



# LCD-TV

| Chassis | Model    |
|---------|----------|
| GTR23KE | LE23T51B |
| GTR27KE | LE27T51B |
| GTR32KE | LE32T51B |

## *SERVICE* Manual

### LCD TV



### Fashion Feature

- RF, DVI-D, PC(Analog), 2Scart, Component, Video, S-Video
- Brightness : 500cd/m<sup>2</sup>
- Contrast Ratio :  
23": 800:1, 27": 1000:1, 32": 800:1
- Response time : 16ms
- Dynamic contrast
- PIP (on PC only)

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## 14 Reference Information

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### 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.

**- 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.

**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).

**- BTSC**

Broadcast Television System Committee

The stereo broadcasting system that is used in most of the countries that have adopted the NTSC system, including the United States, Canada, Chile, Venezuela and Taiwan. It also refers to the organization that has been organized to promote its development and management.

**- EIAJ**

Electronic Industries Association of Japan.

**- RF Cable**

A round signal cable generally used for TV antennas.

**- Satellite Broadcasting**

Broadcasting service provided via satellite. Enables high picture quality and clear sound throughout the country regardless of the location of the viewer.

**- Sound Balance**

Balances the levels of the sound coming from each speaker in televisions with two speakers.

**- Cable TV**

Whereas the terrestrial broadcasting is delivered via frequency signals through the air, cable broadcasting is transmitted via a cable network. In order to view cable TV, one must purchase a cable receiver and hook it up to the cable network.

**- CATV**

"CATV" refers to the broadcasting service offered at hotels, schools and other buildings through their own broadcasting system, apart from VHF or UHF broadcasting by terrestrial broadcasters. The CATV programs may include movies, entertainment and educational programs. (Different from cable TV.)

CATV can be viewed only within the area in which the CATV service is offered.

**- S-Video**

Short for "Super Video." S-Video allows up to 800 lines of horizontal resolution, enabling high-quality video.

**- VHF/UHF**

VHF indicates TV channels 2 to 13, and UHF indicates channels 14 through 69.

**- Channel Fine Tuning**

This feature allows the viewer to fine-tune the TV channel to obtain the best viewing conditions. The Samsung LCD TV has both automatic and manual channel fine-tuning features to enable the viewer to adjust their desired settings.

**- External Device Input**

External device input refers to video input from such external video devices as VCRs, camcorders and DVD players, separate from a TV broadcast.

14-2 Pin Assignments

14-2-1 DVI-D

| <div>Sync<br/>Type</div> <div>Pin No.</div> | 24P DVI-D |    |                              |  |
|---------------------------------------------|-----------|----|------------------------------|--|
| 1                                           | Rx2-      | 13 | NC                           |  |
| 2                                           | Rx2+      | 14 | DDC Input power (+5V)        |  |
| 3                                           | GND       | 15 | IDENT-DVI                    |  |
| 4                                           | NC        | 16 | Output Signal (HDCP Control) |  |
| 5                                           | NC        | 17 | Rx0-                         |  |
| 6                                           | DDC - SCL | 18 | Rx0+                         |  |
| 7                                           | DDC - SDA | 19 | GND                          |  |
| 8                                           | NC        | 20 | NC                           |  |
| 9                                           | Rx1-      | 21 | NC                           |  |
| 10                                          | Rx1+      | 22 | GND                          |  |
| 11                                          | GND       | 23 | RxC+                         |  |
| 12                                          | NC        | 24 | RxC-                         |  |

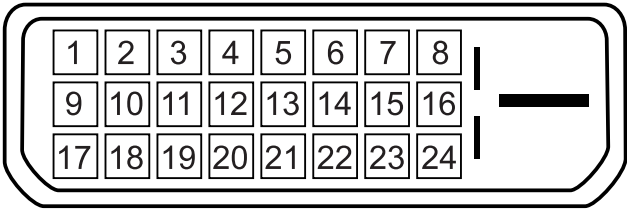


Figure 1.

## 14-2-2 Component

|           |         |
|-----------|---------|
| RCA Green | Y       |
|           | GND     |
| RCA Blue  | Pb (Cb) |
|           | GND     |
| RCA Red   | Pr (Cr) |
|           | GND     |
| RCA White | Audio L |
|           | GND     |
| RCA Red   | Audio R |
|           | GND     |

## 14-2-4 A/V

|            |         |
|------------|---------|
| RCA Yellow | CVBS    |
| RCA White  | Audio L |
|            | GND     |
| RCA Red    | Audio R |
|            | GND     |

## 14-2-3 S-Video

| Pin | Separate |
|-----|----------|
| 1   | GND      |
| 2   | Y        |
| 3   | C        |
| 4   | GND      |
| 5   | GND      |

## 14-2-5 D-SUB

| Pin | Separate             |
|-----|----------------------|
| 1   | Red                  |
| 2   | Green                |
| 3   | Blue                 |
| 4   | GND                  |
| 5   | GND                  |
| 6   | GND Red              |
| 7   | GND Green            |
| 8   | GND Blue             |
| 9   | DDC Input power(+5V) |
| 10  | IDENT PC             |
| 11  | GND                  |
| 12  | DDC Data(SDA)        |
| 13  | H SYNC               |
| 14  | V SYNC               |
| 15  | DDC Clock(SCL)       |

## 14-2-6 PC Display mode

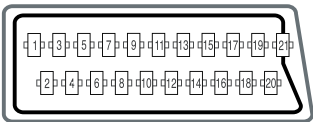
Both screen position and size will vary depending on the type of PC monitor and its resolution.

The resolutions in the table are recommended. (All resolutions between the supported limits are supported)

| Mode | Resolution | Horizontal Frequency (kHz) | Vertical Frequency (Hz) | Pixel Clock Frequency (MHz) | Sync Polarity (H/V) |
|------|------------|----------------------------|-------------------------|-----------------------------|---------------------|
| IBM  | 640 x 480  | 31.469                     | 59.940                  | 25.175                      | - / -               |
|      | 720 x 400  | 31.469                     | 70.087                  | 28.322                      | - / +               |
| VESA | 640 x 480  | 37.861                     | 72.809                  | 31.500                      | - / -               |
|      | 640 x 480  | 37.500                     | 75.000                  | 31.500                      | - / -               |
|      | 800 x 600  | 37.879                     | 60.317                  | 40.000                      | + / +               |
|      | 800 x 600  | 48.077                     | 72.188                  | 50.000                      | + / +               |
|      | 800 x 600  | 46.875                     | 75.000                  | 49.500                      | + / +               |
|      | 1024 x 768 | 48.364                     | 60.000                  | 65.000                      | - / -               |
|      | 1024 x 768 | 56.476                     | 70.069                  | 75.000                      | - / -               |
|      | 1024 x 768 | 60.023                     | 75.029                  | 78.750                      | + / +               |
|      | 1360 x 768 | 47.712                     | 60.015                  | 85.800                      | + / +               |

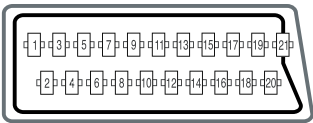
- The interlace mode is not supported.
- The set might operate abnormally if a non-standard video format is selected.
- DVI dose not support PC function.

14-2-7 Scart 1



| Pin | Signal                | Pin | Signal                               |
|-----|-----------------------|-----|--------------------------------------|
| 1   | Audio output R        | 12  | NC                                   |
| 2   | Audio input R         | 13  | Video GND (RGB red)                  |
| 3   | Audio output L        | 14  | GND                                  |
| 4   | Audio common GND      | 15  | RGB red input                        |
| 5   | Video GND (RGB blue)  | 16  | Fast Blanking signal (RGB switching) |
| 6   | Audio input L         | 17  | Video output GND                     |
| 7   | RGB blue input        | 18  | Video input GND                      |
| 8   | Switching voltage     | 19  | Video output (CVBS out)              |
| 9   | Video GND (RGB green) | 20  | Video input (CVBS in)                |
| 10  | NC                    | 21  | Common GND                           |
| 11  | RGB green input       |     |                                      |

14-2-8 Scart 2



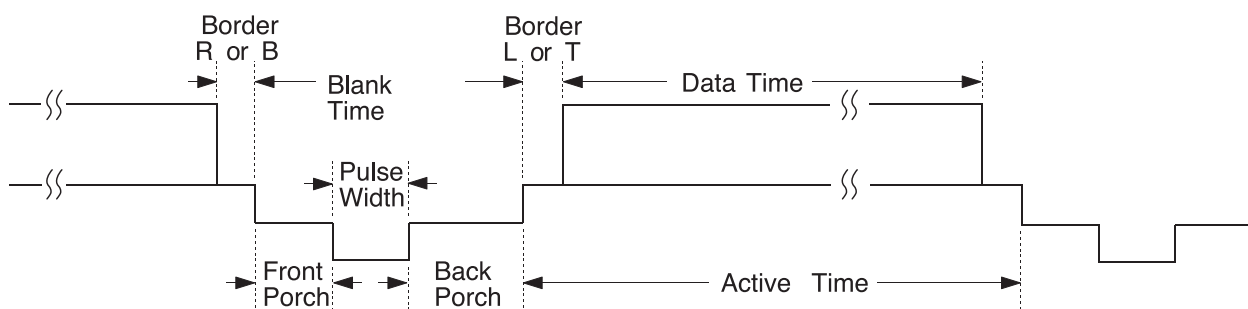
| Pin | Signal                | Pin | Signal                  |
|-----|-----------------------|-----|-------------------------|
| 1   | Audio output R        | 12  | NC                      |
| 2   | Audio input R         | 13  | Video GND (RGB red)     |
| 3   | Audio output L        | 14  | GND                     |
| 4   | Audio common GND      | 15  | RGB red input           |
| 5   | Video GND (RGB blue)  | 16  | NC                      |
| 6   | Audio input L         | 17  | Video output GND        |
| 7   | RGB blue input        | 18  | Video input GND         |
| 8   | Switching voltage     | 19  | Video output (CVBS out) |
| 9   | Video GND (RGB green) | 20  | Video input (CVBS in)   |
| 10  | NC                    | 21  | Common GND              |
| 11  | RGB green input       |     |                         |

## 14-3 Timing Chart

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

### 14-3-1 LCD Panel Mode1 mode

|                  |                |
|------------------|----------------|
| Timing No.       | LTA400W2       |
| Originator       | VESA           |
| Mode Name        | 1366/60Hz      |
| Resolution (HxV) | 1366x768       |
| HORIZONTAL       |                |
| Frequency        | 47.712kHz      |
| Total time       | 20.959 $\mu$ s |
| Active time      | 15.906 $\mu$ s |
| Blank time       | 5.053 $\mu$ s  |
| Border(L / R)    | 0.000 $\mu$ s  |
| Data time        | 15.906 $\mu$ s |
| Front porch      | 0.749 $\mu$ s  |
| Sync. width      | 1.702 $\mu$ s  |
| Back porch       | 2.994 $\mu$ s  |
| Sync. polarity   | Positive       |
| VERTICAL         |                |
| Frequency        | 60.015Hz       |
| Total time       | 16.662 ms      |
| Active time      | 16.097 ms      |
| Blank time       | 0.566 ms       |
| Border(T / B)    | 0.000 ms       |
| Data time        | 16.097 ms      |
| Front porch      | 0.063 ms       |
| Sync. width      | 0.105 ms       |
| Back porch       | 0.377 ms       |
| Sync polarity    | Positive       |
| Dot Clock        | 85.500MHz      |
| Sync. Type       | Separate       |
| Scan Type        | N/I            |



**14-3-2 Supported Modes (1)**

|                  |           |           |           |           |           |
|------------------|-----------|-----------|-----------|-----------|-----------|
| Timing No.       | 2         | 3         | 11        | 17        | 32        |
| Originator       | IBM       | IBM       | VESA      | VESA      | MAC       |
| Mode Name        | VGA2      | VGA3      | 640/72Hz  | 640/75Hz  | 640/67Hz  |
| Resolution (HxV) | 720x400   | 640x480   | 640x480   | 640x480   | 640x480   |
| HORIZONTAL       |           |           |           |           |           |
| Frequency        | 31.469kHz | 31.469kHz | 37.861kHz | 37.500kHz | 35.000kHz |
| Total time       | 31.777μs  | 31.778μs  | 26.413μs  | 26.667μs  | 28.571μs  |
| Active time      | 26.058μs  | 26.058μs  | 20.825μs  | 20.317μs  | 21.164μs  |
| Blank time       | 5.720μs   | 5.720μs   | 5.588μs   | 6.350μs   | 7.407μs   |
| Border(L / R)    | 0.318μs   | 0.318μs   | 0.254μs   | 0.000μs   | 0.000μs   |
| Data time        | 25.422μs  | 25.422μs  | 20.317μs  | 20.317μs  | 21.164μs  |
| Front porch      | 0.318μs   | 0.318μs   | 0.508μs   | 0.508μs   | 2.116μs   |
| Sync. width      | 3.813μs   | 3.813μs   | 1.270μs   | 2.032μs   | 2.116μs   |
| Back porch       | 1.589μs   | 1.589μs   | 3.810μs   | 3.810μs   | 3.175μs   |
| Sync. polarity   | Negative  | Negative  | Negative  | Negative  | Negative  |
| VERTICAL         |           |           |           |           |           |
| Frequency        | 70.087Hz  | 59.940Hz  | 72.809Hz  | 75.000Hz  | 66.667Hz  |
| Total time       | 14.268ms  | 16.683ms  | 13.735ms  | 13.333ms  | 15.000ms  |
| Active time      | 13.155ms  | 15.761ms  | 13.100ms  | 12.800ms  | 13.714ms  |
| Blank time       | 1.113ms   | 0.922ms   | 0.635ms   | 0.533ms   | 1.286ms   |
| Border(T / B)    | 0.222ms   | 0.254ms   | 0.211ms   | 0.000ms   | 0.000ms   |
| Data time        | 12.711ms  | 15.253ms  | 12.678ms  | 12.800ms  | 13.714ms  |
| Front porch      | 0.191ms   | 0.064ms   | 0.026ms   | 0.027ms   | 0.086ms   |
| Sync. width      | 0.064ms   | 0.064ms   | 0.079ms   | 0.080ms   | 0.086ms   |
| Back porch       | 0.858ms   | 0.794ms   | 0.528ms   | 0.427ms   | 1.114ms   |
| Sync polarity    | Positive  | Negative  | Negative  | Negative  | Negative  |
| Dot Clock        | 28.322MHz | 25.175MHz | 31.500MHz | 31.500MHz | 30.240MHz |
| Sync. Type       | Separate  | Separate  | Separate  | Separate  | Separate  |
| Scan Type        | N/I       | N/I       | N/I       | N/I       | N/I       |

**14-3-3 Supported Modes (2)**

|                  |                |                |                |
|------------------|----------------|----------------|----------------|
| Timing No.       | 13             | 14             | 18             |
| Originator       | VESA           | VESA           | VESA           |
| Mode Name        | 800/60Hz       | 800/72Hz       | 800/75Hz       |
| Resolution (HxV) | 800x600        | 800x600        | 800x600        |
| HORIZONTAL       |                |                |                |
| Frequency        | 37.879kHz      | 48.077kHz      | 46.875kHz      |
| Total time       | 26.400 $\mu$ s | 20.800 $\mu$ s | 21.333 $\mu$ s |
| Active time      | 20.000 $\mu$ s | 16.000 $\mu$ s | 16.162 $\mu$ s |
| Blank time       | 6.400 $\mu$ s  | 4.800 $\mu$ s  | 5.171 $\mu$ s  |
| Border(L / R)    | 0.000 $\mu$ s  | 0.000 $\mu$ s  | 0.000 $\mu$ s  |
| Data time        | 20.000 $\mu$ s | 16.000 $\mu$ s | 16.162 $\mu$ s |
| Front porch      | 1.000 $\mu$ s  | 1.120 $\mu$ s  | 0.323 $\mu$ s  |
| Sync. width      | 3.200 $\mu$ s  | 2.400 $\mu$ s  | 1.616 $\mu$ s  |
| Back porch       | 2.200 $\mu$ s  | 1.280 $\mu$ s  | 3.232 $\mu$ s  |
| Sync. polarity   | Positive       | Positive       | Positive       |
| VERTICAL         |                |                |                |
| Frequency        | 60.317Hz       | 72.188Hz       | 75.000Hz       |
| Total time       | 16.579ms       | 13.853ms       | 13.333ms       |
| Active time      | 15.840ms       | 12.480ms       | 12.800ms       |
| Blank time       | 0.739ms        | 1.373ms        | 0.533ms        |
| Border(T / B)    | 0.000ms        | 0.000ms        | 0.000ms        |
| Data time        | 15.840ms       | 12.480ms       | 12.800ms       |
| Front porch      | 0.026ms        | 0.770ms        | 0.021ms        |
| Sync. width      | 0.106ms        | 0.125ms        | 0.064ms        |
| Back porch       | 0.607ms        | 0.478ms        | 0.448ms        |
| Sync polarity    | Positive       | Positive       | Positive       |
| Dot Clock        | 40.000MHz      | 50.000MHz      | 49.500MHz      |
| Sync. Type       | Separate       | Separate       | Separate       |
| Scan Type        | N/I            | N/I            | N/I            |

**14-3-4 Supported Modes (3)**

|                                                                                                                                                               |                                                                                                                                                                  |                                                                                                                                                                  |                                                                                                                                                                  |                                                                                                                                                                  |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Timing No.<br>Originator<br>Mode Name<br>Resolution (HxV)                                                                                                     | 15<br>VESA<br>1024/60Hz<br>1024x768                                                                                                                              | 16<br>VESA<br>1024/70Hz<br>1024x768                                                                                                                              | 19<br>VESA<br>1024/75Hz<br>1024x768                                                                                                                              | VESA<br>1360/60Hz<br>1360x768                                                                                                                                    |
| HORIZONTAL<br>Frequency<br>Total time<br>Activetime<br>Blank time<br>Border(L / R)<br>Data time<br>Front porch<br>Sync. width<br>Back porch<br>Sync. polarity | 48.363kHz<br>20.677 $\mu$ s<br>15.754 $\mu$ s<br>4.923 $\mu$ s<br>0.000 $\mu$ s<br>15.754 $\mu$ s<br>0.369 $\mu$ s<br>2.092 $\mu$ s<br>2.462 $\mu$ s<br>Negative | 56.476kHz<br>17.707 $\mu$ s<br>13.653 $\mu$ s<br>4.053 $\mu$ s<br>0.000 $\mu$ s<br>13.653 $\mu$ s<br>0.320 $\mu$ s<br>1.813 $\mu$ s<br>1.920 $\mu$ s<br>Negative | 60.023kHz<br>16.660 $\mu$ s<br>13.003 $\mu$ s<br>3.777 $\mu$ s<br>0.000 $\mu$ s<br>13.003 $\mu$ s<br>0.323 $\mu$ s<br>1.219 $\mu$ s<br>2.235 $\mu$ s<br>Positive | 47.712kHz<br>20.959 $\mu$ s<br>15.906 $\mu$ s<br>5.053 $\mu$ s<br>0.000 $\mu$ s<br>15.906 $\mu$ s<br>0.749 $\mu$ s<br>1.702 $\mu$ s<br>2.994 $\mu$ s<br>Positive |
| VERTICAL<br>Frequency<br>Total time<br>Active time<br>Blank time<br>Border(T / B)<br>Data time<br>Front porch<br>Sync. width<br>Back porch<br>Sync polarity   | 60.004Hz<br>16.666ms<br>15.880ms<br>0.786ms<br>0.000ms<br>15.880ms<br>0.062ms<br>0.124ms<br>0.600ms<br>Negative                                                  | 70.069Hz<br>14.272ms<br>13.599ms<br>0.672ms<br>0.000ms<br>13.599ms<br>0.053ms<br>0.106ms<br>0.513ms<br>Negative                                                  | 75.029Hz<br>13.328ms<br>12.795ms<br>0.533ms<br>0.000ms<br>12.795ms<br>0.017ms<br>0.050ms<br>0.466ms<br>Positive                                                  | 60.015Hz<br>16.662ms<br>16.097ms<br>0.566ms<br>0.000ms<br>16.097ms<br>0.063ms<br>0.105ms<br>0.377ms<br>Positive                                                  |
| Dot Clock                                                                                                                                                     | 65.000MHz                                                                                                                                                        | 75.000MHz                                                                                                                                                        | 78.750MHz                                                                                                                                                        | 85.500MHz                                                                                                                                                        |
| Sync. Type                                                                                                                                                    | Separate                                                                                                                                                         | Separate                                                                                                                                                         | Separate                                                                                                                                                         | Separate                                                                                                                                                         |
| Scan Type                                                                                                                                                     | N/I                                                                                                                                                              | N/I                                                                                                                                                              | N/I                                                                                                                                                              | N/I                                                                                                                                                              |

## 14-4 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 derivation                     |
| 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

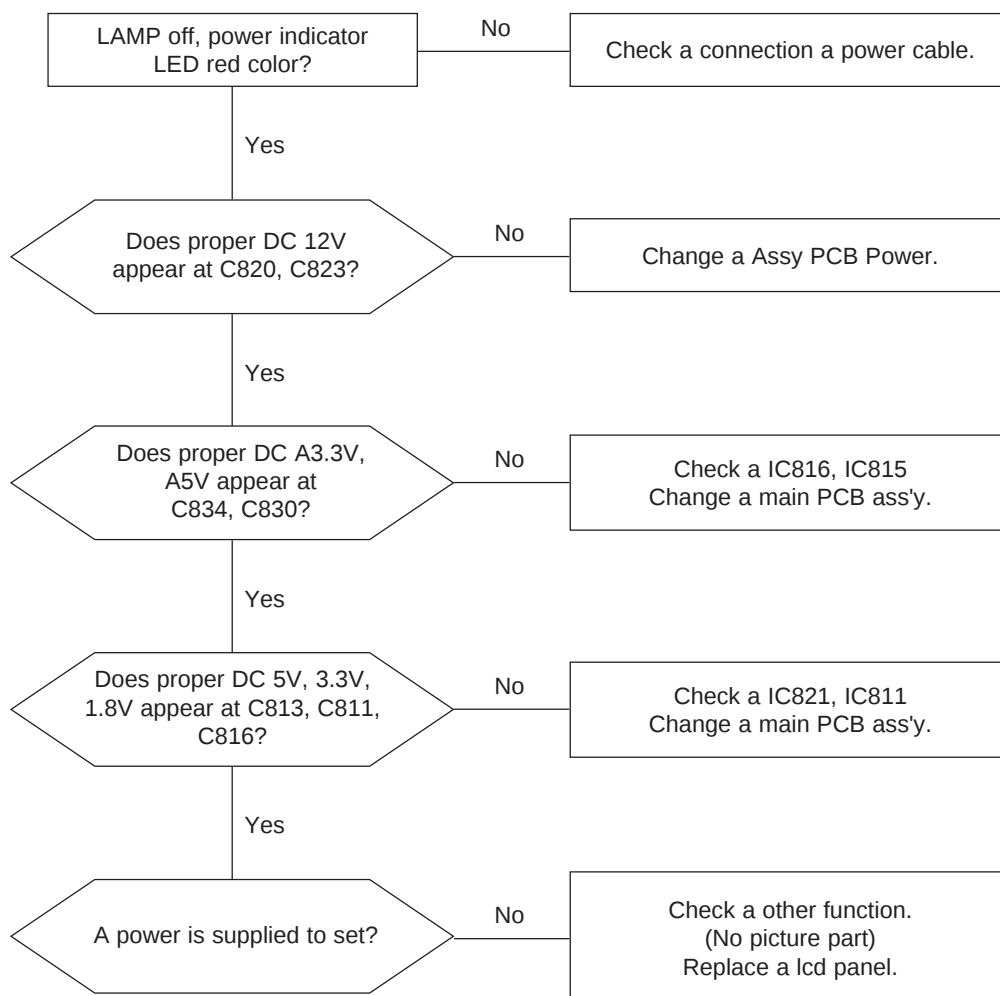
| Maker     | VENDOR P/N  | PANEL_CODE  | PANEL_ABB | STICKER_CODE | Remarks                                            |
|-----------|-------------|-------------|-----------|--------------|----------------------------------------------------|
| HYUNDAI   | HT15X13     | BN07-00035A | DA        |              | -                                                  |
| 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(BM) PJT 17"" HYDIS PANEL Derivation"  |
| HYUNDAI   | HT17E13-100 | BN07-00167B | DTZ       |              | "PINEHURST-2(BM) 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        |              | CHIME 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)                       |

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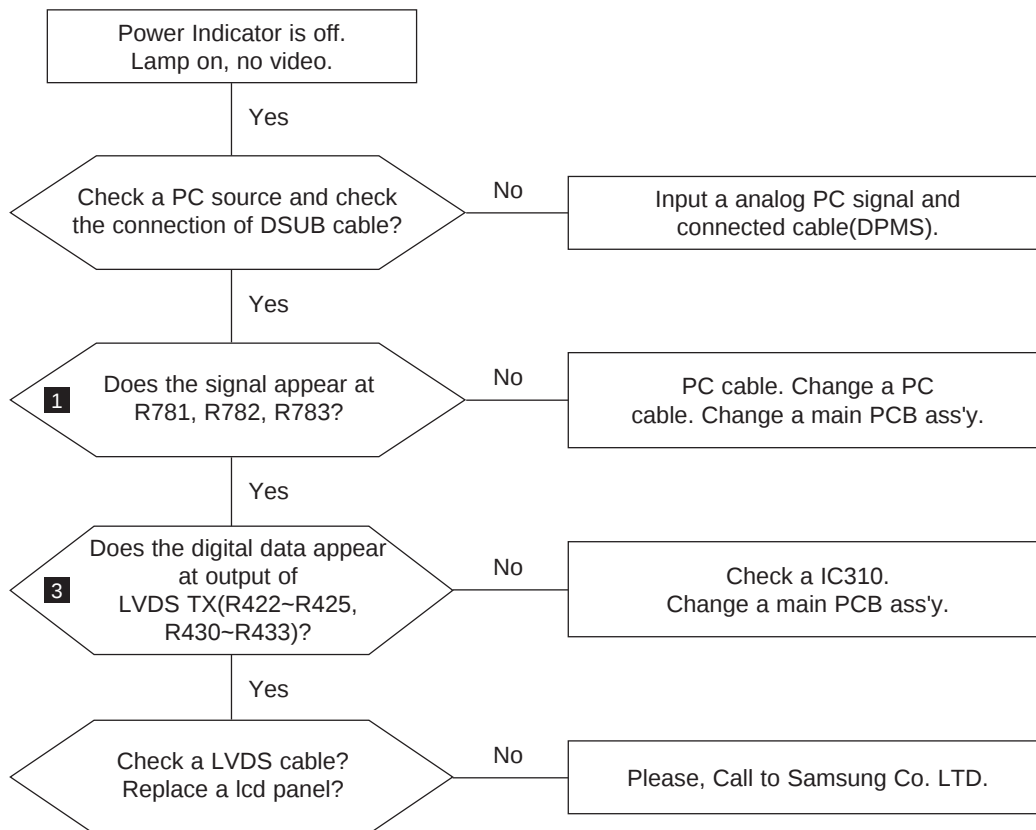
## 4 Troubleshooting

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### 4-1 No Power

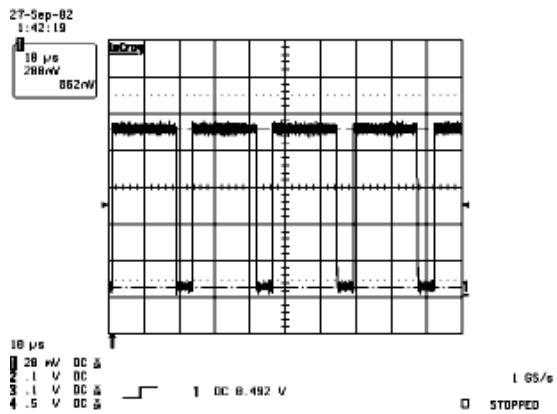


## 4-2 No Video (Analog PC Signal)

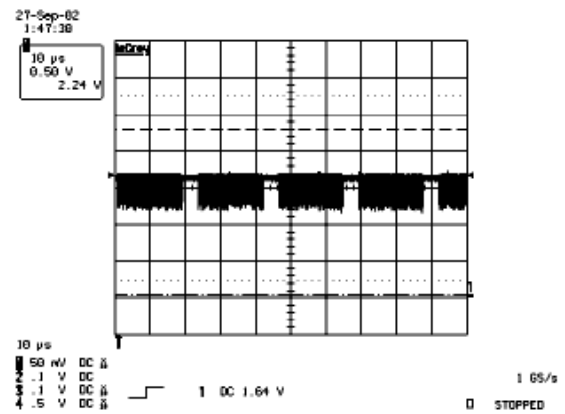


## WAVEFORMS

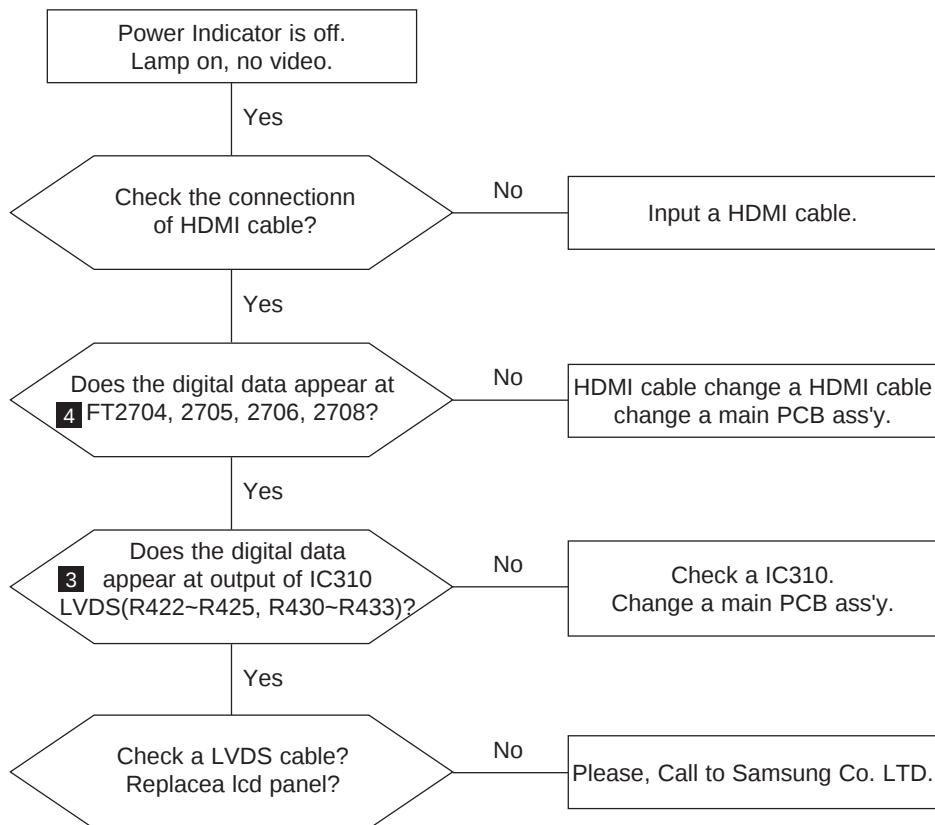
### 1 R,G,B Output Signal



### 3 Digital Output Data of IC310

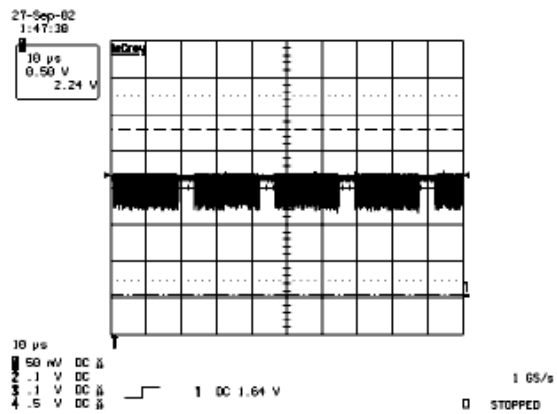


## 4-3 No Video (DVI-Digital Signal)

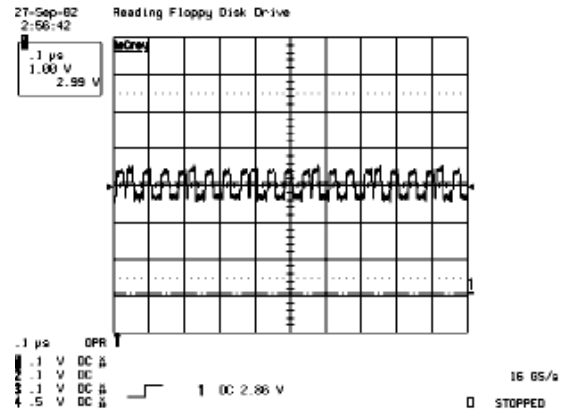


## WAVEFORMS

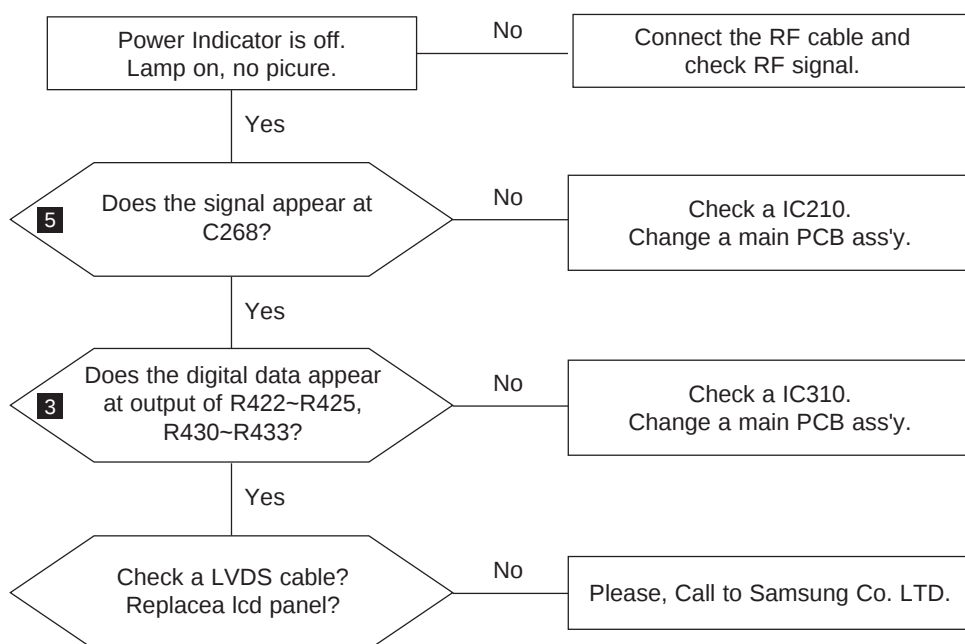
### 3 Digital Output Data of IC310



### 4 Signal of DVI(Data)

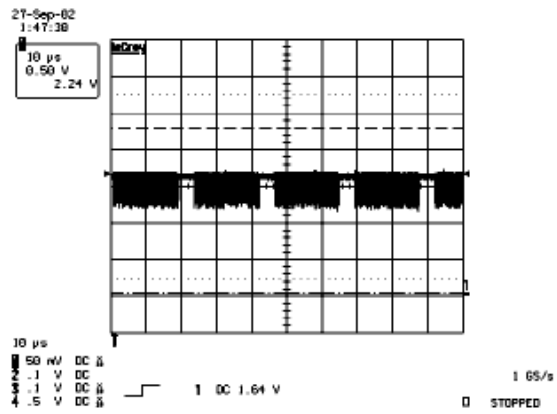


## 4-4 No Picture (Tuner\_CVBS)

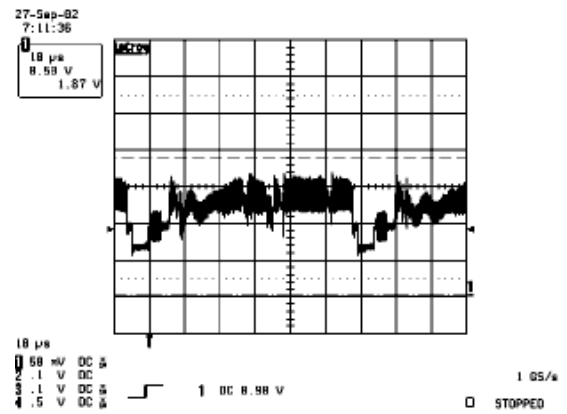


## WAVEFORMS

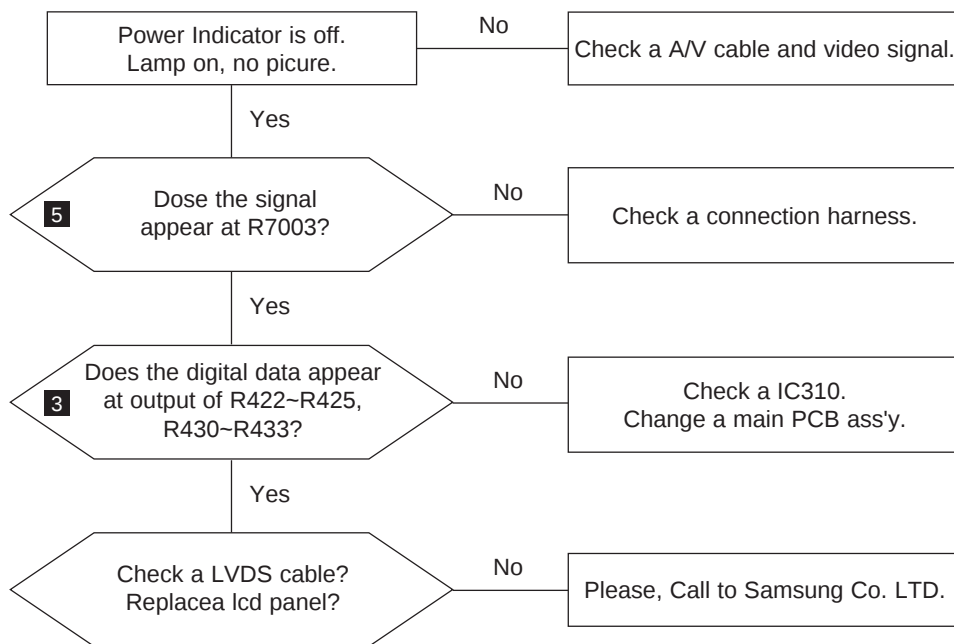
### 3 Digital Output Data of IC310



### 5 Tuner\_CVBS Output Signal

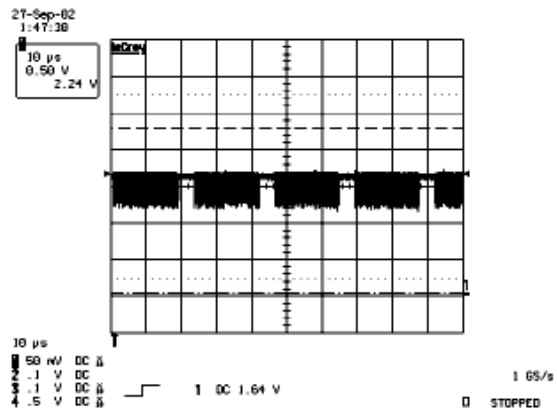


## 4-5 No Picture (Video\_CVBS)

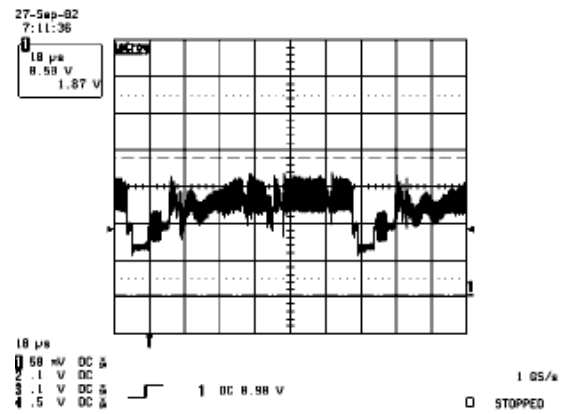


## WAVEFORMS

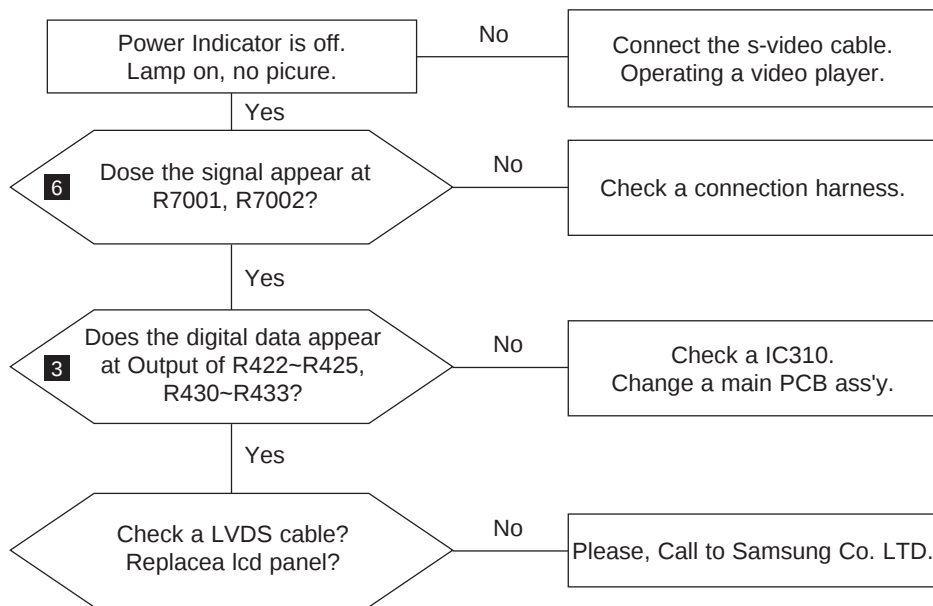
### 3 Digital Output Data of IC310



### 5 Tuner\_CVBS Output Signal

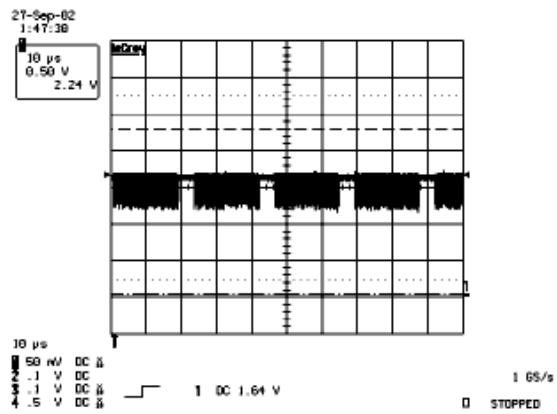


## 4-6 No Picture (S-VIDEO\_Y,C)

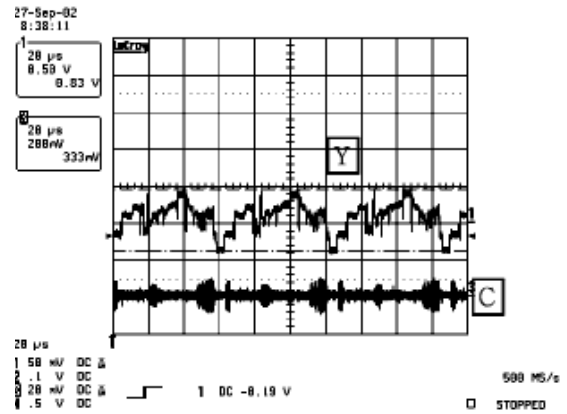


## WAVEFORMS

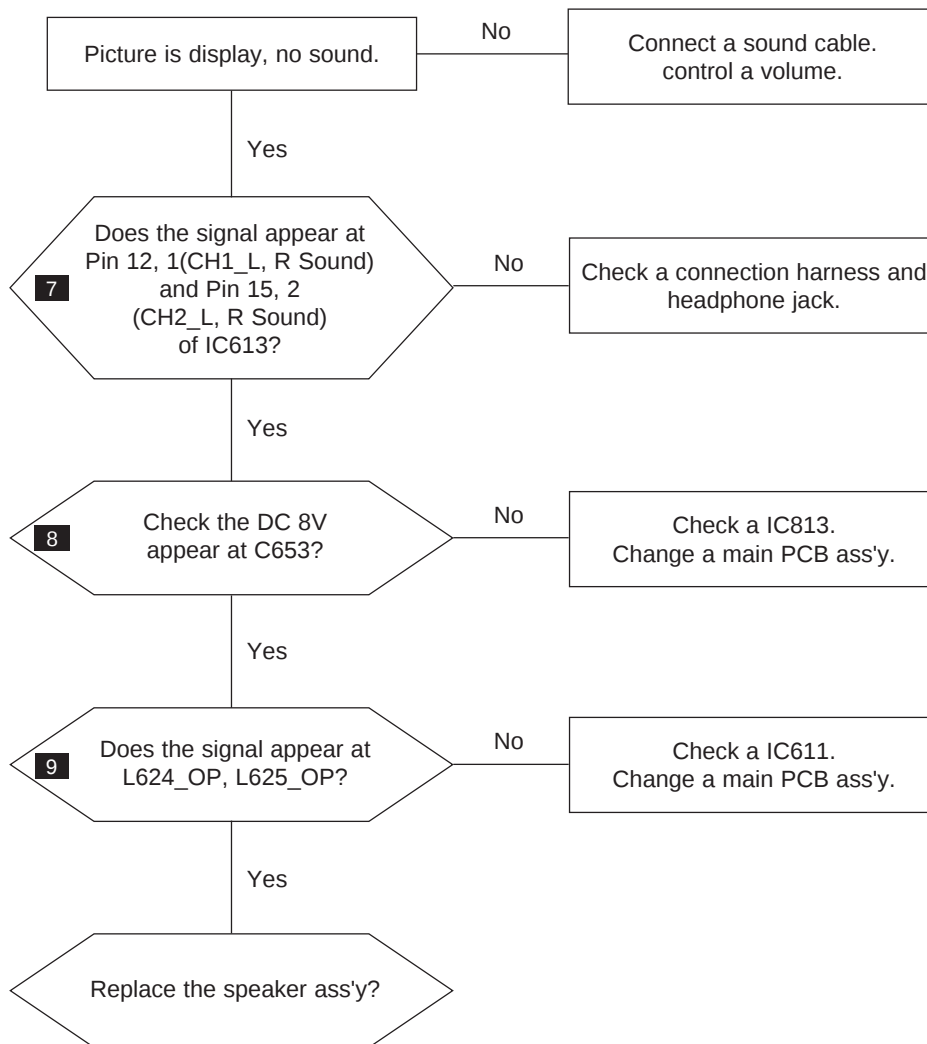
### 3 Digital Output Data of IC310



### 6 Analog Signal(Y,C)

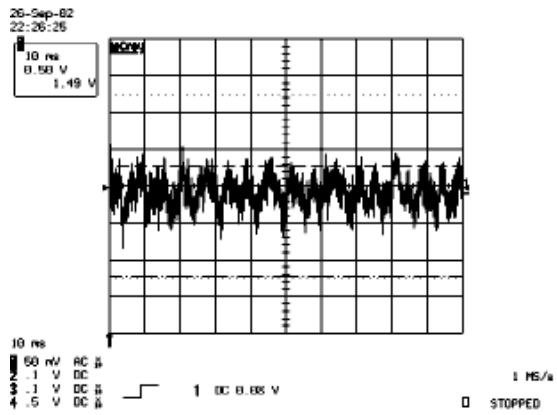


## 4-7 No Sound

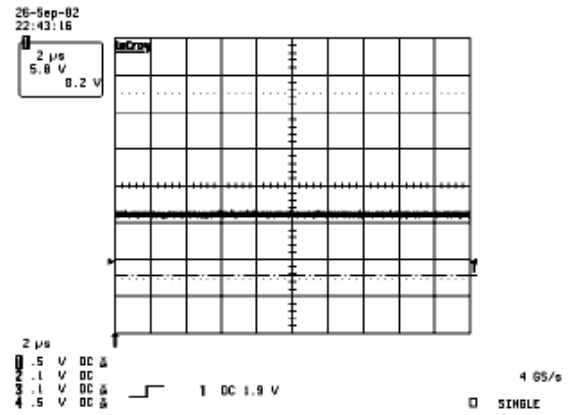


## WAVEFORMS

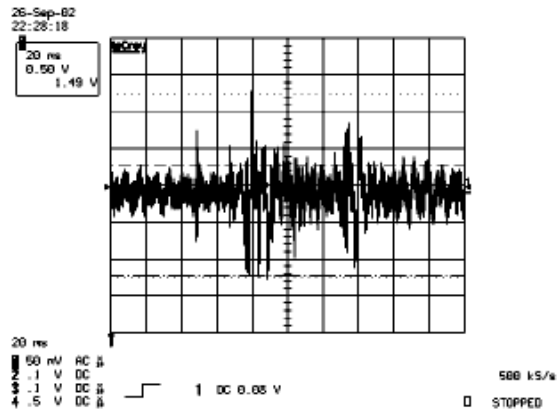
### 7 The Signal are Inputed to IC610



### 8 DC +8V



### 9 Output WaveForm



---

## 3 Alignments and Adjustments

---

### 3-1 General Alignment Instruction

---

1. Usually, a color LCD-TV needs only slight touch-up adjustment upon installation.  
Check the basic characteristics such as height, horizontal and vertical sync.
2. Use the specified test equipment or its equivalent.
3. Correct impedance matching is essential.
4. Avoid overload. Excessive signal from a sweep generator might overload the front-end of the TV. When inserting signal markers, do not allow the marker generator to distort test result.
5. Connect the TV only to an AC power source with voltage and frequency as specified on the backcover nameplate.
6. Do not attempt to connect or disconnect any wire while the TV is turned on. Make sure that the power cord is disconnected before replacing any parts.
7. To protect against shock hazard, use an isolation transform.

