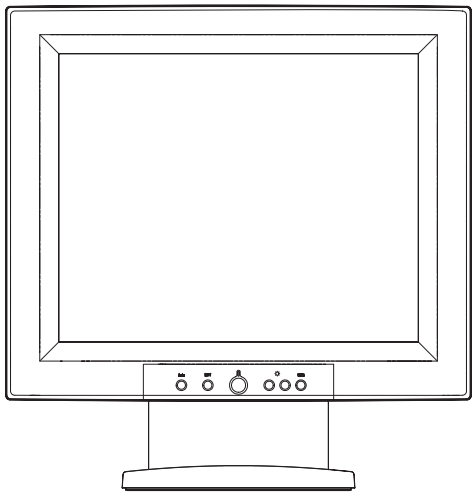
SAMSUNG

TFT-LCD MONITOR

CN17V*

SERVICE Manual

TFT-LCD MONITOR



CONTENTS

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*).

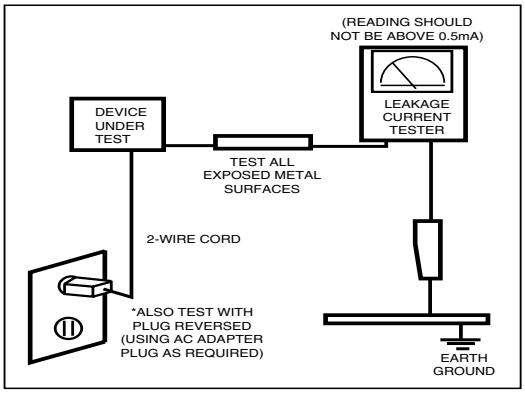


Figure 1-1. Leakage Current Test Circuit

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

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 devices 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, normally black transmissive, 17-Inch viewable, 0.264 (H) x 0.264 (V) mm pixel pitch
Scanning Frequency	Horizontal : 30 kHz ~ 81 kHz (Automatic) Vertical : 56 Hz ~ 85 Hz (~XGA), 76 Hz (SXGA)
Display Colors	16,7 Million colors
Maximum Resolution	Horizontal : 1280 Pixels Vertical : 1024 Pixels
Input Video Signal	Analog, 0.714 Vp-p ± 5% positive at 75 Ω, internally terminated
Input Sync Signal	Type : Seperate H/V sync, Composite H/V, Sync-on-Green Level : TTL level (V high ≥ 2.0 V, V low ≤ 0.8 V), Sync-on-Green (≤ –0.25 V)
Maximum Pixel Clock rate	135 MHz
Active Display Horizontal/Vertical	338 ± 3 mm/270 ± 3 mm
AC power voltage & Frequency	AC 90 ~ 264 Volts, 60/50 Hz ± 3 Hz
Power Consumption	42 W (max), 40W (normal)
Dimensions Unit (W x D x H) Carton (W x D x H)	 17.32 x 8.66 x 18.05 Inches (440 x 220 x 458.5 mm) 22.79 x 22.4 x 12.24 Inches (579 x 569 x 311 mm)
Weight (Net/Gross)	 8.0 kg (17.6 lbs) / 10.2 kg (22.5 lbs)
Environmental Considerations	Operating Temperature : 50°F ~ 104°F (10°C ~ 35°C) Humidity : 10 % ~ 80 % Storage Temperature : -68°F ~ 113°F (-20°C ~ 45°C) Humidity : 5 % ~ 95 %

- CN17V* comply with SWEDAC (MPRII) recommendations for reduced electromagnetic fields.
- Designs and specifications are subject to change without prior notice.

2-2 Pin Assignments

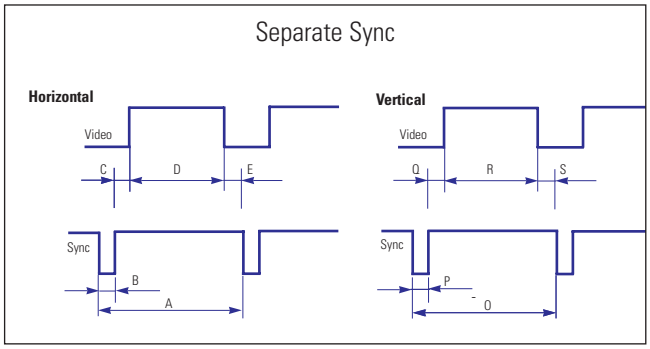
Sync Type / Pin No.	15-Pin D-Sub Signal Cable Connector		
	Separate	**Composite**	**Sync-on-green**
1	Red	Red	Red
2	Green	Green	Green + H/V Sync.
3	Blue	Blue	Blue
4	GND	GND	GND
5	DDC Return (GND)	DDC Return (GND)	DDC Return (GND)
6	GND-R	GND-R	GND-R
7	GND-G	GND-G	GND-G
8	GND-B	GND-B	GND-B
9	DDC Power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

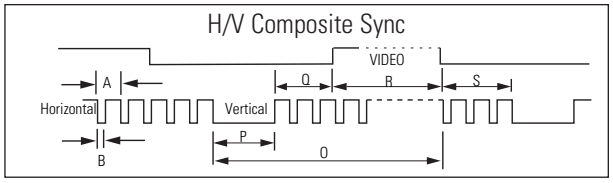
2-3 Timing Chart

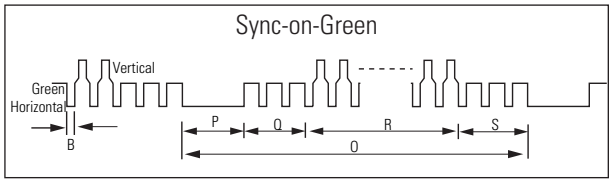
This section of the service manual describes the timing that the computer industry recognizes as standard for computer-generated video signals.

Table 2-1. Timing Chart

Mode / Timing	IBM		VESA								
	VGA2/ 70 Hz 720 x 400	VGA3/ 60 Hz 640 x 480	640/75 Hz 640 x 480	640/85 Hz 640 x 480	800/75 Hz 800 x 600	800/85 Hz 800 x 600	1024/60Hz 1024 x 768	1024/75Hz 1024 x 768	1024/85Hz 1024x768	1280/76Hz 1280x1024 (Analog Only)	1280/75Hz 1280x1024 (Analog Only)
fH (kHz)	31.469	31.469	37.500	43.269	46.875	53.674	48.363	60.023	68.677	81.129	79.976
A µsec	31.777	31.778	26.667	23.111	21.333	18.631	20.677	16.660	14.561	16.640	12.504
B µsec	3.813	3.813	2.032	1.556	1.616	1.138	2.092	1.219	1.016	6.400	1.067
C µsec	1.589	1.589	3.810	2.222	3.232	2.702	2.462	2.235	2.201	2.880	1.837
D µsec	26.058	26.058	20.317	17.778	16.162	14.222	15.754	13.003	10.836		9.481
E µsec	0.318	0.318	0.508	1.556	0.323	0.569	0.369	0.203	0.508	3.200	0.119
fV (Hz)	70.087	59.940	75.000	85.008	75.000	85.061	60.004	75.029	84.997	76.106	75.025
O msec	14.268	16.683	13.333	11.764	13.333	11.756	16.666	13.328	11.765	10.660	13.329
P msec	0.064	0.064	0.080	0.671	0.064	0.056	0.124	0.050	0.044	0.080	0.038
Q msec	0.858	0.794	0.427	0.578	0.448	0.503	0.600	0.466	0.524	3.200	0.475
R msec	13.155	15.761	12.800	11.093	12.800	11.179	15.880	12.795	11.183		12.804
S msec	0.191	0.064	0.027	0.023	0.021	0.019	0.062	0.017	0.015	0.020	0.013
Clock Freq. (MHz)	28.322	25.175	31.500	49.500	49.500	56.250	75.000	78.750	94.500	135.000	135.000
Polarity H.Sync	Negative	Negative	Negative	Negative	Positive	Positive	Negative	Positive	Positive	Negative	Positive
V.Sync	Positive	Negative	Negative	Negative	Positive	Positive	Negative	Positive	Positive	Negative	Positive
Remark	Separate	Separate	Separate	Separate	Separate	Separate	Separate	Separate	Separate	Com.	Separate







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

Memo

3 Disassembly and Reassembly

This section of the service manual describes the disassembly and reassembly procedures for the CN17V* TFT-LCD monitors.

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.

3-1-1 Removing the Stand

1. With a pad beneath it, stand the monitor on its front with the screen facing downward and the base close to you. Make sure nothing will damage the screen.
2. Remove the 4 screws on the Stand.

Caution: Be careful. The signal cable and power cable are still attached to the monitor.

3. Disconnect the Signal Cable and Power Cord.

3-1-2 Main Body Disassembly

1. Remove STAND-NECK/REAR and COVER-HINGE on the moniter
2. Remove 4 screws on the STAND-Assy.
   Remove signal and Ac adapter cable on the monitor
3. Remove 4 screws on the Rear Cover.
4. Pull the Rear Cover up and off the monitor.
5. Remove 18 screws on the PCB Shield and remove the Shield.
6. Remove 4 screws on the Main PCB and 2 screws on the Inverter PCB and 2 screws on the 10P Harness.
7. Disconnect the interface wire (30P) between the Panel and the CN301 connector on the Main PCB.
8. Disconnect the Function PCB wire (10P) between the Function PCB and the CN303 connector on the Main PCB.
9. Disconnect 4 Inverter wires between the Panel and the CN2, 3, 4, 5 connectors on the Inverter PCB and disconnect the 12P harness between CN1 connector on the inverter and CN302 connector on the Main PCB.
10. Carefully lift the Main PCB Assembly and Inverter PCB and place them on a flat, level surface that is protected from static electricity.
11. Remove 6 screws on the Panel Bracket.
12. Remove the Bracket Assembly from the Front Cover.
13. Remove the 3 screws on the Function PCB from the Front Cover and remove the Function PCB and Function Knob.
14. Remove 4 screws on the Front Shield and remove the Panel Bracket and the Front Shield.

3-2 Reassembly

Reassembly procedures are in the reverse order of Disassembly procedures.

4 Alignments and Adjustments

This section of the service manual explains how to use the DDC JIG to adjust the black, red, green, and blue levels of the FPD when you replace the AD Board, and how to update the microprocessor when you change the Panel or Lamp(s).

4-1 Required Equipment

The following equipment is necessary for adjusting the monitor:

- Oscilloscope with probe tool
- Computer with Windows 95®, Windows 98®, or Windows NT®.
- DV17AS.exe software
- DDC Control JIG

4-2 Using the DDC Control JIG

After replacing the LCD Panel, Lamp(s), and / or AD Board, use the DDC Control JIG to complete your service. Attach the DDC Control JIG to the flat panel display (FPD) as shown in the diagrams, below.

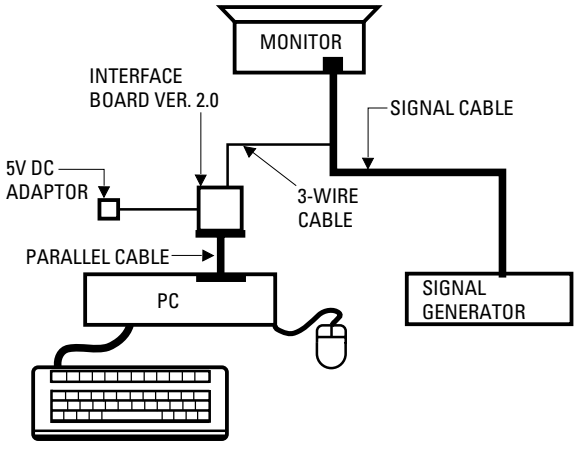


Figure 4-1. Setup 1, With Signal Generator

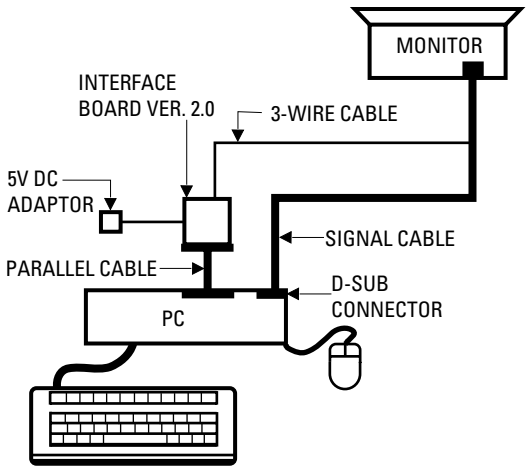


Figure 4-2. Setup 2, Without Signal Generator

4-2-1 Main Menu

4-2-1 (a) Service JIG : DV17

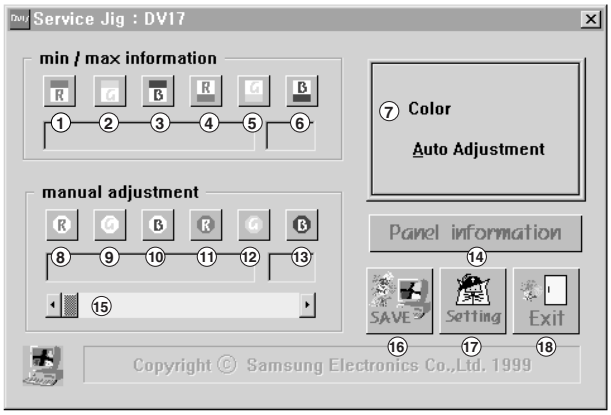


Figure 4-3.Service JIG Menu

No	Label	Definition
①	Red max value	Shows the red video signal max value
②	Green max value	Shows the green video signal max value
③	Blue max value	Shows the blue video signal max value
④	Red min value	Shows the red video signal min value
⑤	Green min value	Shows the green video signal min value
⑥	Blue min value	Shows the blue video signal min value
⑦	Color Auto Adjustment	Automatical screen contrast setting
⑧	Red gain control	Adjusts the red video signal gain control
⑨	Green gain control	Adjusts the green video signal gain control
⑩	Blue gain control	Adjusts the blue video signal gain control
⑪	Red cutoff control	Adjusts the red video signal cutoff control
⑫	Green cutoff control	Adjusts the green video signal cutoff control
⑬	Blue cutoff control	Adjusts the blue video signal cutoff control
⑭	Panel information	Shows the sub menu to panel information (4-2-2 (a))
⑮	Scroll bar	Changes the value or level of the selected item. The window to the right shows the value as it changes.
⑯	SAVE	Saves the current adjustment value of the R,G,B video contrast gain and cutoff level
⑰	Setting	Displays and allows you to adjust the PC and Control JIG communication environment. Use this button to change the Delay parameter and Port Address of your PC system and to test the connection between the Control JIG and your computer
⑱	Exit	Quits the DDC Control JIG

4-2-2 Sub Menu

4-2-2 (a) Panel Information

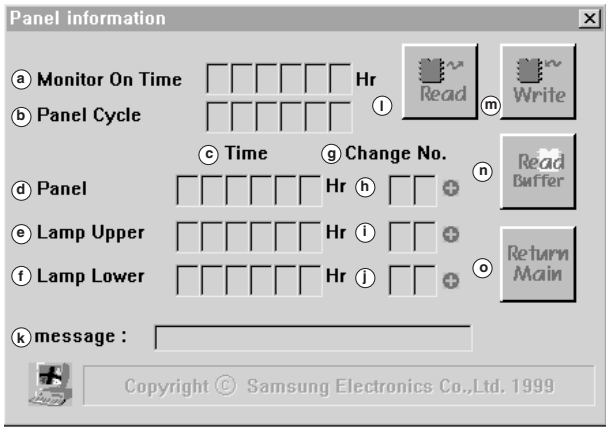


Figure 4-4. Control JIG Menu

No	Label	Definition
ⓐ	Monitor On Time	Total hours that the monitor has been actively functioning.
ⓑ	Panel Cycle	The total number of times the Panel has been turned ON.
ⓒ	Time	Total in Hours that this Panel or Lamp has been ON. Reset this number to 000000 after replacing the part.
ⓓ	Panel	Total number of hours that this Panel has been ON.
ⓔ	Lamp, Upper	Total number of hours that this Upper Lamp has been ON.
ⓕ	Lamp, Lower	Total number of hours that this Lower Lamp has been ON.
ⓖ	Change No.	The number of times this Panel or Lamp has been replaced. The numbers are 00 if the item is the original factory part installed during manufacture of this monitor.
ⓗ	Panel	Replacement times. This value is 00 if original equipment.
ⓘ	Lamp, Upper	Replacement times. This value is 00 if original equipment.
ⓙ	Lamp, Lower	Replacement times. This value is 00 if original equipment.
ⓚ	Message	Shows the message.
ⓛ	Read	Reads all Panel information data from the AD Board
ⓜ	Write	Writes the Panel Parameter Control values to the AD Board
ⓝ	Read buffer	Reload the Panel Parameter Control values from the Program buffer
ⓞ	Return Main	Returns to the Main menu

4-2-3 Adjustment Procedures

Use the following procedures whenever you replace the AD Board, Panel, or one or both of the Lamps.

