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LCD TV

SERVICE MANUAL

CHASSIS : ML-024E

MODEL : RT-15LA70

CAUTION

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



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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 Replacement Parts List.

It is essential that these special safety parts should be replaced with the same components as recommended in this manual to prevent X-RADIATION, 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.

Due to high vacuum and large surface area of picture tube, extreme care should be used in **handling the Picture Tube**. Do not lift the Picture tube by its Neck.

X-RAY Radiation

Warning:

The source of X-RAY RADIATION in this TV receiver is the High Voltage Section and the Picture Tube.

For continued X-RAY RADIATION protection, the replacement tube must be the same type tube as specified in the Replacement Parts List.

To determine the presence of high voltage, use an accurate high impedance HV meter.

Adjust brightness, color, contrast controls to minimum.

Measure the high voltage.

The meter reading should indicate

23.5 $\pm$ 1.5KV: 14-19 inch, 26 $\pm$ 1.5KV: 19-21 inch,

29.0 $\pm$ 1.5KV: 25-29 inch, 30.0 $\pm$ 1.5KV: 32 inch

If the meter indication is out of tolerance, immediate service and correction is required to prevent the possibility of premature component failure.

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 Ω and 5.2M Ω .

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.

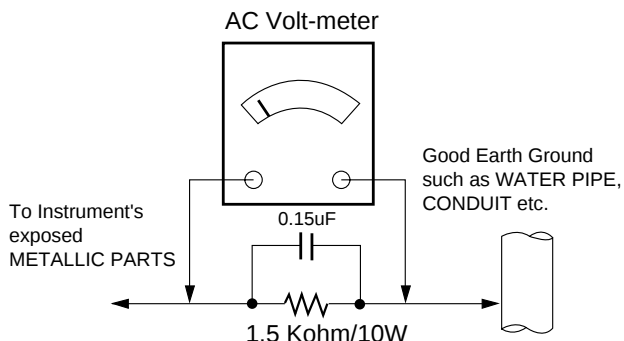
Connect 1.5K/10watt resistor in parallel with a 0.15uF capacitor between a known good earth ground (Water Pipe, Conduit, etc.) and the exposed metallic parts.

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.
- d. Discharging the picture tube anode.

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. Discharge the picture tube anode only by (a) first connecting one end of an insulated clip lead to the degaussing or kine aquadag grounding system shield at the point where the picture tube socket ground lead is connected, and then (b) touch the other end of the insulated clip lead to the picture tube anode button, using an insulating handle to avoid personal contact with high voltage.

4. Do not spray chemicals on or near this receiver or any of its assemblies.

5. 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.

6. Do not defeat any plug/socket B+ voltage interlocks with which receivers covered by this service manual might be equipped.
7. 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.

8. 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.

9. Use with this receiver only the test fixtures specified in this service manual.

CAUTION: Do not connect the test fixture ground strap to any heat sink in this receiver.

Electrostatically Sensitive (ES) Devices

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

should be used to help reduce the incidence of component damage caused by static by static electricity.

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

CAUTION: Be sure no power is applied to the chassis or circuit, and observe all other safety precautions.

8. Minimize bodily motions when handling unpackaged replacement ES devices. (Otherwise harmless motion such as the brushing together of your clothes fabric or the lifting of your foot from a carpeted floor can generate static electricity sufficient to damage an ES device.)

General Soldering Guidelines

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

- c. Quickly move the soldering iron tip to the junction of the component lead and the printed circuit foil, and hold it there only until the solder flows onto and around both the component lead and the foil.

CAUTION: Work quickly to avoid overheating the circuit board printed foil.

- d. Closely inspect the solder area and remove any excess or splashed solder with a small wire-bristle brush.

IC Remove/Replacement

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

Removal

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

Replacement

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

"Small-Signal" Discrete Transistor

Removal/Replacement

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

Power Output, Transistor Device

Removal/Replacement

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

Diode Removal/Replacement

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

Fuse and Conventional Resistor

Removal/Replacement

1. Clip each fuse or resistor lead at top of the circuit board hollow stake.
2. Securely crimp the leads of replacement component around notch at stake top.
3. Solder the connections.

CAUTION: Maintain original spacing between the replaced component and adjacent components and the circuit board to prevent excessive component temperatures.

Circuit Board Foil Repair

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

At IC Connections

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

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

At Other Connections

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

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

SPECIFICATION

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

1. Application range

This specification is applied to ML-024E chassis.

2. Requirement for Test

Testing for standard of each part must be followed in below condition.

- (1) Temperature: 25°C ± 5°C(But, CST must be tested 40°C ± 5°C)
- (2) Humidity: 65% ± 10%
- (3) Power: Standard input voltage (AC 100-220V, 50/60Hz)
- (4) Measurement must be performed after heat-run more than 15min.

(5) Adjusting standard for this chassis is followed a special standard.

(6) Use the parts only designated in B.O.M.,PARTS SPEC.,or drawings.

(7) Follow each drawing or spec for spec and performance of parts,based upon P/N of RPL

3. Test and Inspection method

- (1) Capacity: Follow LG electronics TV Testing Standard.
- (2) RCA JACK performance :Follow the standard of LG.
- (3) Another Required Standard
Follow the standard of each nation.

4.General Specification

No.	Item	Specification				Remark
		Min	Typ	Max	Unit	
1	Receivable broadcasting system	1)PAL/SECAM-BG 2)PAL/SECAM-DK 3)PAL-I/I 4)SECAM-L/L' 5)NTSC -M 6)NTSC 4.43(AV)				EU/Non-EU (PAL Market)
		7)PAL N/M 8)NTSC-M				NTSC Market
2	RF input channel	VHF: E02 ~ E12 UHF : E21 ~ E69 CATV : S1 ~ S20 HYPER : S21 ~ S41				PAL
		L/L' : B,C,D				FRANCE
		VHF : 2 ~13 UHF : 14 ~ 69 CATV : 1 ~ 125				NTSC
		VHF low : 1 ~M10 VHF high : 14 ~ 69 UHF : S23 ~ 62				JAPAN
3	Input voltage	110 - 220V ~± 10%, 50/60Hz				USA(120V/60Hz) EU(230~240V/50Hz JAPAN(100V/60Hz)
4	Tuning system	FVS 100 program FS				PAL, 200PR.(option) NTSC
5	Market	World Wide				Initial : Zenith(RMS)
6	Screen size	15.1" diagonal (384mm)				024A
		15" diagonal				024E
		17.1" diagonal				024F
7	Aspect ratio	4:3				024A/E
		16:9				024F
8	Operating temperature	0		50	deg	024A/E/F
9	Operating humidity	10		90	%RH	024A/F
		20		85		024E
10	Storage temperature	-20		60	deg	024A/E/F
11	Storage humidity	10		90	%RH	024A/F
		5		85		024E

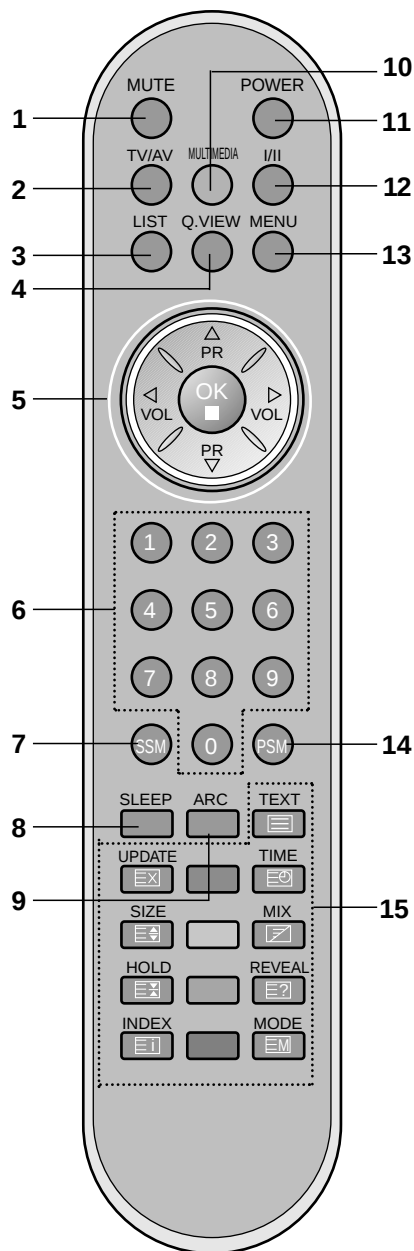
5. Feature and Function

No.	Item	Specification				Remark
		Min	Typ	Max	Unit	
1	Teletext	TOP,FLOF,LIST				TOP(option)
2	REMOCON	NEC code				
3	RGB(VGA) input	1	Rear			D-Sub 15 pin
4	Component input	0	Y, P _B , P _R			Option, Non-EU
5	PERI TV Connector	1	Rear (Full Scart)			Option, EU
6	AV input	1	Rear			
7	S-video input	1	Rear			
8	RS232 Port	1	Rear			Only for RMS
9	H/P output	1	Rear			
10	PC sound Input	1				
11	2 Carrier stereo	BG, DK				
12	NICAM Stereo	BG, I, LL'				
13	2 Carrier Dual	BG, DK				
14	NICAM Dual	BG, I, LL'				
15	Local Key	TV/video, menu, enter Volume (◀,▶), Channel(▲,▼)				
16	Main Power Key	O				
17	DPM (Display power management)	O				
18	AVL	O				
19	On/Off Timer	O				
20	APC	O				PAL : PSM
21	DASP	O				PAL : SSM

DESCRIPTION OF CONTROLS

All the functions can be controlled with the remote control handset. Some functions can also be adjusted with the buttons on the side panel of the set. Only the remote control handset supplied will operate this set.

Remote control handset



Before you use the remote control handset, please install the batteries. See the next page.

- 1. MUTE**
switches the sound on or off.
- 2. TV/AV**
selects TV or AV mode.
clears the menu from the screen.
switches the set on from standby.
- 3. LIST**
displays the programme table.
- 4. Q.VIEW**
returns to the previously viewed programme.
selects a favourite programme.
- 5. ▼ / ▲ (Programme Up/Down)**
selects a programme or a menu item.
switches the set on from standby.
- ◀ / ▶ (Volume Up/Down)**
adjusts the volume.
adjusts menu settings.
- OK**
accepts your selection or displays the current mode.
- 6. NUMBER BUTTONS**
switches the set on from standby or directly select a number.
- 7. SSM (Sound Status Memory)**
recalls your preferred sound setting.
- 8. SLEEP**
sets the sleep timer.
- 9. ARC(OPTION)**
Select your desired picture format.

(With TELETEXT)

10. MULTIMEDIA

selects TV, DVD or PC mode.
clears the menu from the screen.
switches the set on from standby.

11. POWER

switches the set on from standby or off to standby.

12. I/II

selects the language during dual language broadcast.
selects the sound output (option).

13. MENU

selects a menu.

14. PSM (Picture Status Memory)

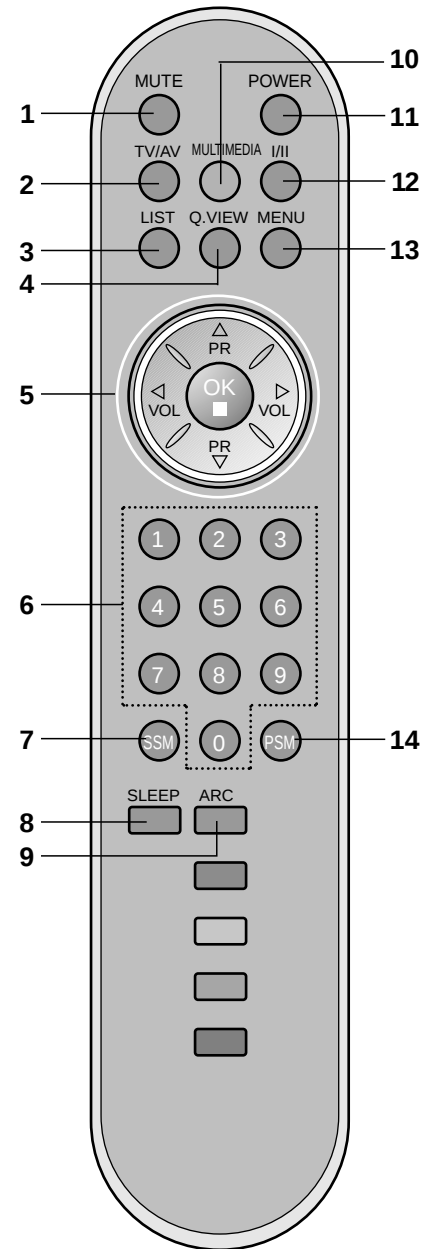
recalls your preferred picture setting.

15. TELETEXT BUTTONS (option)

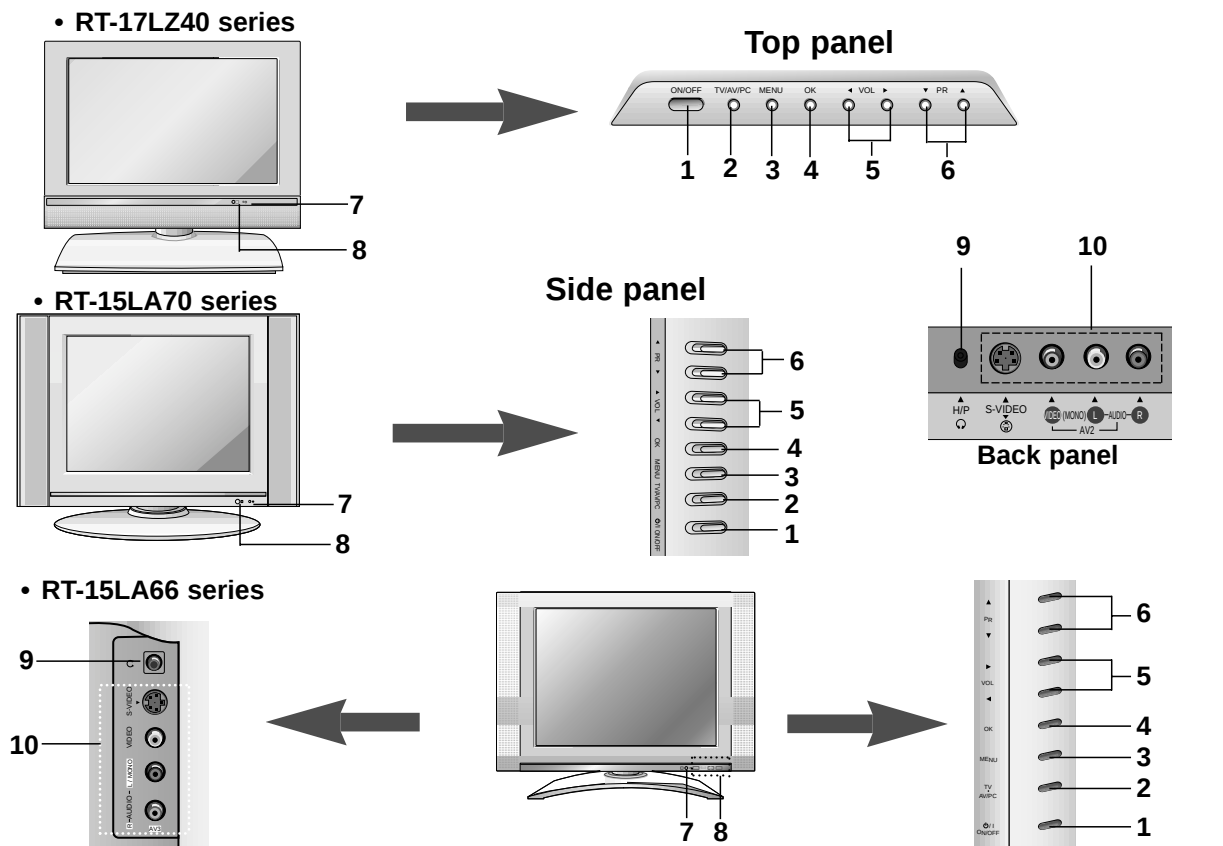
These buttons are used for teletext.
For further details, see the 'Teletext' section.

✱ : No function

COLOURED BUTTONS : These buttons are used for teletext (only TELETEXT models) or programme edit.



(Without TELETEXT)



1. **ON/OFF**
switches the set on from standby or off to standby.
Note : Power line lives even when the power is off.

2. **TV/AV/PC/DVD**
selects the remote operating mode.
clears the menu from the screen.
switches the set on from standby.

3. **MENU**
selects a menu.

4. **OK**
accepts your selection or displays the current mode.

5. **◀ / ▶ (Volume Up/Down)**
adjusts the volume.
adjusts menu settings.

6. **▲ / ▼ (Programme Up/Down)**
selects a programme or a menu item.
switches the set on from standby.

7. **POWER/STANDBY INDICATOR (⏻)**
illuminates red in standby mode.
illuminates green when the set is switched on.

8. **REMOTE CONTROL SENSOR (option)**
illuminates brightly when the set is switched on.

⏻ : POWER/STANDBY indicator

MONO : MONO indicator

STEREO : STEREO indicator

DUAL : DUAL indicator

DPM : DPM indicator

9. **HEADPHONE SOCKET**
Connect the headphone plug to this socket.

10. **AUDIO/VIDEO IN SOCKETS (AV)**
Connect the audio/video out sockets of external equipment to these sockets.

S-VIDEO/AUDIO IN SOCKETS (SAV)

Connect the video out socket of an S-VIDEO VCR to the **S-VIDEO** socket.

Connects the audio out sockets of the S-VIDEO VCR to the audio sockets as in **AV**.

ADJUSTMENT INSTRUCTION

1. Application Object

This instruction is for the application to the LCD TV/Monitor, ML-024E.

