Service Manual

ViewSonic E90fB-4

Model No. VS10794

19” PerfectFlat™ Color Monitor

(E90fB-4_SM Rev. 1a Nov. 2005)

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

Revision History

Revision	SM Editing Date	ECR Number	Description of Changes	Editor
1a	11/24/05		Initial Release	Sophia Kao

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1. Precautions and Safety Notices

WARNING!

This service information is designed for experience repair technicians only and is not designed for use by the general public.

It does not contain warnings or cautions to advise non-technical individuals of potential dangers in attempting to service a product.

Products powered by electricity should be serviced or repaired only by experienced professional technicians.

Any attempt to service or repair the product or products dealt within this service information by anyone else could result in serious injury or death.

1. 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 guide lines.

2. SAFETY CHECK

Care should be taken while servicing this CRT display because of the high voltage used in the deflection circuits. These voltages are exposed in such areas as the associated flyback and yoke circuits.

3. FIRE & SHOCK HAZARD

3-1 Insert an isolation transformer between the CRT display and AC power line before servicing the chassis.

3-2 In servicing pay attention to original lead dress especially in the high voltage circuit. If a short circuit is found, replace all parts which have been overheated as a result of the short circuit.

3-3 All the protective devices munt be reinstalled per original design.

3-4 Soldering must be inspected for possible cold solder joints, frayed leads, damaged insulation, solder splashes or sharp solder points. Be certain to remove all foreign material.

4. LEAKAGE CURRENT COLD CHECK

4-1 Unplug the AC cord and connect a jumper between the two prongs on the plug.

4-2 Turn the CRT display power switch “on”.

4-3 Measure the resistance value with an ohmmeter between the jumpered AC plug and each exposed metallic part on the CRT display such as the metal frame, screwheads, control shafts, etc. When the exposed metallic part has a return path to the chassis, the reading should be 1.8 megohm minimum.

5. LEAKAGE CURRENT HOT CHECK

5-1 Plug the AC cord directly into the AC outlet. Do not use an isolation transformer during this check.

5-2 Connect a 1500 ohm, 10 watt resistor, paralleled by a 0.15uF capacitor between each exposed metallic part and a good earth ground (as shown in Fig.1).

5-3 Use an AC voltmeter with 1000 ohm/volt or more sensitivity and measure the AC voltage across the

combination 1500 ohm resistor and 0.15uF capacitor.

5-4 Move the resistor connection to each exposed metallic part and measure the voltage.

5-5 Reverse the polarity of the AC plug in the AC outlet and repeat the above measurement.

5-6 Voltage measured must not exceed 7.5 volt RMS, from any exposed metallic part to ground A leakage current tester may be used in the above hot check, in which case any current measured must not exceed 5.0 milliamp. In the case of a measurement exceeding the 5.0 milliamp value, a rework is required to eliminate the chance of shock hazard.

Note： High voltage is present when this CRT display is operating. Always discharge the anode of the picture tube to the display chassis to prevent shock hazard.

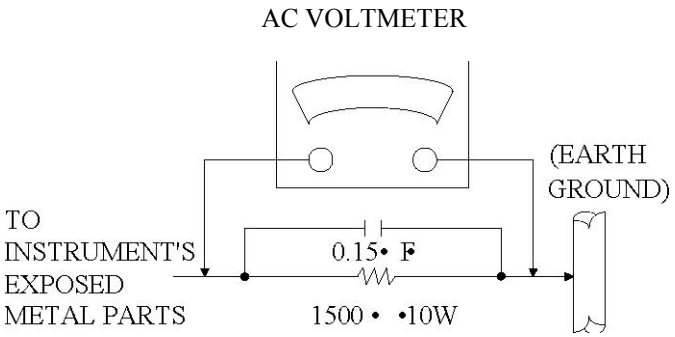


Fig. 1

6. IMPLOSION PROTECTION

Picture tubes are equipped with an integral implosion protection system, but care should be taken to avoid damage and scratching during installation. Use only Panasonic replacement picture tubes.

7. X-RADIATION

WARNING：The only potential source of X-Radiation is the picture tube. However when the high voltage circuit is operating properly there is no possibility of X-Radiation problem. The basic precaution which must be exercised is to keep the high voltage at the following factory-recommended level.

Note： It is important to use an accurate periodically calibrated high voltage meter.

7-1 The procedure for adjusting high voltage is shown on page 12.

7-2 If can not be adjust 25.0 KV at immediate service is required to prevent the possibility of premature component failure.

7-3 To prevent X-Radiation possibility it is essential to use the specified picture tube

IMPORTANT SAFETY NOTICE

There are special components used in this CRT displays which are important for safety. These parts are identified by the international symbol ⚠ on the schematic diagram and on the replacement parts list. It is essential that these critical parts should be replaced with manufacture's specified parts to prevent X-RADIATION, shock, fire, or other hazards. Do not modify the original design or this will void the original parts and labor guarantee.

2. Specification

1. CRT : 46CM(19") 90 Deflection, Shadow mask ,29mm Neck, flat high contrast CRT, 0.21mm(H) / 0.25mm (D) dot pitch, Non-Glare Screen

2. Viewable image Size: 45.7CM (18") diagonal

3. Display Color: Unlimited Colors

4. External Controls:
   Power On/Off, OSD key, Function knob: Contrast, Brightness, Degauss, H-Size, H-Center, V-Center, V-Size, ZOOM, Pincushion, Trapezoid, Pin-Balance, Parallelogram, Rotation, Color Temperature, H-Moire Reduce, V-Morie, Memory Recall, Language, ViewMeter,OSD position select

5. Input Video Signal

Timing	**Timing116**	**Timing119**	**Timing 127**	**Timing 129**	**Timing 139**
Resolution	640*480	640*480	800*600	800*600	1024*768
H(KHz)	31.347	43.269	46.875	53．000	60.023
V(Hz)	60	85.008	75.000	85．000	75.029
Timing	**Timing140**	**Timing 148**	**Timing 156**	**Timing179**	
Resolution	1024*768	1280*1024	1600*1200	640*480	
H(KHz)	69．000	79.976	75．000	31.469	
V(Hz)	85．000	75.025	60．000	70.086	

6. Display Size

Default:	352 mm(H) ×264 mm(V)
Full scan	352 mm(H) ×264 mm(V)

7. Scanning Frequencies

Horizontal:	30KHz ~ 86KHz
Vertical:	50 Hz ~ 160 Hz

8. Factory Preset Timings: 9
   User Timings: 10

9. Misconvergence

A Zone:	0.25 mm Max.
B Zone:	0.35 mm Max.

10. Video Bandwidth: 210 MHz

11. Power Source:
    Switching Mode Power Supply
    AC 90 ~264V, 50/60Hz Universal Type

12. Operating Temperature: 0°C to 40°C Ambient

13. Humidity: 5% to 95% Relative, Non-Condensing

14. Weight: 18.0 kgs / 39.7 (lbs) (Net), 21.2 kgs / 46.7 (lbs) (Gross)

15. Dimensions

	Machine	**Package**
Width:	445 mm (17.6 inches)	540 mm
Height:	424 mm (16.7 inches) 378 mm (14.9 inches) w/o base	530 mm
Depth:	465 mm (18.3 inches)	570mm

16. External Connection:
    15 Pin D-sub Connector
    AC Power Cord

17. Power Consumption Modes :

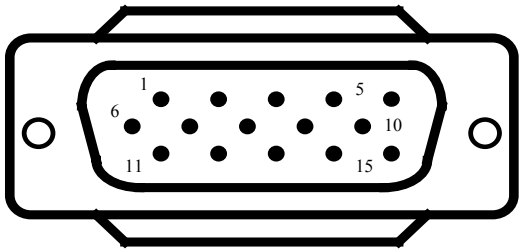
On	<75W max (Green LED)
Sleep	<4W (Amber LED)
Off	<2W

18. Regulatiory/Safety
    UL/CUL, FCC-B, CB, CE, DHHS, ICES 003, NOM, TUV/GS, TUV/Ergo, MPRII, GOST-R, SASO, BSMI, CCC, PSB, Argentina-TUV/S, EPA Energy Star (Y2005 tier1)

OPERATING INSTRUCTIONS

This procedure gives you instructions for installing and using the Color display.

1. Position the display on the desired operation and plug the power cord into a convenient AC outlet. Three-wire power cord must be shielded and is provided as a safety precaution as it connects the chassis and cabinet to the electrical conduit ground. If the AC outlet in your location does not have provisions for the grounded type plug, the installer should attach the proper adapter to ensure a safe ground potential.
2. Connect the 15-pin color display shielded signal cable to your signal system device and lock both screws on the connector to ensure firm grounding. The connector information is as follow:



15 - Pin Color Display Signal Cable

PIN NO.	DESCRIPTION	PIN NO.	DESCRIPTION
1.	RED-V	9.	5V From PC
2.	GREEN-V	10.	Sync GND
3.	BLUE-V	11.	NC
4.	NC	12.	SDA
5.	GND	13.	H- SYNC
6.	GND-R	14.	V- SYNC
7.	GND-G	15.	SCL
8.	GND-B		

3. Apply power to the display by turning the power switch to the "ON" position and allow about thirty seconds for display tube warm-up. The Power-On indicator lights when the display is on.
4. With proper signals feed to the display, a pattern or data should appear on the screen, adjust the brightness and contrast to the most pleasing display.
5. This monitor has power saving function following the VESA DPMS. Be sure to connect the signal cable to the PC.
6. If your color display requires service, it must be returned with the power cord.

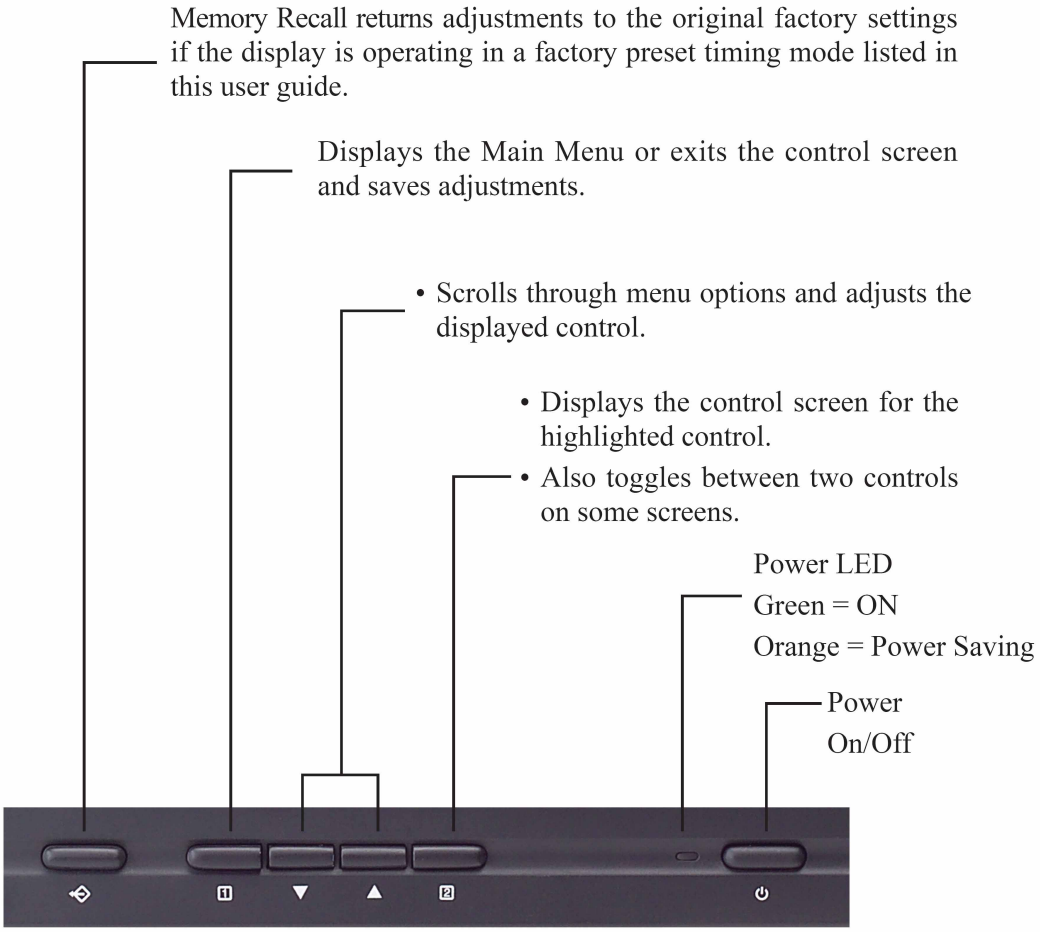
3. Front Panel Function Control Description

Adjusting the Screen Image

Use the buttons on the front control panel to display and adjust the OSD controls .The OSD controls are explained at the top of the next page and are defined in “Main Menu Controls” on page 8.

Main Menu
With OSD controls

Front Control Panel
shown below in detail



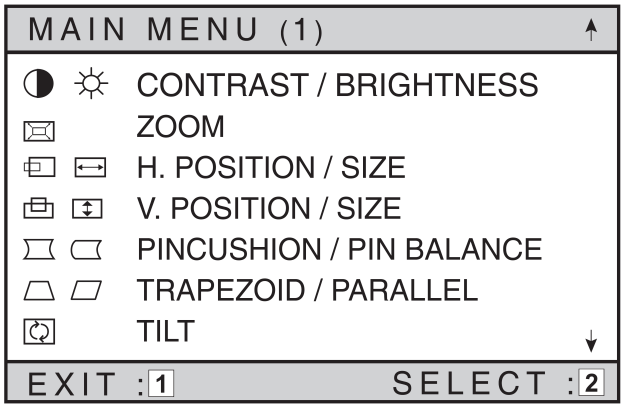
OSD Lock Settings

You have the option of using the On Screen Display (OSD) locking feature, OSD LOCK, to prevent unwanted changes to the current image settings.

- **OSD Lock:** Press and hold the [1] button on the face of the monitor for 10 seconds. The message "OSD LOCK" will then display briefly, indicating that the OSD image settings are now locked.
- **OSD Unlock:** Press and hold the [1] button again for 10 seconds. The message "OSD UNLOCK" will then display briefly, indicating that the OSD image settings are now unlocked.

Do the following to adjust the screen image:

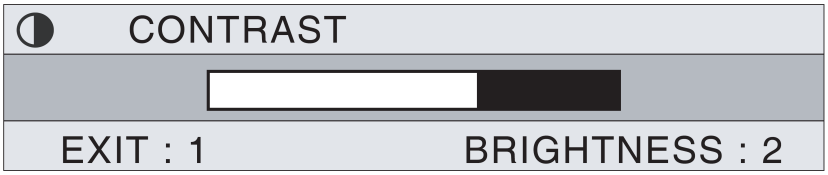
1 To display the Main Menu, press button [1].



2 To select a control you want to adjust, press the arrow buttons on the front control panel of your monitor and scroll through the choices. When the desired control is highlighted, press button [2].

NOTE: Some controls on the Main Menu are listed in pairs, such as Contrast/Brightness. Display control screen (sample shown in step 3 below). Press button [2] to toggle to the next control in the pair.

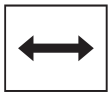
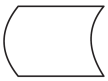
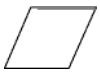
3 To adjust the setting, such as **CONTRAST** in the sample below, press the arrow buttons.



4 To save the control setting and Exit the menu press button [1] twice.

Main Menu Controls

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

Control	Explanation
	**Contrast** adjusts the difference between the image background (black level) and the foreground (white level).
	**Brightness** adjusts the background black level of the screen image
	**ZOOM** expands and contracts the entire screen image
	**Horizontal Position** moves the screen image left or right.
	**Horizontal Size** adjusts width of the screen image.
	**Vertical Position** moves the screen image up or down.
	**Vertical Size** adjusts the height of the screen image.
	**Pincushion** curves the vertical sides of the screen image.
	**Pin Balance** curves the vertical edges of the screen image to the left or right.
	**Trapezoid** adjusts the top and bottom of the screen image until they have equal length.
	**Parallel** slants the vertical edges of the screen image until they are parallel.
	**Tilt** rotates the entire screen image.

Control	Explanation
	**Degauss** removes the build-up of magnetic fields that can cause irregular colors to appear around the edges of screen images. There are two ways to degauss the display: automatically by turning the monitor on, or manually by selecting the Degauss control from the menu. With Degauss selected from the menu, press button [2] to degauss the monitor manually. **Important:** *Do not degauss repeatedly. Doing so can be harmful to the display. Wait at* least 20 minutes (before selecting this control again.
	**ViewMatch® Color** provides several color options: several preset color temperatures and User Color which allows you to adjust red (R), green (G), and blue (B). The factory setting for this product is 9300K (9300° Kelvin). **9300K —** 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. **5000K —** Adds blue and green to the screen image for a darker color. **User Color —** Individual adjustments for red, green, and blue.
	**Moire** reduces interference patterns that appear as ripples, waves, or unwanted background color textures. Interference patterns of this type are most noticeable when viewing images having closely spaced lines or finely detailed patterns.
	**Language** allows you to choose from among several languages for the menus and control screens: English, French, German, Italian, and Spanish.
	**Memory Recall** returns adjustments to the original factory settings if the display is operating in a factory preset timing mode listed in this user guide. *Exception:* This control does not affect changes made with the **User Color** control.
	**OSD Position** allows you to move the on-screen display menus and control screens.
	**ViewMeter** displays the frequencies (horizontal and vertical) coming from the graphics card of the computer.

4. Circuit Description

4-1 MICRO CONTROLLER AND DEFLECTION CIRCUIT

MICRO Controller

The micro controller(IC101) core is a 80C51 type. The micro clock frequency of 12 Mhz is derived from the Xtal oscillator,which is running at 48MHz. The DDC interface is suitable to handle DDC2 by a modified hardware I^2C-bus interface .Standard high current ports,3 ADC pouts with voltage inputs and 4 static standard 8 bit DAC outputs (low interference) and one PWM output for digital control application are implemented. The central processing unit (CPU) manipulates operands in two memory spaces.These are the 1024byte internal data memory(consisting of 256 bytes standard RAM and 768 bytes AUX-RAM) and 48K-byte internal program memory . The programmemory of the SAA4849 consists of 48K bytes ROM.

The SAA4849P provides sync. Processing with full auto sync. Capability, a flexible SMPS block and an extensive set of geometry control facilities. Further the IC generates the drive waveforms for DC coupled vertical boosters to the TDA4863A.

H/V sync signals processor

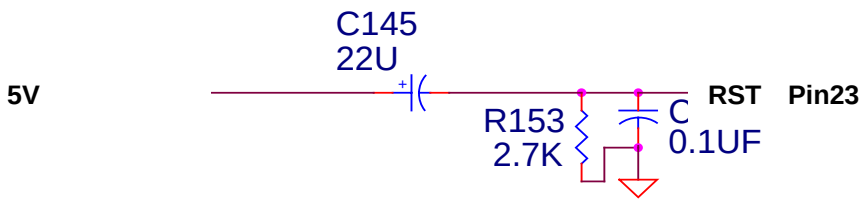
The functions of the sync processor include polarity detection, H-SYNC & V-SYNC signals counting, Programmable SYNC signals output, free running signal generator. Pin52/Pin53 are for the H-SYNC and V-SYNC input. and the polarity are setting in the positive. When no signal input, the Pin49 will output a 75Hz V-SYNC free run signal. The Pin18/20will output a 60KHz H-SYNC free run signal. for the monitor testing use.

Reset Circuit(pin23)

There are three ways possible to invoke a reset and initialize the SAA4849 micro controller part:

Via power-on reset circuit
Via watchdog timer overflow(only micro controller reset)
Via deflection reset after start up(only micro controller reset)

The reset pin(pin23) is connected to a Schmitt trigger for nose reduction. A reset is accomplished by holding the Reset pin HIGH.



x-ray protection

The x-ray ptotection(pin22) input XRAY provides a voltage detector with a precise voltage input for X-ray protection .If the input voltage at XRAY exceeds the upper threshold for 150us to 300us,the system is forced to shut down by switching off vertical,H-and B-drive signals.There are two different ways to handle the system in case of XRAY occurrence:

1. If the xray latch enable bit UCXRAY[2] was set to “0” during startup the system will shut down without any interference of the uC.The deflection controller is set to Idle mode.Restart of the system only possible due to seitching power off/power on.
2. If register bit UCXRAY[2] was set to “1”,micro controller interaction is allowed .If the micro controller doesn’t interrupt the system,the system will shut down to Idle mode.For any interaction of the micro controller the XRAY occurrence has to be acknowledged by the micro controller by clearing the bit SY-STATUS[2].The micro controller take over the control of the handling via software.The actual xray pin status can be read through bit SY-STATUS[1].

Quartz Oscillator(pin45,pin46)

The quartz oscillator circuit is available on pins XTAL1(input) and XTAL2(output) and works together with an external 48MHz 3rd overtone quartz.As a result the quartz oscillator is always running on 48MHz.Other quartz crystal frequencies than 48 MHz cannot be used.External capacitors on XTAL1 and XTAL2 are not allowed.

B+ Control Function Block

The B+control block of the SAA4849 has the same behaviour as the TDA4856 with adapted threshol voltages.The circuit allows the user to choose the trigger edge of the HDRV signal and the polarity of the output stage via I^{2}C-Bus.

The B+ control function block of the SAA4849 consists of an Operational Transconductance Amplifier(OTA), a voltage comparator,a flip-flop and a discharge circuit. This configuration allows easy application for different B+ control concepts.

HPLL

The horizontal part contains a PLL,which works over the full frequency range from 25kHz to 140 kHz.This range can be reduced by a ower and an upper frequency limit(Write Once Registers HPMAX and HPMIN).Via I^{2}C bus the number of 48MHz clock cycles is sent through the register.The slewing speed during mode change is also programmable in a write once register (HSLEW)

After the clocks for the HPLL are switched on,the HPLL starts with a fixed freerunning frequency of 60 kHz.The H-drive pulses are not active and the start up procedure is inhibited.The default setting of register bit HCONTROL [0] will cause the HPLL to slew ,not switch.to the freerunning frequency defined in the I^{2}C register HPFREE(the default value is also 60 kHz).Independent on H-syncs which are possibly present.the HPLL will slew to that freerunning frequency.To achieve an always defined starting point for the startup procedure,this procedure cannot be interrupted.

4-2 TRANSISTOR & DIODE CIRCUIT

LOCATION	CIRCUIT FUNCTION DESCRIPTION
BD901	Bridge Rectifier for AC Source
D910	Clamp Diode for snub CKT
D919	Rectifier for Output Voltage
D922	Rectifier for Output Voltage
D923	Rectifier for Output Voltage
D930	Rectifier for Output Voltage
D918	Rectifier for Output Voltage
IC901	Power IC for Switching Power Control.
Q937, Q937	Use for Power Saving
Q912, Q920	Push-Pull Topology to Drive Q911
Q913	Degaussing Switcher Transistor
IC903	5V Regulator IC
Q403	HOR. Driver Transistor
Q417,Q418,Q416,Q420	Horizontal s correction control MOSFET
Q406	Transistor for H-Size Control
Q705	Brightness Control CKT
Q742	V-Dynamic focus CKT
Q402	Q403 Driver MOSFET
Q901	MOS FET for Switching Power Control.

