

# Service Service **Service**



# Service Manual

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# 1.0 TECHNICAL SPECIFICATION

## General

Dimensions (W x H x D):	195 x 154 x 38.2 mm
Bear Unit Weight:	715g
Power supply:	AC 100~240V (adapter)
Supply voltage	DC 12V (battery)
Supply Power consumption	7W
Operating Temp & RH	0~ 45degC / 30-90% RH
Audio System	
Output voltage 1kHz:	2V +/-0.2V
THD 20-20kHz (%):	≤1%
Dynamic range 1kHz	>/=80dB
Signal/Noise ratio:	>/=80dB
Frequency response (20-20kHz):	+/-3dB
Channel Separation 1kHz	>=55dB
Channel Balance 1kHz	≤2.5dB

Playback disc type:

CD,+/- R/RW,DVD,DVD +/-R/RW  
DVD / VCD /MP3,JPEG Image,DivX5

Video Playback Format:

DVD / VCD /MP3,JPEG Image,DivX5

Audio Playback Format:

CD/MP3, DVD, User Interface:MTK

Disc Diameter

8cm/12cm

## Pixel specification

Max. 0 bright-dot & max. 3 dark-dots

## Current consumption

DC Supply	DC6.3V-15.0V
Standby Power off	<0.45W
Battery	
Voltage	≤6.3V
Capacity	1500mAH
Battery playtime	
Charging time	5.5h
Standby Power off	

## Headphone out (headphone output load 2x16 ohm)

Maximum output power:	≥1.5mW
Frequency response:	+/-1dB
SNR (A-wght):	≥80dB
THD (w/16 ohm loading):	≤1%
Left-Right Channel Separation:	≥55dB
Left-Right Channel Balance:	≤2.5dB

## Supported disc type

Video Playback Formats:



Audio Playback Formats:



## **1.0 TECHNICAL SPECIFICATION**

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### **Factory Service Mode (FSM)**

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#### **Procedure to change region code of your DVD Portable**

1. Power ON the DVD player and do not insert DISC inside player
2. Setup→Prefer  
Press the key in the sequence as  
9 --> 6 --> 5 --> 3  
The LCD display showed the existing region Code.
3. Press ▲ (navigation up) or ▼ (navigation down) repeatedly to select the number from 0 to 6.
4. Then press OK to confirm your region code.
5. Refer below table for your region code setting

Region Code	Region
1	USA
2	EUROPE
3	ASIA PACIFIC
4	AUSTRALIA, NEW ZEALAND, LATAM
5	RUSSIA, INDIA
6	CHINA

**Select "0" setting = Region Free (confidential)**

#### **Procedure for SW upgrade**

1. Please burn the "PHILIPS.BIN" file into a empty disc or copy the "PHILIPS.BIN" file into a USB device..
2. Power on PET736 with AC/DC adapter
3. The set will detect the upgraded SW
4. Press "PLAY/PAUSE key" to confirm and proceed
5. The set will reset once finished upgrade

***Warning: Do not unplug the AC adapter during firmware upgrade to prevent flash corrupt of the set!!***

#### **Procedure to check SW version of your DVD Portable**

1. Setup→General  
Press the IR number key in the sequence as  
3 --> 3 --> 0 --> 8  
Then a menu will be show XX-YYYY-MM-DDD

## 2.0 SAFETY INSTRUCTIONS

### GB WARNING

All ICs and many other semi-conductors are susceptible to electrostatic discharges (ESD). Careless handling during repair can reduce life drastically. When repairing, make sure that you are connected with the same potential as the mass of the set via a wrist wrap with resistance. Keep components and tools also at this potential.

### ESD



### NL WAARSCHUWING

Alle IC's en vele andere halfgeleiders zijn gevoelig voor electrostatische ontladingen (ESD). Onzorgvuldig behandelen tijdens reparatie kan de levensduur drastisch doen verminderen. Zorg ervoor dat u tijdens reparatie via een polsband met weerstand verbonden bent met hetzelfde potentiaal als de massa van het apparaat. Houd componenten en hulpmiddelen ook op ditzelfde potentiaal.

### F ATTENTION

Tous les IC et beaucoup d'autres semi-conducteurs sont sensibles aux décharges statiques (ESD). Leur longévité pourrait être considérablement écourtée par le fait qu'aucune précaution n'est prise à leur manipulation. Lors de réparations, s'assurer de bien être relié au même potentiel que la masse de l'appareil et enfiler le bracelet serti d'une résistance de sécurité. Veiller à ce que les composants ainsi que les outils que l'on utilise soient également à ce potentiel.

### D WARNUNG

Alle ICs und viele andere Halbleiter sind empfindlich gegenüber elektrostatischen Entladungen (ESD). Unsorgfältige Behandlung im Reparaturfall kann die Lebensdauer drastisch reduzieren. Veranlassen Sie, dass Sie im Reparaturfall über ein Pulsarmband mit Widerstand verbunden sind mit dem gleichen Potential wie die Masse des Gerätes. Bauteile und Hilfsmittel auch auf dieses gleiche Potential halten.

### I AVVERTIMENTO

Tutti IC e parecchi semi-conduttori sono sensibili alle scariche statiche (ESD). La loro longevità potrebbe essere fortemente ridotta in caso di non osservazione della più grande cauzione alla loro manipolazione. Durante le riparazioni occorre quindi essere collegato allo stesso potenziale che quello della massa dell'apparecchio tramite un braccialetto a resistenza. Assicurarsi che i componenti e anche gli utensili con quali si lavora siano anche a questo potenziale.

### GB

Safety regulations require that the set be restored to its original condition and that parts which are identical with those specified, be used.

"Pour votre sécurité, ces documents doivent être utilisés par des spécialistes agréés, seuls habilités à réparer votre appareil en panne".

### NL

Veiligheidsbepalingen vereisen, dat het apparaat bij reparatie in zijn oorspronkelijke toestand wordt teruggebracht en dat onderdelen, identiek aan de gespecificeerde, worden toegepast.



### F

Les normes de sécurité exigent que l'appareil soit remis à l'état d'origine et que soient utilisées les pièces de rechange identiques à celles spécifiées.

### GB Warning !

Invisible laser radiation when open.  
Avoid direct exposure to beam.

### S Varning !

Osynlig laserstrålning när apparaten är öppnad och spärren är urkopplad. Betrakta ej strålen.

### SF Varoitus !

Avatussa laitteessa ja suojalukituksen ohittaaessa olet alttiina näkymättömälle laserisäteilylle. Älä katso sääteenseen!

### DK Advarse !

Usynlig laserstrålning ved åbning når sikkerhedsafbrydere er ude af funktion. Undgå udsættelse for stråling.

### I

Le norme di sicurezza esigono che l'apparecchio venga rimesso nelle condizioni originali e che siano utilizzati i pezzi di ricambio identici a quelli specificati.

"After servicing and before returning set to customer perform a leakage current measurement test from all exposed metal parts to earth ground to assure no shock hazard exist. The leakage current must not exceed 0.5mA."

## 2.1 ESD PROTECTION

- レンズには絶対に触れないでください。
- DO NOT TOUCH THE LENS.
- LINSE NICHT BRÜHREN.
- NE PAS TOUCHER LA LENTILLE.

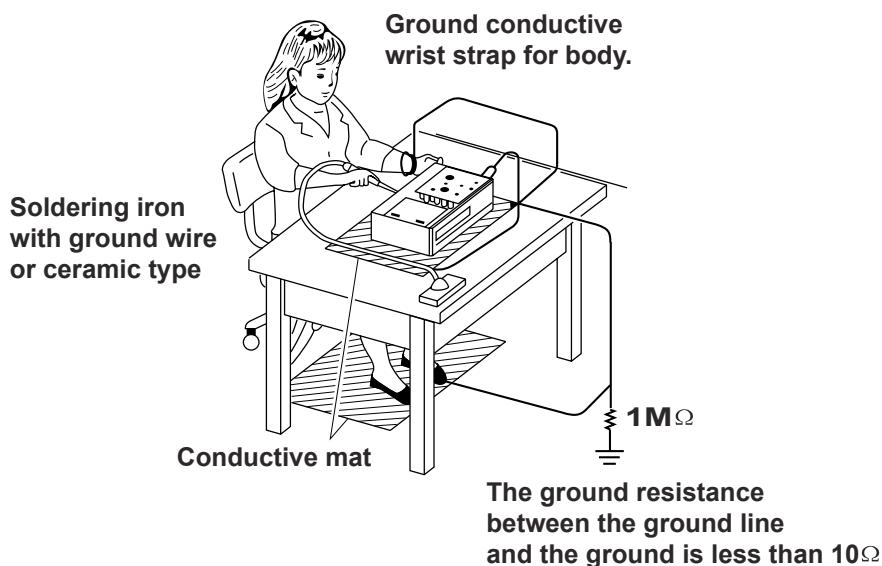
When the power supply is being turned on, you may not remove this laser cautions label. If it removes, radiation of laser may be received.

