



LCD-Monitor

**Chassis : LS20EFH
LS22EFH
LS23EFH**

**Model : P2070
P2270
P2370**

SERVICE^{Manual}

TFT-LCD Monitor



P2070 / P2270 / P2370

Contents

- 1. Precautions**
- 2. Product specifications**
- 3. Disassembly and Reassemble**
- 4. Troubleshooting**
- 5. Exploded View & Part List**
- 6. Wiring Diagram**
- 7. Schematic Diagram**

Refer to the service manual in the GSPN (see the rear cover) for the more information.

Contents

1. Precautions	1-1
1-1. Safety Precautions	1-1
1-2. Servicing Precautions	1-2
1-3. Static Electricity Precautions	1-2
1-4. Installation Precautions	1-3
2. Product specifications	2-1
2-1. Feature & Specifications.....	2-1
2-2. Spec Comparison to the Old Models	2-3
2-3. Accessories	2-4
3. Disassembly and Assembly	3-1
3-1. Disassembly	3-1
4. Troubleshooting	4-1
4-1. Troubleshooting	4-1
4-2. When the power does Not Turn on.....	4-2
4-3. When the screen is blank (Analog).....	4-4
4-4. When a blank screen is displayed (Digital).....	4-7
4-5. Error Examples and Actions	4-10
4-6. Adjustment.....	4-11
5. Exploded View & Part List	5-1
5-1. Exploded View (P2070)	5-1
5-2. Parts List (P2070).....	5-3
5-3. Exploded View (P2270)	5-11
5-4. Parts List (P2270).....	5-13
5-5. Exploded View (P2370)	5-21
5-6. Parts List (P2370).....	5-23
6. Wiring Diagram	6-1
6-1. Wiring Diagram - Main Board	6-1
6-2. Wiring Diagram - IP Board.....	6-2
6-3. Connector Functions	6-3
6-4. Cables	6-3
7. Schematic Diagram	7-1
7-1. Circuit Descriptions.....	7-1
7-2. Schematic Diagrams (Power Flowchart)	7-2
7-3. Schematic Diagrams (Scaler Part)	7-3
7-4. Schematic Diagrams (IP Board)	7-4
7-5. Schematic Diagrams (Main PBA)	7-5



GSPN (Global Service Partner Network)

Area	Web Site
North America	http://service.samsungportal.com
Latin America	http://latin.samsungportal.com
CIS	http://cis.samsungportal.com
Europe	http://europe.samsungportal.com
China	http://china.samsungportal.com
Asia	http://asia.samsungportal.com
Mideast & Africa	http://mea.samsungportal.com

This Service Manual is a property of Samsung Electronics Co.,Ltd.
Any unauthorized use of Manual can be punished under applicable
International and/or domestic law.

© 2009 Samsung Electronics Co.,Ltd.
All rights reserved.
Printed in Korea
P/N: BN82-00523A-00

1. Precautions

1-1. Safety Precautions

Follow these safety, servicing and ESD precautions to prevent damage and to protect against potential hazards such as electrical shock.

1-1-1. Warnings

1. For continued safety, do not attempt to modify the circuit board.
2. Disconnect the AC power and DC power jack before servicing.

1-1-2. Servicing the LCD Monitor

1. When servicing the LCD Monitor, Disconnect the AC line cord from the AC outlet.
2. It is essential that service technicians have an accurate voltage meter available at all times. Check the calibration of this meter periodically.

1-1-3. Fire and Shock Hazard

Before returning the monitor to the user, perform the following safety checks:

1. Inspect each lead dress to make certain that the leads are not pinched or that hardware is not lodged between the chassis and other metal parts in the monitor.
2. Inspect all protective devices such as nonmetallic control knobs, insulating materials, cabinet backs, adjustment and compartment covers or shields, isolation resistorcapacitor networks, mechanical insulators, etc.
3. Leakage Current Hot Check (Figure 1-1):

WARNING : Do not use an isolation transformer during this test.

Use a leakage current tester or a metering system that complies with American National Standards Institute (ANSI C101.1, Leakage Current for Appliances), and Underwriters Laboratories (UL Publication UL1410, 59.7).

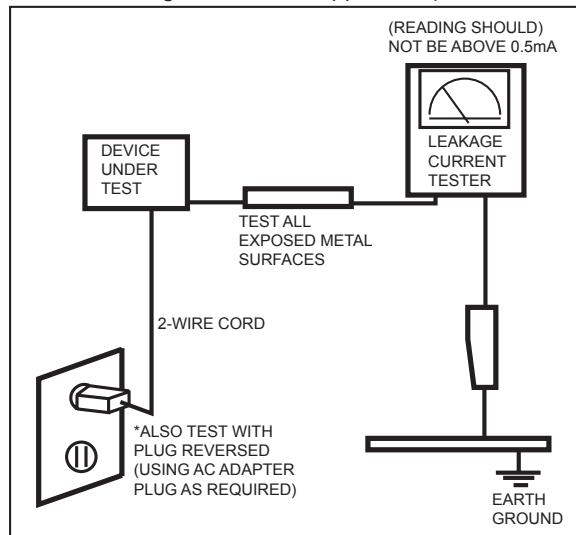


Figure 1-1. Leakage Current Test Circuit

4. With the unit completely reassembled, plug the AC line cord directly into a 120V AC outlet. With the unit's AC switch first in the ON position and then OFF, measure the current between a known earth ground (metal water pipe, conduit, etc.) and all exposed metal parts, including: metal cabinets, screwheads and control shafts.

The current measured should not exceed 0.5 milliamp.

Reverse the power-plug prongs in the AC outlet and repeat the test.

1-1-4. Product Safety Notices

Some electrical and mechanical parts have special safetyrelated characteristics which are often not evident from visual inspection. The protection they give may not be obtained by replacing them with components rated for higher voltage, wattage, etc. Parts that have special safety characteristics are identified by \triangle on schematics and parts lists. A substitute replacement that does not have the same safety characteristics as the recommended replacement part might create shock, fire and/or other hazards. Product safety is under review continuously and new instructions are issued whenever appropriate.

1-2. Servicing Precautions

WARNING: An electrolytic capacitor installed with the wrong polarity might explode.

Caution: Before servicing units covered by this service manual, read and follow the Safety Precautions section of this manual.

Note: If unforeseen circumstances create conflict between the following servicing precautions and any of the safety precautions, always follow the safety precautions.

1-2-1 General Servicing Precautions

1. Always unplug the unit's AC power cord from the AC power source and disconnect the DC Power Jack before attempting to:
(a) remove or reinstall any component or assembly, (b) disconnect PCB plugs or connectors, (c) connect a test component in parallel with an electrolytic capacitor.
2. Some components are raised above the printed circuit board for safety. An insulation tube or tape is sometimes used. The internal wiring is sometimes clamped to prevent contact with thermally hot components. Reinstall all such elements to their original position.
3. After servicing, always check that the screws, components and wiring have been correctly reinstalled. Make sure that the area around the serviced part has not been damaged.
4. Check the insulation between the blades of the AC plug and accessible conductive parts (examples: metal panels, input terminals and earphone jacks).
5. Insulation Checking Procedure: Disconnect the power cord from the AC source and turn the power switch ON. Connect an insulation resistance meter (500 V) to the blades of the AC plug.
The insulation resistance between each blade of the AC plug and accessible conductive parts (see above) should be greater than 1 megohm.
6. Always connect a test instrument's ground lead to the instrument chassis ground before connecting the positive lead; always remove the instrument's ground lead last.

1-3. Static Electricity Precautions

Some semiconductor (solid state) devices can be easily damaged by static electricity. Such components are commonly called Electrostatically Sensitive Devices (ESD). Examples of typical ESD are integrated circuits and some field-effect transistors. The following techniques will reduce the incidence of component damage caused by static electricity.

1. Immediately before handling any semiconductor components or assemblies, drain the electrostatic charge from your body by touching a known earth ground. Alternatively, wear a discharging wrist-strap device. To avoid a shock hazard, be sure to remove the wrist strap before applying power to the monitor.
2. After removing an ESD-equipped assembly, place it on a conductive surface such as aluminum foil to prevent accumulation of an electrostatic charge.
3. Do not use freon-propelled chemicals. These can generate electrical charges sufficient to damage ESDs.
4. Use only a grounded-tip soldering iron to solder or desolder ESDs.
5. Use only an anti-static solder removal device. Some solder removal devices not classified as "anti-static" can generate electrical charges sufficient to damage ESDs.
6. Do not remove a replacement ESD from its protective package until you are ready to install it. Most replacement ESDs are packaged with leads that are electrically shorted together by conductive foam, aluminum foil or other conductive materials.
7. Immediately before removing the protective material from the leads of a replacement ESD, touch the protective material to the chassis or circuit assembly into which the device will be installed.
Caution: Be sure no power is applied to the chassis or circuit and observe all other safety precautions.
8. Minimize body motions when handling unpackaged replacement ESDs. Motions such as brushing clothes together, or lifting your foot from a carpeted floor can generate enough static electricity to damage an ESD.

1-4. Installation Precautions

1. For safety reasons, more than two people are required for carrying the product.
2. Keep the power cord away from any heat emitting devices, as a melted covering may cause fire or electric shock.
3. Do not place the product in areas with poor ventilation such as a bookshelf or closet. The increased internal temperature may cause fire.
4. Bend the external antenna cable when connecting it to the product. This is a measure to protect it from being exposed to moisture. Otherwise, it may cause a fire or electric shock.
5. Make sure to turn the power off and unplug the power cord from the outlet before repositioning the product. Also check the antenna cable or the external connectors if they are fully unplugged. Damage to the cord may cause fire or electric shock.
6. Keep the antenna far away from any high-voltage cables and install it firmly. Contact with the highvoltage cable or the antenna falling over may cause fire or electric shock.
7. When installing the product, leave enough space (10cm) between the product and the wall for ventilation purposes. A rise in temperature within the product may cause fire.

Memo

2. Product specifications

2-1. Feature & Specifications

Model	P2070 / P2270 / P2370					
Feature						
<ul style="list-style-type: none"> ▶ Panel Specification : 250cd/m2, 5ms(G to G 2ms), CR 1000:1(DCR 50000:1), 170/160 ▶ DPMS : <1.0W(Typical), <1.2W(Max) ▶ Off-Timer function for reducing standby power usages ▶ Windows Vista authentication ▶ DVI with HDCP (dual model) ▶ Picture;a screen size desire ▶ Supported Color Effect: Black and white/Sepia/Aqua/Green 						
Specifications						
Item	Description					
Models	P2070	P2270	P2370			
LCD Panel	TFT-LCD panel, RGB vertical stripe, normally white transmissive,	TFT-LCD panel, RGB vertical stripe, normally white transmissive,	TFT-LCD panel, RGB vertical stripe, normally white transmissive,			
	20.0" Wide viewable 0.2768(H) x 0.2768(V) mm pixel pitch	21.6" Wide viewable 0.248(H) X 0.248(V)mm pixel pitch.	23.0" Wide viewable 0.2655(H) x 0.2655(V) mm pixel pitch			
Scanning Frequency	Horizontal : 30KHz ~ 75KHz Vertical: 56Hz ~ 61Hz	Horizontal : 30KHz ~ 75KHz Vertical: 56Hz ~ 61Hz	Horizontal : 30KHz ~ 75KHz Vertical: 56Hz ~ 61Hz			
Display Colors	16.7 Million colors	16.7 Million colors	16.7 Million colors			
Maximum resolution	Horizontal: 1600 Pixels Vertical: 900 Pixels (60Hz)	Horizontal: 1920 Pixels Vertical: 1080 Pixels (60Hz)	Horizontal: 1920 Pixels Vertical: 1080 Pixels (60Hz)			
Input Signal	DVI-I with HDCP	DVI-I with HDCP	DVI-I with HDCP			
Input Sync Signal	Separate H/V sync, Composite H/V, Sync-on-Green Level: TTL level	Separate H/V sync, Composite H/V, Sync-on-Green Level: TTL level	Separate H/V sync, Composite H/V, Sync-on-Green Level: TTL level			
Maximum Pixel Clock rate	164 MHz	164 MHz	164 MHz			
Active Display (Horizontal/Vertical)	442.8(H) x 249.075(V)	477.504(H) X 268.596(V)	509.76(H) x 286.74(V)			
AC power voltage & Frequency	AC 110V~130V, 60Hz & AC, 200V~240V 50Hz	AC 110V~130V, 60Hz & AC, 200V~240V 50Hz	AC 110V~130V, 60Hz & AC, 200V~240V 50Hz			
Power Consumption	MAX 28W/Typical 26W	Max 30W / Typical 28W	MAX 32W/Typical 30W			
Dimensions Set (W x D x H)	500.0mm x 325.0mm x 47.0 mm (Without Stand) 500.0mm x 382.0mm x 190.0 mm (With Stand)	536.3 x 403.0 x 189.5 mm (Without Stand) 536.3 x 345.2 x 49.6 mm (With Stand)	571.0mm x 423.0mm x 190.5 mm (Without Stand) 571.0mm x 364.5mm x 47.0 mm (With Stand)			
Weight (Set/Package)	Set 3.0kg(without stand) / 3.3kg(with stand) / Package : 5.0kg	Set 3.3kg(without stand) / 3.6kg(with stand) / Package : 5.3kg	Set 3.8kg(without stand) / 4.1kg(with stand) / Package : 5.9kg			

2. Product specifications

Specifications			
Item	Description		
Models	P2070	P2270	P2370
Environmental Considerations	Operating Temperature: 10°C ~ 50°C(50°F ~ 122°F) Operating Humidity : 10% ~ 90% Operating Temperature: -20°C ~ 45°C(-4°F ~ 113°F) Operating Humidity: 5% ~ 90%		
Note: Designs and specifications are subject to change without prior notice.			

2-2. Spec Comparison to the Old Models

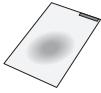
Model	ECOFIT(P2070 / P2270 / P2370)	CREAM (2333SW)
Design		
Resolution	P2070 : 1600 x 900 P2270/P2370 : 1920 x 1080	1920x1080
Input	DVI-I with HDCP	Analog / DVI digital with HDCP
Response Time	5ms(G to G 2ms)	5ms(W to B)
Viewing Angle	170/160(CR>10)	170/160(CR>10)
Brightness	250 cd/m ²	300 cd/m ²
Contrast	50000:1(DCR)	20000:1(DCR)
MagicBright	7 step	7 step
Feature	Magic Color Color Effect Image Size Magic Bright3 Magic Tune(Premium)	Magic Color Color Effect Image Size Magic Bright3 Magic Tune (Premium)

*Color Effect

- Grey scale: Images are displayed in a grey tone on the screen.
- Green: Images are displayed in a green tone on the screen.
- Aqua: Images are displayed in a blue tone on the screen.
- Sepia: Images are displayed in a brown tone on the screen.

Image Size : If the resolution is not wide resolution, this option allows the screen size to be selected as normal or wide.

2-3. Accessories

Product	Description	Code. No	Remark
	Quick Setup Guide	BN68-01650A	
	Warranty Card (Not available in all locations)	BH68-00633B	
	User's Guide, Monitor Driver, Natural Color Pro Software	BN96-09890A	
	Stand Body	BN96-09628A	
	Stand Base	BN96-09629A	
	CBF SIGNAL-DVI(I) to D-sub 1,500mm(1.5M)	BN39-00310D	Samsung Electronics Service center
	Power Cord 1,830mm(1.8M)	3903-000085	
	Adator (12V/3V)	BN44-00139A	
	Cleaning Cloth 160mm x 120mm	BN63-02368B	
	DVI Cable 1,500mm(1.5M)	BN39-00246L	

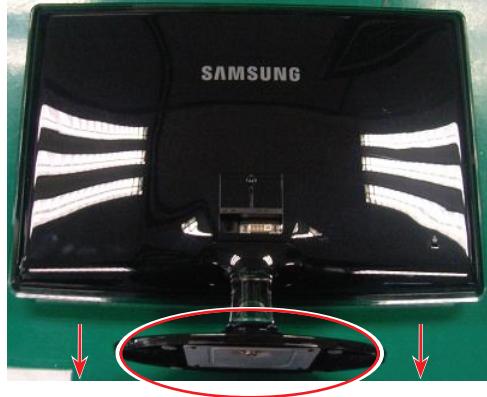
3. Disassembly and Assembly

This section describes the disassembly and reassembly sequences for this monitor.

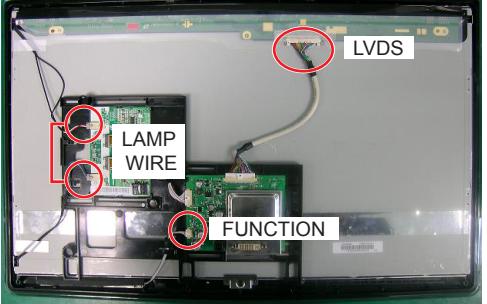
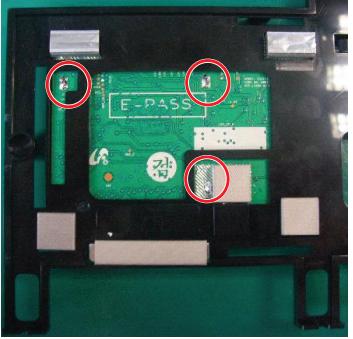
⚠ Warning: As this monitor has parts that are sensitive to static electricity, be careful when handling them.

3-1. Disassembly

- ⚠ Caution:**
1. Turn the monitor off before beginning the disassembly process.
 2. When disassembling the monitor, do not use any metal tools except for the provided jig.
 3. Disassemble the monitor carefully as directed in the following procedures.
 4. When assembling and disassembling the monitor, the gasket attached to the PCB may be detached from the PCB. Therefore, make sure to check whether it is attached to the PCB correctly. If it is detached from the PCB, make sure to reattach it.

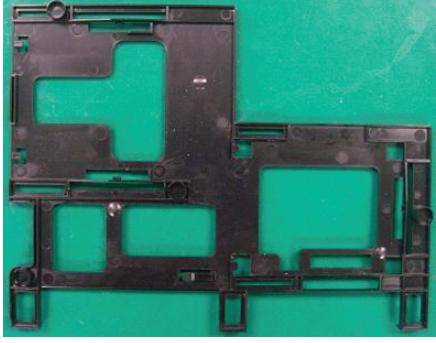
Description	Photo	Screws
<p>1. Place a soft cloth on the floor and place the monitor on it so that the front of the monitor is on the cloth.</p> <p>⚠ Caution: If you do not tilt the stand and use too much force to remove it, the connection pin may break.</p>		
<p>2. Hold one edge of the FRONT-COVER and push it downwards to separate it.</p>		

3. Disassembly and Assembly

Description	Photo	Screws
3. Separate the other side in the same way.		
4. Lift the REAR-COVER up to separate it.		
5. Remove the LVDS(FFC Cable), LAMP wire, Function cable.		
6. Remove the LCD panel.		
7. Remove the lead from the three (3) soldering parts at the back of the PCB, as shown in the figure. ⚠ Caution: When assembling and disassembling the monitor, the gasket attached to the PCB may be detached from the PCB. Therefore, make sure to check whether it is attached to the PCB correctly. If it is detached from the PCB, make sure to reattach it.		

Description	Photo	Screws
8. Remove the two (2) hexagonal screws, as shown in the figure.		
9. Lift the shield upwards and remove it.		
10. Separate the Inverter, Main PBA .		
11. Pulling over the direction of arrow as shown in the figure.		

3. Disassembly and Assembly

Description	Photo	Screws
12. Separate the Inverter, Main PBA and SHIELD-MAIN.		
13. HOLDER SUB-PCB.		

※ The assembly is in the reverse order of disassembly.

4. Troubleshooting

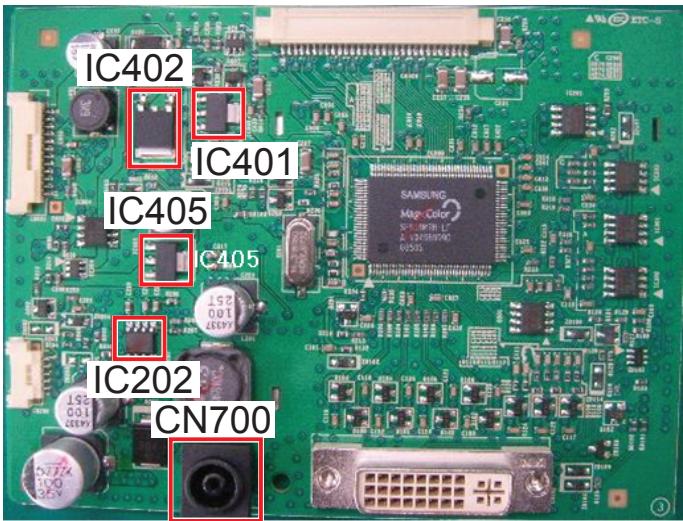
4-1. Troubleshooting

1. Set custom mode as follows before beginning a repair.

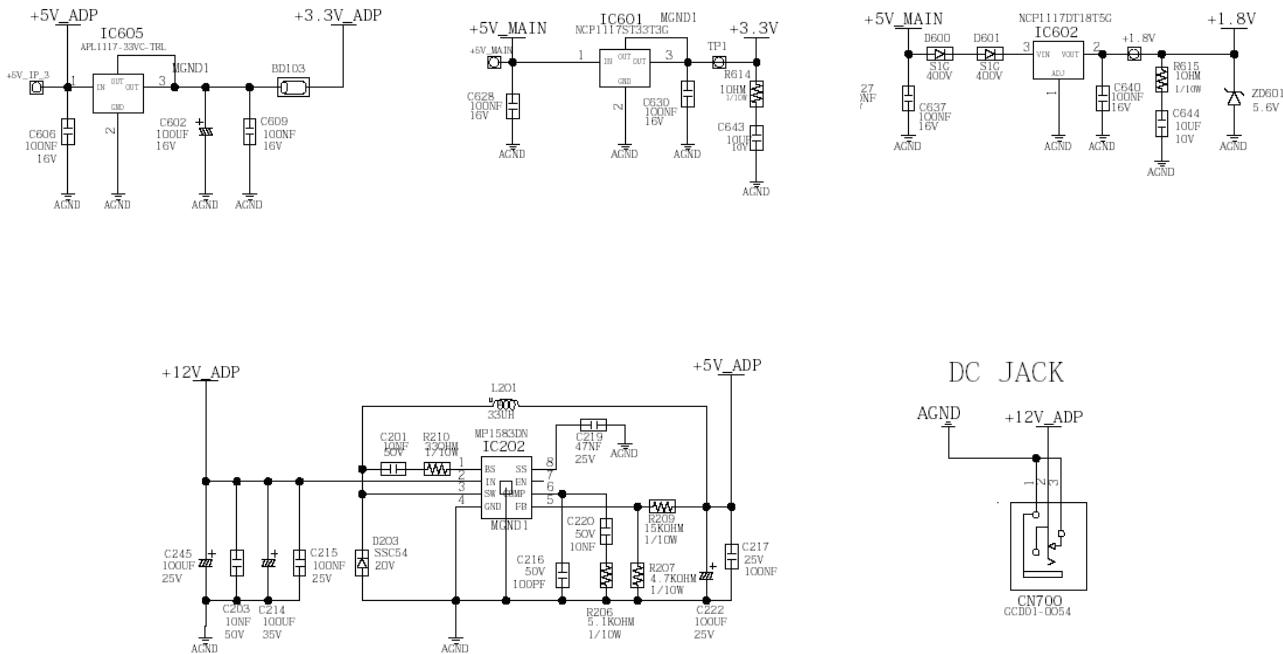
P2070	P2270/P2370
<ul style="list-style-type: none">• Resolution: 1600 x 900• H-frequency: 60.000kHz• V-frequency: 60.000Hz	<ul style="list-style-type: none">• Resolution: 1920 x 1080• H-frequency: 67.500kHz• V-frequency: 60.000Hz

2. If the screen is blank, check whether the power cord is connected correctly.
3. The circuits to check:
 - When the raster does not appear: The Function PBA, Main PBA, Inverter, Adaptor
 - When 5V is generated but a blank screen is displayed : Main PBA
 - When 12V is not Generated : Adaptor
4. "Press the MENU button and hold down the, " [] (Enter, Source)" button for more than five (5) seconds to return the monitor to factory mode.

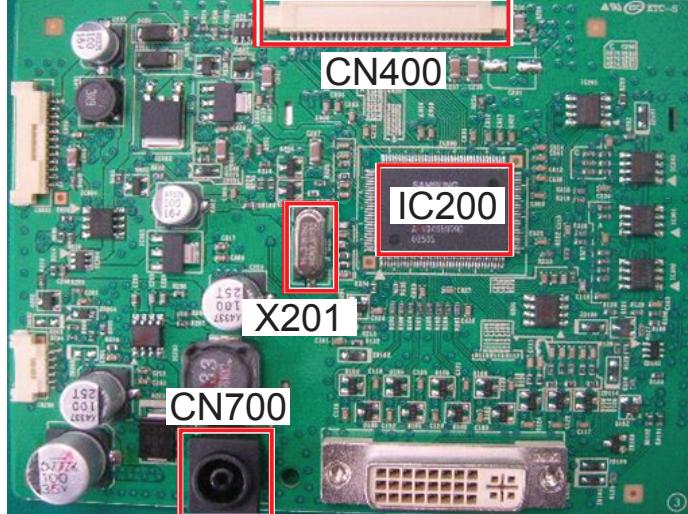
4-2. When the power does Not Turn on

Symptom	<ul style="list-style-type: none"> - When turning on the power button after connecting Adaptor, the LED at the front of the monitor does not operate.
Major checkpoints	<ul style="list-style-type: none"> - Check the Adaptor power fuse and the Adaptor output power. - Check the connections for Adaptor and the Main board inside the monitor. - Check the Main board power part and also check whether there is any abnormal output at any of the other output terminals
	
Diagnostics	<pre> graph TD A[Is DC12V measured at pins2 of the CN700 connector when pins 1,3 are 0V?] -- Yes --> B[Check the connection status for the function ass'y.] A -- No --> C[Replace the Adaptor.] C --> D[Is DC5V measured at C222 when pin2 of IC202 is DC 12V?] D -- No --> E[Check the circuits related to IC202.] D -- Yes --> F[Is DC3.3V measured at pin3 of the IC605 when pin1 is DC 5V?] F -- No --> G[Check the circuits related to IC605.] F -- Yes --> H[Is DC3.3V measured at pin3 of the IC601 when pin1 is DC 5V?] H -- No --> I[Check the circuits related to IC601.] H -- Yes --> J[Is DC1.8V measured at pin1 of the IC602 when pin3 is DC 5V?] J -- No --> K[Check the circuits related to IC602.] J -- Yes --> L[Check and replace the Adaptor.] </pre>
Caution	Make sure to disconnect the power before working on the Adaptor.