5. Adjusting Procedure

5-1ADJUSTMENT CONDITIONS AND PRECAUTIONS

1. Approximately 30 minutes should be allowed for warm up before proceeding.
2. Adjustments should be undertaken only on those necessary elements since most of them have been carefully preset at the factory.

5-2 MAIN ADJUSTMENTS

NO.	FUNCTION	LOCATION	DESIGNATION
1.	14V ADJ	PCB - MAIN	VR903
2.	B + ADJ	PCB - MAIN	VR902
3.	SCREEN ADJ	FLY BACK TRANS	T402 SCREEN VR
4.	FOCUS ADJ	FLY BACK TRANS	T402 FOCUS VR1&VR2
5.	ABL ADJ	PCB - MAIN	AB in factory OSD
6.	FUNCTION ADJ -MENU [1]	PCB - MAIN	(SW101)
	-UP ▲	PCB - MAIN	(SW102)
	-DOWN ▼	PCB - MAIN	(SW103)
	-SELECT [2]	PCB - MAIN	(SW104)

5-3 ADJUSTMENT METHOD

1. 14V, B + & HV voltage adjustment:
   A. Chroma-2000 Signal generator or PC equivalent set mode 1, VGA 640X480 pattern 1.0.
   B. Connect a DC Volt meter between TP901 and ground, then adjust VR903to be 14VDC.
   C. Connect a DC Volt meter between TP902 and ground, then adjust VR902 to be 65.5 VDC.

2. Factory preset Timings Adjustment:
   A. Press [1] Key to show OSD window press Up or Down Key to switch the functional controls.
   B. Press the Up Key to select the "ZOOM" function, then press the MENU Key. While do not release the MENU Key until the OSD window changed to the Factory preset window.
   C. The Factory preset window contains the following functional controls. Select one of the control. Then press the Up/Down Key to adjust its value for the optimum picture.

	CONTRAST		V-LINEARITY
	BRIGHTNESS		V-LINEARITY
	H-CENTER	R	R-GAIN
	H-SIZE	G	G-GAIN
	V-CENTER	B	B-GAIN
	V-SIZE	R	R-BIAS
	DEGAUSS	G	G-BIAS
	PINCUSHION	B	R-BIAS
	TRAPEZOID	**9300**	COLOR TEMPERATURE
	PIN-BALANCE	**6500**	COLOR TEMPERATURE
	PARALLELOGRAM	**50**	COLOR TEMPERATURE
	ROTATION	EXIT	OSD EXIT
HD	H-DRIVER COMPENSATION	**VG**	MAX V-SIZE GAIN RANGE
HG	H-SIZE GAIN		H-MOIRE REDUCE
HS	SUB H-SIZE		V-MOIRE REDUCE
	TOP CORNER	**HL**	H-Linearity Modify
	BOTTOM CORNER	**VF**	V-FOCUS ADJUST
HR	V-HV Variation rate ajust	**TM**	BURN IN TIME

HM	MAX H-SIZE RANGE	**BI**	SET BURN-IN
Hs	SUB H-SIZE	**Bb**	BOTTOM BALANCE
Hb	H-SIZE WAVE BALANCE	**Bp**	B+ VOLTAGE ADJUST
Tb	TOP BALANCE	**EU**	EHT CURRENT
EO	EHT OFFSET	**EA**	EHT AUTO ADJUST
VG	MAX V-SIZE GAIN RANGE	**DC**	video IC dc off set
HG	H-SIZE GAIN	**SW**	H-frequency select
SB	HIGH BRIGHTNESS SELECT	**LH**	Brightness Save
	RETURN	**VO**	V-CENTER OFFSET

D. To switches the input signal to the other Timing Mode. Please follow step A ~ C to get the optimum picture.

E. Select the "  " RETURN function and press the MENU Key, then the Factor Preset window will be returned to the original OSD window.(user's operating condition)

F. The setting data of the CONTRAST, BRIGHTNESS, PIN-BALANCE, PARALLELOGRAM, ROTATION, COLOR TEMPERATURE are common mode saved in the memory. Don't needed adjust it individual at every timing Mode and save in the memory.

3. White Balance, Luminance adjustment:

A. Press MENU Key to show OSD menu ,and press the down Key to select the "size/center" function, then press the menu Key to enter second menu, press the down key to select " "(zoom) about 10S,,then enter into factory setting area for modulation.

B. Set R,G,B gain DAC value for 30, R ,G ,B bias DAC value for 40.

C. Raster Pattern, Brightness & contrast ratio MAX, fix to G-BIAS,fix to 40. adjust R or B bias, make x=265±10, y=290±10, adjust G2,make Y=3.0 cd/m^2 ,and then adjust brightness,make Y=0.05 cd/m^2 ,then save it into 9300K,6500K,5000K color temprature.

D. adjust R or G or B gain, make x=346±10, y=359±10, Y=150±5 cd/m^2 ,then save it into 5000K color temprature .

E. adjust R or G or B gain, make x=313±10, y=329±10, Y=150±5 cd/m^2 ,then save it into 6500K color temprature .

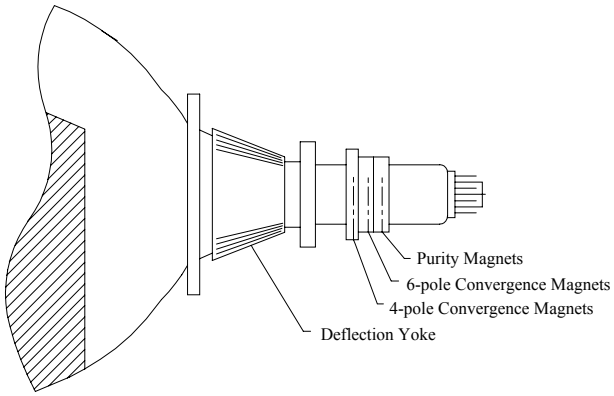
F. adjust R or G or B gain, make x=283±10, y=297±10, Y=150±5 cd/m^2 ,then save it into 9300K color temprature

G. After modulation, it's necessary to check if the white balance accords with the normal specification. If not, which needs reset.

4. Focus Adjustment:
   A. under 1024×768 Fv: 85Hz with character full page.
   B. Adjust brightness to center and contrast to max.
   C. Then adjust focus VR1 to a fine vertical line.
   D. Adjust focus VR2 to a fine horizontal line.
   E. Repeat step C & D.then fix the Focus VR, G2 VR .

5. Purity Adjustment
   A. Be sure that the display is not being exposed to any external magnetic fields.
   B. Ensure that the spacing between the Purity, Convergence, Magnet, (PCM), assembly and the CRT stem is 29mm. (See below diagram)
   C. Produce a complete, red pattern on the display. Adjust the purity magnet rings on the PCM assembly to obtain a complete field of the color red. This is done by moving the two tabs in such a manner that they advance in an opposite direction but at the same time to obtain the same angle between the two tabs, which should be approximately 180'.
   D. Check the complete blue and complete green patterns to observe their respective color purity. Make minor adjustments if needed.

RELATIVE PLACEMENT OF TYPICAL COMPONENTS

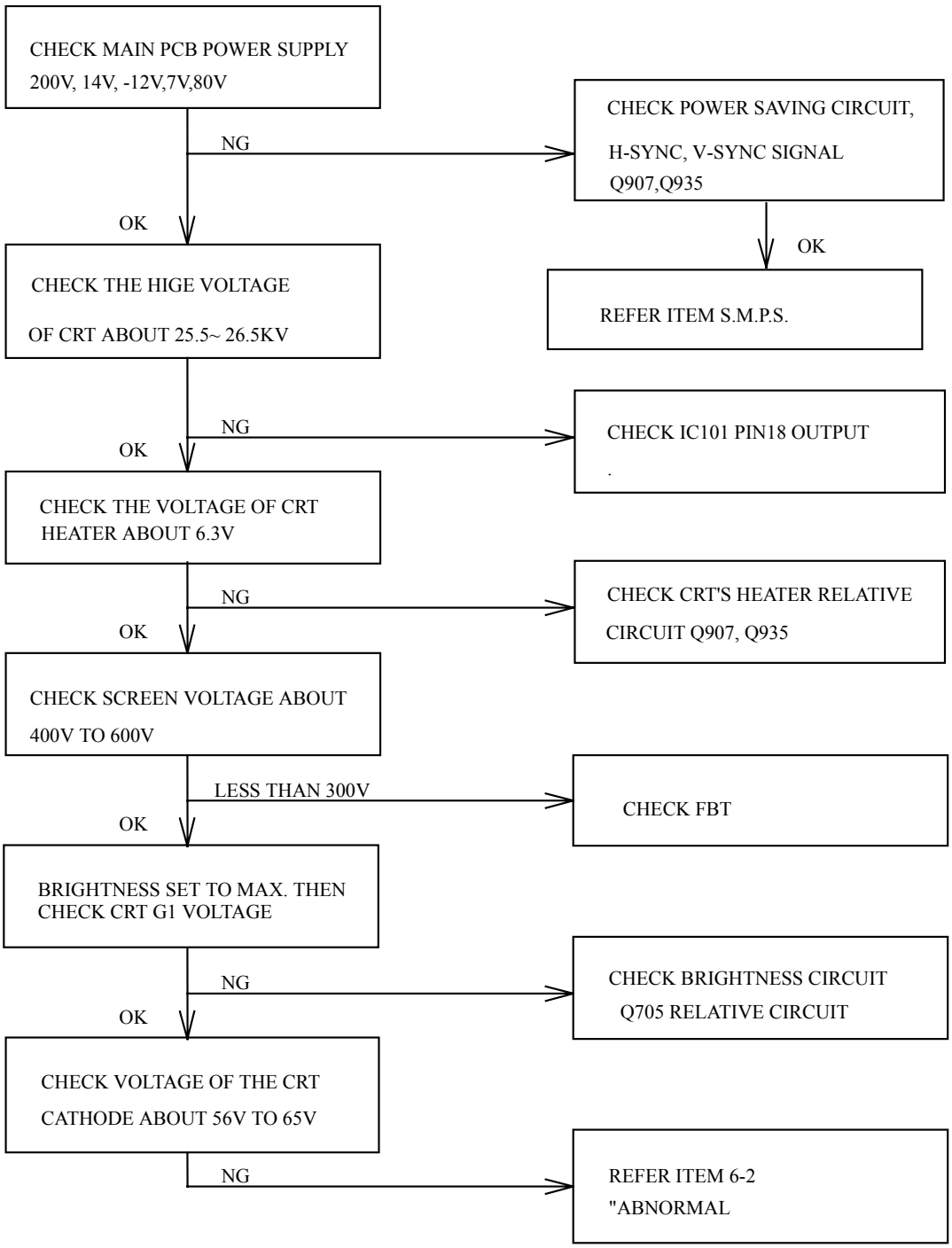


6. Convergence adjustment

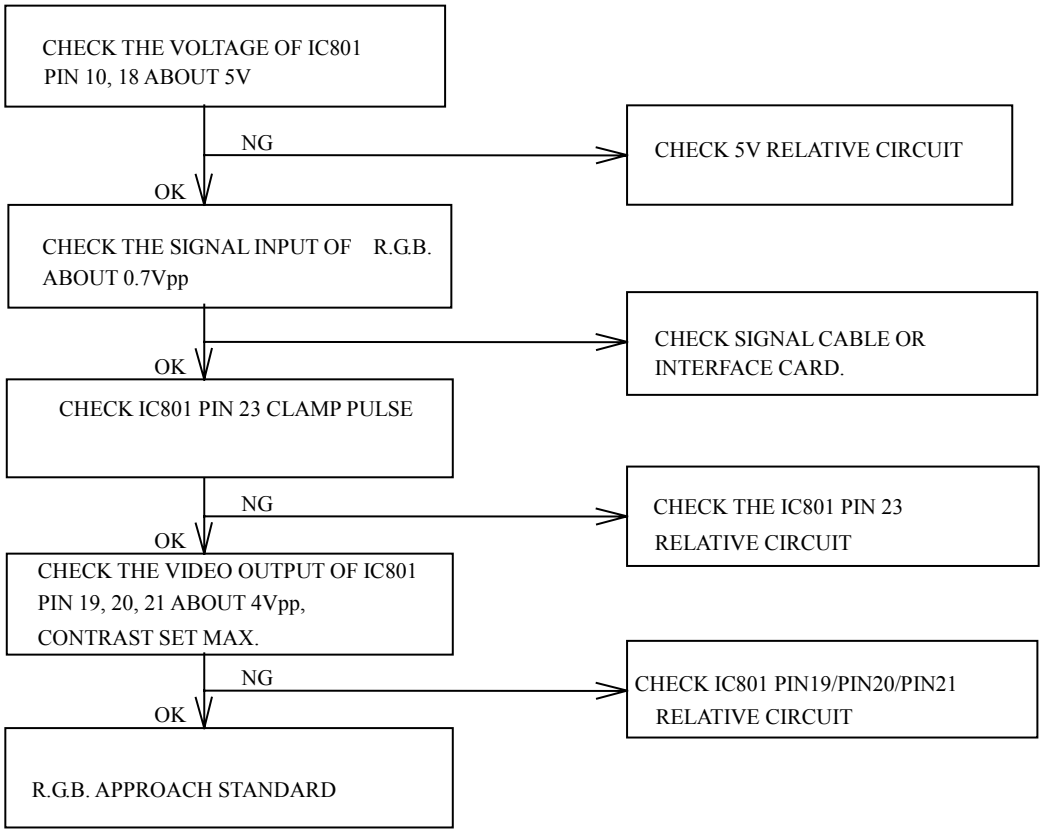
   A. Produce a magenta crosshatch on the display.
   B. Adjust the focus for the best overall focus on the display.
      Also adjust the brightness to the desired condition.
   C. Vertical red and blue lines are converged by varying the angle between the two tabs of the 4 pole magnets on the PCM assembly. (See above diagrams)
   D. Horizontal red and blue lines are converged by varying the two tabs together, keeping the angle between them constant.
   E. Produce a white crosshatch pattern on the display.
   F. Vertical green and magenta lines are converged by varying the angle between the two tabs of the 6-pole magnets.
   G. Horizontal green and magenta lines are converged by varying the two tabs together, keeping the angle between them constant.

6. Trouble Shooting Flow Chart

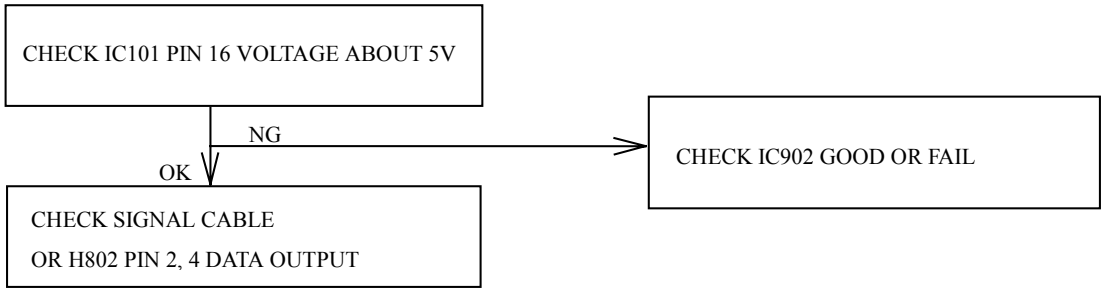
6-1-1. NO RASTER, CRT RELATIVE CIRCUIT PROBLEMS



6-1-2. ABNORMAL VIDEO LEVEL ON SCREEN

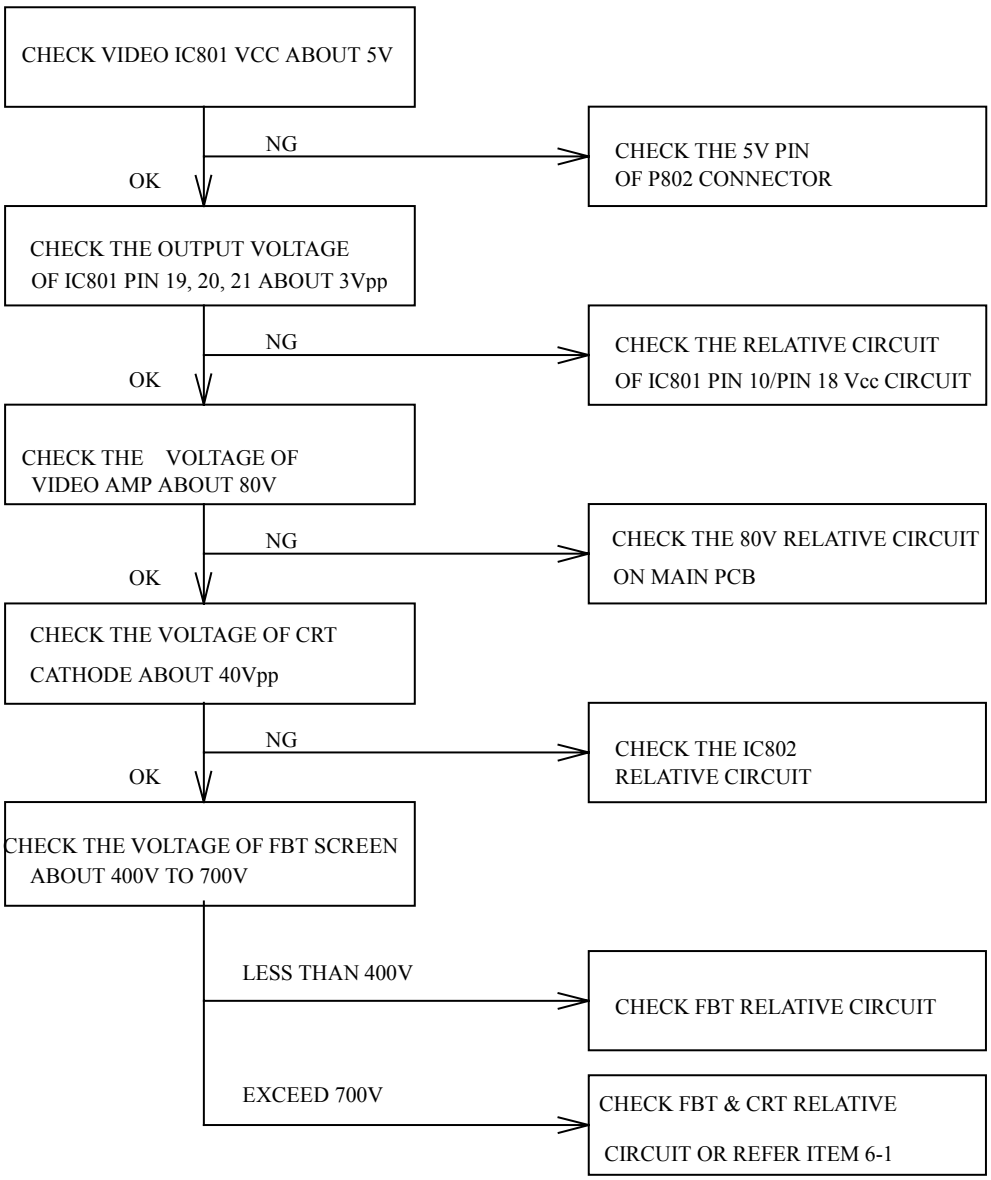


6-1-3. ABNORMAL DDC (PLUG & PLAY)

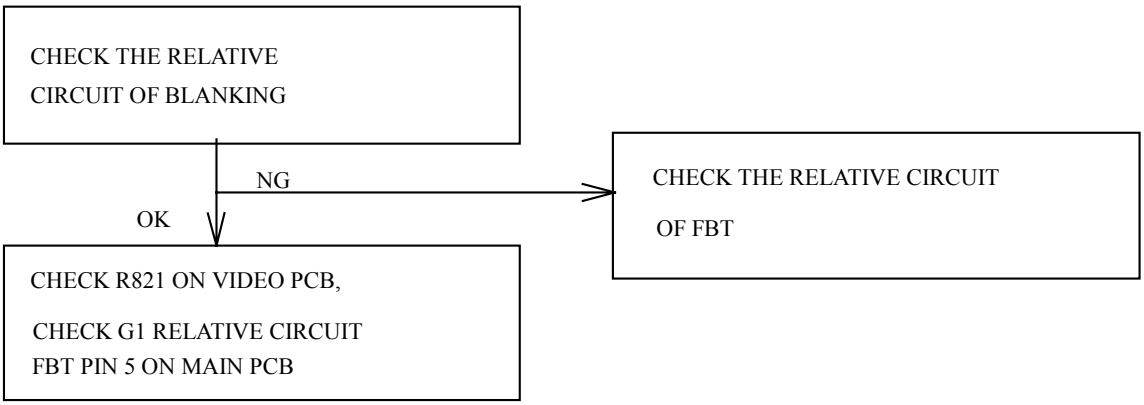


6-2 ABNORMAL DISPLAY

6-2-1. NO SIGNAL ON SCREEN

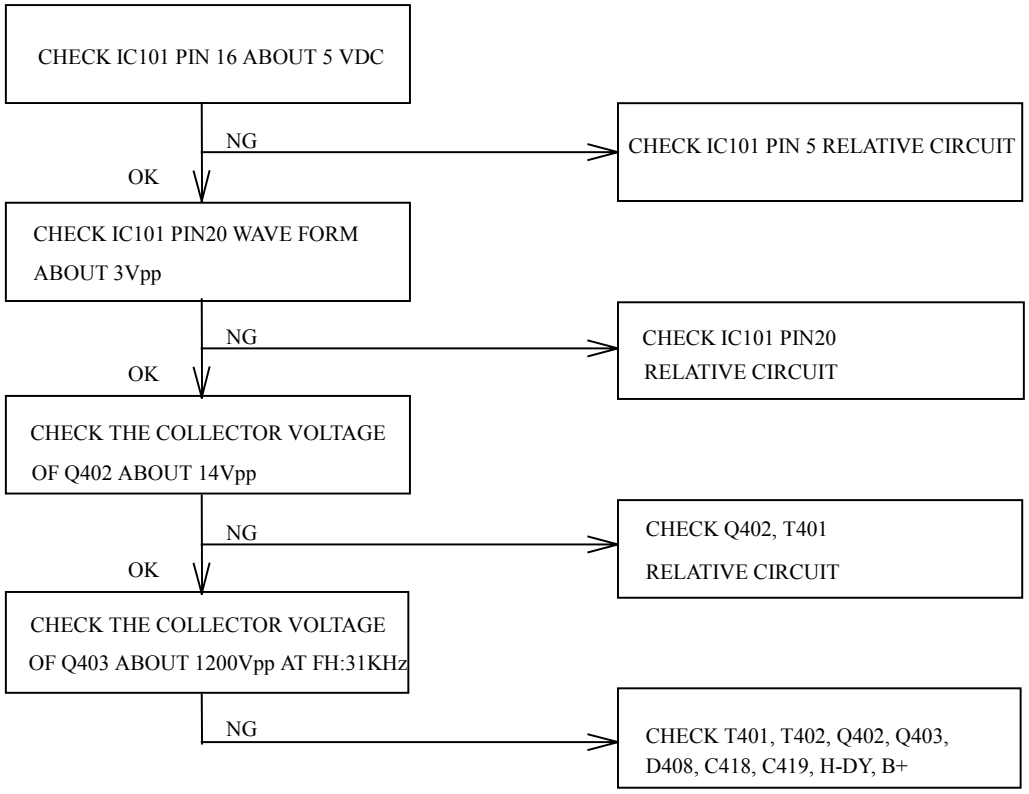


6-3. NO BLANKING



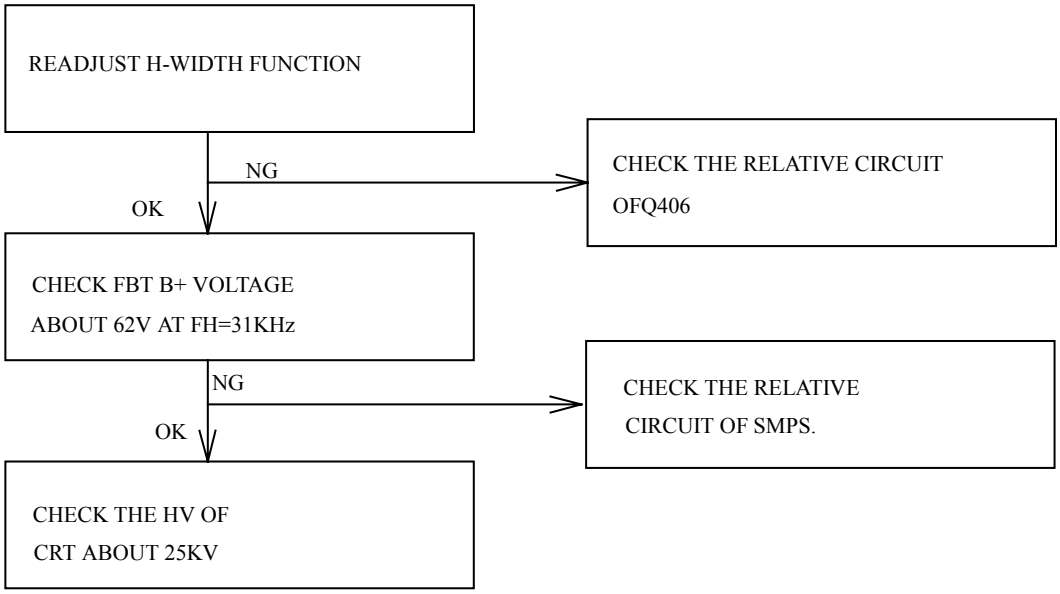
6-4. HOR./OSC/DEF/HV CIRCUIT FAULT

6-4-1. NO RASTER (DISCONNECT WITH SIGNAL CABLE)