## 3-2 Factory Mode Adjustments

### 3-2-1 Entering Factory Mode

To enter 'Service Mode' Press the remote -control keys in this sequence :

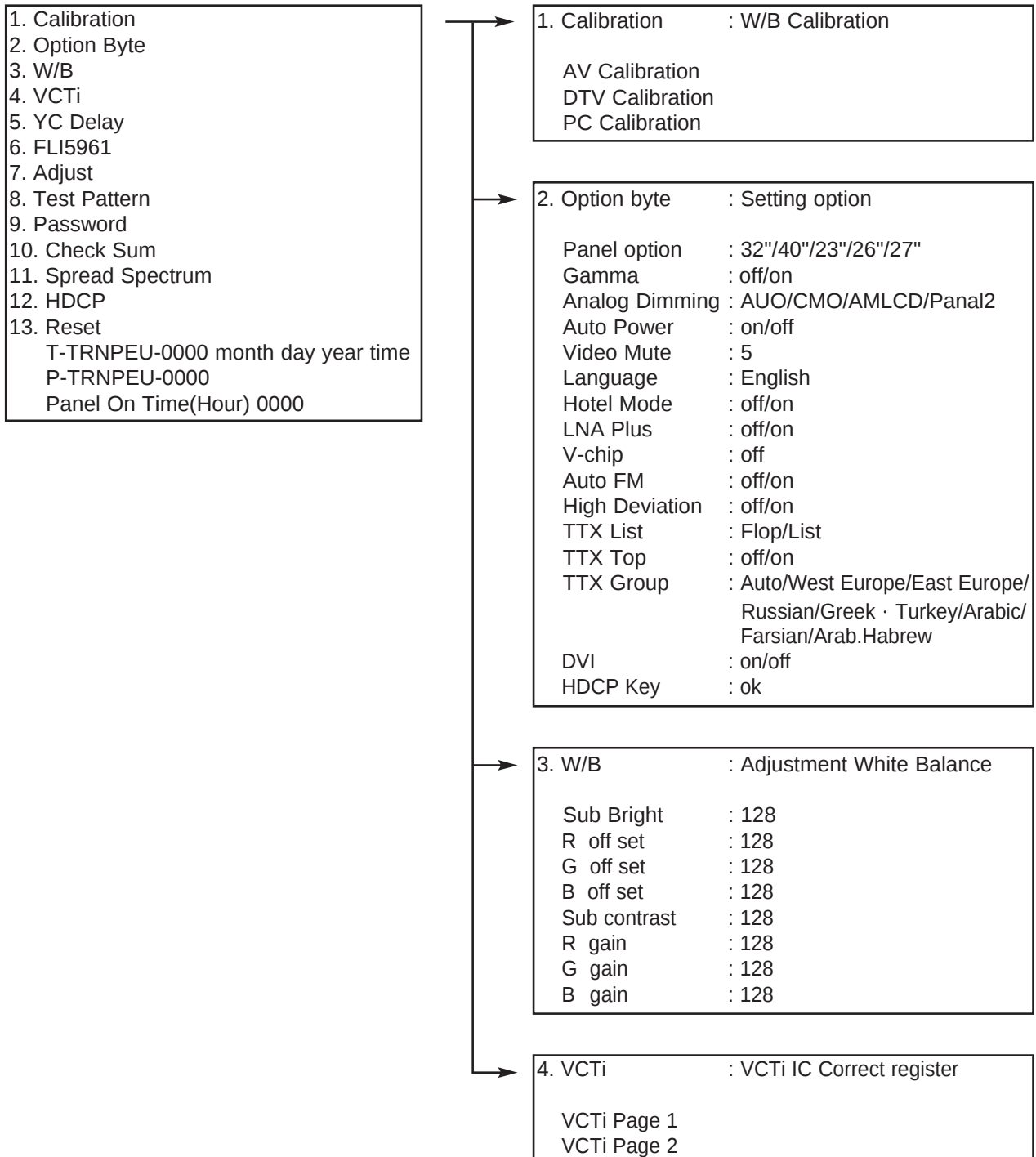
- If you do not have Factory remote - control



### 3-2-2 Factory Mode Tree

- If you have Factory remote - control

**[INFO] -> [FACTORY]**



1. Calibration
  2. Option Byte
  3. W/B
  4. VCTi
  5. YC Delay
  6. FLI5961
  7. Adjust
  8. Test Pattern
  9. Chip Debugger
  10. Check Sum
  11. Spread Spectrum
  12. HDCP
  13. Reset
- T-TRNPEU-0000 month day year time  
P-TRNPEU-0000  
Panel On Time(Hour) 0000

## 5. YC Delay

RF PAL-B/G : 5  
 RF PAL-D/K : 6  
 RF PAL-I : 5  
 RF PAL-L/L' : 5  
 RF SECAM-B/G : 2  
 RF SECAM-D/K : 0  
 RF SECAM-I : 2  
 RF SECAM-L/L' : 0  
 RF NTSC 3.58 : 5  
 RF NTSC 4.43 : 5  
 AV PAL : 5  
 AV SECAM : 2  
 AV NTSC 3.58 : 5  
 AV NTSC 4.43 : 5  
 AV PAL 60 : 5

## 6. FLI5961 : Scaler IC Correct register

Component Calibration: Result DTV Calibration  
 PC Calibration : Result PC Calibration  
 ACC/ACM  
 TNR  
 Picture Enhance

## 7. Adjust

User Control Initial  
 LNA PLUS  
 Hotel Option

8. Test Pattern : VCTi IC'S own test patterns.  
(Total 7 patterns)

## 9. Password : Use IC Register Correction.

## 10. Check Sum : 0000

## 11. Spread Spectrum

Spread Spectrum : on/off  
 Spread Spectrum Range : 2  
 Step : 63

## 12. HDCP : 0000

## 13. Reset

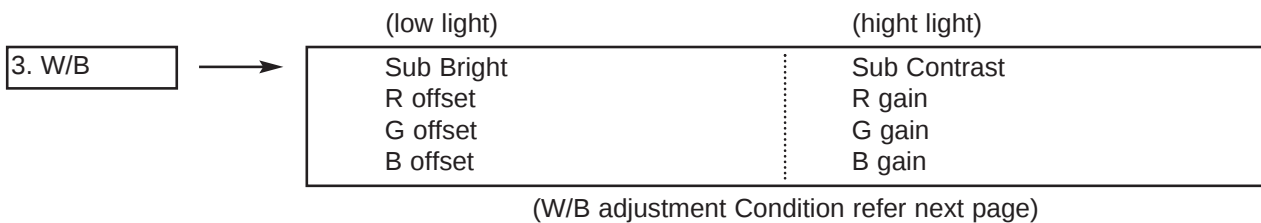
## 3-3 White Balance - Calibration

---

### 3-3-1 White Balance -Calibration



### 3-3-2 White Balance - Adjustment



### 3-3-3 Conditions for Measurement

1. On the basis of toshiba ABL pattern : High Light level (57 IRE)
  - INPUT SIGNAL GENERATOR : MSPG-925LTH
    - \* Mode NO 1 : 744X484@60 Hz
    - NO 6 : 1280X720@60 Hz (Component 720P)
    - NO 21 : 1024X768@60 Hz
    - \* Pattern NO 15 : Color bar
    - NO 16 : Toshiba ABL Pattern
    - NO 17 : 16 gray
2. Optical measuring device : CA210 (FL)  
Please use the MSPG-925 LTH generator for model LNR2355W,LNR2755W,LNR3255W.

### 3-3-4 Method of Adjustment

1. Adjust the basic level of Component and PC input signals.
  - a) Set the input to the mode in which the adjustment will be made (Component → PC ).
    - \* Input signal - Component Mode : Model #6 (1280\*720 Mode), Pattern #15 (picture 4-1)
    - PC Mode : Model #21 (1024\*768 Mode), Pattern #17 (Picture 4-2)
  - b) Enter factory Calibration (DTV, PC Mode Only).
    - \* DTV Calibration → Source change for PC → PC Calibration

Picture 4-1 Color bar

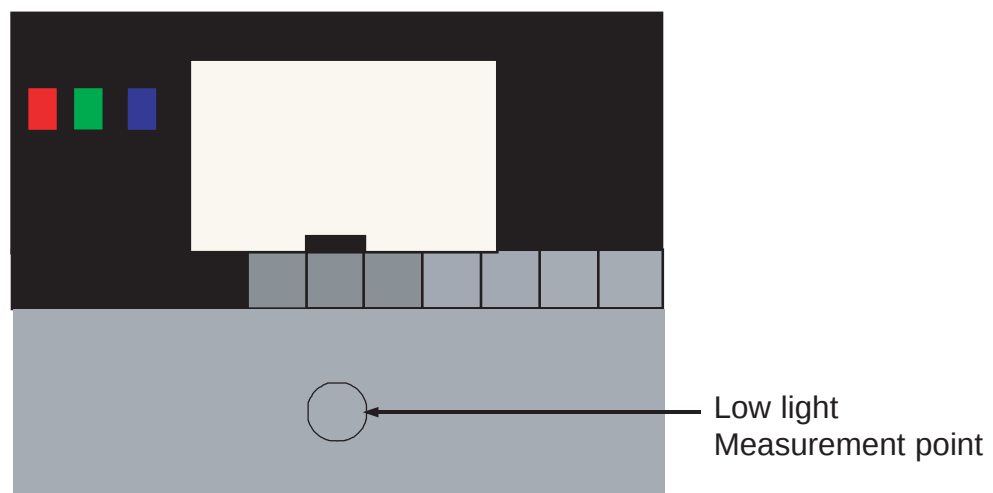


Picture 4-2 16gray



2. Adjust the white balance of AV, Component and DVI Modes.
  - a) Set the input to the mode in which the adjustment will be made (AV → Component → DVI).
    - \* Input signal - VIDEO Mode : Model #1 (744\*484 Mode), Pattern #16
    - Component, DVI Mode : Model #6 (1280\*720 Mode), Pattern #16
  - b) Enter factory W/B.
  - c) Adjust the low light.
    - Adjust sub - Brightness to set the 'Y' value.
    - Adjust red offset ('x') and blue offset ('y') to the color coordinates. ( x : 263, y : 267, Y : 1.3 ft)
    - \* Do not adjust green offset data.

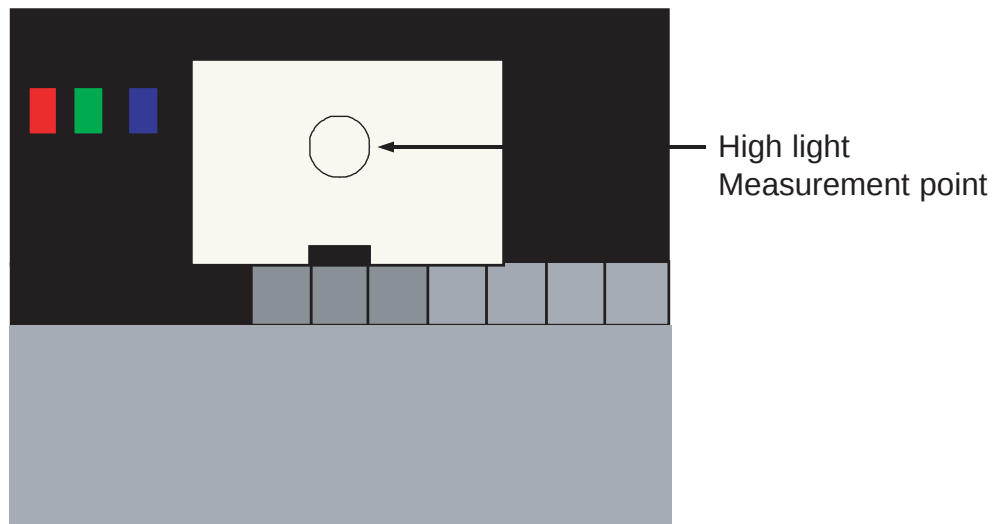
Picture 4-3 Toshiba ABL Pattern



### 3 Alignments and Adjustments

- d) Adjust the high light. (Refer to table 1, 2 in adjustment position by mode)
- Adjust red gain ('x') and blue gain ('y') to the color coordinates. ( x : 263, y : 267 )
  - \* Do not adjust the green gain and sub-contrast (Y) data.

Picture 4-4 Toshiba ABL Pattern

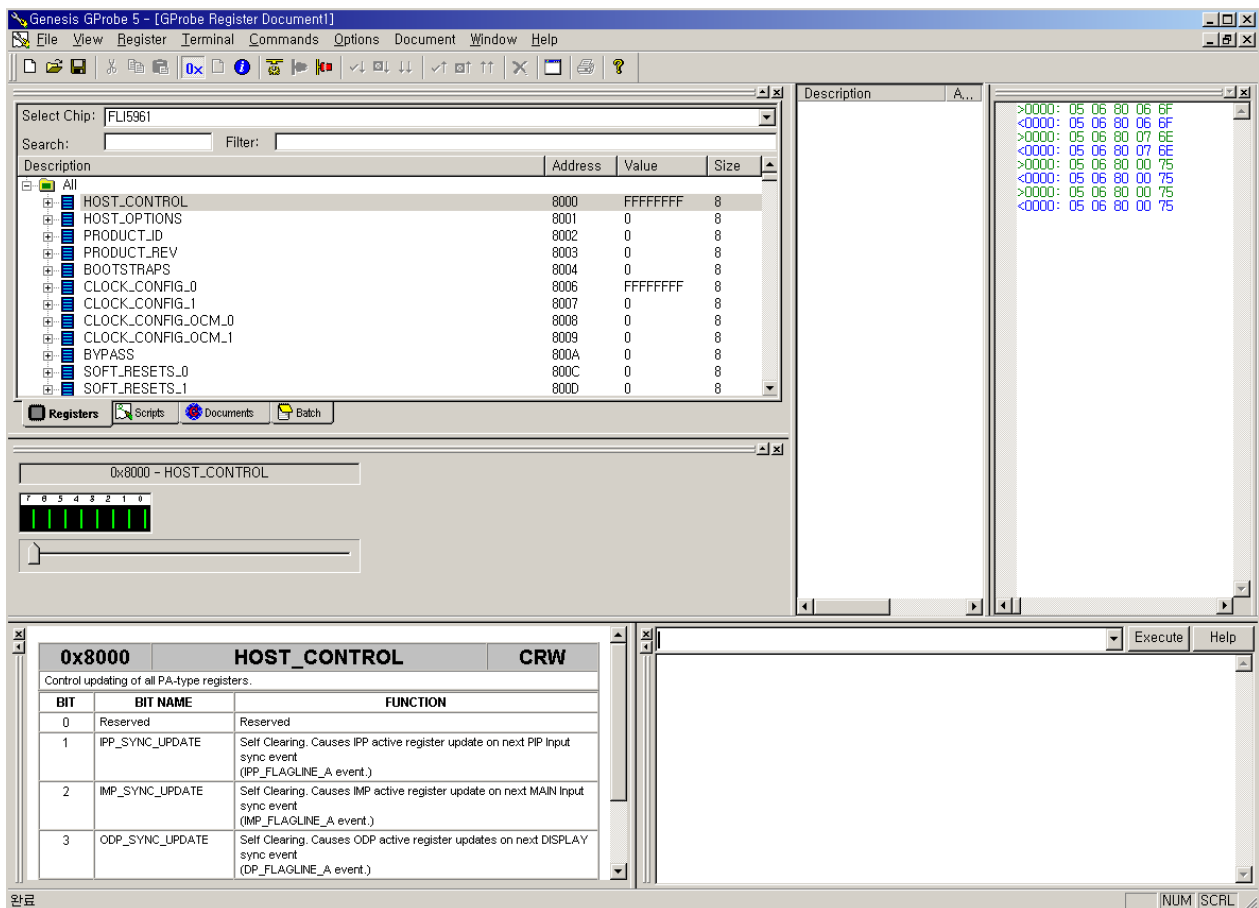


## 3-4 TORINO Micom Update

### 3-4-1 Installing G-Probe

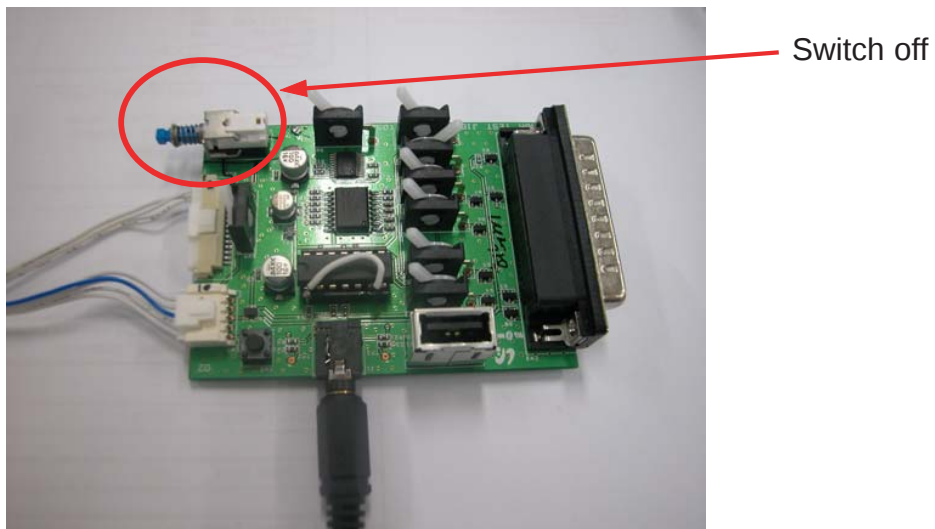
1. Uncompress GProbe5.1.0.18.zip.
2. Run GProbe5.1.0.18.exe.
3. The files are created in the C:\Program Files\Genesis Microchip\GProbe 5 folder.
4. Copy the ispoak\_spi.hex file to the C:\Program Files\Genesis Microchip\GProbe 5 folder.
5. Uncompress FLI5961-AC\_GProbe\_S0006-CSC-33B.zip.
6. Three files are extracted (FLI5961.Chip.GProbe, FLI5961.chm, outputlog.txt).
7. Copy all 3 files to the C:\Program Files\Genesis Microchip\GProbe 5\ChipDB folder.
8. Run GProbe.exe in the C:\Program Files\Genesis Microchip\GProbe 5 folder. The G-Probe program is created.

<The screen that appears when G-Probe is successfully installed>

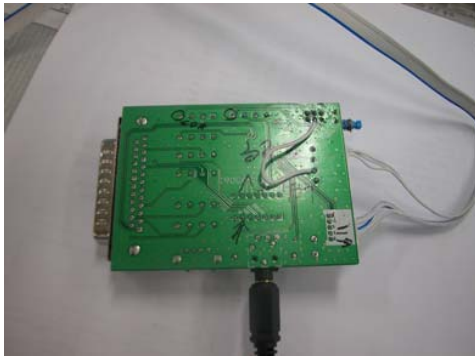


### 3 Alignments and Adjustments

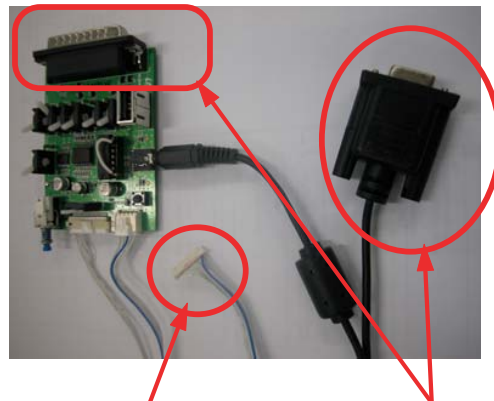
#### 3-4-2 Connecting to the MAIN PCB



<Micom Download Jig Top Side: Note the direction of the switch>



<Bottom Side>



Connect to the MAIN PCB. Connect to the PC



### 3-4-3 Update Procedures

1. Open mgm.txt in the C:\Program Files\WGenesis Microchip\WProbe 5 folder.

2. The following result will appear.

```
//
// Batch file to program a sPI serial flash using ISP.
// Moving the stack to high memory area is now taken care of in IROM
// through the "Reset 0" command. Assumes the ISP driver is in the same
// directory as this file. Change ISP driver path in "fastFlashWrite"
// command, if different from current directory.
//
debugon

SetBuffer 0x2000 0x800
delay 200
Reset 0
delay 500

// SPI flash driver
RAMWrite ispoak_spi.hex

Run 0x500
delay 100

// Optional - Get Flash ID. The second parameter is a don't care
//FLASHCRC 0xff0000 0x20000

// Command delay for flash erase
SetDelay 1000 9000

FlashErase

// Command delay for flash write. This is for each flash write packet (upto 4 k Bytes)
SetDelay 1000 3000

// Change this line to point to a file in a different location, if needed
//fastFlashWrite C:\Proj\OAK\WAPP-59xx\debug\obj\W59xx_proj.hex
fastFlashWrite C:\Program Files\WGenesis Microchip\WProbe 5\T_TRNNUS.hex

// Optional - Get CRC of 128 kByte flash. For other sizes, change second parameter
// accordingly
//FLASHCRC 0x80000 0x20000
// to reset the monitor after programming the flash using DDC2BI ONLY:
// Un-comment the following three lines (PLEASE - FOR DDC2BI PORT SELECTED ONLY)
//0x8000=1
//0x8003=0
//0x8027=1
```

### 3 Alignments and Adjustments

The Micom program is to be copied to the folder marked in red and the name of the program is to be the same as the file name marked in blue.

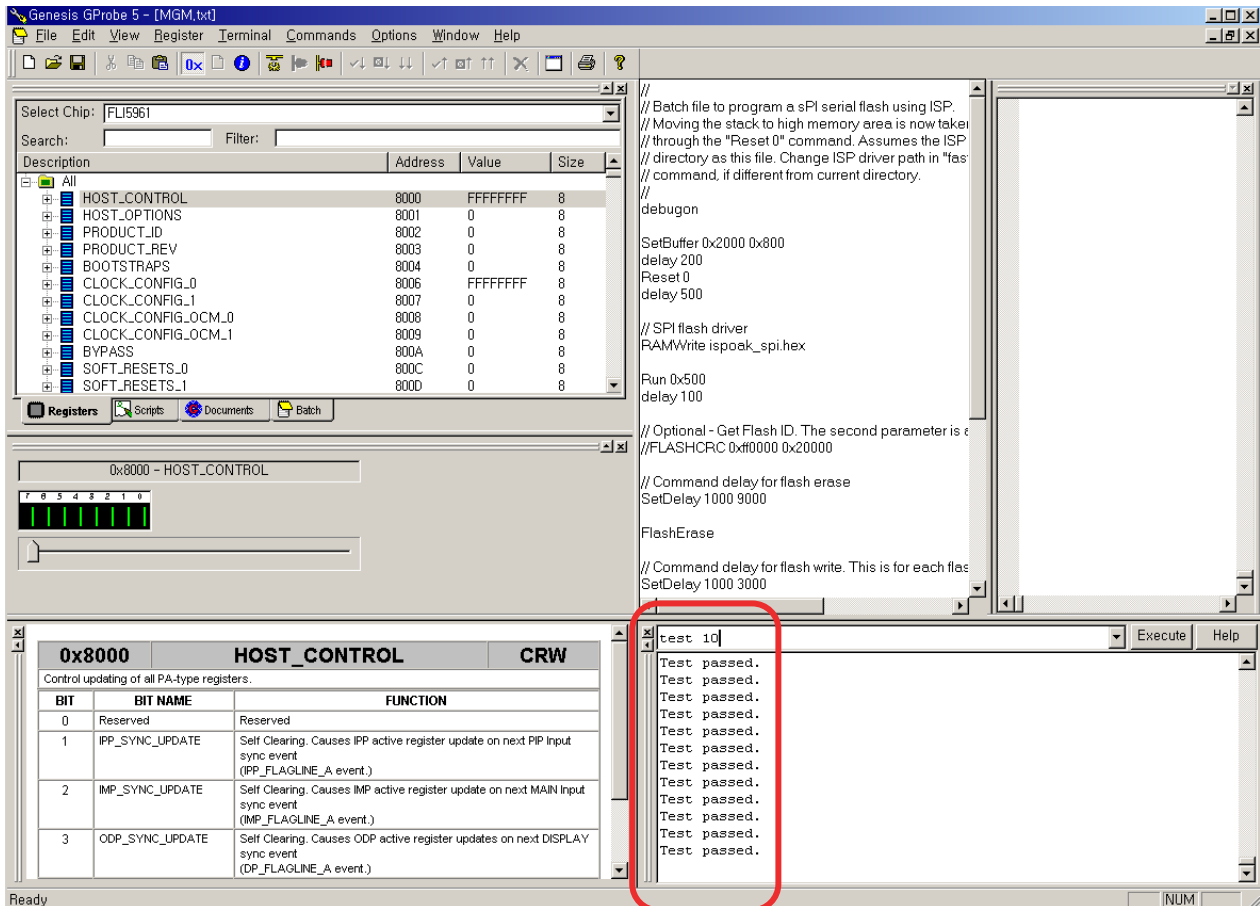
(If the Micom program is not in the folder marked in red, change the path to the folder which includes the Micom program and then save the file.)

#### 3. When completing all the procedures above, connect the Jig and the PCB, and run the G-Probe program.

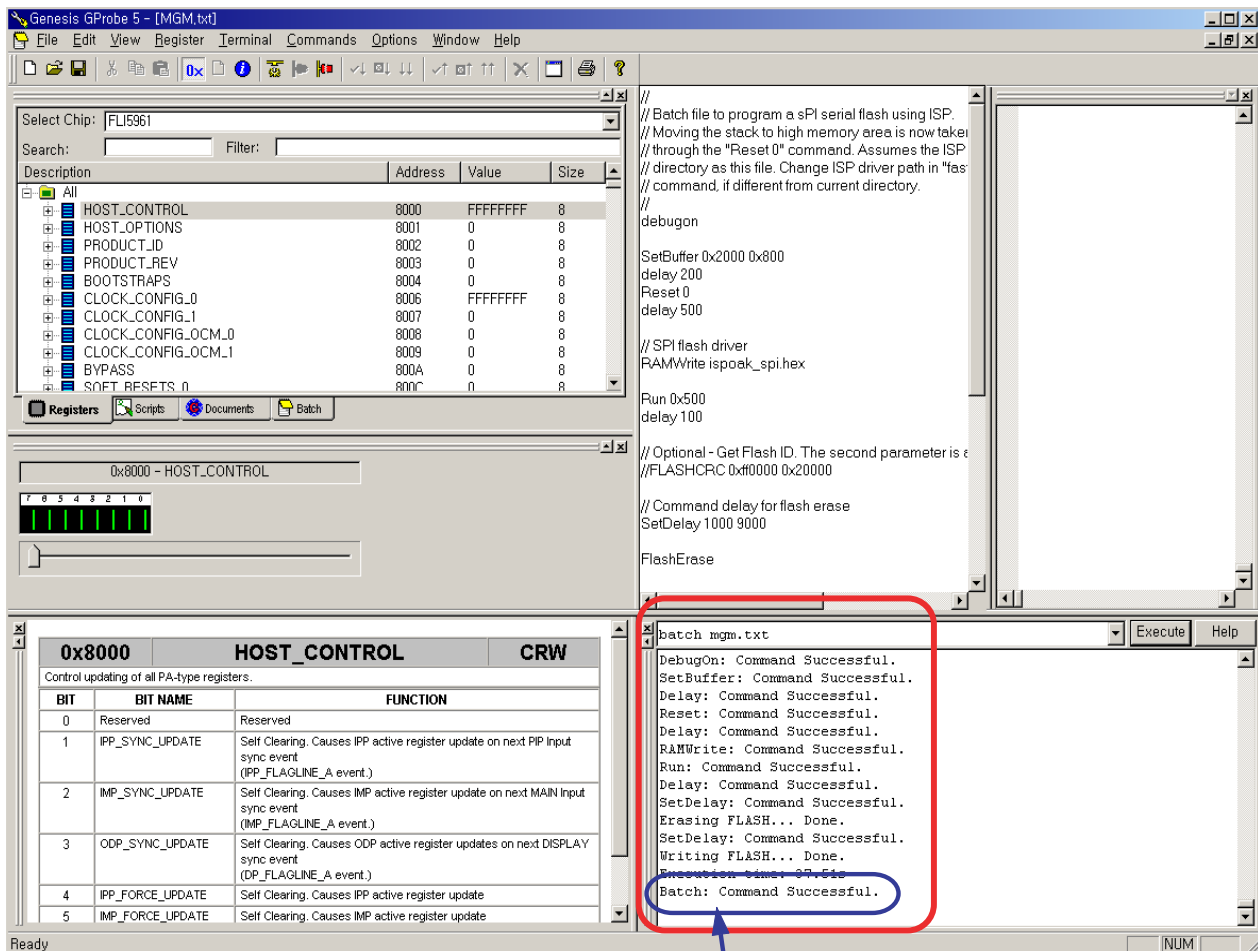
After that

Enter 'test 10' as shown in the following figure and press Enter or click the Execute button.

If the result appears as shown in the following figure, it is properly connected.



4. Enter 'batch mgm.txt' as show in the following figure and press Enter or click the Execute button to update Micom.



If the MICOM update is successfully completed, the above message appears.

## 11 Disassembly and Reassembly

This section of the service manual describes the disassembly and reassembly procedures for the LE23T51B/LE27T51B/LE32T51B TFT-LCD monitors.

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

(ONLY LE32T51B) Check the connector of POWER BOARD which are CNM 802, 803.  
IF Panel MARK is A(AUO), The wire which is from PANEL INVERTER Must be connected into CNM 803.

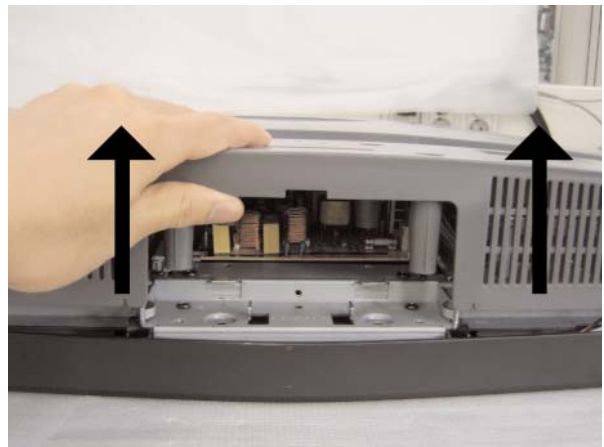
IF Panel MARK is S(Sec), The wire which is from PANEL INVERTER Must be connected into CNM 802.

### 11-1 Disassembly

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



1. Place LCD-TV face down on cushioned table.  
Remove 14 screws from the rear-cover and Remove stand.

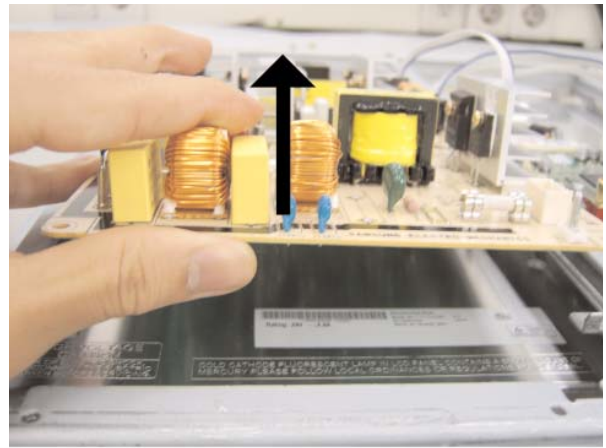


2. Remove 2 screws from the cover-jack.  
Lift up the rear-cover.

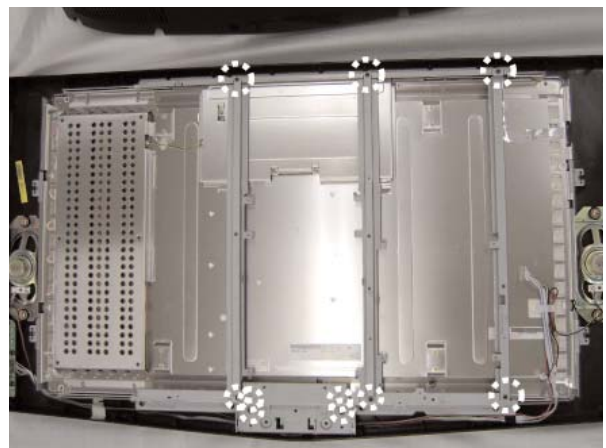
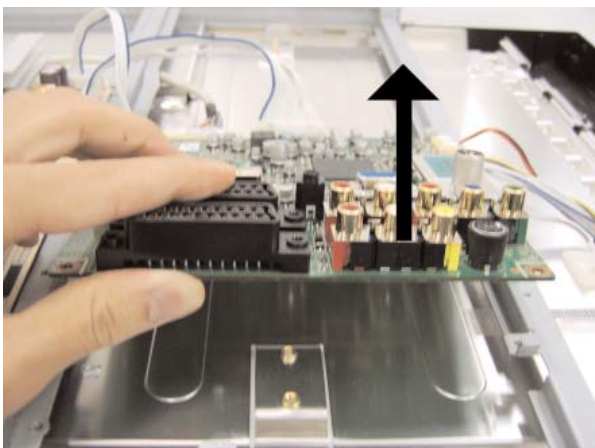
## 11 Disassembly and Reassembly



3. Disconnect cables and remove 6 screws from the power board.



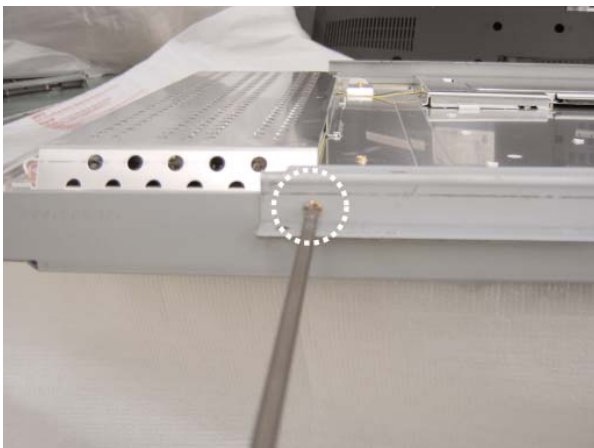
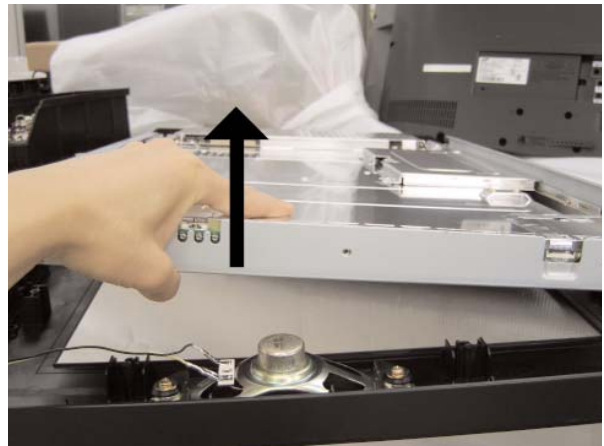
4. Remove 4 screws from the main board.  
Lift up the power board.



5. Lift up the main board and remove 10 screws from the BRKT.



6. Remove 4 screws and Lift up the Lcd panel.



7. Remove 4 screws

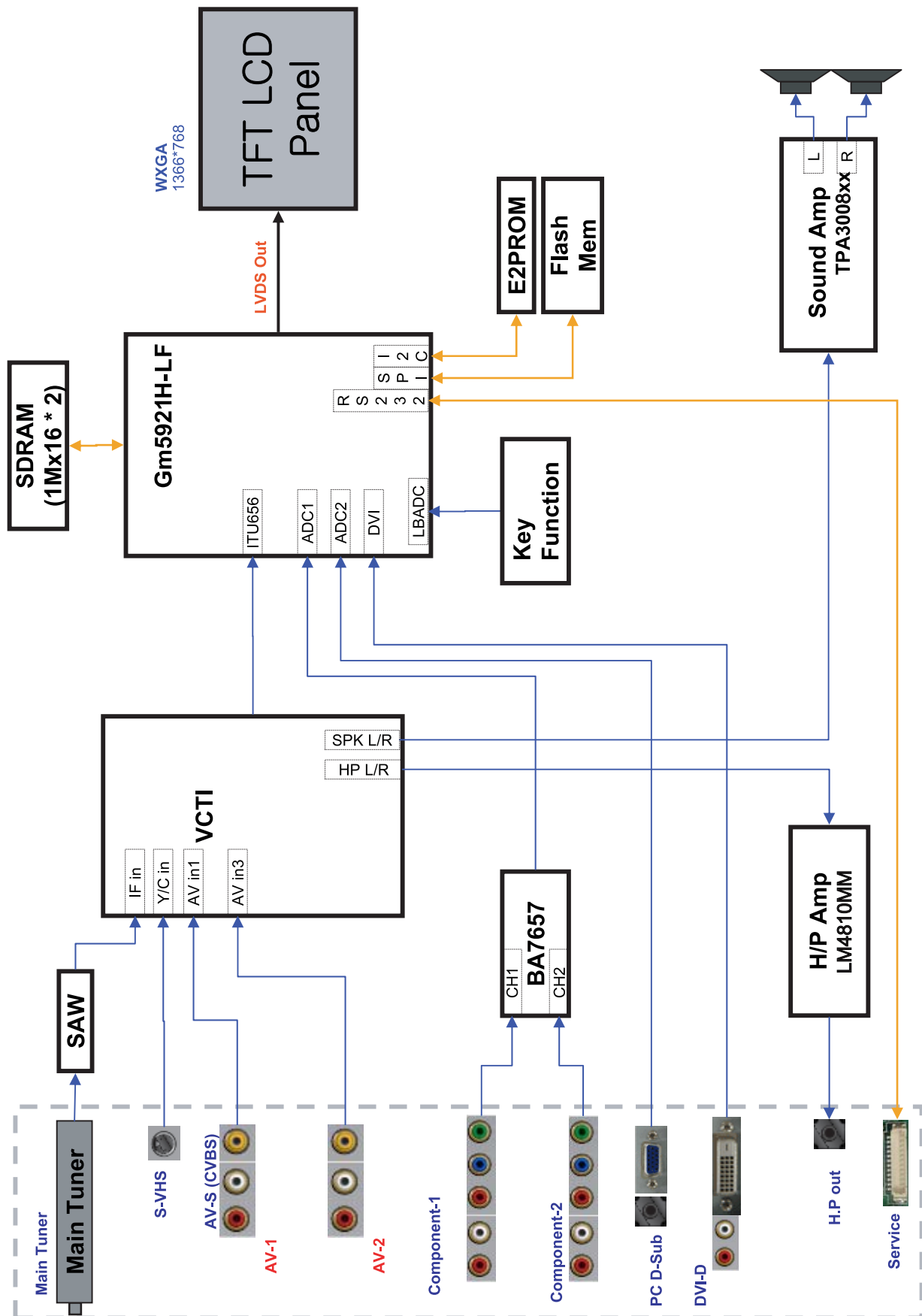
## 11-2 Reassembly

---

Reassembly procedures are in the reverse order of disassembly procedures.

## 7 Block Diagram

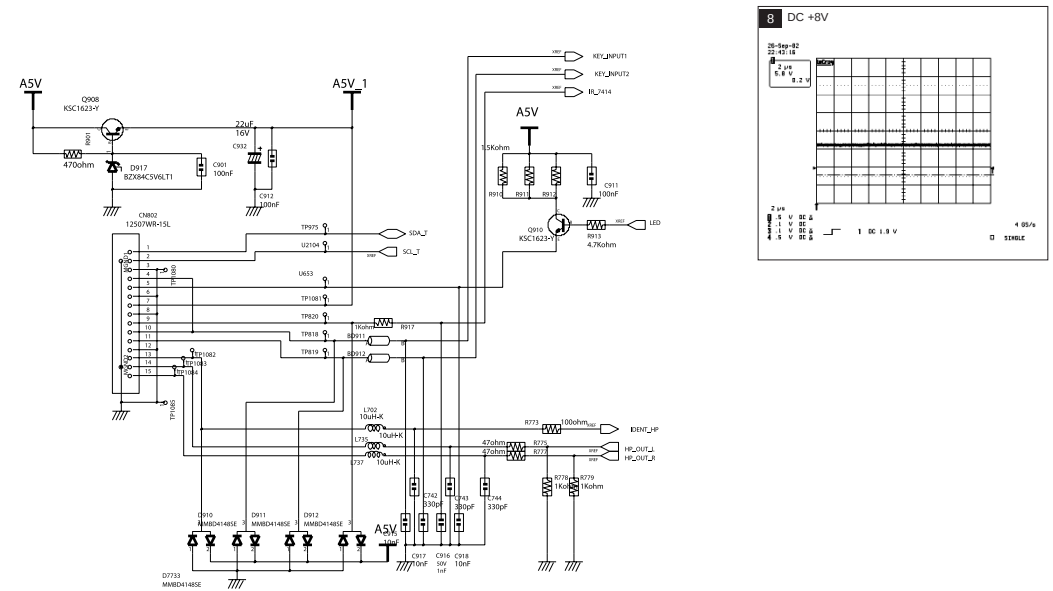
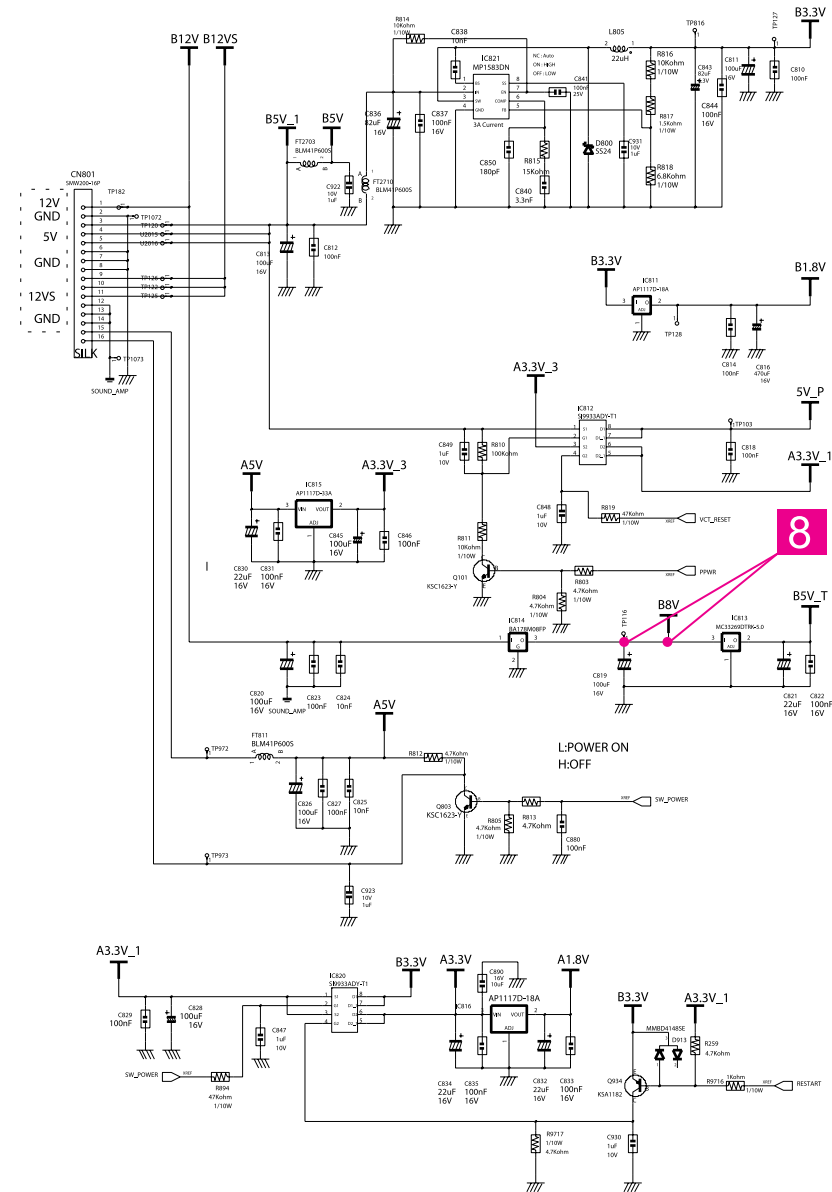
- This Document can not be used without Samsung's authorization



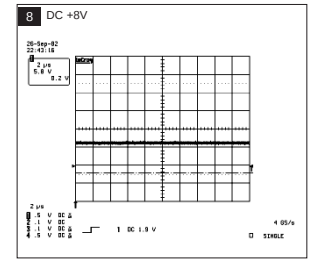
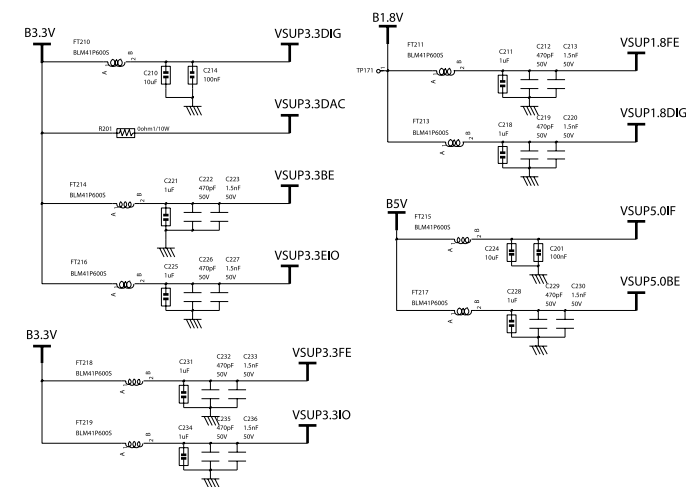
## 9 Schematic Diagrams

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

### 9-1 Power & Function Schematic Diagram

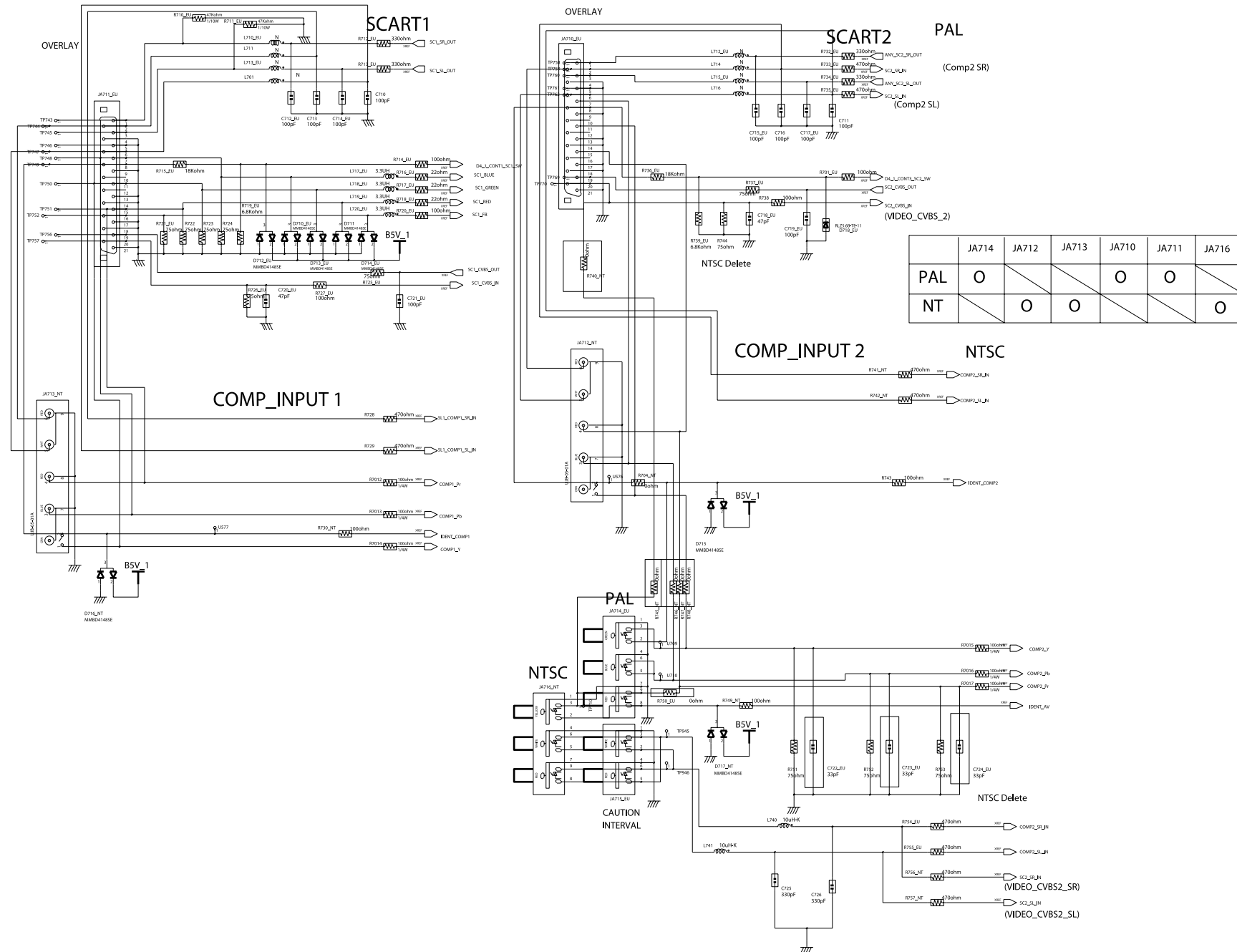


To front function Ass'y



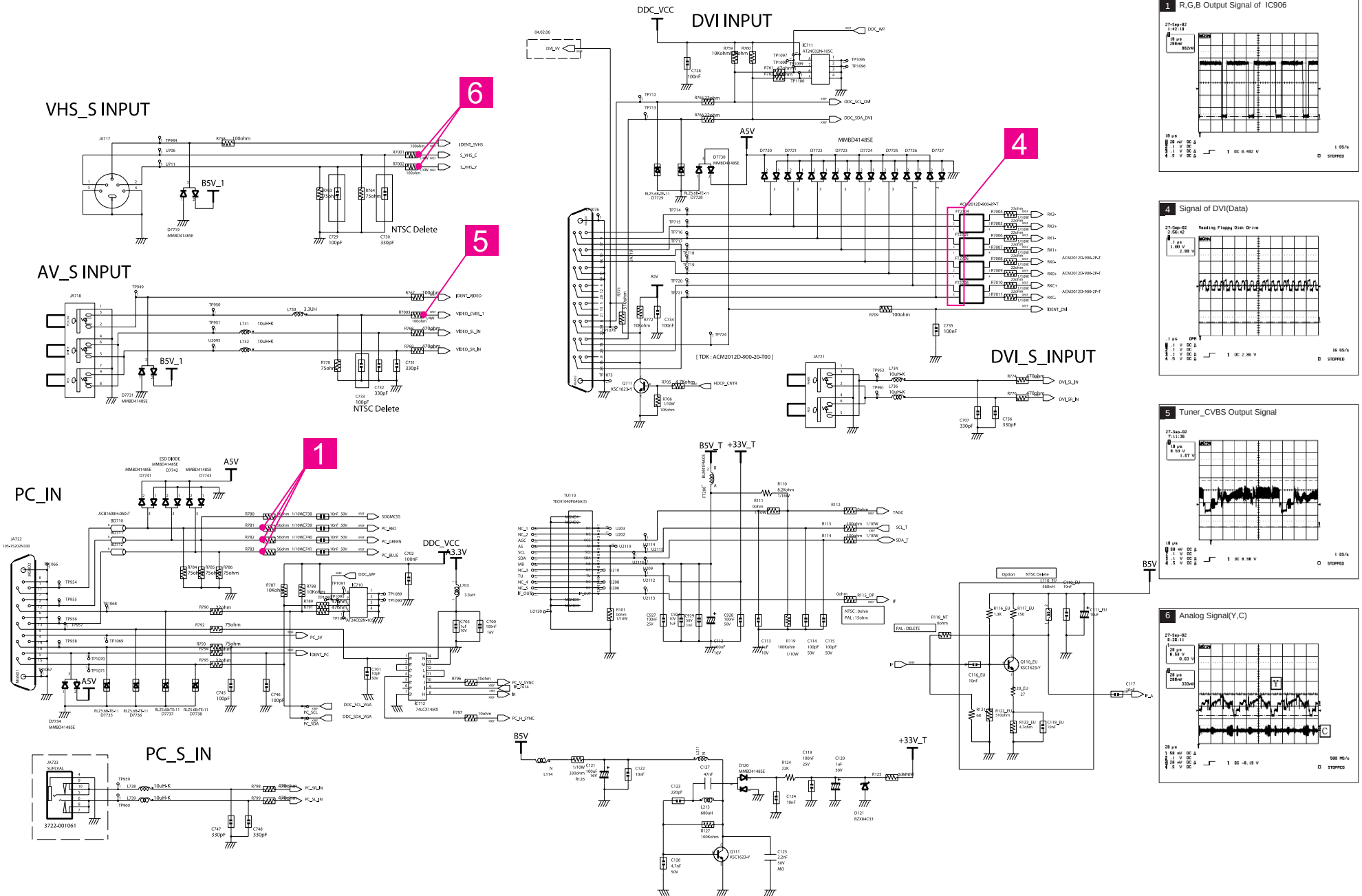
- This Document can not be used without Samsung's authorization.

