



SAMSUNG

LCD-Monitor

Chassis

DE17PS/DE19PS

Model

173P PLUS/193P PLUS

SERVICE Manual

LCD Monitor



Fashion Feature

- Ultra Slim Design
Depth 17": 26mm, 19": 32mm
- Folder-Type Dual Hinge Stand
- Pivot (rotation)
- Real Metal F/cabinet & Stand
- Clean Look : Eliminate control button,
Back Side cable management

Copyright

©2005 by Samsung Electronics Co., Ltd.

All rights reserved.

This manual may not, in whole or in part, be copied, photocopied, reproduced, translated, or converted to any electronic or machine readable form without prior written permission of Samsung Electronics Co., Ltd.

DE17PS/DE19PS Service Manual

First edition March 2005.

Printed in Korea.

Trademarks

Samsung is the registered trademark of Samsung Electronics Co., Ltd.

DE17PS/DE19PS and MacMaster Cable Adapter are trademarks of Samsung Electronics Co., Ltd.

Macintosh, Power Macintosh are trademarks of Apple Computer, Inc.

All other trademarks are the property of their respective owners.

Contents

| | |
|---|------------|
| 1. Precautions | 1-1 |
| 1-1 Safety Precautions | 1-1 |
| 1-2 Servicing Precautions | 1-2 |
| 1-3 Electrostatically Sensitive Devices (ESD) Precautions | 1-2 |
| 2. Product specifications | 2-1 |
| 2-1 Fashion Feature | 2-1 |
| 2-2 Spec Comparison | 2-1 |
| 2-3 DE17PS/DE19PS feature | 2-3 |
| 2-4 DE17PS Specifications | 2-4 |
| 2-5 DE19PS Specifications | 2-5 |
| 2-6 Spec Comparison to the Old Models | 2-6 |
| 2-7 Option Specification | 2-7 |
| 3. Alignments and Adjustments | 3-1 |
| 3-1 Required Equipment | 3-1 |
| 3-2 Automatic Color Adjustment | 3-1 |
| 3-3 DDC EDID Data Input | 3-1 |
| 3-4 OSD Adjustment When Replacing Panel | 3-1 |
| 3-5 OSD Adjustment When Replacing Lamp Only | 3-1 |
| 3-6 Service Function Spec. | 3-2 |
| 3-7 Hidden Key list | 3-3 |
| 3-8 EDID Installation with Dos Program | 3-5 |
| 3-9 EDID Installation with Windows Program | 3-6 |
| 4. Troubleshooting | 4-1 |
| 4-1 No Power (DE17PS/DE19PS) | 4-1 |
| 4-2 No Video (ANALOG) | 4-2 |
| 4-3 No Video (DIGITAL) | 4-4 |
| 5. Exploded View and Parts List | 5-1 |
| 6. Electrical Parts List | 6-1 |
| 7. Block Diagram | 7-1 |

Contents

| | |
|--|-------------|
| 8. Wiring Diagram | 8-1 |
| 9. Schematic Diagrams | 9-1 |
| 10. Operating Instructions and Installation | 10-1 |
| 10-1 Product Features | 10-1 |
| 10-2 Component & Function | 10-1 |
| 10-3 New Features | 10-2 |
| 10-4 Installation Instructions | 10-2 |
| 10-5 Attaching a Base | 10-3 |
| 11. Disassembly and Reassembly | 11-1 |
| 11-1 Disassembly | 11-1 |
| 11-2 Reassembly | 11-3 |
| 12. PCB Diagram | 12-1 |
| 13. Circuit Descriptions | 13-1 |
| 13-1 Block description | 13-1 |
| 13-2 Block operating | 13-2 |
| 14. Reference Information | 14-1 |
| 14-1 Technical Terms | 14-1 |
| 14-2 Connecting Your Monitor | 14-3 |
| 14-3 Pin Assignments | 14-4 |
| 14-4 Timing Chart | 14-5 |
| 14-5 Preset Timing Modes | 14-6 |
| 14-6 Panel Description | 14-7 |



-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.

Samsung Electronics Co.,Ltd.
416, Maetan-3Dong, Yeongtong-Gu, Suwon City,
Gyeonggi-Do, Korea, 443-742
Printed in Korea
P/N : BN82-00110G-00
URL : <http://itself.sec.samsung.co.kr/>

1 Precautions

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

1-1 Safety Precautions

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 resistor-capacitor 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 ULI410, 59.7*).

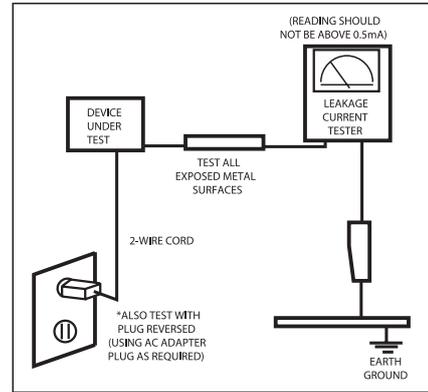


Figure 1-1. Leakage Current Test Circuit

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 safety-related 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 Electrostatically Sensitive Devices (ESD) 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.

2 Product Specifications

2-1 Fashion Feature

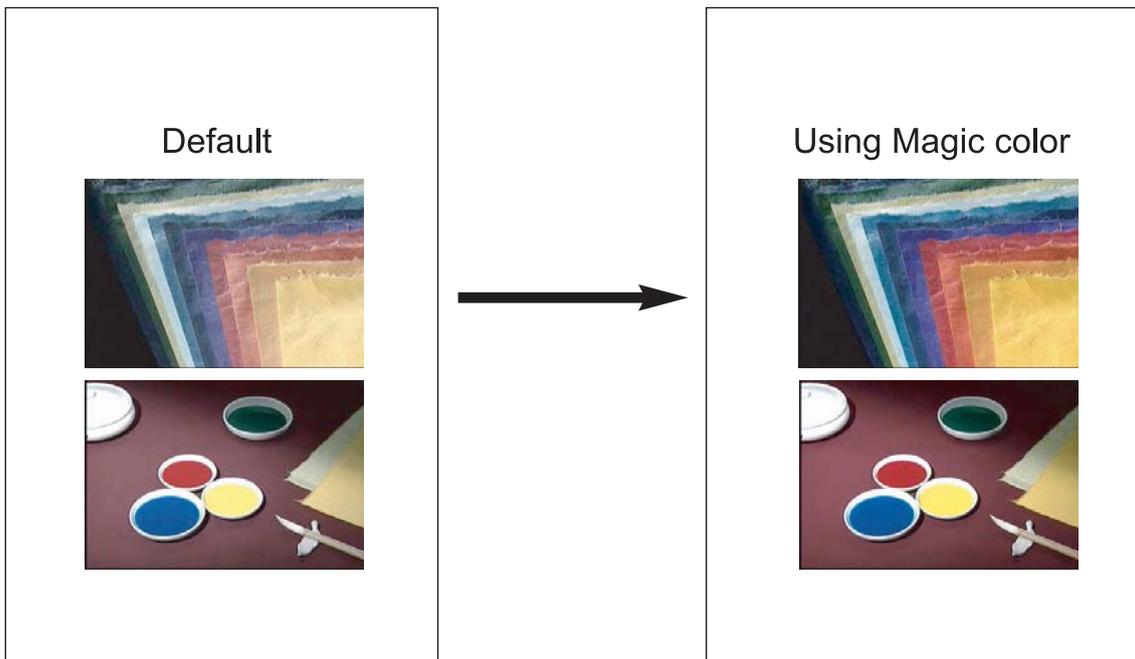
- Improved Response Time by Adopting RTA: 12ms (Based on "Gray to Gray")
- Support Magic Color: Demo, Full, Intelligent
- Magic Zone: Brightness adjustment for local areas
- Magic Bright: 6 Steps used
Text, Internet, Sports, Game, Movie and Custom
- Magic Tune 3.6 and Pivot software installed
: An upgraded version that compensates for the old Magic Tune 2.0 and adds some new features for the user's convenience
- Auto Pivot: When the monitor is rotated in 90 or 180 degrees, the display LED and OSD also are automatically rotated accordingly. This can be performed only when Magic Tune 3.6 and the Pivot software are running.

2-2 Spec Comparison

| Key Specification | | | | |
|--|--|---|--|---|
| Model | DI17PS 173P | DE17PS 173P plus | DI19PS 193P | DE19PS 193P plus |
| Screen Size | 17" | 17" | 19" | 19" |
| Brightness | 280cd/m ² | 280cd/m ² | 250cd/m ² | 250cd/m ² |
| Contrast | 600:1 | 1500:1 | 600:1 | 1000:1 |
| Fast Response Time | 25ms(w to b) | RTA chip 12ms(g to g) 25ms(w to b) | 20ms(w to b) | RTA chip 12ms(g to g) 20ms(w to b) |
| Magic color | X | O | X | O |
| Magic Pivot | X After the screen rotation , User should change the Pivot degrees with Pivot Software manually. Impossible OSD rotation. | O When Monitor is rotated, as Pivot sensor is applied to PBA,OSD and screen is changed automatically | X After the screen rotation , User should change the Pivot degrees with Pivot Software manually. Impossible OSD rotation. | O When Monitor is rotated, as Pivot sensor is applied to PBA,OSD and screen is changed automatically |
| Magic tune | 2.0version | 3.6version | 2.0version | 3.6version |
| Magic Zone | X | O (support in only Magic tune3.6) | X | O (support in only Magic tune3.6) |
| Detail control Gamma, Color Temperature | X | O | X | O |
| sharpness | X | O | X | O |
| Magic Bright | 4steps Text, Internet, Entertain, Custom | 6steps Text, Internet, Sports, Movie, Game, Custom | 4steps Text, Internet, Entertain, Custom | 6steps Text, Internet, Sports, Movie, Game, Custom |

2-3 DE17PS/DE19PS feature

| No | Feature | Feature | Operating method |
|----|-----------------------|--|---|
| 1 | Auto Auto | If Dali turns on in some resolution for the first time, 173P+/193P+ can execute Auto adjustment automatically for the high Quality. | |
| 2 | Auto source selection | 173P+/193P+ can check the change of Source automatically and change the source to the active Input. | During Power ON, touch Power Button for 2 seconds with a "beep" and release |
| 3 | Auto Power on/off | 173P+/193P+ can turn on and off the Power automatically if Monitor detect the DPMS mode. (it means BLUE LED off) | |
| 4 | 180° Pivot Rotation | 173P+/193P+ can support the 180 degrees Pivot. (90° Portrait, 180° landscape) | |
| 5 | Wall mount Dual hinge | 173P+/193P+ can support Wall Mount having Dual Hinge. | There is a accessory kit with wall mount. |
| 6 | Auto Pivot | As Dali-2 has sensor IC for Pivot, 1) if Dali-2 rotates 90°, 180° and 0°, 2) MCU can detect the current status through sensor IC, OSD rotates 3) Magic tune 3.6 and Pivot Software can make change Screen to the rotated degrees automatically. | It must be installed Magic tune 3.6 and Pivot Software to the PC. |
| 7 | Magic Zone | It is the same with the Highlight zone of CDT Monitor. It can make the assigned area brighter and darker than the whole screen using the Brightness, Hue, Saturation and Sharpness of Magic zone menu. - Using Auto detect function of Magic tune, in Moving screen, Magic tune can display it Brighter automatically. | It must be installed Magic tune 3.6 and Pivot Software to the PC. |
| 8 | Magic Color | Off- Returns to the original mode. Demo - The screen before applying MagicColor appears on the right and the screen after applying MagicColor appears on the left. Full - Displays vivid natural color with clearness. Intelligent - Displays not only vivid natural color but also more realistic natural skin color with clearness. | Color menu of Magictune3.6 |



| No | Feature | Feature | Operating method |
|----|--|---|------------------|
| 9 | Fast response time | Using the RTA (response time accelerator) chip, Dali-2 can support the fast response time(12ms) in Gray to Gray pattern. | |
| 10 | Detailed gamma and Color temperature control | Dali-2 can support 9 steps of gamma control and Color temperature . | Magic tune 3.6 |
| 11 | Magic Bright | Support 6 steps as Text, Internet, Sports, Movie, Game, Custom | Magic tune 3.6 |
| 12 | Sharpness | Support 26 steps for the detail control fitting up the signal quality of Video card. | Magic tune 3.6 |

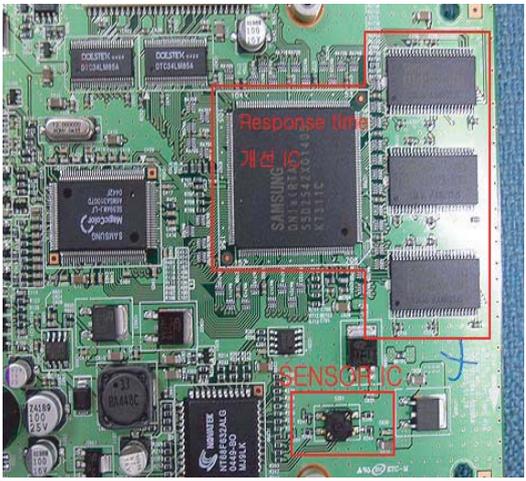
2-4 DE17PS Specifications

| Item | Description |
|--|--|
| LCD Panel | TFT-LCD panel, RGB vertical stripe, normally black transmissive, 17-Inch viewable, 0.264 (H) x 0.264 (V) mm pixel pitch |
| Scanning Frequency | Horizontal : 30 kHz ~ 81 kHz (Automatic) Vertical : 56 Hz ~ 75 Hz |
| Display Colors | 16.7 Million colors |
| Maximum Resolution | Horizontal : 1280 Pixels Vertical : 1024 Pixels |
| Input Video Signal | Analog, 0.7 Vp-p \pm 1% positive at 75 Ω , internally terminated |
| Input Sync Signal | Type : Seperate H/V sync, Composite H/V, Sync-on-Green (option), automatic synchronization without external switch of sync type Level : TTL level |
| Maximum Pixel Clock rate | 135 MHz |
| Active Display Horizontal/Vertical | 338 \pm 3 mm / 270 \pm 3 mm |
| AC power voltage & Frequency | AC 90 ~ 264 Volts, 60/50 Hz \pm 3 Hz |
| Power Consumption | 40W (Max) |
| Dimensions | |
| Set (W x D x H) | 15.0 x 1.6 x 12.3 Inches (380 x 40.5 x 316.5 mm) 15.0 x 9.3 x 15.5 Inches (380 x 236x 394.6 mm) State of stand installed 15.0 x 3.9 x 12.5 Inches (380 x 99.3x 316.5 mm) State of stand folded |
| Package | 17.9 x 5.6 x 17.2 Inches (455 x 141 x 437 mm) |
| Weight (Set/Package) | 4.5 kg (9.9 lbs) / 6.15 kg (13.6 lbs) |
| Environmental Considerations | Operating Temperature : 50°F ~ 104°F (10°C ~ 40°C) Operating Humidity : 10 % ~ 80 % Storage Temperature : -13°F ~ 113°F (-25°C ~ 45°C) Storage Humidity : 5 % ~ 95 % |
| - Designs and specifications are subject to change without prior notice. | |

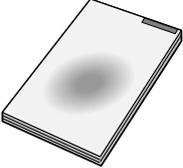
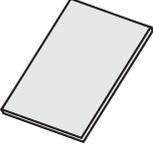
2-5 DE19PS Specifications

| Item | Description |
|---|--|
| LCD Panel | TFT-LCD panel, RGB vertical stripe, normally black transmissive, 19-Inch viewable, 0.294 (H) x 0.294 (V) mm pixel pitch |
| Scanning Frequency | Horizontal : 30 kHz ~ 81 kHz (Automatic) Vertical : 56 Hz ~ 75 Hz |
| Display Colors | 16.7 Million colors |
| Maximum Resolution | Horizontal : 1280 Pixels Vertical : 1024 Pixels |
| Input Video Signal | Analog, 0.7 Vp-p \pm 1% positive at 75 Ω , Digital, TMDS internally terminated |
| Input Sync Signal | Type : Seperate H/V sync, Composite H/V, Sync-on-Green, automatic synchronization without external switch of sync type Level : TTL level/TMDS(DIGITAL) |
| Maximum Pixel Clock rate | 135 MHz |
| Active Display Horizontal/Vertical | 376.32 (H)mm / 301.056 (V)mm |
| AC power voltage & Frequency | AC 100 ~ 240 VAC (+ / - 10%), 60 / 50 Hz ~ \pm 3 Hz |
| Power Consumption | 40 W (MAX) |
| Dimensions Set (W x D x H) Package | 16.7 x 1.7 x 13.8 Inches (423 x 44.2 x 351.5 mm) 16.7 x 9.3 x 16.2 Inches (423 x 236.2 x 412.7 mm) State of stand installed 16.7 x 4.1 x 13.8 Inches (423 x 103 x 351.5 mm) State of stand folded 20.6 x 17.8 x 7.2 Inches (524 x 453 x 183 mm) |
| Weight (Set/Package) | 9.1 kg (20.1 lbs) |
| Environmental Considerations | Operating Temperature : 50°F ~ 104°F (10°C ~ 40°C) Operating Humidity : 10 % ~ 80 % Storage Temperature : -13°F ~ 113°F (-25°C ~ 45°C) Storage Humidity : 5 % ~ 95 % |
| -Designs and specifications are subject to change without prior notice. | |

2-6 Spec Comparison to the Old Models

| Model | DI17PS(173P) DI19PS(193P) | DE17PS(173P PLUS) DE19PS(193P PLUS) |
|--------------------|---|--|
| Repones Time | 25ms (White to Black) No IC for the enhancement of the response time is applied. | 12ms (Gray to Gray) The IC for the enhancement of the response time is applied. |
| Magic pivot | Manual(Pivot program) | AUTO(Pivot program + Sensor IC) |
| Magic color | X | 0 |
| Magic zone | X | 0 |
| Magic tune | Ver 2.0 Applied | Ver 3.6 Applied |
| PBA |  |  |
| Additional portion | - |  |

2-7 Option Specification

| Item | Item Name | CODE.NO | Remark |
|---|--|-------------|------------------|
|  | Quick Setup Guide | BH68-00376L | |
|  | Warranty Card (Not available in all locations) | BH68-70438A | |
|  | User's Guide, Monitor Driver, Natural Color software, MagicTune™ software | BN59-00395F | |
|  | D-Sub(15 Pin) Cable | BN39-00244B | |
|  | Power Cord | 3903-000042 | |
|  | ADAPTOR | BN44-00071A | |
|  | DVI Cable | BN39-00341A | Sold separatelys |

Memo

3 Alignments and Adjustments

This section of the service manual explains how to use the RS232 JIG.
This function is needed for AD board change and program memory (IC200) change.

3-1 Required Equipment

The following equipment is necessary for adjusting the monitor:

- Computer with Windows 95, Windows 98, or Windows NT.
- MTI-2031 DDC MANAGER JIG

3-2 Automatic Color Adjustment

To input video, use 16 gray or any pattern using black and white.

1. Switch the power button off (Monitor powered off)
2. Press and hold down the power button until you hear ten beeps.
3. Switch the power button on
4. Press and hold down the power button until the OSD displays.
5. Select Auto Adjustment from the menu.

(Press and hold down the power button to proceed with the next process/ press and release it to make a selection)

3-3 DDC EDID Data Input

1. Input DDC EDID data when replacing AD PCB.
2. Receive/Download the proper DDC file for the model from HQ quality control department.
Install the below jig (Figure 1) and enter the data.

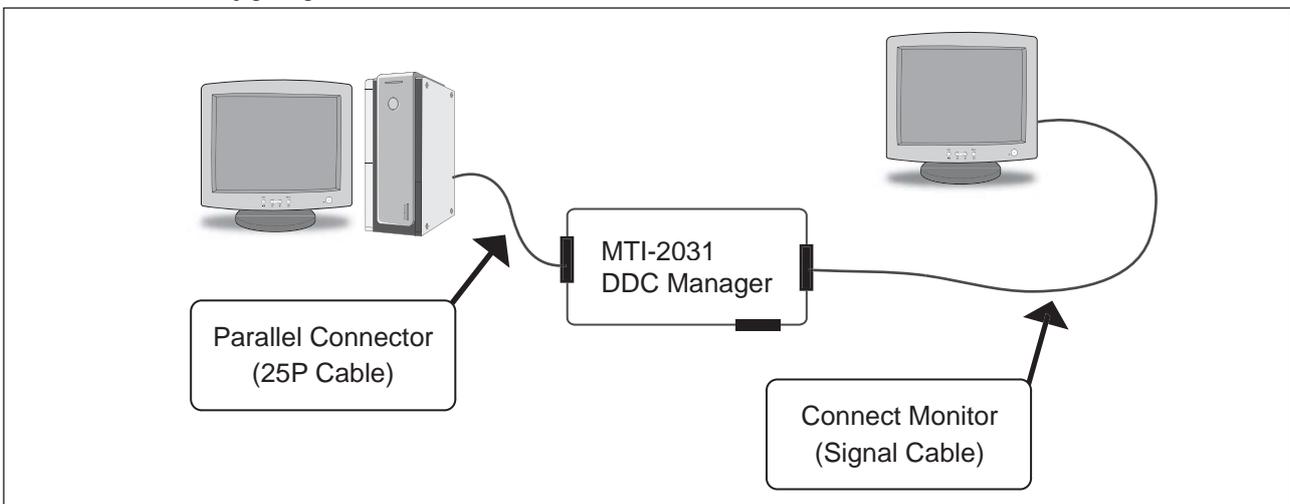


Figure 1.

3-4 OSD Adjustment When Replacing Panel

1. The OSD is displayed just like in 3-2.
2. Select Information.
3. Select a panel that you want to replace with.

3-5 OSD Adjustment When Replacing Lamp Only

1. The OSD is displayed just like in 3-2.
2. Select Information.
3. Select the upper lamp/ lower lamp.

-Note : Please be sure to read the following instructions for details on service function.

3-6 Service Function Spec.

3-6-1 How to Display Service Function OSD

1. The OSD is displayed just like in 3-2.
2. Select Exit from the menu to remove the OSD display.



Figure 2. The example of service function OSD

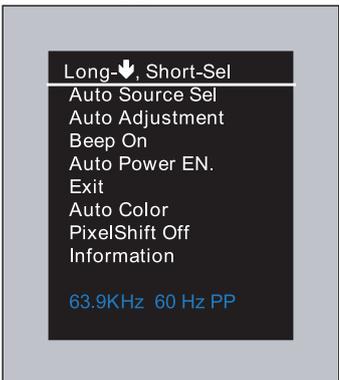
3-6-2 How to Control Service Function OSD

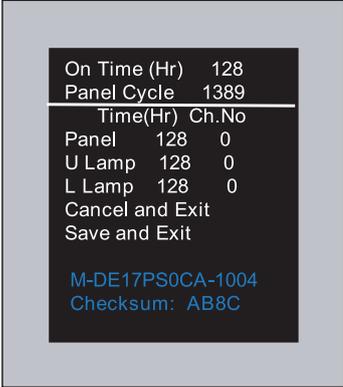
Press and hold down the power button to proceed with the next process/ press and release it to make a selection. When a selection is made, the OSD menu turns yellow.



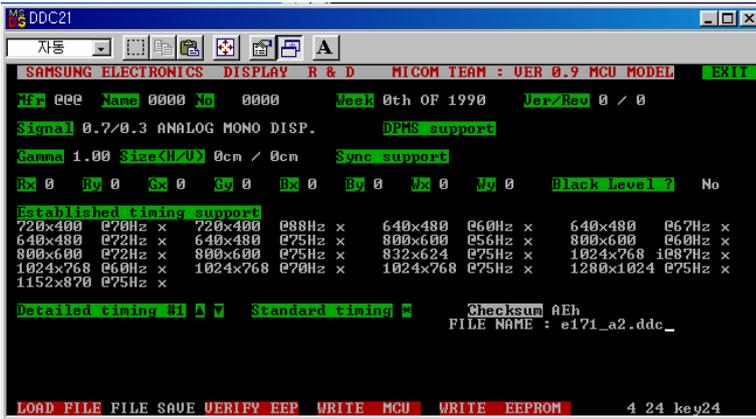
Figure 3.

3-7 Hidden Key list

| No | Function | Operating method |
|----|---|--|
| 1 | Auto adjustment key | During Power ON Touch Power Button longer than for 3 seconds with two " beep" |
| 2 | Input Source selection key | During Power ON Touch Power Button for 2 seconds with a "beep" and release |
| 3 | User delete | During Power OFF, touch Power button for 5 seconds. |
| 4 | Hidden simple OSD mode  | 1) During Power off, touch Power button with more than five times "beep". 2) Then Power on, touch Power button for 15 seconds. During OSD display time, if you keep touching the Power key, the selected menu will be moved down. If you find the menu you wanted, please stop it on menu and touch the Power key one more time. Then you can change the function as you want. The Basic OSD function. 1)Auto source selection : Auto or Manual 2)Auto adjustment 3)Beep on : "beep" sound on/off 4)Auto Power EN: - . Enable: During DPMS status, it can be Blue LED off. - . Disable: During DPMS status, Blue LED is blinking |
| 5 | Hidden full Service OSD mode(1)  | 1) During Power off, touch Power button with more than ten times "beep". (It will be changed to long "beep" sound) 2) Then Power on, touch Power button for 15 seconds. During OSD display time, if you keep touching the Power key, the selected menu will be moved down. If you find the menu you wanted, please stop it on menu and touch the Power key one more time. Then you can change the function as you want. 1) Auto source selection : Auto or Manual 2) Auto adjustment 3) Beep on : "beep" sound on/off 4) Auto Power EN: - . Enable: During DPMS status, it can be Blue LED off. - . Disable: During DPMS status, Blue LED is blinking. 5) Auto Color : Auto Color calibration. 1024* 768 60Hz 16gray Pattern. (please, refer to 16gray pattern on the left) 6) Pixelshift Off : It is only for a panel that it has the image sticking problem, - .at regular intervals, to the top, bottom, left and right, the 8 pixels of panel moves by 32 steps. At this time, User can not feel the movement of the pixel. - . Factory default setting is OFF |

| No | Function | Operating method |
|----|--|--|
| 6 | <p>Hidden full Service OSD mode(2)</p>  | <p>7) Information : include several function regarding Monitor life time.</p> <ol style="list-style-type: none"> 1 On Time : Power On Time 2 Panel Cycle : the number of Panel On/off times (It can be counted for Power on/off, Mode change, DPMS on/off) 3 Panel : on Time of Panel (If panel is changed, this function should be reset and count the number of change time) 4 U Lamp : Upper Lamp on time (If a Upper lamp is changed, this function should be reset and count the number of change time) But, Lamp change is impossible for Dali because panel for Dali can not support the lamp change. 5 L lamp : Lower lamp on time (If a Lower lamp is changed, this function should be reset and count the number of change time) But, Lamp change is impossible for Dali because a panel for Dali can not support the lamp change. 6 Cancel and Exit 7 Save and Exit 8 M- DE17PS0CA- 1004 : MCU firmware version If you found a compatibility problem, please inform us with this information. 9 Checksum : MCU firmware checksum If you found a compatibility problem, please inform us with this information. |

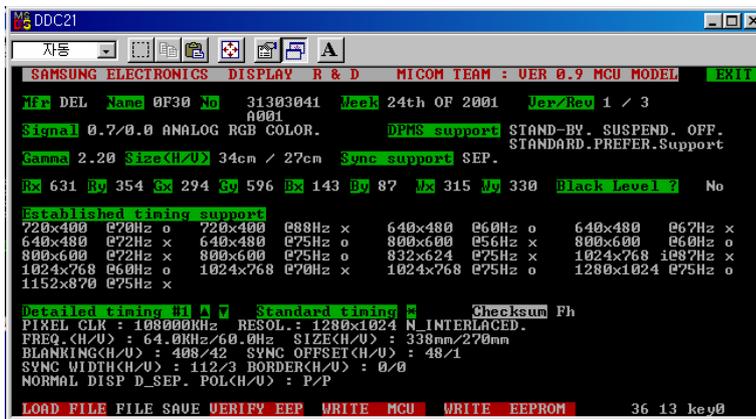
3-8 EDID Installation with Dos Program



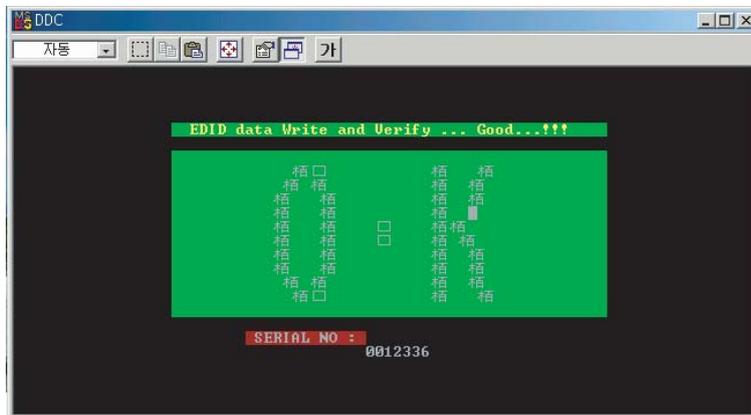
1. Execute "DDC21.exe"±

2. Click "LOAD FILE"±

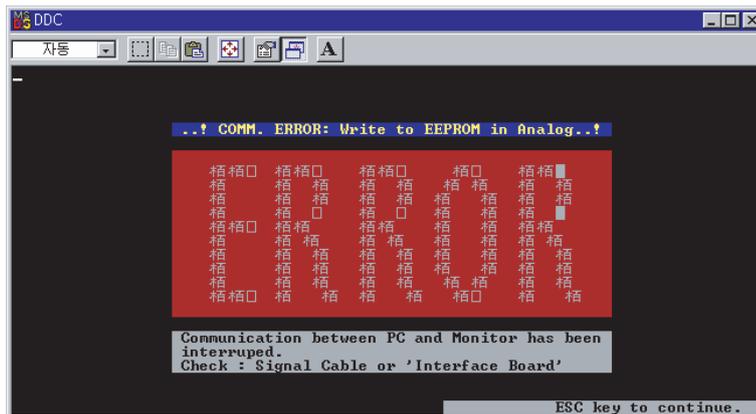
3. File Name "173PPA.ddc"±
 "173PPD.ddc"±
 "193PPA.ddc"±
 "193PPD.ddc"±



4. Click "WRITE EEPROM"±



Confirm the "OK" Sign



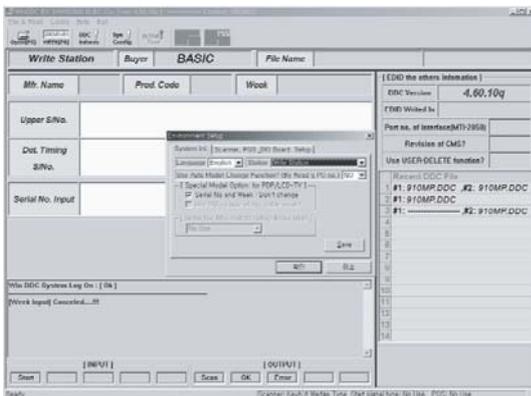
Error Message: Check the Signal Cable or Interface Board

3 Alignments and Adjustments

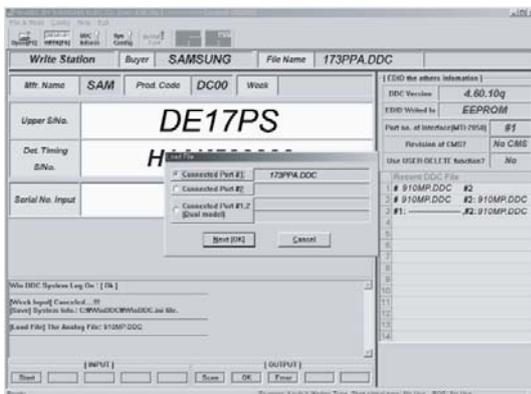
3-9 EDID Installation with Windows Program



1. Execute "WinDDC.exe"



2. Click "Sys Config"
Select "Station : Write station".
Check "Serial No and Week : Don't change"
Click "Save"



3. Click "Open" icon.
Select "Connected Port #1" and Next "OK".
* File Name - 173PPA.DDC : Analog
Press enter key on your keyboard.



