

**CONFIDENTIAL**

**PDP-014-1 (Module Format)**

**Issued:June.20.2003**

**Version:1.0**

**42“ PDP**

**SERVICE MANUAL**

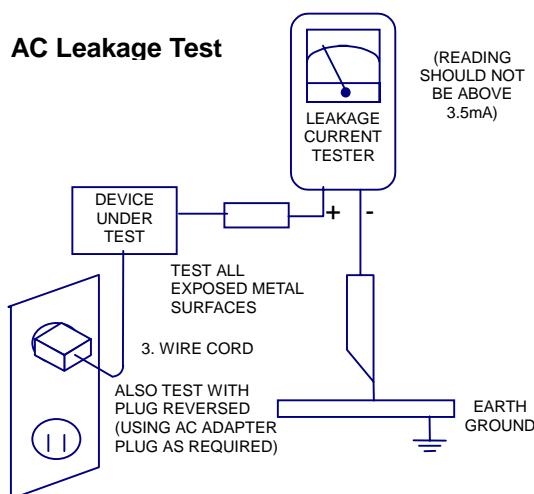
**MODEL : GTW-P42M203**

**Panel:Samsung (VVEPP42SD001F--)**

# **CONTENTS**

1. IMPORTANT SAFETY PRECAUTIONS .....	1-2
2. SPECIFICATION .....	2-9
3. FACTORY & ELECTRONIC ADJUSTMENT ..	3-7
4. BLOCK DIAGRAM .....	4-6
5. TROUBLE SHOOTING GUIDES .....	5-6
6. B.O.M OF BOARD ASSEMBLY.....	6-23
7. P.C.BOARD TOP VIEW.....	7-8
8. ELECTRONIC MODULE LIST .....	8-1
9. EXPLODED VIEW.....	9-1
10.PACKAGING OF THE LIST .....	10-1

1. Before returning an instrument to the customer, always make a safety check of the entire instrument, including, but not limited to, the following items.
  - a. Be sure that no built-in protective devices are defective and/or have been defeated during servicing. (1) Protective shields are provided on this chassis to protect both the technician and the customer. Correctly replace all missing protective shields, including any removed for servicing convenience. (2) When reinstalling the chassis and/or other assembly in the cabinet, be sure to put back in place all protective devices, including, but not limited to, nonmetallic control knobs, insulating fish papers, adjustment and compartment covers/shields, and isolation resistor/capacitor networks. **Do not operate this instrument or permit it to be operated without all protective devices correctly installed and functioning.**
  - b. Be sure that there are no cabinet openings through which an adult or child might be able to insert their fingers into. Such openings include, but are not limited to, (1) spacing between the picture tube and the cabinet mask, (2) excessively wide cabinet ventilation slots, and (3) an improperly fitted and/or incorrectly secured cabinet back cover.
  - c. **Leakage Current Check**—With the instrument completely reassembled, plug the AC line cord directly into a 120V AC outlet. (Do not use an isolation transformer during this test.) Use a leakage current tester or a metering system that complies with American National Standards Institutes (ANSI) C101.1 Leakage Current for Appliances and Underwriters Laboratories (UL) 478. With the instrument AC switch first in the ON position and then in the OFF position, measure from a known earth ground (metal water pipe, conduit, etc.) to all exposed metal parts of the instrument (antennas, handle bracket, metal cabinet, screw heads, metallic overlays, control shafts, etc.), especially any exposed metal parts that offer an electrical return path to the chassis. Any current measured must not exceed 3.5 milliamp. Reverse the instrument power cord plug in the outlet and repeat test. **ANY MEASUREMENTS NOT WITHIN THE LIMITS SPECIFIED HEREIN INDICATE A POTENTIAL SHOCK HAZARD THAT MUST BE ELIMINATED BEFORE RETURNING THE INSTRUMENT TO THE CUSTOMER.**



2. Read and comply with all caution and safety-related notes on or inside the Monitor cabinet.
3. **Design Alteration Warning**—Do not alter or add to the mechanical or electrical design of this unit. Design alterations and additions, including, but not limited to, circuit modifications and the addition of the items such as auxiliary audio and/or video output connections might alter the safety characteristics of this Monitor and create a hazard to the user. Any design alterations or additions will void the manufacturer's warranty and will make you, the service, responsible for personal injury or property damage resulting therefrom.

4. **Primary Chassis Warning**—**a.** Certain Monitor chasses are electrically connected directly to one conductor of the AC power cord. They may be safely serviced without an isolation transformer only if the AC power plug is inserted so that the chassis is connected to the groundside of the AC power source. To confirm that the AC power plug is inserted correctly use an AC voltmeter to measure the voltage potential between the chassis and a known earth ground. If the voltage reading is greater than 1.0V, remove and reinsert the AC power plug in opposite polarity and re-measure the voltage potential between the chassis and a known earth ground. **b.** Certain Monitor chasses have 85V AC (RMS) between chassis and earth ground regardless of the AC plug polarity. These chasses can be safely serviced only with an isolation transformer inserted in the power line between the receiver and the AC power source, for both personnel and test equipment protection. **c.** Some Monitor chasses have a secondary ground systems in addition to the main chassis ground. This secondary ground system is not isolated from the AC power line. The two ground systems are electrically separated by insulating material that must not be defeated or altered.
5. Observe original lead dress. Take extra care to assure correct lead dress in the following areas: **a.** near sharp edges, **b.** near thermally hot parts—be sure that leads and components do not touch thermally hot parts, **c.** the AC supply, **d.** high voltage, **e.** antenna wiring. Inspect in all areas for pinched, out-of-place, or frayed wiring. Do not change the spacing between components or the spacing between the printed-circuit board and components. Last but not least, visually check the AC power cord to ensure no outer appearance damage is present.
6. Components, parts, and/or wiring that appear to have overheated or are otherwise damaged should be replaced with components, parts, or wiring that meet original specifications. Additionally, determine the cause of overheating and/or damage and, if necessary, take corrective action to remove any potential safety hazard(s).
7. **PRODUCT SAFETY NOTICE** — Many electrical and mechanical parts have special safety-related characteristics some of which are often not evident from visual inspection, nor can the protection they give necessarily be obtained by replacing them with components rated for higher voltage, wattage, etc. Parts that have special safety characteristics are identified in this service data by shading with a mark on schematics and by shading or a \* mark in the parts list. Use of a replacement part that does not have the same safety characteristics as the recommended replacement part in the Service data parts list might create shock, fire, and/or other hazards.

**1. SCOPE:**

These specifications describe all the characteristics of the 42 inch color monitor.

**2. ELECTRICAL REQUIREMENTS:**

2.1. Display panel:	Specification
a. Screen size	Diagonal 42 inch
b. Aspect ratio	16:9 wide
c. Number of pixels	852(Horizontal, RGB Trio ) X 480(Vertical)pixels
d. Pixel Pitch	1.08mm X 1.08mm
e. Luminance	570cd/m <sup>2</sup> ,at APL13%
f. Chromatically	x=0.270±0.03, y=0.300±0.03(color temperature mode 1 : ) at center block white pattern 100% (mosaic).
2.2. Power Source:	
a. Input voltage	100 ~ 240 Vac , 50 / 60 Hz
b. Input current	3.3A
c. Inrush current	60 A p-p/20ms Max.
d. Power consumption	380±10% Watts ( at 110Vac/color bar pattern)
e. Stand-by & DPMS	5 Watts Max. (at 110Vac)
2.3. Input Signal:	
2.3.1 Connector Type:	RCA Jack for audio, video Y/C <sub>B</sub> /C <sub>R</sub> and Y/P <sub>B</sub> /P <sub>R</sub> 6 pin Din S-terminal 9 pin D-SUB 15 pin D-SUB 24 pin DVI
2.3.2 Video/S-Video Signal:	
a. Type	Analog
b. Polarity	Positive
c. Amplitude	Video 1Vp-p , (priority S-Video) Y=1Vp-p C=0.286Vp-p
d. Frequency	H: 15.734KHz V: 60Hz(NTSC) H: 15.625KHz V: 50Hz(PAL)
e. Input impedance	75 ohms
2.3.3 Y/CB/CR or Y/PB/PR Signal:	
a. Type	Analog
b. Polarity	Positive
c. Amplitude	AV: 1Vp-p (with sync) S-Video: Y: 1Vp-p , C: 0.286Vp-p
d. Frequency	H: 15.734KHz ,V: 60Hz (NTSC) H: 15.625KHz ,V: 50Hz (PAL) 1. 31KHz/60Hz (480P) 2. 45KHz/60Hz (720P) 33KHz/60Hz(1080I)
Y/C <sub>B</sub> /C <sub>R</sub>	
Y/P <sub>B</sub> /P <sub>R</sub> :HDTV	

**2.3.4 RGB Signal:**

a. Type	TTL
b. Polarity	Positive or Negative
c. Amplitude	RGB: 0.7Vp-p
d. Frequency	H: support to 31K~91KHz V: support to 50~85Hz

**2.3.5 DVI Signal:**

a. Type	Digital
b. Polarity	Positive or Negative
c. Frequency	H: support to 31K~63KHz V: support to 50~85Hz

**2.3.6 Audio Signal:**

Analog 500mV rms /more than 22Kohm

**2.3.7 Pin Assignments For D-SUB Connector (In / Loop Out):**

Pin	Signal Assignment	Pin	Signal Assignment	Pin	Signal Assignment
1	RED	6	RED GND	11	GND
2	GREEN	7	GREEN GND	12	SDA
3	BLUE	8	BLUE GND	13	H-SYNC
4	GND	9	NC	14	V-SYNC
5	GND	10	GND	15	SCL

**2.3.8 Pin Assignments For 24 Pin DVI Connector(Digital Only):**

Pin	Signal Assignment	Pin	Signal Assignment	Pin	Signal Assignment
1	TMDS Data 2-	9	TMDS Data 1-	17	TMDS Data 0-
2	TMDS Data 2+	10	TMDS Data 1+	18	TMDS Data 0+
3	TMDS Data 2/4 Shield	11	TMDS Data 1/3 Shield	19	TMDS Data 0/5 Shield
4	TMDS Data 4-	12	TMDS Data 3-	20	TMDS Data 5-
5	TMDS Data 4+	13	TMDS Data 3+	21	TMDS Data 5+
6	DDC Clock	14	+5V Power	22	TMDS Clock Shield
7	DDC Data	15	Ground (For +5V)	23	TMDS Clock +
8	No Connect	16	Hot Plug Detect	24	TMDS Clock -

# SPECIFICATION

VER1.0

## 2.3.9 RGB/DVI For VESA Standard:

Mode No	Resolution	Refresh Rate (Hz)	Horizontal Frequency (K Hz)	Vertical Frequency (Hz)	Vertical Sync Polarity (TTL)	Horizontal Sync Polarity (TTL)	Dot rate (MHz)
1	640(VGA)×480	60	31.5	59.94	-	-	25.175
2	640(VGA)×480	72	37.9	72.81	-	-	31.500
3	640(VGA)×480	75	37.5	75	-	-	31.500
4	640(VGA)×480	85	43.3	85.01	-	-	36.000
5	800(SVGA)×600	56	35.1	56.25	+	+	36.000
6	800(SVGA)×600	60	37.9	60.317	+	+	40.000
7	800(SVGA)×600	72	48.1	72.19	+	+	50.000
8	800(SVGA)×600	75	46.9	75	+	+	49.500
9	800(SVGA)×600	85	53.7	85.06	+	+	56.250
10	1024(XGA)×768	60	48.4	60.01	-	-	65.000
11	1024(XGA)×768	70	56.5	70.07	-	-	75.000
12	1024(XGA)×768	75	60.0	75.03	+	+	78.750
13	1024(XGA)×768	85	68.7	84.99	+	+	94.500
14	1280(SXGA)×1024	60	63.98	60.02	+	+	108.00
15◎	1280(SXGA)×1024	75	79.98	75.03	+	+	135.00
16◎	1280(SXGA)×1024	85	91.15	85.02	+	+	157.50
18	640(VGA)×350	70	31.50	70	-	-	25.175
19	640(VGA)×480	50	31.5	50	-	-	25.175
20◎	1280(HDTV)×720P	60	45.15	60	-	-	74.250
21◎	1920(HDTV)×1080I	60(I)	33.78	60	-	-	74.250
22	720(DOS)×400	70	31.46	70.08	+	-	28.320
23	852(WGA)×480	60	31.72	60.41	-	-	34.00

## RGB/DVI For Apple Standard.

Mode No	Resolution	Refresh Rate (Hz)	Horizontal Frequency (K Hz)	Vertical Frequency (Hz)	Vertical Sync Polarity (TTL)	Horizontal Sync Polarity (TTL)	Dot rate (MHz)
24	640×870	75	68.85	75.00	-	-	57.283
25	832 x 624	75	49.73	74.55	-	-	57.283
26	1152 x 870	75	68.68	75.06	-	-	100.000

Attention ◎: For DVI is not supported.

## 2.3.10 Y/PB/PR For Component:

Mode No	Resolution	Refresh Rate
1	640 × 480P	60
2	1920 × 1080I	60
3	1280 × 720P	60

**2.4. Display Performance Requirements:**

The data of display performance are measured based on the following.  
Conditions unless otherwise specified.

- |                         |   |
|-------------------------|---|
| a. Ambient temperature  | 25±5 °C   |
| b. Warm up period       | 30 minutes Min.                                       |
| c. Line input voltage : | 100 Vac ~ 240 Vac (50 / 60 Hz)                        |
| d. Viewing distance     | Distance from screen is 81 cm                         |
| e. Display mode         | Test with window white pattern mode if not specified. |
| f. Brightness condition | Press recall bottom to set default brightness         |

**2.4.1 Maximum Resolution:**

Support to 1280 x 1024

**2.4.2 Horizontal Size (Standard)**

Vertical Size (Standard)

920±8 mm (for mode 1~26)

518±8 mm (for mode 1~26)

**2.4.3 Horizontal Size (Max.)**

Vertical Size (Max.)

Mode 1~26⇒ full-scan

Mode 1~26⇒ full-scan

**2.4.4 Maximum Brightness Level:**

- a. 100% center block white pattern(mosaic)
- b. raster background

Timing Mode 1

More than 30FL

(while pressing recall button to set default brightness)  
with contrast / brightness at Max. and black signal)  
less than 0.4FL

**2.5. Operation:****Main unit button**

Main power switch (power ON /OFF)

Power ON/OFF

Input Mode (Video1 -> S-Video1 -> Video2 or S-Video2 ->  
Y/P<sub>B</sub>/P<sub>R</sub> 1 or Y/C<sub>B</sub>/C<sub>R</sub> 1 -> Y/P<sub>B</sub>/P<sub>R</sub> 1 or Y/C<sub>B</sub>/C<sub>R</sub> 1 -> RGB ->

DVI->Video1 run in circle)

Menu key -,+ Adjustment -,+

Power on/off

Input Mode (same as Main unit button)

Volume -,+ Wide , Video/S video

input:4:3/16:9/ZOOM1/ZOOM2

Analog RGB input :W4:3/W16:9

Menu -,+ Adjustment -,+ RECALL

PIP ,POP ,SWAP ,MUTE

**2.5.1 Adjustable Items:**

AV/S-video input  
Y/CB/CR

Brightness, Contrast, Color , Tint, Sharpness  
Color Temperature

Analog RGB input

Display position :  
Brightness, Contrast, Vertical position, Vertical width,  
Horizontal position, Horizontal width, Color Temperature  
Clock phase, DPMS.

DVI input

Brightness, Contrast, Vertical position, Vertical width,  
Horizontal position, Horizontal width, Color Temperature,  
DPMS

3.	<b>DIMENSIONS:</b>	<b>Without/Stand</b>	<b>With/Stand</b>
	Width	1040mm	1040mm
	Height	648 mm	690mm
	Depth	95mm	375 mm
3.1.	<b>Package Dimensions:</b>		
	Width	1230 mm	
	Height	960 mm	
	Depth	470 mm	
3.2.	<b>Weight:</b>		
	Net weight	79.4lbs/36 Kgs (w/o stand)	
	Gross weight	83.8lbs/ 38Kgs (w/ stand)	
115lbs/52 Kgs			
4.	<b>ENVIRONMENT:</b>		
4.1.	<b>Operating:</b>		
	Temperature	0~40°C(32~104°F)	
	Relative humidity	20~80%	
	Pressure	800~1114hpa	
4.2.	<b>Non-Operating:</b>		
	Temperature	-20~60°C	
	Relative humidity	20~90%	
	Pressure	700~1114hpa	
	Vibration	X/Y/Z, 0.5G/10~55Hz(sweep), 10 minutes	
4.3.	<b>Acoustics:</b> (IHF A-weighted 1meter)		
		40dB Max.	
5.	<b>SOUND:</b>		
a.	Residual hum (at volume min)	500 $\mu$ W Max.	
b.	Practical max. Audio output (at 10% THD max.)		
	1.0vp-p      1K Hz input	5W +5W Max. /12 ohm	
c.	Sound distortion (at 250 mw 1K Hz)	1% Max.	
d.	Sound distortion	(at	
	i.ovp-p  1kHz input    volume max )	9% max	
e.	Audio output (input at 1.4V <sub>P-P</sub> )	$\geq$ 1.0 V <sub>P-P</sub>	
f.	Max. hum (at volume max)	1000 $\mu$ W Max.	
g.	Sensitivity (at volume max. O/P 1W) at 1KHz AV Input	150mV $\pm$ 3dB	
h.	Audio Fidelity (1KHz 0dB,corrected for emphasis characteristics)		
	BBE ON	60Hz	6dB $\pm$ 3dB
		10KHz	8dB $\pm$ 3dB
	WOOFER & BBE OFF	100Hz	-6dB $\pm$ 3dB
		10KHz	-2dB $\pm$ 3dB

## 6. RF

### 6.1 RF Sensitivity (Peak)

VHF	CH 2 ~ CH 13	30dB Max.
UHF	CH 14 ~ CH 69	30dB Max.
CATV	CH A-5 ~ CH W+29	30dB Max.

### 6.2 AFT Pull-In Range

VHF	CH 2 ~ CH 13	±0.6MHz Min.
UHF	CH 14 ~ CH 69	±0.6MHz Min.
CATV	CH A-5 ~ CH W+29	±0.6MHz Min.

### 6.3 Picture IF Rejection

VHF	CH 2 ~ CH 13	50dB Min.
UHF	CH 14 ~ CH 69	50dB Min.
CATV	CH A-5 ~ CH W+29	50dB Min.

### 6.4 Picture Image Rejection

VHF	CH 2 ~ CH 13	40dB Min.
UHF	CH 14 ~ CH 69	35dB Min.
CATV	CH A-5 ~ CH W+29	35dB Min.

### 6.5 AGC Characteristics

AGC Figure Of Merit	50dB Min.
RF signal range in which video at PDP drops 6 dB from output level obtained with 100mV input.	

### 6.6 RF AGC Cut In Level

55dB ±2dB

### 6.7 FM/AM Rejection (100mV at SIF input)

14dB min

### 6.8 Noise Limits Sensitivity

VHF 45dB max

UHF 49dB max

## 7. RELIABILITY REQUIREMENT:

The MTBF needs 20000hrs under operation  $25\pm5^{\circ}\text{C}$  (half luminosity, motion picture)

## 8. REGULATORY REQUIREMENTS:

### 8.1 Safety Requirement:

- a. UL Safety of information technology equipment including electrical business equipment
- b. CSA Safety of information technology equipment including electrical business equipment
- c. TUV

### 8.2 Emission Requirement:

The unit shall meet the EMI limits in all screen modes. For EMI testing, the unit must be failed with the screen pattern consisting of scrolling capital "H" characters also the brightness contrast will be adjusted to max. Level.

- a. FCC class A part 15

**8.3 Transit test**

a. Drop Test	200mm max.
b. Vibration Test	
1. Forward and backward	30 minutes 1000 c.p.m
2. Right and left	30 minutes 1000 c.p.m
3. Up and down	30 minutes 1000 c.p.m

**8.4 Power Management:**

Mode	H-sync	V-sync	Video	Power dissipation
Normal	Pulse	Pulse	Active	Normal power
Stand-by	No pulse	No pulse	No video	Power off
Power saving	Pulse	No pulse	Blanked	Less than 5 watts
	No pulse	Pulse		

This Plasma display is Energy star compliant when used with a computer equipped with DPMS.

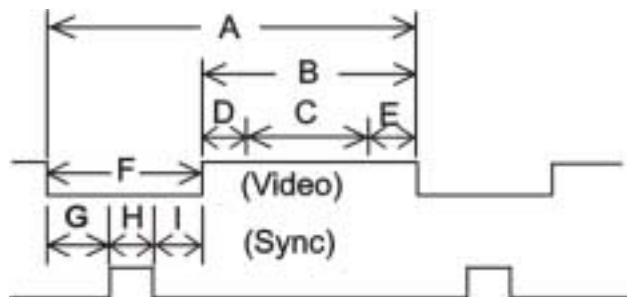
Note: The power indicator LED color is green in normal state, yellow in stand-by and power saving state.

