

PS976D

Service Manual

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WARNING

To prevent from fire or shock hazard,do not expose monitor to any rain or any form of water.High voltage is inside the monitor so please do not remove the back cover of the cabinet if you are not a qualified monitor engineer.Contact the local dealer or the nearest **Proview** branch office if you need help.

A. IMPORTANT SAFETY INSTRUCTION

Prior to using this service manual,please ensure that you have carefully followed all the procedures outlined in the user's manual for this product.

1. Read all of these instructions.
2. Save these instructions.
3. Follow all warnings and instructions a marked on the product.
4. Unplug this product from the wall outlet before cleaning.Do not use liquid cleaners or aerosol cleaners, use a damp cloth for cleaning.
5. Do not use this product near water.
6. Do not place this product on an unstable cart,stand or table.The product may fall,causing serious damage to the product.
7. Slots and openings in the cabinet and the back or bottom are provided for ventilation,to ensure reliable operation of the product and to protect it from overheating,those openings must not be blocked or covered.The openings should never be blocked by placing the product on a bed,sofa, rug, or other similar surface.This product should not be placed in a built-in installation less proper ventilation is provided.
8. This products should be operated from the type of power source indicated on the marketin label. If you are not sure of the type of power available, consult your dealer or local power company
9. This product is equipped with a 3-wire grounding type plug,a plug having a third (grounding) pin.This plug will only fit into a grounding-type power outlet.This is a safety feature,if you are unable to insert the plug into the outlet,contact your electrician to replace your obsolete outlet.Do not defeat the purpose of the grounding-type plug.
10. Do not allow anything to rest on the power cord.Do not locate this product where persons will walk on the cord.
11. If an extension cord is used with this product,make sure that the total of the ampere ratings on the product plugged into the extension cord to the waplugged into outlet does not exceed 15 ampere.
12. Never push objects of any kind into this product through cabinet slots as they may touch dangerous voltage points or short out parts that could result in a risk of fire or electric shock.Never spill liquid of any kind on the product.
13. Do not attempt to service this product yourself,as opening or removing covers may expose you to dangerous voltage points or other risks.Refer all servicing to service personnel.
14. Unplug this product from the wall outlet and refer servicing to qualified service personnel under the following conditions.
 - a. When the power cord or plug is damaged or frayed.
 - b. If liquid has been spilled into the product.
 - c. If the product has been exposed to rain or water.
 - d. If the product does not operate normally,when the operating instructions are followed.Adjust only those controls that are covered by the operating instructions since improper adjustment of other controls may result in damage and will often require extension work by a qualified technician to restore the product to normal operation.
 - e. If the product has been dropped or the cabinet has been damaged.
 - f. If the product exhibits a distinct change in performance,indicating a need for service.

B. INSTALLATION

B-1 Install the pedestal

To attach the base to your monitor, please following the steps for installation of the pedestal as below :



Step 1



Step 2



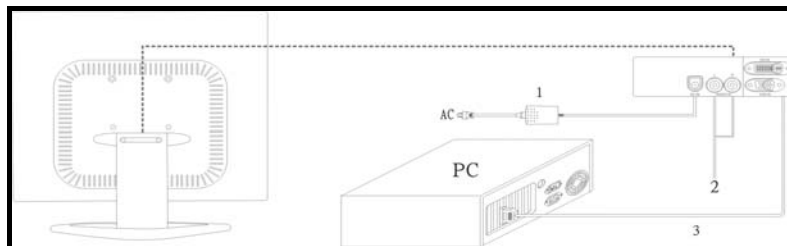
Step 3

B-2 Connect your monitor to computer

1. Turn off your computer and unplug its power cable.
2. Connect the power cable for your monitor to the DC adapter and connect the adapter to the DC power jack on the back of your monitor.

NOTE : You must use the supplied power adapter.

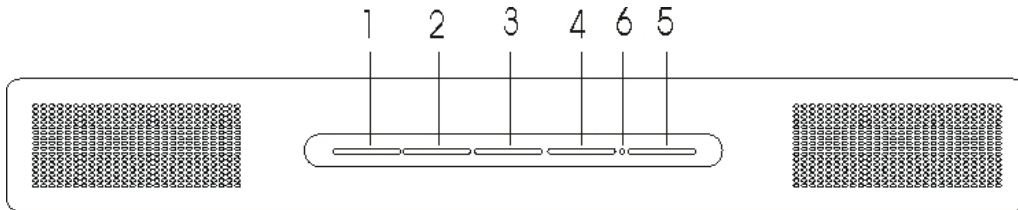
3. Connect the AUDIO IN jack to RCA audio in for DVD or VTR.
4. Connect the DVI (Optional) or D-Sub 15Pin signal cable to the video port on the back of your computer.
5. Plug the computer and monitor power cables into a nearby outlet.
6. Turn your computer and monitor on, if your monitor display an image, you have successfully installed the monitor. If the monitor does not display an image, check all the connections and report steps 1-5 above.



Connecting the monitor to the computer and the power supply

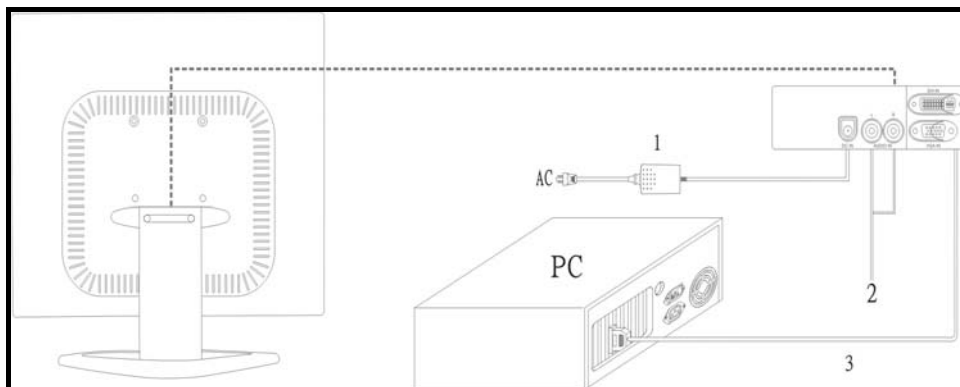
C. CONTROL LOCATION

Font control panel



1. Menu button (MENU)
2. Select button (DOWN)
3. Select button (UP)
4. Auto button (AUTO)
5. Power button (POWER)
6. Power Indicator

Rear panel



The rear panel of the monitor includes 3 plug-in connectors. They are as follows:

1. One DC IN connector
2. Two Audio Signal jack
3. Two VGA Signal (DVI / D-sub) IN connectors

D. OPERATION Direct – Access Features

D-1 Power ON/OFF Switch

This button is used to turn the monitor ON and OFF.

NOTE : The ON/OFF switch does not disconnect the device from the main voltage. To disconnect the mains voltage completely, please remove the power plug from the socket.

D-2 Power indicator

This indicator lights up green when the monitor operates normally. If the monitor is in power saving mode, this indicator change to amber. When monitor is turn off, this indicator change to dark.

D-3 Auto

Press AUTO button and release the auto adjust display mode will tune to the utmost performance according to VGA setting.

D-4 Volume

This feature adjust the DOWN button to decrease the volume and adjust UP button to increase the volume.

D-5 Menu Features

The following features can all be accessed using your monitor on screen menu system. When finished making adjustments to a feature, push the exit button to turn off the menu.

Please follow the procedure of selection and adjust an item using the OSD system as below steps for main functions adjustment.

Step 1. Press Menu Button to activate the OSD menu.

Step 2. Press Select Button DOWN or Select Button UP to scroll through and highlight the main function list.

Step 3. When the desired function is highlight, press Menu Button a second time, the highlight will change to a sub-menu near main menu.

Step 4. Press Menu Button and release again. The highlight of adjusted items and scroll bar will change color from gray to blue.

Step 5. To make your adjustment, press DOWN counterclockwise to decrease or press UP clockwise to increase the setting.

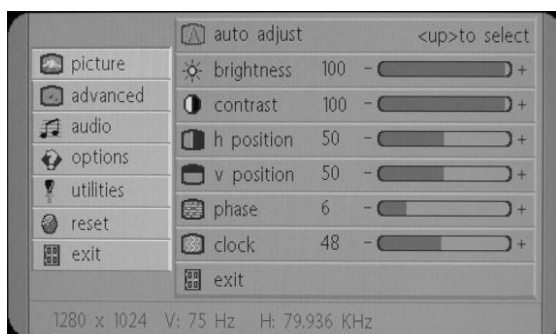
Step 6. Press and release Menu Button again to store the change.. The scroll bar will change color from blue to gray. You can select other functions to adjust by pressing DOWN or UP. You can also select the exit icon and press Menu Button to go back to the main menu.

Step 7. Report step 2 through 6 to make further adjustments.

D-6 OSD menu

Main menu

OSD main menu of controls gives you an overview of the selection of controls available. When you want to make adjustment of the screen image, press and release button Menu.



Picture

1. Auto adjust

Press UP button, auto adjust the display mode to its optional VGA performance setting.

2. Brightness

Adjust the overall image and background screen brightness.

3. Contrast

Adjust the image brightness in relation to the background.

4. H position

To move the picture image horizontally left or right.

5. V position

To move the picture image vertically up or down.

6. Phase

To improve focus clarity and image stability.

7. Clock

To increase or decrease the horizontal size of image.

8. Exit

To exit the menu.

Advanced

1. Sharpness

Adjusts the picture sharpness.

2. Color

You have 4 color options.

Cool

This control adjusts the color temperature of the screen image. This item is preset by the factory and can not be adjusted by the user. The performance is bluer and brighter.

Natural

This performance is reddish and closer to paper white.

Warm

The performance is yellowish and closer to paper white

User

You can adjust the individual color intensity to meet your personal needs.

User red

Increase or decrease red.

User green

Increase or decrease green.

User blue

Increase or decrease blue.

Exit

To exit the main menu.

Audio

1. Volume

DOWN to decrease volume, and UP to increase volume.

2. Mute

Choose this feature to mute the sound on or off.

3. Exit

To exit the main menu.

Options

1. OSD

To move the OSD image.

2. OSD H position

To move the OSD image horizontally left or right.

3. OSD V position

To move the OSD image vertically up or down.

4. Language

You can choose one of the nine languages.

5. Exit

To exit the main menu.

Utilities

1. OSD timeout

You can select how long the monitor waits after the last adjust of the key to shut off the OSD menu. The time setting choices are from 5 to 60 seconds.

2. OSD background

You can select **opaque** or **translucent** to change OSD background.

3. Source icon

You can select **on** or **off** to display OSD icon.

4. Exit

To exit the main menu.

Reset

1. Memory recall

Reset the currently highlight control to the factory setting. User must be using factory preset video mode to use this function.

2. Exit

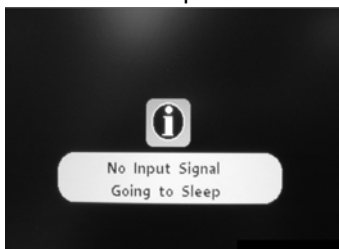
To exit the main menu.

Exit

To exit the OSD menu.

D-7 Self test pattern

When the computer's video signal is not reaching the monitor, the monitor will display a self test pattern.



D-8 Safety protection

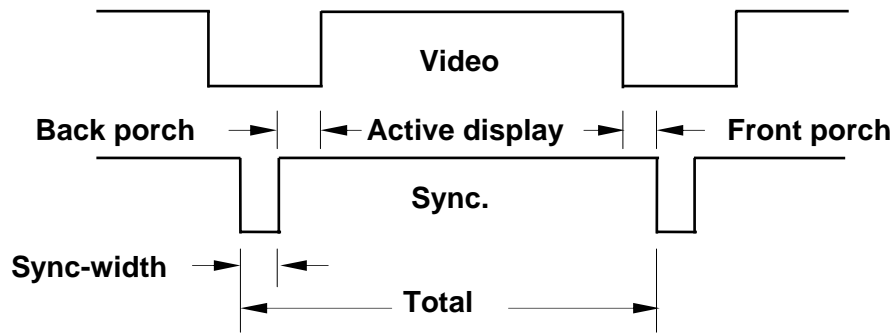
When the frequency of the video signal from your computer is out of range, the monitor will protect by itself and a warning OSD message will appear on the screen.



