YEPP

Model Name : YP-P3
Model Code : YP-P3JCB/XEE
YP-P3JCB/XEF

SERVICE Manual

YEPP

YP-P3

CONTENTS

Refer to the service manual in the GSPN (see the rear cover) for the more information.

GSPN (Global Service Partner Network)

Area	Web Site
North America	service.samsungportal.com
Latin America	latin.samsungportal.com
CIS	cis.samsungportal.com
Europe	europe.samsungportal.com
China	china.samsungportal.com
Asia	asia.samsungportal.com
Mideast & Africa	mea.samsungportal.com

Contents

1. Precaution

1-1 Safety Precautions

1. Do not use liquid or an aerosol cleaner when wiping dirt from the case lid. Instead, use a dry cloth.
2. Do not use attachments which the company doesn’t recommend. This may cause danger or damage.
3. Do not use the product near a source of water, e.g., bathtub, bucket, sink, washing machine, swimming pool, or lake.
4. Power: Use only the type of battery specified on the label.
5. Do not insert any objects or liquid into the product. This may cause failure or malfunctioning.
6. A technician must use standard parts when replacement is required. Using non-standard parts may cause failure.

1-2 Static Electricity Precautions

Some semiconductor devices may easily be damaged by static electricity. In general these devices are called Electro-static Devices (ESD). Representative examples of ESDs are IC, FET and semiconductor chips. The following procedure must be performed to reduce damage to devices due to static electricity.

1. Ensure that all electric charges are discharged from your body by using grounded materials when dealing with semiconductor devices or equipment with semiconductor devices. Another way is to use a commercialized anti-static electricity bracelet. It must be removed, however, due to potential impact before applying power to equipment under testing.

2. After removing an electronic device with an ESD, place it on a conductible surface, e.g., aluminum foil, to prevent a build-up of electric charge, or exposure of the device.

3. Make sure to use a soldering iron with its end grounded to solder the ESD or to remove soldering.

4. Minimize movements of the body when dealing with an ESD which is not wrapped for replacement. (Otherwise it may cause static electricity due to unconscious actions, e.g., friction between your clothing, moving a foot on the carpet.)

2. Product Specification

2-1 Product Feature

■ Stylish Slim Design

- 9.9mm Stylish Slim Design
- Tempered glass touch screen + beautiful metal design.
- Wide 3" screen with high portability and multi format playback.

■ Emoture™2.0 + Widgets + Haptic

- Offers a more convenient touch interface than Emoture™1.0
- Offers color icons and stylish GUI, and enables user to move icons freely.
- The menu screen can be neatly personalized with the widget function using Flash.
- A vibration motor maximizes the feeling of touching the product.

■ Supports an external speaker

- User can listen to music without earphones anywhere, as an external speaker is supported.

2-2 Specifications

■ Basic Specification

Rating		DC 5.0V / 1A
Built-in Battery Power		610mAh / DC 3.7V
File Compatibility		AUDIO: MPEG1/2/2.5 Layer3 (8kbps ~ 320kbps, 22kHz ~ 48kHz), WMA(8kbps ~ 320kbps, 8kHz ~ 48kHz), Ogg (Q-1 ~ Q10), FLAC (Free Lossless Audio Codec), AAC-LC (16kbps ~ 256kbps, 8kHz ~ 48kHz), AAC-Plus (16kbps ~ 256kbps, 16kHz ~ 44.1kHz), Enhanced-AAC-Plus (16kbps ~ 56kbps, 32kHz ~ 44.1kHz) VIDEO: AVI/SVI: MPEG-4 Video (480x272) Simple Profile, MP3 Audio (44.1KHz, 128kbps), WMV: WMV9 Video (480x272) Simple Profile, WMA Audio, Max bitrate 860kbps MP4: H.264/AVC Video (480x272) Baseline Profile @ Level 1.3, AAC/AAC+ Audio IMAGE: JPEG (Baseline, Progressive), BMP (Max 32bit), PNG, GIF (89a/87a)
Earphone Output		20mW/Ch. (based on 16Ω)
Output Frequency Range		20Hz ~ 20kHz
Signal to Noise Ratio		89dB with 20kHz LPF (based on 1kHz 0dB)
Play Time		Music: Max. 30hours (MP3 128kbps, Volume: 15, Normal Sound Mode, LCD Off) Video : Max. 5hours (Brightness 5, Volume: 15, Normal Sound Mode)
Temperature Range for Operation		-5 ~ 35˚C (23 ~ 95˚F)
Case		Tempered glass, Plastic, Aluminum
Weight		96g
Dimensions (WxHxD)		52.7 x 102 x 9.9 mm
Speaker	**Rated Output**	0.8W Mono
	Impedance	8Ω
	Frequency Range	400Hz ~ 20kHz
FM	**FM Frequency**	87.5 ~ 108.0MHz
	FM Signal to Noise Ratio	45dB
	FM T.H.D	0.8%
	FM Useable Sensitivity	5dB

2-3 Specifications Analysis

Model Name		YP-P3	YP-P2
Photo			
Basic	Storage Type	Flash Memory (MLC)	Flash Memory (MLC)
	LCD Display	Size: 3.0" 16.7M WQVGA Display Color: 16.7M LCD (Dot pitch: 0.0455(H) x 0.1365(V)) Resolution: 480RGB(H) x 272(V)	Size: 3.0" 16.7M WQVGA Display Color: 16.7M LCD (Dot pitch: 0.0455(H) x 0.1365(V)) Resolution: 480RGB(H) x 272(V)
	Platform	TCC79x (Telechips)	TCC78x (Telechips)
	Battery Type	Li-Polymer rechargeable battery	Li-Polymer rechargeable battery
	Battery Capacity	Built-in rechargeable battery capacity 610 mAh	Built-in rechargeable battery capacity 830 mAh
	Playing Time	35 hrs when using the earphones (MP3 128 kbps, Volume 20, Normal Sound Mode), Play Movies for 5 hrs	35 hrs when using the earphones (MP3 128 kbps, volume 20, normal sound mode), play movies for 5 hrs
	Color	Black/Silver	Black/White/Red Wine
	Capacity	4G/8G/16G/32G	2G/4G/8G/16G
	Case	Tempered glass, Plastic, Aluminum	Plastic, Aluminum
	Widgets	○	X
	Colorful + Moving GUI	○	X
	HAPTIC	○	X
	Speaker Output	○ (Mono)	X
Files Supported	MP3	○	○
	WMA	○	○
	OGG	○ (up to Q10)	○ (up to Q10)
	WAV	X	X
	AAC	○	X
	Audible	X	X
	JPEG	○	○
	FLAC	○	X
	APE	X	X
	WMV	○	○
	MPEG4 (SVI)	○	○
	SWF	○	X
	Others	X	X
DRM	Netsync (Korea)	○	○
	SKT Melon (Korea)	X	X
	WMA DRM	○	○
	Janus	○	○

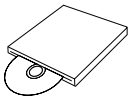
※ ○: application, X: non-application

Model Name		YP-P3	YP-P2
Photo			
Sound Field	DNSE	DNSE 3.0 (General, Studio, Rock, Classical, Jazz, Ballad, Club, R&B, Dance, Cafe, Concert, Cathedral)	DNSE 2.0 (General, Studio, Rock, Classical, Jazz, Ballad, R&B, Dance, Concert)
	User EQ	○ (9 Band Control)	○ (9 Band Control)
	Street Mode	○	○
	Sound Feedback	○ (AUI)	○ (AUI)
	High-pitched Sound Recovery	○	X
	Playlist DNSE	○	X
	Speed Control	○ (MP3 file play 0.75~1.3X)	○ (MP3 file play 0.75~1.3X)
	Output Power (Earphone)	20mW/CH	20mW/CH
	Output Power (Speaker)	800mW (Mono)	X
Tuner	FM	○	○
	RDS	○	○
	ETC	X	X
Additional Functions	Alarm	○	○
	Bluetooth	○	○
	Photo Viewer	○ (Slideshow Effect)	○
	Text Viewer	○	○
	Game	○	○
	Dictionary	○	○
	Wallpaper	○	○
	World Clock	○ (Support More)	○
	Voice Recording	○	○
	FM Recording	○	○
	Wise Volume (Hearing Protection)	○	X
	Address Book	○	○
	Data Cast	○	○
	Flash Player	○	X
	Calculator	○	○
	TTS (Text to Speech)	○	X
	Calendar	○	○
	MEMO	○	X
	Bookmark	TEXT, VIDEO, TTS	TEXT, VIDEO
	Vive Woofer (Using Haptic)	○ (Music, Video)	X
	Quick Tray	○ (Home Key, Hold, Sound Output, Bluetooth)	X
	Mini Player	○ (Music, FM)	X

※ ○: application, X: non-application

2-4 Accessories

2-4-1 Supplied Accessories

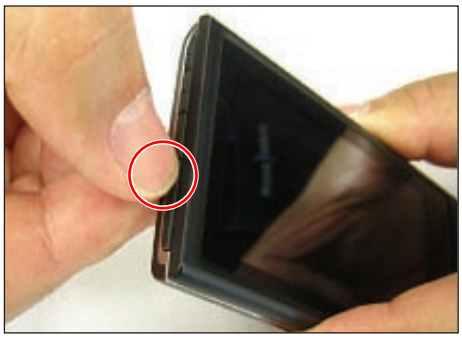
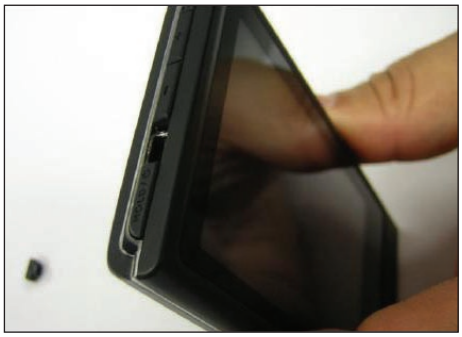
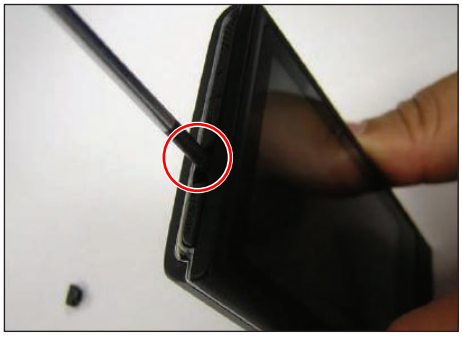
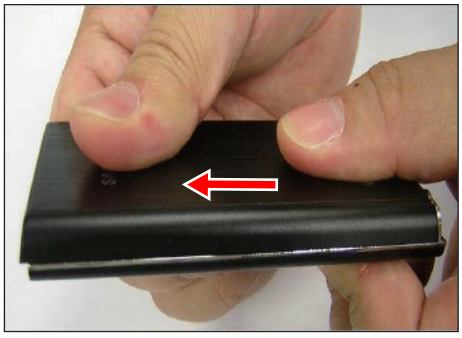
Accessories	Item	Item code		Remark
	Earphones	AH59-01884A		Samsung Service Center
	USB Cable	AH39-00899A		
	Program Installation CD	XEE	AH46-00088C	
		XEF	AH46-00088D	

