

Service
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Service Manual

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SAFETY NOTICE

ANY PERSON ATTEMPTING TO SERVICE THIS CHASSIS MUST FAMILIARIZE HIMSELF WITH THE CHASSIS AND BE AWARE OF THE NECESSARY SAFETY PRECAUTIONS TO BE USED WHEN SERVICING ELECTRONIC EQUIPMENT CONTAINING HIGH VOLTAGES.

CAUTION: USE A SEPARATE ISOLATION TRANSFORMER FOR THIS UNIT WHEN SERVICING

Revision List

Version	Release Date	Revision History	TPV Model
A00	NOV-5-2008	Initial Release	T96MNBDKIWVSNNN
			T96MNBDKIWVSNNND

Precautions and safety notices

safety precautions

This monitor is manufactured and tested on a ground principle that a user's safety comes first. However, improper use or installation may cause damage to the monitor as well as the user. Carefully go over the following WARNINGS before installing and keep this guide handy.

WARNINGS

This monitor should be operated only at the correct power sources indicated on the label on the rear end of the monitor. If you're unsure of the power supply in your residence, consult you local dealer or power company.

- . Use only the special power adapter that comes with this monitor for power input.
- . Do not try to repair the monitor your self as it contains no user-serviceable parts. This monitor should only be repaired by a qualified technician.
- . Do not remove the monitor cabinet. There is high-voltage parts inside that may cause electric shock to human bodies, even when the power cord is unplugged.
- . Stop using the monitor if the cabinet is damaged. Have it checked by a service technician.
- . Put your monitor only in a clean, dry environment. If it gets wet, unplug the power cable immediately and consult your service technician.
- . Always unplug the monitor before cleaning it .Clean the cabinet with a clean, dry cloth. Apply non-ammonia based cleaner onto the cloth, not directly onto the glass screen.
- . Keep the monitor away from magnetic objects, motors, TV sets, and transformer.
- . Do not place heavy objects on the monitor or power cord.

Product safety notice

Many electrical and mechanical parts in this chassis have special safety visual inspections and the protection afforded by them cannot necessarily be obtained by using replacement components rated for higher voltages, wattage, etc. Before replacing any of these components read the parts list in this manual carefully. The use of substitute replacement parts which do not have the same safety characteristics as specified in the parts list may create shock, fire ,or other hazards.

Service notes

When replacing parts or circuit boards, clamp the lead wires around terminals before soldering.

When replacing a high wattage resistor (more than 1W of metal oxide film resistor) in circuit board, keep the resistor about 5mm away from circuit board.

Keep wires away from high voltage, high temperature components and sharp edges.

Keep wires in their original position so as to reduce interference.

Usage of this product please refer to also user's manual.

1. Monitor Specifications

1.1 specifications

Region	VSA (M)	VSAP P	VSE (E)/(U)	VSCN (G)
Product Name	VX1940w-2			
Model Number	VS11868			
OSD Languages	English, French, German, Italian, Spanish, Finnish, Russian, Korean, Japanese, Traditional Chinese, Simplified Chinese			
TFT LCD Panel and Model #	CMO A190Z1 L01			
Scalar	Model # : NT68670HTFG			
Input Signal	D-Sub / DVI-D			
Sync Compatibility	Separate / Composite / SOG			
Power Consumption	Built-in/ under 49W (max) / 44W(typ)			
Power Cable	Refer to Appendix G			
Analog Cable (1.8 m, color : black), with PC 2001 and Hot Plug Detect &DDC	YES			
DVI-D Cable / 1.8m	YES			
ViewSonic CD Wizard	Arabic, English, Finnish, Spanish, German, Italian, Japanese, Swedish, Polish, Korean Portuguese, Russian, French, Greek, Dutch, Turkish, Simplified Chinese, Traditional Chinese, Czech, Hungarian			
ViewSonic Quick Start Guide				
Screen Protector Mylar	YES			
Extrme Label (up to 2ms)	Yes			
Service Insert (new version)	YES	NO	NO	NO
Warranty Sticker	NO	NO	NO	YES
Warranty Card (new version)	NO	NO	NO	YES
Carton Sticker (new version)	NO	NO	NO	YES
PE bag of Carton	NO	NO	NO	YES

1.2 General specification

Test Resolution & Frequency	1680x1050@ 60Hz
Test Image Size	Full Size
Contrast and Brightness Controls	Factory Default: Contrast = 70%, Brightness = 100%

1.3 Video interface

Analog Input Connector	DB-15 (Analog), refer the appendix A
Digital Input Connector	DVI-D
Default Input Connector	Defaults to the first detected input
Video Cable Strain Relief	Equal to twice the weight of the monitor for five minutes
Video Cable Connector DB-15 Pin out	Compliant DDC/CI / DDC2B
Video Signals	1. Video RGB (Analog)

	Separate, Composite, and Sync on Green 2. TMDS (Digital)			
Video Impedance	75 Ohms (Analog), 100 Ohms (Digital)			
Maximum PC Video Signal	950 mV with no damage to monitor			
Maximum Mac Video Signal	1250 mV with no damage to monitor			
Sync Signals	TTL			
DDC2B	Compliant with Revision 1.3			
DDC/CI	Compliant with Revision 1.1			
HDCP	HDCP code inside and compatible			
Sync Compatibility	Separate Sync, Composite Sync, SOG			
Video Compatibility	Shall be compatible with all PC type computers, Macintosh computers, and after market video cards			
Resolution Compatibility	640x350	640x400	640x480	720x400
	720x480	800x600	832x624	1024x768
	1152x864	1152x870	1280x720	1280x768
	1280x960	1280x1024	1360x768	1400x1050
	1440x900	1600x1200	1680x1050	
	The image vertical size might not be full screen. But the image vertical position should be at the center.			
Exclusions	Not compatible with interlaced video			

1.4 TFT LCD panel

Panel Source Identify

The panel code (refer to segment 4-16) should be shown on following position,

- (1) The lower right side of ID label. (see Figure 2)
- (2) The lower right side of UPC label. (see Figure 3)
- (3) The F/W version sticker or silkscreen on main board.

Panel Characteristics :

1st Source Panel

Model number	CMO A190Z1 L01
Type	TN TYPE WITH LVDS INTERFACE
Active Size	19" WIDE; 408.24(H) X 255.15(V)
Pixel Arrangement	RGB VERTICAL STRIPE
Pixel Pitch	0.243(H) X 0.243(H) MM
Glass Treatment	ANTI GLARE (HARD COATING 3H)
# of Backlights	4 CCFL
Backlight Life	40000 HOURS (MIN)
Luminance (5-point) – Condition: CT = User Color, Contrast = Max, Brightness = Max	300 CD/M2 (TYP AFTER 30 MINUTE WARM UP) 230 CD/M2 (MIN AFTER 30 MINUTE WARM UP)
Brightness Uniformity	≥ 67% (MIN)
Contrast Ratio	1000:1 (TYP), 630:1(MIN)
Color Depth	16.2 MILLION COLORS

Viewing Angle (Horizontal) Ultra –TN type	@ CR>10 Typical: 170 Minimum: 150
Viewing Angle (Vertical) Ultra –TN type	@ CR>10 Typical: 160 MINIMUM: 140
Response Time 10%-90% @ Ta=25°C	Typical = 5ms (on/off) Maximum = 15ms (on/off)
Panel Defects	Please see Panel Quality Specifications.

1.5 Image performance

Display Size

Horizontal Display Size, Primary Preset	Full Screen
Vertical Display Size, Primary Preset	Full Screen

Luminance

Item	Condition	JUDGMENT
Lv (Max)	Contrast = 100% Brightness = 100% CCT = User color(R/G/B=100%)	LV (MAX) = THE LUMINANCE IN SECTION 4-7 "TFT LCD PANEL"
Lv (Def)	Contrast = 100% Brightness = 100% CCT = 6500K	$[LV (DEF) / LV (MAX)] \times 100\% \geq 65\%$
Lv (6500k)	Contrast = Default Brightness = Default Color Temperature = 6500K	$[LV (6500K) / LV (MAX)] \times 100\% \geq 85\%$
Lv (9300k)	Contrast = Default Brightness = Default Color Temperature = 9300K	$[LV (9300K) / LV (MAX)] \times 100\% \geq 65\%$
Lv (7500k)	Contrast = Default Brightness = Default Color Temperature = 7500K	$[LV (7500K) / LV (MAX)] \times 100\% \geq 75\%$
Lv (5400k)	Contrast = Default Brightness = Default Color Temperature = 5400K	$[LV (5400K) / LV (MAX)] \times 100\% \geq 70\%$
Lv (Brightness)	Contrast = 100%	$[LV(BRIGHTNESS=0\%) / LV(BRIGHTNESS=100\%)] \times 100\% \leq 55\%$
Lv (Contrast)	Brightness = 100%	$[Lv(Contrast =0\%) / Lv(Contrast =100\%)] \times 100\% \leq 30\%$

Contrast Ratio

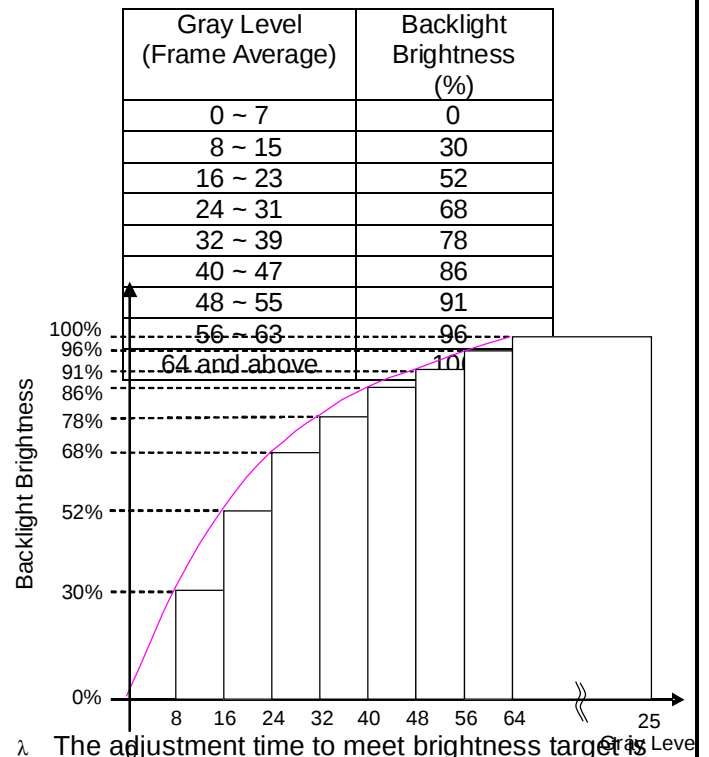
Contrast = Default Brightness = Default Test Pattern = 64-Gray	NO VISIBLE SATURATION
Contrast = 100% Brightness = 100% Test Pattern = 64-Gray	12-16 LEVEL SATURATION

Dynamic Contrast Ratio

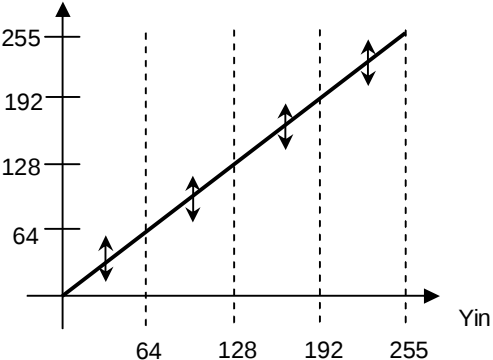
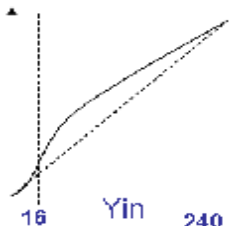
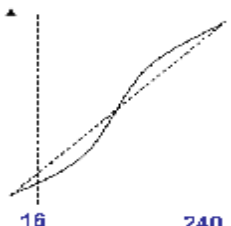
CR(Max) –Condition: CCT=USERCOLOR (R/G/B=100%)	3000 :1 (typ)
DCR Selection in OSD Menu	Display “Dynamic Contrast” text with “On/Off” selection.
DCR Default Setting	Off
DCR On Definition	Full time frame luminance detection for: 1. Backlight Adjustment 2. Adaptive Contrast Adjustment

Backlight Adjustment Method

DCR will calculate the gray level histogram in a frame and set backlight brightness target as below:



- λ The adjustment time to meet brightness target is 3 ± 0.5 seconds.
- λ Image flicker or flashing is prohibited for video display and/or PC mode operation.

Adaptive Contrast Adjustment	To adjust Gamma data for different frame luminance  - λ The contrast/data delta percentage is less than 10% of original value. - λ Low level noise can not occur during adaptive contrast adjustment. - λ The dynamic change in Gamma data can not cause flashing during gray level transition (L0 to L255)
Contrast Curve Reference	Dark Scene  Bright Scene  (Actual curve may vary depends on performance)
Color and Sharpness tuning (Optional)	- λ To improve image contrast, the saturation and peaking can be increased up to 5%. - λ Be aware of side effects like color distortion and

	data noise.
OSD Control Limitation (DCR on)	1. Disable Contrast/Brightness menu and hot key control. CR/BT user settings are stored for later retrieval. 2. Brightness level is based on DCR calculation and independent from OSD setting. 3. Disable White Balance hot key. 4. Disable "sRGB" selection in Color Adjust menu
OSD Control Limitation (DCR off)	1. Restore BR/CT settings when DCR is off 2. Disable DCR when "sRGB" is selected in Color Adjust menu.
DDC/CI Control (for CR / BT only)	Disable Contrast/Brightness control.
Remark	Compatible to all listed timing settings.

