

**SAMSUNG**

## TFT-LCD TV

**Chassis**  
**VR17EO**

**Model**  
**LW17N23W**

# **SERVICE** *Manual*

### TFT-LCD TV



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# 1 Precautions

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

## 1-1 Safety Precautions

### 1-1-1 Warnings

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

### 1-1-2 Servicing the LCD Monitor

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

### 1-1-3 Fire and Shock Hazard

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

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

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

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

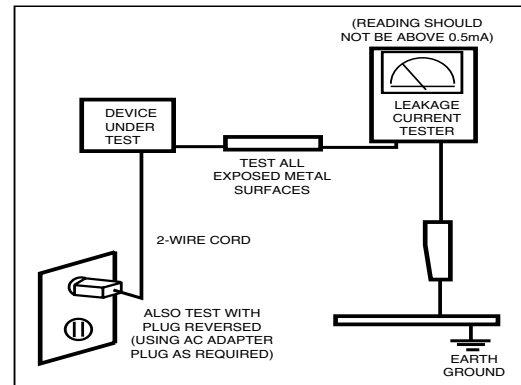


Figure 1-1. Leakage Current Test Circuit

4. With the unit completely reassembled, plug the AC line cord directly into a 120V AC outlet. With the unit's AC switch first in the ON position and then OFF, measure the current between a known earth ground (metal water pipe, conduit, etc.) and all exposed metal parts, including: metal cabinets, screwheads and control shafts. The current measured should not exceed 0.5 milliamp. Reverse the power-plug prongs in the AC outlet and repeat the test.

### 1-1-4 Product Safety Notices

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

## 1-2 Servicing Precautions

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

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

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

### 1-2-1 General Servicing Precautions

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

## 1-3 Electrostatically Sensitive Devices (ESD) Precautions

---

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

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

## 2 Product Specifications

### 2-1 Specifications

Item	Description	
LCD Panel	TFT-LCD panel, RGB vertical stripe, normaly, white 17-Inch viewable, 0.2895 mm pixel pitch	
Scanning Frequency	Horizontal : 30 kHz ~ 38 kHz (Automatic) Vertical : 56 Hz ~ 85 Hz (Automatic)	
Display Colors	16.7 Million colors	
Maximum Resolution	Horizontal : 1280 Pixels Vertical : 768 Pixels	
Input Video Signal	Positive at 75 $\Omega$	
Input Sync Signal	Type : Separate H/V Level : TTL level	
Maximum Pixel Clock rate	70 MHz	
Active Display Horizontal/Vertical	376.56 mm / 274.32 mm	
AC power voltage & Frequency	AC 100 ~ 260 Volts, 50~60 Hz $\pm$ 3 Hz, DC 14V / 4.5A	
Power Consumption	70 W (Max)	
Set Dim (W x D x H)	463.8 X 179.0 X 363.7 mm (18.3 X 7.0 X 14.3 Inches) After installation of Stand 463.8 X 87.7 X 345.0 mm (18.3 X 3.5 X 13.6 Inches) Without Stand	
Package Dim	557.0 X 473.0 X 175.0 mm (21.9 X 18.6 X 6.9 Inches)	
Weight Set/Package	4.72 kg (10.4 lbs) / 7.22 kg (15.9 lbs)	
Environmental Considerations	Operating Temperature : 50 °F ~ 104 °F (10 °C ~ 40 °C) Operating Humidity : 10 % ~ 80 % Storage Temperature : -4 °F ~ 113 °F (-20 °C ~ 45 °C) Storage Humidity : 5 % ~ 95 %	
TV System	Tunning	Frequency Synthesize
	System	PAL/SECAM-B/G/I/D/K/L/L', NTSC (AV)
	Sound	FM, STEREO, NICAM
Antena Input	75 $\Omega$	
Sound Characteristic	– MAX Internal speaker Out : Right => 3W Left => 3W	
	– BASS Control Range : -8 dB ~ + 8dB – TREBLE Control Range : -8 dB ~ +8 dB – Headphone Out : 5 mW max (400 m Vrms) – Output Frequency : 20 Hz ~15.2 Hz	

## 2-2 Pin Assignments

### 2-2-1 D-SUB

Pin	Separate
1	Red
2	Green
3	Blue
4	GND
5	GND (DDC Return)
6	GND-Red
7	GND-Green
8	GND-Blue
9	No Connection
10	GND-Sync./Self Test
11	GND
12	DDC Data
13	H-Sync.
14	V-Sync.
15	DDC Clock

### 2-2-2 SCART

Pin	Separate	Pin	Separate	Pin	Separate
1	SC1 RED OUT	15	SC1 RED	29	SC2 SWITCHING
2	SC1 RED IN	16	GND	30	GND
3	SC1 LEFT OUT	17	SC1 FAST BLANKING	31	N/C
4	GND	18	GND	32	N/C
5	GND	19	SC1 CVBS OUT	33	N/C
6	SC1 LEFT IN	20	SC1 CVBS IN	34	GND
7	SC1 BLUE	21	GND	35	GND
8	SC1 SWITCHING	22	SC2 RED OUT	36	N/C
9	GND	23	SC2 RED IN	37	N/C
10	N/C	24	SC2 LEFT OUT	38	GND
11	SC1 GREEN	25	GND	39	GND
12	N/C	26	GND	40	SC2 CVBS OUT
13	GND	27	SC2 LEFT IN	41	SC2 CVBS IN
14	GND	28	N/C	42	GND

### 2-2-3 S-Video

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

### 2-2-4 A/V

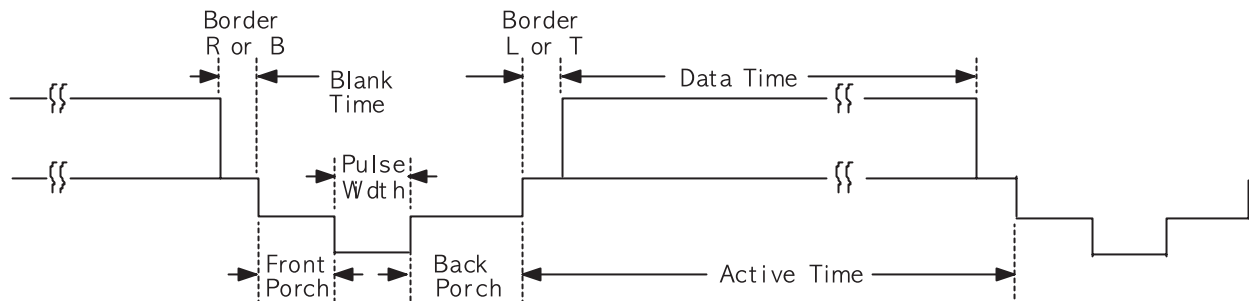
RCA Yellow	CVBS
RCA White	Audio L
	GND
RCA Red	Audio R
	GND

## 2-3 Timing Chart

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

### 2-3-1 LCD Panel Mode1 mode

Timing No.	
Originator	GTF
Mode Name	1280/60Hz
Resolution (HxV)	1280x768
HORIZONTAL	
Frequency	47.700kHz
Total time	20.964 $\mu$ s
Active time	15.973 $\mu$ s
Blank time	4.992 $\mu$ s
Border (L / R)	0.000 $\mu$ s
Data time	15.964 $\mu$ s
Front porch	0.799 $\mu$ s
Sync. width	1.697 $\mu$ s
Back porch	2.496 $\mu$ s
Sync. polarity	Negative
VERTICAL	
Frequency	60Hz
Total time	16.667ms
Active time	16.101ms
Blank time	0.566ms
Border (T / B)	0.000ms
Data time	16.101ms
Front porch	20.964ms
Sync. width	62.893ms
Back porch	482.180
Sync. polarity	Positive
Dot Clock	80.136MHz
Sync. Type	Separate
Scan Type*	N/I



## 2-3-2 Supported Modes

Timing No.	2	3	11	17	32	42
Originator	IBM	IBM	VESA	STD	MAC	STD
Mode Name	VGA2	VGA3	640/72Hz	640/75Hz	640/67Hz	640/85Hz
Resolution (HxV)	720x400	640x480	640x480	640x480	640x480	640x480
HORIZONTAL						
Frequency	31.469kHz	31.469kHz	37.861kHz	37.500kHz	35.000kHz	43.269kHz
Total time	31.777 $\mu$ s	31.778 $\mu$ s	26.413 $\mu$ s	26.667 $\mu$ s	28.571 $\mu$ s	23.111 $\mu$ s
Active time	26.058 $\mu$ s	26.058 $\mu$ s	20.825 $\mu$ s	20.317 $\mu$ s	21.164 $\mu$ s	17.778 $\mu$ s
Blank time	5.720 $\mu$ s	5.720 $\mu$ s	5.588 $\mu$ s	6.350 $\mu$ s	7.407 $\mu$ s	5.333 $\mu$ s
Border (L / R)	0.318 $\mu$ s	0.318 $\mu$ s	0.254 $\mu$ s	0.000 $\mu$ s	0.000 $\mu$ s	0.000 $\mu$ s
Data time	25.422 $\mu$ s	25.422 $\mu$ s	20.317 $\mu$ s	20.317 $\mu$ s	21.164 $\mu$ s	17.778 $\mu$ s
Front porch	0.318 $\mu$ s	0.318 $\mu$ s	0.508 $\mu$ s	0.508 $\mu$ s	2.116 $\mu$ s	1.556 $\mu$ s
Sync. width	3.813 $\mu$ s	3.813 $\mu$ s	1.270 $\mu$ s	2.032 $\mu$ s	2.116 $\mu$ s	1.556 $\mu$ s
Back porch	1.589 $\mu$ s	1.589 $\mu$ s	3.810 $\mu$ s	3.810 $\mu$ s	3.175 $\mu$ s	2.222 $\mu$ s
Sync. polarity	Negative	Negative	Negative	Negative	Negative	Negative
VERTICAL						
Frequency	70.087Hz	59.940Hz	72.809Hz	75.000Hz	66.667Hz	85.008Hz
Total time	14.268ms	16.683ms	13.735ms	13.333ms	15.000ms	11.764ms
Active time	13.155ms	15.761ms	13.100ms	12.800ms	13.714ms	11.093ms
Blank time	1.113ms	0.922ms	0.635ms	0.533ms	1.286ms	0.671ms
Border (T / B)	0.222ms	0.254ms	0.211ms	0.000ms	0.000ms	0.000ms
Data time	12.711ms	15.253ms	12.678ms	12.800ms	13.714ms	11.093ms
Front porch	0.191ms	0.064ms	0.026ms	0.027ms	0.086ms	0.023ms
Sync. width	0.064ms	0.064ms	0.079ms	0.080ms	0.086ms	0.069ms
Back porch	0.858ms	0.794ms	0.528ms	0.427ms	1.114ms	0.578ms
Sync. polarity	Positive	Negative	Negative	Negative	Negative	Negative
Dot Clock	28.322MHz	25.175MHz	31.500MHz	31.500MHz	30.240MHz	36.000MHz
Sync. Type	Separate	Separate	Separate	Separate	Separate	Separate
Scan Type*	N/I	N/I	N/I	N/I	N/I	N/I



## 2-3-3 Supported Modes

Timing No.	12	13	14	18	43	33
Originator	VESA	VESA	STD	STD	VESA	MAC
Mode Name	800/56Hz	800/60Hz	800/72Hz	800/75Hz	800/85Hz	832/75Hz
Resolution (HxV)	800x600	800x600	800x600	800x600	800x600	832x624
HORIZONTAL						
Frequency	35.156kHz	37.879kHz	48.077kHz	46.875kHz	53.674kHz	49.726kHz
Total time	28.444 $\mu$ s	26.400 $\mu$ s	20.800 $\mu$ s	21.333 $\mu$ s	18.631 $\mu$ s	20.110 $\mu$ s
Active time	22.222 $\mu$ s	20.000 $\mu$ s	16.000 $\mu$ s	16.162 $\mu$ s	14.222 $\mu$ s	14.524 $\mu$ s
Blank time	6.222 $\mu$ s	6.400 $\mu$ s	4.800 $\mu$ s	5.171 $\mu$ s	4.409 $\mu$ s	5.586 $\mu$ s
Border (L / R)	0.000 $\mu$ s	0.000 $\mu$ s	0.000 $\mu$ s	0.000 $\mu$ s	0.000 $\mu$ s	0.000 $\mu$ s
Data time	22.222 $\mu$ s	20.000 $\mu$ s	16.000 $\mu$ s	16.162 $\mu$ s	14.222 $\mu$ s	14.524 $\mu$ s
Front porch	0.667 $\mu$ s	1.000 $\mu$ s	1.120 $\mu$ s	0.323 $\mu$ s	0.569 $\mu$ s	0.559 $\mu$ s
Sync. width	2.000 $\mu$ s	3.200 $\mu$ s	2.400 $\mu$ s	1.616 $\mu$ s	1.138 $\mu$ s	1.117 $\mu$ s
Back porch	3.556 $\mu$ s	2.200 $\mu$ s	1.280 $\mu$ s	3.232 $\mu$ s	2.702 $\mu$ s	3.910 $\mu$ s
Sync. polarity	Positive or Negative	Positive	Positive	Positive	Positive	Negative
VERTICAL						
Frequency	56.250Hz	60.317Hz	72.188Hz	75.000Hz	85.061Hz	74.551Hz
Total time	17.778ms	16.579ms	13.853ms	13.333ms	11.756ms	13.414ms
Active time	17.067ms	15.840ms	12.480ms	12.800ms	11.179ms	12.549ms
Blank time	0.711ms	0.739ms	1.373ms	0.533ms	0.577ms	0.865ms
Border (T / B)	0.000ms	0.000ms	0.000ms	0.000ms	0.000ms	0.000ms
Data time	17.067ms	15.840ms	12.480ms	12.800ms	11.179ms	12.549ms
Front porch	0.028ms	0.026ms	0.770ms	0.021ms	0.019ms	0.020ms
Sync. width	0.057ms	0.106ms	0.125ms	0.064ms	0.056ms	0.060ms
Back porch	0.626ms	0.607ms	0.478ms	0.448ms	0.503ms	0.784ms
Sync. polarity	Positive or Negative	Positive	Positive	Positive	Positive	Negative
Dot Clock	36.000MHz	40.000MHz	50.000MHz	49.500MHz	56.250MHz	57.284MHz
Sync. Type	Separate	Separate	Separate	Separate	Separate	Separate Composite Sync.-on-G
Scan Type*	N/I	N/I	N/I	N/I	N/I	N/I

## 2-3-4 Supported Modes

Timing No.	15	16	19	44
Originator	VESA	VESA	VESA	VESA
Mode Name	1024/60Hz	1024/70Hz	1024/75Hz	1024/85Hz
Resolution (HxV)	1024x768	1024x768	1024x768	1024x768
HORIZONTAL				
Frequency	48.363kHz	56.476kHz	60.023kHz	68.677kHz
Total time	20.677 $\mu$ s	17.707 $\mu$ s	16.660 $\mu$ s	14.561 $\mu$ s
Active time	15.754 $\mu$ s	13.653 $\mu$ s	13.003 $\mu$ s	10.836 $\mu$ s
Blank time	4.923 $\mu$ s	4.053 $\mu$ s	3.777 $\mu$ s	3.725 $\mu$ s
Border (L / R)	0.000 $\mu$ s	0.000 $\mu$ s	0.000 $\mu$ s	0.000 $\mu$ s
Data time	15.754 $\mu$ s	13.653 $\mu$ s	13.003 $\mu$ s	10.836 $\mu$ s
Front porch	0.369 $\mu$ s	0.320 $\mu$ s	0.323 $\mu$ s	0.508 $\mu$ s
Sync. width	2.092 $\mu$ s	1.813 $\mu$ s	1.219 $\mu$ s	1.016 $\mu$ s
Back porch	2.462 $\mu$ s	1.920 $\mu$ s	2.235 $\mu$ s	2.201 $\mu$ s
Sync. polarity	Negative	Negative	Positive	Positive
VERTICAL				
Frequency	60.004Hz	70.069Hz	75.029Hz	84.997Hz
Total time	16.666ms	14.272ms	13.328ms	11.765ms
Active time	15.880ms	13.599ms	12.795ms	11.183ms
Blank time	0.786ms	0.672ms	0.533ms	0.582ms
Border (T / B)	0.000ms	0.000ms	0.000ms	0.000ms
Data time	15.880ms	13.599ms	12.795ms	11.183ms
Front porch	0.062ms	0.053ms	0.017ms	0.015ms
Sync. width	0.124ms	0.106ms	0.050ms	0.044ms
Back porch	0.600ms	0.513ms	0.466ms	0.524ms
Sync. polarity	Negative	Negative	Positive	Positive
Dot Clock	65.000MHz	75.000MHz	78.750MHz	94.500MHz
Sync. Type	Separate	Separate	Separate	Separate
Scan Type*	N/I	N/I	N/I	N/I

## 3 Disassembly and Reassembly

This section of the service manual describes the disassembly and reassembly procedures for the LW17N23W monitor.

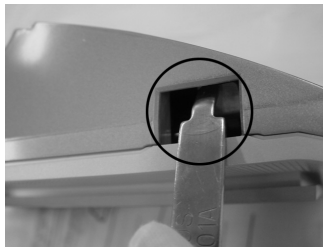
**WARNING:** This monitor contains electrostatically sensitive devices. Use caution when handling these components.

### 3-1 Disassembly

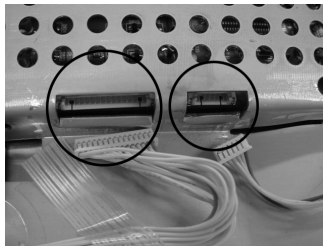
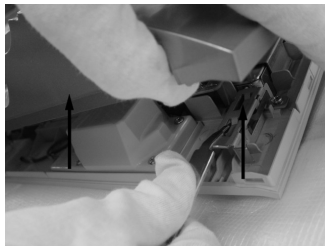
- Cautions :**
1. Disconnect the monitor from the power source before disassembly.
  2. Follow these directions carefully; never use metal instruments to pry apart the cabinet.
  3. R/Cover opening jig : BH81-00001A



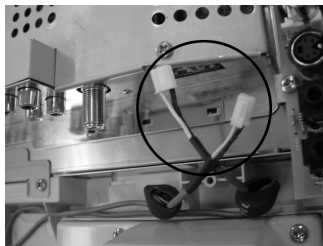
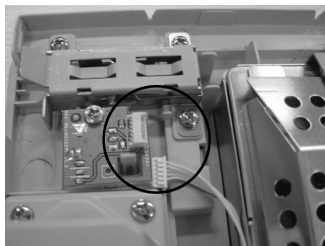
1. Loacte the monitor on the cushioned table with face down. Remove the stand from LCD-TV and pull the rear cover.



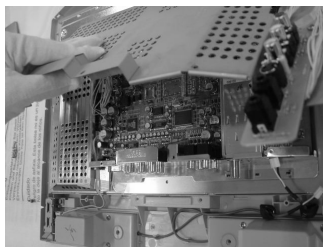
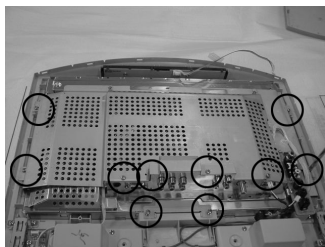
2. Remove 2 screws from the rear cover and remove rear cover by using opening jig.



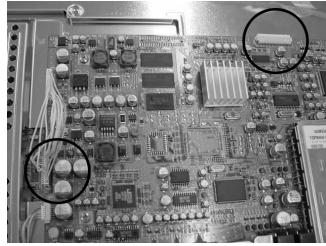
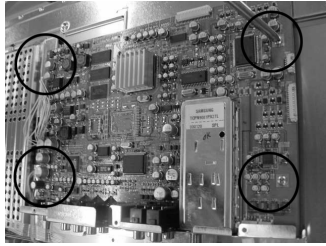
3. Lift up the rear cover and disconnect function cable and audio cable from the shield.



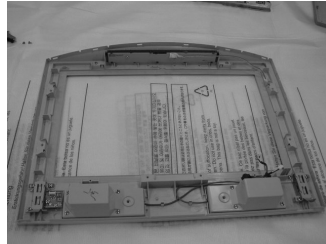
4. Disconnect IR cable and speaker cable from the shield. (see illustrations)



5. Remove 10 screws from the shield and lift up the shield. (see illustrations)



6. Remove 4 screws from the main board and disconnect cable. (see illustrations)



7. Lift up the panel.

### **3-2 Replacement Order of Lamp Assemblies**

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LCD panel may not be serviced. (Lamps are generally located at top and bottom of panel, which may be replaced. However, for the Victoria LTA170WP\_L01 panel, the lamp is firmly soldered inside of the back panel. Therefore, servicing the lamp may cause a defective panel. Also, servicing lamp requires front glass removal, which may cause scratch and/or foreign materials on the glass.)

### **3-3 Reassembly**

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Reassembly procedures are in the reverse order of disassembly procedures.

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## **4 Alignments and Adjustments**

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### **4-1 General Alignment Instruction**

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1. Usually, a color TV-VCR 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 transformer.

## 4-2 Factory Mode Adjustments

### 4-2-1 Entering Factory Mode

1. To enter "Service Mode" Press the remote -control keys in this sequence :

- If you do not have Factory remote - control



- If you have Factory remote - control



### 4-2-2 Factory Mode Tree

<b>1. PC Calibration</b>	10. Reset
2. Option Table	002C 0050
3. Color Control	
4. PW565	
5. VPC3230- MAIN	
6. ADC	
7. Test Pattern	
8. Check sum	0000
9. Adjust	
T_VIC17PEU_2002 09/12/2003 15:41:31	

1. PC Calibration	10. Reset
<b>2. Option Table</b>	<b>002C 0050</b>
3. Color Control	
4. PW565	
5. VPC3230 -MAIN	
6. ADC	
7. Test Pattern	
8. Check sum	0000
9. Adjust	
T_VIC17PEU_2002 09/12/2003 15:41:31	

<b>2. Option Table 002C 0050</b>			
Flesh tone	Off	Area	CW
LNA	Off	Debugexpress	Off
Language	English	High Deviation	Off
Melody Volume	10	TTX Group	Osd Language
<b>TTX List</b>	<b>Flop</b>		
TTX TOP	Off		
Auto FM	Off		
Help	On		
Panel life time 19Day 07h 14m			
T_VIC17PEU_2002 09/12/2003 15:41:31			

1. PC Calibration                      10. Reset  
 2. Option Table      002C 0050  
**3. Color Control**  
 4. PW565  
 5. VPC3230-MAIN  
 6. ADC  
 7. Test Pattern  
 8. Check sum            0000  
 9. Adjust  
 T\_VIC17PEU\_2002 09/12/2003 15:41:31

**3. Color Control**

Sub\_Brightness 125      Sub\_contrast 105  
 Red Offset      128      Red Gain      144  
 Green Offset    128      Green Gain    128  
 Blue Offset     128      Blue Gain     84  
 Brightness      45      Contrast      100

T\_VIC17PEU\_2002 09/12/2003 15:41:31

1. PC Calibration                      10. Reset  
 2. Option Table      002C 0050  
 3. Color Control  
**4. PW565**  
 5. VPC3230- MAIN  
 6. ADC  
 7. Test Pattern  
 8. Check sum            0000  
 9. Adjust  
 T\_VIC17PEU\_2002 09/12/2003 15:41:31

**4. PW565**

Red Gain      140      Pixel Shift      Video Port  
 Green Gain    140      Pixel Number      4  
 Blue Gain     140      Time              4  
 Red Offset    140      Virtual Framelock 2  
 Green Offset  140      Alpha              255  
 Blue Offset   140      Beta               255  
 APL            Off      Degree            30

T\_VIC17PEU\_2002 09/12/2003 15:41:31

1. PC Calibration                      10. Reset  
 2. Option Table      002C 0050  
 3. Color Control  
 4. PW565  
**5. VPC3230- MAIN**  
 6. ADC  
 7. Test Pattern  
 8. Check sum            0000  
 9. Adjust  
 T\_VIC17PEU\_2002 09/12/2003 15:41:31

**5. VPC3230-MAIN**

CT            30      CIPCT    29      KILVL    1A  
 BR           90      PFS      02      LDLY     09  
 ACC\_SAT    80      PK       02      PKCOR   01  
 TINT       32      VPK      00      FB\_GAIN  22  
 SAT Cb     24      LPF2    00  
 SAT Cr     2B      CBW2    00  
 CIPTNT    1F      CBW     03  
 CIPBR     C5      IFC      02

T\_VIC17PEU\_2002 09/12/2003 15:41:31

1. PC Calibration                      10. Reset  
 2. Option Table      002C 0050  
 3. Color Control  
 4. PW565  
 5. VPC3230 -MAIN  
**6. ADC**  
 7. Test Pattern  
 8. Check sum            0000  
 9. Adjust  
 T\_VIC17PEU\_2002 09/12/2003 15:41:31

**6. ADC**

RedGain      8C      PrGain      A0  
 GreenGain    8C      YGain      A0  
 BlueGain     8C      PbGain     A0  
 RedOffset    46      Pr Offset    43  
 GreenOffset  46      Y Offset     45  
 BlueOffset   46      PbOffset    42  
 Current      00      TTX Phase   96  
 VCO          00      TTX Contrast 00

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1. PC Calibration                   10. Reset  
 2. Option Table    002C 0050  
 3. Color Control  
 4. PW565  
 5. VPC3230-MAIN  
 6. ADC  
**7. Test Pattern**  
 8. Check sum             0000  
 9. Adjust  
 T\_VIC17PEU\_2002 09/12/2003 15:41:31

**7. Test Pattern**

1. Luma Ramp (16 step)  
 2. Luma Ramp (128 step)  
 3. Wite 16  
 4. White 240  
 5. Color Bar  
 6. RGB Ramp (32 Step)

1. PC Calibration                   10. Reset  
 2. Option Table    002C 0050  
 3. Color Control  
 4. PW565  
 5. VPC3230 -MAIN  
 6. ADC  
 7. Test Pattern  
**8. Check sum**                05E27  
 9. Adjust  
 T\_VIC17PEU\_2002 09/12/2003 15:41:31

1. PC Calibration                   10. Reset  
 2. Option Table    002C 0050  
 3. Color Control  
 4. PW565  
 5. VPC3230 -MAIN  
 6. ADC  
 7. Test Pattern  
 8. Check sum             0000  
**9. Adjust**  
 T\_VIC17PEU\_2002 09/12/2003 15:41:31

**9. Adjust**

TTX-Brightness                   20  
 TTX-Contrast                     20  
 Carrier Mute                     42  
 Pilot High                       14  
 Pilot Low                         07  
 Dynamic           100 145 75 65  
 Standard           85 45 60 60  
 Movie              70 47 50 50



### 4-3 White Balance Adjustment

1. In factory mode (1, 3, 6), you can adjust the white balance.
2. As the adjustment and data values differ depending on input sources, different adjustments are required for RF and PC modes.
3. Optimum condition data for each mode are saved as default values. (Refer to Table 2, 3)
4. As the RF mode is applied with the same values as for VIDEO and S-VIDEO, adjustment can be made in any of RF, VIDEO and S-VIDEO modes.

Table 4-1. White Balance Setting Conditions

Mode	High Light			Low Light		
	"x"	"y"	Y	"x"	"y"	Y
RF	285	295	40fL	285	295	2.0fL
PC	283	298	20fL	283	298	0.6fL

Table 4-2. Color Control Default Value

Mode	RF	PC	Mode	RF	PC
Sub-Brightness	125	128	Sub-Contrast	105	95
Red Offset	128	128	Red Gain	144	130
Green Offset	128(FIX)	128(FIX)	Green Gain	128(FIX)	128(FIX)
Blue Offset	128	128	Blue Gain	84	93
Brightness	45	55	Contrast	100	75

Table 4-3. ADC Default Value

Mode	PC	Mode	DTV
Red Gain	8C	Pr Gain	A0
Green Gain	8C	Y Gain	A0
Blue Gain	8C	Pb Gain	A0
Red Offset	46	Pr Offset	43
Green Offset	46	Y Offset	45
Blue Offset	46	Pb Offset	42
Current	00	<b>TTX Phase</b>	96
VCO	00	<b>TTX Contrast</b>	00

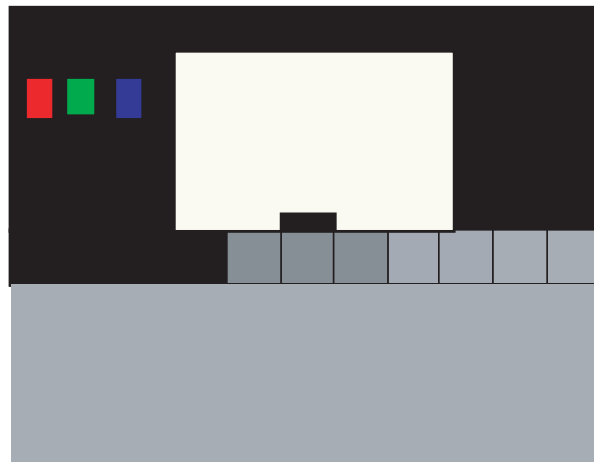
### 4-3-1 Conditions for Measurement

1. On the basis of toshiba ABL pattern : High Light level (57 IRE)
  - INPUT SIGNAL GENERATOR : MSPG-925LTH
2. Optical measuring device : CA210 (FL)

### 4-3-2 Method of Adjustment

1. Adjust the basic level of PC input signals.
  - a) Set the input to the mode in which the adjustment will be made (PC).
    - \* Input signal
      - PC Mode : Model #21 (1024\*768 Mode), Pattern #16 (Picture 4-1)
  - b) Enter factory PC Calibration, confirm the ADC data (PC Mode Only).
    - \* ADC default value : Table 4-3.

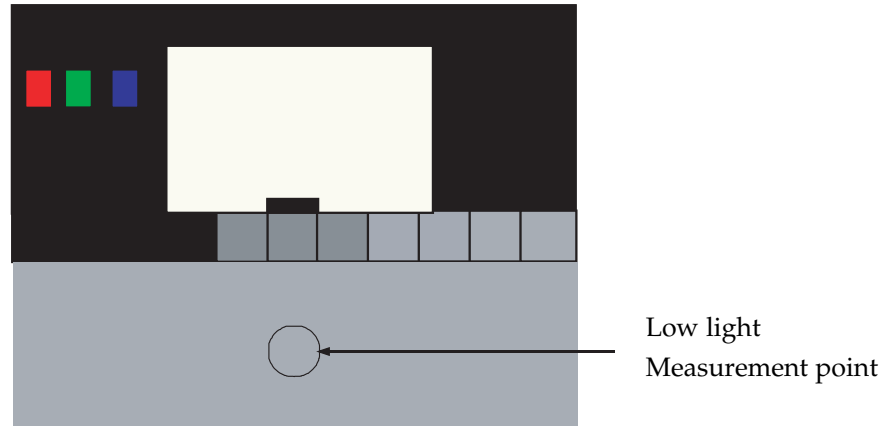
Picture 4-1 Toshiba ABL Pattern



2. Adjust the white balance of RF, PC Modes.
  - a) Set the input to the mode in which the adjustment will be made (RF → PC).
    - \* Input signal - RF Mode : Model #1 (750\*480 Mode), Pattern #16
    - PC Mode : Model #21 (1024\*768 Mode), Pattern #16
  - b) Enter factory color control, confirm the data.

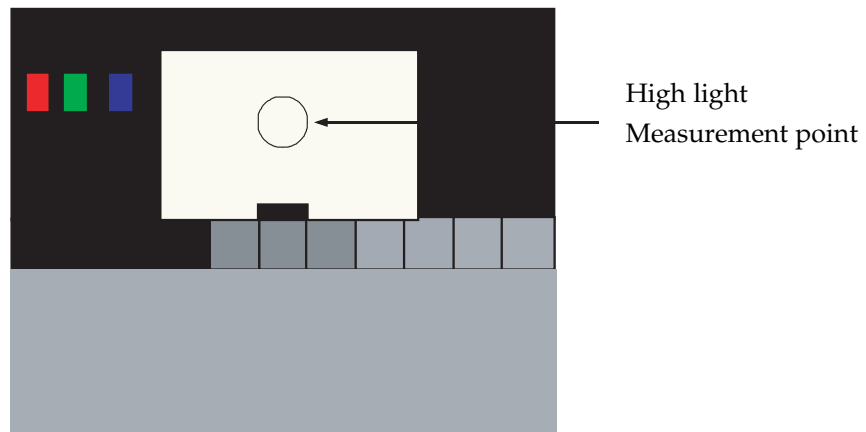
- c) Adjust the low light. (Refer to table 1, 2 in adjustment position by mode)
- Adjust sub - Brightness to set the 'Y' value.
  - Adjust red offset ('x') and blue offset ('y') to the color coordinates.
  - \* The green offset is fixed to the default and is not adjusted.

Picture 4-2 Toshiba ABL Pattern



- 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.
  - \* The green gain and sub - Contrast ('Y') are fixed to the default and are not adjusted.

Picture 4-3 Toshiba ABL Pattern



**4-3-3 PW565**

\* The PW565 output data are fixed to the default and are not adjusted.

Mode	Data
Red Gain	140
Green Gain	140
Blue Gain	140
Red Offset	140
Green Offset	140
Blue Offset	140

**4-3-4 VPC 3230-MAIN**

\* The Data are fixed to the default and are not adjusted.

MODE	Data	MODE	Data
CT	30	PK	02
BR	90	VPK	00
ACC_SAT	80	LPF2	07
TINT	32	CBW2	00
SATCb	24	CBW	03
SATCr	2B	IFC	02
CIPTNT	1F	KILVL	1A
CIPBR	C5	LDLY	09
CIPCT	29	PKCOR	01
PFS	02	FB_GAIN	22

### 4-3-5 ADC

\*Adjust the R(Pr), G(Y), B(Pb) gain and offset to the basic level of PC input signals.