E. SPECIFICATIONS

1. Maximum Resolution		1280 x 1024 @ 75Hz																																																																																								
2. Recommend Resolution		1280 x 1024 @ 60Hz																																																																																								
3. Synchronization Range	Horizontal Vertical	31 – 80 KHz 60– 75 Hz																																																																																								
4. Active Display Area		376mm (H) x 301mm (V)																																																																																								
5. Dot Pitch		0.294(H) x 0.294(V) mm																																																																																								
6. Support display colors		16.7M color																																																																																								
7. Contrast Ratio (Typical)		600																																																																																								
8. Luminance of White		250cd/m ²																																																																																								
9. Bandwidth		135MHz																																																																																								
10. User Control		4 Key Switch																																																																																								
11. OSD Function		Brightness, Contrast, H-Pos, V-Pos, H. Size, Phase, Color Select, Auto, Reset, Language, OSD Adjust, Exit																																																																																								
12. View Angle CR=5	Horizontal Vertical	85 , 85 Degrees 85 , 85 Degrees																																																																																								
13. Power Source		100 – 240 Vac 60 / 50 Hz																																																																																								
14. Power Consumption		60W (max.)																																																																																								
15. Connection Type		15 Pin D Type / DVI																																																																																								
16. Input Signal	Video Sync.	Analog R.G.B. , 0.7Vp-p / 75 Ohms TTL level, positive or negative polarity																																																																																								
17. Color Temperature		Cool / Natural / Warm																																																																																								
18. Dimension (WxHxD)	Packing Set	484mm x 500mm x 150mm 420mm x 428mm x 170mm																																																																																								
19. Monitor Weight		7.3Kg / 6.1Kg																																																																																								
20. Base Operation	Tilt	0 / + 15 degree																																																																																								
21. Power Saving	ON STAND BY OFF	< 60W < 5W < 5W																																																																																								
22. Signal Connector Pin Assignment		<p>D-Sub Signal connector PIN assignment</p> <table border="0"> <thead> <tr> <th>PIN</th> <th>Signal</th> <th>PIN</th> <th>Signal</th> </tr> </thead> <tbody> <tr> <td>1.</td> <td>Red</td> <td>9.</td> <td>VDD from PC for DDC</td> </tr> <tr> <td>2.</td> <td>Green</td> <td>10.</td> <td>Sync. Ground</td> </tr> <tr> <td>3.</td> <td>Blue</td> <td>11.</td> <td>Ground</td> </tr> <tr> <td>4.</td> <td>Ground</td> <td>12.</td> <td>SDA (For DDC)</td> </tr> <tr> <td>5.</td> <td>Self Test</td> <td>13.</td> <td>Horizontal Sync.</td> </tr> <tr> <td>6.</td> <td>Red Ground</td> <td>14.</td> <td>Vertical Sync.</td> </tr> <tr> <td>7.</td> <td>Green Ground</td> <td>15.</td> <td>SCL (For DDC)</td> </tr> <tr> <td>8.</td> <td>Blue Ground</td> <td></td> <td></td> </tr> </tbody> </table> <p>DVI Signal connector PIN assignment</p> <table border="0"> <thead> <tr> <th>PIN</th> <th>Signal</th> <th>PIN</th> <th>Signal</th> </tr> </thead> <tbody> <tr> <td>1.</td> <td>TMDS Data 2-</td> <td>13.</td> <td>TMDS Data 3+</td> </tr> <tr> <td>2.</td> <td>TMDS Data 2+</td> <td>14.</td> <td>+5V Power</td> </tr> <tr> <td>3.</td> <td>TMDS Data 2/4 shield</td> <td>15.</td> <td>Ground</td> </tr> <tr> <td>4.</td> <td>TMDS Data 4-</td> <td>16.</td> <td>Hot Plug Detect</td> </tr> <tr> <td>5.</td> <td>TMDS Data 4+</td> <td>17.</td> <td>TMDS Data 0-</td> </tr> <tr> <td>6.</td> <td>DDC Clock</td> <td>18.</td> <td>TMDS Data 0+</td> </tr> <tr> <td>7.</td> <td>DDC Data</td> <td>19.</td> <td>TMDS Data 0/5 shield</td> </tr> <tr> <td>8.</td> <td>Analogy V. sync.</td> <td>20.</td> <td>TMDS Data 5-</td> </tr> <tr> <td>9.</td> <td>TMDS Data 1-</td> <td>21.</td> <td>TMDS Data 5+</td> </tr> <tr> <td>10.</td> <td>TMDS Data 1+</td> <td>22.</td> <td>Clock shield</td> </tr> <tr> <td>11.</td> <td>TMDS Data 1/3 shield</td> <td>23.</td> <td>Clock+</td> </tr> <tr> <td>12.</td> <td>TMDS Data 3-</td> <td>24.</td> <td>Clock-</td> </tr> </tbody> </table>	PIN	Signal	PIN	Signal	1.	Red	9.	VDD from PC for DDC	2.	Green	10.	Sync. Ground	3.	Blue	11.	Ground	4.	Ground	12.	SDA (For DDC)	5.	Self Test	13.	Horizontal Sync.	6.	Red Ground	14.	Vertical Sync.	7.	Green Ground	15.	SCL (For DDC)	8.	Blue Ground			PIN	Signal	PIN	Signal	1.	TMDS Data 2-	13.	TMDS Data 3+	2.	TMDS Data 2+	14.	+5V Power	3.	TMDS Data 2/4 shield	15.	Ground	4.	TMDS Data 4-	16.	Hot Plug Detect	5.	TMDS Data 4+	17.	TMDS Data 0-	6.	DDC Clock	18.	TMDS Data 0+	7.	DDC Data	19.	TMDS Data 0/5 shield	8.	Analogy V. sync.	20.	TMDS Data 5-	9.	TMDS Data 1-	21.	TMDS Data 5+	10.	TMDS Data 1+	22.	Clock shield	11.	TMDS Data 1/3 shield	23.	Clock+	12.	TMDS Data 3-	24.	Clock-
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12.	TMDS Data 3-	24.	Clock-																																																																																							
23. Audio signal		3.5Φ stereo phone jack 2.5+2.5W 8Ω Speaker																																																																																								

F. TIMING CHART

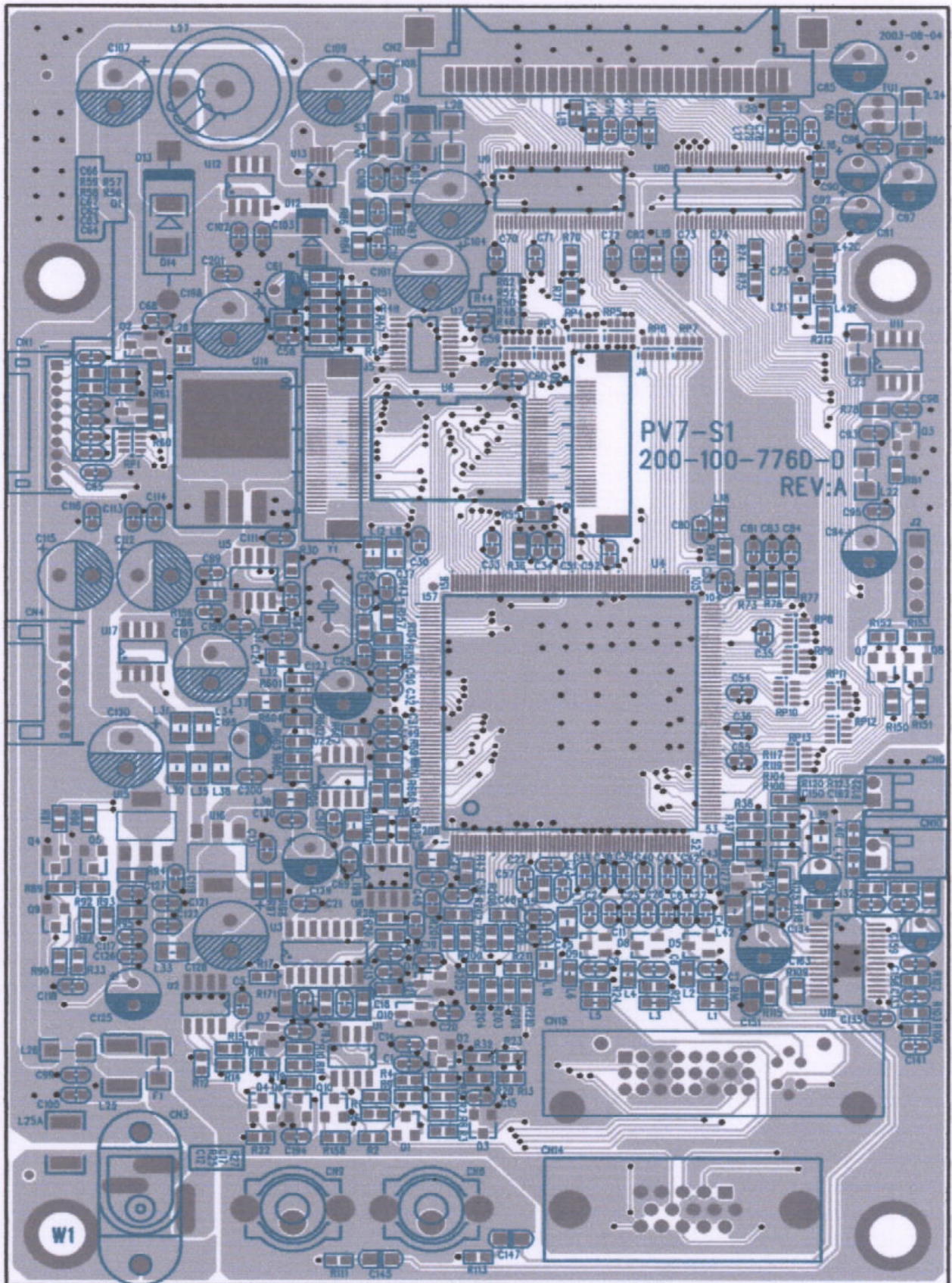


Preset Modes	VGA	VGA	VESA	VESA	VESA	VESA	VESA
	720X400	640X480	640X480	640X480	800X600	800X600	800X600
Pixel clock (MHz)	28.325	25.175	31.500	31.500	36.000	40.000	50.000
H-Frequency (KHz)	31.472	31.469	37.861	37.500	35.156	37.879	48.077
H-Total (μs)	31.774	31.778	26.413	26.667	28.444	26.400	20.800
H-Active Display (μs)	25.419	25.422	20.317	20.317	22.222	20.000	16.000
H-Blanking (μs)	6.355	6.356	6.095	6.349	6.222	6.400	4.800
Front Porch (μs)	0.635	0.636	0.762	0.508	0.667	1.000	1.120
H-Sync-width (μs)	3.813	3.813	1.270	2.032	2.000	3.200	2.400
H-Back Porch (μs)	1.906	1.907	4.063	3.810	3.556	2.200	1.280
V-Frequency (Hz)	70.1	59.94	72.81	75.0	56.25	60.3	72.2
V-Total (ms)	14.267	16.683	13.735	13.333	17.778	16.579	13.853
V-Active Display (ms)	12.710	15.253	12.678	12.800	17.067	15.840	12.480
V-Blanking (ms)	1.557	1.430	1.057	0.533	0.711	0.739	1.373
V-Front Porch (ms)	0.413	0.318	0.238	0.027	0.028	0.026	0.770
V-Sync-width (ms)	0.064	0.064	0.079	0.080	0.057	0.106	0.125
V-Back Porch (ms)	1.080	1.049	0.740	0.427	0.626	0.607	0.478
H/V Sync. Polarity	- +	- -	- -	- -	+ +	+ +	+ +
Interlace	NONE	NONE	NONE	NONE	NONE	NONE	NONE