2. Notes

- (1) This LCD TV has power within set. Connect the power correctly, then start the adjustment.
 - (2) The adjustment must be performed under the correct sequence.
 - (3) The adjustment must be performed in the circumstance of $25^{\circ}\text{C} \pm 5^{\circ}\text{C}$ of temperature and $65 \pm 10\%$ of relative humidity if there is no specific designation.
 - (4) The input voltage of the receiver must keep 100~220V, 50/60Hz in adjusting.
 - (5) The set must be operated for 15 minutes preliminary before adjustment if there is no specific designation.
- o 'Heat Run' must be performed with the full white signal or TV noise signal in the internal part of the set.
 - o The time for 'Heat Run' can be changed owing to production plan.
 - o Condition of Line Test : Standard color signal - $65 \pm 1\text{dBuV}$

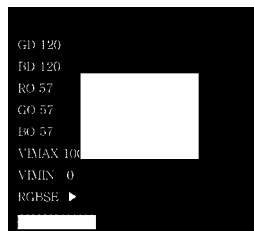
3. PC Mode Adjustment

3-1. Required Test Equipment

- (1) Window Pattern which satisfied with VESA Spec. or pattern which has White-Black signal simultaneously.
- (2) Remote control for adjustment

3-2. Preparation for Adjustment

- (1) Perform 'Heat Run' for more than 15 minutes in white pattern.
- (2) Connect the signal of pattern generator with LCD TV of PC Input Jack(D-Sub).
- (3) Confirm the XGA(1024x768) Window Pattern or signal(White-Black) using the 801-GF/GD, VG819.
- (4) Use the IN-START Key on R/C for adjustment to enter the PC adjustment mode.
- (5) Example of adjustment screen.



<Fig. 1>

- (6) Enter into the adjustment mode as <Fig. 1> and select the cursor(red letters) to "RGBSE ►" with the channel key on R/C for adjustment.
- (7) Press the Volume ► on R/C for adjustment.

- (8) At this time the adjustment starts automatically changing the number in order of RO --> GO --> BO --> RD --> GD --> BD.

Finally, when the number of BD is changed the adjustment is completed.

- (9) Press the MENU or EXIT key to come out of the adjustment mode.

4. COMPONENT Adjustment

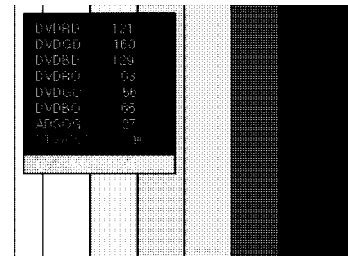
(Only CMO MODULE)

4-1. Required Test Equipment

- (1) Standard Color bar (75% Full Color bar) -> refer <fig.2>
- (2) Remote control for adjustment

4-2. Preparation for Adjustment

- (1) Operate Component Mode adjustment, after PC Mode adjustment.
- (2) Connect the signal of pattern generator with LCD TV of Component Input Jack(D-Sub).
- (3) Confirm the Color bar (75% Full Color bar) signal using the 801-GF/GD, VG819.
- (4) Use the IN-START Key on R/C for adjustment to enter the Component adjustment mode.
- (5) Example of adjustment screen.



<Fig. 1>

- (6) Enter into the adjustment mode as <Fig. 2> and select the cursor(red letters) to "DTVADJT ►" with the channel key on R/C for adjustment.
 - (7) Press the Volume ► on R/C for adjustment.
 - (8) At this time the adjustment starts automatically changing the color of Color bar.
- Finally, when the number of BD is changed the adjustment is completed.
- (9) Press the ENTER key. and then press EXIT key to come out of the adjustment mode.

5. Option1 data(200PR~A2 ST:1bit,SYS:2bit)

OPTION Data	200PR	TEXT	I/II SV	TOP	SCART	A2 ST	SYS
0	0	0	0	0	0	0	0
1	0	0	0	0	0	0	1
2	0	0	0	0	0	0	2
3	0	0	0	0	0	0	3
4	0	0	0	0	0	1	0
5	0	0	0	0	0	1	1
6	0	0	0	0	0	1	2
7	0	0	0	0	0	1	3
8	0	0	0	0	1	0	0
9	0	0	0	0	1	0	1
10	0	0	0	0	1	0	2
11	0	0	0	0	1	0	3
12	0	0	0	0	1	1	0
13	0	0	0	0	1	1	1
14	0	0	0	0	1	1	2
15	0	0	0	0	1	1	3
16	0	0	0	1	0	0	0
17	0	0	0	1	0	0	1
18	0	0	0	1	0	0	2
19	0	0	0	1	0	0	3
20	0	0	0	1	0	1	0
21	0	0	0	1	0	1	1
22	0	0	0	1	0	1	2
23	0	0	0	1	0	1	3
24	0	0	0	1	1	0	0
25	0	0	0	1	1	0	1
26	0	0	0	1	1	0	2
27	0	0	0	1	1	0	3
28	0	0	0	1	1	1	0
29	0	0	0	1	1	1	1
30	0	0	0	1	1	1	2
31	0	0	0	1	1	1	3

OPTION Data	200PR	TEXT	I/II SV	TOP	SCART	A2 ST	SYS
32	0	0	1	0	0	0	0
33	0	0	1	0	0	0	1
34	0	0	1	0	0	0	2
35	0	0	1	0	0	0	3
36	0	0	1	0	0	1	0
37	0	0	1	0	0	1	1
38	0	0	1	0	0	1	2
39	0	0	1	0	0	1	3
40	0	0	1	0	1	0	0
41	0	0	1	0	1	0	1
42	0	0	1	0	1	0	2
43	0	0	1	0	1	0	3
44	0	0	1	0	1	1	0
45	0	0	1	0	1	1	1
46	0	0	1	0	1	1	2
47	0	0	1	0	1	1	3
48	0	0	1	1	0	0	0
49	0	0	1	1	0	0	1
50	0	0	1	1	0	0	2
51	0	0	1	1	0	0	3
52	0	0	1	1	0	1	0
53	0	0	1	1	0	1	1
54	0	0	1	1	0	1	2
55	0	0	1	1	0	1	3
56	0	0	1	1	1	0	0
57	0	0	1	1	1	0	1
58	0	0	1	1	1	0	2
59	0	0	1	1	1	0	3
60	0	0	1	1	1	1	0
61	0	0	1	1	1	1	1
62	0	0	1	1	1	1	2
63	0	0	1	1	1	1	3

OPTION Data	200PR	TEXT	I/II SV	TOP	SCART	A2 ST	SYS
64	0	1	0	0	0	0	0
65	0	1	0	0	0	0	1
66	0	1	0	0	0	0	2
67	0	1	0	0	0	0	3
68	0	1	0	0	0	1	0
69	0	1	0	0	0	1	1
70	0	1	0	0	0	1	2
71	0	1	0	0	0	1	3
72	0	1	0	0	1	0	0
73	0	1	0	0	1	0	1
74	0	1	0	0	1	0	2
75	0	1	0	0	1	0	3
76	0	1	0	0	1	1	0
77	0	1	0	0	1	1	1
78	0	1	0	0	1	1	2
79	0	1	0	0	1	1	3
80	0	1	0	1	0	0	0
81	0	1	0	1	0	0	1
82	0	1	0	1	0	0	2
83	0	1	0	1	0	0	3
84	0	1	0	1	0	1	0
85	0	1	0	1	0	1	1
86	0	1	0	1	0	1	2
87	0	1	0	1	0	1	3
88	0	1	0	1	1	0	0
89	0	1	0	1	1	0	1
90	0	1	0	1	1	0	2
91	0	1	0	1	1	0	3
92	0	1	0	1	1	1	0
93	0	1	0	1	1	1	1
94	0	1	0	1	1	1	2
95	0	1	0	1	1	1	3
96	0	1	1	0	0	0	0
97	0	1	1	0	0	0	1
98	0	1	1	0	0	0	2
99	0	1	1	0	0	0	3
100	0	1	1	0	0	1	0
101	0	1	1	0	0	1	1
102	0	1	1	0	0	1	2
103	0	1	1	0	0	1	3
104	0	1	1	0	1	0	0
105	0	1	1	0	1	0	1
106	0	1	1	0	1	0	2
107	0	1	1	0	1	0	3
108	0	1	1	0	1	1	0
109	0	1	1	0	1	1	1

OPTION Data	200PR	TEXT	I/II SV	TOP	SCART	A2 ST	SYS
110	0	1	1	0	1	1	2
111	0	1	1	0	1	1	3
112	0	1	1	1	0	0	0
113	0	1	1	1	0	0	1
114	0	1	1	1	0	0	2
115	0	1	1	1	0	0	3
116	0	1	1	1	0	1	0
117	0	1	1	1	0	1	1
118	0	1	1	1	0	1	2
119	0	1	1	1	0	1	3
120	0	1	1	1	1	0	0
121	0	1	1	1	1	0	1
122	0	1	1	1	1	0	2
123	0	1	1	1	1	0	3
124	0	1	1	1	1	1	0
125	0	1	1	1	1	1	1
126	0	1	1	1	1	1	2
127	0	1	1	1	1	1	3
128	1	0	0	0	0	0	0
129	1	0	0	0	0	0	1
130	1	0	0	0	0	0	2
131	1	0	0	0	0	0	3
132	1	0	0	0	0	1	0
133	1	0	0	0	0	1	1
134	1	0	0	0	0	1	2
135	1	0	0	0	0	1	3
136	1	0	0	0	1	0	0
137	1	0	0	0	1	0	1
138	1	0	0	0	1	0	2
139	1	0	0	0	1	0	3
140	1	0	0	0	1	1	0
141	1	0	0	0	1	1	1
142	1	0	0	0	1	1	2
143	1	0	0	0	1	1	3
144	1	0	0	1	0	0	0
145	1	0	0	1	0	0	1
146	1	0	0	1	0	0	2
147	1	0	0	1	0	0	3
148	1	0	0	1	0	1	0
149	1	0	0	1	0	1	1
150	1	0	0	1	0	1	2
151	1	0	0	1	0	1	3
152	1	0	0	1	1	0	0
153	1	0	0	1	1	0	1
154	1	0	0	1	1	0	2
155	1	0	0	1	1	0	3

OPTION Data	200PR	TEXT	I/II SV	TOP	SCART	A2 ST	SYS
156	1	0	0	1	1	1	0
157	1	0	0	1	1	1	1
158	1	0	0	1	1	1	2
159	1	0	0	1	1	1	3
160	1	0	1	0	0	0	0
161	1	0	1	0	0	0	1
162	1	0	1	0	0	0	2
163	1	0	1	0	0	0	3
164	1	0	1	0	0	1	0
165	1	0	1	0	0	1	1
166	1	0	1	0	0	1	2
167	1	0	1	0	0	1	3
168	1	0	1	0	1	0	0
169	1	0	1	0	1	0	1
170	1	0	1	0	1	0	2
171	1	0	1	0	1	0	3
172	1	0	1	0	1	1	0
173	1	0	1	0	1	1	1
174	1	0	1	0	1	1	2
175	1	0	1	0	1	1	3
176	1	0	1	1	0	0	0
177	1	0	1	1	0	0	1
178	1	0	1	1	0	0	2
179	1	0	1	1	0	0	3
180	1	0	1	1	0	1	0
181	1	0	1	1	0	1	1
182	1	0	1	1	0	1	2
183	1	0	1	1	0	1	3
184	1	0	1	1	1	0	0
185	1	0	1	1	1	0	1
186	1	0	1	1	1	0	2
187	1	0	1	1	1	0	3
188	1	0	1	1	1	1	0
189	1	0	1	1	1	1	1
190	1	0	1	1	1	1	2
191	1	0	1	1	1	1	3
192	1	1	0	0	0	0	0
193	1	1	0	0	0	0	1
194	1	1	0	0	0	0	2
195	1	1	0	0	0	0	3
196	1	1	0	0	0	1	0
197	1	1	0	0	0	1	1
198	1	1	0	0	0	1	2
199	1	1	0	0	0	1	3
200	1	1	0	0	1	0	0
201	1	1	0	0	1	0	1

OPTION Data	200PR	TEXT	I/II SV	TOP	SCART	A2 ST	SYS
202	01	1	0	0	1	0	2
203	1	1	0	0	1	0	3
204	1	1	0	0	1	1	0
205	1	1	0	0	1	1	1
206	1	1	0	0	1	1	2
207	1	1	0	0	1	1	3
208	1	1	0	1	0	0	0
209	1	1	0	1	0	0	1
210	1	1	0	1	0	0	2
211	1	1	0	1	0	0	3
212	1	1	0	1	0	1	0
213	1	1	0	1	0	1	1
214	1	1	0	1	0	1	2
215	1	1	0	1	0	1	3
216	1	1	0	1	1	0	0
217	1	1	0	1	1	0	1
218	1	1	0	1	1	0	2
219	1	1	0	1	1	0	3
220	1	1	0	1	1	1	0
221	1	1	0	1	1	1	1
222	1	1	0	1	1	1	2
223	1	1	0	1	1	1	3
224	1	1	1	0	0	0	0
225	1	1	1	0	0	0	1
226	1	1	1	0	0	0	2
227	1	1	1	0	0	0	3
228	1	1	1	0	0	1	0
229	1	1	1	0	0	1	1
230	1	1	1	0	0	1	2
231	1	1	1	0	0	1	3
232	1	1	1	0	1	0	0
233	1	1	1	0	1	0	1
234	1	1	1	0	1	0	2
235	1	1	1	0	1	0	3
236	1	1	1	0	1	1	0
237	1	1	1	0	1	1	1
238	1	1	1	0	1	1	2
239	1	1	1	0	1	1	3
240	1	1	1	1	0	0	0
241	1	1	1	1	0	0	1
242	1	1	1	1	0	0	2
243	1	1	1	1	0	0	3
244	1	1	1	1	0	1	0
245	1	1	1	1	0	1	1
246	1	1	1	1	0	1	2
247	1	1	1	1	0	1	3

OPTION Data	200PR	TEXT	I/II SV	TOP	SCART	A2 ST	SYS
248	1	1	1	1	1	0	0
249	1	1	1	1	1	0	1
250	1	1	1	1	1	0	2
251	1	1	1	1	1	0	3
252	1	1	1	1	1	1	0
253	1	1	1	1	1	1	1
254	1	1	1	1	1	1	2
255	1	1	1	1	1	1	3

6. Option2 data(ACMS~BBACK:1bit,LANG:3bit)

OPTION Data	ACMS	VOL	BRACK	LANG	OPTION Data	ACMS	VOL	BRACK	LANG	OPTION Data	ACMS	VOL	BRACK	LANG
0	0	0	0	0	12	0	0	1	4	24	0	1	1	0
1	0	0	0	1	13	0	0	1	5	25	0	1	1	1
2	0	0	0	2	14	0	0	1	6	26	0	1	1	2
3	0	0	0	3	15	0	0	1	7	27	0	1	1	3
4	0	0	0	4	16	0	1	0	0	28	0	1	1	4
5	0	0	0	5	17	0	1	0	1	29	0	1	1	5
6	0	0	0	6	18	0	1	0	2	30	0	1	1	6
7	0	0	0	7	19	0	1	0	3	31	0	1	1	7
8	0	0	1	0	20	0	1	0	4	32	1	0	0	0
9	0	0	1	1	21	0	1	0	5	33	1	0	0	1
10	0	0	1	2	22	0	1	0	6	34	1	0	0	2
11	0	0	1	3	23	0	1	0	7	35	1	0	0	3

OPTION Data	ACMS	VOL	BRACK	LANG	OPTION Data	ACMS	VOL	BRACK	LANG
36	1	0	0	4	50	1	1	0	2
37	1	0	0	5	51	1	1	0	3
38	1	0	0	6	52	1	1	0	4
39	1	0	0	7	53	1	1	0	5
40	1	0	1	0	54	1	1	0	6
41	1	0	1	1	55	1	1	0	7
42	1	0	1	2	56	1	1	1	0
43	1	0	1	3	57	1	1	1	1
44	1	0	1	4	58	1	1	1	2
45	1	0	1	5	59	1	1	1	3
46	1	0	1	6	60	1	1	1	4
47	1	0	1	7	61	1	1	1	5
48	1	1	0	0	62	1	1	1	6
49	1	1	0	1	63	1	1	1	7

