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LCD TV

SERVICE MANUAL

CHASSIS : LD84A

MODEL : 22LG3000 22LG3000-ZA
22LG3010 22LG3010-ZB

CAUTION

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



CONTENTS

CONTENTS	2
PRODUCT SAFETY	3
SPECIFICATION	6
DOWNLOAD METHOD.....	11
ADJUSTMENT INSTRUCTION.....	21
TROUBLE SHOOTING	23
BLOCK DIAGRAM.....	27
EXPLODED VIEW	29
REPLACEMENT PARTS LIST	32
SVC. SHEET	

SAFETY PRECAUTIONS

IMPORTANT SAFETY NOTICE

Many electrical and mechanical parts in this chassis have special safety-related characteristics. These parts are identified by $\triangle$ in the Schematic Diagram and Exploded View.

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 its 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 $1M\Omega$ and $5.2M\Omega$.

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.

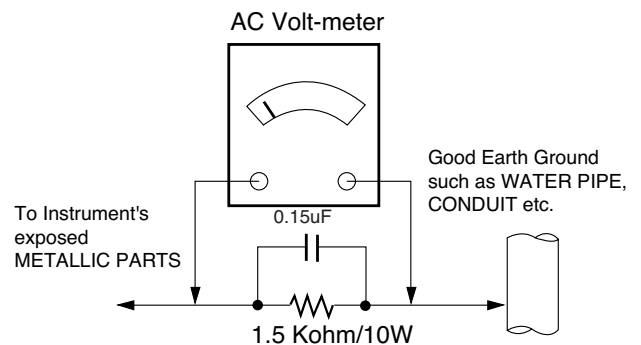
Connect 1.5K/10watt resistor in parallel with a 0.15uF capacitor between a known good earth ground (Water Pipe, Conduit, etc.) and the exposed metallic parts.

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 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 is 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 of 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

1.1 This spec sheet is applied all of the 22" LCD TV

1.2 Not included spec and each product spec in this spec sheet apply correspondingly to the following each country standard and requirement of Buyer

2. Specification

Each part is tested as below without special appointment.

2.1 Temperature: 25 ± 5 °C

2.2 Relative Humidity: 10 to 90%

2.3 Power Voltage: input voltage (90 ~ 264 V, 50/60 Hz $\pm$ 3 Hz)

* Standard Voltage of each product 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 30 minutes prior to the adjustment.

3. General Specification (TV)

No	Item	Specification
1	Receiving system	PAL /SECAM
2	Input voltage	AC 90 ~ 264 V/ 50,60 Hz
3	Market	Europe
4	Screen size	22 inch wide
5	Aspect Ratio	16:9
6	LCD Module	M220Z1-L03 CMO
7	Operating Environment	Temp: 5 ~ 35 deg Humidity: 10 to 90%
8	Storage Environment	Temp:-20 ~ 50 deg Humidity: 10 to 90%
9	Input Signal	D-sub / Composite / S-Video / Component / SCART / HDMI / CI Slot / SPDIF
10	Power consumption	Normal on < 65 W (Depend on screen size) Standby < 1W at 240Vac mains, RC standby mode. Switch off < 1W at 240Vac mains, RC in-active
6.	Vertical refresh rate	56 - 75 Hz
7.	Horizontal frequency	31 - 75 KHz

4. Optical Feature

22"LCD Module-CMO

Item		Symbol	Condition	Min.	Typ.	Max.	Unit	Note
Color Chromaticity	Red	R _x	$\theta_x=0^\circ, \theta_Y=0^\circ$ CS-1000T R=G=B=255 Grayscale	Typ – 0.03	0.649	Typ + 0.03		(1), (5)
		R _y			0.335			
	Green	G _x			0.283			
		G _y			0.605			
	Blue	B _x			0.151			
		B _y			0.073			
	White	W _x			0.313			
		W _y			0.329			
Center Luminance of White		L _C		250	300	---	cd/m ²	(4), (5)
Contrast Ratio		CR		700	1000	---	-	(2), (6)
Response Time		T _R	$\theta_x=0^\circ, \theta_Y=0^\circ$	---	1.3	2.2	ms	(3)
		T _F		---	3.7	5.8	ms	
White Variation		δW	$\theta_x=0^\circ, \theta_Y=0^\circ$	---	1.3	1.42	-	(5), (6)
Viewing Angle	Horizontal	θ _x +	CR>10	75	85	---	Deg.	(1), (5)
		θ _x -		75	85	---		
	Vertical	θ _Y +		70	80	---		
		θ _Y -		70	80	---		

5. External Input Format

5-1. RGB Input

2 LED colors Blue/Red for Power on / sleeping / switch off
Preset timings are as below

No	Resolution	H-freq(kHz)	V-freq.(Hz)	Pixel clock(MHz)	Proposed	Remarks
1.	720*400	31.468	70.08	28.321		
2.	640*480	31.469 37.684	59.94 75.00	25.17 31.50	VESA	Input 848*480 60Hz, 852*480 60Hz → 640*480 60Hz Display
3	800*600	37.879 46.875	60.31 75.00	40.00 49.50	VESA	
4.	832*624	49.725	74.55	57.283	Macintosh	
5	1024*768	48.363 56.470 60.123	60.00 70.00 75.029	65.00 75.00 78.75	VESA(XGA)	
6	1152*864		75		WXGA	
7	1280*720		60		WXGA	
8	1280X800		75		WXGA	
9	1280X1024		60		WSXGA	
10	1280X1024		75		WSXGA	

No	Resolution	H-freq(kHz)	V-freq.(Hz)	Pixel clock(MHz)	Proposed	Remarks
11	1680*1050	65.16	59.94	147.00	WSXGA	

*** RGB-PC EDID DATA**

	00	01	02	03	04	05	06	07	08	09	0A	0B	0C	0D	0E	0F
00	00	FF	FF	FF	FF	FF	FF	00	1E	6D	00	22	40	E2	01	00
10	04	12	01	03	1C	2F	1E	78	2A	78	F5	A6	55	48	9B	26
20	12	50	54	A5	6F	00	71	4F	81	C0	81	80	01	01	01	01
30	01	01	01	01	01	01	21	39	90	30	62	1A	27	40	68	B0
40	36	00	D6	2C	11	00	00	1C	02	3A	80	18	71	38	2D	40
50	58	2C	45	00	C4	8E	21	00	00	1E	00	00	00	FC	00	32
60	32	4C	47	33	30	30	30	0A	20	20	20	20	00	00	00	FD
70	00	38	4E	1F	50	11	00	0A	20	20	20	20	20	20	00	FF

5-2. HDMI mode

HDMI video input should support timings defined in **CEA 861-B** specification with extended EDID blocks
Timing requirements

No	Resolution	H-freq(kHz)	V-freq.(kHz)	Pixel clock(MHz)	Proposed	Remarks
1	640*480		60		SDTV 480P	4:3
2	720*480	15.734 / 15.6	59.94 / 60	27.00	SDTV 480P	4:3
3	720*480	31.469 / 31.5	59.94 / 60	27.00/27.03	SDTV 480P	16:9
4	720*576	15.625	50	27(54)	SDTV 576I	4:3
5	720*576	31.25	50	54	SDTV 576P	16:9
6	1280*720	37.500	50	74.25	HDTV 720P	
7	1280*720	44.96 / 45	59.94 / 60	74.17/74.25	HDTV 720P	
8	1920*1080	33.72 / 33.75	59.94 / 60	74.17/74.25	HDTV 1080I	
9	1920*1080	28.125	50.00	74.25	HDTV 1080I	
10	1920*1080	26.97 / 27	23.97 / 24	74.17/74.25	HDTV 1080P	
11	1920*1080		25	74.25	HDTV 1080P	
12	1920*1080	33.716 / 33.75	29.976 / 30.00	74.25	HDTV 1080P	
13	1920*1080	56.250	50	148.5	HDTV 1080P	
14	1920*1080	67.43 / 67.5	59.94 / 60	148.35/148.50	HDTV 1080P	

HDMI is major for video input. It also can support RGB mode on above timing.(Just only rear HDMI) The video mode is first priority. RGB timing is design in. The color temperature value will copy from TV mode, no need to check

No	Resolution	H-freq(kHz)	V-freq.(Hz)	Pixel clock(MHz)	Proposed	Remarks
1.	720*400	31.468	70.08	28.321		
2.	640*480	31.469 37.684	59.94 75.00	25.17 31.50	VESA	Input 848*480 60Hz, 852*480 60Hz ➔ 640*480 60Hz Display
3	800*600	37.879 46.875	60.31 75.00	40.00 49.50	VESA	
4.	832*624	49.725	74.55	57.283	Macintosh	
5	1024*768	48.363 56.470 60.123	60.00 70.00 75.029	65.00 75.00 78.75	VESA(XGA)	
6	1152*864		75		WXGA	
7	1280*720		60		WXGA	
8	1280X800		75		WXGA	
9	1280X1024		60		WSXGA	
10	1280X1024		75		WSXGA	
11	1680*1050	65.16	59.94	147.00	WSXGA	

*** HDMI EDID DATA**
HDMI1 on the Side

Block 0

	00	01	02	03	04	05	06	07	08	09	0A	0B	0C	0D	0E	0F
00	00	FF	FF	FF	FF	FF	FF	00	1E	6D	00	22	01	01	01	01
10	04	12	01	03	80	2F	1E	78	2A	78	F5	A6	55	48	9B	26
20	12	50	54	00	00	00	01	01	01	01	01	01	01	01	01	01
30	01	01	01	01	01	01	01	1D	00	72	51	D0	1E	20	6E	28
40	55	00	C4	8E	21	00	00	1E	00	00	00	FF	00	31	31	31
50	31	31	31	31	31	31	31	31	31	31	00	00	00	FD	00	38
60	4E	1E	50	11	00	0A	20	20	20	20	20	20	00	00	00	FC
70	00	32	32	4C	47	33	30	30	30	0A	20	20	20	20	01	A1

Block 1

00	02	03	21	F1	4E	81	02	03	15	12	13	04	14	05	20	21
10	22	1F	10	23	15	07	50	83	01	00	00	65	03	0C	00	20
20	00	01	1D	00	BC	52	D0	1E	20	B8	28	55	40	34	CD	31
30	00	00	1E	01	1D	80	18	71	1C	16	20	58	2C	25	00	34
40	CD	31	00	00	9E	01	1D	00	72	51	D0	1E	20	6E	28	55
50	00	34	CD	31	00	00	1E	01	1D	80	D0	72	1C	16	20	10
60	2C	25	80	34	CD	31	00	00	9E	8C	0A	D0	90	20	40	31
70	20	0C	40	55	00	34	CD	31	00	00	18	00	00	00	00	F5

HDMI2 on the Rear Cover

Block 0

	00	01	02	03	04	05	06	07	08	09	0A	0B	0C	0D	0E	0F
00	00	FF	FF	FF	FF	FF	FF	00	1E	6D	00	22	01	01	01	01
10	04	12	01	03	80	2F	1E	78	2A	78	F5	A6	55	48	9B	26
20	12	50	54	A5	6F	00	71	4F	81	C0	81	80	01	01	01	01
30	01	01	01	01	01	01	01	1D	00	72	51	D0	1E	20	6E	28
40	55	00	C4	8E	21	00	00	1E	21	39	90	30	62	1A	27	40
50	68	B0	36	00	AE	0E	11	00	00	1C	00	00	00	FD	00	38
60	4E	1E	50	11	00	0A	20	20	20	20	20	20	00	00	00	FC
70	00	32	32	4C	47	33	30	30	30	0A	20	20	20	20	01	D9

Block 1

00	02	03	21	F1	4E	81	02	03	15	12	13	04	14	05	20	21
10	22	1F	10	23	15	07	50	83	01	00	00	65	03	0C	00	10
20	00	01	1D	00	BC	52	D0	1E	20	B8	28	55	40	34	CD	31
30	00	00	1E	01	1D	80	18	71	1C	16	20	58	2C	25	00	34
40	CD	31	00	00	9E	01	1D	00	72	51	D0	1E	20	6E	28	55
50	00	34	CD	31	00	00	1E	01	1D	80	D0	72	1C	16	20	10
60	2C	25	80	34	CD	31	00	00	9E	8C	0A	D0	90	20	40	31
70	20	0C	40	55	00	34	CD	31	00	00	18	00	00	00	00	05

6. Mechanical specification

22LG3000

NO.	Item	Content			Unit	Remark
1	Product Dimension		Width(W)	Length(L)	Height(H)	mm
		Before packing	522.2	189.2	431.4	mm
		After packing	603	163	471	mm
2	Product	Only Set	5.4			kg
		With Box	7.6			kg

Download Method

1. How to Enter the Service Menu

- 1) Turn on the TV set.
- 2) After displaying, press 'Menu' key.
- 3) Press '0' key (Number key 'zero') four times slowly.
- 4) Showing the Service Menu.

2. F/W Download Method

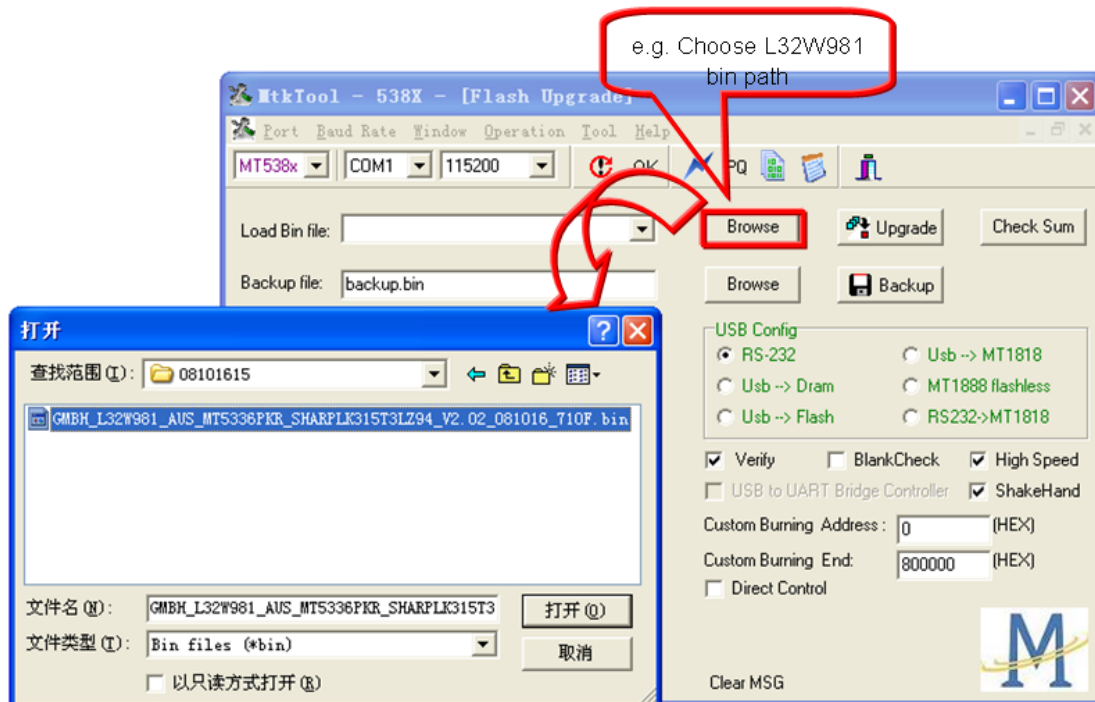
Please refer to the attached F/W download SOP file: "S/W download SOP", MTK Tool, S/W.

Connect the serial cable from PC RS232 port to TV RS-232 port.

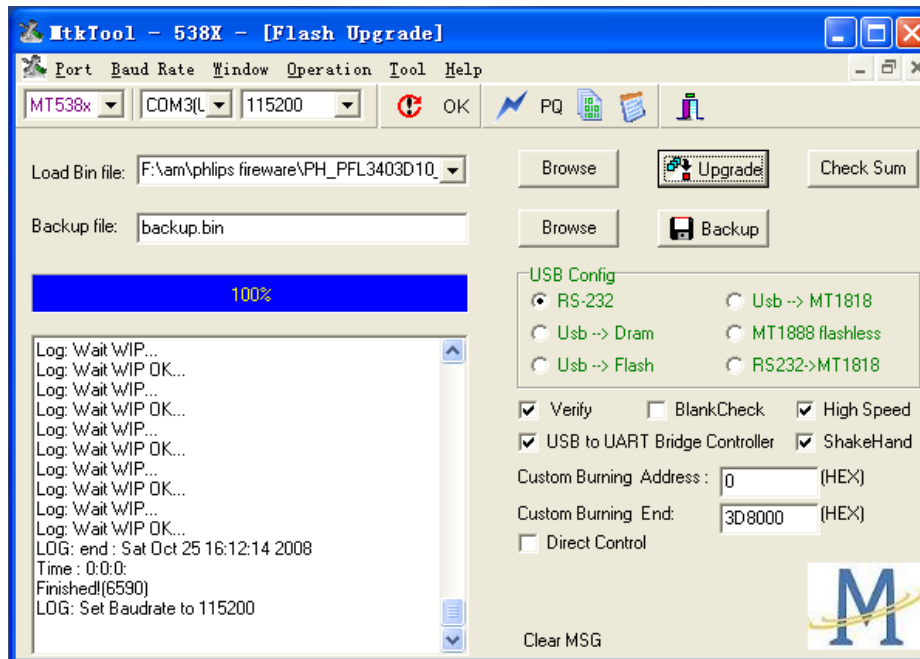
- 1) Run the MTK tool (as picture 1), and select "MTK 538*", "COM 1".
- 2) Press the "Browse", and select the correct S/W. (as picture 2, e.g.L32W981 bin path)
- 3) Press "Upgrade" to start S/W upgrade. (**can't in PC mode, can't plug off when upgrade**)
- 4) When it displays 100% finished, it is OK (about 10 minutes). (as picture 3)
- 5) After download the S/W, press "MENU+1999" to reset the TV.



Picture 1



Picture 2



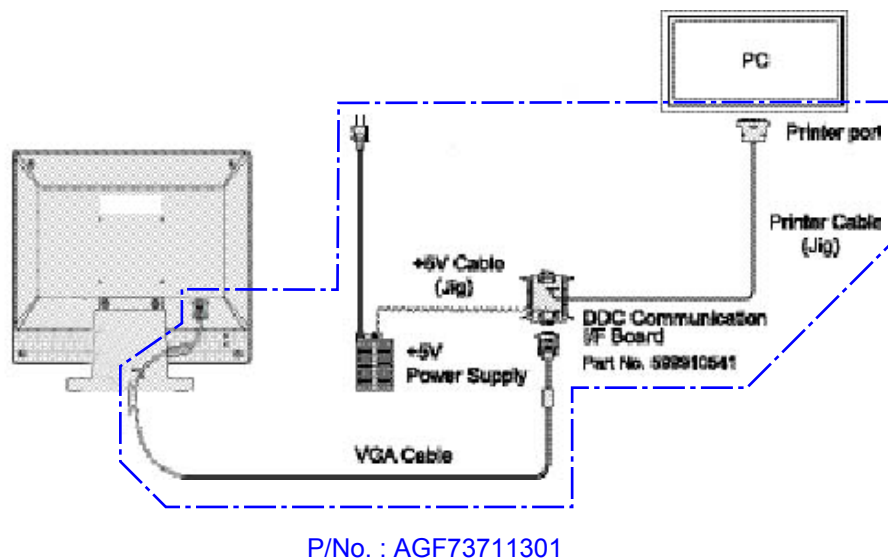
Picture 3

3. EDID Download Method

1) System Connection

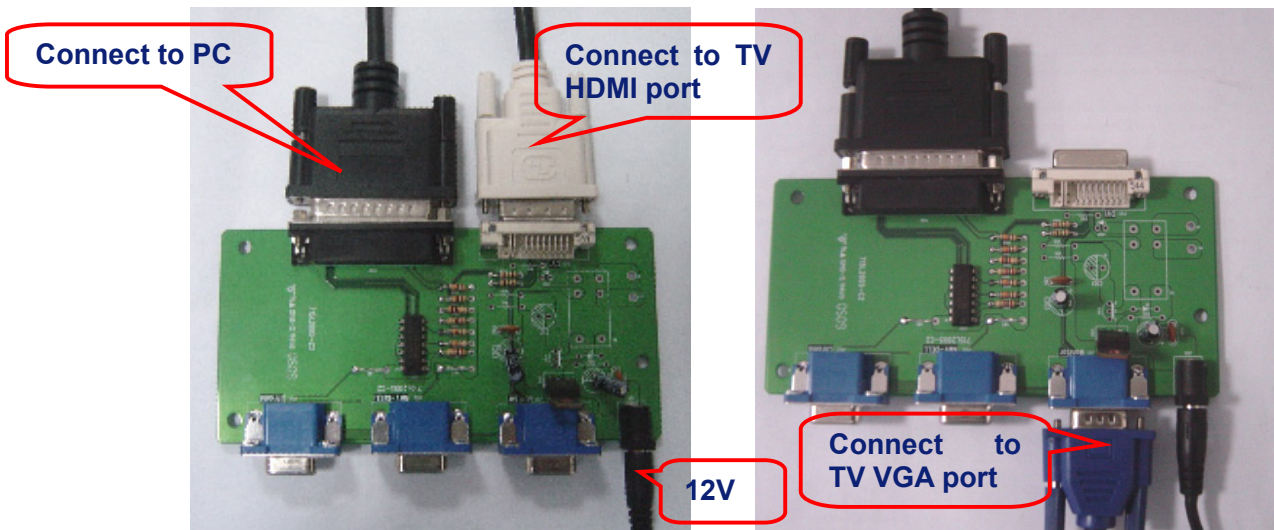
Tool list: 715G2005-C	1PCS	} EDID JIG (LGE P/No. : AGF73711301)
Printer cable	1PCS	
12V ADAPTER	1PCS	
DVI-HDMI cable	1PCS	
VGA cable	1PCS	

This system should be connected as shown below



This system should be connected as shown below

Note: Do not connect VGA and DVI-HDMI cable with ISP board at the same time

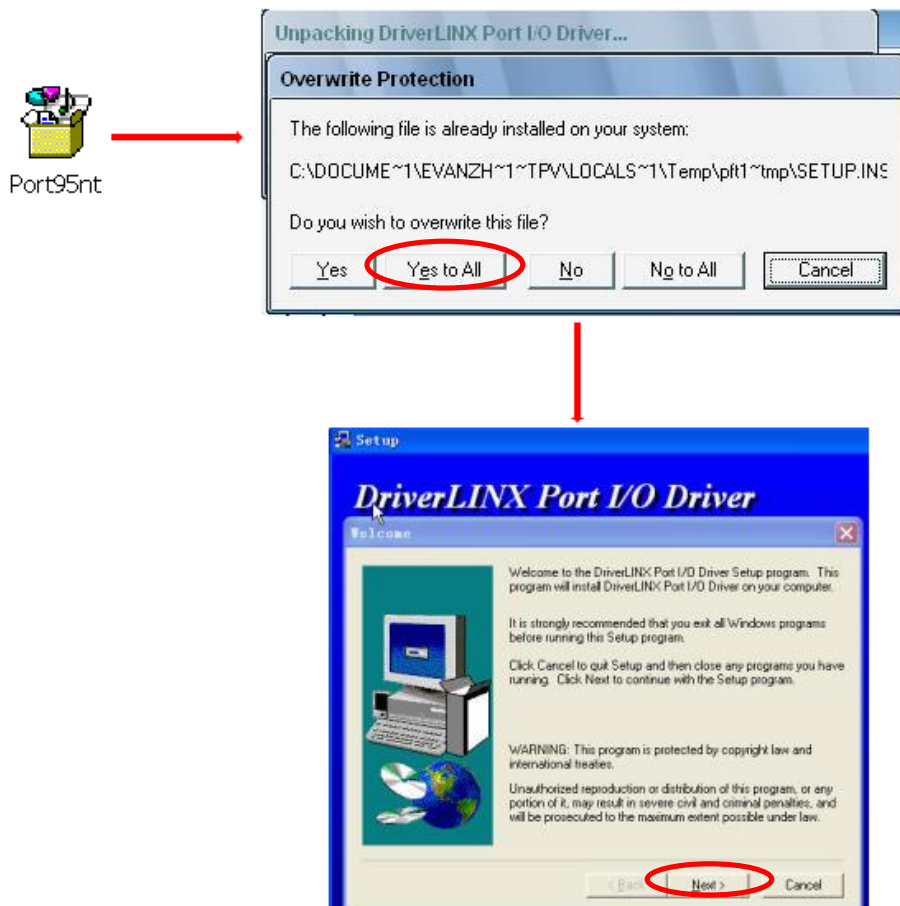


DDC connect for HDMI (DVI-HDMI cable)

DDC connect for VGA

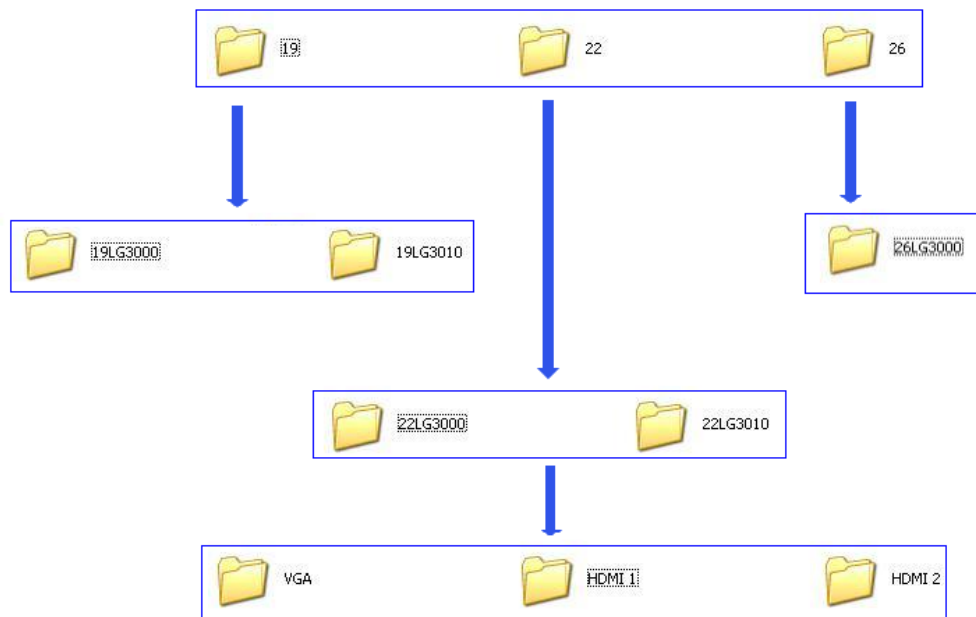
2) Preparations

Running Port95nt.exe to install Driver LINK Port I/O Driver, and restart PC. (as picture 4)



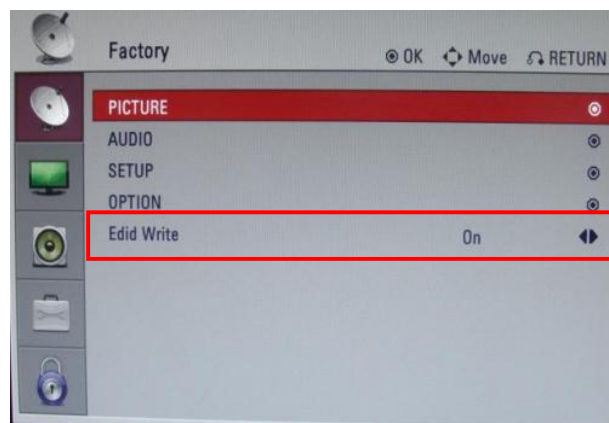
Picture 4

Check the TV model name, find the corresponding EDID date (as picture 5)



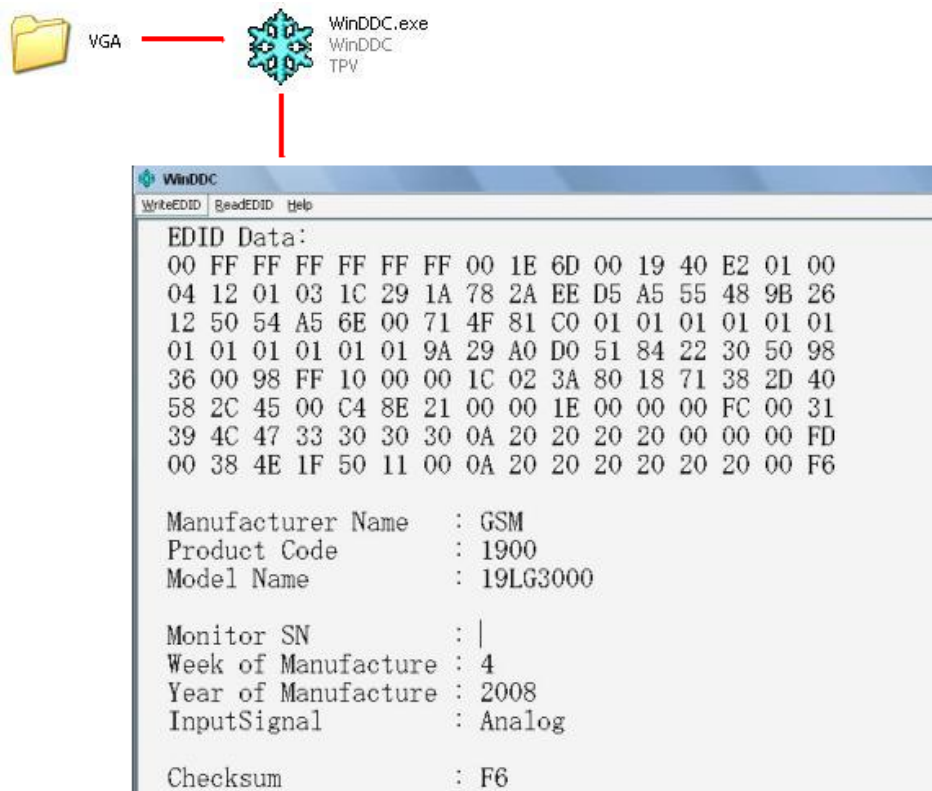
Picture 5

Turn on TV, press “menu”+1998 to enter EDID ISP mode. you will see the following menu. And then EDID ISP mode on, if this menu disappear, EDID ISP mode will turn off automatically.

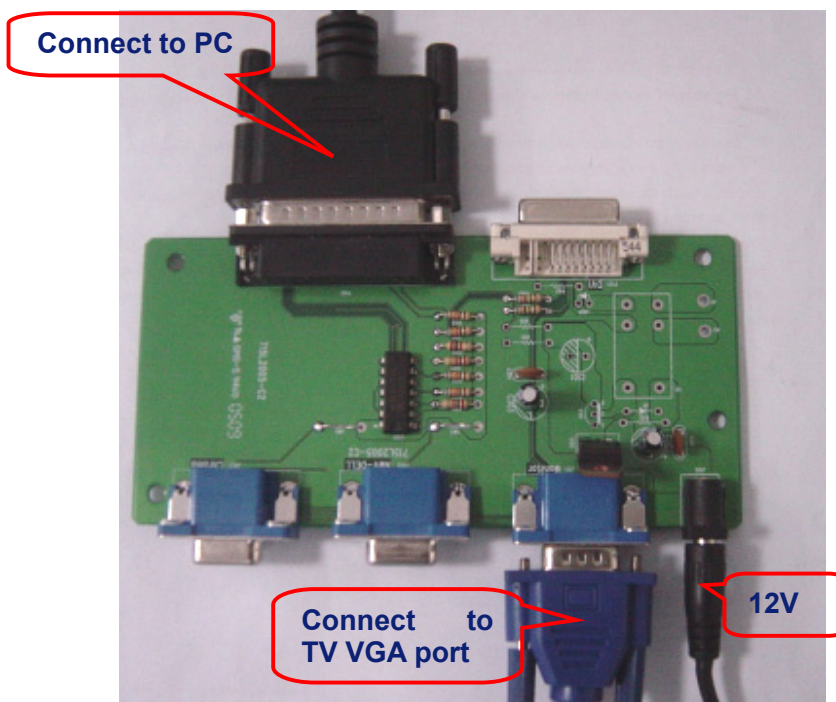


3) VGA EDID update

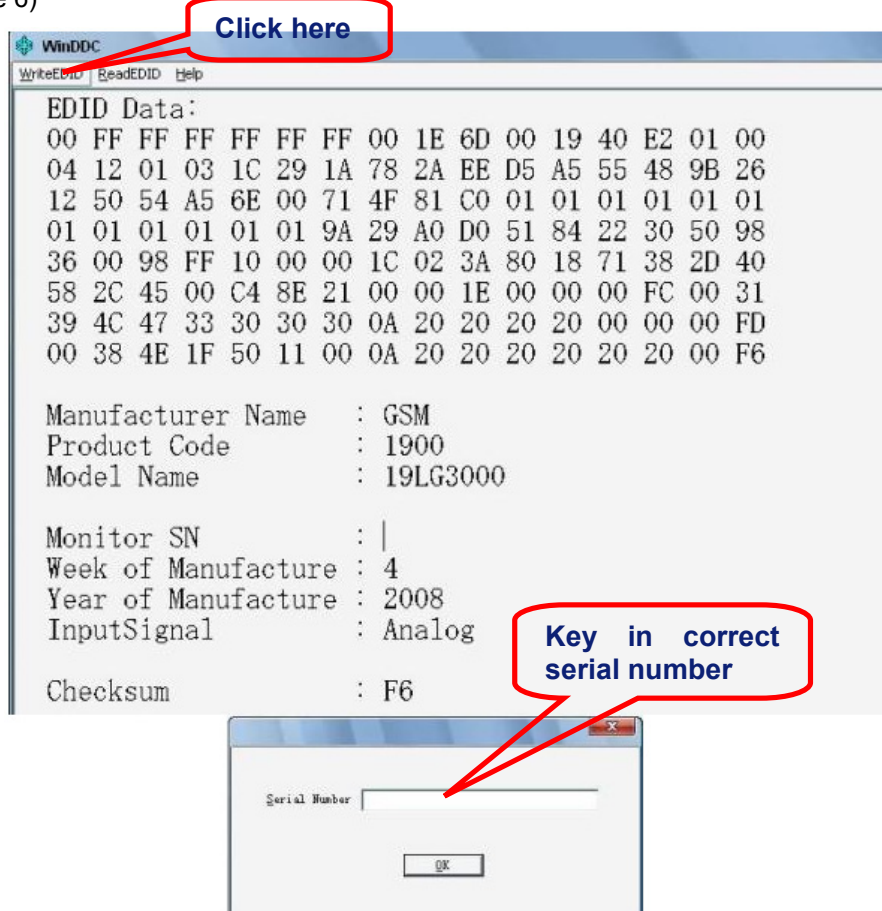
- ① Open the VGA file, and running WinDDC.exe, you will see the following table (e.g.19LG3000)



- ② Check the connection below is right, and TV should in EDID ISP mode, if the EDID ISP mode menu disappear please enter it again.