Saturation

Contrast = Default Brightness = Default Test Pattern = 64-Gray	NO VISIBLE SATURATION
Contrast = 100% Brightness = 100% Test Pattern = 64-Gray	12-16 LEVEL SATURATION

Preset Color Temperatures

sRGB	It should meet IEC 61966-2-1 (1999-10) standard.
Preset 1	CCT(typ)= 9300K ($x=0.283 \pm 0.03$; $y=0.297 \pm 0.03$) (@ Full White pattern)
Preset 2	CCT (typ) = 7500K ($x=0.299 \pm 0.03$; $y=0.315 \pm 0.03$) (@ Full White pattern)
Preset 3 (Primary)	CCT (typ) = 6500K ($x=0.313 \pm 0.03$; $y=0.329 \pm 0.03$) (@ Full White pattern)
Preset 4	CCT (typ) = 5400K ($x=0.335 \pm 0.03$; $y=0.350 \pm 0.03$) (@ Full White pattern)
Preset Color Temperature Adjustability	Each color preset shall be adjustable. Red, Green, and Blue shall be individually controlled.

Gray scales must be" linear" with no banding And gray scales must be "gray" with no red, green, or bluish distortion

Video Cards Compatibility

Peaking Performance: Peaking is not adjustable

Raster Artifacts

- Video Artifacts : No visible streaking, sag, or smearing artifacts when driven by the specified video cards in the primary mode and after user adjustment to best condition

- Power Supply, and Grounding Artifacts : No visible artifacts in any specified video mode within the horizontal or vertical frequency range of the monitor
- Temperature Drift : Image shall not drift or lose fine-tune adjustment

1.6 Video communications

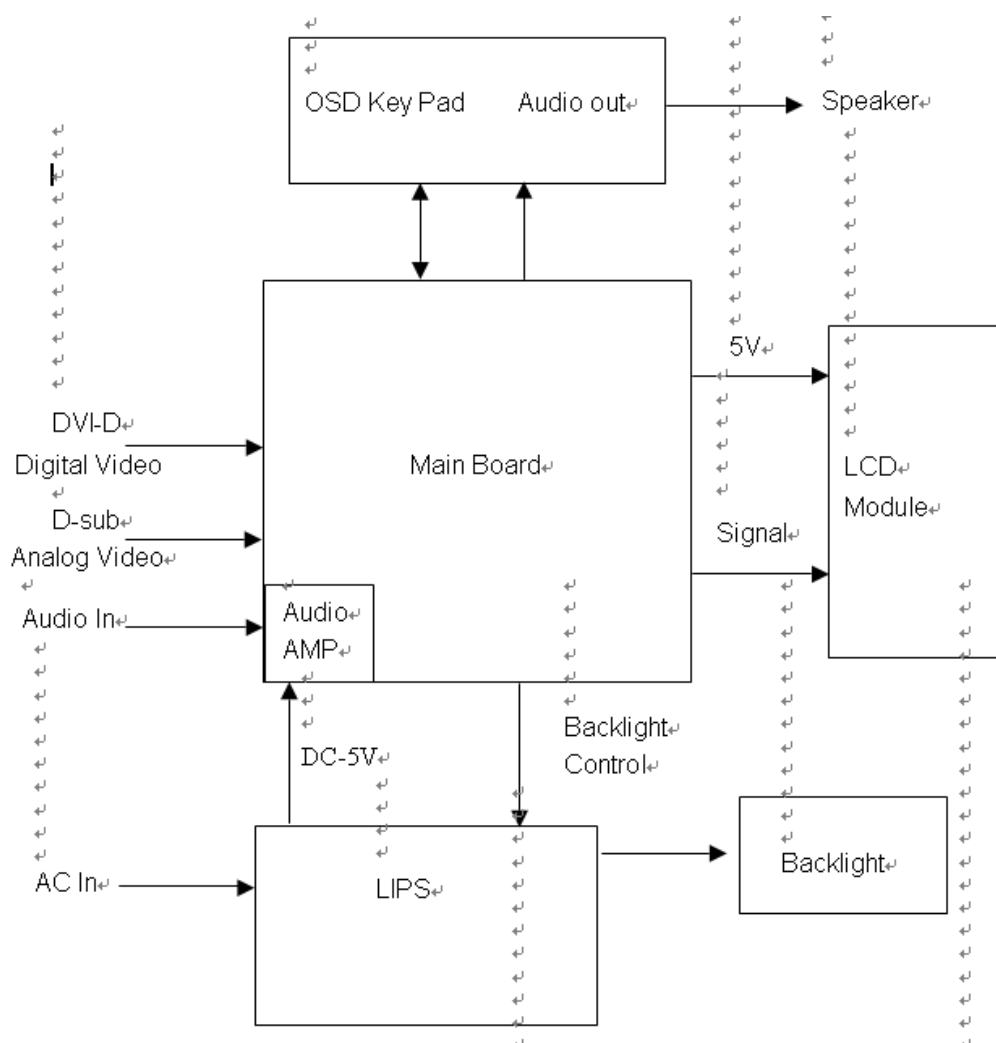
EDID Standard And Structure

EDID File Format	VESA's EDID Standard Version #3, Revision #0, EDID Structure Version #1, Revision #3.
EDID VENDOR NAME	VSC: Byte 8 – 0x5A, Byte 9 – 0x63.
EDID PRODUCT ID	Byte 10 – 20 , Byte 11 – 6A
EDID File	Shall be approved by VSC prior to MP.

1.7 Coding assignment

Product Name	ViewSonic VX1940w-2
Model number	VS11868
S/N Coding – ID Label and Small S/N Sticker (Code '128' format)	PPPYYWWAxxxx where PPP = Regional Product ID Code YY= Last 2 digits of manufacturing year WW = Manufacturing week A = 2~4 for CMO A190Z1 L01 with NT68670HTFG (Ningbo / TPV) A = 5~6 for CMO A190Z1 L01 with NT68670HTFG (Ningbo / CMO) A = 0~1 and 7~9 Reserved xxxx = Sequence number
Regional Product ID Code	ID Code: R60
GTIN (UCC-12) Code: UPC-A	UPC-A Code: 766907 27531 5 Note: For UPC label, please refer to Figure 3
GTIN (EAN/UCC-14) Code: ITF-14	ITF-14 Code: 0 0766907 27531 5 Note: For UPC label, please refer to Figure 3
FCC ID	Self Certification

2. LCD MONITOR DESCRIPTION



3. Front panel function control description

3.1 Front Panel Hardware Controls

Power Switch (Front Head)	Power Control, soft Power Switch.
Power LED (Front Head)	Blue– ON Amber – Active Off Dark = Soft Power Switch OFF
Front Panel Controls (Head) [1] [2] [⏻] [▼] [▲]	[1] BUTTON 1 [2] Button 2 [⏻] Power [▼] DOWN ARROW BUTTON [▲] UP ARROW BUTTON Note: Power Button, Button 1 and Button 2 must be one-shot logic operation. (i.e. there should be no cycling)

Reaction Time	OSD must fully appear within 0.5s after pushing Button 1
---------------	--

Short Cuts Function from the button(s)

[1]	Main Menu
[2]	Input toggle (D-sub / DVI)
[▼] or [▲]	To immediately activate CR or BT menu.
[▼]+[▲]	Recall both of CR and BT to default
[1] + [2]	1. Toggle 1400x1050 and 1680x1050 mode when input 1400x1050 or 1680x1050 mode. 2. Toggle 640x400 and 720x400 mode when input 640x400 or 720x400 modes.
[1] + [▼] + [▲] (Keep pushing 3 sec)	White Balance. (Not shown on user's guide)
[1] + [▼]	Power Lock
[1] + [▲]	OSD Lock
[2] + [▼]	DDC/CI switch ◊ on = DDC/CI ; off = DDC2B
[1] + [2] + [⏻]	Factory Mode
Remark : All the short cuts function are only available while OSD off	

3.2 Function descriptions

OSD Lock short cuts function for the buttons

The OSD lock will be activated by pressing the front panel control buttons "(1), & (▲)" for 10 seconds.

If the user then tries to access the OSD by pressing any of the buttons "1", "▼", "▲", "2" a message will appear on the screen for 3 seconds showing "OSD Locked".

The OSD lock will be deactivated by pressing the front panel control buttons "(1), & (▲)" again for 10 seconds.

Note1: When the OSD is locked will lock all functions, including "Volume" and "Mute"

Note2: Status bar indicating OSD Lock or Unlock is in progress and when complete it will indicate "OSD Locked"

Note3: OSD Lock should not lock Power Button and Power Lock function

Power Lock short cuts function for the buttons

The power button lock will be activated by pressing the front panel control buttons "(1), & (▼)" for 10 seconds.

Locking the power button means that the user won't be able to turn off the LCD while the power button is locked. If the user presses the power button while it is locked, a message will appear on the screen for 3 seconds showing "Power Button Locked". It also means that with the power button locked, the LCD would automatically turn back "On" when power is restored after a power failure. If the power button is not in the locked mode, then power should return to its previous state when power is restored after a power failure.

The power button lock will be deactivated by pressing the front panel control buttons "(1), & (▼)" again for 10 seconds.

Note 1: Status bar indicating Power Button lock or unlock is in progress and when complete it will indicate "Power Button Locked"

Note 2: Power should only be lockable in the "On State"

Memory Recall Actions

Memory Recall action on the analog and digital mode as below

1. Set the factory defaults as shown in Section 4-8
2. Clean all the mode setting buffer
3. Execute Auto Image Adjust

Note: Memory Recall should have no effect for Language, Power Lock, User Color Settings or Input Priority

Resolution Notice Actions

1. Resolution Notice OSD should show on screen after changing to non-native mode for 30 sec
 2. The OSD should disappear after 10 sec or by pushing button [1] or [2]
- Resolution Notice function should be disabled when push button [2] under Resolution Notice OSD

0-Touch™ Function Actions

1. Execute Auto Image Adjust when new mode detected, and save the settings to buffer for further use
2. It should be reset by Memory Recall function
(Should not reset by power off, power unplug and others)

OSD Auto Save

The OSD shall save new settings when it is turned off by the user or when it times out. There shall not be a separate save

Input Priority

This function is defined the auto detect priority when the display has several inputs. Please refer to the detail flow chart as the appendix D

*1. Tolerance $\cong \pm 2\text{KHz}$. (if the range dose not cover other timing mode)

*2. Any timing not in the list, it should display as normal or show on "OUT OF RANGE" OSD message with blanking.

*3. The image quality of 85Hz mode might be worse than 75Hz.

Primary Presets

1680x1050 @ 60Hz

User Presets

Number of User Presets (recognized timings) Available: 10 presets total in FIFO configuration

Changing Modes

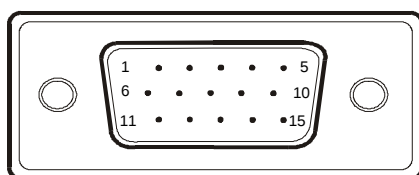
- Maximum Mode Change Blank Time for image stability : 3 seconds (Max), excluding "Auto Image Adjust" time
- Under DOS mode (640 x 350, 720 x 400 & 640 x 400), it should recall factory setting when execute "Auto Image Adjust"
- The monitor needs to do "Auto Adjust" the first time when a new mode is detected
(See section "0-Touch™ Function Actions")

4. Input/output specification

4.1 D-SUB connector pin assignment

Pin Number	Pin Function
1	Red video input
2	Green video input
3	Blue video input
4	No Connection
5	Ground
6	Red video ground
7	Green video ground
8	Blue video ground
9	+5V
10	H/V sync ground
11	No connection
12	(SDA)
13	Horizontal sync (Composite sync)
14	Vertical sync
15	(SCL)

D-SUB 15 PIN connector



DVI-D connector pin assignment

Pin Number	Pin Function
1	DATA2-
2	DATA2+
3	DATA2/4 Shield
4	DATA4-
5	DATA4+
6	DDC Clock
7	DDC Data
8	No Connect
9	DATA1-
10	DATA1+
11	DATA1/3 Shield
12	DATA3-
13	DATA3+
14	+5V

15	GND for +5V
16	HOT PLUG DETECT
17	DATA0-
18	DATA0+
19	DATA0/5 Shield
20	DATA5-
21	DATA5+
22	Clock Shield
23	Clock+
24	Clock-