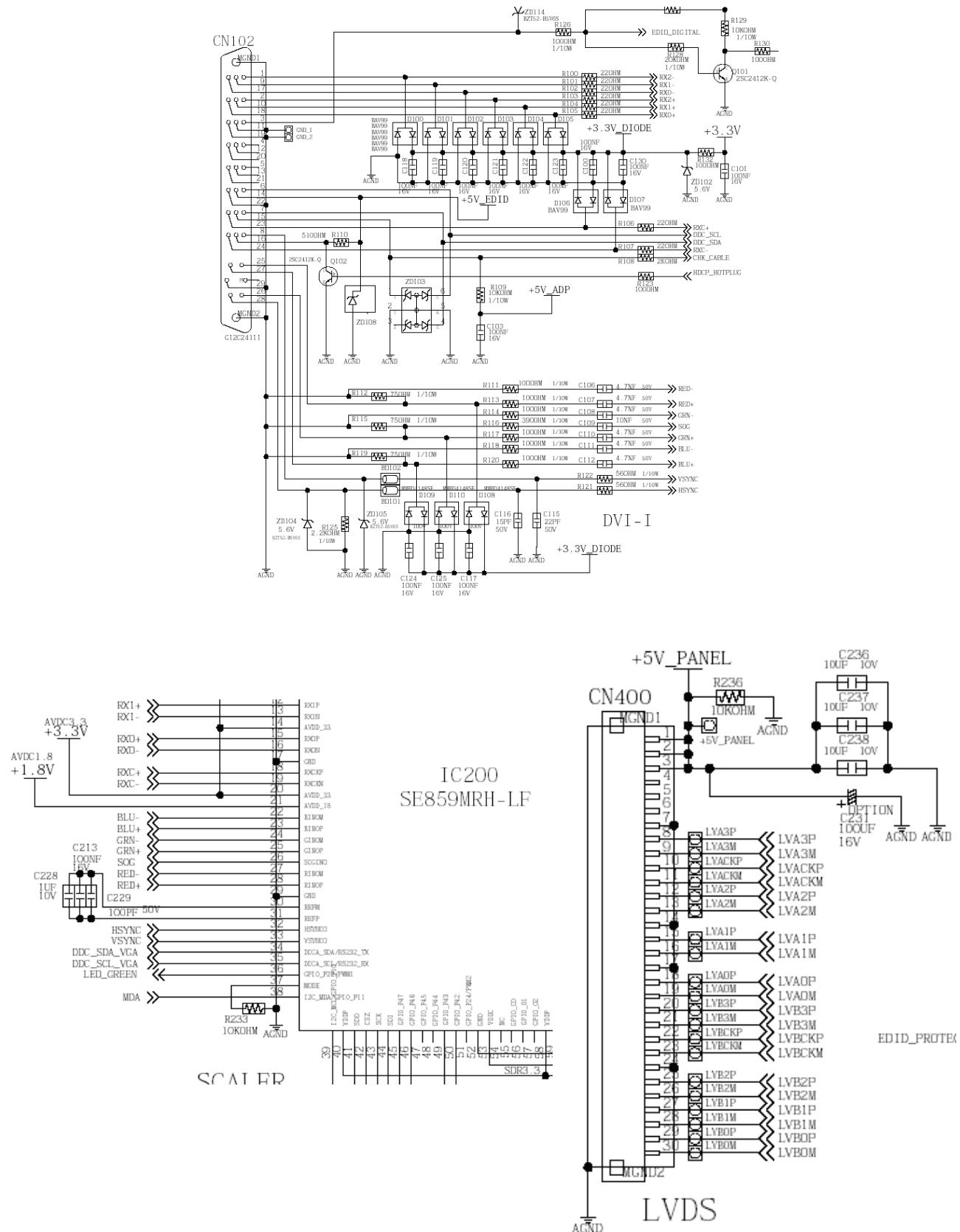
4-2-1. Circuit diagrams when the power does not turn on



4-3. When the screen is blank (Analog)

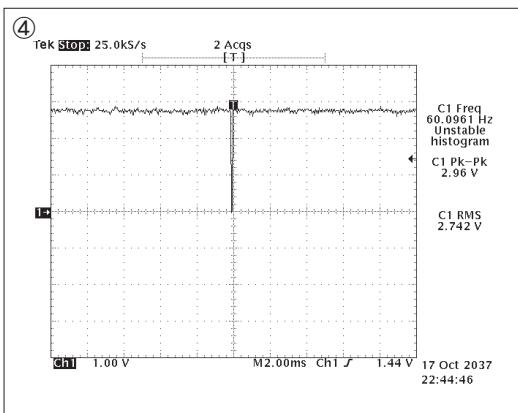
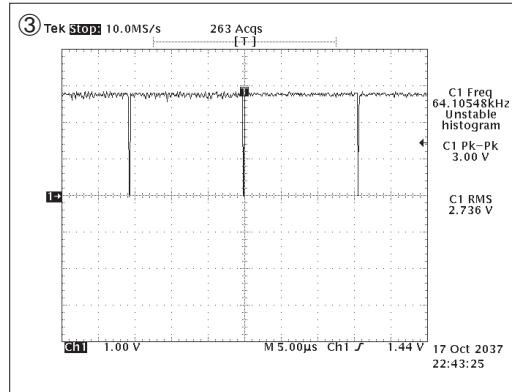
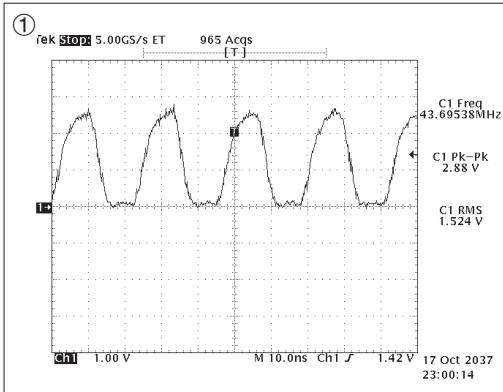
Symptom	- Even though the LED power turns on, the screen is blank when connecting the DVI-I to D-sub cable.
Major checkpoints	<ul style="list-style-type: none"> - Check the DVI-I to D-sub cable connections. - Check whether the LVDS(FFC) cable is connected correctly to the panel. - Check whether the lamp connector of the panel is connected correctly to the Inverter.
	
Diagnostics	<pre> graph TD A[① Is X201 oscillating correctly?] -- Yes --> B[Check the signal cables and their connections.] A -- No --> C[Check and replace the circuits related to X201.] C --> D[② Do the RGB inputs appear at R113, R117 and R120 of CN102?] D -- Yes --> E[Check the R113, R117 and R120 input terminals.] E --> F[Do the ③ Hsync and ④ Vsync waveforms appear at pins 32, 33 of IC200, respectively?] F -- Yes --> G[Check the circuits related to IC200.] G --> H[Do output signals appear at pins 8 to 30 of CN400?] H -- Yes --> I[Check the circuits related to CN400.] I --> J[Is DC 5V measured at pins 1, 2 and 3 of CN400?] J -- Yes --> K[Check and replace the panel.] J -- No --> L[Check the +5V_PANEL signal and the BL_EN signal.] </pre>
Caution	Make sure to disconnect the power before working on the Adaptor.

4-3-1. When a blank screen is displayed (Analog)

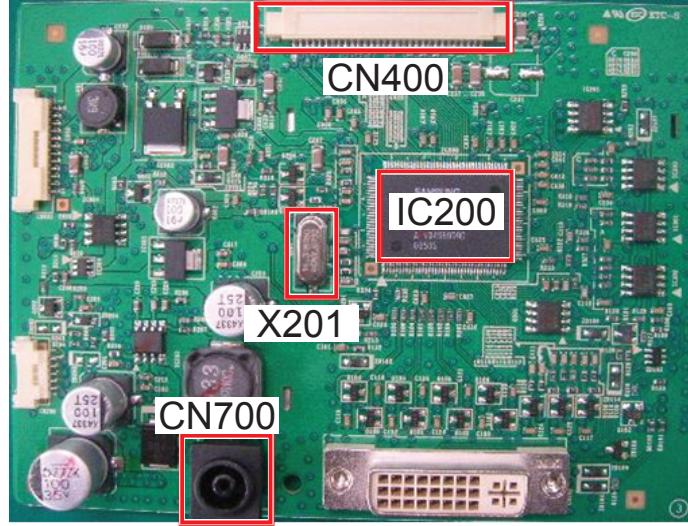


4. Troubleshooting

4-3-2. Waveforms when no screen is displayed (Analog)

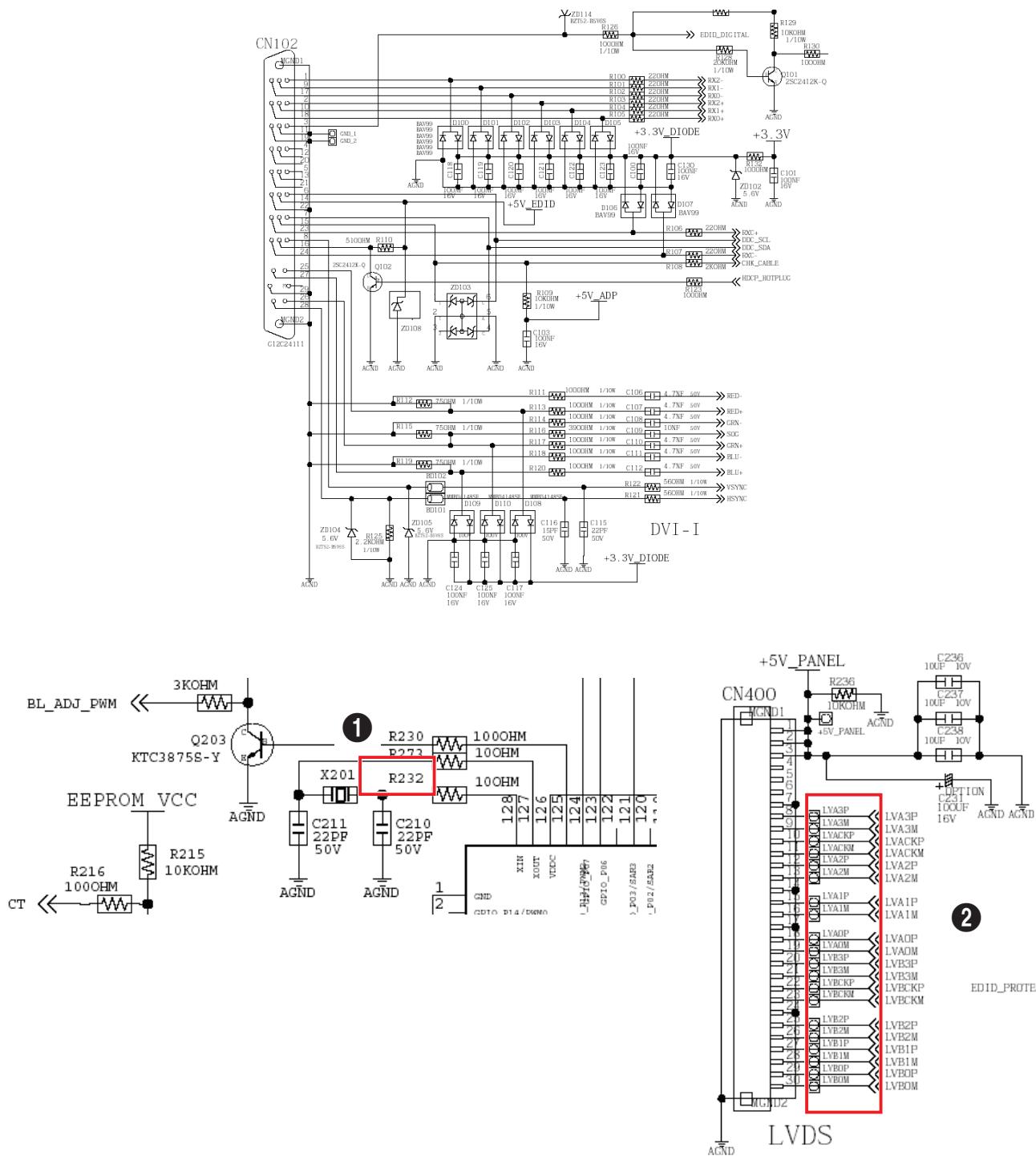


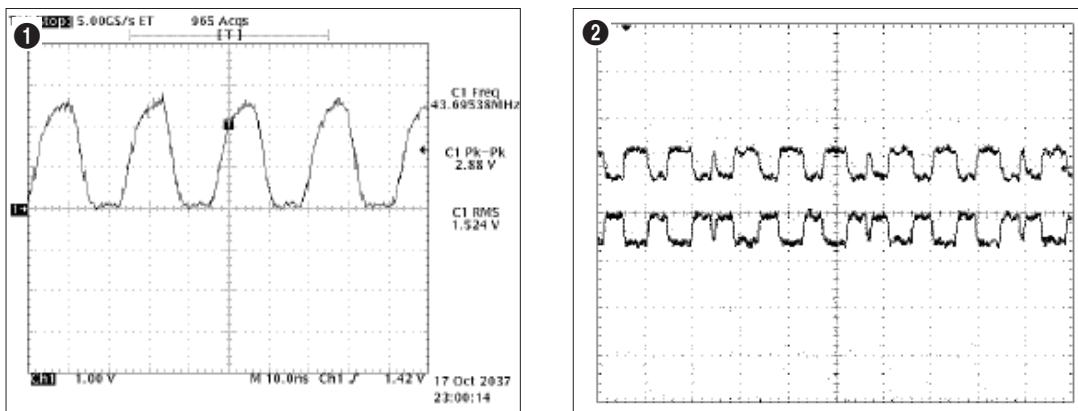
4-4. When a blank screen is displayed (Digital)

Symptom	- Even though the LED power turns on, the screen is blank when connecting the DVI cable.
Major checkpoints	<ul style="list-style-type: none"> - Check the DVI cable connections. - Check whether the LVDS(FFC) cable is connected correctly to the panel. - Check whether the lamp connector of the panel is connected correctly to the Inverter.
	
Diagnostics	<pre> graph TD A[① Is X201 oscillating correctly?] -- Yes --> B[Check the signal cables and their connections.] A -- No --> C[② Do the RGB inputs appear at R100 to R105 of CN102?] C -- Yes --> D[Check the R100 to 105 input terminals.] C -- No --> E[Do output signals appear at pins 8 to 30 of CN400?] E -- Yes --> F[Check the circuits related to CN400.] E -- No --> G[Is DC 5V measured at pins 1, 2 and 3 of CN400?] G -- Yes --> H[Check and replace the Panel.] G -- No --> I[Check the +5V_PANEL signal and the BL_EN signal.] </pre>
Caution	Make sure to disconnect the power before working on the Adaptor.

4. Troubleshooting

4-4-1. Circuit diagrams when a blank screen is displayed (Digital)



4-4-2. Waveforms when a blank screen is displayed (Digital)

4-5. Error Examples and Actions

Error Appearance	Symptoms and Actions	Remarks
	<p>Symptom: DVI signals are not recognized.</p> <p>Cause: This error occurs because the PC cannot recognize the mode information since the DVI DDC is not input to the monitor.</p> <p>Action: Input the DVI DDC.</p>	*On how to input DDC, refer to the training manual.
	<p>Symptom: A full white screen is displayed regardless of the signals when turning on the monitor.</p> <p>Cause: This error occurs when only lamp power is supplied and the video signals are not input to the panel due to an LVDS cable connection error.</p> <p>Action: Replace the LVDS cable or connect the cable correctly so that the video signals can be supplied to the panel.</p>	*A Full White pattern is a feature of a TN panel when no video signals are supplied.
	<p>Symptom: When connecting the DVD, noise occurs on the screen.</p> <p>Cause: The HDCP key is not inserted.</p> <p>Action: Enter the HDCP key. (See page 4-17.)</p>	

4-6. Adjustment

4-6-1. Service Adjustment Conditions

1. Precautions before a Service Adjustment

- 1) Check whether the devices for the service adjustment are operating normally.
- 2) Secure a space that is sufficiently wide for disassembling the monitor.
- 3) Prepare a soft mat on which the monitor will be disassembled.

2. Entering Service Mode

Entering: **Menu** → **Brightness 0** → **Contrast 0** → **Hold down the Enter button for five (5) seconds.**

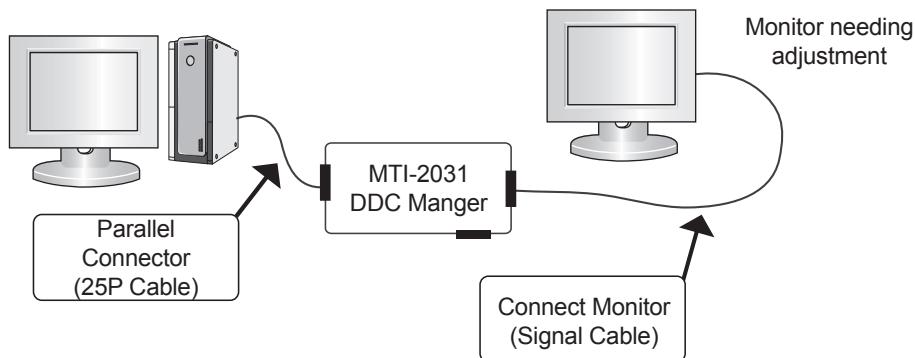
Exiting: **Power OFF** → **Power ON**

3. Basic Service Items to Perform after Replacing a Board

- 1) Check the PC color adjustment status.
- 2) Input DDC (input both of Analog and Digital).
- 3) Check whether the appropriate MCU code for the model is input.
- 4) Hard power the monitor off after entering service mode and performing a reset.

4. DDC EDIT Data Input

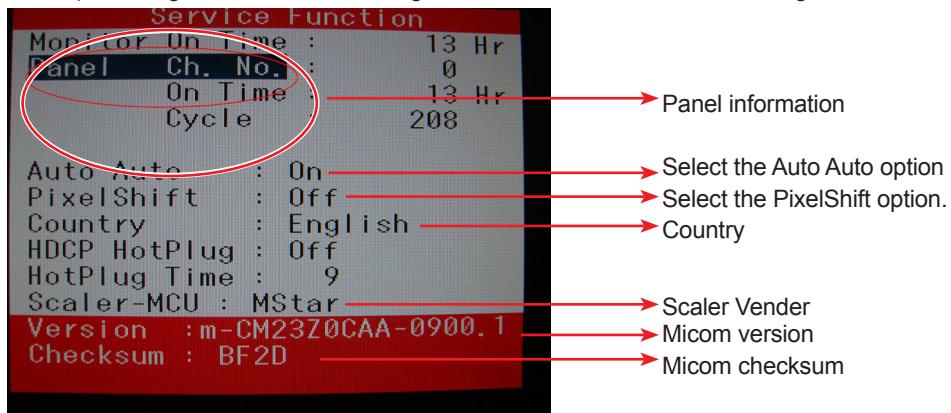
- 1) Use when updating the AD board code.
- 2) Download the WinDDC program, DDC Input program, and Hex and DDC files appropriate to the model through the Quality Control department of Samsung Electronics. Install the jig and input the data, as shown in the figure.



4-6-2. Service Function Specifications

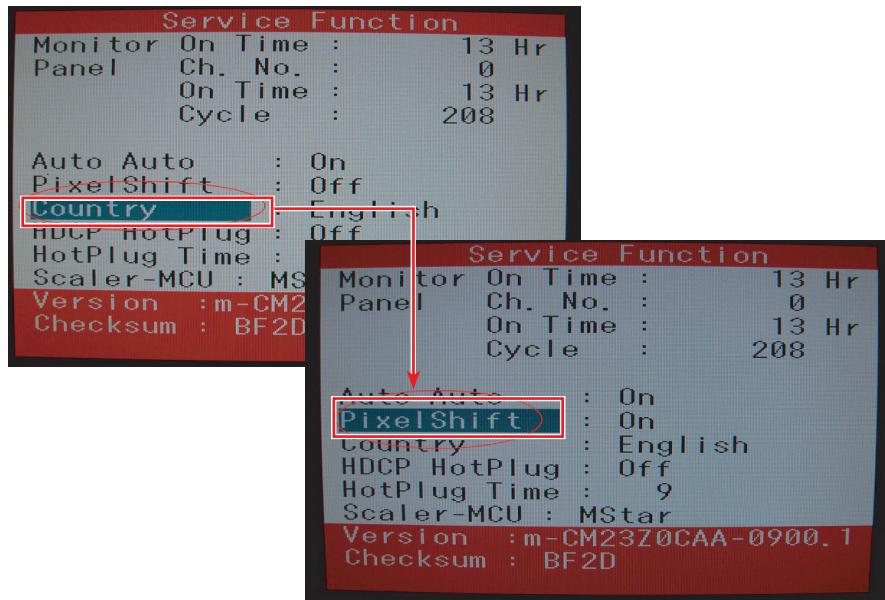
■ Checking the Code Version

1. Check the MCU code version and checksum after entering SVC Mode.
2. Entering SVC Mode
 - Adjust the Brightness and Contrast values to 0.
 - Hold down the Enter button for five (5) seconds.
 - The SVC Function OSD is displayed.
 - To exit the SVC Function, turn the power off.
3. Safe Mode
 - When the input signal is higher than the supported frequency of the product, safe mode gives users some time (one minute) to change the video card settings to the Recommended Mode settings.

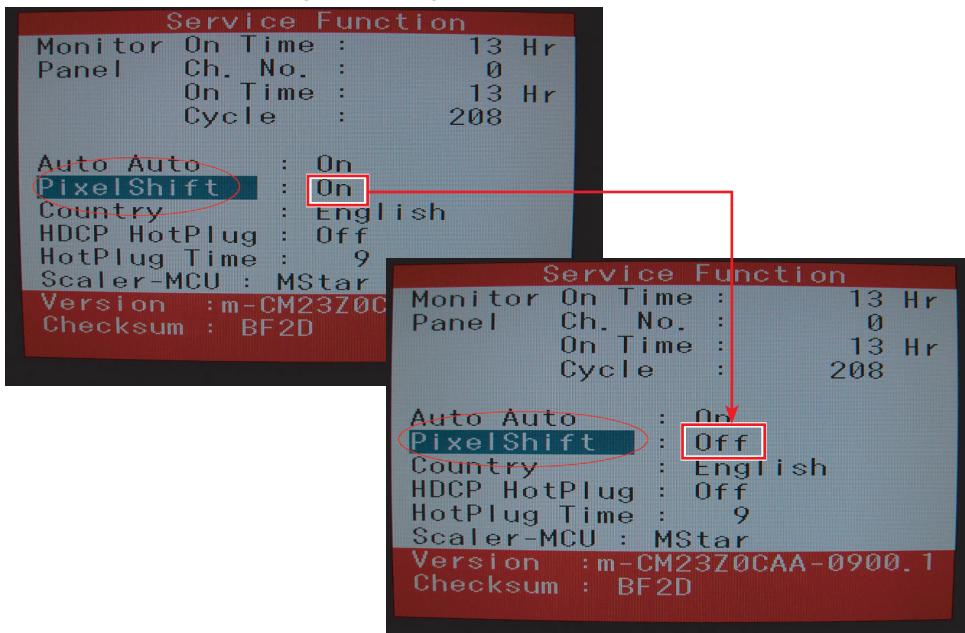


■ Service Mode (Moving around)

1. Press the + button to move to other items.

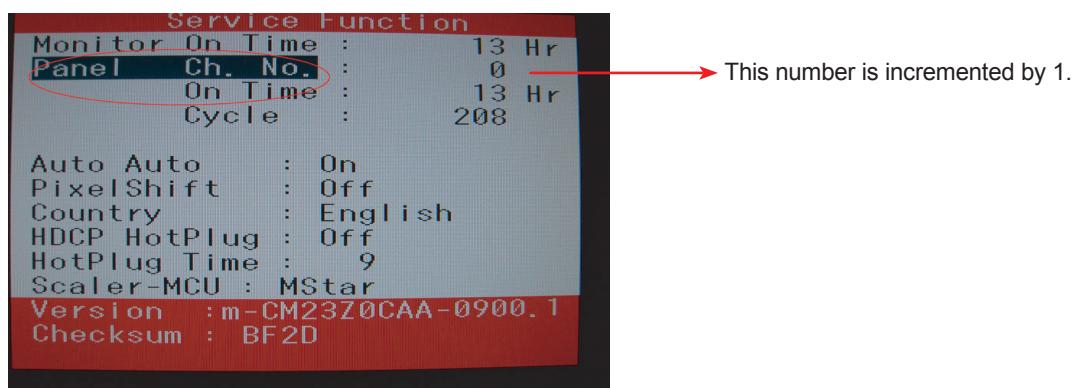


2. Press the - button to change the setting to On or Off.



■ When replacing the panel

After replacing the panel, move to the Panel item and hold down the Menu button for five (5) seconds. The Ch. No is incremented by 1 and then both the On Time and Cycle are set to 0.



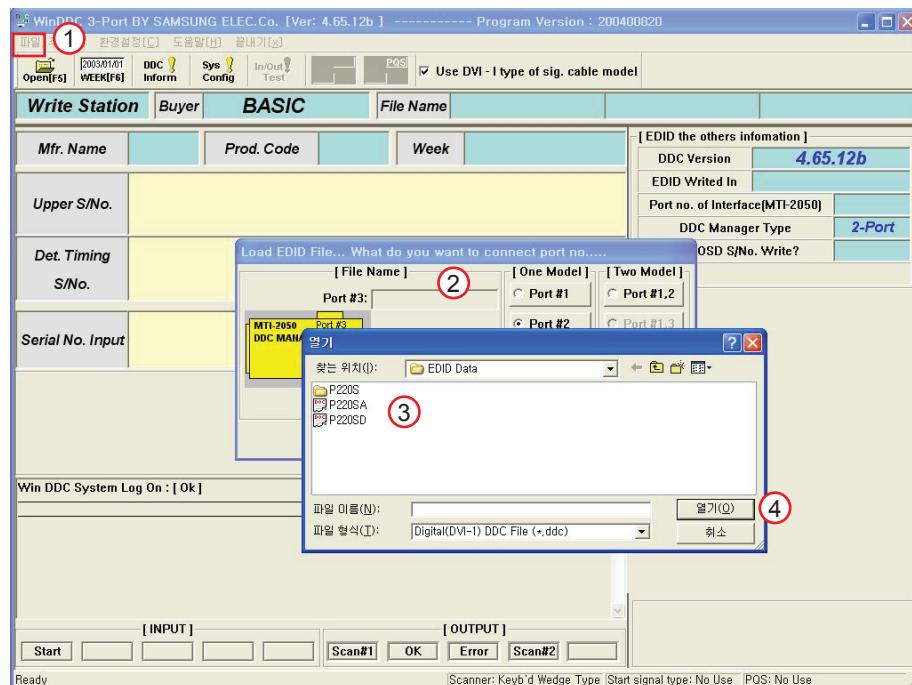
4. Troubleshooting

■ Inputting the DDC Data

- After exchange the Main Board, We use DDC manager and must complete downloading.
- Connecting is refer to below picture.
- MICOM can be updated with DDC manager.