**9. VIDEO & AUDIO**

9.1 Video Signal Output (impedance 75 ohm)	1.0 Vp-p ±0.2Vp-p
(input signal at 1.0 Vp-p ±0.2Vp-p)	

## APPENDIX A :

## Preset Timing Chart



Item	Description:
A	Total time
B	Active display area including borders
C	Active display area excluding borders
D	Left/Top border
E	Right/bottom border
F	Blanking time
G	Front porch
H	Sync-width
I	Back porch

Mode No	1	2	3	4	5	6	7	8	9	
Resolution	640	640	640	640	800	800	800	800	800	
&	480	480	480	480	600	600	600	600	600	
Refresh Rate	60	72	75	85	56	60	72	75	85	Hz
Pixel	25.175	31.5	31.5	36	36	40	50	49.5	56.25	MHz
Horizontal visible	640	640	640	640	800	800	800	800	800	Dots
Horizontal total	800	832	840	832	1024	1056	1040	1056	1048	Dots
Horizontal front porch	24	32	16	56	24	40	56	16	32	Dots
Horizontal sync	96	40	64	56	72	128	120	80	64	Dots
Horizontal back porch	40	120	120	80	128	88	64	160	152	Dots
Horiz blanking time	160	192	200	192	224	256	240	256	248	Dots
Vertical visible	480	480	480	480	600	600	600	600	600	Lines
Vertical total	525	520	500	509	625	628	666	625	631	Lines
Vertical front porch	18	17	1	1	1	1	37	1	1	Lines
Vertical sync	2	3	3	3	2	4	6	3	3	Lines
Vertical back porch	25	20	16	25	22	23	23	21	27	Lines
Vertical blanking time	45	40	20	29	25	28	66	25	31	Lines
Horizontal frequency	31.469	37.9	37.5	43.3	35.1	37.9	48.1	46.9	53.7	KHz
Vertical frequency	59.94	72.81	75	85.01	56.25	60.317	72.19	75	85.06	Hz
Vertical sync polarity	-	-	-	-	+	+	+	+	+	TTL
Horiz sync polarity	-	-	-	-	+	+	+	+	+	TTL
Dot rate	25.175	31.5	31.5	36	36	40	50	49.5	56.25	MHz

# SPECIFICATION

VER1.0

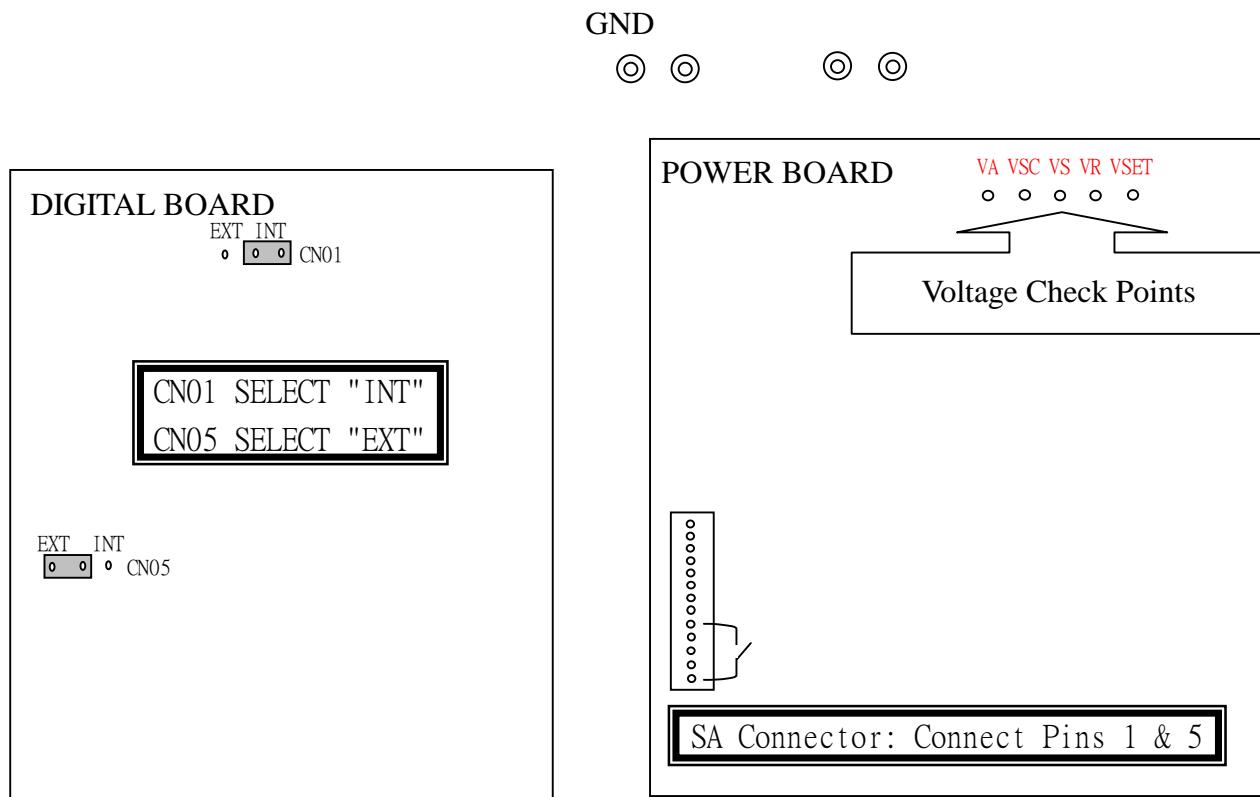
Mode No	10	11	12	13	14	15	16	18	19	
Resolution & Refresh Rate	1024 768 60	1024 768 70	1024 768 75	1024 768 85	1280 1024 60	1280 1024 75	1280 1024 85	640 350 70	640 480 50	Hz
Pixel	65	75	78.75	94.5	108	135	157.5	25.175	25.175	MHz
Horizontal visible	1024	1024	1024	1024	1280	1280	1280	640	640	Dots
Horizontal total	1344	1328	1312	1376	1688	1688	1728	800	800	Dots
Horizontal front porch	24	24	16	48	48	16	64	16	16	Dots
Horizontal sync	136	136	96	96	112	144	160	96	96	Dots
Horizontal back porch	160	144	176	208	248	248	224	48	48	Dots
Horiz blanking time	320	304	288	352	408	408	448	160	160	Dots
Vertical visible	768	768	768	768	1024	1024	1024	350	480	Lines
Vertical total	806	806	800	808	1066	1066	1072	449	629	Lines
Vertical front porch	3	3	1	1	1	1	1	37	62	Lines
Vertical sync	6	6	3	3	3	3	3	2	2	Lines
Vertical back porch	29	29	28	36	38	38	44	60	85	Lines
Vertical blanking time	38	38	32	40	42	42	48	99	149	Lines
Horizontal frequency	48.4	56.5	60	68.7	63.98	79.98	91.15	31.50	31.5	KHz
Vertical frequency	60.01	70.07	75.03	84.99	60.02	75.03	85.02	70	50	Hz
Vertical sync polarity	-	-	+	+	+	+	+	-	-	TTL
Horiz sync polarity	-	-	+	+	+	+	+	-	-	TTL
Dot rate	65	75	78.75	94.5	108	135	157.5	25.175	25.175	MHz

Mode No	20	21	22	23	24	25	26			
Resolution & Refresh Rate	1280 720P 60	1920 1080I 60I	720 400 70	852 480 60	640 870 75	832 624 75	1152 870 75			Hz
Pixel	74.250	74.25	28.320	30	57.283	57.283	100.000			MHz
Horizontal visible	1266	1901	720	852	640	832	1152			Dots
Horizontal total	1650	2201	900	955	832	1152	1456			Dots
Horizontal front porch	42	68	18	19	32	32	32			Dots
Horizontal sync	63	63	108	48	80	64	128			Dots
Horizontal back porch	279	169	54	36	80	224	144			Dots
Horiz blanking time	384	300	180	103	192	320	304			Dots
Vertical visible	687	518	400	480	870	624	870			Lines
Vertical total	750	562.5	449	525	918	667	915			Lines
Vertical front porch	1	0.5	12	10	3	1	3			Lines
Vertical sync	6	6	2	2	3	3	3			Lines
Vertical back porch	56	38	35	33	42	39	39			Lines
Vertical blanking time	63	44.5	49	45	48	43	45			Lines
Horizontal frequency	45.15	33.78	31.46	31.72	68.85	49.73	68.68			KHz
Vertical frequency	60	60	70.08	60.41	75.00	74.55	75.06			Hz
Vertical sync polarity	-	-	+	-	-	-	-			TTL
Horiz sync polarity	-	-	-	-	-	-	-			TTL
Dot rate	74.25	74.25	28.32	30	57.283	57.283	100.000			MHz

## 1. PANEL Voltage Adjustment

The power voltage needs to be re-adjusted and checked whenever the panel module or power board module is changed.

## POWER VOLTAGE ADJUSTMENT FOR SAMSUNG TTL PANEL



1. Remove the Image Board to access the Digital Board beneath it.
2. As shown in the diagram above (left), set the CN01 Jumper to “INT” and set the CN05\* Jumper to “EXT”.
3. Locate the Power Board and the SA Connector (see diagram above: right). Connect pins 1 and 5 of the SA connector. This connection will turn on the Panel Power.
4. Locate the Voltage Label under the upper right speaker holder. The Voltage Label specifies the 5 Voltage Adjustment Parameters and their respective values\*\*.
5. Locate the Voltage Regulator-VR8005 on the Power Board and connect a Multimeter to the VA Voltage Check Point (see diagram above: right) and Ground. Adjust the Voltage Regulator until the Multimeter voltage reading is equivalent to the VA value on the Voltage Label.
6. Repeat Step 5 for VSC, VS, VR and VSET adjustments. Follow the table below for the adjustment sequence and the Voltage Regulator to be adjusted for each Parameter.

1 <sup>st</sup>	→	2 <sup>nd</sup>	→	3 <sup>rd</sup>	→	4 <sup>th</sup>	→	5 <sup>th</sup>
VA		VSC		VS		VR		VSET
VR8005		VR8006		VR8003		VR8001		VR8007

## Color Temperature Adjustment

2. Pre-setting Adjustment and Equipment Preparation:
  - (1) Turn on the PDP and let it warm up for at least 30 minutes.
  - (2) Turn on the Color Analyzer (ie. Minolta, Model = CA-100) and reset the Color Analyzer.
  - (3) Change the PDP input mode to DVI and press the "Recall" key on the remote control to have the PDP set recalled back to default factory settings.
  - (4) Set up the Video Pattern Generator (ie. Chroma, Model = C2226) with the following settings:
    - a. Timing: 640 x 480 @ 60Hz,
    - b. Make sure the Output signal is Digital (DVI)Connect the PDP DVI input connector to the Chroma DVI output connector.
  - (5) Dark level and bright level center block definition:
    - A. Dark level center block definition:  
Pattern set = Pattern name = 1-mosaic,  
Color form = norm,  
Background color = 0  
Foreground color = 17  
According to the C-2226's user manual, appendix analog-color: Normal Pen from Pen 17 = R: 102, G: 102, B: 102  
102 (output amplifier)/1024 (total amplifier)=10%, therefore the 10% is the 10 IRE white output pattern.
    - B. Bright level center block definition:  
Pattern set = Pattern name = 1-mosaic,  
Color form = norm,  
Background color = 0  
Foreground color = 25  
According to the C-2226's user manual, appendix analog-color: Normal Pen from Pen 25 = R: 614, G: 614, B: 614  
614 (output amplifier)/1024 (total amplifier)=60%, therefore the 60% is the 60 IRE white output pattern.
  - (6) There are 3 different modes (DVI, RGB and AV) that have Color Temperature settings. For each one of these 3 modes, there are 4 different Color Temperatures (5400K, 6500D, 9300K and 13800K) that can be individually adjusted. Each Color Temperature is adjusted through the dark level, bright level, Gain and Bias values.

- (7) Press the following key sequence to access the Factory Adjustment Menu:  
Press and hold down the Left Arrow key for at least 5 seconds, then press and hold down the Right Arrow key for at least 5 seconds followed by pressing the FAV.SET key.

From the Factory Adjustment Menu, choose the Color Temp. Adj option and the following OSD will appear.

DVI (RGB, AV)	5400K (6500D, 9300K, 13800K)
x=335	y=343
GAIN	BIAS
R G B	R G B
X X X	X X X

**\*Note: When adjusting the DVI and RGB color temperatures, please set the PDP input source so that it matches the color temperature source being adjusted (DVI color temp. to be adjusted with DVI source under DVI mode, RGB color temp. with RGB source under RGB mode, AV color temp. with Composite source under AV1 mode).\***

- (8) Flatly place the Minolta Color Analyzer's Photo Detector in contact with the center of the PDP screen.
3. DVI Mode Color Temperature Adjustment procedure:
  - (1) With the PDP's DVI input connected to Chroma C-2226's DVI output connector, set the Chroma to send a dark level center block signal (10 IRE). Now press the Factory Adjustment key sequence as stated in point (7) above. The DVI 5400K Color Temperature setting menu will appear after choosing the Color Temperature Adjustment option.
  - (2) Press the Left/Right Button to switch between the Bias (R, G, B) and Gain (R, G, B) values. Use the Up/Down Buttons to change the Bias and Gain Values.
  - (3) 5400K dark level center block adjustment procedure:
    - A. Press the Left/Right key on the remote control to select G-BIAS and adjust (using the up/down key) the G-Bias value until  $Y = 0.4 \pm 0.08$  FL.
    - B. Press the Left/Right key on the remote control to select R-BIAS and adjust the R-Bias value until  $x = 335 \pm 8$
    - C. Press the Left/Right key on the remote control to select B-BIAS and adjust the B-Bias value until  $y = 343 \pm 8$
    - D. Repeat steps A, B and C until the following final values are obtained:  
 $x = 335 \pm 8$   
 $y = 343 \pm 8$   
 $Y = 0.4 \pm 0.08$  FL
  - (4) 5400K bright level center block adjustment procedure: (Please set the Chroma C-2226 DVI bright level center block signal to 60 IRE)
    - A. Select G-GAIN and adjust the G-GAIN value until  $Y = 30 \pm 0.8$  FL.
    - B. Select R-GAIN and adjust the R-GAIN value until  $x = 335 \pm 8$
    - C. Select B-GAIN and adjust the B-GAIN value until  $y = 343 \pm 8$
    - D. Repeat steps A, B and C until the following final values are obtained:  
 $x = 335 \pm 8$   
 $y = 343 \pm 8$   
 $Y = 30 \pm 0.8$  FL

- (5) Upon completion of Steps 3 and 4 above, press the FAV.SET key for the next Color Temperature setting (5400→6500D→9300→13800).

For each color temperature setting, please repeat Steps 3 and 4 above but replace the x and y settings with the following values:

- a. 6500D: x = 313, y = 329 for both Dark and Bright Level Settings
- b. 9300K: x = 285, y = 295 for both Dark and Bright Level Settings
- c. 13800K: x = 260, y = 275 for both Dark and Bright Level Settings

For these 3 Color Temperatures (6500D, 9300K and 13800K), adjust the Dark and Bright Levels to the following Y values:

- a. Dark level Y = 0.4±0.08 FL
- b. Bright level Y = 30±0.8 FL

- (6) Once all 4 Color Temperatures have been adjusted, skip through the RGB and AV Color Temperatures (using the FAV.SET key) and completely exit the Factory Adjustment Menu.

#### 4. RGB Mode Color Temperature Adjustment procedure:

- (1) Turn on the Color Analyzer (Minolta, Model = CA-100) and reset the Color Analyzer.
- (2) Switch the PDP input to RGB mode and press the "Recall" key on the remote control to have the PDP set recalled back to default factory settings.
- (3) Set up the Video Pattern Generator (Chroma, Model = C2226) with the following settings:
  - a. Timing: 640 x 480 @ 60Hz,
  - b. Make sure the Output signal is Analog (RGB)

Connect the PDP RGB input connector to the Chroma C-2226 RGB output connector.

- (4) Dark level and bright level center block definition:

##### C. Dark level center block definition:

Pattern set = Pattern name = 1-mosaic

Color form = norm

Background color = 0

Foreground color = 17

According to the C-2226's user manual, appendix analog-color: Normal Pen from Pen 17 = R: 102, G: 102, B: 102

102 (output amplifier)/1024 (total amplifier)=10%, therefore the 10% is the 10 IRE white output pattern.

##### D. Bright level center block definition:

Pattern set = Pattern name = 1-mosaic

Color form = norm

Background color = 0

Foreground color = 25

According to the C-2226's user manual, appendix analog-color: Normal Pen from Pen 25 = R: 614, G: 614, B: 614

614 (output amplifier)/1024 (total amplifier)=60%, therefore the 60% is the 60 IRE white output pattern.

- (5) Flatly place the Minolta Color Analyzer's Photo Detector in contact with the center of the PDP screen.

- (6) Set the Chroma C-2226 to a dark level center block signal (10 IRE). Enter the Factory Adjustment Menu using the same Key sequence specified above and then select the Color Temperature Adjustment option. Using the FAV.SET key skip through all the DVI Color Temperatures until you reach the 5400K RGB Color Temperature OSD.

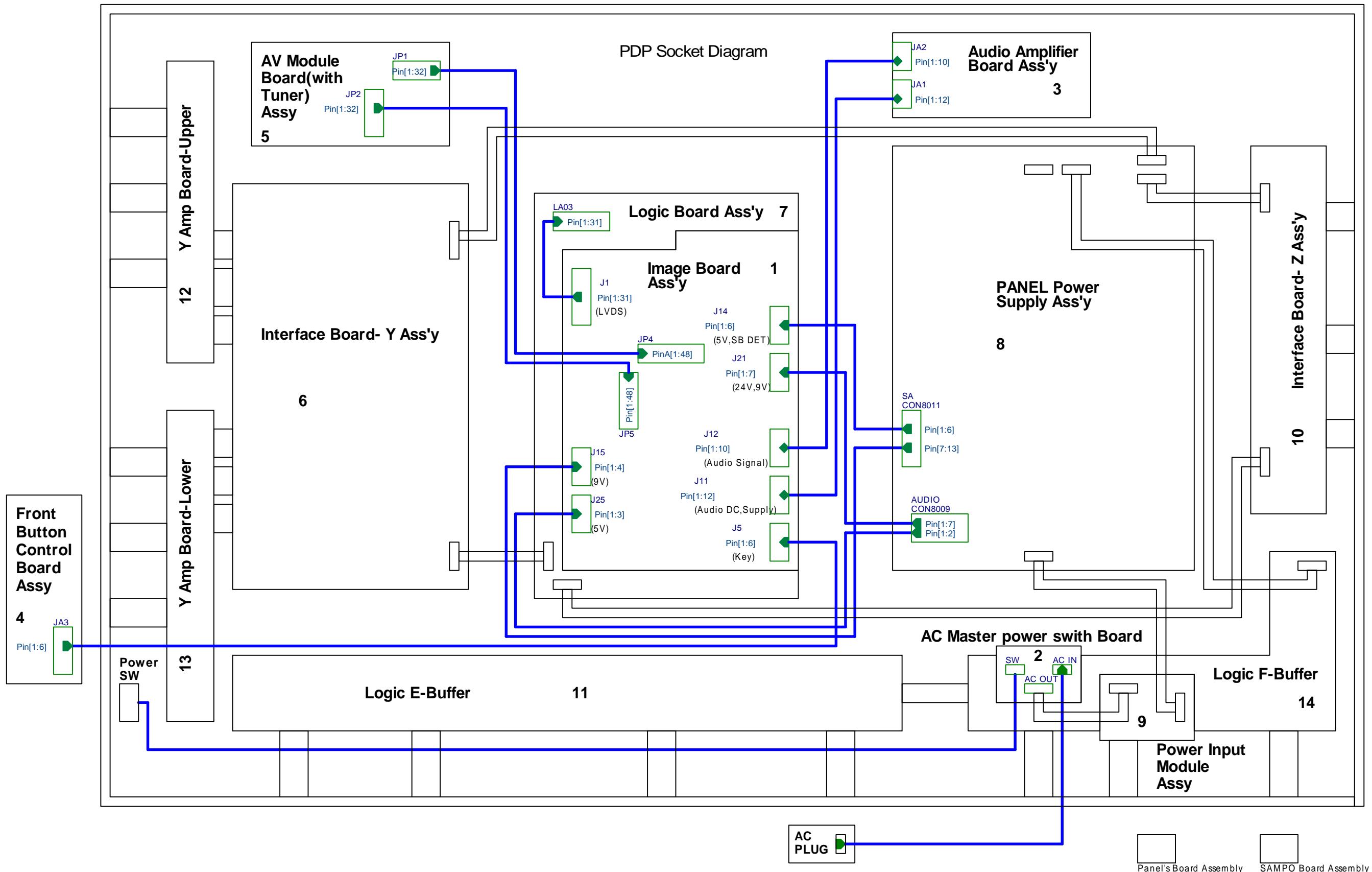
- (7) 5400K dark level center block adjustment procedure:
- Select G-BIAS and adjust the G-Bias value until  $Y = 0.5 \pm 0.08$  FL
  - Select R-BIAS and adjust the R-Bias value until  $x = 335 \pm 8$
  - Select B-BIAS and adjust the B-Bias value until  $y = 343 \pm 8$
  - Repeat steps A, B and C until the following final values are obtained:  
 $x = 335 \pm 8$   
 $y = 343 \pm 8$   
 $Y = 0.5 \pm 0.08$  FL
- (8) 5400K bright level center block adjustment procedure: (Please set the Chroma C-2226 DVI bright level center block signal to 60 IRE)
- Select G-GAIN and adjust the G-GAIN value until  $Y = 30 \pm 0.8$  FL
  - Select R-GAIN and adjust the R-GAIN value until  $x = 335 \pm 8$
  - Select B-GAIN and adjust the B-GAIN value until  $y = 343 \pm 8$
  - Repeat steps A, B and C until the following final values are obtained:  
 $x = 335 \pm 8$   $y = 343 \pm 8$   $Y = 30 \pm 0.8$  FL
- (9) Upon completion of Steps 7 and 8 above, press the FAV.SET key for the next Color Temperature setting (5400 → 6500D → 9300 → 13800).  
For each color temperature setting, please repeat Steps 7 and 8 above but replace the x and y settings with the following values:
- 6500D:  $x = 313$ ,  $y = 329$  for both Dark and Bright Level Settings
  - 9300K:  $x = 285$ ,  $y = 295$  for both Dark and Bright Level Settings
  - 13800K:  $x = 260$ ,  $y = 275$  for both Dark and Bright Level Settings
- For these 3 Color Temperatures (6500D, 9300K and 13800K), adjust the Dark and Bright Levels to the following Y values:
- Dark level  $Y = 0.5 \pm 0.08$  FL
  - Bright level  $Y = 30 \pm 0.8$  FL
- (10) Once all 4 Color Temperatures have been adjusted, skip through the AV Color Temperatures and completely exit the Factory Adjustment Menu.

## 5. AV Mode Color Temperature Adjustment procedure:

- Turn on the Color Analyzer (Minolta, Model = CA-100) and reset the Color Analyzer.
- Switch the PDP input to AV1 mode and press the “Recall” key on the remote control to have the PDP set recalled back to default factory settings.
- Using a Pattern Generator (ie. SENCORE VP-300 Multimedia Video Generator) set the dark level and bright level center block with the following settings:
  - Dark Level Center block definition:
    - Signal Type: NTSC/PAL
    - Format: NTSC
    - Pattern = WINDOW 1 14 IRE
  - Bright Level Center block definition:
    - Signal Type: NTSC/PAL
    - Format: NTSC
    - Pattern = WINDOW 2 60 IRE
- Connect the PDP AV1 input to the VP-300 Composite output connector.
- Flatly place the Minolta Color Analyzer’s Photo Detector in contact with the center of the PDP screen.
- Set the VP-300 to send a dark level center block signal (14 IRE). Enter the Factory Adjustment Menu using the same Key sequence specified above and then select the Color Temperature Adjustment option. Using the FAV.SET key skip through all the DVI and RGB Color Temperatures until you reach the 5400K AV Color Temperature OSD.

- (7) 5400K dark level center block adjustment procedure:
- Select G-BIAS and adjust the G-Bias value until  $Y = 1.2 \pm 0.1$  FL.
  - Select R-BIAS and adjust the R-Bias value until  $x = 335 \pm 10$
  - Select B-BIAS and adjust the B-Bias value until  $y = 343 \pm 10$
  - Repeat steps A, B and C until the following final values are obtained:  
 $x = 335 \pm 10$   
 $y = 343 \pm 10$   
 $Y = 1.2 \pm 0.1$  FL
- (8) 5400K bright level center block adjustment procedure: (Please set the VP-300 bright level center block signal to 60 IRE)
- Select G-GAIN and adjust the G-GAIN value until  $Y = 30 \pm 1$  FL
  - Select R-GAIN and adjust the R-GAIN value until  $x = 335 \pm 10$
  - Select B-GAIN and adjust the B-GAIN value until  $y = 343 \pm 10$
  - Repeat steps A, B and C until the following final values are obtained:  
 $x = 335 \pm 10$   
 $y = 343 \pm 10$   
 $Y = 30 \pm 1$  FL
- (9) Upon completion of Steps 7 and 8 above, press the FAV.SET key for the next Color Temperature setting (5400 → 6500D → 9300 → 13800).  
For each color temperature setting, please repeat Steps 7 and 8 above but replace the x, y and Y values with the following values:
- 6500D:  $x = 313$ ,  $y = 329$  for both Dark and Bright Level Settings
  - 9300K:  $x = 285$ ,  $y = 295$  for both Dark and Bright Level Settings
  - 13800K:  $x = 260$ ,  $y = 275$  for both Dark and Bright Level Settings
- For these 3 Color Temperatures (6500D, 9300K and 13800K), adjust the Dark and Bright Levels to the following Y values:
- Dark level  $Y = 1.2 \pm 0.1$  FL
  - Bright level  $Y = 30 \pm 1$  FL

Once all 4 Color Temperatures have been set you will automatically exit the Color Temperature Adjustment. Once you exit the Color Temperature Adjustment proceed on by completely exiting the Factory Adjustment Menu.