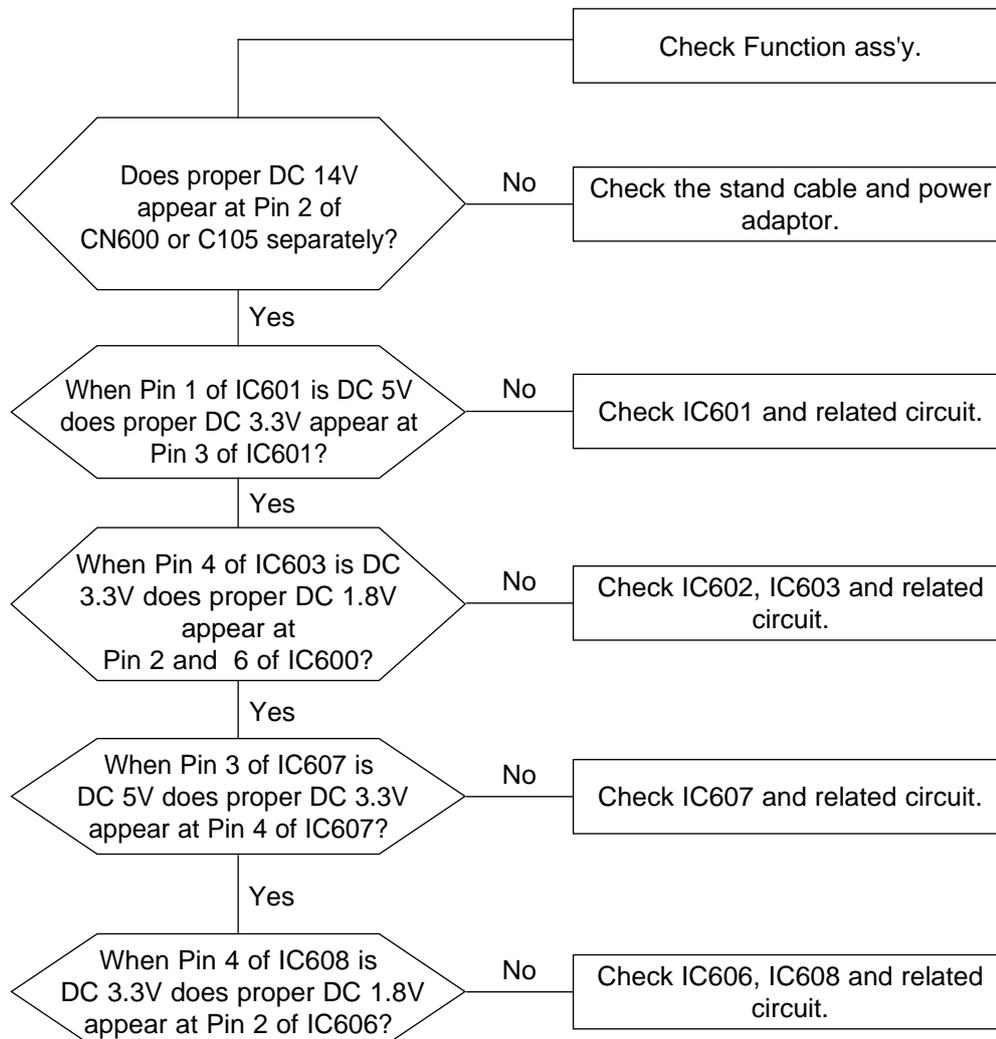
4. Confirm the "DDC OK".

- After Replacing the Main Board
 - EDID Installation (Analog and Digital)
 - Factory Reset(Using Power key)
- During Power off, press Power key for 5 seconds.
With 1 beep sound, Factory Reset executes.

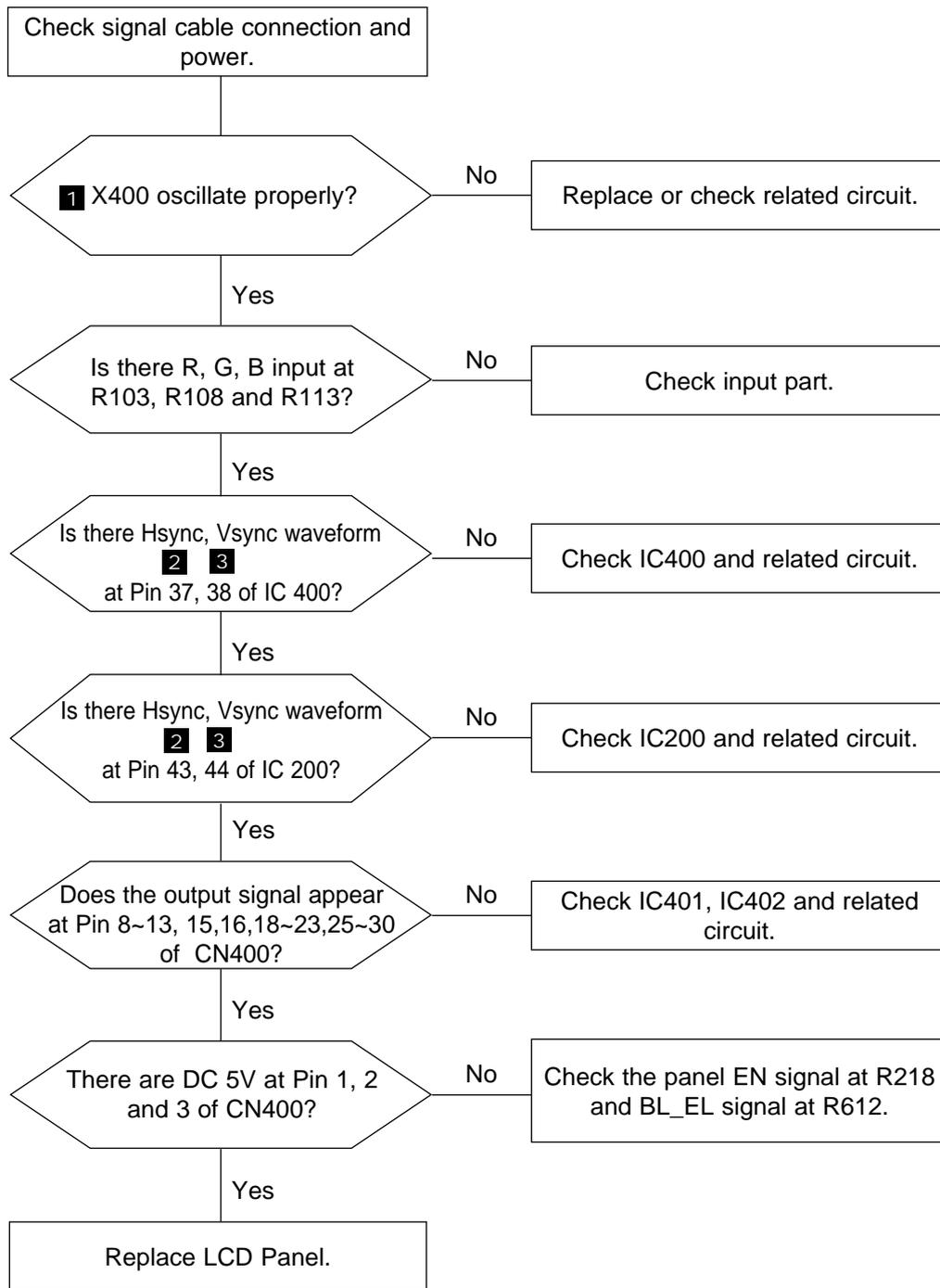
4 Troubleshooting

- Notes:**
1. Before troubleshooting, setup the PC's display as below.
 - Resolution: 1280 x 1024
 - H-frequency: 64 kHz
 - V-frequency: 60 Hz
 2. If no picture appears, make sure the power cord is correctly connected.
 3. Check the following circuits.
 - No raster appears: Function PBA, Main PBA, Inverter
 - 5V develop but no screen: Main PBA
 - 14V, 5V does not develop: Adaptor, Main PBA
 4. During power off if you push and hold the "Power key" button for more than 5 seconds, the monitor automatically returns to the factory preset.

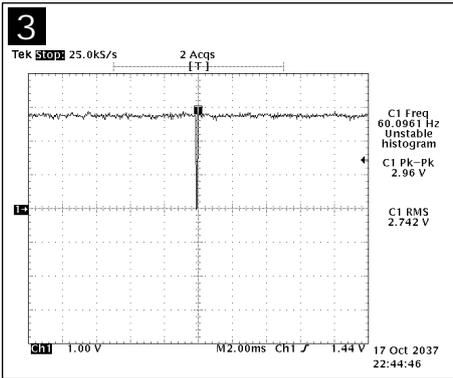
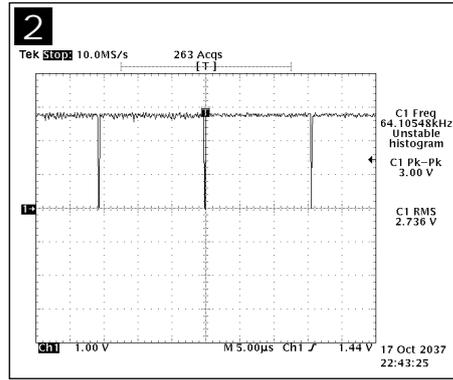
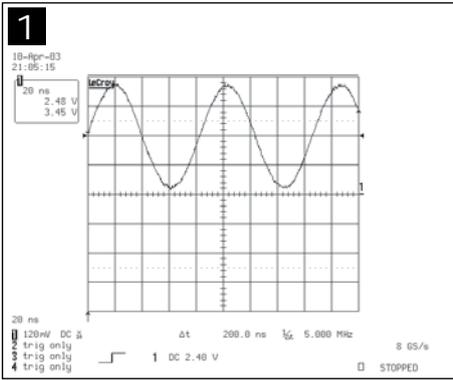
4-1 No Power (DE17PS/DE19PS)



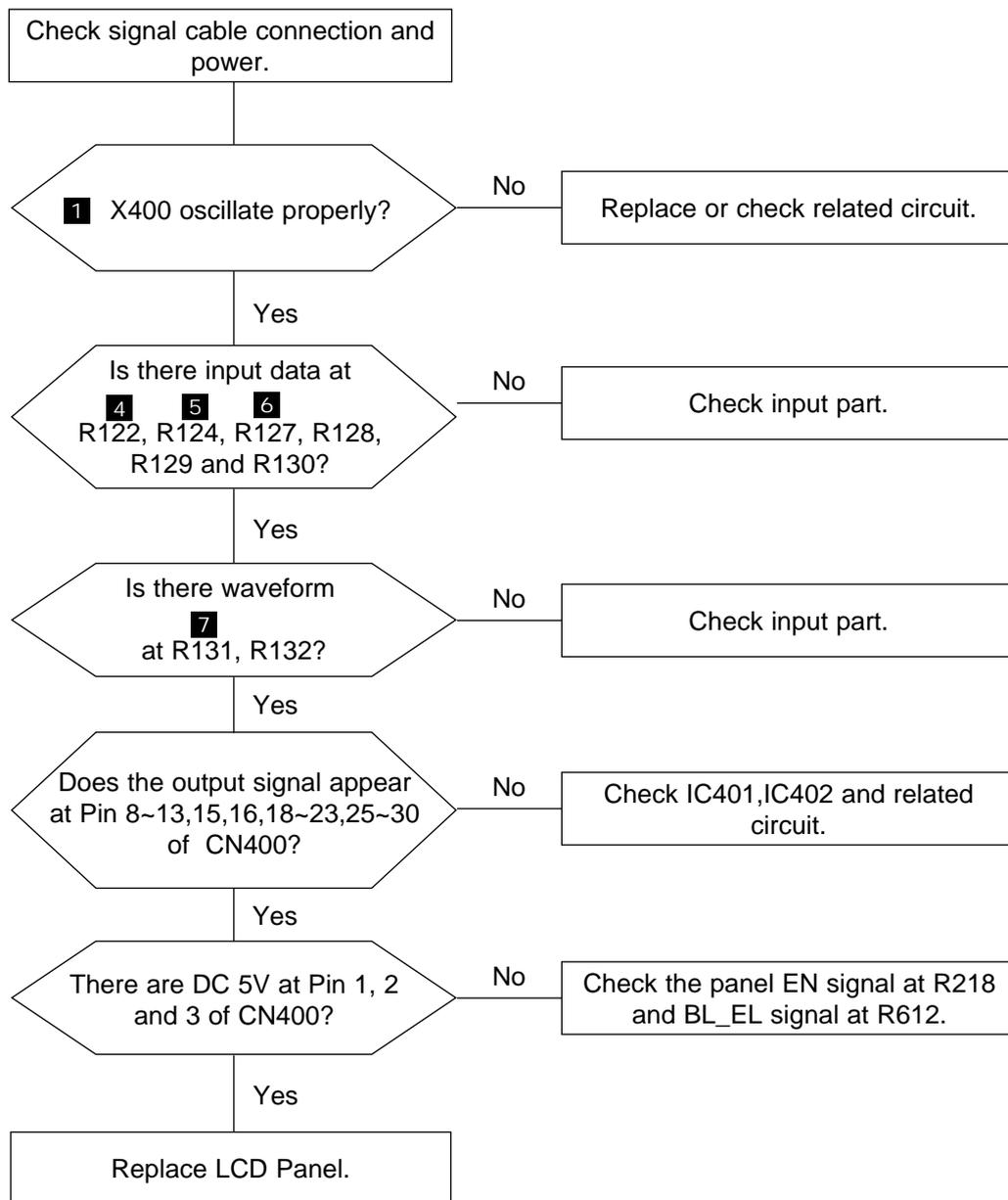
4-2 No Video (ANALOG)



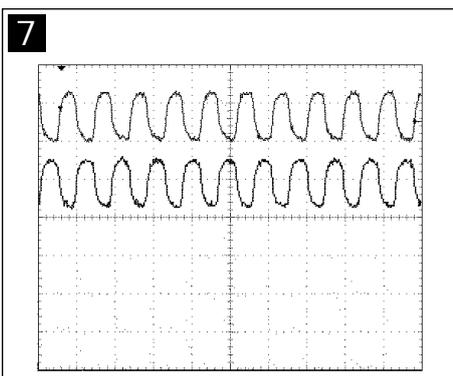
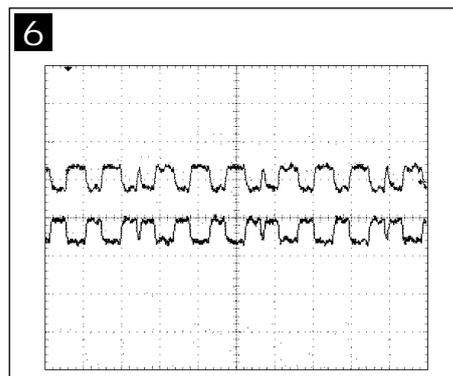
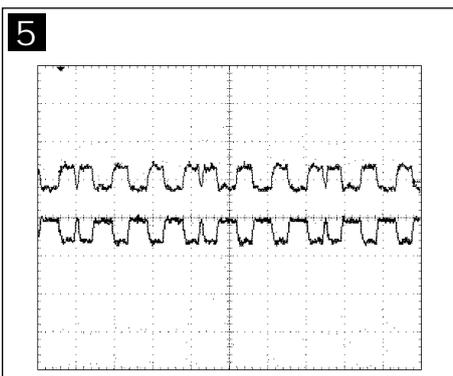
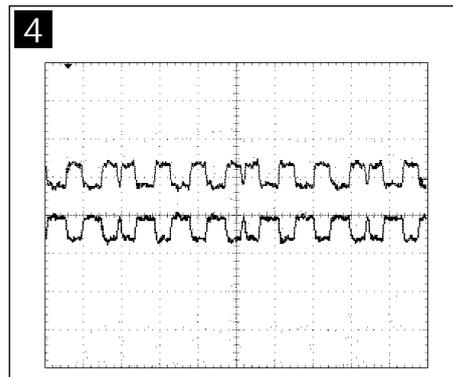
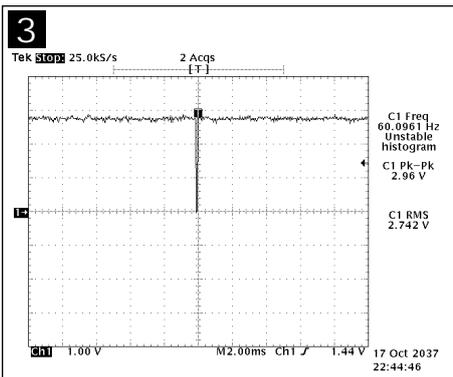
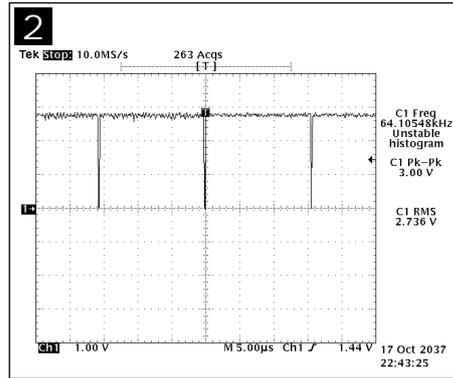
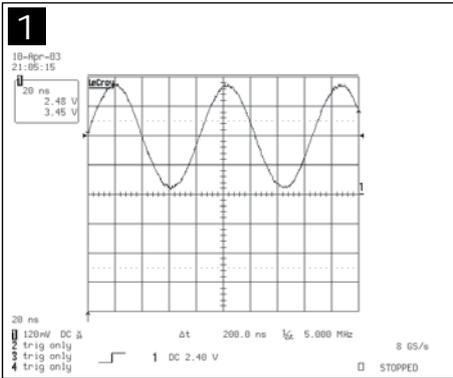
WAVEFORMS



4-3 No Video (DIGITAL)



WAVEFORMS



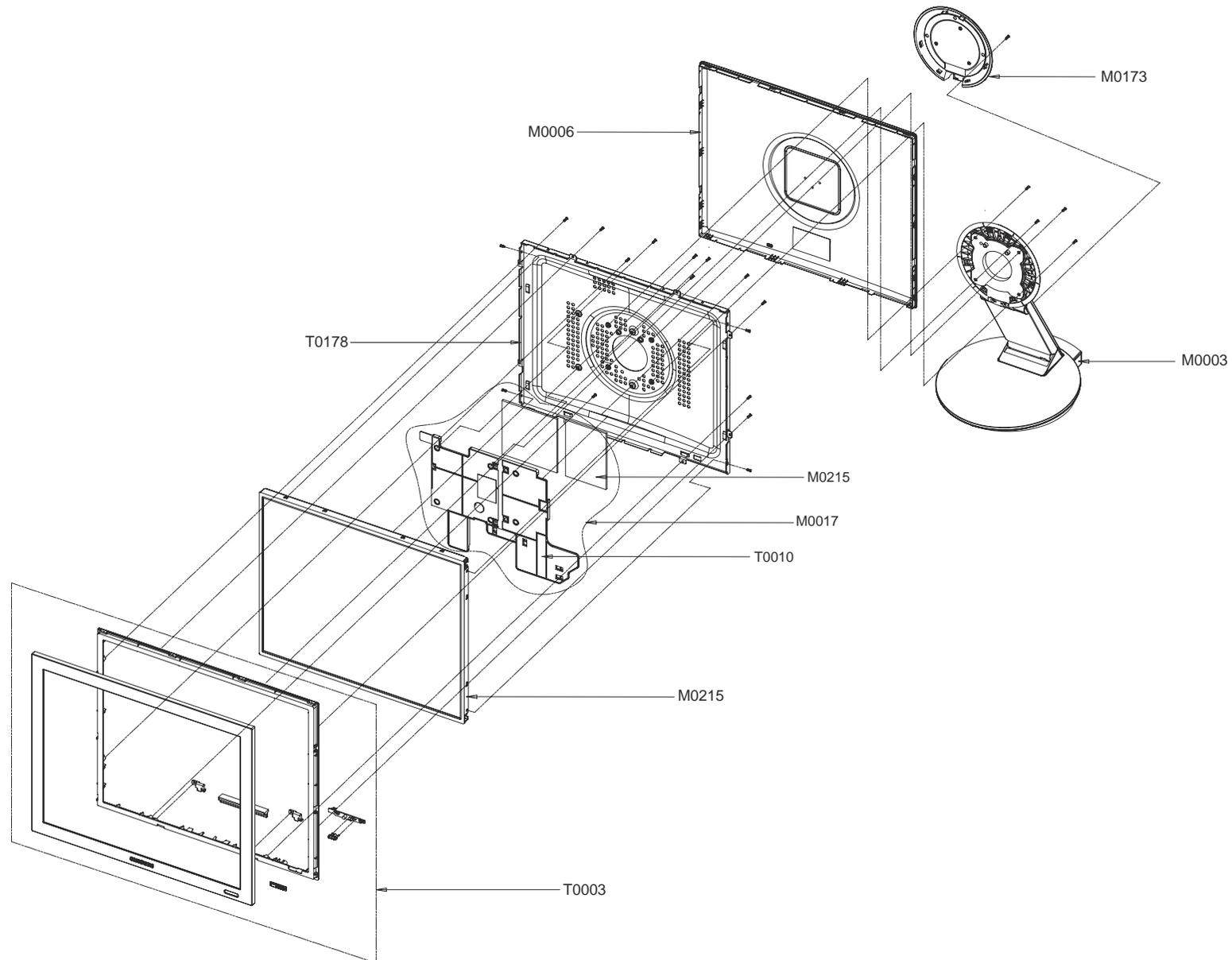
Memo

5 Exploded View and Parts List

-You can search for updated part codes through ITSELF web site.

URL : <http://itself.sec.samsung.co.kr>

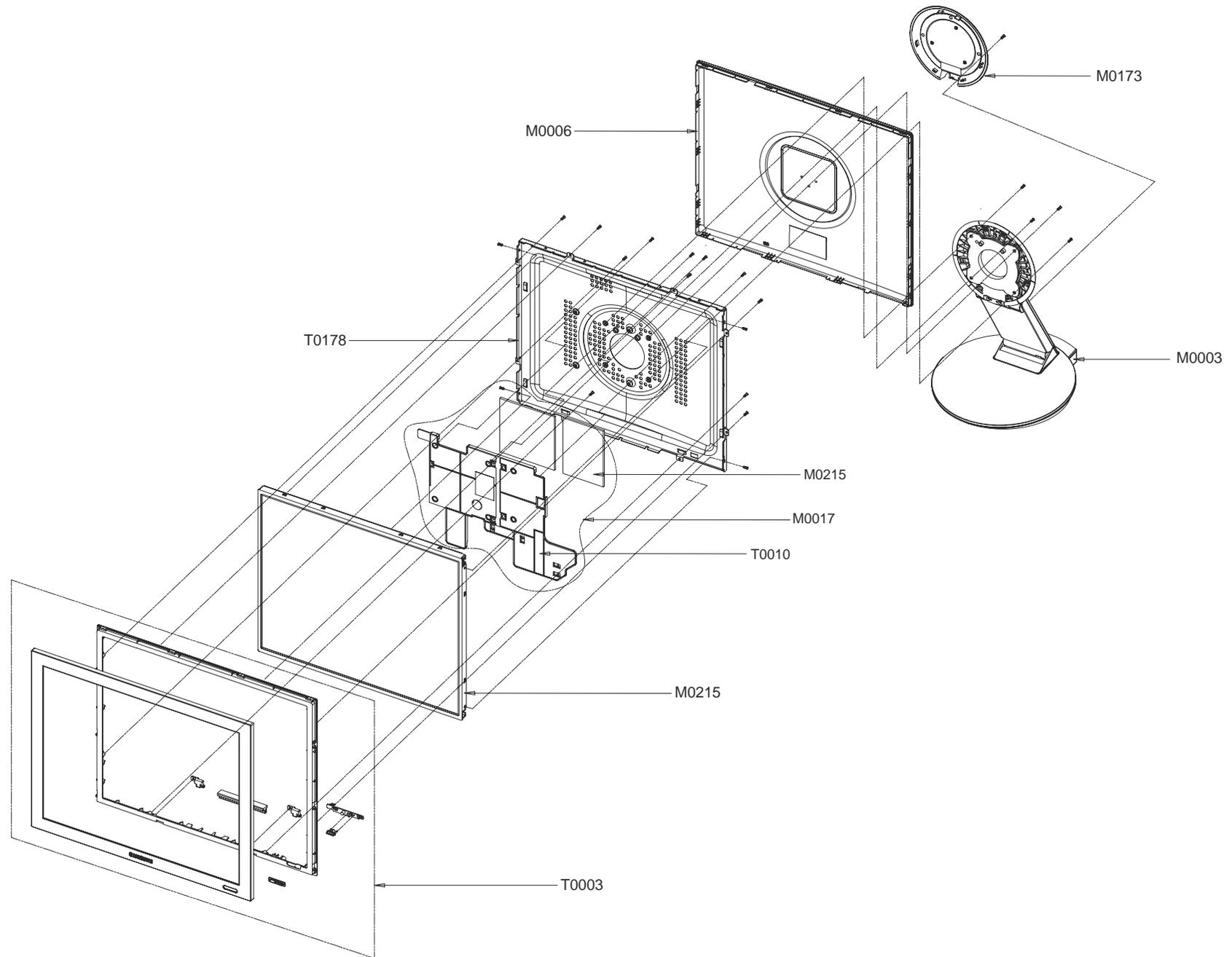
5-1 DE17PSQFV/XAX Exploded View



5-2 DE17PSQFV/XAX Parts List

| Location | Code.No | Item & Specification | Q'ty | SA/SNA | Remark |
|----------|-------------|--|------|--------|--------|
| T0003 | BN96-00778E | ASSY COVER P-FRONT;DI17PS,ABS HB,BLACK | 1 | S.A | |
| M0215 | BN07-00218A | LCD-PANEL;LTM170E8-L21,Dali2,6BIT FRC,35 | 1 | S.A | |
| T0010 | BN61-01598A | HOLDER-SUB PCB;DI17PS,ABS HB,T1.8,IV16,D | 1 | S.N.A | |
| M0017 | BN91-00836T | ASSY CHASSIS-E19;DE17PSQAQ/EDC,DALI2 | 1 | S.A | |
| M0215 | BN44-00103B | INVERTER;RL17,SIC842,13.0~14.5V,2.0MA,7. | 1 | S.A | |
| T0178 | BN63-01034A | SHIELD-PCB;DALI 17,SECC,T1.0 | 1 | S.N.A | |
| M0006 | BN63-01035C | COVER-REAR;DALI 17,ABS HB BK21,CLP-2402H | 1 | S.A | |
| M0173 | BN96-00890B | ASSY STAND P-CAP;DALI 17_19,ABS HB,BLACK | 1 | S.A | |
| M0003 | BN96-01998B | ASSY STAND P;DE17P (S/M 173 PLUS),ABS HB | 1 | S.A | |

5-3 DE17PSQRV/XAX Exploded View



5-4 DE17PSQRV/XAX Parts List

| Location | Code.No | Item & Specification | Q'ty | SA/SNA | Remark |
|----------|-------------|--|------|--------|--------|
| T0003 | BN96-00778G | ASSY COVER P-FRONT;DI17PS,ABS HB,RED | 1 | S.A | |
| M0215 | BN07-00218A | LCD-PANEL;LTM170E8-L21,Dali2,6BIT FRC,35 | 1 | S.A | |
| T0010 | BN61-01598A | HOLDER-SUB PCB;DI17PS,ABS HB,T1.8,IV16,D | 1 | S.N.A | |
| M0017 | BN91-00836T | ASSY CHASSIS-E19;DE17PSQAQ/EDC,DALI2 | 1 | S.A | |
| M0215 | BN44-00103B | INVERTER;RL17,SIC842,13.0~14.5V,2.0MA,7. | 1 | S.A | |
| T0178 | BN63-01034A | SHIELD-PCB;DALI 17,SECC,T1.0 | 1 | S.N.A | |
| M0006 | BN63-01035E | COVER-REAR;DALI 17,ABS HB RD01,RDP-2407, | 1 | S.A | |
| M0173 | BN96-00890D | ASSY STAND P-CAP;DALI 17_19,ABS HB,RED | 1 | S.A | |
| M0003 | BN96-01998D | ASSY STAND P;DE17P (S/M 173 PLUS),ABS HB | 1 | S.A | |