- ③ Click "Write EDID", appear the dialog box. Key in correct serial number according to rating label of back cover, and click "OK" (as picture 6)



Picture 6

- ④ Appear "write ok" on the screen that indicate you are successful to write.



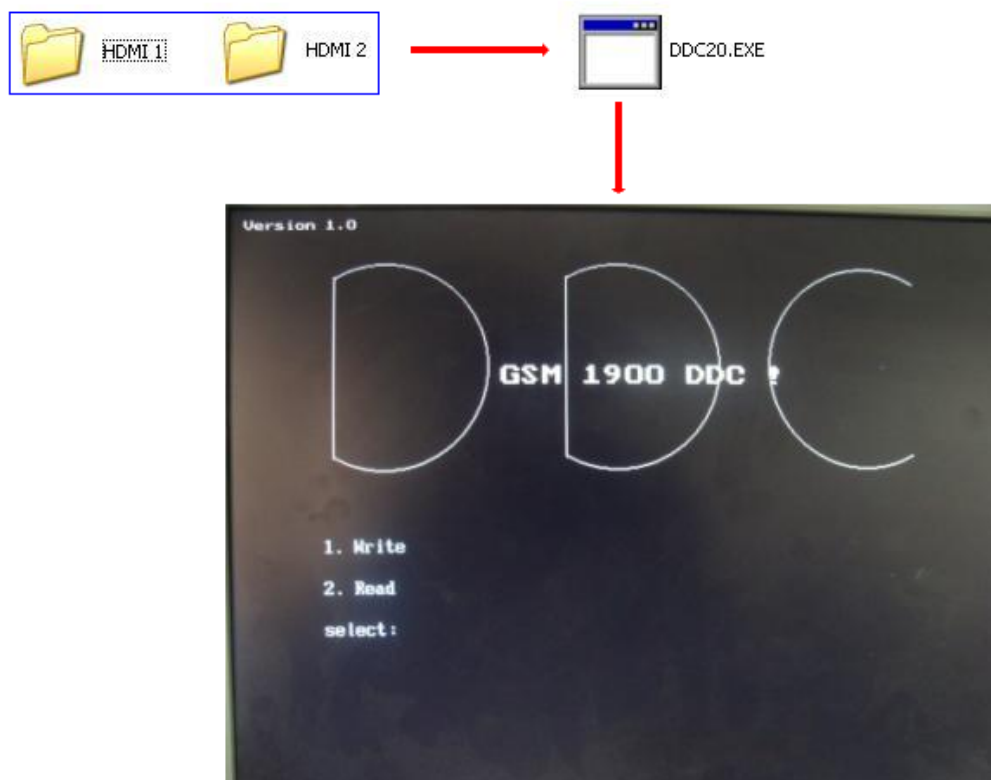
- ⑤ Appear "IIC Communication Error" on the screen that indicate fail to write. Please check whether the connection is OK and whether the EDID ISP mode menu is disappear.



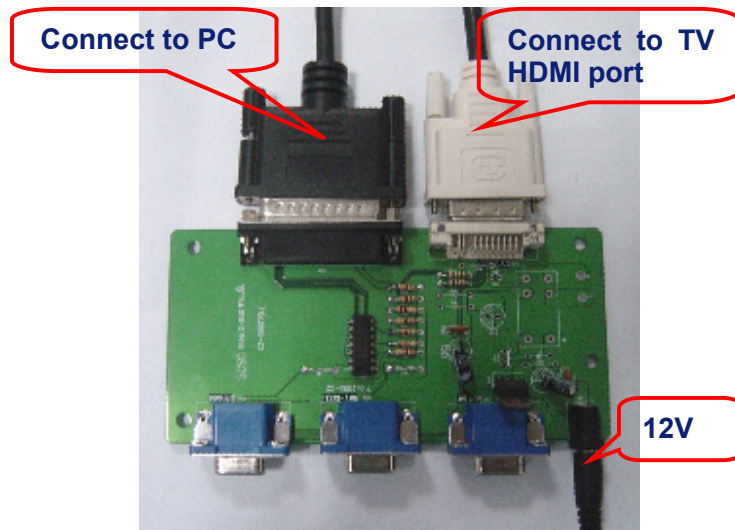
4). HDMI EDID update

Notice: Please write or read the VGA EDID firstly by Winddc.exe

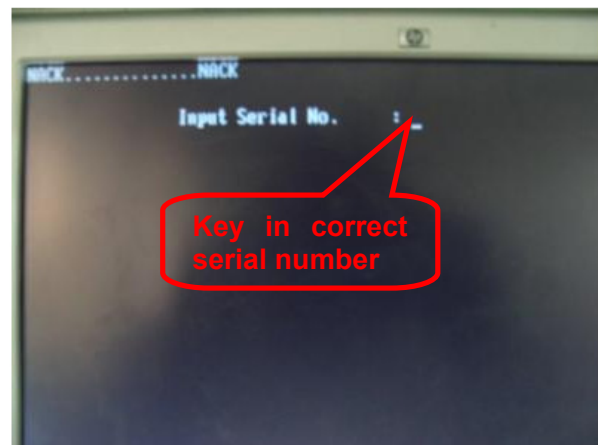
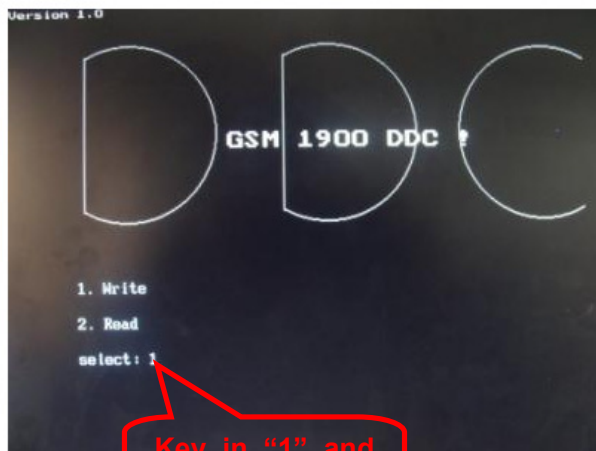
- ① Open the HDMI file, and running DDC20.exe, you will see the following DOS table. (e.g.19LG3000)



② Check the connection below is right, and TV should in EDID ISP mode, if the EDID ISP mode menu disappear please enter it again.

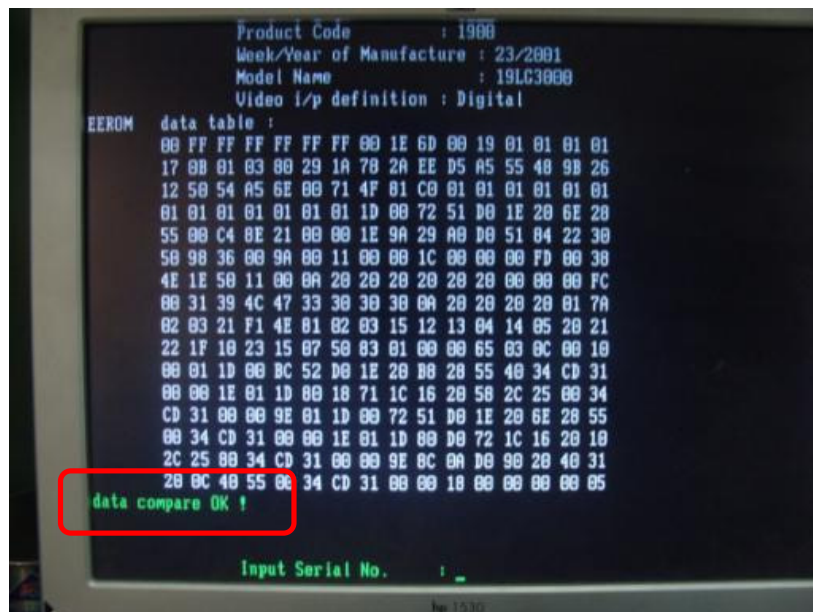


③ “1” means write. “2” means read. Key in “2” and press “Enter” on keyboard can read the HDMI EDID date of this TV. Key in “1” and press “Enter” can update HDMI EDID date, key in correct serial number according to rating label of back cover, and press “Enter” (as picture 7)

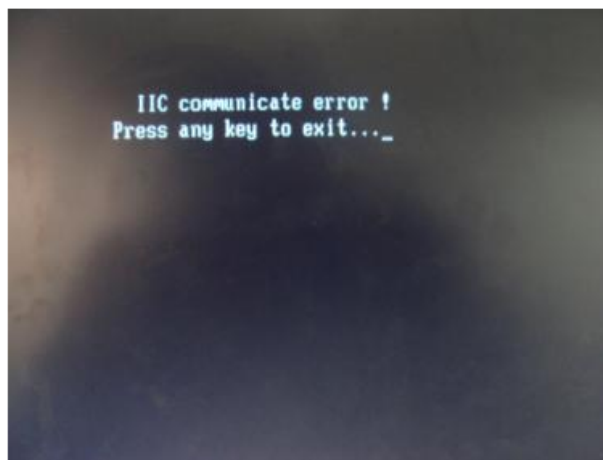
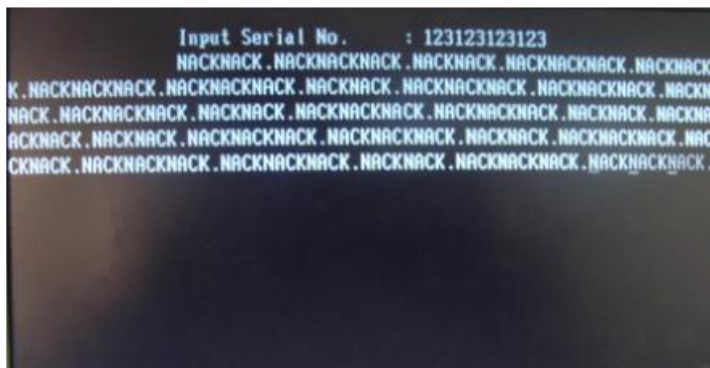


Picture 7

④ If the screen shows “data compare OK” , it means the EDID writing process is OK. Press “Ctrl” + “C” to exit DOS mode.



⑤ If the screen shows as below, it means the EDID writing process is fail. Please check whether the connection is OK and whether the EDID ISP mode menu is disappear.



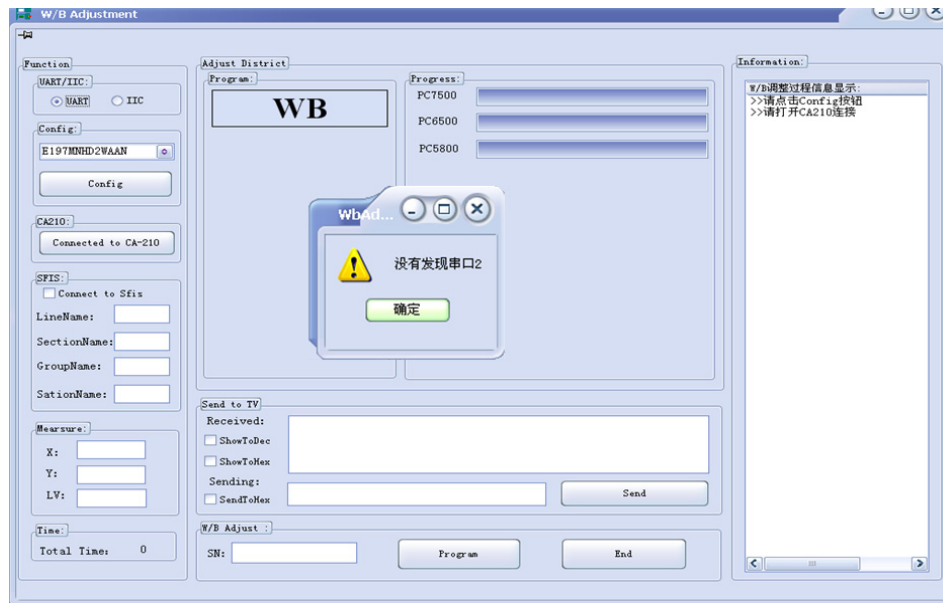
4. Serial Number Download Method

Please refer to the attached Serial number scan file: "Scan serial number SOP" and "LG Serial Number".

Connect the serial cable from PC RS232 port to TV RS-232 port.

1) Open the program "WBadjust.exe", press the "Config" option, if serial port displays fail (as picture 8), then you must check whether Com2 exist. After that press the "Program" option to start scanning serial number process.

2) If adjust successfully, display **WB**; If adjust fail, display **WB**.



Picture 8

ADJUSTMENT INSTRUCTION

1. Application Range

This spec. sheet is applied to the models of 22LG3000 and 22LG3010.

2. Specification.

2.1 Adjustment must be done in the correct sequence.

2.2 The adjustment must be performed at $25\pm5^{\circ}\text{C}$ temperature and 10 to 90% relative humidity if there is no specified designation.

2.3 The input voltage of the receiver must be kept between 90 to 264 V, 50/60 Hz $\pm$ 3 Hz.

2.4 Before adjustment execute Heat-Run for 30 minutes at RF no signal.

3. ADC Calibration

3.1. ADC Calibration

ADC	Component	RGB-PC
22LG3000 22LG3010	Timing:314 Pattern:185 720P/50HZ	Timing:137 Pattern:42 1024*768/50HZ

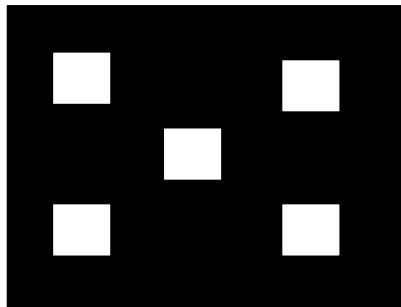
3.1.1 Prepare

1) Power on the Chroma 22291/23291 and power on the PC.

2) Change TV Source to PC mode.

3) Connect PC Com3 to Chroma 22291/23291 RS-232 connector. Make sure USB-to-Serial Com to Com7.

3.1.2 ADC Picture

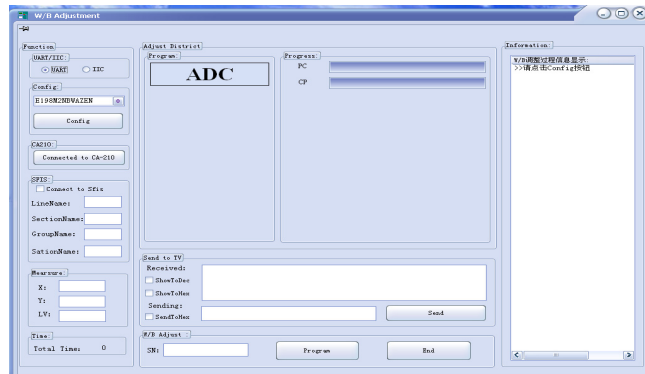


3.1.3 ADC Adjust

1) Open the program, press the Config button, if serial Comm open fail, then you must check whether Com3 and Com7 are exist.

2) If step one is OK, press the PROGRAM button start adjustment.

3) If adjust successful, "ADC" will be green, as ADC. If adjust fail, "ADC" will be red, as ADC.



3.2. W/B Adjustment

- The color temperature at the screen Should be :

	Warm	Normal	Cool
CCT	6500k	9300k	11000k
x	0.314	0.283	0.273
y	0.324	0.297	0.285

Tolerance $\Delta x, \Delta y = \pm 0.020$

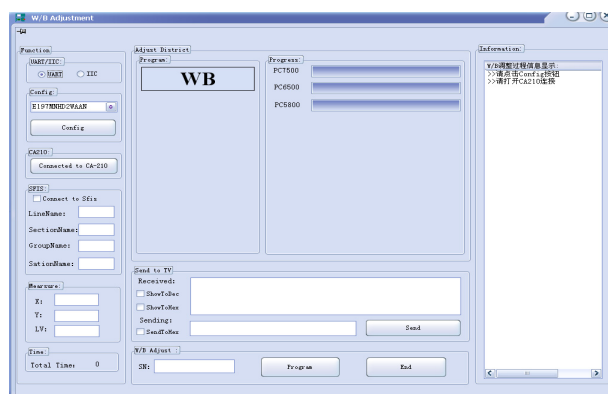
Factory alignment tolerance $\Delta x, \Delta y = \pm 0.005$

3.2.1 Prepare

- 1) Power on the Chorma 22291/23291 and power on the PC.
- 2) Change TV Source to PC mode.
- 3) Connect PC Com3 to Chroma 22291/23291 RS-232 connector. Make sure USB-to-Serial Com to Com7.

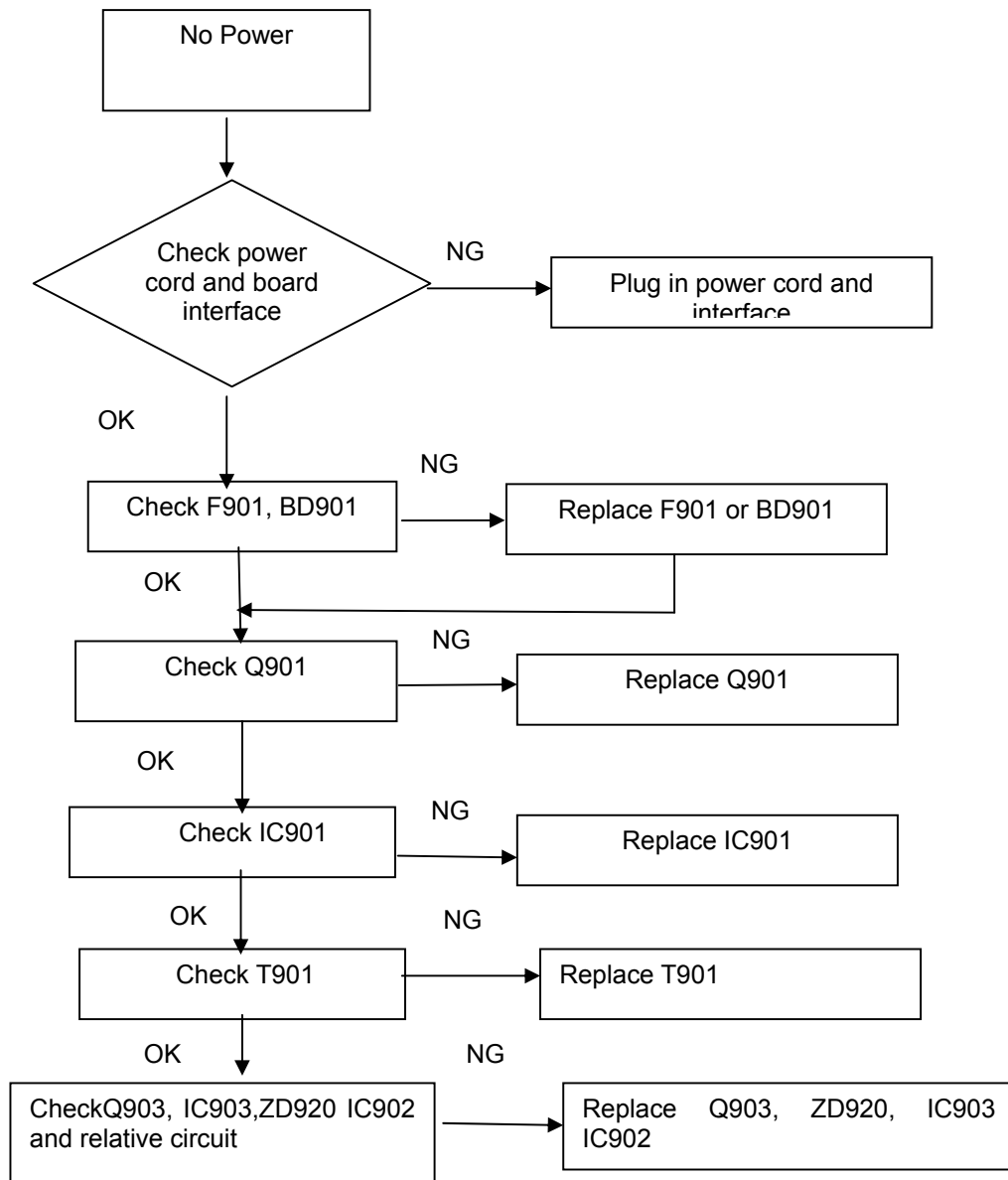
3.2.2 W/B Adjust

- 1) Open the program, press the Config button, if serial Comm open fail, then you must check whether Com3 and Com7 are exist.
- 2) Press Connect to CA-210 button, then wait a minute, until connect OK.
- 3) If step one and step two are OK, press the PROGRAM button start adjustment.

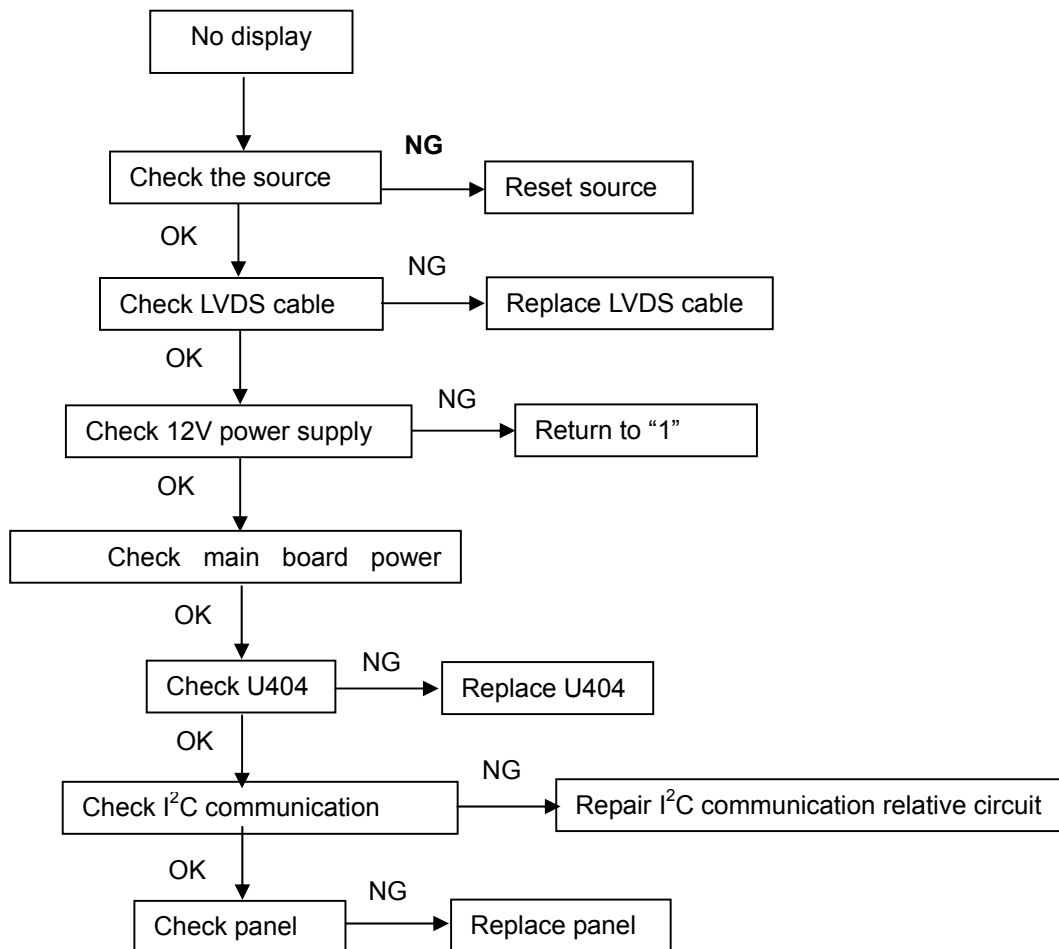


TROUBLE SHOOTING

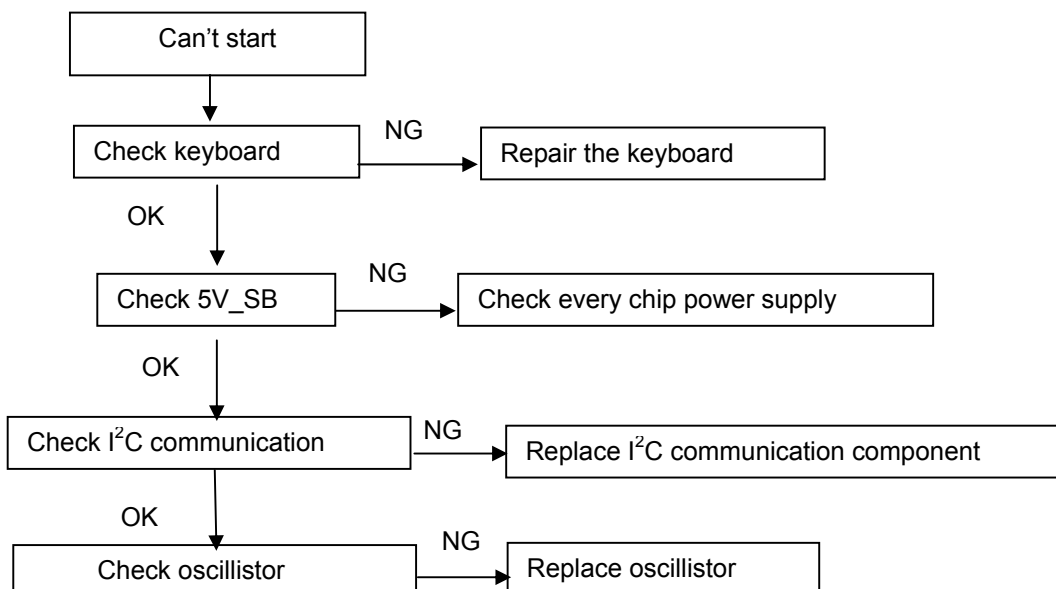
1. No Power (LED Blank)



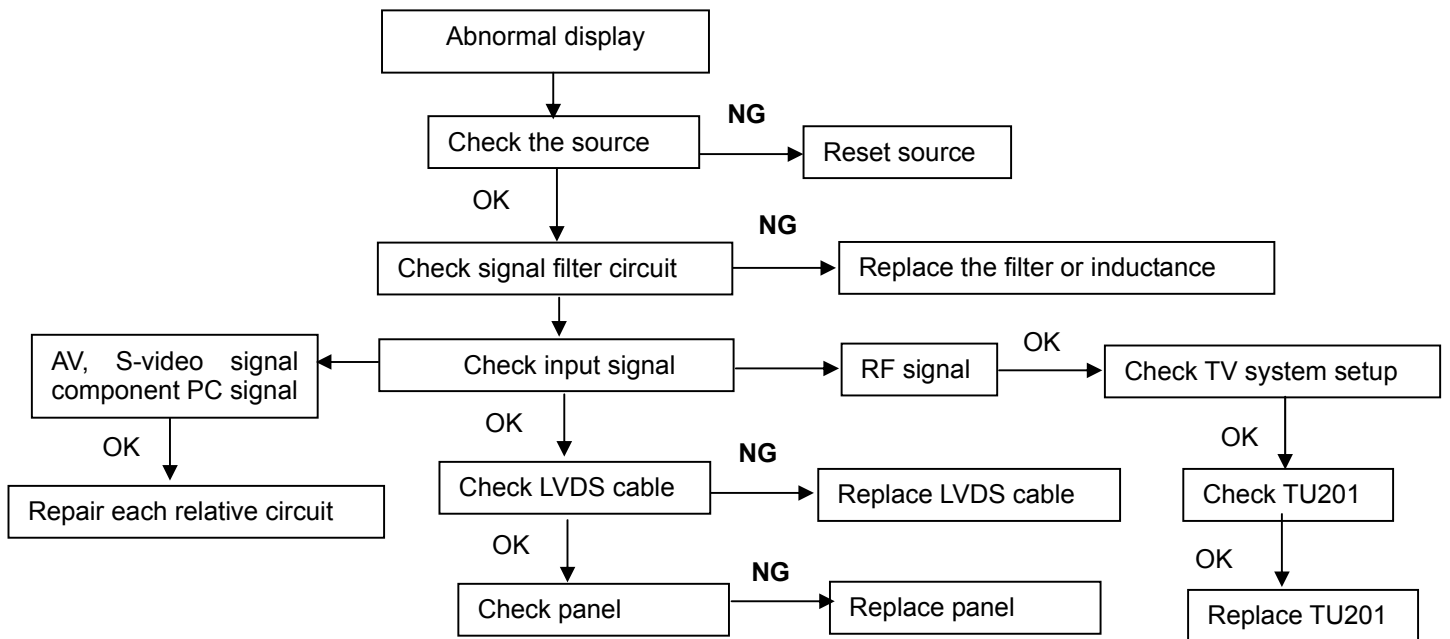
2. No Display



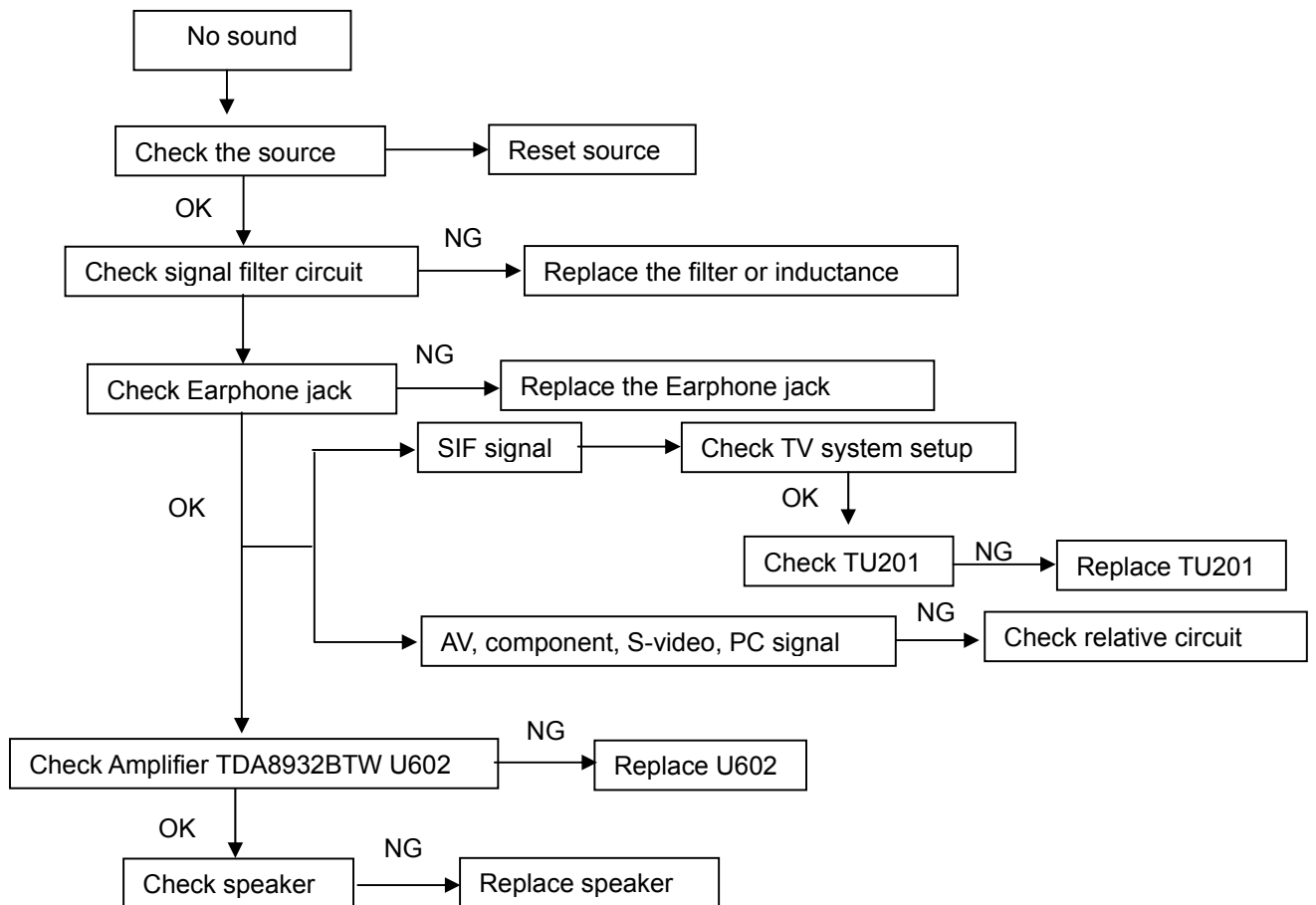
3. Can't start (LED indicator Blank)



