



# DIGITAL AUDIO PLAYER

YP-NDU

# **SERVICE** *Manual*



## DIGITAL AUDIO PLAYER



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# 1. Precautions

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1. Some semiconductor (“solid state”) devices are easily damaged by static electricity. Such components are called Electrostatically Sensitive Devices(ESDs); Examples included integrated circuits and Some field-effect transistors. The following techniques will reduce the occurrence of component damage caused by static electricity.
2. Immediately before handling any semiconductor components or assemblies, drain the electrostatic charge from your body by touching a known earth ground. Alternatively, wear a discharging wrist-strap device. (Be sure to remove it prior to applying Power-this is an electric shock precaution.)
3. After removing an ESD-equipped assembly, place it on a conductive surface such as aluminum foil to prevent accumulation of electrostatic charge.
4. Do not use freon-propelled chemicals. These can generate electrical charges that damage ESDs.
5. Use only a grounded-tip soldering iron when soldering ESDs.
6. Use only anti-static solder removal device. Many solder removal devices are not rated as “anti-static”; these can accumulate sufficient electrical charge to damage ESDs.
7. Do not remove a replacement ESDs from its protective package until you are ready to install it. Most replacement ESDs are packaged with leads that are electrically shorted together by conductive materials.
8. Immediately before removing the protective material from the leads of a replacement ESDs, touch the protective material to the chassis or circuit or assembly into which the device will be installed.
9. Minimize body motions when handling unpackaged replacement ESDs. Motions such as brushing clothes together or lifting a foot from a carpeted floor can generate enough static electricity to damage an ESDs.

# MEMO

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## 2. Specifications

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<b>Model</b>	YP-NDU
<b>Processor</b>	12MHz, 16bit CISC
<b>Memory Capacity</b>	Built-in Memory 32MB/64MB
<b>Power</b>	3V
<b>Battery</b>	Two AAA-Size/8-hr or longer playing time (with alkaline batteries)
<b>Dimensions (W x H x D)</b>	70x88x21mm(2.75"x3.46"x0.83")/76g(2.68 Oz; without batteries)
<b>Case</b>	Plastic / Aluminum
<b>File Transmission Speed</b>	Up to 1.5Mbps
<b>Memory Socket</b>	SmartMedia Card Socket
<b>Noise Ratio</b>	90dB(with A filter)
<b>Earphone Output Power</b>	7mW
<b>Output Frequency Range</b>	20Hz-20KHz

# MEMO

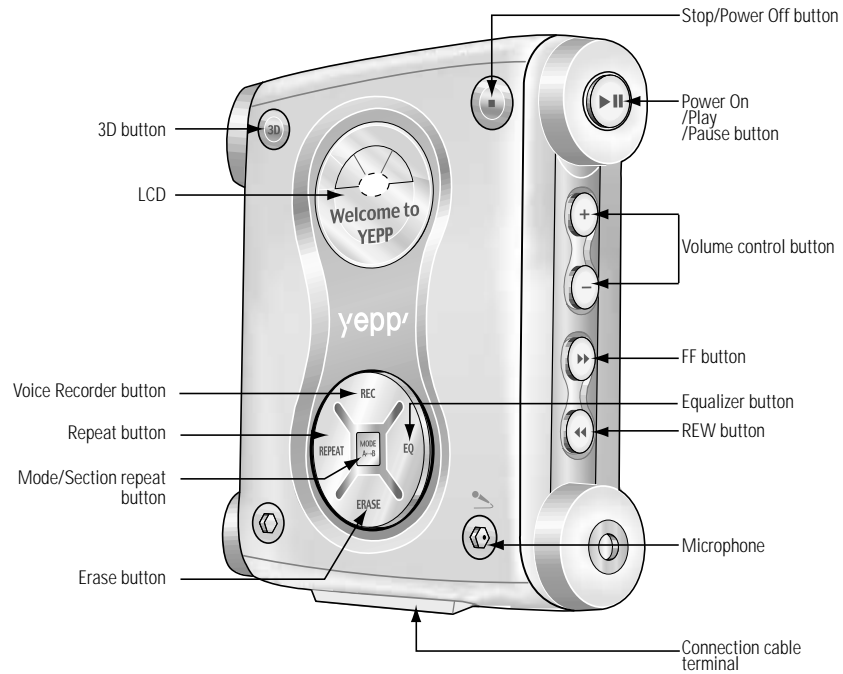
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### 3. Location of Contols

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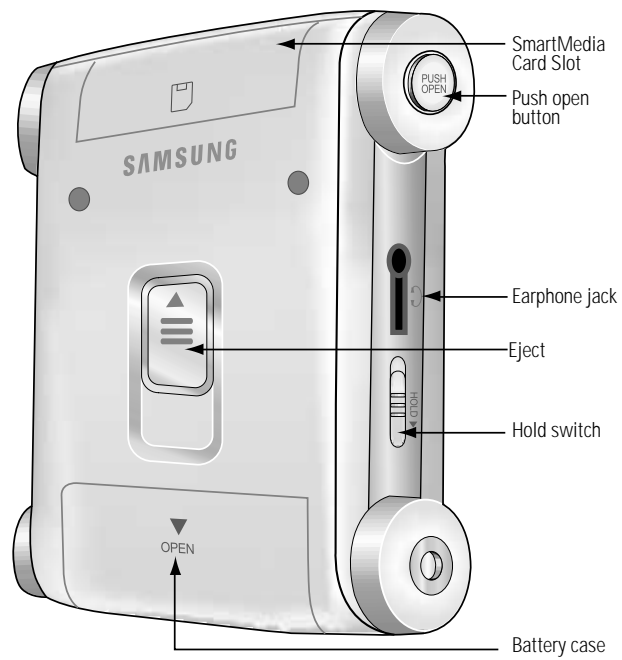
#### 3-1 Front Panel

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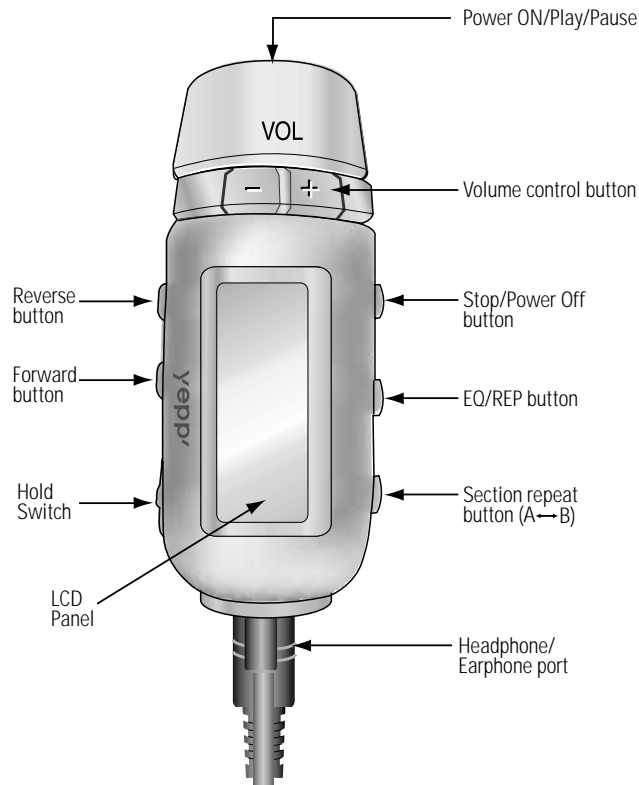