Mode	PC	Mode	DTV
Red Gain	8C →Adjust	Pr Gain	A0 →Adjust
Green Gain	8C →Adjust	Y Gain	A0 →Adjust
Blue Gain	8C →Adjust	Pb Gain	A0 →Adjust
Red Offset	46 →Adjust	Pr Offset	43 →Adjust
Green Offset	46 →Adjust	Y Offset	45 →Adjust
Blue Offset	46 →Adjust	Pb Offset	42 →Adjust
Current	00	<b>TTx Phase</b>	96
VCO	00	<b>TTx Contrast</b>	00

### 4-3-6 Test Pattern

\* It is only displayed to a signal of the PW565 data.

- 1) Luma Ramp (16 step)
- 2) Luma Ramp (128 Step)
- 3) White 16
- 4) White 240
- 5) Color Bar
- 6) RGB Ramp (32 Step)

### 4-3-7 Check sum

\* XXXX : Displays the current check sum size of the MICOM.  
(Varies depending on program update)

### 4-3-8 Reset

\* Initializes the data in the MICOM. (Set to default value)  
The values set in factory mode remain unchanged.

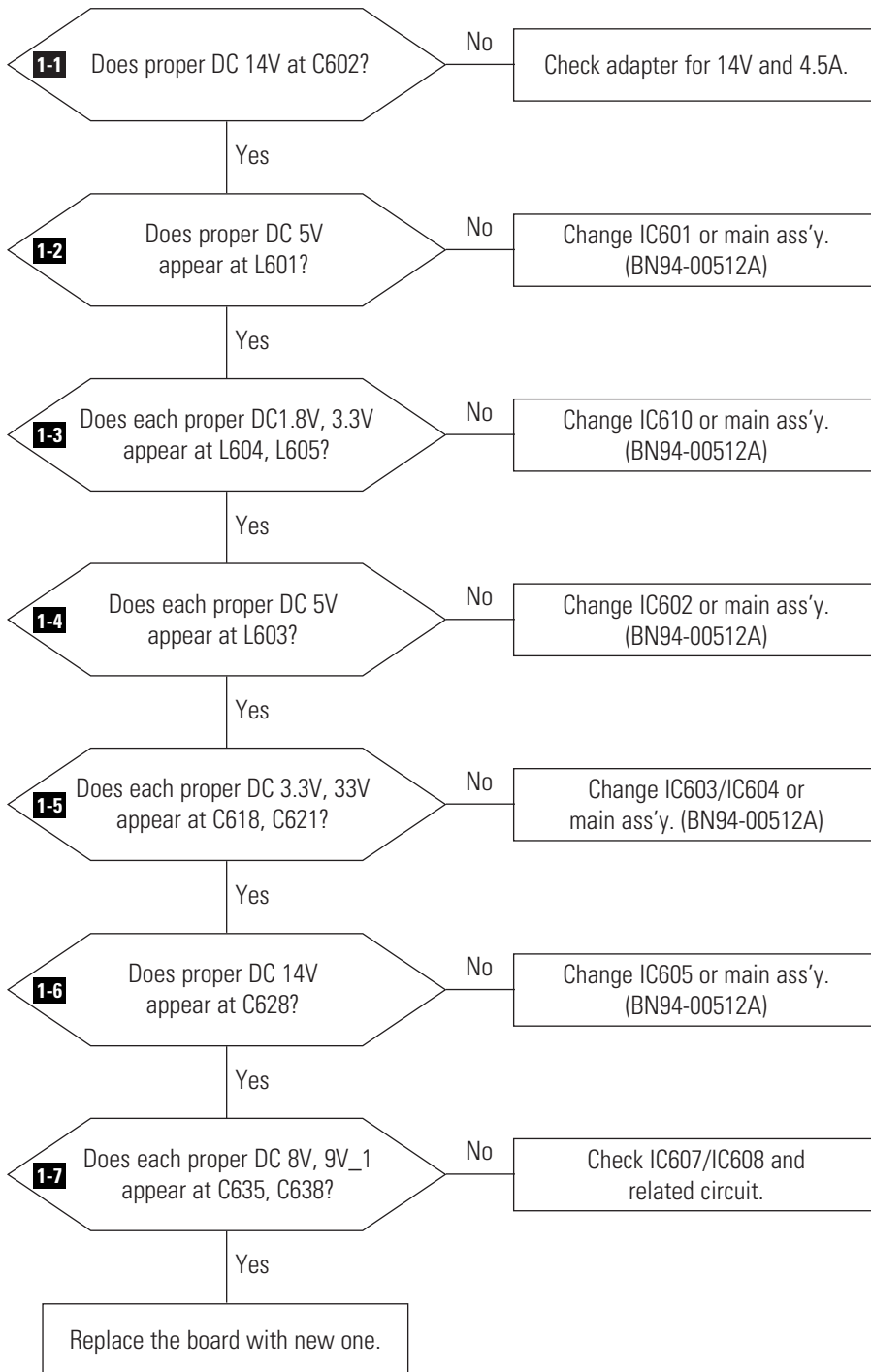
### 4-3-9 T\_VIC17PEU\_2002 09/12/2003 15:41:31

\* Displays the MICOM program version

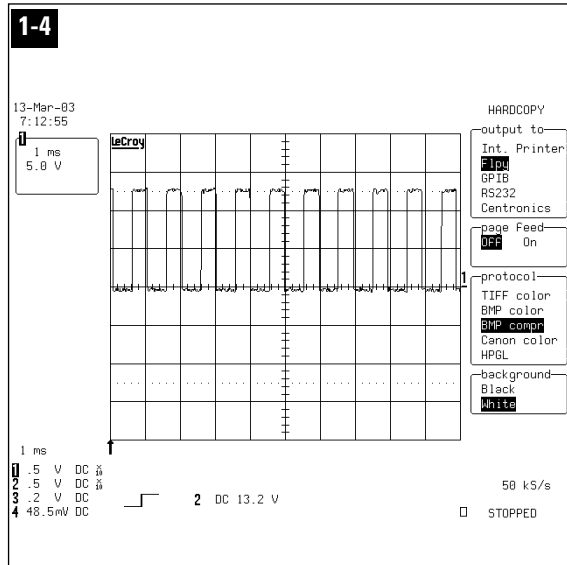
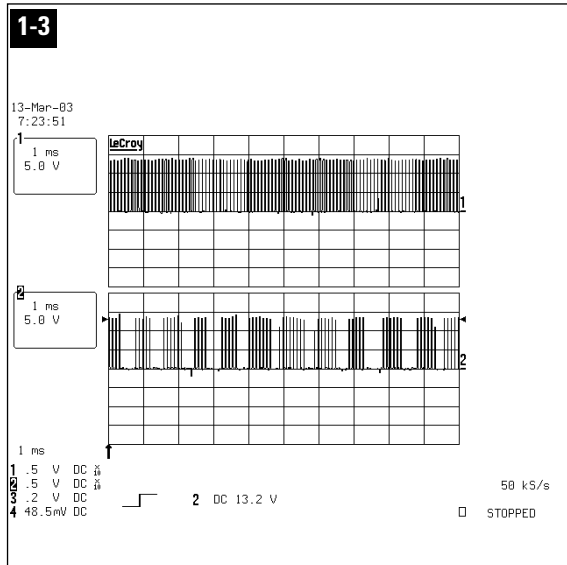
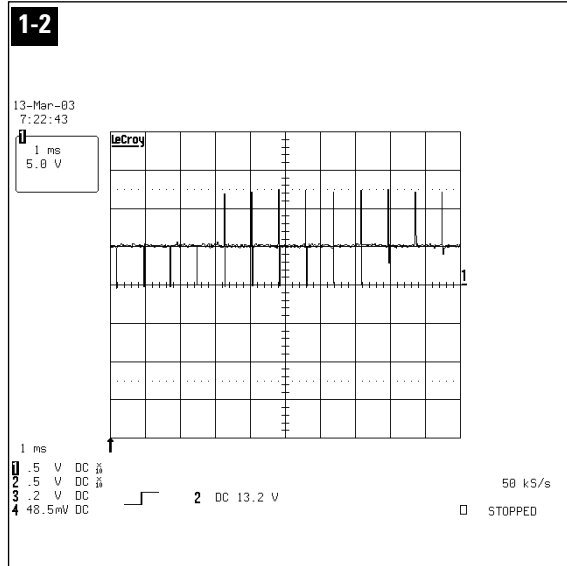
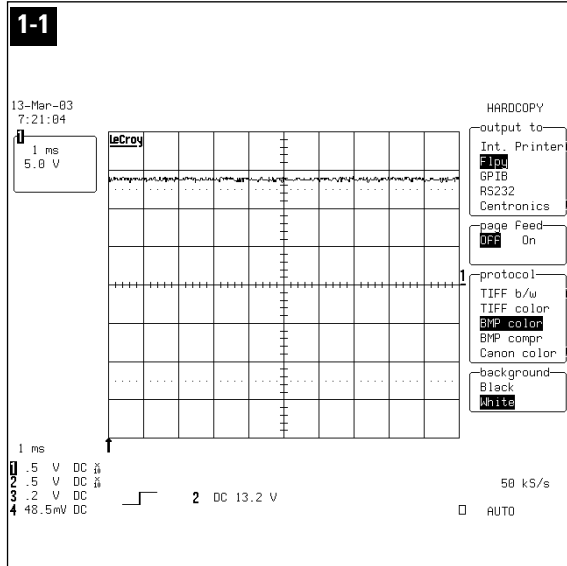
**Memo**

# 5 Troubleshooting

## 5-1 No Power



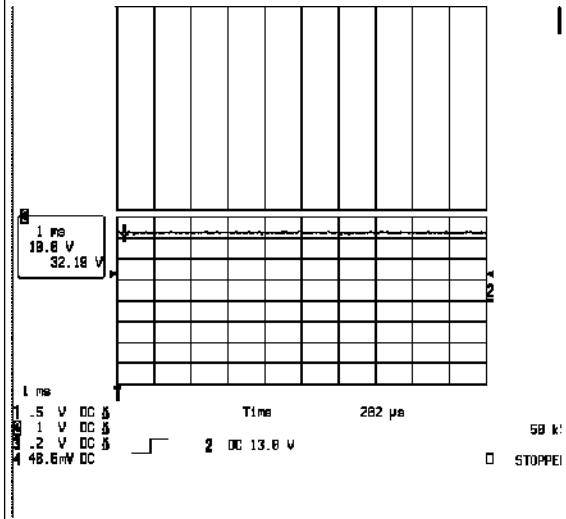
# WAVEFORMS



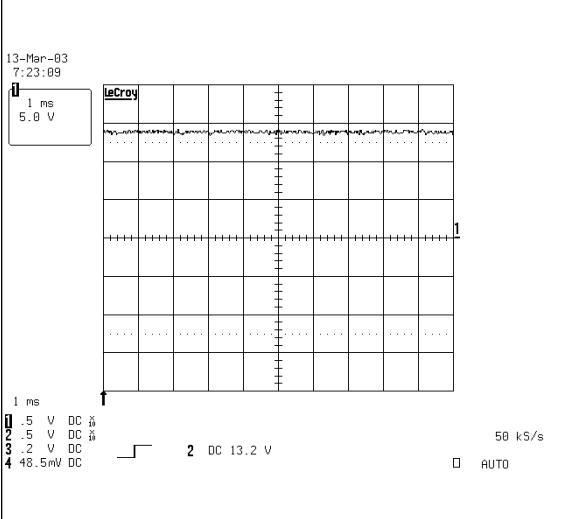


# WAVEFORMS

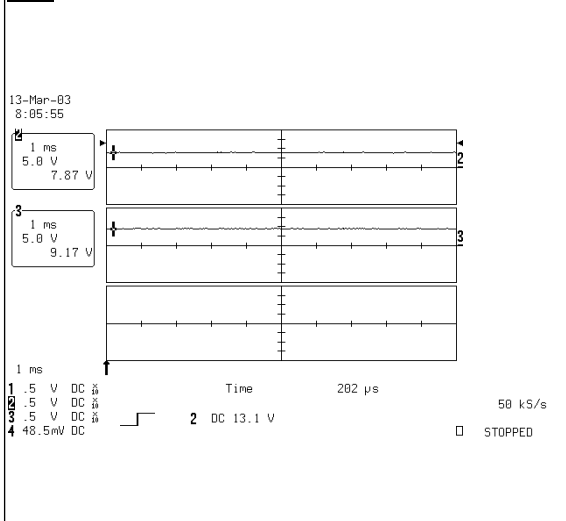
1-5



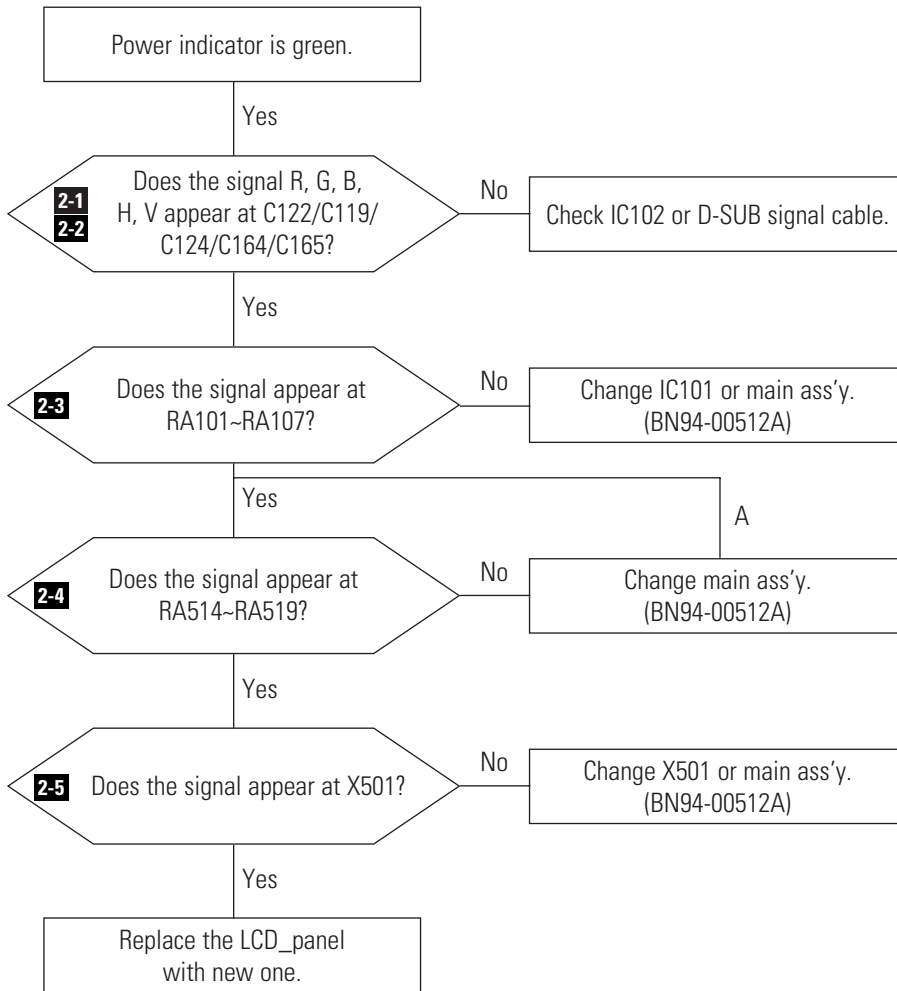
1-6



1-7

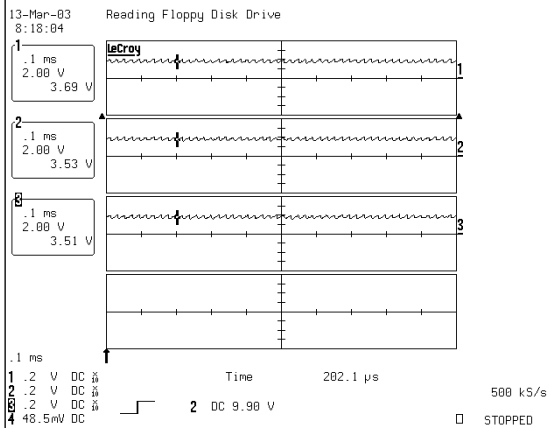


## 5-2 No PC Signal

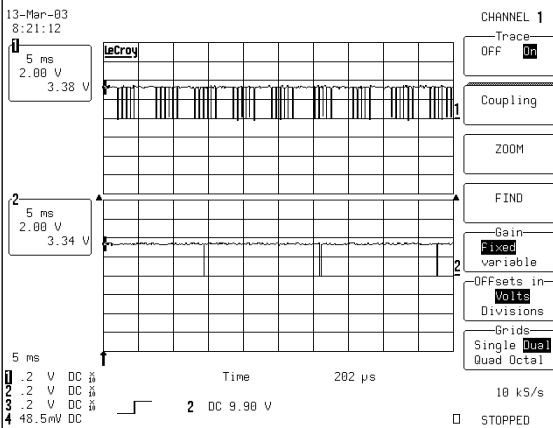


# WAVEFORMS

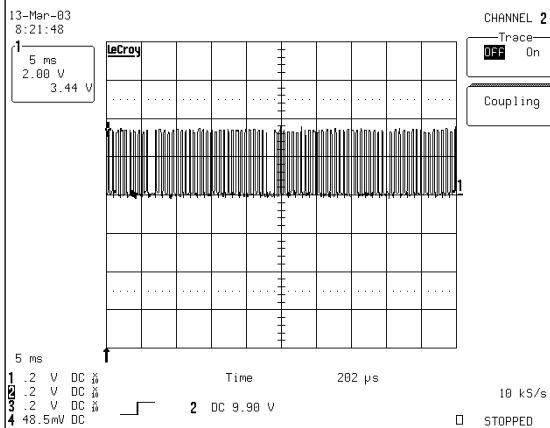
**2-1**



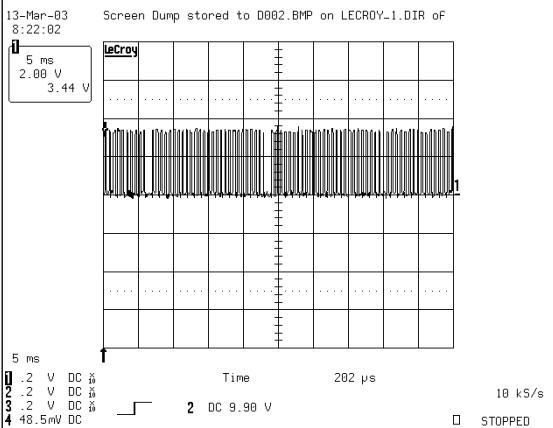
**2-2**



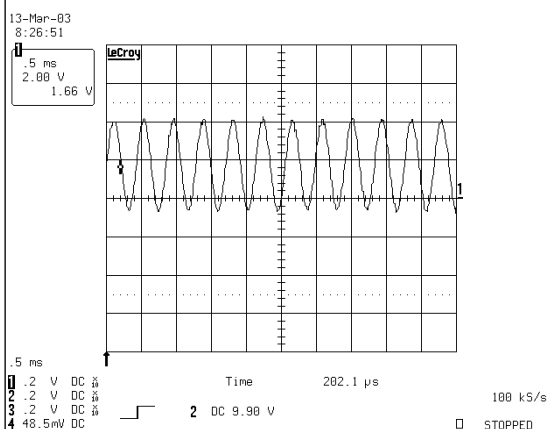
**2-3**



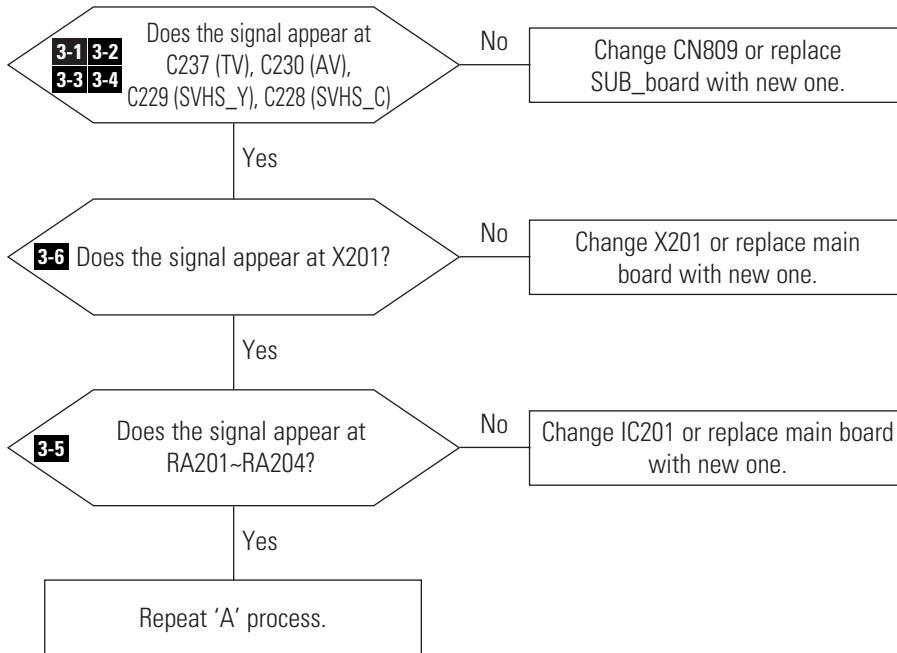
**2-4**



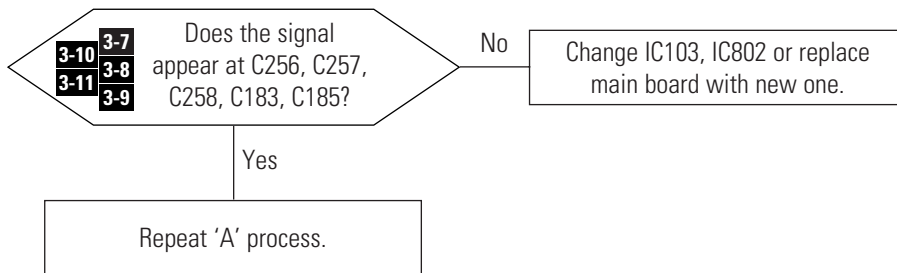
**2-5**



### 5-3-1 No Video (Tuner, AV CVBS, S-Video)



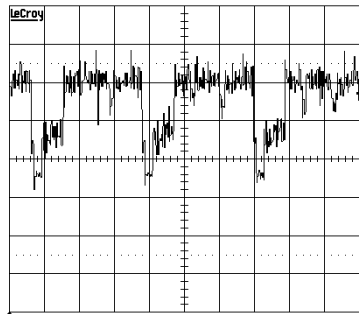
### 5-3-2 No Video (Scart Input)



# WAVEFORMS

**3-1**

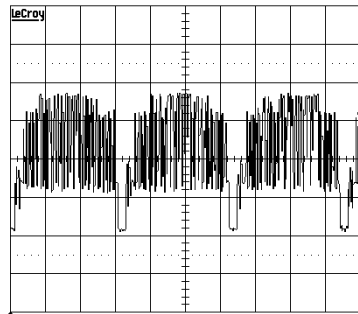
13-Mar-03  
9:10:31  
1 20  $\mu$ s  
0.50 V  
1.869 V



20  $\mu$ s  
1 50 mV DC  
2 .2 V DC  
3 .2 V DC  
4 48.5mV DC  
Time 200.0  $\mu$ s  
2.5 MS/s  
2 DC 9.90 V  
STOPPED

**3-2**

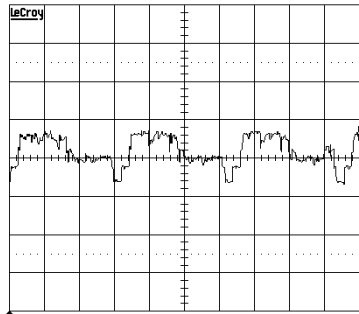
13-Mar-03  
9:11:13  
1 20  $\mu$ s  
0.50 V  
649mV



20  $\mu$ s  
1 50 mV DC  
2 .2 V DC  
3 .2 V DC  
4 48.5mV DC  
Time 200.0  $\mu$ s  
2.5 MS/s  
2 DC 9.90 V  
STOPPED

**3-3**

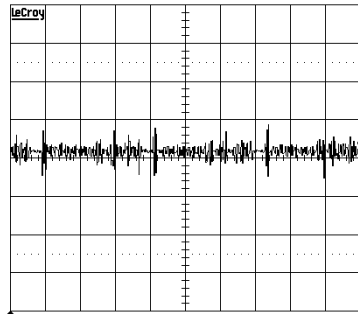
13-Mar-03  
9:12:36  
1 20  $\mu$ s  
0.50 V  
383mV



20  $\mu$ s  
1 50 mV DC  
2 .2 V DC  
3 .2 V DC  
4 48.5mV DC  
Time 200.0  $\mu$ s  
2.5 MS/s  
2 DC 9.90 V  
STOPPED

**3-4**

13-Mar-03  
9:02:41  
1 20  $\mu$ s  
200mV  
61mV

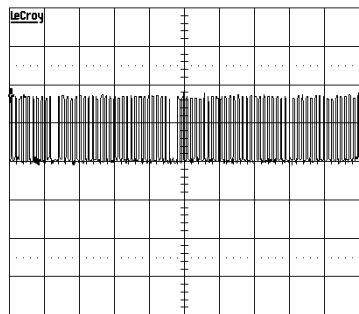


20  $\mu$ s  
1 20 mV DC  
2 .2 V DC  
3 .2 V DC  
4 48.5mV DC  
Time 200.0  $\mu$ s  
2.5 MS/s  
2 DC 9.90 V  
STOPPED

**3-5**

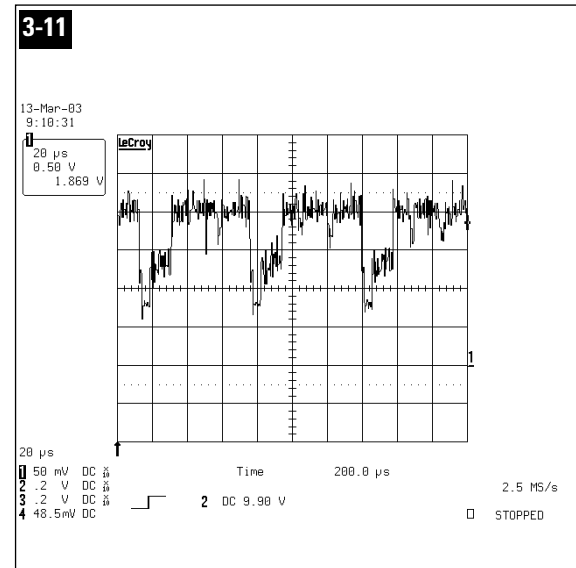
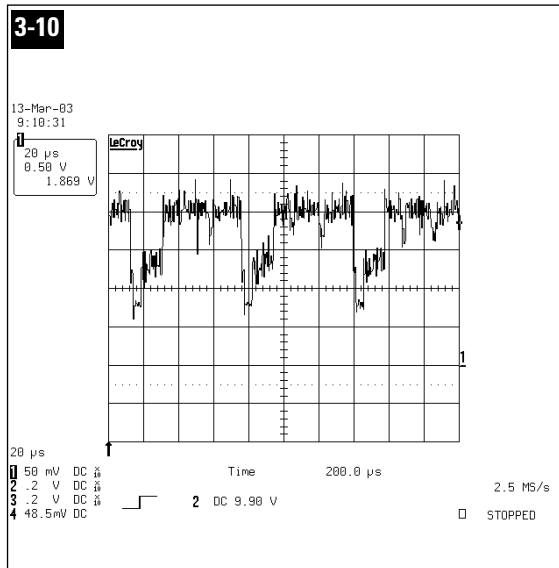
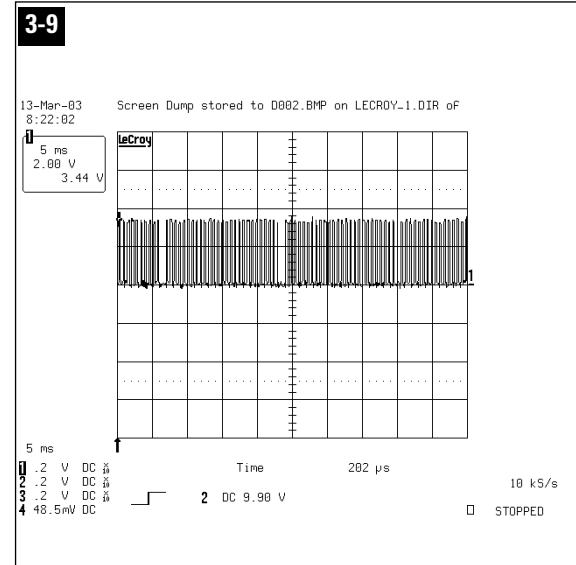
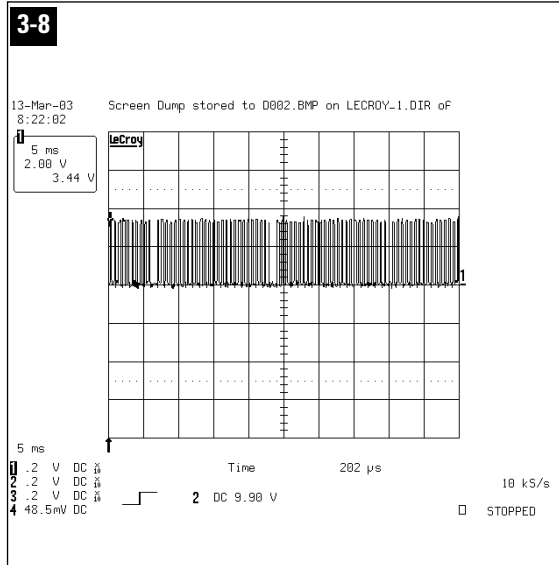
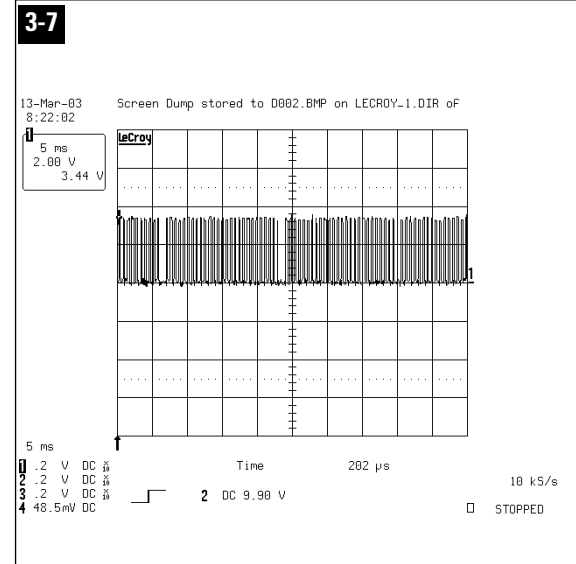
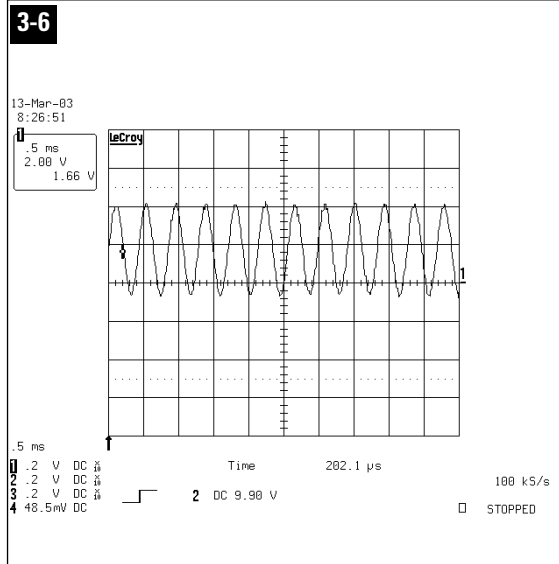
13-Mar-03  
8:22:02  
Screen Dump stored to D002.BMP on LECROY-1.DIR of

1 5 ms  
2.00 V  
3.44 V

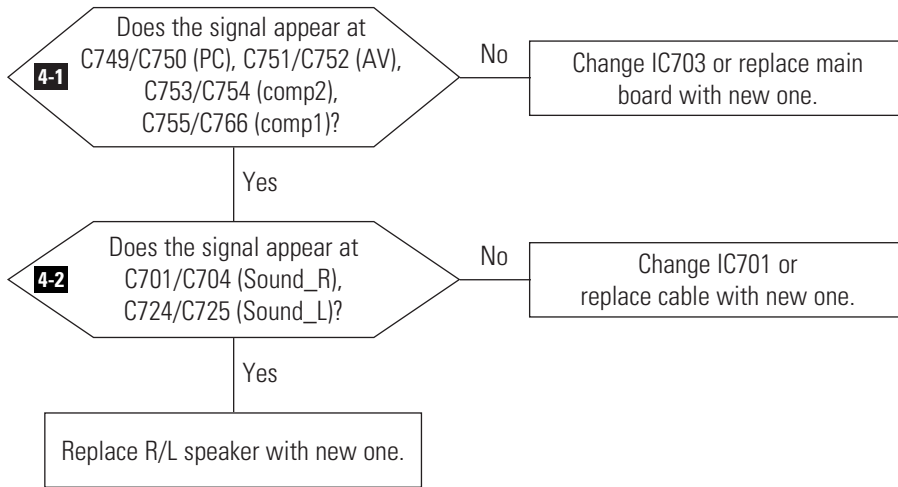


5 ms  
1 .2 V DC  
2 .2 V DC  
3 .2 V DC  
4 48.5mV DC  
Time 202  $\mu$ s  
10 kS/s  
2 DC 9.90 V  
STOPPED