## PREPARATION OF SERVICING

Pickup Head consists of a laser diode that is very susceptible to external static electricity.

Although it operates properly after replacement, if it was subject to electrostatic discharge during replacement, its life might be shortened. When replacing, use a conductive mat, soldering iron with ground wire,etc. to protect the laser diode from damage by static electricity.

And also, the LSI and IC are same as above.



## SAFTY NOTICE

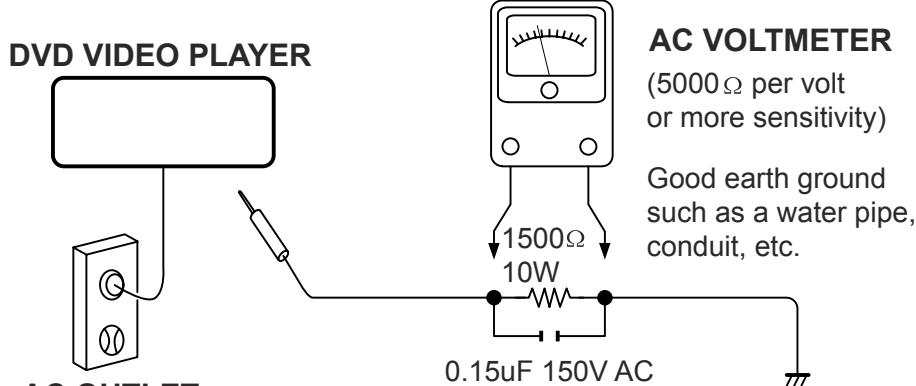
## SAFTY PRECAUTIONS

### LEAKAGE CURRENT CHECK

Plug the AC line cord directly into a 120V AC outlet (do not use an isolation transformer for this check). Use an AC voltmeter, having  $5000\Omega$  per volt or more sensitivity. Connect a  $1500\Omega$  10W resistor, paralleled by a  $0.15\mu F$  150V AC capacitor between a known good earth ground (water pipe, conduit, etc.) and all exposed metal parts of cabinet (antennas, handle bracket, metal cabinet screwheads, metal overlays, control shafts, etc.).

Measure the AC voltage across the  $1500\Omega$  resistor. The test must be conducted with the AC switch on and then repeated with the AC switch off. The AC voltage indicated by the meter may not exceed 0.3V. A reading exceeding 0.3V indicates that a dangerous potential exists, the fault must be located and corrected. Repeat the above test with the DVD VIDEO PLAYER power plug reversed. NEVER RETURN A DVD VIDEO PLAYER TO THE CUSTOMER WITHOUT TAKING NECESSARY CORRECTIVE ACTION.

### READING SHOULD NOT EXCEED 0.3V



The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



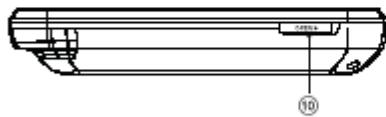
The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

## 3.0 INSTRUCTION FOR USE

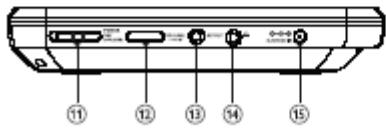
### Overview of the main unit



- ① SETUP
  - Accesses or exits the setup menu.
- ②
  - Adjusts brightness of the screen backlight.
- ③ STOP
  - Stops disc play.
- ④
  - Skips to the previous or next title, chapter, or track.
- ⑤
  - Navigates through the menus.
  - - Searches backward/forward at different speeds.
- ⑥
  - Charging indicator/Remote control sensor/Power indicator
- ⑦ AV MODE
  - Turns off the front panel display when the player is connected to TV.
- ⑧ OPTION
  - Accesses options relating to the current activity or selection.
- ⑨ DISC MENU
  - For DVD, accesses or exits disc menu.
  - For VCD, turns on or off PBC (Playback Control) mode.
  - For VCD version 2.0 or SVCD with PBC turned on, returns to the menu.



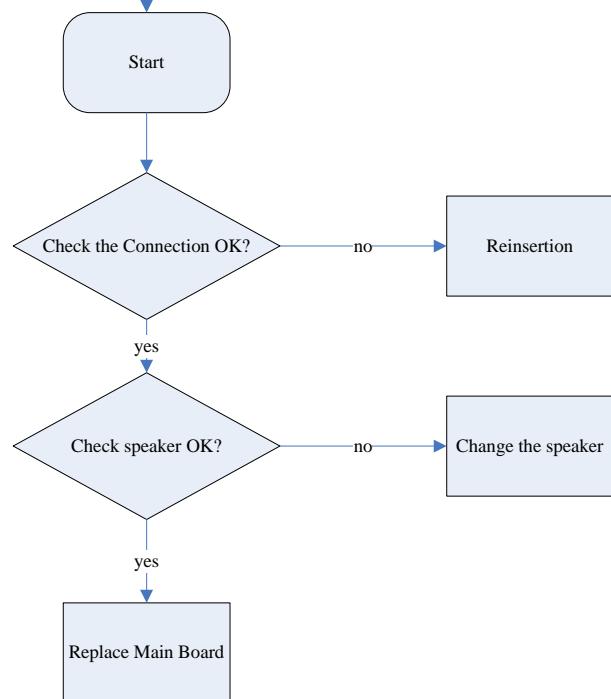
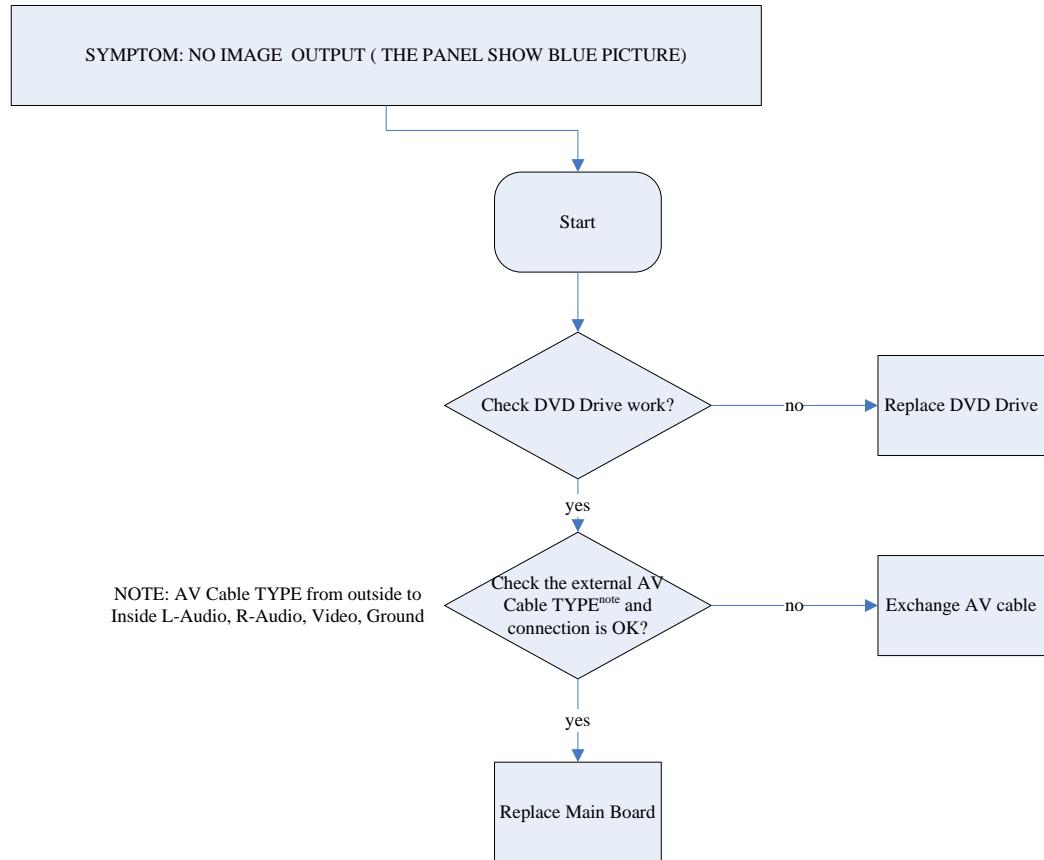
- ⑩ OPEN
  - Opens the disc compartment.