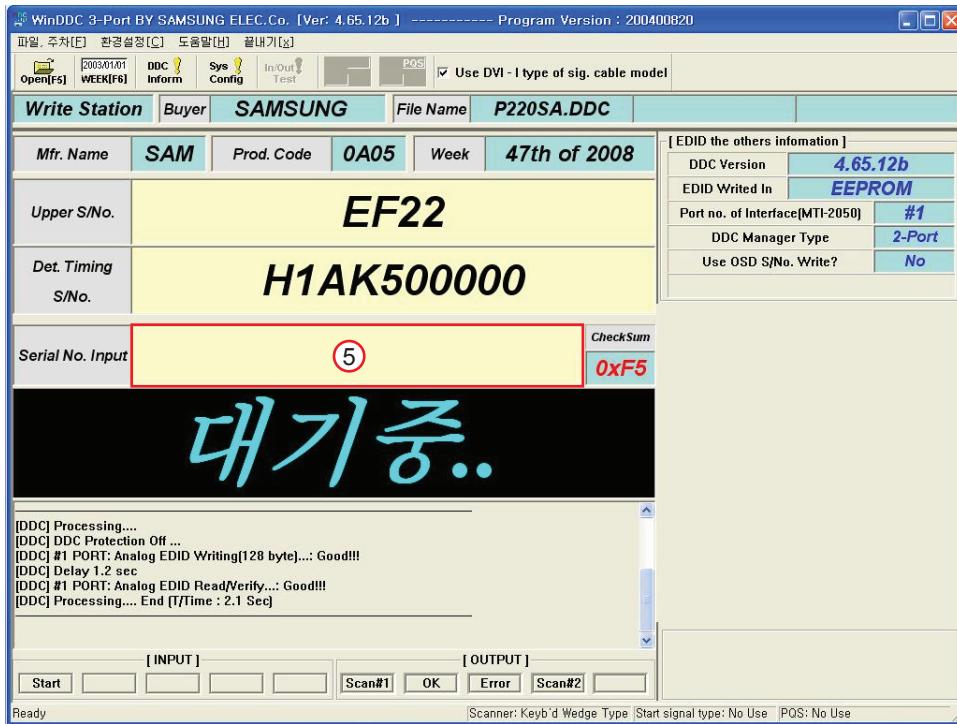
- Connect DDC Manager Jig to P2070 / P2270 / P2370 with DVI-I to D-Sub cable and DVI cable.
- Execute Winddc.exe Program on PC.
- Click the Winddc icon.
- 1. Click the Open [F5] icon
- 2. Select Port #
-> Open a DDC file. (Ex) "P220SA.ddc" : Analog
- 3. Select the other Port # "P220SD.ddc" : Digital
- 4. Click Next (OK) button



5. Enter the serial number and then press the Enter button.

If you using old version.

-> When inputting digital data after inputting analog data, repeat steps 2 to 5.

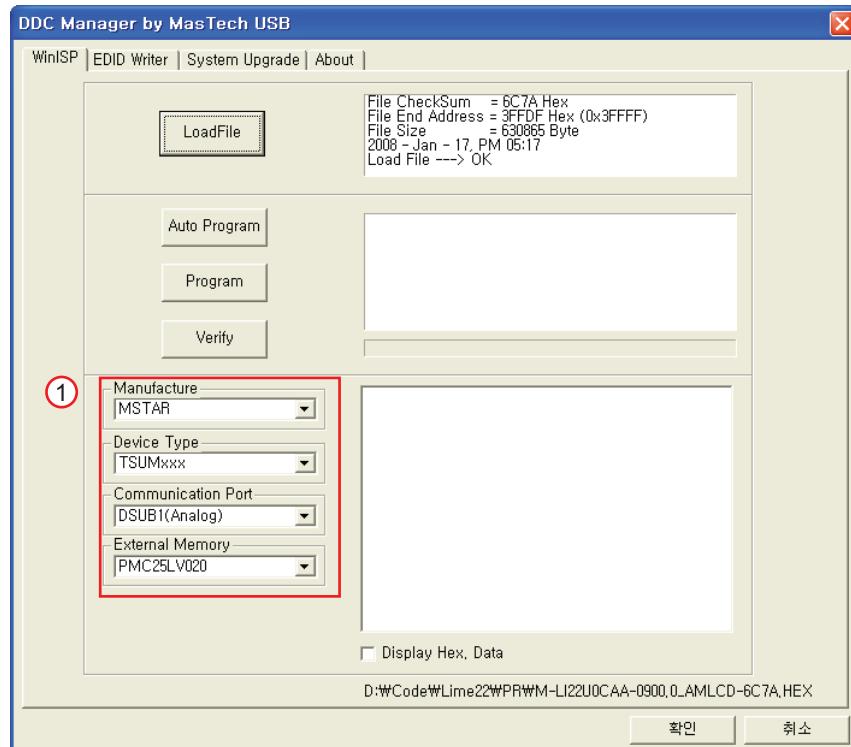


4. Troubleshooting

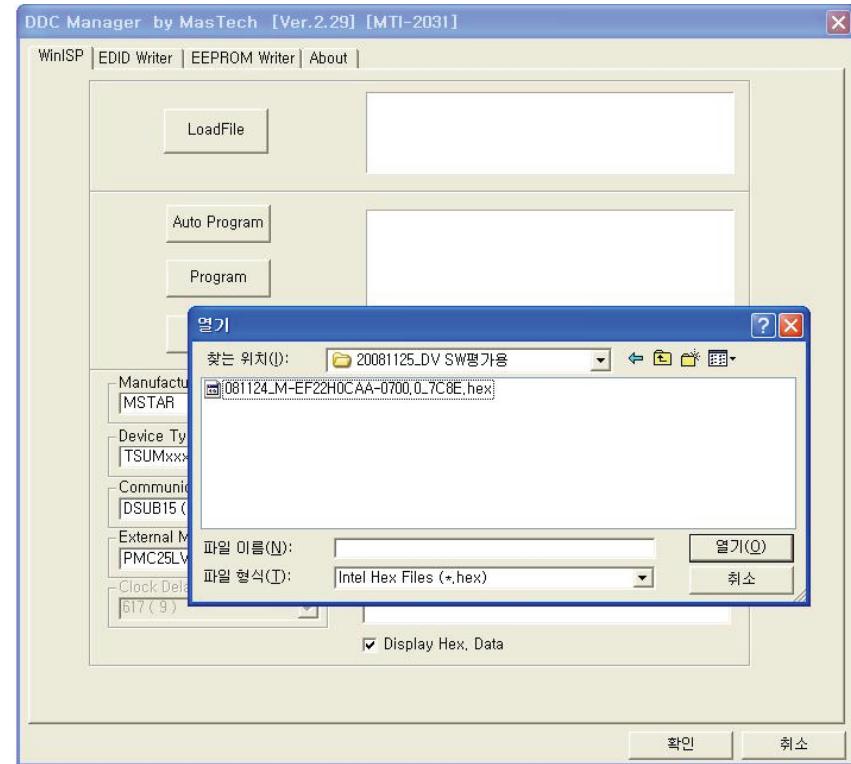
■ Inputting the MCU Data

1) Check the following options.

- Manufacture : MSTAR
- Device Type : TSUMxx
- Communication Port: DSUB15(Analog)
- External Memory : PMC25LV010

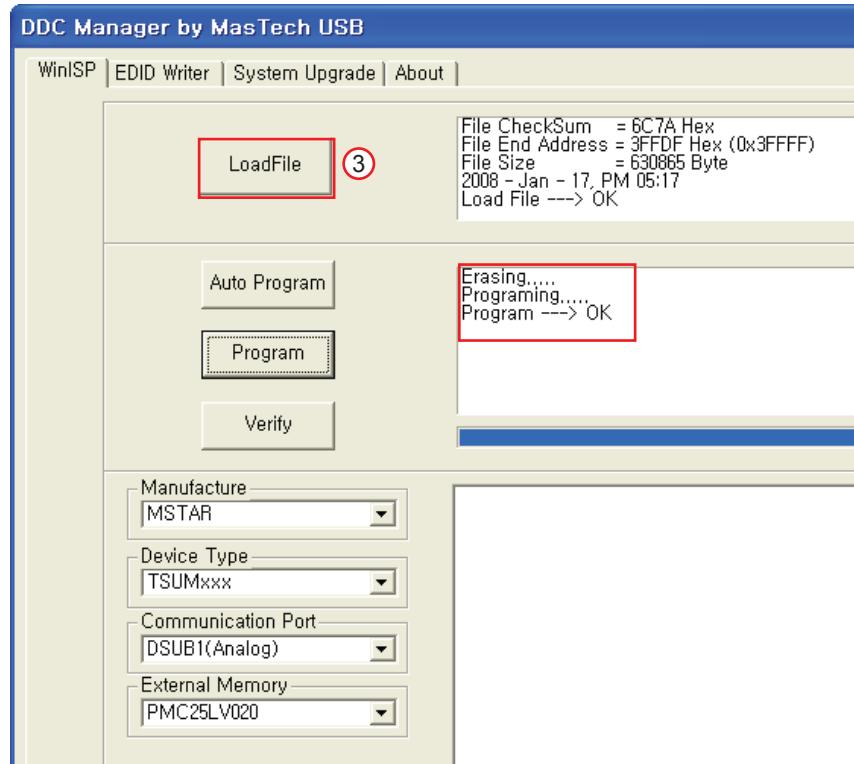


2) Click the LoadFile button, select an MCU code file, and then click the Open [O] button.



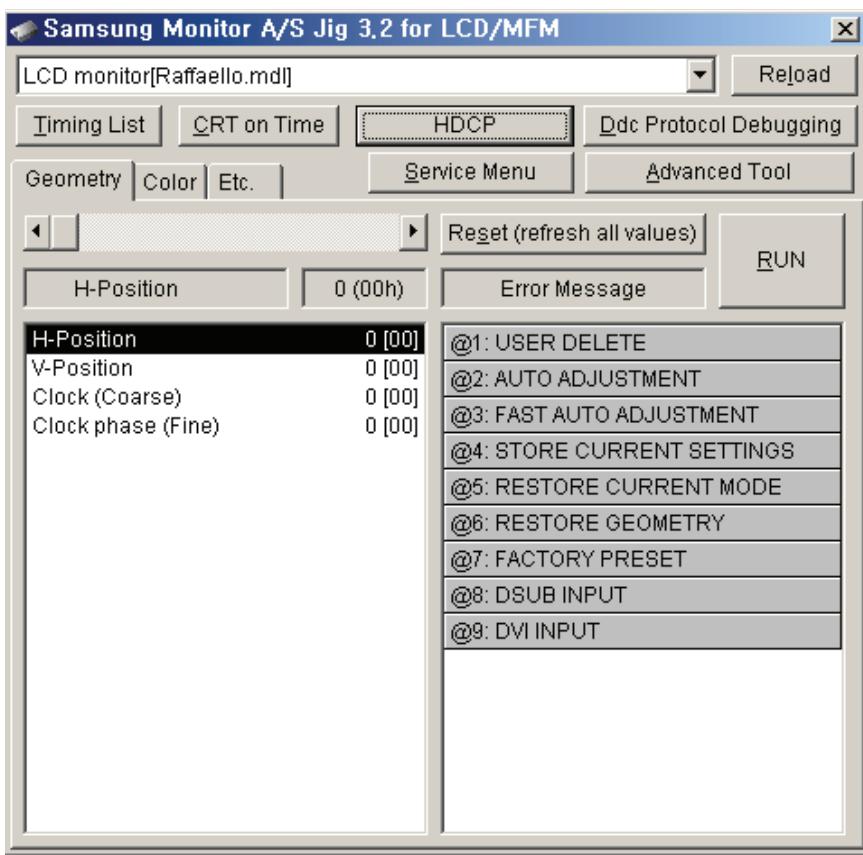
3) Click the Auto Program button.

4) When programming and verification are complete, hard power the monitor off and then on again.

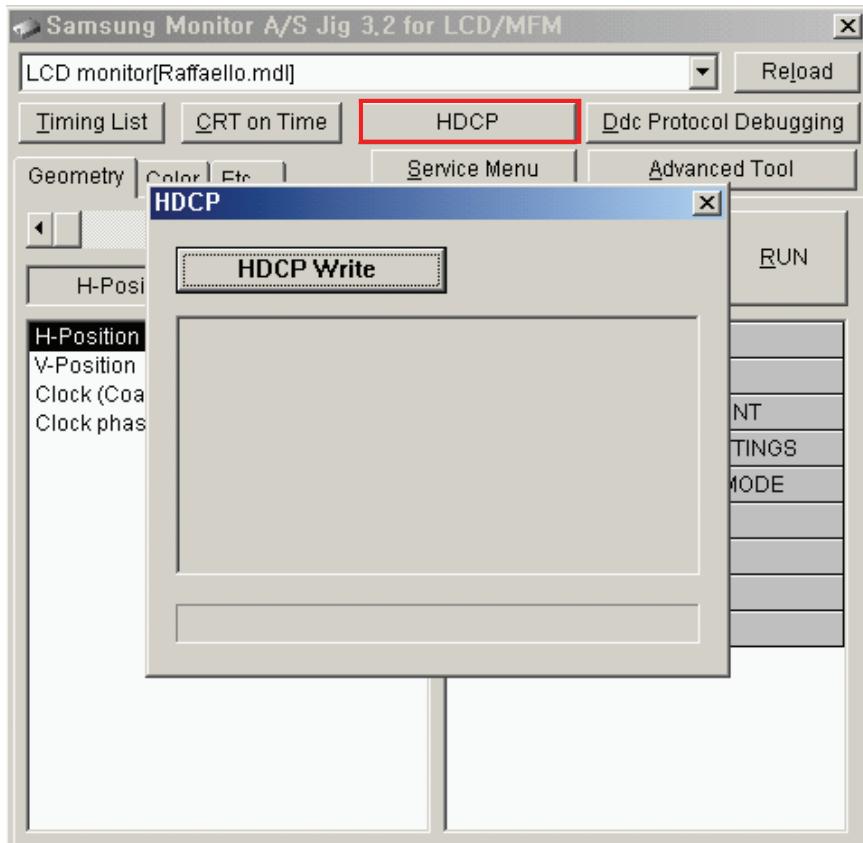


4. Troubleshooting

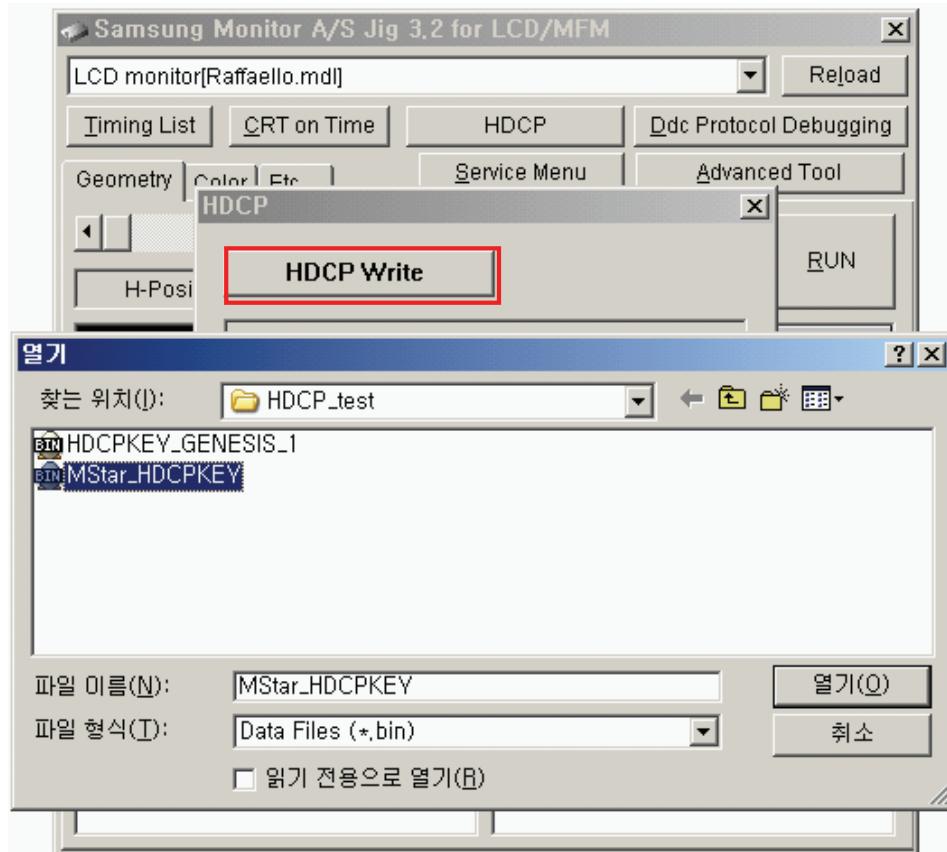
■ Inputting the Code (HDCP)



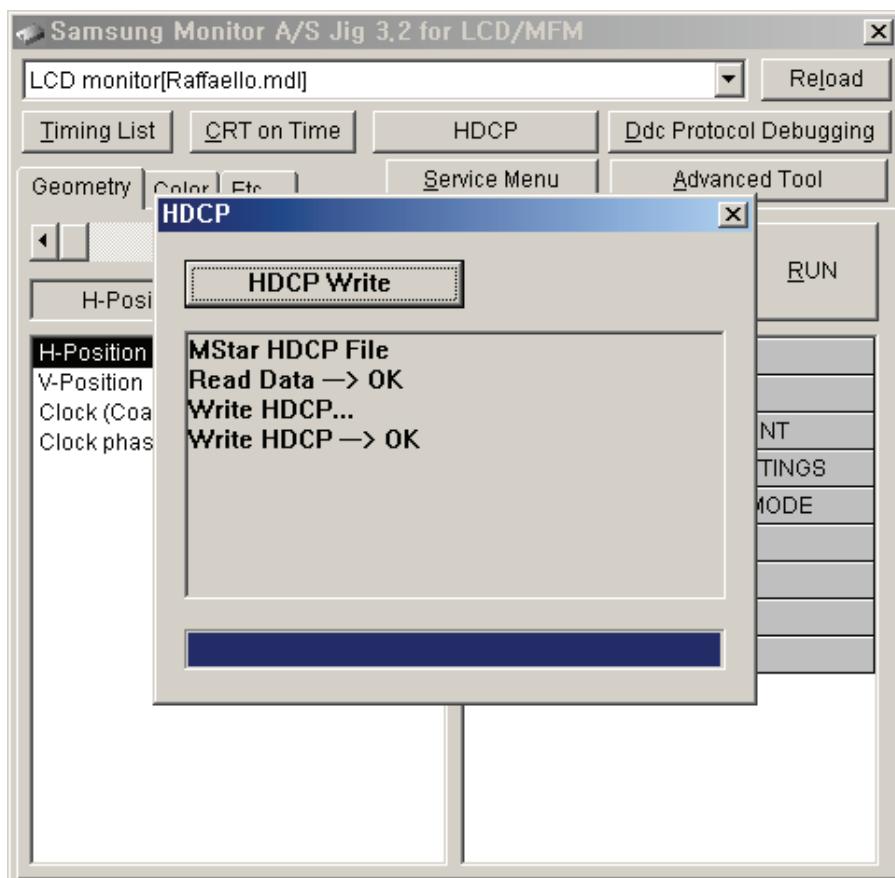
1. Run the service.exe file.



2. Click the HDCP button.



3. Click the HDCP Write button and select MStar_HDCPKEY.

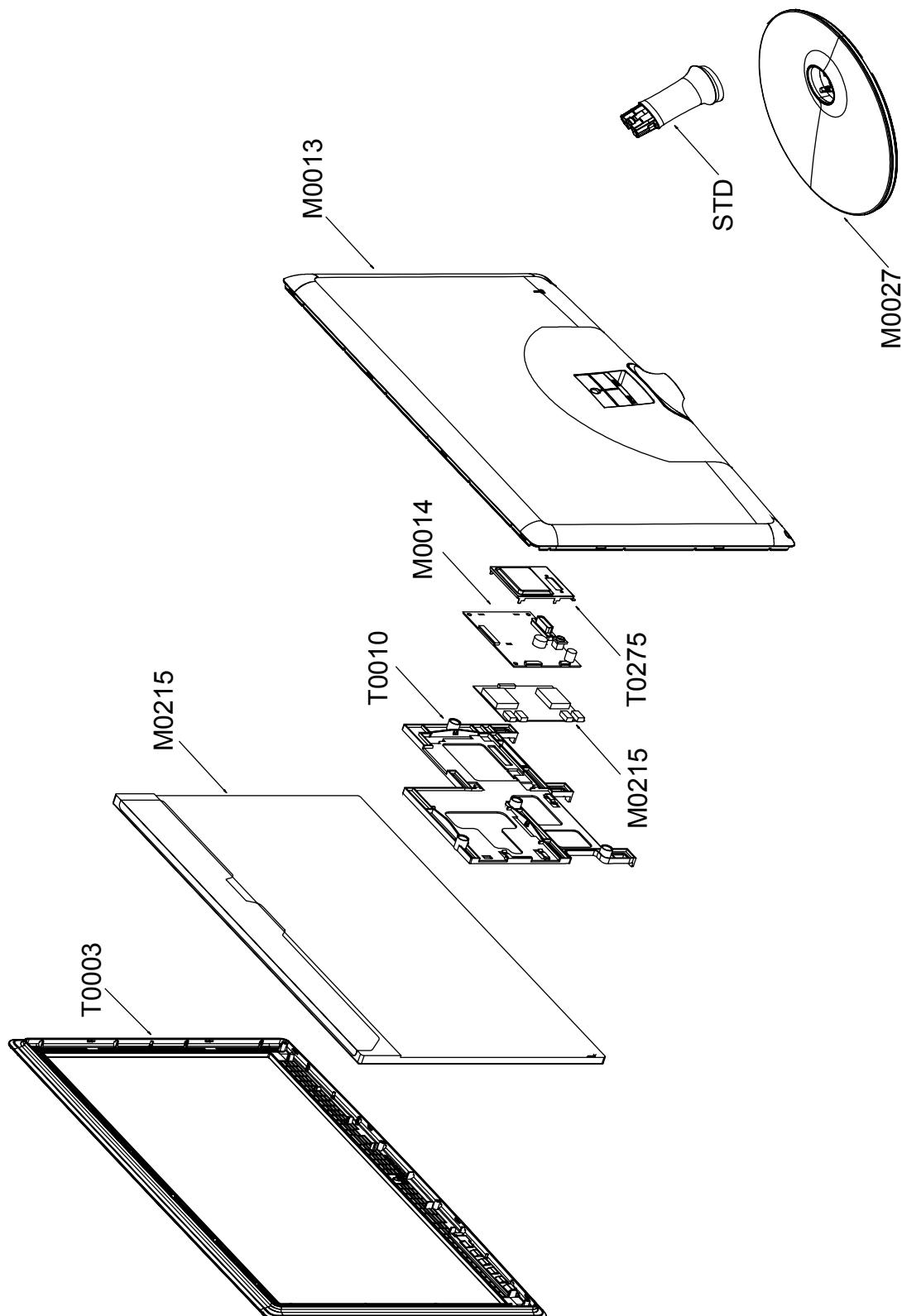


4. Inputting the HDCP key is completed.

Memo

5. Exploded View & Part List

5-1. LS23EFHKFV/EN Exploded View (P2370)



5. Exploded View & Part List

5-1-1. LS23EFHKFV/EN Parts List (P2370)

Location No.	Code No.	Description & Specification	Q'ty	SA/SNA	Remark
M0215	BN07-00711A	LCD-PANEL;LTM230HT02	1	S.A	
M0215	BN44-00286B	INVERTER;Ecofit23" w, INV23N02A, 60khz, 12V,	1	S.A	
T0010	BN61-05083A	HOLDER-SUB PCB;LS23EF,HIPS,BK23	1	S.N.A	
T0275	BN63-05769A	SHIELD-MAIN;ECOFIT 22",SPTE,T0.3	1	S.N.A	
M0014	BN94-02609B	ASSY PCB MAIN-STZ,W/W;LS23EFH*	1	S.A	
T0003	BN96-09624A	ASSY COVER P-FRONT;ECOFIT 23,PMMA, PMMA+	1	S.A	
M0013	BN96-09625A	ASSY COVER P-REAR;ECOFIT 23,PMMA+ABS,HB,	1	S.A	
STD	BN96-09628B	ASSY STAND P-BODY;ECOFIT,PC	1	S.N.A	
M0027	BN96-09629A	ASSY STAND P-BASE;ECOFIT,ABS HB,BK23(H/G	1	S.A	

5-2. LS23EFHKFV/EN Parts List (P2370)

Service Bom (SA: SERVICE AVAILABLE, SNA: SERVICE NOT AVAILABLE)