### 9-2 In\_Out\_Jack Schematic Diagram



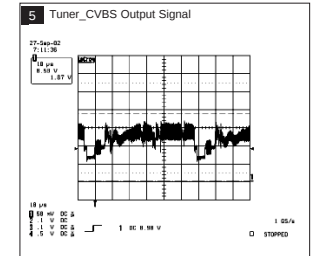
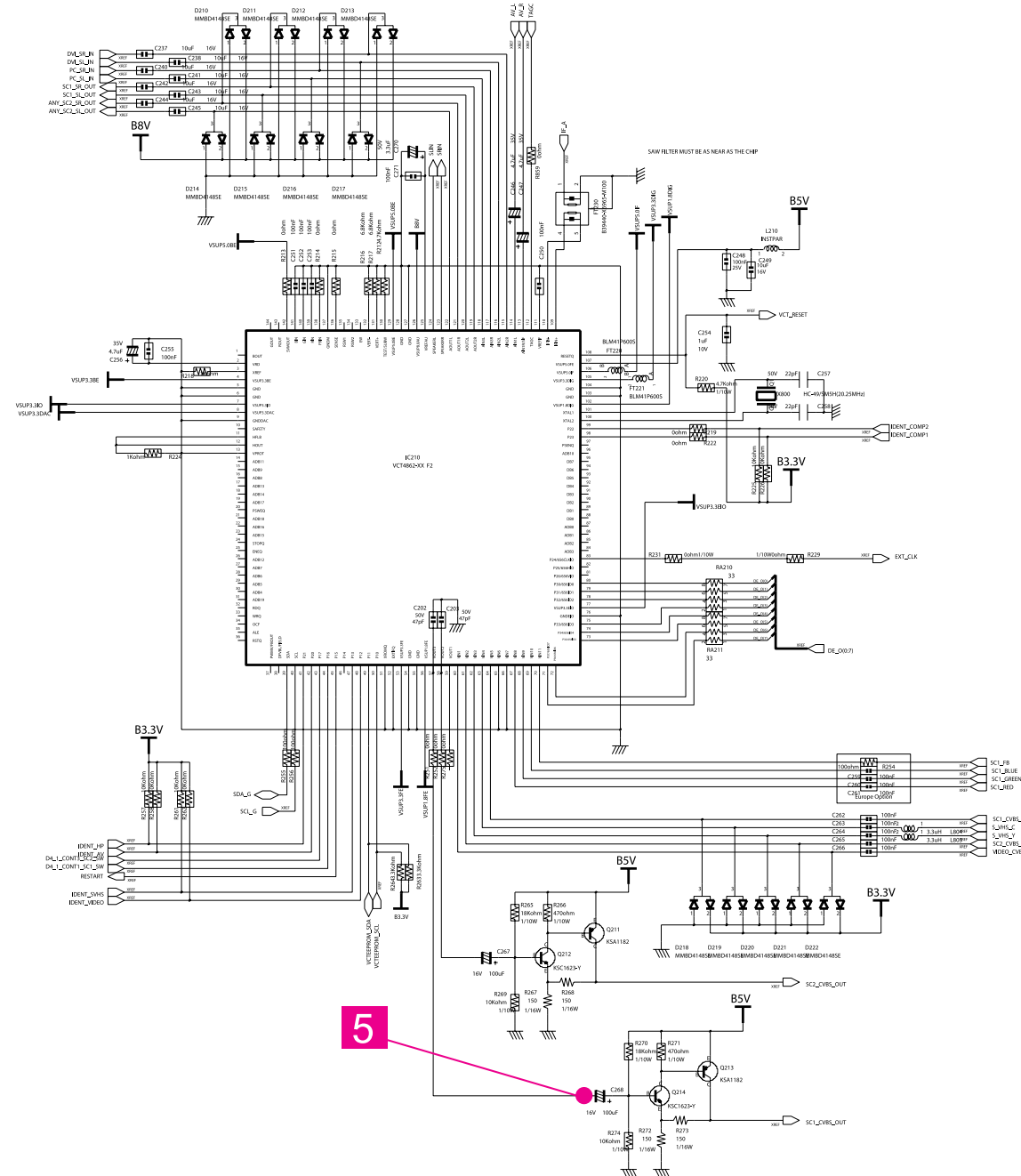
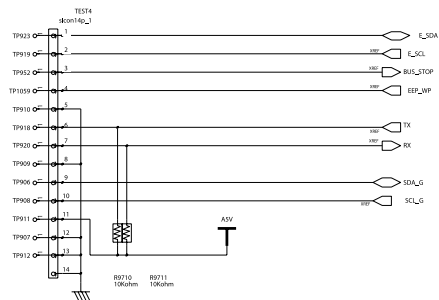
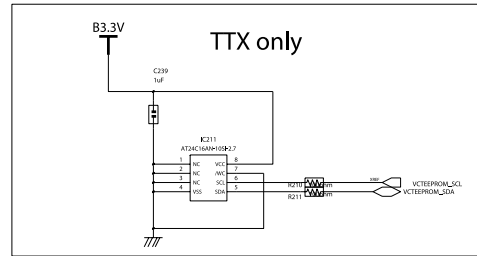
- This Document can not be used without Samsung's authorization.

### 9-3 In-Out-Jack Schmatic Diagram



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

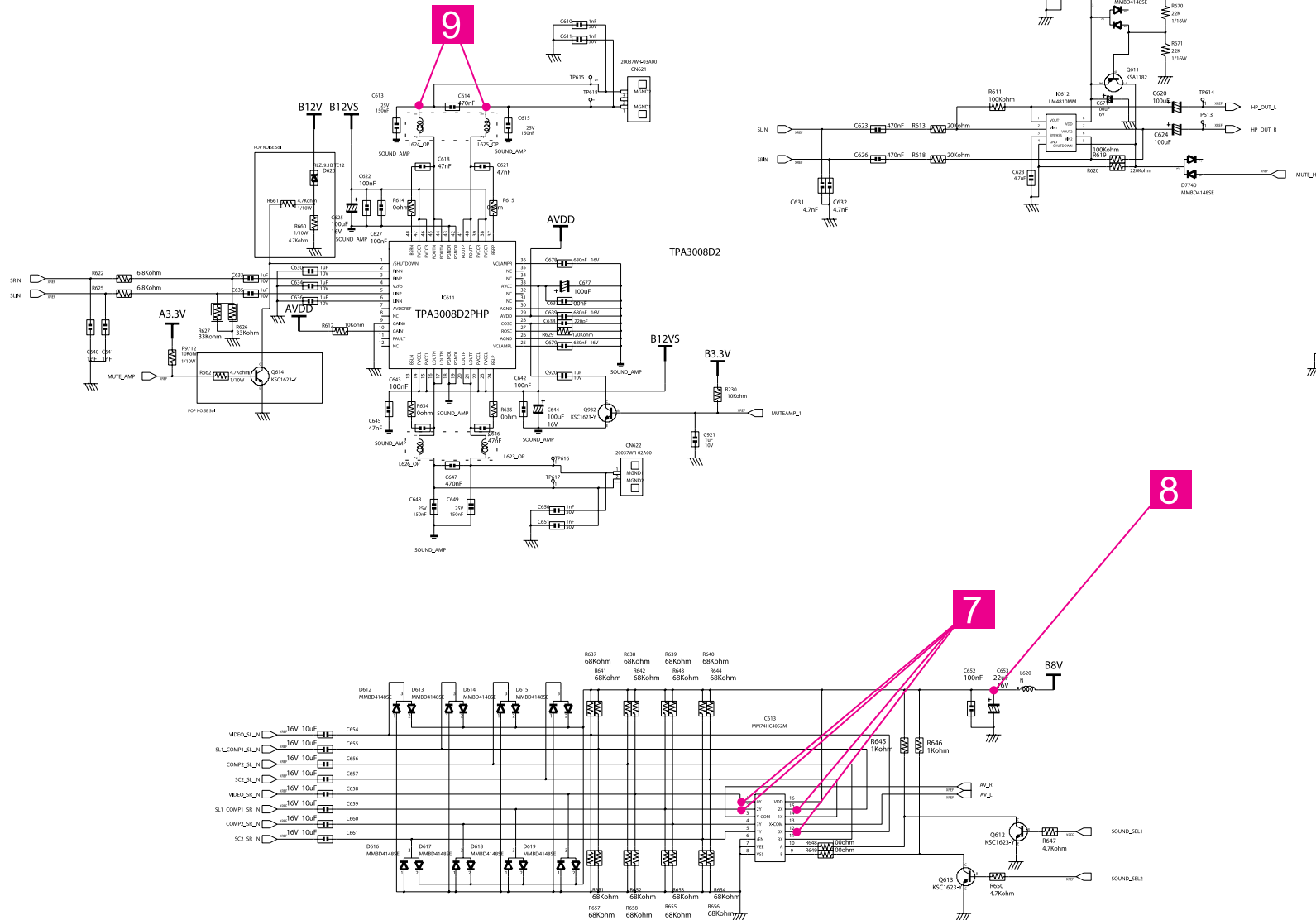
#### 9-4 Video Decoder & Sound Processing IC Schematic Diagram



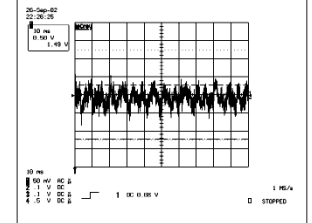
- This Document can not be used without Samsung's authorization.

## 9-5 Sound Amp Schmatic Diagram

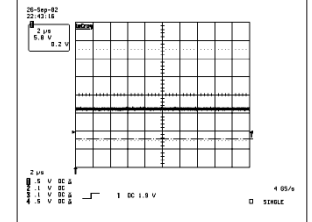
### SOUND AMP



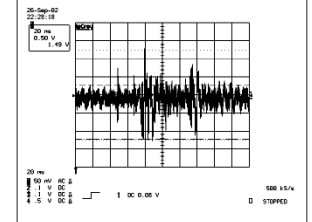
7 The Signal are Inputed to IC610



8 DC +8V



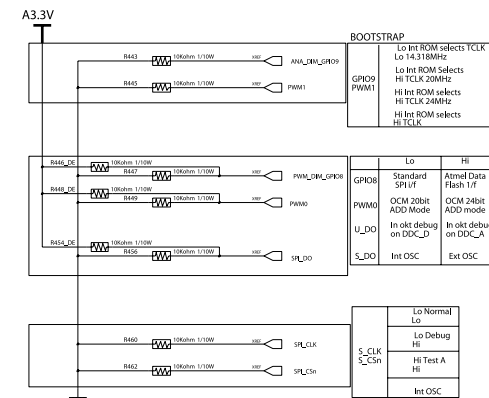
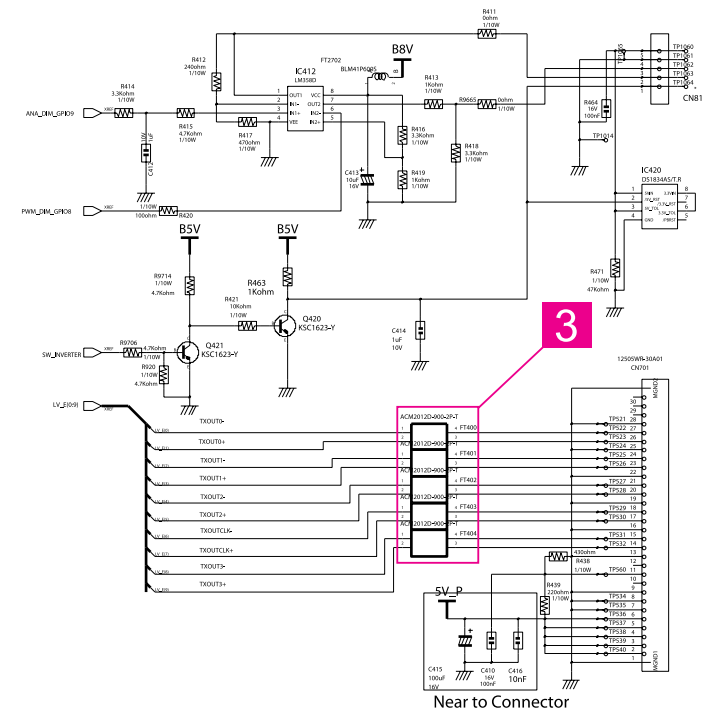
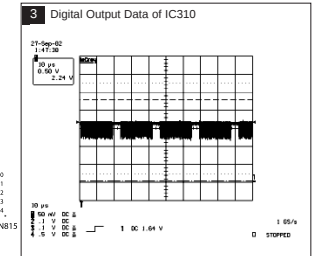
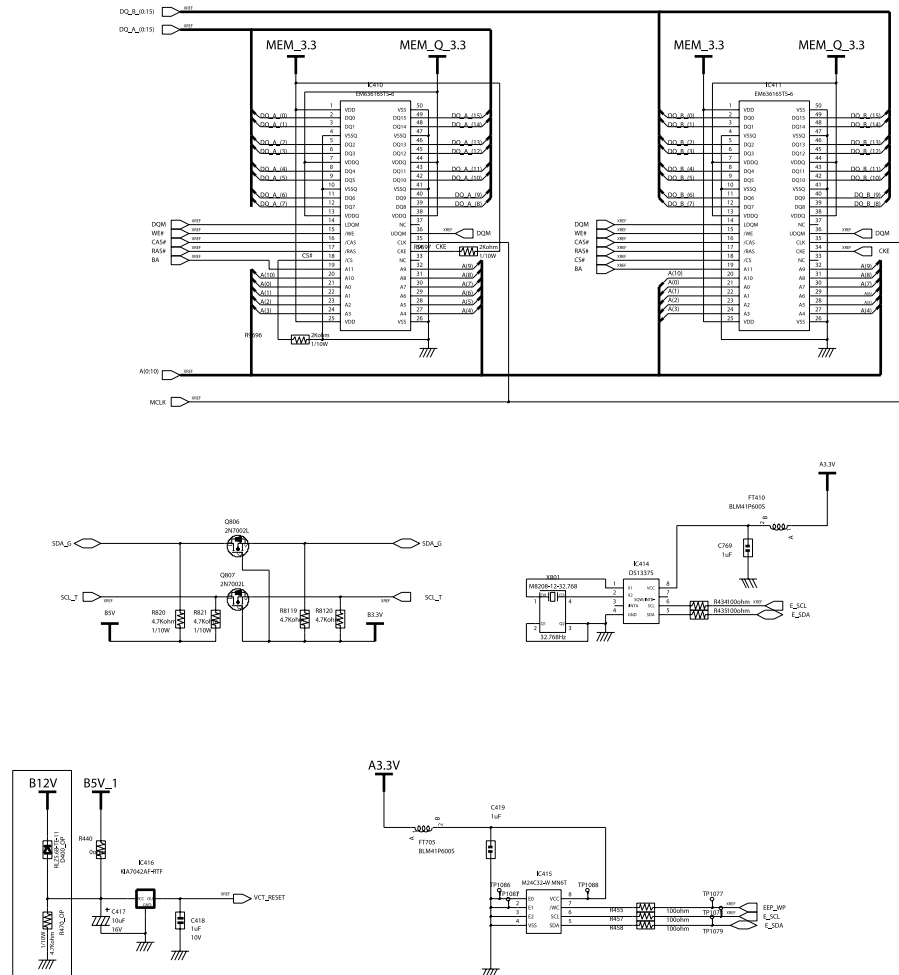
9 Output WaveForm





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

### 9-7 Memory & LVDS Output Schmetic Diagram

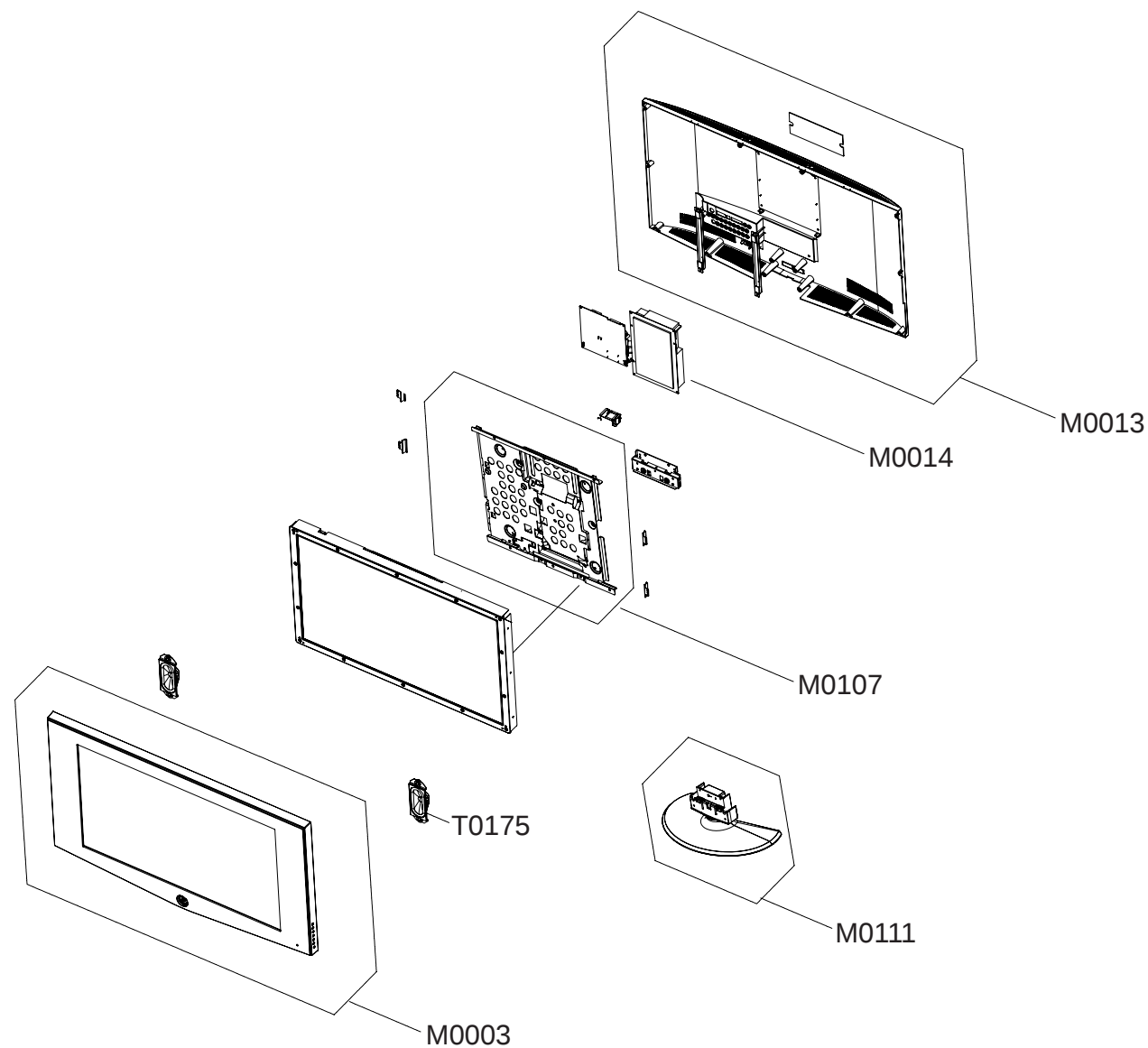


## 5 Exploded View and Parts List

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

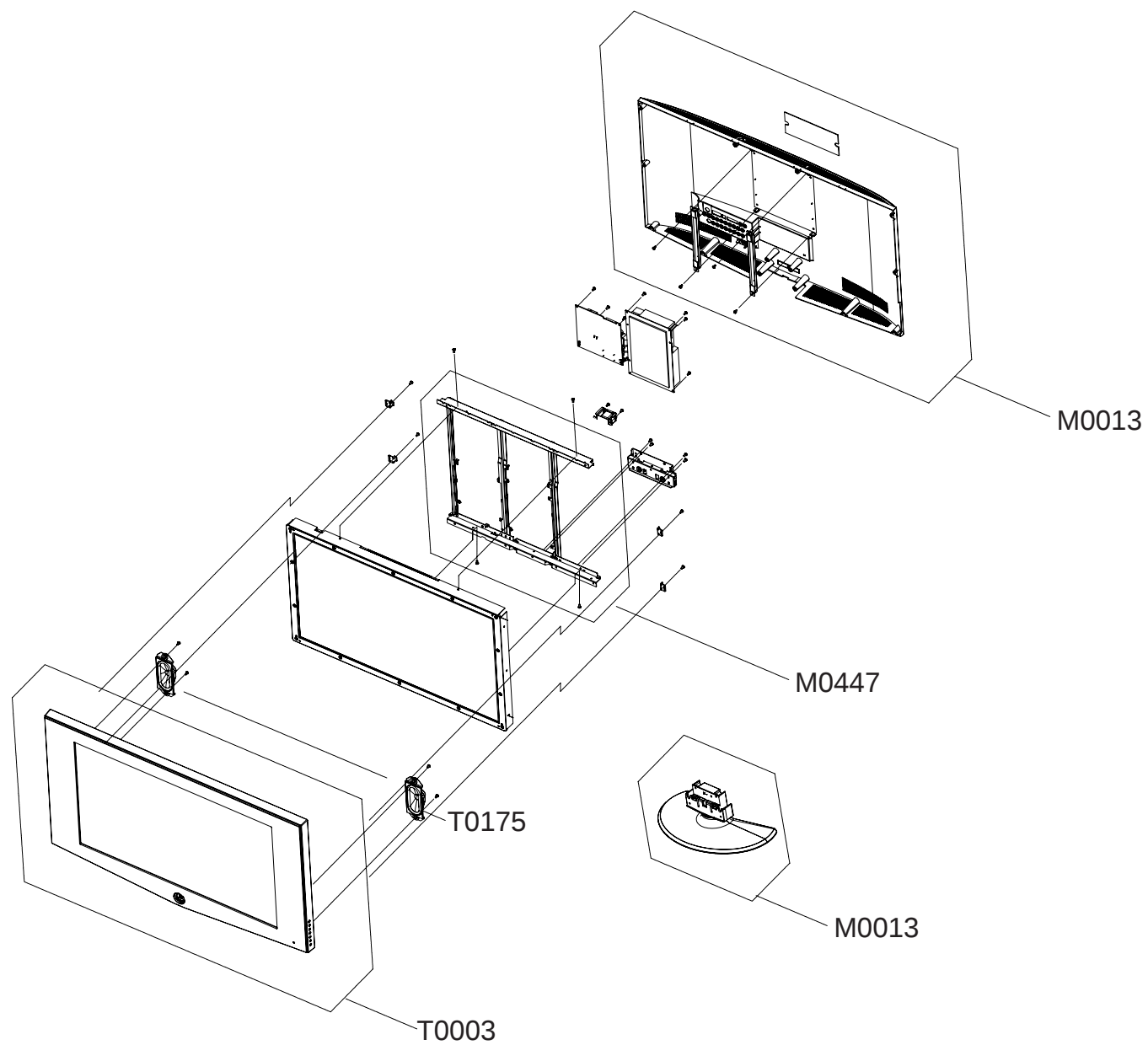
URL : <http://itself.sec.samsung.co.kr/>

5-1 LE23T51B



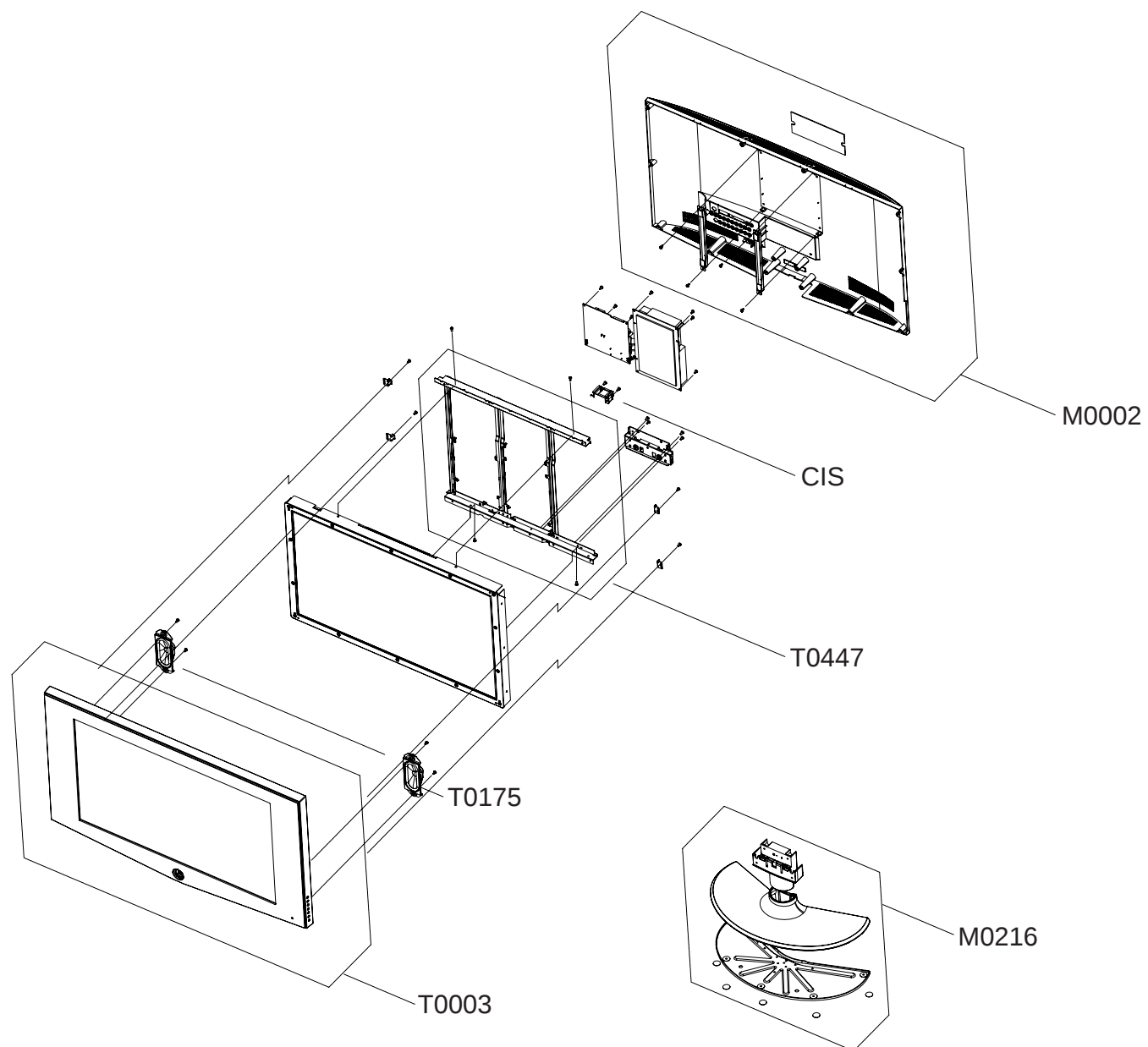
| Location.No | CODE-NO     | SPECIFICATION & DESCRIPTION              | Q'TY | REMARK |
|-------------|-------------|------------------------------------------|------|--------|
| T0003       | BN96-02645B | ASSY COVER P-FRONT;23T50,HIPS,HB,BK07,BK | 1    | SNA    |
| T0175       | BN96-02587A | ASSY SPEAKER P;16OHM,TORINO 23,RIGHT,5W  | 1    | SNA    |
| M0107       | BN61-02065A | BRACKET-PCB;23" MGM,SECC,T1.0            | 1    | SNA    |
| M0014       | BN94-00752C | ASSY PCB MAIN-AMLCD;LE23T51BX/*,TORINO   | 1    | SNA    |
| M0013       | BN96-02646B | ASSY COVER P-REAR;23T50,EO,HIPS,HB,GR503 | 1    | SNA    |
| M0111       | BN63-01718C | COVER-STAND;TORINO,23,27,HIPS,HB,GR503,B | 1    | SNA    |

## 5-2 LE27T51B



| Location.No | CODE-NO     | SPECIFICATION & DESCRIPTION              | Q'TY | REMARK |
|-------------|-------------|------------------------------------------|------|--------|
| T0003       | BN96-02642A | ASSY COVER P-FRONT;27T50,EO,HIPS,HB,GR50 | 1    | SNA    |
| T0175       | BN96-02589A | ASSY SPEAKER P;16ohm,Torino 26",Right,5W | 1    | SNA    |
| T0447       | BN96-02640A | ASSY BRACKET P-PANEL;TORINO 27,SECC      | 1    | SNA    |
| M0013       | BN96-02641A | ASSY COVER P-REAR;27T50,EO,HIPS,HB,GR503 | 1    | SNA    |
| M0013       | BN96-02639A | ASSY STAND P-BASE;TORINO,23,27,HIPS,HB,G | 1    | SNA    |

## 5-3 LE32T51B



| Location.No | CODE-NO     | SPECIFICATION & DESCRIPTION              | Q'TY | REMARK |
|-------------|-------------|------------------------------------------|------|--------|
| T0003       | BN96-02625B | ASSY COVER P-FRONT;32T50,EO,HIPS,HB,GR50 | 1    | SNA    |
| T0175       | BN96-02591A | ASSY SPEAKER P;8ohm,Torino 32",Right,10W | 1    | SNA    |
| T0447       | BN96-02628A | ASSY BRACKET P-PANEL;TORINO 32",SECC     | 1    | SNA    |
| CIS         | BN39-00693A | CBF HARNESS-IN-LET;TORINO,1617#22,3P,1P, | 1    |        |
| M0002       | BN90-00786B | ASSY COVER REAR;TORINO,32EO,32T50        | 1    | SNA    |
| M0216       | BN90-00787A | ASSY STAND;TORINO,32,32T50               | 1    | SNA    |

## 6 Electrical Parts List

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

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

### 6-1 LE32T51BX/XEE Parts list

| Level | Loc. No. | Code No.      | Description & Specification              | EA   | SA/SNA |
|-------|----------|---------------|------------------------------------------|------|--------|
| 0     |          | LE32T51BX/XEE | LE32T51B,Q54A/32T50-GTR,32,LCD-TV,SWEDEN |      |        |
| 0.1   | M0001    | BN90-00785B   | ASSY COVER FRONT;TORINO,32EO,32T50       | 1    | S.N.A  |
| ..2   | M0081    | 6006-001096   | SCREW-TAPTITE;WP,BH,+,M4,0,L12,BLK,SWRCH | 4    | S.N.A  |
| ..2   | T0003    | BN96-02625B   | ASSY COVER P-FRONT;32T50,EO,HIPS,HB,BK50 | 1    | S.A    |
| ...3  | M0081    | 6003-001003   | SCREW-TAPTITE;BH,+,B,M4,L12,ZPC(BLK),SWR | 2    | S.N.A  |
| ...3  | M0081    | 6003-001003   | SCREW-TAPTITE;BH,+,B,M4,L12,ZPC(BLK),SWR | 2    | S.N.A  |
| ...3  | T0060    | BN61-01655A   | SPRING ETC;STS-304 SUS,D8,L12,T0.5       | 1    | S.A    |
| ...3  | M0112    | BN63-02174B   | COVER-FRONT;32T50,EO,HIPS,HB,BK500,BKN-1 | 1    | S.N.A  |
| ...3  | T0023    | BN64-00342A   | KNOB POWER;ROME,40,PC+ABS,VIOLET         | 1    | S.N.A  |
| ...3  | T0071    | BN64-00366A   | INDICATOR-LED;ROME-I,PC,CLEAR,ALL MODEL  | 1    | S.N.A  |
| ...3  |          | BN64-00413A   | KNOB-DECORATION;MGM,ABS,V0,GR70,SV012P   | 1    | S.N.A  |
| ...3  | T0022    | BN64-00416A   | KNOB CONTROL;MGM,ABS,V0,BK500            | 1    | S.N.A  |
| ...3  | T0014    | BN67-00078A   | LENS-IR;VENUS32",ACRYL,CLEAR,VENUS32"    | 1    | S.N.A  |
| ...3  | M0162    | 6502-001067   | CABLE CLAMP;DAFC-1300,ID2.2,T5.2,NYLIN6/ | 1    | S.N.A  |
| ...3  | T0069    | AA60-00171W   | SPACER-FELT;GTR32K*,FELT,460,T0.35,10    | 2    | S.N.A  |
| ...3  | M0145    | BN96-02626D   | ASSY BOARD P-FUNCTION;TORINO-27/32,SJ05- | 1    | S.A    |
| ..2   | T0175    | BN96-02590A   | ASSY SPEAKER P;8ohm,Torino 32",Left,10W  | 1    | S.A    |
| ..2   | T0175    | BN96-02591A   | ASSY SPEAKER P;8ohm,Torino 32",Right,10W | 1    | S.A    |
| 0.1   | M0002    | BN90-00786B   | ASSY COVER REAR;TORINO,32EO,32T50        | 1    | S.N.A  |
| ..2   | T0081    | 6002-001294   | SCREW-TAPPING;BH,+,M4,L16,ZPC(BLK)       | 10   | S.A    |
| ..2   | M0013    | BN96-02627B   | ASSY COVER P-REAR;32T50,EO,HIPS,HB,GR503 | 1    | S.A    |
| ...3  | M0081    | 6003-001003   | SCREW-TAPTITE;BH,+,B,M4,L12,ZPC(BLK),SWR | 4    | S.N.A  |
| ...3  | T0064    | AA65-00003A   | CLAMPER CORE;SIR-T100,PE BLACK           | 1    | S.N.A  |
| ...3  | T0101    | BN61-02032A   | BRACKET-WALL;32,MGM,SECC,T1.6            | 2    | S.N.A  |
| ...3  |          | BN64-00415A   | INLAY-JACK;MGM,PS,SHEET,T0.3,PAL         | 1    | S.N.A  |
| ...3  | T0069    | AA60-00091K   | SPACER-FELT;FELT,330X10,-,BLK,T0.35,     | 4    | S.N.A  |
| ...3  | M0006    | BN63-02297A   | COVER-REAR;32T50,HIPS,HB,GR503,SESK,(PAL | 1    | S.N.A  |
| ..2   | M0081    | 6003-000115   | SCREW-TAPTITE;BH,+,B,M3,L6,ZPC(BLK),SWRC | 2    | S.N.A  |
| 0.1   | M0216    | BN90-00787A   | ASSY STAND;TORINO,32,32T50               | 1    | S.N.A  |
| ..2   | M0013    | BN96-02633A   | ASSY STAND P-BASE;TORINO,32,HIPS,HB,GR50 | 1    | S.A    |
| ...3  | T0081    | 6002-001294   | SCREW-TAPPING;BH,+,M4,L16,ZPC(BLK)       | 3    | S.A    |
| ...3  | M0081    | 6003-001239   | SCREW-TAPTITE;FH,+,B,M4,L10,ZPC(YEL),SWR | 3    | S.A    |
| ...3  |          | BN61-01524A   | BRACKET-STAND BOTTOM;32,ROME,SECC,T2.0   | 1    | S.N.A  |
| ...3  |          | BN61-02024A   | GUIDE-STAND;TORINO,32,HIPS,HB,GR503      | 1    | S.N.A  |
| ...3  | M0111    | BN63-01673C   | COVER-STAND;TORINO,32,HIPS,HB,GR503,DM-B | 1    | S.N.A  |
| ...3  | T0132    | BN73-00052A   | RUBBER FOOT;ARES 17,SILICON,DIA 17 * T1. | 5    | S.N.A  |
| ..2   | T0524    | 6902-000520   | BAG PE;HDPE/NITRON(DOUBLE),T0.015/T0.5(D | 1    | S.N.A  |
| 0.1   | T0852    | BN91-00407K   | ASSY LCD-SPZ;DU32EO                      | 1    | S.N.A  |
| ..2   | M0215    | BN07-00243A   | LCD-PANEL;LTA320W2-L03,8bit,760*450*50.0 | 1    | S.A    |
| 0.1   | M0017    | BN91-00946B   | ASSY CHASSIS;LE32T51BX/*,TORINO          | 1    | S.N.A  |
| ..2   | M0014    | BN94-00752B   | ASSY PCB MAIN-AU;LE32T51BX/*,TORINO      | 1    | S.A    |
| ...3  | T0245    | 0202-001366   | SOLDER-WIRE FLUX;-RS60S,D1.2,63Sn/37Pb,  | 0.01 | S.N.A  |
| ...3  | JA719    | 3701-001292   | CONNECTOR-DVI;24P,3R,FEMALE,STRAIGHT,AU1 | 1    | S.A    |
| ...3  | JA722    | 3701-001294   | CONNECTOR-DSUB;15P,3R,FEMALE,STRAIGHT,AU | 1    | S.A    |
| ...3  | CN815    | 3711-004484   | HEADER-BOARD TO CABLE;BOX,5P,1R,2mm,STRA | 1    | S.A    |
| ...3  | CN801    | 3711-005942   | HEADER-BOARD TO CABLE;BOX,16P,1R,2mm,STR | 1    | S.A    |
| ...3  | JA710_EU | 3722-000498   | JACK-SCART;21P,-,SN,BLK,NO               | 1    | S.A    |
| ...3  | JA711_EU | 3722-000498   | JACK-SCART;21P,-,SN,BLK,NO               | 1    | S.A    |
| ...3  | JA723    | 3722-001061   | JACK-PHONE;1P,3.6PI,AG,BLK,N             | 1    | S.A    |
| ...3  | JA717    | 3722-001734   | JACK-VHS;4P,-,SN,BLK,-                   | 1    | S.A    |
| ...3  | JA715_EU | 3722-001903   | JACK-PIN;2P,-,AU,WHT/RED,-               | 1    | S.A    |
| ...3  | JA721    | 3722-001903   | JACK-PIN;2P,-,AU,WHT/RED,-               | 1    | S.A    |
| ...3  | JA714_EU | 3722-001938   | JACK-PIN;3P,-,AU,GRN/BLU/RED,-           | 1    | S.A    |
| ...3  | JA718    | 3722-002063   | JACK-PIN;3P,AU,YEL/WHT/RED,STRAIGHT      | 1    | S.A    |
| ...3  | CIS3     | BN40-00072A   | TUNER;TECH0949PG46A(S),TECH0949PG46A(S), | 1    | S.A    |
| ...3  |          | BN97-00658B   | ASSY SMD-AU;LE32T51BX/*,TORINO           | 1    | S.N.A  |
| ....4 | CIS5     | 0202-001375   | SOLDER-CREAM;RMA-20-21L,S63,-,Sn63/Pb36. | 8.48 | S.N.A  |