## BLOCK DIAGRAM

VER1.0

Image Board ↔ Panel					
Image Board Ass'y					
	J1 (40 Pin)	J14 (6 Pin)	J15 (4 Pin)	J21 (7 Pin)	J25 (3 Pin)
Pin 1	GND	+5VSB	VGND	+9VT	+5VA
Pin 2	NC	DGND	VGND	NC	VGND
Pin 3	RA-	DGND	NC	DGND	VGND
Pin 4	RA+	5V1	+9V	+24V	
Pin 5	GND	SB		+24V	
Pin 6	GND	DGND		GND	
Pin 7	RB-			GND	
Pin 8	RB+				
Pin 9	GND				
Pin 10	GND				
Pin 11	RC-				
Pin 12	RC+				
Pin 13	GND				
Pin 14	GND				
Pin 15	RCLK-				
Pin 16	RCLK+				
Pin 17	GND				
Pin 18	GND				
Pin 19	RD-				
Pin 20	RD+				
Pin 21	GND				
Pin 22	GND				
Pin 23	GND				
Pin 24	GND				
Pin 25	NC				
Pin 26	GND				
Pin 27	NC				
Pin 28	GND				
Pin 29	NC				
Pin 30	GND				
Pin 31	NC				
Pin 32	NC				
Pin 33	NC				
Pin 34	NC				
Pin 35	NC				
Pin 36	NC				
Pin 37	NC				
Pin 38	NC				
Pin 39	NC				
Pin 40	NC				

### Image Board Socket Data

Image Board ↔ AV Module Board		
Image Board	AV Module Board	Content
JP5 (48 Pin)	JP2 (48 Pin)	
A1	A16	+9VT
A2	A15	DGND
A3	A14	NC
A4	A13	DGND
A5	A12	SCL2
A6	A11	DGND
A7	A10	SDA2
A8	A9	DGND
A9	A8	NC
A10	A7	DGND
A11	A6	TV_R
A12	A5	DGND
A13	A4	TV_L
A14	A3	DGND
A15	A2	AFT_TUN
A16	A1	TUN_DETn
B1	B16	DVI_L
B2	B15	DVI_R
B3	B14	AGND
B4	B13	L_OUT
B5	B12	R_OUT
B6	B11	SUB_WFR
B7	B10	PWR_CTL
B8	B9	AGND
B9	B8	AGND
B10	B7	AGND
B11	B6	AGND
B12	B5	AGND
B13	B4	AGND
B14	B3	D_CTL
B15	B2	RESETQ
B16	B1	SD
C1	C1	AS_MP
C2	C2	AS_SP
C3	C3	RST_DPTV
C4	C4	SV2_SW
C5	C5	V2B_DETn
C6	C6	YUVn_RGB
C7	C7	15Kn_MP
C8	C8	15Kn_SP
C9	C9	SB5V
C10	C10	TDO
C11	C11	TDI
C12	C12	NC
C13	C13	NC
C14	C14	TMS
C15	C15	DGND
C16	C16	TCK

Image Board ↔ AV Module Board		
Image Board	AV Module Board	Content
JP5 (48 Pin)	JP2 (48 Pin)	
A1	A16	COMPOSITE
A2	A15	VGND
A3	A14	S2_Y
A4	A13	S2_C
A5	A12	VGND
A6	A11	Y1
A7	A10	PB1_CB1
A8	A9	PR1_CR1
A9	A8	VGND
A10	A7	Y2
A11	A6	PB2_CB2
A12	A5	PR2_CR2
A13	A4	VGND
A14	A3	AVB_DETn
A15	A2	TV
A16	A1	VGND
B1	B16	AV1_I
B2	B15	AV1_R
B3	B14	AGND
B4	B13	S2_I
B5	B12	S2_R
B6	B11	AGND
B7	B10	YUV1_I
B8	B9	YUV1_R
B9	B8	AGND
B10	B7	YUV2_I
B11	B6	YUV2_R
B12	B5	AGND
B13	B4	RGB_L
B14	B3	RGB_R
B15	B2	AGND
B16	B1	AGND
C1	C1	PCn_MPU
C2	C2	PCSCS
C3	C3	PCSI
C4	C4	PCSLK
C5	C5	SSO
C6	C6	DGND
C7	C7	P5V
C8	C8	SCL2
C9	C9	SDA2
C10	C10	DGND
C11	C11	SCL_SP
C12	C12	SDA_SP
C13	C13	DGND
C14	C14	SCL2_33
C15	C15	SDA2_33
C16	C16	DGND

Image Board ↔ Audio Amplifier Board		
Image Board	Audio Amplifier Board	Content
J11 (12 Pin)	JA1 (12 Pin)	
Pin 1	Pin 1	24V
Pin 2	Pin 2	24V
Pin 3	Pin 3	DGND
Pin 4	Pin 4	SB5V
Pin 5	Pin 5	DGND
Pin 6	Pin 6	AO_SEL
Pin 7	Pin 7	SDA2
Pin 8	Pin 8	SCL2
Pin 9	Pin 9	A_MUTEn
Pin 10	Pin 10	SURR1
Pin 11	Pin 11	SURR2
Pin 12	Pin 12	DGND

Image Board ↔ Audio Amplifier Board		
Image Board	Audio Amplifier Board	Content
J12 (10 Pin)	JA2 (10 Pin)	
Pin 1	Pin 1	L_IN
Pin 2	Pin 2	R_IN
Pin 3	Pin 3	AGND
Pin 4	Pin 4	L_OUT
Pin 5	Pin 5	R_OUT
Pin 6	Pin 6	AGND
Pin 7	Pin 7	SUB_WFR
Pin 8	Pin 8	SPK_CTL
Pin 9	Pin 9	PWR_CTL
Pin 10	Pin 10	NC

Image Board ↔ Front Button Control Board		
Image Board	Front Button Control Board	Content
J5 (6 Pin)	JA3 (6 Pin)	
Pin 1	Pin 1	RC_OUT
Pin 2	Pin 2	SW_OUT
Pin 3	Pin 3	ON_LED
Pin 4	Pin 4	SB_LED
Pin 5	Pin 5	DGND
Pin 6	Pin 6	SB5V

Image Board Signal Block Diagram

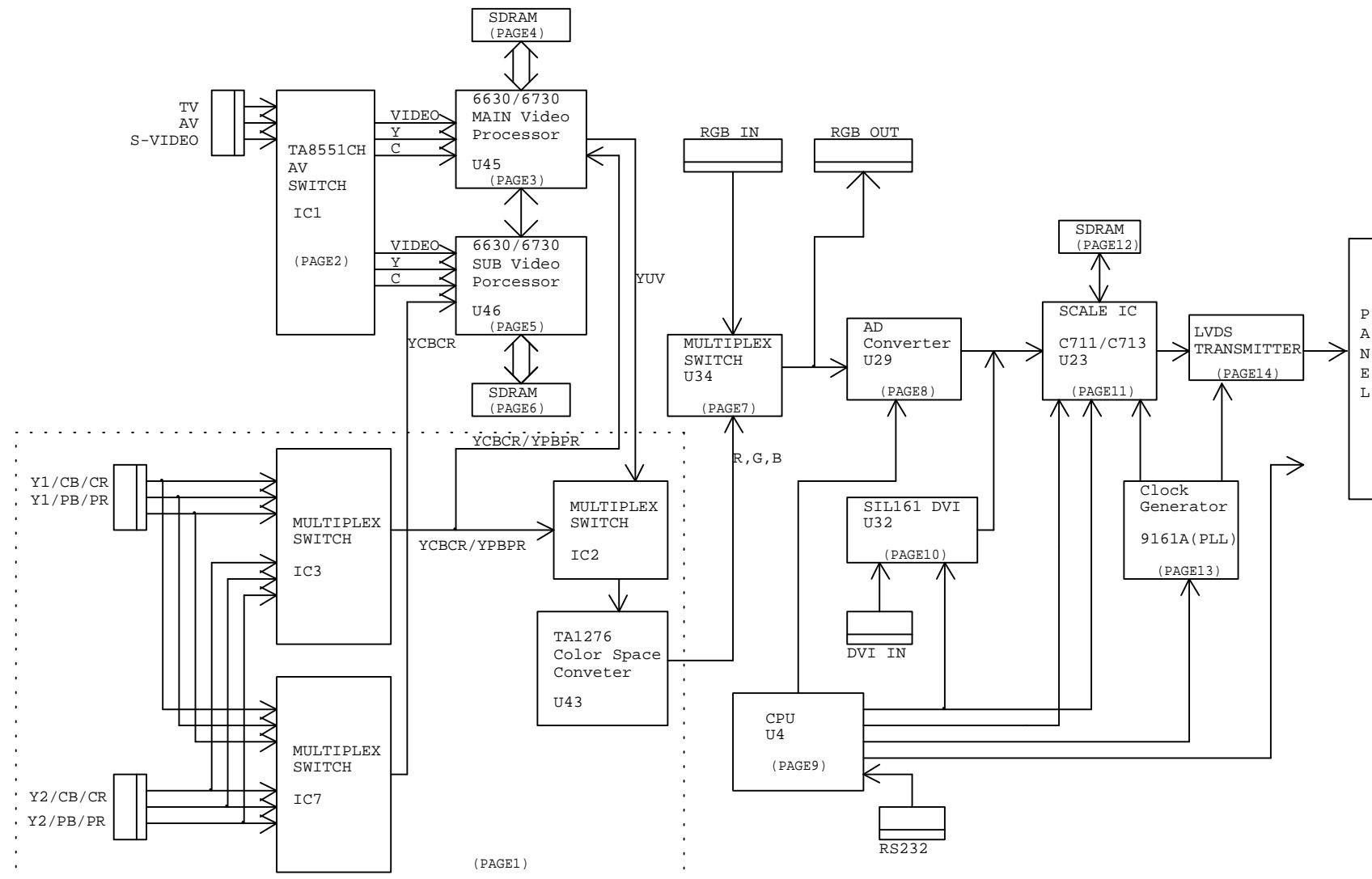
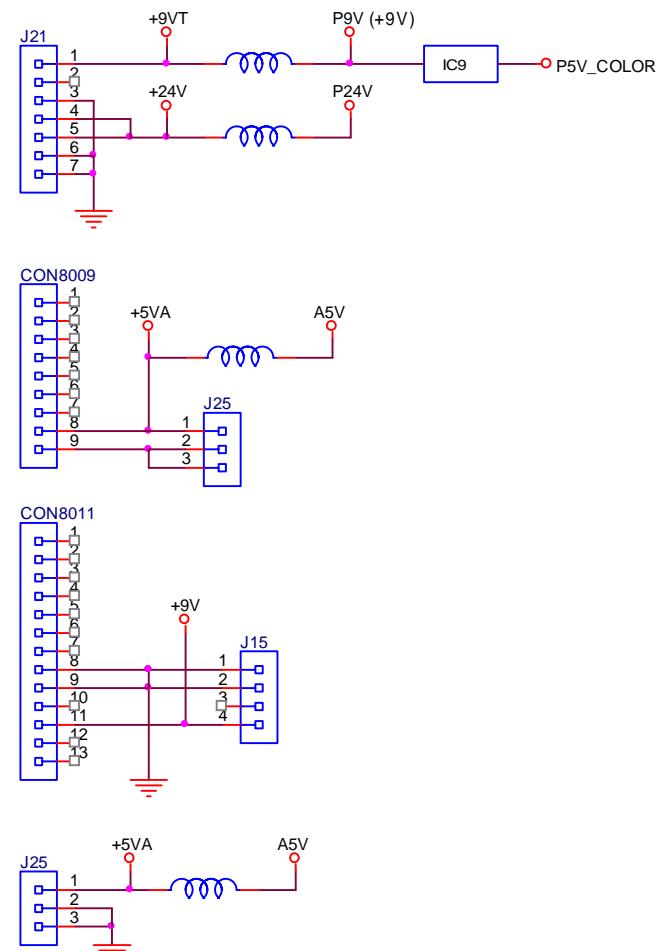
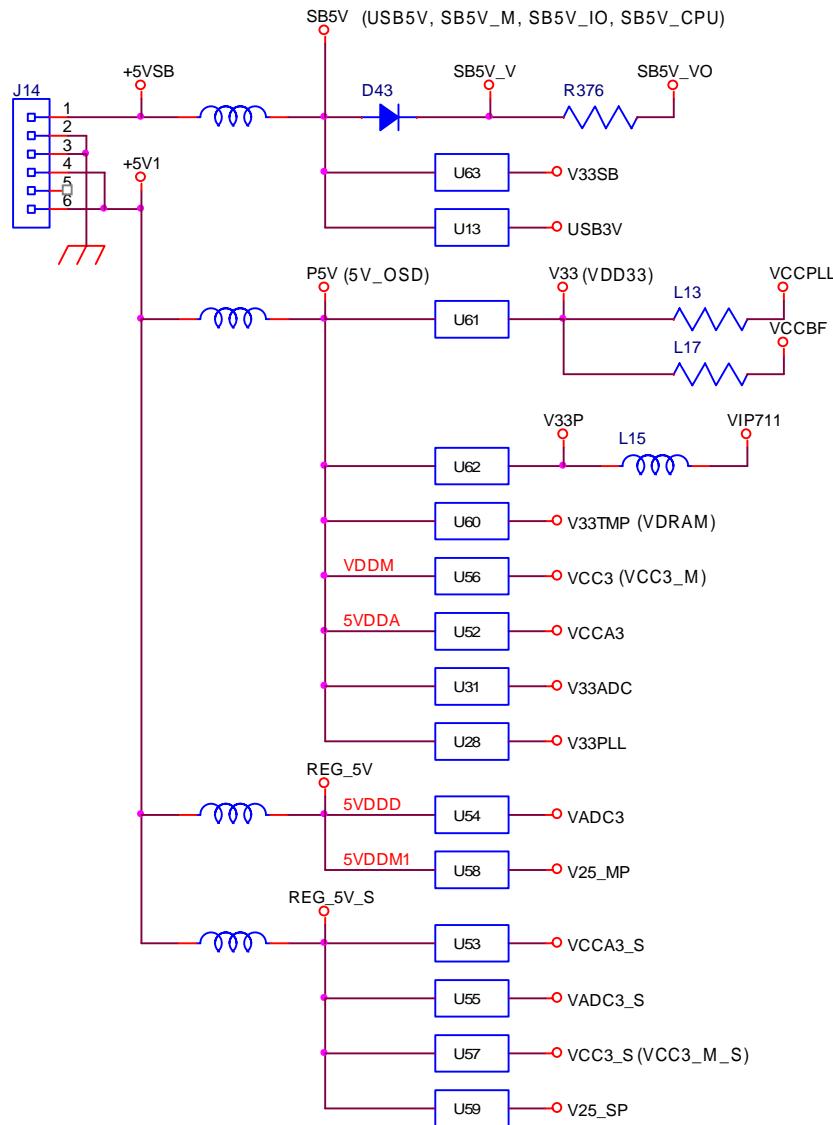
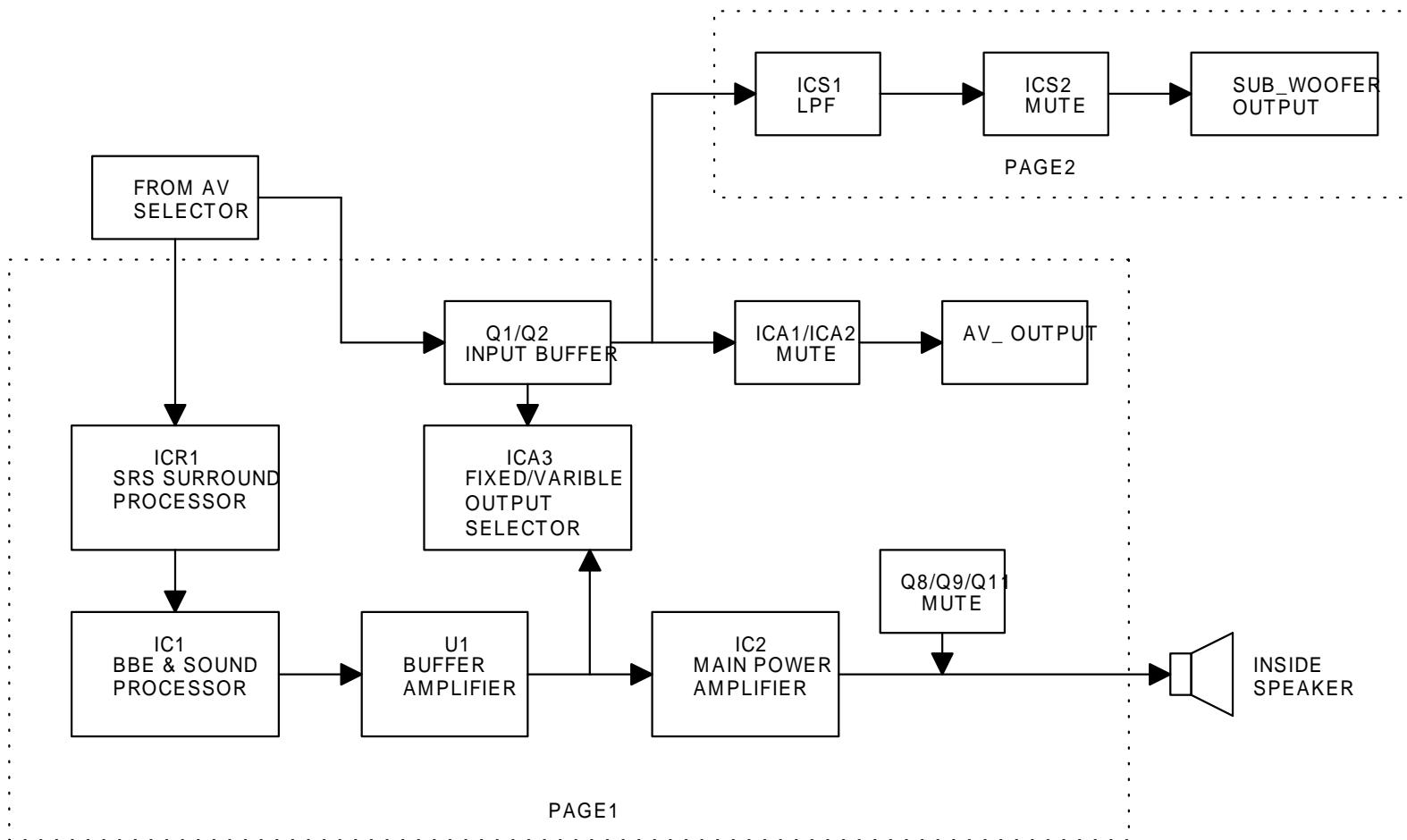