4. Abnormal Display

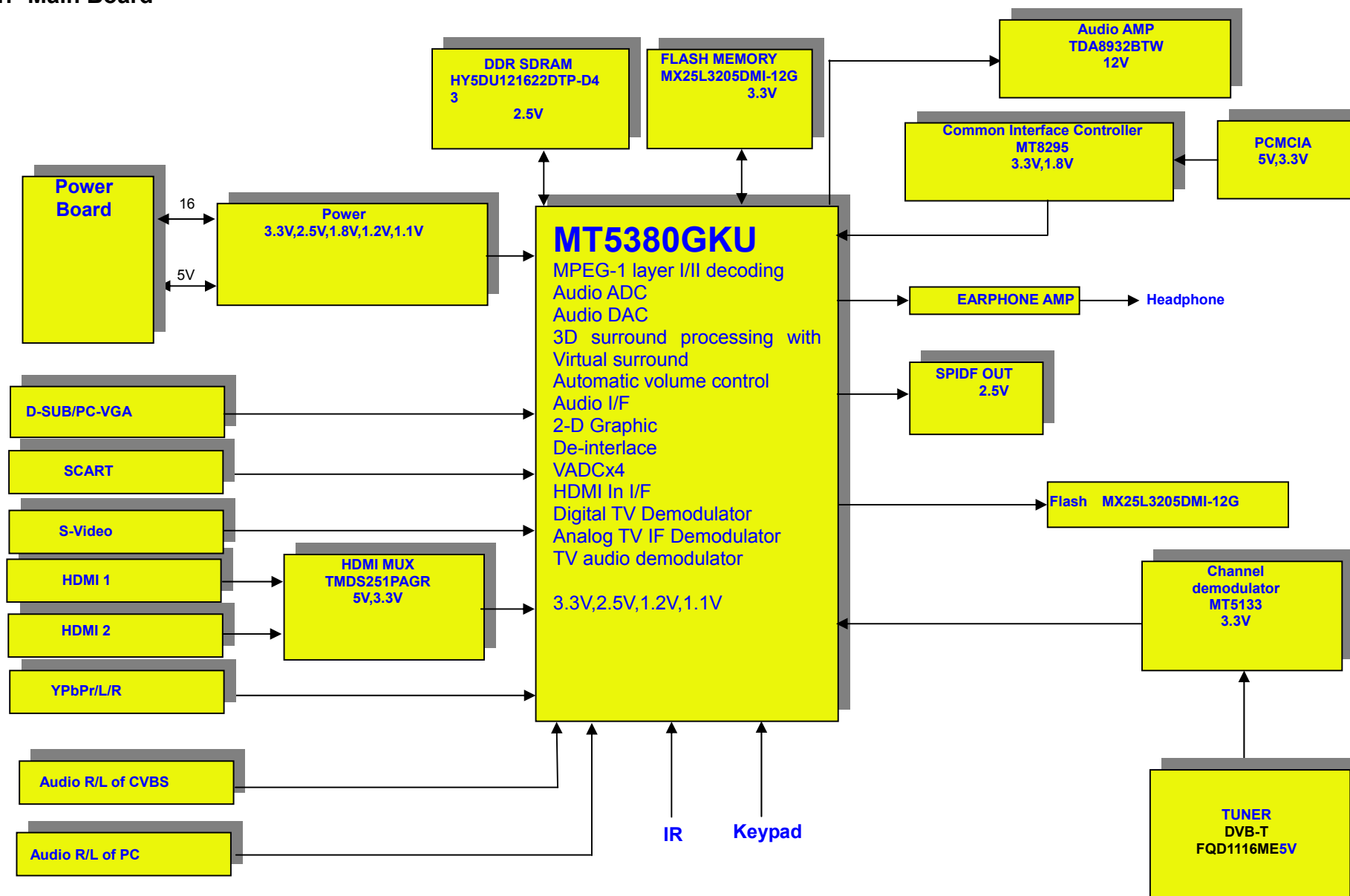


5. No Sound



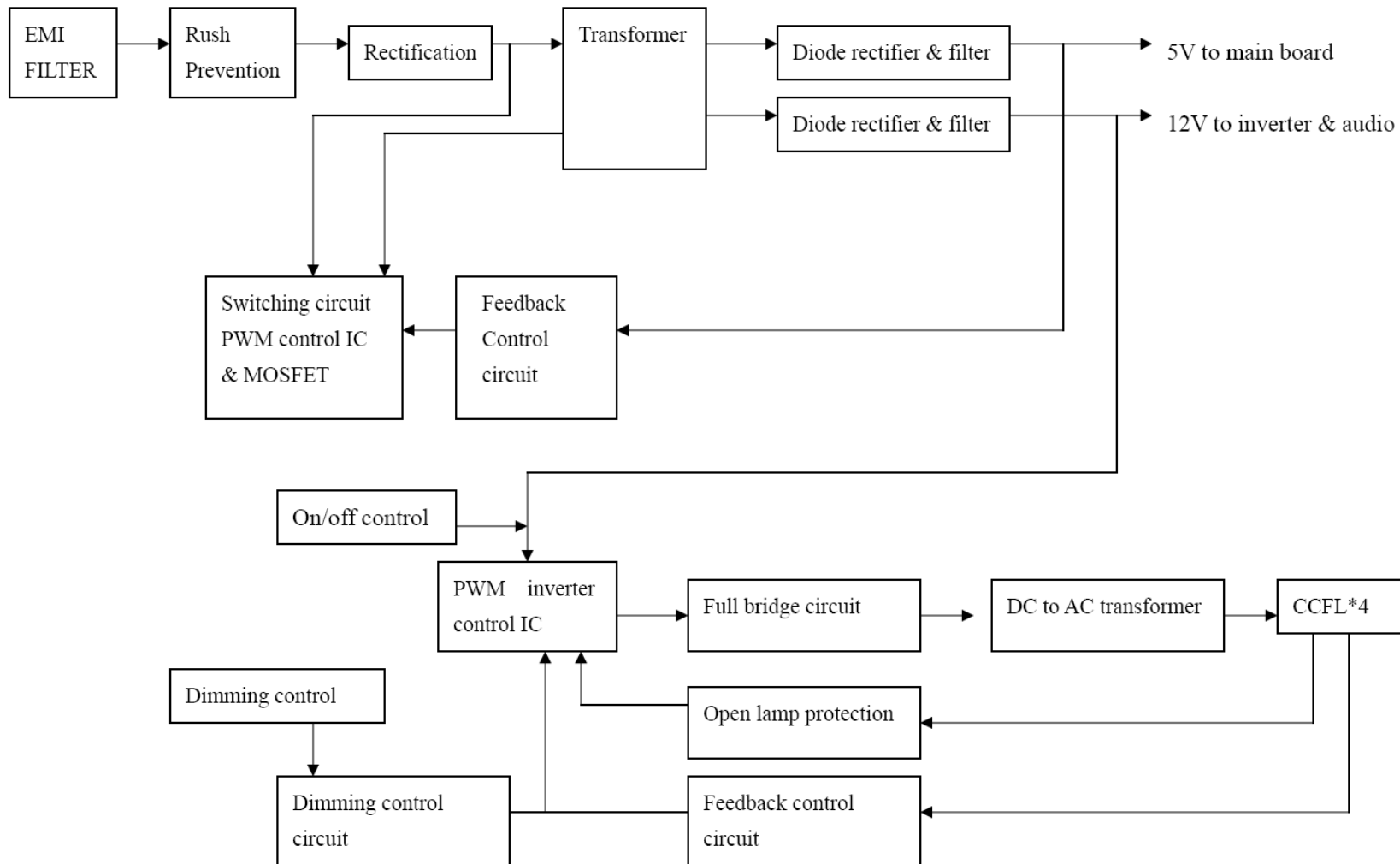
BLOCK DIAGRAM

1. Main Board



2. Power Board

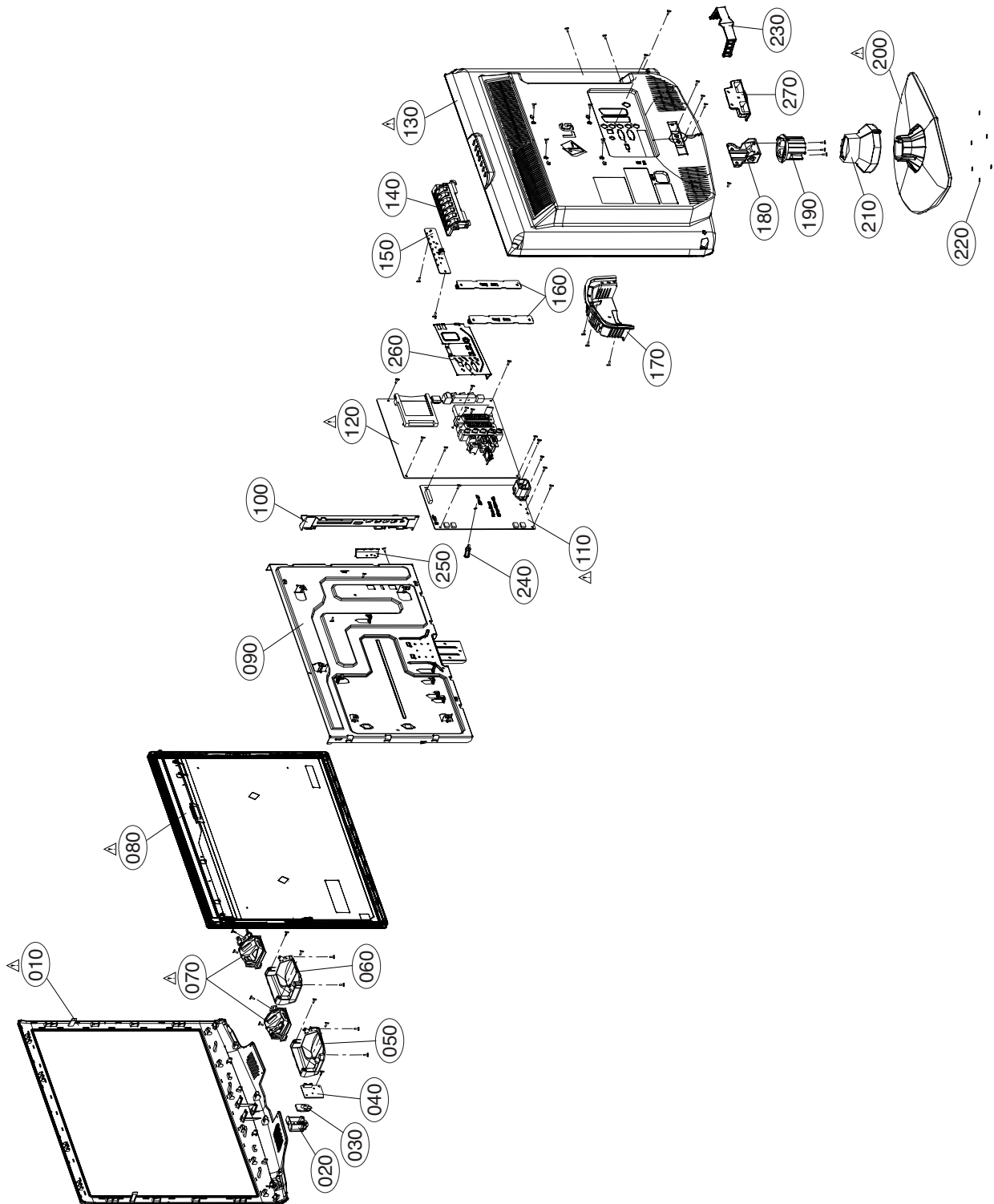
Input

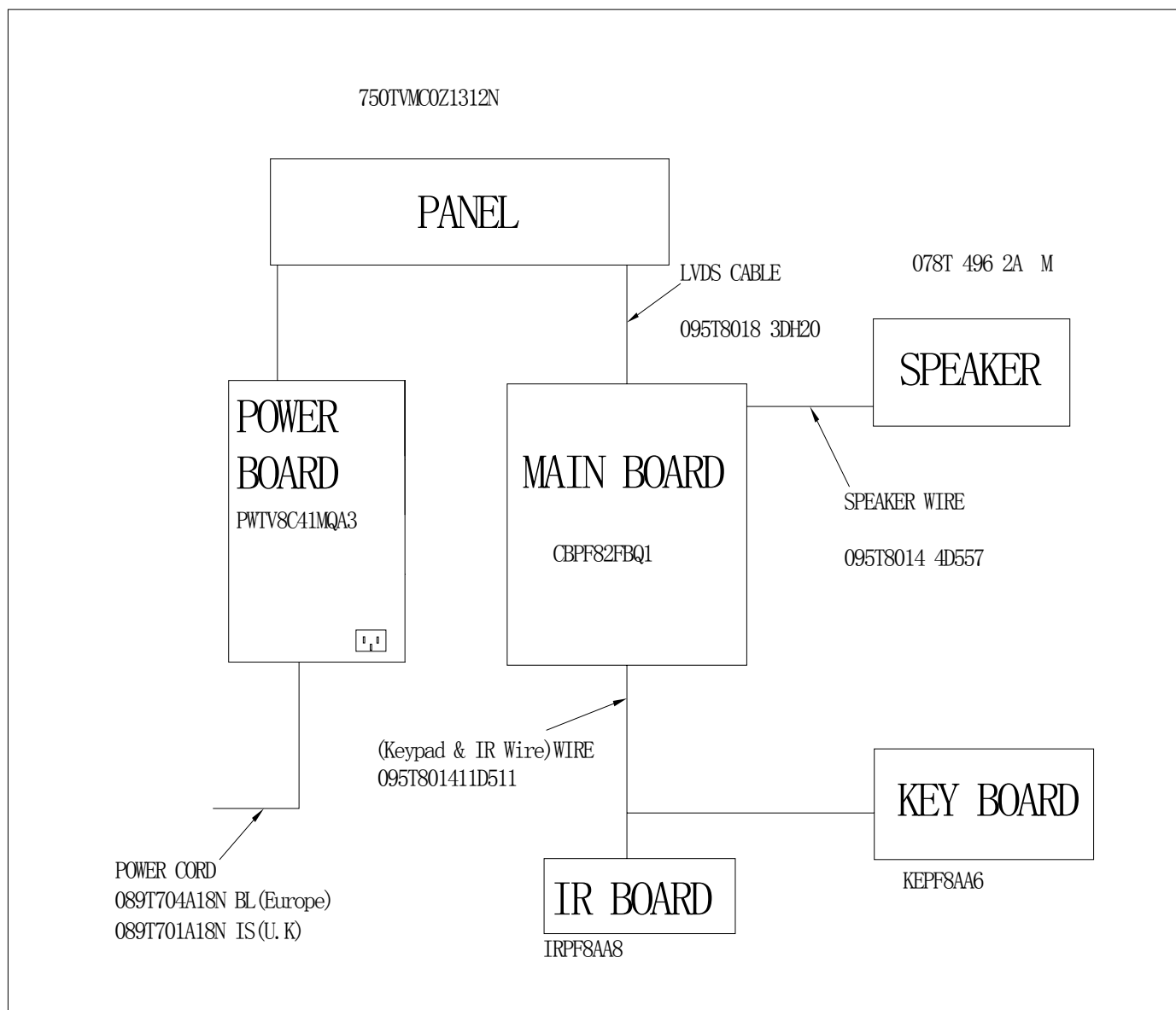


EXPLODED VIEW

IMPORTANT SAFETY NOTICE

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





Wiring diagram

EXPLODED VIEW PARTS LIST

No.	PART NO.	NO. TPV PART	DESCRIPTION
⚠	010	ABJ68402801	A34T0770AES1X0100 Cabinet Assembly 22LG3001-ZA ODM 22"
		ABJ68402802	A34T0770AEWA1X0100 Cabinet Assembly 22LG3001-ZA ODM 22" White model that made by TPV
	020	MEY57580001	A33T0409BCC 1L0100 Knob MOLD ABS MAIN 1 19/22LG3001-ZA_ODM POWER Button
		MEY57580003	A33T0409BCC 3L0100 Knob MOLD ABS MAIN 1 19/22LG3001-ZA_ODM POWER Button White model
	030	MFB57580201	A33T0410 1 1P0100 Lens MOLD PMMA 19/22LG3001-ZA_ODM INDICATOR_LED_LENS
	040	EBU57410601	IRPF8AA8 19/22/26LG3000 BRAND TPV ODM IR BOARD FOR SVC(IRPF8AA8)
	050	ABA68403501	A33T0406AES 1L0100 SPEAKER 19/22LG3001-ZA ODM SVC P/N - SPK Bracket_R
	060	ABA68403401	A33T0405AES 1L0100 SPEAKER 19/22LG3001-ZA_ODM - ODM_SPK Bracket_L
⚠	070	COV30053501	078T 496 2A M OEM TPV 078T 496 2A M SPEAKER 19/22LG3000-ZA 8ohm 3.5W 90X42mm
⚠	080	COV30055501	750TVMC0Z1312N OEM TPV 750TVMC0Z1312N LCD MODULE(CMO) 22LG3000 TPV ODM
	090	ADV68405201	A15T0414101 Frame Assembly 22LG3001-ZA ODM 22" Main Frame Assy
	100	MAZ57819101	A33T0404AES 1L0100 Bracket MOLD ABS 380 19/22LG3001-ZA_ODM, HF-380 Side AV Bracket
		MAZ57819102	A33T0404AEW 1L0200 Bracket MOLD ABS 380 SIDE AV 19/22LG3001-ZA_ODM, HF-380 White model
⚠	110	EBU57406101	PWTV8C41MQA3 Main Total Assembly TPV ODM POWER BOARD FOR SVC
⚠	120	EBU57405801	CBPF82FBQ1 Main Total Assembly 22LG3000 TPV ODM MAIN BOARD FOR SVC
⚠	130	ACQ68403001	A34T0771AES1L0100 Cover Assembly, Rear 22LG3001-ZA ODM 22" Back Cover Assy
		ACQ68403002	A34T0771AEWA1L0100 Cover Assembly,Rear 22LG3001-ZA ODM 22" Back Cover Assy White model
	140	MEY57580101	A33T0407AES 1L0100 Knob MOLD ABS MAIN2 7 19/22LG3001-ZA_ODM Function Control Knob
		MEY57580102	A33T0407AEW 1L0100 Knob MOLD ABS MAIN2 7 Function Control Knob White model
	150	EBU57406301	KEPF8AA6 Main Total Assembly TPV ODM LOCAL KEY BOARD FOR SVC
	160	MAZ57580301	A15T0315101 Bracket PRESS H-GI 1.0 19/22LG3001-ZA ODM SBHG Wall Mount Bracket
	170	ABA68403101	A34T0769AES 1L0100 Bracket Assembly COVER 19/22LG3001-ZA AB HINGE COVER ASSY
		ABA68403102	A34T0769AEW 1L0100 Bracket Assembly COVER 19/22LG3001-ZA AB HINGE COVER ASSY White model
	180	AAN68404601	A37T0056015 Base Assembly ASSY 19LG3001-ZA_ODM - Hinge Assy_ODM
	190	ABA68403201	A34T0789AES 1L0100 Bracket Assembly 19/22LG3001-ZA AB ODM_Stand Neck Bracket
		ABA68403202	A34T0789AEW 1L0100 Bracket Assembly BRACKET 19/22LG3001-ZA_Stand Neck Bracket White model
⚠	200	MAM57743401	A34T0767AEZ 1L0130 Base MOLD ABS 380 BASE 19/22LG3001_SVC - STAND Base
		MAM57743402	A34T0767AEW 1L0130 Base MOLD ABS 380 BASE 19/22LG3001_SVC - STAND Base White model
	210	MAZ57743501	A34T0768AEZ 1L0100 Bracket MOLD ABS 380 ODM - ABS, HF-380 Stand Neck Bracket
		MAZ57743502	A34T0768AEW 1L0100 Bracket MOLD ABS 380 BRACKET ABS, HF-380 Stand Neck Bracket White model
	220	MCQ57579901	Q12T6600 6 Damper MOLD SANTOPRENE FOOT RUBBER GRAY_ODM
	230	MAZ57578701	A33T0408AES1X0100 Bracket MOLD NYLON 66 COVER - ABS, HF-380 ODM_Cable Managemet
		MAZ57578702	A33T0408AEWA1X0100 Bracket MOLD NYLON 66 COVER ABS, HF-380 Cable Managemet White model
	240	MJH57579401	Q11T5048 1 Supporter MOLD ABS Supporter ABS PCB_Supporter_ODM
	250	MHY57579801	Q15T0342101 Spring PRESS H-GI 0.2 COIL SBHG 10*30 0.5 19/22LG3001-ZA_ODM
	260	MGJ57579701	A85T0113101 S Plate,Shield PRESS SPTE 0.5 SPTE Main shield_19/22LG3001-ZA_ODM
	270	MCK57579601	A34T0819AES 1L0132 Cover MOLD ABS ODM ABS, HF-380 Cover_Bottom_for W/O Stand Status
		MCK57579602	A34T0819AEW 1L0132 Cover MOLD ABS, HF-380 Cover_Bottom_for W/O Stand Status White model

REPLACEMENT PARTS LIST

DATE:2008.6.26				
*S	*AL	LOC.NO	PART NO.	DESCRIPTION/SPECIFICATION
MAIN BORRD				
CAPACITOR				
		C101	065T0402470 31	MLCC 0402 47PF J 50V NPO
		C102	065T0402473 12	MLCC 0402 47NF K 16V X7R
		C103	065T0603105 12	CHIP 1UF 16V X7R
		C104	065T0402473 12	MLCC 0402 47NF K 16V X7R
		C105	065T0402473 12	MLCC 0402 47NF K 16V X7R
		C106	065T0603105 12	CHIP 1UF 16V X7R
		C107	065T0402104 12	CAP CHIP 0402 0.1UF 16V X7R
		C108	065T0402470 31	MLCC 0402 47PF J 50V NPO
		C109	065T0805475 A5	CHIP 4.7UF 10V X5R
		C110	065T0603105 12	CHIP 1UF 16V X7R
		C111	065T0402104 12	CAP CHIP 0402 0.1UF 16V X7R
		C112	065T0805225 12	CHIP 2.2UF 16V X7R 0805
		C113	065T0805225 12	CHIP 2.2UF 16V X7R 0805
		C114	065T0402471 32	CHIP 470PF 50V X7R
		C115	065T0402471 32	CHIP 470PF 50V X7R
		C116	065T0402330 31	33PF +-50% 50V NPO
		C117	065T0402330 31	33PF +-50% 50V NPO
		C118	065T0603105 12	CHIP 1UF 16V X7R
		C119	065T0402104 12	CAP CHIP 0402 0.1UF 16V X7R
		C120	065T0402473 12	MLCC 0402 47NF K 16V X7R
		C121	065T0603105 12	CHIP 1UF 16V X7R
		C122	065T0402104 12	CAP CHIP 0402 0.1UF 16V X7R
		C123	065T0402470 31	MLCC 0402 47PF J 50V NPO
		C124	065T0603105 12	CHIP 1UF 16V X7R
		C125	065T0402473 12	MLCC 0402 47NF K 16V X7R
		C126	065T0402470 31	MLCC 0402 47PF J 50V NPO
		C127	065T0603105 12	CHIP 1UF 16V X7R
		C128	065T040210322K M	MLCC 0402 CAP 0.01UF 25V X7R
		C129	065T040215031J M	MLCC 0402 CAP 15PF 50V NPO
		C130	065T040210322K M	MLCC 0402 CAP 0.01UF 25V X7R
		C131	065T040210322K M	MLCC 0402 CAP 0.01UF 25V X7R
		C132	065T040215031J M	MLCC 0402 CAP 15PF 50V NPO
		C133	065T040210322K M	MLCC 0402 CAP 0.01UF 25V X7R
		C134	065T040215031J M	MLCC 0402 CAP 15PF 50V NPO
		C135	065T040210322K M	MLCC 0402 CAP 0.01UF 25V X7R
		C136	065T0805225 12	CHIP 2.2UF 16V X7R 0805
		C137	065T0805225 12	CHIP 2.2UF 16V X7R 0805
		C138	065T0402471 32	CHIP 470PF 50V X7R
		C139	065T0402471 32	CHIP 470PF 50V X7R
		C140	065T0402330 31	33PF +-50% 50V NPO

	C141	065T0402330 31	33PF +-50% 50V NPO
	C142	065T0603473 32	CHIP 0.047UF 50V X7R
	C143	065T0603470 32	CHIP 47PF 50V X7R
	C144	065T0402471 32	CHIP 470PF 50V X7R
	C145	065T0402471 32	CHIP 470PF 50V X7R
	C146	065T0603105 12	CHIP 1UF 16V X7R
	C147	065T0603103 32	CHIP 0.01UF 50V X7R
	C148	065T0603150 31	CHIP 15PF 50V NPO
	C149	065T0603105 12	CHIP 1UF 16V X7R
	C150	065T0603104 32	CHIP 0.1UF 50V X7R
	C151	067T215Y4704KT	EC CAP.105 ℃
	C152	095T 90 23	JUMP WIRE
	C153	065T0603105 12	CHIP 1UF 16V X7R
	C154	065T0805106 A7	CHIP 10UF 10V Y5V 0805
	C155	065T0402104 12	CAP CHIP 0402 0.1UF 16V X7R
	C156	067T 305101 3T	100UF 16V 105C
	C157	065T0603105 12	CHIP 1UF 16V X7R
	C158	065T0402104 12	CAP CHIP 0402 0.1UF 16V X7R
	C160	065T0402104 12	CAP CHIP 0402 0.1UF 16V X7R
	C161	067T 305221 3T	220UF/16V
	C162	065T0402104 12	CAP CHIP 0402 0.1UF 16V X7R
	C163	065T0402105 05	MLCC 0402 1UF K 6.3V X5R
	C164	065T0805106 A7	CHIP 10UF 10V Y5V 0805
	C165	065T0402104 12	CAP CHIP 0402 0.1UF 16V X7R
	C166	065T0603104 22	CHIP 0.1UF 25V
	C167	065T0805106 A7	CHIP 10UF 10V Y5V 0805
	C168	065T0805106 A7	CHIP 10UF 10V Y5V 0805
	C169	065T0805106 A7	CHIP 10UF 10V Y5V 0805
	C170	065T0805106 A7	CHIP 10UF 10V Y5V 0805
	C171	065T0402104 12	CAP CHIP 0402 0.1UF 16V X7R
	C172	065T0402104 12	CAP CHIP 0402 0.1UF 16V X7R
	C173	065T0402104 12	CAP CHIP 0402 0.1UF 16V X7R
	C174	065T0402104 12	CAP CHIP 0402 0.1UF 16V X7R
	C175	065T0402104 12	CAP CHIP 0402 0.1UF 16V X7R
	C176	065T0402104 12	CAP CHIP 0402 0.1UF 16V X7R
	C177	065T0805106 A7	CHIP 10UF 10V Y5V 0805
	C178	065T0805106 A7	CHIP 10UF 10V Y5V 0805
	C179	065T0402104 12	CAP CHIP 0402 0.1UF 16V X7R
	C180	065T0402104 12	CAP CHIP 0402 0.1UF 16V X7R
	C181	065T0805106 A7	CHIP 10UF 10V Y5V 0805
	C182	065T0603105 12	CHIP 1UF 16V X7R
	C183	065T0402104 12	CAP CHIP 0402 0.1UF 16V X7R
	C184	065T0805106 A7	CHIP 10UF 10V Y5V 0805
	C185	065T0603105 12	CHIP 1UF 16V X7R
	C186	065T0402104 12	CAP CHIP 0402 0.1UF 16V X7R
	C187	065T0402100 31	CAP 0402 10PF J 50V NPO

	C188	065T0402270 31	CHIP 27PF 50V
	C189	065T0402270 31	CHIP 27PF 50V
	C190	065T0402100 31	CAP 0402 10PF J 50V NPO
	C191	065T0402100 31	CAP 0402 10PF J 50V NPO
	C192	065T0805106 A7	CHIP 10UF 10V Y5V 0805
	C193	065T0805106 A7	CHIP 10UF 10V Y5V 0805
	C194	065T0402100 31	CAP 0402 10PF J 50V NPO
	C195	065T0402100 31	CAP 0402 10PF J 50V NPO
	C196	065T0402100 31	CAP 0402 10PF J 50V NPO
	C197	065T0402100 31	CAP 0402 10PF J 50V NPO
	C198	065T0402104 12	CAP CHIP 0402 0.1UF 16V X7R
	C199	065T0402104 12	CAP CHIP 0402 0.1UF 16V X7R
	C201	065T0603103 12	CHIP 0.01UF 16V X7R
	C202	065T0603103 12	CHIP 0.01UF 16V X7R
	C203	065T0402104 12	CAP CHIP 0402 0.1UF 16V X7R
	C204	065T0805106 A7	CHIP 10UF 10V Y5V 0805
	C206	065T0603103 12	CHIP 0.01UF 16V X7R
	C213	065T0402104 12	CAP CHIP 0402 0.1UF 16V X7R
	C214	067T215Y4704KT	EC CAP.105 °C
	C215	095T 90 23	JUMP WIRE
	C216	065T0402104 12	CAP CHIP 0402 0.1UF 16V X7R
	C218	065T0402104 12	CAP CHIP 0402 0.1UF 16V X7R
	C219	065T0603470 32	CHIP 47PF 50V X7R
	C220	065T0402102 32	1000PF +-10% 50V X7R
	C222	065T0805106 A7	CHIP 10UF 10V Y5V 0805
	C223	065T0402104 12	CAP CHIP 0402 0.1UF 16V X7R
	C224	065T0402104 12	CAP CHIP 0402 0.1UF 16V X7R
	C225	065T0402104 12	CAP CHIP 0402 0.1UF 16V X7R
	C226	065T0402104 12	CAP CHIP 0402 0.1UF 16V X7R
	C227	065T0402104 12	CAP CHIP 0402 0.1UF 16V X7R
	C228	065T0402102 32	1000PF +-10% 50V X7R
	C229	065T0402224 A7	CAP 0402 0.22UF Z 10V
	C230	065T0402224 A7	CAP 0402 0.22UF Z 10V
	C231	065T0805106 A7	CHIP 10UF 10V Y5V 0805
	C232	065T0402104 12	CAP CHIP 0402 0.1UF 16V X7R
	C233	065T0402104 12	CAP CHIP 0402 0.1UF 16V X7R
	C234	065T0402104 12	CAP CHIP 0402 0.1UF 16V X7R
	C235	065T0402104 12	CAP CHIP 0402 0.1UF 16V X7R
	C236	065T0402224 A7	CAP 0402 0.22UF Z 10V
	C237	065T0402473 12	MLCC 0402 47NF K 16V X7R
	C238	065T0805106 A7	CHIP 10UF 10V Y5V 0805
	C239	065T0402104 12	CAP CHIP 0402 0.1UF 16V X7R
	C240	065T0402104 12	CAP CHIP 0402 0.1UF 16V X7R
	C241	065T0402270 31	CHIP 27PF 50V
	C242	065T0402104 12	CAP CHIP 0402 0.1UF 16V X7R
	C243	065T0402270 31	CHIP 27PF 50V

	C244	065T0402104 12	CAP CHIP 0402 0.1UF 16V X7R
	C245	065T0805106 A7	CHIP 10UF 10V Y5V 0805
	C246	065T0402100 31	CAP 0402 10PF J 50V NPO
	C248	065T0402220 31	CHIP 22PF 50V NPO
	C249	065T0402220 31	CHIP 22PF 50V NPO
	C250	065T0402100 31	CAP 0402 10PF J 50V NPO
	C251	065T0603339 31	CHIP 3.3PF 50V NPO
	C252	065T0603682 32	CHIP 0.0068UF 50V X7R 0603
	C253	065T0603682 32	CHIP 0.0068UF 50V X7R 0603
	C254	065T0603561 31	CHIP 560PF 50V NPO
	C255	065T0603561 31	CHIP 560PF 50V NPO
	C256	065T0603102 21	CHIP 1000PF 25V NPO
	C257	065T0603102 21	CHIP 1000PF 25V NPO
	C258	065T0603561 31	CHIP 560PF 50V NPO
	C259	065T0603561 31	CHIP 560PF 50V NPO
	C409	065T0402104 12	CAP CHIP 0402 0.1UF 16V X7R
	C410	065T0402104 12	CAP CHIP 0402 0.1UF 16V X7R
	C411	065T0603105 12	CHIP 1UF 16V X7R
	C412	065T0603105 12	CHIP 1UF 16V X7R
	C413	065T0603105 12	CHIP 1UF 16V X7R
	C414	065T0603105 12	CHIP 1UF 16V X7R
	C415	065T0603105 12	CHIP 1UF 16V X7R
	C416	065T0402104 12	CAP CHIP 0402 0.1UF 16V X7R
	C417	065T0402104 12	CAP CHIP 0402 0.1UF 16V X7R
	C418	065T0402104 12	CAP CHIP 0402 0.1UF 16V X7R
	C419	065T0805475 A5	CHIP 4.7UF 10V X5R
	C420	065T0603105 12	CHIP 1UF 16V X7R
	C421	065T0805475 A5	CHIP 4.7UF 10V X5R
	C422	065T0603105 12	CHIP 1UF 16V X7R
	C423	065T0402104 12	CAP CHIP 0402 0.1UF 16V X7R
	C424	065T0402104 12	CAP CHIP 0402 0.1UF 16V X7R
	C425	065T0402104 12	CAP CHIP 0402 0.1UF 16V X7R
	C426	065T0402104 12	CAP CHIP 0402 0.1UF 16V X7R
	C427	065T0402104 12	CAP CHIP 0402 0.1UF 16V X7R
	C428	065T0402104 12	CAP CHIP 0402 0.1UF 16V X7R
	C429	065T0402104 12	CAP CHIP 0402 0.1UF 16V X7R
	C430	065T0402104 12	CAP CHIP 0402 0.1UF 16V X7R
	C431	065T0402104 12	CAP CHIP 0402 0.1UF 16V X7R
	C432	065T0805475 A5	CHIP 4.7UF 10V X5R
	C433	065T0603105 12	CHIP 1UF 16V X7R
	C434	065T0402104 12	CAP CHIP 0402 0.1UF 16V X7R
	C435	065T0402104 12	CAP CHIP 0402 0.1UF 16V X7R
	C436	065T0402104 12	CAP CHIP 0402 0.1UF 16V X7R
	C437	065T0402104 12	CAP CHIP 0402 0.1UF 16V X7R
	C438	065T0402104 12	CAP CHIP 0402 0.1UF 16V X7R
	C439	065T0402104 12	CAP CHIP 0402 0.1UF 16V X7R

