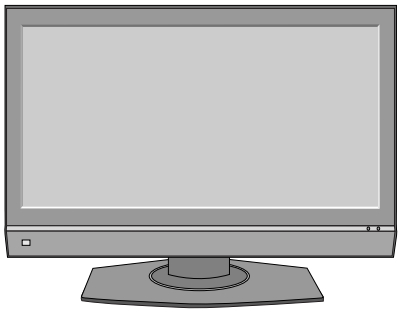
LG

LCD TV
SERVICE MANUAL

CHASSIS : LA73A

MODEL : 47LB5DF 47LB5DF-UC

CAUTION
BEFORE SERVICING THE CHASSIS,
READ THE SAFETY PRECAUTIONS IN THIS MANUAL.



CONTENTS

SAFETY PRECAUTIONS

IMPORTANT SAFETY NOTICE

Many electrical and mechanical parts in this chassis have special safety-related characteristics. These parts are identified by ⚠ in the Schematic Diagram and Replacement Parts List.
It is essential that these special safety parts should be replaced with the same components as recommended in this manual to prevent Shock, Fire, or other Hazards.
Do not modify the original design without permission of manufacturer.

General Guidance

An **isolation Transformer should always be used** during the servicing of a receiver whose chassis is not isolated from the AC power line. Use a transformer of adequate power rating as this protects the technician from accidents resulting in personal injury from electrical shocks.

It will also protect the receiver and it's components from being damaged by accidental shorts of the circuitry that may be inadvertently introduced during the service operation.

If any fuse (or Fusible Resistor) in this TV receiver is blown, replace it with the specified.

When replacing a high wattage resistor (Oxide Metal Film Resistor, over 1W), keep the resistor 10mm away from PCB.

Keep wires away from high voltage or high temperature parts.

Before returning the receiver to the customer,

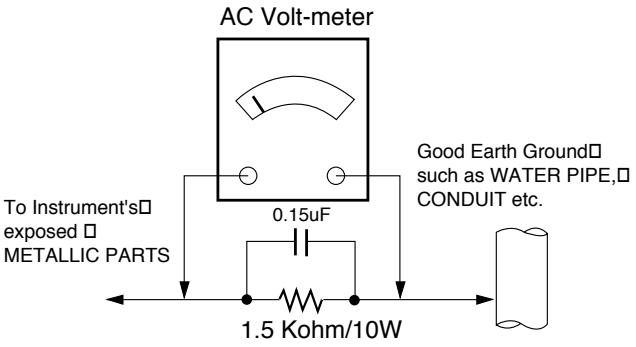
always perform an **AC leakage current check** on the exposed metallic parts of the cabinet, such as antennas, terminals, etc., to be sure the set is safe to operate without damage of electrical shock.

Leakage Current Cold Check(Antenna Cold Check)
With the instrument AC plug removed from AC source, connect an electrical jumper across the two AC plug prongs. Place the AC switch in the on position, connect one lead of ohm-meter to the AC plug prongs tied together and touch other ohm-meter lead in turn to each exposed metallic parts such as antenna terminals, phone jacks, etc.
If the exposed metallic part has a return path to the chassis, the measured resistance should be between 1MΩ and 5.2MΩ.
When the exposed metal has no return path to the chassis the reading must be infinite.
An other abnormality exists that must be corrected before the receiver is returned to the customer.

Leakage Current Hot Check (See below Figure)
Plug the AC cord directly into the AC outlet.

Do not use a line Isolation Transformer during this check.
Connect 1.5K/10watt resistor in parallel with a 0.15uF capacitor between a known good earth ground (Water Pipe, Conduit, etc.) and the exposed metallic parts.
Measure the AC voltage across the resistor using AC voltmeter with 1000 ohms/volt or more sensitivity.
Reverse plug the AC cord into the AC outlet and repeat AC voltage measurements for each exposed metallic part. Any voltage measured must not exceed 0.75 volt RMS which is corresponds to 0.5mA.
In case any measurement is out of the limits specified, there is possibility of shock hazard and the set must be checked and repaired before it is returned to the customer.

Leakage Current Hot Check circuit



SERVICING PRECAUTIONS

CAUTION: Before servicing receivers covered by this service manual and its supplements and addenda, read and follow the *SAFETY PRECAUTIONS* on page 3 of this publication.
NOTE: If unforeseen circumstances create conflict between the following servicing precautions and any of the safety precautions on page 3 of this publication, always follow the safety precautions. Remember: Safety First.

General Servicing Precautions

1. Always unplug the receiver AC power cord from the AC power source before;
   a. Removing or reinstalling any component, circuit board module or any other receiver assembly.
   b. Disconnecting or reconnecting any receiver electrical plug or other electrical connection.
   c. Connecting a test substitute in parallel with an electrolytic capacitor in the receiver.
   CAUTION: A wrong part substitution or incorrect polarity installation of electrolytic capacitors may result in an explosion hazard.

2. Test high voltage only by measuring it with an appropriate high voltage meter or other voltage measuring device (DVM, FETVOM, etc) equipped with a suitable high voltage probe.
   Do not test high voltage by "drawing an arc".
3. Do not spray chemicals on or near this receiver or any of its assemblies.
4. Unless specified otherwise in this service manual, clean electrical contacts only by applying the following mixture to the contacts with a pipe cleaner, cotton-tipped stick or comparable non-abrasive applicator; 10% (by volume) Acetone and 90% (by volume) isopropyl alcohol (90%-99% strength)
   CAUTION: This is a flammable mixture.
   Unless specified otherwise in this service manual, lubrication of contacts in not required.
5. Do not defeat any plug/socket B+ voltage interlocks with which receivers covered by this service manual might be equipped.
6. Do not apply AC power to this instrument and/or any of its electrical assemblies unless all solid-state device heat sinks are correctly installed.
7. Always connect the test receiver ground lead to the receiver chassis ground before connecting the test receiver positive lead.
   Always remove the test receiver ground lead last.
8. *Use with this receiver only the test fixtures specified in this service manual.*
   CAUTION: Do not connect the test fixture ground strap to any heat sink in this receiver.

Electrostatically Sensitive (ES) Devices

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

1. Immediately before handling any semiconductor component or semiconductor-equipped assembly, drain off any electrostatic charge on your body by touching a known earth ground. Alternatively, obtain and wear a commercially available discharging wrist strap device, which should be removed to prevent potential shock reasons prior to applying power to the unit under test.
2. After removing an electrical assembly equipped with ES devices, place the assembly on a conductive surface such as aluminum foil, to prevent electrostatic charge buildup or exposure of the assembly.
3. Use only a grounded-tip soldering iron to solder or unsolder ES devices.
4. Use only an anti-static type solder removal device. Some solder removal devices not classified as "anti-static" can generate electrical charges sufficient to damage ES devices.
5. Do not use freon-propelled chemicals. These can generate electrical charges sufficient to damage ES devices.
6. Do not remove a replacement ES device from its protective package until immediately before you are ready to install it. (Most replacement ES devices are packaged with leads electrically shorted together by conductive foam, aluminum foil or comparable conductive material).
7. Immediately before removing the protective material from the leads of a replacement ES device, 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 bodily motions when handling unpackaged replacement ES devices. (Otherwise harmless motion such as the brushing together of your clothes fabric or the lifting of your foot from a carpeted floor can generate static electricity sufficient to damage an ES device.)

General Soldering Guidelines

1. Use a grounded-tip, low-wattage soldering iron and appropriate tip size and shape that will maintain tip temperature within the range or 500 °F to 600 °F.
2. Use an appropriate gauge of RMA resin-core solder composed of 60 parts tin/40 parts lead.
3. Keep the soldering iron tip clean and well tinned.
4. Thoroughly clean the surfaces to be soldered. Use a mall wire-bristle (0.5 inch, or 1.25cm) brush with a metal handle.
   Do not use freon-propelled spray-on cleaners.
5. Use the following unsoldering technique
   a. Allow the soldering iron tip to reach normal temperature. (500 °F to 600 °F)
   b. Heat the component lead until the solder melts.
   c. Quickly draw the melted solder with an anti-static, suction-type solder removal device or with solder braid.
   CAUTION: Work quickly to avoid overheating the circuitboard printed foil.
6. Use the following soldering technique.
   a. Allow the soldering iron tip to reach a normal temperature (500 °F to 600 °F)
   b. First, hold the soldering iron tip and solder the strand against the component lead until the solder melts.
   c. Quickly move the soldering iron tip to the junction of the component lead and the printed circuit foil, and hold it there only until the solder flows onto and around both the component lead and the foil.
   CAUTION: Work quickly to avoid overheating the circuit board printed foil.
   d. Closely inspect the solder area and remove any excess or splashed solder with a small wire-bristle brush.

IC Remove/Replacement

Some chassis circuit boards have slotted holes (oblong) through which the IC leads are inserted and then bent flat against the circuit foil. When holes are the slotted type, the following technique should be used to remove and replace the IC. When working with boards using the familiar round hole, use the standard technique as outlined in paragraphs 5 and 6 above.

Removal

1. Desolder and straighten each IC lead in one operation by gently prying up on the lead with the soldering iron tip as the solder melts.
2. Draw away the melted solder with an anti-static suction-type solder removal device (or with solder braid) before removing the IC.

Replacement

1. Carefully insert the replacement IC in the circuit board.
2. Carefully bend each IC lead against the circuit foil pad and solder it.
3. Clean the soldered areas with a small wire-bristle brush. (It is not necessary to reapply acrylic coating to the areas).

"Small-Signal" Discrete Transistor Removal/Replacement

1. Remove the defective transistor by clipping its leads as close as possible to the component body.
2. Bend into a "U" shape the end of each of three leads remaining on the circuit board.
3. Bend into a "U" shape the replacement transistor leads.
4. Connect the replacement transistor leads to the corresponding leads extending from the circuit board and crimp the "U" with long nose pliers to insure metal to metal contact then solder each connection.

Power Output, Transistor Device Removal/Replacement

1. Heat and remove all solder from around the transistor leads.
2. Remove the heat sink mounting screw (if so equipped).
3. Carefully remove the transistor from the heat sink of the circuit board.
4. Insert new transistor in the circuit board.
5. Solder each transistor lead, and clip off excess lead.
6. Replace heat sink.

Diode Removal/Replacement

1. Remove defective diode by clipping its leads as close as possible to diode body.
2. Bend the two remaining leads perpendicular y to the circuit board.
3. Observing diode polarity, wrap each lead of the new diode around the corresponding lead on the circuit board.
4. Securely crimp each connection and solder it.
5. Inspect (on the circuit board copper side) the solder joints of the two "original" leads. If they are not shiny, reheat them and if necessary, apply additional solder.

Fuse and Conventional Resistor Removal/Replacement

1. Clip each fuse or resistor lead at top of the circuit board hollow stake.
2. Securely crimp the leads of replacement component around notch at stake top.
3. Solder the connections.
   CAUTION: Maintain original spacing between the replaced component and adjacent components and the circuit board to prevent excessive component temperatures.

Circuit Board Foil Repair

Excessive heat applied to the copper foil of any printed circuit board will weaken the adhesive that bonds the foil to the circuit board causing the foil to separate from or "lift-off" the board. The following guidelines and procedures should be followed whenever this condition is encountered.

At IC Connections

To repair a defective copper pattern at IC connections use the following procedure to install a jumper wire on the copper pattern side of the circuit board. (Use this technique only on IC connections).

1. Carefully remove the damaged copper pattern with a sharp knife. (Remove only as much copper as absolutely necessary).
2. carefully scratch away the solder resist and acrylic coating (if used) from the end of the remaining copper pattern.
3. Bend a small "U" in one end of a small gauge jumper wire and carefully crimp it around the IC pin. Solder the IC connection.
4. Route the jumper wire along the path of the out-away copper pattern and let it overlap the previously scraped end of the good copper pattern. Solder the overlapped area and clip off any excess jumper wire.

At Other Connections

Use the following technique to repair the defective copper pattern at connections other than IC Pins. This technique involves the installation of a jumper wire on the component side of the circuit board.

1. Remove the defective copper pattern with a sharp knife. Remove at least 1/4 inch of copper, to ensure that a hazardous condition will not exist if the jumper wire opens.
2. Trace along the copper pattern from both sides of the pattern break and locate the nearest component that is directly connected to the affected copper pattern.
3. Connect insulated 20-gauge jumper wire from the lead of the nearest component on one side of the pattern break to the lead of the nearest component on the other side. Carefully crimp and solder the connections.
   CAUTION: Be sure the insulated jumper wire is dressed so the it does not touch components or sharp edges.

SPECIFICATION

NOTE : Specifications and others are subject to change without notice for improvement.

1. Application Range.

This spec sheet is applied to the 37"/42" LCD TV used LA73A chassis.

2. Especificación

Each part is tested as below without special appointment

2.1 Temperature : 25±5°C(77±9°F), CST : 40±5°C
2.2 Relative Humidity : 65±10%
2.3 Power Voltage : Standard input voltage
(100~240V@ 50/60Hz)
• Standard Voltage of each products is marked by models
2.4 Specification and performance of each parts are followed each drawing and specification by part number in accordance with BOM .
2.5 The receiver must be operated for about 20 minutes prior to the adjustment.

3. Test method

3.1 Performance : LGE TV test method followed.
3.2 Demanded other specification
Safety : UL, CSA, IEC specification
3.3 EMC : FCC, ICES, IEC specification

4. General Specification(TV)

No.	Item	Specification	Remark
1.	Receiving System	ATSC/64 & 256 QAM/ NTSC-M	
2.	Available Channel	1) VHF : 02~13 2) UHF : 14~69 3) DTV : 02-69 4) CATV : 01~135 5) CADTV : 01~135	
3.	Input Voltage	1) AC 100 ~ 240V 50/60Hz	
4.	Market	NORTH AMERICA	
5.	Screen Size	47 inch Wide(1920 x 1080) 42 inch Wide(1920 x 1080) 37 inch Wide(1920 x 1080)	47LB5DF-UC 42LB5DF-UC 37LB5DF-UC
6.	Aspect Ratio	16:9	
7.	Tuning System	FS	
8.	LCD Module	LC470WU1-SLB2 LC420WU2-SLB1 LC370WX2-SLD1	47LB5DF-UC 42LB5DF-UC 37LB5DF-UC
9.	Operating Environment	1) Temp : 0 ~ 40 deg 2) Humidity : ~ 80 %	
10.	Storage Environment	1) Temp : -20 ~ 60 deg 2) Humidity : ~ 85 %	

5. Chrominance & Luminance Specification

No	Item			Min	Typ	Max	Unit	Remark
1.	White peak brightness			450	550		cd/m^2	47LB5DF-UC
				400	550		cd/m^2	42LB5DF-UC
				400	500		cd/m^2	37LB5DF-UC
2.	Contrast ratio						cd/m^2	N/A
3.	Brightness uniformity			80			%	Full white
4.	Color coordinate	RED	X		0.638			+/- 0.03
			Y		0.340			+/- 0.03
		GREEN	X		0.279			+/- 0.03
			Y		0.611			+/- 0.03
		BLUE	X		0.146			+/- 0.03
			Y		0.062			+/- 0.03
		WHITE	X		0.272			+/- 0.03
			Y		0.278			+/- 0.03
5.	Color coordinate uniformity							N/A
6.	Contrast ratio			600:1	800:1			47LB5DF-UC
				600:1	800:1			42LB5DF-UC
				600:1	800:1			37LB5DF-UC
7.	Color Temperature	Cool			11,000			<Test Signal>
		Medium			9,300			HDMI input, With 16-gray pattern
		Warm			6,500			6th bar from right
8.	Color Distortion, DG					10.0	%	
9.	Color Distortion, DP					10.0	deg	
10.	Color S/N, AM/FM			43.0			dB	
11.	Color Killer Sensitivity			-80			dBm	

Peak & average Brightness & Contrast measure standard specification

- White Peak brightness measure specification
  1) In non-impressed condition, measure peak brightness displayable as much as possible LCD module.
  2) Measuring instrument: CA-110 or a sort of Color Analyzer.
  3) Pattern Generator : VG-828 or a sort of digital pattern generator (displayable Full White & 1/25 White Window pattern)
  4) Measure condition
     - Test pattern: in center, 1/5(H)x1/5(V) of Window Pattern (white pattern in non-impressed condition)
     - SET condition : Contrast & Brightness Level 100%
     - Environment condition : Dark room in the non outside light
     - Video menu option condition

	Signal	Picture Mode	XD	Black Level
RF	NTSC-M	USER1	Off	N/A
AV	NTSC-M	USER1	Off	Low
Component	720P	USER1	Off	N/A
RGB	1024x768	USER1	N/A	N/A
HDMI	DTV 720P	USER1	Off	High

  5) Measurement
     - Do heat-run LCD module at 30minutes in normal temperature (25°C) by using full white pattern of 15% signal level(38 gray level).
     - Impress test pattern signal in 1/5(H)x1/5(V) White Window of 100%(255Gray Level)
     - measure 3 times brightness of central white window, and mark peak brightness in max brightness degree
     - measure the same condition in video signal /RGB signal.

Average Brightness measure specification

  1) Impress 100%(255Gray Level) full white pattern at the same peak brightness measurement.
  2) Measure average brightness in 9 points.

1	4	7
2	5	8
3	6	9

Contrast ratio measure specification

  1) Test display signal : 30x30 dots White Window signal & all Black Raster signal
  2) Dark room measure condition : Using touch type Color analyzer CA-100 Dark room in the non outside light
  3) Bright room measure condition : In bright room of 150Lx illumination in the panel surface, locate a source of light on the above 45°of the panel surface.
  4) Measure method
     - In standard test condition, impress 30x30 dots White Window Pattern signal .
       Measure center peak brightness degree Lw of white window
     - Impress black Raster signal as contrast ratio measurement signal.
       Measure black brightness degree Lb of PDP central
       Calculate the following numerical formula.
       Contrast ratio = Lw / Lb

** If it does not use Prior measurement, use generally simple test measurement.*
The Correct measure specification is followed by IEC61988-2/CD, JAPAN EIAJ-2710

6. Component Video Input (Y, P_B, P_R)

No.	Specification			Remark
	Resolution	H-freq(kHz)	V-freq(Hz)	
1.	720*480	15.73	60	SDTV ,DVD 480I
2.	720*480	15.73	59.94	SDTV ,DVD 480I
3.	720*480	31.47	60	SDTV 480P
4.	720*480	31.47	59.94	SDTV 480P
5.	1280*720	45.00	60.00	HDTV 720P
6.	1280*720	44.96	59.94	HDTV 720P
7.	1920*1080	33.75	60.00	HDTV 1080I
8.	1920*1080	33.72	59.94	HDTV 1080I
9.	1920*1080	67.500	60	HDTV 1080P
10.	1920*1080	67.432	59.939	HDTV 1080P
11.	1920*1080	27.000	24.000	HDTV 1080P
12.	1920*1080	26.97	23.94	HDTV 1080P
13.	1920*1080	33.75	30.000	HDTV 1080P
14.	1920*1080	33.71	29.97	HDTV 1080P

7. RGB PC

No.	Resolution	H-freq(kHz)	V-freq(Hz)	Pixel clock(MHz)	Remark	
	PC					DDC
1.	640*350	31.468	70.09	25.17	EGA	X
2.	720*400	31.469	70.08	28.32	DOS	O
3.	640*480	31.469	59.94	25.17	VESA(VGA)	O
4.	640*480	37.861	72.80	31.50	VESA(VGA)	O
5.	640*480	37.500	75.00	31.50	VESA(VGA)	O
6.	800*600	35.156	56.25	36.00	VESA(SVGA)	O
7.	800*600	37.879	60.31	40.00	VESA(SVGA)	O
8.	800*600	48.077	72.18	50.00	VESA(SVGA)	O
9.	800*600	46.875	75.00	49.50	VESA(SVGA)	O
10.	1024*768	48.363	60.00	65.00	VESA(XGA)	O
11.	1024*768	56.476	70.06	75.00	VESA(XGA)	O
12.	1024*768	60.023	75.02	78.75	VESA(XGA)	O
13.	1280*768	47.776	59.870	79.5	CVT(WXGA)	O
14.	1280*768	60.289	74.893	102.25	CVT(WXGA)	O
15.	1360*768	47.712	60.015	85.50	VESA (WXGA)	O
16.	1280*1024	63.981	60.020	108.00	VESA (SXGA)	O
17.	1280*1024	79.976	75.025	135	VESA (SXGA)	O
18.	1600*1200	75.00	60.00	162	VESA (UXGA)	O
19	1920*1080	67.5	60	148.5	HDTV 1080P	O

8. HDMI Input (PC/DTV)

No.	Resolution	H-freq(kHz)	V-freq(Hz)	Pixel clock(MHz)	Remark	
	PC					DDC
1	640*350	31.468	70.09	25.17	EGA	X
2	720*400	31.469	70.08	28.32	DOS	_
3	640*480	31.469	59.94	25.17	VESA(VGA)	_
4	640*480	37.861	72.80	31.50	VESA(VGA)	_
5	640*480	37.500	75.00	31.50	VESA(VGA)	_
6	800*600	35.156	56.25	36.00	VESA(SVGA)	_
7	800*600	37.879	60.31	40.00	VESA(SVGA)	_
8	800*600	48.077	72.18	50.00	VESA(SVGA)	_
9	800*600	46.875	75.00	49.50	VESA(SVGA)	_
10	1024*768	48.363	60.00	65.00	VESA(XGA)	_
11	1024*768	56.476	70.06	75.00	VESA(XGA)	_
12	1024*768	60.023	75.02	78.75	VESA(XGA)	_
13	1280*768	47.776	59.870	79.5	CVT(WXGA)	_
14	1360*768	47.712	60.015	85.50	VESA (WXGA)	_
15	1280*1024	63.981	60.020	108.00	VESA (SXGA)	_
16	1280*1024	79.976	75.025	135	VESA (SXGA)	_
17	1600*1200	75.00	60.00	162	VESA (UXGA)	_
18	1920*1080	67.5	60	148.5	HDTV 1080P	_
	DTV					
1	720*480	31.47	60		SDTV 480P	
2	720*480	31.47	59.94		SDTV 480P	
3	1280*720	45.00	60.00		HDTV 720P	
4	1280*720	44.96	59.94		HDTV 720P	
5	1920*1080	33.75	60.00		HDTV 1080I	
6	1920*1080	33.72	59.94		HDTV 1080I	
7	1920*1080	67.500	60		HDTV 1080P	
8	1920*1080	67.432	59.939		HDTV 1080P	
9	1920*1080	27.000	24.000		HDTV 1080P	
10	1920*1080	26.97	23.94		HDTV 1080P	
11	1920*1080	33.75	30.000		HDTV 1080P	
12	1920*1080	33.71	29.97		HDTV 1080P	

9. General specifications

9-1. 47" LCD MODULE

No	Item	Specification	Unit	Remark
1	Active Screen Size	46.96 inches(1192.87mm) mm		
2	Outline dimension	1096.0(H)x640.0(V)x481(D)	mm	
3	Pixel Pitch	0.5415x0.5415x RGB	mm	
4	Pixel Format	1920 horiz by 1080 vert.		RGB Stripe arrangement
5	Color Depth	8-bit / 16.7M Color		
6	Luminance, White	550 cd/m2		
7	Power Consumption	Total 230.56 Watt		
8	Weight	20.0Kg		
9	Display Operating Mode	Transmissive Mode, Normally Black		
10	Surface Treatment	Hard Coating (3H) Anti-glare treatment of the front polarizer		

9-2. 42" LCD MODULE

No	Item	Specification	Unit	Remark
1	Active Screen Size	42.02 inches(1067.31mm) mm		
2	Outline dimension	983.0(H)x576.0(V)x51.0(D)	mm	
3	Pixel Pitch	0.4845x0.4845x RGB	mm	
4	Pixel Format	1920 horiz by 1080 vert.		RGB Stripe arrangement
5	Color Depth	8-bit / 16.7M Color		
6	Luminance, White	550 cd/m2 (Center 1 point, Typ)	kg	
7	Power Consumption	Total 167.3 Watt(Typ)		
8	Weight	13Kg		
9	Display Operating Mode	Transmissive Mode, Normally Black		
10	Surface Treatment	Hard Coating (3H), Anti-glare treatment of the front polarizer		

9-3. 37" LCD MODULE

No	Item	Specification	Unit	Remark
1	Active Screen Size	37.02 inches(940.3mm) mm		
2	Outline dimension	877.0(H)x516.8(V)x55.5(D)	mm	
3	Pixel Pitch	0.200 x 0.600 x RGB	mm	
4	Pixel Format	1366 horiz by 768 vert.		RGB Stripe arrangement
5	Color Depth	8-bit / 16.7M Color, 10-bit / 1 G colors		
6	Luminance, White	550 cd/m2 (Center 1 point, Typ)	kg	
7	Power Consumption	Total TDB Watt		
8	Weight	9.5Kg		
9	Display Operating Mode	Transmissive Mode, Normally Black		
10	Surface Treatment	Hard Coating (3H), Anti-glare treatment of the front polarizer		

10. Mechanical specification

10-1. 47LB5DF-UC

No.	Item		Content			Unit	Remark
1.	Product Dimension		Widt(W)	Length(D)	Height(H)	mm	
		Before Packing	1144.5	331	825.6	mm	With Stant
		After Packing	1230	410	912	mm	
2.	Product	Only SET	37.5			Kg	
		With BOX	44.7			Kg	

10-2. 42LB5DF-UC

No.	Item		Content			Unit	Remark
1.	Product Dimension		Widt(W)	Length(D)	Height(H)	mm	
		Before Packing	1033.1±1.0	287.6±0.7	750±2.0	mm	With Stant
		After Packing	1119	374	858	mm	
2.	Product	Only SET	27.5			Kg	
		With BOX	32.5			Kg	

9. Customer Menu Setup (Shipment Condition)

No	Item		Condition	Remark
1.	Input Mode		TV02CH	
2.	Volume Level		30	
3.	Mute		Off	
4.	Aspect Ratio		16:9	
5.	Video	EZ Picture	Daylight	
		Contrast	100	
		Brightness	40	
		Color	70	
		Sharpness	70	
		Tint	0	
		Color-temperature	Cool	
		XD	Auto(On)	
		Advanced	Cinema3:2 Mode(Off) Black Level(RF,HDMI=>Low),(AV=>High)(RGB-PC,Component=>Disable)	
6.	Audio	Audio Language	Off	
		EZ Sound	Normal	
		Balance	0	
		Bass	50	
		Front Surround	Off	
		TV Speaker	On	
7.	Timer	Auto clock	Off	
		Manual Clock	Off	
		Off Timer	Off	
		On Timer	Off	
		Sleep Timer	Off	
		Auto Off	Off	
8.	Option	Aspect Ratio	16:9	
		Caption/Text	Off	
		Caption Option	Set By Program	
		Language	English	
		Simplink	On	
9.	Lock	Lock System	Off	
		Set password	On	(Default:0000)
		Block channel	None	
		Movie Rating	Off	
		TV Rating-Children	None	
		TV Rating-General	None	
		Input Block	Off	
10.	Channel Memory		RF : 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 30, 51, 63 CATV : 15, 16, 17	

ADJUSTMENT INSTRUCTION

1. Scope

These instructions are applied to all of the LCD TV, LA73A Chassis.

2. Designation

2.1 Because this chassis is a non-charge type chassis of power supply insulation, it does not require an insulation type transformer. But it is preferable to use an insulation type transformer between the power supply line and the chassis input side to operate it before the adjustment.

2.2 The adjustment must be done in the accurate order. But it can be changed considering the mass production capability.

2.3 Unless specified specially, the adjustment must be done in an environment with the surrounding temperature of 25 ±5°C and relative humidity of 65 ±10%.

2.4 The input voltage of the receiver during the adjustment must be maintained at 220V, 60Hz.

2.5 Unless specified otherwise, the receiver must be pre-operated for 15 minutes before the adjustment.

● The pre-operation must be done after receiving 100% White Pattern (06CH).
(Or 8. Test Pattern condition of Ez – Adjust)

● How to enter White Pattern

A. Press the POWER ON KEY on the adjustment R/C.

B. Or press the ADJ KEY on the adjustment R/C to enter Ez – Adjust
And select 10. Test Pattern using the CH + / - KEY and then select White using the arrow keys to display the 100% FULL WHITE PATTERN.

* In this mode, you can heat run the set without separate signal generator.

Caution) When you keep the still screen on for more than 20 minutes (Especially for internal Digital pattern (13 CH), Cross Hatch Pattern (09CH) with higher black/white contrast), be careful not to create residual image on the black level part.

3. Board adjustment

- Adjust 480i Comp1
- Adjust 1080p Comp1/RGB
- Adjust RF and Video

4. Adjustment method using RS-232C

Adjust the 3 board adjustment items of 3 using the RS-232C according to the "4.1.2 Adjustment order".

4-1. Necessary details before adjustment

- ad 00 00 Enter ADC adjustment mode.
- kb 00 01 Switch RF input (Input is not switched)
- ad 00 10 Adjust RF and Video (Input is switched and adjusted)
- kb 00 04 Switch component1 input (Input is not switched)
- ad 00 10 Adjust 480i Comp1 (Input is switched and adjusted)
- kb 00 06 Switch RGB-DTV input (Actual input is not switched)
- ad 00 10 Adjust 1080p Comp1/RGB (Input is switched and adjusted)
- ad 00 90 Complete adjustment

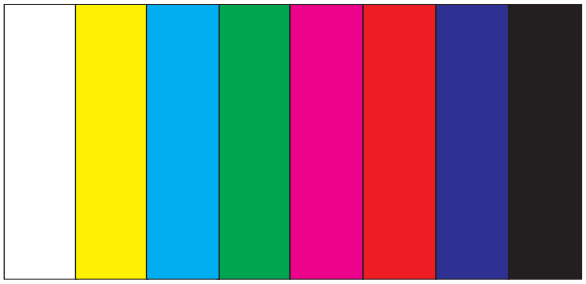
4-2. Auto adjustment of RF and Video

4.2.1 Introduction

This is the adjustment to reduce the color difference of main/sub screen of RF and video signal.

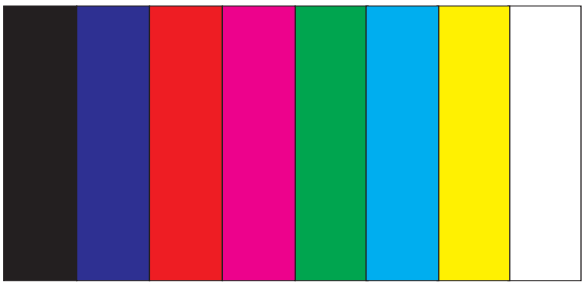
4.2.2 Adjustment method

A. Connect the Video Signal Generator (Master) to TV AV input terminal with AV output.
At this time, when you enter the input pattern as Model : 201(NTSC-M) , Pattern : 33(100% color Bar), the following video is displayed on the screen



Model: 201(NTSC-M), Pattern: 33(100% color Bar)

Note: When the video is shown as follows showing black patterns from the left, it cannot be adjusted

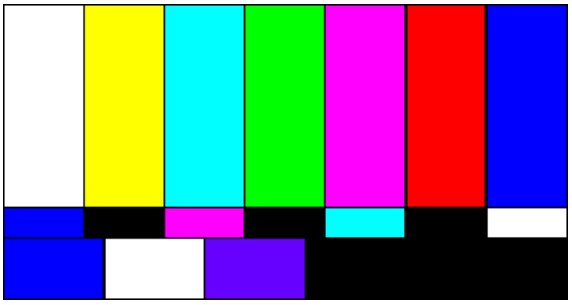


In this case, first press the **Rev button** of Video Signal Generator (Master), to generate the white pattern to be displayed from the left.

Because the above pattern can differ by the model and pattern for each device, you must check the pattern first.

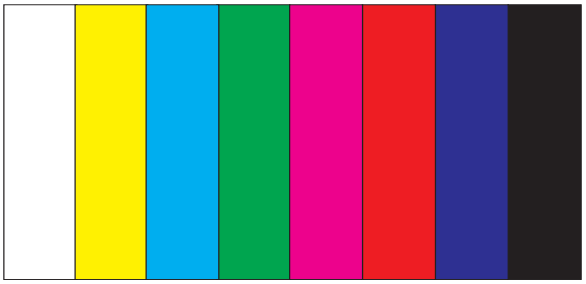
B. When the receiving signal is confirmed after inputting the internal signal, press the ADJ KEY on the adjustment R/C to enter 'EZ-ADJUST'. Select '5.Adjust RF and Video' and press the right key (▶) to enter the adjustment mode.

C. When you enter the adjustment mode, the video is automatically set to TV 2CH and the following window is displayed.



D. When the adjustment is completed, a message saying 'RF Configuration Success' is displayed. If the adjustment has failed, a message saying 'RF Configuration Error' is displayed.

E. When the automatic adjustment of RF signal is completed, it is automatically switched to the Video Mode as shown in the above picture, and automatic adjustment for Video Mode is done. When the automatic adjustment is completed, a message saying 'Video Configuration Success' is displayed. If the adjustment has failed, a message saying 'Video Configuration Error' is displayed..



- Check RS-232C operation
  Press the Instart of adjustment R/C to enter the 7.Baud Rate menu and set the Baud Rate to 115200 to check the 232-C operation

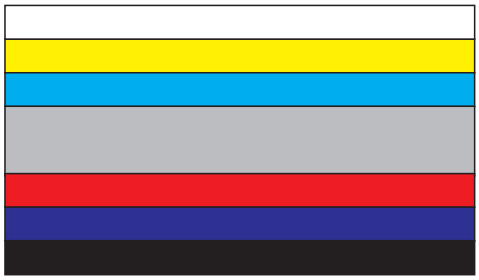
5. Automatic adjustment of Component 480i/1080p RGB 1080p

5.1 Introduction

The Component 480i/1080p RGB 1080p adjustment sets the optimal black level and gain automatically from the analog => digital converter, and is the function to correct the RGB deviation

5.2 Using device

Adjustment remote controller, 801GF (802B, 802F, 802R) or MSPG925FA Pattern Generator
(480i/1080P Horizontal 100% Color Bar Pattern output must be possible and output level must be adjusted accurately to 0.7±0.1Vp-p.)



(Adjustment pattern : 480i / 1080P 60Hz Pattern)

Because the above pattern can differ by the model and pattern for each device, you must check the pattern first.

5.3 480i Comp1, 1080p Comp1/RGB adjustment method

A. ADC 480i component1 adjustment
- Check Component1 connected condition from the using device.
- (MSPG-925FA : (model :209 , pattern :65)

B. Input Component 100% Horizontal Color Bar Pattern (HozTV31Bar) of 480i Mode that is supported, select the input to Component1 and select the video to 'Normal'.

C. Wait for more than 1 second after receiving the signal and then press the ADJ KEY on the adjustment R/C to enter 'Ez – Adjust'. Select '3. ADC 480i Comp1' and press the Enter KEY to make the automatic adjustment.

D. When the adjustment is normally completed, a message saying "ADC Component1 Success" is displayed.

E. When the adjustment is not normally completed, a message saying 'ADC Component1 480i Fail' is displayed. When the component is not connected, a message saying 'Component1 Not Connected', when the input format is not 480i, a message saying 'Not Valid Format' and when the input signal is not coming out, a message saying 'Check Signal Status' is displayed for 1 second.

F. ADC 1080P Component1/RGB adjustment
- Check the Component1, RGB connected condition from the using device.
- (MSPG-925FA : => model :225 , pattern :65)

G. Input Component 100% Horizontal Color Bar Pattern (HozTV31Bar) of 480i Mode that is supported, select the input to Component1 and select the video to 'Normal'.

H. Wait for more than 1 second after receiving the signal and then press the ADJ KEY on the adjustment R/C to enter 'Ez – Adjust'. Select '4. ADC 1080P Comp1/RGB' and press the Enter KEY to make the automatic adjustment for component 1 first.

I. When the adjustment is normally completed, a message saying "ADC Component1 Success" is displayed, and when the adjustment is not normally completed, a message saying 'ADC Component1 1080P Fail' is displayed.

J. After the Component1 adjustment is completed, it is automatically switch to RGB-DTV Mode to start RGB adjustment. When the adjustment is normally completed, a message saying "ADC RGB 1080P Success" is displayed.

K. When the adjustment is not normally completed, make the adjustment again after checking the pattern or adjustment condition. The error message is as E.

L. When the adjustment is completed, press the ADJ KEY to exit.

6. EDID(The Extended Display Identification Data)/DDC (Display Data Channel) Download

6.1 Introduction

This has been established by VESA and is the function created to "Plug and Play" by making the computer reconfigure user environment through communication with the monitor automatically without having the user set commands directly to the PC or the monitor so that the user can use it immediately.

When writing EDID, use the DDC2B protocol.