7. Option3 data(IIC AFT~CH+AU:1bit)

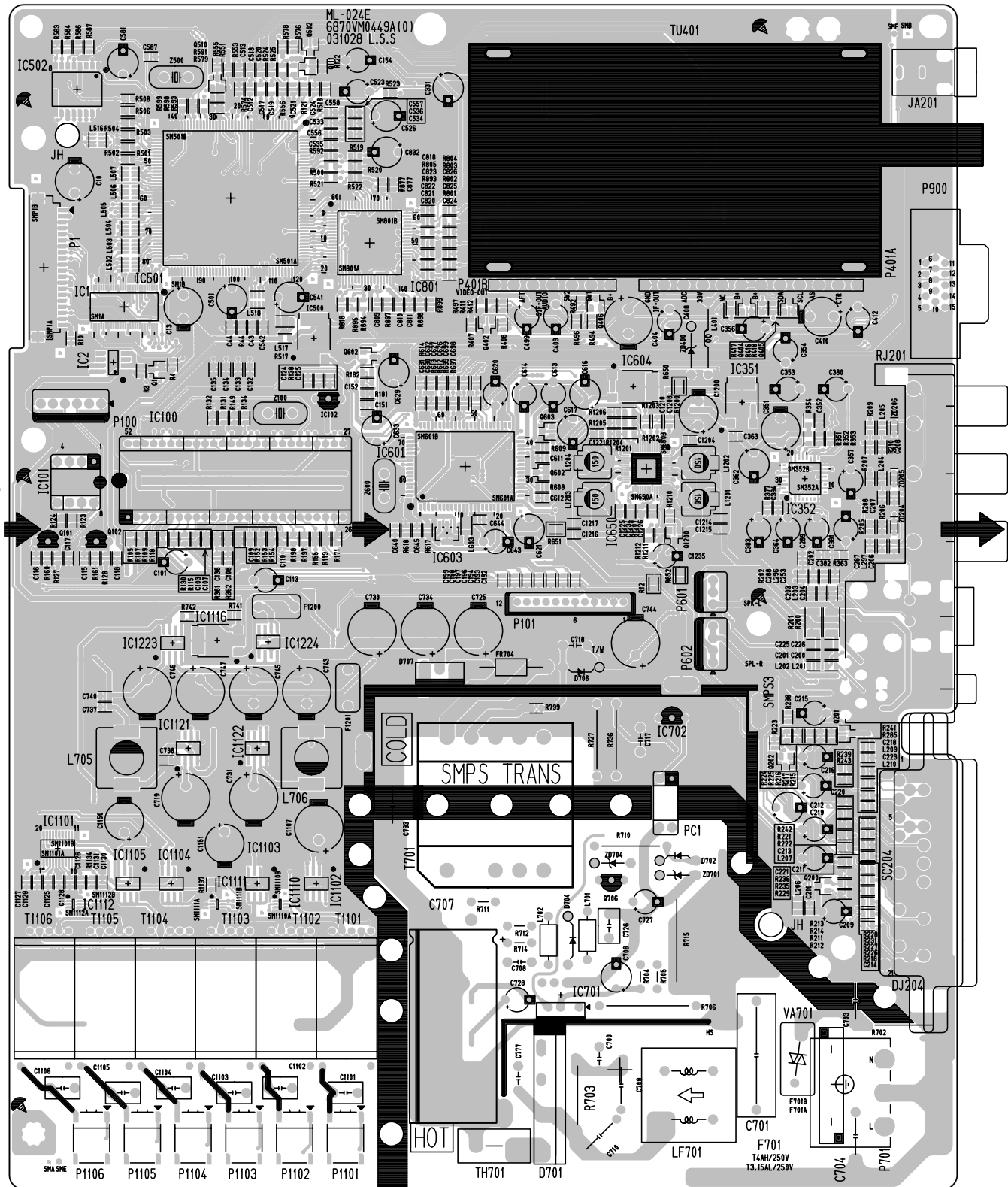
OPTION Data	HiDEV	TSS	IIC T	MONO	CH + AUS
0	0	0	0	0	0
1	0	0	0	0	1
2	0	0	0	1	0
3	0	0	0	1	1
4	0	0	1	0	0
5	0	0	1	0	1
6	0	0	1	1	0
7	0	0	1	1	1
8	0	1	0	0	0
9	0	1	0	0	1
10	0	1	0	1	0
11	0	1	0	1	1
12	0	1	1	0	0
13	0	1	1	0	1
14	0	1	1	1	0
15	0	1	1	1	1
16	1	0	0	0	0
17	1	0	0	0	1
18	1	0	0	1	0
19	1	0	0	1	1
20	1	0	1	0	0
21	1	0	1	0	1
22	1	0	1	1	0
23	1	0	1	1	1
24	1	1	0	0	0
25	1	1	0	0	1
26	1	1	0	1	0
27	1	1	0	1	1
28	1	1	1	0	0
29	1	1	1	0	1
30	1	1	1	1	0
31	1	1	1	1	1

The diagram illustrates the internal architecture of a portable DVD player, organized into three main functional blocks: POWER, DC-DC, and the main processing unit.

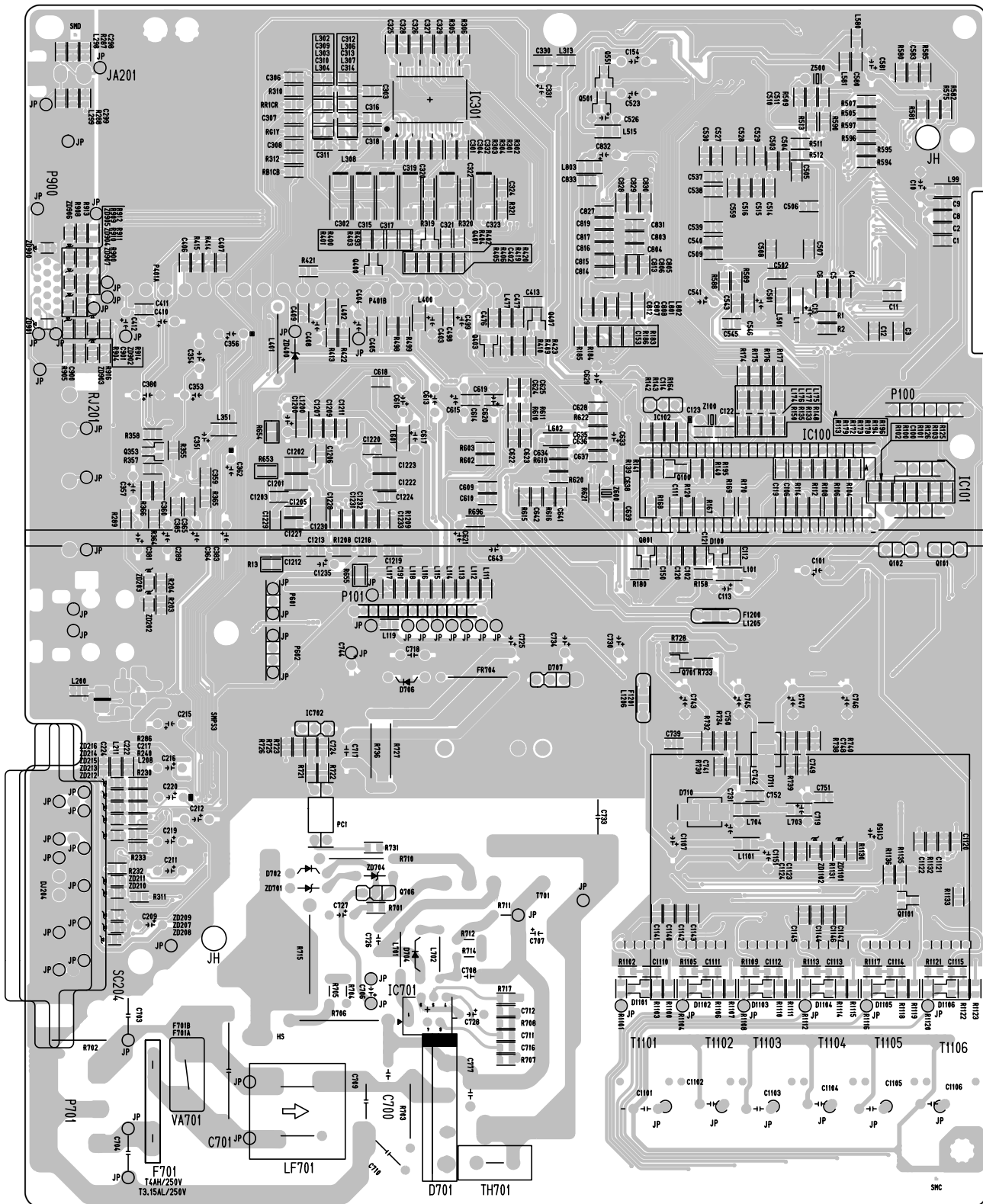
- POWER Block:**
 - AC In:** Receives 110~240V (AC) input.
 - POWER (STR-W6853P):** A switching regulator that converts AC to 33V.
 - DC-DC (MP1583):** A switching regulator that converts 33V to 15V.
- DC-DC Block:**
 - INVERTER, OZ960S MSP34**:** Converts 15V to 13V.
 - ST-BY3.3/3.3V:** A voltage regulator that converts 13V to 3.3V.
 - ST-BY5/5V:** A voltage regulator that converts 13V to 5V.
- Main Processing Unit:**
 - TO MODULE (400nF):** A buffer for the 3.3V supply.
 - LVDS TRANSMITTER (THC63LVDM83R):** Receives 3.3V and H/V Sync signals.
 - MICOM / TXT (6.0MHz):** Receives 3.3V/2.5V and SCL/SDA signals.
 - SCALER (Format Converter) LG8801:** The central processing unit for video and audio. It receives RF V., A/V V., S-V., and SCART V. signals. It outputs Video S/W, Video S/W, and CVBS (To Microm) signals.
 - MULTISTANDARD SOUND PROCESSOR MSP-34XX:** Receives SIF, AUDIO MONO, A/V L/R, PC L/R, S L/R, and RESET 4.2V signals. It outputs S L/R and H/P L/R signals.
 - D-CLASS 2W x 2 AMP TPA3000D2:** Receives S L/R and H/P L/R signals.
 - AD Converter AD9883:** Receives R/G/B, SCL, and SDA signals. It outputs R/G/B H/V or YUV signals.
 - RGB/YUV S/W M52758FP:** Receives R/G/B H/V or YUV signals and outputs A/V L/R signals.
 - TUNER:** Receives RF V., AFT, SIF, AUDIO, SW2, SW1, B+, IF-OUT, ADC, 33V, SDA, SCL, CTR, and AGC signals. It outputs PC L/R and PC A. In (L/R) signals.

The diagram also shows various input and output connectors, including SCART, RF, A/V, S-V, PC, and DVD/DTV inputs.

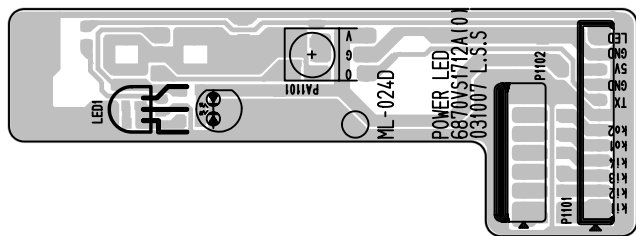
MAIN (TOP)



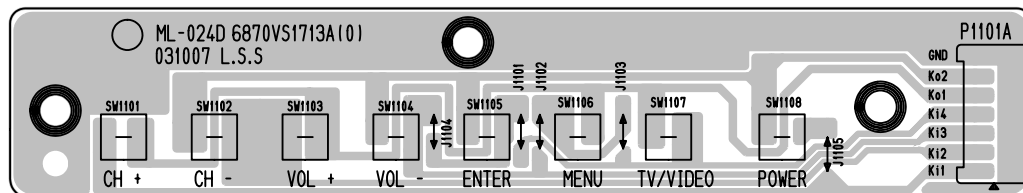
MAIN (BOTTOM)



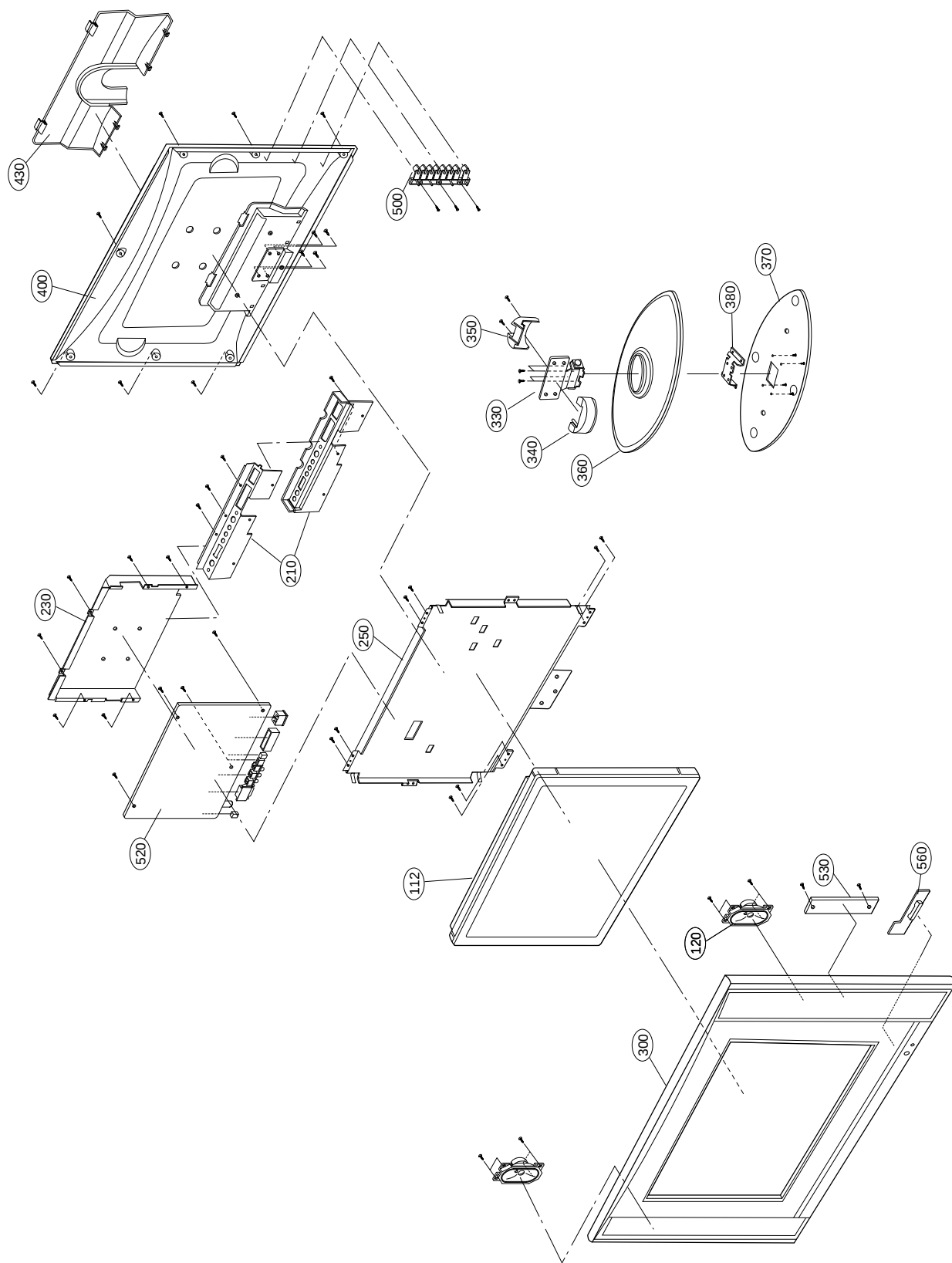
POWER



CONTROL



EXPLODED VIEW



EXPLODED VIEW PARTS LIST

No.	PART NO.	DESCRIPTION
112	6306V15002A	LCD MODULE, M150X3-L04 XGA CHIMEI TFT COLOR
120	6400GKTX01A	SPEAKER,FULLRANGE F1527C-6428 K-TONE 8OHM 7/12W 83DB OTHERS 34.5X71
	6400GKTX01B	SPEAKER,FULLRANGE F1527C-6428-2 K-TONE 8OHM 7/12W 85DB OTHERS 40*70MM TRACK TYPE
210	4811V00076E	BRACKET ASSEMBLY, REAR AV RT-15LA70 ML024E PHONE, PC.
230	4950V00192B	METAL, SHIELD SBHG ML-024E
250	4951TKS150A	METAL ASSEMBLY, FRAME MAIN, RZ-15LAMP
300	3091V00593A	CABINET ASSEMBLY, RZ-15LA70 NON ML024E .
310	5020V00874A	BUTTON, CONTROL RZ-15LA70 ABS, HF-380 8KEY
330	4950V00157F	METAL, HINGE ASSY NON 15LA70
340	4810V00777D	BRACKET, STAND RU-15LA61 ML012C HIPS 60HR FRONT
350	4810V00778D	BRACKET, STAND RU-15LA61 ML012C HIPS 60HR REAR
360	4810V00928A	BRACKET, STAND RZ-15LA70 NON ABS, HF-380
370	4950V00190A	METAL, BASE SPCC(CR) 3T RZ-15LA70
380	4950V00194A	METAL, STAND SPCC(CR) SUPPORTER(LA70)
400	3809TKB030D	BACK COVER ASSEMBLY, RT-15LA70 3808V00433 407AF
	3809V00411C	BACK COVER ASSEMBLY, RT-15LA70 1P/1D NON
430	3550V00385A	COVER, REAR AV RZ-15LA70 ABS, HF-380
520	6871VMMR73A	PWB(PCB) ASSEMBLY,MAIN ML-024E RT-15LA PCB ASSY, MAIN
530	6871VSMQ31A	PWB(PCB) ASSEMBLY,SUB CONT ML024D 70TOOL CONTROL ASSY
560	6871VSMQ30A	PWB(PCB) ASSEMBLY,SUB POWER ML024D 70TOOL POWER ASSY

REPLACEMENT PARTS LIST

For Capacitor & Resistors, the characters at 2nd and 3rd digit in the P/No. means as follows;

CC, CX, CK, CN, CH : Ceramic
CQ : Polyester
CE : Electrolytic
CF : Fixed Film

RD : Carbon Film
RS : Metal Oxide Film
RN : Metal Film
RH : CHIP, Metal Glazed(Chip)
RR : Drawing