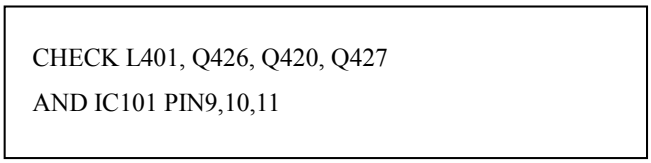


6-5. ABNORMAL HORIZONTAL DEFLECTION

6-5-1. ABNORMAL HORIZONTAL WIDTH OF VIDEO

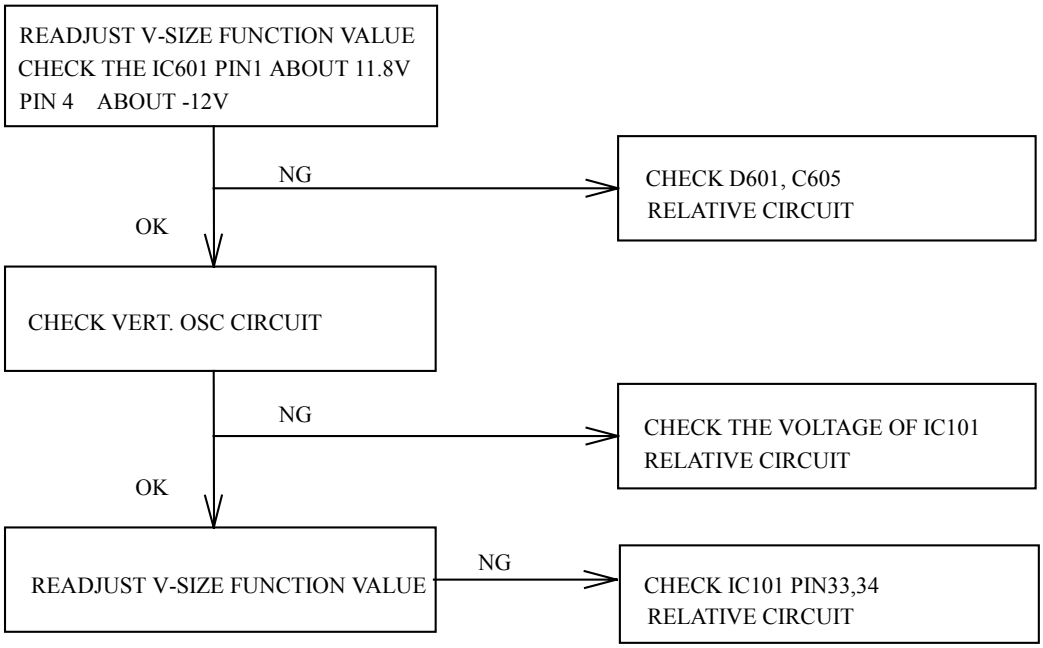


6-5-2. ABNORMAL HORIZONTAL LINEARITY

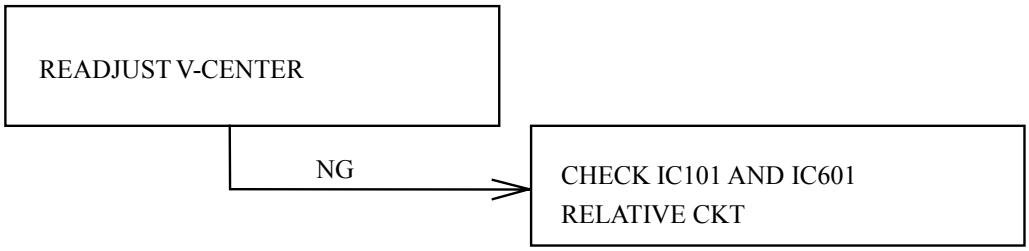


6-6 ABNORMAL VERTICAL SCANNING

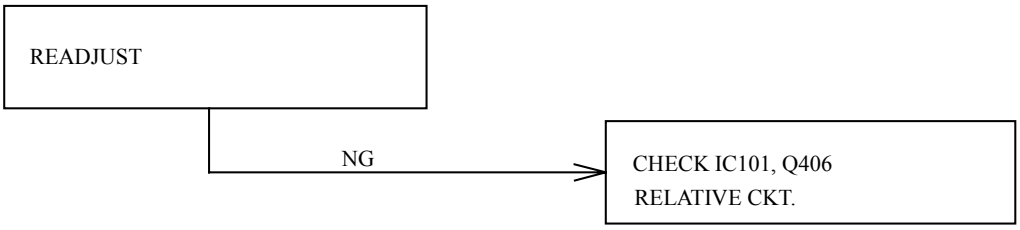
6-6-1. ABNORMAL VERTICAL SIZE



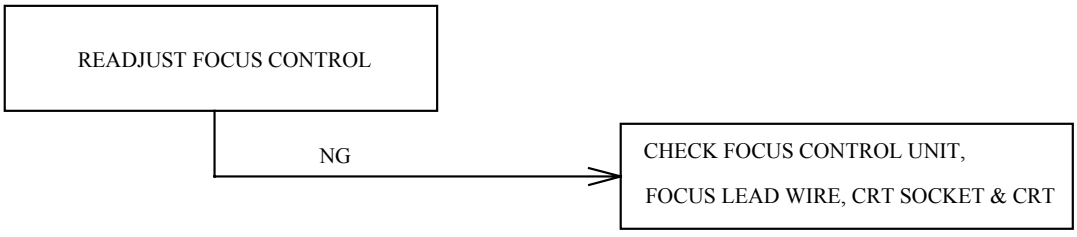
6-6-2. VERTICAL CENTER



6-7 . SIDE-PIN CUSHION DISTORTION

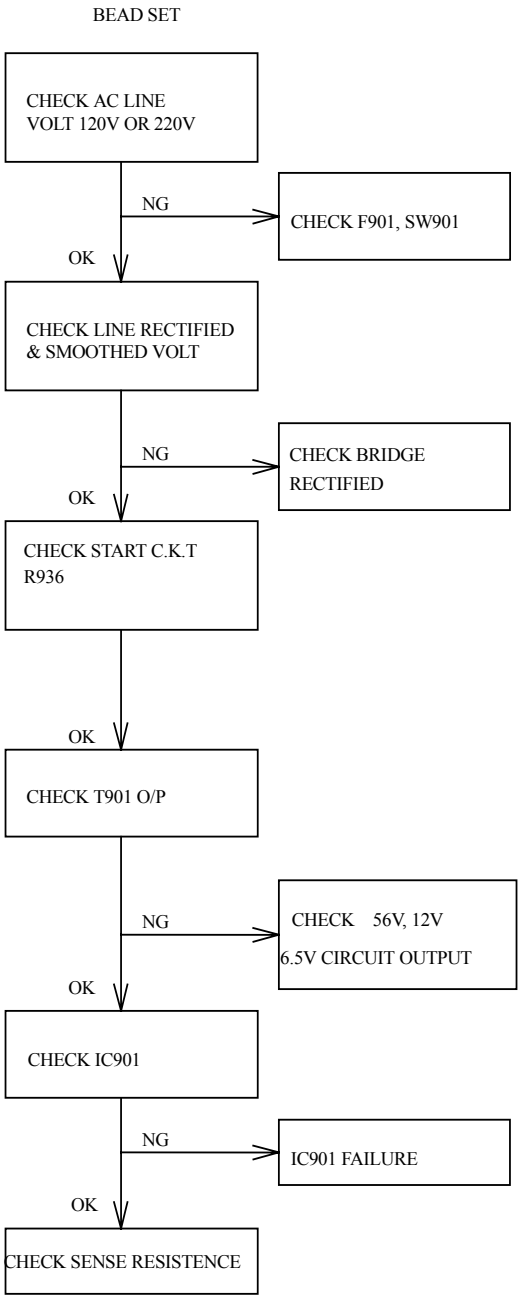


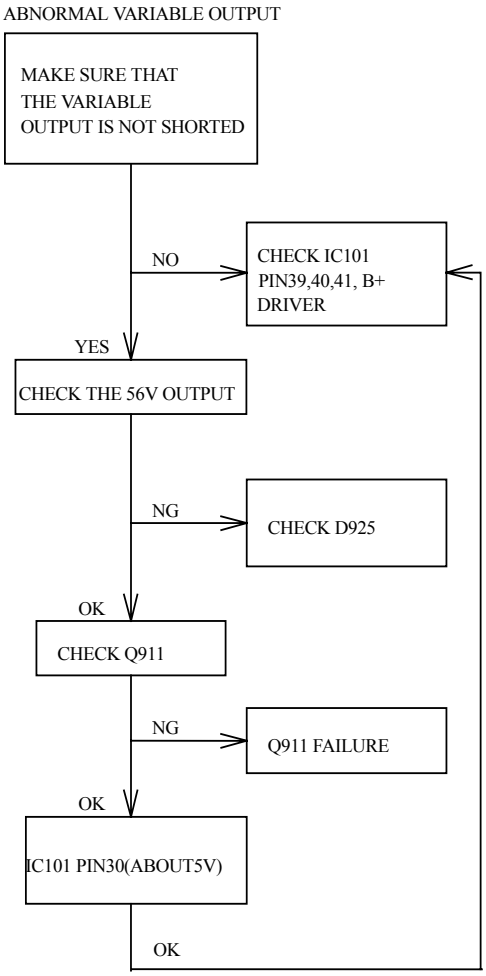
6-8 . POOR FOCUS



6-9 POWER SUPPLY TROUBLE SHOOTING CHART

BEFORE CHECK SW.REG. PLEASE REFER TO THE POWER SUPPLY BLOCK DIAGRAM
POWER SUPPLY OUTPUT: (A) VARIABLE OUTPUT : 60V
(B) CONSTANT OUTPUT : 6.3V, 14V,80V，200.V，－12V





7. Recommended Spare Parts List

RECOMMENDED SPARE PARTS LIST (E90fB-4 for "M-Model")

ViewSonic Model Number: VS10794-4M

Rev: 1a

Serial No. Prefix: PT6

Item	Description		ECR/ECN	ViewSonic P/N	Ref. P/N	Location	Universal number#	Q'ty
1	**Accessories:**	POWER CORD (-4M)		A-00004049	89C402A18N IS	E089A		1
2		CHASSIS FOR P985D-1VSC(-4M)		B-00004051	CMP985D1NVSC			1
3		CRT BAORD		B-00004053	CRP985D1NVSC			1
4	**Cabinets:**	BACK COVER		C-00004055	34C6286 E7 F			1
5		BASE		C-00002683	34C 741 QE L			1
6		FRONT PANEL		C-00004054	34C6285AE7 F			1
7		SWIVEL		PL-00004056	34C6293 QE L			1
8	**Cables:**	SIGNAL CABLE		CB-00004057	89C 71B8MY HX			1
9	**Documentation:**	CD MANUAL		DC-00004058	70CD918709 1A			1
10	**Electronic**	150UH +-10% FOR TDK		E-00002875	73C 253 69 T	L405		1
11	**Components:**	220UF 400V		E-00004073	67C 3022114P	C907		1
12		2SJ584LS		E-00004070	57C 751 4	Q911		1
13		CHOKE COIL		E-00004062	73C 253513 H	L906		1
14		COIL		E-00004074	73C 147542 H	L401		1
15		DRIVE TRANSFORMER		E-00004063	79C 167118 LC	T401		1
16		DRIVER TRANS		E-00001632	79C 167124 HB	T403		1
17		FBT		E-00004064	79C 793 1 LB	T402		1
18		FUSE 4A 250V LF-618 004		E-00002695	84A 7H400 SL	F901		1
19		IRF630B		E-00004068	57C 600 28	Q416		1
20		IRF630M/S.T		E-00004069	57C 600 21	Q406		1
21		LM1246DKA/NA/NOPB		E-IC-0401-4019	56C 366509	IC801		1
22		LM2476		E-00004061	56C 551525	IC802		1
23		M24C08-WBN6P		E-00002717	56C1133508	IC102		1
24		MOSFET		E-00004066	57C 600 14	Q417/Q418/Q420		1
25		NTCR 10OHM+-20% 5A THIN		E-R-0405-0377	61C 58 9T	NR901		1
26		PHILIPS 1500V/12A BU252		E-00004067	57C 705 7 A	Q403		1
27		PTCR 9OHM+-20% 220V WAL		E-00002725	61C 52 27 4W	PR901		1
28		SAA4849PS		E-00004059	56C1125575 X	IC101		1
29		SBYV26C		E-00001604	93A106050652T	D919		1
30		STP9NK70Z		E-00004071	57C 724502	Q901		1
31		TDA4863A/PHILIPS		E-00002874	56C 584 1A	IC601		1
32		TEA1507P		E-00004060	56C 625500 S	IC901		1
33		TRANSFORMER		E-00004065	80C995D 1 N1	T901		1
34		U4KB80R		E-00004072	93C 50460 16	BD901		1
35	**Hardware:**	SCREW		HW-00002750	B1C1035 10 47			1
36		SCREW		HW-00002749	Q1C 340 16 47			1
37		SCREW 4X7(FOR AC)		HW-00002758	D1C1140 7128			1
38	**Miscellaneous:**	Rear Bracket		HW-00004075	15C5659500 2			1
39	**Packing Material:**	Carton		P-00004076	44C6925709 1A			1
40		EPS CUSHION 1 OF 2		P-00004077	44C6932 1			1
41		EPS CUSHION 2 OF 2		P-00004078	44C6932 2			1

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.

RECOMMENDED SPARE PARTS LIST (E90fB-4 for "G-Model")

ViewSonic Model Number: VS10794-4G

Rev: 1a

Serial No. Prefix: PTC

Item	Description		ECR/ECN	ViewSonic P/N	Ref. P/N	Location	Universal number#	Q'ty
1	**Accessories:**	POWER CORD (-4G)		A-00004050	89C414A18N IS	E089A		1
2	**Board Assembly:**	CHASSIS FOR B985D-1VSC(-4G)		B-00004052	CMP985D1NVW			1
3		CRT BAORD		B-00004053	CRP985D1NVSC			1
4	**Cabinets:**	BACK COVER		C-00004055	34C6286 E7 F			1
5		BASE		C-00002683	34C 741 QE L			1
6		FRONT PANEL		C-00004054	34C6285AE7 F			1
7		SWIVEL		PL-00004056	34C6293 QE L			1
8	**Cables:**	SIGNAL CABLE		CB-00004057	89C 71B8MY HX			1
9	**Documentation:**	CD MANUAL		DC-00004058	70CD918709 1A			1
10	**Electronic**	150UH +-10% FOR TDK		E-00002875	73C 253 69 T	L405		1
11	**Components:**	220UF 400V		E-00004073	67C 3022114P	C907		1
12		2SJ584LS		E-00004070	57C 751 4	Q911		1
13		CHOKE COIL		E-00004062	73C 253513 H	L906		1
14		COIL		E-00004074	73C 147542 H	L401		1
15		DRIVE TRANSFORMER		E-00004063	79C 167118 LC	T401		1
16		DRIVER TRANS		E-00001632	79C 167124 HB	T403		1
17		FBT		E-00004064	79C 793 1 LB	T402		1
18		FUSE 4A 250V LF-618 004		E-00002695	84A 7H400 SL	F901		1
19		IRF630B		E-00004068	57C 600 28	Q416		1
20		IRF630M/S.T		E-00004069	57C 600 21	Q406		1
21		LM1246DKA/NA/NOPB		E-IC-0401-4019	56C 366509	IC801		1
22		LM2476		E-00004061	56C 551525	IC802		1
23		M24C08-WBN6P		E-00002717	56C1133508	IC102		1
24		MOSFET		E-00004066	57C 600 14	Q417/Q418/Q420		1
25		NTCR 10OHM+-20% 5A THIN		E-R-0405-0377	61C 58 9T	NR901		1
26		PHILIPS 1500V/12A BU252		E-00004067	57C 705 7 A	Q403		1
27		PTCR 9OHM+-20% 220V WAL		E-00002725	61C 52 27 4W	PR901		1
28		SAA4849PS		E-00004059	56C1125575 X	IC101		1
29		SBYV26C		E-00001604	93A106050652T	D919		1
30		STP9NK70Z		E-00004071	57C 724502	Q901		1
31		TDA4863A/PHILIPS		E-00002874	56C 584 1A	IC601		1
32		TEA1507P		E-00004060	56C 625500 S	IC901		1
33		TRANSFORMER		E-00004065	80C995D 1 N1	T901		1
34		U4KB80R		E-00004072	93C 50460 16	BD901		1
35	**Hardware:**	SCREW		HW-00002750	B1C1035 10 47			1
36		SCREW		HW-00002749	Q1C 340 16 47			1
37		SCREW 4X7(FOR AC)		HW-00002758	D1C1140 7128			1
38	**Miscellaneous:**	Rear Bracket		HW-00004075	15C5659500 2			1
39	**Packing Material:**	Carton		P-00004076	44C6925709 1A			1
40		EPS CUSHION 1 OF 2		P-00004077	44C6932 1			1
41		EPS CUSHION 2 OF 2		P-00004078	44C6932 2			1

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 (E90fB-4 for "M & G-Region)

ViewSonic Model Number: VS10794-1M/G

Rev: 1a

Item	ViewSonic P/N	Ref. P/N	Description	Location	Universal number#	Q'ty
1	B-00004051	CMP985D1NVSC	CHASSIS FOR P985D-1VSC（-4M）			1
2	B-00004052	CMP985D1NVW	CHASSIS FOR B985D-1VSC（-4G）			1
3	#N/A	1C 503 5T 47	SCREW FOR CRT			4
4	#N/A	5C 38 8	RUBBER WASHER			4
5	#N/A	11C 112500	WIRE MOUNT			1
6	#N/A	11C 115500	FBT CLIP			1
7	#N/A	19C 403 7	STEEL			1
8	#N/A	23C3182 1	Logo			1
9	#N/A	33C6336 E7 F	POWER KNOB			1
10	#N/A	33C6337 1	LENS			1
11	#N/A	33C6338 E7 F	KEY PAD			1
12	#N/A	33C6339 E7 F	OSD KNOB			1
13	#N/A	33C6918 Y A	S.W.CAP			1
14	C-00002683	34C 741 QE L	BASE			1
15	C-00004054	34C6285AE7 F	FRONT PANEL			1
16	C-00004055	34C6286 E7 F	BACK COVER			1
17	PL-00004056	34C6293 QE L	SWIVEL			1
18	#N/A	40C 153 17 1B	CRT WARNING LABEL			1
19	#N/A	40C 58162410A	H/V LABEL			1
20	#N/A	40C 58162435A	MANUAL P/N LABEL			1
21	#N/A	40C 581709 1A	CARTON LABEL			1
22	#N/A	40C 90P709 1A	ID LABEL			1
23	#N/A	41C 6870913A	QUICK SET UP GUIDE			1
24	P-00004076	44C6925709 1A	CARTON			1
25	P-00004077	44C6932 1	EPS CUSHION			1
26	P-00004078	44C6932 2	EPS CUSHION			1
27	#N/A	45C 76 20 RN	PE BAG FOR MONITOR			1
28	P-00002871	45C 76 28 V3	PE BAG FOR MANUAL			1
29	#N/A	45C 88601 C	EPE COVER			1
30	#N/A	50C 500500	CABLE TIE			2
31	#N/A	50C 502 2	PLASTIC TIE			2
32	#N/A	50C 502 5	CABLE TIE			1
33	#N/A	51C 6 4	SILICON			9
34	#N/A	52C 1150 C	TAPE			12
35	#N/A	52C 1185	MIDDLE TAPE FOR CARTON			56
36	#N/A	52C 1185 1	BIG TAPE			56
37	#N/A	52C 1186	SMALL TAPE			5.5
38	DC-00004058	70CD918709 1A	CD MANUAL			1
39	#N/A	71C 100504 T	CORE			1
40	#N/A	85C6024506	HIELD			1
41	#N/A	85C6027606	SHIELD			1
42	#N/A	85C6028514	SHIELD			1
43	CB-00004057	89C 71B8MY HX	SIGNAL CABLE			1
44	A-00004049	89C402A18N IS	POWER CORD（-4M）	E089A		1
45	A-00004050	89C414A18N IS	POWER CORD （-4G）	E089A		1
46	#N/A	95C 91205782	WIRE HARNESS			1
47	HW-00002750	B1C1035 10 47	SCREW			1
48	HW-00002758	D1C1140 7128	SCREW 4X7(FOR AC)			1
49	HW-00002749	Q1C 340 16 47	SCREW			4
50	#N/A	705A985DP52 01	COPPER ASS'Y			1
51	#N/A	750A1697 77BAG	DEGAUSSING COIL			1
52	#N/A	AMP985D1NVSC	MAIN BOARD			1
53	B-00004053	CRP985D1NVSC	CRT BAORD			1
54	#N/A	1C 421 4128	SCREW			2
55	#N/A	11C6033 3	PCB SUPPORT			2
56	#N/A	15C5640 1 A B	GND LUG			1
57	HW-00004075	15C5659500 2	Rear Bracket			1
58	#N/A	40C 581624 2B	CHASSIS LABEL			1
59	M-MS-0808-7412	55A 1 4	SOLDER BAR			22
60	#N/A	71C 100 8	FERRITE CORE 12*25*15			1
61	#N/A	B1C1040 12128	SCREW			1
62	HW-00002758	D1C1140 7128	SCREW 4X7(FOR AC)			1
63	#N/A	M1C1140 6128	SCREW			1
64	#N/A	M1C1730 8128	SCREW M3x8			1
65	#N/A	705A985DC5601A	IC601 ASS'Y			1
66	#N/A	705A985DC5701A	D408/Q403 ASS'Y			1
67	#N/A	705A985DC5701B	Q901 ASS'Y			1
68	#N/A	705A985DC5702A	Q420 ASS'Y			1
69	#N/A	705A985DC6101A	NR901 ASS'Y			1
70	#N/A	705A985DC8702A	CN901 ASS'Y			1
71	#N/A	705A995DC84 1	F901 ASS'Y			1