4.2 Factory Preset Display Modes

Timing table

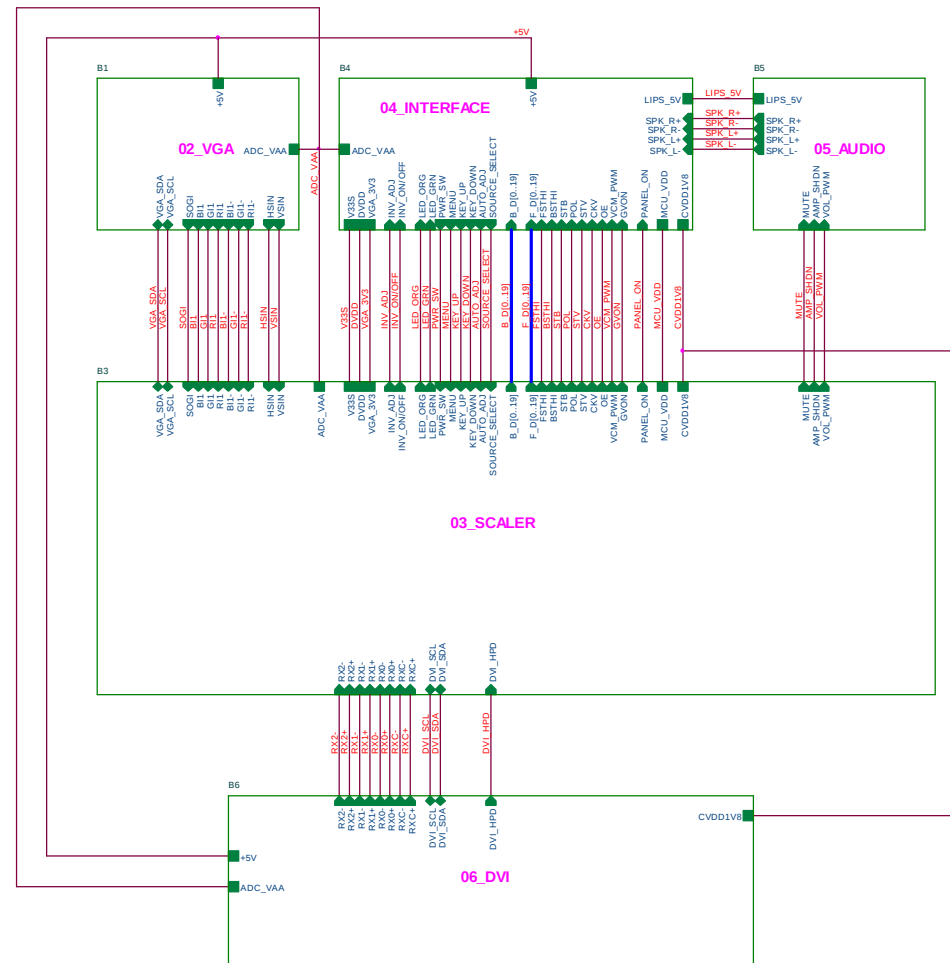
Item	Timing						Analog			Digital - TMDS	Remark
							Separate	Composite	SOG		
1	640 x 350	@	70	Hz,	32	kHz	V	V	V	V	
2	640 x 400	@	60	Hz,	32	kHz	V	V	V	V	
3	640 x 400	@	70	Hz,	32	kHz	V	V	V	V	
5	640 x 480	@	50	Hz,	25	kHz	V	V	V	X	The pixel clock is lower than DVI standard.
6	640 x 480	@	60	Hz,	32	kHz	V	V	V	V	
7	640 x 480	@	67	Hz,	35	kHz	V	V	V	V	
8	640 x 480	@	72	Hz,	38	kHz	V	V	V	V	
9	640 x 480	@	75	Hz,	38	kHz	V	V	V	V	
11	720 x 400	@	70	Hz,	32	kHz	V	V	V	V	
13	720 x 480	@	60	Hz,	29.8	kHz	V	V	V	V	
14	720 x 576	@	50	Hz,	31.3	kHz	V	V	V	V	
15	800 x 600	@	56	Hz,	35.1	kHz	V	V	V	V	
16	800 x 600	@	60	Hz,	38	kHz	V	V	V	V	
17	800 x 600	@	72	Hz,	48	kHz	V	V	V	V	
18	800 x 600	@	75	Hz,	47	kHz	V	V	V	V	
20	832 x 624	@	75	Hz,	50	kHz	V	V	V	V	
21	1024 x 768	@	50	Hz,	40	kHz	V	V	V	V	
22	1024 x 768	@	60	Hz,	48	kHz	V	V	V	V	
23	1024 x 768	@	70	Hz,	57	kHz	V	V	V	V	
24	1024 x 768	@	72	Hz,	58.1	KHz	V	V	V	V	
25	1024 x 768	@	75	Hz,	60	KHz	V	V	V	V	
26	1024 x 768	@	75	Hz,	60.2	KHz	V	V	V	V	
28	1152 x 864	@	75	Hz,	68	KHz	V	V	V	V	
29	1152 x 870	@	75	Hz,	69	KHz	V	V	V	V	
31	1280 x 720	@	50	Hz,	37	KHz	V	X	X	V	
32	1280 x 720	@	60	Hz,	45	KHz	V	V	V	V	
33	1280 x 768	@	50	Hz,	40	KHz	V	V	V	V	
34	1280 x 768	@	60	Hz,	47.8	KHz	V	V	V	V	

35	1280 x 768	@	75	Hz,	60	KHz	V	V	V	V	
37	1280 x 960	@	50	Hz,	49	KHz	V	V	V	V	
38	1280 x 960	@	60	Hz,	60	KHz	V	V	V	V	
39	1280 x 960	@	75	Hz,	75	KHz	V	V	V	V	
40	1280 x 1024	@	50	Hz,	53	KHz	V	V	V	V	
41	1280 x 1024	@	60	Hz,	64	KHz	V	V	V	V	
42	1280 x 1024	@	75	Hz,	80	KHz	V	V	V	V	
43	1360 x 768	@	60	Hz,	48	kHz	V	V	V	V	
44	1400 x 1050	@	50	Hz,	54	kHz	V	V	V	V	
45	1400 x 1050	@	60	Hz,	65.3	kHz	V	V	X	V	For analog sync, Switch 1400 x 1050@60Hz and 1680 x 1050@60Hz by [1]+[2] short cut key (primary = 1680 x 1050@60Hz) Auto image should be executed when Switch 1400 x 1050@60Hz and 1680 x 1050@60Hz by [1]+[2] short cut key
46	1440 x 900	@	60	Hz,	55.9	kHz	V	V	V	V	
47	1440 x 900	@	75	Hz,	70.6	kHz	V	V	V	V	
48	1600 x 1200	@	60	Hz,	75	kHz	V	V	V	V	
49	1680 x 1050	@	60	Hz,	65.3	kHz	V	V	X	V	

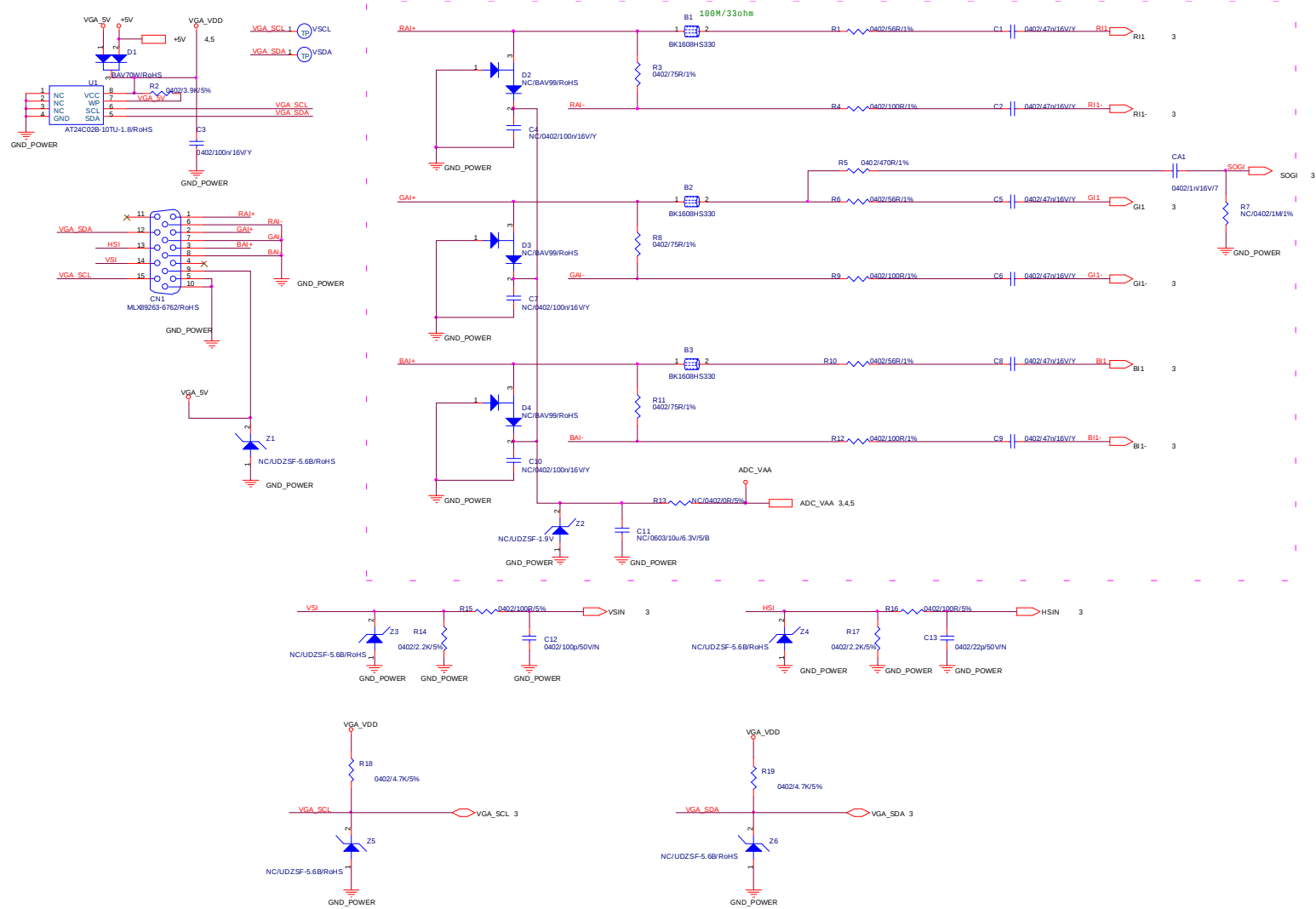
4.3 Factory defaults

Item	Defaults	Item	Defaults
Contrast	70%	OSD Time Out	15 Sec
Brightness	100%	OSD Background	On
Color Temperature	6500K	Volume	N/A
Sharpness	100%	Treble	N/A
OSD H. Position	50%	Bass	N/A
OSD V. Position	50%	Input Priority	Auto Search
720x400/640x400	720x400	Dynamic contrast	Off
Resolution Notice	On	Aspect Ratio	Full screen
		Response Time	50