DATE: 2004. 2. 23.				
*S	*AL	LOC. NO.	PART NO.	DESCRIPTION / SPECIFICATION
CAPACITOR				
		C10	0CE227DF618	220UF STD 16V M FL TP5
		C1200	0CE227DH618	220UF STD 25V M FL TP5
		C1235	0CE107DD618	100UF STD 10V M FL TP5
		C13	0CE227DF618	220UF STD 16V M FL TP5
		C209	0CE476DF618	47UF STD 16V M FL TP5
		C211	0CE106DF618	10UF STD 16V M FL TP5
		C215	0CE106DF618	10UF STD 16V M FL TP5
		C216	0CE106DF618	10UF STD 16V M FL TP5
		C289	0CE104DK618	0.1000UF STD 50V M FL TP5
		C331	0CE107DF618	100UF STD 16V M FL TP5
		C351	0CE227DF618	220UF STD 16V M FL TP5
		C354	0CE476DF618	47UF STD 16V M FL TP5
		C356	0CE106DF618	10UF STD 16V M FL TP5
		C362	0CE107DF618	100UF STD 16V M FL TP5
		C364	0CE336DF618	33UF STD 16V M FL TP5
		C380	0CE105DK618	1UF STD 50V M FL TP5
		C381	0CE106DF618	10UF STD 16V M FL TP5
		C383	0CE106DF618	10UF STD 16V M FL TP5
		C408	0CE106DK618	10UF STD 50V M FL TP5
		C412	0CE105DK618	1UF STD 50V M FL TP5
		C499	0CE476DK618	47UF STD 50V M FL TP5
		C501	0CE107DF618	100UF STD 16V M FL TP5
		C523	0CE104DK618	0.1000UF STD 50V M FL TP5
		C526	0CE107DF618	100UF STD 16V M FL TP5
		C541	0CE107DF618	100UF STD 16V M FL TP5
		C581	0CE107DF618	100UF STD 16V M FL TP5
		C613	0CE106DF618	10UF STD 16V M FL TP5
		C614	0CE106DF618	10UF STD 16V M FL TP5
		C616	0CE107DF618	100UF STD 16V M FL TP5
		C629	0CE107DF618	100UF STD 16V M FL TP5
		C633	0CE107DF618	100UF STD 16V M FL TP5
		C706	0CE226BK618	22UF KME 50V M FL TP5
		C719	0CE227BJ618	220U KME 35V M FL TP5
		C728	0CE476BK618	47UF KME 50V M FL TP5
		C731	0CE227BJ618	220U KME 35V M FL TP5
		C832	0CE107DF618	100UF STD 16V M FL TP5
		C733	181-120N	1000PF 4KV M E FMTW LEAD4.5
		C1120	0CH2473K516	47000P 50V K B 2.0X1.25 R/TP
		C1122	0CH2473K516	47000P 50V K B 2.0X1.25 R/TP
		C402	0CH2472K516	4700P 50V K B 2.0X1.25 R/TP
		C512	0CH2473K516	47000P 50V K B 2.0X1.25 R/TP
		C513	0CH2473K516	47000P 50V K B 2.0X1.25 R/TP
		C517	0CH2473K516	47000P 50V K B 2.0X1.25 R/TP
		C518	0CH2473K516	47000P 50V K B 2.0X1.25 R/TP
		C519	0CH2473K516	47000P 50V K B 2.0X1.25 R/TP
		C520	0CH2473K516	47000P 50V K B 2.0X1.25 R/TP
		C820	0CH2473K516	47000P 50V K B 2.0X1.25 R/TP
		C821	0CH2473K516	47000P 50V K B 2.0X1.25 R/TP
		C823	0CH2473K516	47000P 50V K B 2.0X1.25 R/TP
		C703	181-120P	470 PF 4KV K JE R FL 10
		C704	181-120P	470 PF 4KV K JE R FL 10
		C708	181-091D	"DEHR33A102KN2A 1000PF 1KV 10%,"
		C709	181-120K	2200PF 4KV M E FMTW LEAD 4.5
		C710	181-120K	2200PF 4KV M E FMTW LEAD 4.5
		C717	181-091D	"DEHR33A102KN2A 1000PF 1KV 10%,"
		C718	181-091D	"DEHR33A102KN2A 1000PF 1KV 10%,"
		C726	181-091N	"SL 100PF 1KV 10%,-10% R/TP TP5"
		C777	181-091D	"DEHR33A102KN2A 1000PF 1KV 10%,"
		C100	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C102	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C107	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C11	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C110	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C1101	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP

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		C111	0CH5101K416	100PF 50V 5% NP0 2012 R/TP
		C1110	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C1111	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C1114	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C1115	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C112	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C1121	0CH5271K416	270PF 50V 5% NP0 2012 R/TP
		C1123	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C1124	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C1126	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C1127	0CK105DF64A	1UF 2012 16V 20% R/TP F(Y5V)
		C1128	0CK105DF64A	1UF 2012 16V 20% R/TP F(Y5V)
		C1129	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C1130	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C1132	0CK105DF64A	1UF 2012 16V 20% R/TP F(Y5V)
		C1133	0CK105DF64A	1UF 2012 16V 20% R/TP F(Y5V)
		C1134	0CK105DF64A	1UF 2012 16V 20% R/TP F(Y5V)
		C1137	0CK105DF64A	1UF 2012 16V 20% R/TP F(Y5V)
		C114	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C1140	0CK225DFK4A	"2.2UF 2012 16V 20%,-20% F(Y5V)"
		C1141	0CK225DFK4A	"2.2UF 2012 16V 20%,-20% F(Y5V)"
		C1142	0CK225DFK4A	"2.2UF 2012 16V 20%,-20% F(Y5V)"
		C1143	0CK225DFK4A	"2.2UF 2012 16V 20%,-20% F(Y5V)"
		C1144	0CK225DFK4A	"2.2UF 2012 16V 20%,-20% F(Y5V)"
		C1145	0CK225DFK4A	"2.2UF 2012 16V 20%,-20% F(Y5V)"
		C1146	0CK225DFK4A	"2.2UF 2012 16V 20%,-20% F(Y5V)"
		C1147	0CK225DFK4A	"2.2UF 2012 16V 20%,-20% F(Y5V)"
		C115	0CH5620K416	62PF 50V 5% NP0 2012 R/TP
		C116	0CH5620K416	62PF 50V 5% NP0 2012 R/TP
		C117	0CH5620K416	62PF 50V 5% NP0 2012 R/TP
		C118	0CH5620K416	62PF 50V 5% NP0 2012 R/TP
		C12	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C1203	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C1204	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C1207	0CK105DF64A	1UF 2012 16V 20% R/TP F(Y5V)
		C1208	0CK105DF64A	1UF 2012 16V 20% R/TP F(Y5V)
		C1209	0CK105DF64A	1UF 2012 16V 20% R/TP F(Y5V)
		C1210	0CK105DF64A	1UF 2012 16V 20% R/TP F(Y5V)
		C1211	0CK105DF64A	1UF 2012 16V 20% R/TP F(Y5V)
		C122	0CH5330K416	33PF 50V 5% NP0 2012 R/TP
		C1221	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C1224	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C1226	0CK105DF64A	1UF 2012 16V 20% R/TP F(Y5V)
		C1227	0CK105DF64A	1UF 2012 16V 20% R/TP F(Y5V)
		C1228	0CK105DF64A	1UF 2012 16V 20% R/TP F(Y5V)
		C1229	0CK105DF64A	1UF 2012 16V 20% R/TP F(Y5V)
		C123	0CH5330K416	33PF 50V 5% NP0 2012 R/TP
		C1231	0CK105DF64A	1UF 2012 16V 20% R/TP F(Y5V)
		C1232	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C1233	0CH5221K416	220PF 50V 5% NP0 2012 R/TP
		C1234	0CK105DF64A	1UF 2012 16V 20% R/TP F(Y5V)
		C124	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C132	0CH5101K416	100PF 50V 5% NP0 2012 R/TP
		C133	0CH5101K416	100PF 50V 5% NP0 2012 R/TP
		C134	0CH5101K416	100PF 50V 5% NP0 2012 R/TP
		C135	0CH5101K416	100PF 50V 5% NP0 2012 R/TP
		C150	0CH5101K416	100PF 50V 5% NP0 2012 R/TP
		C191	0CH5330K416	33PF 50V 5% NP0 2012 R/TP
		C192	0CH5330K416	33PF 50V 5% NP0 2012 R/TP
		C193	0CH5330K416	33PF 50V 5% NP0 2012 R/TP
		C194	0CH5330K416	33PF 50V 5% NP0 2012 R/TP
		C196	0CH5330K416	33PF 50V 5% NP0 2012 R/TP
		C197	0CH5330K416	33PF 50V 5% NP0 2012 R/TP
		C198	0CH5330K416	33PF 50V 5% NP0 2012 R/TP
		C199	0CH5330K416	33PF 50V 5% NP0 2012 R/TP

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		C200	OCK225DFK4A	"2.2UF 2012 16V 20%,-20% F(Y5V)"
		C201	OCK225DFK4A	"2.2UF 2012 16V 20%,-20% F(Y5V)"
		C202	0CH5331K416	330PF 50V 5% NP0 2012 R/TP
		C204	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C206	0CH5391K416	390PF 50V 5% NP0 2012 R/TP
		C207	0CH5471K416	470PF 50V 5% NP0 2012 R/TP
		C208	0CH5471K416	470PF 50V 5% NP0 2012 R/TP
		C210	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C213	0CH5221K416	220PF 50V 5% NP0 2012 R/TP
		C214	0CH5101K416	100PF 50V 5% NP0 2012 R/TP
		C225	OCK225DFK4A	"2.2UF 2012 16V 20%,-20% F(Y5V)"
		C226	OCK225DFK4A	"2.2UF 2012 16V 20%,-20% F(Y5V)"
		C253	0CH5391K416	390PF 50V 5% NP0 2012 R/TP
		C287	0CH5391K416	390PF 50V 5% NP0 2012 R/TP
		C288	0CH5391K416	390PF 50V 5% NP0 2012 R/TP
		C298	0CH5471K416	470PF 50V 5% NP0 2012 R/TP
		C299	0CH5471K416	470PF 50V 5% NP0 2012 R/TP
		C3	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C301	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C303	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C304	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C305	0CH5471K416	470PF 50V 5% NP0 2012 R/TP
		C312	0CH5680K416	68PF 50V 5% NP0 2012 R/TP
		C313	0CH5680K416	68PF 50V 5% NP0 2012 R/TP
		C314	0CH5680K416	68PF 50V 5% NP0 2012 R/TP
		C316	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C318	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C320	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C322	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C324	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C325	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C326	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C327	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C328	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C329	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C330	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C332	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C352	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C360	0CH5151K416	150PF 50V 5% NP0 2012 R/TP
		C382	0CH5151K416	150PF 50V 5% NP0 2012 R/TP
		C385	0CH5151K416	150PF 50V 5% NP0 2012 R/TP
		C4	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C405	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C406	0CH5101K416	100PF 50V 5% NP0 2012 R/TP
		C407	0CH5101K416	100PF 50V 5% NP0 2012 R/TP
		C409	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C411	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C413	OCK224DF56A	220000PF 2012 16V 10% R/TP X7R
		C44	0CH5150K416	15PF 50V 5% NP0 2012 R/TP
		C498	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C5	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C502	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C503	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C504	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C505	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C506	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C507	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C508	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C509	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C510	0CH5150K416	15PF 50V 5% NP0 2012 R/TP
		C511	0CH5150K416	15PF 50V 5% NP0 2012 R/TP
		C514	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C515	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C516	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C527	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C528	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C529	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C530	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C533	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C534	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C535	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C536	0CH5151K416	150PF 50V 5% NP0 2012 R/TP
		C537	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C538	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP

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		C539	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C540	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C556	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C557	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C558	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C580	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C587	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C6	0CH5102K416	1000PF 50V 5% NP0 2012 R/TP
		C615	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C618	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C619	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C624	OCK224DF56A	220000PF 2012 16V 10% R/TP X7R
		C625	OCK224DF56A	220000PF 2012 16V 10% R/TP X7R
		C626	OCK224DF56A	220000PF 2012 16V 10% R/TP X7R
		C627	OCK224DF56A	220000PF 2012 16V 10% R/TP X7R
		C631	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C635	0CH5560K416	56PF 50V 5% NP0 2012 R/TP
		C636	0CH5560K416	56PF 50V 5% NP0 2012 R/TP
		C638	0CH5020K116	2PF 50V 0.5 PF NP0 2012 R/TP
		C639	0CH5020K116	2PF 50V 0.5 PF NP0 2012 R/TP
		C645	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C661	0CH5120K416	12PF 50V 5% NP0 2012 R/TP
		C662	0CH5120K416	12PF 50V 5% NP0 2012 R/TP
		C663	0CH5120K416	12PF 50V 5% NP0 2012 R/TP
		C664	0CH5120K416	12PF 50V 5% NP0 2012 R/TP
		C665	0CH5120K416	12PF 50V 5% NP0 2012 R/TP
		C666	0CH5120K416	12PF 50V 5% NP0 2012 R/TP
		C667	0CH5120K416	12PF 50V 5% NP0 2012 R/TP
		C668	0CH5120K416	12PF 50V 5% NP0 2012 R/TP
		C669	0CH5120K416	12PF 50V 5% NP0 2012 R/TP
		C670	0CH5120K416	12PF 50V 5% NP0 2012 R/TP
		C671	0CH5120K416	12PF 50V 5% NP0 2012 R/TP
		C672	0CH5120K416	12PF 50V 5% NP0 2012 R/TP
		C673	0CH5120K416	12PF 50V 5% NP0 2012 R/TP
		C674	0CH5120K416	12PF 50V 5% NP0 2012 R/TP
		C675	0CH5120K416	12PF 50V 5% NP0 2012 R/TP
		C676	0CH5120K416	12PF 50V 5% NP0 2012 R/TP
		C677	0CH5120K416	12PF 50V 5% NP0 2012 R/TP
		C678	0CH5120K416	12PF 50V 5% NP0 2012 R/TP
		C679	0CH5120K416	12PF 50V 5% NP0 2012 R/TP
		C680	0CH5120K416	12PF 50V 5% NP0 2012 R/TP
		C681	0CH5120K416	12PF 50V 5% NP0 2012 R/TP
		C682	0CH5120K416	12PF 50V 5% NP0 2012 R/TP
		C683	0CH5120K416	12PF 50V 5% NP0 2012 R/TP
		C684	0CH5120K416	12PF 50V 5% NP0 2012 R/TP
		C698	OCK224DF56A	220000PF 2012 16V 10% R/TP X7R
		C699	OCK224DF56A	220000PF 2012 16V 10% R/TP X7R
		C712	0CH5821K416	820PF 50V 5% NP0 2012 R/TP
		C724	0CH5102K416	1000PF 50V 5% NP0 2012 R/TP
		C737	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C739	0CH5101K416	100PF 50V 5% NP0 2012 R/TP
		C740	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C749	0CH5101K416	100PF 50V 5% NP0 2012 R/TP
		C750	0CH5101K416	100PF 50V 5% NP0 2012 R/TP
		C751	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C752	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C8	0CH5101K416	100PF 50V 5% NP0 2012 R/TP
		C803	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C804	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C805	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C806	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C807	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C808	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C810	OCK823DK56A	82000PF 2012 50V 10% R/TP X7R
		C811	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C812	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C813	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C814	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C815	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C816	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C817	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C818	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C819	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C822	0CH5102K416	1000PF 50V 5% NP0 2012 R/TP

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		C824	OCH5220K416	22PF 50V 5% NP0 2012 R/TP
		C825	OCH5220K416	22PF 50V 5% NP0 2012 R/TP
		C826	OCH5220K416	22PF 50V 5% NP0 2012 R/TP
		C827	OCH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C828	OCH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C829	OCH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C830	OCH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C831	OCH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C833	OCH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C877	OCH5180K416	18PF 50V 5% NP0 2012 R/TP
		C900	OCH5330K416	33PF 50V 5% NP0 2012 R/TP
		C901	OCH5390K416	39PF 50V 5% NP0 2012 R/TP
		C103	OCH2103K516	10000PF 50V 10% B(Y5P) 2012 R/
		C106	OCH2103K516	10000PF 50V 10% B(Y5P) 2012 R/
		C108	OCH2103K516	10000PF 50V 10% B(Y5P) 2012 R/
		C1101	OCC15003G06	"15PF D 3KV 10%,-10% SL FMTW"
		C1102	OCC15003G06	"15PF D 3KV 10%,-10% SL FMTW"
		C1105	OCC15003G06	"15PF D 3KV 10%,-10% SL FMTW"
		C1106	OCC15003G06	"15PF D 3KV 10%,-10% SL FMTW"
		C1125	OCH2474F566	0.47UF 16V 10% X7R 2012 R/TP
		C1131	OCH2153K516	15000PF 50V 10% B(Y5P) 2012 R/
		C119	OCH2103K516	10000PF 50V 10% B(Y5P) 2012 R/
		C120	OCH2103K516	10000PF 50V 10% B(Y5P) 2012 R/
		C1205	OCH2103K516	10000PF 50V 10% B(Y5P) 2012 R/
		C1206	OCH2103K516	10000PF 50V 10% B(Y5P) 2012 R/
		C121	OCH2103K516	10000PF 50V 10% B(Y5P) 2012 R/
		C1212	OCH2474F566	0.47UF 16V 10% X7R 2012 R/TP
		C1213	OCH2474F566	0.47UF 16V 10% X7R 2012 R/TP
		C1214	OCH2474F566	0.47UF 16V 10% X7R 2012 R/TP
		C1217	OCH2474F566	0.47UF 16V 10% X7R 2012 R/TP
		C1218	OCH2474F566	0.47UF 16V 10% X7R 2012 R/TP
		C1219	OCH2474F566	0.47UF 16V 10% X7R 2012 R/TP
		C1220	OCH2103K516	10000PF 50V 10% B(Y5P) 2012 R/
		C1225	OCH2103K516	10000PF 50V 10% B(Y5P) 2012 R/
		C125	OCH2103K516	10000PF 50V 10% B(Y5P) 2012 R/
		C151	OCH2272K516	2700PF 50V 10% B(Y5P) 2012 R/T
		C152	OCH2182K516	1800PF 50V 10% B(Y5P) 2012 R/T
		C153	OCH2102K516	1000PF 50V 10% B(Y5P) 2012 R/T
		C363	OCH2103K516	10000PF 50V 10% B(Y5P) 2012 R/
		C365	OCH2103K516	10000PF 50V 10% B(Y5P) 2012 R/
		C609	OCH2822K516	8200PF 50V 10% B(Y5P) 2012 R/T
		C610	OCH2822K516	8200PF 50V 10% B(Y5P) 2012 R/T
		C611	OCH2222K516	2200PF 50V 10% B(Y5P) 2012 R/T
		C612	OCH2222K516	2200PF 50V 10% B(Y5P) 2012 R/T
		C622	OCH2222K516	2200PF 50V 10% B(Y5P) 2012 R/T
		C623	OCH2222K516	2200PF 50V 10% B(Y5P) 2012 R/T
		C628	OCH2103K516	10000PF 50V 10% B(Y5P) 2012 R/
		C630	OCH2152K516	1500PF 50V 10% B(Y5P) 2012 R/T
		C634	OCH2103K516	10000PF 50V 10% B(Y5P) 2012 R/
		C640	OCH2103K516	10000PF 50V 10% B(Y5P) 2012 R/
		C644	OCH2103K516	10000PF 50V 10% B(Y5P) 2012 R/
		C711	OCH2103K516	10000PF 50V 10% B(Y5P) 2012 R/
		C716	OCH2222K516	2200PF 50V 10% B(Y5P) 2012 R/T
		C738	OCH2103K516	10000PF 50V 10% B(Y5P) 2012 R/
		C741	OCH2103K516	10000PF 50V 10% B(Y5P) 2012 R/
		C742	OCH2103K516	10000PF 50V 10% B(Y5P) 2012 R/
		C748	OCH2103K516	10000PF 50V 10% B(Y5P) 2012 R/
		C809	OCH2822K516	8200PF 50V 10% B(Y5P) 2012 R/T
		C101	OCE107BF618	100UF KME 16V M FL TP5
		C1107	OCE4772J618	470UF KMF 35V 20% TP 5 FL
		C113	OCE107BF618	100UF KME 16V M FL TP5
		C1150	OCE4772J618	470UF KMF 35V 20% TP 5 FL
		C1151	OCE4772J618	470UF KMF 35V 20% TP 5 FL
		C353	OCE475DK618	4.7UF STD 50V 20% FL TP 5
		C357	OCE225DK618	2.2UF STD 50V 20% FL TP 5
		C403	OCE476DH618	47UF STD 25V 20% FL TP 5
		C404	OCE108DD618	1000UF STD 10V M FL TP5
		C617	OCE107BH618	100UF KME TYPE 25V 20% FL TP 5
		C620	OCE335DK618	3.3UF STD 50V 20% FL TP 5
		C621	OCE107BF618	100UF KME 16V M FL TP5
		C643	OCE476BF618	47UF KME TYPE 16V 20% FL TP 5
		C707	OCE1072V610	100UF KMF 450V 20% FL BULK
		C725	OCE4772J618	470UF KMF 35V 20% TP 5 FL
		C727	OCE226BN618	22UF KME 100V M FL TP5

