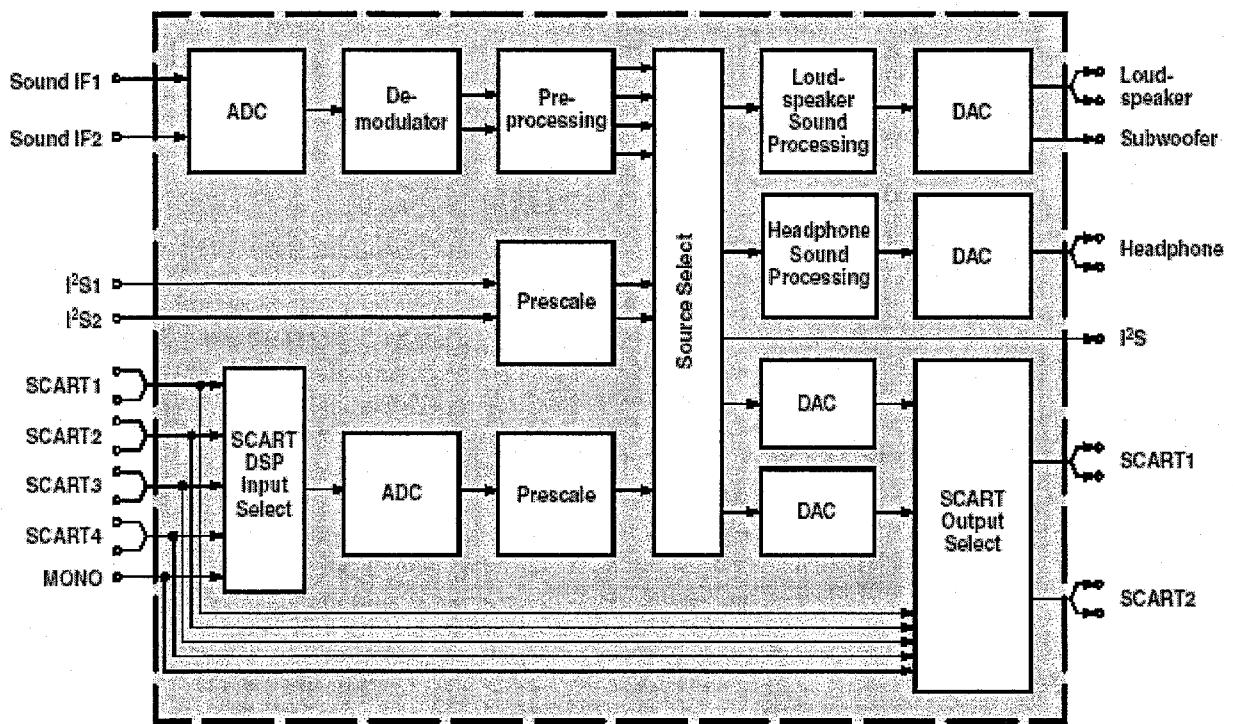
Note: the upgrading process maybe appears unstable because of the upgrading software, but the software can download and write again automatic. If download and write repeated many times, please turn off the TV and enter into IAP again, upgrade again.

LC-32M5S block diagram



Main IC

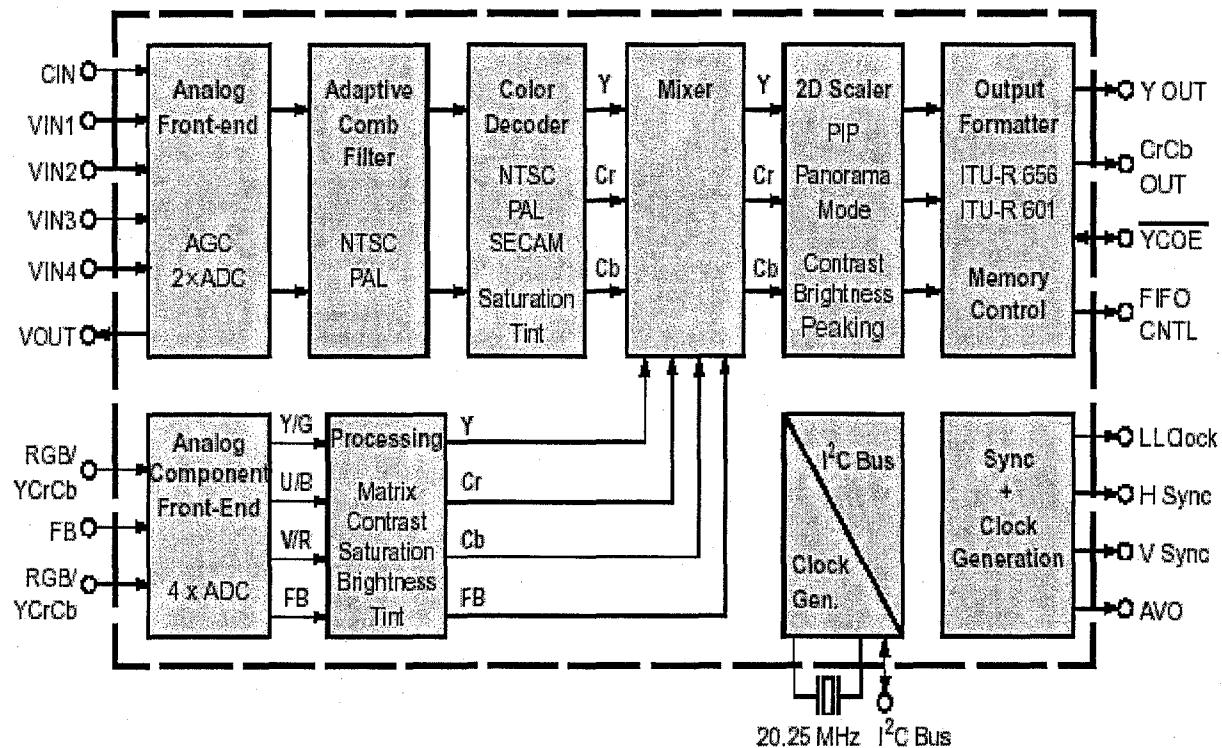
1. Sound processing IC (MSP3410)



Main pins function:

- 2, 3: SCL, SDA, control IC
- 27, 28: To R/L of sound amplifier
- 24, 25: R/L of Earphone;
- 36, 37: R/L of AV OUT;
- 33, 34: R/L of TV OUT;
- 47, 48: R/L from main board;
- 50, 51: R/L of SCART2;
- 53, 54: R/L of SCART1;
- 56, 57: R/L of AV IN;
- 67, 69: SIF input of main and sub channels;
- 59: MONO input of sub-channel

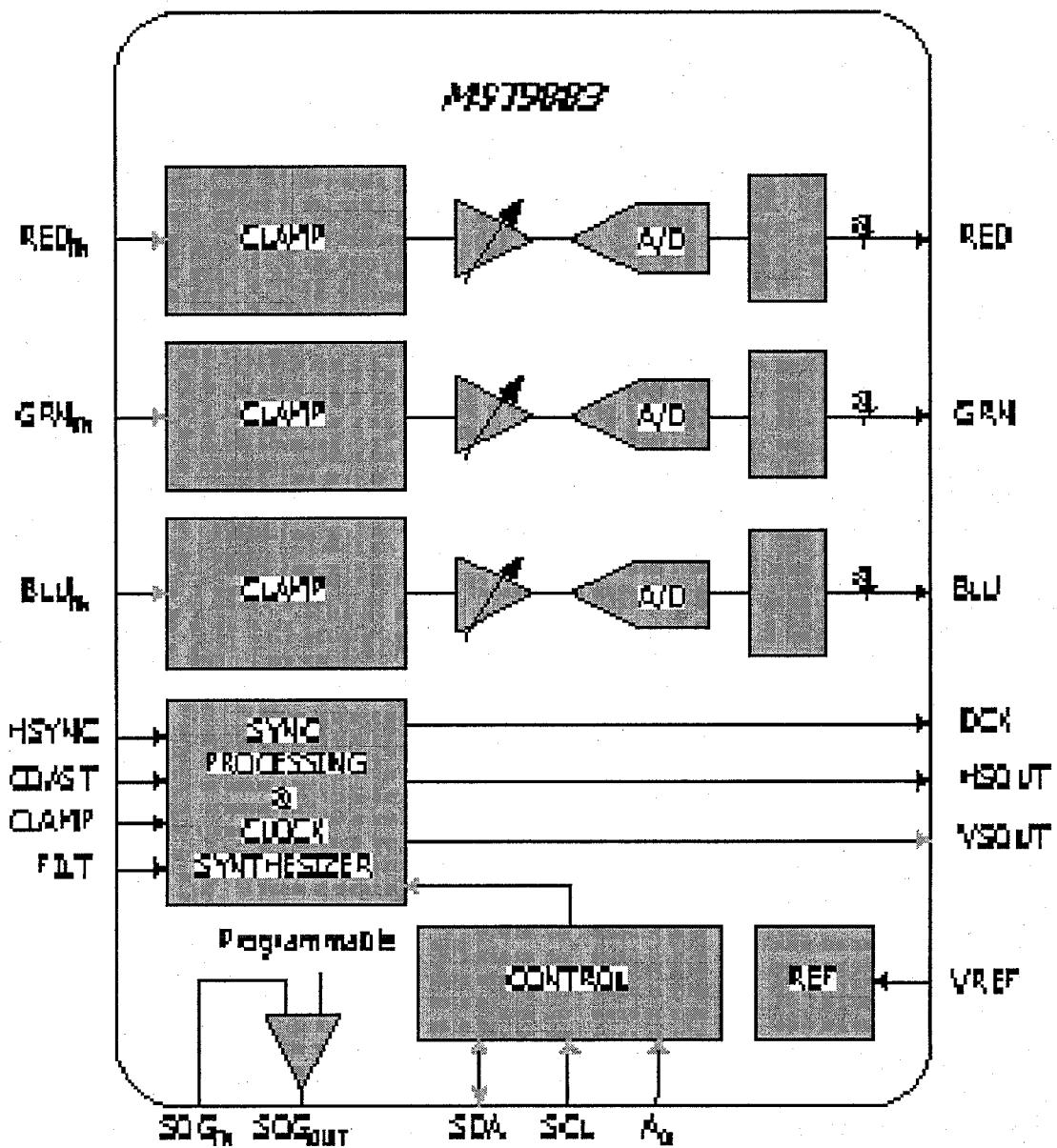
2.sub-channel and AV signal decoder IC of SCART (VPC3230)



Main pins function:

- 13, 14: SCL, SDA, control IC;
- 4, 5, 6: RGB input of SCART1;
- 74: AV signal of SCART1 and complex sync of RGB input
- 71, 72: Y/C of SCART2 input;
- 73: AV signal of sub tuner input;
- 75: AV input;
- 70: VOUT signal of VPC3230

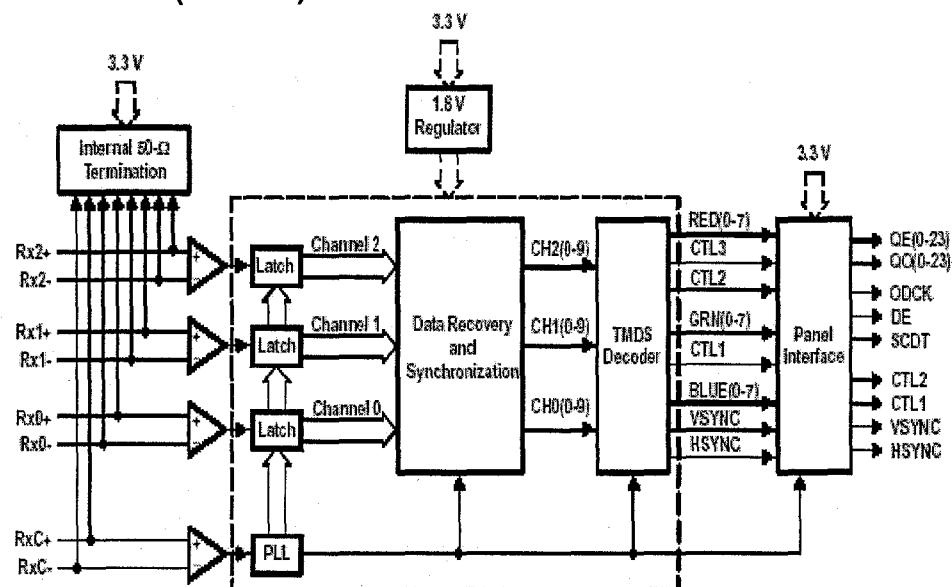
3. Receive of YPbPr/YcbCr and RGB (MST9883)



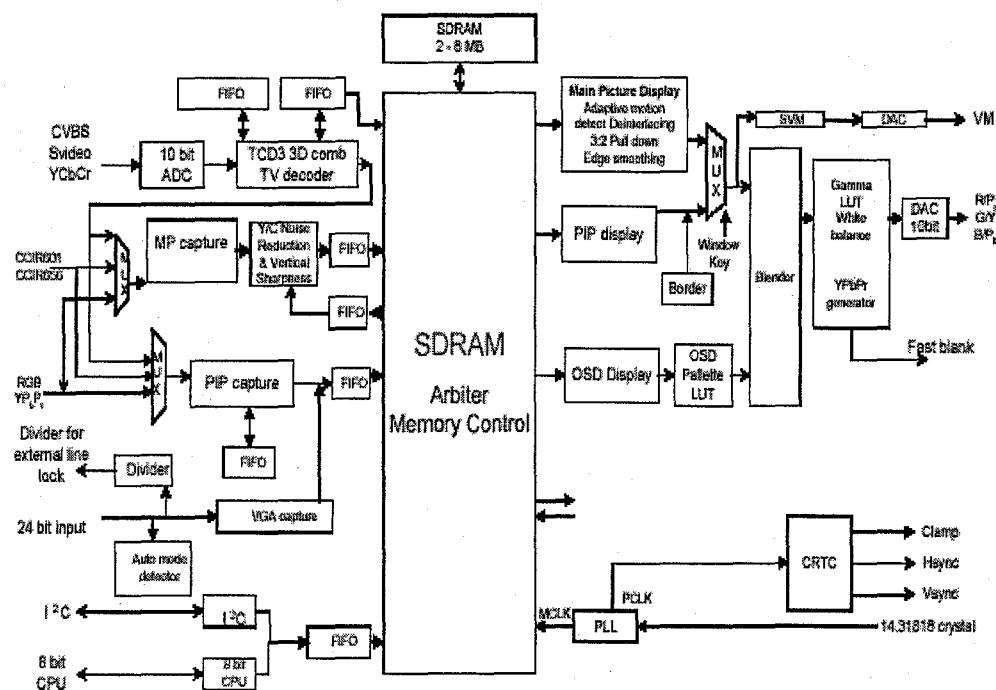
Main pins function:

- 56, 57: SCL, SDA, control IC;
- 43, 48, 54: RGB/YUV input;
- 30, 31: H/V sync of RGB input;

4. Receive of DVI (TFP501)



5. Main picture decoder and processing (PanelTv-Svp)



Main pins function

K4, J1: SCL, SDA, adjustment IC

L2, P4: Y/C of S-video ;

L4: AV of main tuner input;

L3: AV input;

Y10, Y11, W11: analog RGB output;

U13, V13, Y2: H/V sync and PCLK output.

