

Service Manual

ViewSonic VG2030wm-1

Model No. VS11425

20" Color TFT LCD Display

(VG2030wm-1_SM Rev. 1a Nov. 2006)

ViewSonic 381 Brea Canyon Road, Walnut, California 91789 USA - (800) 888-8583

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Revision History

Revision	SM Editing Date	ECR Number	Description of Changes	Editor
1a	11/28/2006		Initial Release	Jamie Chang

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1. Precautions and Safety Notices

1. Appropriate Operation

- (1) Turn off the product before cleaning.
- (2) Use only a dry soft cloth when cleaning the LCD panel surface.
- (3) Use a soft cloth soaked with mild detergent to clean the display housing.
- (4) Disconnect the power plug from AC outlet if the product is not used for a long period of time.
- (5) If smoke, abnormal noise, or strange odor is present, immediately switch the LCD display off.
- (6) Do not touch the LCD panel surface with sharp or hard objects.
- (7) Do not place heavy objects on the LCD display, video cable, or power cord.
- (8) Do not use abrasive cleaners, waxes or solvents for your cleaning.
- (9) Do not operate the product under the following conditions:
 - Extremely hot, cold or humid environment.
 - Areas susceptible to excessive dust and dirt.
 - Near any appliance generating a strong magnetic field.
 - Place in direct sunlight.

2. Caution

No modification of any circuit should be attempted. Service work should only be performed after you are thoroughly familiar with all of the following safety checks and servicing guidelines.

3. Safety Check

Care should be taken while servicing this LCD display. Because of the high voltage used in the inverter circuit, the voltage is exposed in such areas as the associated transformer circuits.

4. Power Supply Requirements

The external AC power operating range shall be from 90 to 264Vac

5. LCD Module Handling Precautions

5.1. Handling Precautions

- (1) Since front polarizer is easily damaged, pay attention not to scratch it.
- (2) Be sure to turn off power supply when inserting or disconnecting from input connector.
- (3) Wipe off water drop immediately. Long contact with water may cause discoloration or spots.
- (4) When the panel surface is soiled, wipe it with absorbent cotton or other soft cloth.
- (5) Since the panel is made of glass, it may break or crack if dropped or bumped on hard surface.
- (6) Since CMOS LSI is used in this module, take care of static electricity and insure human earth when handling.
- (7) Do not open nor modify the Module Assembly.
- (8) Do not press the reflector sheet at the back of the module to any directions.
- (9) In case if a Module has to be put back into the packing container slot after once it was taken out from the container, do not press the center of the CCFL Reflector edge. Instead, press at the far ends of the CFL Reflector edge softly. Otherwise the TFT Module may be damaged.
- (10) At the insertion or removal of the Signal Interface Connector, be sure not to rotate nor tilt the Interface Connector of the TFT Module.
- (11) After installation of the TFT Module into an enclosure (LCD monitor housing, for example), do not twist nor bend the TFT Module even momentary. At designing the enclosure, it should be taken into consideration that no bending/twisting forces are applied to the TFT Module from outside. Otherwise the TFT Module may be damaged.
- (12) Cold cathode fluorescent lamp in LCD contains a small amount of mercury. Please follow local ordinances or regulations for disposal.
- (13) Small amount of materials having no flammability grade is used in the LCD module. The LCD module should be supplied by power complied with requirements of Limited Power Source (IEC60950 or UL1950), or be applied exemption.
- (14) The LCD module is designed so that the CFL in it is supplied by Limited Current Circuit (IEC60950 or UL1950). Do not connect the CFL in Hazardous Voltage Circuit.

5.2. Handling and Placing Methods

Correct Methods:	Incorrect Methods:
Only touch the metal frame of the LCD panel or the front cover of the monitor. Do not touch the surface of the polarizer.	Surface of the LCD panel is pressed by fingers and that may cause "Mura"
	
	
	

2. Specification

Product definition and specification

Product Name	ViewSonic VG2030wm
Oracle P/N	VG2030WM
Model Number	VS11425
OSD Languages	English, French, German, Italian, Spanish, Finnish, Japanese, Traditional Chinese, Simplified Chinese
TFT LCD Panel and Model #	1 st Source: AUO M201EW02 V.0
Scalar	Realtek RTD2553V
Input Signal	Analog x1 / Digital x1
Sync Compatibility	Separate Sync / Composite Sync / SOG
Adapter	Internal Power Board
Power Cable	Yes, refer to APPENDIX B: Power Cable
Analog Cable (1.8 m, black), with PC 2001 and Hot Plug Detect &DDC	Yes (Detached cable; refer the Appendix A)
DVI-D Cable(1.8m, black) with PC 2001	Yes (refer the Appendix A)
Audio Cable(1.8m, black) with PC 2001	Yes
MIC Cable(1.8m, black) with PC 2001	No
USB Cable (V2.0)	No
ViewSonic CD Wizard	Arabic, English, Finnish, Spanish, German, Italian, Japanese, Swedish, Polish, Korean, Portuguese, Russian, Turkish , French, Czech, Hungarian, Simplified Chinese, Traditional Chinese
ViewSonic Quick Start Guide	
PerfectSuite CD	Yes
Screen Protector Mylar	Yes
Foot Protector plastic	Yes, for left-front and right-front foot
Service Insert	For Region code = M units only
Warranty Sticker	For Region code = G units only
Warranty Card	For Region code = G units only
Carton Sticker	For Region code = G units only
PE bag of Carton	For Region code = G units only

1 GENERAL specification

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

2 VIDEO INTERFACE

Input Connector (refer the Appendix A)	Analog = DB-15 Digital = 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 Pin out	Refer to Appendix A; Compliant DDC/2B
Video Signals	Video RGB (Analog) Separate Sync / Composite Sync / SOG 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
DDC/2B	Compliant with version 3
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	Refer to Segment 5
Exclusions	Not compatible with interlaced video

3 USB INTERFACE

No USB interface

4 POWER SUPPLY

Internal Power Supply	HJC H0AU032001														
Input Voltage Range	90 to 264 VAC														
Input Frequency Range	47 to 63 Hertz														
Short Circuit Protection	Output can be shorted without damage														
Over Current Protection	5.0 A typical at 12.0 VDC														
Leakage Current	3.5mA (Max) at 254VAC / 60Hz														
Efficiency (at 115VAC Full Load)	Typical: 80% Minimum: 75%														
Fuse	Internal and not user replaceable														
Power Output	38 Watts (typ)														
Ripple and Noise	Ripple: <3% Noise: <1%														
Max Input AC Current	1.5 Arms @ 90VAC, 0.75 Arms @180VAC														
Inrush Current (Cold Start)	50 A (max) @ 115VAC 90 A (max) @ 230VAC														
Power Supply Cold Start	Shall start and function properly when under full load, with all combinations of input voltage, input frequency, and operating temperature.														
Power Supply Transient Immunity	Shall be able to withstand an ANSI/IEEE C62.41-1980 6000V 200 ampere ring wave transient test with no damage.														
Power Supply Line Surge Immunity	Shall be able to withstand 1.5 times nominal line voltage for one cycle with no damage.														
Power Supply Missing Cycle Immunity	Shall be able to function properly, without reset or visible screen artifacts, when ½ cycle of AC power is randomly missing at nominal input.														
Power Supply Acoustics	The power supply shall not produce audible noise that would be detectable by the user. Audible shall defined to be in compliance with ISO 7779 (DIN EN27779:1991) Noise measurements of machines acoustics. Power Switch noise shall not be considered.														
Power Saving Operation(Method)	VESA DPMS Signaling														
Power Consumption	<table><tr><td>Mode</td><td>LED</td><td>Power Consumption</td></tr><tr><td>On</td><td>Blue</td><td>With Audio 50W (typ) 55W (max) Without Audio 43W (typ) 48W (max)</td></tr><tr><td>Active off</td><td>Amber</td><td><1W</td></tr><tr><td>Off</td><td>Off</td><td><1W</td></tr></table>			Mode	LED	Power Consumption	On	Blue	With Audio 50W (typ) 55W (max) Without Audio 43W (typ) 48W (max)	Active off	Amber	<1W	Off	Off	<1W
Mode	LED	Power Consumption													
On	Blue	With Audio 50W (typ) 55W (max) Without Audio 43W (typ) 48W (max)													
Active off	Amber	<1W													
Off	Off	<1W													
Recovery Time	On Mode = N/A, Active Off < 3 sec														

5 ELECTRICAL REQUIREMENT

Horizontal / Vertical Frequency

Horizontal Frequency	24 – 82 kHz
Vertical Refresh Rate	50 – 85 Hz
Maximum Pixel Clock	165 MHz
Sync Polarity	Independent of sync polarity

Timing Table

Item	Timing	Analog			Digital - TMDS	Remark
		Separated	Composite	SOG		
1	640 x 350 @ 70 Hz, 31.5 KHz					For SOG sync, OSD will be 720x400@70Hz.
2	640 x 400 @ 60 Hz, 31.5 KHz					For SOG sync, switch 640x400@60Hz and 640x480@60Hz by [1]+[2] short cut key (primary=640x480@60Hz)
3	640 x 400 @ 70 Hz, 31.5 KHz					For Analog sync, OSD will be 640x400@70Hz/720x400@70Hz. (Promary=720x400@70Hz)
4	640 x 480 @ 50 Hz, 24.7 KHz					
5	640 x 480 @ 60 Hz, 31.5 KHz					For SOG sync, switch 640x400@60Hz and 640x480@60Hz by [1]+[2] short cut key (primary=640x480@60Hz)
6	640 x 480 @ 67 Hz, 35 KHz					
7	640 x 480 @ 72 Hz, 37.9 KHz					
8	640 x 480 @ 75 Hz, 37.5 KHz					
9	640 x 480 @ 85 Hz, 43.3 KHz					
10	720 x 400 @ 70 Hz, 31.5 KHz					For Analog sync, OSD will be 640x400@70Hz/720x400@70Hz. (Promary=720x400@70Hz)
11	720 x 480 @ 60 Hz, 31.5 KHz					
12	720 x 576 @ 50 Hz, 31.3 KHz					
13	800 x 600 @ 50 Hz, 24.7 KHz					
14	800 x 600 @ 56 Hz, 35.1 KHz					
15	800 x 600 @ 60 Hz, 37.9 KHz					
16	800 x 600 @ 70 Hz, 43 KHz					
17	800 x 600 @ 72 Hz, 48.1 KHz					
18	800 x 600 @ 75 Hz, 46.9 KHz					
19	800 x 600 @ 85 Hz, 53.7 KHz					
20	832 x 624 @ 75 Hz, 49.7 KHz					
21	1024 x 768 @ 50 Hz, 39.6 KHz					For SOG sync, the Information OSD will be 1024x768@50Hz, the OSD content also can be changed to 1280x768@50Hz by [1]+[2] short cut key.
22	1024 x 768 @ 60 Hz, 48.4 KHz					For SOG sync, the Information OSD will be 1024x768@60Hz, the OSD content also can be changed to 1280x768@60Hz by [1]+[2] short cut key.
23	1024 x 768 @ 70 Hz, 56.5 KHz					
24	1024 x 768 @ 72 Hz, 58.1 KHz					
25	1024 x 768 @ 75 Hz, 60 KHz					For SOG sync, the Information OSD will be 1024x768@75Hz, the OSD content also can be changed to 1280x768@75Hz by [1]+[2] short cut key.
26	1024 x 768 @ 85 Hz, 68.7 KHz					
27	1152 x 864 @ 75 Hz, 67.5 KHz					
28	1152 x 870 @ 75 Hz, 68.7 KHz					

29	1280 x 720 @ 50 Hz, 37.5 KHz				
30	1280 x 720 @ 60 Hz, 45 KHz				
31	1280 x 768 @ 50 Hz, 39.6 KHz				For SOG sync, the Information OSD will be 1024x768@50Hz, the OSD content also can be changed to 1280x768@50Hz by [1]+[2] short cut key.
32	1280 x 768 @ 60 Hz, 47.8 KHz				For SOG sync, the Information OSD will be 1024x768@60Hz, the OSD content also can be changed to 1280x768@60Hz by [1]+[2] short cut key.
33	1280 x 768 @ 75 Hz, 60.3 KHz				For SOG sync, the Information OSD will be 1024x768@75Hz, the OSD content also can be changed to 1280x768@75Hz by [1]+[2] short cut key.
34	1280 x 960 @ 50 Hz, 49.4 KHz				
35	1280 x 960 @ 60 Hz, 59.7 KHz				
36	1280 x 960 @ 75 Hz, 75.2 KHz				
37	1280 x 1024 @ 60 Hz, 64 KHz				
38	1280 x 1024 @ 75 Hz, 80 KHz				
39	1400 x 1050 @ 60 Hz, 65.3 KHz				For Analog sync, switch 1680x1050@60Hz and 1400x1050@60Hz by [1]+[2] short cut key (primary=1680x1050@60Hz)
40	1440 x 900 @ 60 Hz, 55.5 KHz				
41	1440 x 900 @ 75 Hz, 75 KHz				
42	1600 x 1200 @ 60 Hz, 75 KHz				
43	1680 x 1050 @ 60 Hz, 64.7 KHz				For Analog sync, switch 1680x1050@60Hz and 1400x1050@60Hz by [1]+[2] short cut key (primary=1680x1050@60Hz)

*1. Tolerance $\geq \pm 2\text{KHz}$.

*2. Any timing not in the list, it should display as normal or show on “OUT OF RANGE” OSD message without blanking.

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

7 AUDIO INTERFACE (SPEAKER SPECIFICATION)

SPEAKER SPECIFICATION

LINE INPUT CONNECTION	3.5 MM STEREO JACK
LINE INPUT SIGNAL	1.0 VRMS
LINE INPUT IMPEDANCE	10 KOHM
MAXIMUM POWER OUTPUT (ELECTRIC)	2 W / CH
SIGNAL TO NOISE RATIO	50 DB
FREQUENCY RESPONSE	100 HZ – 20 KHZ
DISTORTION	< 10 % THD (@1KHZ)
VIBRATION	THERE SHOULD BE NO AUDIBLE VIBRATION WITH VOLUME AT 100% AND TREBLE / BASS AT DEFAULT.
SCREEN IMAGE	THERE SHOULD BE NO AFFECT ON THE SCREEN IMAGE STABILITY UNDER ANY CONDITIONS.
CONNECTOR PC99 REQUIREMENT AUDIO IN	LIME GREEN PANTONE # 577C
CABLE TYPE / LENGTH	3.5MM STEREO CABLE / 1.8M LENGTH
AUDIO DPMS	SPEAKERS SHOULD BE OFF WHEN THE REST OF THE MONITOR IS IN POWER SAVING.

* No any sympathetic or abnormal noise allowed.

8 TFT LCD PANEL

Panel Characteristics :

1st Source Panel

Model number	AUO M201EW02 V0
Type	Active Matrix TFT, TN technology
Active Size	20.1" Wide
Pixel Arrangement	RGB Vertical Stripe
Pixel Pitch	0.258 mm
Glass Treatment	Anti-Glare, Hard coating (3H)
# of Backlights	6 CCFL
Backlight Life	60000 Hrs (Typ) 50000 Hrs (Min)
Luminance (Center) – CT = 6500K, Contrast/ Brightness = Max	300 cd/m2 (Typ after 30 minute warm up) 240 cd/m2 (Min after 30 minute warm up)
Brightness Uniformity	80 % (Typ) / 75 % (Min)
Contrast Ratio	800 :1 (Typ) 600 : 1 (Min)
Color Depth	16.7 million colors (6 bits + Hi FRC)
Horizontal Viewing Angle	160 degrees (Typ)
Vertical Viewing Angle	160 degrees (Typ)
Response Time 10%-90% @ Ta=25°C	On-Off 5ms (Typ) / 8ms (Max)
Mercury	3.0 mg per lamp
Panel Defects	Please see Panel Quality Specifications.

*The average of measured value from monthly shipment shall be equal or better than the Typical value above.

9 IMAGE PERFORMANCE

Display Size

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

Luminance

Lv (Max) –Condition: Brightness / Contrast = 100% CCT = USER COLOR (R/G/B=100%)	Lv (Max) = The Luminance requirement of section 6 “TFT LCD PANEL”
Lv (Def) –Condition: Brightness / Contrast = 100% Color Temperature = 6500K / sRGB	$Lv (Def) / Lv (Max) \times 100\% > 95\%$
Lv (sRGB/6500K) –Condition: Brightness / Contrast = Default CCT = 6500K / sRGB	$Lv (sRGB/6500K) / Lv (Max) \times 100\% > 85\%$
Lv (9300K) –Condition: Brightness / Contrast = Default CCT = 9300K	$Lv (9300K) / Lv (Def) \times 100\% > 70\%$
Lv (7500K) –Condition: Brightness / Contrast = Default CCT = 7500K	$Lv (7500K) / Lv (Def) \times 100\% > 75\%$
Lv (5400K) –Condition: Brightness / Contrast = Default CCT = 5400K	$Lv (5400K) / Lv (Def) \times 100\% > 75\%$
Lv (5000K) –Condition: Brightness / Contrast = Default CCT = 5000K	$Lv (5000K) / Lv (Def) \times 100\% > 75\%$
Lv (Brightness) –Condition: Contrast = 100%	$Lv(Brightness=0\%) / Lv(Brightness=100\%) \times 100\% \quad 55\%$
Lv (Contrast) –Condition: Brightness = 100%	$Lv(Contrast=0\%) / Lv(Contrast=100\%) \times 100\% \quad 30\%$

Contrast Ratio

CR(Max) –Condition: Contrast / Brightness = 100% CCT = USER COLOR (R/G/B=100%)	Same as the Contrast Ratio in section 6 “TFT LCD PANEL”
CR(6500K) –Condition: Contrast / Brightness = Default CCT = 6500K	CR(6500K) / CR(Max) $\geq$ 85%

Saturation

Contrast = Default Brightness = Default Test pattern = 6gray	NO VISIBLE SATURATION * $\geq$ 50% UNITS OF SHIPMENT SHALL BE EQUAL OR BETTER THAN TYPICAL CR SPEC.
Contrast = 100% Brightness = 100% Test pattern = 6gray	4~6 - LEVEL SATURATION

10 MECHANICAL

Dimension (Desktop)

Width	493 mm (19.4 inch)
Height (Height adjust to the bottom)	477mm (18.8 inch)
Depth	230mm (9.1 inch)
Monitor Weight	7 Kg (15.4 lbs)

*Refer to Figure 1

Dimension (Head Only / Wall Mount)

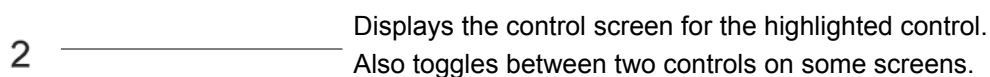
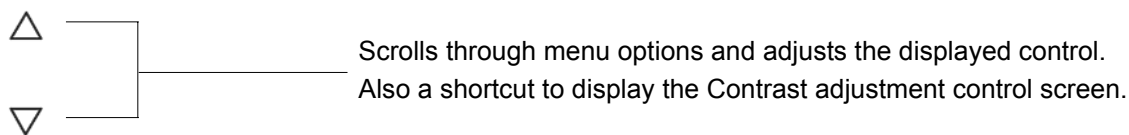
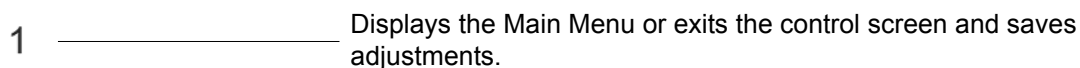
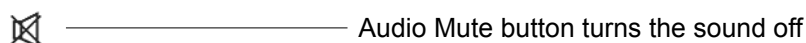
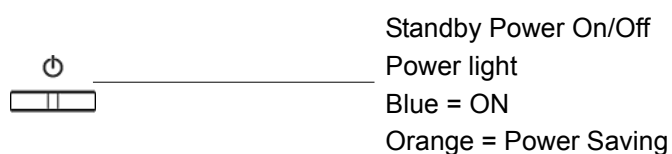
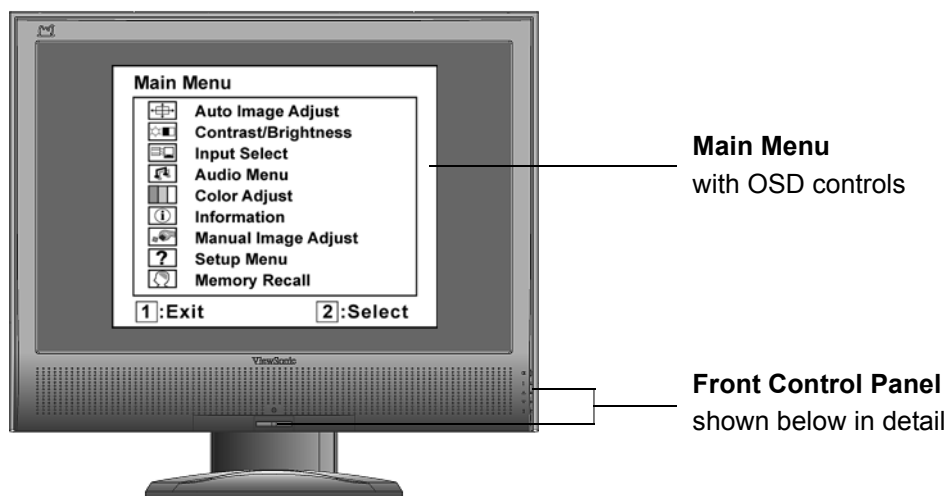
Width	493 mm (19.4 inch)
Height	388mm (15.3 inch)
Depth	70mm (2.8 inch)
Monitor Weight	6 Kg (13.2 lbs)

*Refer to Figure 1

Ergonomics

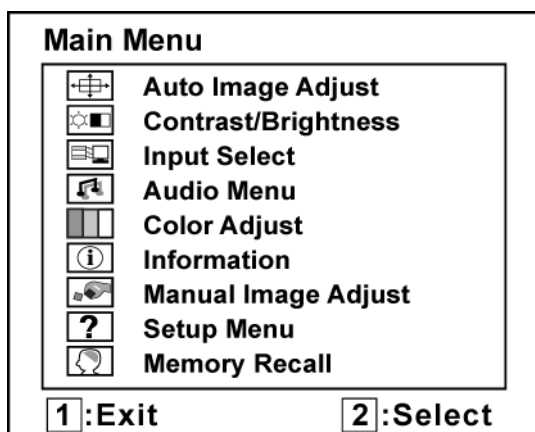
Tilt Up	$\geq 20^\circ$
Tilt Down	From 0° down to $-3^\circ \sim -5^\circ$
Swivel Right	$\geq 180^\circ$
Swivel Left	$\geq 180^\circ$
Height Adjust	$0 \sim \geq 80$ mm
Pivot	No

3. Front Panel Function Control Description



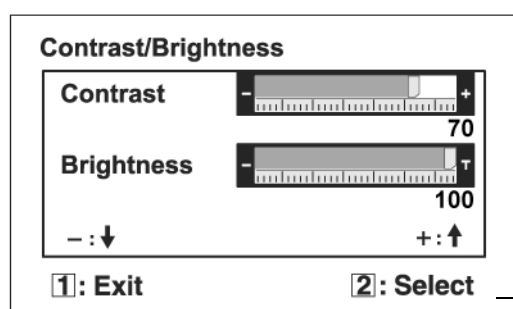
Do the following to adjust the display setting:

1. To display the Main Menu, press button [1].



NOTE: All OSD menus and adjustment screens disappear automatically after about 15 seconds. This is adjustable through the OSD timeout setting in the setup menu.

2. To select a control to adjust, press▲or▼to scroll up or down in the Main Menu.
3. After the desired control is selected, press button [2]. A control screen like the one shown below appears.



The command line at the bottom of the control screen tells what to do next from this screen. You can toggle between control screens, adjust the selected option, or exit the screen.

4. To adjust the setting, press the up ▲ or down ▼ buttons.
5. To save the adjustments and exit the menu, press button [1] *twice*.

The following tips may help you optimize your display:

- Adjust the computer's graphics card so that it outputs a 1680 x 1050 @ 60Hz video signal to the LCD display. (Look for instructions on “changing the refresh rate” in the graphics card's user guide.)
- If necessary, make small adjustments using H. POSITION and V. POSITION until the screen image is completely visible. (The black border around the edge of the screen should barely touch the illuminated “active area” of the LCD display.)

Main Menu Controls

Adjust the menu items shown below by using the up ▲ and down ▼ buttons.

Control	Explanation
	Auto Image Adjust sizes and centers the screen image automatically.
	Contrast adjusts the difference between the image background (black level) and the foreground (white level).
	Brightness adjusts background black level of the screen image.
	Input Select toggles between inputs if you have more than one computer connected to the VG2030wm.
	Audio Adjust Volume increases the volume, decreases the volume, and mutes the audio. Mute temporarily silences audio output.
	Color Adjust provides several color adjustment modes, including preset color temperatures and a User Color mode which allows independent adjustment of red (R), green (G), and blue (B). The factory setting for this product is 6500K (6500 Kelvin).

Color Adjust	
sRGB	
9300K	
7500K	
6500K	
5400K	
User Color	
1: Exit	2: Select

sRGB-This is quickly becoming the industry standard for color management, with support being included in many of the latest applications. Enabling this setting allows the LCD display to more accurately display colors the way they were originally intended. Enabling the sRGB setting will cause the Contrast and Brightness adjustments to be disabled.

9300K-Adds blue to the screen image for cooler white (used in most office settings with fluorescent lighting).

7500K - Adds blue to the screen image for cooler white (used in most office settings with fluorescent lighting).

6500K-Adds red to the screen image for warmer white and richer red.

5400K-Adds green to the screen image for a darker color.

User Color Individual adjustments for red (R), green (G), and blue (B).

1. To select color (R, G or B) press button [2].
2. To adjust selected color, press▲and▼.

Important: If you select RECALL from the Main Menu when the product is set to a Preset Timing Mode, colors return to the 6500K factory preset.



Information displays the timing mode (video signal input) coming from the graphics card in the computer, the LCD model number, the serial number, and the ViewSonic® website URL. See your graphics card's user guide for instructions on changing the resolution and refresh rate (vertical frequency).

NOTE: VESA 1680 x 1050 @ 60Hz (recommended) means that the resolution is 1680 x 1050 and the refresh rate is 60 Hertz.

H. Frequency:	XX	kHz
V. Frequency:	XX	Hz
Resolution:	XXX	
Pixel Clock:	XXXXXXXXXX	MHz
Serial Number:	XXXXXXXXXXXX	
Model Number:	XXXXXXXXXXXX	
www.ViewSonic.com		1: Exit

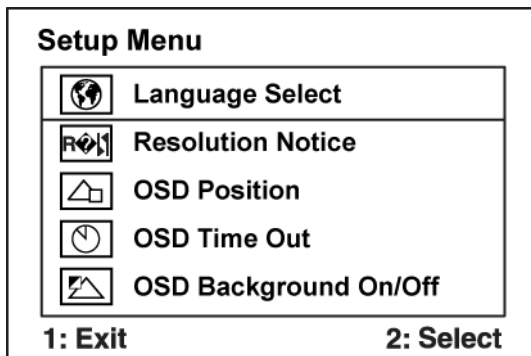
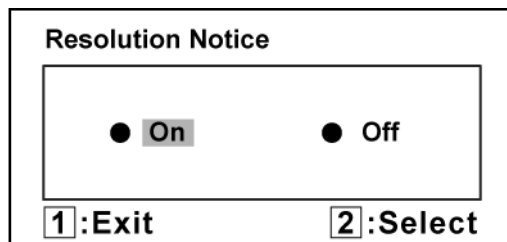
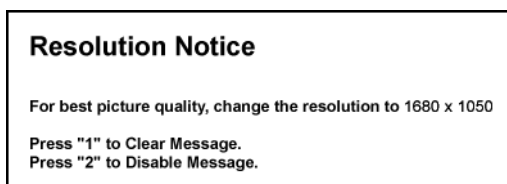


Manual Image Adjust

Manual Image Adjust

-  Horizontal Size
-  H./V. Position
-  Fine Tune
-  Sharpness

1: Exit **2: Select**

Control	Explanation
	Horizontal Size adjusts the width of the screen image.
	H./V. Position (Horizontal/Vertical Position) moves the screen image left or right and up or down.
	Fine Tune sharpens the focus by aligning text and/or graphics with pixel boundaries. NOTE: Try Auto Image Adjust first.
	Sharpness adjusts the clarity and focus of the screen image.
	Setup Menu displays the menu shown below: 
	Language Select allows the user to choose the language used in the menus and control screens.
	Resolution Notice allows the user to enable or disable this notice.  If you enable the Resolution Notice shown above and your computer is set at a resolution other than 1680 x 1050, the following screen appears. 

Control	Explanation
	OSD Position allows the user to move the OSD menus and control screens.
	OSD Timeout sets the length of time the OSD screen is displayed. For example, with a “30 second” setting, if a control is not pushed within 30 seconds, the display screen disappears.
	OSD Background allows the user to turn the OSD background On or Off.
	Memory Recall returns the adjustments back to factory settings if the display is operating in a factory Preset Timing Mode listed in the Specifications of this manual.

4. Circuit Description

RTD2553V

LCD Monitor/MFM Controller

General

- . Embedded dual DDC with DDC1/2B/CI
- . Zoom scaling up and down
- . No external memory required.
- . Require only one crystal to generate all timing.
- . Programmable 3.3V/5V detection reset output.
- . Embedded crystal output to micro-controller.
- . 3 channels 8 bits PWM output, and wide range selectable PWM frequency.

Analog RGB Input Interface

- . Integrated 8-bit triple-channel 210/165 (optional) MHz ADC/PLL
- . Embedded programmable Schmitt trigger of HSYNC
- . Support Sync On Green (SOG) and various kinds of composite sync modes
- . On-chip high-performance hybrid PLLs
- . High resolution true 64 phase ADC PLL
- . Y/Pb/Pr support up to HDTV 1080i resolution
- . Support 2/1 Analog input (optional)

Digital Video Input Interface

- . Support 8-bit video (ITU 656) format input
- . Support 16-bit video (ITU 601) format input (optional)
- . Built-in YUV to RGB color space converter & de-interlace

DVI Compliant Digital Input Interface (optional)

- . Single link on-chip TMDS receiver
- . Support to 165Mhz with long cable
- . Adaptive algorithm for TMDS capability
- . Data enable only mode support
- . High-Bandwidth Digital Content Protection (HDCP 1.1) (optional only in H version)
- . Enhanced protection of HDCP secret key (optional only in H version)

Auto Detection /Auto Calibration

- . Input format detection
- . Compatibility with standard VESA mode and support user-defined mode
- . Smart engine for Phase/Image position/Color calibration

Scaling

- . Fully programmable zoom ratios
- . Independent horizontal/vertical scaling
- . Advanced zoom algorithm provides high image quality
- . Sharpness/Smooth filter enhancement
- . Support non-linear scaling from 4:3 to 16:9 or 16:9 to 4:3

Vivid Color.

- . Dynamic Contrast Control (DCC)
- . Independent Color Management (ICM)
- . True 10 bits color processing engine
- . sRGB compliance
- . Advanced Dithering logic for 18-bit panel color depth enhancement
- . Dynamic overshoot-smear canceling engine
- . Brightness and contrast control
- . Programmable 10-bit gamma support

Output Interface

- . Fully programmable display timing generator
- . Flexible data pair swapping for easier system design.
- . Programmable TCON function support
- . Multi-output interface (RSDS/LVDS/TTL) on single PCB
- . Spread-Spectrum DPLL to reduce EMI
- . Fixed Last Line output for perfect panel capability

Host Interface

- . Support MCU serial/parallel bus interface.
- . Support MCU dual edge data latch.

Embedded OSD

- . Embedded 12K SRAM dynamically stores OSD command and fonts
- . Support multi-color RAM font, 1, 2 and 4-bit per pixel
- . 16 color palette with 24bit true color selection
- . Maximum 8 window with alpha-blending/gradient/dynamic fade-in/fade-out, bordering/shadow/3D window type
- . Rotary 90,180,270 degree
- . Independent row shadowing/bordering
- . Programmable blinking effects for each character
- . OSD-made internal pattern generator for factory mode
- . Support 12x18~4x18 proportional font
- . Decompress OSD font

Power & Technology

- . 3.3V power supplier
- . 0.18um CMOS process, 128-pin QFP package
- . Embedded 3.3V to 1.8V voltage regulator

Analog Input

RTD integrates three ADC's (analog-to-digital converters), one for each color (red, green, and blue). The sync-processor can deal with Separate-Sync, Composite-Sync, and Sync-On-Green. And the PLL can generate very low jitter clock from HS to sample the analog signal to digital data. Input data is latched within a capture window defined in registers refer to VS and HS leading edge. RTD also has 2 ADC input, we can switch these 2 input to choose which input we want to present on RTD embedded LCD monitor.

RTD has a YPbPr input, we can connect DVD or some devices that has YPbPr input, YPbPr input can be 1st or 2nd ADC pins.

TMDS Input

RTD integrates high-speed single link receiver function. It can operate up to 165 M at long cable. RTD integrates an equalizer to enhance the cable loss weakness in long cable application and the advanced tracking algorithm to have better performance in DVI RX.

Display Output Timing

The display output port sends single/double pixel data transfer and synchronized display timing to an external device. The display port also support display panel with 6-bit per color, turn on the dithering function to enhance color depth. In single pixel output mode, single pixel data (24-bit RGB) is transferred to display port A on each active edge of DCLK, the rate of DCLK is also equal to display pixel clock. The sync & enable signals are also sent to display port on each active edge of DCLK. In double pixel output mode, double pixel data (48-bit RGB) is transferred to display port A & B on each active edge of DCLK and the rate of DCLK is equal to half display pixel clock at this moment. The sync & enable signals are also sent to display port on each active edge of DCLK.