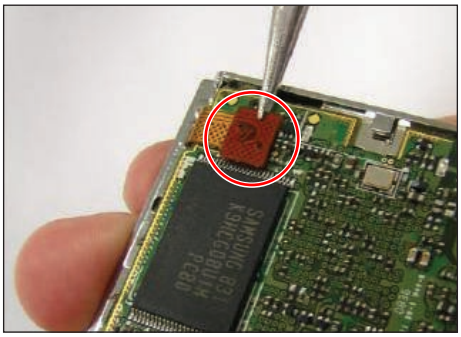
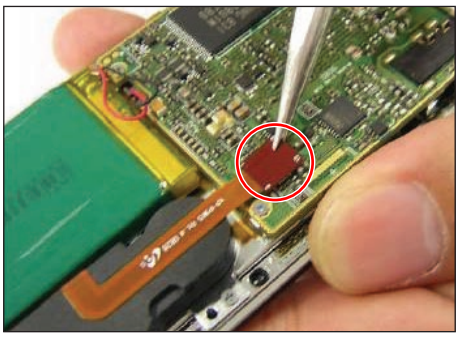
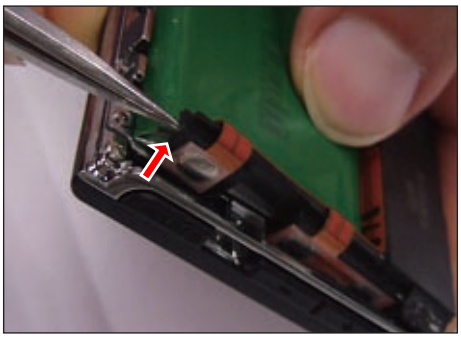
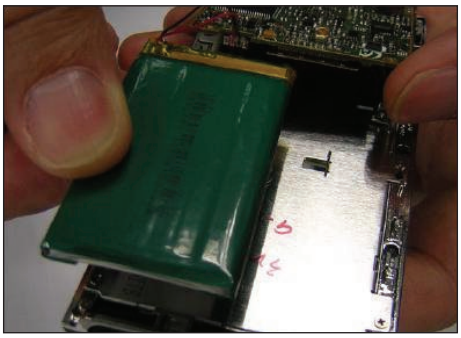
MEMO

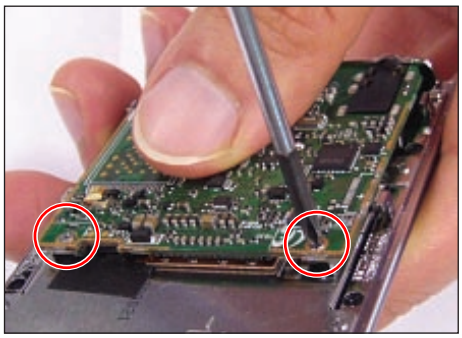
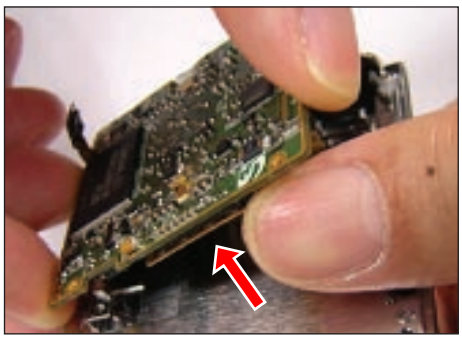
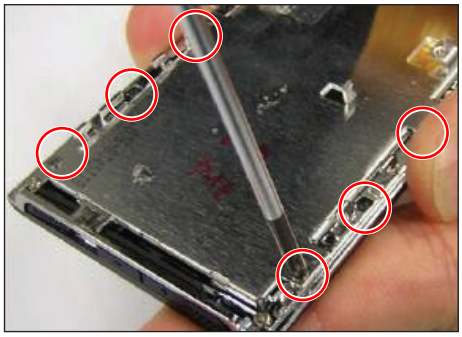
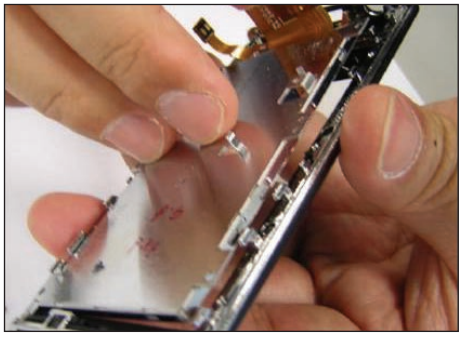
3. Disassembly & Reassembly

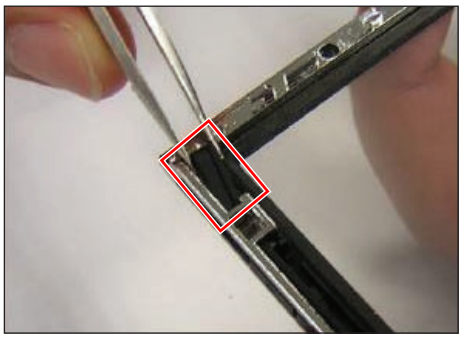
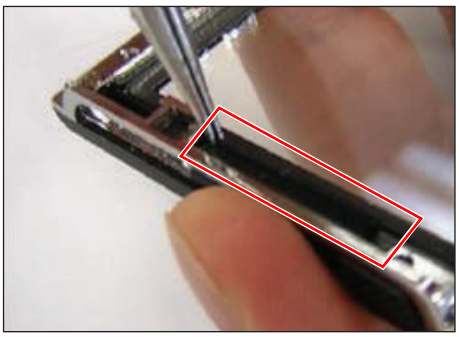
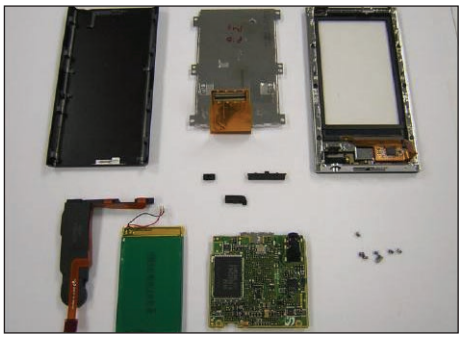
3-1 Disassembly Method

- Be careful to follow the disassembly sequence described in the manual. Otherwise, the product may be damaged.
- Be sure to carefully read and understand the safety instructions before performing any work as the IC chips on the PCB are vulnerable to static electricity.
- Assemble in the reverse order of disassembly.

No.	Part Name	Description	Description Photo
1	CABINET-FRONT	1) Remove the COVER-SCREW on the top of the CABINET-FRONT. 2) Remove the screw on the top of the CABINET-FRONT. : CH,+,M1.4,L2.0,CR PLT,SWRCH18 ⚠ Make sure not to scratch the product when using a screwdriver.	  
2	CABINET-BACK	1) Remove the CABINET-BACK by pushing it upward. ⚠ Do not apply excessive pressure on the product, as it may cause damage to the PCB.	

No.	Part Name	Description	Description Photo
3	CONNECTOR	1) Remove the TSP Connector.	
		2) Remove the SPK-Module Connector.	
4	BATTERY	1) Remove the SPK-Module. (Remove it by pulling the disassembly rib at the end.)	
		2) Remove the BATTERY. (Remove the double-sided tape and the battery connector.)	

No.	Part Name	Description	Description Photo
5	MAIN PCB	1) Remove the two screws on the MAIN PCB. : CH,+,M1.4,L2.0,CR PLT,SWRCH18	
		2) Disconnect the LCD connector and remove the MAIN PCB.	
6	LCD	1) Remove the six screws on the LCD. : CH,+,M1.4,L2.0,CR PLT,SWRCH18	
		2) Remove the LCD.	

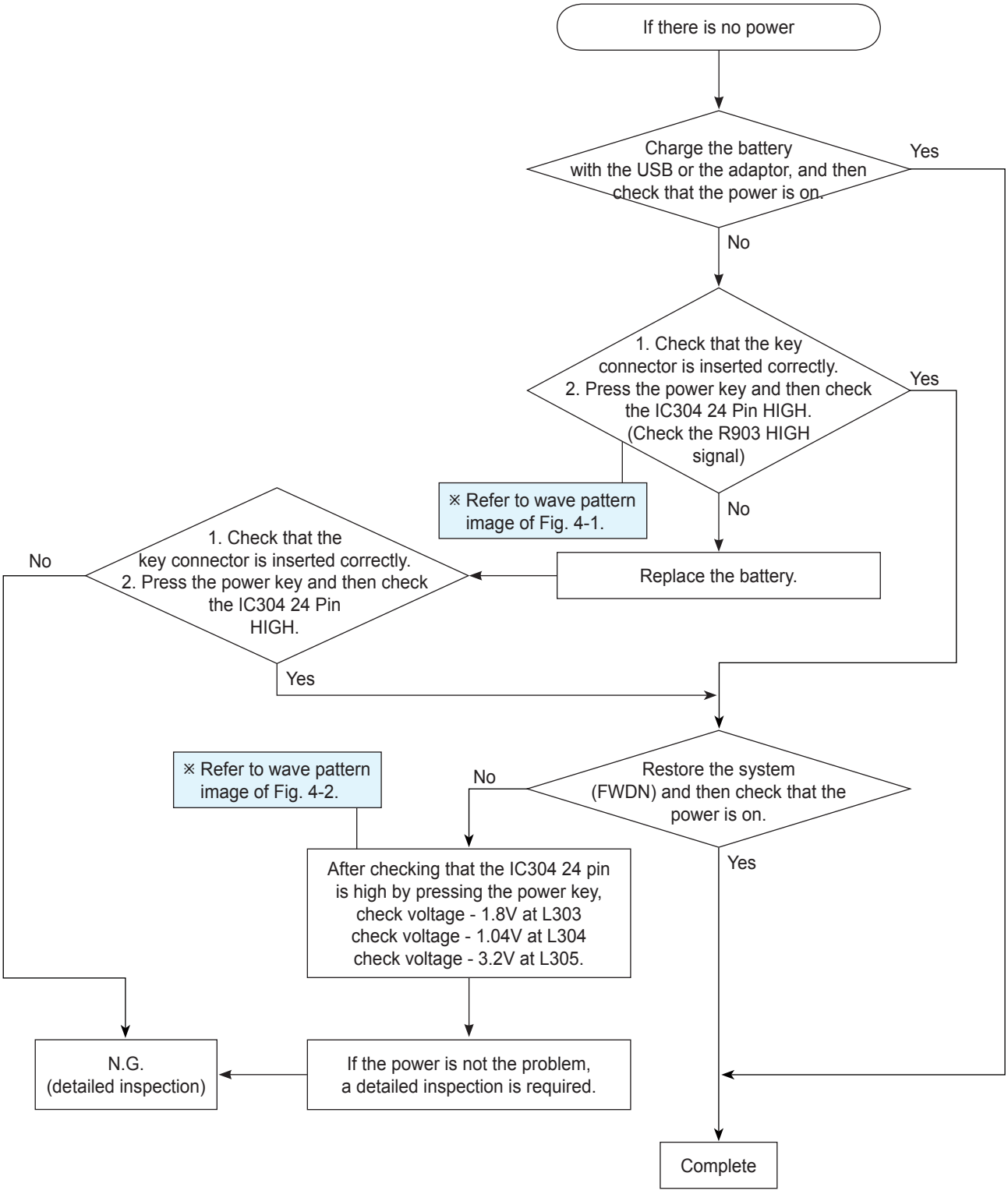
No.	Part Name	Description	Description Photo
7	KNOB-HOLD / KNOB-VOLUME	1) Remove the KNOB-HOLD. ⚠ Make sure not to scratch the product during the removal. 2) Remove the KNOB-VOLUME. ⚠ Make sure not to scratch the product during the removal.	 
8	SET	1) Picture after completion of disassembly.	