## 6 Electrical Parts List

| Level | Loc. No. | Code No.    | Description & Specification              | Q'ty | SA/SNA |
|-------|----------|-------------|------------------------------------------|------|--------|
| ...4  | D120     | 0401-001056 | DIODE-SWITCHING;MMBD4148SE,100V,200MA,SO | 1    | S.A    |
| ...4  | D210     | 0401-001056 | DIODE-SWITCHING;MMBD4148SE,100V,200MA,SO | 1    | S.A    |
| ...4  | D211     | 0401-001056 | DIODE-SWITCHING;MMBD4148SE,100V,200MA,SO | 1    | S.A    |
| ...4  | D212     | 0401-001056 | DIODE-SWITCHING;MMBD4148SE,100V,200MA,SO | 1    | S.A    |
| ...4  | D213     | 0401-001056 | DIODE-SWITCHING;MMBD4148SE,100V,200MA,SO | 1    | S.A    |
| ...4  | D214     | 0401-001056 | DIODE-SWITCHING;MMBD4148SE,100V,200MA,SO | 1    | S.A    |
| ...4  | D215     | 0401-001056 | DIODE-SWITCHING;MMBD4148SE,100V,200MA,SO | 1    | S.A    |
| ...4  | D216     | 0401-001056 | DIODE-SWITCHING;MMBD4148SE,100V,200MA,SO | 1    | S.A    |
| ...4  | D217     | 0401-001056 | DIODE-SWITCHING;MMBD4148SE,100V,200MA,SO | 1    | S.A    |
| ...4  | D218     | 0401-001056 | DIODE-SWITCHING;MMBD4148SE,100V,200MA,SO | 1    | S.A    |
| ...4  | D219     | 0401-001056 | DIODE-SWITCHING;MMBD4148SE,100V,200MA,SO | 1    | S.A    |
| ...4  | D220     | 0401-001056 | DIODE-SWITCHING;MMBD4148SE,100V,200MA,SO | 1    | S.A    |
| ...4  | D221     | 0401-001056 | DIODE-SWITCHING;MMBD4148SE,100V,200MA,SO | 1    | S.A    |
| ...4  | D222     | 0401-001056 | DIODE-SWITCHING;MMBD4148SE,100V,200MA,SO | 1    | S.A    |
| ...4  | D316     | 0401-001056 | DIODE-SWITCHING;MMBD4148SE,100V,200MA,SO | 1    | S.A    |
| ...4  | D317     | 0401-001056 | DIODE-SWITCHING;MMBD4148SE,100V,200MA,SO | 1    | S.A    |
| ...4  | D318     | 0401-001056 | DIODE-SWITCHING;MMBD4148SE,100V,200MA,SO | 1    | S.A    |
| ...4  | D612     | 0401-001056 | DIODE-SWITCHING;MMBD4148SE,100V,200MA,SO | 1    | S.A    |
| ...4  | D613     | 0401-001056 | DIODE-SWITCHING;MMBD4148SE,100V,200MA,SO | 1    | S.A    |
| ...4  | D614     | 0401-001056 | DIODE-SWITCHING;MMBD4148SE,100V,200MA,SO | 1    | S.A    |
| ...4  | D615     | 0401-001056 | DIODE-SWITCHING;MMBD4148SE,100V,200MA,SO | 1    | S.A    |
| ...4  | D616     | 0401-001056 | DIODE-SWITCHING;MMBD4148SE,100V,200MA,SO | 1    | S.A    |
| ...4  | D617     | 0401-001056 | DIODE-SWITCHING;MMBD4148SE,100V,200MA,SO | 1    | S.A    |
| ...4  | D618     | 0401-001056 | DIODE-SWITCHING;MMBD4148SE,100V,200MA,SO | 1    | S.A    |
| ...4  | D619     | 0401-001056 | DIODE-SWITCHING;MMBD4148SE,100V,200MA,SO | 1    | S.A    |
| ...4  | D621     | 0401-001056 | DIODE-SWITCHING;MMBD4148SE,100V,200MA,SO | 1    | S.A    |
| ...4  | D710_EU  | 0401-001056 | DIODE-SWITCHING;MMBD4148SE,100V,200MA,SO | 1    | S.A    |
| ...4  | D711     | 0401-001056 | DIODE-SWITCHING;MMBD4148SE,100V,200MA,SO | 1    | S.A    |
| ...4  | D712_EU  | 0401-001056 | DIODE-SWITCHING;MMBD4148SE,100V,200MA,SO | 1    | S.A    |
| ...4  | D713_EU  | 0401-001056 | DIODE-SWITCHING;MMBD4148SE,100V,200MA,SO | 1    | S.A    |
| ...4  | D714_EU  | 0401-001056 | DIODE-SWITCHING;MMBD4148SE,100V,200MA,SO | 1    | S.A    |
| ...4  | D715     | 0401-001056 | DIODE-SWITCHING;MMBD4148SE,100V,200MA,SO | 1    | S.A    |
| ...4  | D7719    | 0401-001056 | DIODE-SWITCHING;MMBD4148SE,100V,200MA,SO | 1    | S.A    |
| ...4  | D7720    | 0401-001056 | DIODE-SWITCHING;MMBD4148SE,100V,200MA,SO | 1    | S.A    |
| ...4  | D7721    | 0401-001056 | DIODE-SWITCHING;MMBD4148SE,100V,200MA,SO | 1    | S.A    |
| ...4  | D7722    | 0401-001056 | DIODE-SWITCHING;MMBD4148SE,100V,200MA,SO | 1    | S.A    |
| ...4  | D7723    | 0401-001056 | DIODE-SWITCHING;MMBD4148SE,100V,200MA,SO | 1    | S.A    |
| ...4  | D7724    | 0401-001056 | DIODE-SWITCHING;MMBD4148SE,100V,200MA,SO | 1    | S.A    |
| ...4  | D7725    | 0401-001056 | DIODE-SWITCHING;MMBD4148SE,100V,200MA,SO | 1    | S.A    |
| ...4  | D7726    | 0401-001056 | DIODE-SWITCHING;MMBD4148SE,100V,200MA,SO | 1    | S.A    |
| ...4  | D7727    | 0401-001056 | DIODE-SWITCHING;MMBD4148SE,100V,200MA,SO | 1    | S.A    |
| ...4  | D7730    | 0401-001056 | DIODE-SWITCHING;MMBD4148SE,100V,200MA,SO | 1    | S.A    |
| ...4  | D7731    | 0401-001056 | DIODE-SWITCHING;MMBD4148SE,100V,200MA,SO | 1    | S.A    |
| ...4  | D7733    | 0401-001056 | DIODE-SWITCHING;MMBD4148SE,100V,200MA,SO | 1    | S.A    |
| ...4  | D7734    | 0401-001056 | DIODE-SWITCHING;MMBD4148SE,100V,200MA,SO | 1    | S.A    |
| ...4  | D7740    | 0401-001056 | DIODE-SWITCHING;MMBD4148SE,100V,200MA,SO | 1    | S.A    |
| ...4  | D7741    | 0401-001056 | DIODE-SWITCHING;MMBD4148SE,100V,200MA,SO | 1    | S.A    |
| ...4  | D7742    | 0401-001056 | DIODE-SWITCHING;MMBD4148SE,100V,200MA,SO | 1    | S.A    |
| ...4  | D7743    | 0401-001056 | DIODE-SWITCHING;MMBD4148SE,100V,200MA,SO | 1    | S.A    |
| ...4  | D910     | 0401-001056 | DIODE-SWITCHING;MMBD4148SE,100V,200MA,SO | 1    | S.A    |
| ...4  | D911     | 0401-001056 | DIODE-SWITCHING;MMBD4148SE,100V,200MA,SO | 1    | S.A    |
| ...4  | D912     | 0401-001056 | DIODE-SWITCHING;MMBD4148SE,100V,200MA,SO | 1    | S.A    |
| ...4  | D913     | 0401-001056 | DIODE-SWITCHING;MMBD4148SE,100V,200MA,SO | 1    | S.A    |
| ...4  | D800     | 0402-000553 | DIODE-RECTIFIER;SS24,40V,2.0A,DO-214AA   | 1    | S.A    |
| ...4  | D917     | 0403-000258 | DIODE-ZENER;BZX84C5V6,5.2-6V,225MW,SOT-2 | 1    | S.A    |
| ...4  | D718_EU  | 0403-000620 | DIODE-ZENER;RLZ5.6B,5.45-5.73V,500MW,LL- | 1    | S.A    |
| ...4  | D7728    | 0403-000620 | DIODE-ZENER;RLZ5.6B,5.45-5.73V,500MW,LL- | 1    | S.A    |
| ...4  | D7729    | 0403-000620 | DIODE-ZENER;RLZ5.6B,5.45-5.73V,500MW,LL- | 1    | S.A    |
| ...4  | D7735    | 0403-000620 | DIODE-ZENER;RLZ5.6B,5.45-5.73V,500MW,LL- | 1    | S.A    |
| ...4  | D7736    | 0403-000620 | DIODE-ZENER;RLZ5.6B,5.45-5.73V,500MW,LL- | 1    | S.A    |
| ...4  | D7737    | 0403-000620 | DIODE-ZENER;RLZ5.6B,5.45-5.73V,500MW,LL- | 1    | S.A    |
| ...4  | D7738    | 0403-000620 | DIODE-ZENER;RLZ5.6B,5.45-5.73V,500MW,LL- | 1    | S.A    |
| ...4  | D121     | 0403-001425 | DIODE-ZENER;BZX84C33,31-35V,350MW,SOT-23 | 1    | S.A    |
| ...4  | D314     | 0407-000123 | DIODE-ARRAY;DAN202K,80V,100MA,CA2-3,SOT- | 1    | S.A    |
| ...4  | D319     | 0407-000123 | DIODE-ARRAY;DAN202K,80V,100MA,CA2-3,SOT- | 1    | S.A    |
| ...4  | D610     | 0407-000123 | DIODE-ARRAY;DAN202K,80V,100MA,CA2-3,SOT- | 1    | S.A    |
| ...4  | Q211     | 0501-000280 | TR-SMALL SIGNAL;KSA1182,PNP,150mW,SOT-23 | 1    | S.A    |
| ...4  | Q213     | 0501-000280 | TR-SMALL SIGNAL;KSA1182,PNP,150mW,SOT-23 | 1    | S.A    |
| ...4  | Q611     | 0501-000280 | TR-SMALL SIGNAL;KSA1182,PNP,150mW,SOT-23 | 1    | S.A    |

| Level | Loc. No. | Code No.    | Description & Specification              | Q'ty | SA/SNA |
|-------|----------|-------------|------------------------------------------|------|--------|
| ....4 | Q934     | 0501-000280 | TR-SMALL SIGNAL;KSA1182,PNP,150mW,SOT-23 | 1    | SA     |
| ....4 | Q101     | 0501-000342 | TR-SMALL SIGNAL;KSC1623-Y,NPN,200mW,SOT- | 1    | SA     |
| ....4 | Q110_EU  | 0501-000342 | TR-SMALL SIGNAL;KSC1623-Y,NPN,200mW,SOT- | 1    | SA     |
| ....4 | Q111     | 0501-000342 | TR-SMALL SIGNAL;KSC1623-Y,NPN,200mW,SOT- | 1    | SA     |
| ....4 | Q212     | 0501-000342 | TR-SMALL SIGNAL;KSC1623-Y,NPN,200mW,SOT- | 1    | SA     |
| ....4 | Q214     | 0501-000342 | TR-SMALL SIGNAL;KSC1623-Y,NPN,200mW,SOT- | 1    | SA     |
| ....4 | Q310     | 0501-000342 | TR-SMALL SIGNAL;KSC1623-Y,NPN,200mW,SOT- | 1    | SA     |
| ....4 | Q420     | 0501-000342 | TR-SMALL SIGNAL;KSC1623-Y,NPN,200mW,SOT- | 1    | SA     |
| ....4 | Q421     | 0501-000342 | TR-SMALL SIGNAL;KSC1623-Y,NPN,200mW,SOT- | 1    | SA     |
| ....4 | Q612     | 0501-000342 | TR-SMALL SIGNAL;KSC1623-Y,NPN,200mW,SOT- | 1    | SA     |
| ....4 | Q613     | 0501-000342 | TR-SMALL SIGNAL;KSC1623-Y,NPN,200mW,SOT- | 1    | SA     |
| ....4 | Q614     | 0501-000342 | TR-SMALL SIGNAL;KSC1623-Y,NPN,200mW,SOT- | 1    | SA     |
| ....4 | Q711     | 0501-000342 | TR-SMALL SIGNAL;KSC1623-Y,NPN,200mW,SOT- | 1    | SA     |
| ....4 | Q803     | 0501-000342 | TR-SMALL SIGNAL;KSC1623-Y,NPN,200mW,SOT- | 1    | SA     |
| ....4 | Q908     | 0501-000342 | TR-SMALL SIGNAL;KSC1623-Y,NPN,200mW,SOT- | 1    | SA     |
| ....4 | Q910     | 0501-000342 | TR-SMALL SIGNAL;KSC1623-Y,NPN,200mW,SOT- | 1    | SA     |
| ....4 | Q932     | 0501-000342 | TR-SMALL SIGNAL;KSC1623-Y,NPN,200mW,SOT- | 1    | SA     |
| ....4 | Q409     | 0505-000110 | FET-SILICON;2N7002,N,60V,115mA,7.5ohm,0. | 1    | SA     |
| ....4 | Q409     | 0505-000110 | FET-SILICON;2N7002,N,60V,115mA,7.5ohm,0. | 1    | SA     |
| ....4 | Q409     | 0505-001170 | FET-SILICON;SI9933ADY-T1,P,-20V,3.4A,0.0 | 1    | SA     |
| ....4 | Q409     | 0505-001170 | FET-SILICON;SI9933ADY-T1,P,-20V,3.4A,0.0 | 1    | SA     |
| ....4 | IC104    | 0801-002267 | IC-CMOS LOGIC;74LCX14,-,SOIC,14P,150MIL, | 1    | SA     |
| ....4 | IC105    | 0909-001036 | IC-REAL TIME CLOCK;DS1337S+T&R,-,SO,8P,1 | 1    | SA     |
| ....4 | IC613    | 1001-000164 | IC-ANALOG MULTIPLEX;74HC4052,CMOS,SOP,16 | 1    | SA     |
| ....4 | IC310    | 1003-001857 | IC-CRT CONTROLLER;FLI5921H-LF,PQFP,208P, | 1    | SA     |
| ....4 | IC112    | 1103-000129 | IC-EEPROM;24C02,256x8,SOP,8P,5x4mm,4.5/5 | 1    | SA     |
| ....4 | IC112    | 1103-000129 | IC-EEPROM;24C02,256x8,SOP,8P,5x4mm,4.5/5 | 1    | SA     |
| ....4 | IC112    | 1103-001279 | IC-EEPROM;24C32,4Kx8,SOP,8P,5x4mm,2.5/5. | 1    | SA     |
| ....4 | IC112    | 1103-001314 | IC-EEPROM;24C16,2Kx8,SOP,8P,5x4mm,2.7/5. | 1    | SA     |
| ....4 | IC113    | 1105-001284 | IC-DRAM;636165,1Mx16Bit,TSOP,50P,467MIL, | 1    | S.N.A  |
| ....4 | IC113    | 1105-001284 | IC-DRAM;636165,1Mx16Bit,TSOP,50P,467MIL, | 1    | S.N.A  |
| ....4 | DU410    | 1201-000166 | IC-OP AMP;LM358,SOP,ST,8P,150MIL,DUAL,10 | 1    | SA     |
| ....4 | T0085    | 1201-002136 | IC-AUDIO AMP;LM4810,MSOP,8P,3x3mm,DUAL,- | 1    | SA     |
| ....4 | T0085    | 1201-002274 | IC-AUDIO AMP;TPA3008D2,HTQFP,48P,7x7mm,D | 1    | SA     |
| ....4 | T0087    | 1203-001816 | IC-POS.FIXED REG.;78M08,TO-252,3P,-,PLA  | 1    | SA     |
| ....4 | IC416    | 1203-001824 | IC-VOL. DETECTOR;7042,SOT-89,3P,-,PLASTI | 1    | SA     |
| ....4 | T0087    | 1203-002842 | IC-POS.FIXED REG.;AP1117D-33A,TO-252,3P  | 1    | SA     |
| ....4 | T0087    | 1203-002844 | IC-POS.FIXED REG.;AP1117D-18A,TO-252-3L  | 1    | SA     |
| ....4 | T0087    | 1203-002844 | IC-POS.FIXED REG.;AP1117D-18A,TO-252-3L  | 1    | SA     |
| ....4 | T0087    | 1203-002855 | IC-POS.FIXED REG.;MC33269DTRK-5.0,DPRK,  | 1    | SA     |
| ....4 | T0170    | 1203-003059 | IC-SWITCH VOL. REG.;MP1583,SOIC,8P,4.9x3 | 1    | SA     |
| ....4 | R225     | 2007-000052 | R-CHIP;10Kohm,1%,1/10W,TP,1608           | 1    | SA     |
| ....4 | R226     | 2007-000052 | R-CHIP;10Kohm,1%,1/10W,TP,1608           | 1    | SA     |
| ....4 | R257     | 2007-000052 | R-CHIP;10Kohm,1%,1/10W,TP,1608           | 1    | SA     |
| ....4 | R258     | 2007-000052 | R-CHIP;10Kohm,1%,1/10W,TP,1608           | 1    | SA     |
| ....4 | R261     | 2007-000052 | R-CHIP;10Kohm,1%,1/10W,TP,1608           | 1    | SA     |
| ....4 | R262     | 2007-000052 | R-CHIP;10Kohm,1%,1/10W,TP,1608           | 1    | SA     |
| ....4 | R320     | 2007-000052 | R-CHIP;10Kohm,1%,1/10W,TP,1608           | 1    | SA     |
| ....4 | R321     | 2007-000052 | R-CHIP;10Kohm,1%,1/10W,TP,1608           | 1    | SA     |
| ....4 | R341     | 2007-000052 | R-CHIP;10Kohm,1%,1/10W,TP,1608           | 1    | SA     |
| ....4 | R343     | 2007-000052 | R-CHIP;10Kohm,1%,1/10W,TP,1608           | 1    | SA     |
| ....4 | R344     | 2007-000052 | R-CHIP;10Kohm,1%,1/10W,TP,1608           | 1    | SA     |
| ....4 | R355     | 2007-000052 | R-CHIP;10Kohm,1%,1/10W,TP,1608           | 1    | SA     |
| ....4 | R356     | 2007-000052 | R-CHIP;10Kohm,1%,1/10W,TP,1608           | 1    | SA     |
| ....4 | R612     | 2007-000052 | R-CHIP;10Kohm,1%,1/10W,TP,1608           | 1    | SA     |
| ....4 | R816     | 2007-000052 | R-CHIP;10Kohm,1%,1/10W,TP,1608           | 1    | SA     |
| ....4 | C375     | 2007-000070 | R-CHIP;0ohm,5%,1/10W,TP,1608             | 1    | SA     |
| ....4 | C377     | 2007-000070 | R-CHIP;0ohm,5%,1/10W,TP,1608             | 1    | SA     |
| ....4 | C378     | 2007-000070 | R-CHIP;0ohm,5%,1/10W,TP,1608             | 1    | SA     |
| ....4 | R101     | 2007-000070 | R-CHIP;0ohm,5%,1/10W,TP,1608             | 1    | SA     |
| ....4 | R111     | 2007-000070 | R-CHIP;0ohm,5%,1/10W,TP,1608             | 1    | SA     |
| ....4 | R112     | 2007-000070 | R-CHIP;0ohm,5%,1/10W,TP,1608             | 1    | SA     |
| ....4 | R125     | 2007-000070 | R-CHIP;0ohm,5%,1/10W,TP,1608             | 1    | SA     |
| ....4 | R201     | 2007-000070 | R-CHIP;0ohm,5%,1/10W,TP,1608             | 1    | SA     |
| ....4 | R213     | 2007-000070 | R-CHIP;0ohm,5%,1/10W,TP,1608             | 1    | SA     |
| ....4 | R214     | 2007-000070 | R-CHIP;0ohm,5%,1/10W,TP,1608             | 1    | SA     |
| ....4 | R215     | 2007-000070 | R-CHIP;0ohm,5%,1/10W,TP,1608             | 1    | SA     |
| ....4 | R219     | 2007-000070 | R-CHIP;0ohm,5%,1/10W,TP,1608             | 1    | SA     |
| ....4 | R222     | 2007-000070 | R-CHIP;0ohm,5%,1/10W,TP,1608             | 1    | SA     |

## 6 Electrical Parts List

| Level | Loc. No. | Code No.    | Description & Specification    | Q'ty | SA/SNA |
|-------|----------|-------------|--------------------------------|------|--------|
| ...4  | R251     | 2007-000070 | R-CHIP;0ohm,5%,1/10W,TP,1608   | 1    | S.A    |
| ...4  | R252     | 2007-000070 | R-CHIP;0ohm,5%,1/10W,TP,1608   | 1    | S.A    |
| ...4  | R275     | 2007-000070 | R-CHIP;0ohm,5%,1/10W,TP,1608   | 1    | S.A    |
| ...4  | R322     | 2007-000070 | R-CHIP;0ohm,5%,1/10W,TP,1608   | 1    | S.A    |
| ...4  | R323     | 2007-000070 | R-CHIP;0ohm,5%,1/10W,TP,1608   | 1    | S.A    |
| ...4  | R324     | 2007-000070 | R-CHIP;0ohm,5%,1/10W,TP,1608   | 1    | S.A    |
| ...4  | R325     | 2007-000070 | R-CHIP;0ohm,5%,1/10W,TP,1608   | 1    | S.A    |
| ...4  | R329     | 2007-000070 | R-CHIP;0ohm,5%,1/10W,TP,1608   | 1    | S.A    |
| ...4  | R330     | 2007-000070 | R-CHIP;0ohm,5%,1/10W,TP,1608   | 1    | S.A    |
| ...4  | R333     | 2007-000070 | R-CHIP;0ohm,5%,1/10W,TP,1608   | 1    | S.A    |
| ...4  | R335     | 2007-000070 | R-CHIP;0ohm,5%,1/10W,TP,1608   | 1    | S.A    |
| ...4  | R336     | 2007-000070 | R-CHIP;0ohm,5%,1/10W,TP,1608   | 1    | S.A    |
| ...4  | R337     | 2007-000070 | R-CHIP;0ohm,5%,1/10W,TP,1608   | 1    | S.A    |
| ...4  | R358     | 2007-000070 | R-CHIP;0ohm,5%,1/10W,TP,1608   | 1    | S.A    |
| ...4  | R360_EU  | 2007-000070 | R-CHIP;0ohm,5%,1/10W,TP,1608   | 1    | S.A    |
| ...4  | R361_EU  | 2007-000070 | R-CHIP;0ohm,5%,1/10W,TP,1608   | 1    | S.A    |
| ...4  | R362_EU  | 2007-000070 | R-CHIP;0ohm,5%,1/10W,TP,1608   | 1    | S.A    |
| ...4  | R411     | 2007-000070 | R-CHIP;0ohm,5%,1/10W,TP,1608   | 1    | S.A    |
| ...4  | R440     | 2007-000070 | R-CHIP;0ohm,5%,1/10W,TP,1608   | 1    | S.A    |
| ...4  | R614     | 2007-000070 | R-CHIP;0ohm,5%,1/10W,TP,1608   | 1    | S.A    |
| ...4  | R615     | 2007-000070 | R-CHIP;0ohm,5%,1/10W,TP,1608   | 1    | S.A    |
| ...4  | R634     | 2007-000070 | R-CHIP;0ohm,5%,1/10W,TP,1608   | 1    | S.A    |
| ...4  | R635     | 2007-000070 | R-CHIP;0ohm,5%,1/10W,TP,1608   | 1    | S.A    |
| ...4  | R750_EU  | 2007-000070 | R-CHIP;0ohm,5%,1/10W,TP,1608   | 1    | S.A    |
| ...4  | R859     | 2007-000070 | R-CHIP;0ohm,5%,1/10W,TP,1608   | 1    | S.A    |
| ...4  | R9665    | 2007-000070 | R-CHIP;0ohm,5%,1/10W,TP,1608   | 1    | S.A    |
| ...4  | R9720    | 2007-000070 | R-CHIP;0ohm,5%,1/10W,TP,1608   | 1    | S.A    |
| ...4  | R9721    | 2007-000070 | R-CHIP;0ohm,5%,1/10W,TP,1608   | 1    | S.A    |
| ...4  | R9722    | 2007-000070 | R-CHIP;0ohm,5%,1/10W,TP,1608   | 1    | S.A    |
| ...4  | R7004    | 2007-000071 | R-CHIP;22ohm,5%,1/10W,TP,1608  | 1    | S.A    |
| ...4  | R7005    | 2007-000071 | R-CHIP;22ohm,5%,1/10W,TP,1608  | 1    | S.A    |
| ...4  | R7006    | 2007-000071 | R-CHIP;22ohm,5%,1/10W,TP,1608  | 1    | S.A    |
| ...4  | R7007    | 2007-000071 | R-CHIP;22ohm,5%,1/10W,TP,1608  | 1    | S.A    |
| ...4  | R7008    | 2007-000071 | R-CHIP;22ohm,5%,1/10W,TP,1608  | 1    | S.A    |
| ...4  | R7009    | 2007-000071 | R-CHIP;22ohm,5%,1/10W,TP,1608  | 1    | S.A    |
| ...4  | R7010    | 2007-000071 | R-CHIP;22ohm,5%,1/10W,TP,1608  | 1    | S.A    |
| ...4  | R7011    | 2007-000071 | R-CHIP;22ohm,5%,1/10W,TP,1608  | 1    | S.A    |
| ...4  | R716_EU  | 2007-000071 | R-CHIP;22ohm,5%,1/10W,TP,1608  | 1    | S.A    |
| ...4  | R717_EU  | 2007-000071 | R-CHIP;22ohm,5%,1/10W,TP,1608  | 1    | S.A    |
| ...4  | R718_EU  | 2007-000071 | R-CHIP;22ohm,5%,1/10W,TP,1608  | 1    | S.A    |
| ...4  | R765     | 2007-000071 | R-CHIP;22ohm,5%,1/10W,TP,1608  | 1    | S.A    |
| ...4  | R766     | 2007-000071 | R-CHIP;22ohm,5%,1/10W,TP,1608  | 1    | S.A    |
| ...4  | R790     | 2007-000071 | R-CHIP;22ohm,5%,1/10W,TP,1608  | 1    | S.A    |
| ...4  | R795     | 2007-000071 | R-CHIP;22ohm,5%,1/10W,TP,1608  | 1    | S.A    |
| ...4  | R231     | 2007-000072 | R-CHIP;47ohm,5%,1/10W,TP,1608  | 1    | S.A    |
| ...4  | R761     | 2007-000072 | R-CHIP;47ohm,5%,1/10W,TP,1608  | 1    | S.A    |
| ...4  | R762     | 2007-000072 | R-CHIP;47ohm,5%,1/10W,TP,1608  | 1    | S.A    |
| ...4  | R775     | 2007-000072 | R-CHIP;47ohm,5%,1/10W,TP,1608  | 1    | S.A    |
| ...4  | R777     | 2007-000072 | R-CHIP;47ohm,5%,1/10W,TP,1608  | 1    | S.A    |
| ...4  | R789     | 2007-000072 | R-CHIP;47ohm,5%,1/10W,TP,1608  | 1    | S.A    |
| ...4  | R791     | 2007-000072 | R-CHIP;47ohm,5%,1/10W,TP,1608  | 1    | S.A    |
| ...4  | R113     | 2007-000074 | R-CHIP;100ohm,5%,1/10W,TP,1608 | 1    | S.A    |
| ...4  | R114     | 2007-000074 | R-CHIP;100ohm,5%,1/10W,TP,1608 | 1    | S.A    |
| ...4  | R210     | 2007-000074 | R-CHIP;100ohm,5%,1/10W,TP,1608 | 1    | S.A    |
| ...4  | R211     | 2007-000074 | R-CHIP;100ohm,5%,1/10W,TP,1608 | 1    | S.A    |
| ...4  | R254     | 2007-000074 | R-CHIP;100ohm,5%,1/10W,TP,1608 | 1    | S.A    |
| ...4  | R255     | 2007-000074 | R-CHIP;100ohm,5%,1/10W,TP,1608 | 1    | S.A    |
| ...4  | R256     | 2007-000074 | R-CHIP;100ohm,5%,1/10W,TP,1608 | 1    | S.A    |
| ...4  | R351     | 2007-000074 | R-CHIP;100ohm,5%,1/10W,TP,1608 | 1    | S.A    |
| ...4  | R420     | 2007-000074 | R-CHIP;100ohm,5%,1/10W,TP,1608 | 1    | S.A    |
| ...4  | R434     | 2007-000074 | R-CHIP;100ohm,5%,1/10W,TP,1608 | 1    | S.A    |
| ...4  | R435     | 2007-000074 | R-CHIP;100ohm,5%,1/10W,TP,1608 | 1    | S.A    |
| ...4  | R455     | 2007-000074 | R-CHIP;100ohm,5%,1/10W,TP,1608 | 1    | S.A    |
| ...4  | R457     | 2007-000074 | R-CHIP;100ohm,5%,1/10W,TP,1608 | 1    | S.A    |
| ...4  | R458     | 2007-000074 | R-CHIP;100ohm,5%,1/10W,TP,1608 | 1    | S.A    |
| ...4  | R648     | 2007-000074 | R-CHIP;100ohm,5%,1/10W,TP,1608 | 1    | S.A    |
| ...4  | R649     | 2007-000074 | R-CHIP;100ohm,5%,1/10W,TP,1608 | 1    | S.A    |
| ...4  | R701_EU  | 2007-000074 | R-CHIP;100ohm,5%,1/10W,TP,1608 | 1    | S.A    |
| ...4  | R709     | 2007-000074 | R-CHIP;100ohm,5%,1/10W,TP,1608 | 1    | S.A    |

| Level | Loc. No. | Code No.    | Description & Specification     | Q'ty | SA/SNA |
|-------|----------|-------------|---------------------------------|------|--------|
| ....4 | R714_EU  | 2007-000074 | R-CHIP;100ohm,5%,1/10W,TP,1608  | 1    | SA     |
| ....4 | R720_EU  | 2007-000074 | R-CHIP;100ohm,5%,1/10W,TP,1608  | 1    | SA     |
| ....4 | R743     | 2007-000074 | R-CHIP;100ohm,5%,1/10W,TP,1608  | 1    | SA     |
| ....4 | R758     | 2007-000074 | R-CHIP;100ohm,5%,1/10W,TP,1608  | 1    | SA     |
| ....4 | R767     | 2007-000074 | R-CHIP;100ohm,5%,1/10W,TP,1608  | 1    | SA     |
| ....4 | R773     | 2007-000074 | R-CHIP;100ohm,5%,1/10W,TP,1608  | 1    | SA     |
| ....4 | R794     | 2007-000074 | R-CHIP;100ohm,5%,1/10W,TP,1608  | 1    | SA     |
| ....4 | R936     | 2007-000074 | R-CHIP;100ohm,5%,1/10W,TP,1608  | 1    | SA     |
| ....4 | R937     | 2007-000074 | R-CHIP;100ohm,5%,1/10W,TP,1608  | 1    | SA     |
| ....4 | R9703    | 2007-000074 | R-CHIP;100ohm,5%,1/10W,TP,1608  | 1    | SA     |
| ....4 | R328     | 2007-000075 | R-CHIP;220ohm,5%,1/10W,TP,1608  | 1    | SA     |
| ....4 | R439     | 2007-000075 | R-CHIP;220ohm,5%,1/10W,TP,1608  | 1    | SA     |
| ....4 | R126     | 2007-000076 | R-CHIP;330ohm,5%,1/10W,TP,1608  | 1    | SA     |
| ....4 | R232     | 2007-000076 | R-CHIP;330ohm,5%,1/10W,TP,1608  | 1    | SA     |
| ....4 | R366     | 2007-000076 | R-CHIP;330ohm,5%,1/10W,TP,1608  | 1    | SA     |
| ....4 | R712_EU  | 2007-000076 | R-CHIP;330ohm,5%,1/10W,TP,1608  | 1    | SA     |
| ....4 | R713_EU  | 2007-000076 | R-CHIP;330ohm,5%,1/10W,TP,1608  | 1    | SA     |
| ....4 | R732_EU  | 2007-000076 | R-CHIP;330ohm,5%,1/10W,TP,1608  | 1    | SA     |
| ....4 | R734_EU  | 2007-000076 | R-CHIP;330ohm,5%,1/10W,TP,1608  | 1    | SA     |
| ....4 | R266     | 2007-000077 | R-CHIP;470ohm,5%,1/10W,TP,1608  | 1    | SA     |
| ....4 | R271     | 2007-000077 | R-CHIP;470ohm,5%,1/10W,TP,1608  | 1    | SA     |
| ....4 | R417     | 2007-000077 | R-CHIP;470ohm,5%,1/10W,TP,1608  | 1    | SA     |
| ....4 | R728     | 2007-000077 | R-CHIP;470ohm,5%,1/10W,TP,1608  | 1    | SA     |
| ....4 | R729     | 2007-000077 | R-CHIP;470ohm,5%,1/10W,TP,1608  | 1    | SA     |
| ....4 | R733_EU  | 2007-000077 | R-CHIP;470ohm,5%,1/10W,TP,1608  | 1    | SA     |
| ....4 | R735_EU  | 2007-000077 | R-CHIP;470ohm,5%,1/10W,TP,1608  | 1    | SA     |
| ....4 | R754_EU  | 2007-000077 | R-CHIP;470ohm,5%,1/10W,TP,1608  | 1    | SA     |
| ....4 | R755_EU  | 2007-000077 | R-CHIP;470ohm,5%,1/10W,TP,1608  | 1    | SA     |
| ....4 | R768     | 2007-000077 | R-CHIP;470ohm,5%,1/10W,TP,1608  | 1    | SA     |
| ....4 | R769     | 2007-000077 | R-CHIP;470ohm,5%,1/10W,TP,1608  | 1    | SA     |
| ....4 | R774     | 2007-000077 | R-CHIP;470ohm,5%,1/10W,TP,1608  | 1    | SA     |
| ....4 | R776     | 2007-000077 | R-CHIP;470ohm,5%,1/10W,TP,1608  | 1    | SA     |
| ....4 | R798     | 2007-000077 | R-CHIP;470ohm,5%,1/10W,TP,1608  | 1    | SA     |
| ....4 | R799     | 2007-000077 | R-CHIP;470ohm,5%,1/10W,TP,1608  | 1    | SA     |
| ....4 | R901     | 2007-000077 | R-CHIP;470ohm,5%,1/10W,TP,1608  | 1    | SA     |
| ....4 | R218     | 2007-000078 | R-CHIP;1Kohm,5%,1/10W,TP,1608   | 1    | SA     |
| ....4 | R224     | 2007-000078 | R-CHIP;1Kohm,5%,1/10W,TP,1608   | 1    | SA     |
| ....4 | R326     | 2007-000078 | R-CHIP;1Kohm,5%,1/10W,TP,1608   | 1    | SA     |
| ....4 | R327     | 2007-000078 | R-CHIP;1Kohm,5%,1/10W,TP,1608   | 1    | SA     |
| ....4 | R345     | 2007-000078 | R-CHIP;1Kohm,5%,1/10W,TP,1608   | 1    | SA     |
| ....4 | R413     | 2007-000078 | R-CHIP;1Kohm,5%,1/10W,TP,1608   | 1    | SA     |
| ....4 | R419     | 2007-000078 | R-CHIP;1Kohm,5%,1/10W,TP,1608   | 1    | SA     |
| ....4 | R463     | 2007-000078 | R-CHIP;1Kohm,5%,1/10W,TP,1608   | 1    | SA     |
| ....4 | R645     | 2007-000078 | R-CHIP;1Kohm,5%,1/10W,TP,1608   | 1    | SA     |
| ....4 | R646     | 2007-000078 | R-CHIP;1Kohm,5%,1/10W,TP,1608   | 1    | SA     |
| ....4 | R778     | 2007-000078 | R-CHIP;1Kohm,5%,1/10W,TP,1608   | 1    | SA     |
| ....4 | R779     | 2007-000078 | R-CHIP;1Kohm,5%,1/10W,TP,1608   | 1    | SA     |
| ....4 | R917     | 2007-000078 | R-CHIP;1Kohm,5%,1/10W,TP,1608   | 1    | SA     |
| ....4 | R9716    | 2007-000078 | R-CHIP;1Kohm,5%,1/10W,TP,1608   | 1    | SA     |
| ....4 | R9696    | 2007-000080 | R-CHIP;2Kohm,5%,1/10W,TP,1608   | 1    | SA     |
| ....4 | R9697    | 2007-000080 | R-CHIP;2Kohm,5%,1/10W,TP,1608   | 1    | SA     |
| ....4 | R263     | 2007-000082 | R-CHIP;3.3Kohm,5%,1/10W,TP,1608 | 1    | SA     |
| ....4 | R264     | 2007-000082 | R-CHIP;3.3Kohm,5%,1/10W,TP,1608 | 1    | SA     |
| ....4 | R414     | 2007-000082 | R-CHIP;3.3Kohm,5%,1/10W,TP,1608 | 1    | SA     |
| ....4 | R416     | 2007-000082 | R-CHIP;3.3Kohm,5%,1/10W,TP,1608 | 1    | SA     |
| ....4 | R418     | 2007-000082 | R-CHIP;3.3Kohm,5%,1/10W,TP,1608 | 1    | SA     |
| ....4 | R9701    | 2007-000082 | R-CHIP;3.3Kohm,5%,1/10W,TP,1608 | 1    | SA     |
| ....4 | R9702    | 2007-000082 | R-CHIP;3.3Kohm,5%,1/10W,TP,1608 | 1    | SA     |
| ....4 | R110     | 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 | R220     | 2007-000084 | R-CHIP;4.7Kohm,5%,1/10W,TP,1608 | 1    | SA     |
| ....4 | R259     | 2007-000084 | R-CHIP;4.7Kohm,5%,1/10W,TP,1608 | 1    | SA     |
| ....4 | R310     | 2007-000084 | R-CHIP;4.7Kohm,5%,1/10W,TP,1608 | 1    | SA     |
| ....4 | R311     | 2007-000084 | R-CHIP;4.7Kohm,5%,1/10W,TP,1608 | 1    | SA     |
| ....4 | R346     | 2007-000084 | R-CHIP;4.7Kohm,5%,1/10W,TP,1608 | 1    | SA     |
| ....4 | R365     | 2007-000084 | R-CHIP;4.7Kohm,5%,1/10W,TP,1608 | 1    | SA     |
| ....4 | R415     | 2007-000084 | R-CHIP;4.7Kohm,5%,1/10W,TP,1608 | 1    | SA     |
| ....4 | R647     | 2007-000084 | R-CHIP;4.7Kohm,5%,1/10W,TP,1608 | 1    | SA     |
| ....4 | R650     | 2007-000084 | R-CHIP;4.7Kohm,5%,1/10W,TP,1608 | 1    | SA     |

## 6 Electrical Parts List

| Level | Loc. No. | Code No.    | Description & Specification     | Q'ty | SA/SNA |
|-------|----------|-------------|---------------------------------|------|--------|
| ...4  | R660     | 2007-000084 | R-CHIP;4.7Kohm,5%,1/10W,TP,1608 | 1    | S.A    |
| ...4  | R661     | 2007-000084 | R-CHIP;4.7Kohm,5%,1/10W,TP,1608 | 1    | S.A    |
| ...4  | R662     | 2007-000084 | R-CHIP;4.7Kohm,5%,1/10W,TP,1608 | 1    | S.A    |
| ...4  | R705     | 2007-000084 | R-CHIP;4.7Kohm,5%,1/10W,TP,1608 | 1    | S.A    |
| ...4  | R803     | 2007-000084 | R-CHIP;4.7Kohm,5%,1/10W,TP,1608 | 1    | S.A    |
| ...4  | R804     | 2007-000084 | R-CHIP;4.7Kohm,5%,1/10W,TP,1608 | 1    | S.A    |
| ...4  | R805     | 2007-000084 | R-CHIP;4.7Kohm,5%,1/10W,TP,1608 | 1    | S.A    |
| ...4  | R812     | 2007-000084 | R-CHIP;4.7Kohm,5%,1/10W,TP,1608 | 1    | S.A    |
| ...4  | R813     | 2007-000084 | R-CHIP;4.7Kohm,5%,1/10W,TP,1608 | 1    | S.A    |
| ...4  | R820     | 2007-000084 | R-CHIP;4.7Kohm,5%,1/10W,TP,1608 | 1    | S.A    |
| ...4  | R821     | 2007-000084 | R-CHIP;4.7Kohm,5%,1/10W,TP,1608 | 1    | S.A    |
| ...4  | R913     | 2007-000084 | R-CHIP;4.7Kohm,5%,1/10W,TP,1608 | 1    | S.A    |
| ...4  | R920     | 2007-000084 | R-CHIP;4.7Kohm,5%,1/10W,TP,1608 | 1    | S.A    |
| ...4  | R9699    | 2007-000084 | R-CHIP;4.7Kohm,5%,1/10W,TP,1608 | 1    | S.A    |
| ...4  | R9700    | 2007-000084 | R-CHIP;4.7Kohm,5%,1/10W,TP,1608 | 1    | S.A    |
| ...4  | R9706    | 2007-000084 | R-CHIP;4.7Kohm,5%,1/10W,TP,1608 | 1    | S.A    |
| ...4  | R9714    | 2007-000084 | R-CHIP;4.7Kohm,5%,1/10W,TP,1608 | 1    | S.A    |
| ...4  | R9717    | 2007-000084 | R-CHIP;4.7Kohm,5%,1/10W,TP,1608 | 1    | S.A    |
| ...4  | R216     | 2007-000087 | R-CHIP;6.8Kohm,5%,1/10W,TP,1608 | 1    | S.A    |
| ...4  | R217     | 2007-000087 | R-CHIP;6.8Kohm,5%,1/10W,TP,1608 | 1    | S.A    |
| ...4  | R719_EU  | 2007-000087 | R-CHIP;6.8Kohm,5%,1/10W,TP,1608 | 1    | S.A    |
| ...4  | R739_EU  | 2007-000087 | R-CHIP;6.8Kohm,5%,1/10W,TP,1608 | 1    | S.A    |
| ...4  | R230     | 2007-000090 | R-CHIP;10Kohm,5%,1/10W,TP,1608  | 1    | S.A    |
| ...4  | R269     | 2007-000090 | R-CHIP;10Kohm,5%,1/10W,TP,1608  | 1    | S.A    |
| ...4  | R274     | 2007-000090 | R-CHIP;10Kohm,5%,1/10W,TP,1608  | 1    | S.A    |
| ...4  | R302     | 2007-000090 | R-CHIP;10Kohm,5%,1/10W,TP,1608  | 1    | S.A    |
| ...4  | R421     | 2007-000090 | R-CHIP;10Kohm,5%,1/10W,TP,1608  | 1    | S.A    |
| ...4  | R443     | 2007-000090 | R-CHIP;10Kohm,5%,1/10W,TP,1608  | 1    | S.A    |
| ...4  | R445     | 2007-000090 | R-CHIP;10Kohm,5%,1/10W,TP,1608  | 1    | S.A    |
| ...4  | R447     | 2007-000090 | R-CHIP;10Kohm,5%,1/10W,TP,1608  | 1    | S.A    |
| ...4  | R449     | 2007-000090 | R-CHIP;10Kohm,5%,1/10W,TP,1608  | 1    | S.A    |
| ...4  | R456     | 2007-000090 | R-CHIP;10Kohm,5%,1/10W,TP,1608  | 1    | S.A    |
| ...4  | R460     | 2007-000090 | R-CHIP;10Kohm,5%,1/10W,TP,1608  | 1    | S.A    |
| ...4  | R462     | 2007-000090 | R-CHIP;10Kohm,5%,1/10W,TP,1608  | 1    | S.A    |
| ...4  | R626     | 2007-000090 | R-CHIP;10Kohm,5%,1/10W,TP,1608  | 1    | S.A    |
| ...4  | R627     | 2007-000090 | R-CHIP;10Kohm,5%,1/10W,TP,1608  | 1    | S.A    |
| ...4  | R706     | 2007-000090 | R-CHIP;10Kohm,5%,1/10W,TP,1608  | 1    | S.A    |
| ...4  | R759     | 2007-000090 | R-CHIP;10Kohm,5%,1/10W,TP,1608  | 1    | S.A    |
| ...4  | R760     | 2007-000090 | R-CHIP;10Kohm,5%,1/10W,TP,1608  | 1    | S.A    |
| ...4  | R772     | 2007-000090 | R-CHIP;10Kohm,5%,1/10W,TP,1608  | 1    | S.A    |
| ...4  | R787     | 2007-000090 | R-CHIP;10Kohm,5%,1/10W,TP,1608  | 1    | S.A    |
| ...4  | R788     | 2007-000090 | R-CHIP;10Kohm,5%,1/10W,TP,1608  | 1    | S.A    |
| ...4  | R811     | 2007-000090 | R-CHIP;10Kohm,5%,1/10W,TP,1608  | 1    | S.A    |
| ...4  | R814     | 2007-000090 | R-CHIP;10Kohm,5%,1/10W,TP,1608  | 1    | S.A    |
| ...4  | R9710    | 2007-000090 | R-CHIP;10Kohm,5%,1/10W,TP,1608  | 1    | S.A    |
| ...4  | R9711    | 2007-000090 | R-CHIP;10Kohm,5%,1/10W,TP,1608  | 1    | S.A    |
| ...4  | R9712    | 2007-000090 | R-CHIP;10Kohm,5%,1/10W,TP,1608  | 1    | S.A    |
| ...4  | R9715    | 2007-000090 | R-CHIP;10Kohm,5%,1/10W,TP,1608  | 1    | S.A    |
| ...4  | R815     | 2007-000092 | R-CHIP;15Kohm,5%,1/10W,TP,1608  | 1    | S.A    |
| ...4  | R613     | 2007-000093 | R-CHIP;20Kohm,5%,1/10W,TP,1608  | 1    | S.A    |
| ...4  | R618     | 2007-000093 | R-CHIP;20Kohm,5%,1/10W,TP,1608  | 1    | S.A    |
| ...4  | R124     | 2007-000094 | R-CHIP;22Kohm,5%,1/10W,TP,1608  | 1    | S.A    |
| ...4  | R670     | 2007-000094 | R-CHIP;22Kohm,5%,1/10W,TP,1608  | 1    | S.A    |
| ...4  | R671     | 2007-000094 | R-CHIP;22Kohm,5%,1/10W,TP,1608  | 1    | S.A    |
| ...4  | R710_EU  | 2007-000097 | R-CHIP;47Kohm,5%,1/10W,TP,1608  | 1    | S.A    |
| ...4  | R711_EU  | 2007-000097 | R-CHIP;47Kohm,5%,1/10W,TP,1608  | 1    | S.A    |
| ...4  | R819     | 2007-000097 | R-CHIP;47Kohm,5%,1/10W,TP,1608  | 1    | S.A    |
| ...4  | R894     | 2007-000097 | R-CHIP;47Kohm,5%,1/10W,TP,1608  | 1    | S.A    |
| ...4  | R637     | 2007-000100 | R-CHIP;68Kohm,5%,1/10W,TP,1608  | 1    | S.A    |
| ...4  | R638     | 2007-000100 | R-CHIP;68Kohm,5%,1/10W,TP,1608  | 1    | S.A    |
| ...4  | R639     | 2007-000100 | R-CHIP;68Kohm,5%,1/10W,TP,1608  | 1    | S.A    |
| ...4  | R640     | 2007-000100 | R-CHIP;68Kohm,5%,1/10W,TP,1608  | 1    | S.A    |
| ...4  | R641     | 2007-000100 | R-CHIP;68Kohm,5%,1/10W,TP,1608  | 1    | S.A    |
| ...4  | R642     | 2007-000100 | R-CHIP;68Kohm,5%,1/10W,TP,1608  | 1    | S.A    |
| ...4  | R643     | 2007-000100 | R-CHIP;68Kohm,5%,1/10W,TP,1608  | 1    | S.A    |
| ...4  | R644     | 2007-000100 | R-CHIP;68Kohm,5%,1/10W,TP,1608  | 1    | S.A    |
| ...4  | R651     | 2007-000100 | R-CHIP;68Kohm,5%,1/10W,TP,1608  | 1    | S.A    |
| ...4  | R652     | 2007-000100 | R-CHIP;68Kohm,5%,1/10W,TP,1608  | 1    | S.A    |
| ...4  | R653     | 2007-000100 | R-CHIP;68Kohm,5%,1/10W,TP,1608  | 1    | S.A    |

| Level | Loc. No. | Code No.    | Description & Specification     | Q'ty | SA/SNA |
|-------|----------|-------------|---------------------------------|------|--------|
| ....4 | R654     | 2007-000100 | R-CHIP;68Kohm,5%,1/10W,TP,1608  | 1    | SA     |
| ....4 | R655     | 2007-000100 | R-CHIP;68Kohm,5%,1/10W,TP,1608  | 1    | SA     |
| ....4 | R656     | 2007-000100 | R-CHIP;68Kohm,5%,1/10W,TP,1608  | 1    | SA     |
| ....4 | R657     | 2007-000100 | R-CHIP;68Kohm,5%,1/10W,TP,1608  | 1    | SA     |
| ....4 | R658     | 2007-000100 | R-CHIP;68Kohm,5%,1/10W,TP,1608  | 1    | SA     |
| ....4 | R119     | 2007-000102 | R-CHIP;100Kohm,5%,1/10W,TP,1608 | 1    | SA     |
| ....4 | R127     | 2007-000102 | R-CHIP;100Kohm,5%,1/10W,TP,1608 | 1    | SA     |
| ....4 | R611     | 2007-000102 | R-CHIP;100Kohm,5%,1/10W,TP,1608 | 1    | SA     |
| ....4 | R619     | 2007-000102 | R-CHIP;100Kohm,5%,1/10W,TP,1608 | 1    | SA     |
| ....4 | R810     | 2007-000102 | R-CHIP;100Kohm,5%,1/10W,TP,1608 | 1    | SA     |
| ....4 | R629     | 2007-000103 | R-CHIP;120Kohm,5%,1/10W,TP,1608 | 1    | SA     |
| ....4 | R620     | 2007-000106 | R-CHIP;220Kohm,5%,1/10W,TP,1608 | 1    | SA     |
| ....4 | R817     | 2007-000123 | R-CHIP;1.5Kohm,5%,1/10W,TP,1608 | 1    | SA     |
| ....4 | R910     | 2007-000123 | R-CHIP;1.5Kohm,5%,1/10W,TP,1608 | 1    | SA     |
| ....4 | R911     | 2007-000123 | R-CHIP;1.5Kohm,5%,1/10W,TP,1608 | 1    | SA     |
| ....4 | R912     | 2007-000123 | R-CHIP;1.5Kohm,5%,1/10W,TP,1608 | 1    | SA     |
| ....4 | R7001    | 2007-000293 | R-CHIP;100ohm,5%,1/4W,TP,3216   | 1    | SA     |
| ....4 | R7002    | 2007-000293 | R-CHIP;100ohm,5%,1/4W,TP,3216   | 1    | SA     |
| ....4 | R7003    | 2007-000293 | R-CHIP;100ohm,5%,1/4W,TP,3216   | 1    | SA     |
| ....4 | R7012    | 2007-000293 | R-CHIP;100ohm,5%,1/4W,TP,3216   | 1    | SA     |
| ....4 | R7013    | 2007-000293 | R-CHIP;100ohm,5%,1/4W,TP,3216   | 1    | SA     |
| ....4 | R7014    | 2007-000293 | R-CHIP;100ohm,5%,1/4W,TP,3216   | 1    | SA     |
| ....4 | R7015    | 2007-000293 | R-CHIP;100ohm,5%,1/4W,TP,3216   | 1    | SA     |
| ....4 | R7016    | 2007-000293 | R-CHIP;100ohm,5%,1/4W,TP,3216   | 1    | SA     |
| ....4 | R7017    | 2007-000293 | R-CHIP;100ohm,5%,1/4W,TP,3216   | 1    | SA     |
| ....4 | R727_EU  | 2007-000293 | R-CHIP;100ohm,5%,1/4W,TP,3216   | 1    | SA     |
| ....4 | R738     | 2007-000293 | R-CHIP;100ohm,5%,1/4W,TP,3216   | 1    | SA     |
| ....4 | R229     | 2007-000309 | R-CHIP;10ohm,5%,1/10W,TP,1608   | 1    | SA     |
| ....4 | R796     | 2007-000309 | R-CHIP;10ohm,5%,1/10W,TP,1608   | 1    | SA     |
| ....4 | R797     | 2007-000309 | R-CHIP;10ohm,5%,1/10W,TP,1608   | 1    | SA     |
| ....4 | R117_EU  | 2007-000402 | R-CHIP;150ohm,5%,1/10W,TP,1608  | 1    | SA     |
| ....4 | R267     | 2007-000402 | R-CHIP;150ohm,5%,1/10W,TP,1608  | 1    | SA     |
| ....4 | R272     | 2007-000402 | R-CHIP;150ohm,5%,1/10W,TP,1608  | 1    | SA     |
| ....4 | R265     | 2007-000458 | R-CHIP;18Kohm,5%,1/10W,TP,1608  | 1    | SA     |
| ....4 | R270     | 2007-000458 | R-CHIP;18Kohm,5%,1/10W,TP,1608  | 1    | SA     |
| ....4 | R715_EU  | 2007-000458 | R-CHIP;18Kohm,5%,1/10W,TP,1608  | 1    | SA     |
| ....4 | R736_EU  | 2007-000458 | R-CHIP;18Kohm,5%,1/10W,TP,1608  | 1    | SA     |
| ....4 | R412     | 2007-000608 | R-CHIP;240ohm,5%,1/10W,TP,1608  | 1    | SA     |
| ....4 | R438     | 2007-000903 | R-CHIP;430ohm,1%,1/10W,TP,1608  | 1    | SA     |
| ....4 | R122_EU  | 2007-001002 | R-CHIP;510ohm,5%,1/10W,TP,1608  | 1    | SA     |
| ....4 | R771     | 2007-001002 | R-CHIP;510ohm,5%,1/10W,TP,1608  | 1    | SA     |
| ....4 | R338     | 2007-001042 | R-CHIP;56ohm,1%,1/10W,TP,1608   | 1    | SA     |
| ....4 | R339     | 2007-001042 | R-CHIP;56ohm,1%,1/10W,TP,1608   | 1    | SA     |
| ....4 | R340     | 2007-001042 | R-CHIP;56ohm,1%,1/10W,TP,1608   | 1    | SA     |
| ....4 | R780     | 2007-001042 | R-CHIP;56ohm,1%,1/10W,TP,1608   | 1    | SA     |
| ....4 | R781     | 2007-001042 | R-CHIP;56ohm,1%,1/10W,TP,1608   | 1    | SA     |
| ....4 | R782     | 2007-001042 | R-CHIP;56ohm,1%,1/10W,TP,1608   | 1    | SA     |
| ....4 | R783     | 2007-001042 | R-CHIP;56ohm,1%,1/10W,TP,1608   | 1    | SA     |
| ....4 | R818     | 2007-001068 | R-CHIP;6.8Kohm,1%,1/10W,TP,1608 | 1    | SA     |
| ....4 | R721_EU  | 2007-001164 | R-CHIP;75ohm,1%,1/10W,TP,1608   | 1    | SA     |
| ....4 | R722     | 2007-001164 | R-CHIP;75ohm,1%,1/10W,TP,1608   | 1    | SA     |
| ....4 | R723     | 2007-001164 | R-CHIP;75ohm,1%,1/10W,TP,1608   | 1    | SA     |
| ....4 | R724     | 2007-001164 | R-CHIP;75ohm,1%,1/10W,TP,1608   | 1    | SA     |
| ....4 | R725_EU  | 2007-001164 | R-CHIP;75ohm,1%,1/10W,TP,1608   | 1    | SA     |
| ....4 | R726_EU  | 2007-001164 | R-CHIP;75ohm,1%,1/10W,TP,1608   | 1    | SA     |
| ....4 | R737_EU  | 2007-001164 | R-CHIP;75ohm,1%,1/10W,TP,1608   | 1    | SA     |
| ....4 | R744     | 2007-001164 | R-CHIP;75ohm,1%,1/10W,TP,1608   | 1    | SA     |
| ....4 | R751     | 2007-001164 | R-CHIP;75ohm,1%,1/10W,TP,1608   | 1    | SA     |
| ....4 | R752     | 2007-001164 | R-CHIP;75ohm,1%,1/10W,TP,1608   | 1    | SA     |
| ....4 | R753     | 2007-001164 | R-CHIP;75ohm,1%,1/10W,TP,1608   | 1    | SA     |
| ....4 | R763     | 2007-001164 | R-CHIP;75ohm,1%,1/10W,TP,1608   | 1    | SA     |
| ....4 | R764     | 2007-001164 | R-CHIP;75ohm,1%,1/10W,TP,1608   | 1    | SA     |
| ....4 | R770     | 2007-001164 | R-CHIP;75ohm,1%,1/10W,TP,1608   | 1    | SA     |
| ....4 | R331     | 2007-001167 | R-CHIP;75ohm,5%,1/10W,TP,1608   | 1    | SA     |
| ....4 | R348     | 2007-001167 | R-CHIP;75ohm,5%,1/10W,TP,1608   | 1    | SA     |
| ....4 | R349     | 2007-001167 | R-CHIP;75ohm,5%,1/10W,TP,1608   | 1    | SA     |
| ....4 | R353     | 2007-001167 | R-CHIP;75ohm,5%,1/10W,TP,1608   | 1    | SA     |
| ....4 | R784     | 2007-001167 | R-CHIP;75ohm,5%,1/10W,TP,1608   | 1    | SA     |
| ....4 | R785     | 2007-001167 | R-CHIP;75ohm,5%,1/10W,TP,1608   | 1    | SA     |