#### 3-2 Rear Panel

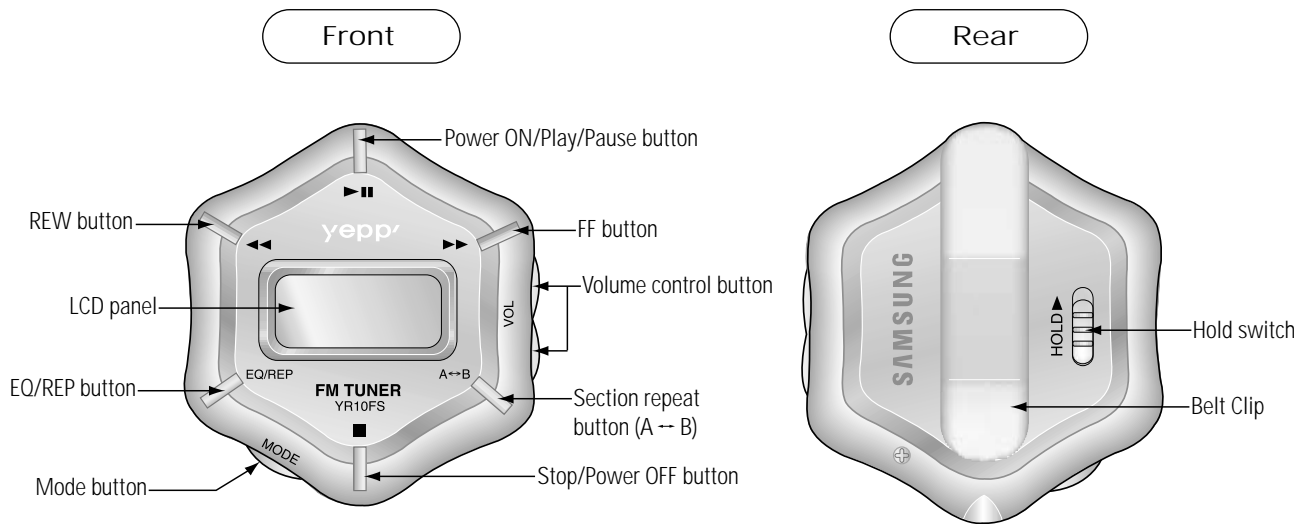
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### 3-3 Remote Controller