Main assembly

NAME	NO.	MAIN COMPONENT AND it'S NO.
Sound processing board	667-L32M5S-69	N101 PanelTv—Svp (353-PANEL-20) N201 MST9883 (353-98830-10) N401 VPC3230 (353-32300-80) N501 SDA5550M (353-55500-00) N502 W29C040 (353-29040-00) N601 DS90C383 (353-03830-70) N761 TFP501 (353-05010-00) (353-77200-10)
AV processing board	667-L32M5S-40	TUNER201 JS-6B2/122A2-A2 (590-40512-00) TUNER202 JS-6B2/121A2 (590-40511-00) N201 MSP3410G (353-34100-80) N213 N214 MP7720 (353-77200-10) N212 TLE2142CP (352-21420-00)
IR board	667-L32M5S-09	
Keypad board	667-L32M5S-05	
Update board	667-L32M5S-29	
Power supply board	667-L34K5-20	

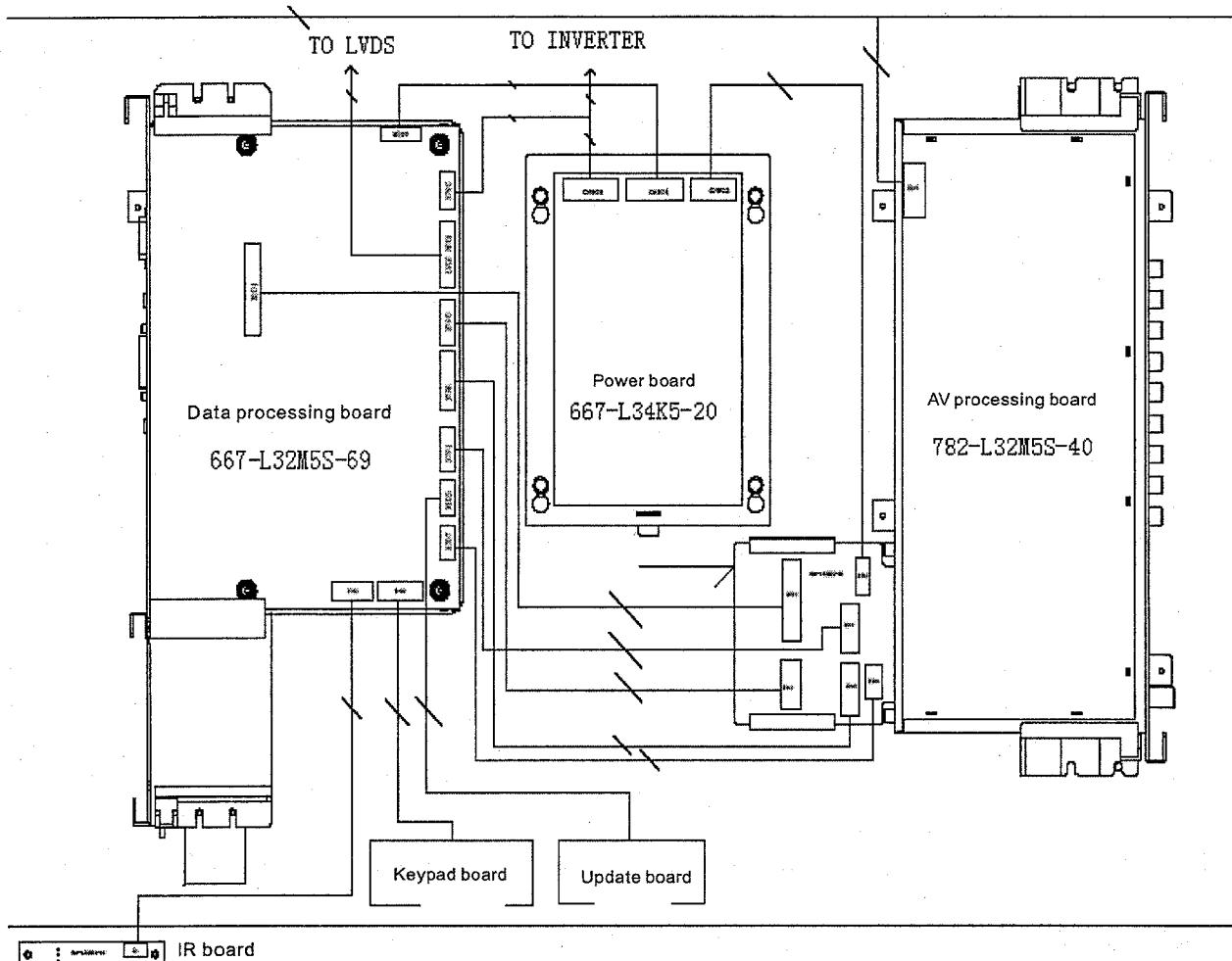
Identification criteria for the bright spot and dark spot of the LCD screen

Category	criteria	Q'ty allowed					Distance between two spots					
		15"	20"	22"	30"	40"	15"	20"	22"	30"	40"	
Bright spot	One single spot	≤5	≤2	≤5	≤2	≤3	≥15mm	≥15mm			≥5mm	
	2 neighboring spots	≤2	≤1	≤2	≤1	≤1						
	Total No.	≤5	≤2	≤5	≤2	≤3						
Dark spots	One single spot	≤6	≤7	≤5	≤4	≤10	≥15mm	≥10mm	≥5mm	≥5mm		
	Two neighboring spots	≤2	≤2	≤2	≤1	≤5						
	Total No.	≤6	≤7	≤5	≤4	≤10						
Total defected point		≤8	≤7	≤5	≤4	/						

Notes:

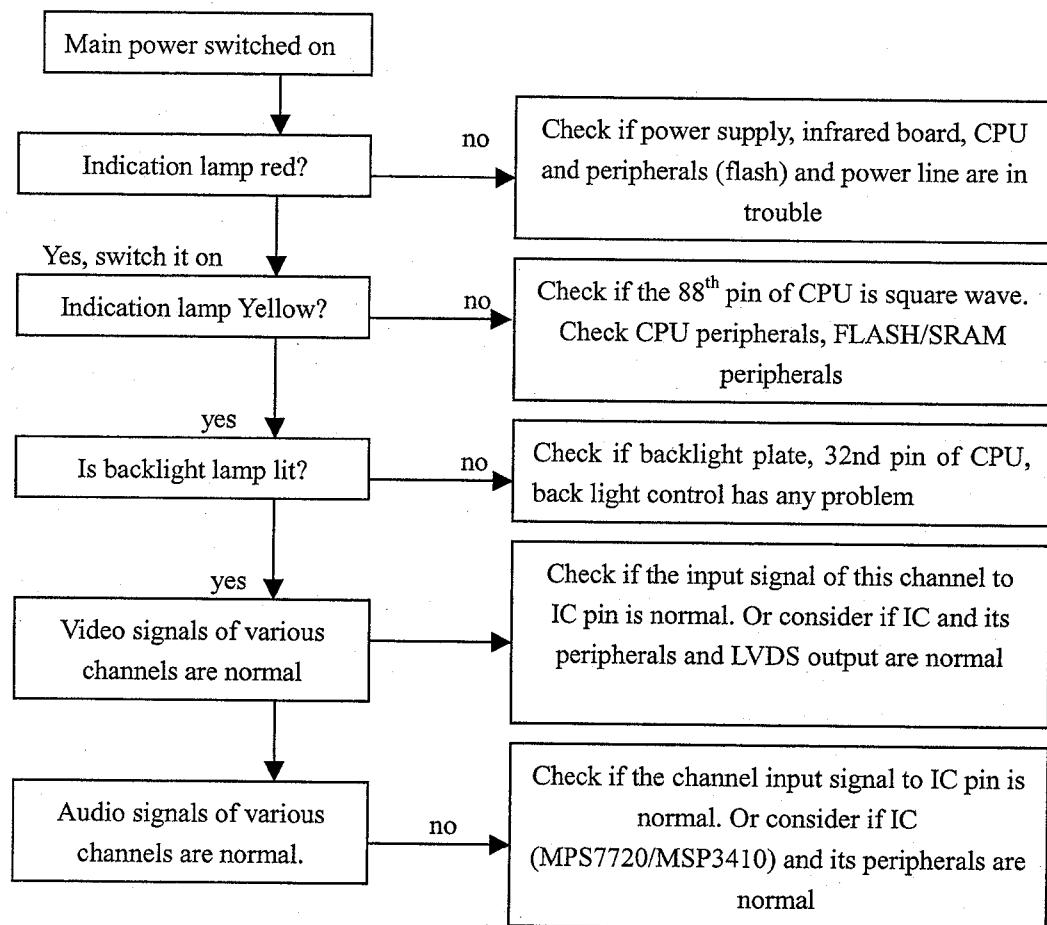
1. Definition of defected point (bright spot, dark spot): It is identified as a defected point if its area exceeds 1/2 of a single picture element (R, G, B).
2. Definition of bright spot: It is identified as a bright spot if it is bright in the state of dark field and its bright size remains unchanged
3. Definition of dark spot: It is identified as a dark spot if it is dark in the state of white field and its dark size remains unchanged
4. Definition of two neighboring points: Defects of a group of picture elements (RB,RG,GB).

Wiring diagram

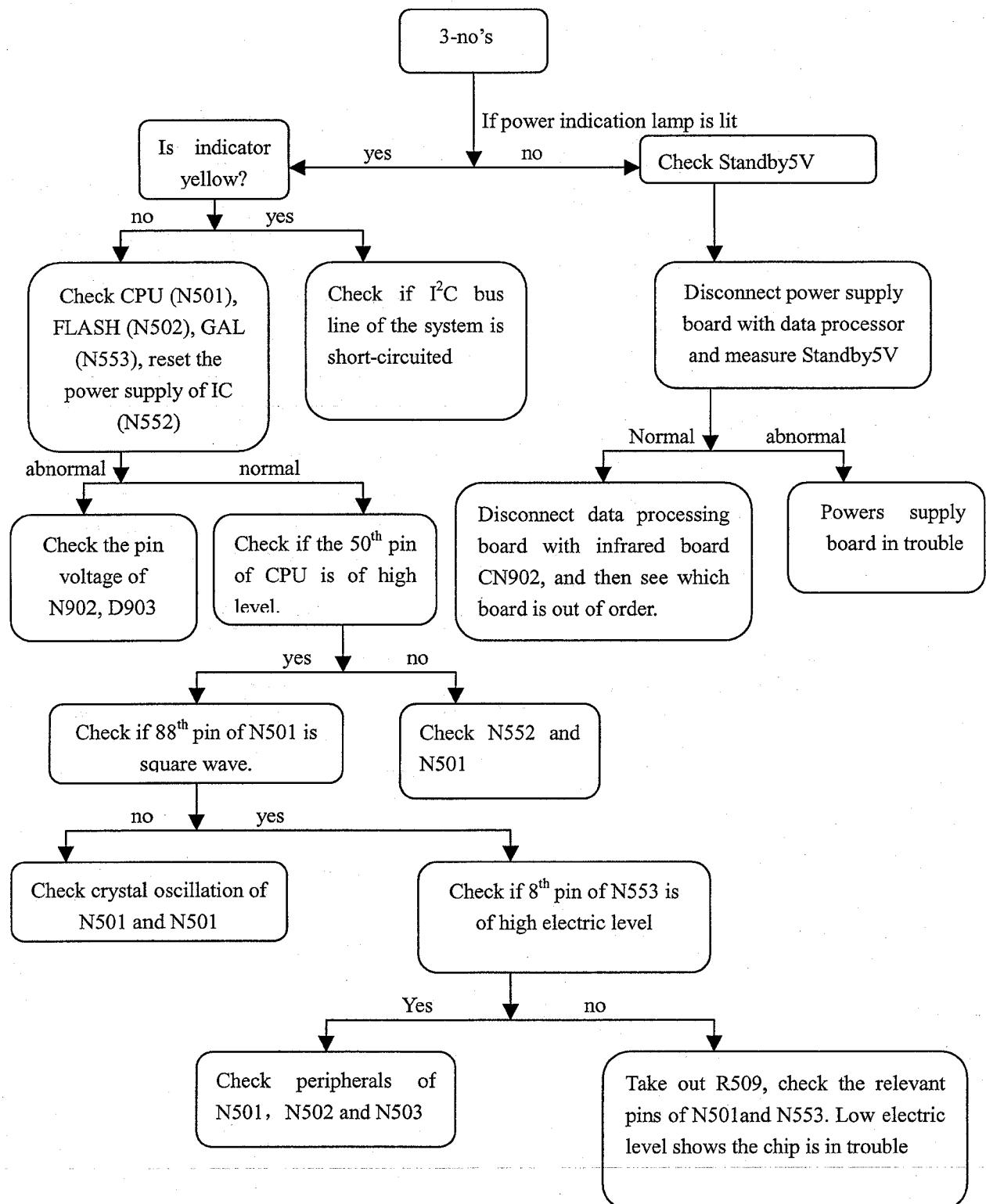


Troubleshooting guide

1. Process of diagnosing happening troubles



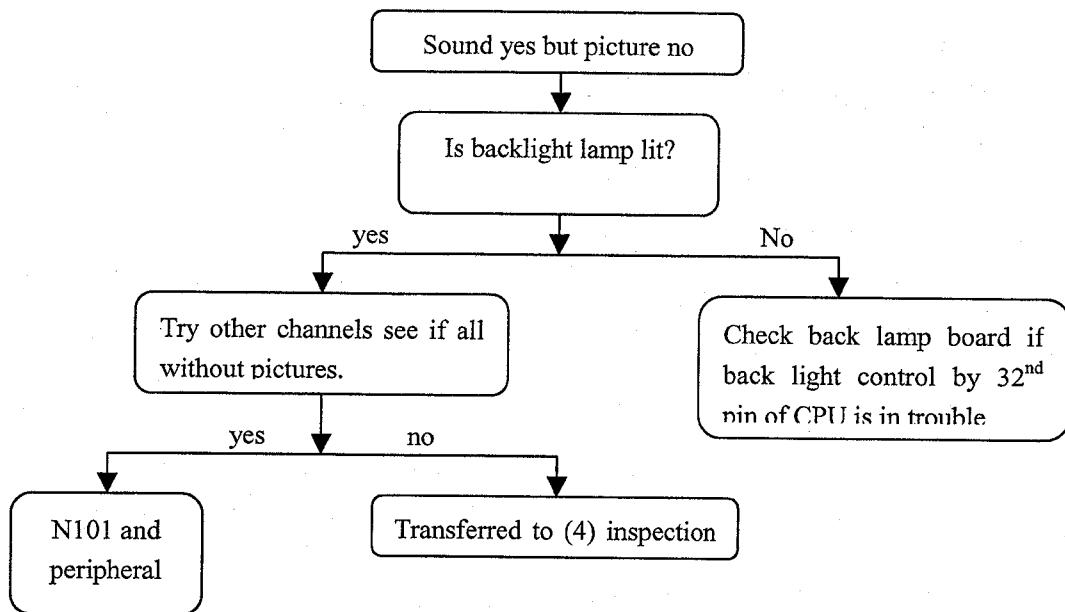
2.Trouble of 3-no's (no raster, no picture and no sound)



Note: When the electric level of the 50th pin of N501 is measured low, take R554 out. Then check if the relevant pins of N501 and N552 are of high electric level. Low electric level shows that the chip is in trouble. During the check of the peripherals of N501, N502 and N503, oscilloscope can be used to detect the pins of the resistor array connected

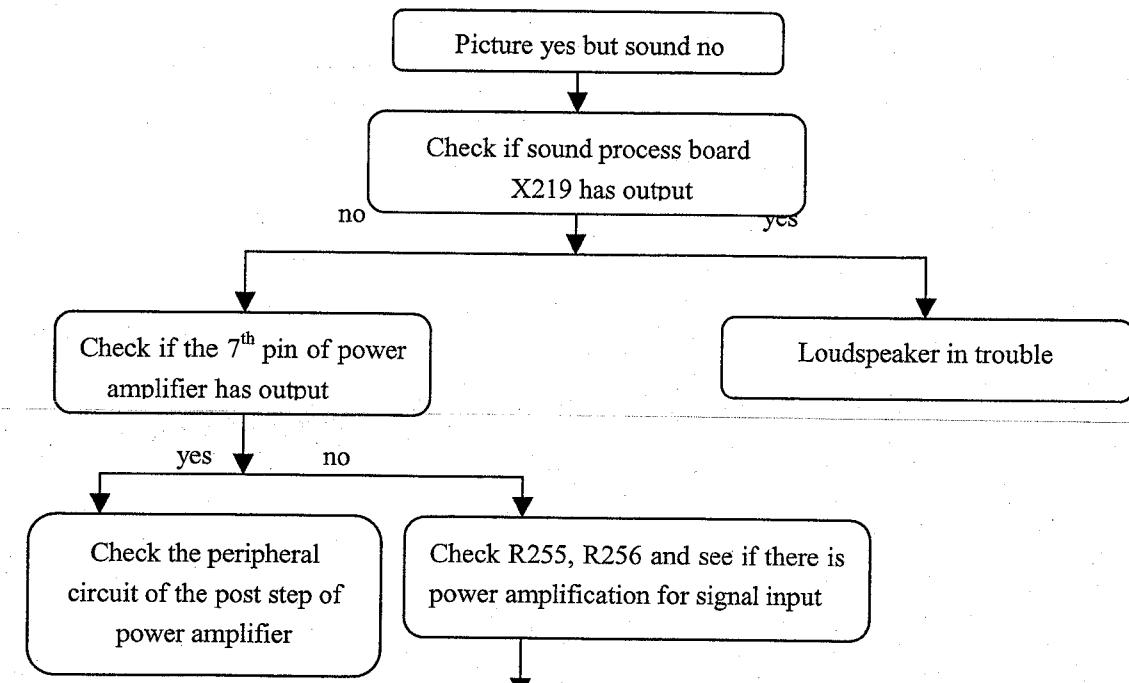
between N501, N502 and N503, in addition to inspect the welding condition of relevant parts and fittings. If the waveform detected is of regular square wave or no signal, it shows that N501 or N502 or N503 is abnormal so that the address link and data link between them become out of order. Now most probably N502 has error.