4-2-3 (a) When Replacing the AD Board

1. Before replacing the AD Board, read all Panel information data by using the Read button on the DDC Control JIG.
2. Remove the old AD Board and replace it with a new board.
3. Perform the procedures described in section 4-2-3 (b).
4. Write the Panel information data to the new AD Board by using the Write button.
5. Perform other procedures using the DDC Control JIG, if necessary.
6. When all procedures are complete, select the Exit button (⑱) to quit the DDC Control JIG software.

4-2-3 (b) Color Auto Adjustment

1. After displaying 16-Gray pattern or black and white mixed pattern, click “Color Auto Adjustment” button.
2. During normal execution of Auto Algorithm the screen image may flicker. If Auto Algorithm does not excute properly, check DDC Control JIG.
3. After normal execution of Auto Algorithm, confirm optimal settings by observing the contrast of several different patterns on the display.
4. If you want to check each color value, click the button from ① to ⑥ and from ⑧ to ⑬

4-2-3 (c) When Replacing the Panel

1. Select the Read Buffer button (ⓝ) to gather the current information about this monitor.
2. Increment the number by clicking on the (+) button on the Panel row in the Change No. column. If they were not already 00, the numbers for the Upper and Lower Lamps will automatically change to 00.
3. Check all values. If there is an error, select Read Buffer again and increment the Change No. column to the correct number. When all values are correct, select the Write button (ⓜ) to record the data in the firmware.
4. Select the Return Menu button (⊙) to Return Main Menu.

4-2-3 (d) When Replacing the Upper and/or Lower Lamp

1. Select the Read Buffer button (ⓝ) to gather current information about this monitor.
2. Increment the number by clicking on the (+) button on the Lamp Upper and/or Lamp Lower row in the Change No. column.
3. Check all values. If there is an error, select Read Buffer again and increment the Change No. column to the correct number(s). When all values are correct, select the Write button (ⓜ) to record the data in the firmware.
4. Select the Return Menu button (⊙) to Return Main Menu.

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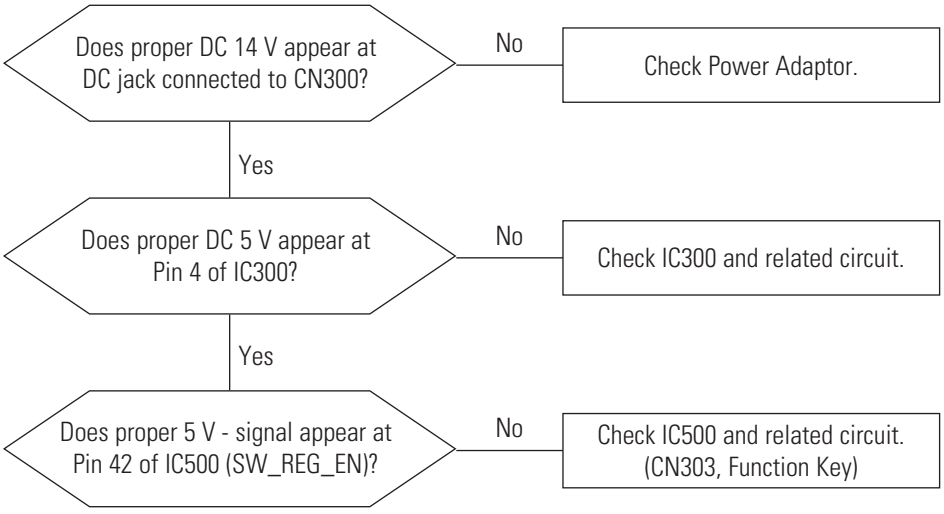
5 Troubleshooting

Notes: 1. Before troubleshooting, setup the PC's display as below.
- Resolution: 1280 x 1024
- H-frequency: 64 kHz
- V-frequency: 60 Hz

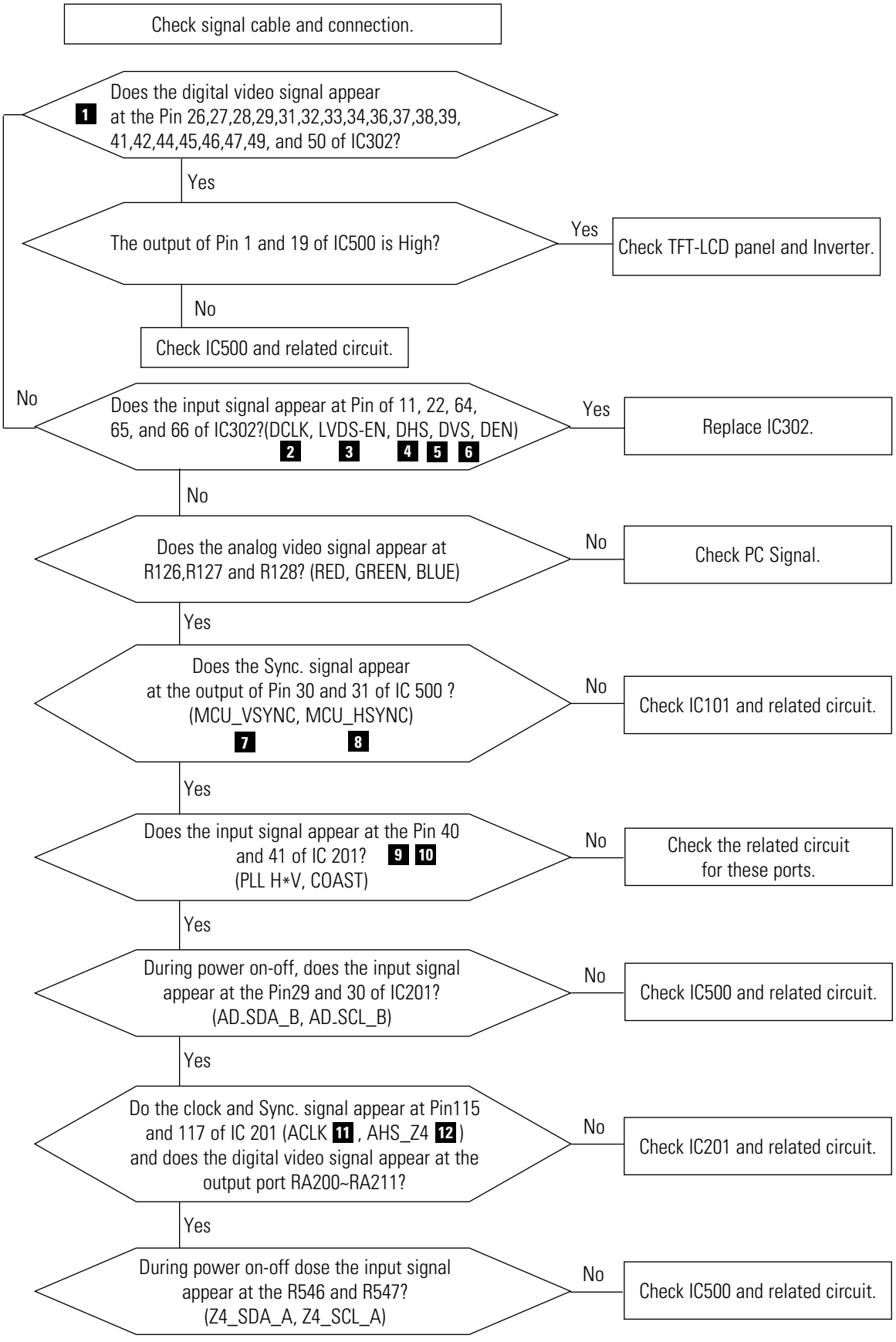
2. If no picture appears, make sure the power cord is correctly connected.
3. Check the following circuits.
- No raster appears: Stand PCB, Main PCB
- 14V develop but no screen: Main PCB
- 14V does not develop: Main PCB

4. If you push and hold the EXIT button for more than 5 seconds, the monitor automatically turns back to the factory preset.

5-1 No Power

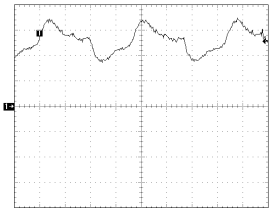


5-2 No Video [Analog]