## 6 Electrical Parts List

| Level | Loc. No. | Code No.    | Description & Specification              | Q'ty | SA/SNA |
|-------|----------|-------------|------------------------------------------|------|--------|
| ...4  | R786     | 2007-001167 | R-CHIP;75ohm,5%,1/10W,TP,1608            | 1    | S.A    |
| ...4  | R792     | 2007-001167 | R-CHIP;75ohm,5%,1/10W,TP,1608            | 1    | S.A    |
| ...4  | R793     | 2007-001167 | R-CHIP;75ohm,5%,1/10W,TP,1608            | 1    | S.A    |
| ...4  | RA210    | 2011-000881 | R-NET;33ohm,5%,1/16W,L,CHIP,8P,TP,3.2x1. | 1    | S.A    |
| ...4  | RA211    | 2011-000881 | R-NET;33ohm,5%,1/16W,L,CHIP,8P,TP,3.2x1. | 1    | S.A    |
| ...4  | C213     | 2203-000140 | C-CER,CHIP;1.5nF,10%,50V,X7R,1608        | 1    | S.A    |
| ...4  | C220     | 2203-000140 | C-CER,CHIP;1.5nF,10%,50V,X7R,1608        | 1    | S.A    |
| ...4  | C223     | 2203-000140 | C-CER,CHIP;1.5nF,10%,50V,X7R,1608        | 1    | S.A    |
| ...4  | C227     | 2203-000140 | C-CER,CHIP;1.5nF,10%,50V,X7R,1608        | 1    | S.A    |
| ...4  | C230     | 2203-000140 | C-CER,CHIP;1.5nF,10%,50V,X7R,1608        | 1    | S.A    |
| ...4  | C233     | 2203-000140 | C-CER,CHIP;1.5nF,10%,50V,X7R,1608        | 1    | S.A    |
| ...4  | C236     | 2203-000140 | C-CER,CHIP;1.5nF,10%,50V,X7R,1608        | 1    | S.A    |
| ...4  | C119     | 2203-000189 | C-CER,CHIP;100nF,+80-20%,25V,Y5V,1608    | 1    | S.A    |
| ...4  | C201     | 2203-000189 | C-CER,CHIP;100nF,+80-20%,25V,Y5V,1608    | 1    | S.A    |
| ...4  | C214     | 2203-000189 | C-CER,CHIP;100nF,+80-20%,25V,Y5V,1608    | 1    | S.A    |
| ...4  | C248     | 2203-000189 | C-CER,CHIP;100nF,+80-20%,25V,Y5V,1608    | 1    | S.A    |
| ...4  | C250     | 2203-000189 | C-CER,CHIP;100nF,+80-20%,25V,Y5V,1608    | 1    | S.A    |
| ...4  | C251     | 2203-000189 | C-CER,CHIP;100nF,+80-20%,25V,Y5V,1608    | 1    | S.A    |
| ...4  | C252     | 2203-000189 | C-CER,CHIP;100nF,+80-20%,25V,Y5V,1608    | 1    | S.A    |
| ...4  | C253     | 2203-000189 | C-CER,CHIP;100nF,+80-20%,25V,Y5V,1608    | 1    | S.A    |
| ...4  | C255     | 2203-000189 | C-CER,CHIP;100nF,+80-20%,25V,Y5V,1608    | 1    | S.A    |
| ...4  | C259     | 2203-000189 | C-CER,CHIP;100nF,+80-20%,25V,Y5V,1608    | 1    | S.A    |
| ...4  | C260     | 2203-000189 | C-CER,CHIP;100nF,+80-20%,25V,Y5V,1608    | 1    | S.A    |
| ...4  | C261     | 2203-000189 | C-CER,CHIP;100nF,+80-20%,25V,Y5V,1608    | 1    | S.A    |
| ...4  | C262     | 2203-000189 | C-CER,CHIP;100nF,+80-20%,25V,Y5V,1608    | 1    | S.A    |
| ...4  | C263     | 2203-000189 | C-CER,CHIP;100nF,+80-20%,25V,Y5V,1608    | 1    | S.A    |
| ...4  | C264     | 2203-000189 | C-CER,CHIP;100nF,+80-20%,25V,Y5V,1608    | 1    | S.A    |
| ...4  | C265     | 2203-000189 | C-CER,CHIP;100nF,+80-20%,25V,Y5V,1608    | 1    | S.A    |
| ...4  | C266     | 2203-000189 | C-CER,CHIP;100nF,+80-20%,25V,Y5V,1608    | 1    | S.A    |
| ...4  | C271     | 2203-000189 | C-CER,CHIP;100nF,+80-20%,25V,Y5V,1608    | 1    | S.A    |
| ...4  | C616     | 2203-000189 | C-CER,CHIP;100nF,+80-20%,25V,Y5V,1608    | 1    | S.A    |
| ...4  | C622     | 2203-000189 | C-CER,CHIP;100nF,+80-20%,25V,Y5V,1608    | 1    | S.A    |
| ...4  | C627     | 2203-000189 | C-CER,CHIP;100nF,+80-20%,25V,Y5V,1608    | 1    | S.A    |
| ...4  | C637     | 2203-000189 | C-CER,CHIP;100nF,+80-20%,25V,Y5V,1608    | 1    | S.A    |
| ...4  | C642     | 2203-000189 | C-CER,CHIP;100nF,+80-20%,25V,Y5V,1608    | 1    | S.A    |
| ...4  | C643     | 2203-000189 | C-CER,CHIP;100nF,+80-20%,25V,Y5V,1608    | 1    | S.A    |
| ...4  | C702     | 2203-000189 | C-CER,CHIP;100nF,+80-20%,25V,Y5V,1608    | 1    | S.A    |
| ...4  | C734     | 2203-000189 | C-CER,CHIP;100nF,+80-20%,25V,Y5V,1608    | 1    | S.A    |
| ...4  | C812     | 2203-000189 | C-CER,CHIP;100nF,+80-20%,25V,Y5V,1608    | 1    | S.A    |
| ...4  | C818     | 2203-000189 | C-CER,CHIP;100nF,+80-20%,25V,Y5V,1608    | 1    | S.A    |
| ...4  | C823     | 2203-000189 | C-CER,CHIP;100nF,+80-20%,25V,Y5V,1608    | 1    | S.A    |
| ...4  | C827     | 2203-000189 | C-CER,CHIP;100nF,+80-20%,25V,Y5V,1608    | 1    | S.A    |
| ...4  | C841     | 2203-000189 | C-CER,CHIP;100nF,+80-20%,25V,Y5V,1608    | 1    | S.A    |
| ...4  | C880     | 2203-000189 | C-CER,CHIP;100nF,+80-20%,25V,Y5V,1608    | 1    | S.A    |
| ...4  | C901     | 2203-000189 | C-CER,CHIP;100nF,+80-20%,25V,Y5V,1608    | 1    | S.A    |
| ...4  | C912     | 2203-000189 | C-CER,CHIP;100nF,+80-20%,25V,Y5V,1608    | 1    | S.A    |
| ...4  | C925     | 2203-000189 | C-CER,CHIP;100nF,+80-20%,25V,Y5V,1608    | 1    | S.A    |
| ...4  | C926     | 2203-000189 | C-CER,CHIP;100nF,+80-20%,25V,Y5V,1608    | 1    | S.A    |
| ...4  | C927     | 2203-000189 | C-CER,CHIP;100nF,+80-20%,25V,Y5V,1608    | 1    | S.A    |
| ...4  | C114     | 2203-000236 | C-CER,CHIP;0.1nF,5%,50V,C0G,1608         | 1    | S.A    |
| ...4  | C115     | 2203-000236 | C-CER,CHIP;0.1nF,5%,50V,C0G,1608         | 1    | S.A    |
| ...4  | C710     | 2203-000236 | C-CER,CHIP;0.1nF,5%,50V,C0G,1608         | 1    | S.A    |
| ...4  | C711     | 2203-000236 | C-CER,CHIP;0.1nF,5%,50V,C0G,1608         | 1    | S.A    |
| ...4  | C712_EU  | 2203-000236 | C-CER,CHIP;0.1nF,5%,50V,C0G,1608         | 1    | S.A    |
| ...4  | C713     | 2203-000236 | C-CER,CHIP;0.1nF,5%,50V,C0G,1608         | 1    | S.A    |
| ...4  | C714_EU  | 2203-000236 | C-CER,CHIP;0.1nF,5%,50V,C0G,1608         | 1    | S.A    |
| ...4  | C715_EU  | 2203-000236 | C-CER,CHIP;0.1nF,5%,50V,C0G,1608         | 1    | S.A    |
| ...4  | C716     | 2203-000236 | C-CER,CHIP;0.1nF,5%,50V,C0G,1608         | 1    | S.A    |
| ...4  | C717_EU  | 2203-000236 | C-CER,CHIP;0.1nF,5%,50V,C0G,1608         | 1    | S.A    |
| ...4  | C719_EU  | 2203-000236 | C-CER,CHIP;0.1nF,5%,50V,C0G,1608         | 1    | S.A    |
| ...4  | C721_EU  | 2203-000236 | C-CER,CHIP;0.1nF,5%,50V,C0G,1608         | 1    | S.A    |
| ...4  | C729     | 2203-000236 | C-CER,CHIP;0.1nF,5%,50V,C0G,1608         | 1    | S.A    |
| ...4  | C733     | 2203-000236 | C-CER,CHIP;0.1nF,5%,50V,C0G,1608         | 1    | S.A    |
| ...4  | C745     | 2203-000236 | C-CER,CHIP;0.1nF,5%,50V,C0G,1608         | 1    | S.A    |
| ...4  | C746     | 2203-000236 | C-CER,CHIP;0.1nF,5%,50V,C0G,1608         | 1    | S.A    |
| ...4  | C110_EU  | 2203-000257 | C-CER,CHIP;10nF,10%,50V,X7R,1608         | 1    | S.A    |
| ...4  | C116_EU  | 2203-000257 | C-CER,CHIP;10nF,10%,50V,X7R,1608         | 1    | S.A    |
| ...4  | C117     | 2203-000257 | C-CER,CHIP;10nF,10%,50V,X7R,1608         | 1    | S.A    |
| ...4  | C118_EU  | 2203-000257 | C-CER,CHIP;10nF,10%,50V,X7R,1608         | 1    | S.A    |

| Level | Loc. No. | Code No.    | Description & Specification             | Q'ty | SA/SNA |
|-------|----------|-------------|-----------------------------------------|------|--------|
| ....4 | C122     | 2203-000257 | C-CER,CHIP;10nF,10%,50V,X7R,1608        | 1    | SA     |
| ....4 | C124     | 2203-000257 | C-CER,CHIP;10nF,10%,50V,X7R,1608        | 1    | SA     |
| ....4 | C354     | 2203-000257 | C-CER,CHIP;10nF,10%,50V,X7R,1608        | 1    | SA     |
| ....4 | C355     | 2203-000257 | C-CER,CHIP;10nF,10%,50V,X7R,1608        | 1    | SA     |
| ....4 | C356     | 2203-000257 | C-CER,CHIP;10nF,10%,50V,X7R,1608        | 1    | SA     |
| ....4 | C416     | 2203-000257 | C-CER,CHIP;10nF,10%,50V,X7R,1608        | 1    | SA     |
| ....4 | C738     | 2203-000257 | C-CER,CHIP;10nF,10%,50V,X7R,1608        | 1    | SA     |
| ....4 | C739     | 2203-000257 | C-CER,CHIP;10nF,10%,50V,X7R,1608        | 1    | SA     |
| ....4 | C740     | 2203-000257 | C-CER,CHIP;10nF,10%,50V,X7R,1608        | 1    | SA     |
| ....4 | C741     | 2203-000257 | C-CER,CHIP;10nF,10%,50V,X7R,1608        | 1    | SA     |
| ....4 | C824     | 2203-000257 | C-CER,CHIP;10nF,10%,50V,X7R,1608        | 1    | SA     |
| ....4 | C825     | 2203-000257 | C-CER,CHIP;10nF,10%,50V,X7R,1608        | 1    | SA     |
| ....4 | C838     | 2203-000257 | C-CER,CHIP;10nF,10%,50V,X7R,1608        | 1    | SA     |
| ....4 | C915     | 2203-000257 | C-CER,CHIP;10nF,10%,50V,X7R,1608        | 1    | SA     |
| ....4 | C917     | 2203-000257 | C-CER,CHIP;10nF,10%,50V,X7R,1608        | 1    | SA     |
| ....4 | C918     | 2203-000257 | C-CER,CHIP;10nF,10%,50V,X7R,1608        | 1    | SA     |
| ....4 | C850     | 2203-000405 | C-CER,CHIP;0.18nF,5%,50V,C0G,1608       | 1    | SA     |
| ....4 | C301     | 2203-000440 | C-CER,CHIP;1nF,10%,50V,X7R,1608         | 1    | SA     |
| ....4 | C610     | 2203-000440 | C-CER,CHIP;1nF,10%,50V,X7R,1608         | 1    | SA     |
| ....4 | C611     | 2203-000440 | C-CER,CHIP;1nF,10%,50V,X7R,1608         | 1    | SA     |
| ....4 | C640     | 2203-000440 | C-CER,CHIP;1nF,10%,50V,X7R,1608         | 1    | SA     |
| ....4 | C641     | 2203-000440 | C-CER,CHIP;1nF,10%,50V,X7R,1608         | 1    | SA     |
| ....4 | C650     | 2203-000440 | C-CER,CHIP;1nF,10%,50V,X7R,1608         | 1    | SA     |
| ....4 | C651     | 2203-000440 | C-CER,CHIP;1nF,10%,50V,X7R,1608         | 1    | SA     |
| ....4 | C916     | 2203-000440 | C-CER,CHIP;1nF,10%,50V,X7R,1608         | 1    | SA     |
| ....4 | C929     | 2203-000440 | C-CER,CHIP;1nF,10%,50V,X7R,1608         | 1    | SA     |
| ....4 | C125     | 2203-000491 | C-CER,CHIP;2.2nF,10%,50V,X7R,1608       | 1    | SA     |
| ....4 | C257     | 2203-000626 | C-CER,CHIP;0.022nF,5%,50V,C0G,1608      | 1    | SA     |
| ....4 | C258     | 2203-000626 | C-CER,CHIP;0.022nF,5%,50V,C0G,1608      | 1    | SA     |
| ....4 | C840     | 2203-000715 | C-CER,CHIP;3.3nF,10%,50V,X7R,1608       | 1    | SA     |
| ....4 | C707     | 2203-000783 | C-CER,CHIP;0.33nF,5%,50V,C0G,1608       | 1    | SA     |
| ....4 | C725     | 2203-000783 | C-CER,CHIP;0.33nF,5%,50V,C0G,1608       | 1    | SA     |
| ....4 | C726     | 2203-000783 | C-CER,CHIP;0.33nF,5%,50V,C0G,1608       | 1    | SA     |
| ....4 | C730     | 2203-000783 | C-CER,CHIP;0.33nF,5%,50V,C0G,1608       | 1    | SA     |
| ....4 | C731     | 2203-000783 | C-CER,CHIP;0.33nF,5%,50V,C0G,1608       | 1    | SA     |
| ....4 | C732     | 2203-000783 | C-CER,CHIP;0.33nF,5%,50V,C0G,1608       | 1    | SA     |
| ....4 | C736     | 2203-000783 | C-CER,CHIP;0.33nF,5%,50V,C0G,1608       | 1    | SA     |
| ....4 | C742     | 2203-000783 | C-CER,CHIP;0.33nF,5%,50V,C0G,1608       | 1    | SA     |
| ....4 | C747     | 2203-000783 | C-CER,CHIP;0.33nF,5%,50V,C0G,1608       | 1    | SA     |
| ....4 | C748     | 2203-000783 | C-CER,CHIP;0.33nF,5%,50V,C0G,1608       | 1    | SA     |
| ....4 | C722_EU  | 2203-000815 | C-CER,CHIP;0.033nF,5%,50V,C0G,1608      | 1    | SA     |
| ....4 | C723_EU  | 2203-000815 | C-CER,CHIP;0.033nF,5%,50V,C0G,1608      | 1    | SA     |
| ....4 | C724_EU  | 2203-000815 | C-CER,CHIP;0.033nF,5%,50V,C0G,1608      | 1    | SA     |
| ....4 | C126     | 2203-000888 | C-CER,CHIP;4.7nF,10%,50V,X7R,1608       | 1    | SA     |
| ....4 | C631     | 2203-000888 | C-CER,CHIP;4.7nF,10%,50V,X7R,1608       | 1    | SA     |
| ....4 | C632     | 2203-000888 | C-CER,CHIP;4.7nF,10%,50V,X7R,1608       | 1    | SA     |
| ....4 | C743     | 2203-000888 | C-CER,CHIP;4.7nF,10%,50V,X7R,1608       | 1    | SA     |
| ....4 | C744     | 2203-000888 | C-CER,CHIP;4.7nF,10%,50V,X7R,1608       | 1    | SA     |
| ....4 | C127     | 2203-000972 | C-CER,CHIP;47nF,10%,16V,X7R,TP,1608     | 1    | SA     |
| ....4 | C618     | 2203-000975 | C-CER,CHIP;47nF,10%,25V,X7R,TP,1608,-   | 1    | SA     |
| ....4 | C621     | 2203-000975 | C-CER,CHIP;47nF,10%,25V,X7R,TP,1608,-   | 1    | SA     |
| ....4 | C645     | 2203-000975 | C-CER,CHIP;47nF,10%,25V,X7R,TP,1608,-   | 1    | SA     |
| ....4 | C646     | 2203-000975 | C-CER,CHIP;47nF,10%,25V,X7R,TP,1608,-   | 1    | SA     |
| ....4 | C202     | 2203-000998 | C-CER,CHIP;0.047nF,5%,50V,C0G,1608      | 1    | SA     |
| ....4 | C203     | 2203-000998 | C-CER,CHIP;0.047nF,5%,50V,C0G,1608      | 1    | SA     |
| ....4 | C718_EU  | 2203-000998 | C-CER,CHIP;0.047nF,5%,50V,C0G,1608      | 1    | SA     |
| ....4 | C720_EU  | 2203-000998 | C-CER,CHIP;0.047nF,5%,50V,C0G,1608      | 1    | SA     |
| ....4 | C373     | 2203-001086 | C-CER,CHIP;0.0050nF,0.25pF,50V,NP0,1608 | 1    | SA     |
| ....4 | C374     | 2203-001086 | C-CER,CHIP;0.0050nF,0.25pF,50V,NP0,1608 | 1    | SA     |
| ....4 | C613     | 2203-001391 | C-CER,CHIP;150nF,10%,25V,X7R,TP,2012,-  | 1    | SA     |
| ....4 | C615     | 2203-001391 | C-CER,CHIP;150nF,10%,25V,X7R,TP,2012,-  | 1    | SA     |
| ....4 | C648     | 2203-001391 | C-CER,CHIP;150nF,10%,25V,X7R,TP,2012,-  | 1    | SA     |
| ....4 | C649     | 2203-001391 | C-CER,CHIP;150nF,10%,25V,X7R,TP,2012,-  | 1    | SA     |
| ....4 | C123     | 2203-001607 | C-CER,CHIP;0.22nF,5%,50V,NP0,1608       | 1    | SA     |
| ....4 | C638     | 2203-001607 | C-CER,CHIP;0.22nF,5%,50V,NP0,1608       | 1    | SA     |
| ....4 | C623     | 2203-001652 | C-CER,CHIP;470nF,+80-20%,16V,Y5V,1608   | 1    | SA     |
| ....4 | C626     | 2203-001652 | C-CER,CHIP;470nF,+80-20%,16V,Y5V,1608   | 1    | SA     |
| ....4 | C212     | 2203-001656 | C-CER,CHIP;0.47nF,5%,50V,NP0,1608       | 1    | SA     |
| ....4 | C219     | 2203-001656 | C-CER,CHIP;0.47nF,5%,50V,NP0,1608       | 1    | SA     |

## 6 Electrical Parts List

| Level | Loc. No. | Code No.    | Description & Specification              | Q'ty | SA/SNA |
|-------|----------|-------------|------------------------------------------|------|--------|
| ...4  | C222     | 2203-001656 | C-CER,CHIP;0.47nF,5%,50V,NP0,1608        | 1    | S.A    |
| ...4  | C226     | 2203-001656 | C-CER,CHIP;0.47nF,5%,50V,NP0,1608        | 1    | S.A    |
| ...4  | C229     | 2203-001656 | C-CER,CHIP;0.47nF,5%,50V,NP0,1608        | 1    | S.A    |
| ...4  | C232     | 2203-001656 | C-CER,CHIP;0.47nF,5%,50V,NP0,1608        | 1    | S.A    |
| ...4  | C235     | 2203-001656 | C-CER,CHIP;0.47nF,5%,50V,NP0,1608        | 1    | S.A    |
| ...4  | C628     | 2203-001724 | C-CER,CHIP;4700nF,+80-20%,16V,Y5V,3216   | 1    | S.A    |
| ...4  | C366     | 2203-005005 | C-CER,CHIP;100nF,10%,16V,X7R,1608        | 1    | S.A    |
| ...4  | C410     | 2203-005005 | C-CER,CHIP;100nF,10%,16V,X7R,1608        | 1    | S.A    |
| ...4  | C652     | 2203-005005 | C-CER,CHIP;100nF,10%,16V,X7R,1608        | 1    | S.A    |
| ...4  | C700     | 2203-005005 | C-CER,CHIP;100nF,10%,16V,X7R,1608        | 1    | S.A    |
| ...4  | C728     | 2203-005005 | C-CER,CHIP;100nF,10%,16V,X7R,1608        | 1    | S.A    |
| ...4  | C735     | 2203-005005 | C-CER,CHIP;100nF,10%,16V,X7R,1608        | 1    | S.A    |
| ...4  | C810     | 2203-005005 | C-CER,CHIP;100nF,10%,16V,X7R,1608        | 1    | S.A    |
| ...4  | C814     | 2203-005005 | C-CER,CHIP;100nF,10%,16V,X7R,1608        | 1    | S.A    |
| ...4  | C822     | 2203-005005 | C-CER,CHIP;100nF,10%,16V,X7R,1608        | 1    | S.A    |
| ...4  | C829     | 2203-005005 | C-CER,CHIP;100nF,10%,16V,X7R,1608        | 1    | S.A    |
| ...4  | C831     | 2203-005005 | C-CER,CHIP;100nF,10%,16V,X7R,1608        | 1    | S.A    |
| ...4  | C833     | 2203-005005 | C-CER,CHIP;100nF,10%,16V,X7R,1608        | 1    | S.A    |
| ...4  | C835     | 2203-005005 | C-CER,CHIP;100nF,10%,16V,X7R,1608        | 1    | S.A    |
| ...4  | C837     | 2203-005005 | C-CER,CHIP;100nF,10%,16V,X7R,1608        | 1    | S.A    |
| ...4  | C844     | 2203-005005 | C-CER,CHIP;100nF,10%,16V,X7R,1608        | 1    | S.A    |
| ...4  | C846     | 2203-005005 | C-CER,CHIP;100nF,10%,16V,X7R,1608        | 1    | S.A    |
| ...4  | C911     | 2203-005005 | C-CER,CHIP;100nF,10%,16V,X7R,1608        | 1    | S.A    |
| ...4  | R464     | 2203-005005 | C-CER,CHIP;100nF,10%,16V,X7R,1608        | 1    | S.A    |
| ...4  | C614     | 2203-005030 | C-CER,CHIP;470nF,+80-20%,50V,Y5V,TP,3216 | 1    | S.A    |
| ...4  | C647     | 2203-005030 | C-CER,CHIP;470nF,+80-20%,50V,Y5V,TP,3216 | 1    | S.A    |
| ...4  | C113     | 2203-005065 | C-CER,CHIP;1000nF,+80-20%,10V,Y5V,1608   | 1    | S.A    |
| ...4  | C211     | 2203-005065 | C-CER,CHIP;1000nF,+80-20%,10V,Y5V,1608   | 1    | S.A    |
| ...4  | C218     | 2203-005065 | C-CER,CHIP;1000nF,+80-20%,10V,Y5V,1608   | 1    | S.A    |
| ...4  | C221     | 2203-005065 | C-CER,CHIP;1000nF,+80-20%,10V,Y5V,1608   | 1    | S.A    |
| ...4  | C225     | 2203-005065 | C-CER,CHIP;1000nF,+80-20%,10V,Y5V,1608   | 1    | S.A    |
| ...4  | C228     | 2203-005065 | C-CER,CHIP;1000nF,+80-20%,10V,Y5V,1608   | 1    | S.A    |
| ...4  | C231     | 2203-005065 | C-CER,CHIP;1000nF,+80-20%,10V,Y5V,1608   | 1    | S.A    |
| ...4  | C234     | 2203-005065 | C-CER,CHIP;1000nF,+80-20%,10V,Y5V,1608   | 1    | S.A    |
| ...4  | C239     | 2203-005065 | C-CER,CHIP;1000nF,+80-20%,10V,Y5V,1608   | 1    | S.A    |
| ...4  | C254     | 2203-005065 | C-CER,CHIP;1000nF,+80-20%,10V,Y5V,1608   | 1    | S.A    |
| ...4  | C311     | 2203-005065 | C-CER,CHIP;1000nF,+80-20%,10V,Y5V,1608   | 1    | S.A    |
| ...4  | C312     | 2203-005065 | C-CER,CHIP;1000nF,+80-20%,10V,Y5V,1608   | 1    | S.A    |
| ...4  | C313     | 2203-005065 | C-CER,CHIP;1000nF,+80-20%,10V,Y5V,1608   | 1    | S.A    |
| ...4  | C314     | 2203-005065 | C-CER,CHIP;1000nF,+80-20%,10V,Y5V,1608   | 1    | S.A    |
| ...4  | C315     | 2203-005065 | C-CER,CHIP;1000nF,+80-20%,10V,Y5V,1608   | 1    | S.A    |
| ...4  | C316     | 2203-005065 | C-CER,CHIP;1000nF,+80-20%,10V,Y5V,1608   | 1    | S.A    |
| ...4  | C317     | 2203-005065 | C-CER,CHIP;1000nF,+80-20%,10V,Y5V,1608   | 1    | S.A    |
| ...4  | C318     | 2203-005065 | C-CER,CHIP;1000nF,+80-20%,10V,Y5V,1608   | 1    | S.A    |
| ...4  | C320     | 2203-005065 | C-CER,CHIP;1000nF,+80-20%,10V,Y5V,1608   | 1    | S.A    |
| ...4  | C321     | 2203-005065 | C-CER,CHIP;1000nF,+80-20%,10V,Y5V,1608   | 1    | S.A    |
| ...4  | C322     | 2203-005065 | C-CER,CHIP;1000nF,+80-20%,10V,Y5V,1608   | 1    | S.A    |
| ...4  | C323     | 2203-005065 | C-CER,CHIP;1000nF,+80-20%,10V,Y5V,1608   | 1    | S.A    |
| ...4  | C325     | 2203-005065 | C-CER,CHIP;1000nF,+80-20%,10V,Y5V,1608   | 1    | S.A    |
| ...4  | C326     | 2203-005065 | C-CER,CHIP;1000nF,+80-20%,10V,Y5V,1608   | 1    | S.A    |
| ...4  | C327     | 2203-005065 | C-CER,CHIP;1000nF,+80-20%,10V,Y5V,1608   | 1    | S.A    |
| ...4  | C328     | 2203-005065 | C-CER,CHIP;1000nF,+80-20%,10V,Y5V,1608   | 1    | S.A    |
| ...4  | C329     | 2203-005065 | C-CER,CHIP;1000nF,+80-20%,10V,Y5V,1608   | 1    | S.A    |
| ...4  | C330     | 2203-005065 | C-CER,CHIP;1000nF,+80-20%,10V,Y5V,1608   | 1    | S.A    |
| ...4  | C331     | 2203-005065 | C-CER,CHIP;1000nF,+80-20%,10V,Y5V,1608   | 1    | S.A    |
| ...4  | C333     | 2203-005065 | C-CER,CHIP;1000nF,+80-20%,10V,Y5V,1608   | 1    | S.A    |
| ...4  | C334     | 2203-005065 | C-CER,CHIP;1000nF,+80-20%,10V,Y5V,1608   | 1    | S.A    |
| ...4  | C335     | 2203-005065 | C-CER,CHIP;1000nF,+80-20%,10V,Y5V,1608   | 1    | S.A    |
| ...4  | C336     | 2203-005065 | C-CER,CHIP;1000nF,+80-20%,10V,Y5V,1608   | 1    | S.A    |
| ...4  | C337     | 2203-005065 | C-CER,CHIP;1000nF,+80-20%,10V,Y5V,1608   | 1    | S.A    |
| ...4  | C340     | 2203-005065 | C-CER,CHIP;1000nF,+80-20%,10V,Y5V,1608   | 1    | S.A    |
| ...4  | C341     | 2203-005065 | C-CER,CHIP;1000nF,+80-20%,10V,Y5V,1608   | 1    | S.A    |
| ...4  | C342     | 2203-005065 | C-CER,CHIP;1000nF,+80-20%,10V,Y5V,1608   | 1    | S.A    |
| ...4  | C343     | 2203-005065 | C-CER,CHIP;1000nF,+80-20%,10V,Y5V,1608   | 1    | S.A    |
| ...4  | C344     | 2203-005065 | C-CER,CHIP;1000nF,+80-20%,10V,Y5V,1608   | 1    | S.A    |
| ...4  | C345     | 2203-005065 | C-CER,CHIP;1000nF,+80-20%,10V,Y5V,1608   | 1    | S.A    |
| ...4  | C346     | 2203-005065 | C-CER,CHIP;1000nF,+80-20%,10V,Y5V,1608   | 1    | S.A    |
| ...4  | C347     | 2203-005065 | C-CER,CHIP;1000nF,+80-20%,10V,Y5V,1608   | 1    | S.A    |
| ...4  | C350     | 2203-005065 | C-CER,CHIP;1000nF,+80-20%,10V,Y5V,1608   | 1    | S.A    |

| Level | Loc. No. | Code No.    | Description & Specification               | Q'ty | SA/SNA |
|-------|----------|-------------|-------------------------------------------|------|--------|
| ....4 | C351     | 2203-005065 | C-CER,CHIP;1000nF,+80-20%,10V,Y5V,1608    | 1    | SA     |
| ....4 | C352     | 2203-005065 | C-CER,CHIP;1000nF,+80-20%,10V,Y5V,1608    | 1    | SA     |
| ....4 | C353     | 2203-005065 | C-CER,CHIP;1000nF,+80-20%,10V,Y5V,1608    | 1    | SA     |
| ....4 | C359     | 2203-005065 | C-CER,CHIP;1000nF,+80-20%,10V,Y5V,1608    | 1    | SA     |
| ....4 | C360     | 2203-005065 | C-CER,CHIP;1000nF,+80-20%,10V,Y5V,1608    | 1    | SA     |
| ....4 | C361     | 2203-005065 | C-CER,CHIP;1000nF,+80-20%,10V,Y5V,1608    | 1    | SA     |
| ....4 | C362     | 2203-005065 | C-CER,CHIP;1000nF,+80-20%,10V,Y5V,1608    | 1    | SA     |
| ....4 | C363     | 2203-005065 | C-CER,CHIP;1000nF,+80-20%,10V,Y5V,1608    | 1    | SA     |
| ....4 | C364     | 2203-005065 | C-CER,CHIP;1000nF,+80-20%,10V,Y5V,1608    | 1    | SA     |
| ....4 | C385     | 2203-005065 | C-CER,CHIP;1000nF,+80-20%,10V,Y5V,1608    | 1    | SA     |
| ....4 | C412     | 2203-005065 | C-CER,CHIP;1000nF,+80-20%,10V,Y5V,1608    | 1    | SA     |
| ....4 | C418     | 2203-005065 | C-CER,CHIP;1000nF,+80-20%,10V,Y5V,1608    | 1    | SA     |
| ....4 | C419     | 2203-005065 | C-CER,CHIP;1000nF,+80-20%,10V,Y5V,1608    | 1    | SA     |
| ....4 | C630     | 2203-005065 | C-CER,CHIP;1000nF,+80-20%,10V,Y5V,1608    | 1    | SA     |
| ....4 | C633     | 2203-005065 | C-CER,CHIP;1000nF,+80-20%,10V,Y5V,1608    | 1    | SA     |
| ....4 | C634     | 2203-005065 | C-CER,CHIP;1000nF,+80-20%,10V,Y5V,1608    | 1    | SA     |
| ....4 | C635     | 2203-005065 | C-CER,CHIP;1000nF,+80-20%,10V,Y5V,1608    | 1    | SA     |
| ....4 | C636     | 2203-005065 | C-CER,CHIP;1000nF,+80-20%,10V,Y5V,1608    | 1    | SA     |
| ....4 | C703     | 2203-005065 | C-CER,CHIP;1000nF,+80-20%,10V,Y5V,1608    | 1    | SA     |
| ....4 | C769     | 2203-005065 | C-CER,CHIP;1000nF,+80-20%,10V,Y5V,1608    | 1    | SA     |
| ....4 | C847     | 2203-005065 | C-CER,CHIP;1000nF,+80-20%,10V,Y5V,1608    | 1    | SA     |
| ....4 | C848     | 2203-005065 | C-CER,CHIP;1000nF,+80-20%,10V,Y5V,1608    | 1    | SA     |
| ....4 | C849     | 2203-005065 | C-CER,CHIP;1000nF,+80-20%,10V,Y5V,1608    | 1    | SA     |
| ....4 | C920     | 2203-005065 | C-CER,CHIP;1000nF,+80-20%,10V,Y5V,1608    | 1    | SA     |
| ....4 | C921     | 2203-005065 | C-CER,CHIP;1000nF,+80-20%,10V,Y5V,1608    | 1    | SA     |
| ....4 | C922     | 2203-005065 | C-CER,CHIP;1000nF,+80-20%,10V,Y5V,1608    | 1    | SA     |
| ....4 | C923     | 2203-005065 | C-CER,CHIP;1000nF,+80-20%,10V,Y5V,1608    | 1    | SA     |
| ....4 | C924     | 2203-005065 | C-CER,CHIP;1000nF,+80-20%,10V,Y5V,1608    | 1    | SA     |
| ....4 | C930     | 2203-005065 | C-CER,CHIP;1000nF,+80-20%,10V,Y5V,1608    | 1    | SA     |
| ....4 | C931     | 2203-005065 | C-CER,CHIP;1000nF,+80-20%,10V,Y5V,1608    | 1    | SA     |
| ....4 | C639     | 2203-006036 | C-CER,CHIP;680nF,+80-20%,16V,Y5V,TP,1608  | 1    | SA     |
| ....4 | C678     | 2203-006036 | C-CER,CHIP;680nF,+80-20%,16V,Y5V,TP,1608  | 1    | SA     |
| ....4 | C679     | 2203-006036 | C-CER,CHIP;680nF,+80-20%,16V,Y5V,TP,1608  | 1    | SA     |
| ....4 | C210     | 2203-006333 | C-CER,CHIP;10000nF,20%,16V,X5R,TP,3216    | 1    | SA     |
| ....4 | C224     | 2203-006333 | C-CER,CHIP;10000nF,20%,16V,X5R,TP,3216    | 1    | SA     |
| ....4 | C237     | 2203-006333 | C-CER,CHIP;10000nF,20%,16V,X5R,TP,3216    | 1    | SA     |
| ....4 | C238     | 2203-006333 | C-CER,CHIP;10000nF,20%,16V,X5R,TP,3216    | 1    | SA     |
| ....4 | C240     | 2203-006333 | C-CER,CHIP;10000nF,20%,16V,X5R,TP,3216    | 1    | SA     |
| ....4 | C241     | 2203-006333 | C-CER,CHIP;10000nF,20%,16V,X5R,TP,3216    | 1    | SA     |
| ....4 | C242     | 2203-006333 | C-CER,CHIP;10000nF,20%,16V,X5R,TP,3216    | 1    | SA     |
| ....4 | C243     | 2203-006333 | C-CER,CHIP;10000nF,20%,16V,X5R,TP,3216    | 1    | SA     |
| ....4 | C244     | 2203-006333 | C-CER,CHIP;10000nF,20%,16V,X5R,TP,3216    | 1    | SA     |
| ....4 | C245     | 2203-006333 | C-CER,CHIP;10000nF,20%,16V,X5R,TP,3216    | 1    | SA     |
| ....4 | C249     | 2203-006333 | C-CER,CHIP;10000nF,20%,16V,X5R,TP,3216    | 1    | SA     |
| ....4 | C654     | 2203-006333 | C-CER,CHIP;10000nF,20%,16V,X5R,TP,3216    | 1    | SA     |
| ....4 | C655     | 2203-006333 | C-CER,CHIP;10000nF,20%,16V,X5R,TP,3216    | 1    | SA     |
| ....4 | C656     | 2203-006333 | C-CER,CHIP;10000nF,20%,16V,X5R,TP,3216    | 1    | SA     |
| ....4 | C657     | 2203-006333 | C-CER,CHIP;10000nF,20%,16V,X5R,TP,3216    | 1    | SA     |
| ....4 | C658     | 2203-006333 | C-CER,CHIP;10000nF,20%,16V,X5R,TP,3216    | 1    | SA     |
| ....4 | C659     | 2203-006333 | C-CER,CHIP;10000nF,20%,16V,X5R,TP,3216    | 1    | SA     |
| ....4 | C660     | 2203-006333 | C-CER,CHIP;10000nF,20%,16V,X5R,TP,3216    | 1    | SA     |
| ....4 | C661     | 2203-006333 | C-CER,CHIP;10000nF,20%,16V,X5R,TP,3216    | 1    | SA     |
| ....4 | C890     | 2203-006333 | C-CER,CHIP;10000nF,20%,16V,X5R,TP,3216    | 1    | SA     |
| ....4 | C417     | 2402-000108 | C-AL,SMD;10uF,20%,16V,WT,TP,4.3x4.3x5.2mm | 1    | SA     |
| ....4 | C112     | 2402-001128 | C-AL,SMD;100uF,20%,16V,WT,TP,6.3X5.7MM    | 1    | SA     |
| ....4 | C121     | 2402-001128 | C-AL,SMD;100uF,20%,16V,WT,TP,6.3X5.7MM    | 1    | SA     |
| ....4 | C267     | 2402-001128 | C-AL,SMD;100uF,20%,16V,WT,TP,6.3X5.7MM    | 1    | SA     |
| ....4 | C268     | 2402-001128 | C-AL,SMD;100uF,20%,16V,WT,TP,6.3X5.7MM    | 1    | SA     |
| ....4 | C415     | 2402-001128 | C-AL,SMD;100uF,20%,16V,WT,TP,6.3X5.7MM    | 1    | SA     |
| ....4 | C620     | 2402-001128 | C-AL,SMD;100uF,20%,16V,WT,TP,6.3X5.7MM    | 1    | SA     |
| ....4 | C624     | 2402-001128 | C-AL,SMD;100uF,20%,16V,WT,TP,6.3X5.7MM    | 1    | SA     |
| ....4 | C625     | 2402-001128 | C-AL,SMD;100uF,20%,16V,WT,TP,6.3X5.7MM    | 1    | SA     |
| ....4 | C644     | 2402-001128 | C-AL,SMD;100uF,20%,16V,WT,TP,6.3X5.7MM    | 1    | SA     |
| ....4 | C671     | 2402-001128 | C-AL,SMD;100uF,20%,16V,WT,TP,6.3X5.7MM    | 1    | SA     |
| ....4 | C677     | 2402-001128 | C-AL,SMD;100uF,20%,16V,WT,TP,6.3X5.7MM    | 1    | SA     |
| ....4 | C811     | 2402-001128 | C-AL,SMD;100uF,20%,16V,WT,TP,6.3X5.7MM    | 1    | SA     |
| ....4 | C813     | 2402-001128 | C-AL,SMD;100uF,20%,16V,WT,TP,6.3X5.7MM    | 1    | SA     |
| ....4 | C819     | 2402-001128 | C-AL,SMD;100uF,20%,16V,WT,TP,6.3X5.7MM    | 1    | SA     |
| ....4 | C820     | 2402-001128 | C-AL,SMD;100uF,20%,16V,WT,TP,6.3X5.7MM    | 1    | SA     |