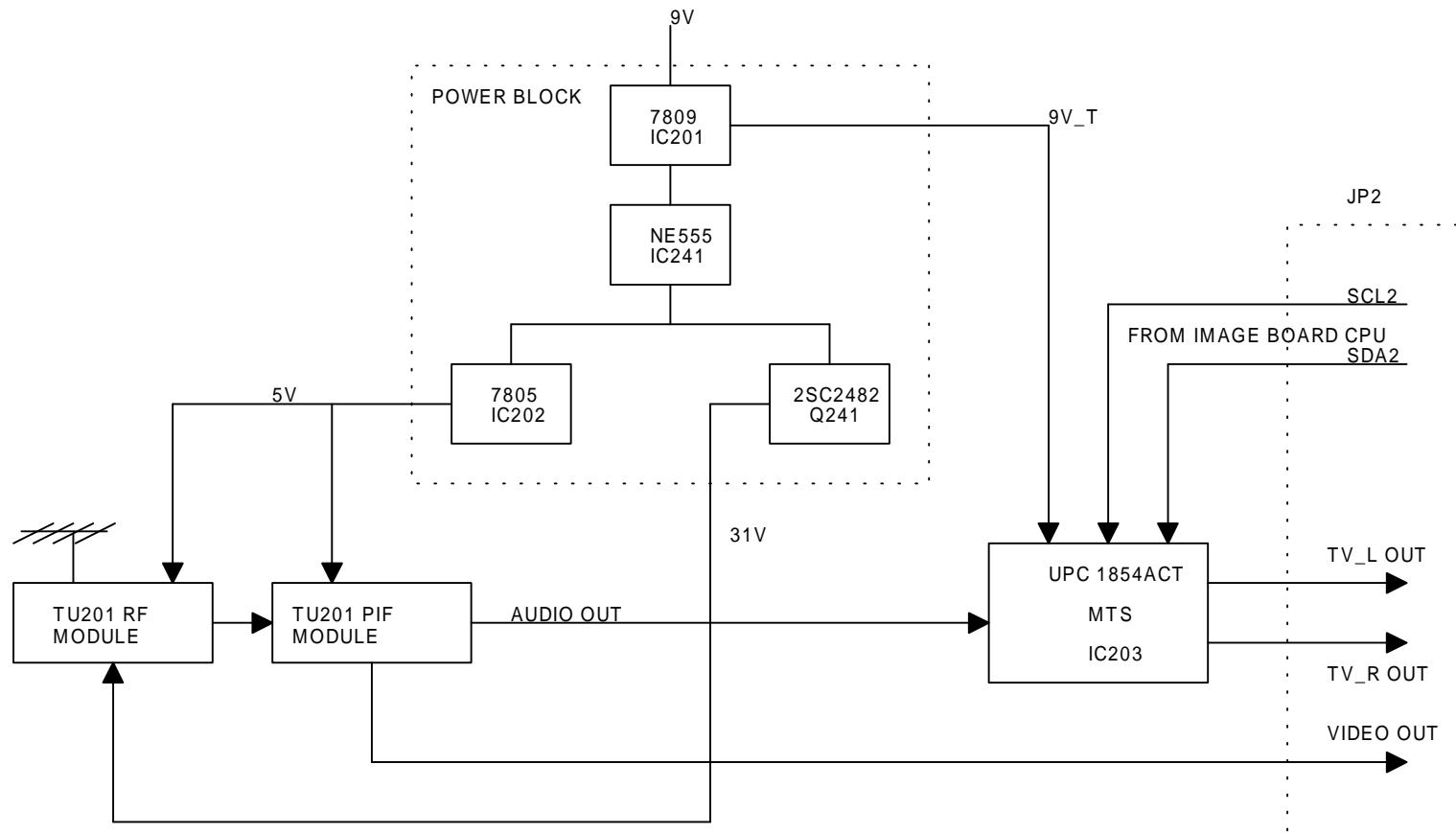
Image board Power Block Diagram



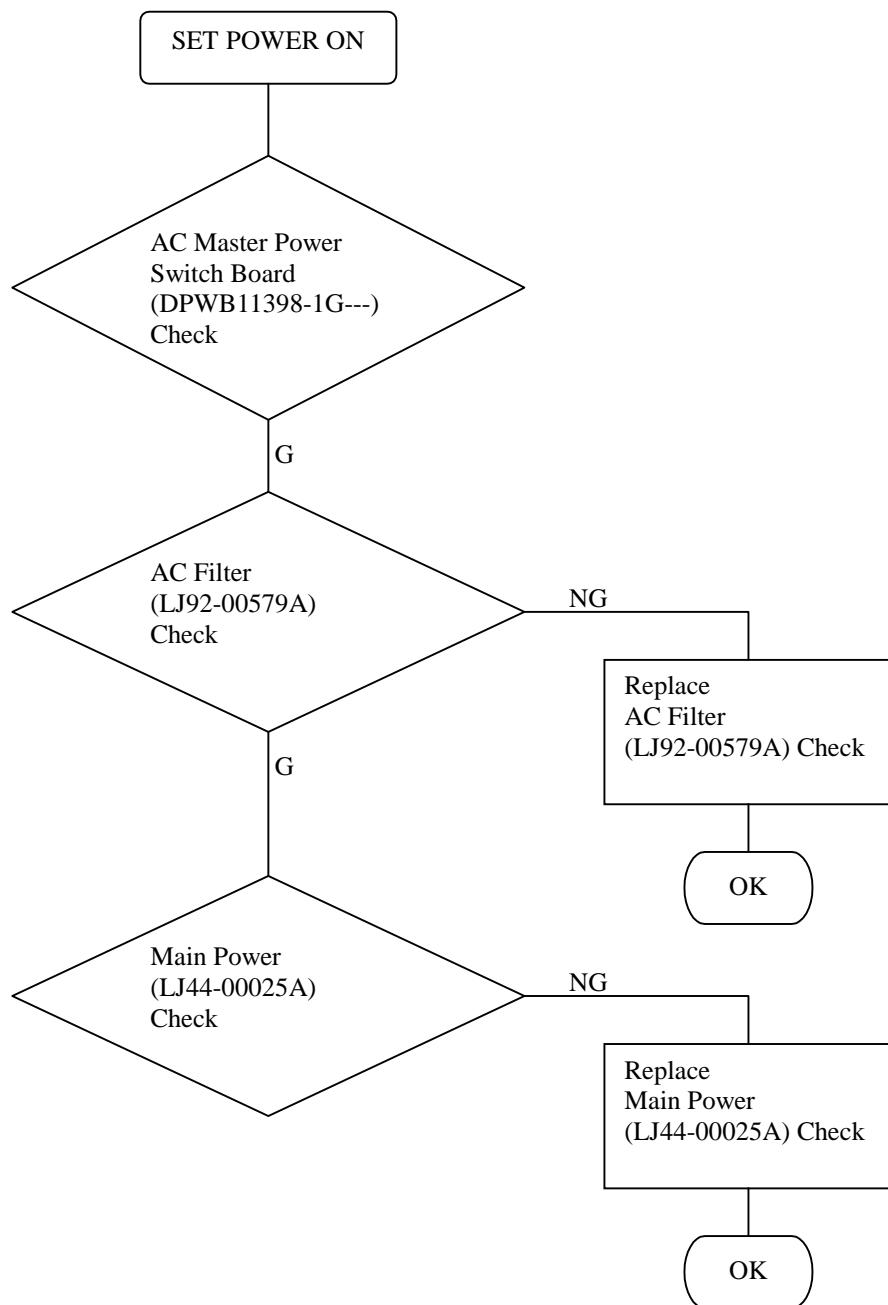
PDP Sound Block Diagram

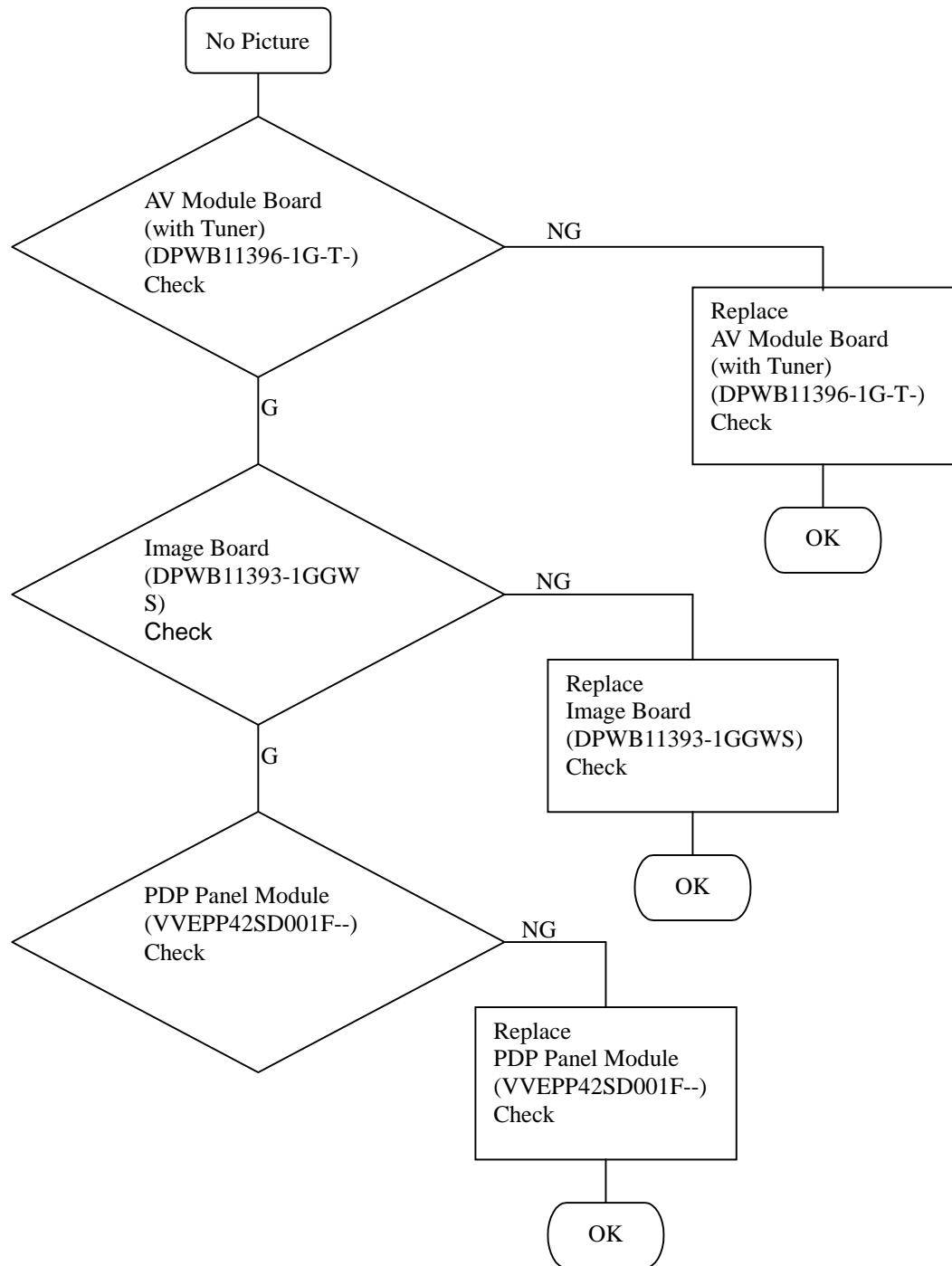


Tuner Signal Block Diagram

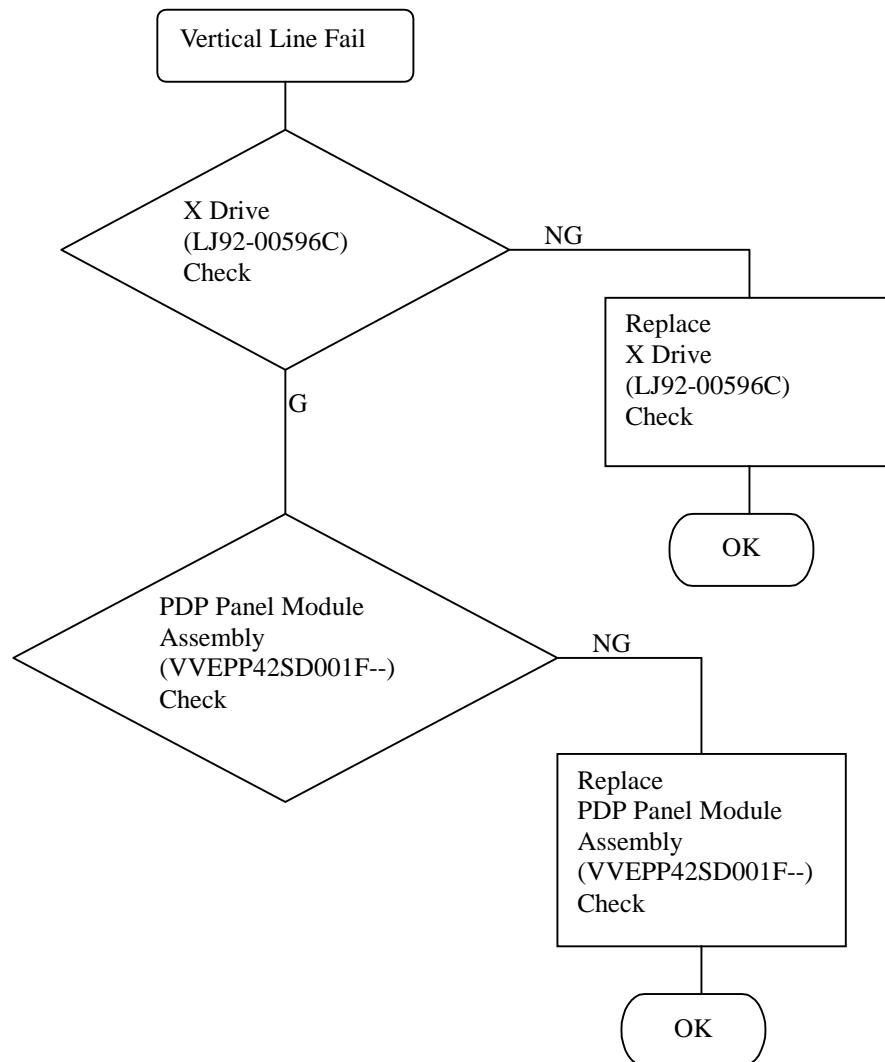


DPWB11396-1G-T-

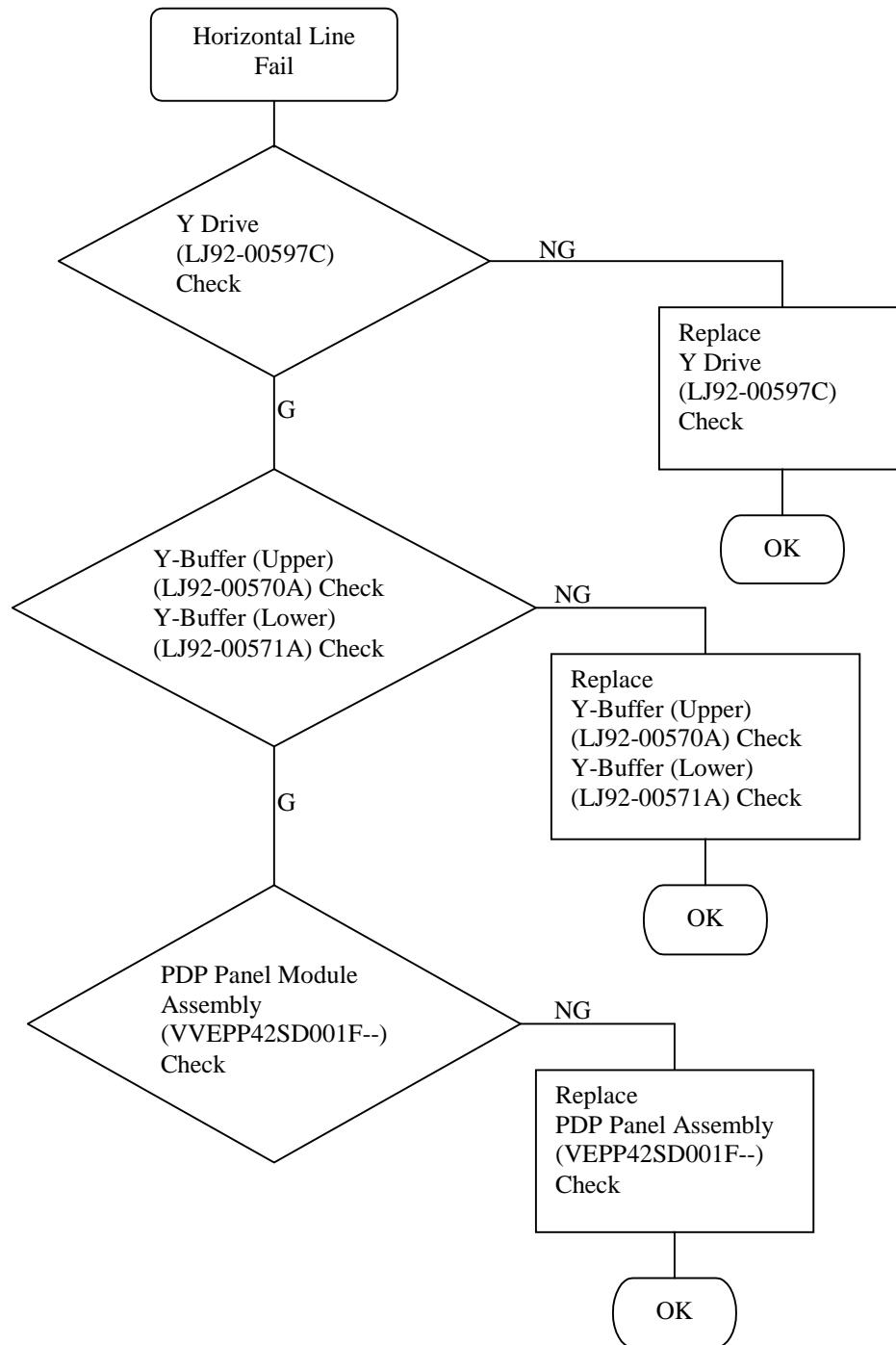
**No Power**

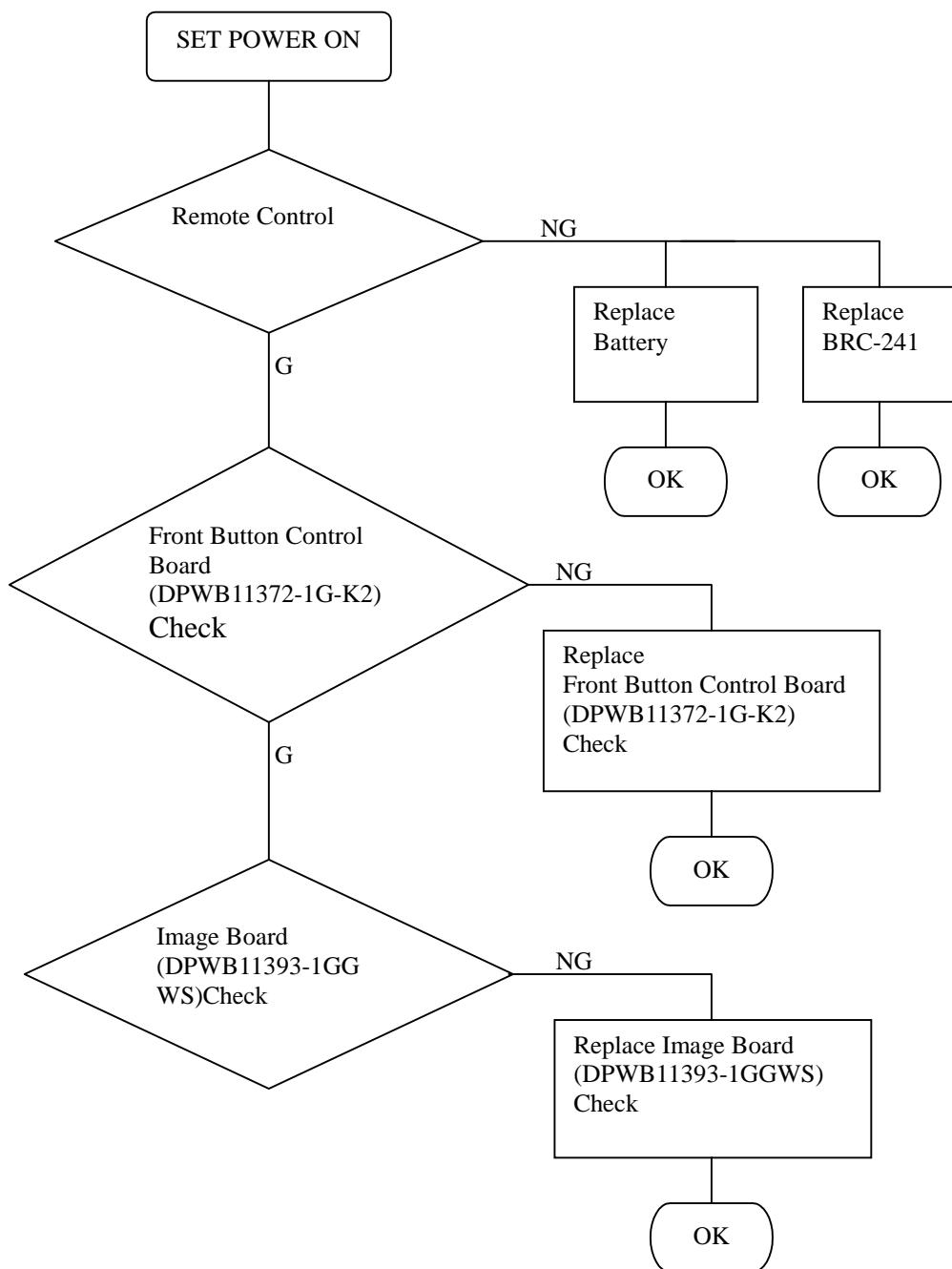
**No Picture**

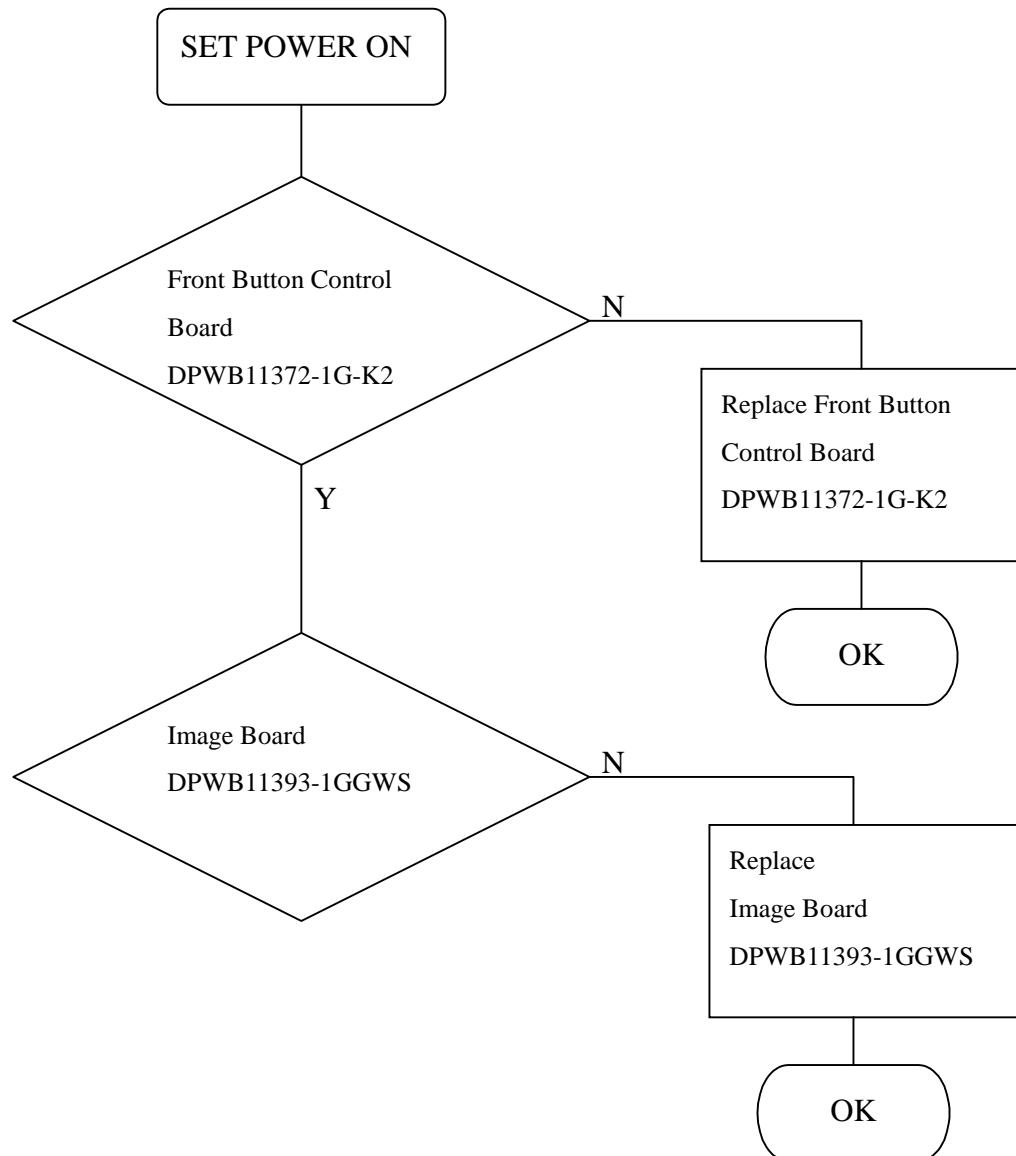
## Vertical Line Fail



## Horizontal Line Fail



**No Remote Control**

**Front Button Fail**

**Module Breakdown****Model Name: GTW-P42M203**

No.	Module	Supplier	Supplier's Ass'y Part #	Quantity Per Final Assembly	Sub-Con Name	Sub-Con Location	Current Revision Level
1	<a href="#">Image Board</a>	Sampo	DPWB11393-1GGWS	1	TSMT	Taiwan	S11393-05-1A1
2	<a href="#">AC Master Power Switch Board</a>	Sampo	DPWB11398-1G---	1	TSMT	Taiwan	OR
3	<a href="#">Audio Amplifier Board</a>	Sampo	DPWB11372-1G-S-	1	TSMT	Taiwan	A11372-02-100
4	<a href="#">Front Button Control Board</a>	Sampo	DPWB11372-1G-K2	1	TSMT	Taiwan	K2
5	<a href="#">AV w/ Tuner Module Board</a>	Sampo	DPWB11396-1G-T-	1	TSMT	Taiwan	T11396-00-100
6	Logic Board	Samsung	LJ92-00621A	1	-	-	A4
7	X Drive	Samsung	LJ92-00596C	1	-	-	A1
8	Y Drive	Samsung	LJ92-00597C	1	-	-	A1
9	Logic E - Buffer	Samsung	LJ92-00600A	1	-	-	A1
10	Logic F - Buffer	Samsung	LJ92-00601A	1	-	-	A1
11	Y-Buffer (Upper)	Samsung	LJ92-00570A	1	-	-	A1
12	Y-Buffer (Lower)	Samsung	LJ92-00571A	1	-	-	A1
13	Main Power	Samsung	LJ44-00025A	1	Danam	Korea	A1
14	AC Filter	Samsung	LJ92-00579A	1	-	-	0.2
15	PDP Panel Module	Samsung	VVEPP42SD001F--	1	-	-	V1
16	Glass Filter	Sampo	PGLS-0013-1----	1	Asahi Glass Corporation	Japan	OR
17	Speaker	Sampo	RSPK1L068-1CFI-	2	In Hana Industrial Co. Ltd.	Taiwan	OR
18	Front Bezel	Sampo	DMSKP0124-1F- <a href="#">AL</a>	1	Cheng Fa Plastic Mfg Co., Ltd.	Taiwan	AL
19	Rear Cover	Sampo	GCABB0297-1P- <a href="#">I</a>	1	Yund Cheng Industrial Co., Ltd.	Taiwan	I
20	Plasma Stand Assembly- Leg Type	Sampo	DSTN-0009-1F--A	2	Yo Tai Plastic Industrial Co., Ltd.	Taiwan	A