Color Processing

Digital color R & G & B independent channel sRGB, contrast, brightness, gamma, dithering controls are built in RTD. sRGB compliance function is provided with 9 multipliers. The contrast control is performed a multiply value from 0 to 2 for each R/G/B channel. The brightness control is used to set an offset value from -512 to +511 also for each R/G/B channel. Also RTD provided 10 bit gamma and a high performance dithering function.

Build-In OSD

The detailed function-description of build-in OSD, please refer to the application note for RTD embedded OSD.

Color LUT & Overlay Port

The following diagram presents the data flow among the gamma correction, dithering, overlay MUX, OSD LUT and output format conversion blocks.

Auto-Adjustment

There are two main independent auto-adjustment functions supported by RTD, including auto-position & auto-tracking. The operation procedure is as following;

Auto-Position

1. Define the RGB color noise margin: When the value of color channel R or G or B is greater than these noise margins, a valid pixel is found.
2. Define the threshold-pixel for vertical boundary search
3. Define the boundary window of searching for horizontal boundary search.
4. Start auto-function.
5. The result can be read from register.

Auto-Tracking

1. Setting the control-registers for the function (auto-phase, auto-balance) according to the Control-Table.
2. Define the Threshold
3. Define the boundary window of searching for tracking window.
4. Start auto-function.
5. The result can be read from register

PLL System

Inside the RTD, there are four PLL systems for display clock and ADC sample clock (PLL1, PLL2, M2PLL, DPLL).

DCLK PLL

$DPLL \text{ frequency} = F_IN * DPM / DPN * \text{Divider}$.

F_IN is input crystal frequency. DPM and DPN is in **DPLL_M** and **DPLL_N**.

DPLL_N, and it divide PLL frequency by 1, 2, 4 or 8.

According to parameter DPN, you must set LPF Mode in **DPLL_WD**. If LPF Mode is 1, the charge pump current, Ich, must be DPM/17.6, while Ich must be DPM/1.67 if LPF Mode is 0. The charge pump current Ich is in **DPLL_CRNT**.

Spread-Spectrum function is also build in DCLK to reduce EMI. You can control the SSP_I, SSP_W, and FMDIV to fine-tune the EMI.

M2PLL is a PLL used to power-on reset, FIFO clock and Internal crystal clock. After power-on reset, M2PLL output 10 times frequency of crystal clock. According to crystal frequency, set M2PLL to keep FIFO clock frequency between 240MHz and 250MHz.

ADC Pixel Sampling PLL

The input pixel sampling PLL of RTD compose of PLL1 and PLL2 and DDS, the hybrid PLL system inherently has a process-independent advantages comparing with pure analog PLL, DDS synthesizer is in charge of the phase-frequency control, PLL1 provided a high frequency to get a larger bandwidth letting the system fast locking, PLL2 finally synthesize the desired pixel sampling clock. The block diagram shown below describes our high-performance tracking system.

Host Interface

Parallel/Serial Port Determination:

After RESET end, the status of pin 5 (TMDS_TST) can be sensed to determine the interface mode: high for parallel port, low, low for serial port.

Host Interface Location Determination:

After the falling edge of RESET signal, the status of pin 3 can be sensed to determine the host interface location: high for 112-115, 118, 119, and low for 52-57

Reset Output

We have the RESET_OUT function, and also reserve the RESET_IN function. By the bounding of internal pins we can select two kinds of reset function. First of all is only reset-out, we can output the reset signal to MCU, and the MCU can reset the RTD by firmware. The second is RTD output reset and also reset itself. Notice that the reset output is positive polarity, besides, the reset output is open-drain pin, please don't forget to attach a pull-up resistor (10K). The reset function for 3.3V operating voltage detection is determined by 33VRST_REF voltage, No matter 5V or 3.3V MCU is been used, divider the input voltage on 33VRST_REF to 2.2V for internal power sensing circuit detecting, the divider resistor should be 10K level avoiding current leakage.

The Programmable Schmitt Trigger of HSYNC

To get better waveform of the input HSYNC, we have a programmable Schmitt Trigger circuit. For different HSYNC amplitude and polarity, we can select different setting of the threshold voltage. The Vt + and the Vt - can be selected by register CR97 We can select the old mode or the new mode. When using the new mode we can directly determine the positive threshold voltage (1.4V, 1.6V... 2.6V), and we can choose the hysteresis from the Vt + to determine the Vt - (0.6V, 0.8V, 1.0V, 1.2V). We also can finely tune the voltage by minus 0.1V. For application, we can select different threshold voltage by the polarity of the HSYNC. The control register is CR97

Crystal Frequency Output

RTD can output crystal frequency or 1/2 crystal frequency to external MCU to save a crystal device. Once power state is on and reset is finished, we can set crystal frequency by firmware and output to pin 48 and pin 110 simultaneously, and then can turn off them in Pin Share Part. Pin 48 and PIN 110 is configurable, detail setting is listed in Pin-Share part

RTD2120 8051 Embedded Micro-Controller for Monitor

Overview

This chip is the micro-processor of LCD monitor. It uses the design ware DW8051 of Synopsys as the 8051 core of this chip and is compatible with other industry 8051 series. Also, 96Kbyte FLASH with 8 bit bus is embedded in this chip which is licensed from TSMC 0.18um e-FLASH process. Here we use the package of PLCC44/LQFP48 if we would like to have a discrete MCU controller or we make a multi-chip package with our LCD monitor controller to form one chip package to save the cost of package and PCB material.

Features

- Operating voltage range : 3.0V to 3.6V
 - 8051 core, CPU operating frequency up to 50MHz
 - 4 clocks per machine cycle
 - 256-byte internal RAM
 - 512-byte external data RAM, including 256-byte DDC RAM(128-byte x 2) and 256-byte general purpose RAM
 - 96K-byte flash memory, 64k for program and 32k for saving parameter
 - Two DDC ports compliant with VESA DDC1/2B/2Bi/CI
 - Three channels of PWM DAC with programable frequency from 100K to 100Hz
 - Watchdog timer with programmable interval
 - Three 16-bit counters/timers (T0, T1, and T2)
 - One PLL to provide programmable operating frequency and clock output, 2 clock output ports
 - One full-duplex serial port
 - Six interrupt sources with 2 external interrupts
- Four channels of 6-bit ADC
 - Hardware In System Programming(ISP) capability, no boot code required
 - Built-in Low voltage reset circuit
 - Embedded 1.8V regulator
 - Code protection
 - Available in 44-pin PLCC or 48-pin LQFP package

AUDIO STEREO CLASS-D AUDIO POWER AMPLIFIER

DESCRIPTION

The TPA2008D2 is a third generation 5-V class-D amplifier from Texas Instruments. Improvements to previous generation devices include: dc volume control, lower supply current, lower noise floor, higher efficiency, smaller packaging, and fewer external components. Most notably, a new filter-free class-D modulation technique allows the TPA2008D2 to directly drive the speakers, without needing a low-pass output filter consisting of two inductors and three capacitors per channel. Eliminating this output filter saves approximately 30% in system cost and 75% in PCB area.

The improvements and functionality make this device ideal for LCD projectors, LCD monitors, powered speakers, and other applications that demand more battery life, reduced board space, and functionality that surpasses currently available class-D devices.

A chip-level shutdown control limits total supply current to 1 μ A, making the device ideal for battery-powered applications. Protection circuitry increases device reliability: thermal and short circuit. Undervoltage shutdown saves battery power for more essential devices when battery voltage drops to low level.

5. Adjustment Procedure

1. Function Test

1.1 Product

- 20" LCD Monitor

1.2 Test Equipment

- Color Video Signal & Pattern (or PC with WSXGA+ resolution and a sound card)

1.3 Test Condition

Before function test and alignment, each LCD Monitor should be run-in and warmed up for at least 30 minutes with the following conditions:

- (a) In room temperature,
- (b) With full-white screen, RGB, and Black
- (c) With cycled display modes,
640*480 (H=43.27kHz, V=85Hz)
800*600 (H=53.7kHz, V=85Hz)
1024*768 (H=68.67kHz, V=85Hz)
1680*1050 (H=64.7kHz, V=60Hz)

1.4 Test Display Modes & Pattern

1.4.1 Compatible Modes

Analog	Digital
1. 640 x 350 @ 70Hz, 31.5kHz	640 x 350 @ 70Hz, 31.5kHz
2. 640 x 400 @ 60Hz, 31.5kHz	640 x 400 @ 60Hz, 31.5kHz
3. 640 x 400 @ 70Hz, 31.5kHz	640 x 400 @ 70Hz, 31.5kHz
4. 640 x 480 @ 50Hz, 24.7kHz	640 x 480 @ 50Hz, 24.7kHz
5. 640 x 480 @ 60Hz, 31.5kHz	640 x 480 @ 60Hz, 31.5kHz
6. 640 x 480 @ 67Hz, 35.0kHz	640 x 480 @ 67Hz, 35.0kHz
7. 640 x 480 @ 72Hz, 37.9kHz	640 x 480 @ 72Hz, 37.9kHz
8. 640 x 480 @ 75Hz, 37.5kHz	640 x 480 @ 75Hz, 37.5kHz
9. 640 x 480 @ 85Hz, 43.27kHz	640 x 480 @ 85Hz, 43.27kHz
10. 720 x 400 @ 70Hz, 31.5kHz	720 x 400 @ 70Hz, 31.5kHz
11. 720 x 480 @ 60Hz, 31.5kHz	720 x 480 @ 60Hz, 31.5kHz
12. 720 x 576 @ 50Hz, 31.3kHz	720 x 576 @ 50Hz, 31.3kHz
13. 800 x 600 @ 50Hz, 24.7kHz	800 x 600 @ 50Hz, 24.7kHz
14. 800 x 600 @ 56Hz, 35.1kHz	800 x 600 @ 56Hz, 35.1kHz
15. 800 x 600 @ 60Hz, 37.9kHz	800 x 600 @ 60Hz, 37.9kHz
16. 800 x 600 @ 70Hz, 43 kHz	800 x 600 @ 70Hz, 43 kHz
17. 800 x 600 @ 72Hz, 48.1kHz	800 x 600 @ 72Hz, 48.1kHz
18. 800 x 600 @ 75Hz, 46.9kHz	800 x 600 @ 75Hz, 46.9kHz
19. 800 x 600 @ 85Hz, 53.7kHz	800 x 600 @ 85Hz, 53.7kHz
20. 832 x 624 @ 75Hz, 49.7kHz	832 x 624 @ 75Hz, 49.7kHz
21. 1024 x 768 @ 50Hz, 39.6kHz	1024 x 768 @ 50Hz, 39.6kHz
22. 1024 x 768 @ 60Hz, 48.4kHz	1024 x 768 @ 60Hz, 48.4kHz
23. 1024 x 768 @ 70Hz, 56.5kHz	1024 x 768 @ 70Hz, 56.5kHz
24. 1024 x 768 @ 72Hz, 58.1kHz	1024 x 768 @ 72Hz, 58.1kHz
25. 1024 x 768 @ 75Hz, 60 kHz	1024 x 768 @ 75Hz, 60 kHz
26. 1024 x 768 @ 85Hz, 68.7 kHz	1024 x 768 @ 85Hz, 68.7 kHz
27. 1152 x 864 @ 75Hz, 67.5 kHz	1152 x 864 @ 75Hz, 67.5 kHz
28. 1152 x 870 @ 75Hz, 68.7 kHz	1152 x 870 @ 75Hz, 68.7 kHz

Analog	Digital
29. 1280 x 720 @ 50Hz, 37.5 kHz	1280 x 720 @ 50Hz, 37.5 kHz
30. 1280 x 720 @ 60Hz, 45 kHz	1280 x 720 @ 60Hz, 45 kHz
31. 1280 x 768 @ 50Hz, 39.6 kHz	1280 x 768 @ 50Hz, 39.6 kHz
32. 1280 x 768 @ 60Hz, 47.8 kHz	1280 x 768 @ 60Hz, 47.8 kHz
33. 1280 x 768 @ 75Hz, 60.3 kHz	1280 x 768 @ 75Hz, 60.3 kHz
34. 1280 x 960 @ 50Hz, 49.4 kHz	1280 x 960 @ 50Hz, 49.4 kHz
35. 1280 x 960 @ 60Hz, 59.7 kHz	1280 x 960 @ 60Hz, 59.7 kHz
36. 1280 x 960 @ 75Hz, 75.2 kHz	1280 x 960 @ 75Hz, 75.2 kHz
37. 1280 x 1024 @ 60Hz, 64 kHz	1280 x 1024 @ 60Hz, 64 kHz
38. 1280 x 1024 @ 75Hz, 80 kHz	1280 x 1024 @ 75Hz, 80 kHz
39. 1400 x 1050 @ 60Hz, 65.3 kHz	1400 x 1050 @ 60Hz, 65.3 kHz
40. 1400 x 900 @ 60Hz, 55.5 kHz	1400 x 900 @ 60Hz, 55.5 kHz
41. 1400 x 900 @ 75Hz, 75 kHz	1400 x 900 @ 75Hz, 75 kHz
42. 1600 x 1200 @ 60Hz, 75 kHz	1600 x 1200 @ 60Hz, 75 kHz
43. 1680 x 1050 @ 60Hz, 64.7 kHz	1680 x 1050 @ 60Hz, 64.7 kHz

1.4.2 Function Test Display Pattern

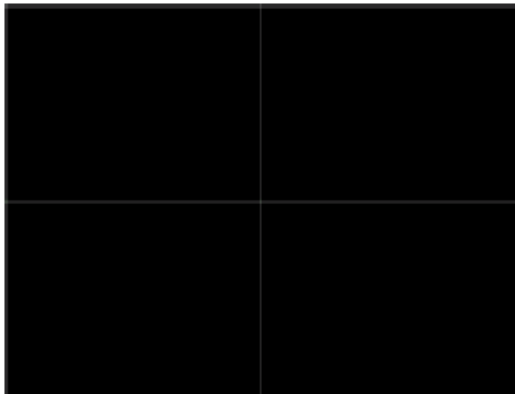
Item	Test Content	Pattern	Specification	Remark
1	Frequency & Tracking	Fine Line Moire	Eliminate visual wavy noise.	Figure 1
2	Contrast/Brightness	16 Gray Scale	16 gray levels should be distinguishable.	Figure 2
3	Boundary	Horizontal & Vertical Thickness	Horizontal and Vertical position of video should be adjustable to be within the screen frame.	Figure 3
4	RGB Color Performance	RGB Color Intensities	Contrast of each R, G, B, color should be normal.	Figure 4, 5, 6
5	Screen Uniformity & Flicker	Full White	Should be compliant with the spec.	Figure 7
6	Dead Pixel/Line	White Screen & Dark Screen	The numbers of dead pixels should be compliant with the spec.	Figure 7, 8
7	White Balance	White & Black Pattern	The screen must have the pure white and black pattern, no other color.	Figure 9



Fine Line Morie Pattern (Figure1)



Gray Scale Pattern (Figure2)



Horizontal & Vertical Thickness Pattern (Figure 3)



R. Color Pattern (Figure 4)



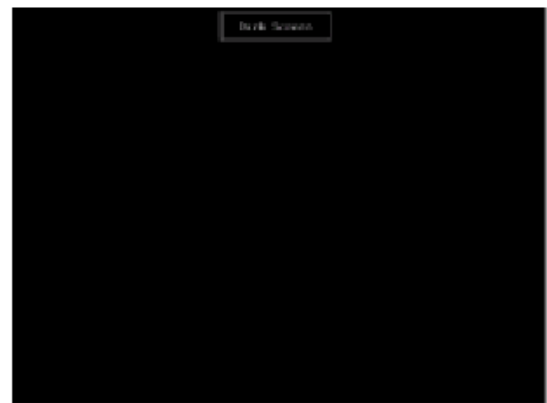
G. Color Pattern (Figure5)



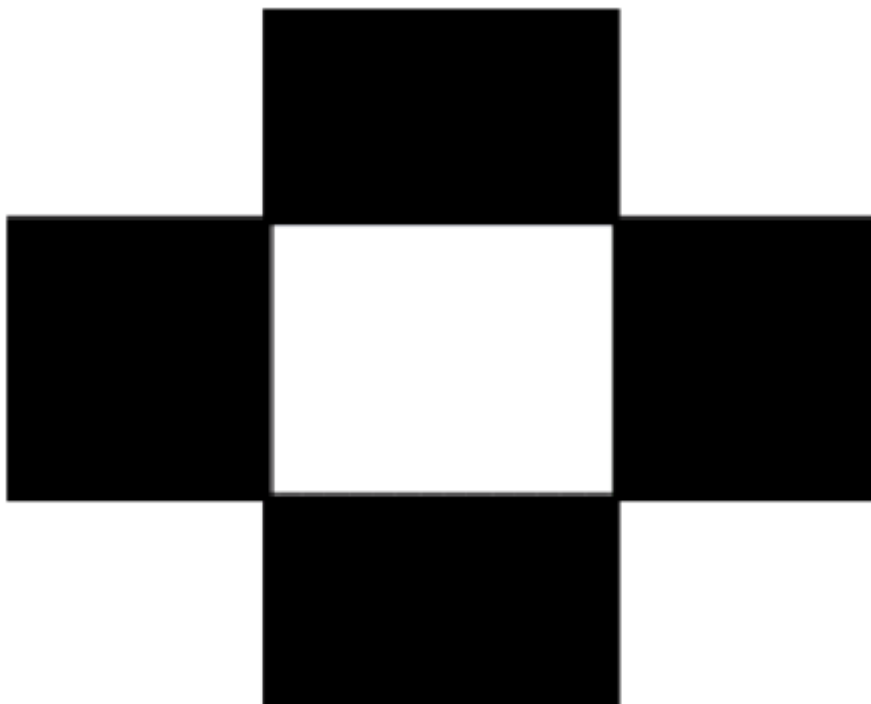
B. Color Pattern (Figure 6)



Full White Patter (Figure 7)



Dark Screen Pattern (Figure 8)



Black-White Pattern (Figure 9)

1.5 Function Test and Alignment Procedure

1.5.1 All Modes Reset

You should do “All Mode Reset” (Refer to Chapter III-3. Hot Keys for Function Controls) first. This action will allow you to erase all end-user’s settings and restore the factory defaults.

1.5.2 Auto Image Adjust

Please select and enter “**Auto Image Adjust**” function on Main Menu to see if it is workable. The “**Auto Image Adjust**” function is aimed to offer a better screen quality by built-in ASIC. For optimum screen quality, the user has to adjust each function manually.

1.5.3 Firmware

Test Pattern: Burn In Mode (Refer to Chapter III-3. Hot Keys for Function Controls)

- Make sure the F/W is the latest version.

1.5.4 DDC

Test Pattern: EDID program

- Make sure it can pass test program.

1.5.5 Fine Tune and Sharpness

Test Signal: 1680*1050@60Hz

Test Pattern: Line Moire Pattern

- Check and see if the image has noise and focus performs well. Eliminate visual line bar.

- If not, readjust by the following steps:

- (a) Select and enter “**Fine Tune**” function on “**Manual Image Adjust**” to adjust the image to eliminate visual wavy noise.

- (b) Then, select and enter “**Sharpness**” function to adjust the clarity and focus of the screen image.

1.5.6 Boundary

Test Signal: 1680*1050@60Hz

Test Pattern: Horizontal & Vertical Line Thickness Pattern

- Check and see if the image boundary is within the screen frame.

- If not, readjust by the following steps:

- (a) Select and enter “**Manual Image Adjust**” function on OSD Main Menu.

- (b) Then, select and enter “**Horizontal Size**” or “**Horizontal/Vertical Position**” function to adjust the video boundary to be full scanned and within screen frame.

1.5.7 White Balance

Test Signal: 1680*1050@60Hz

Test Pattern: White and Black Pattern

1.5.8 R, G, B, Colors Contrast

Test Signal: 1680*1050@60Hz

Test Pattern: R, G, B, Color Intensities Pattern and 16 Gray Scale Pattern

- Check and see if each color is normal and distinguishable.

- If not, please return the unit to repair area.

1.5.9 Screen Uniformity and Flicker

Test Signal: 1680*1050@60Hz

Test Pattern: Full White Pattern

- Check and see if it is in normal condition.

1.5.10 Dead Pixel and Line

Test Signal: 1680*1050@60Hz

Test Pattern: Dark and White Screen Pattern

- Check and see if there are dead pixels on LCD panel with shadow gauge and filter film.

- The total numbers and distance of dead pixels should be compliant with the spec.

1.5.11 Mura

Test Pattern: White, RGB, Black, & Grey

Test Tool: 8% ND Filter

- Check if the Mura can pass 8% ND Filter.

1.5.12 Audio

Test Signal: Voice signal (optional, depend on model)

Test Pattern: liberty

- Make sure there is audio output.

- Make sure that audio function (volume 80%) is working without noise and resonance.

- Make sure that the sound of right and left speakers are in balance.

1.5.13 Check for Secondary Display Modes

Test Signal:

Analog: 640*350@70Hz; 640*480@60HZ

720*400@70Hz; 800*600@60HZ/70HZ/75HZ

832*624@75Hz, 1024*768@60HZ/70HZ/75HZ

1280*1024@60/75Hz

Digital: 640*350@70Hz; 640*480@60HZ

720*400@70Hz; 800*600@60HZ/70HZ/75HZ

1024*768@60/70/72/75; 1152*870@75Hz,

1280*1024@60Hz/75HZ

- Normally when the primary mode 1280*1024@60Hz is well adjusted and compliant with the specification, the secondary display modes will be great possible to be compliant with the spec. But we still have to check with the general test pattern to make sure every secondary is compliant with the specification.

1.5.14 All Modes Reset

After final QC step, we have to erase all saved changes again and restore the factory defaults. You should do “All Mode Reset” again.

1.5.15 Power Off Monitor

Turn off the monitor by pressing “Power” button.

2. Firmware Upgrade Procedure

When you receive the returned monitor, please check whether the firmware version is the latest. If not, please do the following procedures to upgrade it to the latest version.

2.1 Equipment Needed

- VG2030WM1 Monitor
- Fixture for Firmware Upgrade
- VGA Cable
- PC (Personal Computer)
- LPT Cable
- Firmware Upgrade Program
- One additional monitor for checking the program execution

2.2 Setup Procedure

2.2.1 Connect P2 of Fixture with printer port of PC by LPT Cable.

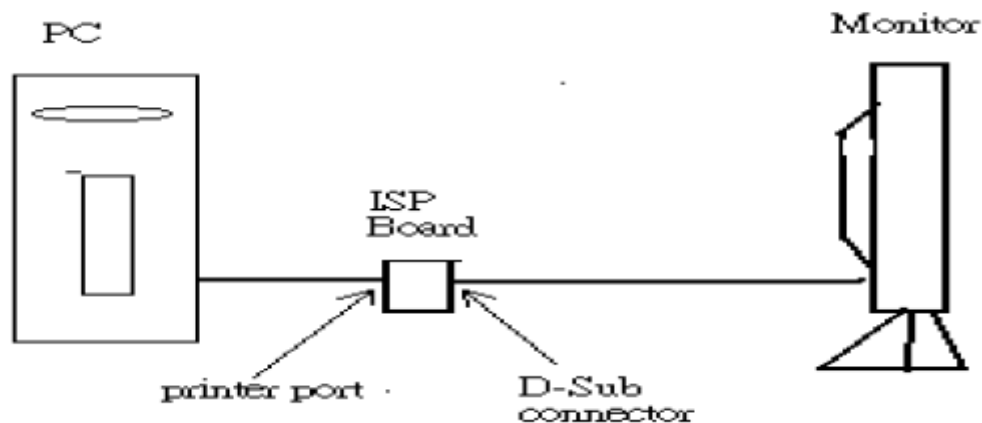
2.2.2 Connect P1 of Fixture with Monitor by VGA Cable.

2.2.3 Connect Power Cord to Monitor.

2.2.4 Connect PC to the additional monitor.

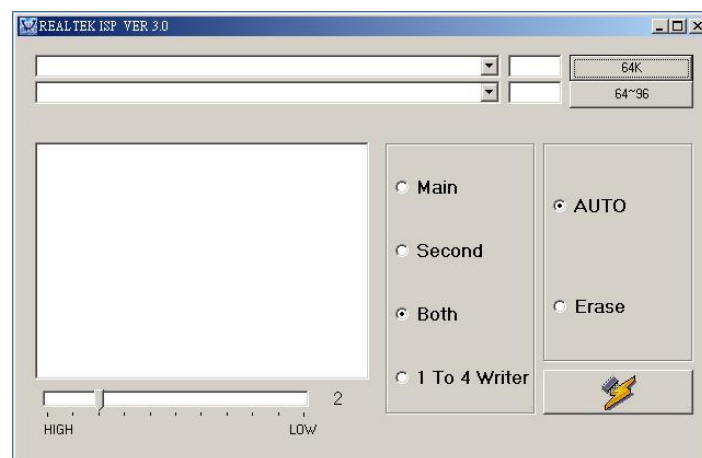
I. ISP Download program procedure

1 Hardware Connect status:



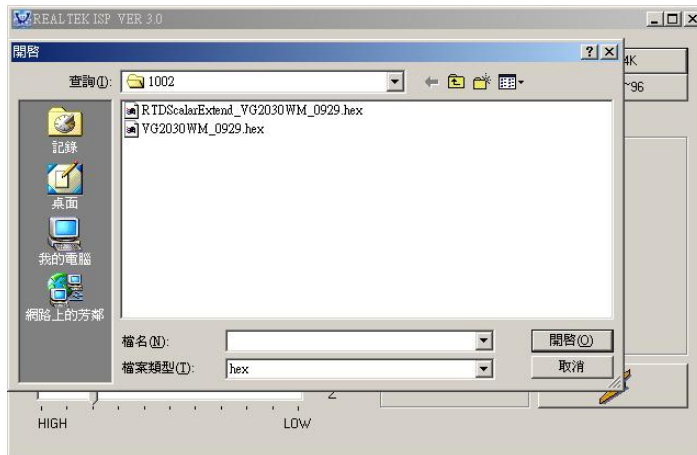
2 Down load isp program

Step 1: Execute ISP.exe



Step 2: Load file

Press the Load MCU File button to select the file will be download. (*.hex)

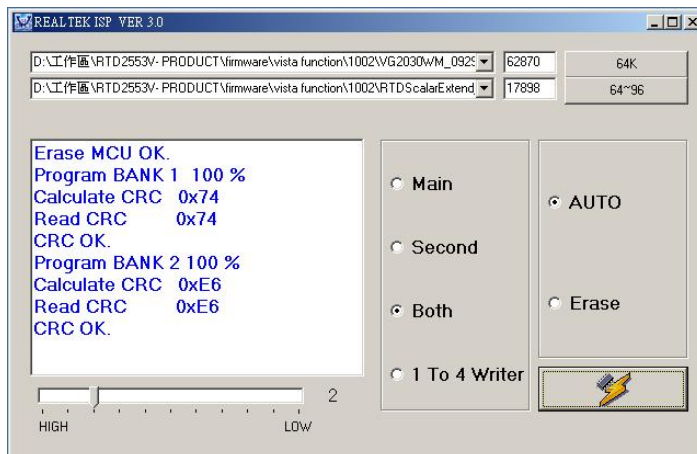


Step 3: Run

Pressing the Run Button to start download program. Press OK button to Enter ISP mode.

Step 4: Download program finish

Pressing the OK Button to finish the download program procedure.



Trouble shooting:

If you find the status like the follow picture. Please check the following item.

- The connecting status between PC and ISP board.
- The connecting status between ISP status and Monitor.

Turn off the power of monitor (AC plug off) and disconnect the D-Sub connector . To connect the D-Sub connector and then turn on the power of monitor.(AC plug on)

3. DDC Key In Procedure

Note:

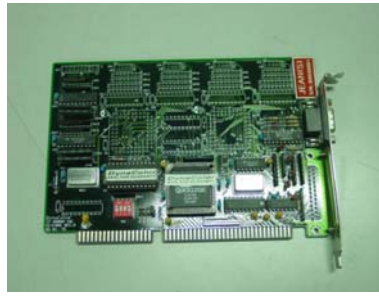
1. Every time after replacing the main board, you have to do the DDC key in.
2. If you find the DDC does not conform to the monitor, you have to do the DDC key in.

3.1 Equipment Needed

- VG2030WM1 Series Monitor
- DDC Card
- PC
- RS232 cable
- DVI-DVI Cable
- Barcode Reader
- VGA Cable



VG2030WM1



DDC Card



PC



RS232 cable



VGA cable



BAR code reader

3.2 Setup Procedure

1. Connect VGA Card and DDC Card with RS-232 cable.
2. Barcode Reader connect with keyboard and PC keyboard port.



3. Connect RS-232 Cable and VG2030 with VGA Cable.
4. (when key in DVI DDC information, use VGA transform to DVI port)

5.Connect Power Cord to VG2030 Monitor.



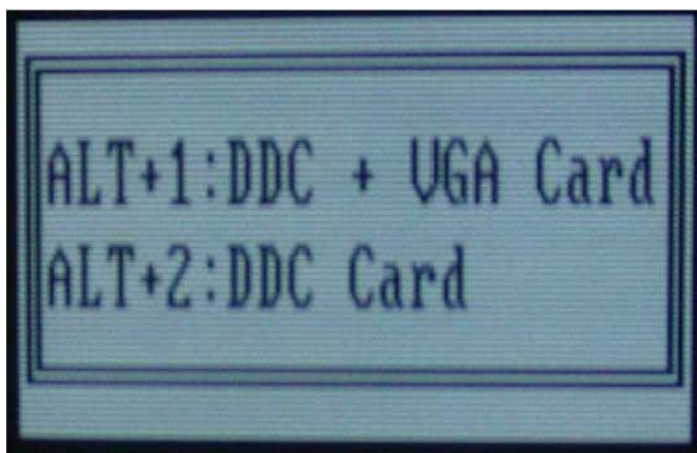
3.3 DDC Key In Procedure

1.Run DDC.exe

2.Choose model number and conform the Time then Press “ENTER” key.



3.When appear the PIC “ choose DDC Card”, Press ALT+2 .Enter DDC 2B test interface.

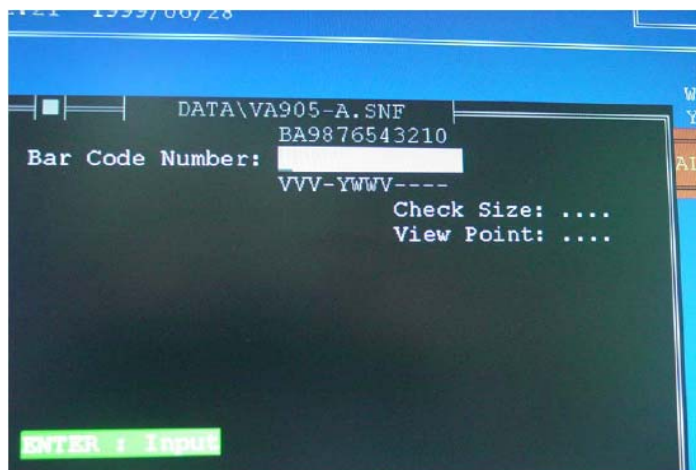


Choose DDC Card

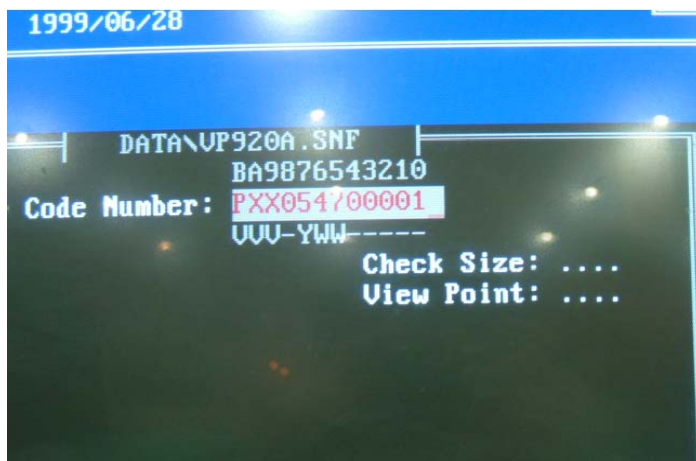
4.Press F8 to choose corresponding model.DAT(VG2030A.DAT press“ENTER” key)

VG2030_A means the DDC under analog mode. VG2030D means the DDC under digital mode.