## 6 Electrical Parts List

| Level | Loc. No. | Code No.    | Description & Specification              | Q'ty | SA/SNA |
|-------|----------|-------------|------------------------------------------|------|--------|
| ...4  | C826     | 2402-001128 | C-AL,SMD;100UF,20%,16V,WT,TP,6.3X5.7MM   | 1    | S.A    |
| ...4  | C828     | 2402-001128 | C-AL,SMD;100UF,20%,16V,WT,TP,6.3X5.7MM   | 1    | S.A    |
| ...4  | C845     | 2402-001128 | C-AL,SMD;100UF,20%,16V,WT,TP,6.3X5.7MM   | 1    | S.A    |
| ...4  | C612     | 2402-001129 | C-AL,SMD;47UF,20%,16V,WT,TP,6.3X5.2MM    | 1    | S.A    |
| ...4  | C111_EU  | 2402-001178 | C-AL,SMD;10uF,20%,16V,WT,TP,4.3x4.3x5.8m | 1    | S.A    |
| ...4  | C413     | 2402-001178 | C-AL,SMD;10uF,20%,16V,WT,TP,4.3x4.3x5.8m | 1    | S.A    |
| ...4  | C365     | 2402-001183 | C-AL,SMD;22UF,20%,16V,WT,TP,5.3X5.3X6MM  | 1    | S.A    |
| ...4  | C653     | 2402-001183 | C-AL,SMD;22UF,20%,16V,WT,TP,5.3X5.3X6MM  | 1    | S.A    |
| ...4  | C821     | 2402-001183 | C-AL,SMD;22UF,20%,16V,WT,TP,5.3X5.3X6MM  | 1    | S.A    |
| ...4  | C830     | 2402-001183 | C-AL,SMD;22UF,20%,16V,WT,TP,5.3X5.3X6MM  | 1    | S.A    |
| ...4  | C832     | 2402-001183 | C-AL,SMD;22UF,20%,16V,WT,TP,5.3X5.3X6MM  | 1    | S.A    |
| ...4  | C834     | 2402-001183 | C-AL,SMD;22UF,20%,16V,WT,TP,5.3X5.3X6MM  | 1    | S.A    |
| ...4  | C932     | 2402-001183 | C-AL,SMD;22UF,20%,16V,WT,TP,5.3X5.3X6MM  | 1    | S.A    |
| ...4  | C270     | 2402-001222 | C-AL,SMD;3.3UF,20%,50V,HR,TP,4.3X4.3X5.8 | 1    | S.A    |
| ...4  | C246     | 2402-001226 | C-AL,SMD;4.7UF,20%,35V,HR,TP,4.3X4.3X5.8 | 1    | S.A    |
| ...4  | C247     | 2402-001226 | C-AL,SMD;4.7UF,20%,35V,HR,TP,4.3X4.3X5.8 | 1    | S.A    |
| ...4  | C256     | 2402-001226 | C-AL,SMD;4.7UF,20%,35V,HR,TP,4.3X4.3X5.8 | 1    | S.A    |
| ...4  | C120     | 2402-001238 | C-AL,SMD;1uF,20%,50V,HR,TP,4.3x4.3x5.2mm | 1    | S.A    |
| ...4  | C816     | 2402-001257 | C-AL,SMD;470uF,20%,16V,-,TP,8.3*10       | 1    | S.A    |
| ...4  | T0052    | 2703-000185 | INDUCTOR-SMD;3.3uH,10%,2012              | 1    | S.A    |
| ...4  | T0052    | 2703-000185 | INDUCTOR-SMD;3.3uH,10%,2012              | 1    | S.A    |
| ...4  | T0052    | 2703-000185 | INDUCTOR-SMD;3.3uH,10%,2012              | 1    | S.A    |
| ...4  | T0052    | 2703-000392 | INDUCTOR-SMD;10uH,5%,4532                | 1    | S.A    |
| ...4  | T0052    | 2703-000398 | INDUCTOR-SMD;10uH,10%,3225               | 1    | S.A    |
| ...4  | T0052    | 2703-000398 | INDUCTOR-SMD;10uH,10%,3225               | 1    | S.A    |
| ...4  | T0052    | 2703-000398 | INDUCTOR-SMD;10uH,10%,3225               | 1    | S.A    |
| ...4  | T0052    | 2703-000398 | INDUCTOR-SMD;10uH,10%,3225               | 1    | S.A    |
| ...4  | T0052    | 2703-000398 | INDUCTOR-SMD;10uH,10%,3225               | 1    | S.A    |
| ...4  | T0052    | 2703-000398 | INDUCTOR-SMD;10uH,10%,3225               | 1    | S.A    |
| ...4  | T0052    | 2703-000398 | INDUCTOR-SMD;10uH,10%,3225               | 1    | S.A    |
| ...4  | T0052    | 2703-000398 | INDUCTOR-SMD;10uH,10%,3225               | 1    | S.A    |
| ...4  | T0052    | 2703-000398 | INDUCTOR-SMD;10uH,10%,3225               | 1    | S.A    |
| ...4  | T0052    | 2703-000398 | INDUCTOR-SMD;10uH,10%,3225               | 1    | S.A    |
| ...4  | T0052    | 2703-000398 | INDUCTOR-SMD;10uH,10%,3225               | 1    | S.A    |
| ...4  | T0052    | 2703-000398 | INDUCTOR-SMD;10uH,10%,3225               | 1    | S.A    |
| ...4  | T0052    | 2703-000398 | INDUCTOR-SMD;10uH,10%,3225               | 1    | S.A    |
| ...4  | T0052    | 2703-000398 | INDUCTOR-SMD;10uH,10%,3225               | 1    | S.A    |
| ...4  | T0052    | 2703-000398 | INDUCTOR-SMD;10uH,10%,3225               | 1    | S.A    |
| ...4  | T0052    | 2703-000398 | INDUCTOR-SMD;10uH,10%,3225               | 1    | S.A    |
| ...4  | T0052    | 2703-000398 | INDUCTOR-SMD;10uH,10%,3225               | 1    | S.A    |
| ...4  | T0052    | 2703-000398 | INDUCTOR-SMD;10uH,10%,3225               | 1    | S.A    |
| ...4  | T0052    | 2703-000398 | INDUCTOR-SMD;10uH,10%,3225               | 1    | S.A    |
| ...4  | T0052    | 2703-000398 | INDUCTOR-SMD;10uH,10%,3225               | 1    | S.A    |
| ...4  | T0052    | 2703-000398 | INDUCTOR-SMD;10uH,10%,3225               | 1    | S.A    |
| ...4  | T0052    | 2703-000398 | INDUCTOR-SMD;10uH,10%,3225               | 1    | S.A    |
| ...4  | T0052    | 2703-000398 | INDUCTOR-SMD;10uH,10%,3225               | 1    | S.A    |
| ...4  | T0052    | 2703-000398 | INDUCTOR-SMD;10uH,10%,3225               | 1    | S.A    |
| ...4  | T0052    | 2703-000417 | INDUCTOR-SMD;220uH,5%,3225               | 1    | S.A    |
| ...4  | T0052    | 2703-001426 | INDUCTOR-SMD;680uH,20%,7070              | 1    | S.A    |
| ...4  | T0052    | 2703-001778 | INDUCTOR-SMD;3.3uH,20%,3225              | 1    | S.A    |
| ...4  | T0052    | 2703-001778 | INDUCTOR-SMD;3.3uH,20%,3225              | 1    | S.A    |
| ...4  | T0052    | 2703-001778 | INDUCTOR-SMD;3.3uH,20%,3225              | 1    | S.A    |
| ...4  | T0052    | 2703-001778 | INDUCTOR-SMD;3.3uH,20%,3225              | 1    | S.A    |
| ...4  | T0052    | 2703-001778 | INDUCTOR-SMD;3.3uH,20%,3225              | 1    | S.A    |
| ...4  | T0052    | 2703-001778 | INDUCTOR-SMD;3.3uH,20%,3225              | 1    | S.A    |
| ...4  | T0052    | 2703-002327 | INDUCTOR-SMD;3.9uH,5%,3225               | 1    | S.A    |
| ...4  | X801     | 2801-000258 | CRYSTAL-SMD;0.032768MHz,20ppm,SMD,12.5pF | 1    | S.A    |
| ...4  | X710     | 2801-003667 | CRYSTAL-SMD;14.31818MHz,30ppm,28-AAN,16, | 1    | S.A    |
| ...4  | X800     | 2801-004004 | CRYSTAL-SMD;20.25MHz,20ppm,28-AAN,13pF,2 | 1    | S.A    |
| ...4  | F103     | 2901-001302 | FILTER-EMI SMD;20V,0.3A,-,-,2.0x1.2x1.3m | 1    | S.A    |
| ...4  | F103     | 2901-001302 | FILTER-EMI SMD;20V,0.3A,-,-,2.0x1.2x1.3m | 1    | S.A    |
| ...4  | F103     | 2901-001302 | FILTER-EMI SMD;20V,0.3A,-,-,2.0x1.2x1.3m | 1    | S.A    |
| ...4  | F103     | 2901-001302 | FILTER-EMI SMD;20V,0.3A,-,-,2.0x1.2x1.3m | 1    | S.A    |
| ...4  | F103     | 2901-001302 | FILTER-EMI SMD;20V,0.3A,-,-,2.0x1.2x1.3m | 1    | S.A    |
| ...4  | F103     | 2901-001302 | FILTER-EMI SMD;20V,0.3A,-,-,2.0x1.2x1.3m | 1    | S.A    |
| ...4  | F103     | 2901-001302 | FILTER-EMI SMD;20V,0.3A,-,-,2.0x1.2x1.3m | 1    | S.A    |
| ...4  | F103     | 2901-001302 | FILTER-EMI SMD;20V,0.3A,-,-,2.0x1.2x1.3m | 1    | S.A    |
| ...4  | F103     | 2901-001302 | FILTER-EMI SMD;20V,0.3A,-,-,2.0x1.2x1.3m | 1    | S.A    |
| ...4  | F103     | 2901-001302 | FILTER-EMI SMD;20V,0.3A,-,-,2.0x1.2x1.3m | 1    | S.A    |
| ...4  | T0568    | 3301-001145 | BEAD-SMD;60OHM,4516.6000,TP,70OHM/45MHZ, | 1    | S.N.A  |
| ...4  | T0568    | 3301-001145 | BEAD-SMD;60OHM,4516.6000,TP,70OHM/45MHZ, | 1    | S.N.A  |
| ...4  | T0568    | 3301-001145 | BEAD-SMD;60OHM,4516.6000,TP,70OHM/45MHZ, | 1    | S.N.A  |
| ...4  | T0568    | 3301-001145 | BEAD-SMD;60OHM,4516.6000,TP,70OHM/45MHZ, | 1    | S.N.A  |
| ...4  | T0568    | 3301-001145 | BEAD-SMD;60OHM,4516.6000,TP,70OHM/45MHZ, | 1    | S.N.A  |
| ...4  | T0568    | 3301-001145 | BEAD-SMD;60OHM,4516.6000,TP,70OHM/45MHZ, | 1    | S.N.A  |

[illegible]

## 6 Electrical Parts List

| Level | Loc. No.  | Code No.    | Description & Specification              | Q'ty  | SA/SNA |
|-------|-----------|-------------|------------------------------------------|-------|--------|
| ....4 | M0107     | BN63-02302A | SHIELD-COVER;TORINO,SPTe,T0.3,EMS        | 1     | S.N.A  |
| 0.1   | M0112     | BN91-00998A | ASSY SHIELD;LE32T51BX/*,Q54A             | 1     | S.N.A  |
| ..2   | M0081     | 6003-000115 | SCREW-TAPTITE;BH,+,B,M3,L6,ZPC(BLK),SWRC | 2     | S.N.A  |
| ..2   | M0081     | 6003-000115 | SCREW-TAPTITE;BH,+,B,M3,L6,ZPC(BLK),SWRC | 1     | S.N.A  |
| ..2   | M0081     | 6003-000115 | SCREW-TAPTITE;BH,+,B,M3,L6,ZPC(BLK),SWRC | 4     | S.N.A  |
| ..2   | M0081     | 6003-000115 | SCREW-TAPTITE;BH,+,B,M3,L6,ZPC(BLK),SWRC | 6     | S.N.A  |
| ..2   | M0081     | 6003-000133 | SCREW-TAPTITE;BH,+,S,M4,L8,ZPC(BLK),SW   | 2     | S.N.A  |
| ..2   | M0081     | 6003-000133 | SCREW-TAPTITE;BH,+,S,M4,L8,ZPC(BLK),SW   | 2     | S.N.A  |
| ..2   | M0081     | 6003-001003 | SCREW-TAPTITE;BH,+,B,M4,L12,ZPC(BLK),SWR | 4     | S.N.A  |
| ..2   | M0081     | 6003-001003 | SCREW-TAPTITE;BH,+,B,M4,L12,ZPC(BLK),SWR | 5     | S.N.A  |
| ..2   | M0081     | 6003-001003 | SCREW-TAPTITE;BH,+,B,M4,L12,ZPC(BLK),SWR | 4     | S.N.A  |
| ..2   | M0081     | 6003-001003 | SCREW-TAPTITE;BH,+,B,M4,L12,ZPC(BLK),SWR | 2     | S.N.A  |
| ..2   | M0081     | 6003-001003 | SCREW-TAPTITE;BH,+,B,M4,L12,ZPC(BLK),SWR | 2     | S.N.A  |
| ..2   | CCM1      | 6006-000245 | SCREW-MACHINE;WSP,PH,+,M4,L8,ZPC(YEL),SW | 1     | S.N.A  |
| ..2   | T0069     | AA60-00091K | SPACER-FELT;-FELT,330X10,-,BLK,T0.35,    | 2     | S.N.A  |
| ..2   | M2893     | BH39-00362B | LEAD CONNECTOR;RE32** UL1007#26,5P,150mm | 1     | S.A    |
| ..2   | M2893     | BN39-00603A | LEAD CONNECTOR;RE40** UL1007#26,UL,14P,2 | 1     | S.A    |
| ..2   | M2893     | BN39-00614A | LEAD CONNECTOR;RE40** UL2027#30,30P,300  | 1     | S.A    |
| ..2   | M2893     | BN39-00691A | LEAD CONNECTOR;Torino-32,UL1007#26,16P,1 | 1     | S.A    |
| ..2   | T0076     | BN39-00693B | CBF HARNESS-INLET;TORINO,1617#22,3P,1P,R | 1     | S.A    |
| ..2   | M0114     | BN61-01778A | HOLDER-WIRE;NYLON-66,NATURAL or GRAY,DAF | 1     | S.N.A  |
| ..2   |           | BN61-01944A | BRACKET-PANEL SIDE;23 ROMEI,SECC,T1.2    | 4     | S.N.A  |
| ..2   |           | BN61-02031A | BRACKET-GUIDE STAND;32,MGM,SECC,T1.6     | 1     | S.N.A  |
| ..2   | T0159     | BN96-02583A | ASSY PCB P-SMPS;Free Voltage SMPS,GTR32K | 1     | S.A    |
| ..2   | T0447     | BN96-02628A | ASSY BRACKET P-PANEL;TORINO 32",SECC     | 1     | S.N.A  |
| ...3  | M0081     | 6003-000115 | SCREW-TAPTITE;BH,+,B,M3,L6,ZPC(BLK),SWRC | 6     | S.N.A  |
| ...3  |           | BN61-02025A | BRACKET-PANEL TOP;32" MGM,SECC,T1.2      | 1     | S.N.A  |
| ...3  |           | BN61-02026A | BRACKET-GUIDE POWER;32" MGM,SECC,T1.2,LE | 1     | S.N.A  |
| ...3  |           | BN61-02027A | BRACKET-PANEL BOTTOM;32" MGM,SECC,T1.6   | 1     | S.N.A  |
| ...3  |           | BN61-02029A | BRACKET-GUIDE POWER;32" MGM,SECC,T1.2,RI | 1     | S.N.A  |
| ...3  |           | BN61-02030A | BRACKET-GUIDE MAIN;32" MGM,SECC,T1.2     | 1     | S.N.A  |
| ...3  | M0131     | AA63-01289A | GASKET;TORINO 32",Conductive Fabric,18mm | 1     | S.N.A  |
| 0.1   | M0019     | BN92-01044C | ASSY LABEL;NF26EO                        | 1     | S.N.A  |
| 0.1   | M0045     | BN92-01536Z | ASSY ACCESSORY;LE27T51BX/XEE             | 1     | S.N.A  |
| ..2   | M0045     | BN96-02756A | ASSY ACCESSORY;LE32T51BX/XEE             | 1     | S.A    |
| ...3  | T0268     | 3903-000042 | CBF-POWER CORD;DT,EU,FP3/YES,IEC320 C13/ | 1     | S.A    |
| ...3  | T0524     | 6902-000110 | BAG PE;LDPE,T0.05,W250,L400,TRP,28,2     | 2     | S.N.A  |
| ...3  | T0610     | AA68-03242E | MANUAL-SAFETY GUIDE;All Model,SAMSUNG,8L | 1     | S.N.A  |
| ...3  | ACCESSORY | AA68-03575A | MANUAL-01,REGISTRATION CARD;XEU,ENG,UK,W | 1     | S.N.A  |
| ...3  | T0074     | BN59-00488A | REMOCON;TORINO-EO,TM79,Single Micom,39,E | 1     | S.A    |
| ...3  | T0531     | BN63-02177A | COVER-BOTTOM;MGM,23,27,32,HIPS,V0,GR503  | 1     | S.N.A  |
| ...3  | ACCESSORY | BN68-00514A | MANUAL-03,WARRANTY CARD;PDP/LCD TV,EN,FR | 1     | S.N.A  |
| ...3  | M0596     | BN68-00860D | MANUAL USERS-00;LE23T51BX/LE27T51BX/SAM  | 1     | S.N.A  |
| ...3  | T0511     | BN68-00895A | MANUAL USERS;COMM,SAMSUNG,W/P 5G,PRECAUT | 1     | S.N.A  |
| ...3  | T0059     | BN68-00907A | MANUAL-CARD;COMM,SAMSUNG,18 LANG,EUROPE, | 1     | S.N.A  |
| ...3  | T0376     | BN69-01086A | BOX-00,ACCESSORY;COMM,SW1,YEL,W573,D632, | 1     | S.N.A  |
| ...3  | M0045     | BN96-01800A | ASSY ACCESSORY;ROME32,SCREW              | 1     | S.A    |
| ....4 | T0081     | 6002-001294 | SCREW-TAPPING;BH,+,M4,L16,ZPC(BLK)       | 4     | S.A    |
| ....4 | ACCESSORY | 6902-000128 | BAG ZIPPER;LDPE,T0.05,W200,L150,TRP,8,2- | 1     | S.N.A  |
| 0.1   | M0003     | BN92-01550C | ASSY BOX;LE32T51BX/XEE                   | 1     | S.N.A  |
| ..2   | T0376     | BN69-01163B | BOX-00,MONITOR;32T5,DW3,AB,YEL,A1,EUROPE | 1.02  | S.N.A  |
| 0.1   | M0113     | BN92-01551A | ASSY P/MATERIAL;TORINO,32,32T50          | 1     | S.N.A  |
| ..2   | T0376     | 6902-000061 | BAG AIR;LDPE,T0.2,L1000,W500,TRP,,,      | 0.019 | S.N.A  |
| ..2   | T0376     | 6902-000379 | BAG AIR;LDPE,T0.2,W1000,L1800,TRP,-,-    | 0.004 | S.N.A  |
| ..2   |           | 6902-000604 | BAG WRAPPING;LDPE,T0.02,W500,L10000,TRP, | 7.23  | S.N.A  |
| ..2   | T0524     | 6902-000524 | BAG PE;HDPE/NITRON(DOUBLE),T0.015/T0.5(D | 1     | S.N.A  |

## 6-2 LE32T51BX/BWT Parts list

| Level | Loc. No. | Code No.      | Description & Specification              | Q'ty | SA/SNA |
|-------|----------|---------------|------------------------------------------|------|--------|
| 0     |          | LE32T51BX/BWT | LE32T51B,Q54A/32T50-GTR,32,LCD-TV,RUSSIA |      |        |
|       |          |               |                                          |      | S.A    |
| 0.1   | M0001    | BN90-00785B   | ASSY COVER FRONT;TORINO,32EO,32T50       | 1    | S.N.A  |
| ..2   | M0081    | 6006-001096   | SCREW-TAPTITE;WP,BH,+,M4,0,L12,BLK,SWRCH | 4    | S.N.A  |
| ..2   | T0003    | BN96-02625B   | ASSY COVER P-FRONT;32T50,EO,HIPS,HB,BK50 | 1    | S.A    |
| ...3  | M0081    | 6003-001003   | SCREW-TAPTITE;BH,+,B,M4,L12,ZPC(BLK),SWR | 2    | S.N.A  |
| ...3  | M0081    | 6003-001003   | SCREW-TAPTITE;BH,+,B,M4,L12,ZPC(BLK),SWR | 2    | S.N.A  |
| ...3  | T0060    | BN61-01655A   | SPRING ETC;STS-304 SUS,D8,L12,T0.5       | 1    | S.A    |
| ...3  | M0112    | BN63-02174B   | COVER-FRONT;32T50,EO,HIPS,HB,BK500,BKN-1 | 1    | S.N.A  |
| ...3  | T0023    | BN64-00342A   | KNOB POWER;ROME,40,PC+ABS,VIOLET         | 1    | S.N.A  |
| ...3  | T0071    | BN64-00366A   | INDICATOR-LED;ROME-i,PC,CLEAR,ALL MODEL  | 1    | S.N.A  |
| ...3  |          | BN64-00413A   | KNOB-DECORATION;MGM,ABS,V0,GR70,SV012P   | 1    | S.N.A  |
| ...3  | T0022    | BN64-00416A   | KNOB CONTROL;MGM,ABS,V0,BK500            | 1    | S.N.A  |
| ...3  | T0014    | BN67-00078A   | LENS-IR;VENUS32",ACRYL,CLEAR,VENUS32"    | 1    | S.N.A  |
| ...3  | M0162    | 6502-001067   | CABLE CLAMP;DAFC-1300,ID2.2,T5.2,NYLIN6/ | 1    | S.N.A  |
| ...3  | T0069    | AA60-00171W   | SPACER-FELT;GTR32K*,FELT,460,T0.35,10    | 2    | S.N.A  |
| ...3  | M0145    | BN96-02626D   | ASSY BOARD P-FUNCTION;TORINO-27/32,SJ05- | 1    | S.A    |
| ..2   | T0175    | BN96-02590A   | ASSY SPEAKER P;8ohm,Torino 32",Left,10W  | 1    | S.A    |
| ..2   | T0175    | BN96-02591A   | ASSY SPEAKER P;8ohm,Torino 32",Right,10W | 1    | S.A    |
| 0.1   | M0002    | BN90-00786B   | ASSY COVER REAR;TORINO,32EO,32T50        | 1    | S.N.A  |
| ..2   | T0081    | 6002-001294   | SCREW-TAPPING;BH,+,M4,L16,ZPC(BLK)       | 10   | S.A    |
| ..2   | M0013    | BN96-02627B   | ASSY COVER P-REAR;32T50,EO,HIPS,HB,GR503 | 1    | S.A    |
| ...3  | M0081    | 6003-001003   | SCREW-TAPTITE;BH,+,B,M4,L12,ZPC(BLK),SWR | 4    | S.N.A  |
| ...3  | T0064    | AA65-00003A   | CLAMPER CORE;SIR-T100,PE BLACK           | 1    | S.N.A  |
| ...3  | T0101    | BN61-02032A   | BRACKET-WALL;32,MGM,SECC,T1.6            | 2    | S.N.A  |
| ...3  |          | BN64-00415A   | INLAY-JACK;MGM,PS,SHEET,T0.3,PAL         | 1    | S.N.A  |
| ...3  | T0069    | AA60-00091K   | SPACER-FELT;-FELT,330X10,-,BLK,T0.35,    | 4    | S.N.A  |
| ...3  | M0006    | BN63-02297A   | COVER-REAR;32T50,HIPS,HB,GR503,SESK,(PAL | 1    | S.N.A  |
| ..2   | M0081    | 6003-000115   | SCREW-TAPTITE;BH,+,B,M3,L6,ZPC(BLK),SWRC | 2    | S.N.A  |
| 0.1   | M0216    | BN90-00787A   | ASSY STAND;TORINO,32,32T50               | 1    | S.N.A  |
| ..2   | M0013    | BN96-02633A   | ASSY STAND P-BASE;TORINO,32,HIPS,HB,GR50 | 1    | S.A    |
| ...3  | T0081    | 6002-001294   | SCREW-TAPPING;BH,+,M4,L16,ZPC(BLK)       | 3    | S.A    |
| ...3  | M0081    | 6003-001239   | SCREW-TAPTITE;FH,+,B,M4,L10,ZPC(YEL),SWR | 3    | S.A    |
| ...3  |          | BN61-01524A   | BRACKET-STAND BOTTOM;32,ROME,SECC,T2.0   | 1    | S.N.A  |
| ...3  |          | BN61-02024A   | GUIDE-STAND;TORINO,32,HIPS,HB,GR503      | 1    | S.N.A  |
| ...3  | M0111    | BN63-01673C   | COVER-STAND;TORINO,32,HIPS,HB,GR503,DM-B | 1    | S.N.A  |
| ...3  | T0132    | BN73-00052A   | RUBBER FOOT;ARES 17,SILICON,DIA 17 * T1. | 5    | S.N.A  |
| ..2   | T0524    | 6902-000520   | BAG PE;HDPE/NITRON(DOUBLE),T0.015/T0.5(D | 1    | S.N.A  |
| 0.1   | T0852    | BN91-00407K   | ASSY LCD-SPZ;DU32EO                      | 1    | S.N.A  |
| ..2   | M0215    | BN07-00243A   | LCD-PANEL;LTA320W2-L03,8bit,760*450*50.0 | 1    | S.A    |
| 0.1   | M0017    | BN91-00946B   | ASSY CHASSIS;LE32T51BX/*,TORINO          | 1    | S.N.A  |
| ..2   | M0014    | BN94-00752B   | ASSY PCB MAIN-AU;LE32T51BX/*,TORINO      | 1    | S.A    |
| ...3  | T0245    | 0202-001366   | SOLDER-WIRE FLUX;-RS60S,D1.2,63Sn/37Pb,  | 0.01 | S.N.A  |
| ...3  | JA719    | 3701-001292   | CONNECTOR-DVI;24P,3R,FEMALE,STRAIGHT,AU1 | 1    | S.A    |
| ...3  | JA722    | 3701-001294   | CONNECTOR-DSUB;15P,3R,FEMALE,STRAIGHT,AU | 1    | S.A    |
| ...3  | CN815    | 3711-004484   | HEADER-BOARD TO CABLE;BOX,5P,1R,2mm,STRA | 1    | S.A    |
| ...3  | CN801    | 3711-005942   | HEADER-BOARD TO CABLE;BOX,16P,1R,2mm,STR | 1    | S.A    |
| ...3  | JA710_EU | 3722-000498   | JACK-SCART;21P,-,SN,BLK,NO               | 1    | S.A    |
| ...3  | JA711_EU | 3722-000498   | JACK-SCART;21P,-,SN,BLK,NO               | 1    | S.A    |
| ...3  | JA723    | 3722-001061   | JACK-PHONE;1P,3.6PI,AG,BLK,N             | 1    | S.A    |
| ...3  | JA717    | 3722-001734   | JACK-VHS;4P,-,SN,BLK,-                   | 1    | S.A    |
| ...3  | JA715_EU | 3722-001903   | JACK-PIN;2P,-,AU,WHT/RED,-               | 1    | S.A    |
| ...3  | JA721    | 3722-001903   | JACK-PIN;2P,-,AU,WHT/RED,-               | 1    | S.A    |
| ...3  | JA714_EU | 3722-001938   | JACK-PIN;3P,-,AU,GRN/BLU/RED,-           | 1    | S.A    |
| ...3  | JA718    | 3722-002063   | JACK-PIN;3P,AU,YEL/WHT/RED,STRAIGHT      | 1    | S.A    |
| ...3  | CIS3     | BN40-00072A   | TUNER;TECH0949PG46A(S),TECH0949PG46A(S), | 1    | S.A    |
| ...3  |          | BN97-00658B   | ASSY SMD-AU;LE32T51BX/*,TORINO           | 1    | S.N.A  |
| ....4 | CIS5     | 0202-001375   | SOLDER-CREAM;RMA-20-21L,S63,-,Sn63/Pb36. | 8.48 | S.N.A  |
| ....4 | D120     | 0401-001056   | DIODE-SWITCHING;MMBD4148SE,100V,200MA,SO | 1    | S.A    |
| ....4 | D210     | 0401-001056   | DIODE-SWITCHING;MMBD4148SE,100V,200MA,SO | 1    | S.A    |
| ....4 | D211     | 0401-001056   | DIODE-SWITCHING;MMBD4148SE,100V,200MA,SO | 1    | S.A    |
| ....4 | D212     | 0401-001056   | DIODE-SWITCHING;MMBD4148SE,100V,200MA,SO | 1    | S.A    |
| ....4 | D213     | 0401-001056   | DIODE-SWITCHING;MMBD4148SE,100V,200MA,SO | 1    | S.A    |
| ....4 | D214     | 0401-001056   | DIODE-SWITCHING;MMBD4148SE,100V,200MA,SO | 1    | S.A    |
| ....4 | D215     | 0401-001056   | DIODE-SWITCHING;MMBD4148SE,100V,200MA,SO | 1    | S.A    |

## 6 Electrical Parts List

| Level | Loc. No. | Code No.    | Description & Specification              | Q'ty | SA/SNA |
|-------|----------|-------------|------------------------------------------|------|--------|
| ...4  | D216     | 0401-001056 | DIODE-SWITCHING;MMBD4148SE,100V,200MA,SO | 1    | S.A    |
| ...4  | D217     | 0401-001056 | DIODE-SWITCHING;MMBD4148SE,100V,200MA,SO | 1    | S.A    |
| ...4  | D218     | 0401-001056 | DIODE-SWITCHING;MMBD4148SE,100V,200MA,SO | 1    | S.A    |
| ...4  | D219     | 0401-001056 | DIODE-SWITCHING;MMBD4148SE,100V,200MA,SO | 1    | S.A    |
| ...4  | D220     | 0401-001056 | DIODE-SWITCHING;MMBD4148SE,100V,200MA,SO | 1    | S.A    |
| ...4  | D221     | 0401-001056 | DIODE-SWITCHING;MMBD4148SE,100V,200MA,SO | 1    | S.A    |
| ...4  | D222     | 0401-001056 | DIODE-SWITCHING;MMBD4148SE,100V,200MA,SO | 1    | S.A    |
| ...4  | D316     | 0401-001056 | DIODE-SWITCHING;MMBD4148SE,100V,200MA,SO | 1    | S.A    |
| ...4  | D317     | 0401-001056 | DIODE-SWITCHING;MMBD4148SE,100V,200MA,SO | 1    | S.A    |
| ...4  | D318     | 0401-001056 | DIODE-SWITCHING;MMBD4148SE,100V,200MA,SO | 1    | S.A    |
| ...4  | D612     | 0401-001056 | DIODE-SWITCHING;MMBD4148SE,100V,200MA,SO | 1    | S.A    |
| ...4  | D613     | 0401-001056 | DIODE-SWITCHING;MMBD4148SE,100V,200MA,SO | 1    | S.A    |
| ...4  | D614     | 0401-001056 | DIODE-SWITCHING;MMBD4148SE,100V,200MA,SO | 1    | S.A    |
| ...4  | D615     | 0401-001056 | DIODE-SWITCHING;MMBD4148SE,100V,200MA,SO | 1    | S.A    |
| ...4  | D616     | 0401-001056 | DIODE-SWITCHING;MMBD4148SE,100V,200MA,SO | 1    | S.A    |
| ...4  | D617     | 0401-001056 | DIODE-SWITCHING;MMBD4148SE,100V,200MA,SO | 1    | S.A    |
| ...4  | D618     | 0401-001056 | DIODE-SWITCHING;MMBD4148SE,100V,200MA,SO | 1    | S.A    |
| ...4  | D619     | 0401-001056 | DIODE-SWITCHING;MMBD4148SE,100V,200MA,SO | 1    | S.A    |
| ...4  | D621     | 0401-001056 | DIODE-SWITCHING;MMBD4148SE,100V,200MA,SO | 1    | S.A    |
| ...4  | D710_EU  | 0401-001056 | DIODE-SWITCHING;MMBD4148SE,100V,200MA,SO | 1    | S.A    |
| ...4  | D711     | 0401-001056 | DIODE-SWITCHING;MMBD4148SE,100V,200MA,SO | 1    | S.A    |
| ...4  | D712_EU  | 0401-001056 | DIODE-SWITCHING;MMBD4148SE,100V,200MA,SO | 1    | S.A    |
| ...4  | D713_EU  | 0401-001056 | DIODE-SWITCHING;MMBD4148SE,100V,200MA,SO | 1    | S.A    |
| ...4  | D714_EU  | 0401-001056 | DIODE-SWITCHING;MMBD4148SE,100V,200MA,SO | 1    | S.A    |
| ...4  | D715     | 0401-001056 | DIODE-SWITCHING;MMBD4148SE,100V,200MA,SO | 1    | S.A    |
| ...4  | D7719    | 0401-001056 | DIODE-SWITCHING;MMBD4148SE,100V,200MA,SO | 1    | S.A    |
| ...4  | D7720    | 0401-001056 | DIODE-SWITCHING;MMBD4148SE,100V,200MA,SO | 1    | S.A    |
| ...4  | D7721    | 0401-001056 | DIODE-SWITCHING;MMBD4148SE,100V,200MA,SO | 1    | S.A    |
| ...4  | D7722    | 0401-001056 | DIODE-SWITCHING;MMBD4148SE,100V,200MA,SO | 1    | S.A    |
| ...4  | D7723    | 0401-001056 | DIODE-SWITCHING;MMBD4148SE,100V,200MA,SO | 1    | S.A    |
| ...4  | D7724    | 0401-001056 | DIODE-SWITCHING;MMBD4148SE,100V,200MA,SO | 1    | S.A    |
| ...4  | D7725    | 0401-001056 | DIODE-SWITCHING;MMBD4148SE,100V,200MA,SO | 1    | S.A    |
| ...4  | D7726    | 0401-001056 | DIODE-SWITCHING;MMBD4148SE,100V,200MA,SO | 1    | S.A    |
| ...4  | D7727    | 0401-001056 | DIODE-SWITCHING;MMBD4148SE,100V,200MA,SO | 1    | S.A    |
| ...4  | D7730    | 0401-001056 | DIODE-SWITCHING;MMBD4148SE,100V,200MA,SO | 1    | S.A    |
| ...4  | D7731    | 0401-001056 | DIODE-SWITCHING;MMBD4148SE,100V,200MA,SO | 1    | S.A    |
| ...4  | D7733    | 0401-001056 | DIODE-SWITCHING;MMBD4148SE,100V,200MA,SO | 1    | S.A    |
| ...4  | D7734    | 0401-001056 | DIODE-SWITCHING;MMBD4148SE,100V,200MA,SO | 1    | S.A    |
| ...4  | D7740    | 0401-001056 | DIODE-SWITCHING;MMBD4148SE,100V,200MA,SO | 1    | S.A    |
| ...4  | D7741    | 0401-001056 | DIODE-SWITCHING;MMBD4148SE,100V,200MA,SO | 1    | S.A    |
| ...4  | D7742    | 0401-001056 | DIODE-SWITCHING;MMBD4148SE,100V,200MA,SO | 1    | S.A    |
| ...4  | D7743    | 0401-001056 | DIODE-SWITCHING;MMBD4148SE,100V,200MA,SO | 1    | S.A    |
| ...4  | D910     | 0401-001056 | DIODE-SWITCHING;MMBD4148SE,100V,200MA,SO | 1    | S.A    |
| ...4  | D911     | 0401-001056 | DIODE-SWITCHING;MMBD4148SE,100V,200MA,SO | 1    | S.A    |
| ...4  | D912     | 0401-001056 | DIODE-SWITCHING;MMBD4148SE,100V,200MA,SO | 1    | S.A    |
| ...4  | D913     | 0401-001056 | DIODE-SWITCHING;MMBD4148SE,100V,200MA,SO | 1    | S.A    |
| ...4  | D800     | 0402-000553 | DIODE-RECTIFIER;SS24,40V,2.0A,DO-214AA   | 1    | S.A    |
| ...4  | D917     | 0403-000258 | DIODE-ZENER;BZX84C5V6,5.2-6V,225MW,SOT-2 | 1    | S.A    |
| ...4  | D718_EU  | 0403-000620 | DIODE-ZENER;RLZ5.6B,5.45-5.73V,500MW,LL- | 1    | S.A    |
| ...4  | D7728    | 0403-000620 | DIODE-ZENER;RLZ5.6B,5.45-5.73V,500MW,LL- | 1    | S.A    |
| ...4  | D7729    | 0403-000620 | DIODE-ZENER;RLZ5.6B,5.45-5.73V,500MW,LL- | 1    | S.A    |
| ...4  | D7735    | 0403-000620 | DIODE-ZENER;RLZ5.6B,5.45-5.73V,500MW,LL- | 1    | S.A    |
| ...4  | D7736    | 0403-000620 | DIODE-ZENER;RLZ5.6B,5.45-5.73V,500MW,LL- | 1    | S.A    |
| ...4  | D7737    | 0403-000620 | DIODE-ZENER;RLZ5.6B,5.45-5.73V,500MW,LL- | 1    | S.A    |
| ...4  | D7738    | 0403-000620 | DIODE-ZENER;RLZ5.6B,5.45-5.73V,500MW,LL- | 1    | S.A    |
| ...4  | D121     | 0403-001425 | DIODE-ZENER;BZX84C33,31-35V,350MW,SOT-23 | 1    | S.A    |
| ...4  | D314     | 0407-000123 | DIODE-ARRAY;DAN202K,80V,100MA,CA2-3,SOT- | 1    | S.A    |
| ...4  | D319     | 0407-000123 | DIODE-ARRAY;DAN202K,80V,100MA,CA2-3,SOT- | 1    | S.A    |
| ...4  | D610     | 0407-000123 | DIODE-ARRAY;DAN202K,80V,100MA,CA2-3,SOT- | 1    | S.A    |
| ...4  | Q211     | 0501-000280 | TR-SMALL SIGNAL;KSA1182,PNP,150mW,SOT-23 | 1    | S.A    |
| ...4  | Q213     | 0501-000280 | TR-SMALL SIGNAL;KSA1182,PNP,150mW,SOT-23 | 1    | S.A    |
| ...4  | Q611     | 0501-000280 | TR-SMALL SIGNAL;KSA1182,PNP,150mW,SOT-23 | 1    | S.A    |
| ...4  | Q934     | 0501-000280 | TR-SMALL SIGNAL;KSA1182,PNP,150mW,SOT-23 | 1    | S.A    |
| ...4  | Q101     | 0501-000342 | TR-SMALL SIGNAL;KSC1623-Y,NPN,200mW,SOT- | 1    | S.A    |
| ...4  | Q110_EU  | 0501-000342 | TR-SMALL SIGNAL;KSC1623-Y,NPN,200mW,SOT- | 1    | S.A    |
| ...4  | Q111     | 0501-000342 | TR-SMALL SIGNAL;KSC1623-Y,NPN,200mW,SOT- | 1    | S.A    |
| ...4  | Q212     | 0501-000342 | TR-SMALL SIGNAL;KSC1623-Y,NPN,200mW,SOT- | 1    | S.A    |
| ...4  | Q214     | 0501-000342 | TR-SMALL SIGNAL;KSC1623-Y,NPN,200mW,SOT- | 1    | S.A    |
| ...4  | Q310     | 0501-000342 | TR-SMALL SIGNAL;KSC1623-Y,NPN,200mW,SOT- | 1    | S.A    |

| Level | Loc. No. | Code No.    | Description & Specification              | Q'ty | SA/SNA |
|-------|----------|-------------|------------------------------------------|------|--------|
| ....4 | Q420     | 0501-000342 | TR-SMALL SIGNAL;KSC1623-Y,NPN,200mW,SOT- | 1    | SA     |
| ....4 | Q421     | 0501-000342 | TR-SMALL SIGNAL;KSC1623-Y,NPN,200mW,SOT- | 1    | SA     |
| ....4 | Q612     | 0501-000342 | TR-SMALL SIGNAL;KSC1623-Y,NPN,200mW,SOT- | 1    | SA     |
| ....4 | Q613     | 0501-000342 | TR-SMALL SIGNAL;KSC1623-Y,NPN,200mW,SOT- | 1    | SA     |
| ....4 | Q614     | 0501-000342 | TR-SMALL SIGNAL;KSC1623-Y,NPN,200mW,SOT- | 1    | SA     |
| ....4 | Q711     | 0501-000342 | TR-SMALL SIGNAL;KSC1623-Y,NPN,200mW,SOT- | 1    | SA     |
| ....4 | Q803     | 0501-000342 | TR-SMALL SIGNAL;KSC1623-Y,NPN,200mW,SOT- | 1    | SA     |
| ....4 | Q908     | 0501-000342 | TR-SMALL SIGNAL;KSC1623-Y,NPN,200mW,SOT- | 1    | SA     |
| ....4 | Q910     | 0501-000342 | TR-SMALL SIGNAL;KSC1623-Y,NPN,200mW,SOT- | 1    | SA     |
| ....4 | Q932     | 0501-000342 | TR-SMALL SIGNAL;KSC1623-Y,NPN,200mW,SOT- | 1    | SA     |
| ....4 | Q409     | 0505-000110 | FET-SILICON;2N7002,N,60V,115mA,7.5ohm,0. | 1    | SA     |
| ....4 | Q409     | 0505-000110 | FET-SILICON;2N7002,N,60V,115mA,7.5ohm,0. | 1    | SA     |
| ....4 | Q409     | 0505-001170 | FET-SILICON;SI9933ADY-T1,P,-20V,3.4A,0.0 | 1    | SA     |
| ....4 | Q409     | 0505-001170 | FET-SILICON;SI9933ADY-T1,P,-20V,3.4A,0.0 | 1    | SA     |
| ....4 | IC104    | 0801-002267 | IC-CMOS LOGIC;74LCX14,-,SOIC,14P,150MIL, | 1    | SA     |
| ....4 | IC105    | 0909-001036 | IC-REAL TIME CLOCK;DS1337S+T&R,-,SO,8P,1 | 1    | SA     |
| ....4 | IC613    | 1001-000164 | IC-ANALOG MULTIPLEX;74HC4052,CMOS,SOP,16 | 1    | SA     |
| ....4 | IC310    | 1003-001857 | IC-CRT CONTROLLER;FLI5921H-LF,PQFP,208P, | 1    | SA     |
| ....4 | IC112    | 1103-000129 | IC-EEPROM;24C02,256x8,SOP,8P,5x4mm,4.5/5 | 1    | SA     |
| ....4 | IC112    | 1103-000129 | IC-EEPROM;24C02,256x8,SOP,8P,5x4mm,4.5/5 | 1    | SA     |
| ....4 | IC112    | 1103-001279 | IC-EEPROM;24C32,4Kx8,SOP,8P,5x4mm,2.5/5. | 1    | SA     |
| ....4 | IC112    | 1103-001314 | IC-EEPROM;24C16,2Kx8,SOP,8P,5x4mm,2.7/5. | 1    | SA     |
| ....4 | IC113    | 1105-001284 | IC-DRAM;636165,1Mx16Bit,TSOP,50P,467MIL, | 1    | S.N.A  |
| ....4 | IC113    | 1105-001284 | IC-DRAM;636165,1Mx16Bit,TSOP,50P,467MIL, | 1    | S.N.A  |
| ....4 | DU410    | 1201-000166 | IC-OP AMP;LM358,SOP,ST,8P,150MIL,DUAL,10 | 1    | SA     |
| ....4 | T0085    | 1201-002136 | IC-AUDIO AMP;LM4810,MSOP,8P,3x3mm,DUAL,- | 1    | SA     |
| ....4 | T0085    | 1201-002274 | IC-AUDIO AMP;TPA3008D2,HTQFP,48P,7x7mm,D | 1    | SA     |
| ....4 | T0087    | 1203-001816 | IC-POS.FIXED REG.;78M08,TO-252,3P,-,PLA  | 1    | SA     |
| ....4 | IC416    | 1203-001824 | IC-VOL. DETECTOR;7042,SOT-89,3P,-,PLASTI | 1    | SA     |
| ....4 | T0087    | 1203-002842 | IC-POS.FIXED REG.;AP1117D-33A,TO-252,3P  | 1    | SA     |
| ....4 | T0087    | 1203-002844 | IC-POS.FIXED REG.;AP1117D-18A,TO-252-3L  | 1    | SA     |
| ....4 | T0087    | 1203-002844 | IC-POS.FIXED REG.;AP1117D-18A,TO-252-3L  | 1    | SA     |
| ....4 | T0087    | 1203-002855 | IC-POS.FIXED REG.;MC33269DTRK-5.0,DPRK,  | 1    | SA     |
| ....4 | T0170    | 1203-003059 | IC-SWITCH VOL. REG.;MP1583,SOIC,8P,4.9x3 | 1    | SA     |
| ....4 | R225     | 2007-000052 | R-CHIP;10Kohm,1%,1/10W,TP,1608           | 1    | SA     |
| ....4 | R226     | 2007-000052 | R-CHIP;10Kohm,1%,1/10W,TP,1608           | 1    | SA     |
| ....4 | R257     | 2007-000052 | R-CHIP;10Kohm,1%,1/10W,TP,1608           | 1    | SA     |
| ....4 | R258     | 2007-000052 | R-CHIP;10Kohm,1%,1/10W,TP,1608           | 1    | SA     |
| ....4 | R261     | 2007-000052 | R-CHIP;10Kohm,1%,1/10W,TP,1608           | 1    | SA     |
| ....4 | R262     | 2007-000052 | R-CHIP;10Kohm,1%,1/10W,TP,1608           | 1    | SA     |
| ....4 | R320     | 2007-000052 | R-CHIP;10Kohm,1%,1/10W,TP,1608           | 1    | SA     |
| ....4 | R321     | 2007-000052 | R-CHIP;10Kohm,1%,1/10W,TP,1608           | 1    | SA     |
| ....4 | R341     | 2007-000052 | R-CHIP;10Kohm,1%,1/10W,TP,1608           | 1    | SA     |
| ....4 | R343     | 2007-000052 | R-CHIP;10Kohm,1%,1/10W,TP,1608           | 1    | SA     |
| ....4 | R344     | 2007-000052 | R-CHIP;10Kohm,1%,1/10W,TP,1608           | 1    | SA     |
| ....4 | R355     | 2007-000052 | R-CHIP;10Kohm,1%,1/10W,TP,1608           | 1    | SA     |
| ....4 | R356     | 2007-000052 | R-CHIP;10Kohm,1%,1/10W,TP,1608           | 1    | SA     |
| ....4 | R612     | 2007-000052 | R-CHIP;10Kohm,1%,1/10W,TP,1608           | 1    | SA     |
| ....4 | R816     | 2007-000052 | R-CHIP;10Kohm,1%,1/10W,TP,1608           | 1    | SA     |
| ....4 | C375     | 2007-000070 | R-CHIP;0ohm,5%,1/10W,TP,1608             | 1    | SA     |
| ....4 | C377     | 2007-000070 | R-CHIP;0ohm,5%,1/10W,TP,1608             | 1    | SA     |
| ....4 | C378     | 2007-000070 | R-CHIP;0ohm,5%,1/10W,TP,1608             | 1    | SA     |
| ....4 | R101     | 2007-000070 | R-CHIP;0ohm,5%,1/10W,TP,1608             | 1    | SA     |
| ....4 | R111     | 2007-000070 | R-CHIP;0ohm,5%,1/10W,TP,1608             | 1    | SA     |
| ....4 | R112     | 2007-000070 | R-CHIP;0ohm,5%,1/10W,TP,1608             | 1    | SA     |
| ....4 | R125     | 2007-000070 | R-CHIP;0ohm,5%,1/10W,TP,1608             | 1    | SA     |
| ....4 | R201     | 2007-000070 | R-CHIP;0ohm,5%,1/10W,TP,1608             | 1    | SA     |
| ....4 | R213     | 2007-000070 | R-CHIP;0ohm,5%,1/10W,TP,1608             | 1    | SA     |
| ....4 | R214     | 2007-000070 | R-CHIP;0ohm,5%,1/10W,TP,1608             | 1    | SA     |
| ....4 | R215     | 2007-000070 | R-CHIP;0ohm,5%,1/10W,TP,1608             | 1    | SA     |
| ....4 | R219     | 2007-000070 | R-CHIP;0ohm,5%,1/10W,TP,1608             | 1    | SA     |
| ....4 | R222     | 2007-000070 | R-CHIP;0ohm,5%,1/10W,TP,1608             | 1    | SA     |
| ....4 | R251     | 2007-000070 | R-CHIP;0ohm,5%,1/10W,TP,1608             | 1    | SA     |
| ....4 | R252     | 2007-000070 | R-CHIP;0ohm,5%,1/10W,TP,1608             | 1    | SA     |
| ....4 | R275     | 2007-000070 | R-CHIP;0ohm,5%,1/10W,TP,1608             | 1    | SA     |
| ....4 | R322     | 2007-000070 | R-CHIP;0ohm,5%,1/10W,TP,1608             | 1    | SA     |
| ....4 | R323     | 2007-000070 | R-CHIP;0ohm,5%,1/10W,TP,1608             | 1    | SA     |
| ....4 | R324     | 2007-000070 | R-CHIP;0ohm,5%,1/10W,TP,1608             | 1    | SA     |
| ....4 | R325     | 2007-000070 | R-CHIP;0ohm,5%,1/10W,TP,1608             | 1    | SA     |