6 Electrical Parts List

6-1 DE17PSQFV/XAX Parts List

| Code No. | Loc. No. | Description | Specification | EA | SA/SNA | Remarks |
|----------|----------|---------------|--|----|--------|---------|
| | | DE17PSQFV/XAX | 173P PLUS,DE17P,17,LCD-MQ,MEXICO | | | |
| 0.1 | M0001 | BN90-00662C | ASSY COVER FRONT;DI17PSQFV*,AL+BK07,BLA | 1 | S.N.A | |
| ..2 | T0003 | BN96-00778E | ASSY COVER P-FRONT;DI17PS,ABS HB,BLACK | 1 | S.A | |
| ...3 | M0081 | 6003-001522 | SCREW-TAPTITE;CH,+,B,M3,L8,ZPC(YEL),SWRC | 4 | S.N.A | |
| ...3 | C/F | BN61-00809A | HOLDER-COVER LOCK;DALI 17,ABS | 2 | S.N.A | |
| ...3 | M0112 | BN63-01032B | COVER-FRONT;DALI 17,AL T1.0 BKN-8412 | 1 | S.N.A | |
| ...3 | T0069 | BN63-01033C | COVER-MIDDLE;DALI 17,ABS HB BK07 | 1 | S.N.A | |
| ...3 | C/F | BN64-00221A | DECORATION-LED;DALI 17,PC CLEAR | 1 | S.N.A | |
| ...3 | M0007 | BN64-00225A | KNOB-FUNCTION;DALI 17,ABS HB | 1 | S.N.A | |
| ...3 | C/F | BN73-00061B | RUBBER-PROTECT;DALI 17,RUBBER,BLK,PANTON | 1 | S.N.A | |
| ...3 | M0145 | BN96-00848A | ASSY BOARD P-FUNCTION;DI17PS,FUNCTION | 1 | S.A | |
| 0.1 | M0002 | BN90-00666A | ASSY COVER REAR;DI17PSQFV/,AL+BK07,BLACK | 1 | S.N.A | |
| ..2 | M0006 | BN63-01035C | COVER-REAR;DALI 17,ABS HB BK21,CLP-2402H | 1 | S.A | |
| 0.1 | M0216 | BN90-00706N | ASSY STAND;DE17PSQFV/EDC | 1 | S.N.A | |
| ..2 | M0003 | BN96-01998B | ASSY STAND P;DE17P (S/M 173 PLUS),ABS HB | 1 | S.A | |
| ...3 | T0081 | 6001-000346 | SCREW-MACHINE;FH,+,M3,L4,ZPC(YEL),SWRCH1 | 2 | S.N.A | |
| ...3 | M0081 | 6003-000115 | SCREW-TAPTITE;BH,+,B,M3,L6,ZPC(BLK),SWRC | 5 | S.N.A | |
| ...3 | M0081 | 6003-000276 | SCREW-TAPTITE;BH,+,-,B,M3,L10,ZPC(YEL),S | 4 | S.N.A | |
| ...3 | M0081 | 6003-000301 | SCREW-TAPTITE;BH,+,S,M4,L6,ZPC(YEL),SWRC | 1 | S.N.A | |
| ...3 | M0081 | 6003-001010 | SCREW-TAPTITE;FH,+,B,M3,L6,ZPC(YEL),SWRC | 3 | S.N.A | |
| ...3 | M0081 | 6003-001119 | SCREW-TAPTITE;FH,+,-,S,M4,L10,ZPC(BLK),S | 4 | S.N.A | |
| ...3 | M0081 | 6003-001136 | SCREW-TAPTITE;BH,+,B,M4,L8,ZPC(YEL),SWRC | 4 | S.N.A | |
| ...3 | M0081 | 6003-001185 | SCREW-TAPTITE;FH,+,B,M3,L8,NI PLT,SWRCH1 | 12 | S.N.A | |
| ...3 | M0081 | 6003-001238 | SCREW-TAPTITE;FH,+,S,M4,L8,ZPC(BLK),SWRC | 3 | S.N.A | |
| ...3 | STD | 6011-001445 | BOLT-SOCKET;4-40 UNC,L7,NI PLT,BRASS,HEX | 4 | S.N.A | |
| ...3 | M0326 | 6501-000113 | CABLE TIE;DA-100,T1,W2.5,L102,WHT,NYLON | 1 | S.N.A | |
| ...3 | M0134 | BN39-00452A | CBF-STAND CABLE;DI17PS,UL20276#32,UL,15P | 1 | S.A | |
| ...3 | M0142 | BN61-00251A | FOOT-RUBBER;GH17BS,RUBBER,T1.6 | 4 | S.N.A | |
| ...3 | STD | BN61-00827B | STAND-REAR BODY;DI1*PS,ABS HB,BK21,CLP-2 | 1 | S.N.A | |
| ...3 | STD | BN61-00828B | STAND-NECK FRONT;DI1*PS,ABS HB,BK07 | 1 | S.N.A | |
| ...3 | STD | BN61-00830B | STAND-FRONT BODY;DI1*PS,ABS HB,BK07 | 1 | S.N.A | |
| ...3 | STD | BN61-00841B | STAND-REAR DECO;DI1*PS,ABS HB,BK21,CLP-2 | 1 | S.N.A | |
| ...3 | STD | BN61-00844B | STAND-HINGE COVER;DI1*PS,ABS HB,BK07 | 1 | S.N.A | |
| ...3 | M0009 | BN61-00854B | STAND-BOTTOM;DI1*PS,ABS HB,BK07 | 1 | S.N.A | |
| ...3 | STD | BN61-00855B | STAND-JACK COVER;DI1*PS,ABS HB,BK07 | 1 | S.N.A | |
| ...3 | STD | BN61-00856A | STAND-SWIVEL;DALI 17,ABS | 1 | S.N.A | |
| ...3 | STD | BN61-00857B | STAND-SWIVEL COVER;DI1*PS,ABS HB,BK07 | 1 | S.N.A | |
| ...3 | STD | BN61-00859B | STAND-COVER AL;DALI 17,AL,BLK T1.0,BKN-8 | 1 | S.N.A | |
| ...3 | STD | BN61-00860A | STAND-BOTTOM AL;DALI 17,AL | 1 | S.N.A | |
| ...3 | STD | BN61-00880A | STAND-GUIDE AL;DALI 17,ABS | 1 | S.N.A | |
| ...3 | M0131 | BN63-00951A | GASKET;RT15NS,CONDUCTIVE FAB,5,17,60,GRA | 1 | S.N.A | |
| ...3 | STD | BN63-01036B | COVER-REARCAP BOTTOM;DI1*PS,ABS HB BK13 | 1 | S.N.A | |
| ...3 | STD | BN63-01056B | COVER-REARCAP SUB;DI1*PS,ABS HB,BK07 | 1 | S.N.A | |
| ...3 | STD | BN63-01161A | PROTECTOR-TAPE;DI17PS,T0.4,9*30 | 6 | S.N.A | |
| ...3 | M0122 | BN96-00839A | ASSY MISC P-HINGE;DI17PS,ZNCD2 | 1 | S.N.A | |
| ...3 | T0346 | BN96-00882A | ASSY MISC P-PIVOT HINGE;DI17PS | 1 | S.N.A | |
| ...3 | M0081 | 6003-000008 | SCREW-TAPTITE;BH,+,S,M3,L4,ZPC3,SWRCH18A | 1 | S.N.A | |
| 0.1 | M0112 | BN91-00752B | ASSY SHIELD;DI17PSQFV/,BLACK | 1 | S.N.A | |
| ..2 | T0081 | 6001-000113 | SCREW-MACHINE;FH,+,M3,L5,ZPC(BLK),SWRCH1 | 1 | S.A | |
| ..2 | T0081 | 6001-000346 | SCREW-MACHINE;FH,+,M3,L4,ZPC(YEL),SWRCH1 | 4 | S.N.A | |
| ..2 | M0081 | 6003-000282 | SCREW-TAPTITE;BH,+,-,B,M3,L8,ZPC(BLK),SW | 8 | S.N.A | |
| ..2 | M0081 | 6003-001238 | SCREW-TAPTITE;FH,+,S,M4,L8,ZPC(BLK),SWRC | 4 | S.N.A | |

6 Electrical Parts List

| Code No. | Loc. No. | Description | Specification | EA | SA/SNA | Remarks |
|----------|----------|-------------|--|----|--------|---------|
| ..2 | M0081 | 6003-001336 | SCREW-TAPTITE;CH,+,S,M3,L5.5,ZPC(YEL),SW | 4 | S.N.A | |
| ..2 | T0081 | BN96-00837A | ASSY MISC P-SHIELD PCB;DI17PS,SECC T1.0 | 1 | S.N.A | |
| ...3 | T0178 | BN63-01034A | SHIELD-PCB;DALI 17,SECC,T1.0 | 1 | S.N.A | |
| ..2 | M0173 | BN96-00890B | ASSY STAND P-CAP;DALI 17_19,ABS HB,BLACK | 1 | S.A | |
| ...3 | | BN63-01038B | COVER-REARCAP TOP;DALI,ABS HB BK12,CLP-2 | 1 | S.N.A | |
| ...3 | CCM1 | BN63-01039A | SHIELD-CAP;DALI 17,SPT T0.3 | 1 | S.N.A | |
| 0.1 | M0017 | BN91-00836T | ASSY CHASSIS-E19;DE17PSQAQ/EDC,DALI2 | 1 | S.A | |
| ..2 | M2893 | BN39-00419A | LEAD CONNECTOR;DS17BS,UL1571#30,UL/CSA,1 | 1 | S.A | |
| ..2 | M2893 | BN39-00431A | LEAD CONNECTOR-LVDS;DI17PS,UL1571#30,UL/ | 1 | S.A | |
| ..2 | M2893 | BN39-00446A | LEAD CONNECTOR;DI17PS,UL1061#28,UL/CSA,4 | 1 | S.A | |
| ..2 | M0215 | BN44-00103B | INVERTER;RL17,SIC842,13.0-14.5V,2.0MA,7. | 1 | S.A | |
| ..2 | T0010 | BN61-01598A | HOLDER-SUB PCB;DI17PS,ABS HB,T1.8,IV16,D | 1 | S.N.A | |
| ..2 | M0014 | BN94-00642Q | ASSY PCB MAIN-E19;DE17PSQAQ/EDC,DALI2 | 1 | S.A | |
| ...3 | BZ201 | 3002-001123 | BUZZER-PIEZO;85DB,9VDC,8MA,4.4KHZ +/- 0 | 1 | S.A | |
| ...3 | CN101 | 3711-005506 | HEADER-BOARD TO CABLE;BOX,22P,2R,2mm,STR | 1 | S.A | |
| ...3 | CN102 | 3711-005507 | HEADER-BOARD TO CABLE;BOX,20P,2R,2mm,STR | 1 | S.A | |
| ...3 | T0174 | BN97-00512H | ASSY SMD;DE17PSQAQ/EDC,DALI2 | 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 | 0402-000553 | DIODE-SCHOTTKY;"SS24,B240",40V,2000mA,DO | 1 | S.A | |
|4 | ZD100 | 0403-000258 | DIODE-ZENER;BZX84C5V6,5.2-6V,225mW,SOT-2 | 1 | S.A | |
|4 | ZD101 | 0403-000258 | DIODE-ZENER;BZX84C5V6,5.2-6V,225mW,SOT-2 | 1 | S.A | |
|4 | ZD102 | 0403-000258 | DIODE-ZENER;BZX84C5V6,5.2-6V,225mW,SOT-2 | 1 | S.A | |
|4 | ZD103 | 0403-000258 | DIODE-ZENER;BZX84C5V6,5.2-6V,225mW,SOT-2 | 1 | S.A | |
|4 | ZD104 | 0403-000258 | DIODE-ZENER;BZX84C5V6,5.2-6V,225mW,SOT-2 | 1 | S.A | |
|4 | ZD105 | 0403-000258 | DIODE-ZENER;BZX84C5V6,5.2-6V,225mW,SOT-2 | 1 | S.A | |
|4 | ZD106 | 0403-000258 | DIODE-ZENER;BZX84C5V6,5.2-6V,225mW,SOT-2 | 1 | S.A | |
|4 | ZD107 | 0403-000258 | DIODE-ZENER;BZX84C5V6,5.2-6V,225mW,SOT-2 | 1 | S.A | |
|4 | ZD108 | 0403-000258 | DIODE-ZENER;BZX84C5V6,5.2-6V,225mW,SOT-2 | 1 | S.A | |
|4 | ZD109 | 0403-000258 | DIODE-ZENER;BZX84C5V6,5.2-6V,225mW,SOT-2 | 1 | S.A | |
|4 | ZD110 | 0403-000258 | DIODE-ZENER;BZX84C5V6,5.2-6V,225mW,SOT-2 | 1 | S.A | |
|4 | ZD111 | 0403-000258 | DIODE-ZENER;BZX84C5V6,5.2-6V,225mW,SOT-2 | 1 | S.A | |
|4 | ZD112 | 0403-000258 | DIODE-ZENER;BZX84C5V6,5.2-6V,225mW,SOT-2 | 1 | S.A | |
|4 | ZD113 | 0403-000258 | DIODE-ZENER;BZX84C5V6,5.2-6V,225mW,SOT-2 | 1 | S.A | |
|4 | ZD114 | 0403-000258 | DIODE-ZENER;BZX84C5V6,5.2-6V,225mW,SOT-2 | 1 | S.A | |
|4 | ZD115 | 0403-000258 | DIODE-ZENER;BZX84C5V6,5.2-6V,225mW,SOT-2 | 1 | S.A | |
|4 | ZD116 | 0403-000258 | DIODE-ZENER;BZX84C5V6,5.2-6V,225mW,SOT-2 | 1 | S.A | |
|4 | ZD201 | 0403-000258 | DIODE-ZENER;BZX84C5V6,5.2-6V,225mW,SOT-2 | 1 | S.A | |
|4 | ZD202 | 0403-000258 | DIODE-ZENER;BZX84C5V6,5.2-6V,225mW,SOT-2 | 1 | S.A | |
|4 | Q201 | 0501-000342 | TR-SMALL SIGNAL;KSC1623-Y,NPN,200mW,SOT- | 1 | S.A | |
|4 | Q600 | 0501-000342 | TR-SMALL SIGNAL;KSC1623-Y,NPN,200mW,SOT- | 1 | S.A | |
|4 | Q601 | 0501-000342 | TR-SMALL SIGNAL;KSC1623-Y,NPN,200mW,SOT- | 1 | S.A | |
|4 | Q602 | 0501-000342 | TR-SMALL SIGNAL;KSC1623-Y,NPN,200mW,SOT- | 1 | S.A | |
|4 | Q409 | 0505-001170 | FET-SILICON;SI9933ADY-T1,P,-20V,3.4A,0.0 | 1 | S.A | |
|4 | IC109 | 1003-001538 | IC-LCD CONTROLLER;S5D2542X,LQFP,208P,28X | 1 | S.A | |
|4 | IC109 | 1003-001789 | IC-LCD CONTROLLER;SE59AWJ-LF,PQFP,128P,2 | 1 | S.A | |
|4 | IC112 | 1103-000129 | IC-EEPROM;24C02,2Kbit,256x8Bit,SOP,8P,5x | 1 | S.A | |
|4 | IC112 | 1103-000129 | IC-EEPROM;24C02,2Kbit,256x8Bit,SOP,8P,5x | 1 | S.A | |
|4 | IC112 | 1103-001023 | IC-EEPROM;24C08,8Kbit,1Kx8Bit,SOP,8P,5x4 | 1 | S.A | |

| Code No. | Loc. No. | Description | Specification | EA | SA/SNA | Remarks |
|----------|----------|-------------|--|----|--------|---------|
|4 | IC604 | 1202-000164 | IC-VOLTAGE COMP.;393,SOP,8P,150MIL,DUAL, | 1 | S.A | |
|4 | T0087 | 1203-002425 | IC-POSIFIXED REG.;AP1117,SOT-223,3P,138 | 1 | S.A | |
|4 | T0087 | 1203-002842 | IC-POSIFIXED REG.;AP1117D-33A,TO-252,3P | 1 | S.A | |
|4 | T0087 | 1203-002842 | IC-POSIFIXED REG.;AP1117D-33A,TO-252,3P | 1 | S.A | |
|4 | T0087 | 1203-002842 | IC-POSIFIXED REG.;AP1117D-33A,TO-252,3P | 1 | S.A | |
|4 | T0087 | 1203-002844 | IC-POSIFIXED REG.;AP1117D-18A,TO-252-3L | 1 | S.A | |
|4 | T0087 | 1203-002844 | IC-POSIFIXED REG.;AP1117D-18A,TO-252-3L | 1 | S.A | |
|4 | T0170 | 1203-003059 | IC-SWITCH VOL. REG.;MP1583,SOIC,8P,4.9x3 | 1 | S.A | |
|4 | IC120 | 1205-002412 | IC-TRANSMITTER;DTC34LM85A,TSSOP,56P,14x6 | 1 | S.A | |
|4 | IC120 | 1205-002412 | IC-TRANSMITTER;DTC34LM85A,TSSOP,56P,14x6 | 1 | S.A | |
|4 | R608 | 2007-000052 | R-CHIP;10Kohm,1%,1/10W,TP,1608 | 1 | S.A | |
|4 | R708 | 2007-000070 | R-CHIP;0ohm,5%,1/10W,TP,1608 | 1 | S.A | |
|4 | R709 | 2007-000070 | R-CHIP;0ohm,5%,1/10W,TP,1608 | 1 | S.A | |
|4 | R710 | 2007-000070 | R-CHIP;0ohm,5%,1/10W,TP,1608 | 1 | S.A | |
|4 | R711 | 2007-000070 | R-CHIP;0ohm,5%,1/10W,TP,1608 | 1 | S.A | |
|4 | R712 | 2007-000070 | R-CHIP;0ohm,5%,1/10W,TP,1608 | 1 | S.A | |
|4 | R713 | 2007-000070 | R-CHIP;0ohm,5%,1/10W,TP,1608 | 1 | S.A | |
|4 | R701 | 2007-000071 | R-CHIP;22ohm,5%,1/10W,TP,1608 | 1 | S.A | |
|4 | R702 | 2007-000071 | R-CHIP;22ohm,5%,1/10W,TP,1608 | 1 | S.A | |
|4 | R704 | 2007-000071 | R-CHIP;22ohm,5%,1/10W,TP,1608 | 1 | S.A | |
|4 | R705 | 2007-000071 | R-CHIP;22ohm,5%,1/10W,TP,1608 | 1 | S.A | |
|4 | R706 | 2007-000071 | R-CHIP;22ohm,5%,1/10W,TP,1608 | 1 | S.A | |
|4 | R707 | 2007-000071 | R-CHIP;22ohm,5%,1/10W,TP,1608 | 1 | S.A | |
|4 | R121 | 2007-000072 | R-CHIP;47ohm,5%,1/10W,TP,1608 | 1 | S.A | |
|4 | R123 | 2007-000072 | R-CHIP;47ohm,5%,1/10W,TP,1608 | 1 | S.A | |
|4 | R402 | 2007-000072 | R-CHIP;47ohm,5%,1/10W,TP,1608 | 1 | S.A | |
|4 | R107 | 2007-000074 | R-CHIP;100ohm,5%,1/10W,TP,1608 | 1 | S.A | |
|4 | R109 | 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 | |
|4 | R119 | 2007-000074 | R-CHIP;100ohm,5%,1/10W,TP,1608 | 1 | S.A | |
|4 | R200 | 2007-000074 | R-CHIP;100ohm,5%,1/10W,TP,1608 | 1 | S.A | |
|4 | R201 | 2007-000074 | R-CHIP;100ohm,5%,1/10W,TP,1608 | 1 | S.A | |
|4 | R217 | 2007-000074 | R-CHIP;100ohm,5%,1/10W,TP,1608 | 1 | S.A | |
|4 | R219 | 2007-000074 | R-CHIP;100ohm,5%,1/10W,TP,1608 | 1 | S.A | |
|4 | R220 | 2007-000074 | R-CHIP;100ohm,5%,1/10W,TP,1608 | 1 | S.A | |
|4 | R222 | 2007-000074 | R-CHIP;100ohm,5%,1/10W,TP,1608 | 1 | S.A | |
|4 | R228 | 2007-000074 | R-CHIP;100ohm,5%,1/10W,TP,1608 | 1 | S.A | |
|4 | R229 | 2007-000074 | R-CHIP;100ohm,5%,1/10W,TP,1608 | 1 | S.A | |
|4 | R231 | 2007-000074 | R-CHIP;100ohm,5%,1/10W,TP,1608 | 1 | S.A | |
|4 | R232 | 2007-000074 | R-CHIP;100ohm,5%,1/10W,TP,1608 | 1 | S.A | |
|4 | R233 | 2007-000074 | R-CHIP;100ohm,5%,1/10W,TP,1608 | 1 | S.A | |
|4 | R234 | 2007-000074 | R-CHIP;100ohm,5%,1/10W,TP,1608 | 1 | S.A | |
|4 | R235 | 2007-000074 | R-CHIP;100ohm,5%,1/10W,TP,1608 | 1 | S.A | |
|4 | R236 | 2007-000074 | R-CHIP;100ohm,5%,1/10W,TP,1608 | 1 | S.A | |
|4 | R237 | 2007-000074 | R-CHIP;100ohm,5%,1/10W,TP,1608 | 1 | S.A | |
|4 | R238 | 2007-000074 | R-CHIP;100ohm,5%,1/10W,TP,1608 | 1 | S.A | |
|4 | R239 | 2007-000074 | R-CHIP;100ohm,5%,1/10W,TP,1608 | 1 | S.A | |
|4 | R240 | 2007-000074 | R-CHIP;100ohm,5%,1/10W,TP,1608 | 1 | S.A | |
|4 | R241 | 2007-000074 | R-CHIP;100ohm,5%,1/10W,TP,1608 | 1 | S.A | |
|4 | R242 | 2007-000074 | R-CHIP;100ohm,5%,1/10W,TP,1608 | 1 | S.A | |
|4 | R248 | 2007-000074 | R-CHIP;100ohm,5%,1/10W,TP,1608 | 1 | S.A | |
|4 | R250 | 2007-000074 | R-CHIP;100ohm,5%,1/10W,TP,1608 | 1 | S.A | |
|4 | R221 | 2007-000077 | R-CHIP;470ohm,5%,1/10W,TP,1608 | 1 | S.A | |
|4 | R213 | 2007-000078 | R-CHIP;1Kohm,5%,1/10W,TP,1608 | 1 | S.A | |
|4 | R101 | 2007-000080 | R-CHIP;2Kohm,5%,1/10W,TP,1608 | 1 | S.A | |
|4 | R120 | 2007-000080 | R-CHIP;2Kohm,5%,1/10W,TP,1608 | 1 | S.A | |
|4 | R700 | 2007-000082 | R-CHIP;3.3Kohm,5%,1/10W,TP,1608 | 1 | S.A | |
|4 | R703 | 2007-000082 | R-CHIP;3.3Kohm,5%,1/10W,TP,1608 | 1 | S.A | |
|4 | R125 | 2007-000084 | R-CHIP;4.7Kohm,5%,1/10W,TP,1608 | 1 | S.A | |

6 Electrical Parts List

| Code No. | Loc. No. | Description | Specification | EA | SA/SNA | Remarks |
|----------|----------|-------------|---------------------------------|----|--------|---------|
|4 | R126 | 2007-000084 | R-CHIP;4.7Kohm,5%,1/10W,TP,1608 | 1 | SA | |
|4 | R205 | 2007-000084 | R-CHIP;4.7Kohm,5%,1/10W,TP,1608 | 1 | SA | |
|4 | R206 | 2007-000084 | R-CHIP;4.7Kohm,5%,1/10W,TP,1608 | 1 | SA | |
|4 | R207 | 2007-000084 | R-CHIP;4.7Kohm,5%,1/10W,TP,1608 | 1 | SA | |
|4 | R208 | 2007-000084 | R-CHIP;4.7Kohm,5%,1/10W,TP,1608 | 1 | SA | |
|4 | R209 | 2007-000084 | R-CHIP;4.7Kohm,5%,1/10W,TP,1608 | 1 | SA | |
|4 | R212 | 2007-000084 | R-CHIP;4.7Kohm,5%,1/10W,TP,1608 | 1 | SA | |
|4 | R214 | 2007-000084 | R-CHIP;4.7Kohm,5%,1/10W,TP,1608 | 1 | SA | |
|4 | R215 | 2007-000084 | R-CHIP;4.7Kohm,5%,1/10W,TP,1608 | 1 | SA | |
|4 | R223 | 2007-000084 | R-CHIP;4.7Kohm,5%,1/10W,TP,1608 | 1 | SA | |
|4 | R224 | 2007-000084 | R-CHIP;4.7Kohm,5%,1/10W,TP,1608 | 1 | SA | |
|4 | R225 | 2007-000084 | R-CHIP;4.7Kohm,5%,1/10W,TP,1608 | 1 | SA | |
|4 | R226 | 2007-000084 | R-CHIP;4.7Kohm,5%,1/10W,TP,1608 | 1 | SA | |
|4 | R227 | 2007-000084 | R-CHIP;4.7Kohm,5%,1/10W,TP,1608 | 1 | SA | |
|4 | R230 | 2007-000084 | R-CHIP;4.7Kohm,5%,1/10W,TP,1608 | 1 | SA | |
|4 | R100 | 2007-000090 | R-CHIP;10Kohm,5%,1/10W,TP,1608 | 1 | SA | |
|4 | R202 | 2007-000090 | R-CHIP;10Kohm,5%,1/10W,TP,1608 | 1 | SA | |
|4 | R216 | 2007-000090 | R-CHIP;10Kohm,5%,1/10W,TP,1608 | 1 | SA | |
|4 | R218 | 2007-000090 | R-CHIP;10Kohm,5%,1/10W,TP,1608 | 1 | SA | |
|4 | R243 | 2007-000090 | R-CHIP;10Kohm,5%,1/10W,TP,1608 | 1 | SA | |
|4 | R244 | 2007-000090 | R-CHIP;10Kohm,5%,1/10W,TP,1608 | 1 | SA | |
|4 | R245 | 2007-000090 | R-CHIP;10Kohm,5%,1/10W,TP,1608 | 1 | SA | |
|4 | R246 | 2007-000090 | R-CHIP;10Kohm,5%,1/10W,TP,1608 | 1 | SA | |
|4 | R247 | 2007-000090 | R-CHIP;10Kohm,5%,1/10W,TP,1608 | 1 | SA | |
|4 | R603 | 2007-000090 | R-CHIP;10Kohm,5%,1/10W,TP,1608 | 1 | SA | |
|4 | R604 | 2007-000090 | R-CHIP;10Kohm,5%,1/10W,TP,1608 | 1 | SA | |
|4 | R606 | 2007-000090 | R-CHIP;10Kohm,5%,1/10W,TP,1608 | 1 | SA | |
|4 | R607 | 2007-000090 | R-CHIP;10Kohm,5%,1/10W,TP,1608 | 1 | SA | |
|4 | R609 | 2007-000090 | R-CHIP;10Kohm,5%,1/10W,TP,1608 | 1 | SA | |
|4 | R612 | 2007-000090 | R-CHIP;10Kohm,5%,1/10W,TP,1608 | 1 | SA | |
|4 | R115 | 2007-000092 | R-CHIP;15Kohm,5%,1/10W,TP,1608 | 1 | SA | |
|4 | R116 | 2007-000092 | R-CHIP;15Kohm,5%,1/10W,TP,1608 | 1 | SA | |
|4 | R210 | 2007-000092 | R-CHIP;15Kohm,5%,1/10W,TP,1608 | 1 | SA | |
|4 | R211 | 2007-000092 | R-CHIP;15Kohm,5%,1/10W,TP,1608 | 1 | SA | |
|4 | R104 | 2007-000097 | R-CHIP;47Kohm,5%,1/10W,TP,1608 | 1 | SA | |
|4 | R105 | 2007-000097 | R-CHIP;47Kohm,5%,1/10W,TP,1608 | 1 | SA | |
|4 | R401 | 2007-000118 | R-CHIP;390ohm,5%,1/10W,TP,1608 | 1 | SA | |
|4 | R102 | 2007-000287 | R-CHIP;100OHM,1%,1/10W,TP,1608 | 1 | SA | |
|4 | R106 | 2007-000287 | R-CHIP;100OHM,1%,1/10W,TP,1608 | 1 | SA | |
|4 | R110 | 2007-000287 | R-CHIP;100OHM,1%,1/10W,TP,1608 | 1 | SA | |
|4 | R111 | 2007-000287 | R-CHIP;100OHM,1%,1/10W,TP,1608 | 1 | SA | |
|4 | R112 | 2007-000287 | R-CHIP;100OHM,1%,1/10W,TP,1608 | 1 | SA | |
|4 | R114 | 2007-000287 | R-CHIP;100OHM,1%,1/10W,TP,1608 | 1 | SA | |
|4 | R122 | 2007-000659 | R-CHIP;27ohm,5%,1/10W,TP,1608 | 1 | SA | |
|4 | R124 | 2007-000659 | R-CHIP;27ohm,5%,1/10W,TP,1608 | 1 | SA | |
|4 | R127 | 2007-000659 | R-CHIP;27ohm,5%,1/10W,TP,1608 | 1 | SA | |
|4 | R128 | 2007-000659 | R-CHIP;27ohm,5%,1/10W,TP,1608 | 1 | SA | |
|4 | R129 | 2007-000659 | R-CHIP;27ohm,5%,1/10W,TP,1608 | 1 | SA | |
|4 | R130 | 2007-000659 | R-CHIP;27ohm,5%,1/10W,TP,1608 | 1 | SA | |
|4 | R131 | 2007-000659 | R-CHIP;27ohm,5%,1/10W,TP,1608 | 1 | SA | |
|4 | R132 | 2007-000659 | R-CHIP;27ohm,5%,1/10W,TP,1608 | 1 | SA | |
|4 | R400 | 2007-000821 | R-CHIP;390ohm,1%,1/10W,TP,1608 | 1 | SA | |
|4 | R602 | 2007-000962 | R-CHIP;5.1Kohm,1%,1/10W,TP,1608 | 1 | SA | |
|4 | R601 | 2007-000965 | R-CHIP;5.1Kohm,5%,1/10W,TP,1608 | 1 | SA | |
|4 | R117 | 2007-001002 | R-CHIP;510ohm,5%,1/10W,TP,1608 | 1 | SA | |
|4 | R203 | 2007-001002 | R-CHIP;510ohm,5%,1/10W,TP,1608 | 1 | SA | |
|4 | R204 | 2007-001002 | R-CHIP;510ohm,5%,1/10W,TP,1608 | 1 | SA | |
|4 | R103 | 2007-001164 | R-CHIP;75ohm,1%,1/10W,TP,1608 | 1 | SA | |
|4 | R108 | 2007-001164 | R-CHIP;75ohm,1%,1/10W,TP,1608 | 1 | SA | |