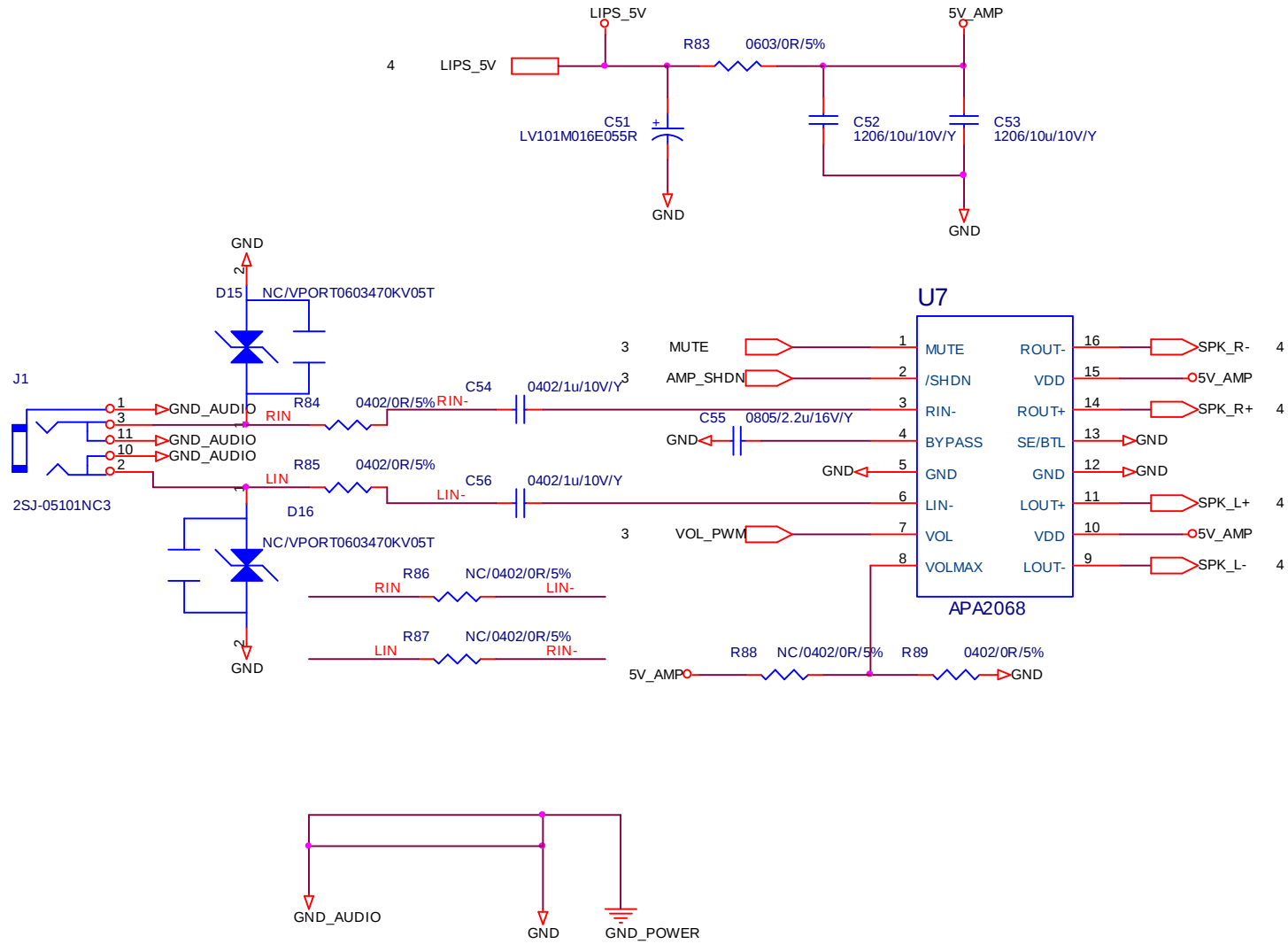
5.1Main board TOP



VGA



Audio



5.2 Power board

90~264 Vac

AC1

1 2

T3.15A / 250V

MST

1H

FG

CY1 102 Y2

CY2 102 Y2

GND-FG

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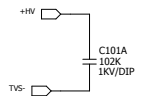
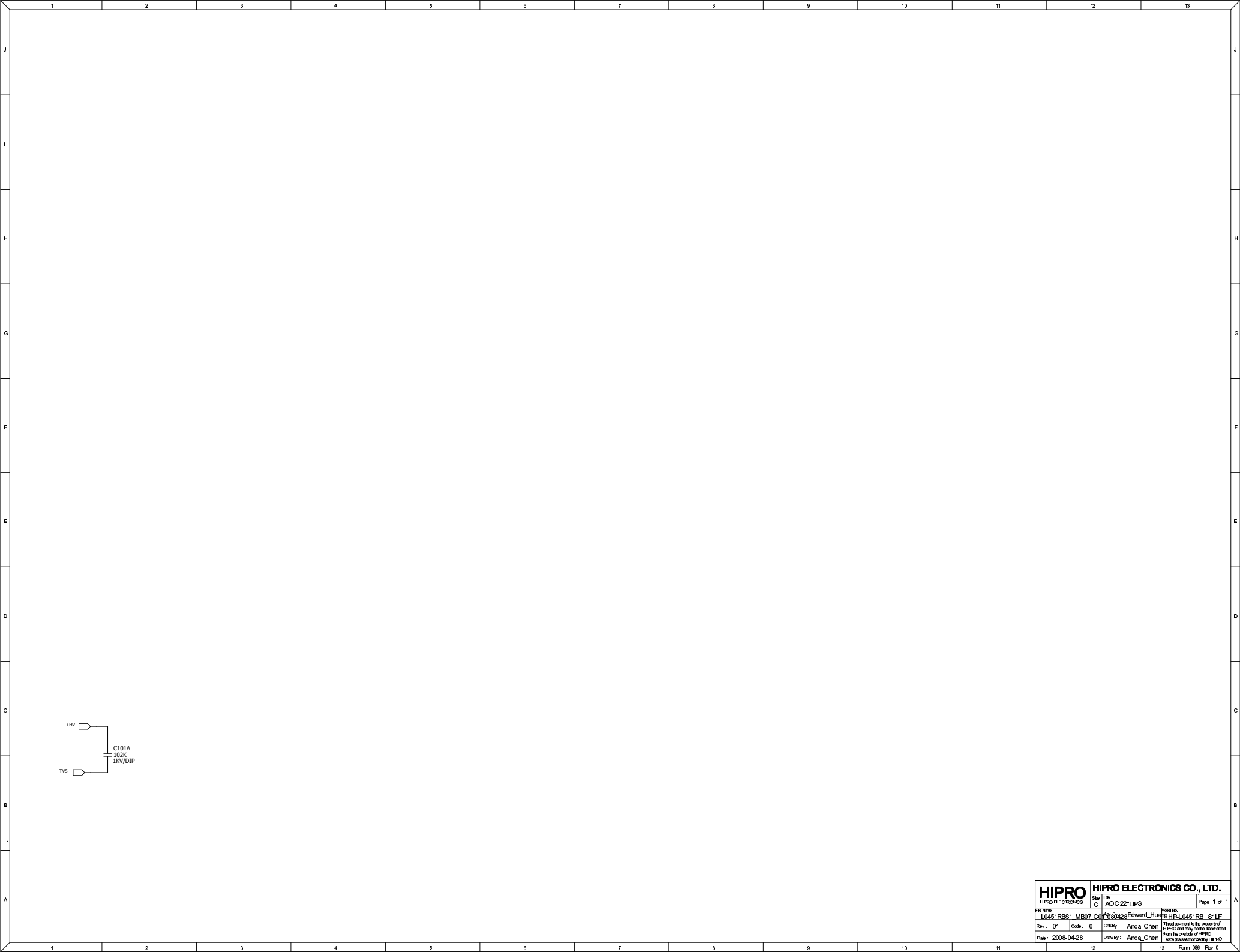
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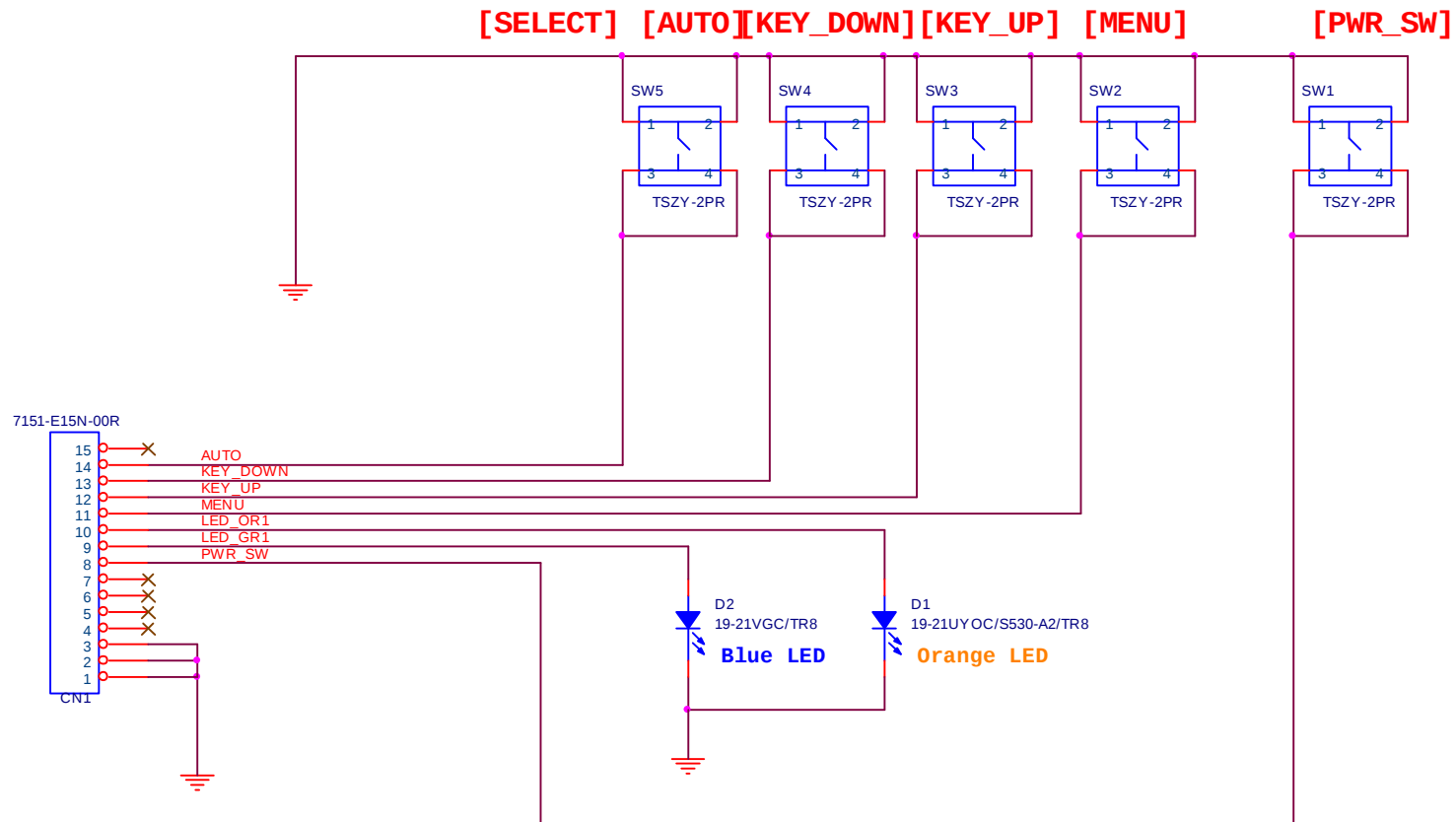
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Rev.: 01	Code: 0	Drawn By: Anoa_Chen	Modified By: Edward_Huo
Date: 2008-04-28		Drawn By: Anoa_Chen	Modified By: Edward_Huo

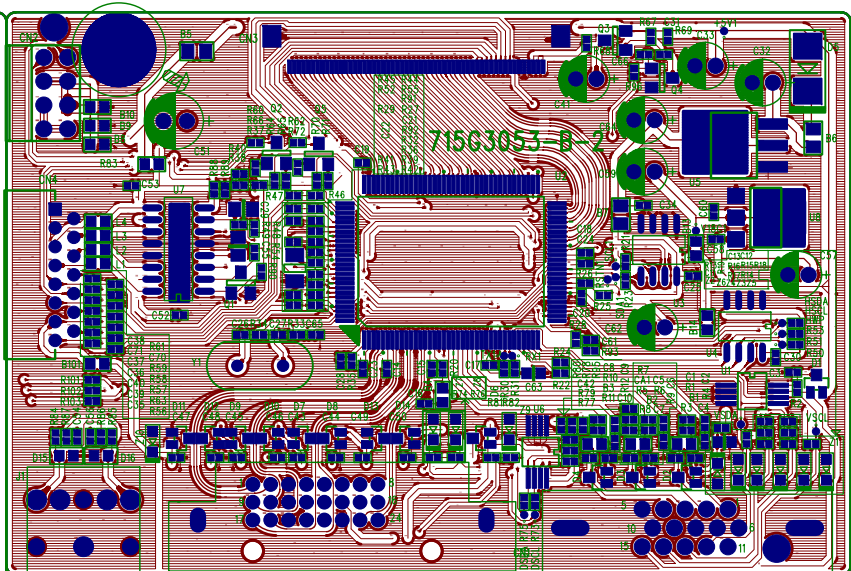
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5.3 OSD KEY PAD