- ⑪ POWER ON/OFF
  - Turns on/off DVD player.
- ⑫ VOLUME...
  - Increases or decreases volume.

## 5.0 TROUBLESHOOTING

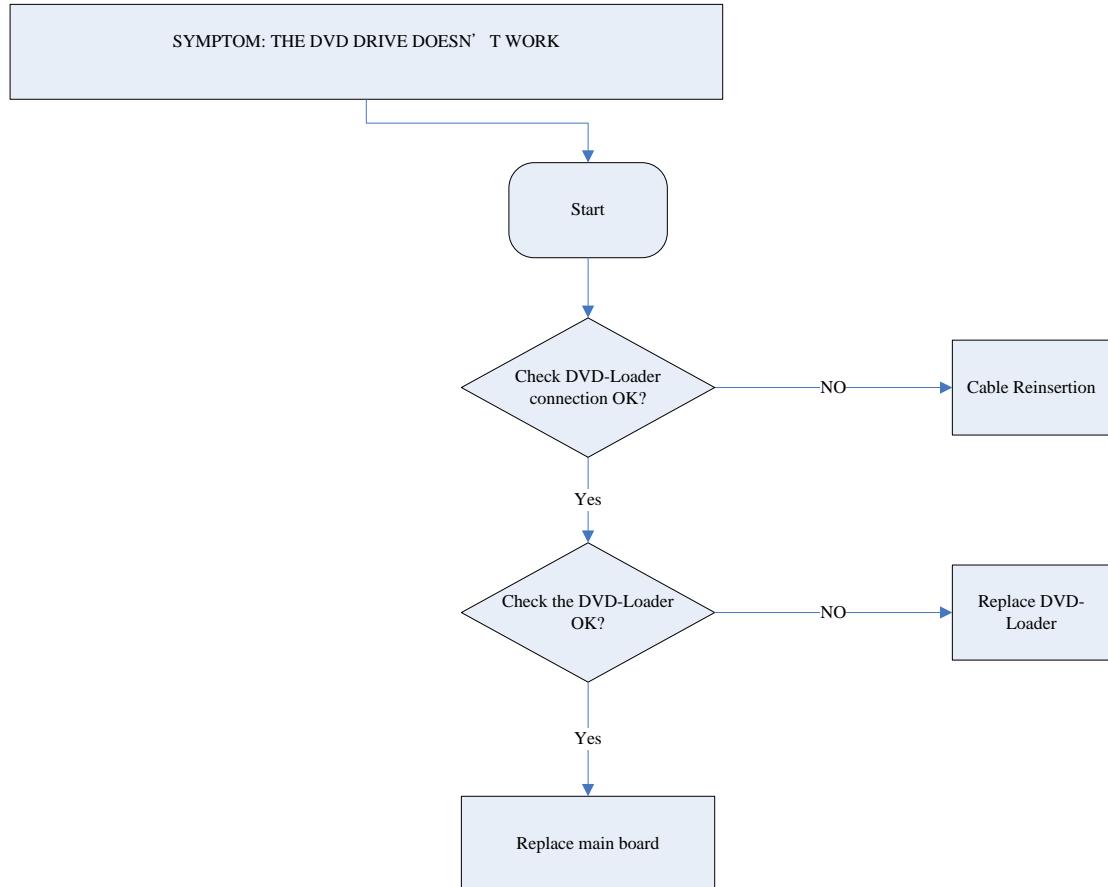
### SYMPTOM: NO IMAGE / NO SOUND



## 5.0 TROUBLESHOOTING

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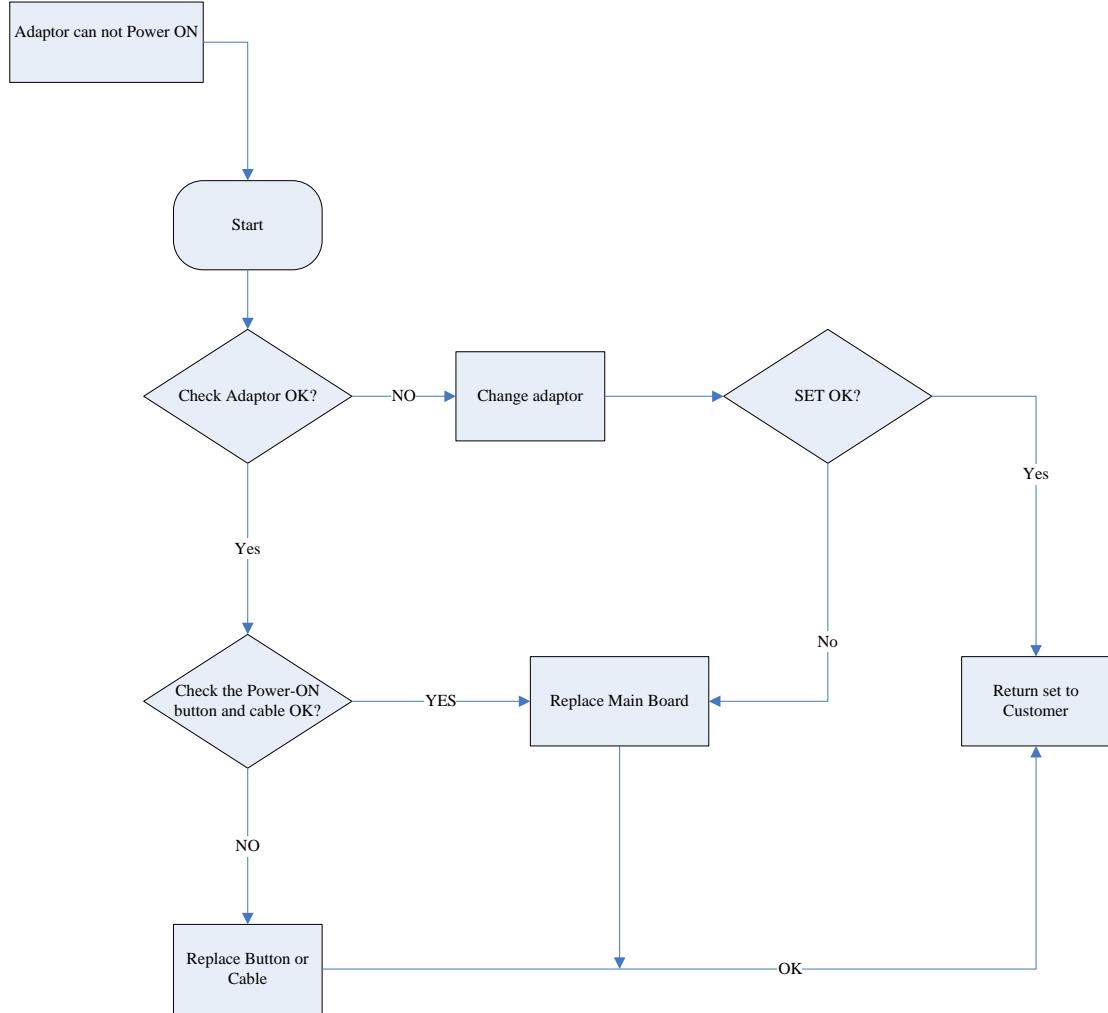
### SYMPTOM: THE DVD DRIVE DOES NOT WORK