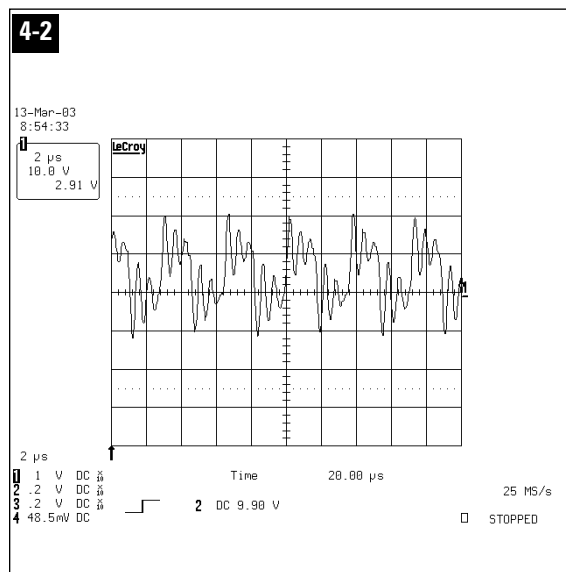
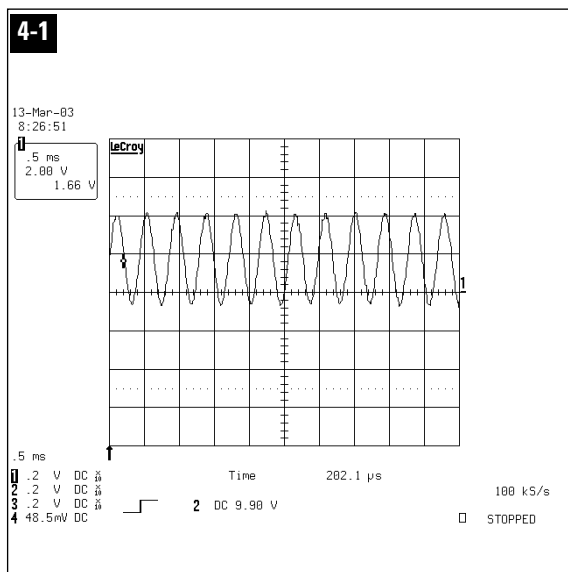
# WAVEFORMS



### 5-4 No Sound



### WAVEFORMS

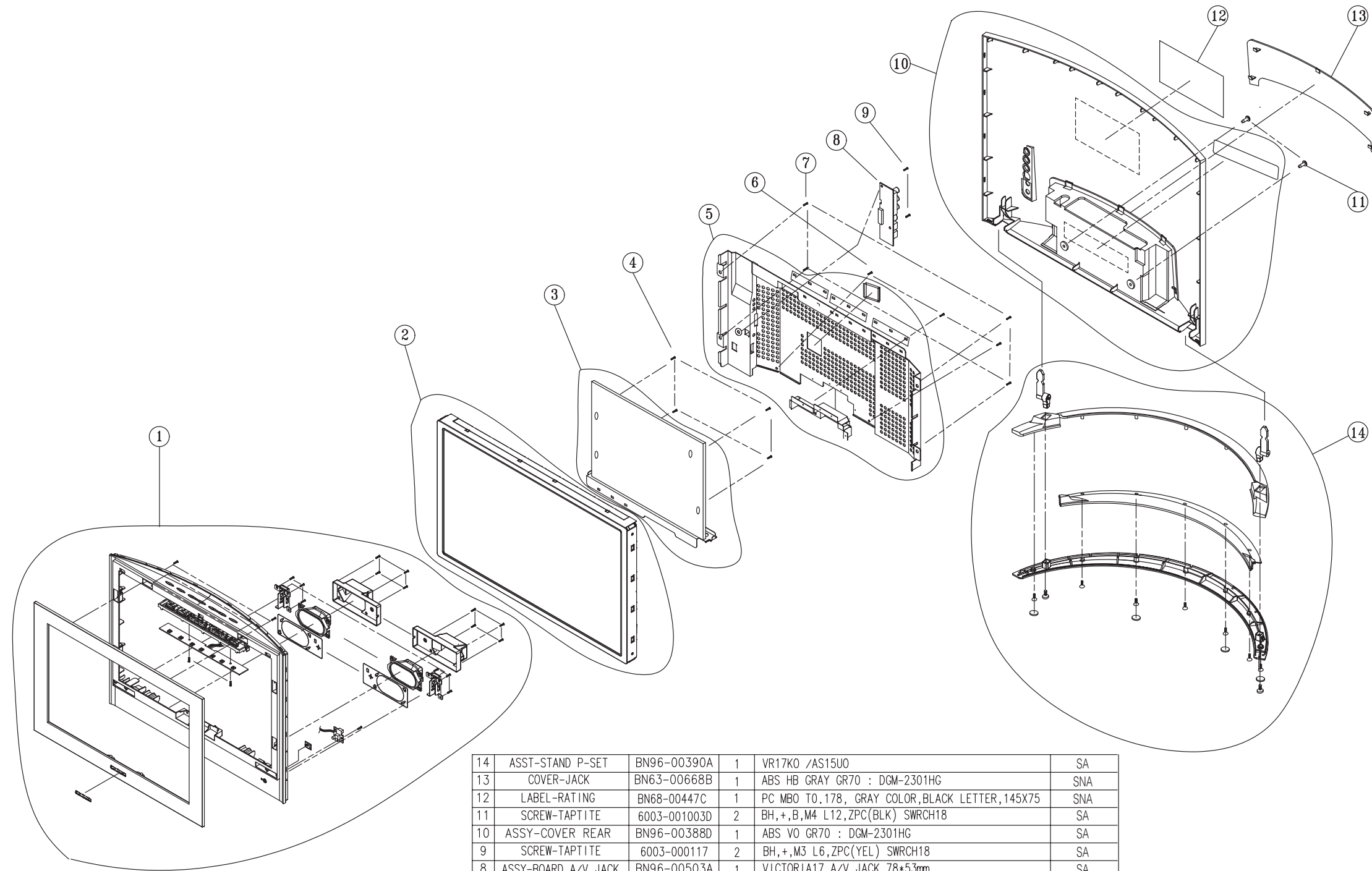


## **Memo**



## 6 Exploded View and Parts List

\* You can search for updated part codes through CMS web site.  
 URL : <http://ecms.samsungelectronics.com/>



14	ASST-STAND P-SET	BN96-00390A	1	VR17K0 /AS15U0	SA
13	COVER-JACK	BN63-00668B	1	ABS HB GRAY GR70 : DGM-2301HG	SNA
12	LABEL-RATING	BN68-00447C	1	PC MBO T0.178, GRAY COLOR, BLACK LETTER, 145X75	SNA
11	SCREW-TAPTITE	6003-001003D	2	BH,+,B,M4 L12,ZPC(BLK) SWRCH18	SA
10	ASSY-COVER REAR	BN96-00388D	1	ABS VO GR70 : DGM-2301HG	SA
9	SCREW-TAPTITE	6003-000117	2	BH,+,M3 L6,ZPC(YEL) SWRCH18	SA
8	ASSY-BOARD A/V JACK	BN96-00503A	1	VICTORIA17,A/V JACK 78*53mm	SA
7	SCREW-TAPTITE	6003-000276	4	BH,+,M3 L10,ZPC(YEL) SWRCH18	SA
6	SCREW-TAPTITE	6003-000117	3	BH,+,M3 L6,ZPC(YEL) SWRCH18	SA
5	ASSY-SHIELD COVER	BN96-000389A	1	VICTRIA17,SECC T0.8	SNA
4	SCREW-TAPTITE	6003-000117	4	BH,+,M3 L6,ZPC(YEL) SWRCH18	SA
3	ASSY-MAIN,PCB	BN91-00715A	1	VR17K0	SA
2	PANEL	BN07-00119A	1	LTA170WP	SA
1	ASSY-COVER FRONT	BN96-00387D	1	ASSY	SNA
NO	PART NAME	CODE NO.	Q'TY	SPECIFICATION	REMARK

**Memo**

## 7 Electrical Parts List

\* You can search for updated part codes through CMS web site.

URL : <http://ecms.samsungelectronics.com/>

### 7-1 Main PCB Parts

Loc. No.	Code No.	Description	Specification	Remarks
-	BN94-00512A	ASSY PCB MAIN-S9	VR17E0	SNA
C603	2409-001044	C-ORGANIC	100UF,+20%,16V,WT,TP,8X10.5,5	
CIS1	0202-001044	SOLDER-WIRE.	S63S-W3.0,S63S,D3,63Sn/37Pb,-	SNA
CIS2	0202-001222	SOLDER-WIRE FLUX	RS-107,RS60-1.2AA,D1.2,SN60/PB40,-	SNA
CIS3	0204-001095	THINNER	#4520,-,-,-	SNA
CIS4	0204-001677	FLUX	DF-201TVS,MIX,0.820,FLUX 13%,G	SNA
CIS6	6502-001088	CABLE CLAMP	DAST-1NB,1D9,T1.5,NYLON66,NTR	SNA
CIS7	BN63-00151A	GASKET	GHTPSS,CONDUCTIVE FABRIC,4MM,30MM,60MM,GRAY,71TSSK 30-4-60-13,71TSSK 30-4-60-13	SNA
CN601	3722-000117	JACK-DC POWER	3P,1.45MM,AG,BLK	
CN701	3711-004386	CONNECTOR-HEADER	BOX,3P,1R,2mm,ANGLE,SN	
CN702	3711-004270	CONNECTOR-HEADER	BOX,2P,1R,2MM,ANGLE,SN	
CN801	3722-001991	JACK-SCART	42P,-,SNPB,BLK,-	SNA
CN808	3701-001219	CONNECTOR-DSUB	15P,3R,FEMALE,ANGLE,AUF	
CN809	BN40-00030A	TUNER	TCPO8081(PD28LS),TCL08081(PD28LS),PAL,181CH,38.9MHZ,32V,75 OHM,75 OHM,DIN JACK A	SNA
IC565_ADD	BN62-00003A	HEAT SINK-IC	NK,SUN,A6063S,T2.5,W28,L28,-,BH62,-	SNA
M/PCB+SU/D_SUB	BN60-00001A	SCREW-CHASSIS	-.NI PLATING,-,11,HEX,HEX,-,U	SNA
-	BN97-00251D	ASSY SMD-S9	VR17E0	SNA
BD101	2703-001778	INDUCTOR-SMD	3.3uH,20%,3225	
BD102	2703-001778	INDUCTOR-SMD	3.3uH,20%,3225	
BD201	2703-001778	INDUCTOR-SMD	3.3uH,20%,3225	
BD202	2703-001778	INDUCTOR-SMD	3.3uH,20%,3225	
BD203	2703-001778	INDUCTOR-SMD	3.3uH,20%,3225	
BD301	2703-001778	INDUCTOR-SMD	3.3uH,20%,3225	
BD302	2703-001778	INDUCTOR-SMD	3.3uH,20%,3225	
BD303	2703-001778	INDUCTOR-SMD	3.3uH,20%,3225	
BD501	3301-001145	BEAD-SMD	4.5x1.6x1.6mm,-,-	SNA
BD502	3301-001145	BEAD-SMD	4.5x1.6x1.6mm,-,-	SNA
BD503	3301-001145	BEAD-SMD	4.5x1.6x1.6mm,-,-	SNA
BD504	3301-001145	BEAD-SMD	4.5x1.6x1.6mm,-,-	SNA
BD505	2703-001778	INDUCTOR-SMD	3.3uH,20%,3225	
BD506	3301-001145	BEAD-SMD	4.5x1.6x1.6mm,-,-	SNA
BD507	2703-001778	INDUCTOR-SMD	3.3uH,20%,3225	
BD508	2703-001778	INDUCTOR-SMD	3.3uH,20%,3225	
BD601	3301-001145	BEAD-SMD	4.5x1.6x1.6mm,-,-	SNA
BD602	3301-001145	BEAD-SMD	4.5x1.6x1.6mm,-,-	SNA
BD603	3301-001145	BEAD-SMD	4.5x1.6x1.6mm,-,-	SNA
BD604	3301-001145	BEAD-SMD	4.5x1.6x1.6mm,-,-	SNA
BD605	3301-001145	BEAD-SMD	4.5x1.6x1.6mm,-,-	SNA
BD606	3301-001145	BEAD-SMD	4.5x1.6x1.6mm,-,-	SNA
BD607	3301-001145	BEAD-SMD	4.5x1.6x1.6mm,-,-	SNA
BD801	3301-001236	BEAD-SMD	-60,-,200,-55TO+125C,-,0.7	
BD802	3301-001236	BEAD-SMD	-60,-,200,-55TO+125C,-,0.7	
BD803	3301-001236	BEAD-SMD	-60,-,200,-55TO+125C,-,0.7	
BD804	3301-001145	BEAD-SMD	4.5x1.6x1.6mm,-,-	SNA
BD805	3301-001145	BEAD-SMD	4.5x1.6x1.6mm,-,-	SNA
BD806	3301-001145	BEAD-SMD	4.5x1.6x1.6mm,-,-	SNA
BD807	3301-001145	BEAD-SMD	4.5x1.6x1.6mm,-,-	SNA
BD808	3301-001145	BEAD-SMD	4.5x1.6x1.6mm,-,-	SNA
C101	2402-000108	C-AL,SMD	10uF,20%,16V,WT,TP,4.3x4.3x5.4	
C102	2203-000440	C-CER,CHIP	1nF,10%,50V,X7R,TP,1608,-	
C103	2203-000189	C-CER,CHIP	100nF,+80-20%,25V,Y5V,TP,1608,-	
C104	2402-001042	C-AL,SMD	100uF,20%,16V,GP,TP,6.6x6.6x5.4mm	
C105	2203-000838	C-CER,CHIP	0.39NF,5%,50V,C0G,TP,1608	
C106	2203-000843	C-CER,CHIP	39nF,10%,25V,X7R,TP,1608,-	
C107	2203-005005	C-CER,CHIP	100nF,10%,16V,X7R,TP,1608	

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Loc. No.	Code No.	Description	Specification	Remarks
C108	2203-005005	C-CER,CHIP	100nF,10%,16V,X7R,TP,1608	
C109	2203-005005	C-CER,CHIP	100nF,10%,16V,X7R,TP,1608	
C110	2203-005005	C-CER,CHIP	100nF,10%,16V,X7R,TP,1608	
C111	2203-005005	C-CER,CHIP	100nF,10%,16V,X7R,TP,1608	
C112	2203-005005	C-CER,CHIP	100nF,10%,16V,X7R,TP,1608	
C113	2203-005005	C-CER,CHIP	100nF,10%,16V,X7R,TP,1608	
C114	2203-005005	C-CER,CHIP	100nF,10%,16V,X7R,TP,1608	
C115	2203-005005	C-CER,CHIP	100nF,10%,16V,X7R,TP,1608	
C116	2203-005005	C-CER,CHIP	100nF,10%,16V,X7R,TP,1608	
C117	2203-000440	C-CER,CHIP	1nF,10%,50V,X7R,TP,1608,-	
C119	2203-005005	C-CER,CHIP	100nF,10%,16V,X7R,TP,1608	
C122	2203-005005	C-CER,CHIP	100nF,10%,16V,X7R,TP,1608	
C124	2203-005005	C-CER,CHIP	100nF,10%,16V,X7R,TP,1608	
C125	2203-005005	C-CER,CHIP	100nF,10%,16V,X7R,TP,1608	
C126	2203-005005	C-CER,CHIP	100nF,10%,16V,X7R,TP,1608	
C127	2203-005005	C-CER,CHIP	100nF,10%,16V,X7R,TP,1608	
C128	2203-005005	C-CER,CHIP	100nF,10%,16V,X7R,TP,1608	
C129	2203-005005	C-CER,CHIP	100nF,10%,16V,X7R,TP,1608	
C141	2203-000257	C-CER,CHIP	10nF,10%,50V,X7R,TP,1608	
C142	2402-000176	C-AL,SMD	10uF,20%,16V,GP,TP,4.3x4.3x5.4	
C143	2203-002392	C-CER,CHIP	220nF,+80-20%,50V,Y5V,TP,2012	
C162	2203-000236	C-CER,CHIP	0.1nF,5%,50V,COG,TP,1608	
C163	2203-000236	C-CER,CHIP	0.1nF,5%,50V,COG,TP,1608	
C164	2203-000815	C-CER,CHIP	0.033nF,5%,50V,COG,TP,1608	
C165	2203-000815	C-CER,CHIP	0.033nF,5%,50V,COG,TP,1608	
C166	2402-000135	C-AL,SMD	22uF,20%,16V,GP,TP,5.3x5.3x5.4	
C167	2203-005005	C-CER,CHIP	100nF,10%,16V,X7R,TP,1608	
C168	2402-000108	C-AL,SMD	10uF,20%,16V,WT,TP,4.3x4.3x5.4	
C169	2203-005005	C-CER,CHIP	100nF,10%,16V,X7R,TP,1608	
C170	2402-001042	C-AL,SMD	100uF,20%,16V,GP,TP,6.6x6.6x5.4mm	
C171	2402-000176	C-AL,SMD	10uF,20%,16V,GP,TP,4.3x4.3x5.4	
C172	2402-000176	C-AL,SMD	10uF,20%,16V,GP,TP,4.3x4.3x5.4	
C173	2402-000176	C-AL,SMD	10uF,20%,16V,GP,TP,4.3x4.3x5.4	
C174	2402-000176	C-AL,SMD	10uF,20%,16V,GP,TP,4.3x4.3x5.4	
C175	2402-000176	C-AL,SMD	10uF,20%,16V,GP,TP,4.3x4.3x5.4	
C176	2402-000176	C-AL,SMD	10uF,20%,16V,GP,TP,4.3x4.3x5.4	
C183	2402-000135	C-AL,SMD	22uF,20%,16V,GP,TP,5.3x5.3x5.4	
C184	2203-000236	C-CER,CHIP	0.1nF,5%,50V,COG,TP,1608	
C185	2402-000135	C-AL,SMD	22uF,20%,16V,GP,TP,5.3x5.3x5.4	
C186	2203-000236	C-CER,CHIP	0.1nF,5%,50V,COG,TP,1608	
C187	2203-000189	C-CER,CHIP	100nF,+80-20%,25V,Y5V,TP,1608,	
C188	2402-000176	C-AL,SMD	10uF,20%,16V,GP,TP,4.3x4.3x5.4	
C189	2203-000280	C-CER,CHIP	0.01nF,0.5PF,50V,COG,TP,1608	
C190	2203-000257	C-CER,CHIP	10nF,10%,50V,X7R,TP,1608	
C191	2402-000176	C-AL,SMD	10uF,20%,16V,GP,TP,4.3x4.3x5.4	
C192	2203-000257	C-CER,CHIP	10nF,10%,50V,X7R,TP,1608	
C193	2402-000176	C-AL,SMD	10uF,20%,16V,GP,TP,4.3x4.3x5.4	
C194	2203-000257	C-CER,CHIP	10nF,10%,50V,X7R,TP,1608	
C195	2402-000176	C-AL,SMD	10uF,20%,16V,GP,TP,4.3x4.3x5.4	
C196	2203-000257	C-CER,CHIP	10nF,10%,50V,X7R,TP,1608	
C197	2402-000176	C-AL,SMD	10uF,20%,16V,GP,TP,4.3x4.3x5.4	
C198	2203-000257	C-CER,CHIP	10nF,10%,50V,X7R,TP,1608	
C199	2402-000176	C-AL,SMD	10uF,20%,16V,GP,TP,4.3x4.3x5.4	
C1991	2402-001042	C-AL,SMD	100uF,20%,16V,GP,TP,6.6x6.6x5.4mm	
C1992	2402-001042	C-AL,SMD	100uF,20%,16V,GP,TP,6.6x6.6x5.4mm	
C202	2203-001140	C-CER,CHIP	68nF,10%,16V,X7R,TP,1608,-	
C203	2402-001042	C-AL,SMD	100uF,20%,16V,GP,TP,6.6x6.6x5.4mm	
C204	2203-000140	C-CER,CHIP	1.5nF,10%,50V,X7R,TP,1608,-	
C205	2203-000972	C-CER,CHIP	47nF,10%,16V,X7R,TP,1608	
C206	2203-000815	C-CER,CHIP	0.033nF,5%,50V,COG,TP,1608	
C207	2203-001140	C-CER,CHIP	68nF,10%,16V,X7R,TP,1608,-	
C208	2203-000972	C-CER,CHIP	47nF,10%,16V,X7R,TP,1608	

Loc. No.	Code No.	Description	Specification	Remarks
C209	2203-000140	C-CER,CHIP	1.5nF,10%,50V,X7R,TP,1608,-	
C210	2203-000998	C-CER,CHIP	0.047NF,5%,50V,COG,TP,1608	
C211	2203-000998	C-CER,CHIP	0.047NF,5%,50V,COG,TP,1608	
C212	2203-000998	C-CER,CHIP	0.047NF,5%,50V,COG,TP,1608	
C213	2203-000783	C-CER,CHIP	0.33NF,5%,50V,COG,TP,1608	
C214	2203-000903	C-CER,CHIP	0.0047NF,0.25PF,50V,COG,TP,1608	
C215	2203-000903	C-CER,CHIP	0.0047NF,0.25PF,50V,COG,TP,1608	
C216	2203-005005	C-CER,CHIP	100nF,10%,16V,X7R,TP,1608	
C217	2402-001042	C-AL,SMD	100uF,20%,16V,GP,TP,6.6x6.6x5.4mm	
C218	2203-001402	C-CER,CHIP	220nF,+80-20%,16V,Y5V,TP,1608	
C219	2402-000176	C-AL,SMD	10uF,20%,16V,GP,TP,4.3x4.3x5.4	
C220	2203-001402	C-CER,CHIP	220nF,+80-20%,16V,Y5V,TP,1608	
C225	2203-006036	C-CER,CHIP	680NF,+80-20%,16V,Y5V,TP,1608	
C226	2203-006036	C-CER,CHIP	680NF,+80-20%,16V,Y5V,TP,1608	
C227	2203-006036	C-CER,CHIP	680NF,+80-20%,16V,Y5V,TP,1608	
C228	2203-000236	C-CER,CHIP	0.1NF,5%,50V,COG,TP,1608	
C229	2203-000236	C-CER,CHIP	0.1NF,5%,50V,COG,TP,1608	
C230	2203-000236	C-CER,CHIP	0.1NF,5%,50V,COG,TP,1608	
C231	2203-001656	C-CER,CHIP	0.47nF,5%,50V,NPO,TP,1608	
C232	2203-000140	C-CER,CHIP	1.5nF,10%,50V,X7R,TP,1608,-	
C233	2203-001402	C-CER,CHIP	220nF,+80-20%,16V,Y5V,TP,1608	
C234	2203-000972	C-CER,CHIP	47nF,10%,16V,X7R,TP,1608	
C235	2402-000176	C-AL,SMD	10uF,20%,16V,GP,TP,4.3x4.3x5.4	
C239	2203-000280	C-CER,CHIP	0.01NF,0.5PF,50V,COG,TP,1608	
C240	2203-000280	C-CER,CHIP	0.01NF,0.5PF,50V,COG,TP,1608	
C241	2203-000280	C-CER,CHIP	0.01NF,0.5PF,50V,COG,TP,1608	
C245	2203-000440	C-CER,CHIP	1nF,10%,50V,X7R,TP,1608,-	
C246	2203-000838	C-CER,CHIP	0.39NF,5%,50V,COG,TP,1608	
C247	2203-001402	C-CER,CHIP	220nF,+80-20%,16V,Y5V,TP,1608	
C248	2402-001042	C-AL,SMD	100uF,20%,16V,GP,TP,6.6x6.6x5.4mm	
C249	2203-000189	C-CER,CHIP	100nF,+80-20%,25V,Y5V,TP,1608,	
C250	2203-000972	C-CER,CHIP	47nF,10%,16V,X7R,TP,1608	
C251	2203-001656	C-CER,CHIP	0.47nF,5%,50V,NPO,TP,1608	
C252	2203-000140	C-CER,CHIP	1.5nF,10%,50V,X7R,TP,1608,-	
C253	2203-001402	C-CER,CHIP	220nF,+80-20%,16V,Y5V,TP,1608	
C254	2203-000280	C-CER,CHIP	0.01NF,0.5PF,50V,COG,TP,1608	
C259	2203-001402	C-CER,CHIP	220nF,+80-20%,16V,Y5V,TP,1608	
C260	2203-001140	C-CER,CHIP	68nF,10%,16V,X7R,TP,1608,-	
C261	2203-000236	C-CER,CHIP	0.1NF,5%,50V,COG,TP,1608	
C262	2203-000236	C-CER,CHIP	0.1NF,5%,50V,COG,TP,1608	
C264	2203-000236	C-CER,CHIP	0.1NF,5%,50V,COG,TP,1608	
C302	2402-001042	C-AL,SMD	100uF,20%,16V,GP,TP,6.6x6.6x5.4mm	
C303	2402-001042	C-AL,SMD	100uF,20%,16V,GP,TP,6.6x6.6x5.4mm	
C304	2203-000189	C-CER,CHIP	100nF,+80-20%,25V,Y5V,TP,1608,	
C305	2402-000176	C-AL,SMD	10uF,20%,16V,GP,TP,4.3x4.3x5.4	
C306	2203-005005	C-CER,CHIP	100nF,10%,16V,X7R,TP,1608	
C307	2402-001042	C-AL,SMD	100uF,20%,16V,GP,TP,6.6x6.6x5.4mm	
C308	2402-000179	C-AL,SMD	47uF,20%,16V,GP,TP,6.6x6.6x5.4	
C309	2203-005005	C-CER,CHIP	100nF,10%,16V,X7R,TP,1608	
C310	2203-005005	C-CER,CHIP	100nF,10%,16V,X7R,TP,1608	
C311	2203-000357	C-CER,CHIP	0.15NF,5%,50V,COG,TP,1608	
C312	2203-005005	C-CER,CHIP	100nF,10%,16V,X7R,TP,1608	
C313	2203-005005	C-CER,CHIP	100nF,10%,16V,X7R,TP,1608	
C314	2203-001652	C-CER,CHIP	470nF,+80-20%,16V,Y5V,TP,1608	
C318	2402-000135	C-AL,SMD	22uF,20%,16V,GP,TP,5.3x5.3x5.4	
C319	2203-005005	C-CER,CHIP	100nF,10%,16V,X7R,TP,1608	
C320	2402-000173	C-AL,SMD	4.7uF,20%,35V,GP,TP,4.3x4.3x5.	
C321	2203-000189	C-CER,CHIP	100nF,+80-20%,25V,Y5V,TP,1608,	
C322	2402-001042	C-AL,SMD	100uF,20%,16V,GP,TP,6.6x6.6x5.4mm	
C323	2203-000552	C-CER,CHIP	0.02NF,5%,50V,COG,TP,1608	
C324	2203-000552	C-CER,CHIP	0.02NF,5%,50V,COG,TP,1608	
C325	2203-005005	C-CER,CHIP	100nF,10%,16V,X7R,TP,1608	

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Loc. No.	Code No.	Description	Specification	Remarks
C326	2402-000179	C-AL,SMD	47uF,20%,16V,GP,TP,6.6x6.6x5.4	
C327	2203-005005	C-CER,CHIP	100nF,10%,16V,X7R,TP,1608	
C328	2203-000189	C-CER,CHIP	100nF,+80-20%,25V,Y5V,TP,1608,	
C329	2203-005005	C-CER,CHIP	100nF,10%,16V,X7R,TP,1608	
C501	2203-005005	C-CER,CHIP	100nF,10%,16V,X7R,TP,1608	
C502	2203-005005	C-CER,CHIP	100nF,10%,16V,X7R,TP,1608	
C503	2203-005005	C-CER,CHIP	100nF,10%,16V,X7R,TP,1608	
C504	2203-005005	C-CER,CHIP	100nF,10%,16V,X7R,TP,1608	
C505	2203-005005	C-CER,CHIP	100nF,10%,16V,X7R,TP,1608	
C506	2203-005005	C-CER,CHIP	100nF,10%,16V,X7R,TP,1608	
C507	2203-005005	C-CER,CHIP	100nF,10%,16V,X7R,TP,1608	
C508	2203-005005	C-CER,CHIP	100nF,10%,16V,X7R,TP,1608	
C509	2203-005005	C-CER,CHIP	100nF,10%,16V,X7R,TP,1608	
C510	2203-005005	C-CER,CHIP	100nF,10%,16V,X7R,TP,1608	
C511	2203-005005	C-CER,CHIP	100nF,10%,16V,X7R,TP,1608	
C512	2402-001042	C-AL,SMD	100uF,20%,16V,GP,TP,6.6x6.6x5.4mm	
C513	2203-005005	C-CER,CHIP	100nF,10%,16V,X7R,TP,1608	
C514	2402-001042	C-AL,SMD	100uF,20%,16V,GP,TP,6.6x6.6x5.4mm	
C515	2203-000440	C-CER,CHIP	1nF,10%,50V,X7R,TP,1608,-	
C516	2402-001042	C-AL,SMD	100uF,20%,16V,GP,TP,6.6x6.6x5.4mm	
C517	2203-000440	C-CER,CHIP	1nF,10%,50V,X7R,TP,1608,-	
C518	2402-001042	C-AL,SMD	100uF,20%,16V,GP,TP,6.6x6.6x5.4mm	
C519	2203-000189	C-CER,CHIP	100nF,+80-20%,25V,Y5V,TP,1608,	
C520	2203-000189	C-CER,CHIP	100nF,+80-20%,25V,Y5V,TP,1608,	
C521	2203-000280	C-CER,CHIP	0.01NF,0.5PF,50V,C0G,TP,1608	
C522	2402-000135	C-AL,SMD	22uF,20%,16V,GP,TP,5.3x5.3x5.4	
C523	2402-000135	C-AL,SMD	22uF,20%,16V,GP,TP,5.3x5.3x5.4	
C524	2402-000135	C-AL,SMD	22uF,20%,16V,GP,TP,5.3x5.3x5.4	
C525	2402-000135	C-AL,SMD	22uF,20%,16V,GP,TP,5.3x5.3x5.4	
C526	2402-000135	C-AL,SMD	22uF,20%,16V,GP,TP,5.3x5.3x5.4	
C527	2402-000135	C-AL,SMD	22uF,20%,16V,GP,TP,5.3x5.3x5.4	
C528	2203-005005	C-CER,CHIP	100nF,10%,16V,X7R,TP,1608	
C529	2203-005005	C-CER,CHIP	100nF,10%,16V,X7R,TP,1608	
C530	2203-005005	C-CER,CHIP	100nF,10%,16V,X7R,TP,1608	
C531	2203-005005	C-CER,CHIP	100nF,10%,16V,X7R,TP,1608	
C532	2203-005005	C-CER,CHIP	100nF,10%,16V,X7R,TP,1608	
C533	2203-005005	C-CER,CHIP	100nF,10%,16V,X7R,TP,1608	
C534	2203-005005	C-CER,CHIP	100nF,10%,16V,X7R,TP,1608	
C535	2203-005005	C-CER,CHIP	100nF,10%,16V,X7R,TP,1608	
C536	2203-005005	C-CER,CHIP	100nF,10%,16V,X7R,TP,1608	
C537	2203-005005	C-CER,CHIP	100nF,10%,16V,X7R,TP,1608	
C538	2203-005005	C-CER,CHIP	100nF,10%,16V,X7R,TP,1608	
C539	2203-005005	C-CER,CHIP	100nF,10%,16V,X7R,TP,1608	
C540	2203-005005	C-CER,CHIP	100nF,10%,16V,X7R,TP,1608	
C541	2203-005005	C-CER,CHIP	100nF,10%,16V,X7R,TP,1608	
C542	2402-000135	C-AL,SMD	22uF,20%,16V,GP,TP,5.3x5.3x5.4	
C543	2402-000135	C-AL,SMD	22uF,20%,16V,GP,TP,5.3x5.3x5.4	
C544	2203-005005	C-CER,CHIP	100nF,10%,16V,X7R,TP,1608	
C545	2203-005005	C-CER,CHIP	100nF,10%,16V,X7R,TP,1608	
C546	2203-005005	C-CER,CHIP	100nF,10%,16V,X7R,TP,1608	
C547	2203-005005	C-CER,CHIP	100nF,10%,16V,X7R,TP,1608	
C548	2203-005005	C-CER,CHIP	100nF,10%,16V,X7R,TP,1608	
C549	2203-005005	C-CER,CHIP	100nF,10%,16V,X7R,TP,1608	
C550	2203-005005	C-CER,CHIP	100nF,10%,16V,X7R,TP,1608	
C551	2203-005005	C-CER,CHIP	100nF,10%,16V,X7R,TP,1608	
C552	2203-005005	C-CER,CHIP	100nF,10%,16V,X7R,TP,1608	
C553	2203-005005	C-CER,CHIP	100nF,10%,16V,X7R,TP,1608	
C554	2402-001019	C-AL,SMD	2.2uF,20%,35V,GP,TP,3.3x3.3x5.	
C555	2203-005005	C-CER,CHIP	100nF,10%,16V,X7R,TP,1608	
C556	2402-001019	C-AL,SMD	2.2uF,20%,35V,GP,TP,3.3x3.3x5.	
C557	2203-005005	C-CER,CHIP	100nF,10%,16V,X7R,TP,1608	
C558	2402-001019	C-AL,SMD	2.2uF,20%,35V,GP,TP,3.3x3.3x5.	