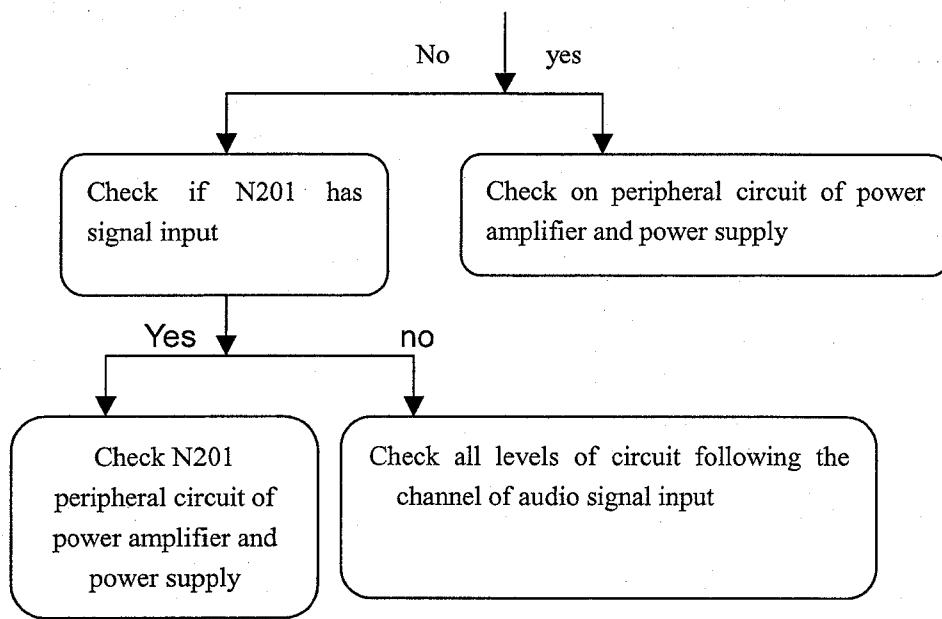
3. With sound but without picture



Note: The no picture phenomena in channel discussed here refers to that detected TV, AV and terminal S are detected to be with sound but without picture. As to inspection details of other channels, please refer to inspection program (4).

4. With picture but without sound

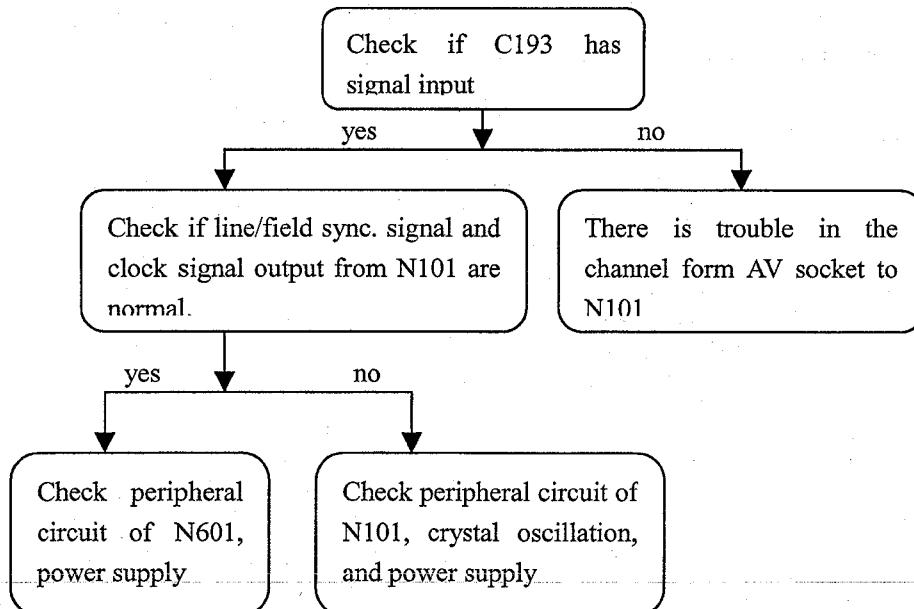




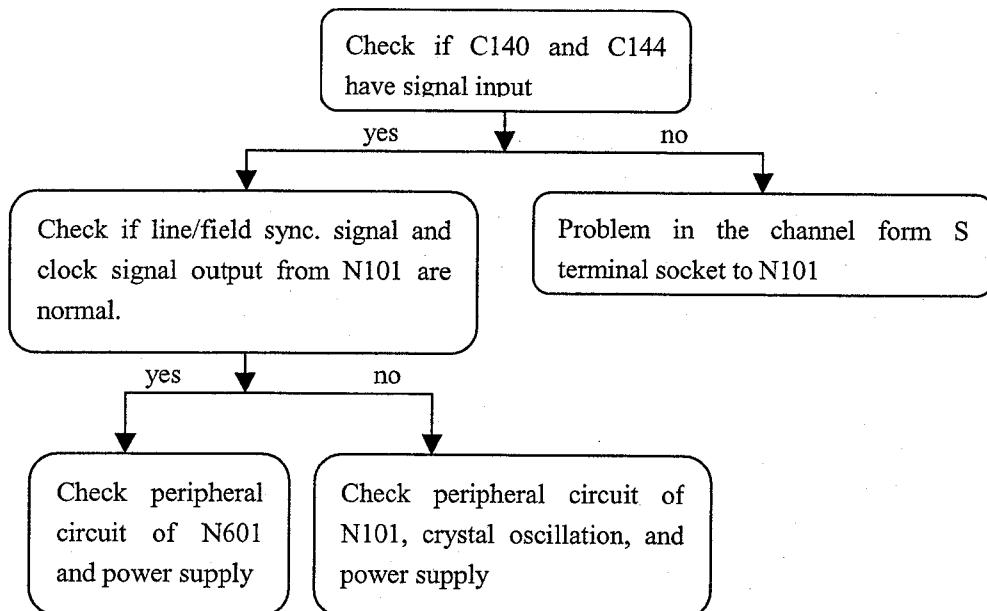
Note: It is after the changeover by external audio switch that the audio signal of high definition, DVI and VGA channels enters MSP3410 through. Therefore if the audio signal of the channels above is in trouble, it is necessary to check the peripheral circuit of N704 on the data processing board as well as the power supply.

5.A certain channel works abnormally

a). No picture in AV



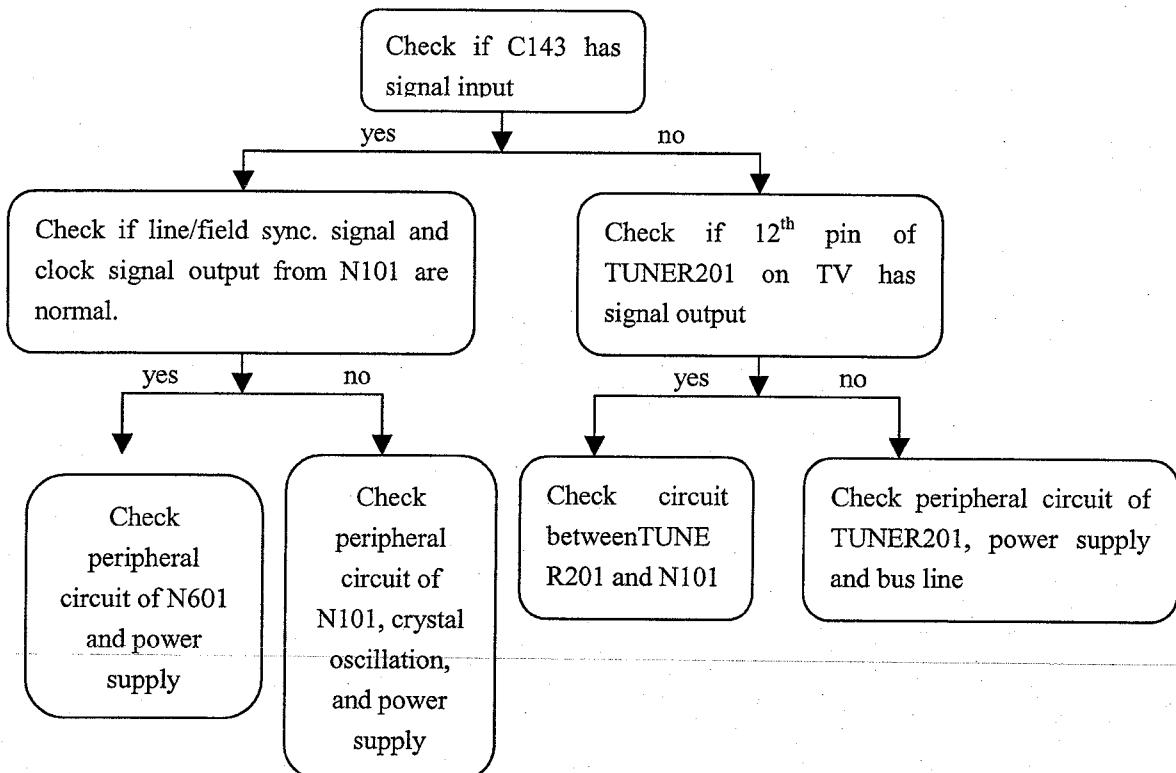
b). No picture for S terminal



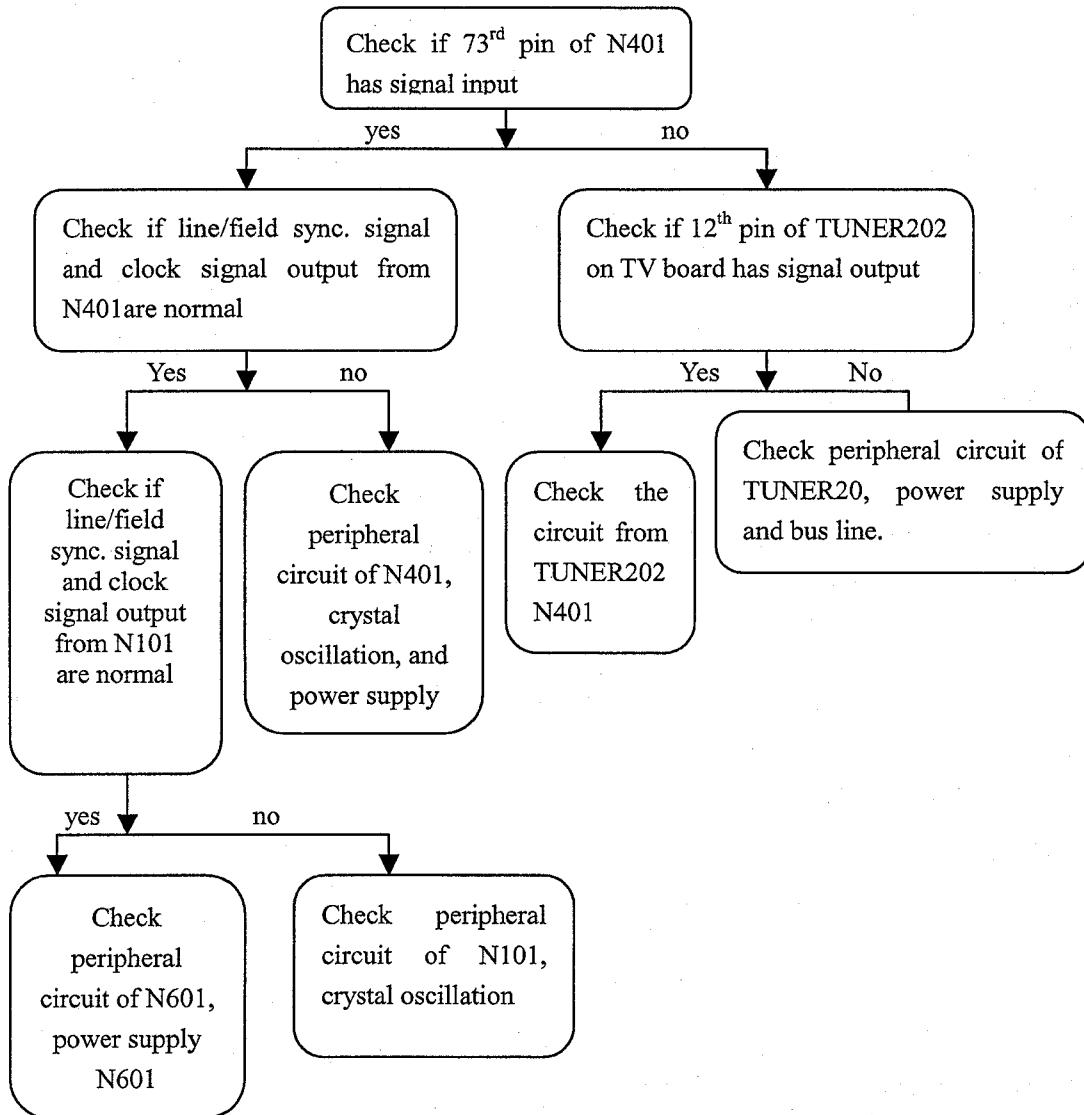
c). No picture in TV channel

First use the double picture function to judge whether the problem lies in the main screen or sub-screen.