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*S	*AL	LOC. NO.	PART NO.	DESCRIPTION / SPECIFICATION
		C730	OCE4772J618	470UF KMF 35V 20% TP 5 FL
		C734	OCE4772J618	470UF KMF 35V 20% TP 5 FL
		C743	OCE477BD618	470UF KME TYPE 10V 20% FL TP 5
		C744	OCE227DK618	220UF STD 50V M FL TP5
		C745	OCE477BD618	470UF KME TYPE 10V 20% FL TP 5
		C746	OCE477BD618	470UF KME TYPE 10V 20% FL TP 5
		C747	OCE477BD618	470UF KME TYPE 10V 20% FL TP 5
		C701	OCF474285B0	0.47UF S 275V 10% PCX2 337 BUL
		C302	OCH7476F662	47UF 16V 20% 7343 TP(+)
		C315	OCH7476F662	47UF 16V 20% 7343 TP(+)
		C317	OCH7476F662	47UF 16V 20% 7343 TP(+)
		C319	OCH7476F662	47UF 16V 20% 7343 TP(+)
		C321	OCH7476F662	47UF 16V 20% 7343 TP(+)
		C323	OCH7476F662	47UF 16V 20% 7343 TP(+)
		C1202	OCN475FH67A	4.7UF 3225 25V 20% R/TP X5R
		C1222	OCN475FH67A	4.7UF 3225 25V 20% R/TP X5R
		C1230	OCN475FH67A	4.7UF 3225 25V 20% R/TP X5R
DIODEs				
		D701	ODRSA00150A	DIODE, RBV-406 BK USC 600V 4A
		D702	ODD100009AM	DIODE, EU12V(1) TP SANKEN
		D704	ODD100009AM	DIODE, EU12V(1) TP SANKEN
		D706	ODR060009AA	DIODE, TVR06J TP GULF
		D707	ODRSD00091A	DIODE, SF20JC10 FTO220
		D710	ODR340009AA	DIODE, MBRS340 TP FAIRCHILD NON 40V
		D711	ODR340009AA	DIODE, MBRS340 TP FAIRCHILD NON 40V
		D100	ODD181009AB	DIODE, KDS181 TP KEC - 85V - - - 300M
		D1101	ODD181009AB	DIODE, KDS181 TP KEC - 85V - - - 300M
		D1102	ODD181009AB	DIODE, KDS181 TP KEC - 85V - - - 300M
		D1105	ODD181009AB	DIODE, KDS181 TP KEC - 85V - - - 300M
		D1106	ODD181009AB	DIODE, KDS181 TP KEC - 85V - - - 300M
		ZD704	ODZ110009AD	DIODE, MTZJ11B TP DO34 500MW
		ZD1101	ODZRM00178A	DIODE, UDZS TE-17 5.1B ROHM R/TP
		ZD1102	ODZRM00178A	DIODE, UDZS TE-17 5.1B ROHM R/TP
		ZD202	ODZRM00178A	DIODE, UDZS TE-17 5.1B ROHM R/TP
		ZD203	ODZRM00178A	DIODE, UDZS TE-17 5.1B ROHM R/TP
		ZD400	ODZ330009BA	DIODE, ZENER HZT33 TAPING
		ZD701	ODZ910009AJ	DIODE, MTZJ9.1B TP DO34 0.5W
IC				
		IC502	OICTMMO0005B	IC, SC786110DW MOTOROLA SOIC 16P
		IC102	OIFA752700A	IC, KA75270Z 3 TP RE-SET IC MC-007
		IC1106	OIKE704200J	IC, KIA7042AF SOT-89 TP 4.2V VOLTA
		IC603	OIKE704200J	IC, KIA7042AF SOT-89 TP 4.2V VOLTA
		PC1	OIL1817000G	IC, LTV817M-VB 4P,DIP BK PHOTO CO"
		IC101	OIAL241610B	IC, AT24C16A-10PI-2.7 8PIN DIP ST
		IC1	OIMCRTH001A	IC, THC63LVD83R THINE ELECTRONICS
		IC1101	OIMCRO2001A	IC, OZ960S O2MICRO 20P SSOP R/TP
		IC1110	OIMCRRH005A	IC, UM6K1N ROHM 6P SOT363 R/TP 30V
		IC1112	OIMCRRH005A	IC, UM6K1N ROHM 6P SOT363 R/TP 30V
		IC1121	OIMCRMZ001A	IC, MP1583DN MONOLITHIC POWER SYST
		IC1122	OIMCRMZ001A	IC, MP1583DN MONOLITHIC POWER SYST
		IC301	OIMCRMIO06A	IC, M52758FP MITSUBISHI 36PIN, R/T"
		IC352	OISO204000A	IC, CXA2040AQ 32P,QFP BK IIC BUS V"
		IC501	OIMCRTW001B	IC, LG8801-H TECHWELL 160P QPFD TR
		IC601	OIMCRMN011D	IC, MSP3410G QA B8 V3 MICRONAS 80P
		IC650	OIMCRTI022D	IC, TPA3004D2 TEXAS INSTRUMENT 48P
		IC801	OIMCRAD002A	IC, AD9883AKST-110 ANALOG DEVICE
		IC351	OIMCRFA010A	IC, KA7809R, FAIRCHILD 2P D-PAK
		IC500	OIMCRFA016A	IC, KA78RH33RTF FAIRCHILD 2P D-PAK
		IC604	OIMCRFA009A	IC, KA78M08RTM, FAIRCHILD 2P D-PAK
		IC701	OIPMGSK012A	IC, STR-W6853P SANKEN 6P T0-220 ST
		IC702	OIMCRFA007A	IC, "KA431Z FAIRCHILD 3DIP,TO-92 TP"
		Q101	OIFA270000A	IC, "2N7000TA TO-92, 3P TP LEVEL SH"
		Q102	OIFA270000A	IC, "2N7000TA TO-92, 3P TP LEVEL SH"
COIL & CORE				
		L1201	6140VR0005B	COIL, SLF7045T-330MR82 TDK 33UF
		L1202	6140VR0005B	COIL, SLF7045T-330MR82 TDK 33UF
		L1203	6140VR0005B	COIL, SLF7045T-330MR82 TDK 33UF
		L1204	6140VR0005B	COIL, SLF7045T-330MR82 TDK 33UF

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		L705	6140VR0008B	COIL, SLF12575T-150M3R2 15UH SMD
		L706	6140VR0008B	COIL, SLF12575T-150M3R2 15UH SMD
		L1	6210TCE001G	CORE (CIRC),BEAD, HH-1M3216-501 3216MM
		L101	6210TCE001G	CORE (CIRC),BEAD, HH-1M3216-501 3216MM
		L1101	6210TCE001G	CORE (CIRC),BEAD, HH-1M3216-501 3216MM
		L119	6210TCE001A	CORE (CIRC),BEAD, HB-1S2012-080JT 2012MM
		L1200	6210TCE001G	CORE (CIRC),BEAD, HH-1M3216-501 3216MM
		L1205	6210TCE001G	CORE (CIRC),BEAD, HH-1M3216-501 3216MM
		L1206	6210TCE001G	CORE (CIRC),BEAD, HH-1M3216-501 3216MM
		L204	6210TCE001A	CORE (CIRC),BEAD, HB-1S2012-080JT 2012MM
		L205	6210TCE001A	CORE (CIRC),BEAD, HB-1S2012-080JT 2012MM
		L206	6210TCE001G	CORE (CIRC),BEAD, HH-1M3216-501 3216MM
		L298	6210TCE001A	CORE (CIRC),BEAD, HB-1S2012-080JT 2012MM
		L299	6210TCE001A	CORE (CIRC),BEAD, HB-1S2012-080JT 2012MM
		L313	6210TCE001G	CORE (CIRC),BEAD, HH-1M3216-501 3216MM
		L351	6210TCE001G	CORE (CIRC),BEAD, HH-1M3216-501 3216MM
		L400	6210TCE001G	CORE (CIRC),BEAD, HH-1M3216-501 3216MM
		L402	6210TCE001G	CORE (CIRC),BEAD, HH-1M3216-501 3216MM
		L501	6210TCE001G	CORE (CIRC),BEAD, HH-1M3216-501 3216MM
		L515	6210TCE001G	CORE (CIRC),BEAD, HH-1M3216-501 3216MM
		L517	6210TCE001G	CORE (CIRC),BEAD, HH-1M3216-501 3216MM
		L581	6210TCE001A	CORE (CIRC),BEAD, HB-1S2012-080JT 2012MM
		L601	6210TCE001G	CORE (CIRC),BEAD, HH-1M3216-501 3216MM
		L602	6210TCE001G	CORE (CIRC),BEAD, HH-1M3216-501 3216MM
		L603	6210TCE001G	CORE (CIRC),BEAD, HH-1M3216-501 3216MM
		L701	125-022K	CORE (CIRC),BEAD, FERRITE 1UH NY 3.5*6.0MM
		L702	125-022K	CORE (CIRC),BEAD, FERRITE 1UH NY 3.5*6.0MM
		L703	6210TCE001G	CORE (CIRC),BEAD, HH-1M3216-501 3216MM
		L704	6210TCE001G	CORE (CIRC),BEAD, HH-1M3216-501 3216MM
		L801	6210TCE001G	CORE (CIRC),BEAD, HH-1M3216-501 3216MM
		L802	6210TCE001G	CORE (CIRC),BEAD, HH-1M3216-501 3216MM
		L803	6210TCE001G	CORE (CIRC),BEAD, HH-1M3216-501 3216MM
		L99	6210TCE001G	CORE (CIRC),BEAD, HH-1M3216-501 3216MM
		R505	6210TCE001A	CORE (CIRC),BEAD, HB-1S2012-080JT 2012MM
		R710	125-022K	CORE (CIRC),BEAD, FERRITE 1UH NY 3.5*6.0MM
		L401	OLA0272K139	INDUCTOR,AXIAL LEAD, 27UH K 4X10.5 TP
		L174	OLC0233002A	INDUCTOR,CHIP, 3.3UH CERATECH
		L175	OLC0233002A	INDUCTOR,CHIP, 3.3UH CERATECH
		L176	OLC0233002A	INDUCTOR,CHIP, 3.3UH CERATECH
		L177	OLC0233002A	INDUCTOR,CHIP, 3.3UH CERATECH
		L203	OLC0233002A	INDUCTOR,CHIP, 3.3UH CERATECH
		L207	OLC1020101A	INDUCTOR,CHIP, 1UH 10% 2012 R/TC FI-B2012-102
		L296	OLC0233002A	INDUCTOR,CHIP, 3.3UH CERATECH
		L297	OLC0233002A	INDUCTOR,CHIP, 3.3UH CERATECH
		L302	OLC1020101A	INDUCTOR,CHIP, 1UH 10% 2012 R/TC FI-B2012-102
		L303	OLC1020101A	INDUCTOR,CHIP, 1UH 10% 2012 R/TC FI-B2012-102
		L304	OLC1020101A	INDUCTOR,CHIP, 1UH 10% 2012 R/TC FI-B2012-102
		L306	OLC1020101A	INDUCTOR,CHIP, 1UH 10% 2012 R/TC FI-B2012-102
		L307	OLC1020101A	INDUCTOR,CHIP, 1UH 10% 2012 R/TC FI-B2012-102
		L308	OLC1020101A	INDUCTOR,CHIP, 1UH 10% 2012 R/TC FI-B2012-102
TRANSISTOR				
		IC1223	0TF492509AA	FET, SI4925DY TP TEMIC 30V 6.1A SO
		IC1224	0TF492509AA	FET, SI4925DY TP TEMIC 30V 6.1A SO
		IC2	0TF492509AA	FET, SI4925DY TP TEMIC 30V 6.1A SO
		Q1	0TR387500AA	TR, CHIP 2SC3875S(ALY) BK KEC --
		Q100	0TR387500AA	TR, CHIP 2SC3875S(ALY) BK KEC --
		Q1101	0TR387500AA	TR, CHIP 2SC3875S(ALY) BK KEC --
		Q1101	0TR387500AA	TR, CHIP 2SC3875S(ALY) BK KEC --
		Q1102	0TR387500AA	TR, CHIP 2SC3875S(ALY) BK KEC --
		Q1103	0TR387500AA	TR, CHIP 2SC3875S(ALY) BK KEC --
		Q1200	0TR150400BA	TR, CHIP 2SA1504S(ASY) BK KEC --
		Q200	0TR387500AA	TR, CHIP 2SC3875S(ALY) BK KEC --
		Q201	0TR387500AA	TR, CHIP 2SC3875S(ALY) BK KEC --
		Q202	0TR387500AA	TR, CHIP 2SC3875S(ALY) BK KEC --
		Q353	0TR150400BA	TR, CHIP 2SA1504S(ASY) BK KEC --
		Q402	0TR150400BA	TR, CHIP 2SA1504S(ASY) BK KEC --
		Q403	0TR150400BA	TR, CHIP 2SA1504S(ASY) BK KEC --
		Q406	0TR387500AA	TR, CHIP 2SC3875S(ALY) BK KEC --
		Q407	0TR387500AA	TR, CHIP 2SC3875S(ALY) BK KEC --
		Q501	0TR387500AA	TR, CHIP 2SC3875S(ALY) BK KEC --
		Q502	0TR150400BA	TR, CHIP 2SA1504S(ASY) BK KEC --
		Q510	0TR150400BA	TR, CHIP 2SA1504S(ASY) BK KEC --