## 6 Electrical Parts List

| Level | Loc. No. | Code No.    | Description & Specification    | Q'ty | SA/SNA |
|-------|----------|-------------|--------------------------------|------|--------|
| ....4 | R329     | 2007-000070 | R-CHIP;0ohm,5%,1/10W,TP,1608   | 1    | S.A    |
| ....4 | R330     | 2007-000070 | R-CHIP;0ohm,5%,1/10W,TP,1608   | 1    | S.A    |
| ....4 | R333     | 2007-000070 | R-CHIP;0ohm,5%,1/10W,TP,1608   | 1    | S.A    |
| ....4 | R335     | 2007-000070 | R-CHIP;0ohm,5%,1/10W,TP,1608   | 1    | S.A    |
| ....4 | R336     | 2007-000070 | R-CHIP;0ohm,5%,1/10W,TP,1608   | 1    | S.A    |
| ....4 | R337     | 2007-000070 | R-CHIP;0ohm,5%,1/10W,TP,1608   | 1    | S.A    |
| ....4 | R358     | 2007-000070 | R-CHIP;0ohm,5%,1/10W,TP,1608   | 1    | S.A    |
| ....4 | R360_EU  | 2007-000070 | R-CHIP;0ohm,5%,1/10W,TP,1608   | 1    | S.A    |
| ....4 | R361_EU  | 2007-000070 | R-CHIP;0ohm,5%,1/10W,TP,1608   | 1    | S.A    |
| ....4 | R362_EU  | 2007-000070 | R-CHIP;0ohm,5%,1/10W,TP,1608   | 1    | S.A    |
| ....4 | R411     | 2007-000070 | R-CHIP;0ohm,5%,1/10W,TP,1608   | 1    | S.A    |
| ....4 | R440     | 2007-000070 | R-CHIP;0ohm,5%,1/10W,TP,1608   | 1    | S.A    |
| ....4 | R614     | 2007-000070 | R-CHIP;0ohm,5%,1/10W,TP,1608   | 1    | S.A    |
| ....4 | R615     | 2007-000070 | R-CHIP;0ohm,5%,1/10W,TP,1608   | 1    | S.A    |
| ....4 | R634     | 2007-000070 | R-CHIP;0ohm,5%,1/10W,TP,1608   | 1    | S.A    |
| ....4 | R635     | 2007-000070 | R-CHIP;0ohm,5%,1/10W,TP,1608   | 1    | S.A    |
| ....4 | R750_EU  | 2007-000070 | R-CHIP;0ohm,5%,1/10W,TP,1608   | 1    | S.A    |
| ....4 | R859     | 2007-000070 | R-CHIP;0ohm,5%,1/10W,TP,1608   | 1    | S.A    |
| ....4 | R9665    | 2007-000070 | R-CHIP;0ohm,5%,1/10W,TP,1608   | 1    | S.A    |
| ....4 | R9720    | 2007-000070 | R-CHIP;0ohm,5%,1/10W,TP,1608   | 1    | S.A    |
| ....4 | R9721    | 2007-000070 | R-CHIP;0ohm,5%,1/10W,TP,1608   | 1    | S.A    |
| ....4 | R9722    | 2007-000070 | R-CHIP;0ohm,5%,1/10W,TP,1608   | 1    | S.A    |
| ....4 | R7004    | 2007-000071 | R-CHIP;22ohm,5%,1/10W,TP,1608  | 1    | S.A    |
| ....4 | R7005    | 2007-000071 | R-CHIP;22ohm,5%,1/10W,TP,1608  | 1    | S.A    |
| ....4 | R7006    | 2007-000071 | R-CHIP;22ohm,5%,1/10W,TP,1608  | 1    | S.A    |
| ....4 | R7007    | 2007-000071 | R-CHIP;22ohm,5%,1/10W,TP,1608  | 1    | S.A    |
| ....4 | R7008    | 2007-000071 | R-CHIP;22ohm,5%,1/10W,TP,1608  | 1    | S.A    |
| ....4 | R7009    | 2007-000071 | R-CHIP;22ohm,5%,1/10W,TP,1608  | 1    | S.A    |
| ....4 | R7010    | 2007-000071 | R-CHIP;22ohm,5%,1/10W,TP,1608  | 1    | S.A    |
| ....4 | R7011    | 2007-000071 | R-CHIP;22ohm,5%,1/10W,TP,1608  | 1    | S.A    |
| ....4 | R716_EU  | 2007-000071 | R-CHIP;22ohm,5%,1/10W,TP,1608  | 1    | S.A    |
| ....4 | R717_EU  | 2007-000071 | R-CHIP;22ohm,5%,1/10W,TP,1608  | 1    | S.A    |
| ....4 | R718_EU  | 2007-000071 | R-CHIP;22ohm,5%,1/10W,TP,1608  | 1    | S.A    |
| ....4 | R765     | 2007-000071 | R-CHIP;22ohm,5%,1/10W,TP,1608  | 1    | S.A    |
| ....4 | R766     | 2007-000071 | R-CHIP;22ohm,5%,1/10W,TP,1608  | 1    | S.A    |
| ....4 | R790     | 2007-000071 | R-CHIP;22ohm,5%,1/10W,TP,1608  | 1    | S.A    |
| ....4 | R795     | 2007-000071 | R-CHIP;22ohm,5%,1/10W,TP,1608  | 1    | S.A    |
| ....4 | R231     | 2007-000072 | R-CHIP;47ohm,5%,1/10W,TP,1608  | 1    | S.A    |
| ....4 | R761     | 2007-000072 | R-CHIP;47ohm,5%,1/10W,TP,1608  | 1    | S.A    |
| ....4 | R762     | 2007-000072 | R-CHIP;47ohm,5%,1/10W,TP,1608  | 1    | S.A    |
| ....4 | R775     | 2007-000072 | R-CHIP;47ohm,5%,1/10W,TP,1608  | 1    | S.A    |
| ....4 | R777     | 2007-000072 | R-CHIP;47ohm,5%,1/10W,TP,1608  | 1    | S.A    |
| ....4 | R789     | 2007-000072 | R-CHIP;47ohm,5%,1/10W,TP,1608  | 1    | S.A    |
| ....4 | R791     | 2007-000072 | R-CHIP;47ohm,5%,1/10W,TP,1608  | 1    | S.A    |
| ....4 | R113     | 2007-000074 | R-CHIP;100ohm,5%,1/10W,TP,1608 | 1    | S.A    |
| ....4 | R114     | 2007-000074 | R-CHIP;100ohm,5%,1/10W,TP,1608 | 1    | S.A    |
| ....4 | R210     | 2007-000074 | R-CHIP;100ohm,5%,1/10W,TP,1608 | 1    | S.A    |
| ....4 | R211     | 2007-000074 | R-CHIP;100ohm,5%,1/10W,TP,1608 | 1    | S.A    |
| ....4 | R254     | 2007-000074 | R-CHIP;100ohm,5%,1/10W,TP,1608 | 1    | S.A    |
| ....4 | R255     | 2007-000074 | R-CHIP;100ohm,5%,1/10W,TP,1608 | 1    | S.A    |
| ....4 | R256     | 2007-000074 | R-CHIP;100ohm,5%,1/10W,TP,1608 | 1    | S.A    |
| ....4 | R351     | 2007-000074 | R-CHIP;100ohm,5%,1/10W,TP,1608 | 1    | S.A    |
| ....4 | R420     | 2007-000074 | R-CHIP;100ohm,5%,1/10W,TP,1608 | 1    | S.A    |
| ....4 | R434     | 2007-000074 | R-CHIP;100ohm,5%,1/10W,TP,1608 | 1    | S.A    |
| ....4 | R435     | 2007-000074 | R-CHIP;100ohm,5%,1/10W,TP,1608 | 1    | S.A    |
| ....4 | R455     | 2007-000074 | R-CHIP;100ohm,5%,1/10W,TP,1608 | 1    | S.A    |
| ....4 | R457     | 2007-000074 | R-CHIP;100ohm,5%,1/10W,TP,1608 | 1    | S.A    |
| ....4 | R458     | 2007-000074 | R-CHIP;100ohm,5%,1/10W,TP,1608 | 1    | S.A    |
| ....4 | R648     | 2007-000074 | R-CHIP;100ohm,5%,1/10W,TP,1608 | 1    | S.A    |
| ....4 | R649     | 2007-000074 | R-CHIP;100ohm,5%,1/10W,TP,1608 | 1    | S.A    |
| ....4 | R701_EU  | 2007-000074 | R-CHIP;100ohm,5%,1/10W,TP,1608 | 1    | S.A    |
| ....4 | R709     | 2007-000074 | R-CHIP;100ohm,5%,1/10W,TP,1608 | 1    | S.A    |
| ....4 | R714_EU  | 2007-000074 | R-CHIP;100ohm,5%,1/10W,TP,1608 | 1    | S.A    |
| ....4 | R720_EU  | 2007-000074 | R-CHIP;100ohm,5%,1/10W,TP,1608 | 1    | S.A    |
| ....4 | R743     | 2007-000074 | R-CHIP;100ohm,5%,1/10W,TP,1608 | 1    | S.A    |
| ....4 | R758     | 2007-000074 | R-CHIP;100ohm,5%,1/10W,TP,1608 | 1    | S.A    |
| ....4 | R767     | 2007-000074 | R-CHIP;100ohm,5%,1/10W,TP,1608 | 1    | S.A    |
| ....4 | R773     | 2007-000074 | R-CHIP;100ohm,5%,1/10W,TP,1608 | 1    | S.A    |
| ....4 | R794     | 2007-000074 | R-CHIP;100ohm,5%,1/10W,TP,1608 | 1    | S.A    |

| Level | Loc. No. | Code No.    | Description & Specification     | Q'ty | SA/SNA |
|-------|----------|-------------|---------------------------------|------|--------|
| ....4 | R936     | 2007-000074 | R-CHIP;100ohm,5%,1/10W,TP,1608  | 1    | SA     |
| ....4 | R937     | 2007-000074 | R-CHIP;100ohm,5%,1/10W,TP,1608  | 1    | SA     |
| ....4 | R9703    | 2007-000074 | R-CHIP;100ohm,5%,1/10W,TP,1608  | 1    | SA     |
| ....4 | R328     | 2007-000075 | R-CHIP;220ohm,5%,1/10W,TP,1608  | 1    | SA     |
| ....4 | R439     | 2007-000075 | R-CHIP;220ohm,5%,1/10W,TP,1608  | 1    | SA     |
| ....4 | R126     | 2007-000076 | R-CHIP;330ohm,5%,1/10W,TP,1608  | 1    | SA     |
| ....4 | R232     | 2007-000076 | R-CHIP;330ohm,5%,1/10W,TP,1608  | 1    | SA     |
| ....4 | R366     | 2007-000076 | R-CHIP;330ohm,5%,1/10W,TP,1608  | 1    | SA     |
| ....4 | R712_EU  | 2007-000076 | R-CHIP;330ohm,5%,1/10W,TP,1608  | 1    | SA     |
| ....4 | R713_EU  | 2007-000076 | R-CHIP;330ohm,5%,1/10W,TP,1608  | 1    | SA     |
| ....4 | R732_EU  | 2007-000076 | R-CHIP;330ohm,5%,1/10W,TP,1608  | 1    | SA     |
| ....4 | R734_EU  | 2007-000076 | R-CHIP;330ohm,5%,1/10W,TP,1608  | 1    | SA     |
| ....4 | R266     | 2007-000077 | R-CHIP;470ohm,5%,1/10W,TP,1608  | 1    | SA     |
| ....4 | R271     | 2007-000077 | R-CHIP;470ohm,5%,1/10W,TP,1608  | 1    | SA     |
| ....4 | R417     | 2007-000077 | R-CHIP;470ohm,5%,1/10W,TP,1608  | 1    | SA     |
| ....4 | R728     | 2007-000077 | R-CHIP;470ohm,5%,1/10W,TP,1608  | 1    | SA     |
| ....4 | R729     | 2007-000077 | R-CHIP;470ohm,5%,1/10W,TP,1608  | 1    | SA     |
| ....4 | R733_EU  | 2007-000077 | R-CHIP;470ohm,5%,1/10W,TP,1608  | 1    | SA     |
| ....4 | R735_EU  | 2007-000077 | R-CHIP;470ohm,5%,1/10W,TP,1608  | 1    | SA     |
| ....4 | R754_EU  | 2007-000077 | R-CHIP;470ohm,5%,1/10W,TP,1608  | 1    | SA     |
| ....4 | R755_EU  | 2007-000077 | R-CHIP;470ohm,5%,1/10W,TP,1608  | 1    | SA     |
| ....4 | R768     | 2007-000077 | R-CHIP;470ohm,5%,1/10W,TP,1608  | 1    | SA     |
| ....4 | R769     | 2007-000077 | R-CHIP;470ohm,5%,1/10W,TP,1608  | 1    | SA     |
| ....4 | R774     | 2007-000077 | R-CHIP;470ohm,5%,1/10W,TP,1608  | 1    | SA     |
| ....4 | R776     | 2007-000077 | R-CHIP;470ohm,5%,1/10W,TP,1608  | 1    | SA     |
| ....4 | R798     | 2007-000077 | R-CHIP;470ohm,5%,1/10W,TP,1608  | 1    | SA     |
| ....4 | R799     | 2007-000077 | R-CHIP;470ohm,5%,1/10W,TP,1608  | 1    | SA     |
| ....4 | R901     | 2007-000077 | R-CHIP;470ohm,5%,1/10W,TP,1608  | 1    | SA     |
| ....4 | R218     | 2007-000078 | R-CHIP;1Kohm,5%,1/10W,TP,1608   | 1    | SA     |
| ....4 | R224     | 2007-000078 | R-CHIP;1Kohm,5%,1/10W,TP,1608   | 1    | SA     |
| ....4 | R326     | 2007-000078 | R-CHIP;1Kohm,5%,1/10W,TP,1608   | 1    | SA     |
| ....4 | R327     | 2007-000078 | R-CHIP;1Kohm,5%,1/10W,TP,1608   | 1    | SA     |
| ....4 | R345     | 2007-000078 | R-CHIP;1Kohm,5%,1/10W,TP,1608   | 1    | SA     |
| ....4 | R413     | 2007-000078 | R-CHIP;1Kohm,5%,1/10W,TP,1608   | 1    | SA     |
| ....4 | R419     | 2007-000078 | R-CHIP;1Kohm,5%,1/10W,TP,1608   | 1    | SA     |
| ....4 | R463     | 2007-000078 | R-CHIP;1Kohm,5%,1/10W,TP,1608   | 1    | SA     |
| ....4 | R645     | 2007-000078 | R-CHIP;1Kohm,5%,1/10W,TP,1608   | 1    | SA     |
| ....4 | R646     | 2007-000078 | R-CHIP;1Kohm,5%,1/10W,TP,1608   | 1    | SA     |
| ....4 | R778     | 2007-000078 | R-CHIP;1Kohm,5%,1/10W,TP,1608   | 1    | SA     |
| ....4 | R779     | 2007-000078 | R-CHIP;1Kohm,5%,1/10W,TP,1608   | 1    | SA     |
| ....4 | R917     | 2007-000078 | R-CHIP;1Kohm,5%,1/10W,TP,1608   | 1    | SA     |
| ....4 | R9716    | 2007-000078 | R-CHIP;1Kohm,5%,1/10W,TP,1608   | 1    | SA     |
| ....4 | R9696    | 2007-000080 | R-CHIP;2Kohm,5%,1/10W,TP,1608   | 1    | SA     |
| ....4 | R9697    | 2007-000080 | R-CHIP;2Kohm,5%,1/10W,TP,1608   | 1    | SA     |
| ....4 | R263     | 2007-000082 | R-CHIP;3.3Kohm,5%,1/10W,TP,1608 | 1    | SA     |
| ....4 | R264     | 2007-000082 | R-CHIP;3.3Kohm,5%,1/10W,TP,1608 | 1    | SA     |
| ....4 | R414     | 2007-000082 | R-CHIP;3.3Kohm,5%,1/10W,TP,1608 | 1    | SA     |
| ....4 | R416     | 2007-000082 | R-CHIP;3.3Kohm,5%,1/10W,TP,1608 | 1    | SA     |
| ....4 | R418     | 2007-000082 | R-CHIP;3.3Kohm,5%,1/10W,TP,1608 | 1    | SA     |
| ....4 | R9701    | 2007-000082 | R-CHIP;3.3Kohm,5%,1/10W,TP,1608 | 1    | SA     |
| ....4 | R9702    | 2007-000082 | R-CHIP;3.3Kohm,5%,1/10W,TP,1608 | 1    | SA     |
| ....4 | R110     | 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 | R220     | 2007-000084 | R-CHIP;4.7Kohm,5%,1/10W,TP,1608 | 1    | SA     |
| ....4 | R259     | 2007-000084 | R-CHIP;4.7Kohm,5%,1/10W,TP,1608 | 1    | SA     |
| ....4 | R310     | 2007-000084 | R-CHIP;4.7Kohm,5%,1/10W,TP,1608 | 1    | SA     |
| ....4 | R311     | 2007-000084 | R-CHIP;4.7Kohm,5%,1/10W,TP,1608 | 1    | SA     |
| ....4 | R346     | 2007-000084 | R-CHIP;4.7Kohm,5%,1/10W,TP,1608 | 1    | SA     |
| ....4 | R365     | 2007-000084 | R-CHIP;4.7Kohm,5%,1/10W,TP,1608 | 1    | SA     |
| ....4 | R415     | 2007-000084 | R-CHIP;4.7Kohm,5%,1/10W,TP,1608 | 1    | SA     |
| ....4 | R647     | 2007-000084 | R-CHIP;4.7Kohm,5%,1/10W,TP,1608 | 1    | SA     |
| ....4 | R650     | 2007-000084 | R-CHIP;4.7Kohm,5%,1/10W,TP,1608 | 1    | SA     |
| ....4 | R660     | 2007-000084 | R-CHIP;4.7Kohm,5%,1/10W,TP,1608 | 1    | SA     |
| ....4 | R661     | 2007-000084 | R-CHIP;4.7Kohm,5%,1/10W,TP,1608 | 1    | SA     |
| ....4 | R662     | 2007-000084 | R-CHIP;4.7Kohm,5%,1/10W,TP,1608 | 1    | SA     |
| ....4 | R705     | 2007-000084 | R-CHIP;4.7Kohm,5%,1/10W,TP,1608 | 1    | SA     |
| ....4 | R803     | 2007-000084 | R-CHIP;4.7Kohm,5%,1/10W,TP,1608 | 1    | SA     |
| ....4 | R804     | 2007-000084 | R-CHIP;4.7Kohm,5%,1/10W,TP,1608 | 1    | SA     |
| ....4 | R805     | 2007-000084 | R-CHIP;4.7Kohm,5%,1/10W,TP,1608 | 1    | SA     |

## 6 Electrical Parts List

| Level | Loc. No. | Code No.    | Description & Specification     | Q'ty | SA/SNA |
|-------|----------|-------------|---------------------------------|------|--------|
| ....4 | R812     | 2007-000084 | R-CHIP;4.7Kohm,5%,1/10W,TP,1608 | 1    | SA     |
| ....4 | R813     | 2007-000084 | R-CHIP;4.7Kohm,5%,1/10W,TP,1608 | 1    | SA     |
| ....4 | R820     | 2007-000084 | R-CHIP;4.7Kohm,5%,1/10W,TP,1608 | 1    | SA     |
| ....4 | R821     | 2007-000084 | R-CHIP;4.7Kohm,5%,1/10W,TP,1608 | 1    | SA     |
| ....4 | R913     | 2007-000084 | R-CHIP;4.7Kohm,5%,1/10W,TP,1608 | 1    | SA     |
| ....4 | R920     | 2007-000084 | R-CHIP;4.7Kohm,5%,1/10W,TP,1608 | 1    | SA     |
| ....4 | R9699    | 2007-000084 | R-CHIP;4.7Kohm,5%,1/10W,TP,1608 | 1    | SA     |
| ....4 | R9700    | 2007-000084 | R-CHIP;4.7Kohm,5%,1/10W,TP,1608 | 1    | SA     |
| ....4 | R9706    | 2007-000084 | R-CHIP;4.7Kohm,5%,1/10W,TP,1608 | 1    | SA     |
| ....4 | R9714    | 2007-000084 | R-CHIP;4.7Kohm,5%,1/10W,TP,1608 | 1    | SA     |
| ....4 | R9717    | 2007-000084 | R-CHIP;4.7Kohm,5%,1/10W,TP,1608 | 1    | SA     |
| ....4 | R216     | 2007-000087 | R-CHIP;6.8Kohm,5%,1/10W,TP,1608 | 1    | SA     |
| ....4 | R217     | 2007-000087 | R-CHIP;6.8Kohm,5%,1/10W,TP,1608 | 1    | SA     |
| ....4 | R719_EU  | 2007-000087 | R-CHIP;6.8Kohm,5%,1/10W,TP,1608 | 1    | SA     |
| ....4 | R739_EU  | 2007-000087 | R-CHIP;6.8Kohm,5%,1/10W,TP,1608 | 1    | SA     |
| ....4 | R230     | 2007-000090 | R-CHIP;10Kohm,5%,1/10W,TP,1608  | 1    | SA     |
| ....4 | R269     | 2007-000090 | R-CHIP;10Kohm,5%,1/10W,TP,1608  | 1    | SA     |
| ....4 | R274     | 2007-000090 | R-CHIP;10Kohm,5%,1/10W,TP,1608  | 1    | SA     |
| ....4 | R302     | 2007-000090 | R-CHIP;10Kohm,5%,1/10W,TP,1608  | 1    | SA     |
| ....4 | R421     | 2007-000090 | R-CHIP;10Kohm,5%,1/10W,TP,1608  | 1    | SA     |
| ....4 | R443     | 2007-000090 | R-CHIP;10Kohm,5%,1/10W,TP,1608  | 1    | SA     |
| ....4 | R445     | 2007-000090 | R-CHIP;10Kohm,5%,1/10W,TP,1608  | 1    | SA     |
| ....4 | R447     | 2007-000090 | R-CHIP;10Kohm,5%,1/10W,TP,1608  | 1    | SA     |
| ....4 | R449     | 2007-000090 | R-CHIP;10Kohm,5%,1/10W,TP,1608  | 1    | SA     |
| ....4 | R456     | 2007-000090 | R-CHIP;10Kohm,5%,1/10W,TP,1608  | 1    | SA     |
| ....4 | R460     | 2007-000090 | R-CHIP;10Kohm,5%,1/10W,TP,1608  | 1    | SA     |
| ....4 | R462     | 2007-000090 | R-CHIP;10Kohm,5%,1/10W,TP,1608  | 1    | SA     |
| ....4 | R626     | 2007-000090 | R-CHIP;10Kohm,5%,1/10W,TP,1608  | 1    | SA     |
| ....4 | R627     | 2007-000090 | R-CHIP;10Kohm,5%,1/10W,TP,1608  | 1    | SA     |
| ....4 | R706     | 2007-000090 | R-CHIP;10Kohm,5%,1/10W,TP,1608  | 1    | SA     |
| ....4 | R759     | 2007-000090 | R-CHIP;10Kohm,5%,1/10W,TP,1608  | 1    | SA     |
| ....4 | R760     | 2007-000090 | R-CHIP;10Kohm,5%,1/10W,TP,1608  | 1    | SA     |
| ....4 | R772     | 2007-000090 | R-CHIP;10Kohm,5%,1/10W,TP,1608  | 1    | SA     |
| ....4 | R787     | 2007-000090 | R-CHIP;10Kohm,5%,1/10W,TP,1608  | 1    | SA     |
| ....4 | R788     | 2007-000090 | R-CHIP;10Kohm,5%,1/10W,TP,1608  | 1    | SA     |
| ....4 | R811     | 2007-000090 | R-CHIP;10Kohm,5%,1/10W,TP,1608  | 1    | SA     |
| ....4 | R814     | 2007-000090 | R-CHIP;10Kohm,5%,1/10W,TP,1608  | 1    | SA     |
| ....4 | R9710    | 2007-000090 | R-CHIP;10Kohm,5%,1/10W,TP,1608  | 1    | SA     |
| ....4 | R9711    | 2007-000090 | R-CHIP;10Kohm,5%,1/10W,TP,1608  | 1    | SA     |
| ....4 | R9712    | 2007-000090 | R-CHIP;10Kohm,5%,1/10W,TP,1608  | 1    | SA     |
| ....4 | R9715    | 2007-000090 | R-CHIP;10Kohm,5%,1/10W,TP,1608  | 1    | SA     |
| ....4 | R815     | 2007-000092 | R-CHIP;15Kohm,5%,1/10W,TP,1608  | 1    | SA     |
| ....4 | R613     | 2007-000093 | R-CHIP;20Kohm,5%,1/10W,TP,1608  | 1    | SA     |
| ....4 | R618     | 2007-000093 | R-CHIP;20Kohm,5%,1/10W,TP,1608  | 1    | SA     |
| ....4 | R124     | 2007-000094 | R-CHIP;22Kohm,5%,1/10W,TP,1608  | 1    | SA     |
| ....4 | R670     | 2007-000094 | R-CHIP;22Kohm,5%,1/10W,TP,1608  | 1    | SA     |
| ....4 | R671     | 2007-000094 | R-CHIP;22Kohm,5%,1/10W,TP,1608  | 1    | SA     |
| ....4 | R710_EU  | 2007-000097 | R-CHIP;47Kohm,5%,1/10W,TP,1608  | 1    | SA     |
| ....4 | R711_EU  | 2007-000097 | R-CHIP;47Kohm,5%,1/10W,TP,1608  | 1    | SA     |
| ....4 | R819     | 2007-000097 | R-CHIP;47Kohm,5%,1/10W,TP,1608  | 1    | SA     |
| ....4 | R894     | 2007-000097 | R-CHIP;47Kohm,5%,1/10W,TP,1608  | 1    | SA     |
| ....4 | R637     | 2007-000100 | R-CHIP;68Kohm,5%,1/10W,TP,1608  | 1    | SA     |
| ....4 | R638     | 2007-000100 | R-CHIP;68Kohm,5%,1/10W,TP,1608  | 1    | SA     |
| ....4 | R639     | 2007-000100 | R-CHIP;68Kohm,5%,1/10W,TP,1608  | 1    | SA     |
| ....4 | R640     | 2007-000100 | R-CHIP;68Kohm,5%,1/10W,TP,1608  | 1    | SA     |
| ....4 | R641     | 2007-000100 | R-CHIP;68Kohm,5%,1/10W,TP,1608  | 1    | SA     |
| ....4 | R642     | 2007-000100 | R-CHIP;68Kohm,5%,1/10W,TP,1608  | 1    | SA     |
| ....4 | R643     | 2007-000100 | R-CHIP;68Kohm,5%,1/10W,TP,1608  | 1    | SA     |
| ....4 | R644     | 2007-000100 | R-CHIP;68Kohm,5%,1/10W,TP,1608  | 1    | SA     |
| ....4 | R651     | 2007-000100 | R-CHIP;68Kohm,5%,1/10W,TP,1608  | 1    | SA     |
| ....4 | R652     | 2007-000100 | R-CHIP;68Kohm,5%,1/10W,TP,1608  | 1    | SA     |
| ....4 | R653     | 2007-000100 | R-CHIP;68Kohm,5%,1/10W,TP,1608  | 1    | SA     |
| ....4 | R654     | 2007-000100 | R-CHIP;68Kohm,5%,1/10W,TP,1608  | 1    | SA     |
| ....4 | R655     | 2007-000100 | R-CHIP;68Kohm,5%,1/10W,TP,1608  | 1    | SA     |
| ....4 | R656     | 2007-000100 | R-CHIP;68Kohm,5%,1/10W,TP,1608  | 1    | SA     |
| ....4 | R657     | 2007-000100 | R-CHIP;68Kohm,5%,1/10W,TP,1608  | 1    | SA     |
| ....4 | R658     | 2007-000100 | R-CHIP;68Kohm,5%,1/10W,TP,1608  | 1    | SA     |
| ....4 | R119     | 2007-000102 | R-CHIP;100Kohm,5%,1/10W,TP,1608 | 1    | SA     |
| ....4 | R127     | 2007-000102 | R-CHIP;100Kohm,5%,1/10W,TP,1608 | 1    | SA     |

| Level | Loc. No. | Code No.    | Description & Specification              | Q'ty | SA/SNA |
|-------|----------|-------------|------------------------------------------|------|--------|
| ....4 | R611     | 2007-000102 | R-CHIP;100Kohm,5%,1/10W,TP,1608          | 1    | SA     |
| ....4 | R619     | 2007-000102 | R-CHIP;100Kohm,5%,1/10W,TP,1608          | 1    | SA     |
| ....4 | R810     | 2007-000102 | R-CHIP;100Kohm,5%,1/10W,TP,1608          | 1    | SA     |
| ....4 | R629     | 2007-000103 | R-CHIP;120Kohm,5%,1/10W,TP,1608          | 1    | SA     |
| ....4 | R620     | 2007-000106 | R-CHIP;220Kohm,5%,1/10W,TP,1608          | 1    | SA     |
| ....4 | R817     | 2007-000123 | R-CHIP;1.5Kohm,5%,1/10W,TP,1608          | 1    | SA     |
| ....4 | R910     | 2007-000123 | R-CHIP;1.5Kohm,5%,1/10W,TP,1608          | 1    | SA     |
| ....4 | R911     | 2007-000123 | R-CHIP;1.5Kohm,5%,1/10W,TP,1608          | 1    | SA     |
| ....4 | R912     | 2007-000123 | R-CHIP;1.5Kohm,5%,1/10W,TP,1608          | 1    | SA     |
| ....4 | R7001    | 2007-000293 | R-CHIP;100ohm,5%,1/4W,TP,3216            | 1    | SA     |
| ....4 | R7002    | 2007-000293 | R-CHIP;100ohm,5%,1/4W,TP,3216            | 1    | SA     |
| ....4 | R7003    | 2007-000293 | R-CHIP;100ohm,5%,1/4W,TP,3216            | 1    | SA     |
| ....4 | R7012    | 2007-000293 | R-CHIP;100ohm,5%,1/4W,TP,3216            | 1    | SA     |
| ....4 | R7013    | 2007-000293 | R-CHIP;100ohm,5%,1/4W,TP,3216            | 1    | SA     |
| ....4 | R7014    | 2007-000293 | R-CHIP;100ohm,5%,1/4W,TP,3216            | 1    | SA     |
| ....4 | R7015    | 2007-000293 | R-CHIP;100ohm,5%,1/4W,TP,3216            | 1    | SA     |
| ....4 | R7016    | 2007-000293 | R-CHIP;100ohm,5%,1/4W,TP,3216            | 1    | SA     |
| ....4 | R7017    | 2007-000293 | R-CHIP;100ohm,5%,1/4W,TP,3216            | 1    | SA     |
| ....4 | R727_EU  | 2007-000293 | R-CHIP;100ohm,5%,1/4W,TP,3216            | 1    | SA     |
| ....4 | R738     | 2007-000293 | R-CHIP;100ohm,5%,1/4W,TP,3216            | 1    | SA     |
| ....4 | R229     | 2007-000309 | R-CHIP;10ohm,5%,1/10W,TP,1608            | 1    | SA     |
| ....4 | R796     | 2007-000309 | R-CHIP;10ohm,5%,1/10W,TP,1608            | 1    | SA     |
| ....4 | R797     | 2007-000309 | R-CHIP;10ohm,5%,1/10W,TP,1608            | 1    | SA     |
| ....4 | R117_EU  | 2007-000402 | R-CHIP;150ohm,5%,1/10W,TP,1608           | 1    | SA     |
| ....4 | R267     | 2007-000402 | R-CHIP;150ohm,5%,1/10W,TP,1608           | 1    | SA     |
| ....4 | R272     | 2007-000402 | R-CHIP;150ohm,5%,1/10W,TP,1608           | 1    | SA     |
| ....4 | R265     | 2007-000458 | R-CHIP;18Kohm,5%,1/10W,TP,1608           | 1    | SA     |
| ....4 | R270     | 2007-000458 | R-CHIP;18Kohm,5%,1/10W,TP,1608           | 1    | SA     |
| ....4 | R715_EU  | 2007-000458 | R-CHIP;18Kohm,5%,1/10W,TP,1608           | 1    | SA     |
| ....4 | R736_EU  | 2007-000458 | R-CHIP;18Kohm,5%,1/10W,TP,1608           | 1    | SA     |
| ....4 | R412     | 2007-000608 | R-CHIP;240ohm,5%,1/10W,TP,1608           | 1    | SA     |
| ....4 | R438     | 2007-000903 | R-CHIP;430ohm,1%,1/10W,TP,1608           | 1    | SA     |
| ....4 | R122_EU  | 2007-001002 | R-CHIP;510ohm,5%,1/10W,TP,1608           | 1    | SA     |
| ....4 | R771     | 2007-001002 | R-CHIP;510ohm,5%,1/10W,TP,1608           | 1    | SA     |
| ....4 | R338     | 2007-001042 | R-CHIP;56ohm,1%,1/10W,TP,1608            | 1    | SA     |
| ....4 | R339     | 2007-001042 | R-CHIP;56ohm,1%,1/10W,TP,1608            | 1    | SA     |
| ....4 | R340     | 2007-001042 | R-CHIP;56ohm,1%,1/10W,TP,1608            | 1    | SA     |
| ....4 | R780     | 2007-001042 | R-CHIP;56ohm,1%,1/10W,TP,1608            | 1    | SA     |
| ....4 | R781     | 2007-001042 | R-CHIP;56ohm,1%,1/10W,TP,1608            | 1    | SA     |
| ....4 | R782     | 2007-001042 | R-CHIP;56ohm,1%,1/10W,TP,1608            | 1    | SA     |
| ....4 | R783     | 2007-001042 | R-CHIP;56ohm,1%,1/10W,TP,1608            | 1    | SA     |
| ....4 | R818     | 2007-001068 | R-CHIP;6.8Kohm,1%,1/10W,TP,1608          | 1    | SA     |
| ....4 | R721_EU  | 2007-001164 | R-CHIP;75ohm,1%,1/10W,TP,1608            | 1    | SA     |
| ....4 | R722     | 2007-001164 | R-CHIP;75ohm,1%,1/10W,TP,1608            | 1    | SA     |
| ....4 | R723     | 2007-001164 | R-CHIP;75ohm,1%,1/10W,TP,1608            | 1    | SA     |
| ....4 | R724     | 2007-001164 | R-CHIP;75ohm,1%,1/10W,TP,1608            | 1    | SA     |
| ....4 | R725_EU  | 2007-001164 | R-CHIP;75ohm,1%,1/10W,TP,1608            | 1    | SA     |
| ....4 | R726_EU  | 2007-001164 | R-CHIP;75ohm,1%,1/10W,TP,1608            | 1    | SA     |
| ....4 | R737_EU  | 2007-001164 | R-CHIP;75ohm,1%,1/10W,TP,1608            | 1    | SA     |
| ....4 | R744     | 2007-001164 | R-CHIP;75ohm,1%,1/10W,TP,1608            | 1    | SA     |
| ....4 | R751     | 2007-001164 | R-CHIP;75ohm,1%,1/10W,TP,1608            | 1    | SA     |
| ....4 | R752     | 2007-001164 | R-CHIP;75ohm,1%,1/10W,TP,1608            | 1    | SA     |
| ....4 | R753     | 2007-001164 | R-CHIP;75ohm,1%,1/10W,TP,1608            | 1    | SA     |
| ....4 | R763     | 2007-001164 | R-CHIP;75ohm,1%,1/10W,TP,1608            | 1    | SA     |
| ....4 | R764     | 2007-001164 | R-CHIP;75ohm,1%,1/10W,TP,1608            | 1    | SA     |
| ....4 | R770     | 2007-001164 | R-CHIP;75ohm,1%,1/10W,TP,1608            | 1    | SA     |
| ....4 | R331     | 2007-001167 | R-CHIP;75ohm,5%,1/10W,TP,1608            | 1    | SA     |
| ....4 | R348     | 2007-001167 | R-CHIP;75ohm,5%,1/10W,TP,1608            | 1    | SA     |
| ....4 | R349     | 2007-001167 | R-CHIP;75ohm,5%,1/10W,TP,1608            | 1    | SA     |
| ....4 | R353     | 2007-001167 | R-CHIP;75ohm,5%,1/10W,TP,1608            | 1    | SA     |
| ....4 | R784     | 2007-001167 | R-CHIP;75ohm,5%,1/10W,TP,1608            | 1    | SA     |
| ....4 | R785     | 2007-001167 | R-CHIP;75ohm,5%,1/10W,TP,1608            | 1    | SA     |
| ....4 | R786     | 2007-001167 | R-CHIP;75ohm,5%,1/10W,TP,1608            | 1    | SA     |
| ....4 | R792     | 2007-001167 | R-CHIP;75ohm,5%,1/10W,TP,1608            | 1    | SA     |
| ....4 | R793     | 2007-001167 | R-CHIP;75ohm,5%,1/10W,TP,1608            | 1    | SA     |
| ....4 | RA210    | 2011-000881 | R-NET;33ohm,5%,1/16W,L,CHIP,8P,TP,3.2x1. | 1    | SA     |
| ....4 | RA211    | 2011-000881 | R-NET;33ohm,5%,1/16W,L,CHIP,8P,TP,3.2x1. | 1    | SA     |
| ....4 | C213     | 2203-000140 | C-CER,CHIP;1.5nF,10%,50V,X7R,1608        | 1    | SA     |
| ....4 | C220     | 2203-000140 | C-CER,CHIP;1.5nF,10%,50V,X7R,1608        | 1    | SA     |

## 6 Electrical Parts List

| Level | Loc. No. | Code No.    | Description & Specification           | Q'ty | SA/SNA |
|-------|----------|-------------|---------------------------------------|------|--------|
| ....4 | C223     | 2203-000140 | C-CER,CHIP;1.5nF,10%,50V,X7R,1608     | 1    | S.A    |
| ....4 | C227     | 2203-000140 | C-CER,CHIP;1.5nF,10%,50V,X7R,1608     | 1    | S.A    |
| ....4 | C230     | 2203-000140 | C-CER,CHIP;1.5nF,10%,50V,X7R,1608     | 1    | S.A    |
| ....4 | C233     | 2203-000140 | C-CER,CHIP;1.5nF,10%,50V,X7R,1608     | 1    | S.A    |
| ....4 | C236     | 2203-000140 | C-CER,CHIP;1.5nF,10%,50V,X7R,1608     | 1    | S.A    |
| ....4 | C119     | 2203-000189 | C-CER,CHIP;100nF,+80-20%,25V,Y5V,1608 | 1    | S.A    |
| ....4 | C201     | 2203-000189 | C-CER,CHIP;100nF,+80-20%,25V,Y5V,1608 | 1    | S.A    |
| ....4 | C214     | 2203-000189 | C-CER,CHIP;100nF,+80-20%,25V,Y5V,1608 | 1    | S.A    |
| ....4 | C248     | 2203-000189 | C-CER,CHIP;100nF,+80-20%,25V,Y5V,1608 | 1    | S.A    |
| ....4 | C250     | 2203-000189 | C-CER,CHIP;100nF,+80-20%,25V,Y5V,1608 | 1    | S.A    |
| ....4 | C251     | 2203-000189 | C-CER,CHIP;100nF,+80-20%,25V,Y5V,1608 | 1    | S.A    |
| ....4 | C252     | 2203-000189 | C-CER,CHIP;100nF,+80-20%,25V,Y5V,1608 | 1    | S.A    |
| ....4 | C253     | 2203-000189 | C-CER,CHIP;100nF,+80-20%,25V,Y5V,1608 | 1    | S.A    |
| ....4 | C255     | 2203-000189 | C-CER,CHIP;100nF,+80-20%,25V,Y5V,1608 | 1    | S.A    |
| ....4 | C259     | 2203-000189 | C-CER,CHIP;100nF,+80-20%,25V,Y5V,1608 | 1    | S.A    |
| ....4 | C260     | 2203-000189 | C-CER,CHIP;100nF,+80-20%,25V,Y5V,1608 | 1    | S.A    |
| ....4 | C261     | 2203-000189 | C-CER,CHIP;100nF,+80-20%,25V,Y5V,1608 | 1    | S.A    |
| ....4 | C262     | 2203-000189 | C-CER,CHIP;100nF,+80-20%,25V,Y5V,1608 | 1    | S.A    |
| ....4 | C263     | 2203-000189 | C-CER,CHIP;100nF,+80-20%,25V,Y5V,1608 | 1    | S.A    |
| ....4 | C264     | 2203-000189 | C-CER,CHIP;100nF,+80-20%,25V,Y5V,1608 | 1    | S.A    |
| ....4 | C265     | 2203-000189 | C-CER,CHIP;100nF,+80-20%,25V,Y5V,1608 | 1    | S.A    |
| ....4 | C266     | 2203-000189 | C-CER,CHIP;100nF,+80-20%,25V,Y5V,1608 | 1    | S.A    |
| ....4 | C271     | 2203-000189 | C-CER,CHIP;100nF,+80-20%,25V,Y5V,1608 | 1    | S.A    |
| ....4 | C616     | 2203-000189 | C-CER,CHIP;100nF,+80-20%,25V,Y5V,1608 | 1    | S.A    |
| ....4 | C622     | 2203-000189 | C-CER,CHIP;100nF,+80-20%,25V,Y5V,1608 | 1    | S.A    |
| ....4 | C627     | 2203-000189 | C-CER,CHIP;100nF,+80-20%,25V,Y5V,1608 | 1    | S.A    |
| ....4 | C637     | 2203-000189 | C-CER,CHIP;100nF,+80-20%,25V,Y5V,1608 | 1    | S.A    |
| ....4 | C642     | 2203-000189 | C-CER,CHIP;100nF,+80-20%,25V,Y5V,1608 | 1    | S.A    |
| ....4 | C643     | 2203-000189 | C-CER,CHIP;100nF,+80-20%,25V,Y5V,1608 | 1    | S.A    |
| ....4 | C702     | 2203-000189 | C-CER,CHIP;100nF,+80-20%,25V,Y5V,1608 | 1    | S.A    |
| ....4 | C734     | 2203-000189 | C-CER,CHIP;100nF,+80-20%,25V,Y5V,1608 | 1    | S.A    |
| ....4 | C812     | 2203-000189 | C-CER,CHIP;100nF,+80-20%,25V,Y5V,1608 | 1    | S.A    |
| ....4 | C818     | 2203-000189 | C-CER,CHIP;100nF,+80-20%,25V,Y5V,1608 | 1    | S.A    |
| ....4 | C823     | 2203-000189 | C-CER,CHIP;100nF,+80-20%,25V,Y5V,1608 | 1    | S.A    |
| ....4 | C827     | 2203-000189 | C-CER,CHIP;100nF,+80-20%,25V,Y5V,1608 | 1    | S.A    |
| ....4 | C841     | 2203-000189 | C-CER,CHIP;100nF,+80-20%,25V,Y5V,1608 | 1    | S.A    |
| ....4 | C880     | 2203-000189 | C-CER,CHIP;100nF,+80-20%,25V,Y5V,1608 | 1    | S.A    |
| ....4 | C901     | 2203-000189 | C-CER,CHIP;100nF,+80-20%,25V,Y5V,1608 | 1    | S.A    |
| ....4 | C912     | 2203-000189 | C-CER,CHIP;100nF,+80-20%,25V,Y5V,1608 | 1    | S.A    |
| ....4 | C925     | 2203-000189 | C-CER,CHIP;100nF,+80-20%,25V,Y5V,1608 | 1    | S.A    |
| ....4 | C926     | 2203-000189 | C-CER,CHIP;100nF,+80-20%,25V,Y5V,1608 | 1    | S.A    |
| ....4 | C927     | 2203-000189 | C-CER,CHIP;100nF,+80-20%,25V,Y5V,1608 | 1    | S.A    |
| ....4 | C114     | 2203-000236 | C-CER,CHIP;0.1nF,5%,50V,C0G,1608      | 1    | S.A    |
| ....4 | C115     | 2203-000236 | C-CER,CHIP;0.1nF,5%,50V,C0G,1608      | 1    | S.A    |
| ....4 | C710     | 2203-000236 | C-CER,CHIP;0.1nF,5%,50V,C0G,1608      | 1    | S.A    |
| ....4 | C711     | 2203-000236 | C-CER,CHIP;0.1nF,5%,50V,C0G,1608      | 1    | S.A    |
| ....4 | C712_EU  | 2203-000236 | C-CER,CHIP;0.1nF,5%,50V,C0G,1608      | 1    | S.A    |
| ....4 | C713     | 2203-000236 | C-CER,CHIP;0.1nF,5%,50V,C0G,1608      | 1    | S.A    |
| ....4 | C714_EU  | 2203-000236 | C-CER,CHIP;0.1nF,5%,50V,C0G,1608      | 1    | S.A    |
| ....4 | C715_EU  | 2203-000236 | C-CER,CHIP;0.1nF,5%,50V,C0G,1608      | 1    | S.A    |
| ....4 | C716     | 2203-000236 | C-CER,CHIP;0.1nF,5%,50V,C0G,1608      | 1    | S.A    |
| ....4 | C717_EU  | 2203-000236 | C-CER,CHIP;0.1nF,5%,50V,C0G,1608      | 1    | S.A    |
| ....4 | C719_EU  | 2203-000236 | C-CER,CHIP;0.1nF,5%,50V,C0G,1608      | 1    | S.A    |
| ....4 | C721_EU  | 2203-000236 | C-CER,CHIP;0.1nF,5%,50V,C0G,1608      | 1    | S.A    |
| ....4 | C729     | 2203-000236 | C-CER,CHIP;0.1nF,5%,50V,C0G,1608      | 1    | S.A    |
| ....4 | C733     | 2203-000236 | C-CER,CHIP;0.1nF,5%,50V,C0G,1608      | 1    | S.A    |
| ....4 | C745     | 2203-000236 | C-CER,CHIP;0.1nF,5%,50V,C0G,1608      | 1    | S.A    |
| ....4 | C746     | 2203-000236 | C-CER,CHIP;0.1nF,5%,50V,C0G,1608      | 1    | S.A    |
| ....4 | C110_EU  | 2203-000257 | C-CER,CHIP;10nF,10%,50V,X7R,1608      | 1    | S.A    |
| ....4 | C116_EU  | 2203-000257 | C-CER,CHIP;10nF,10%,50V,X7R,1608      | 1    | S.A    |
| ....4 | C117     | 2203-000257 | C-CER,CHIP;10nF,10%,50V,X7R,1608      | 1    | S.A    |
| ....4 | C118_EU  | 2203-000257 | C-CER,CHIP;10nF,10%,50V,X7R,1608      | 1    | S.A    |
| ....4 | C122     | 2203-000257 | C-CER,CHIP;10nF,10%,50V,X7R,1608      | 1    | S.A    |
| ....4 | C124     | 2203-000257 | C-CER,CHIP;10nF,10%,50V,X7R,1608      | 1    | S.A    |
| ....4 | C354     | 2203-000257 | C-CER,CHIP;10nF,10%,50V,X7R,1608      | 1    | S.A    |
| ....4 | C355     | 2203-000257 | C-CER,CHIP;10nF,10%,50V,X7R,1608      | 1    | S.A    |
| ....4 | C356     | 2203-000257 | C-CER,CHIP;10nF,10%,50V,X7R,1608      | 1    | S.A    |
| ....4 | C416     | 2203-000257 | C-CER,CHIP;10nF,10%,50V,X7R,1608      | 1    | S.A    |
| ....4 | C738     | 2203-000257 | C-CER,CHIP;10nF,10%,50V,X7R,1608      | 1    | S.A    |