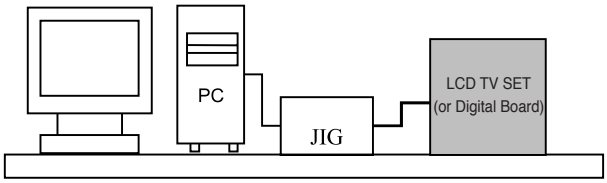
6.2 HDMI EDID Data input

1) Using device

a. Jig for PC, DDC adjustment (PC serial to D-sub connection device)
b. DDC recording S/W (EDID Data Write & Read)
c. D-Sub terminal
d. Separate HDMI Cable connecting JIG is necessary

2) Adjustment preparation and device configuration

e. Configure as Fig., and turn on the PC
f. Turn on the JIG.
g. Run the DDC recording S/W (EDID Data Write & Read). (Execute in DOS mode)



Device configuration diagram for HDMI EDID Data input

6.3 EDID Data for LA73A

l HDMI-1 EDID (DDC (Display Data Channel) Data)
EDID table =

```
0  1  2  3  4  5  6  7  8  9  A  B  C  D  E  F
-----------------------------------------------
 0 I 00 FF FF FF FF FF FF 00 1E 6D 01 00 01 01 01 01
10 I 00 11 01 03 80 73 41 96 0A CF 74 A3 57 4C B0 23
20 I 09 48 4C AF CF 00 31 40 45 40 61 40 81 80 A9 40
30 I 01 01 01 01 01 01 66 21 50 B0 51 00 1B 30 40 70
40 I 36 00 C4 8E 21 00 00 1E 02 3A 80 18 71 38 2D 40
50 I 58 2C 45 00 C4 8E 21 00 00 1E 00 00 00 FD 00 30
60 I 58 1F 64 11 00 0A 20 20 20 20 20 20 00 00 00 FC
70 I 00 4C 47 20 54 56 0A 20 20 20 20 20 20 20 01 8A

0  1  2  3  4  5  6  7  8  9  A  B  C  D  E  F
-----------------------------------------------
 0 I 02 03 17 F1 47 84 05 03 02 20 22 10 23 15 07 50
10 I 66 03 0C 00 10 00 80 01 1D 00 72 51 D0 1E 20 6E
20 I 28 55 00 C4 8E 21 00 00 1E 01 1D 80 18 71 1C 16
30 I 20 58 2C 25 00 C4 8E 21 00 00 9E 8C 0A D0 8A 20
40 I E0 2D 10 10 3E 96 00 C4 8E 21 00 00 18 8C 0A D0
50 I 8A 20 E0 2D 10 10 3E 96 00 13 8E 21 00 00 18 0E
60 I 1F 00 80 51 00 1E 30 40 80 37 00 C4 8E 21 00 00
70 I 1C 00 00 00 00 00 00 00 00 00 00 00 00 00 00 41
```

l HDMI-2 EDID (DDC (Display Data Channel) Data)
EDID table =

```
0  1  2  3  4  5  6  7  8  9  A  B  C  D  E  F
-----------------------------------------------
 0 I 00 FF FF FF FF FF FF 00 1E 6D 01 00 01 01 01 01
10 I 00 11 01 03 80 73 41 96 0A CF 74 A3 57 4C B0 23
20 I 09 48 4C AF CF 00 31 40 45 40 61 40 81 80 A9 40
30 I 01 01 01 01 01 01 66 21 50 B0 51 00 1B 30 40 70
40 I 36 00 C4 8E 21 00 00 1E 02 3A 80 18 71 38 2D 40
50 I 58 2C 45 00 C4 8E 21 00 00 1E 00 00 00 FD 00 30
60 I 58 1F 64 11 00 0A 20 20 20 20 20 20 00 00 00 FC
70 I 00 4C 47 20 54 56 0A 20 20 20 20 20 20 20 01 8A

0  1  2  3  4  5  6  7  8  9  A  B  C  D  E  F
-----------------------------------------------
 0 I 02 03 17 F1 47 84 05 03 02 20 22 10 23 15 07 50
10 I 66 03 0C 00 20 00 80 01 1D 00 72 51 D0 1E 20 6E
20 I 28 55 00 C4 8E 21 00 00 1E 01 1D 80 18 71 1C 16
30 I 20 58 2C 25 00 C4 8E 21 00 00 9E 8C 0A D0 8A 20
40 I E0 2D 10 10 3E 96 00 C4 8E 21 00 00 18 8C 0A D0
50 I 8A 20 E0 2D 10 10 3E 96 00 13 8E 21 00 00 18 0E
60 I 1F 00 80 51 00 1E 30 40 80 37 00 C4 8E 21 00 00
70 I 1C 00 00 00 00 00 00 00 00 00 00 00 00 00 00 31
```

l HDMI-3 EDID (DDC (Display Data Channel) Data)
EDID table =

```
0  1  2  3  4  5  6  7  8  9  A  B  C  D  E  F
-----------------------------------------------
 0 I 00 FF FF FF FF FF FF 00 1E 6D 01 00 01 01 01 01
10 I 00 11 01 03 80 73 41 96 0A CF 74 A3 57 4C B0 23
20 I 09 48 4C AF CF 00 31 40 45 40 61 40 81 80 A9 40
30 I 01 01 01 01 01 01 66 21 50 B0 51 00 1B 30 40 70
40 I 36 00 C4 8E 21 00 00 1E 02 3A 80 18 71 38 2D 40
50 I 58 2C 45 00 C4 8E 21 00 00 1E 00 00 00 FD 00 30
60 I 58 1F 64 11 00 0A 20 20 20 20 20 20 00 00 00 FC
70 I 00 4C 47 20 54 56 0A 20 20 20 20 20 20 20 01 8A

0  1  2  3  4  5  6  7  8  9  A  B  C  D  E  F
-----------------------------------------------
 0 I 02 03 17 F1 47 84 05 03 02 20 22 10 23 15 07 50
10 I 66 03 0C 00 30 00 80 01 1D 00 72 51 D0 1E 20 6E
20 I 28 55 00 C4 8E 21 00 00 1E 01 1D 80 18 71 1C 16
30 I 20 58 2C 25 00 C4 8E 21 00 00 9E 8C 0A D0 8A 20
40 I E0 2D 10 10 3E 96 00 C4 8E 21 00 00 18 8C 0A D0
50 I 8A 20 E0 2D 10 10 3E 96 00 13 8E 21 00 00 18 0E
60 I 1F 00 80 51 00 1E 30 40 80 37 00 C4 8E 21 00 00
70 I 1C 00 00 00 00 00 00 00 00 00 00 00 00 00 00 21
```

l RGB EDID DATA
EDID table =

```
0  1  2  3  4  5  6  7  8  9  A  B  C  D  E  F
-----------------------------------------------
 0 I 00 FF FF FF FF FF FF 00 1E 6D 01 00 01 01 01 01
10 I 00 11 01 03 18 73 41 96 0A CF 74 A3 57 4C B0 23
20 I 09 48 4C AF CF 00 31 40 45 40 61 40 81 80 A9 40
30 I 01 01 01 01 01 01 66 21 50 B0 51 00 1B 30 40 70
40 I 36 00 C4 8E 21 00 00 1A 02 3A 80 18 71 38 2D 40
50 I 58 2C 45 00 C4 8E 21 00 00 1E 00 00 00 FD 00 30
60 I 58 1F 64 11 00 0A 20 20 20 20 20 20 00 00 00 FC
70 I 00 4C 47 20 54 56 0A 20 20 20 20 20 20 20 01 F6

0  1  2  3  4  5  6  7  8  9  A  B  C  D  E  F
-----------------------------------------------
 0 I 02 03 04 00 0E 1F 00 80 51 00 1E 30 40 80 37 00
10 I C4 8E 21 00 00 1C F1 27 00 A0 51 00 25 30 50 80
20 I 37 00 C4 8E 21 00 00 1C 00 00 00 00 00 00 00 00
30 I 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
40 I 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
50 I 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
60 I 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
70 I 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 31
```

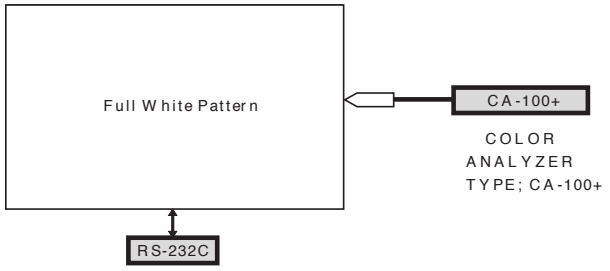
7. White Balance adjustment

7-1. Using device

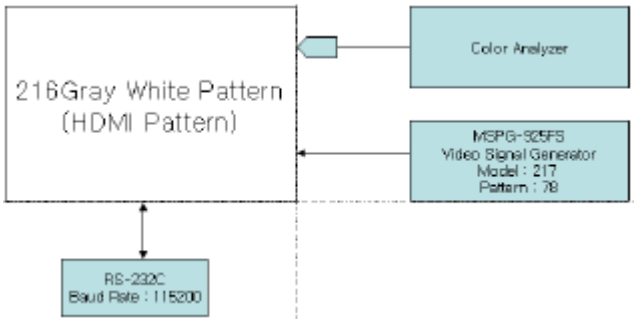
A. Color Analyzer : CA-210 (CH 9)
When adjusting the LCD white balance, use CS-1000 as the color analyzer (CA-210) and channel 9 corrected of Matrix (corrected for White, Red, Green, Blue) and the adjustment must be done in accordance with the White balance adjustment coordinate.
B. Automatic adjuster (Necessary for automatic adjustment, must be able to communicate with RS-232C, Baud Rate : 115200)
C. Video Signal Generator MSPG-925F 720p, 216Gray(Model : 217, Pattern 78

7-2. Measuring device connection diagram (for automatic adjustment)

=> Connection diagram for internal pattern



=> Connection diagram for HDMI input



7-3. White Balance adjustment method

Basically it uses the internal pattern but when internal pattern is not possible, you can select HDMI input for adjustment. Through the option at the most bottom part of the Ez Adjust Menu 7.White Balance menu, you can select NONE, INNER and HDMI, and the default is set to INNER. When the adjustment cannot be done with the internal pattern, you can select HDMI input for adjustment.

For manual adjustment, press the ADJ KEY of the adjustment R/C to enter Ez Adjust 7.White-Balance, and the pattern is automatically displayed. (When you set the Option to INNER, the default is always set to INNER)

A. Connect the set according to the internal pattern or HDMI input in accordance with 4.3.2 measuring device connection diagram.
B. Set the Baud Rate of RS-232C to 115200. It is set to 115200 as default.
C. Connect the RS-232C Cable to the set.
D. Connect the HDMI Cable to the set. (Limited to the set with HDMI option)
E. Select and adjust the model applicable to LA73A chassis from the adjuster

Caution) For automatic adjustment, RS-232C Command and Chassis are commonly applied

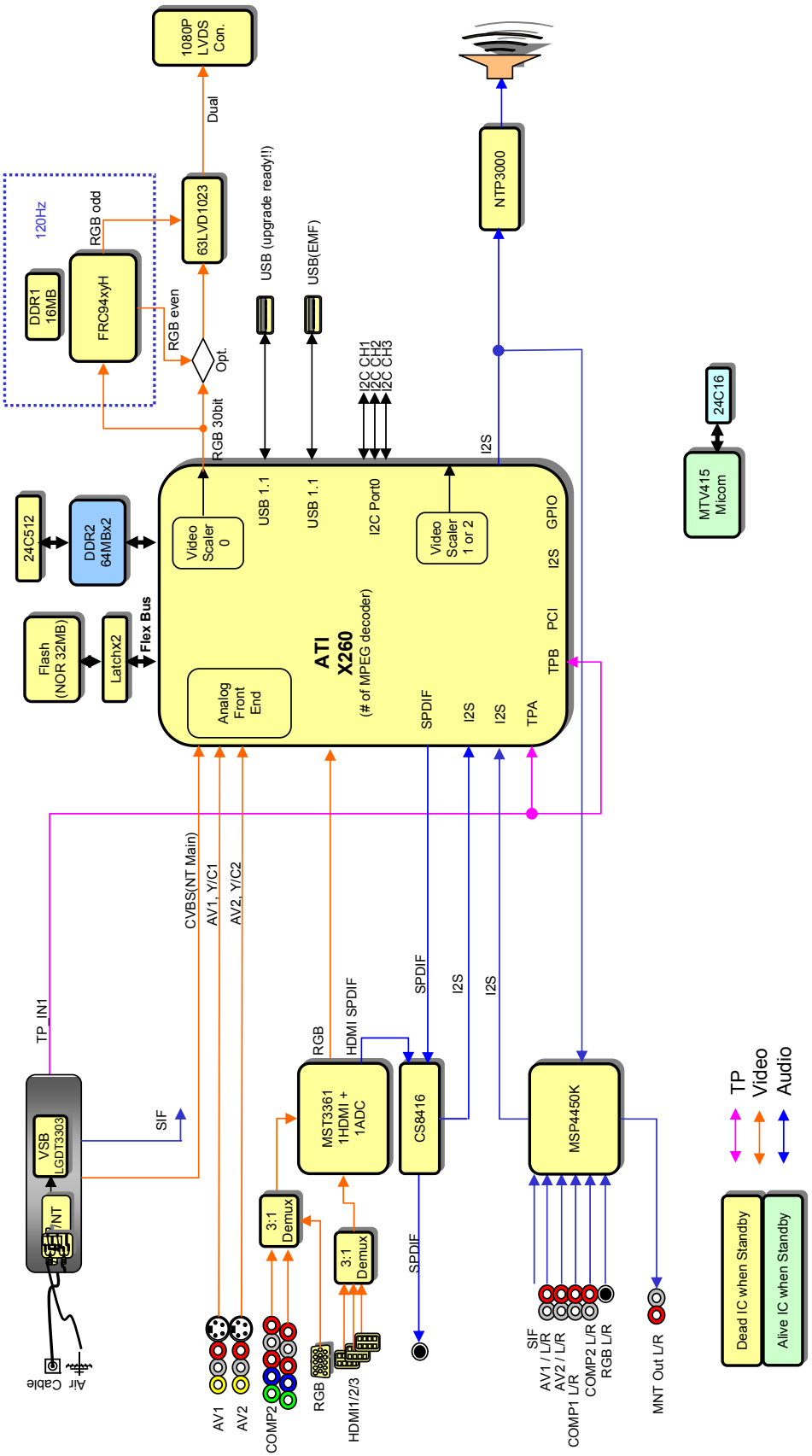
7.3.1 White Balance adjustment (For automatic adjustment)
- Execute Power Only Key of the adjustment R/C to execute automatic adjustment. Set the Baud Rate to 115200.
: Always start adjustment with "wb 00 00" and end adjustment with "wb 00 ff"
: Adjust the offset if necessary.

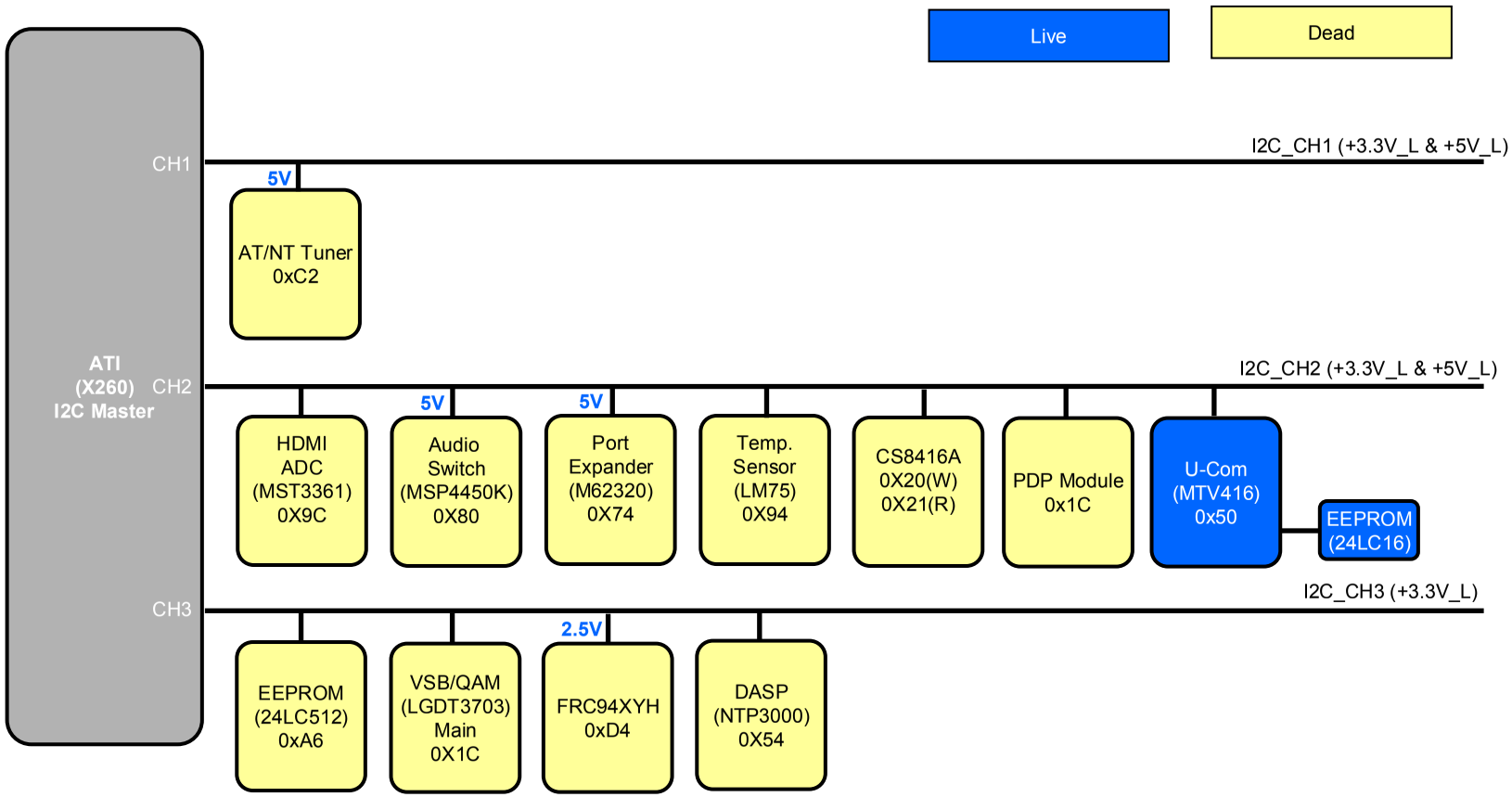
7-4. White Balance adjustment (For manual adjustment)

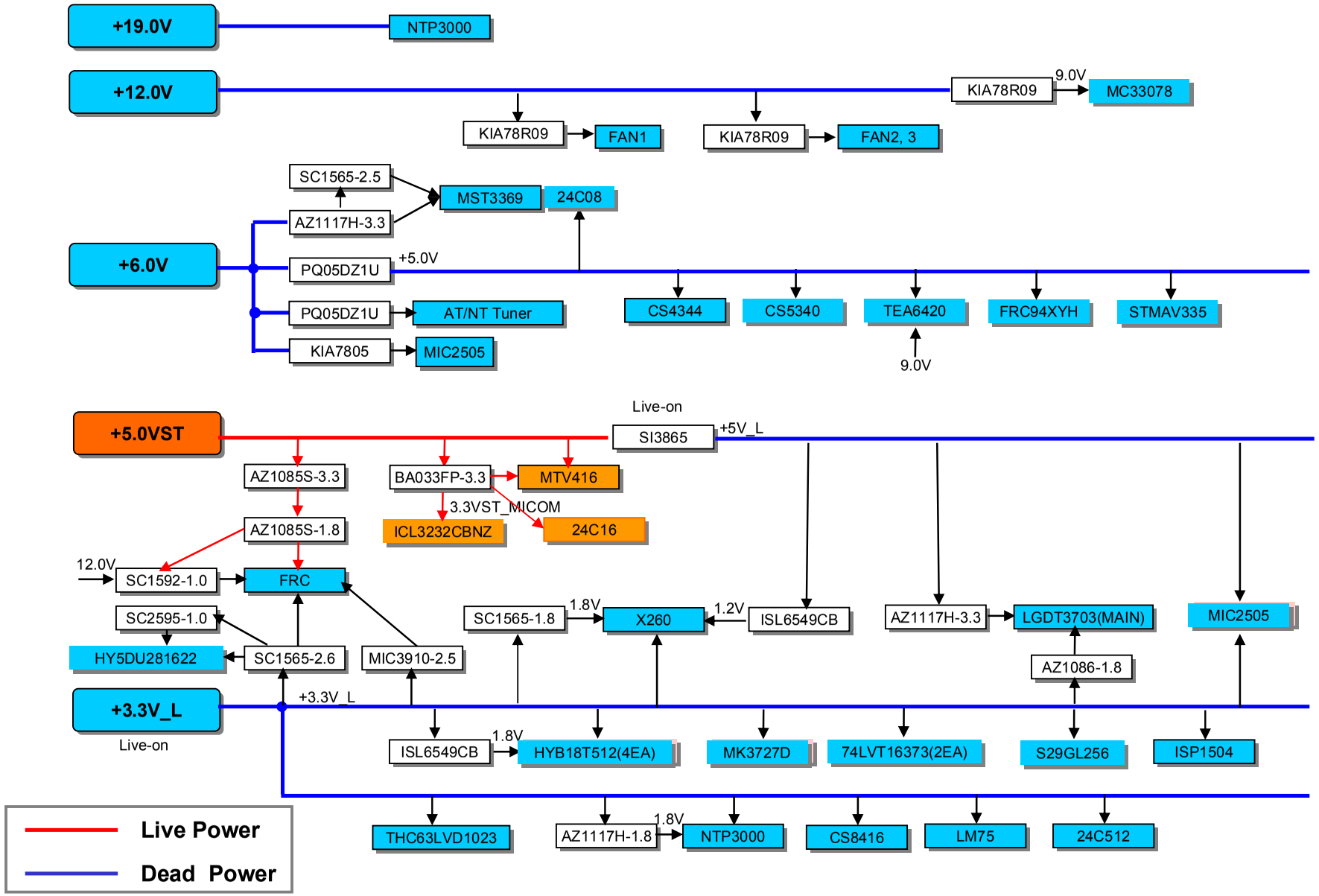
● Using device: CA-210
=> When adjusting the plasma white balance, use CS-1000 as the color analyzer (CA-210) and channel 9 corrected of Matrix (corrected for White, Red, Green, Blue) and the adjustment must be done in accordance with the below White balance adjustment coordinate.

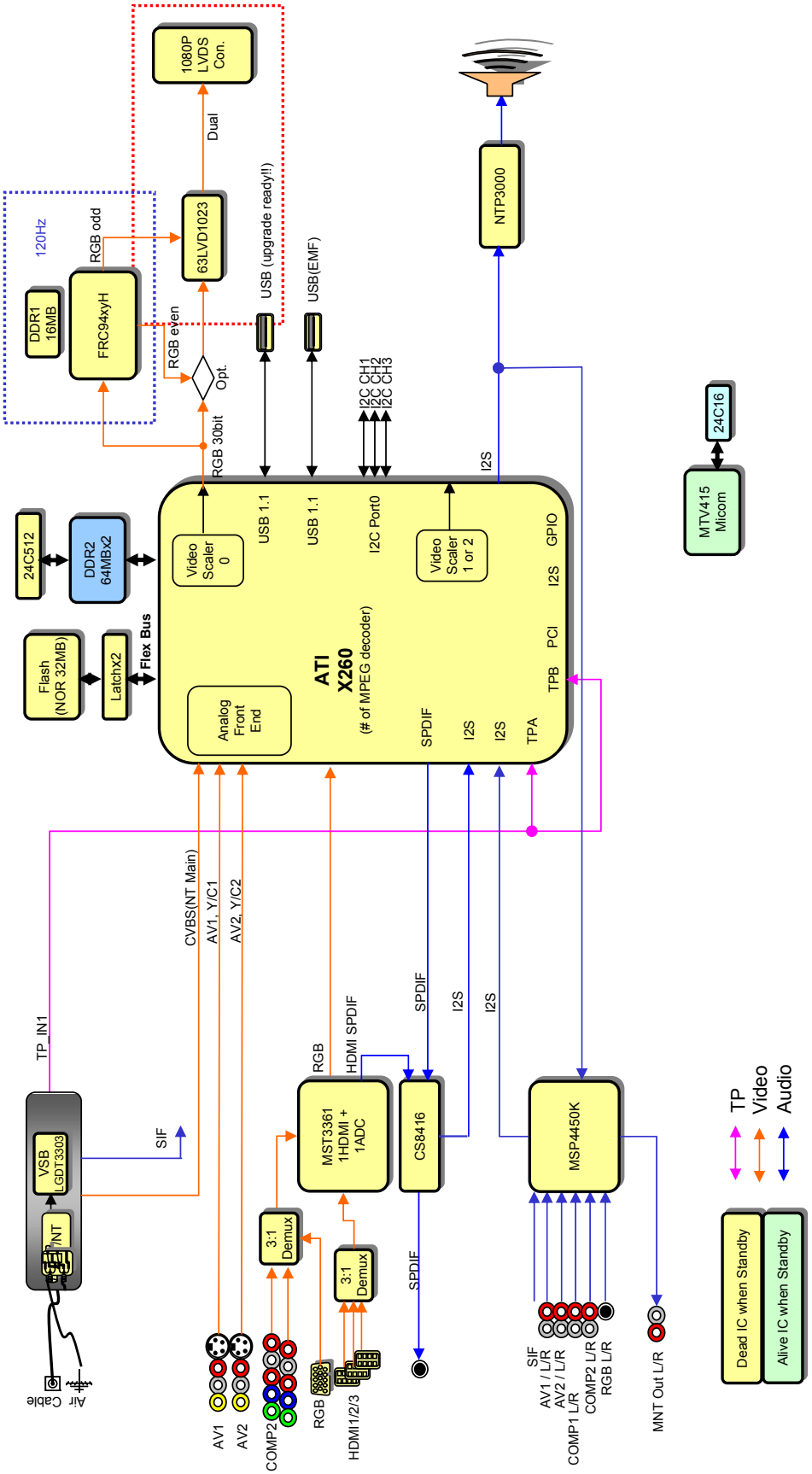
● Manual adjustment must be done in the following order
A. Press the ADJ of adjustment R/C to enter 'EZ-ADJUST'.
B. Select 10.TEST PATTERN using the CH + / - KEY and press the Enter KEY to execute a heat run for more than 30 minutes.
C. Execute a Zero Calibration for CA-210 and put it at distance of less than 10Cm from the LCD module surface center during the adjustment.
D. Press the ADJ of adjustment R/C, select '7.White-Balance' of 'Ez – Adjust' and enter the adjustment mode using the right key (▶).
(When you press the ¢∫ button, the screen enters the full white internal pattern..)
E. The adjustment is executed in 3 different white balance of COOL, MEDIUM and WARM.
F. When the white balance is Cool,
Fix B Gain 192, fix R-Cut / G-Cut / B-Cut 64,
and use R Gain / G Gain to adjust the High Light.
When the white balance is Medium,
Fix R Gain 192, fix R-Cut / G-Cut / B-Cut 64,
and use G Gain / B Gain to adjust the High Light.
When the white balance is Warm
Fix R Gain 192, fix R-Cut / G-Cut / B-Cut 64,
and use G Gain / B Gain to adjust High Light.
G. Use the +, - key for adjustment.
H. When the adjustment is completed, press the OK (■ KEY) button to move to the Ez –Adjust screen. Press the ADJ KEY to exit the adjustment mode.

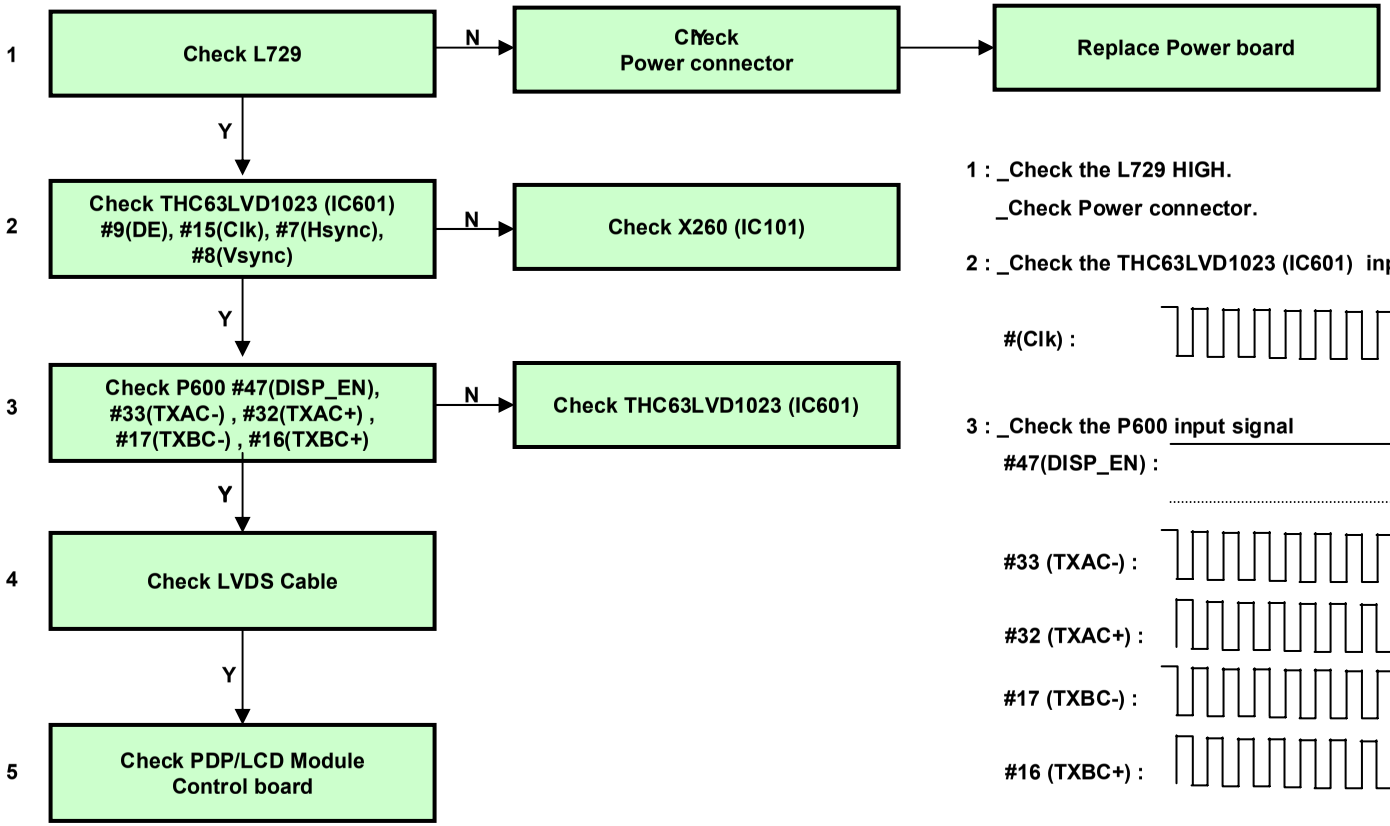
TROUBLESHOOTING & BLOCK DIAGRAM




Live
Dead
ATI
(X260)
I2C Master
CH1
CH2
CH3
I2C_CH1 (+3.3V_L & +5V_L)
5V
AT/NT Tuner
0xC2
I2C_CH2 (+3.3V_L & +5V_L)
HDMI
ADC
(MST3361)
0X9C
5V
Audio
Switch
(MSP4450K)
0X80
5V
Port
Expander
(M62320)
0X74
Temp.
Sensor
(LM75)
0X94
CS8416A
0X20(W)
0X21(R)
PDP Module
0x1C
U-Com
(MTV416)
0x50
EEPROM
(24LC16)
I2C_CH3 (+3.3V_L)
EEPROM
(24LC512)
0xA6
VSB/QAM
(LGDT3703)
Main
0X1C
2.5V
FRC94XYH
0xD4
DASP
(NTP3000)
0X54


+19.0V
NTP3000
+12.0V
KIA78R09
9.0V
MC33078
KIA78R09
FAN1
KIA78R09
FAN2, 3
SC1565-2.5
MST3369
24C08
AZ1117H-3.3
+6.0V
PQ05DZ1U
+5.0V
PQ05DZ1U
AT/NT Tuner
KIA7805
MIC2505
CS4344
CS5340
TEA6420
FRC94XYH
STMAV335
9.0V
Live-on
+5.0VST
SI3865
+5V_L
AZ1085S-3.3
BA033FP-3.3
MTV416
3.3VST_MICOM
AZ1085S-1.8
ICL3232CBNZ
24C16
12.0V
SC1592-1.0
FRC
SC2595-1.0
SC1565-1.8
1.8V
X260
1.2V
ISL6549CB
AZ1117H-3.3
LGDT3703(MAIN)
MIC2505
AZ1086-1.8
HY5DU281622
SC1565-2.6
MIC3910-2.5
+3.3V_L
Live-on
+3.3V_L
ISL6549CB
1.8V
HYB18T512(4EA)
MK3727D
74LVT16373(2EA)
S29GL256
ISP1504
THC63LVD1023
AZ1117H-1.8
1.8V
NTP3000
CS8416
LM75
24C512
Live Power
Dead Power


1080P LVDS Con.
Dual
63LVD1023
120Hz
RGB odd
DDR1 16MB
FRC94xyH
RGB even
Opt.
USB (upgrade ready!!)
USB(EMF)
NTP3000
I2C CH1
I2C CH2
I2C CH3
RGB 30bit
I2S
24C16
MTV415 Micom
24C512
DDR2 64MBx2
Flash (NOR 32MB)
LatchX2
Flex Bus
Video Scaler 0
USB 1.1
USB 1.1
I2C Port0
Video Scaler 1 or 2
GPIO
I2S
PCI
TPB
TPA
I2S
I2S
SPDIF
Analog Front End
ATI
X260
(# of MPEG decoder)
TP_IN1
VSB LGDT3303
TNT
Air Cable
SIF
CVBS(NT Main)
AV1, Y/C1
AV2, Y/C2
RGB
HDMI SPDIF
SPDIF
I2S
I2S
MST3361 1HDMI + 1ADC
CS8416
MSP4450K
3:1 Demux
3:1 Demux
SPDIF
AV1
AV2
COMP2
RGB
HDMI1/2/3
SIF
AV1 / L/R
AV2 / L/R
COMP1 L/R
COMP2 L/R
RGB L/R
MNT Out L/R
TP
Video
Audio
Dead IC when Standby
Alive IC when Standby



1 : _Check the L729 HIGH.
_Check Power connector.

2 : _Check the THC63LVD1023 (IC601) input signal

#(Clk) : 74.25MHz

3 : _Check the P600 input signal

#47(DISP_EN) : 3.3V / GND

#33 (TXAC-) : 74.25MHz

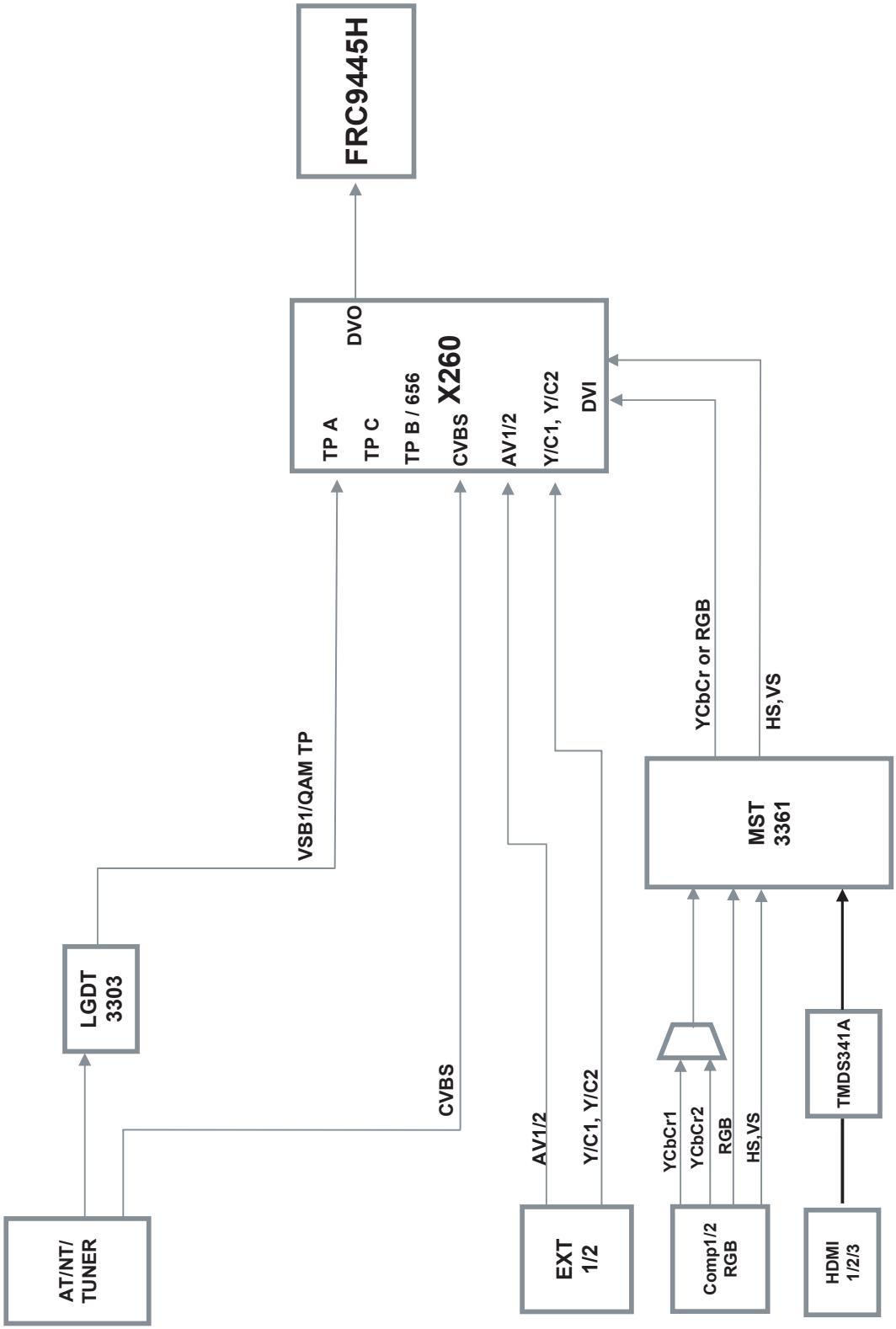
#32 (TXAC+) : 74.25MHz

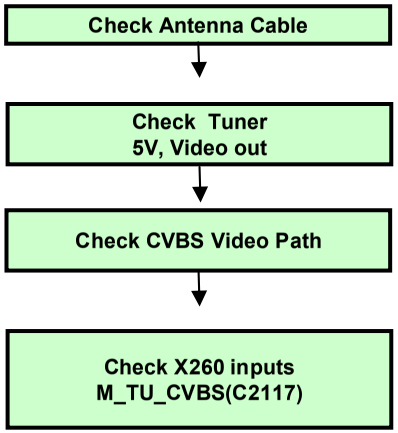
#17 (TXBC-) : 74.25MHz

#16 (TXBC+) : 74.25MHz

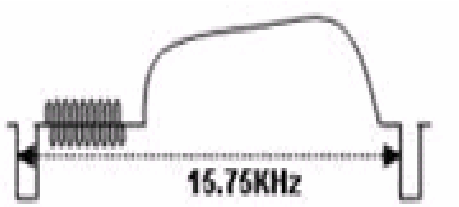
4 : _Check the LVDS Cable

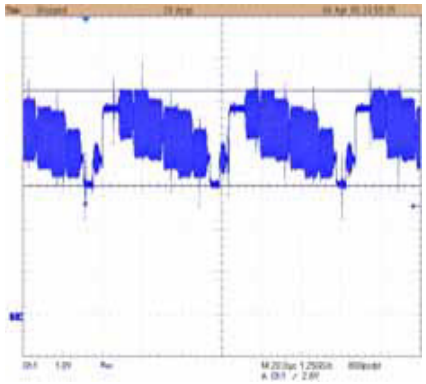
5 : _Check the PDP Module control board

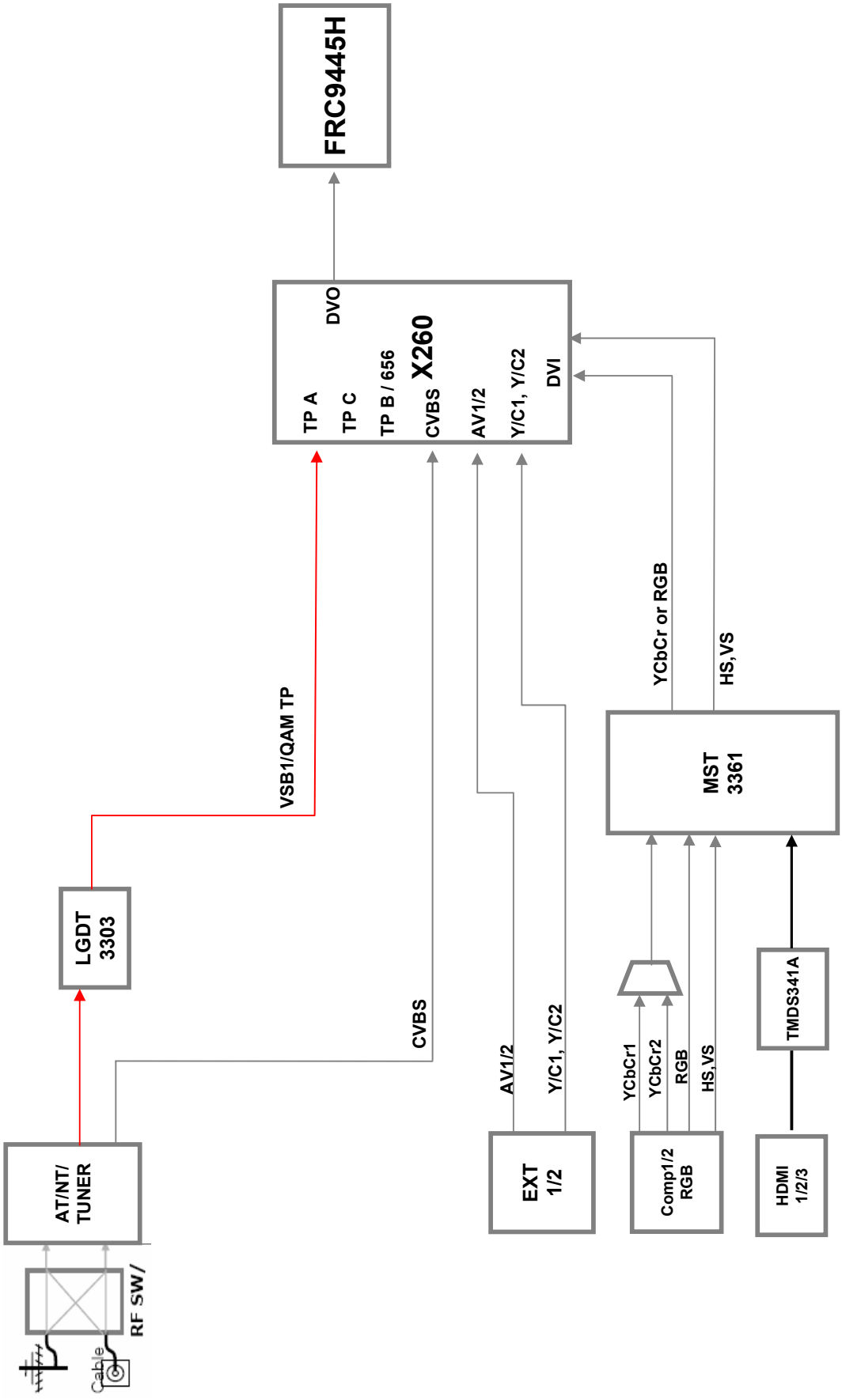

FRC9445H
DVO
X260
TP A
TP C
TP B / 656
CVBS
AV1/2
Y/C1, Y/C2
DVI
YCbCr or RGB
HS,VS
MST
3361
VSB1/QAM TP
LGDT
3303
CVBS
AV1/2
Y/C1, Y/C2
YCbCr1
YCbCr2
RGB
HS,VS
TMDS341A
AT/NT/
TUNER
EXT
1/2
Comp1/2
RGB
HDMI
1/2/3

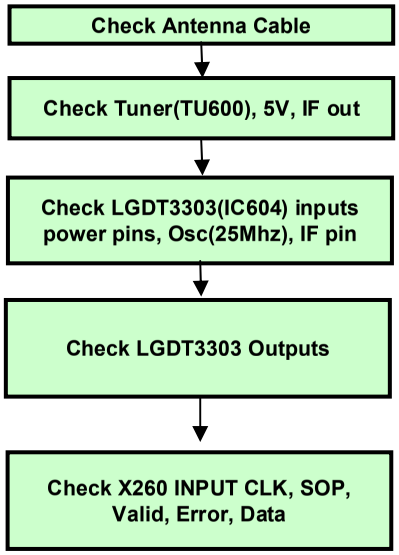


1 : _Check Tuners Vcc and Video out






FRC9445H
DVO
X260
TP A
TP C
TP B / 656
CVBS
AV1/2
Y/C1, Y/C2
DVI
VSB1/QAM TP
LGDT 3303
CVBS
AV1/2
Y/C1, Y/C2
YCbCr or RGB
HS,VS
MST 3361
YCbCr1
YCbCr2
RGB
HS,VS
TMDS341A
AT/NT/ TUNER
RF SW/
Cable
EXT 1/2
Comp1/2 RGB
HDMI 1/2/3

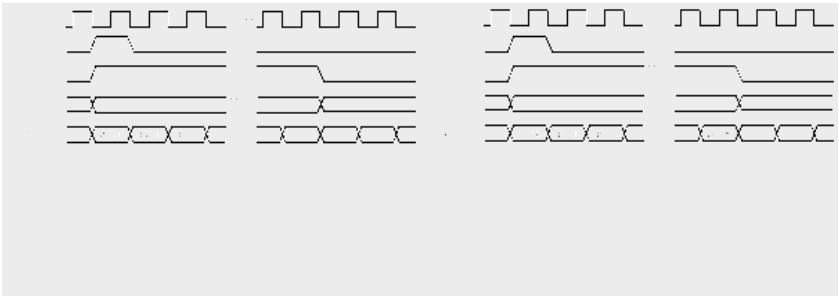


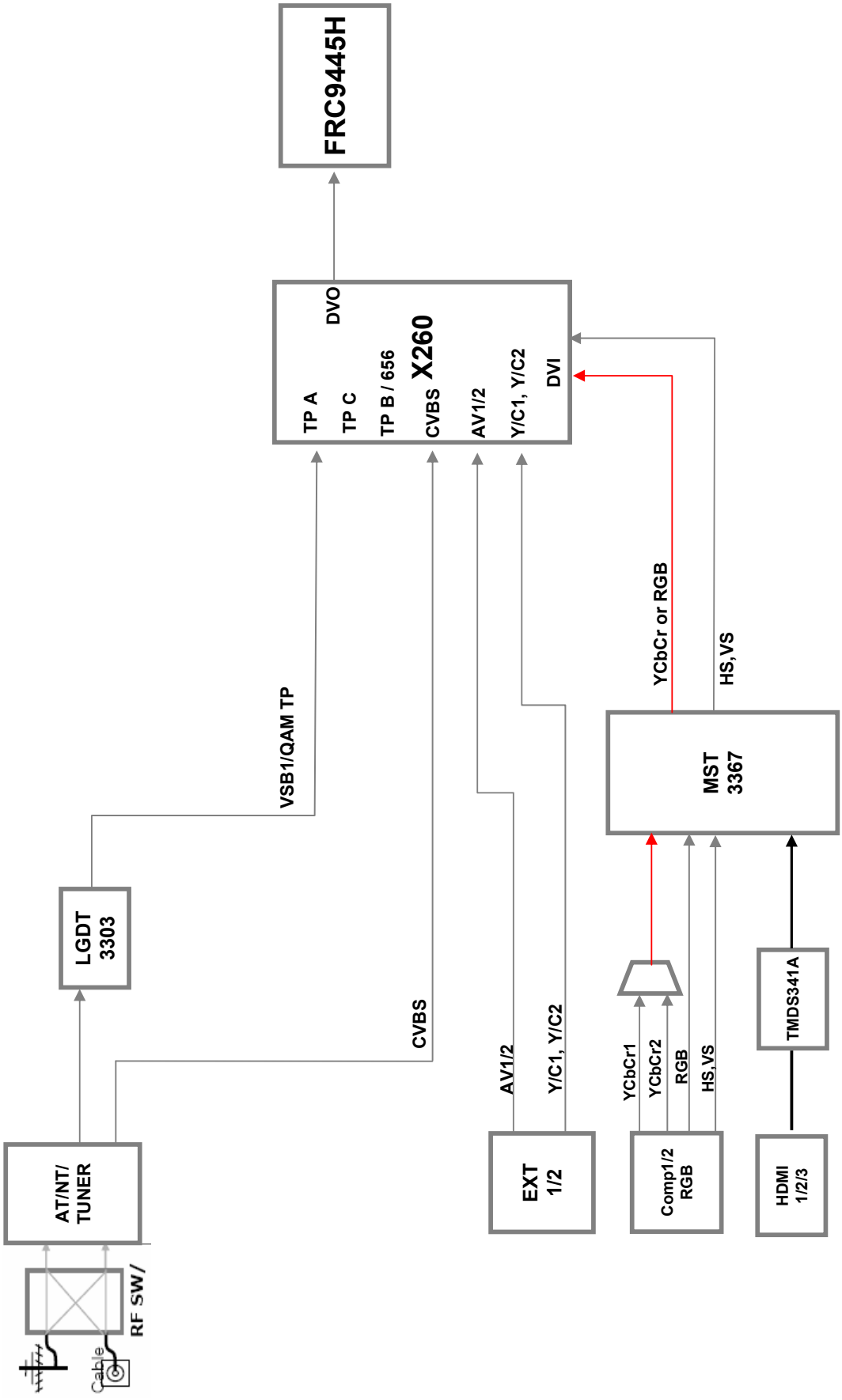
1 : _Check Antenna cable(RF switch, Tuners...)