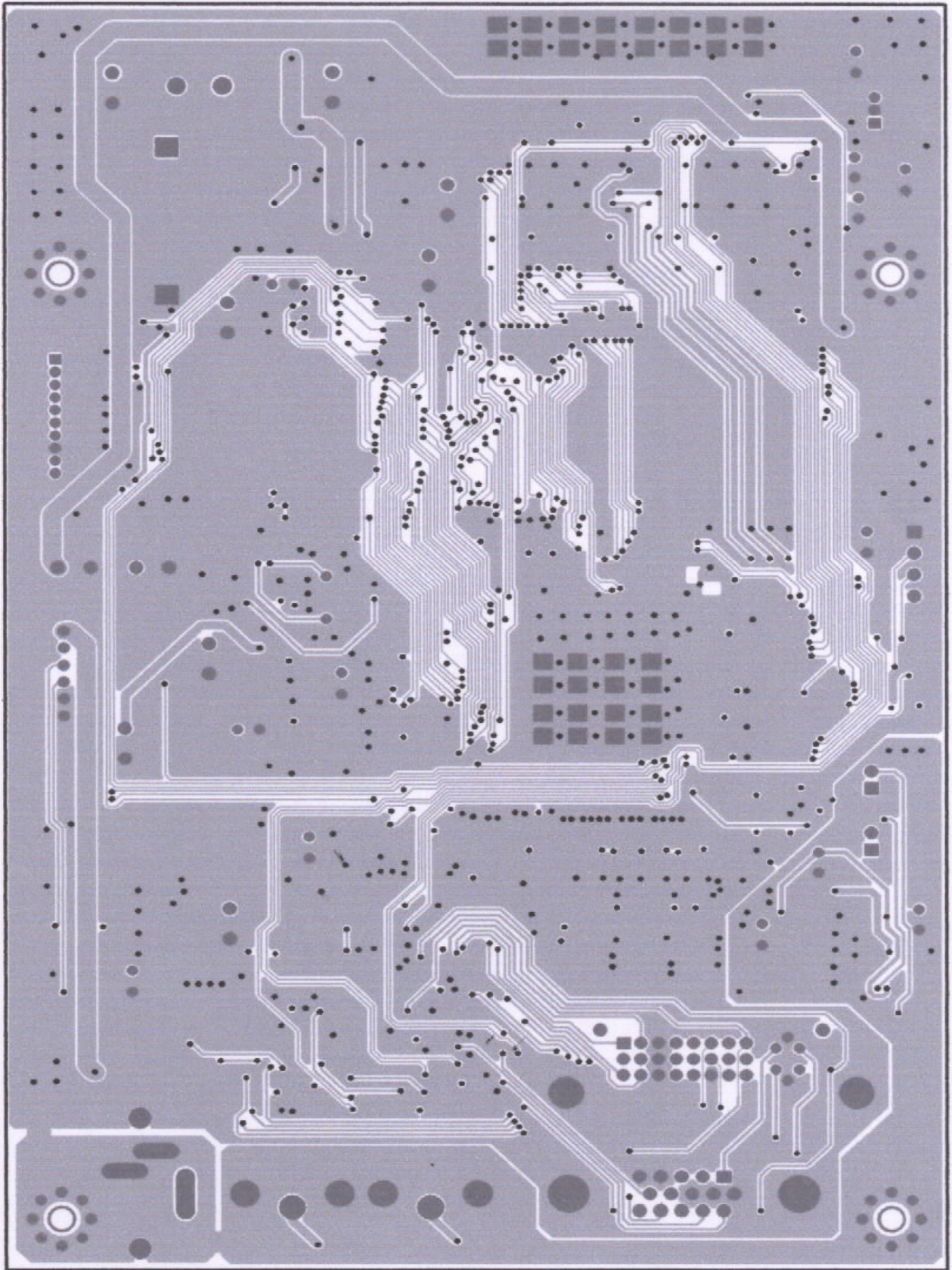
Modes \ Preset	VESA 800X600	VESA 1024X768	VESA 1024X768	VESA 1024X768	VESA 1280X1024	VESA 1280X1024
Pixel clock (MHz)	49.500	65.000	75.000	78.750	108.00	135.00
H-Frequency (KHz)	46.875	48.363	56.476	60.023	63.981	79.976
H-Total (µs)	21.333	20.677	17.707	16.660	15.630	12.540
H-Active Display (µs)	16.162	15.754	13.563	13.003	11.852	9.481
H-Blanking (µs)	5.172	4.923	4.053	3.657	3.778	3.022
Front Porch (µs)	0.323	0.369	0.320	0.203	0.444	0.119
H-Sync-width (µs)	1.616	2.092	1.813	1.219	1.037	1.067
H-Back Porch (µs)	3.232	2.462	1.920	2.235	2.296	1.837
V-Frequency (Hz)	75.0	60.0	70.1	75.0	60.0	75.0
V-Total (ms)	13.333	16.666	14.272	13.328	16.661	13.329
V-Active Display (ms)	12.800	15.880	13.599	12.795	16.005	12.804
V-Blanking (ms)	0.533	0.786	0.673	0.533	0.656	0.525
V-Front Porch (ms)	0.021	0.062	0.053	0.017	0.016	0.013
V-Sync-width (ms)	0.064	0.124	0.106	0.050	0.047	0.038
V-Back Porch (ms)	0.448	0.600	0.513	0.466	0.594	0.475
H/V Sync. Polarity	+ +	- -	- -	+ +	+ +	+ +
Interlace	NONE	NONE	NONE	NONE	NONE	NONE

G. CONDUCTION VIEW

MAIN BOARD (Component Side)



MAIN BOARD (Component Side)