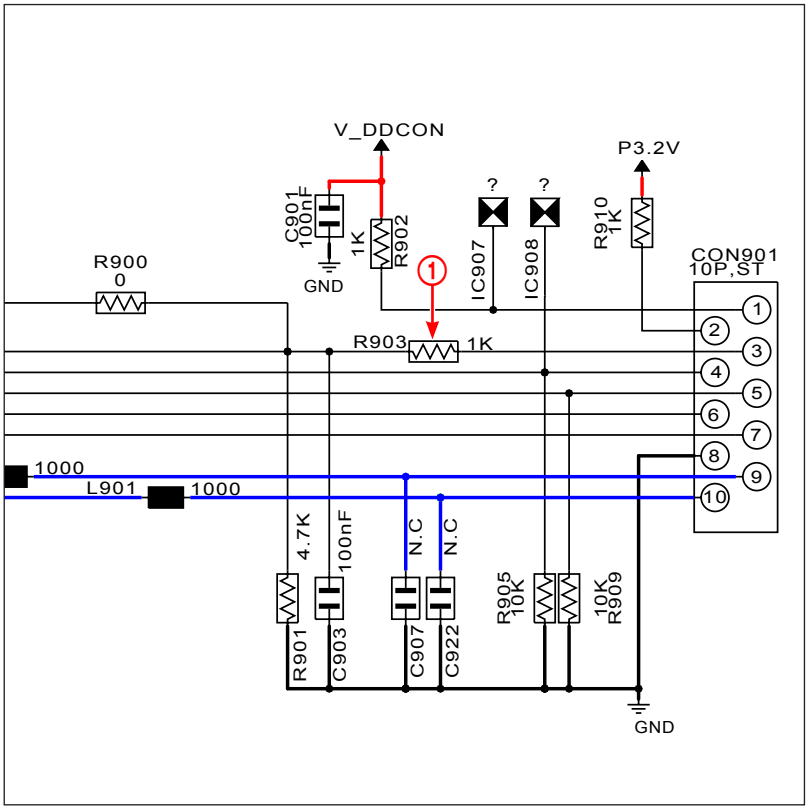
4. Troubleshooting

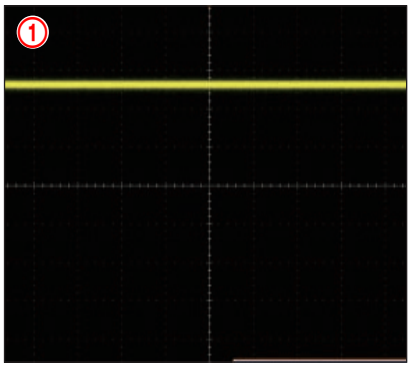
4-1 Checkpoints by Error Mode

Oscilloscope Setting Values	
Voltage/DIV	1V/div
TIME/DIV	20us/div

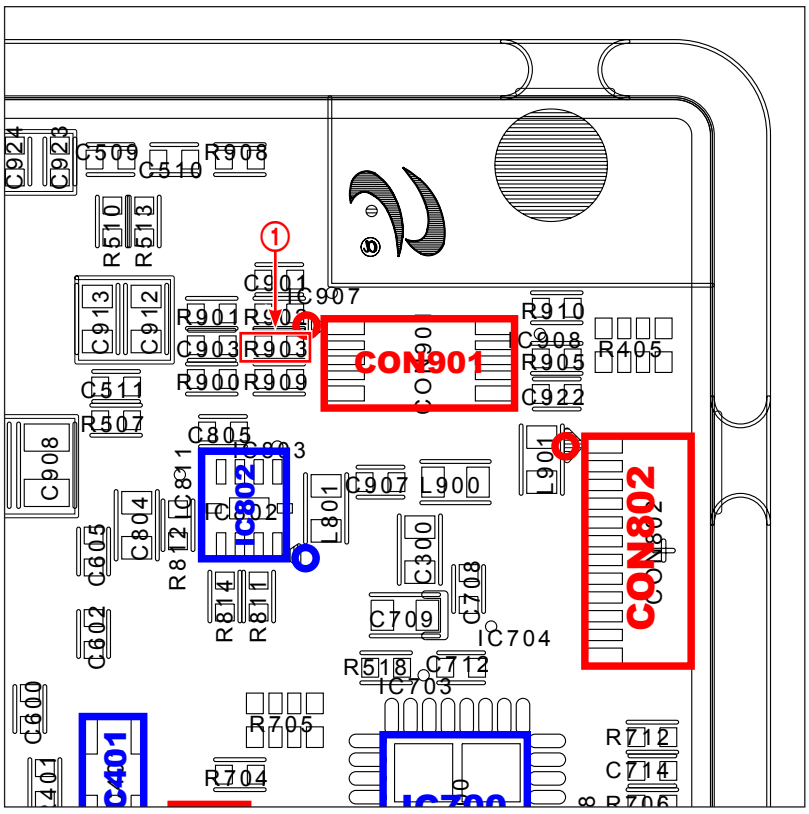
4-1-1 If there is no power





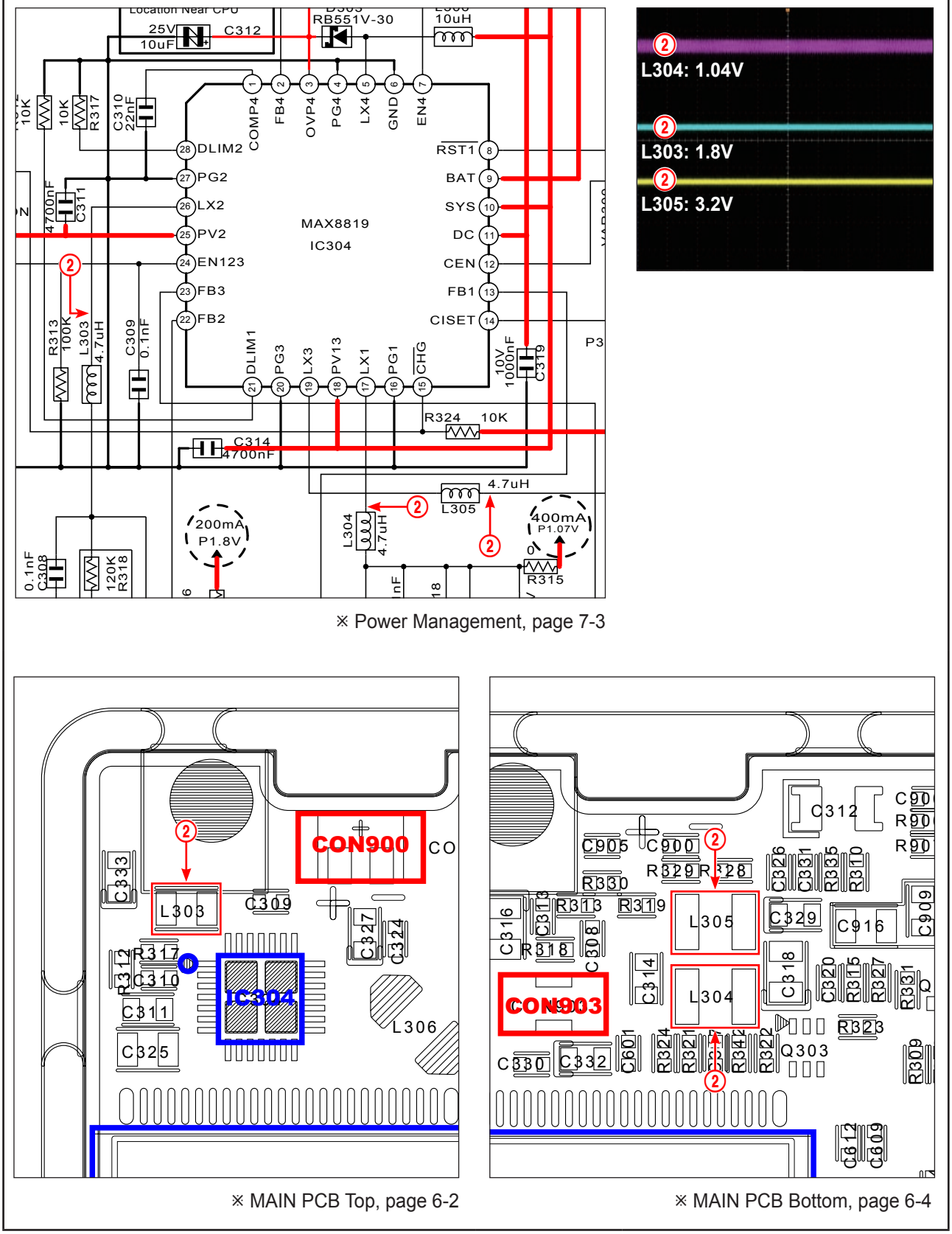


※ WQVGA LCD Interface, page 7-9



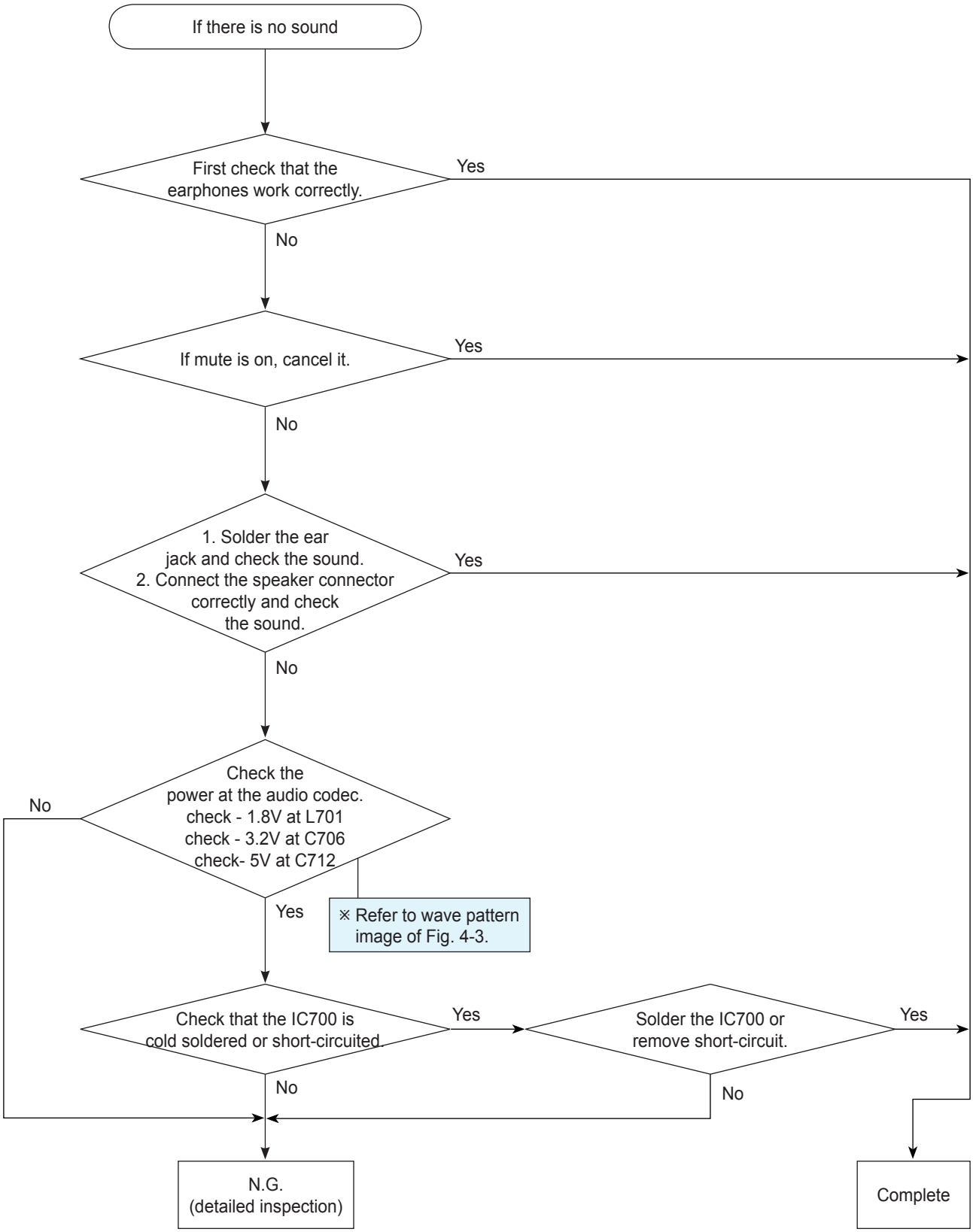
※ MAIN PCB Bottom, page 6-4

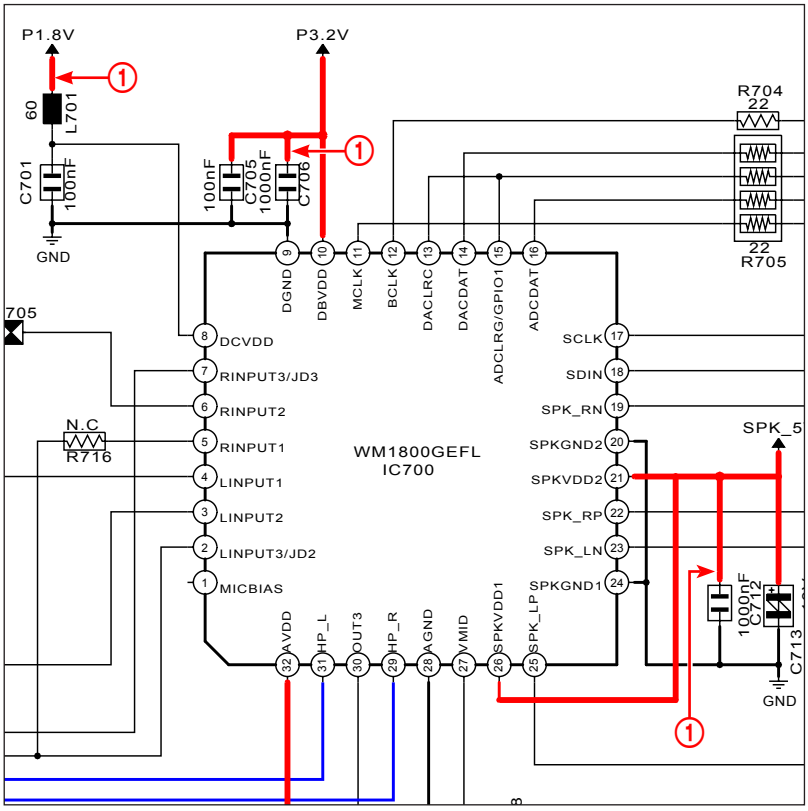
<Fig. 4-1>

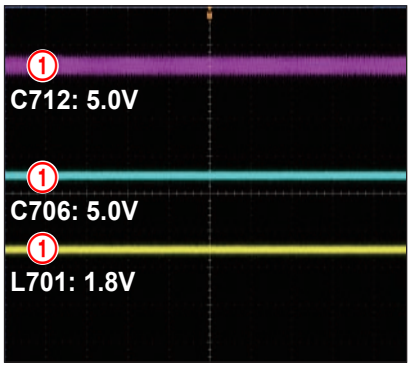

Location Near CPU
25V
10uF
C312
RB551V-30
10uH
MAX8819
IC304
DLIM2
PG2
LX2
PV2
EN123
FB3
FB2
COMP4
FB4
OVP4
PG4
LX4
GND
EN4
RST1
BAT
SYS
DC
CEN
FB1
CISET
DLIM1
PG3
LX3
PV13
LX1
PG1
CHG
C310 22nF
R317 10K
C311 4700nF
R313 100K
L303 4.7uH
C309 0.1nF
C319 10V 1000nF
R324 10K
C314 4700nF
L305 4.7uH
L304 4.7uH
R315 0
200mA P1.8V
400mA P1.07V
C308 0.1nF
R318 120K
L304: 1.04V
L303: 1.8V
L305: 3.2V
※ Power Management, page 7-3
CON900
IC304
L303
L306
C309
C310
C311
C325
R317
※ MAIN PCB Top, page 6-2
CON903
L305
L304
C312
Q303
※ MAIN PCB Bottom, page 6-4