| Level | Loc. No. | Code No.    | Description & Specification             | Q'ty | SA/SNA |
|-------|----------|-------------|-----------------------------------------|------|--------|
| ....4 | C739     | 2203-000257 | C-CER,CHIP;10nF,10%,50V,X7R,1608        | 1    | SA     |
| ....4 | C740     | 2203-000257 | C-CER,CHIP;10nF,10%,50V,X7R,1608        | 1    | SA     |
| ....4 | C741     | 2203-000257 | C-CER,CHIP;10nF,10%,50V,X7R,1608        | 1    | SA     |
| ....4 | C824     | 2203-000257 | C-CER,CHIP;10nF,10%,50V,X7R,1608        | 1    | SA     |
| ....4 | C825     | 2203-000257 | C-CER,CHIP;10nF,10%,50V,X7R,1608        | 1    | SA     |
| ....4 | C838     | 2203-000257 | C-CER,CHIP;10nF,10%,50V,X7R,1608        | 1    | SA     |
| ....4 | C915     | 2203-000257 | C-CER,CHIP;10nF,10%,50V,X7R,1608        | 1    | SA     |
| ....4 | C917     | 2203-000257 | C-CER,CHIP;10nF,10%,50V,X7R,1608        | 1    | SA     |
| ....4 | C918     | 2203-000257 | C-CER,CHIP;10nF,10%,50V,X7R,1608        | 1    | SA     |
| ....4 | C850     | 2203-000405 | C-CER,CHIP;0.18nF,5%,50V,C0G,1608       | 1    | SA     |
| ....4 | C301     | 2203-000440 | C-CER,CHIP;1nF,10%,50V,X7R,1608         | 1    | SA     |
| ....4 | C610     | 2203-000440 | C-CER,CHIP;1nF,10%,50V,X7R,1608         | 1    | SA     |
| ....4 | C611     | 2203-000440 | C-CER,CHIP;1nF,10%,50V,X7R,1608         | 1    | SA     |
| ....4 | C640     | 2203-000440 | C-CER,CHIP;1nF,10%,50V,X7R,1608         | 1    | SA     |
| ....4 | C641     | 2203-000440 | C-CER,CHIP;1nF,10%,50V,X7R,1608         | 1    | SA     |
| ....4 | C650     | 2203-000440 | C-CER,CHIP;1nF,10%,50V,X7R,1608         | 1    | SA     |
| ....4 | C651     | 2203-000440 | C-CER,CHIP;1nF,10%,50V,X7R,1608         | 1    | SA     |
| ....4 | C916     | 2203-000440 | C-CER,CHIP;1nF,10%,50V,X7R,1608         | 1    | SA     |
| ....4 | C929     | 2203-000440 | C-CER,CHIP;1nF,10%,50V,X7R,1608         | 1    | SA     |
| ....4 | C125     | 2203-000491 | C-CER,CHIP;2.2nF,10%,50V,X7R,1608       | 1    | SA     |
| ....4 | C257     | 2203-000626 | C-CER,CHIP;0.022nF,5%,50V,C0G,1608      | 1    | SA     |
| ....4 | C258     | 2203-000626 | C-CER,CHIP;0.022nF,5%,50V,C0G,1608      | 1    | SA     |
| ....4 | C840     | 2203-000715 | C-CER,CHIP;3.3nF,10%,50V,X7R,1608       | 1    | SA     |
| ....4 | C707     | 2203-000783 | C-CER,CHIP;0.33nF,5%,50V,C0G,1608       | 1    | SA     |
| ....4 | C725     | 2203-000783 | C-CER,CHIP;0.33nF,5%,50V,C0G,1608       | 1    | SA     |
| ....4 | C726     | 2203-000783 | C-CER,CHIP;0.33nF,5%,50V,C0G,1608       | 1    | SA     |
| ....4 | C730     | 2203-000783 | C-CER,CHIP;0.33nF,5%,50V,C0G,1608       | 1    | SA     |
| ....4 | C731     | 2203-000783 | C-CER,CHIP;0.33nF,5%,50V,C0G,1608       | 1    | SA     |
| ....4 | C732     | 2203-000783 | C-CER,CHIP;0.33nF,5%,50V,C0G,1608       | 1    | SA     |
| ....4 | C736     | 2203-000783 | C-CER,CHIP;0.33nF,5%,50V,C0G,1608       | 1    | SA     |
| ....4 | C742     | 2203-000783 | C-CER,CHIP;0.33nF,5%,50V,C0G,1608       | 1    | SA     |
| ....4 | C747     | 2203-000783 | C-CER,CHIP;0.33nF,5%,50V,C0G,1608       | 1    | SA     |
| ....4 | C748     | 2203-000783 | C-CER,CHIP;0.33nF,5%,50V,C0G,1608       | 1    | SA     |
| ....4 | C722_EU  | 2203-000815 | C-CER,CHIP;0.033nF,5%,50V,C0G,1608      | 1    | SA     |
| ....4 | C723_EU  | 2203-000815 | C-CER,CHIP;0.033nF,5%,50V,C0G,1608      | 1    | SA     |
| ....4 | C724_EU  | 2203-000815 | C-CER,CHIP;0.033nF,5%,50V,C0G,1608      | 1    | SA     |
| ....4 | C126     | 2203-000888 | C-CER,CHIP;4.7nF,10%,50V,X7R,1608       | 1    | SA     |
| ....4 | C631     | 2203-000888 | C-CER,CHIP;4.7nF,10%,50V,X7R,1608       | 1    | SA     |
| ....4 | C632     | 2203-000888 | C-CER,CHIP;4.7nF,10%,50V,X7R,1608       | 1    | SA     |
| ....4 | C743     | 2203-000888 | C-CER,CHIP;4.7nF,10%,50V,X7R,1608       | 1    | SA     |
| ....4 | C744     | 2203-000888 | C-CER,CHIP;4.7nF,10%,50V,X7R,1608       | 1    | SA     |
| ....4 | C127     | 2203-000972 | C-CER,CHIP;47nF,10%,16V,X7R,TP,1608     | 1    | SA     |
| ....4 | C618     | 2203-000975 | C-CER,CHIP;47nF,10%,25V,X7R,TP,1608,-   | 1    | SA     |
| ....4 | C621     | 2203-000975 | C-CER,CHIP;47nF,10%,25V,X7R,TP,1608,-   | 1    | SA     |
| ....4 | C645     | 2203-000975 | C-CER,CHIP;47nF,10%,25V,X7R,TP,1608,-   | 1    | SA     |
| ....4 | C646     | 2203-000975 | C-CER,CHIP;47nF,10%,25V,X7R,TP,1608,-   | 1    | SA     |
| ....4 | C202     | 2203-000998 | C-CER,CHIP;0.047nF,5%,50V,C0G,1608      | 1    | SA     |
| ....4 | C203     | 2203-000998 | C-CER,CHIP;0.047nF,5%,50V,C0G,1608      | 1    | SA     |
| ....4 | C718_EU  | 2203-000998 | C-CER,CHIP;0.047nF,5%,50V,C0G,1608      | 1    | SA     |
| ....4 | C720_EU  | 2203-000998 | C-CER,CHIP;0.047nF,5%,50V,C0G,1608      | 1    | SA     |
| ....4 | C373     | 2203-001086 | C-CER,CHIP;0.0050nF,0.25pF,50V,NP0,1608 | 1    | SA     |
| ....4 | C374     | 2203-001086 | C-CER,CHIP;0.0050nF,0.25pF,50V,NP0,1608 | 1    | SA     |
| ....4 | C613     | 2203-001391 | C-CER,CHIP;150nF,10%,25V,X7R,TP,2012,-  | 1    | SA     |
| ....4 | C615     | 2203-001391 | C-CER,CHIP;150nF,10%,25V,X7R,TP,2012,-  | 1    | SA     |
| ....4 | C648     | 2203-001391 | C-CER,CHIP;150nF,10%,25V,X7R,TP,2012,-  | 1    | SA     |
| ....4 | C649     | 2203-001391 | C-CER,CHIP;150nF,10%,25V,X7R,TP,2012,-  | 1    | SA     |
| ....4 | C123     | 2203-001607 | C-CER,CHIP;0.22nF,5%,50V,NP0,1608       | 1    | SA     |
| ....4 | C638     | 2203-001607 | C-CER,CHIP;0.22nF,5%,50V,NP0,1608       | 1    | SA     |
| ....4 | C623     | 2203-001652 | C-CER,CHIP;470nF,+80-20%,16V,Y5V,1608   | 1    | SA     |
| ....4 | C626     | 2203-001652 | C-CER,CHIP;470nF,+80-20%,16V,Y5V,1608   | 1    | SA     |
| ....4 | C212     | 2203-001656 | C-CER,CHIP;0.47nF,5%,50V,NP0,1608       | 1    | SA     |
| ....4 | C219     | 2203-001656 | C-CER,CHIP;0.47nF,5%,50V,NP0,1608       | 1    | SA     |
| ....4 | C222     | 2203-001656 | C-CER,CHIP;0.47nF,5%,50V,NP0,1608       | 1    | SA     |
| ....4 | C226     | 2203-001656 | C-CER,CHIP;0.47nF,5%,50V,NP0,1608       | 1    | SA     |
| ....4 | C229     | 2203-001656 | C-CER,CHIP;0.47nF,5%,50V,NP0,1608       | 1    | SA     |
| ....4 | C232     | 2203-001656 | C-CER,CHIP;0.47nF,5%,50V,NP0,1608       | 1    | SA     |
| ....4 | C235     | 2203-001656 | C-CER,CHIP;0.47nF,5%,50V,NP0,1608       | 1    | SA     |
| ....4 | C628     | 2203-001724 | C-CER,CHIP;4700nF,+80-20%,16V,Y5V,3216  | 1    | SA     |
| ....4 | C366     | 2203-005005 | C-CER,CHIP;100nF,10%,16V,X7R,1608       | 1    | SA     |

## 6 Electrical Parts List

| Level | Loc. No. | Code No.    | Description & Specification              | Q'ty | SA/SNA |
|-------|----------|-------------|------------------------------------------|------|--------|
| ....4 | C410     | 2203-005005 | C-CER,CHIP;100nF,10%,16V,X7R,1608        | 1    | S.A    |
| ....4 | C652     | 2203-005005 | C-CER,CHIP;100nF,10%,16V,X7R,1608        | 1    | S.A    |
| ....4 | C700     | 2203-005005 | C-CER,CHIP;100nF,10%,16V,X7R,1608        | 1    | S.A    |
| ....4 | C728     | 2203-005005 | C-CER,CHIP;100nF,10%,16V,X7R,1608        | 1    | S.A    |
| ....4 | C735     | 2203-005005 | C-CER,CHIP;100nF,10%,16V,X7R,1608        | 1    | S.A    |
| ....4 | C810     | 2203-005005 | C-CER,CHIP;100nF,10%,16V,X7R,1608        | 1    | S.A    |
| ....4 | C814     | 2203-005005 | C-CER,CHIP;100nF,10%,16V,X7R,1608        | 1    | S.A    |
| ....4 | C822     | 2203-005005 | C-CER,CHIP;100nF,10%,16V,X7R,1608        | 1    | S.A    |
| ....4 | C829     | 2203-005005 | C-CER,CHIP;100nF,10%,16V,X7R,1608        | 1    | S.A    |
| ....4 | C831     | 2203-005005 | C-CER,CHIP;100nF,10%,16V,X7R,1608        | 1    | S.A    |
| ....4 | C833     | 2203-005005 | C-CER,CHIP;100nF,10%,16V,X7R,1608        | 1    | S.A    |
| ....4 | C835     | 2203-005005 | C-CER,CHIP;100nF,10%,16V,X7R,1608        | 1    | S.A    |
| ....4 | C837     | 2203-005005 | C-CER,CHIP;100nF,10%,16V,X7R,1608        | 1    | S.A    |
| ....4 | C844     | 2203-005005 | C-CER,CHIP;100nF,10%,16V,X7R,1608        | 1    | S.A    |
| ....4 | C846     | 2203-005005 | C-CER,CHIP;100nF,10%,16V,X7R,1608        | 1    | S.A    |
| ....4 | C911     | 2203-005005 | C-CER,CHIP;100nF,10%,16V,X7R,1608        | 1    | S.A    |
| ....4 | R464     | 2203-005005 | C-CER,CHIP;100nF,10%,16V,X7R,1608        | 1    | S.A    |
| ....4 | C614     | 2203-005030 | C-CER,CHIP;470nF,+80-20%,50V,Y5V,TP,3216 | 1    | S.A    |
| ....4 | C647     | 2203-005030 | C-CER,CHIP;470nF,+80-20%,50V,Y5V,TP,3216 | 1    | S.A    |
| ....4 | C113     | 2203-005065 | C-CER,CHIP;1000nF,+80-20%,10V,Y5V,1608   | 1    | S.A    |
| ....4 | C211     | 2203-005065 | C-CER,CHIP;1000nF,+80-20%,10V,Y5V,1608   | 1    | S.A    |
| ....4 | C218     | 2203-005065 | C-CER,CHIP;1000nF,+80-20%,10V,Y5V,1608   | 1    | S.A    |
| ....4 | C221     | 2203-005065 | C-CER,CHIP;1000nF,+80-20%,10V,Y5V,1608   | 1    | S.A    |
| ....4 | C225     | 2203-005065 | C-CER,CHIP;1000nF,+80-20%,10V,Y5V,1608   | 1    | S.A    |
| ....4 | C228     | 2203-005065 | C-CER,CHIP;1000nF,+80-20%,10V,Y5V,1608   | 1    | S.A    |
| ....4 | C231     | 2203-005065 | C-CER,CHIP;1000nF,+80-20%,10V,Y5V,1608   | 1    | S.A    |
| ....4 | C234     | 2203-005065 | C-CER,CHIP;1000nF,+80-20%,10V,Y5V,1608   | 1    | S.A    |
| ....4 | C239     | 2203-005065 | C-CER,CHIP;1000nF,+80-20%,10V,Y5V,1608   | 1    | S.A    |
| ....4 | C254     | 2203-005065 | C-CER,CHIP;1000nF,+80-20%,10V,Y5V,1608   | 1    | S.A    |
| ....4 | C311     | 2203-005065 | C-CER,CHIP;1000nF,+80-20%,10V,Y5V,1608   | 1    | S.A    |
| ....4 | C312     | 2203-005065 | C-CER,CHIP;1000nF,+80-20%,10V,Y5V,1608   | 1    | S.A    |
| ....4 | C313     | 2203-005065 | C-CER,CHIP;1000nF,+80-20%,10V,Y5V,1608   | 1    | S.A    |
| ....4 | C314     | 2203-005065 | C-CER,CHIP;1000nF,+80-20%,10V,Y5V,1608   | 1    | S.A    |
| ....4 | C315     | 2203-005065 | C-CER,CHIP;1000nF,+80-20%,10V,Y5V,1608   | 1    | S.A    |
| ....4 | C316     | 2203-005065 | C-CER,CHIP;1000nF,+80-20%,10V,Y5V,1608   | 1    | S.A    |
| ....4 | C317     | 2203-005065 | C-CER,CHIP;1000nF,+80-20%,10V,Y5V,1608   | 1    | S.A    |
| ....4 | C318     | 2203-005065 | C-CER,CHIP;1000nF,+80-20%,10V,Y5V,1608   | 1    | S.A    |
| ....4 | C320     | 2203-005065 | C-CER,CHIP;1000nF,+80-20%,10V,Y5V,1608   | 1    | S.A    |
| ....4 | C321     | 2203-005065 | C-CER,CHIP;1000nF,+80-20%,10V,Y5V,1608   | 1    | S.A    |
| ....4 | C322     | 2203-005065 | C-CER,CHIP;1000nF,+80-20%,10V,Y5V,1608   | 1    | S.A    |
| ....4 | C323     | 2203-005065 | C-CER,CHIP;1000nF,+80-20%,10V,Y5V,1608   | 1    | S.A    |
| ....4 | C325     | 2203-005065 | C-CER,CHIP;1000nF,+80-20%,10V,Y5V,1608   | 1    | S.A    |
| ....4 | C326     | 2203-005065 | C-CER,CHIP;1000nF,+80-20%,10V,Y5V,1608   | 1    | S.A    |
| ....4 | C327     | 2203-005065 | C-CER,CHIP;1000nF,+80-20%,10V,Y5V,1608   | 1    | S.A    |
| ....4 | C328     | 2203-005065 | C-CER,CHIP;1000nF,+80-20%,10V,Y5V,1608   | 1    | S.A    |
| ....4 | C329     | 2203-005065 | C-CER,CHIP;1000nF,+80-20%,10V,Y5V,1608   | 1    | S.A    |
| ....4 | C330     | 2203-005065 | C-CER,CHIP;1000nF,+80-20%,10V,Y5V,1608   | 1    | S.A    |
| ....4 | C331     | 2203-005065 | C-CER,CHIP;1000nF,+80-20%,10V,Y5V,1608   | 1    | S.A    |
| ....4 | C333     | 2203-005065 | C-CER,CHIP;1000nF,+80-20%,10V,Y5V,1608   | 1    | S.A    |
| ....4 | C334     | 2203-005065 | C-CER,CHIP;1000nF,+80-20%,10V,Y5V,1608   | 1    | S.A    |
| ....4 | C335     | 2203-005065 | C-CER,CHIP;1000nF,+80-20%,10V,Y5V,1608   | 1    | S.A    |
| ....4 | C336     | 2203-005065 | C-CER,CHIP;1000nF,+80-20%,10V,Y5V,1608   | 1    | S.A    |
| ....4 | C337     | 2203-005065 | C-CER,CHIP;1000nF,+80-20%,10V,Y5V,1608   | 1    | S.A    |
| ....4 | C340     | 2203-005065 | C-CER,CHIP;1000nF,+80-20%,10V,Y5V,1608   | 1    | S.A    |
| ....4 | C341     | 2203-005065 | C-CER,CHIP;1000nF,+80-20%,10V,Y5V,1608   | 1    | S.A    |
| ....4 | C342     | 2203-005065 | C-CER,CHIP;1000nF,+80-20%,10V,Y5V,1608   | 1    | S.A    |
| ....4 | C343     | 2203-005065 | C-CER,CHIP;1000nF,+80-20%,10V,Y5V,1608   | 1    | S.A    |
| ....4 | C344     | 2203-005065 | C-CER,CHIP;1000nF,+80-20%,10V,Y5V,1608   | 1    | S.A    |
| ....4 | C345     | 2203-005065 | C-CER,CHIP;1000nF,+80-20%,10V,Y5V,1608   | 1    | S.A    |
| ....4 | C346     | 2203-005065 | C-CER,CHIP;1000nF,+80-20%,10V,Y5V,1608   | 1    | S.A    |
| ....4 | C347     | 2203-005065 | C-CER,CHIP;1000nF,+80-20%,10V,Y5V,1608   | 1    | S.A    |
| ....4 | C350     | 2203-005065 | C-CER,CHIP;1000nF,+80-20%,10V,Y5V,1608   | 1    | S.A    |
| ....4 | C351     | 2203-005065 | C-CER,CHIP;1000nF,+80-20%,10V,Y5V,1608   | 1    | S.A    |
| ....4 | C352     | 2203-005065 | C-CER,CHIP;1000nF,+80-20%,10V,Y5V,1608   | 1    | S.A    |
| ....4 | C353     | 2203-005065 | C-CER,CHIP;1000nF,+80-20%,10V,Y5V,1608   | 1    | S.A    |
| ....4 | C359     | 2203-005065 | C-CER,CHIP;1000nF,+80-20%,10V,Y5V,1608   | 1    | S.A    |
| ....4 | C360     | 2203-005065 | C-CER,CHIP;1000nF,+80-20%,10V,Y5V,1608   | 1    | S.A    |
| ....4 | C361     | 2203-005065 | C-CER,CHIP;1000nF,+80-20%,10V,Y5V,1608   | 1    | S.A    |
| ....4 | C362     | 2203-005065 | C-CER,CHIP;1000nF,+80-20%,10V,Y5V,1608   | 1    | S.A    |

| Level | Loc. No. | Code No.    | Description & Specification              | Q'ty | SA/SNA |
|-------|----------|-------------|------------------------------------------|------|--------|
| ....4 | C363     | 2203-005065 | C-CER,CHIP;1000nF,+80-20%,10V,Y5V,1608   | 1    | SA     |
| ....4 | C364     | 2203-005065 | C-CER,CHIP;1000nF,+80-20%,10V,Y5V,1608   | 1    | SA     |
| ....4 | C385     | 2203-005065 | C-CER,CHIP;1000nF,+80-20%,10V,Y5V,1608   | 1    | SA     |
| ....4 | C412     | 2203-005065 | C-CER,CHIP;1000nF,+80-20%,10V,Y5V,1608   | 1    | SA     |
| ....4 | C418     | 2203-005065 | C-CER,CHIP;1000nF,+80-20%,10V,Y5V,1608   | 1    | SA     |
| ....4 | C419     | 2203-005065 | C-CER,CHIP;1000nF,+80-20%,10V,Y5V,1608   | 1    | SA     |
| ....4 | C630     | 2203-005065 | C-CER,CHIP;1000nF,+80-20%,10V,Y5V,1608   | 1    | SA     |
| ....4 | C633     | 2203-005065 | C-CER,CHIP;1000nF,+80-20%,10V,Y5V,1608   | 1    | SA     |
| ....4 | C634     | 2203-005065 | C-CER,CHIP;1000nF,+80-20%,10V,Y5V,1608   | 1    | SA     |
| ....4 | C635     | 2203-005065 | C-CER,CHIP;1000nF,+80-20%,10V,Y5V,1608   | 1    | SA     |
| ....4 | C636     | 2203-005065 | C-CER,CHIP;1000nF,+80-20%,10V,Y5V,1608   | 1    | SA     |
| ....4 | C703     | 2203-005065 | C-CER,CHIP;1000nF,+80-20%,10V,Y5V,1608   | 1    | SA     |
| ....4 | C769     | 2203-005065 | C-CER,CHIP;1000nF,+80-20%,10V,Y5V,1608   | 1    | SA     |
| ....4 | C847     | 2203-005065 | C-CER,CHIP;1000nF,+80-20%,10V,Y5V,1608   | 1    | SA     |
| ....4 | C848     | 2203-005065 | C-CER,CHIP;1000nF,+80-20%,10V,Y5V,1608   | 1    | SA     |
| ....4 | C849     | 2203-005065 | C-CER,CHIP;1000nF,+80-20%,10V,Y5V,1608   | 1    | SA     |
| ....4 | C920     | 2203-005065 | C-CER,CHIP;1000nF,+80-20%,10V,Y5V,1608   | 1    | SA     |
| ....4 | C921     | 2203-005065 | C-CER,CHIP;1000nF,+80-20%,10V,Y5V,1608   | 1    | SA     |
| ....4 | C922     | 2203-005065 | C-CER,CHIP;1000nF,+80-20%,10V,Y5V,1608   | 1    | SA     |
| ....4 | C923     | 2203-005065 | C-CER,CHIP;1000nF,+80-20%,10V,Y5V,1608   | 1    | SA     |
| ....4 | C924     | 2203-005065 | C-CER,CHIP;1000nF,+80-20%,10V,Y5V,1608   | 1    | SA     |
| ....4 | C930     | 2203-005065 | C-CER,CHIP;1000nF,+80-20%,10V,Y5V,1608   | 1    | SA     |
| ....4 | C931     | 2203-005065 | C-CER,CHIP;1000nF,+80-20%,10V,Y5V,1608   | 1    | SA     |
| ....4 | C639     | 2203-006036 | C-CER,CHIP;680nF,+80-20%,16V,Y5V,TP,1608 | 1    | SA     |
| ....4 | C678     | 2203-006036 | C-CER,CHIP;680nF,+80-20%,16V,Y5V,TP,1608 | 1    | SA     |
| ....4 | C679     | 2203-006036 | C-CER,CHIP;680nF,+80-20%,16V,Y5V,TP,1608 | 1    | SA     |
| ....4 | C210     | 2203-006333 | C-CER,CHIP;10000nF,20%,16V,X5R,TP,3216   | 1    | SA     |
| ....4 | C224     | 2203-006333 | C-CER,CHIP;10000nF,20%,16V,X5R,TP,3216   | 1    | SA     |
| ....4 | C237     | 2203-006333 | C-CER,CHIP;10000nF,20%,16V,X5R,TP,3216   | 1    | SA     |
| ....4 | C238     | 2203-006333 | C-CER,CHIP;10000nF,20%,16V,X5R,TP,3216   | 1    | SA     |
| ....4 | C240     | 2203-006333 | C-CER,CHIP;10000nF,20%,16V,X5R,TP,3216   | 1    | SA     |
| ....4 | C241     | 2203-006333 | C-CER,CHIP;10000nF,20%,16V,X5R,TP,3216   | 1    | SA     |
| ....4 | C242     | 2203-006333 | C-CER,CHIP;10000nF,20%,16V,X5R,TP,3216   | 1    | SA     |
| ....4 | C243     | 2203-006333 | C-CER,CHIP;10000nF,20%,16V,X5R,TP,3216   | 1    | SA     |
| ....4 | C244     | 2203-006333 | C-CER,CHIP;10000nF,20%,16V,X5R,TP,3216   | 1    | SA     |
| ....4 | C245     | 2203-006333 | C-CER,CHIP;10000nF,20%,16V,X5R,TP,3216   | 1    | SA     |
| ....4 | C249     | 2203-006333 | C-CER,CHIP;10000nF,20%,16V,X5R,TP,3216   | 1    | SA     |
| ....4 | C654     | 2203-006333 | C-CER,CHIP;10000nF,20%,16V,X5R,TP,3216   | 1    | SA     |
| ....4 | C655     | 2203-006333 | C-CER,CHIP;10000nF,20%,16V,X5R,TP,3216   | 1    | SA     |
| ....4 | C656     | 2203-006333 | C-CER,CHIP;10000nF,20%,16V,X5R,TP,3216   | 1    | SA     |
| ....4 | C657     | 2203-006333 | C-CER,CHIP;10000nF,20%,16V,X5R,TP,3216   | 1    | SA     |
| ....4 | C658     | 2203-006333 | C-CER,CHIP;10000nF,20%,16V,X5R,TP,3216   | 1    | SA     |
| ....4 | C659     | 2203-006333 | C-CER,CHIP;10000nF,20%,16V,X5R,TP,3216   | 1    | SA     |
| ....4 | C660     | 2203-006333 | C-CER,CHIP;10000nF,20%,16V,X5R,TP,3216   | 1    | SA     |
| ....4 | C661     | 2203-006333 | C-CER,CHIP;10000nF,20%,16V,X5R,TP,3216   | 1    | SA     |
| ....4 | C890     | 2203-006333 | C-CER,CHIP;10000nF,20%,16V,X5R,TP,3216   | 1    | SA     |
| ....4 | C417     | 2402-000108 | C-AL,SMD;10uF,20%,16V,WT,TP,4.3x4.3x5.2m | 1    | SA     |
| ....4 | C112     | 2402-001128 | C-AL,SMD;100UF,20%,16V,WT,TP,6.3X5.7MM   | 1    | SA     |
| ....4 | C121     | 2402-001128 | C-AL,SMD;100UF,20%,16V,WT,TP,6.3X5.7MM   | 1    | SA     |
| ....4 | C267     | 2402-001128 | C-AL,SMD;100UF,20%,16V,WT,TP,6.3X5.7MM   | 1    | SA     |
| ....4 | C268     | 2402-001128 | C-AL,SMD;100UF,20%,16V,WT,TP,6.3X5.7MM   | 1    | SA     |
| ....4 | C415     | 2402-001128 | C-AL,SMD;100UF,20%,16V,WT,TP,6.3X5.7MM   | 1    | SA     |
| ....4 | C620     | 2402-001128 | C-AL,SMD;100UF,20%,16V,WT,TP,6.3X5.7MM   | 1    | SA     |
| ....4 | C624     | 2402-001128 | C-AL,SMD;100UF,20%,16V,WT,TP,6.3X5.7MM   | 1    | SA     |
| ....4 | C625     | 2402-001128 | C-AL,SMD;100UF,20%,16V,WT,TP,6.3X5.7MM   | 1    | SA     |
| ....4 | C644     | 2402-001128 | C-AL,SMD;100UF,20%,16V,WT,TP,6.3X5.7MM   | 1    | SA     |
| ....4 | C671     | 2402-001128 | C-AL,SMD;100UF,20%,16V,WT,TP,6.3X5.7MM   | 1    | SA     |
| ....4 | C677     | 2402-001128 | C-AL,SMD;100UF,20%,16V,WT,TP,6.3X5.7MM   | 1    | SA     |
| ....4 | C811     | 2402-001128 | C-AL,SMD;100UF,20%,16V,WT,TP,6.3X5.7MM   | 1    | SA     |
| ....4 | C813     | 2402-001128 | C-AL,SMD;100UF,20%,16V,WT,TP,6.3X5.7MM   | 1    | SA     |
| ....4 | C819     | 2402-001128 | C-AL,SMD;100UF,20%,16V,WT,TP,6.3X5.7MM   | 1    | SA     |
| ....4 | C820     | 2402-001128 | C-AL,SMD;100UF,20%,16V,WT,TP,6.3X5.7MM   | 1    | SA     |
| ....4 | C826     | 2402-001128 | C-AL,SMD;100UF,20%,16V,WT,TP,6.3X5.7MM   | 1    | SA     |
| ....4 | C828     | 2402-001128 | C-AL,SMD;100UF,20%,16V,WT,TP,6.3X5.7MM   | 1    | SA     |
| ....4 | C845     | 2402-001128 | C-AL,SMD;100UF,20%,16V,WT,TP,6.3X5.7MM   | 1    | SA     |
| ....4 | C612     | 2402-001129 | C-AL,SMD;47UF,20%,16V,WT,TP,6.3X5.2MM    | 1    | SA     |
| ....4 | C111_EU  | 2402-001178 | C-AL,SMD;10uF,20%,16V,WT,TP,4.3x4.3x5.8m | 1    | SA     |
| ....4 | C413     | 2402-001178 | C-AL,SMD;10uF,20%,16V,WT,TP,4.3x4.3x5.8m | 1    | SA     |
| ....4 | C365     | 2402-001183 | C-AL,SMD;22UF,20%,16V,WT,TP,5.3X5.3X6MM  | 1    | SA     |

## 6 Electrical Parts List

[illegible]

| Level | Loc. No. | Code No.    | Description & Specification              | Q'ty | SA/SNA |
|-------|----------|-------------|------------------------------------------|------|--------|
| ....4 | T0568    | 3301-001145 | BEAD-SMD;60OHM,4516,6000,TP,70OHM/45MHZ, | 1    | S.NA   |
| ....4 | T0568    | 3301-001145 | BEAD-SMD;60OHM,4516,6000,TP,70OHM/45MHZ, | 1    | S.NA   |
| ....4 | T0568    | 3301-001145 | BEAD-SMD;60OHM,4516,6000,TP,70OHM/45MHZ, | 1    | S.NA   |
| ....4 | T0568    | 3301-001145 | BEAD-SMD;60OHM,4516,6000,TP,70OHM/45MHZ, | 1    | S.NA   |
| ....4 | T0568    | 3301-001145 | BEAD-SMD;60OHM,4516,6000,TP,70OHM/45MHZ, | 1    | S.NA   |
| ....4 | T0568    | 3301-001145 | BEAD-SMD;60OHM,4516,6000,TP,70OHM/45MHZ, | 1    | S.NA   |
| ....4 | T0568    | 3301-001145 | BEAD-SMD;60OHM,4516,6000,TP,70OHM/45MHZ, | 1    | S.NA   |
| ....4 | T0568    | 3301-001145 | BEAD-SMD;60OHM,4516,6000,TP,70OHM/45MHZ, | 1    | S.NA   |
| ....4 | T0568    | 3301-001145 | BEAD-SMD;60OHM,4516,6000,TP,70OHM/45MHZ, | 1    | S.NA   |
| ....4 | T0568    | 3301-001145 | BEAD-SMD;60OHM,4516,6000,TP,70OHM/45MHZ, | 1    | S.NA   |
| ....4 | T0568    | 3301-001145 | BEAD-SMD;60OHM,4516,6000,TP,70OHM/45MHZ, | 1    | S.NA   |
| ....4 | T0568    | 3301-001236 | BEAD-SMD;60ohm,1608,200mA,,,,0.7ohm      | 1    | S.NA   |
| ....4 | T0568    | 3301-001236 | BEAD-SMD;60ohm,1608,200mA,,,,0.7ohm      | 1    | S.NA   |
| ....4 | T0568    | 3301-001236 | BEAD-SMD;60ohm,1608,200mA,,,,0.7ohm      | 1    | S.NA   |
| ....4 | T0568    | 3301-001236 | BEAD-SMD;60ohm,1608,200mA,,,,0.7ohm      | 1    | S.NA   |
| ....4 | T0568    | 3301-001236 | BEAD-SMD;60ohm,1608,200mA,,,,0.7ohm      | 1    | S.NA   |
| ....4 | TEST4    | 3711-002046 | HEADER-BOARD TO CABLE;BOX,12P,1R,1.25mm, | 1    | SA     |
| ....4 | CN622    | 3711-005291 | HEADER-BOARD TO CABLE;BOX,2P,1R,2MM,SMD- | 1    | SA     |
| ....4 | CN621    | 3711-005292 | HEADER-BOARD TO CABLE;BOX,3P,1R,2MM,SMD- | 1    | SA     |
| ....4 | CN701    | 3711-005470 | HEADER-BOARD TO CABLE;BOX,30P,1R,1.25mm, | 1    | SA     |
| ....4 | CN802    | 3711-005497 | HEADER-BOARD TO CABLE;BOX,15P,1R,1.25MM, | 1    | SA     |
| ....4 | L805     | BN27-00008A | COIL CHOKE-SMD;SMD12*12*8.5,GH15/17PS,22 | 1    | SA     |
| ....4 | L623_OP  | BN27-00017A | COIL CHOKE-SMD;PO5845-330,LT17N2,33uH,10 | 1    | SA     |
| ....4 | L624_OP  | BN27-00017A | COIL CHOKE-SMD;PO5845-330,LT17N2,33uH,10 | 1    | SA     |
| ....4 | L625_OP  | BN27-00017A | COIL CHOKE-SMD;PO5845-330,LT17N2,33uH,10 | 1    | SA     |
| ....4 | L626_OP  | BN27-00017A | COIL CHOKE-SMD;PO5845-330,LT17N2,33uH,10 | 1    | SA     |
| ....4 | M0018    | BN97-00657C | ASSY MICOM;0000,20050528,1107-001500,Q55 | 1    | SA     |
| ....5 | IC115    | 1107-001580 | IC-FLASH MEMORY;MX25L4005,4Mbit,512Kx8Bi | 1    | SA     |
| ....4 | M0018    | BN97-00657D | ASSY MICOM;0000,20050810,BN09-00014A,Q5  | 1    | SA     |
| ....5 | T0119    | BN09-00014A | IC MICOM;VCT4973,VCT49X3F,XX,F2,144,3.3V | 1    | S.NA   |
| ....4 | C836     | 2409-001065 | C-ORGANIC;82UF,20%,16V,WT,TP,8X6.9MM,-   | 1    | SA     |
| ....4 | D620     | 0403-000314 | DIODE-ZENER;RLZJ9.1B,8.8-9.3V,500MW,LL-3 | 1    | SA     |
| ....4 | C701     | 2203-000041 | C-CER,CHIP;0.01nF,0.25pF,50V,C0G,1608    | 1    | SA     |
| ....4 | C414     | 2203-005249 | C-CER,CHIP;100nF,10%,50V,X7R,1608        | 1    | SA     |
| ....4 | C928     | 2203-005249 | C-CER,CHIP;100nF,10%,50V,X7R,1608        | 1    | SA     |
| ....4 | C843     | 2409-001051 | C-ORGANIC;82UF,20%,6.3V,WT,TP,6.3*5.9MM, | 1    | SA     |
| ....4 | R116_EU  | 2007-000234 | R-CHIP;1.3Kohm,5%,1/10W,TP,1608          | 1    | SA     |
| ....4 | R120_EU  | 2007-000659 | R-CHIP;27ohm,5%,1/10W,TP,1608            | 1    | SA     |
| ....4 | R123_EU  | 2007-000882 | R-CHIP;4.7ohm,5%,1/10W,TP,1608           | 1    | SA     |
| ....4 | R121_EU  | 2007-001134 | R-CHIP;68ohm,5%,1/10W,TP,1608            | 1    | SA     |
| ....4 | T0052    | 2703-000222 | INDUCTOR-SMD;560nH,10%,2012              | 1    | SA     |
| ....4 | R115_OP  | 2007-000416 | R-CHIP;15ohm,5%,1/10W,TP,1608            | 1    | SA     |
| ....4 | C382     | 2203-000578 | C-CER,CHIP;220nF,20%,50V,Y5V,TP,3216     | 1    | SA     |
| ....4 | C384     | 2203-000578 | C-CER,CHIP;220nF,20%,50V,Y5V,TP,3216     | 1    | SA     |
| ....4 | C387     | 2203-000578 | C-CER,CHIP;220nF,20%,50V,Y5V,TP,3216     | 1    | SA     |
| ....4 | R622     | 2007-000381 | R-CHIP;13Kohm,5%,1/10W,TP,1608           | 1    | SA     |
| ....4 | R625     | 2007-000381 | R-CHIP;13Kohm,5%,1/10W,TP,1608           | 1    | SA     |
| ....4 | T0077    | BN41-00636C | PCB MAIN;TORINO,FR-4,4,MP1.2,1.6,160 * 1 | 1    | S.NA   |
| ....4 | Q210     | 0501-002080 | TR-SMALL SIGNAL;2SC2412K,NPN,200mW,SC-59 | 1    | SA     |
| ....4 | R268     | 2007-000539 | R-CHIP;200ohm,5%,1/10W,TP,1608           | 1    | SA     |
| ....4 | R273     | 2007-000539 | R-CHIP;200ohm,5%,1/10W,TP,1608           | 1    | SA     |
| ...3  | FT230    | 2904-001179 | FILTER-SAW;36.125MHz,-,32.65-39.6MHz/0.5 | 1    | SA     |
| ...3  | M0107    | BN63-02176A | SHIELD-COVER;MGM,SPTE,0.5                | 1    | S.NA   |
| ...3  | T0562    | 6046-001013 | STAND OFF;M3,L5,Ni PLT,SUM24L,#4-40      | 4    | S.NA   |
| ...3  | MICOM3   | BN97-00688A | ASSY HDCP;BN46-00018A,PS-42V6S,D73A,GENE | 1    | S.NA   |
| ....4 |          | BN46-00018A | KEY CODE-CERTIFICATE;(HDCP KEY)PPM42MSS, | 1    | S.NA   |
| ...3  | M0131    | AA63-01304A | GASKET;TORINO,Conductive Fabric,1mm,14mm | 1    | S.NA   |
| ...3  | M0112    | BN96-02858A | ASSY SHIELD P-PCB;TORINO,SPTE,T0.3       | 1    | S.NA   |
| ....4 | M0131    | AA63-01313A | GASKET;TORINO,Conductive Fabric,13mm,10m | 1    | S.NA   |
| ....4 | M0107    | BN63-02302A | SHIELD-COVER;TORINO,SPTE,T0.3,EMS        | 1    | S.NA   |
| 0.1   | M0112    | BN91-00998A | ASSY SHIELD;LE32T51BX*,Q54A              | 1    | S.NA   |
| ..2   | M0081    | 6003-000115 | SCREW-TAPTITE;BH,+,B,M3,L6,ZPC(BLK),SWRC | 2    | S.NA   |
| ..2   | M0081    | 6003-000115 | SCREW-TAPTITE;BH,+,B,M3,L6,ZPC(BLK),SWRC | 1    | S.NA   |
| ..2   | M0081    | 6003-000115 | SCREW-TAPTITE;BH,+,B,M3,L6,ZPC(BLK),SWRC | 4    | S.NA   |
| ..2   | M0081    | 6003-000115 | SCREW-TAPTITE;BH,+,B,M3,L6,ZPC(BLK),SWRC | 6    | S.NA   |

## 6 Electrical Parts List

| Level | Loc. No.  | Code No.    | Description & Specification                 | Q'ty  | SA/SNA |
|-------|-----------|-------------|---------------------------------------------|-------|--------|
| ..2   | M0081     | 6003-000133 | SCREW-TAPTITE;BH,+,-,S,M4,L8,ZPC(BLK),SW    | 2     | S.N.A  |
| ..2   | M0081     | 6003-000133 | SCREW-TAPTITE;BH,+,-,S,M4,L8,ZPC(BLK),SW    | 2     | S.N.A  |
| ..2   | M0081     | 6003-001003 | SCREW-TAPTITE;BH,+B,M4,L12,ZPC(BLK),SWR     | 4     | S.N.A  |
| ..2   | M0081     | 6003-001003 | SCREW-TAPTITE;BH,+B,M4,L12,ZPC(BLK),SWR     | 5     | S.N.A  |
| ..2   | M0081     | 6003-001003 | SCREW-TAPTITE;BH,+B,M4,L12,ZPC(BLK),SWR     | 4     | S.N.A  |
| ..2   | M0081     | 6003-001003 | SCREW-TAPTITE;BH,+B,M4,L12,ZPC(BLK),SWR     | 2     | S.N.A  |
| ..2   | M0081     | 6003-001003 | SCREW-TAPTITE;BH,+B,M4,L12,ZPC(BLK),SWR     | 2     | S.N.A  |
| ..2   | CCM1      | 6006-000245 | SCREW-MACHINE;WSP,PH,+M4,L8,ZPC(YEL),SW     | 1     | S.N.A  |
| ..2   | T0069     | AA60-00091K | SPACER-FELT;-FELT,330X10,-,-,BLK,T0.35,     | 2     | S.N.A  |
| ..2   | M2893     | BH39-00362B | LEAD CONNECTOR;RE32**,UL1007#26,5P,150mm    | 1     | S.A    |
| ..2   | M2893     | BN39-00603A | LEAD CONNECTOR;RE40**,UL1007#26,UL,14P,2    | 1     | S.A    |
| ..2   | M2893     | BN39-00614A | LEAD CONNECTOR;RE40**,UL20276#30,30P,300    | 1     | S.A    |
| ..2   | M2893     | BN39-00691A | LEAD CONNECTOR;Torino-32,UL1007#26,16P,1    | 1     | S.A    |
| ..2   | T0076     | BN39-00693B | CBF HARNESS-INLET;TORINO,1617#22,3P,1P,R    | 1     | S.A    |
| ..2   | M0114     | BN61-01778A | HOLDER-WIRE;NYLON-66,NATURAL or GRAY,DAF    | 1     | S.N.A  |
| ..2   |           | BN61-01944A | BRACKET-PANEL SIDE;23 ROMEII,SECC,T1.2      | 4     | S.N.A  |
| ..2   |           | BN61-02031A | BRACKET-GUIDE STAND;32,MGM,SECC,T1.6        | 1     | S.N.A  |
| ..2   | T0159     | BN96-02583A | ASSY PCB P-SMPS;Free Voltage SMPS,GTR32K    | 1     | S.A    |
| ..2   | T0447     | BN96-02628A | ASSY BRACKET P-PANEL;TORINO 32",SECC        | 1     | S.N.A  |
| ...3  | M0081     | 6003-000115 | SCREW-TAPTITE;BH,+B,M3,L6,ZPC(BLK),SWRC     | 6     | S.N.A  |
| ...3  |           | BN61-02025A | BRACKET-PANEL TOP;32" MGM,SECC,T1.2         | 1     | S.N.A  |
| ...3  |           | BN61-02026A | BRACKET-GUIDE POWER;32" MGM,SECC,T1.2,LE    | 1     | S.N.A  |
| ...3  |           | BN61-02027A | BRACKET-PANEL BOTTOM;32" MGM,SECC,T1.6      | 1     | S.N.A  |
| ...3  |           | BN61-02029A | BRACKET-GUIDE POWER;32" MGM,SECC,T1.2,RI    | 1     | S.N.A  |
| ...3  |           | BN61-02030A | BRACKET-GUIDE MAIN;32" MGM,SECC,T1.2        | 1     | S.N.A  |
| ...3  | M0131     | AA63-01289A | GASKET;TORINO 32",Conductive Fabric,18mm    | 1     | S.N.A  |
| 0.1   | M0019     | BN92-01044C | ASSY LABEL;NF26EO                           | 1     | S.N.A  |
| 0.1   | M0003     | BN92-01550D | ASSY BOX;LE32T51BX/XEU                      | 1     | S.N.A  |
| ..2   | T0376     | BN69-01163B | BOX-00,MONITOR;32T5,DW3,AB,YEL,A1,EUROPE    | 1.02  | S.N.A  |
| 0.1   | M0113     | BN92-01551A | ASSY P/MATERIAL;TORINO,32,32T50             | 1     | S.N.A  |
| ..2   | T0376     | 6902-000061 | BAG AIR;LDPE,T0.2,L1000,W500,TRP,,,         | 0.019 | S.N.A  |
| ..2   | T0376     | 6902-000379 | BAG AIR;LDPE,T0.2,W1000,L1800,TRP,-,-       | 0.004 | S.N.A  |
| ..2   |           | 6902-000604 | BAG WRAPPING;LDPE,T0.02,W500,L10000,TRP,    | 7.23  | S.N.A  |
| ..2   | T0524     | 6902-000524 | BAG PE;HDPE/NITRON(DOUBLE),T0.015/T0.5(D    | 1     | S.N.A  |
| 0.1   | M0045     | BN92-01573B | ASSY ACCESSORY;LE27T51BX/BWT                | 1     | S.N.A  |
| ..2   | ACCESSORY | AA68-00816B | CARD WARRANTY-05;;RUSSINA,2,W/P 120G,BOT    | 1     | S.N.A  |
| ..2   | M0045     | BN96-02756C | ASSY ACCESSORY;LE27T51BX/BWT                | 1     | S.A    |
| ...3  | T0268     | 3903-000042 | CBF-POWER CORD;DT,EU,FP3/YES,IEC320 C13/    | 1     | S.A    |
| ...3  | T0524     | 6902-000110 | BAG PE;LDPE,T0.05,W250,L400,TRP,28,2        | 2     | S.N.A  |
| ...3  | T0269     | AA68-01120A | MANUAL SERVICE;-,-,CIS,A4,6PAGE(FOLD),W/    | 1     | S.N.A  |
| ...3  | ACCESSORY | AA68-01402A | MANUAL-GOOD WILL LETTER;-,-,CIS,B5,1PAGE,A/ | 1     | S.N.A  |
| ...3  | T0610     | AA68-03242E | MANUAL-SAFETY GUIDE;All Model,SAMSUNG,8L    | 1     | S.N.A  |
| ...3  | ACCESSORY | AA68-03576A | MANUAL-00 REGISTRATION CARD;BWT,RU,RUSSI    | 1     | S.N.A  |
| ...3  | T0074     | BN59-00488A | REMOCON;TORINO-EO,TM79,Single Micom,39,E    | 1     | S.A    |
| ...3  | T0531     | BN63-02177A | COVER-BOTTOM;MGM,23,27,32,HIPS,V0,GR503     | 1     | S.N.A  |
| ...3  | M0596     | BN68-00860F | MANUAL USERS-00;LE23T51BX/LE27T51BX/,SAM    | 1     | S.N.A  |
| ...3  | T0511     | BN68-00895A | MANUAL USERS;COMM,SAMSUNG,W/P 5G,PRECAUT    | 1     | S.N.A  |
| ...3  | T0059     | BN68-00907A | MANUAL-CARD;COMM,SAMSUNG,18 LANG,EUROPE,    | 1     | S.N.A  |
| ...3  | T0376     | BN69-01086A | BOX-00,ACCESSORY;COMM,SW1,YEL,W573,D632,    | 1     | S.N.A  |
| ...3  | M0045     | BN96-01800A | ASSY ACCESSORY;ROME32,SCREW                 | 1     | S.A    |
| ....4 | T0081     | 6002-001294 | SCREW-TAPPING;BH,+,-,M4,L16,ZPC(BLK)        | 4     | S.A    |
| ....4 | ACCESSORY | 6902-000128 | BAG ZIPPER;LDPE,T0.05,W200,L150,TRP,8,2-    | 1     | S.N.A  |

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