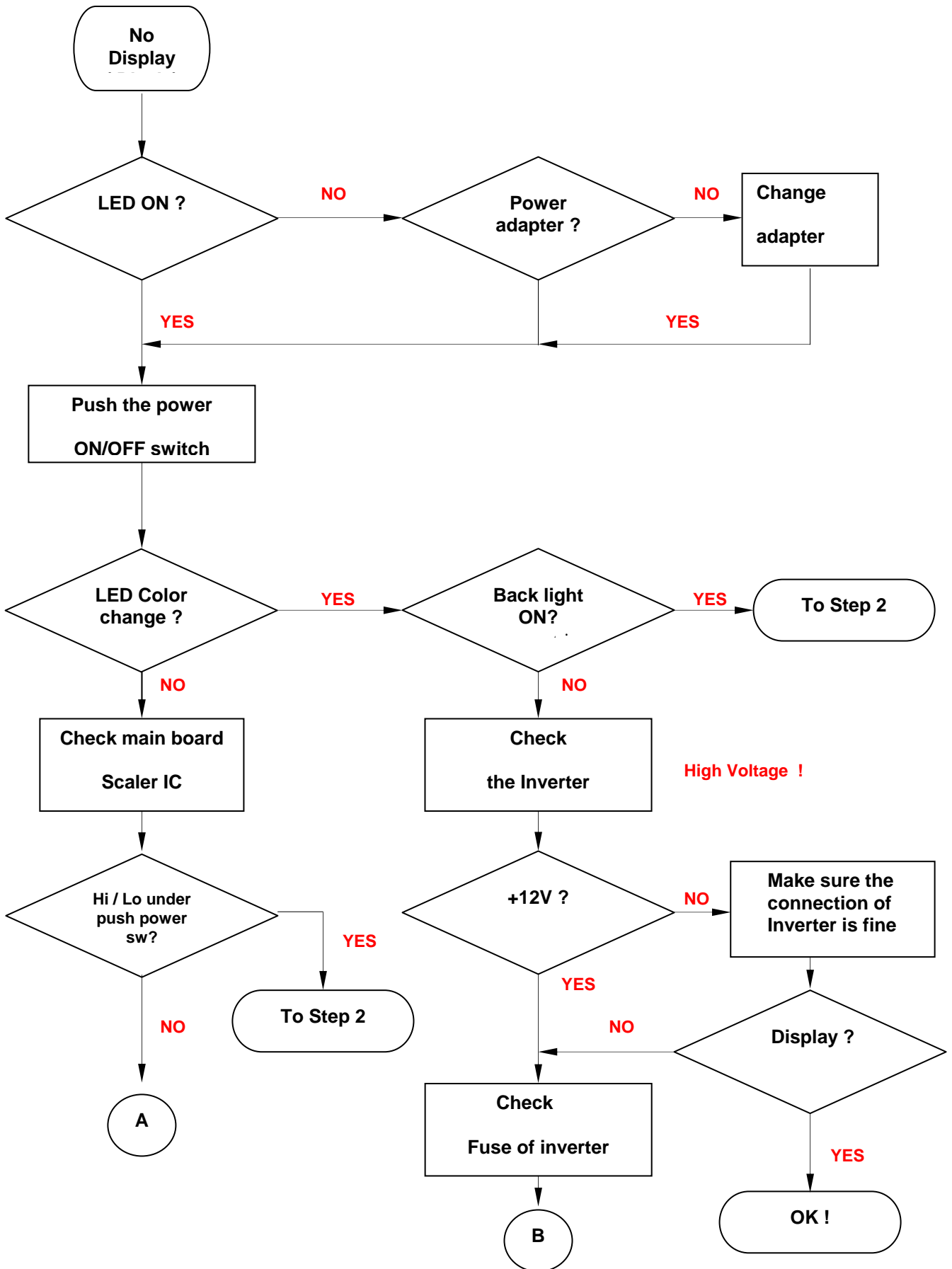


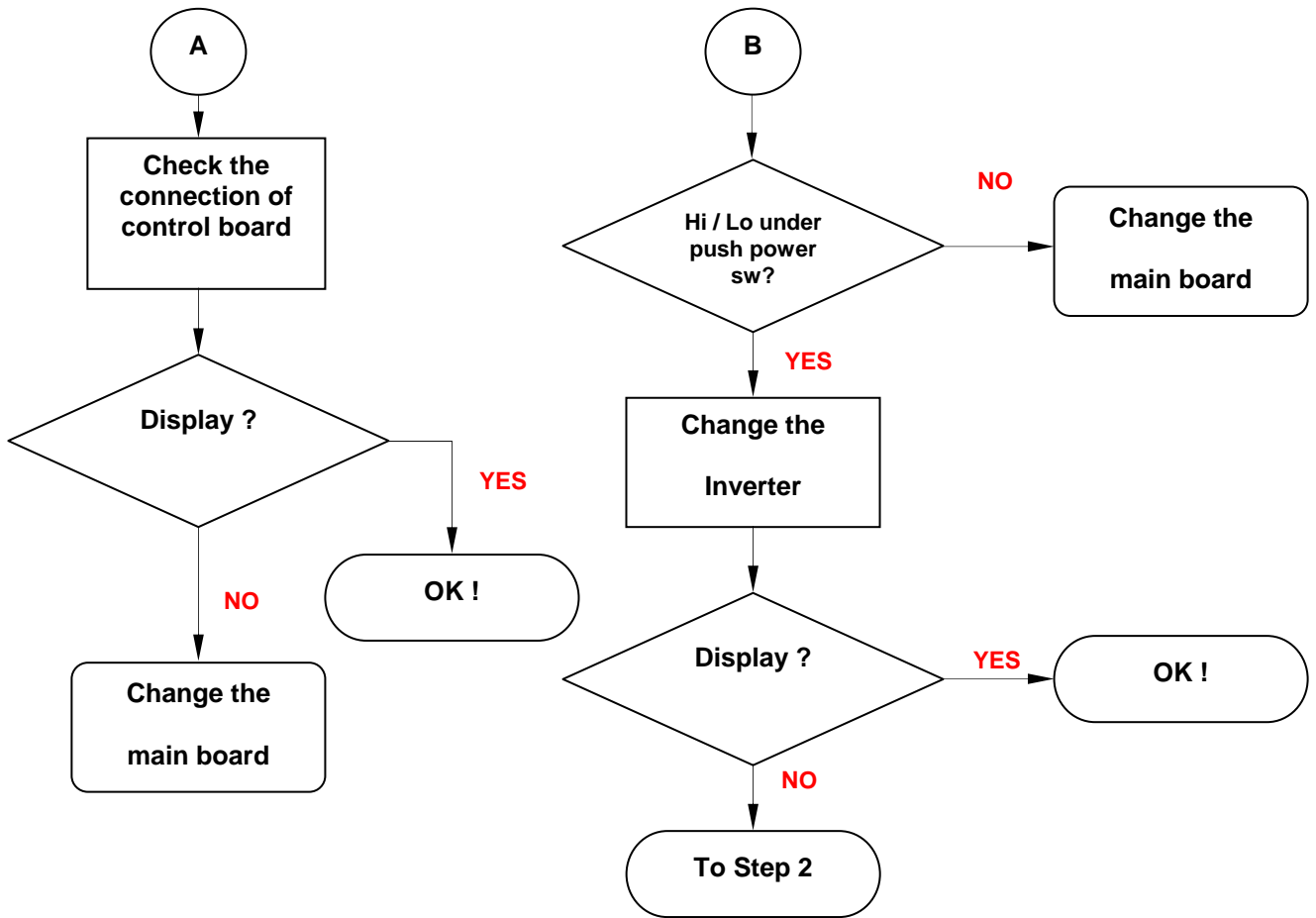
INVERTER BOARD

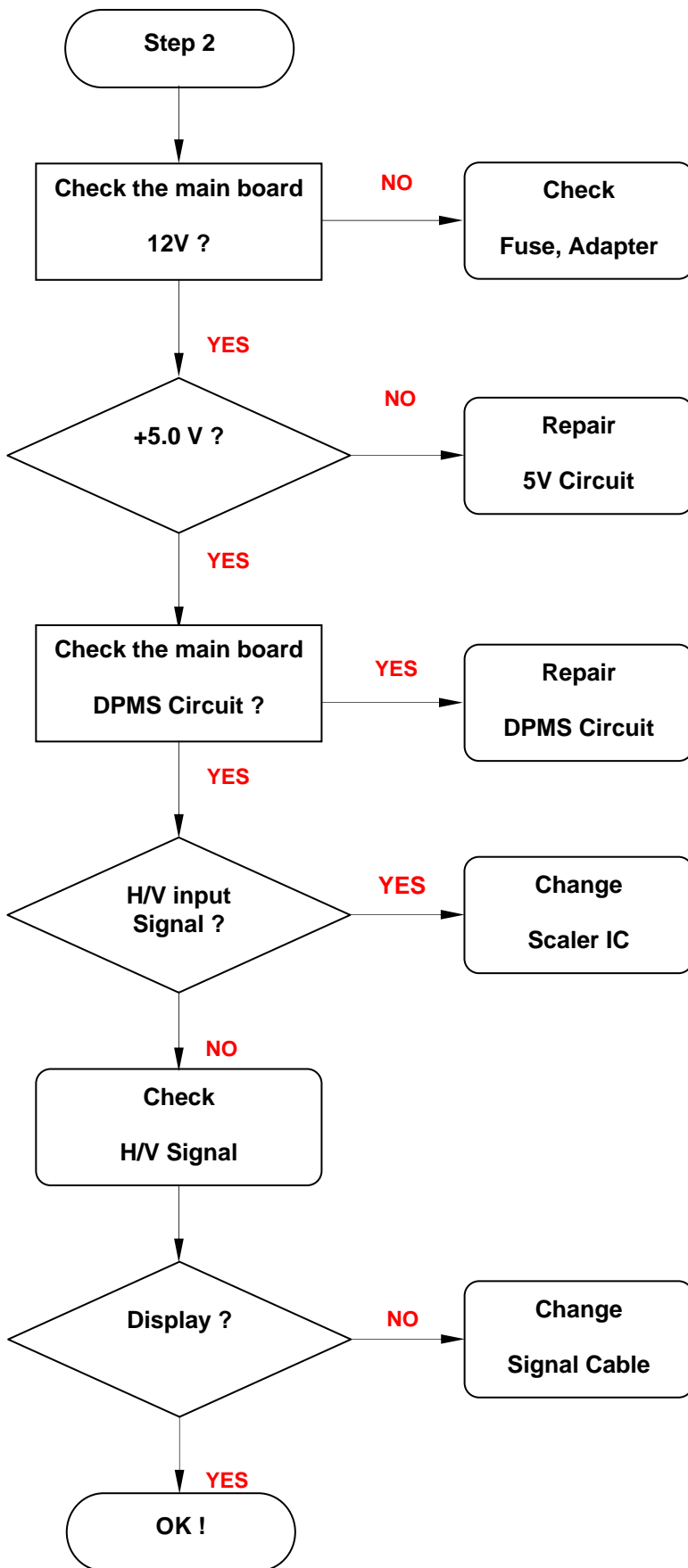
H. ADJUSTMENT PROCEDURE

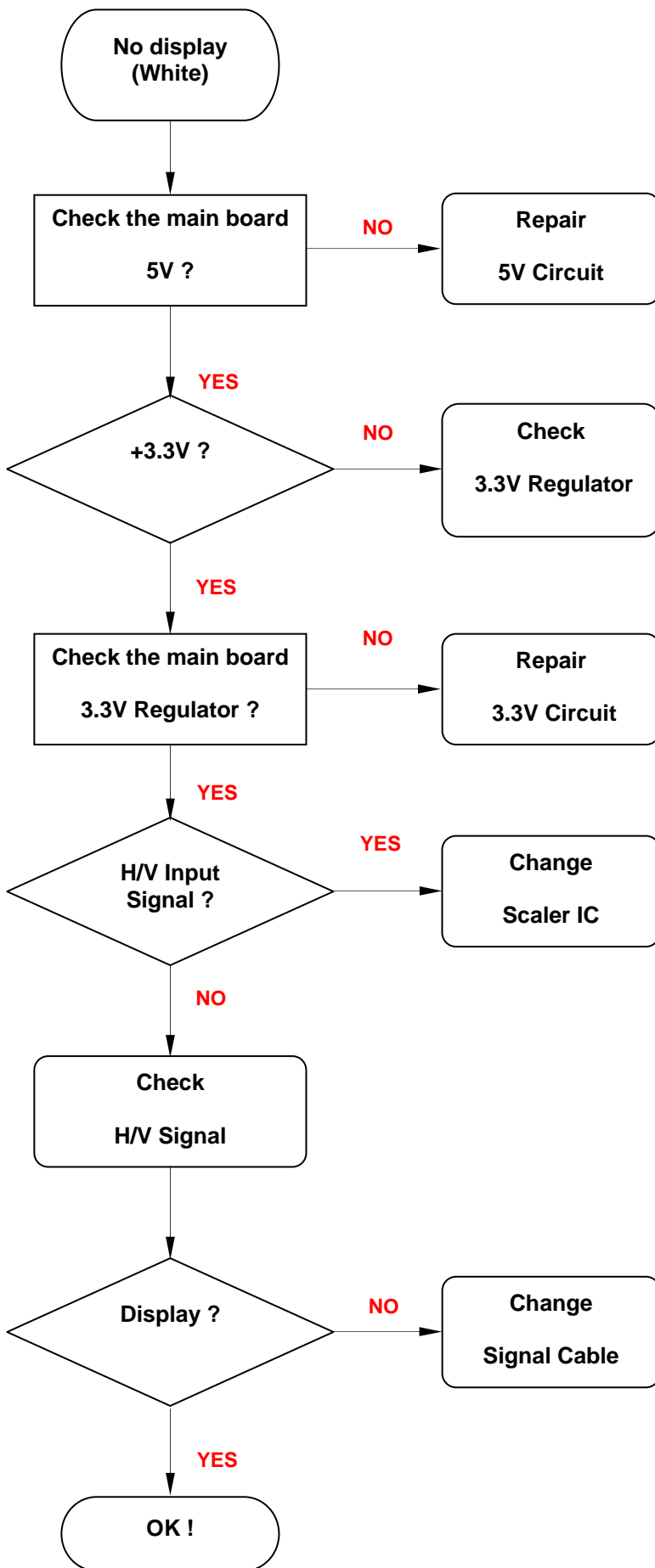
ITEM		# Test Meter * Test Point @ Pattern	Operation	Check Value
Program Menu.				
A	B+ Check	# Digital Voltmeter * CN7 @ Crosshatch Pattern (31.5KHz,640x480)	1. Plug power cable into the adapter, check adapter power indicator light up green. 2. Make sure the voltage of the power plug (CN7) on the main PCB to the value shown at right.	12.0V ±0.2V
B	Power Saving Check	# Wattmeter # PC or Pattern generator @ Crosshatch Pattern (31.5KHz,640x480)	1. Unplug the signal cable into the monitor. 2. Turn the power switch of the monitor ON . 3. Check monitor power indicator light up orange. 4. Make sure the wattmeter value shown at right. 5. OSD will be display " NO SIGNAL " Picture.	< 2.5W
C	Into Factory mode	# PC or Pattern generator @ Crosshatch Pattern (31.5KHz,640x480)	1. Hold < key, then turn the power switch of the monitor OFF . 2. Hold > key, then turn the power switch of the monitor ON . 3. You can into factory adjustment mode.	
D	Auto mode Check	# PC or Pattern generator @ Crosshatch Pattern (1024x768/60Hz)	1. Press and release the MENU knob to activate the OSD menu. 2. Move the OSD to the AUTO function, press MENU key auto adjust display mode to its utmost performance according to VGA setting. 3. In the event of the display image needs further adjustment	
E	White Balance Adjust	# PC or Pattern generator @ White Pattern (1024x768/60Hz)	1. Move the OSD to the COLOR mode (AUTO COLOR). 2. set color is 9300°K using the OSD, Check the value shown at right. $Y = 220 \pm 0.1FL$ $x = 0.283 \pm 0.01$ $y = 0.297 \pm 0.01$ 3. set color is 7500°K using the OSD, Check the value shown at right. $Y = 220 \pm 0.1FL$ $x = 0.299 \pm 0.01$ $y = 0.315 \pm 0.01$ 4. set color is 6500°K using the OSD, Check the value shown at right. $Y = 220 \pm 0.1FL$ $x = 0.313 \pm 0.01$ $y = 0.329 \pm 0.01$	
F	OSD Language Setting	# PC or Pattern generator	1. Move the OSD to the LANGUAGE mode. 2. You can choose one of the eight language you need.	

I. TROUBLE SHOOTING HINTS









J. REPLACEMENT PARTS LIST

NO	Parts No.	Description	Part Location	Q'ty
1	154-500-976D-A	19" protection cover	For bezel	1
2	160-52L-980DL	Polyfoam L		1
3	160-52R-980DL	Polyfoam R		1
4	170-001-LCD5-1	PE Bag		1
5	170-005-VM541	PE BAG 300*200mm.		1
6	170-500-AS776	BASE BAG 360*360mm 0.03t		1
7	170-500-PS776D	DC LINE BAG 200*340		1
8	600-151-1500	Power cable 1.8M		1
9	600-151-15R22	D-Sub 15Pin Signal cable		1
10	846-120-E0AL-SA	Adapter LSE 60W	DC12V,5A	1
11	610-151-19R2A5	DVI-D Signal cable 1.5M		1
12	005-500-980DL	Carton		1
13	002-C50-MA982	English user manual	Gigabyte	1
14	153-500-980DL	Back Label		1
15	200-701-GA780	Control PCB		1
16	401-270-0205	Tact SW 2P 6*3.5 TSHB-2P	S1,S2,S3,S4,S5,	5
17	630-008-C001	JST 1.5mm HEADER ZR S8B-ZR	J1,	1
18	520-005-L317-F	LED 3D2P	D1,	1
19	631-001-4060	4.3D+107#18 BLK 75mm+TIN2.5	Control+Ground wire	2
20	705-590-950F	19" FUJI FLC48SXC8V-10		1
21	849-40M-0770-C	Inverter		1
22	200-100-776D-C	Main Board		1
23	281-031-20014	SMD R 2K 1% 0603	R87,	1
24	281-031-62014	SMD R 6.2K 0603	R86,	1
25	281-035-0R04	SMD R 0 ohm 5% 0603	R154,R155,L1,L2,L3,L4,L5,L6, L7,R17,L19,R5,R7,R36,R71,R75, R88,R55,R13,R23,	20
26	281-035-1014	RES 100 5% 1/10W 0603	R25,R26,R27,R28,	4
27	281-035-1024	RES 1K 5% 1/10W 0603	R60,R61,	2
28	281-035-1044	RES 100K 5% 1/10W 0603	R44,	1
29	281-035-1554	SMD R 0603 1.5 Mohm	R43,	1
30	281-035-2704	SMD R 27ohm 5% 0603	R200,R201,R203,R204,R206,R207, R209,R210,	8