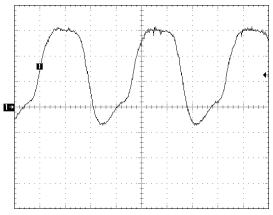
WAVEFORMS

1 IC302 #26



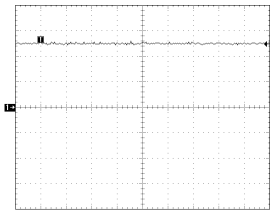
CH1 RMS = 1.323V

2 IC302 #11



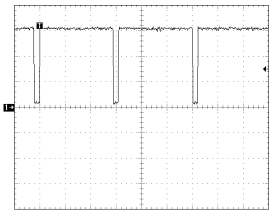
CH1 RMS = 2.046V

3 IC302 #22



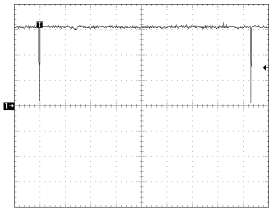
CH1 RMS = 4.999V

4 IC302 #64



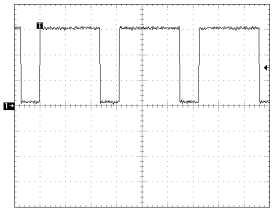
CH1 RMS =2.989V

5 IC302 #65



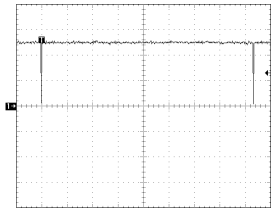
CH1 RMS = 3.098V

6 IC302 #66



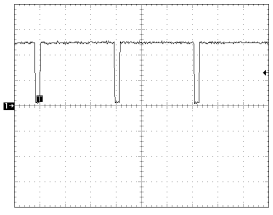
CH1 RMS =2.621 V

7 IC500 #30



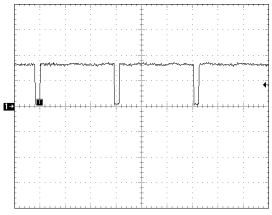
CH1 RMS = 4.979V

8 IC500 #31



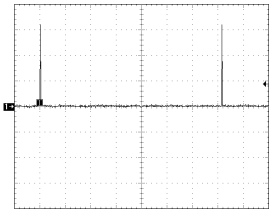
CH1 RMS = 4.816V

9 IC201 #40



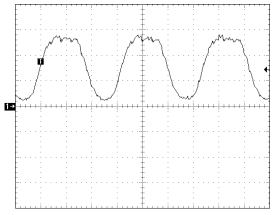
CH1 RMS = 1.188V

10 IC201 #41



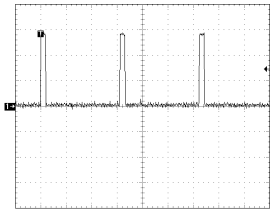
CH1 RMS = 205mV

11 IC201 #115



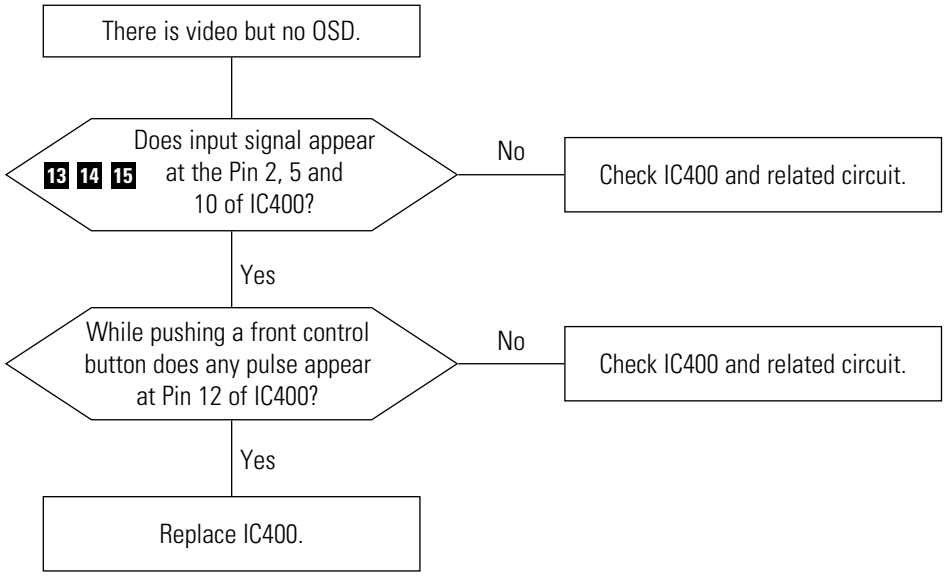
CH1 RMS = 1.864V

12 IC201 #117



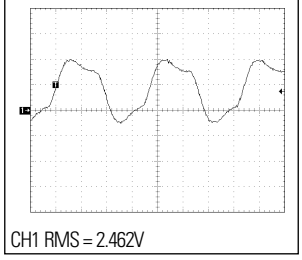
CH1 RMS = 695mV

5-3 No OSD



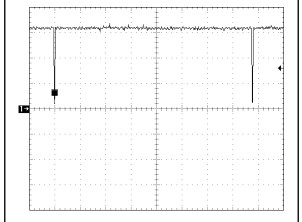
WAVEFORMS

13 IC400 #2



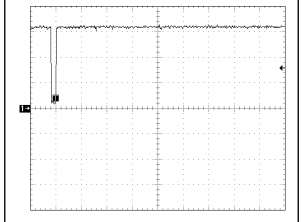
CH1 RMS = 2.462V

14 IC400 #5



CH1 RMS = 3.163V

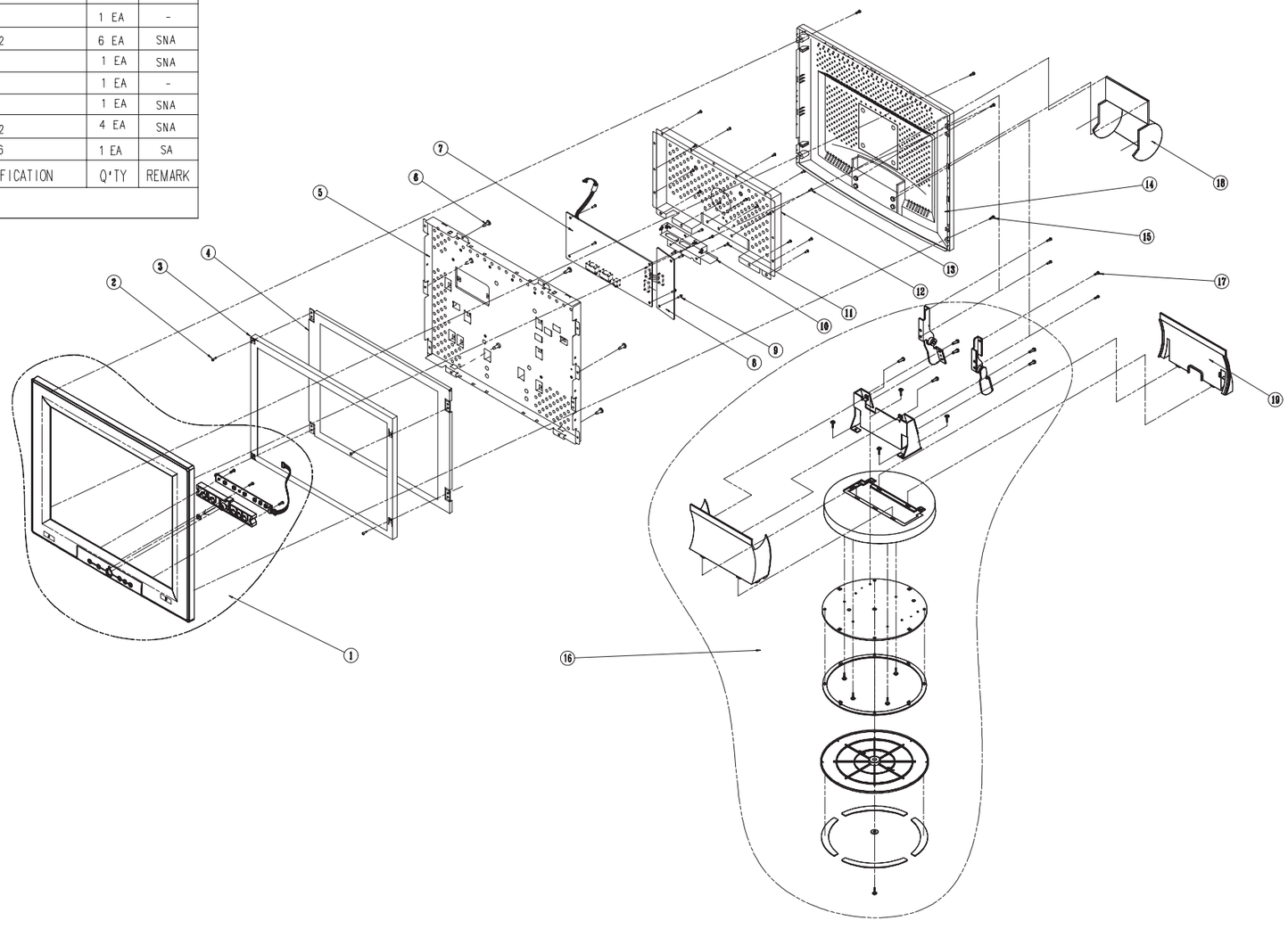
15 IC400 #10



CH1 RMS = 3.154V

6 Exploded View and Parts List

19	STAND-NECK, REAR	BN72-60046A	ABS HB IV16	1 EA	SNA
18	COVER-REAR	BN72-60043C	ABS HB IV16	1 EA	SA
17	SCREW-TAPTITE	6003-000133	BH,+,M4,L8	4 EA	SNA
16	UNIT/STAND-ASSY	BN75-10033A	ABS HB IV16	1 EA	SA
15	SCREW-TAPTITE	6003-000122	BH,+,M4,L12	4 EA	SNA
14	COVER-REAR	BN72-60041C	ABS HB IV16	1 EA	SA
13	SCREW-TAPTITE	6003-000117	BH,+,M3,L6	15 EA	SNA
12	SHIELD-PCB	BN70-10040A	SECC T1.0	1 EA	SNA
11	SCREW-TAPTITE	6003-000117	BH,+,M3,L6	3 EA	SNA
10	SHIELD-D/SUB	BN70-00114C	SPTE T0.5	1 EA	SNA
9	SCREW-TAPTITE	6003-000117	BH,+,M3,L6	6 EA	SNA
8	INVERTER PCB			1 EA	-
7	PBA			1 EA	-
6	SCREW-TAPTITE	6003-000122	BH,+,M4,L12	6 EA	SNA
5	BRKT-PANEL	BN70-10039A	SECC T1.2	1 EA	SNA
4	PANEL			1 EA	-
3	SHIELD FRONT	BN75-00009A	SPTE T0.5	1 EA	SNA
2	SCREW-TAPTITE	6003-000135	BH,+,M3,L12	4 EA	SNA
1	UNIT/COVER-FRONT	BN75-00143A	ABS HB IV16	1 EA	SA
NO	DESCRIPTION	PART CODE-NO	SPECIFICATION	Q'TY	REMARK
UNIT PART LIST					



Memo

7 Electrical Parts List

7-1 Main PCB Parts

Loc. No.	Code No.	Description	Specification	Remarks
C306	2409-001004	C-ORGANIC	100uF,20%,16V,LL,BK,8x10.5mm,3	
CIS	BN70-00114C	SHIELD-D/SUB	CN17BS,SPTE,-,T0.5,-,-,ANALOG TYPE	SNA
CIS	BN46-00005Y	MICOM-S/W,CN17MSF(E4)	CN17MSF(E4 PANEL),-,-,-,-,-,-	SNA
CN101	3701-001219	CONNECTOR-DSUB	15P,3R,FEMALE,ANGLE,AUF	
CN300	3722-000117	JACK-DC POWER	3P,3.5mm,AG,BLK,NO	SNA
CN500	3711-001465	CONNECTOR-HEADER	NOWALL,3P,1R,2.54mm,STRAIGHT,A	SNA
IC500	0903-001194	IC-MICROCONTROLLER	3PB63,8Bit,SDIP,42P,600MIL,12MHz,ST,CMOS,PLASTIC,5V,-,-40to+85C,1040BYTE,48KBYTE	SNA
IC500_SOCK	3704-001071	SOCKET-IC	42P,DIP,SN,1.778mm	
C100	2203-000257	C-CERAMIC,CHIP	10nF,10%,50V,X7R,TP,1608	
C105	2402-000176	C-AL,SMD	10uF,20%,16V,GP,TP,4.3x4.3x5.4	
C107	2203-005005	C-CERAMIC,CHIP	100nF,10%,16V,X7R,TP,1608	
C108	2203-005005	C-CERAMIC,CHIP	100nF,10%,16V,X7R,TP,1608	
C116	2203-000257	C-CERAMIC,CHIP	10nF,10%,50V,X7R,TP,1608	
C117	2402-000176	C-AL,SMD	10uF,20%,16V,GP,TP,4.3x4.3x5.4	
C118	2203-000257	C-CERAMIC,CHIP	10nF,10%,50V,X7R,TP,1608	
C119	2402-000176	C-AL,SMD	10uF,20%,16V,GP,TP,4.3x4.3x5.4	
C120	2203-000257	C-CERAMIC,CHIP	10nF,10%,50V,X7R,TP,1608	
C121	2402-000176	C-AL,SMD	10uF,20%,16V,GP,TP,4.3x4.3x5.4	
C122	2203-000257	C-CERAMIC,CHIP	10nF,10%,50V,X7R,TP,1608	
C123	2402-000176	C-AL,SMD	10uF,20%,16V,GP,TP,4.3x4.3x5.4	
C124	2203-005005	C-CERAMIC,CHIP	100nF,10%,16V,X7R,TP,1608	
C125	2203-005005	C-CERAMIC,CHIP	100nF,10%,16V,X7R,TP,1608	
C126	2203-000257	C-CERAMIC,CHIP	10nF,10%,50V,X7R,TP,1608	
C127	2402-000176	C-AL,SMD	10uF,20%,16V,GP,TP,4.3x4.3x5.4	
C225	2402-000176	C-AL,SMD	10uF,20%,16V,GP,TP,4.3x4.3x5.4	
C226	2203-005005	C-CERAMIC,CHIP	100nF,10%,16V,X7R,TP,1608	
C227	2203-005005	C-CERAMIC,CHIP	100nF,10%,16V,X7R,TP,1608	
C228	2203-005005	C-CERAMIC,CHIP	100nF,10%,16V,X7R,TP,1608	
C229	2203-005005	C-CERAMIC,CHIP	100nF,10%,16V,X7R,TP,1608	
C230	2203-005005	C-CERAMIC,CHIP	100nF,10%,16V,X7R,TP,1608	
C231	2203-005005	C-CERAMIC,CHIP	100nF,10%,16V,X7R,TP,1608	
C232	2203-005005	C-CERAMIC,CHIP	100nF,10%,16V,X7R,TP,1608	
C233	2203-005005	C-CERAMIC,CHIP	100nF,10%,16V,X7R,TP,1608	
C234	2203-005005	C-CERAMIC,CHIP	100nF,10%,16V,X7R,TP,1608	
C235	2203-005005	C-CERAMIC,CHIP	100nF,10%,16V,X7R,TP,1608	
C236	2203-005005	C-CERAMIC,CHIP	100nF,10%,16V,X7R,TP,1608	
C237	2203-005005	C-CERAMIC,CHIP	100nF,10%,16V,X7R,TP,1608	
C238	2203-005005	C-CERAMIC,CHIP	100nF,10%,16V,X7R,TP,1608	
C239	2203-005005	C-CERAMIC,CHIP	100nF,10%,16V,X7R,TP,1608	

Loc. No.	Code No.	Description	Specification	Remarks
C240	2203-005005	C-CERAMIC,CHIP	100nF,10%,16V,X7R,TP,1608	
C241	2203-005005	C-CERAMIC,CHIP	100nF,10%,16V,X7R,TP,1608	
C242	2203-005005	C-CERAMIC,CHIP	100nF,10%,16V,X7R,TP,1608	
C243	2203-005005	C-CERAMIC,CHIP	100nF,10%,16V,X7R,TP,1608	
C244	2203-005005	C-CERAMIC,CHIP	100nF,10%,16V,X7R,TP,1608	
C245	2402-000176	C-AL,SMD	10uF,20%,16V,GP,TP,4.3x4.3x5.4	
C246	2402-001042	C-AL,SMD	100uF,20%,16V,GP,TP,6.6x6.6x5.4mm	
C247	2203-005005	C-CERAMIC,CHIP	100nF,10%,16V,X7R,TP,1608	
C248	2203-005005	C-CERAMIC,CHIP	100nF,10%,16V,X7R,TP,1608	
C249	2203-005005	C-CERAMIC,CHIP	100nF,10%,16V,X7R,TP,1608	
C250	2203-005005	C-CERAMIC,CHIP	100nF,10%,16V,X7R,TP,1608	
C251	2203-005005	C-CERAMIC,CHIP	100nF,10%,16V,X7R,TP,1608	
C252	2203-005005	C-CERAMIC,CHIP	100nF,10%,16V,X7R,TP,1608	
C253	2203-005005	C-CERAMIC,CHIP	100nF,10%,16V,X7R,TP,1608	
C254	2402-000176	C-AL,SMD	10uF,20%,16V,GP,TP,4.3x4.3x5.4	
C255	2203-005005	C-CERAMIC,CHIP	100nF,10%,16V,X7R,TP,1608	
C256	2203-005005	C-CERAMIC,CHIP	100nF,10%,16V,X7R,TP,1608	
C257	2203-000257	C-CERAMIC,CHIP	10nF,10%,50V,X7R,TP,1608	
C258	2203-000257	C-CERAMIC,CHIP	10nF,10%,50V,X7R,TP,1608	
C259	2203-000972	C-CERAMIC,CHIP	47nF,10%,16V,X7R,TP,1608	
C260	2203-000972	C-CERAMIC,CHIP	47nF,10%,16V,X7R,TP,1608	
C261	2203-000972	C-CERAMIC,CHIP	47nF,10%,16V,X7R,TP,1608	
C265	2203-005005	C-CERAMIC,CHIP	100nF,10%,16V,X7R,TP,1608	
C266	2402-001042	C-AL,SMD	100uF,20%,16V,GP,TP,6.6x6.6x5.4mm	
C267	2203-000815	C-CERAMIC,CHIP	0.033nF,5%,50V,NP0,TP,1608	
C300	2402-000176	C-AL,SMD	10uF,20%,16V,GP,TP,4.3x4.3x5.4	
C301	2203-005005	C-CERAMIC,CHIP	100nF,10%,16V,X7R,TP,1608	
C302	2402-001042	C-AL,SMD	100uF,20%,16V,GP,TP,6.6x6.6x5.4mm	
C303	2402-001044	C-AL,SMD	100uF,20%,25V,-,TP,8.3x8.3x6.3	
C304	2203-000257	C-CERAMIC,CHIP	10nF,10%,50V,X7R,TP,1608	
C305	2203-000257	C-CERAMIC,CHIP	10nF,10%,50V,X7R,TP,1608	
C307	2203-000257	C-CERAMIC,CHIP	10nF,10%,50V,X7R,TP,1608	
C308	2203-000257	C-CERAMIC,CHIP	10nF,10%,50V,X7R,TP,1608	
C311	2203-005005	C-CERAMIC,CHIP	100nF,10%,16V,X7R,TP,1608	
C312	2402-001044	C-AL,SMD	100uF,20%,25V,-,TP,8.3x8.3x6.3	
C313	2203-000257	C-CERAMIC,CHIP	10nF,10%,50V,X7R,TP,1608	
C314	2203-000257	C-CERAMIC,CHIP	10nF,10%,50V,X7R,TP,1608	
C315	2402-001042	C-AL,SMD	100uF,20%,16V,GP,TP,6.6x6.6x5.4mm	
C316	2402-001042	C-AL,SMD	100uF,20%,16V,GP,TP,6.6x6.6x5.4mm	
C317	2203-005005	C-CERAMIC,CHIP	100nF,10%,16V,X7R,TP,1608	
C318	2402-001042	C-AL,SMD	100uF,20%,16V,GP,TP,6.6x6.6x5.4mm	