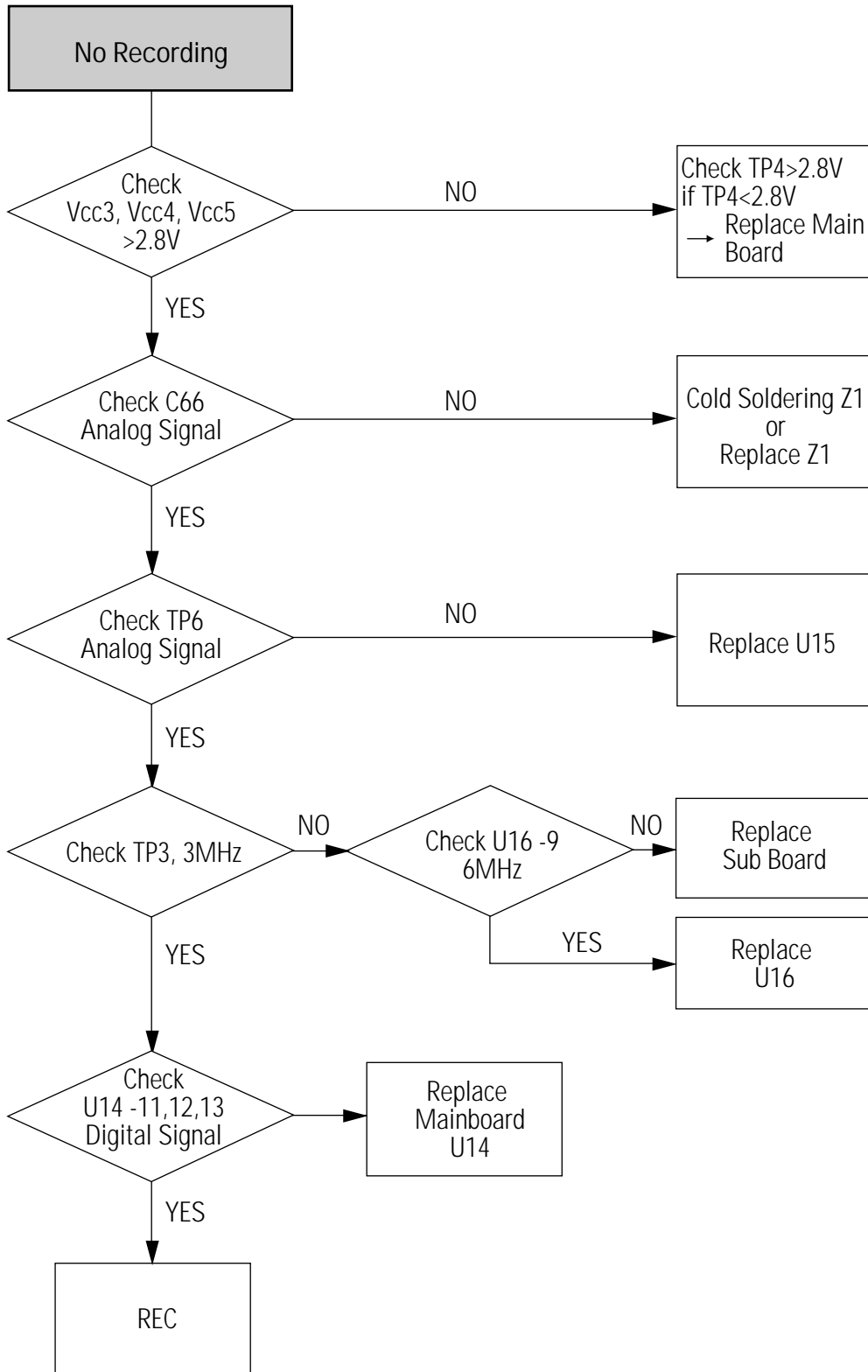
### 3-4 FM Remote Controller

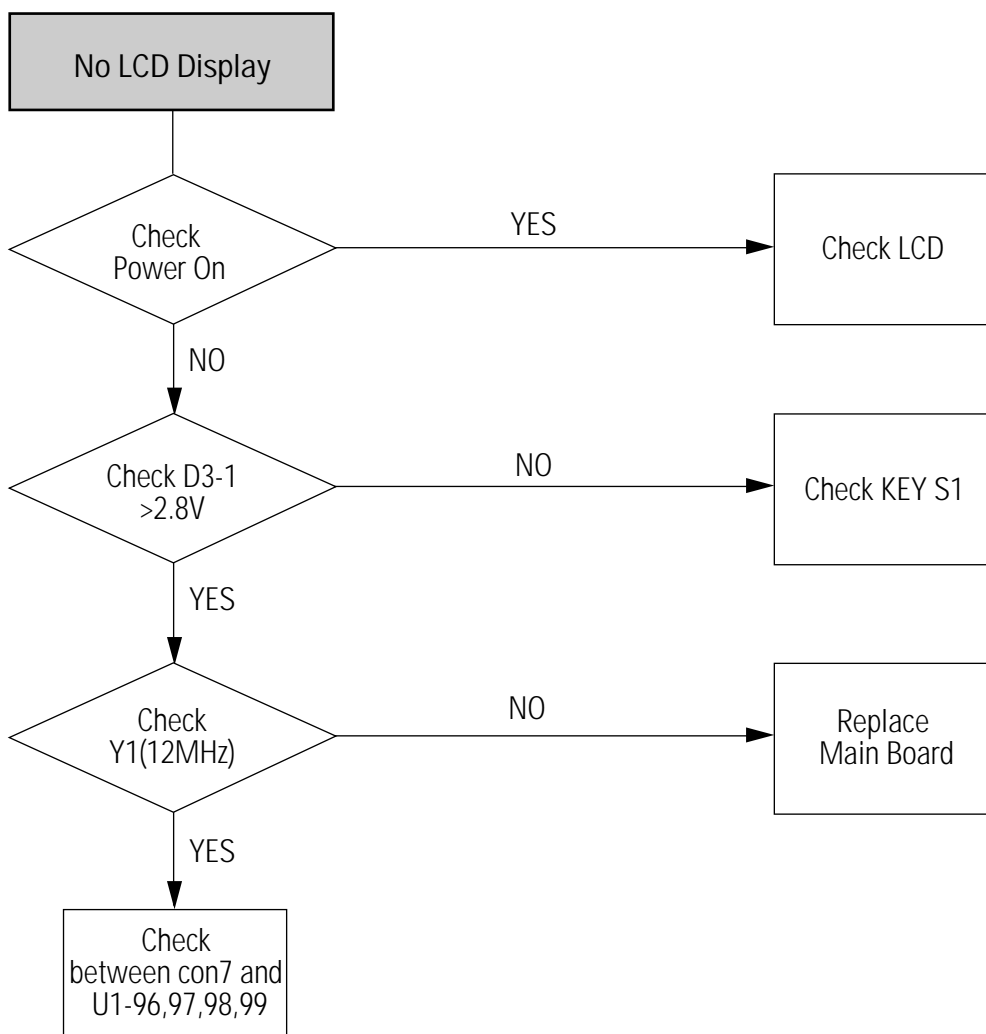


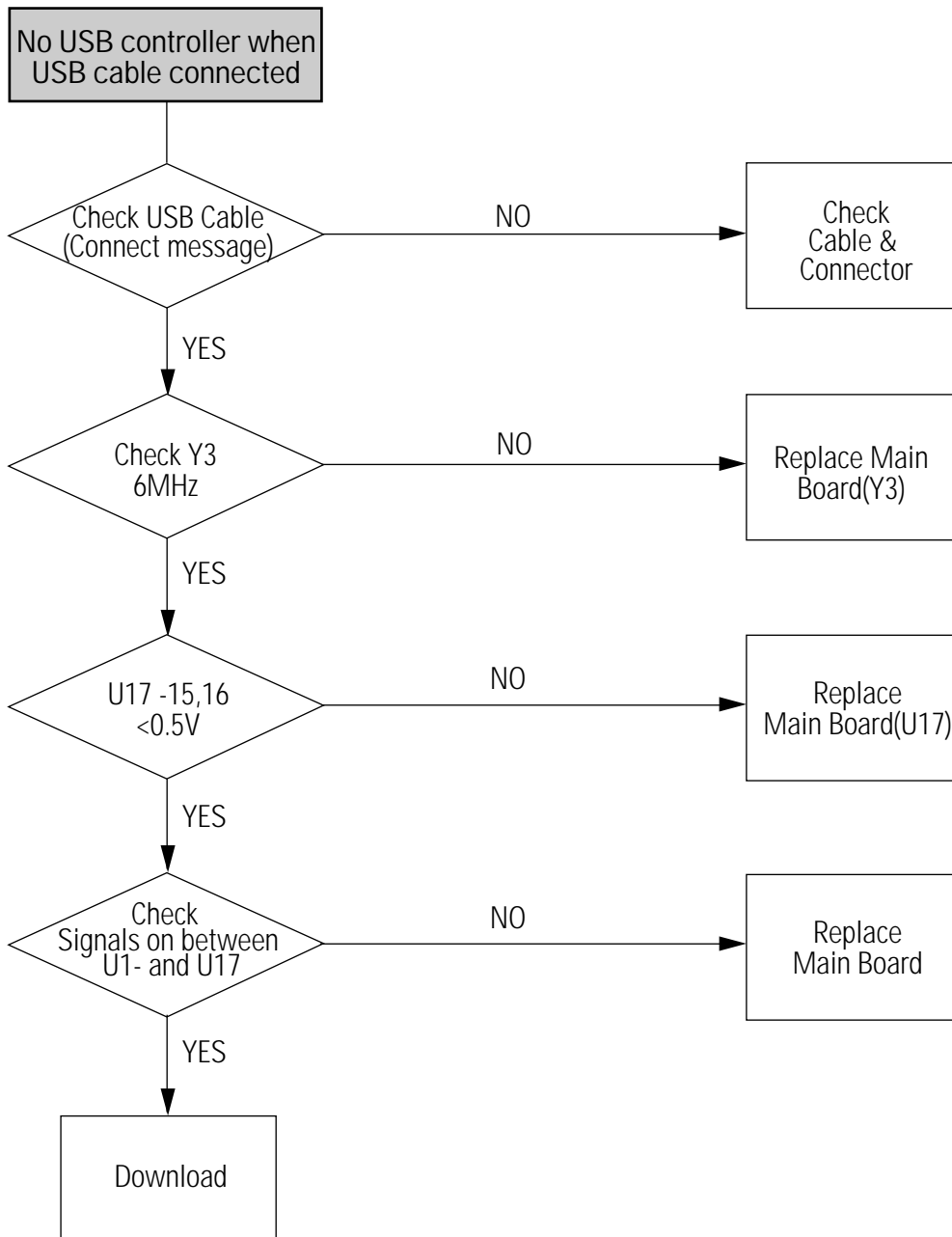
## 4. Troubleshooting

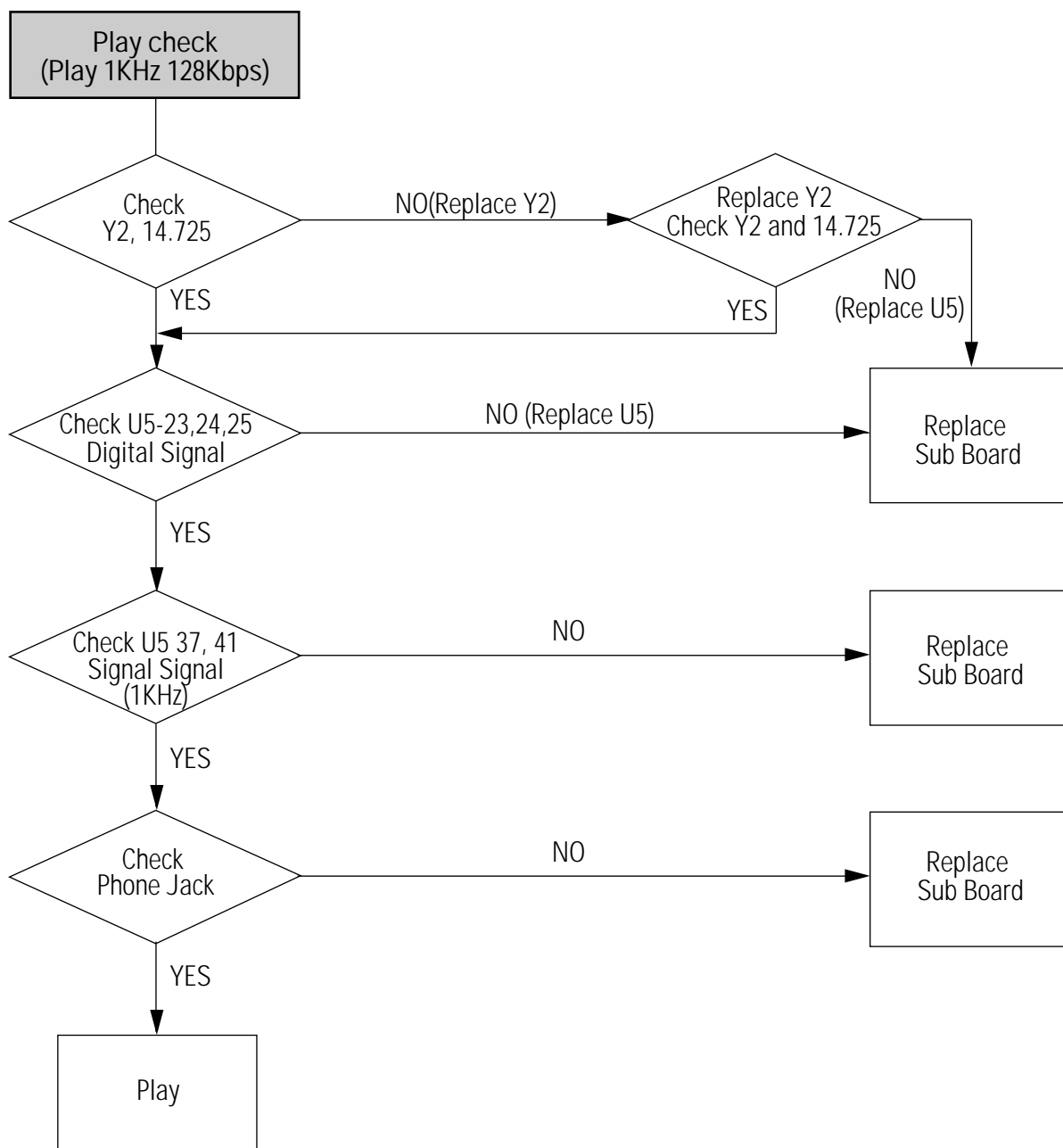
Symptoms	Possible Causes	Check Point	Action
No LCD	No Power	- L3(3V) - U1 Pin 3,13,35,80(3V)	Replace Main & Sub board
	Faulty LCD	- J1 Pln 1 (3V) - U1 Pin 98 (Signal)	Replace LCD
No Recording	Faulty Z1, U15, U14	- C66 (Signal)	Replace Z1
		- U15 Pln 5(3V)	Check Vcc5 Check TP4 (High)
		- U14 Pin 11,12,13 & TP3(Signal) - U14 Pin 6,16(3V)	Replace (U14) Replace Main & Sub
Faulty recognition of memory	- Open or Short PCB - Faulty Flash Memory	- Ports between U2 and memory chip (smart media card socket) - Mechanical parts	Soldering Replace Flash Memory
Faulty switch operation	- Cold soldering on switch - Open PCB pattern	- Check TP1, TP2 - Open/Short test of switch - Mechanical parts	Soldering Replace Switch Replace main board
Faulty down load	- Open or Short on switch - Faulty J6	- Check between U1 and U17 - Cold soldering on J6	Soldering
Faulty switch operation	- Open or Short on switch - Open PCB pattern	- Open / Short test of switch - Mechanical parts	Soldering Replace Switch
Faulty remote control button	- Faulty Remote control - Cold soldering	- U1 Pin 17	Replace remote control