6 Electrical Parts List

| Code No. | Loc. No. | Description | Specification | EA | SA/SNA | Remarks |
|----------|----------|-------------|---------------------------------------|----|--------|---------|
|4 | C704 | 2203-000189 | C-CER,CHIP;100nF,+80-20%,25V,Y5V,1608 | 1 | SA | |
|4 | C705 | 2203-000189 | C-CER,CHIP;100nF,+80-20%,25V,Y5V,1608 | 1 | SA | |
|4 | C706 | 2203-000189 | C-CER,CHIP;100nF,+80-20%,25V,Y5V,1608 | 1 | SA | |
|4 | C707 | 2203-000189 | C-CER,CHIP;100nF,+80-20%,25V,Y5V,1608 | 1 | SA | |
|4 | C708 | 2203-000189 | C-CER,CHIP;100nF,+80-20%,25V,Y5V,1608 | 1 | SA | |
|4 | C709 | 2203-000189 | C-CER,CHIP;100nF,+80-20%,25V,Y5V,1608 | 1 | SA | |
|4 | C710 | 2203-000189 | C-CER,CHIP;100nF,+80-20%,25V,Y5V,1608 | 1 | SA | |
|4 | C711 | 2203-000189 | C-CER,CHIP;100nF,+80-20%,25V,Y5V,1608 | 1 | SA | |
|4 | C712 | 2203-000189 | C-CER,CHIP;100nF,+80-20%,25V,Y5V,1608 | 1 | SA | |
|4 | C713 | 2203-000189 | C-CER,CHIP;100nF,+80-20%,25V,Y5V,1608 | 1 | SA | |
|4 | C714 | 2203-000189 | C-CER,CHIP;100nF,+80-20%,25V,Y5V,1608 | 1 | SA | |
|4 | C715 | 2203-000189 | C-CER,CHIP;100nF,+80-20%,25V,Y5V,1608 | 1 | SA | |
|4 | C716 | 2203-000189 | C-CER,CHIP;100nF,+80-20%,25V,Y5V,1608 | 1 | SA | |
|4 | C717 | 2203-000189 | C-CER,CHIP;100nF,+80-20%,25V,Y5V,1608 | 1 | SA | |
|4 | C718 | 2203-000189 | C-CER,CHIP;100nF,+80-20%,25V,Y5V,1608 | 1 | SA | |
|4 | C719 | 2203-000189 | C-CER,CHIP;100nF,+80-20%,25V,Y5V,1608 | 1 | SA | |
|4 | C720 | 2203-000189 | C-CER,CHIP;100nF,+80-20%,25V,Y5V,1608 | 1 | SA | |
|4 | C721 | 2203-000189 | C-CER,CHIP;100nF,+80-20%,25V,Y5V,1608 | 1 | SA | |
|4 | C722 | 2203-000189 | C-CER,CHIP;100nF,+80-20%,25V,Y5V,1608 | 1 | SA | |
|4 | C723 | 2203-000189 | C-CER,CHIP;100nF,+80-20%,25V,Y5V,1608 | 1 | SA | |
|4 | C724 | 2203-000189 | C-CER,CHIP;100nF,+80-20%,25V,Y5V,1608 | 1 | SA | |
|4 | C725 | 2203-000189 | C-CER,CHIP;100nF,+80-20%,25V,Y5V,1608 | 1 | SA | |
|4 | C726 | 2203-000189 | C-CER,CHIP;100nF,+80-20%,25V,Y5V,1608 | 1 | SA | |
|4 | C727 | 2203-000189 | C-CER,CHIP;100nF,+80-20%,25V,Y5V,1608 | 1 | SA | |
|4 | C728 | 2203-000189 | C-CER,CHIP;100nF,+80-20%,25V,Y5V,1608 | 1 | SA | |
|4 | C729 | 2203-000189 | C-CER,CHIP;100nF,+80-20%,25V,Y5V,1608 | 1 | SA | |
|4 | C118 | 2203-000236 | C-CER,CHIP;0.1nF,5%,50V,C0G,1608 | 1 | SA | |
|4 | C608 | 2203-000236 | C-CER,CHIP;0.1nF,5%,50V,C0G,1608 | 1 | SA | |
|4 | C409 | 2203-000257 | C-CER,CHIP;10nF,10%,50V,X7R,1608 | 1 | SA | |
|4 | C423 | 2203-000257 | C-CER,CHIP;10nF,10%,50V,X7R,1608 | 1 | SA | |
|4 | C600 | 2203-000257 | C-CER,CHIP;10nF,10%,50V,X7R,1608 | 1 | SA | |
|4 | C604 | 2203-000257 | C-CER,CHIP;10nF,10%,50V,X7R,1608 | 1 | SA | |
|4 | C605 | 2203-000257 | C-CER,CHIP;10nF,10%,50V,X7R,1608 | 1 | SA | |
|4 | C623 | 2203-000257 | C-CER,CHIP;10nF,10%,50V,X7R,1608 | 1 | SA | |
|4 | C424 | 2203-000626 | C-CER,CHIP;0.022nF,5%,50V,C0G,1608 | 1 | SA | |
|4 | C425 | 2203-000626 | C-CER,CHIP;0.022nF,5%,50V,C0G,1608 | 1 | SA | |
|4 | C731 | 2203-000783 | C-CER,CHIP;0.33nF,5%,50V,C0G,1608 | 1 | SA | |
|4 | C114 | 2203-000998 | C-CER,CHIP;0.047nF,5%,50V,C0G,1608 | 1 | SA | |
|4 | C100 | 2203-005005 | C-CER,CHIP;100nF,10%,16V,X7R,1608 | 1 | SA | |
|4 | C101 | 2203-005005 | C-CER,CHIP;100nF,10%,16V,X7R,1608 | 1 | SA | |
|4 | C102 | 2203-005005 | C-CER,CHIP;100nF,10%,16V,X7R,1608 | 1 | SA | |
|4 | C103 | 2203-005005 | C-CER,CHIP;100nF,10%,16V,X7R,1608 | 1 | SA | |
|4 | C104 | 2203-005005 | C-CER,CHIP;100nF,10%,16V,X7R,1608 | 1 | SA | |
|4 | C106 | 2203-005005 | C-CER,CHIP;100nF,10%,16V,X7R,1608 | 1 | SA | |
|4 | C107 | 2203-005005 | C-CER,CHIP;100nF,10%,16V,X7R,1608 | 1 | SA | |
|4 | C108 | 2203-005005 | C-CER,CHIP;100nF,10%,16V,X7R,1608 | 1 | SA | |
|4 | C109 | 2203-005005 | C-CER,CHIP;100nF,10%,16V,X7R,1608 | 1 | SA | |
|4 | C110 | 2203-005005 | C-CER,CHIP;100nF,10%,16V,X7R,1608 | 1 | SA | |
|4 | C111 | 2203-005005 | C-CER,CHIP;100nF,10%,16V,X7R,1608 | 1 | SA | |
|4 | C112 | 2203-005005 | C-CER,CHIP;100nF,10%,16V,X7R,1608 | 1 | SA | |
|4 | C113 | 2203-005005 | C-CER,CHIP;100nF,10%,16V,X7R,1608 | 1 | SA | |
|4 | C115 | 2203-005005 | C-CER,CHIP;100nF,10%,16V,X7R,1608 | 1 | SA | |
|4 | C116 | 2203-005005 | C-CER,CHIP;100nF,10%,16V,X7R,1608 | 1 | SA | |
|4 | C117 | 2203-005005 | C-CER,CHIP;100nF,10%,16V,X7R,1608 | 1 | SA | |
|4 | C119 | 2203-005005 | C-CER,CHIP;100nF,10%,16V,X7R,1608 | 1 | SA | |
|4 | C201 | 2203-005005 | C-CER,CHIP;100nF,10%,16V,X7R,1608 | 1 | SA | |
|4 | C400 | 2203-005005 | C-CER,CHIP;100nF,10%,16V,X7R,1608 | 1 | SA | |
|4 | C402 | 2203-005005 | C-CER,CHIP;100nF,10%,16V,X7R,1608 | 1 | SA | |
|4 | C403 | 2203-005005 | C-CER,CHIP;100nF,10%,16V,X7R,1608 | 1 | SA | |

| Code No. | Loc. No. | Description | Specification | EA | SA/SNA | Remarks |
|----------|----------|-------------|--|----|--------|---------|
|4 | C404 | 2203-005005 | C-CER,CHIP;100nF,10%,16V,X7R,1608 | 1 | S.A | |
|4 | C405 | 2203-005005 | C-CER,CHIP;100nF,10%,16V,X7R,1608 | 1 | S.A | |
|4 | C406 | 2203-005005 | C-CER,CHIP;100nF,10%,16V,X7R,1608 | 1 | S.A | |
|4 | C407 | 2203-005005 | C-CER,CHIP;100nF,10%,16V,X7R,1608 | 1 | S.A | |
|4 | C408 | 2203-005005 | C-CER,CHIP;100nF,10%,16V,X7R,1608 | 1 | S.A | |
|4 | C411 | 2203-005005 | C-CER,CHIP;100nF,10%,16V,X7R,1608 | 1 | S.A | |
|4 | C412 | 2203-005005 | C-CER,CHIP;100nF,10%,16V,X7R,1608 | 1 | S.A | |
|4 | C413 | 2203-005005 | C-CER,CHIP;100nF,10%,16V,X7R,1608 | 1 | S.A | |
|4 | C414 | 2203-005005 | C-CER,CHIP;100nF,10%,16V,X7R,1608 | 1 | S.A | |
|4 | C415 | 2203-005005 | C-CER,CHIP;100nF,10%,16V,X7R,1608 | 1 | S.A | |
|4 | C416 | 2203-005005 | C-CER,CHIP;100nF,10%,16V,X7R,1608 | 1 | S.A | |
|4 | C417 | 2203-005005 | C-CER,CHIP;100nF,10%,16V,X7R,1608 | 1 | S.A | |
|4 | C418 | 2203-005005 | C-CER,CHIP;100nF,10%,16V,X7R,1608 | 1 | S.A | |
|4 | C419 | 2203-005005 | C-CER,CHIP;100nF,10%,16V,X7R,1608 | 1 | S.A | |
|4 | C420 | 2203-005005 | C-CER,CHIP;100nF,10%,16V,X7R,1608 | 1 | S.A | |
|4 | C421 | 2203-005005 | C-CER,CHIP;100nF,10%,16V,X7R,1608 | 1 | S.A | |
|4 | C422 | 2203-005005 | C-CER,CHIP;100nF,10%,16V,X7R,1608 | 1 | S.A | |
|4 | C436 | 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 | C616 | 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 | C625 | 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 | C630 | 2203-005005 | C-CER,CHIP;100nF,10%,16V,X7R,1608 | 1 | S.A | |
|4 | C203 | 2203-005065 | C-CER,CHIP;1000nF,+80-20%,10V,Y5V,1608 | 1 | S.A | |
|4 | C204 | 2203-005065 | C-CER,CHIP;1000nF,+80-20%,10V,Y5V,1608 | 1 | S.A | |
|4 | C621 | 2203-005065 | C-CER,CHIP;1000nF,+80-20%,10V,Y5V,1608 | 1 | S.A | |
|4 | C622 | 2203-005065 | C-CER,CHIP;1000nF,+80-20%,10V,Y5V,1608 | 1 | S.A | |
|4 | C740 | 2203-005065 | C-CER,CHIP;1000nF,+80-20%,10V,Y5V,1608 | 1 | S.A | |
|4 | C200 | 2203-005437 | C-CER,CHIP;10000nF,+80-20%,10V,Y5V,3216 | 1 | S.A | |
|4 | C202 | 2203-005437 | C-CER,CHIP;10000nF,+80-20%,10V,Y5V,3216 | 1 | S.A | |
|4 | C401 | 2203-005437 | C-CER,CHIP;10000nF,+80-20%,10V,Y5V,3216 | 1 | S.A | |
|4 | C410 | 2203-005437 | C-CER,CHIP;10000nF,+80-20%,10V,Y5V,3216 | 1 | S.A | |
|4 | C426 | 2203-005437 | C-CER,CHIP;10000nF,+80-20%,10V,Y5V,3216 | 1 | S.A | |
|4 | C614 | 2203-005437 | C-CER,CHIP;10000nF,+80-20%,10V,Y5V,3216 | 1 | S.A | |
|4 | C615 | 2203-005437 | C-CER,CHIP;10000nF,+80-20%,10V,Y5V,3216 | 1 | S.A | |
|4 | C619 | 2203-005437 | C-CER,CHIP;10000nF,+80-20%,10V,Y5V,3216 | 1 | S.A | |
|4 | C620 | 2203-005437 | C-CER,CHIP;10000nF,+80-20%,10V,Y5V,3216 | 1 | S.A | |
|4 | C626 | 2203-005437 | C-CER,CHIP;10000nF,+80-20%,10V,Y5V,3216 | 1 | S.A | |
|4 | C628 | 2203-005437 | C-CER,CHIP;10000nF,+80-20%,10V,Y5V,3216 | 1 | S.A | |
|4 | C629 | 2203-005437 | C-CER,CHIP;10000nF,+80-20%,10V,Y5V,3216 | 1 | S.A | |
|4 | C631 | 2203-005437 | C-CER,CHIP;10000nF,+80-20%,10V,Y5V,3216 | 1 | S.A | |
|4 | C632 | 2203-005437 | C-CER,CHIP;10000nF,+80-20%,10V,Y5V,3216 | 1 | S.A | |
|4 | C730 | 2203-005437 | C-CER,CHIP;10000nF,+80-20%,10V,Y5V,3216 | 1 | S.A | |
|4 | C606 | 2203-006036 | C-CER,CHIP;680NF,+80-20%,16V,Y5V,TP,1608 | 1 | S.A | |
|4 | C611 | 2402-000179 | C-AL,SMD;47uF,20%,16V,GP,TP,6.6x6.6x5.7m | 1 | S.A | |
|4 | C430 | 2402-001042 | C-AL,SMD;100uF,20%,16V,GP,TP,6.6x6.6x5.4 | 1 | S.A | |
|4 | C435 | 2402-001042 | C-AL,SMD;100uF,20%,16V,GP,TP,6.6x6.6x5.4 | 1 | S.A | |
|4 | C610 | 2402-001042 | C-AL,SMD;100uF,20%,16V,GP,TP,6.6x6.6x5.4 | 1 | S.A | |
|4 | C618 | 2402-001042 | C-AL,SMD;100uF,20%,16V,GP,TP,6.6x6.6x5.4 | 1 | S.A | |
|4 | C105 | 2402-001044 | C-AL,SMD;100UF,20%,25V,GP,TP,8.3X8.3X6.3 | 1 | S.A | |
|4 | C601 | 2402-001044 | C-AL,SMD;100UF,20%,25V,GP,TP,8.3X8.3X6.3 | 1 | S.A | |
|4 | C609 | 2409-001051 | C-ORGANIC;82UF,20%,6.3V,WT,TP,6.3*5.9MM, | 1 | S.A | |
|4 | C624 | 2409-001065 | C-ORGANIC;82uF,20%,16V,WT,TP,8X6.9mm,- | 1 | S.A | |
|4 | C602 | 2409-001086 | C-ORGANIC;10uF,20%,20V,WT,TP,5.3x5.3x6.0 | 1 | S.A | |
|4 | X400 | 2801-003773 | CRYSTAL-SMD;12MHz,30ppm,28-AN,20pF,50oh | 1 | S.A | |
|4 | T0568 | 3301-000314 | BEAD-SMD;120ohm,1.6x0.8x0.8mm,-,-,- | 1 | S.N.A | |
|4 | T0568 | 3301-000314 | BEAD-SMD;120ohm,1.6x0.8x0.8mm,-,-,- | 1 | S.N.A | |

6 Electrical Parts List

| Code No. | Loc. No. | Description | Specification | EA | SA/SNA | Remarks |
|----------|------------|-------------|--|-------|--------|---------|
|4 | T0568 | 3301-000314 | BEAD-SMD;120ohm,1.6x0.8x0.8mm,-,- | 1 | S.N.A | |
|4 | T0568 | 3301-000314 | BEAD-SMD;120ohm,1.6x0.8x0.8mm,-,- | 1 | S.N.A | |
|4 | T0568 | 3301-000314 | BEAD-SMD;120ohm,1.6x0.8x0.8mm,-,- | 1 | S.N.A | |
|4 | CN400 | 3711-005470 | HEADER-BOARD TO CABLE;BOX,30P,1R,1.25mm, | 1 | S.A | |
|4 | CN601 | 3711-005471 | HEADER-BOARD TO CABLE;BOX,12P,1R,1.25mm, | 1 | S.A | |
|4 | T0010 | BN27-00009A | COIL CHOKE;SMD 12X12X6,EOS,33UH,15%,-.0. | 1 | S.A | |
|4 | S201 | BN32-00005A | SENSOR SW-TILT;SPSF100100,DC5V,1mA,-10 ~ | 1 | S.A | |
|4 | M0018 | BN97-00489N | ASSY MICOM;DE17PS*,W/W | 1 | S.A | |
|5 | IC520 | 0903-001402 | IC-MICROCONTROLLER;NT68F632ALG,8Bit,PLCC | 1 | S.N.A | |
|4 | R610 | 2007-000208 | R-CHIP;1.1Kohm,1%,1/10W,TP,1608 | 1 | S.A | |
|4 | CN200 | 3711-005509 | HEADER-BOARD TO CABLE;BOX,4P,1R,1.25mm,S | 1 | S.A | |
|4 | R605 | 2007-000842 | R-CHIP;3Kohm,1%,1/10W,TP,1608 | 1 | S.A | |
|4 | CIS7 | 0202-001477 | SOLDER-CREAM;LST309-M,-,D20-45\$,96.5Sn/ | 1.95 | S.N.A | |
|4 | IC113 | 1105-001284 | IC-DRAM;636165,-,16Mbit,1Mx16Bit,TSOP,50 | 1 | S.A | |
|4 | IC113 | 1105-001284 | IC-DRAM;636165,-,16Mbit,1Mx16Bit,TSOP,50 | 1 | S.A | |
|4 | IC113 | 1105-001284 | IC-DRAM;636165,-,16Mbit,1Mx16Bit,TSOP,50 | 1 | S.A | |
|4 | T0077 | BN41-00586C | PCB MAIN;DALI-2.FR-4,4L,MP1.2,1.0T,145*1 | 1 | S.N.A | |
| ...3 | CIS2 | BN60-00011B | FASTENER-PEM NUT;DE17PS,FASTENER-PEM/NUT | 4 | S.N.A | |
| ...3 | T0245 | 0202-001522 | SOLDER-WIRE FLUX;LFA3-107,-,D1.2,96.5Sn/ | 0.01 | S.N.A | |
| ..2 | M0131 | BN63-01079A | GASKET;,CONDUCTIVE FAB,4MM,10MM,10MM,GRA | 1 | S.N.A | |
| 0.1 | | BN91-00841Q | ASSY LCD-SPZ(DALI2);DE17PS* | 1 | S.N.A | |
| ..2 | M0215 | BN07-00218A | LCD-PANEL;LTM170E8-L21,Dali2,6BIT FRC,35 | 1 | S.A | |
| ..2 | M0131 | BN63-00995A | GASKET;GY17MS,CONDUCTIVE FAB,4MM,15MM,10 | 1 | S.N.A | |
| 0.1 | M0113 | BN92-00956A | ASSY P/MATERIAL;DI17PS,BASIC | 1 | S.N.A | |
| ..2 | T0376 | 6902-000379 | BAG AIR;LDPE,TO.2,W1000,L1800,TRP,-,- | 0.032 | S.N.A | |
| ..2 | M0505 | BN96-00838A | ASSY MISC P-WALL MOUNTING;DI17PS,TEXTURE | 1 | S.A | |
| ...3 | CIS | BN61-00934A | BRACKET-WALL FRONT;DALI17",SECC,T2.0 | 1 | S.N.A | |
| ...3 | CIS | BN61-00935A | BRACKET-WALL REAR;DALI17",SECC,T2.0 | 1 | S.N.A | |
| ...3 | CIS | BN61-01043A | BRACKET-WALL MOUNT;DI17PS/DI19PS,SK-5,T0 | 1 | S.N.A | |
| ...3 | T0059 | BN68-00473H | MANUAL FLYER-CARD;Dali Wall Mount,SyncMa | 1 | S.N.A | |
| ...3 | M0132 | BN96-00196A | ASSY MISC P-SCREW;MODIGLIANI ,SCREW-WOOD | 1 | S.A | |
| ..2 | T0081 | 6902-000604 | BAG WRAPPING;LDPE,TO.02,W500,L10000,TRP, | 3 | S.N.A | |
| ..2 | T0524 | 6902-000642 | BAG PE;HD/NITR/HD(DOUBLE),TO.015/T0.5/T0 | 1 | S.N.A | |
| 0.1 | M0019 | BN92-01091K | ASSY LABEL;DI19BSASQ/XAX,MEXICO | 1 | S.N.A | |
| 0.1 | M0045 | BN92-01371P | ASSY ACCESSORY;DE17PSQAQ/XAX | 1 | S.N.A | |
| ..2 | M0125 | BN39-00246F | CBF SIGNAL-DVI(D);1703FP,24P/24P,20276-D | 1 | S.A | |
| ..2 | M0045 | BN96-02129H | ASSY ACCESSORY;DE17_19PSQAQ/XAX | 1 | S.A | |
| ...3 | T0268 | 3903-000085 | CBF-POWER CORD;DT,US,BP3/YES, IEC C13/C | 1 | S.A | |
| ...3 | T0524 | 6902-000110 | BAG PE;LDPE,TO.05,W250,L400,TRP,28,2 | 1 | S.N.A | |
| ...3 | M0114 | BN39-00244B | CBF SIGNAL;MO15PS,15P/15P,20276-N,1830mm | 1 | S.A | |
| ...3 | M0215 | BN96-00881K | ASSY MANUAL P-IB+QSG;DE17PS,DE19PS,SYNCM | 1 | S.N.A | |
|4 | QUICKSETUP | BH68-00376L | MANUAL FLYER-04,QSG;LCDQUICK SETUP GUIDE | 1 | S.N.A | |
|4 | IB | BN59-00395K | S/W DRIVER-02,IB;COMM,W/W,SYNCMaster,W/W | 1 | S.N.A | |
| ...3 | ACCESSROY | BN68-00797A | MANUAL FLYER-02,WARRANT CARD;SAMEX BASIC | 1 | S.N.A | |
| ...3 | T0238 | BP68-00515A | MANUAL FLYER-REGISTRATION CARD;PRC CARD, | 1 | S.N.A | |
| 0.1 | M0003 | BN92-01389Q | ASSY BOX;DE17PSQFV/XAX,SEM,MEXICO,TCO99 | 1 | S.N.A | |
| ..2 | BOX | BN69-01024A | BOX-03;S/M173P PLUS(DE17PS),SW4,A,YEL,A1 | 1.01 | S.N.A | |
| ..2 | M0103 | BN66-00007A | LEVER-TOP;ALL MODEL,LDPE,WHITE | 1 | S.N.A | |
| 0.1 | MP1.4 | BN91-00591U | ASSY MISC-ADAPTOR;CX718T-QH | 1 | S.N.A | |
| ..2 | M0158 | BN44-00131A | ADAPTOR;SAD04214-UV,Internal,90 ~ 264Vac | 1 | S.A | |

6-2 DE17PSQRV/XAX Parts List

| Code No. | Loc. No. | Description | Specification | EA | SA/SNA | Remarks |
|----------|----------|---------------|--|----|--------|---------|
| | | DE17PSQRV/XAX | 173P PLUS,DE17P,17,LCD-MO,MEXICO | | | |
| 0.1 | M0001 | BN90-00662E | ASSY COVER FRONT;DI17PSQRV/*,AL+BR01,RED | 1 | S.N.A | |
| ..2 | T0003 | BN96-00778G | ASSY COVER P-FRONT;DI17PS,ABS HB,RED | 1 | S.A | |
| ...3 | M0081 | 6003-001522 | SCREW-TAPTITE;CH,+,B,M3,L8,ZPC(YEL),SWRC | 4 | S.N.A | |
| ...3 | C/F | BN61-00809A | HOLDER-COVER LOCK;DALI 17,ABS | 2 | S.N.A | |
| ...3 | M0112 | BN63-01032D | COVER-FRONT;DALI 17,AL T1.0 RDN-8410 | 1 | S.A | |
| ...3 | T0069 | BN63-01033E | COVER-MIDDLE;DALI 17,ABS HB BR01 | 1 | S.A | |
| ...3 | C/F | BN64-00221A | DECORATION-LED;DALI 17,PC CLEAR | 1 | S.N.A | |
| ...3 | M0007 | BN64-00225A | KNOB-FUNCTION;DALI 17,ABS HB | 1 | S.N.A | |
| ...3 | C/F | BN73-00061B | RUBBER-PROTECT;DALI 17,RUBBER,BLK,PANTON | 1 | S.N.A | |
| ...3 | M0145 | BN96-00848A | ASSY BOARD P-FUNCTION;DI17PS,FUNCTION | 1 | S.A | |
| 0.1 | M0002 | BN90-00666C | ASSY COVER REAR;DI17PSQRV,AL+BR01,RED | 1 | S.N.A | |
| ..2 | M0006 | BN63-01035E | COVER-REAR;DALI 17,ABS HB RD01,RDP-2407, | 1 | S.A | |
| 0.1 | M0216 | BN90-00706Q | ASSY STAND;DE17PSQRV/EDC | 1 | S.N.A | |
| ..2 | M0003 | BN96-01998D | ASSY STAND P;DE17P (S/M 173 PLUS),ABS HB | 1 | S.A | |
| ...3 | T0081 | 6001-000346 | SCREW-MACHINE;FH,+,M3,L4,ZPC(YEL),SWRCH1 | 2 | S.N.A | |
| ...3 | M0081 | 6003-000115 | SCREW-TAPTITE;BH,+,B,M3,L6,ZPC(BLK),SWRC | 5 | S.N.A | |
| ...3 | M0081 | 6003-000276 | SCREW-TAPTITE;BH,+,B,M3,L10,ZPC(YEL),S | 4 | S.N.A | |
| ...3 | M0081 | 6003-000301 | SCREW-TAPTITE;BH,+,S,M4,L6,ZPC(YEL),SWRC | 1 | S.N.A | |
| ...3 | M0081 | 6003-001010 | SCREW-TAPTITE;FH,+,B,M3,L6,ZPC(YEL),SWRC | 3 | S.N.A | |
| ...3 | M0081 | 6003-001119 | SCREW-TAPTITE;FH,+,S,M4,L10,ZPC(BLK),S | 4 | S.N.A | |
| ...3 | M0081 | 6003-001136 | SCREW-TAPTITE;BH,+,B,M4,L8,ZPC(YEL),SWRC | 4 | S.N.A | |
| ...3 | M0081 | 6003-001185 | SCREW-TAPTITE;FH,+,B,M3,L8,NI PLT,SWRCH1 | 12 | S.N.A | |
| ...3 | M0081 | 6003-001238 | SCREW-TAPTITE;FH,+,S,M4,L8,ZPC(BLK),SWRC | 3 | S.N.A | |
| ...3 | STD | 6011-001445 | BOLT-SOCKET;4-40 UNC,L7,NI PLT,BRASS,HEX | 4 | S.N.A | |
| ...3 | M0326 | 6501-000113 | CABLE TIE;DA-100,T1,W2.5,L102,WHT,NYLON | 1 | S.N.A | |
| ...3 | M0134 | BN39-00452A | CBF-STAND CABLE;DI17PS,UL20276#32,UL,15P | 1 | S.A | |
| ...3 | M0142 | BN61-00251A | FOOT-RUBBER;GH17BS,RUBBER,T1.6 | 4 | S.N.A | |
| ...3 | STD | BN61-00827D | STAND-REAR BODY;DI1*PS,ABS HB,RD01,RDP-2 | 1 | S.A | |
| ...3 | STD | BN61-00828D | STAND-NECK FRONT;DI1*PS,ABS HB,BR01 | 1 | S.A | |
| ...3 | STD | BN61-00830D | STAND-FRONT BODY;DI1*PS,ABS HB,BR01 | 1 | S.A | |
| ...3 | STD | BN61-00841D | STAND-REAR DECO;DI1*PS,ABS HB,RD01,RDP-2 | 1 | S.A | |
| ...3 | STD | BN61-00844D | STAND-HINGE COVER;DI1*PS,ABS HB,BR01 | 1 | S.A | |
| ...3 | M0009 | BN61-00854D | STAND-BOTTOM;DI1*PS,ABS HB,BR01 | 1 | S.A | |
| ...3 | STD | BN61-00855D | STAND-JACK COVER;DI1*PS,ABS HB,BR01 | 1 | S.A | |
| ...3 | STD | BN61-00856A | STAND-SWIVEL;DALI 17,ABS | 1 | S.N.A | |
| ...3 | STD | BN61-00857D | STAND-SWIVEL COVER;DI1*PS,ABS HB,BR01 | 1 | S.A | |
| ...3 | STD | BN61-00859D | STAND-COVER AL;DALI 17,AL,T1.0 RED,RDN-8 | 1 | S.A | |
| ...3 | STD | BN61-00860A | STAND-BOTTOM AL;DALI 17,AL | 1 | S.N.A | |
| ...3 | STD | BN61-00880A | STAND-GUIDE AL;DALI 17,ABS | 1 | S.N.A | |
| ...3 | M0131 | BN63-00951A | GASKET;RT15NS,CONDUCTIVE FAB,5,17,60,GRA | 1 | S.N.A | |
| ...3 | STD | BN63-01036D | COVER-REARCAP BOTTOM;DI1*PS,ABS HB,BR01 | 1 | S.A | |
| ...3 | STD | BN63-01056D | COVER-REARCAP SUB;DI1*PS,ABS HB,BR01 | 1 | S.A | |
| ...3 | STD | BN63-01161A | PROTECTOR-TAPE;DI17PS,T0.4,9*30 | 6 | S.N.A | |
| ...3 | M0122 | BN96-00839A | ASSY MISC P-HINGE;DI17PS,ZNCD2 | 1 | S.N.A | |
| ...3 | T0346 | BN96-00882A | ASSY MISC P-PIVOT HINGE;DI17PS | 1 | S.N.A | |
| ...3 | M0081 | 6003-000008 | SCREW-TAPTITE;BH,+,S,M3,L4,ZPC3,SWRCH18A | 1 | S.N.A | |
| 0.1 | M0112 | BN91-00752D | ASSY SHIELD;DI17PSQRV/*,RED | 1 | S.N.A | |
| ..2 | T0081 | 6001-000346 | SCREW-MACHINE;FH,+,M3,L4,ZPC(YEL),SWRCH1 | 4 | S.N.A | |
| ..2 | M0081 | 6003-000282 | SCREW-TAPTITE;BH,+,B,M3,L8,ZPC(BLK),SW | 8 | S.N.A | |
| ..2 | M0081 | 6003-001238 | SCREW-TAPTITE;FH,+,S,M4,L8,ZPC(BLK),SWRC | 4 | S.N.A | |
| ..2 | M0081 | 6003-001336 | SCREW-TAPTITE;CH,+,S,M3,L5.5,ZPC(YEL),SW | 4 | S.N.A | |
| ..2 | T0081 | BN96-00837A | ASSY MISC P-SHIELD PCB;DI17PS,SECC T1.0 | 1 | S.N.A | |
| ...3 | T0178 | BN63-01034A | SHIELD-PCB;DALI 17,SECC,T1.0 | 1 | S.N.A | |
| ..2 | M0173 | BN96-00890D | ASSY STAND P-CAP;DALI 17_19,ABS HB,RED | 1 | S.A | |