Loc. No.	Code No.	Description	Specification	Remarks
C319	2203-005005	C-CERAMIC,CHIP	100nF,10%,16V,X7R,TP,1608	
C320	2402-001042	C-AL,SMD	100uF,20%,16V,GP,TP,6.6x6.6x5.4mm	
C321	2203-000257	C-CERAMIC,CHIP	10nF,10%,50V,X7R,TP,1608	
C322	2402-001044	C-AL,SMD	100uF,20%,25V,-,TP,8.3x8.3x6.3	
C323	2203-005005	C-CERAMIC,CHIP	100nF,10%,16V,X7R,TP,1608	
C324	2203-005005	C-CERAMIC,CHIP	100nF,10%,16V,X7R,TP,1608	
C325	2203-005005	C-CERAMIC,CHIP	100nF,10%,16V,X7R,TP,1608	
C326	2203-005005	C-CERAMIC,CHIP	100nF,10%,16V,X7R,TP,1608	
C327	2203-005005	C-CERAMIC,CHIP	100nF,10%,16V,X7R,TP,1608	
C328	2203-005005	C-CERAMIC,CHIP	100nF,10%,16V,X7R,TP,1608	
C329	2402-001042	C-AL,SMD	100uF,20%,16V,GP,TP,6.6x6.6x5.4mm	
C330	2203-005005	C-CERAMIC,CHIP	100nF,10%,16V,X7R,TP,1608	
C331	2007-000077	R-CHIP	470ohm,5%,1/16W,DA,TP,1608	
C332	2203-005005	C-CERAMIC,CHIP	100nF,10%,16V,X7R,TP,1608	
C333	2203-005005	C-CERAMIC,CHIP	100nF,10%,16V,X7R,TP,1608	
C334	2203-005005	C-CERAMIC,CHIP	100nF,10%,16V,X7R,TP,1608	
C335	2203-005005	C-CERAMIC,CHIP	100nF,10%,16V,X7R,TP,1608	
C336	2203-005005	C-CERAMIC,CHIP	100nF,10%,16V,X7R,TP,1608	
C337	2203-005005	C-CERAMIC,CHIP	100nF,10%,16V,X7R,TP,1608	
C338	2402-000176	C-AL,SMD	10uF,20%,16V,GP,TP,4.3x4.3x5.4	
C339	2402-000176	C-AL,SMD	10uF,20%,16V,GP,TP,4.3x4.3x5.4	
C340	2203-005005	C-CERAMIC,CHIP	100nF,10%,16V,X7R,TP,1608	
C341	2203-005005	C-CERAMIC,CHIP	100nF,10%,16V,X7R,TP,1608	
C342	2203-005005	C-CERAMIC,CHIP	100nF,10%,16V,X7R,TP,1608	
C343	2402-000176	C-AL,SMD	10uF,20%,16V,GP,TP,4.3x4.3x5.4	
C344	2203-005005	C-CERAMIC,CHIP	100nF,10%,16V,X7R,TP,1608	
C345	2203-005005	C-CERAMIC,CHIP	100nF,10%,16V,X7R,TP,1608	
C346	2203-005005	C-CERAMIC,CHIP	100nF,10%,16V,X7R,TP,1608	
C347	2402-001042	C-AL,SMD	100uF,20%,16V,GP,TP,6.6x6.6x5.4mm	
C348	2203-005005	C-CERAMIC,CHIP	100nF,10%,16V,X7R,TP,1608	
C349	2203-005005	C-CERAMIC,CHIP	100nF,10%,16V,X7R,TP,1608	
C350	2203-000257	C-CERAMIC,CHIP	10nF,10%,50V,X7R,TP,1608	
C351	2203-000257	C-CERAMIC,CHIP	10nF,10%,50V,X7R,TP,1608	
C352	2402-000168	C-AL,SMD	100uF,20%,16V,GP,TP,8.3x8.3x6.3mm	
C353	2402-000168	C-AL,SMD	100uF,20%,16V,GP,TP,8.3x8.3x6.3mm	
C400	2203-005005	C-CERAMIC,CHIP	100nF,10%,16V,X7R,TP,1608	
C401	2203-005005	C-CERAMIC,CHIP	100nF,10%,16V,X7R,TP,1608	
C402	2203-005005	C-CERAMIC,CHIP	100nF,10%,16V,X7R,TP,1608	
C403	2203-005005	C-CERAMIC,CHIP	100nF,10%,16V,X7R,TP,1608	
C404	2203-005005	C-CERAMIC,CHIP	100nF,10%,16V,X7R,TP,1608	
C405	2203-005005	C-CERAMIC,CHIP	100nF,10%,16V,X7R,TP,1608	

Loc. No.	Code No.	Description	Specification	Remarks
C406	2203-005005	C-CERAMIC,CHIP	100nF,10%,16V,X7R,TP,1608	
C407	2203-005005	C-CERAMIC,CHIP	100nF,10%,16V,X7R,TP,1608	
C408	2203-005005	C-CERAMIC,CHIP	100nF,10%,16V,X7R,TP,1608	
C409	2203-005005	C-CERAMIC,CHIP	100nF,10%,16V,X7R,TP,1608	
C410	2203-005005	C-CERAMIC,CHIP	100nF,10%,16V,X7R,TP,1608	
C411	2203-005005	C-CERAMIC,CHIP	100nF,10%,16V,X7R,TP,1608	
C412	2203-005005	C-CERAMIC,CHIP	100nF,10%,16V,X7R,TP,1608	
C413	2203-005005	C-CERAMIC,CHIP	100nF,10%,16V,X7R,TP,1608	
C414	2203-005005	C-CERAMIC,CHIP	100nF,10%,16V,X7R,TP,1608	
C415	2203-005005	C-CERAMIC,CHIP	100nF,10%,16V,X7R,TP,1608	
C416	2203-005005	C-CERAMIC,CHIP	100nF,10%,16V,X7R,TP,1608	
C417	2203-005005	C-CERAMIC,CHIP	100nF,10%,16V,X7R,TP,1608	
C418	2203-005005	C-CERAMIC,CHIP	100nF,10%,16V,X7R,TP,1608	
C419	2203-005005	C-CERAMIC,CHIP	100nF,10%,16V,X7R,TP,1608	
C420	2203-005005	C-CERAMIC,CHIP	100nF,10%,16V,X7R,TP,1608	
C421	2203-005005	C-CERAMIC,CHIP	100nF,10%,16V,X7R,TP,1608	
C422	2203-005005	C-CERAMIC,CHIP	100nF,10%,16V,X7R,TP,1608	
C423	2203-005005	C-CERAMIC,CHIP	100nF,10%,16V,X7R,TP,1608	
C424	2203-005005	C-CERAMIC,CHIP	100nF,10%,16V,X7R,TP,1608	
C425	2409-001029	C-ORGANIC	120uF,20%,6.3V,WT,TP,10.3x10.3x10.3mm,9	
C426	2409-001029	C-ORGANIC	120uF,20%,6.3V,WT,TP,10.3x10.3x10.3mm,9	
C427	2203-000280	C-CERAMIC,CHIP	0.01nF,0.5pF,50V,NP0,TP,1608	
C428	2203-000384	C-CERAMIC,CHIP	0.015nF,5%,50V,NP0,TP,1608	
C429	2203-000626	C-CERAMIC,CHIP	0.022nF,5%,50V,NP0,TP,1608	
C430	2203-000626	C-CERAMIC,CHIP	0.022nF,5%,50V,NP0,TP,1608	
C431	2203-000455	C-CERAMIC,CHIP	1nF,5%,50V,NP0,TP,2012	
C432	2402-000176	C-AL,SMD	10uF,20%,16V,GP,TP,4.3x4.3x5.4	
C433	2203-005005	C-CERAMIC,CHIP	100nF,10%,16V,X7R,TP,1608	
C434	2203-005005	C-CERAMIC,CHIP	100nF,10%,16V,X7R,TP,1608	
C435	2203-000384	C-CERAMIC,CHIP	0.015nF,5%,50V,NP0,TP,1608	
C436	2203-005005	C-CERAMIC,CHIP	100nF,10%,16V,X7R,TP,1608	
C437	2203-005005	C-CERAMIC,CHIP	100nF,10%,16V,X7R,TP,1608	
C438	2203-005005	C-CERAMIC,CHIP	100nF,10%,16V,X7R,TP,1608	
C439	2203-005005	C-CERAMIC,CHIP	100nF,10%,16V,X7R,TP,1608	
C440	2203-005005	C-CERAMIC,CHIP	100nF,10%,16V,X7R,TP,1608	
C441	2203-005005	C-CERAMIC,CHIP	100nF,10%,16V,X7R,TP,1608	
C442	2203-005005	C-CERAMIC,CHIP	100nF,10%,16V,X7R,TP,1608	
C443	2203-005005	C-CERAMIC,CHIP	100nF,10%,16V,X7R,TP,1608	
C444	2203-005005	C-CERAMIC,CHIP	100nF,10%,16V,X7R,TP,1608	
C445	2203-005005	C-CERAMIC,CHIP	100nF,10%,16V,X7R,TP,1608	
C446	2203-005005	C-CERAMIC,CHIP	100nF,10%,16V,X7R,TP,1608	

Loc. No.	Code No.	Description	Specification	Remarks
C447	2203-005005	C-CERAMIC,CHIP	100nF,10%,16V,X7R,TP,1608	
C448	2203-005005	C-CERAMIC,CHIP	100nF,10%,16V,X7R,TP,1608	
C449	2203-005005	C-CERAMIC,CHIP	100nF,10%,16V,X7R,TP,1608	
C450	2203-005005	C-CERAMIC,CHIP	100nF,10%,16V,X7R,TP,1608	
C500	2203-000257	C-CERAMIC,CHIP	10nF,10%,50V,X7R,TP,1608	
C501	2402-000176	C-AL,SMD	10uF,20%,16V,GP,TP,4.3x4.3x5.4	
C502	2203-000257	C-CERAMIC,CHIP	10nF,10%,50V,X7R,TP,1608	
C503	2402-000176	C-AL,SMD	10uF,20%,16V,GP,TP,4.3x4.3x5.4	
C504	2203-000257	C-CERAMIC,CHIP	10nF,10%,50V,X7R,TP,1608	
C505	2402-000176	C-AL,SMD	10uF,20%,16V,GP,TP,4.3x4.3x5.4	
C506	2402-000176	C-AL,SMD	10uF,20%,16V,GP,TP,4.3x4.3x5.4	
C507	2203-000626	C-CERAMIC,CHIP	0.022nF,5%,50V,NP0,TP,1608	
C508	2203-000626	C-CERAMIC,CHIP	0.022nF,5%,50V,NP0,TP,1608	
C509	2203-005005	C-CERAMIC,CHIP	100nF,10%,16V,X7R,TP,1608	
C510	2402-000176	C-AL,SMD	10uF,20%,16V,GP,TP,4.3x4.3x5.4	
C511	2203-000257	C-CERAMIC,CHIP	10nF,10%,50V,X7R,TP,1608	
C512	2402-001042	C-AL,SMD	100uF,20%,16V,GP,TP,6.6x6.6x5.4mm	
CN301	3711-004070	CONNECTOR-HEADER	BOX,30P,1R,1.25mm,SMD-A,SN	SNA
CN302	3711-000556	CONNECTOR-HEADER	BOX,12P,1R,1.25mm,SMD-A,SN	SNA
CN303	3711-002050	CONNECTOR-HEADER	BOX,10P,1R,1.25mm,SMD-A,SN	SNA
D114	0401-001056	DIODE-SWITCHING	MMBD4148SE,75V,600mA,SOT-23,TP	
D115	0401-001056	DIODE-SWITCHING	MMBD4148SE,75V,600mA,SOT-23,TP	
D116	0401-001056	DIODE-SWITCHING	MMBD4148SE,75V,600mA,SOT-23,TP	
D117	0401-001056	DIODE-SWITCHING	MMBD4148SE,75V,600mA,SOT-23,TP	
D118	0401-001056	DIODE-SWITCHING	MMBD4148SE,75V,600mA,SOT-23,TP	
D119	0401-001056	DIODE-SWITCHING	MMBD4148SE,75V,600mA,SOT-23,TP	
D300	0402-001098	DIODE-RECTIFIER	SK34,40V,3A,SMC,TP	
D301	0402-001098	DIODE-RECTIFIER	SK34,40V,3A,SMC,TP	
D302	0401-001056	DIODE-SWITCHING	MMBD4148SE,75V,600mA,SOT-23,TP	
D303	0401-001056	DIODE-SWITCHING	MMBD4148SE,75V,600mA,SOT-23,TP	
FT100	2901-001114	FILTER-EMI SMD	25VDC,2.0ADC,-,100nF,3.2x1.6x1	
FT102	2901-001114	FILTER-EMI SMD	25VDC,2.0ADC,-,100nF,3.2x1.6x1	
FT103	2901-001114	FILTER-EMI SMD	25VDC,2.0ADC,-,100nF,3.2x1.6x1	
FT104	2901-001114	FILTER-EMI SMD	25VDC,2.0ADC,-,100nF,3.2x1.6x1	
FT105	2901-001114	FILTER-EMI SMD	25VDC,2.0ADC,-,100nF,3.2x1.6x1	
FT107	2901-001114	FILTER-EMI SMD	25VDC,2.0ADC,-,100nF,3.2x1.6x1	
FT200	2901-001133	FILTER-EMI SMD	25V,0.15A,-,33pF,2x1.25x0.8mm,TP	
FT300	2901-001114	FILTER-EMI SMD	25VDC,2.0ADC,-,100nF,3.2x1.6x1	
FT301	2901-001114	FILTER-EMI SMD	25VDC,2.0ADC,-,100nF,3.2x1.6x1	
FT302	2901-001114	FILTER-EMI SMD	25VDC,2.0ADC,-,100nF,3.2x1.6x1	
FT303	3301-001145	CORE-FERRITE BEAD	AB,4.5x1.6x1.6mm,-,-	SNA