<Fig. 4-2>

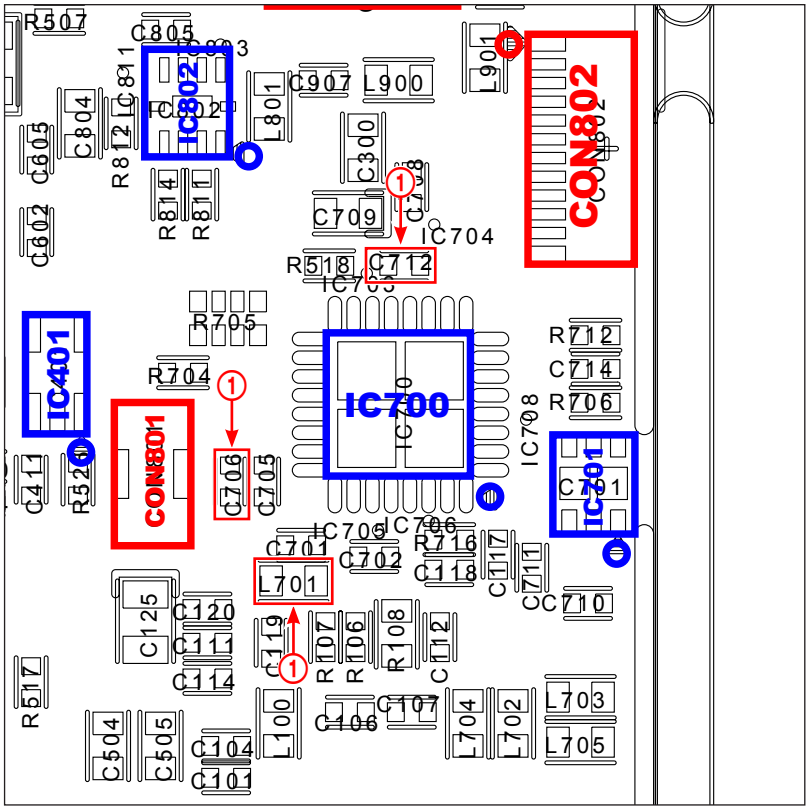
4-1-2 If there is no sound







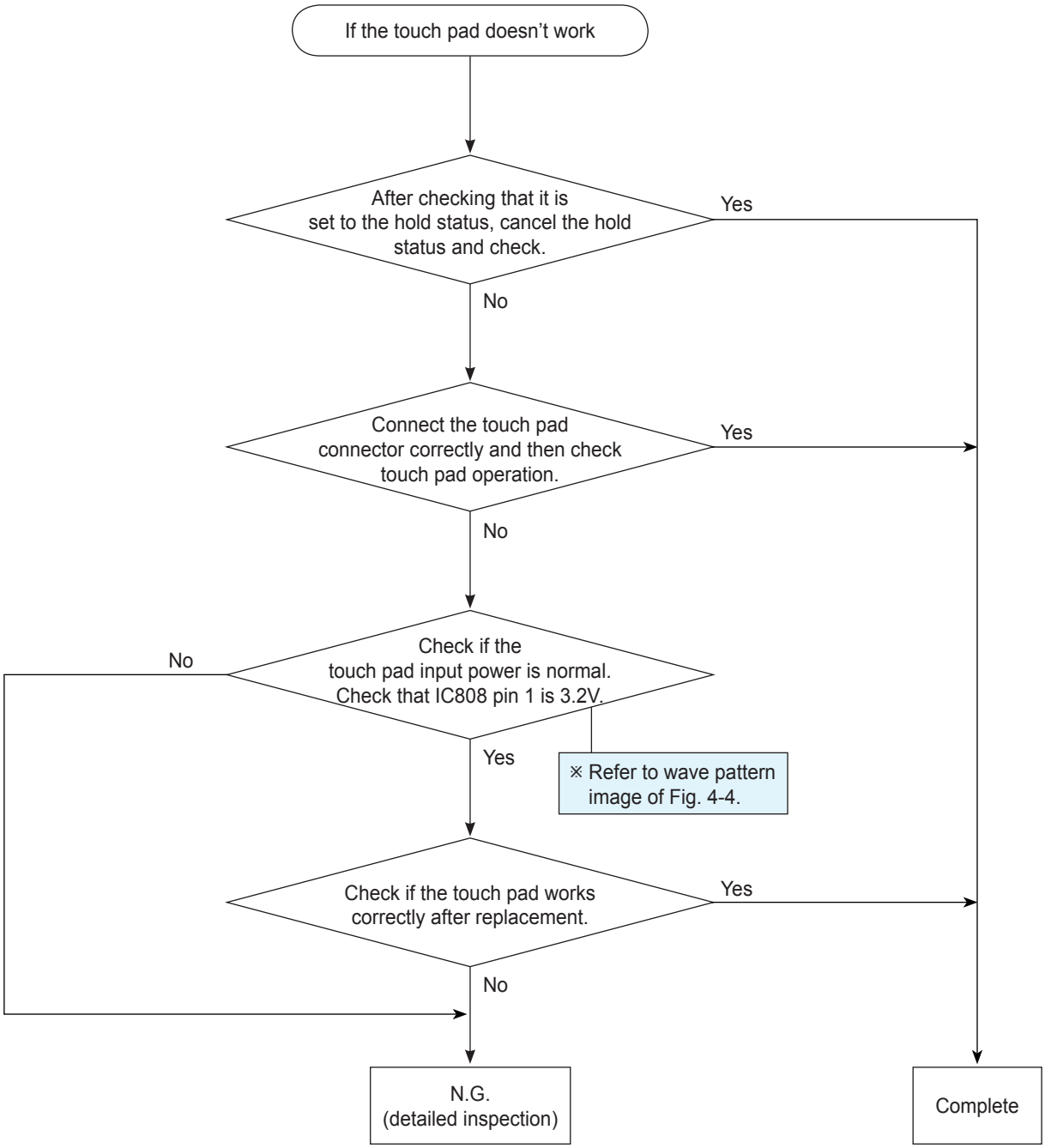
※ Audio CODEC, page 7-7

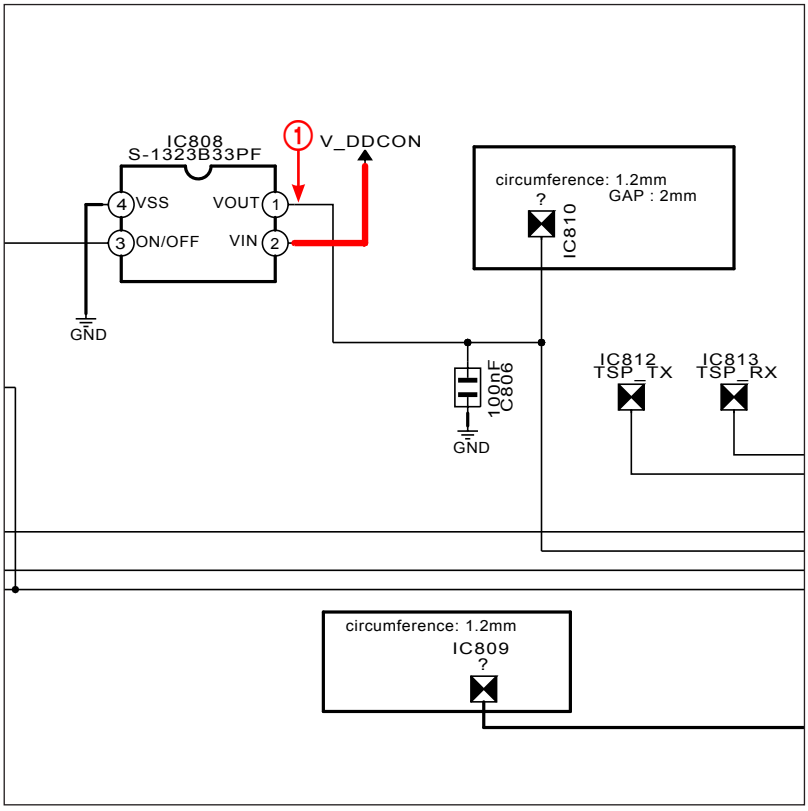


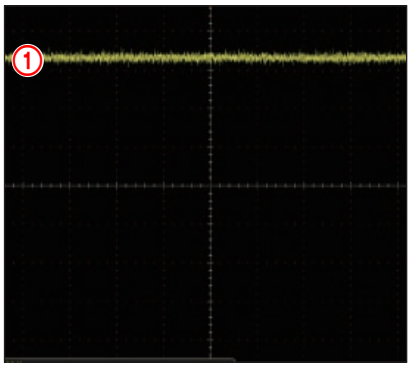
※ MAIN PCB Bottom, page 6-4

<Fig. 4-3>

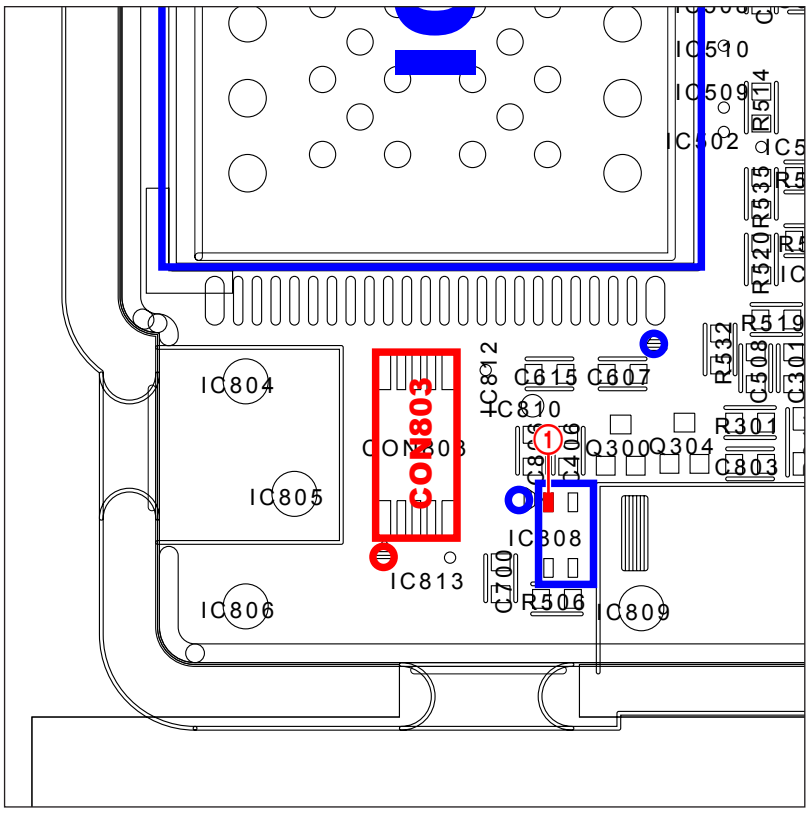
4-1-3 If the touch pad doesn't work







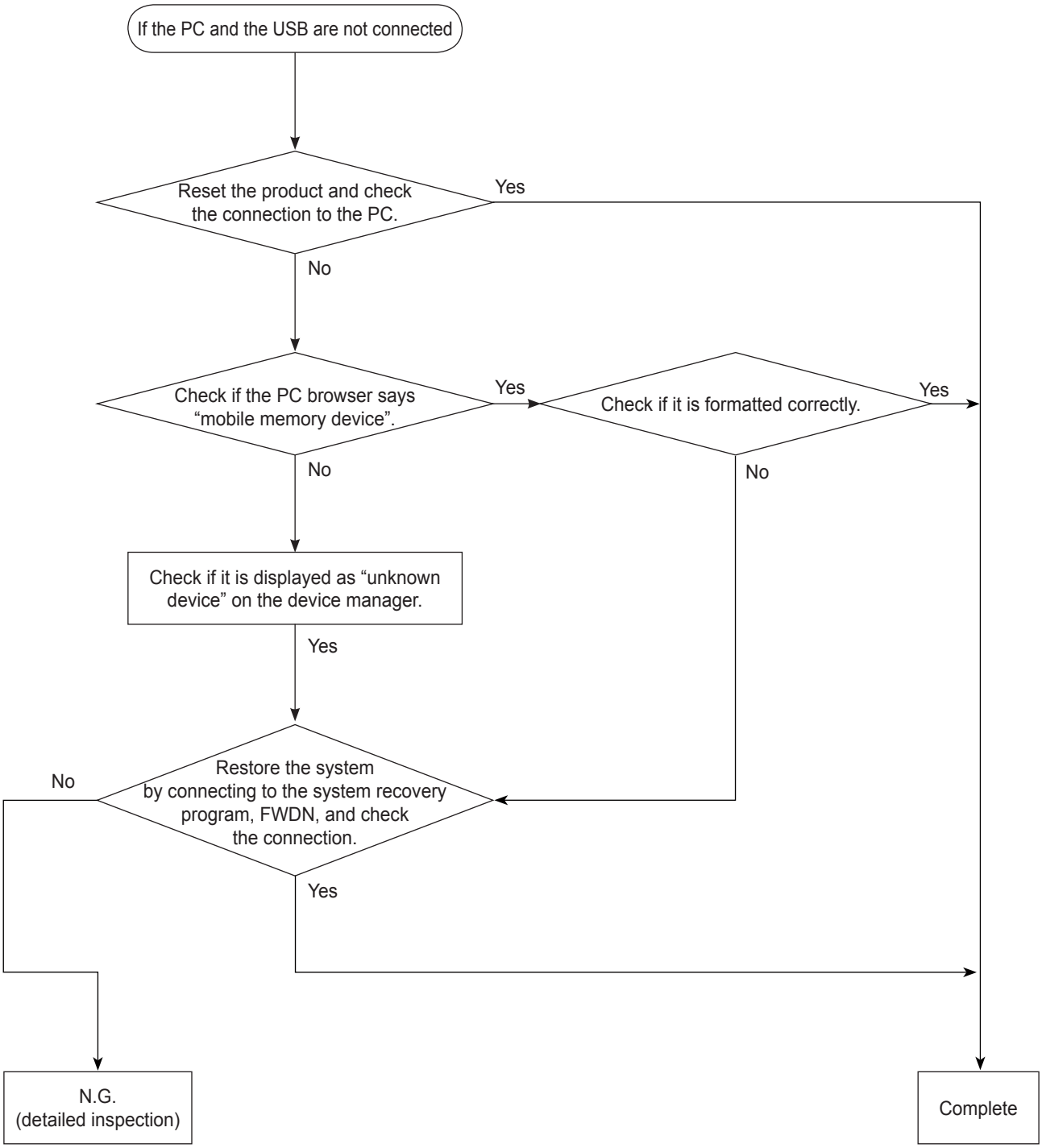
※ 24pin IO, Interface, page 7-8



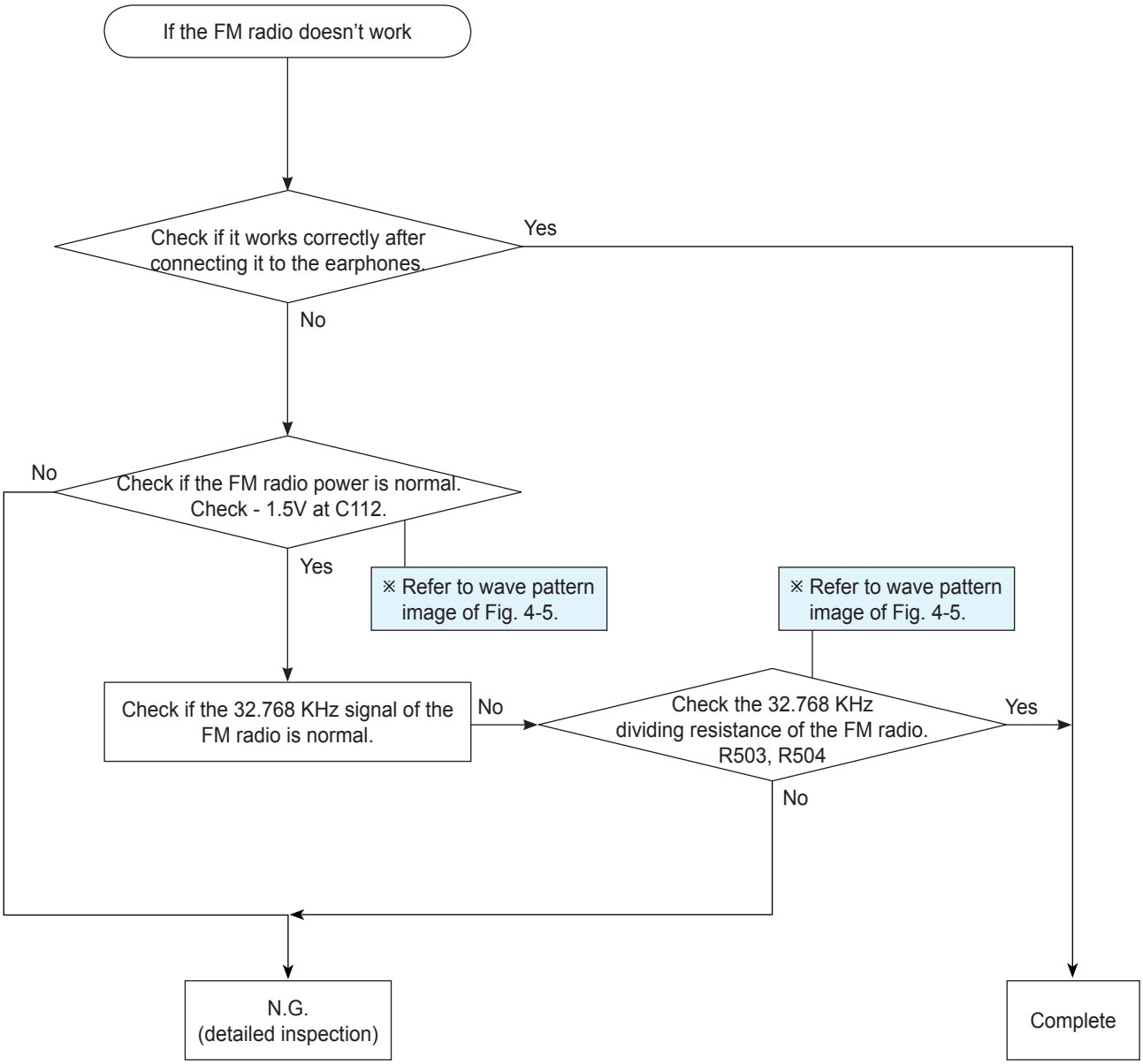
※ MAIN PCB Bottom, page 6-4

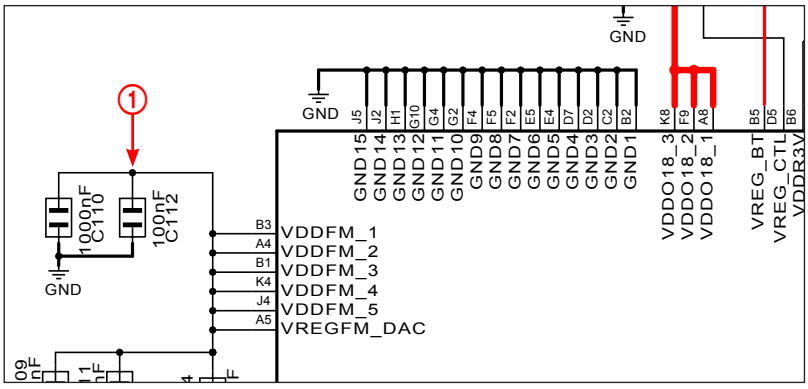
<Fig. 4-4>

4-1-4 If the PC and the USB are not connected

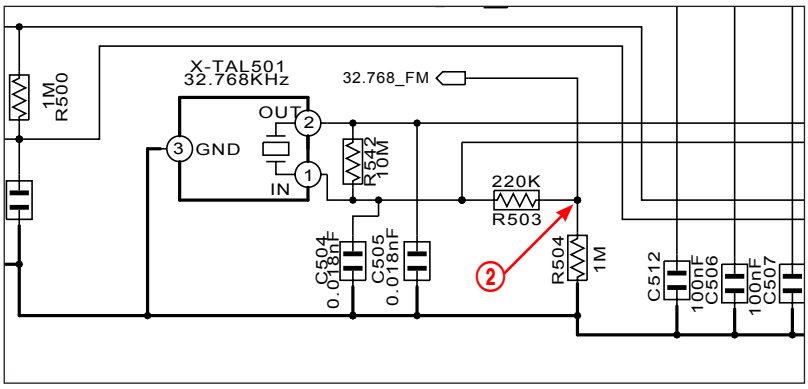


4-1-5 If the FM radio doesn't work

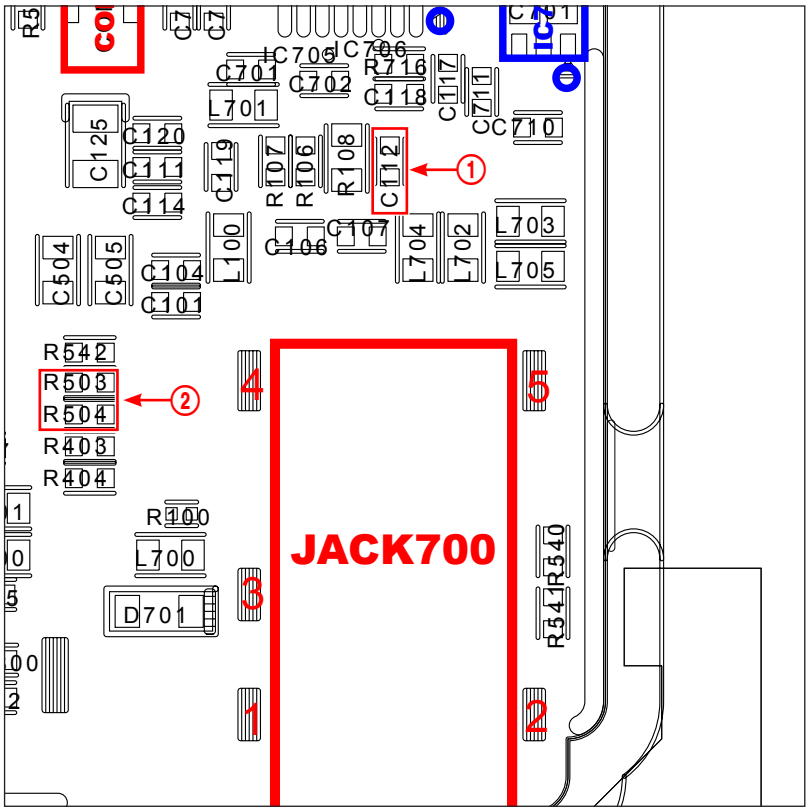




※ Blue-Tooth, FM, page 7-10



※ TCC7801 I_O Setting, page 7-5



※ MAIN PCB Bottom, page 6-4

<Fig. 4-5>

4-2 Upgrade Methods

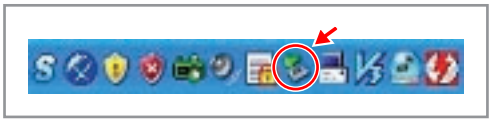
■ If the product does not power on and shows any of the following symptoms, you may try the upgrade methods in this chapter without having to disassemble the product:
- The product does not turn on when the power switch is pressed.
- The product powers on normally but no USB connection can be made.
- The product's icons appear garbled or malfunction.
- Files are corrupted, or the product shows as a "removable storage" in Windows but cannot be accessed.

4-2-1 Firmware Upgrade Method

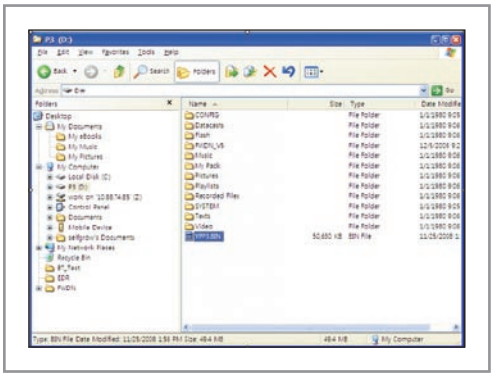
■ When is this upgrade executed?

- This is the procedure for the firmware upgrade when the YP-P3 and the PC are connected correctly.
- This procedure is used without disassembling the product when there is an operational problem with the YP-P3, and it is possible to fix it by upgrading the firmware.