Item	ViewSonic P/N	Ref. P/N	Description	Location	Universal number#	Q'ty
72	#N/A	705A995DX9301A	X101 ASS'Y			1
73	#N/A	77C 602 1 CJ	TACT SWITCH TSVB-2-T-NP	(SW103)		1
74	#N/A	77C 602 1 CJ	TACT SWITCH TSVB-2-T-NP	<SW101>		1
75	#N/A	77C 602 1 CJ	TACT SWITCH TSVB-2-T-NP	<SW102>		1
76	#N/A	77C 602 1 CJ	TACT SWITCH TSVB-2-T-NP	<SW103>		1
77	#N/A	77C 602 1 CJ	TACT SWITCH TSVB-2-T-NP	<SW104>		1
78	#N/A	95C 201 69012	WIRE HARNESS	A1-A2		1
79	#N/A	95C 201 69032	WIRE	B1-B2		1
80	E-00004072	93C 50460 16	U4KB80R	BD901		1
81	#N/A	65C 2K470 6A6921	47PF 2KV	C410		1
82	#N/A	63C210J4328CC	4.3nF/2KV +-5%	C418		1
83	#N/A	63C210J1825CU	1800PF 1KV	C419		1
84	#N/A	63C210J1042CC	0.1UF +-5% 250V ?	C420		1
85	#N/A	64C100J225 59	2.2UF +-5% 100V	C422		1
86	#N/A	63C210J2442CC	0.24uF 250V	C423		1
87	#N/A	63C210J2443CC	0.24uF 400V	C425		1
88	#N/A	63C210J2725CC	2700PF/1KV	C426		1
89	#N/A	63C210J1052CC	1.0UF 250V	C427		1
90	#N/A	63C210J5642CC	0.56UF/250V	C428		1
91	#N/A	63C210J1227CC	MPP 1.2nF/1.6KV. +-5%	C472		1
92	#N/A	67C 21547012H	47UF +-20% 250V HERMEI	C481		1
93	#N/A	65C 2K151 5A6921	150PF 2KV	C488		1
94	#N/A	65C 2K151 5A6921	150PF 2KV	C490		1
95	#N/A	67C 305102 3	1000 UF +-20% 16V	C606		1
96	#N/A	63C107K105 US	1.0UF 300VAC	C901		1
97	#N/A	63A107K104 U	0.1UF/275V	C902		1
98	E-00004073	67C 3022114P	220UF 400V	C907		1
99	#N/A	67C 305472 3	4700UF 16V	C918		1
100	#N/A	65C 2M103 3A6921	10000PF 2KV	C919		1
101	#N/A	67C 215470 10	47UF +-20% 160V	C930		1
102	#N/A	67C 21522012P	LOW E.SD 22UF 250V	C931		1
103	E-00002738	67C 305101 9	100UF +-20% 100V	C936		1
104	#N/A	67C 309471 3K	470UF 16V	C937		1
105	#N/A	67C 305102 3	1000 UF +-20% 16V	C939		1
106	#N/A	67C 305102 3	1000 UF +-20% 16V	C944		1
107	#N/A	67C 305471 4	470UF +-20% 25V	C945		1
108	#N/A	65C305M2222BH	2200P	C961		1
109	#N/A	65A305M3322B3	CS13-E2GA332MYNS	C962		1
110	#N/A	65A305M3322B3	CS13-E2GA332MYNS	C963		1
111	#N/A	33C3803 3	WAFER EH-E	CN903		1
112	#N/A	93C 6073F	31DF4-FC	D918		1
113	#N/A	71C 55 24 A	FERRITE BEAD 10*6.0*0.6	FB903		1
114	#N/A	71C 100 9	FERRIRE CORE 28.5*17.5*	FBTF		1
115	#N/A	71C 100501 S	CORD	FBTG2		1
116	#N/A	19C 553500	SPRING PIECE	GND-PIN		1
117	#N/A	19C 553500	SPRING PIECE	GND-PIN		1
118	#N/A	95C8013 14607	WIRE HARNESS	H802		1
119	E-00004059	56C1125575 X	SAA4849PS	IC101		1
120	E-00002717	56C1133508	M24C08-WBN6P	IC102		1
121	E-00004060	56C 625500 S	TEA1507P	IC901		1
122	#N/A	56C 133 5 ST	L7805CV	IC902		1
123	#N/A	56C 139 5A	TCET 1103G	IC903		1
124	E-00004074	73C 147542 H	COIL	L401		1
125	E-00002875	73C 253 69 T	150UH +-10% FOR TDK	L405		1
126	#N/A	73A 174 7S3G	LINE FILTER	L901		1
127	#N/A	73C 25818110T	180UH	L902		1
128	#N/A	73C 25810110T	100UH	L903		1
129	#N/A	73C 25810110T	100UH	L904		1
130	#N/A	73C 25818110T	180UH	L905		1
131	E-00004062	73C 253513 H	CHOKE COIL	L906		1
132	#N/A	81C 11 7 GP	GP32052CE/DIY-ZY	LED4		1
133	#N/A	33C3278 6D	WAFER	P803		1
134	E-00002725	61C 52 27 4W	PTCR 9OHM+-20% 220V WAL	PR901		1
135	E-00004068	57C 600 28	IRF630B	Q416		1
136	#N/A	61C 208109 64	MOFR 1 OHM +-5% 1W	R401		1
137	#N/A	61C152M393 64	MOFR 39KOHM+-5% 2W	R424		1
138	#N/A	61C152M681 64	MOFR 680 OHM+-5% 2W	R426		1
139	#N/A	61C153M518 59	MOFR 0.51 OHM +-5% 3W	R428		1
140	#N/A	61C152M220 64	22 OHM +-5% 2W	R455		1
141	E-R-0405-6855	61C153M151 59	MOFR 150 OHM +-5% 3W	R456		1
142	#N/A	61C152M109 64	MOFR 1 OHM +-5% 2W	R607		1
143	#N/A	61C152M688 64	MOFR 0.68 OHM +-5% 2W	R608		1
144	#N/A	61C152M220 64	22 OHM +-5% 2W	R723		1
145	#N/A	61C 208513 64	51K 1W	R741		1
146	#N/A	61C 208681 64	MOFR 680 OHM +-5% 1W	R907		1

Item	ViewSonic P/N	Ref. P/N	Description	Location	Universal number#	Q'ty
147	#N/A	61C152M823 64	MOFR 82K+-5% 2W	R927		1
148	#N/A	61C152M560 64	MOFR 56 OHM+-5% 2W	R929		1
149	#N/A	77C 260 5 4	RELAY	RY401		1
150	#N/A	77C 260 5 4	RELAY	RY901		1
151	#N/A	62A 10 16 W	SPARK GAP	SG408		1
152	#N/A	95C2070548	WIRE	SS1		1
153	#N/A	77C411A 2 S	MINI PUSH SWITCH	SW901		1
154	E-00004063	79C 167118 LC	DRIVE TRANSFORMER	T401		1
155	E-00004064	79C 793 1 LB	FBT	T402		1
156	E-00001632	79C 167124 HB	DRIVER TRANS	T403		1
157	E-00004065	80C995D 1 N1	TRANSFORMER	T901		1
158	#N/A	9C 211 2	PIN 1.2X15MM	TP402		1
159	E-R-0405-6802	75A 335473	CFVR 47K OHM +-20%	VR701		1
160	#N/A	75A 334222	CFVR 2.2K OHM +-20%	VR902		1
161	#N/A	715C1576 1	CMPC			1
162	#N/A	67C 305470 3T	47UF +-20% 16V	C100		1
163	#N/A	65C 450104 3T	0.1UF 50V Y5V	C101		1
164	#N/A	65C 450104 3T	0.1UF 50V Y5V	C102		1
165	#N/A	65C 450104 3T	0.1UF 50V Y5V	C103		1
166	#N/A	67C 309101 3T	100UF +-20% 16V	C104		1
167	#N/A	65C 444102 5T	1000 PF 10% 50V Y5P	C105		1
168	#N/A	65C 444102 5T	1000 PF 10% 50V Y5P	C106		1
169	E-C-0404-4629	65C 44210113T	100PF +-5% NPO 50V	C107		1
170	#N/A	65C 444222 5T	2200PF 10% Y5P 50V	C109		1
171	E-C-0404-4629	65C 44210113T	100PF +-5% NPO 50V	C110		1
172	#N/A	65C 450104 7T	0.1UF +80-20% 50V Y5V	C111		1
173	#N/A	67C 309101 3T	100UF +-20% 16V	C113		1
174	#N/A	65C 444222 5T	2200PF 10% Y5P 50V	C114		1
175	#N/A	67C 305478 7T	0.47UF +-20% 50V	C115		1
176	#N/A	64C 45G2221AT	.0022UF +-2% 100V	C116		1
177	#N/A	64C178J152 1T	"1500PF 100V +-5%"	C117		1
178	#N/A	67C 309109 7T	1.0UF +-20% 50V	C118		1
179	#N/A	67C 309100 3T	10UF +-20% 16V	C119		1
180	#N/A	65C 450104 3T	0.1UF 50V Y5V	C120		1
181	E-C-0404-4629	65C 44210113T	100PF +-5% NPO 50V	C121		1
182	E-C-0404-4629	65C 44210113T	100PF +-5% NPO 50V	C122		1
183	#N/A	65C 450103 7T	10000PF/50V Y5V +80% -2	C123		1
184	#N/A	65C 444222 5T	2200PF 10% Y5P 50V	C124		1
185	#N/A	65C 442471 9T	470PF 50V	C127		1
186	#N/A	65C 444102 5T	1000 PF 10% 50V Y5P	C130		1
187	#N/A	65C 44233013T	33PF +-5% NPO 50V	C131		1
188	#N/A	67C 309220 4T	22UF +-20% 25V	C145		1
189	#N/A	64C178J103 1T	CL21X 0.01UF 100V +-5%	C401		1
190	#N/A	65C 450104 7T	0.1UF +80-20% 50V Y5V	C402		1
191	#N/A	65C 450104 7T	0.1UF +80-20% 50V Y5V	C411		1
192	#N/A	64C178J152 1T	"1500PF 100V +-5%"	C412		1
193	#N/A	64C178J224 1T	C121X 0.22UF 100V +-5%	C414		1
194	#N/A	65C 450104 7T	0.1UF +80-20% 50V Y5V	C416		1
195	#N/A	64C178J474 0T	CL21X. 0.47UF 63V +-5%	C417		1
196	#N/A	65C 450104 7T	0.1UF +80-20% 50V Y5V	C429		1
197	#N/A	65C517K222 5T6921	2200PF 10% 500V	C430		1
198	#N/A	67C 309220 7T	22UF +-20% 50V	C433		1
199	#N/A	67C 309479 7T	4.7UF +-20% 50V	C434		1
200	#N/A	67C 30547910T	4.7UF 160V	C436		1
201	#N/A	67C 305221 3T	220UF +-20% 16V	C483		1
202	#N/A	64C178J104 0T	CL21X0.1UF 63V +-5%	C494		1
203	#N/A	64C178J102 0T	1000PF +-5% 63V	C601		1
204	#N/A	67C 309471 3T	470UF +-20% 16V	C603		1
205	#N/A	67C 305470 7T	47UF +-20% 50V	C605		1
206	#N/A	64C178J104 1T	C121X 0.1UF 100V +-5%	C610		1
207	#N/A	64C178J103 1T	CL21X 0.01UF 100V +-5%	C702		1
208	#N/A	65C 1K331 5T6921	330PF/1KV Y5P+-10%	C706		1
209	#N/A	64C178J103 2T	MPE 0.01UF 250V +-5%	C710		1
210	#N/A	67C 30522912T	2.2UF +-20% 250V	C713		1
211	#N/A	67C 309479 3T	4.7UF +-20% 16V	C714		1
212	#N/A	65C 1K561 5T6921	560PF 10% Y5P 1KV	C720		1
213	#N/A	65C517M103 3T6921	10NF 500V	C740		1
214	#N/A	67C 309100 7T	10UF +-20% 50V	C743		1
215	#N/A	64C178J223 1T	CL21X 0.022UF 100V +-5%	C906		1
216	#N/A	65C 450104 7T	0.1UF +80-20% 50V Y5V	C908		1
217	#N/A	67C 309101 3T	100UF +-20% 16V	C909		1
218	#N/A	67C 305470 3T	47UF +-20% 16V	C910		1
219	#N/A	65C 450104 7T	0.1UF +80-20% 50V Y5V	C911		1
220	#N/A	65C517K472 5T6921	CAP C 4700P 10% 500V Y5	C914		1
221	#N/A	65C 1K221 5T6921	220PF/1KV Y5P+-10%	C920		1

Item	ViewSonic P/N	Ref. P/N	Description	Location	Universal number#	Q'ty
222	#N/A	64C178J103 2T	MPE 0.01UF 250V +-5%	C925		1
223	#N/A	65C 2K221 5T6921	220PF 2000V	C927		1
224	#N/A	65C 1K470 5T6921	47P/1KV	C928		1
225	#N/A	67C 305470 4T	47UF +-20% 25V	C929		1
226	#N/A	65C 450473 4T	47000PF -20 +80% 50V Z5	C932		1
227	#N/A	65C 444332 5T	3300PF 10% 50V Y5P	C933		1
228	#N/A	65C 444221 5T	220PF/50V	C934		1
229	#N/A	67C 70109 7T	1UF +-20% 50V	C935		1
230	#N/A	65A517K102 5T6213	1000PF 500V +-10% Y5P	C940		1
231	#N/A	64C178J103 2T	MPE 0.01UF 250V +-5%	C941		1
232	#N/A	63C212J1042AT	MPE 0.1UF/250V +-5%	C946		1
233	E-C-0404-4629	65C 44210113T	100PF +-5% NPO 50V	C947		1
234	#N/A	67C 309100 3T	10UF +-20% 16V	C967		1
235	#N/A	9C 203503	PIN	CN902		2
236	E-D-0403-2800	93C1002 1P52T	1N5817	D103		1
237	E-D-0403-0531	93A 64 1152T	DIODE 1N4148	D104		1
238	E-D-0403-2800	93C1002 1P52T	1N5817	D405		1
239	E-00001604	93A106050652T	SBYV26C	D406		1
240	E-00001604	93A106050652T	SBYV26C	D407		1
241	E-D-0403-0531	93A 64 1152T	DIODE 1N4148	D409		1
242	E-D-0403-0531	93A 64 1152T	DIODE 1N4148	D450		1
243	#N/A	93C 6450752T	BAV21	D460		1
244	E-00002716	93C 6026T52T	RECTIFIER DIODE FR107	D463		1
245	E-00002716	93C 6026T52T	RECTIFIER DIODE FR107	D470		1
246	E-00002716	93C 6026T52T	RECTIFIER DIODE FR107	D473		1
247	E-00002716	93C 6026T52T	RECTIFIER DIODE FR107	D474		1
248	#N/A	93C 64 1152T	IN4148	D476		1
249	#N/A	93C 5247T52T	1N4004	D601		1
250	#N/A	93C 6431T52T	BAV20	D701		1
251	E-D-0403-0531	93A 64 1152T	DIODE 1N4148	D705		1
252	#N/A	93C 6044T52T	RECTIFIER DIODE FR157S	D706		1
253	E-D-0403-1005	93C1040 252T	UF4004	D740		1
254	#N/A	93C102050152T	RGP10D	D909		1
255	#N/A	93C106050652T	DIODE	D910		1
256	#N/A	93C102050152T	RGP10D	D911		1
257	#N/A	93C 6431T52T	BAV20	D912		1
258	E-D-0403-2800	93C1002 1P52T	1N5817	D913		1
259	#N/A	93C 6431T52T	BAV20	D914		1
260	#N/A	93C 6450752T	BAV21	D915		1
261	#N/A	93C2040 1A	ER204 2A 400V	D916		1
262	#N/A	93C 6450152T	SWITCHING DIODE BAV21	D917		1
263	E-00001604	93A106050652T	SBYV26C	D919		1
264	#N/A	93C202050052T	BYV27-200	D922		1
265	#N/A	93C 521ZJ26T	SB240	D923		1
266	E-D-0403-1005	93C1040 252T	UF4004	D929		1
267	#N/A	93C202050052T	BYV27-200	D930		1
268	E-D-0403-0531	93A 64 1152T	DIODE 1N4148	D936		1
269	E-D-0403-0531	93A 64 1152T	DIODE 1N4148	D937		1
270	#N/A	93C106050152T	BYV26C/TFK	D938		1
271	E-D-0403-0531	93A 64 1152T	DIODE 1N4148	D939		1
272	E-D-0403-0531	93A 64 1152T	DIODE 1N4148	D940		1
273	E-D-0403-2800	93C1002 1P52T	1N5817	D942		1
274	#N/A	61C 60233252T	CFR 3.3K OHM+-5% 1/6W	D991		1
275	#N/A	71C 55 29	FERRITE BEAD	FB402		1
276	#N/A	71C 55 19 T	FERRITE BEAD 9X3.5X0.8	FB901		1
277	#N/A	71C 55 19 T	FERRITE BEAD 9X3.5X0.8	FB902		1
278	#N/A	73C 5333910T	3.3UH +-10%	FB910		1
279	#N/A	9C 203 8	BRASS PIN	GND1		1
280	#N/A	9C 203 8	BRASS PIN	GND3		1
281	#N/A	9C 203 8	BRASS PIN	GND4		1
282	#N/A	56C 158 4 T	H431-B	IC904		1
283	#N/A	61C 17247052T	CFR 47 OHM +-5% 1/4W	J080		1
284	#N/A	61A 58450 WT	45OHM NTCR FOR THIMKING	NR601		1
285	#N/A	9C 203 8	BRASS PIN	P402		4
286	#N/A	57A 516 1 T	TRAN PH2369 TAPING	Q401		1
287	#N/A	57C 734 1	BSN254A	Q402		1
288	#N/A	57C 446 3 T	2SC2120-Y	Q404		1
289	#N/A	57C 419503 T	2SC945P	Q407		1
290	#N/A	57C 419503 T	2SC945P	Q408		1
291	#N/A	57C 521 1 T	2SD667ACTZ-E	Q410		1
292	#N/A	57C 419503 T	2SC945P	Q412		1
293	#N/A	57C 419503 T	2SC945P	Q422		1
294	#N/A	57C 419503 T	2SC945P	Q423		1
295	#N/A	57C 498 1 T	BF423	Q705		1
296	#N/A	57C 493 12 T	BF420	Q742		1