Level	Location No.	Code No.	Description & Specification	Q'ty	SA/SNA	Remark
		LS23EFHKFV/EN	P2370,WBJ1/S23H0-LEF,23,LCD-MO,NETHERLAN			
0.1	M0001	BN90-02018A	ASSY COVER FRONT;LS23EF,ECOFIT	1	S.N.A	
..2	T0003	BN96-09624A	ASSY COVER P-FRONT;ECOFIT 23,PMMA, PMMA+	1	S.A	
...3	CCM1	BN63-02183D	COVER-SHEET;Rhcm,PE Vinyl,T0.05,680mm,20	0.5	S.N.A	
...3	M0112	BN63-05423A	COVER-FRONT;ECOFIT 23",PMMA, PMMA+ABS,TO	1	S.N.A	
...3		6003-000282	SCREW-TAPTYPE;BH,+, -,B,M3,L8,ZPC(BLK),SW	1	S.N.A	
...3	T0212	BN61-05458A	BRACKET-PANEL;ECOFIT 23",SECC,T1.0	1	S.N.A	
...3	M0140	BN63-01474G	FELT-STAND;ECOFIT23"(P2370),T0.35,20,127	1	S.N.A	
...3	M0020	BN96-10522B	ASSY BOARD P;Ecofit,Function Assy,With H	1	S.N.A	
....4	M2893	BN39-01164A	LEAD CONNECTOR;ECOFIT,UL1571#30,5P,10 0mm	1	S.A	
....4	M0020	BN96-10522A	ASSY BOARD P;Ecofit,Function Assy,Withou	1	S.N.A	
....5		BN94-02622R	ASSY PCB MISC-ECOFIT,F/PCB,BN9;ECOFIT	1	S.N.A	
....6		BN64-01023A	KNOB-CONTROL MIRROR;ECOFIT 23",ABS,HB,WH	1	S.N.A	
....6		BN64-01024A	INLAY-PLATE;P2370,ECOFIT 23",PET SHEET,T	1	S.N.A	
....6	TOP	BN74-00025A	TAPE-FUNCTION TAPE;DOUBLE FACE TAPE,Poly	1	S.N.A	
....6	BOTTOM	BN74-00026A	TAPE-FUNCTION TAPE;DOUBLE FACE TAPE,Poly	1	S.N.A	
....6	T0174	BN97-03017N	ASSY SMD;ECOFIT,F/PCB-SMD	1	S.N.A	
....7	L0405	0601-002331	LED;SMD,(SIDE VIEW),WHT,2.04mm	1	S.A	
....7	L0405	0601-002331	LED;SMD,(SIDE VIEW),WHT,2.04mm	1	S.A	
....7	L0405	0601-002331	LED;SMD,(SIDE VIEW),WHT,2.04mm	1	S.A	
....7	L0405	0601-002331	LED;SMD,(SIDE VIEW),WHT,2.04mm	1	S.A	
....7	L0405	0601-002331	LED;SMD,(SIDE VIEW),WHT,2.04mm	1	S.A	
....7	L0405	0601-002331	LED;SMD,(SIDE VIEW),WHT,2.04mm	1	S.A	
....7	U1	1209-001809	IC-SENSOR;MCS-5000, UQFN,24P,4x4mm,PLA STI	1	S.A	
....7	R1	2007-000082	R-CHIP;3.3Kohm,5%,1/10W,TP,1608	1	S.N.A	
....7	C1	2203-006618	C-CER,CHIP;2200nF,+80-20%,16V,Y5V,TP,160	1	S.N.A	
....7	C2	2203-006618	C-CER,CHIP;2200nF,+80-20%,16V,Y5V,TP,160	1	S.N.A	
....7	CN330	3711-005743	HEADER-BOARD TO CABLE;BOX,5P,1R,1.25mm,A	1	S.N.A	
....7	PCB	BN41-01189A	PCB-FUNCTION;Ecofit Function PCB,FR-4,2,	1	S.N.A	
0.1	M0002	BN90-02019A	ASSY COVER REAR;LS23EF,ECOFIT	1	S.N.A	
..2	M0013	BN96-09625A	ASSY COVER P-REAR;ECOFIT 23,PMMA+ABS,HB,	1	S.A	
...3		6003-001001	SCREW-TAPTYPE;FH,+, -,B,M3,L8,ZPC(BLK),SW RC	1	S.N.A	
...3	CIS4	BN61-05084A	HOLDER-STAND;ECOFIT 23",ACETAL,WHITE	1	S.N.A	
...3	CCM1	BN63-02183D	COVER-SHEET;Rhcm,PE Vinyl,T0.05,680mm,20	0.5	S.N.A	
...3	M0006	BN63-05424A	COVER-REAR;P2370, ECOFIT 23",PMMA+ABS,HB	1	S.N.A	
...3		BN63-05434A	SHIELD-LAMP;ECOFIT 23",SPTE,T0.3	1	S.N.A	

5. Exploded View & Part List

Level	Location No.	Code No.	Description & Specification	Q'ty	SA/SNA	Remark
...3	M0111	BN63-05442A	COVER-STAND;P2370, ECOFIT 23",PMMA+ABS,H	1	S.N.A	
...3	M0131	BN63-02966A	GASKET;GASKET EMI,Polyurethane Sponge+Po	1	S.N.A	
...3		6003-001239	SCREW-TAPTYPE;FH,+,B,M4,L10,ZPC(WHT),S WR	2	S.N.A	
...3	T0060	BN61-05090A	SPRING ETC;ECOFIT 23",SK5,T0.5	1	S.N.A	
...3		BN61-05091A	SPRING ETC-STAND;ECOFIT 23",SUS304,T0.3	1	S.N.A	
...3	T0069	AA63-60122K	SPACER-FELT;SPD-42P3S,FELT,L60,D20,T0.35	2	S.N.A	
0.1	M0017	BN91-03323T	ASSY CHASSIS-STZ,W/W;LS23EFH*	1	S.N.A	
..2	M0215	BN44-00286B	INVERTER;Ecofit23" w,INV23N02A,60khz,12V,	1	S.A	
..2	T0010	BN61-05083A	HOLDER-SUB PCB;LS23EF,HIPS,BK23	1	S.N.A	
..2	M0014	BN94-02609B	ASSY PCB MAIN-STZ,W/W;LS23EFH*	1	S.A	
...3	T0245	0202-001608	SOLDER-WIRE FLUX;LFC7-107,D0.8,99.3Sn/0.	0.003	S.N.A	
...3	CN102	3701-001225	CONNECTOR-DVI;24P+5C,3R,FEMALE,STRAIGHT,	1	S.A	
...3	CN700	3722-001849	JACK-DC POWER;3P,7.1MM,SNPB,BLK	1	S.A	
...3	HDCP	BN97-00707A	ASSY HDCP;BN46-00018A,BR20/21BS_CS,MSTAR	1	S.N.A	
....4		BN46-00018A	KEY CODE-CERTIFICATE;(HDCP KEY)PPM42M5S,	1	S.N.A	
...3	T0174	BN97-03017C	ASSY SMD;LS23EFHKFV/ZC	1	S.N.A	
....4	D100	0401-001056	DIODE-SWITCHING;MMBD4148SE,100V,200mA,SO	1	S.A	
....4	D101	0401-001056	DIODE-SWITCHING;MMBD4148SE,100V,200mA,SO	1	S.A	
....4	D102	0401-001056	DIODE-SWITCHING;MMBD4148SE,100V,200mA,SO	1	S.A	
....4	D103	0401-001056	DIODE-SWITCHING;MMBD4148SE,100V,200mA,SO	1	S.A	
....4	D104	0401-001056	DIODE-SWITCHING;MMBD4148SE,100V,200mA,SO	1	S.A	
....4	D105	0401-001056	DIODE-SWITCHING;MMBD4148SE,100V,200mA,SO	1	S.A	
....4	D106	0401-001056	DIODE-SWITCHING;MMBD4148SE,100V,200mA,SO	1	S.A	
....4	D107	0401-001056	DIODE-SWITCHING;MMBD4148SE,100V,200mA,SO	1	S.A	
....4	D108	0401-001056	DIODE-SWITCHING;MMBD4148SE,100V,200mA,SO	1	S.A	
....4	D109	0401-001056	DIODE-SWITCHING;MMBD4148SE,100V,200mA,SO	1	S.A	
....4	D110	0401-001056	DIODE-SWITCHING;MMBD4148SE,100V,200mA,SO	1	S.A	
....4	D600	0402-001614	DIODE-RECTIFIER;S1G,400V,1A,DO-214AC,TP	1	S.A	
....4	D601	0402-001614	DIODE-RECTIFIER;S1G,400V,1A,DO-214AC,TP	1	S.A	
....4	ZD102	0403-001411	DIODE-ZENER;5.49-5.73V,200mW,SOD-323,TP	1	S.N.A	
....4	ZD104	0403-001411	DIODE-ZENER;5.49-5.73V,200mW,SOD-323,TP	1	S.N.A	
....4	ZD105	0403-001411	DIODE-ZENER;5.49-5.73V,200mW,SOD-323,TP	1	S.N.A	
....4	ZD106	0403-001411	DIODE-ZENER;5.49-5.73V,200mW,SOD-323,TP	1	S.N.A	
....4	ZD107	0403-001411	DIODE-ZENER;5.49-5.73V,200mW,SOD-323,TP	1	S.N.A	
....4	ZD114	0403-001411	DIODE-ZENER;5.49-5.73V,200mW,SOD-323,TP	1	S.N.A	
....4	ZD204	0403-001411	DIODE-ZENER;5.49-5.73V,200mW,SOD-323,TP	1	S.N.A	
....4	ZD601	0403-001411	DIODE-ZENER;5.49-5.73V,200mW,SOD-323,TP	1	S.N.A	
....4	D0254	0404-001307	DIODE-SCHOTTKY;SSC54,20V,5000mA,DO-214AB	1	S.A	

5. Exploded View & Part List

Level	Location No.	Code No.	Description & Specification	Q'ty	SA/SNA	Remark
....4	ZD103	0406-001061	DIODE-TVS;MMQA5V6T3,5.32/5.6/5.88V,24W,S	1	S.A	
....4	Q201	0501-000445	TR-SMALL SIGNAL;KTC3875S-Y,NPN,150mW,SOT	1	S.A	
....4	Q203	0501-000445	TR-SMALL SIGNAL;KTC3875S-Y,NPN,150mW,SOT	1	S.A	
....4	Q204	0501-000445	TR-SMALL SIGNAL;KTC3875S-Y,NPN,150mW,SOT	1	S.A	
....4	Q601	0501-000445	TR-SMALL SIGNAL;KTC3875S-Y,NPN,150mW,SOT	1	S.A	
....4	Q101	0501-002080	TR-SMALL SIGNAL;2SC2412K,NPN,200mW,SC-59	1	S.A	
....4	Q102	0501-002080	TR-SMALL SIGNAL;2SC2412K,NPN,200mW,SC-59	1	S.A	
....4	Q202	0501-002080	TR-SMALL SIGNAL;2SC2412K,NPN,200mW,SC-59	1	S.A	
....4	Q205	0501-002080	TR-SMALL SIGNAL;2SC2412K,NPN,200mW,SC-59	1	S.A	
....4	Q207	0501-002080	TR-SMALL SIGNAL;2SC2412K,NPN,200mW,SC-59	1	S.A	
....4	Q409	0505-001165	FET-SILICON;SI3443BDV,P,-20V,+4.4A,65mo	1	S.A	
....4	Q409	0505-001165	FET-SILICON;SI3443BDV,P,-20V,+4.4A,65mo	1	S.A	
....4	Q409	0505-001170	FET-SILICON;SI9933ADY-T1,P,-20V,3.4A,0.0	1	S.A	
....4	IC112	1103-000129	IC-EEPROM;24C02,2Kbit,256x8,SOP,8P,5x4mm	1	S.A	
....4	IC112	1103-000129	IC-EEPROM;24C02,2Kbit,256x8,SOP,8P,5x4mm	1	S.A	
....4	IC112	1103-001410	IC-EEPROM;S-24CS08AFJ-TB-1GE,8Kbit,1Kx8,	1	S.A	
....4	IC604	1202-000104	IC-VOLTAGE COMP.;393,SOP,8P,150MIL,DUAL,	1	S.A	
....4	T0170	1203-003059	IC-SWITCH VOL. REG.;MP1583,SOIC,8P,4.9x3	1	S.A	
....4	T0087	1203-003695	IC-POSI.FIXED REG.;NCP1117ST33T3G,SOT-22	1	S.A	
....4	T0087	1203-003695	IC-POSI.FIXED REG.;NCP1117ST33T3G,SOT-22	1	S.A	
....4	T0087	1203-003696	IC-POSI.FIXED REG.;NCP1117DT18T5G,DPAK,3	1	S.A	
....4	IC109	1205-003664	IC-LCD CONTROLLER;SE859MRH-LH,PQFP,128P,	1	S.A	
....4	R603	2007-000052	R-CHIP;10Kohm,1%,1/10W,TP,1608	1	S.N.A	
....4	R608	2007-000052	R-CHIP;10Kohm,1%,1/10W,TP,1608	1	S.N.A	
....4	R123	2007-000070	R-CHIP;0ohm,5%,1/10W,TP,1608	1	S.N.A	
....4	R100	2007-000071	R-CHIP;22ohm,5%,1/10W,TP,1608	1	S.N.A	
....4	R101	2007-000071	R-CHIP;22ohm,5%,1/10W,TP,1608	1	S.N.A	
....4	R102	2007-000071	R-CHIP;22ohm,5%,1/10W,TP,1608	1	S.N.A	
....4	R103	2007-000071	R-CHIP;22ohm,5%,1/10W,TP,1608	1	S.N.A	
....4	R104	2007-000071	R-CHIP;22ohm,5%,1/10W,TP,1608	1	S.N.A	
....4	R105	2007-000071	R-CHIP;22ohm,5%,1/10W,TP,1608	1	S.N.A	
....4	R106	2007-000071	R-CHIP;22ohm,5%,1/10W,TP,1608	1	S.N.A	
....4	R107	2007-000071	R-CHIP;22ohm,5%,1/10W,TP,1608	1	S.N.A	
....4	R354	2007-000071	R-CHIP;22ohm,5%,1/10W,TP,1608	1	S.N.A	
....4	R355	2007-000071	R-CHIP;22ohm,5%,1/10W,TP,1608	1	S.N.A	
....4	R302	2007-000072	R-CHIP;47ohm,5%,1/10W,TP,1608	1	S.N.A	
....4	R303	2007-000072	R-CHIP;47ohm,5%,1/10W,TP,1608	1	S.N.A	
....4	R335	2007-000072	R-CHIP;47ohm,5%,1/10W,TP,1608	1	S.N.A	
....4	R337	2007-000072	R-CHIP;47ohm,5%,1/10W,TP,1608	1	S.N.A	
....4	R111	2007-000074	R-CHIP;100ohm,5%,1/10W,TP,1608	1	S.A	
....4	R113	2007-000074	R-CHIP;100ohm,5%,1/10W,TP,1608	1	S.A	
....4	R114	2007-000074	R-CHIP;100ohm,5%,1/10W,TP,1608	1	S.A	
....4	R117	2007-000074	R-CHIP;100ohm,5%,1/10W,TP,1608	1	S.A	
....4	R118	2007-000074	R-CHIP;100ohm,5%,1/10W,TP,1608	1	S.A	

5. Exploded View & Part List

Level	Location No.	Code No.	Description & Specification	Q'ty	SA/SNA	Remark
....4	R120	2007-000074	R-CHIP;100ohm,5%,1/10W,TP,1608	1	S.A	
....4	R126	2007-000074	R-CHIP;100ohm,5%,1/10W,TP,1608	1	S.A	
....4	R130	2007-000074	R-CHIP;100ohm,5%,1/10W,TP,1608	1	S.A	
....4	R132	2007-000074	R-CHIP;100ohm,5%,1/10W,TP,1608	1	S.A	
....4	R216	2007-000074	R-CHIP;100ohm,5%,1/10W,TP,1608	1	S.A	
....4	R230	2007-000074	R-CHIP;100ohm,5%,1/10W,TP,1608	1	S.A	
....4	R255	2007-000074	R-CHIP;100ohm,5%,1/10W,TP,1608	1	S.A	
....4	R261	2007-000074	R-CHIP;100ohm,5%,1/10W,TP,1608	1	S.A	
....4	R263	2007-000074	R-CHIP;100ohm,5%,1/10W,TP,1608	1	S.A	
....4	R281	2007-000074	R-CHIP;100ohm,5%,1/10W,TP,1608	1	S.A	
....4	R282	2007-000074	R-CHIP;100ohm,5%,1/10W,TP,1608	1	S.A	
....4	R283	2007-000074	R-CHIP;100ohm,5%,1/10W,TP,1608	1	S.A	
....4	R110	2007-000078	R-CHIP;1Kohm,5%,1/10W,TP,1608	1	S.A	
....4	R127	2007-000078	R-CHIP;1Kohm,5%,1/10W,TP,1608	1	S.A	
....4	R108	2007-000080	R-CHIP;2Kohm,5%,1/10W,TP,1608	1	S.N.A	
....4	R270	2007-000080	R-CHIP;2Kohm,5%,1/10W,TP,1608	1	S.N.A	
....4	R218	2007-000083	R-CHIP;3Kohm,5%,1/10W,TP,1608	1	S.N.A	
....4	R229	2007-000083	R-CHIP;3Kohm,5%,1/10W,TP,1608	1	S.N.A	
....4	R207	2007-000084	R-CHIP;4.7Kohm,5%,1/10W,TP,1608	1	S.A	
....4	R219	2007-000084	R-CHIP;4.7Kohm,5%,1/10W,TP,1608	1	S.A	
....4	R223	2007-000084	R-CHIP;4.7Kohm,5%,1/10W,TP,1608	1	S.A	
....4	R234	2007-000084	R-CHIP;4.7Kohm,5%,1/10W,TP,1608	1	S.A	
....4	R264	2007-000084	R-CHIP;4.7Kohm,5%,1/10W,TP,1608	1	S.A	
....4	R265	2007-000084	R-CHIP;4.7Kohm,5%,1/10W,TP,1608	1	S.A	
....4	R109	2007-000090	R-CHIP;10Kohm,5%,1/10W,TP,1608	1	S.A	
....4	R129	2007-000090	R-CHIP;10Kohm,5%,1/10W,TP,1608	1	S.A	
....4	R213	2007-000090	R-CHIP;10Kohm,5%,1/10W,TP,1608	1	S.A	
....4	R215	2007-000090	R-CHIP;10Kohm,5%,1/10W,TP,1608	1	S.A	
....4	R217	2007-000090	R-CHIP;10Kohm,5%,1/10W,TP,1608	1	S.A	
....4	R222	2007-000090	R-CHIP;10Kohm,5%,1/10W,TP,1608	1	S.A	
....4	R224	2007-000090	R-CHIP;10Kohm,5%,1/10W,TP,1608	1	S.A	
....4	R226	2007-000090	R-CHIP;10Kohm,5%,1/10W,TP,1608	1	S.A	
....4	R233	2007-000090	R-CHIP;10Kohm,5%,1/10W,TP,1608	1	S.A	
....4	R236	2007-000090	R-CHIP;10Kohm,5%,1/10W,TP,1608	1	S.A	
....4	R254	2007-000090	R-CHIP;10Kohm,5%,1/10W,TP,1608	1	S.A	
....4	R262	2007-000090	R-CHIP;10Kohm,5%,1/10W,TP,1608	1	S.A	
....4	R271	2007-000090	R-CHIP;10Kohm,5%,1/10W,TP,1608	1	S.A	
....4	R274	2007-000090	R-CHIP;10Kohm,5%,1/10W,TP,1608	1	S.A	
....4	R275	2007-000090	R-CHIP;10Kohm,5%,1/10W,TP,1608	1	S.A	
....4	R276	2007-000090	R-CHIP;10Kohm,5%,1/10W,TP,1608	1	S.A	
....4	R318	2007-000090	R-CHIP;10Kohm,5%,1/10W,TP,1608	1	S.A	
....4	R319	2007-000090	R-CHIP;10Kohm,5%,1/10W,TP,1608	1	S.A	
....4	R327	2007-000090	R-CHIP;10Kohm,5%,1/10W,TP,1608	1	S.A	
....4	R328	2007-000090	R-CHIP;10Kohm,5%,1/10W,TP,1608	1	S.A	
....4	R612	2007-000090	R-CHIP;10Kohm,5%,1/10W,TP,1608	1	S.A	
....4	R128	2007-000093	R-CHIP;20Kohm,5%,1/10W,TP,1608	1	S.N.A	
....4	R605	2007-000093	R-CHIP;20Kohm,5%,1/10W,TP,1608	1	S.N.A	
....4	R622	2007-000093	R-CHIP;20Kohm,5%,1/10W,TP,1608	1	S.N.A	
....4	R214	2007-000102	R-CHIP;100Kohm,5%,1/10W,TP,1608	1	S.A	
....4	R225	2007-000102	R-CHIP;100Kohm,5%,1/10W,TP,1608	1	S.A	
....4	R125	2007-000124	R-CHIP;2.2Kohm,5%,1/10W,TP,1608	1	S.N.A	

5. Exploded View & Part List

Level	Location No.	Code No.	Description & Specification	Q'ty	SA/SNA	Remark
....4	R299	2007-000134	R-CHIP;33Kohm,5%,1/10W,TP,1608	1	S.N.A	
....4	R232	2007-000309	R-CHIP;10ohm,5%,1/10W,TP,1608	1	S.A	
....4	R273	2007-000309	R-CHIP;10ohm,5%,1/10W,TP,1608	1	S.A	
....4	R116	2007-000821	R-CHIP;390ohm,1%,1/10W,TP,1608	1	S.N.A	
....4	R235	2007-000821	R-CHIP;390ohm,1%,1/10W,TP,1608	1	S.N.A	
....4	R206	2007-000965	R-CHIP;5.1Kohm,5%,1/10W,TP,1608	1	S.N.A	
....4	R121	2007-001044	R-CHIP;56ohm,5%,1/10W,TP,1608	1	S.A	
....4	R122	2007-001044	R-CHIP;56ohm,5%,1/10W,TP,1608	1	S.A	
....4	R112	2007-001164	R-CHIP;75ohm,1%,1/10W,TP,1608	1	S.N.A	
....4	R115	2007-001164	R-CHIP;75ohm,1%,1/10W,TP,1608	1	S.N.A	
....4	R119	2007-001164	R-CHIP;75ohm,1%,1/10W,TP,1608	1	S.N.A	
....4	R614	2007-002425	R-CHIP;1ohm,5%,1/10W,TP,1608	1	S.N.A	
....4	R615	2007-002425	R-CHIP;1ohm,5%,1/10W,TP,1608	1	S.N.A	
....4	C215	2203-000189	C-CER,CHIP;100nF,+80-20%,25V,Y5V,1608	1	S.N.A	
....4	C217	2203-000189	C-CER,CHIP;100nF,+80-20%,25V,Y5V,1608	1	S.N.A	
....4	C216	2203-000236	C-CER,CHIP;0.1nF,5%,50V,C0G,1608	1	S.N.A	
....4	C229	2203-000236	C-CER,CHIP;0.1nF,5%,50V,C0G,1608	1	S.N.A	
....4	C109	2203-000257	C-CER,CHIP;10nF,10%,50V,X7R,TP,1608	1	S.A	
....4	C201	2203-000257	C-CER,CHIP;10nF,10%,50V,X7R,TP,1608	1	S.A	
....4	C203	2203-000257	C-CER,CHIP;10nF,10%,50V,X7R,TP,1608	1	S.A	
....4	C220	2203-000257	C-CER,CHIP;10nF,10%,50V,X7R,TP,1608	1	S.A	
....4	C663	2203-000257	C-CER,CHIP;10nF,10%,50V,X7R,TP,1608	1	S.A	
....4	C116	2203-000384	C-CER,CHIP;0.015nF,5%,50V,C0G,1608	1	S.N.A	
....4	C115	2203-000626	C-CER,CHIP;0.022nF,5%,50V,C0G,1608	1	S.N.A	
....4	C106	2203-000888	C-CER,CHIP;4.7nF,10%,50V,X7R,TP,1608	1	S.A	
....4	C107	2203-000888	C-CER,CHIP;4.7nF,10%,50V,X7R,TP,1608	1	S.A	
....4	C108	2203-000888	C-CER,CHIP;4.7nF,10%,50V,X7R,TP,1608	1	S.A	
....4	C110	2203-000888	C-CER,CHIP;4.7nF,10%,50V,X7R,TP,1608	1	S.A	
....4	C111	2203-000888	C-CER,CHIP;4.7nF,10%,50V,X7R,TP,1608	1	S.A	
....4	C112	2203-000888	C-CER,CHIP;4.7nF,10%,50V,X7R,TP,1608	1	S.A	
....4	C219	2203-000975	C-CER,CHIP;47nF,10%,25V,X7R,TP,1608,-	1	S.N.A	
....4	C100	2203-005005	C-CER,CHIP;100nF,10%,16V,X7R,1608	1	S.A	
....4	C101	2203-005005	C-CER,CHIP;100nF,10%,16V,X7R,1608	1	S.A	
....4	C103	2203-005005	C-CER,CHIP;100nF,10%,16V,X7R,1608	1	S.A	
....4	C117	2203-005005	C-CER,CHIP;100nF,10%,16V,X7R,1608	1	S.A	
....4	C118	2203-005005	C-CER,CHIP;100nF,10%,16V,X7R,1608	1	S.A	
....4	C119	2203-005005	C-CER,CHIP;100nF,10%,16V,X7R,1608	1	S.A	
....4	C120	2203-005005	C-CER,CHIP;100nF,10%,16V,X7R,1608	1	S.A	
....4	C121	2203-005005	C-CER,CHIP;100nF,10%,16V,X7R,1608	1	S.A	
....4	C122	2203-005005	C-CER,CHIP;100nF,10%,16V,X7R,1608	1	S.A	
....4	C123	2203-005005	C-CER,CHIP;100nF,10%,16V,X7R,1608	1	S.A	
....4	C124	2203-005005	C-CER,CHIP;100nF,10%,16V,X7R,1608	1	S.A	
....4	C125	2203-005005	C-CER,CHIP;100nF,10%,16V,X7R,1608	1	S.A	
....4	C130	2203-005005	C-CER,CHIP;100nF,10%,16V,X7R,1608	1	S.A	
....4	C205	2203-005005	C-CER,CHIP;100nF,10%,16V,X7R,1608	1	S.A	
....4	C206	2203-005005	C-CER,CHIP;100nF,10%,16V,X7R,1608	1	S.A	
....4	C209	2203-005005	C-CER,CHIP;100nF,10%,16V,X7R,1608	1	S.A	
....4	C212	2203-005005	C-CER,CHIP;100nF,10%,16V,X7R,1608	1	S.A	
....4	C213	2203-005005	C-CER,CHIP;100nF,10%,16V,X7R,1608	1	S.A	
....4	C234	2203-005005	C-CER,CHIP;100nF,10%,16V,X7R,1608	1	S.A	
....4	C600	2203-005005	C-CER,CHIP;100nF,10%,16V,X7R,1608	1	S.A	