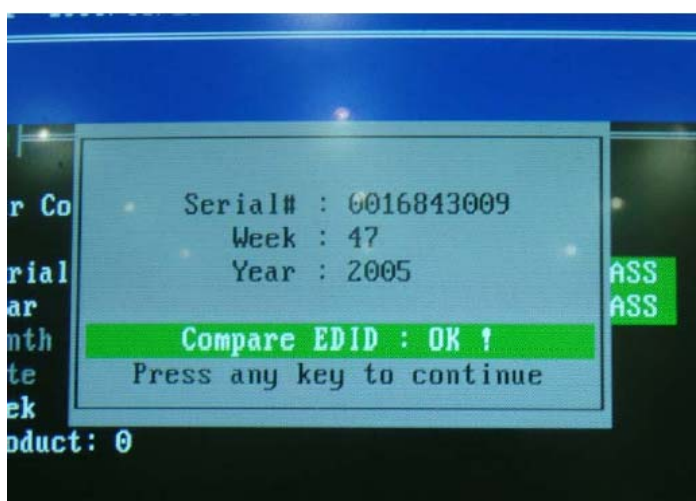
5. Press F9 enter the download interface



6. Key in the serial number or use the barcode reader to scan the barcode of the monitor, and press "ENTER" key.



7. The successful picture is as follows. "Compare EDID : OK! Press any key to continue".



Packing For Shipping And Disassembly Procedure

Packing For Shipping

1. Packing Procedure

1.1 Paste protection film to protect the LCD TV. (Figure 1)

1.2 Put the LCD TV in the PE bag and seal the bag. (Figure 2)



Figure 1



Figure 2

1.3 Put the cushions on the LCD TV. (Figure 3)

1.4 Place the LCD TV into the carton and then Put the other cushions on the LCD TV, put all the accessories into the carton. At last, close the carton and seal it with tape. (Figure 4)



Figure 3

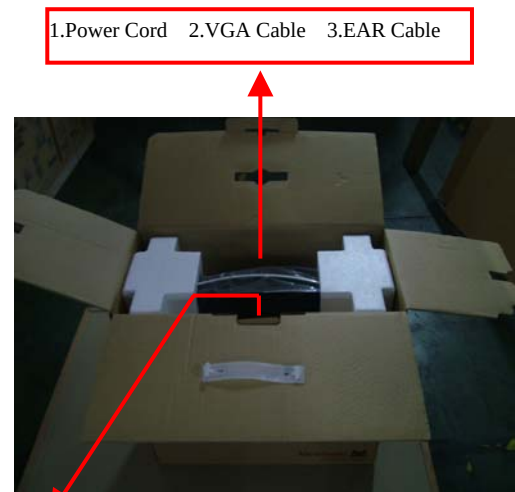
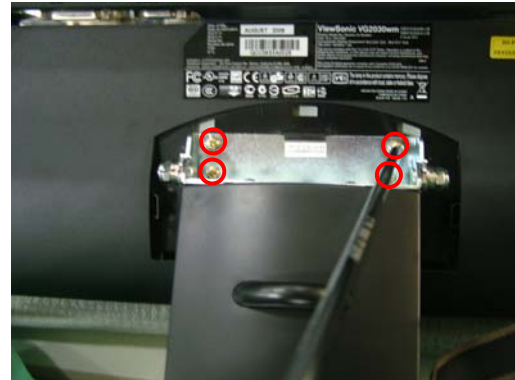


Figure 4

Disassembly Procedure

1. Disassembly of Stand and Dust Cover from LCD TV.

1.1 Detach Dust Cover from the LCD TV and Unscrew 4 screws that secure Stand Unit.



Dust Cover



Stand



2. Disassembly of Rear Cover.

2.1 Unscrew 4 screws to remove Rear Cover.

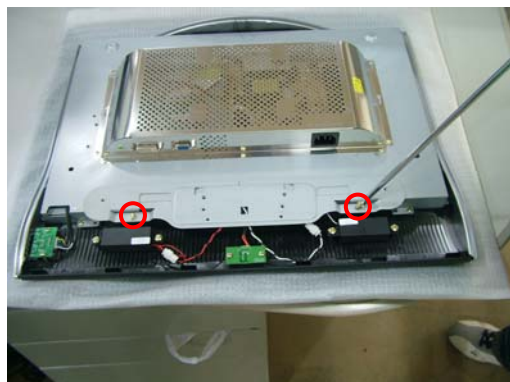


Rear Cover

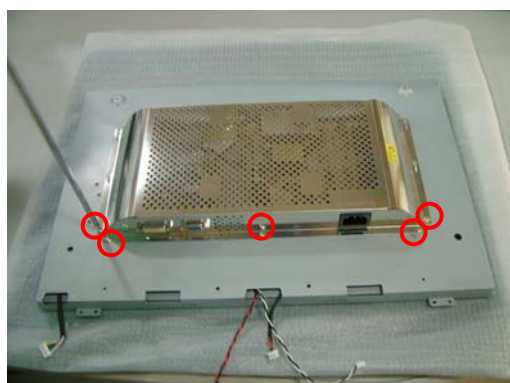
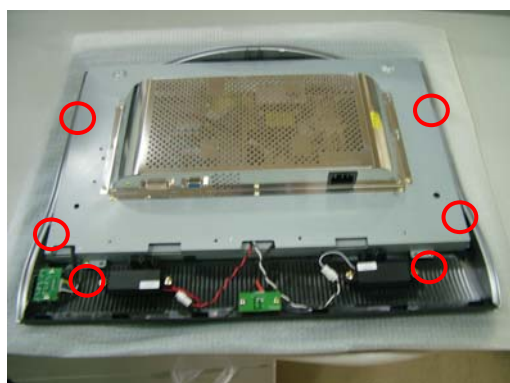


3. Disassembly of Main Board,Power Board,IR Board,Speaker,Front Cover and Panel Unit.

3.1 Unscrew 2 screws to remove Bracket,fix.

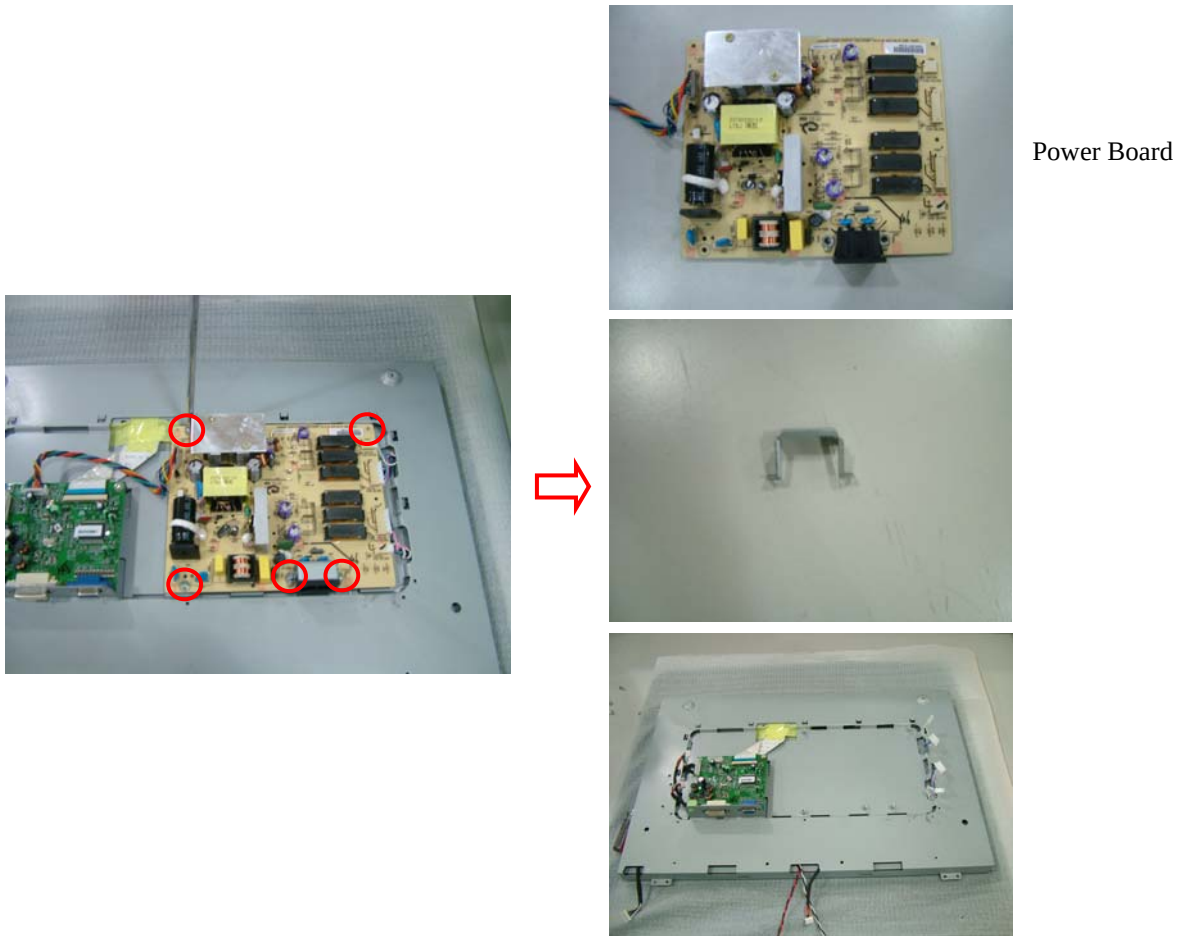


3.2 Unscrew 15 screws to remove Front Bezel and Shield Plate.

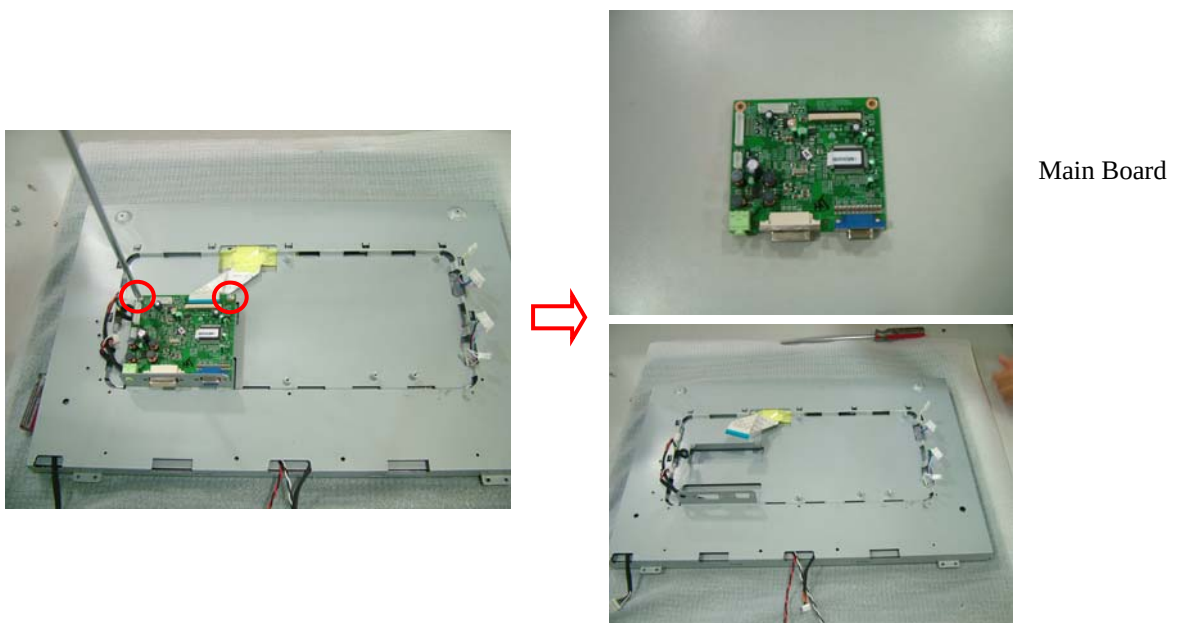


Shield Plate

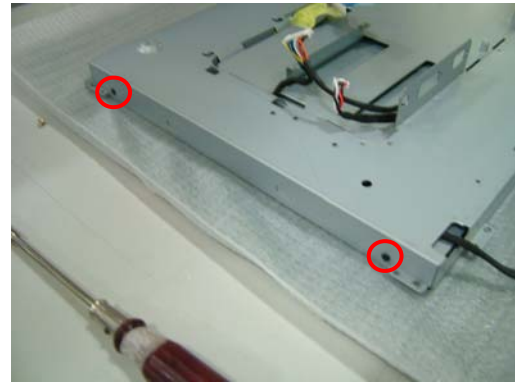
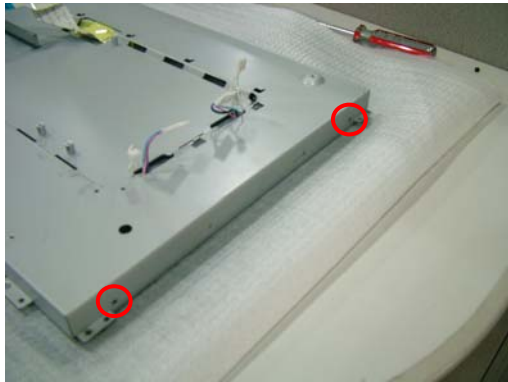
3.2. Unscrew 5 screws and disconnect the wires to remove Power Board.



3.3. Unscrew 2 screws and disconnect the wires to remove Main Board.



3.4. Lay Panel Unit facedown and unscrew 4 screws on its right, left sides, to remove Panel Unit and Panel Bracket.

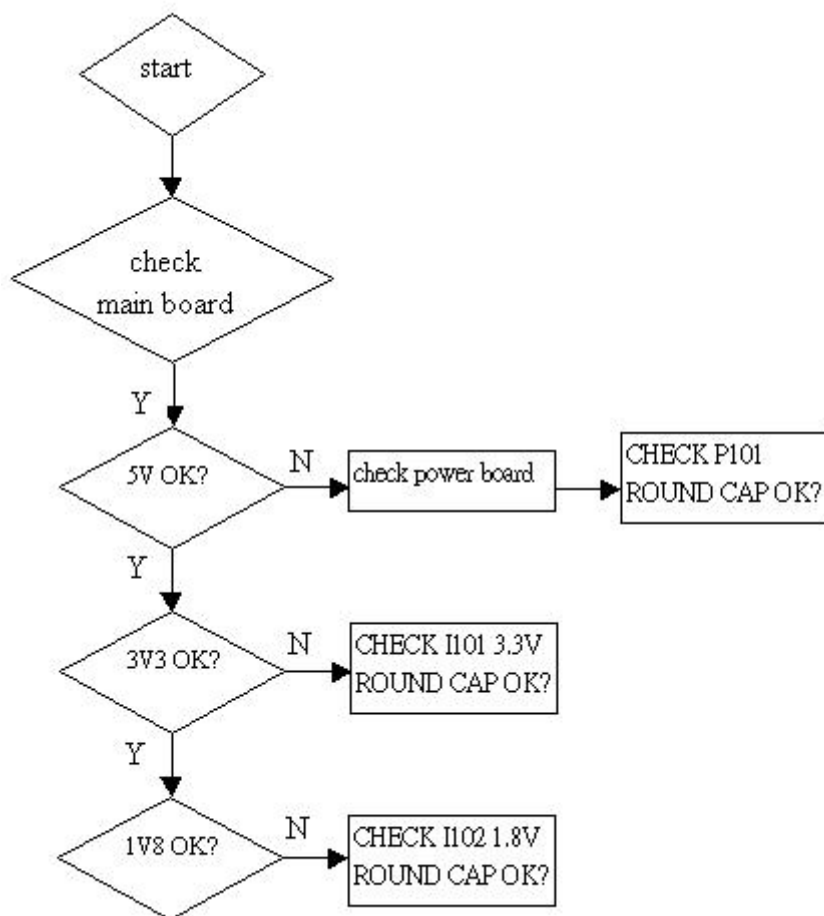


Panel Bracket

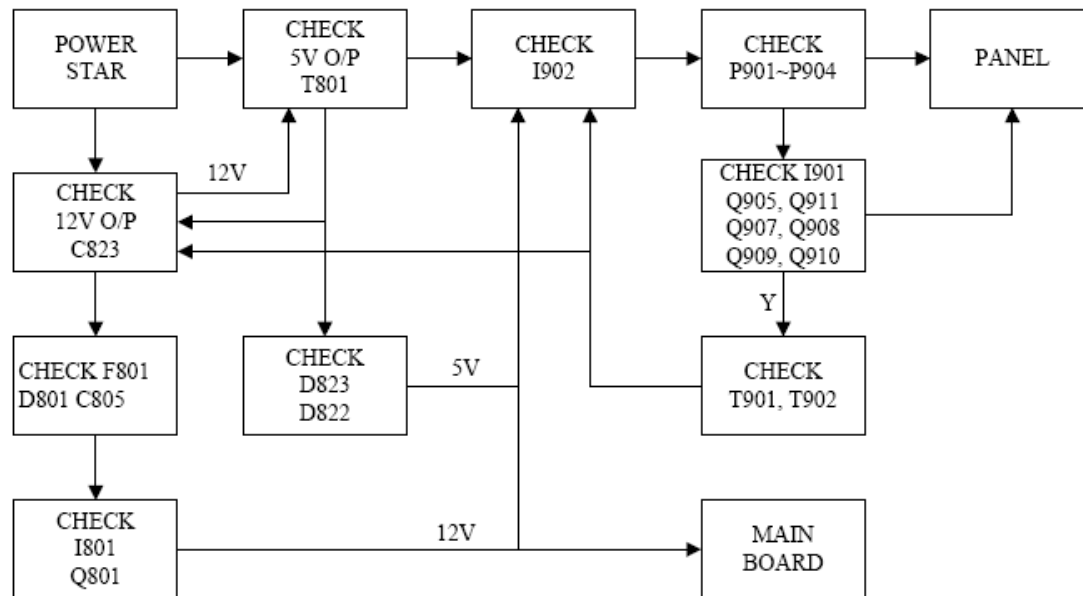


Panel

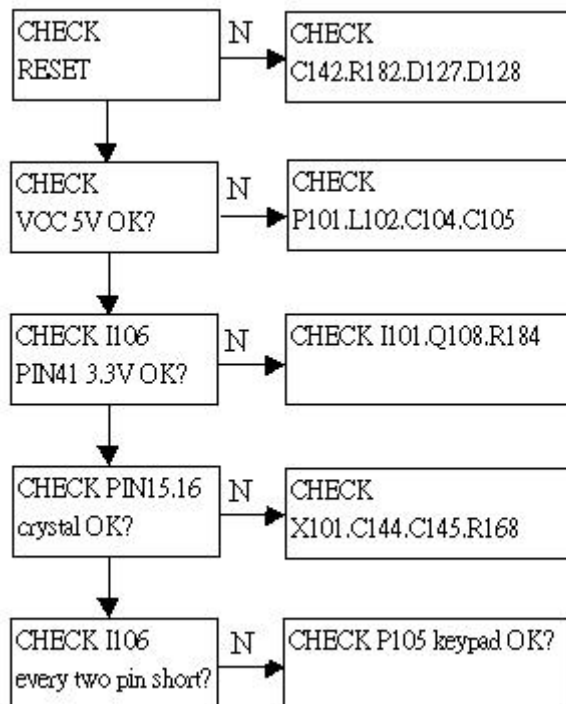
6. Troubleshooting Flow Chart



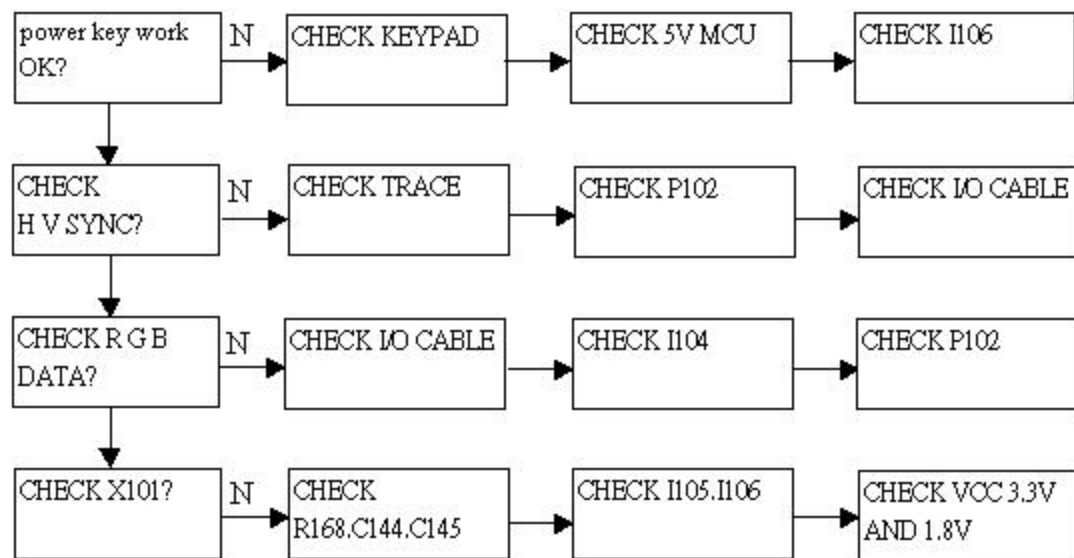
6.1. NO POWER



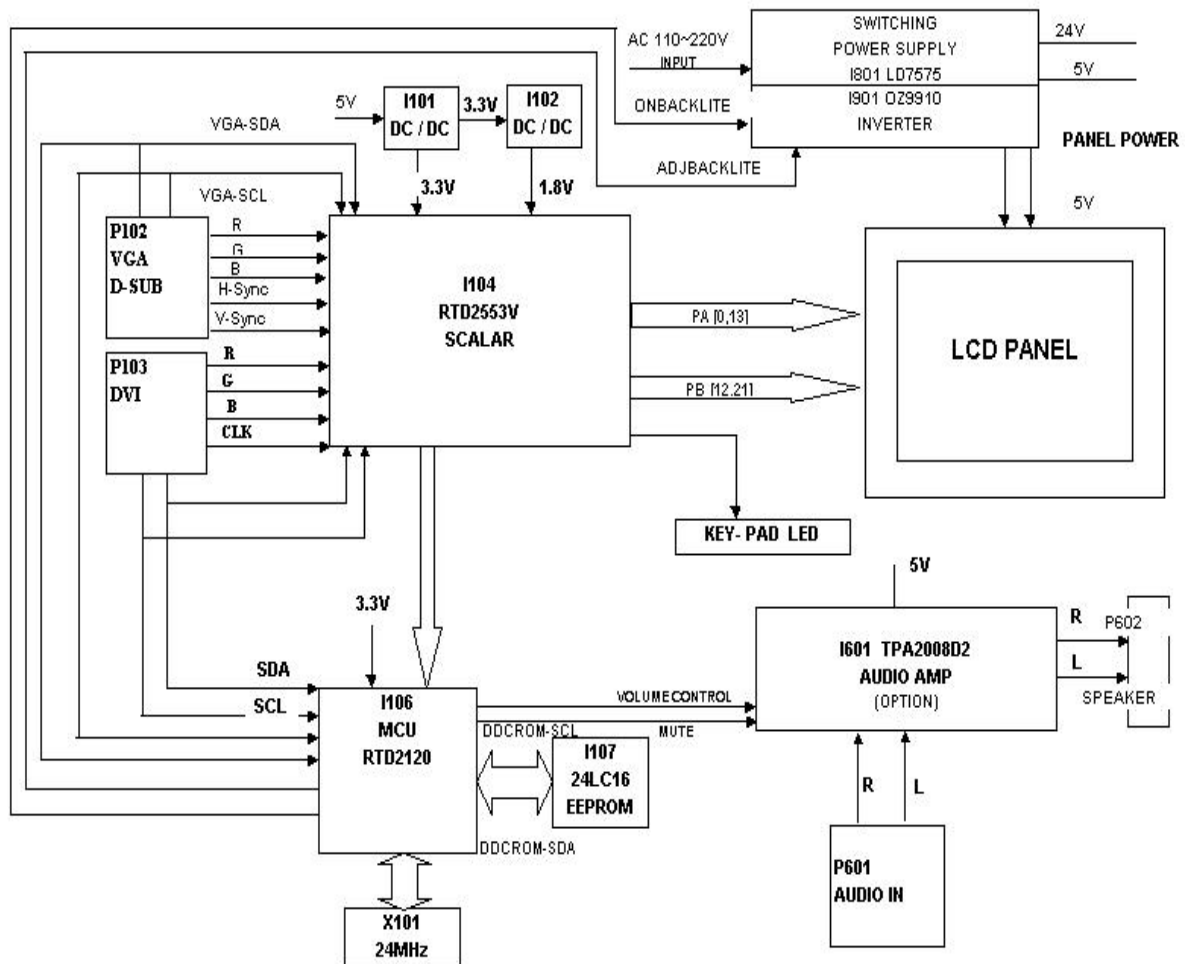
6.2. MCU NO FUNCTION



6.3. NO DISPLAY

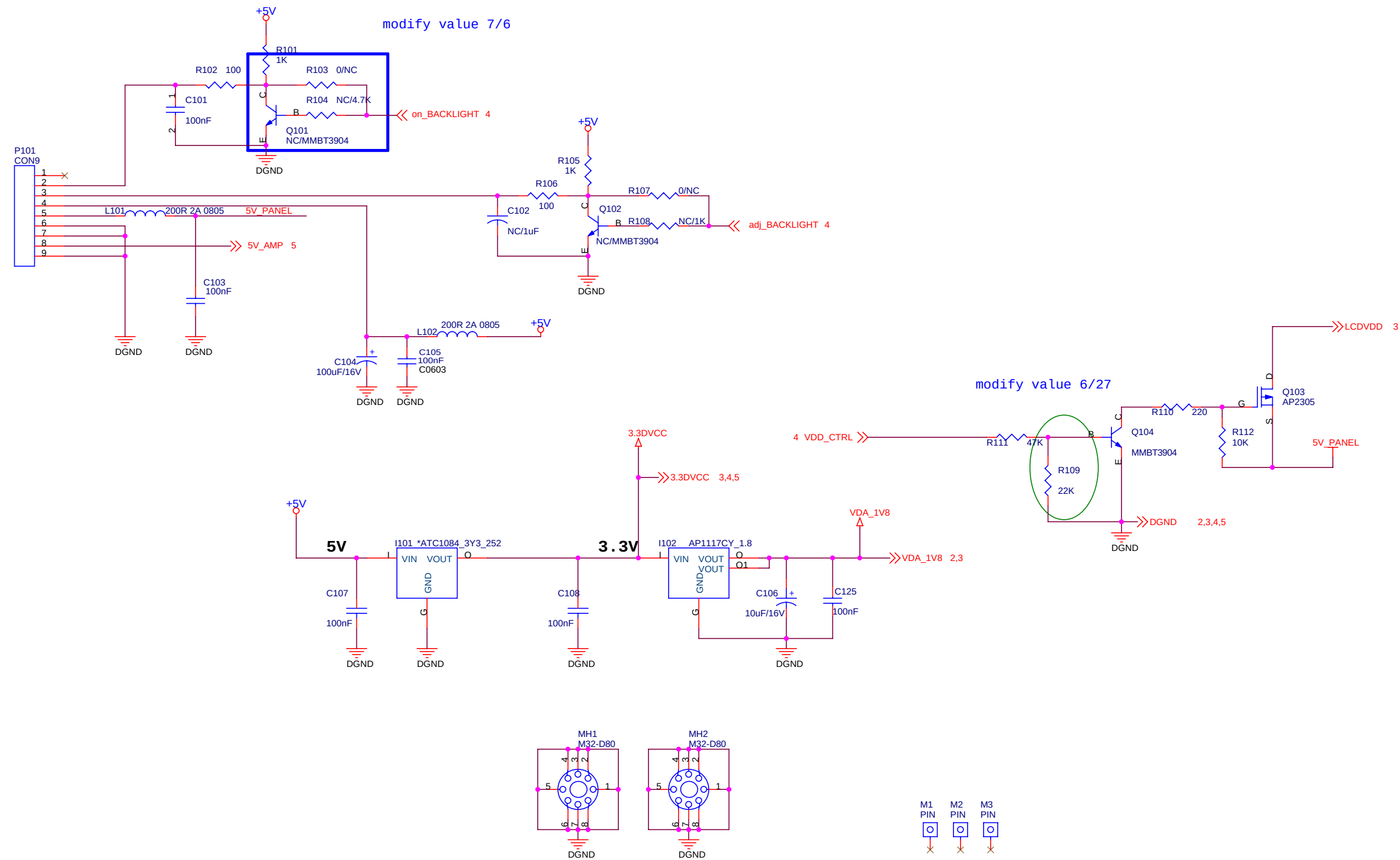


7. Block Diagram



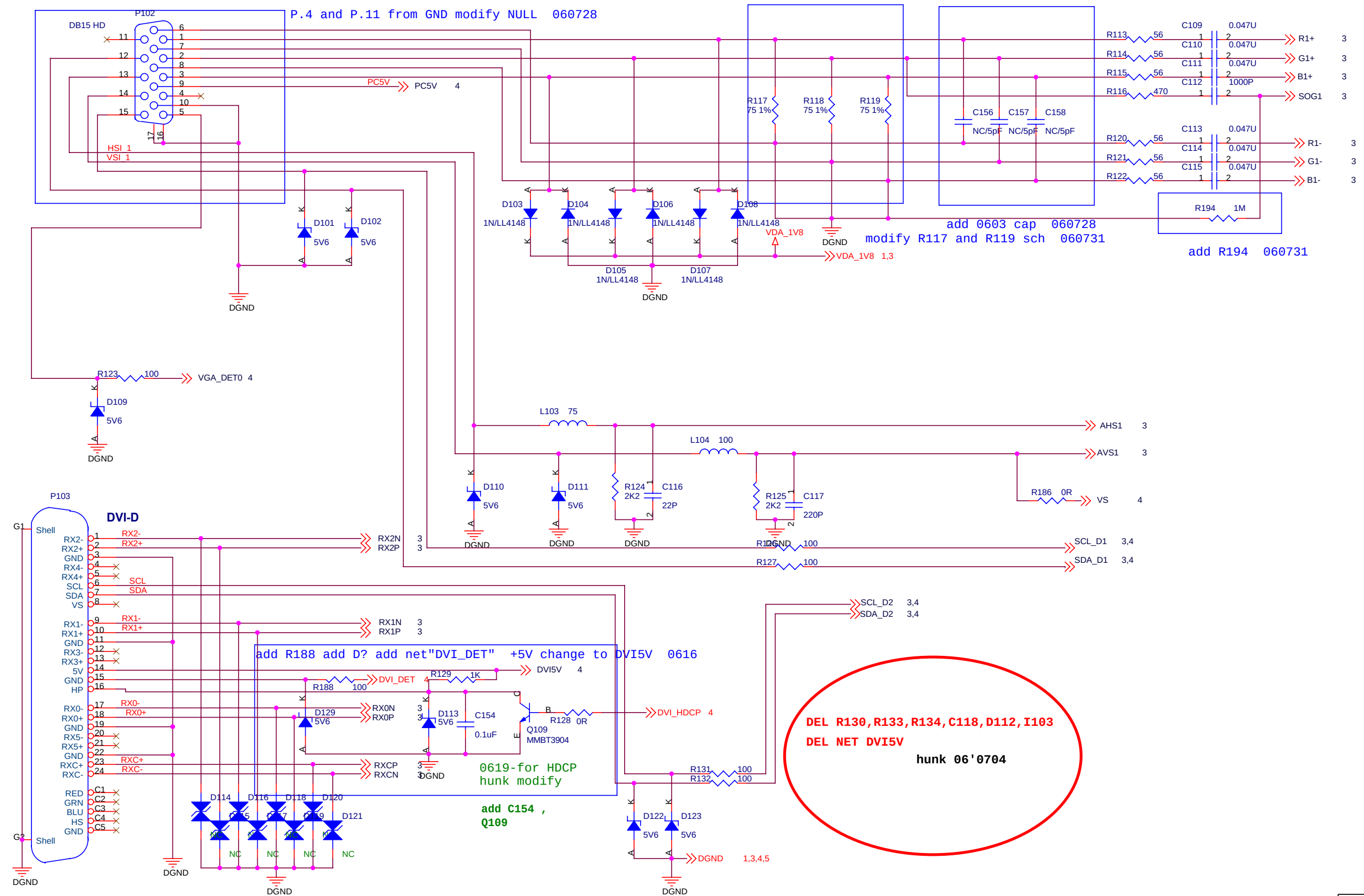
8. PCB Layout Diagrams

8.1. DC TO DC



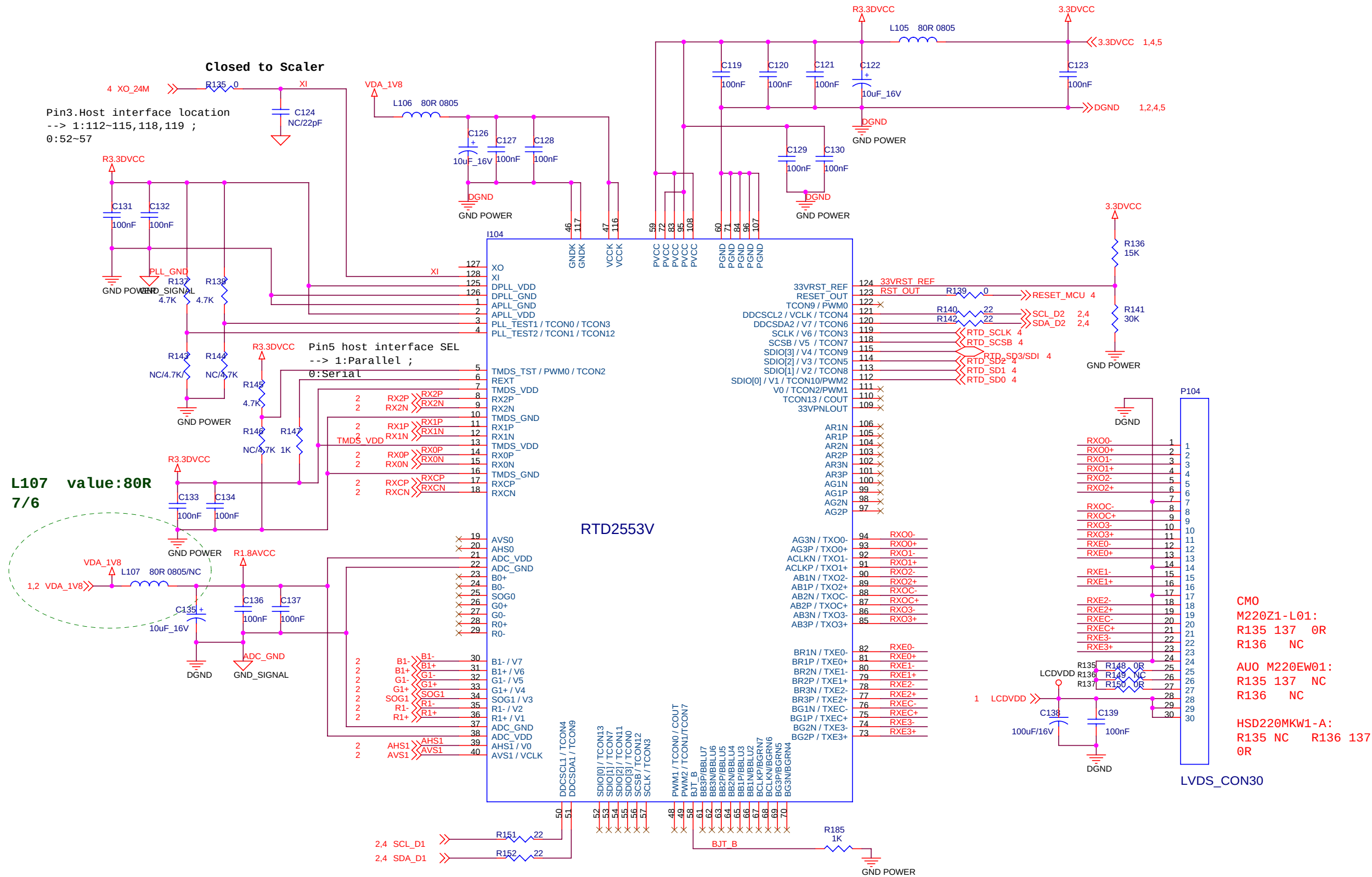
ViewSonic Corporation		
Model		
Title	DC TO DC	
Date		Rev:

8.2. INPUT



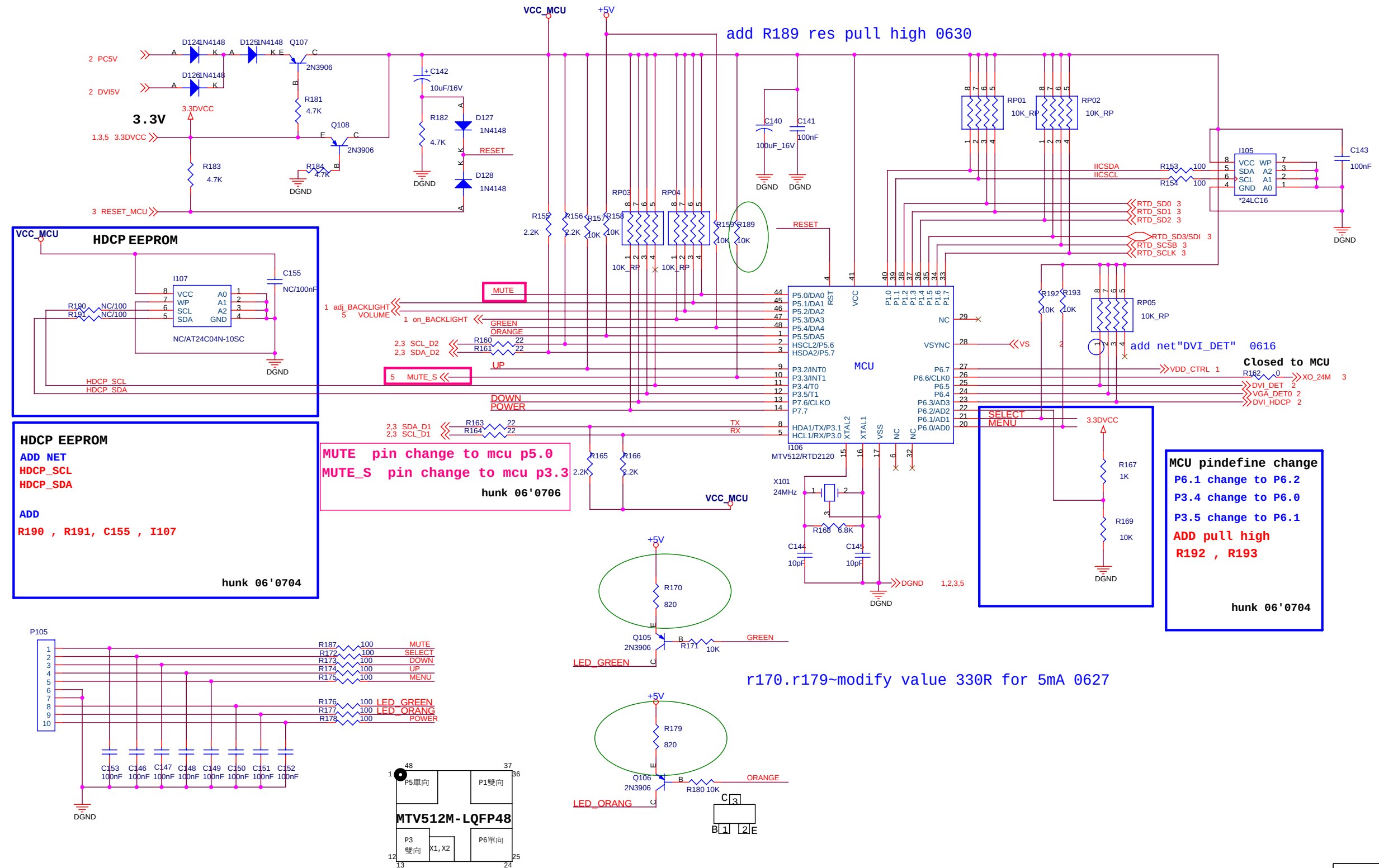
ViewSonic Corporation		
Model		
Title	INPUT	
Date		Rev:

8.3. SCALER



ViewSonic Corporation		
Model		
Title	SCALER	
Date		Rev:

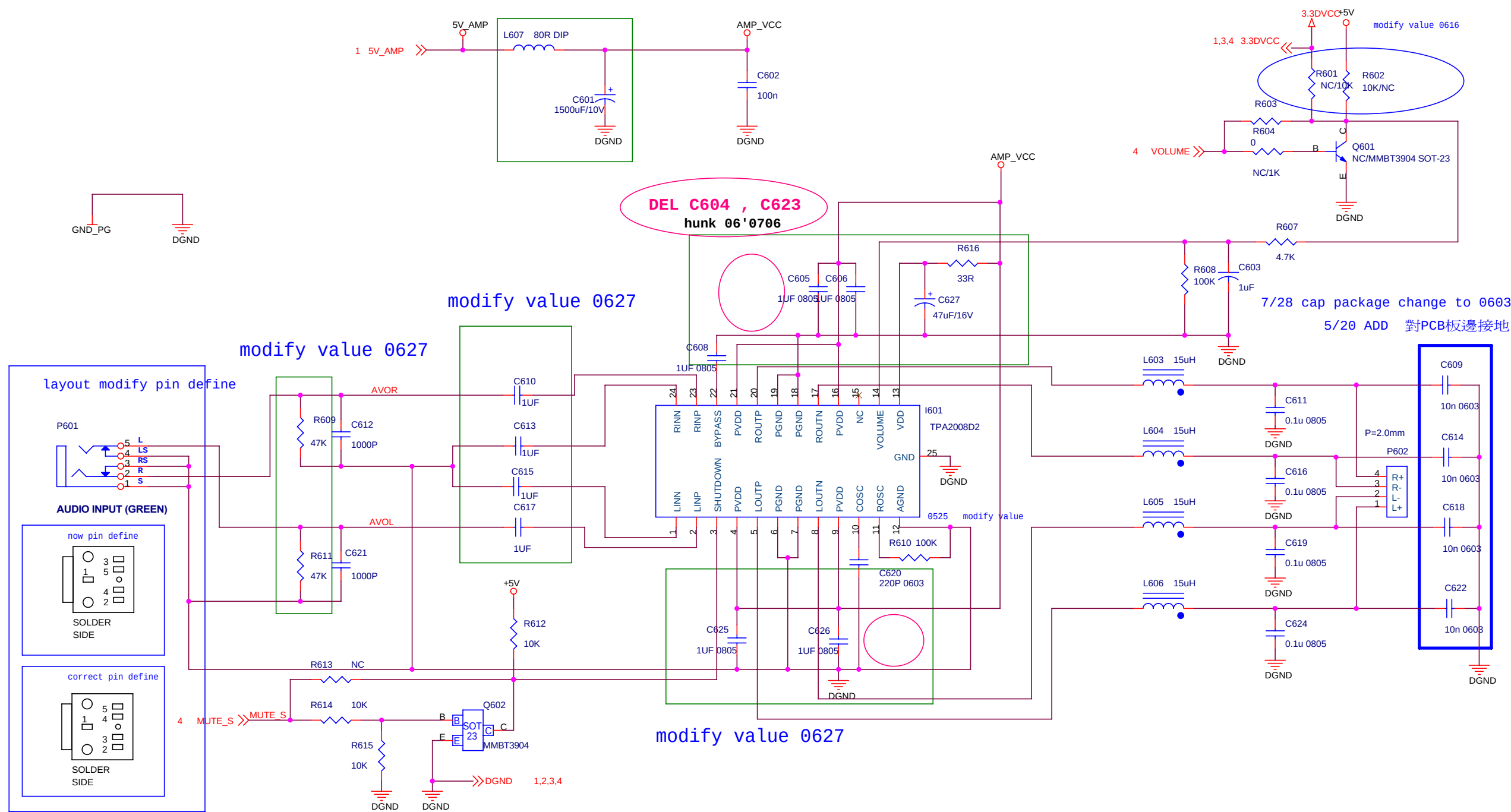
8.4. MCU



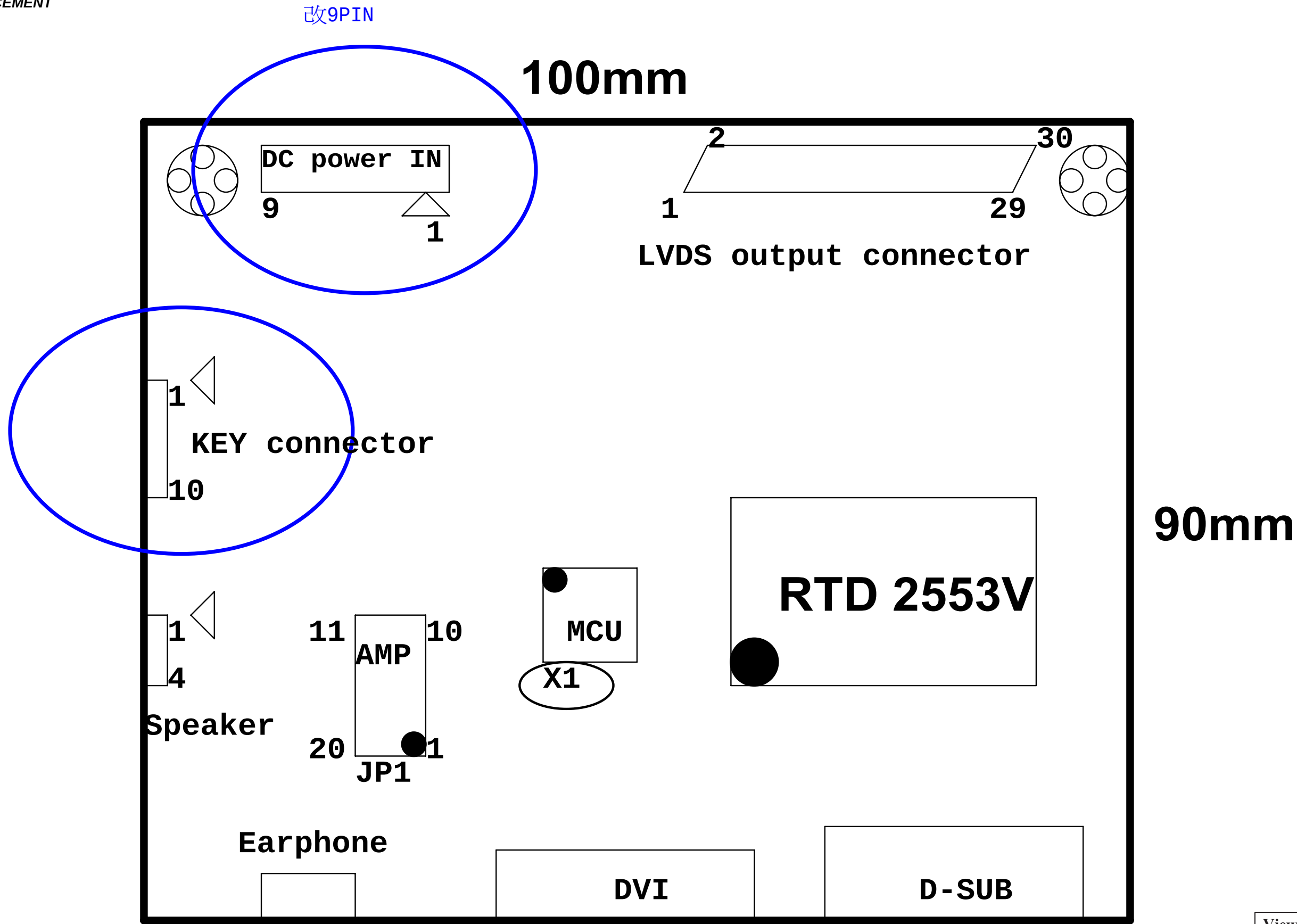
ViewSonic Corporation		
Model		
Title	MCU	
Date		Rev:

8.5. Audio Amplifier

from two smt 0805 bead modify dip type and make a drill include of the cap 1500UF 060728

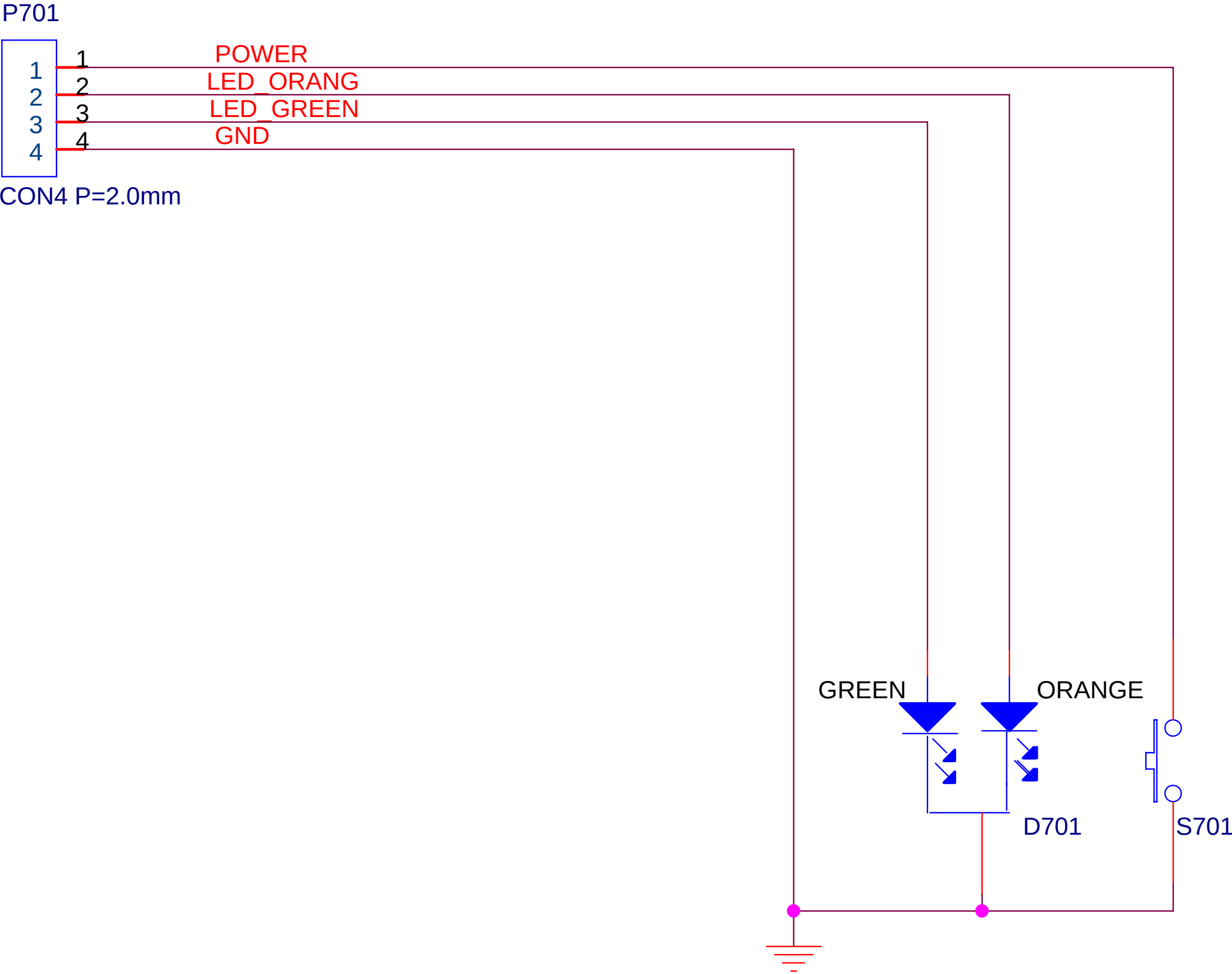


ViewSonic Corporation		
Model		
Title	Audio Amplifier	
Date		Rev:



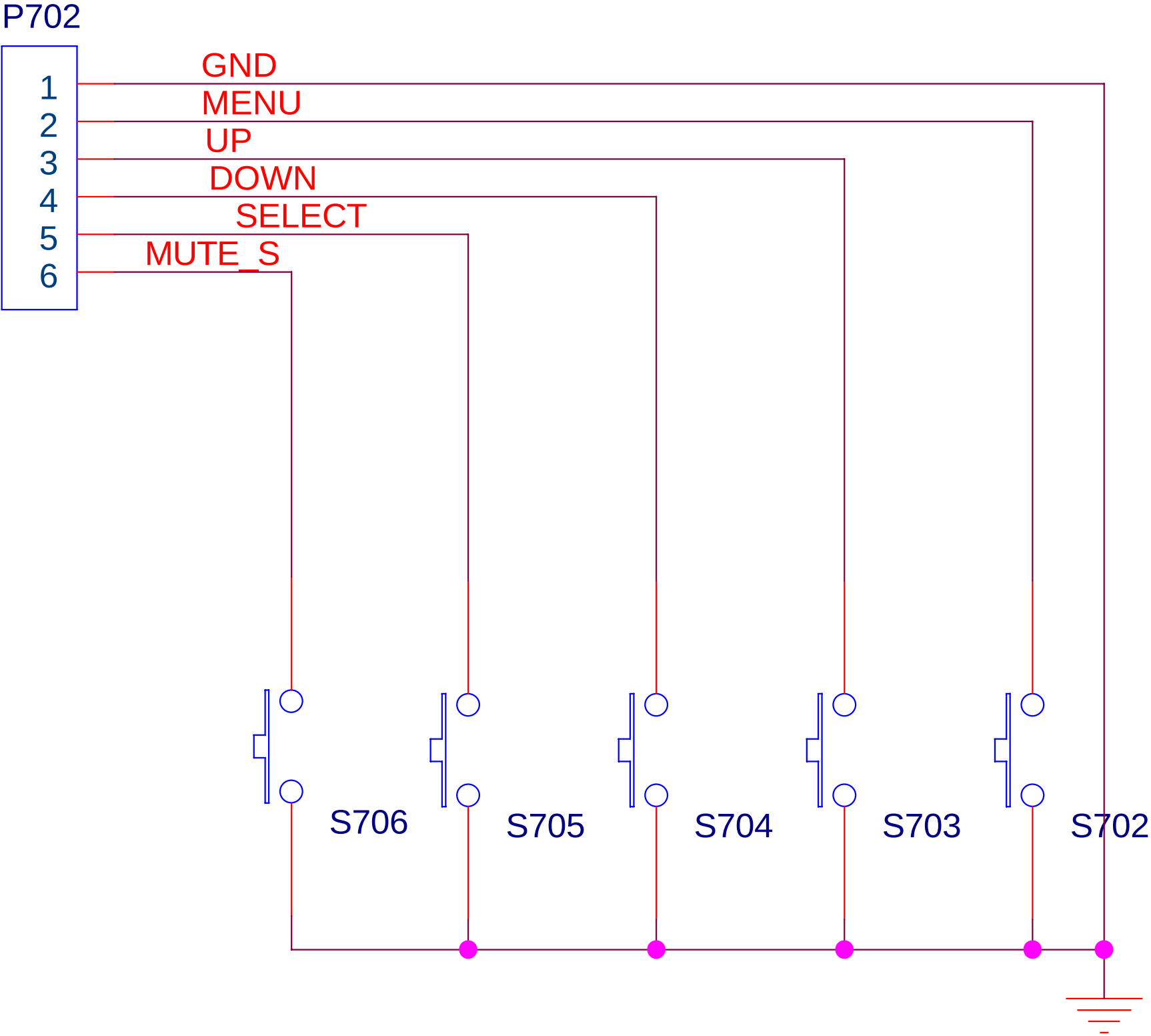
ViewSonic Corporation		
Model		
Title	PLACEMENT	
Date		Rev:

Contra_l_key_pad



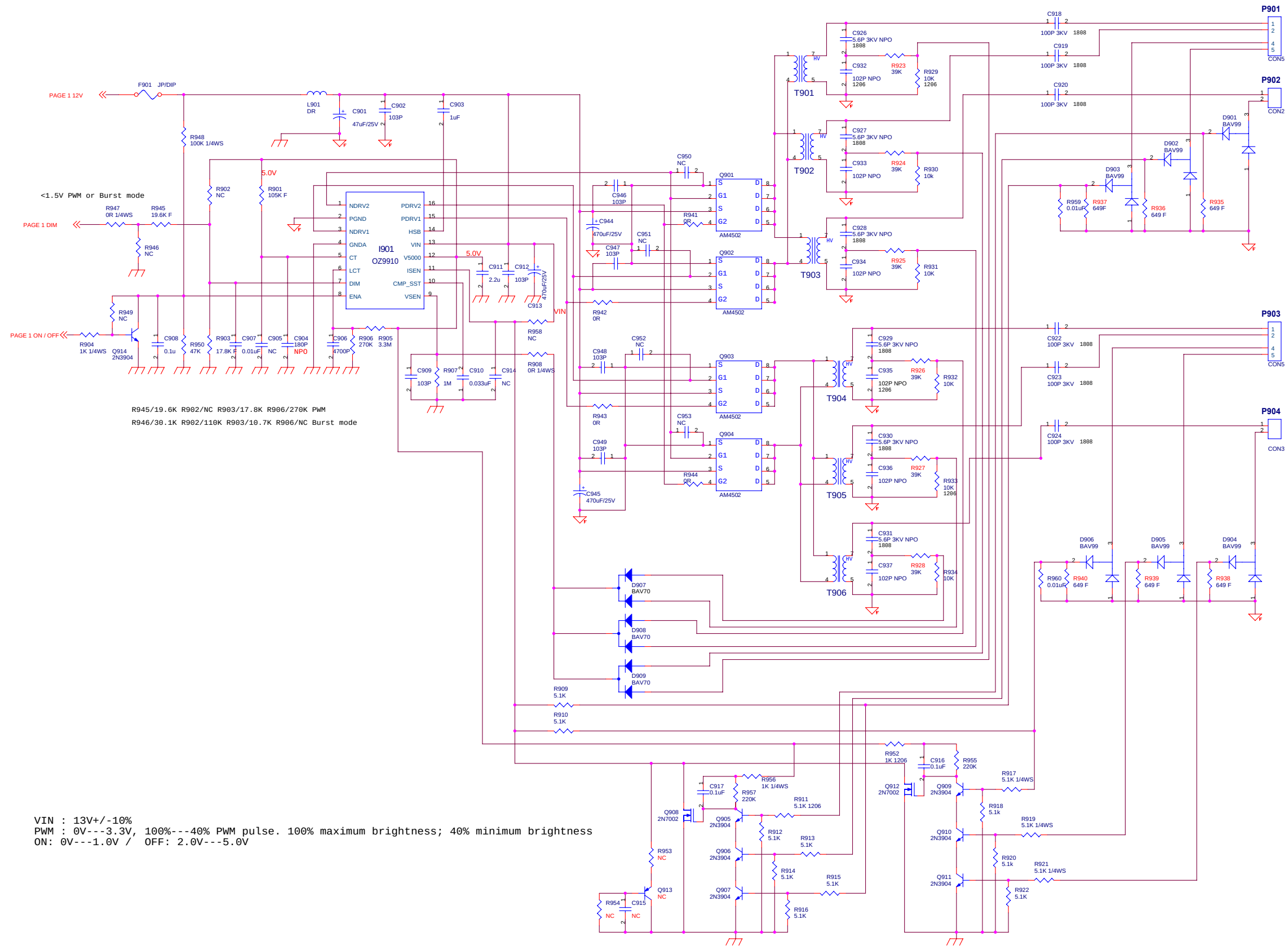
ViewSonic Corporation		
Model		
Title	Power Key Board	
Date		Rev:

8.8. Founction Key Board



ViewSonic Corporation		
Model		
Title	Founction Key Board	
Date		Rev:

8.9. INVERTER

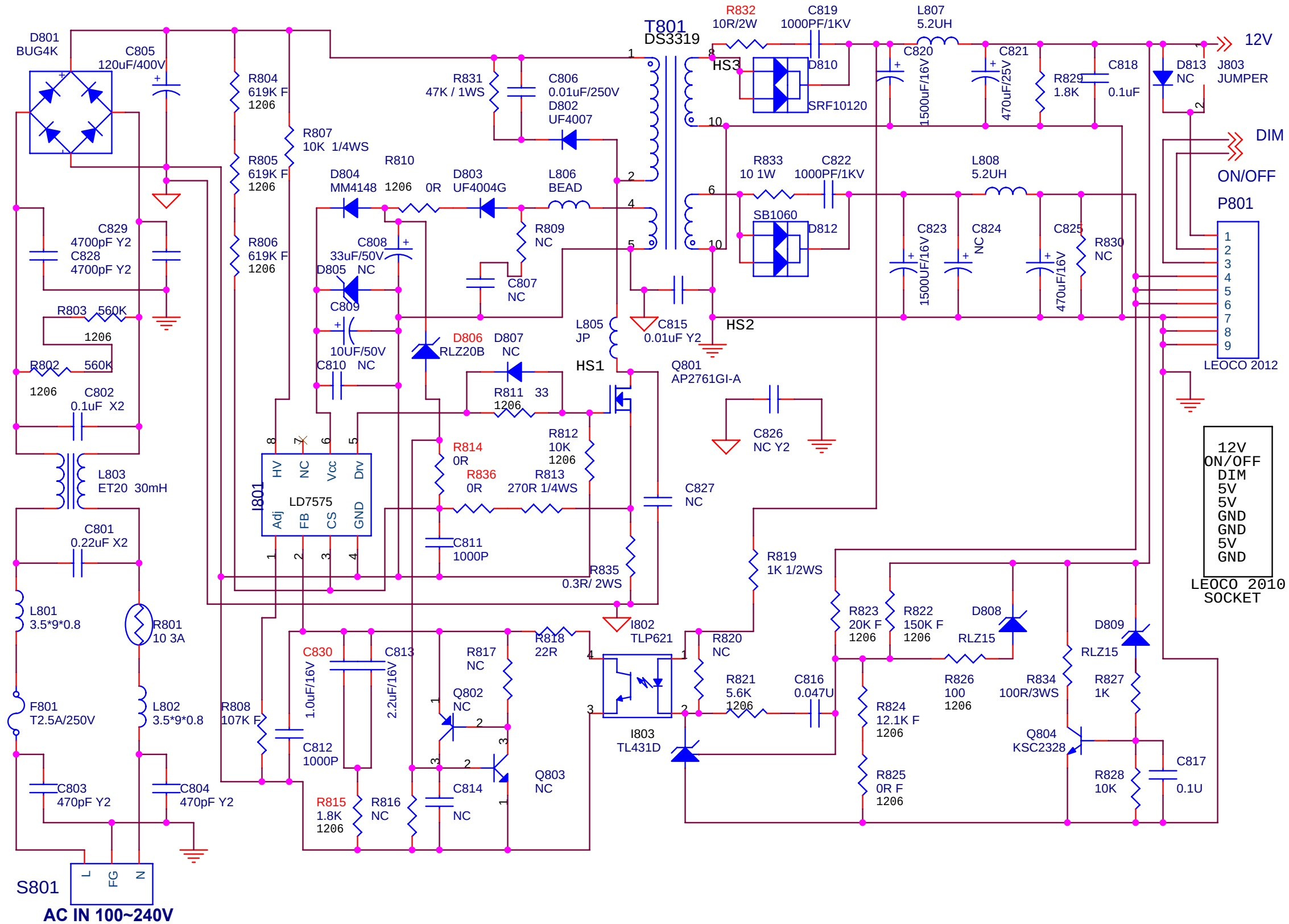


VIN : 13V+/-10%
PWM : 0V---3.3V, 100%---40% PWM pulse. 100% maximum brightness; 40% minimum brightness
ON: 0V---1.0V / OFF: 2.0V---5.0V

ViewSonic Corporation

Model	
Title	INVERTER
Date	Rev:

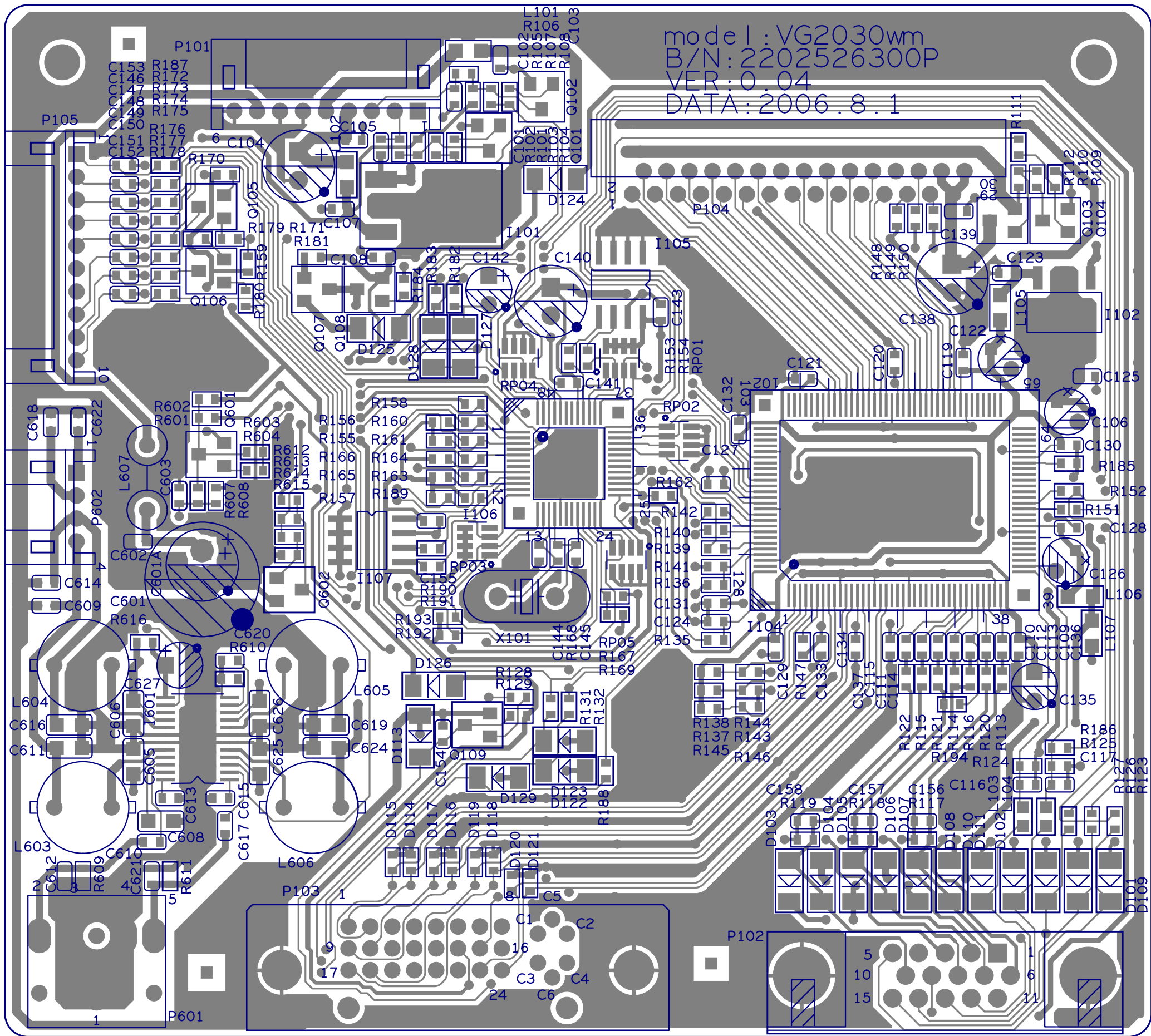
8.10. POWER



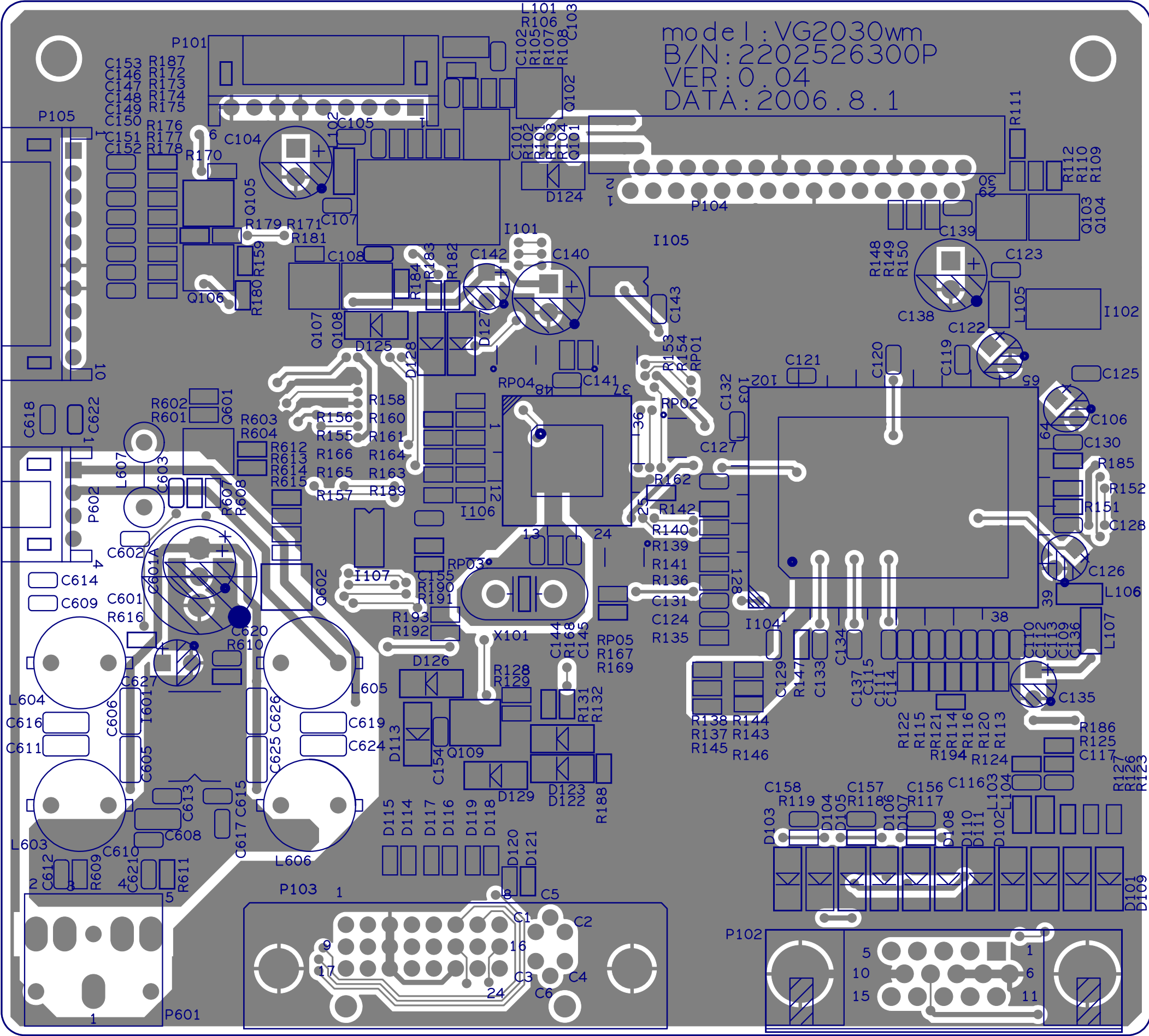
ViewSonic Corporation		
Model		
Title	POWER	
Date		Rev:

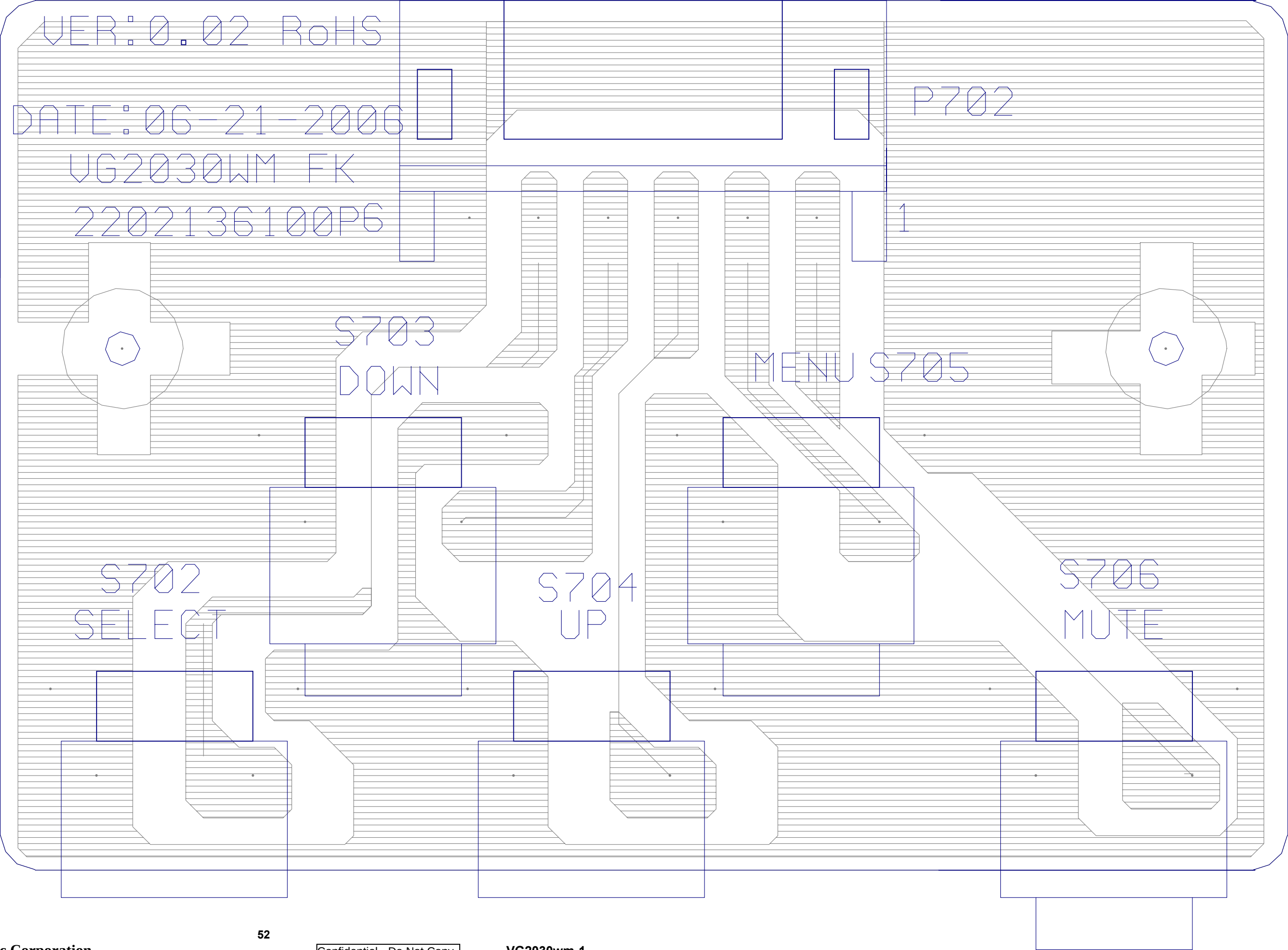
9. Schematic Diagrams

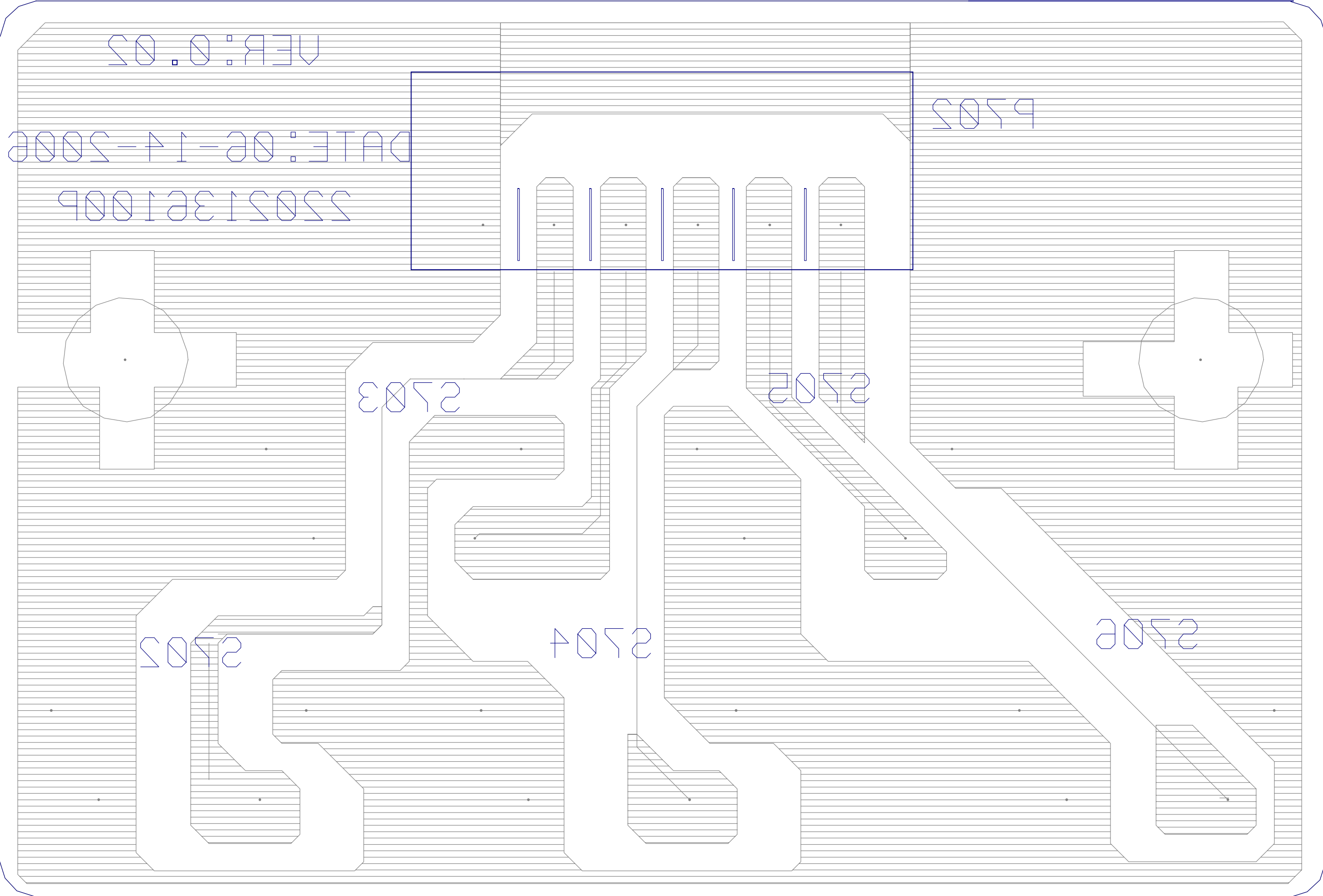
9.1. MAIN PCB TOP VIEW

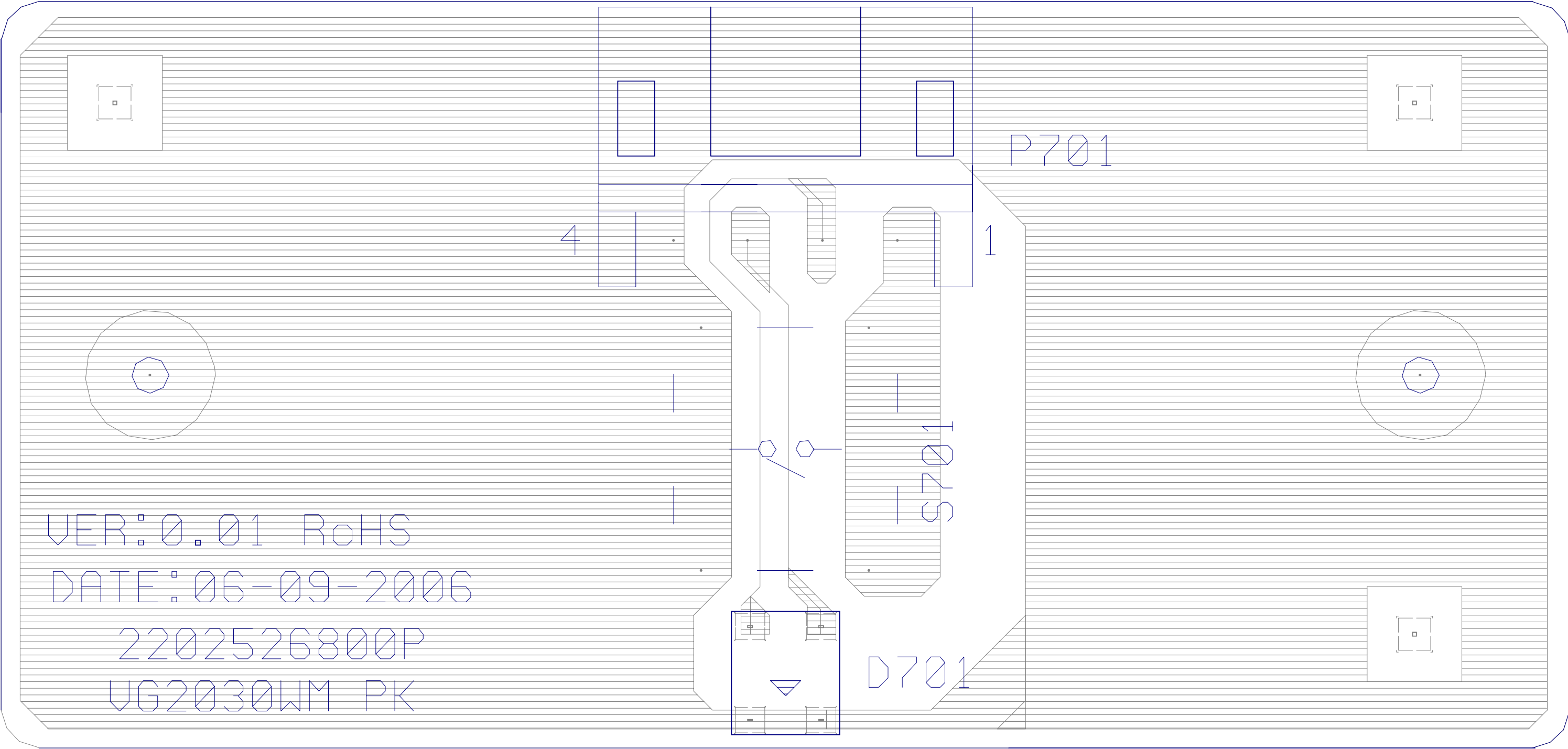


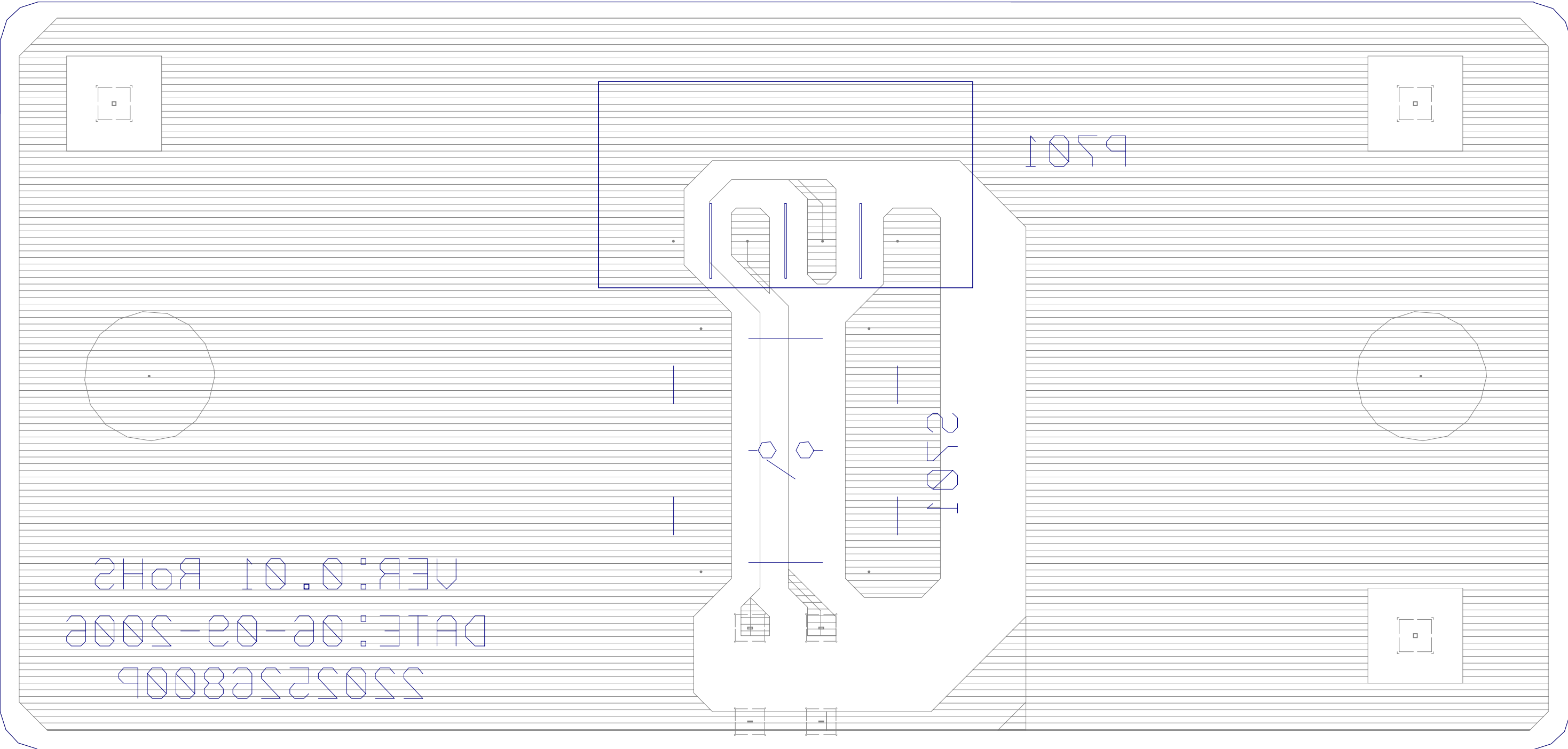
9.2. MAIN PCB BOTTOM VIEW

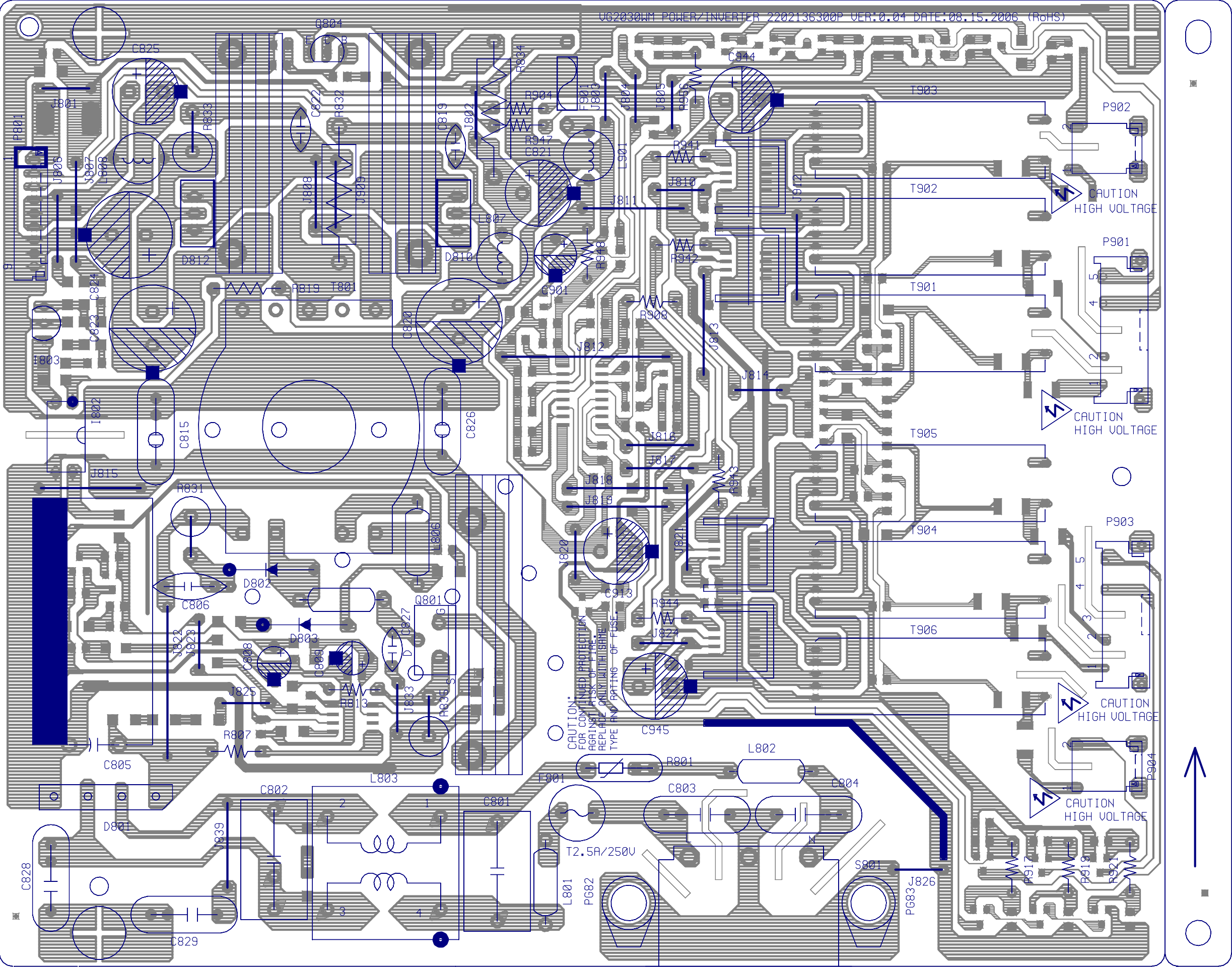




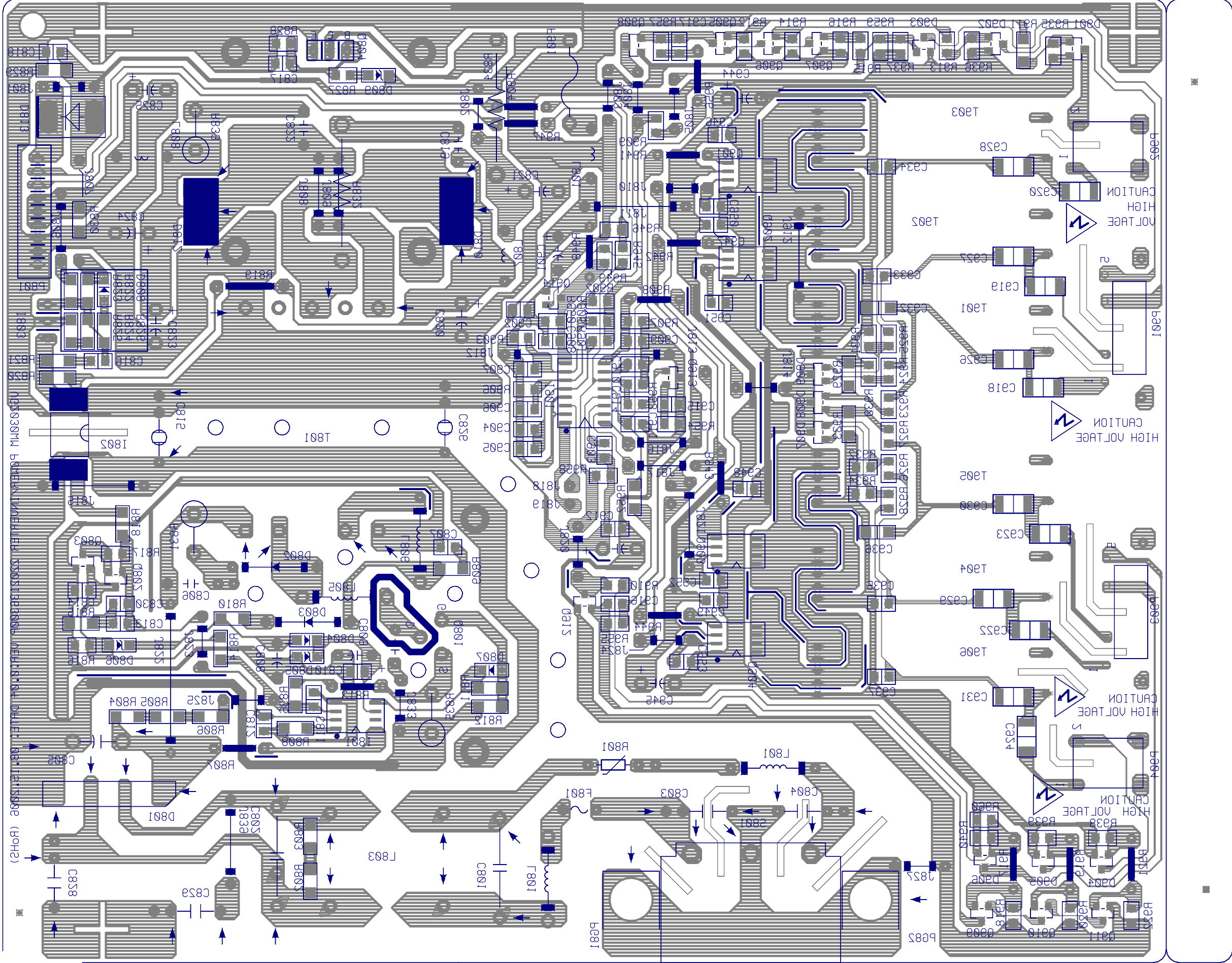




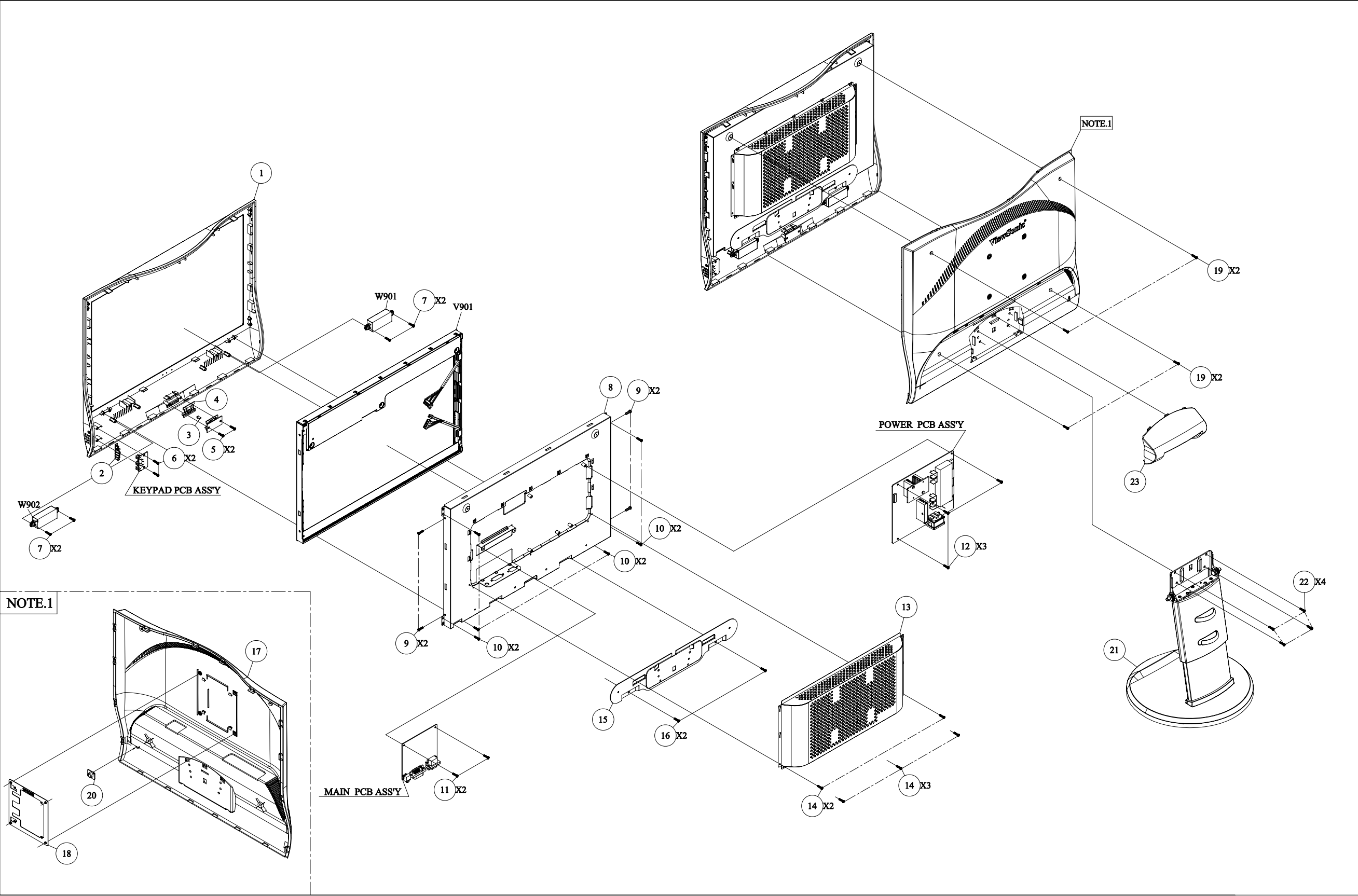


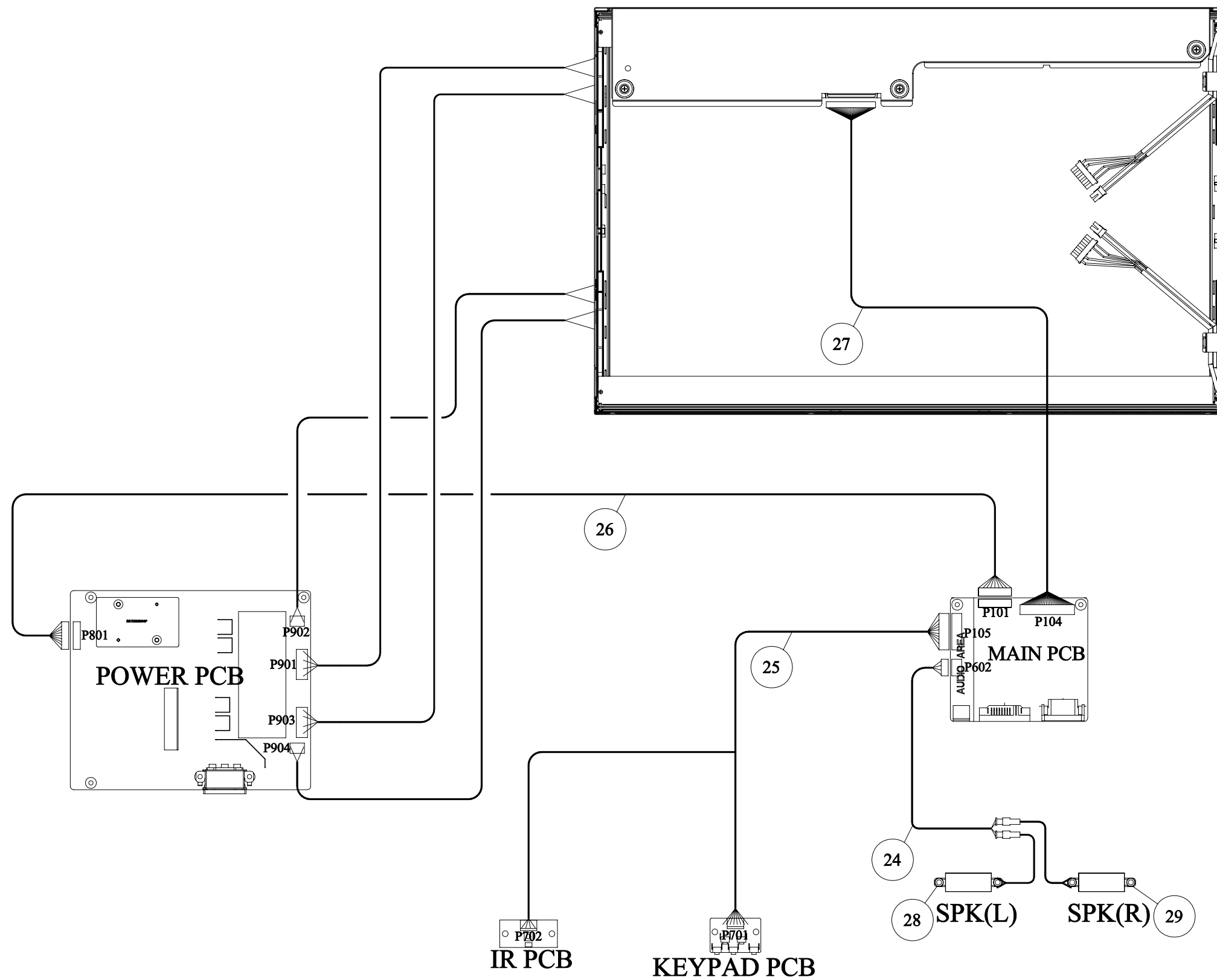


9.8. POWER PCB BOTTOM VIEW



10. Exploded Diagram and Exploded Parts List





EXPLODED PARTS LIST (VG2030wm-1)