Item	ViewSonic P/N	Ref. P/N	Description	Location	Universal number#	Q'ty
297	#N/A	57C 446500 T	2SC1213C	Q743		1
298	#N/A	57C 446 1 T	2SC1213ACTZ-E	Q902		1
299	#N/A	57C 419503 T	2SC945P	Q903		1
300	#N/A	57C 420502 T	2SA733P	Q905		1
301	#N/A	57C 446 1 T	2SC1213ACTZ-E	Q906		1
302	#N/A	57C 4197AP T	BC547B	Q907		1
303	#N/A	57A 516 1 T	TRAN PH2369 TAPING	Q910		1
304	#N/A	57C 419503 T	2SC945P	Q912		1
305	#N/A	57C 419503 T	2SC945P	Q913		1
306	#N/A	57C 420502 T	2SA733P	Q920		1
307	#N/A	57C 5661PH	BT169B	Q935		1
308	#N/A	61C 60210152T	CFR 100 OHM+-5% 1/6W	R101		1
309	#N/A	61C 60224252T	CFR 2.4K OHM +-5% 1/6W	R102		1
310	#N/A	61C 60210152T	CFR 100 OHM+-5% 1/6W	R103		1
311	#N/A	61C 60210152T	CFR 100 OHM+-5% 1/6W	R104		1
312	#N/A	61C 60210152T	CFR 100 OHM+-5% 1/6W	R105		1
313	#N/A	61C 60215352T	CFR 15K OHM+-5% 1/6W	R106		1
314	#N/A	61C 60247252T	CFR 4.7K OHM+-5% 1/6W	R107		1
315	#N/A	61C 60222252T	CFR 2.2K OHM +-5% 1/6W	R108		1
316	#N/A	61C 60222252T	CFR 2.2K OHM +-5% 1/6W	R109		1
317	#N/A	61C 60210052T	CFR 10 OHM +-5% 1/6W	R110		1
318	#N/A	61C 60210052T	CFR 10 OHM +-5% 1/6W	R111		1
319	#N/A	61C 60215152T	CFR 150 OHM +-5% 1/6W	R112		1
320	#N/A	61C 60218252T	CFR 1.8K OHM+-5% 1/6W	R113		1
321	#N/A	61C 60218252T	CFR 1.8K OHM+-5% 1/6W	R114		1
322	#N/A	61C 60239252T	CFR 3.9K OHM+-5% 1/6W	R116		1
323	#N/A	61C 60210152T	CFR 100 OHM+-5% 1/6W	R117		1
324	#N/A	61C 60212252T	CFR 1.2K OHM+-5% 1/6W	R118		1
325	#N/A	61C 60247052T	CFR 47 OHM +-5% 1/6W	R119		1
326	#N/A	61C 60210152T	CFR 100 OHM+-5% 1/6W	R122		1
327	#N/A	61C 60247252T	CFR 4.7K OHM+-5% 1/6W	R123		1
328	#N/A	61C 60210252T	CFR 1K OHM+-5% 1/6W	R124		1
329	#N/A	61C 60247152T	CFR 470 OHM +-5% 1/6W	R125		1
330	#N/A	61C 60210352T	CFR 10K OHM+-5% 1/6W	R126		1
331	#N/A	61C 60256252T	CFR 5.6KOHM+-5% 1/6W	R127		1
332	#N/A	61C 60233352T	CFR 33K OHM+-5% 1/6W	R128		1
333	#N/A	61C 60247152T	CFR 470 OHM +-5% 1/6W	R129		1
334	#N/A	61C 60210352T	CFR 10K OHM+-5% 1/6W	R130		1
335	#N/A	61C 60222252T	CFR 2.2K OHM +-5% 1/6W	R131		1
336	#N/A	61C 60210152T	CFR 100 OHM+-5% 1/6W	R132		1
337	#N/A	61C 17275252T	CFR 7.5K OHM +-5% 1/4W	R133		1
338	#N/A	61C 60239252T	CFR 3.9K OHM+-5% 1/6W	R134		1
339	#N/A	61C 60247152T	CFR 470 OHM +-5% 1/6W	R135		1
340	#N/A	61C 60275352T	CFR 75K OHM +-5% 1/6W	R137		1
341	#N/A	61C 17251352T	CFR 51K OHM +-5% 1/4W	R138		1
342	#N/A	61C 60210152T	CFR 100 OHM+-5% 1/6W	R139		1
343	#N/A	61C 60210152T	CFR 100 OHM+-5% 1/6W	R140		1
344	#N/A	61C 60233352T	CFR 33K OHM+-5% 1/6W	R141		1
345	#N/A	61C 60218352T	CFR 18K OHM +-5% 1/6W	R142		1
346	#N/A	61C 60210152T	CFR 100 OHM+-5% 1/6W	R143		1
347	#N/A	61C 60210352T	CFR 10K OHM+-5% 1/6W	R144		1
348	#N/A	61C 60210152T	CFR 100 OHM+-5% 1/6W	R145		1
349	#N/A	61C 60275252T	CFR 7.5K OHM +-5% 1/6W	R146		1
350	#N/A	61C 17256352T	CFR 56K OHM +-5% 1/4W	R147		1
351	#N/A	61C 60247252T	CFR 4.7K OHM+-5% 1/6W	R148		1
352	#N/A	61C 60210352T	CFR 10K OHM+-5% 1/6W	R149		1
353	#N/A	61C 17212452T	CFR 120K OHM +-5% 1/4W	R150		1
354	#N/A	61C 60247152T	CFR 470 OHM +-5% 1/6W	R151		1
355	#N/A	61C 60210252T	CFR 1K OHM+-5% 1/6W	R152		1
356	#N/A	61C 60227252T	CFR 2.7K OHM+-5% 1/6W	R153		1
357	#N/A	61C 60247152T	CFR 470 OHM +-5% 1/6W	R154		1
358	#N/A	61C 17224252T	CFR 2.4KOHM+-5% 1/4W	R155		1
359	#N/A	61C 60227252T	CFR 2.7K OHM+-5% 1/6W	R156		1
360	#N/A	61C 60227252T	CFR 2.7K OHM+-5% 1/6W	R157		1
361	#N/A	61C 60247252T	CFR 4.7K OHM+-5% 1/6W	R158		1
362	#N/A	61C 60210152T	CFR 100 OHM+-5% 1/6W	R159		1
363	#N/A	61C 17212452T	CFR 120K OHM +-5% 1/4W	R161		1
364	#N/A	61C 60210252T	CFR 1K OHM+-5% 1/6W	R162		1
365	#N/A	61C 60210252T	CFR 1K OHM+-5% 1/6W	R163		1
366	#N/A	61C 60210152T	CFR 100 OHM+-5% 1/6W	R164		1
367	#N/A	61C 60210152T	CFR 100 OHM+-5% 1/6W	R165		1
368	#N/A	61C 60247252T	CFR 4.7K OHM+-5% 1/6W	R166		1
369	#N/A	61C 60224252T	CFR 2.4K OHM +-5% 1/6W	R167		1
370	#N/A	61C 17233252T	CFR 3.3KOHM+-5% 1/4W	R168		1
371	#N/A	61C 60210152T	CFR 100 OHM+-5% 1/6W	R172		1

Item	ViewSonic P/N	Ref. P/N	Description	Location	Universal number#	Q'ty
372	#N/A	61C 60224252T	CFR 2.4K OHM +-5% 1/6W	R181		1
373	#N/A	61C 60256252T	CFR 5.6KOHM+-5% 1/6W	R182		1
374	#N/A	61C 60227352T	CFR 27K OHM+-5% 1/6W	R183		1
375	#N/A	61C 17236952T	3.6OHM +-5% 1/4W	R402		1
376	#N/A	61C175L68352T	CFR 68K OHM +-5% 1/2W	R403		1
377	#N/A	61C175L68252T	CFR 6.8K OHM +-5% 1/2W	R407		1
378	#N/A	61C 17247352T	CFR 47K OHM +-5% 1/4W	R412		1
379	#N/A	61C 17210052T	CFR 10OHM+-5% 1/4W	R413		1
380	#N/A	61C 17211252T	CFR 1.1K OHM +-5% 1/4W	R414		1
381	#N/A	61C 17210452T	CFR100K OHM +-5% 1/4W	R415		1
382	#N/A	61C 17212452T	CFR 120K OHM +-5% 1/4W	R416		1
383	#N/A	61C 17236352T	CFR 36K OHM +-5% 1/4W	R417		1
384	#N/A	61C 17211352T	CFR 11K OHM +-5% 1/4W	R418		1
385	#N/A	61C 17222452T	CFR 220KOHM+-5% 1/4W	R420		1
386	#N/A	61C 17210052T	CFR 10OHM+-5% 1/4W	R421		1
387	#N/A	61C 60220352T	CFR 20K OHM+-5% 1/6W	R423		1
388	#N/A	61C175L22052T	CFR 22 OHM +-5% 1/2W	R427		1
389	#N/A	61C 30110052T	1/2W 10 OHM FUSIBIE RES	R429		1
390	#N/A	61C 60247152T	CFR 470 OHM +-5% 1/6W	R433		1
391	#N/A	61C 17210452T	CFR100K OHM +-5% 1/4W	R435		1
392	#N/A	61C 17222252T	CFR 2.2KOHM+-5% 1/4W	R437		1
393	#N/A	61C 60233352T	CFR 33K OHM+-5% 1/6W	R440		1
394	#N/A	61C 17222252T	CFR 2.2KOHM+-5% 1/4W	R442		1
395	#N/A	61C 60247252T	CFR 4.7K OHM+-5% 1/6W	R446		1
396	#N/A	61C 17210452T	CFR100K OHM +-5% 1/4W	R449		1
397	#N/A	61C 17210052T	CFR 10OHM+-5% 1/4W	R450		1
398	#N/A	61A212Y47252T	MGFR 4.7KOHM +-5% 1/2W	R459		1
399	#N/A	61C 17247252T	CFR 4.7K OHM +-5% 1/4W	R460		1
400	#N/A	61C 17220552T	CFR 2MOHM+-5% 1/4W	R463		1
401	#N/A	61C 17210452T	CFR100K OHM +-5% 1/4W	R471		1
402	#N/A	61C 17247252T	CFR 4.7K OHM +-5% 1/4W	R473		1
403	#N/A	61C 17210052T	CFR 10OHM+-5% 1/4W	R475		1
404	#N/A	61C 17222452T	CFR 220KOHM+-5% 1/4W	R476		1
405	#N/A	61C 17222252T	CFR 2.2KOHM+-5% 1/4W	R477		1
406	#N/A	61C 17222452T	CFR 220KOHM+-5% 1/4W	R478		1
407	#N/A	61C 17222452T	CFR 220KOHM+-5% 1/4W	R479		1
408	#N/A	61A212Y47152T	470 OHM 1/2W	R480		1
409	#N/A	61C 17247252T	CFR 4.7K OHM +-5% 1/4W	R481		1
410	#N/A	61C 17247252T	CFR 4.7K OHM +-5% 1/4W	R486		1
411	#N/A	61C 17222252T	CFR 2.2KOHM+-5% 1/4W	R487		1
412	#N/A	61C 17222452T	CFR 220KOHM+-5% 1/4W	R488		1
413	#N/A	61C 60233352T	CFR 33K OHM+-5% 1/6W	R489		1
414	#N/A	61C 60247152T	CFR 470 OHM +-5% 1/6W	R601		1
415	#N/A	61C 21020252T	MFR 2KOHM +-1% 1/6W	R602		1
416	#N/A	61C 60247152T	CFR 470 OHM +-5% 1/6W	R603		1
417	#N/A	61C 21020252T	MFR 2KOHM +-1% 1/6W	R604		1
418	#N/A	61C 60210052T	CFR 10 OHM +-5% 1/6W	R605		1
419	#N/A	61C175L12152T	CFR 120 OHM +-5% 1/2W	R606		1
420	#N/A	61C175L27152T	CFR 270 OHM +-5% 1/2W	R609		1
421	#N/A	61C175L10952T	CFR 1 OHM +-5% 1/2W	R610		1
422	#N/A	61C 17212052T	CFR 12 OHM +-5%1/4W	R611		1
423	#N/A	61C 17233352T	CFR 33KOHM+-5% 1/4W	R707		1
424	#N/A	61C 17213352T	CFR 13K OHM +-5% 1/4W	R715		1
425	#N/A	61C 21020252T	MFR 2KOHM +-1% 1/6W	R718		1
426	#N/A	61C175L10252T	CFR 1K OHM +-5% 1/2W	R721		1
427	#N/A	61C 17282352T	CFR 82KOHM+-5% 1/4W	R722		1
428	#N/A	61A212Y18452T	MGFR 180K OHM +-5% 1/2W	R725		1
429	#N/A	61C 17275252T	CFR 7.5K OHM +-5% 1/4W	R726		1
430	#N/A	61C 20047952T	MFR 4.7 OHM +-1% 1/4W	R738		1
431	#N/A	61C175L56352T	CFR 56K OHM +-5% 1/2W	R740		1
432	#N/A	61C 60268252T	CFR 6.8K OHM+-5% 1/6W	R748		1
433	#N/A	61C 17262352T	CFR 62K OHM +-5% 1/4W	R749		1
434	#N/A	61C 60222152T	CFR 220 OHM +-5% 1/6W	R751		1
435	E-R-0405-6803	61A212Y10652T	10MOHM +-5% 1/2W	R900		1
436	E-R-0405-6779	61A212Y10552T	MGFR 1M OHM+-5% 1/2W	R901		1
437	#N/A	61C 60275252T	CFR 7.5K OHM +-5% 1/6W	R902		1
438	#N/A	61C175L43152T	CFR 430 OHM +-5% 1/2W	R903		1
439	#N/A	61C 17227252T	CFR 2.7KOHM+-5% 1/4W	R904		1
440	#N/A	61C 60262252T	CFR 6.2K OHM +-5% 1/6W	R905		1
441	#N/A	61C 17247052T	CFR 47 OHM +-5% 1/4W	R906		1
442	#N/A	61C175L15052T	CFR 15 OHM +-5% 1/2W	R908		1
443	#N/A	61C 17210152T	CFR 100OHM+-5% 1/4W	R909		1
444	#N/A	61C 60291352T	CFR 91K OHM +-5% 1/6W	R910		1
445	#N/A	61C 60210252T	CFR 1K OHM+-5% 1/6W	R912		1
446	#N/A	61C203S12452T	120KOHM 1/2W	R913		1

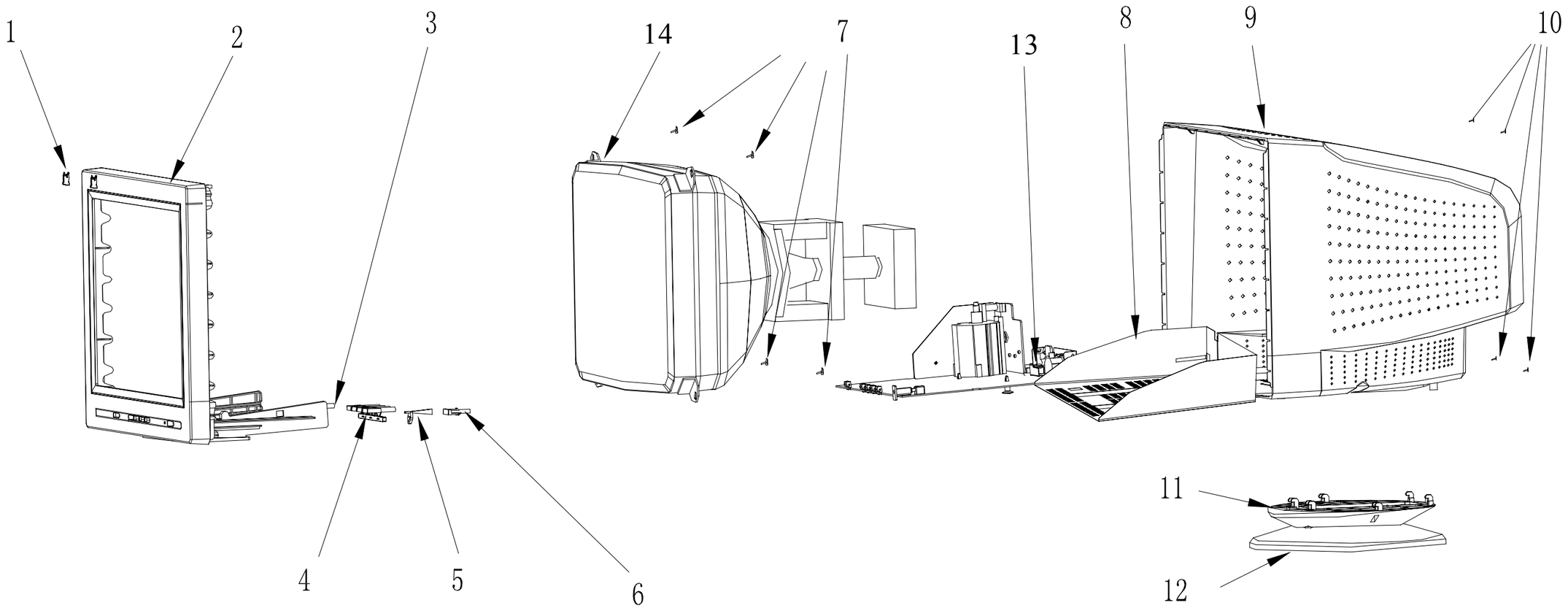
Item	ViewSonic P/N	Ref. P/N	Description	Location	Universal number#	Q'ty
447	#N/A	61C 60247052T	CFR 47 OHM +-5% 1/6W	R914		1
448	#N/A	61C203S27252T	2.7K 1/2W	R915		1
449	#N/A	61C 17218052T	CFR 18 OHM+-5% 1/4W	R916		1
450	#N/A	61C203S10452T	100KOHM 1/2W	R917		1
451	#N/A	61C 20733252T	3.3K 1/2W	R918		1
452	#N/A	61C 17247852T	0.47OHM 1/4 W	R920		1
453	E-R-0405-6779	61A212Y10552T	MGFR 1M OHM+-5% 1/2W	R921		1
454	#N/A	61C 17247852T	0.47OHM 1/4 W	R923		1
455	#N/A	61C 17247852T	0.47OHM 1/4 W	R924		1
456	#N/A	61C 17247852T	0.47OHM 1/4 W	R925		1
457	#N/A	61C 60239152T	CFR 390 OHM +-5% 1/6W	R928		1
458	#N/A	61C 60233152T	CFR 330 OHM+-5% 1/6W	R931		1
459	#N/A	61C 60227352T	CFR 27K OHM+-5% 1/6W	R932		1
460	#N/A	61C 60210252T	CFR 1K OHM+-5% 1/6W	R933		1
461	#N/A	61C 17210052T	CFR 10OHM+-5% 1/4W	R934		1
462	#N/A	61C203S24452T	240K 1/2W	R935		1
463	#N/A	61A214Y10252T	MGFR 1K 1/4W	R936		1
464	#N/A	61C203S33452T	330K 1/2W	R937		1
465	#N/A	61C 60215052T	CFR 15 OHM +-5% 1/6W	R938		1
466	#N/A	61C 17222352T	CFR 22KOHM+-5% 1/4W	R939		1
467	#N/A	61C 17215452T	CFR 150K OHM +-5% 1/4W	R950		1
468	#N/A	61C 60210252T	CFR 1K OHM+-5% 1/6W	R951		1
469	#N/A	61C203S56252T	5.6K OHM 1/2W	R953		1
470	#N/A	61C 17247052T	CFR 47 OHM +-5% 1/4W	R962		1
471	#N/A	61C 17210052T	CFR 10OHM+-5% 1/4W	R965		1
472	#N/A	61C 17247352T	CFR 47K OHM +-5% 1/4W	R967		1
473	#N/A	61C 17239352T	CFR 39K OHM +-5% 1/4W	R969		1
474	#N/A	61C175L22452T	CFR 220K OHM +-5% 1/2W	R970		1
475	#N/A	61C 17220252T	CFR 2KOHM+-5% 1/4W	R972		1
476	#N/A	61A212Y20452T	MGFR 200K OHM +-5% 1/2W	R973		1
477	#N/A	61C175L20452T	CFR 200K OHM +-5% 1/2W	R977		1
478	#N/A	61C 17222152T	CFR 220OHM+-5% 1/4W	R980		1
479	#N/A	61C 17210352T	CFR 10KOHM +-5% 1/4W	R982		1
480	#N/A	61C 17210352T	CFR 10KOHM +-5% 1/4W	R983		1
481	#N/A	61C 17210052T	CFR 10OHM+-5% 1/4W	R989		1
482	#N/A	6C 31500	EYELET	RV1		1
483	PL-00002759	6C 31 4	BRASS	RV10		1
484	PL-00002759	6C 31 4	BRASS	RV11		1
485	PL-00002759	6C 31 4	BRASS	RV12		1
486	PL-00002759	6C 31 4	BRASS	RV13		1
487	PL-00002759	6C 31 4	BRASS	RV14		1
488	PL-00002759	6C 31 4	BRASS	RV15		1
489	PL-00002759	6C 31 4	BRASS	RV16		1
490	PL-00002759	6C 31 4	BRASS	RV17		1
491	PL-00002759	6C 31 4	BRASS	RV18		1
492	#N/A	6C 31502	BRASS	RV19		1
493	#N/A	6C 31500	EYELET	RV2		1
494	#N/A	6C 31502	BRASS	RV20		1
495	#N/A	6C 31502	BRASS	RV22		1
496	#N/A	6C 31502	BRASS	RV24		1
497	#N/A	6C 31502	BRASS	RV25		1
498	#N/A	6C 31502	BRASS	RV26		1
499	#N/A	6C 31502	BRASS	RV28		1
500	#N/A	6C 31500	EYELET	RV3		1
501	#N/A	6C 31502	BRASS	RV30		1
502	#N/A	6C 31501	BRASS	RV31		1
503	#N/A	6C 31501	BRASS	RV32		1
504	#N/A	6C 31501	BRASS	RV33		1
505	#N/A	6C 31500	EYELET	RV4		1
506	PL-00002759	6C 31 4	BRASS	RV5		1
507	PL-00002759	6C 31 4	BRASS	RV6		1
508	PL-00002759	6C 31 4	BRASS	RV7		1
509	PL-00002759	6C 31 4	BRASS	RV8		1
510	PL-00002759	6C 31 4	BRASS	RV9		1
511	#N/A	93A 3950752T	BZX55C51	ZD101		1
512	#N/A	93C 3951352T	HZ6C2-E	ZD102		1
513	#N/A	93C 3951352T	HZ6C2-E	ZD103		1
514	#N/A	93C 3951352T	HZ6C2-E	ZD104		1
515	#N/A	93C 3951352T	HZ6C2-E	ZD105		1
516	E-00003628	93C 3951652T	TZX5V1B	ZD107		1
517	E-00003628	93C 3951652T	TZX5V1B	ZD701		1
518	#N/A	93C 39 7352T	HZ6B1-E	ZD702		1
519	E-00003628	93C 3951652T	TZX5V1B	ZD726		1
520	E-00002740	93C 3951852T	TZX8V2A	ZD901		1
521	#N/A	93C 39 7352T	HZ6B1-E	ZD902		1