2 : _Check Tuners Vcc and IF out

Seems to noise

3._ Check X260 Input (CLK, SOP, Valid, Error, Data)




FRC9445H
DVO
TP A
TP C
TP B / 656
X260
CVBS
AV1/2
Y/C1, Y/C2
DVI
VSB1/QAM TP
CVBS
AV1/2
Y/C1, Y/C2
YCbCr or RGB
HS,VS
LGDT 3303
MST 3367
AT/NT/ TUNER
RF SW/
Cable
EXT 1/2
YCbCr1
YCbCr2
RGB
HS,VS
Comp1/2 RGB
TMDS341A
HDMI 1/2/3

1 Check Signal format (supported format?)

↓

2 Check STMAV335(IC403) Power Pins, Comp1(#2,#5,#11), Comp2(#3,#6,#10), RGB(#9,#4,#7) RGB_V,H(R400,R401)

↓

3 Check STMAV335(IC403) outputs #14(MUX_OUT_Y), #13(MUX_OUT_Pb), #8(MUX_OUT_Pr)

↓

4 Check MST3361(IC402) OSC, Power pins,#44(Y_in), #41(Cb_in),#46(Cr_in) #37(H),#38(V)

↓

5 Check MST3361(IC402) Outputs V-out (#99) , H-out (#98) , Clock (#96) , Data (30Bit) , DE(#97)

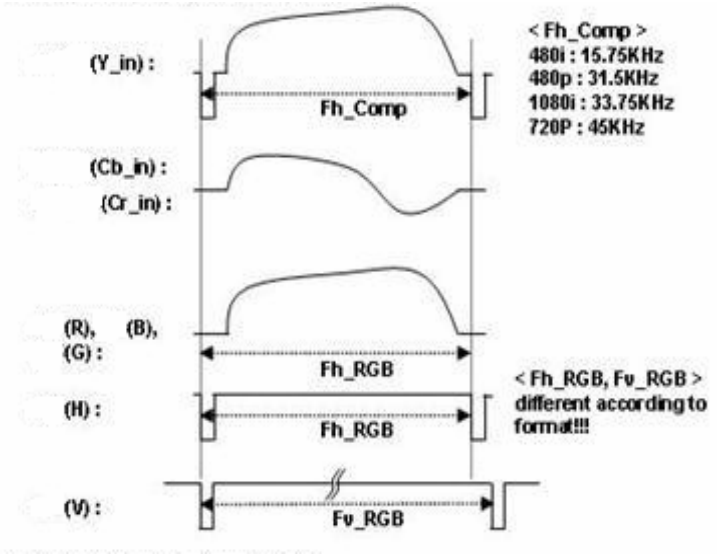
↓

6 Check X260 (IC101) Inputs

MST3361_HS(#T6) , MST3361_VS(#T5) , Clock (#P3) , Data (30Bit) , DE(#U6)

1. Check Signal format (ref. owenr's manual)

2. Check STMAV335(IC403) Power Input Signal

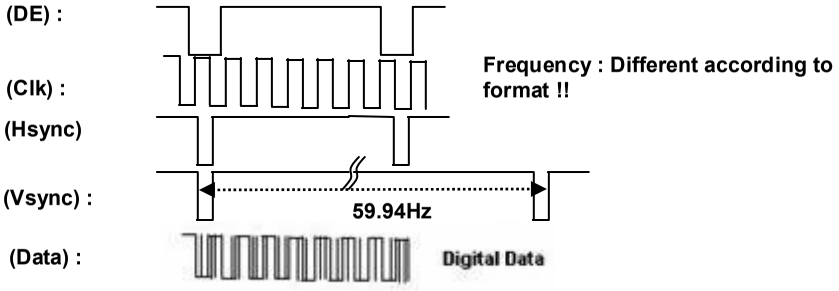


3 : Check STMAV335(IC403) outputs

Signal shape is same (above)

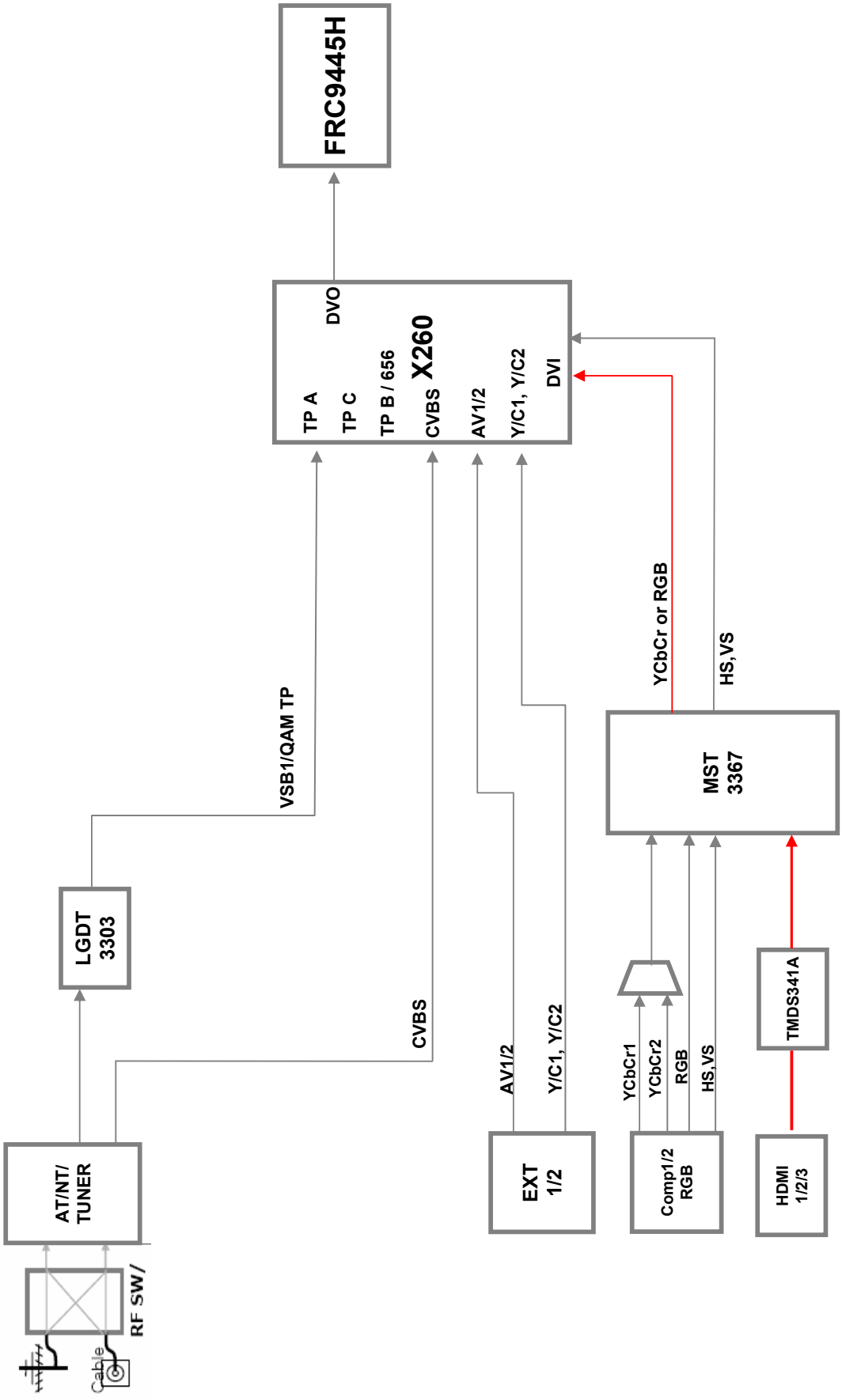
4 : _Check MST3361(IC402) Power pins, Input Signals, Signal Shape is Same (above)

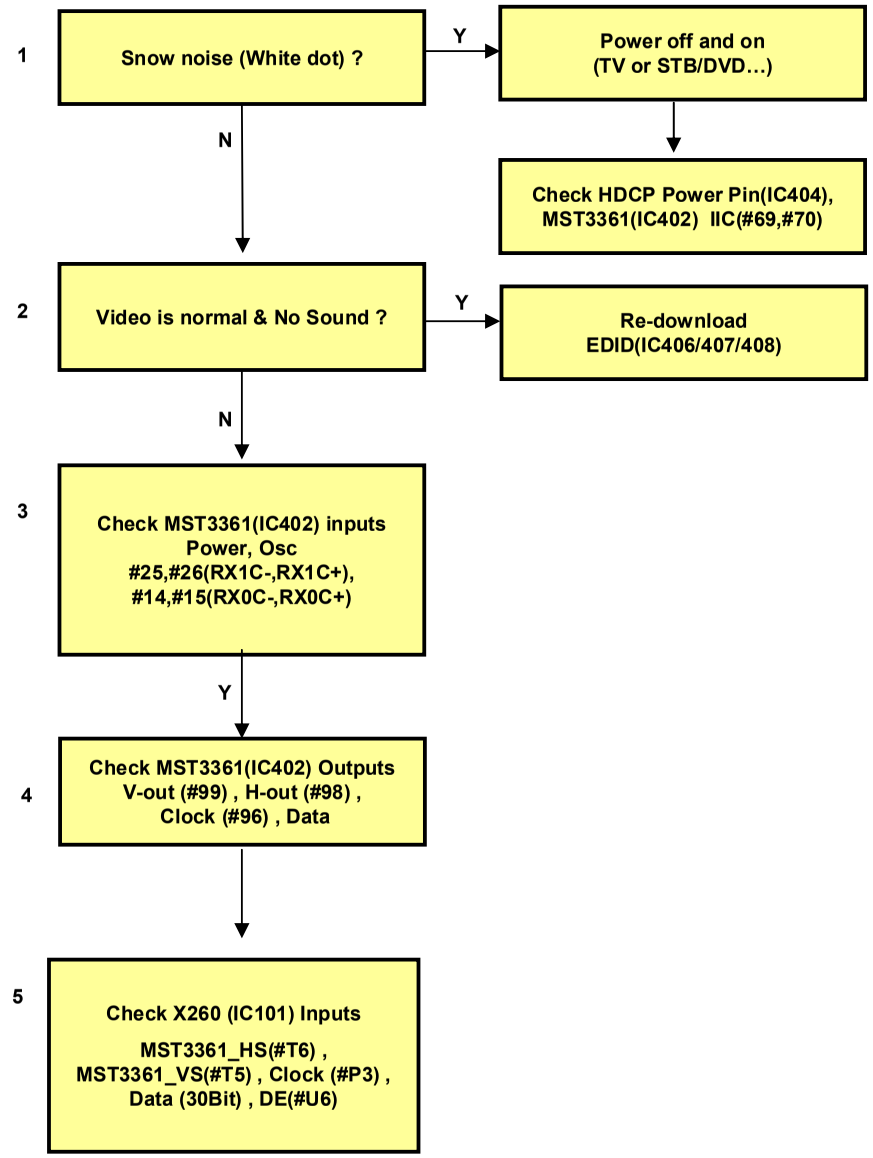
5 : _Check the MST3361(IC402) Output Signals



6 : _Check X260 (IC101) Inputs

_Signal shape is same (above)


FRC9445H
DVO
X260
TP A
TP C
TP B / 656
CVBS
AV1/2
Y/C1, Y/C2
DVI
YCbCr or RGB
HS,VS
VSB1/QAM TP
CVBS
AV1/2
Y/C1, Y/C2
LGDT 3303
MST 3367
AT/NT/ TUNER
RF SW/
Cable
EXT 1/2
YCbCr1
YCbCr2
RGB
HS,VS
Comp1/2 RGB
TMDS341A
HDMI 1/2/3



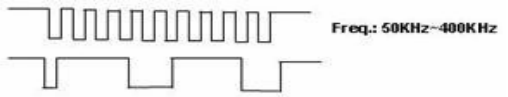
1 : _Check HDCP Error

_Retry power off and on (TV or STB/DVD…)

_Check MST3361(IC402) HDCP IIC line (#69,#70)

SCL :

SDA :

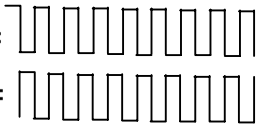


2 : _Check EDID Download

3 : _ MST3361(IC402) inputs

(RX0C-,RX0C+) :

(RX1C-,RX1C+) :



Frequency : Different according to format !!

4 : _Check MST3361(IC402) Outputs

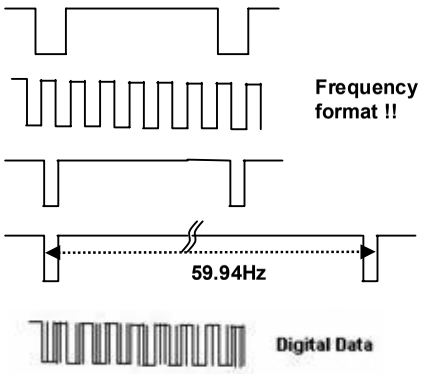
(DE) :

(Clk) :

(Hsync)

(Vsync) :

(Data) :

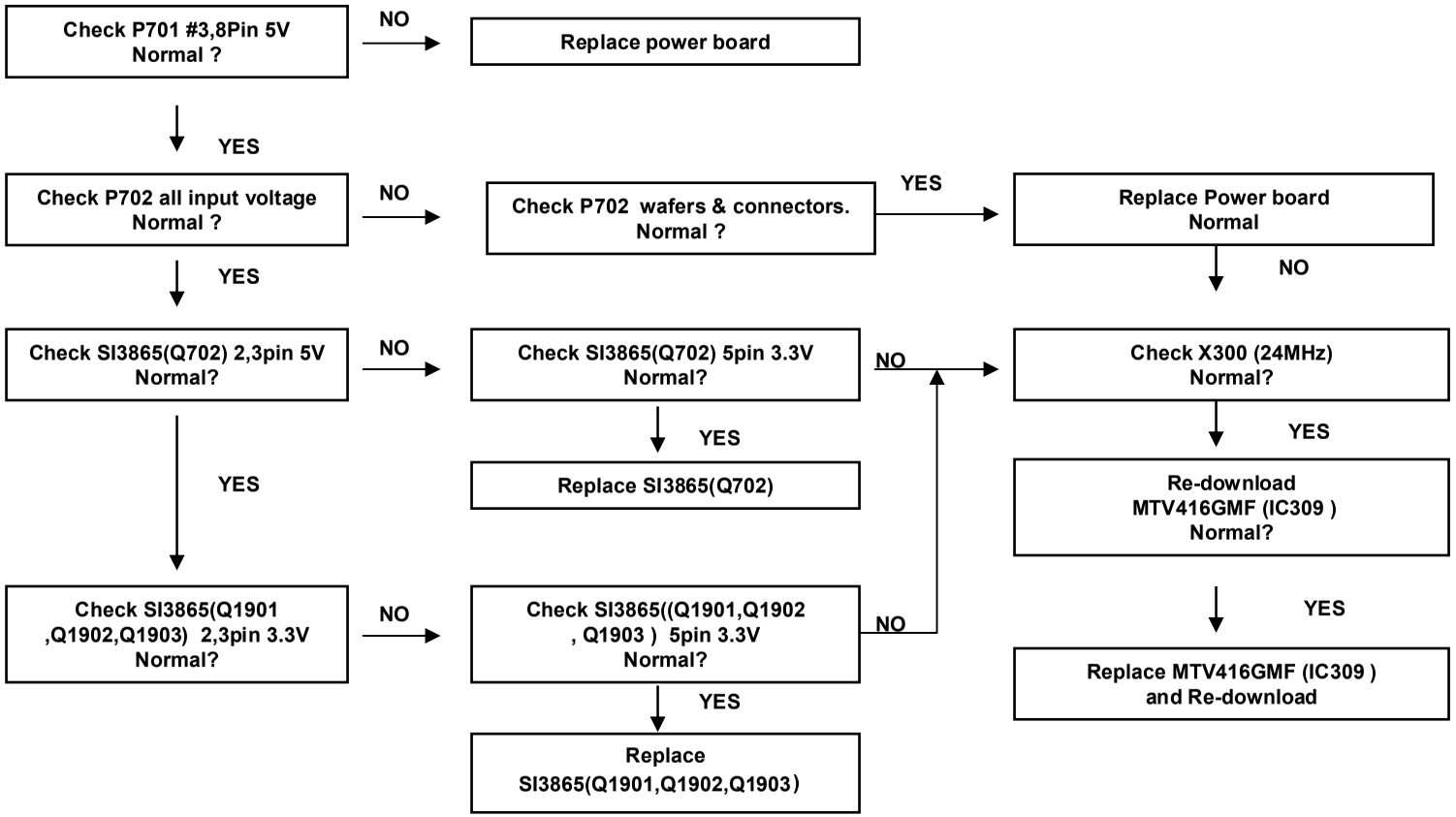


Frequency : Different according to format !!

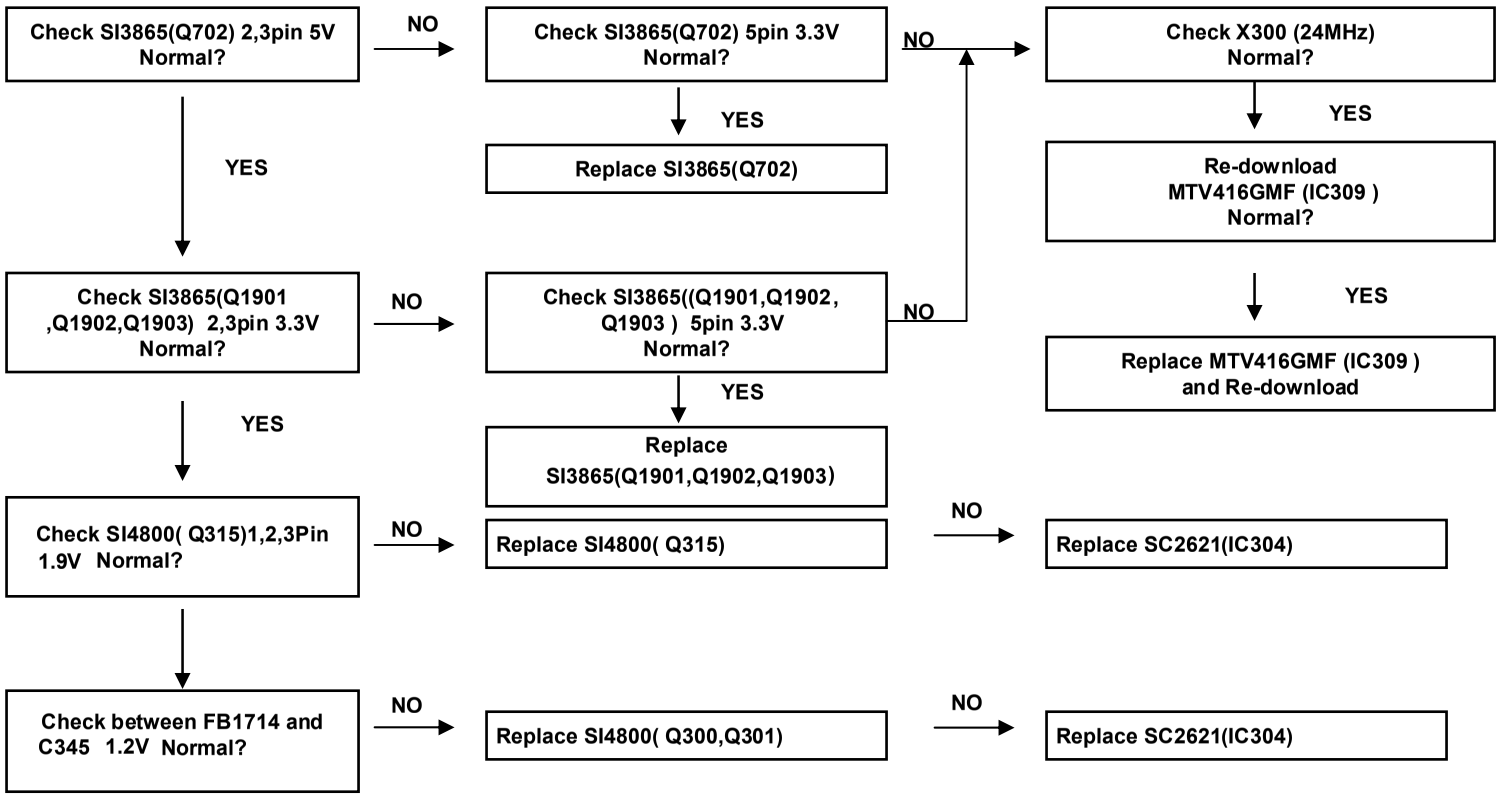
5 : _Check X260 (IC101) Inputs

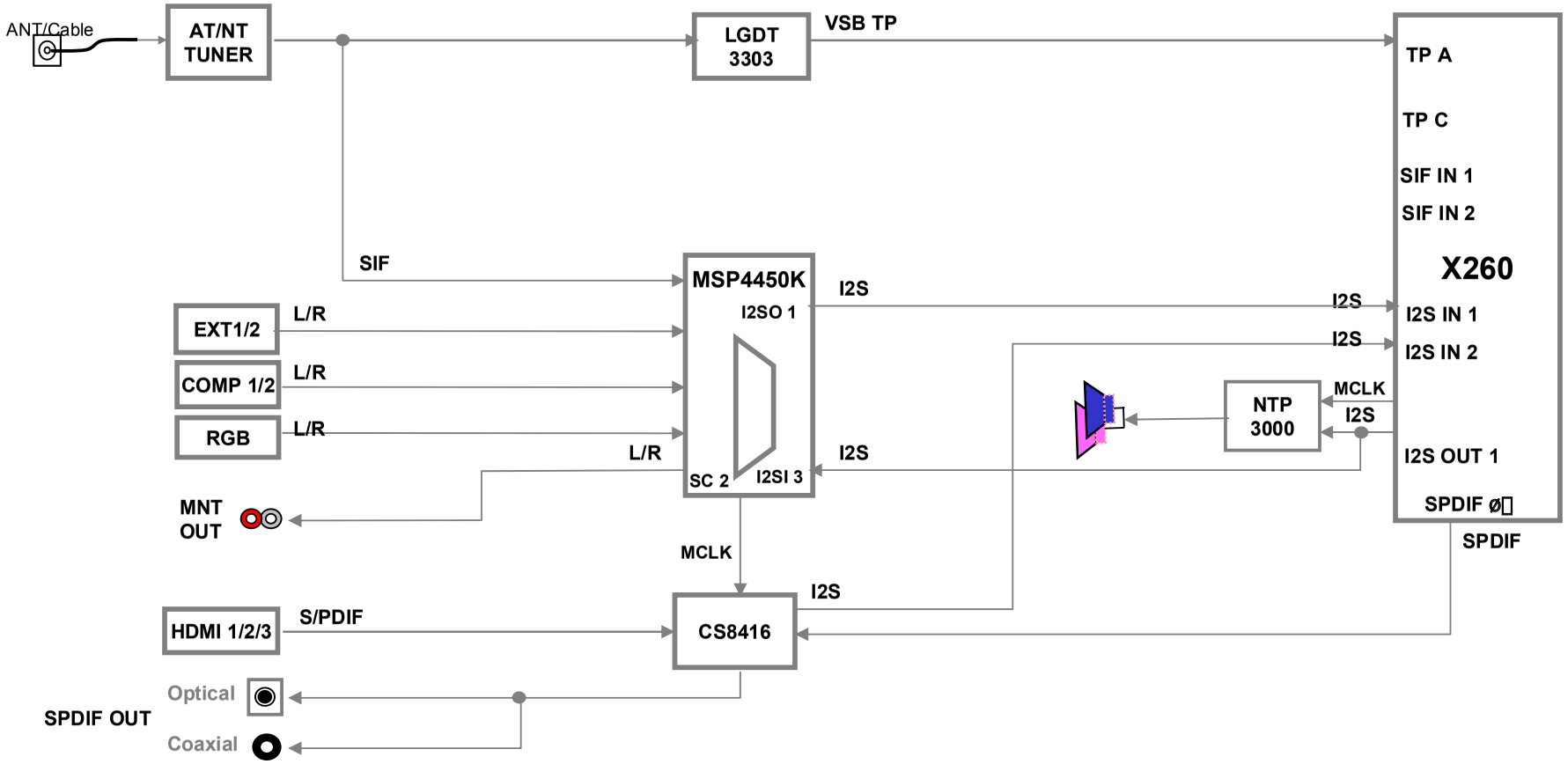
_Signal shape is same (above)

Symptom : TV set out of order on powers



Symptom : No booting




ANT/Cable
AT/NT TUNER
LGDT 3303
VSB TP
TP A
TP C
SIF IN 1
SIF IN 2
X260
I2S IN 1
I2S IN 2
I2S OUT 1
SPDIF ø
SPDIF
SIF
MSP4450K
I2SO 1
I2S
I2S
I2S
EXT1/2
L/R
COMP 1/2
L/R
RGB
L/R
L/R
SC 2
I2SI 3
I2S
NTP 3000
MCLK
I2S
MNT OUT
MCLK
I2S
HDMI 1/2/3
S/PDIF
CS8416
Optical
Coaxial
SPDIF OUT

All Source Speaker Out

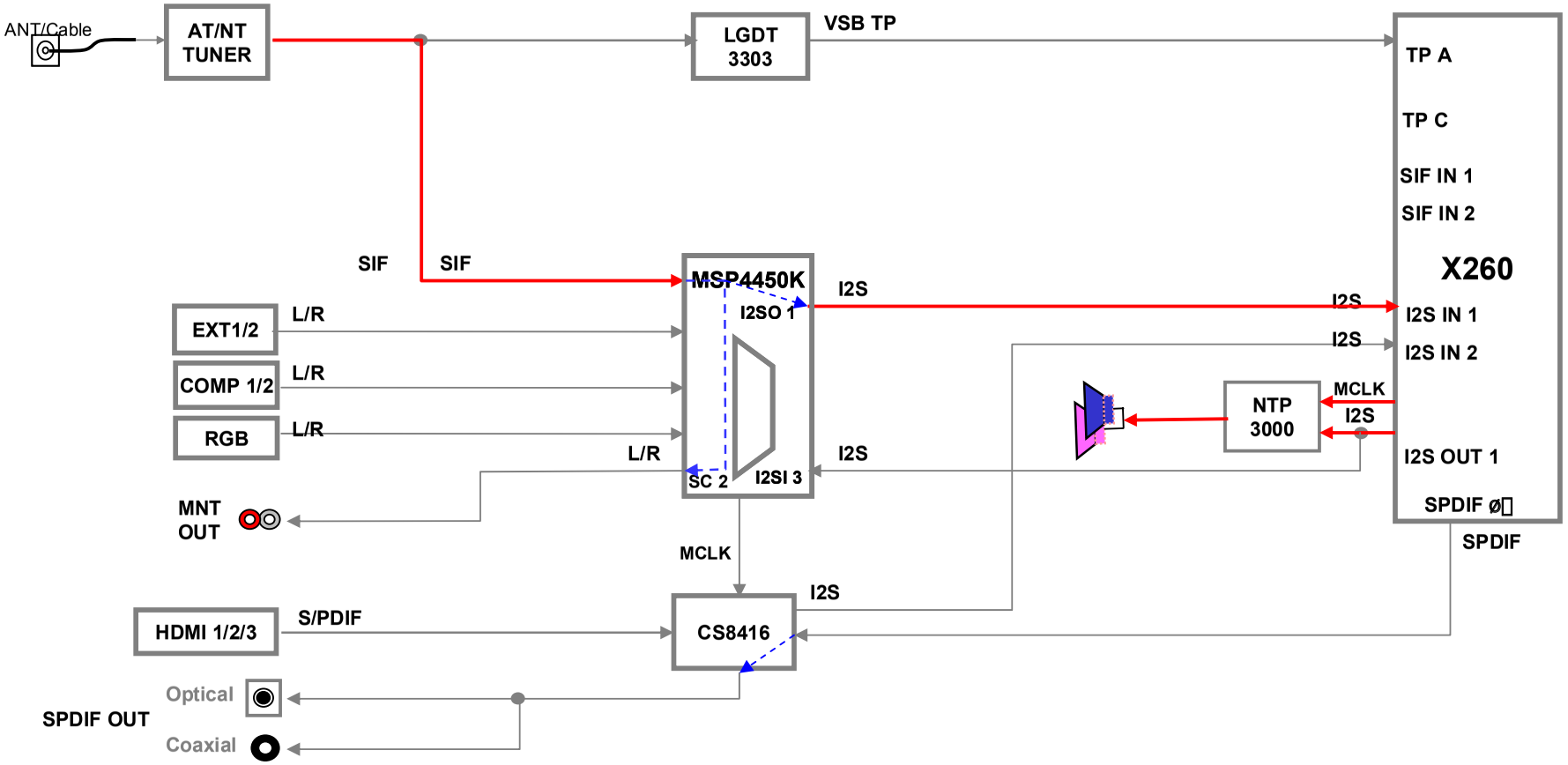
1. Check X260 (IC101) Output
   R153(SCLK), R154(LRCLK), R155(DATA), R156(MCLK)
2. Check NTP3000 (IC505) Power
3. Check NTP3000 (IC505) Inputs pins
   #17(DATA), #18(LRCLK), #19(SCLK), #6(MCLK)
4. Check NTP3000 (IC505) Output
   L510,L511(Left) / L512,L513(Right)
5. Check NTP3000 (IC505) Output
   L515,L516(Left) L517,L518(Right)
6. Check Speaker output wafer
   P502(Left), P501(Right)
7. Check Speaker

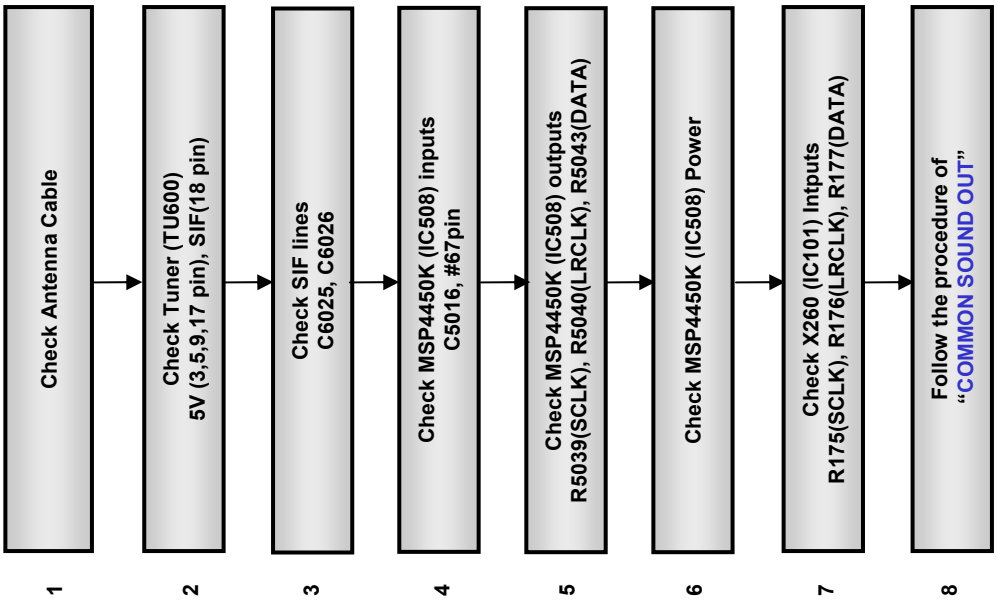
Monitor L,R Out

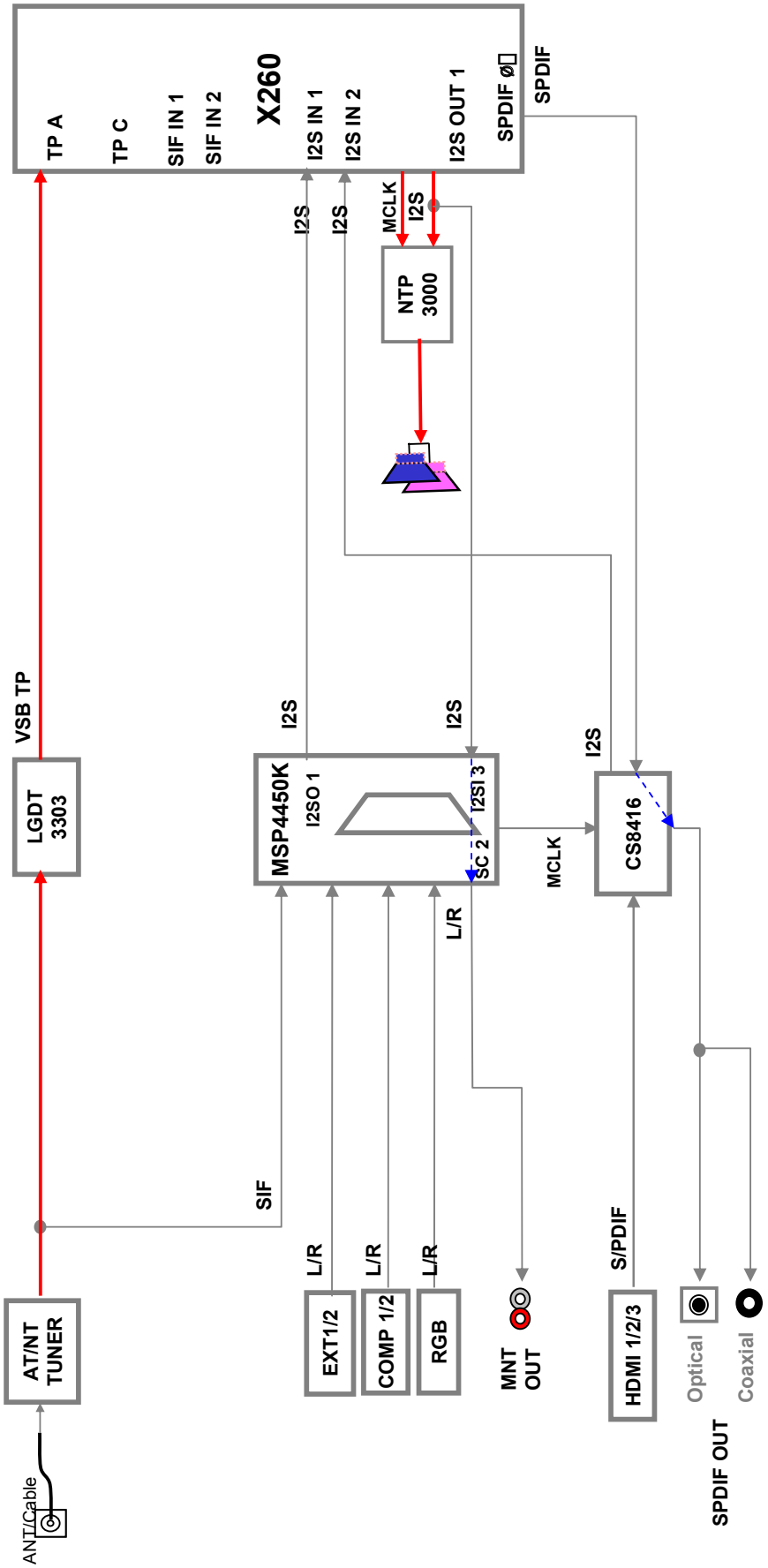
1. If DTV or HDMI input
   Check X260 (IC101) Output
   R153(SCLK), R154(LRCLK), R155(DATA)
   Check MSP4450K (IC508) Input
   R5059(SCLK) R5060(LRCLK), R5061(DATA)
2. If ATV, AV, Component, RGB input
   Check MSP4450K (IC508) Input
   C5016(ATV_SIF), R5041(AV1_R), R5042(AV1_L),
   R5045(AV2_R), R5046(AV2_L), R5048(CMP1_R),
   R5049(CMP1_L), R5051(CMP2_R), R5052(CMP2_L),
   R5055(RGB_R), R5058(RGB_L)
3. Check MSP4450K (IC508) Power
4. Check MSP4450K (IC508) X-tal Input
   X-tal Input (71,72pin) : 18.432MHz
5. Check MSP4450K (IC508) Output
   R5062 (Left), R5063 (Right)
6. Check MNT Output Jack (J704)