Remark:

1. Please refer to each "Module BOM (#)" Tab for each module according to the No. indicated in the first column.
2. OR: Original Revision

**Module Part Level BOM**

**Module Name:** Image Board  
**Supplier Name:** Sampo  
**Module P/N:** DPWB11393-1GGWS  
**Revision:** S11393-05-1A1

Part #	Part Number Name	Part Description			Quantity per Assembly	Supplier Name	Ref Designator
QCNCPI623-140-A	Connector	40PIN			1	Chia-Soon Electronics Co., Ltd.	J1
QCNCIS1680-1----	Connector	48pin			2	Oupiin Enterprise Co., Ltd.	JP4 JP5
QCNWT1285-1001-					1	JST ELECTRONIC PRODUCTS MFG.CO.,LTD	
QCNWT128A-1001-					1	JST ELECTRONIC PRODUCTS MFG.CO.,LTD	
QPWB11393-1G-5-	PCB Bareboard	Image Board			1	EISD Enterprise Co., Ltd.	PCB
QSOCD1550-115--	Socket				2	Chia-Soon Electronics Co., Ltd.	S1 S2
QSOCD1553-109--	Socket				1	Chia-Soon Electronics Co., Ltd.	P1
QSOCD1555-124--	DVI Socket	24PIN			1	MOLEX	J9
QSOCI1177-108--	IC Socket	8Pin			3	Suyin Corporation	U33 Socket U35 Socket U7 Socket
QSOCI1514-132-S	IC Socket	32Pin			1	Chia-Soon Electronics Co., Ltd.	U3 SOCKET
RCHO-1022D8----	Choke	330uH			1	Top-Nation Electronic Factory	L24
RCHOL1020-1100-	Choke	10uH			5	Taiwan Sumida Electronics Inc.	L25 L26 L27 L28 L30
RCORA1021-1---U	Bead core	0.45uH			1	Murata Mfg. Co., Ltd.	L29
RCORA1047-1---A	Bead core	120 Ω/100MHz			3	Walsin Technology Corp.	F21 F23 F26
RCORA1048-1121A	Bead core	120 Ω/100MHz			4	Walsin Technology Corp.	L21 L22 L23 R87
RCRSL1185-1---A	Crystal	16MHz			1	KDS Taiwan Electronics Corp.	Y1
RCRSL1187-1---A	Crystal	14.318MHz			2	KDS Taiwan Electronics Corp.	Y3 YD1
RNWR-0028CM103A	Network Resister	10K ohm			9	Yageo Corporation	RP1 RP2 RP3 RP5 RP8 RP9 RP12 RP43 RP45
RNWR-0028CM220A	Network Resister	22 ohm			13	Yageo Corporation	RND1 RND2 RND3 RND4 RND5 RND6 RP35 RP36 RP37 RP38 RP39 RP40 RP41
RNWR-0028CM330A	Network Resister	33 ohm			24	Yageo Corporation	RP10 RP11 RP13 RP14 RP15 RP16 RP17 RP18 RP19 RP20 RP21 RP22 RP23 RP24 RP25 RP26 RP27 RP28 RP29 RP30 RP31 RP32 RP33 RP34
TLABD1145-1B---	Barcode label				1	Diing Yih Enterprise Co., Ltd.	
TLABD1149-1B---	Label				1	Trim International Inc.	
VCEABN1CG106MNA	Capacity,Aluminum Elect.	10uF	16V	±20%	62	Matsushita Electric Co., Ltd.	C9 C10 C13 C14 C15 C27 C43 C58 C99 C115 C158 C185 C214 C219 C220 C221 C222 C223 C230 C231 C246 C251 C253 C258 C271 C310 C312 C322 C324 C391 C399 C400 C401 C405 C406 C407 C409 C415 CD8 CD17 CD22 CD36 CD40 CD45 CD47 CD49 CD51 CD53 CD67 CD71 CDS8 CDS17 CDS22 CDS36 CDS40 CDS45 CDS47 CDS49 CDS51 CDS53 CDS67 CDS71

**Module Part Level BOM**

**Module Name:** Image Board  
**Supplier Name:** Sampo  
**Module P/N:** DPWB11393-1GGWS  
**Revision:** S11393-05-1A1

Part #	Part Number Name	Part Description			Quantity per Assembly	Supplier Name	Ref Designator
VCEABN1CG107MNA	Capacity,Aluminum Elect.	100uF	16V	$\pm 20\%$	22	Matsushita Electric Co., Ltd.	C86 C124 C211 C224 C226 C237 C241 C259 C266 C291 C295 C299 C309 C311 C321 C323 C338 C343 C346 C349 C381 C412
VCEABN1CG226MNA	Capacity,Aluminum Elect.	22uF	16V	$\pm 20\%$	32	Matsushita Electric Co., Ltd.	C65 C71 C72 C73 C160 C194 C203 C204 C268 C277 CD16 CD23 CD69 CD82 CD84 CD87 CD89 CD92 CD94 CD97 CD99 CDS16 CDS23 CDS69 CDS82 CDS84 CDS87 CDS89 CDS92 CDS94 CDS97 CDSA1
VCEABN1CG227MNA	Capacity,Aluminum Elect.	220uF	16V	$\pm 20\%$	10	Matsushita Electric Co., Ltd.	C197 C202 C210 C337 C342 C345 C348 C411 CD18 CDS18
VCEABN1CG337MNA	Capacity,Aluminum Elect.	330uF	16V	$\pm 20\%$	2	Matsushita Electric Co., Ltd.	C269 C287
VCEABN1CG476MNA	Capacity,Aluminum Elect.	47uF	16V	$\pm 20\%$	34	Matsushita Electric Co., Ltd.	C37 C55 C59 C162 C165 C167 C171 C172 C173 C175 C179 C190 C191 C193 C195 C215 C217 C229 C233 C234 C238 C239 C240 C249 C256 C284 C410 C417 CD9 CD13 CD15 CDS9 CDS13 CDS15
VCEABN1EG227MNA	Capacity,Aluminum Elect.	220uF	25V	$\pm 20\%$	2	Matsushita Electric Co., Ltd.	C333 C335
VCEABN1HG105MNA	Capacity,Aluminum Elect.	1uF	50V	$\pm 20\%$	11	Matsushita Electric Co., Ltd.	C31 C34 C192 C236 C275 C283 C297 CD12 CD14 CDS12 CDS14
VCEABN1HG224MNA	Capacity,Aluminum Elect.	0.22uF	50V	$\pm 20\%$	1	Matsushita Electric Co., Ltd.	C288
VCEABN1HG225MNA	Capacity,Aluminum Elect.	2.2uF	50V	$\pm 20\%$	20	Matsushita Electric Co., Ltd.	C4 C183 C184 C186 C187 C188 C189 C198 C199 C205 C206 C207 C208 C248 C273 C274 C276 C281 C282 C286
VCEABN1VG475MNA	Capacity,Aluminum Elect.	4.7uF	35V	$\pm 20\%$	4	Matsushita Electric Co., Ltd.	C384 C385 C386 C389
VCEACU1HG476MNP	Capacity,Aluminum Elect.	47uF	50V	$\pm 20\%$	1	Matsushita Electric Co., Ltd.	C216
VCICHN1HH100J-A	Capacity,Temp. Comp. Ceramic	10PF	50V	$\pm 5\%$	11	Yageo Corporation	C6 C7 CD38 CD39 CD42 CD43 CD44 CDS38 CDS39 CDS42 CDS44
VCICHN1HH101J-A	Capacity,Temp. Comp. Ceramic	100PF	50V	$\pm 5\%$	31	Yageo Corporation	C29 C30 C140 C153 C154 C155 C156 C166 C169 C176 C180 C181 C182 C232 C245 C265 C301 C308 C341 CD6 CD10 CD21 CD25 CD37 CD41 CDS6 CDS10 CDS21 CDS25 CDS37 CDS41
VCICHN1HH120J-A	Capacity,Temp. Comp. Ceramic	12PF	50V	$\pm 5\%$	3	Yageo Corporation	C22 C51 C52
VCICHN1HH121J-A	Capacity,Temp. Comp. Ceramic	120PF	50V	$\pm 5\%$	6	Yageo Corporation	C16 C17 C18 C19 C20 C375
VCICHN1HH181J-A	Capacity,Temp. Comp. Ceramic	180PF	50V	$\pm 5\%$	5	Yageo Corporation	C35 C36 C306 C307 C383
VCICHN1HH200J-A	Capacity,Temp. Comp. Ceramic	20PF	50V	$\pm 5\%$	2	Yageo Corporation	CD3 CD4
VCICHN1HH220J-A	Capacity,Temp. Comp. Ceramic	22PF	50V	$\pm 5\%$	3	Yageo Corporation	C300 C404 C414
VCICHN1HH330J-A	Capacity,Temp. Comp. Ceramic	33PF	50V	$\pm 5\%$	3	Yageo Corporation	C2 C3 C303
VCICHN1HH331J-A	Capacity,Temp. Comp. Ceramic	330PF	50V	$\pm 5\%$	8	Yageo Corporation	C144 C145 C146 C147 C148 C149 C150 C151

**Module Part Level BOM**

**Module Name:** Image Board  
**Supplier Name:** Sampo  
**Module P/N:** DPWB11393-1GGWS  
**Revision:** S11393-05-1A1

Part #	Part Number Name	Part Description			Quantity per Assembly	Supplier Name	Ref Designator
VCICHN1HH470J-A	Capacity,Temp. Comp. Ceramic	47PF	50V	±5%	25	Yageo Corporation	C305 C351 C352 C353 C354 C355 C356 C357 C358 C359 C360 C361 C362 C363 C364 C365 C366 C367 C368 C369 C370 C371 C372 C373 C374
VCICHN1HH471J-A	Capacity,Temp. Comp. Ceramic	470PF	50V	±5%	1	Yageo Corporation	C177
VCICHN1HH561J-A	Capacity,Temp. Comp. Ceramic	560PF	50V	±5%	1	Samsung	C387
VCICHN1HH680J-A	Capacity,High Diel. Ceramic	68PF	50V	±5%	1	Yageo Corporation	C54
VCLFCN1HY224M-A	Capacity,High Diel. Ceramic	0.22uF	50V	±20%	5	Yageo Corporation	C200 C334 C380 C402 C403
VCLFH1EY104Z-A	Capacity,High Diel. Ceramic	0.1uF	25V	+80%~-20%	187	Yageo Corporation	C1 C5 C8 C11 C12 C21 C23 C24 C25 C28 C33 C38 C39 C40 C50 C56 C57 C60 C61 C62 C63 C64 C66 C67 C68 C69 C70 C74 C75 C76 C77 C78 C79 C80 C81 C82 C83 C84 C85 C87 C88 C89 C90 C91 C92 C93 C94 C95 C96 C97 C98 C100 C101 C102 C103 C104 C105 C107 C111 C114 C116 C117 C118 C119 C120 C121 C122 C123 C125 C127 C129 C130 C131 C132 C133 C134 C135 C136 C137 C138 C139 C157 C161 C178 C212 C213 C267 C278 C279 C280 C304 C313 C315 C317 C319 C325 C327 C329 C331 C336 C339 C344 C347 C350 C390 C392 C393 C394 C395 C396 C397 C398 C408 C413 C419 C421 C423 C425 C427 C425 CD5 CD7 CD11 CD24 CD26 CD27 CD28 CD29 CD32 CD33 CD34 CD35 CD46 CD48 CD50 CD52 CD54 CD55 CD56 CD57 CD58 CD59 CD60 CD68 CD70 CD72 CD85 CD86 CD90 CD91 CD95 CD96 CD100 CD101 CDS5 CDS7 CDS11 CDS24 CDS26 CDS27 CDS28 CDS29 CDS32 CDS33 CDS34 CDS35 CDS46 CDS48 CDS50 CDS52 CDS54 CDS55 CDS56 CDS57 CDS58 CDS59 CDS60 CDS68 CDS70 CDS72 CDS85 CDS86 CDS90 CDS91 CDS95 CDS96 CDS99 CDSB2
VCLRHN1CB393K-A	Capacity,High Diel. Ceramic	0.039uF	16V	±10%	1	Yageo Corporation	C113
VCLRHN1CB473K-A	Capacity,High Diel. Ceramic	0.047uF	16V	±10%	3	Yageo Corporation	C108 C109 C110
VCLRHN1CB683K-A	Capacity,High Diel. Ceramic	0.068uF	16V	±10%	1	Yageo Corporation	C388
VCLRHN1HB102K-A	Capacity,High Diel. Ceramic	1000PF	50V	±10%	27	Yageo Corporation	C376 C377 C378 C379 C430 CD30 CD31 CD73 CD74 CD75 CD76 CD77 CD78 CD79 CD80 CD81 CDS30 CDS31 CDS73 CDS74 CDS75 CDS76 CDS77 CDS78 CDS79 CDS80 CDS81

**Module Part Level BOM**

**Module Name:** Image Board  
**Supplier Name:** Sampo  
**Module P/N:** DPWB11393-1GGWS  
**Revision:** S11393-05-1A1

Part #	Part Number Name	Part Description			Quantity per Assembly	Supplier Name	Ref Designator
VCLRHN1HB103K-A	Capacity,High Diel. Ceramic	0.01uF	50V	±10%	67	Yageo Corporation	C106 C126 C128 C159 C163 C164 C168 C170 C174 C196 C201 C209 C218 C225 C228 C235 C247 C260 C270 C272 C290 C292 C293 C294 C298 C314 C316 C318 C320 C326 C328 C330 C332 C340 C382 CD61 CD62 CD63 CD64 CD65 CD66 CD102 CD103 CD104 CD105 CD106 CD107 CD108 CD109 CD110 CD111 CDS61 CDS62 CDS63 CDS64 CDS65 CDS66 CDSA2 CDSA3 CDSA4 CDSA5 CDSA6 CDSA7 CDSA8 CDSA9 CDSB0 CDSB1
VCLRHN1HB222K-A	Capacity,High Diel. Ceramic	2200PF	50V	±10%	4	Yageo Corporation	CD1 CD2 CDS1 CDS2
VCLRHN1HB392K-A	Capacity,High Diel. Ceramic	3900PF	50V	±10%	1	Yageo Corporation	C112
VCNCP0053-JJST-	Connector	3 Pin			1	JST ELECTRONIC PRODUCTS MFG.CO.,LTD	J25
VCNCP0054-JJST-	Connector	4 Pin			1	JST ELECTRONIC PRODUCTS MFG.CO.,LTD	J15
VCNCP0056-JJST-	Connector	6 Pin			1	JST ELECTRONIC PRODUCTS MFG.CO.,LTD	J14
VCNCP0057-JJST-	Connector	7 Pin			1	JST ELECTRONIC PRODUCTS MFG.CO.,LTD	J21
VCNCP0316-EJST-	Connector	6 Pin			1	JST ELECTRONIC PRODUCTS MFG.CO.,LTD	J5
VCNCP031A-EJST-	Connector	10 Pin			1	JST ELECTRONIC PRODUCTS MFG.CO.,LTD	J12
VCNCP031C-EJST-	Connector	12 Pin			1	JST ELECTRONIC PRODUCTS MFG.CO.,LTD	J11
VCNCT1285-BJSTA	Connector	5 PIN			2	JST ELECTRONIC PRODUCTS MFG.CO.,LTD	J26 J27
VCNCT128A-BJSTA	Connector	10PIN			2	JST ELECTRONIC PRODUCTS MFG.CO.,LTD	J23 J24
VCPELU1HG222J-P	Capacity,Polyester Film	2200PF	50V	±5%	1	Mylar Electronics Co., Ltd.	C289
VCTABN1AB106M-A	Capacity,tantalum	10uF	10V	±20%	4	Energie Electronic Co., Ltd.	C141 C142 C143 C152
VRMBNV8--000J-A	Resiser,Metal Film	0	1/8W	±5%	68	Yageo Corporation	F1 F2 F5 F6 F7 F8 F9 F10 F11 F12 F13 F15 F17 F18 F20 F22 F24 L1 L2 L3 L4 L6 L7 L9 L10 L11 L12 L13 L15 L16 L17 L18 L19 L31 L33 L36 L38 L50 LD1 LD2 LD3 LD4 LD5 LD6 LD7 LD8 LD11 LD12 LD13 LD14 LD18 LD22 LD26 LDS1 LDS2 LDS3 LDS4 LDS5 LDS6 LDS7 LDS8 LDS11 LDS12 LDS13 LDS14 LDS15 LDS17 LDS19
VRMBNV8--181J-A	Resiser,Metal Film	180	1/8W	±5%	2	Yageo Corporation	F3 F4
VRMHNVG--000J-A	Resiser,Metal Film	0	1/16W	±5%	40	Yageo Corporation	R49 R91 R96 R98 R101 R123 R139 R229 R236 R246 R258 R259 R260 R261 R263 R272 R320 R340 R341 R342 R344 R345 R385 R389 R391 R393 R402 R404 R408 RD1 RD2 RD19 RD28 RD35 RDS1 RDS2 RDS19 RDS22 RDS28 RDS35
VRMHNVG--100J-A	Resiser,Metal Film	10	1/16W	±5%	20	Yageo Corporation	R22 R23 R38 R40 R175 R187 R189 R192 R193 R230 R235 R254 R257 R376 R377 R378 R379 R380 R381 R383

**Module Part Level BOM**

**Module Name:** Image Board  
**Supplier Name:** Sampo  
**Module P/N:** DPWB11393-1GGWS  
**Revision:** S11393-05-1A1

Part #	Part Number Name	Part Description			Quantity per Assembly	Supplier Name	Ref Designator
VRMHNVG--101J-A	Resiser,Metal Film	100	1/16W	±5%	16	Yageo Corporation	R62 R65 R66 R67 R145 R150 R154 R159 R160 R163 R195 R198 R200 R273 R281 R286
VRMHNVG--102J-A	Resiser,Metal Film	1K	1/16W	±5%	17	Yageo Corporation	R58 R168 R170 R205 R225 R239 R256 R270 R271 R279 R303 R306 R308 R327 R335 R337 R338
VRMHNVG--103J-A	Resiser,Metal Film	10K	1/16W	±5%	30	Yageo Corporation	R1 R5 R36 R37 R39 R89 R92 R93 R106 R119 R120 R125 R134 R136 R138 R142 R144 R156 R161 R162 R178 R184 R265 R287 R313 R339 RD13 RD23 RDS13 RDS23
VRMHNVG--104J-A	Resiser,Metal Film	100K	1/16W	±5%	3	Yageo Corporation	R6 R266 R310
VRMHNVG--105J-A	Resiser,Metal Film	1M	1/16W	±5%	1	Yageo Corporation	R309
VRMHNVG--121J-A	Resiser,Metal Film	120	1/16W	±5%	3	Yageo Corporation	R372 R373 R374
VRMHNVG--122J-A	Resiser,Metal Film	1.2K	1/16W	±5%	11	Yageo Corporation	R148 R151 R155 R164 R165 R166 R282 R295 R355 R356 R357
VRMHNVG--123J-A	Resiser,Metal Film	12K	1/16W	±5%	3	Yageo Corporation	R289 R291 R305
VRMHNVG-1240F-A	Resiser,Metal Film	124	1/16W	±1%	4	Yageo Corporation	R397 R398 R400 R401
VRMHNVG--124J-A	Resiser,Metal Film	120K	1/16W	±5%	2	Yageo Corporation	R243 R300
VRMHNVG--132J-A	Resiser,Metal Film	1.3K	1/16W	±5%	1	Yageo Corporation	R71
VRMHNVG--151J-A	Resiser,Metal Film	150	1/16W	±5%	5	Yageo Corporation	R211 R217 R220 R223 R386
VRMHNVG--152J-A	Resiser,Metal Film	1.5K	1/16W	±5%	10	Yageo Corporation	R208 R209 R213 R215 R218 R219 R221 R222 R276 R285
VRMHNVG--181J-A	Resiser,Metal Film	180	1/16W	±5%	4	Yageo Corporation	R241 R247 R269 R292
VRMHNVG--182J-A	Resiser,Metal Film	1.8K	1/16W	±5%	1	Yageo Corporation	R387
VRMHNVG--183J-A	Resiser,Metal Film	18K	1/16W	±5%	3	Yageo Corporation	R262 R264 R275
VRMHNVG--202J-A	Resiser,Metal Film	2K	1/16W	±5%	4	Yageo Corporation	R118 R232 R237 R248
VRMHNVG--220J-A	Resiser,Metal Film	22	1/16W	±5%	8	Yageo Corporation	R54 R86 R382 RDS3 RDS4 RDS5 RDS6 RDS12
VRMHNVG--221J-A	Resiser,Metal Film	220	1/16W	±5%	10	Yageo Corporation	R202 R224 R316 R369 R370 R371 RD16 RD20 RDS16 RDS20
VRMHNVG--222J-A	Resiser,Metal Film	2.2K	1/16W	±5%	1	Yageo Corporation	R288
VRMHNVG--223J-A	Resiser,Metal Film	22K	1/16W	±5%	7	Yageo Corporation	R27 R30 R34 R35 R297 R301 R311
VRMHNVG--224J-A	Resiser,Metal Film	220K	1/16W	±5%	1	Yageo Corporation	R250
VRMHNVG--270J-A	Resiser,Metal Film	27	1/16W	±5%	3	Yageo Corporation	R72 R74 R388
VRMHNVG--272J-A	Resiser,Metal Film	2.7K	1/16W	±5%	1	Yageo Corporation	R268
VRMHNVG--273J-A	Resiser,Metal Film	27K	1/16W	±5%	2	Yageo Corporation	RD10 RDS10
VRMHNVG--303J-A	Resiser,Metal Film	30K	1/16W	±5%	2	Yageo Corporation	R283 R284