	C440	065T0402104 12	CAP CHIP 0402 0.1UF 16V X7R
	C441	067T 305100 3T	10UF 16V
	C442	065T0402104 12	CAP CHIP 0402 0.1UF 16V X7R
	C443	067T 305101 3T	100UF 16V 105C
	C444	065T0603105 12	CHIP 1UF 16V X7R
	C445	065T0402104 12	CAP CHIP 0402 0.1UF 16V X7R
	C446	065T0603105 12	CHIP 1UF 16V X7R
	C447	065T0402104 12	CAP CHIP 0402 0.1UF 16V X7R
	C448	065T0805475 A5	CHIP 4.7UF 10V X5R
	C449	065T0603105 12	CHIP 1UF 16V X7R
	C450	065T0402104 12	CAP CHIP 0402 0.1UF 16V X7R
	C451	065T0603105 12	CHIP 1UF 16V X7R
	C452	065T0402104 12	CAP CHIP 0402 0.1UF 16V X7R
	C453	065T0603105 12	CHIP 1UF 16V X7R
	C454	065T0402104 12	CAP CHIP 0402 0.1UF 16V X7R
	C455	065T0805475 A5	CHIP 4.7UF 10V X5R
	C456	065T0402104 12	CAP CHIP 0402 0.1UF 16V X7R
	C457	065T0402100 31	CAP 0402 10PF J 50V NPO
	C458	065T0402100 31	CAP 0402 10PF J 50V NPO
	C459	065T0402102 32	1000PF +-10% 50V X7R
	C460	065T0805475 A5	CHIP 4.7UF 10V X5R
	C461	065T0603224 32	MLCC 0603 0.22UF K 50V X7R
	C462	065T0805475 A5	CHIP 4.7UF 10V X5R
	C463	065T0603105 12	CHIP 1UF 16V X7R
	C464	065T0402104 12	CAP CHIP 0402 0.1UF 16V X7R
	C465	065T0402102 32	1000PF +-10% 50V X7R
	C466	065T0402102 32	1000PF +-10% 50V X7R
	C467	065T0603105 12	CHIP 1UF 16V X7R
	C468	065T0402104 12	CAP CHIP 0402 0.1UF 16V X7R
	C469	065T0603105 12	CHIP 1UF 16V X7R
	C470	065T0402104 12	CAP CHIP 0402 0.1UF 16V X7R
	C471	065T0402104 12	CAP CHIP 0402 0.1UF 16V X7R
	C473	065T0402104 12	CAP CHIP 0402 0.1UF 16V X7R
	C474	065T0402101 31	MLCC 0402 100PF J 50V NPO
	C475	065T0402104 12	CAP CHIP 0402 0.1UF 16V X7R
	C476	065T0402104 12	CAP CHIP 0402 0.1UF 16V X7R
	C477	065T0402104 12	CAP CHIP 0402 0.1UF 16V X7R
	C478	065T0402104 12	CAP CHIP 0402 0.1UF 16V X7R
	C501	065T0603105 12	CHIP 1UF 16V X7R
	C502	067T 305100 3T	10UF 16V
	C503	065T0402104 12	CAP CHIP 0402 0.1UF 16V X7R
	C504	065T0402104 12	CAP CHIP 0402 0.1UF 16V X7R
	C505	065T0402104 12	CAP CHIP 0402 0.1UF 16V X7R
	C506	065T0402104 12	CAP CHIP 0402 0.1UF 16V X7R
	C507	065T0402104 12	CAP CHIP 0402 0.1UF 16V X7R
	C508	065T0402104 12	CAP CHIP 0402 0.1UF 16V X7R

	C509	065T0402104 12	CAP CHIP 0402 0.1UF 16V X7R
	C510	065T0402104 12	CAP CHIP 0402 0.1UF 16V X7R
	C511	065T0402104 12	CAP CHIP 0402 0.1UF 16V X7R
	C512	065T0603224 32	MLCC 0603 0.22UF K 50V X7R
	C513	065T0603224 32	MLCC 0603 0.22UF K 50V X7R
	C514	065T0402104 12	CAP CHIP 0402 0.1UF 16V X7R
	C515	065T0805475 A5	CHIP 4.7UF 10V X5R
	C516	065T040210322K M	MLCC 0402 CAP 0.01UF 25V X7R
	C517	065T0402104 12	CAP CHIP 0402 0.1UF 16V X7R
	C518	065T0805475 A5	CHIP 4.7UF 10V X5R
	C519	065T0402104 12	CAP CHIP 0402 0.1UF 16V X7R
	C520	065T0805106 A7	CHIP 10UF 10V Y5V 0805
	C521	065T0805475 A5	CHIP 4.7UF 10V X5R
	C522	065T0402104 12	CAP CHIP 0402 0.1UF 16V X7R
	C523	065T0603105 12	CHIP 1UF 16V X7R
	C524	065T0805475 A5	CHIP 4.7UF 10V X5R
	C525	065T040210322K M	MLCC 0402 CAP 0.01UF 25V X7R
	C526	065T0402104 12	CAP CHIP 0402 0.1UF 16V X7R
	C527	065T0805475 A5	CHIP 4.7UF 10V X5R
	C528	065T0402104 12	CAP CHIP 0402 0.1UF 16V X7R
	C529	065T0603105 12	CHIP 1UF 16V X7R
	C530	065T0603105 12	CHIP 1UF 16V X7R
	C531	065T0805475 A5	CHIP 4.7UF 10V X5R
	C532	065T0402104 12	CAP CHIP 0402 0.1UF 16V X7R
	C533	065T0603101 31	CHIP 100PF 50V NPO
	C534	065T0402472 22	BHIP 4700PF 25V X7R
	C535	065T040210322K M	MLCC 0402 CAP 0.01UF 25V X7R
	C536	065T040210322K M	MLCC 0402 CAP 0.01UF 25V X7R
	C537	065T040210322K M	MLCC 0402 CAP 0.01UF 25V X7R
	C538	065T040210322K M	MLCC 0402 CAP 0.01UF 25V X7R
	C539	065T0603101 31	CHIP 100PF 50V NPO
	C540	065T040210322K M	MLCC 0402 CAP 0.01UF 25V X7R
	C541	065T0603101 31	CHIP 100PF 50V NPO
	C542	065T0603105 12	CHIP 1UF 16V X7R
	C543	065T0402104 12	CAP CHIP 0402 0.1UF 16V X7R
	C544	065T0805106 A7	CHIP 10UF 10V Y5V 0805
	C545	065T0402104 12	CAP CHIP 0402 0.1UF 16V X7R
	C546	065T0402471 32	CHIP 470PF 50V X7R
	C547	065T0402471 32	CHIP 470PF 50V X7R
	C548	065T0603105 12	CHIP 1UF 16V X7R
	C549	065T0402104 12	CAP CHIP 0402 0.1UF 16V X7R
	C550	065T0402472 22	BHIP 4700PF 25V X7R
	C551	065T040210322K M	MLCC 0402 CAP 0.01UF 25V X7R
	C552	065T0603509 31	CHIP 5PF 50V NPO
	C553	065T040210322K M	MLCC 0402 CAP 0.01UF 25V X7R
	C554	065T040210322K M	MLCC 0402 CAP 0.01UF 25V X7R

	C555	065T0603509 31	CHIP 5PF 50V NPO
	C556	065T040210322K M	MLCC 0402 CAP 0.01UF 25V X7R
	C557	065T0603509 31	CHIP 5PF 50V NPO
	C558	065T040210322K M	MLCC 0402 CAP 0.01UF 25V X7R
	C559	065T0603509 31	CHIP 5PF 50V NPO
	C560	065T040210322K M	MLCC 0402 CAP 0.01UF 25V X7R
	C561	065T0603509 31	CHIP 5PF 50V NPO
	C562	065T0603224 32	MLCC 0603 0.22UF K 50V X7R
	C563	065T0805106 A7	CHIP 10UF 10V Y5V 0805
	C564	065T0805106 A7	CHIP 10UF 10V Y5V 0805
	C565	065T0402471 32	CHIP 470PF 50V X7R
	C566	065T0402471 32	CHIP 470PF 50V X7R
	C567	065T0402330 31	33PF +-50% 50V NPO
	C568	065T0402330 31	33PF +-50% 50V NPO
	C569	065T0402104 12	CAP CHIP 0402 0.1UF 16V X7R
	C601	065T0603104 32	CHIP 0.1UF 50V X7R
	C602	065T0805105 22	CHIP 1UF 25V X7R 0805
	C603	065T0603331 32	CHIP 330PF 50V X7R
	C604	065T0603104 22	CHIP 0.1UF 25V
	C605	065T0805105 22	CHIP 1UF 25V X7R 0805
	C606	065T0603104 32	CHIP 0.1UF 50V X7R
	C607	065T0603153 32	CHIP 0.015UF 50V X7R 0603
	C608	065T0603471 32	CHIP 470PF 50V NPO
	C609	065T0603474 12	CHIP 0.47UF 16V X7R
	C611	064T176J684 0T	FILM CAP 0.68UF 63V
	C612	067T215L681 4N	CAP L105℃ 680UF M 25V NCC
	C613	065T0603104 22	CHIP 0.1UF 25V
	C614	065T0603104 22	CHIP 0.1UF 25V
	C615	067T215L681 4N	CAP L105℃ 680UF M 25V NCC
	C617	064T176J684 0T	FILM CAP 0.68UF 63V
	C618	067T215Y4704KT	EC CAP.105 ℃
	C619	065T0603153 32	CHIP 0.015UF 50V X7R 0603
	C620	065T0603471 32	CHIP 470PF 50V NPO
	C621	065T0603104 22	CHIP 0.1UF 25V
	C622	065T0603104 22	CHIP 0.1UF 25V
	C623	065T0603104 32	CHIP 0.1UF 50V X7R
	C624	065T0805105 22	CHIP 1UF 25V X7R 0805
	C625	065T0603331 32	CHIP 330PF 50V X7R
	C626	065T0603104 22	CHIP 0.1UF 25V
	C627	065T0603104 22	CHIP 0.1UF 25V
	C628	065T0805105 22	CHIP 1UF 25V X7R 0805
	C629	067T215V471 6N	EC L105℃ 470UF M 35V NCC
	C630	067T215V471 6N	EC L105℃ 470UF M 35V NCC
	C631	067T 3053313PT	E.C 330UF M 16V 8*12
	C632	065T0603104 32	CHIP 0.1UF 50V X7R
	C633	065T0402104 12	CAP CHIP 0402 0.1UF 16V X7R

	C634	067T 305221 3T	220UF/16V
	C635	065T0805104 32	CHIP 0.1UF 50V X7R
	C638	065T0805106 A7	CHIP 10UF 10V Y5V 0805
	C639	067T 309221 2	220UF +-20% 10V
	C640	065T0402104 12	CAP CHIP 0402 0.1UF 16V X7R
	C641	065T0603222 22	MLCC 0603 2200PF K 25V X7R
	C642	065T0603222 22	MLCC 0603 2200PF K 25V X7R
	C645	067T 305100 3T	10UF 16V
	C649	065T0805106 A7	CHIP 10UF 10V Y5V 0805
	C650	067T 309221 2	220UF +-20% 10V
	C658	065T0603105 12	CHIP 1UF 16V X7R
	C659	065T0603105 12	CHIP 1UF 16V X7R
	C661	065T0402101 32	100PF +-10% 50V X7R
	C662	065T0805106 A7	CHIP 10UF 10V Y5V 0805
	C663	065T0805106 A7	CHIP 10UF 10V Y5V 0805
	C664	065T0805106 A7	CHIP 10UF 10V Y5V 0805
	C665	065T0603222 22	MLCC 0603 2200PF K 25V X7R
	C666	065T0603102 32	CHIP 1000PF 50V X7R
	C667	065T0603102 32	CHIP 1000PF 50V X7R
	C668	065T0805106 A7	CHIP 10UF 10V Y5V 0805
	C669	065T0805106 A7	CHIP 10UF 10V Y5V 0805
	C670	065T0805106 A7	CHIP 10UF 10V Y5V 0805
	C671	065T0402101 32	100PF +-10% 50V X7R
	C672	065T0603222 22	MLCC 0603 2200PF K 25V X7R
	C673	065T0805106 A7	CHIP 10UF 10V Y5V 0805
	C674	067T 305100 3T	10UF 16V
	C675	065T0603104 32	CHIP 0.1UF 50V X7R
	C676	067T 305100 3T	10UF 16V
	C677	065T0603104 32	CHIP 0.1UF 50V X7R
	C678	065T0805106 A7	CHIP 10UF 10V Y5V 0805
	C679	065T0603104 32	CHIP 0.1UF 50V X7R
	C680	065T0805106 A7	CHIP 10UF 10V Y5V 0805
	C681	065T0805106 A7	CHIP 10UF 10V Y5V 0805
	C682	065T0805106 A7	CHIP 10UF 10V Y5V 0805
	C683	065T0805106 A7	CHIP 10UF 10V Y5V 0805
	C684	065T0805106 A7	CHIP 10UF 10V Y5V 0805
	C685	065T0805106 A7	CHIP 10UF 10V Y5V 0805
	C686	065T0805106 A7	CHIP 10UF 10V Y5V 0805
	C687	065T0402330 31	33PF +-50% 50V NPO
	C688	065T0402330 31	33PF +-50% 50V NPO
	C689	065T0805106 A7	CHIP 10UF 10V Y5V 0805
	C690	065T0805106 A7	CHIP 10UF 10V Y5V 0805
	C691	065T0805106 A7	CHIP 10UF 10V Y5V 0805
	C692	065T0603222 22	MLCC 0603 2200PF K 25V X7R
	C693	065T0603222 22	MLCC 0603 2200PF K 25V X7R
	C694	065T0805106 A7	CHIP 10UF 10V Y5V 0805

	C695	065T0805106 A7	CHIP 10UF 10V Y5V 0805
	C696	065T0603152 31	CHIP 1500PF 50V NPO
	C697	065T0603152 31	CHIP 1500PF 50V NPO
	C698	065T0402101 32	100PF +-10% 50V X7R
	C699	065T0402101 32	100PF +-10% 50V X7R
	C701	065T0402104 12	CAP CHIP 0402 0.1UF 16V X7R
	C702	067T 305101 3T	100UF 16V 105C
	C703	067T 305101 3T	100UF 16V 105C
	C704	065T0402104 12	CAP CHIP 0402 0.1UF 16V X7R
	C705	065T0402104 12	CAP CHIP 0402 0.1UF 16V X7R
	C706	065T0402104 12	CAP CHIP 0402 0.1UF 16V X7R
	C707	065T0402104 12	CAP CHIP 0402 0.1UF 16V X7R
	C708	065T0402104 12	CAP CHIP 0402 0.1UF 16V X7R
	C709	065T0402104 12	CAP CHIP 0402 0.1UF 16V X7R
	C710	065T0402104 12	CAP CHIP 0402 0.1UF 16V X7R
	C711	065T0805475 A5	CHIP 4.7UF 10V X5R
	C712	065T0402104 12	CAP CHIP 0402 0.1UF 16V X7R
	C713	065T0805475 A5	CHIP 4.7UF 10V X5R
	C714	065T0402104 12	CAP CHIP 0402 0.1UF 16V X7R
	C715	065T0402104 12	CAP CHIP 0402 0.1UF 16V X7R
	C716	065T0402104 12	CAP CHIP 0402 0.1UF 16V X7R
	C717	065T0402104 12	CAP CHIP 0402 0.1UF 16V X7R
	C718	065T0402104 12	CAP CHIP 0402 0.1UF 16V X7R
	C719	065T0402104 12	CAP CHIP 0402 0.1UF 16V X7R
	C720	065T0402104 12	CAP CHIP 0402 0.1UF 16V X7R
	C721	065T0805475 A5	CHIP 4.7UF 10V X5R
	C722	065T0402104 12	CAP CHIP 0402 0.1UF 16V X7R
	C723	065T0402104 12	CAP CHIP 0402 0.1UF 16V X7R
	C724	065T0402104 12	CAP CHIP 0402 0.1UF 16V X7R
	C725	065T0805475 A5	CHIP 4.7UF 10V X5R
	C726	065T0402104 12	CAP CHIP 0402 0.1UF 16V X7R
	C727	067T215L471 2N	ELCAP 105℃ 470UF M 10V
	C728	065T0402104 12	CAP CHIP 0402 0.1UF 16V X7R
	C729	065T0603105 12	CHIP 1UF 16V X7R
	C730	065T0805106 A7	CHIP 10UF 10V Y5V 0805
	C731	067T 2152207RT	22UF +-20%
	C732	065T0402104 12	CAP CHIP 0402 0.1UF 16V X7R
	C733	065T0603105 12	CHIP 1UF 16V X7R
	C734	065T0402104 12	CAP CHIP 0402 0.1UF 16V X7R
	C735	065T040210322K M	MLCC 0402 CAP 0.01UF 25V X7R
	C736	065T040210322K M	MLCC 0402 CAP 0.01UF 25V X7R
	C737	065T040210322K M	MLCC 0402 CAP 0.01UF 25V X7R
	C738	065T040210322K M	MLCC 0402 CAP 0.01UF 25V X7R
	C739	065T0805106 A7	CHIP 10UF 10V Y5V 0805
	C740	065T0805106 A7	CHIP 10UF 10V Y5V 0805
	C741	065T0805106 A7	CHIP 10UF 10V Y5V 0805

	C742	065T0805106 A7	CHIP 10UF 10V Y5V 0805
	C743	065T0603105 12	CHIP 1UF 16V X7R
	C7901	065T0603473 32	CHIP 0.047UF 50V X7R
	C7903	067T 305101 3T	100UF 16V 105C
	C7904	065T0805106 A7	CHIP 10UF 10V Y5V 0805
	C7905	065T0805104 22	0.1UF +-10% 25V X7R 0805
	C7906	065T0603105 12	CHIP 1UF 16V X7R
	C7907	065T0603474 12	CHIP 0.47UF 16V X7R
	C7908	065T0603221 32	CHIP 220PF 50V X7R
	C7909	067T 305101 3T	100UF 16V 105C
	C7910	067T 305101 3T	100UF 16V 105C
	C7911	065T0805104 22	0.1UF +-10% 25V X7R 0805
	C7912	065T0805104 22	0.1UF +-10% 25V X7R 0805
	C7913	065T0603105 12	CHIP 1UF 16V X7R
	C7914	065T0805104 22	0.1UF +-10% 25V X7R 0805
	C7915	067T215B4713PV	EC 470UF M 16V 10*13
	C7916	065T0805104 22	0.1UF +-10% 25V X7R 0805
	C7917	065T0603105 12	CHIP 1UF 16V X7R
	C7918	065T0603105 12	CHIP 1UF 16V X7R
	C7920	067T 305101 3T	100UF 16V 105C
	C7921	067T 305101 3T	100UF 16V 105C
	C7922	067T 305101 3T	100UF 16V 105C
	C7924	067T215L471 2N	ELCAP 105°C 470UF M 10V
	C7925	065T0805104 22	0.1UF +-10% 25V X7R 0805
	C7926	065T0805106 A7	CHIP 10UF 10V Y5V 0805
	C7927	065T0805104 22	0.1UF +-10% 25V X7R 0805
	C7928	067T 305471 3T	105°C470UF +-20% 16V
	C7929	065T0805104 22	0.1UF +-10% 25V X7R 0805
	C7930	065T040210322K M	MLCC 0402 CAP 0.01UF 25V X7R
	C7931	065T0805104 22	0.1UF +-10% 25V X7R 0805
	C7932	067T 305101 3T	100UF 16V 105C
	C7933	065T0805105 22	CHIP 1UF 25V X7R 0805
	C7935	065T0805104 22	0.1UF +-10% 25V X7R 0805
	C7936	067T215L471 2N	ELCAP 105°C 470UF M 10V
	C7937	067T215B101 4T	105°C RADIAL E-CAPACTOR 100UF 25V
	C7938	065T0805104 22	0.1UF +-10% 25V X7R 0805
	C7939	067T215L471 2N	ELCAP 105°C 470UF M 10V
	C7940	065T0805104 22	0.1UF +-10% 25V X7R 0805
	C7941	065T0805104 22	0.1UF +-10% 25V X7R 0805
	C7942	065T040210322K M	MLCC 0402 CAP 0.01UF 25V X7R
	C7943	067T 305100 4T	CAP 105°C 10UF M 25V 5*11
	C7944	065T0805104 22	0.1UF +-10% 25V X7R 0805
	C7945	067T215S471 4N	CAP 105°C 470UF M 25V
	C7946	065T0805475A2K T	CAP CHIP 0805 4.7UF K 10V X7R
	C7947	065T1206106 25	CHIP 10UF 25V X5R 1206

DOIDE				
		D501	093T 64 37 N	V-PORT-0603-100K V05
		D502	093T 60S 34 T	DIODE SCS140V 1A/40V SC-76
		D503	093T 64 37 N	V-PORT-0603-100K V05
		D504	093T 64 37 N	V-PORT-0603-100K V05
		D506	093T 60230	BAT54C BY MCC
		D507	093T 60230	BAT54C BY MCC
		D508	093T 64 37 N	V-PORT-0603-100K V05
		D509	093T 64 37 N	V-PORT-0603-100K V05
		D510	093T 64 37 N	V-PORT-0603-100K V05
		D512	093T 60230	BAT54C BY MCC
		D601	093T 64S522SEM	DIODE LL4148 SEMTECH
		D602	093T 64S522SEM	DIODE LL4148 SEMTECH
		D603	093T 64S522SEM	DIODE LL4148 SEMTECH
		D604	093T 64S522SEM	DIODE LL4148 SEMTECH
		D605	093T 64S522SEM	DIODE LL4148 SEMTECH
		D7901	093T2004 2A	SM240A DO-214AC
		D7902	093T 64S522SEM	DIODE LL4148 SEMTECH
		D7903	093T3004 3	SM340A DO-214AC BY SECOS
		D7904	093T3004 3	SM340A DO-214AC BY SECOS
		ZD101	093T 64 37 N	V-PORT-0603-100K V05
		ZD102	093T 39S 34 T	UDZSNP5.6B ROHM
		ZD103	093T 39S 34 T	UDZSNP5.6B ROHM
		ZD104	093T 64 37 N	V-PORT-0603-100K V05
		ZD105	093T 39S 34 T	UDZSNP5.6B ROHM
		ZD106	093T 39S 34 T	UDZSNP5.6B ROHM
		ZD107	093T 39S 34 T	UDZSNP5.6B ROHM
		ZD108	093T 39S 34 T	UDZSNP5.6B ROHM
		ZD109	093T 39S 34 T	UDZSNP5.6B ROHM
		ZD110	093T 39S 34 T	UDZSNP5.6B ROHM
		ZD111	093T 39S 40 T	RLZ 13B LLDS
		ZD112	093T 64 37 N	V-PORT-0603-100K V05
		ZD113	093T 64 37 N	V-PORT-0603-100K V05
		ZD114	093T 39S 34 T	UDZSNP5.6B ROHM
		ZD115	093T 64 37 N	V-PORT-0603-100K V05
		ZD116	093T 64 37 N	V-PORT-0603-100K V05
		ZD117	093T 39S 34 T	UDZSNP5.6B ROHM
		ZD118	093T 64 37 N	V-PORT-0603-100K V05
		ZD119	093T 64 37 N	V-PORT-0603-100K V05
		ZD120	093T 39S 40 T	RLZ 13B LLDS
		ZD121	093T 39S 34 T	UDZSNP5.6B ROHM
		ZD401	093T 64 37 N	V-PORT-0603-100K V05
		ZD402	093T 64 37 N	V-PORT-0603-100K V05
		ZD403	093T 39S 34 T	UDZSNP5.6B ROHM
		ZD404	093T 39S 34 T	UDZSNP5.6B ROHM
		ZD501	093T 39S 34 T	UDZSNP5.6B ROHM

		ZD502	093T 39S 34 T	UDZSNP5.6B ROHM
		ZD503	093T 39S 34 T	UDZSNP5.6B ROHM
		ZD504	093T 39S 34 T	UDZSNP5.6B ROHM
		ZD505	093T 39S 34 T	UDZSNP5.6B ROHM
		ZD506	093T 64 37 N	V-PORT-0603-100K V05
		ZD507	093T 64 37 N	V-PORT-0603-100K V05
		ZD508	093T 39S 34 T	UDZSNP5.6B ROHM
		ZD509	093T 39S 34 T	UDZSNP5.6B ROHM
		ZD510	093T 39S 34 T	UDZSNP5.6B ROHM
		ZD511	093T 39S 34 T	UDZSNP5.6B ROHM
		ZD512	093T 39S 34 T	UDZSNP5.6B ROHM
		ZD513	093T 64 37 N	V-PORT-0603-100K V05
		ZD514	093T 64 37 N	V-PORT-0603-100K V05
		ZD515	093T 39S 34 T	UDZSNP5.6B ROHM
		ZD516	093T 39S 34 T	UDZSNP5.6B ROHM
		ZD601	093T 64 37 N	V-PORT-0603-100K V05
		ZD602	093T 64 37 N	V-PORT-0603-100K V05
RESISTOR				
		R101	061T0603270	RST CHIPR 27 OHM +-5% 1/10W
		R102	061T0603101	RST CHIPR 100 OHM +-5% 1/10W
		R103	061T0603103	RST CHIPR 10KOHM +-5% 1/10W
		R104	061T0603000	RST CHIPR 0 OHM +-5% 1/10W
		R105	061T0603101	RST CHIPR 100 OHM +-5% 1/10W
		R106	061T0603470	RST CHIPR 47 OHM +-5% 1/10W
		R107	061T0603270	RST CHIPR 27 OHM +-5% 1/10W
		R108	061T0603101	RST CHIPR 100 OHM +-5% 1/10W
		R109	061T0603470	RST CHIPR 47 OHM +-5% 1/10W
		R110	061T0603102	RST CHIPR 1KOHM +-5% 1/10W
		R111	061T0603302	CHIP 3K OHM 5% 1/16
		R112	061T0603203	CHIPR 20K OHM+-5% 1/10W
		R113	061T0603102	RST CHIPR 1KOHM +-5% 1/10W
		R114	061T0603302	CHIP 3K OHM 5% 1/16
		R115	061T0603203	CHIPR 20K OHM+-5% 1/10W
		R116	061T0603104	RST CHIPR 100KOHM +-5% 1/10W
		R117	061T0603104	RST CHIPR 100KOHM +-5% 1/10W
		R118	061T0603303	RST CHIPR 30 KOHM +-5% 1/10W
		R119	061T0603303	RST CHIPR 30 KOHM +-5% 1/10W
		R120	061T0603270	RST CHIPR 27 OHM +-5% 1/10W
		R121	061T0603101	RST CHIPR 100 OHM +-5% 1/10W
		R122	061T0603470	RST CHIPR 47 OHM +-5% 1/10W
		R123	061T0603000	RST CHIPR 0 OHM +-5% 1/10W

	R124	061T0603270	RST CHIPR 27 OHM +-5% 1/10W
	R125	061T0603101	RST CHIPR 100 OHM +-5% 1/10W
	R126	061T0603470	RST CHIPR 47 OHM +-5% 1/10W
	R127	061T0603000	RST CHIPR 0 OHM +-5% 1/10W
	R128	061T0603680	RST CHIPR 68 OHM +-5% 1/10W
	R129	061T0805750	RST CHIPR 75 OHM +-5% 1/8W
	R130	061T0603000	RST CHIPR 0 OHM +-5% 1/10W
	R131	061T0603101	RST CHIPR 100 OHM +-5% 1/10W
	R132	061T0603680	RST CHIPR 68 OHM +-5% 1/10W
	R133	061T0805750	RST CHIPR 75 OHM +-5% 1/8W
	R134	061T0603000	RST CHIPR 0 OHM +-5% 1/10W
	R135	061T0603101	RST CHIPR 100 OHM +-5% 1/10W
	R136	061T0805750	RST CHIPR 75 OHM +-5% 1/8W
	R137	061T0603000	RST CHIPR 0 OHM +-5% 1/10W
	R138	061T0603680	RST CHIPR 68 OHM +-5% 1/10W
	R139	061T0603750	RST CHIPR 75 OHM +-5% 1/10W
	R140	061T0603333	RST CHIPR 33 KOHM +-5% 1/10W
	R141	061T0603102	RST CHIPR 1KOHM +-5% 1/10W
	R142	061T0603302	CHIP 3K OHM 5% 1/16
	R143	061T0603203	CHIPR 20K OHM+-5% 1/10W
	R144	061T0603103	RST CHIPR 10KOHM +-5% 1/10W
	R145	061T0603102	RST CHIPR 1KOHM +-5% 1/10W
	R146	061T0603302	CHIP 3K OHM 5% 1/16
	R147	061T0603203	CHIPR 20K OHM+-5% 1/10W
	R148	061T0603104	RST CHIPR 100KOHM +-5% 1/10W
	R149	061T0603104	RST CHIPR 100KOHM +-5% 1/10W
	R150	061T0603303	RST CHIPR 30 KOHM +-5% 1/10W
	R151	061T0603303	RST CHIPR 30 KOHM +-5% 1/10W
	R152	061T0603102	RST CHIPR 1KOHM +-5% 1/10W
	R153	061T0603270	RST CHIPR 27 OHM +-5% 1/10W
	R154	061T0603101	RST CHIPR 100 OHM +-5% 1/10W
	R155	061T0603102	RST CHIPR 1KOHM +-5% 1/10W
	R156	061T0603470	RST CHIPR 47 OHM +-5% 1/10W
	R157	061T0603104	RST CHIPR 100KOHM +-5% 1/10W
	R158	061T0603104	RST CHIPR 100KOHM +-5% 1/10W
	R159	061T0603000	RST CHIPR 0 OHM +-5% 1/10W
	R160	061T0603680	RST CHIPR 68 OHM +-5% 1/10W
	R161	061T0603750	RST CHIPR 75 OHM +-5% 1/10W
	R164	061T0603000	RST CHIPR 0 OHM +-5% 1/10W

	R165	061T0603103	RST CHIPR 10KOHM +-5% 1/10W
	R166	061T0603333	RST CHIPR 33 KOHM +-5% 1/10W
	R167	061T0603103	RST CHIPR 10KOHM +-5% 1/10W
	R168	061T0603680	RST CHIPR 68 OHM +-5% 1/10W
	R169	061T0603333	RST CHIPR 33 KOHM +-5% 1/10W
	R170	061T0603750	RST CHIPR 75 OHM +-5% 1/10W
	R171	061T0603000	RST CHIPR 0 OHM +-5% 1/10W
	R172	061T0603104	RST CHIPR 100KOHM +-5% 1/10W
	R173	061T0603103	RST CHIPR 10KOHM +-5% 1/10W
	R174	061T0603513	RST CHIPR 51 KOHM +-5% 1/10W
	R175	061T0603105	RST CHIPR 1MOHM +-5% 1/10W
	R176	061T0603103	RST CHIPR 10KOHM +-5% 1/10W
	R178	061T0603103	RST CHIPR 10KOHM +-5% 1/10W
	R181	061T0603103	RST CHIPR 10KOHM +-5% 1/10W
	R182	061T0603104	RST CHIPR 100KOHM +-5% 1/10W
	R183	061T0603473	CHIP 47KOHM 1/16W
	R184	061T0603103	RST CHIPR 10KOHM +-5% 1/10W
	R185	061T0603103	RST CHIPR 10KOHM +-5% 1/10W
	R186	061T0603103	RST CHIPR 10KOHM +-5% 1/10W
	R187	061T0603103	RST CHIPR 10KOHM +-5% 1/10W
	R188	061T0603103	RST CHIPR 10KOHM +-5% 1/10W
	R189	061T0603103	RST CHIPR 10KOHM +-5% 1/10W
	R190	061T0603103	RST CHIPR 10KOHM +-5% 1/10W
	R191	061T0603472	CHIP 4.7KOHM 1/16W
	R192	061T0603472	CHIP 4.7KOHM 1/16W
	R193	061T0603105	RST CHIPR 1MOHM +-5% 1/10W
	R194	061T0603103	RST CHIPR 10KOHM +-5% 1/10W
	R195	061T0603330	CHIP 33OHM 1/16W
	R196	061T0603330	CHIP 33OHM 1/16W
	R197	061T0603330	CHIP 33OHM 1/16W
	R198	061T0603330	CHIP 33OHM 1/16W
	R199	061T0603000	RST CHIPR 0 OHM +-5% 1/10W
	R200	061T0603472	CHIP 4.7KOHM 1/16W
	R201	061T0603101	RST CHIPR 100 OHM +-5% 1/10W
	R204	061T0603101	RST CHIPR 100 OHM +-5% 1/10W
	R205	061T0603472	CHIP 4.7KOHM 1/16W
	R206	061T0603472	CHIP 4.7KOHM 1/16W
	R209	061T0603103	RST CHIPR 10KOHM +-5% 1/10W
	R210	061T0603000	RST CHIPR 0 OHM +-5% 1/10W
	R211	061T0603100	CHIP 10OHM 1/16W
	R213	061T0603560 9F	RST CHIPR 56 OHM +-1% 1/10W
	R214	061T0603333	RST CHIPR 33 KOHM +-5%

				1/10W
		R215	061T1206750	RST CHIPR 75 OHM +-5% 1/4W
		R216	061T0603000	RST CHIPR 0 OHM +-5% 1/10W
		R218	061T0603100	CHIP 100HM 1/16W
		R219	061T0603560 9F	RST CHIPR 56 OHM +-1% 1/10W
		R220	061T1206750	RST CHIPR 75 OHM +-5% 1/4W
		R221	061T0603750	RST CHIPR 75 OHM +-5% 1/10W
		R222	061T0603000	RST CHIPR 0 OHM +-5% 1/10W
		R223	061T0603000	RST CHIPR 0 OHM +-5% 1/10W
		R224	061T0603000	RST CHIPR 0 OHM +-5% 1/10W
		R225	061T0603102	RST CHIPR 1KOHM +-5% 1/10W
		R226	061T0603105	RST CHIPR 1MOHM +-5% 1/10W
		R228	061T0603101	RST CHIPR 100 OHM +-5% 1/10W
		R229	061T0603103	RST CHIPR 10KOHM +-5% 1/10W
		R230	061T0402101	RST CHIPR 100 OHM +-5% 1/16W
		R231	061T0402101	RST CHIPR 100 OHM +-5% 1/16W
		R232	061T0402101	RST CHIPR 100 OHM +-5% 1/16W
		R233	061T0603000	RST CHIPR 0 OHM +-5% 1/10W
		R234	061T0402101	RST CHIPR 100 OHM +-5% 1/16W
		R235	061T0603000	RST CHIPR 0 OHM +-5% 1/10W
		R236	061T0402101	RST CHIPR 100 OHM +-5% 1/16W
		R237	061T0402101	RST CHIPR 100 OHM +-5% 1/16W
		R238	061T0402101	RST CHIPR 100 OHM +-5% 1/16W
		R239	061T0402101	RST CHIPR 100 OHM +-5% 1/16W
		R240	061T0402101	RST CHIPR 100 OHM +-5% 1/16W
		R241	061T0402101	RST CHIPR 100 OHM +-5% 1/16W
		R242	061T0402101	RST CHIPR 100 OHM +-5% 1/16W
		R243	061T0603101	RST CHIPR 100 OHM +-5% 1/10W
		R244	061T0603101	RST CHIPR 100 OHM +-5% 1/10W
		R245	061T0603101	RST CHIPR 100 OHM +-5% 1/10W
		R246	061T0603472	CHIP 4.7KOHM 1/16W
		R248	061T0603000	RST CHIPR 0 OHM +-5% 1/10W
		R250	061T0603101	RST CHIPR 100 OHM +-5% 1/10W
		R251	061T0603101	RST CHIPR 100 OHM +-5% 1/10W
		R252	061T0603101	RST CHIPR 100 OHM +-5% 1/10W