Item	ViewSonic P/N	Ref. P/N	Description	Location	Universal number#	Q'ty
522	#N/A	93C 39 7752T	HZ5C1-E	ZD904		1
523	#N/A	ARP985D1NVSC	CRT BAORD			1
524	#N/A	40C 45762412B	LABEL			1
525	#N/A	87A3504 DL	CRT SOCKET			1
526	#N/A	90C6113 4	HEAT SINK			1
527	#N/A	705A985DR5601B	IC802 ASS'Y			1
528	#N/A	67C 305470 9	47UF +-20% 100V	C805		1
529	#N/A	65C 2M1033FB6921	10000PF -20%~+18% 2KV	C806		1
530	#N/A	67C 305470 9	47UF +-20% 100V	C811		1
531	M-FT-0827-0085	53A 40 8	FILTER	FB801		1
532	M-FT-0827-0085	53A 40 8	FILTER	FB802		1
533	M-FT-0827-0085	53A 40 8	FILTER	FB803		1
534	#N/A	71C 55 21 B	FERRITE BEAD 10*6.0*0.8	FB809		1
535	#N/A	9C 203 8	BRASS PIN	G2		1
536	#N/A	9C 203 8	BRASS PIN	GND2		1
537	E-IC-0401-4019	56C 366509	LM1246DKA/NA/NOPB	IC801		1
538	#N/A	71C 55503	FERRITE BEAD	J809		1
539	#N/A	71C 55503	FERRITE BEAD	J810		1
540	#N/A	71C 55503	FERRITE BEAD	J811		1
541	#N/A	71C 55 9 T C	CORE RF BEAD RH 3.5X6X0	J818		1
542	#N/A	33C3278 6D	WAFER	P801		1
543	#N/A	33C327814D	WAFER& PLUG	P802		1
544	#N/A	61C 208688 64	MOFR 0.68OHM +-5% 1W	R846		1
545	PL-00002759	6C 31 4	BRASS			3
546	#N/A	715C1451 2	CRPC BOARD			1
547	#N/A	65C517K561 2T6921	560PF 500V Z5P +-10%	C801		1
548	E-C-0404-4629	65C 44210113T	100PF +-5% NPO 50V	C802		1
549	E-C-0404-4629	65C 44210113T	100PF +-5% NPO 50V	C803		1
550	#N/A	65C 450104 7T	0.1UF +80-20% 50V Y5V	C804		1
551	#N/A	64C176J104 0T	0.1UF 5% 63V	C807		1
552	#N/A	67C 305100 3T	10UF +-20% 16V	C808		1
553	E-C-0404-4629	65C 44210113T	100PF +-5% NPO 50V	C809		1
554	#N/A	67C 305220 3T	22UF +-20% 16V	C810		1
555	E-C-0404-4629	65C 44210113T	100PF +-5% NPO 50V	C812		1
556	#N/A	65C251K104 2T	0.1UF 250V	C813		1
557	#N/A	65C 450104 7T	0.1UF +80-20% 50V Y5V	C814		1
558	#N/A	64C176J104 0T	0.1UF 5% 63V	C815		1
559	#N/A	65C 444101 5T	100 PF 10% 50V Y5P	C816		1
560	#N/A	65C 444101 5T	100 PF 10% 50V Y5P	C817		1
561	#N/A	65C 444101 5T	100 PF 10% 50V Y5P	C818		1
562	#N/A	67C 305470 3T	47UF +-20% 16V	C819		1
563	#N/A	67C 70109 9T	1UF +-20% 100V	C820		1
564	#N/A	67C 70109 9T	1UF +-20% 100V	C821		1
565	#N/A	67C 70109 9T	1UF +-20% 100V	C822		1
566	#N/A	64C176J104 0T	0.1UF 5% 63V	C823		1
567	#N/A	64C176J104 0T	0.1UF 5% 63V	C824		1
568	#N/A	67C 309471 3T	470UF +-20% 16V	C826		1
569	#N/A	65C251K104 2T	0.1UF 250V	C827		1
570	#N/A	67C 309470 3T	47UF +-20% 16V	C828		1
571	#N/A	65C251K104 2T	0.1UF 250V	C829		1
572	#N/A	64C 44J3331AT	0.033u/100V	C830		1
573	#N/A	65C251K104 2T	0.1UF 250V	C831		1
574	#N/A	65C251K104 2T	0.1UF 250V	C832		1
575	#N/A	65C 444152 5T	1500PF 10% Y5P 50V	C833		1
576	#N/A	65C251K104 2T	0.1UF 250V	C834		1
577	#N/A	65C 2K101 5T6921	100PF/2KV	C835		1
578	#N/A	65C 2K101 5T6921	100PF/2KV	C836		1
579	#N/A	65C 44447113T	470PF +-10% Z5P 50V	C837		1
580	#N/A	64C176J104 0T	0.1UF 5% 63V	C838		1
581	#N/A	65C 44268013T	68PF +-5% NPO 50V	C839		1
582	#N/A	65C 1K221 5T6921	220PF/1KV Y5P+-10%	C841		1
583	#N/A	65C 44210013T	10PF +-5% NPO 50V	C842		1
584	#N/A	65C 44210013T	10PF +-5% NPO 50V	C843		1
585	#N/A	65C 44210013T	10PF +-5% NPO 50V	C844		1
586	#N/A	65C517K102 5T6921	1000PF 500V +-10% Y5P	C846		1
587	#N/A	65C517K102 5T6921	1000PF 500V +-10% Y5P	C847		1
588	#N/A	67C 305109 9T	1UF +-20% 100V	C848		1
589	#N/A	65C517K102 5T6921	1000PF 500V +-10% Y5P	C849		1
590	#N/A	93C 6450152T	SWITCHING DIODE BAV21	D802		1
591	E-D-0403-0531	93A 64 1152T	DIODE 1N4148	D803		1
592	#N/A	93C 6450152T	SWITCHING DIODE BAV21	D804		1
593	E-D-0403-0531	93A 64 1152T	DIODE 1N4148	D805		1
594	#N/A	93C 6450152T	SWITCHING DIODE BAV21	D806		1
595	#N/A	93C 6450152T	SWITCHING DIODE BAV21	D807		1
596	#N/A	93C 6450152T	SWITCHING DIODE BAV21	D808		1

Item	ViewSonic P/N	Ref. P/N	Description	Location	Universal number#	Q'ty
597	#N/A	93C106050152T	BYV26C/TFK	D809		1
598	#N/A	93C 6450152T	SWITCHING DIODE BAV21	D810		1
599	E-D-0403-0531	93A 64 1152T	DIODE 1N4148	D811		1
600	E-D-0403-0531	93A 64 1152T	DIODE 1N4148	D812		1
601	E-D-0403-0531	93A 64 1152T	DIODE 1N4148	D813		1
602	E-D-0403-0531	93A 64 1152T	DIODE 1N4148	D814		1
603	#N/A	61C175L56452T	CFR 560K OHM +-5% 1/2W	FB804		1
604	#N/A	71C 55 9 T C	CORE RF BEAD RH 3.5X6X0	FB805		1
605	#N/A	71C 55 9 T C	CORE RF BEAD RH 3.5X6X0	FB806		1
606	#N/A	71C 55 9 T C	CORE RF BEAD RH 3.5X6X0	J808		1
607	#N/A	71C 55 9 T C	CORE RF BEAD RH 3.5X6X0	J816		1
608	#N/A	71C 55 9 T C	CORE RF BEAD RH 3.5X6X0	L804		1
609	#N/A	93C1060 6P52T	ER106/PANJIT	L805		1
610	#N/A	61C 17210152T	CFR 100OHM+-5% 1/4W	L807		1
611	#N/A	61C 17210152T	CFR 100OHM+-5% 1/4W	L808		1
612	#N/A	61C 17210152T	CFR 100OHM+-5% 1/4W	L809		1
613	#N/A	61C 60210152T	CFR 100 OHM+-5% 1/6W	R802		1
614	#N/A	61C175L10152T	CFR 100 OHM +-5% 1/2W	R804		1
615	#N/A	61C 60210152T	CFR 100 OHM+-5% 1/6W	R805		1
616	#N/A	61C172S47152T	RES CF 5% 1/4W 470OHM A	R809		1
617	#N/A	61C 21062252T	MFR 6.2KOHM +-1% 1/6W	R811		1
618	#N/A	61C 60220352T	CFR 20K OHM+-5% 1/6W	R812		1
619	#N/A	61C 60220352T	CFR 20K OHM+-5% 1/6W	R813		1
620	#N/A	61C 60210252T	CFR 1K OHM+-5% 1/6W	R814		1
621	#N/A	61C 17215152T	CFR 150 OHM +-5% 1/4W	R815		1
622	#N/A	61C 60220352T	CFR 20K OHM+-5% 1/6W	R816		1
623	#N/A	61C172S47152T	RES CF 5% 1/4W 470OHM A	R817		1
624	#N/A	61C 60233052T	CFR 33 OHM +-5% 1/6W	R818		1
625	#N/A	61C 17233452T	CFR 330K OHM +-5% 1/4W	R819		1
626	#N/A	61C 60210152T	CFR 100 OHM+-5% 1/6W	R820		1
627	#N/A	61C 60233052T	CFR 33 OHM +-5% 1/6W	R821		1
628	#N/A	61C 60247252T	CFR 4.7K OHM+-5% 1/6W	R822		1
629	#N/A	61C 21010352T	MFR 10K OHM +- 1% 1/6W	R823		1
630	#N/A	61C 60275052T	CFR 75 OHM+-5% 1/6W	R824		1
631	#N/A	61C 60275052T	CFR 75 OHM+-5% 1/6W	R826		1
632	#N/A	61C 20733052T	33OHM 1/2W	R828		1
633	#N/A	61C 20733052T	33OHM 1/2W	R829		1
634	#N/A	61C172S47152T	RES CF 5% 1/4W 470OHM A	R830		1
635	#N/A	61C 60210152T	CFR 100 OHM+-5% 1/6W	R832		1
636	#N/A	61C 60275052T	CFR 75 OHM+-5% 1/6W	R834		1
637	#N/A	61C 60210152T	CFR 100 OHM+-5% 1/6W	R835		1
638	#N/A	61C 60233052T	CFR 33 OHM +-5% 1/6W	R836		1
639	#N/A	61C 17233452T	CFR 330K OHM +-5% 1/4W	R837		1
640	#N/A	61C 20733052T	33OHM 1/2W	R840		1
641	#N/A	73C 5447810T	0.47UH +-10% peaking co	R841		1
642	#N/A	73C 5447810T	0.47UH +-10% peaking co	R842		1
643	#N/A	73C 5447810T	0.47UH +-10% peaking co	R843		1
644	#N/A	61C 17233452T	CFR 330K OHM +-5% 1/4W	R844		1
645	#N/A	61C 21010252T	MFR 1K OHM +- 1% 1/6W	R845		1
646	E-00002740	93C 3951852T	TZX8V2A	ZD804		1
647	#N/A	2C6003 1	SCREW NUT			2
648	#N/A	90C6026506 A	HEAT SINK			1
649	#N/A	90C6074 4	HEAT SINK			1
650	#N/A	M1C1730 10128	SCREW M3x10			2
651	E-00004061	56C 551525	LM2476	IC802		1
652	#N/A	M1C1730 10128	SCREW M3x10			1
653	#N/A	32C3028 8	MICA			1
654	#N/A	90C 351511 A	HEAT SINK			1
655	#N/A	M1C1730 10128	SCREW M3x10			1
656	E-00002874	56C 584 1A	TDA4863A/PHILIPS	IC601		1
657	E-00004070	57C 751 4	2SJ584LS	Q911		1
658	#N/A	5C 71 1	TRANSISTOR HOUSING			3
659	#N/A	32C3028504	MICA			3
660	#N/A	90C6055700	HEAT SINK			1
661	#N/A	M1C1730 8128	SCREW M3x8			1
662	#N/A	M1C1730 10128	SCREW M3x10			1
663	#N/A	M1C1730 12128	SCREW			3
664	#N/A	93C 220505	DMV1500M-AOC	D408		1
665	E-00004067	57C 705 7 A	PHILIPS 1500V/12A BU252	Q403		1
666	E-00004069	57C 600 21	IRF630M/S.T	Q406		1
667	E-00004066	57C 600 14	MOSFET	Q417		1
668	E-00004066	57C 600 14	MOSFET	Q418		1
669	#N/A	32C3028 8	MICA			1
670	#N/A	90C6234 1	HEAT SINK			1
671	#N/A	M1C1730 8128	SCREW M3x8			1

Item	ViewSonic P/N	Ref. P/N	Description	Location	Universal number#	Q'ty
672	E-00004071	57C 724502	STP9NK70Z	Q901		1
673	#N/A	90C6118 1	HEAT SINK			1
674	#N/A	M1C1730 6128	SCREW M3x6			1
675	E-00004066	57C 600 14	MOSFET	Q420		1
676	#N/A	9C 203 9	PIN			1
677	E-R-0405-0377	61C 58 9T	NTCR 10OHM+-20% 5A THIN	NR901		1
678	M-00002753	87C 501 6	AC SOCKET			1
679	#N/A	95C 800 2 1	WIRE HARNESS	CN901		1
680	E-00002695	84A 7H400 SL	FUSE 4A 250V LF-618 004	F901		1
681	#N/A	84C 33 10	FUSE CLIP	F901		2
682	#N/A	93C 22 48 H	48MHZ ?	X101		1
683	E-00003625	95C 90 23	JUMPER	XGND		1
684	#N/A	11C 112 1 A	WIRE MOUNTS			2
685	E-00003860	750C55372AV	SDI 19" DFTM CRT			1
686	#N/A	65C 1K470 5T6921	47P/1KV	C450		1
687	E-00003625	95C 90 23	JUMPER	C480		1
688	#N/A	95C201F 50162	16" PULSE	TP405		1
689	E-00003860	750C55372AV	SDI 19" DFTM CRT			1
690	#N/A	65C 1K470 5T6921	47P/1KV	C450		1
691	E-00003625	95C 90 23	JUMPER	C480		1
692	#N/A	95C2070501	WIRE HARNESS			1
693	#N/A	750A55379852AM	19" MPRII SDI CRT ASS'YM	E750A		1

8. Exploded Diagram And Spare Parts List



ViewSonic Corporation		
Model	E90fB-4	
Title		
Date		Rev:

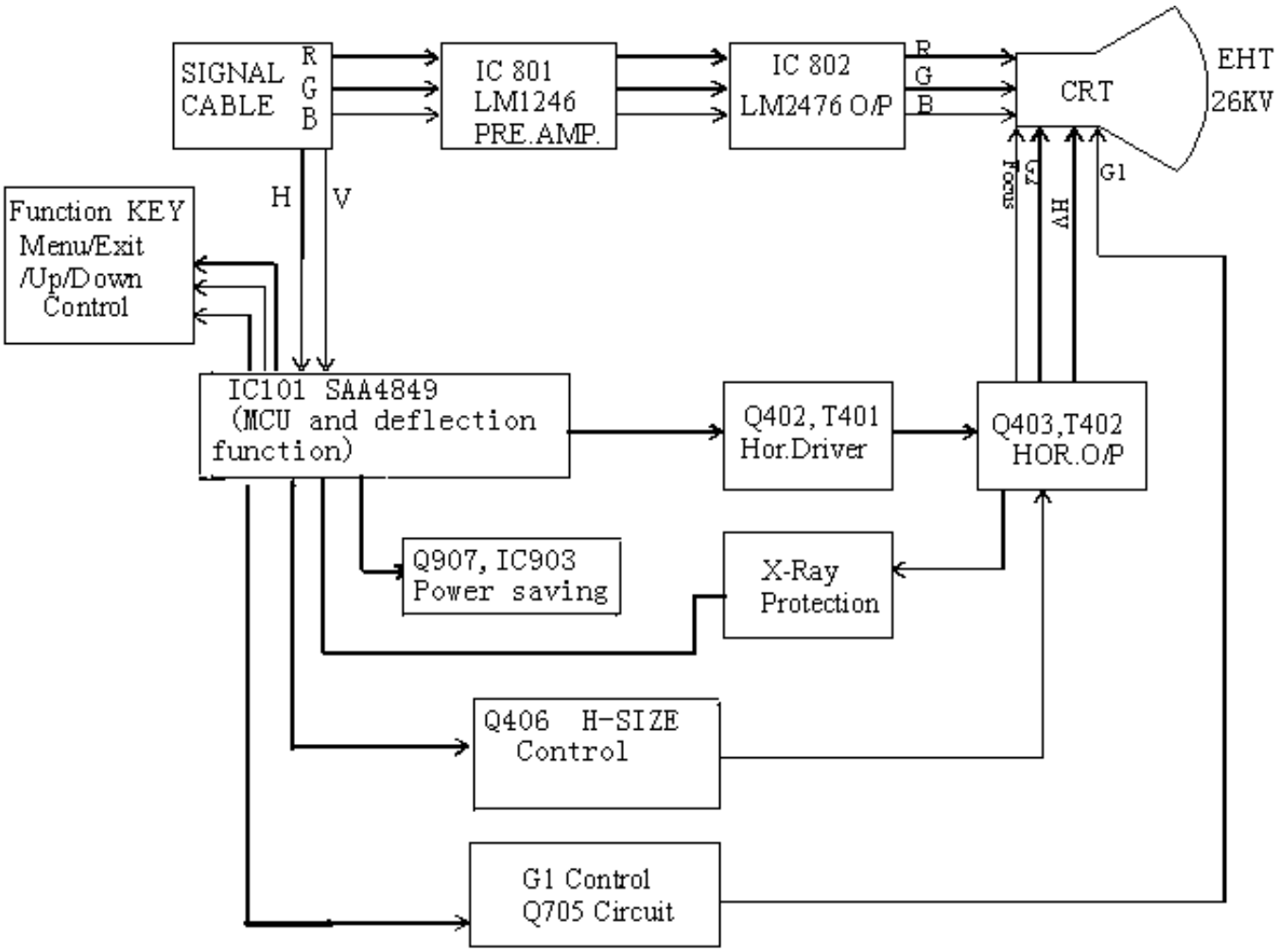
EXPLODED PARTS LIST (E90fB-4 for "M & G-Model)

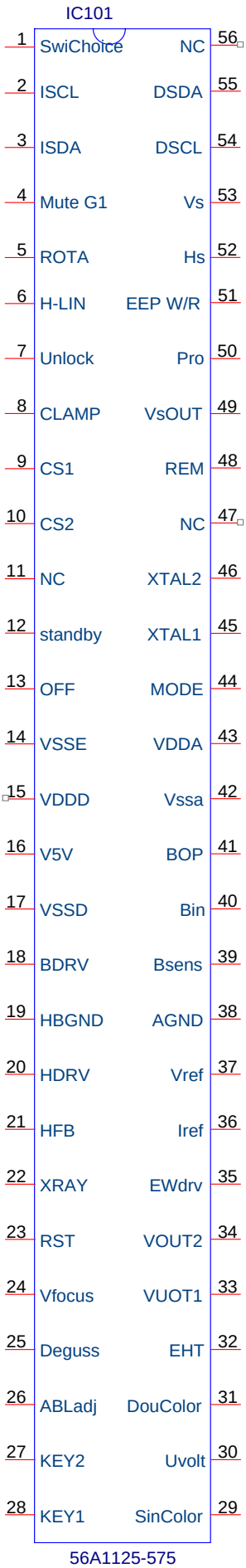
ViewSonic Model Number: VS10794-1M/G

Rev: 1a

Item	ViewSonic P/N	Ref.P/N	Description	Q'ty
1	#N/A	23C3182-1	LOGO	1 PCS
2	C-00004054	34C6285-AE7-F	BEZEL	1PCS
3	#N/A	33C6339-E7-F	OSD KNOB	1PCS
4	#N/A	33C6338-E7-F	KEY PAD	1 PCS
5	#N/A	33C6337-1	LENS	1PCS
6	#N/A	33C6336-E7-F	POWER KNOB	1 PCS
7	#N/A	1C503-5T-47	SCREW	4 PCS
8	#N/A	85C6027-606	SHIELD	1 PCS
9	C-00004055	34C6286-E7-F	REAR COVER	1 PCS
10	HW-00002749	Q1C340-16-47	SCREW	4 PCS
11	PL-00004056	34C6293-QE-L	SWIVEL	1 PCS
12	C-00002683	34C741-QE-L	BASE	1 PCS
13	E-00003860	750C5537-2AV	CRT	1 PCS
14	#N/A	715C1576-1	PCB	1 PCS