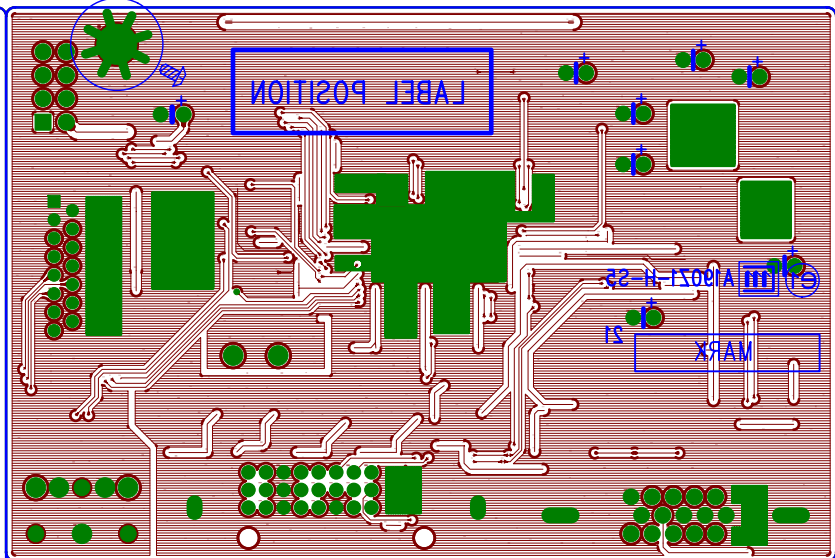


6. PCB layout diagrams

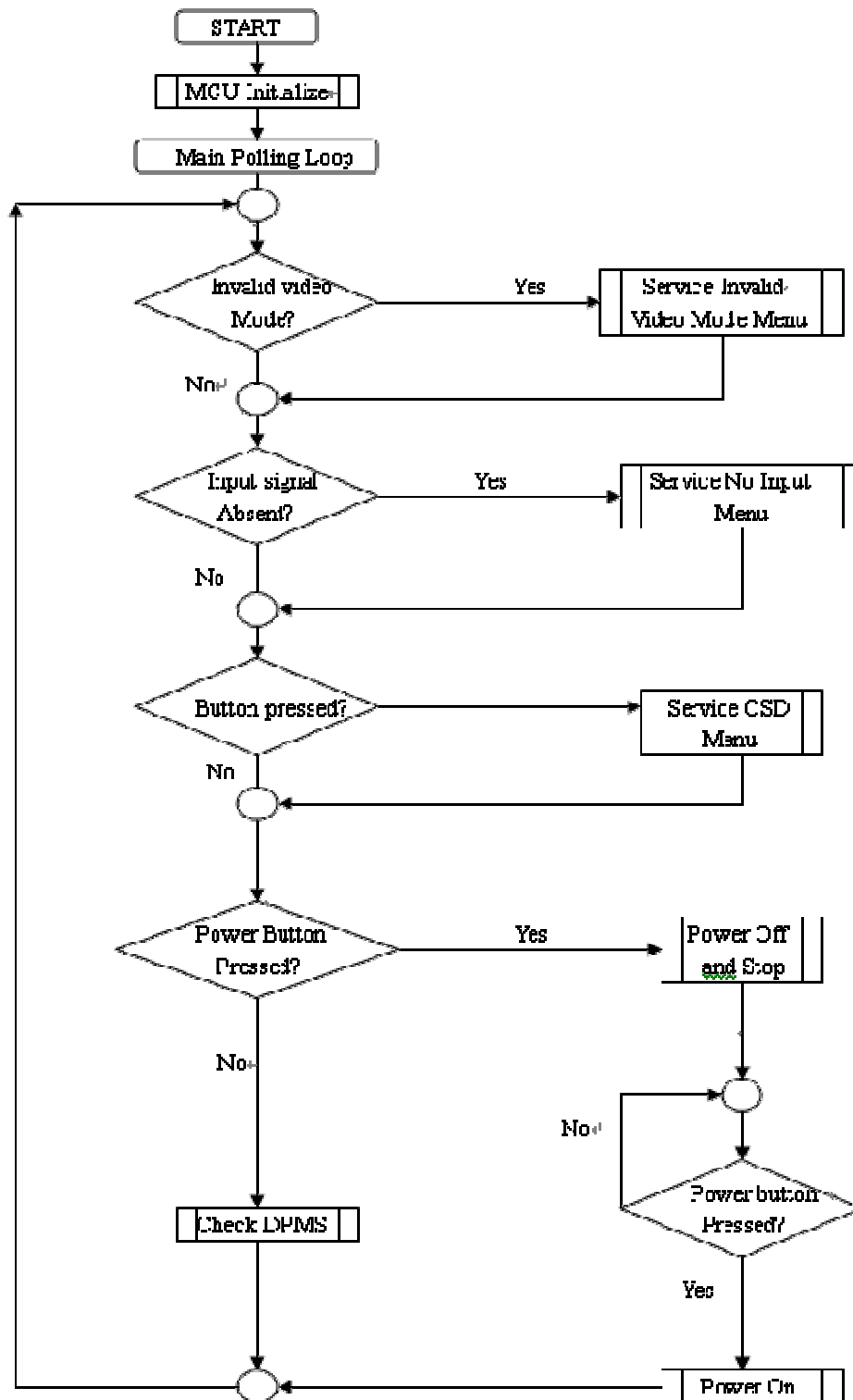
6.1 Main board TOP



3N5



7. Trouble shooting flow chart



No power

- Make sure power button (or switch) is ON.
- Make sure A/C power cord is securely connected to the LCD display.
- Plug another electrical device (like a radio) into the power outlet to verify that the outlet is supplying proper voltage.

Power is ON but no screen image

- Make sure the video cable supplied with the LCD display is tightly secured to the video output port on the back of the computer. If the other end of the video cable is not attached permanently to the LCD display, tightly secure it to the LCD display.
- Adjust brightness and contrast.
- If you are using an Macintosh older than G3, you need a Macintosh adapter.

Wrong or abnormal colors

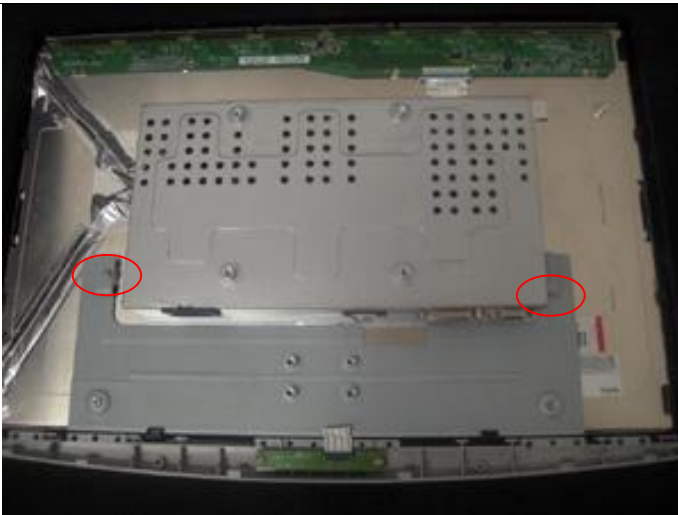
- If any colors (red, green, or blue) are missing, check the video cable to make sure it is securely connected. Loose or broken pins in the cable connector could cause an improper connection.
- Connect the LCD display to another computer.
- If you have an older graphics card, contact ViewSonic® for a non-DDC adapter.

Control buttons do not work

- Press only one button at a time.

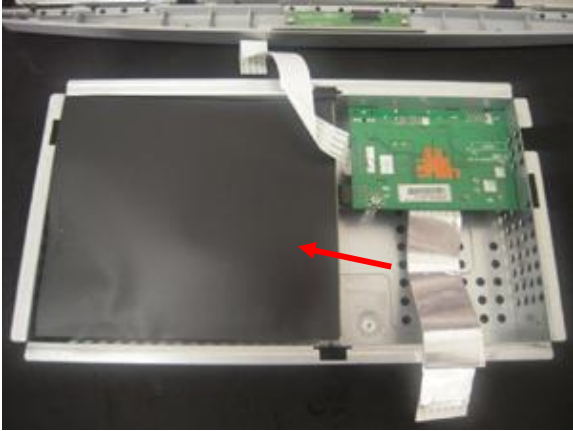
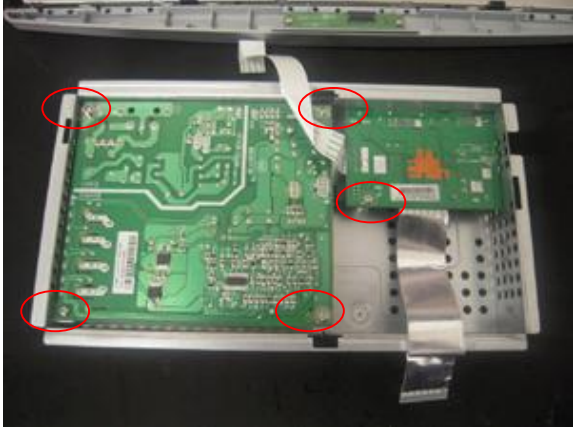
8. Mechanical instructions

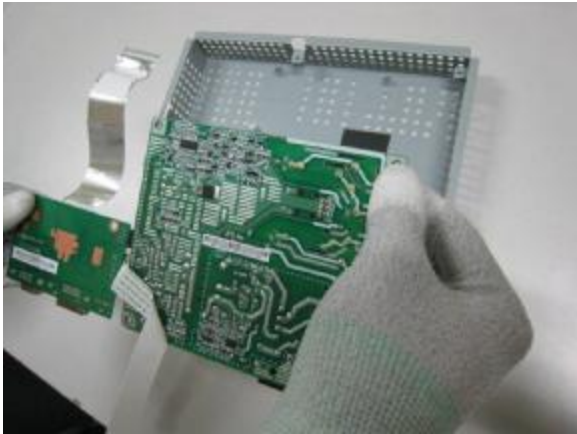
Step	Figure	Description
Remove seat assy		Lay the LCD-TV on a flat, soft and clean surface
Remove cover hinge		Loose and remove 4 Screws of Stand Assy.
Dismount stand assy		

Open the bezel assy		Use disassembly tool to open the bezel assy , and then open the other latches along the edge of the back cover
Remove the rear cover		
Remove screws		Loose and remove 2 Screws of Support Plate.

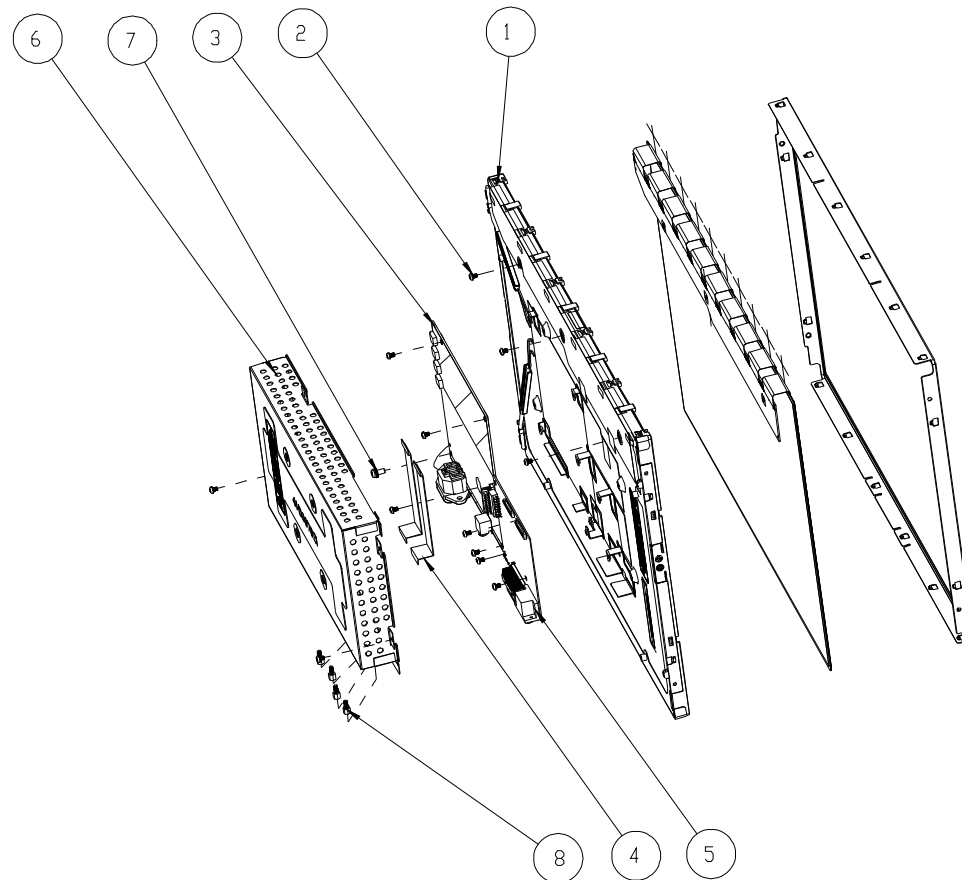
FFC		Pull out FFC-OSD to AD Board and remove OSD Board.
Remove screws		Remove 2 Screws of OSD Board.
Pull out 2 FFCs.		Pull out FFC-OSD to X-Board.

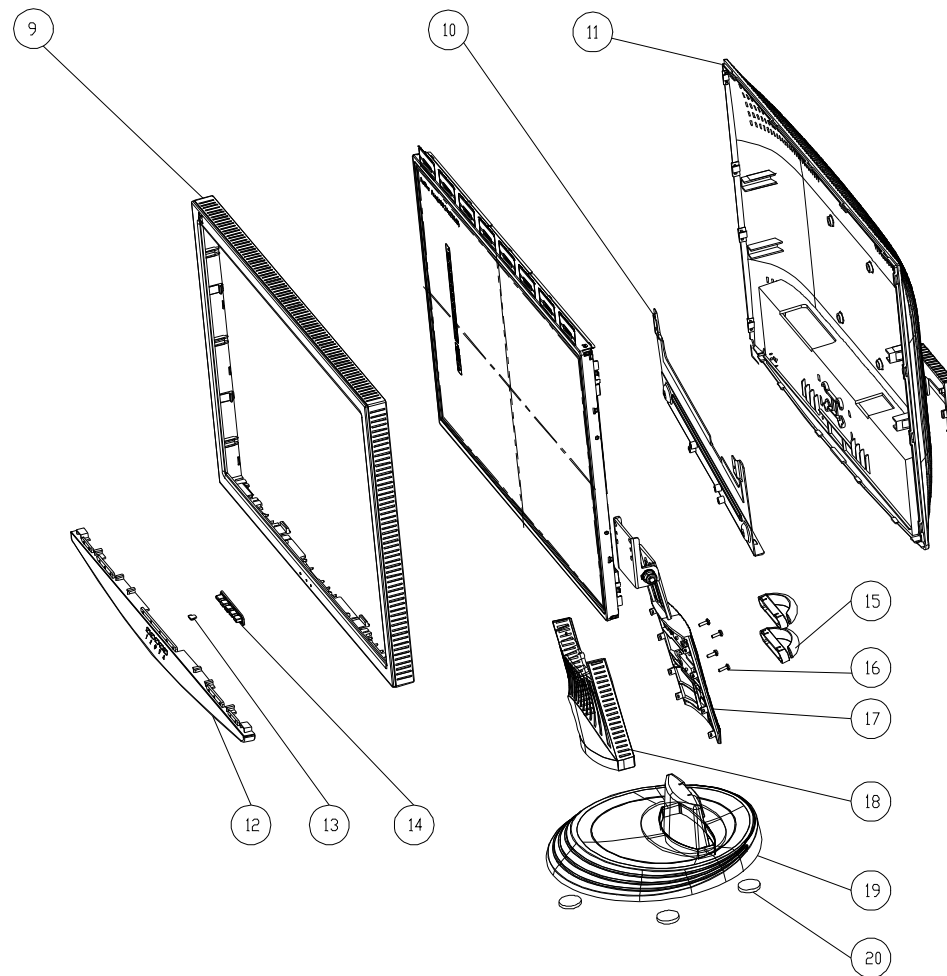
Disconnect Lamp wires.		Pull out 4 Backlight Wires.
Remove screws		remove 2 Screws of PCBA Cover.
Remove Cover AD		Remove Cover AD.

Remove screws		Loose and remove 4 Screws of D-sub and DVI Jack.
Remove mylar		
Remove Screws of AD board.		Remove 4 Screws of Lips.