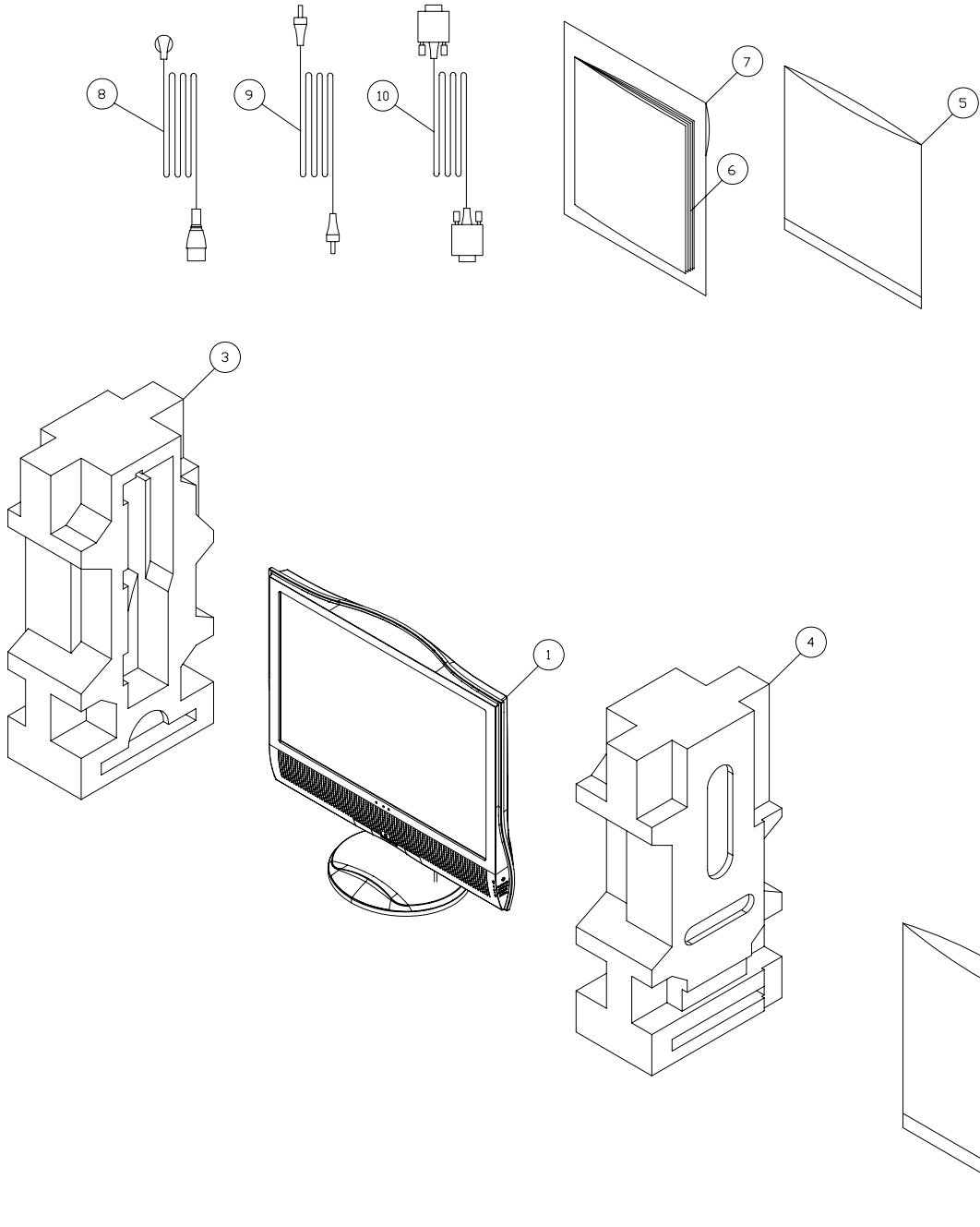
ViewSonic Model Number: VS11425

Rev: 1a

Serial No. Prefix: QCC

Item	ViewSonic P/N	Ref. P/N	Description	Q'ty
1	N/A	2024274401P	FRONT BEZEL (VG2030WM) ABS HB PS-7604B/BLACK C	1
2	N/A	2044269001P	FUNCTION KEY (VG2030WM) POWER KEY ABS HB AL-PLATE	1
3	N/A	2053756301P	LED INDIC.-PWR VG2030WM/PMMA	1
4	N/A	2044270701P	FUNCTION KEY (VG2030WM) ABS HB AL-PLATE	1
5	M-SCW-0824-0812	2084730062P	SCREW,BND T+ M3X6(BND T+)	2
6	M-SCW-0824-0812	2084730062P	SCREW,BND T+ M3X6(BND T+)	2
7	N/A	2084740082P	SCREW,BND T+ M4X8(BND T+)	4
8	N/A	2071983000P	METAL FITTG (FOR AUO PANEL) VG2030WM-DUAL/SECC T=0.8mm	1
9	N/A	2080005100P	SCREW,SPE M3*6 CANERA SCREW BLACK NY10K	4
10	M-SCW-0824-0812	2084730062P	SCREW,BND T+ M3X6(BND T+)	6
11	M-SCW-0824-0811	2080003700P	SCREW,SPE ISZZTER001A M3*6L MSWR17/FZMYI	2
12	M-SCW-0824-0811	2080003700P	SCREW,SPE ISZZTER001A M3*6L MSWR17/FZMYI	3
13	N/A	2071678600P	SHIELD PLATE VG2030WM-DUAL/SPTE T=0.3mm	1
14	N/A	2082630042P	SCREW M3*4 P=0.5	5
15	N/A	2071884600P	BRACKET,FIX VG2030WM HINGE FIX SECC T=1MM	1
16	N/A	2084740082P	SCREW,BND T+ M4X8(BND T+)	2
17	N/A	2022269801P	CABI BACK (VG2030WM-DUAL) ABS HB BLACK C	1
18	HW-00003031	2071872900P	BRACKET,FIX JT198QP SECC 0.8T WALL MOUNT	1
19	N/A	2082630064P	SCREW M3*6 P=0.5 BLACK	4
20	M-BK-0805-0070	2071869400P	BRACKET,FIX METAL PLATE 1.0MM KENSINGTON	1
21	PL-00008058	2028050300P	STAND CJC STAND ASS'Y BLACK C	1
22	M-SCW-0824-6746	2087340126P	SCREW,B SPW+ 4X12(+)SWRM-3 ZMC2-C	4
23	N/A	2027264401P	DUST COVER (VG2030WM) CJC HINGE COVE ABS HB BLACK C	1
24	N/A	2427404027P	WIRE HARNESS 2+2/4P H/H 1061#24 L=370mm	1
25	N/A	2427410009P	WIRE HARNESS 4+6/10P H/H 1007#26 L=385/330	1
26	N/A	2427409007P	WIRE HARNESS 9/9P H/B 1007#26 L=150mm	1
27	N/A	2420330161P	FFC CABLE 30P*P0.5mm*L126mm	1
28	E-00008186	2391302008P	SPEAKER ASS'Y 2W/4ohm (L) D.L	1
29	E-00008185	2391302007P	SPEAKER ASS'Y 2W/4ohm (R) D.L	1

Packing for Shipping



PACKING PART LIST (VG2030wm-1)

ViewSonic Model Number: VS11425

Rev: 1a

Item	ViewSonic P/N	Ref. P/N	Location	Q'ty
1	N/A		VG2030WM1 monitor	1
2	M-MS-0808-1317	2013053000P	POLYETHY BAG	1
3	P-00008209	2012194700P	VG2030WM EPS (R)	1
4	P-00008210	2012194800P	VG2030WM EPS (L)	1
5	N/A	2013228806P	POLYETHY BAG	1
6	DC-00008164	2438501251P	OWNER GUIDE	1
7	DC-00008163	2002310599P	GUARANT CARD(QSG)	1
8	A-00005362	2427130046P	AC POWER CORD	1
9	CB-00005735	2427721841P	EAR CABLE	1
10	CB-00005507	2427501195P	VGA CABLE	1
11	P-00008208	2011121501P	CARTON BOX	1
12	N/A	2055632223P	LABEL	1

11. Recommended Spare Parts List

RECOMMENDED SPARE PARTS LIST (VG2030wm-1)

ViewSonic Model Number: VS11425

Serial No. Prefix: QCC

Rev: 1a

Item	Description	ECR/ECN	ViewSonic P/N	Ref. P/N	Location	Universal number#
1	Accessories:					
2			A-00005362	2427130046P	P951	
3			A-00006132	2427130097P	P951	
4			A-00006133	2427130047P	P951	
5	PC Board Assembly:		B-00008184	6202-7920902001		
6			B-00008185	6203-7920902001		
7			B-00008186	6204-7920902001		
8			B-00008195	6201-7920902001		
9	Cabinets:		C-00008208	2603308122		
10			C-00008209	2603407737		
11	Cables:		CB-00005507	2427501195P	P961	
12			CB-00006182	2427501198P	P971	
13	Documentation:		DC-00008163	2002310599P	6P81	
14			DC-00008164	2438501251P	6P80	
15	Electronic Components:		E-00006217	2212011210P	V901	
16			E-00008185	2391302007P	W902	
17			E-00008186	2391302008P	W901	
18	Packing Material:		M-MS-0808-1317	2013053000P	6P60	
19			P-00008208	2011121501P	6P01	
20			P-00008209	2012194700P	6P20	
21			P-00008210	2012194800P	6P21	
22			P-00001347	30833		
23			P-00002515	20653		
24	Plastics:		PL-00008058	2028050300P	5B01	

Remark 1: Above listed items are examples, supplier can expand the rows to add more necessary items.

Remark 2: All revised RSPLs with newly added items or any change made should be highlighted and correlated with the ECN/ECR approved by ViewSonic Corporation. This is to eliminate repeated cross checks of each item between this version and prior versions.

BOM LIST (VG2030wm-1)

ViewSonic Model Number: VS11425

Rev: 1a

Serial No. Prefix: QCC

Item	ViewSonic P/N	Ref. P/N	Description	Universal number#	Q'ty
1	N/A	2700180500	SET ASS'Y VG2030WM(1)	B011	1
2	N/A	2700580500	ACCESSORY ASS'Y VG2030WM(1)	B012	1
3	N/A	2700680500	PACKING ASS'Y VG2030WM(1)	B013	1
4	N/A	2701180500	PCB ASS'Y VG2030WM(1)	B021	1
5	N/A	2701580500	FRONT ASS'Y VG2030WM(1)	B022	1
6	N/A	2701680500	FINAL ASS'Y VG2030WM(1)	B023	1
7	N/A	2702180500	PCB-MAIN VG2030WM(1)	BA31	1
8	N/A	2702280500	PCB-CON VG2030WM(1)	BB31	1
9	N/A	2702380500	PCB POWER VG2030WM(1)	BC31	1
10	N/A	2703380500	POWER S/W VG2030W-1	BM31	1
11	N/A	2704180500	AUTO INSERT-MAIN VG2030WM(1)	BA41	1
12	N/A	2704380500	AUTO INSERT-POWER VG2030WM(1)	BC41	1
13	N/A	2705380500	AUTO INSERT S/W VG2030WM-1	BM41	1
14	N/A	2706180500	SMT-MAIN VG2030WM	BA51	1
15	N/A	2706380500	SMT-POWER VG2030WM(1)	BC51	1
16	N/A	2707380500	SMT-POWER S/W VG2030WM-1	BM51	1
17	N/A	2708180500	FRONT BEZEL VG2030WM(1)	BT31	1
18	N/A	2708680500	CABI BACK VG2030WM(1)	BN31	1
19	N/A	2710180500	MANUAL INSERT-MAIN VG2030WM	BA42	1
20	N/A	2710680500	MANUAL INSERT-CON VG2030WM(1)	BB42	1
21	N/A	2711180500	MANUAL INSERT-POWER VG2030WM(1)	BC42	1
22	N/A	2711280500	PROCESS-POWER VG2030WM(1)	BC43	1
23	N/A	2716180500	MANUAL S/W VG2030WM-1	BM42	1
24	N/A	2718180500	LCD PANEL ASS'Y VG2030WM(1)	BT32	1
25	N/A	2718580500	FRONT OTHER VG2030WM(1)	BT39	1
26	N/A	2718680500	STAND ASS'Y VG2030WM(1)	BN32	1
27	N/A	2720180500	V-TYPE-MAIN VG2030WM	BA52	1
28	N/A	2721180500	V-TYPE-POWER VG2030WM(1)	BC52	1
29	N/A	2721280500	H-TYPE-POWER VG2030WM(1)	BC53	1
30	DC-00008163	2002310599P	GUARANT CARD VIEWSONIC VG2030WM-1 QSG	6P81	1
31	P-00008208	2011121501P	CARTON BOX VG2030WM-1 VS11425	6P01	1
32	P-00008209	2012194700P	POLYFOAM VG2030WM EPS (R)	6P20	1
33	P-00008210	2012194800P	POLYFOAM VG2030WM EPS (L)	6P21	1
34	M-MS-0808-1317	2013053000P	POLYETHY BAG 90CMX75CMX0.02t PE-LD	6P60	1
35	N/A	2013228806P	POLYETHY BAG 150X250X0.03T mm LDPE VSC LCD	6P85	1
36	N/A	2022269801P	CABI BACK (VG2030WM-DUAL) ABS HB BLACK C	2C01	1
37	N/A	2024274401P	FRONT BEZEL (VG2030WM) ABS HB PS-7604B/BLACK C	1F01	1
38	N/A	2027264401P	DUST COVER (VG2030WM) CJC HINGE COVE ABS HB BLACK C	5B03	1
39	PL-00008058	2028050300P	STAND CJC STAND ASS'Y BLACK C	5B01	1
40	N/A	2044269001P	FUNCTION KEY (VG2030WM) POWER KEY ABS HB AL-PLATE	1F02	1
41	N/A	2044270701P	FUNCTION KEY (VG2030WM) ABS HB AL-PLATE	1F04	1
42	M-MS-0808-9214	2051352100P	NAME PLATE VIEWSONIC E015-006 3-BIRD LOGO	1F05	1
43	N/A	2051352800P	NAME PLATE 38.00MM*5.90MM	1F06	1
44	N/A	2053756301P	LED INDIC.-PWR VG2030WM/PMMA	1F03	1
45	N/A	2055134159P	LABEL VG2030WM-1 VS11425 AUO TCO03	6P50	1
46	N/A	2055613379P	LABEL VIEWSONIC CONTAINER LABEL	6P11	36
47	M-LB-0813-0959	2055613392P	LABEL VSC HIGH VOLTAGE WARNING LABEL	6P14	1
48	N/A	2055613523P	LABEL VIEWSONIC 5MS STICKER	6P08	1
49	M-LB-0813-0530	2055617101P	LABEL 10*20 HI-POT TESTED OK	6P13	1
50	N/A	2055632226P	LABEL VG2030WM-1 VS11425 (G) AUO	6P02	1
51	N/A	2055636061P	LABEL VG2030WM-1 VS11425 SMALL LABEL	6P05	1
52	N/A	2055690060P	LABEL ENERGYSTAR LABEL 11X11MM NO PP	6P04	1
53	M-MS-0808-9408	2061453400P	BUSHING VE710 PLUG RUBBER	2C03	4
54	N/A	2071678600P	SHIELD PLATE VG2030WM-DUAL/SPT T=0.3mm	1F25	1
55	M-BK-0805-0070	2071869400P	BRACKET, FIX METAL PLATE 1.0MM KENSINGTON	2C05	1
56	HW-00003031	2071872900P	BRACKET, FIX JT198QP SECC 0.8T WALL MOUNT	2C02	1
57	HW-00003028	2071874300P	BRACKET, FIX SECC T=0.8 VE910 ACINLET	9H11	1
58	N/A	2071884600P	BRACKET, FIX VG2030WM HINGE FIX SECC T=1MM	1F27	1
59	N/A	2071983000P	METAL FITTG (FOR AUO PANEL) VG2030WM-DUAL/SECC T=0.8mm	1F20	1
60	N/A	2072263400P	HEAT SINK SPT 10*10*11(MM) T=10MM	9H06	4
61	N/A	2072263500P	HEAT SINK VG2030 AL60*36MM T=2.0MM	9H03	1
62	N/A	2072263600P	HEAT SINK VG2030 AL 36*23*10MM	9H01	1
63	N/A	2072263600P	HEAT SINK VG2030 AL 36*23*10MM	9H02	1
64	N/A	2072263700P	HEAT SINK VG2030 AL 45*23*10MM	9H05	1
65	N/A	2072263900P	HEAT SINK SPT 22X45*X6.5 T=0.3MM(VG2030	9H12	1
66	M-SCW-0824-0811	2080003700P	SCREW,SPE ISZZTER001A M3*6L MSWR17/FZMYI	9S11	2
67	M-SCW-0824-0811	2080003700P	SCREW,SPE ISZZTER001A M3*6L MSWR17/FZMYI	1F23	2
68	M-SCW-0824-0811	2080003700P	SCREW,SPE ISZZTER001A M3*6L MSWR17/FZMYI	1F24	3
69	M-SCW-0824-0811	2080003700P	SCREW,SPE ISZZTER001A M3*6L MSWR17/FZMYI	1F29	3
70	N/A	2080005100P	SCREW,SPE M3*6 CANERA SCREW BLACK NY10K	1F21	4
71	N/A	2082630042P	SCREW M3*4 P=0.5	1F26	5
72	N/A	2082630064P	SCREW M3*6 P=0.5 BLACK	2C04	4
73	N/A	2083730082P	SCREW,BND T+ BND T+ M3*8 ZN	9S04	2
74	M-SCW-0824-0812	2084730062P	SCREW,BND T+ M3X6(BND T+)	9S01	1

Item	ViewSonic P/N	Ref. P/N	Description	Universal number#	Q'ty
75	M-SCW-0824-0812	2084730062P	SCREW,BND T+ M3X6(BND T+)	9S02	1
76	M-SCW-0824-0812	2084730062P	SCREW,BND T+ M3X6(BND T+)	9S05	1
77	M-SCW-0824-0812	2084730062P	SCREW,BND T+ M3X6(BND T+)	1F22	6
78	M-SCW-0824-0812	2084730062P	SCREW,BND T+ M3X6(BND T+)	1F10	2
79	M-SCW-0824-0812	2084730062P	SCREW,BND T+ M3X6(BND T+)	1F11	2
80	N/A	2084740082P	SCREW,BND T+ M4X8(BND T+)	1F28	2
81	N/A	2084740082P	SCREW,BND T+ M4X8(BND T+)	1F12	4
82	M-SCW-0824-6746	2087340126P	SCREW,B SPW+ 4X12(+JSWRM-3 ZMC2-C	5B02	4
83	N/A	2105251400P	SPRING PLATE SPTE T=0.4MM (GROUND PLATE)	9H10	2
84	N/A	2202136100P	PC BOARD VG2030WM K/B FR1 37*25	U702	1
85	N/A	2202136300P	PC BOARD VG2030WM P/B CEM1 175*145	U801	1
86	N/A	2202526300P	PCB MULTILAYER VG2030VW-1 M/B FR4*2 90*100	U101	1
87	N/A	2202526800P	PCB MULTILAYER VG2030WM IR/B FR4*2 42*20	U701	1
88	E-00006217	2212011210P	LCD PANEL M201EW02 V.0AUO	V901	1
89	N/A	2213125213P	FUSE 3921250 2.5A/250V WICKMANN	F801 RB	1
90	N/A	2213125214P	FUSE MRT-2.5A BEL	F801 RA	1
91	N/A	2229400512P	THERMISTOR,NTC NTC N13SP010M UPPERMOST	R801 RA	1
92	N/A	2229401612P	THERMISTOR,NTC SCK13104MGY503 P=7.5 THINKING	R801 RB	1
93	E-R-0405-3235	2233410295P	RES,CBN 1/4 S RD 1/4WS1Kohm J T52	R904	1
94	E-R-0405-3235	2233410295P	RES,CBN 1/4 S RD 1/4WS1Kohm J T52	R956	1
95	E-R-0405-3214	2233410395P	RES,CBN 1/4 S RD 1/4WS10Kohm J T52	R807	1
96	E-R-0405-3221	2233410495P	RES,CBN 1/4 S RD 1/4WS100Kohm J T52	R948	1
97	N/A	2233422095P	RES,CBN 1/4 S RD 1/4WS 22 ohm J T52	J810	1
98	N/A	2233422095P	RES,CBN 1/4 S RD 1/4WS 22 ohm J T52	J824	1
99	N/A	2233427195P	RES,CBN 1/4 S RD 1/4WS270 ohm J T52	R813	1
100	N/A	2233451295P	RES,CBN 1/4 S RD 1/4WS5.1Kohm J T52	R917	1
101	N/A	2233451295P	RES,CBN 1/4 S RD 1/4WS5.1Kohm J T52	R919	1
102	N/A	2233451295P	RES,CBN 1/4 S RD 1/4WS5.1Kohm J T52	R921	1
103	N/A	2233610295P	RES,CBN 1/2WS RD 1/2WS1Kohm J T52	R819	1
104	N/A	2235410016P	RES,MTL 1 RS 1WS10 ohm J P=7.0	R833	1
105	N/A	2235510003P	RES,MTL 2 RS 2W 10ohm J P=20.0	R832	1
106	N/A	2235530816P	RES,MTL 2 RS 2WS 0.3ohm J P=7.0	R835	1
107	N/A	2235547316P	RES,MTL 2 RS 2WS 47Kohm J P=7.0	R831	1
108	N/A	2235610113P	RES,MTL 3 RS 3WS 100ohm J P=20.0	R834	1
109	N/A	2251310536P	RES CHIP 1/8W RC 0805 1/8 W105Kohm F T	R901	1
110	N/A	2251317826P	RES CHIP 1/8W RC 0805 1/8 W 17.8Kohm F T	R903	1
111	N/A	2251319626P	RES CHIP 1/8W RC 0805 1/8 W 19.6Kohm F T	R945	1
112	N/A	2251364906P	RES CHIP 1/8W RC 0805 1/8 W 649ohm F T	R935	1
113	N/A	2251364906P	RES CHIP 1/8W RC 0805 1/8 W 649ohm F T	R936	1
114	N/A	2251364906P	RES CHIP 1/8W RC 0805 1/8 W 649ohm F T	R937	1
115	N/A	2251364906P	RES CHIP 1/8W RC 0805 1/8 W 649ohm F T	R938	1
116	N/A	2251364906P	RES CHIP 1/8W RC 0805 1/8 W 649ohm F T	R939	1
117	N/A	2251364906P	RES CHIP 1/8W RC 0805 1/8 W 649ohm F T	R940	1
118	N/A	2251410736P	RES CHIP 1/4W RC 1206 1/4 W107Kohm F T	R808	1
119	N/A	2251412126P	RES CHIP 1/4W RC 1206 1/4 W 12.1Kohm F T	R824	1
120	N/A	2251415036P	RES,CHIP 1/4 RC 1206 1/4 W150Kohm F T	R822	1
121	N/A	2251420026P	RES,CHIP 1/4 RC 1206 1/4 W 20Kohm F T	R823	1
122	N/A	2251461936P	RES CHIP 1/4W RC 1206 1/4 W619Kohm F T	R804	1
123	N/A	2251461936P	RES CHIP 1/4W RC 1206 1/4 W619Kohm F T	R805	1
124	N/A	2251461936P	RES CHIP 1/4W RC 1206 1/4 W619Kohm F T	R806	1
125	E-R-0405-6600	2253200096P	RES CHIP 1/10W RC 0603 1/10W 0 ohm J T	R103	1
126	E-R-0405-6600	2253200096P	RES CHIP 1/10W RC 0603 1/10W 0 ohm J T	R107	1
127	E-R-0405-6600	2253200096P	RES CHIP 1/10W RC 0603 1/10W 0 ohm J T	R128	1
128	E-R-0405-6600	2253200096P	RES CHIP 1/10W RC 0603 1/10W 0 ohm J T	R135	1
129	E-R-0405-6600	2253200096P	RES CHIP 1/10W RC 0603 1/10W 0 ohm J T	R139	1
130	E-R-0405-6600	2253200096P	RES CHIP 1/10W RC 0603 1/10W 0 ohm J T	R148	1
131	E-R-0405-6600	2253200096P	RES CHIP 1/10W RC 0603 1/10W 0 ohm J T	R150	1
132	E-R-0405-6600	2253200096P	RES CHIP 1/10W RC 0603 1/10W 0 ohm J T	R162	1
133	E-R-0405-6600	2253200096P	RES CHIP 1/10W RC 0603 1/10W 0 ohm J T	R186	1
134	E-R-0405-6600	2253200096P	RES CHIP 1/10W RC 0603 1/10W 0 ohm J T	R603	1
135	N/A	2253210196P	RES CHIP 1/10W RC 0603 1/10W100 ohm J T	L104	1
136	N/A	2253210196P	RES CHIP 1/10W RC 0603 1/10W100 ohm J T	R102	1
137	N/A	2253210196P	RES CHIP 1/10W RC 0603 1/10W100 ohm J T	R106	1
138	N/A	2253210196P	RES CHIP 1/10W RC 0603 1/10W100 ohm J T	R123	1
139	N/A	2253210196P	RES CHIP 1/10W RC 0603 1/10W100 ohm J T	R126	1
140	N/A	2253210196P	RES CHIP 1/10W RC 0603 1/10W100 ohm J T	R127	1
141	N/A	2253210196P	RES CHIP 1/10W RC 0603 1/10W100 ohm J T	R131	1
142	N/A	2253210196P	RES CHIP 1/10W RC 0603 1/10W100 ohm J T	R132	1
143	N/A	2253210196P	RES CHIP 1/10W RC 0603 1/10W100 ohm J T	R153	1
144	N/A	2253210196P	RES CHIP 1/10W RC 0603 1/10W100 ohm J T	R154	1
145	N/A	2253210196P	RES CHIP 1/10W RC 0603 1/10W100 ohm J T	R172	1
146	N/A	2253210196P	RES CHIP 1/10W RC 0603 1/10W100 ohm J T	R173	1
147	N/A	2253210196P	RES CHIP 1/10W RC 0603 1/10W100 ohm J T	R174	1
148	N/A	2253210196P	RES CHIP 1/10W RC 0603 1/10W100 ohm J T	R175	1
149	N/A	2253210196P	RES CHIP 1/10W RC 0603 1/10W100 ohm J T	R176	1
150	N/A	2253210196P	RES CHIP 1/10W RC 0603 1/10W100 ohm J T	R177	1
151	N/A	2253210196P	RES CHIP 1/10W RC 0603 1/10W100 ohm J T	R178	1
152	N/A	2253210196P	RES CHIP 1/10W RC 0603 1/10W100 ohm J T	R187	1
153	N/A	2253210196P	RES CHIP 1/10W RC 0603 1/10W100 ohm J T	R188	1

Item	ViewSonic P/N	Ref. P/N	Description	Universal number#	Q'ty
154	E-R-0405-6410	2253210296P	RES CHIP 1/10W RC 0603 1/10W1.0Kohm J T	R101	1
155	E-R-0405-6410	2253210296P	RES CHIP 1/10W RC 0603 1/10W1.0Kohm J T	R129	1
156	E-R-0405-6410	2253210296P	RES CHIP 1/10W RC 0603 1/10W1.0Kohm J T	R147	1
157	E-R-0405-6410	2253210296P	RES CHIP 1/10W RC 0603 1/10W1.0Kohm J T	R167	1
158	E-R-0405-6410	2253210296P	RES CHIP 1/10W RC 0603 1/10W1.0Kohm J T	R185	1
159	N/A	2253210396P	RES CHIP 1/10W RC 0603 1/10W 10Kohm J T	R112	1
160	N/A	2253210396P	RES CHIP 1/10W RC 0603 1/10W 10Kohm J T	R157	1
161	N/A	2253210396P	RES CHIP 1/10W RC 0603 1/10W 10Kohm J T	R158	1
162	N/A	2253210396P	RES CHIP 1/10W RC 0603 1/10W 10Kohm J T	R159	1
163	N/A	2253210396P	RES CHIP 1/10W RC 0603 1/10W 10Kohm J T	R169	1
164	N/A	2253210396P	RES CHIP 1/10W RC 0603 1/10W 10Kohm J T	R171	1
165	N/A	2253210396P	RES CHIP 1/10W RC 0603 1/10W 10Kohm J T	R180	1
166	N/A	2253210396P	RES CHIP 1/10W RC 0603 1/10W 10Kohm J T	R189	1
167	N/A	2253210396P	RES CHIP 1/10W RC 0603 1/10W 10Kohm J T	R192	1
168	N/A	2253210396P	RES CHIP 1/10W RC 0603 1/10W 10Kohm J T	R193	1
169	N/A	2253210396P	RES CHIP 1/10W RC 0603 1/10W 10Kohm J T	R602	1
170	N/A	2253210396P	RES CHIP 1/10W RC 0603 1/10W 10Kohm J T	R612	1
171	N/A	2253210396P	RES CHIP 1/10W RC 0603 1/10W 10Kohm J T	R614	1
172	N/A	2253210396P	RES CHIP 1/10W RC 0603 1/10W 10Kohm J T	R615	1
173	N/A	2253210496P	RES CHIP 1/10W RC 0603 1/10W100Kohm J T	R608	1
174	N/A	2253210496P	RES CHIP 1/10W RC 0603 1/10W100Kohm J T	R610	1
175	N/A	2253215396P	RES CHIP 1/10W RC 0603 1/10W 15Kohm J T	R136	1
176	N/A	2253222096P	RES CHIP 1/10W RC 0603 1/10W 22 ohm J T	R140	1
177	N/A	2253222096P	RES CHIP 1/10W RC 0603 1/10W 22 ohm J T	R142	1
178	N/A	2253222096P	RES CHIP 1/10W RC 0603 1/10W 22 ohm J T	R151	1
179	N/A	2253222096P	RES CHIP 1/10W RC 0603 1/10W 22 ohm J T	R152	1
180	N/A	2253222096P	RES CHIP 1/10W RC 0603 1/10W 22 ohm J T	R160	1
181	N/A	2253222096P	RES CHIP 1/10W RC 0603 1/10W 22 ohm J T	R161	1
182	N/A	2253222096P	RES CHIP 1/10W RC 0603 1/10W 22 ohm J T	R163	1
183	N/A	2253222096P	RES CHIP 1/10W RC 0603 1/10W 22 ohm J T	R164	1
184	N/A	2253222196P	RES CHIP 1/10W RC 0603 1/10W220 ohm J T	R110	1
185	N/A	2253222296P	RES CHIP 1/10W RC 0603 1/10W2.2Kohm J T	R124	1
186	N/A	2253222296P	RES CHIP 1/10W RC 0603 1/10W2.2Kohm J T	R125	1
187	N/A	2253222296P	RES CHIP 1/10W RC 0603 1/10W2.2Kohm J T	R155	1
188	N/A	2253222296P	RES CHIP 1/10W RC 0603 1/10W2.2Kohm J T	R156	1
189	N/A	2253222296P	RES CHIP 1/10W RC 0603 1/10W2.2Kohm J T	R165	1
190	N/A	2253222296P	RES CHIP 1/10W RC 0603 1/10W2.2Kohm J T	R166	1
191	N/A	2253222396P	RES CHIP 1/10W RC 0603 1/10W 22Kohm J T	R109	1
192	N/A	2253230396P	RES CHIP 1/10W RC 0603 1/10W 30Kohm J T	R141	1
193	N/A	2253233096P	RES CHIP 1/10W RC 0603 1/10W 33 ohm J T	R616	1
194	N/A	2253233196P	RES CHIP 1/10W RC 0603 1/10W330 ohm J T	R170	1
195	N/A	2253233196P	RES CHIP 1/10W RC 0603 1/10W330 ohm J T	R179	1
196	N/A	2253247196P	RES CHIP 1/10W RC 0603 1/10W470 ohm J T	R116	1
197	E-R-0405-6419	2253247296P	RES CHIP 1/10W RC 0603 1/10W4.7Kohm J T	R137	1
198	E-R-0405-6419	2253247296P	RES CHIP 1/10W RC 0603 1/10W4.7Kohm J T	R138	1
199	E-R-0405-6419	2253247296P	RES CHIP 1/10W RC 0603 1/10W4.7Kohm J T	R145	1
200	E-R-0405-6419	2253247296P	RES CHIP 1/10W RC 0603 1/10W4.7Kohm J T	R181	1
201	E-R-0405-6419	2253247296P	RES CHIP 1/10W RC 0603 1/10W4.7Kohm J T	R182	1
202	E-R-0405-6419	2253247296P	RES CHIP 1/10W RC 0603 1/10W4.7Kohm J T	R183	1
203	E-R-0405-6419	2253247296P	RES CHIP 1/10W RC 0603 1/10W4.7Kohm J T	R184	1
204	E-R-0405-6419	2253247296P	RES CHIP 1/10W RC 0603 1/10W4.7Kohm J T	R607	1
205	E-00003527	2253247396P	RES CHIP 1/10W RC 0603 1/10W 47Kohm J T	R111	1
206	E-00003527	2253247396P	RES CHIP 1/10W RC 0603 1/10W 47Kohm J T	R609	1
207	E-00003527	2253247396P	RES CHIP 1/10W RC 0603 1/10W 47Kohm J T	R611	1
208	N/A	2253256096P	RES CHIP 1/10W RC 0603 1/10W 56 ohm J T	R113	1
209	N/A	2253256096P	RES CHIP 1/10W RC 0603 1/10W 56 ohm J T	R114	1
210	N/A	2253256096P	RES CHIP 1/10W RC 0603 1/10W 56 ohm J T	R115	1
211	N/A	2253256096P	RES CHIP 1/10W RC 0603 1/10W 56 ohm J T	R120	1
212	N/A	2253256096P	RES CHIP 1/10W RC 0603 1/10W 56 ohm J T	R121	1
213	N/A	2253256096P	RES CHIP 1/10W RC 0603 1/10W 56 ohm J T	R122	1
214	N/A	2253268296P	RES CHIP 1/10W RC 0603 1/10W6.8Kohm J T	R168	1
215	N/A	2253275096P	RES CHIP 1/10W RC 0603 1/10W 75 ohm J T	L103	1
216	N/A	2253275096P	RES CHIP 1/10W RC 0603 1/10W 75 ohm J T	R117	1
217	N/A	2253275096P	RES CHIP 1/10W RC 0603 1/10W 75 ohm J T	R118	1
218	N/A	2253275096P	RES CHIP 1/10W RC 0603 1/10W 75 ohm J T	R119	1
219	N/A	2253310296P	RES CHIP 1/8W RC 0805 1/8 W1.0Kohm J T	R827	1
220	N/A	2253310396P	RES CHIP 1/8W RC 0805 1/8 W 10Kohm J T	R828	1
221	N/A	2253310396P	RES CHIP 1/8W RC 0805 1/8 W 10Kohm J T	R930	1
222	N/A	2253310396P	RES CHIP 1/8W RC 0805 1/8 W 10Kohm J T	R931	1
223	N/A	2253310396P	RES CHIP 1/8W RC 0805 1/8 W 10Kohm J T	R932	1
224	N/A	2253310396P	RES CHIP 1/8W RC 0805 1/8 W 10Kohm J T	R934	1
225	N/A	2253310596P	RES CHIP 1/8W RC 0805 1/8 W 1Mohm J T	R907	1
226	N/A	2253322496P	RES CHIP 1/8W RC 0805 1/8 W220Kohm J T	R955	1
227	N/A	2253322496P	RES CHIP 1/8W RC 0805 1/8 W220Kohm J T	R957	1
228	N/A	2253327496P	RES CHIP 1/8W RC 0805 1/8 W270Kohm J T	R906	1
229	N/A	2253333596P	RES CHIP 1/8W RC 0805 1/8 W3.3Mohm J T	R905	1
230	N/A	2253339396P	RES CHIP 1/8W RC 0805 1/8 W39KohmJ T	R923	1
231	N/A	2253339396P	RES CHIP 1/8W RC 0805 1/8 W39KohmJ T	R924	1
232	N/A	2253339396P	RES CHIP 1/8W RC 0805 1/8 W39KohmJ T	R925	1