31	281-035-2734	SMD R 27K 0603	R96,	1
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NO	Parts No.	Description	Part Location	Q'ty
32	281-035-3014	SMD R 300 ohm 0603	R95,R98,	2
33	281-035-3304	SMD R 33 ohm 0603	R608,R611,R612,L18,R58,R59,R73, R76,R77,	9
34	281-035-3314	SMD R 0603 330 ohm	R56,R57,	2
35	281-035-3324	SMD R 3.3K 0603 1/10W 5%.	R35,R39,R40,	3
36	281-035-4704	SMD R 47 ohm 0603	R18,R19,R6,R8,R9,	5
37	281-035-4724	SMD R 4.7 K 0603	R2,R33,R78,R81,R89,R91,R92,R93, R150,R152,R153,R158,	12
38	281-035-4734	SMD R 47K 0603	R3,R4,R41,R12,R14,	5
39	281-035-5614	SMD R 560 ohm 0603	R42.	1
40	281-035-6814	SMD R 0603 680ohm	R97,R94,	2
41	281-035-7504	SMD R 75 ohm 0603	R202,R205,R208,R211,R16,R21,R24,	7
42	281-035-7534	SMD R 75K 0603	R84,	1
43	282-330-2454	SMD R ARRAY 33 ohm 1206	RP1,RP2,RP3,RP4,RP5,RP6,RP7, RP8, RP9,RP10,RP11,RP12,RP13,	13
44	330-100-16255	5mmEC 10uF 16V 105C M TP	C195,C125,	2
45	330-101-16255	5mmEC 100uF 16V 105C M TP	C85,C94,C97,C123,C129,	5
46	330-220-16255	EC 22uF 16V 4*5 105C	C91,	1
47	330-221-16255	EC H:5mm 220uF 16V 105C M	C104,C107,C109,C112,C115,C120, C128,C197,C198,C101,	10
48	381-180-032554	CMD CC NPO 18pF 25V 0603	C28,C29,	2
49	381-220-032554	SMD CC 22pF 25V NPO 0603	C12,C13,C18,C19,C80,C81,	6
50	381-301-032554	SMD CC NPO 25V 300PF 5% 0603	C110,	1
51	381-5R0-032554	SMD NPO 5P 25V 0603	C2,C6,C9,	3
52	382-102-032564	SMD CC 1000pF/25V X7R 0603	C26,	1
53	382-103-032564	SMD CC 0.01uF/25V X7R 0603	C501,C75,C99,C103,C106,C114, C122, C124,C130,C10,	10
54	382-392-032564	X7R 3900pF 10% 25V 0603	C22,	1
55	382-392-032564	SMD CC 0.039uF 25V X7R 0603	C22,	1
56	382-393-032564	SMD CC 0.047uF 25V X7R 0603	C23,	1
57	382-473-032564	SMD CC 0.047uF 25V X7R 0603	C24,C25,C27,	3
58	385-104-032584	SMD CC 0.1uF 25V Y5V 0603	C5,C193,C194,C1,C4,C8,C11,C14,C15, C16,C20,C21,C30,C31,C32,C33,C34, C35,C36,C37,C38,C39,C40,C41,C42, C43,C44,C45,C46,C47,C48,C49,C50, C51,C52,C53,C54,C55,C56,C57,C58, C59,C60,C62,C63,C64,C65,C66,C67, C68,C69,C70,C71,C72,C73,C74,C76, C77,C78,C79,C86,C92,C93,C95,C96, C98,C100,C102,C105,C108,C111,C113, C116,C117,C118,C119,C121,C126, C127,C131,C199,C200,C201,	83
59	409-003-0110	DC Jack 3.5D SCD510	CN3,	1
60	483-002-104S6	Connector Pin Pitch 2.54mm 1*4 Pin	J2,	1

NO	Parts No.	Description	Part Location	Q'ty
61	485-415-S070	D-SUB 3R15 180D H6.8 Blue	CN14,	1
62	485-D25-S118	DVI-D connector 11.40mm	CN15,	1
63	506-0AI-C1084	SMD REG. AIC1084CM 3.3V 5A	U14,	1
64	506-0CS-5828	SMD 85M LVDS CS5828+TQFP56	U9,U10,	2
65	506-1LM-3485	LM3485/NS MSOP-8	U13,	1
66	506-524-LC21	Memory IC 24LC21 SMD	U2,U1,	2
67	506-5EN-29LV8	Flash 8M EN29LV800T-70RTC/EON	U6,	1
68	506-5NM-24C16	Linear OC NM24C16M-8 (SMD)	U8,	1
69	506-774-LCX14	SMD Hi Speed TTL 74LCX14	U3,	1
70	506-774-LCX541	74LCX541 TSSOP-20 FAIRCHILD	U7,	1
71	506-CPW-131A-20	Scaler IC PW131A-20Q	U4,	1
72	506-RLD-1117-A	LD1117-ADJ-A UTC SOT223	U15,U16,	2
73	518-02N-3904	TR. 2N3904 SMD	Q1,Q2,Q3,Q4,Q5,Q7,Q8,Q9,	8
74	518-02N-3906	SMD TR 2N3906	Q10,	1
75	518-1CE-9435	MOSFET CE9435A CO8	U11,U12,U17,	3
76	522-030-B340-T	SCHOTTKY SB340 TP	D14,	1
77	528-2BA-T54C	SMD Diode BAT54C SOT23	D4,D1,	2
78	529-350-05R6	SMD Zener 5.6V MMSZ5232B	D15,	1
79	531-143-49US	XTAL 14.318Mhz LC=16pF 49US	Y1,	1
80	558-352-5000	SMD Fuse 1206 24V 5A	F1,	1
81	630-006-1008	Base 6P JWT A2001 Pitch 2	CN4,	1
82	630-008-C001	JST 1.5mm HEADER ZR S8B-ZR	CN1,	1
83	630-030-8001	Connector 125HR(DF14) 30P1.25 SMD	CN2,	1
84	745-330-2062-3	33uH C4426-060128YB-UL	L27,	1
85	780-103-3000	SMD BEAD SBK160808-300Y	L13,L14,L15,L16,L17,L20,	6
86	780-104-6010	SMD Bead SBK-201209T-601Y-S	L199,L21,L29,L30,L31,L32,L35,L36, L37,L38,	10
87	780-107-121K50	Bead 120ohm 1206 5A FBM-11	L22,L24,L26,L28,	4
88	780-112-8000	Bead HCB4532K-800T60 80ohm6A	L25,	1
89	781-220-0462	L 0805 22uH CL201212T-220K	L8,L9,L10,L11,L12,	5
90	152-000-SH570	TOSHIBA DC Jack Support NYLON	CN3,	1
91	281-035-2224	SMD R 2.2K 0603	R171,R29,R69,	3
92	281-035-1034	RES 10K 5% 1/10W 0603	R15,R212,R22,R45,R46,R47,R48,R49, R50,R51,R52,R62,R80,R601,R605,	15
93	506-XMK-1707	展頻 IC MK1707/ICS SOIC-8	U22,	1

NO	Parts No.	Description	Part Location	Q'ty
94	151-A00-Q906A	GA980DL Front bezel	ABS HB K2440	1
95	121-500-980D	GA980DL Rear Plate SECC1.0		1
96	123-001-776DT-A	Connector Cover		1
97	154-002-782S4	GA980DL Tuner Cover	Color : 877C	1
98	154-001-GA580S4	GA980DL Key Top	Color : 877C	1
99	154-500-980DL	GA-980DL CR Bar L	Color : 877C	1
100	154-501-980DL	GA-980DL CR Bar R	Color : 877C	1
101	154-002-GA580	GA-980DL LED Lens		1
102	540-600-976DA	Insulation	For Panel back side	1
103	540-700-1976	Mylar Film 0.2t		1
104	540-600-976DB	Insulation	Rear Plate inside	1
105	154-502-980DL	GA-980DL PVC film 0.3t		1
106	126-500-976D	Hinge		1
107	123-500-0980	AL Base	Color : 877C	1
108	155-001-PS576-A	Cushion		5
109	106-006-4033-1	Screw I4*6 ISO		2
110	107-005-3032	Screw B3*5 ISO		6
111	107-006-3032	Screw B M3xL6 ISO		2
112	107-008-3032	Screw M3xL8 ISO		2
113	103-008-4033	Screw F3*8 NI		1
114	101-009-3013	Screw P3*L9mm TP1		2
115	101-010-4033-1	Screw P4*10 ISO		2
116	132-300-PS576	Base Screw Ass'y		1
117	106-012-6033	Screw M6 L 12mm		1
118	132-001-PS576-A	Springe		1
119	631-030-J976	30P 1.25-1.0 130mm		1
120	631-006-7008-A	Wire 150mm		1
121	126-030-ALP4	AL Foil 200x30mm		2
122	126-030-ALP7	AL Foil W30*L90mm		1
123	126-030-ALP	AL Foil 150x30mm		1
124	631-008-G976	8P1.5 220mm+CORE 加 SHIELD+GND		1
125	101-010-3012	Screw P3*L10mm TP1		10
126	105-008-3012	Screw T3*8mm TP1		3
127	831-411-00405	Sponge 11x405.2x2mm		2
128	831-411-00323	Sponge 11x323.5x2mm		2

NO	Parts No.	Description	Part Location	Q'ty
129	123-507-976D	AL Neck	Color : 877C	1
130	123-502-976D	NECK		1
131	151-051-980DL	Rear cover		1
132	109-950-0950	Screw	For D-SUB Connector	2
133	109-948-1000	Screw	For D-SUB Connector	2

PARTS LIST M074

SYM	PART NUMBER	DESCRIPTION	QUANT	ITEM NO.	MFRS.	INS.
C1	25MV100SGX+TS	CAPACTOR	1.	C01-004S	SANYO	
C2	N.A					
C3	C1608X7R1E104KT GRM39X7R104K25	OR CAPACTOR	1.	C03-065T C03-065U	TDK MURATA	
C4	C1608X7R1E104KT GRM39X7R104K25	OR CAPACTOR	1.	C03-065T C03-065U	TDK MURATA	
C5	N.A					
C6	C1608X7R1E104KT GRM39X7R104K25	OR CAPACTOR	1.	C03-065T C03-065U	TDK MURATA	
C7	N.A					
C8	C1608X7R1H681KT GRM39X7R681K50	OR CAPACTOR	1.	C03-082T C03-082U	TDK MURATA	
C9	N.A					
C10	C2012Y5V1C225ZT	CAPACTOR	1.	C03-446T	TDK	
C11	RSBEC3180DQJ	CAPACTOR	1.	C02-016R	ARCO	
C12	CC45SL3FD270JY	CAPACTOR	1.	C04-925T	TDK	
C13	CC45SL3FD270JY	CAPACTOR	1.	C04-925T	TDK	
C14	N.A					
C15	C1608X7R1E104KT GRM39X7R104K25	OR CAPACTOR	1.	C03-065T C03-065U	TDK MURATA	
C17	RSBEC3180DQJ	CAPACTOR	1.	C02-016R	ARCO	
C18	CC45SL3FD270JY	CAPACTOR	1.	C04-925T	TDK	
C19	CC45SL3FD270JY	CAPACTOR	1.	C04-925T	TDK	
C20	N.A					
C21	C1608X7R1E104KT GRM39X7R104K25	OR CAPACTOR	1.	C03-065T C03-065U	TDK MURATA	
C22	C1608Y5V1A105ZT GRM39Y5V105Z10	OR CAPACTOR	1.	C03-487T C03-476U	TDK MURATA	
C23	N.A					
C24	C1608Y5V1A105ZT GRM39Y5V105Z10	OR CAPACTOR	1.	C03-487T C03-476U	TDK MURATA	
C27	N.A					
C28	N.A					
C29	C2012Y5V1C225ZT	CAPACTOR	1.	C03-446T	TDK	
C30	C1608Y5V1A105ZT GRM39Y5V105Z10	OR CAPACTOR	1.	C03-487T C03-476U	TDK MURATA	
				MODEL	M074	DATE
				DRAWN	Linda	6/18/02
				DESIGNED	KEV	6/18/02
				LEADER	[Signature]	6/18/02
REV.	DATE	DESCRIPTION	DESIGNED	APV.	MANAGER	[Signature]
MULTIPAL TECHNOLOGY CORP.					EPLAM0740	PAGE 1/5