5. Exploded View & Part List

Level	Location No.	Code No.	Description & Specification	Q'ty	SA/SNA	Remark
....4	C601	2203-005005	C-CER,CHIP;100nF,10%,16V,X7R,1608	1	S.A	
....4	C603	2203-005005	C-CER,CHIP;100nF,10%,16V,X7R,1608	1	S.A	
....4	C604	2203-005005	C-CER,CHIP;100nF,10%,16V,X7R,1608	1	S.A	
....4	C605	2203-005005	C-CER,CHIP;100nF,10%,16V,X7R,1608	1	S.A	
....4	C606	2203-005005	C-CER,CHIP;100nF,10%,16V,X7R,1608	1	S.A	
....4	C609	2203-005005	C-CER,CHIP;100nF,10%,16V,X7R,1608	1	S.A	
....4	C612	2203-005005	C-CER,CHIP;100nF,10%,16V,X7R,1608	1	S.A	
....4	C613	2203-005005	C-CER,CHIP;100nF,10%,16V,X7R,1608	1	S.A	
....4	C614	2203-005005	C-CER,CHIP;100nF,10%,16V,X7R,1608	1	S.A	
....4	C617	2203-005005	C-CER,CHIP;100nF,10%,16V,X7R,1608	1	S.A	
....4	C618	2203-005005	C-CER,CHIP;100nF,10%,16V,X7R,1608	1	S.A	
....4	C619	2203-005005	C-CER,CHIP;100nF,10%,16V,X7R,1608	1	S.A	
....4	C620	2203-005005	C-CER,CHIP;100nF,10%,16V,X7R,1608	1	S.A	
....4	C621	2203-005005	C-CER,CHIP;100nF,10%,16V,X7R,1608	1	S.A	
....4	C622	2203-005005	C-CER,CHIP;100nF,10%,16V,X7R,1608	1	S.A	
....4	C623	2203-005005	C-CER,CHIP;100nF,10%,16V,X7R,1608	1	S.A	
....4	C626	2203-005005	C-CER,CHIP;100nF,10%,16V,X7R,1608	1	S.A	
....4	C627	2203-005005	C-CER,CHIP;100nF,10%,16V,X7R,1608	1	S.A	
....4	C628	2203-005005	C-CER,CHIP;100nF,10%,16V,X7R,1608	1	S.A	
....4	C630	2203-005005	C-CER,CHIP;100nF,10%,16V,X7R,1608	1	S.A	
....4	C631	2203-005005	C-CER,CHIP;100nF,10%,16V,X7R,1608	1	S.A	
....4	C632	2203-005005	C-CER,CHIP;100nF,10%,16V,X7R,1608	1	S.A	
....4	C635	2203-005005	C-CER,CHIP;100nF,10%,16V,X7R,1608	1	S.A	
....4	C636	2203-005005	C-CER,CHIP;100nF,10%,16V,X7R,1608	1	S.A	
....4	C637	2203-005005	C-CER,CHIP;100nF,10%,16V,X7R,1608	1	S.A	
....4	C638	2203-005005	C-CER,CHIP;100nF,10%,16V,X7R,1608	1	S.A	
....4	C640	2203-005005	C-CER,CHIP;100nF,10%,16V,X7R,1608	1	S.A	
....4	C641	2203-005005	C-CER,CHIP;100nF,10%,16V,X7R,1608	1	S.A	
....4	C208	2203-005065	C-CER,CHIP;1000nF,+80-20%,10V,Y5V,1608	1	S.N.A	
....4	C218	2203-005065	C-CER,CHIP;1000nF,+80-20%,10V,Y5V,1608	1	S.N.A	
....4	C228	2203-005065	C-CER,CHIP;1000nF,+80-20%,10V,Y5V,1608	1	S.N.A	
....4	C230	2203-005065	C-CER,CHIP;1000nF,+80-20%,10V,Y5V,1608	1	S.N.A	
....4	C207	2203-005437	C-CER,CHIP;10000nF,+80-20%,10V,Y5V,3216	1	S.N.A	
....4	C236	2203-005437	C-CER,CHIP;10000nF,+80-20%,10V,Y5V,3216	1	S.N.A	
....4	C237	2203-005437	C-CER,CHIP;10000nF,+80-20%,10V,Y5V,3216	1	S.N.A	
....4	C238	2203-005437	C-CER,CHIP;10000nF,+80-20%,10V,Y5V,3216	1	S.N.A	
....4	C643	2203-005437	C-CER,CHIP;10000nF,+80-20%,10V,Y5V,3216	1	S.N.A	
....4	C644	2203-005437	C-CER,CHIP;10000nF,+80-20%,10V,Y5V,3216	1	S.N.A	
....4	C660	2203-005437	C-CER,CHIP;10000nF,+80-20%,10V,Y5V,3216	1	S.N.A	
....4	C214	2402-001079	C-AL,SMD;100uF,20%,35V,WT,TP,10.3x10.3x1	1	S.A	
....4	C222	2402-001081	C-AL,SMD;100uF,20%,25V,WT,TP,8.3x8.3x10	1	S.A	
....4	C245	2402-001081	C-AL,SMD;100uF,20%,25V,WT,TP,8.3x8.3x10	1	S.A	
....4	C602	2402-001128	C-AL,SMD;100μF,20%,16V,-,TP,6.3X5.7mm	1	S.A	
....4	C653	2402-001128	C-AL,SMD;100μF,20%,16V,-,TP,6.3X5.7mm	1	S.A	
....4	T0052	2703-002801	INDUCTOR-SMD;3.9uH,20%,7070	1	S.A	
....4	X202	2801-003667	CRYSTAL-SMD;14.31818MHz,30ppm,28-AAN,16p	1	S.A	
....4	CN330	3711-005471	HEADER-BOARD TO CABLE;BOX,12P,1R,1.25mm,	1	S.N.A	
....4	CN330	3711-005743	HEADER-BOARD TO CABLE;BOX,5P,1R,1.25mm,A	1	S.N.A	

5. Exploded View & Part List

Level	Location No.	Code No.	Description & Specification	Q'ty	SA/SNA	Remark
....4	T0010	BN27-00009A	COIL CHOKE;SMD 12x12x6, EOS, 33uH, 15%, 0.12	1	S.A	
....4	T0077	BN41-01155A	PCB MAIN;Ecofit Project, CEM-3, 2, MP 1.0, 1	1	S.N.A	
....4	MAIN_MICOM	BN97-02994K	ASSY MICOM-STZ,W/W;LS23EFHKFV/*	1	S.N.A	
....5	IC115	1107-001614	IC-FLASH MEMORY;MX25L1005, 1Mbit, 1Mx1, S OP	1	S.N.A	
....4	ZD108	0403-001180	DIODE-ZENER;BZX84C6V2, 5.8-6.6V, 350mW, SOT	1	S.A	
....4	R209	2007-000092	R-CHIP;15Kohm, 5%, 1/10W, TP, 1608	1	S.A	
....4	R210	2007-000113	R-CHIP;33ohm, 5%, 1/10W, TP, 1608	1	S.N.A	
....4	R610	2007-000869	R-CHIP;4.7Kohm, 1%, 1/10W, TP, 1608	1	S.N.A	
....4	T0568	3301-001407	BEAD-SMD;30ohm, 1608, 300mA, TP, .0.4ohm	1	S.N.A	
....4	T0568	3301-001407	BEAD-SMD;30ohm, 1608, 300mA, TP, .0.4ohm	1	S.N.A	
....4	T0568	3301-001407	BEAD-SMD;30ohm, 1608, 300mA, TP, .0.4ohm	1	S.N.A	
....4	SUB05	0202-001477	SOLDER-CREAM;LST309-M, D20~45um, 96.5Sn/3A	0.733	S.N.A	
....4	CN330	3711-006222	HEADER-BOARD TO CABLE;BOX, 30P, 1R, 1mm, SMD	1	S.A	
....4	C210	2203-000292	C-CER, CHIP; 0.01nF, 5%, 50V, C0G, 1608	1	S.A	
....4	C211	2203-000292	C-CER, CHIP; 0.01nF, 5%, 50V, C0G, 1608	1	S.A	
....4	C244	2203-006141	C-CER, CHIP; 1000nF, 10%, 16V, X5R, 1608	1	S.N.A	
....4	C333	2203-000440	C-CER, CHIP; 1nF, 10%, 50V, X7R, 1608	1	S.A	
....4	C334	2203-000440	C-CER, CHIP; 1nF, 10%, 50V, X7R, 1608	1	S.A	
...3	T0275	BN63-05769A	SHIELD-MAIN; ECOFIT 22", SPTE, T0.3	1	S.N.A	
.2	M2893	BN39-00419C	LEAD CONNECTOR; ECOFIT, UL1571#30, 12P, 80mm	1	S.A	
.2	M2893	BN39-01188A	LEAD CONNECTOR; ECOFIT, UL20276#30, 30P, 200	1	S.A	
.2	T0073	AA63-00822A	GASKET-EMI; 71TSVK-15-5-15-13, Conductive	3	S.N.A	
.2	M0131	AA63-00975A	GASKET; CT40CS, Conductive Fabric, 7mm, 7mm,	1	S.N.A	
.2	M0131	BN63-05878A	GASKET; Ecofit, Polyurethane+Cu+Ni+Hotmelt	2	S.N.A	
0.1	M0106	BN91-03324E	ASSY LCD-STZ; LS23EFHKFV/ZC	1	S.N.A	
.2	M0215	BN07-00711A	LCD-PANEL; LTM230HT02	1	S.A	
0.1	M0112	BN91-03700A	ASSY SHIELD; LS23EF, ECOFIT	1	S.N.A	
.2	CIS1	BN74-00021A	TAPE-FILAMENT; Filament tape, clear, #8915,	0.06	S.N.A	
0.1	M0019	BN92-03547X	ASSY LABEL; LS22EFHKFV/ZC	1	S.N.A	
0.1		BN92-04218Z	ASSY P/MATERIAL-W/W; LS23EFHKFV/ZC	1	S.N.A	
.2	T0376	6902-000061	BAG AIR; LDPE, T0.2, W500, L1000, TRP, 370.000	0.006	S.N.A	
.2	T0376	6902-000379	BAG AIR; LDPE, T0.2, W1000, L1800, TRP, 1260.0	0.002	S.N.A	
.2	T0003	6902-000604	BAG WRAPPING; LDPE, T0.02, W500, L10000, TRP,	1.05	S.N.A	
.2	M0081	6902-000609	BAG ROLL; LDPE, T0.05, W2400, L1000, TRP, 30.0	0.017	S.N.A	
.2	T0524	6902-000996	BAG PE; HDPE/NITRON, T0.015/T0.5, W800, L600	1	S.N.A	
0.1	M0045	BN92-04233Y	ASSY ACCESSORY; LS22EFHKFV/CI	1	S.N.A	
.2	T0268	3903-000042	CBF-POWER CORD; DT, EU, FP3/YES, IEC320 C13/	1	S.A	
.2	M0158	BN44-00139A	ADAPTOR; SAD03612A-UV, ADAPTOR, 90 ~ 264Vac	1	S.A	
..3		BN81-02978A	A/S-THREAD LOCKER; 762, 760G, 0201-003005	0.08	S.N.A	

5. Exploded View & Part List

Level	Location No.	Code No.	Description & Specification	Q'ty	SA/SNA	Remark
...3		BN81-02979A	A/S-ADHESIVE SEALANT;TSE3854-DW,SILICONE	0.007	S.N.A	
...3		BN81-02983A	A/S-SILICON GREESE;YG-6111,0206-000001	0.05	S.N.A	
...3	D103	BN81-02988A	A/S-DIODE-SWG;0401-000002	1	S.N.A	
...3	D1	BN81-02989A	A/S-DIODE-BRIDGE;0402-000003	1	S.N.A	
...3	ZD201	BN81-02990A	A/S-DIODE-ZENER;0403-000003	1	S.N.A	
...3	D202	BN81-02991A	A/S-DIODE-SCH;0404-000005	1	S.N.A	
...3	D102	BN81-02992A	A/S-DIODE-UF;0409-000007	1	S.N.A	
...3	D105	BN81-02992A	A/S-DIODE-UF;0409-000007	1	S.N.A	
...3	Q102	BN81-02993A	A/S-TR-PNP;0502-000001	1	S.N.A	
...3	Q201	BN81-02993A	A/S-TR-PNP;0502-000001	1	S.N.A	
...3	Q202	BN81-02994A	A/S-TR-NPN;0502-000002	1	S.N.A	
...3	Q101	BN81-02995A	A/S-FET-N MOS;0505-000006	1	S.N.A	
...3	PC201	BN81-02996A	A/S-PHOTO-COUPLER;0604-000001	1	S.N.A	
...3	IC101	BN81-02997A	A/S-IC-PWM CONTROLLER;0904-000001	1	S.N.A	
...3	IC201	BN81-02998A	A/S-IC-SHUNT REGULATOR;1203-000003	1	S.N.A	
...3	TH1	BN81-02999A	A/S-THERMISTOR-NTC;1404-000003	1	S.N.A	
...3	TH101	BN81-03001A	A/S-THERMISTOR-CHIP;1404-000005	1	S.N.A	
...3	R109	BN81-03002A	A/S-RESISTOR-CARBON;2001-000007	1	S.N.A	
...3	R118	BN81-03003A	A/S-RESISTOR-CARBON;2001-000011	1	S.N.A	
...3	R106	BN81-03004A	A/S-RESISTOR-MOR;2001-100005	1	S.N.A	
...3	R117	BN81-03005A	A/S-RESISTOR-MOR;2001-100008	1	S.N.A	
...3	R107	BN81-03006A	A/S-RESISTOR-MOR;2001-100013	1	S.N.A	
...3	R114	BN81-03007A	A/S-RES-CHIP;2007-300003	1	S.N.A	
...3	R206	BN81-03008A	A/S-RES-CHIP;2007-300005	1	S.N.A	
...3	R207	BN81-03009A	A/S-RES-CHIP;2007-300006	1	S.N.A	
...3	R119	BN81-03010A	A/S-RES-CHIP;2007-300010	1	S.N.A	
...3	R208	BN81-03010A	A/S-RES-CHIP;2007-300010	1	S.N.A	
...3	R209	BN81-03010A	A/S-RES-CHIP;2007-300010	1	S.N.A	
...3	R205	BN81-03011A	A/S-RES-CHIP;2007-300012	1	S.N.A	
...3	R110	BN81-03012A	A/S-RES-CHIP;2007-300015	1	S.N.A	
...3	R108	BN81-03013A	A/S-RES-CHIP;2007-300025	1	S.N.A	
...3	R113	BN81-03014A	A/S-RES-CHIP;2007-300027	1	S.N.A	
...3	R111	BN81-03015A	A/S-RES-CHIP;2007-300028	1	S.N.A	
...3	R210	BN81-03016A	A/S-RES-CHIP;2007-300042	1	S.N.A	
...3	R213	BN81-03017A	A/S-RES-CHIP;2007-400015	1	S.N.A	
...3	R212	BN81-03018A	A/S-RES-CHIP;2007-400017	1	S.N.A	
...3	J101	BN81-03019A	A/S-RES-CHIP;2007-500001	1	S.N.A	
...3	J116	BN81-03019A	A/S-RES-CHIP;2007-500001	1	S.N.A	
...3	R201	BN81-03020A	A/S-RES-CHIP;2007-500002	1	S.N.A	
...3	R202	BN81-03020A	A/S-RES-CHIP;2007-500002	1	S.N.A	
...3	R1	BN81-03021A	A/S-RES-CHIP;2007-500012	1	S.N.A	
...3	R2	BN81-03021A	A/S-RES-CHIP;2007-500012	1	S.N.A	
...3	R3	BN81-03021A	A/S-RES-CHIP;2007-500012	1	S.N.A	
...3	R104	BN81-03022A	A/S-RES-CHIP;2007-500017	1	S.N.A	
...3	R105	BN81-03022A	A/S-RES-CHIP;2007-500017	1	S.N.A	
...3	R211	BN81-03023A	A/S-RES-CHIP;2007-600002	1	S.N.A	
...3	C5	BN81-03024A	A/S-CAP-C DS;2201-000003	1	S.N.A	
...3	C102	BN81-03025A	A/S-CAP-C DS;2201-100001	1	S.N.A	
...3	C104	BN81-03026A	A/S-CAP-C MLCC;2203-000001	1	S.N.A	
...3	C105	BN81-03027A	A/S-CAP-C MLCC;2203-100001	1	S.N.A	

5. Exploded View & Part List

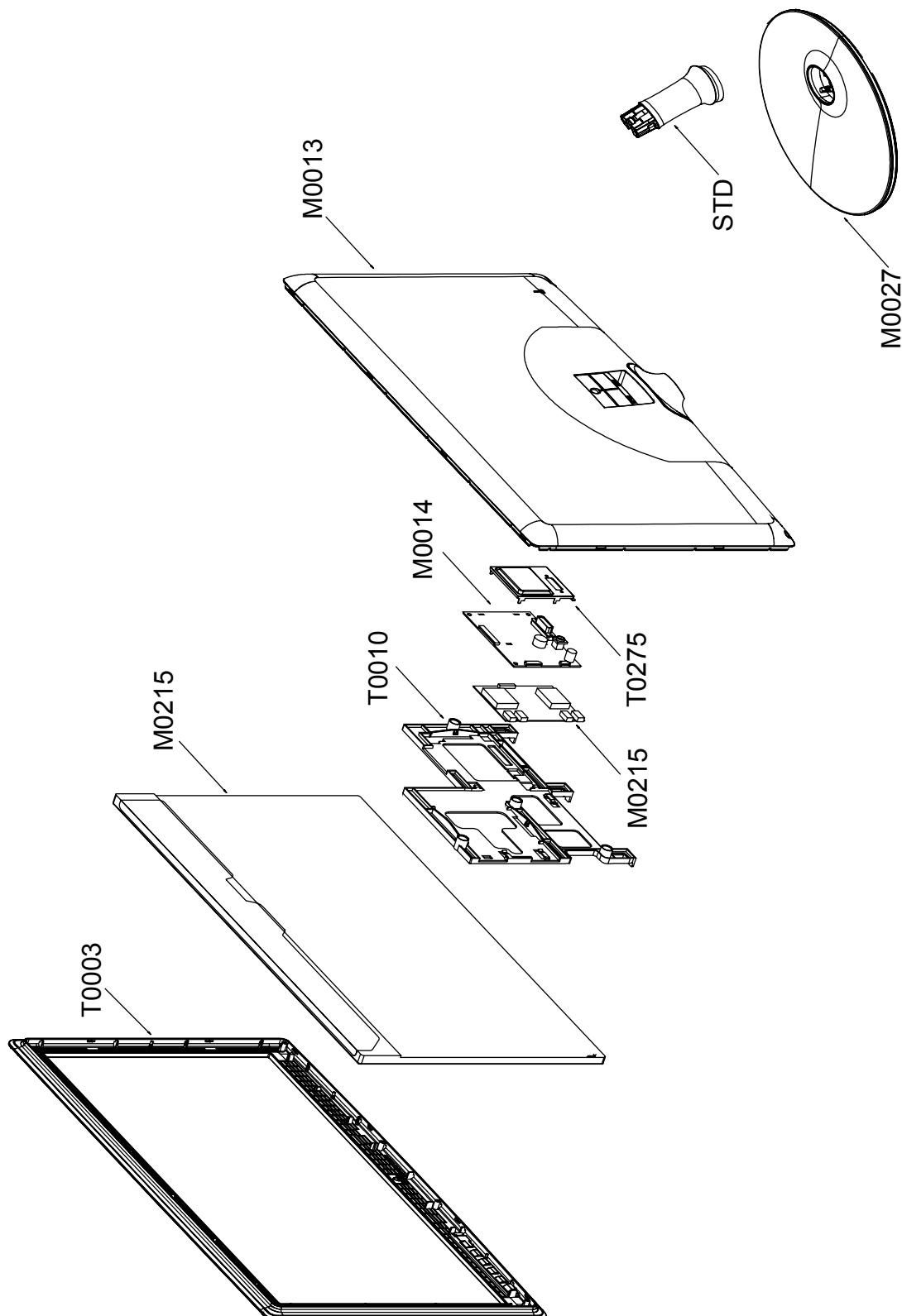
Level	Location No.	Code No.	Description & Specification	Q'ty	SA/SNA	Remark
...3	C208	BN81-03027A	A/S-CAP-C MLCC;2203-100001	1	S.N.A	
...3	C209	BN81-03028A	A/S-CAP-C MLCC;2203-100002	1	S.N.A	
...3	C201	BN81-03029A	A/S-CAP-C MLCC;2203-100005	1	S.N.A	
...3	C202	BN81-03029A	A/S-CAP-C MLCC;2203-100005	1	S.N.A	
...3	C103	BN81-03030A	A/S-CAP-C MLCC;2203-200001	1	S.N.A	
...3	C106	BN81-03030A	A/S-CAP-C MLCC;2203-200001	1	S.N.A	
...3	C210	BN81-03030A	A/S-CAP-C MLCC;2203-200001	1	S.N.A	
...3	C206	BN81-03031A	A/S-CAP-C MLCC;2203-300001	1	S.N.A	
...3	C2	BN81-03032A	A/S-CAP-FILM;2305-000012	1	S.N.A	
...3	C1	BN81-03033A	A/S-CAP-FILM;2305-000014	1	S.N.A	
...3	C101	BN81-03034A	A/S-CAP-E AL;2401-000005	1	S.N.A	
...3	C108	BN81-03035A	A/S-CAP-E AL;2401-300007	1	S.N.A	
...3	C203	BN81-03036A	A/S-CAP-E AL;2401-500001	1	S.N.A	
...3	C204	BN81-03036A	A/S-CAP-E AL;2401-500001	1	S.N.A	
...3	T101	BN81-03037A	A/S-TRANS-SWG;2602-000013	1	S.N.A	
...3	LF1	BN81-03038A	A/S-LINE-FILTER;2902-000002	1	S.N.A	
...3	L102	BN81-03039A	A/S-FERRITE-BEAD FILTER;3301-002073	1	S.N.A	
...3	L101	BN81-03041A	A/S-FERRITE-BEAD CORE;3301-002075	1	S.N.A	
...3	L103	BN81-03041A	A/S-FERRITE-BEAD CORE;3301-002075	1	S.N.A	
...3	F1	BN81-03042A	A/S-FUSE;3601-000005	1	S.N.A	
...3		BN81-03043A	A/S-SCREW-M;6001-000004	2	S.N.A	
...3		BN81-03044A	A/S-NUT-HEXAGON;6021-000001	2	S.N.A	
...3	D202	BN81-03045A	A/S-HEAT SINK;6203-000008	1	S.N.A	
...3	Q101	BN81-03046A	A/S-HEAT SINK;6203-000014	1	S.N.A	
...3		BN81-03047A	A/S-EYELET;6402-000001	4	S.N.A	
...3		BN81-03048A	A/S-EYELET;6402-000002	4	S.N.A	
...3		BN81-03054A	A/S-VINYL SACK;MA69-00325F	1	S.N.A	
...3		BN81-03055A	A/S-LABEL-HIPOT;MB68-00001A	1	S.N.A	
...3		BN81-03056A	A/S-LABEL-CODE;MB68-00002A	1	S.N.A	
...3		BN81-03057A	A/S-LABEL;MB68-00038A	1	S.N.A	
...3		BN81-03058A	A/S-CASE-TOP;MB72-00003A	1	S.N.A	
...3		BN81-03059A	A/S-CASE-BOTTOM;MB72-00003B	1	S.N.A	
...3		BN81-03060A	A/S-CHOKE COIL ASSY;MB75-00007A	1	S.N.A	
...3		BN81-03061A	A/S-IN-LET;MB75-30002A	1	S.N.A	
...3		BN81-03062A	A/S-INSULATION-SHEET;MB75-40001A	1	S.N.A	
...3		BN81-03063A	A/S-INSULATOR-RING;MB75-40012A	1	S.N.A	
...3		BN81-03064A	A/S-PCB-MAIN;MB81-10014A	1	S.N.A	
...3		BN81-03065A	A/S-DC CABLE;MB84-20001A	1	S.N.A	
.2	M0045	BN96-09373V	ASSY ACCESSORY;LS22EFHKFV/CI	1	S.A	
...3	T0524	6902-000110	BAG PE;LDPE,T0.05,W250,L400,TRP,28,2,-,9	1	S.N.A	
...3		BH68-00633B	MANUAL FLYER-03,WARRANTY CARD;comm,Samsu	1	S.N.A	
...3		BH68-70448A	CARD-01;TFT LCD,SRC,RUSSIA,S/W,120,W210*	1	S.N.A	
...3	M0125	BN39-00246L	CBF SIGNAL-DVI(D);DVI-Cable,24P/24P,2027	1	S.A	
...3	M0215	BN96-09890B	ASSY MANUAL P-IB+QSG;P2070,P2270,P237 0,P	1	S.N.A	
....4	CCM1	BN59-00841B	S/W DRIVER-02,IB;P2*70(G),WW,SyncMaster	1	S.N.A	
....4		BN68-01905B	MANUAL FLYER-QSG;P2*70(G),W/W,Moj 80g,1	1	S.N.A	
...3	M9889	BN63-02368B	CLOTH-CLEAN;cloth,120,160,sea blue,ToC	1	S.N.A	
...3		BN68-00907F	MANUAL FLYER-00,WEE;comm,Samsung,23La ng,	1	S.N.A	

5. Exploded View & Part List

Level	Location No.	Code No.	Description & Specification	Q'ty	SA/SNA	Remark
...3	T0238	BN68-01925B	MANUAL FLYER-WARRANTY CARD;comm,Samsung,	1	S.N.A	
..2	M0027	BN96-09629A	ASSY STAND P-BASE;ECOFIT,ABS HB,BK23(H/G	1	S.A	
...3	CIS4	BN61-01717A	HOLDER-STAND;BIZET,NI PLT,CH,+,M4,L11(5)	1	S.N.A	
...3		BN61-05087A	BRACKET-STAND BOTTOM;ECOFIT 23",SECC TO.	1	S.N.A	
...3	CCM1	BN63-02183K	COVER-SHEET;Rhcm,PE Vinyl,T 0.05,250MM,2	0.3	S.N.A	
...3	T0004	BN63-05425A	COVER-STAND BASE;ECOFIT 23",ABS,HB,BK23,	1	S.N.A	
...3	T0132	BN73-00077A	RUBBER FOOT;MATISSE,BUMPON,Φ13.5,T2.0,6	4	S.N.A	
...3		6003-001001	SCREW-TAPTYPE;FH,+,B,M3,L8,ZPC(BLK),SW RC	4	S.N.A	
...3	T0524	6902-000109	BAG PE;HDPE,T0.015,W350,L430,TRP,28,2,4.	1	S.N.A	
...3		BN68-02009B	MANUAL FLYER-STAND;Ecofit,Lavender,Mojo	1	S.N.A	
.2		BN39-00310D	CBF SIGNAL-DVI(A);DVI(A) cable,15P/10P,U	1	S.A	
.2	STD	BN96-09628B	ASSY STAND P-BODY;ECOFIT,PC	1	S.N.A	
...3	T0524	6902-000023	BAG PE;LDPE,T0.08,W150,L120,TRP,1.650g	1	S.N.A	
...3	T0069	BN60-00119B	SPACER-FELT;ECOFIT 23"(P2370),FELT,L145,	1	S.N.A	
...3		BN61-05095A	STAND-BAR;P2370, ECOFIT 23",PC CLEAR,TP3	1	S.N.A	
....4		BN61-05094A	STAND-BAR IN;P2370, ECOFIT 23",PC CLEAR,	1	S.N.A	
....4		BN61-05410A	STAND-BAR A;ECOFIT, LB650 19",22",PC BLU	1	S.N.A	
.....5		BN61-02932E	BRACKET-STOPPER NUT;ECOFIT 20,M4,D8,L12,	1	S.N.A	
0.1	M0003	BN92-04332G	ASSY BOX;LS23EFHKFV/CH	1	S.N.A	
.2		BN96-02895A	ASSY MISC P-01,HANDLE PACKING;ALL MODEL,	1	S.N.A	
...3	M0103	BN66-00007A	LEVER-TOP;ALL MODEL,LDPE,WHITE,5.8g	1	S.N.A	
...3	M0102	BN66-00008A	LEVER-BOTTOM;ALL MODEL,LDPE,WHITE,4.01g	1	S.N.A	
.2		BN69-03563C	BOX-SET;P230S,CB,A-01,SW2, ECT40,YEL,W68	1.01	S.N.A	

5. Exploded View & Part List

5-1. LS23EFHKFV/EN Exploded View (P2370)



5. Exploded View & Part List

5-1-1. LS23EFHKFV/EN Parts List (P2370)