Loc. No.	Code No.	Description	Specification	Remarks
FT304	3301-001145	CORE-FERRITE BEAD	AB,4.5x1.6x1.6mm,-,-	SNA
FT305	3301-001145	CORE-FERRITE BEAD	AB,4.5x1.6x1.6mm,-,-	SNA
FT306	3301-001145	CORE-FERRITE BEAD	AB,4.5x1.6x1.6mm,-,-	SNA
FT307	3301-001145	CORE-FERRITE BEAD	AB,4.5x1.6x1.6mm,-,-	SNA
FT308	3301-001145	CORE-FERRITE BEAD	AB,4.5x1.6x1.6mm,-,-	SNA
FT400	2901-001114	FILTER-EMI SMD	25VDC,2.0ADC,-,100nF,3.2x1.6x1	
FT401	2901-001114	FILTER-EMI SMD	25VDC,2.0ADC,-,100nF,3.2x1.6x1	
FT402	2901-001114	FILTER-EMI SMD	25VDC,2.0ADC,-,100nF,3.2x1.6x1	
FT403	2901-001114	FILTER-EMI SMD	25VDC,2.0ADC,-,100nF,3.2x1.6x1	
FT404	2901-001114	FILTER-EMI SMD	25VDC,2.0ADC,-,100nF,3.2x1.6x1	
FT405	2901-001114	FILTER-EMI SMD	25VDC,2.0ADC,-,100nF,3.2x1.6x1	
FT500	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	
IC100	0803-000117	IC-TTL	74F14,INVERTER,SOP,14P,150MIL,	
IC103	1103-001164	IC-EEPROM	24LC21A,128X8BIT,SOP,8P,150MIL,-,5V,10%,PLASTIC,0 TO +70C,100UA,CMOS,TP	
IC104	0803-000106	IC-TTL	74F132,TRIGGER,SOP,14P,150MIL,	
IC107	1204-001551	IC-VIDEO SYSTEM	GS1881,SOIC,8P,150MIL,PLASTIC,13.2V,-,0TO+70C,TP,VIDEO SYNC SEPARATOR	
IC108	0801-002171	IC-CMOS LOGIC	74LCX125,BUS BUFFER,SOP,14P,15	
IC200	1203-001801	IC-POSI.FIXED REG.	3300,SOT-23,6P,70MIL,PLASTIC,3.3V,-,-55TO+125C,50MA,-,TP	
IC201	1002-001204	IC-A/D CONVERTER	AD9884AKS-140,8BIT,QFP,128P,-,¡Ł0.5LSB,TR,CMOS,PLASTIC,4V,0to+70C,570mW,Flat Pan	
IC300	1203-001448	IC-POSI.FIXED REG.	2596,TO-263,5P,-,PLASTIC,4.750	
IC302	1205-001870	IC-TRANSMITTER	DS90C387VJD,QFP,100P,550MIL,PLASTIC,3.6V,2.8W,-10to+70C,TR,Dual Pixel LVDS	
IC303	1203-001447	IC-POSI.FIXED REG.	2596,TO-263,5P,-,PLASTIC,3.135	
IC305	1203-001488	IC-POSI.FIXED REG.	7805,TO-252,3P,-,PLASTIC,4.8/5	
IC400	BN09-00001A	IC-OSD PROCESSOR	LCD,MTV121P-31,16P,-	
IC401	1003-001349	IC-LCD CONTROLLER	gmZ4S,BGA,292P,1063MIL,-,-,TR,PLASTIC,-,0to+70C,-,2.4V,-	
IC402	1105-001268	IC-DRAM	3617161,512Kx16bitx2Bit,TSOP,50P,400MIL,7nS,3.3V,10%,PLASTIC,0to+70C,-,CMOS,ST	
IC403	1105-001268	IC-DRAM	3617161,512Kx16bitx2Bit,TSOP,50P,400MIL,7nS,3.3V,10%,PLASTIC,0to+70C,-,CMOS,ST	
IC404	1105-001268	IC-DRAM	3617161,512Kx16bitx2Bit,TSOP,50P,400MIL,7nS,3.3V,10%,PLASTIC,0to+70C,-,CMOS,ST	
IC501	1103-001163	IC-EEPROM	S524C80D41,512x8Bit,SOP,8P,150MIL,10mS,5V,10%,PLASTIC,-25to+70C,10uA,CMOS,TP	
IC502	1203-001109	IC-VOL. DETECTOR	7045,SOT-89,3P,-,PLASTIC,4.3/4	
L200	2703-001334	INDUCTOR-SMD	1.5uH,10%,2x1.25x0.85mm	
L201	2703-001070	INDUCTOR-SMD	100uH,10%,4.5x3.2x3.2mm	
L202	2703-001334	INDUCTOR-SMD	1.5uH,10%,2x1.25x0.85mm	
L203	2703-001334	INDUCTOR-SMD	1.5uH,10%,2x1.25x0.85mm	
L204	2703-001334	INDUCTOR-SMD	1.5uH,10%,2x1.25x0.85mm	
L205	2703-001070	INDUCTOR-SMD	100uH,10%,4.5x3.2x3.2mm	
L206	2703-001778	INDUCTOR-SMD	3.3UH,20%,3.2X2.5X2.2MM	
L207	2703-001070	INDUCTOR-SMD	100uH,10%,4.5x3.2x3.2mm	
L300	2703-001778	INDUCTOR-SMD	3.3UH,20%,3.2X2.5X2.2MM	
L301	2703-001778	INDUCTOR-SMD	3.3UH,20%,3.2X2.5X2.2MM	

Loc. No.	Code No.	Description	Specification	Remarks
L302	2703-001778	INDUCTOR-SMD	3.3UH,20%,3.2X2.5X2.2MM	
L304	2703-001778	INDUCTOR-SMD	3.3UH,20%,3.2X2.5X2.2MM	
L305	2703-001334	INDUCTOR-SMD	1.5uH,10%,2x1.25x0.85mm	
L306	2703-001334	INDUCTOR-SMD	1.5uH,10%,2x1.25x0.85mm	
L307	2703-001334	INDUCTOR-SMD	1.5uH,10%,2x1.25x0.85mm	
L308	2703-001778	INDUCTOR-SMD	3.3UH,20%,3.2X2.5X2.2MM	
L309	2703-001334	INDUCTOR-SMD	1.5uH,10%,2x1.25x0.85mm	
L310	2703-001334	INDUCTOR-SMD	1.5uH,10%,2x1.25x0.85mm	
L311	2703-001334	INDUCTOR-SMD	1.5uH,10%,2x1.25x0.85mm	
L312	2703-001334	INDUCTOR-SMD	1.5uH,10%,2x1.25x0.85mm	
L313	2703-001334	INDUCTOR-SMD	1.5uH,10%,2x1.25x0.85mm	
L314	2703-001334	INDUCTOR-SMD	1.5uH,10%,2x1.25x0.85mm	
L315	2703-001334	INDUCTOR-SMD	1.5uH,10%,2x1.25x0.85mm	
L316	2703-001334	INDUCTOR-SMD	1.5uH,10%,2x1.25x0.85mm	
L317	2703-001334	INDUCTOR-SMD	1.5uH,10%,2x1.25x0.85mm	
L319	2703-001334	INDUCTOR-SMD	1.5uH,10%,2x1.25x0.85mm	
L320	2703-001334	INDUCTOR-SMD	1.5uH,10%,2x1.25x0.85mm	
L321	2703-001334	INDUCTOR-SMD	1.5uH,10%,2x1.25x0.85mm	
L322	2703-001334	INDUCTOR-SMD	1.5uH,10%,2x1.25x0.85mm	
L323	2703-001334	INDUCTOR-SMD	1.5uH,10%,2x1.25x0.85mm	
L324	2703-001334	INDUCTOR-SMD	1.5uH,10%,2x1.25x0.85mm	
L325	2703-001334	INDUCTOR-SMD	1.5uH,10%,2x1.25x0.85mm	
L326	2703-001334	INDUCTOR-SMD	1.5uH,10%,2x1.25x0.85mm	
L327	2703-001334	INDUCTOR-SMD	1.5uH,10%,2x1.25x0.85mm	
L328	2703-001334	INDUCTOR-SMD	1.5uH,10%,2x1.25x0.85mm	
L329	2703-001334	INDUCTOR-SMD	1.5uH,10%,2x1.25x0.85mm	
L330	2703-001778	INDUCTOR-SMD	3.3UH,20%,3.2X2.5X2.2MM	
L331	2703-001334	INDUCTOR-SMD	1.5uH,10%,2x1.25x0.85mm	
L332	2703-001334	INDUCTOR-SMD	1.5uH,10%,2x1.25x0.85mm	
L333	2703-001778	INDUCTOR-SMD	3.3UH,20%,3.2X2.5X2.2MM	
L334	BN27-20001A	COIL-CHOKE		
L335	BN27-20001C	COIL-SMD		
L400	2703-001334	INDUCTOR-SMD	1.5uH,10%,2x1.25x0.85mm	
L500	2703-001334	INDUCTOR-SMD	1.5uH,10%,2x1.25x0.85mm	
L501	2703-001334	INDUCTOR-SMD	1.5uH,10%,2x1.25x0.85mm	
L502	2703-001334	INDUCTOR-SMD	1.5uH,10%,2x1.25x0.85mm	
L503	2703-001334	INDUCTOR-SMD	1.5uH,10%,2x1.25x0.85mm	
MP1.2	BN41-00045A	PCB MAIN	cn17ms,-,-,-,1.6t,223*118.9,-,-,-,-	SNA
Q300	0501-002080	TR-SMALL SIGNAL	2SC2412K,NPN,200mW,SC-59,TP,120-270	
Q301	0501-002080	TR-SMALL SIGNAL	2SC2412K,NPN,200mW,SC-59,TP,120-270	
Q302	0501-002080	TR-SMALL SIGNAL	2SC2412K,NPN,200mW,SC-59,TP,120-270	

Loc. No.	Code No.	Description	Specification	Remarks
Q500	0501-002080	TR-SMALL SIGNAL	2SC2412K,NPN,200mW,SC-59,TP,120-270	
Q501	0501-002080	TR-SMALL SIGNAL	2SC2412K,NPN,200mW,SC-59,TP,120-270	
R113	2007-000092	R-CHIP	15Kohm,5%,1/16W,DA,TP,1608	
R114	2007-000092	R-CHIP	15Kohm,5%,1/16W,DA,TP,1608	
R115	2007-000074	R-CHIP	100ohm,5%,1/16W,DA,TP,1608	
R116	2007-000074	R-CHIP	100ohm,5%,1/16W,DA,TP,1608	
R117	2007-000074	R-CHIP	100ohm,5%,1/16W,DA,TP,1608	
R126	2007-000113	R-CHIP	33ohm,5%,1/16W,DA,TP,1608	
R127	2007-000113	R-CHIP	33ohm,5%,1/16W,DA,TP,1608	
R128	2007-000113	R-CHIP	33ohm,5%,1/16W,DA,TP,1608	
R129	2007-001167	R-CHIP	75ohm,5%,1/16W,DA,TP,1608	
R130	2007-001167	R-CHIP	75ohm,5%,1/16W,DA,TP,1608	
R131	2007-001167	R-CHIP	75ohm,5%,1/16W,DA,TP,1608	
R132	2007-000074	R-CHIP	100ohm,5%,1/16W,DA,TP,1608	
R133	2007-000074	R-CHIP	100ohm,5%,1/16W,DA,TP,1608	
R135	2007-000074	R-CHIP	100ohm,5%,1/16W,DA,TP,1608	
R136	2007-000080	R-CHIP	2Kohm,5%,1/16W,DA,TP,1608	
R137	2007-000074	R-CHIP	100ohm,5%,1/16W,DA,TP,1608	
R139	2007-000080	R-CHIP	2Kohm,5%,1/16W,DA,TP,1608	
R147	2007-000116	R-CHIP	120ohm,5%,1/16W,DA,TP,1608	
R148	2007-001114	R-CHIP	680Kohm,5%,1/16W,DA,TP,1608	
R149	2007-000084	R-CHIP	4.7Kohm,5%,1/16W,DA,TP,1608	
R151	2007-000070	R-CHIP	0ohm,5%,1/16W,DA,TP,1608	
R153	2007-000070	R-CHIP	0ohm,5%,1/16W,DA,TP,1608	
R154	2007-000070	R-CHIP	0ohm,5%,1/16W,DA,TP,1608	
R155	2007-000070	R-CHIP	0ohm,5%,1/16W,DA,TP,1608	
R156	2007-000070	R-CHIP	0ohm,5%,1/16W,DA,TP,1608	
R157	2007-000070	R-CHIP	0ohm,5%,1/16W,DA,TP,1608	
R158	2007-000113	R-CHIP	33ohm,5%,1/16W,DA,TP,1608	
R159	2007-000070	R-CHIP	0ohm,5%,1/16W,DA,TP,1608	
R160	2007-000070	R-CHIP	0ohm,5%,1/16W,DA,TP,1608	
R208	2007-000102	R-CHIP	100Kohm,5%,1/16W,DA,TP,1608	
R209	2007-000239	R-CHIP	1.5Kohm,1%,1/16W,DA,TP,1608	
R210	2007-000084	R-CHIP	4.7Kohm,5%,1/16W,DA,TP,1608	
R211	2007-000084	R-CHIP	4.7Kohm,5%,1/16W,DA,TP,1608	
R212	2007-000071	R-CHIP	22ohm,5%,1/16W,DA,TP,1608	
R213	2007-000071	R-CHIP	22ohm,5%,1/16W,DA,TP,1608	
R214	2007-000071	R-CHIP	22ohm,5%,1/16W,DA,TP,1608	
R215	2007-000071	R-CHIP	22ohm,5%,1/16W,DA,TP,1608	
R216	2007-000071	R-CHIP	22ohm,5%,1/16W,DA,TP,1608	
R217	2007-000090	R-CHIP	10Kohm,5%,1/16W,DA,TP,1608	

Loc. No.	Code No.	Description	Specification	Remarks
R218	2007-000090	R-CHIP	10Kohm,5%,1/16W,DA,TP,1608	
R219	2007-000090	R-CHIP	10Kohm,5%,1/16W,DA,TP,1608	
R220	2007-000090	R-CHIP	10Kohm,5%,1/16W,DA,TP,1608	
R221	2007-000071	R-CHIP	22ohm,5%,1/16W,DA,TP,1608	
R222	2007-000070	R-CHIP	0ohm,5%,1/16W,DA,TP,1608	
R224	2007-000078	R-CHIP	1Kohm,5%,1/16W,DA,TP,1608	
R300	2007-000102	R-CHIP	100Kohm,5%,1/16W,DA,TP,1608	
R301	2007-000084	R-CHIP	4.7Kohm,5%,1/16W,DA,TP,1608	
R302	2007-000102	R-CHIP	100Kohm,5%,1/16W,DA,TP,1608	
R303	2007-000090	R-CHIP	10Kohm,5%,1/16W,DA,TP,1608	
R304	2007-000090	R-CHIP	10Kohm,5%,1/16W,DA,TP,1608	
R305	2007-000084	R-CHIP	4.7Kohm,5%,1/16W,DA,TP,1608	
R306	2007-000102	R-CHIP	100Kohm,5%,1/16W,DA,TP,1608	
R307	2007-000090	R-CHIP	10Kohm,5%,1/16W,DA,TP,1608	
R311	2007-000090	R-CHIP	10Kohm,5%,1/16W,DA,TP,1608	
R312	2007-000090	R-CHIP	10Kohm,5%,1/16W,DA,TP,1608	
R313	2007-000090	R-CHIP	10Kohm,5%,1/16W,DA,TP,1608	
R314	2007-000090	R-CHIP	10Kohm,5%,1/16W,DA,TP,1608	
R315	2007-000072	R-CHIP	47ohm,5%,1/16W,DA,TP,1608	
R316	2007-000090	R-CHIP	10Kohm,5%,1/16W,DA,TP,1608	
R317	2007-000090	R-CHIP	10Kohm,5%,1/16W,DA,TP,1608	
R318	2007-000070	R-CHIP	0ohm,5%,1/16W,DA,TP,1608	
R319	2007-000070	R-CHIP	0ohm,5%,1/16W,DA,TP,1608	
R320	2007-000070	R-CHIP	0ohm,5%,1/16W,DA,TP,1608	
R321	2007-000070	R-CHIP	0ohm,5%,1/16W,DA,TP,1608	
R322	2007-000070	R-CHIP	0ohm,5%,1/16W,DA,TP,1608	
R323	2007-000070	R-CHIP	0ohm,5%,1/16W,DA,TP,1608	
R324	2007-000070	R-CHIP	0ohm,5%,1/16W,DA,TP,1608	
R325	2007-000070	R-CHIP	0ohm,5%,1/16W,DA,TP,1608	
R326	2007-000070	R-CHIP	0ohm,5%,1/16W,DA,TP,1608	
R327	2007-000070	R-CHIP	0ohm,5%,1/16W,DA,TP,1608	
R328	2007-000070	R-CHIP	0ohm,5%,1/16W,DA,TP,1608	
R329	2007-000070	R-CHIP	0ohm,5%,1/16W,DA,TP,1608	
R330	2007-000070	R-CHIP	0ohm,5%,1/16W,DA,TP,1608	
R331	2007-000070	R-CHIP	0ohm,5%,1/16W,DA,TP,1608	
R332	2007-000070	R-CHIP	0ohm,5%,1/16W,DA,TP,1608	
R333	2007-000070	R-CHIP	0ohm,5%,1/16W,DA,TP,1608	
R334	2007-000070	R-CHIP	0ohm,5%,1/16W,DA,TP,1608	
R335	2007-000070	R-CHIP	0ohm,5%,1/16W,DA,TP,1608	
R336	2007-000070	R-CHIP	0ohm,5%,1/16W,DA,TP,1608	
R337	2007-000070	R-CHIP	0ohm,5%,1/16W,DA,TP,1608	