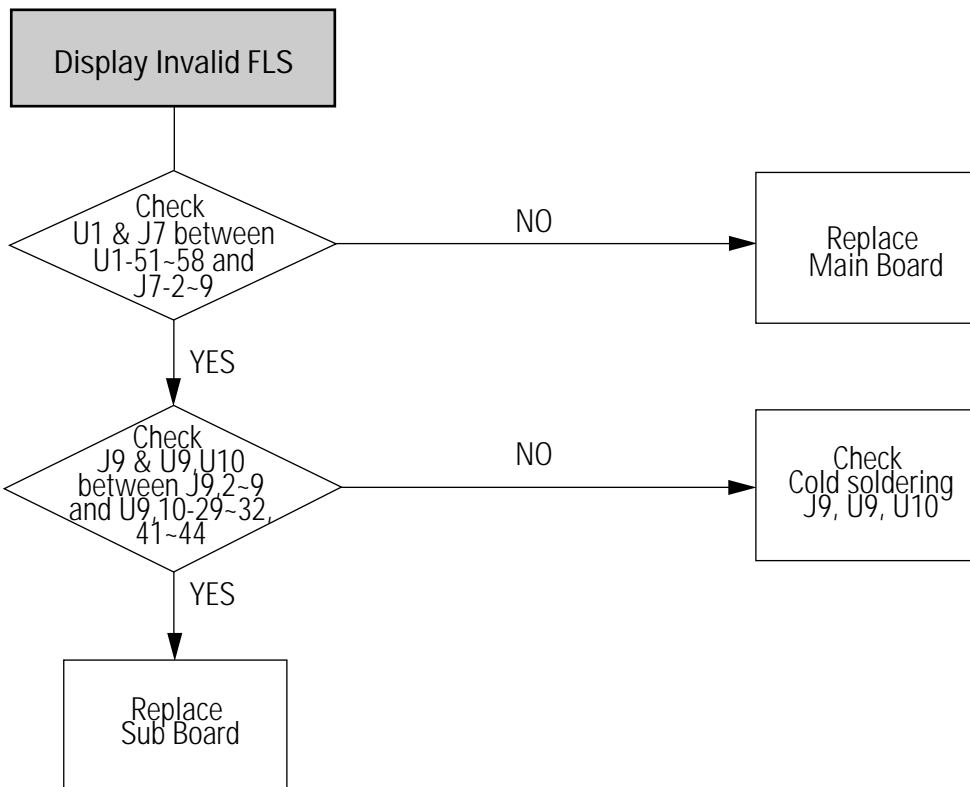




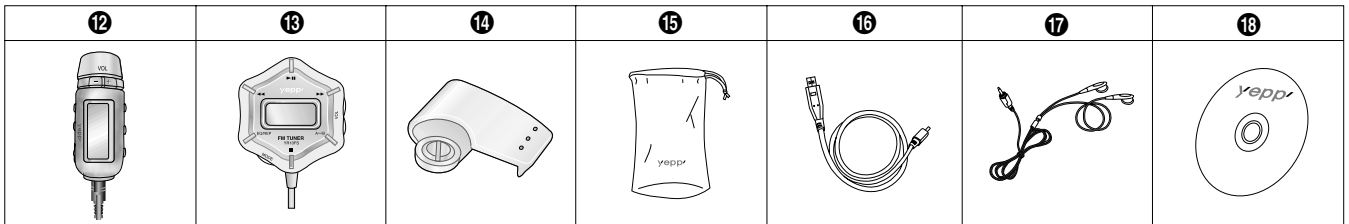
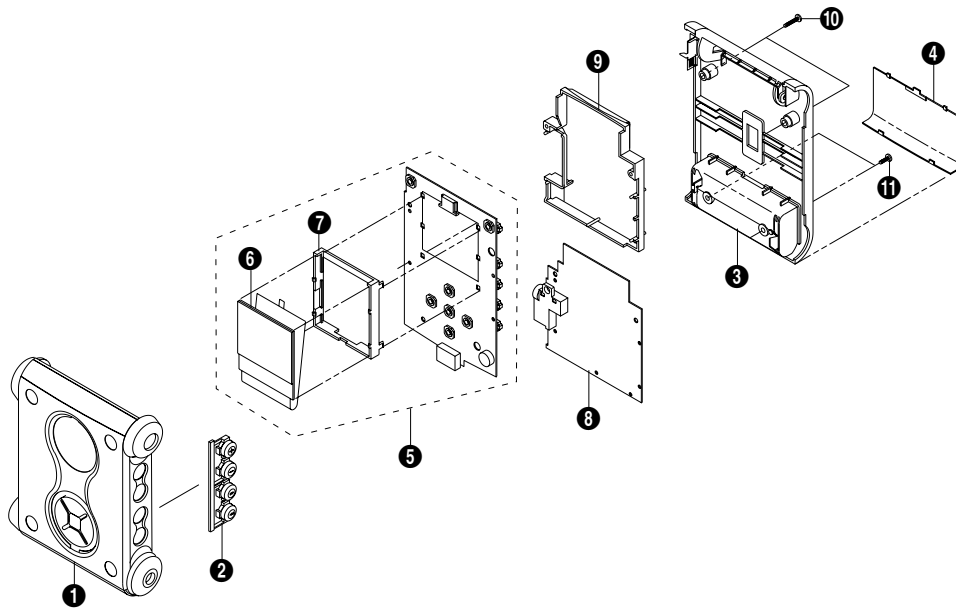