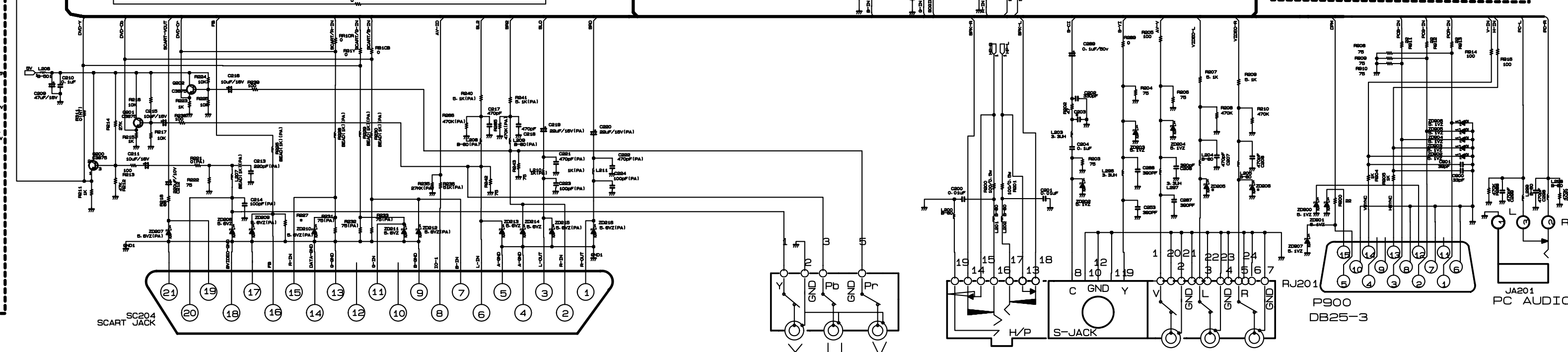
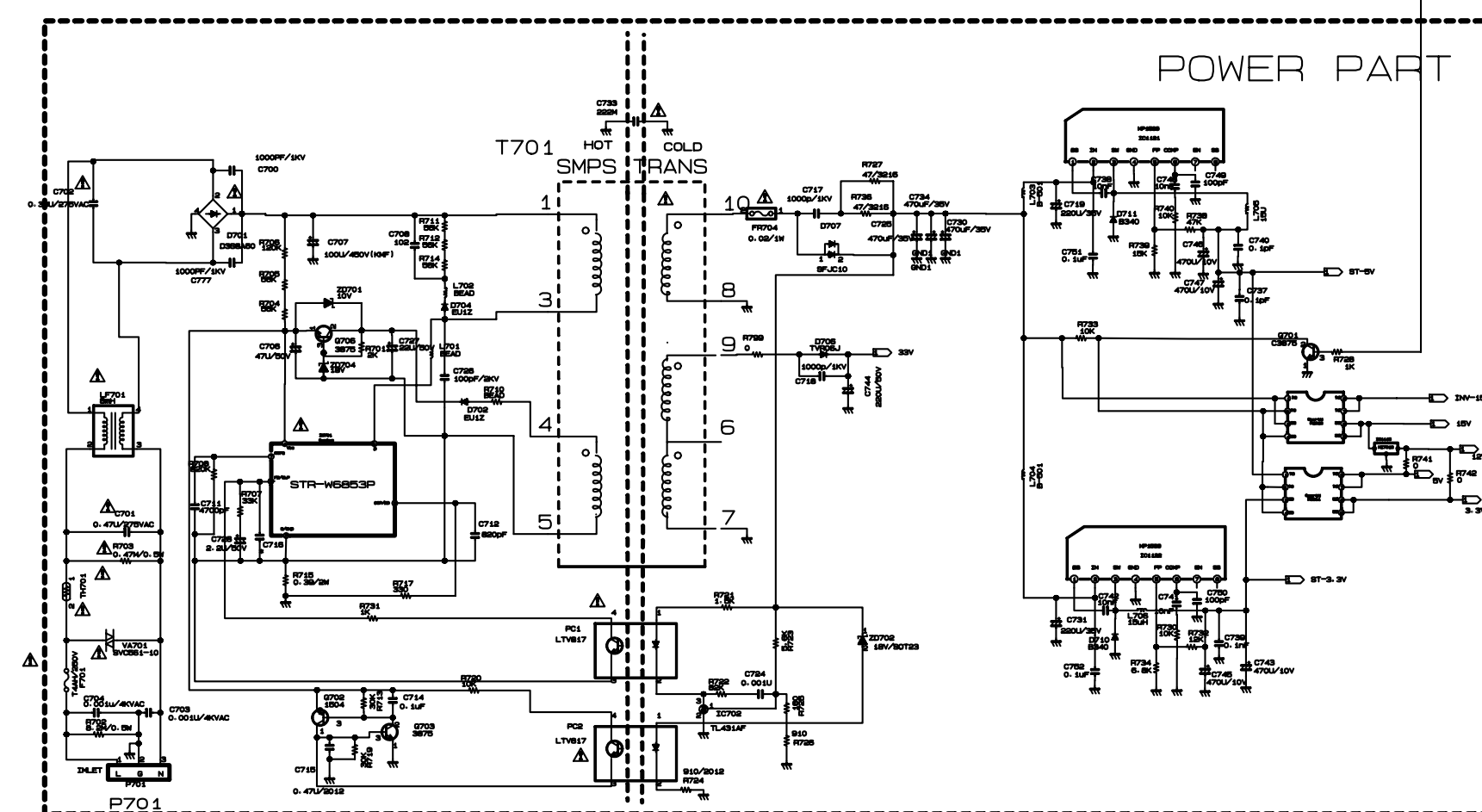
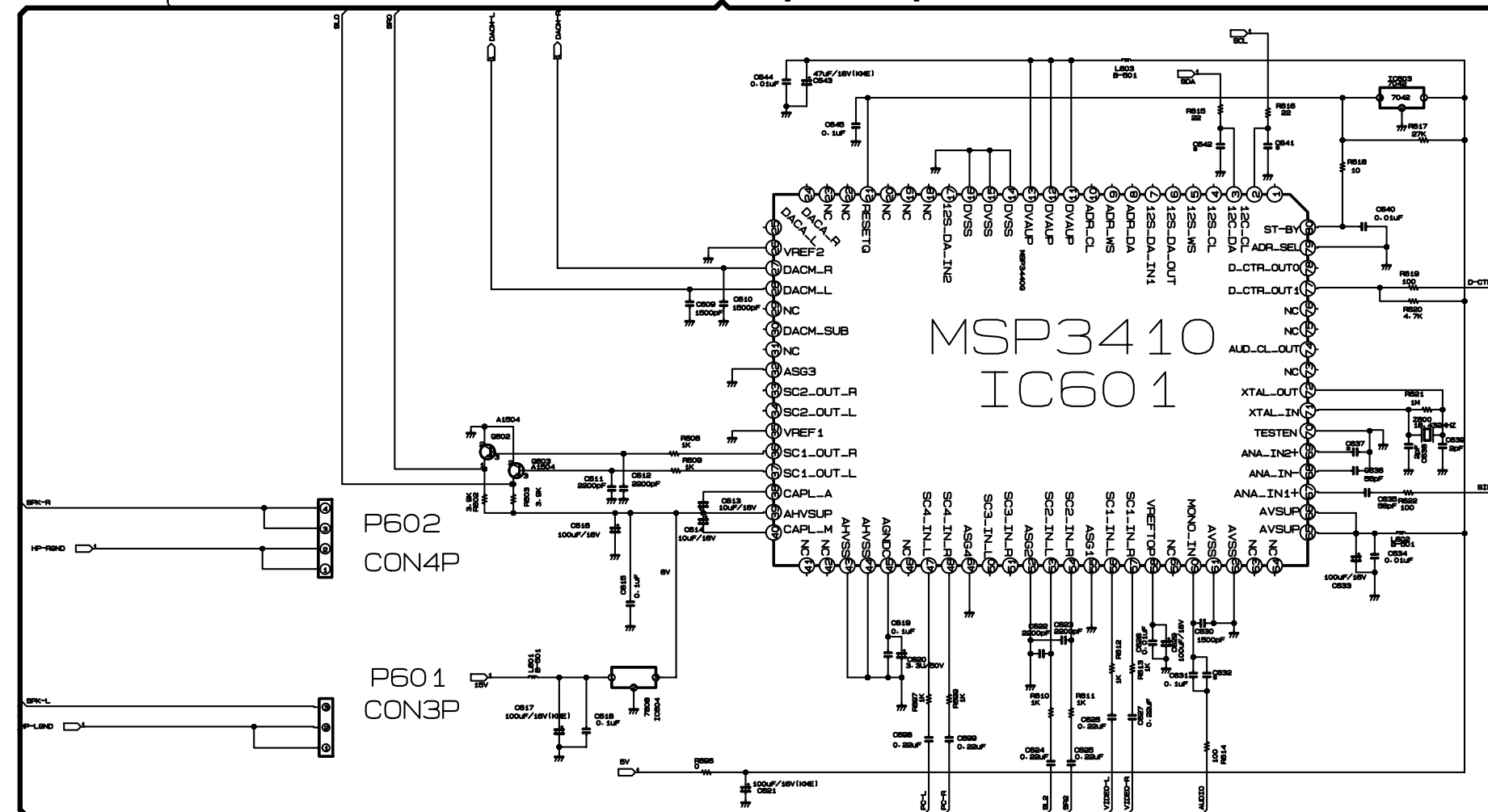
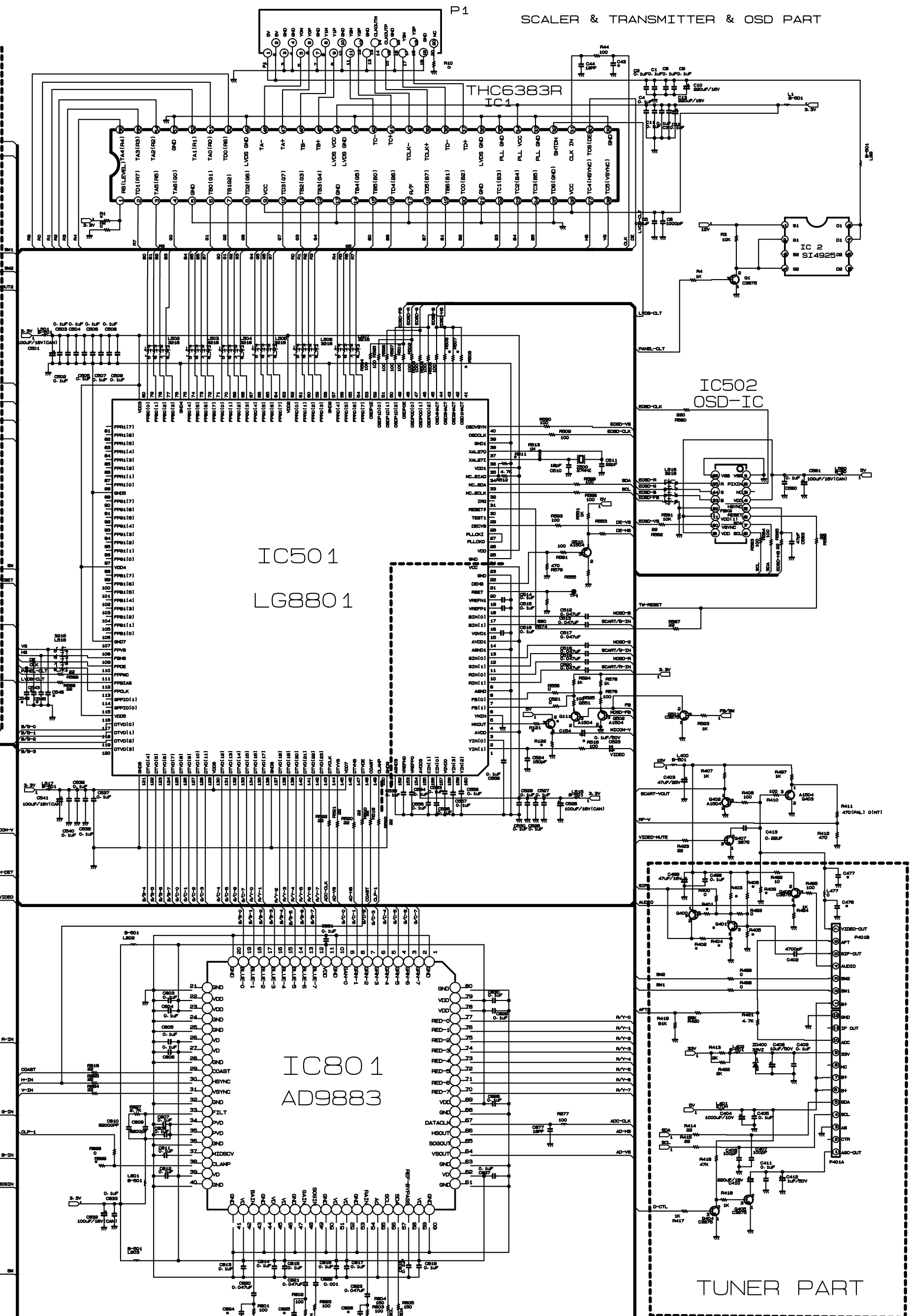
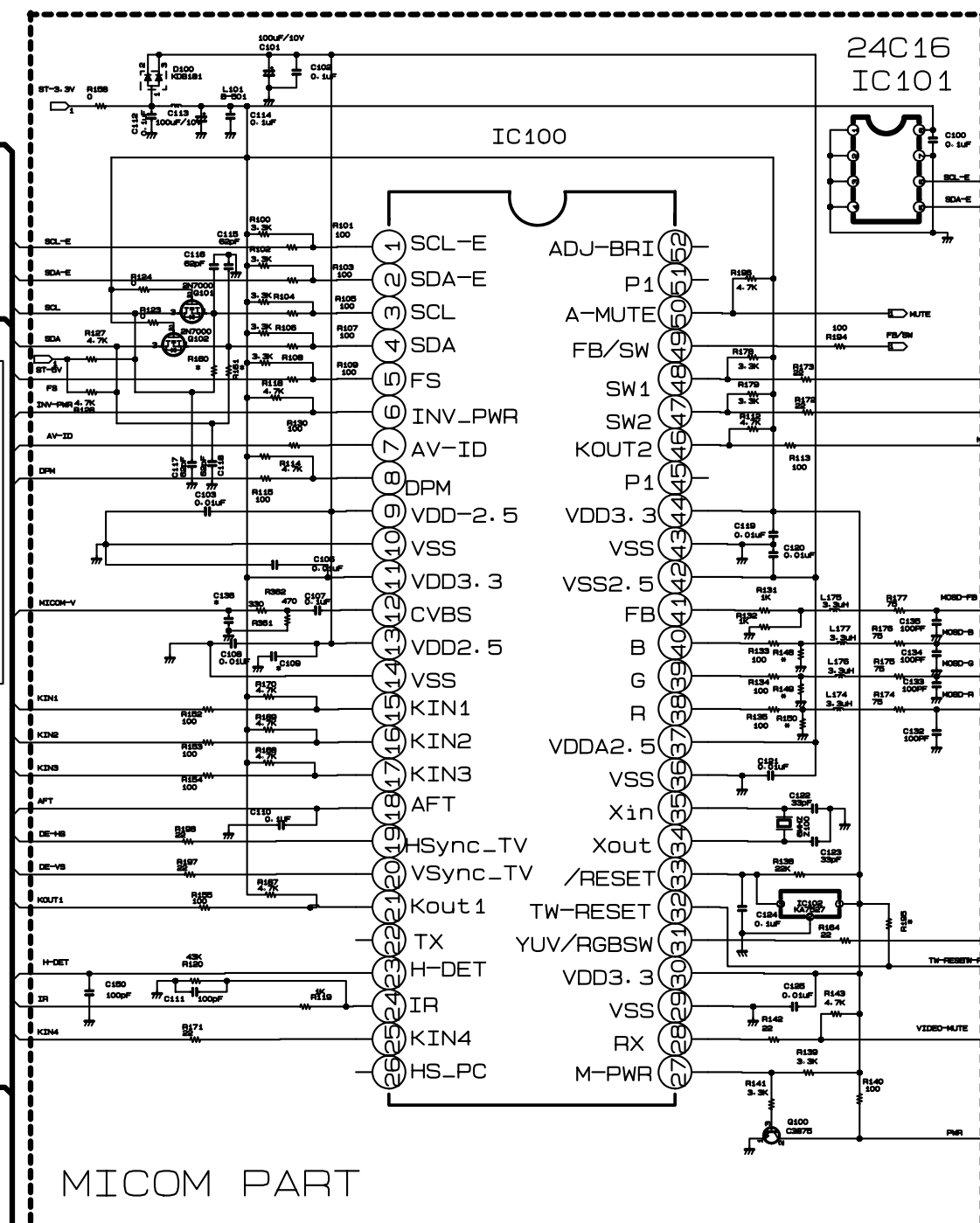
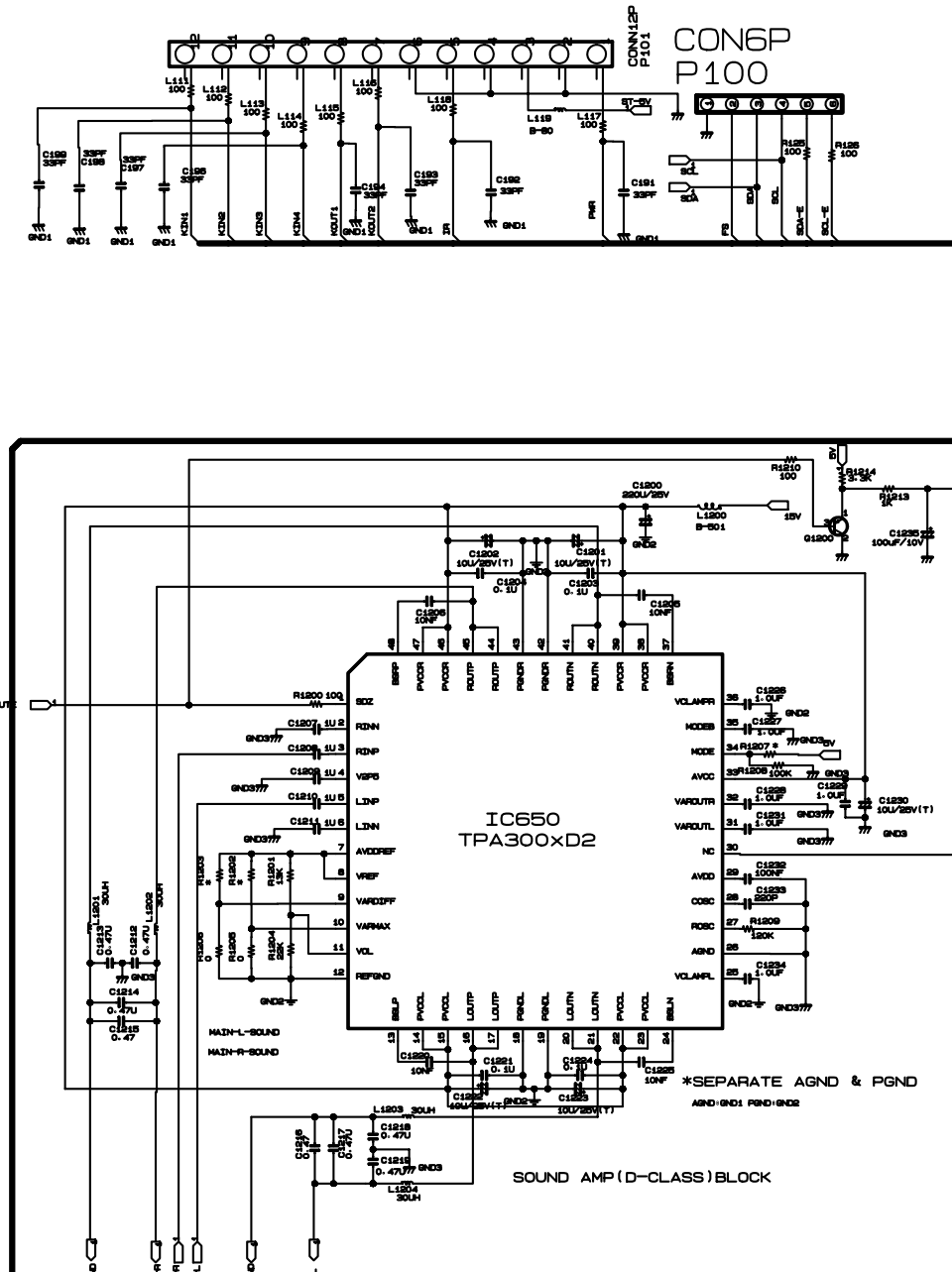
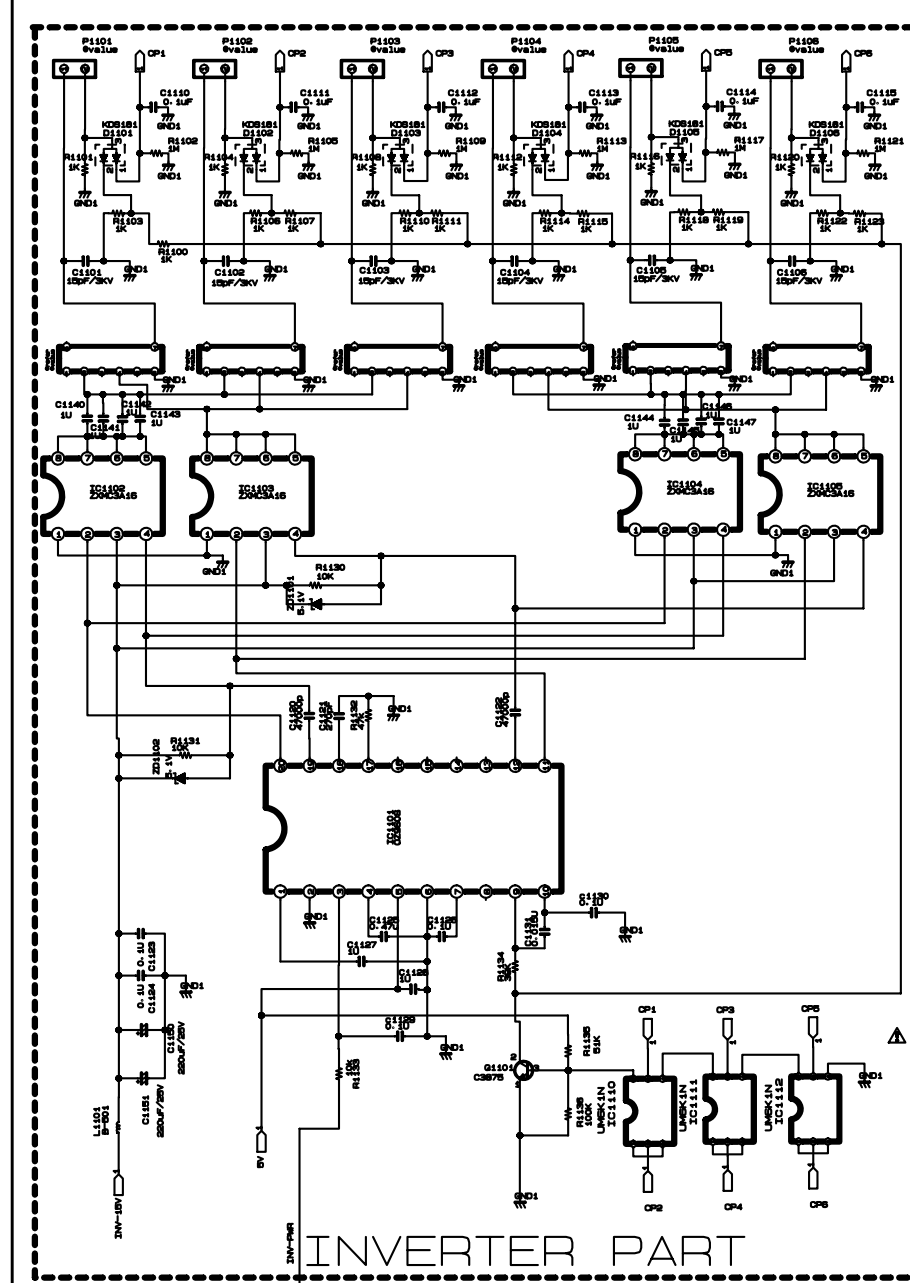
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*S	*AL	LOC. NO.	PART NO.	DESCRIPTION / SPECIFICATION
			Q551	0TR150400BA TR, CHIP 2SA1504S(ASY) BK KEC --
			Q602	0TR150400BA TR, CHIP 2SA1504S(ASY) BK KEC --
			Q603	0TR150400BA TR, CHIP 2SA1504S(ASY) BK KEC --
			Q701	0TR387500AA TR, CHIP 2SC3875S(ALY) BK KEC --
			Q706	0TR322709AA TR, "KTC3227 TP KEC - -Y, (KTC1627A"
			Q801	0TR387500AA TR, CHIP 2SC3875S(ALY) BK KEC --
			Q802	0TR150400BA TR, CHIP 2SA1504S(ASY) BK KEC --
			IC1102	0TFFC80044A TR, FDS8958A FAIRCHILD R/TP SO-8 3
			IC1103	0TFFC80044A TR, FDS8958A FAIRCHILD R/TP SO-8 3
			IC1104	0TFFC80044A TR, FDS8958A FAIRCHILD R/TP SO-8 3
			IC1105	0TFFC80044A TR, FDS8958A FAIRCHILD R/TP SO-8 3
RESISTORS				
			C521	0RH0000D622 R, 0 1/10W P-TYPE TAPPING
			L111	0RH1000D622 R, 100 1/10W 5 D.R/TP
			L112	0RH1000D622 R, 100 1/10W 5 D.R/TP
			L113	0RH1000D622 R, 100 1/10W 5 D.R/TP
			L114	0RH1000D622 R, 100 1/10W 5 D.R/TP
			L115	0RH1000D622 R, 100 1/10W 5 D.R/TP
			L116	0RH1000D622 R, 100 1/10W 5 D.R/TP
			L117	0RH1000D622 R, 100 1/10W 5 D.R/TP
			L118	0RH1000D622 R, 100 1/10W 5 D.R/TP
			L477	0RH0000D622 R, 0 1/10W P-TYPE TAPPING
			R10	0RH0000D622 R, 0 1/10W P-TYPE TAPPING
			R100	0RH3301D622 R, 3.3K 1/10W 5 D.R/TP
			R101	0RH1000D622 R, 100 1/10W 5 D.R/TP
			R102	0RH3301D622 R, 3.3K 1/10W 5 D.R/TP
			R103	0RH1000D622 R, 100 1/10W 5 D.R/TP
			R104	0RH3301D622 R, 3.3K 1/10W 5 D.R/TP
			R105	0RH1000D622 R, 100 1/10W 5 D.R/TP
			R106	0RH3301D622 R, 3.3K 1/10W 5 D.R/TP
			R107	0RH1000D622 R, 100 1/10W 5 D.R/TP
			R108	0RH3301D622 R, 3.3K 1/10W 5 D.R/TP
			R109	0RH1000D622 R, 100 1/10W 5 D.R/TP
			R1101	0RH1000D622 R, 100 1/10W 5 D.R/TP
			R1102	0RH1000D622 R, 100 1/10W 5 D.R/TP
			R1102	0RH1004D622 R, 1.0M 1/10W 5 D.R/TP
			R1105	0RH1004D622 R, 1.0M 1/10W 5 D.R/TP
			R1106	0RH1000D622 R, 100 1/10W 5 D.R/TP
			R1107	0RH0000D622 R, 0 1/10W P-TYPE TAPPING
			R1113	0RH0000D622 R, 0 1/10W P-TYPE TAPPING
			R1117	0RH1004D622 R, 1.0M 1/10W 5 D.R/TP
			R112	0RH4701D622 R, 4.7K 1/10W 5 D.R/TP
			R1121	0RH1004D622 R, 1.0M 1/10W 5 D.R/TP
			R113	0RH1000D622 R, 100 1/10W 5 D.R/TP
			R1132	0RH4702D622 R, 47K 1/10W 5 D.R/TP
			R1135	0RH5102D622 R, 51K 1/10W 5 D.R/TP
			R1136	0RH1003D622 R, 100K 1/10W 5 D.R/TP
			R1137	0RH0000D622 R, 0 1/10W P-TYPE TAPPING
			R114	0RH4701D622 R, 4.7K 1/10W 5 D.R/TP
			R1140	0RH2001D622 R, 2.0K 1/10W 5 D.R/TP
			R1143	0RH2702D622 R, 27K 1/10W 5 D.R/TP
			R115	0RH1000D622 R, 100 1/10W 5 D.R/TP
			R116	0RH0000D622 R, 0 1/10W P-TYPE TAPPING
			R118	0RH4701D622 R, 4.7K 1/10W 5 D.R/TP
			R120	0RH4302D622 R, 43K 1/10W 5 D.R/TP
			R1200	0RH1000D622 R, 100 1/10W 5 D.R/TP
			R1201	0RH1302D622 R, 13K 1/10W 5 TA
			R1204	0RH1802D622 R, 18K 1/10W 5 D.R/TP
			R1208	0RH1003D622 R, 100K 1/10W 5 D.R/TP
			R1209	0RH1003D622 R, 100K 1/10W 5 D.R/TP
			R1210	0RH1000D622 R, 100 1/10W 5 D.R/TP
			R1212	0RH3301D622 R, 3.3K 1/10W 5 D.R/TP
			R123	0RH0000D622 R, 0 1/10W P-TYPE TAPPING
			R124	0RH0000D622 R, 0 1/10W P-TYPE TAPPING
			R125	0RH1000D622 R, 100 1/10W 5 D.R/TP
			R126	0RH1000D622 R, 100 1/10W 5 D.R/TP
			R127	0RH4701D622 R, 4.7K 1/10W 5 D.R/TP
			R128	0RH4701D622 R, 4.7K 1/10W 5 D.R/TP
			R130	0RH1000D622 R, 100 1/10W 5 D.R/TP
			R133	0RH1000D622 R, 100 1/10W 5 D.R/TP
			R134	0RH1000D622 R, 100 1/10W 5 D.R/TP
			R135	0RH1000D622 R, 100 1/10W 5 D.R/TP