PARTS LIST M074

SYM	PART NUMBER	OR	DESCRIPTION	QUANT	ITEM NO.	MFRS.	INS.
C31	C1608Y5V1A105ZT	OR	CAPACTOR	1.	C03-487T	TDK	
	GRM39Y5V105Z10				C03-476U	MURATA	
R2	RC0805FR-220R	OR	RESISTOR	1.	R02-034Y	YAGEO	
	RMC10P2200F				R02-034K	KAMAYA	
R3	RC0603FR-10K	OR	RESISTOR	1.	R01-077Y	YAGEO	
	RMC16P1002F				R01-077K	KAMAYA	
R4	N.A						
R6	RC0603FR-100K	OR	RESISTOR	1.	R01-102Y	YAGEO	
	RMC16P1003F				R01-102K	KAMAYA	
R7	RC0603FR-100K	OR	RESISTOR	1.	R01-102Y	YAGEO	
	RMC16P1003F				R01-102K	KAMAYA	
R8	RC0603FR-750K	OR	RESISTOR	1.	R01-124Y	YAGEO	
	RMC16P7503F				R01-124K	KAMAYA	
R9	RC0603FR-10K	OR	RESISTOR	1.	R01-077Y	YAGEO	
	RMC16P1002F				R01-077K	KAMAYA	
R10	RC0603FR-10K	OR	RESISTOR	1.	R01-077Y	YAGEO	
	RMC16P1002F				R01-077K	KAMAYA	
R11	RC0603FR-10K	OR	RESISTOR	1.	R01-077Y	YAGEO	
	RMC16P1002F				R01-077K	KAMAYA	
R12	N.A						
R13	RC0805FR-3K	OR	RESISTOR	1.	R02-062Y	YAGEO	
	RMC10P3001F				R02-062K	KAMAYA	
R14	N.A						
R15	N.A						
R16	RC0603FR-33K	OR	RESISTOR	1.	R01-088Y	YAGEO	
	RMC16P3302F				R01-088K	KAMAYA	
R17	N.A		RESISTOR				
R18	RC1206FR-1K	OR	RESISTOR	1.	R03-052Y	YAGEO	
	RMC14P1001F				R03-052K	KAMAYA	
R19	RC0603FR-1K	OR	RESISTOR	1.	R01-052Y	YAGEO	
	RMC16P1001F				R01-052K	KAMAYA	
R20	RC0805FR-43K	OR	RESISTOR	1.	R02-091Y	YAGEO	
	RMC10P4302F				R02-091K	KAMAYA	
R21	RC0603FR-100K	OR	RESISTOR	1.	R01-102Y	YAGEO	
	RMC16P1003F				R01-102K	KAMAYA	
R22	RC0603FR-51K	OR	RESISTOR	1.	R01-093Y	YAGEO	
					MODEL	M074	DATE
					DRAWN	Linda	6/18/02
					DESIGNED	KEN	6/18/02
					LEADER	Ken	6/18/02
REV.	DATE	DESCRIPTION	DESIGNED	APV.	MANAGER	D. H. ...	6/18/02
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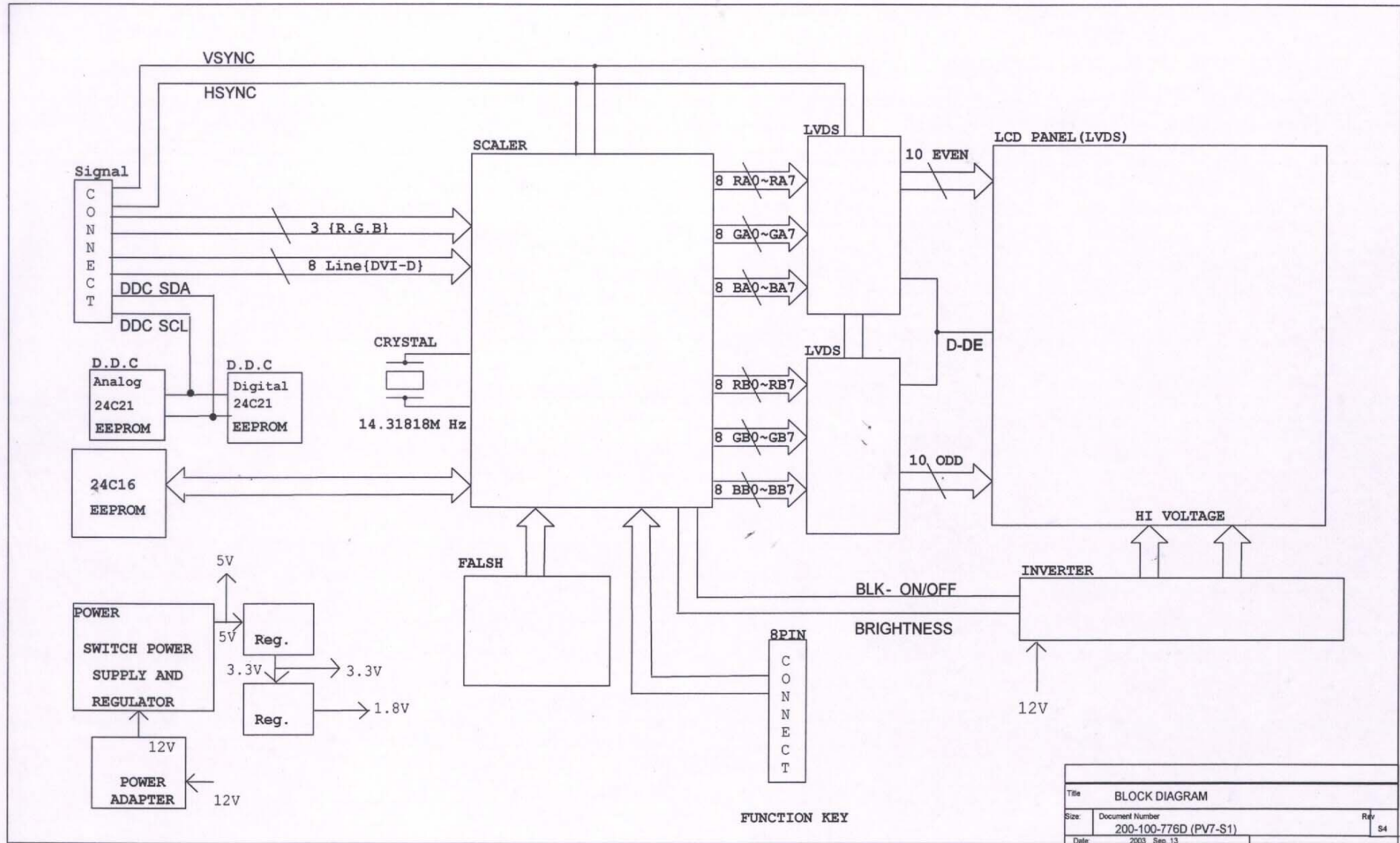
PARTS LIST M074

SYM	PART NUMBER	DESCRIPTION	QUANT	ITEM NO.	MFRS.	INS.
R22	RMC16P5102F	RESISTOR	1.	R01-093K	KAMAYA	
R23	RC0603FR-62K OR RMC16P6202F	RESISTOR	1.	R01-097Y R01-097K	YAGEO KAMAYA	
R24	RC0805FR-3K OR RMC10P3001F	RESISTOR	1.	R02-062Y R02-062K	YAGEO KAMAYA	
R25	N.A					
R26	N.A					
R27	RC0603FR-33K OR RMC16P3302F	RESISTOR	1.	R01-088Y R01-088K	YAGEO KAMAYA	
R28	RC1206FR-1K OR RMC14P1001F	RESISTOR	1.	R03-052Y R03-052K	YAGEO KAMAYA	
R29	N.A					
R30	RC0603FR-1K OR RMC16P1001F	RESISTOR	1.	R01-052Y R01-052K	YAGEO KAMAYA	
R31	RC0805FR-43K OR RMC10P4302F	RESISTOR	1.	R02-091Y R02-091K	YAGEO KAMAYA	
R32	RC0603FR-100K OR RMC16P1003F	RESISTOR	1.	R01-102Y R01-102K	YAGEO KAMAYA	
R33	RC0603FR-51K OR RMC16P5102F	RESISTOR	1.	R01-093Y R01-093K	YAGEO KAMAYA	
R34	RC0603FR-62K OR RMC16P6202F	RESISTOR	1.	R01-097Y R01-097K	YAGEO KAMAYA	
R35	RC0603FR-62K OR RMC16P6202F	RESISTOR	1.	R01-097Y R01-097K	YAGEO KAMAYA	
R36	RC0603FR-10K OR RMC16P1002F	RESISTOR	1.	R01-077Y R01-077K	YAGEO KAMAYA	
R37	RC0603FR-10K OR RMC16P1002F	RESISTOR	1.	R01-077Y R01-077K	YAGEO KAMAYA	
R38	RC0603FR-100R OR RMC16P1000F	RESISTOR	1.	R01-027Y R01-027K	YAGEO KAMAYA	
R39	RC0603FR-100R OR RMC16P1000F	RESISTOR	1.	R01-027Y R01-027K	YAGEO KAMAYA	
R40	N.A					
R41	RC1206FR-1K OR RMC14P1001F	RESISTOR	1.	R03-052Y R03-052K	YAGEO KAMAYA	
R42	N.A					
				MODEL	M074	DATE
				DRAWN	Linda	6/18/02
				DESIGNED	KEV	6/18/02
				LEADER	John	6/18/02
REV.	DATE	DESCRIPTION	DESIGNED	APV.	MANAGER	6/18/02
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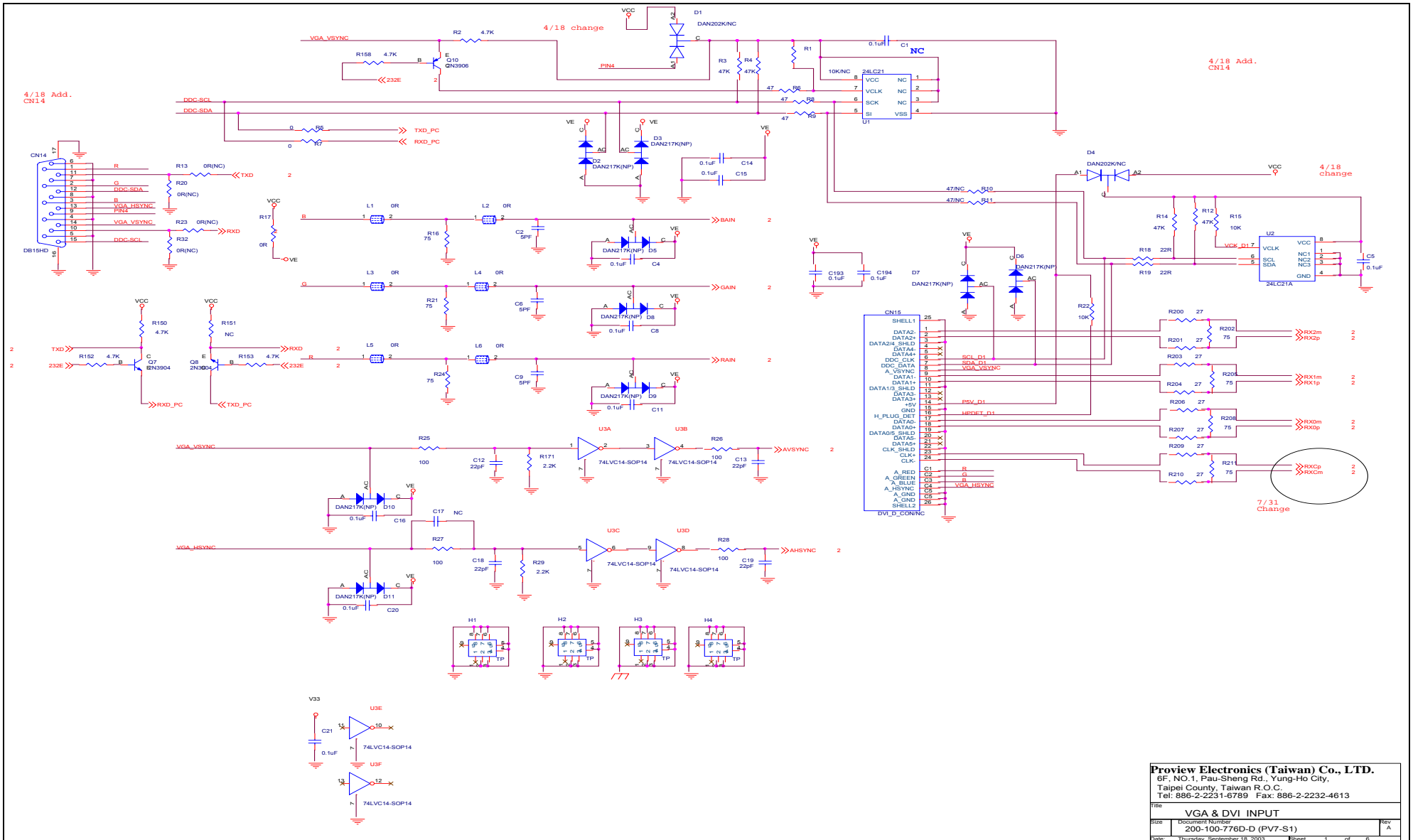
PARTS LIST M074