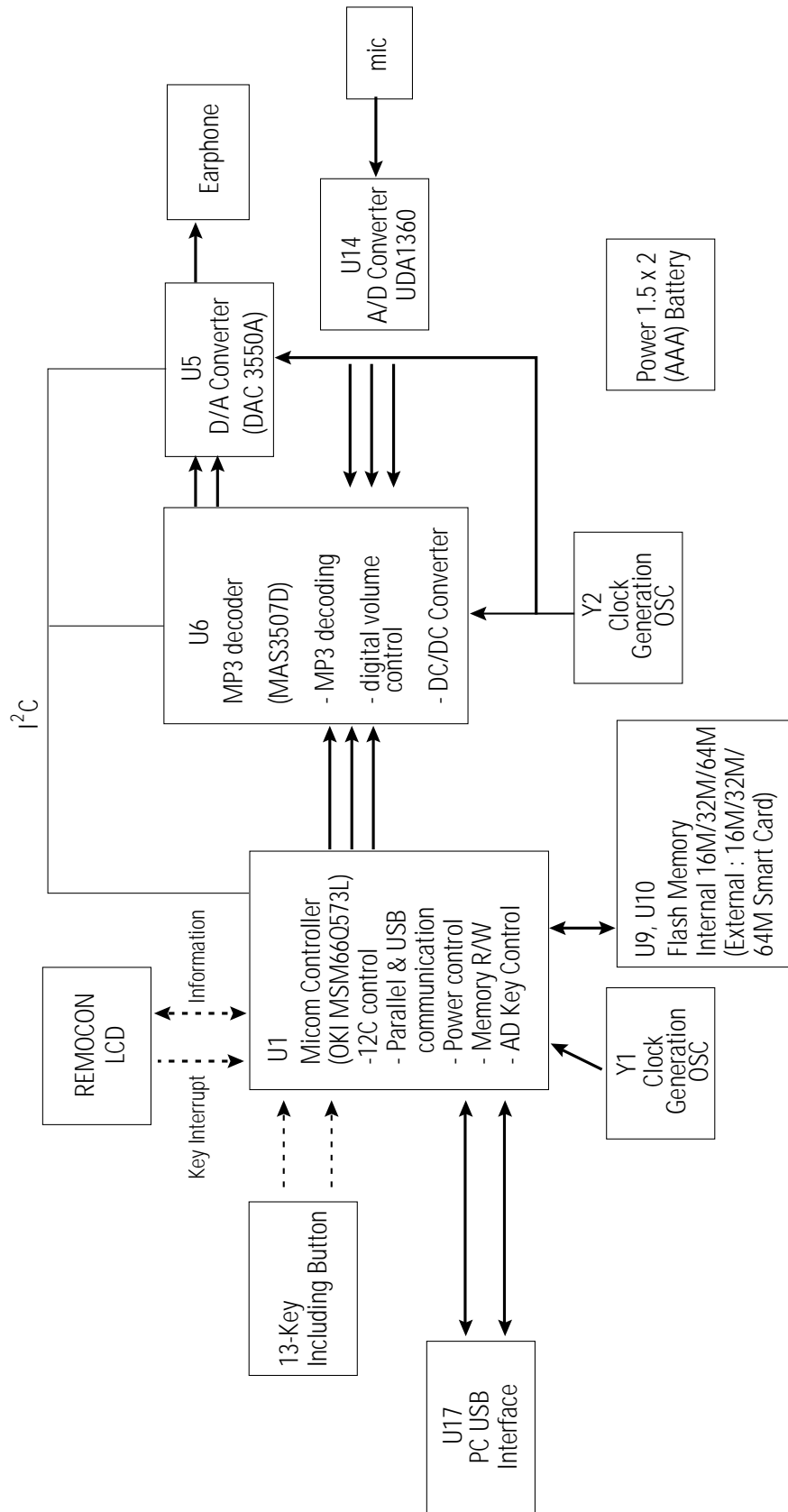
## 5. Exploded View and Parts List



Loca. No.	Parts No.	Description ; Specification	Remark
1	AH97-00477B	ASSY-TOP;-YP-NDU,USB	
2	AH72-00038A	KNOB-4;YP-ND,ABS,-,-,1,-,Cr-PLATING	
3	AH97-00476B	ASSY-BOTTOM;ASSY,YP-NDU,USB	
4	AH72-00029A	COVER-BATTERY;YP-ND,ABS,SILVER,-,-,1,-,C	
5	AH92-01010A	ASSY PCB-MICOM;YP-NDU(EUROPE2.0), MIC(ENG2.0)	EUROPE ONLY
	AH92-00888A	ASSY PCB-MICOM(CHA);YP-NDU(FM), MIC(CHA)	CHINA/TAIPEI/HONG KONG ONLY
	AH92-00884A	ASSY PCB-MICOM;YP-NDU(FM), MIC(ENG)	OTHERS AREA
6	AH82-00079A	A/S MATERIAL ASSY;YP-NDP/U,Samsung,24 Pa	OTHERS AREA
	AH07-00045A	LCD;DCM-08B3FT-09,YP-MF64,-,30x60	CHINA/TAIPEI/HONG KONG ONLY
7	AH72-00044A	HOLDER-LCD B;YP-ND,ABS,GRY,-,-,1,-,ENG	OTHERS AREA
	AH72-00045A	HOLDER-LCD B;YP-ND,ABS,GRY,-,-,1,-,KOR	CHINA/TAIPEI/HONG KONG ONLY
8	AH92-00882A	ASSY PCB-SMC;YP-NDU(FM),SMC(64MB)	
9	AH72-00046A	CHASSIS-FRAME;YP-ND,ABS,GRY,-,-,1,-,FRAM	
10	6003-001174	SCREW-TAPTITE;PH,+B,M1.7,L13,NI PLT,SWR	
11	6003-001173	SCREW-TAPTITE;PH,+S,M1.7,L6,NI PLT,SWCH	
12	AH59-00065A	REMOCON;YP-NE/ND/MF,SAMSUNG,56*24*24mm	
13	AH59-00100A	REMOCON;YR-10FS,SAMSUNG,FM Tuner,uPD75	EUROPE ONLY
	AH59-00073A	REMOCON-FM;YR-10FS,SAMSUNG,55mm,V850e,9e	OTHERS AREA
14	AH97-00645A	ASSY-BELT CLIP;ASSY,YP-NDU,-	
15	AH69-00296A	BAG ACCESSORY;YP-ND Series,PANDA SUEDE,3	
16	AH39-00208A	CABLE FORM;C17-004-6436E,YP-NDU,4P,1300m	
17	AH59-00066A	SPEAKER SYSTEM;YP-ND/NE,SB-900X,0.22V,0.	
18	AH80-00003A	INSTALL;YP-ND,Export,CD,Pa	EUROPE ONLY
	AH80-00011A	INSTALL-CD EUROPE;YP-NDU,-,CD MASTER,EUR	FM REMOTE ONLY (Except U.S.A.)
	AH80-00019A	INSTALL-CD EUROPE;YP-NDU,-,CD MASTER,EUR (INSERT MAC VER.)	FM REMOTE ONLY (Except U.S.A.)
	AH80-00016A	INSTALL-CD USA(128KBPS);YP-NDU,USA FULL	U.S.A. ONLY
	AH80-00010A	INSTALL-CD JAPAN;YP-NDU,-,CD MASTER, JAPAN	JAPAN ONLY