6 Electrical Parts List

| Code No. | Loc. No. | Description | Specification | EA | SA/SNA | Remarks |
|----------|----------|-------------|--|----|--------|---------|
| ...3 | | BN63-01038D | COVER-REARCAP TOP;DALI,ABS HB RD01,RDP-2 | 1 | S.N.A | |
| ...3 | CCM1 | BN63-01039A | SHIELD-CAP;DALI 17,SPT E T0.3 | 1 | S.N.A | |
| ..2 | T0081 | 6001-000113 | SCREW-MACHINE;FH,+,M3,L5,ZPC(BLK),SWRCH1 | 1 | S.A | |
| 0.1 | M0017 | BN91-00836T | ASSY CHASSIS-E19;DE17PSQAQ/EDC,DALI2 | 1 | S.A | |
| ..2 | M2893 | BN39-00419A | LEAD CONNECTOR;DS17BS,UL1571#30,UL/CSA,1 | 1 | S.A | |
| ..2 | M2893 | BN39-00431A | LEAD CONNECTOR-LVDS;DI17PS,UL1571#30,UL/ | 1 | S.A | |
| ..2 | M2893 | BN39-00446A | LEAD CONNECTOR;DI17PS,UL1061#28,UL/CSA,4 | 1 | S.A | |
| ..2 | M0215 | BN44-00103B | INVERTER;RL17,SIC842,13.0-14.5V,2.0MA,7. | 1 | S.A | |
| ..2 | T0010 | BN61-01598A | HOLDER-SUB PCB;DI17PS,ABS HB,T1.8,IV16,D | 1 | S.N.A | |
| ..2 | M0014 | BN94-00642Q | ASSY PCB MAIN-E19;DE17PSQAQ/EDC,DALI2 | 1 | S.A | |
| ...3 | BZ201 | 3002-001123 | BUZZER-PIEZO;85DB,9VDC,8MA,4.4KHZ +/- 0 | 1 | S.A | |
| ...3 | CN101 | 3711-005506 | HEADER-BOARD TO CABLE;BOX,22P,2R,2mm,STR | 1 | S.A | |
| ...3 | CN102 | 3711-005507 | HEADER-BOARD TO CABLE;BOX,20P,2R,2mm,STR | 1 | S.A | |
| ...3 | T0174 | BN97-00512H | ASSY SMD;DE17PSQAQ/EDC,DALI2 | 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 | 0402-000553 | DIODE-SCHOTTKY;"SS24,B240",40V,2000mA,DO | 1 | S.A | |
|4 | ZD100 | 0403-000258 | DIODE-ZENER;BZX84C5V6,5.2-6V,225mW,SOT-2 | 1 | S.A | |
|4 | ZD101 | 0403-000258 | DIODE-ZENER;BZX84C5V6,5.2-6V,225mW,SOT-2 | 1 | S.A | |
|4 | ZD102 | 0403-000258 | DIODE-ZENER;BZX84C5V6,5.2-6V,225mW,SOT-2 | 1 | S.A | |
|4 | ZD103 | 0403-000258 | DIODE-ZENER;BZX84C5V6,5.2-6V,225mW,SOT-2 | 1 | S.A | |
|4 | ZD104 | 0403-000258 | DIODE-ZENER;BZX84C5V6,5.2-6V,225mW,SOT-2 | 1 | S.A | |
|4 | ZD105 | 0403-000258 | DIODE-ZENER;BZX84C5V6,5.2-6V,225mW,SOT-2 | 1 | S.A | |
|4 | ZD106 | 0403-000258 | DIODE-ZENER;BZX84C5V6,5.2-6V,225mW,SOT-2 | 1 | S.A | |
|4 | ZD107 | 0403-000258 | DIODE-ZENER;BZX84C5V6,5.2-6V,225mW,SOT-2 | 1 | S.A | |
|4 | ZD108 | 0403-000258 | DIODE-ZENER;BZX84C5V6,5.2-6V,225mW,SOT-2 | 1 | S.A | |
|4 | ZD109 | 0403-000258 | DIODE-ZENER;BZX84C5V6,5.2-6V,225mW,SOT-2 | 1 | S.A | |
|4 | ZD110 | 0403-000258 | DIODE-ZENER;BZX84C5V6,5.2-6V,225mW,SOT-2 | 1 | S.A | |
|4 | ZD111 | 0403-000258 | DIODE-ZENER;BZX84C5V6,5.2-6V,225mW,SOT-2 | 1 | S.A | |
|4 | ZD112 | 0403-000258 | DIODE-ZENER;BZX84C5V6,5.2-6V,225mW,SOT-2 | 1 | S.A | |
|4 | ZD113 | 0403-000258 | DIODE-ZENER;BZX84C5V6,5.2-6V,225mW,SOT-2 | 1 | S.A | |
|4 | ZD114 | 0403-000258 | DIODE-ZENER;BZX84C5V6,5.2-6V,225mW,SOT-2 | 1 | S.A | |
|4 | ZD115 | 0403-000258 | DIODE-ZENER;BZX84C5V6,5.2-6V,225mW,SOT-2 | 1 | S.A | |
|4 | ZD116 | 0403-000258 | DIODE-ZENER;BZX84C5V6,5.2-6V,225mW,SOT-2 | 1 | S.A | |
|4 | ZD201 | 0403-000258 | DIODE-ZENER;BZX84C5V6,5.2-6V,225mW,SOT-2 | 1 | S.A | |
|4 | ZD202 | 0403-000258 | DIODE-ZENER;BZX84C5V6,5.2-6V,225mW,SOT-2 | 1 | S.A | |
|4 | Q201 | 0501-000342 | TR-SMALL SIGNAL;KSC1623-Y,NPN,200mW,SOT- | 1 | S.A | |
|4 | Q600 | 0501-000342 | TR-SMALL SIGNAL;KSC1623-Y,NPN,200mW,SOT- | 1 | S.A | |
|4 | Q601 | 0501-000342 | TR-SMALL SIGNAL;KSC1623-Y,NPN,200mW,SOT- | 1 | S.A | |
|4 | Q602 | 0501-000342 | TR-SMALL SIGNAL;KSC1623-Y,NPN,200mW,SOT- | 1 | S.A | |
|4 | Q409 | 0505-001170 | FET-SILICON;SI9933ADY-T1,P,-20V,3.4A,0.0 | 1 | S.A | |
|4 | IC109 | 1003-001538 | IC-LCD CONTROLLER;S5D2542X,LQFP,208P,28X | 1 | S.A | |
|4 | IC109 | 1003-001789 | IC-LCD CONTROLLER;SE59AWJ-LF,PQFP,128P,2 | 1 | S.A | |
|4 | IC112 | 1103-000129 | IC-EEPROM;24C02,2Kbit,256x8Bit,SOP,8P,5x | 1 | S.A | |
|4 | IC112 | 1103-000129 | IC-EEPROM;24C02,2Kbit,256x8Bit,SOP,8P,5x | 1 | S.A | |
|4 | IC112 | 1103-001023 | IC-EEPROM;24C08,8Kbit,1Kx8Bit,SOP,8P,5x4 | 1 | S.A | |
|4 | IC604 | 1202-000164 | IC-VOLTAGE COMP.;393,SOP,8P,150MIL,DUAL, | 1 | S.A | |
|4 | T0087 | 1203-002425 | IC-POSIFIXED REG.;AP1117,SOT-223,3P,138 | 1 | S.A | |
|4 | T0087 | 1203-002842 | IC-POSIFIXED REG.;AP1117D-33A,TO-252,3P | 1 | S.A | |

| Code No. | Loc. No. | Description | Specification | EA | SA/SNA | Remarks |
|----------|----------|-------------|--|----|--------|---------|
|4 | T0087 | 1203-002842 | IC-POSI.FIXED REG.;AP1117D-33A,TO-252,3P | 1 | S.A | |
|4 | T0087 | 1203-002842 | IC-POSI.FIXED REG.;AP1117D-33A,TO-252,3P | 1 | S.A | |
|4 | T0087 | 1203-002844 | IC-POSI.FIXED REG.;AP1117D-18A,TO-252-3L | 1 | S.A | |
|4 | T0087 | 1203-002844 | IC-POSI.FIXED REG.;AP1117D-18A,TO-252-3L | 1 | S.A | |
|4 | T0170 | 1203-003059 | IC-SWITCH VOL. REG.;MP1583,SOIC,8P,4.9x3 | 1 | S.A | |
|4 | IC120 | 1205-002412 | IC-TRANSMITTER;DTC34LM85A,TSSOP,56P,14x6 | 1 | S.A | |
|4 | IC120 | 1205-002412 | IC-TRANSMITTER;DTC34LM85A,TSSOP,56P,14x6 | 1 | S.A | |
|4 | R608 | 2007-000052 | R-CHIP;10Kohm,1%,1/10W,TP,1608 | 1 | S.A | |
|4 | R708 | 2007-000070 | R-CHIP;0ohm,5%,1/10W,TP,1608 | 1 | S.A | |
|4 | R709 | 2007-000070 | R-CHIP;0ohm,5%,1/10W,TP,1608 | 1 | S.A | |
|4 | R710 | 2007-000070 | R-CHIP;0ohm,5%,1/10W,TP,1608 | 1 | S.A | |
|4 | R711 | 2007-000070 | R-CHIP;0ohm,5%,1/10W,TP,1608 | 1 | S.A | |
|4 | R712 | 2007-000070 | R-CHIP;0ohm,5%,1/10W,TP,1608 | 1 | S.A | |
|4 | R713 | 2007-000070 | R-CHIP;0ohm,5%,1/10W,TP,1608 | 1 | S.A | |
|4 | R701 | 2007-000071 | R-CHIP;22ohm,5%,1/10W,TP,1608 | 1 | S.A | |
|4 | R702 | 2007-000071 | R-CHIP;22ohm,5%,1/10W,TP,1608 | 1 | S.A | |
|4 | R704 | 2007-000071 | R-CHIP;22ohm,5%,1/10W,TP,1608 | 1 | S.A | |
|4 | R705 | 2007-000071 | R-CHIP;22ohm,5%,1/10W,TP,1608 | 1 | S.A | |
|4 | R706 | 2007-000071 | R-CHIP;22ohm,5%,1/10W,TP,1608 | 1 | S.A | |
|4 | R707 | 2007-000071 | R-CHIP;22ohm,5%,1/10W,TP,1608 | 1 | S.A | |
|4 | R121 | 2007-000072 | R-CHIP;47ohm,5%,1/10W,TP,1608 | 1 | S.A | |
|4 | R123 | 2007-000072 | R-CHIP;47ohm,5%,1/10W,TP,1608 | 1 | S.A | |
|4 | R402 | 2007-000072 | R-CHIP;47ohm,5%,1/10W,TP,1608 | 1 | S.A | |
|4 | R107 | 2007-000074 | R-CHIP;100ohm,5%,1/10W,TP,1608 | 1 | S.A | |
|4 | R109 | 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 | |
|4 | R119 | 2007-000074 | R-CHIP;100ohm,5%,1/10W,TP,1608 | 1 | S.A | |
|4 | R200 | 2007-000074 | R-CHIP;100ohm,5%,1/10W,TP,1608 | 1 | S.A | |
|4 | R201 | 2007-000074 | R-CHIP;100ohm,5%,1/10W,TP,1608 | 1 | S.A | |
|4 | R217 | 2007-000074 | R-CHIP;100ohm,5%,1/10W,TP,1608 | 1 | S.A | |
|4 | R219 | 2007-000074 | R-CHIP;100ohm,5%,1/10W,TP,1608 | 1 | S.A | |
|4 | R220 | 2007-000074 | R-CHIP;100ohm,5%,1/10W,TP,1608 | 1 | S.A | |
|4 | R222 | 2007-000074 | R-CHIP;100ohm,5%,1/10W,TP,1608 | 1 | S.A | |
|4 | R228 | 2007-000074 | R-CHIP;100ohm,5%,1/10W,TP,1608 | 1 | S.A | |
|4 | R229 | 2007-000074 | R-CHIP;100ohm,5%,1/10W,TP,1608 | 1 | S.A | |
|4 | R231 | 2007-000074 | R-CHIP;100ohm,5%,1/10W,TP,1608 | 1 | S.A | |
|4 | R232 | 2007-000074 | R-CHIP;100ohm,5%,1/10W,TP,1608 | 1 | S.A | |
|4 | R233 | 2007-000074 | R-CHIP;100ohm,5%,1/10W,TP,1608 | 1 | S.A | |
|4 | R234 | 2007-000074 | R-CHIP;100ohm,5%,1/10W,TP,1608 | 1 | S.A | |
|4 | R235 | 2007-000074 | R-CHIP;100ohm,5%,1/10W,TP,1608 | 1 | S.A | |
|4 | R236 | 2007-000074 | R-CHIP;100ohm,5%,1/10W,TP,1608 | 1 | S.A | |
|4 | R237 | 2007-000074 | R-CHIP;100ohm,5%,1/10W,TP,1608 | 1 | S.A | |
|4 | R238 | 2007-000074 | R-CHIP;100ohm,5%,1/10W,TP,1608 | 1 | S.A | |
|4 | R239 | 2007-000074 | R-CHIP;100ohm,5%,1/10W,TP,1608 | 1 | S.A | |
|4 | R240 | 2007-000074 | R-CHIP;100ohm,5%,1/10W,TP,1608 | 1 | S.A | |
|4 | R241 | 2007-000074 | R-CHIP;100ohm,5%,1/10W,TP,1608 | 1 | S.A | |
|4 | R242 | 2007-000074 | R-CHIP;100ohm,5%,1/10W,TP,1608 | 1 | S.A | |
|4 | R248 | 2007-000074 | R-CHIP;100ohm,5%,1/10W,TP,1608 | 1 | S.A | |
|4 | R250 | 2007-000074 | R-CHIP;100ohm,5%,1/10W,TP,1608 | 1 | S.A | |
|4 | R221 | 2007-000077 | R-CHIP;470ohm,5%,1/10W,TP,1608 | 1 | S.A | |
|4 | R213 | 2007-000078 | R-CHIP;1Kohm,5%,1/10W,TP,1608 | 1 | S.A | |
|4 | R101 | 2007-000080 | R-CHIP;2Kohm,5%,1/10W,TP,1608 | 1 | S.A | |
|4 | R120 | 2007-000080 | R-CHIP;2Kohm,5%,1/10W,TP,1608 | 1 | S.A | |
|4 | R700 | 2007-000082 | R-CHIP;3.3Kohm,5%,1/10W,TP,1608 | 1 | S.A | |
|4 | R703 | 2007-000082 | R-CHIP;3.3Kohm,5%,1/10W,TP,1608 | 1 | S.A | |
|4 | R125 | 2007-000084 | R-CHIP;4.7Kohm,5%,1/10W,TP,1608 | 1 | S.A | |
|4 | R126 | 2007-000084 | R-CHIP;4.7Kohm,5%,1/10W,TP,1608 | 1 | S.A | |
|4 | R205 | 2007-000084 | R-CHIP;4.7Kohm,5%,1/10W,TP,1608 | 1 | S.A | |
|4 | R206 | 2007-000084 | R-CHIP;4.7Kohm,5%,1/10W,TP,1608 | 1 | S.A | |

6 Electrical Parts List

| Code No. | Loc. No. | Description | Specification | EA | SA/SNA | Remarks |
|----------|----------|-------------|--|----|--------|---------|
|4 | R207 | 2007-000084 | R-CHIP;4.7Kohm,5%,1/10W,TP,1608 | 1 | SA | |
|4 | R208 | 2007-000084 | R-CHIP;4.7Kohm,5%,1/10W,TP,1608 | 1 | SA | |
|4 | R209 | 2007-000084 | R-CHIP;4.7Kohm,5%,1/10W,TP,1608 | 1 | SA | |
|4 | R212 | 2007-000084 | R-CHIP;4.7Kohm,5%,1/10W,TP,1608 | 1 | SA | |
|4 | R214 | 2007-000084 | R-CHIP;4.7Kohm,5%,1/10W,TP,1608 | 1 | SA | |
|4 | R215 | 2007-000084 | R-CHIP;4.7Kohm,5%,1/10W,TP,1608 | 1 | SA | |
|4 | R223 | 2007-000084 | R-CHIP;4.7Kohm,5%,1/10W,TP,1608 | 1 | SA | |
|4 | R224 | 2007-000084 | R-CHIP;4.7Kohm,5%,1/10W,TP,1608 | 1 | SA | |
|4 | R225 | 2007-000084 | R-CHIP;4.7Kohm,5%,1/10W,TP,1608 | 1 | SA | |
|4 | R226 | 2007-000084 | R-CHIP;4.7Kohm,5%,1/10W,TP,1608 | 1 | SA | |
|4 | R227 | 2007-000084 | R-CHIP;4.7Kohm,5%,1/10W,TP,1608 | 1 | SA | |
|4 | R230 | 2007-000084 | R-CHIP;4.7Kohm,5%,1/10W,TP,1608 | 1 | SA | |
|4 | R100 | 2007-000090 | R-CHIP;10Kohm,5%,1/10W,TP,1608 | 1 | SA | |
|4 | R202 | 2007-000090 | R-CHIP;10Kohm,5%,1/10W,TP,1608 | 1 | SA | |
|4 | R216 | 2007-000090 | R-CHIP;10Kohm,5%,1/10W,TP,1608 | 1 | SA | |
|4 | R218 | 2007-000090 | R-CHIP;10Kohm,5%,1/10W,TP,1608 | 1 | SA | |
|4 | R243 | 2007-000090 | R-CHIP;10Kohm,5%,1/10W,TP,1608 | 1 | SA | |
|4 | R244 | 2007-000090 | R-CHIP;10Kohm,5%,1/10W,TP,1608 | 1 | SA | |
|4 | R245 | 2007-000090 | R-CHIP;10Kohm,5%,1/10W,TP,1608 | 1 | SA | |
|4 | R246 | 2007-000090 | R-CHIP;10Kohm,5%,1/10W,TP,1608 | 1 | SA | |
|4 | R247 | 2007-000090 | R-CHIP;10Kohm,5%,1/10W,TP,1608 | 1 | SA | |
|4 | R603 | 2007-000090 | R-CHIP;10Kohm,5%,1/10W,TP,1608 | 1 | SA | |
|4 | R604 | 2007-000090 | R-CHIP;10Kohm,5%,1/10W,TP,1608 | 1 | SA | |
|4 | R606 | 2007-000090 | R-CHIP;10Kohm,5%,1/10W,TP,1608 | 1 | SA | |
|4 | R607 | 2007-000090 | R-CHIP;10Kohm,5%,1/10W,TP,1608 | 1 | SA | |
|4 | R609 | 2007-000090 | R-CHIP;10Kohm,5%,1/10W,TP,1608 | 1 | SA | |
|4 | R612 | 2007-000090 | R-CHIP;10Kohm,5%,1/10W,TP,1608 | 1 | SA | |
|4 | R115 | 2007-000092 | R-CHIP;15Kohm,5%,1/10W,TP,1608 | 1 | SA | |
|4 | R116 | 2007-000092 | R-CHIP;15Kohm,5%,1/10W,TP,1608 | 1 | SA | |
|4 | R210 | 2007-000092 | R-CHIP;15Kohm,5%,1/10W,TP,1608 | 1 | SA | |
|4 | R211 | 2007-000092 | R-CHIP;15Kohm,5%,1/10W,TP,1608 | 1 | SA | |
|4 | R104 | 2007-000097 | R-CHIP;47Kohm,5%,1/10W,TP,1608 | 1 | SA | |
|4 | R105 | 2007-000097 | R-CHIP;47Kohm,5%,1/10W,TP,1608 | 1 | SA | |
|4 | R401 | 2007-000118 | R-CHIP;390ohm,5%,1/10W,TP,1608 | 1 | SA | |
|4 | R102 | 2007-000287 | R-CHIP;100OHM,1%,1/10W,TP,1608 | 1 | SA | |
|4 | R106 | 2007-000287 | R-CHIP;100OHM,1%,1/10W,TP,1608 | 1 | SA | |
|4 | R110 | 2007-000287 | R-CHIP;100OHM,1%,1/10W,TP,1608 | 1 | SA | |
|4 | R111 | 2007-000287 | R-CHIP;100OHM,1%,1/10W,TP,1608 | 1 | SA | |
|4 | R112 | 2007-000287 | R-CHIP;100OHM,1%,1/10W,TP,1608 | 1 | SA | |
|4 | R114 | 2007-000287 | R-CHIP;100OHM,1%,1/10W,TP,1608 | 1 | SA | |
|4 | R122 | 2007-000659 | R-CHIP;27ohm,5%,1/10W,TP,1608 | 1 | SA | |
|4 | R124 | 2007-000659 | R-CHIP;27ohm,5%,1/10W,TP,1608 | 1 | SA | |
|4 | R127 | 2007-000659 | R-CHIP;27ohm,5%,1/10W,TP,1608 | 1 | SA | |
|4 | R128 | 2007-000659 | R-CHIP;27ohm,5%,1/10W,TP,1608 | 1 | SA | |
|4 | R129 | 2007-000659 | R-CHIP;27ohm,5%,1/10W,TP,1608 | 1 | SA | |
|4 | R130 | 2007-000659 | R-CHIP;27ohm,5%,1/10W,TP,1608 | 1 | SA | |
|4 | R131 | 2007-000659 | R-CHIP;27ohm,5%,1/10W,TP,1608 | 1 | SA | |
|4 | R132 | 2007-000659 | R-CHIP;27ohm,5%,1/10W,TP,1608 | 1 | SA | |
|4 | R400 | 2007-000821 | R-CHIP;390ohm,1%,1/10W,TP,1608 | 1 | SA | |
|4 | R602 | 2007-000962 | R-CHIP;5.1Kohm,1%,1/10W,TP,1608 | 1 | SA | |
|4 | R601 | 2007-000965 | R-CHIP;5.1Kohm,5%,1/10W,TP,1608 | 1 | SA | |
|4 | R117 | 2007-001002 | R-CHIP;510ohm,5%,1/10W,TP,1608 | 1 | SA | |
|4 | R203 | 2007-001002 | R-CHIP;510ohm,5%,1/10W,TP,1608 | 1 | SA | |
|4 | R204 | 2007-001002 | R-CHIP;510ohm,5%,1/10W,TP,1608 | 1 | SA | |
|4 | R103 | 2007-001164 | R-CHIP;75ohm,1%,1/10W,TP,1608 | 1 | SA | |
|4 | R108 | 2007-001164 | R-CHIP;75ohm,1%,1/10W,TP,1608 | 1 | SA | |
|4 | R113 | 2007-001164 | R-CHIP;75ohm,1%,1/10W,TP,1608 | 1 | SA | |
|4 | R600 | 2007-007841 | R-CHIP;16.2Kohm,1%,1/10W,TP,1608 | 1 | SA | |
|4 | RA700 | 2011-001262 | R-NET;22OHM,5%,1/16W,L,CHIP,8P,TP,2.0X1. | 1 | SA | |

6 Electrical Parts List

6-4 Others

| Code No. | Loc. No. | Description | Specification | EA | SA/SNA | Remarks |
|----------|----------|-------------|---------------------------------------|----|--------|---------|
|4 | C707 | 2203-000189 | C-CER,CHIP;100nF,+80-20%,25V,Y5V,1608 | 1 | SA | |
|4 | C708 | 2203-000189 | C-CER,CHIP;100nF,+80-20%,25V,Y5V,1608 | 1 | SA | |
|4 | C709 | 2203-000189 | C-CER,CHIP;100nF,+80-20%,25V,Y5V,1608 | 1 | SA | |
|4 | C710 | 2203-000189 | C-CER,CHIP;100nF,+80-20%,25V,Y5V,1608 | 1 | SA | |
|4 | C711 | 2203-000189 | C-CER,CHIP;100nF,+80-20%,25V,Y5V,1608 | 1 | SA | |
|4 | C712 | 2203-000189 | C-CER,CHIP;100nF,+80-20%,25V,Y5V,1608 | 1 | SA | |
|4 | C713 | 2203-000189 | C-CER,CHIP;100nF,+80-20%,25V,Y5V,1608 | 1 | SA | |
|4 | C714 | 2203-000189 | C-CER,CHIP;100nF,+80-20%,25V,Y5V,1608 | 1 | SA | |
|4 | C715 | 2203-000189 | C-CER,CHIP;100nF,+80-20%,25V,Y5V,1608 | 1 | SA | |
|4 | C716 | 2203-000189 | C-CER,CHIP;100nF,+80-20%,25V,Y5V,1608 | 1 | SA | |
|4 | C717 | 2203-000189 | C-CER,CHIP;100nF,+80-20%,25V,Y5V,1608 | 1 | SA | |
|4 | C718 | 2203-000189 | C-CER,CHIP;100nF,+80-20%,25V,Y5V,1608 | 1 | SA | |
|4 | C719 | 2203-000189 | C-CER,CHIP;100nF,+80-20%,25V,Y5V,1608 | 1 | SA | |
|4 | C720 | 2203-000189 | C-CER,CHIP;100nF,+80-20%,25V,Y5V,1608 | 1 | SA | |
|4 | C721 | 2203-000189 | C-CER,CHIP;100nF,+80-20%,25V,Y5V,1608 | 1 | SA | |
|4 | C722 | 2203-000189 | C-CER,CHIP;100nF,+80-20%,25V,Y5V,1608 | 1 | SA | |
|4 | C723 | 2203-000189 | C-CER,CHIP;100nF,+80-20%,25V,Y5V,1608 | 1 | SA | |
|4 | C724 | 2203-000189 | C-CER,CHIP;100nF,+80-20%,25V,Y5V,1608 | 1 | SA | |
|4 | C725 | 2203-000189 | C-CER,CHIP;100nF,+80-20%,25V,Y5V,1608 | 1 | SA | |
|4 | C726 | 2203-000189 | C-CER,CHIP;100nF,+80-20%,25V,Y5V,1608 | 1 | SA | |
|4 | C727 | 2203-000189 | C-CER,CHIP;100nF,+80-20%,25V,Y5V,1608 | 1 | SA | |
|4 | C728 | 2203-000189 | C-CER,CHIP;100nF,+80-20%,25V,Y5V,1608 | 1 | SA | |
|4 | C729 | 2203-000189 | C-CER,CHIP;100nF,+80-20%,25V,Y5V,1608 | 1 | SA | |
|4 | C118 | 2203-000236 | C-CER,CHIP;0.1nF,5%,50V,C0G,1608 | 1 | SA | |
|4 | C608 | 2203-000236 | C-CER,CHIP;0.1nF,5%,50V,C0G,1608 | 1 | SA | |
|4 | C409 | 2203-000257 | C-CER,CHIP;10nF,10%,50V,X7R,1608 | 1 | SA | |
|4 | C423 | 2203-000257 | C-CER,CHIP;10nF,10%,50V,X7R,1608 | 1 | SA | |
|4 | C600 | 2203-000257 | C-CER,CHIP;10nF,10%,50V,X7R,1608 | 1 | SA | |
|4 | C604 | 2203-000257 | C-CER,CHIP;10nF,10%,50V,X7R,1608 | 1 | SA | |
|4 | C605 | 2203-000257 | C-CER,CHIP;10nF,10%,50V,X7R,1608 | 1 | SA | |
|4 | C623 | 2203-000257 | C-CER,CHIP;10nF,10%,50V,X7R,1608 | 1 | SA | |
|4 | C424 | 2203-000626 | C-CER,CHIP;0.022nF,5%,50V,C0G,1608 | 1 | SA | |
|4 | C425 | 2203-000626 | C-CER,CHIP;0.022nF,5%,50V,C0G,1608 | 1 | SA | |
|4 | C731 | 2203-000783 | C-CER,CHIP;0.33nF,5%,50V,C0G,1608 | 1 | SA | |
|4 | C114 | 2203-000998 | C-CER,CHIP;0.047nF,5%,50V,C0G,1608 | 1 | SA | |
|4 | C100 | 2203-005005 | C-CER,CHIP;100nF,10%,16V,X7R,1608 | 1 | SA | |
|4 | C101 | 2203-005005 | C-CER,CHIP;100nF,10%,16V,X7R,1608 | 1 | SA | |
|4 | C102 | 2203-005005 | C-CER,CHIP;100nF,10%,16V,X7R,1608 | 1 | SA | |
|4 | C103 | 2203-005005 | C-CER,CHIP;100nF,10%,16V,X7R,1608 | 1 | SA | |
|4 | C104 | 2203-005005 | C-CER,CHIP;100nF,10%,16V,X7R,1608 | 1 | SA | |
|4 | C106 | 2203-005005 | C-CER,CHIP;100nF,10%,16V,X7R,1608 | 1 | SA | |
|4 | C107 | 2203-005005 | C-CER,CHIP;100nF,10%,16V,X7R,1608 | 1 | SA | |
|4 | C108 | 2203-005005 | C-CER,CHIP;100nF,10%,16V,X7R,1608 | 1 | SA | |
|4 | C109 | 2203-005005 | C-CER,CHIP;100nF,10%,16V,X7R,1608 | 1 | SA | |
|4 | C110 | 2203-005005 | C-CER,CHIP;100nF,10%,16V,X7R,1608 | 1 | SA | |
|4 | C111 | 2203-005005 | C-CER,CHIP;100nF,10%,16V,X7R,1608 | 1 | SA | |
|4 | C112 | 2203-005005 | C-CER,CHIP;100nF,10%,16V,X7R,1608 | 1 | SA | |
|4 | C113 | 2203-005005 | C-CER,CHIP;100nF,10%,16V,X7R,1608 | 1 | SA | |
|4 | C115 | 2203-005005 | C-CER,CHIP;100nF,10%,16V,X7R,1608 | 1 | SA | |
|4 | C116 | 2203-005005 | C-CER,CHIP;100nF,10%,16V,X7R,1608 | 1 | SA | |
|4 | C117 | 2203-005005 | C-CER,CHIP;100nF,10%,16V,X7R,1608 | 1 | SA | |
|4 | C119 | 2203-005005 | C-CER,CHIP;100nF,10%,16V,X7R,1608 | 1 | SA | |
|4 | C201 | 2203-005005 | C-CER,CHIP;100nF,10%,16V,X7R,1608 | 1 | SA | |
|4 | C400 | 2203-005005 | C-CER,CHIP;100nF,10%,16V,X7R,1608 | 1 | SA | |
|4 | C402 | 2203-005005 | C-CER,CHIP;100nF,10%,16V,X7R,1608 | 1 | SA | |
|4 | C403 | 2203-005005 | C-CER,CHIP;100nF,10%,16V,X7R,1608 | 1 | SA | |
|4 | C404 | 2203-005005 | C-CER,CHIP;100nF,10%,16V,X7R,1608 | 1 | SA | |
|4 | C405 | 2203-005005 | C-CER,CHIP;100nF,10%,16V,X7R,1608 | 1 | SA | |
|4 | C406 | 2203-005005 | C-CER,CHIP;100nF,10%,16V,X7R,1608 | 1 | SA | |