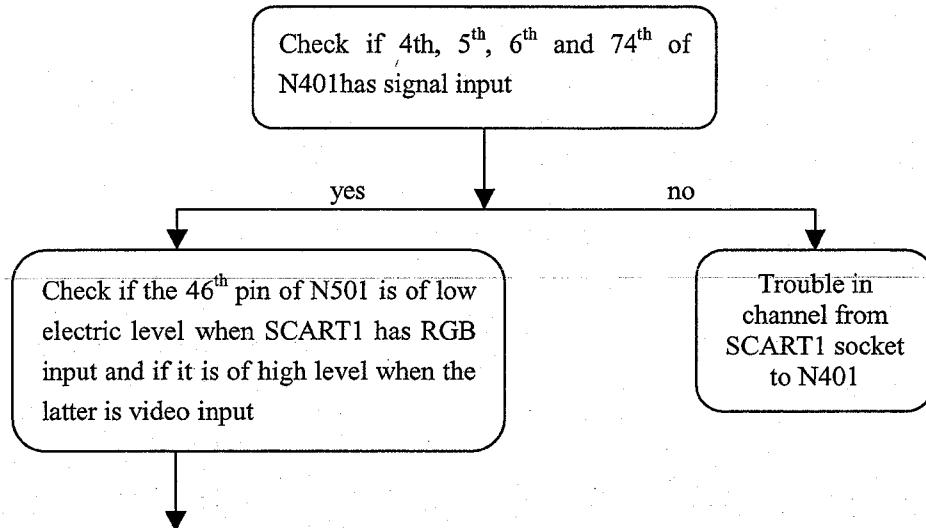
No picture in the main screen:

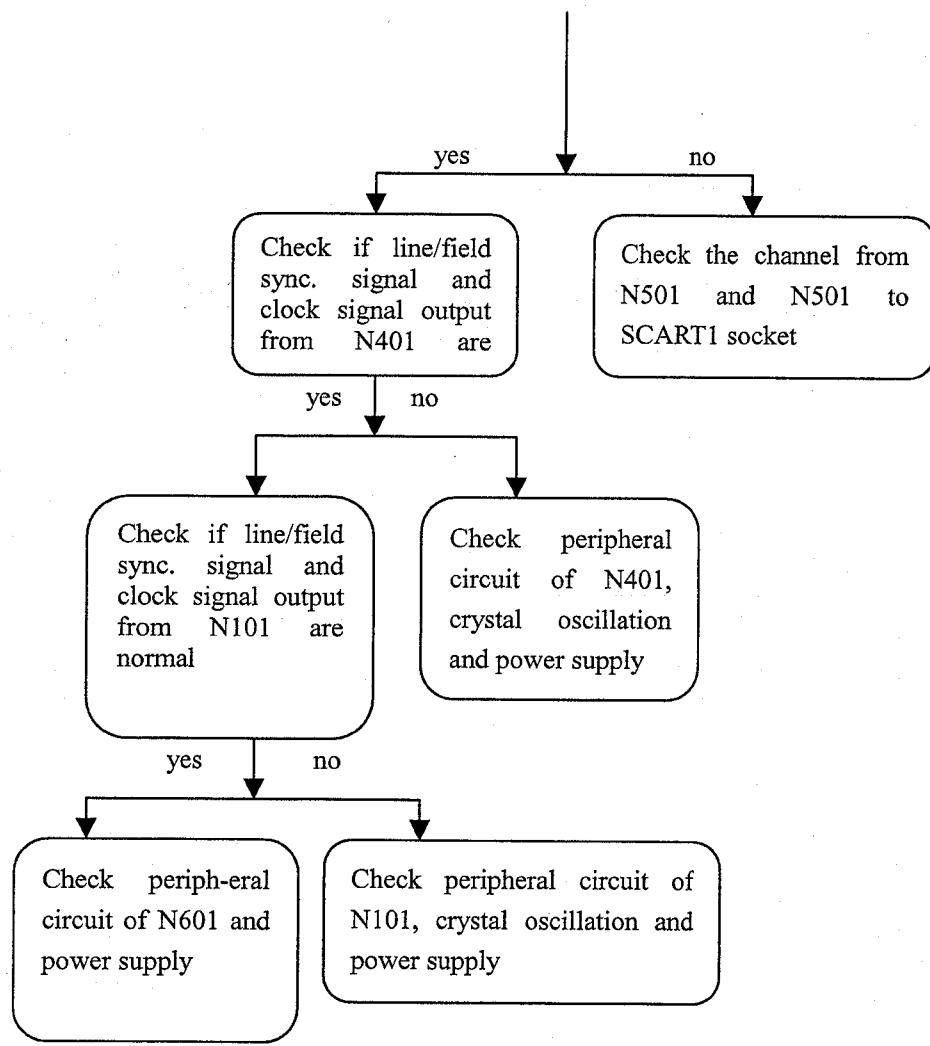


No picture in sub-screen:

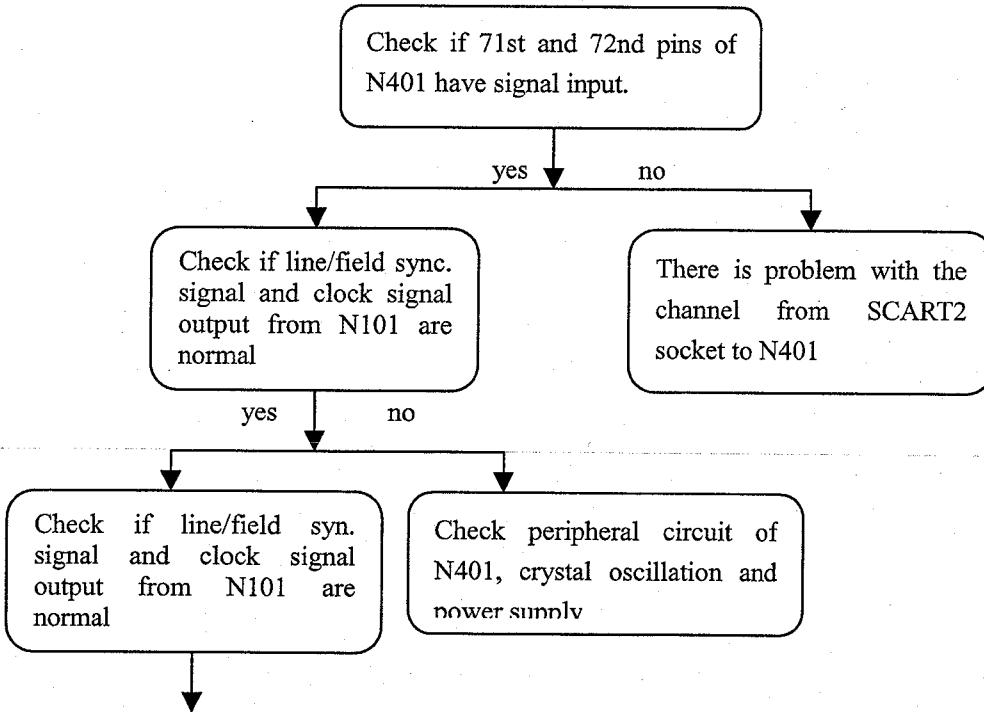


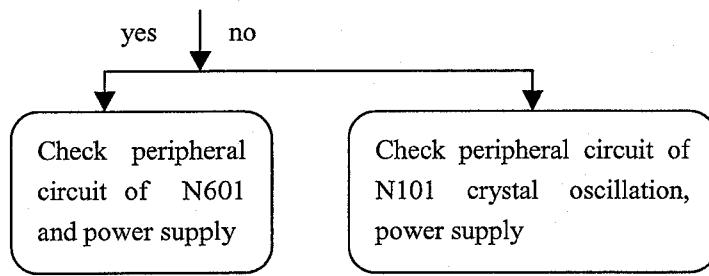
d). No picture in SCART1 channel



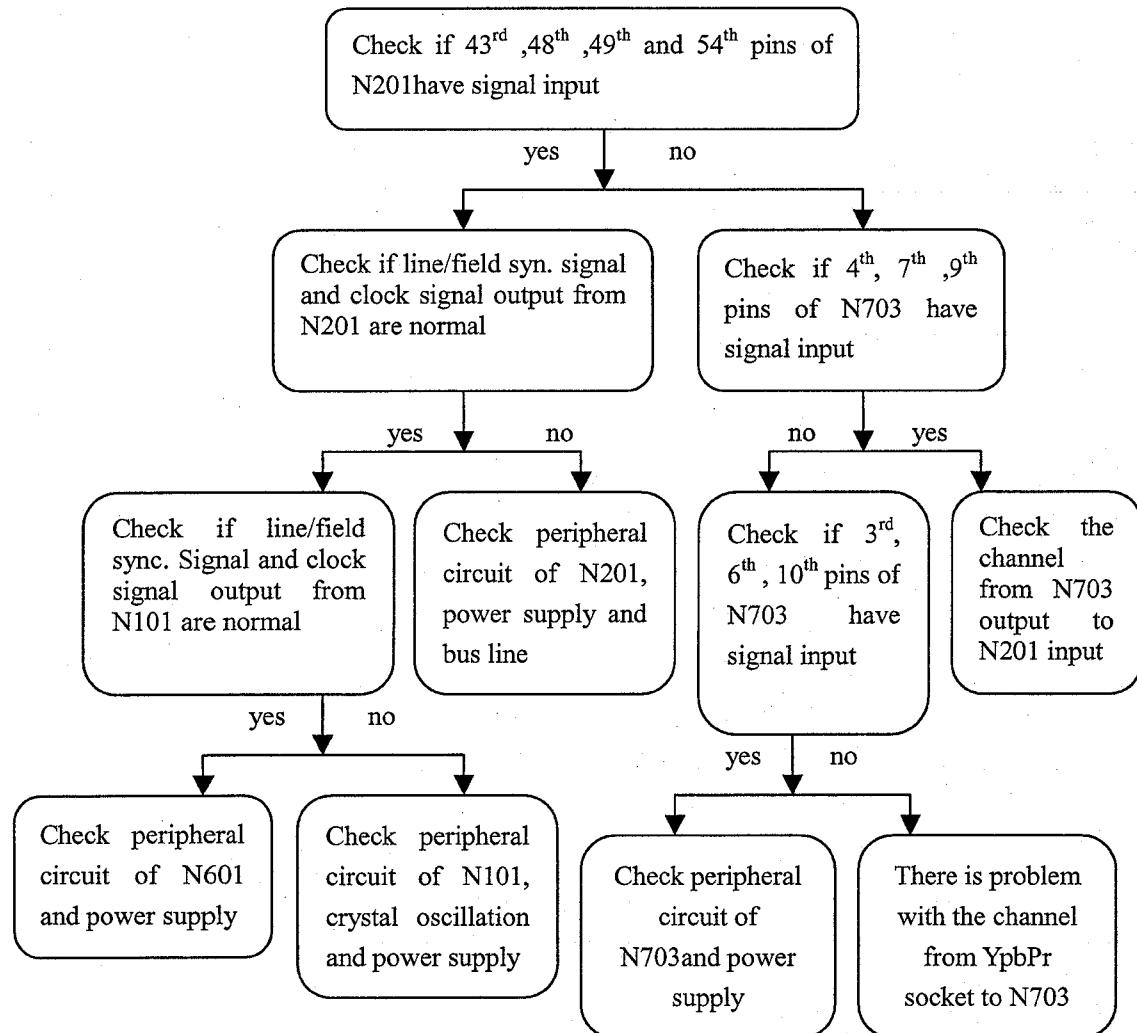


e). No picture in SCART2 channel

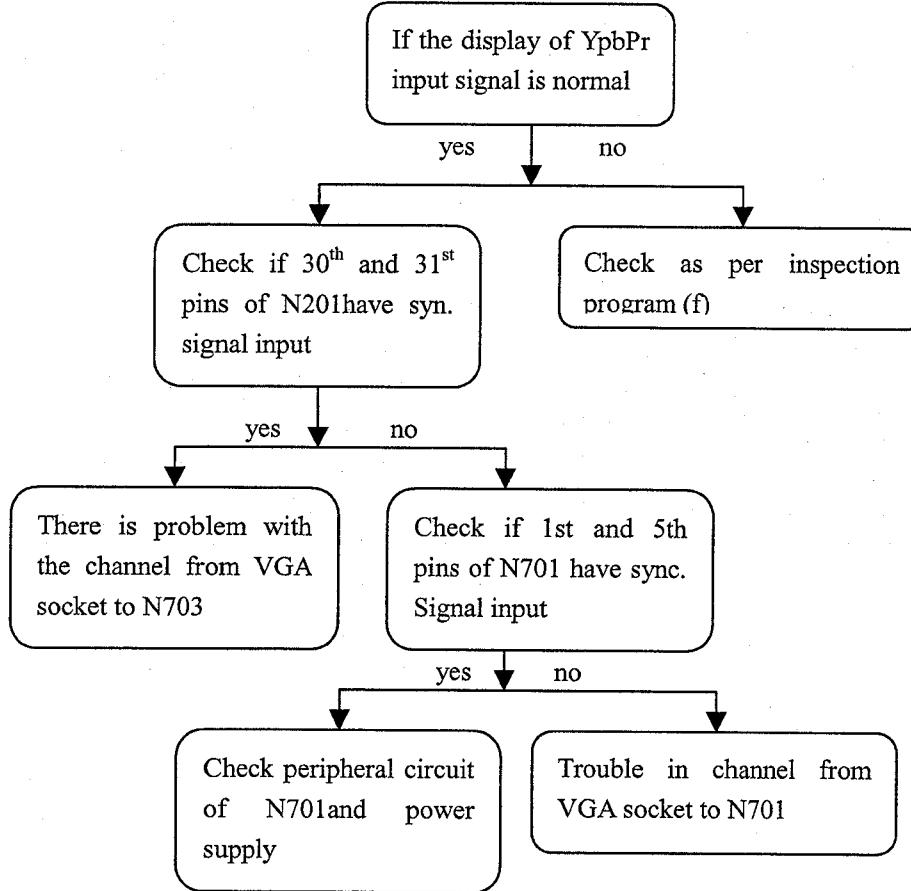




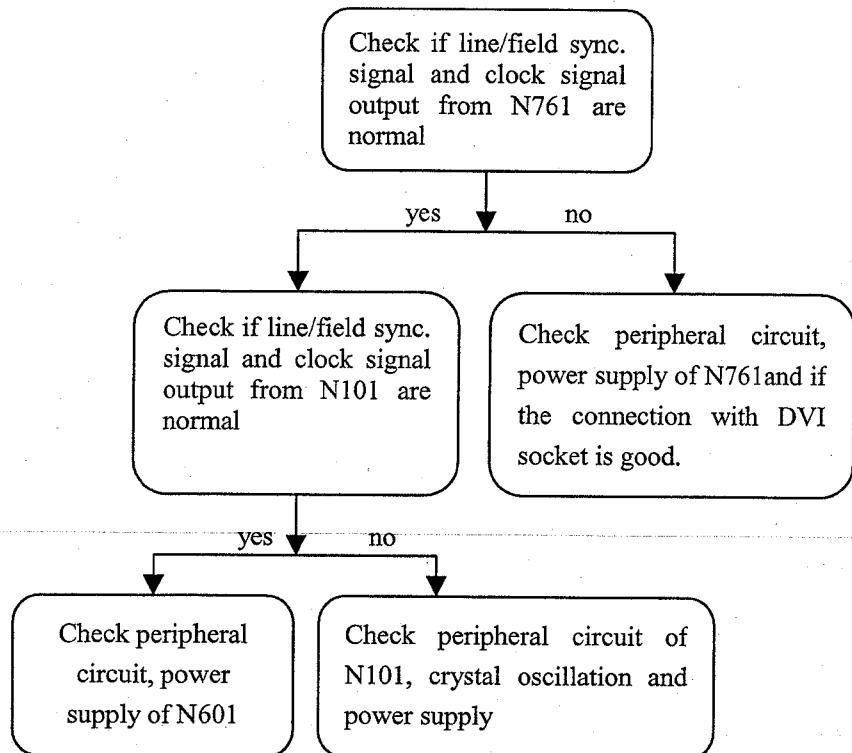
f).No picture in YPbPr/YcbCr channel



g). No picture in D_Sub channel



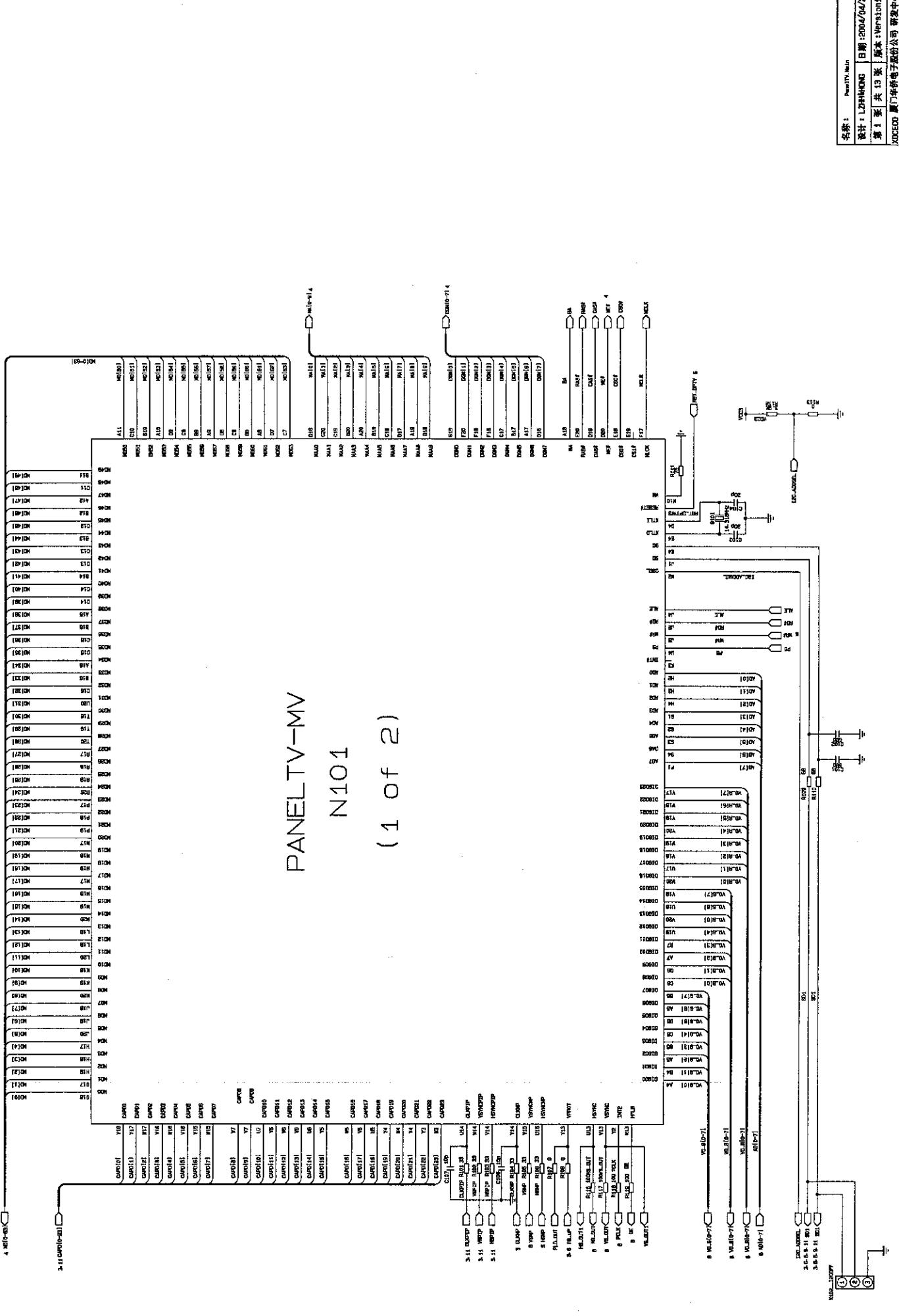
h).No picture in DVI channel

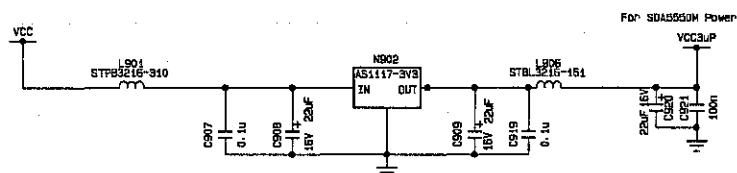
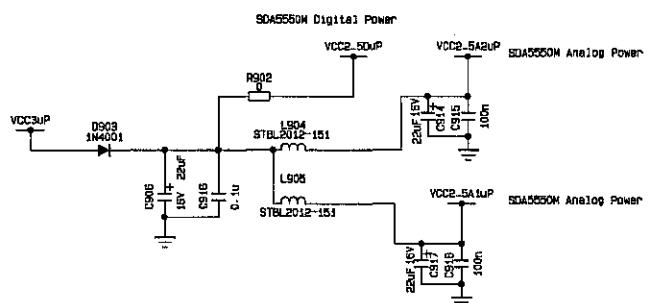
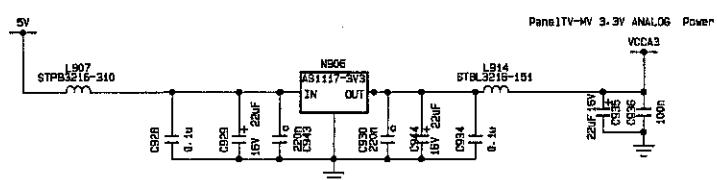
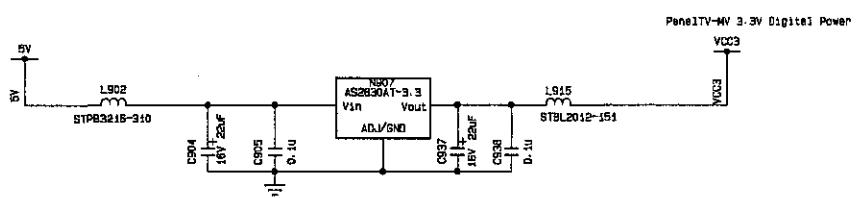
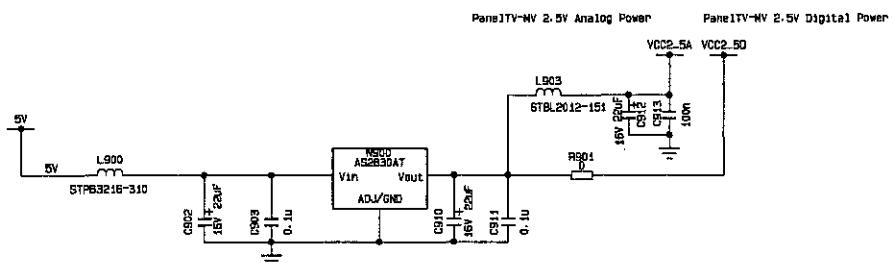


Note: To enable DVI picture to be displayed normally, especially to be connectable with the computer display card, the top priority is to ensure that N762 (DDC chip of DVI port) are well flash written. When picture signal is with HDCP, it is also necessary to ensure that the KEY in HDCP of N760 is well flash written.

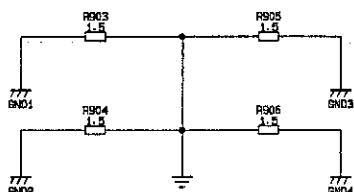
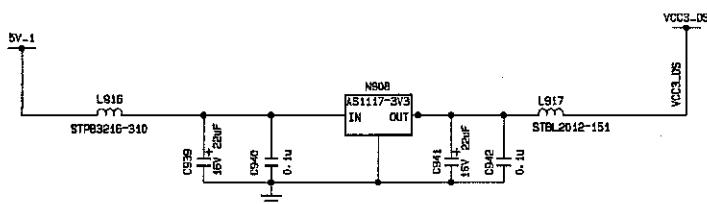
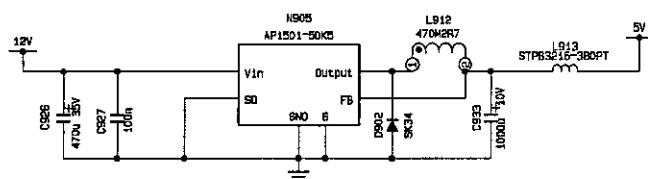
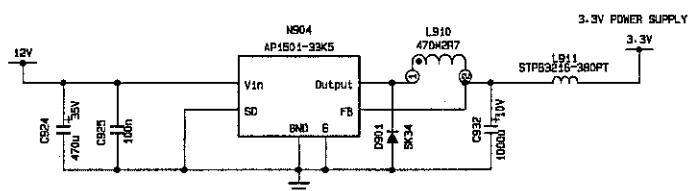
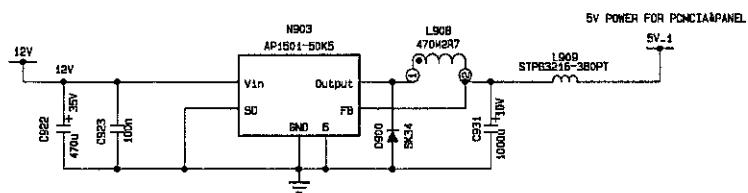
7. Abnormal picture on screen

- 1). A certain LVDS differential line of X601 LVDS is abnormal against (RX0+/-, RX1+/-, RX2+/-, RX3+/-), which may result in under coloring or color speckle;
- 2). R602~R607 resistor array in trouble, which may result in the loss of corresponding color in corresponding gray degree for the picture of all channels;
- 3). R205~R210 resistor array in trouble, which may result in the loss of corresponding color in corresponding gray degree for the picture of YPbPr/VGA channel;
- 4). R777~R782 resistor array in trouble, which may result in the loss of corresponding color in corresponding gray degree for the picture of DVI channel;
- 5). R414 and R415 resistor array in trouble, which may result in abnormality in the picture of SCART and TV sub screen.

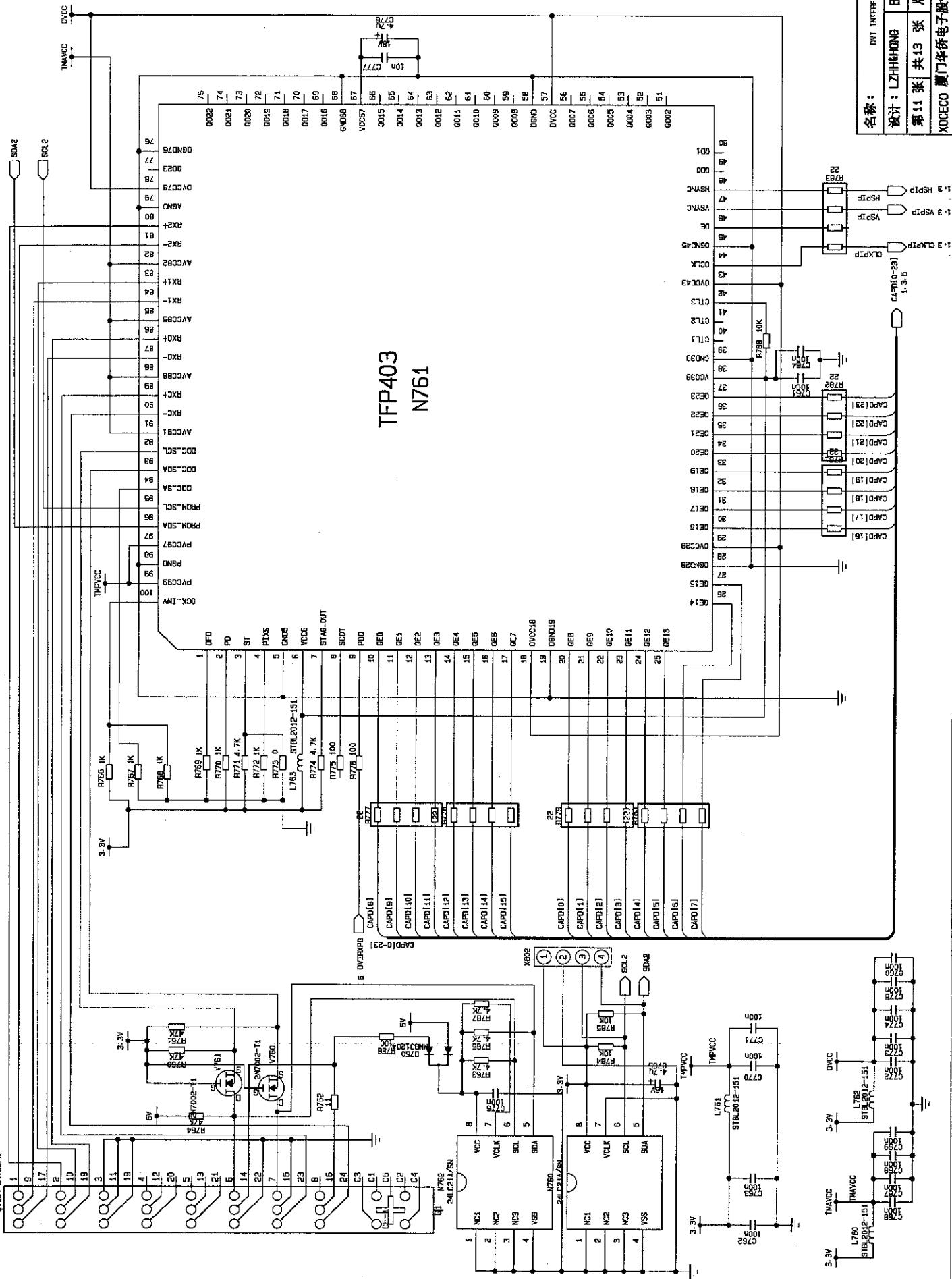
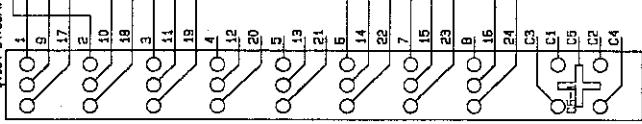




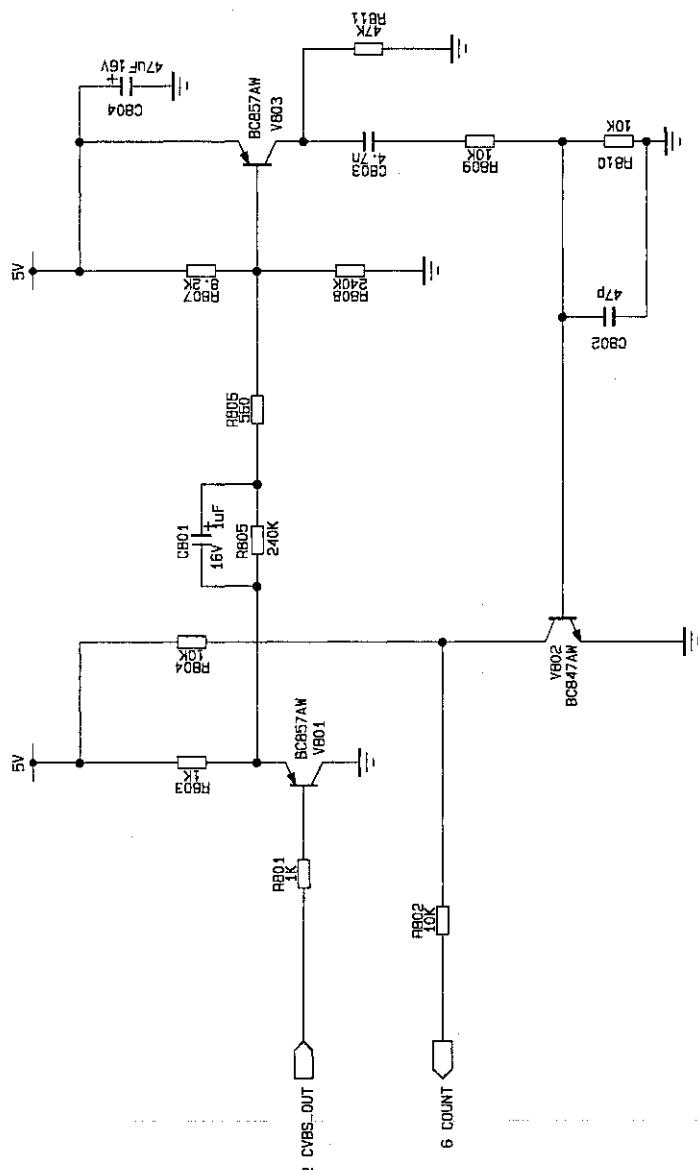
名称：POWER	
设计 : LZHH&HONG	日期 : 2004/04/21
第12张 共13张	版本 : Version1.0
XOCECO 厦门华侨电子股份公司 研发中心	