Loc. No.	Code No.	Description	Specification	Remarks
C559	2203-005005	C-CER,CHIP	100nF,10%,16V,X7R,TP,1608	
C560	2203-005005	C-CER,CHIP	100nF,10%,16V,X7R,TP,1608	
C561	2402-000108	C-AL,SMD	10uF,20%,16V,WT,TP,4.3x4.3x5.4	
C562	2203-005005	C-CER,CHIP	100nF,10%,16V,X7R,TP,1608	
C563	2203-005005	C-CER,CHIP	100nF,10%,16V,X7R,TP,1608	
C564	2203-005005	C-CER,CHIP	100nF,10%,16V,X7R,TP,1608	
C565	2203-001628	C-CER,CHIP	0.03nF,5%,50V,NPO,TP,1608	
C566	2203-000426	C-CER,CHIP	0.018nF,5%,50V,COG,TP,1608	
C567	2402-000108	C-AL,SMD	10uF,20%,16V,WT,TP,4.3x4.3x5.4	
C568	2203-005005	C-CER,CHIP	100nF,10%,16V,X7R,TP,1608	
C569	2402-000176	C-AL,SMD	10uF,20%,16V,GP,TP,4.3x4.3x5.4	
C570	2203-005005	C-CER,CHIP	100nF,10%,16V,X7R,TP,1608	
C572	2402-000176	C-AL,SMD	10uF,20%,16V,GP,TP,4.3x4.3x5.4	
C573	2402-000176	C-AL,SMD	10uF,20%,16V,GP,TP,4.3x4.3x5.4	
C574	2203-005005	C-CER,CHIP	100nF,10%,16V,X7R,TP,1608	
C575	2402-001042	C-AL,SMD	100uF,20%,16V,GP,TP,6.6x6.6x5.4mm	
C576	2203-000189	C-CER,CHIP	100nF,+80-20%,25V,Y5V,TP,1608,	
C578	2203-000440	C-CER,CHIP	1nF,10%,50V,X7R,TP,1608,-	
C579	2203-005005	C-CER,CHIP	100nF,10%,16V,X7R,TP,1608	
C580	2203-005005	C-CER,CHIP	100nF,10%,16V,X7R,TP,1608	
C581	2203-000236	C-CER,CHIP	0.1nF,5%,50V,COG,TP,1608	
C582	2203-000440	C-CER,CHIP	1nF,10%,50V,X7R,TP,1608,-	
C583	2203-005005	C-CER,CHIP	100nF,10%,16V,X7R,TP,1608	
C584	2203-005005	C-CER,CHIP	100nF,10%,16V,X7R,TP,1608	
C590	2203-005005	C-CER,CHIP	100nF,10%,16V,X7R,TP,1608	
C601	2203-001402	C-CER,CHIP	220nF,+80-20%,16V,Y5V,TP,1608	
C602	2203-001402	C-CER,CHIP	220nF,+80-20%,16V,Y5V,TP,1608	
C604	2402-001204	C-POLYMER AL CHIP	82uF,20%,16V,-,TP,8.3X8.3X6.7 MM	
C605	2203-000257	C-CER,CHIP	10nF,10%,50V,X7R,TP,1608	
C606	2203-000189	C-CER,CHIP	100nF,+80-20%,25V,Y5V,TP,1608,	
C607	2203-001126	C-CER,CHIP	0.68nF,10%,50V,X7R,TP,1608	
C608	2402-001219	C-AL,SMD	150uF,20%,10V,-,TP,7.3x4.3 mm	
C610	2402-001033	C-AL,SMD	220uF,20%,16V,GP,TP,8.3x8.3x10	
C611	2203-000189	C-CER,CHIP	100nF,+80-20%,25V,Y5V,TP,1608,	
C612	2203-000257	C-CER,CHIP	10nF,10%,50V,X7R,TP,1608	
C613	2402-001219	C-AL,SMD	150uF,20%,10V,-,TP,7.3x4.3 mm	
C614	2203-000189	C-CER,CHIP	100nF,+80-20%,25V,Y5V,TP,1608,	
C615	2203-000189	C-CER,CHIP	100nF,+80-20%,25V,Y5V,TP,1608,	
C616	2402-000176	C-AL,SMD	10uF,20%,16V,GP,TP,4.3x4.3x5.4	
C617	2203-000189	C-CER,CHIP	100nF,+80-20%,25V,Y5V,TP,1608,	
C618	2402-001042	C-AL,SMD	100uF,20%,16V,GP,TP,6.6x6.6x5.4mm	
C619	2402-000170	C-AL,SMD	1uF,20%,50V,GP,TP,4.3x4.3x5.4,	
C620	2402-001079	C-AL,SMD	100uF,20%,35V,WT,TP,10X10X10MM	
C621	2402-001079	C-AL,SMD	100uF,20%,35V,WT,TP,10X10X10MM	
C623	2402-001079	C-AL,SMD	100uF,20%,35V,WT,TP,10X10X10MM	
C624	2402-001042	C-AL,SMD	100uF,20%,16V,GP,TP,6.6x6.6x5.4mm	
C625	2203-000189	C-CER,CHIP	100nF,+80-20%,25V,Y5V,TP,1608,	
C626	2402-000170	C-AL,SMD	1uF,20%,50V,GP,TP,4.3x4.3x5.4,	
C627	2402-000170	C-AL,SMD	1uF,20%,50V,GP,TP,4.3x4.3x5.4,	
C628	2203-000189	C-CER,CHIP	100nF,+80-20%,25V,Y5V,TP,1608,	
C629	2402-001042	C-AL,SMD	100uF,20%,16V,GP,TP,6.6x6.6x5.4mm	
C630	2203-000257	C-CER,CHIP	10nF,10%,50V,X7R,TP,1608	
C631	2402-001204	C-POLYMER AL CHIP	82uF,20%,16V,-,TP,8.3X8.3X6.7 MM	
C632	2402-000179	C-AL,SMD	47uF,20%,16V,GP,TP,6.6x6.6x5.4	
C633	2203-000189	C-CER,CHIP	100nF,+80-20%,25V,Y5V,TP,1608,	
C634	2203-000189	C-CER,CHIP	100nF,+80-20%,25V,Y5V,TP,1608,	
C635	2402-001042	C-AL,SMD	100uF,20%,16V,GP,TP,6.6x6.6x5.4mm	
C640	2402-001202	C-AL,SMD	150uF,20%,6.3V,-,TP,7.3X4.3 MM	
C641	2402-001202	C-AL,SMD	150uF,20%,6.3V,-,TP,7.3X4.3 MM	
C642	2203-005533	C-CER,CHIP	1000nF,20%,6.3V,X7R,TP,1608	
C643	2203-005005	C-CER,CHIP	100nF,10%,16V,X7R,TP,1608	
C644	2203-005015	C-CER,CHIP	150nF,+80-20%,16V,Y5V,TP,1608	

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Loc. No.	Code No.	Description	Specification	Remarks
C645	2402-000173	C-AL,SMD	4.7uF,20%,35V,GP,TP,4.3x4.3x5.	
C646	2203-005005	C-CER,CHIP	100nF,10%,16V,X7R,TP,1608	
C647	2203-000440	C-CER,CHIP	1nF,10%,50V,X7R,TP,1608,-	
C648	2203-000257	C-CER,CHIP	10nF,10%,50V,X7R,TP,1608	
C649	2203-005005	C-CER,CHIP	100nF,10%,16V,X7R,TP,1608	
C650	2203-005533	C-CER,CHIP	1000nF,20%,6.3V,X7R,TP,1608	
C651	2203-000257	C-CER,CHIP	10nF,10%,50V,X7R,TP,1608	
C652	2402-000135	C-AL,SMD	22uF,20%,16V,GP,TP,5.3x5.3x5.4	
C653	2203-000440	C-CER,CHIP	1nF,10%,50V,X7R,TP,1608,-	
C654	2203-005005	C-CER,CHIP	100nF,10%,16V,X7R,TP,1608	
C655	2203-005015	C-CER,CHIP	150nF,+80-20%,16V,Y5V,TP,1608	
C656	2203-005005	C-CER,CHIP	100nF,10%,16V,X7R,TP,1608	
C657	2203-005533	C-CER,CHIP	1000nF,20%,6.3V,X7R,TP,1608	
C658	2402-001202	C-AL,SMD	150UF,20%,6.3V,-,TP,7.3X4.3 MM	
C659	2402-001202	C-AL,SMD	150UF,20%,6.3V,-,TP,7.3X4.3 MM	
C660	2402-000173	C-AL,SMD	4.7uF,20%,35V,GP,TP,4.3x4.3x5.	
C661	2203-005005	C-CER,CHIP	100nF,10%,16V,X7R,TP,1608	
C662	2402-000176	C-AL,SMD	10uF,20%,16V,GP,TP,4.3x4.3x5.4	
C663	2203-005005	C-CER,CHIP	100nF,10%,16V,X7R,TP,1608	
C664	2203-005249	C-CER,CHIP	100nF,10%,50V,X7R,TP,1608,-	
C665	2203-005005	C-CER,CHIP	100nF,10%,16V,X7R,TP,1608	
C701	2203-000189	C-CER,CHIP	100nF,+80-20%,25V,Y5V,TP,1608,	
C702	2203-000189	C-CER,CHIP	100nF,+80-20%,25V,Y5V,TP,1608,	
C703	2402-001204	C-POLYMER AL CHIP	82UF,20%,16V,-,TP,8.3X8.3X6.7 MM	
C704	2203-000189	C-CER,CHIP	100nF,+80-20%,25V,Y5V,TP,1608,	
C705	2203-000257	C-CER,CHIP	10nF,10%,50V,X7R,TP,1608	
C706	2203-000257	C-CER,CHIP	10nF,10%,50V,X7R,TP,1608	
C707	2402-000170	C-AL,SMD	1uF,20%,50V,GP,TP,4.3x4.3x5.4,	
C708	2402-000170	C-AL,SMD	1uF,20%,50V,GP,TP,4.3x4.3x5.4,	
C709	2402-000170	C-AL,SMD	1uF,20%,50V,GP,TP,4.3x4.3x5.4,	
C710	2402-000170	C-AL,SMD	1uF,20%,50V,GP,TP,4.3x4.3x5.4,	
C711	2402-000170	C-AL,SMD	1uF,20%,50V,GP,TP,4.3x4.3x5.4,	
C714	2402-000170	C-AL,SMD	1uF,20%,50V,GP,TP,4.3x4.3x5.4,	
C715	2203-000189	C-CER,CHIP	100nF,+80-20%,25V,Y5V,TP,1608,	
C716	2402-000108	C-AL,SMD	10uF,20%,16V,WT,TP,4.3x4.3x5.4	
C717	2203-000189	C-CER,CHIP	100nF,+80-20%,25V,Y5V,TP,1608,	
C718	2203-001607	C-CER,CHIP	0.22nF,5%,50V,NPO,TP,1608	
C719	2402-000170	C-AL,SMD	1uF,20%,50V,GP,TP,4.3x4.3x5.4,	
C720	2203-000257	C-CER,CHIP	10nF,10%,50V,X7R,TP,1608	
C721	2203-000257	C-CER,CHIP	10nF,10%,50V,X7R,TP,1608	
C722	2203-000189	C-CER,CHIP	100nF,+80-20%,25V,Y5V,TP,1608,	
C723	2203-000189	C-CER,CHIP	100nF,+80-20%,25V,Y5V,TP,1608,	
C724	2203-000189	C-CER,CHIP	100nF,+80-20%,25V,Y5V,TP,1608,	
C725	2203-000189	C-CER,CHIP	100nF,+80-20%,25V,Y5V,TP,1608,	
C726	2402-000108	C-AL,SMD	10uF,20%,16V,WT,TP,4.3x4.3x5.4	
C727	2402-001042	C-AL,SMD	100uF,20%,16V,GP,TP,6.6x6.6x5.4mm	
C728	2402-001042	C-AL,SMD	100uF,20%,16V,GP,TP,6.6x6.6x5.4mm	
C729	2203-000236	C-CER,CHIP	0.1nF,5%,50V,COG,TP,1608	
C730	2203-000189	C-CER,CHIP	100nF,+80-20%,25V,Y5V,TP,1608,	
C731	2402-000179	C-AL,SMD	47uF,20%,16V,GP,TP,6.6x6.6x5.4	
C732	2203-001630	C-CER,CHIP	330nF,+80-20%,16V,Y5V,TP,1608	
C733	2203-001630	C-CER,CHIP	330nF,+80-20%,16V,Y5V,TP,1608	
C734	2402-001042	C-AL,SMD	100uF,20%,16V,GP,TP,6.6x6.6x5.4mm	
C735	2402-001042	C-AL,SMD	100uF,20%,16V,GP,TP,6.6x6.6x5.4mm	
C736	2203-000440	C-CER,CHIP	1nF,10%,50V,X7R,TP,1608,-	
C737	2203-000440	C-CER,CHIP	1nF,10%,50V,X7R,TP,1608,-	
C738	2203-005065	C-CER,CHIP	1000nF,+80-20%,10V,Y5V,TP,1608	
C739	2203-005065	C-CER,CHIP	1000nF,+80-20%,10V,Y5V,TP,1608	
C740	2203-000896	C-CER,CHIP	4.7nF,10%,50V,X7R,TP,1608	
C741	2203-000896	C-CER,CHIP	4.7nF,10%,50V,X7R,TP,1608	
C742	2402-001042	C-AL,SMD	100uF,20%,16V,GP,TP,6.6x6.6x5.4mm	
C743	2203-000140	C-CER,CHIP	1.5nF,10%,50V,X7R,TP,1608,-	



Loc. No.	Code No.	Description	Specification	Remarks
C744	2203-001656	C-CER,CHIP	0.47nF,5%,50V,NP0,TP,1608	
C745	2402-001147	C-AL,SMD	3.3UF,20%,50V,WT,TP,4X5.8MM	
C746	2402-000176	C-AL,SMD	10uF,20%,16V,GP,TP,4.3x4.3x5.4	
C747	2203-005005	C-CER,CHIP	100nF,10%,16V,X7R,TP,1608	
C748	2402-000173	C-AL,SMD	4.7uF,20%,35V,GP,TP,4.3x4.3x5.	
C749	2402-000173	C-AL,SMD	4.7uF,20%,35V,GP,TP,4.3x4.3x5.	
C750	2402-000173	C-AL,SMD	4.7uF,20%,35V,GP,TP,4.3x4.3x5.	
C751	2402-000173	C-AL,SMD	4.7uF,20%,35V,GP,TP,4.3x4.3x5.	
C752	2402-000173	C-AL,SMD	4.7uF,20%,35V,GP,TP,4.3x4.3x5.	
C753	2402-000173	C-AL,SMD	4.7uF,20%,35V,GP,TP,4.3x4.3x5.	
C754	2402-000173	C-AL,SMD	4.7uF,20%,35V,GP,TP,4.3x4.3x5.	
C755	2402-000173	C-AL,SMD	4.7uF,20%,35V,GP,TP,4.3x4.3x5.	
C756	2402-000173	C-AL,SMD	4.7uF,20%,35V,GP,TP,4.3x4.3x5.	
C757	2402-000176	C-AL,SMD	10uF,20%,16V,GP,TP,4.3x4.3x5.4	
C758	2203-000189	C-CER,CHIP	100nF,+80-20%,25V,Y5V,TP,1608,	
C759	2203-001071	C-CER,CHIP	0.056NF,5%,50V,COG,TP,1608	
C760	2402-001042	C-AL,SMD	100uF,20%,16V,GP,TP,6.6x6.6x5.4mm	
C761	2203-000972	C-CER,CHIP	47nF,10%,16V,X7R,TP,1608	
C762	2203-001656	C-CER,CHIP	0.47nF,5%,50V,NP0,TP,1608	
C763	2203-000140	C-CER,CHIP	1.5nF,10%,50V,X7R,TP,1608,-	
C764	2402-000135	C-AL,SMD	22uF,20%,16V,GP,TP,5.3x5.3x5.4	
C765	2203-001071	C-CER,CHIP	0.056NF,5%,50V,COG,TP,1608	
C766	2203-001071	C-CER,CHIP	0.056NF,5%,50V,COG,TP,1608	
C767	2203-000872	C-CER,CHIP	0.003NF,0.25PF,50V,COG,TP,1608	
C768	2203-000872	C-CER,CHIP	0.003NF,0.25PF,50V,COG,TP,1608	
C769	2203-000189	C-CER,CHIP	100nF,+80-20%,25V,Y5V,TP,1608,	
C770	2402-001042	C-AL,SMD	100uF,20%,16V,GP,TP,6.6x6.6x5.4mm	
C772	2402-000108	C-AL,SMD	10uF,20%,16V,WT,TP,4.3x4.3x5.4	
C773	2203-005005	C-CER,CHIP	100nF,10%,16V,X7R,TP,1608	
C774	2203-000189	C-CER,CHIP	100nF,+80-20%,25V,Y5V,TP,1608,	
C775	2203-001652	C-CER,CHIP	470nF,+80-20%,16V,Y5V,TP,1608	
C776	2203-001652	C-CER,CHIP	470nF,+80-20%,16V,Y5V,TP,1608	
C791	2402-000135	C-AL,SMD	22uF,20%,16V,GP,TP,5.3x5.3x5.4	
C792	2402-000135	C-AL,SMD	22uF,20%,16V,GP,TP,5.3x5.3x5.4	
C793	2402-000135	C-AL,SMD	22uF,20%,16V,GP,TP,5.3x5.3x5.4	
C794	2402-000135	C-AL,SMD	22uF,20%,16V,GP,TP,5.3x5.3x5.4	
C801	2203-000783	C-CER,CHIP	0.33NF,5%,50V,COG,TP,1608	
C802	2203-000783	C-CER,CHIP	0.33NF,5%,50V,COG,TP,1608	
C803	2203-000783	C-CER,CHIP	0.33NF,5%,50V,COG,TP,1608	
C804	2203-000783	C-CER,CHIP	0.33NF,5%,50V,COG,TP,1608	
C805	2203-000236	C-CER,CHIP	0.1NF,5%,50V,COG,TP,1608	
C806	2203-000783	C-CER,CHIP	0.33NF,5%,50V,COG,TP,1608	
C807	2203-000783	C-CER,CHIP	0.33NF,5%,50V,COG,TP,1608	
C808	2203-000783	C-CER,CHIP	0.33NF,5%,50V,COG,TP,1608	
C809	2203-000783	C-CER,CHIP	0.33NF,5%,50V,COG,TP,1608	
C810	2203-000236	C-CER,CHIP	0.1NF,5%,50V,COG,TP,1608	
C811	2203-000189	C-CER,CHIP	100nF,+80-20%,25V,Y5V,TP,1608,	
C812	2203-000236	C-CER,CHIP	0.1NF,5%,50V,COG,TP,1608	
C813	2203-000236	C-CER,CHIP	0.1NF,5%,50V,COG,TP,1608	
C814	2402-000108	C-AL,SMD	10uF,20%,16V,WT,TP,4.3x4.3x5.4	
C815	2203-000189	C-CER,CHIP	100nF,+80-20%,25V,Y5V,TP,1608,	
C816	2203-000189	C-CER,CHIP	100nF,+80-20%,25V,Y5V,TP,1608,	
C817	2402-001204	C-POLYMER AL CHIP	82UF,20%,16V,-,TP,8.3X8.3X6.7 MM	
C818	2402-001204	C-POLYMER AL CHIP	82UF,20%,16V,-,TP,8.3X8.3X6.7 MM	
C819	2203-000189	C-CER,CHIP	100nF,+80-20%,25V,Y5V,TP,1608,	
C820	2203-000236	C-CER,CHIP	0.1NF,5%,50V,COG,TP,1608	
C821	2402-000176	C-AL,SMD	10uF,20%,16V,GP,TP,4.3x4.3x5.4	
C822	2203-000189	C-CER,CHIP	100nF,+80-20%,25V,Y5V,TP,1608,	
C823	2402-001070	C-AL,SMD	470uF,20%,16V,GP,TP,10x10.2,-	
C824	2203-005005	C-CER,CHIP	100nF,10%,16V,X7R,TP,1608	
C825	2402-001042	C-AL,SMD	100uF,20%,16V,GP,TP,6.6x6.6x5.4mm	
C828	2203-000236	C-CER,CHIP	0.1NF,5%,50V,COG,TP,1608	

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Loc. No.	Code No.	Description	Specification	Remarks
C829	2203-000236	C-CER,CHIP	0.1NF,5%,50V,COG,TP,1608	
C830	2402-001145	C-AL,CHIP	47UF,20%,50V,GP,TP,6.3X7.7MM	
C831	2203-005249	C-CER,CHIP	100nF,10%,50V,X7R,TP,1608,-	
C833	2402-001033	C-AL,SMD	220uF,20%,16V,GP,TP,8.3x8.3x10	
C834	2203-000257	C-CER,CHIP	10nF,10%,50V,X7R,TP,1608	
C835	2203-000257	C-CER,CHIP	10nF,10%,50V,X7R,TP,1608	
C836	2203-000257	C-CER,CHIP	10nF,10%,50V,X7R,TP,1608	
C837	2203-000257	C-CER,CHIP	10nF,10%,50V,X7R,TP,1608	
C838	2203-000257	C-CER,CHIP	10nF,10%,50V,X7R,TP,1608	
C839	2203-000257	C-CER,CHIP	10nF,10%,50V,X7R,TP,1608	
C840	2203-000257	C-CER,CHIP	10nF,10%,50V,X7R,TP,1608	
C841	2203-000257	C-CER,CHIP	10nF,10%,50V,X7R,TP,1608	
C842	2203-000257	C-CER,CHIP	10nF,10%,50V,X7R,TP,1608	
C843	2203-000257	C-CER,CHIP	10nF,10%,50V,X7R,TP,1608	
C844	2203-000257	C-CER,CHIP	10nF,10%,50V,X7R,TP,1608	
C845	2203-001071	C-CER,CHIP	0.056NF,5%,50V,COG,TP,1608	
C846	2203-005005	C-CER,CHIP	100nF,10%,16V,X7R,TP,1608	
C847	2203-005005	C-CER,CHIP	100nF,10%,16V,X7R,TP,1608	
C848	2203-005005	C-CER,CHIP	100nF,10%,16V,X7R,TP,1608	
C853	2203-000998	C-CER,CHIP	0.047NF,5%,50V,COG,TP,1608	
C854	2203-000998	C-CER,CHIP	0.047NF,5%,50V,COG,TP,1608	
C855	2203-000998	C-CER,CHIP	0.047NF,5%,50V,COG,TP,1608	
C908	2402-000176	C-AL,SMD	10uF,20%,16V,GP,TP,4.3x4.3x5.4	
C909	2203-000189	C-CER,CHIP	100nF,+80-20%,25V,Y5V,TP,1608,	
C910	2203-000552	C-CER,CHIP	0.02NF,5%,50V,COG,TP,1608	
C911	2203-000552	C-CER,CHIP	0.02NF,5%,50V,COG,TP,1608	
C913	2402-000108	C-AL,SMD	10uF,20%,16V,WT,TP,4.3x4.3x5.4	
C914	2402-000176	C-AL,SMD	10uF,20%,16V,GP,TP,4.3x4.3x5.4	
C915	2402-000173	C-AL,SMD	4.7uF,20%,35V,GP,TP,4.3x4.3x5.	
CI55	0202-001162	SOLDER-CREAM	RMA-20-21L,S63,-,SN63/PB36.6/AGO.4,FLUX9.5%	SNA
CN505	3711-003161	CONNECTOR-HEADER	BOX,20P,1R,1.25MM,SMD-A,SN,BEG	
CN804	3711-002049	CONNECTOR-HEADER	BOX,6P,1R,1.25mm,SMD-A,SN	
CN805	3711-002052	CONNECTOR-HEADER	BOX,15P,1R,1.25mm,SMD-A,SN	SNA
CN806	3711-003938	CONNECTOR-HEADER	3WALL,15P,1R,1.25mm,SMD-S,SN	SNA
CN807	3711-002049	CONNECTOR-HEADER	BOX,6P,1R,1.25mm,SMD-A,SN	
D101	0407-000123	DIODE-ARRAY	DAN202K,80V,100MA,CA2-3,SOT-23,TP	
D301	0403-000579	DIODE-ZENER	BZX84C5V1,5.1V,5%,200mW,SOT-23	
D302	0403-000579	DIODE-ZENER	BZX84C5V1,5.1V,5%,200mW,SOT-23	
D303	0407-000123	DIODE-ARRAY	DAN202K,80V,100MA,CA2-3,SOT-23,TP	
D304	0403-000579	DIODE-ZENER	BZX84C5V1,5.1V,5%,200mW,SOT-23	
D305	0403-000579	DIODE-ZENER	BZX84C5V1,5.1V,5%,200mW,SOT-23	
D501	0403-000579	DIODE-ZENER	BZX84C5V1,5.1V,5%,200mW,SOT-23	
D502	0401-001056	DIODE-SWITCHING	MMBD4148SE,75V,200MA,SOT-23,TP	
D510	0401-001056	DIODE-SWITCHING	MMBD4148SE,75V,200MA,SOT-23,TP	
D601	0404-001166	DIODE-SCHOTTKY	MBRM130LT3,30V,1000MA,DO-216AA,TP	
D602	0402-000553	DIODE-RECTIFIER	SS24,40V,2.0A,DO-214AA	
D603	0402-000553	DIODE-RECTIFIER	SS24,40V,2.0A,DO-214AA	
D604	0404-001084	DIODE-SCHOTTKY	BAT54A,30V,200MA,SOT-23,TP	
D605	0404-001084	DIODE-SCHOTTKY	BAT54A,30V,200MA,SOT-23,TP	
D606	0402-000553	DIODE-RECTIFIER	SS24,40V,2.0A,DO-214AA	
D607	0402-000553	DIODE-RECTIFIER	SS24,40V,2.0A,DO-214AA	
D701	0403-001435	DIODE-ZENER	QZX363C5V6,5.32-5.88,200MW,SOT-363,TP	
D702	0401-001056	DIODE-SWITCHING	MMBD4148SE,75V,200MA,SOT-23,TP	
D703	0403-001052	DIODE-ZENER	RD8.2MB,8.2V,7.7-8.64V,200mW,S	
D704	0403-001052	DIODE-ZENER	RD8.2MB,8.2V,7.7-8.64V,200mW,S	
D705	0403-001282	DIODE-ZENER	BZT52-C15,13.8-15.6,410MW,SOD-123,TP	
D706	0403-001052	DIODE-ZENER	RD8.2MB,8.2V,7.7-8.64V,200mW,S	
D707	0403-001052	DIODE-ZENER	RD8.2MB,8.2V,7.7-8.64V,200mW,S	
D806	0403-001052	DIODE-ZENER	RD8.2MB,8.2V,7.7-8.64V,200mW,S	
D807	0403-001052	DIODE-ZENER	RD8.2MB,8.2V,7.7-8.64V,200mW,S	
D808	0403-001052	DIODE-ZENER	RD8.2MB,8.2V,7.7-8.64V,200mW,S	
D809	0403-001052	DIODE-ZENER	RD8.2MB,8.2V,7.7-8.64V,200mW,S	

Loc. No.	Code No.	Description	Specification	Remarks
D816	0403-001052	DIODE-ZENER	RD8.2MB,8.2V,7.7-8.64V,200mW,S	
D817	0403-001052	DIODE-ZENER	RD8.2MB,8.2V,7.7-8.64V,200mW,S	
D818	0403-001052	DIODE-ZENER	RD8.2MB,8.2V,7.7-8.64V,200mW,S	
D819	0403-001052	DIODE-ZENER	RD8.2MB,8.2V,7.7-8.64V,200mW,S	
D820	0403-001052	DIODE-ZENER	RD8.2MB,8.2V,7.7-8.64V,200mW,S	
D821	0403-001052	DIODE-ZENER	RD8.2MB,8.2V,7.7-8.64V,200mW,S	
D822	0403-001052	DIODE-ZENER	RD8.2MB,8.2V,7.7-8.64V,200mW,S	
D823	0403-001052	DIODE-ZENER	RD8.2MB,8.2V,7.7-8.64V,200mW,S	
D824	0403-001052	DIODE-ZENER	RD8.2MB,8.2V,7.7-8.64V,200mW,S	
D825	0403-001052	DIODE-ZENER	RD8.2MB,8.2V,7.7-8.64V,200mW,S	
D826	0403-001052	DIODE-ZENER	RD8.2MB,8.2V,7.7-8.64V,200mW,S	
D827	0403-001052	DIODE-ZENER	RD8.2MB,8.2V,7.7-8.64V,200mW,S	
D828	0403-001052	DIODE-ZENER	RD8.2MB,8.2V,7.7-8.64V,200mW,S	
D832	0401-001056	DIODE-SWITCHING	MMBD4148SE,75V,200MA,SOT-23,TP	
D833	0401-001056	DIODE-SWITCHING	MMBD4148SE,75V,200MA,SOT-23,TP	
D834	0401-001056	DIODE-SWITCHING	MMBD4148SE,75V,200MA,SOT-23,TP	
D835	0401-001056	DIODE-SWITCHING	MMBD4148SE,75V,200MA,SOT-23,TP	
D837	0403-000579	DIODE-ZENER	BZX84C5V1.5.1V,5%,200mW,SOT-23	
D838	0403-000579	DIODE-ZENER	BZX84C5V1.5.1V,5%,200mW,SOT-23	
D839	0403-001435	DIODE-ZENER	QZX363C5V6,5.32-5.88,200MW,SOT-363,TP	
D901	0407-000123	DIODE-ARRAY	DAN202K,80V,100MA,CA2-3,SOT-23,TP	
FT101	2901-001114	FILTER-EMI SMD	25VDC,2.0ADC,-,100nF,3.2x1.6x1	
FT171	2901-001114	FILTER-EMI SMD	25VDC,2.0ADC,-,100nF,3.2x1.6x1	
FT501	2901-001114	FILTER-EMI SMD	25VDC,2.0ADC,-,100nF,3.2x1.6x1	
FT502	2901-001114	FILTER-EMI SMD	25VDC,2.0ADC,-,100nF,3.2x1.6x1	
FT503	2901-001114	FILTER-EMI SMD	25VDC,2.0ADC,-,100nF,3.2x1.6x1	
FT504	2901-001114	FILTER-EMI SMD	25VDC,2.0ADC,-,100nF,3.2x1.6x1	
FT505	3301-001605	BEAD-SMD	3600HM,2.0X1.2X1.2MM,100MA,TP,FERRITE,0.50HM	SNA
FT506	3301-001605	BEAD-SMD	3600HM,2.0X1.2X1.2MM,100MA,TP,FERRITE,0.50HM	SNA
FT507	3301-001605	BEAD-SMD	3600HM,2.0X1.2X1.2MM,100MA,TP,FERRITE,0.50HM	SNA
FT508	3301-001605	BEAD-SMD	3600HM,2.0X1.2X1.2MM,100MA,TP,FERRITE,0.50HM	SNA
FT509	3301-001605	BEAD-SMD	3600HM,2.0X1.2X1.2MM,100MA,TP,FERRITE,0.50HM	SNA
FT901	1203-001824	IC-VOL. DETECTOR	7042,SOT-89,3P,-,PLASTIC,4.05V/4.35V,500MW,-30TO+75C,20MA,-,TP	
IC012	1001-001109	IC-ANALOG SWITCH	FST3125M,BUS SWITCH & CMOS,SOIC,17P,150MIL,QUAD,7V,-40TO+85C,PLASTIC,-4.00HM,5	
IC101	1002-001365	IC-A/D CONVERTER	MST9883A-110,24BIT,8X3,LQFP,44P,14X14MM,+0.5(LSB),TR,-,PLASTIC,3.3V,-20TO+80C,-	
IC104	0801-002267	IC-CMOS LOGIC	74LCX14,-,SOIC,14P,150MIL,-,TP,-,-,3.6V,-40TO+85C,-,5.5V,-,24MA	
IC105	1103-000129	IC-EEPROM	24C02,256x8BIT,SOP,8P,150MIL,1	
IC106	1203-002067	IC-POSI.FIXED REG.	3330,SOT-23,6P,65MIL,PLASTIC,3.284/3.316V,-,40to+125C,200mA,-,TP	
IC107	1001-001177	IC-VIDEO SWITCH	TEA6425D,VIDEO SWITCH,SOIC,20P,300MIL,-,8.8V,0TO+70C,PLASTIC,-,-,-,2UA,ST,-	
IC108	1001-001082	IC-VIDEO SWITCH	BA7657F,-,SOP,24P,300MIL,SINGL	
IC201	1204-001926	IC-VIDEO PROCESS	VPC3230D-C5,PQFP,80P,-,PLASTIC,6V,-,0 TO 65C,TP,VPC3230D-C5	
IC301_SOCKET	3704-000249	SOCKET-IC	32P,PLCC,SN,1.27mm	
IC302	1204-001912	IC-DECODER	SDA5550M,P-MQFP,100P,-,PLASTIC,3.3V,1.5W,0TO+70C,TR,-	
IC303	1203-001212	IC-VOL. DETECTOR	7029,SOT-89,3P,-,PLASTIC,-,500	
IC304	1103-000129	IC-EEPROM	24C02,256x8BIT,SOP,8P,150MIL,1	
IC305	1203-002945	IC-POSI.FIXED REG.	AP1117E25A,SOT-223,3P,6.5X3.5MM,PLASTIC,2.45/2.55V,-,0 TO+150C,1A,1.225/1.275,TP	
IC501	1105-001336	IC-DRAM	4S643232,512Kx32x4Bt,TSOP,86P,400MIL,60ns,3.3V,10%,PLASTIC,0to+70C,2mA,CMOS,TP	
IC502	1105-001336	IC-DRAM	4S643232,512Kx32x4Bt,TSOP,86P,400MIL,60ns,3.3V,10%,PLASTIC,0to+70C,2mA,CMOS,TP	
IC503	1205-001740	IC-TRANSMITTER	DS90C385,TSOP,56P,240MIL,PLASTIC,4V,1.63W,-10 TO +70C,ST,FPD LINK-85MHZ(LVDS)	
IC504	1203-001212	IC-VOL. DETECTOR	7029,SOT-89,3P,-,PLASTIC,-,500	
IC505	0801-002396	IC-CMOS LOGIC	74LCX74,D FLIP FLOP,SOP,14,150MIL,DUAL,TP,2.0/3.6V	
IC507	1103-001147	IC-EEPROM	24256,256KBIT,SOP,8P,150MIL,-,3V,10%,PLASTIC,-40TO+125C,2UA,CMOS,TP	
IC512	2011-000585	R-NET	470HM,5%,1/16W,L,CHIP,8P,TP	
IC513	2011-000585	R-NET	470HM,5%,1/16W,L,CHIP,8P,TP	
IC565	1003-001559	IC-LCD CONTROLLER	PW565,PBGA,365P,24X24MM,-,22/57,TR,PLASTIC,3.3V,0TO+70C,-,2.4/0.4,MASS PRODUCT	
IC601	1203-000404	IC-DC/DC CONVERTER	34063,SOP,8P,150MIL,PLASTIC,1.0/1.3V,-,0TO+70C,4.0MA,-,ST	
IC602	1203-001448	IC-SWITCH VOL.REG	2596,TO-263,5P,-,PLASTIC,4.750/5.250V,-,40TO+125C,3A,-,ST	
IC603	1203-001293	IC-POSI.FIXED REG.	033,TO-252,3P,6.5MIL,PLASTIC,3	
IC604	1203-001009	IC-SWITCH REG.	3172,SOP,8P,244MIL,PLASTIC,1.8	
IC605	0505-001170	FET-SILICON	SI9933ADY-T1,P,-,20V,3.4A,0.06ohm,2W,SO-8	
IC606	1203-002889	IC-DC/DC CONVERTER	AP1501-K5A,T0263-5L,3P,10.54x9.65mm,PLASTIC,1.18/1.28V,-,40to+125C,3A,-,TP	
IC607	1203-001816	IC-POSI.FIXED REG.	78M08,TO-252,3P,-,PLASTIC,7.7/8.3V,1.0W,-40TO+85C,0.5A,-,TP	