SYM	PART NUMBER	OR	DESCRIPTION	QUANT	ITEM NO.	MFRS.	INS.
R43	RC1206FR-1K	OR	RESISTOR	1.	R03-052Y	YAGEO	
	RMC14P1001F				R03-052K	KAMAYA	
R44	N.A						
R45	N.A						
J1	JS-1125R-06	OR	CONNECTOR	1.	J01-002Y	CHYAO SHIUNN	
	JH2-20-0648				J01-002B	FCN	
G1	C002		CABLE	1.	G02-003J	JST	
G2	C002		CABLE	1.	G02-003J	JST	
F1	3216FF 3A	OR	FUSE	1.	F01-003B	BUSINNES	
	429 003				F01-003L	LITTELFUSE	
B1	M074	OR	PCB	1.	B02-074P/3	POL	
	M074				B02-074H/3	CHIUN YANG	
T1	T08118	OR	TRANSFORMER	1.	T02-033T	TMP	
	TME011925065				T02-033R	TRANSMORE	
T2	T08118	OR	TRANSFORMER	1.	T02-033T	TMP	
	TME011925065				T02-033R	TRANSMORE	
L1	D108C-101K	OR	INDUCTOR	1.	L01-023L	LONGVIEW	
	RCP1008-101K				L01-023S	STAR	
L2	D108C-101K	OR	INDUCTOR	1.	L01-023L	LONGVIEW	
	RCP1008-101K				L01-023S	STAR	
U1	BA9741FP-E2		IC	1.	U02-005R	ROHM	
D1	EC21QS04-TE12R	OR	DIODE	1.	D02-002I	INTECH	
	SMA240LV				D02-002F	FCI	
D3	UDZS TE-1713B	OR	DIODE	1.	D03-018R	ROHM	
	KDZ13V				D03-018K	KEC	
D5	MA157A	OR	DIODE	1.	D01-002P	PANASONIC	
	DAN217 T146	OR			D01-002R	ROHM	
	1SS226-TE85L				D01-002T	TOSHIBA	
D6	EC21QS04-TE12R	OR	DIODE	1.	D02-002I	INTECH	
	SMA240LV				D02-002F	FCI	
D8	UDZS TE-1713B	OR	DIODE	1.	D03-018R	ROHM	
	KDZ13V				D03-018K	KEC	
D10	MA157A	OR	DIODE	1.	D01-002P	PANASONIC	
	DAN217 T146	OR			D01-002R	ROHM	
	1SS226-TE85L				D01-002T	TOSHIBA	
Q1	DTC114EUA T106	OR	TRANSISTOR	1.	Q02-002R	ROHM	
					MODEL	M074	DATE
					DRAWN	Linda	6/18/02
					DESIGNED	Ken	6/18/02
					LEADER	Wan	6/18/02
REV.	DATE	DESCRIPTION	DESIGNED	APV.	MANAGER	Q. A. - dm	6/18/02
MULTIPAL TECHNOLOGY CORP.					EPLAM0740		PAGE 4/5