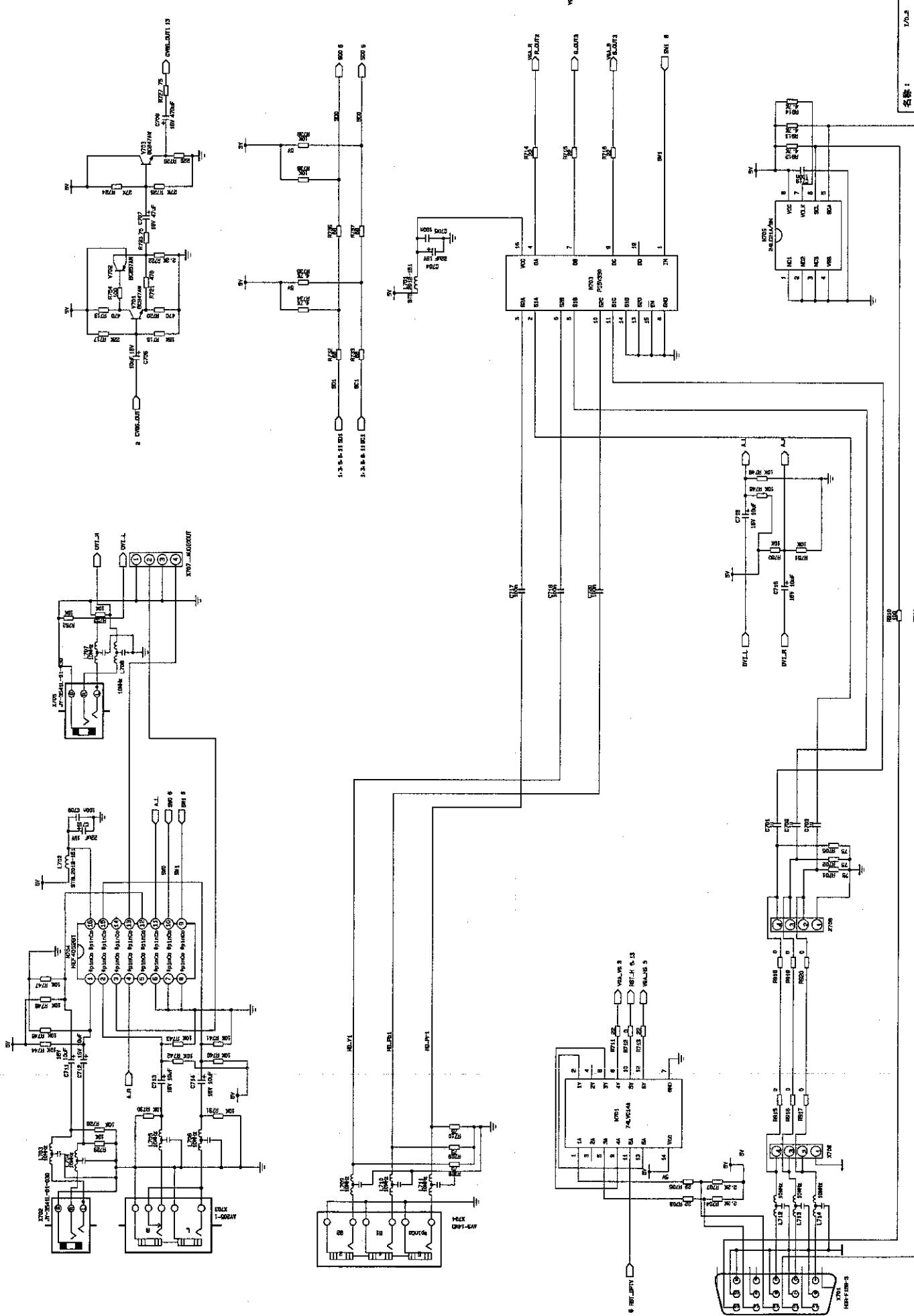
名称：	POWER
设计：LZH&HONG	日期：2004/04/21
第12张 共13张	版本：Version1.0
XOCECO 厦门华侨电子股份公司	研发中心

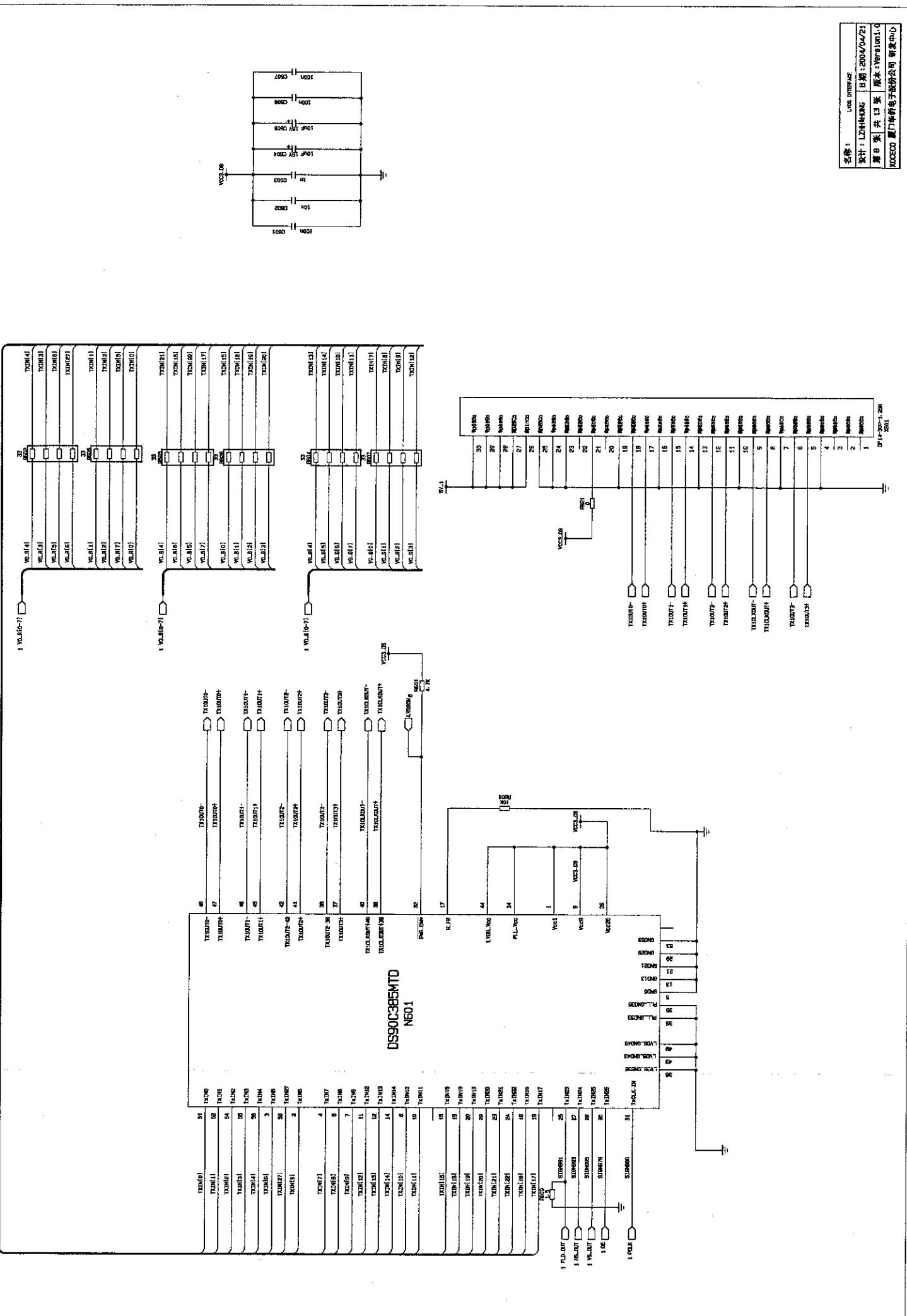
62 X760
N761

名称：	SIGNAL_DETECT	
设计：	LZH&HONG	日期：2004/04/21
第 10 张	共 13 张	版本：Version1.0
XOCECO	厦门华侨电子股份公司	研发中心

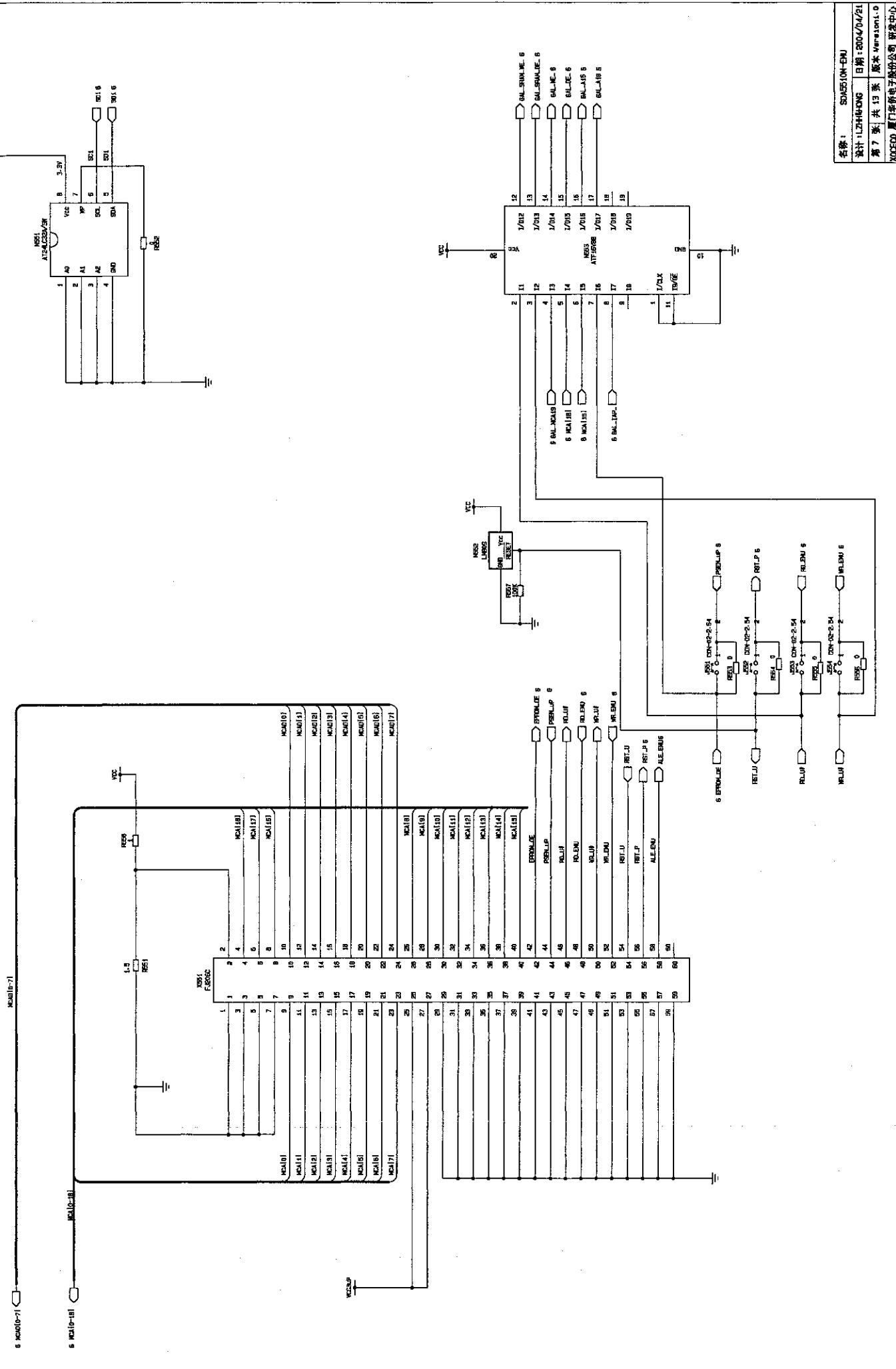


名称：
设计：1.2MHzN9NE
第 9 张 共 13 张 日期：2004/04/21
版本：Version1.0
KOECD 虎门华新电子有限公司 新发中心



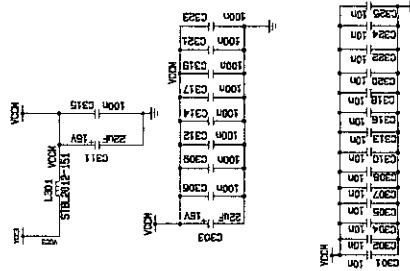
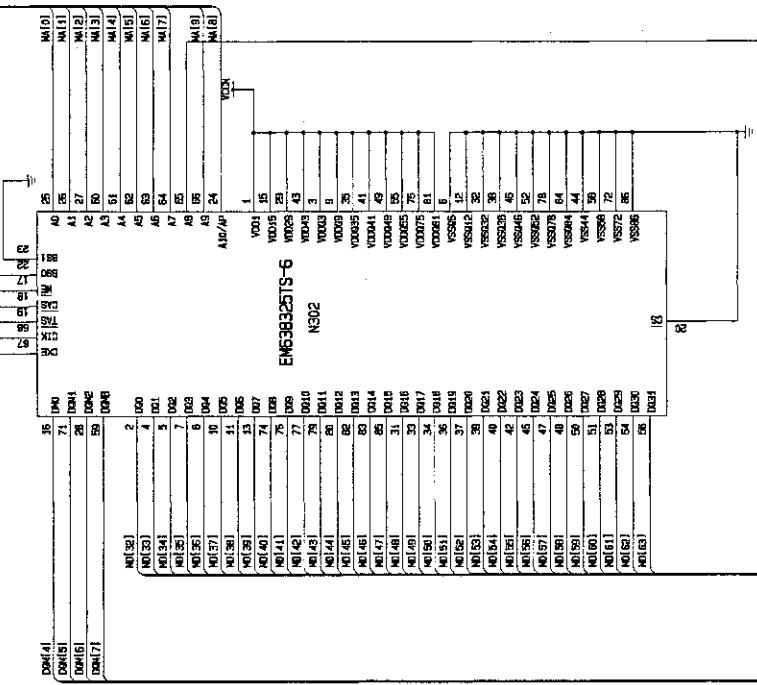
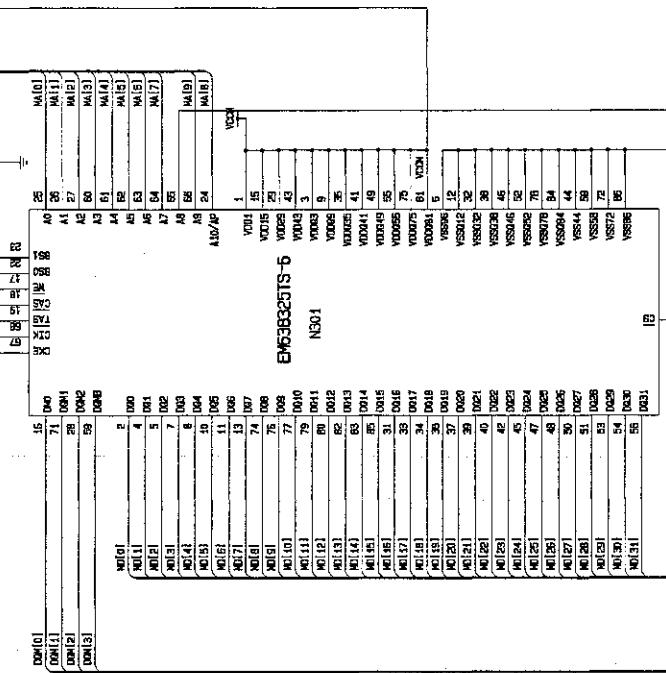


名称: LVDS INTERFACE
设计: LZH-MHONG | 日期: 2004/04/21
第 8 版 | 共 13 页 | 版本: Version1.0
XOCED 深圳市电子有限公司 新研发中心