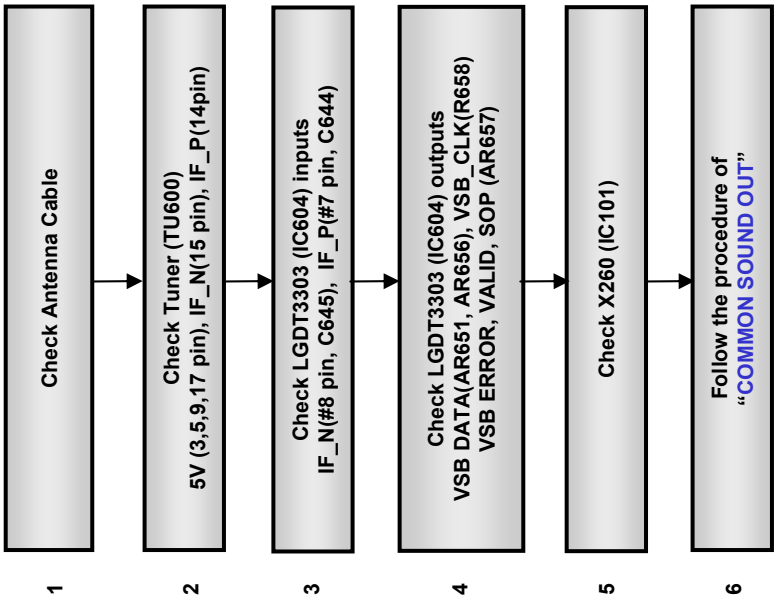
Digital Audio Out

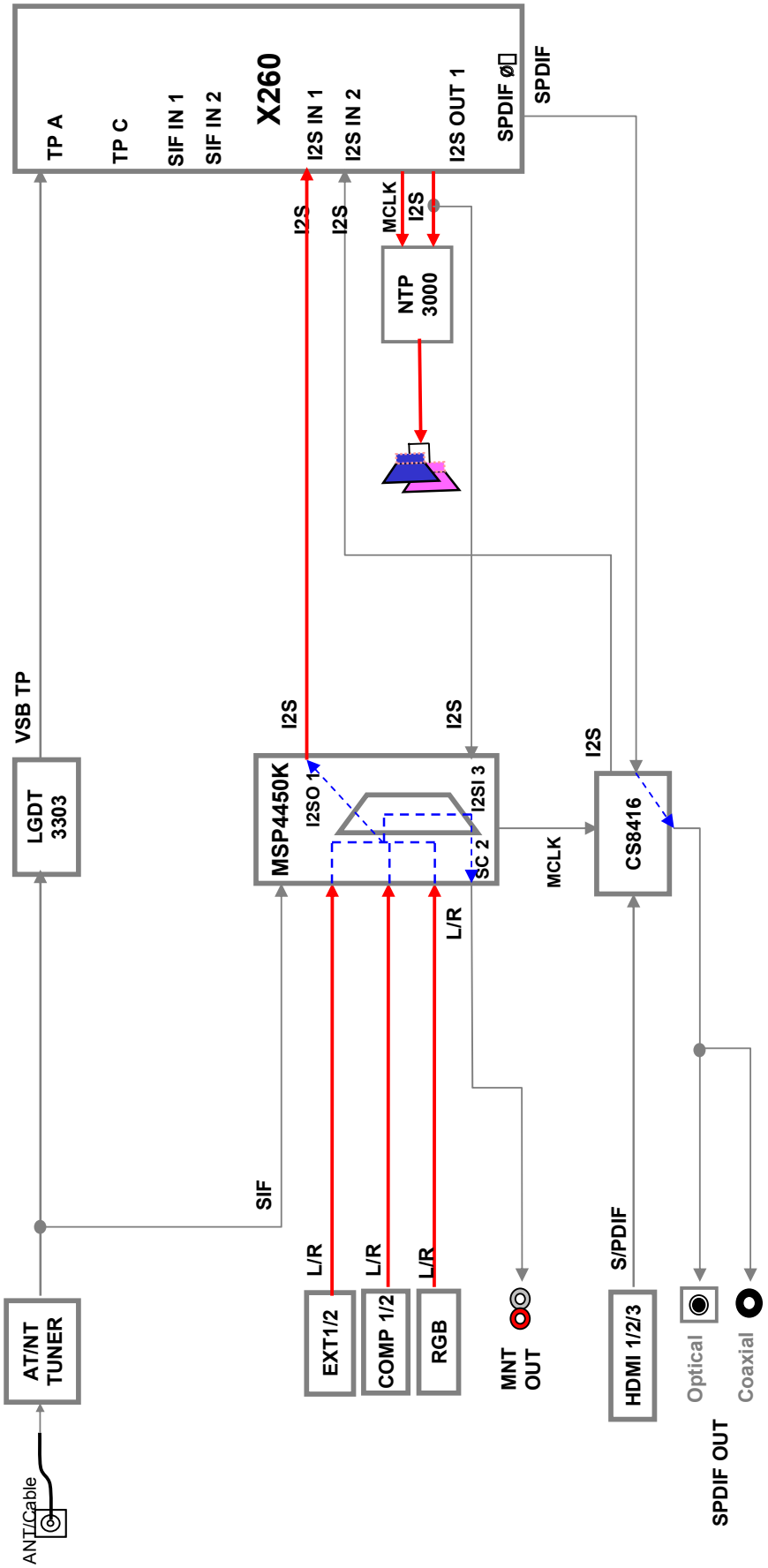
1. Check CS8416 (IC501) Power
2. Check CS8416(IC501) Input
   C5006 (X260_SPDIF) or
   C5005 (HDMI_SPDIF)
3. Check CS8416(IC501) Output
   R590 (8416_SPDIF_out)
4. Check SPDIF Jack
   P500 (Optical SPDIF Jack) and
   P501 (Coaxial SPDIF Jack)

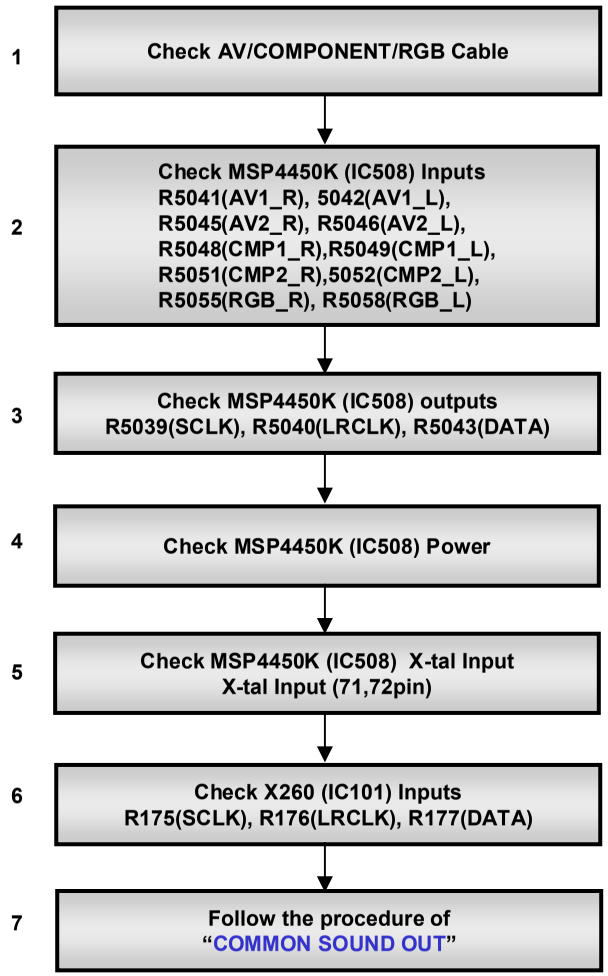

ANT/Cable
AT/NT TUNER
LGDT 3303
VSB TP
TP A
TP C
SIF IN 1
SIF IN 2
X260
I2S IN 1
I2S IN 2
I2S OUT 1
SPDIF ø
SPDIF
SIF
SIF
MSP4450K
I2SO 1
I2S
I2S
I2S
EXT1/2
L/R
COMP 1/2
L/R
RGB
L/R
L/R
SC 2
I2SI 3
I2S
MNT OUT
NTP 3000
MCLK
I2S
MCLK
I2S
HDMI 1/2/3
S/PDIF
CS8416
Optical
Coaxial
SPDIF OUT

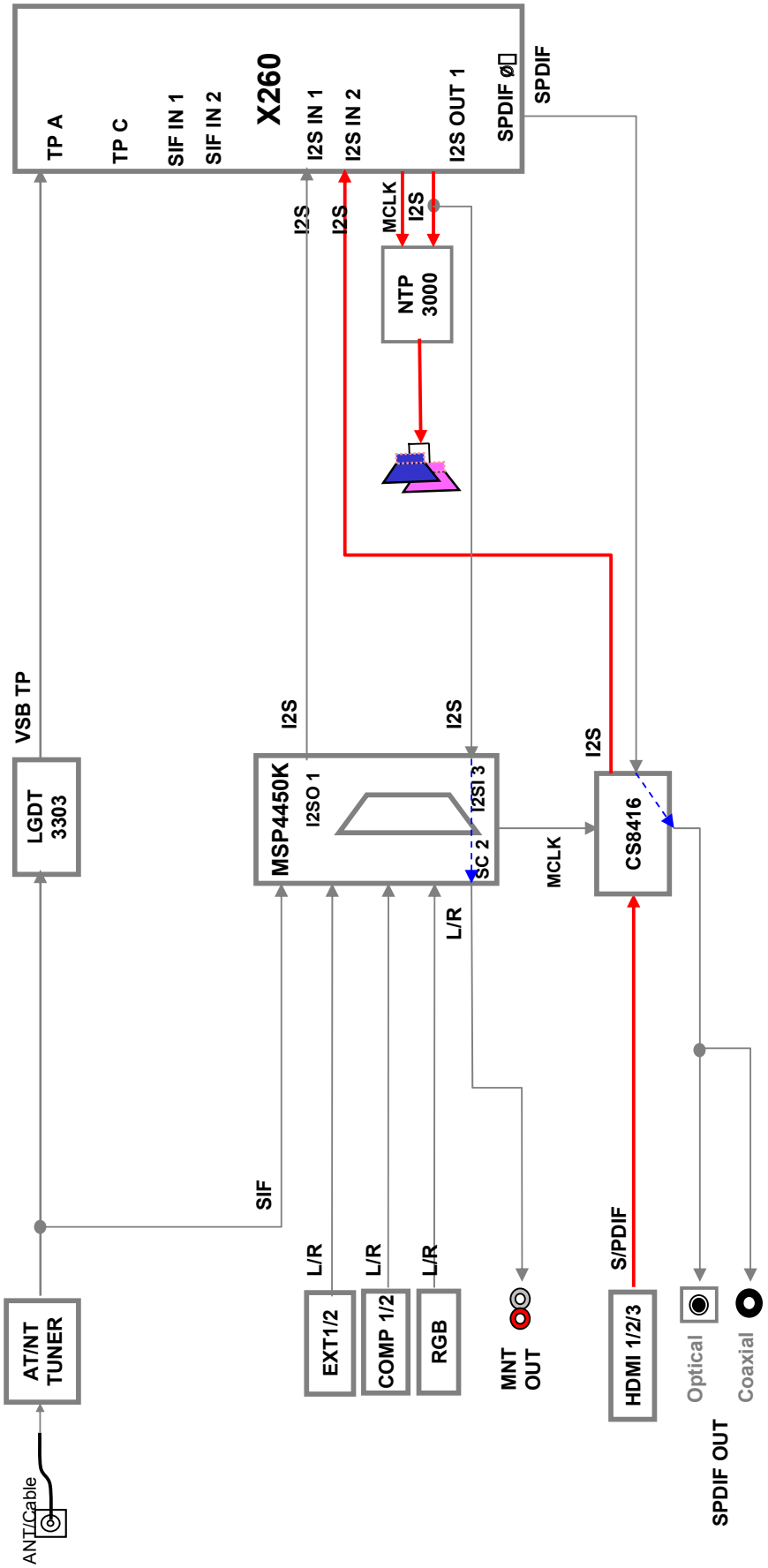

Check Antenna Cable
Check Tuner (TU600)
5V (3,5,9,17 pin), SIF(18 pin)
Check SIF lines
C6025, C6026
Check MSP4450K (IC508) inputs
C5016, #67pin
Check MSP4450K (IC508) outputs
R5039(SCLK), R5040(LRCLK), R5043(DATA)
Check MSP4450K (IC508) Power
Check X260 (IC101) Intputs
R175(SCLK), R176(LRCLK), R177(DATA)
Follow the procedure of
"COMMON SOUND OUT"
1
2
3
4
5
6
7
8

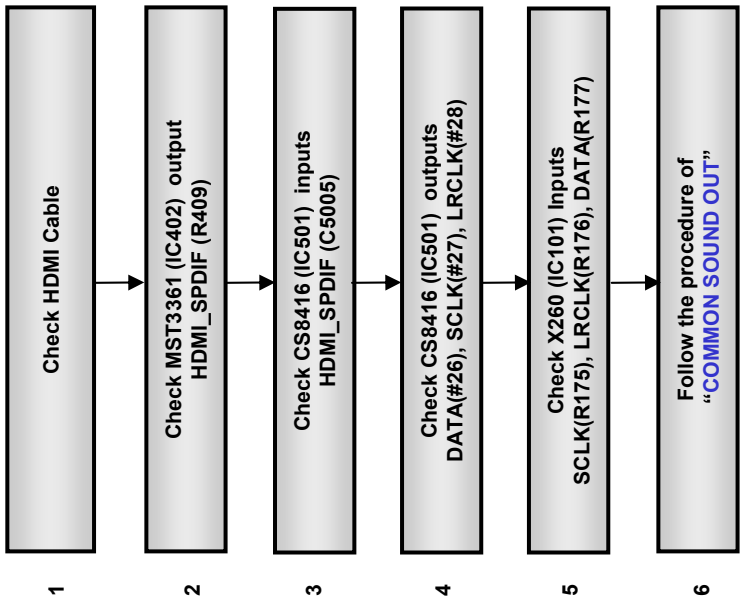

X260
TP A
TP C
SIF IN 1
SIF IN 2
I2S IN 1
I2S IN 2
I2S OUT 1
SPDIF Ø
SPDIF
I2S
I2S
MCLK
I2S
NTP 3000
VSB TP
LGDT 3303
I2S
I2S
MSP4450K
I2SO 1
I2SI 3
SC 2
I2S
CS8416
MCLK
L/R
SIF
L/R
L/R
L/R
S/PDIF
AT/NT TUNER
EXT1/2
COMP 1/2
RGB
MNT OUT
HDMI 1/2/3
Optical
Coaxial
SPDIF OUT
ANT/Cable


Check Antenna Cable
Check Tuner (TU600)
5V (3,5,9,17 pin), IF_N(15 pin), IF_P(14pin)
Check LGDT3303 (IC604) inputs
IF_N(#8 pin, C645), IF_P(#7 pin, C644)
Check LGDT3303 (IC604) outputs
VSB DATA(AR651, AR656), VSB_CLK(R658)
VSB ERROR, VALID, SOP (AR657)
Check X260 (IC101)
Follow the procedure of
"COMMON SOUND OUT"
1
2
3
4
5
6

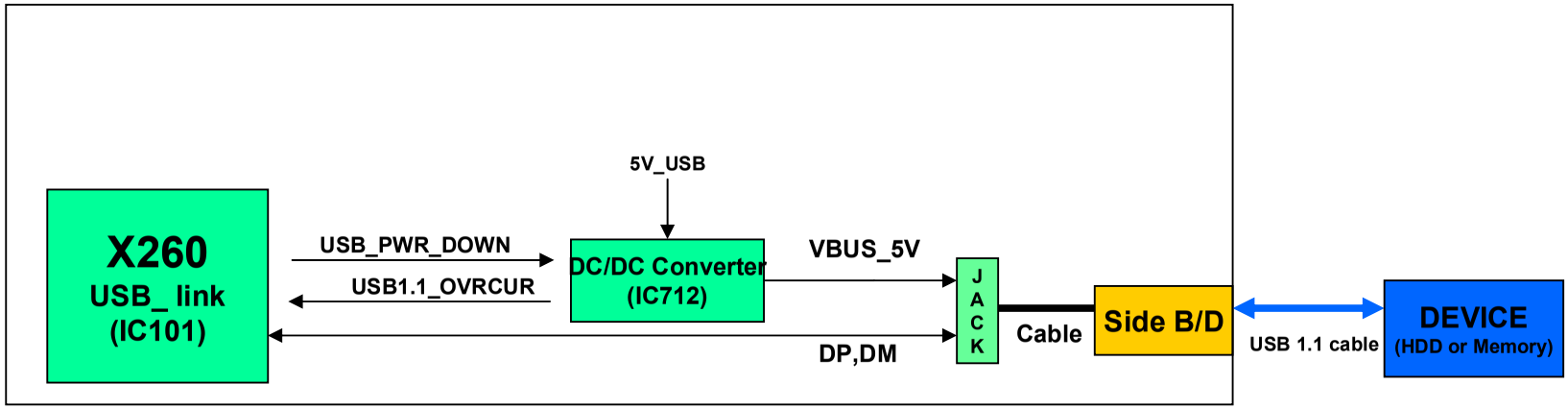

X260
TP A
TP C
SIF IN 1
SIF IN 2
I2S IN 1
I2S IN 2
I2S OUT 1
SPDIF Ø
SPDIF
I2S
I2S
MCLK
I2S
NTP 3000
VSB TP
LGDT 3303
I2S
I2S
MSP4450K
I2SO 1
I2SI 3
SC 2
I2S
CS8416
MCLK
L/R
SIF
L/R
L/R
L/R
EXT1/2
COMP 1/2
RGB
MNT OUT
S/PDIF
HDMI 1/2/3
Optical
Coaxial
SPDIF OUT
AT/NT TUNER
ANT/Cable


1
Check AV/COMPONENT/RGB Cable
2
Check MSP4450K (IC508) Inputs
R5041(AV1_R), 5042(AV1_L),
R5045(AV2_R), R5046(AV2_L),
R5048(CMP1_R),R5049(CMP1_L),
R5051(CMP2_R),5052(CMP2_L),
R5055(RGB_R), R5058(RGB_L)
3
Check MSP4450K (IC508) outputs
R5039(SCLK), R5040(LRCLK), R5043(DATA)
4
Check MSP4450K (IC508) Power
5
Check MSP4450K (IC508) X-tal Input
X-tal Input (71,72pin)
6
Check X260 (IC101) Inputs
R175(SCLK), R176(LRCLK), R177(DATA)
7
Follow the procedure of
"COMMON SOUND OUT"

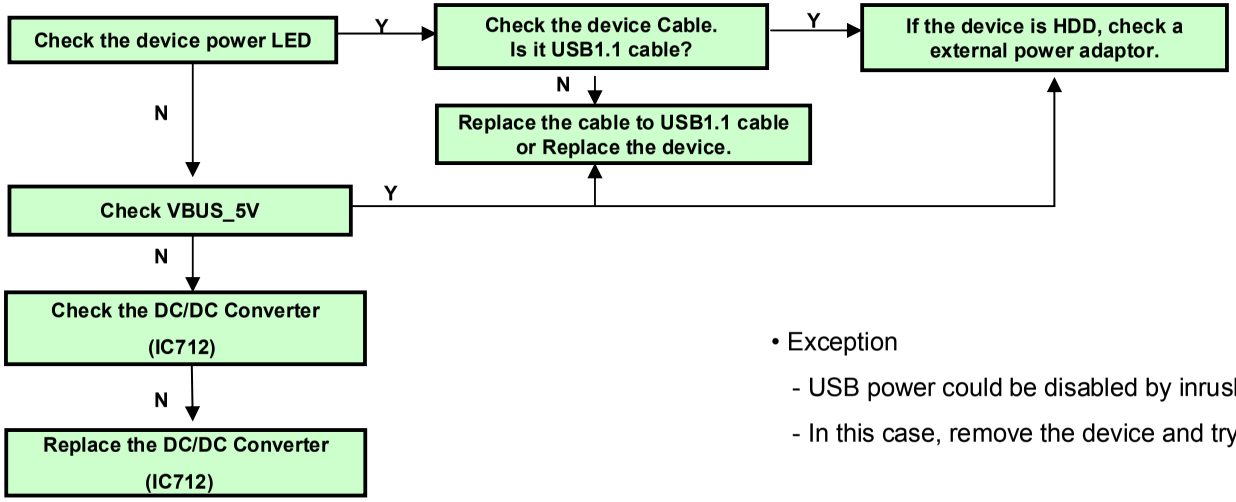

X260
TP A
TP C
SIF IN 1
SIF IN 2
I2S IN 1
I2S IN 2
I2S OUT 1
SPDIF Ø
SPDIF
I2S
I2S
MCLK
I2S
NTP 3000
VSB TP
LGDT 3303
I2S
I2S
MSP4450K
I2SO 1
I2SI 3
SC 2
I2S
CS8416
MCLK
SIF
L/R
L/R
L/R
L/R
S/PDIF
AT/NT TUNER
EXT1/2
COMP 1/2
RGB
MNT OUT
HDMI 1/2/3
Optical
Coaxial
SPDIF OUT
ANT/Cable


Check HDMI Cable
Check MST3361 (IC402) output HDMI_SPDIF (R409)
Check CS8416 (IC501) inputs HDMI_SPDIF (C5005)
Check CS8416 (IC501) outputs DATA(#26), SCLK(#27), LRCLK(#28)
Check X260 (IC101) Inputs SCLK(R175), LRCLK(R176), DATA(R177)
Follow the procedure of "COMMON SOUND OUT"
1
2
3
4
5
6

1. USB 1.1 Block Diagram For EMF



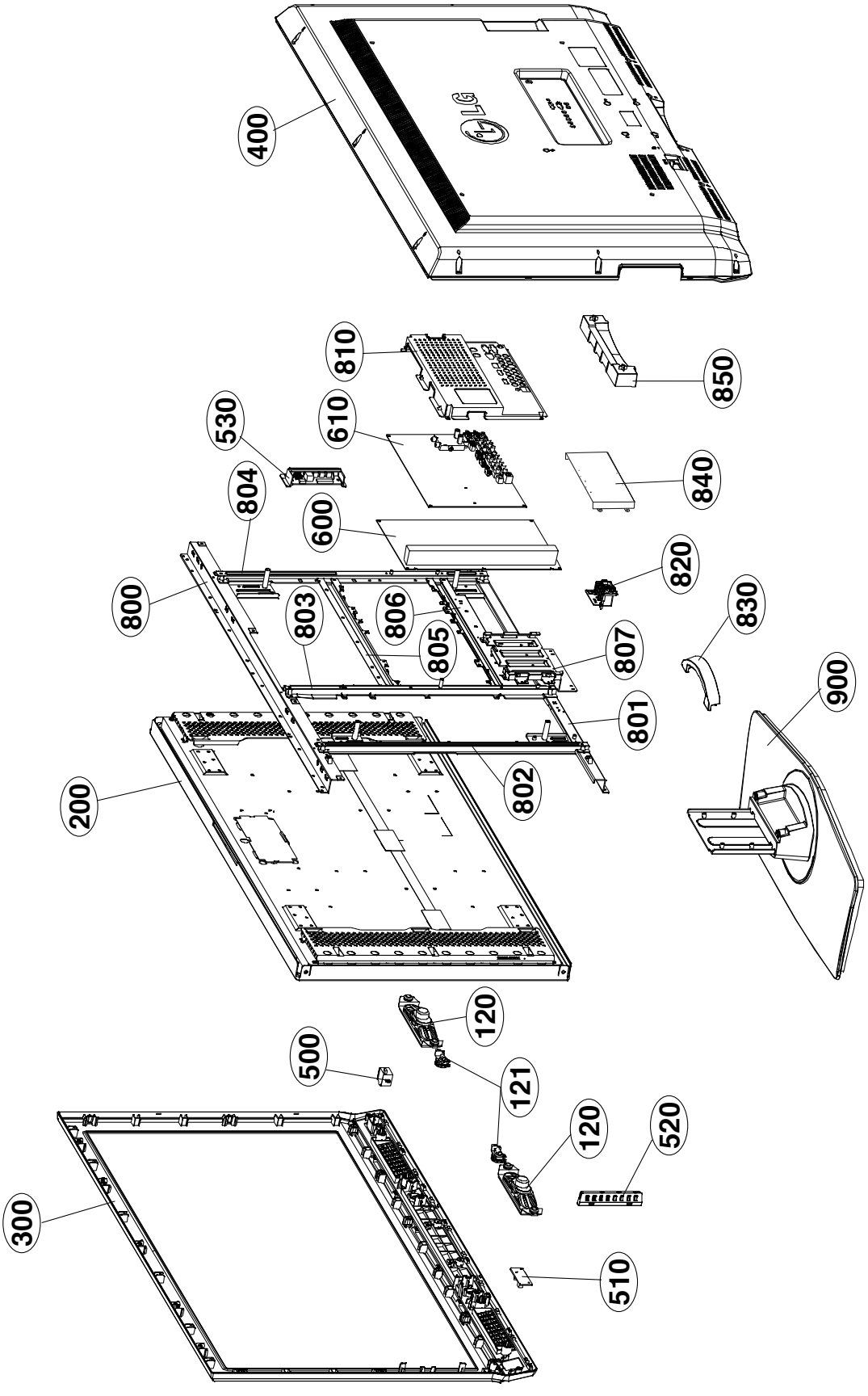
2. Check Sequence



• Exception

- USB power could be disabled by inrushing current
- In this case, remove the device and try to reboot the TV (AC power off/on)

EXPLODED VIEW



EXPLODED VIEW PARTS LIST

No.		PART NO.	DESCRIPTION
	120	EAB33775101	Speaker,Full Range, EN1562C-6712 ND 10W 8OHM 82DB 100HZ 193.5 X 42 X 39.9 LUG KOREA TOPTONE
	121	EAB33893101	Speaker,Tweeter, EN10D-6714 ND 10W 8OHM 82DB 0HZ 68 X 23 X 22.7 LUG KOREA TOPTONE
⚠	200	EAJ35565901	LCD,Module-TFT, LC470WU1-SLB2 FULLHD 47INCH 1920X1080 550CD COLOR 72% 16/9 800:1(basic) DCR(1600:1) A-TW Pol. 12000K P7 LG PHILIPS LCD
⚠	300	ABJ32083303	Cabinet Assembly, 47LB5 LA73A 47" XG569 CABINET ASS'Y FOR SKD
⚠	400	ACQ32083406	Cover Assembly, 47LB5 LA73A 47" HIPS 405AF BACK COVER ASS'Y FOR SKD
	500	6500VR0003E	Sensor,Ambient Light, YGCA-T071C 12 HOUSING BK 26.4X20X26.4mm VOUT 5V(AT 80LUX) LG INNOTEK CO., LTD
	510	EBR35909801	PCB Assembly,Sub, SUB T.T LA73A 47LB5DF-UC AUSLLHX SUB T.T LA73A 47LB5DF-UC IR total
	520	EBR35015201	PCB Assembly,Sub, SUB T.T LA73A 47LB4DF-UA - Control key total
	530	EBR35015401	PCB Assembly,Sub, SUB T.T LA73A 47LB4DF-UA - Side AV total
⚠	600	EAY32816901	SMPS,AC/DC, FSP327-6F01 90VTO264V 375W 50/60 CB, UL, IEC600,650 etc... LCD 47inch SPI PSU for New chassis(E3 etc...) SPI ELECTRONIC CO.,LTD
	610	EBU35309101	Main Total Assembly, 47LB5DF-UA BRAND LA73A
	800	MGJ32889304	Plate,Metal, PRESS SBHG1 1.6 METAL EGI BAR TOP(47LY3)_ NORMAL MODULE_ FOR C/SKD
	801	MGJ32889604	Plate,Metal, PRESS SBHG1 1.6 METAL EGI BAR BOTTOM (47LY3)_GENERAL MODULE_ FOR C/SKD
	802	MGJ32889802	Plate,Metal, PRESS SBHG1 1.6 METAL EGI METAL BAR, LEFT (47LY3) FOR C/SKD
	803	MGJ32897004	Plate,Metal, PRESS SBHGI 1.6 METAL EGI BAR CENTER (47LY3),FAD30046142(PEMNUT) FOR C/SKD
	804	MGJ32890003	Plate,Metal, PRESS SBHG1 1.6 METAL EGI BAR RIGHT (47LB4, PEM-NUT 'YES') FOR C/SKD
	805	MGJ32897104	Plate,Metal, PRESS SBHG1 1.6 METAL EGI BAR SIDE TOP (47LB5DF-UC) EV3_FOR C/SKD
	806	MGJ32897204	Plate,Metal, PRESS SBHG1 1.6 METAL EGI BAR SIDE BOTTOM (47LB5DF-UC) EVE3_FOR C/SKD
	807	MGJ32897302	Plate,Metal, PRESS SBHG1 1.6 METAL EGI BAR SUPPORTER (47LY3) FOR C/SKD
	810	MGJ32918107	Plate,Shield, PRESS SPTE 0.5 SHIELD SPTE COVER MAIN "01"C/SKD(EV3)
	820	EBR36524801	PCB Assembly,Sub, SUB T.T LA71A 42LY3DR-NA AKRLLH AC-Inlet Ass'y Total
	830	MAZ37752001	Bracket, MOLD HPS 51SF HANDLE 47LB4 LD73A HIPS 51SF 47LB4 CABLE MANAGEMENT(
	840	MGJ37663503	Plate,Shield, PRESS SPTE 0.5 SHIELD SPTE 47LY3/LB4/LB5/LC7 POWER SHIELD FOR C/SKD
	850	MAZ34946201	Bracket, MOLD HIPS 405AF STAND 47LC5 LA73A HIPS 405AF Guide
⚠	900	AAN33079802	Base Assembly, STAND 47LB5 LD75A STAND ASSY_NO_PRINT C/SKD (HIGH GLOSSY ROUND TYPE)

REPLACEMENT PARTS LIST

DATE: 2007. 03. 24.

LOC. NO.	PART NO.	DESCRIPTION / SPECIFICATION
		ACCESSORY
A1	MFL35930210	"Manual,Owners" PRINTING USER LA73A BRA
A2	6710900011Z	Remote Controller COMPLEX LA73A 42LB5DF-U
A3	6410TUW008A	Power Cord "UL_CSA,LP-31 & SVT 18X3"
A4	341-746B	Holder MOLD ABS CABLE Holder
		CAPACITORs
C14	68509A0004E	"Cable,Assembly" RCA JACK RCA JACK 1.0M
C15	6852TAZ010F	"Cable,Assembly" KCN-NS-0-0038 SMA CONNE
C103	0CE107SF6DC	"Capacitor,AL,Chip" VMV107M016S0ANE010 100u
C107	0CE477SF6DC	"Capacitor,AL,Chip" VMV477M016S0ANG030 470u
C108	0CE107SF6DC	"Capacitor,AL,Chip" VMV107M016S0ANE010 100u
C2144	0CE107WF6DC	"Capacitor,AL,Chip" MVK6.3TP16VC100M 100uF
C2152	0CE226WF6DC	"Capacitor,AL,Chip" MVK5.0TP16VC22M 22uF 20
C2153	EAE30840301	"Capacitor,AL,Chip" 10SVPC68M 68uF 20% 10V
C2173	0CE226WF6DC	"Capacitor,AL,Chip" MVK5.0TP16VC22M 22uF 20
C2174	EAE30840301	"Capacitor,AL,Chip" 10SVPC68M 68uF 20% 10V
C2188	0CE226WF6DC	"Capacitor,AL,Chip" MVK5.0TP16VC22M 22uF 20
C2189	0CE107WF6DC	"Capacitor,AL,Chip" MVK6.3TP16VC100M 100uF
C2189	0CE107WF6DC	"Capacitor,AL,Chip" MVK6.3TP16VC100M 100uF
C219	EAE30840301	"Capacitor,AL,Chip" 10SVPC68M 68uF 20% 10V
C240	EAE30840301	"Capacitor,AL,Chip" 10SVPC68M 68uF 20% 10V
C242	0CE106WFKDC	"Capacitor,AL,Chip" MVK4.0TP16VC10M 10uF 20
C260	EAE30840301	"Capacitor,AL,Chip" 10SVPC68M 68uF 20% 10V
C261	EAE30840301	"Capacitor,AL,Chip" 10SVPC68M 68uF 20% 10V
C265	EAE30840301	"Capacitor,AL,Chip" 10SVPC68M 68uF 20% 10V
C300	0CE226WF6DC	"Capacitor,AL,Chip" MVK5.0TP16VC22M 22uF 20
C302	0CE336WD6D8	"Capacitor,AL,Chip" RC1A336M05005VR 33uF 20
C303	0CE476WF6DC	"Capacitor,AL,Chip" MVK6.3TP16VC47M 47uF 20
C304	0CE476WF6DC	"Capacitor,AL,Chip" MVK6.3TP16VC47M 47uF 20
C307	0CE476WF6DC	"Capacitor,AL,Chip" MVK6.3TP16VC47M 47uF 20
C308	0CE106WFKDC	"Capacitor,AL,Chip" MVK4.0TP16VC10M 10uF 20
C310	0CE226WF6DC	"Capacitor,AL,Chip" MVK5.0TP16VC22M 22uF 20
C314	0CE106WFKDC	"Capacitor,AL,Chip" MVK4.0TP16VC10M 10uF 20
C314	0CE476WF6DC	"Capacitor,AL,Chip" MVK6.3TP16VC47M 47uF 20
C318	0CE476WF6DC	"Capacitor,AL,Chip" MVK6.3TP16VC47M 47uF 20
C319	0CE476WF6DC	"Capacitor,AL,Chip" MVK6.3TP16VC47M 47uF 20
C320	0CE476WF6DC	"Capacitor,AL,Chip" MVK6.3TP16VC47M 47uF 20
C336	0CE476WF6DC	"Capacitor,AL,Chip" MVK6.3TP16VC47M 47uF 20
C345	0CE106WFKDC	"Capacitor,AL,Chip" MVK4.0TP16VC10M 10uF 20
C346	0CE107WF6DC	"Capacitor,AL,Chip" MVK6.3TP16VC100M 100uF
C354	0CE476WF6DC	"Capacitor,AL,Chip" MVK6.3TP16VC47M 47uF 20
C356	0CE226WF6DC	"Capacitor,AL,Chip" MVK5.0TP16VC22M 22uF 20
C357	0CE476WF6DC	"Capacitor,AL,Chip" MVK6.3TP16VC47M 47uF 20
C363	0CE106WFKDC	"Capacitor,AL,Chip" MVK4.0TP16VC10M 10uF 20
C369	0CE107WF6DC	"Capacitor,AL,Chip" MVK6.3TP16VC100M 100uF
C372	0CE106WFKDC	"Capacitor,AL,Chip" MVK4.0TP16VC10M 10uF 20
C400	0CE476WF6DC	"Capacitor,AL,Chip" MVK6.3TP16VC47M 47uF 20
C407	0CE476WF6DC	"Capacitor,AL,Chip" MVK6.3TP16VC47M 47uF 20

LOC. NO.	PART NO.	DESCRIPTION / SPECIFICATION
C408	0CE476WF6DC	"Capacitor,AL,Chip" MVK6.3TP16VC47M 47uF 20
C453	0CE106WFKDC	"Capacitor,AL,Chip" MVK4.0TP16VC10M 10uF 20
C466	0CE476WF6DC	"Capacitor,AL,Chip" MVK6.3TP16VC47M 47uF 20
C487	0CE106WFKDC	"Capacitor,AL,Chip" MVK4.0TP16VC10M 10uF 20
C488	0CE106WFKDC	"Capacitor,AL,Chip" MVK4.0TP16VC10M 10uF 20
C495	0CE106WFKDC	"Capacitor,AL,Chip" MVK4.0TP16VC10M 10uF 20
C5000	0CE105WK6DC	"Capacitor,AL,Chip" MVK4.0TP50VC1M 1uF 20%
C5001	0CE105WK6DC	"Capacitor,AL,Chip" MVK4.0TP50VC1M 1uF 20%
C5002	0CE106WFKDC	"Capacitor,AL,Chip" MVK4.0TP16VC10M 10uF 20
C5012	0CE226WF6DC	"Capacitor,AL,Chip" MVK5.0TP16VC22M 22uF 20
C5018	0CE335WK6D8	"Capacitor,AL,Chip" MVK4.0TP50VC3.3M 3.3uF
C5025	0CE226WF6DC	"Capacitor,AL,Chip" MVK5.0TP16VC22M 22uF 20
C5045	0CE335WK6D8	"Capacitor,AL,Chip" MVK4.0TP50VC3.3M 3.3uF
C5047	0CE107WF6DC	"Capacitor,AL,Chip" MVK6.3TP16VC100M 100uF
C5048	0CE106WFKDC	"Capacitor,AL,Chip" MVK4.0TP16VC10M 10uF 20
C5049	0CE106WFKDC	"Capacitor,AL,Chip" MVK4.0TP16VC10M 10uF 20
C5050	0CE475WK6DC	"Capacitor,AL,Chip" MVK5.0TP50VC4.7M 4.7uF
C5051	0CE475WK6DC	"Capacitor,AL,Chip" MVK5.0TP50VC4.7M 4.7uF
C507	0CE226WF6DC	"Capacitor,AL,Chip" MVK5.0TP16VC22M 22uF 20
C524	0CE226WF6DC	"Capacitor,AL,Chip" MVK5.0TP16VC22M 22uF 20
C525	0CE226WF6DC	"Capacitor,AL,Chip" MVK5.0TP16VC22M 22uF 20
C527	0CE335WK6D8	"Capacitor,AL,Chip" MVK4.0TP50VC3.3M 3.3uF
C532	0CE106WFKDC	"Capacitor,AL,Chip" MVK4.0TP16VC10M 10uF 20
C536	0CE106WFKDC	"Capacitor,AL,Chip" MVK4.0TP16VC10M 10uF 20
C537	0CE106WFKDC	"Capacitor,AL,Chip" MVK4.0TP16VC10M 10uF 20
C539	0CE335WK6D8	"Capacitor,AL,Chip" MVK4.0TP50VC3.3M 3.3uF
C540	0CE335WK6D8	"Capacitor,AL,Chip" MVK4.0TP50VC3.3M 3.3uF
C549	0CE226WF6DC	"Capacitor,AL,Chip" MVK5.0TP16VC22M 22uF 20
C550	0CE226WF6DC	"Capacitor,AL,Chip" MVK5.0TP16VC22M 22uF 20
C556	0CE337WJ6D8	"Capacitor,AL,Chip" MVK12.5TP35VC330M 330uF
C562	0CE106WFKDC	"Capacitor,AL,Chip" MVK4.0TP16VC10M 10uF 20
C570	0CE337WJ6D8	"Capacitor,AL,Chip" MVK12.5TP35VC330M 330uF
C593	0CE105WK6DC	"Capacitor,AL,Chip" MVK4.0TP50VC1M 1uF 20%
C600	0CE476WF6DC	"Capacitor,AL,Chip" MVK6.3TP16VC47M 47uF 20
C600	0CE476WF6DC	"Capacitor,AL,Chip" MVK6.3TP16VC47M 47uF 20
C6015	EAE30840301	"Capacitor,AL,Chip" 10SVPC68M 68uF 20% 10V
C603	0CE106WFKDC	"Capacitor,AL,Chip" MVK4.0TP16VC10M 10uF 20
C609	0CE476WF6DC	"Capacitor,AL,Chip" MVK6.3TP16VC47M 47uF 20
C613	0CE476WF6DC	"Capacitor,AL,Chip" MVK6.3TP16VC47M 47uF 20
C628	0CE107WF6DC	"Capacitor,AL,Chip" MVK6.3TP16VC100M 100uF
C631	0CE476WF6DC	"Capacitor,AL,Chip" MVK6.3TP16VC47M 47uF 20
C633	0CE226WF6DC	"Capacitor,AL,Chip" MVK5.0TP16VC22M 22uF 20
C635	0CE106WFKDC	"Capacitor,AL,Chip" MVK4.0TP16VC10M 10uF 20
C637	0CE476WF6DC	"Capacitor,AL,Chip" MVK6.3TP16VC47M 47uF 20
C637	0CE476WF6DC	"Capacitor,AL,Chip" MVK6.3TP16VC47M 47uF 20
C639	0CE226WF6DC	"Capacitor,AL,Chip" MVK5.0TP16VC22M 22uF 20
C641	0CE476WF6DC	"Capacitor,AL,Chip" MVK6.3TP16VC47M 47uF 20
C647	0CE476WF6DC	"Capacitor,AL,Chip" MVK6.3TP16VC47M 47uF 20
C653	0CE476WF6DC	"Capacitor,AL,Chip" MVK6.3TP16VC47M 47uF 20
C656	0CE476WF6DC	"Capacitor,AL,Chip" MVK6.3TP16VC47M 47uF 20