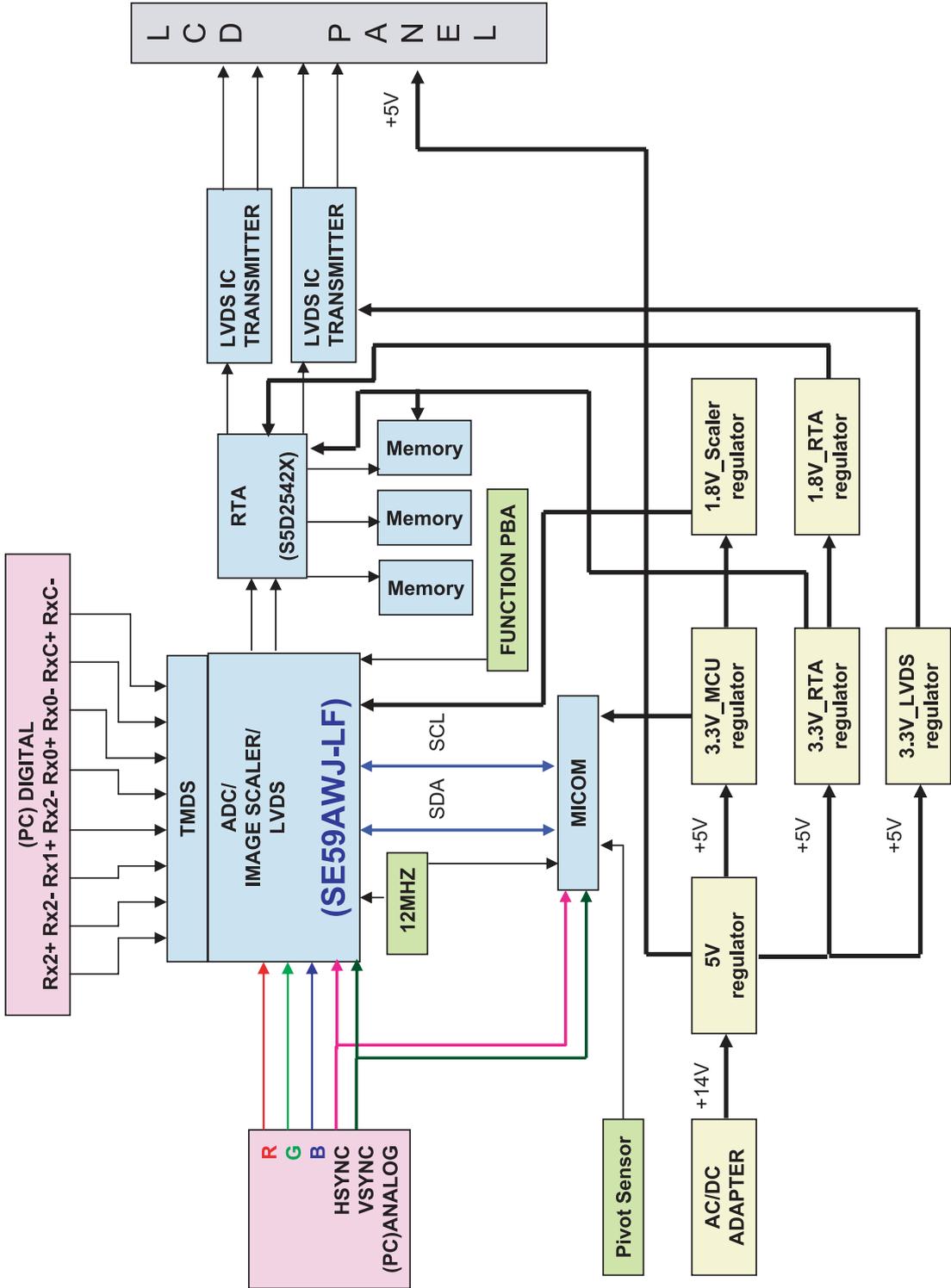
| Code No. | Loc. No. | Description | Specification | EA | SA/SNA | Remarks |
|----------|----------|-------------|---|----|--------|---------|
|4 | C407 | 2203-005005 | C-CER,CHIP;100nF,10%,16V,X7R,1608 | 1 | S.A | |
|4 | C408 | 2203-005005 | C-CER,CHIP;100nF,10%,16V,X7R,1608 | 1 | S.A | |
|4 | C411 | 2203-005005 | C-CER,CHIP;100nF,10%,16V,X7R,1608 | 1 | S.A | |
|4 | C412 | 2203-005005 | C-CER,CHIP;100nF,10%,16V,X7R,1608 | 1 | S.A | |
|4 | C413 | 2203-005005 | C-CER,CHIP;100nF,10%,16V,X7R,1608 | 1 | S.A | |
|4 | C414 | 2203-005005 | C-CER,CHIP;100nF,10%,16V,X7R,1608 | 1 | S.A | |
|4 | C415 | 2203-005005 | C-CER,CHIP;100nF,10%,16V,X7R,1608 | 1 | S.A | |
|4 | C416 | 2203-005005 | C-CER,CHIP;100nF,10%,16V,X7R,1608 | 1 | S.A | |
|4 | C417 | 2203-005005 | C-CER,CHIP;100nF,10%,16V,X7R,1608 | 1 | S.A | |
|4 | C418 | 2203-005005 | C-CER,CHIP;100nF,10%,16V,X7R,1608 | 1 | S.A | |
|4 | C419 | 2203-005005 | C-CER,CHIP;100nF,10%,16V,X7R,1608 | 1 | S.A | |
|4 | C420 | 2203-005005 | C-CER,CHIP;100nF,10%,16V,X7R,1608 | 1 | S.A | |
|4 | C421 | 2203-005005 | C-CER,CHIP;100nF,10%,16V,X7R,1608 | 1 | S.A | |
|4 | C422 | 2203-005005 | C-CER,CHIP;100nF,10%,16V,X7R,1608 | 1 | S.A | |
|4 | C436 | 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 | C616 | 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 | C625 | 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 | C630 | 2203-005005 | C-CER,CHIP;100nF,10%,16V,X7R,1608 | 1 | S.A | |
|4 | C203 | 2203-005065 | C-CER,CHIP;1000nF,+80-20%,10V,Y5V,1608 | 1 | S.A | |
|4 | C204 | 2203-005065 | C-CER,CHIP;1000nF,+80-20%,10V,Y5V,1608 | 1 | S.A | |
|4 | C621 | 2203-005065 | C-CER,CHIP;1000nF,+80-20%,10V,Y5V,1608 | 1 | S.A | |
|4 | C622 | 2203-005065 | C-CER,CHIP;1000nF,+80-20%,10V,Y5V,1608 | 1 | S.A | |
|4 | C740 | 2203-005065 | C-CER,CHIP;1000nF,+80-20%,10V,Y5V,1608 | 1 | S.A | |
|4 | C200 | 2203-005437 | C-CER,CHIP;10000nF,+80-20%,10V,Y5V,3216 | 1 | S.A | |
|4 | C202 | 2203-005437 | C-CER,CHIP;10000nF,+80-20%,10V,Y5V,3216 | 1 | S.A | |
|4 | C401 | 2203-005437 | C-CER,CHIP;10000nF,+80-20%,10V,Y5V,3216 | 1 | S.A | |
|4 | C410 | 2203-005437 | C-CER,CHIP;10000nF,+80-20%,10V,Y5V,3216 | 1 | S.A | |
|4 | C426 | 2203-005437 | C-CER,CHIP;10000nF,+80-20%,10V,Y5V,3216 | 1 | S.A | |
|4 | C614 | 2203-005437 | C-CER,CHIP;10000nF,+80-20%,10V,Y5V,3216 | 1 | S.A | |
|4 | C615 | 2203-005437 | C-CER,CHIP;10000nF,+80-20%,10V,Y5V,3216 | 1 | S.A | |
|4 | C619 | 2203-005437 | C-CER,CHIP;10000nF,+80-20%,10V,Y5V,3216 | 1 | S.A | |
|4 | C620 | 2203-005437 | C-CER,CHIP;10000nF,+80-20%,10V,Y5V,3216 | 1 | S.A | |
|4 | C626 | 2203-005437 | C-CER,CHIP;10000nF,+80-20%,10V,Y5V,3216 | 1 | S.A | |
|4 | C628 | 2203-005437 | C-CER,CHIP;10000nF,+80-20%,10V,Y5V,3216 | 1 | S.A | |
|4 | C629 | 2203-005437 | C-CER,CHIP;10000nF,+80-20%,10V,Y5V,3216 | 1 | S.A | |
|4 | C631 | 2203-005437 | C-CER,CHIP;10000nF,+80-20%,10V,Y5V,3216 | 1 | S.A | |
|4 | C632 | 2203-005437 | C-CER,CHIP;10000nF,+80-20%,10V,Y5V,3216 | 1 | S.A | |
|4 | C730 | 2203-005437 | C-CER,CHIP;10000nF,+80-20%,10V,Y5V,3216 | 1 | S.A | |
|4 | C606 | 2203-006036 | C-CER,CHIP;680nF,+80-20%,16V,Y5V,TP,1608 | 1 | S.A | |
|4 | C611 | 2402-000179 | C-AL,SMD;47uF,20%,16V,GP,TP,6.6x6.6x5.7mm | 1 | S.A | |
|4 | C430 | 2402-001042 | C-AL,SMD;100uF,20%,16V,GP,TP,6.6x6.6x5.4 | 1 | S.A | |
|4 | C435 | 2402-001042 | C-AL,SMD;100uF,20%,16V,GP,TP,6.6x6.6x5.4 | 1 | S.A | |
|4 | C610 | 2402-001042 | C-AL,SMD;100uF,20%,16V,GP,TP,6.6x6.6x5.4 | 1 | S.A | |
|4 | C618 | 2402-001042 | C-AL,SMD;100uF,20%,16V,GP,TP,6.6x6.6x5.4 | 1 | S.A | |
|4 | C105 | 2402-001044 | C-AL,SMD;100UF,20%,25V,GP,TP,8.3X8.3X6.3 | 1 | S.A | |
|4 | C601 | 2402-001044 | C-AL,SMD;100UF,20%,25V,GP,TP,8.3X8.3X6.3 | 1 | S.A | |
|4 | C609 | 2409-001051 | C-ORGANIC;82UF,20%,6.3V,WT,TP,6.3*5.9MM, | 1 | S.A | |
|4 | C624 | 2409-001065 | C-ORGANIC;82uF,20%,16V,WT,TP,8X6.9mm,- | 1 | S.A | |
|4 | C602 | 2409-001086 | C-ORGANIC;10uF,20%,20V,WT,TP,5.3x5.3x6.0 | 1 | S.A | |
|4 | X400 | 2801-003773 | CRYSTAL-SMD;12MHz,30ppm,28-AAN,20pF,50oh | 1 | S.A | |
|4 | T0568 | 3301-000314 | BEAD-SMD;120ohm,1.6x0.8x0.8mm,-,-,- | 1 | S.N.A | |
|4 | T0568 | 3301-000314 | BEAD-SMD;120ohm,1.6x0.8x0.8mm,-,-,- | 1 | S.N.A | |
|4 | T0568 | 3301-000314 | BEAD-SMD;120ohm,1.6x0.8x0.8mm,-,-,- | 1 | S.N.A | |
|4 | T0568 | 3301-000314 | BEAD-SMD;120ohm,1.6x0.8x0.8mm,-,-,- | 1 | S.N.A | |
|4 | T0568 | 3301-000314 | BEAD-SMD;120ohm,1.6x0.8x0.8mm,-,-,- | 1 | S.N.A | |

6 Electrical Parts List

| Code No. | Loc. No. | Description | Specification | EA | SA/SNA | Remarks |
|----------|------------|-------------|--|-------|--------|---------|
|4 | CN400 | 3711-005470 | HEADER-BOARD TO CABLE;BOX,30P,1R,1.25mm, | 1 | S.A | |
|4 | CN601 | 3711-005471 | HEADER-BOARD TO CABLE;BOX,12P,1R,1.25mm, | 1 | S.A | |
|4 | T0010 | BN27-00009A | COIL CHOKE;SMD 12X12X6,EOS,33UH,15%,-,0. | 1 | S.A | |
|4 | S201 | BN32-00005A | SENSOR SW-TILT;SPSF100100,DC5V,1mA,-10 ~ | 1 | S.A | |
|4 | M0018 | BN97-00489N | ASSY MICOM;DE17PS*,W/W | 1 | S.A | |
|5 | IC520 | 0903-001402 | IC-MICROCONTROLLER;NT68F632ALG,8Bit,PLCC | 1 | S.N.A | |
|4 | R610 | 2007-000208 | R-CHIP;1.1Kohm,1%,1/10W,TP,1608 | 1 | S.A | |
|4 | CN200 | 3711-005509 | HEADER-BOARD TO CABLE;BOX,4P,1R,1.25mm,S | 1 | S.A | |
|4 | R605 | 2007-000842 | R-CHIP;3Kohm,1%,1/10W,TP,1608 | 1 | S.A | |
|4 | CIS7 | 0202-001477 | SOLDER-CREAM;LST309-M,-,D20-45\$,-.96.5Sn/ | 1.95 | S.N.A | |
|4 | IC113 | 1105-001284 | IC-DRAM;636165,-,16Mbit,1Mx16Bit,TSOP,50 | 1 | S.A | |
|4 | IC113 | 1105-001284 | IC-DRAM;636165,-,16Mbit,1Mx16Bit,TSOP,50 | 1 | S.A | |
|4 | IC113 | 1105-001284 | IC-DRAM;636165,-,16Mbit,1Mx16Bit,TSOP,50 | 1 | S.A | |
|4 | T0077 | BN41-00586C | PCB MAIN;DALI-2,FR-4,4L,MP1.2,1.0T,145*1 | 1 | S.N.A | |
| ...3 | CIS2 | BN60-00011B | FASTENER-PEM NUT;DE17PS,FASTENER-PEM/NUT | 4 | S.N.A | |
| ...3 | T0245 | 0202-001522 | SOLDER-WIRE FLUX;LFA3-107,-,D1.2,96.5Sn/ | 0.01 | S.N.A | |
| ..2 | M0131 | BN63-01079A | GASKET;,CONDUCTIVE FAB,4MM,10MM,10MM,GRA | 1 | S.N.A | |
| 0.1 | | BN91-00841Q | ASSY LCD-SPZ(DALI2);DE17PS* | 1 | S.N.A | |
| ..2 | M0215 | BN07-00218A | LCD-PANEL;LTM170E8-L21,Dali2,6BIT FRC,35 | 1 | S.A | |
| ..2 | M0131 | BN63-00995A | GASKET;GY17MS,CONDUCTIVE FAB,4MM,15MM,10 | 1 | S.N.A | |
| 0.1 | M0113 | BN92-00956A | ASSY P/MATERIAL;DI17PS,BASIC | 1 | S.N.A | |
| ..2 | T0376 | 6902-000379 | BAG AIR;LDPE,T0.2,W1000,L1800,TRP,-,- | 0.032 | S.N.A | |
| ..2 | M0505 | BN96-00838A | ASSY MISC P-WALL MOUNTING;DI17PS,TEXTURE | 1 | S.A | |
| ...3 | CIS | BN61-00934A | BRACKET-WALL FRONT;DALI17",SECC,T2.0 | 1 | S.N.A | |
| ...3 | CIS | BN61-00935A | BRACKET-WALL REAR;DALI17",SECC,T2.0 | 1 | S.N.A | |
| ...3 | CIS | BN61-01043A | BRACKET-WALL MOUNT;DI17PS/DI19PS,SK-5,T0 | 1 | S.N.A | |
| ...3 | T0059 | BN68-00473H | MANUAL FLYER-CARD;Dali Wall Mount,SyncMa | 1 | S.N.A | |
| ...3 | M0132 | BN96-00196A | ASSY MISC P-SCREW;MODIGLIANI ,SCREW-WOOD | 1 | S.A | |
| ..2 | T0081 | 6902-000604 | BAG WRAPPING;LDPE,T0.02,W500,L10000,TRP, | 3 | S.N.A | |
| ..2 | T0524 | 6902-000642 | BAG PE;HD/NITR/HD(DOUBLE),T0.015/T0.5/T0 | 1 | S.N.A | |
| 0.1 | M0019 | BN92-01091K | ASSY LABEL;DI19BSASQ/XAX,MEXICO | 1 | S.N.A | |
| 0.1 | M0045 | BN92-01371P | ASSY ACCESSORY;DE17PSQAQ/XAX | 1 | S.N.A | |
| ..2 | M0125 | BN39-00246F | CBF SIGNAL-DVI(D);1703FP,24P/24P,20276-D | 1 | S.A | |
| ..2 | M0045 | BN96-02129H | ASSY ACCESSORY;DE17_19PSQAQ/XAX | 1 | S.A | |
| ...3 | T0268 | 3903-000085 | CBF-POWER CORD;DT,US,BP3/YES,(IEC C13/C | 1 | S.A | |
| ...3 | T0524 | 6902-000110 | BAG PE;LDPE,T0.05,W250,L400,TRP,28,2 | 1 | S.N.A | |
| ...3 | M0114 | BN39-00244B | CBF SIGNAL;M015PS,15P/15P,20276-N,1830mm | 1 | S.A | |
| ...3 | M0215 | BN96-00881K | ASSY MANUAL P-IB+QSG;DE17PS,DE19PS,SYNCM | 1 | S.N.A | |
|4 | QUICKSETUP | BH68-00376L | MANUAL FLYER-04,QSG;LCDQUICK SETUP GUIDE | 1 | S.N.A | |
|4 | IB | BN59-00395K | S/W DRIVER-02,IB;COMM,W/W,SYNCMASTER,W/W | 1 | S.N.A | |
| ...3 | ACCESSROY | BN68-00797A | MANUAL FLYER-02,WARRANT CARD;SAMEX BASIC | 1 | S.N.A | |
| ...3 | T0238 | BP68-00515A | MANUAL FLYER-REGISTRATION CARD;PRC CARD, | 1 | S.N.A | |
| 0.1 | M0003 | BN92-01389Q | ASSY BOX;DE17PSQFV/XAX,SEM,MEXICO,TCO99 | 1 | S.N.A | |
| ..2 | BOX | BN69-01024A | BOX-03;S/M173P PLUS(DE17PS),SW4,A,YEL,A1 | 1.01 | S.N.A | |
| ..2 | M0103 | BN66-00007A | LEVER-TOP;ALL MODEL,LDPE,WHITE | 1 | S.N.A | |
| 0.1 | MP1.4 | BN91-00591U | ASSY MISC-ADAPTOR;CX718T-QH | 1 | S.N.A | |
| ..2 | M0158 | BN44-00131A | ADAPTOR;SAD04214-UV,Internal,90 ~ 264Vac | 1 | S.A | |

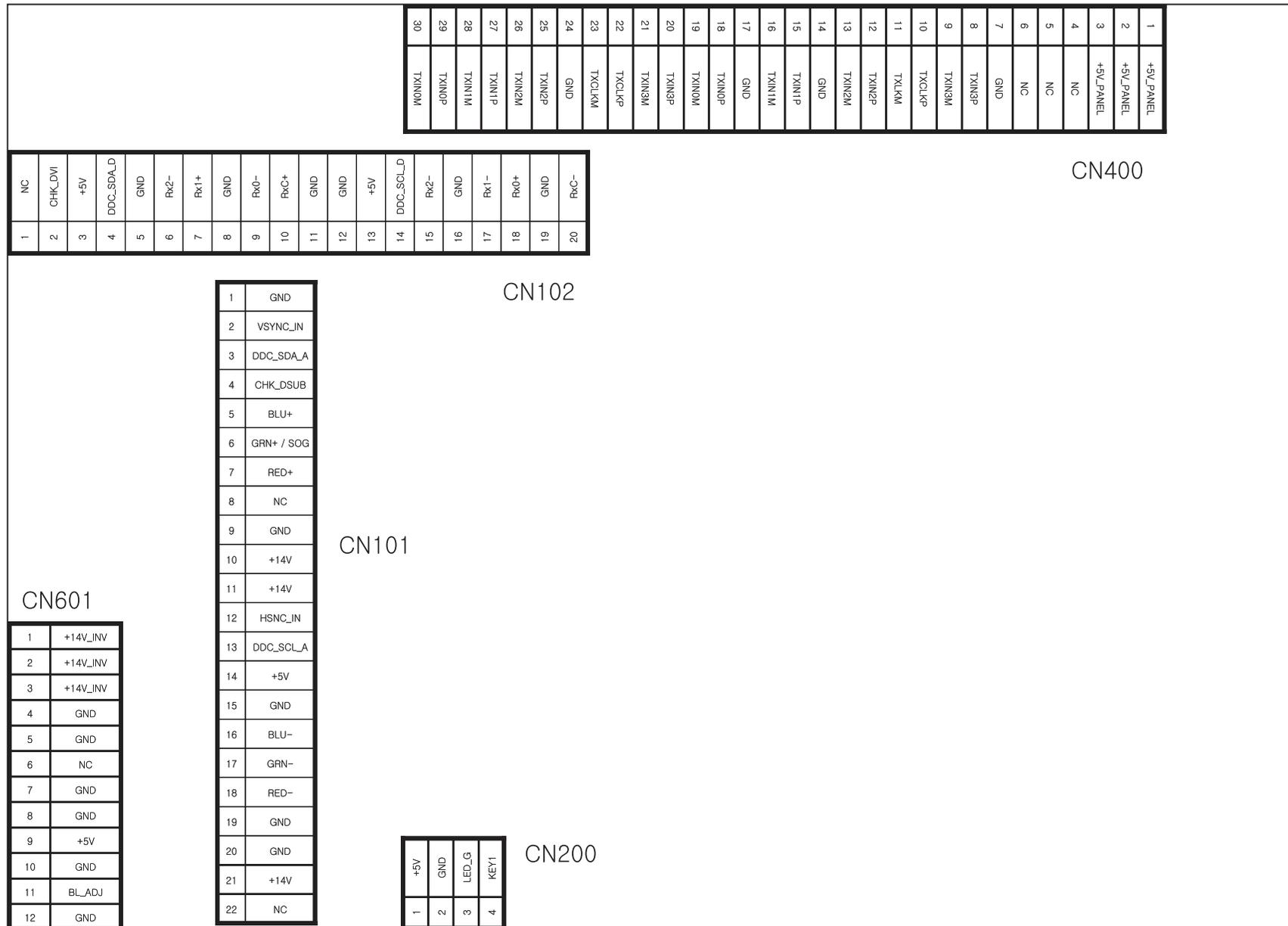
7 Block Diagram

Block Diagram



Memo

8 Wiring Diagram

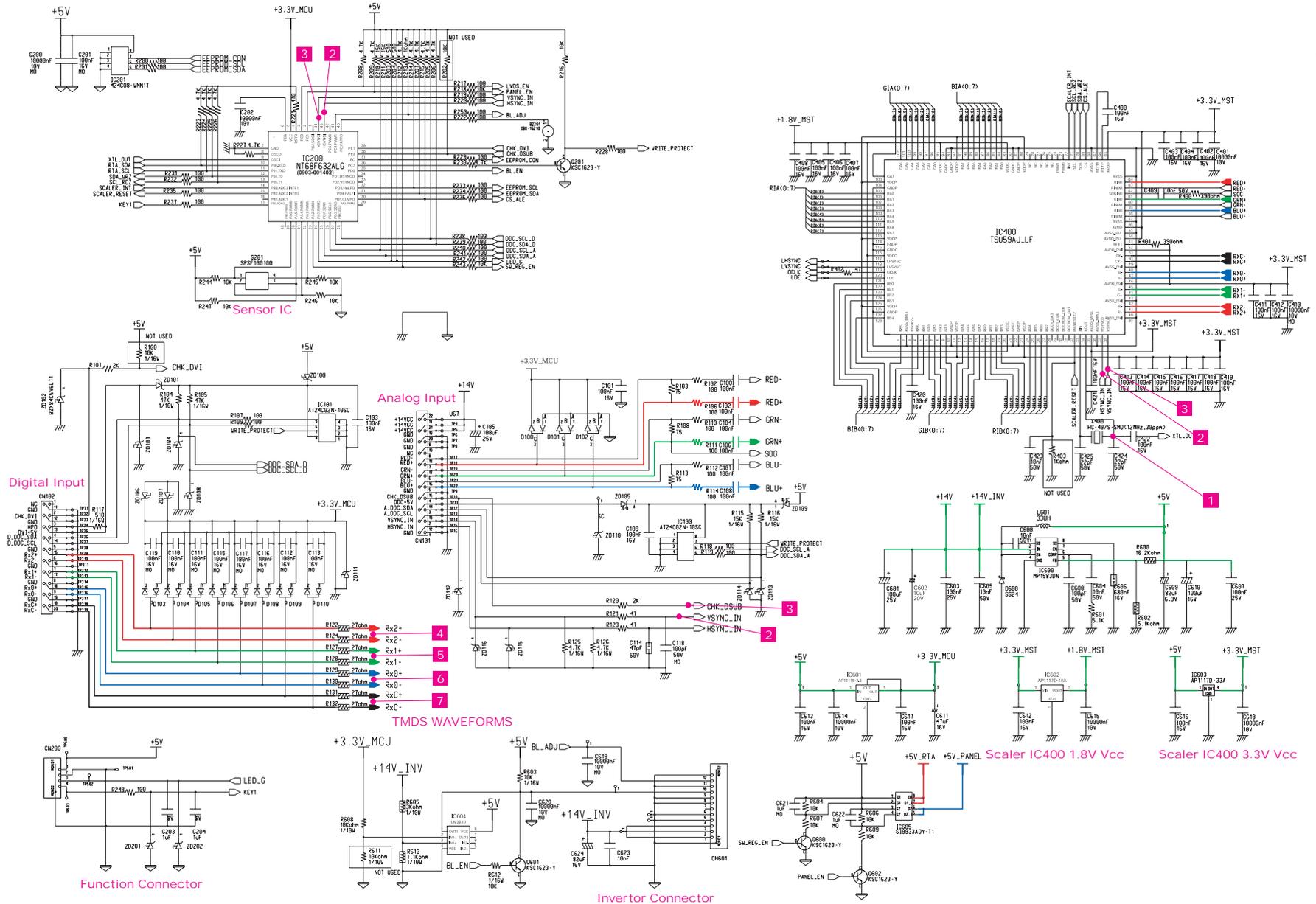


Memo

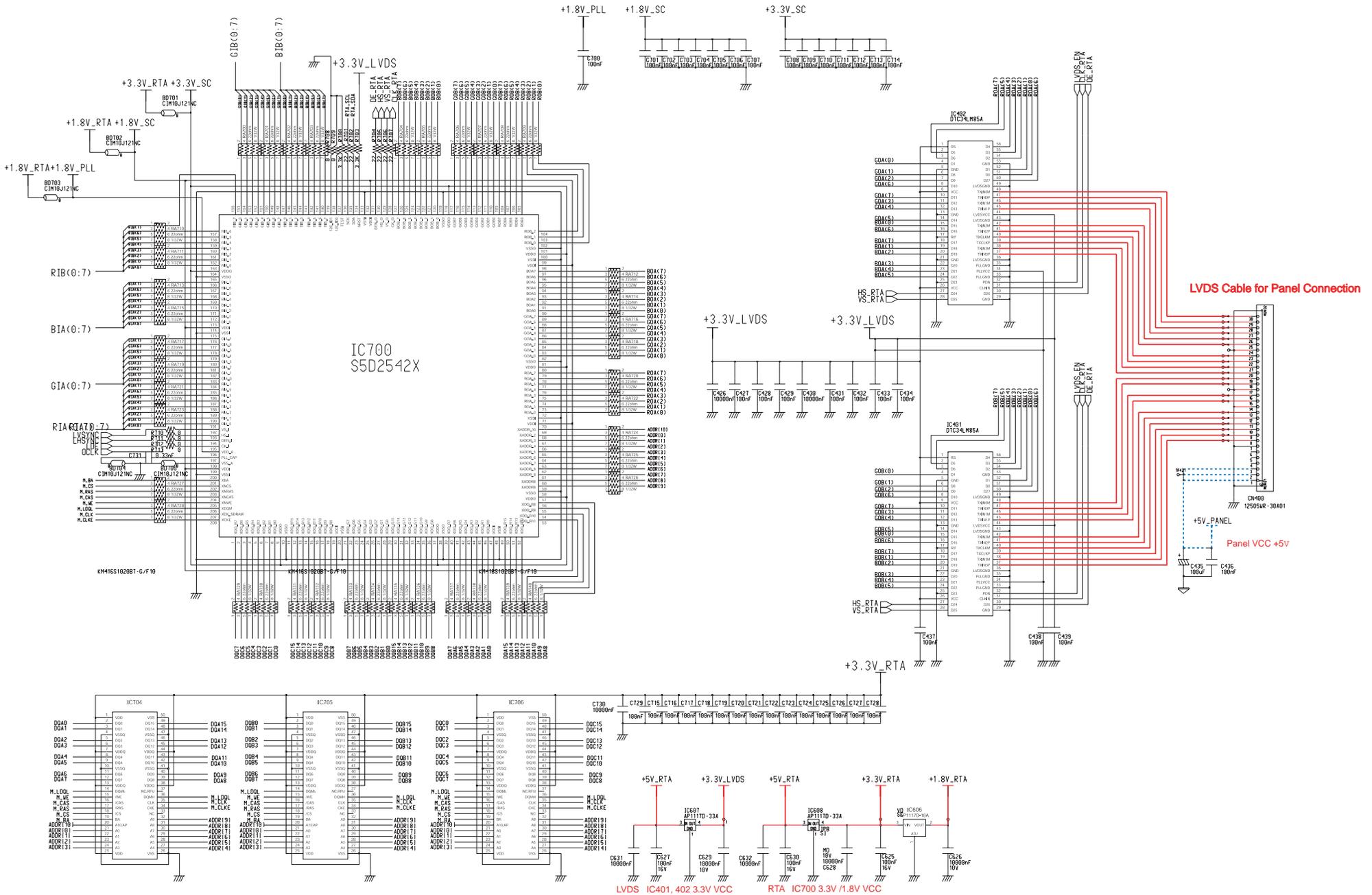
9 Schematic Diagrams

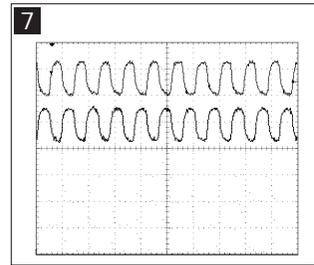
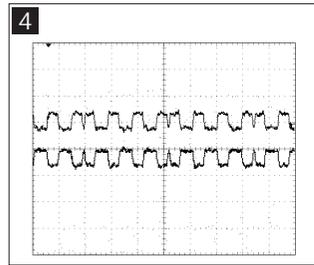
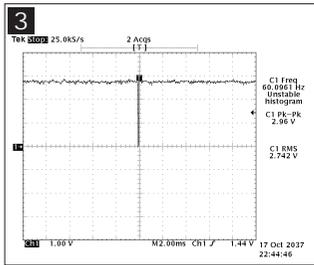
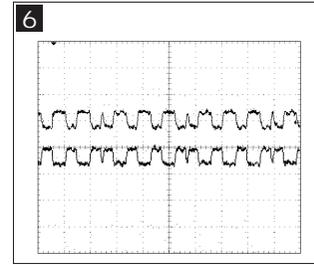
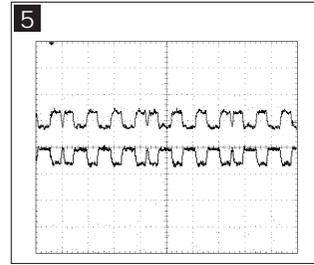
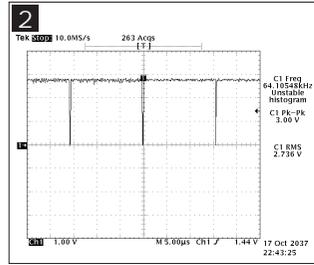
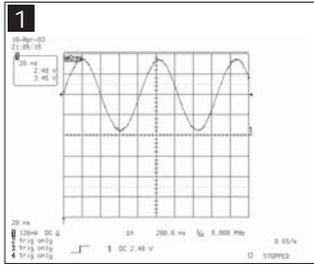
- This Document can not be used without Samsung's authorization.

9-1 Schematic Diagrams



9-2 Schematic Diagrams





Memo

10 Operating Instructions and Installation

10-1 Product Features



0°(Standard)



90°(Pivot)



180°(Pivot)

- Improved Response Time by Adopting RTA : 12ms (Based on "Gray to Gray")
- Support Magic Color
- Magic Zone
- Magic Bright: 6 steps used
- Magic Tune 3.6 and Pivot software installed
- Auto Pivot: Screen automatic switch
- Folder-type Dual Hinge stand with pivot (rotation) & Swivel
- Auto power, Auto auto, Down Scaling(UXGA)
- VESA Mount 100 x 100mm & Custom Mounting

10-2 Component & Function



1. Power indicator

This light glows blue during normal operation, and blinks blue once as the monitor saves your adjustments.

2. Power button

Use this button for power the monitor on and off, change the input source, or perform Auto Adjustment.

-Power On/Off : Press the power button and listen for one beep, to turn the monitor on or off.

-Input Source : Press the power button and listen for two beeps, then release to switch the input source to analog or digital.