BL	BA	REG2_33
NEF	ME1	REG3_33
CASH	CAS1	REG4_33
1 PASH	PASH	REG5_33
MUL	MUL	REG6_33

1 M[0~9]



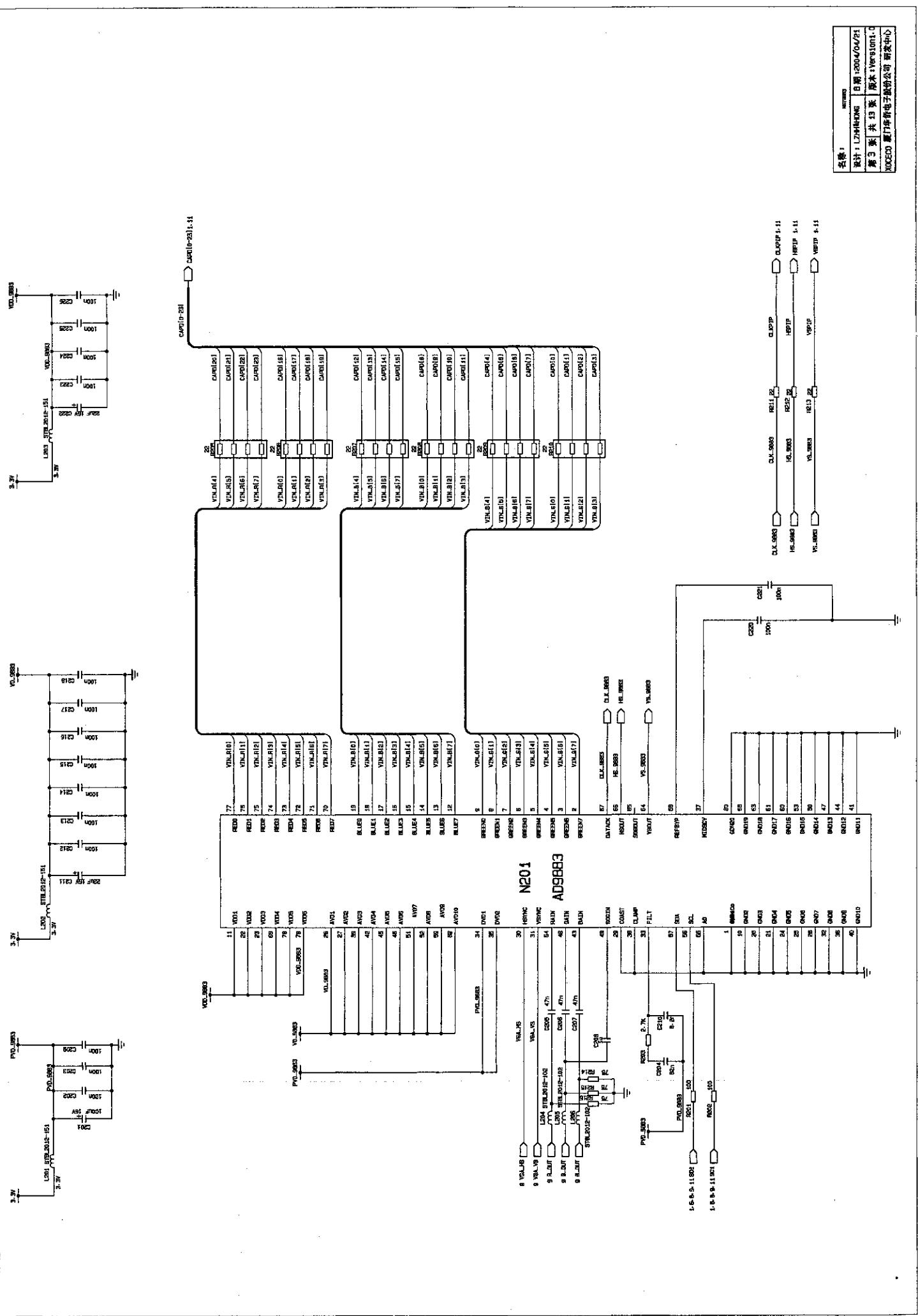
版權：
Pantech Co., Ltd.
設計：D.B.A.D.C
製造：三星半導體
規格書號：DS9000
2000年1月發行

NO [0~53]

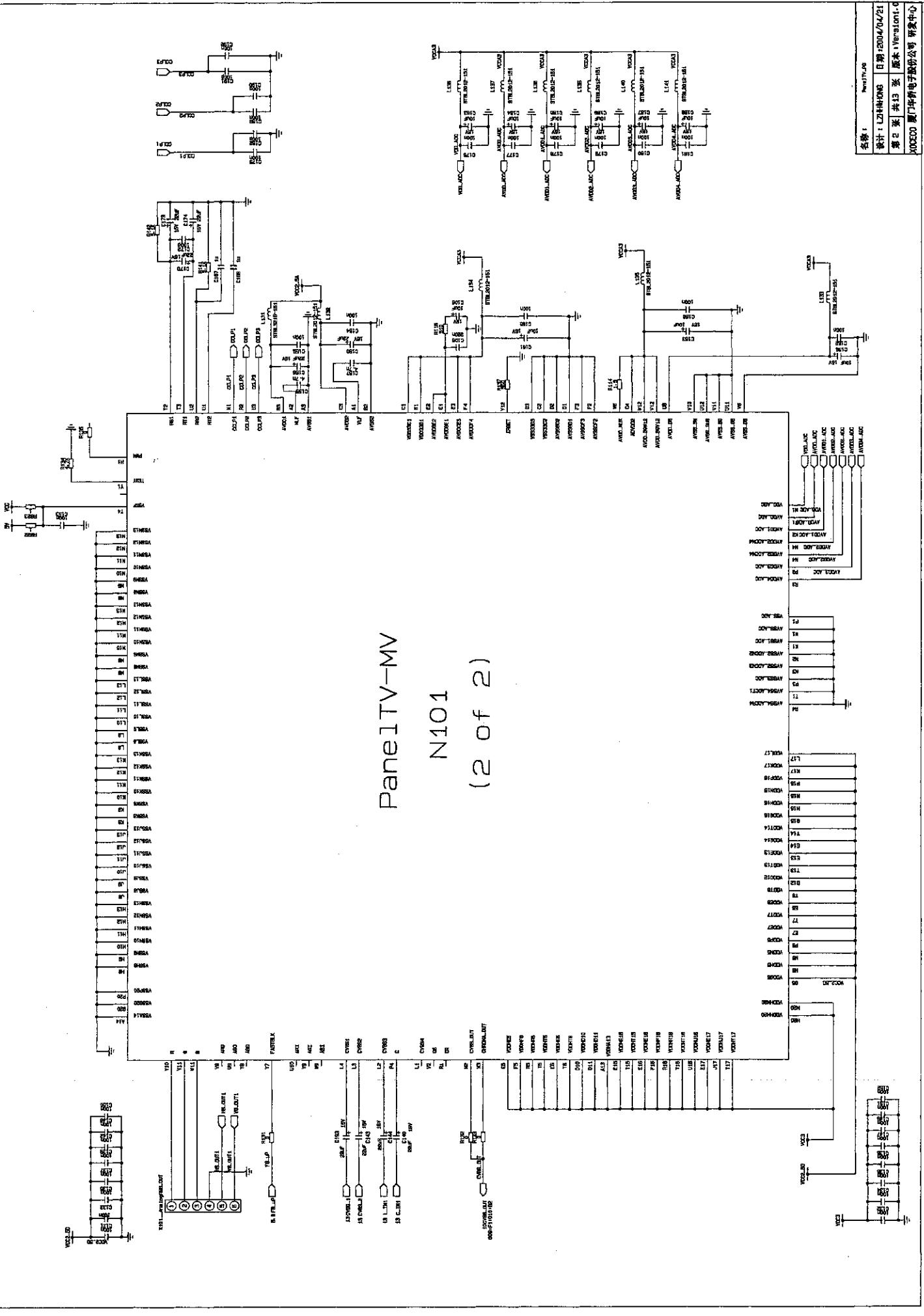
NO [6~53]

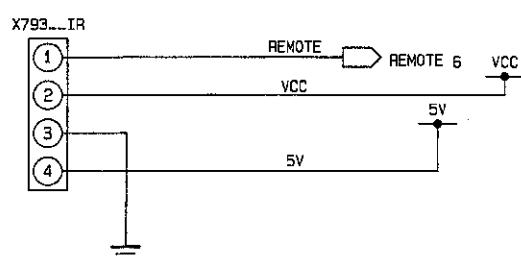
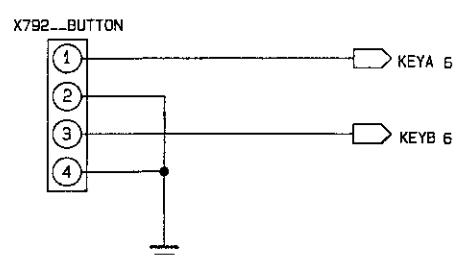
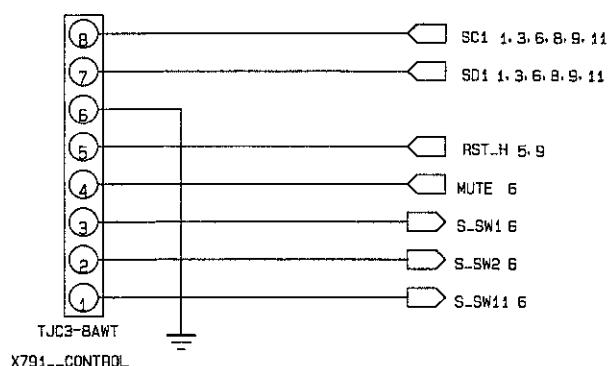
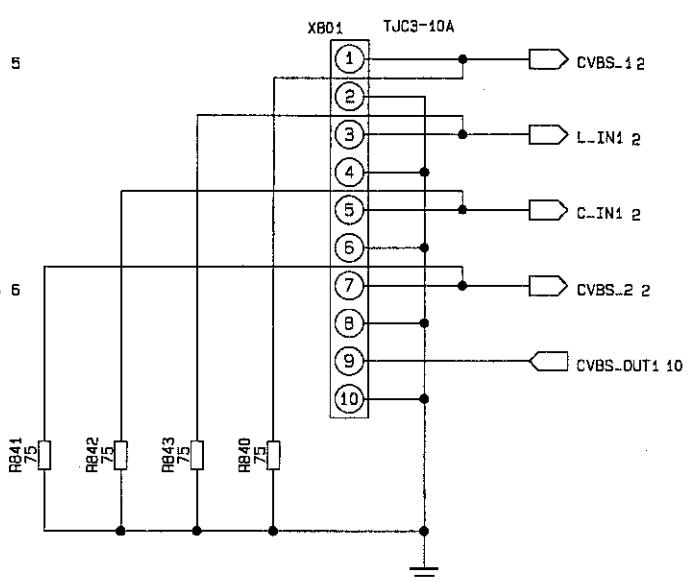
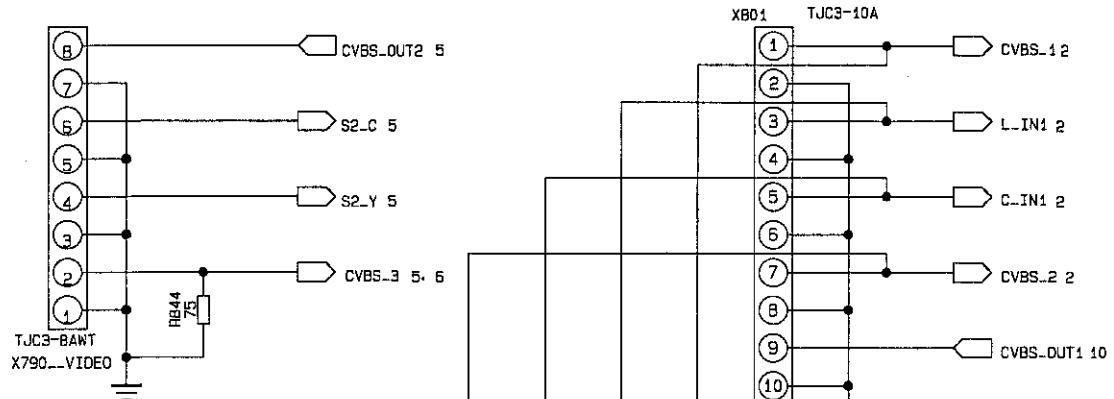
DS9000

ISSN

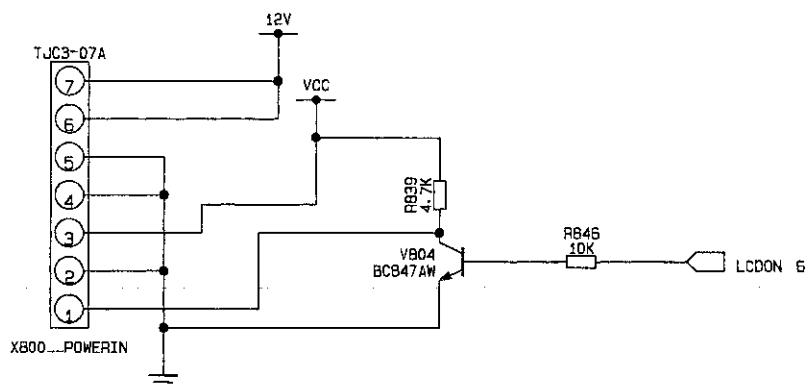
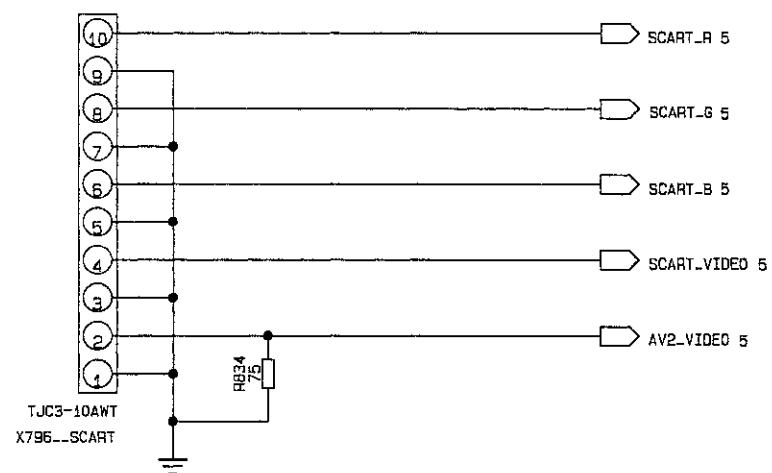
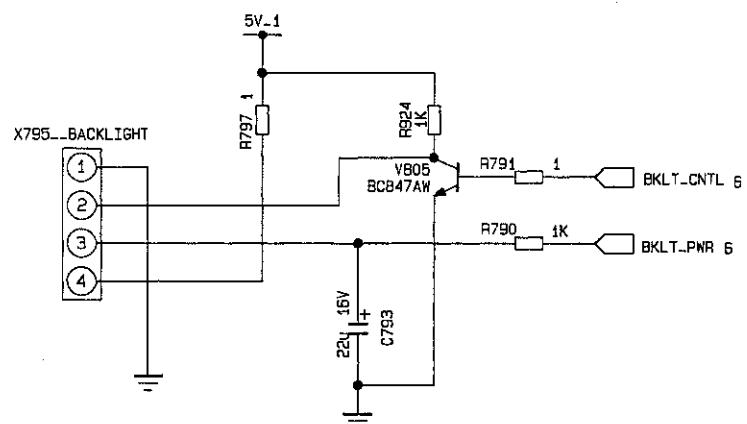