Take out Lips and AD Board.		
Disconnect the power board and main board		Disconnect the connector to remove the power board and the main board
Pull out 2 FFCs		The end

9. Exploded diagram





EXPLODED PARTS LIST (T96MNBDKIWVSNNN)

ViewSonic Model Number: VX1940w-2

Rev:

Item	ViewSonic P/N	Ref. P/N	Description	Q'ty
1		750GLM90KA232C000Q	PANEL A190Z1 VSC CMO/SJ0Z101D01	1
2		0M1G 330 4120	SCREW 42A9930008	2
3		080G L19 7HIB	POWER BOARD	1
4		089G176J 55N06	FFC CABLE 55P 135MM(Add core)	1
5		CBPC8NBVWQ2	CONVERSION BOARD	1
6		0M1G4340 10120	SCREW 42A9940013	1
7		N85G0015 11 SL	COVER-AD	1
8		002G6008 2	SCREW 42-D015647	4
9		705GN834409 CM	BEZEL ASS'Y 40-D019515	1
10		N15G0009 1 ZA	Support plate 41-D018266	1
11		N34G0191 NB 1B CM	REAR 40-D019514	1
12		KEPC7QO1	KEY BOARD 35-D019680	1
13		N33G0035 1P CM	LENS 40-D018272	1
14		N33G0034 ZN 1B	KEY PAD 40-D018263	1
15		N34G0083 ZK 1B CM	STAND HOLDER 40-D018273	2
16		0Q1G 330 10120	SCREW FOR FP/RC 42-D003792	4
17		N34G0194 ZK 1B CM	STAND BACK 40-D019517	1
18		N34G0192 ZK 1B CM	STAND_FRONT 40-D019518	1
19		N34G0193 ZK 1B CM	seat 40-D019520	1
20		N12G6300002 SX	RUBBER 40A1769201	5

10. BOM LIST

T96MNBKMWVSNN

Location	Part No.	Description	Remark
	CBPC8NBVWQ2	CONVERSION BOARD	
	089G176C 15N15	FFC Cable 15P 127mm / 32-D019529	
	750GLM90KA232C000Q	PANEL A190Z1 VSC CMO/SJ0Z101D01	
	089G1738SAA600	D-SUB CABLE 1800mm 32-D002132	
	089G402A18N IS	POWER CORD/(TPV 共用)32-D022438	
	089G176C 55N00	FFC Cable 55P 135MM / 32-D019103	
	089G1748SAAA01	DVI CORD 32-D013540	
	705GN834409 CM	BEZEL ASS'Y 40-D019515	
	N34G0079 ZK 1B CM	COVER HINGE 40-D018256	
	N34G0193 ZK 1B CM	seat 40-D019520	
	N34G0192 ZK 1B CM	STAND_FRONT 40-D019518	
	N12G6300003 SX	RUBBER_CAP 40-D000227	
	N15G0009 1 ZA	Support plate 41-D018266	
	0Q1G 330 5120	SCREW 42-D003574	
	0M1G4340 10120	SCREW 42A9940013	
	P45G 77001	缠绕膜	
	N45G 52001	PE SHEET	
	N45G 88607005 HQ	PE BAG 78-D018384	
	N44G9007 1 DD	CUSHION BOTTOM 78-D018484	
	N44G9007 2 DD	CUSHION TOP 78-D018485	
	0M1G1740 8120	SCREW FOR STD/MF 42-D020715/42-D000649	
	0M1G 330 4120	SCREW 42A9930008	
	002G6008 2	SCREW 42-D015647	
	N52G6020002 HB	panel protector film	
	N52G 2191 01	TAPE /7345911004	
	N52G 1VSC002 HY	Security Tape- 7345511002	
	N40G000196867A	S/N LABEL FOR VIEWSONIC	
	N40G0001968 2A	S/N LABEL 7741513161	
	N44G9003185	CORNER PAPER 7841595111/78-D004862	
	N44G9003 80	CORNER PAPER 78-D004868	
	N07G0004 1 RW	PALLET 78-D003113	
	N44G9003 90	CORNER PAPER 7841795141	
	N44G9007968 6A	VX1940w CARTON For Refresh	
	050G 600 1 W	WHITE STRAP	

	N44G9007VSC 1A	Shipping Draw- 79-D018282	
	089G1748CAA AC	SIGNAL CABLE DVI COMLINK	
	089G 728CAA DB	D-SUB CABLE	
	N40G000296820A ZA	POP LABEL	
	N52G 1VSC005	mylar 73-d0157632	
	N52G 1VSC010	Conductive Tape 277mm *15mm *0.06mm (单导)	
	N40G000296823A	HG LABEL- 77-D022377	
	089G402A18N YH	POWER CORD(32-D022438)(美規)	
	KEPC7QO1	KEY BOARD 35-D019680	
	089G1748HAA AC	DVI CABLE	
	N40G000296810A	LABEL HI-POT-PASS 77-D005237	
	N40G000196855A	CARTON LABEL	
	EDIDVSC19A003	CHECKSUM 0X73	
	EDIDVSC19D002	CHECKSUM 0XC8	
	089G 728HAA DB	D-SUB CABLE	
	BIOS19N00700	19Z1LN0003-20080102	
	N23G3155709 1A	VIEWSONIC NAME PLATE 77-D000224	
	N23G3178712 1A	VSC-BIRD-LOGO 77-D020778	
	N12G6300002 SX	RUBBER 40A1769201	
	N15G0010 1 FH	SEAT_PLATE 41-D018262	
	0Q1G 130 8120	SCREW 42A9930011	
	N34G0083 ZK 1B CM	STAND HOLDER 40-D018273	
	0Q1G 330 10120	SCREW FOR FP/RC 42-D003792	
	N34G0194 ZK 1B CM	STAND_BACK 40-D019517	
	N37G0028 1 CX	HINGE 41-D018268	
	N34G0191 NB 1B CM	REAR 40-D019514	
	N52G 1VSC010 HB	Conductive Tape 277mm *15mm *0.06mm (单导)	
	F40G 19N96842A	SAFETY LABEL	
	N41G900296837A	MANUAL VX1940W-2	
	N85G0015 11 SL	COVER-AD	
	N52G6032 17001 HB	mylar	
	KEPC8QE4	KEY BOARD 35-D019680	
	080G L19 7HIB	POWER BOARD	
	052G 1211 A	Conductive Tape 55mm *45mm *0.08mm (单导)	
	N52G 1211002 HB	Conductive Tape 90mm *24mm *0.06mm(单导)	
	Q85G 583605	GASKET_ALUMINIUM FOIL	

	Q85G 583603	GASKET_ALUMINIUM FOIL	
	052G 1211527	Conductive Tape 75mm *45mm *0.08mm (单导)	
	N45G 88606012 DS	pe bag for base	
	N34G0190 ZK 1B CM	BEZEL 40-D019513	
	N34G0189 ZNA1B CM	DECORATION 40-D019530	
	N33G0035 1P	LENS 40-D018272	
	N33G0034 ZN 1B	KEYPAD 40-D018263	
CN4	033G801915T H	CONNECTOR	
CN2	033G8022 8 H	CONNECTOR	
C32	067G305V100 3	105 摄氏度 10UF +-20% 16V	
C41	067G305V100 3	105 摄氏度 10UF +-20% 16V	
C59	067G305V100 3	105 摄氏度 10UF +-20% 16V	
C64	067G305V101 3	105 摄氏度 100UF M 16V	
C62	067G305V101 3	105 摄氏度 100UF M 16V	
CN1	088G 35315F H	D-SUB 15PIN	
CN5	088G 35424F N CMO	DVI 24PIN CONN F WITH SCREW(TEMP)	
Y1	093G 22 51 H	CRYSTAL	
U5	Q90G 445 1	HEAT SINK	
	SMT C8NBVWQ2	MAIN BOARD	
Y1	093G 22 51	CRYSTAL 12MHz HC-49US ARG6-120	
	040G 45762412B	CBPC LABEL	
CN3	033G801955Y H HC	0.5 PITCH 55P SMT	
U8	056G 133 33AAC	AZ1117H-1.8-E1	
U2	056G 562153CMO	IC NT68670HTFG QFP-128 Novatek	
U5	056G 563 52	IC AP1117D33L-13 TO252-3L DIODES	
U4	056G1133 32	IC M24C04-WMN6TP SO8	
U3	056G1133 56	M24C16-WMN6TP	
U6	056G1133913	IC M24C02-WDW6P TSSOP8	
U1	056G1133913	IC M24C02-WDW6P TSSOP8	
Q2	057G 417512	MMBT3906	
Q5	057G 417512	MMBT3906	
Q4	057G 759 2	RK7002	
Q3	057G 763 1A	AP2305N	
R91	061G0402000	RST CHIP MAX 0R05 1/16W	
R92	061G0402000	RST CHIP MAX 0R05 1/16W	
R93	061G0402000	RST CHIP MAX 0R05 1/16W	
R4	061G0402100 0F	RST CHIPR 100 OHM +-1% 1/16W	
R9	061G0402100 0F	RST CHIPR 100 OHM +-1% 1/16W	

R12	061G0402100 0F	RST CHIPR 100 OHM +-1% 1/16W	
R15	061G0402101	RST CHIPR 100 OHM +-5% 1/16W	
R16	061G0402101	RST CHIPR 100 OHM +-5% 1/16W	
R22	061G0402101	RST CHIPR 100 OHM +-5% 1/16W	
R24	061G0402101	RST CHIPR 100 OHM +-5% 1/16W	
R25	061G0402101	RST CHIPR 100 OHM +-5% 1/16W	
R26	061G0402101	RST CHIPR 100 OHM +-5% 1/16W	
R73	061G0402101	RST CHIPR 100 OHM +-5% 1/16W	
R75	061G0402101	RST CHIPR 100 OHM +-5% 1/16W	
R38	061G0402102	RST CHIPR 1 KOHM +-5% 1/16W	
R37	061G0402102	RST CHIPR 1 KOHM +-5% 1/16W	
R96	061G0402102	RST CHIPR 1 KOHM +-5% 1/16W	
R82	061G0402102	RST CHIPR 1 KOHM +-5% 1/16W	
R69	061G0402102	RST CHIPR 1 KOHM +-5% 1/16W	
R90	061G0402103	RST CHIPR 10 KOHM +-5% 1/16W	
R81	061G0402103	RST CHIPR 10 KOHM +-5% 1/16W	
R70	061G0402103	RST CHIPR 10 KOHM +-5% 1/16W	
R64	061G0402103	RST CHIPR 10 KOHM +-5% 1/16W	
R52	061G0402103	RST CHIPR 10 KOHM +-5% 1/16W	
R47	061G0402103	RST CHIPR 10 KOHM +-5% 1/16W	
R46	061G0402103	RST CHIPR 10 KOHM +-5% 1/16W	
R45	061G0402103	RST CHIPR 10 KOHM +-5% 1/16W	
R44	061G0402103	RST CHIPR 10 KOHM +-5% 1/16W	
R43	061G0402103	RST CHIPR 10 KOHM +-5% 1/16W	
R42	061G0402103	RST CHIPR 10 KOHM +-5% 1/16W	
R39	061G0402103	RST CHIPR 10 KOHM +-5% 1/16W	
R36	061G0402103	RST CHIPR 10 KOHM +-5% 1/16W	
R29	061G0402103	RST CHIPR 10 KOHM +-5% 1/16W	
R27	061G0402103	RST CHIPR 10 KOHM +-5% 1/16W	
R35	061G0402104	RST CHIPR 100 KOHM +-5% 1/16W	
R34	061G0402105	RST CHIPR 1MOHM +-5% 1/16W	
R68	061G0402106	RST CHIP 10M 1/16W 5%	
R1	061G0402120 0F	RST CHIPR 120 OHM +-1% 1/16W	
R10	061G0402120 0F	RST CHIPR 120 OHM +-1% 1/16W	
R6	061G0402120 0F	RST CHIPR 120 OHM +-1% 1/16W	
R17	061G0402222	RST CHIPR 2.2 KOHM +-5% 1/16W	
R14	061G0402222	RST CHIPR 2.2 KOHM +-5% 1/16W	
R65	061G0402240 0F	RST CHIPR 0402 240 OHM +-1% 1/16W	

R71	061G0402240 0F	RST CHIPR 0402 240 OHM +-1% 1/16W	
R63	061G0402330	RST CHIPR 33 OHM +-5% 1/16W	
R62	061G0402330	RST CHIPR 33 OHM +-5% 1/16W	
R61	061G0402330	RST CHIPR 33 OHM +-5% 1/16W	
R60	061G0402330	RST CHIPR 33 OHM +-5% 1/16W	
R59	061G0402330	RST CHIPR 33 OHM +-5% 1/16W	
R58	061G0402330	RST CHIPR 33 OHM +-5% 1/16W	
R57	061G0402330	RST CHIPR 33 OHM +-5% 1/16W	
R56	061G0402330	RST CHIPR 33 OHM +-5% 1/16W	
R53	061G0402332	RST CHIPR 3.3KOHM +-5% 1/16W	
R51	061G0402332	RST CHIPR 3.3KOHM +-5% 1/16W	
R50	061G0402332	RST CHIPR 3.3KOHM +-5% 1/16W	
R23	061G0402332	RST CHIPR 3.3KOHM +-5% 1/16W	
R21	061G0402332	RST CHIPR 3.3KOHM +-5% 1/16W	
R67	061G0402333	RST CHIPR 33 KOHM +-5% 1/16W	
R2	061G0402392	RST CHIP 3.9K 1/16W 5%	
R78	061G0402392	RST CHIP 3.9K 1/16W 5%	
R20	061G0402470 0F	RST CHIPR 0402 470 OHM +-1% 1/16W	
R5	061G0402470 0F	RST CHIPR 0402 470 OHM +-1% 1/16W	
R74	061G0402472	RST CHIPR 4.7 KOHM +-5% 1/16W	
R76	061G0402472	RST CHIPR 4.7 KOHM +-5% 1/16W	
R72	061G0402472	RST CHIPR 4.7 KOHM +-5% 1/16W	
R66	061G0402472	RST CHIPR 4.7 KOHM +-5% 1/16W	
R32	061G0402472	RST CHIPR 4.7 KOHM +-5% 1/16W	
R19	061G0402472	RST CHIPR 4.7 KOHM +-5% 1/16W	
R18	061G0402472	RST CHIPR 4.7 KOHM +-5% 1/16W	
R80	061G0402473	RST CHIPR 47 KOHM +-5% 1/16W	
R11	061G0402750 9F	RST CHIP 75 OHM 1/16W 1%	
R3	061G0402750 9F	RST CHIP 75 OHM 1/16W 1%	
R8	061G0402750 9F	RST CHIP 75 OHM 1/16W 1%	
B9	061G0603000	RST CHIP MAX 0R05 1/10W	
B8	061G0603000	RST CHIP MAX 0R05 1/10W	
B4	061G0603000	RST CHIP MAX 0R05 1/10W	
B13	061G0603000	RST CHIP MAX 0R05 1/10W	
B10	061G0603000	RST CHIP MAX 0R05 1/10W	
B5	061G0805000	RST CHIP MAX 0R05 1/8W	
B6	061G0805000	RST CHIP MAX 0R05 1/8W	
B7	061G0805000	RST CHIP MAX 0R05 1/8W	