- If the USB doesn't work correctly, see the "Bootloader Upgrade Method".

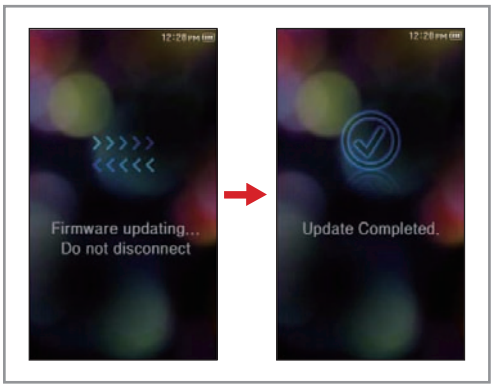
1. Download a file into a temporary folder on the PC, and then decompress the file.
2. Check the contents in the decompressed folder. (YPP3.BIN)
3. Connect the YP-P3 to the PC.
4. Select the P3 folder connected to the PC.



5. Select the installation file in the decompressed folder and then copy the new downloaded firmware file (YPP3.BIN) into the P3 folder connected to the PC.
6. Carefully disconnect the YP-P3 from the PC.
7. After disconnecting the YP-P3 from the PC, wait until it turns off.
8. Connect the USB cable to the PC after the YP-P3 is turned off.
   - If the upgrade is not executed when the USB cable is connected, a problem may occur due to a low battery.



9. Visually check that an updating message appears on the YP-P3 set screen and wait until the firmware update is complete.
10. Disconnect the USB cable from the YP-P3 and then check the firmware version after the power is turned on. (Settings → System → System Information)



4-2-2 Bootloader Upgrade Method

■ When is this upgrade executed?

- This is a manual downloading method of firmware using the FWDN program by operating the product in the system recovery mode when the YP-P3 is not turned on correctly or is not connected to the PC correctly.
- This method is used to fix problems without disassembling the product when the YP-P3 operates incorrectly.
- When using the program, beware of files in the product that may be deleted.

■ How to operate the YP-P3 in the system recovery mode