Loc. No.	Code No.	Description	Specification	Remarks
R338	2007-000070	R-CHIP	0ohm,5%,1/16W,DA,TP,1608	
R339	2007-000070	R-CHIP	0ohm,5%,1/16W,DA,TP,1608	
R34	2007-000090	R-CHIP	10Kohm,5%,1/16W,DA,TP,1608	
R340	2007-000077	R-CHIP	470ohm,5%,1/16W,DA,TP,1608	
R341	2007-000077	R-CHIP	470ohm,5%,1/16W,DA,TP,1608	
R401	2007-000071	R-CHIP	22ohm,5%,1/16W,DA,TP,1608	
R402	2007-000120	R-CHIP	680ohm,5%,1/16W,DA,TP,1608	
R403	2007-000090	R-CHIP	10Kohm,5%,1/16W,DA,TP,1608	
R404	2007-000071	R-CHIP	22ohm,5%,1/16W,DA,TP,1608	
R405	2007-000071	R-CHIP	22ohm,5%,1/16W,DA,TP,1608	
R406	2007-000071	R-CHIP	22ohm,5%,1/16W,DA,TP,1608	
R409	2007-000070	R-CHIP	0ohm,5%,1/16W,DA,TP,1608	
R410	2007-000070	R-CHIP	0ohm,5%,1/16W,DA,TP,1608	
R411	2007-000070	R-CHIP	0ohm,5%,1/16W,DA,TP,1608	
R421	2007-000070	R-CHIP	0ohm,5%,1/16W,DA,TP,1608	
R422	2007-000070	R-CHIP	0ohm,5%,1/16W,DA,TP,1608	
R423	2007-000070	R-CHIP	0ohm,5%,1/16W,DA,TP,1608	
R427	2007-000070	R-CHIP	0ohm,5%,1/16W,DA,TP,1608	
R431	2007-000070	R-CHIP	0ohm,5%,1/16W,DA,TP,1608	
R433	2007-000070	R-CHIP	0ohm,5%,1/16W,DA,TP,1608	
R434	2007-000070	R-CHIP	0ohm,5%,1/16W,DA,TP,1608	
R435	2007-000070	R-CHIP	0ohm,5%,1/16W,DA,TP,1608	
R436	2007-000070	R-CHIP	0ohm,5%,1/16W,DA,TP,1608	
R437	2007-000070	R-CHIP	0ohm,5%,1/16W,DA,TP,1608	
R438	2007-000070	R-CHIP	0ohm,5%,1/16W,DA,TP,1608	
R439	2007-000070	R-CHIP	0ohm,5%,1/16W,DA,TP,1608	
R440	2007-000070	R-CHIP	0ohm,5%,1/16W,DA,TP,1608	
R441	2007-000090	R-CHIP	10Kohm,5%,1/16W,DA,TP,1608	
R444	2007-000090	R-CHIP	10Kohm,5%,1/16W,DA,TP,1608	
R445	2007-000090	R-CHIP	10Kohm,5%,1/16W,DA,TP,1608	
R448	2007-000090	R-CHIP	10Kohm,5%,1/16W,DA,TP,1608	
R449	2007-000090	R-CHIP	10Kohm,5%,1/16W,DA,TP,1608	
R452	2007-000090	R-CHIP	10Kohm,5%,1/16W,DA,TP,1608	
R453	2007-000090	R-CHIP	10Kohm,5%,1/16W,DA,TP,1608	
R456	2007-000090	R-CHIP	10Kohm,5%,1/16W,DA,TP,1608	
R457	2007-000090	R-CHIP	10Kohm,5%,1/16W,DA,TP,1608	
R460	2007-000090	R-CHIP	10Kohm,5%,1/16W,DA,TP,1608	
R462	2007-000090	R-CHIP	10Kohm,5%,1/16W,DA,TP,1608	
R464	2007-000090	R-CHIP	10Kohm,5%,1/16W,DA,TP,1608	
R466	2007-000090	R-CHIP	10Kohm,5%,1/16W,DA,TP,1608	
R468	2007-000090	R-CHIP	10Kohm,5%,1/16W,DA,TP,1608	

Loc. No.	Code No.	Description	Specification	Remarks
R469	2007-000070	R-CHIP	0ohm,5%,1/16W,DA,TP,1608	
R470	2007-000070	R-CHIP	0ohm,5%,1/16W,DA,TP,1608	
R471	2007-000070	R-CHIP	0ohm,5%,1/16W,DA,TP,1608	
R472	2007-000070	R-CHIP	0ohm,5%,1/16W,DA,TP,1608	
R473	2007-000070	R-CHIP	0ohm,5%,1/16W,DA,TP,1608	
R474	2007-000074	R-CHIP	100ohm,5%,1/16W,DA,TP,1608	
R475	2007-000074	R-CHIP	100ohm,5%,1/16W,DA,TP,1608	
R476	2007-000084	R-CHIP	4.7Kohm,5%,1/16W,DA,TP,1608	
R477	2007-000084	R-CHIP	4.7Kohm,5%,1/16W,DA,TP,1608	
R478	2007-000078	R-CHIP	1Kohm,5%,1/16W,DA,TP,1608	
R479	2007-000090	R-CHIP	10Kohm,5%,1/16W,DA,TP,1608	
R501	2007-000076	R-CHIP	330ohm,5%,1/16W,DA,TP,1608	
R502	2007-001002	R-CHIP	510ohm,5%,1/16W,DA,TP,1608	
R503	2007-001002	R-CHIP	510ohm,5%,1/16W,DA,TP,1608	
R504	2007-001002	R-CHIP	510ohm,5%,1/16W,DA,TP,1608	
R506	2007-000084	R-CHIP	4.7Kohm,5%,1/16W,DA,TP,1608	
R507	2007-000084	R-CHIP	4.7Kohm,5%,1/16W,DA,TP,1608	
R508	2007-000084	R-CHIP	4.7Kohm,5%,1/16W,DA,TP,1608	
R509	2007-000084	R-CHIP	4.7Kohm,5%,1/16W,DA,TP,1608	
R510	2007-000084	R-CHIP	4.7Kohm,5%,1/16W,DA,TP,1608	
R511	2007-000076	R-CHIP	330ohm,5%,1/16W,DA,TP,1608	
R512	2007-000076	R-CHIP	330ohm,5%,1/16W,DA,TP,1608	
R513	2007-001002	R-CHIP	510ohm,5%,1/16W,DA,TP,1608	
R514	2007-000084	R-CHIP	4.7Kohm,5%,1/16W,DA,TP,1608	
R515	2007-000084	R-CHIP	4.7Kohm,5%,1/16W,DA,TP,1608	
R516	2007-000084	R-CHIP	4.7Kohm,5%,1/16W,DA,TP,1608	
R517	2007-000084	R-CHIP	4.7Kohm,5%,1/16W,DA,TP,1608	
R518	2007-000084	R-CHIP	4.7Kohm,5%,1/16W,DA,TP,1608	
R519	2007-000074	R-CHIP	100ohm,5%,1/16W,DA,TP,1608	
R520	2007-000074	R-CHIP	100ohm,5%,1/16W,DA,TP,1608	
R521	2007-000074	R-CHIP	100ohm,5%,1/16W,DA,TP,1608	
R522	2007-000078	R-CHIP	1Kohm,5%,1/16W,DA,TP,1608	
R523	2007-000074	R-CHIP	100ohm,5%,1/16W,DA,TP,1608	
R524	2007-000074	R-CHIP	100ohm,5%,1/16W,DA,TP,1608	
R526	2007-000077	R-CHIP	470ohm,5%,1/16W,DA,TP,1608	
R527	2007-000074	R-CHIP	100ohm,5%,1/16W,DA,TP,1608	
R528	2007-000074	R-CHIP	100ohm,5%,1/16W,DA,TP,1608	
R529	2007-000078	R-CHIP	1Kohm,5%,1/16W,DA,TP,1608	
R530	2007-000074	R-CHIP	100ohm,5%,1/16W,DA,TP,1608	
R531	2007-000070	R-CHIP	0ohm,5%,1/16W,DA,TP,1608	
R532	2007-000074	R-CHIP	100ohm,5%,1/16W,DA,TP,1608	

Loc. No.	Code No.	Description	Specification	Remarks
R533	2007-000074	R-CHIP	100ohm,5%,1/16W,DA,TP,1608	
R534	2007-000074	R-CHIP	100ohm,5%,1/16W,DA,TP,1608	
R535	2007-000074	R-CHIP	100ohm,5%,1/16W,DA,TP,1608	
R536	2007-000074	R-CHIP	100ohm,5%,1/16W,DA,TP,1608	
R537	2007-000074	R-CHIP	100ohm,5%,1/16W,DA,TP,1608	
R538	2007-000074	R-CHIP	100ohm,5%,1/16W,DA,TP,1608	
R539	2007-000074	R-CHIP	100ohm,5%,1/16W,DA,TP,1608	
R540	2007-000074	R-CHIP	100ohm,5%,1/16W,DA,TP,1608	
R541	2007-000074	R-CHIP	100ohm,5%,1/16W,DA,TP,1608	
R542	2007-000074	R-CHIP	100ohm,5%,1/16W,DA,TP,1608	
R543	2007-000074	R-CHIP	100ohm,5%,1/16W,DA,TP,1608	
R544	2007-000074	R-CHIP	100ohm,5%,1/16W,DA,TP,1608	
R545	2007-000074	R-CHIP	100ohm,5%,1/16W,DA,TP,1608	
R546	2007-000074	R-CHIP	100ohm,5%,1/16W,DA,TP,1608	
R547	2007-000074	R-CHIP	100ohm,5%,1/16W,DA,TP,1608	
R548	2007-000074	R-CHIP	100ohm,5%,1/16W,DA,TP,1608	
R549	2007-000074	R-CHIP	100ohm,5%,1/16W,DA,TP,1608	
R550	2007-000074	R-CHIP	100ohm,5%,1/16W,DA,TP,1608	
R551	2007-000074	R-CHIP	100ohm,5%,1/16W,DA,TP,1608	
R552	2007-000074	R-CHIP	100ohm,5%,1/16W,DA,TP,1608	
R553	2007-000074	R-CHIP	100ohm,5%,1/16W,DA,TP,1608	
R554	2007-000074	R-CHIP	100ohm,5%,1/16W,DA,TP,1608	
R555	2007-000074	R-CHIP	100ohm,5%,1/16W,DA,TP,1608	
R556	2007-000084	R-CHIP	4.7Kohm,5%,1/16W,DA,TP,1608	
R557	2007-000084	R-CHIP	4.7Kohm,5%,1/16W,DA,TP,1608	
R560	2007-000109	R-CHIP	1Mohm,5%,1/16W,DA,TP,1608	
R561	2007-000075	R-CHIP	220ohm,5%,1/16W,DA,TP,1608	
RA200	2011-000002	R-NETWORK	22ohm,5%,63mW,L,CHIP,8P,TP	
RA201	2011-000002	R-NETWORK	22ohm,5%,63mW,L,CHIP,8P,TP	
RA202	2011-000002	R-NETWORK	22ohm,5%,63mW,L,CHIP,8P,TP	
RA203	2011-000002	R-NETWORK	22ohm,5%,63mW,L,CHIP,8P,TP	
RA204	2011-000002	R-NETWORK	22ohm,5%,63mW,L,CHIP,8P,TP	
RA205	2011-000002	R-NETWORK	22ohm,5%,63mW,L,CHIP,8P,TP	
RA206	2011-000002	R-NETWORK	22ohm,5%,63mW,L,CHIP,8P,TP	
RA207	2011-000002	R-NETWORK	22ohm,5%,63mW,L,CHIP,8P,TP	
RA208	2011-000002	R-NETWORK	22ohm,5%,63mW,L,CHIP,8P,TP	
RA209	2011-000002	R-NETWORK	22ohm,5%,63mW,L,CHIP,8P,TP	
RA210	2011-000002	R-NETWORK	22ohm,5%,63mW,L,CHIP,8P,TP	
RA211	2011-000002	R-NETWORK	22ohm,5%,63mW,L,CHIP,8P,TP	
RA400	2011-000002	R-NETWORK	22ohm,5%,63mW,L,CHIP,8P,TP	