**B.O.M of Board Assembly****VER1.0****Module Part Level BOM**

**Module Name:** Image Board  
**Supplier Name:** Sampo  
**Module P/N:** DPWB11393-1GGWS  
**Revision:** S11393-05-1A1

Part #	Part Number Name	Part Description			Quantity per Assembly	Supplier Name	Ref Designator
VRMHNVG--330J-A	Resiser,Metal Film	33	1/16W	±5%	39	Yageo Corporation	R10 R12 R18 R19 R20 R21 R24 R31 R33 R68 R69 R77 R78 R79 R80 R81 R83 R105 R108 R111 R112 R113 R114 R121 R122 R317 R318 RD29 RD30 RD31 RD32 RD33 RD34 RDS29 RDS30 RDS31 RDS32 RDS33 RDS34
VRMHNVG--332J-A	Resiser,Metal Film	3.3K	1/16W	±5%	22	Yageo Corporation	R7 R15 R16 R17 R109 R171 R173 R176 R179 R181 R185 R194 R199 R203 R206 R210 R214 R267 R277 R312 R323 R329
VRMHNVG--333J-A	Resiser,Metal Film	33K	1/16W	±5%	2	Yageo Corporation	R298 R307
VRMHNVG--390J-A	Resiser,Metal Film	39	1/16W	±5%	3	Yageo Corporation	RD3 RD4 RD5
VRMHNVG--391J-A	Resiser,Metal Film	390	1/16W	±5%	1	Yageo Corporation	R116
VRMHNVG--392J-A	Resiser,Metal Film	3.9K	1/16W	±5%	1	Yageo Corporation	R293
VRMHNVG--393J-A	Resiser,Metal Film	39K	1/16W	±5%	2	Yageo Corporation	R274 R299
VRMHNVG--470J-A	Resiser,Metal Film	47	1/16W	±5%	7	Yageo Corporation	R8 R9 R13 R59 R60 R61 R63
VRMHNVG--472J-A	Resiser,Metal Film	4.7K	1/16W	±5%	6	Yageo Corporation	R182 R188 R190 R197 R315 RD14
VRMHNVG--473J-A	Resiser,Metal Film	47K	1/16W	±5%	17	Yageo Corporation	R28 R32 R172 R174 R177 R180 R183 R186 R191 R196 R201 R204 R207 R212 R216 R296 R331
VRMHNVG--474J-A	Resiser,Metal Film	470K	1/16W	±5%	1	Yageo Corporation	R153
VRMHNVG--4R7J-A	Resiser,Metal Film	4.7	1/16W	±5%	4	Yageo Corporation	R82 R115 R117 R157
VRMHNVG--561J-A	Resiser,Metal Film	560	1/16W	±5%	2	Yageo Corporation	RD9 RDS9
VRMHNVG--562J-A	Resiser,Metal Film	5.6K	1/16W	±5%	4	Yageo Corporation	R25 R29 R278 R328
VRMHNVG--563J-A	Resiser,Metal Film	56K	1/16W	±5%	5	Yageo Corporation	R88 R129 R333 R334 R336
VRMHNVG--682J-A	Resiser,Metal Film	6.8K	1/16W	±5%	2	Yageo Corporation	R290 R332
VRMHNVG--750J-A	Resiser,Metal Film	75	1/16W	±5%	20	Yageo Corporation	R102 R103 R104 R146 R147 R149 R167 R169 R358 R359 R360 R361 R362 R363 R364 R365 R366 R367 R368 R375
VRMHNVG--821J-A	Resiser,Metal Film	820	1/16W	±5%	1	Yageo Corporation	R280
VRMHNVG--823J-A	Resiser,Metal Film	82K	1/16W	±5%	1	Yageo Corporation	R302
VSDBAV99----A	Diode	BAV99			22	Philips Semiconductors	D4 D8 D11 D12 D13 D14 D15 D16 D17 D18 D19 D20 D21 D22 D23 D24 D26 D28 D29 D30 D31 D32
VSDRLS4148----A	Diode	RLS4148			22	ROHM CO.,LTD	D1 D2 D3 D25 D34 D35 D36 D37 D38 D39 D40 D41 D42 D43 D45 D50 D51 D52 D54 D55 D57 D58
VSI29C020CP90BS	IC- 256K CMOS Flash Memory	29C020CP90BS			1	WINBOND ELECTRONICS CORP.	U3
VSI5160L16-7--D	IC- SDRAM	5160L16-7			3	G-Link Technology	U25 U26 U27

**Module Part Level BOM**

**Module Name:** Image Board  
**Supplier Name:** Sampo  
**Module P/N:** DPWB11393-1GGWS  
**Revision:** S11393-05-1A1

Part #	Part Number Name	Part Description			Quantity per Assembly	Supplier Name	Ref Designator
VSI74HC221D---A	IC- Dual Non-Retriggerable Monostable Multivibrator with Reset	74HC221D			1	Philips Semiconductors / Texas Instruments	IC12
VSI74HC4538D--A	IC- Dual Retriggerable Precision Monostable Multivibrator	74HC4538D			1	Philips Semiconductors / Texas Instruments	IC11
VSI74HCT04D---A	IC- Inverter	74HCT04D			1	Philips Semiconductors / Texas Instruments	U67
VSI74LVC157---A	IC- Multiplexer	74LVC157			2	Philips Semiconductors / Texas Instruments	U15 U22
VSI74LVC244ADBA	IC- Octal Buffer/Line Driver	74LVC244ADBA			4	Philips Semiconductors / Texas Instruments	U18 U19 U20 U21
VSI74LVT04---A	IC- Hex Inverter	74LVT04			2	Philips Semiconductors / Texas Instruments	U6 U24
VSI74LVT14---A	IC- Hex Inverter	74LVT14			1	Philips Semiconductors / Texas Instruments	U30
VSI78M05A----A	IC- 5 Voltage Regulator	78M05A			1	ST Microelectronics	IC9
VSIA5-32-10VC4D	IC- In System Programmable High Density PLD	A5-32-10VC4			1	LATTICE SEMICONDUCTOR CORPORATION	U1
VSIAD9884AKS--D	IC- Analog Interface	AD9884AKS			1	ANALOG DEVICES	U29
VSIAT24C21-----	IC- EEPROM	AT24C21			2	ST Microelectronics / Atmel Corporation	U33 U35
VSIBA033-----A	IC- Low Dropout 3.3 Voltage	BA033			9	ROHM CO.,LTD	U31 U52 U53 U54 U55 U60 U61 U62 U63
VSIBA033LBSG--A	IC- 3.3 Voltage Regulator	BA033LBSG			1	ROHM CO.,LTD	U28
VSIBA7657F---A	IC- Input Selector Switch	BA7657F			1	ROHM CO.,LTD	U34
VSIDS90C385---A	IC- LVDS Transmitter	DS90C385			1	National Semiconductor	U66
VSIEM83010-----	IC- I/O Expander	EM83010			1	EMC CORPORATION	U8
VSIHD6413079F-D	IC- CPU	HD6413079F			1	Hitachi SEMICONDUCTOR	U4
VSIHEF4053BT--A	IC- Analogue	HEF4053BT			2	Philips Semiconductors / Texas Instruments	IC13 U42
VSIHIN232CB-T-A	IC- RS232 IC	HIN232CB			1	FAIRCHILD SEMICONDUCTOR	U12
VSIIC9161A---A	IC- Programmable Freq. IC	ICS9161A			1	INTEGRATED CIRCUIT SYSTEMS	U16
VSIIP00C713---D	IC- Color Image Enlargement Reduction LSI	IP00C713			1	I-CHIPS TECHNOLOGY INC.	U23
VSILAT213-----	IC- Monolithiclinear	LA7213			3	SANYO SEMICONDUCTORS	IC4 IC6 IC10
VSILM1085ISX-3A	IC- 3.3 Voltage Regulator	LM1085ISX-3			2	NATIONAL SEMICONDUCTORS	U56 U57
VSILM1085ISX-AA	IC- 2.5 Voltage Regulator	LM1085ISX-A			2	NATIONAL SEMICONDUCTORS	U58 U59
VSIM24C16WBN6--	IC- EEPROM	M24C16WBN6			1	ST Microelectronics	U7
VSIM52055FP---A	IC- 3-Channel Analog Switch	M52055FP			3	MUTSUBISHI ELECTRIC CORPORATION	IC2 IC3 IC7
VSIM52347FP---A	IC- Sync Signal Processor	M52347FP			1	MUTSUBISHI ELECTRIC CORPORATION	U64
VSIMTV130----A	IC- OSD IC	MTV130			1	MYSON TECHNOLOGY INC.	U11

**Module Part Level BOM**

**Module Name:** Image Board  
**Supplier Name:** Sampo  
**Module P/N:** DPWB11393-1GGWS  
**Revision:** S11393-05-1A1

Part #	Part Number Name	Part Description			Quantity per Assembly	Supplier Name	Ref Designator
VSIPNLTVP6730-D	IC- Progressive	PNLTVP6730			2	Trident Technologies Inc.	U45 U46
VSIS80845ANUP-A	IC- Voltage Detector	S80845ANUP			1	Seiko Instrunets Taiwan Inc.	U5
VSISII161BCT--D	IC- DVI Interface IC	SII161BCT			1	SILICON IMAGE	U32
VSISM84L512K--D	IC- SGRAM	SM84L512K			4	SILICOM MAGIC CORP.	U48 U49 U50 U51
VSITA1276AF---D	IC- Video/Chroma/Deflection	TA1276AF			1	TOSHIBA CORPORATION	U43
VSITA8851CN----	IC- Audio/Video Switch	TA8851CN			1	TOSHIBA CORPORATION	IC1
VST2SA1037KQ--A	Transistor	2SA1037KQ			3	ROHM CO.,LTD	Q31 Q34 Q39
VST2SC1213C---P	Transistor	2SC1213C			1	HITACHI SEMICONDUCTOR	Q48
VST2SC2412KBQ-A	Transistor	2SC2412KBQ			30	ROHM CO.,LTD	Q1 Q2 Q3 Q4 Q7 Q8 Q9 Q10 Q11 Q12 Q14 Q15 Q16 Q17 Q18 Q19 Q25 Q26 Q27 Q28 Q29 Q30 Q32 Q33 Q35 Q36 Q37 Q38 Q43 Q44
VSTBSN20-----A	Transistor	BSN20			4	Philips Semiconductors	Q5 Q6 Q20 Q21
VSTDTC144EKA--A	Transistor	DTC144EKA			6	ROHM CO.,LTD	Q40 Q41 Q42 Q45 Q46 Q47
VSZRLZ7.5B----A	Zener Diode	RLZ7.5B			1	ROHM CO.,LTD	ZD1

**Module Part Level BOM**

**Module Name:** AC Master Power Switch Board

**Supplier Name:** Sampo

**Module P/N:** DPWB11398-1G---

**Revision:** OR

Part #	Part Number Name	Part Description			Quantity per Assembly	Supplier Name	Ref Designator
QPWB11398-1G---	PCB Bareboard	POWER SWITCH B/O			1	Chien Wey Electronic Industrial Co., Ltd.	PCB
QCNCNP1552-1----	Connector	3PIN			2	Chia-Soon Electronics Co., Ltd.	AC IN, AC OUT
QCNCNP1622-1----	Connector	4PIN			1	Chia-Soon Electronics Co., Ltd.	SW

## B.O.M of Board Assembly

**VER1.0**

### Module Part Level BOM

**Module Name:** Audio Amplifier Board  
**Supplier Name:** Sampo  
**Module P/N:** DPWB11372-1G-S-  
**Revision:** A11372-02-100

Part #	Part Number Name	Part Description			Quantity per Assembly	Supplier Name	Ref Designator
PRDAA0116-1G--I	HEAT SINK IC2 USE				1	Base Strong Industrial Co., Ltd.	
PRDAA0140-1P--G	U2 USE Heat Sink				1	Base Strong Industrial Co., Ltd.	
QPWB11372-1G-2S	PCB				1	EISD Enterprise Co., Ltd.	PCB (AUDIO)
RFILN1011-1----	Amp Output Filter	1000P/100V			2	Murata Mfg. Co., Ltd.	F1 F2
TLABD1145-1B---	Barcode label				1	Diing Yih Enterprise Co., Ltd.	
VCEACU1CG107MNP	Aluminum Elect.	100uF	16V	±20%	4	Matsushita Electric Co., Ltd.	C30 C31 C42 CR10
VCEACU1CG226MNP	Aluminum Elect.	22uF	16V	±20%	3	Matsushita Electric Co., Ltd.	C1 C8 C14
VCEACU1CG337MNP	Aluminum Elect.	330uF	16V	±20%	1	Matsushita Electric Co., Ltd.	C54
VCEABN1CG476MNA	Aluminum Elect.	47uF	16V	±20%	1	Matsushita Electric Co., Ltd.	CS1
VCEACU1CG477MNP	Aluminum Elect.	470uF	16V	±20%	1	Matsushita Electric Co., Ltd.	C28
VCEACU1EG477MNP	Aluminum Elect.	470uF	25V	±20%	2	Matsushita Electric Co., Ltd.	C52 C59
VCEACU1HG105MNP	Aluminum Elect.	1uF	50V	±20%	3	Matsushita Electric Co., Ltd.	C36 CR6 CR9
VCEACU1HG106MNP	Aluminum Elect.	10uF	50V	±20%	15	Matsushita Electric Co., Ltd.	C3 C5 C7 C12 C62 C63 C65 C66 C67 C68 CR4 CR5 CR15 CS2 CS3
VCEACU1HG224MNP	Aluminum Elect.	0.22uF	50V	±20%	2	Matsushita Electric Co., Ltd.	C16 C40
VCEACU1HG225MNP	Aluminum Elect.	2.2uF	50V	±20%	4	Matsushita Electric Co., Ltd.	C2 C4 C64 CR1
VCEACU1HG475MNP	Aluminum Elect.	4.7uF	50V	±20%	13	Matsushita Electric Co., Ltd.	C9 C11 C17 C18 C23 C24 C25 C33 C34 C37 C41 CR13 CR16
VCEACU1VG107MNP	Aluminum Elect.	100uF	35V	±20%	1	Matsushita Electric Co., Ltd.	C53
VCEACU1VG108MNP	Aluminum Elect.	1000uF	35V	±20%	2	Matsushita Electric Co., Ltd.	C49 C71
VCEACU1VG227MNP	Aluminum Elect.	220uF	35V	±20%	1	Matsushita Electric Co., Ltd.	C43
VCICHN1HH221J-	Temp. Comp. Ceramic	220PF	50V	±10%	2	Yageo Corporation	C6 C13
VCLFCN1HY224M-A	High Diel. Ceramic	0.22uF	50V	±20%	3	Yageo Corporation	C51 C56 C72

**B.O.M of Board Assembly**
**VER1.0**

Part #	Part Number Name	Part Description			Quantity per Assembly	Supplier Name	Ref Designator
VCLFHNIAY105Z-A	High Diel. Ceramic	1uF	10V	+80%~20%	1	Yageo Corporation	C55
VCLFHNIYEY104Z-A	High Diel. Ceramic	0.1uF	25V	+80%~20%	2	Yageo Corporation	C29 C45 C46 C50
VCLRCN1CB224K-A	High Diel. Ceramic	0.22uF	16V	±10%	2	Yageo Corporation	CR12 CR17
VCLRCN1CB474K-A	High Diel. Ceramic	0.47uF	16V	±10%	6	Yageo Corporation	C21 C27 C32 C35 CR2 CR11
VCLRHN1CB104K-A	High Diel. Ceramic	0.1uF	50V	±10%	8	Yageo Corporation	C22 C44 C69 C70 CR8 CR19 CR29 CS4
VCLRHN1CB273K-A	High Diel. Ceramic	0.027uF	16V	±10%	1	Yageo Corporation	CR20
VCLRHN1CB333K-A	High Diel. Ceramic	0.033uF	16V	±10%	2	Lipers Enterprise Co., Ltd.	C20 C39
VCLRHN1CB473K-A	High Diel. Ceramic	0.047uF	16V	±10%	1	Yageo Corporation	CS5
VCLRHN1HB102K-A	High Diel. Ceramic	1000PF	50V	±10%	2	Yageo Corporation	C15 C48
VCLRHN1HB103K-A	High Diel. Ceramic	0.01uF	50V	±10%	3	Yageo Corporation	CR7 CR28 CR99
VCLRHN1HB153K-A	High Diel. Ceramic	0.015uF	50V	±10%	1	Yageo Corporation	CR26
VCLRHN1HB222K-A	High Diel. Ceramic	2200PF	50V	±10%	3	Yageo Corporation	CR14 CR18 CR27
VCLRHN1HB332K-A	High Diel. Ceramic	3300PF	50V	±10%	2	Yageo Corporation	C19 C38
VCLRHN1HB392K-A	High Diel. Ceramic	3900PF	50V	±10%	2	Yageo Corporation	C58 C61
VCLRHN1HB471K-A	High Diel. Ceramic	470PF	50V	±10%	1	Yageo Corporation	CR25
VCLRHN1HB472K-A	High Diel. Ceramic	4700PF	50V	±10%	3	Yageo Corporation	CR21 CR23 CR30
VCMECU1JG474J-P	Metal Ploy. Film	0.47uF	63V	±5%	1	Mylar Electronics Co., Ltd.	CR24
VCNCP0302-EJST-	Connector	2 PIN			2	Chia-Soon Electronics Co., Ltd.	BT1 BT2
VCNCP030A-EJST-	Connector	10 PIN			1	Chia-Soon Electronics Co., Ltd.	JA2
VCNCP030C-EJST-	Connector	12 PIN			1	Chia-Soon Electronics Co., Ltd.	JA1
VCPELU1HG104J-P	Polyester Film	0.1uF	50V	±5%	1	Mylar Electronics Co., Ltd.	CR22
VCPELU1HG223J-P	Polyester Film	0.022uF	50V	±5%	2	Mylar Electronics Co., Ltd.	C57 C60
VL-DH120K0000-U	Peaking Coil	12uH		±10%	1	Chilisin Electronics Corp.	L1
VRCPT4--2R2J-U	Metel Film	2.2	1/4W	±5%	1	Yageo Corporation	
VRMHNVG--000J-A	Metel Film	0	1/16W	±5%	1	Yageo Corporation	R55
VRMHNVG--100J-A	Metel Film	10	1/16W	±5%	1	Yageo Corporation	R30
VRMHNVG--101J-A	Metel Film	100	1/16W	±5%	2	Yageo Corporation	R33 R34
VRMHNVG--102J-A	Metel Film	1K	1/16W	±5%	1	Yageo Corporation	RR22

**B.O.M of Board Assembly**
**VER1.0**

Part #	Part Number Name	Part Description			Quantity per Assembly	Supplier Name	Ref Designator
VRMHNVG--103J-A	Metel Film	10K	1/16W	$\pm 5\%$	20	Yageo Corporation	R13 R16 R17 R18 R19 R21 R41 R50 R51 R59 RR1 RR3 RR4 RR10 RR18 RR28 RR30 RR32 RS6 RS7
VRMHNVG--104J-A	Metel Film	100K	1/16W	$\pm 5\%$	4	Yageo Corporation	RR11 RR17 RR29 RR31
VRMHNVG--123J-A	Metel Film	12K	1/16W	$\pm 5\%$	2	Yageo Corporation	RR25 RR27
VRMHNVG--124J-A	Metel Film	120K	1/16W	$\pm 5\%$	2	Yageo Corporation	R1 R2
VRMHNVG--152J-A	Metel Film	1.5K	1/16W	$\pm 5\%$	4	Yageo Corporation	R3 R7 R43 RR8
VRMHNVG--222J-A	Metel Film	2.2K	1/16W	$\pm 5\%$	6	Yageo Corporation	R27 R28 R56 RR13 RR20 RR21
VRMHNVG--223J-A	Metel Film	22K	1/16W	$\pm 5\%$	2	Yageo Corporation	RS1 RS2
VRMHNVG--224J-A	Metel Film	220K	1/16W	$\pm 5\%$	2	Yageo Corporation	R5 R8
VRMHNVG--272J-A	Metel Film	2.7K	1/16W	$\pm 5\%$	6	Yageo Corporation	R24 R35 R39 R40 RR24 RR26
VRMHNVG--273J-A	Metel Film	27K	1/16W	$\pm 5\%$	1	Yageo Corporation	R48
VRMHNVG--333J-A	Metel Film	33K	1/16W	$\pm 5\%$	1	Yageo Corporation	RR15
VRMHNVG--391J-A	Metel Film	390	1/16W	$\pm 5\%$	1	Yageo Corporation	RR7
VRMHNVG--392J-A	Metel Film	3.9K	1/16W	$\pm 5\%$	4	Yageo Corporation	R12 R20 RR5 RR12
VRMHNVG--472J-A	Metel Film	4.7K	1/16W	$\pm 5\%$	3	Yageo Corporation	R15 R23 RR16
VRMHNVG--473J-A	Metel Film	47K	1/16W	$\pm 5\%$	12	Yageo Corporation	R4 R6 R9 R10 R11 R25 R52 R53 RR14 RS3 RS4 RS5
VRMHNVG--563J-A	Metel Film	56K	1/16W	$\pm 5\%$	1	Yageo Corporation	RR19
VRMHNVG--682J-A	Metel Film	6.8K	1/16W	$\pm 5\%$	4	Yageo Corporation	R45 R47 RR9 RR23
VRMHNVG--822J-A	Metel Film	8.2K	1/16W	$\pm 5\%$	2	Yageo Corporation	R26 R32
VRMHNVG--823J-A	Metel Film	82K	1/16W	$\pm 5\%$	1	Yageo Corporation	R46
VRMMTV2--1R0J-U	Metel Film	1	1/2W	$\pm 5\%$	1	Yageo Corporation	R49
VRMMTV2--2R2J-U	Metel Film	2.2	1/2W	$\pm 5\%$	2	Yageo Corporation	R29 R31
VRMMTV2--8R2J-U	Metel Film	8.2	1/2W	$\pm 5\%$	2	Yageo Corporation	R42 R44
VRNMK01--R22J--	Metal Oxide Film	0.22	1W	$\pm 5\%$	1	Yageo Corporation	R38
VRNMK03--820J--	Metal Oxide Film	82	3W	$\pm 5\%$	1	Yageo Corporation	R57
VSDRLS4148----A	Diode				6	ROHM CO.,LTD	D1 DR3 DR4 DR5 DR6 DR7

**B.O.M of Board Assembly****VER1.0**

Part #	Part Number Name	Part Description			Quantity per Assembly	Supplier Name	Ref Designator
VSIHEF4052BT--A	IC- Dual 4-Channel Analogue Multiplexer/ Demultiplexer				1	PHILIPS SEMICONDUCTORS	ICA3
VSILM2940CT12--	IC- Voltage Regulator				1	National semiconductor	U2
VSINJM2178L----	IC- SRS 3D Surround Audio Processor				1	NEW JAPAN RADIO CO.,LTD	ICR1
VSINJM4558M---A	IC- Operational Amplifier				2	NEW JAPAN RADIO CO.,LTD	ICS1 U1
VSINJW1132-----	IC- Sound Processor (BBE)				1	NEW JAPAN RADIO CO.,LTD	IC1
VSITC4W53FU---A	IC- SMT Analogue Switch				3	TOSHIBA SEMICONDUCTORS	ICA1 ICA2 ICS2
VSITDA2616-----	IC- Sound Amplifier				1	Philips Semiconductors	IC2
VST2SA1037KQ--A	Transistor				1	ROHM CO.,LTD	Q6
VST2SC2412KBQ-A	Transistor				3	ROHM CO.,LTD	Q1 Q2 Q7
VSTDTC144EKA--A	Transistor				14	ROHM CO.,LTD	Q3 Q5 Q8 Q9 Q10 Q11 Q12 Q13 Q14 Q15 Q16 QR1 QR2 QR3
XBSD30P10000--	U2 USE Screw				1	Kou Fei Screw Industrial Co., Ltd.	
XJASD30P08000--	FOR PRDAA0116-1G--I*2				2	Shi Ho Screw Industrial Co., Ltd.	
XJSD30P10000--	IC2 USE Screw				2	Kou Fei Screw Industrial Co., Ltd.	