① Execute the FWDN program.
② Press the power button on the YP-P3.
③ Connect the USB cable while pressing the power button.
④ Press the reset button at the bottom of the YP-P3.

■ What is the system recovery mode on the YP-P3?

- It is not the firmware program included in the product, but it is a booting mode of the main chipset itself.
- It activates USB functions and saves the firmware forcibly in the product as the NAND flash memory using the FWDN program.

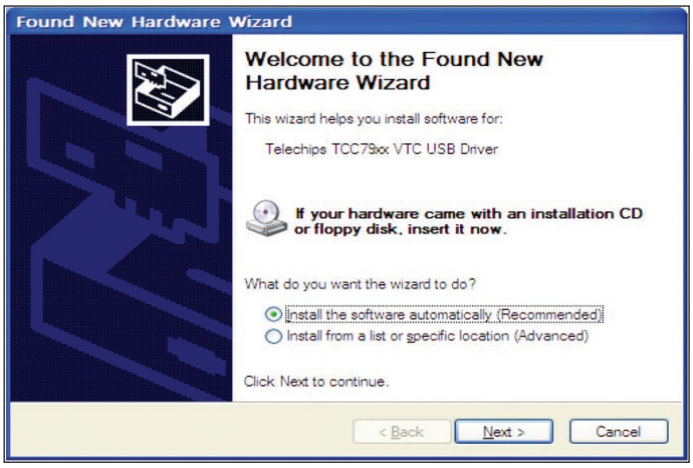
■ Bootloader download procedure (FWDN program driver installation)

※ When using the FWDN_V5 program for the first time, you must install the driver that accompanies the program.

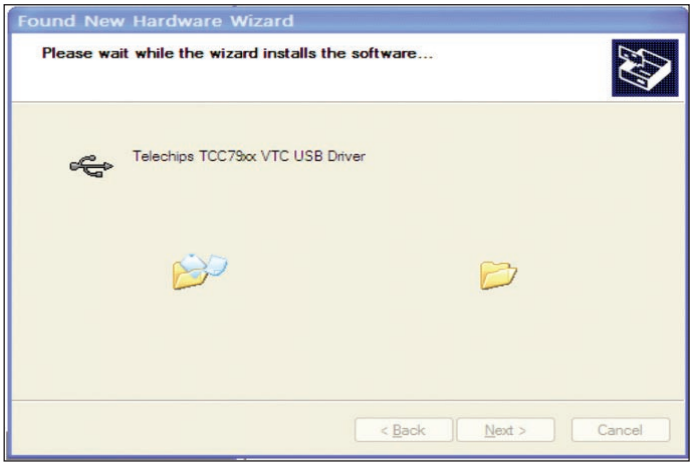
1. Click on the folder suitable for each operating system (MS Windows 2000, XP/Vista) in the “FWDN_V5\vtcdrv” folder and execute the FWDN_V5 program after executing the “install.bat” file.

2. Turn on the YP-P3 and connect the USB cable. When entering the system recovery mode by pressing the reset button, a window appears with the message, “A new device is detected”.

3. Select “Install the software automatically” and click on “Next”.

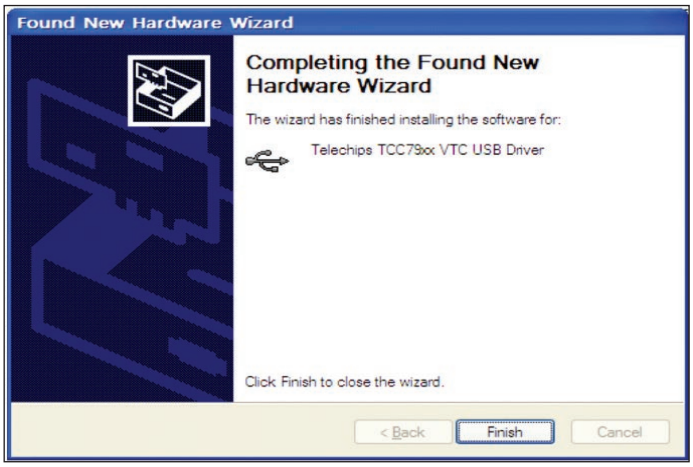


4. Search the device and click on “Continue Anyway”.



5. Select the “vtcdrv.inf” file in the FWDN_V5\vtcdrv folder and click on “Continue Anyway”.

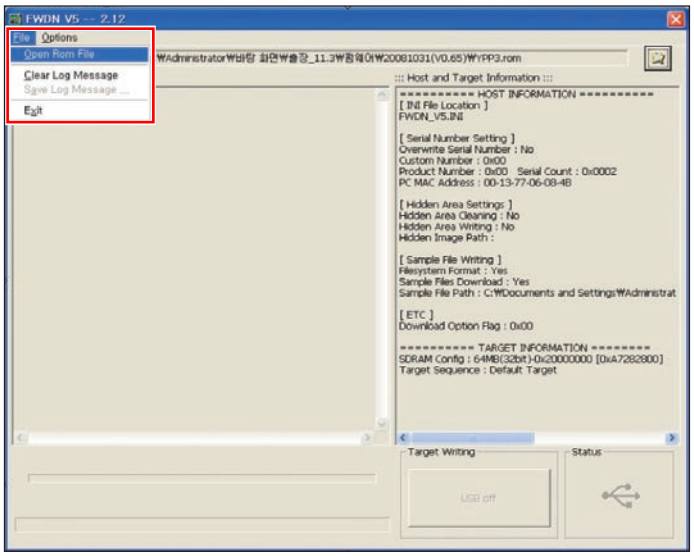
6. After verifying the message of driver installation completion, click on “Finish”.



■ Bootloader download procedure (FWDN program setup)

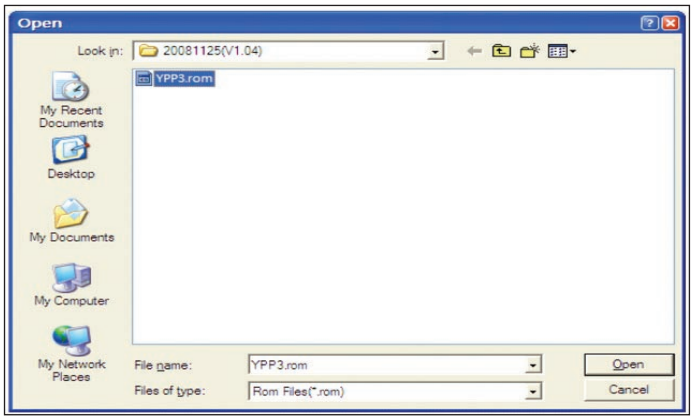
※ Install the driver and set up the FWDN_V5 program.