## 5.0 TROUBLESHOOTING

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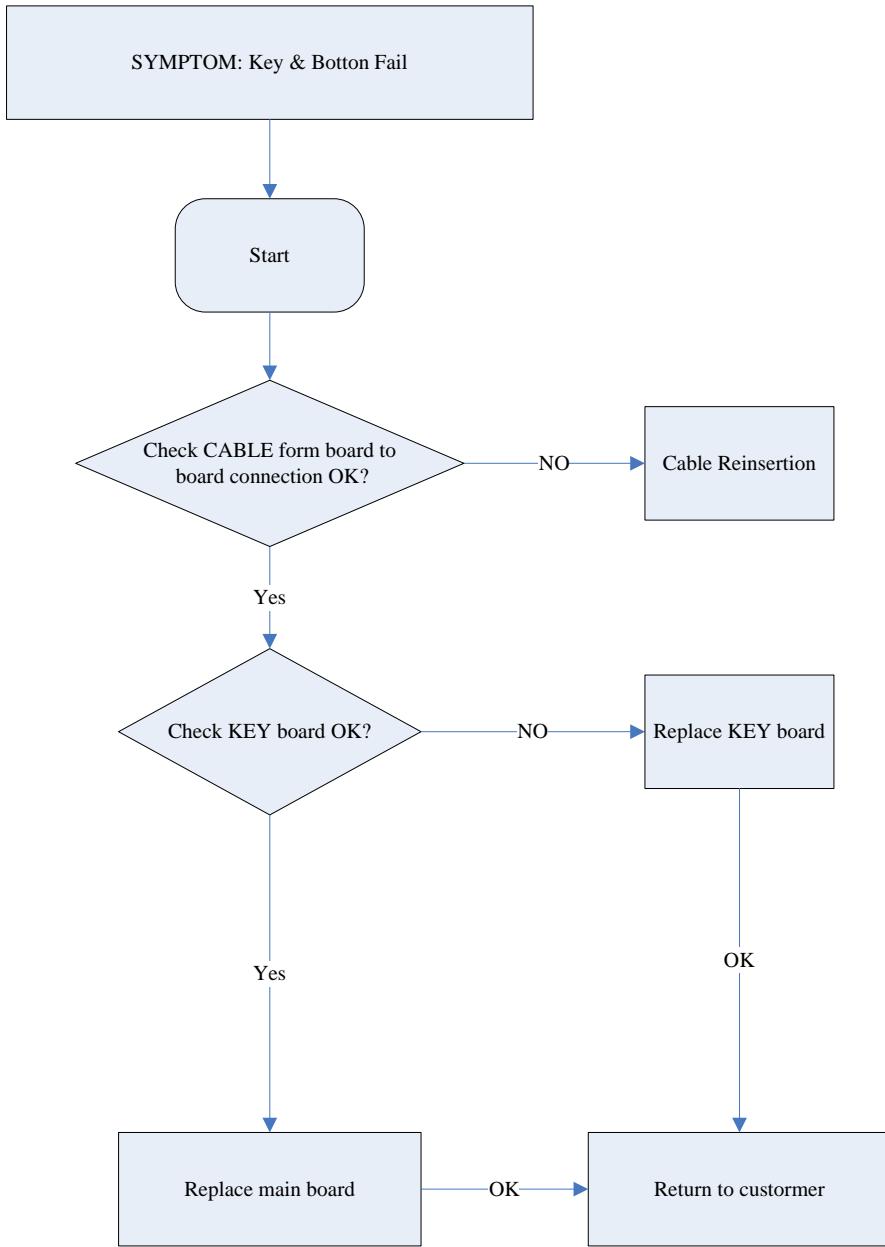
### SYMPTOM: ADAPTOR CANNOT POWER ON