LOC. NO.	PART NO.	DESCRIPTION / SPECIFICATION
C670	0CE105WK6DC	"Capacitor,AL,Chip" MVK4.0TP50VC1M 1uF 20%
C700	0CE105WK6DC	"Capacitor,AL,Chip" MVK4.0TP50VC1M 1uF 20%
C701	EAE30840301	"Capacitor,AL,Chip" 10SVPC68M 68uF 20% 10V
C7014	0CE107WF6DC	"Capacitor,AL,Chip" MVK6.3TP16VC100M 100uF
C711	0CE225WK6DC	"Capacitor,AL,Chip" MVK4.0TP50VC2.2M 2.2uF
C713	0CE225WK6DC	"Capacitor,AL,Chip" MVK4.0TP50VC2.2M 2.2uF
C714	0CE225WK6DC	"Capacitor,AL,Chip" MVK4.0TP50VC2.2M 2.2uF
C721	0CE225WK6DC	"Capacitor,AL,Chip" MVK4.0TP50VC2.2M 2.2uF
C724	EAE32720101	"Capacitor,AL,Chip" 16SVP330M 330uF 20% 16V
C725	EAE32720101	"Capacitor,AL,Chip" 16SVP330M 330uF 20% 16V
C726	EAE30840301	"Capacitor,AL,Chip" 10SVPC68M 68uF 20% 10V
C727	EAE30840401	"Capacitor,AL,Chip" 25SVPD10M 10uF 20% 25V
C737	0CE337WH6DC	"Capacitor,AL,Chip" MVK10TP25VC330M 330uF 2
C748	0CE476WF6DC	"Capacitor,AL,Chip" MVK6.3TP16VC47M 47uF 20
C756	0CE226WF6DC	"Capacitor,AL,Chip" MVK5.0TP16VC22M 22uF 20
C101	0CH4471K416	"Capacitor,Ceramic,Chip" C2012C0G1H471JT 470pF 5
C102	0CH5101K416	"Capacitor,Ceramic,Chip" C2012C0G1H101JT 100pF 5
C104	0CH4471K416	"Capacitor,Ceramic,Chip" C2012C0G1H471JT 470pF 5
C105	0CH4471K416	"Capacitor,Ceramic,Chip" C2012C0G1H471JT 470pF 5
C105	0CH5101K416	"Capacitor,Ceramic,Chip" C2012C0G1H101JT 100pF 5
C106	0CH5101K416	"Capacitor,Ceramic,Chip" C2012C0G1H101JT 100pF 5
C200	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C201	EAE33970001	"Capacitor,Ceramic,Chip" CS1005X5R105K6R3NR 1uF
C202	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C203	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C204	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C205	EAE33970001	"Capacitor,Ceramic,Chip" CS1005X5R105K6R3NR 1uF
C206	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C207	EAE33970001	"Capacitor,Ceramic,Chip" CS1005X5R105K6R3NR 1uF
C208	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C209	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C210	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C211	EAE33970001	"Capacitor,Ceramic,Chip" CS1005X5R105K6R3NR 1uF
C2114	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C2115	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C2116	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C2117	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C2119	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C212	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C2120	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C2122	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C2124	0CK106EF56A	"Capacitor,Ceramic,Chip" C3216X7R1C106KT 10uF 10
C2126	0CC150BK4AA	"Capacitor,Ceramic,Chip" C1005C0G1H150JT 15pF 5%
C2127	0CC150BK4AA	"Capacitor,Ceramic,Chip" C1005C0G1H150JT 15pF 5%
C2127	0CZZB00035A	"Capacitor,Ceramic,Chip" GRM1555C1H330J 33pF 5%
C2128	0CK102BK56A	"Capacitor,Ceramic,Chip" 0402B102K500CT 1nF 10%
C213	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C2130	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C2131	0CK106EF56A	"Capacitor,Ceramic,Chip" C3216X7R1C106KT 10uF 10
C2132	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C2133	0CK106EF56A	"Capacitor,Ceramic,Chip" C3216X7R1C106KT 10uF 10
C2134	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C2136	0CK106EF56A	"Capacitor,Ceramic,Chip" C3216X7R1C106KT 10uF 10
C2137	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C2138	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10

LOC. NO.	PART NO.	DESCRIPTION / SPECIFICATION
C2139	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C214	EAE33970001	"Capacitor,Ceramic,Chip" CS1005X5R105K6R3NR 1uF
C2140	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C2141	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C2142	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C2143	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C2145	0CK105CD56A	"Capacitor,Ceramic,Chip" C1608X7R1A105KT 1uF 10%
C2146	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C2147	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C2148	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C2149	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C215	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C2150	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C2151	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C2154	EAE33970001	"Capacitor,Ceramic,Chip" CS1005X5R105K6R3NR 1uF
C2155	EAE33970001	"Capacitor,Ceramic,Chip" CS1005X5R105K6R3NR 1uF
C2156	EAE33970001	"Capacitor,Ceramic,Chip" CS1005X5R105K6R3NR 1uF
C2157	EAE33970001	"Capacitor,Ceramic,Chip" CS1005X5R105K6R3NR 1uF
C2158	EAE33970001	"Capacitor,Ceramic,Chip" CS1005X5R105K6R3NR 1uF
C2159	EAE33970001	"Capacitor,Ceramic,Chip" CS1005X5R105K6R3NR 1uF
C216	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C2160	EAE33970001	"Capacitor,Ceramic,Chip" CS1005X5R105K6R3NR 1uF
C2161	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C2162	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C2163	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C2164	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C2165	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C2166	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C2167	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C2168	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C2169	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C217	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C2170	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C2171	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C2172	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C2175	EAE33970001	"Capacitor,Ceramic,Chip" CS1005X5R105K6R3NR 1uF
C2176	EAE33970001	"Capacitor,Ceramic,Chip" CS1005X5R105K6R3NR 1uF
C2177	EAE33970001	"Capacitor,Ceramic,Chip" CS1005X5R105K6R3NR 1uF
C2178	EAE33970001	"Capacitor,Ceramic,Chip" CS1005X5R105K6R3NR 1uF
C2179	EAE33970001	"Capacitor,Ceramic,Chip" CS1005X5R105K6R3NR 1uF
C218	EAE33970001	"Capacitor,Ceramic,Chip" CS1005X5R105K6R3NR 1uF
C2180	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C2181	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C2182	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C2183	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C2184	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C2185	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C2186	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C2187	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C2190	0CK105CD56A	"Capacitor,Ceramic,Chip" C1608X7R1A105KT 1uF 10%
C2191	0CK105CD56A	"Capacitor,Ceramic,Chip" C1608X7R1A105KT 1uF 10%
C2192	0CK105CD56A	"Capacitor,Ceramic,Chip" C1608X7R1A105KT 1uF 10%
C2193	0CK105CD56A	"Capacitor,Ceramic,Chip" C1608X7R1A105KT 1uF 10%
C2194	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C2195	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10

LOC. NO.	PART NO.	DESCRIPTION / SPECIFICATION
C2196	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C2197	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C2198	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C2199	0CK105CD56A	"Capacitor,Ceramic,Chip" C1608X7R1A105KT 1uF 10%
C220	EAE33970001	"Capacitor,Ceramic,Chip" CS1005X5R105K6R3NR 1uF
C2200	0CK105CD56A	"Capacitor,Ceramic,Chip" C1608X7R1A105KT 1uF 10%
C2201	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C2202	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C2203	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C2204	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C2205	EAE33970001	"Capacitor,Ceramic,Chip" CS1005X5R105K6R3NR 1uF
C2206	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C2207	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C2208	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C2209	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C221	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C2210	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C2211	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C2212	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C2213	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C2214	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C2215	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C2216	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C2217	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C2218	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C2219	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C222	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C2220	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C2221	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C2222	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C2223	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C2224	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C2225	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C2226	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C2227	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C2228	0CK106EF56A	"Capacitor,Ceramic,Chip" C3216X7R1C106KT 10uF 10
C2229	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C223	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C2230	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C2231	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C2232	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C2233	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C2239	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C224	EAE33970001	"Capacitor,Ceramic,Chip" CS1005X5R105K6R3NR 1uF
C2240	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C2241	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C2242	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C2243	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C2244	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C225	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C226	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C227	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C228	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C229	EAE33970001	"Capacitor,Ceramic,Chip" CS1005X5R105K6R3NR 1uF
C230	EAE33970001	"Capacitor,Ceramic,Chip" CS1005X5R105K6R3NR 1uF

LOC. NO.	PART NO.	DESCRIPTION / SPECIFICATION
C231	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C232	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C233	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C234	EAE33970001	"Capacitor,Ceramic,Chip" CS1005X5R105K6R3NR 1uF
C235	EAE33970001	"Capacitor,Ceramic,Chip" CS1005X5R105K6R3NR 1uF
C236	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C238	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C239	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C241	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C243	EAE33970001	"Capacitor,Ceramic,Chip" CS1005X5R105K6R3NR 1uF
C244	EAE33970001	"Capacitor,Ceramic,Chip" CS1005X5R105K6R3NR 1uF
C246	EAE33970001	"Capacitor,Ceramic,Chip" CS1005X5R105K6R3NR 1uF
C250	EAE33970001	"Capacitor,Ceramic,Chip" CS1005X5R105K6R3NR 1uF
C252	EAE33970001	"Capacitor,Ceramic,Chip" CS1005X5R105K6R3NR 1uF
C256	EAE33970001	"Capacitor,Ceramic,Chip" CS1005X5R105K6R3NR 1uF
C257	EAE33970001	"Capacitor,Ceramic,Chip" CS1005X5R105K6R3NR 1uF
C264	EAE33970001	"Capacitor,Ceramic,Chip" CS1005X5R105K6R3NR 1uF
C266	EAE33970001	"Capacitor,Ceramic,Chip" CS1005X5R105K6R3NR 1uF
C276	EAE33970001	"Capacitor,Ceramic,Chip" CS1005X5R105K6R3NR 1uF
C285	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C301	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C305	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C306	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C309	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C311	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C312	0CK222BKG6A	"Capacitor,Ceramic,Chip" 0402B222K500CT 2.2nF 10
C313	0CC221BKFAA	"Capacitor,Ceramic,Chip" C1005C0G1H221JT 220pF 5
C315	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C316	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C317	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C321	0CK106DC67A	"Capacitor,Ceramic,Chip" JMK212JB106MG-T 10uF 20
C322	0CK106DC67A	"Capacitor,Ceramic,Chip" JMK212JB106MG-T 10uF 20
C323	0CK106DC67A	"Capacitor,Ceramic,Chip" JMK212JB106MG-T 10uF 20
C324	0CK106DC67A	"Capacitor,Ceramic,Chip" JMK212JB106MG-T 10uF 20
C325	0CK106DC67A	"Capacitor,Ceramic,Chip" JMK212JB106MG-T 10uF 20
C326	0CK106DC67A	"Capacitor,Ceramic,Chip" JMK212JB106MG-T 10uF 20
C327	0CK106DC67A	"Capacitor,Ceramic,Chip" JMK212JB106MG-T 10uF 20
C328	0CK106DC67A	"Capacitor,Ceramic,Chip" JMK212JB106MG-T 10uF 20
C329	0CK105EJ56A	"Capacitor,Ceramic,Chip" GMK316BJ105KL-T 1uF 10%
C330	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C331	EAE33970001	"Capacitor,Ceramic,Chip" CS1005X5R105K6R3NR 1uF
C332	EAE33970001	"Capacitor,Ceramic,Chip" CS1005X5R105K6R3NR 1uF
C333	EAE33970001	"Capacitor,Ceramic,Chip" CS1005X5R105K6R3NR 1uF
C334	EAE33970001	"Capacitor,Ceramic,Chip" CS1005X5R105K6R3NR 1uF
C335	0CK105EJ56A	"Capacitor,Ceramic,Chip" GMK316BJ105KL-T 1uF 10%
C337	0CK332CK56A	"Capacitor,Ceramic,Chip" C1608X7R1H332KT 3.3nF 1
C338	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C339	0CK471BK56A	"Capacitor,Ceramic,Chip" C1005X7R1H471KT 470pF 1
C340	0CH2334F566	"Capacitor,Ceramic,Chip" 0805B334K160CT 330nF 10
C341	0CH2334F566	"Capacitor,Ceramic,Chip" 0805B334K160CT 330nF 10
C342	EAE32166101	"Capacitor,Ceramic,Chip" CS1005XR473K250CR 0.047
C343	0CH2334F566	"Capacitor,Ceramic,Chip" 0805B334K160CT 330nF 10
C344	0CH2334F566	"Capacitor,Ceramic,Chip" 0805B334K160CT 330nF 10
C347	0CK103CK56A	"Capacitor,Ceramic,Chip" 0603B103K500CT 10nF 10%
C348	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10

LOC. NO.	PART NO.	DESCRIPTION / SPECIFICATION
C349	0CC221BKFAA	"Capacitor,Ceramic,Chip" C1005C0G1H221JT 220pF 5
C350	0CC221BKFAA	"Capacitor,Ceramic,Chip" C1005C0G1H221JT 220pF 5
C351	0CH5470K618	"Capacitor,Ceramic,Chip" 0402N470M500LT 47pF 5%
C352	0CH5470K618	"Capacitor,Ceramic,Chip" 0402N470M500LT 47pF 5%
C353	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C355	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C360	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C361	0CH5220K618	"Capacitor,Ceramic,Chip" 0402N220M500LT 22pF 5%
C362	0CH5220K618	"Capacitor,Ceramic,Chip" 0402N220M500LT 22pF 5%
C364	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C365	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C366	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C367	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C368	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C370	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C371	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C373	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C374	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C4000	0CK103CK56A	"Capacitor,Ceramic,Chip" 0603B103K500CT 10nF 10%
C4001	0CK103CK56A	"Capacitor,Ceramic,Chip" 0603B103K500CT 10nF 10%
C4002	0CK103CK56A	"Capacitor,Ceramic,Chip" 0603B103K500CT 10nF 10%
C4003	0CK103CK56A	"Capacitor,Ceramic,Chip" 0603B103K500CT 10nF 10%
C4004	0CK103CK56A	"Capacitor,Ceramic,Chip" 0603B103K500CT 10nF 10%
C4005	0CK103CK56A	"Capacitor,Ceramic,Chip" 0603B103K500CT 10nF 10%
C4006	0CK103CK56A	"Capacitor,Ceramic,Chip" 0603B103K500CT 10nF 10%
C4007	0CK103CK56A	"Capacitor,Ceramic,Chip" 0603B103K500CT 10nF 10%
C4008	0CK103CK56A	"Capacitor,Ceramic,Chip" 0603B103K500CT 10nF 10%
C4009	0CK103CK56A	"Capacitor,Ceramic,Chip" 0603B103K500CT 10nF 10%
C401	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C4010	0CK103CK56A	"Capacitor,Ceramic,Chip" 0603B103K500CT 10nF 10%
C4011	0CK103CK56A	"Capacitor,Ceramic,Chip" 0603B103K500CT 10nF 10%
C4012	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C4013	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C4014	0CH5220K618	"Capacitor,Ceramic,Chip" 0402N220M500LT 22pF 5%
C4015	0CH5220K618	"Capacitor,Ceramic,Chip" 0402N220M500LT 22pF 5%
C402	0CK104CK56A	"Capacitor,Ceramic,Chip" 0603B104K500CT 100nF 10
C404	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C405	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C406	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C409	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C410	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C412	0CK473CH56A	"Capacitor,Ceramic,Chip" C1608X7R1E473KT 47nF 10
C413	EAE32166101	"Capacitor,Ceramic,Chip" CS1005XR473K250CR 0.047
C414	0CK102BK56A	"Capacitor,Ceramic,Chip" 0402B102K500CT 1nF 10%
C415	0CK473CH56A	"Capacitor,Ceramic,Chip" C1608X7R1E473KT 47nF 10
C416	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C417	EAE32166101	"Capacitor,Ceramic,Chip" CS1005XR473K250CR 0.047
C419	0CK473CH56A	"Capacitor,Ceramic,Chip" C1608X7R1E473KT 47nF 10
C420	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C421	EAE32166101	"Capacitor,Ceramic,Chip" CS1005XR473K250CR 0.047
C423	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C424	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C424	0CK473CH56A	"Capacitor,Ceramic,Chip" C1608X7R1E473KT 47nF 10
C425	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C425	EAE32166101	"Capacitor,Ceramic,Chip" CS1005XR473K250CR 0.047

LOC. NO.	PART NO.	DESCRIPTION / SPECIFICATION
C426	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C427	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C428	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C429	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C429	0CK473CH56A	"Capacitor,Ceramic,Chip" C1608X7R1E473KT 47nF 10
C430	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C431	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C431	EAE32166101	"Capacitor,Ceramic,Chip" CS1005XR473K250CR 0.047
C432	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C433	0CK473CH56A	"Capacitor,Ceramic,Chip" C1608X7R1E473KT 47nF 10
C434	EAE32166101	"Capacitor,Ceramic,Chip" CS1005XR473K250CR 0.047
C436	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C437	0CH5220K618	"Capacitor,Ceramic,Chip" 0402N220M500LT 22pF 5%
C438	0CH5220K618	"Capacitor,Ceramic,Chip" 0402N220M500LT 22pF 5%
C439	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C440	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C441	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C442	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C449	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C450	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C451	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C452	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C454	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C457	0CK102BK56A	"Capacitor,Ceramic,Chip" 0402B102K500CT 1nF 10%
C459	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C460	0CC180BKFAA	"Capacitor,Ceramic,Chip" C1005C0G1H180JT 18pF 5%
C465	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C467	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C468	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C469	0CK101BK4EA	"Capacitor,Ceramic,Chip" C1005C0G1H101JT 100pF 5
C470	0CK471BK56A	"Capacitor,Ceramic,Chip" C1005X7R1H471KT 470pF 1
C471	0CC180BKFAA	"Capacitor,Ceramic,Chip" C1005C0G1H180JT 18pF 5%
C476	0CK101BK4EA	"Capacitor,Ceramic,Chip" C1005C0G1H101JT 100pF 5
C477	0CH5220K618	"Capacitor,Ceramic,Chip" 0402N220M500LT 22pF 5%
C478	0CH5220K618	"Capacitor,Ceramic,Chip" 0402N220M500LT 22pF 5%
C481	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C482	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C484	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C491	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C492	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C496	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C5003	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C5004	0CK102BK56A	"Capacitor,Ceramic,Chip" 0402B102K500CT 1nF 10%
C5005	0CK103CK56A	"Capacitor,Ceramic,Chip" 0603B103K500CT 10nF 10%
C5006	0CK103CK56A	"Capacitor,Ceramic,Chip" 0603B103K500CT 10nF 10%
C5007	0CK223CK56A	"Capacitor,Ceramic,Chip" UMK107JB223KA-T 22nF 10
C5008	0CK103CK56A	"Capacitor,Ceramic,Chip" 0603B103K500CT 10nF 10%
C5009	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C5010	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C5013	0CC020CK01A	"Capacitor,Ceramic,Chip" C1608C0G1H020CT 2pF 0.2
C5014	0CC020CK01A	"Capacitor,Ceramic,Chip" C1608C0G1H020CT 2pF 0.2
C5015	0CK104CK56A	"Capacitor,Ceramic,Chip" 0603B104K500CT 100nF 10
C5016	0CC560CK41A	"Capacitor,Ceramic,Chip" C1608C0G1H560JT 56pF 5%
C5016	0CC560CK41A	"Capacitor,Ceramic,Chip" C1608C0G1H560JT 56pF 5%
C5017	0CC560CK41A	"Capacitor,Ceramic,Chip" C1608C0G1H560JT 56pF 5%

LOC. NO.	PART NO.	DESCRIPTION / SPECIFICATION
C5019	0CC560CK41A	"Capacitor,Ceramic,Chip" C1608C0G1H560JT 56pF 5%
C5020	0CK103CK56A	"Capacitor,Ceramic,Chip" 0603B103K500CT 10nF 10%
C5021	0CK474CH94A	"Capacitor,Ceramic,Chip" 0603F474Z250CT 470nF -2
C5022	0CK222CK56A	"Capacitor,Ceramic,Chip" 0603B222K500CT 2.2nF 10
C5023	0CK474CH94A	"Capacitor,Ceramic,Chip" 0603F474Z250CT 470nF -2
C5024	0CK222CK56A	"Capacitor,Ceramic,Chip" 0603B222K500CT 2.2nF 10
C5026	0CK474CH94A	"Capacitor,Ceramic,Chip" 0603F474Z250CT 470nF -2
C5027	0CK222CK56A	"Capacitor,Ceramic,Chip" 0603B222K500CT 2.2nF 10
C5028	0CK474CH94A	"Capacitor,Ceramic,Chip" 0603F474Z250CT 470nF -2
C5029	0CK222CK56A	"Capacitor,Ceramic,Chip" 0603B222K500CT 2.2nF 10
C5030	0CK104CK56A	"Capacitor,Ceramic,Chip" 0603B104K500CT 100nF 10
C5031	0CK474CH94A	"Capacitor,Ceramic,Chip" 0603F474Z250CT 470nF -2
C5032	0CK222CK56A	"Capacitor,Ceramic,Chip" 0603B222K500CT 2.2nF 10
C5033	0CK474CH94A	"Capacitor,Ceramic,Chip" 0603F474Z250CT 470nF -2
C5034	0CK103CK56A	"Capacitor,Ceramic,Chip" 0603B103K500CT 10nF 10%
C5035	0CK222CK56A	"Capacitor,Ceramic,Chip" 0603B222K500CT 2.2nF 10
C5036	0CK474CH94A	"Capacitor,Ceramic,Chip" 0603F474Z250CT 470nF -2
C5037	0CK222CK56A	"Capacitor,Ceramic,Chip" 0603B222K500CT 2.2nF 10
C5038	0CK474CH94A	"Capacitor,Ceramic,Chip" 0603F474Z250CT 470nF -2
C5039	0CC101CK41A	"Capacitor,Ceramic,Chip" C1608C0G1H101JT 100pF 5
C5040	0CK222CK56A	"Capacitor,Ceramic,Chip" 0603B222K500CT 2.2nF 10
C5041	0CK222CK56A	"Capacitor,Ceramic,Chip" 0603B222K500CT 2.2nF 10
C5042	0CK222CK56A	"Capacitor,Ceramic,Chip" 0603B222K500CT 2.2nF 10
C5043	0CK103CK56A	"Capacitor,Ceramic,Chip" 0603B103K500CT 10nF 10%
C5044	0CC471CK41A	"Capacitor,Ceramic,Chip" C1608C0G1H471JT 470pF 5
C5046	0CK104CK56A	"Capacitor,Ceramic,Chip" 0603B104K500CT 100nF 10
C5052	0CK104CK56A	"Capacitor,Ceramic,Chip" 0603B104K500CT 100nF 10
C509	0CK103CK56A	"Capacitor,Ceramic,Chip" 0603B103K500CT 10nF 10%
C511	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C512	0CK101BK4EA	"Capacitor,Ceramic,Chip" C1005C0G1H101JT 100pF 5
C513	0CK101BK4EA	"Capacitor,Ceramic,Chip" C1005C0G1H101JT 100pF 5
C515	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C523	0CK103CK56A	"Capacitor,Ceramic,Chip" 0603B103K500CT 10nF 10%
C528	0CK103CK56A	"Capacitor,Ceramic,Chip" 0603B103K500CT 10nF 10%
C529	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C530	0CK104CK56A	"Capacitor,Ceramic,Chip" 0603B104K500CT 100nF 10
C531	0CK101BK4EA	"Capacitor,Ceramic,Chip" C1005C0G1H101JT 100pF 5
C533	0CK102BK56A	"Capacitor,Ceramic,Chip" 0402B102K500CT 1nF 10%
C534	0CK104CK56A	"Capacitor,Ceramic,Chip" 0603B104K500CT 100nF 10
C535	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C541	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C542	0CK104CK56A	"Capacitor,Ceramic,Chip" 0603B104K500CT 100nF 10
C546	0CK105CD56A	"Capacitor,Ceramic,Chip" C1608X7R1A105KT 1uF 10%
C547	0CZZB00035A	"Capacitor,Ceramic,Chip" GRM1555C1H330J 33pF 5%
C548	0CZZB00035A	"Capacitor,Ceramic,Chip" GRM1555C1H330J 33pF 5%
C551	0CK223CK56A	"Capacitor,Ceramic,Chip" UMK107JB223KA-T 22nF 10
C552	0CK103CK56A	"Capacitor,Ceramic,Chip" 0603B103K500CT 10nF 10%
C557	0CK104CK56A	"Capacitor,Ceramic,Chip" 0603B104K500CT 100nF 10
C558	0CK104CK56A	"Capacitor,Ceramic,Chip" 0603B104K500CT 100nF 10
C559	0CK223CK56A	"Capacitor,Ceramic,Chip" UMK107JB223KA-T 22nF 10
C560	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C561	0CK104CK56A	"Capacitor,Ceramic,Chip" 0603B104K500CT 100nF 10
C563	0CK103CK56A	"Capacitor,Ceramic,Chip" 0603B103K500CT 10nF 10%
C564	0CK105CD56A	"Capacitor,Ceramic,Chip" C1608X7R1A105KT 1uF 10%
C565	0CK105CD56A	"Capacitor,Ceramic,Chip" C1608X7R1A105KT 1uF 10%

LOC. NO.	PART NO.	DESCRIPTION / SPECIFICATION
C566	0CK223CK56A	"Capacitor,Ceramic,Chip" UMK107JB223KA-T 22nF 10
C567	0CK223CK56A	"Capacitor,Ceramic,Chip" UMK107JB223KA-T 22nF 10
C568	0CK105CD56A	"Capacitor,Ceramic,Chip" C1608X7R1A105KT 1uF 10%
C569	0CK104CK56A	"Capacitor,Ceramic,Chip" 0603B104K500CT 100nF 10
C571	0CK104CK56A	"Capacitor,Ceramic,Chip" 0603B104K500CT 100nF 10
C572	0CK104CK56A	"Capacitor,Ceramic,Chip" 0603B104K500CT 100nF 10
C573	0CK104CK56A	"Capacitor,Ceramic,Chip" 0603B104K500CT 100nF 10
C574	0CK103CK56A	"Capacitor,Ceramic,Chip" 0603B103K500CT 10nF 10%
C575	0CK104CK56A	"Capacitor,Ceramic,Chip" 0603B104K500CT 100nF 10
C575	0CK474CH94A	"Capacitor,Ceramic,Chip" 0603F474Z250CT 470nF -2
C576	0CK474CH94A	"Capacitor,Ceramic,Chip" 0603F474Z250CT 470nF -2
C581	0CK102CK56A	"Capacitor,Ceramic,Chip" 0603B102K500CT 1nF 10%
C582	0CK102CK56A	"Capacitor,Ceramic,Chip" 0603B102K500CT 1nF 10%
C583	0CK102CK56A	"Capacitor,Ceramic,Chip" 0603B102K500CT 1nF 10%
C584	0CK102CK56A	"Capacitor,Ceramic,Chip" 0603B102K500CT 1nF 10%
C585	0CK104CK56A	"Capacitor,Ceramic,Chip" 0603B104K500CT 100nF 10
C586	0CK104CK56A	"Capacitor,Ceramic,Chip" 0603B104K500CT 100nF 10
C587	0CK104CK56A	"Capacitor,Ceramic,Chip" 0603B104K500CT 100nF 10
C588	0CK104CK56A	"Capacitor,Ceramic,Chip" 0603B104K500CT 100nF 10
C589	0CK474DK56A	"Capacitor,Ceramic,Chip" UMK212BJ474KG-T 470nF 1
C590	0CK474DK56A	"Capacitor,Ceramic,Chip" UMK212BJ474KG-T 470nF 1
C591	0CK104CK56A	"Capacitor,Ceramic,Chip" 0603B104K500CT 100nF 10
C592	0CK103CK56A	"Capacitor,Ceramic,Chip" 0603B103K500CT 10nF 10%
C594	0CK103CK56A	"Capacitor,Ceramic,Chip" 0603B103K500CT 10nF 10%
C595	0CK104CK56A	"Capacitor,Ceramic,Chip" 0603B104K500CT 100nF 10
C596	0CK104CK56A	"Capacitor,Ceramic,Chip" 0603B104K500CT 100nF 10
C597	0CK103CK56A	"Capacitor,Ceramic,Chip" 0603B103K500CT 10nF 10%
C598	0CK103CK56A	"Capacitor,Ceramic,Chip" 0603B103K500CT 10nF 10%
C599	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C6008	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C6009	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C601	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C6010	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C6015	0CK226FF67A	"Capacitor,Ceramic,Chip" EMK325BJ226MM-T 22uF 20
C6017	0CK226FF67A	"Capacitor,Ceramic,Chip" EMK325BJ226MM-T 22uF 20
C6018	0CK102BK56A	"Capacitor,Ceramic,Chip" 0402B102K500CT 1nF 10%
C6019	0CK102BK56A	"Capacitor,Ceramic,Chip" 0402B102K500CT 1nF 10%
C6021	0CK102BK56A	"Capacitor,Ceramic,Chip" 0402B102K500CT 1nF 10%
C6022	0CK102BK56A	"Capacitor,Ceramic,Chip" 0402B102K500CT 1nF 10%
C6023	0CC180BKFAA	"Capacitor,Ceramic,Chip" C1005C0G1H180JT 18pF 5%
C6024	0CC180BKFAA	"Capacitor,Ceramic,Chip" C1005C0G1H180JT 18pF 5%
C6025	0CK103BH56A	"Capacitor,Ceramic,Chip" C1005X7R1E103KT- 10nF 1
C6026	0CK103BH56A	"Capacitor,Ceramic,Chip" C1005X7R1E103KT- 10nF 1
C604	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C605	0CK103BH56A	"Capacitor,Ceramic,Chip" C1005X7R1E103KT- 10nF 1
C605	EAE32166601	"Capacitor,Ceramic,Chip" CH1005CG391J500NR 390pF
C610	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C611	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C612	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C614	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C616	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C617	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C618	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C619	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C620	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10

LOC. NO.	PART NO.	DESCRIPTION / SPECIFICATION
C621	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C622	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C623	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C624	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C625	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C626	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C627	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C629	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C630	0CK102BK56A	"Capacitor,Ceramic,Chip" 0402B102K500CT 1nF 10%
C632	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C634	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C636	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C638	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C640	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C642	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C644	0CK103BH56A	"Capacitor,Ceramic,Chip" C1005X7R1E103KT- 10nF 1
C645	0CK103BH56A	"Capacitor,Ceramic,Chip" C1005X7R1E103KT- 10nF 1
C648	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C649	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C650	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C651	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C652	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C660	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C661	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C663	0CK102BK56A	"Capacitor,Ceramic,Chip" 0402B102K500CT 1nF 10%
C666	0CH2334F566	"Capacitor,Ceramic,Chip" 0805B334K160CT 330nF 10
C667	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C668	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C671	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C672	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C673	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C674	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C675	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C676	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C677	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C678	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C679	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C680	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C681	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C682	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C683	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C685	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C686	EAE30281301	"Capacitor,Ceramic,Chip" CS1005C0G200J400NR 20pF
C687	EAE30281301	"Capacitor,Ceramic,Chip" CS1005C0G200J400NR 20pF
C696	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C697	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C7012	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C7013	0CK103CK56A	"Capacitor,Ceramic,Chip" 0603B103K500CT 10nF 10%
C7015	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C7028	0CK103CK56A	"Capacitor,Ceramic,Chip" 0603B103K500CT 10nF 10%
C7029	0CK104CK56A	"Capacitor,Ceramic,Chip" 0603B104K500CT 100nF 10
C704	0CK471BK56A	"Capacitor,Ceramic,Chip" C1005X7R1H471KT 470pF 1
C705	0CK471BK56A	"Capacitor,Ceramic,Chip" C1005X7R1H471KT 470pF 1
C706	0CK471BK56A	"Capacitor,Ceramic,Chip" C1005X7R1H471KT 470pF 1
C707	0CK471BK56A	"Capacitor,Ceramic,Chip" C1005X7R1H471KT 470pF 1

LOC. NO.	PART NO.	DESCRIPTION / SPECIFICATION
C710	0CK104CK56A	"Capacitor,Ceramic,Chip" 0603B104K500CT 100nF 10
C712	0CK104CK56A	"Capacitor,Ceramic,Chip" 0603B104K500CT 100nF 10
C717	0CK101BK4EA	"Capacitor,Ceramic,Chip" C1005C0G1H101JT 100pF 5
C718	0CK101BK4EA	"Capacitor,Ceramic,Chip" C1005C0G1H101JT 100pF 5
C722	0CK101BK4EA	"Capacitor,Ceramic,Chip" C1005C0G1H101JT 100pF 5
C722	0CK101BK4EA	"Capacitor,Ceramic,Chip" C1005C0G1H101JT 100pF 5
C723	0CK101BK4EA	"Capacitor,Ceramic,Chip" C1005C0G1H101JT 100pF 5
C723	0CK101BK4EA	"Capacitor,Ceramic,Chip" C1005C0G1H101JT 100pF 5
C728	0CK471BK56A	"Capacitor,Ceramic,Chip" C1005X7R1H471KT 470pF 1
C729	0CK471BK56A	"Capacitor,Ceramic,Chip" C1005X7R1H471KT 470pF 1
C733	0CK471BK56A	"Capacitor,Ceramic,Chip" C1005X7R1H471KT 470pF 1
C735	0CK104CK56A	"Capacitor,Ceramic,Chip" 0603B104K500CT 100nF 10
C742	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C743	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C744	0CC102CK41A	"Capacitor,Ceramic,Chip" C1608C0G1H102JT 1nF 5%
C746	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C754	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C757	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C763	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C764	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C765	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C766	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C767	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C768	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C801	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C811	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C823	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C828	0CC150CK41A	"Capacitor,Ceramic,Chip" C1608C0G1H150JT 15pF 5%
C845	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C846	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C848	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
C882	0CK104BF56A	"Capacitor,Ceramic,Chip" C1005X7R104KET 100nF 10
DIODEs		
D303	0DD184009AA	Diode Assembly KDS184 KDS184 TP KEC -
D304	0DD184009AA	Diode Assembly KDS184 KDS184 TP KEC -
D402	0DD184009AA	Diode Assembly KDS184 KDS184 TP KEC -
D404	0DD184009AA	Diode Assembly KDS184 KDS184 TP KEC -
D408	0DD184009AA	Diode Assembly KDS184 KDS184 TP KEC -
D300	0DSGD00038A	"Diode,Switching" 1N4148W 1.25V 100V 150M
D301	0DRSE00038A	"Diode,TVS" SDC15 1.3V 14.3VTO16.4V
D302	0DRSE00038A	"Diode,TVS" SDC15 1.3V 14.3VTO16.4V
ZD101	0DZ560009DA	"Diode,Zener" UDZS5.6B 5.6V 5.49TO5.7
ZD102	0DZ560009DA	"Diode,Zener" UDZS5.6B 5.6V 5.49TO5.7
ZD300	0DZ330009GB	"Diode,Zener" UDZS3.3B 3.3V 3.32TO3.5
ZD405	0DZ360009EB	"Diode,Zener" UDZS3.6B 3.6V 3.6TO3.84
ZD406	0DZ360009EB	"Diode,Zener" UDZS3.6B 3.6V 3.6TO3.84
ZD407	0DZ560009DA	"Diode,Zener" UDZS5.6B 5.6V 5.49TO5.7
ZD408	0DZ560009DA	"Diode,Zener" UDZS5.6B 5.6V 5.49TO5.7
ZD409	0DZ560009DA	"Diode,Zener" UDZS5.6B 5.6V 5.49TO5.7
ZD415	0DZ360009EB	"Diode,Zener" UDZS3.6B 3.6V 3.6TO3.84
ZD416	0DZ560009DA	"Diode,Zener" UDZS5.6B 5.6V 5.49TO5.7
ZD417	0DZ560009DA	"Diode,Zener" UDZS5.6B 5.6V 5.49TO5.7
ZD418	0DZ560009DA	"Diode,Zener" UDZS5.6B 5.6V 5.49TO5.7

LOC. NO.	PART NO.	DESCRIPTION / SPECIFICATION
ZD419	0DZ560009DA	"Diode,Zener" UDZS5.6B 5.6V 5.49TO5.7
ZD501	0DZ560009DA	"Diode,Zener" UDZS5.6B 5.6V 5.49TO5.7
ZD502	0DZRM00248A	"Diode,Zener" RLZ8.2B 8.2V 7.78TO8.19
ZD700	0DZ360009EB	"Diode,Zener" UDZS3.6B 3.6V 3.6TO3.84
ZD705	0DZ360009EB	"Diode,Zener" UDZS3.6B 3.6V 3.6TO3.84
ZD710	0DZ560009DA	"Diode,Zener" UDZS5.6B 5.6V 5.49TO5.7
ZD711	0DZ360009EB	"Diode,Zener" UDZS3.6B 3.6V 3.6TO3.84
ZD712	0DZ360009EB	"Diode,Zener" UDZS3.6B 3.6V 3.6TO3.84
ICs		
IC402	0IPRP00696C	"IC,A/D Converter" MST3361M-LF-170 3.3V_2.
IC403	EAN32724701	"IC,Analog Switch" STMAV335 4.0TO5.5V 5NSE
IC409	EAN35942401	"IC,Analog Switch" TMDS341APFCR 3TO3.6V 10
IC505	EAN32404601	"IC,Audio Amplifier" NTP3000 7TO30V 5.5V 0.0
IC201	EAN33931901	"IC,CMOS" TC74LCX16373AFT 2V~3.6V
IC202	EAN33931901	"IC,CMOS" TC74LCX16373AFT 2V~3.6V
IC305	0ISTLPH026A	"IC,CMOS" 74LVC14APW 1.2TO3.6V 0.
IC604	0ICTMLG019A	"IC,Data Controller" LGDT3303 3TO5 25m 16M T
IC712	EAN32013101	"IC,DC,DC Converter" MIC2505-2YM 2.7V TO 7.5
IC200	EAN33624401	"IC,DDR2 SDRAM" HYB18TC512160BF-3S 512M
IC203	EAN33624401	"IC,DDR2 SDRAM" HYB18TC512160BF-3S 512M
IC206	EAN33624401	"IC,DDR2 SDRAM" HYB18TC512160BF-3S 512M
IC208	EAN33624401	"IC,DDR2 SDRAM" HYB18TC512160BF-3S 512M
IC207	0IMCRAL021A	"IC,EEPROM" AT24C512W-10SU-2.7 512K
IC310	0IMCRAL006A	"IC,EEPROM" AT24C16AN-10SU-2.7 16KB
IC404	0IMMRCS012B	"IC,EEPROM" CAT24WC08W-T(MST3000) 8
IC405	0IMMRAL014D	"IC,EEPROM" AT24C02BN-10SU-1.8 2KBI
IC405	0IMMRAL014D	"IC,EEPROM" AT24C02BN-10SU-1.8 2KBI
IC406	0IMMRAL014D	"IC,EEPROM" AT24C02BN-10SU-1.8 2KBI
IC407	0IMMRAL014D	"IC,EEPROM" AT24C02BN-10SU-1.8 2KBI
IC408	0IMMRAL014D	"IC,EEPROM" AT24C02BN-10SU-1.8 2KBI
IC301	0IMCRSJ001B	"IC,LDO Voltage Regulator" SC1565IST-2.5TR 2.2TO5V
IC302	0IPMG00049A	"IC,LDO Voltage Regulator" AZ1117H-1.8TR/E1[H13A]
IC303	0IPMG00049A	"IC,LDO Voltage Regulator" AZ1117H-1.8TR/E1[H13A]
IC308	0IPMGA0010A	"IC,LDO Voltage Regulator" AZ1117H-3.3 4.75TO10V 3
IC400	0IMCRSJ001B	"IC,LDO Voltage Regulator" SC1565IST-2.5TR 2.2TO5V
IC401	0IPMGA0010A	"IC,LDO Voltage Regulator" AZ1117H-3.3 4.75TO10V 3
IC507	0IPMG00049A	"IC,LDO Voltage Regulator" AZ1117H-1.8TR/E1[H13A]
IC600	0IPMGKE030A	"IC,LDO Voltage Regulator" KIA78R05F 6TO12V 5V 8W
IC603	0IPMGA0010A	"IC,LDO Voltage Regulator" AZ1117H-3.3 4.75TO10V 3
IC605	0IPMG00049A	"IC,LDO Voltage Regulator" AZ1117H-1.8TR/E1[H13A]
IC704	0IPMGKE030A	"IC,LDO Voltage Regulator" KIA78R05F 6TO12V 5V 8W
IC711	0IPMGKE030A	"IC,LDO Voltage Regulator" KIA78R05F 6TO12V 5V 8W
IC304	EAN33573001	"IC,PWM Controller" SC2621ASTRT 18V 0.5V~17
IC501	0IPRPCI017A	"IC,Receiver" CS8416-CZZR 3.13VTO3.46
IC508	0IMCRMN028C	"IC,Sound/Audio Processor" MSP4450K-QA-D6 7.6TO8.7
IC306	0IPRP00009A	"IC,Tx/Rx" ICL3232CBNZ 3VTO5.5V -
IC601	EAN32174001	"IC,Tx/Rx" THC63LVD1023 3.0VTO3.6V
IC101	EAN32808701	"IC,Video Processors" "XILLEON260 500MVTO2.1V,"
IC300	0IKE702900G	"IC,Voltage Detector" KIA7029AF -0.3TO15V 2.9
IC307	0IKE702900G	"IC,Voltage Detector" KIA7029AF -0.3TO15V 2.9
IC602	0IPMGSH019A	"IC,Voltage Regulator" PQ018EZ02ZPH(PB-FREE) 2
IC605	0IPMGSH019A	"IC,Voltage Regulator" PQ018EZ02ZPH(PB-FREE) 2
IC700	EAN32662801	"IC,Voltage Regulator" KA7809ERTM 35V to 40V 9