Loc. No.	Code No.	Description	Specification	Remarks
IC609	0505-001556	FET-SILICON	-,N,30V,7.5A,0.0250HM,2.5W,SO-8	
IC610	1203-002486	IC-PWM CONTROLLER	ISL6225CA-T,SSOP,28P,153MIL,-,0.9/5.5V,-,10TO+125C,-,0.9V,TP	
IC611	0505-001556	FET-SILICON	-,N,30V,7.5A,0.0250HM,2.5W,SO-8	
IC701	1201-001983	IC-AUDIO AMP	TPA3002D2P4P,HTOP,48P,7X7MM,-,PLASTIC,20V,2.7W,-,40TO+85C,-,1VUS,-,10MV,TR	
IC702	1201-001495	IC-AUDIO AMP	7050,SOP,8P,150MIL,DUAL,26DB,PLASTIC,6V,0.25W,-,40DB,-,20NA,-	
IC703	1204-002128	IC-SOUND PROCESSOR	MSP3410G-QA-C12,POFP,80P,20X14MM,PLASTIC,9V,860MW,-,0TO+70C,TR,-	
L151	2703-001778	INDUCTOR-SMD	3.3uH,20%,3225	
L301	2703-000412	INDUCTOR-SMD	8.2uH,5%,3225	
L601	BN27-00010A	COIL CHOKE	-.NK17NS,100uH,10%,-,0.78V MAX,6A,DR5.8X4.5MM,59.5TS,6.0X5.2X4.5MM,1.8MM,IUEW 0.	
L602	2703-000398	INDUCTOR-SMD	10uH,10%,3225	
L603	BN27-20001A	COIL-CHOKE	-.53.0UH,20%,DR10*5,-,-,-,0.18ohm,-,-,-,TRAY	
L604	BH27-00120A	COIL CHOKE	SB1260,IB10L0,7uH,15%,-,0.048V MAX,1.5A,DR10X5,8.5T,12.1X12.1X6.89MM,2UEW 0.35	
L605	BH27-00120A	COIL CHOKE	SB1260,IB10L0,7uH,15%,-,0.048V MAX,1.5A,DR10X5,8.5T,12.1X12.1X6.89MM,2UEW 0.35	
L606	2703-000398	INDUCTOR-SMD	10uH,10%,3225	
L607	BN27-00002A	COIL-CHOKE(SMD)	47uH,47uH,20%,12*12*8mm,22.5Ts,SMD,-,-,0.75ohm,-,-,-,TP	
L701	BN27-00017A	COIL CHOKE-SMD	PO5845-330,LT17N2,33uH,10%,0.3ohm,1A,DR5845,35.5Ts,6*5.2*4.5,1.5mm,TP	
L702	BN27-00017A	COIL CHOKE-SMD	PO5845-330,LT17N2,33uH,10%,0.3ohm,1A,DR5845,35.5Ts,6*5.2*4.5,1.5mm,TP	
L703	BN27-00017A	COIL CHOKE-SMD	PO5845-330,LT17N2,33uH,10%,0.3ohm,1A,DR5845,35.5Ts,6*5.2*4.5,1.5mm,TP	
L704	BN27-00017A	COIL CHOKE-SMD	PO5845-330,LT17N2,33uH,10%,0.3ohm,1A,DR5845,35.5Ts,6*5.2*4.5,1.5mm,TP	
L705	2703-001778	INDUCTOR-SMD	3.3uH,20%,3225	
L706	2703-001778	INDUCTOR-SMD	3.3uH,20%,3225	
L707	2703-001778	INDUCTOR-SMD	3.3uH,20%,3225	
L801	2703-001778	INDUCTOR-SMD	3.3uH,20%,3225	
L802	2703-001778	INDUCTOR-SMD	3.3uH,20%,3225	
L804	2703-001778	INDUCTOR-SMD	3.3uH,20%,3225	
L805	2703-000398	INDUCTOR-SMD	10uH,10%,3225	
L806	2703-000398	INDUCTOR-SMD	10uH,10%,3225	
L807	3301-001145	BEAD-SMD	4.5x1.6x1.6mm,-,-	SNA
L808	3301-001145	BEAD-SMD	4.5x1.6x1.6mm,-,-	SNA
L810	2703-001778	INDUCTOR-SMD	3.3uH,20%,3225	
L811	2703-001778	INDUCTOR-SMD	3.3uH,20%,3225	
L812	2703-001334	INDUCTOR-SMD	1.5uH,10%,2012	
L813	2703-001334	INDUCTOR-SMD	1.5uH,10%,2012	
L814	2703-001334	INDUCTOR-SMD	1.5uH,10%,2012	
L815	2703-001778	INDUCTOR-SMD	3.3uH,20%,3225	
L816	2703-001778	INDUCTOR-SMD	3.3uH,20%,3225	
L817	2703-001778	INDUCTOR-SMD	3.3uH,20%,3225	
L818	2703-001778	INDUCTOR-SMD	3.3uH,20%,3225	
L819	2703-001778	INDUCTOR-SMD	3.3uH,20%,3225	
L820	2703-001778	INDUCTOR-SMD	3.3uH,20%,3225	
L821	2703-001778	INDUCTOR-SMD	3.3uH,20%,3225	
MP1.0	BN41-00318A	PCB MAIN	VICTORIA,FR4,4L,1.0,1.6T,240*170*1.6,VR17E0	SNA
Q101	0505-000110	FET-SILICON	2N7002,N,60V,115mA,7.5ohm,0.3W,SOT-23	
Q102	0505-000110	FET-SILICON	2N7002,N,60V,115mA,7.5ohm,0.3W,SOT-23	
Q177	0501-002080	TR-SMALL SIGNAL	2SC2412K,NPN,200mW,SC-59,TP,120-270	
Q178	0501-002080	TR-SMALL SIGNAL	2SC2412K,NPN,200mW,SC-59,TP,120-270	
Q301	0501-000342	TR-SMALL SIGNAL	KSC1623-Y,NPN,200mW,SOT-23,TP,135-270	
Q502	0505-000110	FET-SILICON	2N7002,N,60V,115mA,7.5ohm,0.3W,SOT-23	
Q503	0505-000110	FET-SILICON	2N7002,N,60V,115mA,7.5ohm,0.3W,SOT-23	
Q601	0501-002080	TR-SMALL SIGNAL	2SC2412K,NPN,200mW,SC-59,TP,120-270	
Q602	0501-002080	TR-SMALL SIGNAL	2SC2412K,NPN,200mW,SC-59,TP,120-270	
Q603	0501-002080	TR-SMALL SIGNAL	2SC2412K,NPN,200mW,SC-59,TP,120-270	
Q701	0501-000342	TR-SMALL SIGNAL	KSC1623-Y,NPN,200mW,SOT-23,TP,135-270	
Q703	0501-002080	TR-SMALL SIGNAL	2SC2412K,NPN,200mW,SC-59,TP,120-270	
Q801	0501-002080	TR-SMALL SIGNAL	2SC2412K,NPN,200mW,SC-59,TP,120-270	
Q802	0501-002080	TR-SMALL SIGNAL	2SC2412K,NPN,200mW,SC-59,TP,120-270	
Q901	0501-002080	TR-SMALL SIGNAL	2SC2412K,NPN,200mW,SC-59,TP,120-270	
R100	2007-001164	R-CHIP	75ohm,1%,1/10W,TP,1608	
R101	2007-000133	R-CHIP	330Kohm,5%,1/10W,TP,1608	
R102	2007-000102	R-CHIP	100Kohm,5%,1/10W,TP,1608	
R103	2007-000082	R-CHIP	3.3Kohm,5%,1/10W,TP,1608	
R107	2007-000077	R-CHIP	470ohm,5%,1/10W,TP,1608	

Loc. No.	Code No.	Description	Specification	Remarks
R108	2007-000077	R-CHIP	470ohm,5%,1/10W,TP,1608	
R109	2007-000077	R-CHIP	470ohm,5%,1/10W,TP,1608	
R110	2007-000077	R-CHIP	470ohm,5%,1/10W,TP,1608	
R111	2007-000076	R-CHIP	330ohm,5%,1/10W,TP,1608	
R112	2007-000076	R-CHIP	330ohm,5%,1/10W,TP,1608	
R113	2007-000076	R-CHIP	330ohm,5%,1/10W,TP,1608	
R114	2007-000076	R-CHIP	330ohm,5%,1/10W,TP,1608	
R115	2007-001167	R-CHIP	75ohm,5%,1/10W,TP,1608	
R125	2007-000074	R-CHIP	100ohm,5%,1/10W,TP,1608	
R126	2007-000074	R-CHIP	100ohm,5%,1/10W,TP,1608	
R127	2007-000074	R-CHIP	100ohm,5%,1/10W,TP,1608	
R128	2007-000074	R-CHIP	100ohm,5%,1/10W,TP,1608	
R129	2007-000074	R-CHIP	100ohm,5%,1/10W,TP,1608	
R131	2007-000090	R-CHIP	10Kohm,5%,1/10W,TP,1608	
R132	2007-000090	R-CHIP	10Kohm,5%,1/10W,TP,1608	
R134	2007-000074	R-CHIP	100ohm,5%,1/10W,TP,1608	
R137	2007-000074	R-CHIP	100ohm,5%,1/10W,TP,1608	
R151	2007-000074	R-CHIP	100ohm,5%,1/10W,TP,1608	
R152	2007-000074	R-CHIP	100ohm,5%,1/10W,TP,1608	
R153	2007-000084	R-CHIP	4.7Kohm,5%,1/10W,TP,1608	
R154	2007-000084	R-CHIP	4.7Kohm,5%,1/10W,TP,1608	
R155	2007-000084	R-CHIP	4.7Kohm,5%,1/10W,TP,1608	
R156	2007-000084	R-CHIP	4.7Kohm,5%,1/10W,TP,1608	
R157	2007-000084	R-CHIP	4.7Kohm,5%,1/10W,TP,1608	
R158	2007-000091	R-CHIP	12Kohm,5%,1/10W,TP,1608	
R159	2007-000071	R-CHIP	22ohm,5%,1/10W,TP,1608	
R161	2007-000094	R-CHIP	22Kohm,5%,1/10W,TP,1608	
R162	2007-000078	R-CHIP	1Kohm,5%,1/10W,TP,1608	
R163	2007-001167	R-CHIP	75ohm,5%,1/10W,TP,1608	
R164	2007-000091	R-CHIP	12Kohm,5%,1/10W,TP,1608	
R165	2007-000071	R-CHIP	22ohm,5%,1/10W,TP,1608	
R166	2007-000094	R-CHIP	22Kohm,5%,1/10W,TP,1608	
R167	2007-001167	R-CHIP	75ohm,5%,1/10W,TP,1608	
R168	2007-000078	R-CHIP	1Kohm,5%,1/10W,TP,1608	
R171	2007-000074	R-CHIP	100ohm,5%,1/10W,TP,1608	
R173	2007-000074	R-CHIP	100ohm,5%,1/10W,TP,1608	
R174	2007-000074	R-CHIP	100ohm,5%,1/10W,TP,1608	
R175	2007-000074	R-CHIP	100ohm,5%,1/10W,TP,1608	
R177	2007-000090	R-CHIP	10Kohm,5%,1/10W,TP,1608	
R178	2007-000078	R-CHIP	1Kohm,5%,1/10W,TP,1608	
R179	2007-000074	R-CHIP	100ohm,5%,1/10W,TP,1608	
R181	2007-000074	R-CHIP	100ohm,5%,1/10W,TP,1608	
R182	2007-000074	R-CHIP	100ohm,5%,1/10W,TP,1608	
R183	2007-000074	R-CHIP	100ohm,5%,1/10W,TP,1608	
R184	2007-000113	R-CHIP	33ohm,5%,1/10W,TP,1608	
R185	2007-000113	R-CHIP	33ohm,5%,1/10W,TP,1608	
R186	2007-000113	R-CHIP	33ohm,5%,1/10W,TP,1608	
R201	2007-001164	R-CHIP	75ohm,1%,1/10W,TP,1608	
R202	2007-000070	R-CHIP	0ohm,5%,1/10W,TP,1608	
R203	2007-000071	R-CHIP	22ohm,5%,1/10W,TP,1608	
R204	2007-000071	R-CHIP	22ohm,5%,1/10W,TP,1608	
R205	2007-000074	R-CHIP	100ohm,5%,1/10W,TP,1608	
R206	2007-000071	R-CHIP	22ohm,5%,1/10W,TP,1608	
R207	2007-000071	R-CHIP	22ohm,5%,1/10W,TP,1608	
R208	2007-000071	R-CHIP	22ohm,5%,1/10W,TP,1608	
R216	2007-000074	R-CHIP	100ohm,5%,1/10W,TP,1608	
R217	2007-000074	R-CHIP	100ohm,5%,1/10W,TP,1608	
R218	2007-001167	R-CHIP	75ohm,5%,1/10W,TP,1608	
R225	2007-001167	R-CHIP	75ohm,5%,1/10W,TP,1608	
R226	2007-001167	R-CHIP	75ohm,5%,1/10W,TP,1608	
R227	2007-001167	R-CHIP	75ohm,5%,1/10W,TP,1608	
R229	2007-000074	R-CHIP	100ohm,5%,1/10W,TP,1608	

7 Electrical Parts List

Loc. No.	Code No.	Description	Specification	Remarks
R230	2007-000090	R-CHIP	10Kohm,5%,1/10W,TP,1608	
R235	2007-000070	R-CHIP	0ohm,5%,1/10W,TP,1608	
R301	2007-000097	R-CHIP	47Kohm,5%,1/10W,TP,1608	
R302	2007-000125	R-CHIP	3.9Kohm,5%,1/10W,TP,1608	
R303	2007-000094	R-CHIP	22Kohm,5%,1/10W,TP,1608	
R304	2007-000074	R-CHIP	100ohm,5%,1/10W,TP,1608	
R305	2007-000077	R-CHIP	470ohm,5%,1/10W,TP,1608	
R306	2007-000076	R-CHIP	330ohm,5%,1/10W,TP,1608	
R307	2007-000090	R-CHIP	10Kohm,5%,1/10W,TP,1608	
R310	2007-000070	R-CHIP	0ohm,5%,1/10W,TP,1608	
R311	2007-000090	R-CHIP	10Kohm,5%,1/10W,TP,1608	
R315	2007-000239	R-CHIP	1.5Kohm,1%,1/10W,TP,1608	
R316	2007-000239	R-CHIP	1.5Kohm,1%,1/10W,TP,1608	
R317	2007-000078	R-CHIP	1Kohm,5%,1/10W,TP,1608	
R318	2007-000078	R-CHIP	1Kohm,5%,1/10W,TP,1608	
R319	2007-000078	R-CHIP	1Kohm,5%,1/10W,TP,1608	
R320	2007-000512	R-CHIP	2.4Kohm,5%,1/10W,TP,1608	
R321	2007-000084	R-CHIP	4.7Kohm,5%,1/10W,TP,1608	
R322	2007-000084	R-CHIP	4.7Kohm,5%,1/10W,TP,1608	
R323	2007-000084	R-CHIP	4.7Kohm,5%,1/10W,TP,1608	
R324	2007-000078	R-CHIP	1Kohm,5%,1/10W,TP,1608	
R326	2007-000074	R-CHIP	100ohm,5%,1/10W,TP,1608	
R327	2007-000074	R-CHIP	100ohm,5%,1/10W,TP,1608	
R328	2007-000074	R-CHIP	100ohm,5%,1/10W,TP,1608	
R329	2007-000074	R-CHIP	100ohm,5%,1/10W,TP,1608	
R348	2007-000074	R-CHIP	100ohm,5%,1/10W,TP,1608	
R349	2007-000074	R-CHIP	100ohm,5%,1/10W,TP,1608	
R351	2007-000120	R-CHIP	680ohm,5%,1/10W,TP,1608	
R352	2007-000084	R-CHIP	4.7Kohm,5%,1/10W,TP,1608	
R353	2007-001167	R-CHIP	75ohm,5%,1/10W,TP,1608	
R354	2007-000074	R-CHIP	100ohm,5%,1/10W,TP,1608	
R503	2007-000070	R-CHIP	0ohm,5%,1/10W,TP,1608	
R504	2007-000070	R-CHIP	0ohm,5%,1/10W,TP,1608	
R505	2007-000070	R-CHIP	0ohm,5%,1/10W,TP,1608	
R506	2007-000070	R-CHIP	0ohm,5%,1/10W,TP,1608	
R507	2007-000070	R-CHIP	0ohm,5%,1/10W,TP,1608	
R508	2007-000070	R-CHIP	0ohm,5%,1/10W,TP,1608	
R509	2007-000084	R-CHIP	4.7Kohm,5%,1/10W,TP,1608	
R510	2007-000070	R-CHIP	0ohm,5%,1/10W,TP,1608	
R511	2007-000070	R-CHIP	0ohm,5%,1/10W,TP,1608	
R512	2007-000084	R-CHIP	4.7Kohm,5%,1/10W,TP,1608	
R513	2007-000084	R-CHIP	4.7Kohm,5%,1/10W,TP,1608	
R514	2007-000078	R-CHIP	1Kohm,5%,1/10W,TP,1608	
R515	2007-000102	R-CHIP	100Kohm,5%,1/10W,TP,1608	
R516	2007-000097	R-CHIP	47Kohm,5%,1/10W,TP,1608	
R517	2007-000097	R-CHIP	47Kohm,5%,1/10W,TP,1608	
R518	2007-000070	R-CHIP	0ohm,5%,1/10W,TP,1608	
R519	2007-000070	R-CHIP	0ohm,5%,1/10W,TP,1608	
R520	2007-000070	R-CHIP	0ohm,5%,1/10W,TP,1608	
R521	2007-000070	R-CHIP	0ohm,5%,1/10W,TP,1608	
R522	2007-000070	R-CHIP	0ohm,5%,1/10W,TP,1608	
R523	2007-000070	R-CHIP	0ohm,5%,1/10W,TP,1608	
R524	2007-000070	R-CHIP	0ohm,5%,1/10W,TP,1608	
R525	2007-000070	R-CHIP	0ohm,5%,1/10W,TP,1608	
R526	2007-000070	R-CHIP	0ohm,5%,1/10W,TP,1608	
R527	2007-000070	R-CHIP	0ohm,5%,1/10W,TP,1608	
R528	2007-000084	R-CHIP	4.7Kohm,5%,1/10W,TP,1608	
R529	2007-000084	R-CHIP	4.7Kohm,5%,1/10W,TP,1608	
R530	2007-000084	R-CHIP	4.7Kohm,5%,1/10W,TP,1608	
R531	2007-000084	R-CHIP	4.7Kohm,5%,1/10W,TP,1608	
R532	2007-000070	R-CHIP	0ohm,5%,1/10W,TP,1608	
R533	2007-000070	R-CHIP	0ohm,5%,1/10W,TP,1608	

Loc. No.	Code No.	Description	Specification	Remarks
R534	2007-000070	R-CHIP	0ohm,5%,1/10W,TP,1608	
R535	2007-000070	R-CHIP	0ohm,5%,1/10W,TP,1608	
R536	2007-000070	R-CHIP	0ohm,5%,1/10W,TP,1608	
R537	2007-000070	R-CHIP	0ohm,5%,1/10W,TP,1608	
R538	2007-000082	R-CHIP	3.3Kohm,5%,1/10W,TP,1608	
R539	2007-000082	R-CHIP	3.3Kohm,5%,1/10W,TP,1608	
R540	2007-001164	R-CHIP	75ohm,1%,1/10W,TP,1608	
R541	2007-001164	R-CHIP	75ohm,1%,1/10W,TP,1608	
R542	2007-001164	R-CHIP	75ohm,1%,1/10W,TP,1608	
R543	2007-000608	R-CHIP	240ohm,5%,1/10W,TP,1608	
R545	2007-000074	R-CHIP	100ohm,5%,1/10W,TP,1608	
R546	2007-000074	R-CHIP	100ohm,5%,1/10W,TP,1608	
R547	2007-000074	R-CHIP	100ohm,5%,1/10W,TP,1608	
R548	2007-000074	R-CHIP	100ohm,5%,1/10W,TP,1608	
R549	2007-000090	R-CHIP	10Kohm,5%,1/10W,TP,1608	
R550	2007-000090	R-CHIP	10Kohm,5%,1/10W,TP,1608	
R551	2007-000078	R-CHIP	1Kohm,5%,1/10W,TP,1608	
R552	2007-000070	R-CHIP	0ohm,5%,1/10W,TP,1608	
R553	2007-000072	R-CHIP	47ohm,5%,1/10W,TP,1608	
R554	2007-000072	R-CHIP	47ohm,5%,1/10W,TP,1608	
R555	2007-000070	R-CHIP	0ohm,5%,1/10W,TP,1608	
R556	2007-000078	R-CHIP	1Kohm,5%,1/10W,TP,1608	
R557	2007-000070	R-CHIP	0ohm,5%,1/10W,TP,1608	
R558	2007-000072	R-CHIP	47ohm,5%,1/10W,TP,1608	
R559	2007-000072	R-CHIP	47ohm,5%,1/10W,TP,1608	
R560	2007-000082	R-CHIP	3.3Kohm,5%,1/10W,TP,1608	
R561	2007-000082	R-CHIP	3.3Kohm,5%,1/10W,TP,1608	
R562	2007-000072	R-CHIP	47ohm,5%,1/10W,TP,1608	
R563	2007-000078	R-CHIP	1Kohm,5%,1/10W,TP,1608	
R564	2007-000074	R-CHIP	100ohm,5%,1/10W,TP,1608	
R565	2007-000074	R-CHIP	100ohm,5%,1/10W,TP,1608	
R566	2007-000082	R-CHIP	3.3Kohm,5%,1/10W,TP,1608	
R567	2007-000082	R-CHIP	3.3Kohm,5%,1/10W,TP,1608	
R568	2007-000070	R-CHIP	0ohm,5%,1/10W,TP,1608	
R569	2007-000070	R-CHIP	0ohm,5%,1/10W,TP,1608	
R570	2007-000090	R-CHIP	10Kohm,5%,1/10W,TP,1608	
R571	2007-000090	R-CHIP	10Kohm,5%,1/10W,TP,1608	
R572	2007-000070	R-CHIP	0ohm,5%,1/10W,TP,1608	
R580	2007-000070	R-CHIP	0ohm,5%,1/10W,TP,1608	
R581	2007-000072	R-CHIP	47ohm,5%,1/10W,TP,1608	
R582	2007-000070	R-CHIP	0ohm,5%,1/10W,TP,1608	
R598	2007-000107	R-CHIP	470Kohm,5%,1/10W,TP,1608	
R601	2007-008433	R-CHIP	0.330HM,1%,1W,DA,TP,6432	
R602	2007-000084	R-CHIP	4.7Kohm,5%,1/10W,TP,1608	
R603	2007-000078	R-CHIP	1Kohm,5%,1/10W,TP,1608	
R604	2007-000083	R-CHIP	3Kohm,5%,1/10W,TP,1608	
R605	2007-000052	R-CHIP	10Kohm,1%,1/10W,TP,1608	
R606	2007-000084	R-CHIP	4.7Kohm,5%,1/10W,TP,1608	
R607	2007-000078	R-CHIP	1Kohm,5%,1/10W,TP,1608	
R608	2007-000129	R-CHIP	27Kohm,5%,1/10W,TP,1608	
R609	2007-000125	R-CHIP	3.9Kohm,5%,1/10W,TP,1608	
R610	2007-000122	R-CHIP	1.2Kohm,5%,1/10W,TP,1608	
R611	2007-000084	R-CHIP	4.7Kohm,5%,1/10W,TP,1608	
R612	2007-000090	R-CHIP	10Kohm,5%,1/10W,TP,1608	
R614	2007-000101	R-CHIP	82Kohm,5%,1/10W,TP,1608	
R615	2007-000102	R-CHIP	100Kohm,5%,1/10W,TP,1608	
R616	2007-000090	R-CHIP	10Kohm,5%,1/10W,TP,1608	
R617	2007-000090	R-CHIP	10Kohm,5%,1/10W,TP,1608	
R618	2007-000090	R-CHIP	10Kohm,5%,1/10W,TP,1608	
R619	2007-000084	R-CHIP	4.7Kohm,5%,1/10W,TP,1608	
R620	2007-000070	R-CHIP	0ohm,5%,1/10W,TP,1608	
R621	2007-000083	R-CHIP	3Kohm,5%,1/10W,TP,1608	

7 Electrical Parts List

Loc. No.	Code No.	Description	Specification	Remarks
R622	2007-000070	R-CHIP	0ohm,5%,1/10W,TP,1608	
R623	2007-000083	R-CHIP	3Kohm,5%,1/10W,TP,1608	
R624	2007-000052	R-CHIP	10Kohm,1%,1/10W,TP,1608	
R625	2007-000052	R-CHIP	10Kohm,1%,1/10W,TP,1608	
R626	2007-000100	R-CHIP	68Kohm,5%,1/10W,TP,1608	
R627	2007-000070	R-CHIP	0ohm,5%,1/10W,TP,1608	
R628	2007-000091	R-CHIP	12Kohm,5%,1/10W,TP,1608	
R629	2007-000091	R-CHIP	12Kohm,5%,1/10W,TP,1608	
R630	2007-000100	R-CHIP	68Kohm,5%,1/10W,TP,1608	
R631	2007-000070	R-CHIP	0ohm,5%,1/10W,TP,1608	
R632	2007-000091	R-CHIP	12Kohm,5%,1/10W,TP,1608	
R633	2007-000134	R-CHIP	33Kohm,5%,1/10W,TP,1608	
R634	2007-000078	R-CHIP	1Kohm,5%,1/10W,TP,1608	
R636	2007-000084	R-CHIP	4.7Kohm,5%,1/10W,TP,1608	
R637	2007-000093	R-CHIP	20Kohm,5%,1/10W,TP,1608	
R638	2007-000082	R-CHIP	3.3Kohm,5%,1/10W,TP,1608	
R639	2007-000090	R-CHIP	10Kohm,5%,1/10W,TP,1608	
R701	2007-000070	R-CHIP	0ohm,5%,1/10W,TP,1608	
R702	2007-000103	R-CHIP	120Kohm,5%,1/10W,TP,1608	
R703	2007-000070	R-CHIP	0ohm,5%,1/10W,TP,1608	
R704	2007-000070	R-CHIP	0ohm,5%,1/10W,TP,1608	
R705	2007-000103	R-CHIP	120Kohm,5%,1/10W,TP,1608	
R706	2007-000070	R-CHIP	0ohm,5%,1/10W,TP,1608	
R707	2007-000070	R-CHIP	0ohm,5%,1/10W,TP,1608	
R708	2007-000070	R-CHIP	0ohm,5%,1/10W,TP,1608	
R709	2007-000129	R-CHIP	27Kohm,5%,1/10W,TP,1608	
R710	2007-000091	R-CHIP	12Kohm,5%,1/10W,TP,1608	
R711	2007-000458	R-CHIP	18Kohm,5%,1/10W,TP,1608	
R712	2007-001167	R-CHIP	75ohm,5%,1/10W,TP,1608	
R713	2007-001167	R-CHIP	75ohm,5%,1/10W,TP,1608	
R714	2007-000078	R-CHIP	1Kohm,5%,1/10W,TP,1608	
R715	2007-000078	R-CHIP	1Kohm,5%,1/10W,TP,1608	
R716	2007-000881	R-CHIP	4.7ohm,5%,1/8W,TP,2012	
R717	2007-000881	R-CHIP	4.7ohm,5%,1/8W,TP,2012	
R718	2007-000090	R-CHIP	10Kohm,5%,1/10W,TP,1608	
R719	2007-000090	R-CHIP	10Kohm,5%,1/10W,TP,1608	
R720	2007-000093	R-CHIP	20Kohm,5%,1/10W,TP,1608	
R721	2007-000093	R-CHIP	20Kohm,5%,1/10W,TP,1608	
R722	2007-000074	R-CHIP	100ohm,5%,1/10W,TP,1608	
R723	2007-000074	R-CHIP	100ohm,5%,1/10W,TP,1608	
R724	2007-000084	R-CHIP	4.7Kohm,5%,1/10W,TP,1608	
R725	2007-000084	R-CHIP	4.7Kohm,5%,1/10W,TP,1608	
R728	2007-000084	R-CHIP	4.7Kohm,5%,1/10W,TP,1608	
R729	2007-000074	R-CHIP	100ohm,5%,1/10W,TP,1608	
R730	2007-000078	R-CHIP	1Kohm,5%,1/10W,TP,1608	
R731	2007-000074	R-CHIP	100ohm,5%,1/10W,TP,1608	
R732	2007-000074	R-CHIP	100ohm,5%,1/10W,TP,1608	
R733	2007-000074	R-CHIP	100ohm,5%,1/10W,TP,1608	
R734	2007-000078	R-CHIP	1Kohm,5%,1/10W,TP,1608	
R735	2007-000078	R-CHIP	1Kohm,5%,1/10W,TP,1608	
R736	2007-000078	R-CHIP	1Kohm,5%,1/10W,TP,1608	
R737	2007-000078	R-CHIP	1Kohm,5%,1/10W,TP,1608	
R738	2007-000078	R-CHIP	1Kohm,5%,1/10W,TP,1608	
R739	2007-000078	R-CHIP	1Kohm,5%,1/10W,TP,1608	
R740	2007-000078	R-CHIP	1Kohm,5%,1/10W,TP,1608	
R741	2007-000078	R-CHIP	1Kohm,5%,1/10W,TP,1608	
R750	2007-000090	R-CHIP	10Kohm,5%,1/10W,TP,1608	
R753	2007-000102	R-CHIP	100Kohm,5%,1/10W,TP,1608	
R760	2007-000099	R-CHIP	62Kohm,5%,1/10W,TP,1608	
R761	2007-000099	R-CHIP	62Kohm,5%,1/10W,TP,1608	
R762	2007-000070	R-CHIP	0ohm,5%,1/10W,TP,1608	
R765	2007-000070	R-CHIP	0ohm,5%,1/10W,TP,1608	