	R253	061T0603101	RST CHIPR 100 OHM +-5% 1/10W
	R254	061T0603101	RST CHIPR 100 OHM +-5% 1/10W
	R255	061T0603000	RST CHIPR 0 OHM +-5% 1/10W
	R256	061T0603331	RST CHIPR 330 OHM +-5% 1/10W
	R257	061T0805000	RST CHIPR 0 OHM +-5% 1/8W
	R263	061T0603472	CHIP 4.7KOHM 1/16W
	R264	061T0603102	RST CHIPR 1KOHM +-5% 1/10W
	R401	061T0603472	CHIP 4.7KOHM 1/16W
	R420	061T0603000	RST CHIPR 0 OHM +-5% 1/10W
	R421	061T0603472	CHIP 4.7KOHM 1/16W
	R422	061T0603103	RST CHIPR 10KOHM +-5% 1/10W
	R423	061T0603102	RST CHIPR 1KOHM +-5% 1/10W
	R424	061T0603330	CHIP 33OHM 1/16W
	R425	061T0603103	RST CHIPR 10KOHM +-5% 1/10W
	R426	061T0603103	RST CHIPR 10KOHM +-5% 1/10W
	R427	061T0603103	RST CHIPR 10KOHM +-5% 1/10W
	R428	061T0603472	CHIP 4.7KOHM 1/16W
	R429	061T0603472	CHIP 4.7KOHM 1/16W
	R430	061T0603472	CHIP 4.7KOHM 1/16W
	R431	061T0603472	CHIP 4.7KOHM 1/16W
	R432	061T0603472	CHIP 4.7KOHM 1/16W
	R434	061T0603472	CHIP 4.7KOHM 1/16W
	R437	061T0603102	RST CHIPR 1KOHM +-5% 1/10W
	R440	061T0603000	RST CHIPR 0 OHM +-5% 1/10W
	R441	061T0603000	RST CHIPR 0 OHM +-5% 1/10W
	R442	061T0603109	RST CHIPR 1 OHM +-5% 1/10W
	R443	061T0603472	CHIP 4.7KOHM 1/16W
	R447	061T0603103	RST CHIPR 10KOHM +-5% 1/10W
	R449	061T0603330	CHIP 33OHM 1/16W
	R450	061T0603103	RST CHIPR 10KOHM +-5% 1/10W
	R451	061T0603392	CHIP 3.9KOHM 1/16W
	R452	061T0603103	RST CHIPR 10KOHM +-5% 1/10W
	R453	061T0603472	CHIP 4.7KOHM 1/16W
	R454	061T0603472	CHIP 4.7KOHM 1/16W
	R455	061T0603392	CHIP 3.9KOHM 1/16W
	R456	061T0603000	RST CHIPR 0 OHM +-5% 1/10W
	R457	061T0603000	RST CHIPR 0 OHM +-5% 1/10W
	R461	061T0603473	CHIP 47KOHM 1/16W
	R462	061T0603102	RST CHIPR 1KOHM +-5% 1/10W
	R464	061T0603473	CHIP 47KOHM 1/16W
	R465	061T0603330	CHIP 33OHM 1/16W
	R466	061T0603330	CHIP 33OHM 1/16W
	R467	061T0603330	CHIP 33OHM 1/16W
	R468	061T0603330	CHIP 33OHM 1/16W

	R470	061T0603203	CHIPR 20K OHM+-5% 1/10W
	R471	061T0603203	CHIPR 20K OHM+-5% 1/10W
	R472	061T0603820 0F	RST CHIPR 820 OHM +-1% 1/10W
	R473	061T0603180 1F	RST CHIPR 1.8 KOHM +-1% 1/10W
	R476	061T0603103	RST CHIPR 10KOHM +-5% 1/10W
	R477	061T0603103	RST CHIPR 10KOHM +-5% 1/10W
	R478	061T0603121	RST CHIPR 120 OHM +-5% 1/10W
	R501	061T0603512	RST CHIPR 5.1 KOHM +-5% 1/10W
	R502	061T0603472	CHIP 4.7KOHM 1/16W
	R503	061T0603000	RST CHIPR 0 OHM +-5% 1/10W
	R504	061T0603222	CHIP 2.2K OHM 1/16W
	R505	061T0603222	CHIP 2.2K OHM 1/16W
	R507	061T0603472	CHIP 4.7KOHM 1/16W
	R508	061T0603472	CHIP 4.7KOHM 1/16W
	R509	061T0603222	CHIP 2.2K OHM 1/16W
	R510	061T0603362	RST CHIPR 3.6 KOHM +-5% 1/10W
	R511	061T0603121	RST CHIPR 120 OHM +-5% 1/10W
	R512	061T0603104	RST CHIPR 100KOHM +-5% 1/10W
	R513	061T0603472	CHIP 4.7KOHM 1/16W
	R514	061T0603472	CHIP 4.7KOHM 1/16W
	R515	061T0603472	CHIP 4.7KOHM 1/16W
	R516	061T0603101	RST CHIPR 100 OHM +-5% 1/10W
	R517	061T0603101	RST CHIPR 100 OHM +-5% 1/10W
	R518	061T0603103	RST CHIPR 10KOHM +-5% 1/10W
	R519	061T0603472	CHIP 4.7KOHM 1/16W
	R520	061T0603472	CHIP 4.7KOHM 1/16W
	R521	061T0603472	CHIP 4.7KOHM 1/16W
	R522	061T0603104	RST CHIPR 100KOHM +-5% 1/10W
	R523	061T0603101	RST CHIPR 100 OHM +-5% 1/10W
	R524	061T0603101	RST CHIPR 100 OHM +-5% 1/10W
	R525	061T0603103	RST CHIPR 10KOHM +-5% 1/10W
	R528	061T0603000	RST CHIPR 0 OHM +-5% 1/10W
	R529	061T0603000	RST CHIPR 0 OHM +-5% 1/10W
	R532	061T0603000	RST CHIPR 0 OHM +-5% 1/10W
	R533	061T0603000	RST CHIPR 0 OHM +-5% 1/10W
	R534	061T0603104	RST CHIPR 100KOHM +-5% 1/10W
	R535	061T0603102	RST CHIPR 1KOHM +-5% 1/10W
	R536	061T0603104	RST CHIPR 100KOHM +-5% 1/10W

	R537	061T08057509FY	RST CHIPR 75 OHM +-1% 1/8W
	R538	061T0603000	RST CHIPR 0 OHM +-5% 1/10W
	R539	061T0603680	RST CHIPR 68 OHM +-5% 1/10W
	R540	061T0603101	RST CHIPR 100 OHM +-5% 1/10W
	R541	061T0603680	RST CHIPR 68 OHM +-5% 1/10W
	R542	061T08057509FY	RST CHIPR 75 OHM +-1% 1/8W
	R543	061T0603101	RST CHIPR 100 OHM +-5% 1/10W
	R544	061T0603680	RST CHIPR 68 OHM +-5% 1/10W
	R545	061T08057509FY	RST CHIPR 75 OHM +-1% 1/8W
	R546	061T0603102	RST CHIPR 1KOHM +-5% 1/10W
	R547	061T0603102	RST CHIPR 1KOHM +-5% 1/10W
	R548	061T0603104	RST CHIPR 100KOHM +-5% 1/10W
	R549	061T0603104	RST CHIPR 100KOHM +-5% 1/10W
	R550	061T0603000	RST CHIPR 0 OHM +-5% 1/10W
	R551	061T0603000	RST CHIPR 0 OHM +-5% 1/10W
	R552	061T0603000	RST CHIPR 0 OHM +-5% 1/10W
	R553	061T06033909FY	RST CHIPR 39 OHM +-1% 1/10W
	R554	061T08057509FY	RST CHIPR 75 OHM +-1% 1/8W
	R555	061T0603000	RST CHIPR 0 OHM +-5% 1/10W
	R556	061T0603101	RST CHIPR 100 OHM +-5% 1/10W
	R557	061T06033909FY	RST CHIPR 39 OHM +-1% 1/10W
	R558	061T08057509FY	RST CHIPR 75 OHM +-1% 1/8W
	R559	061T0603000	RST CHIPR 0 OHM +-5% 1/10W
	R560	061T0603101	RST CHIPR 100 OHM +-5% 1/10W
	R561	061T0603222	CHIP 2.2K OHM 1/16W
	R562	061T06033909FY	RST CHIPR 39 OHM +-1% 1/10W
	R563	061T08057509FY	RST CHIPR 75 OHM +-1% 1/8W
	R564	061T0603000	RST CHIPR 0 OHM +-5% 1/10W
	R565	061T0603101	RST CHIPR 100 OHM +-5% 1/10W
	R566	061T0603222	CHIP 2.2K OHM 1/16W
	R567	061T0603822	RST CHIPR 8.2 KOHM +-5% 1/10W
	R568	061T0603302	CHIP 3K OHM 5% 1/16
	R569	061T0603203	CHIPR 20K OHM+-5% 1/10W
	R570	061T0603822	RST CHIPR 8.2 KOHM +-5% 1/10W
	R571	061T0603302	CHIP 3K OHM 5% 1/16
	R572	061T0603203	CHIPR 20K OHM+-5% 1/10W
	R573	061T0603101	RST CHIPR 100 OHM +-5% 1/10W
	R574	061T0603101	RST CHIPR 100 OHM +-5% 1/10W
	R575	061T0603104	RST CHIPR 100KOHM +-5% 1/10W

		R576	061T0603104	RST CHIPR 100KOHM +-5% 1/10W
		R577	061T0603300 2F	RST CHIPR 30 KOHM +-1% 1/10W
		R578	061T0603300 2F	RST CHIPR 30 KOHM +-1% 1/10W
		R581	061T0603330	CHIP 33OHM 1/16W
		R582	061T0603103	RST CHIPR 10KOHM +-5% 1/10W
		R601	061T0603000	RST CHIPR 0 OHM +-5% 1/10W
		R602	061T0603472	CHIP 4.7KOHM 1/16W
		R603	061T0603512	RST CHIPR 5.1 KOHM +-5% 1/10W
		R604	061T0603472	CHIP 4.7KOHM 1/16W
		R605	061T0603000	RST CHIPR 0 OHM +-5% 1/10W
		R606	061T1206100	RST CHIPR 10 OHM +-5% 1/4W
		R607	061T0603102	RST CHIPR 1KOHM +-5% 1/10W
		R608	061T0603473	CHIP 47KOHM 1/16W
		R609	061T0603123	RST CHIPR 12 KOHM +-5%1/10W
		R610	061T0603473	CHIP 47KOHM 1/16W
		R613	061T0603393	RST CHIPR 39 KOHM +-5% 1/10W
		R614	061T1206100	RST CHIPR 10 OHM +-5% 1/4W
		R615	061T0603472	CHIP 4.7KOHM 1/16W
		R616	061T0603512	RST CHIPR 5.1 KOHM +-5% 1/10W
		R617	061T0603472	CHIP 4.7KOHM 1/16W
		R618	061T0603122	RST CHIPR 1.2 KOHM +-5% 1/10W
		R620	061T0603103	RST CHIPR 10KOHM +-5% 1/10W
		R621	061T0603333	RST CHIPR 33 KOHM +-5% 1/10W
		R622	061T0603302	CHIP 3K OHM 5% 1/16
		R623	061T0603103	RST CHIPR 10KOHM +-5% 1/10W
		R624	061T0603000	RST CHIPR 0 OHM +-5% 1/10W
		R625	061T0603102	RST CHIPR 1KOHM +-5% 1/10W
		R626	061T12061009FY	RST CHIPR 10 OHM +-1% 1/4W
		R628	061T0603104	RST CHIPR 100KOHM +-5% 1/10W
		R629	061T0603100	CHIP 10OHM 1/16W
		R630	061T0603103	RST CHIPR 10KOHM +-5% 1/10W
		R631	061T0603333	RST CHIPR 33 KOHM +-5% 1/10W
		R632	061T0603000	RST CHIPR 0 OHM +-5% 1/10W
		R634	061T0603153	RST CHIPR 15 KOHM +-5% 1/10W
		R635	061T0603000	RST CHIPR 0 OHM +-5% 1/10W
		R636	061T0603200	RST CHIPR 20 OHM +-5% 1/10W
		R638	061T0603101	RST CHIPR 100 OHM +-5% 1/10W
		R639	061T0603102	RST CHIPR 1KOHM +-5% 1/10W
		R640	061T0603473	CHIP 47KOHM 1/16W

	R641	061T0603473	CHIP 47KOHM 1/16W
	R642	061T0603102	RST CHIPR 1KOHM +-5% 1/10W
	R644	061T0603153	RST CHIPR 15 KOHM +-5% 1/10W
	R645	061T0603000	RST CHIPR 0 OHM +-5% 1/10W
	R646	061T0603200	RST CHIPR 20 OHM +-5% 1/10W
	R648	061T0603101	RST CHIPR 100 OHM +-5% 1/10W
	R649	061T0603333	RST CHIPR 33 KOHM +-5% 1/10W
	R652	061T0603102	RST CHIPR 1KOHM +-5% 1/10W
	R654	061T0603102	RST CHIPR 1KOHM +-5% 1/10W
	R656	061T0603333	RST CHIPR 33 KOHM +-5% 1/10W
	R657	061T0603471	RST CHIPR 470OHM +-5% 1/10W
	R658	061T0603103	RST CHIPR 10KOHM +-5% 1/10W
	R659	061T0603512	RST CHIPR 5.1 KOHM +-5% 1/10W
	R660	061T0603100	CHIP 10OHM 1/16W
	R661	061T0603103	RST CHIPR 10KOHM +-5% 1/10W
	R662	061T0603104	RST CHIPR 100KOHM +-5% 1/10W
	R663	061T0603102	RST CHIPR 1KOHM +-5% 1/10W
	R664	061T0603473	CHIP 47KOHM 1/16W
	R665	061T0603471	RST CHIPR 470OHM +-5% 1/10W
	R666	061T0603103	RST CHIPR 10KOHM +-5% 1/10W
	R667	061T0603512	RST CHIPR 5.1 KOHM +-5% 1/10W
	R668	061T0603100	CHIP 10OHM 1/16W
	R669	061T0603103	RST CHIPR 10KOHM +-5% 1/10W
	R670	061T0603104	RST CHIPR 100KOHM +-5% 1/10W
	R671	061T0603102	RST CHIPR 1KOHM +-5% 1/10W
	R672	061T0603333	RST CHIPR 33 KOHM +-5% 1/10W
	R673	061T0603473	CHIP 47KOHM 1/16W
	R674	061T0603103	RST CHIPR 10KOHM +-5% 1/10W
	R675	061T0603103	RST CHIPR 10KOHM +-5% 1/10W
	R676	061T0603473	CHIP 47KOHM 1/16W
	R677	061T0603102	RST CHIPR 1KOHM +-5% 1/10W
	R678	061T0603000	RST CHIPR 0 OHM +-5% 1/10W
	R679	061T0603000	RST CHIPR 0 OHM +-5% 1/10W
	R680	061T0603000	RST CHIPR 0 OHM +-5% 1/10W
	R681	061T0603473	CHIP 47KOHM 1/16W
	R682	061T0603470	RST CHIPR 47 OHM +-5% 1/10W
	R683	061T0603222	CHIP 2.2K OHM 1/16W
	R684	061T0603222	CHIP 2.2K OHM 1/16W
	R685	061T0603103	RST CHIPR 10KOHM +-5% 1/10W
	R686	061T0603102	RST CHIPR 1KOHM +-5% 1/10W
	R687	061T0603473	CHIP 47KOHM 1/16W

	R688	061T0603000	RST CHIPR 0 OHM +-5% 1/10W
	R689	061T0603303	RST CHIPR 30 KOHM +-5% 1/10W
	R690	061T0603303	RST CHIPR 30 KOHM +-5% 1/10W
	R691	061T0603104	RST CHIPR 100KOHM +-5% 1/10W
	R692	061T0603104	RST CHIPR 100KOHM +-5% 1/10W
	R693	061T0603104	RST CHIPR 100KOHM +-5% 1/10W
	R694	061T0603104	RST CHIPR 100KOHM +-5% 1/10W
	R695	061T0603470	RST CHIPR 47 OHM +-5% 1/10W
	R696	061T0603104	RST CHIPR 100KOHM +-5% 1/10W
	R697	061T0603104	RST CHIPR 100KOHM +-5% 1/10W
	R698	061T0603103	RST CHIPR 10KOHM +-5% 1/10W
	R699	061T0603102	RST CHIPR 1KOHM +-5% 1/10W
	R700	061T0603473	CHIP 47KOHM 1/16W
	R701	061T0603104	RST CHIPR 100KOHM +-5% 1/10W
	R702	061T0603104	RST CHIPR 100KOHM +-5% 1/10W
	R704	061T0402470	RST CHIPR 47 OHM +-5% 1/16W
	R705	061T0603750	RST CHIPR 75 OHM +-5% 1/10W
	R706	061T0402470	RST CHIPR 47 OHM +-5% 1/16W
	R707	061T0603750	RST CHIPR 75 OHM +-5% 1/10W
	R708	061T0402470	RST CHIPR 47 OHM +-5% 1/16W
	R709	061T0603750	RST CHIPR 75 OHM +-5% 1/10W
	R710	061T0402470	RST CHIPR 47 OHM +-5% 1/16W
	R711	061T0603750	RST CHIPR 75 OHM +-5% 1/10W
	R712	061T0603220	CHIP 22OHM 1/10W
	R713	061T0603101	RST CHIPR 100 OHM +-5% 1/10W
	R714	061T0603220	CHIP 22OHM 1/10W
	R715	061T0603472	CHIP 4.7KOHM 1/16W
	R716	061T0603111	RST CHIPR 110 OHM +-5% 1/10W
	R717	061T0603121	RST CHIPR 120 OHM +-5% 1/10W
	R718	061T0603220	CHIP 22OHM 1/10W
	R720	061T0603473	CHIP 47KOHM 1/16W
	R721	061T0603473	CHIP 47KOHM 1/16W
	R725	061T0603000	RST CHIPR 0 OHM +-5% 1/10W
	R726	061T0603473	CHIP 47KOHM 1/16W
	R727	061T0603472	CHIP 4.7KOHM 1/16W
	R728	061T0603133	RST CHIPR 13 KOHM +-5% 1/10W
	R729	061T0603103	RST CHIPR 10KOHM +-5% 1/10W
	R730	061T0603103	RST CHIPR 10KOHM +-5% 1/10W

	R731	061T0603103	RST CHIPR 10KOHM +-5% 1/10W
	R732	061T0603103	RST CHIPR 10KOHM +-5% 1/10W
	R733	061T0603512	RST CHIPR 5.1 KOHM +-5% 1/10W
	R734	061T0603333	RST CHIPR 33 KOHM +-5% 1/10W
	R735	061T0603512	RST CHIPR 5.1 KOHM +-5% 1/10W
	R736	061T0603333	RST CHIPR 33 KOHM +-5% 1/10W
	R737	061T0603471	RST CHIPR 470OHM +-5% 1/10W
	R738	061T0603471	RST CHIPR 470OHM +-5% 1/10W
	R739	061T0603000	RST CHIPR 0 OHM +-5% 1/10W
	R7901	061T0603000	RST CHIPR 0 OHM +-5% 1/10W
	R7902	061T0603102	RST CHIPR 1KOHM +-5% 1/10W
	R7903	061T0603472	CHIP 4.7KOHM 1/16W
	R7904	061T0603473	CHIP 47KOHM 1/16W
	R7905	061T0603103	RST CHIPR 10KOHM +-5% 1/10W
	R7906	061T0603103	RST CHIPR 10KOHM +-5% 1/10W
	R7907	061T0603472	CHIP 4.7KOHM 1/16W
	R7908	061T0603752	RST CHIPR 7.5 KOHM +-5% 1/10W
	R7909	061T0603103	RST CHIPR 10KOHM +-5% 1/10W
	R7912	061T0603103	RST CHIPR 10KOHM +-5% 1/10W
	R7915	061T0603473	CHIP 47KOHM 1/16W
	R7916	061T0603103	RST CHIPR 10KOHM +-5% 1/10W
	R7917	061T0603562	RST CHIPR 5.6 KOHM +-5% 1/10W
	R7918	061T0603103	RST CHIPR 10KOHM +-5% 1/10W
	R7919	061T0603101	RST CHIPR 100 OHM +-5% 1/10W
	R7920	061T0603153	RST CHIPR 15 KOHM +-5% 1/10W
	R7921	061T0603103	RST CHIPR 10KOHM +-5% 1/10W
	R7922	061T0603103	RST CHIPR 10KOHM +-5% 1/10W
	R7923	061T0603000	RST CHIPR 0 OHM +-5% 1/10W
	R7924	061T0603103	RST CHIPR 10KOHM +-5% 1/10W
	R7925	061T0603202	RST CHIPR 2 KOHM +-5% 1/10W
	R7926	061T0603102 1F	RST CHIPR 1.02KOHM +-1% 1/10W
	R7927	061T0603104	RST CHIPR 100KOHM +-5% 1/10W
	R7928	061T0603302	CHIP 3K OHM 5% 1/16
	R7929	061T0603271	RST CHIPR 270 OHM +-5% 1/10W
	R7930	061T0603000	RST CHIPR 0 OHM +-5% 1/10W
	R7931	061T0603130 1F	RST CHIPR 1.3 KOHM +-1% 1/10W
	R7932	061T0603103	RST CHIPR 10KOHM +-5% 1/10W
	R7933	061T0603203	CHIPR 20K OHM+-5% 1/10W
	R7934	061T0603202	RST CHIPR 2 KOHM +-5% 1/10W

		R7935	061T0805000	RST CHIPR 0 OHM +-5% 1/8W
		R7936	061T 208201 64	RST MOFR 200 OHM +-5% 1W
		R7937	061T0805000	RST CHIPR 0 OHM +-5% 1/8W
		R795	061T0603104	RST CHIPR 100KOHM +-5% 1/10W
		R796	061T0603562	RST CHIPR 5.6 KOHM +-5% 1/10W
		RN401	061T 125103 8	RST CHIP AR 8P4R 10KOHM +-5% 1/16W
		RN501	061T 125472 8	RST CHIP AR 8P4R 4.7KOHM +-5% 1/16W
		RN701	061T 126470 8	RST CHIPR AR 8P4R 47 OHM +-5% 1/16W
		RN702	061T 125750 8Y	RST CHIP AR 8P4R 75 OHM +-5% 1/16W
		RN703	061T 125750 8Y	RST CHIP AR 8P4R 75 OHM +-5% 1/16W
		RN704	061T 125750 8Y	RST CHIP AR 8P4R 75 OHM +-5% 1/16W
		RN705	061T 125750 8Y	RST CHIP AR 8P4R 75 OHM +-5% 1/16W
		RN706	061T 125750 8Y	RST CHIP AR 8P4R 75 OHM +-5% 1/16W
		RN707	061T 126470 8	RST CHIPR AR 8P4R 47 OHM +-5% 1/16W
		RN708	061T 126470 8	RST CHIPR AR 8P4R 47 OHM +-5% 1/16W
		RN709	061T 125750 8Y	RST CHIP AR 8P4R 75 OHM +-5% 1/16W
		RN710	061T 126470 8	RST CHIPR AR 8P4R 47 OHM +-5% 1/16W
		RN711	061T 125750 8Y	RST CHIP AR 8P4R 75 OHM +-5% 1/16W
		RN712	061T 126470 8	RST CHIPR AR 8P4R 47 OHM +-5% 1/16W
		RN713	061T 126470 8	RST CHIPR AR 8P4R 47 OHM +-5% 1/16W
		RN714	061T 126470 8	RST CHIPR AR 8P4R 47 OHM +-5% 1/16W
		RN715	061T 125750 8Y	RST CHIP AR 8P4R 75 OHM +-5% 1/16W
		RN716	061T 126470 8	RST CHIPR AR 8P4R 47 OHM +-5% 1/16W
		RN717	061T 126470 8	RST CHIPR AR 8P4R 47 OHM +-5% 1/16W
		RN718	061T 125750 8Y	RST CHIP AR 8P4R 75 OHM +-5% 1/16W
IC				
		TU201	094T DVB T 5P	TUNER DVB-T FQD1116ME/IH-5
		U101	057T 763 79	FET AO4449 -7A/-30V SOIC-8
		U103	056T1126 40	IC MT8295AE LQFP-128
		U104	056T 563113	IC G1117-18T63UF 1A/1.8V SOT-223
		U201	056T 647 25	IC MT5133AN QFN-48
		U401	056T1133 56	M24C16-WMN6TP

	U401	070GHDCP500HDC	HDCP CODE
	U403	056T1126 55	IC MT5380GKU LQFP-256
	U404	056T1133935(DLGBK5M22NQ1 (CHECKSUM: 4629; V001))	IC MX25L3205DMI-12G SOP-16
	U405	056T 645 1	HIN232CB-T S016 INTERSIL
	U406	056T 643 35	IC MAX809STRG 2.93V SOT23-3
	U501	056T 662 10	IC RCLAMP0524P.TCT
	U502	056T 634902	IC TMDS251PAGR TQFP-64
	U503	056T1133913	IC M24C02-WDW6P TSSOP8
	U504	056T 662 10	IC RCLAMP0524P.TCT
	U505	056T1133913	IC M24C02-WDW6P TSSOP8
	U506	056T 662 10	IC RCLAMP0524P.TCT
	U507	056T 662 10	IC RCLAMP0524P.TCT
	U508	056T 623904	IC TS5A3157DCKR SC70
	U510	056T1133913	IC M24C02-WDW6P TSSOP8
	U601	056T 647 18	IC WM8521HCGED/RV SOIC-14
	U602	056T 616913	IC TDA8932BTW HTSSOP32
	U603	056T 616 3	PT2308S SO-8 PTC
	U604	056T 616914	IC RC4580IPWR TSSOP8
	U605	056T 614 1	IC 74HC4052D PHILIPS
	U606	056T566N600	NDC7002N SOT-6 FAIRCHILD
	U607	056T 616914	IC RC4580IPWR TSSOP8
	U701	056T 615 71	IC HY5DU121622DTP-D43 512MB TSOPII-66
	U704	056T 563 93	IC G9084T43U TO-252
	U705	056T 379 82	IC G2996F1UF SOP-8
	U7901	056T 563129	IC AME8810-AEGTZ 0.6A/3.3V SOT-223
	U7902	056T 563109	IC SC4519S.TRT SO-8 EDP
	U7903	056T 563126	IC G1117T63UF SOT-223
	U7904	056T 379 86	IC AP1513SA SOP-8L
	U7905	056T 563 75	G1084-33T43UF TO-252
	U7906	056T 563126	IC G1117T63UF SOT-223
	U7907	056T 563 44	AME8815BEGT 250Z SOP-223
	U7908	056T 563 57	AP1510SA
	U7909	056T 585 11	AZ1117D-5.0-E1
	U7910	056T 563136	IC G78M12T45U TO-252
TRANSISTOR			
	Q101	057T 419911 T	TRA 2A/12V 2SD2653K SOT-346
	Q102	057T 759 2A	2N7002 BY PANJIT
	Q103	057T 763 50	FET ME2301 -2.8A/-20V SOT-23
	Q104	057T 417511	TRA MMBT3904 BLUE ROKET
	Q201	057T 419911 T	TRA 2A/12V 2SD2653K SOT-346
	Q202	057T 419911 T	TRA 2A/12V 2SD2653K SOT-346
	Q405	057T 417511	TRA MMBT3904 BLUE ROKET
	Q406	057T 417512	TRA MMBT3906 BLUE ROKET
	Q407	057T 417511	TRA MMBT3904 BLUE ROKET

		Q408	057T 417512	TRA MMBT3906 BLUE ROKET
		Q502	057T 417511	TRA MMBT3904 BLUE ROKET
		Q503	057T 417511	TRA MMBT3904 BLUE ROKET
		Q505	057T 417511	TRA MMBT3904 BLUE ROKET
		Q601	057T 419 8 T	TRA 2SD1757K 0.5A/15V SC-59
		Q602	057T 417511	TRA MMBT3904 BLUE ROKET
		Q603	057T 417511	TRA MMBT3904 BLUE ROKET
		Q604	057T 417511	TRA MMBT3904 BLUE ROKET
		Q605	057T 417511	TRA MMBT3904 BLUE ROKET
		Q606	057T 417512	TRA MMBT3906 BLUE ROKET
		Q607	057T 419 8 T	TRA 2SD1757K 0.5A/15V SC-59
		Q608	057T 419 8 T	TRA 2SD1757K 0.5A/15V SC-59
		Q609	057T 419 8 T	TRA 2SD1757K 0.5A/15V SC-59
		Q610	057T 419 8 T	TRA 2SD1757K 0.5A/15V SC-59
		Q611	057T 417511	TRA MMBT3904 BLUE ROKET
		Q612	057T 419 8 T	TRA 2SD1757K 0.5A/15V SC-59
		Q613	057T 417511	TRA MMBT3904 BLUE ROKET
		Q7901	057T 417511	TRA MMBT3904 BLUE ROKET
		Q7902	057T 763 80	FET AP9435GM -5.3A/-30V SO-8
		Q7903	057T 417511	TRA MMBT3904 BLUE ROKET
		Q7904	057T 417511	TRA MMBT3904 BLUE ROKET
		Q7907	057T 763 79	FET AO4449 -7A/-30V SOIC-8
		Q7908	057T 417511	TRA MMBT3904 BLUE ROKET
COIL&FILTER& INDUCTOR				
		L101	071T 59C800	CHIP BEAD
		L102	071T 59C800	CHIP BEAD
		L103	071T 59C800	CHIP BEAD
		L104	071T 59C800	CHIP BEAD
		L107	071T 56121 B	CHIP BEAD HCB2012KF-121T30 BULLWILL
		L201	061T0805000	RST CHIPR 0 OHM +-5% 1/8W
		L205	073T 6322910K	CHIP INDUCTOR 2.2UH 10% FLM
		L206	073T 6322910K	CHIP INDUCTOR 2.2UH 10% FLM
		L207	061T0805000	RST CHIPR 0 OHM +-5% 1/8W
		L401	073T 6382810K	CHIP INDUCTOR 0.82UH 10% FLMA-160808-R82
		L501	073T253S 6 T	SMD CHOKE 90 OHM ACM2012D-900-2P-T00
		L502	071T 59B121 K	CHIP BEAD
		L503	073T253S 6 T	SMD CHOKE 90 OHM ACM2012D-900-2P-T00
		L504	073T253S 6 T	SMD CHOKE 90 OHM ACM2012D-900-2P-T00
		L505	073T253S 6 T	SMD CHOKE 90 OHM ACM2012D-900-2P-T00
		L506	073T253S 6 T	SMD CHOKE 90 OHM ACM2012D-900-2P-T00
		L507	073T253S 6 T	SMD CHOKE 90 OHM ACM2012D-900-2P-T00

		L508	073T253S 6 T	SMD CHOKE 90 OHM ACM2012D-900-2P-T00
		L509	073T253S 6 T	SMD CHOKE 90 OHM ACM2012D-900-2P-T00
		L510	071T 59C800	CHIP BEAD
		L511	071T 59C800	CHIP BEAD
		L512	071T 59C800	CHIP BEAD
		L513	071T 59C800	CHIP BEAD
		L514	071T 59C800	CHIP BEAD
		L515	071T 59C800	CHIP BEAD
		L516	071T 59C800	CHIP BEAD
		L517	071T 59C800	CHIP BEAD
		L601	073T 253158 H	CHOKE COIL 22UH+/-25%
		L602	073T 253158 H	CHOKE COIL 22UH+/-25%
		L7901	071T2012221 2M	CHIP BEAD 0805 220 OHM 2000MA
		L7902	073T M58904 T	SMD INDUCTOR 10UH 20% SLF10155T-
		L7903	073T M58908 T	SMD INDUCTOR 27UH 20% SLF10155T-
		L7904	073T M58908 T	SMD INDUCTOR 27UH 20% SLF10155T-
		FB101	071T2012221 2M	CHIP BEAD 0805 220 OHM 2000MA
		FB102	071T2012221 2M	CHIP BEAD 0805 220 OHM
		FB103	071T2012221 2M	CHIP BEAD 0805 220 OHM 2000MA
		FB104	071T2012221 2M	CHIP BEAD 0805 220 OHM 2000MA
		FB105	071T2012221 2M	CHIP BEAD 0805 220 OHM 2000MA
		FB106	071T 57121 M	MGLB3216-120T-LF
		FB109	071T2012221 2M	CHIP BEAD 0805 220 OHM 2000MA
		FB110	071T2012221 2M	CHIP BEAD 0805 220 OHM 2000MA
		FB111	071T2012221 2M	CHIP BEAD 0805 220 OHM 2000MA
		FB201	071T2012221 2M	CHIP BEAD 0805 220 OHM 2000MA
		FB202	071T2012221 2M	CHIP BEAD 0805 220 OHM 2000MA
		FB203	071T2012221 2M	CHIP BEAD 0805 220 OHM 2000MA
		FB204	071T2012221 2M	CHIP BEAD 0805 220 OHM 2000MA
		FB205	071T 59C300	CHIP BEAD 30 OHM 0603
		FB401	071T2012221 2M	CHIP BEAD 0805 220 OHM 2000MA
		FB403	071T2012221 2M	CHIP BEAD 0805 220 OHM 2000MA
		FB404	071T2012221 2M	CHIP BEAD 0805 220 OHM 2000MA
		FB405	071T2012221 2M	CHIP BEAD 0805 220 OHM 2000MA