LOC. NO.	PART NO.	DESCRIPTION / SPECIFICATION
COILs & FILTERs & INDUCTORs		
F3	EAM36140902	"Filter,AC Line" IF-N06AEWL2 1.3mH 250VA
B101	0LCML00003B	"Filter,Bead" MLB-201209-0120P-N2 120
B102	0LCML00003B	"Filter,Bead" MLB-201209-0120P-N2 120
B103	0LCML00003B	"Filter,Bead" MLB-201209-0120P-N2 120
L101	6210TCE001G	"Filter,Bead" HH-1M3216-501JT 500OHM
L101	EAM32500502	"Filter,Bead" BLM18AG151SN1D 150ohm 2
L102	6210TCE001G	"Filter,Bead" HH-1M3216-501JT 500OHM
L200	EAM32500503	"Filter,Bead" BLM18AG221SN1D 220ohm 2
L201	EAM32500503	"Filter,Bead" BLM18AG221SN1D 220ohm 2
L202	EAM32500503	"Filter,Bead" BLM18AG221SN1D 220ohm 2
L203	EAM32500503	"Filter,Bead" BLM18AG221SN1D 220ohm 2
L300	6200J00005N	"Filter,Bead" HH-1M2012-121JT(H:1mm)
L301	6200J00005N	"Filter,Bead" HH-1M2012-121JT(H:1mm)
L302	EAM32500902	"Filter,Bead" BLM18SG700TN1D 70ohm 40
L304	EAM32500502	"Filter,Bead" BLM18AG151SN1D 150ohm 2
L305	EAM32500502	"Filter,Bead" BLM18AG151SN1D 150ohm 2
L306	EAM32500502	"Filter,Bead" BLM18AG151SN1D 150ohm 2
L307	EAM32500502	"Filter,Bead" BLM18AG151SN1D 150ohm 2
L308	EAM32500502	"Filter,Bead" BLM18AG151SN1D 150ohm 2
L309	EAM32500502	"Filter,Bead" BLM18AG151SN1D 150ohm 2
L310	EAM32500502	"Filter,Bead" BLM18AG151SN1D 150ohm 2
L311	EAM32500203	"Filter,Bead" BLM18PG121SN1D 120ohm 2
L312	EAM32500502	"Filter,Bead" BLM18AG151SN1D 150ohm 2
L313	EAM32500502	"Filter,Bead" BLM18AG151SN1D 150ohm 2
L315	EAM32500502	"Filter,Bead" BLM18AG151SN1D 150ohm 2
L316	6210TCE001G	"Filter,Bead" HH-1M3216-501JT 500OHM
L320	EAM32500902	"Filter,Bead" BLM18SG700TN1D 70ohm 40
L321	EAM32500502	"Filter,Bead" BLM18AG151SN1D 150ohm 2
L400	6200J00005N	"Filter,Bead" HH-1M2012-121JT(H:1mm)
L401	6200J00005N	"Filter,Bead" HH-1M2012-121JT(H:1mm)
L402	6200J00005N	"Filter,Bead" HH-1M2012-121JT(H:1mm)
L403	6200J00005N	"Filter,Bead" HH-1M2012-121JT(H:1mm)
L404	6200J00005N	"Filter,Bead" HH-1M2012-121JT(H:1mm)
L405	6200J00005N	"Filter,Bead" HH-1M2012-121JT(H:1mm)
L406	6200J00005N	"Filter,Bead" HH-1M2012-121JT(H:1mm)
L407	6200J00005N	"Filter,Bead" HH-1M2012-121JT(H:1mm)
L408	6200J00005N	"Filter,Bead" HH-1M2012-121JT(H:1mm)
L504	6200J00005N	"Filter,Bead" HH-1M2012-121JT(H:1mm)
L505	6200J00005N	"Filter,Bead" HH-1M2012-121JT(H:1mm)
L508	6200J00005N	"Filter,Bead" HH-1M2012-121JT(H:1mm)
L515	6200J00005N	"Filter,Bead" HH-1M2012-121JT(H:1mm)
L516	6200J00005N	"Filter,Bead" HH-1M2012-121JT(H:1mm)
L517	6200J00005N	"Filter,Bead" HH-1M2012-121JT(H:1mm)
L518	6200J00005N	"Filter,Bead" HH-1M2012-121JT(H:1mm)
L600	6200J00005N	"Filter,Bead" HH-1M2012-121JT(H:1mm)
L601	6200J00005N	"Filter,Bead" HH-1M2012-121JT(H:1mm)
L602	6200J00005N	"Filter,Bead" HH-1M2012-121JT(H:1mm)
L604	6200J00005N	"Filter,Bead" HH-1M2012-121JT(H:1mm)
L605	6200J00005N	"Filter,Bead" HH-1M2012-121JT(H:1mm)
L606	6200J00005N	"Filter,Bead" HH-1M2012-121JT(H:1mm)
L607	6200J00005N	"Filter,Bead" HH-1M2012-121JT(H:1mm)
L608	0LCML00003B	"Filter,Bead" MLB-201209-0120P-N2 120
L609	0LCML00003B	"Filter,Bead" MLB-201209-0120P-N2 120

LOC. NO.	PART NO.	DESCRIPTION / SPECIFICATION
L610	0LCML00003B	"Filter,Bead" MLB-201209-0120P-N2 120
L611	0LCML00003B	"Filter,Bead" MLB-201209-0120P-N2 120
L612	6200J00005N	"Filter,Bead" HH-1M2012-121JT(H:1mm)
L619	6200J00005N	"Filter,Bead" HH-1M2012-121JT(H:1mm)
L622	6200J00005N	"Filter,Bead" HH-1M2012-121JT(H:1mm)
L623	6200J00005N	"Filter,Bead" HH-1M2012-121JT(H:1mm)
L706	6200J00005N	"Filter,Bead" HH-1M2012-121JT(H:1mm)
L712	6200J00005N	"Filter,Bead" HH-1M2012-121JT(H:1mm)
L713	6200J00005N	"Filter,Bead" HH-1M2012-121JT(H:1mm)
L716	6200J00005N	"Filter,Bead" HH-1M2012-121JT(H:1mm)
L720	6200J00005N	"Filter,Bead" HH-1M2012-121JT(H:1mm)
L723	6210TCE001X	"Filter,Bead" HU-1H4532-121JT 120OHM
L724	6210TCE001X	"Filter,Bead" HU-1H4532-121JT 120OHM
L725	6210TCE001X	"Filter,Bead" HU-1H4532-121JT 120OHM
L726	6210TCE001X	"Filter,Bead" HU-1H4532-121JT 120OHM
L727	6210TCE001X	"Filter,Bead" HU-1H4532-121JT 120OHM
L728	6210TCE001X	"Filter,Bead" HU-1H4532-121JT 120OHM
L755	6200J00005N	"Filter,Bead" HH-1M2012-121JT(H:1mm)
F1	6210VH0004B	"Filter,Ferrite Core" ZCAT1518-0730-M- K 65OH
F2	6210VH0004B	"Filter,Ferrite Core" ZCAT1518-0730-M- K 65OH
L705	EAM33010401	"Filter,LCR" MEM2012P25R0 EMI 25MHZ
L707	EAM33010401	"Filter,LCR" MEM2012P25R0 EMI 25MHZ
L729	EAM33010401	"Filter,LCR" MEM2012P25R0 EMI 25MHZ
L729	EAM37574201	"Filter,LCR" LC-2012-250JT LPF(EMI)
L730	EAM33010401	"Filter,LCR" MEM2012P25R0 EMI 25MHZ
L730	EAM37574201	"Filter,LCR" LC-2012-250JT LPF(EMI)
L731	EAM33010401	"Filter,LCR" MEM2012P25R0 EMI 25MHZ
L731	EAM37574201	"Filter,LCR" LC-2012-250JT LPF(EMI)
L732	EAM33010401	"Filter,LCR" MEM2012P25R0 EMI 25MHZ
L732	EAM37574201	"Filter,LCR" LC-2012-250JT LPF(EMI)
L741	EAM33010401	"Filter,LCR" MEM2012P25R0 EMI 25MHZ
L741	EAM37574201	"Filter,LCR" LC-2012-250JT LPF(EMI)
L742	EAM33010401	"Filter,LCR" MEM2012P25R0 EMI 25MHZ
L742	EAM37574201	"Filter,LCR" LC-2012-250JT LPF(EMI)
L743	EAM33010401	"Filter,LCR" MEM2012P25R0 EMI 25MHZ
L743	EAM37574201	"Filter,LCR" LC-2012-250JT LPF(EMI)
L744	EAM33010401	"Filter,LCR" MEM2012P25R0 EMI 25MHZ
L744	EAM37574201	"Filter,LCR" LC-2012-250JT LPF(EMI)
L745	EAM33010401	"Filter,LCR" MEM2012P25R0 EMI 25MHZ
L745	EAM37574201	"Filter,LCR" LC-2012-250JT LPF(EMI)
L746	EAM33010401	"Filter,LCR" MEM2012P25R0 EMI 25MHZ
L746	EAM37574201	"Filter,LCR" LC-2012-250JT LPF(EMI)
L747	EAM33010401	"Filter,LCR" MEM2012P25R0 EMI 25MHZ
L747	EAM37574201	"Filter,LCR" LC-2012-250JT LPF(EMI)
L748	EAM37276902	"Filter,LCR" LCF20P101-TM LPF(EMI) 1
L749	EAM37276902	"Filter,LCR" LCF20P101-TM LPF(EMI) 1
L750	EAM37276902	"Filter,LCR" LCF20P101-TM LPF(EMI) 1
L751	EAM37276902	"Filter,LCR" LCF20P101-TM LPF(EMI) 1
L752	EAM37276902	"Filter,LCR" LCF20P101-TM LPF(EMI) 1
L753	EAM37276902	"Filter,LCR" LCF20P101-TM LPF(EMI) 1
L501	0LCML00020B	"Inductor,Multilayer,Chip" MLI-201209-6R8K 6.8UH 1
L508	0LCML00020B	"Inductor,Multilayer,Chip" MLI-201209-6R8K 6.8UH 1
L520	0LC2232101A	"Inductor,Multilayer,Chip" FI-D3216-223KJT 22UH 10
L521	0LC2232101A	"Inductor,Multilayer,Chip" FI-D3216-223KJT 22UH 10
L522	0LC2232101A	"Inductor,Multilayer,Chip" FI-D3216-223KJT 22UH 10

LOC. NO.	PART NO.	DESCRIPTION / SPECIFICATION
L624	0LCML00020B	"Inductor,Multilayer,Chip" MLI-201209-6R8K 6.8UH 1
L700	0LC2220101A	"Inductor,Multilayer,Chip" FI-B2012-222KJT 2.2UH 1
L701	0LC2220101A	"Inductor,Multilayer,Chip" FI-B2012-222KJT 2.2UH 1
L702	0LC2220101A	"Inductor,Multilayer,Chip" FI-B2012-222KJT 2.2UH 1
L703	0LC2220101A	"Inductor,Multilayer,Chip" FI-B2012-222KJT 2.2UH 1
L708	0LC2220101A	"Inductor,Multilayer,Chip" FI-B2012-222KJT 2.2UH 1
L709	0LC2220101A	"Inductor,Multilayer,Chip" FI-B2012-222KJT 2.2UH 1
R103	0LC2232101A	"Inductor,Multilayer,Chip" FI-D3216-223KJT 22UH 10
L100	EAP32632801	"Inductor,Wire Wound,Chip" 0805CS-391XJLC 390NH
L314	EAP32842801	"Inductor,Wire Wound,Chip" NR8040T2R0M 2UH 20%
L510	EAP32842805	"Inductor,Wire Wound,Chip" NR8040T150M 15UH 20%
L511	EAP32842805	"Inductor,Wire Wound,Chip" NR8040T150M 15UH 20%
L512	EAP32842805	"Inductor,Wire Wound,Chip" NR8040T150M 15UH 20%
L513	EAP32842805	"Inductor,Wire Wound,Chip" NR8040T150M 15UH 20%
		TRANSISTORs & FETs
Q300	EBK32756101	FET Si4800BDY N-CHANNEL MOS
Q301	EBK32756101	FET Si4800BDY N-CHANNEL MOS
Q315	EBK32756101	FET Si4800BDY N-CHANNEL MOS
Q316	0TFDI80001B	FET 2N7002(F) N-CHANNEL DMO
Q317	0TFDI80001B	FET 2N7002(F) N-CHANNEL DMO
Q318	0TFDI80001B	FET 2N7002(F) N-CHANNEL DMO
Q319	0TFDI80001B	FET 2N7002(F) N-CHANNEL DMO
Q407	0TFDI80001B	FET 2N7002(F) N-CHANNEL DMO
Q503	0TFDI80001B	FET 2N7002(F) N-CHANNEL DMO
Q504	0TFDI80001B	FET 2N7002(F) N-CHANNEL DMO
Q514	0TFDI80001B	FET 2N7002(F) N-CHANNEL DMO
Q515	0TFDI80001B	FET 2N7002(F) N-CHANNEL DMO
Q516	0TFDI80001B	FET 2N7002(F) N-CHANNEL DMO
Q602	0TFDI80001B	FET 2N7002(F) N-CHANNEL DMO
Q602	0TFDI80001B	FET 2N7002(F) N-CHANNEL DMO
Q603	0TFDI80001B	FET 2N7002(F) N-CHANNEL DMO
Q603	0TFDI80001B	FET 2N7002(F) N-CHANNEL DMO
Q606	EBK32753101	FET SI4925BDY P-CHANNEL MOS
Q702	0TFVI80067A	FET SI3865BDV(E3) N-CHANNEL
Q101	0TRIY80001A	"TR,Bipolar" 2SC3052 NPN 6V 50V 50V
Q102	0TRIY80001A	"TR,Bipolar" 2SC3052 NPN 6V 50V 50V
Q302	0TR387500AA	"TR,Bipolar" 2SC3875S(ALY) NPN 5V 60
Q400	0TR387500AA	"TR,Bipolar" 2SC3875S(ALY) NPN 5V 60
Q401	0TR104009AF	"TR,Bipolar" KRC104S NPN 40V 0V 50V
Q402	0TR104009AF	"TR,Bipolar" KRC104S NPN 40V 0V 50V
Q403	0TR387500AA	"TR,Bipolar" 2SC3875S(ALY) NPN 5V 60
Q404	0TR387500AA	"TR,Bipolar" 2SC3875S(ALY) NPN 5V 60
Q405	0TR104009AF	"TR,Bipolar" KRC104S NPN 40V 0V 50V
Q406	0TR104009AF	"TR,Bipolar" KRC104S NPN 40V 0V 50V
Q409	0TR104009AF	"TR,Bipolar" KRC104S NPN 40V 0V 50V
Q410	0TR104009AF	"TR,Bipolar" KRC104S NPN 40V 0V 50V
Q411	0TR387500AA	"TR,Bipolar" 2SC3875S(ALY) NPN 5V 60
Q500	0TR387500AA	"TR,Bipolar" 2SC3875S(ALY) NPN 5V 60
Q501	0TR387500AA	"TR,Bipolar" 2SC3875S(ALY) NPN 5V 60
Q505	0TR387500AA	"TR,Bipolar" 2SC3875S(ALY) NPN 5V 60
Q506	0TR387500AA	"TR,Bipolar" 2SC3875S(ALY) NPN 5V 60
Q508	0TR150400BA	"TR,Bipolar" 2SA1504S(ASY) PNP -5V -
Q510	0TR150400BA	"TR,Bipolar" 2SA1504S(ASY) PNP -5V -

LOC. NO.	PART NO.	DESCRIPTION / SPECIFICATION
Q511	0TR387500AA	"TR,Bipolar" 2SC3875S(ALY) NPN 5V 60
Q512	0TR387500AA	"TR,Bipolar" 2SC3875S(ALY) NPN 5V 60
Q513	0TR102009AM	"TR,Bipolar" KRA102S PNP -30V 0V -50
Q600	0TR387500AA	"TR,Bipolar" 2SC3875S(ALY) NPN 5V 60
Q601	0TR150400BA	"TR,Bipolar" 2SA1504S(ASY) PNP -5V -
Q605	0TR387500AA	"TR,Bipolar" 2SC3875S(ALY) NPN 5V 60
Q611	0TR387500AA	"TR,Bipolar" 2SC3875S(ALY) NPN 5V 60
	RESISTORs	
AR100	EBC32260901	"Resistor,Array" MNR04M0APJ102 1KOHM 5%
AR200	EBC33751901	"Resistor,Array" MNR14M0ABJ180 18OHM 5%
AR201	EBC33751901	"Resistor,Array" MNR14M0ABJ180 18OHM 5%
AR202	EBC33751901	"Resistor,Array" MNR14M0ABJ180 18OHM 5%
AR203	EBC33751901	"Resistor,Array" MNR14M0ABJ180 18OHM 5%
AR204	EBC33751901	"Resistor,Array" MNR14M0ABJ180 18OHM 5%
AR205	EBC33751901	"Resistor,Array" MNR14M0ABJ180 18OHM 5%
AR206	EBC33751901	"Resistor,Array" MNR14M0ABJ180 18OHM 5%
AR207	EBC33751901	"Resistor,Array" MNR14M0ABJ180 18OHM 5%
AR208	EBC33751901	"Resistor,Array" MNR14M0ABJ180 18OHM 5%
AR209	EBC33751901	"Resistor,Array" MNR14M0ABJ180 18OHM 5%
AR210	EBC33751901	"Resistor,Array" MNR14M0ABJ180 18OHM 5%
AR211	EBC33751901	"Resistor,Array" MNR14M0ABJ180 18OHM 5%
AR212	EBC33751901	"Resistor,Array" MNR14M0ABJ180 18OHM 5%
AR213	EBC33751901	"Resistor,Array" MNR14M0ABJ180 18OHM 5%
AR214	EBC33751901	"Resistor,Array" MNR14M0ABJ180 18OHM 5%
AR215	EBC33751901	"Resistor,Array" MNR14M0ABJ180 18OHM 5%
AR431	EBC32260601	"Resistor,Array" MNR04M0APJ101 100OHM 5%
AR432	EBC32260601	"Resistor,Array" MNR04M0APJ101 100OHM 5%
AR452	EBC32260601	"Resistor,Array" MNR04M0APJ101 100OHM 5%
AR453	EBC32260601	"Resistor,Array" MNR04M0APJ101 100OHM 5%
AR470	EBC32260601	"Resistor,Array" MNR04M0APJ101 100OHM 5%
AR471	EBC32260601	"Resistor,Array" MNR04M0APJ101 100OHM 5%
AR600	EBC32260501	"Resistor,Array" MNR04M0APJ000 0OHM 5% 1
AR601	EBC32260501	"Resistor,Array" MNR04M0APJ000 0OHM 5% 1
AR602	EBC32260501	"Resistor,Array" MNR04M0APJ000 0OHM 5% 1
AR603	EBC32260501	"Resistor,Array" MNR04M0APJ000 0OHM 5% 1
AR604	EBC32260501	"Resistor,Array" MNR04M0APJ000 0OHM 5% 1
AR605	EBC32260501	"Resistor,Array" MNR04M0APJ000 0OHM 5% 1
AR651	0RJ0222C687	"Resistor,Array" RCA86TRJ22R0 22OHM 5% 1
AR656	0RJ0222C687	"Resistor,Array" RCA86TRJ22R0 22OHM 5% 1
AR657	0RJ0222C687	"Resistor,Array" RCA86TRJ22R0 22OHM 5% 1
R101	0RH0000D622	"Resistor,Chip" MCR10EZHJ000 0OHM 5% 1/
R101	0RH1002D622	"Resistor,Chip" MCR10EZHJ103 10KOHM 5%
R101	0RH2702D622	"Resistor,Chip" MCR10EZHJ273 27KOHM 5%
R1013	0RJ0000C678	"Resistor,Chip" MCR01MZPJ000 0OHM 5% 1/
R1014	0RJ0000C678	"Resistor,Chip" MCR01MZPJ000 0OHM 5% 1/
R1015	0RJ0000C678	"Resistor,Chip" MCR01MZPJ000 0OHM 5% 1/
R1016	0RJ0000C678	"Resistor,Chip" MCR01MZPJ000 0OHM 5% 1/
R1017	0RJ0000C678	"Resistor,Chip" MCR01MZPJ000 0OHM 5% 1/
R1018	0RJ0000C678	"Resistor,Chip" MCR01MZPJ000 0OHM 5% 1/
R1019	0RJ0000C678	"Resistor,Chip" MCR01MZPJ000 0OHM 5% 1/
R102	0RH0000D622	"Resistor,Chip" MCR10EZHJ000 0OHM 5% 1/
R102	0RH1002D622	"Resistor,Chip" MCR10EZHJ103 10KOHM 5%
R102	0RH8201D622	"Resistor,Chip" MCR10EZHJ822 8.2KOHM 5%
R1021	0RJ0000C678	"Resistor,Chip" MCR01MZPJ000 0OHM 5% 1/

LOC. NO.	PART NO.	DESCRIPTION / SPECIFICATION
R1022	0RJ0000C678	"Resistor,Chip" MCR01MZPJ000 0OHM 5% 1/
R1023	0RJ0000C678	"Resistor,Chip" MCR01MZPJ000 0OHM 5% 1/
R1026	0RJ0000C678	"Resistor,Chip" MCR01MZPJ000 0OHM 5% 1/
R1028	0RJ0000C678	"Resistor,Chip" MCR01MZPJ000 0OHM 5% 1/
R103	0RH2701D622	"Resistor,Chip" MCR10EZHJ272 2.7KOHM 5%
R103	0RJ4701C678	"Resistor,Chip" MCR01MZPJ472 4.7KOHM 5%
R1032	0RJ4701C678	"Resistor,Chip" MCR01MZPJ472 4.7KOHM 5%
R1034	0RJ4701C678	"Resistor,Chip" MCR01MZPJ472 4.7KOHM 5%
R1036	0RJ4701C678	"Resistor,Chip" MCR01MZPJ472 4.7KOHM 5%
R104	0RH9100D622	"Resistor,Chip" MCR10EZHJ911 910OHM 5%
R104	0RJ4701C678	"Resistor,Chip" MCR01MZPJ472 4.7KOHM 5%
R105	0RH2702D622	"Resistor,Chip" MCR10EZHJ273 27KOHM 5%
R106	0RH8201D622	"Resistor,Chip" MCR10EZHJ822 8.2KOHM 5%
R107	0RH2701D622	"Resistor,Chip" MCR10EZHJ272 2.7KOHM 5%
R108	0RH0000D622	"Resistor,Chip" MCR10EZHJ000 0OHM 5% 1/
R108	0RH9100D622	"Resistor,Chip" MCR10EZHJ911 910OHM 5%
R109	0RH0000D622	"Resistor,Chip" MCR10EZHJ000 0OHM 5% 1/
R109	0RH0000D622	"Resistor,Chip" MCR10EZHJ000 0OHM 5% 1/
R109	0RJ0000D677	"Resistor,Chip" MCR03EZPJ000 0OHM 5% 1/
R110	0RH0000D622	"Resistor,Chip" MCR10EZHJ000 0OHM 5% 1/
R110	0RH0000D622	"Resistor,Chip" MCR10EZHJ000 0OHM 5% 1/
R110	0RJ0000D677	"Resistor,Chip" MCR03EZPJ000 0OHM 5% 1/
R111	0RH0000D622	"Resistor,Chip" MCR10EZHJ000 0OHM 5% 1/
R111	0RJ0000C678	"Resistor,Chip" MCR01MZPJ000 0OHM 5% 1/
R112	0RH0000D622	"Resistor,Chip" MCR10EZHJ000 0OHM 5% 1/
R112	0RJ0000C678	"Resistor,Chip" MCR01MZPJ000 0OHM 5% 1/
R113	0RJ0000C678	"Resistor,Chip" MCR01MZPJ000 0OHM 5% 1/
R114	0RJ1002C678	"Resistor,Chip" MCR01MZPJ103 10KOHM 5%
R115	0RH0000D622	"Resistor,Chip" MCR10EZHJ000 0OHM 5% 1/
R116	0RJ1002C678	"Resistor,Chip" MCR01MZPJ103 10KOHM 5%
R117	0RH0000D622	"Resistor,Chip" MCR10EZHJ000 0OHM 5% 1/
R117	0RJ1002C678	"Resistor,Chip" MCR01MZPJ103 10KOHM 5%
R118	0RJ1002C678	"Resistor,Chip" MCR01MZPJ103 10KOHM 5%
R119	0RJ1002C678	"Resistor,Chip" MCR01MZPJ103 10KOHM 5%
R126	0RJ0222C678	"Resistor,Chip" MCR01MZPJ220 22OHM 5% 1
R127	0RJ1002C678	"Resistor,Chip" MCR01MZPJ103 10KOHM 5%
R129	0RJ0182C478	"Resistor,Chip" MCR01MZPF180 18OHM 1% 1
R130	0RJ0182C478	"Resistor,Chip" MCR01MZPF180 18OHM 1% 1
R131	0RJ1002C678	"Resistor,Chip" MCR01MZPJ103 10KOHM 5%
R132	0RJ0332C678	"Resistor,Chip" MCR01MZPJ330 33OHM 5% 1
R133	0RJ1001E478	"Resistor,Chip" MCR01MZPF102 1KOHM 1% 1
R134	0RJ1001E478	"Resistor,Chip" MCR01MZPF102 1KOHM 1% 1
R135	0RJ4701C678	"Resistor,Chip" MCR01MZPJ472 4.7KOHM 5%
R136	0RJ1001E478	"Resistor,Chip" MCR01MZPF102 1KOHM 1% 1
R137	0RJ1001E478	"Resistor,Chip" MCR01MZPF102 1KOHM 1% 1
R139	0RJ1001C678	"Resistor,Chip" MCR01MZPJ102 1KOHM 5% 1
R140	0RJ1001C678	"Resistor,Chip" MCR01MZPJ102 1KOHM 5% 1
R142	0RJ1003C678	"Resistor,Chip" MCR01MZPJ104 100KOHM 5%
R143	0RJ0000C678	"Resistor,Chip" MCR01MZPJ000 0OHM 5% 1/
R148	EBC33834501	"Resistor,Chip" MCR03EZP5FX40R2 40.2OHM
R149	0RJ0471C678	"Resistor,Chip" MCR01MZPJ4R7 4.7OHM 5%
R150	0RJ1001C678	"Resistor,Chip" MCR01MZPJ102 1KOHM 5% 1
R151	0RJ1001C678	"Resistor,Chip" MCR01MZPJ102 1KOHM 5% 1
R153	0RJ0222C678	"Resistor,Chip" MCR01MZPJ220 22OHM 5% 1
R154	0RJ0222C678	"Resistor,Chip" MCR01MZPJ220 22OHM 5% 1

LOC. NO.	PART NO.	DESCRIPTION / SPECIFICATION
R155	0RJ0222C678	"Resistor,Chip" MCR01MZPJ220 22OHM 5% 1
R156	0RJ0222C678	"Resistor,Chip" MCR01MZPJ220 22OHM 5% 1
R160	0RJ0222C678	"Resistor,Chip" MCR01MZPJ220 22OHM 5% 1
R161	0RJ0222C678	"Resistor,Chip" MCR01MZPJ220 22OHM 5% 1
R163	EBC33834701	"Resistor,Chip" MCR03EZP5FX7150 715OHM
R164	EBC33834701	"Resistor,Chip" MCR03EZP5FX7150 715OHM
R165	0RJ0332C678	"Resistor,Chip" MCR01MZPJ330 33OHM 5% 1
R166	0RJ0332C678	"Resistor,Chip" MCR01MZPJ330 33OHM 5% 1
R167	0RJ0332C678	"Resistor,Chip" MCR01MZPJ330 33OHM 5% 1
R168	0RJ1002C678	"Resistor,Chip" MCR01MZPJ103 10KOHM 5%
R169	0RJ1002C678	"Resistor,Chip" MCR01MZPJ103 10KOHM 5%
R170	0RJ0000C678	"Resistor,Chip" MCR01MZPJ000 0OHM 5% 1/
R170	0RJ0222C678	"Resistor,Chip" MCR01MZPJ220 22OHM 5% 1
R171	0RJ0000C678	"Resistor,Chip" MCR01MZPJ000 0OHM 5% 1/
R175	0RJ0000C678	"Resistor,Chip" MCR01MZPJ000 0OHM 5% 1/
R176	0RJ0000C678	"Resistor,Chip" MCR01MZPJ000 0OHM 5% 1/
R177	0RJ0000C678	"Resistor,Chip" MCR01MZPJ000 0OHM 5% 1/
R178	0RJ0000C678	"Resistor,Chip" MCR01MZPJ000 0OHM 5% 1/
R179	0RJ0332C678	"Resistor,Chip" MCR01MZPJ330 33OHM 5% 1
R180	0RJ0332C678	"Resistor,Chip" MCR01MZPJ330 33OHM 5% 1
R181	0RJ0332C678	"Resistor,Chip" MCR01MZPJ330 33OHM 5% 1
R182	0RJ0332C678	"Resistor,Chip" MCR01MZPJ330 33OHM 5% 1
R190	0RJ1002C678	"Resistor,Chip" MCR01MZPJ103 10KOHM 5%
R192	0RJ3001C678	"Resistor,Chip" MCR01MZPJ302 3KOHM 5% 1
R193	0RJ1002C678	"Resistor,Chip" MCR01MZPJ103 10KOHM 5%
R194	0RJ1002C678	"Resistor,Chip" MCR01MZPJ103 10KOHM 5%
R195	0RJ1002C678	"Resistor,Chip" MCR01MZPJ103 10KOHM 5%
R196	0RJ1002C678	"Resistor,Chip" MCR01MZPJ103 10KOHM 5%
R197	0RJ1002C678	"Resistor,Chip" MCR01MZPJ103 10KOHM 5%
R198	0RJ1002C678	"Resistor,Chip" MCR01MZPJ103 10KOHM 5%
R200	0RJ1001E478	"Resistor,Chip" MCR01MZPF102 1KOHM 1% 1
R201	0RJ1001E478	"Resistor,Chip" MCR01MZPF102 1KOHM 1% 1
R202	0RJ0182C478	"Resistor,Chip" MCR01MZPF180 18OHM 1% 1
R203	0RJ0182C478	"Resistor,Chip" MCR01MZPF180 18OHM 1% 1
R204	0RJ0182C478	"Resistor,Chip" MCR01MZPF180 18OHM 1% 1
R205	0RJ0182C478	"Resistor,Chip" MCR01MZPF180 18OHM 1% 1
R215	0RJ1500C678	"Resistor,Chip" MCR01MZPJ151 150OHM 5%
R216	0RJ1500C678	"Resistor,Chip" MCR01MZPJ151 150OHM 5%
R216	0RJ1500C678	"Resistor,Chip" MCR01MZPJ151 150OHM 5%
R217	0RJ0182C478	"Resistor,Chip" MCR01MZPF180 18OHM 1% 1
R218	0RJ0182C478	"Resistor,Chip" MCR01MZPF180 18OHM 1% 1
R219	0RJ0182C478	"Resistor,Chip" MCR01MZPF180 18OHM 1% 1
R220	0RJ0182C478	"Resistor,Chip" MCR01MZPF180 18OHM 1% 1
R228	0RJ0222C678	"Resistor,Chip" MCR01MZPJ220 22OHM 5% 1
R229	0RJ1002C678	"Resistor,Chip" MCR01MZPJ103 10KOHM 5%
R230	0RJ0222C678	"Resistor,Chip" MCR01MZPJ220 22OHM 5% 1
R232	0RJ4701C678	"Resistor,Chip" MCR01MZPJ472 4.7KOHM 5%
R235	0RJ0182C478	"Resistor,Chip" MCR01MZPF180 18OHM 1% 1
R236	0RJ0182C478	"Resistor,Chip" MCR01MZPF180 18OHM 1% 1
R237	0RJ0182C478	"Resistor,Chip" MCR01MZPF180 18OHM 1% 1
R238	0RJ0182C478	"Resistor,Chip" MCR01MZPF180 18OHM 1% 1
R239	0RJ4701C678	"Resistor,Chip" MCR01MZPJ472 4.7KOHM 5%
R240	0RJ0000C678	"Resistor,Chip" MCR01MZPJ000 0OHM 5% 1/
R245	0RJ0182C478	"Resistor,Chip" MCR01MZPF180 18OHM 1% 1
R246	0RJ0182C478	"Resistor,Chip" MCR01MZPF180 18OHM 1% 1

LOC. NO.	PART NO.	DESCRIPTION / SPECIFICATION
R247	0RJ0182C478	"Resistor,Chip" MCR01MZPF180 18OHM 1% 1
R248	0RJ0182C478	"Resistor,Chip" MCR01MZPF180 18OHM 1% 1
R249	0RJ4701C678	"Resistor,Chip" MCR01MZPJ472 4.7KOHM 5%
R250	0RJ4701C678	"Resistor,Chip" MCR01MZPJ472 4.7KOHM 5%
R251	0RJ4701C678	"Resistor,Chip" MCR01MZPJ472 4.7KOHM 5%
R256	0RJ0222C678	"Resistor,Chip" MCR01MZPJ220 22OHM 5% 1
R257	0RJ0222C678	"Resistor,Chip" MCR01MZPJ220 22OHM 5% 1
R300	0RJ3300C678	"Resistor,Chip" MCR01MZPJ331 330OHM 5%
R3000	0RJ1000C678	"Resistor,Chip" MCR01MZPJ101 100OHM 5%
R3001	0RJ0000C678	"Resistor,Chip" MCR01MZPJ000 0OHM 5% 1/
R3002	0RJ0000C678	"Resistor,Chip" MCR01MZPJ000 0OHM 5% 1/
R3003	0RJ0000C678	"Resistor,Chip" MCR01MZPJ000 0OHM 5% 1/
R301	0RJ1502C478	"Resistor,Chip" MCR01MZPF153 15KOHM 1%
R3014	0RJ1000C678	"Resistor,Chip" MCR01MZPJ101 100OHM 5%
R3017	0RJ4701C678	"Resistor,Chip" MCR01MZPJ472 4.7KOHM 5%
R302	0RJ4302D677	"Resistor,Chip" MCR03EZPJ433 43KOHM 5%
R3022	0RJ1000C678	"Resistor,Chip" MCR01MZPJ101 100OHM 5%
R3023	0RJ4701C678	"Resistor,Chip" MCR01MZPJ472 4.7KOHM 5%
R3027	0RJ6802C678	"Resistor,Chip" MCR01MZPJ683 68KOHM 5%
R3028	0RJ1000C678	"Resistor,Chip" MCR01MZPJ101 100OHM 5%
R303	0RJ3300C678	"Resistor,Chip" MCR01MZPJ331 330OHM 5%
R3033	0RJ1000C678	"Resistor,Chip" MCR01MZPJ101 100OHM 5%
R3034	0RJ1000C678	"Resistor,Chip" MCR01MZPJ101 100OHM 5%
R3035	0RJ1001C678	"Resistor,Chip" MCR01MZPJ102 1KOHM 5% 1
R3035	0RJ4701C678	"Resistor,Chip" MCR01MZPJ472 4.7KOHM 5%
R304	0RJ1502C478	"Resistor,Chip" MCR01MZPF153 15KOHM 1%
R3041	0RJ1001C678	"Resistor,Chip" MCR01MZPJ102 1KOHM 5% 1
R3041	0RJ4701C678	"Resistor,Chip" MCR01MZPJ472 4.7KOHM 5%
R3042	0RJ3302C678	"Resistor,Chip" MCR01MZPJ333 33KOHM 5%
R3043	0RJ1001C678	"Resistor,Chip" MCR01MZPJ102 1KOHM 5% 1
R3043	0RJ3300C678	"Resistor,Chip" MCR01MZPJ331 330OHM 5%
R3045	0RJ1000C678	"Resistor,Chip" MCR01MZPJ101 100OHM 5%
R3048	0RJ4701C678	"Resistor,Chip" MCR01MZPJ472 4.7KOHM 5%
R3049	0RJ4701C678	"Resistor,Chip" MCR01MZPJ472 4.7KOHM 5%
R305	0RJ6801C678	"Resistor,Chip" MCR01MZPJ682 6.8KOHM 5%
R3050	0RJ4701C678	"Resistor,Chip" MCR01MZPJ472 4.7KOHM 5%
R3051	0RJ4701C678	"Resistor,Chip" MCR01MZPJ472 4.7KOHM 5%
R306	0RJ4701C678	"Resistor,Chip" MCR01MZPJ472 4.7KOHM 5%
R3061	0RJ4701C678	"Resistor,Chip" MCR01MZPJ472 4.7KOHM 5%
R3062	0RJ4701C678	"Resistor,Chip" MCR01MZPJ472 4.7KOHM 5%
R3067	0RJ1002C678	"Resistor,Chip" MCR01MZPJ103 10KOHM 5%
R307	0RJ2001E472	"Resistor,Chip" MCR10EZHF202 2KOHM 1% 1
R3070	0RJ4701C678	"Resistor,Chip" MCR01MZPJ472 4.7KOHM 5%
R3071	0RJ4701C678	"Resistor,Chip" MCR01MZPJ472 4.7KOHM 5%
R3072	0RJ4701C678	"Resistor,Chip" MCR01MZPJ472 4.7KOHM 5%
R3073	0RJ4701C678	"Resistor,Chip" MCR01MZPJ472 4.7KOHM 5%
R308	0RJ2702C478	"Resistor,Chip" MCR01MZPF273 27KOHM 1%
R309	0RJ4703C678	"Resistor,Chip" MCR01MZPJ474 470KOHM 5%
R310	0RJ1000C678	"Resistor,Chip" MCR01MZPJ101 100OHM 5%
R312	0RJ0511D677	"Resistor,Chip" MCR03EZPJ5R1 5.1OHM 5%
R313	0RJ4701C678	"Resistor,Chip" MCR01MZPJ472 4.7KOHM 5%
R315	0RJ0000C678	"Resistor,Chip" MCR01MZPJ000 0OHM 5% 1/
R316	0RJ0000C678	"Resistor,Chip" MCR01MZPJ000 0OHM 5% 1/
R319	0RJ0101C678	"Resistor,Chip" MCR01MZPJ1R0 1OHM 5% 1/
R320	0RJ1001E478	"Resistor,Chip" MCR01MZPF102 1KOHM 1% 1