-Auto adjustment : Press the power button and listen for three beeps, then release to activate the Auto Adjustment feature. (Available only with an analog source.)

10-3 New Features

- Improved Response Time by Adopting RTA: 12ms (Based on "Gray to Gray")
- Support Magic Color: Demo, Full, Intelligent
- Magic Zone: Brightness adjustment for local areas
- Magic Bright: 6 steps used
Text, Internet, Sports, Game, Movie and Custom
- Magic Tune 3.6 and Pivot software installed
: An upgraded version that compensates for the old Magic Tune 2.0 and adds some new features for the user's convenience
- Auto Pivot: When the monitor is rotated in 90 or 180 degrees, the display LED and OSD also are automatically rotated accordingly. This can be performed only when Magic Tune 3.6 and the Pivot software are running.

10-4 Installation Instructions



(The configuration at the back of the monitor may vary from product to product.)

1.Power port

Connect the DC adapter for your monitor to the power port on the back of the monitor. Plug the power cord for the monitor into a nearby outlet.

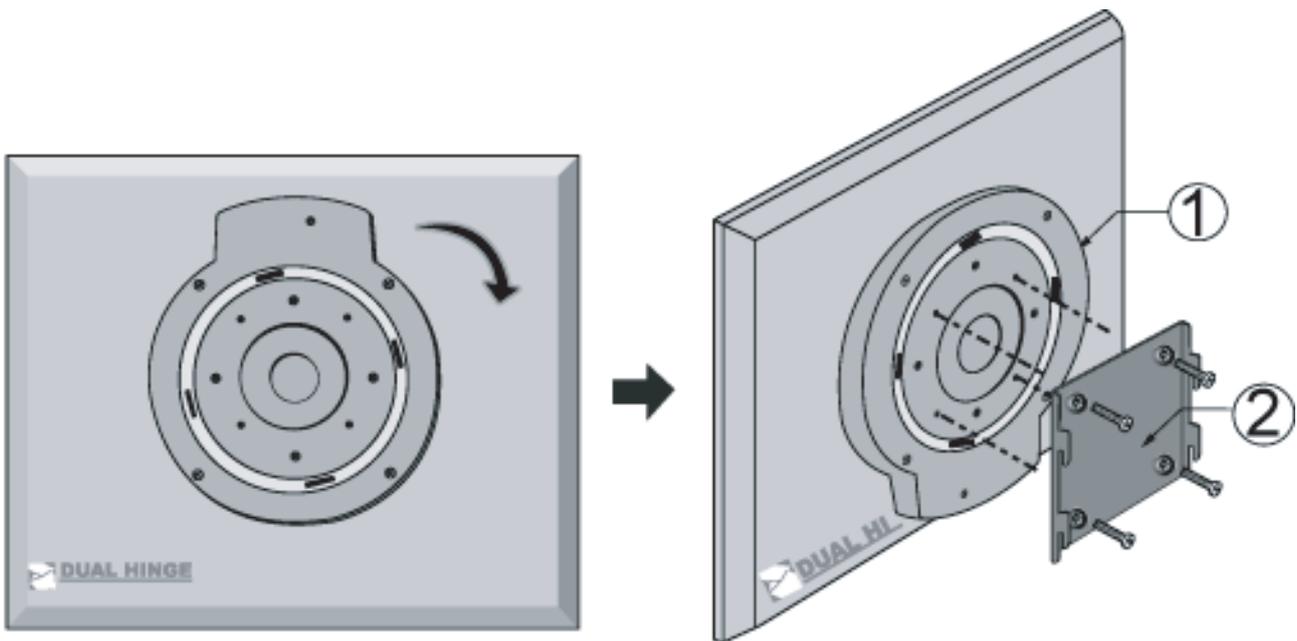
2.DVI port

Connect the DVI cable to the DVI port on the back of your monitor.

3.D-sub 15-pin port

Connect the signal cable to the 15-pin, D-sub connector on the back of your monitor.

10-5 Attaching a Base



This monitor accepts a 75mm x 75mm VESA-compliant mounting interface pad.

1. VESA Stand
2. VESA Mounting Bracket

Fold the monitor stand. Turn it so that the side to which the cable is connected faces down. Attach the VESA Mounting Bracket to the bottom side of the stand. Align the holes of the bracket with those in the VESA stand, and fasten it tightly in place with four screws.

Caution: The stand is made of aluminum. Keep it from getting nicked or scratched.

Memo

11 Disassembly and Reassembly

This section of the service manual describes the disassembly and reassembly procedures for the DE17PS/DE19PS TFT-LCD monitors.

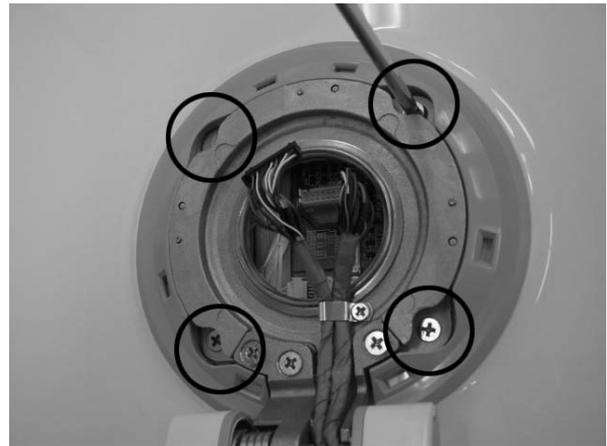
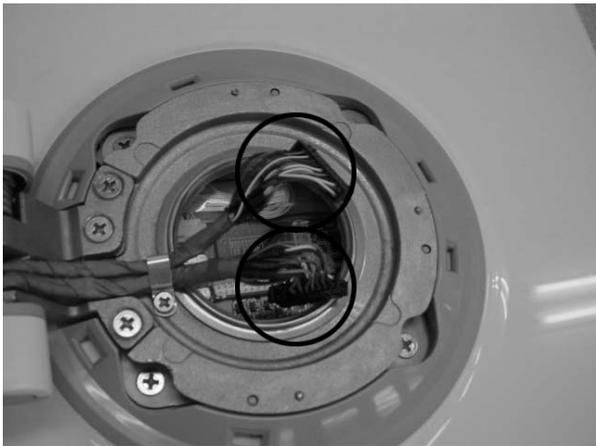
⚠ WARNING: This monitor contains electrostatically sensitive devices. Use caution when handling these components.

11-1 Disassembly

⚠ Cautions: 1. Disconnect the monitor from the power source before disassembly.

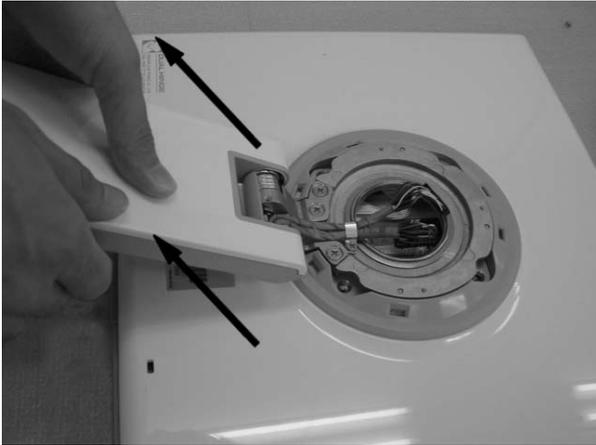


1. Place monitor face down on cushioned table. Remove 1 screws from grip on the stand and remove back cover from the stand.

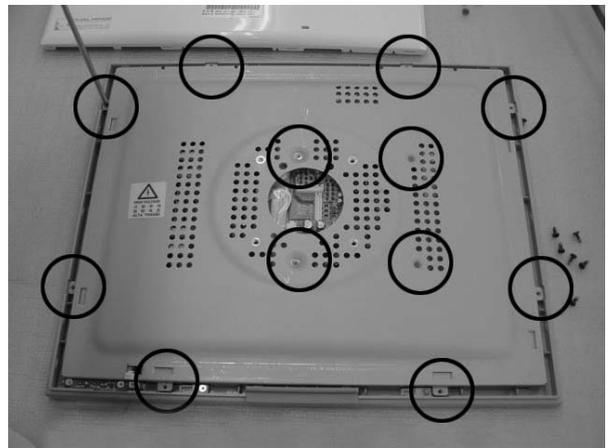
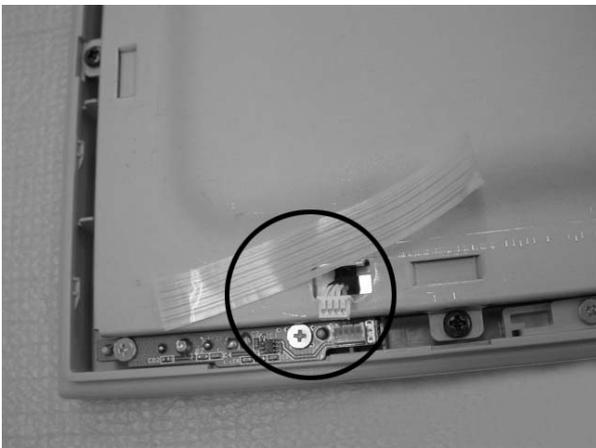


2. Disconnect cable and remove 4 screws from the stand.

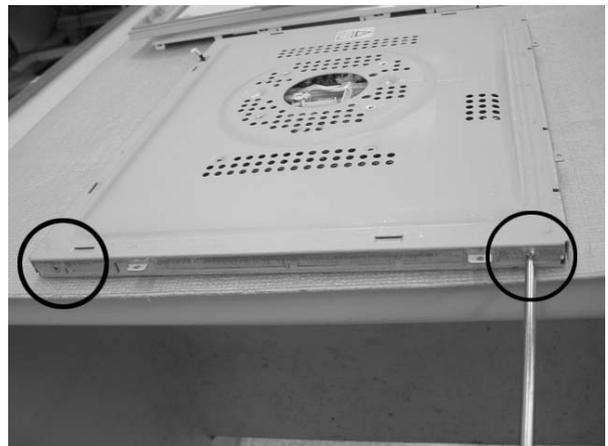
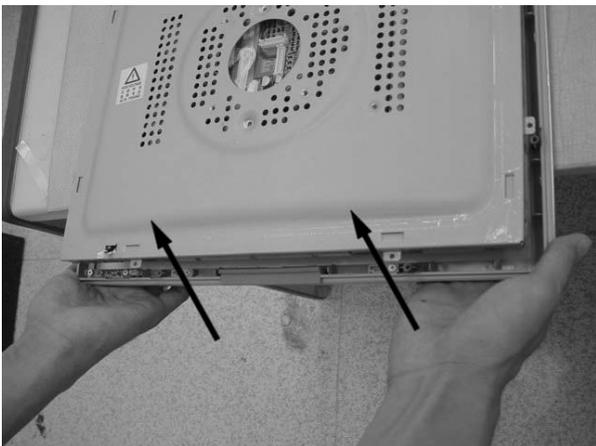
11 Disassembly and Reassembly



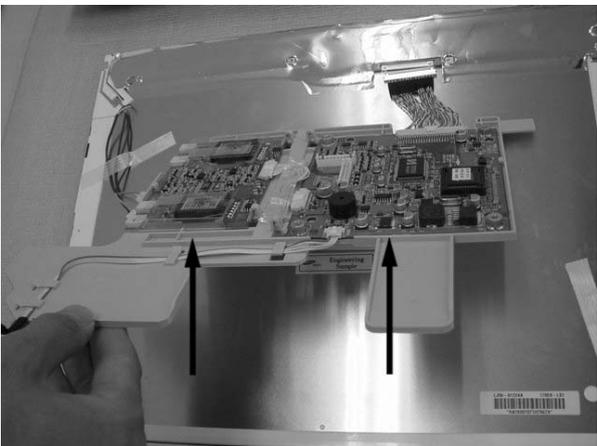
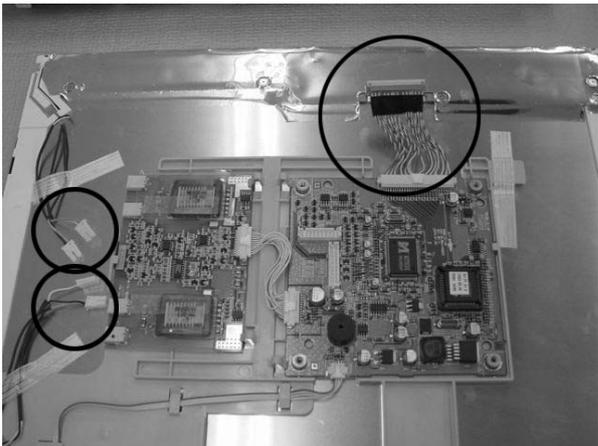
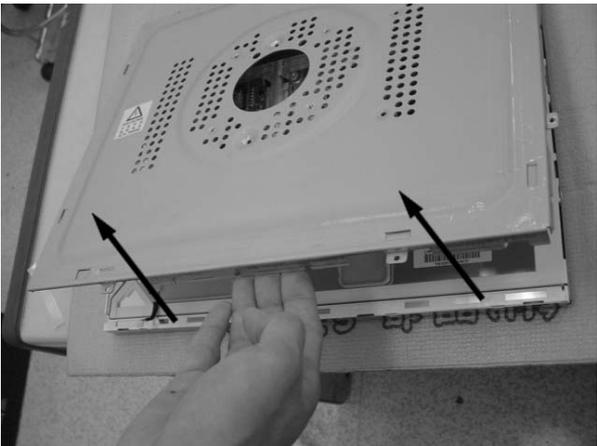
3. Lift up the stand and insert the opening drive into the grooves at each side and press until it clicks.



4. Disconnect function cable and remove 12 screws from the shield.



5. Remove the cover front and remove 4 screws from the panel.



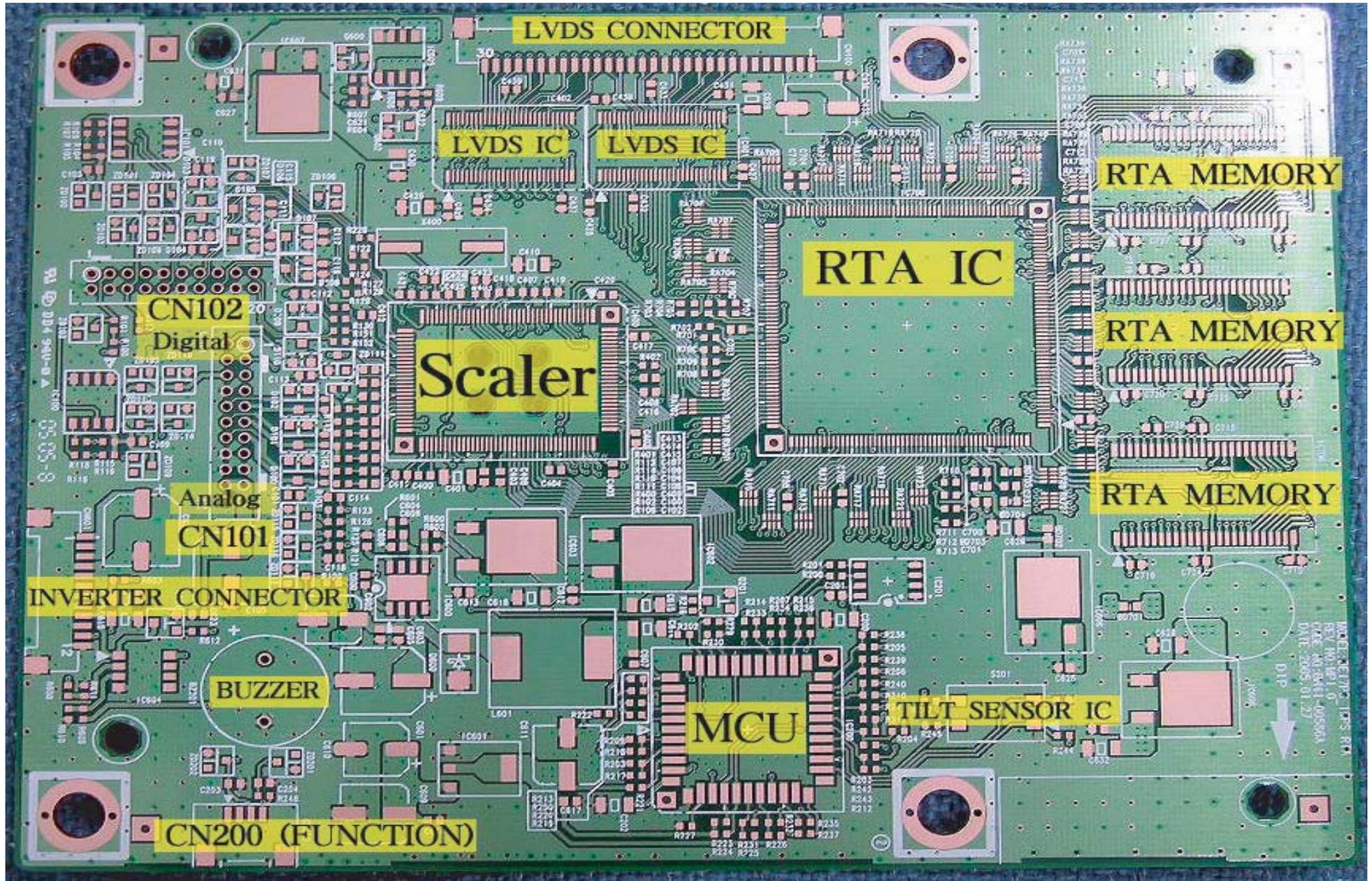
7. Remove main board from the panel.

3-2 Reassembly

Reassembly procedures are in the reverse order of disassembly procedures.

Memo

12 PCB Diagram

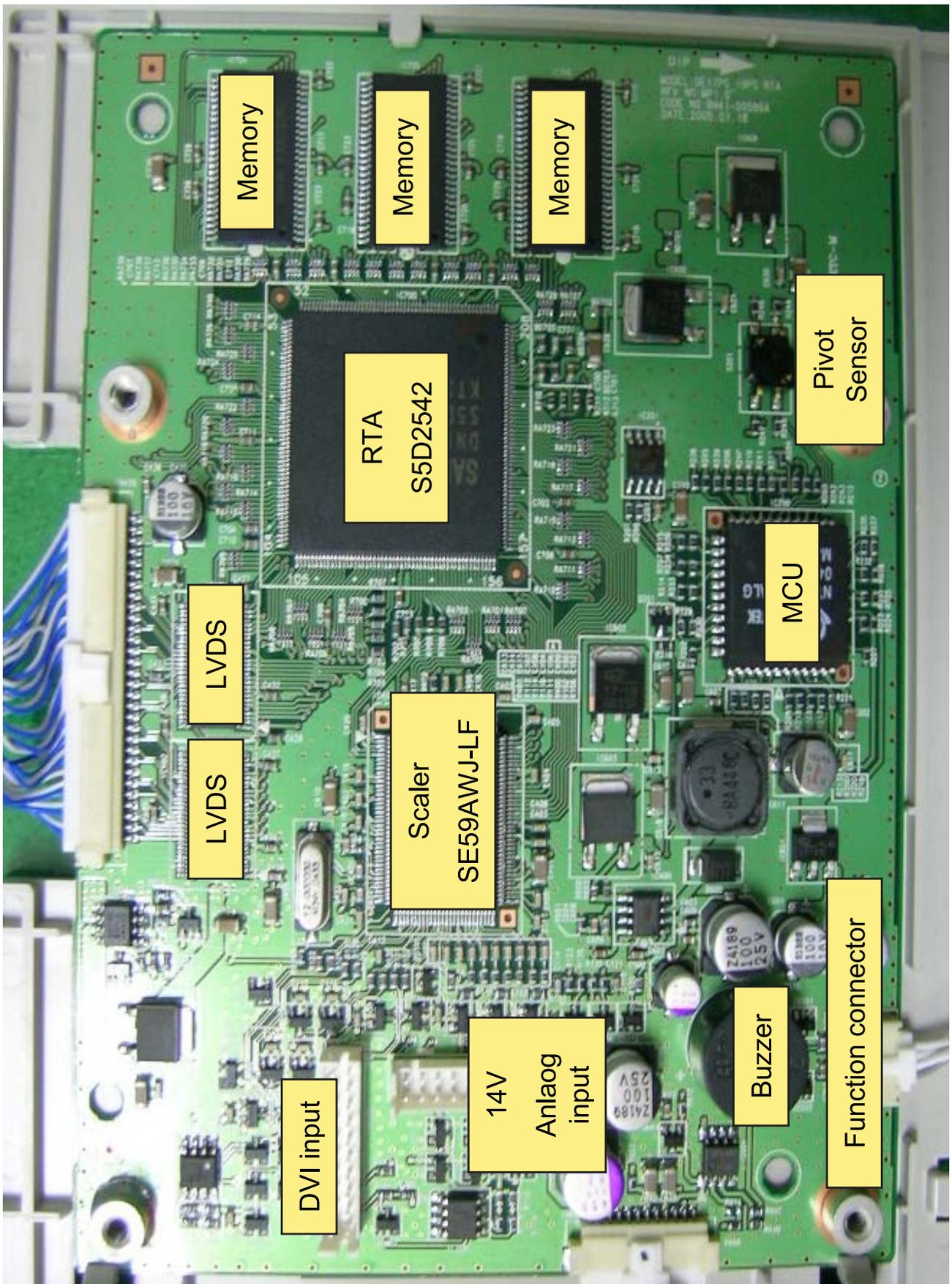


MODEL: 3ET1703-1035-RTA
REV: 1.01
DATE: 2005.01.27

Memo

13 Circuit Descriptions

13-1 Block description



13 Circuit Descriptions

| No | Block | Description | Name |
|----|----------------------|---|------------|
| 1 | Scaler | Integrate ADC, TMSD and Scaling etc to 1 chipset | SE59AWJ-LF |
| 2 | RTA | Using the RTA (response time accelerator) chip, Dali-2 can support the fast response time(12ms) in Gray to Gray pattern. | S5D2542 |
| 3 | LVDS | LVDS IC transit the data to panel. | DT34LM85AL |
| 4 | MCU | Microcontroller. MCU can control all of Monitor feature. As it is flash type, it can be re-written several times. | NT58F63ALG |
| 5 | Buzzer | While touching Power key , it happens beep sound. | |
| 6 | Pivot sensor | As Dali-2 has sensor IC for Pivot, 1) if Dali-2 rotates 90°, 180° and 0°, 2) MCU can detect the current status through sensor IC, OSD rotates, 3) Magic tune 3.6 and Pivot Software can make change Screen to the rotated degrees automatically. | |
| 7 | 14V and Analog input | 14V and analog source input | |
| 8 | DVI input | DVI input connector | |
| 9 | Function connector | Power key connector | |

13-2 Block operating

| No | Feature | Block | Description | Failure Symptom |
|----|----------------------|--|---|---|
| 1 | Fast response time | RTA chip | Using the RTA (response time accelerator) chip, Dali-2 can support the fast response time(12ms) in Gray to Gray pattern. | Abnormal display, No video |
| 2 | 14V and Analog input | Analog input connector | 14V and analog source input | No Power/ Analog No video |
| 3 | DVI input | DVI input connector | DVI input connector | DVI No video |
| 4 | Sharpness | Scaler | Support sharpness control fitting up the quality of Video card. | Enhancement of sharpness and image quality. |
| 5 | Auto Pivot | Pivot sensor/ MCU/ Magic tune3.6/ Pivot Software | As Dali-2 has sensor IC for Pivot, 1) if Dali-2 rotates 90°, 180° and 0°, 2) MCU can detect the current status through sensor IC, OSD rotates, 3) Magic tune 3.6 and Pivot Software can make change Screen to the rotated degrees automatically. | It must be installed Magic tune 3.6 and Pivot Software to the PC. |
| 6 | Beep sound | Buzzer/ MCU | While touching Power key , it happens beep sound. | No beep sound |
| 7 | Function Power key | Function connector/unction ass'y | Power key ass'y | Function key operating fail |

14 Reference Information

14-1 Technical Terms

-TFT-LCD

(Thin film Transistor Liquid Crystal Display)

ADC(Analog to Digital Converter)

This is a circuit that converts from analog signal to digital signals.

-PLL(Phase Locked Loop)

During progressing ADC, Device makes clock synchronizing HSYNC with Video clock

-Inverter

Device that supply Power to LCD panel lamp. this device generate about 1,500~2,000V.

AC Adapter

Device that converts AC(90V~240V) to DC(+12V or 14V)

SMPS(Switching Mode Power Supply)

Switching Mode Power supply. This design technology is used to step up/down the input power by switching on/off

-FRC(Frame Rate Controller)

Technology that change image frame quantity displayed on screen for one second.

Actually TFT-LCD panel require 60 pcs of frame for one second.

so, this technology is needed to convert input image to 60 pcs regardless input frame quantity.

-Image Scaler

Technology that convert various input resolution to other resolution.(ex. 640* 480 to 1024*768)

-Auto Configuration(Auto adjustment)

This is an algorithm to adjust monitor to optimum condition by pushing one key.

-OSD(On Screen Display)

On screen display. customer can control the screen easily with this.

-Image Lock

This means "Fineness adjustment " in LCD Monitor, the features are "Fine" and "Coarse"

-FINE

"Fine" adjustment is used to adjust visibility by control phase difference.

-COARSE

This is a adjustment by tuning with Video colck and PLL clock.

-DVI (Digital Visual Interface)

This provides a high speed digital connection for visual data types that is display technology independent. this interface is primarily focused at providing a connection between a computer and its display device.

-L.V.D.S.(Low Voltage Differential Signaling)

a kind of transmission method for Digital.It can be used from Main PBA to Panel.

-DVI (Digital Visual Interface)

This provides a high speed digital connection for visual data types that is display technology independent. this interface is primarily focused at providing a connection between a computer and its display device.

-T.M.D.S

(Transition minimized Differential Signaling)

a kind of transmission method for Digital.

It can be used from Video card to Main PBA.

-DDC(Display data channel)

It is a communication method between Host Computer and related equipment.

It can make it Plug and Play between PC and Monitor.

-EDID

Extended Display Identification Data PC can recognize the monitor information as Product data, Product name, Display mode, Serial number and Signal source, etc through DDC Line communicating with PC and Monitor.

Example: If the resolution is 1280 x 1024, this means the screen is composed of 1280 horizontal dots (horizontal resolution) and 1024 vertical lines (vertical resolution).

-Dot Pitch

The image on a monitor is composed of red, green and blue dots. The closer the dots, the higher the resolution. The distance between two dots of the same color is called the 'Dot Pitch'. Unit: mm

-Vertical Frequency

The screen must be redrawn several times per second in order to create and display an image for the user. The frequency of this repetition per second is called Vertical Frequency or Refresh Rate. Unit: Hz

Example: If the same light repeats itself 60 times per second, this is regarded as 60 Hz.

-Horizontal Frequency

The time to scan one line connecting the right edge to the left edge of the screen horizontally is called Horizontal Cycle. The inverse number of the Horizontal Cycle is called Horizontal Frequency. Unit: kHz

-Interlace and Non-Interlace Methods

Showing the horizontal lines of the screen from the top to the bottom in order is called the Non-Interlace method while showing odd lines and then even lines in turn is called the Interlace method. The Non-Interlace method is used for the majority of monitors to ensure a clear image. The Interlace method is the same as that used in TVs.

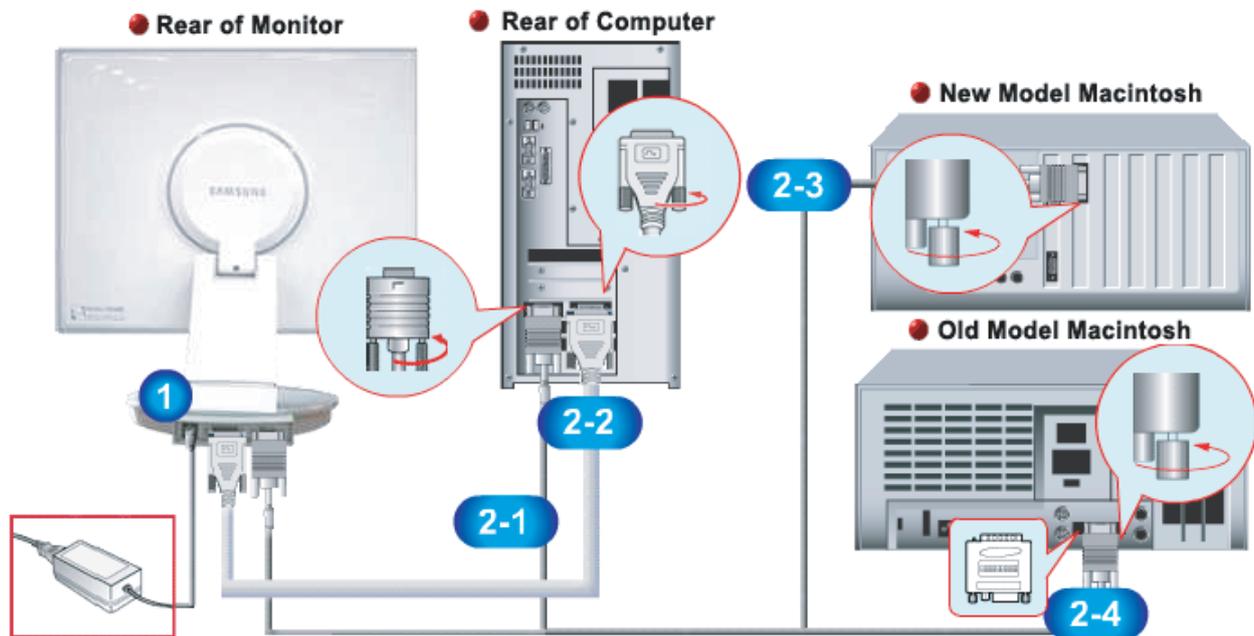
-Plug & Play

This is a function that provides the best quality screen for the user by allowing the computer and the monitor to exchange information automatically. This monitor follows the international standard VESA DDC for the Plug & Play function.

-Resolution

The number of horizontal and vertical dots used to compose the screen image is called 'resolution'. This number shows the accuracy of the display. High resolution is good for performing multiple tasks as more image information can be shown on the screen.

14-2 Connecting Your Monitor



1. Connect the DC adapter for your monitor to the power port on the back of the monitor. Plug the power cord for the monitor into a nearby outlet.
- 2-1. Using the D-sub (Analog) connector on the video card.
Connect the signal cable to the 15-pin, D-sub connector on the back of your monitor.



- 2-2. Using the DVI (Digital) connector on the video card.
Connect the DVI cable to the DVI port on the back of your monitor.



- 2-3. Connected to a Macintosh.
Connect the monitor to the Macintosh computer using the D-SUB connection cable.
- 2-4. In the case of an old model Macintosh, you need to connect the monitor using a special Mac adapter.
3. Turn on your computer and monitor. If your monitor displays an image, installation is complete.

- You may get a blank screen depending on the type of video card you are using, if you connect simultaneously both the D-Sub and DVI cables to one computer.
- If you properly connect your monitor using the DVI connector but get a blank screen, check to see if the monitor status is set to analog. Press power button to have the monitor double-check the input signal source.