# MEMO

## 6. Block Diagram



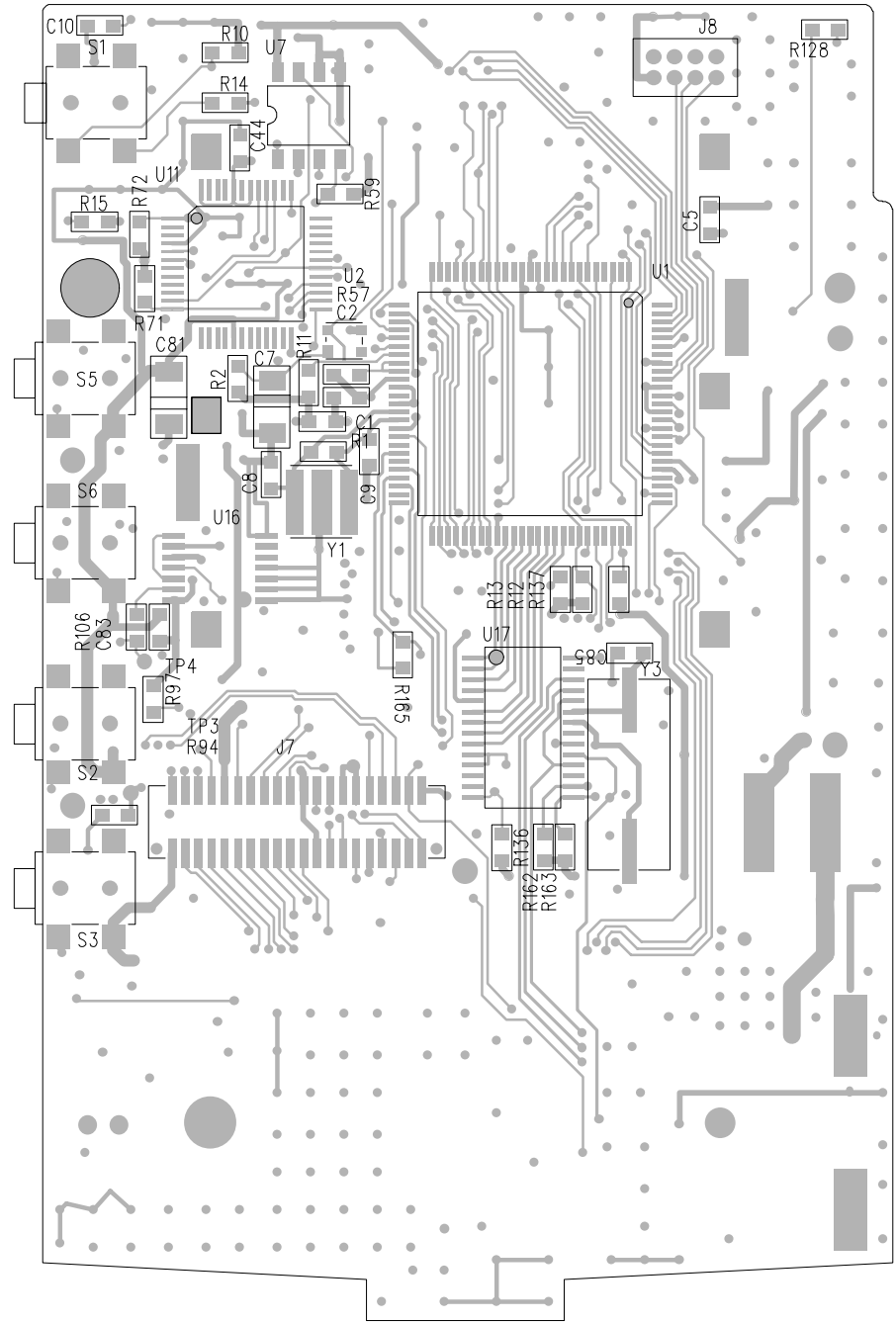


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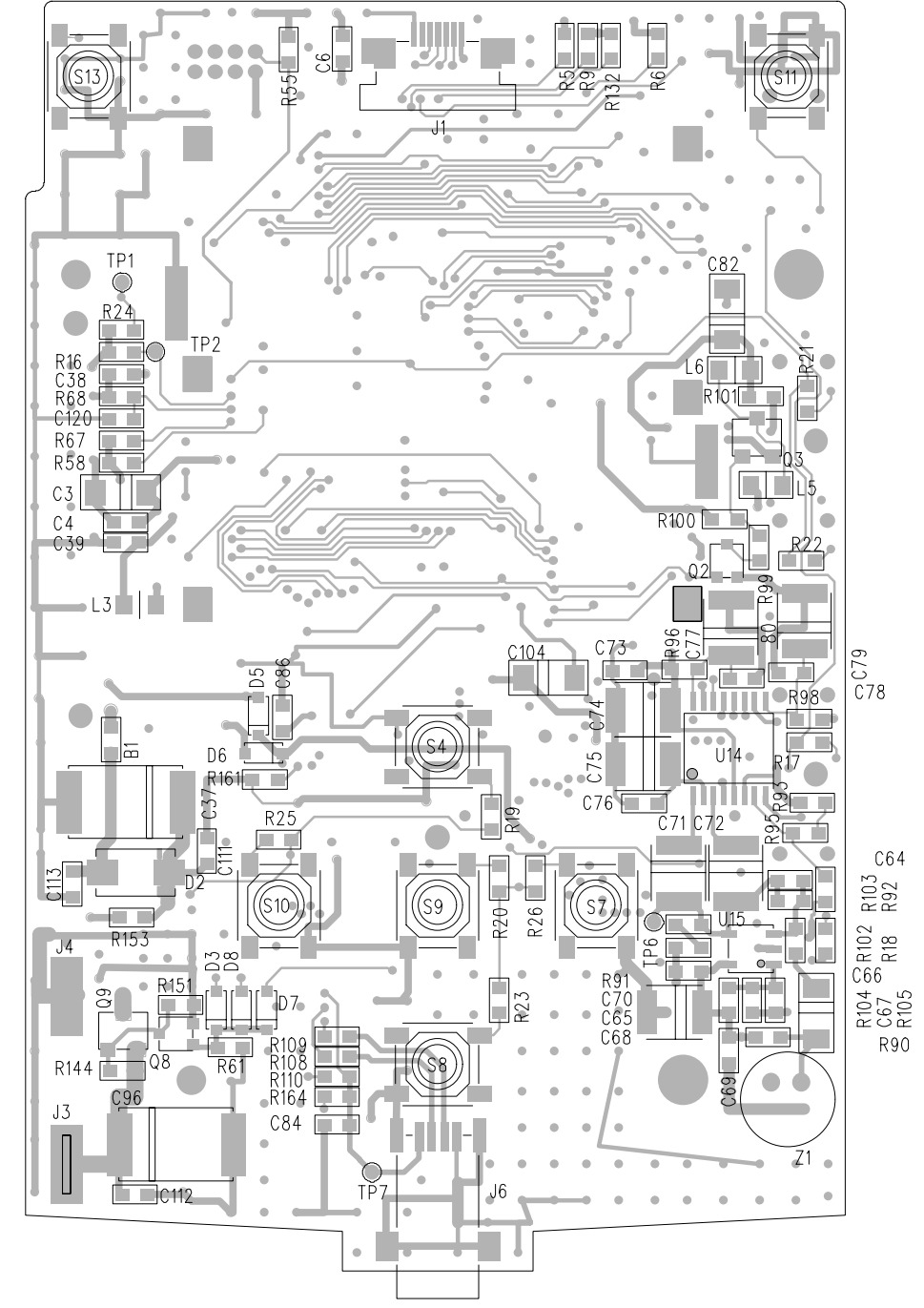
# 7. PCB Diagrams