Item	ViewSonic P/N	Ref. P/N	Description	Universal number#	Q'ty
233	N/A	2253339396P	RES CHIP 1/8W RC 0805 1/8 W39KohmJ T	R926	1
234	N/A	2253339396P	RES CHIP 1/8W RC 0805 1/8 W39KohmJ T	R927	1
235	N/A	2253339396P	RES CHIP 1/8W RC 0805 1/8 W39KohmJ T	R928	1
236	N/A	2253347396P	RES CHIP 1/8W RC 0805 1/8 W 47Kohm J T	R950	1
237	N/A	2253351296P	RES CHIP 1/8W RC 0805 1/8 W5.1Kohm J T	R909	1
238	N/A	2253351296P	RES CHIP 1/8W RC 0805 1/8 W5.1Kohm J T	R910	1
239	N/A	2253351296P	RES CHIP 1/8W RC 0805 1/8 W5.1Kohm J T	R912	1
240	N/A	2253351296P	RES CHIP 1/8W RC 0805 1/8 W5.1Kohm J T	R913	1
241	N/A	2253351296P	RES CHIP 1/8W RC 0805 1/8 W5.1Kohm J T	R914	1
242	N/A	2253351296P	RES CHIP 1/8W RC 0805 1/8 W5.1Kohm J T	R915	1
243	N/A	2253351296P	RES CHIP 1/8W RC 0805 1/8 W5.1Kohm J T	R916	1
244	N/A	2253351296P	RES CHIP 1/8W RC 0805 1/8 W5.1Kohm J T	R918	1
245	N/A	2253351296P	RES CHIP 1/8W RC 0805 1/8 W5.1Kohm J T	R920	1
246	N/A	2253351296P	RES CHIP 1/8W RC 0805 1/8 W5.1Kohm J T	R922	1
247	E-R-0405-7116	2253400096P	RES CHIP 1/4W RC 1206 1/4 W 0 ohm J T	R810	1
248	E-R-0405-7116	2253400096P	RES CHIP 1/4W RC 1206 1/4 W 0 ohm J T	R814	1
249	E-R-0405-7116	2253400096P	RES CHIP 1/4W RC 1206 1/4 W 0 ohm J T	R825	1
250	E-R-0405-7116	2253400096P	RES CHIP 1/4W RC 1206 1/4 W 0 ohm J T	R836	1
251	N/A	2253410196P	RES CHIP 1/4W RC 1206 1/4 W100 ohm J T	R826	1
252	N/A	2253410296P	RES CHIP 1/4W RC 1206 1/4 W1.0Kohm J T	R952	1
253	E-00001013	2253410396P	RES CHIP 1/4W RC 1206 1/4 W 10Kohm J T	R812	1
254	E-00001013	2253410396P	RES CHIP 1/4W RC 1206 1/4 W 10Kohm J T	R929	1
255	E-00001013	2253410396P	RES CHIP 1/4W RC 1206 1/4 W 10Kohm J T	R933	1
256	N/A	2253418296P	RES CHIP 1/4W RC 1206 1/4 W1.8Kohm J T	R815	1
257	N/A	2253422096P	RES CHIP 1/4W RC 1206 1/4 W 22 ohm J T	R818	1
258	N/A	2253422296P	RES CHIP 1/4W RC 1206 1/4 W2.2Kohm J T	R829	1
259	N/A	2253433096P	RES CHIP 1/4W RC 1206 1/4 W 33 ohm J T	R811	1
260	N/A	2253451296P	RES CHIP 1/4W RC 1206 1/4 W5.1Kohm J T	R911	1
261	N/A	2253456296P	RES CHIP 1/4W RC 1206 1/4 W5.6Kohm J T	R821	1
262	N/A	2253456496P	RES CHIP 1/4W RC 1206 1/4 W560Kohm J T	R802	1
263	N/A	2253456496P	RES CHIP 1/4W RC 1206 1/4 W560Kohm J T	R803	1
264	N/A	2259210308P	RES,CHIP NETWORKS 8P4R 1/16W 10Kohm J P=0.8	RP01	1
265	N/A	2259210308P	RES,CHIP NETWORKS 8P4R 1/16W 10Kohm J P=0.8	RP02	1
266	N/A	2259210308P	RES,CHIP NETWORKS 8P4R 1/16W 10Kohm J P=0.8	RP03	1
267	N/A	2259210308P	RES,CHIP NETWORKS 8P4R 1/16W 10Kohm J P=0.8	RP04	1
268	N/A	2259210308P	RES,CHIP NETWORKS 8P4R 1/16W 10Kohm J P=0.8	RP05	1
269	N/A	2284110291P	CAP CER CC 1000P/1KV X7R P=5.0 K T	C819	1
270	N/A	2284110291P	CAP CER CC 1000P/1KV X7R P=5.0 K T	C822	1
271	E-C-0404-1856	2287210312P	CAP CER Y2 0.01uF/250VP=10.0 M C	C815	1
272	N/A	2287247112P	CAP CER Y2470p/250V Y5V P=7.5 M K	C803	1
273	N/A	2287247112P	CAP CER Y2470p/250V Y5V P=7.5 M K	C804	1
274	E-C-0404-1855	2287247212P	CAP CER Y2 4700p/250V Y5V P=10.0 M K	C828	1
275	E-C-0404-1855	2287247212P	CAP CER Y2 4700p/250V Y5V P=10.0 M K	C829	1
276	N/A	2300910401P	CAP MTL MINI X2 0.1u/275V P=10.0 K C	C802 RA	1
277	N/A	2300910481P	X CAP MINI X2 0.1u/275V P=10.0 K C	C802 RB	1
278	N/A	2300922401P	X CAP MINI X2 0.22u/275V P=15.0 K C	C801 RA	1
279	N/A	2300922481P	X CAP MINI X2 0.22u/275V P=15.0 K C	C801 RB	1
280	N/A	2304210312P	CAP,MTL CF93M0.010UF 400V K KC	C806	1
281	N/A	2333447691P	CAP,ELE 105°C EC47u/ 25V 5*11P=5.0 T	C901	1
282	E-C-0404-1838	2333610691P	CAP ELE 105°C EC10u/ 50V 5*11P=5.0 T	C809	1
283	N/A	2333633691P	CAP ELE 105°C EC33u/ 50V 6.3*11P=5.0 T	C808	1
284	N/A	2335215811P	CAP,ELE LOW ESR 105°C EC 1500u/ 10V10*16P=5.0 C	C601	1
285	N/A	2335315811P	CAP,ELE LOW ESR 105°C EC 1500u/ 16V13*16 P=5.0 C	C820 RA	1
286	N/A	2335315811P	CAP,ELE LOW ESR 105°C EC 1500u/ 16V13*16 P=5.0 C	C823 RA	1
287	N/A	2335315871P	CAP,ELE LOW ESR 105°C (5000HR) EC 1500u/ 16V13*20 P=5.0 C	C820 RB	1
288	N/A	2335315871P	CAP,ELE LOW ESR 105°C (5000HR) EC 1500u/ 16V13*20 P=5.0 C	C823 RB	1
289	N/A	2335447771P	CAP,ELE LOW ESR 3000HR EC 470u/ 25V 10*16P=5.0 C	C821 RB	1
290	N/A	2335447791P	CAP,ELE LOW ESR 105°C EC 470u/ 25V 10*13P=5.0 T	C821 RA	1
291	N/A	2335447791P	CAP,ELE LOW ESR 105°C EC 470u/ 25V 10*13P=5.0 T	C913	1
292	N/A	2335447791P	CAP,ELE LOW ESR 105°C EC 470u/ 25V 10*13P=5.0 T	C944	1
293	N/A	2335447791P	CAP,ELE LOW ESR 105°C EC 470u/ 25V 10*13P=5.0 T	C945	1
294	N/A	2336010811P	HI-LIFE LOW ESR E.CAP (6000HR) EC 1000u/ 16V10*16 P=5.0 C	C825	1
295	N/A	2336310613P	CAP,MINI ELE 105°C EC10u/ 16V4*7 P=2.5 T	C135	1
296	N/A	2336310613P	CAP,MINI ELE 105°C EC10u/ 16V4*7 P=2.5 T	C142	1
297	N/A	2336310613P	CAP,MINI ELE 105°C EC10u/ 16V4*7 P=2.5 T	C106	1
298	N/A	2336310613P	CAP,MINI ELE 105°C EC10u/ 16V4*7 P=2.5 T	C122	1
299	N/A	2336310613P	CAP,MINI ELE 105°C EC10u/ 16V4*7 P=2.5 T	C126	1
300	N/A	2336310713P	CAP,MINI ELE 105°C EC 100u/ 16V 6.3*7 P=2.5 T	C104	1
301	N/A	2336310713P	CAP,MINI ELE 105°C EC 100u/ 16V 6.3*7 P=2.5 T	C138	1
302	N/A	2336310713P	CAP,MINI ELE 105°C EC 100u/ 16V 6.3*7 P=2.5 T	C140	1
303	E-00000999	2336347613P	CAP,MINI ELE 105°C EC47u/ 16V5*7 P=2.5 T	C627	1
304	E-C-0404-3898	2341110096P	CAP,CHIP 125°C CS 0603/COG/50V 10 p J T	C144	1
305	E-C-0404-3898	2341110096P	CAP,CHIP 125°C CS 0603/COG/50V 10 p J T	C145	1
306	E-C-0404-4423	2341122096P	CAP,CHIP 125°C CS 0603/COG/50V 22p J T	C116	1
307	N/A	2341122196P	CAP,CHIP 125°C CS 0603/COG/50V 220p J T	C117	1
308	N/A	2341122196P	CAP,CHIP 125°C CS 0603/COG/50V 220p J T	C620	1
309	N/A	2342110296P	CAP,CHIP 125°C CS 0805/COG/50V1000p J T	C811	1
310	N/A	2342110296P	CAP,CHIP 125°C CS 0805/COG/50V1000p J T	C812	1
311	N/A	2342110296P	CAP,CHIP 125°C CS 0805/COG/50V1000p J T	C933	1

Item	ViewSonic P/N	Ref. P/N	Description	Universal number#	Q'ty
312	N/A	2342110296P	CAP,CHIP 125°C CS 0805/COG/50V1000p J T	C934	1
313	N/A	2342110296P	CAP,CHIP 125°C CS 0805/COG/50V1000p J T	C935	1
314	N/A	2342110296P	CAP,CHIP 125°C CS 0805/COG/50V1000p J T	C937	1
315	N/A	2342110296P	CAP,CHIP 125°C CS 0805/COG/50V1000p J T	C950	1
316	N/A	2342110296P	CAP,CHIP 125°C CS 0805/COG/50V1000p J T	C953	1
317	N/A	2342118196P	CAP,CHIP TEMPERATURE 125°C CS 0805/COG/50V 180p J T	C904	1
318	N/A	2344110296P	CAP,CHIP 125°C CS 1206/COG/50V1000P J T	C932	1
319	N/A	2344110296P	CAP,CHIP 125°C CS 1206/COG/50V1000P J T	C936	1
320	N/A	2346110296P	CAP,CHIP 125°C CS 0603/X7R/50V1000p K T	C112	1
321	N/A	2346110296P	CAP,CHIP 125°C CS 0603/X7R/50V1000p K T	C612	1
322	N/A	2346110296P	CAP,CHIP 125°C CS 0603/X7R/50V1000p K T	C621	1
323	N/A	2346110396P	CAP,CHIP 125°C CS 0603/X7R/50V0.01u K T	C609	1
324	N/A	2346110396P	CAP,CHIP 125°C CS 0603/X7R/50V0.01u K T	C614	1
325	N/A	2346110396P	CAP,CHIP 125°C CS 0603/X7R/50V0.01u K T	C618	1
326	N/A	2346110396P	CAP,CHIP 125°C CS 0603/X7R/50V0.01u K T	C622	1
327	N/A	2346147396P	CAP,CHIP 125°C CS 0603/X7R/50V 0.047u K T	C109	1
328	N/A	2346147396P	CAP,CHIP 125°C CS 0603/X7R/50V 0.047u K T	C110	1
329	N/A	2346147396P	CAP,CHIP 125°C CS 0603/X7R/50V 0.047u K T	C111	1
330	N/A	2346147396P	CAP,CHIP 125°C CS 0603/X7R/50V 0.047u K T	C113	1
331	N/A	2346147396P	CAP,CHIP 125°C CS 0603/X7R/50V 0.047u K T	C114	1
332	N/A	2346147396P	CAP,CHIP 125°C CS 0603/X7R/50V 0.047u K T	C115	1
333	E-C-0404-3815	2346410496P	CAP,CHIP 85°C CS 0603/Y5V/50V 0.1u Z T	C101	1
334	E-C-0404-3815	2346410496P	CAP,CHIP 85°C CS 0603/Y5V/50V 0.1u Z T	C103	1
335	E-C-0404-3815	2346410496P	CAP,CHIP 85°C CS 0603/Y5V/50V 0.1u Z T	C105	1
336	E-C-0404-3815	2346410496P	CAP,CHIP 85°C CS 0603/Y5V/50V 0.1u Z T	C107	1
337	E-C-0404-3815	2346410496P	CAP,CHIP 85°C CS 0603/Y5V/50V 0.1u Z T	C108	1
338	E-C-0404-3815	2346410496P	CAP,CHIP 85°C CS 0603/Y5V/50V 0.1u Z T	C119	1
339	E-C-0404-3815	2346410496P	CAP,CHIP 85°C CS 0603/Y5V/50V 0.1u Z T	C120	1
340	E-C-0404-3815	2346410496P	CAP,CHIP 85°C CS 0603/Y5V/50V 0.1u Z T	C121	1
341	E-C-0404-3815	2346410496P	CAP,CHIP 85°C CS 0603/Y5V/50V 0.1u Z T	C123	1
342	E-C-0404-3815	2346410496P	CAP,CHIP 85°C CS 0603/Y5V/50V 0.1u Z T	C125	1
343	E-C-0404-3815	2346410496P	CAP,CHIP 85°C CS 0603/Y5V/50V 0.1u Z T	C127	1
344	E-C-0404-3815	2346410496P	CAP,CHIP 85°C CS 0603/Y5V/50V 0.1u Z T	C128	1
345	E-C-0404-3815	2346410496P	CAP,CHIP 85°C CS 0603/Y5V/50V 0.1u Z T	C129	1
346	E-C-0404-3815	2346410496P	CAP,CHIP 85°C CS 0603/Y5V/50V 0.1u Z T	C130	1
347	E-C-0404-3815	2346410496P	CAP,CHIP 85°C CS 0603/Y5V/50V 0.1u Z T	C131	1
348	E-C-0404-3815	2346410496P	CAP,CHIP 85°C CS 0603/Y5V/50V 0.1u Z T	C132	1
349	E-C-0404-3815	2346410496P	CAP,CHIP 85°C CS 0603/Y5V/50V 0.1u Z T	C133	1
350	E-C-0404-3815	2346410496P	CAP,CHIP 85°C CS 0603/Y5V/50V 0.1u Z T	C134	1
351	E-C-0404-3815	2346410496P	CAP,CHIP 85°C CS 0603/Y5V/50V 0.1u Z T	C136	1
352	E-C-0404-3815	2346410496P	CAP,CHIP 85°C CS 0603/Y5V/50V 0.1u Z T	C137	1
353	E-C-0404-3815	2346410496P	CAP,CHIP 85°C CS 0603/Y5V/50V 0.1u Z T	C139	1
354	E-C-0404-3815	2346410496P	CAP,CHIP 85°C CS 0603/Y5V/50V 0.1u Z T	C141	1
355	E-C-0404-3815	2346410496P	CAP,CHIP 85°C CS 0603/Y5V/50V 0.1u Z T	C143	1
356	E-C-0404-3815	2346410496P	CAP,CHIP 85°C CS 0603/Y5V/50V 0.1u Z T	C146	1
357	E-C-0404-3815	2346410496P	CAP,CHIP 85°C CS 0603/Y5V/50V 0.1u Z T	C147	1
358	E-C-0404-3815	2346410496P	CAP,CHIP 85°C CS 0603/Y5V/50V 0.1u Z T	C148	1
359	E-C-0404-3815	2346410496P	CAP,CHIP 85°C CS 0603/Y5V/50V 0.1u Z T	C149	1
360	E-C-0404-3815	2346410496P	CAP,CHIP 85°C CS 0603/Y5V/50V 0.1u Z T	C150	1
361	E-C-0404-3815	2346410496P	CAP,CHIP 85°C CS 0603/Y5V/50V 0.1u Z T	C151	1
362	E-C-0404-3815	2346410496P	CAP,CHIP 85°C CS 0603/Y5V/50V 0.1u Z T	C152	1
363	E-C-0404-3815	2346410496P	CAP,CHIP 85°C CS 0603/Y5V/50V 0.1u Z T	C153	1
364	E-C-0404-3815	2346410496P	CAP,CHIP 85°C CS 0603/Y5V/50V 0.1u Z T	C154	1
365	E-C-0404-3815	2346410496P	CAP,CHIP 85°C CS 0603/Y5V/50V 0.1u Z T	C602	1
366	N/A	2346710596P	CAP,CHIP 85°C CS 0603/Y5V/16V 1.0u Z T	C603	1
367	N/A	2346710596P	CAP,CHIP 85°C CS 0603/Y5V/16V 1.0u Z T	C610	1
368	N/A	2346710596P	CAP,CHIP 85°C CS 0603/Y5V/16V 1.0u Z T	C613	1
369	N/A	2346710596P	CAP,CHIP 85°C CS 0603/Y5V/16V 1.0u Z T	C615	1
370	N/A	2346710596P	CAP,CHIP 85°C CS 0603/Y5V/16V 1.0u Z T	C617	1
371	N/A	2347110396P	CAP,CHIP 125°C CS 0805/X7R/50V0.01u K T	C902	1
372	N/A	2347110396P	CAP,CHIP 125°C CS 0805/X7R/50V0.01u K T	C909	1
373	N/A	2347110396P	CAP,CHIP 125°C CS 0805/X7R/50V0.01u K T	C912	1
374	N/A	2347110396P	CAP,CHIP 125°C CS 0805/X7R/50V0.01u K T	R959	1
375	N/A	2347110396P	CAP,CHIP 125°C CS 0805/X7R/50V0.01u K T	R960	1
376	N/A	2347110496P	CAP,CHIP 125°C CS 0805/X7R/50V 0.1u K T	C611	1
377	N/A	2347110496P	CAP,CHIP 125°C CS 0805/X7R/50V 0.1u K T	C616	1
378	N/A	2347110496P	CAP,CHIP 125°C CS 0805/X7R/50V 0.1u K T	C619	1
379	N/A	2347110496P	CAP,CHIP 125°C CS 0805/X7R/50V 0.1u K T	C624	1
380	N/A	2347110596P	CAP,CHIP 125°C CS 0805/X7R/50V 1.0u K T	C605 RA	1
381	N/A	2347110596P	CAP,CHIP 125°C CS 0805/X7R/50V 1.0u K T	C606 RA	1
382	N/A	2347110596P	CAP,CHIP 125°C CS 0805/X7R/50V 1.0u K T	C608 RA	1
383	N/A	2347110596P	CAP,CHIP 125°C CS 0805/X7R/50V 1.0u K T	C625 RA	1
384	N/A	2347110596P	CAP,CHIP 125°C CS 0805/X7R/50V 1.0u K T	C626 RA	1
385	N/A	2347147296P	CAP,CHIP 125°C CS 0805/X7R/50V4700p K T	C906	1
386	N/A	2347147396P	CAP,CHIP 125°C CS 0805/X7R/50V 0.047u K T	C816	1
387	N/A	2347168396P	CAP,CHIP CS 0805/X7R/50V 0.068u K T	C910	1
388	N/A	2347210596P	CAP,CHIP 125°C CS 0805/X7R/25V 1.0u K T	C605 RB	1
389	N/A	2347210596P	CAP,CHIP 125°C CS 0805/X7R/25V 1.0u K T	C606 RB	1
390	N/A	2347210596P	CAP,CHIP 125°C CS 0805/X7R/25V 1.0u K T	C608 RB	1

Item	ViewSonic P/N	Ref. P/N	Description	Universal number#	Q'ty
391	N/A	2347210596P	CAP,CHIP 125°C CS 0805/X7R/25V 1.0u K T	C625 RB	1
392	N/A	2347210596P	CAP,CHIP 125°C CS 0805/X7R/25V 1.0u K T	C626 RB	1
393	N/A	2347210596P	CAP,CHIP 125°C CS 0805/X7R/25V 1.0u K T	C830	1
394	N/A	2347210596P	CAP,CHIP 125°C CS 0805/X7R/25V 1.0u K T	C903	1
395	N/A	2347410396P	CAP,CHIP 85°C CS 0805/Y5V/50V0.01u Z T	C907	1
396	N/A	2347410396P	CAP,CHIP 85°C CS 0805/Y5V/50V0.01u Z T	C946	1
397	N/A	2347410396P	CAP,CHIP 85°C CS 0805/Y5V/50V0.01u Z T	C947	1
398	N/A	2347410396P	CAP,CHIP 85°C CS 0805/Y5V/50V0.01u Z T	C948	1
399	N/A	2347410396P	CAP,CHIP 85°C CS 0805/Y5V/50V0.01u Z T	C949	1
400	N/A	2347410496P	CAP,CHIP 85°C CS 0805/Y5V/50V 0.1u Z T	C810	1
401	N/A	2347410496P	CAP,CHIP 85°C CS 0805/Y5V/50V 0.1u Z T	C817	1
402	N/A	2347410496P	CAP,CHIP 85°C CS 0805/Y5V/50V 0.1u Z T	C818	1
403	N/A	2347410496P	CAP,CHIP 85°C CS 0805/Y5V/50V 0.1u Z T	C908	1
404	N/A	2347410496P	CAP,CHIP 85°C CS 0805/Y5V/50V 0.1u Z T	C916	1
405	N/A	2347410496P	CAP,CHIP 85°C CS 0805/Y5V/50V 0.1u Z T	C917	1
406	N/A	2347622596P	CAP,CHIP 85°C CS 0805/Y5V/16V 2.2u Z T	C813	1
407	N/A	2347622596P	CAP,CHIP 85°C CS 0805/Y5V/16V 2.2u Z T	C911	1
408	N/A	2349901496P	CAP,CHIP SPEC 5.6p/3KV NPO/1808 ±D	C926	1
409	N/A	2349901496P	CAP,CHIP SPEC 5.6p/3KV NPO/1808 ±D	C927	1
410	N/A	2349901496P	CAP,CHIP SPEC 5.6p/3KV NPO/1808 ±D	C928	1
411	N/A	2349901496P	CAP,CHIP SPEC 5.6p/3KV NPO/1808 ±D	C929	1
412	N/A	2349901496P	CAP,CHIP SPEC 5.6p/3KV NPO/1808 ±D	C930	1
413	N/A	2349901496P	CAP,CHIP SPEC 5.6p/3KV NPO/1808 ±D	C931	1
414	N/A	2349901596P	CAP,CHIP SPEC 100p/3KV NPO/1808 ±J	C918	1
415	N/A	2349901596P	CAP,CHIP SPEC 100p/3KV NPO/1808 ±J	C919	1
416	N/A	2349901596P	CAP,CHIP SPEC 100p/3KV NPO/1808 ±J	C920	1
417	N/A	2349901596P	CAP,CHIP SPEC 100p/3KV NPO/1808 ±J	C922	1
418	N/A	2349901596P	CAP,CHIP SPEC 100p/3KV NPO/1808 ±J	C923	1
419	N/A	2349901596P	CAP,CHIP SPEC 100p/3KV NPO/1808 ±J	C924	1
420	N/A	2357512718P	EC HI-RIPPLE 105C 400V EC 120u/400V 18*36P=7.5 S	C805	1
421	E-Q-0402-1607	2360100596P	XISTOR,PNP R SMD MMBT3906-NL SOT23FAIRCHILD	Q105 RD	1
422	E-Q-0402-1607	2360100596P	XISTOR,PNP R SMD MMBT3906-NL SOT23FAIRCHILD	Q106 RD	1
423	E-Q-0402-1607	2360100596P	XISTOR,PNP R SMD MMBT3906-NL SOT23FAIRCHILD	Q107 RD	1
424	E-Q-0402-1607	2360100596P	XISTOR,PNP R SMD MMBT3906-NL SOT23FAIRCHILD	Q108 RD	1
425	N/A	2360100696P	XISTOR,PNP R SMD PMBS3906 SOT-23 PHILIPS	Q105 RB	1
426	N/A	2360100696P	XISTOR,PNP R SMD PMBS3906 SOT-23 PHILIPS	Q106 RB	1
427	N/A	2360100696P	XISTOR,PNP R SMD PMBS3906 SOT-23 PHILIPS	Q107 RB	1
428	N/A	2360100696P	XISTOR,PNP R SMD PMBS3906 SOT-23 PHILIPS	Q108 RB	1
429	E-Q-0402-1607	2360100796P	XISTOR,PNP R SMD MMBT3906-F SOT-23DIODES	Q105 RC	1
430	E-Q-0402-1607	2360100796P	XISTOR,PNP R SMD MMBT3906-F SOT-23DIODES	Q106 RC	1
431	E-Q-0402-1607	2360100796P	XISTOR,PNP R SMD MMBT3906-F SOT-23DIODES	Q107 RC	1
432	E-Q-0402-1607	2360100796P	XISTOR,PNP R SMD MMBT3906-F SOT-23DIODES	Q108 RC	1
433	N/A	2360100896P	XISTOR,PNP R SMD MMBT3906LT1G SOT-23 ON	Q105 RA	1
434	N/A	2360100896P	XISTOR,PNP R SMD MMBT3906LT1G SOT-23 ON	Q106 RA	1
435	N/A	2360100896P	XISTOR,PNP R SMD MMBT3906LT1G SOT-23 ON	Q107 RA	1
436	N/A	2360100896P	XISTOR,PNP R SMD MMBT3906LT1G SOT-23 ON	Q108 RA	1
437	E-Q-0402-1608	2360300896P	XISTOR,NPN R SMD MMBT3904K SOT-23 FAIRCHILD	Q104 RB	1
438	E-Q-0402-1608	2360300896P	XISTOR,NPN R SMD MMBT3904K SOT-23 FAIRCHILD	Q109 RB	1
439	E-Q-0402-1608	2360300896P	XISTOR,NPN R SMD MMBT3904K SOT-23 FAIRCHILD	Q602 RB	1
440	E-Q-0402-1608	2360300896P	XISTOR,NPN R SMD MMBT3904K SOT-23 FAIRCHILD	Q905 RC	1
441	E-Q-0402-1608	2360300896P	XISTOR,NPN R SMD MMBT3904K SOT-23 FAIRCHILD	Q906 RC	1
442	E-Q-0402-1608	2360300896P	XISTOR,NPN R SMD MMBT3904K SOT-23 FAIRCHILD	Q907 RC	1
443	E-Q-0402-1608	2360300896P	XISTOR,NPN R SMD MMBT3904K SOT-23 FAIRCHILD	Q909 RC	1
444	E-Q-0402-1608	2360300896P	XISTOR,NPN R SMD MMBT3904K SOT-23 FAIRCHILD	Q910 RC	1
445	E-Q-0402-1608	2360300896P	XISTOR,NPN R SMD MMBT3904K SOT-23 FAIRCHILD	Q911 RC	1
446	E-Q-0402-1608	2360300896P	XISTOR,NPN R SMD MMBT3904K SOT-23 FAIRCHILD	Q914 RC	1
447	E-Q-0402-1180	2360301296P	XISTOR,NPN R SMD MMBT3904-F SOT23 DIODES	Q104 RA	1
448	E-Q-0402-1180	2360301296P	XISTOR,NPN R SMD MMBT3904-F SOT23 DIODES	Q109 RA	1
449	E-Q-0402-1180	2360301296P	XISTOR,NPN R SMD MMBT3904-F SOT23 DIODES	Q602 RA	1
450	E-Q-0402-1180	2360301296P	XISTOR,NPN R SMD MMBT3904-F SOT23 DIODES	Q905 RA	1
451	E-Q-0402-1180	2360301296P	XISTOR,NPN R SMD MMBT3904-F SOT23 DIODES	Q906 RA	1
452	E-Q-0402-1180	2360301296P	XISTOR,NPN R SMD MMBT3904-F SOT23 DIODES	Q907 RA	1
453	E-Q-0402-1180	2360301296P	XISTOR,NPN R SMD MMBT3904-F SOT23 DIODES	Q909 RA	1
454	E-Q-0402-1180	2360301296P	XISTOR,NPN R SMD MMBT3904-F SOT23 DIODES	Q910 RA	1
455	E-Q-0402-1180	2360301296P	XISTOR,NPN R SMD MMBT3904-F SOT23 DIODES	Q911 RA	1
456	E-Q-0402-1180	2360301296P	XISTOR,NPN R SMD MMBT3904-F SOT23 DIODES	Q914 RA	1
457	E-Q-0402-1624	2360301696P	XISTOR,NPN R SMD PMBS3904 SOT-23 PHILIPS	Q104 RC	1
458	E-Q-0402-1624	2360301696P	XISTOR,NPN R SMD PMBS3904 SOT-23 PHILIPS	Q109 RC	1
459	E-Q-0402-1624	2360301696P	XISTOR,NPN R SMD PMBS3904 SOT-23 PHILIPS	Q602 RC	1
460	E-Q-0402-1624	2360301696P	XISTOR,NPN R SMD PMBS3904 SOT-23 PHILIPS	Q905 RB	1
461	E-Q-0402-1624	2360301696P	XISTOR,NPN R SMD PMBS3904 SOT-23 PHILIPS	Q906 RB	1
462	E-Q-0402-1624	2360301696P	XISTOR,NPN R SMD PMBS3904 SOT-23 PHILIPS	Q907 RB	1
463	E-Q-0402-1624	2360301696P	XISTOR,NPN R SMD PMBS3904 SOT-23 PHILIPS	Q909 RB	1
464	E-Q-0402-1624	2360301696P	XISTOR,NPN R SMD PMBS3904 SOT-23 PHILIPS	Q910 RB	1
465	E-Q-0402-1624	2360301696P	XISTOR,NPN R SMD PMBS3904 SOT-23 PHILIPS	Q911 RB	1
466	E-Q-0402-1624	2360301696P	XISTOR,NPN R SMD PMBS3904 SOT-23 PHILIPS	Q914 RB	1
467	N/A	2360501396P	FET,P-CH SMD AP2305GN SOT23 APEC	Q103 RA	1
468	N/A	2360502196P	FET,P-CH SMD STS2301 SOT-23SamHop	Q103 RB	1
469	N/A	2360608496P	FET,N-CH(SMD) 2N7002K-T1-E3 SOT-23VISHAY	Q908 RB	1