C12	065G0402101 31	CHIP 100PF 50V NPO	
CA1	065G0402102 12	CAP CHIP 0402 1nF K 16V X7R	
C61	065G0402104 17	CAP CHIP 0402 100nF Z 16V Y5V	
C60	065G0402104 17	CAP CHIP 0402 100nF Z 16V Y5V	
C58	065G0402104 17	CAP CHIP 0402 100nF Z 16V Y5V	
C42	065G0402104 17	CAP CHIP 0402 100nF Z 16V Y5V	
C31	065G0402104 17	CAP CHIP 0402 100nF Z 16V Y5V	
C30	065G0402104 17	CAP CHIP 0402 100nF Z 16V Y5V	
C3	065G0402104 17	CAP CHIP 0402 100nF Z 16V Y5V	
C28	065G0402104 17	CAP CHIP 0402 100nF Z 16V Y5V	
C25	065G0402104 17	CAP CHIP 0402 100nF Z 16V Y5V	
C24	065G0402104 17	CAP CHIP 0402 100nF Z 16V Y5V	
C23	065G0402104 17	CAP CHIP 0402 100nF Z 16V Y5V	
C21	065G0402104 17	CAP CHIP 0402 100nF Z 16V Y5V	
C20	065G0402104 17	CAP CHIP 0402 100nF Z 16V Y5V	
C19	065G0402104 17	CAP CHIP 0402 100nF Z 16V Y5V	
C18	065G0402104 17	CAP CHIP 0402 100nF Z 16V Y5V	
C17	065G0402104 17	CAP CHIP 0402 100nF Z 16V Y5V	
C16	065G0402104 17	CAP CHIP 0402 100nF Z 16V Y5V	
C15	065G0402104 17	CAP CHIP 0402 100nF Z 16V Y5V	
C14	065G0402104 17	CAP CHIP 0402 100nF Z 16V Y5V	
C34	065G040210412K	CAP CHIP 0402 100N 16V X7R +/-10%	
C66	065G0402105 05	MLCC 0402 1μF 6.3V X5R	
C13	065G0402220 31	CHIP 22PF 50V NPO	
C26	065G0402220 31	CHIP 22PF 50V NPO	
C27	065G0402220 31	CHIP 22PF 50V NPO	
C9	065G0402473 17	CAP CHIP 0402 47nF K 16V Y5V	
C8	065G0402473 17	CAP CHIP 0402 47nF K 16V Y5V	
C6	065G0402473 17	CAP CHIP 0402 47nF K 16V Y5V	
C5	065G0402473 17	CAP CHIP 0402 47nF K 16V Y5V	
C2	065G0402473 17	CAP CHIP 0402 47nF K 16V Y5V	
C1	065G0402473 17	CAP CHIP 0402 47nF K 16V Y5V	
C63	065G0603106 05	CAP CHIP 0603 10uF K 6.3V X5R	
C22	065G1206106 05	CHIP 10UF/6.3V X5R	
B14	071G 59S102 Y	CHIP BEAD 0603 1000ohm+-25% 0.3A	
B1	071G 59S330 Y	CHIP BEAD 0603 33ohm+-25% 1.2A	
B2	071G 59S330 Y	CHIP BEAD 0603 33ohm+-25% 1.2A	
B3	071G 59S330 Y	CHIP BEAD 0603 33ohm+-25% 1.2A	

D1	093G 64S503CMO	BAV70W,SOT-323(SC-70),Pan Jit CMO	
D6	093G 64S503CMO	BAV70W,SOT-323(SC-70),Pan Jit CMO	
D5	093G3004 3	SM340A	
	715G3053 B 2	MAIN PCB FR-4 90x60x1.0 DS	
C25	065G0402104 15	MLCC 0402 0.1UF K 16V X5R	
C28	065G0402104 15	MLCC 0402 0.1UF K 16V X5R	
C3	065G0402104 15	MLCC 0402 0.1UF K 16V X5R	
C30	065G0402104 15	MLCC 0402 0.1UF K 16V X5R	
C31	065G0402104 15	MLCC 0402 0.1UF K 16V X5R	
C42	065G0402104 15	MLCC 0402 0.1UF K 16V X5R	
C58	065G0402104 15	MLCC 0402 0.1UF K 16V X5R	
C60	065G0402104 15	MLCC 0402 0.1UF K 16V X5R	
C61	065G0402104 15	MLCC 0402 0.1UF K 16V X5R	
C24	065G0402104 15	MLCC 0402 0.1UF K 16V X5R	
C23	065G0402104 15	MLCC 0402 0.1UF K 16V X5R	
C21	065G0402104 15	MLCC 0402 0.1UF K 16V X5R	
C20	065G0402104 15	MLCC 0402 0.1UF K 16V X5R	
C19	065G0402104 15	MLCC 0402 0.1UF K 16V X5R	
C18	065G0402104 15	MLCC 0402 0.1UF K 16V X5R	
C17	065G0402104 15	MLCC 0402 0.1UF K 16V X5R	
C16	065G0402104 15	MLCC 0402 0.1UF K 16V X5R	
C15	065G0402104 15	MLCC 0402 0.1UF K 16V X5R	
C14	065G0402104 15	MLCC 0402 0.1UF K 16V X5R	
B14	071G 59S102 M	IND FXD 0603 EMI 100MHZ 1K R	
	SMTKEPC7QO1	KEY BOARD FOR SMT	
CN1	033G8019 2CMO	CONN.25-D000187	
SW1	077G 606501 CJ	TACT SWITCH	
SW2	077G 606501 CJ	TACT SWITCH	
SW3	077G 606501 CJ	TACT SWITCH	
SW4	077G 606501 CJ	TACT SWITCH	
SW5	077G 606501 CJ	TACT SWITCH	
D1	081G 63O 1 GP	LED GPTS0603OC3-PB	
D2	081G0603 B GP	LED GPTS06033BC1 GP	
	715G3032 1	KEY PCB FR-4 76x11.8x1.0mm DS	
CN1	033G8019 2JCMO	CONNECTOR 1.0pitch SMT 15p	

T96MNBDKIWVSNNN

Location	Part No.	Description	Remark
	CBPC8NBVWQ2	CONVERSION BOARD	
	089G176C 15N15	FFC Cable 15P 127mm / 32-D019529	
	750GLM90KA232C000Q	PANEL A190Z1 VSC CMO/SJ0Z101D01	
	089G1738SAA600	D-SUB CABLE 1800mm 32-D002132	
N-USA	089G402A18N IS	POWER CORD/(TPV 共用)32-D022438	
	089G176C 55N00	FFC Cable 55P 135MM / 32-D019103	
	089G1748SAAA01	DVI CORD 32-D013540	
	705GN834409 CM	BEZEL ASS'Y 40-D019515	
	N34G0079 ZK 1B CM	COVER HINGE 40-D018256	
	N34G0193 ZK 1B CM	seat 40-D019520	
	N34G0192 ZK 1B CM	STAND_FRONT 40-D019518	
	N12G6300003 SX	RUBBER_CAP 40-D000227	
	N15G0009 1 ZA	Support plate 41-D018266	
	0Q1G 330 5120	SCREW 42-D003574	
	0M1G4340 10120	SCREW 42A9940013	
	P45G 77001	缠绕膜	
	N45G 52001	PE SHEET	
	N45G 88607005 HQ	PE BAG 78-D018384	
	N44G9007 1 DD	CUSHION BOTTOM 78-D018484	
	N44G9007 2 DD	CUSHION TOP 78-D018485	
	0M1G1740 8120	SCREW FOR STD/MF 42-D020715/42-D000649	
	0M1G 330 4120	SCREW 42A9930008	
	002G6008 2	SCREW 42-D015647	
	N52G6020002 HB	panel protector film	
	N52G 2191 01	TAPE /7345911004	
	N52G 1VSC002 HY	Security Tape- 7345511002	
	N40G000196867A	S/N LABEL FOR VIEWSONIC	
	N40G0001968 2A	S/N LABEL 7741513161	
	N44G9003185	CORNER PAPER 7841595111/78-D004862	
	N44G9003 80	CORNER PAPER 78-D004868	
	N07G0004 1 RW	PALLET 78-D003113	
	N44G9003 90	CORNER PAPER 7841795141	
	N44G9007968 6A	VX1940w CARTON For Refresh	
	050G 600 1 W	WHITE STRAP	
	N44G9007VSC 1A	Shipping Draw- 79-D018282	

	089G1748CAA AC	SIGNAL CABLE DVI COMLINK	
	089G 728CAA DB	D-SUB CABLE	
	N40G000296820A ZA	POP LABEL	
	N52G 1VSC005	mylar 73-d0157632	
	N52G 1VSC010	Conductive Tape 277mm *15mm *0.06mm (单导)	
	N40G000296823A	HG LABEL- 77-D022377	
N-USA	089G402A18N YH	POWER CORD(32-D022438)(美規)	
	KEPC7QO1	KEY BOARD 35-D019680	
	089G1748HAA AC	DVI CABLE	
	N40G000296810A	LABEL HI-POT-PASS 77-D005237	
	N40G000196855A	CARTON LABEL	
	EDIDVSC19A003	CHECKSUM 0X73	
	EDIDVSC19D002	CHECKSUM 0XC8	
	089G 728HAA DB	D-SUB CABLE	
	BIOS19N00700	19Z1LN0003-20080102	
	N23G3155709 1A	VIEWSONIC NAME PLATE 77-D000224	
	N23G3178712 1A	VSC-BIRD-LOGO 77-D020778	
	N12G6300002 SX	RUBBER 40A1769201	
	N15G0010 1 FH	SEAT_PLATE 41-D018262	
	0Q1G 130 8120	SCREW 42A9930011	
	N34G0083 ZK 1B CM	STAND HOLDER 40-D018273	
	0Q1G 330 10120	SCREW FOR FP/RC 42-D003792	
	N34G0194 ZK 1B CM	STAND_BACK 40-D019517	
	N37G0028 1 CX	HINGE 41-D018268	
	N34G0191 NB 1B CM	REAR 40-D019514	
	N52G 1VSC010 HB	Conductive Tape 277mm *15mm *0.06mm (单导)	
	N40G 19N96842A	SAFETY LABEL	
	N41G900296837A	MANUAL VX1940W-2	
	N85G0015 11 SL	COVER-AD	
	N52G6032 17001 HB	mylar	
	KEPC8QE4	KEY BOARD 35-D019680	
	080G L19 7HIB	POWER BOARD	
	052G 1211 A	Conductive Tape 55mm *45mm *0.08mm (单导)	
	N52G 1211002 HB	Conductive Tape 90mm *24mm *0.06mm(单导)	
	Q85G 583605	GASKET_ALUMINIUM FOIL	
	Q85G 583603	GASKET_ALUMINIUM FOIL	

	052G 1211527	Conductive Tape 75mm *45mm *0.08mm (单导)	
	N45G 88606012 DS	pe bag for base	
	N34G0190 ZK 1B CM	BEZEL 40-D019513	
	N34G0189 ZNA1B CM	DECORATION 40-D019530	
	N33G0035 1P CM	LENS 40-D018272	
	N33G0034 ZN 1B	KEYPAD 40-D018263	
CN4	033G801915T H	CONNECTOR	
CN2	033G8022 8 H	CONNECTOR	
C32	067G305V100 3	105 摄氏度 10UF +-20% 16V	
C41	067G305V100 3	105 摄氏度 10UF +-20% 16V	
C59	067G305V100 3	105 摄氏度 10UF +-20% 16V	
C64	067G305V101 3	105 摄氏度 100UF M 16V	
C62	067G305V101 3	105 摄氏度 100UF M 16V	
CN1	088G 35315F H	D-SUB 15PIN	
CN5	088G 35424F N CMO	DVI 24PIN CONN F WITH SCREW(TEMP)	
Y1	093G 22 51 H	CRYSTAL	
U5	Q90G 445 1	HEAT SINK	
	SMT C8NBWQ2	MAIN BOARD	
Y1	093G 22 51	CRYSTAL 12MHz HC-49US ARG6-120	
	040G 45762412B	CBPC LABEL	
CN3	033G801955Y H HC	0.5 PITCH 55P SMT	
U8	056G 133 33AAC	AZ1117H-1.8-E1	
U2	056G 562153CMO	IC NT68670HTFG QFP-128 Novatek	
U5	056G 563 52	IC AP1117D33L-13 TO252-3L DIODES	
U4	056G1133 32	IC M24C04-WMN6TP SO8	
U3	056G1133 56	M24C16-WMN6TP	
U6	056G1133913	IC M24C02-WDW6P TSSOP8	
U1	056G1133913	IC M24C02-WDW6P TSSOP8	
Q2	057G 417512	MMBT3906	
Q5	057G 417512	MMBT3906	
Q4	057G 759 2	RK7002	
Q3	057G 763 1A	AP2305N	
R91	061G0402000	RST CHIP MAX 0R05 1/16W	
R92	061G0402000	RST CHIP MAX 0R05 1/16W	
R93	061G0402000	RST CHIP MAX 0R05 1/16W	
R4	061G0402100 0F	RST CHIPR 100 OHM +-1% 1/16W	
R9	061G0402100 0F	RST CHIPR 100 OHM +-1% 1/16W	
R12	061G0402100 0F	RST CHIPR 100 OHM +-1% 1/16W	