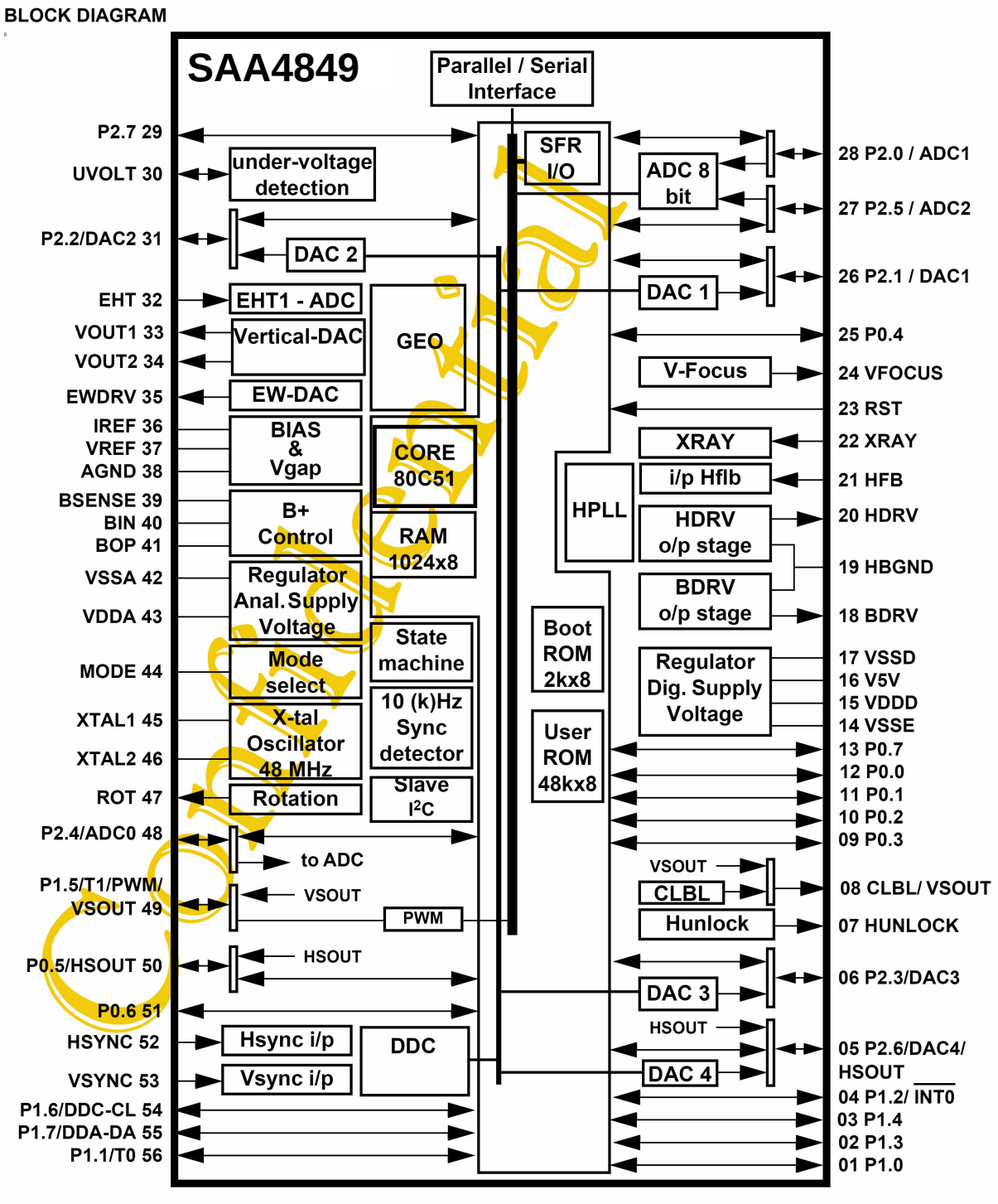
9. Block Diagram

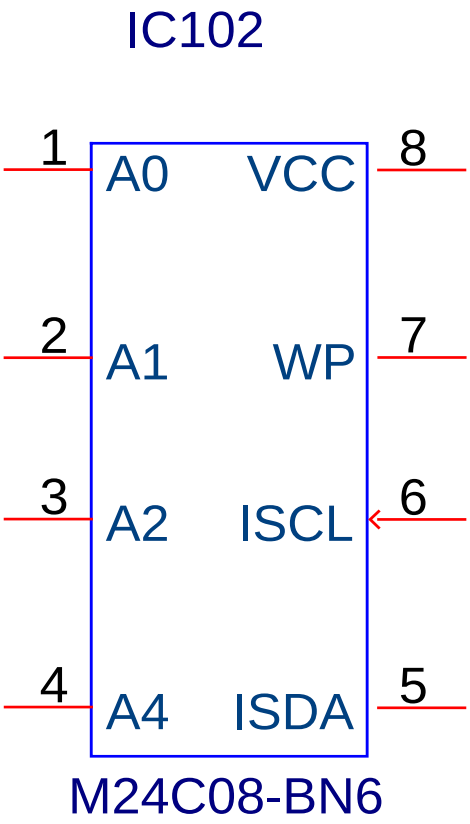


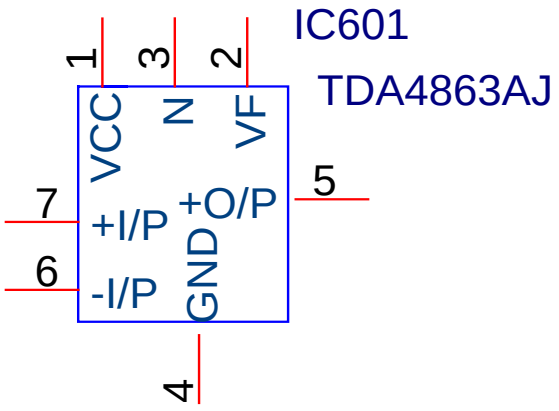


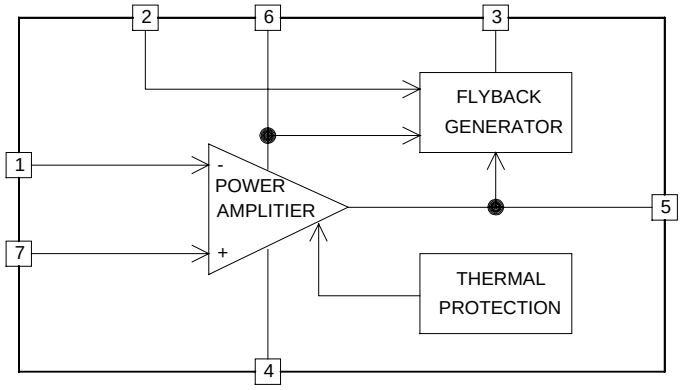
IC101 SAA4849

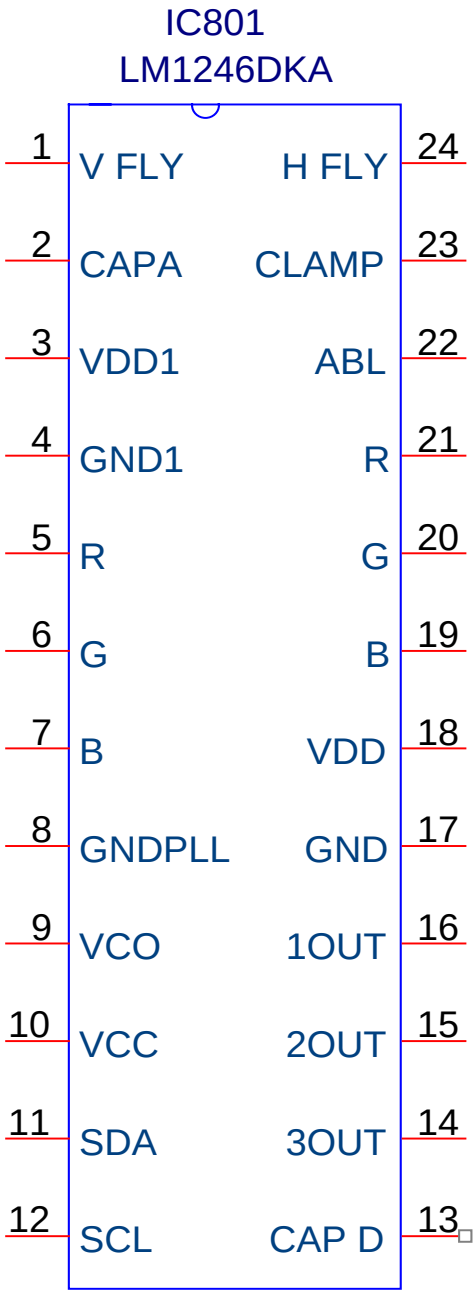
BLOCK DIAGRAM

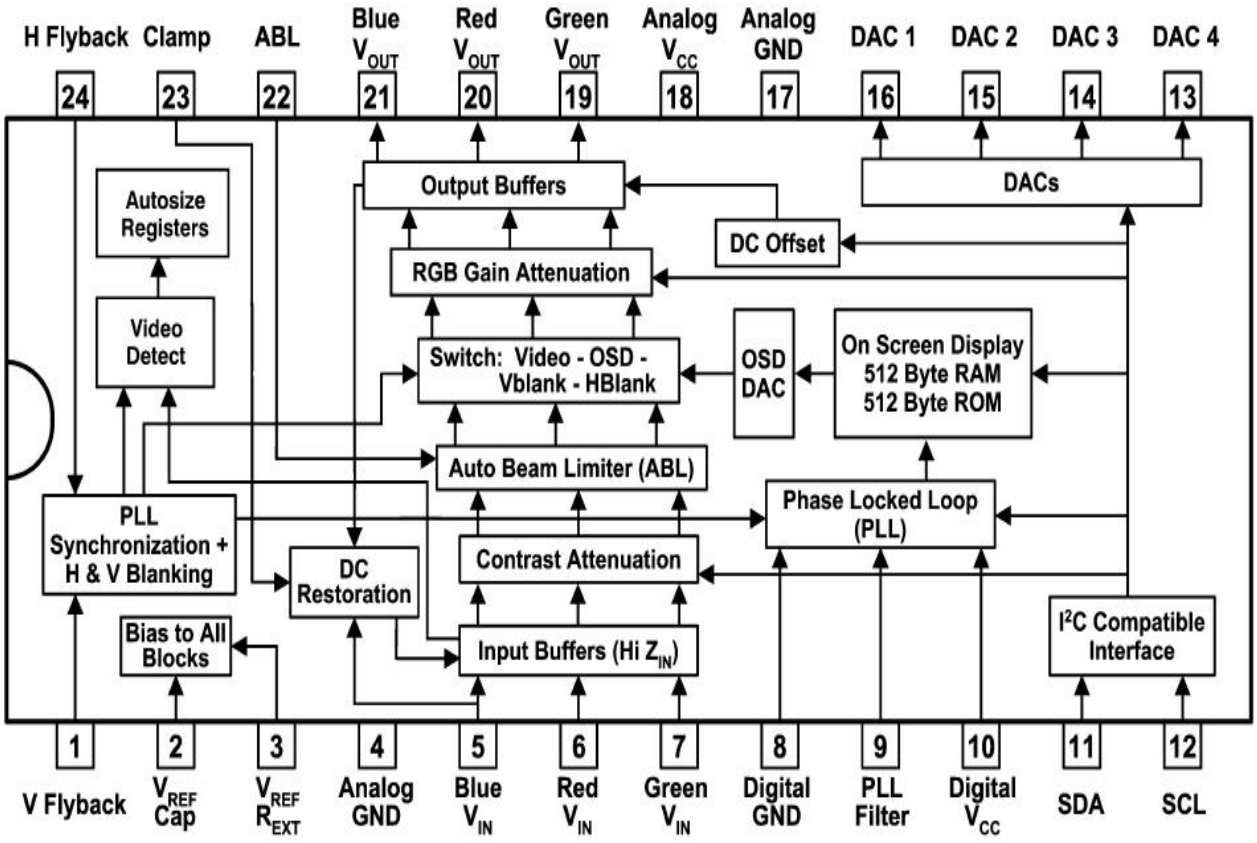



IC102
1
A0
VCC
8
2
A1
WP
7
3
A2
ISCL
6
4
A4
ISDA
5
M24C08-BN6

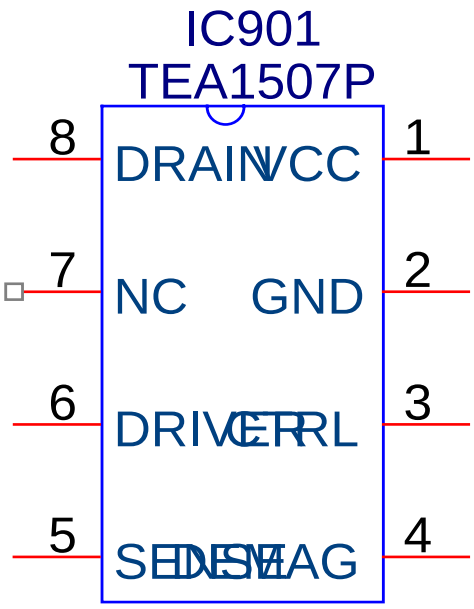

IC601
TDA4863AJ
1
VCC
3
N
2
VF
7
+I/P
6
-I/P
GND
+O/P
5
4


2
6
3
FLYBACK
GENERATOR
1
-
POWER
AMPLITIER
+
7
5
THERMAL
PROTECTION
4


IC801
LM1246DKA
1
V FLY
2
CAPA
3
VDD1
4
GND1
5
R
6
G
7
B
8
GNDPLL
9
VCO
10
VCC
11
SDA
12
SCL
24
H FLY
23
CLAMP
22
ABL
21
R
20
G
19
B
18
VDD
17
GND
16
1OUT
15
2OUT
14
3OUT
13
CAP D



IC801 LM1246DKA



BLOCK DIAGRAM

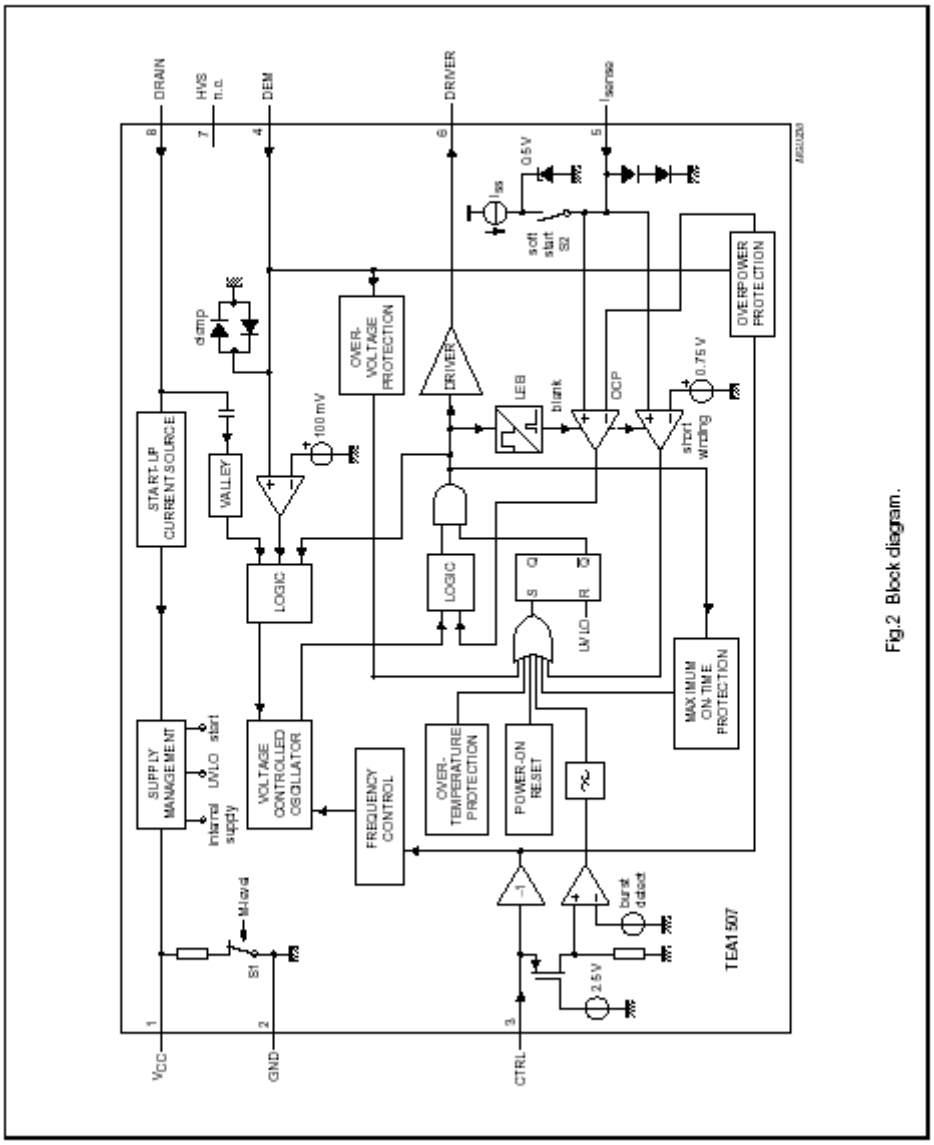
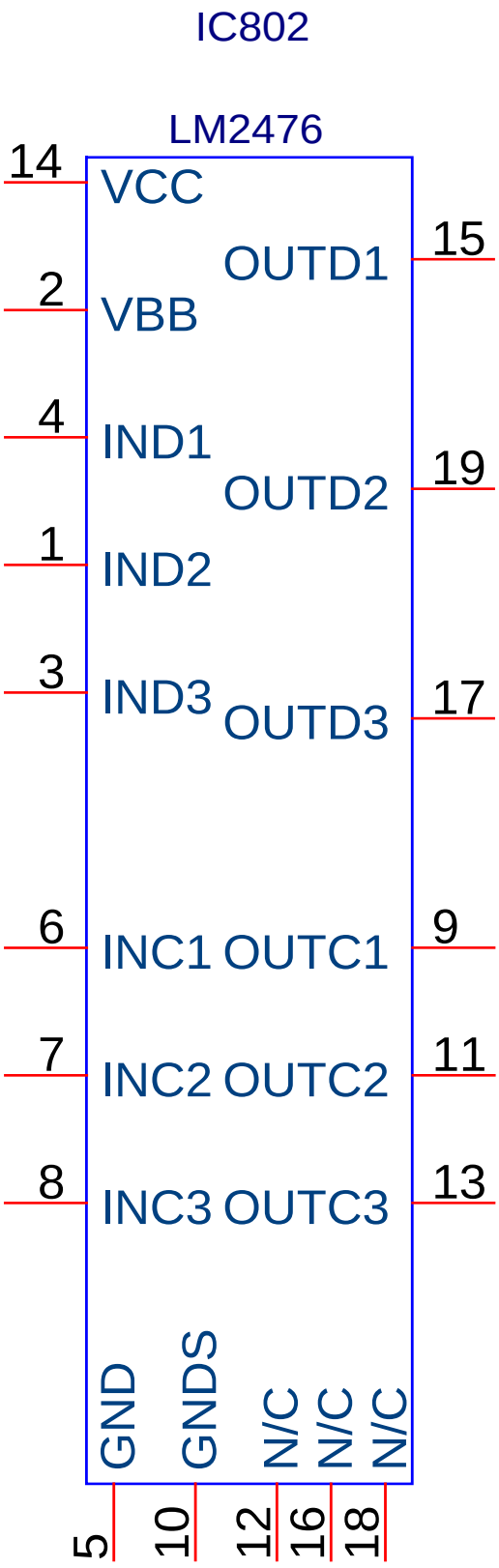
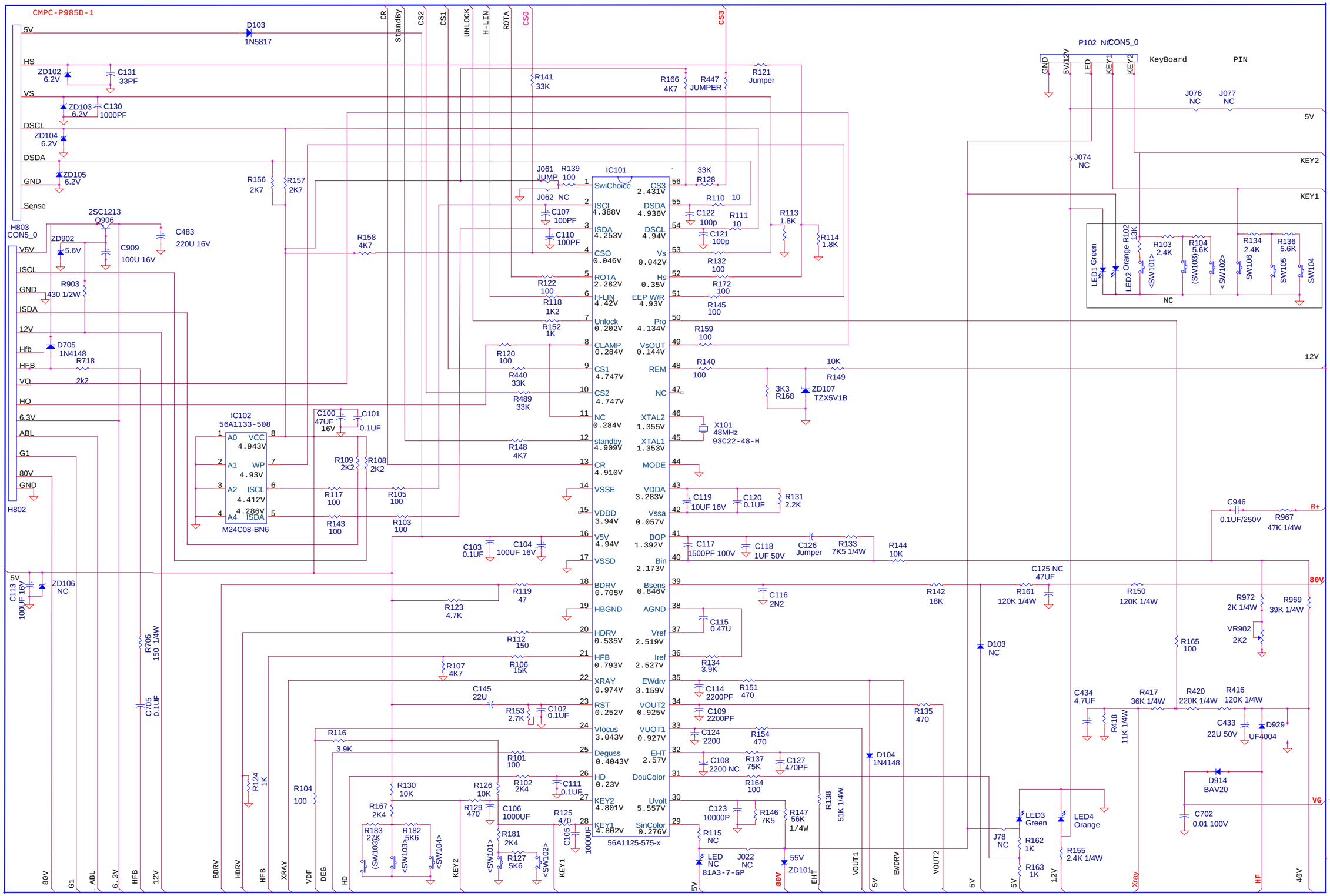
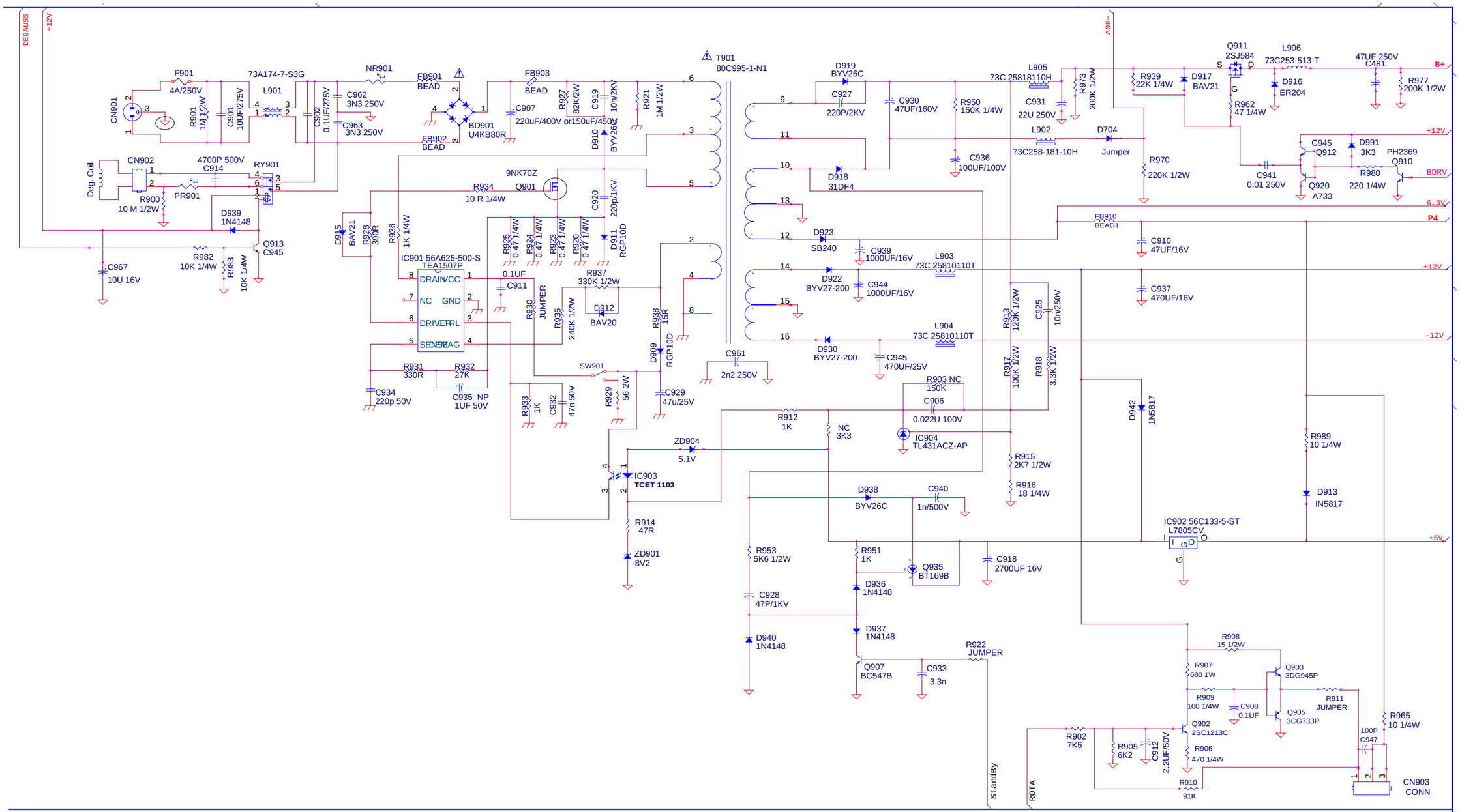


Fig.2 Block diagram.