**Module Part Level BOM**

**Module Name:** Front Button Control Board  
**Supplier Name:** Sampo  
**Module P/N:** DPWB11372-1G-K2  
**Revision:** K2

Part #	Part Number Name	Part Description		Quantity per Assembly	Supplier Name	Ref Designator
QPWB11372-1G-4K	PCB			1	EISD Enterprise Co., Ltd.	PCB (KEY)
QSW-A1225-11-1P	Tact Switch			6	Hua Jie (Taiwan) Corp.	S3 S4 S5 S6 S7 S8
VSI93M2AKF----	IC- Infrared Receiver	93M2AKF		1	Imperial Star Corp.	U39
VSPHB5-30YGC---	LED			1	Huey Jann Electronics Industry Co., Ltd.	LD1
VRMHNVG-1501F-A	Metel Film	1.5K	1/16W	2	Yageo Corporation	R167 R171
VRMHNVG-3301F-A	Metel Film	3.3K	1/16W	2	Yageo Corporation	R168 R174
VRMHNVG-7501F-A	Metel Film	7.5K	1/16W	1	Yageo Corporation	R169
VRMHNVG-6800F-A	Metel Film	680	1/16W	1	Yageo Corporation	R170
VRMHNVG-1001F-A	Metel Film	1K	1/16W	2	Yageo Corporation	R172 R173
VRMHNVG--471J-A	Metel Film	470	1/16W	1	Yageo Corporation	R175
VRMHNVG-8201F-A	Metel Film	8.2K	1/16W	1	Yageo Corporation	R176
VRMHNVG--821J-A	Metel Film	820	1/16W	1	Yageo Corporation	R177
VRMHNVG--4R7J-A	Metel Film	4.7	1/16W	1	Yageo Corporation	R178
VCLRHN1HB471K-A	High Diel. Ceramic	470PF	50V	1	Yageo Corporation	C236
VCLRHN1HB102K-A	High Diel. Ceramic	1000PF	50V	1	Yageo Corporation	C235
VCTAEN1AB107M-A	Tantalum	100uF	10V	1	Kentec Vision Corp.	C237
VCNCP0316-EJST-	Connector	6 PIN		1	Chia-Soon Electronics Co., Ltd.	JA3
VSDRLS4148---A	Diode		RLS4148	2	ROHM CO.,LTD	D100,D101
VSZUDZ5.1B---A	Diode		MTZJ7.5B	2	ROHM CO.,LTD	ZD100,ZD101

**Module Part Level BOM**

**Module Name:** AV w/ Tuner Module Board  
**Supplier Name:** Sampo  
**Module P/N:** DPWB11396-1G-T-  
**Revision:** T11396-00-100

Part #	Part Number Name	Part Description			Quantity per Assembly	Supplier Name	Ref Designator
QCNCP1615-132--	Connector				2	Oupiin Enterprise Co., Ltd.	JP1 JP2
QJAKM1076-1---A	Pin jack				1	Jye Tai Precision Industrial Co., Ltd.	J5
QJAKP1147-1---A	Pin jack				1	MSK Technology Corp.	J40
QJAKP1158-1-6-C	Pin jack	(J15A-F)			1	Gaoma Engineering Co., Ltd.	J15
QJAKP1159-1-4-C	Pin jack	(J12A-D, J17A-D, J24A-D)			3	Gaoma Engineering Co., Ltd.	J12 J17 J24
QJAKP1177-1----	Pin jack				1	Mina Information Co., Ltd.	S1A/S1B
QJAKS1006-1DU--	Phone jack				1	Jye Tai Precision Industrial Co., Ltd.	J3
QJUM-1039-1540U	Jumper				3		J69 R201 R225
QPLGR1218-101--					1	MSK Technology Corp.	RCA Wire
QPWB11396-1G---	PCB				1	EISD Enterprise Co., Ltd.	PCB (AV)
RCHOM1016-1202A	Choke				1	Frontier Electronics Co., Ltd.	L241
RUNTZ1036-1----	PIF	TUJH9-805A			1	Forward Electronics Co. Ltd.	TU202
RVRSH6014-1103-	SemiVar. Resistor	10K			1	Heng Ya Electrical Industry Co., Ltd.	VR201
TLABD1145-1B---	Barcode label				1	Diing Yih Enterprise Co., Ltd.	
VCEACU1CG107MNP	Aluminum Elect.	100uF	16V	±20%	1	Matsushita Electric Co., Ltd.	C226
VCEACU1CG226MNP	Aluminum Elect.	22uF	16V	±20%	1	Matsushita Electric Co., Ltd.	C216
VCEACU1CG227MNP	Aluminum Elect.	220uF	16V	±20%	1	Matsushita Electric Co., Ltd.	C224
VCEACU1CG476MNP	Aluminum Elect.	47uF	16V	±20%	1	Matsushita Electric Co., Ltd.	C221
VCEACU1HG104MNP	Aluminum Elect.	0.1uF	50V	±20%	1	Matsushita Electric Co., Ltd.	C215
VCEACU1HG105MNP	Aluminum Elect.	1uF	50V	±20%	6	Matsushita Electric Co., Ltd.	C204 C205 C206 C209 C210
VCEACU1HG106MNP	Aluminum Elect.	10uF	50V	±20%	3	Matsushita Electric Co., Ltd.	C202 C203 C207
VCEACU1HG225MNP	Aluminum Elect.	2.2uF	50V	±20%	5	Matsushita Electric Co., Ltd.	C222 CE29 CE30 CE31 CE32

**B.O.M of Board Assembly****VER1.0**

Part #	Part Number Name	Part Description			Quantity per Assembly	Supplier Name	Ref Designator
VCEACU1HG335MNP	Aluminum Elect.	3.3uF	50V	±20%	1	Matsushita Electric Co., Ltd.	C208
VCEACU1HG474MNP	Aluminum Elect.	0.47uF	50V	±20%	1	Matsushita Electric Co., Ltd.	C220
VCEACU2CG475MNP	Aluminum Elect.	4.7uF	160V	±20%	1	Matsushita Electric Co., Ltd.	C243
VCEACU1HG475MNP	Aluminum Elect.	4.7uF	50V	±20%	1	Matsushita Electric Co., Ltd.	C219
VCICHN1HH101J-A	Temp. Comp. Ceramic	100PF	50V	±5%	7	Yageo Corporation	C223 CE12 CE14 CE15 CE16 CE17 CE18
VCICHN1HH221J-A	Temp. Comp. Ceramic	220PF	50V	±5%	2	Yageo Corporation	C211 C212
VCICHN1HH561J-A	Temp. Comp. Ceramic	5.6K	50V	±5%	1	Yageo Corporation	C245
VCKBDU2HY103K--	High Diel. Ceramic	0.01uF	500V	±10%	1	MMC Electronics Taiwan Co., Ltd.	C242
VCLRCN1HB104K-A	High Diel. Ceramic	0.1uF	50V	±10%	1	Yageo Corporation	C244
VCLFHN1EY104Z-A	High Diel. Ceramic	0.1uF	25V	+80%~20%	1	Yageo Corporation	C241
VCPELU1HG473J-P	Polyester Film	0.047uF	50V	±5%	1	Mylar Electronics Co., Ltd.	C218
VCLRHN1HB102K-A	High Diel. Ceramic	1000PF	50V	±10%	16	Yageo Corporation	CE1 CE2 CE3 CE4 CE5 CE6 CE7 CE8 CE9 CE10 CE11 CE13 CE25 CE26 CE27 CE28
VCLRHN1HB103K-A	High Diel. Ceramic	0.01uF	50V	±10%	1	Yageo Corporation	C225
VCLRHN1HB561K-A	Temp. Comp. Ceramic	560PF	50V	±5%	1	Yageo Corporation	C245
VCPELU1HG104J-P	Polyester Film	0.1uF	50V	±5%	2	Mylar Electronics Co., Ltd.	C213 C214
VRCPTV2--101J-U	Carbon Film	100	1/2W	±5%	1	Yageo Corporation	L201
VRCPTV4--2R2J-U	Carbon Film	2.2	1/4W	±5%	1	Yageo Corporation	R217
VRCPTV6--362G-U	Carbon Film	3.6K	1/6W	±2%	1	Yageo Corporation	R207
VRMBNV8--000J-A	Metel Film	0	1/8W	±5%	25	Yageo Corporation	FE1 FE2 FE3 FE4 FE5 FE6 FE7 FE8 FE9 FE10 FE11 FE12 FE13 FE14 FE15 FE16 FE17 FE18 FE19 FE20 FE21 FE30 FE31
VRMHNVG--000J-A	Metel Film	0	1/16W	±5%	1	Yageo Corporation	R222
VRMHNVG--101J-A	Metel Film	100	1/16W	±5%	4	Yageo Corporation	R202 R205 R214 R215
VRMHNVG--102J-A	Metel Film	1K	1/16W	±5%	5	Yageo Corporation	R206 R210 R216 R220 R223
VRMHNVG--122J-A	Metel Film	1.2K	1/16W	±5%	4	Yageo Corporation	R203 R242 R246 R248
VRMHNVG--151J-A	Metel Film	150	1/16W	±5%	1	Yageo Corporation	R221
VRMHNVG--152J-A	Metel Film	1.5K	1/16W	±5%	2	Yageo Corporation	R208 R209

**B.O.M of Board Assembly****VER1.0**

Part #	Part Number Name	Part Description			Quantity per Assembly	Supplier Name	Ref Designator
VRMHNVG--273J-A	Metel Film	27K	1/16W	±5%	2	Yageo Corporation	R241 R244
VRMHNVG--331J-A	Metel Film	330	1/16W	±5%	1	Yageo Corporation	R245
VRMHNVG--392J-A	Metel Film	3.9K	1/16W	±5%	1	Yageo Corporation	R204
VRMHNVG--393J-A	Metel Film	39K	1/16W	±5%	2	Yageo Corporation	R212 R213
VRMHNVG--473J-A	Metel Film	47K	1/16W	±5%	13	Yageo Corporation	RE3 RE4 RE5 RE7 RE8 RE9 RE10 RE11 RE12 RE14 RE25
VRMHVG-5601F-A	Metel Film	5.6K	1/16W	±10%	1	Yageo Corporation	R243
VRMHNVG--681J-A	Metel Film	680	1/16W	±5%	1	Yageo Corporation	R219
VRMHNVG--683J-A	Metel Film	68K	1/16W	±5%	1	Yageo Corporation	R218
VRPTV6--133G-L	Metel film	13K	1/6W	±2%	1	Yageo Corporation	R211
VSDRLS4148----A	Diode	RLS4148			2	ROHM CO.,LTD	D241 D242
VSINE555D----A	IC- Timer	NE555D			1	PHILIPS SEMICONDUCTORS	IC241
VSINJM7805FA---	IC- Positive Voltage Regulator	NJM7805FA			1	NEW JAPAN RADIO CO.,LTD	IC202
VSIUPC1854ACT--	IC- US MTS Processing LSI	UPC1854ACT			1	NEC CORPORATION	IC203
VSIUPC574J----	IC- Voltage Regulator	UPC574J			1	NEC CORPORATION	ZD241
VST2SC2412KBQ-A	Transistor	2SC2412KBQ			1	ROHM CO.,LTD	Q201
VST2SC2482----	Transistor	2SC2482			1	TOSHIBA CORPORATION	Q241
VSZUDZ5.1B----A	Zener Diode	UDZ5.1B			3	ROHM CO.,LTD	ZDA1 ZDA2 ZDA3
VSZUDZ6.8B----A	Zener Diode	UDZ6.8B			6	ROHM CO.,LTD	ZDA4 ZDA5 ZDA6 ZDA7 ZDA8 ZDA9
VTU-TELH9-819A-	Tuner	TELH9-819A			1	Forward Electronics Co. Ltd.	TU201
VWVA5TMW1D-H6B-	GND/GND wire 3 3						

**B.O.M of Board Assembly****VER1.0****Supplier Approved Vendor List\_SAMPO**

Remark: 1. The vendor is qualified by Sampo RD, QA and Purchasing Department.

2. The part is qualified by Sampo RD Department.

No.	Vendor Name	Taiwan Distributor Name	Vendor/ Taiwan Distributor Address	Zip Code	Commodity Supplied
1	ADD Microtech Corp.	TEX YEA CORPORTION	13Fl., No. 49, Sec. 3, Minsheng E. Rd., Sungshan Chiu, Taipei, Taiwan 105, R.O.C.	105	IC
2	ANALOG DEVICES	EPCO TECHNOLOGY CO.,LTD.	6Fl., No. 37, Lane 513, Rueiguang Rd., Neihu Chiu, Taipei, Taiwan 114, R.O.C.	114	IC
3	Asahi Glass Co.	Lim Shang Hang Temper-Safe Glass Factory Co., Ltd.	46, Ta Yeh South Road, Hsiao Kang District, Kaohsiung, 812 Taiwan, R.O.C.	812	Glass Filter
4	Base Strong Industrial Co., Ltd.	-	No. 53, Chingshiang St., Tucheng City, Taipei, Taiwan 236, R.O.C.	236	Heat sink
5	Best Enterprise Co., Ltd.	-	1Fl., No. 143, Dadau Rd., Shinyi Chiu, Taipei, Taiwan 110, R.O.C.	110	Packing material
6	Cation Industry Co., Ltd.	-	No. 59, Lane 530, Sec. 1, Kuo-Gi Road, Taoyuan, Taiwan, R.O.C.	330	PCB insertion
7	Cheng Fa Plastic Mfg Co., Ltd.	-	No. 555, Sec. 1, Wanshou Rd., Gueishan Shiang, Taoyuan, Taiwan 333, R.O.C.	333	Bezel
8	Chia-Soon Electronics Co., Ltd.	-	No. 145-1, Ankang Rd., Neihu Chiu, Taipei, Taiwan 114, R.O.C.	114	Connector, Socker
9	Chien Wey Electronic Industrial Co., Ltd.		No. 12-4, Dunglin Rd., Shiaugang Chiu, Kaohsiung, Taiwan 812, R.O.C	812	PCB
10	Chihnneng Packing Co., Ltd.	-	No. 7, Lane 325, Jungjeng Rd., Banchiau City, Taipei, Taiwan 220, R.O.C.	220	Packing AD.
11	Chilisin Electronics Corp.	-	No. 29, Lane 301, Deshing Rd., Hukou Shiang, Hsinchu, Taiwan 303, R.O.C.	303	Coil
12	Digimax Innovative Products Ltd.	-	4Fl.-4, No. 129, Lane 235, Bauchiau Rd., Shindian City, Taipei, Taiwan 231, R.O.C.	231	Elec. accessory
13	Diing Yih Enterprise Co., Ltd.	-	No. 32-1, Lane 23, Yian Rd., Junghe City, Taipei, Taiwan 235, R.O.C.	235	Printing
14	EISD Enterprise Co., Ltd.	-	1Fl., No. 52-2, Beinei St., Shulin City, Taipei, Taiwan 238, R.O.C.	238	PCB
15	EMC CORPORATION	Kuen-Chang Optic Corp.	6Fl., No. 92, Baujung Rd., Shindian City, Taipei, Taiwan 231, R.O.C.	231	IC
16	Energie Electronic Co., Ltd.	-	6-1Fl., No. 142, Sec. 2, Nangang Rd., Nangang Chiu, Taipei, Taiwan 115, R.O.C.	115	Capacitor

## B.O.M of Board Assembly

**VER1.0**

No.	Vendor Name	Taiwan Distributor Name	Vendor/ Taiwan Distributor Address	Zip Code	Commodity Supplied
17	FAIRCHILD SEMICONDUCTOR	TECO ENTERPRISE CO.,LTD.	10Fl., No. 292, Minsheng W. Rd., Datung Chiu, Taipei, Taiwan 103, R.O.C.	103	IC
18	Forward Electronics Co. Ltd.	-	No. 393, Sec. 1, Jungjeng Rd., Sanshia Jen, Taipei, Taiwan 237, R.O.C.	237	Tuner unit
19	Frontier Electronics Co., Ltd.	-	4Fl., No. 48, Minchuan Rd., Shindian City, Taipei, Taiwan 231, R.O.C.	231	Choke
20	G.I.S. Enterprise Co., Ltd.	-	No. 93-15, Luju Tsuen, Luju Shiang, Taoyuan, Taiwan 338, R.O.C.	338	Poly foam
21	Gaoma Engineering Co., Ltd.	-	No. 27, Lane 469, Liancheng Rd., Junghe City, Taipei, Taiwan 235, R.O.C.	235	Socket
22	G-Link Technology	PROHUBS INTERNATIONAL CORP	9Fl., No. 77, Sec. 1, Shintai 5th Rd., Shijr City, Taipei, Taiwan 221, R.O.C.	221	IC
23	Goldfull Electronics & Telecommunications Corp.	-	5Fl., No. 132, Lide St., Junghe City, Taipei, Taiwan 235, R.O.C.	235	Power cord
24	Heng Ya Electrical Industry Co., Ltd.	UCOME TEK CO.,LTD	3Fl., No. 542-2, Jungjeng Rd., Shindian City, Taipei, Taiwan 231, R.O.C.	231	Resistor
25	Hirose	Forward-Tech Electronics, Ltd.	4Fl., No. 118, Hougang St., Shrlin Chiu, Taipei, Taiwan 111, R.O.C.	111	Conector
26	Hitachi SEMICONDUCTOR	NISSEI SANGYO CO.,LTD. TAIPEI BRANCH	10Fl., No. 44, Sec. 2, Jungshan N. Rd., Jungshan Chiu, Taipei, Taiwan 104, R.O.C.	104	Transistor, IC
27	Hua Jie (Taiwan) Corp.	-	No. 231, Lungshou St., Taoyuan City, Taoyuan, Taiwan 330, R.O.C.	330	Switch
28	Huey Jann Electronics Industry Co., Ltd.	-	No. 27, Lane 466, Sec. 2, Gangnan Rd., Wuchi Jen, Taichung, Taiwan 435, R.O.C.	435	LED
29	I-CHIPS TECHNOLOGY INC.	Micromax Technology	3Fl., No. 103, Sec. 2, Jioutzung Rd., Neihu Chiu, Taipei, Taiwan 114, R.O.C.	114	IC
30	Imperial Star Corp.	-	6Fl.-4, No. 27, Lane 61, Sec. 1, Guangfu Rd., Sanchung City, Taipei, Taiwan 241, R.O.C.	241	IC
31	In Hana Industrial Co. Ltd.	-	No. 120, Shinshing Rd., Bade City, Taoyuan, Taiwan 334, R.O.C.	334	Speaker
32	INTEGRATED CIRCUIT SYSTEMS	MAXTEK TECHNOLGY CO.,LTD.	3Fl.-2, No. 197, Sec. 4, Nanjing E. Rd., Sungshan Chiu, Taipei, Taiwan 105, R.O.C.	105	IC
33	JST ELECTRONIC PRODUCTS MFG.CO.,LTD	-	No. 145-1, Ankang Rd., Neihu Chiu, Taipei, Taiwan 114, R.O.C.	114	Connector
34	Jye Tai Precision Industrial Co., Ltd.	-	5Fl.-3, No. 8, Lane 609, Sec. 5, Chungshin Rd., Sanchung City, Taipei, Taiwan 241, R.O.C.	241	Connector
35	Jyh Dong Co., Ltd.	-	No. 20, Lane 169, Fuhua St., Jungli City, Taoyuan, Taiwan 320, R.O.C.	320	Printing

## B.O.M of Board Assembly

**VER1.0**

No.	Vendor Name	Taiwan Distributor Name	Vendor/ Taiwan Distributor Address	Zip Code	Commodity Supplied
36	KDS Taiwan Electronics Corp.	-	6Fl., No. 69, Jilin Rd., Jungshan Chiu, Taipei, Taiwan 104, R.O.C.	104	Crystal
37	Kentec Vision Corp.	CHIEFTAIN ENTERPRISES CO.,LTD.	6Fl., No. 726, Sec. 6, Jungshan N. Rd., Shrlin Chiu, Taipei, Taiwan 111, R.O.C.	111	Capacitor
38	Kou Fei Screw Industrial Co., Ltd.	-	No. 12, Lane 195, Huacheng Rd., Shinjuang City, Taipei, Taiwan 242, R.O.C.	242	Scraw
39	LATTICE SEMICONDUCTOR CORPORATION	PROMASTER TECHNOLOGY CROP.	16Fl., No. 182, Sec. 2, Duenhua S. Rd., Daan Chiu, Taipei, Taiwan 106, R.O.C.	103	IC
40	Matsushita Electric (Taiwan) Ltd.	-	6Fl., No. 550, Sec. 4, Jungshiau E. Rd., Shinyi Chiu, Taipei, Taiwan 110, R.O.C.	110	Remote control
41	Maxi Electronic Enterprise Co., Ltd.	-	3Fl., No. 111, Sec. 3, Chungshin Rd., Sanchung City, Taipei, Taiwan 241, R.O.C.	241	Connector
42	Mina Information Co., Ltd.	MINA INFORMATION CO.,LTD.	17Fl.-2, No. 327, Sec. 2, Fushing S. Rd., Daan Chiu, Taipei, Taiwan 106, R.O.C.	106	Connector
43	MMC Electronics Taiwan Co., Ltd.	MMC ELECTRONICS TAIWAN CO.,LTD.	No. 20, Jianguo Rd., Tanzi Shiang, Taichung, Taiwan 427, R.O.C.	427	Capacitor
44	MOLEX	-	1Fl., No. 49, Lane 264, Tzuenshan St., Beitou Chiu, Taipei, Taiwan 112, R.O.C.	112	Socket
45	MSK Technology Corp.	-	No. 62, Sec. 2, Renhe Rd., Dashi Jen, Taoyuan, Taiwan 335, R.O.C.	335	Connector
46	Murata Mfg. Co., Ltd.	-	26-10 TENJIN 2-		Core, Filter
47	MUTSUBISHI ELECTRIC CORPORATION	SETSUYO	5Fl., No. 105, Wugung 3rd Rd., Wugu Shiang, Taipei, Taiwan 248, R.O.C.	248	IC
48	Mylar Electronics Co., Ltd.	-	6Fl.-2, No. 135, Sec. 4, Bade Rd., Sungshan Chiu, Taipei, Taiwan 105, R.O.C.	105	Capacitor
49	MYSON TECHNOLOGY INC.	-	No. 6, Alley 10, Lane 51, Sec. 3, Jungshiau E. Rd., Daan Chiu, Taipei, Taiwan 106, R.O.C.	106	IC
50	National Semiconductor	ARROW\ALLY,INC.	19Fl., No. 75, Sec. 1, Shintai 5th Rd., Shijr City, Taipei, Taiwan 221, R.O.C.	221	IC
51	National Semiconductor	SILTRONTECH Electronics Corp.	11F, No. 20, Alley 1, Lane 768, Sec. 4, Pate Rd., Nangang Chiu, Taipei, Taiwan 115, R.O.C.	115	IC
52	NEC CORPORATION	TAIWAN SATORI CO.,LTD.	Suite 2108, 21Fl., No. 333, Sec. 1, Jilung Rd., Shinyi Chiu, Taipei, Taiwan 110, R.O.C.	110	IC
53	NEW JAPAN RADIO CO.,LTD	CASSNA INTERNATIONAL CO.,LTD.	9Fl., No. 415, Sec. 4, Shinyi Rd., Shinyi Chiu, Taipei, Taiwan 110, R.O.C.	110	IC
54	Oupiin Enterprise Co., Ltd.	-	No. 302, Changshing Rd., Bade City, Taoyuan, Taiwan 334, R.O.C.	334	Connector
55	Philips Semiconductors	PHILIPS TAIWAN LTD.	28Fl., No. 66, Sec. 1, Jungshiau W. Rd., Jungjeng Chiu, Taipei, Taiwan 100, R.O.C.	100	Diode, IC