Loc. No.	Code No.	Description	Specification	Remarks
R766	2007-000070	R-CHIP	0ohm,5%,1/10W,TP,1608	
R791	2007-000074	R-CHIP	100ohm,5%,1/10W,TP,1608	
R792	2007-000074	R-CHIP	100ohm,5%,1/10W,TP,1608	
R793	2007-000074	R-CHIP	100ohm,5%,1/10W,TP,1608	
R794	2007-000074	R-CHIP	100ohm,5%,1/10W,TP,1608	
R811	2007-000074	R-CHIP	100ohm,5%,1/10W,TP,1608	
R812	2007-000074	R-CHIP	100ohm,5%,1/10W,TP,1608	
R813	2007-000074	R-CHIP	100ohm,5%,1/10W,TP,1608	
R814	2007-000074	R-CHIP	100ohm,5%,1/10W,TP,1608	
R815	2007-000074	R-CHIP	100ohm,5%,1/10W,TP,1608	
R816	2007-001164	R-CHIP	75ohm,1%,1/10W,TP,1608	
R817	2007-001164	R-CHIP	75ohm,1%,1/10W,TP,1608	
R818	2007-001164	R-CHIP	75ohm,1%,1/10W,TP,1608	
R819	2007-000078	R-CHIP	1Kohm,5%,1/10W,TP,1608	
R820	2007-000078	R-CHIP	1Kohm,5%,1/10W,TP,1608	
R825	2007-000084	R-CHIP	4.7Kohm,5%,1/10W,TP,1608	
R826	2007-000084	R-CHIP	4.7Kohm,5%,1/10W,TP,1608	
R827	2007-000097	R-CHIP	47Kohm,5%,1/10W,TP,1608	
R828	2007-007512	R-CHIP	43ohm,5%,1/10W,TP,1608	
R829	2007-000074	R-CHIP	100ohm,5%,1/10W,TP,1608	
R830	2007-000097	R-CHIP	47Kohm,5%,1/10W,TP,1608	
R831	2007-001167	R-CHIP	75ohm,5%,1/10W,TP,1608	
R832	2007-001167	R-CHIP	75ohm,5%,1/10W,TP,1608	
R833	2007-001167	R-CHIP	75ohm,5%,1/10W,TP,1608	
R834	2007-000074	R-CHIP	100ohm,5%,1/10W,TP,1608	
R835	2007-000074	R-CHIP	100ohm,5%,1/10W,TP,1608	
R844	2007-000097	R-CHIP	47Kohm,5%,1/10W,TP,1608	
R860	2007-001167	R-CHIP	75ohm,5%,1/10W,TP,1608	
R861	2007-001167	R-CHIP	75ohm,5%,1/10W,TP,1608	
R862	2007-000078	R-CHIP	1Kohm,5%,1/10W,TP,1608	
R863	2007-000078	R-CHIP	1Kohm,5%,1/10W,TP,1608	
R864	2007-000078	R-CHIP	1Kohm,5%,1/10W,TP,1608	
R865	2007-000078	R-CHIP	1Kohm,5%,1/10W,TP,1608	
R866	2007-000078	R-CHIP	1Kohm,5%,1/10W,TP,1608	
R867	2007-000078	R-CHIP	1Kohm,5%,1/10W,TP,1608	
R869	2007-001164	R-CHIP	75ohm,1%,1/10W,TP,1608	
R870	2007-001164	R-CHIP	75ohm,1%,1/10W,TP,1608	
R871	2007-000090	R-CHIP	10Kohm,5%,1/10W,TP,1608	
R872	2007-000090	R-CHIP	10Kohm,5%,1/10W,TP,1608	
R875	2007-000084	R-CHIP	4.7Kohm,5%,1/10W,TP,1608	
R878	2007-000084	R-CHIP	4.7Kohm,5%,1/10W,TP,1608	
R880	2007-000293	R-CHIP	100ohm,5%,1/4W,TP,3216	
R881	2007-000293	R-CHIP	100ohm,5%,1/4W,TP,3216	
R882	2007-000293	R-CHIP	100ohm,5%,1/4W,TP,3216	
R886	2007-000078	R-CHIP	1Kohm,5%,1/10W,TP,1608	
R887	2007-000074	R-CHIP	100ohm,5%,1/10W,TP,1608	
R888	2007-000074	R-CHIP	100ohm,5%,1/10W,TP,1608	
R914	2007-000084	R-CHIP	4.7Kohm,5%,1/10W,TP,1608	
R916	2007-000070	R-CHIP	0ohm,5%,1/10W,TP,1608	
R917	2007-000074	R-CHIP	100ohm,5%,1/10W,TP,1608	
R918	2007-000074	R-CHIP	100ohm,5%,1/10W,TP,1608	
R919	2007-000074	R-CHIP	100ohm,5%,1/10W,TP,1608	
R920	2007-000074	R-CHIP	100ohm,5%,1/10W,TP,1608	
R921	2007-000074	R-CHIP	100ohm,5%,1/10W,TP,1608	
R922	2007-000074	R-CHIP	100ohm,5%,1/10W,TP,1608	
R923	2007-000074	R-CHIP	100ohm,5%,1/10W,TP,1608	
R924	2007-000074	R-CHIP	100ohm,5%,1/10W,TP,1608	
R925	2007-000074	R-CHIP	100ohm,5%,1/10W,TP,1608	
R926	2007-000074	R-CHIP	100ohm,5%,1/10W,TP,1608	
R927	2007-000074	R-CHIP	100ohm,5%,1/10W,TP,1608	
R928	2007-000074	R-CHIP	100ohm,5%,1/10W,TP,1608	
R929	2007-000074	R-CHIP	100ohm,5%,1/10W,TP,1608	

7 Electrical Parts List

Loc. No.	Code No.	Description	Specification	Remarks
R930	2007-000074	R-CHIP	100ohm,5%,1/10W,TP,1608	
R931	2007-000074	R-CHIP	100ohm,5%,1/10W,TP,1608	
R932	2007-000074	R-CHIP	100ohm,5%,1/10W,TP,1608	
R933	2007-000074	R-CHIP	100ohm,5%,1/10W,TP,1608	
R934	2007-000074	R-CHIP	100ohm,5%,1/10W,TP,1608	
R935	2007-000074	R-CHIP	100ohm,5%,1/10W,TP,1608	
R936	2007-000074	R-CHIP	100ohm,5%,1/10W,TP,1608	
R937	2007-000078	R-CHIP	1Kohm,5%,1/10W,TP,1608	
R938	2007-000088	R-CHIP	7.5Kohm,5%,1/10W,TP,1608	
R939	2007-000078	R-CHIP	1Kohm,5%,1/10W,TP,1608	
R940	2007-000074	R-CHIP	100ohm,5%,1/10W,TP,1608	
R945	2007-000072	R-CHIP	47ohm,5%,1/10W,TP,1608	
R946	2007-000082	R-CHIP	3.3Kohm,5%,1/10W,TP,1608	
R947	2007-000072	R-CHIP	47ohm,5%,1/10W,TP,1608	
R948	2007-000084	R-CHIP	4.7Kohm,5%,1/10W,TP,1608	
R950	2007-000074	R-CHIP	100ohm,5%,1/10W,TP,1608	
R951	2007-000078	R-CHIP	1Kohm,5%,1/10W,TP,1608	
R952	2007-000078	R-CHIP	1Kohm,5%,1/10W,TP,1608	
R953	2007-000078	R-CHIP	1Kohm,5%,1/10W,TP,1608	
R964	2007-000090	R-CHIP	10Kohm,5%,1/10W,TP,1608	
R965	2007-000074	R-CHIP	100ohm,5%,1/10W,TP,1608	
R966	2007-000074	R-CHIP	100ohm,5%,1/10W,TP,1608	
R98	2007-001164	R-CHIP	75ohm,1%,1/10W,TP,1608	
R99	2007-001164	R-CHIP	75ohm,1%,1/10W,TP,1608	
RA101	2011-000585	R-NET	470HM,5%,1/16W,L,CHIP,8P,TP	
RA102	2011-000585	R-NET	470HM,5%,1/16W,L,CHIP,8P,TP	
RA103	2011-000585	R-NET	470HM,5%,1/16W,L,CHIP,8P,TP	
RA104	2011-000585	R-NET	470HM,5%,1/16W,L,CHIP,8P,TP	
RA105	2011-000585	R-NET	470HM,5%,1/16W,L,CHIP,8P,TP	
RA106	2011-000585	R-NET	470HM,5%,1/16W,L,CHIP,8P,TP	
RA107	2011-000585	R-NET	470HM,5%,1/16W,L,CHIP,8P,TP	
RA201	2011-000002	R-NET	220HM,5%,1/16W,L,CHIP,8P,TP,3216	
RA202	2011-000002	R-NET	220HM,5%,1/16W,L,CHIP,8P,TP,3216	
RA203	2011-000002	R-NET	220HM,5%,1/16W,L,CHIP,8P,TP,3216	
RA204	2011-000002	R-NET	220HM,5%,1/16W,L,CHIP,8P,TP,3216	
RA301	2011-000651	R-NET	100HM,5%,1/16W,L,CHIP,8P,TP,3216	
RA302	2011-000651	R-NET	100HM,5%,1/16W,L,CHIP,8P,TP,3216	
RA303	2011-000651	R-NET	100HM,5%,1/16W,L,CHIP,8P,TP,3216	
RA304	2011-000651	R-NET	100HM,5%,1/16W,L,CHIP,8P,TP,3216	
RA305	2011-000651	R-NET	100HM,5%,1/16W,L,CHIP,8P,TP,3216	
RA307	2011-000651	R-NET	100HM,5%,1/16W,L,CHIP,8P,TP,3216	
RA309	2011-000651	R-NET	100HM,5%,1/16W,L,CHIP,8P,TP,3216	
RA310	2011-000515	R-NET	4.7Kohm,5%,1/16W,L,CHIP,8P,TP	
RA501	2011-000002	R-NET	220HM,5%,1/16W,L,CHIP,8P,TP,3216	
RA502	2011-000002	R-NET	220HM,5%,1/16W,L,CHIP,8P,TP,3216	
RA503	2011-000585	R-NET	470HM,5%,1/16W,L,CHIP,8P,TP	
RA504	2011-000585	R-NET	470HM,5%,1/16W,L,CHIP,8P,TP	
RA505	2011-000585	R-NET	470HM,5%,1/16W,L,CHIP,8P,TP	
RA506	2011-000585	R-NET	470HM,5%,1/16W,L,CHIP,8P,TP	
RA507	2011-000585	R-NET	470HM,5%,1/16W,L,CHIP,8P,TP	
RA508	2011-000585	R-NET	470HM,5%,1/16W,L,CHIP,8P,TP	
RA509	2011-000585	R-NET	470HM,5%,1/16W,L,CHIP,8P,TP	
RA510	2011-000515	R-NET	4.7Kohm,5%,1/16W,L,CHIP,8P,TP	
RA511	2011-000515	R-NET	4.7Kohm,5%,1/16W,L,CHIP,8P,TP	
RA514	2011-000585	R-NET	470HM,5%,1/16W,L,CHIP,8P,TP	
RA515	2011-000585	R-NET	470HM,5%,1/16W,L,CHIP,8P,TP	
RA516	2011-000585	R-NET	470HM,5%,1/16W,L,CHIP,8P,TP	
RA517	2011-000585	R-NET	470HM,5%,1/16W,L,CHIP,8P,TP	
RA518	2011-000585	R-NET	470HM,5%,1/16W,L,CHIP,8P,TP	
RA519	2011-000585	R-NET	470HM,5%,1/16W,L,CHIP,8P,TP	
RA520	2011-000585	R-NET	470HM,5%,1/16W,L,CHIP,8P,TP	
RA521	2011-001001	R-NET	00HM,5%,1/16W,L,CHIP,8P,TP	

Loc. No.	Code No.	Description	Specification	Remarks
RA522	2011-001001	R-NET	00HM,5%,1/16W,L,CHIP,8P,TP	
RA523	2011-001001	R-NET	00HM,5%,1/16W,L,CHIP,8P,TP	
RA524	2011-001001	R-NET	00HM,5%,1/16W,L,CHIP,8P,TP	
RA531	2011-001001	R-NET	00HM,5%,1/16W,L,CHIP,8P,TP	
RA532	2011-001001	R-NET	00HM,5%,1/16W,L,CHIP,8P,TP	
RA533	2011-001001	R-NET	00HM,5%,1/16W,L,CHIP,8P,TP	
RA534	2011-001001	R-NET	00HM,5%,1/16W,L,CHIP,8P,TP	
RA535	2011-001001	R-NET	00HM,5%,1/16W,L,CHIP,8P,TP	
RA536	2011-001001	R-NET	00HM,5%,1/16W,L,CHIP,8P,TP	
RA537	2011-001001	R-NET	00HM,5%,1/16W,L,CHIP,8P,TP	
RA538	2011-001001	R-NET	00HM,5%,1/16W,L,CHIP,8P,TP	
RA539	2011-001001	R-NET	00HM,5%,1/16W,L,CHIP,8P,TP	
RA541	2011-001001	R-NET	00HM,5%,1/16W,L,CHIP,8P,TP	
RA542	2011-001001	R-NET	00HM,5%,1/16W,L,CHIP,8P,TP	
RA543	2011-001001	R-NET	00HM,5%,1/16W,L,CHIP,8P,TP	
RA544	2011-001001	R-NET	00HM,5%,1/16W,L,CHIP,8P,TP	
RA545	2011-001001	R-NET	00HM,5%,1/16W,L,CHIP,8P,TP	
RA546	2011-001001	R-NET	00HM,5%,1/16W,L,CHIP,8P,TP	
RA547	2011-001001	R-NET	00HM,5%,1/16W,L,CHIP,8P,TP	
RA548	2011-001001	R-NET	00HM,5%,1/16W,L,CHIP,8P,TP	
RA549	2011-001001	R-NET	00HM,5%,1/16W,L,CHIP,8P,TP	
U91	2203-002392	C-CER,CHIP	220nF,+80-20%,50V,Y5V,TP,2012	
U92	2703-001778	INDUCTOR-SMD	3.3uH,20%,3225	
X201	2801-004004	CRYSTAL-SMD	20.25MHz,20ppm,28-AAN,13pF,25ohm,TP	
X301	2801-004117	CRYSTAL-SMD	6MHZ,30PPM,28-ABX,20PF,1500HM,TP	
X501	2801-003755	CRYSTAL-SMD	20MHZ,30PPM,28-AAN,20PF,500HM,TP	
X701	2801-004300	CRYSTAL-SMD	18.432MHz,30ppm,28-ABX,13pF,30ohm,TP	
X901	2801-003773	CRYSTAL-SMD	12MHZ,30PPM,28-AAN,20PF,500HM,TP	
ZD801	0403-001052	DIODE-ZENER	RD8.2MB,8.2V,7.7-8.64V,200mW,S	
ZD802	0403-001052	DIODE-ZENER	RD8.2MB,8.2V,7.7-8.64V,200mW,S	
ZD803	0403-001052	DIODE-ZENER	RD8.2MB,8.2V,7.7-8.64V,200mW,S	
ZD804	0403-001052	DIODE-ZENER	RD8.2MB,8.2V,7.7-8.64V,200mW,S	
ZD812	0403-001052	DIODE-ZENER	RD8.2MB,8.2V,7.7-8.64V,200mW,S	
ZD813	0403-001052	DIODE-ZENER	RD8.2MB,8.2V,7.7-8.64V,200mW,S	
ZD816	0403-001052	DIODE-ZENER	RD8.2MB,8.2V,7.7-8.64V,200mW,S	
ZD817	0403-001052	DIODE-ZENER	RD8.2MB,8.2V,7.7-8.64V,200mW,S	
ZD818	0403-001052	DIODE-ZENER	RD8.2MB,8.2V,7.7-8.64V,200mW,S	
ZD819	0403-001052	DIODE-ZENER	RD8.2MB,8.2V,7.7-8.64V,200mW,S	
ZD820	0403-001052	DIODE-ZENER	RD8.2MB,8.2V,7.7-8.64V,200mW,S	
ZD821	0403-001052	DIODE-ZENER	RD8.2MB,8.2V,7.7-8.64V,200mW,S	
ZD822	0403-001052	DIODE-ZENER	RD8.2MB,8.2V,7.7-8.64V,200mW,S	
ZD823	0403-001052	DIODE-ZENER	RD8.2MB,8.2V,7.7-8.64V,200mW,S	
ZD825	0403-001052	DIODE-ZENER	RD8.2MB,8.2V,7.7-8.64V,200mW,S	
MICOM	BN97-00242W	ASSY MICOM	VR17EO	SNA
IC301	1102-001129	IC-EPROM	M27W401,512KX8BIT,PLCC,32P,11.35X13.89MM,80NS,3.3V,10%,PLASTIC,-40TO+85C,-CMOS,	
IC506	1107-001087	IC-FLASH MEMORY	29LV160,1Mx16BIT,SOP,48P,-,90n	
CIS	BN82-00104D	A/S MICOM	VR17EO	SNA
CIS	BN82-00106R	A/S MICOM-SUB	VR17EO	SNA
IC902	MD09-00137A	IC MICOM	P-PCFM-012,P-PCFM-012,32,5V,12MHZ,I/O EXPANDER,8K BYTE,SOP,SOP,12 X 19.9,8,-40°...	

## 7-2 Others

Loc. No.	Code No.	Description	Specification	Remarks
-	BN90-00507A	ASSY STAND	AS15U0	SNA
STD	BN96-00390A	ASSY STAND P-SET	VR17KO,,SECC,,	
STD	6001-000139	SCREW-MACHINE	BH,+B,M4,L10,ZPC(YEL),SM10C,-	SNA
STD	6003-001010	SCREW-TAPTITE	FH,+B,M3,L6,ZPC(YEL),SWRCH18A	
STD	BN61-00399A	BRACKET-STAND	VR17KO,AL,T2.0,,,,DIECASTING	SNA
STD	BN63-00671A	COVER-STAND FRONT	VR17KO,ABS HB,,,,,SPRAY	SNA
STD	BN63-00672A	COVER-STAND REAR	VR17KO,ABS HB,,,,,COATING	SNA
STD	BN73-60002A	RUBBER-FOOT	CY15PQ,SPONGE,-,-,-,BL,-,-,-,-	SNA
STD	BN96-00558A	ASSY MISC P-HINGE LEFT	ARES17,Zn T4.0	SNA
STD	BN96-00559A	ASSY MISC P-HINGE RIGHT	ARES17,Zn T4.0	SNA
-	BN90-00592A	ASSY COVER FRONT	VR17E0	SNA
C/F+C/R	6003-001003	SCREW-TAPTITE	BH,+B,M4,L12,ZPC(BLK),SWRCH18	
C/F	BN96-00387D	ASSY COVER P-FRONT	VR17E0,ABS HB,IVORY	SNA
C/F	6003-000259	SCREW-TAPTITE	BH,+B,M3,L8,ZPC(YEL),SWRCH18A	SNA
C/F	6003-000276	SCREW-TAPTITE	BH,+B,M3,L10,ZPC(YEL),SWCH10	SNA
C/F	BN61-00398A	BRACKET-STAND	VR17KO,SECC,T1.0,,,,	SNA
C/F	BN61-00400A	STAND-SPRING	VR17KO,SUS,T0.5,,,,	SNA
C/F	BN63-00666A	COVER-FRONT	VR17KO,ABS HB,,,,,SPRAY	SNA
C/F	BN63-00667A	COVER-FRONT BEZEL	VR17KO,ABS HB,,,,,COATING	SNA
C/F	BN63-00670A	COVER-SPEAKER DOME	VR17KO,ABS HB,,,,,	SNA
C/F	BN64-00155A	KNOB-FUNCTION	VR17KO,ABS HB,,,,,	SNA
C/F	BN67-00083A	LENS LED-IR	VR17KO,ABS,CLEAR,,,,ACRYL	SNA
C/F	BN73-00055A	RUBBER-SHEET	VR17KO,EVA,118*45.5,40,T1.2,BLK	SNA
C/F	BN96-00468A	ASSY SPEAKER P	80HM,VICTORIA,17_L,3W,260MM	SNA
C/F	BN96-00484A	ASSY SPEAKER P	8ohm,Victoria,17_R,3W,275mm,R Speaker	SNA
C/F	BN96-00501A	ASSY BOARD P-FUNCTION	VICTORIA,FUNCTION	
C/F	BN96-00502A	ASSY BOARD P-IR	VICTORIA,IR	
C/F	BP64-00229A	BADGE-BRAND	LCDTM,AL,T1.5,45.0,7.5,BLK,SILVER,SAMSUNG,TAPE	SNA
-	BN90-00593A	ASSY COVER REAR	VR17E0	SNA
C/R	BN63-00669A	COVER-DOOR JACK	VR17KO,ABS HB,,,,,COATING	SNA
C/R	BN96-00388D	ASSY COVER P-REAR	VR17E0,ABS HB,IVORY	SNA
CIS	BN63-00668B	COVER-REAR	VR17E0,ABS HB,COATING	SNA
CIS	BN64-00175A	INLAY-REAR	Victoria,PC EMBO,TO.178,123*27.5,GRAY,PAL	SNA
-	BN91-00403E	ASSY LCD-S9	VR17KO,,,	SNA
LCD	BN07-00119A	LCD-PANEL	LTM170WP-L01,NIKE,1280*768,404*258*16.2,16.7M,40,0.2895*0.2895,0-50,3.3V,PVA	
-	BN91-00591G	ASSY MISC-ADAPTOR	VR17KO,,,	SNA
APT	BN44-00074A	ADAPTOR	AP06314-UV,PC211T,90V-264VAC,47-63HZ,14VDC,4.5ADC,63W,0-40,135*65*41	
-	BN91-00745A	ASSY CHASSIS-S9	VR17E0	
CIS	BN96-00678C	ASSY MISC P-SHIELD D SUB	VR17E0,EUROPE,SPT E TO.5	SNA
CIS	BN63-00675C	SHIELD-D SUB	VR17E0,SPT E,TO.5	SNA
CIS	BN71-00024A	EARTH-PLATE	GH17LS,SUS,TO.15	SNA
-	BN91-00746A	ASSY SHIELD	VR17E0	SNA
CIS	0203-001160	TAPE-FILAMENT	SCOTCH#8915,TO.16,W48,L55M,TRP	SNA
CIS	0203-001244	TAPE-AL FOIL	DK100-30-50,T40uM,W30,L50,SIL	SNA
AUD/PCB+SH/PCB	6003-000117	SCREW-TAPTITE	BH,+B,M3,L6,ZPC(YEL),SWRCH18A	SNA

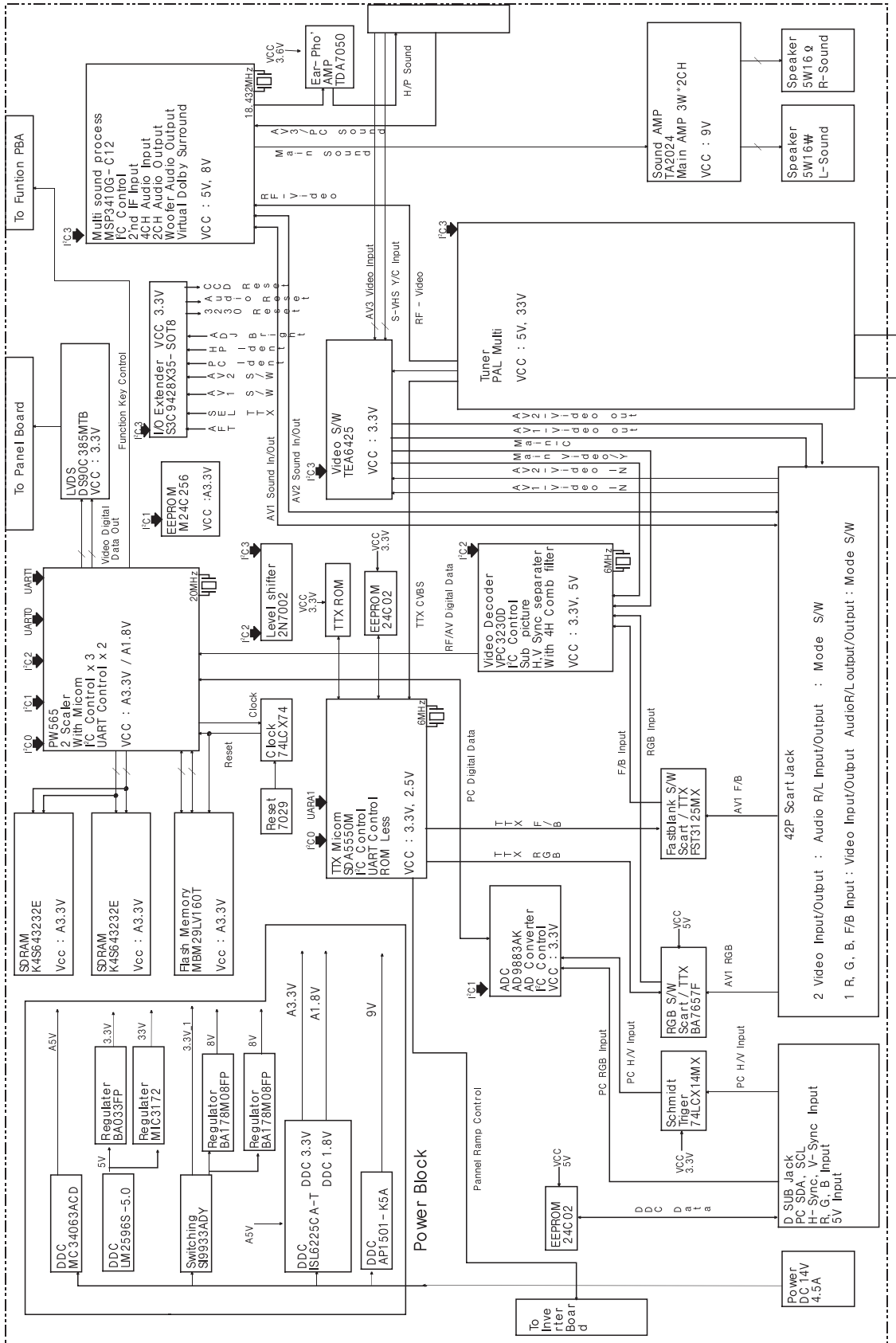
Loc. No.	Code No.	Description	Specification	Remarks
M/PCB+PAN	6003-000117	SCREW-TAPTITE	BH,+ ,B,M3,L6,ZPC(YEL),SWRCH18A	SNA
SH/PCB+SH/D_SUB	6003-000117	SCREW-TAPTITE	BH,+ ,B,M3,L6,ZPC(YEL),SWRCH18A	SNA
C/F+BRKT/SUPP	6003-000276	SCREW-TAPTITE	BH,+ ,B,M3,L10,ZPC(YEL),SWCH10	SNA
SH/PCB+C/F	6003-000276	SCREW-TAPTITE	BH,+ ,B,M3,L10,ZPC(YEL),SWCH10	SNA
CIS	BN39-00363A	LEAD CONNECTOR	VR17KO,UL1061#28,UL/CSA,20P,110MM,#26,12507HS-20,12507HS-20,BK,110MM,1061#28,COR	
CIS	BN39-00365A	LEAD CONNECTOR	VR17KO,UL1061#28,UL/CSA,16P,90MM,#28,12505HS-15,12505HS-15,BK,90MM,1061#28,NON-F	
CIS	BN70-00192A	BRACKET-SUPPORT	RB15AS,SECC,0.8	SNA
CIS	BN96-00389A	ASSY MISC P-SHIELD COVER	VR17KO,,,SECC T1.0	SNA
CIS	BH68-30003C	LABEL-00,HIGH,VOLTAGE	SS,ART 100G,30*33,YEL	SNA
CIS	BN63-00673A	SHIELD-PCB	VR17KO,SECC,T1.0,,,,	SNA
CIS	BN63-00674A	SHIELD-SUB PCB	VR17KO,SECC,TO.5,,,,	SNA
CIS	BN63-00933A	GASKET	VR17KO,CONDUCTIVE FAB,3MM,10MM,140MM,GRAY,45K,71TSFK-10-3-140-13	SNA
CIS	BN63-00934A	GASKET	VR17KO,CONDUCTIVE FAB,5MM,10MM,170MM,GRAY,45K,71TSFK-10-5-170-13	SNA
CIS	BN63-00935A	GASKET	VR17KO,CONDUCTIVE FAB,5MM,10MM,205MM,GRAY,45K,71TSFK-10-5-170-13	SNA
CIS	BN71-00024A	EARTH-PLATE	GH17LS,SUS,TO.15	SNA
CIS	BN96-00905A	ASSY BOARD P-AV/JACK	VICTORIA,AV/JACK	SNA
-	BN92-00329H	ASSY LABEL	LW17N23WX/XEC	SNA
LABEL	AA68-50502A	LABEL-CONFORMATION	W/P100(G),CTV,ITALY,170x110,BL	SNA
LABEL	BN68-00412A	LABEL BAR,CODE-00	W/W,PE,TO.05,60*35,BLK,POLYESTER	SNA
LABEL	BN68-00447C	LABEL RATING-01	VR17E0,EUROPE,PC EMBO,TO.178,145*75,GRAY	SNA
-	BN92-00707A	ASSY P/MATERIAL	VR17KO,,,,	SNA
P/M	0203-001100	TAPE-OPP MASKING	OPP/W75/CLR,TO.05,W75,L800000,CLR	SNA
P/M	6902-000379	BAG AIR	HDPE,TO.2,L1800,W1000,TRP,,,PAPER	SNA
P/M	6902-000520	BAG PE	HDPE(NITRON(DOUBLE),TO.015/TO.5(DOUBLE),W700,L700,TRP,28 LANGUAGE,2-	SNA
P/M	6902-000539	BAG SHEET	HDPE+NITRON,TO.015+TO.5,W600,L250,-,-,2+ HOLE(40MM)	SNA
P/M	6902-000576	BAG ROLL	LDPE,TO.05,W2400,L1000,TRP,-,-	SNA
P/M	BH69-00256A	PAD-PACKING-EDGE	MV540,B400,200,2170,-,-,YEL,-,-	SNA
P/M	BH69-40379A	PACKING-WRAP	LDPE,W500*TO.02,-,-	SNA
P/M	BH69-40383L	PACKING-PAD	CB-SW4,W1200xD900,CHB7707	SNA
P/M	BN68-00129A	LABEL SHIPPING	-,LABEL SHIPPING,ART-PAPER,100G,-,WHT,BLACK,-,-,-	SNA
P/M	BN69-00131S	PALLET	VR17KO,WOODEN,1120,960,120	SNA
P/M	BN69-00140C	PAD-PALLET COVER	DV17,SW,1100*3690,1258,-,-,-,-	SNA
P/M	BN69-00140Q	PAD-PALLET COVER	FP1701,SW,1000*4000,1350,-,-,-,-	SNA
P/M	BN69-00477A	CUSHION-L/R	VR17KO,EPS M50,,,,,,	SNA
-	BN92-00937A	ASSY BOX	VR17E0	SNA
BOX	BH68-00329D	LABEL BAR CODE	NO CE,NO WTY,MPIII,ART-PAPER 90G,-,90,95,LABEL-BARCODE,-,WHT,-,-	SNA
BOX	BH75-10529C	UNIT-HANDLE/PACKING	S/M170MP,PE-LD,PE-HD,-,WHITE,-	
CIS	BN72-60001A	LEVER-TOP	LSD210TL,PE-LD,WHITE,TFT_LCD	SNA
CIS	BN72-60002C	LEVER-BOTTOM	S/M170MP,PE-HD,BLUE	SNA
BOX	BN69-00558D	PACKING CASE-01	17N2(VICTORIA),SW4 A,A1,YEL,EUROPE/CIS	SNA
-	BN92-01001C	ASSY ACCESSORY	LW17N23WX/XEC	SNA
ACCESSORY	BN59-00369A	REMOCON	TM76B,VICTORIA,47,G6148,PAL,DO,PAL	SNA
UNIT/ACCESSORY	BN96-00645F	ASSY ACCESSORY	VR17E0	
ACCESSORY	0203-000214	TAPE-OPP MASKING	OPP/W50/CLR,TO.05,W50,L400000,	SNA
ACCESSORY	4301-000121	BATTERY-MN	1.5V,-,AAA,10.5x44.5m,HOLDER	
ACCESSORY	6902-000110	BAG PE	LDPE,TO.05,L356,W240,TRP,28,2,PE MARK	SNA
ACCESSORY	BH39-10339H	CBF POWER CORD	DET,H05VV-F,250V/10,16A,BLK,25	
ACCESSORY	BN39-00043A	CBF SIGNAL	DETACHABLE,-,15P/15P,-,-,-	
UNIT/ACCESSORY	BN96-00919C	ASSY ACCESSORY	LW17N23WX/XEC	
ACCESSORY	0203-000214	TAPE-OPP MASKING	OPP/W50/CLR,TO.05,W50,L400000,	SNA
ACCESSORY	6801-001014	CARD-REGISTRATION	XEU,ENG,MOJO100,L150,W392,-,-	SNA
ACCESSORY	6801-001015	CARD-REGISTRATION	XEG,GERMAN,MOJO100,L150,W392,-,-	SNA
ACCESSORY	6801-001016	CARD-REGISTRATION	XEF,FRENCH,MOJO100,L150,W392,-,-	SNA

7 Electrical Parts List

Loc. No.	Code No.	Description	Specification	Remarks
ACCESSORY	6801-001017	CARD-REGISTRATION	XEC,SPANISH,MOJO100,L150,W392,-,-	SNA
ACCESSORY	6801-001018	CARD-REGISTRATION	XET,ITALY,MOJO100,L150,W392,-,-	SNA
ACCESSORY	6801-001019	CARD-REGISTRATION	XEN,DUTCH,MOJO100,L150,W392,-,-	SNA
ACCESSORY	6801-001020	CARD-REGISTRATION	XEP,PORTUGAL,MOJO100,L150,W392,-,-	SNA
ACCESSORY	6902-000110	BAG PE	LDPE,TO.05,L356,W240,TRP.28,2,PE MARK	SNA
ACCESSORY	BN68-00437D	MANUAL USERS	LW17N23W,SAMSUNG,E/F/G/Du/lt/Sp/P,W-Europe,00	SNA
ACCESSORY	BN68-00514A	MANUAL-WARRANTY CARD	PDP/LCD TV,EN,FR,DE, ETC,W/P 120g	SNA
ACCESSORY	BN68-00515K	MANUAL INSTALL	Card,InstallingStand,SAMSUNG,NONE,W/W,Mojo 100g,182,257,00	SNA