IC802
LM2476
14
VCC
15
OUTD1
2
VBB
4
IND1
19
OUTD2
1
IND2
3
IND3
17
OUTD3
6
INC1
OUTC1
9
7
INC2
OUTC2
11
8
INC3
OUTC3
13
GND
GNDS
N/C
N/C
N/C
5
10
12
16
18

10. Schematic Diagrams



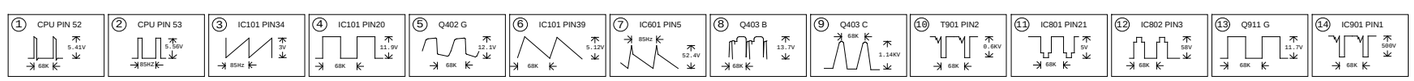


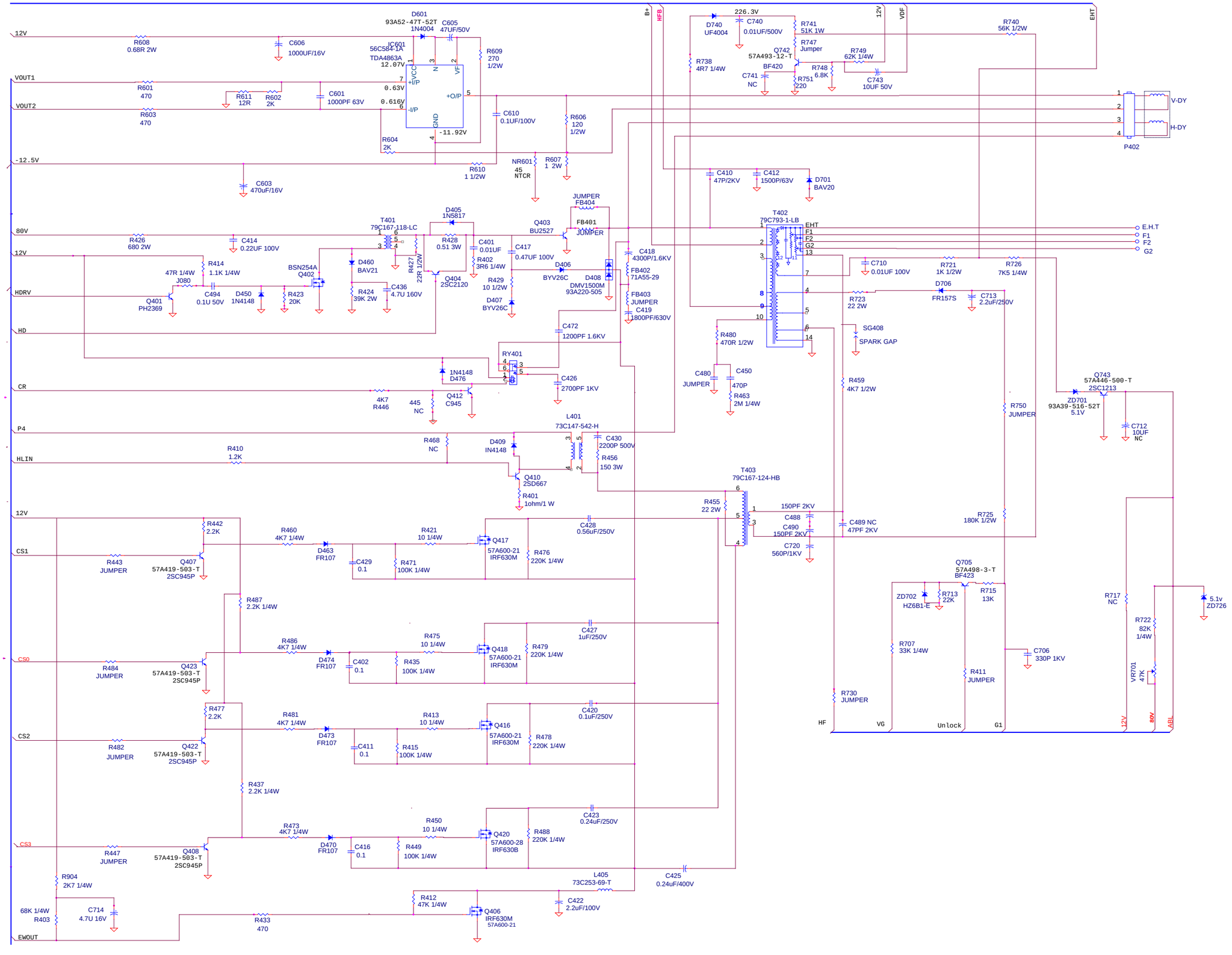
: : :220V/50HZ,H-FREQ:68KHZ,V-FREQ:85HZ;

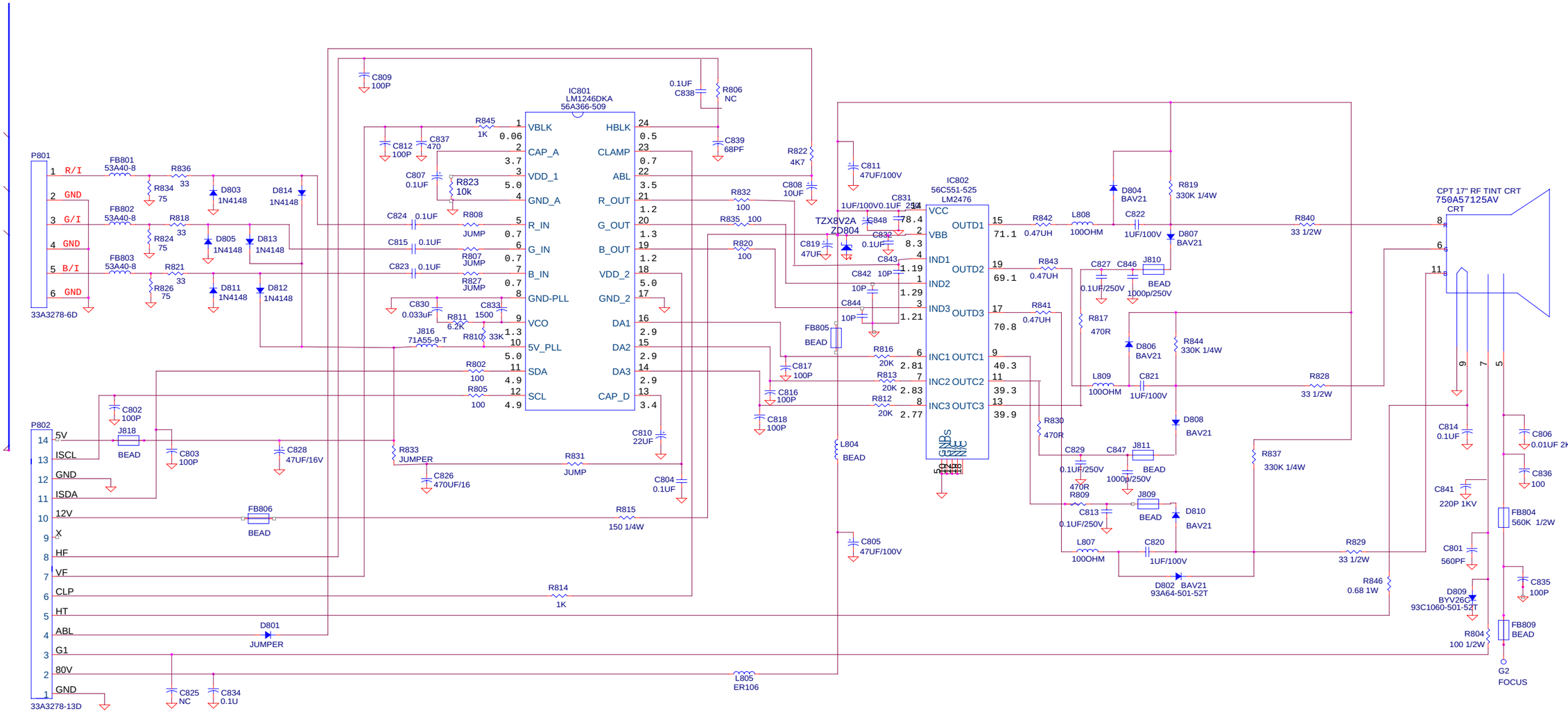
CS TABLE:

Frequency	CS1	CS2
<40KHZ	0	0
40KHZ~58KHZ	0	1
>58KHZ	1	1

LED1 ,POWERSAVING ;LED2 ;

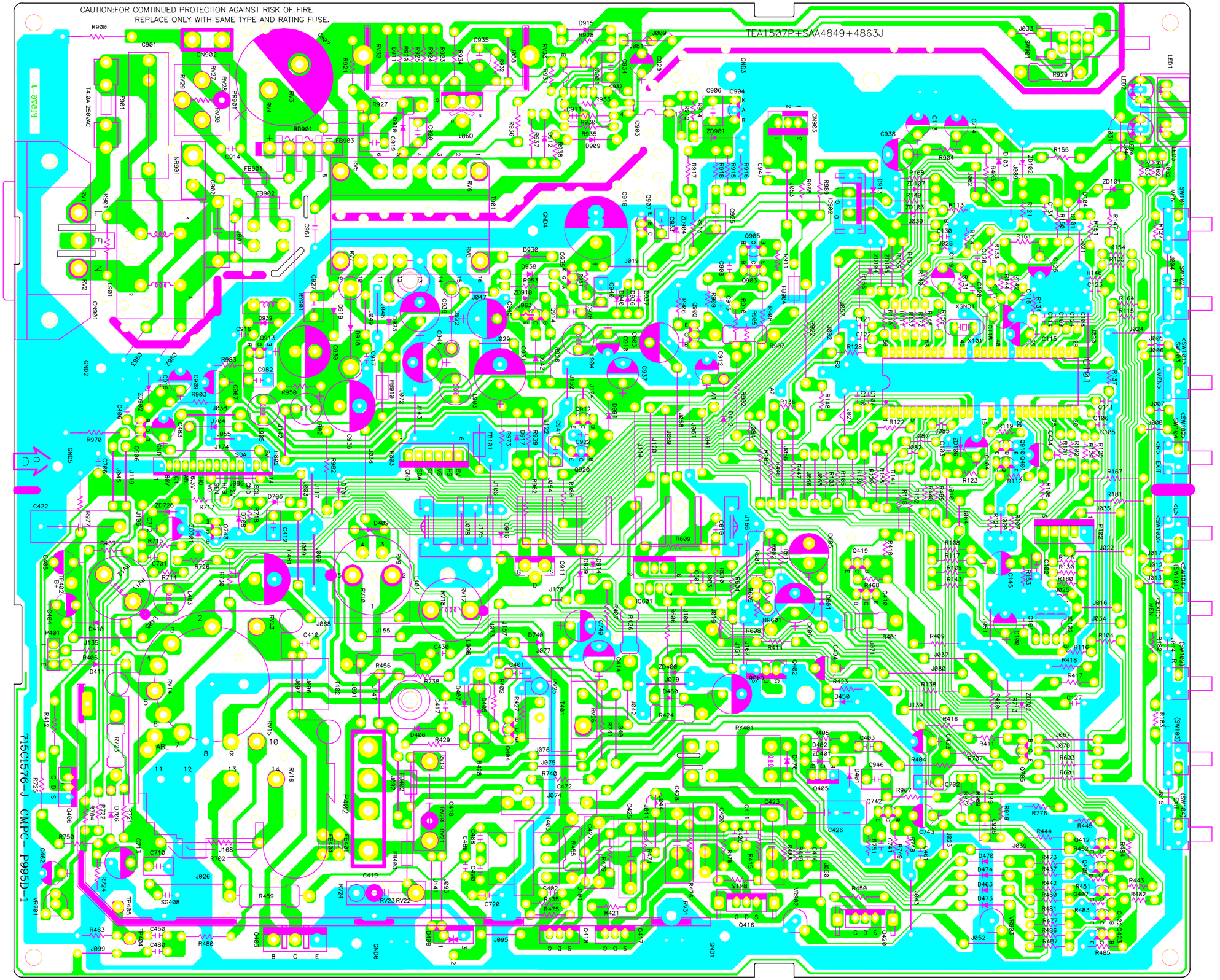



12V
VOUT1
VOUT2
-12.5V
80V
HDRV
HD
CR
P4
HLIN
CS1
CS0
CS2
CS3
EW0UT
D601
93A52-47T-52T
1N4004
C605
47UF/50V
IC601
56C584-1A
TDA4863A
12.07V
+VCC
+I/P
-I/P
GND
VF
+O/P
0.63V
0.616V
-11.92V
R608
0.68R 2W
C606
1000UF/16V
R601
470
R603
470
R611
12R
R602
2K
C601
1000PF 63V
R604
2K
R609
270
1/2W
C610
0.1UF/100V
R606
120
1/2W
R607
1 2W
NR601
45
NTCR
R610
1 1/2W
C603
470uF/16V
B+
HFB
D740
UF4004
226.3V
C740
0.01UF/500V
R741
51K 1W
R747
Jumper
Q742
57A493-12-T
BF420
R738
4R7 1/4W
C741
NC
R751
220
R748
6.8K
R749
62K 1/4W
C743
10UF 50V
R740
56K 1/2W
EHT
P402
V-DY
H-DY
C410
47P/2KV
C412
1500P/63V
D701
BAV20
JUMPER
FB404
FB401
JUMPER
T401
79C167-118-LC
D405
1N5817
R428
0.51 3W
C401
0.01UF
R402
3R6 1/4W
Q404
2SC2120
C417
0.47UF 100V
Q403
BU2527
D406
BYV26C
D408
DMV1500M
93A220-505
R429
10 1/2W
D407
BYV26C
C418
4300P/1.6KV
FB402
71A55-29
FB403
JUMPER
C419
1800PF/630V
T402
79C793-1-LB
EHT
F1
F2
G2
E.H.T
F1
F2
G2
C710
0.01UF 100V
R721
1K 1/2W
R726
7K5 1/4W
D706
FR157S
C713
2.2uF/250V
R723
22 2W
SG408
SPARK GAP
R480
470R 1/2W
C480
JUMPER
C450
470P
R463
2M 1/4W
R459
4K7 1/2W
R750
JUMPER
Q743
57A446-500-T
2SC1213
ZD701
93A39-516-52T
5.1V
C712
10UF
NC
R426
680 2W
C414
0.22UF 100V
R414
1.1K 1/4W
47R 1/4W
J080
Q401
PH2369
C494
0.1U 50V
D450
1N4148
R423
20K
BSN254A
Q402
D460
BAV21
R424
39K 2W
C436
4.7U 160V
R427
22R 1/2W
C472
1200PF 1.6KV
RY401
1N4148
D476
Q412
C945
4K7
R446
445
NC
C426
2700PF 1KV
L401
73C147-542-H
R468
NC
D409
IN4148
C430
2200P 500V
R456
150 3W
Q410
2SD667
R401
1ohm/1 W
R410
1.2K
T403
79C167-124-HB
R455
22 2W
150PF 2KV
C488
C490
150PF 2KV
C720
560P/1KV
C489 NC
47PF 2KV
R442
2.2K
R460
4K7 1/4W
D463
FR107
C429
0.1
R421
10 1/4W
R471
100K 1/4W
Q417
57A600-21
IRF630M
R476
220K 1/4W
C428
0.56uF/250V
R443
JUMPER
Q407
57A419-503-T
2SC945P
R487
2.2K 1/4W
R486
4K7 1/4W
D474
FR107
C402
0.1
R475
10 1/4W
R435
100K 1/4W
Q418
57A600-21
IRF630M
R479
220K 1/4W
C427
1uF/250V
R484
JUMPER
Q423
57A419-503-T
2SC945P
R477
2.2K
R481
4K7 1/4W
D473
FR107
C411
0.1
R413
10 1/4W
R415
100K 1/4W
Q416
57A600-21
IRF630M
R478
220K 1/4W
C420
0.1uF/250V
R482
JUMPER
Q422
57A419-503-T
2SC945P
R437
2.2K 1/4W
R473
4K7 1/4W
D470
FR107
C416
0.1
R450
10 1/4W
R449
100K 1/4W
Q420
57A600-28
IRF630B
R488
220K 1/4W
C423
0.24uF/250V
R447
JUMPER
Q408
57A419-503-T
2SC945P
R904
2K7 1/4W
68K 1/4W
R403
C714
4.7U 16V
R433
470
R412
47K 1/4W
Q406
IRF630M
57A600-21
L405
73C253-69-T
C425
0.24uF/400V
C422
2.2uF/100V
R725
180K 1/2W
Q705
57A498-3-T
BF423
ZD702
HZ6B1-E
R713
22K
R715
13K
R707
33K 1/4W
C706
330P 1KV
R411
JUMPER
R730
JUMPER
R717
NC
R722
82K
1/4W
VR701
47K
5.1v
ZD726
HF
VG
Unlock
G1
12V
80V
ABL
VDF

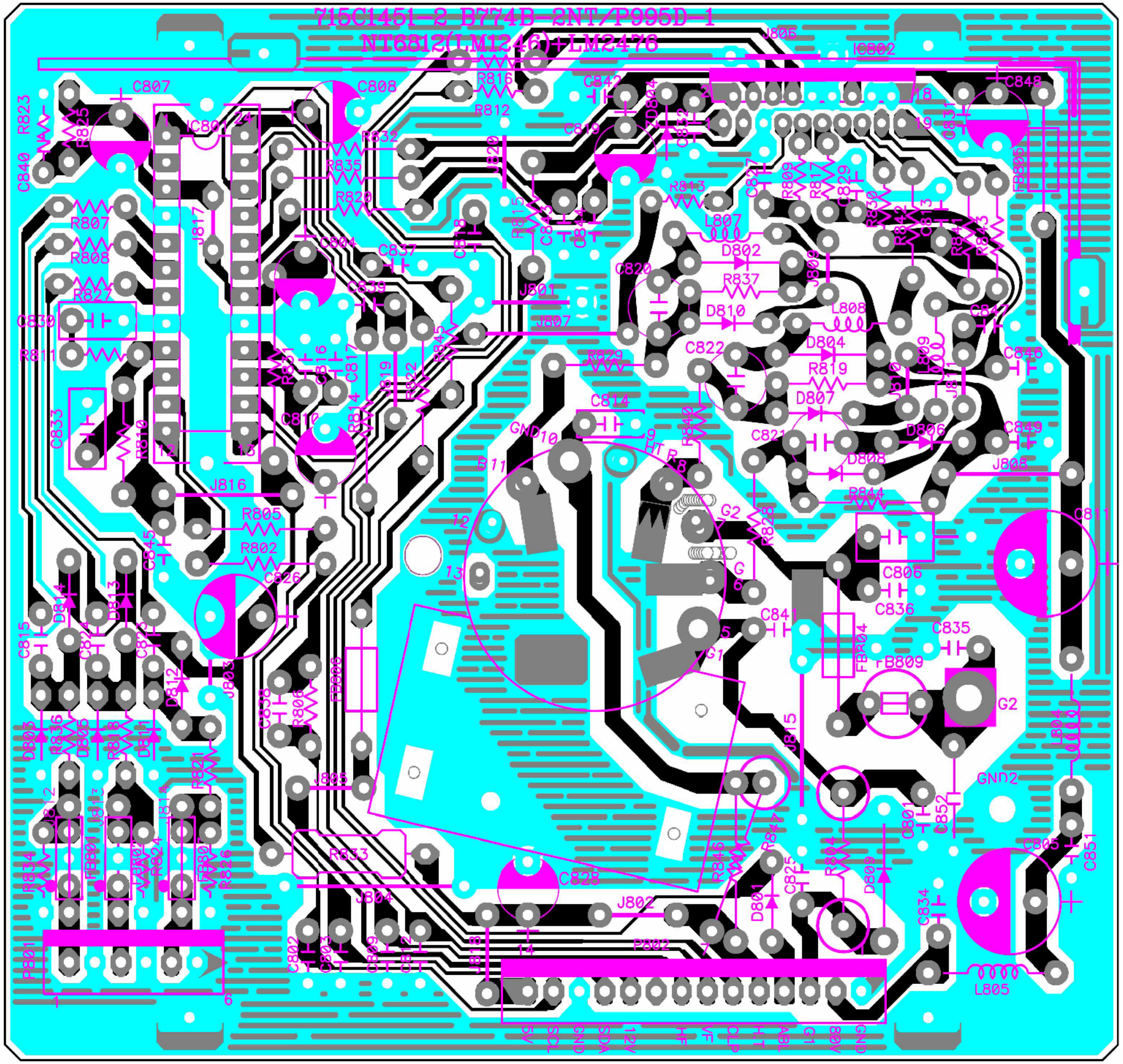

P801
33A3278-6D
P802
33A3278-13D
IC801
LM1246DKA
56A366-509
VBLK
CAP_A
VDD_1
GND_A
R_IN
G_IN
B_IN
GND-PLL
VCO
5V_PLL
SDA
SCL
HBLK
CLAMP
ABL
R_OUT
G_OUT
B_OUT
VDD_2
GND_2
DA1
DA2
DA3
CAP_D
IC802
56C551-525
LM2476
VCC
VBB
IND1
IND2
IND3
OUTD1
OUTD2
OUTD3
INC1 OUTC1
INC2 OUTC2
INC3 OUTC3
GND
CPT 17" RF TINT CRT
750A57125AV
CRT
R
G
B
G2
FOCUS
R/I
GND
G/I
GND
B/I
GND
5V
ISCL
GND
ISDA
12V
X
HF
VF
CLP
HT
ABL
G1
80V
GND
FB801 53A40-8
FB802 53A40-8
FB803 53A40-8
R834 75
R824 75
R826 75
R836 33
R818 33
R821 33
D803 1N4148
D805 1N4148
D811 1N4148
D814 1N4148
D813 1N4148
D812 1N4148
C809 100P
C812 100P
C837 470
C807 0.1UF
R823 10k
C824 0.1UF
C815 0.1UF
C823 0.1UF
R808 JUMP
R807 JUMP
R827 JUMP
C830 0.033uF
C833 1500
R811 6.2K
R810 33K
J816 71A55-9-T
R802 100
R805 100
R845 1K
C838 0.1UF
R806 NC
C839 68PF
R822 4K7
C808 10UF
R832 100
R835 100
R820 100
C811 47UF/100V
C831 1UF/100V
C848 0.1UF
C832 0.1UF
C843 10P
C842 10P
C844 10P
C819 47UF
TZX8V2A ZD804
FB805 BEAD
C817 100P
C816 100P
C818 100P
R816 20K
R813 20K
R812 20K
L804 BEAD
C805 47UF/100V
C802 100P
J818 BEAD
C803 100P
C828 47UF/16V
R833 JUMPER
C826 470UF/16
R831 JUMP
C804 0.1UF
C810 22UF
FB806 BEAD
R815 150 1/4W
R814 1K
D801 JUMPER
C825 NC
C834 0.1U
L805 ER106
D804 BAV21
R819 330K 1/4W
R842 0.47UH
L808 100OHM
C822 1UF/100V
D807 BAV21
R840 33 1/2W
R843 0.47UH
C827 0.1UF/250V
C846 1000p/250V
J810 BEAD
R817 470R
D806 BAV21
R844 330K 1/4W
R841 0.47UH
L809 100OHM
C821 1UF/100V
R828 33 1/2W
D808 BAV21
R830 470R
C829 0.1UF/250V
C847 1000p/250V
J811 BEAD
R837 330K 1/4W
470R R809
C813 0.1UF/250V
J809 BEAD
D810 BAV21
L807 100OHM
C820 1UF/100V
D802 BAV21 93A64-501-52T
R829 33 1/2W
R846 0.68 1W
C814 0.1UF
C841 220P 1KV
C801 560PF
D809 BYV26C 93C1060-501-52T
R804 100 1/2W
C806 0.01UF 2KV
C836 100
FB804 560K 1/2W
C835 100P
FB809 BEAD

11. PCB Layout Diagrams

11-1 MAIN PCB LAYOUT



11-2 CRT BOARD LAYOUT



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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?

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

B. Are you satisfied with **this** Service Manual?

Item	*Excellent*	*Good*	*Fair*	*Bad*
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?

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Company:			
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Tel:		Fax:	
E-mail:			

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