Location No.	Code No.	Description & Specification	Q'ty	SA/SNA	Remark
M0215	BN07-00711A	LCD-PANEL;LTM230HT02	1	S.A	
M0215	BN44-00286B	INVERTER;Ecofit23" w, INV23N02A, 60khz, 12V,	1	S.A	
T0010	BN61-05083A	HOLDER-SUB PCB;LS23EF,HIPS,BK23	1	S.N.A	
T0275	BN63-05769A	SHIELD-MAIN;ECOFIT 22",SPTE,T0.3	1	S.N.A	
M0014	BN94-02609B	ASSY PCB MAIN-STZ,W/W;LS23EFH*	1	S.A	
T0003	BN96-09624A	ASSY COVER P-FRONT;ECOFIT 23,PMMA, PMMA+	1	S.A	
M0013	BN96-09625A	ASSY COVER P-REAR;ECOFIT 23,PMMA+ABS,HB,	1	S.A	
STD	BN96-09628B	ASSY STAND P-BODY;ECOFIT,PC	1	S.N.A	
M0027	BN96-09629A	ASSY STAND P-BASE;ECOFIT,ABS HB,BK23(H/G	1	S.A	

5-2. LS23EFHKFV/EN Parts List (P2370)

Service Bom (SA: SERVICE AVAILABLE, SNA: SERVICE NOT AVAILABLE)

Level	Location No.	Code No.	Description & Specification	Q'ty	SA/SNA	Remark
		LS23EFHKFV/EN	P2370,WBJ1/S23H0-LEF,23,LCD-MO,NETHERLAN			
0.1	M0001	BN90-02018A	ASSY COVER FRONT;LS23EF,ECOFIT	1	S.N.A	
..2	T0003	BN96-09624A	ASSY COVER P-FRONT;ECOFIT 23,PMMA, PMMA+	1	S.A	
...3	CCM1	BN63-02183D	COVER-SHEET;Rhcm,PE Vinyl,T0.05,680mm,20	0.5	S.N.A	
...3	M0112	BN63-05423A	COVER-FRONT;ECOFIT 23",PMMA, PMMA+ABS,TO	1	S.N.A	
...3		6003-000282	SCREW-TAPTYPE;BH,+, -,B,M3,L8,ZPC(BLK),SW	1	S.N.A	
...3	T0212	BN61-05458A	BRACKET-PANEL;ECOFIT 23",SECC,T1.0	1	S.N.A	
...3	M0140	BN63-01474G	FELT-STAND;ECOFIT23"(P2370),T0.35,20,127	1	S.N.A	
...3	M0020	BN96-10522B	ASSY BOARD P;Ecofit,Function Assy,With H	1	S.N.A	
....4	M2893	BN39-01164A	LEAD CONNECTOR;ECOFIT,UL1571#30,5P,10 0mm	1	S.A	
....4	M0020	BN96-10522A	ASSY BOARD P;Ecofit,Function Assy,Withou	1	S.N.A	
....5		BN94-02622R	ASSY PCB MISC-ECOFIT,F/PCB,BN9;ECOFIT	1	S.N.A	
....6		BN64-01023A	KNOB-CONTROL MIRROR;ECOFIT 23",ABS,HB,WH	1	S.N.A	
....6		BN64-01024A	INLAY-PLATE;P2370,ECOFIT 23",PET SHEET,T	1	S.N.A	
....6	TOP	BN74-00025A	TAPE-FUNCTION TAPE;DOUBLE FACE TAPE,Poly	1	S.N.A	
....6	BOTTOM	BN74-00026A	TAPE-FUNCTION TAPE;DOUBLE FACE TAPE,Poly	1	S.N.A	
....6	T0174	BN97-03017N	ASSY SMD;ECOFIT,F/PCB-SMD	1	S.N.A	
....7	L0405	0601-002331	LED;SMD,(SIDE VIEW),WHT,2.04mm	1	S.A	
....7	L0405	0601-002331	LED;SMD,(SIDE VIEW),WHT,2.04mm	1	S.A	
....7	L0405	0601-002331	LED;SMD,(SIDE VIEW),WHT,2.04mm	1	S.A	
....7	L0405	0601-002331	LED;SMD,(SIDE VIEW),WHT,2.04mm	1	S.A	
....7	L0405	0601-002331	LED;SMD,(SIDE VIEW),WHT,2.04mm	1	S.A	
....7	L0405	0601-002331	LED;SMD,(SIDE VIEW),WHT,2.04mm	1	S.A	
....7	U1	1209-001809	IC-SENSOR;MCS-5000, UQFN,24P,4x4mm,PLA STI	1	S.A	
....7	R1	2007-000082	R-CHIP;3.3Kohm,5%,1/10W,TP,1608	1	S.N.A	
....7	C1	2203-006618	C-CER,CHIP;2200nF,+80-20%,16V,Y5V,TP,160	1	S.N.A	
....7	C2	2203-006618	C-CER,CHIP;2200nF,+80-20%,16V,Y5V,TP,160	1	S.N.A	
....7	CN330	3711-005743	HEADER-BOARD TO CABLE;BOX,5P,1R,1.25mm,A	1	S.N.A	
....7	PCB	BN41-01189A	PCB-FUNCTION;Ecofit Function PCB,FR-4,2,	1	S.N.A	
0.1	M0002	BN90-02019A	ASSY COVER REAR;LS23EF,ECOFIT	1	S.N.A	
..2	M0013	BN96-09625A	ASSY COVER P-REAR;ECOFIT 23,PMMA+ABS,HB,	1	S.A	
...3		6003-001001	SCREW-TAPTYPE;FH,+, -,B,M3,L8,ZPC(BLK),SW RC	1	S.N.A	
...3	CIS4	BN61-05084A	HOLDER-STAND;ECOFIT 23",ACETAL,WHITE	1	S.N.A	
...3	CCM1	BN63-02183D	COVER-SHEET;Rhcm,PE Vinyl,T0.05,680mm,20	0.5	S.N.A	
...3	M0006	BN63-05424A	COVER-REAR;P2370, ECOFIT 23",PMMA+ABS,HB	1	S.N.A	
...3		BN63-05434A	SHIELD-LAMP;ECOFIT 23",SPTE,T0.3	1	S.N.A	

5. Exploded View & Part List

Level	Location No.	Code No.	Description & Specification	Q'ty	SA/SNA	Remark
...3	M0111	BN63-05442A	COVER-STAND;P2370, ECOFIT 23",PMMA+ABS,H	1	S.N.A	
...3	M0131	BN63-02966A	GASKET;GASKET EMI,Polyurethane Sponge+Po	1	S.N.A	
...3		6003-001239	SCREW-TAPTYPE;FH,+,B,M4,L10,ZPC(WHT),S WR	2	S.N.A	
...3	T0060	BN61-05090A	SPRING ETC;ECOFIT 23",SK5,T0.5	1	S.N.A	
...3		BN61-05091A	SPRING ETC-STAND;ECOFIT 23",SUS304,T0.3	1	S.N.A	
...3	T0069	AA63-60122K	SPACER-FELT;SPD-42P3S,FELT,L60,D20,T0.35	2	S.N.A	
0.1	M0017	BN91-03323T	ASSY CHASSIS-STZ,W/W;LS23EFH*	1	S.N.A	
..2	M0215	BN44-00286B	INVERTER;Ecofit23" w,INV23N02A,60khz,12V,	1	S.A	
..2	T0010	BN61-05083A	HOLDER-SUB PCB;LS23EF,HIPS,BK23	1	S.N.A	
..2	M0014	BN94-02609B	ASSY PCB MAIN-STZ,W/W;LS23EFH*	1	S.A	
...3	T0245	0202-001608	SOLDER-WIRE FLUX;LFC7-107,D0.8,99.3Sn/0.	0.003	S.N.A	
...3	CN102	3701-001225	CONNECTOR-DVI;24P+5C,3R,FEMALE,STRAIGHT,	1	S.A	
...3	CN700	3722-001849	JACK-DC POWER;3P,7.1MM,SNPB,BLK	1	S.A	
...3	HDCP	BN97-00707A	ASSY HDCP;BN46-00018A,BR20/21BS_CS,MSTAR	1	S.N.A	
....4		BN46-00018A	KEY CODE-CERTIFICATE;(HDCP KEY)PPM42M5S,	1	S.N.A	
...3	T0174	BN97-03017C	ASSY SMD;LS23EFHKFV/ZC	1	S.N.A	
....4	D100	0401-001056	DIODE-SWITCHING;MMBD4148SE,100V,200mA,SO	1	S.A	
....4	D101	0401-001056	DIODE-SWITCHING;MMBD4148SE,100V,200mA,SO	1	S.A	
....4	D102	0401-001056	DIODE-SWITCHING;MMBD4148SE,100V,200mA,SO	1	S.A	
....4	D103	0401-001056	DIODE-SWITCHING;MMBD4148SE,100V,200mA,SO	1	S.A	
....4	D104	0401-001056	DIODE-SWITCHING;MMBD4148SE,100V,200mA,SO	1	S.A	
....4	D105	0401-001056	DIODE-SWITCHING;MMBD4148SE,100V,200mA,SO	1	S.A	
....4	D106	0401-001056	DIODE-SWITCHING;MMBD4148SE,100V,200mA,SO	1	S.A	
....4	D107	0401-001056	DIODE-SWITCHING;MMBD4148SE,100V,200mA,SO	1	S.A	
....4	D108	0401-001056	DIODE-SWITCHING;MMBD4148SE,100V,200mA,SO	1	S.A	
....4	D109	0401-001056	DIODE-SWITCHING;MMBD4148SE,100V,200mA,SO	1	S.A	
....4	D110	0401-001056	DIODE-SWITCHING;MMBD4148SE,100V,200mA,SO	1	S.A	
....4	D600	0402-001614	DIODE-RECTIFIER;S1G,400V,1A,DO-214AC,TP	1	S.A	
....4	D601	0402-001614	DIODE-RECTIFIER;S1G,400V,1A,DO-214AC,TP	1	S.A	
....4	ZD102	0403-001411	DIODE-ZENER;5.49-5.73V,200mW,SOD-323,TP	1	S.N.A	
....4	ZD104	0403-001411	DIODE-ZENER;5.49-5.73V,200mW,SOD-323,TP	1	S.N.A	
....4	ZD105	0403-001411	DIODE-ZENER;5.49-5.73V,200mW,SOD-323,TP	1	S.N.A	
....4	ZD106	0403-001411	DIODE-ZENER;5.49-5.73V,200mW,SOD-323,TP	1	S.N.A	
....4	ZD107	0403-001411	DIODE-ZENER;5.49-5.73V,200mW,SOD-323,TP	1	S.N.A	
....4	ZD114	0403-001411	DIODE-ZENER;5.49-5.73V,200mW,SOD-323,TP	1	S.N.A	
....4	ZD204	0403-001411	DIODE-ZENER;5.49-5.73V,200mW,SOD-323,TP	1	S.N.A	
....4	ZD601	0403-001411	DIODE-ZENER;5.49-5.73V,200mW,SOD-323,TP	1	S.N.A	
....4	D0254	0404-001307	DIODE-SCHOTTKY;SSC54,20V,5000mA,DO-214AB	1	S.A	

5. Exploded View & Part List

Level	Location No.	Code No.	Description & Specification	Q'ty	SA/SNA	Remark
....4	ZD103	0406-001061	DIODE-TVS;MMQA5V6T3,5.32/5.6/5.88V,24W,S	1	S.A	
....4	Q201	0501-000445	TR-SMALL SIGNAL;KTC3875S-Y,NPN,150mW,SOT	1	S.A	
....4	Q203	0501-000445	TR-SMALL SIGNAL;KTC3875S-Y,NPN,150mW,SOT	1	S.A	
....4	Q204	0501-000445	TR-SMALL SIGNAL;KTC3875S-Y,NPN,150mW,SOT	1	S.A	
....4	Q601	0501-000445	TR-SMALL SIGNAL;KTC3875S-Y,NPN,150mW,SOT	1	S.A	
....4	Q101	0501-002080	TR-SMALL SIGNAL;2SC2412K,NPN,200mW,SC-59	1	S.A	
....4	Q102	0501-002080	TR-SMALL SIGNAL;2SC2412K,NPN,200mW,SC-59	1	S.A	
....4	Q202	0501-002080	TR-SMALL SIGNAL;2SC2412K,NPN,200mW,SC-59	1	S.A	
....4	Q205	0501-002080	TR-SMALL SIGNAL;2SC2412K,NPN,200mW,SC-59	1	S.A	
....4	Q207	0501-002080	TR-SMALL SIGNAL;2SC2412K,NPN,200mW,SC-59	1	S.A	
....4	Q409	0505-001165	FET-SILICON;SI3443BDV,P,-20V,+4.4A,65mo	1	S.A	
....4	Q409	0505-001165	FET-SILICON;SI3443BDV,P,-20V,+4.4A,65mo	1	S.A	
....4	Q409	0505-001170	FET-SILICON;SI9933ADY-T1,P,-20V,3.4A,0.0	1	S.A	
....4	IC112	1103-000129	IC-EEPROM;24C02,2Kbit,256x8,SOP,8P,5x4mm	1	S.A	
....4	IC112	1103-000129	IC-EEPROM;24C02,2Kbit,256x8,SOP,8P,5x4mm	1	S.A	
....4	IC112	1103-001410	IC-EEPROM;S-24CS08AFJ-TB-1GE,8Kbit,1Kx8,	1	S.A	
....4	IC604	1202-000104	IC-VOLTAGE COMP.;393,SOP,8P,150MIL,DUAL,	1	S.A	
....4	T0170	1203-003059	IC-SWITCH VOL. REG.;MP1583,SOIC,8P,4.9x3	1	S.A	
....4	T0087	1203-003695	IC-POSI.FIXED REG.;NCP1117ST33T3G,SOT-22	1	S.A	
....4	T0087	1203-003695	IC-POSI.FIXED REG.;NCP1117ST33T3G,SOT-22	1	S.A	
....4	T0087	1203-003696	IC-POSI.FIXED REG.;NCP1117DT18T5G,DPAK,3	1	S.A	
....4	IC109	1205-003664	IC-LCD CONTROLLER;SE859MRH-LH,PQFP,128P,	1	S.A	
....4	R603	2007-000052	R-CHIP;10Kohm,1%,1/10W,TP,1608	1	S.N.A	
....4	R608	2007-000052	R-CHIP;10Kohm,1%,1/10W,TP,1608	1	S.N.A	
....4	R123	2007-000070	R-CHIP;0ohm,5%,1/10W,TP,1608	1	S.N.A	
....4	R100	2007-000071	R-CHIP;22ohm,5%,1/10W,TP,1608	1	S.N.A	
....4	R101	2007-000071	R-CHIP;22ohm,5%,1/10W,TP,1608	1	S.N.A	
....4	R102	2007-000071	R-CHIP;22ohm,5%,1/10W,TP,1608	1	S.N.A	
....4	R103	2007-000071	R-CHIP;22ohm,5%,1/10W,TP,1608	1	S.N.A	
....4	R104	2007-000071	R-CHIP;22ohm,5%,1/10W,TP,1608	1	S.N.A	
....4	R105	2007-000071	R-CHIP;22ohm,5%,1/10W,TP,1608	1	S.N.A	
....4	R106	2007-000071	R-CHIP;22ohm,5%,1/10W,TP,1608	1	S.N.A	
....4	R107	2007-000071	R-CHIP;22ohm,5%,1/10W,TP,1608	1	S.N.A	
....4	R354	2007-000071	R-CHIP;22ohm,5%,1/10W,TP,1608	1	S.N.A	
....4	R355	2007-000071	R-CHIP;22ohm,5%,1/10W,TP,1608	1	S.N.A	
....4	R302	2007-000072	R-CHIP;47ohm,5%,1/10W,TP,1608	1	S.N.A	
....4	R303	2007-000072	R-CHIP;47ohm,5%,1/10W,TP,1608	1	S.N.A	
....4	R335	2007-000072	R-CHIP;47ohm,5%,1/10W,TP,1608	1	S.N.A	
....4	R337	2007-000072	R-CHIP;47ohm,5%,1/10W,TP,1608	1	S.N.A	
....4	R111	2007-000074	R-CHIP;100ohm,5%,1/10W,TP,1608	1	S.A	
....4	R113	2007-000074	R-CHIP;100ohm,5%,1/10W,TP,1608	1	S.A	
....4	R114	2007-000074	R-CHIP;100ohm,5%,1/10W,TP,1608	1	S.A	
....4	R117	2007-000074	R-CHIP;100ohm,5%,1/10W,TP,1608	1	S.A	
....4	R118	2007-000074	R-CHIP;100ohm,5%,1/10W,TP,1608	1	S.A	

5. Exploded View & Part List

Level	Location No.	Code No.	Description & Specification	Q'ty	SA/SNA	Remark
....4	R120	2007-000074	R-CHIP;100ohm,5%,1/10W,TP,1608	1	S.A	
....4	R126	2007-000074	R-CHIP;100ohm,5%,1/10W,TP,1608	1	S.A	
....4	R130	2007-000074	R-CHIP;100ohm,5%,1/10W,TP,1608	1	S.A	
....4	R132	2007-000074	R-CHIP;100ohm,5%,1/10W,TP,1608	1	S.A	
....4	R216	2007-000074	R-CHIP;100ohm,5%,1/10W,TP,1608	1	S.A	
....4	R230	2007-000074	R-CHIP;100ohm,5%,1/10W,TP,1608	1	S.A	
....4	R255	2007-000074	R-CHIP;100ohm,5%,1/10W,TP,1608	1	S.A	
....4	R261	2007-000074	R-CHIP;100ohm,5%,1/10W,TP,1608	1	S.A	
....4	R263	2007-000074	R-CHIP;100ohm,5%,1/10W,TP,1608	1	S.A	
....4	R281	2007-000074	R-CHIP;100ohm,5%,1/10W,TP,1608	1	S.A	
....4	R282	2007-000074	R-CHIP;100ohm,5%,1/10W,TP,1608	1	S.A	
....4	R283	2007-000074	R-CHIP;100ohm,5%,1/10W,TP,1608	1	S.A	
....4	R110	2007-000078	R-CHIP;1Kohm,5%,1/10W,TP,1608	1	S.A	
....4	R127	2007-000078	R-CHIP;1Kohm,5%,1/10W,TP,1608	1	S.A	
....4	R108	2007-000080	R-CHIP;2Kohm,5%,1/10W,TP,1608	1	S.N.A	
....4	R270	2007-000080	R-CHIP;2Kohm,5%,1/10W,TP,1608	1	S.N.A	
....4	R218	2007-000083	R-CHIP;3Kohm,5%,1/10W,TP,1608	1	S.N.A	
....4	R229	2007-000083	R-CHIP;3Kohm,5%,1/10W,TP,1608	1	S.N.A	
....4	R207	2007-000084	R-CHIP;4.7Kohm,5%,1/10W,TP,1608	1	S.A	
....4	R219	2007-000084	R-CHIP;4.7Kohm,5%,1/10W,TP,1608	1	S.A	
....4	R223	2007-000084	R-CHIP;4.7Kohm,5%,1/10W,TP,1608	1	S.A	
....4	R234	2007-000084	R-CHIP;4.7Kohm,5%,1/10W,TP,1608	1	S.A	
....4	R264	2007-000084	R-CHIP;4.7Kohm,5%,1/10W,TP,1608	1	S.A	
....4	R265	2007-000084	R-CHIP;4.7Kohm,5%,1/10W,TP,1608	1	S.A	
....4	R109	2007-000090	R-CHIP;10Kohm,5%,1/10W,TP,1608	1	S.A	
....4	R129	2007-000090	R-CHIP;10Kohm,5%,1/10W,TP,1608	1	S.A	
....4	R213	2007-000090	R-CHIP;10Kohm,5%,1/10W,TP,1608	1	S.A	
....4	R215	2007-000090	R-CHIP;10Kohm,5%,1/10W,TP,1608	1	S.A	
....4	R217	2007-000090	R-CHIP;10Kohm,5%,1/10W,TP,1608	1	S.A	
....4	R222	2007-000090	R-CHIP;10Kohm,5%,1/10W,TP,1608	1	S.A	
....4	R224	2007-000090	R-CHIP;10Kohm,5%,1/10W,TP,1608	1	S.A	
....4	R226	2007-000090	R-CHIP;10Kohm,5%,1/10W,TP,1608	1	S.A	
....4	R233	2007-000090	R-CHIP;10Kohm,5%,1/10W,TP,1608	1	S.A	
....4	R236	2007-000090	R-CHIP;10Kohm,5%,1/10W,TP,1608	1	S.A	
....4	R254	2007-000090	R-CHIP;10Kohm,5%,1/10W,TP,1608	1	S.A	
....4	R262	2007-000090	R-CHIP;10Kohm,5%,1/10W,TP,1608	1	S.A	
....4	R271	2007-000090	R-CHIP;10Kohm,5%,1/10W,TP,1608	1	S.A	
....4	R274	2007-000090	R-CHIP;10Kohm,5%,1/10W,TP,1608	1	S.A	
....4	R275	2007-000090	R-CHIP;10Kohm,5%,1/10W,TP,1608	1	S.A	
....4	R276	2007-000090	R-CHIP;10Kohm,5%,1/10W,TP,1608	1	S.A	
....4	R318	2007-000090	R-CHIP;10Kohm,5%,1/10W,TP,1608	1	S.A	
....4	R319	2007-000090	R-CHIP;10Kohm,5%,1/10W,TP,1608	1	S.A	
....4	R327	2007-000090	R-CHIP;10Kohm,5%,1/10W,TP,1608	1	S.A	
....4	R328	2007-000090	R-CHIP;10Kohm,5%,1/10W,TP,1608	1	S.A	
....4	R612	2007-000090	R-CHIP;10Kohm,5%,1/10W,TP,1608	1	S.A	
....4	R128	2007-000093	R-CHIP;20Kohm,5%,1/10W,TP,1608	1	S.N.A	
....4	R605	2007-000093	R-CHIP;20Kohm,5%,1/10W,TP,1608	1	S.N.A	
....4	R622	2007-000093	R-CHIP;20Kohm,5%,1/10W,TP,1608	1	S.N.A	
....4	R214	2007-000102	R-CHIP;100Kohm,5%,1/10W,TP,1608	1	S.A	
....4	R225	2007-000102	R-CHIP;100Kohm,5%,1/10W,TP,1608	1	S.A	
....4	R125	2007-000124	R-CHIP;2.2Kohm,5%,1/10W,TP,1608	1	S.N.A	

5. Exploded View & Part List

Level	Location No.	Code No.	Description & Specification	Q'ty	SA/SNA	Remark
....4	R299	2007-000134	R-CHIP;33Kohm,5%,1/10W,TP,1608	1	S.N.A	
....4	R232	2007-000309	R-CHIP;10ohm,5%,1/10W,TP,1608	1	S.A	
....4	R273	2007-000309	R-CHIP;10ohm,5%,1/10W,TP,1608	1	S.A	
....4	R116	2007-000821	R-CHIP;390ohm,1%,1/10W,TP,1608	1	S.N.A	
....4	R235	2007-000821	R-CHIP;390ohm,1%,1/10W,TP,1608	1	S.N.A	
....4	R206	2007-000965	R-CHIP;5.1Kohm,5%,1/10W,TP,1608	1	S.N.A	
....4	R121	2007-001044	R-CHIP;56ohm,5%,1/10W,TP,1608	1	S.A	
....4	R122	2007-001044	R-CHIP;56ohm,5%,1/10W,TP,1608	1	S.A	
....4	R112	2007-001164	R-CHIP;75ohm,1%,1/10W,TP,1608	1	S.N.A	
....4	R115	2007-001164	R-CHIP;75ohm,1%,1/10W,TP,1608	1	S.N.A	
....4	R119	2007-001164	R-CHIP;75ohm,1%,1/10W,TP,1608	1	S.N.A	
....4	R614	2007-002425	R-CHIP;1ohm,5%,1/10W,TP,1608	1	S.N.A	
....4	R615	2007-002425	R-CHIP;1ohm,5%,1/10W,TP,1608	1	S.N.A	
....4	C215	2203-000189	C-CER,CHIP;100nF,+80-20%,25V,Y5V,1608	1	S.N.A	
....4	C217	2203-000189	C-CER,CHIP;100nF,+80-20%,25V,Y5V,1608	1	S.N.A	
....4	C216	2203-000236	C-CER,CHIP;0.1nF,5%,50V,C0G,1608	1	S.N.A	
....4	C229	2203-000236	C-CER,CHIP;0.1nF,5%,50V,C0G,1608	1	S.N.A	
....4	C109	2203-000257	C-CER,CHIP;10nF,10%,50V,X7R,TP,1608	1	S.A	
....4	C201	2203-000257	C-CER,CHIP;10nF,10%,50V,X7R,TP,1608	1	S.A	
....4	C203	2203-000257	C-CER,CHIP;10nF,10%,50V,X7R,TP,1608	1	S.A	
....4	C220	2203-000257	C-CER,CHIP;10nF,10%,50V,X7R,TP,1608	1	S.A	
....4	C663	2203-000257	C-CER,CHIP;10nF,10%,50V,X7R,TP,1608	1	S.A	
....4	C116	2203-000384	C-CER,CHIP;0.015nF,5%,50V,C0G,1608	1	S.N.A	
....4	C115	2203-000626	C-CER,CHIP;0.022nF,5%,50V,C0G,1608	1	S.N.A	
....4	C106	2203-000888	C-CER,CHIP;4.7nF,10%,50V,X7R,TP,1608	1	S.A	
....4	C107	2203-000888	C-CER,CHIP;4.7nF,10%,50V,X7R,TP,1608	1	S.A	
....4	C108	2203-000888	C-CER,CHIP;4.7nF,10%,50V,X7R,TP,1608	1	S.A	
....4	C110	2203-000888	C-CER,CHIP;4.7nF,10%,50V,X7R,TP,1608	1	S.A	
....4	C111	2203-000888	C-CER,CHIP;4.7nF,10%,50V,X7R,TP,1608	1	S.A	
....4	C112	2203-000888	C-CER,CHIP;4.7nF,10%,50V,X7R,TP,1608	1	S.A	
....4	C219	2203-000975	C-CER,CHIP;47nF,10%,25V,X7R,TP,1608,-	1	S.N.A	
....4	C100	2203-005005	C-CER,CHIP;100nF,10%,16V,X7R,1608	1	S.A	
....4	C101	2203-005005	C-CER,CHIP;100nF,10%,16V,X7R,1608	1	S.A	
....4	C103	2203-005005	C-CER,CHIP;100nF,10%,16V,X7R,1608	1	S.A	
....4	C117	2203-005005	C-CER,CHIP;100nF,10%,16V,X7R,1608	1	S.A	
....4	C118	2203-005005	C-CER,CHIP;100nF,10%,16V,X7R,1608	1	S.A	
....4	C119	2203-005005	C-CER,CHIP;100nF,10%,16V,X7R,1608	1	S.A	
....4	C120	2203-005005	C-CER,CHIP;100nF,10%,16V,X7R,1608	1	S.A	
....4	C121	2203-005005	C-CER,CHIP;100nF,10%,16V,X7R,1608	1	S.A	
....4	C122	2203-005005	C-CER,CHIP;100nF,10%,16V,X7R,1608	1	S.A	
....4	C123	2203-005005	C-CER,CHIP;100nF,10%,16V,X7R,1608	1	S.A	
....4	C124	2203-005005	C-CER,CHIP;100nF,10%,16V,X7R,1608	1	S.A	
....4	C125	2203-005005	C-CER,CHIP;100nF,10%,16V,X7R,1608	1	S.A	
....4	C130	2203-005005	C-CER,CHIP;100nF,10%,16V,X7R,1608	1	S.A	
....4	C205	2203-005005	C-CER,CHIP;100nF,10%,16V,X7R,1608	1	S.A	
....4	C206	2203-005005	C-CER,CHIP;100nF,10%,16V,X7R,1608	1	S.A	
....4	C209	2203-005005	C-CER,CHIP;100nF,10%,16V,X7R,1608	1	S.A	
....4	C212	2203-005005	C-CER,CHIP;100nF,10%,16V,X7R,1608	1	S.A	
....4	C213	2203-005005	C-CER,CHIP;100nF,10%,16V,X7R,1608	1	S.A	
....4	C234	2203-005005	C-CER,CHIP;100nF,10%,16V,X7R,1608	1	S.A	
....4	C600	2203-005005	C-CER,CHIP;100nF,10%,16V,X7R,1608	1	S.A	