# 8 Block Diagram

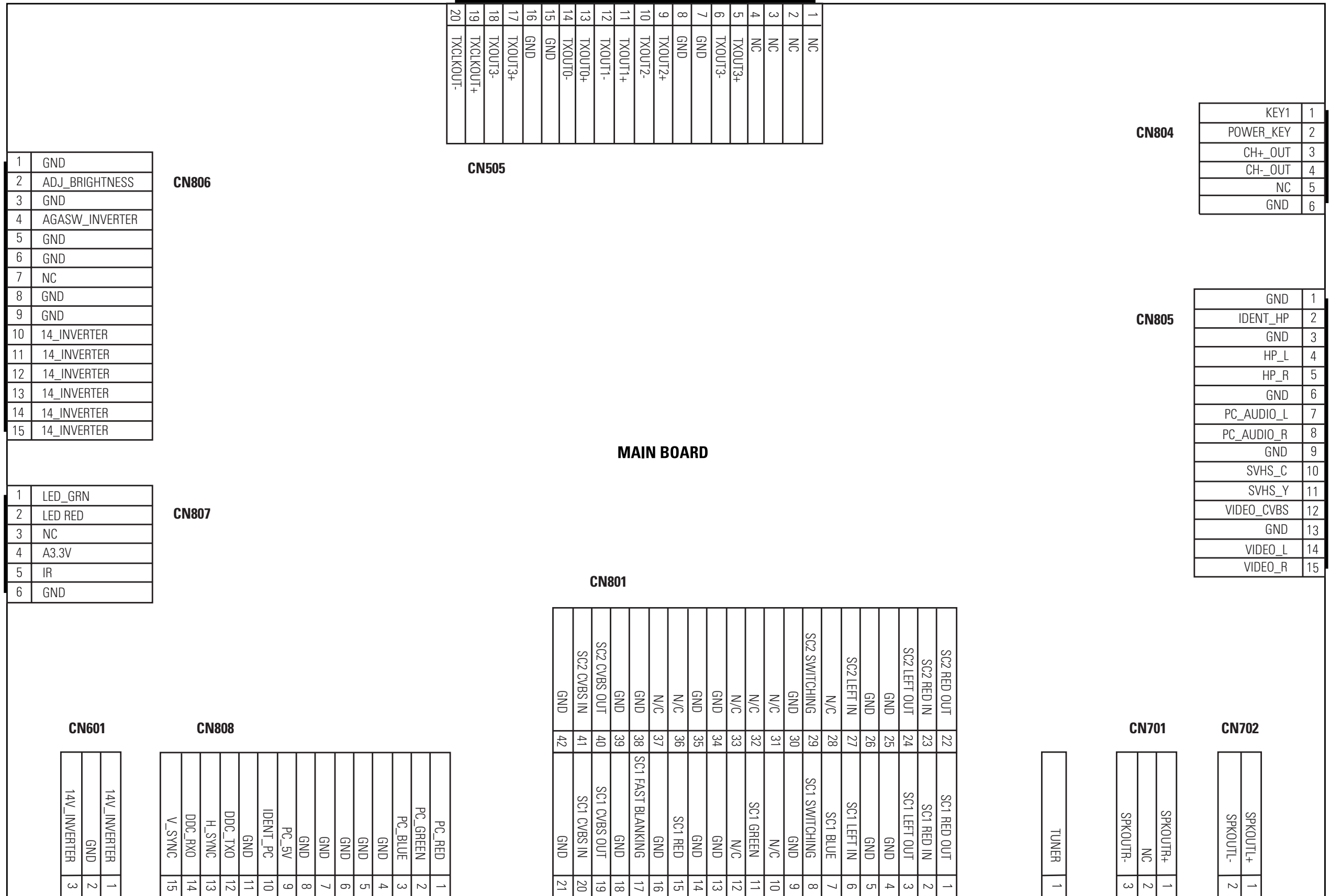
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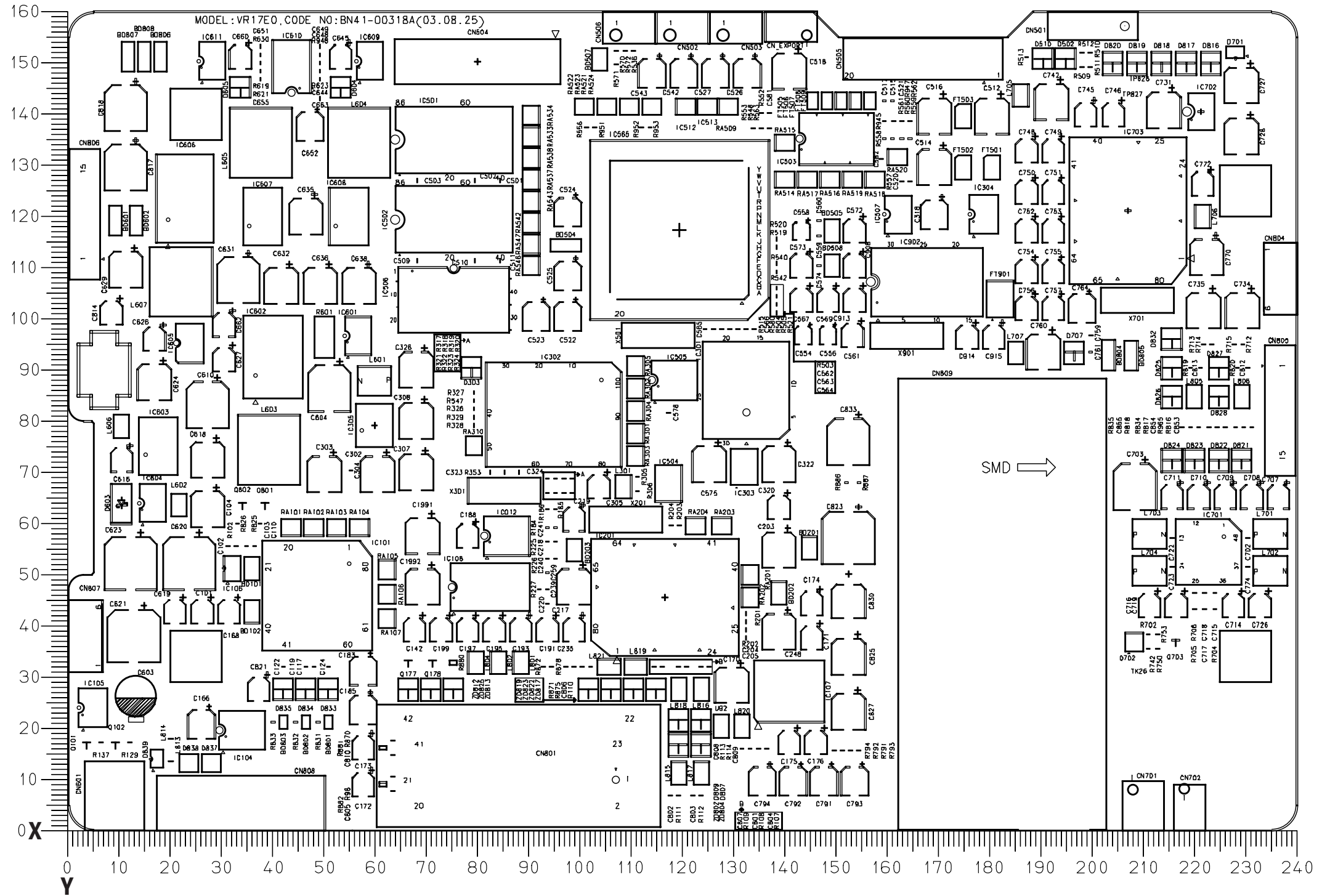
# 9 Wiring Diagram



**Memo**

# 10 PCB Layout

## 10-1 Main PCB Layout Top



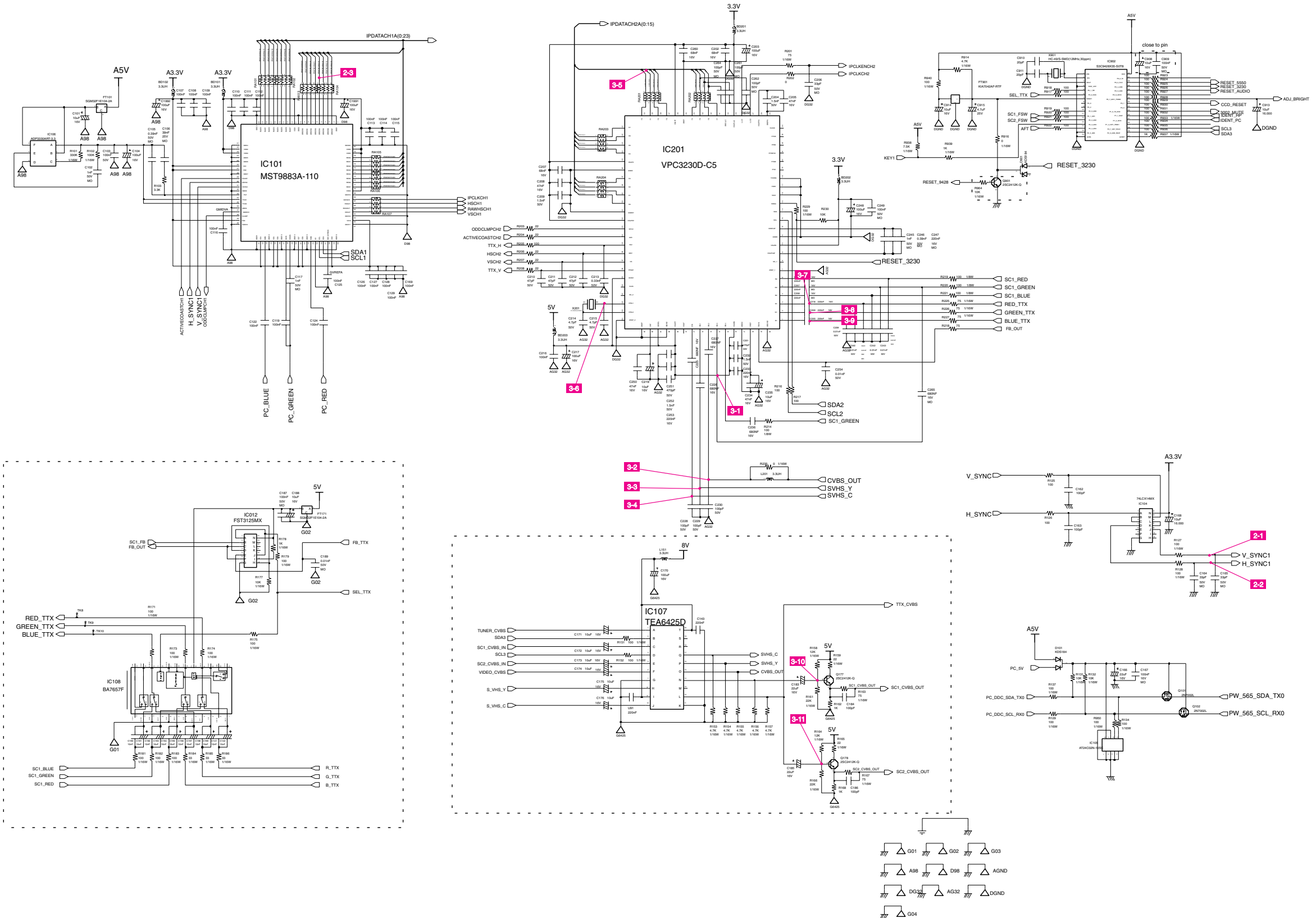
Loc. No.	Description	X	Y
<b>DIODE</b>			
D101	DIODE-ARRAY	26.0	21.6
D301	DIODE-ZENER	119.7	51.0
D302	DIODE-ZENER	105.7	50.3
D303	DIODE-ARRAY	78.8	90.4
D304	DIODE-ZENER	74.4	71.2
D305	DIODE-ZENER	132.0	71.2
D501	DIODE-ZENER	120.0	85.2
D502	DIODE-SWITCHING	194.8	150.8
D510	DIODE-SWITCHING	190.4	150.8
D601	DIODE-SCHOTTKY	59.2	88.0
D602	DIODE-RECTIFIER	33.2	73.6
D603	DIODE-RECTIFIER	10.4	64.0
D604	DIODE-SCHOTTKY	53.2	145.2
D605	DIODE-SCHOTTKY	33.6	145.2
D606	DIODE-RECTIFIER	38.3	143.4
D607	DIODE-RECTIFIER	26.4	106.8
D701	DIODE-ZENER	228.0	152.0
D702	DIODE-SWITCHING	229.2	142.8
D703	DIODE-ZENER	229.4	99.6
D704	DIODE-ZENER	221.8	99.6
D705	DIODE-ZENER	192.1	143.4
D706	DIODE-ZENER	222.4	114.0
D707	DIODE-ZENER	196.5	93.5
D806	DIODE-ZENER	154.4	7.6
D807	DIODE-ZENER	123.6	21.6
D808	DIODE-ZENER	136.4	7.6
D809	DIODE-ZENER	119.2	21.6
D816	DIODE-ZENER	223.2	150.0
D817	DIODE-ZENER	218.4	150.0
D818	DIODE-ZENER	213.6	150.0
D819	DIODE-ZENER	208.8	150.0
D820	DIODE-ZENER	204.0	150.0
D821	DIODE-ZENER	229.2	72.4
D822	DIODE-ZENER	224.8	72.4
D823	DIODE-ZENER	220.0	72.4
D824	DIODE-ZENER	215.6	72.4
D825	DIODE-ZENER	215.6	90.4
D826	DIODE-ZENER	215.6	84.8
D827	DIODE-ZENER	224.8	90.4
D828	DIODE-ZENER	224.8	84.8
D832	DIODE-SWITCHING	215.6	96.0
D833	DIODE-SWITCHING	50.8	27.6
D834	DIODE-SWITCHING	46.4	27.6
D835	DIODE-SWITCHING	42.0	27.6
D837	DIODE-ZENER	28.0	13.2
D838	DIODE-ZENER	23.6	13.2
D839	DIODE-ZENER	17.2	14.0
D901	DIODE-ARRAY	186.0	101.2
ZD801	DIODE-ZENER	136.4	12.4
ZD802	DIODE-ZENER	119.2	16.8
ZD803	DIODE-ZENER	154.4	12.4
ZD804	DIODE-ZENER	123.6	16.8
ZD812	DIODE-ZENER	66.4	27.6
ZD813	DIODE-ZENER	75.2	27.6
ZD816	DIODE-ZENER	148.4	12.4
ZD817	DIODE-ZENER	114.8	27.6
ZD818	DIODE-ZENER	142.4	12.4
ZD819	DIODE-ZENER	101.6	27.6
ZD820	DIODE-ZENER	148.4	7.6
ZD821	DIODE-ZENER	142.4	7.6

Loc. No.	Description	X	Y
ZD822	DIODE-ZENER	110.4	27.6
ZD823	DIODE-ZENER	106.0	27.6
ZD825	DIODE-ZENER	70.8	27.6
<b>IC</b>			
IC012	IC-ANALOG SWITCH	85.6	57.6
IC101	IC-A/D CONVERTER	48.6	45.9
IC104	IC-CMOS LOGIC	34.0	19.6
IC105	IC-EEPROM	4.8	24.0
IC106	IC-POS.FIXED REG.	32.0	51.2
IC107	IC-VIDEO SWITCH	140.8	27.2
IC108	IC-VIDEO SWITCH	82.4	47.6
IC201	IC-VIDEO PROCESS	116.5	45.6
IC301	IC-EPROM	132.4	86.0
IC302	IC-DECODER	94.8	81.2
IC303	IC-VOL. DETECTOR	132.0	71.2
IC304	IC-EEPROM	178.8	120.4
IC305	IC-POS.FIXED REG.	59.8	79.2
IC501	IC-DRAM	75.3	135.0
IC502	IC-DRAM	75.3	119.4
IC503	IC-TRANSMITTER	150.0	135.2
IC504	IC-VOL. DETECTOR	117.2	68.0
IC505	IC-CMOS LOGIC	118.4	88.0
IC506	IC-FLASH MEMORY	75.3	103.6
IC507	IC-EEPROM	162.0	120.4
IC512	R-NETWORK	120.7	141.5
IC513	R-NETWORK	124.8	141.5
IC565	IC-LCD CONTROLLER	119.4	117.3
IC601	IC-DC/DC CONVERTER	56.5	96.7
IC602	IC-POS.FIXED REG.	40.0	92.8
IC603	IC-POS.FIXED REG.	17.6	75.6
IC604	IC-SWITCH REG.	16.4	64.0
IC605	FET-SILICON	23.6	95.2
IC606	IC-DC/DC CONVERTER	22.8	124.0
IC607	IC-POS.FIXED REG.	38.0	120.4
IC608	IC-POS.FIXED REG.	54.8	120.4
IC609	FET-SILICON	58.8	150.4
IC610	IC-PWM CONTROLLER	43.6	149.2
IC611	FET-SILICON	28.0	150.4
IC701	IC-AUDIO AMP	222.8	54.4
IC702	IC-AUDIO AMP	221.3	140.5
IC703	IC-SOUND PROCESSOR	207.0	121.1
IC902	IC MICOM	167.6	107.2
<b>TRANSISTOR</b>			
Q101	FET-SILICON	3.6	17.2
Q102	FET-SILICON	9.2	17.2
Q177	TR-SMALL SIGNAL	66.4	33.2
Q178	TR-SMALL SIGNAL	71.2	33.2
Q301	TR-SMALL SIGNAL	109.6	66.8
Q502	FET-SILICON	167.6	122.8
Q503	FET-SILICON	167.6	118.8
Q601	TR-SMALL SIGNAL	21.2	85.2
Q602	TR-SMALL SIGNAL	16.8	93.2
Q603	TR-SMALL SIGNAL	16.8	97.6
Q701	TR-SMALL SIGNAL	229.2	148.0
Q702	TR-SMALL SIGNAL	208.2	36.8
Q703	TR-SMALL SIGNAL	216.4	37.2
Q801	TR-SMALL SIGNAL	38.4	64.0
Q802	TR-SMALL SIGNAL	34.0	64.0
Q901	TR-SMALL SIGNAL	159.6	102.6

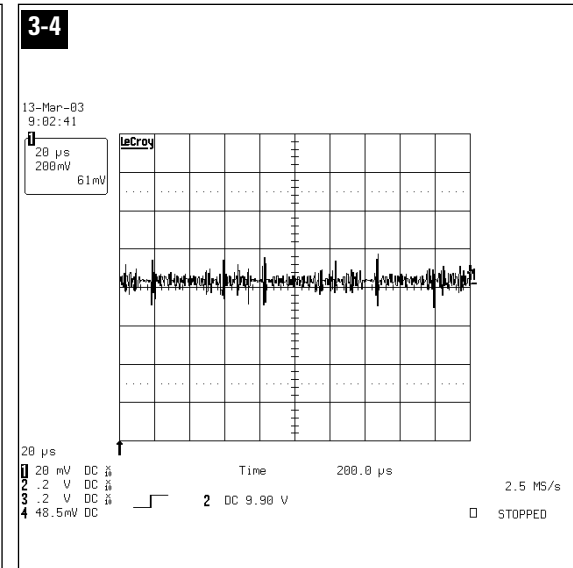
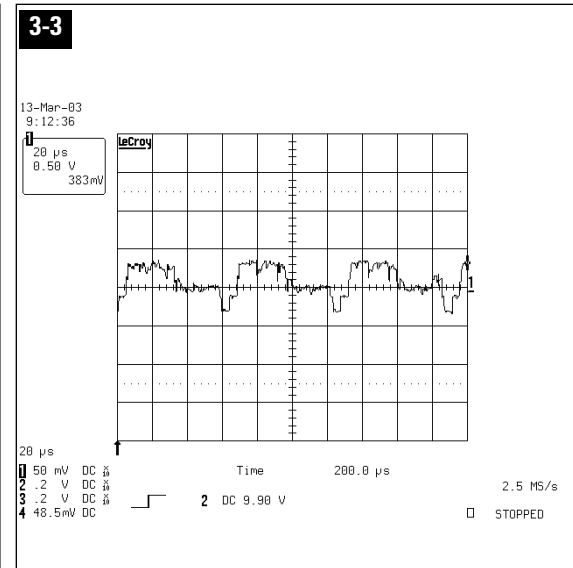
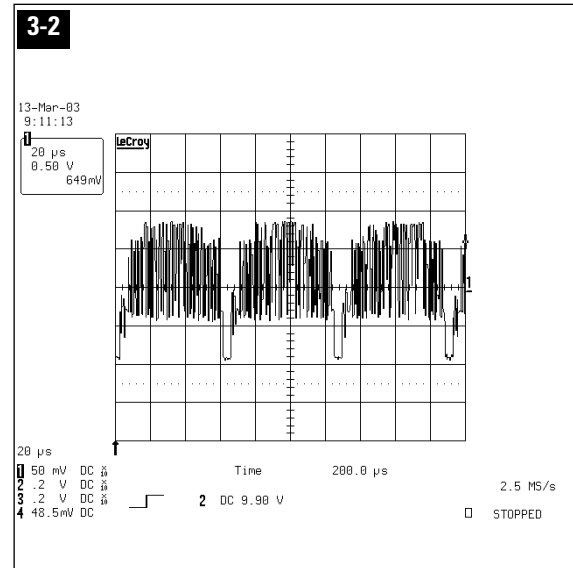
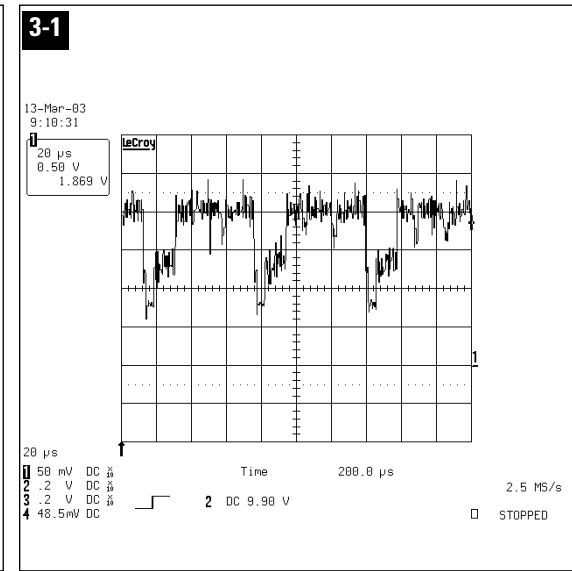
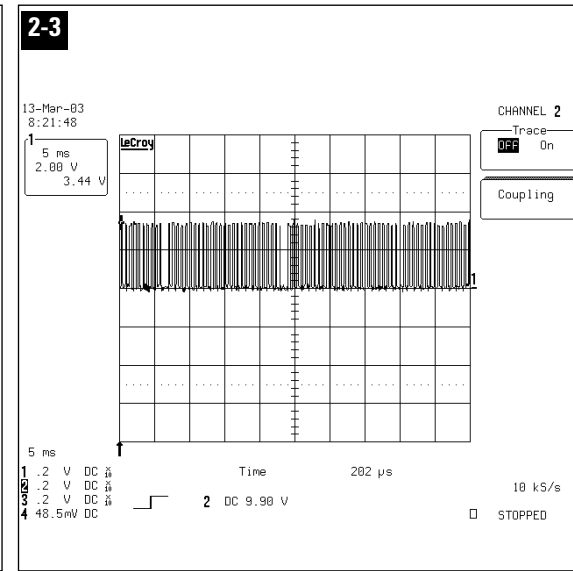
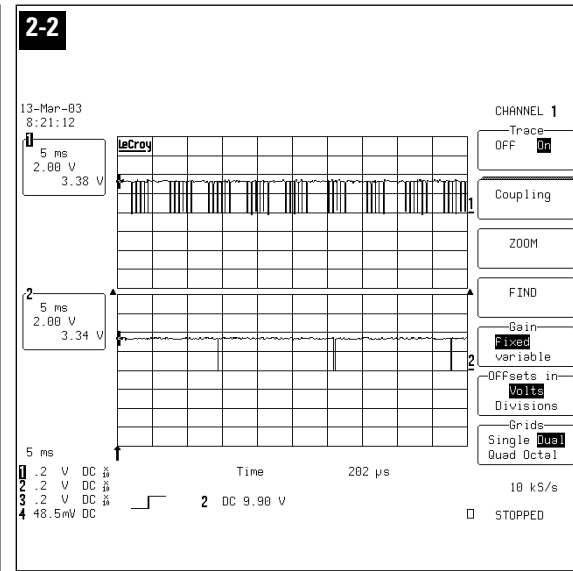
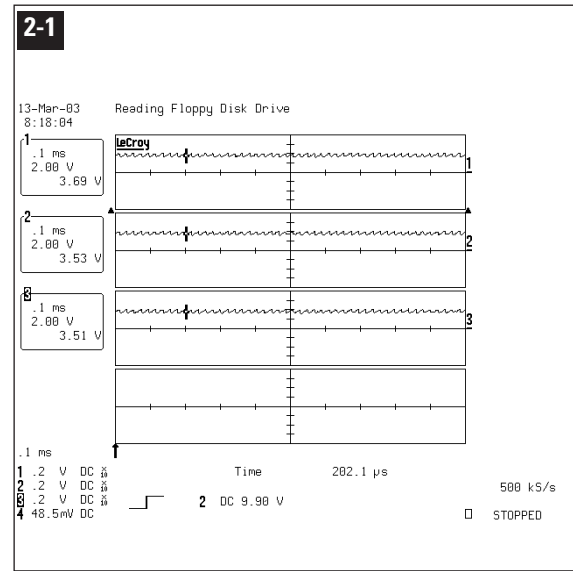
# 11 Schematic Diagrams

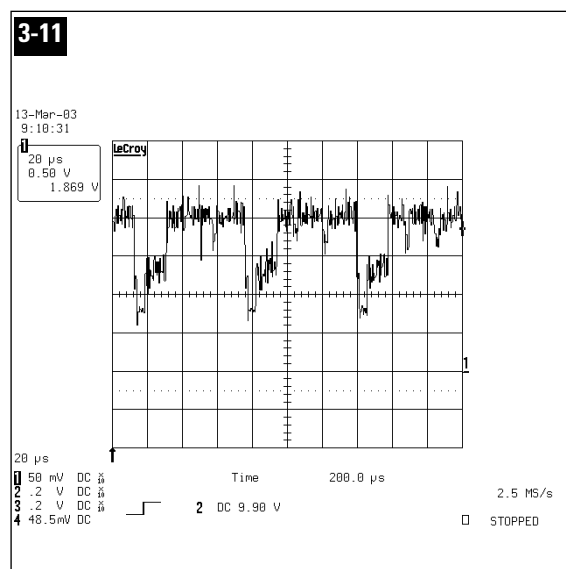
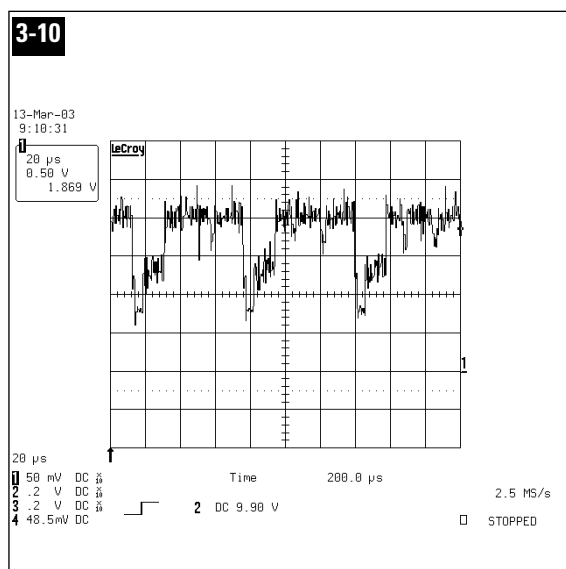
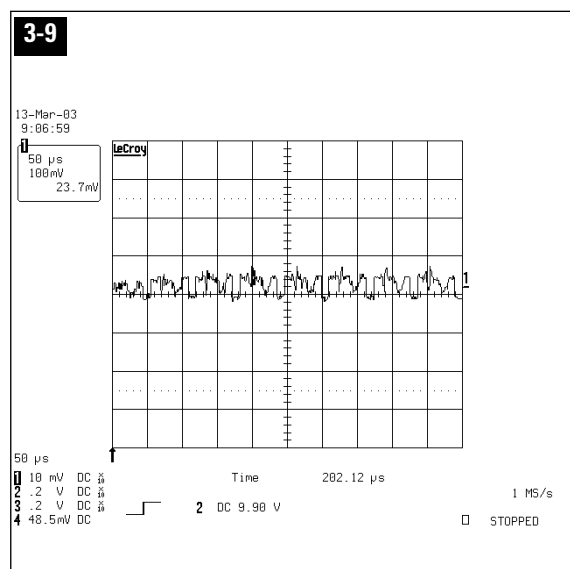
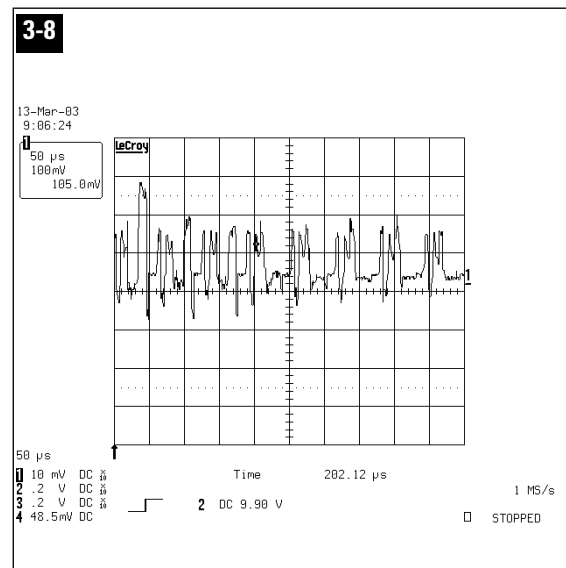
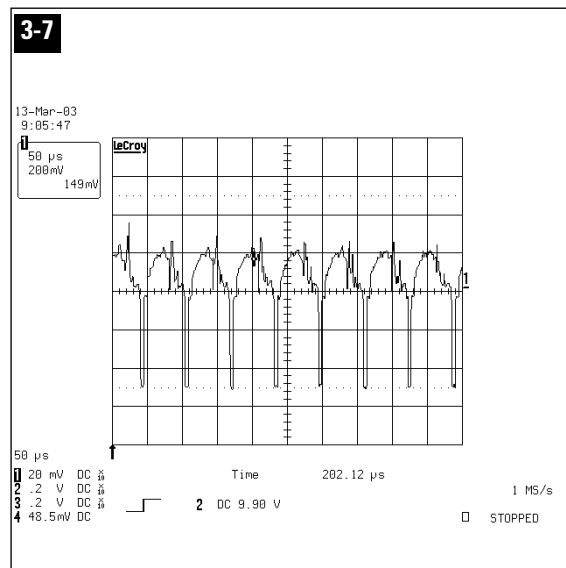
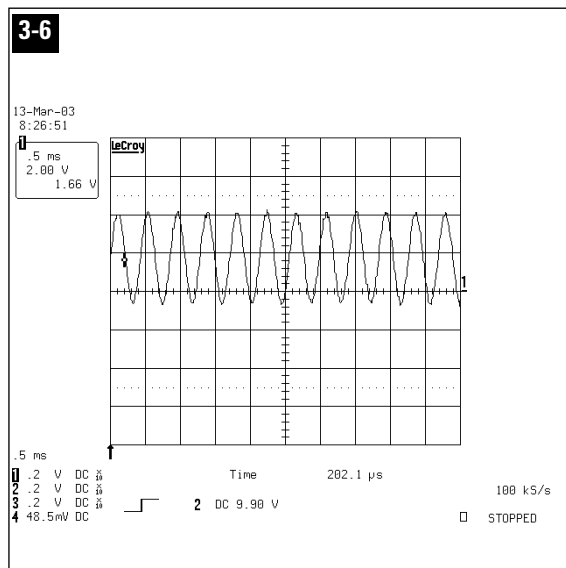
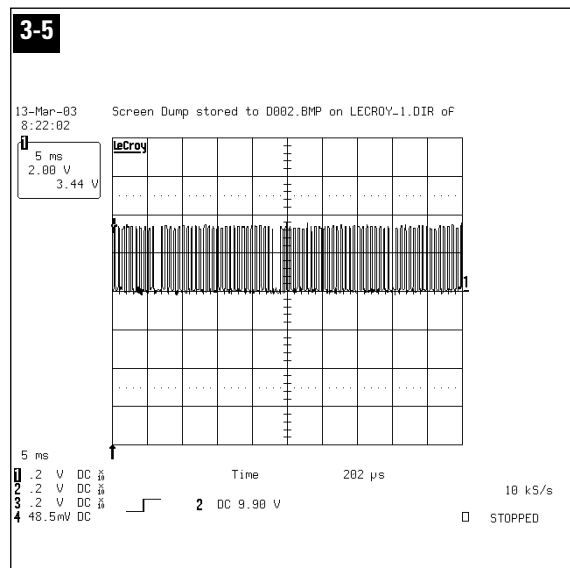
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## 11-1 Schematic Diagram