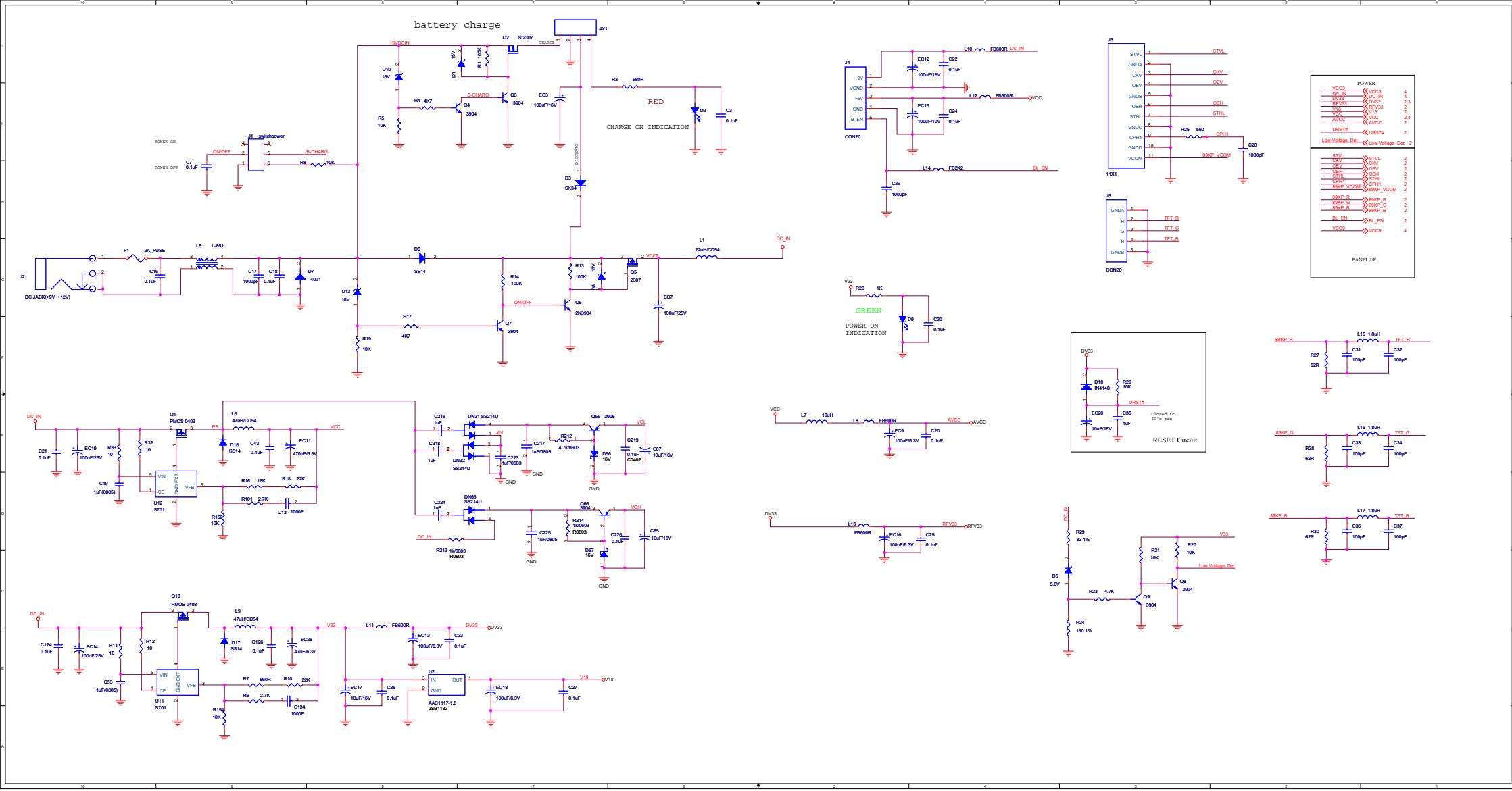


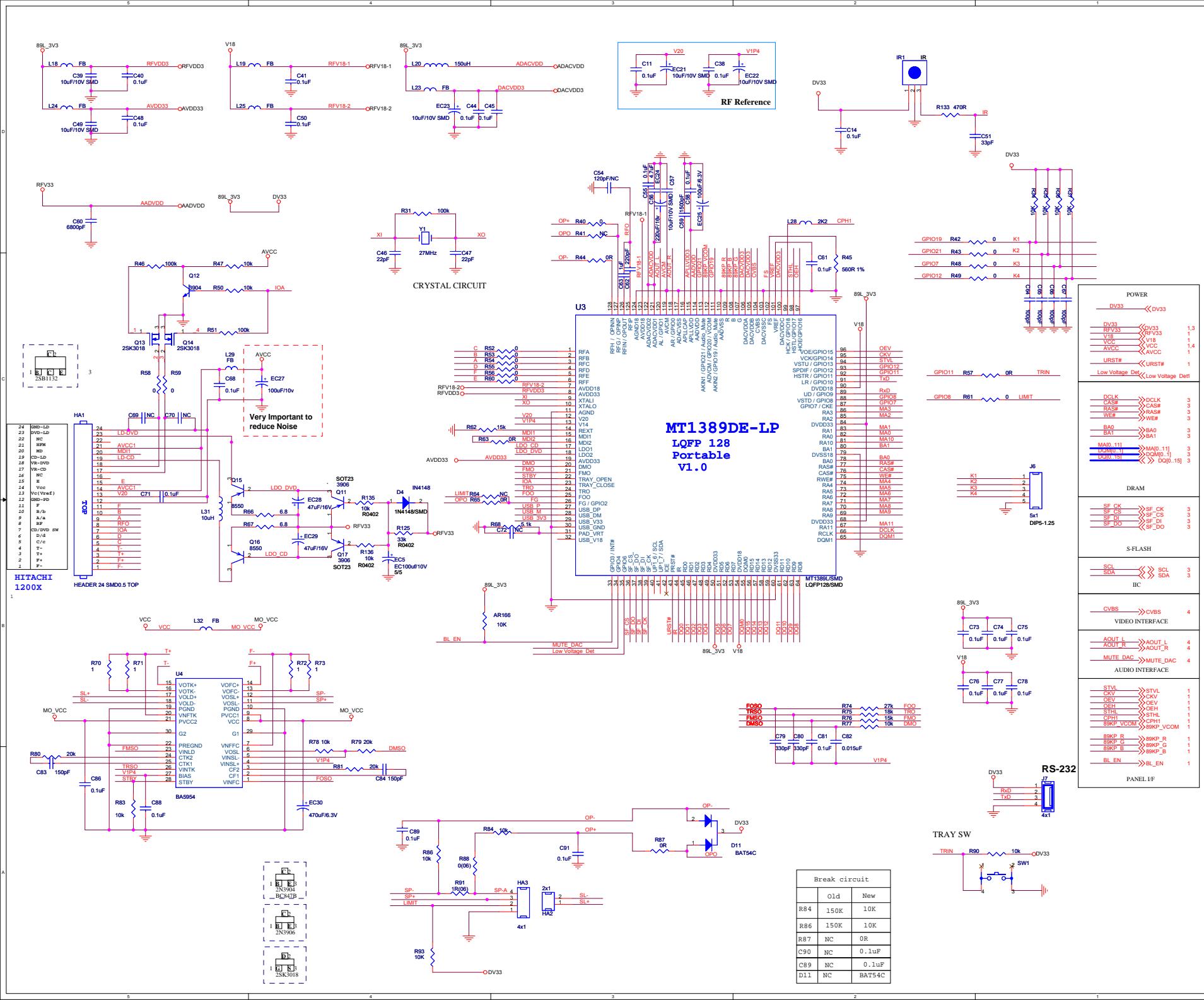
## 5.0 TROUBLESHOOTING

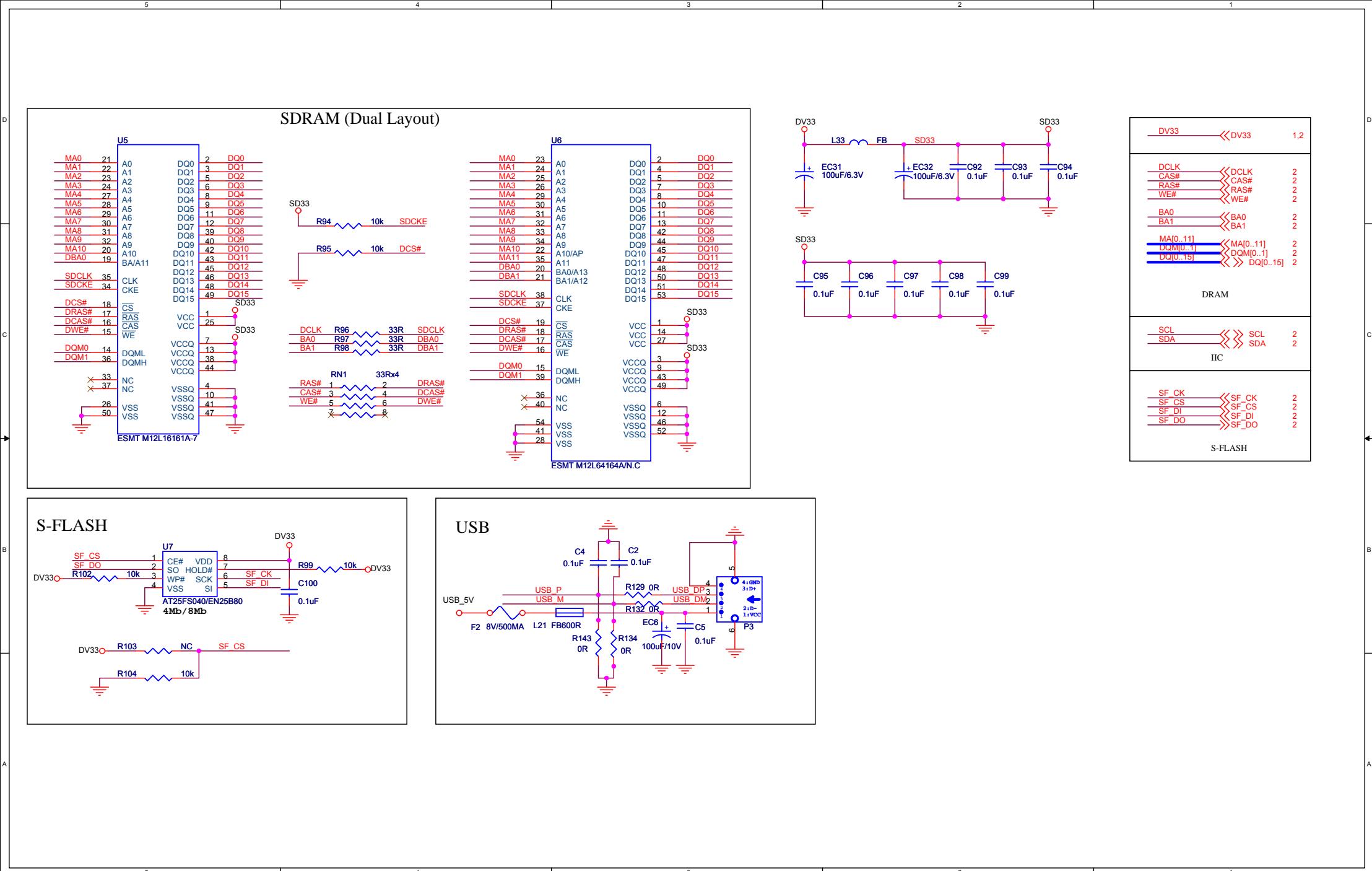
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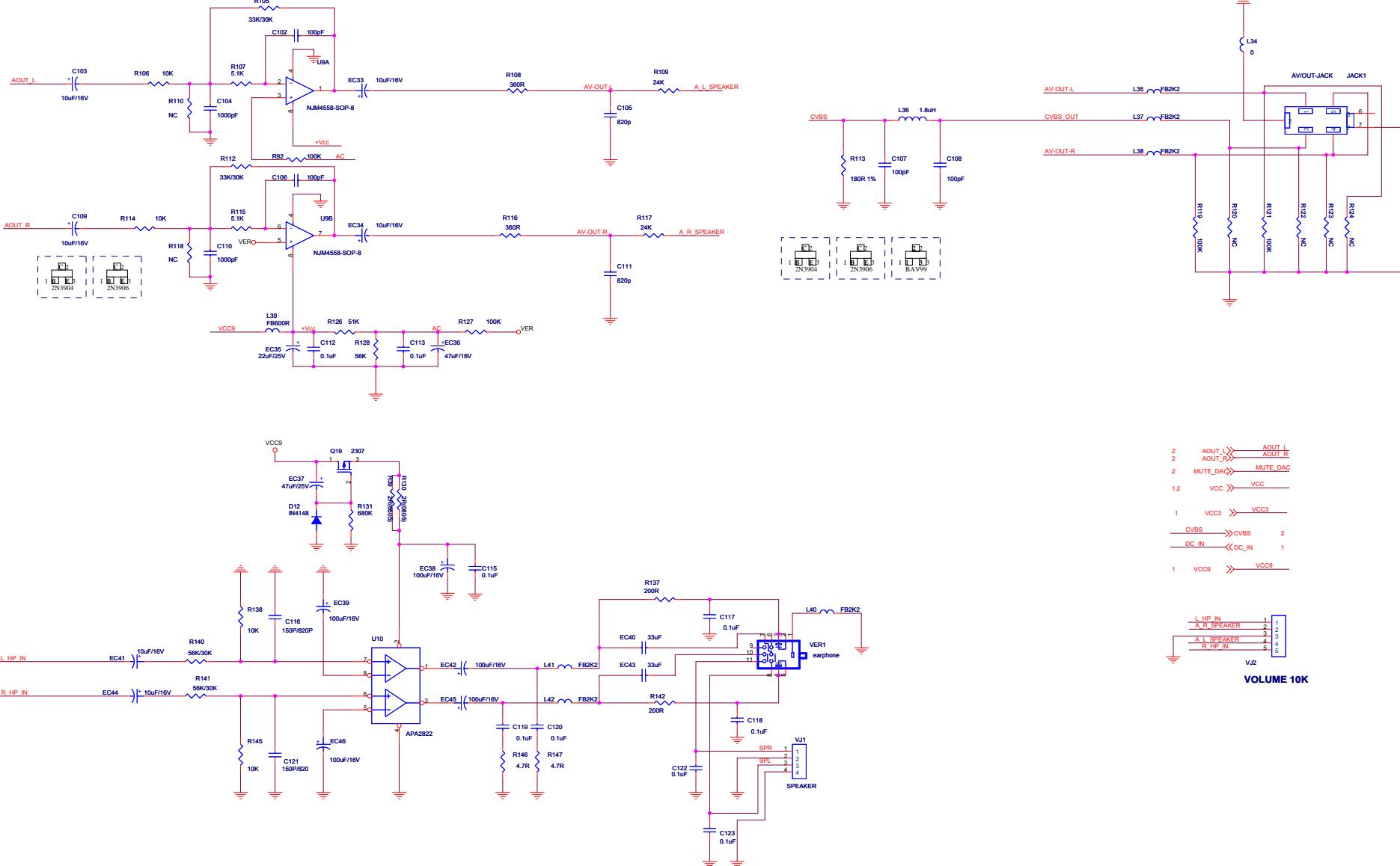
### SYMPTOM: KEY & BOTTON FAILURE