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*S	*AL	LOC. NO.	PART NO.	DESCRIPTION / SPECIFICATION
		R138	ORH2202D622	R, 22K 1/10W 5 D.R/TP
		R139	ORH3301D622	R, 3.3K 1/10W 5 D.R/TP
		R140	ORH1000D622	R, 100 1/10W 5 D.R/TP
		R141	ORH3301D622	R, 3.3K 1/10W 5 D.R/TP
		R143	ORH4701D622	R, 4.7K 1/10W 5 D.R/TP
		R152	ORH1000D622	R, 100 1/10W 5 D.R/TP
		R153	ORH1000D622	R, 100 1/10W 5 D.R/TP
		R154	ORH1000D622	R, 100 1/10W 5 D.R/TP
		R155	ORH1000D622	R, 100 1/10W 5 D.R/TP
		R158	ORH0000D622	R, 0 1/10W P-TYPE TAPPING
		R167	ORH4701D622	R, 4.7K 1/10W 5 D.R/TP
		R168	ORH4701D622	R, 4.7K 1/10W 5 D.R/TP
		R169	ORH4701D622	R, 4.7K 1/10W 5 D.R/TP
		R170	ORH4701D622	R, 4.7K 1/10W 5 D.R/TP
		R174	ORH0752D622	R, 75 1/10W 5 D.R/TP
		R175	ORH0752D622	R, 75 1/10W 5 D.R/TP
		R176	ORH0752D622	R, 75 1/10W 5 D.R/TP
		R177	ORH0752D622	R, 75 1/10W 5 D.R/TP
		R178	ORH3301D622	R, 3.3K 1/10W 5 D.R/TP
		R179	ORH3301D622	R, 3.3K 1/10W 5 D.R/TP
		R180	ORH6801D622	R, 6.8K 1/10W 5 D.R/TP
		R183	ORH1202D622	R, 12K 1/10W 5 D.R/TP
		R184	ORH1003D622	R, 100K 1/10W 5 D.R/TP
		R185	ORH3300D622	R, 330 1/10W 5 D.R/TP
		R194	ORH1000D622	R, 100 1/10W 5 D.R/TP
		R196	ORH4701D622	R, 4.7K 1/10W 5 D.R/TP
		R2	ORH0000D622	R, 0 1/10W P-TYPE TAPPING
		R202	ORH0472D622	R, 47 1/10W 5 D.R/TP
		R203	ORH0752D622	R, 75 1/10W 5 D.R/TP
		R204	ORH0752D622	R, 75 1/10W 5 D.R/TP
		R205	ORH1000D622	R, 100 1/10W 5 D.R/TP
		R206	ORH0752D622	R, 75 1/10W 5 D.R/TP
		R207	ORH5101D622	R, 5.1K 1/10W 5 D.R/TP
		R208	ORH4703D622	R, 470K 1/10W 5 D.R/TP
		R209	ORH5101D622	R, 5.1K 1/10W 5 D.R/TP
		R210	ORH4703D622	R, 470K 1/10W 5 D.R/TP
		R212	ORH4702D622	R, 47K 1/10W 5 D.R/TP
		R213	ORH1000D622	R, 100 1/10W 5 D.R/TP
		R214	ORH2702D622	R, 27K 1/10W 5 D.R/TP
		R221	ORH0000D622	R, 0 1/10W P-TYPE TAPPING
		R222	ORH0752D622	R, 75 1/10W 5 D.R/TP
		R238	ORH1000D622	R, 100 1/10W 5 D.R/TP
		R239	ORH1000D622	R, 100 1/10W 5 D.R/TP
		R242	ORH0752D622	R, 75 1/10W 5 D.R/TP
		R243	ORH0752D622	R, 75 1/10W 5 D.R/TP
		R287	ORH4703D622	R, 470K 1/10W 5 D.R/TP
		R288	ORH4703D622	R, 470K 1/10W 5 D.R/TP
		R289	ORH0000D622	R, 0 1/10W P-TYPE TAPPING
		R301	ORH4701D622	R, 4.7K 1/10W 5 D.R/TP
		R302	ORH4701D622	R, 4.7K 1/10W 5 D.R/TP
		R305	ORH1000D622	R, 100 1/10W 5 D.R/TP
		R306	ORH1000D622	R, 100 1/10W 5 D.R/TP
		R310	ORH0752D622	R, 75 1/10W 5 D.R/TP
		R311	ORH0752D622	R, 75 1/10W 5 D.R/TP
		R312	ORH0752D622	R, 75 1/10W 5 D.R/TP
		R351	ORH6802D622	R, 68K 1/10W 5 D.R/TP
		R352	ORH1000D622	R, 100 1/10W 5 D.R/TP
		R353	ORH1000D622	R, 100 1/10W 5 D.R/TP
		R354	ORH0102D622	R, 10 1/10W 5 D.R/TP
		R355	ORH0102D622	R, 10 1/10W 5 D.R/TP
		R357	ORH0102D622	R, 10 1/10W 5 D.R/TP
		R361	ORH3300D622	R, 330 1/10W 5 D.R/TP
		R362	ORH4700D622	R, 470 1/10W 5 D.R/TP
		R363	ORH2200D622	R, 220 1/10W 5 D.R/TP
		R364	ORH1000D622	R, 100 1/10W 5 D.R/TP
		R365	ORH2200D622	R, 220 1/10W 5 D.R/TP
		R366	ORH2200D622	R, 220 1/10W 5 D.R/TP
		R377	ORH2200D622	R, 220 1/10W 5 D.R/TP
		R400	ORH0000D622	R, 0 1/10W P-TYPE TAPPING
		R408	ORH1000D622	R, 100 1/10W 5 D.R/TP
		R410	ORH1000D622	R, 100 1/10W 5 D.R/TP
		R411	ORH4700D622	R, 470 1/10W 5 D.R/TP
		R412	ORH4700D622	R, 470 1/10W 5 D.R/TP
		R413	ORH2001D622	R, 2.0K 1/10W 5 D.R/TP