Item	ViewSonic P/N	Ref. P/N	Description	Universal number#	Q'ty
470	N/A	2360608496P	FET,N-CH(SMD) 2N7002K-T1-E3 SOT-23VISHAY	Q912 RB	1
471	N/A	2360609096P	FET,N-CH(SMD) 2N7002K SOT-23 PHILIPS	Q908 RC	1
472	N/A	2360609096P	FET,N-CH(SMD) 2N7002K SOT-23 PHILIPS	Q912 RC	1
473	N/A	2360609196P	FET,N-CH(SMD) 2N7002LT1G SOT-23 ON	Q908 RD	1
474	N/A	2360609196P	FET,N-CH(SMD) 2N7002LT1G SOT-23 ON	Q912 RD	1
475	N/A	2360609496P	FET,N-CH(SMD) 2N7002G SOT-23 Pyramis	Q908 RA	1
476	N/A	2360609496P	FET,N-CH(SMD) 2N7002G SOT-23 Pyramis	Q912 RA	1
477	N/A	2360700996P	FET P&N-CH AM4502C SO-8 Analog Power	Q901 RA	1
478	N/A	2360700996P	FET P&N-CH AM4502C SO-8 Analog Power	Q902 RA	1
479	N/A	2360700996P	FET P&N-CH AM4502C SO-8 Analog Power	Q903 RA	1
480	N/A	2360700996P	FET P&N-CH AM4502C SO-8 Analog Power	Q904 RA	1
481	N/A	2360701096P	FET P&N-CH AP4509GM SO-8APEC	Q901 RB	1
482	N/A	2360701096P	FET P&N-CH AP4509GM SO-8APEC	Q902 RB	1
483	N/A	2360701096P	FET P&N-CH AP4509GM SO-8APEC	Q903 RB	1
484	N/A	2360701096P	FET P&N-CH AP4509GM SO-8APEC	Q904 RB	1
485	N/A	2360701196P	FET P&N-CH AP4511GM SO-8APEC	Q901 RC	1
486	N/A	2360701196P	FET P&N-CH AP4511GM SO-8APEC	Q902 RC	1
487	N/A	2360701196P	FET P&N-CH AP4511GM SO-8APEC	Q903 RC	1
488	N/A	2360701196P	FET P&N-CH AP4511GM SO-8APEC	Q904 RC	1
489	N/A	2360701296P	FET P&N-CH STM8306 SO-8 SamHop	Q901 RD	1
490	N/A	2360701296P	FET P&N-CH STM8306 SO-8 SamHop	Q902 RD	1
491	N/A	2360701296P	FET P&N-CH STM8306 SO-8 SamHop	Q903 RD	1
492	N/A	2360701296P	FET P&N-CH STM8306 SO-8 SamHop	Q904 RD	1
493	N/A	2361320291P	XISTOR,NPN R KSC2328A-Y TO-92 FAIRCHILD	Q804	1
494	N/A	2361610000P	FET,N-CH AP09N70GI-A TO-220CMF APEC	Q801 RB	1
495	N/A	2361612200P	FET,N-CH AP2761GI-A TO-220CFM APEC	Q801 RA	1
496	N/A	2361612300P	FET,N-CH FQPF7N65C TO-220FFAIRCHILD	Q801 RC	1
497	E-PC-0411-0083	2362401800P	PHOTO COUPLR TLP621 TOSHIBA	I802 RA	1
498	E-00005306	2362402300P	PHOTO COUPLR TLP421 DIP4 TOSHIBA	I802 RB	1
499	E-D-0403-1465	2363220395P	DIODE,RECT UF4004G DO-41 PEC	D803 RC	1
500	N/A	2363223195P	DIODE,RECT UF4007 DO-204ALGS	D802 RB	1
501	N/A	2363230795P	DIODE,RECT 1H5G-TG-WS R-1WILLAS	D803 RA	1
502	N/A	2363231995P	DIODE,RECT UF4007 DO-41 1000V/1A PEC	D802 RA	1
503	N/A	2363234695P	DIODE,RECT BYV26EGP DO-15VISHAY	D802 RC	1
504	N/A	2363235695P	DIODE,RECT UF1004 DO-41 DIODES	D803 RD	1
505	N/A	2363235795P	DIODE,RECT UF1007 DO-41 DIODES	D802 RD	1
506	N/A	2363303900P	DIODE,SCHOTTKY GMR10H125C TO-220AB GAMMA	D810 RA	1
507	N/A	2363304000P	DIODE,SCHOTTKY FCH10U15 TO-220AB NI	D810 RB	1
508	N/A	2363304100P	DIODE,SCHOTTKY SB1060FCT TO-220AB PEC	D812 RA	1
509	N/A	2363304200P	DIODE,SCHOTTKY GMR10H60C TO-220FPAB GAMMA	D812 RB	1
510	N/A	2363304600P	DIODE,SCHOTTKY FQ10U06 TO-220AB NI	D812 RC	1
511	E-00003534	2363600696P	DIODE,SWITCH RLS4148-T11 SOD80C ROHM	D103 RB	1
512	E-00003534	2363600696P	DIODE,SWITCH RLS4148-T11 SOD80C ROHM	D104 RB	1
513	E-00003534	2363600696P	DIODE,SWITCH RLS4148-T11 SOD80C ROHM	D105 RB	1
514	E-00003534	2363600696P	DIODE,SWITCH RLS4148-T11 SOD80C ROHM	D106 RB	1
515	E-00003534	2363600696P	DIODE,SWITCH RLS4148-T11 SOD80C ROHM	D107 RB	1
516	E-00003534	2363600696P	DIODE,SWITCH RLS4148-T11 SOD80C ROHM	D108 RB	1
517	E-00003534	2363600696P	DIODE,SWITCH RLS4148-T11 SOD80C ROHM	D124 RB	1
518	E-00003534	2363600696P	DIODE,SWITCH RLS4148-T11 SOD80C ROHM	D125 RB	1
519	E-00003534	2363600696P	DIODE,SWITCH RLS4148-T11 SOD80C ROHM	D126 RB	1
520	E-00003534	2363600696P	DIODE,SWITCH RLS4148-T11 SOD80C ROHM	D127 RB	1
521	E-00003534	2363600696P	DIODE,SWITCH RLS4148-T11 SOD80C ROHM	D128 RB	1
522	N/A	2363601395P	DIODE,SWITCH 1U4G 400V/1A R-1PEC	D803 RB	1
523	N/A	2363705896P	LED SIA322Y2B1CB YEL/BLU BRIGHTTEK	D701	1
524	E-D-0403-1892	2364200896P	DIODE,RECT(SMD) BAS32L SOD80CPHILIPS	D103 RC	1
525	E-D-0403-1892	2364200896P	DIODE,RECT(SMD) BAS32L SOD80CPHILIPS	D104 RC	1
526	E-D-0403-1892	2364200896P	DIODE,RECT(SMD) BAS32L SOD80CPHILIPS	D105 RC	1
527	E-D-0403-1892	2364200896P	DIODE,RECT(SMD) BAS32L SOD80CPHILIPS	D106 RC	1
528	E-D-0403-1892	2364200896P	DIODE,RECT(SMD) BAS32L SOD80CPHILIPS	D107 RC	1
529	E-D-0403-1892	2364200896P	DIODE,RECT(SMD) BAS32L SOD80CPHILIPS	D108 RC	1
530	E-D-0403-1892	2364200896P	DIODE,RECT(SMD) BAS32L SOD80CPHILIPS	D124 RC	1
531	E-D-0403-1892	2364200896P	DIODE,RECT(SMD) BAS32L SOD80CPHILIPS	D125 RC	1
532	E-D-0403-1892	2364200896P	DIODE,RECT(SMD) BAS32L SOD80CPHILIPS	D126 RC	1
533	E-D-0403-1892	2364200896P	DIODE,RECT(SMD) BAS32L SOD80CPHILIPS	D127 RC	1
534	E-D-0403-1892	2364200896P	DIODE,RECT(SMD) BAS32L SOD80CPHILIPS	D128 RC	1
535	E-D-0403-1892	2364200896P	DIODE,RECT(SMD) BAS32L SOD80CPHILIPS	D804 RC	1
536	N/A	2364500396P	DIODE,ZENER SMD RLZ5.6B 5.45-5.73V LL-34 ROHM	D101 RC	1
537	N/A	2364500396P	DIODE,ZENER SMD RLZ5.6B 5.45-5.73V LL-34 ROHM	D102 RC	1
538	N/A	2364500396P	DIODE,ZENER SMD RLZ5.6B 5.45-5.73V LL-34 ROHM	D109 RC	1
539	N/A	2364500396P	DIODE,ZENER SMD RLZ5.6B 5.45-5.73V LL-34 ROHM	D110 RC	1
540	N/A	2364500396P	DIODE,ZENER SMD RLZ5.6B 5.45-5.73V LL-34 ROHM	D111 RC	1
541	N/A	2364500396P	DIODE,ZENER SMD RLZ5.6B 5.45-5.73V LL-34 ROHM	D113 RC	1
542	N/A	2364500396P	DIODE,ZENER SMD RLZ5.6B 5.45-5.73V LL-34 ROHM	D122 RC	1
543	N/A	2364500396P	DIODE,ZENER SMD RLZ5.6B 5.45-5.73V LL-34 ROHM	D123 RC	1
544	N/A	2364500396P	DIODE,ZENER SMD RLZ5.6B 5.45-5.73V LL-34 ROHM	D129 RC	1
545	E-D-0403-1779	2364503996P	DIODE,ZENER SMD BVZ55-C5V6 5% SOD-80C PHILIPS	D101 RA	1
546	E-D-0403-1779	2364503996P	DIODE,ZENER SMD BVZ55-C5V6 5% SOD-80C PHILIPS	D102 RA	1
547	E-D-0403-1779	2364503996P	DIODE,ZENER SMD BVZ55-C5V6 5% SOD-80C PHILIPS	D109 RA	1
548	E-D-0403-1779	2364503996P	DIODE,ZENER SMD BVZ55-C5V6 5% SOD-80C PHILIPS	D110 RA	1

Item	ViewSonic P/N	Ref. P/N	Description	Universal number#	Q'ty
549	E-D-0403-1779	2364503996P	DIODE,ZENER SMD BZV55-C5V6 5% SOD-80C PHILIPS	D111 RA	1
550	E-D-0403-1779	2364503996P	DIODE,ZENER SMD BZV55-C5V6 5% SOD-80C PHILIPS	D113 RA	1
551	E-D-0403-1779	2364503996P	DIODE,ZENER SMD BZV55-C5V6 5% SOD-80C PHILIPS	D122 RA	1
552	E-D-0403-1779	2364503996P	DIODE,ZENER SMD BZV55-C5V6 5% SOD-80C PHILIPS	D123 RA	1
553	E-D-0403-1779	2364503996P	DIODE,ZENER SMD BZV55-C5V6 5% SOD-80C PHILIPS	D129 RA	1
554	E-D-0403-2808	2364505616P	DIODE,ZENER SMD TZMC5V6 SOD-80 5.2-6.0V VISHAY	D101 RB	1
555	E-D-0403-2808	2364505616P	DIODE,ZENER SMD TZMC5V6 SOD-80 5.2-6.0V VISHAY	D102 RB	1
556	E-D-0403-2808	2364505616P	DIODE,ZENER SMD TZMC5V6 SOD-80 5.2-6.0V VISHAY	D109 RB	1
557	E-D-0403-2808	2364505616P	DIODE,ZENER SMD TZMC5V6 SOD-80 5.2-6.0V VISHAY	D110 RB	1
558	E-D-0403-2808	2364505616P	DIODE,ZENER SMD TZMC5V6 SOD-80 5.2-6.0V VISHAY	D111 RB	1
559	E-D-0403-2808	2364505616P	DIODE,ZENER SMD TZMC5V6 SOD-80 5.2-6.0V VISHAY	D113 RB	1
560	E-D-0403-2808	2364505616P	DIODE,ZENER SMD TZMC5V6 SOD-80 5.2-6.0V VISHAY	D122 RB	1
561	E-D-0403-2808	2364505616P	DIODE,ZENER SMD TZMC5V6 SOD-80 5.2-6.0V VISHAY	D123 RB	1
562	E-D-0403-2808	2364505616P	DIODE,ZENER SMD TZMC5V6 SOD-80 5.2-6.0V VISHAY	D129 RB	1
563	N/A	2364510496P	DIODE,ZENER SMD HZK15TR LLD HITACHI	D808 RA	1
564	N/A	2364510496P	DIODE,ZENER SMD HZK15TR LLD HITACHI	D809 RA	1
565	N/A	2364515036P	DIODE,ZENER SMD RLZ15C SOD-80ROHM	D808 RB	1
566	N/A	2364515036P	DIODE,ZENER SMD RLZ15C SOD-80ROHM	D809 RB	1
567	N/A	2364600396P	DIODE,SWITCH SMD (EOL) LL4148 SOD-80 DIODES	D804 RB	1
568	N/A	2364600496P	DIODE,SWITCH SMD MM4148 SOD80C GRANDE	D103 RA	1
569	N/A	2364600496P	DIODE,SWITCH SMD MM4148 SOD80C GRANDE	D104 RA	1
570	N/A	2364600496P	DIODE,SWITCH SMD MM4148 SOD80C GRANDE	D105 RA	1
571	N/A	2364600496P	DIODE,SWITCH SMD MM4148 SOD80C GRANDE	D106 RA	1
572	N/A	2364600496P	DIODE,SWITCH SMD MM4148 SOD80C GRANDE	D107 RA	1
573	N/A	2364600496P	DIODE,SWITCH SMD MM4148 SOD80C GRANDE	D108 RA	1
574	N/A	2364600496P	DIODE,SWITCH SMD MM4148 SOD80C GRANDE	D124 RA	1
575	N/A	2364600496P	DIODE,SWITCH SMD MM4148 SOD80C GRANDE	D125 RA	1
576	N/A	2364600496P	DIODE,SWITCH SMD MM4148 SOD80C GRANDE	D126 RA	1
577	N/A	2364600496P	DIODE,SWITCH SMD MM4148 SOD80C GRANDE	D127 RA	1
578	N/A	2364600496P	DIODE,SWITCH SMD MM4148 SOD80C GRANDE	D128 RA	1
579	N/A	2364600496P	DIODE,SWITCH SMD MM4148 SOD80C GRANDE	D804 RD	1
580	N/A	2364600996P	DIODE,SWITCH SMD BAV99 SOT23DIODES	D901 RC	1
581	N/A	2364600996P	DIODE,SWITCH SMD BAV99 SOT23DIODES	D902 RC	1
582	N/A	2364600996P	DIODE,SWITCH SMD BAV99 SOT23DIODES	D903 RC	1
583	N/A	2364600996P	DIODE,SWITCH SMD BAV99 SOT23DIODES	D904 RC	1
584	N/A	2364600996P	DIODE,SWITCH SMD BAV99 SOT23DIODES	D905 RC	1
585	N/A	2364600996P	DIODE,SWITCH SMD BAV99 SOT23DIODES	D906 RC	1
586	N/A	2364601096P	DIODE,SWITCH SMD BAV99 SOT-23 PHILIPS	D901 RB	1
587	N/A	2364601096P	DIODE,SWITCH SMD BAV99 SOT-23 PHILIPS	D902 RB	1
588	N/A	2364601096P	DIODE,SWITCH SMD BAV99 SOT-23 PHILIPS	D903 RB	1
589	N/A	2364601096P	DIODE,SWITCH SMD BAV99 SOT-23 PHILIPS	D904 RB	1
590	N/A	2364601096P	DIODE,SWITCH SMD BAV99 SOT-23 PHILIPS	D905 RB	1
591	N/A	2364601096P	DIODE,SWITCH SMD BAV99 SOT-23 PHILIPS	D906 RB	1
592	E-00003830	2364601396P	DIODE,SWITCH SMD 1N4148W-7-F SOD-123 DIODES	D103 RD	1
593	E-00003830	2364601396P	DIODE,SWITCH SMD 1N4148W-7-F SOD-123 DIODES	D104 RD	1
594	E-00003830	2364601396P	DIODE,SWITCH SMD 1N4148W-7-F SOD-123 DIODES	D105 RD	1
595	E-00003830	2364601396P	DIODE,SWITCH SMD 1N4148W-7-F SOD-123 DIODES	D106 RD	1
596	E-00003830	2364601396P	DIODE,SWITCH SMD 1N4148W-7-F SOD-123 DIODES	D107 RD	1
597	E-00003830	2364601396P	DIODE,SWITCH SMD 1N4148W-7-F SOD-123 DIODES	D108 RD	1
598	E-00003830	2364601396P	DIODE,SWITCH SMD 1N4148W-7-F SOD-123 DIODES	D124 RD	1
599	E-00003830	2364601396P	DIODE,SWITCH SMD 1N4148W-7-F SOD-123 DIODES	D125 RD	1
600	E-00003830	2364601396P	DIODE,SWITCH SMD 1N4148W-7-F SOD-123 DIODES	D126 RD	1
601	E-00003830	2364601396P	DIODE,SWITCH SMD 1N4148W-7-F SOD-123 DIODES	D127 RD	1
602	E-00003830	2364601396P	DIODE,SWITCH SMD 1N4148W-7-F SOD-123 DIODES	D128 RD	1
603	E-00003830	2364601396P	DIODE,SWITCH SMD 1N4148W-7-F SOD-123 DIODES	D804 RA	1
604	N/A	2364601496P	DIODE,SWITCH SMD BAV99PT SOT-23 CHENMKO	D901 RA	1
605	N/A	2364601496P	DIODE,SWITCH SMD BAV99PT SOT-23 CHENMKO	D902 RA	1
606	N/A	2364601496P	DIODE,SWITCH SMD BAV99PT SOT-23 CHENMKO	D903 RA	1
607	N/A	2364601496P	DIODE,SWITCH SMD BAV99PT SOT-23 CHENMKO	D904 RA	1
608	N/A	2364601496P	DIODE,SWITCH SMD BAV99PT SOT-23 CHENMKO	D905 RA	1
609	N/A	2364601496P	DIODE,SWITCH SMD BAV99PT SOT-23 CHENMKO	D906 RA	1
610	N/A	2364601696P	DIODE,SWITCH SMD BAV70 SOT-23 PEC	D907 RB	1
611	N/A	2364601696P	DIODE,SWITCH SMD BAV70 SOT-23 PEC	D908 RB	1
612	N/A	2364601696P	DIODE,SWITCH SMD BAV70 SOT-23 PEC	D909 RB	1
613	N/A	2364601896P	DIODE,SWITCH SMD BAV70 SOT-23 PHILIPS	D907 RA	1
614	N/A	2364601896P	DIODE,SWITCH SMD BAV70 SOT-23 PHILIPS	D908 RA	1
615	N/A	2364601896P	DIODE,SWITCH SMD BAV70 SOT-23 PHILIPS	D909 RA	1
616	N/A	2365100996P	MEMORY IC AT24C16AN-10SU-2.7 SO-8 AMTEL	I105 RB	1
617	N/A	2365106396P	MEMORY IC (EEPROM) M24C16-WMN6TP SO-8ST	I105 RC	1
618	E-IC-0401-2152	2365321991P	LINEAR IC KA431AZTA TO-92 FAIRCHILD	I803 RC	1
619	N/A	2365327691P	LINEAR IC CM431GDCN TO-92CHAMPION	I803 RB	1
620	N/A	2365328191P	LINEAR IC AP431VLA TO-92ATC	I803 RA	1
621	N/A	2365335076P	LINEAR IC CM1117GDCM223 SOT223 CHAMPION	I102 RC	1
622	N/A	2365335086P	LINEAR IC AIC1117A-18PY SOT223AIC	I102 RB	1
623	N/A	2365335266P	LINEAR IC LD7575PS SOP-8Leadtrend	I801	1
624	N/A	2365335316P	LINEAR IC OZ9910GN SOP-16O2-Micro	I901	1
625	N/A	2365335436P	LINEAR IC TPA2008D2PWP HTSSOP-24 TI	I601	1
626	N/A	2365425716P	DIGITAL IC RTD2553V-LF PQFP-128 REALTEK	I104	1
627	N/A	2365425726P	DIGITAL IC RTD2120L-LF LQFP-48REALTEK	I106	1

Item	ViewSonic P/N	Ref. P/N	Description	Universal number#	Q'ty
628	N/A	2365807196P	IC,LINEAR(SMD) AMC1117-3.3 SOT-223 ADD	I101 RA	1
629	E-IC-0401-2924	2365808196P	IC,LINEAR(SMD) AP1117E33LA SOT-223AnaChip	I101 RC	1
630	N/A	2365808396P	IC,LINEAR(SMD) AIC1117-33PY SOT-223AIC	I101 RD	1
631	N/A	2365809496P	IC,LINEAR(SMD) CM1117SCM-3.3V SOT223 CHAMPION	I101 RB	1
632	N/A	2365813696P	IC,LINEAR(SMD) AP1117E18LA SOT-223AnaChip	I102 RA	1
633	N/A	2365915896P	IC,DIGITAL SMD 24LC16BT/SN SO-8 MICROCHIP	I105 RA	1
634	N/A	2368502400P	RECT,BRIDGE GBU4K 4A/800V PEC	D801 RA	1
635	N/A	2368502900P	RECT,BRIDGE GBU4K 4A/800V MOSPEC	D801 RB	1
636	N/A	2369105701P	XTAL,OSC 24.000MHZ/49US0.1mw/16PF	X101	1
637	N/A	2371110901P	COIL,CHOKE R4*12 1.0uH 1.0mm/8.5Ts	L901	1
638	N/A	2371115001P	COIL,CHOKE 15uH/ 8*10 UEW 0.5mm/21.5Ts	L603	1
639	N/A	2371115001P	COIL,CHOKE 15uH/ 8*10 UEW 0.5mm/21.5Ts	L604	1
640	N/A	2371115001P	COIL,CHOKE 15uH/ 8*10 UEW 0.5mm/21.5Ts	L605	1
641	N/A	2371115001P	COIL,CHOKE 15uH/ 8*10 UEW 0.5mm/21.5Ts	L606	1
642	N/A	2371154600P	COIL,CHOKE R6*20 5.2uH 0.9mm/145.5Ts	L807	1
643	N/A	2371154600P	COIL,CHOKE R6*20 5.2uH 0.9mm/145.5Ts	L808	1
644	N/A	2371230311P	LINE FILTER CHOKE ET-20 0.32mm/43+43Ts LSE	L803 RB	1
645	N/A	2371230312P	LINE FILTER CHOKE ET-20 0.32mm/43+43Ts LI TAI	L803 RA	1
646	N/A	2372268995P	COIL,PEAKING 6.8uHKT	L806	1
647	N/A	2374233011P	XFORMER,POWR DS3319 0.65mm/10+15Ts LSE	T801 RB	1
648	N/A	2374233012P	XFORMER,POWR DS3319 0.65mm/10+15Ts LI TAI	T801 RA	1
649	N/A	2374233016P	XFORMER,POWR	T801 RC	1
650	N/A	2374301704P	XFORMER INVERTER TLT-1538 TAILON	T901 RB	1
651	N/A	2374301704P	XFORMER INVERTER TLT-1538 TAILON	T902 RB	1
652	N/A	2374301704P	XFORMER INVERTER TLT-1538 TAILON	T903 RB	1
653	N/A	2374301704P	XFORMER INVERTER TLT-1538 TAILON	T904 RB	1
654	N/A	2374301704P	XFORMER INVERTER TLT-1538 TAILON	T905 RB	1
655	N/A	2374301704P	XFORMER INVERTER TLT-1538 TAILON	T906 RB	1
656	N/A	2374301705P	XFORMER INVERTER TK.4603B.101DARFON	T901 RA	1
657	N/A	2374301705P	XFORMER INVERTER TK.4603B.101DARFON	T902 RA	1
658	N/A	2374301705P	XFORMER INVERTER TK.4603B.101DARFON	T903 RA	1
659	N/A	2374301705P	XFORMER INVERTER TK.4603B.101DARFON	T904 RA	1
660	N/A	2374301705P	XFORMER INVERTER TK.4603B.101DARFON	T905 RA	1
661	N/A	2374301705P	XFORMER INVERTER TK.4603B.101DARFON	T906 RA	1
662	E-L-0407-0013	2379101495P	FERRITE CORE 3.5*9*0.8	L801	1
663	E-L-0407-0013	2379101495P	FERRITE CORE 3.5*9*0.8	L802	1
664	N/A	2379103391P	FERRITE CORE 3.5*6*0.8x2 100MHZ=100ohm Min	L607	1
665	E-00003533	2379520196P	BEAD,HI-CURRENT Z= 200 ohm 0805 I=2.0A	L101	1
666	E-00003533	2379520196P	BEAD,HI-CURRENT Z= 200 ohm 0805 I=2.0A	L102	1
667	N/A	2379820196P	BEAD,HI-IMPEDANCE Z= 200 ohm(200MHZ~) 0805 200mA	L105	1
668	N/A	2379820196P	BEAD,HI-IMPEDANCE Z= 200 ohm(200MHZ~) 0805 200mA	L106	1
669	N/A	2379820196P	BEAD,HI-IMPEDANCE Z= 200 ohm(200MHZ~) 0805 200mA	L107	1
670	E-00008185	2391302007P	SPEAKER ASS'Y 2W/4ohm (R) D.L	W902	1
671	E-00008186	2391302008P	SPEAKER ASS'Y 2W/4ohm (L) D.L	W901	1
672	N/A	2403700600P	TACT SWITCH TSVB-2-D-NP	S702	1
673	N/A	2403700600P	TACT SWITCH TSVB-2-D-NP	S703	1
674	N/A	2403700600P	TACT SWITCH TSVB-2-D-NP	S704	1
675	N/A	2403700600P	TACT SWITCH TSVB-2-D-NP	S705	1
676	N/A	2403700600P	TACT SWITCH TSVB-2-D-NP	S706	1
677	M-SW-0815-0182	2403702200P	TACT SWITCH TSAA-2HUAJIE	S701	1
678	N/A	2404301103P	CONNECTOR JST PH 4P SIDE P=2.0 OR EQUAL	P701	1
679	M-MS-0808-6354	2404301105P	CONNECTOR JST PH 6P SIDE P=2.0 OR EQUAL	P702	1
680	N/A	2404321230P	CONNECTOR CF10301D0T0 CVILUX	P104	1
681	N/A	24043711003P	CONNECTOR JST PH 4P TOP P=2.0 OR EQUAL	P602	1
682	N/A	24043711008P	CONNECTOR JST PH 9P TOP P=2.0 OR EQUAL	P101	1
683	N/A	24043711009P	CONNECTOR JST PH 10P TOP P=2.0 OR EQUAL	P105	1
684	N/A	2404380302P	CONNECTOR 87210-0236 P=3.5 ACE OR EQUAL	P902	1
685	N/A	2404380302P	CONNECTOR 87210-0236 P=3.5 ACE OR EQUAL	P904	1
686	N/A	2404380604P	CONNECTOR FRHS01-D4002P05-N3 FRANCON	P901	1
687	N/A	2404380604P	CONNECTOR FRHS01-D4002P05-N3 FRANCON	P903	1
688	N/A	2404381101P	CONNECTOR 74320-4004 DVI-D MOLEX	P103 RA	1
689	N/A	2404381104P	CONNECTOR QH11121-FP0 DVI-D FOXCONN	P103 RB	1
690	N/A	2404381106P	CONNECTOR 2DS-0341-001 DVI-D S.E	P103 RC	1
691	N/A	2404381107P	CONNECTOR CU072SAHDG DVI-D CVILUX	P103 RD	1
692	N/A	2405106000P	EARPHONE JACK 2SJ-P520-A04 (577C) SINGATRON	P601	1
693	N/A	2407413100P	SOCKET 0711-02-P10-9INALWAYS	S801 RA	1
694	N/A	2407413300P	SOCKET SC-8R-F15A9 SUPERCOM	S801 RB	1
695	N/A	2407430900P	SOCKET DHSB-15FTF7 BLUE(661C)LEOCO	P102	1
696	N/A	2420330161P	FFC CABLE 30P*P0.5mm*L126mm	P980	1
697	A-00006132	2427130097P	AC POWER CORD CHINA WALL 1.83M BLACK	P951	1
698	A-00006133	2427130047P	AC POWER CORD GERMAN WALL1.83M BLACK	P951	1
699	A-00005362	2427130046P	AC POWER CORD USA WALL1.83M BLACK	P951	1
700	N/A	2427404027P	WIRE HARNESS 2+2/4P H/H 1061#24 L=370mm	P603	1
701	N/A	2427409007P	WIRE HARNESS 9/9P H/B 1007#26 L=150mm	P801	1
702	N/A	2427410009P	WIRE HARNESS 4+6/10P H/H 1007#26 L=350/330	P703	1
703	CB-00005507	2427501195P	I/O CABLE D15/D15 20276(4.5) 1.83M BLACK	P961	1
704	CB-00006182	2427501198P	I/O CABLE DVI-D*2 20276(6.0) 1.83M BLACK	P971	1
705	CB-00005735	2427721841P	CABLE EAR 3.5(577C) 2547#28 1.8M BLK	P962	1
706	N/A	2428106075P	JUMPER 0.6 Φ *7.5mm	J801	1

Item	ViewSonic P/N	Ref. P/N	Description	Universal number#	Q'ty
707	N/A	2428106075P	JUMPER 0.6 ϕ *7.5mm	J802	1
708	N/A	2428106075P	JUMPER 0.6 ϕ *7.5mm	J803	1
709	N/A	2428106075P	JUMPER 0.6 ϕ *7.5mm	J804	1
710	N/A	2428106075P	JUMPER 0.6 ϕ *7.5mm	J805	1
711	N/A	2428106075P	JUMPER 0.6 ϕ *7.5mm	J814	1
712	N/A	2428106075P	JUMPER 0.6 ϕ *7.5mm	J820	1
713	N/A	2428106075P	JUMPER 0.6 ϕ *7.5mm	J823	1
714	N/A	2428106075P	JUMPER 0.6 ϕ *7.5mm	J825	1
715	N/A	2428106075P	JUMPER 0.6 ϕ *7.5mm	R908	1
716	N/A	2428106075P	JUMPER 0.6 ϕ *7.5mm	R941	1
717	N/A	2428106075P	JUMPER 0.6 ϕ *7.5mm	R942	1
718	N/A	2428106075P	JUMPER 0.6 ϕ *7.5mm	R943	1
719	N/A	2428106075P	JUMPER 0.6 ϕ *7.5mm	R944	1
720	N/A	2428106075P	JUMPER 0.6 ϕ *7.5mm	R947	1
721	N/A	2428106100P	JUMPER 0.6 ϕ *10.0mm	J806	1
722	N/A	2428106100P	JUMPER 0.6 ϕ *10.0mm	J808	1
723	N/A	2428106100P	JUMPER 0.6 ϕ *10.0mm	J816	1
724	N/A	2428106100P	JUMPER 0.6 ϕ *10.0mm	J817	1
725	N/A	2428106100P	JUMPER 0.6 ϕ *10.0mm	J909	1
726	N/A	2428106125P	JUMPER ϕ 0.6*12.5mm	F901	1
727	N/A	2428106125P	JUMPER ϕ 0.6*12.5mm	J821	1
728	N/A	2428106125P	JUMPER ϕ 0.6*12.5mm	J839	1
729	N/A	2428106125P	JUMPER ϕ 0.6*12.5mm	J912	1
730	N/A	2428106125P	JUMPER ϕ 0.6*12.5mm	L805	1
731	N/A	2428106150P	JUMPER 0.6 ϕ *15.0mm	J807	1
732	N/A	2428106150P	JUMPER 0.6 ϕ *15.0mm	J811	1
733	N/A	2428106150P	JUMPER 0.6 ϕ *15.0mm	J813	1
734	N/A	2428106150P	JUMPER 0.6 ϕ *15.0mm	J815	1
735	N/A	2428106150P	JUMPER 0.6 ϕ *15.0mm	J818	1
736	N/A	2428106150P	JUMPER 0.6 ϕ *15.0mm	J819	1
737	N/A	2428106225P	JUMPER 0.6 ϕ *22.5mm	J822	1
738	N/A	2428106250P	JUMPER 0.6 ϕ 25.00MM	J812	1
739	N/A	2434325603P	SHIELDING TAPE W25*L60mm (AL)	K901	1
740	DC-00008164	2438501251P	CD-OWNER GUIDE VG2030WM-1 VS11425	6P80	1
741	DC-00008109	2002310402P	GUARANT CARDVIEWSONIC WARRANTY CARD-C 2004	6P07	1
742	N/A	2056606025P	SERIAL LABELVS CN WARRANTY CARD SN STICKER	6P08	2
743	N/A	2055613458P	LABEL VIEWSONIC 2005 3C LABEL ROHS	6P10	1
744	M-LB-0813-0863	2056606010P	SERIAL LABEL VIEWSONIC BOX STICKER-G	6P12	1
745	N/A	2056606009P	SERIAL LABEL VIEWSONIC SERVICE STICKER-G	6P15	1

*** Reader's Response***

Dear Readers:

Thank you in advance for your feedback on our Service Manual, which allows continuous improvement of our products. We would appreciate your completion of the Assessment Matrix below, for return to ViewSonic Corporation.

Assessment

A. What do you think about the content of this Service Manual?

<i>Unit</i>	<i>Excellent</i>	<i>Good</i>	<i>Fair</i>	<i>Bad</i>
1. Precautions and Safety Notices				
2. Specification				
3. Front Panel Function Control Description				
4. Circuit Description				
5. Adjustment Procedure				
6. Troubleshooting Flow Chart				
7. Block Diagrams				
8. Schematic Diagrams				
9. PCB Layout Diagrams				
10. Exploded Diagram and Exploded Parts List				
11. Recommended Spare Parts List				

B. Are you satisfied with this Service Manual?

<i>Item</i>	<i>Excellent</i>	<i>Good</i>	<i>Fair</i>	<i>Bad</i>
1. Service Manual Content				
2. Service Manual Layout				
3. The form and listing				

C. Do you have any other opinions or suggestions regarding this service manual?

Reader's basic data:

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Company:			
Add:			
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After completing this form, please return it to ViewSonic Quality Assurance in the USA at facsimile 1-909-839-7943. You may also e-mail any suggestions to the Director, Quality Systems & Processes (marc.maupin@viewsonic.com)