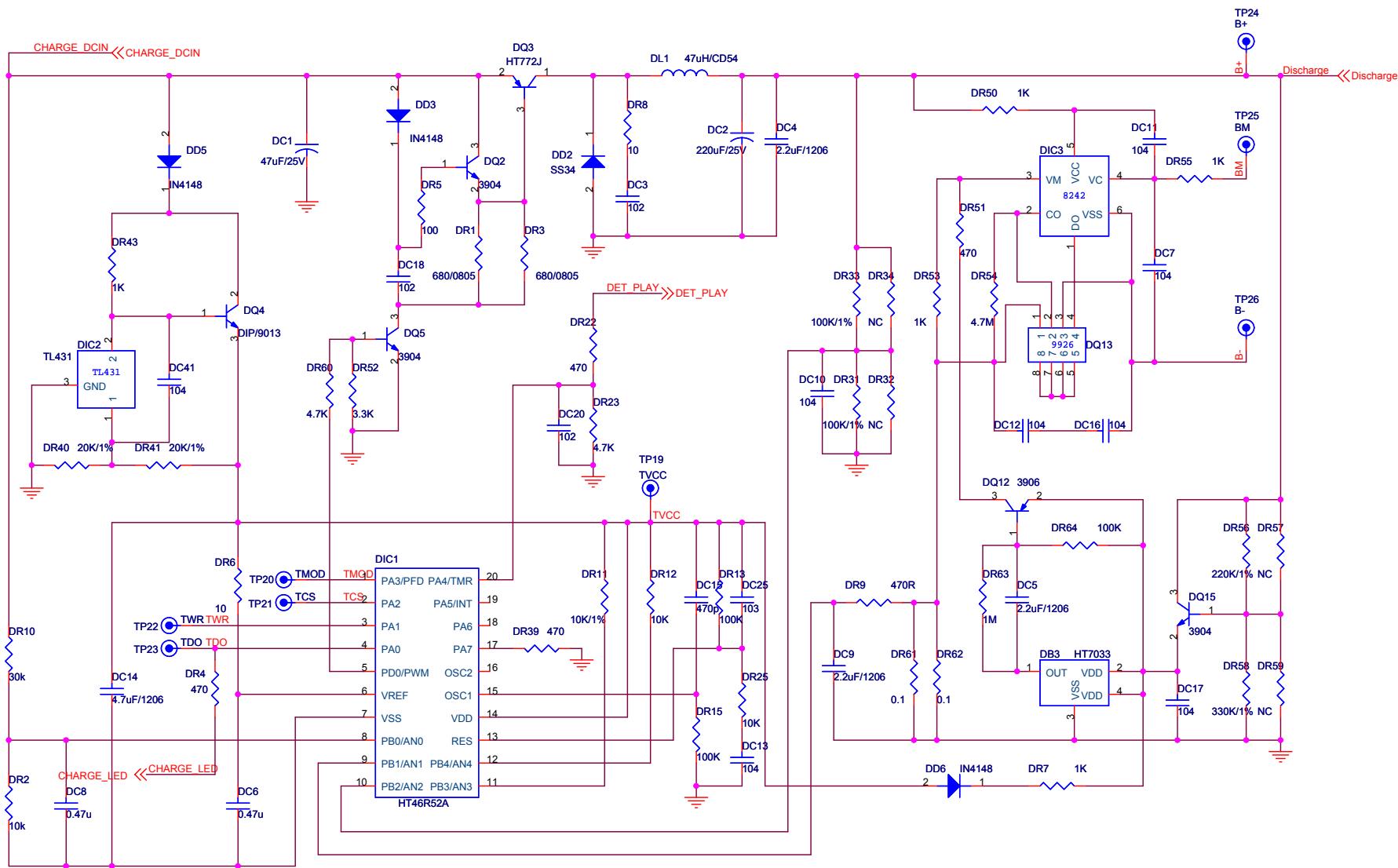


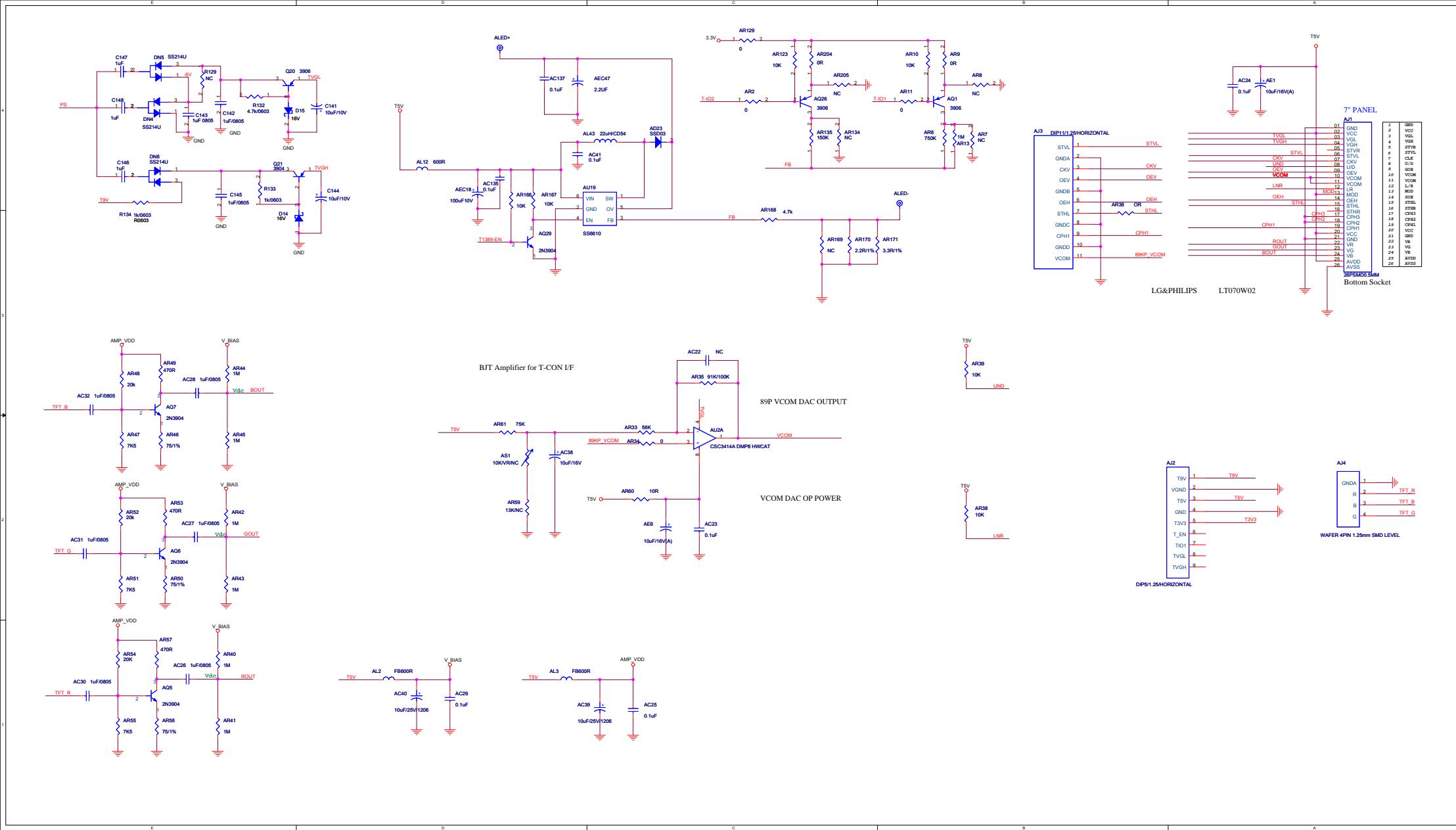


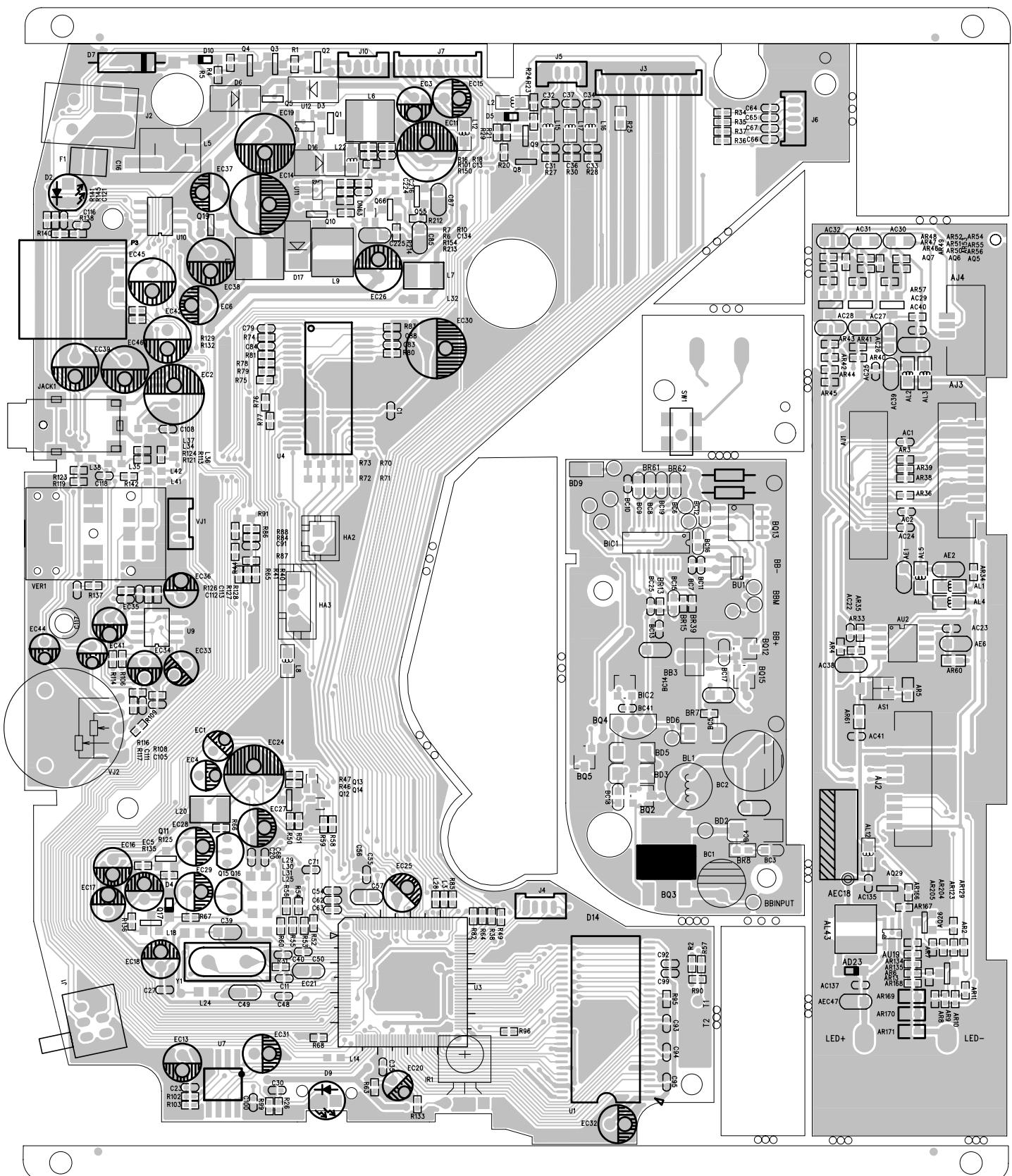


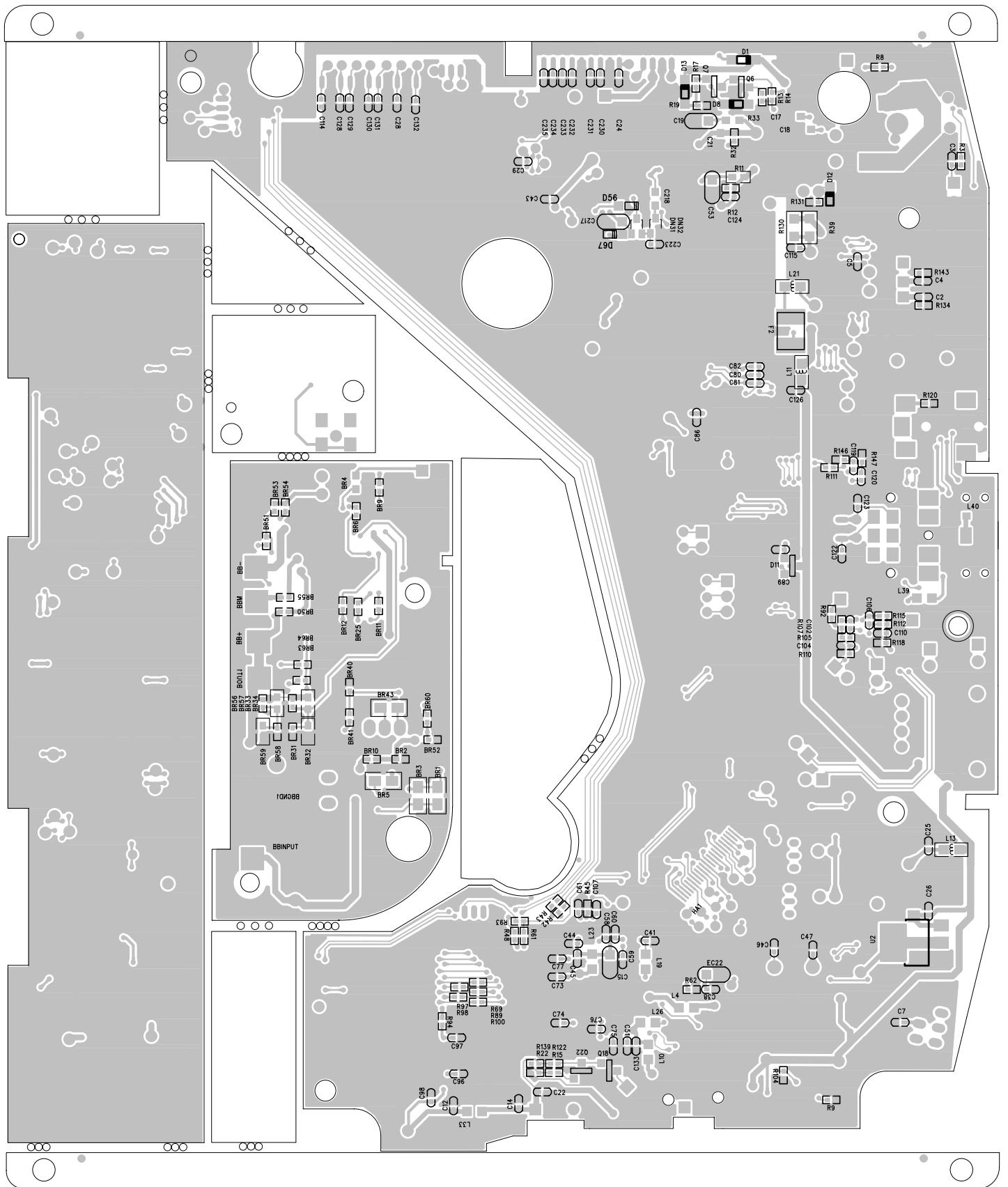


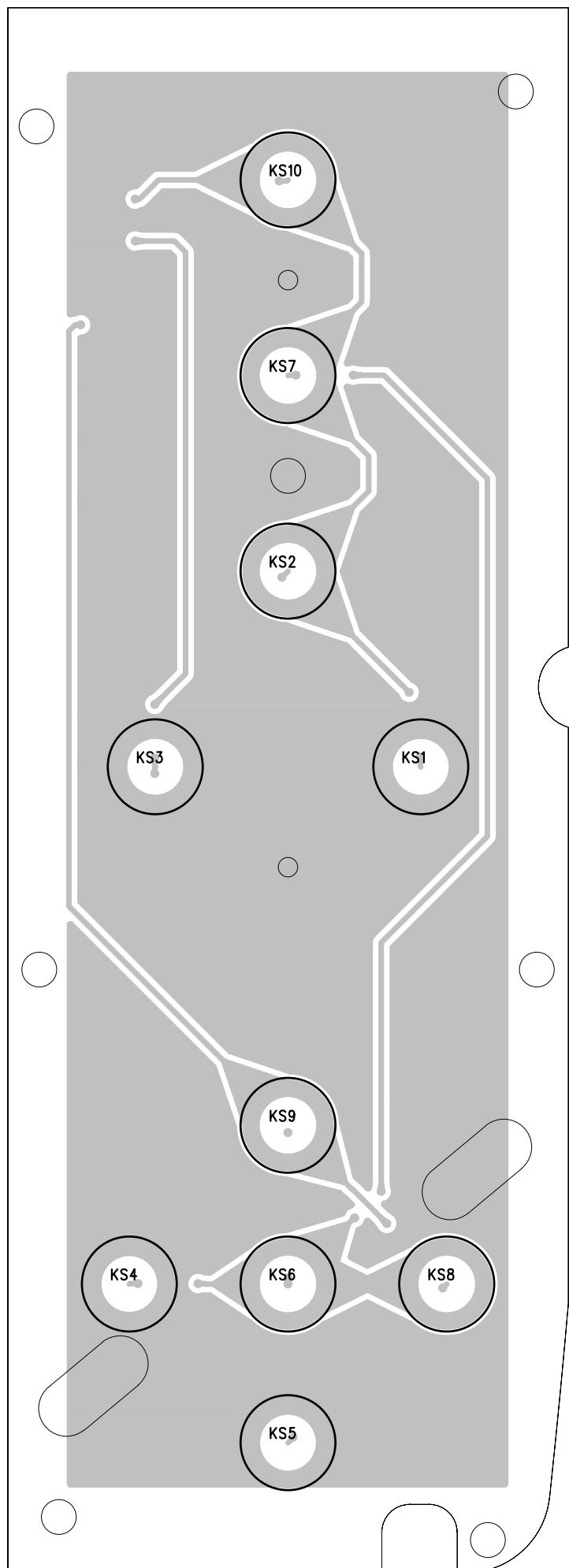


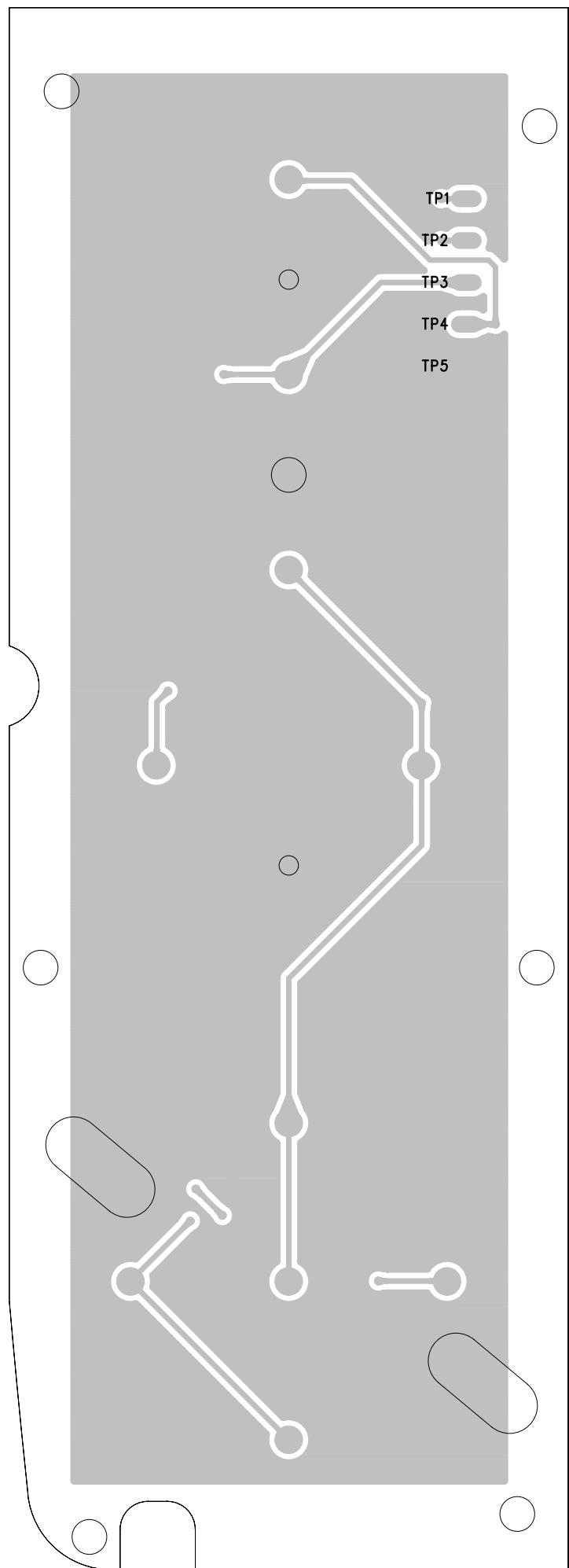












## 8.0 SERVICE PARTLIST

### Electrical Part List:

CTN	Service 12NC	Service Description	Photo	Pos. No.
PET736/55 PET736/77 PET736/98	996510027605	KEY PCBA		100
PET736/55	996510027608	DVD PCBA (MAINBOARD FOR /55)		120
PET736/77 PET736/98	996510027623	DVD PCBA (MAINBOARD FOR /77/98)		
PET736/55 PET736/77 PET736/98	996510027632	TFT PCBA		130
PET736/55 PET736/98	996510027612	BATTERY & BATTERY PCBA		140
PET736/77	996510030406	PET736/77LPA BATTERY FINAL ASS'Y		140
PET736/55 PET736/98	996510027633	7" HANNSTAR PANEL ASSY		200
PET736/77	996510030408	PET736/77LPA 7" PANEL FINAL		200
PET736/55 PET736/98	996510025884	DVD DECK		210
PET736/77	996510028871	DVD DECK PM2381D(SFHD850PH-S)		DECK

## 8.0 SERVICE PARTLIST

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### Mechanical Part List:

CTN	Service 12NC	Service Description	Photo	Pos. No.
PET736/55 PET736/98	996510002356	HINGE RIGHT TURNLMD2708 E		300
PET736/55 PET736/77 PET736/98	996510007682	OPEN KNOB		305
PET736/55 PET736/77 PET736/98	996510027618	POWER KNOB		310
PET736/55 PET736/77 PET736/98	996510027617	MONITOR REAR		315
PET736/55 PET736/77 PET736/98	996510027604	DISPLAY FRAME & SPEAKER		320
PET736/55 PET736/77 PET736/98	996510027622	DVD TOP CABINET		325
PET736/55 PET736/77 PET736/98	996510027607	BOTTOM CABINET		330
PET736/55 PET736/77 PET736/98	996510027619	DVD DOOR		335

## 8.0 SERVICE PARTLIST

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### Mechanical Part List:

CTN	Service 12NC	Service Description	Photo	Pos. No.
PET736/55 PET736/77 PET736/98	996510027611	PLAY KEY		340
PET736/55 PET736/77 PET736/98	996510027616	OK BUTTON		345
PET736/55 PET736/77 PET736/98	996510027609	DIR BUTTON		350
PET736/55 PET736/77 PET736/98	996510027613	LENS		355
PET736/55 PET736/77 PET736/98	996510002384	FFC 24P/0.5MM 130MM		400