5. Exploded View & Part List

Level	Location No.	Code No.	Description & Specification	Q'ty	SA/SNA	Remark
....4	C601	2203-005005	C-CER,CHIP;100nF,10%,16V,X7R,1608	1	S.A	
....4	C603	2203-005005	C-CER,CHIP;100nF,10%,16V,X7R,1608	1	S.A	
....4	C604	2203-005005	C-CER,CHIP;100nF,10%,16V,X7R,1608	1	S.A	
....4	C605	2203-005005	C-CER,CHIP;100nF,10%,16V,X7R,1608	1	S.A	
....4	C606	2203-005005	C-CER,CHIP;100nF,10%,16V,X7R,1608	1	S.A	
....4	C609	2203-005005	C-CER,CHIP;100nF,10%,16V,X7R,1608	1	S.A	
....4	C612	2203-005005	C-CER,CHIP;100nF,10%,16V,X7R,1608	1	S.A	
....4	C613	2203-005005	C-CER,CHIP;100nF,10%,16V,X7R,1608	1	S.A	
....4	C614	2203-005005	C-CER,CHIP;100nF,10%,16V,X7R,1608	1	S.A	
....4	C617	2203-005005	C-CER,CHIP;100nF,10%,16V,X7R,1608	1	S.A	
....4	C618	2203-005005	C-CER,CHIP;100nF,10%,16V,X7R,1608	1	S.A	
....4	C619	2203-005005	C-CER,CHIP;100nF,10%,16V,X7R,1608	1	S.A	
....4	C620	2203-005005	C-CER,CHIP;100nF,10%,16V,X7R,1608	1	S.A	
....4	C621	2203-005005	C-CER,CHIP;100nF,10%,16V,X7R,1608	1	S.A	
....4	C622	2203-005005	C-CER,CHIP;100nF,10%,16V,X7R,1608	1	S.A	
....4	C623	2203-005005	C-CER,CHIP;100nF,10%,16V,X7R,1608	1	S.A	
....4	C626	2203-005005	C-CER,CHIP;100nF,10%,16V,X7R,1608	1	S.A	
....4	C627	2203-005005	C-CER,CHIP;100nF,10%,16V,X7R,1608	1	S.A	
....4	C628	2203-005005	C-CER,CHIP;100nF,10%,16V,X7R,1608	1	S.A	
....4	C630	2203-005005	C-CER,CHIP;100nF,10%,16V,X7R,1608	1	S.A	
....4	C631	2203-005005	C-CER,CHIP;100nF,10%,16V,X7R,1608	1	S.A	
....4	C632	2203-005005	C-CER,CHIP;100nF,10%,16V,X7R,1608	1	S.A	
....4	C635	2203-005005	C-CER,CHIP;100nF,10%,16V,X7R,1608	1	S.A	
....4	C636	2203-005005	C-CER,CHIP;100nF,10%,16V,X7R,1608	1	S.A	
....4	C637	2203-005005	C-CER,CHIP;100nF,10%,16V,X7R,1608	1	S.A	
....4	C638	2203-005005	C-CER,CHIP;100nF,10%,16V,X7R,1608	1	S.A	
....4	C640	2203-005005	C-CER,CHIP;100nF,10%,16V,X7R,1608	1	S.A	
....4	C641	2203-005005	C-CER,CHIP;100nF,10%,16V,X7R,1608	1	S.A	
....4	C208	2203-005065	C-CER,CHIP;1000nF,+80-20%,10V,Y5V,1608	1	S.N.A	
....4	C218	2203-005065	C-CER,CHIP;1000nF,+80-20%,10V,Y5V,1608	1	S.N.A	
....4	C228	2203-005065	C-CER,CHIP;1000nF,+80-20%,10V,Y5V,1608	1	S.N.A	
....4	C230	2203-005065	C-CER,CHIP;1000nF,+80-20%,10V,Y5V,1608	1	S.N.A	
....4	C207	2203-005437	C-CER,CHIP;10000nF,+80-20%,10V,Y5V,3216	1	S.N.A	
....4	C236	2203-005437	C-CER,CHIP;10000nF,+80-20%,10V,Y5V,3216	1	S.N.A	
....4	C237	2203-005437	C-CER,CHIP;10000nF,+80-20%,10V,Y5V,3216	1	S.N.A	
....4	C238	2203-005437	C-CER,CHIP;10000nF,+80-20%,10V,Y5V,3216	1	S.N.A	
....4	C643	2203-005437	C-CER,CHIP;10000nF,+80-20%,10V,Y5V,3216	1	S.N.A	
....4	C644	2203-005437	C-CER,CHIP;10000nF,+80-20%,10V,Y5V,3216	1	S.N.A	
....4	C660	2203-005437	C-CER,CHIP;10000nF,+80-20%,10V,Y5V,3216	1	S.N.A	
....4	C214	2402-001079	C-AL,SMD;100uF,20%,35V,WT,TP,10.3x10.3x1	1	S.A	
....4	C222	2402-001081	C-AL,SMD;100uF,20%,25V,WT,TP,8.3x8.3x10	1	S.A	
....4	C245	2402-001081	C-AL,SMD;100uF,20%,25V,WT,TP,8.3x8.3x10	1	S.A	
....4	C602	2402-001128	C-AL,SMD;100μF,20%,16V,-,TP,6.3X5.7mm	1	S.A	
....4	C653	2402-001128	C-AL,SMD;100μF,20%,16V,-,TP,6.3X5.7mm	1	S.A	
....4	T0052	2703-002801	INDUCTOR-SMD;3.9uH,20%,7070	1	S.A	
....4	X202	2801-003667	CRYSTAL-SMD;14.31818MHz,30ppm,28-AAN,16p	1	S.A	
....4	CN330	3711-005471	HEADER-BOARD TO CABLE;BOX,12P,1R,1.25mm,	1	S.N.A	
....4	CN330	3711-005743	HEADER-BOARD TO CABLE;BOX,5P,1R,1.25mm,A	1	S.N.A	

5. Exploded View & Part List

Level	Location No.	Code No.	Description & Specification	Q'ty	SA/SNA	Remark
....4	T0010	BN27-00009A	COIL CHOKE;SMD 12x12x6, EOS, 33uH, 15%, 0.12	1	S.A	
....4	T0077	BN41-01155A	PCB MAIN;Ecofit Project, CEM-3,2, MP 1.0,1	1	S.N.A	
....4	MAIN_MICOM	BN97-02994K	ASSY MICOM-STZ,W/W;LS23EFHKFV/*	1	S.N.A	
....5	IC115	1107-001614	IC-FLASH MEMORY;MX25L1005, 1Mbit, 1Mx1, S OP	1	S.N.A	
....4	ZD108	0403-001180	DIODE-ZENER;BZX84C6V2, 5.8-6.6V, 350mW, SOT	1	S.A	
....4	R209	2007-000092	R-CHIP;15Kohm, 5%, 1/10W, TP, 1608	1	S.A	
....4	R210	2007-000113	R-CHIP;33ohm, 5%, 1/10W, TP, 1608	1	S.N.A	
....4	R610	2007-000869	R-CHIP;4.7Kohm, 1%, 1/10W, TP, 1608	1	S.N.A	
....4	T0568	3301-001407	BEAD-SMD;30ohm, 1608, 300mA, TP, .0.4ohm	1	S.N.A	
....4	T0568	3301-001407	BEAD-SMD;30ohm, 1608, 300mA, TP, .0.4ohm	1	S.N.A	
....4	T0568	3301-001407	BEAD-SMD;30ohm, 1608, 300mA, TP, .0.4ohm	1	S.N.A	
....4	SUB05	0202-001477	SOLDER-CREAM;LST309-M, D20~45um, 96.5Sn/3A	0.733	S.N.A	
....4	CN330	3711-006222	HEADER-BOARD TO CABLE;BOX, 30P, 1R, 1mm, SMD	1	S.A	
....4	C210	2203-000292	C-CER, CHIP; 0.01nF, 5%, 50V, C0G, 1608	1	S.A	
....4	C211	2203-000292	C-CER, CHIP; 0.01nF, 5%, 50V, C0G, 1608	1	S.A	
....4	C244	2203-006141	C-CER, CHIP; 1000nF, 10%, 16V, X5R, 1608	1	S.N.A	
....4	C333	2203-000440	C-CER, CHIP; 1nF, 10%, 50V, X7R, 1608	1	S.A	
....4	C334	2203-000440	C-CER, CHIP; 1nF, 10%, 50V, X7R, 1608	1	S.A	
...3	T0275	BN63-05769A	SHIELD-MAIN; ECOFIT 22", SPTE, T0.3	1	S.N.A	
.2	M2893	BN39-00419C	LEAD CONNECTOR; ECOFIT, UL1571#30, 12P, 80mm	1	S.A	
.2	M2893	BN39-01188A	LEAD CONNECTOR; ECOFIT, UL20276#30, 30P, 200	1	S.A	
.2	T0073	AA63-00822A	GASKET-EMI; 71TSVK-15-5-15-13, Conductive	3	S.N.A	
.2	M0131	AA63-00975A	GASKET; CT40CS, Conductive Fabric, 7mm, 7mm,	1	S.N.A	
.2	M0131	BN63-05878A	GASKET; Ecofit, Polyurethane+Cu+Ni+Hotmelt	2	S.N.A	
0.1	M0106	BN91-03324E	ASSY LCD-STZ; LS23EFHKFV/ZC	1	S.N.A	
.2	M0215	BN07-00711A	LCD-PANEL; LTM230HT02	1	S.A	
0.1	M0112	BN91-03700A	ASSY SHIELD; LS23EF, ECOFIT	1	S.N.A	
.2	CIS1	BN74-00021A	TAPE-FILAMENT; Filament tape, clear, #8915,	0.06	S.N.A	
0.1	M0019	BN92-03547X	ASSY LABEL; LS22EFHKFV/ZC	1	S.N.A	
0.1		BN92-04218Z	ASSY P/MATERIAL-W/W; LS23EFHKFV/ZC	1	S.N.A	
.2	T0376	6902-000061	BAG AIR; LDPE, T0.2, W500, L1000, TRP, 370.000	0.006	S.N.A	
.2	T0376	6902-000379	BAG AIR; LDPE, T0.2, W1000, L1800, TRP, 1260.0	0.002	S.N.A	
.2	T0003	6902-000604	BAG WRAPPING; LDPE, T0.02, W500, L10000, TRP,	1.05	S.N.A	
.2	M0081	6902-000609	BAG ROLL; LDPE, T0.05, W2400, L1000, TRP, 30.0	0.017	S.N.A	
.2	T0524	6902-000996	BAG PE; HDPE/NITRON, T0.015/T0.5, W800, L600	1	S.N.A	
0.1	M0045	BN92-04233Y	ASSY ACCESSORY; LS22EFHKFV/CI	1	S.N.A	
.2	T0268	3903-000042	CBF-POWER CORD; DT, EU, FP3/YES, IEC320 C13/	1	S.A	
.2	M0158	BN44-00139A	ADAPTOR; SAD03612A-UV, ADAPTOR, 90 ~ 264Vac	1	S.A	
..3		BN81-02978A	A/S-THREAD LOCKER; 762, 760G, 0201-003005	0.08	S.N.A	

5. Exploded View & Part List

Level	Location No.	Code No.	Description & Specification	Q'ty	SA/SNA	Remark
...3		BN81-02979A	A/S-ADHESIVE SEALANT;TSE3854-DW,SILICONE	0.007	S.N.A	
...3		BN81-02983A	A/S-SILICON GREESE;YG-6111,0206-000001	0.05	S.N.A	
...3	D103	BN81-02988A	A/S-DIODE-SWG;0401-000002	1	S.N.A	
...3	D1	BN81-02989A	A/S-DIODE-BRIDGE;0402-000003	1	S.N.A	
...3	ZD201	BN81-02990A	A/S-DIODE-ZENER;0403-000003	1	S.N.A	
...3	D202	BN81-02991A	A/S-DIODE-SCH;0404-000005	1	S.N.A	
...3	D102	BN81-02992A	A/S-DIODE-UF;0409-000007	1	S.N.A	
...3	D105	BN81-02992A	A/S-DIODE-UF;0409-000007	1	S.N.A	
...3	Q102	BN81-02993A	A/S-TR-PNP;0502-000001	1	S.N.A	
...3	Q201	BN81-02993A	A/S-TR-PNP;0502-000001	1	S.N.A	
...3	Q202	BN81-02994A	A/S-TR-NPN;0502-000002	1	S.N.A	
...3	Q101	BN81-02995A	A/S-FET-N MOS;0505-000006	1	S.N.A	
...3	PC201	BN81-02996A	A/S-PHOTO-COUPLER;0604-000001	1	S.N.A	
...3	IC101	BN81-02997A	A/S-IC-PWM CONTROLLER;0904-000001	1	S.N.A	
...3	IC201	BN81-02998A	A/S-IC-SHUNT REGULATOR;1203-000003	1	S.N.A	
...3	TH1	BN81-02999A	A/S-THERMISTOR-NTC;1404-000003	1	S.N.A	
...3	TH101	BN81-03001A	A/S-THERMISTOR-CHIP;1404-000005	1	S.N.A	
...3	R109	BN81-03002A	A/S-RESISTOR-CARBON;2001-000007	1	S.N.A	
...3	R118	BN81-03003A	A/S-RESISTOR-CARBON;2001-000011	1	S.N.A	
...3	R106	BN81-03004A	A/S-RESISTOR-MOR;2001-100005	1	S.N.A	
...3	R117	BN81-03005A	A/S-RESISTOR-MOR;2001-100008	1	S.N.A	
...3	R107	BN81-03006A	A/S-RESISTOR-MOR;2001-100013	1	S.N.A	
...3	R114	BN81-03007A	A/S-RES-CHIP;2007-300003	1	S.N.A	
...3	R206	BN81-03008A	A/S-RES-CHIP;2007-300005	1	S.N.A	
...3	R207	BN81-03009A	A/S-RES-CHIP;2007-300006	1	S.N.A	
...3	R119	BN81-03010A	A/S-RES-CHIP;2007-300010	1	S.N.A	
...3	R208	BN81-03010A	A/S-RES-CHIP;2007-300010	1	S.N.A	
...3	R209	BN81-03010A	A/S-RES-CHIP;2007-300010	1	S.N.A	
...3	R205	BN81-03011A	A/S-RES-CHIP;2007-300012	1	S.N.A	
...3	R110	BN81-03012A	A/S-RES-CHIP;2007-300015	1	S.N.A	
...3	R108	BN81-03013A	A/S-RES-CHIP;2007-300025	1	S.N.A	
...3	R113	BN81-03014A	A/S-RES-CHIP;2007-300027	1	S.N.A	
...3	R111	BN81-03015A	A/S-RES-CHIP;2007-300028	1	S.N.A	
...3	R210	BN81-03016A	A/S-RES-CHIP;2007-300042	1	S.N.A	
...3	R213	BN81-03017A	A/S-RES-CHIP;2007-400015	1	S.N.A	
...3	R212	BN81-03018A	A/S-RES-CHIP;2007-400017	1	S.N.A	
...3	J101	BN81-03019A	A/S-RES-CHIP;2007-500001	1	S.N.A	
...3	J116	BN81-03019A	A/S-RES-CHIP;2007-500001	1	S.N.A	
...3	R201	BN81-03020A	A/S-RES-CHIP;2007-500002	1	S.N.A	
...3	R202	BN81-03020A	A/S-RES-CHIP;2007-500002	1	S.N.A	
...3	R1	BN81-03021A	A/S-RES-CHIP;2007-500012	1	S.N.A	
...3	R2	BN81-03021A	A/S-RES-CHIP;2007-500012	1	S.N.A	
...3	R3	BN81-03021A	A/S-RES-CHIP;2007-500012	1	S.N.A	
...3	R104	BN81-03022A	A/S-RES-CHIP;2007-500017	1	S.N.A	
...3	R105	BN81-03022A	A/S-RES-CHIP;2007-500017	1	S.N.A	
...3	R211	BN81-03023A	A/S-RES-CHIP;2007-600002	1	S.N.A	
...3	C5	BN81-03024A	A/S-CAP-C DS;2201-000003	1	S.N.A	
...3	C102	BN81-03025A	A/S-CAP-C DS;2201-100001	1	S.N.A	
...3	C104	BN81-03026A	A/S-CAP-C MLCC;2203-000001	1	S.N.A	
...3	C105	BN81-03027A	A/S-CAP-C MLCC;2203-100001	1	S.N.A	

5. Exploded View & Part List

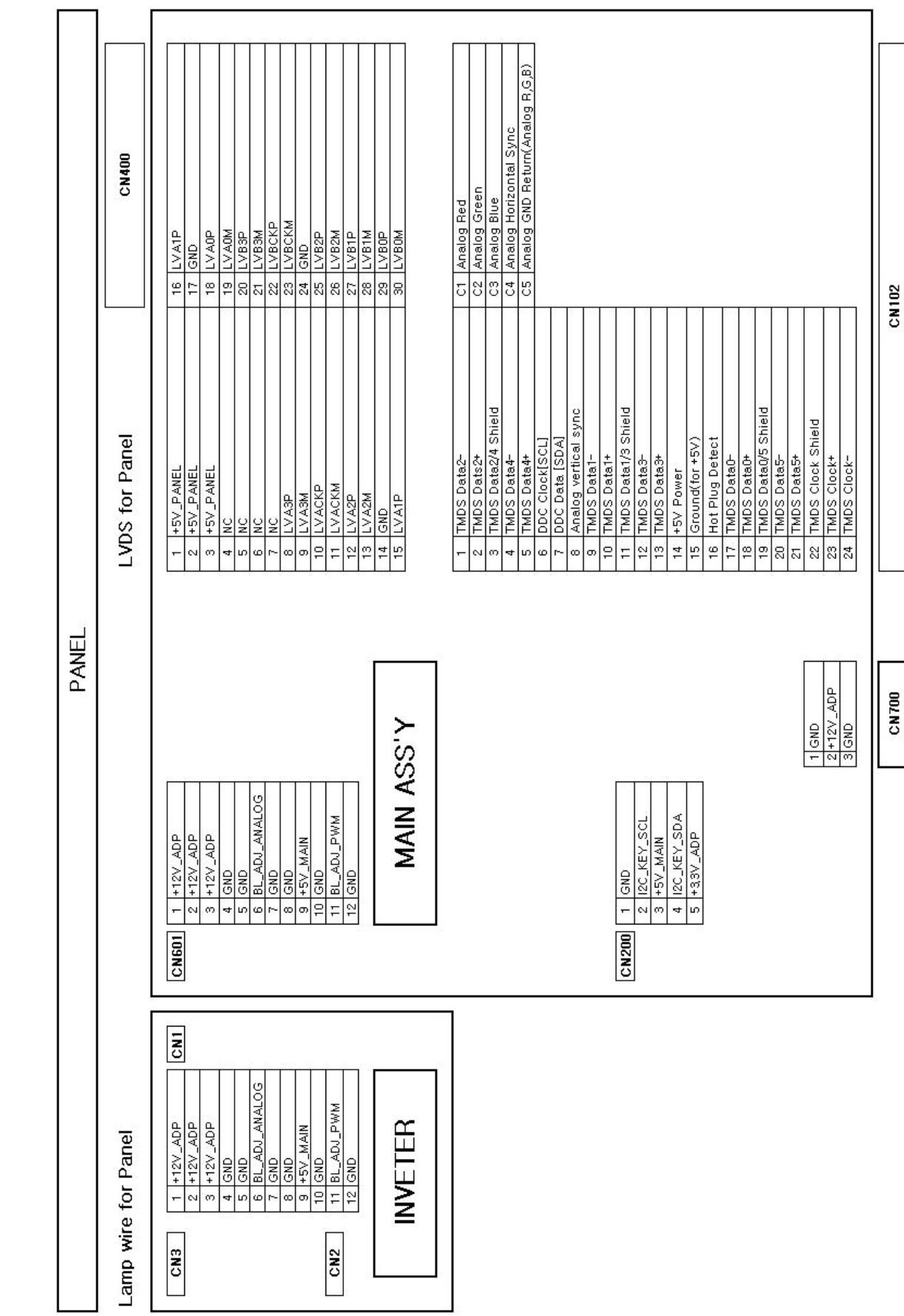
Level	Location No.	Code No.	Description & Specification	Q'ty	SA/SNA	Remark
...3	C208	BN81-03027A	A/S-CAP-C MLCC;2203-100001	1	S.N.A	
...3	C209	BN81-03028A	A/S-CAP-C MLCC;2203-100002	1	S.N.A	
...3	C201	BN81-03029A	A/S-CAP-C MLCC;2203-100005	1	S.N.A	
...3	C202	BN81-03029A	A/S-CAP-C MLCC;2203-100005	1	S.N.A	
...3	C103	BN81-03030A	A/S-CAP-C MLCC;2203-200001	1	S.N.A	
...3	C106	BN81-03030A	A/S-CAP-C MLCC;2203-200001	1	S.N.A	
...3	C210	BN81-03030A	A/S-CAP-C MLCC;2203-200001	1	S.N.A	
...3	C206	BN81-03031A	A/S-CAP-C MLCC;2203-300001	1	S.N.A	
...3	C2	BN81-03032A	A/S-CAP-FILM;2305-000012	1	S.N.A	
...3	C1	BN81-03033A	A/S-CAP-FILM;2305-000014	1	S.N.A	
...3	C101	BN81-03034A	A/S-CAP-E AL;2401-000005	1	S.N.A	
...3	C108	BN81-03035A	A/S-CAP-E AL;2401-300007	1	S.N.A	
...3	C203	BN81-03036A	A/S-CAP-E AL;2401-500001	1	S.N.A	
...3	C204	BN81-03036A	A/S-CAP-E AL;2401-500001	1	S.N.A	
...3	T101	BN81-03037A	A/S-TRANS-SWG;2602-000013	1	S.N.A	
...3	LF1	BN81-03038A	A/S-LINE-FILTER;2902-000002	1	S.N.A	
...3	L102	BN81-03039A	A/S-FERRITE-BEAD FILTER;3301-002073	1	S.N.A	
...3	L101	BN81-03041A	A/S-FERRITE-BEAD CORE;3301-002075	1	S.N.A	
...3	L103	BN81-03041A	A/S-FERRITE-BEAD CORE;3301-002075	1	S.N.A	
...3	F1	BN81-03042A	A/S-FUSE;3601-000005	1	S.N.A	
...3		BN81-03043A	A/S-SCREW-M;6001-000004	2	S.N.A	
...3		BN81-03044A	A/S-NUT-HEXAGON;6021-000001	2	S.N.A	
...3	D202	BN81-03045A	A/S-HEAT SINK;6203-000008	1	S.N.A	
...3	Q101	BN81-03046A	A/S-HEAT SINK;6203-000014	1	S.N.A	
...3		BN81-03047A	A/S-EYELET;6402-000001	4	S.N.A	
...3		BN81-03048A	A/S-EYELET;6402-000002	4	S.N.A	
...3		BN81-03054A	A/S-VINYL SACK;MA69-00325F	1	S.N.A	
...3		BN81-03055A	A/S-LABEL-HIPOT;MB68-00001A	1	S.N.A	
...3		BN81-03056A	A/S-LABEL-CODE;MB68-00002A	1	S.N.A	
...3		BN81-03057A	A/S-LABEL;MB68-00038A	1	S.N.A	
...3		BN81-03058A	A/S-CASE-TOP;MB72-00003A	1	S.N.A	
...3		BN81-03059A	A/S-CASE-BOTTOM;MB72-00003B	1	S.N.A	
...3		BN81-03060A	A/S-CHOKE COIL ASSY;MB75-00007A	1	S.N.A	
...3		BN81-03061A	A/S-IN-LET;MB75-30002A	1	S.N.A	
...3		BN81-03062A	A/S-INSULATION-SHEET;MB75-40001A	1	S.N.A	
...3		BN81-03063A	A/S-INSULATOR-RING;MB75-40012A	1	S.N.A	
...3		BN81-03064A	A/S-PCB-MAIN;MB81-10014A	1	S.N.A	
...3		BN81-03065A	A/S-DC CABLE;MB84-20001A	1	S.N.A	
..2	M0045	BN96-09373V	ASSY ACCESSORY;LS22EFHKFV/CI	1	S.A	
...3	T0524	6902-000110	BAG PE;LDPE,T0.05,W250,L400,TRP,28,2,-,9	1	S.N.A	
...3		BH68-00633B	MANUAL FLYER-03,WARRANTY CARD;comm,Samsu	1	S.N.A	
...3		BH68-70448A	CARD-01;TFT LCD,SRC,RUSSIA,S/W,120,W210*	1	S.N.A	
...3	M0125	BN39-00246L	CBF SIGNAL-DVI(D);DVI-Cable,24P/24P,2027	1	S.A	
...3	M0215	BN96-09890B	ASSY MANUAL P-IB+QSG;P2070,P2270,P237 0,P	1	S.N.A	
....4	CCM1	BN59-00841B	S/W DRIVER-02,IB;P2*70(G),WW,SyncMaster	1	S.N.A	
....4		BN68-01905B	MANUAL FLYER-QSG;P2*70(G),W/W,Moj 80g,1	1	S.N.A	
...3	M9889	BN63-02368B	CLOTH-CLEAN;cloth,120,160,sea blue,ToC	1	S.N.A	
...3		BN68-00907F	MANUAL FLYER-00,WEE;comm,Samsung,23Lang,	1	S.N.A	