名称：
设计人：LZHAIHONG
日期：2004/04/21
第 3 版 | 共 13 版 | 最新版本
XCODE | 莱特新电子股份公司研发中心





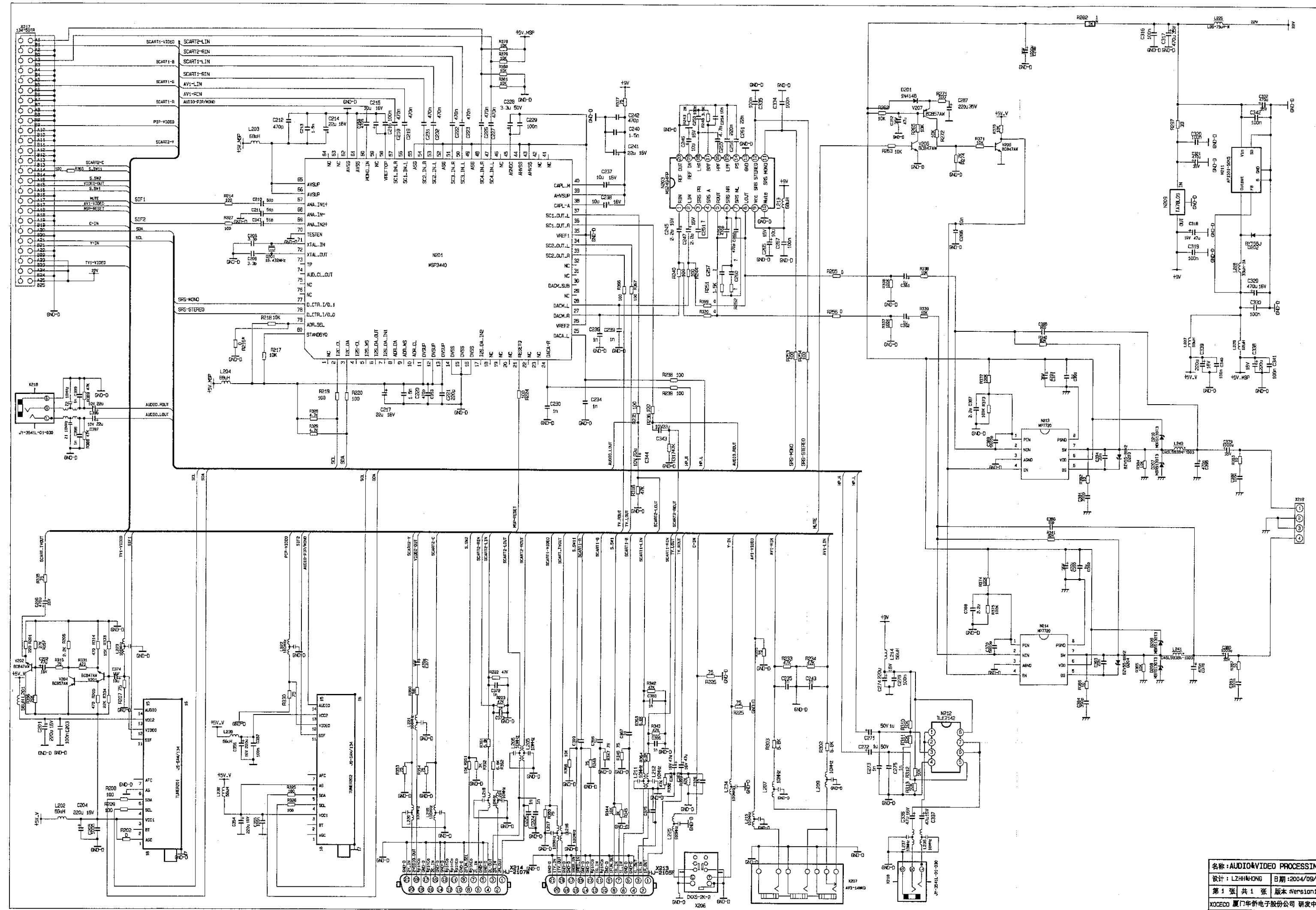
名称： CONNECTOR		
设计： LZHH&HONG	日期 :2004/04/21	
第13 张	共 13 张	版本 :Version1.0
XOCECO 厦门华侨电子股份公司 研发中心		

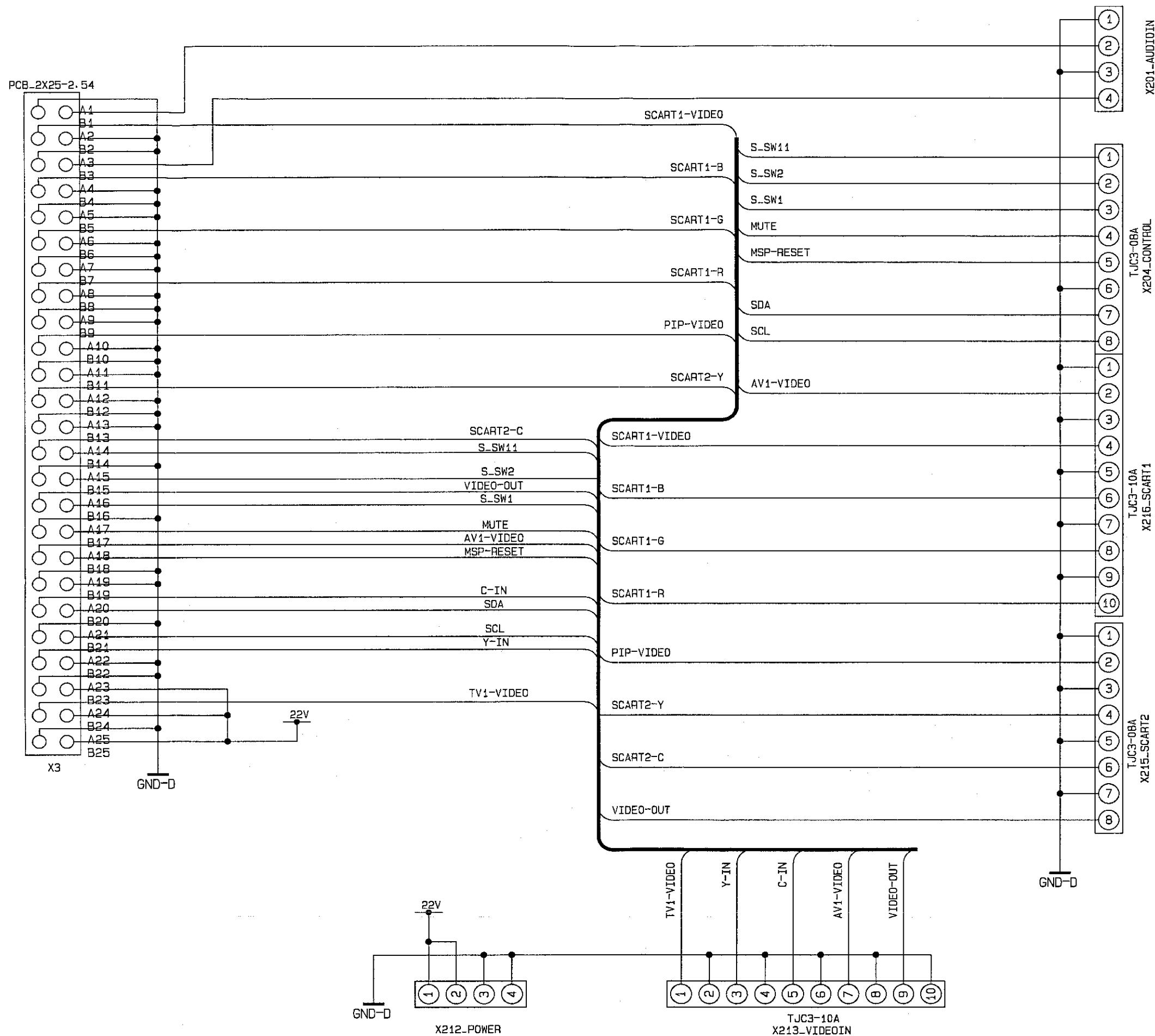


名称： CONNECTOR	
设计： LZHH&HONG	日期：2004/04/21
第13张	共13张
版本：Version1.0 XOCECO 厦门华侨电子股份公司 研发中心	

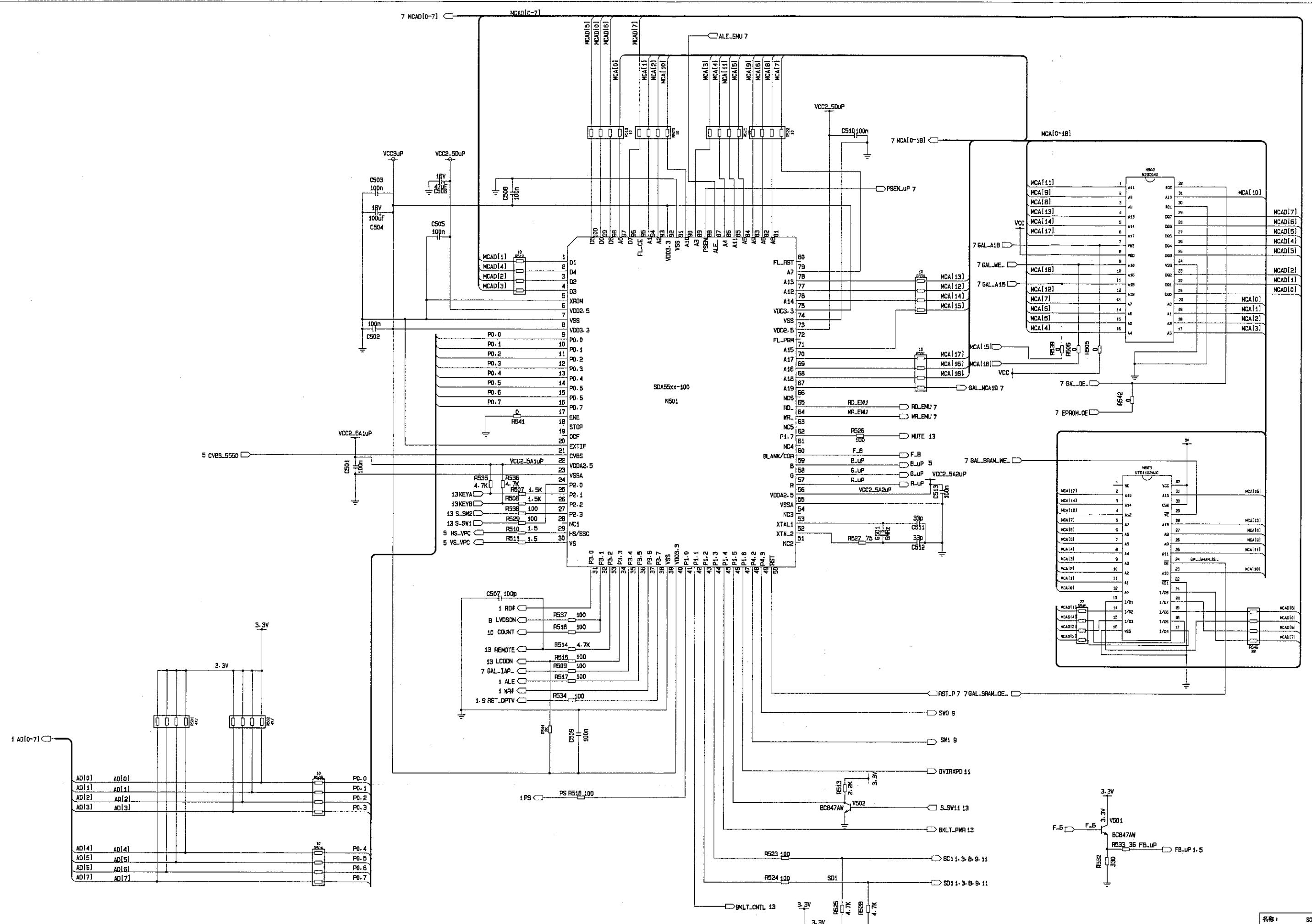
Spare Parts List

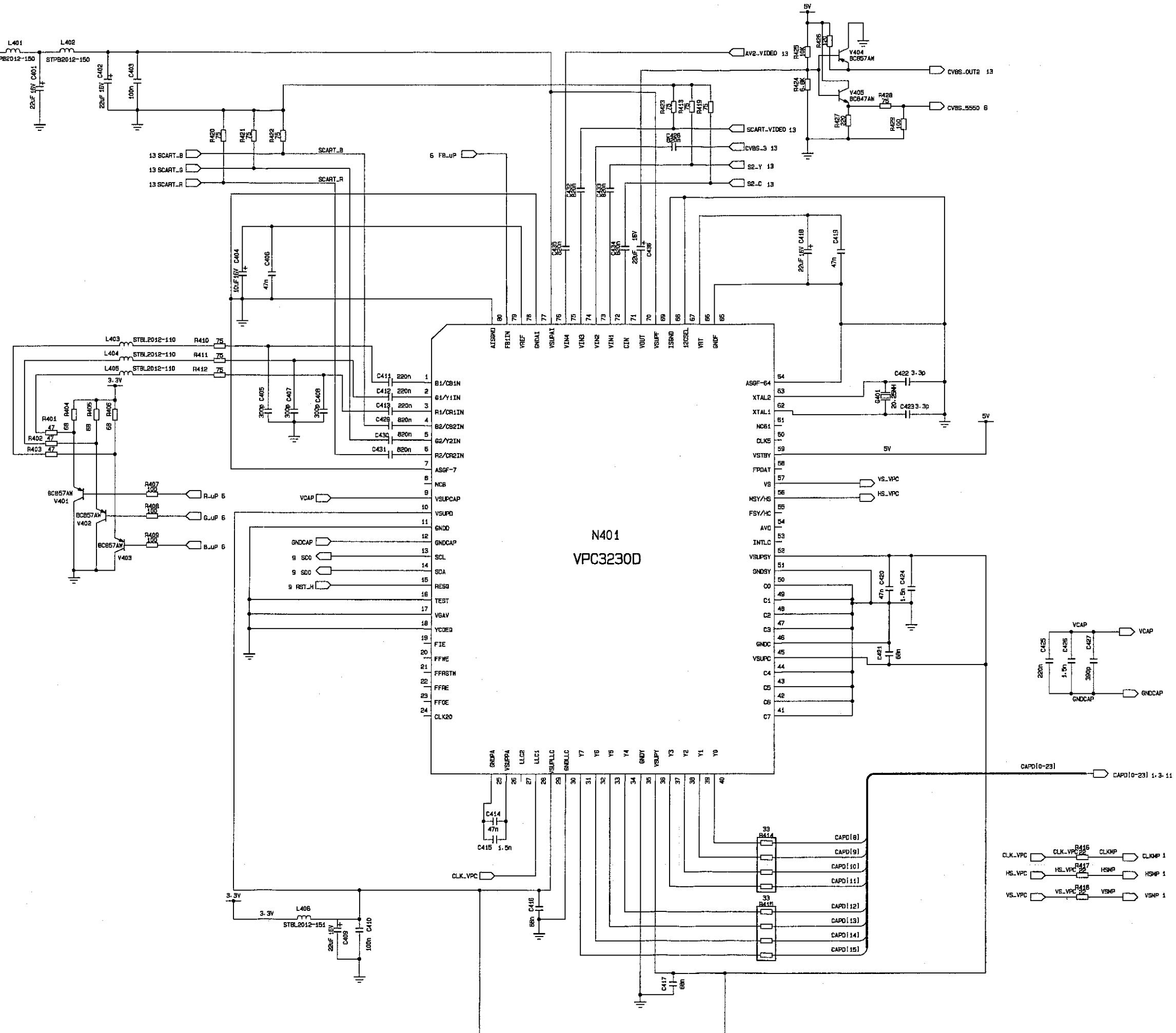
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1	523-L32M5-00(F)	FRONT CABINET
2	523-L32M5-00(B)	BACK CABINET
3	615-10464-02	PANEL STAND ASS'Y
4	667-L32M5S-69W	MAIN BOARD ASS'Y
5	667-L32M5S-40	PROCESSING ASS'Y
6	667-L32M5S-46	RF JACK ASS'Y
8	485-10101-00	POWER CORD
10	665-D0002-421	LEAD WITH HOUSING
11	868-20453-00	RUBBER WASHER
12	887-20047-01	ACCESSORY BAG
13	742-30005-09	LINE TIE
14	881-60085-00	BLANK LABEL
15	808-70322-00	INSULATING WASHER
34	808-6A893-00	BRACKET
35	877-60655-AD0	POWER BUTTON
36	894-70040-11	WASHER
42	886-31730-00	PACKING BOX UNDER COVER
48	886-31729-18	PACKING BOX UP COVER
49	863-81127-00	POLY FOAM
50	863-81128-00	POLY FOAM
51	863-81129-00	POLY FOAM
52	863-81130-00	POLY FOAM
53	863-81111-00A	POLY FOAM
54	604-L32M5S9-01	USER MANUAL
55	870-10218-00	WALL MOUNT BRACKET
56	667-L34K5-20	POWER BOARD ASS'Y
57	360-30037-00	POWER SWITCH
58	364-23207-00	POWER SOCKET
63	870-30141-AF0	POWER SOCKET BRACKET
66	870-1A028-00	POWER SWITCH BRACKET
67	870-10133-00A	WALL MOUNT BRACKET
68	615-20402-00	SPEAKER ASS'Y
69	301-UL27M6-37R	REMOTE CONTROL





名称：CONVERSION	
设计：LZH&HONG	日期：2004/09/20
第 1 张	共 1 张
版本：Version1.0	
XOCECO 厦门华侨电子股份公司 研发中心	





名称:	VPC3230
设计:	LZH&HONG
日期:	2004/04/21
第 5 张	共 13 张
版本:	Version1.0
XOCECO 厦门华侨电子股份公司 研发中心	