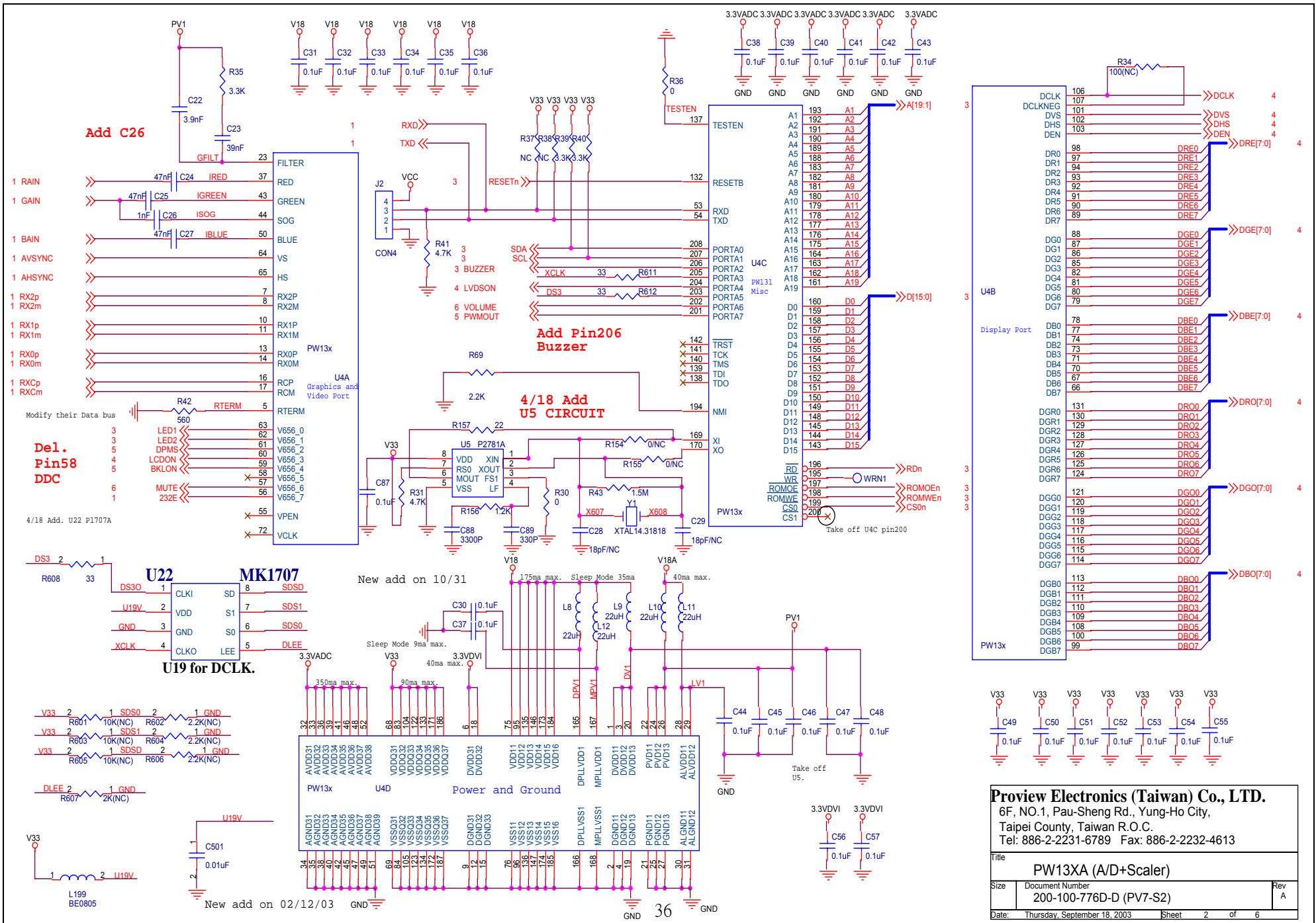
I. BLOCK DIAGRAM



J. SCHEMATIC DIAGRAM

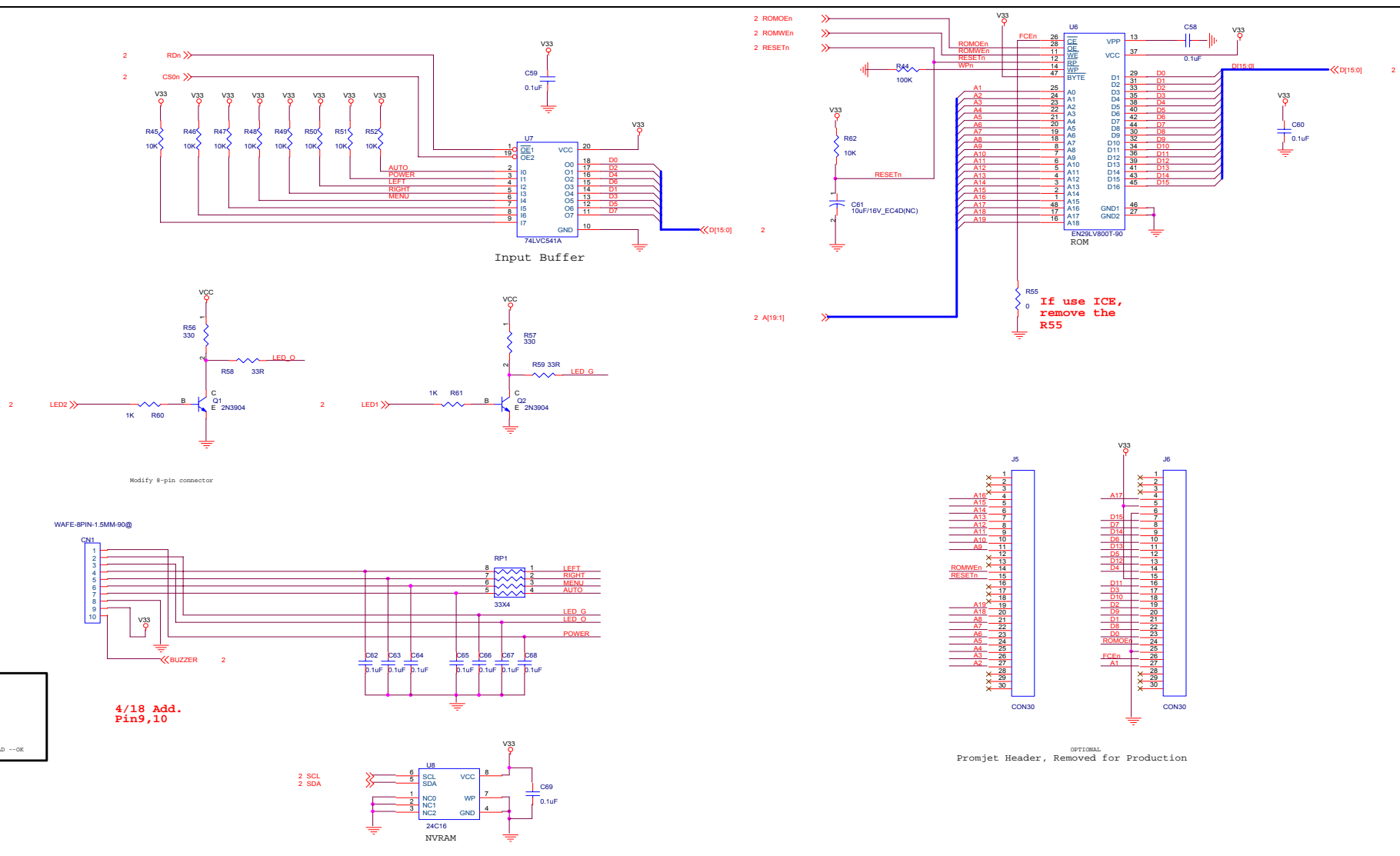


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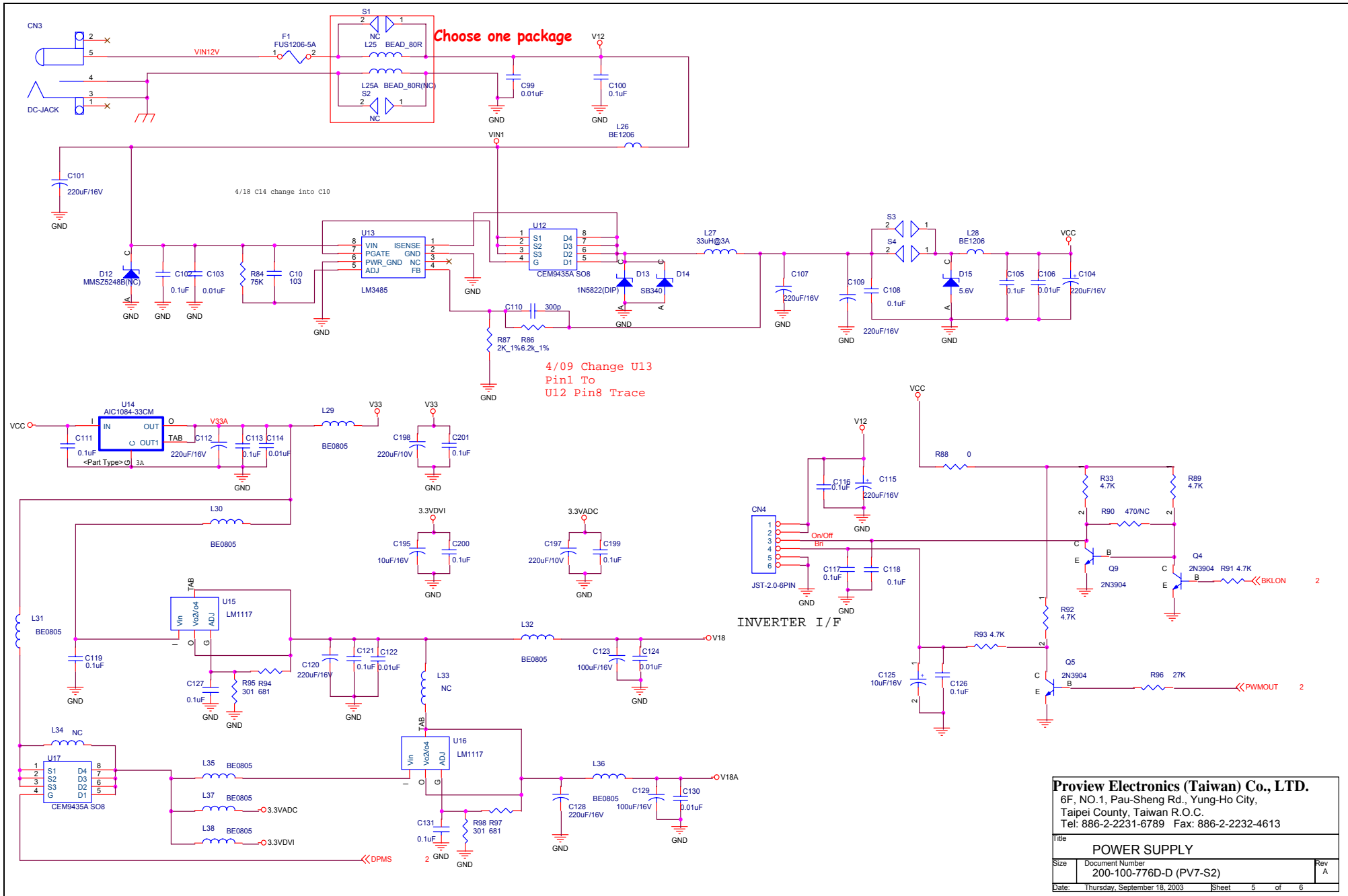


- 1. POWER
 - 2. LED G
 - 3. LED O
 - 4. DOWN
 - 5. UP
 - 6. MENU
 - 7. AUTO
 - 8. GND
 - 9. V33
 - 10. BUZZER
- PROVIEW KEY PAD --OK

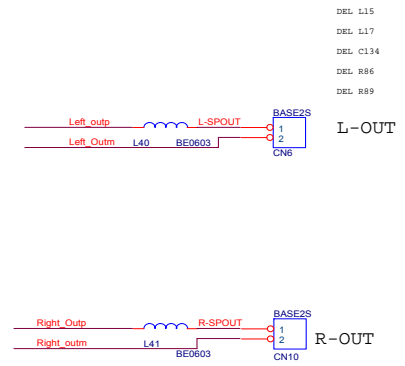
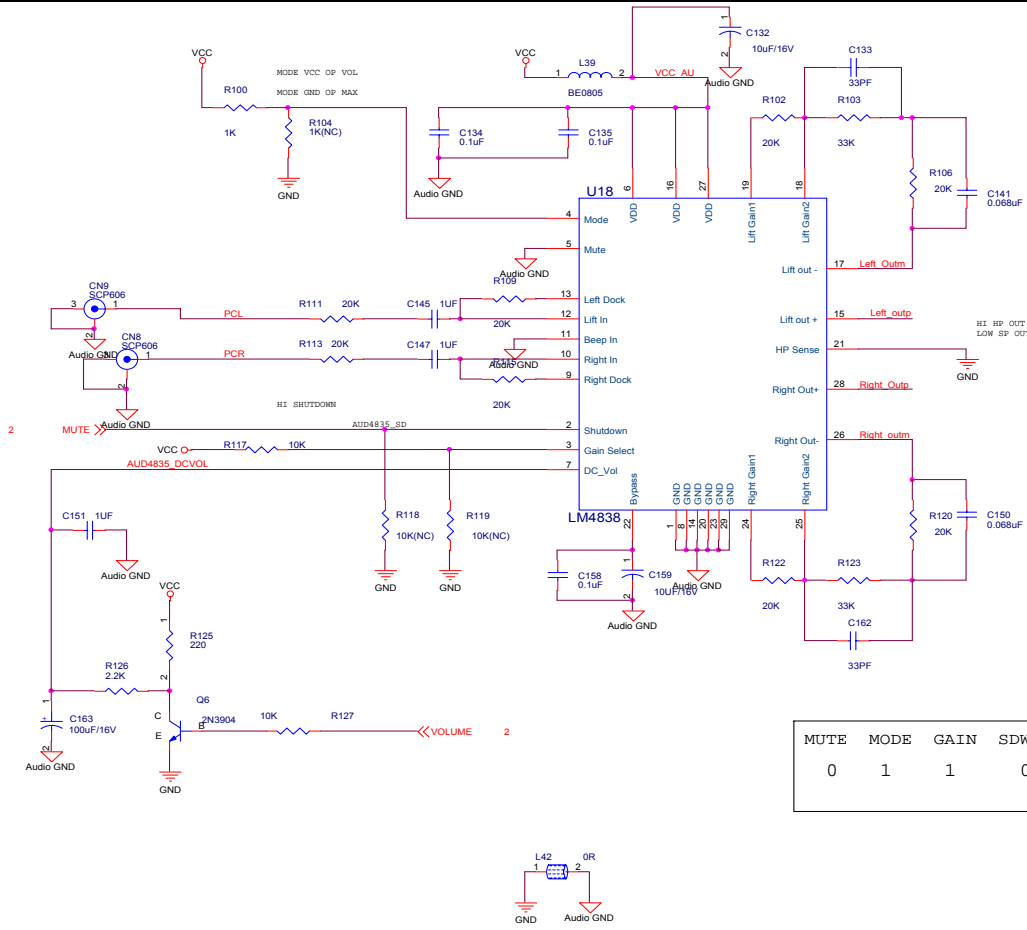
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Take off
 C136,137,138,139,140,142,143,144,146,148,149
 C152,153,154,155,156,157,160,161,159,203
 R99,101,105,107,108,110,112,114,116,121,124
 R148,149,D16,CMS,CN7



MUTE	MODE	GAIN	SDWN	HPS
0	1	1	0	0

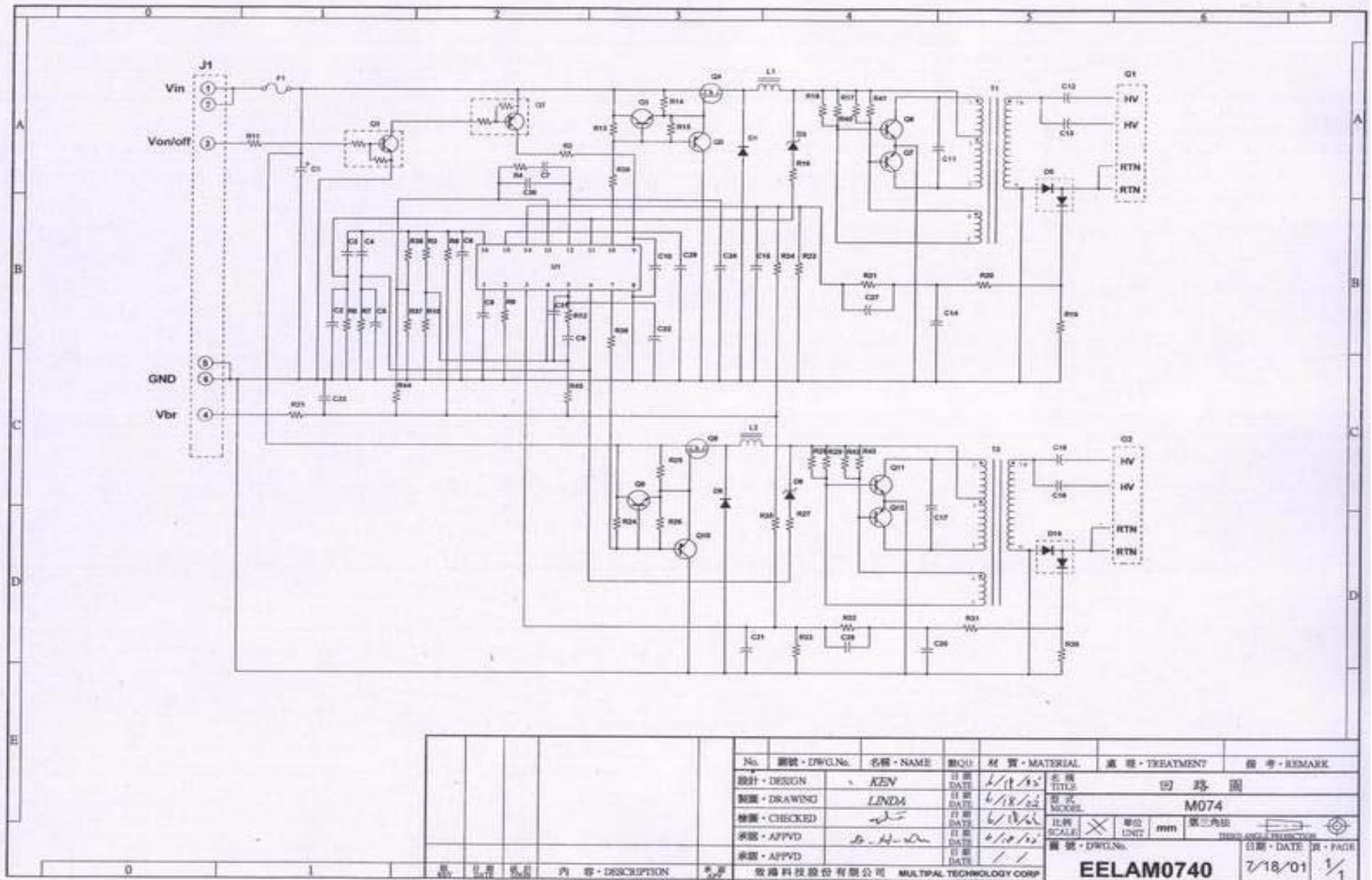
3/18 change GND



DEL L15
 DEL L17
 DEL C134
 DEL R86
 DEL R89

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AUDIO		
Size	Document Number	Rev
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