5. Exploded View & Part List

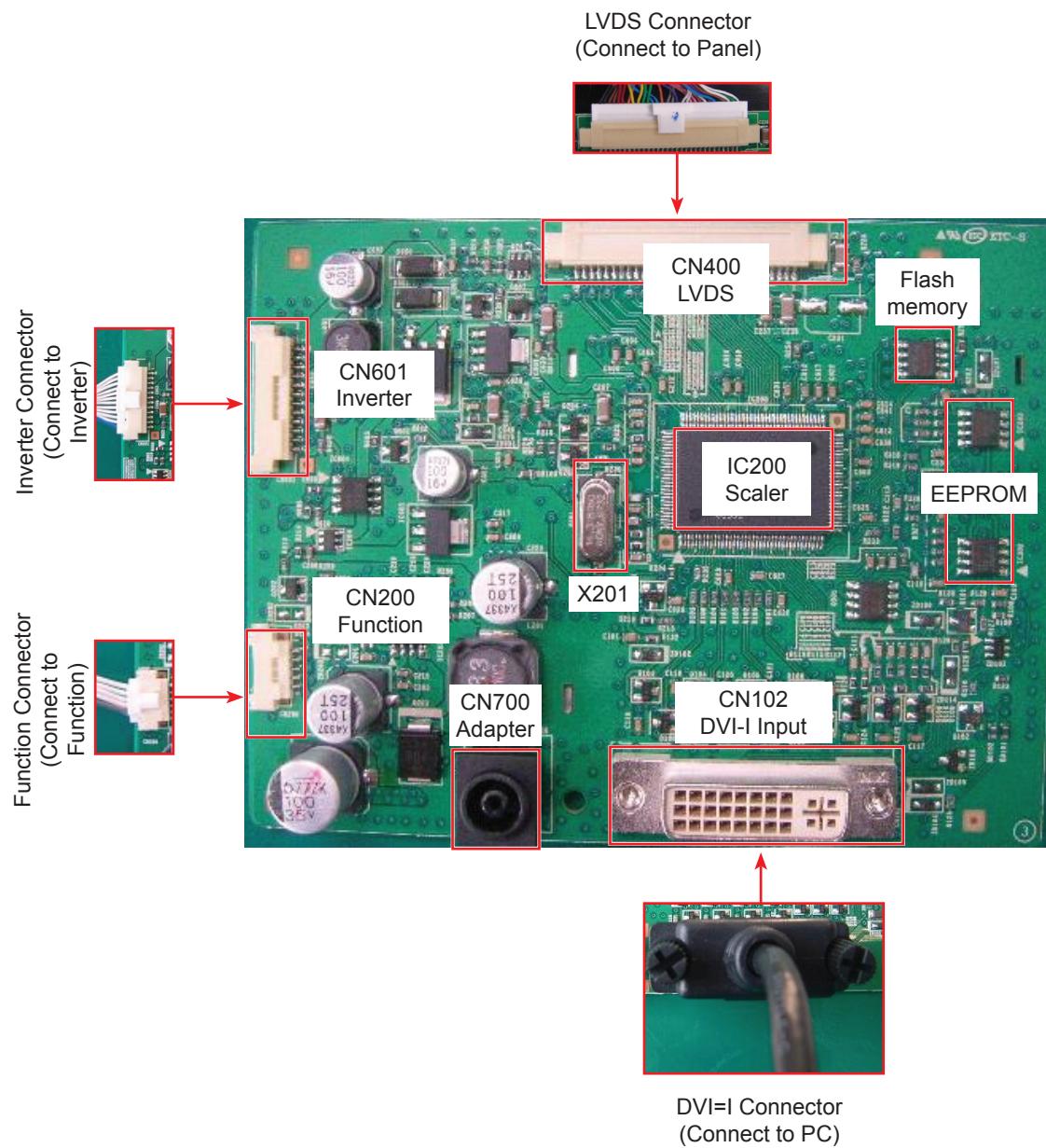
Level	Location No.	Code No.	Description & Specification	Q'ty	SA/SNA	Remark
...3	T0238	BN68-01925B	MANUAL FLYER-WARRANTY CARD;comm,Samsung,	1	S.N.A	
..2	M0027	BN96-09629A	ASSY STAND P-BASE;ECOFIT,ABS HB,BK23(H/G	1	S.A	
...3	CIS4	BN61-01717A	HOLDER-STAND;BIZET,NI PLT,CH,+,M4,L11(5)	1	S.N.A	
...3		BN61-05087A	BRACKET-STAND BOTTOM;ECOFIT 23",SECC TO.	1	S.N.A	
...3	CCM1	BN63-02183K	COVER-SHEET;Rhcm,PE Vinyl,T 0.05,250MM,2	0.3	S.N.A	
...3	T0004	BN63-05425A	COVER-STAND BASE;ECOFIT 23",ABS,HB,BK23,	1	S.N.A	
...3	T0132	BN73-00077A	RUBBER FOOT;MATISSE,BUMPON,Φ13.5,T2.0,6	4	S.N.A	
...3		6003-001001	SCREW-TAPTYPE;FH,+,B,M3,L8,ZPC(BLK),SW RC	4	S.N.A	
...3	T0524	6902-000109	BAG PE;HDPE,T0.015,W350,L430,TRP,28,2,4.	1	S.N.A	
...3		BN68-02009B	MANUAL FLYER-STAND;Ecofit,Lavender,Mojo	1	S.N.A	
.2		BN39-00310D	CBF SIGNAL-DVI(A);DVI(A) cable,15P/10P,U	1	S.A	
.2	STD	BN96-09628B	ASSY STAND P-BODY;ECOFIT,PC	1	S.N.A	
...3	T0524	6902-000023	BAG PE;LDPE,T0.08,W150,L120,TRP,1.650g	1	S.N.A	
...3	T0069	BN60-00119B	SPACER-FELT;ECOFIT 23"(P2370),FELT,L145,	1	S.N.A	
...3		BN61-05095A	STAND-BAR;P2370, ECOFIT 23",PC CLEAR,TP3	1	S.N.A	
....4		BN61-05094A	STAND-BAR IN;P2370, ECOFIT 23",PC CLEAR,	1	S.N.A	
....4		BN61-05410A	STAND-BAR A;ECOFIT, LB650 19",22",PC BLU	1	S.N.A	
.....5		BN61-02932E	BRACKET-STOPPER NUT;ECOFIT 20,M4,D8,L12,	1	S.N.A	
0.1	M0003	BN92-04332G	ASSY BOX;LS23EFHKFV/CH	1	S.N.A	
.2		BN96-02895A	ASSY MISC P-01,HANDLE PACKING;ALL MODEL,	1	S.N.A	
...3	M0103	BN66-00007A	LEVER-TOP;ALL MODEL,LDPE,WHITE,5.8g	1	S.N.A	
...3	M0102	BN66-00008A	LEVER-BOTTOM;ALL MODEL,LDPE,WHITE,4.01g	1	S.N.A	
.2		BN69-03563C	BOX-SET;P230S,CB,A-01,SW2, ECT40,YEL,W68	1.01	S.N.A	

6. Wiring Diagram

6-1. Wiring Diagram - Main Board



6-2. Wiring Diagram - IP Board



6-3. Connector Functions

Connector	Functions
CN700	Supplies 12V From the Adaptor to the main board. *When a problem occurs : The No Power and Blank screen errors may occur.
CN1 -CN601	Transmits the PWM output from the power board to the inverter. * When a problem occurs : The blank screen errors may occur.
CN200	Connects the function board. * When a problem occurs : The No LED screen and Function failure errors may occur.
CN102	DVI/VGA signal input terminal. * When a problem occurs : The No RGB output error may occur.
CN400	Transmits the LVDS signals from the main board to the panel. * When a problem occurs : The Blank screen and No POWER error may occur.
CN2, CN3	Transmits the lamp current(6mA ~ 7mA) generated in the inverter to the lamp of the panel. * When a problem occurs : The Blank Screen error may occur.

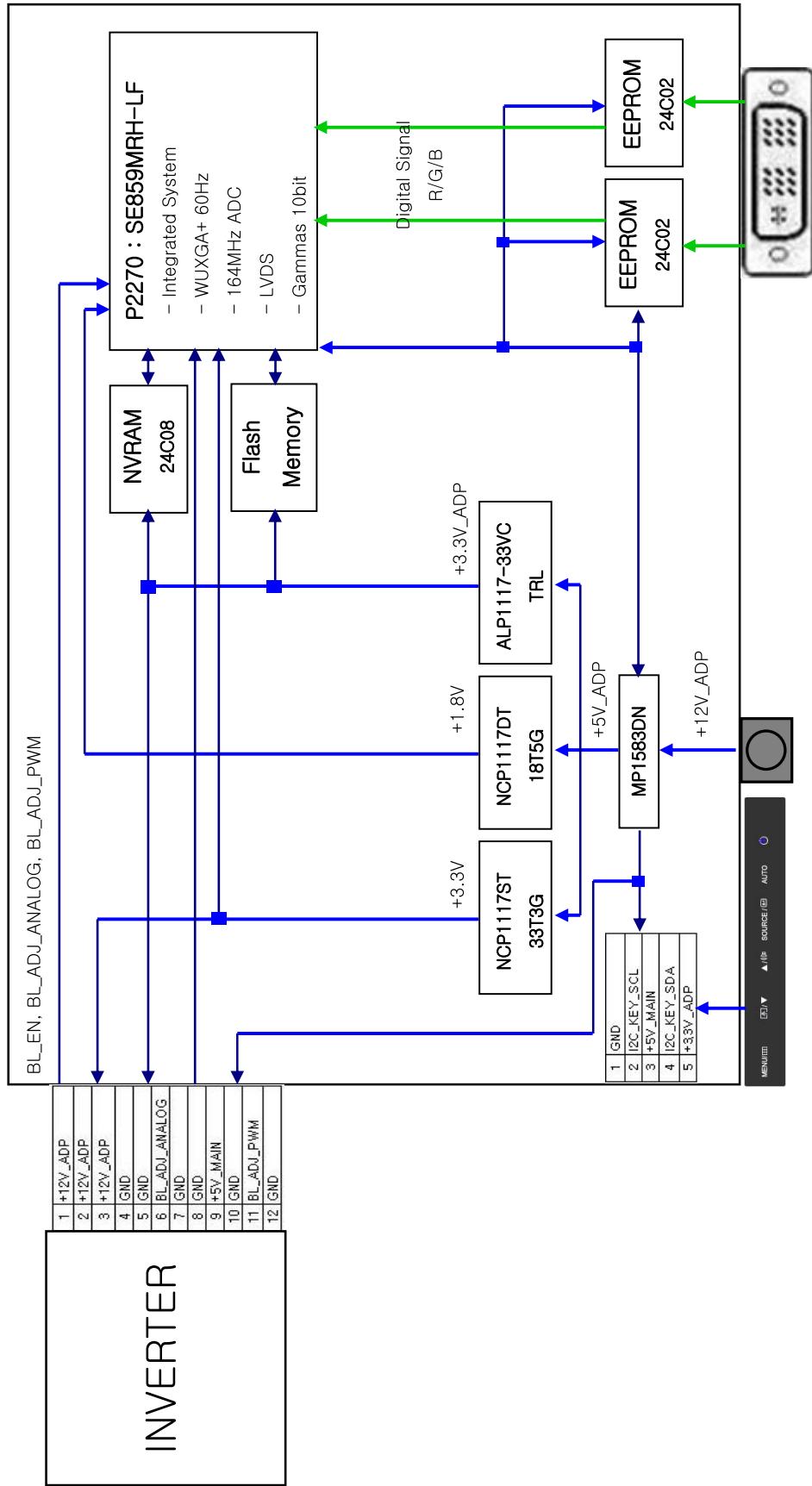
6-4. Cables

Use	LVDS 30p FFC cable
Code	BN96-08740E
Photo	

Memo

7. Schematic Diagram

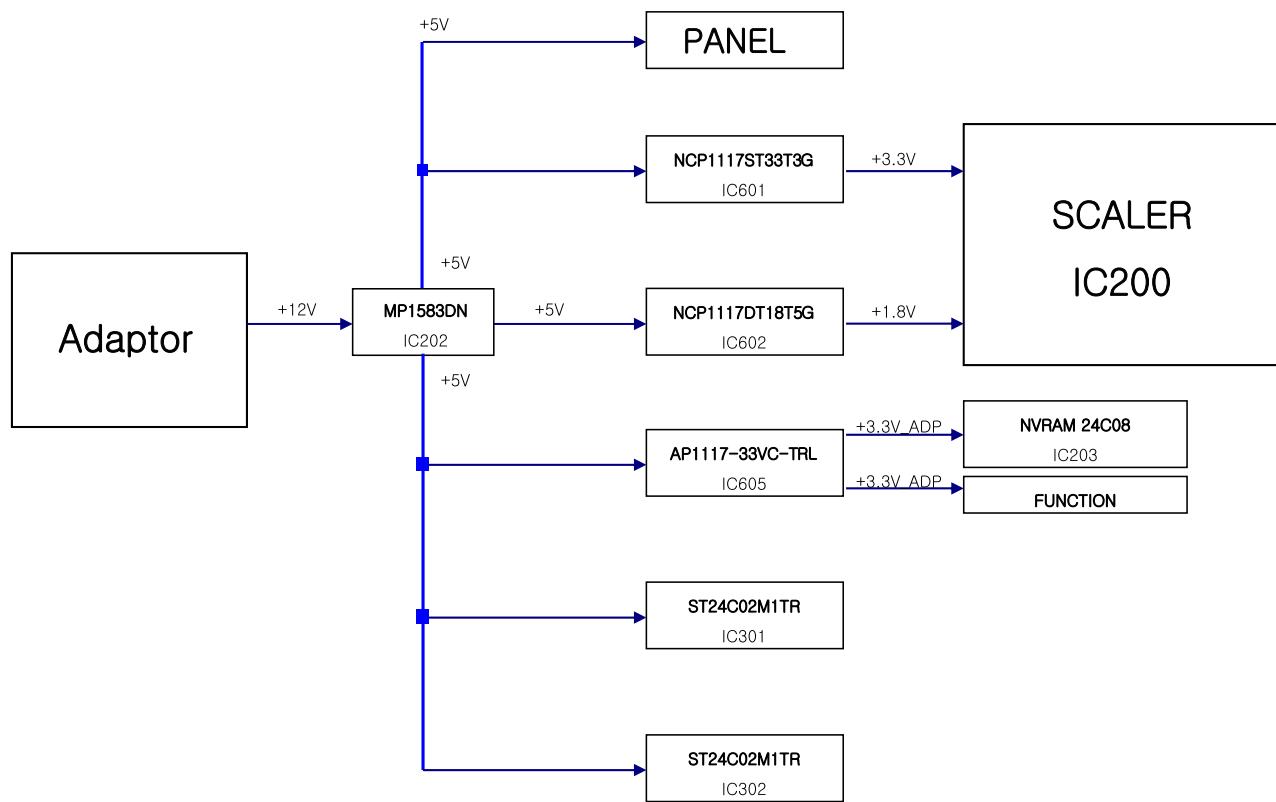
7-1. Circuit Descriptions



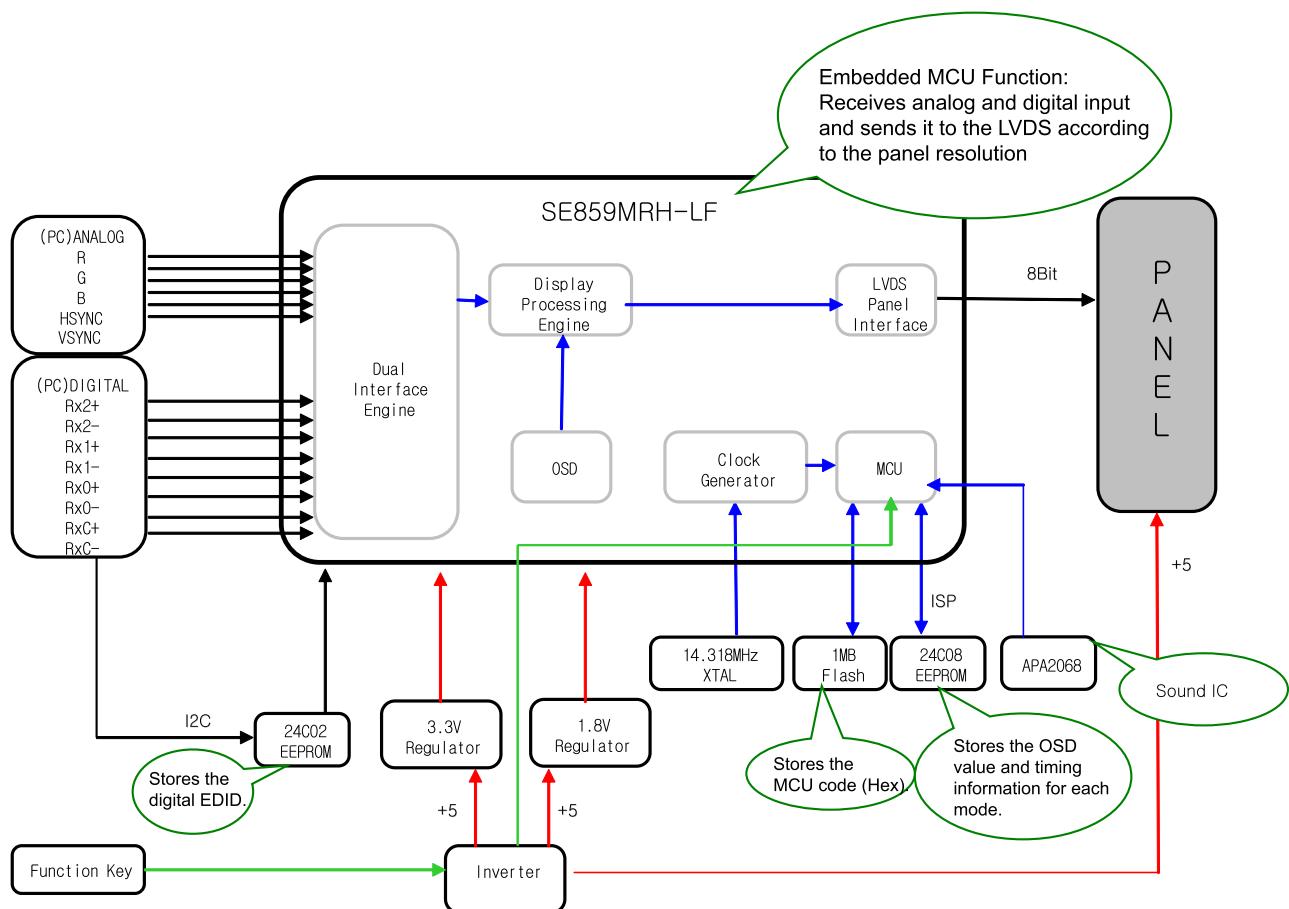
7. Schematic Diagram

Location	Function	Remark
Scaler IC200	Besides the ADC, LVDS and scaling part, an MCU is embedded as well. All of them are integrated into one chip.	SE859MRH-LF
Flash Memory IC201	Stores the MCU program embedded in the scaler. It is of a flash type and rewritable.	MX25L1005MC
IC203	Stores the OSD and various timing values.	24C08
IC301	The memory to which DIGITAL DDC Data is input.	24C02
IC302	The memory to which ANALOG DDC Data is input.	24C02
DC-DC con. IC202	An IC that receives DC voltage inputs. It is used in circuits that stabilize the DC voltage.	MP1583DN
Regulator	An IC that receives DC voltage inputs. It is used in circuits that stabilize the DC voltage.	NCP1117ST33T3G NCP1117DT18T5G AP1117-33VC-TRL

7-2. Schematic Diagrams (Power Flowchart)

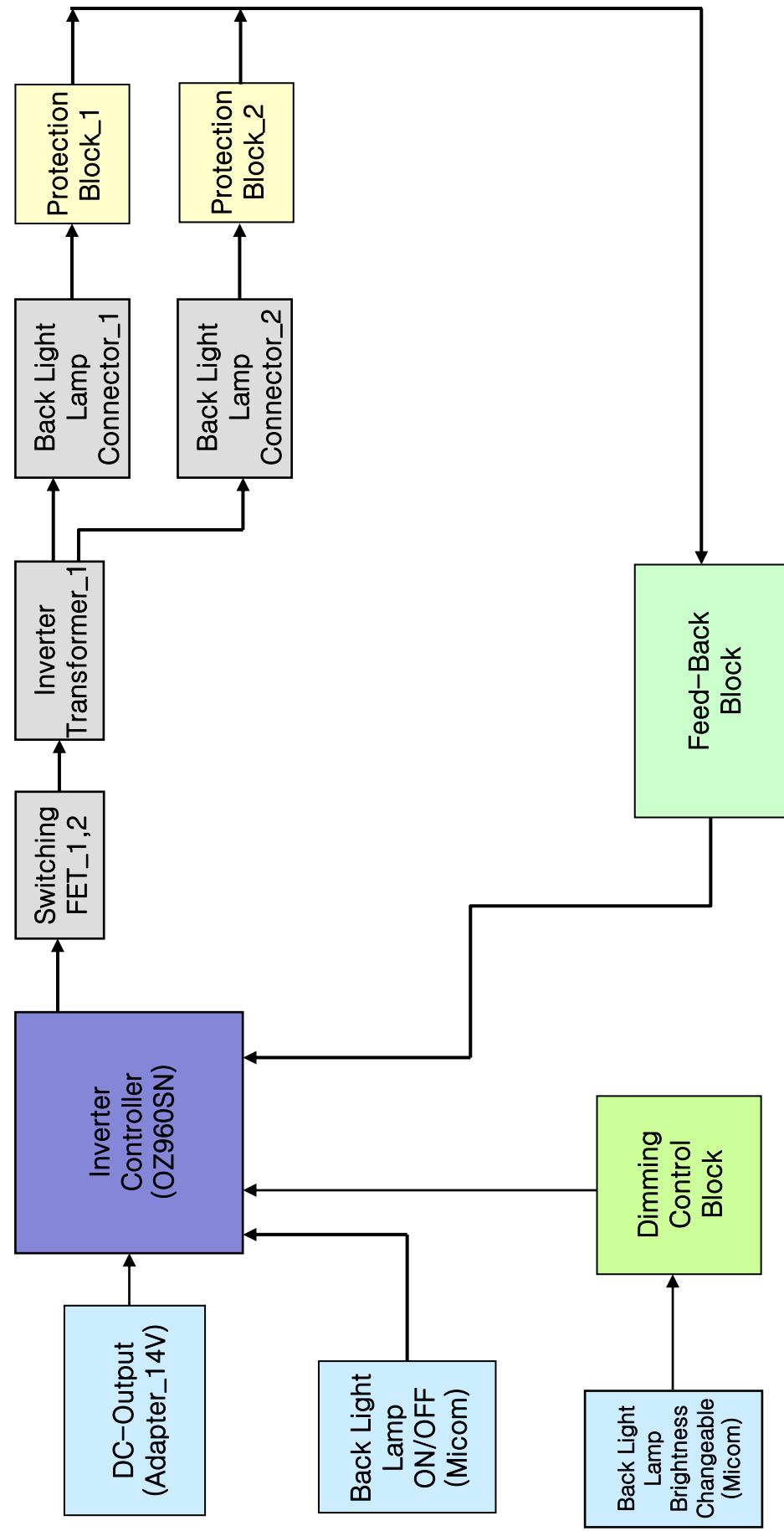


7-3. Schematic Diagrams (Scaler Part)



7-4. Schematic Diagrams (IP Board)

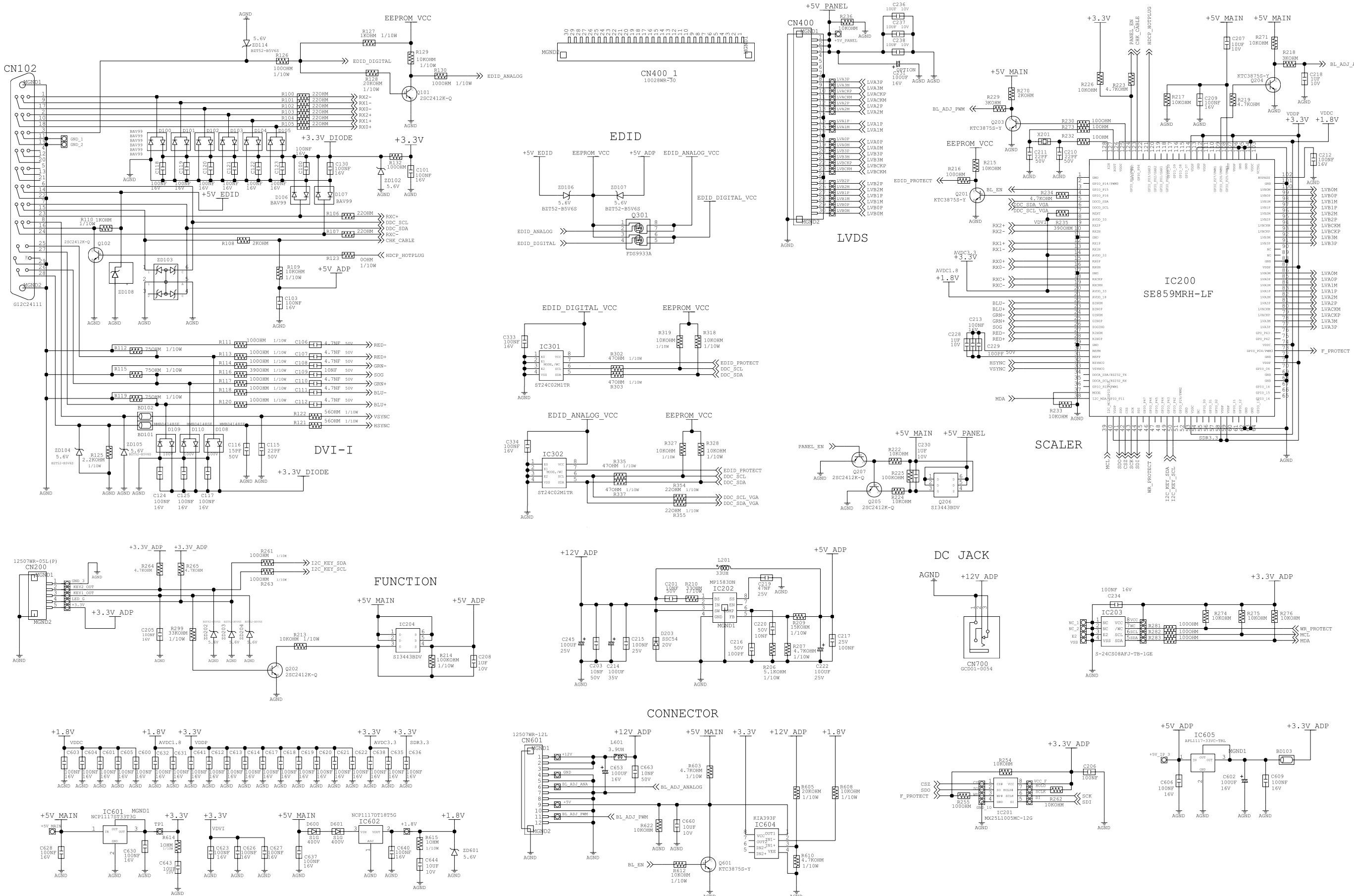
■ Inverter Part



Memo

7-5. Schematic Diagrams (Main PBA)

This Document can not be used without Samsungs authorization.



Memo