1. Execute the “Open Room File” in the “File” pull down menu.

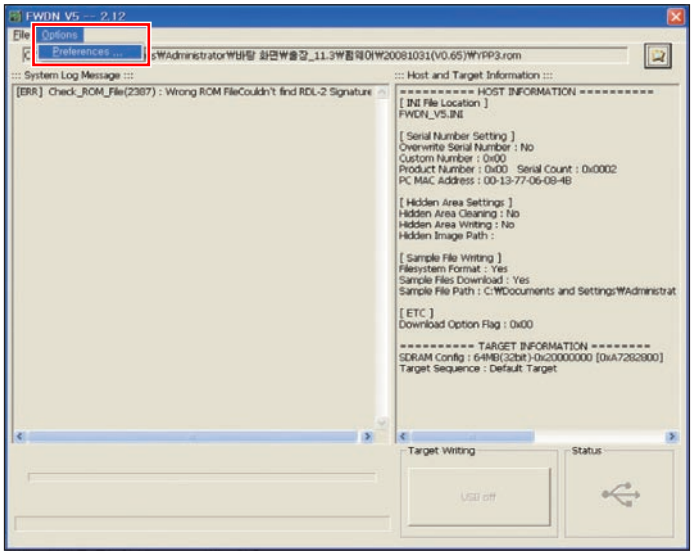


Connect the device to the USB port.

2. When a window appears, move to the folder with the firmware file and select the “YPP3.rom” file. Connect the USB cable to the product.

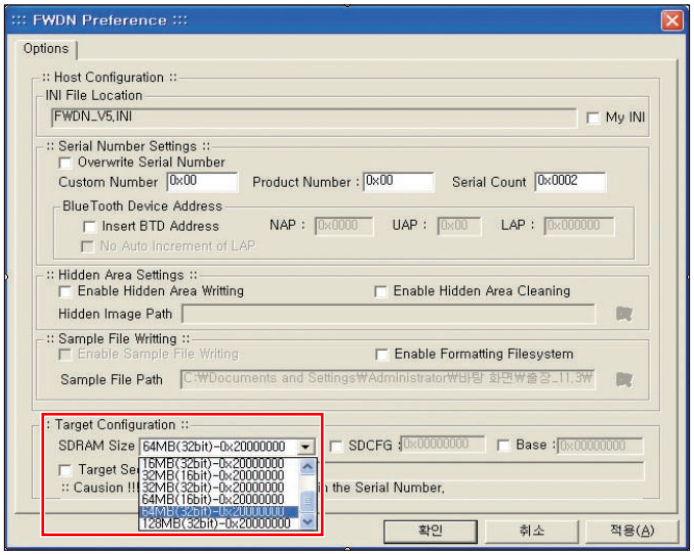


3. Execute “Preferences” in the pull down menu of “Options”.



4. Select “Target Configuration” in the “Preference” window → Select “SDRAM Size: 64MB (32-bit)–0x20000000”
   (required only once during the initial setup.)

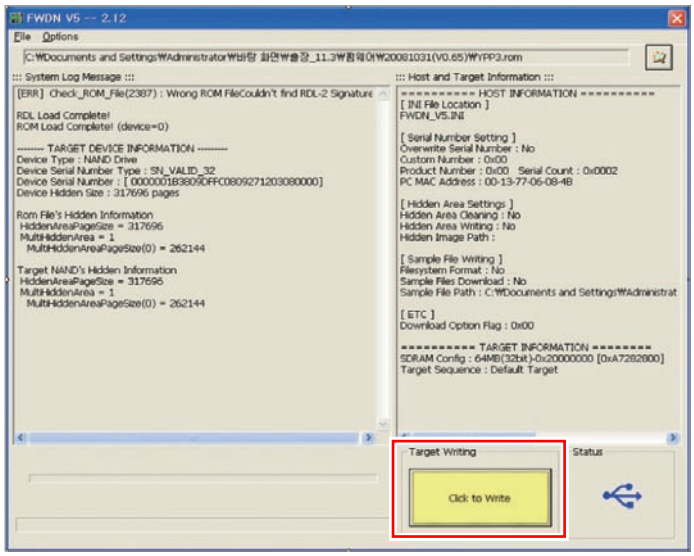
5. Click on “Apply” to end the FWDN program and to save the setting.



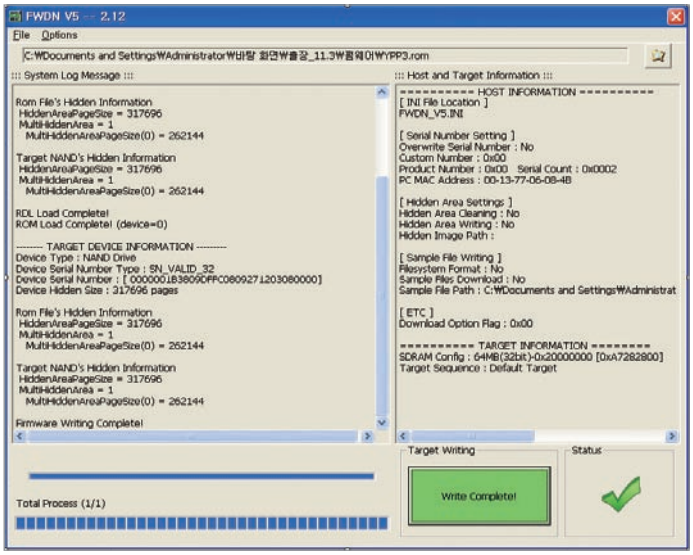
■ Bootloader download procedure (firmware recovery procedure using the FWDN program)

1. Execute the “FWDN_V5”.

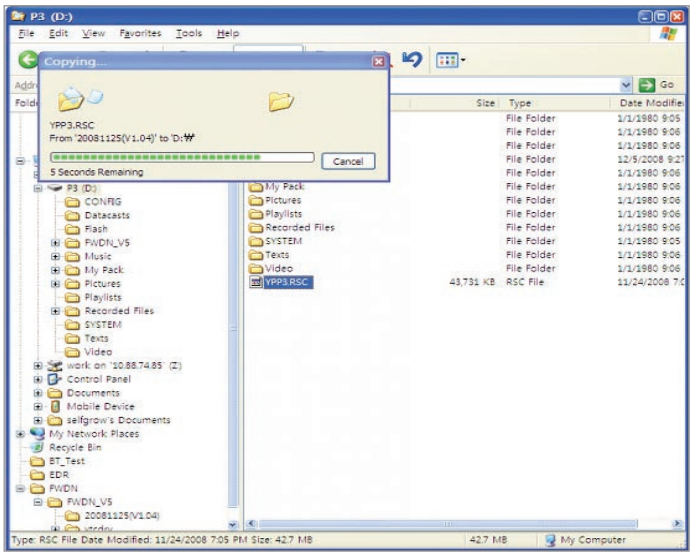
2. Turn on the YP-P3 and connect the USB cable. When entering the system recovery mode by pressing the reset button, the “Write” button is activated.



3. Click on the “Write” button and then wait until the Bootloader is transferred to the YP-P3.



4. After the completion of the transfer, connect the USB cable to the PC by clicking on the reset button on the YP-P3, copy the “YPP3.rsc” file into the P3 folder and reboot.

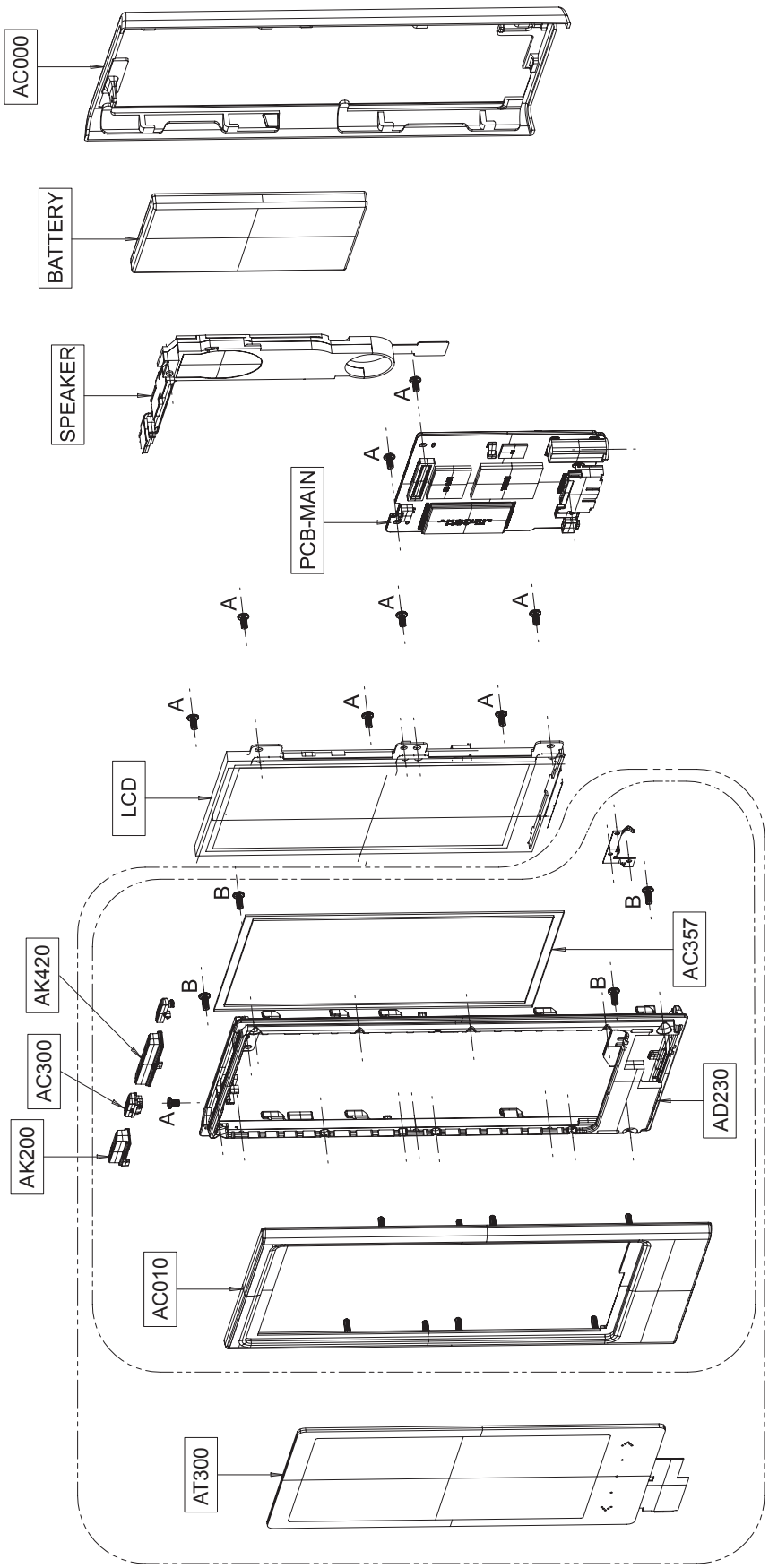


5. After verifying the upgrade message, disconnect the USB cable and check if the product operates correctly.

MEMO

5. Exploded View & Part List

5-1 Exploded View



■ Part List

Loc. No.	Code No.	Description;Specification	Q'ty	SNA	Remark
AC000	AH64-04803A	CABINET-BACK;YP-P3,AL,T0.6,W52,L100,-,Bl	1	SA	
AC010	AH64-04801C	CABINET-FRONT;YP-P3,PC,1.0,W52,W52,-,BLA	1	SA	
AC300	AH63-01787A	COVER-SCREW;YP-P3,PC,T1.0,W3,L23,-,-,Bla	1	SA	
AC357	AH63-01851A	CUSHION-LCD;YP-P3,PORON,0.3t,43.6,68,-,-	1	SA	
AD230	AH64-04802A	DECORATION-MIDDLE;YP-P3,ABS 94HB,1.0,W52	1	SNA	
AK200	AH64-04804A	KNOB-HOLD;YP-P3,PC,T1.0,W2,L12,-,Black,-	1	SNA	
AK420	AH64-04805A	KNOB-VOLUME;YP-P3,PC,T1.0,W3,L23,-,Black	1	SNA	
AT300	AH59-02145A	TOUCH/PANEL;83.1x44.53x1.725,CAPACITIVE,	1	SA	
BATTERY	AH43-00022A	BATTERY;M393048R01,YP-P3,Li Polymer,61	1	SA	
LCD	AH07-00240A	LCD;A030FL01V2MDL,YP-P3,-,110.07X4	1	SA	
PCB-MAIN	AH92-02959B	ASSY PCB MAIN;YP-P3 ASSY,YP-P3,8G,MAIN A	1	SA	
SPEAKER	AH97-03047A	ASSY SPEAKER;MP3,YP-P3,SPEAKER+MOTOR,KEY	1	SA	
A	6001-001677	SCREW-MACHINE;CH,+,M1.4,L2.0,CR PLT,SWRC	9	SA	
B	6003-001508	SCREW-TAPTITE;PH,+,B,M1.4,L3,NI PLT,SWRC	4	SA	