## 7-1 Micom

COMPONENT SIDE

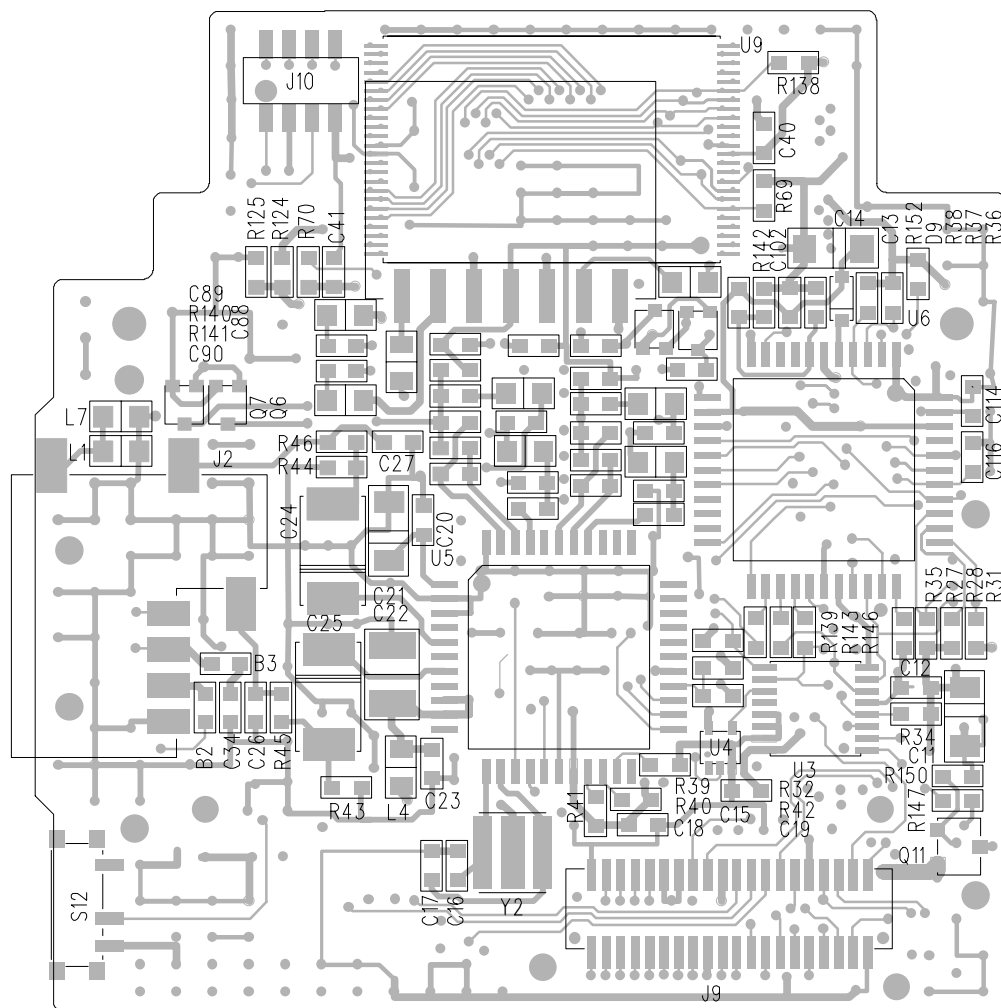


SOLDER SIDE

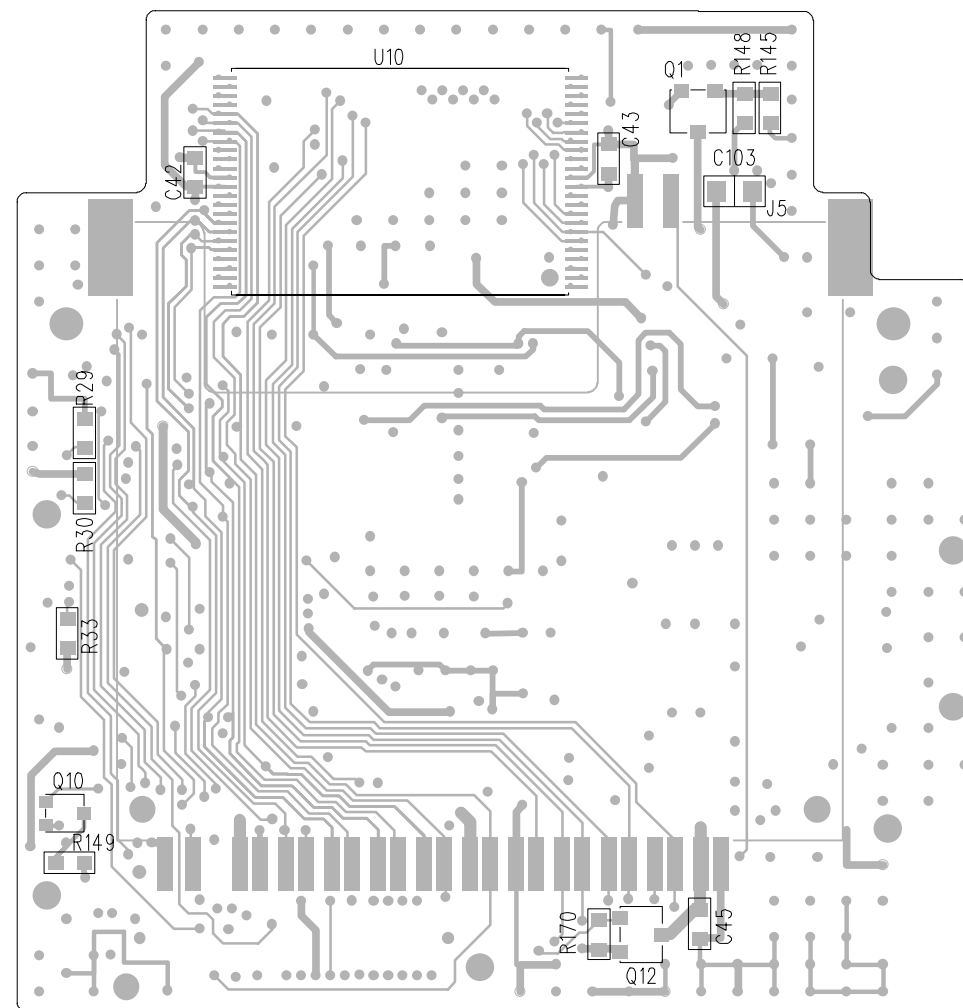


### 7-2 SMC

**COMPONENT SIDE**



**SOLDER SIDE**



# 8. Schematic Diagrams

## 8-1 Micom