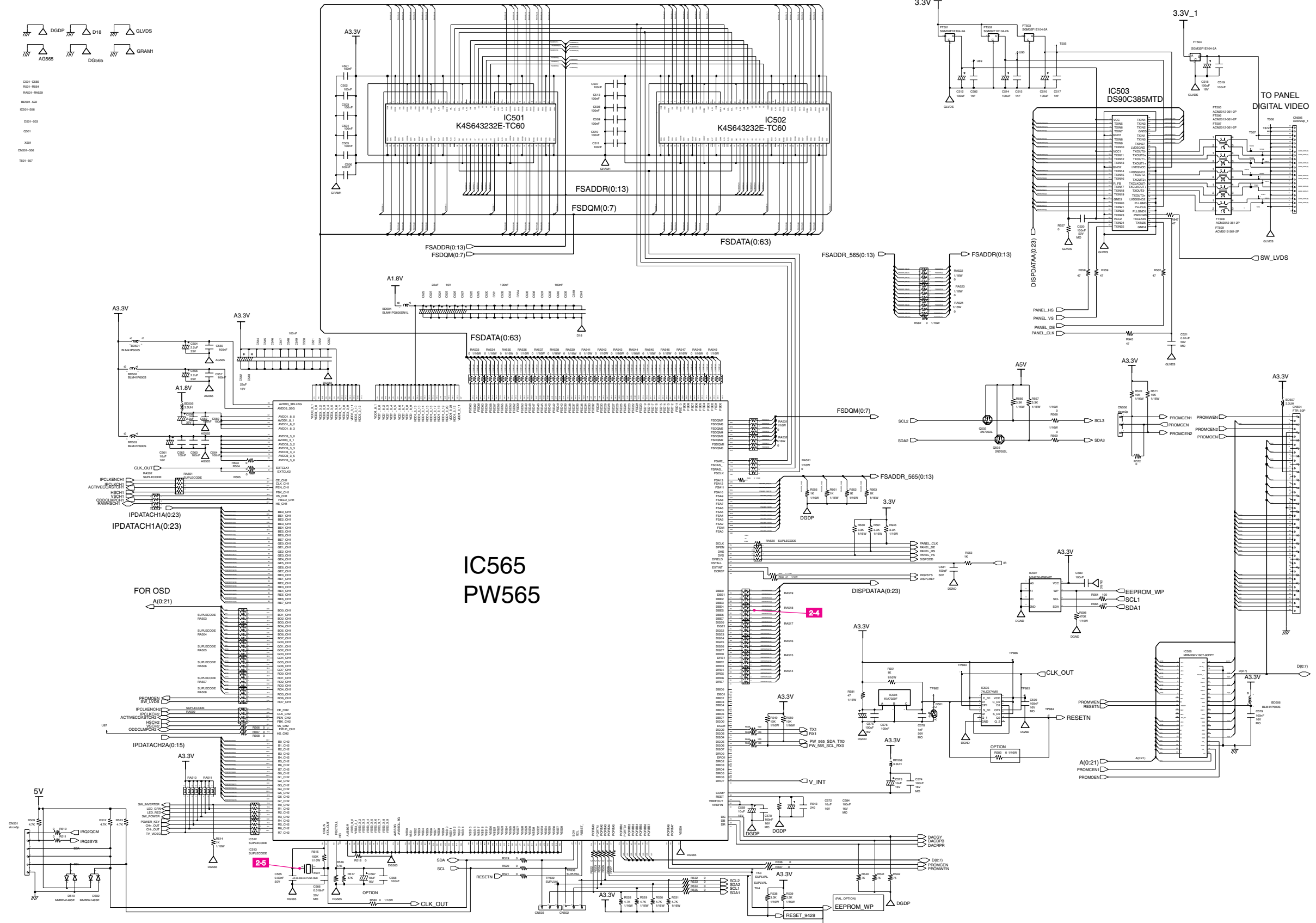
11 Schematic Diagrams



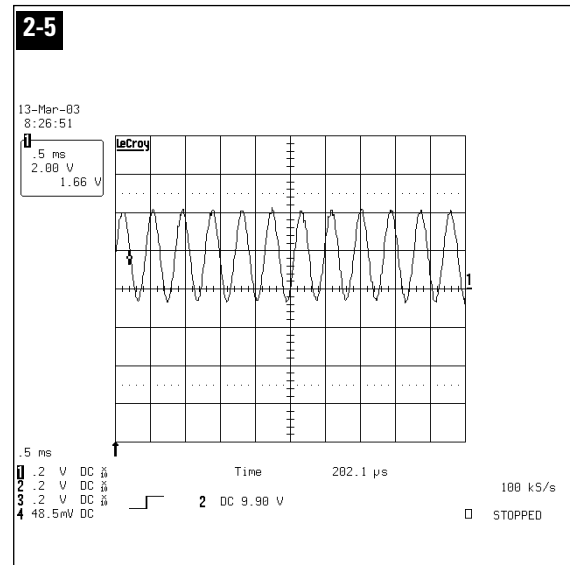
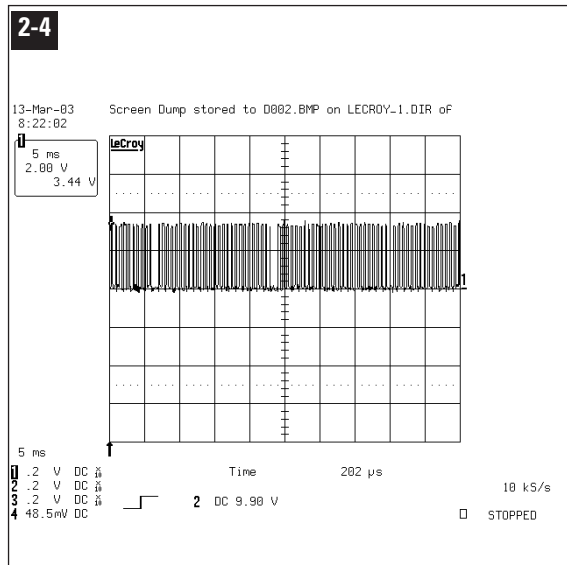


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### 11-2 Schematic Diagram

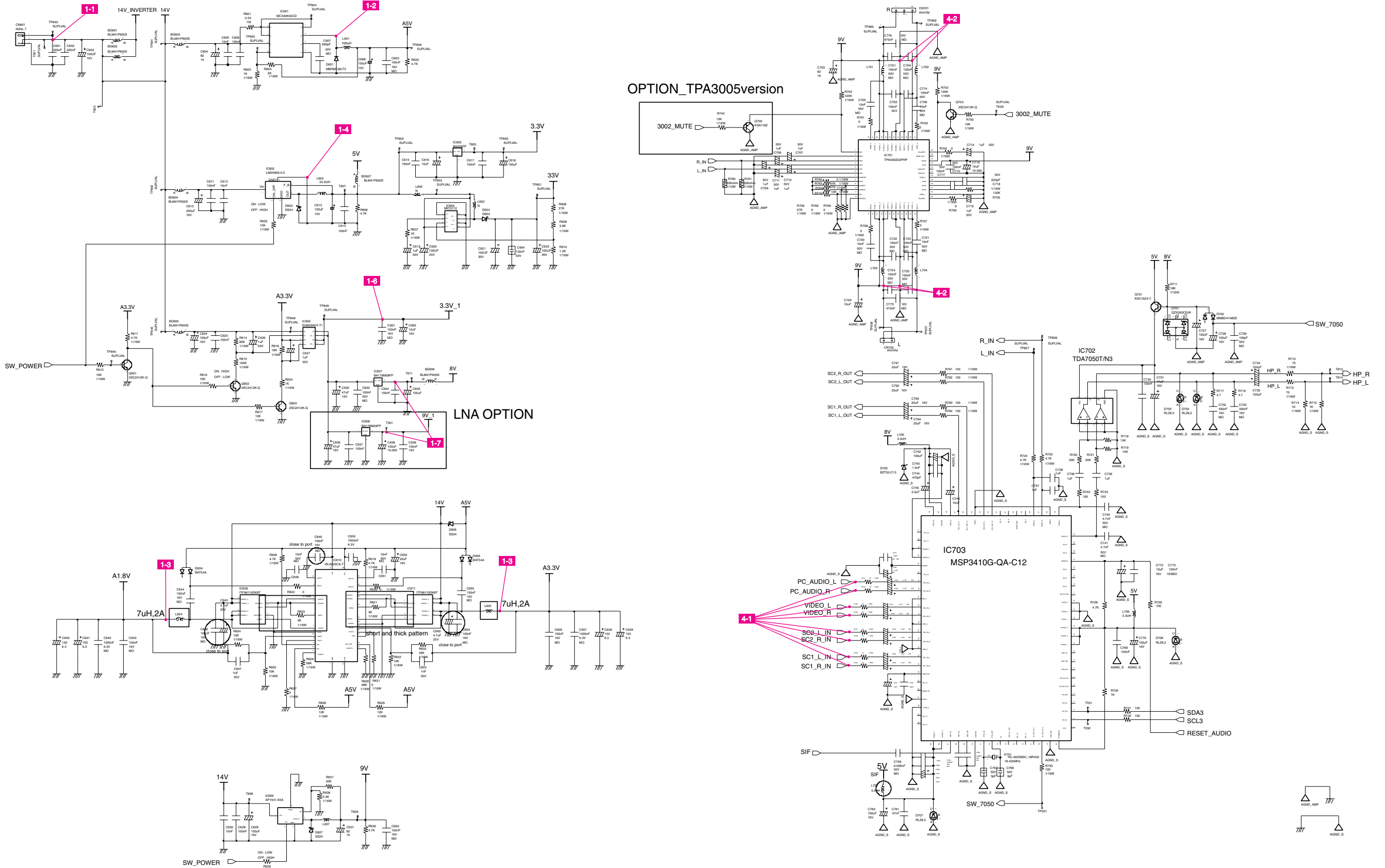


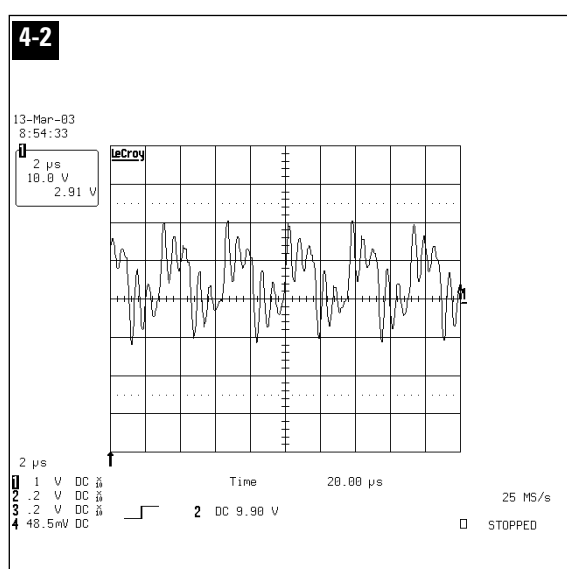
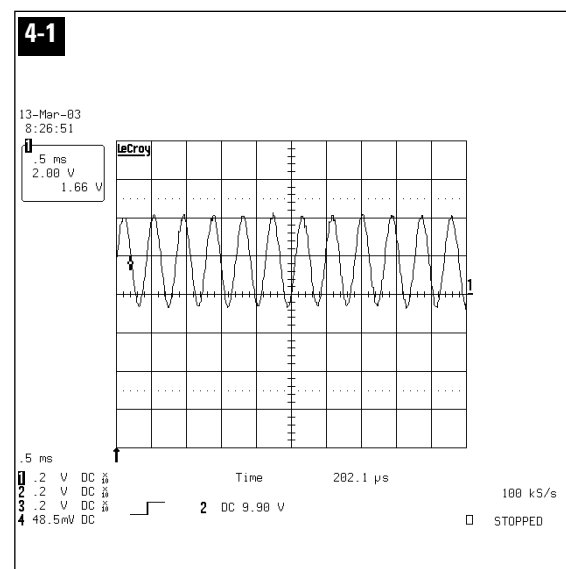
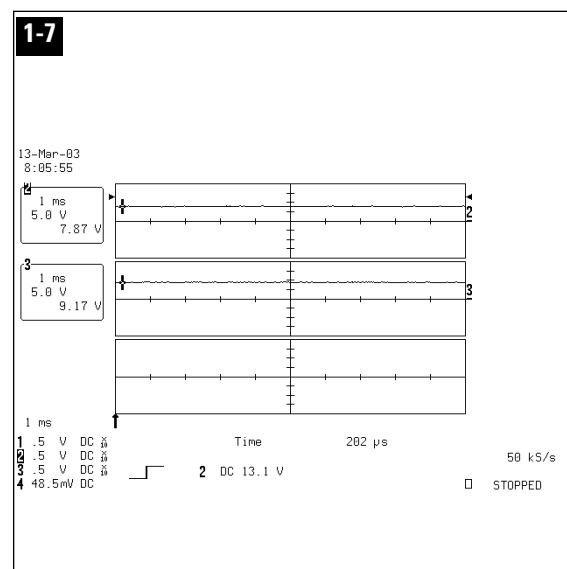
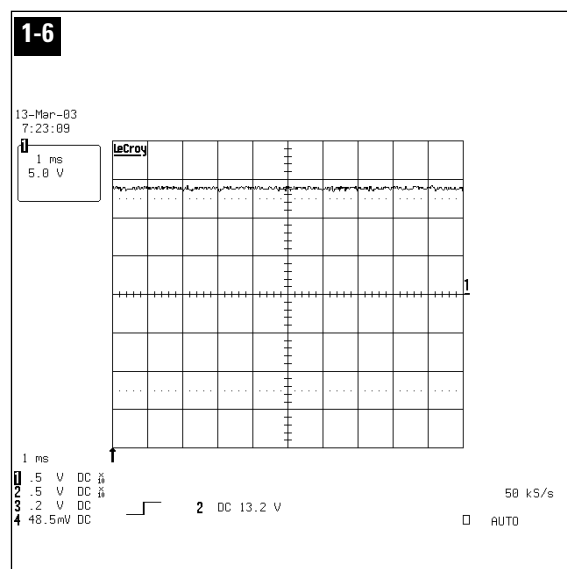
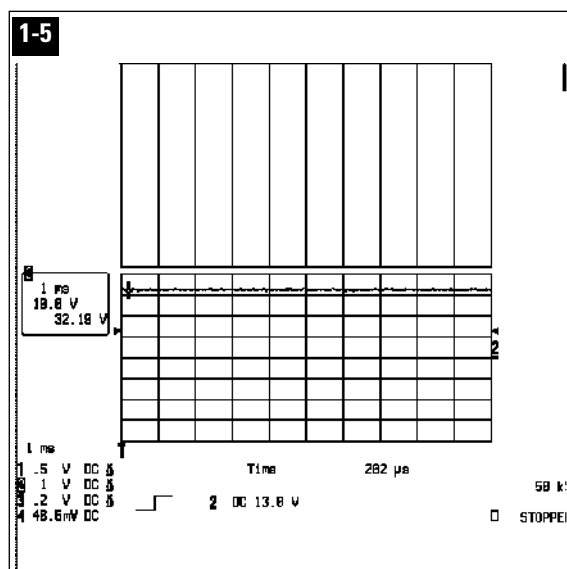
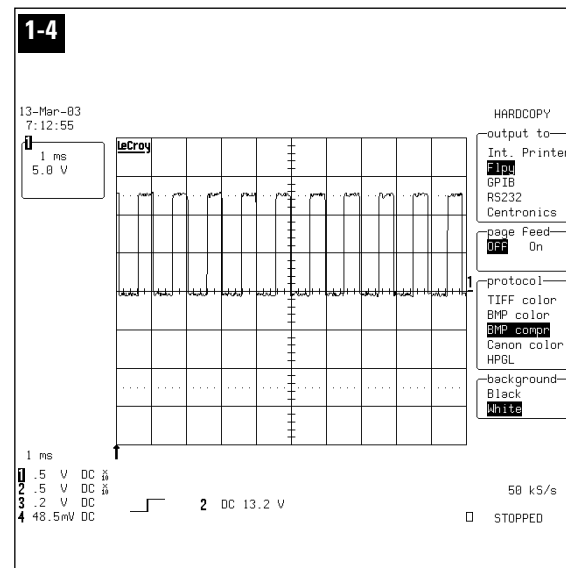
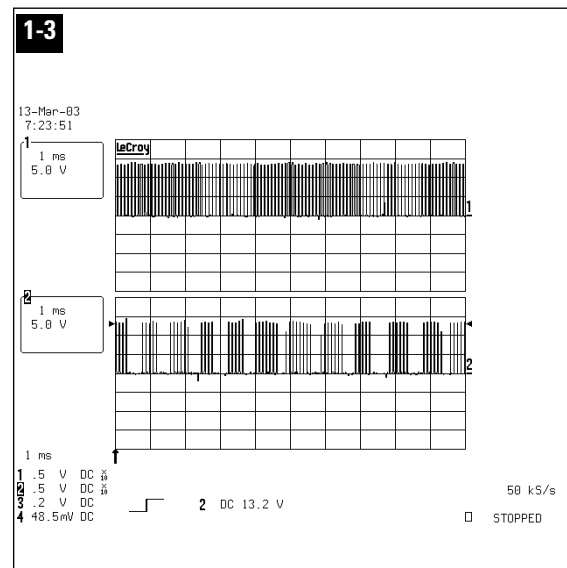
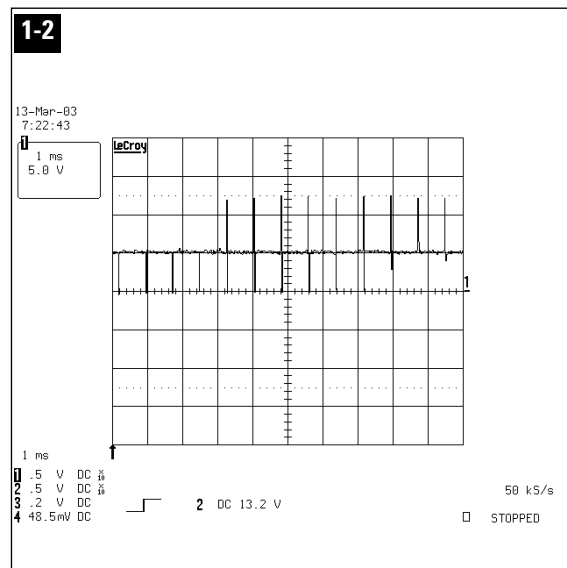
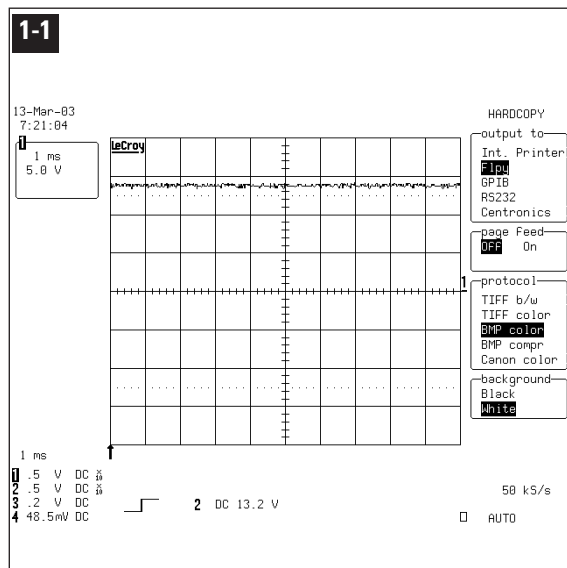




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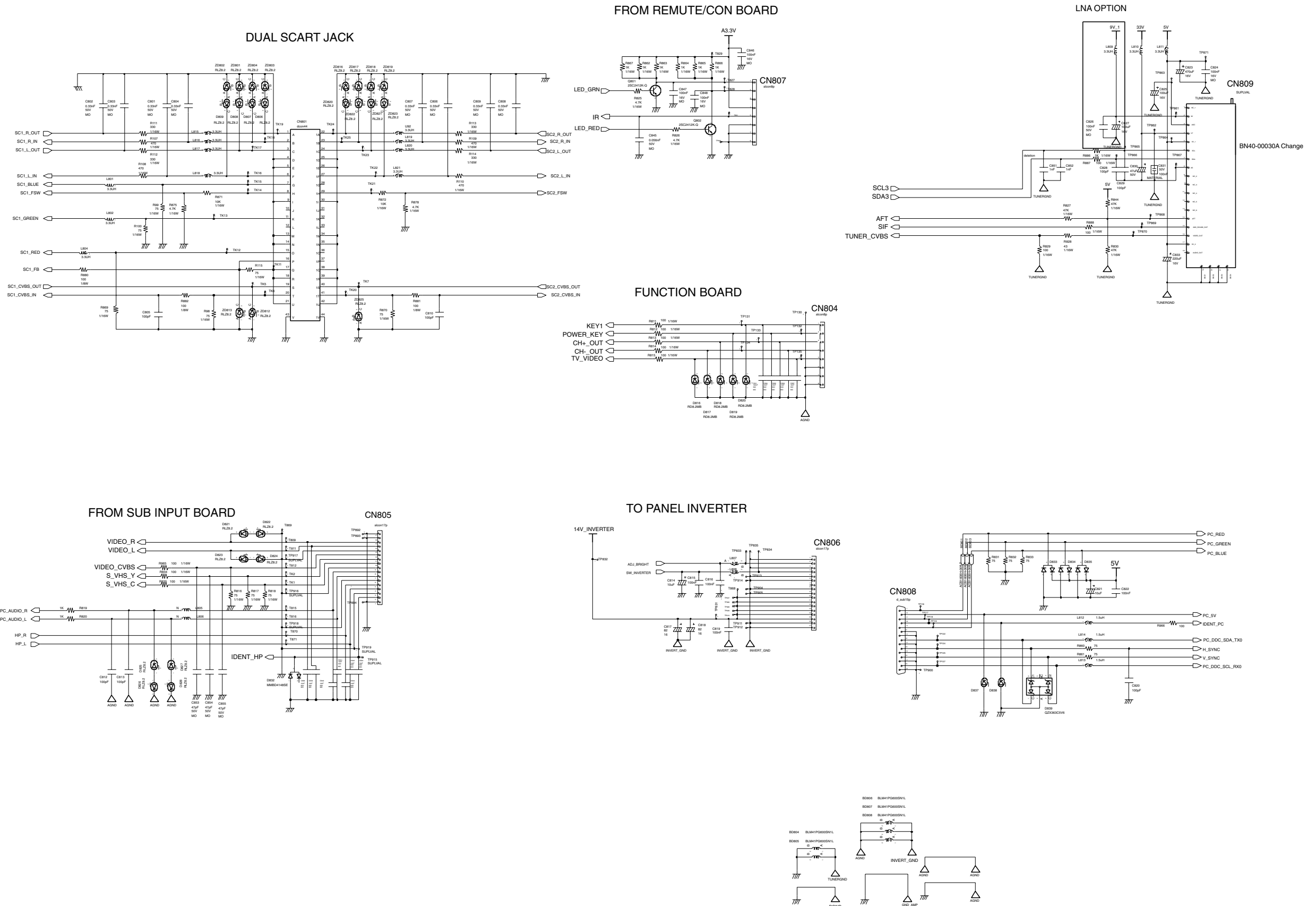
### 11-3 Schematic Diagram





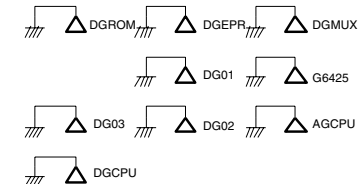
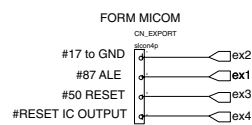
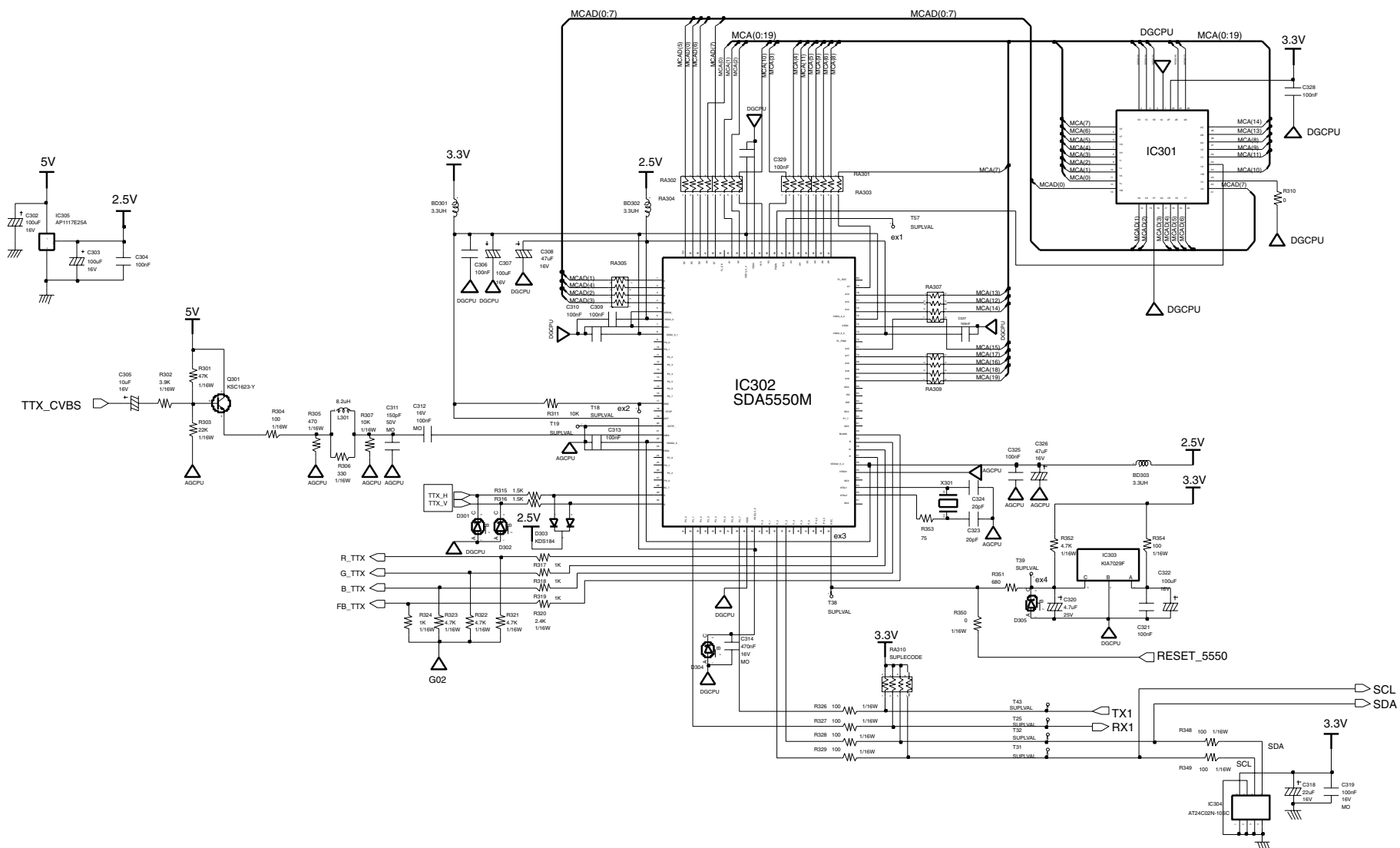
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### 11-4 Schematic Diagram



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### 11-5 Schematic Diagram



**Memo**

## 12 Panel Description

Maker	VENDOR P/N	PANEL_CODE	PANEL_ABB	Remarks
SEC	LT140X1-002	BN07-00004A	SA	
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	PANEL
SEC	LTM170W1-L01	BN07-00047A	SZ	TV PANEL
SEC	LTM150XH-L06	BN07-00053A	EA	TV PANEL/450 Sony& EOS TV panel
SEC	LTM153W1-L01	BN07-00054A	EB	NIKE MODEL
SEC	LTM170EH-L05	BN07-00055A	EC	17" EH-L05 panel EOS proj.
SEC	LTM170E5-L03	BN07-00056A	ED	Dell 1702FP pro. E4. EH Compatible
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	15" Wide tv panel
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	22" TV PANEL
SEC	LTM170E6-L02	BN07-00075A	EM	AMLCD Narrow & slim design 17" PVA mode
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	LCD TV
SEC	LTM153W1-L01	BN07-00092A	EX	AMLCD WIDE 15",9/10
SEC	LTM170W1-L01	BN07-00100A	EY	code
SEC	LTM170EH-L05	BN07-00097A	EZ	LTM170E5-L05 Panel Code
SEC	LTA400W1-L01	BN07-00109A	S1	AMLCD 40" TV PANEL
SEC	LTM153W1-L01	BN07-00110A	S2	0.280/0.290 , 10000K & ZPD Panel
SEC	LTM150XH-L06	BN07-00111A	S3	0.280/0.290 , 10000K & ZPD Panel
SEC	LTM170W1-L01	BN07-00112A	S4	0.280/0.290 , 10000K & ZPD Panel
SEC	LTM170EH-L05	BN07-00113A	S5	0.280/0.290 , 10000K & ZPD Panel code
SEC	LTM220W1-L01	BN07-00114A	S6	AMLCD 22" TV ZPDpanel
SEC	LTM150XH-L06	BN07-00117A	S7	ZPD Panel code
SEC	LTM153W1-L01	BN07-00118A	S8	ZPD code
SEC	LTM170WP-L01	BN07-00119A	S9	NIKE PVA PANEL
SEC	LTM213U4-L01	BN07-00039A	E1	21.3" NARROW
SEC	LTA260W1-L01	BN07-00121A	E2	VENUS
SEC	LTA220W1-L01	BN07-00074B	E3	22" TV PANEL PANEL CODE
SEC	LTA320W1-L01	BN07-00108A	E4	AMLCD 32" TV PANEL
SEC	LTM213U4-L01	BN07-00124A	E5	NARROW BEZEL 21" PANEL
SEC	LTM170E6-L04	BN07-00129A	E6	HIGHLAND 17" LOW PANEL
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	Muse 4:3 VGA TV 17" Pane
SEC	LTM190E1-L02	BN07-00128A	E10	AMLCD Panel 6bit Driver IC
SEC	LTM170EX-L01	BN07-00143A	E11	AMLCD Panel
SEC	LTM170E8-L01	BN07-00144A	E12	AMLCD Panel
SEC	LTM170E6-L04	BN07-00129B	E13	AMLCD ZPD panel

12 Panel Description

Maker	VENDOR P/N	PANEL_CODE	PANEL_ABB	Remarks	
SEC	LTA320W1-L02	BN07-00108B	E14	AMLCD 32" TV panel code	
SEC	LTM190E1-L03	BN07-00151A	E15		
SEC	LTM240W1-L03	BN07-00134A	E16		AMLCD 19" panel
CPT	CLAA150XG09	BN07-00141A	PA		AMLCD 24" panel
CPT	CLAA170EA02	BN07-00148A	PB		CPT 15" Monitor panel
TOSHIBA	LTM15C419(A)	BN07-00002A	TA		17" CPT panel"
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" Panel Toshiba ZPD panel TSB LTM15C458S ( ZPD )	
TOSHIBA	LTM15C458	BN07-00078A	TG		
TOSHIBA	LTM15C458S	BN07-00099A	TH		
HANNSTAR	HSD150MX41A(A)	BN07-00020A	NA		
HANNSTAR	HSD150MX12	BN07-00030A	NB		TTL
TORISAN	TM150XG-22L03(A)	BN07-00021A	RA		LVDS
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" PANEL)
TORISAN	TM396WX-71N31	BN07-00064A	RF	RS24NS (TORISAN 40" PANEL)	
TORISAN	TM150XG-26L09	BN07-00073A	RG	15" TV PANEL	
TORISAN	TM150XG-26L10	BN07-00089A	RH	L10(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	Torisan 29" TV panel	
TORISAN	TM396WX-71N31	BN07-00116A	RP,Q	Torisan 40" TV panel	
TORISAN	TM220WX-71N31	BN07-00125A	RR	TORISAN 22" TV PANEL (ZPD)	
TORISAN	TM220WX-71N31	BN07-00127A	RS	TORISAN 22" TV PANEL (HPD)	
TORISAN	TM396WX-71N32A	BN07-00150A	RT	120V inverter panel	
SHARP	LQ181E1DG11(A)	BN07-10001C	PA		
SHARP	LQ150X1LW71	BN07-00067A	PB	SHARP 15" PVA PANEL	
HITACHI	TX38D12VCOC(A)	BN07-00003A	HA		
HITACHI	TX43DVCOCAB	BN07-00060A	HB	17" SXGA PVA MODE	
HITACHI	TX43D15VCOCAB	BN07-00101A	HC	ZPD Panel	
HITACHI	TX51D11VCOCAB	BN07-00122A	HD	20.1" NARROW	
HITACHI	TX54D11VCOCAB	BN07-00123A	HE	21.3" NARROW	
IBM	ITSX94S	BN07-00017A	IA		
UNIPAC	UM170E0	BN07-00028A	UA		
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	Ares 15" Hydix TV Panel	
HYUNDAI	HT15X15-D01	BN07-00146B	DJ	Ares 15" Hydix TV Panel HPD	
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	
CHIMEI	M170E3-L01	BN07-00050A	CA	TN PANEL	
CHIMEI	M150X3-L01	BN07-00051A	CB	COMPATIBLE	
CHIMEI	M170E4-L01	BN07-00052A	CC	MVA PANEL	
CHIMEI	M150X2-L01	BN07-00066A	CD	CHIMEI 15" I 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 PANE	
CHIMEI	M150X4-L06	BN07-00137A	CL	15" Narrow & Slim panel	
CHIMEI	M170E6-L01	BN07-00133A	CM	2003-03-11	
CHIMEI	M170E6-L01	BN07-00133B	CN	ZPD panel	
CHIMEI	V201V1-T01	BN07-00135A	CP	CHIMEI 20.1" panel	
CHIMEI	M170E6-L02	BN07-00126B	CQ	HIGHLAND 17" LOW PANEL ZPD panel	
CHIMEI	M170E6-L05	BN07-00152A	CR	CMO 17" panel code	
CHIMEI	M170E6-L05	BN07-00152B	CS	CMO 17" ZPD panel code	