14-3 Pin Assignments

| Pin No. \ Sync Type | 15-Pin D-Sub Signal Cable Connector | | |
|---------------------|-------------------------------------|-----------------------|-----------------------|
| | Separate | Composite | Sync-on-green |
| 1 | Red | Red | Red |
| 2 | Green | Green | Green + H/V Sync. |
| 3 | Blue | Blue | Blue |
| 4 | GND | GND | GND |
| 5 | DDC Return (GND) | DDC Return (GND) | DDC Return (GND) |
| 6 | GND-R | GND-R | GND-R |
| 7 | GND-G | GND-G | GND-G |
| 8 | GND-B | GND-B | GND-B |
| 9 | DDC Power Input (+5V) | DDC Power Input (+5V) | DDC Power Input (+5V) |
| 10 | Self Raster | Self Raster | Self Raster |
| 11 | GND | GND | GND |
| 12 | Bi-Dr Data (SDA) | Bi-Dr Data (SDA) | Bi-Dr Data (SDA) |
| 13 | H-Sync. | H/V-Sync. | Not Used |
| 14 | V-Sync. | Not Used | Not Used |
| 15 | DDC Clock (SCL) | DDC Clock (SCL) | DDC Clock (SCL) |

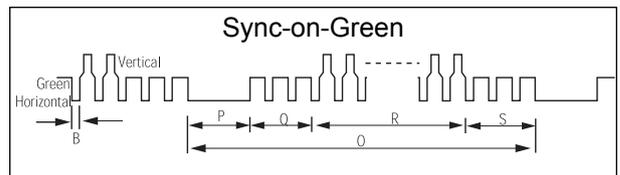
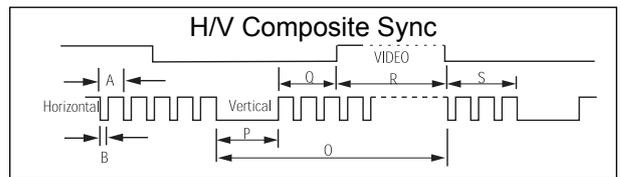
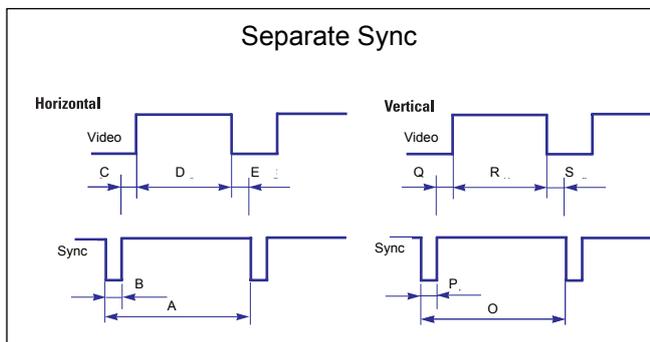
| Pin No. \ Sync Type | 24P DVI-D | | |
|---------------------|-----------------|------|---------------|
| | 1 | Rx2- | 13 |
| 2 | Rx2+ | 14 | +5V_M |
| 3 | GND | 15 | Self Raster |
| 4 | No Connection | 16 | +5V_M |
| 5 | No Connection | 17 | Rx0- |
| 6 | DDC Clock (SCL) | 18 | Rx0+ |
| 7 | DDC Data (SDA) | 19 | NC |
| 8 | NC | 20 | No Connection |
| 9 | Rx1- | 21 | No Connection |
| 10 | Rx1+ | 22 | NC |
| 11 | NC | 23 | RxC+ |
| 12 | No Connection | 24 | RxC- |

14-4 Timing Chart

This section of the service manual describes the timing that the computer industry recognizes as standard for computer-generated video signals.

Table 2-1 Timing Chart

| Mode Timing | IBM | | VESA | | | | | | |
|-------------------|-----------------------------|-----------------------------|----------------------|----------------------|----------------------|------------------------|------------------------|-------------------------|-------------------------|
| | VGA2/ 70 Hz 720 x 400 | VGA3/ 60 Hz 640 x 480 | 640/75 Hz 640x480 | 800/60 Hz 800x600 | 800/75 Hz 800x600 | 1024/60 Hz 1024x768 | 1024/75 Hz 1024x768 | 1280/60 Hz 1280x1024 | 1280/75 Hz 1280x1024 |
| fH (kHz) | 31.469 | 31.469 | 37.500 | 37.879 | 46.875 | 48.363 | 60.023 | 63.981 | 79.975 |
| A μ sec | 31.777 | 31.778 | 26.667 | 26.400 | 21.333 | 20.677 | 16.660 | 11.852 | 12.504 |
| B μ sec | 3.813 | 3.813 | 2.032 | 3.200 | 1.616 | 2.092 | 1.219 | 1.037 | 1.067 |
| C μ sec | 1.589 | 1.589 | 3.810 | 2.200 | 3.232 | 2.462 | 2.235 | 2.296 | 1.837 |
| D μ sec | 26.058 | 26.058 | 20.317 | 20.000 | 16.162 | 15.754 | 13.003 | 9.259 | 9.481 |
| E μ sec | 0.318 | 0.318 | 0.508 | 0.000 | 0.323 | 0.369 | 0.203 | 0.000 | 0.119 |
| fV (Hz) | 70.087 | 59.940 | 75.000 | 60.317 | 75.000 | 60.004 | 75.029 | 60.020 | 75.025 |
| O msec | 14.268 | 16.683 | 13.333 | 16.579 | 13.333 | 16.666 | 13.328 | 16.005 | 13.329 |
| P msec | 0.064 | 0.064 | 0.080 | 0.106 | 0.064 | 0.124 | 0.050 | 0.047 | 0.038 |
| Q msec | 0.858 | 0.794 | 0.427 | 0.607 | 0.448 | 0.600 | 0.466 | 0.594 | 0.475 |
| R msec | 13.155 | 15.761 | 12.800 | 15.840 | 12.800 | 15.880 | 12.795 | 15.630 | 12.804 |
| S msec | 0.191 | 0.064 | 0.027 | 0.0261 | 0.021 | 0.062 | 0.017 | 0.016 | 0.013 |
| Clock Freq. (MHz) | 28.322 | 26.175 | 31.500 | 40.000 | 49.500 | 75.000 | 78.750 | 108.000 | 135.000 |
| Polarity H.Sync | Negative | Negative | Negative | Positive | Positive | Negative | Positive | Positive | Positive |
| V.Sync | Positive | Negative | Negative | Positive | Positive | Negative | Positive | Positive | Positive |
| Remark | Separate | Separate | Separate | Separate | Separate | Separate | Separate | Separate | Separate |



| | | | |
|---------------------|---------------------------|----------------------|-------------------------|
| A : Line time total | B : Horizontal sync width | O : Frame time total | P : Vertical sync width |
| C : Back porch | D : Active time | Q : Back porch | R : Active time |
| E : Front porch | | S : Front porch | |

14-5 Preset Timing Modes

-If the signal transferred from the computer is the same as the following Preset Timing Modes, the screen will be adjusted automatically. However, if the signal differs, the screen may go blank while the power LED is on. Refer to the video card manual and adjust the screen as follows.

Table 1. Preset Timing

| Display Mode | Horizontal Frequency (kHz) | Vertical Frequency (Hz) | Pixel Clock (MHz) | Sync Polarity (H/V) |
|-------------------|----------------------------|-------------------------|-------------------|---------------------|
| IBM, 640 x 350 | 31.469 | 70.086 | 25.175 | +/- |
| IBM, 640 x 480 | 31.469 | 59.940 | 25.175 | -/- |
| IBM, 720 x 400 | 31.469 | 70.087 | 28.322 | -/+ |
| MAC, 640 x 480 | 35.000 | 66.667 | 30.240 | -/- |
| MAC, 832 x 624 | 49.726 | 74.551 | 57.284 | -/- |
| MAC, 1152 x 870 | 68.681 | 75.062 | 100.00 | -/- |
| VESA, 640 x 480 | 37.500 | 75.000 | 31.500 | -/- |
| VESA, 640 x 480 | 37.861 | 72.809 | 31.500 | -/- |
| VESA, 800 x 600 | 35.156 | 56.250 | 36.000 | +, -/+,- |
| VESA, 800 x 600 | 37.879 | 60.317 | 40.000 | +/+ |
| VESA, 800 x 600 | 46.875 | 75.000 | 49.500 | +/+ |
| VESA, 800 x 600 | 48.077 | 72.188 | 50.000 | +/+ |
| VESA, 1024 x 768 | 48.363 | 60.004 | 65.000 | -/- |
| VESA, 1024 x 768 | 56.476 | 70.069 | 75.000 | -/- |
| VESA, 1024 x 768 | 60.023 | 75.029 | 78.750 | +/+ |
| VESA, 1152 x 864 | 67.500 | 75.000 | 108.00 | +/+ |
| VESA, 1280 x 960 | 60.000 | 60.000 | 108.00 | +/+ |
| VESA, 1280 x 1024 | 63.981 | 60.020 | 108.00 | +/+ |
| VESA, 1280 x 1024 | 79.976 | 75.025 | 135.00 | +/+ |

Horizontal Frequency

The time to scan one line connecting the right edge to the left edge of the screen horizontally is called Horizontal Cycle and the inverse number of the Horizontal Cycle is called Horizontal Frequency. Unit: kHz

Vertical Frequency

Like a fluorescent lamp, the screen has to repeat the same image many times per second to display an image to the user. The frequency of this repetition is called Vertical Frequency or Refresh Rate. Unit: Hz

14-6 Panel Description

| Maker | VENDOR P/N | PANEL_CODE | PANEL_ABB | STICKER_CODE | Remarks |
|-------|-------------------|-------------|-----------|--------------|--|
| SEC | LT140X1-002 | BN07-00004A | SA | BN68-00239H | - |
| SEC | LT150XS-L01 | BN07-00009A | SB | | - |
| SEC | LT150XS-L01-B | BN07-00022A | SC | | - |
| SEC | LTM150XS-L02 | BN07-00005A | SD | | - |
| SEC | LT181E2-132 | BN07-00001A | SE | | - |
| SEC | LT150XS-T01 | BN07-00010A | SF | | - |
| SEC | LTM181E3-132 | BN07-00019A | SG | | - |
| SEC | LT170E2-131 | BN07-10001D | SH | | - |
| SEC | LT181E2-131 | BN07-10001E | SJ | | - |
| SEC | LTM170E4-L01 | BN07-00018A | SK | | - |
| SEC | LTM240W1-L01 | BN07-00015A | SL | | - |
| SEC | LTM213U3-L01 | BN07-00016A | SM | | - |
| SEC | LTM150XH-L01 | BN07-00026A | SN | | - |
| SEC | LTM150XH-L03 | BN07-00027A | SP | | - |
| SEC | LTM150XS-L01 | BN07-00032A | SQ | | DELL(ZPD) |
| SEC | LTM181E4-L01 | BN07-00034A | SR | | PVA |
| SEC | LTM170EH-L01 | BN07-00036A | SS | | TN |
| SEC | LTM170E5-L01 | BN07-00037A | SU | | PVA |
| SEC | LTM150XH-L11 | BN07-00041A | SV | | - |
| SEC | LTM213U4-L01 | BN07-00039A | SW | | PVA |
| SEC | LTM150XH-L01(ZPD) | BN07-00045A | SX | | ZPD |
| SEC | LTM150XH-L04 | BN07-00046A | SY | | "New panel with high brightness" |
| SEC | LTM170W1-L01 | BN07-00047A | SZ | | Panel for TV |
| SEC | LTM150XH-L06 | BN07-00053A | EA | | Panel for TV/ High Luminance for 450cd _SONY&EOS Team Panel for TV |
| SEC | LTM153W1-L01 | BN07-00054A | EB | | Use NIKE MODEL |
| SEC | LTM170EH-L05 | BN07-00055A | EC | | Panel EOS proj. for high brightness of 17" EH-L05 |
| SEC | LTM170E5-L03 | BN07-00056A | ED | | Dell 1702FP pro. E4. EH mechanicalCompatible |
| SEC | LTM190E1-L01 | BN07-00057A | EE | | DELL 1900 FP |
| SEC | LTM181E5-L01 | BN07-00061A | EF | | 18" narrow bezel GH18PS |
| SEC | LTM150XP-L01 | BN07-00065A | EG | | AMLCD PVA PANEL |
| SEC | LTM240W1-L02 | BN07-00062A | EH | | Panel for 15" Wide TV |
| SEC | LTM170EU-L01 | BN07-00071A | EJ | | Slim design, TN |
| SEC | LTM170E5-L04 | BN07-00072A | EK | | E5-L04 6 bits FRC... for IBM |
| SEC | LTA220W1-L01 | BN07-00074A | EL | | Panel for 22" TV |
| SEC | LTM170E6-L02 | BN07-00075A | EM | | AMLCD Narrow & slim design 17" PVAmode |
| SEC | LTM170W1-L01 | BN07-00082A | EN | | LTM170W1-L01 ZPD panel |
| SEC | LTM170EH-L01 | BN07-00080A | EP | | LTM170EH-L01 ZPD panel |
| SEC | LTM170E5-L01 | BN07-00081A | EQ | | LTM170E5-L01 ZPD panel |
| SEC | LTM170EH-L05 | BN07-00083A | ER | | LTM170EH-L05 ZPD panel |
| SEC | LTM170E5-L03 | BN07-00084A | ES | | LTM170E5-L03 ZPD panel |
| SEC | LTM170EU-L01 | BN07-00085A | ET | | LTM170EU-L01 ZPD panel |
| SEC | LTM170E5-L04 | BN07-00086A | EU | | LTM170E5-L04 ZPD panel |
| SEC | LTM170E6-L02 | BN07-00087A | EV | | LTM170E6-L02 ZPD panel |
| SEC | LTM150XH-L06 | BN07-00091A | EW | | "Color coordinates change for LCD TV" |
| SEC | LTM153W1-L01 | BN07-00092A | EX | | AMLCD WIDE 15",9/10 |
| SEC | LTM170W1-L01 | BN07-00100A | EY | | "Color Coordinates change code management" |
| SEC | LTM170EH-L05 | BN07-00097A | EZ | | "LTM170E5-L05 Color Coordinates Change Panel Code" |
| SEC | LTA400W1-L01 | BN07-00109A | S1 | | "PANEL of AMLCD 40"" TV" |
| SEC | LTM153W1-L01 | BN07-00110A | S2 | | "Color coordinates change 0.280/0.290, 10000k & ZPD Panel" |
| SEC | LTM150XH-L06 | BN07-00111A | S3 | | "Color coordinates change 0.280/0.290, 10000k & ZPD Panel" |
| SEC | LTM170W1-L01 | BN07-00112A | S4 | | "Color coordinates change 0.280/0.290, 10000k & ZPD Panel" |
| SEC | LTM170EH-L05 | BN07-00113A | S5 | | "Color coordinates change 0.280/0.290, 10000k & ZPD Panel" |

14 Reference Information

| Maker | VENDOR P/N | PANEL_CODE | PANEL_ABB | STICKER_CODE | Remarks |
|-------|--------------|-------------|-----------|--------------|--|
| SEC | LTM220W1-L01 | BN07-00114A | S6 | | "ZPD Panel for AMLCD 22"" TV" |
| SEC | LTM150XH-L06 | BN07-00117A | S7 | | "ZPD Panel code" |
| SEC | LTM153W1-L01 | BN07-00118A | S8 | | "ZPD Panel code" |
| SEC | LTM170WP-L01 | BN07-00119A | S9 | | "PVA Panel for NIKE" |
| SEC | LTM213U4-L01 | BN07-00039A | E1 | | 21.3" NARROW |
| SEC | LTA260W1-L01 | BN07-00121A | E2 | | VENUS |
| SEC | LTA220W1-L01 | BN07-00074B | E3 | | "Panel B-level panel code for 22"" TV Panel " |
| SEC | LTA320W1-L01 | BN07-00108A | E4 | | "Panel for AMLCD 32"" TV" |
| SEC | LTM213U4-L01 | BN07-00124A | E5 | | NARROW BEZEL 21 " PANEL |
| SEC | LTM170E6-L04 | BN07-00129A | E6 | | "HIGHLAND 17"" LOW PANEL (Panel only for TCO03)" |
| SEC | LTM190E1-L01 | BN07-00088A | E7 | | LTM190E1-L01 ZPD panel |
| SEC | M150X4-L06 | BN07-00137A | E8 | | 15" Narrow & Slim panel |
| SEC | LTA170V1 | BN07-00139A | E9 | | "17"" Panel for Muse 4:3 VGA TV" |
| SEC | LTM190E1-L02 | BN07-00128A | E10 | | "New Panel from AMLCDI, Specification : 6bit Driver IC" |
| SEC | LTM170EX-L01 | BN07-00143A | E11 | | "Development new Panel from AMLCD" |
| SEC | LTM170E8-L01 | BN07-00144A | E12 | | "Development new Panel from AMLCD" |
| SEC | LTM170E6-L04 | BN07-00129B | E13 | | "ZPD panel for AMLCD (Panel only for TCO03)" |
| SEC | LTA320W1-L02 | BN07-00108B | E14 | | "Creat B-level Panel code for AMLCD 32"" TV" |
| SEC | LTM190E1-L03 | BN07-00151A | E15 | | "Development new 19"" Panel form AMLCD (Panel only for TCO03)" |
| SEC | LTM240W1-L03 | BN07-00134A | E16 | | "AMLCD 24"" panel development" |
| SEC | LTM190E1-L02 | BN07-00128B | E17 | | "New Panel from AMLCD, Specification : 6bit Driver IC(ZPD)" |
| SEC | LTM190E4-L01 | BN07-00145A | E18 | | "AMLCD 24"" new panel development" |
| SEC | LTM170E8-L01 | BN07-00158A | E19 | | "ZPD code derivation" |
| SEC | LTM170EX-L01 | BN07-00159A | E20 | | "ZPD code derivation" |
| SEC | LTM190E1-L03 | BN07-00151B | E21 | | "Creat new panel code for AMLCD 19"" (Panel only for TCO03)" |
| SEC | LTA460H1-L01 | BN07-00157A | E22 | | "creat panel code for AMLCD 46"" TV " |
| SEC | LTM170EU-L11 | BN07-00160A | E23 | | "creat new panel code for AMLCD 17"" (Panel only for TCO03)" |
| SEC | LTM240W1-L03 | BN07-00134B | E24 | | "24"" panel ZPD code derivation" |
| SEC | LTM190E4-L01 | BN07-00145B | E25 | | "AMLCD 19"" ZPD Panel code derivation" |
| SEC | LTM240W1-L03 | BN07-00134B | E26 | | 24" panel ZPD code derivation |
| SEC | LTM150XO-L01 | BN07-00164A | E27 | | AMLCD 15" XO-L01 new panel development |
| SEC | LTM150XO-L01 | BN07-00164B | E28 | | AMLCD 15" XO-L01 ZPD code derivation |
| SEC | LTM170EU-L11 | BN07-00160B | E29 | | AMLCD 17" NEW panel code derivation |
| SEC | LTA320W2-L01 | BN07-00172A | SPZ | | AMLCD 32" NEW panel |
| SEC | LTM213U4-L01 | BN07-00124B | SPZ | | 21.3" Narrow PANEL ZPD Panel derivation |
| SEC | LTM170EU-L11 | BN07-00189A | STH | | AMLCD EU-L11 Pb free panel code derivtion |
| SEC | LTM170EU-L11 | BN07-00189B | STZ | | AMLCD EU-L11 Pb free panel ZPD code derivation |
| SEC | LTM240W1-L04 | BN07-00188A | SPH | | 24" A-DCC new panel development |
| SEC | LTM190EX-L01 | BN07-00191A | STH | | AMLCD 19" TN new Panel |
| SEC | LTM190EX-L02 | BN07-00191B | STZ | | AMLCD 19" TN new Panel ZPD derivation |
| SEC | LTA230W1-L02 | BN07-00184A | SPZ | | AMLCD 23" 16:9 new Panel |
| SEC | LTA260W2-L01 | BN07-00185A | SPZ | | AMLCD 26" 16:9 new Panel |
| SEC | LTM240M1-L01 | BN07-00195A | SPH | | 24" panel with high brightness development |
| SEC | LTA400W2-L01 | BN07-00186A | SPZ | | AMLCD 40" 16:9 new Panel |
| SEC | LTM150XO-L01 | BN07-00197A | STH | | AMLCD 15" XO-L01 Pb free panel code |
| SEC | LTM150XO-L01 | BN07-00197B | STZ | | AMLCD 15" XO-L01 Pb free panel ZPD code |
| SEC | LTM170EU-L21 | BN07-00202A | STZ | | AMLCD EU-L21 ZPD new code derivation |
| SEC | LTA460W2-L03 | BN07-00187A | SPZ | | BEETOVEN 46"ZPD new Panel |
| CPT | CLAA150XG09 | BN07-00141A | PA | | CPT 15" Monitor new panel development |
| CPT | CLAA170EA02 | BN07-00148A | PB | | 17" CPT NEW development panel |
| CPT | CLAA170EA02 | BN07-00148B | PC | | 17" CPT ZPD panel code derivation |
| CPT | CLAA150XG09 | BN07-00141B | PTZ | | "CPT 15"" panel ZPD code derivation (GOYA-PJT)" |
| CPT | CLAA150XP01 | BN07-00173A | PTH | | CPT 15" PSWG code derivation |

| Maker | VENDOR P/N | PANEL_CODE | PANEL_ABB | STICKER_CODE | Remarks |
|----------|------------------|-------------|-----------|--------------|---|
| CPT | CLAA150XP01 | BN07-00173B | PTZ | | CPT 15" PSWG panel ZPD code |
| CPT | CLAA170EA07 | BN07-00174A | PTH | | "CPT 17"" PSWG panel code derivation? |
| CPT | CLAA170EA07 | BN07-00174B | PTZ | | CPT 17"" PSWG type new Panel code"" |
| CPT | CLAA170EA07 | BN07-00174B | PTZ | | CPT 17" PSWG type new Panel code |
| TOSHIBA | LTM15C419(A) | BN07-00002A | TA | | - |
| TOSHIBA | LTM15C423(B) | BN07-00006A | TB | | - |
| TOSHIBA | LTM18C161 | BN07-00008A | TC | | - |
| TOSHIBA | LTM15C443 | BN07-00031A | TD | | - |
| TOSHIBA | LTM15C458 | BN07-00043A | TE | | - |
| TOSHIBA | LTM15C458S | BN07-00077A | TF | | "TSB 15"" high brightness Panel" |
| TOSHIBA | LTM15C458 | BN07-00078A | TG | | Toshiba ZPD panel |
| TOSHIBA | LTM15C458S | BN07-00099A | TH | | TSB LTM15C458S (ZPD) |
| HANNSTAR | HSD150MX41A(A) | BN07-00020A | NA | | "TTL type" |
| HANNSTAR | HSD150MX12 | BN07-00030A | NB | | "TTL type" |
| HANNSTAR | HSD170ME13 | BN07-00180A | NTH | | Hannstar 17" TN new panel development |
| HANNSTAR | HSD170ME13 | BN07-00180B | NTZ | | Hannstar 17" TN new panel development ZPD code derivation |
| TORISAN | TM150XG-22L03(A) | BN07-00021A | RA | | - |
| TORISAN | TM150XG-26L06 | BN07-00042A | RB | | - |
| TORISAN | TM181SX-76N01 | BN07-00048A | RC | | - |
| TORISAN | TM150XG-26L06 | BN07-00059A | RD | | 15" XGA TN MODE(ZPD) |
| TORISAN | TM290WX-71N31 | BN07-00063A | RE | | "RS24NS (TORISAN 29"" NEW PANEL)" |
| TORISAN | TM396WX-71N31 | BN07-00064A | RF | | "RS24NS (TORISAN 40"" NEW PANEL)" |
| TORISAN | TM150XG-26L09 | BN07-00073A | RG | | "Panel for 15"" TV" |
| TORISAN | TM150XG-26L10 | BN07-00089A | RH | | "L10(change except D/IC) ZPD" |
| TORISAN | TM150XG-26L10 | BN07-00090A | RJ | | L10 NORMAL |
| TORISAN | TM190SX-70N01 | BN07-00098A | RK | | Torisan 19" Panel |
| TORISAN | TM181SX-76N01 | BN07-00106A | RL | | ZPD Panel code |
| TORISAN | TM190SX-70N01 | BN07-00107A | RM | | ZPD Panel code |
| TORISAN | TM290WX-71N31 | BN07-00115A | RN | | "Color Coordinates change panel for TORISAN 29"" TV" |
| TORISAN | TM396WX-71N31 | BN07-00116A | RP,Q | | "Color Coordinates change panel for TORISAN 40"" TV" |
| TORISAN | TM220WX-71N31 | BN07-00125A | RR | | "Development TORISAN 22"" TV PANEL (ZPD)" |
| TORISAN | TM220WX-71N31 | BN07-00127A | RS | | "Development TORISAN 22"" TV PANEL (HPD)" |
| TORISAN | TM396WX-71N32A | BN07-00150A | RT | | 120V inverter Exclusive panel |
| TORISAN | TM190SX-70N02 | BN07-00154A | RMH | | Torisan 6bit panel code Derivation |
| TORISAN | TM190SX-70N02 | BN07-00154B | RMZ | | Torisan 6bit panel code Derivation |
| SHARP | LQ181E1DG11(A) | BN07-10001C | PA | | - |
| SHARP | LQ150X1LW71 | BN07-00067A | PB | | SHARP 15" PVA PANEL |
| HITACHI | TX38D12VC0CAA(A) | BN07-00003A | HA | | - |
| HITACHI | TX43DVCOCAB | BN07-00060A | HB | | 17" SXGA PVA MODE |
| HITACHI | TX43D15VC0CAB | BN07-00101A | HC | | ZPD Panel |
| HITACHI | TX51D11VC0CAB | BN07-00122A | HD | | 20.1" NARROW |
| HITACHI | TX54D11VC0CAB | BN07-00123A | HE | | 21.3" NARROW |
| HITACHI | TX80D12VC0CAB | BN07-00169A | HIZ | | "Development new panel for Hitachi 32"" TV (ZPD)" |
| HITACHI | TX54D11VC0CAB | BN07-00123B | HIZ | | Hitachi 21.3"ZPD panel |
| IBM | ITSX94S | BN07-00017A | IA | | - |
| UNIPAC | UM170E0 | BN07-00028A | UA | | Loaded by cisdba |

14 Reference Information

| Maker | VENDOR P/N | PANEL_CODE | PANEL_ABB | STICKER_CODE | Remarks |
|-----------|-------------|-------------|-----------|--------------|--|
| HYUNDAI | HT15X13 | BN07-00035A | DA | | - |
| HYUNDAI | HT17E11-200 | BN07-00049A | DB | | TN MODE |
| HYUNDAI | HT17E11-300 | BN07-00093A | DC | | HT17E11-300 ZPD panel |
| HYUNDAI | HT17E11-400 | BN07-00094A | DD | | HT17E11-400 normal panel |
| HYUNDAI | HT17E11-400 | BN07-00095A | DE | | HT17E11-400 ZPD panel code |
| HYUNDAI | HT17E12 | BN07-00096A | DF | | HT17E12 (Narrow & slim Design) |
| HYUNDAI | HT17E12 | BN07-00105A | DG | | ZPD Panel code |
| HYUNDAI | HT15X15-D00 | BN07-00146A | DH | | "Development for Ares 15"" Hydis TV" |
| HYUNDAI | HT15X15-D01 | BN07-00146B | DJ | | "Derivation panel HPD for Ares 15"" Hydis TV " |
| HYUNDAI | HT17E13-100 | BN07-00167A | DTH | | "PINEHURST-2(IBM) PJT 17"" HYDIS PANEL Derivation" |
| HYUNDAI | HT17E13-100 | BN07-00167B | DTZ | | "PINEHURST-2(IBM) Hydis 17"" ZPD code Derivation" |
| ACER | L170E3 | BN07-00044A | AA | | TN(ADT) |
| ACER | M170EN05 | BN07-00076A | AB | | AU 17" Panel (Narrow & slim design) |
| ACER | M170EN05 | BN07-00102A | AC | | ZPD Panel code |
| ACER | M190EN02 | BN07-00170A | AMH | | "AU Monitor 19"" new panel development (P19-1S)" |
| ACER | M190EN02 | BN07-00170B | AMZ | | "AU 19"" ZPD code derivation (ZPD)" |
| ACER | M170EN06 | BN07-00171A | ATH | | "AU Monitor 17"" New panel development" |
| ACER | T260XW01 | BN07-00163A | AMZ | | "AU 26"" new panel developm |
| (NF26EO)" | | | | | |
| ACER | A201SN01 | BN07-00177A | ATZ | | "AU TV panel 20.1"" TN SVGA new panel development" |
| ACER | M170EN06 | BN07-00171B | ATZ | | "AU Monitor 17"" ZPD code Derivation |
| ACER | T315XW01 | BN07-00194A | AMZ | | AU 32" new |
| ACER | M170EG01 | BN07-00192A | ATH | | AU TN PSWG type new Panel code |
| ACER | M170EG01 | BN07-00192B | ATZ | | AU TN PSWG type NEW panel code derivation |
| CHIMEI | M170E3-L01 | BN07-00050A | CA | | TN PANEL |
| CHIMEI | M150X3-L01 | BN07-00051A | CB | | COMPATIBLE |
| CHIMEI | M170E4-L01 | BN07-00052A | CC | | MVA PANEL |
| CHIMEI | M150X2-L01 | BN07-00066A | CD | | CHIMEI 15" PVA PANEL |
| CHIMEI | M150X3-L01 | BN07-00079A | CE | | Chimei ZPD panel |
| CHIMEI | M170E3-L01 | BN07-00103A | CF | | ZPD Panel code |
| CHIMEI | M170E4-L01 | BN07-00104A | CG | | ZPD Panel code |
| CHIMEI | V296W1-L01 | BN07-00120A | CH | | MVA |
| CHIMEI | M170E6-L02 | BN07-00126A | CJ | | HIGHLAND 17" LOW PANEL |
| CHIMEI | M190E2-L01 | BN07-00131A | CK | | GH19AS,BS CHIMEI PANEL |
| CHIMEI | M150X4-L06 | BN07-00137A | CL | | 15" Narrow & Slim panel |
| CHIMEI | M170E6-L01 | BN07-00133A | CM | | "2003-03-11 vendor change" |
| CHIMEI | M170E6-L01 | BN07-00133B | CN | | "ZPD derivation panel" |
| CHIMEI | V201V1-T01 | BN07-00135A | CP | | "CHIMEI 20.1"" panel development" |
| CHIMEI | M170E6-L02 | BN07-00126B | CQ | | "HIGHLAND 17"" LOW PANEL ZPD derivation panel" |
| CHIMEI | M170E6-L05 | BN07-00152A | CR | | "CMO 17"" new panel development code" |
| CHIMEI | M170E6-L05 | BN07-00152B | CS | | "CMO 17"" ZPD panel code derivation" |
| CHIMEI | M150X4-L06 | BN07-00137B | CT | | Chimei 15" Narrow & Slim panel ZPD derivation |
| CHIMEI | M170E5-L05 | BN07-00165A | CTH | | CMO 17" new panel development code (GOYA2-PJT) |
| CHIMEI | M170E5-L05 | BN07-00165B | CTZ | | CMO 17" ZPD panel(GOYA2-PJT) |