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*S	*AL	LOC. NO.	PART NO.	DESCRIPTION / SPECIFICATION
		R419	ORH9102D622	R, 91K 1/10W P-TYPE TAPPING
		R420	ORH6802D622	R, 68K 1/10W 5 D.R/TP
		R421	ORH4701D622	R, 4.7K 1/10W 5 D.R/TP
		R422	ORH2001D622	R, 2.0K 1/10W 5 D.R/TP
		R44	ORH1000D622	R, 100 1/10W 5 D.R/TP
		R492	ORH0102D622	R, 10 1/10W 5 D.R/TP
		R493	ORH0000D622	R, 0 1/10W P-TYPE TAPPING
		R496	ORH1000D622	R, 100 1/10W 5 D.R/TP
		R498	ORH0000D622	R, 0 1/10W P-TYPE TAPPING
		R499	ORH0000D622	R, 0 1/10W P-TYPE TAPPING
		R501	ORH1000D622	R, 100 1/10W 5 D.R/TP
		R502	ORH1000D622	R, 100 1/10W 5 D.R/TP
		R503	ORH1000D622	R, 100 1/10W 5 D.R/TP
		R504	ORH1000D622	R, 100 1/10W 5 D.R/TP
		R509	ORH1000D622	R, 100 1/10W 5 D.R/TP
		R512	ORH4701D622	R, 4.7K 1/10W 5 D.R/TP
		R513	ORH1004D622	R, 1.0M 1/10W 5 D.R/TP
		R516	ORH1000D622	R, 100 1/10W 5 D.R/TP
		R525	ORH1000D622	R, 100 1/10W 5 D.R/TP
		R553	ORH0000D622	R, 0 1/10W P-TYPE TAPPING
		R555	ORH0000D622	R, 0 1/10W P-TYPE TAPPING
		R556	ORH0000D622	R, 0 1/10W P-TYPE TAPPING
		R574	ORH6800D622	R, 680 OHM 1 / 10 W 5% D R/TP
		R575	ORH0000D622	R, 0 1/10W P-TYPE TAPPING
		R576	ORH1000D622	R, 100 1/10W 5 D.R/TP
		R579	ORH4700D622	R, 470 1/10W 5 D.R/TP
		R580	ORH2200D622	R, 220 1/10W 5 D.R/TP
		R583	ORH1000D622	R, 100 1/10W 5 D.R/TP
		R584	ORH1000D622	R, 100 1/10W 5 D.R/TP
		R590	ORH1000D622	R, 100 1/10W 5 D.R/TP
		R591	ORH1000D622	R, 100 1/10W 5 D.R/TP
		R593	ORH1000D622	R, 100 1/10W 5 D.R/TP
		R594	ORH1000D622	R, 100 1/10W 5 D.R/TP
		R595	ORH1000D622	R, 100 1/10W 5 D.R/TP
		R596	ORH1000D622	R, 100 1/10W 5 D.R/TP
		R597	ORH1000D622	R, 100 1/10W 5 D.R/TP
		R598	ORH1000D622	R, 100 1/10W 5 D.R/TP
		R599	ORH1000D622	R, 100 1/10W 5 D.R/TP
		R602	ORH3901D622	R, 3.9K 1/10W 5 D.R/TP
		R603	ORH3901D622	R, 3.9K 1/10W 5 D.R/TP
		R614	ORH1000D622	R, 100 1/10W 5 D.R/TP
		R617	ORH2702D622	R, 27K 1/10W 5 D.R/TP
		R618	ORH0102D622	R, 10 1/10W 5 D.R/TP
		R619	ORH1000D622	R, 100 1/10W 5 D.R/TP
		R620	ORH4701D622	R, 4.7K 1/10W 5 D.R/TP
		R621	ORH1004D622	R, 1.0M 1/10W 5 D.R/TP
		R622	ORH1000D622	R, 100 1/10W 5 D.R/TP
		R696	ORH0000D622	R, 0 1/10W P-TYPE TAPPING
		R707	ORH4700D622	R, 470 1/10W 5 D.R/TP
		R708	ORH8203D622	R, 820K 1/10W 5 D.R/TP
		R717	ORH3300D622	R, 330 1/10W 5 D.R/TP
		R722	ORH8202D622	R, 82K 1/10W 5 D.R/TP
		R723	ORH5601D622	R, 5.6K 1/10W 5 D.R/TP
		R725	ORH1800D622	R, 180 1/10W 5 D.R/TP
		R726	ORH9100D622	R, 910 1/10W 5 D.R/TP
		R732	ORH1302D622	R, 13K 1/10W 5 TA
		R734	ORH6801D622	R, 6.8K 1/10W 5 D.R/TP
		R738	ORH4702D622	R, 47K 1/10W 5 D.R/TP
		R739	ORH1502D622	R, 15K 1/10W 5 D.R/TP
		R742	ORH0000D622	R, 0 1/10W P-TYPE TAPPING
		R799	ORH0000D622	R, 0 1/10W P-TYPE TAPPING
		R801	ORH1000D622	R, 100 1/10W 5 D.R/TP
		R802	ORH1000D622	R, 100 1/10W 5 D.R/TP
		R803	ORH1000D622	R, 100 1/10W 5 D.R/TP
		R804	ORH1500D622	R, 150 1/10W 5 D.R/TP
		R805	ORH1500D622	R, 150 1/10W 5 D.R/TP
		R877	ORH1000D622	R, 100 1/10W 5 D.R/TP
		R893	ORH1000D622	R, 100 1/10W 5 D.R/TP
		R897	ORH2701D622	R, 2.7K 1/10W 5 D.R/TP
		R898	ORH0000D622	R, 0 1/10W P-TYPE TAPPING
		R908	ORH0752D622	R, 75 1/10W 5 D.R/TP
		R909	ORH0752D622	R, 75 1/10W 5 D.R/TP
		R910	ORH0752D622	R, 75 1/10W 5 D.R/TP
		R914	ORH1000D622	R, 100 1/10W 5 D.R/TP

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*S	*AL	LOC. NO.	PART NO.	DESCRIPTION / SPECIFICATION
		R916	ORH1000D622	R, 100 1/10W 5 D.R/TP
		L502	ORRZVTA001A	R, MNR-14-E0A-J-101 R OHM 100
		L503	ORRZVTA001A	R, MNR-14-E0A-J-101 R OHM 100
		L504	ORRZVTA001A	R, MNR-14-E0A-J-101 R OHM 100
		L505	ORRZVTA001A	R, MNR-14-E0A-J-101 R OHM 100
		L506	ORRZVTA001A	R, MNR-14-E0A-J-101 R OHM 100
		L507	ORRZVTA001A	R, MNR-14-E0A-J-101 R OHM 100
		L518	ORRZVTA001A	R, MNR-14-E0A-J-101 R OHM 100
		L521	ORRZVTA001A	R, MNR-14-E0A-J-101 R OHM 100
		L522	ORRZVTA001A	R, MNR-14-E0A-J-101 R OHM 100
		L523	ORRZVTA001A	R, MNR-14-E0A-J-101 R OHM 100
		L524	ORRZVTA001A	R, MNR-14-E0A-J-101 R OHM 100
		L525	ORRZVTA001A	R, MNR-14-E0A-J-101 R OHM 100
		L526	ORRZVTA001A	R, MNR-14-E0A-J-101 R OHM 100
		R702	ORKZVTA001C	R, 8.2M OHM 1/2 W 5% TA52 UL PILK
		R703	ORKZVTA001K	R, 0.47M OHM 1/2 W 5% TA52 PILKOR
		R715	180-A01E	R, 2 W RW ROUND G 2W 0.33J TA31(6
		R727	ORD0472H609	R, 47 1/2W 5 TA52
		R736	ORD0472H609	R, 47 1/2W 5 TA52
		R704	ORS5602K619	R, 56K OHM 2 W 5.00% TR
		R705	ORS5602K619	R, 56K OHM 2 W 5.00% TR
		R706	ORS1203K607	R, 120K OHM 2 W 5.00% TA62
		R711	ORS5602K619	R, 56K OHM 2 W 5.00% TR
		R712	ORS5602K619	R, 56K OHM 2 W 5.00% TR
		R714	ORS5602K619	R, 56K OHM 2 W 5.00% TR
		FR704	ORP0020J809	R, 0.02 OHM 1 W 20% TA52
		L211	ORH1001D622	R, 1K OHM 1 / 10 W 2012 5.00%
		R1100	ORH1001D622	R, 1K OHM 1 / 10 W 2012 5.00%
		R1101	ORH1001D622	R, 1K OHM 1 / 10 W 2012 5.00%
		R1103	ORH1001D622	R, 1K OHM 1 / 10 W 2012 5.00%
		R1103	ORH1001D622	R, 1K OHM 1 / 10 W 2012 5.00%
		R1104	ORH1001D622	R, 1K OHM 1 / 10 W 2012 5.00%
		R1104	ORH1001D622	R, 1K OHM 1 / 10 W 2012 5.00%
		R1105	ORH1001D622	R, 1K OHM 1 / 10 W 2012 5.00%
		R1106	ORH1001D622	R, 1K OHM 1 / 10 W 2012 5.00%
		R1107	ORH1001D622	R, 1K OHM 1 / 10 W 2012 5.00%
		R1116	ORH1001D622	R, 1K OHM 1 / 10 W 2012 5.00%
		R1118	ORH1001D622	R, 1K OHM 1 / 10 W 2012 5.00%
		R1119	ORH1001D622	R, 1K OHM 1 / 10 W 2012 5.00%
		R1120	ORH1001D622	R, 1K OHM 1 / 10 W 2012 5.00%
		R1122	ORH1001D622	R, 1K OHM 1 / 10 W 2012 5.00%
		R1123	ORH1001D622	R, 1K OHM 1 / 10 W 2012 5.00%
		R1123	ORH1001D622	R, 1K OHM 1 / 10 W 2012 5.00%
		R1130	ORH1002D622	R, 10K OHM 1 / 10 W 2012 5.00%
		R1131	ORH1002D622	R, 10K OHM 1 / 10 W 2012 5.00%
		R1133	ORH1002D622	R, 10K OHM 1 / 10 W 2012 5.00%
		R1134	ORH3902D622	R, 39K OHM 1 / 10 W 2012 5.00%
		R1141	ORH1001D622	R, 1K OHM 1 / 10 W 2012 5.00%
		R119	ORH1001D622	R, 1K OHM 1 / 10 W 2012 5.00%
		R1211	ORH1001D622	R, 1K OHM 1 / 10 W 2012 5.00%
		R131	ORH1001D622	R, 1K OHM 1 / 10 W 2012 5.00%
		R132	ORH1001D622	R, 1K OHM 1 / 10 W 2012 5.00%
		R142	ORH0222D622	R, 22 OHM 1 / 10 W 2012 5.00%
		R164	ORH0222D622	R, 22 OHM 1 / 10 W 2012 5.00%
		R171	ORH0222D622	R, 22 OHM 1 / 10 W 2012 5.00%
		R172	ORH0222D622	R, 22 OHM 1 / 10 W 2012 5.00%
		R173	ORH0222D622	R, 22 OHM 1 / 10 W 2012 5.00%
		R181	ORH1002D622	R, 10K OHM 1 / 10 W 2012 5.00%
		R182	ORH1001D622	R, 1K OHM 1 / 10 W 2012 5.00%
		R186	ORH0222D622	R, 22 OHM 1 / 10 W 2012 5.00%
		R197	ORH0222D622	R, 22 OHM 1 / 10 W 2012 5.00%
		R198	ORH0222D622	R, 22 OHM 1 / 10 W 2012 5.00%
		R200	ORJ1000H680	R, 100 OHM 1/2 W 5% 5025 R/TP
		R201	ORJ1000H680	R, 100 OHM 1/2 W 5% 5025 R/TP
		R211	ORH1001D622	R, 1K OHM 1 / 10 W 2012 5.00%
		R215	ORH1001D622	R, 1K OHM 1 / 10 W 2012 5.00%
		R216	ORH1002D622	R, 10K OHM 1 / 10 W 2012 5.00%
		R217	ORH1002D622	R, 10K OHM 1 / 10 W 2012 5.00%
		R223	ORH1001D622	R, 1K OHM 1 / 10 W 2012 5.00%
		R224	ORH1002D622	R, 10K OHM 1 / 10 W 2012 5.00%
		R225	ORH1002D622	R, 10K OHM 1 / 10 W 2012 5.00%
		R3	ORH1002D622	R, 10K OHM 1 / 10 W 2012 5.00%
		R358	ORH1001D622	R, 1K OHM 1 / 10 W 2012 5.00%
		R4	ORH1001D622	R, 1K OHM 1 / 10 W 2012 5.00%
		R407	ORH1001D622	R, 1K OHM 1 / 10 W 2012 5.00%

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*S	*AL	LOC. NO.	PART NO.	DESCRIPTION / SPECIFICATION
		R414	ORH0222D622	R, 22 OHM 1 / 10 W 2012 5.00%
		R415	ORH0222D622	R, 22 OHM 1 / 10 W 2012 5.00%
		R423	ORH0222D622	R, 22 OHM 1 / 10 W 2012 5.00%
		R494	ORH1001D622	R, 1K OHM 1 / 10 W 2012 5.00%
		R497	ORH1001D622	R, 1K OHM 1 / 10 W 2012 5.00%
		R500	ORH0222D622	R, 22 OHM 1 / 10 W 2012 5.00%
		R519	ORH0222D622	R, 22 OHM 1 / 10 W 2012 5.00%
		R520	ORH0222D622	R, 22 OHM 1 / 10 W 2012 5.00%
		R521	ORH0222D622	R, 22 OHM 1 / 10 W 2012 5.00%
		R522	ORH0222D622	R, 22 OHM 1 / 10 W 2012 5.00%
		R523	ORH1001D622	R, 1K OHM 1 / 10 W 2012 5.00%
		R524	ORH1001D622	R, 1K OHM 1 / 10 W 2012 5.00%
		R551	ORH1001D622	R, 1K OHM 1 / 10 W 2012 5.00%
		R578	ORH1001D622	R, 1K OHM 1 / 10 W 2012 5.00%
		R581	ORH1002D622	R, 10K OHM 1 / 10 W 2012 5.00%
		R582	ORH0222D622	R, 22 OHM 1 / 10 W 2012 5.00%
		R585	ORH0222D622	R, 22 OHM 1 / 10 W 2012 5.00%
		R586	ORH0222D622	R, 22 OHM 1 / 10 W 2012 5.00%
		R587	ORH0222D622	R, 22 OHM 1 / 10 W 2012 5.00%
		R588	ORH0222D622	R, 22 OHM 1 / 10 W 2012 5.00%
		R589	ORH0222D622	R, 22 OHM 1 / 10 W 2012 5.00%
		R592	ORH0222D622	R, 22 OHM 1 / 10 W 2012 5.00%
		R608	ORH1001D622	R, 1K OHM 1 / 10 W 2012 5.00%
		R609	ORH1001D622	R, 1K OHM 1 / 10 W 2012 5.00%
		R610	ORH1001D622	R, 1K OHM 1 / 10 W 2012 5.00%
		R611	ORH1001D622	R, 1K OHM 1 / 10 W 2012 5.00%
		R612	ORH1001D622	R, 1K OHM 1 / 10 W 2012 5.00%
		R613	ORH1001D622	R, 1K OHM 1 / 10 W 2012 5.00%
		R615	ORH0222D622	R, 22 OHM 1 / 10 W 2012 5.00%
		R616	ORH0222D622	R, 22 OHM 1 / 10 W 2012 5.00%
		R697	ORH1001D622	R, 1K OHM 1 / 10 W 2012 5.00%
		R699	ORH1001D622	R, 1K OHM 1 / 10 W 2012 5.00%
		R701	ORH2002D622	R, 20K OHM 1 / 10 W 2012 5.00%
		R721	ORH1002D622	R, 10K OHM 1 / 10 W 2012 5.00%
		R728	ORH1001D622	R, 1K OHM 1 / 10 W 2012 5.00%
		R730	ORH1002D622	R, 10K OHM 1 / 10 W 2012 5.00%
		R731	ORH1001D622	R, 1K OHM 1 / 10 W 2012 5.00%
		R733	ORH1002D622	R, 10K OHM 1 / 10 W 2012 5.00%
		R740	ORH1002D622	R, 10K OHM 1 / 10 W 2012 5.00%
		R816	ORH0222D622	R, 22 OHM 1 / 10 W 2012 5.00%
		R894	ORH0222D622	R, 22 OHM 1 / 10 W 2012 5.00%
		R895	ORH0222D622	R, 22 OHM 1 / 10 W 2012 5.00%
		R900	ORH0222D622	R, 22 OHM 1 / 10 W 2012 5.00%
		R904	ORH1001D622	R, 1K OHM 1 / 10 W 2012 5.00%
		R905	ORH1001D622	R, 1K OHM 1 / 10 W 2012 5.00%
		R911	ORH0222D622	R, 22 OHM 1 / 10 W 2012 5.00%
		R912	ORH0222D622	R, 22 OHM 1 / 10 W 2012 5.00%
		R913	ORH0222D622	R, 22 OHM 1 / 10 W 2012 5.00%
CONNECTOR				
		P900	6630G15E215	CONNECTOR (CIRC),D-SUB, - KSD 15P 2.29MM
		P1	6602V12005A	CONNECTOR (CIRC),WAFER, 1.25MM 20P
		P100	366-932E	CONNECTOR (CIRC),WAFER, GIL-G-06P
		P101	6602V20005L	CONNECTOR (CIRC),WAFER, 2.0MM 12P
		P1101	6630VV00102	CONNECTOR (CIRC),WAFER, 35001WR 2P 3.5MM
		P1102	6630VV00102	CONNECTOR (CIRC),WAFER, 35001WR 2P 3.5MM
		P1105	6630VV00102	CONNECTOR (CIRC),WAFER, 35001WR 2P 3.5MM
		P1106	6630VV00102	CONNECTOR (CIRC),WAFER, 35001WR 2P 3.5MM
		P601	366-932B	CONNECTOR (CIRC),WAFER, IL-G-03P LGC 2.5MM
		P602	366-932C	CONNECTOR (CIRC),WAFER, IL-G-04P LGC 2.5MM
		P1101	6631V20014E	CONNECTOR ASSEMBLY, 12P 2.0MM 300MM
		P1102	387-A07B	CONNECTOR ASSEMBLY, 7P 2.5MM 150MM
SWITCH				
		SW1101	140-313A	SWITCH,TACT, TACT 2LEAD 100G(TA)
		SW1102	140-313A	SWITCH,TACT, TACT 2LEAD 100G(TA)
		SW1103	140-313A	SWITCH,TACT, TACT 2LEAD 100G(TA)
		SW1104	140-313A	SWITCH,TACT, TACT 2LEAD 100G(TA)
		SW1105	140-313A	SWITCH,TACT, TACT 2LEAD 100G(TA)
		SW1106	140-313A	SWITCH,TACT, TACT 2LEAD 100G(TA)
		SW1107	140-313A	SWITCH,TACT, TACT 2LEAD 100G(TA)
		SW1108	140-313A	SWITCH,TACT, TACT 2LEAD 100G(TA)



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