LOC. NO.	PART NO.	DESCRIPTION / SPECIFICATION
R321	0RJ2002C478	"Resistor,Chip" MCR01MZPF203 20KOHM 1%
R322	0RJ1502C478	"Resistor,Chip" MCR01MZPF153 15KOHM 1%
R323	0RJ1201C678	"Resistor,Chip" MCR01MZPJ122 1.2KOHM 5%
R324	0RJ0000C678	"Resistor,Chip" MCR01MZPJ000 0OHM 5% 1/
R326	0RJ1002C678	"Resistor,Chip" MCR01MZPJ103 10KOHM 5%
R328	0RJ1000C678	"Resistor,Chip" MCR01MZPJ101 100OHM 5%
R330	0RJ1000C678	"Resistor,Chip" MCR01MZPJ101 100OHM 5%
R331	0RJ1000C678	"Resistor,Chip" MCR01MZPJ101 100OHM 5%
R343	0RJ0000C678	"Resistor,Chip" MCR01MZPJ000 0OHM 5% 1/
R344	0RJ0000C678	"Resistor,Chip" MCR01MZPJ000 0OHM 5% 1/
R345	0RJ2200C678	"Resistor,Chip" MCR01MZPJ221 220OHM 5%
R346	0RJ2200C678	"Resistor,Chip" MCR01MZPJ221 220OHM 5%
R347	0RJ4701C678	"Resistor,Chip" MCR01MZPJ472 4.7KOHM 5%
R350	0RJ2000C678	"Resistor,Chip" MCR01MZPJ201 200OHM 5%
R354	0RJ4701C678	"Resistor,Chip" MCR01MZPJ472 4.7KOHM 5%
R355	0RJ4701C678	"Resistor,Chip" MCR01MZPJ472 4.7KOHM 5%
R356	0RJ4702C678	"Resistor,Chip" MCR01MZPJ473 47KOHM 5%
R360	0RJ0222C678	"Resistor,Chip" MCR01MZPJ220 22OHM 5% 1
R361	0RJ0000C678	"Resistor,Chip" MCR01MZPJ000 0OHM 5% 1/
R362	0RJ0222C678	"Resistor,Chip" MCR01MZPJ220 22OHM 5% 1
R363	0RJ4701C678	"Resistor,Chip" MCR01MZPJ472 4.7KOHM 5%
R365	0RJ0222C678	"Resistor,Chip" MCR01MZPJ220 22OHM 5% 1
R366	0RJ0222C678	"Resistor,Chip" MCR01MZPJ220 22OHM 5% 1
R367	0RJ4701C678	"Resistor,Chip" MCR01MZPJ472 4.7KOHM 5%
R367	0RJ4702C678	"Resistor,Chip" MCR01MZPJ473 47KOHM 5%
R368	0RJ1502C478	"Resistor,Chip" MCR01MZPF153 15KOHM 1%
R368	0RJ1502C678	"Resistor,Chip" MCR01MZPJ153 15KOHM 5%
R371	0RJ4701C678	"Resistor,Chip" MCR01MZPJ472 4.7KOHM 5%
R372	0RJ4702C678	"Resistor,Chip" MCR01MZPJ473 47KOHM 5%
R373	0RJ1002C678	"Resistor,Chip" MCR01MZPJ103 10KOHM 5%
R374	0RJ1002C678	"Resistor,Chip" MCR01MZPJ103 10KOHM 5%
R375	0RJ1002C678	"Resistor,Chip" MCR01MZPJ103 10KOHM 5%
R376	0RJ6802C678	"Resistor,Chip" MCR01MZPJ683 68KOHM 5%
R379	0RJ1000C678	"Resistor,Chip" MCR01MZPJ101 100OHM 5%
R380	0RJ0222C678	"Resistor,Chip" MCR01MZPJ220 22OHM 5% 1
R381	0RJ4701C678	"Resistor,Chip" MCR01MZPJ472 4.7KOHM 5%
R382	0RJ0222C678	"Resistor,Chip" MCR01MZPJ220 22OHM 5% 1
R383	0RJ1000C678	"Resistor,Chip" MCR01MZPJ101 100OHM 5%
R385	0RJ0000C678	"Resistor,Chip" MCR01MZPJ000 0OHM 5% 1/
R386	0RJ5601C678	"Resistor,Chip" MCR01MZPJ562 5.6KOHM 5%
R386	0RJ6801C678	"Resistor,Chip" MCR01MZPJ682 6.8KOHM 5%
R388	0RJ3302C678	"Resistor,Chip" MCR01MZPJ333 33KOHM 5%
R390	0RJ0000C678	"Resistor,Chip" MCR01MZPJ000 0OHM 5% 1/
R391	0RJ5601C678	"Resistor,Chip" MCR01MZPJ562 5.6KOHM 5%
R391	0RJ6801C678	"Resistor,Chip" MCR01MZPJ682 6.8KOHM 5%
R400	0RJ0332C678	"Resistor,Chip" MCR01MZPJ330 33OHM 5% 1
R4000	0RJ0000C678	"Resistor,Chip" MCR01MZPJ000 0OHM 5% 1/
R4001	0RJ4701C678	"Resistor,Chip" MCR01MZPJ472 4.7KOHM 5%
R4002	0RJ0000C678	"Resistor,Chip" MCR01MZPJ000 0OHM 5% 1/
R4003	0RJ4701C678	"Resistor,Chip" MCR01MZPJ472 4.7KOHM 5%
R4004	0RJ1003C678	"Resistor,Chip" MCR01MZPJ104 100KOHM 5%
R4004	0RJ4702C678	"Resistor,Chip" MCR01MZPJ473 47KOHM 5%
R4005	0RJ1003C678	"Resistor,Chip" MCR01MZPJ104 100KOHM 5%
R4005	0RJ4702C678	"Resistor,Chip" MCR01MZPJ473 47KOHM 5%
R4007	0RJ1003C678	"Resistor,Chip" MCR01MZPJ104 100KOHM 5%

LOC. NO.	PART NO.	DESCRIPTION / SPECIFICATION
R4007	0RJ4702C678	"Resistor,Chip" MCR01MZPJ473 47KOHM 5%
R4008	0RJ1003C678	"Resistor,Chip" MCR01MZPJ104 100KOHM 5%
R4008	0RJ4702C678	"Resistor,Chip" MCR01MZPJ473 47KOHM 5%
R401	0RJ0332C678	"Resistor,Chip" MCR01MZPJ330 33OHM 5% 1
R4012	0RJ4701C678	"Resistor,Chip" MCR01MZPJ472 4.7KOHM 5%
R4013	0RJ4701C678	"Resistor,Chip" MCR01MZPJ472 4.7KOHM 5%
R4014	0RJ4701C678	"Resistor,Chip" MCR01MZPJ472 4.7KOHM 5%
R4015	0RJ4701C678	"Resistor,Chip" MCR01MZPJ472 4.7KOHM 5%
R4016	0RJ5101C678	"Resistor,Chip" MCR01MZPJ512 5.1KOHM 5%
R4017	0RJ1002C678	"Resistor,Chip" MCR01MZPJ103 10KOHM 5%
R4018	0RJ4701C678	"Resistor,Chip" MCR01MZPJ472 4.7KOHM 5%
R4019	0RJ4701C678	"Resistor,Chip" MCR01MZPJ472 4.7KOHM 5%
R402	0RJ0332C678	"Resistor,Chip" MCR01MZPJ330 33OHM 5% 1
R4020	0RJ5101C678	"Resistor,Chip" MCR01MZPJ512 5.1KOHM 5%
R4021	0RJ1002C678	"Resistor,Chip" MCR01MZPJ103 10KOHM 5%
R4022	0RJ1001C678	"Resistor,Chip" MCR01MZPJ102 1KOHM 5% 1
R4023	0RJ1001C678	"Resistor,Chip" MCR01MZPJ102 1KOHM 5% 1
R4024	0RJ0000C678	"Resistor,Chip" MCR01MZPJ000 0OHM 5% 1/
R4025	0RJ0000C678	"Resistor,Chip" MCR01MZPJ000 0OHM 5% 1/
R4026	0RJ0000C678	"Resistor,Chip" MCR01MZPJ000 0OHM 5% 1/
R4027	0RJ0000C678	"Resistor,Chip" MCR01MZPJ000 0OHM 5% 1/
R4028	0RJ0000C678	"Resistor,Chip" MCR01MZPJ000 0OHM 5% 1/
R4029	0RJ0000C678	"Resistor,Chip" MCR01MZPJ000 0OHM 5% 1/
R403	0RJ0332C678	"Resistor,Chip" MCR01MZPJ330 33OHM 5% 1
R403	0RJ4701C678	"Resistor,Chip" MCR01MZPJ472 4.7KOHM 5%
R4030	0RJ0000C678	"Resistor,Chip" MCR01MZPJ000 0OHM 5% 1/
R4031	0RJ0000C678	"Resistor,Chip" MCR01MZPJ000 0OHM 5% 1/
R4032	0RJ0000C678	"Resistor,Chip" MCR01MZPJ000 0OHM 5% 1/
R4032	0RJ0102C678	"Resistor,Chip" MCR01MZPJ100 10OHM 5% 1
R4033	0RJ0000C678	"Resistor,Chip" MCR01MZPJ000 0OHM 5% 1/
R4033	0RJ0102C678	"Resistor,Chip" MCR01MZPJ100 10OHM 5% 1
R4034	0RJ0000C678	"Resistor,Chip" MCR01MZPJ000 0OHM 5% 1/
R4034	0RJ0102C678	"Resistor,Chip" MCR01MZPJ100 10OHM 5% 1
R4035	0RJ0000C678	"Resistor,Chip" MCR01MZPJ000 0OHM 5% 1/
R4035	0RJ0102C678	"Resistor,Chip" MCR01MZPJ100 10OHM 5% 1
R4036	0RJ0000C678	"Resistor,Chip" MCR01MZPJ000 0OHM 5% 1/
R4036	0RJ0102C678	"Resistor,Chip" MCR01MZPJ100 10OHM 5% 1
R4037	0RJ0000C678	"Resistor,Chip" MCR01MZPJ000 0OHM 5% 1/
R4037	0RJ0102C678	"Resistor,Chip" MCR01MZPJ100 10OHM 5% 1
R4038	0RJ0000C678	"Resistor,Chip" MCR01MZPJ000 0OHM 5% 1/
R4038	0RJ0102C678	"Resistor,Chip" MCR01MZPJ100 10OHM 5% 1
R4039	0RJ0000C678	"Resistor,Chip" MCR01MZPJ000 0OHM 5% 1/
R4039	0RJ0102C678	"Resistor,Chip" MCR01MZPJ100 10OHM 5% 1
R404	0RJ0332C678	"Resistor,Chip" MCR01MZPJ330 33OHM 5% 1
R404	0RJ4701C678	"Resistor,Chip" MCR01MZPJ472 4.7KOHM 5%
R4040	0RJ0000C678	"Resistor,Chip" MCR01MZPJ000 0OHM 5% 1/
R4041	0RJ0000C678	"Resistor,Chip" MCR01MZPJ000 0OHM 5% 1/
R4042	0RJ0000C678	"Resistor,Chip" MCR01MZPJ000 0OHM 5% 1/
R4043	0RJ0000C678	"Resistor,Chip" MCR01MZPJ000 0OHM 5% 1/
R4044	0RJ4701C678	"Resistor,Chip" MCR01MZPJ472 4.7KOHM 5%
R4045	0RJ0332C678	"Resistor,Chip" MCR01MZPJ330 33OHM 5% 1
R4046	0RJ0332C678	"Resistor,Chip" MCR01MZPJ330 33OHM 5% 1
R4047	0RJ0332C678	"Resistor,Chip" MCR01MZPJ330 33OHM 5% 1
R4048	0RJ0332C678	"Resistor,Chip" MCR01MZPJ330 33OHM 5% 1
R4049	0RJ4701C678	"Resistor,Chip" MCR01MZPJ472 4.7KOHM 5%

LOC. NO.	PART NO.	DESCRIPTION / SPECIFICATION
R405	0RJ3900C678	"Resistor,Chip" MCR01MZP5J391 390OHM 5%
R4050	0RJ1001C678	"Resistor,Chip" MCR01MZPJ102 1KOHM 5% 1
R4050	0RJ4701C678	"Resistor,Chip" MCR01MZPJ472 4.7KOHM 5%
R4051	0RJ1001C678	"Resistor,Chip" MCR01MZPJ102 1KOHM 5% 1
R4051	0RJ4701C678	"Resistor,Chip" MCR01MZPJ472 4.7KOHM 5%
R4056	0RJ4703C678	"Resistor,Chip" MCR01MZPJ474 470KOHM 5%
R4057	0RJ4703C678	"Resistor,Chip" MCR01MZPJ474 470KOHM 5%
R4058	0RJ4703C678	"Resistor,Chip" MCR01MZPJ474 470KOHM 5%
R4059	0RJ4703C678	"Resistor,Chip" MCR01MZPJ474 470KOHM 5%
R406	0RJ0332C678	"Resistor,Chip" MCR01MZPJ330 33OHM 5% 1
R4060	0RJ2702D677	"Resistor,Chip" MCR03EZPJ273 27KOHM 5%
R4060	0RJ4702C678	"Resistor,Chip" MCR01MZPJ473 47KOHM 5%
R4065	0RJ0752C678	"Resistor,Chip" MCR01MZPJ750 75OHM 5% 1
R4066	0RJ0752C678	"Resistor,Chip" MCR01MZPJ750 75OHM 5% 1
R4067	0RJ0752C678	"Resistor,Chip" MCR01MZPJ750 75OHM 5% 1
R4068	0RJ0752C678	"Resistor,Chip" MCR01MZPJ750 75OHM 5% 1
R4069	0RJ0752C678	"Resistor,Chip" MCR01MZPJ750 75OHM 5% 1
R4070	0RJ0752C678	"Resistor,Chip" MCR01MZPJ750 75OHM 5% 1
R4071	0RJ1001C678	"Resistor,Chip" MCR01MZPJ102 1KOHM 5% 1
R4076	0RJ1001C678	"Resistor,Chip" MCR01MZPJ102 1KOHM 5% 1
R408	0RJ0332C678	"Resistor,Chip" MCR01MZPJ330 33OHM 5% 1
R4080	0RJ0000C678	"Resistor,Chip" MCR01MZPJ000 0OHM 5% 1/
R4081	0RJ0000C678	"Resistor,Chip" MCR01MZPJ000 0OHM 5% 1/
R4082	0RJ0000C678	"Resistor,Chip" MCR01MZPJ000 0OHM 5% 1/
R4083	0RJ0000C678	"Resistor,Chip" MCR01MZPJ000 0OHM 5% 1/
R4084	0RJ0000C678	"Resistor,Chip" MCR01MZPJ000 0OHM 5% 1/
R4085	0RJ0000C678	"Resistor,Chip" MCR01MZPJ000 0OHM 5% 1/
R4086	0RJ0000C678	"Resistor,Chip" MCR01MZPJ000 0OHM 5% 1/
R4087	0RJ0000C678	"Resistor,Chip" MCR01MZPJ000 0OHM 5% 1/
R4088	0RJ0000C678	"Resistor,Chip" MCR01MZPJ000 0OHM 5% 1/
R4089	0RJ0000C678	"Resistor,Chip" MCR01MZPJ000 0OHM 5% 1/
R409	0RJ0332C678	"Resistor,Chip" MCR01MZPJ330 33OHM 5% 1
R4092	0RJ0000C678	"Resistor,Chip" MCR01MZPJ000 0OHM 5% 1/
R4095	0RJ5101C678	"Resistor,Chip" MCR01MZPJ512 5.1KOHM 5%
R4096	0RJ1001C678	"Resistor,Chip" MCR01MZPJ102 1KOHM 5% 1
R4097	0RJ1002C678	"Resistor,Chip" MCR01MZPJ103 10KOHM 5%
R4099	0RJ4701C678	"Resistor,Chip" MCR01MZPJ472 4.7KOHM 5%
R410	0RJ0682C678	"Resistor,Chip" MCR01MZPJ680 68OHM 5% 1
R4100	0RJ4701C678	"Resistor,Chip" MCR01MZPJ472 4.7KOHM 5%
R4101	0RJ1001C678	"Resistor,Chip" MCR01MZPJ102 1KOHM 5% 1
R4101	0RJ4701C678	"Resistor,Chip" MCR01MZPJ472 4.7KOHM 5%
R4102	0RJ1001C678	"Resistor,Chip" MCR01MZPJ102 1KOHM 5% 1
R4103	0RJ4701C678	"Resistor,Chip" MCR01MZPJ472 4.7KOHM 5%
R4105	0RJ1003C678	"Resistor,Chip" MCR01MZPJ104 100KOHM 5%
R4105	0RJ4702C678	"Resistor,Chip" MCR01MZPJ473 47KOHM 5%
R4106	0RJ1003C678	"Resistor,Chip" MCR01MZPJ104 100KOHM 5%
R4106	0RJ4702C678	"Resistor,Chip" MCR01MZPJ473 47KOHM 5%
R4107	0RJ4701C678	"Resistor,Chip" MCR01MZPJ472 4.7KOHM 5%
R4108	0RJ4701C678	"Resistor,Chip" MCR01MZPJ472 4.7KOHM 5%
R4109	0RJ4701C678	"Resistor,Chip" MCR01MZPJ472 4.7KOHM 5%
R411	0RJ3900C678	"Resistor,Chip" MCR01MZP5J391 390OHM 5%
R4110	0RJ0332C678	"Resistor,Chip" MCR01MZPJ330 33OHM 5% 1
R4111	0RJ0332C678	"Resistor,Chip" MCR01MZPJ330 33OHM 5% 1
R4116	0RJ0000C678	"Resistor,Chip" MCR01MZPJ000 0OHM 5% 1/
R4117	0RJ0000C678	"Resistor,Chip" MCR01MZPJ000 0OHM 5% 1/

LOC. NO.	PART NO.	DESCRIPTION / SPECIFICATION
R4118	0RJ0000C678	"Resistor,Chip" MCR01MZPJ000 0OHM 5% 1/
R4119	0RJ0000C678	"Resistor,Chip" MCR01MZPJ000 0OHM 5% 1/
R412	0RJ0332C678	"Resistor,Chip" MCR01MZPJ330 33OHM 5% 1
R4120	0RJ0000C678	"Resistor,Chip" MCR01MZPJ000 0OHM 5% 1/
R4121	0RJ0000C678	"Resistor,Chip" MCR01MZPJ000 0OHM 5% 1/
R4122	0RJ0000C678	"Resistor,Chip" MCR01MZPJ000 0OHM 5% 1/
R4123	0RJ0000C678	"Resistor,Chip" MCR01MZPJ000 0OHM 5% 1/
R4124	0RJ0000C678	"Resistor,Chip" MCR01MZPJ000 0OHM 5% 1/
R413	0RJ0332C678	"Resistor,Chip" MCR01MZPJ330 33OHM 5% 1
R4138	0RJ0000C678	"Resistor,Chip" MCR01MZPJ000 0OHM 5% 1/
R4139	0RJ0000C678	"Resistor,Chip" MCR01MZPJ000 0OHM 5% 1/
R4140	0RJ0752C678	"Resistor,Chip" MCR01MZPJ750 75OHM 5% 1
R4141	0RJ0752C678	"Resistor,Chip" MCR01MZPJ750 75OHM 5% 1
R4142	0RJ0752C678	"Resistor,Chip" MCR01MZPJ750 75OHM 5% 1
R4143	0RJ2000C678	"Resistor,Chip" MCR01MZPJ201 200OHM 5%
R4144	0RJ0000C678	"Resistor,Chip" MCR01MZPJ000 0OHM 5% 1/
R4145	0RJ2000C678	"Resistor,Chip" MCR01MZPJ201 200OHM 5%
R4146	0RJ1000C678	"Resistor,Chip" MCR01MZPJ101 100OHM 5%
R4147	0RJ1000C678	"Resistor,Chip" MCR01MZPJ101 100OHM 5%
R4148	0RJ0000C678	"Resistor,Chip" MCR01MZPJ000 0OHM 5% 1/
R415	0RJ0682C678	"Resistor,Chip" MCR01MZPJ680 68OHM 5% 1
R4150	0RJ1000C678	"Resistor,Chip" MCR01MZPJ101 100OHM 5%
R4151	0RJ0000C678	"Resistor,Chip" MCR01MZPJ000 0OHM 5% 1/
R4152	0RJ1000C678	"Resistor,Chip" MCR01MZPJ101 100OHM 5%
R4153	0RJ0752C678	"Resistor,Chip" MCR01MZPJ750 75OHM 5% 1
R4154	0RJ0752C678	"Resistor,Chip" MCR01MZPJ750 75OHM 5% 1
R4155	0RJ0752C678	"Resistor,Chip" MCR01MZPJ750 75OHM 5% 1
R416	0RJ0332C678	"Resistor,Chip" MCR01MZPJ330 33OHM 5% 1
R418	0RJ0682C678	"Resistor,Chip" MCR01MZPJ680 68OHM 5% 1
R419	0RJ0332C678	"Resistor,Chip" MCR01MZPJ330 33OHM 5% 1
R419	0RJ0752C678	"Resistor,Chip" MCR01MZPJ750 75OHM 5% 1
R420	0RJ0332C678	"Resistor,Chip" MCR01MZPJ330 33OHM 5% 1
R420	0RJ0752C678	"Resistor,Chip" MCR01MZPJ750 75OHM 5% 1
R421	0RJ0332C678	"Resistor,Chip" MCR01MZPJ330 33OHM 5% 1
R421	0RJ0752C678	"Resistor,Chip" MCR01MZPJ750 75OHM 5% 1
R422	0RJ0752C678	"Resistor,Chip" MCR01MZPJ750 75OHM 5% 1
R422	0RJ9101D477	"Resistor,Chip" MCR03EZPF912 9.1KOHM 1%
R423	0RJ0682C678	"Resistor,Chip" MCR01MZPJ680 68OHM 5% 1
R423	0RJ1800C678	"Resistor,Chip" MCR01MZPJ181 180OHM 5%
R424	0RJ3900C678	"Resistor,Chip" MCR01MZP5J391 390OHM 5%
R424	0RJ9101D477	"Resistor,Chip" MCR03EZPF912 9.1KOHM 1%
R425	0RJ0332C678	"Resistor,Chip" MCR01MZPJ330 33OHM 5% 1
R425	0RJ1800C678	"Resistor,Chip" MCR01MZPJ181 180OHM 5%
R426	0RJ0752C678	"Resistor,Chip" MCR01MZPJ750 75OHM 5% 1
R427	0RJ0682C678	"Resistor,Chip" MCR01MZPJ680 68OHM 5% 1
R428	0RJ0332C678	"Resistor,Chip" MCR01MZPJ330 33OHM 5% 1
R429	0RJ0752C678	"Resistor,Chip" MCR01MZPJ750 75OHM 5% 1
R430	0RJ0682C678	"Resistor,Chip" MCR01MZPJ680 68OHM 5% 1
R433	0RJ1002C678	"Resistor,Chip" MCR01MZPJ103 10KOHM 5%
R434	0RJ1002D677	"Resistor,Chip" MCR03EZPJ103 10KOHM 5%
R435	0RJ1000C678	"Resistor,Chip" MCR01MZPJ101 100OHM 5%
R436	0RJ0222C678	"Resistor,Chip" MCR01MZPJ220 22OHM 5% 1
R436	0RJ1000C678	"Resistor,Chip" MCR01MZPJ101 100OHM 5%
R437	0RJ1000C678	"Resistor,Chip" MCR01MZPJ101 100OHM 5%
R438	0RJ1000C678	"Resistor,Chip" MCR01MZPJ101 100OHM 5%

LOC. NO.	PART NO.	DESCRIPTION / SPECIFICATION
R439	0RJ1001C678	"Resistor,Chip" MCR01MZPJ102 1KOHM 5% 1
R440	0RJ1001C678	"Resistor,Chip" MCR01MZPJ102 1KOHM 5% 1
R441	0RJ0332C678	"Resistor,Chip" MCR01MZPJ330 33OHM 5% 1
R442	0RJ0332C678	"Resistor,Chip" MCR01MZPJ330 33OHM 5% 1
R443	0RJ0332C678	"Resistor,Chip" MCR01MZPJ330 33OHM 5% 1
R445	0RJ0332C678	"Resistor,Chip" MCR01MZPJ330 33OHM 5% 1
R446	0RJ0332C678	"Resistor,Chip" MCR01MZPJ330 33OHM 5% 1
R447	0RJ0332C678	"Resistor,Chip" MCR01MZPJ330 33OHM 5% 1
R448	0RJ0000C678	"Resistor,Chip" MCR01MZPJ000 0OHM 5% 1/
R449	0RJ0332C478	"Resistor,Chip" MCR01MZPF330 33OHM 1% 1
R450	0RJ4701C678	"Resistor,Chip" MCR01MZPJ472 4.7KOHM 5%
R451	0RJ4701C678	"Resistor,Chip" MCR01MZPJ472 4.7KOHM 5%
R454	0RJ0222C678	"Resistor,Chip" MCR01MZPJ220 22OHM 5% 1
R455	0RJ0222C678	"Resistor,Chip" MCR01MZPJ220 22OHM 5% 1
R456	0RJ0332C678	"Resistor,Chip" MCR01MZPJ330 33OHM 5% 1
R457	0RJ0000C678	"Resistor,Chip" MCR01MZPJ000 0OHM 5% 1/
R458	0RJ0000C678	"Resistor,Chip" MCR01MZPJ000 0OHM 5% 1/
R459	0RJ0000C678	"Resistor,Chip" MCR01MZPJ000 0OHM 5% 1/
R460	0RJ1002C678	"Resistor,Chip" MCR01MZPJ103 10KOHM 5%
R464	0RJ1001C678	"Resistor,Chip" MCR01MZPJ102 1KOHM 5% 1
R464	0RJ4701C678	"Resistor,Chip" MCR01MZPJ472 4.7KOHM 5%
R465	0RJ4701C678	"Resistor,Chip" MCR01MZPJ472 4.7KOHM 5%
R467	0RJ1002C678	"Resistor,Chip" MCR01MZPJ103 10KOHM 5%
R468	0RJ1002C678	"Resistor,Chip" MCR01MZPJ103 10KOHM 5%
R472	0RJ1002C678	"Resistor,Chip" MCR01MZPJ103 10KOHM 5%
R474	0RJ1001C678	"Resistor,Chip" MCR01MZPJ102 1KOHM 5% 1
R475	0RJ1000C678	"Resistor,Chip" MCR01MZPJ101 100OHM 5%
R476	0RJ1000C678	"Resistor,Chip" MCR01MZPJ101 100OHM 5%
R477	0RJ1002C678	"Resistor,Chip" MCR01MZPJ103 10KOHM 5%
R478	0RJ1002C678	"Resistor,Chip" MCR01MZPJ103 10KOHM 5%
R481	0RJ1002C678	"Resistor,Chip" MCR01MZPJ103 10KOHM 5%
R485	0RJ0222C678	"Resistor,Chip" MCR01MZPJ220 22OHM 5% 1
R486	0RJ0222C678	"Resistor,Chip" MCR01MZPJ220 22OHM 5% 1
R491	0RJ1002C678	"Resistor,Chip" MCR01MZPJ103 10KOHM 5%
R492	0RJ1002C678	"Resistor,Chip" MCR01MZPJ103 10KOHM 5%
R496	0RJ4701C678	"Resistor,Chip" MCR01MZPJ472 4.7KOHM 5%
R497	0RJ4701C678	"Resistor,Chip" MCR01MZPJ472 4.7KOHM 5%
R5002	0RJ5601C678	"Resistor,Chip" MCR01MZPJ562 5.6KOHM 5%
R5003	0RJ5601C678	"Resistor,Chip" MCR01MZPJ562 5.6KOHM 5%
R5004	0RJ2001C678	"Resistor,Chip" MCR01MZPJ202 2KOHM 5% 1
R5005	0RJ2001C678	"Resistor,Chip" MCR01MZPJ202 2KOHM 5% 1
R5008	0RJ0000C678	"Resistor,Chip" MCR01MZPJ000 0OHM 5% 1/
R5009	0RJ0000C678	"Resistor,Chip" MCR01MZPJ000 0OHM 5% 1/
R5010	0RJ0471D677	"Resistor,Chip" MCR03EZPJ4R7 4.7OHM 5%
R5011	0RJ0471D677	"Resistor,Chip" MCR03EZPJ4R7 4.7OHM 5%
R5012	0RJ0471D677	"Resistor,Chip" MCR03EZPJ4R7 4.7OHM 5%
R5013	0RJ0471D677	"Resistor,Chip" MCR03EZPJ4R7 4.7OHM 5%
R5014	0RJ0471D677	"Resistor,Chip" MCR03EZPJ4R7 4.7OHM 5%
R5015	0RJ0471D677	"Resistor,Chip" MCR03EZPJ4R7 4.7OHM 5%
R5016	0RJ0471D677	"Resistor,Chip" MCR03EZPJ4R7 4.7OHM 5%
R5017	0RJ0471D677	"Resistor,Chip" MCR03EZPJ4R7 4.7OHM 5%
R5018	0RJ4701D677	"Resistor,Chip" MCR03EZPJ472 4.7KOHM 5%
R5019	0RJ4701D677	"Resistor,Chip" MCR03EZPJ472 4.7KOHM 5%
R5020	0RJ4701D677	"Resistor,Chip" MCR03EZPJ472 4.7KOHM 5%
R5021	0RJ4701D677	"Resistor,Chip" MCR03EZPJ472 4.7KOHM 5%

LOC. NO.	PART NO.	DESCRIPTION / SPECIFICATION
R5022	0RJ3302C678	"Resistor,Chip" MCR01MZPJ333 33KOHM 5%
R5022	0RJ6801C678	"Resistor,Chip" MCR01MZPJ682 6.8KOHM 5%
R5023	0RJ4701C678	"Resistor,Chip" MCR01MZPJ472 4.7KOHM 5%
R5024	0RJ0222C678	"Resistor,Chip" MCR01MZPJ220 22OHM 5% 1
R5025	0RJ0000C678	"Resistor,Chip" MCR01MZPJ000 0OHM 5% 1/
R5026	0RJ4701C678	"Resistor,Chip" MCR01MZPJ472 4.7KOHM 5%
R5029	0RJ0000D677	"Resistor,Chip" MCR03EZPJ000 0OHM 5% 1/
R5031	0RJ1000D677	"Resistor,Chip" MCR03EZPJ101 100OHM 5%
R5034	0RJ0000D677	"Resistor,Chip" MCR03EZPJ000 0OHM 5% 1/
R5035	0RJ0392D677	"Resistor,Chip" MCR03EZPJ390 39OHM 5% 1
R5036	0RJ0392D677	"Resistor,Chip" MCR03EZPJ390 39OHM 5% 1
R5037	0RJ0222D677	"Resistor,Chip" MCR03EZPJ220 22OHM 5% 1
R5038	0RJ0222D677	"Resistor,Chip" MCR03EZPJ220 22OHM 5% 1
R5039	0RJ2200D677	"Resistor,Chip" MCR03EZPJ221 220OHM 5%
R5040	0RJ2200D677	"Resistor,Chip" MCR03EZPJ221 220OHM 5%
R5041	0RJ1001D677	"Resistor,Chip" MCR03EZPJ102 1KOHM 5% 1
R5042	0RJ1001D677	"Resistor,Chip" MCR03EZPJ102 1KOHM 5% 1
R5043	0RJ2200D677	"Resistor,Chip" MCR03EZPJ221 220OHM 5%
R5045	0RJ1001D677	"Resistor,Chip" MCR03EZPJ102 1KOHM 5% 1
R5046	0RJ1001D677	"Resistor,Chip" MCR03EZPJ102 1KOHM 5% 1
R5048	0RJ1001D677	"Resistor,Chip" MCR03EZPJ102 1KOHM 5% 1
R5049	0RJ1001D677	"Resistor,Chip" MCR03EZPJ102 1KOHM 5% 1
R5051	0RJ1001D677	"Resistor,Chip" MCR03EZPJ102 1KOHM 5% 1
R5052	0RJ1001D677	"Resistor,Chip" MCR03EZPJ102 1KOHM 5% 1
R5055	0RJ1001D677	"Resistor,Chip" MCR03EZPJ102 1KOHM 5% 1
R5057	0RJ1000D677	"Resistor,Chip" MCR03EZPJ101 100OHM 5%
R5058	0RJ1001D677	"Resistor,Chip" MCR03EZPJ102 1KOHM 5% 1
R5059	0RJ2200D677	"Resistor,Chip" MCR03EZPJ221 220OHM 5%
R5060	0RJ2200D677	"Resistor,Chip" MCR03EZPJ221 220OHM 5%
R5061	0RJ2200D677	"Resistor,Chip" MCR03EZPJ221 220OHM 5%
R5062	0RJ2200D677	"Resistor,Chip" MCR03EZPJ221 220OHM 5%
R5063	0RJ2200D677	"Resistor,Chip" MCR03EZPJ221 220OHM 5%
R5068	0RJ4701D677	"Resistor,Chip" MCR03EZPJ472 4.7KOHM 5%
R5069	0RJ4701D677	"Resistor,Chip" MCR03EZPJ472 4.7KOHM 5%
R5070	0RJ2201D677	"Resistor,Chip" MCR03EZPJ222 2.2KOHM 5%
R5071	0RJ2201D677	"Resistor,Chip" MCR03EZPJ222 2.2KOHM 5%
R5072	0RJ0000D677	"Resistor,Chip" MCR03EZPJ000 0OHM 5% 1/
R5073	0RJ0000D677	"Resistor,Chip" MCR03EZPJ000 0OHM 5% 1/
R5076	0RJ4703D677	"Resistor,Chip" MCR03EZPJ474 470KOHM 5%
R5077	0RJ2001D677	"Resistor,Chip" MCR03EZPJ202 2KOHM 5% 1
R5078	0RJ2001D677	"Resistor,Chip" MCR03EZPJ202 2KOHM 5% 1
R5079	0RJ4703D677	"Resistor,Chip" MCR03EZPJ474 470KOHM 5%
R508	0RJ0000C678	"Resistor,Chip" MCR01MZPJ000 0OHM 5% 1/
R5080	0RJ1501D677	"Resistor,Chip" MCR03EZPJ152 1.5KOHM 5%
R5081	0RJ1501D677	"Resistor,Chip" MCR03EZPJ152 1.5KOHM 5%
R5082	0RJ0000D677	"Resistor,Chip" MCR03EZPJ000 0OHM 5% 1/
R509	0RJ0000C678	"Resistor,Chip" MCR01MZPJ000 0OHM 5% 1/
R513	0RJ0272C678	"Resistor,Chip" MCR01MZPJ270 27OHM 5% 1
R514	0RJ1001C678	"Resistor,Chip" MCR01MZPJ102 1KOHM 5% 1
R523	0RJ1200C678	"Resistor,Chip" MCR01MZPJ121 120OHM 5%
R524	0RJ0752C678	"Resistor,Chip" MCR01MZPJ750 75OHM 5% 1
R525	0RJ1100D677	"Resistor,Chip" MCR03EZPJ111 110OHM 5%
R540	0RJ3301C678	"Resistor,Chip" MCR01MZPJ332 3.3KOHM 5%
R541	0RJ0222C678	"Resistor,Chip" MCR01MZPJ220 22OHM 5% 1
R542	0RJ0222C678	"Resistor,Chip" MCR01MZPJ220 22OHM 5% 1

LOC. NO.	PART NO.	DESCRIPTION / SPECIFICATION
R543	0RJ0000C678	"Resistor,Chip" MCR01MZPJ000 0OHM 5% 1/
R559	0RJ0331D677	"Resistor,Chip" MCR03EZPJ3R3 3.3OHM 5%
R560	0RJ0331D677	"Resistor,Chip" MCR03EZPJ3R3 3.3OHM 5%
R581	0RJ0331D677	"Resistor,Chip" MCR03EZPJ3R3 3.3OHM 5%
R582	0RJ0331D677	"Resistor,Chip" MCR03EZPJ3R3 3.3OHM 5%
R583	0RJ0331D677	"Resistor,Chip" MCR03EZPJ3R3 3.3OHM 5%
R584	0RJ0331D677	"Resistor,Chip" MCR03EZPJ3R3 3.3OHM 5%
R585	0RJ3001C678	"Resistor,Chip" MCR01MZPJ302 3KOHM 5% 1
R586	0RJ0000C678	"Resistor,Chip" MCR01MZPJ000 0OHM 5% 1/
R587	0RJ4702C678	"Resistor,Chip" MCR01MZPJ473 47KOHM 5%
R588	0RJ0222C678	"Resistor,Chip" MCR01MZPJ220 22OHM 5% 1
R589	0RJ0222C678	"Resistor,Chip" MCR01MZPJ220 22OHM 5% 1
R590	0RJ0222C678	"Resistor,Chip" MCR01MZPJ220 22OHM 5% 1
R591	0RJ0222C678	"Resistor,Chip" MCR01MZPJ220 22OHM 5% 1
R593	0RJ4702C678	"Resistor,Chip" MCR01MZPJ473 47KOHM 5%
R594	0RJ0222C678	"Resistor,Chip" MCR01MZPJ220 22OHM 5% 1
R595	0RJ0222C678	"Resistor,Chip" MCR01MZPJ220 22OHM 5% 1
R6001	0RJ1001C678	"Resistor,Chip" MCR01MZPJ102 1KOHM 5% 1
R6002	0RJ0222C678	"Resistor,Chip" MCR01MZPJ220 22OHM 5% 1
R6004	0RJ4701C678	"Resistor,Chip" MCR01MZPJ472 4.7KOHM 5%
R6005	0RJ4701C678	"Resistor,Chip" MCR01MZPJ472 4.7KOHM 5%
R6006	0RJ4701C678	"Resistor,Chip" MCR01MZPJ472 4.7KOHM 5%
R6007	0RJ4701C678	"Resistor,Chip" MCR01MZPJ472 4.7KOHM 5%
R6008	0RJ4701C678	"Resistor,Chip" MCR01MZPJ472 4.7KOHM 5%
R601	0RJ1201C678	"Resistor,Chip" MCR01MZPJ122 1.2KOHM 5%
R6014	0RJ1001C678	"Resistor,Chip" MCR01MZPJ102 1KOHM 5% 1
R6015	0RJ1001C678	"Resistor,Chip" MCR01MZPJ102 1KOHM 5% 1
R6016	0RJ0222C678	"Resistor,Chip" MCR01MZPJ220 22OHM 5% 1
R6017	0RJ4701C678	"Resistor,Chip" MCR01MZPJ472 4.7KOHM 5%
R6018	0RJ4701C678	"Resistor,Chip" MCR01MZPJ472 4.7KOHM 5%
R6019	0RJ4701C678	"Resistor,Chip" MCR01MZPJ472 4.7KOHM 5%
R6020	0RJ1002C678	"Resistor,Chip" MCR01MZPJ103 10KOHM 5%
R6022	0RJ1002C678	"Resistor,Chip" MCR01MZPJ103 10KOHM 5%
R6032	0RJ0000C678	"Resistor,Chip" MCR01MZPJ000 0OHM 5% 1/
R6035	0RJ0752C678	"Resistor,Chip" MCR01MZPJ750 75OHM 5% 1
R6036	0RJ1002C678	"Resistor,Chip" MCR01MZPJ103 10KOHM 5%
R6037	0RJ1000C678	"Resistor,Chip" MCR01MZPJ101 100OHM 5%
R6038	0RJ1000C678	"Resistor,Chip" MCR01MZPJ101 100OHM 5%
R6039	0RJ0000C678	"Resistor,Chip" MCR01MZPJ000 0OHM 5% 1/
R6044	0RJ6802C678	"Resistor,Chip" MCR01MZPJ683 68KOHM 5%
R6045	0RJ6802C678	"Resistor,Chip" MCR01MZPJ683 68KOHM 5%
R6048	0RJ0000C678	"Resistor,Chip" MCR01MZPJ000 0OHM 5% 1/
R6048	0RJ1001C678	"Resistor,Chip" MCR01MZPJ102 1KOHM 5% 1
R6049	0RJ3300C678	"Resistor,Chip" MCR01MZPJ331 330OHM 5%
R609	0RJ0222C678	"Resistor,Chip" MCR01MZPJ220 22OHM 5% 1
R610	0RJ0222C678	"Resistor,Chip" MCR01MZPJ220 22OHM 5% 1
R611	0RJ0222C678	"Resistor,Chip" MCR01MZPJ220 22OHM 5% 1
R614	0RJ0222C678	"Resistor,Chip" MCR01MZPJ220 22OHM 5% 1
R615	0RJ0000C678	"Resistor,Chip" MCR01MZPJ000 0OHM 5% 1/
R616	0RJ0000C678	"Resistor,Chip" MCR01MZPJ000 0OHM 5% 1/
R618	0RJ4701C678	"Resistor,Chip" MCR01MZPJ472 4.7KOHM 5%
R619	0RJ4701C678	"Resistor,Chip" MCR01MZPJ472 4.7KOHM 5%
R621	0RJ0222C678	"Resistor,Chip" MCR01MZPJ220 22OHM 5% 1
R631	0RJ0000C678	"Resistor,Chip" MCR01MZPJ000 0OHM 5% 1/
R632	0RJ1001C678	"Resistor,Chip" MCR01MZPJ102 1KOHM 5% 1