		FB406	071T2012221 2M	CHIP BEAD 0805 220 OHM 2000MA
		FB407	071T2012221 2M	CHIP BEAD 0805 220 OHM 2000MA
		FB408	071T2012221 2M	CHIP BEAD 0805 220 OHM 2000MA
		FB409	071T2012221 2M	CHIP BEAD 0805 220 OHM 2000MA
		FB501	071T2012221 2M	CHIP BEAD 0805 220 OHM 2000MA
		FB502	071T3216330 6M	CHIP BEAD 1206 33OHM 6A
		FB503	071T2012221 2M	CHIP BEAD 0805 220 OHM 2000MA
		FB504	071T2012221 2M	CHIP BEAD 0805 220 OHM 2000MA
		FB505	071T2012221 2M	CHIP BEAD 0805 220 OHM 2000MA
		FB506	071T2012221 2M	CHIP BEAD 0805 220 OHM 2000MA
		FB507	071T2012221 2M	CHIP BEAD 0805 220 OHM 2000MA
		FB508	071T2012221 2M	CHIP BEAD 0805 220 OHM 2000MA
		FB509	071T2012221 2M	CHIP BEAD 0805 220 OHM 2000MA
		FB510	071T2012221 2M	CHIP BEAD 0805 220 OHM 2000MA
		FB511	071T 56G301 EA	CHIP BEAD 300 OHM 0805
		FB601	071T 56G301 EA	CHIP BEAD 300 OHM 0805
		FB603	071T2012221 2M	CHIP BEAD 0805 220 OHM 2000MA
		FB604	071T3216330 6M	CHIP BEAD 1206 33OHM 6A
		FB605	071T2012221 2M	CHIP BEAD 0805 220 OHM 2000MA
		FB606	071T 59G301	CHIP BEAD 300OHM
		FB607	071T 59G301	CHIP BEAD 300OHM
		FB608	071T 56G151 MD	0603 150 OHM
		FB609	071T 56G151 MD	0603 150 OHM
		FB610	071T 56G151 MD	0603 150 OHM
		FB611	071T 56G151 MD	0603 150 OHM
		FB612	071T 57U700 M	CHIP BEAD 1206 70OHM MICROGATE
		FB613	071T 57U700 M	CHIP BEAD 1206 70OHM MICROGATE
		FB614	071T 57U700 M	CHIP BEAD 1206 70OHM MICROGATE
		FB615	071T 57U700 M	CHIP BEAD 1206 70OHM MICROGATE
		FB701	071T2012221 2M	CHIP BEAD 0805 220 OHM 2000MA
		FB702	071T2012221 2M	CHIP BEAD 0805 220 OHM 2000MA
		FB7901	071T2012221 2M	CHIP BEAD 0805 220 OHM 2000MA
		FB7902	061T0805000	RST CHIPR 0 OHM +-5% 1/8W

OTHERS				
		X101	093T 22S64B H	HSX840GA 27.0000MHZ
		X201	093T 2264A J	CRY NXS27.000AE15F-BT1 HC-49/US
		X401	093T 22902 C	CRYSTAL 60MHZ 9P HC-49/S
		CN101	088T 100 11 ST	MINI DIN JACK 4P+ SWITCH 2MJ-0602-005
		CN102	088T 7813A18S	RCA JACK 1*3 R/W/Y
		CN103	088T 35521U ST	SCART CONN. 21P V/T 2SC1503-000111
		CN104	088T 35521U ST	SCART CONN. 21P V/T 2SC1503-000111
		CN105	033T8027 30	WAFER
		CN106	088T 500 9 P	PCMCIA CONN.
		CN401	033T380211B Y	CONNECTOR
		CN404	088T 353 9M VX	D-SUB 9 PIN V/A 附 SCREW
		CN405	033T3802 3	WAFER EH-3
		CN501	088T 340 21 VN	HDMI HEADER 21P V/A
		CN502	088T 340 19CHA	HDMI HEADER 19P 0471518121
		CN503	088T 78 1360S	RCA JACK 1*3 G/B/R V/A
		CN504	088T 78 1357S	RCA JACK 1*1 W+R V/A
		CN505	088T 35315FVSC	D-SUB 15PIN VERTICAL CONN WITH SCREW
		CN506	088T 30252S	PHONE JACK 3.5MM 3P V/A GREEN
		CN517	088T 359 5 JT	FIBER-OPTIC 3P V/T JST1227
		CN601	088T 30211K	PHONE JACK
		CN602	033T3802 4B Y	CONNECTOR
		CN7901	033T327815D	CONNECTOR
POWER BOARD				
CAPACITOR				
		C801	065G0805473 32	CHIP 0.047UF 50V X7R
		C802	065G0805473 32	CHIP 0.047UF 50V X7R
		C804	065G0805225 12	CAP CHIP 0805 2.2UF K 16V X7R
		C805	065G0603103 12	CHIP 0.01UF 16V X7R
		C806	065G0603105 12	CHIP 1UF 16VX7R 0603
		C807	065G0603103 12	CHIP 0.01UF 16V X7R
		C808	061G0603184	RST CHIPR 180 KOHM +-5% 1/10W
		C809	065G0805561 31	CHIP 560PF 50V NPO 0805
		C810	065G0603473 32	CHIP 0.047UF 50V X7R
		C811	065G0805104 32	CAP CHIP 0805 0.1UF K 50V X7R
		C812	067G215H102 4K	LOW ESR EC 1000UF 25V EB1E102M
		C813	065G0603333 32	0.033UF/50V
		C814	065G0805391 31	CHIP 390PF 50V
		C815	065G0603473 32	CHIP 0.047UF 50V X7R
		C816	065T 6J2206ET	22PF 5% SL 6KV

		C817	065T 6J2096ET	2PF 5% SL 6KV TDK
		C818	065G0603221 31	CER1 0603 NP0 50V 220P P
		C819	065G 3J6806ET	CAP CER 68PF J 3KV SL
		C820	065G 3J6806ET	CAP CER 68PF J 3KV SL
		C821	065G 3J6806ET	CAP CER 68PF J 3KV SL
		C822	065G 3J6806ET	CAP CER 68PF J 3KV SL
		C824	065T 6J2206ET	22PF 5% SL 6KV
		C901	065G305M1022B3	CAP Y2 1000PF M 250VAC
		C902	065G305M1022B3	CAP Y2 1000PF M 250VAC
		C903	063G107K474 6S	CAP X2 0.47UF K 275VAC
		C903	006G 31502	1.5MM RIVET
		C905	067T 40Z22115K	EC 220UF M 450V 22*51MM
		C905	006G 31502	1.5MM RIVET
		C906	065G 2K222 2T6921	CAP CER 2200PF K 2KV Y5P
		C908	067G215Y2207KT	CAP 105℃ 22UF M 50V KINGNICH
		C912	065G0805223 22	CHIP 0.022UF 25V X7R 080
		C914	067T 2046812KT	CS CAP 680UF 10V 8*11 MM
		C915	067G215S4713KV	EC 105℃ CAP 470UF M 16V
		C916	065G0805104 32	CAP CHIP 0805 0.1UF K 50V X7R
		C917	067G215S1024KV	EC 105℃ CAP 1000UF M 25V
		C918	067G215S1024KV	EC 105℃ CAP 1000UF M 25V
		C919	065G080510432Y	CAP 0805 0.1UF K 50V X7R
		C920	065G0805104 32	CAP CHIP 0805 0.1UF K 50V X7R
		C921	065G1206222 72	MLCC 1206 2200PF K 500V X7R
		C922	067G215S4714KL	LOW ESR EC 470UF 25V
		C923	065G0805471 31	CHIP 470PF 50V NPO
		C924	065G0805221 31	CAP CHIP 0805 220PF J 50V NPO
		C927	065G0805104 32	CAP CHIP 0805 0.1UF K 50V X7R
		C929	065G1206222 72	MLCC 1206 2200PF K 500V X7R
		C931	065G306M1022BM	Y1.CAP.001UF 250VAC MURATA
		C932	065G0805102 31	CAP CHIP 0805 1000PF J 50V NPO
		C933	067G215Y2207KT	CAP 105℃ 22UF M 50V KINGNICH
		C934	067G215S10915T3964	EC CAP 1.0UF 450V 8*11MM
		C935	065G1206222 72	MLCC 1206 2200PF K 500V X7R
		C936	065G1206222 72	MLCC 1206 2200PF K 500V X7R
DOIDE				
		BD901	093G 50460900	BRIDGE DIODE GBU408 LITEON
		BD901	006G 31 4	1.7MM RIVET
		D801	093G 6432V	LL4148-GSO8
		D802	093G 6432V	LL4148-GSO8
		D803	093G 6432V	LL4148-GSO8

		D804	093G 6432V	LL4148-GSO8
		D805	093G 6432V	LL4148-GSO8
		D806	093G 64 42 PP	BAV70 SOT-23
		D807	093G 64 42 PP	BAV70 SOT-23
		D808	093G 64 42 PP	BAV70 SOT-23
		D809	093G 64 33	DIO SIG SM BAV99 (PHSE)R
		D901	093G 6026T52T	RECTIFIER DIODE FR107
		D901	006G 31502	1.5MM RIVET
		D902	093G 6038T52T	FR103
		D903	093T1100 1152T	DIODE PR1007R 1A/1000V DO-41
		D904	093G 60267	SP10100
		D904	006G 31502	1.5MM RIVET
		D906	093T 64 53 F	DIODE YG906C2RSC 20A/200V TO-220F15
		D906	006G 31502	1.5MM RIVET
		ZD802	093G 39S 24 T	RLZ 5.6B LLDS
		ZD803	093G 39S 24 T	RLZ 5.6B LLDS
		ZD920	093G 39S 44 T	RLZ18B LLDS
RESISTOR				
		NR901	061G 5810T	RST NTCR 8 OHM +-20% 4A 13MM
		NR901	006G 31502	1.5MM RIVET
		R802	061G0805220	RST CHIPR 22 OHM +-1% 1/8W
		R803	061G0603512	RST CHIPR 5.1 KOHM +-5% 1/10W
		R804	061G0603512	RST CHIPR 5.1 KOHM +-5% 1/10W
		R805	061G0603101	RST CHIPR 100 OHM +-5% 1/10W
		R806	061G0603101	RST CHIPR 100 OHM +-5% 1/10W
		R807	061G0603101	RST CHIPR 100 OHM +-5% 1/10W
		R808	061G0603101	RST CHIPR 100 OHM +-5% 1/10W
		R813	061G0603474	RST CHIPR 470 KOHM +-5% 1/10W
		R816	061G0603103	RST CHIPR 10 KOHM +-5% 1/10W
		R817	061G0603105	RST CHIPR 1M OHM +-5% 1/10W
		R818	061G0603753	RST CHIPR 75 KOHM +-5% 1/10W
		R819	061G0603104	RST CHIPR 100 KOHM +-5% 1/10W
		R820	061G0603103	RST CHIPR 10 KOHM +-5% 1/10W
		R821	061G0603105	RST CHIPR 1M OHM +-5% 1/10W
		R822	061G0805200 2F	RST CHIPR 20 KOHM +-1% 1/8W
		R823	061G0603470 0F	RST CHIPR 470 OHM +-1% 1/10W
		R824	061G0603150 1F	RST CHIPR 1.5 KOHM +-1%

				1/10W
		R825	061G0603511	RST CHIPR 510 OHM +-5% 1/10W
		R826	061G0603105	RST CHIPR 1M OHM +-5% 1/10W
		R828	061G212Y625 KT	MGFR 6.2MOHM +-5% 1/2W
		R829	061G0805682	RST CHIPR 6.8 KOHM +-5% 1/8W
		R830	061G0805333	RST CHIPR 33 KOHM +-5% 1/8W
		R836	061G0603513	RST CHIPR 51 KOHM +-5% 1/10W
		R837	061G0603682	RST CHIPR 6.8 KOHM +-5% 1/10W
		R838	061G0603105	RST CHIPR 1M OHM +-5% 1/10W
		R839	061G0603105	RST CHIPR 1M OHM +-5% 1/10W
		R840	061G0603105	RST CHIPR 1M OHM +-5% 1/10W
		R841	061G0603105	RST CHIPR 1M OHM +-5% 1/10W
		R842	061G0603103	RST CHIPR 10 KOHM +-5% 1/10W
		R843	061G0603103	RST CHIPR 10 KOHM +-5% 1/10W
		R844	061G0603103	RST CHIPR 10 KOHM +-5% 1/10W
		R845	061G0603103	RST CHIPR 10 KOHM +-5% 1/10W
		R846	061G0603000	RST CHIPR 0 OHM +-5% 1/10W
		R849	061G0603000	RST CHIPR 0 OHM +-5% 1/10W
		R900	061G1206624	RST CHIPR 620 KOHM +-5% 1/4W
		R901	061G1206624	RST CHIPR 620 KOHM +-5% 1/4W
		R902	061G1206624	RST CHIPR 620 KOHM +-5% 1/4W
		R903	061G1206101	RST CHIPR 100 OHM +-5% 1/4W
		R904	061G1206822	RST CHIPR 8.2 KOHM +-5% 1/4W
		R905	061G1206822	RST CHIPR 8.2 KOHM +-5% 1/4W
		R907	061G0805470	RST CHIPR 47 OHM +-5% 1/8W
		R908	061G152M10452T	RST MOFR 100KOHM +-5% 2WS
		R909	061G1206100	RST CHIPR 10 OHM +-5% 1/4W
		R912	061G0805000	RST CHIPR 0 OHM +-5% 1/8W
		R914	061G1206159	RST CHIPR 1.5 OHM +-5% 1/4W
		R915	061G1206159	RST CHIPR 1.5 OHM +-5% 1/4W
		R916	061G1206249	RST CHIPR 2.4 OHM +-5% 1/4W
		R917	061G1206249	RST CHIPR 2.4 OHM +-5% 1/4W
		R918	061G1206151	RST CHIPR 150 OHM +-5% 1/4W
		R919	061G1206151	RST CHIPR 150 OHM +-5% 1/4W
		R920	061G1206151	RST CHIPR 150 OHM +-5% 1/4W

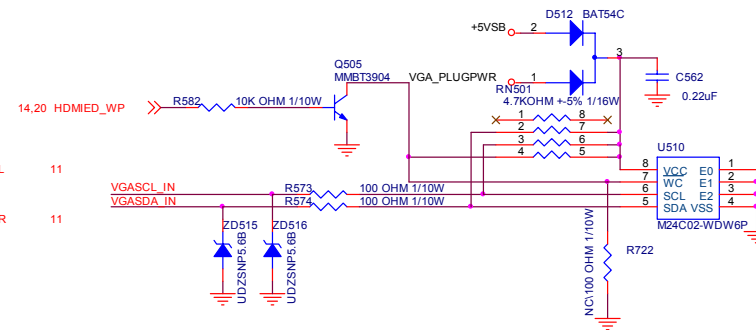
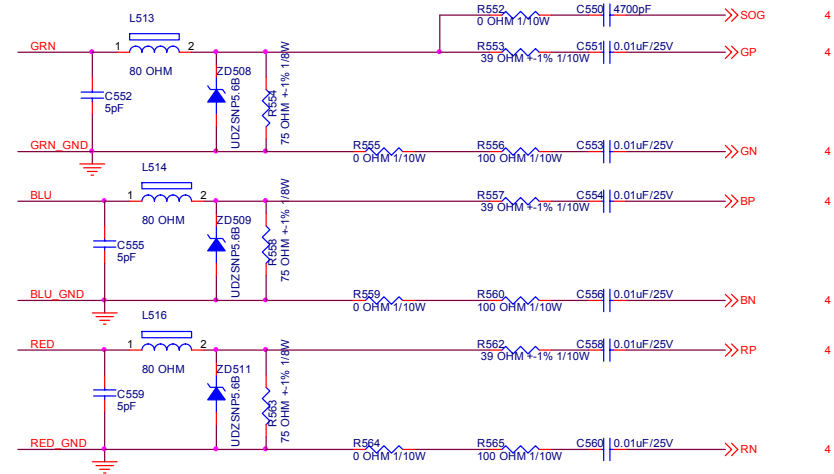
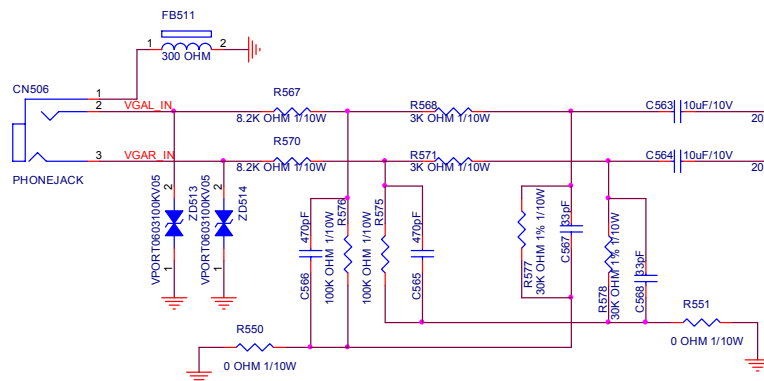
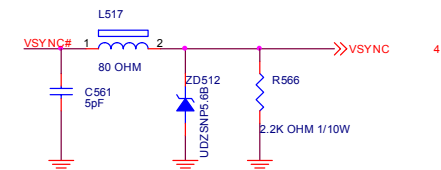
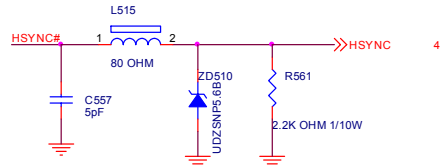
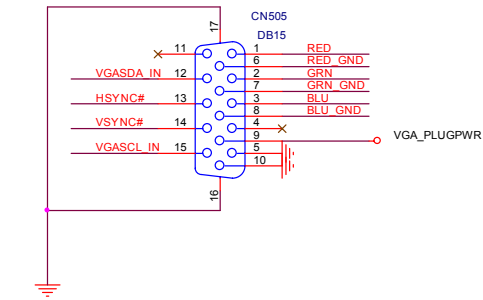
		R921	061G1206754	RST CHIPR 750 KOHM +-5% 1/4W
		R922	061G0805201	RST CHIPR 200 OHM +-5% 1/8W
		R923	061G1206754	RST CHIPR 750 KOHM +-5% 1/4W
		R924	061T0805102	RST CHIPR 1KOHM +-5% 1/4W
		R925	061G0805151	RST CHIPR 150 OHM +-5% 1/8W
		R926	061G1206754	RST CHIPR 750 KOHM +-5% 1/4W
		R927	061G0805360 1F	RST CHIPR 3.6K OHM +-1% 1/8W
		R928	061G0805000	RST CHIPR 0 OHM +-5% 1/8W
		R929	061G0805430 2F	RST CHIPR 43 KOHM +-1% 1/8W
		R930	061G0805243 1F	RST CHIPR 2.43 KOHM +-1% 1/8W
		R932	061G1206754	RST CHIPR 750 KOHM +-5% 1/4W
		R934	061G1206101	RST CHIPR 100 OHM +-5% 1/4W
		R935	061G1206101	RST CHIPR 100 OHM +-5% 1/4W
		R936	061G1206102	RST CHIPR 1K OHM +-5% 1/4W
		R938	061G0805103	RST CHIPR 10K OHM +-5% 1/8W
		R940	061G152M15152T	RST MOFR 150 OHM +-5% 2WS
		R941	061G0805100 3F	RST CHIPR 100KOHM +-1% 1/8W
		R942	061T0805474	RST CHIPR 470 KOHM +-5% 1/8W
		R943	061G0805471	RST CHIPR 470 OHM +-5% 1/8W
		R944	061G1206151	RST CHIPR 150 OHM +-5% 1/4W
		R945	061T0805330 2F	RST CHIPR 33 KOHM +-1% 1/8W
		RJ801	061G1206000	RST CHIPR 0 OHM +-5% 1/4W
		RJ901	061G1206000	RST CHIPR 0 OHM +-5% 1/4W
		RJ902	061G1206000	RST CHIPR 0 OHM +-5% 1/4W
		RJ903	061G1206000	RST CHIPR 0 OHM +-5% 1/4W
		RJ904	061G1206000	RST CHIPR 0 OHM +-5% 1/4W
		RJ905	061G1206000	RST CHIPR 0 OHM +-5% 1/4W
		RJ906	061G1206514	RST CHIPR 510 KOHM +-5% 1/4W
		RJ907	061G1206514	RST CHIPR 510 KOHM +-5% 1/4W
		RV901	061T 46 12 GP	VARISTOR 680V TNR15G681K
		RV901	006G 31502	1.5MM RIVET
COIL&FILTER&INDUCTOR				
		L801	073G 174 35DNA	FILTER 200MH±25%
		L802	073G 174 35DNA	FILTER 200MH±25%
		L902	073L 174 40 HG	GBQM4.778.391
		L902	006G 31502	1.5MM RIVET
		L903	073G 253 91 H	CHOKE COIL
		L904	073G 253 91 H	CHOKE COIL
		FB901	095T 90 23	JUMP WIRE

IC				
		IC801	056G 608 10	IC OZ9938GN-B SOIC-16
		IC901	056T 379107	IC LD7575A PS SOP-8
		IC902	056G 158 12	KIA431A-AT/P TO-92
		IC903	056G 139 3A	IC PC123Y22FZ0F
TRANSISTOR				
		Q802	057G 759 2	RK7002
		Q803	057G 759 2	RK7002
		Q805	057T 600517	AO4616 SOIC-8
		Q806	057T 600517	AO4616 SOIC-8
		Q901	057G 667 21	STP10NK70ZFP
		Q901	006G 31502	1.5MM RIVET
		Q902	057G 763 62	FET 2N7002K 300MA/60V SOT-23
		Q903	057G 417 4	PMBS3904/PHILIPS-SMT(04)
		Q904	057G 417 4	PMBS3904/PHILIPS-SMT(04)
TRANSFORMER				
		PT801	080GL20T 33 DN	X'FMR 99.3UH TK.2018R.101
		T901	080TL19T505 L	X'FMR POWER 950UH
		T901	006G 31502	1.5MM RIVET
OTHERS				
		CN801	033G8021 2E F	WAFER
		CN802	033G8021 2E F	WAFER
		CN803	033G8021 2E F	WAFER
		CN804	033G8021 2E F	WAFER
		CN901	087T 50144G DL	AC SOCKET 3PIN
		CN901	006G 31501	EYELET
		CN902	095T 82011W509	WIRE HARNESS 11P(SAN)-15P(PLUG)
		J801	095G 90 23	JUMPER
		J802	095G 90 23	JUMPER
		J803	095G 90 23	JUMPER
		J804	095G 90 23	JUMPER
		J805	095G 90 23	JUMPER
		J806	095G 90 23	JUMPER
		J807	095G 90 23	JUMPER
		J808	095G 90 23	JUMPER
		J809	095G 90 23	JUMPER
		J810	095G 90 23	JUMPER
		J811	095G 90 23	JUMPER
		J812	095G 90 23	JUMPER
		J813	095G 90 23	JUMPER
		J814	095G 90 23	JUMPER
		J815	095G 90 23	JUMPER
		J816	095G 90 23	JUMPER
		J817	095G 90 23	JUMPER
		J901	095G 90 23	JUMPER

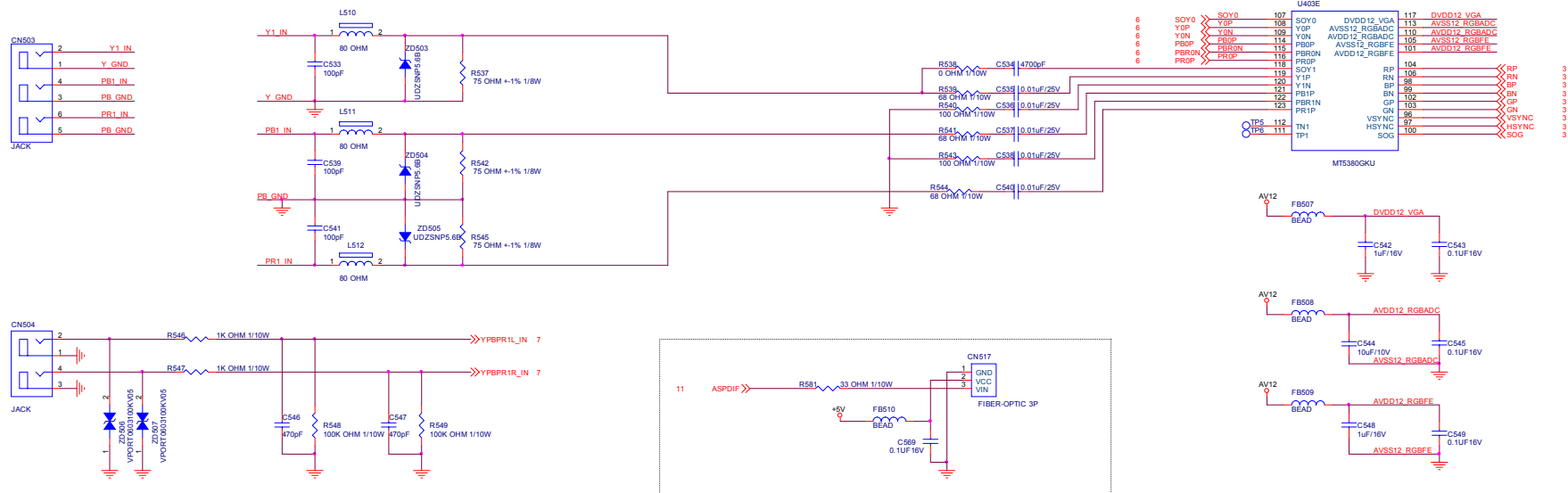
	J902	095G 90 23	JUMPER
	J903	095G 90 23	JUMPER
	J904	095G 90 23	JUMPER
	J905	095G 90 23	JUMPER
	J906	095G 90 23	JUMPER
		705G 201 61 01	NR901 ASS'Y
		705TQ757021	Q901 ASS'Y
		705TQ793032	D904 ASS'Y
		705TQ861003	RV901 ASS'Y
		705TQ893010	D906 ASS'Y
KEY BOARD			
	SW007	077T 602 1 CJ	TACT SWITCH
	SW006	077T 602 1 CJ	TACT SWITCH
	SW005	077T 602 1 CJ	TACT SWITCH
	SW004	077T 602 1 CJ	TACT SWITCH
	SW003	077T 602 1 CJ	TACT SWITCH
	SW002	077T 602 1 CJ	TACT SWITCH
	SW001	077T 602 1 CJ	TACT SWITCH
	R008	061T1206000	RST CHIPR 0 OHM +-5% 1/4W
	R007	061T0603470 0F	RST CHIPR 470 OHM +-1% 1/10W
	R006	061T0603180 1F	RST CHIPR 1.8 KOHM +-1% 1/10W
	R005	061T0603430 1F	RST CHIPR 4.3 KOHM +-1% 1/10W
	R004	061T0603470 0F	RST CHIPR 470 OHM +-1% 1/10W
	R003	061T0603180 1F	RST CHIPR 1.8 KOHM +-1% 1/10W
	R002	061T0603430 1F	RST CHIPR 4.3 KOHM +-1% 1/10W
	R001	061T0603110 2F	RST CHIPR 11KOHM +-1% 1/10W
	GND1	095T 900635	WIRE HARNESS 120MM
	CN001	033T3802 4 BH F	CONNECTOR
	C002	065T0603104 22	CHIP 0.1UF 25V
	C001	065T0603104 22	CHIP 0.1UF 25V
IR BOARD			
	C001	065T0603101 32	CHIP 100PF 50V X7R
	C002	065T0805106 A7	CHIP 10UF 10V Y5V 0805
	C003	065T0603104 32 GP	CHIP 0.1UF 50V X7R
	CN001	033T8032 6F S HR	CONNECTOR
	GND	095T 900544 GP	WIRE HARNESS
	LED001	081T 14 24 EL	CHIP LED BLUE/DARK RED
	R001	061T0603330	CHIP 33OHM 1/16W
	R002	061T0603330	CHIP 33OHM 1/16W
	R003	061T0603330	CHIP 33OHM 1/16W
	R004	061T0603101	RST CHIPR 100 OHM +-5% 1/10W
	R005	061T0603103	RST CHIPR 10KOHM +-5% 1/10W

		R006	061T0603110 2F	RST CHIPR 11KOHM +-1% 1/10W
		SW001	077T 603 3 TO	TACT SWITCH TS-03-BS
		U001	056T 627 33 1	IR 37.9KHZ KSM-603TM2E
		ZD001	093T 39S 34 T	UDZSNP5.6B ROHM

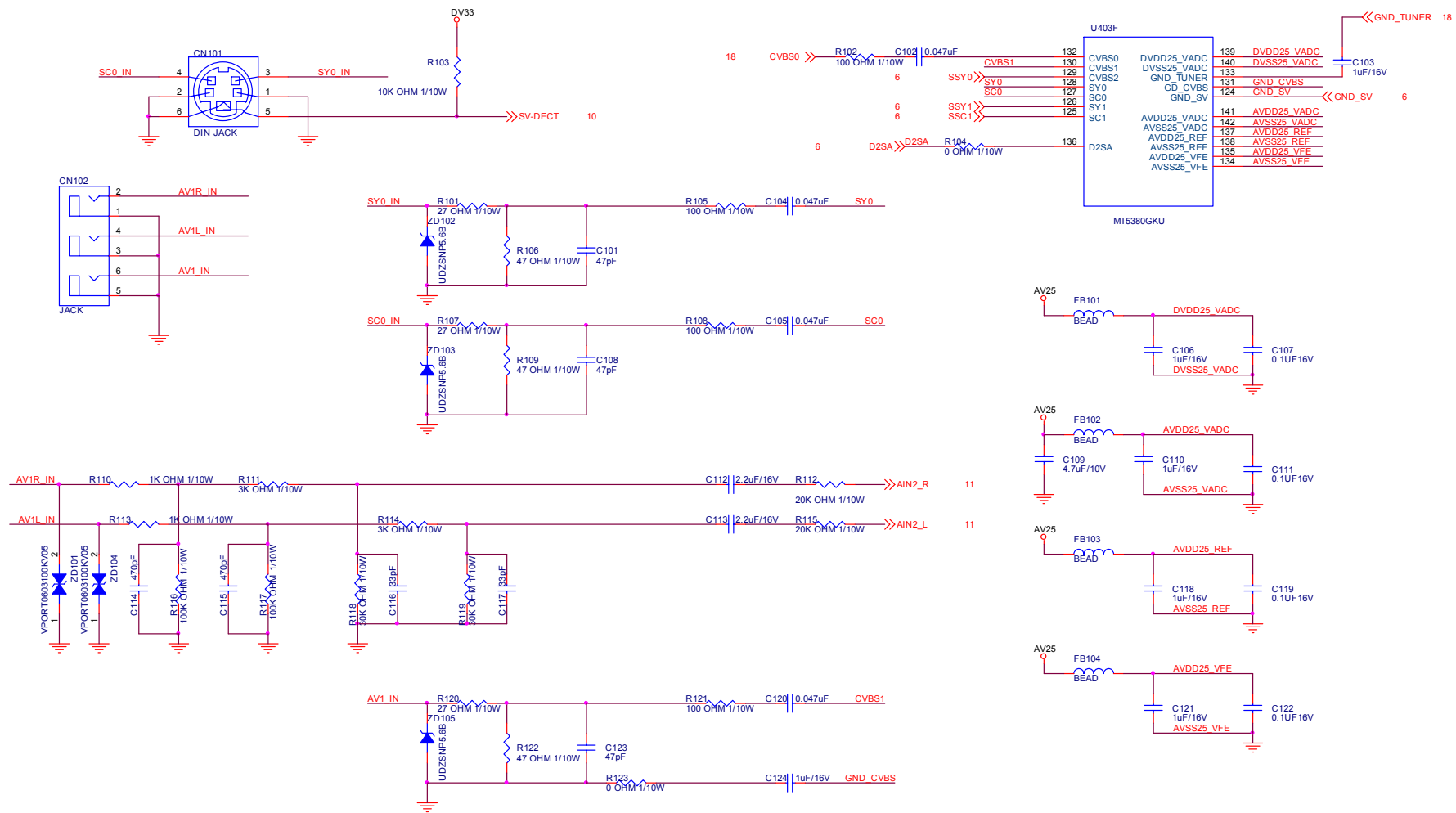
MAIN BOARD PARTS



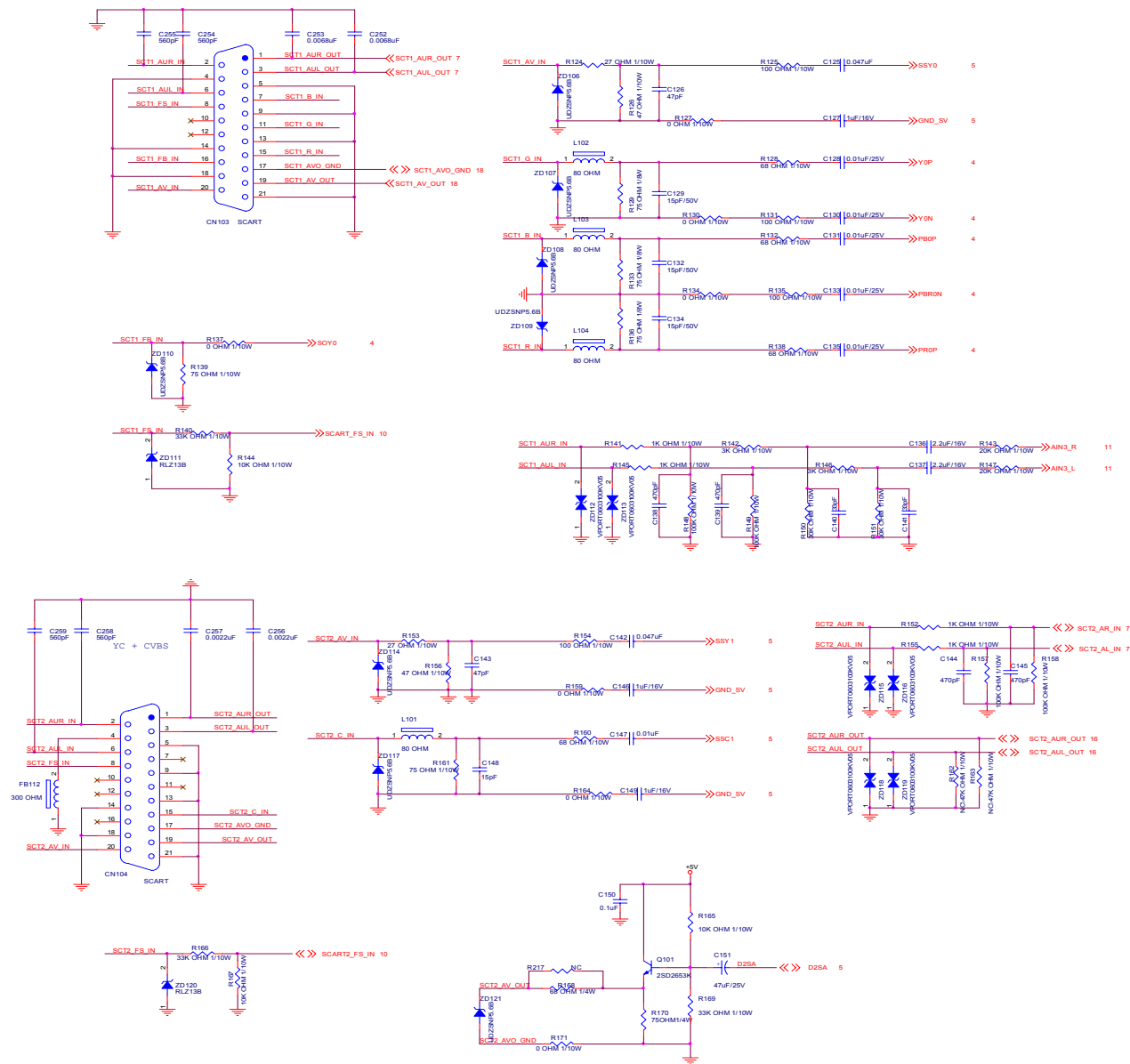
TPV (Top Victory Electronics Co., Ltd.)	OEM MODEL		Size	B
話 話 瓜 網 廠	TPV MODEL		Rev	H
Key Component	VGA IN L/R	PCB NAME	715T3009	称 爹 <称 爹>
Date	Friday, June 20, 2008	Sheet	3 of 21	