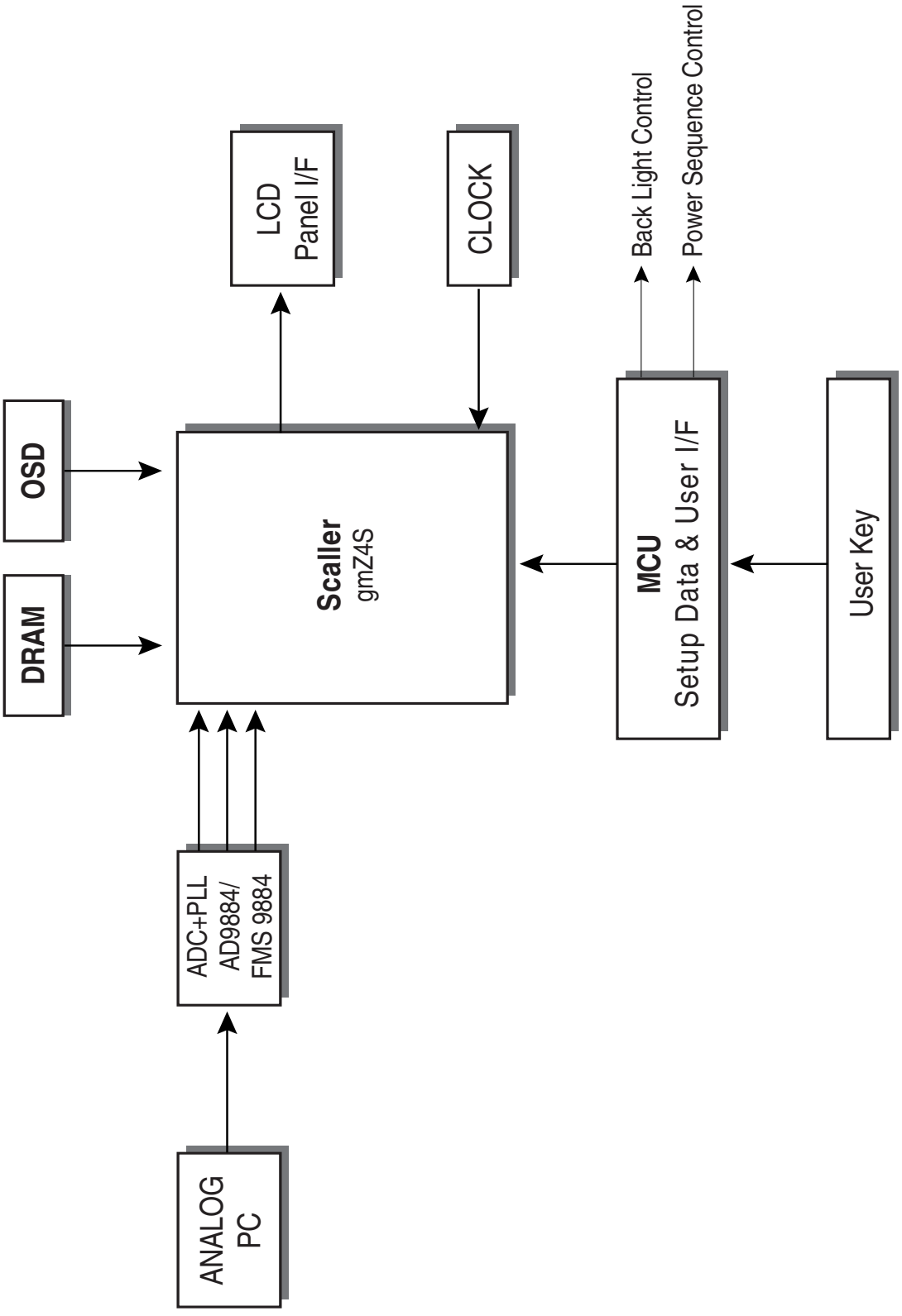
Loc. No.	Code No.	Description	Specification	Remarks
RA401	2011-000002	R-NETWORK	22ohm,5%,63mW,L,CHIP,8P,TP	
RA402	2011-000002	R-NETWORK	22ohm,5%,63mW,L,CHIP,8P,TP	
RA403	2011-000002	R-NETWORK	22ohm,5%,63mW,L,CHIP,8P,TP	
RA404	2011-000002	R-NETWORK	22ohm,5%,63mW,L,CHIP,8P,TP	
RA405	2011-000002	R-NETWORK	22ohm,5%,63mW,L,CHIP,8P,TP	
RA406	2011-000002	R-NETWORK	22ohm,5%,63mW,L,CHIP,8P,TP	
RA407	2011-000002	R-NETWORK	22ohm,5%,63mW,L,CHIP,8P,TP	
RA408	2011-000002	R-NETWORK	22ohm,5%,63mW,L,CHIP,8P,TP	
RA409	2011-000002	R-NETWORK	22ohm,5%,63mW,L,CHIP,8P,TP	
RA410	2011-000002	R-NETWORK	22ohm,5%,63mW,L,CHIP,8P,TP	
RA411	2011-000002	R-NETWORK	22ohm,5%,63mW,L,CHIP,8P,TP	
X400	2801-003981	CRYSTAL-SMD	50MHz,30ppm,28-ABX,20pF,80ohm,TP	
X500	2801-003773	CRYSTAL-SMD	12MHZ,30PPM,28-AAN,20PF,50OHM,TP	
ZD103	0403-000579	DIODE-ZENER	BZX84C5V1,5.1V,5%,200mW,SOT-23	
ZD104	0403-000579	DIODE-ZENER	BZX84C5V1,5.1V,5%,200mW,SOT-23	
ZD108	0403-000579	DIODE-ZENER	BZX84C5V1,5.1V,5%,200mW,SOT-23	
ZD109	0403-000579	DIODE-ZENER	BZX84C5V1,5.1V,5%,200mW,SOT-23	
ZD110	0403-000579	DIODE-ZENER	BZX84C5V1,5.1V,5%,200mW,SOT-23	
ZD500	0403-000579	DIODE-ZENER	BZX84C5V1,5.1V,5%,200mW,SOT-23	

7-2 Others

Loc. No.	Code No.	Description	Specification	Remarks
CIS	BN39-00114A	CBF-SIGNAL	NL150MO,15P/15P,2990,1830MM,UL2990,IVORY,D-SUB	
CIS	BN44-00029A	INVERTER	SIC1801,4LAMP,SIC1801,18.1,14V DC,160x45x17	
CIS	BN41-00045A	PCB MAIN	CEZANNE-II,FR-4 ,4,-,1.6T,117.0*172.4*1.6,CN,-,-,-,CN17MS,-,-,-,1.6+,223x118.9,-,-,-,-	
CN301+PAN	BN39-00102A	CBF-HARNESS	CN17MSS,UL1571,UL/CSA,30P,90MM,BLU/WHT,AWG30,DF14-30S-1.25C,F1-X30H,-,-,-,-,-,-	
CN302+INV	BN39-00002A	CBF-HARNESS	-,60,BLU/WHT,-,26,-	