## B.O.M of Board Assembly

**VER1.0**

No.	Vendor Name	Taiwan Distributor Name	Vendor/ Taiwan Distributor Address	Zip Code	Commodity Supplied
56	Philips Semiconductors	WORLD PEACE INDUSTRIAL CO.,LTD.	8Fl., No. 76, Sec. 1, Chenggung Rd., Nangang Chiu, Taipei, Taiwan 115, R.O.C.	115	Transistor
57	Philips Semiconductors / Texas Instrumenis	ASIA FORTUNE ELECTRONIC ENTERPRISE	No. 238-1, Jihe Rd., Shrlin Chiu, Taipei, Taiwan 111, R.O.C.	111	IC
58	R.U.G. Isolator (Taiwan) Ltd.	-	No. 2-2, Alley 56, Lane 250, Sec. 2, Huanhe S. Rd., Wanhua Chiu, Taipei, Taiwan 108, R.O.C.	108	Packing AD
59	ROHM CO.,LTD	TEX YEA CORPOTION	13Fl., No. 49, Sec. 3, Minsheng E. Rd., Sungshan Chiu, Taipei, Taiwan 105, R.O.C.	105	Diode, IC, Transistor
60	ROHM CO.,LTD	KROM ELECTRONICS CO.,LTD.	2Fl., No. 1, Alley 16, Lane 235, Bauchiau Rd., Shindian City, Taipei, Taiwan 231, R.O.C.	231	Diode, IC, Transistor
61	Samsung	Lipers Enterprise Co., Ltd.	12Fl., No. 786-1, Jungjeng Rd., Junghe City, Taipei, Taiwan 235,R.O.C.	235	Capacitor
62	SANYO SEMICONDUTORS	TONG SAN	Suite 406, No. 372, Linsen N. Rd., Jungjeng Chiu, Taipei, Taiwan 100, R.O.C.	100	IC
63	Seiko Instrunets Taiwan Inc.	SEIKO INSTRUMENTS TAIWAN INC.	4Fl., No. 40, Sec. 2, Minchiuan E. Rd., Jungshan Chiu, Taipei, Taiwan 104, R.O.C.	104	IC
64	Shi Ho Screw Industrial Co., Ltd.	-	12Fl., Yungchuen St., Shiaugang Chiu, Kaohsiung, Taiwan 812, R.O.C.	812	Scraw
65	Shin Chi Paper Container Co., Ltd.	-	No. 188-1, Hungdau Rd., Sanshia Jen, Taipei, Taiwan 237, R.O.C.	237	Carton
66	Shuning Yurn Enterprise Co., Ltd.	-	5Fl., No. 5, Lane 163, Shinyi Rd., Banchiau City, Taipei, Taiwan 220, R.O.C.	220	Choke
67	SILICOM MAGIC CORP.	PROHUBS INTERNATIONAL CORP	9Fl., No. 77, Sec. 1, Shintai 5th Rd., Shijr City, Taipei, Taiwan 221, R.O.C.	221	IC
68	SILICON IMAGE	WORLD PEACE INDUSTRIAL CO.,LTD.	8Fl., No. 76, Sec. 1, Chenggung Rd., Nangang Chiu, Taipei, Taiwan 115, R.O.C.	115	IC
69	Smart Concept Enterprise Co., Ltd.	SMART CONCEPT ENTERPRISE LIMITED	5Fl., No. 67, Jungfeng N. Rd., Jungli City, Taoyuan, Taiwan 320, R.O.C.	320	Packing AD
70	ST Microelectronics	-	12Fl., No. 325, Sec. 1, Duenhua S. Rd., Taipei, Taiwan 105, R.O.C.	105	IC
71	ST Microelectronics / Atmel Corporation	TOPTREND TECHNOLOGIES CORP.	8Fl.-2, No. 15, Lane 360, Sec. 1, Neihu Rd., Neihu Chiu, Taipei, Taiwan 114, R.O.C.	114	IC
72	Suyin Corporation	-	No. 233, Fude 1st Rd., Shijr City, Taipei, Taiwan 221, R.O.C.	221	Socket
73	Taiwan Sumida Electronics Inc.	-	No. 171, Fude St., Shinyi Chiu, Taipei, Taiwan 110, R.O.C.	110	Choke
74	Top-Nation Electronic Factory	Yao Sheng Electronic Co., Ltd	5F, No. 15, Wu Chuang 6th Rd., Wu Ku Industrial Zone, Wu Ku Shiang, Taipei Hsien, Taiwan 248,	248	Diode

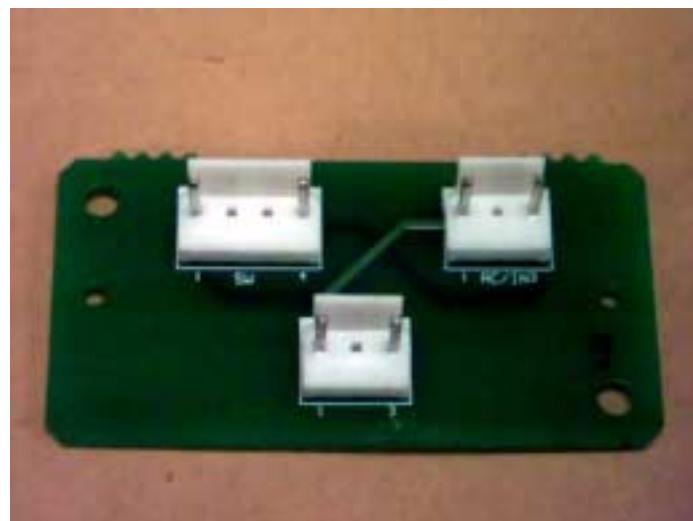
## B.O.M of Board Assembly

**VER1.0**

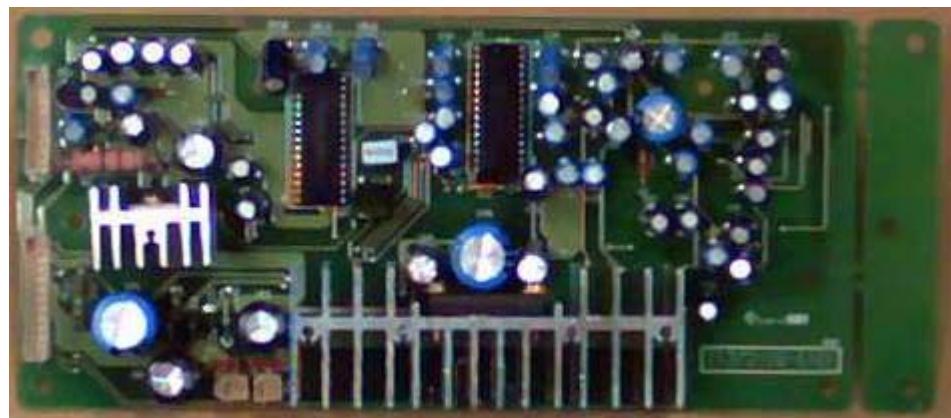
No.	Vendor Name	Taiwan Distributor Name	Vendor/ Taiwan Distributor Address	Zip Code	Commodity Supplied
75	TOSHIBA CORPORATION	TOSHIBA ELECTRONICS TAIWAN CORP.CO.,	17Fl., No. 109, Sec. 3, Minsheng E. Rd., Sungshan Chiu, Taipei, Taiwan 105, R.O.C.	105	IC, Transistor
76	TOSHIBA SEMICONDUCTORS	TOPSHINE ELECTRONICS CORP.	5Fl., No. 68, Joutz St., Neihu Chiu, Taipei, Taiwan 114, R.O.C.	114	IC, Diode
77	TOSHIBA SEMICONDUCTORS	TOSHIBA ELECTRONICS TAIWAN CORP.CO.,	17Fl., No. 109, Sec. 3, Minsheng E. Rd., Sungshan Chiu, Taipei, Taiwan 105, R.O.C.	105	IC, Diode
78	Trident Technologies Inc.	TRIDENT TECHNOLOGIES INC	14F, No. 3, Lishing 2nd Rd., Hsinchu, Taiwan 300, R.O.C.	300	IC
79	Trim International		21Fl., No. 508, Sec. 5, Jungshiau E. Rd., Taipei, Taiwan 110, R.O.C.	110	Label
80	TSMT- Taiwan Surface Mounting Technology Corp.	-	No. 7, Shinghua Rd., Taoyuan City, Taoyuan, Taiwan 330, R.O.C.	330	PCB insertion
81	UNITED MICROELECTRONICS CORP.	SAS ELECTRONIC(TAIWAN)CO., LTD.	6F, No. 3, Lane 235, Bauchiau Rd., Shindian City, Taipei, Taiwan 231, R.O.C.	231	IC
82	Usance Innovative Products Ltd.	-	5F-3, No. 123, Lane 235, Pao-Chiao Rd., Hsin Tien City, Taipei Hsien, Taiwan 231, R.O.C	231	Elec. accessory
83	Walsin Technology Corp.	-	No. 8, Dafeng Rd., Taoyuan City, Taoyuan, Taiwan 330, R.O.C.	330	Core
84	Well Shin Enterprise Co., Ltd.	-	No. 14, Lane 498, Sec. 3, Chenggung Rd., Neihu Chiu, Taipei, Taiwan 114, R.O.C.	114	Power cord
85	WINBOND ELECTRONICS CORP.	ULTIMA ELECTRONICS CORP.	9Fl., No. 18, Alley 1, Lane 768, Sec. 4, Bade Rd., Sungshan Chiu, Taipei, Taiwan 105, R.O.C.	105	IC
86	Yageo Corporation	-	3F, No. 233-1, Bauchiau Rd., Shindian City, Taipei, Taiwan 231, R.O.C.	231	Capacitor, Resistor
87	Yem Chio Co., Ltd.	-	No. 423, Sec. 3, Mingj Rd., Taishan Shiang, Taipei, Taiwan 243, R.O.C.	243	Packing AD
88	Yo Tai Plastic Industrial Co., Ltd.	-	No. 26, Shujung St., Shulin City, Taipei, Taiwan 238, R.O.C.	238	Leg base
89	Yund Cheng Industrial Co., Ltd.	-	No. 15, Lane 333, Shinshu Rd., Shinjuang City, Taipei, Taiwan 242, R.O.C.	242	Cabinet



MODULE NAME	PART NO.
IMAGE BOARD ASS'Y	DPWB11393-1GGWS



MODULE NAME	PART NO.
AC MASTER POWER SWITCH B/D ASS'Y	DPWB11398-1G---



MODULE NAME	PART NO.
AUDIO AMPLIFIER BOARD ASS'Y	DPWB11372-1G-S-



MODULE NAME	PART NO.
FRONT BUTTON CONTROL BOARD ASS'Y	DPWB11372-1G-K2



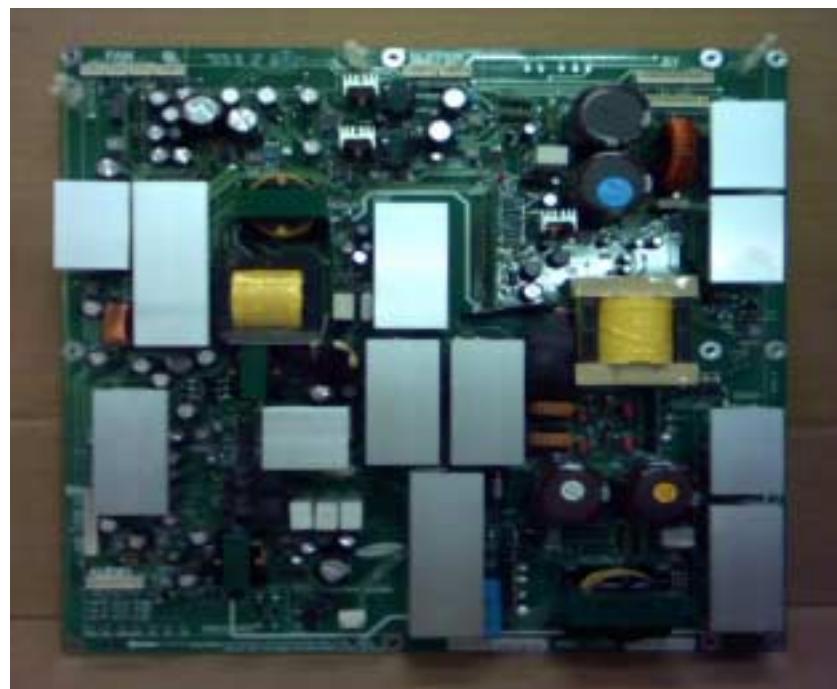
MODULE NAME	PART NO.
AV MODULE BOARD ASS'Y	DPWB11396-1G-T-



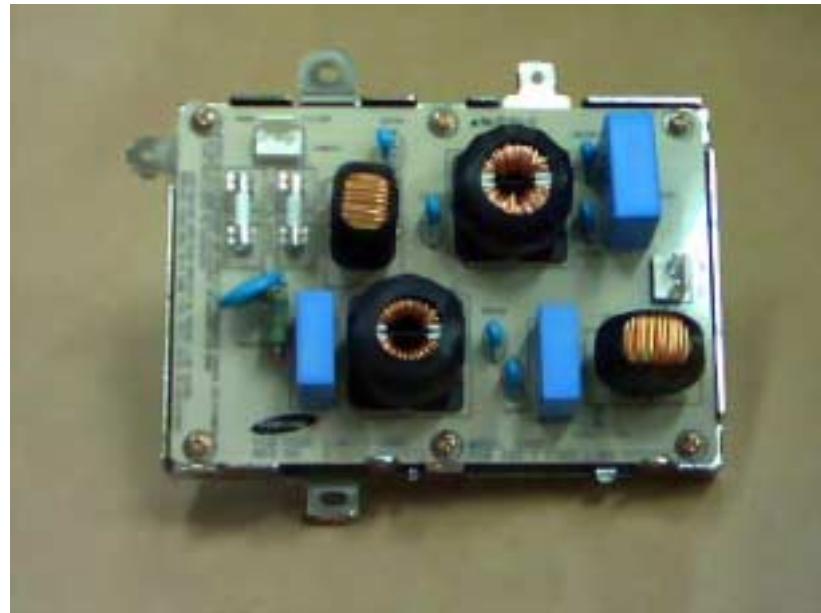
MODULE NAME	PART NO.
Y DRIVE A'SSY	LJ92-00597C



MODULE NAME	PART NO.
LOGIC BOARD ASS'Y	LJ92-00621A



MODULE NAME	PART NO.
MAIN POWER ASS'Y	LJ44-00025A



MODULE NAME	PART NO.
AC FILTER ASS'Y	LJ92-00579A



MODULE NAME	PART NO.
X DRIVE ASS'Y	LJ92-00596C



MODULE NAME	PART NO.
LOGIC E-BUFFER ASS'Y	LJ92-00600A



MODULE NAME	PART NO.
Y-BUFFER (UPPER) ASS'Y	LJ92-00570A



MODULE NAME	PART NO.
Y-BUFFER (LOWER) ASS'Y	LJ92-00571A



MODULE NAME	PART NO.
LOGIC F-BUFFER ASS'Y	LJ92-00601A

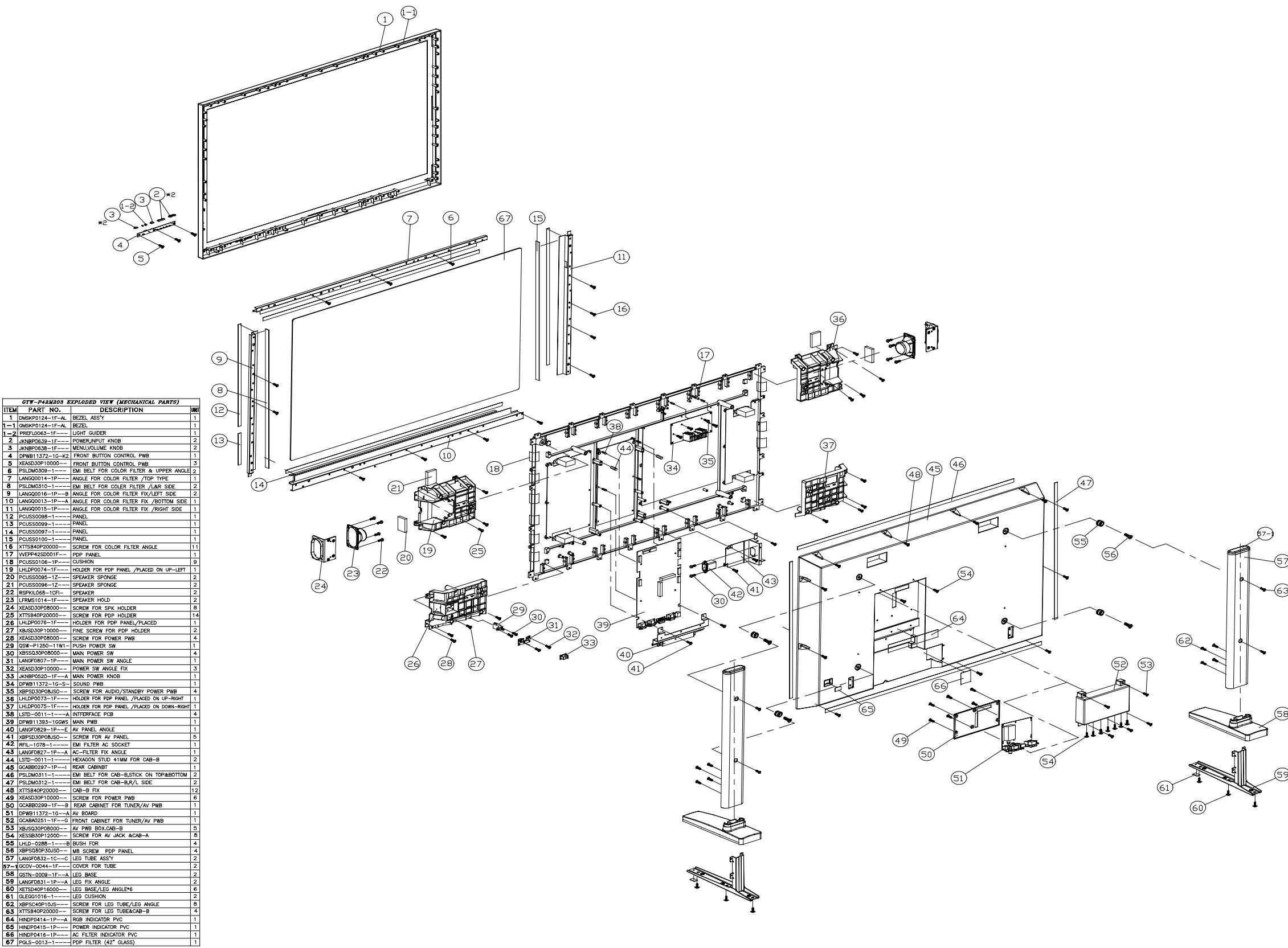


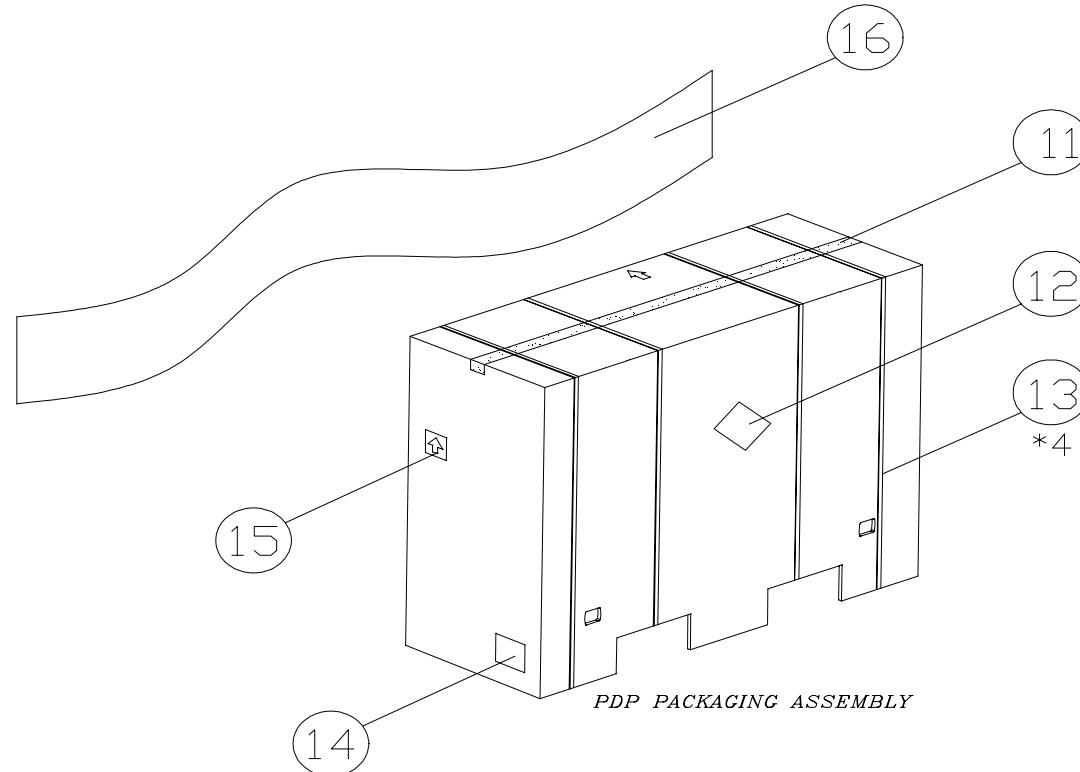
MODULE NAME	PART NO.
PDP PANEL MODULE ASS'Y	VVEPP42SD001F--

**ELECTRONIC MODULES LIST****VER1.0**

Model Name: GTW-P42M203

No.	Module	Supplier	Supplier's Designator / Part #	Quantity Per Final Assembly	Current Revision Level
1	Image Board	Sampo	DPWB11393-1GGWS	1	S11393-05-1A1
2	AC Master Power Switch Board	Sampo	DPWB11398-1G---	1	OR
3	Audio Amplifier Board	Sampo	DPWB11372-1G-S-	1	A11372-02-100
4	Front Button Control Board	Sampo	DPWB11372-1G-K2	1	K2
5	AV Module Board (with tuner)	Sampo	DPWB11396-1G-T-	1	T11396-00-100
6	Y Drive	Samsung	LJ92-00597C	1	A1
7	Logic Board	Samsung	LJ92-00621A	1	A4
8	Main Power	Samsung	LJ44-00025A	1	A1
9	AC Filter	Samsung	LJ92-00579A	1	0.2
10	X Drive	Samsung	LJ92-00596C	1	A1
11	Logic E- Buffer	Samsung	LJ92-00600A	1	A1
12	Y-Buffer (Upper)	Samsung	LJ92-00570A	1	A1
13	Y-Buffer (Lower)	Samsung	LJ92-00571A	1	A1
14	Logic F- Buffer	Samsung	LJ92-00601A	1	A1
15	PDP Panel Module	Samsung	VVEPP42SD001F--	1	V1





GTW-P42M203 EXPLODED VIEW (MECHANICAL PARTS)				
ITEM	PART NO.	DESCRIPTION	UNIT	REMARKS
1	SET	42" PDP	1	
2	TЛАBM1227-1----	MODEL LABEL	1	
3	TЛАBD1142-1----	BAR CODE	2	
3-1	TЛАBD1156-1----	S/N LABEL	2	
4	TЛАBD1139-1B--A	SRS LABEL	1	
5	SSAKH0184-1--B	EPE BAG	1	
6	SPAКА0640-1F--A	POLYFOAM	1	EPO
7	SPAКА0678-1F---	POLYFOAM (B/M)	1	EPO
8	SPAКА0677-1F---	POLYFOAM (T/M)	1	EPO
9	SPAКC0693-1R-AS	CARTON	1	EPO
10	JHNDP0020-1----	CASE HANDLE	4	
11	ZTAPEQ075T900--	TAPE	1	
12	TЛАBW0056-1---A	G METER	1	
13	ZTIE-P155Y1600-	WRAPPING	4	
14	TЛАBD1144-1B---	BAR CODE	1	
15	TЛАBW0063-1---A	TILTWATCH	1	
16	ZTAPEZ500T750--	PE FILM	1	
17	BRC-250SGATEWAY	REMOTE CONTROL	1	
	QACCF1066-1DX--	POWER CORD	1	
	RBATB0221-1DC--	BATTERY	2	
	CPRT-0002-1R--A	USER GUIDE KIT	1	
	TLST-0022-1R1--	BEREADY CHECKLIST	1	