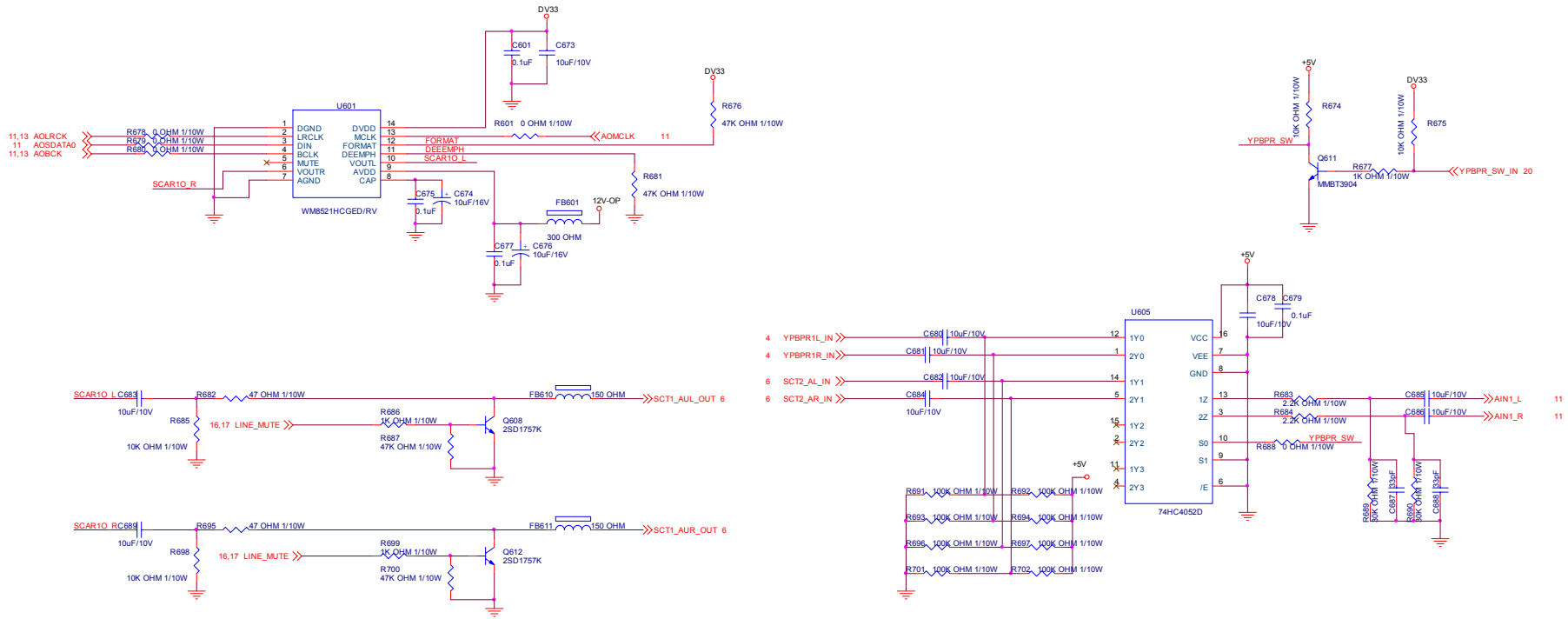
T P V (Top Victory Electronics Co . , Ltd .)		OEM MODEL		Size	
TPV MODEL		Rev		H	
Key Component		PCB NAME		715T3009	
Date		Friday, June 20, 2008		Sheet 4 of 21	



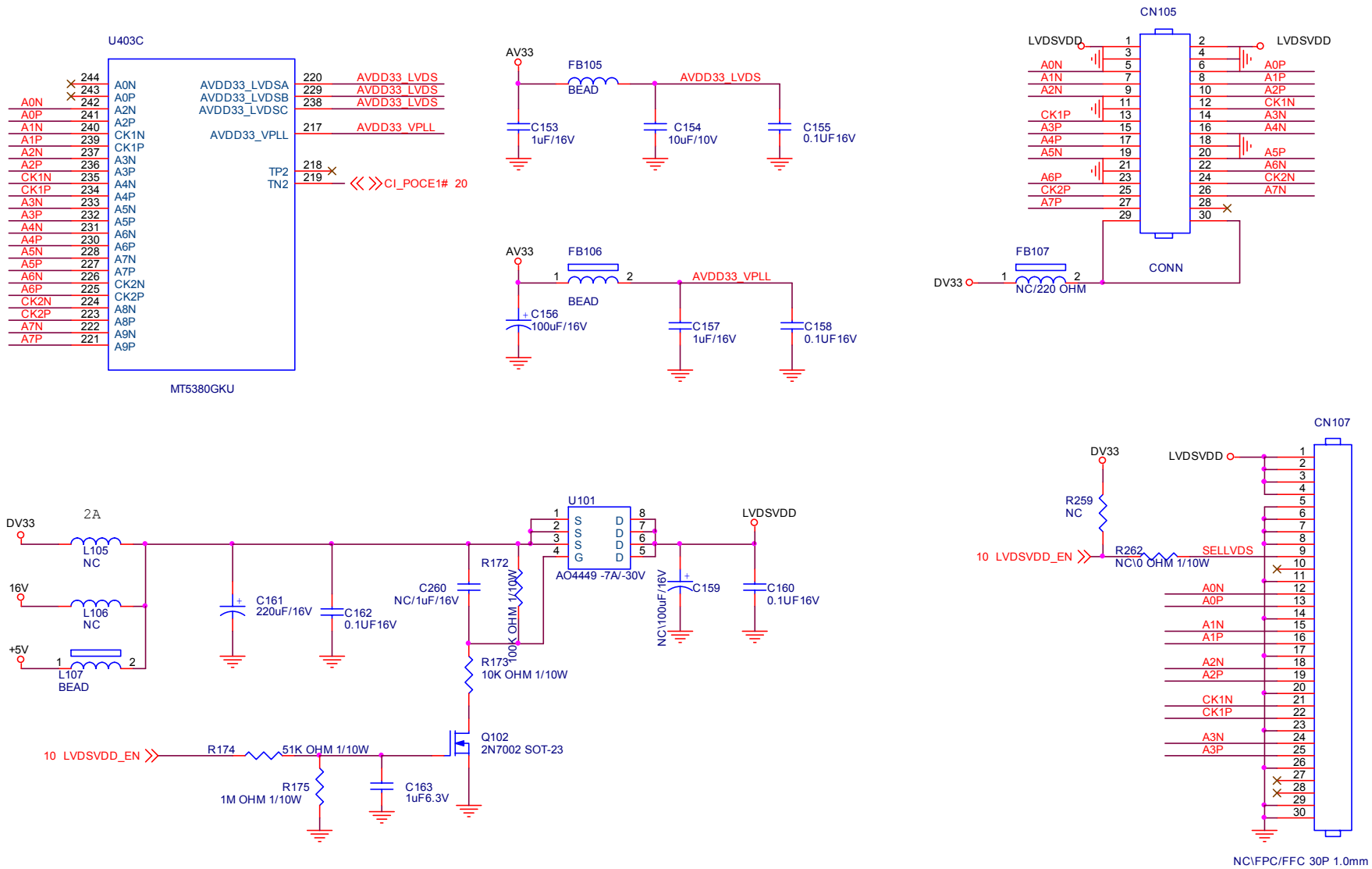
T P V (Top Victory Electronics Co . , Ltd .)	OEM MODEL		Size	B
話 隔 瓜 銅 膜	TPV MODEL		Rev	H
Key Component	SCART connector	PCB NAME	715T3009	称 号
Date	Friday , June 20, 2008	Sheet	5 of 21	<称 号>



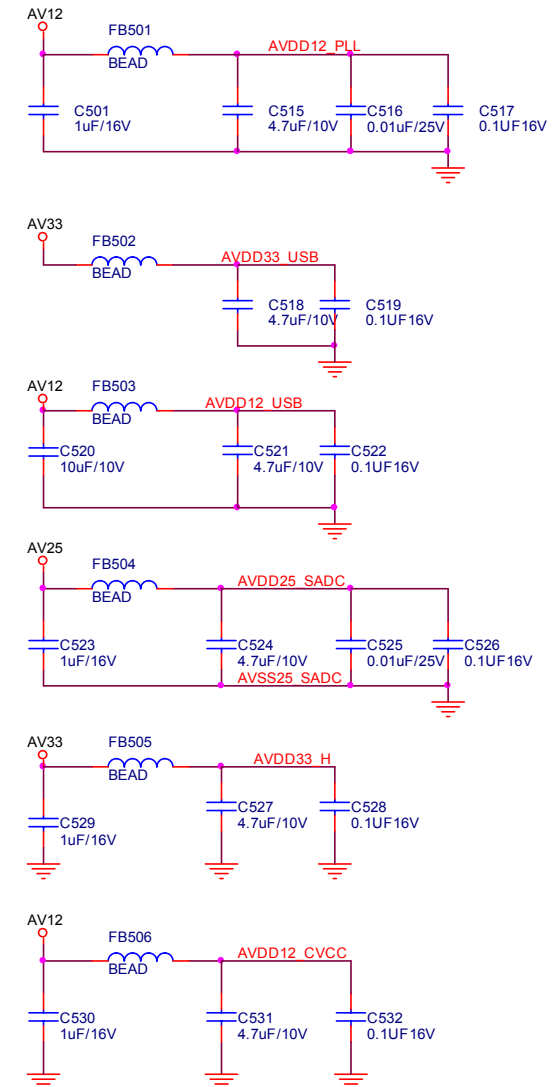
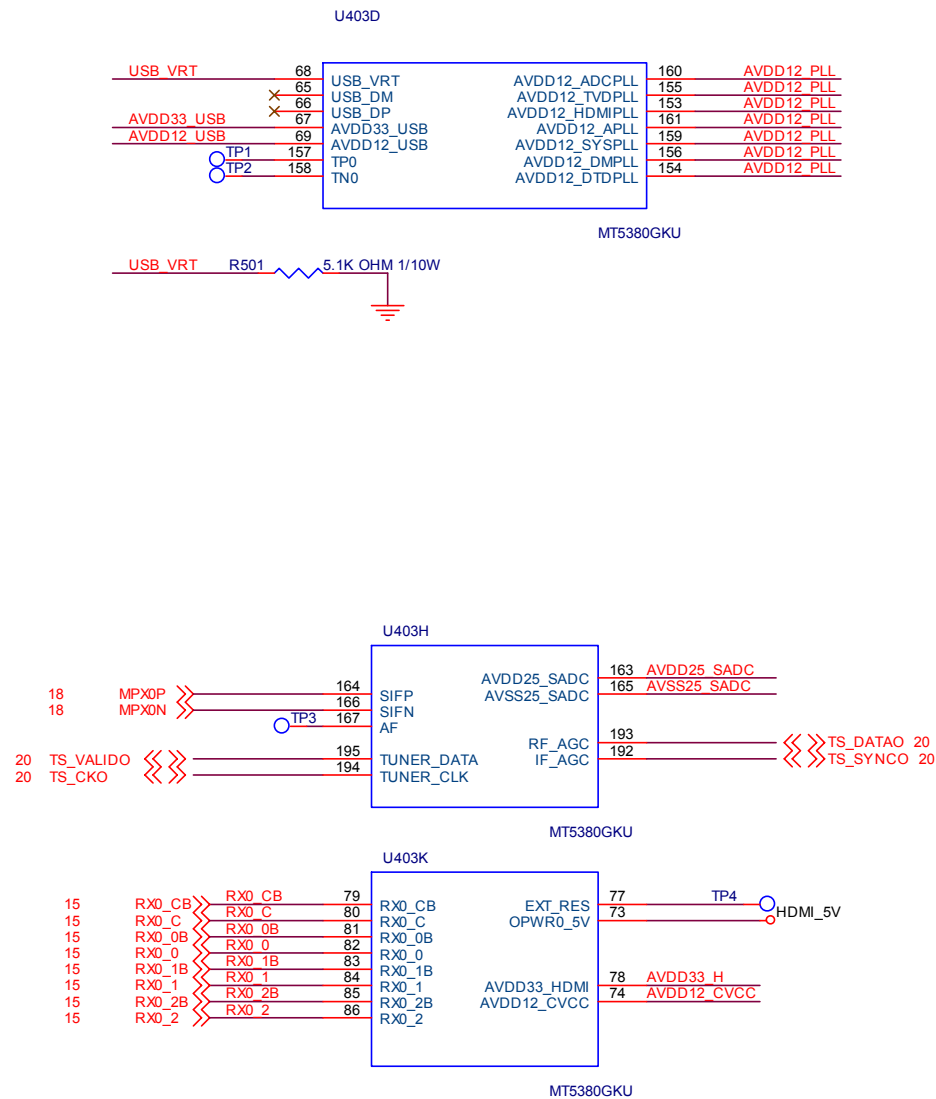
T P V (Top Victory Electronics Co., Ltd.)	DEM MODEL	Size	Custom
胜利电子	TPV MODEL	Rev	H
Key Component SCART connector	PCB NAME	71513009	
Date Friday, June 20, 2008	Sheet	6 of 21	胜利



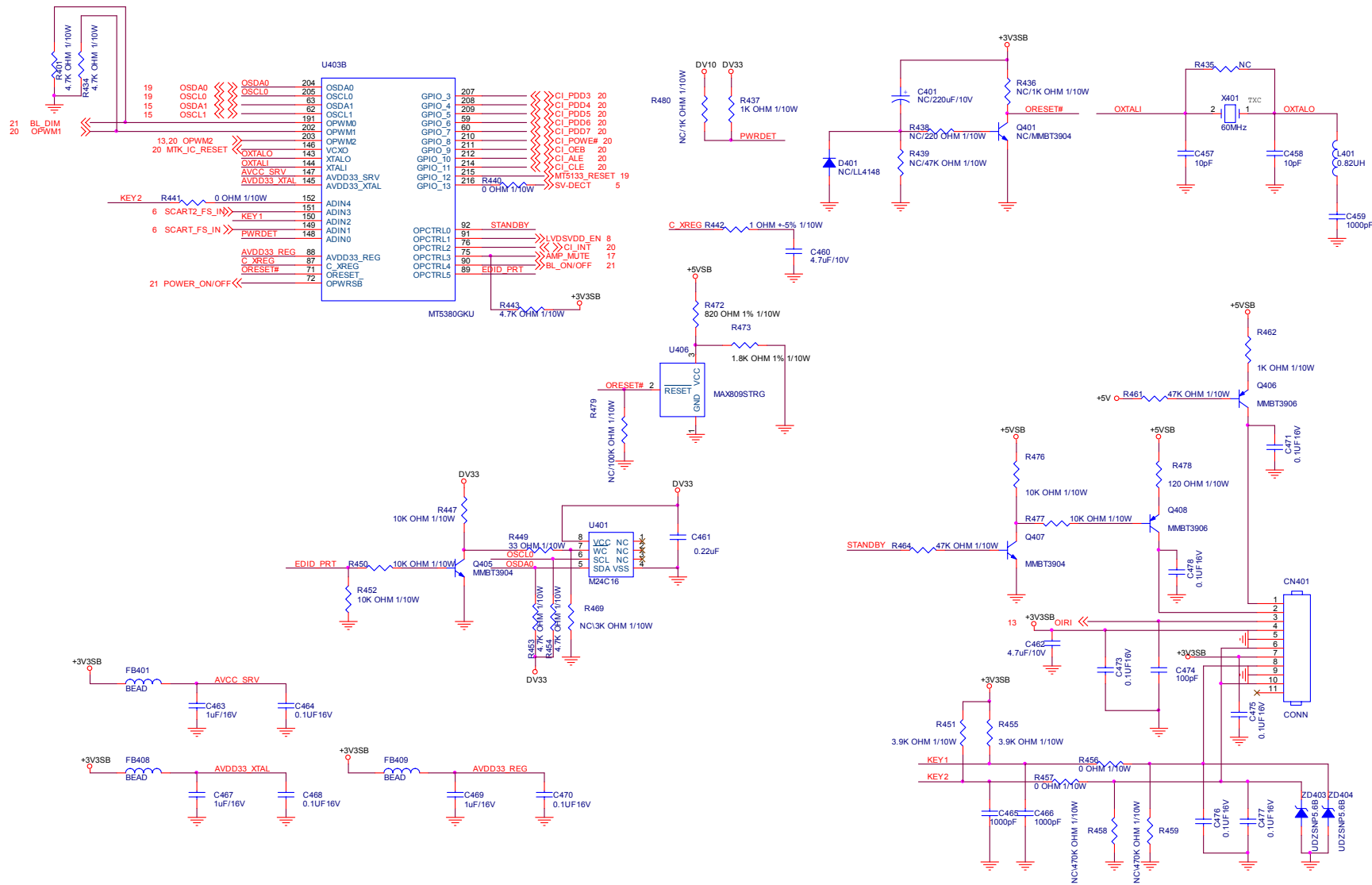
TPV (Top Victory Electronics Co., Ltd.)	OEM MODEL		Size	Custom
新 瑞 瓦 斯 康	TPV MODEL		Rev	H
Key Component	SCART Audio in & out	PCB NAME	715T3009	修 改
Date	Friday, June 20, 2008	Sheet	7 of 21	< 前 页 >



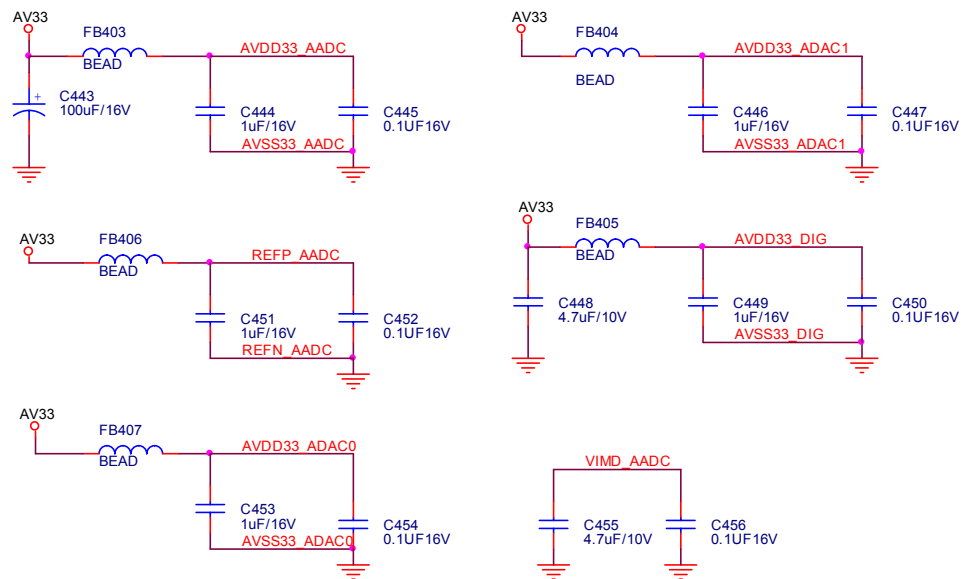
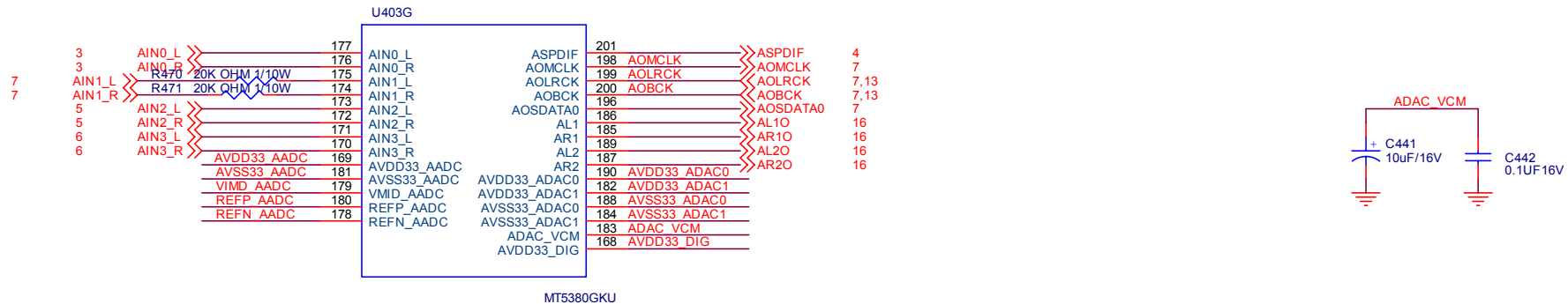
TPV (Top Victory Electronics Co., Ltd.)	OEM MODEL		Size	A4
紙隔瓜網膜	TPV MODEL		Rev	H
Key Component	LVDS OUT	PCB NAME	715T3009	称審 <称審>
Date	Friday, June 20, 2008	Sheet	8 of 21	



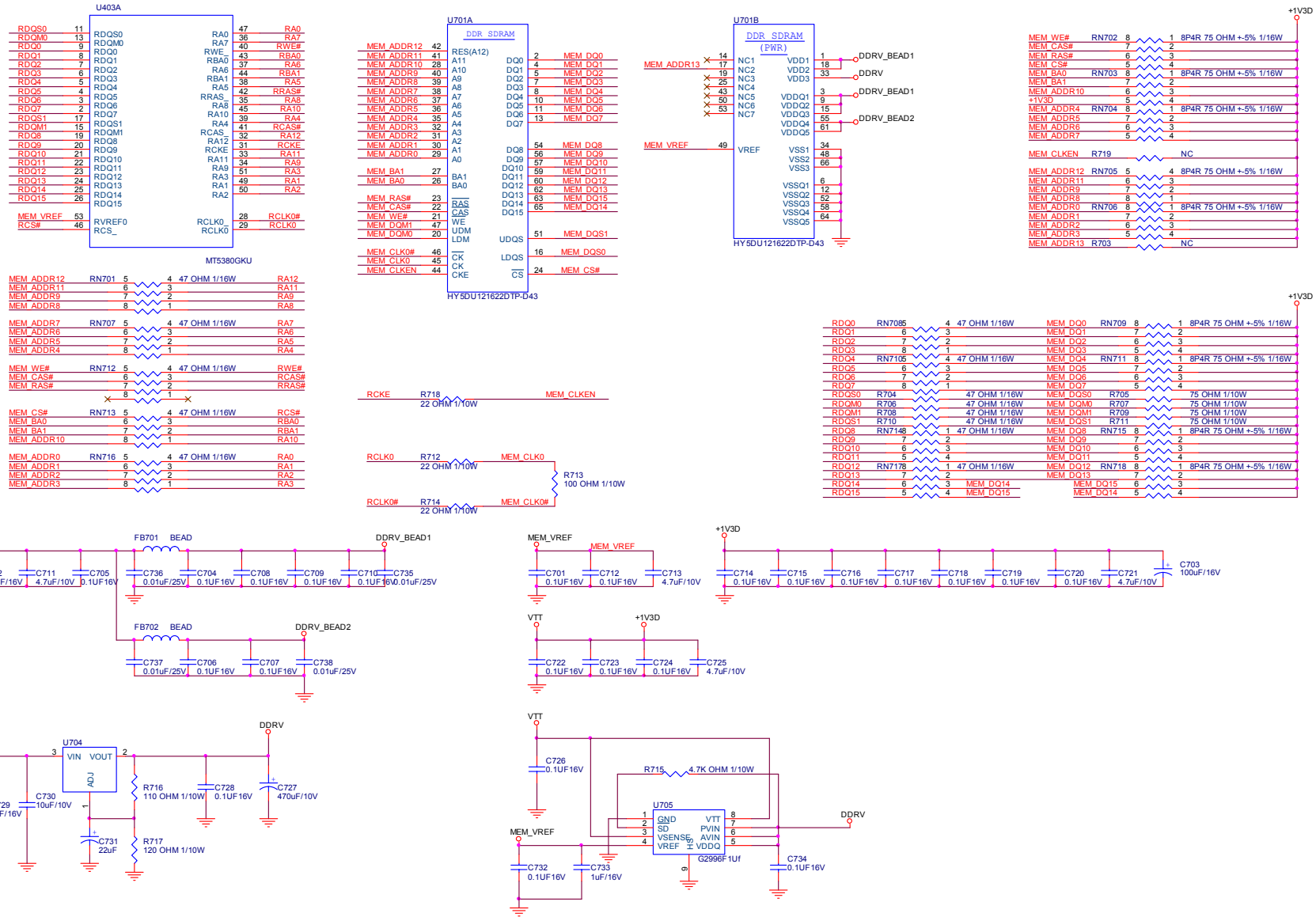
TPV (Top Victory Electronics Co., Ltd.)	OEM MODEL		Size	A4
結隔瓜網腹	TPV MODEL		Rev	H
Key Component	MT5335 HDMI/PLL	PCB NAME	715T3009	称爹 <称爹>
Date	Friday, June 20, 2008	Sheet	9 of 21	



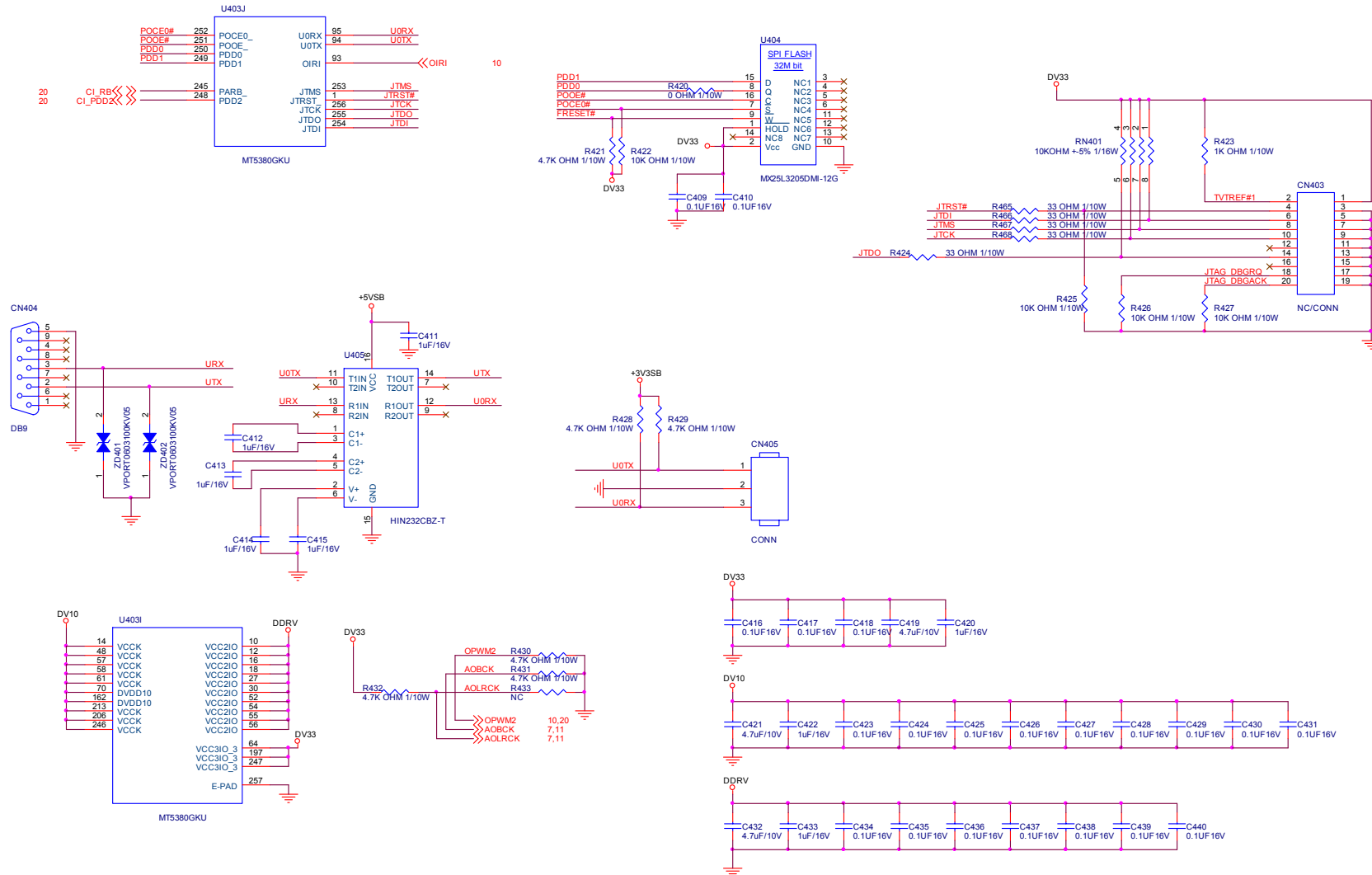
T P V (Top Victory Electronics Co., Ltd.)	OEM MODEL		Size	A3
威爾瓜爾	TPV MODEL		Rev	H
Key Component	MT5335 Control/IR/LED/Key	PCB NAME	715T3009	修 修
Date	Friday, June 20, 2008	Sheet	10 of 21	<修 修>



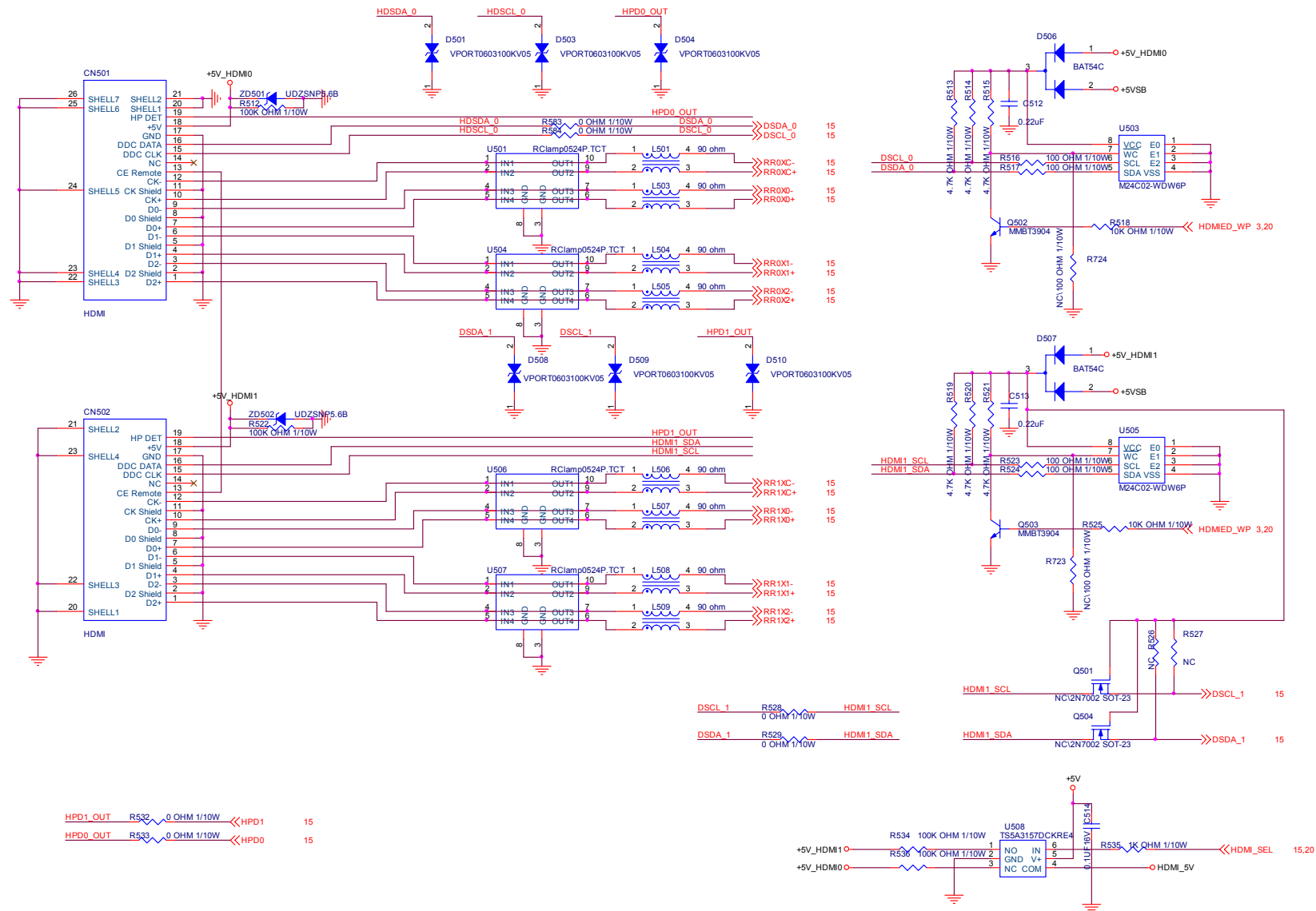
TPV (Top Victory Electronics Co., Ltd.)	OEM MODEL		Size	A4
紙隔瓜網腹	TPV MODEL		Rev	H
Key Component	MT5335 Audio In/Out	PCB NAME	715T3009	称爹 <称爹>
Date	Friday, June 20, 2008	Sheet	11 of 21	