R15	061G0402101	RST CHIPR 100 OHM +-5% 1/16W	
R16	061G0402101	RST CHIPR 100 OHM +-5% 1/16W	
R22	061G0402101	RST CHIPR 100 OHM +-5% 1/16W	
R24	061G0402101	RST CHIPR 100 OHM +-5% 1/16W	
R25	061G0402101	RST CHIPR 100 OHM +-5% 1/16W	
R26	061G0402101	RST CHIPR 100 OHM +-5% 1/16W	
R73	061G0402101	RST CHIPR 100 OHM +-5% 1/16W	
R75	061G0402101	RST CHIPR 100 OHM +-5% 1/16W	
R38	061G0402102	RST CHIPR 1 KOHM +-5% 1/16W	
R37	061G0402102	RST CHIPR 1 KOHM +-5% 1/16W	
R96	061G0402102	RST CHIPR 1 KOHM +-5% 1/16W	
R82	061G0402102	RST CHIPR 1 KOHM +-5% 1/16W	
R69	061G0402102	RST CHIPR 1 KOHM +-5% 1/16W	
R90	061G0402103	RST CHIPR 10 KOHM +-5% 1/16W	
R81	061G0402103	RST CHIPR 10 KOHM +-5% 1/16W	
R70	061G0402103	RST CHIPR 10 KOHM +-5% 1/16W	
R64	061G0402103	RST CHIPR 10 KOHM +-5% 1/16W	
R52	061G0402103	RST CHIPR 10 KOHM +-5% 1/16W	
R47	061G0402103	RST CHIPR 10 KOHM +-5% 1/16W	
R46	061G0402103	RST CHIPR 10 KOHM +-5% 1/16W	
R45	061G0402103	RST CHIPR 10 KOHM +-5% 1/16W	
R44	061G0402103	RST CHIPR 10 KOHM +-5% 1/16W	
R43	061G0402103	RST CHIPR 10 KOHM +-5% 1/16W	
R42	061G0402103	RST CHIPR 10 KOHM +-5% 1/16W	
R39	061G0402103	RST CHIPR 10 KOHM +-5% 1/16W	
R36	061G0402103	RST CHIPR 10 KOHM +-5% 1/16W	
R29	061G0402103	RST CHIPR 10 KOHM +-5% 1/16W	
R27	061G0402103	RST CHIPR 10 KOHM +-5% 1/16W	
R35	061G0402104	RST CHIPR 100 KOHM +-5% 1/16W	
R34	061G0402105	RST CHIPR 1MOHM +-5% 1/16W	
R68	061G0402106	RST CHIP 10M 1/16W 5%	
R1	061G0402120 0F	RST CHIPR 120 OHM +-1% 1/16W	
R10	061G0402120 0F	RST CHIPR 120 OHM +-1% 1/16W	
R6	061G0402120 0F	RST CHIPR 120 OHM +-1% 1/16W	
R17	061G0402222	RST CHIPR 2.2 KOHM +-5% 1/16W	
R14	061G0402222	RST CHIPR 2.2 KOHM +-5% 1/16W	
R65	061G0402240 0F	RST CHIPR 0402 240 OHM +-1% 1/16W	
R71	061G0402240 0F	RST CHIPR 0402 240 OHM +-1% 1/16W	

R63	061G0402330	RST CHIPR 33 OHM +-5% 1/16W	
R62	061G0402330	RST CHIPR 33 OHM +-5% 1/16W	
R61	061G0402330	RST CHIPR 33 OHM +-5% 1/16W	
R60	061G0402330	RST CHIPR 33 OHM +-5% 1/16W	
R59	061G0402330	RST CHIPR 33 OHM +-5% 1/16W	
R58	061G0402330	RST CHIPR 33 OHM +-5% 1/16W	
R57	061G0402330	RST CHIPR 33 OHM +-5% 1/16W	
R56	061G0402330	RST CHIPR 33 OHM +-5% 1/16W	
R53	061G0402332	RST CHIPR 3.3KOHM +-5% 1/16W	
R51	061G0402332	RST CHIPR 3.3KOHM +-5% 1/16W	
R50	061G0402332	RST CHIPR 3.3KOHM +-5% 1/16W	
R23	061G0402332	RST CHIPR 3.3KOHM +-5% 1/16W	
R21	061G0402332	RST CHIPR 3.3KOHM +-5% 1/16W	
R67	061G0402333	RST CHIPR 33 KOHM +-5% 1/16W	
R2	061G0402392	RST CHIP 3.9K 1/16W 5%	
R78	061G0402392	RST CHIP 3.9K 1/16W 5%	
R20	061G0402470 0F	RST CHIPR 0402 470 OHM +-1% 1/16W	
R5	061G0402470 0F	RST CHIPR 0402 470 OHM +-1% 1/16W	
R74	061G0402472	RST CHIPR 4.7 KOHM +-5% 1/16W	
R76	061G0402472	RST CHIPR 4.7 KOHM +-5% 1/16W	
R72	061G0402472	RST CHIPR 4.7 KOHM +-5% 1/16W	
R66	061G0402472	RST CHIPR 4.7 KOHM +-5% 1/16W	
R32	061G0402472	RST CHIPR 4.7 KOHM +-5% 1/16W	
R19	061G0402472	RST CHIPR 4.7 KOHM +-5% 1/16W	
R18	061G0402472	RST CHIPR 4.7 KOHM +-5% 1/16W	
R80	061G0402473	RST CHIPR 47 KOHM +-5% 1/16W	
R11	061G0402750 9F	RST CHIP 75 OHM 1/16W 1%	
R3	061G0402750 9F	RST CHIP 75 OHM 1/16W 1%	
R8	061G0402750 9F	RST CHIP 75 OHM 1/16W 1%	
B9	061G0603000	RST CHIP MAX 0R05 1/10W	
B8	061G0603000	RST CHIP MAX 0R05 1/10W	
B4	061G0603000	RST CHIP MAX 0R05 1/10W	
B13	061G0603000	RST CHIP MAX 0R05 1/10W	
B10	061G0603000	RST CHIP MAX 0R05 1/10W	
B5	061G0805000	RST CHIP MAX 0R05 1/8W	
B6	061G0805000	RST CHIP MAX 0R05 1/8W	
B7	061G0805000	RST CHIP MAX 0R05 1/8W	
C12	065G0402101 31	CHIP 100PF 50V NPO	

CA1	065G0402102 12	CAP CHIP 0402 1nF K 16V X7R	
C61	065G0402104 17	CAP CHIP 0402 100nF Z 16V Y5V	
C60	065G0402104 17	CAP CHIP 0402 100nF Z 16V Y5V	
C58	065G0402104 17	CAP CHIP 0402 100nF Z 16V Y5V	
C42	065G0402104 17	CAP CHIP 0402 100nF Z 16V Y5V	
C31	065G0402104 17	CAP CHIP 0402 100nF Z 16V Y5V	
C30	065G0402104 17	CAP CHIP 0402 100nF Z 16V Y5V	
C3	065G0402104 17	CAP CHIP 0402 100nF Z 16V Y5V	
C28	065G0402104 17	CAP CHIP 0402 100nF Z 16V Y5V	
C25	065G0402104 17	CAP CHIP 0402 100nF Z 16V Y5V	
C24	065G0402104 17	CAP CHIP 0402 100nF Z 16V Y5V	
C23	065G0402104 17	CAP CHIP 0402 100nF Z 16V Y5V	
C21	065G0402104 17	CAP CHIP 0402 100nF Z 16V Y5V	
C20	065G0402104 17	CAP CHIP 0402 100nF Z 16V Y5V	
C19	065G0402104 17	CAP CHIP 0402 100nF Z 16V Y5V	
C18	065G0402104 17	CAP CHIP 0402 100nF Z 16V Y5V	
C17	065G0402104 17	CAP CHIP 0402 100nF Z 16V Y5V	
C16	065G0402104 17	CAP CHIP 0402 100nF Z 16V Y5V	
C15	065G0402104 17	CAP CHIP 0402 100nF Z 16V Y5V	
C14	065G0402104 17	CAP CHIP 0402 100nF Z 16V Y5V	
C34	065G040210412K	CAP CHIP 0402 100N 16V X7R +/-10%	
C66	065G0402105 05	MLCC 0402 1μF 6.3V X5R	
C13	065G0402220 31	CHIP 22PF 50V NPO	
C26	065G0402220 31	CHIP 22PF 50V NPO	
C27	065G0402220 31	CHIP 22PF 50V NPO	
C9	065G0402473 17	CAP CHIP 0402 47nF K 16V Y5V	
C8	065G0402473 17	CAP CHIP 0402 47nF K 16V Y5V	
C6	065G0402473 17	CAP CHIP 0402 47nF K 16V Y5V	
C5	065G0402473 17	CAP CHIP 0402 47nF K 16V Y5V	
C2	065G0402473 17	CAP CHIP 0402 47nF K 16V Y5V	
C1	065G0402473 17	CAP CHIP 0402 47nF K 16V Y5V	
C63	065G0603106 05	CAP CHIP 0603 10uF K 6.3V X5R	
C22	065G1206106 05	CHIP 10UF/6.3V X5R	
B14	071G 59S102 Y	CHIP BEAD 0603 1000ohm+-25% 0.3A	
B1	071G 59S330 Y	CHIP BEAD 0603 33ohm+-25% 1.2A	
B2	071G 59S330 Y	CHIP BEAD 0603 33ohm+-25% 1.2A	
B3	071G 59S330 Y	CHIP BEAD 0603 33ohm+-25% 1.2A	
D1	093G 64S503CMO	BAV70W,SOT-323(SC-70),Pan Jit CMO	

D6	093G 64S503CMO	BAV70W,SOT-323(SC-70),Pan Jit CMO	
D5	093G3004 3	SM340A	
	715G3053 B 2	MAIN PCB FR-4 90x60x1.0 DS	
C25	065G0402104 15	MLCC 0402 0.1UF K 16V X5R	
C28	065G0402104 15	MLCC 0402 0.1UF K 16V X5R	
C3	065G0402104 15	MLCC 0402 0.1UF K 16V X5R	
C30	065G0402104 15	MLCC 0402 0.1UF K 16V X5R	
C31	065G0402104 15	MLCC 0402 0.1UF K 16V X5R	
C42	065G0402104 15	MLCC 0402 0.1UF K 16V X5R	
C58	065G0402104 15	MLCC 0402 0.1UF K 16V X5R	
C60	065G0402104 15	MLCC 0402 0.1UF K 16V X5R	
C61	065G0402104 15	MLCC 0402 0.1UF K 16V X5R	
C24	065G0402104 15	MLCC 0402 0.1UF K 16V X5R	
C23	065G0402104 15	MLCC 0402 0.1UF K 16V X5R	
C21	065G0402104 15	MLCC 0402 0.1UF K 16V X5R	
C20	065G0402104 15	MLCC 0402 0.1UF K 16V X5R	
C19	065G0402104 15	MLCC 0402 0.1UF K 16V X5R	
C18	065G0402104 15	MLCC 0402 0.1UF K 16V X5R	
C17	065G0402104 15	MLCC 0402 0.1UF K 16V X5R	
C16	065G0402104 15	MLCC 0402 0.1UF K 16V X5R	
C15	065G0402104 15	MLCC 0402 0.1UF K 16V X5R	
C14	065G0402104 15	MLCC 0402 0.1UF K 16V X5R	
B14	071G 59S102 M	IND FXD 0603 EMI 100MHZ 1K R	
	SMTKEPC7QO1	KEY BOARD FOR SMT	
CN1	033G8019 2CMO	CONN.25-D000187	
SW1	077G 606501 CJ	TACT SWITCH	
SW2	077G 606501 CJ	TACT SWITCH	
SW3	077G 606501 CJ	TACT SWITCH	
SW4	077G 606501 CJ	TACT SWITCH	
SW5	077G 606501 CJ	TACT SWITCH	
D1	081G 630 1 GP	LED GPTS0603OC3-PB	
D2	081G0603 B GP	LED GPTS06033BC1 GP	
	715G3032 1	KEY PCB FR-4 76x11.8x1.0mm DS	
CN1	033G8019 2JCMO	CONNECTOR 1.0pitch SMT 15p	

11. Different Parts List

Diversity of T96MNBDKIWVSNNN compared with T96MNBDKIWVSNNND			
Location	Part No.	Description	Remark
N-USA	089G402A18N IS	POWER CORD/(TPV 共用)32-D022438	
N-USA	089G402A18N YH	POWER CORD(32-D022438)(美規)	
	N40G 19N96842A	SAFETY LABEL	
	N33G0035 1P CM	LENS 40-D018272	