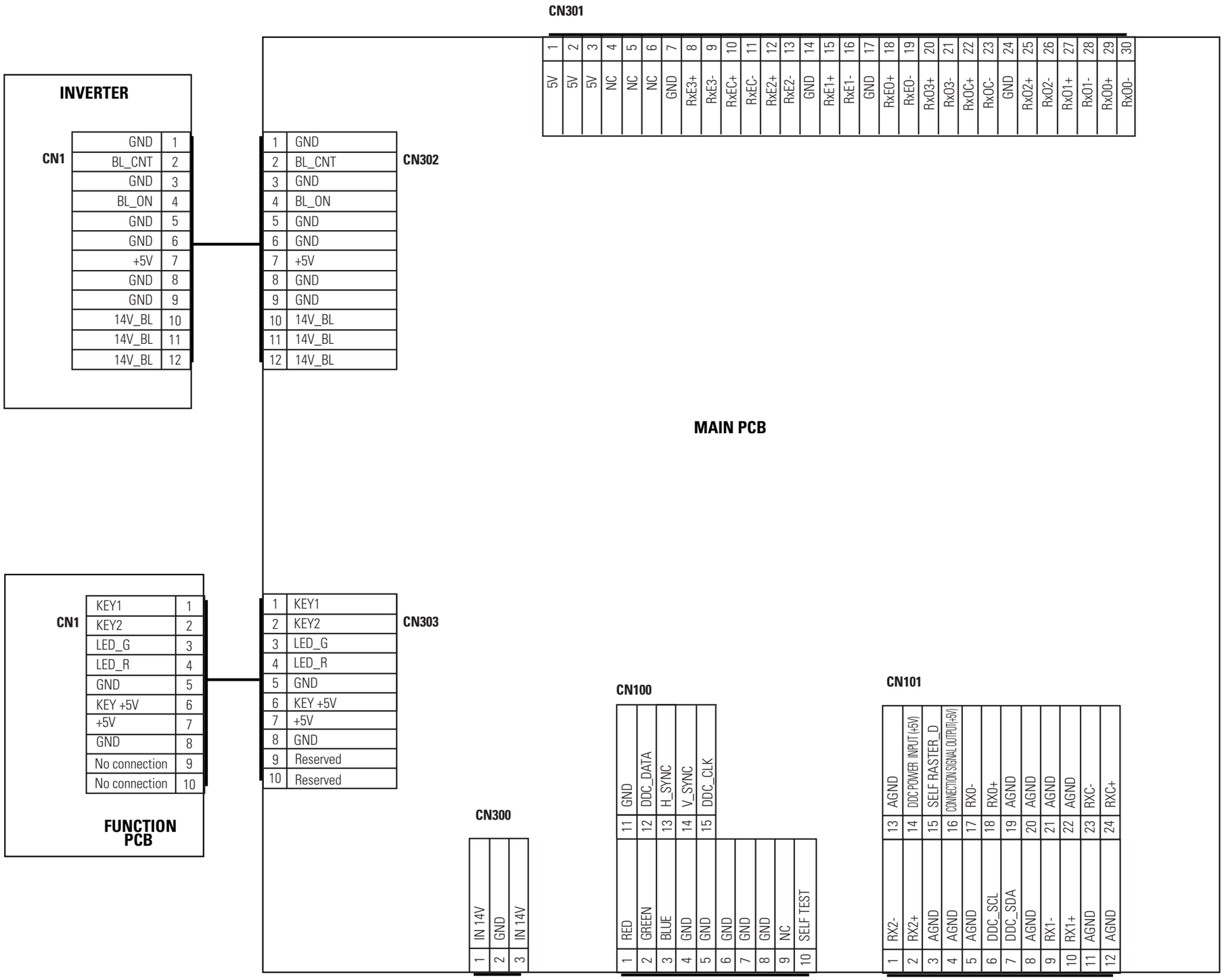
Memo

8 Block Diagram



Memo

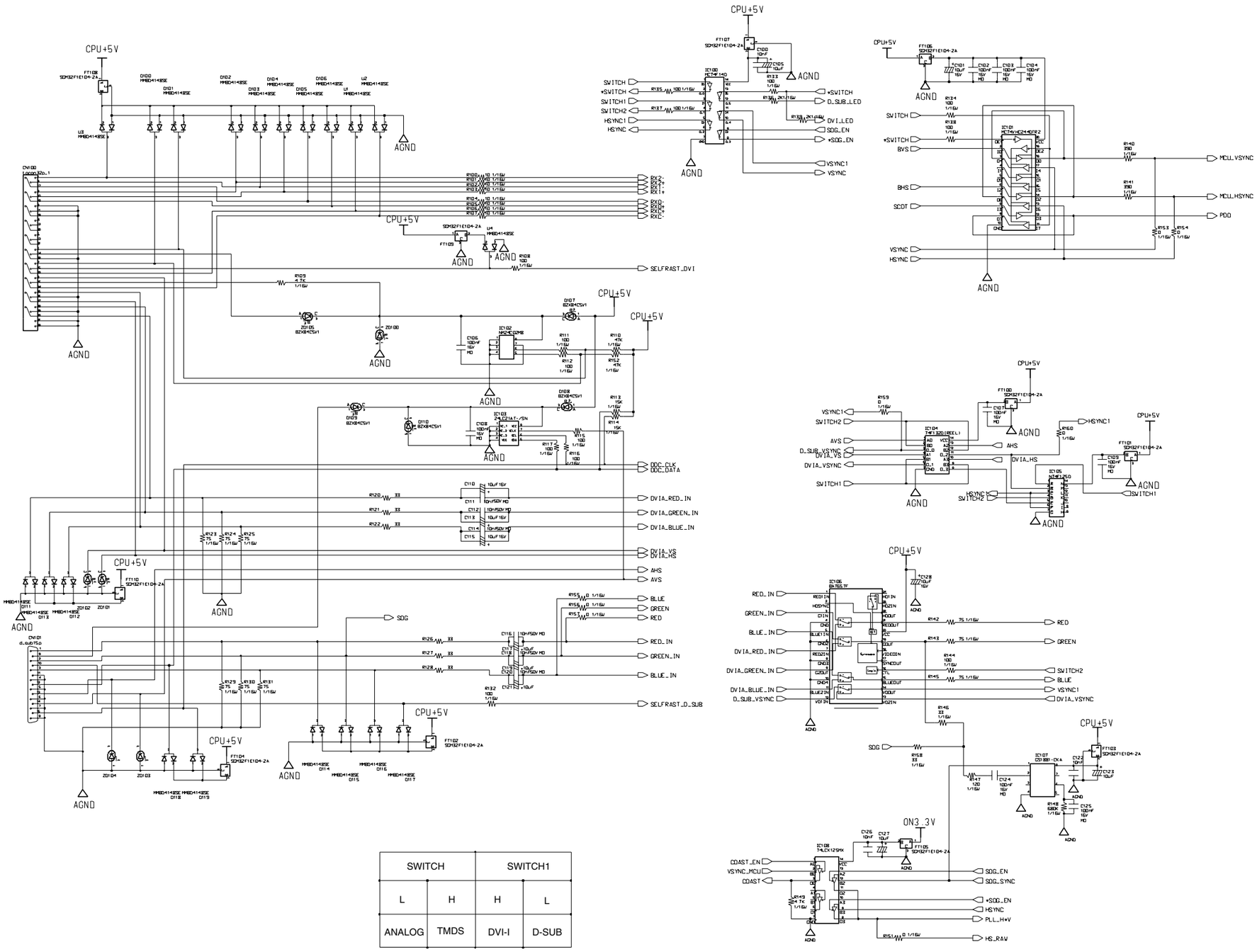
9 Wiring Diagram



Memo

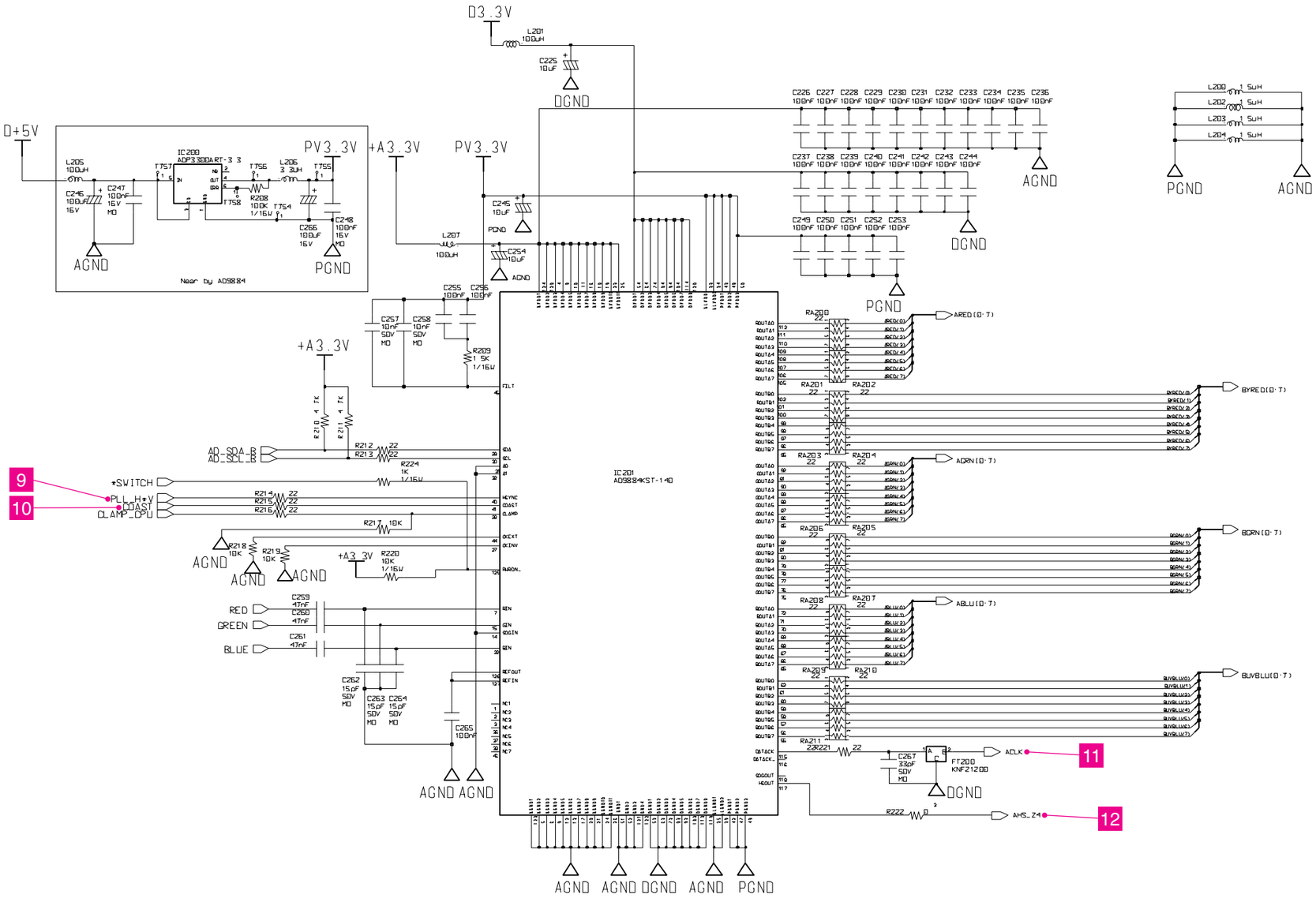
10 Schematic Diagrams

10-1 15P D-Sub Input Part Schematic Diagram

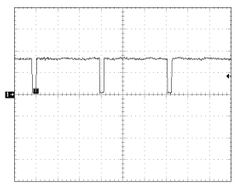


SWITCH		SWITCH1	
L	H	H	L
ANALOG	TMDS	DVI-I	D-SUB

10-2 Analog to Digital Converter Part Schematic Diagram

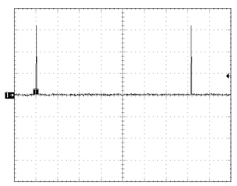


9 IC201 #40



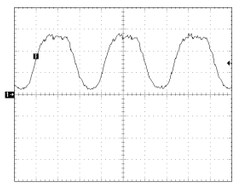
CH1 RMS = 3.188V

10 IC201 #41



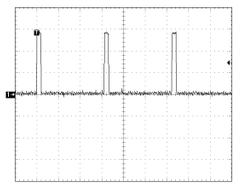
CH1 RMS =205mV

11 IC201 #115



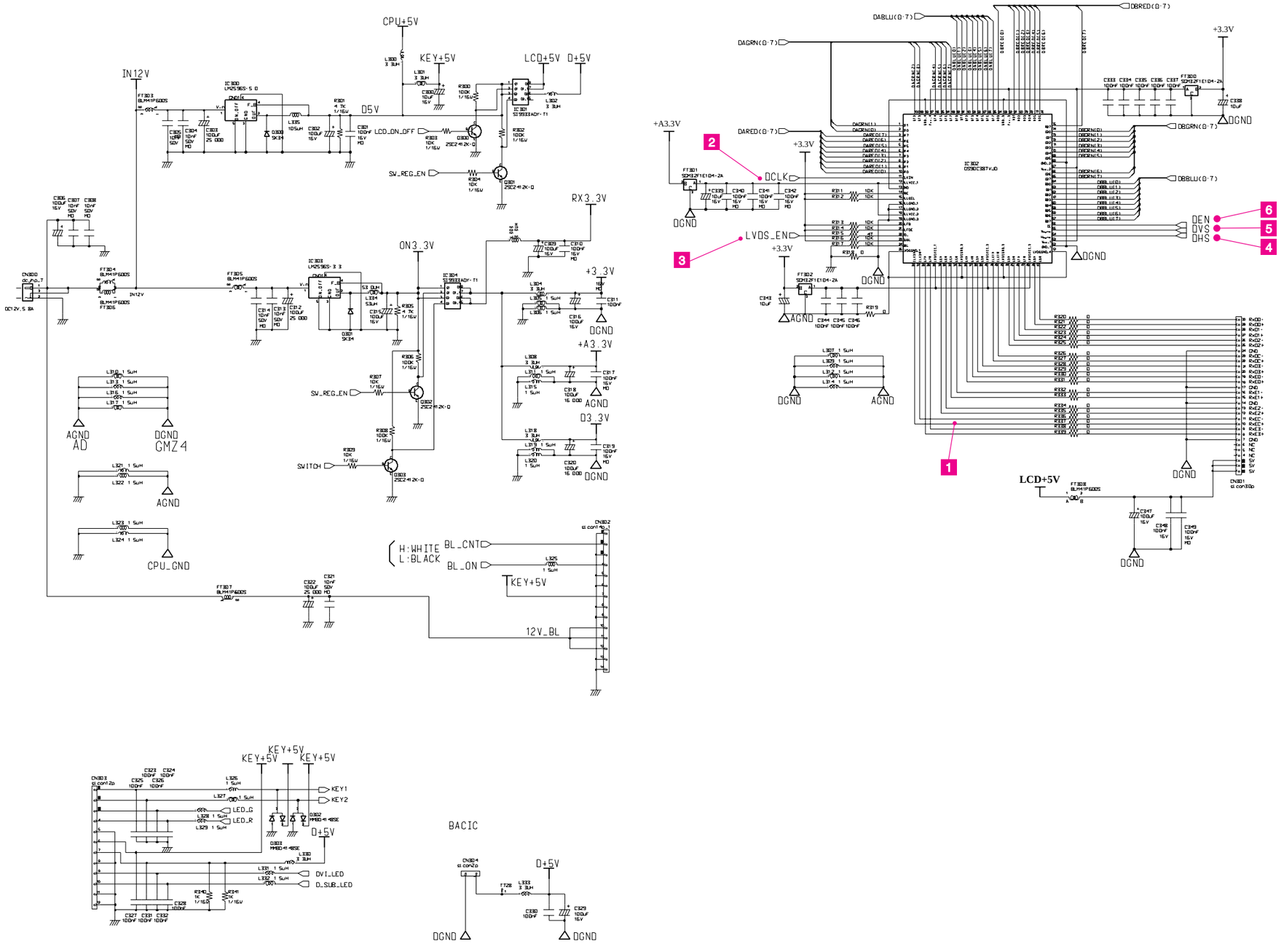
CH1 RMS =1.864V

12 IC201 #117

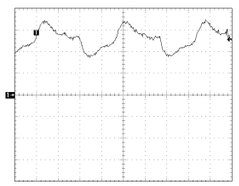


CH1 RMS = 695mV

10-3 Power & Panel Interface Part Schematic Diagram

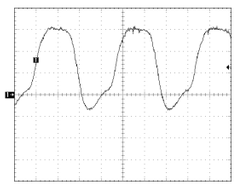


1 IC302 #26



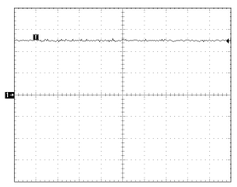
CH1 RMS = 1.323V

2 IC302 #11



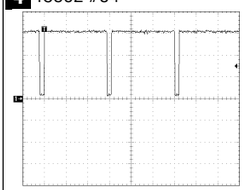
CH1 RMS = 2.046V

3 IC302 #22



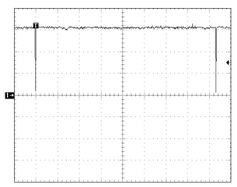
CH1 RMS = 4.999V

4 IC302 #64



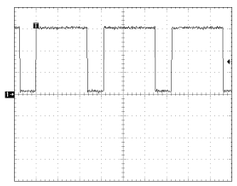
CH1 RMS =2.989V

5 IC302 #65



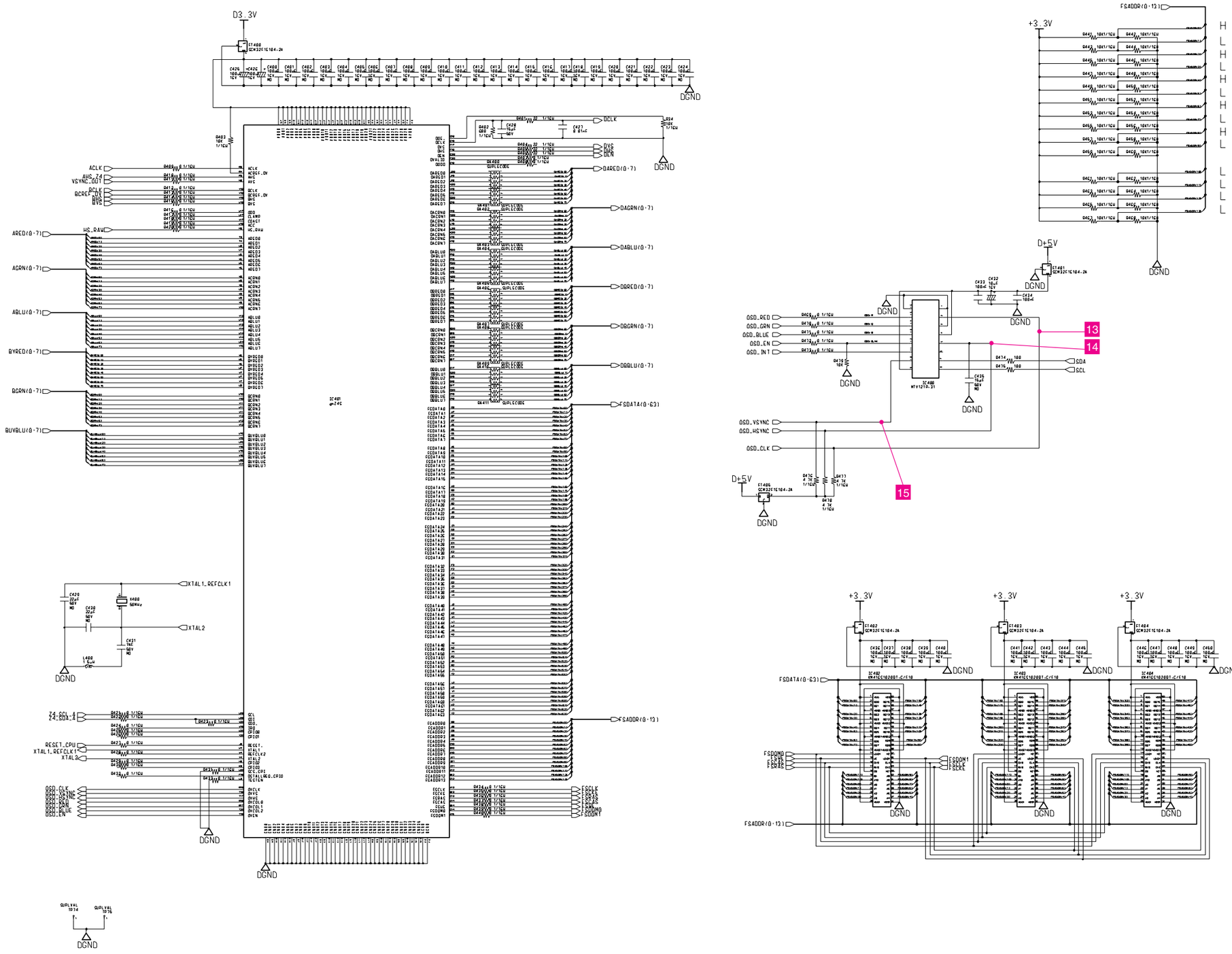
CH1 RMS = 3.098V

6 IC302 #66

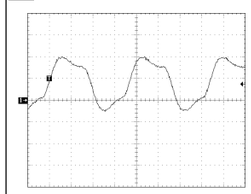


CH1 RMS = 2.621V

10-5 Scaler Part Schematic Diagram

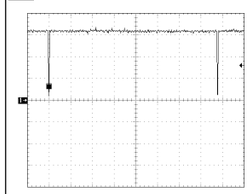


13 IC400 #2



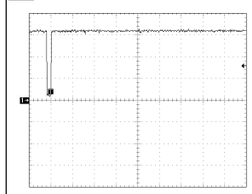
CH1 RMS = 2.462V

14 IC400 #5



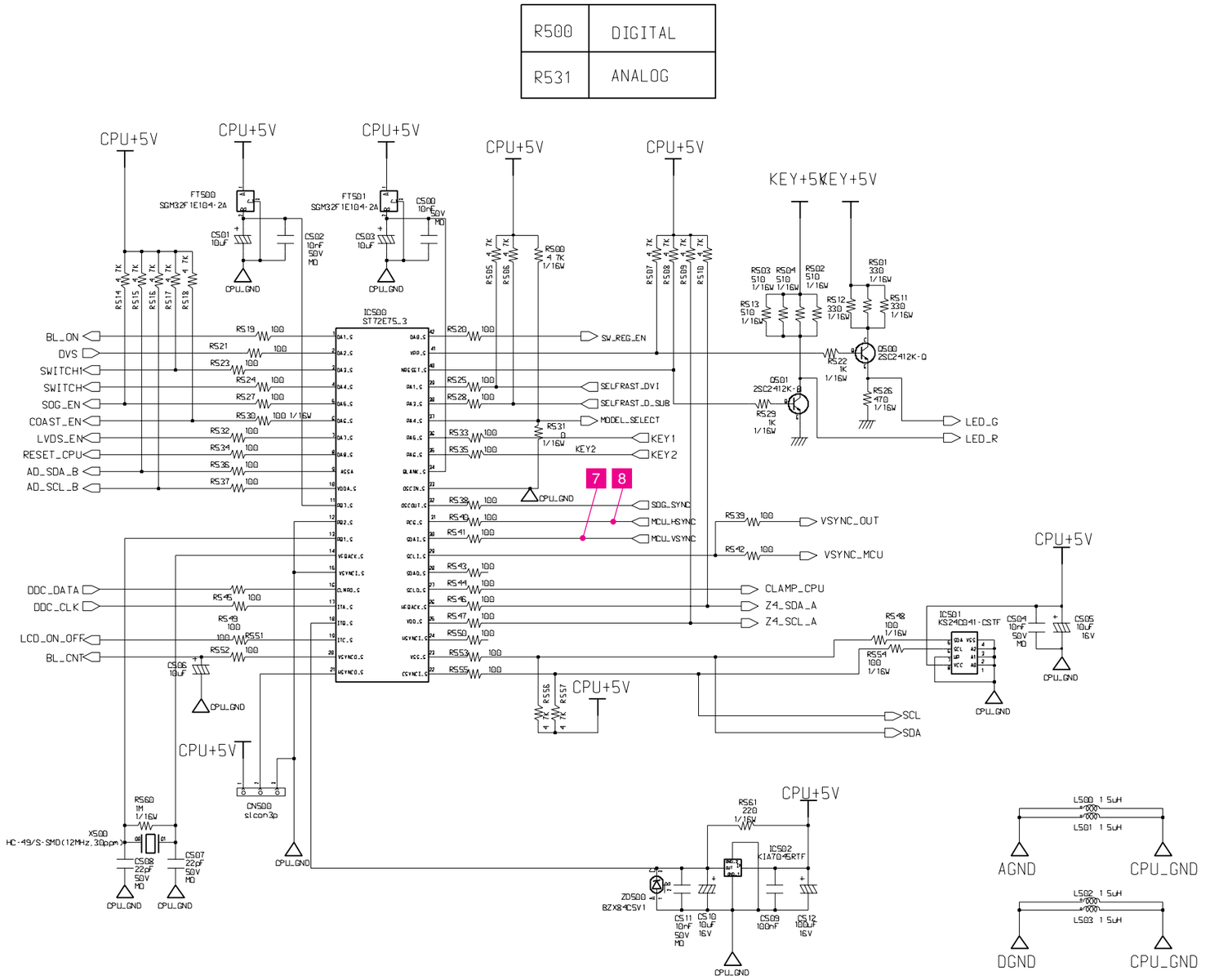
CH1 RMS = 3.163V

15 IC400 #10

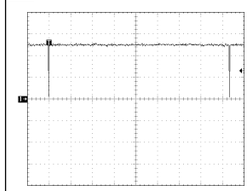


CH1 RMS = 3.154V

10-6 MCU Part Schematic Diagram

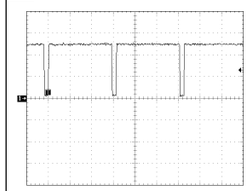


7 IC500 #30



CH1 RMS =4.979 V

8 IC500 #31



CH1 RMS = 4.816V

Memo

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