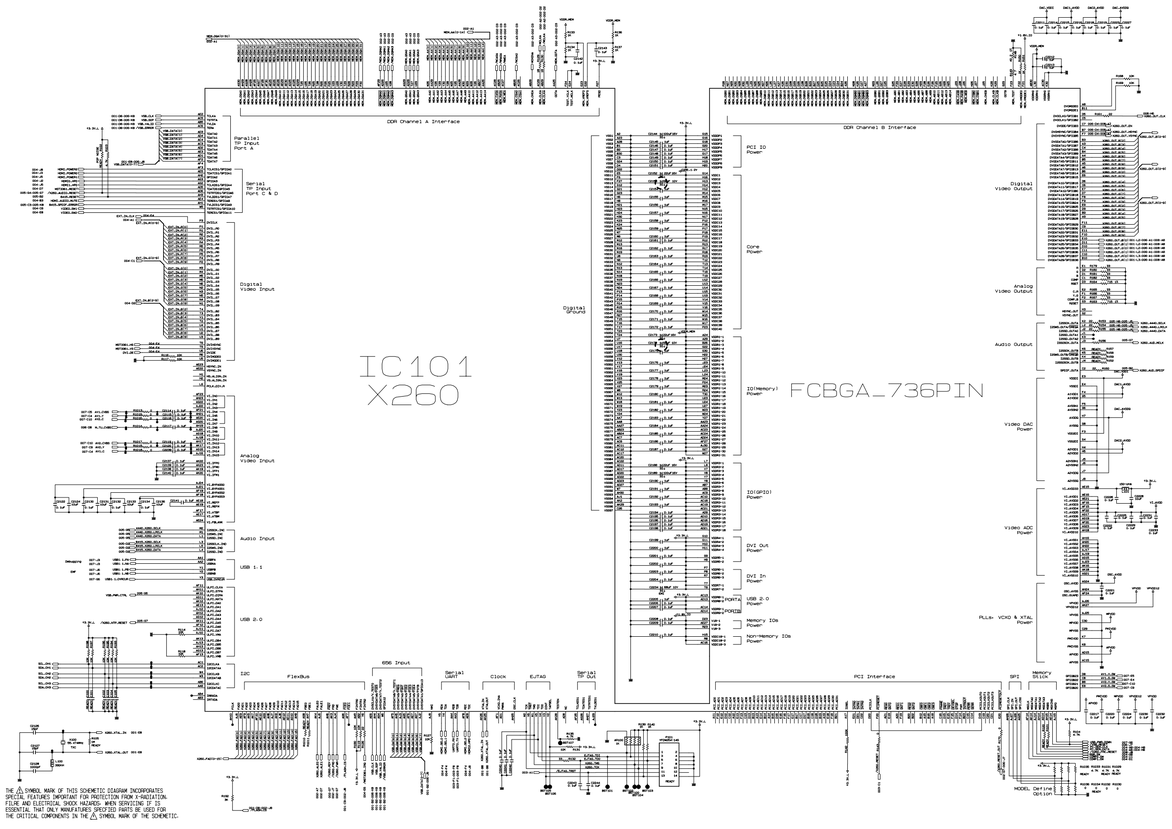
LOC. NO.	PART NO.	DESCRIPTION / SPECIFICATION
R633	0RJ4701C678	"Resistor,Chip" MCR01MZPJ472 4.7KOHM 5%
R635	0RJ0000C678	"Resistor,Chip" MCR01MZPJ000 0OHM 5% 1/
R636	0RJ0000C678	"Resistor,Chip" MCR01MZPJ000 0OHM 5% 1/
R637	0RJ0000C678	"Resistor,Chip" MCR01MZPJ000 0OHM 5% 1/
R638	0RJ1001C678	"Resistor,Chip" MCR01MZPJ102 1KOHM 5% 1
R640	0RJ3001C678	"Resistor,Chip" MCR01MZPJ302 3KOHM 5% 1
R642	0RJ0000C678	"Resistor,Chip" MCR01MZPJ000 0OHM 5% 1/
R643	0RJ0000C678	"Resistor,Chip" MCR01MZPJ000 0OHM 5% 1/
R644	0RJ0000C678	"Resistor,Chip" MCR01MZPJ000 0OHM 5% 1/
R645	0RJ0000C678	"Resistor,Chip" MCR01MZPJ000 0OHM 5% 1/
R646	0RJ3001C678	"Resistor,Chip" MCR01MZPJ302 3KOHM 5% 1
R654	0RJ1001C678	"Resistor,Chip" MCR01MZPJ102 1KOHM 5% 1
R655	0RJ1002C678	"Resistor,Chip" MCR01MZPJ103 10KOHM 5%
R656	0RJ0000C678	"Resistor,Chip" MCR01MZPJ000 0OHM 5% 1/
R658	0RJ0222C678	"Resistor,Chip" MCR01MZPJ220 22OHM 5% 1
R662	0RJ3300C678	"Resistor,Chip" MCR01MZPJ331 330OHM 5%
R664	0RJ0000C678	"Resistor,Chip" MCR01MZPJ000 0OHM 5% 1/
R665	0RJ4701C678	"Resistor,Chip" MCR01MZPJ472 4.7KOHM 5%
R667	0RJ4701C678	"Resistor,Chip" MCR01MZPJ472 4.7KOHM 5%
R668	0RJ1004D477	"Resistor,Chip" MCR03EZPF105 1MOHM 1% 1
R670	0RJ1202C678	"Resistor,Chip" MCR01MZPJ123 12KOHM 5%
R670	0RJ5601C678	"Resistor,Chip" MCR01MZPJ562 5.6KOHM 5%
R671	0RJ1202C678	"Resistor,Chip" MCR01MZPJ123 12KOHM 5%
R671	0RJ5601C678	"Resistor,Chip" MCR01MZPJ562 5.6KOHM 5%
R672	0RJ2001C678	"Resistor,Chip" MCR01MZPJ202 2KOHM 5% 1
R672	0RJ2001C678	"Resistor,Chip" MCR01MZPJ202 2KOHM 5% 1
R673	0RJ2001C678	"Resistor,Chip" MCR01MZPJ202 2KOHM 5% 1
R673	0RJ2001C678	"Resistor,Chip" MCR01MZPJ202 2KOHM 5% 1
R678	0RJ0000C678	"Resistor,Chip" MCR01MZPJ000 0OHM 5% 1/
R679	0RJ0000C678	"Resistor,Chip" MCR01MZPJ000 0OHM 5% 1/
R680	0RJ0000C678	"Resistor,Chip" MCR01MZPJ000 0OHM 5% 1/
R681	0RJ0000C678	"Resistor,Chip" MCR01MZPJ000 0OHM 5% 1/
R682	0RJ0000C678	"Resistor,Chip" MCR01MZPJ000 0OHM 5% 1/
R683	0RJ0000C678	"Resistor,Chip" MCR01MZPJ000 0OHM 5% 1/
R684	0RJ0000C678	"Resistor,Chip" MCR01MZPJ000 0OHM 5% 1/
R685	0RJ0000C678	"Resistor,Chip" MCR01MZPJ000 0OHM 5% 1/
R693	0RJ3301C678	"Resistor,Chip" MCR01MZPJ332 3.3KOHM 5%
R696	0RJ3001C678	"Resistor,Chip" MCR01MZPJ302 3KOHM 5% 1
R697	0RJ1000C678	"Resistor,Chip" MCR01MZPJ101 100OHM 5%
R698	0RJ1000C678	"Resistor,Chip" MCR01MZPJ101 100OHM 5%
R701	0RJ0752C678	"Resistor,Chip" MCR01MZPJ750 75OHM 5% 1
R702	0RJ1001C678	"Resistor,Chip" MCR01MZPJ102 1KOHM 5% 1
R7034	0RJ0000C678	"Resistor,Chip" MCR01MZPJ000 0OHM 5% 1/
R7035	0RJ0000C678	"Resistor,Chip" MCR01MZPJ000 0OHM 5% 1/
R7036	0RJ0000C678	"Resistor,Chip" MCR01MZPJ000 0OHM 5% 1/
R7037	0RJ0000C678	"Resistor,Chip" MCR01MZPJ000 0OHM 5% 1/
R7038	0RJ0000C678	"Resistor,Chip" MCR01MZPJ000 0OHM 5% 1/
R7049	0RJ0222C678	"Resistor,Chip" MCR01MZPJ220 22OHM 5% 1
R705	0RJ0752C678	"Resistor,Chip" MCR01MZPJ750 75OHM 5% 1
R7080	0RJ1002C678	"Resistor,Chip" MCR01MZPJ103 10KOHM 5%
R7082	0RJ1002C678	"Resistor,Chip" MCR01MZPJ103 10KOHM 5%
R7083	0RJ0511D677	"Resistor,Chip" MCR03EZPJ5R1 5.1OHM 5%
R7084	0RJ0511D677	"Resistor,Chip" MCR03EZPJ5R1 5.1OHM 5%
R7085	0RJ1502C478	"Resistor,Chip" MCR01MZPF153 15KOHM 1%
R7086	0RJ1502C478	"Resistor,Chip" MCR01MZPF153 15KOHM 1%

LOC. NO.	PART NO.	DESCRIPTION / SPECIFICATION
R7087	0RJ0000C678	"Resistor,Chip" MCR01MZPJ000 0OHM 5% 1/
R712	0RJ0752C678	"Resistor,Chip" MCR01MZPJ750 75OHM 5% 1
R713	0RJ0752C678	"Resistor,Chip" MCR01MZPJ750 75OHM 5% 1
R714	0RJ0752C678	"Resistor,Chip" MCR01MZPJ750 75OHM 5% 1
R715	0RJ4703C678	"Resistor,Chip" MCR01MZPJ474 470KOHM 5%
R716	0RJ4703C678	"Resistor,Chip" MCR01MZPJ474 470KOHM 5%
R717	0RJ1001C678	"Resistor,Chip" MCR01MZPJ102 1KOHM 5% 1
R718	0RJ4703C678	"Resistor,Chip" MCR01MZPJ474 470KOHM 5%
R719	0RJ4703C678	"Resistor,Chip" MCR01MZPJ474 470KOHM 5%
R720	0RJ0752C678	"Resistor,Chip" MCR01MZPJ750 75OHM 5% 1
R721	0RJ0000C678	"Resistor,Chip" MCR01MZPJ000 0OHM 5% 1/
R721	0RJ1000C678	"Resistor,Chip" MCR01MZPJ101 100OHM 5%
R723	0RJ0000C678	"Resistor,Chip" MCR01MZPJ000 0OHM 5% 1/
R723	0RJ1000C678	"Resistor,Chip" MCR01MZPJ101 100OHM 5%
R724	0RJ0000C678	"Resistor,Chip" MCR01MZPJ000 0OHM 5% 1/
R724	0RJ1000C678	"Resistor,Chip" MCR01MZPJ101 100OHM 5%
R726	0RJ0000C678	"Resistor,Chip" MCR01MZPJ000 0OHM 5% 1/
R726	0RJ1000C678	"Resistor,Chip" MCR01MZPJ101 100OHM 5%
R728	0RJ1001C678	"Resistor,Chip" MCR01MZPJ102 1KOHM 5% 1
R729	0RJ0000C678	"Resistor,Chip" MCR01MZPJ000 0OHM 5% 1/
R729	0RJ1000C678	"Resistor,Chip" MCR01MZPJ101 100OHM 5%
R730	0RJ1002C678	"Resistor,Chip" MCR01MZPJ103 10KOHM 5%
R733	0RJ0000C678	"Resistor,Chip" MCR01MZPJ000 0OHM 5% 1/
R733	0RJ1000C678	"Resistor,Chip" MCR01MZPJ101 100OHM 5%
R736	0RJ1001C678	"Resistor,Chip" MCR01MZPJ102 1KOHM 5% 1
R737	0RJ1001C678	"Resistor,Chip" MCR01MZPJ102 1KOHM 5% 1
R738	0RJ1002C678	"Resistor,Chip" MCR01MZPJ103 10KOHM 5%
R739	0RJ0000C678	"Resistor,Chip" MCR01MZPJ000 0OHM 5% 1/
R740	0RJ0000C678	"Resistor,Chip" MCR01MZPJ000 0OHM 5% 1/
R741	0RJ0000C678	"Resistor,Chip" MCR01MZPJ000 0OHM 5% 1/
R744	0RJ4703C678	"Resistor,Chip" MCR01MZPJ474 470KOHM 5%
R745	0RJ4703C678	"Resistor,Chip" MCR01MZPJ474 470KOHM 5%
R748	0RJ0102C678	"Resistor,Chip" MCR01MZPJ100 10OHM 5% 1
R749	0RJ0000C678	"Resistor,Chip" MCR01MZPJ000 0OHM 5% 1/
R750	0RJ0000C678	"Resistor,Chip" MCR01MZPJ000 0OHM 5% 1/
R752	0RJ0222C678	"Resistor,Chip" MCR01MZPJ220 22OHM 5% 1
R771	0RJ2203D677	"Resistor,Chip" MCR03EZPJ224 220KOHM 5%
R772	0RJ0000C678	"Resistor,Chip" MCR01MZPJ000 0OHM 5% 1/
R773	0RJ0000C678	"Resistor,Chip" MCR01MZPJ000 0OHM 5% 1/
R774	0RJ0000C678	"Resistor,Chip" MCR01MZPJ000 0OHM 5% 1/
R775	0RJ0000C678	"Resistor,Chip" MCR01MZPJ000 0OHM 5% 1/
R777	0RJ2002D677	"Resistor,Chip" MCR03EZPJ203. 20KOHM 5%
R778	0RJ1001C678	"Resistor,Chip" MCR01MZPJ102 1KOHM 5% 1
R779	0RJ1001C678	"Resistor,Chip" MCR01MZPJ102 1KOHM 5% 1
R782	0RJ1002C678	"Resistor,Chip" MCR01MZPJ103 10KOHM 5%
R783	0RJ1002C678	"Resistor,Chip" MCR01MZPJ103 10KOHM 5%
R784	0RJ0511D677	"Resistor,Chip" MCR03EZPJ5R1 5.1OHM 5%
R785	0RJ0511D677	"Resistor,Chip" MCR03EZPJ5R1 5.1OHM 5%
R786	0RJ1502C478	"Resistor,Chip" MCR01MZPF153 15KOHM 1%
R787	0RJ1502C478	"Resistor,Chip" MCR01MZPF153 15KOHM 1%
R804	0RJ1002C678	"Resistor,Chip" MCR01MZPJ103 10KOHM 5%
OTHERs		
X100	EAW30352304	Crystal 9C55400023(16pf) 55.474

LOC. NO.	PART NO.	DESCRIPTION / SPECIFICATION
X300	6202TST001E	Crystal SX-1 24MHZ 30PPM(20PF)
X400	6202VDT002B	Crystal SX-1 14.31818MHZ 30PPM(
X500	6202VDT002H	Crystal SX-1 18.432MHZ 30PPM(16
X601	6212AB2872A	Crystal HC49SM 25MHZ 50PPM 20pF
X900	6212AB2872A	Crystal HC49SM 25MHZ 50PPM 20pF
J101	6612J10033A	"Jack,Complex" PMJ016-13 13P DIN/RCA 1
J600	6612J10024A	"Jack,Complex" KCN-BT-0-0056 4P NT/RCA
J705	6612J00062H	"Jack,Complex" PMJ029-01 14P DIN/RCA 1
J402	6612B00015B	"Jack,DIN" DC1R019WDH SOCKET 21P S
J403	6612B00015B	"Jack,DIN" DC1R019WDH SOCKET 21P S
J404	6612B00015B	"Jack,DIN" DC1R019WDH SOCKET 21P S
J1	EAG32151101	"Jack,Fiber Optic" "TOX177L(F,T) 3P TX 2.54"
J702	6612F00099A	"Jack,Phone" PEJ024-01 1P 4P STRAIGH
J703	6612F00099A	"Jack,Phone" PEJ024-01 1P 4P STRAIGH
J400	6612J10031A	"Jack,RCA" PPJ209-02 14.0MM 1RX5C
J401	6612J10031A	"Jack,RCA" PPJ209-02 14.0MM 1RX5C
J704	6612J10043A	"Jack,RCA" PPJ200-07 15MM 1RX4C AN
LED1	0DLBE0138AA	"LED,DIP" BL-BUBGE301 ROUND 3MM S
IC205	SAA30532516	"S/W,Firmware" 3.06 0DD3 NORTH AMERICA
IC309	SAA30643715	"S/W,Firmware" 3.02 B45B WORLD WIDE Su
SW101	140-313B	"Switch,Tact" KPT-1115AM 1C1P 12VDC 0
SW102	140-313B	"Switch,Tact" KPT-1115AM 1C1P 12VDC 0
SW103	140-313B	"Switch,Tact" KPT-1115AM 1C1P 12VDC 0
SW104	140-313B	"Switch,Tact" KPT-1115AM 1C1P 12VDC 0
SW105	140-313B	"Switch,Tact" KPT-1115AM 1C1P 12VDC 0
SW106	140-313B	"Switch,Tact" KPT-1115AM 1C1P 12VDC 0
SW107	140-313B	"Switch,Tact" KPT-1115AM 1C1P 12VDC 0
SW108	140-313B	"Switch,Tact" KPT-1115AM 1C1P 12VDC 0
TU600	EBL34917003	"Tuner,Analog/Digital" VA1Y2UR2201 NTSC/ATSC 5
VR400	6102W5V016A	Varistor AVRL161A1R1NT 10V 30% 1
VR401	6102W5V016A	Varistor AVRL161A1R1NT 10V 30% 1
VR402	6102W5V016A	Varistor AVRL161A1R1NT 10V 30% 1
VR403	6102W5V016A	Varistor AVRL161A1R1NT 10V 30% 1
VR404	6102W5V016A	Varistor AVRL161A1R1NT 10V 30% 1
VR405	6102W5V016A	Varistor AVRL161A1R1NT 10V 30% 1
VR405	6102W5V016A	Varistor AVRL161A1R1NT 10V 30% 1
VR406	6102W5V016A	Varistor AVRL161A1R1NT 10V 30% 1
VR406	6102W5V016A	Varistor AVRL161A1R1NT 10V 30% 1
VR407	6102W5V016A	Varistor AVRL161A1R1NT 10V 30% 1
VR407	6102W5V016A	Varistor AVRL161A1R1NT 10V 30% 1
VR408	6102W5V016A	Varistor AVRL161A1R1NT 10V 30% 1
VR409	6102W5V016A	Varistor AVRL161A1R1NT 10V 30% 1
VR410	6102W5V016A	Varistor AVRL161A1R1NT 10V 30% 1
VR411	6102W5V016A	Varistor AVRL161A1R1NT 10V 30% 1
CONNECTOR		
J300	6630G00001C	"Connector,DSUB" KCN-DS-1-0088 D-SUB 9P
J404	6630TGA004K	"Connector,DSUB" KCN-DS-1-0089 D-SUB 15P
J405	6630TGA004K	"Connector,DSUB" KCN-DS-1-0089 D-SUB 15P
P103	6630SK00604	"Connector,USB" UAR27-4K2300 A 1P 2.50M
P101	6602T20009C	"Connector,Wafer" SMAW200-04P 4P 2.00MM 1
P101	6602T20009L	"Connector,Wafer" SMAW200-12P 12P 2.00MM
P102	6602T20008N	"Connector,Wafer" SMW200-14P 14P 2.00MM 1
P102	6602T20009C	"Connector,Wafer" SMAW200-04P 4P 2.00MM 1

LOC. NO.	PART NO.	DESCRIPTION / SPECIFICATION
P103	6602T20009L	"Connector,Wafer" SMAW200-12P 12P 2.00MM
P104	6602T25008B	"Connector,Wafer" SMW250-03P 3P 2.50MM 1R
P105	6602T20008D	"Connector,Wafer" SMW200-05P 5P 2.00MM 1R
P501	6602T25008C	"Connector,Wafer" SMW250-04P 4P 2.50MM 1R
P502	6602T25008B	"Connector,Wafer" SMW250-03P 3P 2.50MM 1R
P600	6630V93270A	"Connector,Wafer" FI-RE51S-HFK-A 51P 0.50
P700	6602T20008N	"Connector,Wafer" SMW200-14P 14P 2.00MM 1
P701	6602T25008M	"Connector,Wafer" SMW250-13P 13P 2.50MM 1
P702	6602T25008J	"Connector,Wafer" SMW250-10P 10P 2.50MM 1
P703	6602T20008L	"Connector,Wafer" SMW200-12P 12P 2.00MM 1
P712	6602T20008D	"Connector,Wafer" SMW200-05P 5P 2.00MM 1R
C2	6630V90142A	"Connector,Wafer" TPH254-R-1419-6A 6P 2.5
P501	EAD30301901	"Harness,Single" DMS 4P CONNECTOR ASSY S
P502	6631900102A	"Harness,Single" SMH250 SMP250 300mM 2.5
P703	6631900010N	"Harness,Single" 12P 2.0MM 900MM SMH200
C1	5240VE0001T	"Harness,Single" RING D4.3 RING D4.3 100
C3	6631900012E	"Harness,Single" SMH250 SMH250 300mM 2.5
C4	6631900048A	"Harness,Single" SMH200-4P SMH200-4P 200
C5	6631900097N	"Harness,Single" SMH250 35097/35098 100_
C6	6631900098N	"Harness,Single" SMH250 35097/35098 600_
C7	6631900133E	"Harness,Single" LVDS FULL HD (JAE) FI-R
C8	6631T20032B	"Harness,Single" PHR-12P PHR-12P 600mM 2
C9	6631T20033K	"Harness,Single" SMH200-14P SMH200-14P 5
C10	6631T20037D	"Harness,Single" PHR-12P PHR-12P 700mM 2
C11	6631T20037E	"Harness,Single" PHR-12P PHR-12P 300mM 2
C12	6631T20041B	"Harness,Single" 12P-12P(PHR) PHR-12 PHR
C13	6631T25020L	"Harness,Single" SMH250 SMH250 250mM 2.5
C16	EAD36184801	"Harness,Single" SMH250 SMH250 400MM 2.5
C17	EAD36548901	"Harness,Single" SMH200 SMH200 500MM 2.0

LOC. NO.	PART NO.	DESCRIPTION / SPECIFICATION



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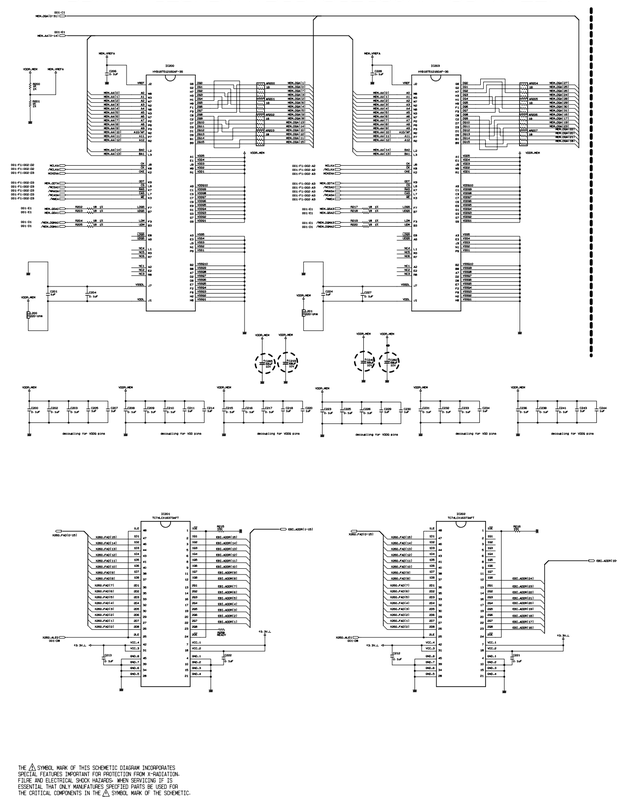

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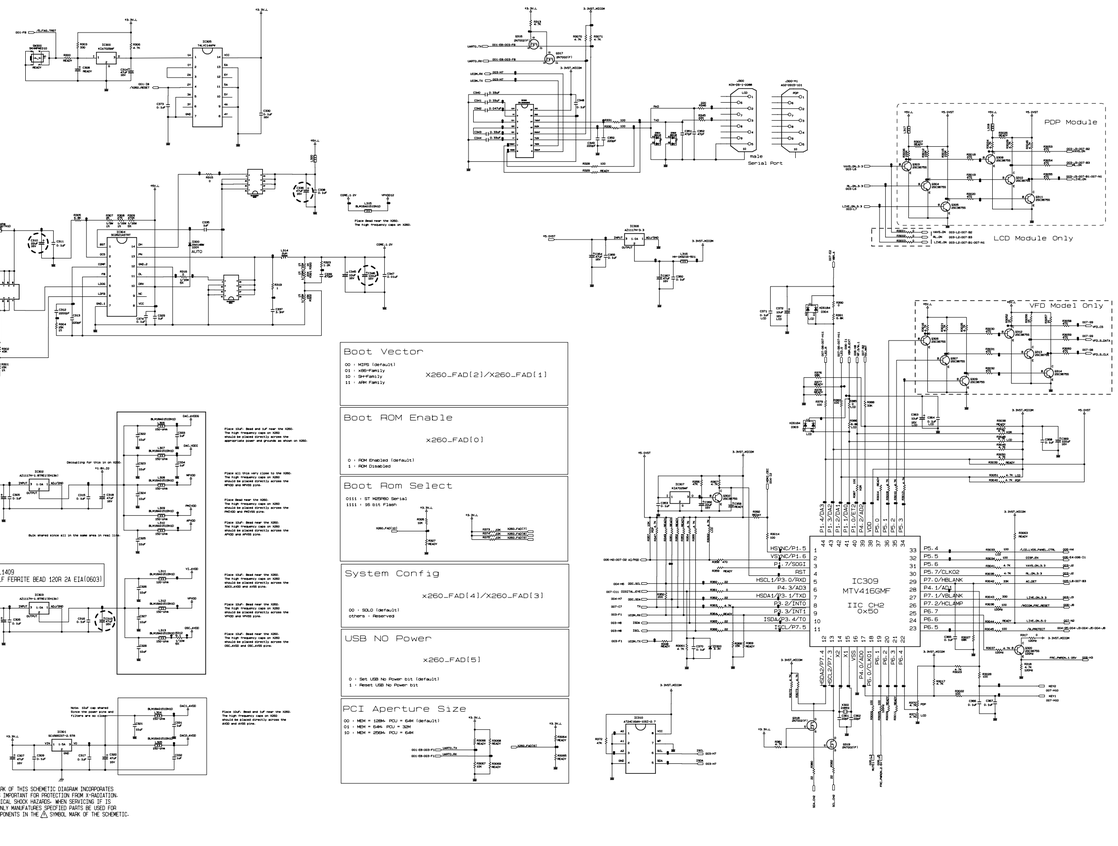

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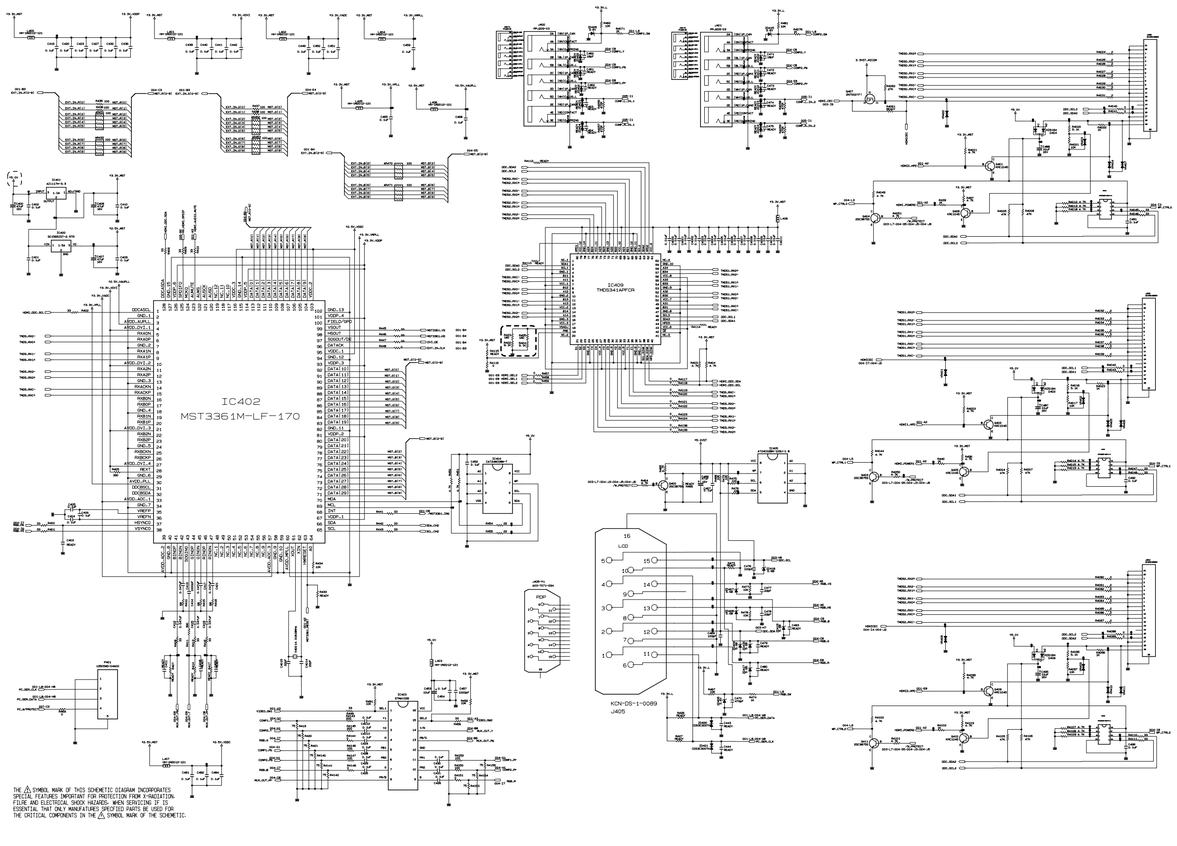

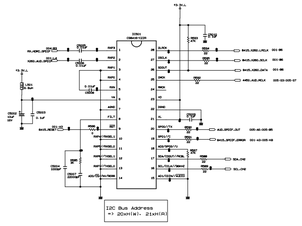

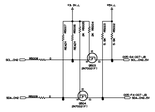

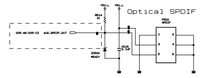

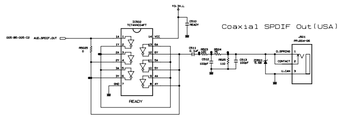

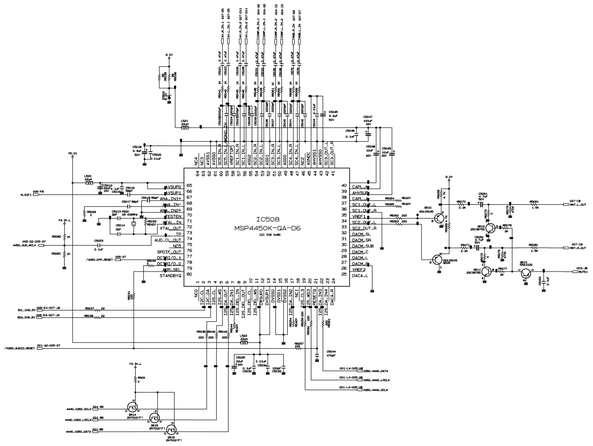

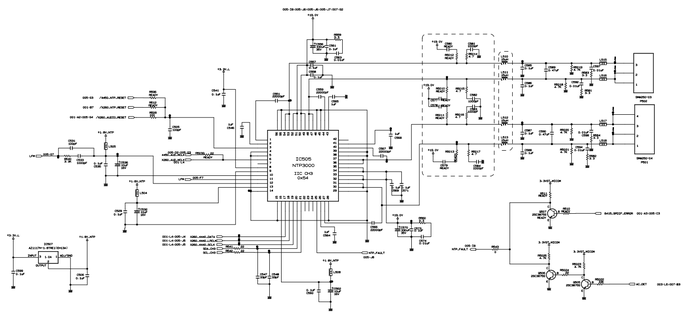

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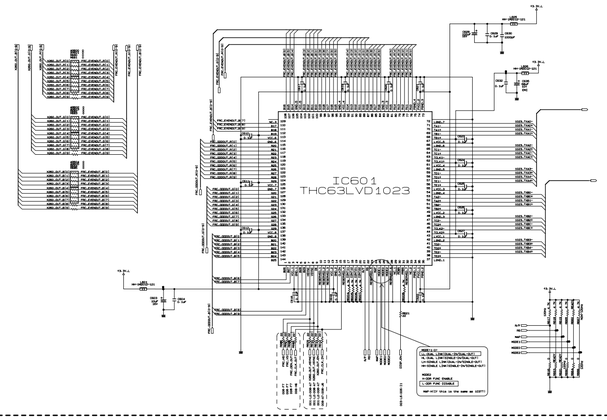
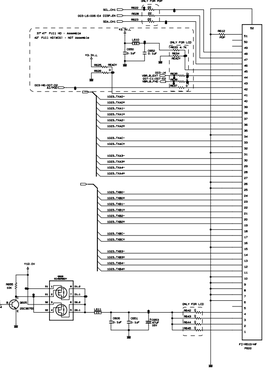
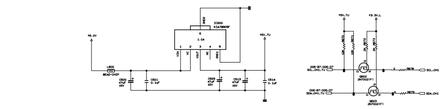
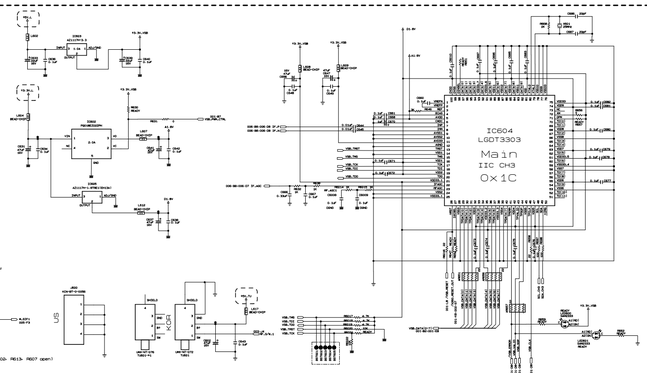
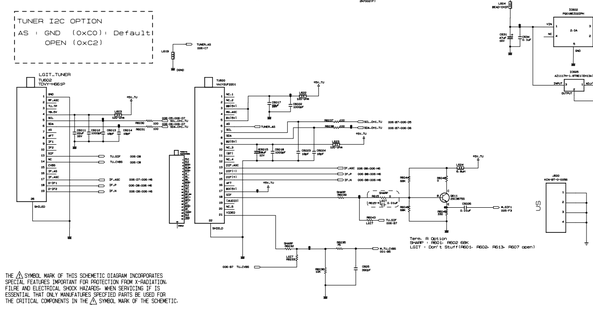








TUNER I2C OPTION
AS : GND (0xC0): Default!
OPEN (0xC2)



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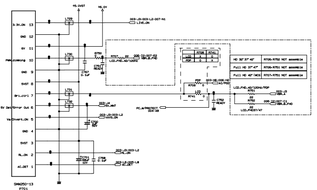

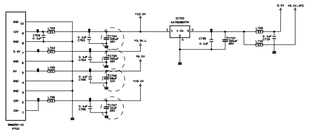

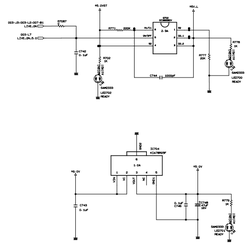

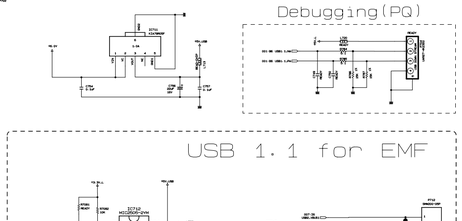

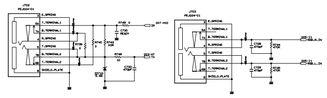

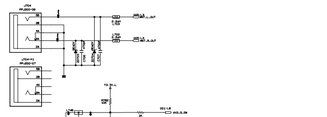

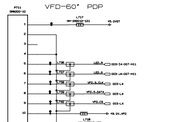

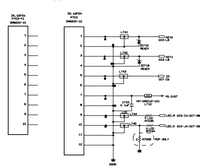

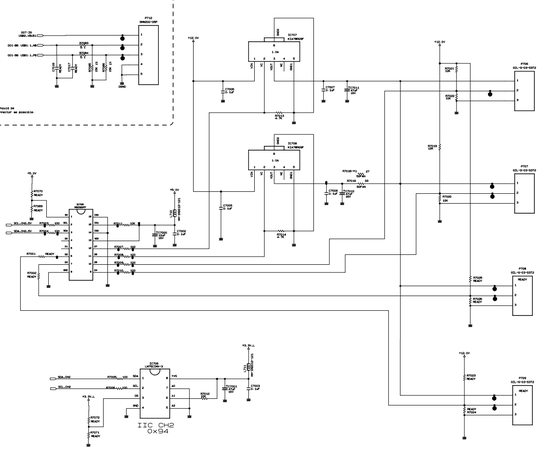

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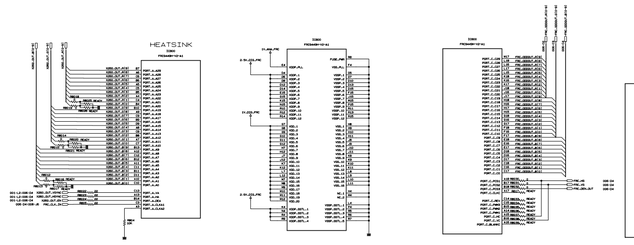

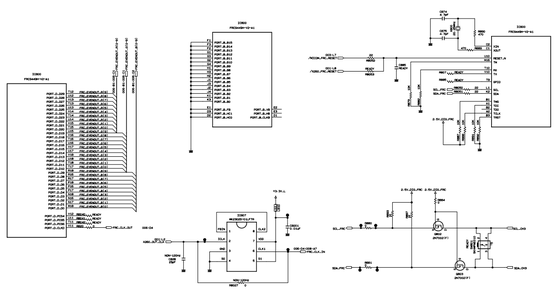

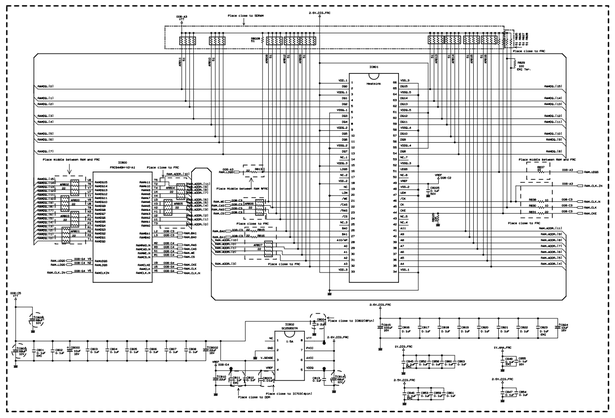

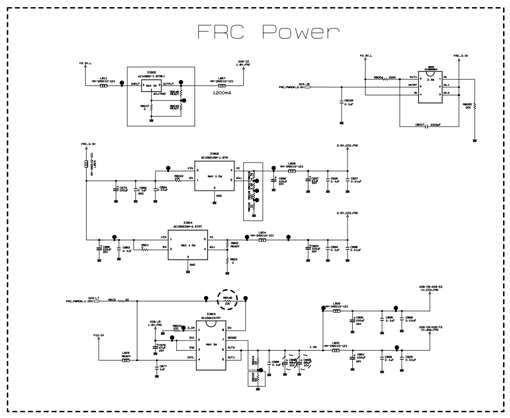

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