PET736/55 PET736/98	996510027603	HOUSING 4P/1.25MM 100MM		410
PET736/55 PET736/98	996510027606	HOUSING 4P/1.25MM 150/250MM		420
PET736/55 PET736/98	996510027615	HOUSING 9P/1.25MM 130MM		430
PET736/55 PET736/98	996510027614	HOUSING 11P/1.25MM 115MM		440

## 8.0 SERVICE PARTLIST

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### Accessories Part List:

CTN	Service 12NC	Service Description	Photo	Pos. No.
PET736/55 PET736/98	996510028872	SW ADP 9V/1A VDE 4.0 BLACK JUNDA		ADAPT
PET736/77	996510012447	AC/DC ADAPTOR /77		ADAPTOR
PET736/55 PET736/77 PET736/98	996510004975	AV CABLE		AVCABLE
PET736/55 PET736/98	996510021031	CAR ADAPTER		CARAPPT
PET736/77	996510021031	CAR ADAPTER		CARADAPTOR
PET736/55 PET736/98	996510028869	REMOTE CONTROL		RC
PET736/55 PET736/77	996510012446	CAR MOUNT (ONLY FOR /55/77)		CARMOUNT

## **9.0 REVISION LIST**

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Version 1.0

- Initial release PET736/55, PET736/98

Version 1.1

- Add PET736/77 and update the 12nc