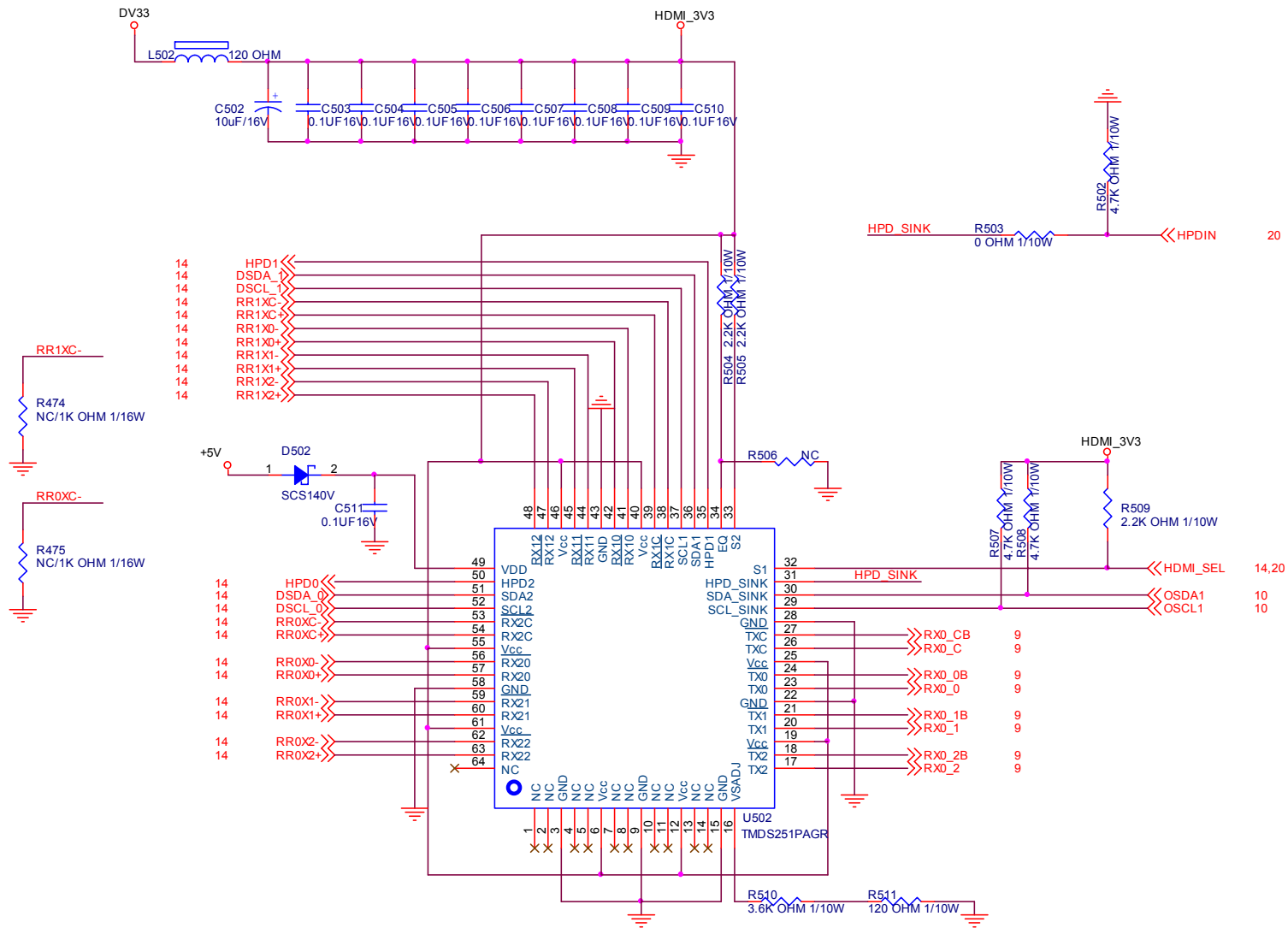


T P V (Top Victory Electronics Co., Ltd.)	OEM MODEL		Size	A3
新陽成業	TPV MODEL		Rev	H
Key Component	DDR1 MEMORY	PCB NAME	715T3009	称案
Date	Friday, June 20, 2008	Sheet	12 of 21	<称案>

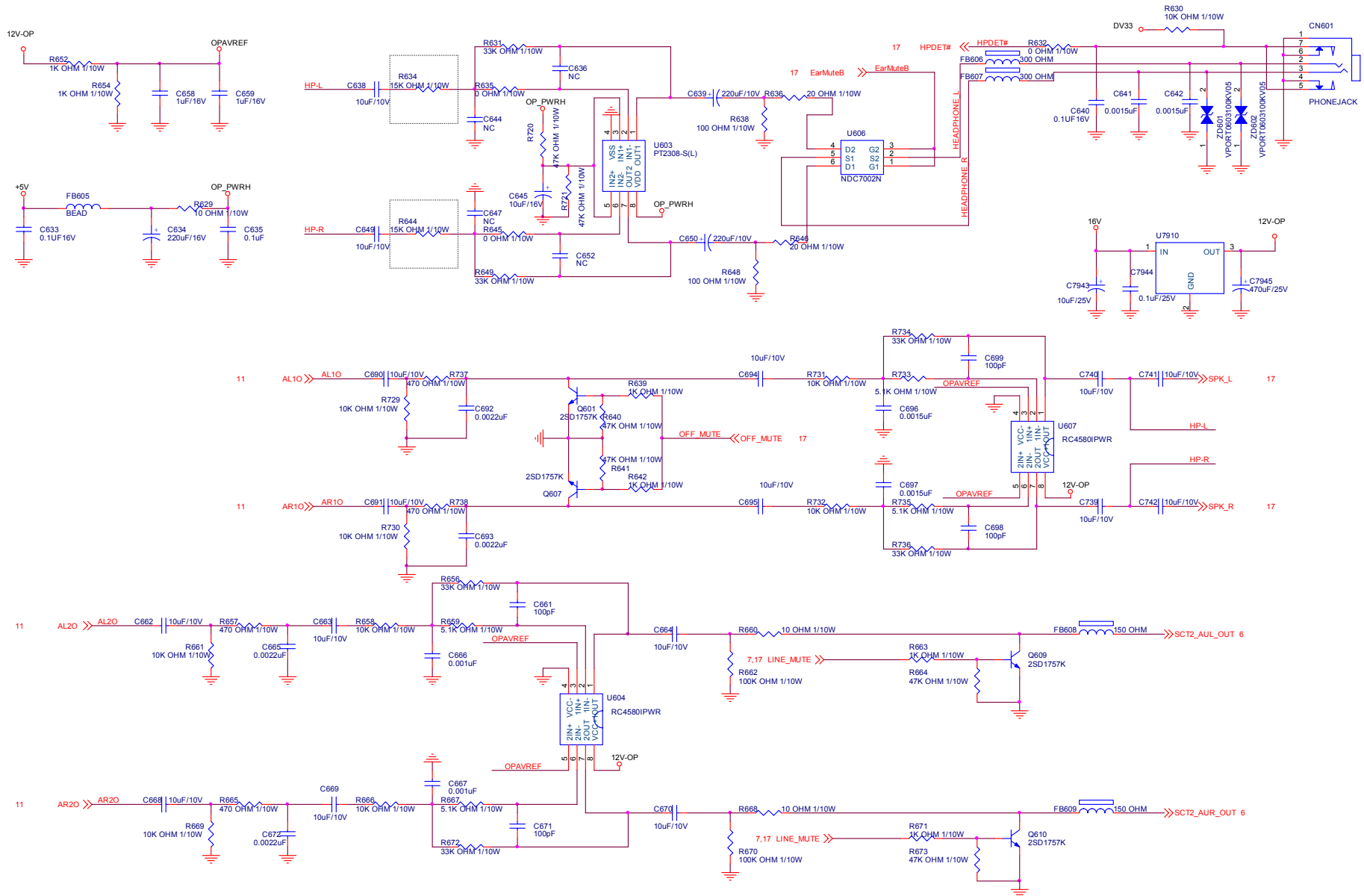


T P V (Top Victory Electronics Co., Ltd.)	OEM MODEL	Size	A3
話 局 互 換 機	TPV MODEL	Rev	H
Key Component	FLASH/JTAG/UART/TRAP	PCB NAME	715T3009
Date	Friday, June 20, 2008	Sheet	13 of 21

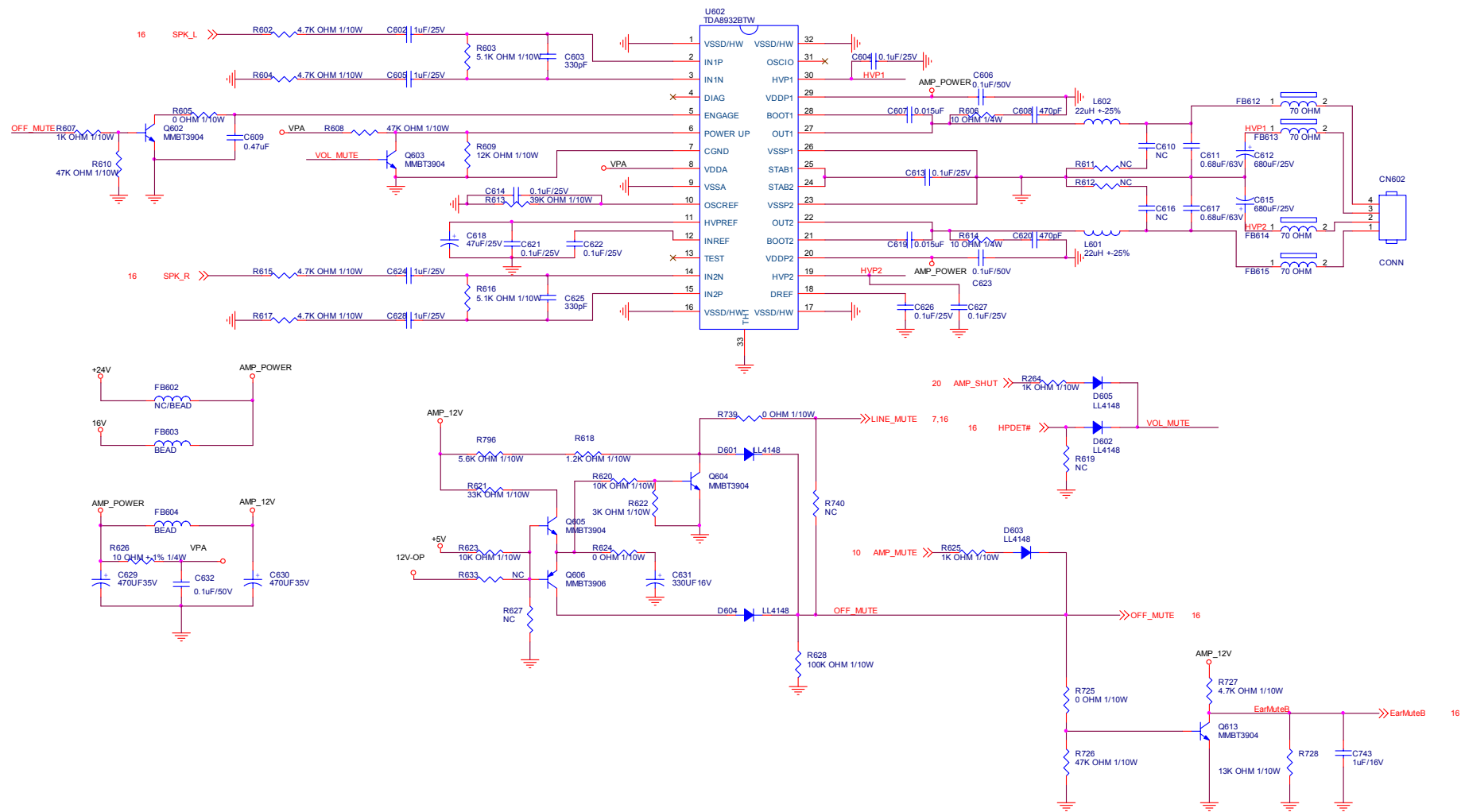




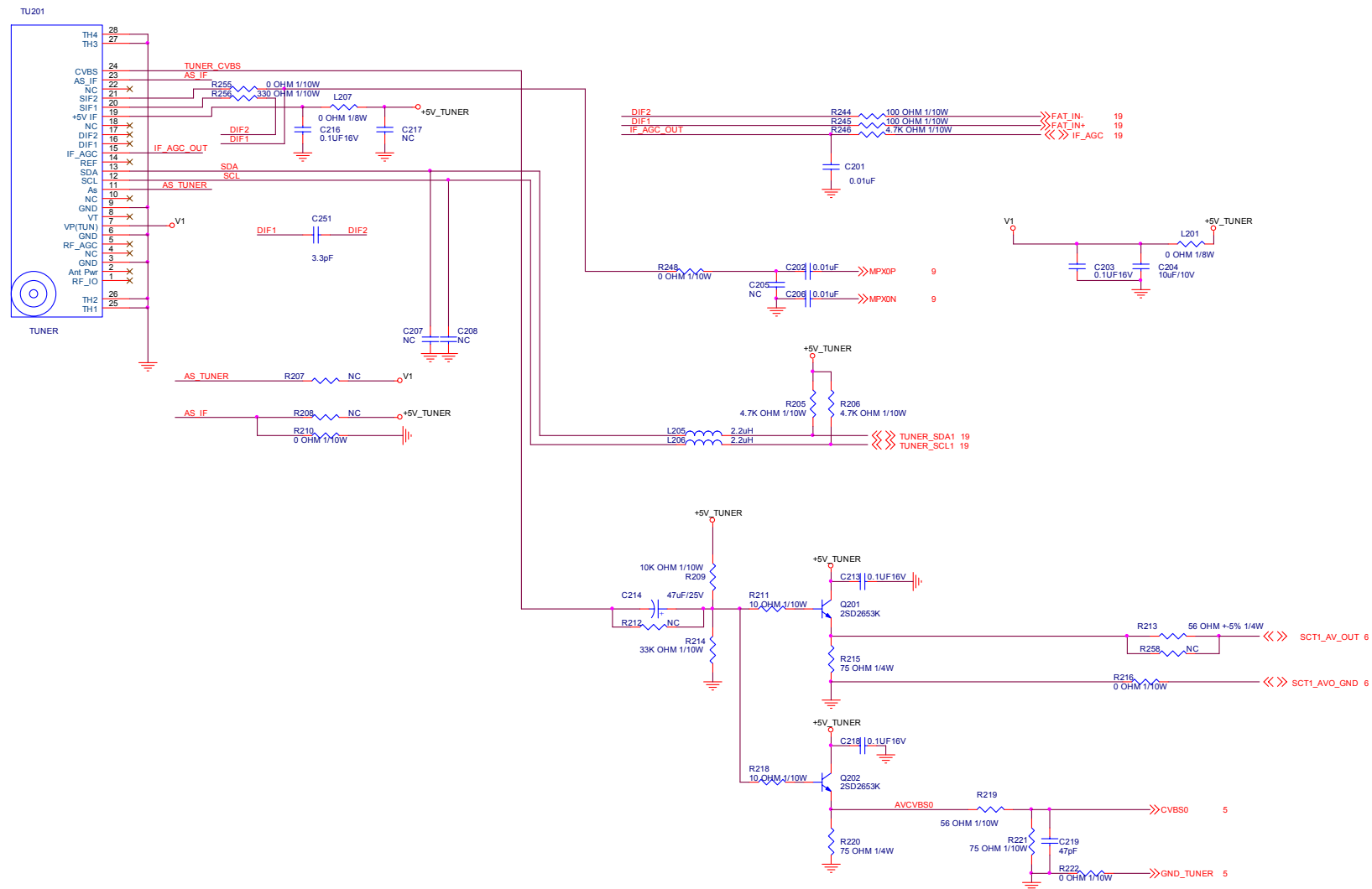
T P V (Top Victory Electronics Co. , Ltd.)		OEM MODEL		Size	A4
話隔瓜網腹		TPV MODEL		Rev	H
Key Component	TMD5251 HDMI 2:1 Switch	PCB NAME	715T3009	稱爹	<稱爹>
Date	Friday , June 20, 2008	Sheet	15 of 21		



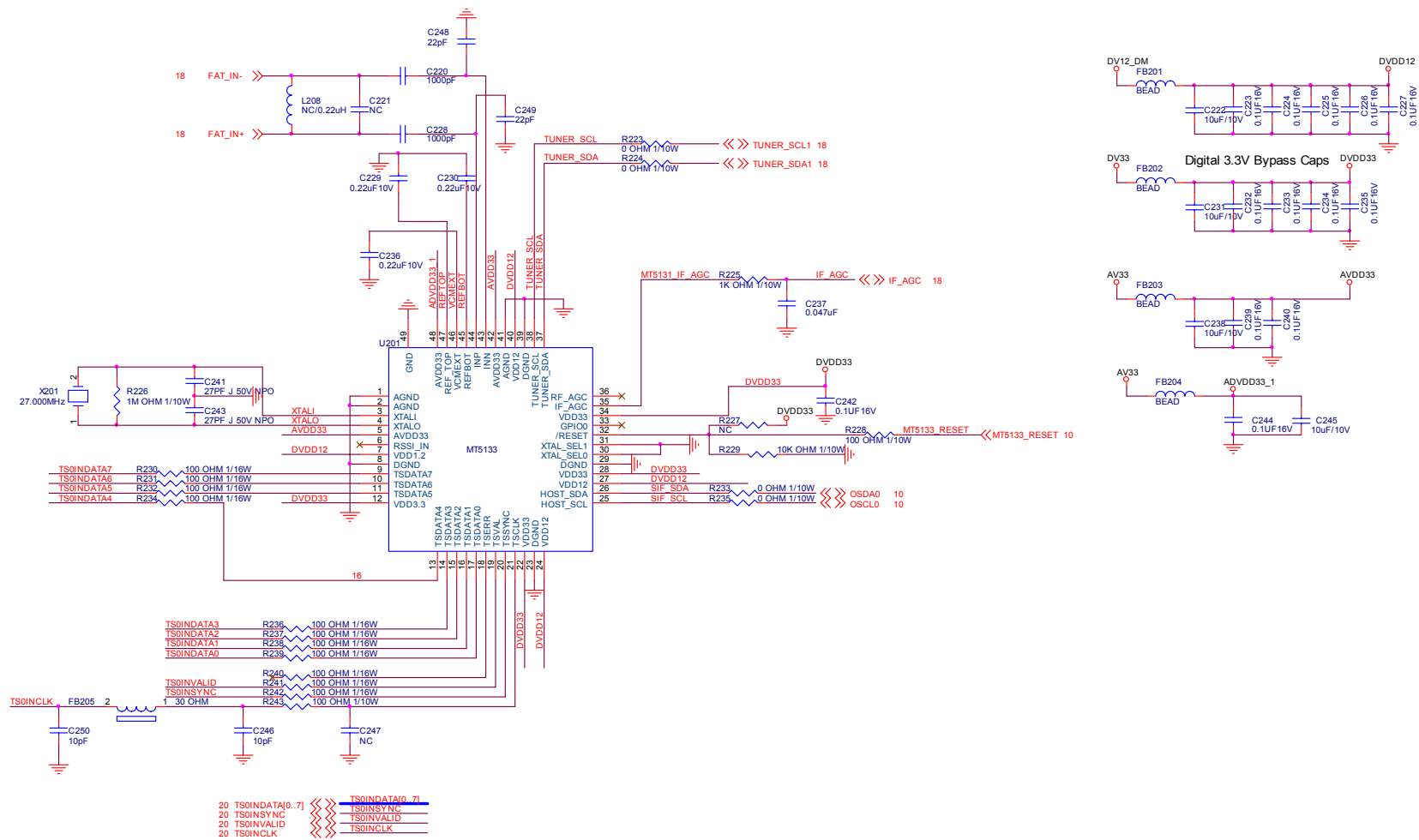
T P V (Top Victory Electronics Co . , Ltd .)	OEM MODEL		Size	A3
話 隔 瓜 蘭 腹	TPV MODEL		Rev	H
Key Component	Line Out/HP	PCB NAME	715T3009	称 差 <称 差>
Date	Friday, June 20, 2008	Sheet	16 of 21	



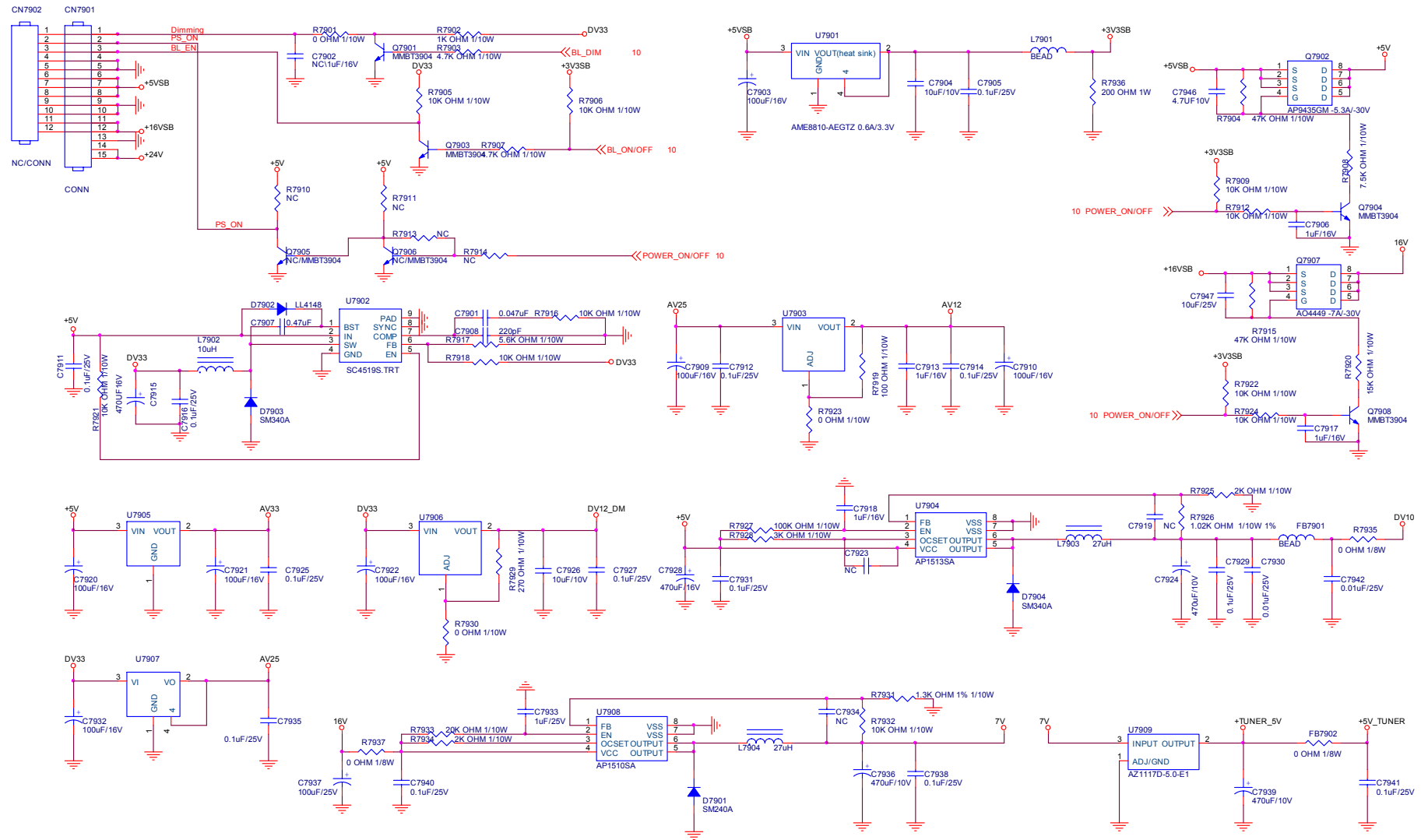
T P V (Top Victory Electronics Co., Ltd.)		OEM MODEL		Size	A3
振興電機		TPV MODEL		Rev	H
Key Component		Audio MP Class D	PCB NAME	715T3009	
Date		Friday, June 20, 2008	Sheet	17 of 21	名称



T P V (Top Victory Electronics Co., Ltd.)	OEM MODEL		Size	A3
経 理 系 課 長	TPV MODEL		Rev	H
Key Component	EU Tuner Interface	PCB NAME	715T3009	称 号
Date	Monday, June 23, 2008	Sheet	18 of 21	<称 号>

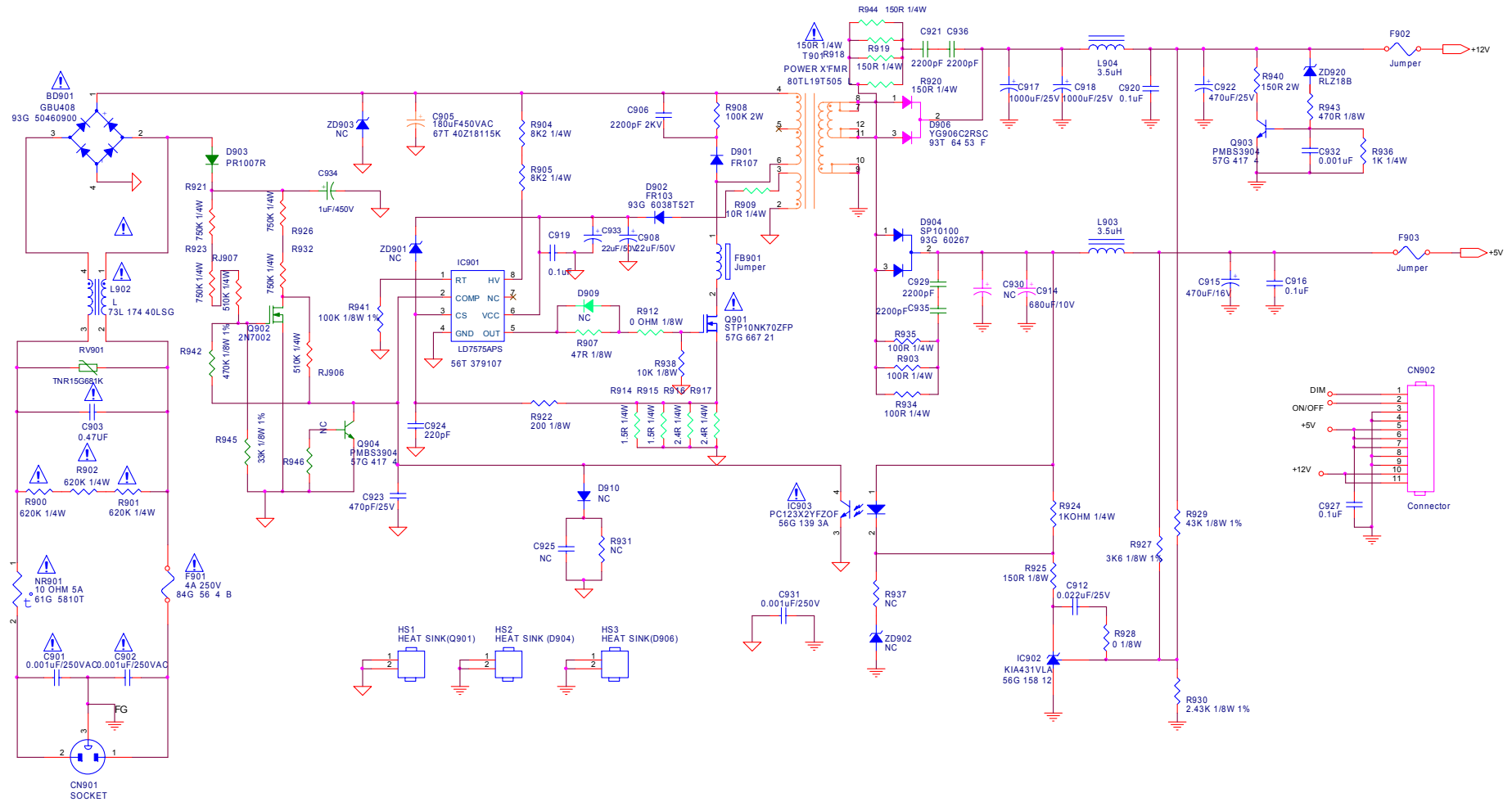


TPV (Top Victory Electronics Co., Ltd.)	OEM MODEL		Size	A3
TPV MODEL			Rev	H
Key Component	MT5133 ASIC	PCB NAME	715T3009	称客
Date	Friday, June 20, 2008	Sheet	19 of 21	<陈客>

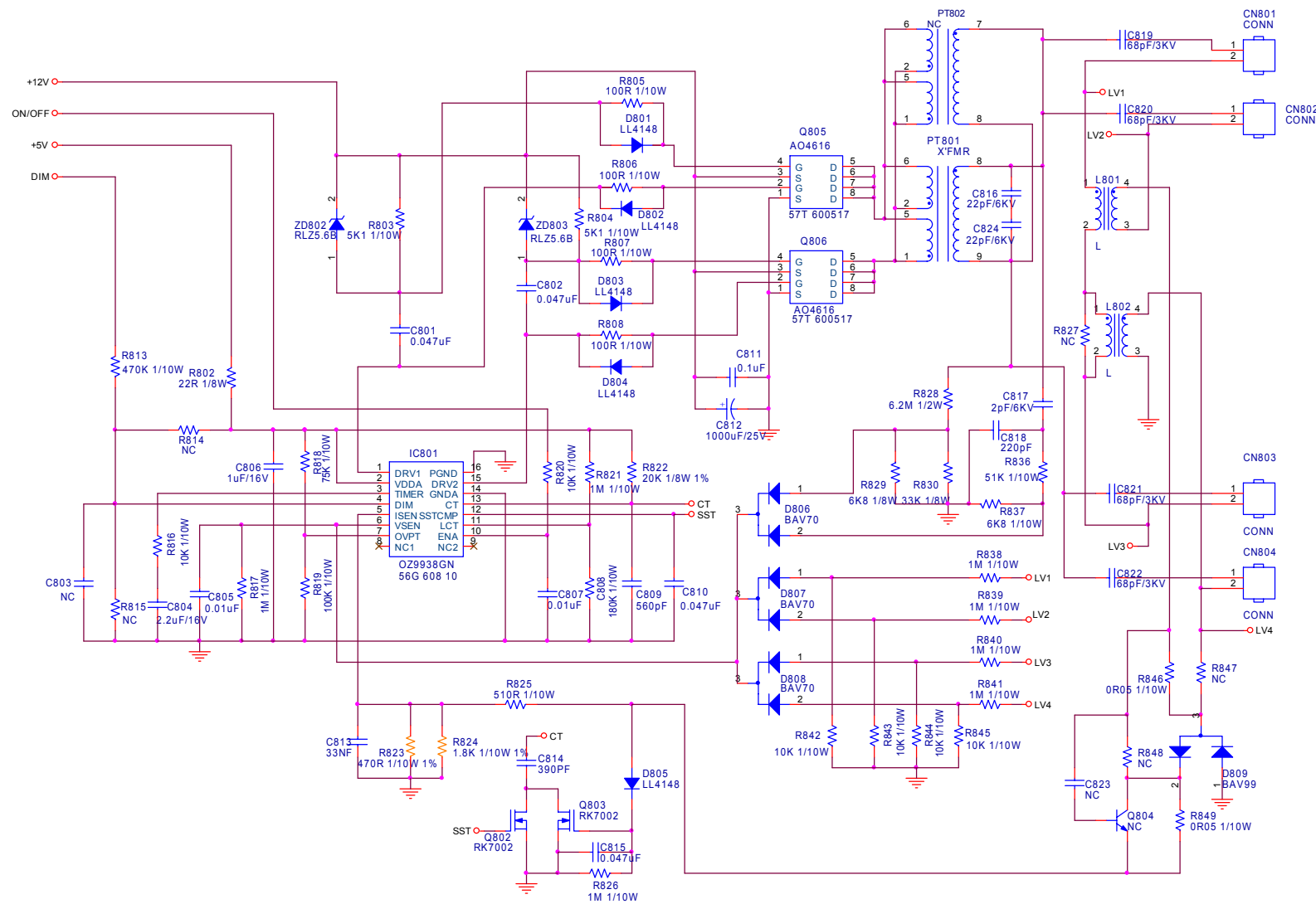


TPV (Top Victory Electronics Co., Ltd.)	OEM MODEL	Size	A3
TPV MODEL		Rev	H
Key Component Power	PCB NAME 715T3009	称	<称>
Date Friday, June 20, 2008	Sheet 21 of 21		

POWER BOARD PARTS



TPV (Top Victory Electronics Co., Ltd.)		OEM MODEL		Size	Custom
話 術 部 課		TPV MODEL		Rev	D
Key Component		PCB NAME		修 改	
Date		Sheet			
Friday, June 13, 2008		2 of 3			



T P V (Top Victory Electronics Co. , Ltd.)		OEM MODEL		Size	B
結 隔 瓜 銅 版		TPV MODEL		Rev	D
Key Component	02.INVERTER	PCB NAME	715T2783	称 差	
Date	Friday, June 13, 2008	Sheet	3 of 3		



P/NO : MFL41037106

Oct., 2008
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