5-2 Electrical Part List

Loc. No.	Part No.	Description;Specification	Q'ty	SNA	Remark
	AH92-02959B	ASSY PCB MAIN;YP-P3 ASSY,YP-P3,8G,M	1	SA	
C101	2203-000438	C-CER,CHIP;1nF,10%,50V,X7R,1005	1	SA	
C104	2203-000330	C-CER,CHIP;0.012nF,5%,50V,C0G,1005	1	SA	
C105	2203-000386	C-CER,CHIP;0.015nF,5%,50V,C0G,1005	1	SA	
C106	2203-000233	C-CER,CHIP;0.1nF,5%,50V,C0G,1005	1	SA	
C107	2203-005089	C-CER,CHIP;0.002nF,0.25pF,50V,TH,TP	1	SA	
C108	2203-000386	C-CER,CHIP;0.015nF,5%,50V,C0G,1005	1	SA	
C109	2203-005819	C-CER,CHIP;1000nF,+80-20%,16V,Y5V,T	1	SA	
C110	2203-005819	C-CER,CHIP;1000nF,+80-20%,16V,Y5V,T	1	SA	
C111	2203-002709	C-CER,CHIP;100nF,+80-20%,16V,Y5V,10	1	SA	
C112	2203-002709	C-CER,CHIP;100nF,+80-20%,16V,Y5V,10	1	SA	
C114	2203-002709	C-CER,CHIP;100nF,+80-20%,16V,Y5V,10	1	SA	
C115	2203-002709	C-CER,CHIP;100nF,+80-20%,16V,Y5V,10	1	SA	
C116	2203-005819	C-CER,CHIP;1000nF,+80-20%,16V,Y5V,T	1	SA	
C117	2203-005900	C-CER,CHIP;1000NF,+80-20%,10V,Y5V,1	1	SA	
C118	2203-005900	C-CER,CHIP;1000NF,+80-20%,10V,Y5V,1	1	SA	
C119	2203-005900	C-CER,CHIP;1000NF,+80-20%,10V,Y5V,1	1	SA	
C120	2203-005900	C-CER,CHIP;1000NF,+80-20%,10V,Y5V,1	1	SA	
C121	2203-002709	C-CER,CHIP;100nF,+80-20%,16V,Y5V,10	1	SA	
C122	2203-002709	C-CER,CHIP;100nF,+80-20%,16V,Y5V,10	1	SA	
C123	2203-001596	C-CER,CHIP;2200nF,+80-20%,50V,Y5V,2	1	SA	
C124	2203-000233	C-CER,CHIP;0.1nF,5%,50V,C0G,1005	1	SA	
C125	2404-001536	C-TA,CHIP;33uF,20%,10V,-,TP,2.2x1.2	1	SA	
C300	2203-006683	C-CER,CHIP;4700nF,+80-20%,6.3V,Y5V,	1	SA	
C301	2203-002709	C-CER,CHIP;100nF,+80-20%,16V,Y5V,10	1	SA	
C302	2404-001381	C-TA,CHIP;10##F,20%,10V,-,TP,1608(0	1	SA	
C303	2203-002709	C-CER,CHIP;100nF,+80-20%,16V,Y5V,10	1	SA	
C306	2203-002709	C-CER,CHIP;100nF,+80-20%,16V,Y5V,10	1	SA	
C308	2203-000233	C-CER,CHIP;0.1nF,5%,50V,C0G,1005	1	SA	
C309	2203-000233	C-CER,CHIP;0.1nF,5%,50V,C0G,1005	1	SA	
C310	2203-001405	C-CER,CHIP;22nF,+80-20%,25V,Y5V,100	1	SA	
C311	2203-006683	C-CER,CHIP;4700nF,+80-20%,6.3V,Y5V,	1	SA	
C312	2404-001418	C-TA,CHIP;10uF,20%,25V,-,TP,3216	1	SA	
C313	2203-002709	C-CER,CHIP;100nF,+80-20%,16V,Y5V,10	1	SA	
C314	2203-006683	C-CER,CHIP;4700nF,+80-20%,6.3V,Y5V,	1	SA	
C316	2404-001536	C-TA,CHIP;33uF,20%,10V,-,TP,2.2x1.2	1	SA	
C317	2203-000233	C-CER,CHIP;0.1nF,5%,50V,C0G,1005	1	SA	
C318	2404-001536	C-TA,CHIP;33uF,20%,10V,-,TP,2.2x1.2	1	SA	
C319	2203-005900	C-CER,CHIP;1000NF,+80-20%,10V,Y5V,1	1	SA	
C320	2203-002709	C-CER,CHIP;100nF,+80-20%,16V,Y5V,10	1	SA	
C322	2203-002709	C-CER,CHIP;100nF,+80-20%,16V,Y5V,10	1	SA	
C324	2203-002709	C-CER,CHIP;100nF,+80-20%,16V,Y5V,10	1	SA	
C325	2203-006361	C-CER,CHIP;10000nF,10%,10V,X5R,TP,2	1	SA	
C326	2203-000233	C-CER,CHIP;0.1nF,5%,50V,C0G,1005	1	SA	
C327	2404-001225	C-TA,CHIP;10uF,20%,6.3V,GP,TP,1608	1	SA	
C328	2203-006093	C-CER,CHIP;1000nF,+80-20%,6.3V,Y5V,	1	SA	
C329	2404-001225	C-TA,CHIP;10uF,20%,6.3V,GP,TP,1608	1	SA	
C330	2203-002709	C-CER,CHIP;100nF,+80-20%,16V,Y5V,10	1	SA	
C331	2203-002709	C-CER,CHIP;100nF,+80-20%,16V,Y5V,10	1	SA	
C332	2404-001225	C-TA,CHIP;10uF,20%,6.3V,GP,TP,1608	1	SA	
C333	2404-001225	C-TA,CHIP;10uF,20%,6.3V,GP,TP,1608	1	SA	
C334	2404-001225	C-TA,CHIP;10uF,20%,6.3V,GP,TP,1608	1	SA	
C400	2203-005900	C-CER,CHIP;1000NF,+80-20%,10V,Y5V,1	1	SA	
C401	2203-005900	C-CER,CHIP;1000NF,+80-20%,10V,Y5V,1	1	SA	
C402	2203-002709	C-CER,CHIP;100nF,+80-20%,16V,Y5V,10	1	SA	
C403	2203-002709	C-CER,CHIP;100nF,+80-20%,16V,Y5V,10	1	SA	
C404	2203-002709	C-CER,CHIP;100nF,+80-20%,16V,Y5V,10	1	SA	
C405	2203-002709	C-CER,CHIP;100nF,+80-20%,16V,Y5V,10	1	SA	
C406	2203-002709	C-CER,CHIP;100nF,+80-20%,16V,Y5V,10	1	SA	
C407	2203-002709	C-CER,CHIP;100nF,+80-20%,16V,Y5V,10	1	SA	
C408	2203-002709	C-CER,CHIP;100nF,+80-20%,16V,Y5V,10	1	SA	
C409	2203-002709	C-CER,CHIP;100nF,+80-20%,16V,Y5V,10	1	SA	
C410	2203-005900	C-CER,CHIP;1000NF,+80-20%,10V,Y5V,1	1	SA	
C411	2203-002709	C-CER,CHIP;100nF,+80-20%,16V,Y5V,10	1	SA	
C412	2203-005900	C-CER,CHIP;1000NF,+80-20%,10V,Y5V,1	1	SA	
C413	2203-002709	C-CER,CHIP;100nF,+80-20%,16V,Y5V,10	1	SA	
C415	2203-002709	C-CER,CHIP;100nF,+80-20%,16V,Y5V,10	1	SA	
C500	2203-000386	C-CER,CHIP;0.015nF,5%,50V,C0G,1005	1	SA	
C501	2203-000386	C-CER,CHIP;0.015nF,5%,50V,C0G,1005	1	SA	
C502	2203-002709	C-CER,CHIP;100nF,+80-20%,16V,Y5V,10	1	SA	
C503	2203-002709	C-CER,CHIP;100nF,+80-20%,16V,Y5V,10	1	SA	
C504	2203-000426	C-CER,CHIP;0.018nF,5%,50V,C0G,1608	1	SA	
C505	2203-000426	C-CER,CHIP;0.018nF,5%,50V,C0G,1608	1	SA	
C506	2203-002709	C-CER,CHIP;100nF,+80-20%,16V,Y5V,10	1	SA	
C507	2203-002709	C-CER,CHIP;100nF,+80-20%,16V,Y5V,10	1	SA	
C508	2203-002709	C-CER,CHIP;100nF,+80-20%,16V,Y5V,10	1	SA	
C509	2203-002994	C-CER,CHIP;68pF,5%,50V,CH,BK,1005,-	1	SA	
C510	2203-002994	C-CER,CHIP;68pF,5%,50V,CH,BK,1005,-	1	SA	
C511	2203-002994	C-CER,CHIP;68pF,5%,50V,CH,BK,1005,-	1	SA	
C512	2203-002709	C-CER,CHIP;100nF,+80-20%,16V,Y5V,10	1	SA	
C600	2203-005900	C-CER,CHIP;1000NF,+80-20%,10V,Y5V,1	1	SA	
C601	2203-002709	C-CER,CHIP;100nF,+80-20%,16V,Y5V,10	1	SA	
C602	2203-005900	C-CER,CHIP;1000NF,+80-20%,10V,Y5V,1	1	SA	
C603	2203-005900	C-CER,CHIP;1000NF,+80-20%,10V,Y5V,1	1	SA	
C604	2203-002709	C-CER,CHIP;100nF,+80-20%,16V,Y5V,10	1	SA	
C605	2203-002709	C-CER,CHIP;100nF,+80-20%,16V,Y5V,10	1	SA	
C606	2203-002709	C-CER,CHIP;100nF,+80-20%,16V,Y5V,10	1	SA	
C607	2203-002709	C-CER,CHIP;100nF,+80-20%,16V,Y5V,10	1	SA	
C608	2203-002709	C-CER,CHIP;100nF,+80-20%,16V,Y5V,10	1	SA	
C609	2203-002709	C-CER,CHIP;100nF,+80-20%,16V,Y5V,10	1	SA	
C610	2203-002709	C-CER,CHIP;100nF,+80-20%,16V,Y5V,10	1	SA	
C612	2203-002709	C-CER,CHIP;100nF,+80-20%,16V,Y5V,10	1	SA	
C615	2203-002709	C-CER,CHIP;100nF,+80-20%,16V,Y5V,10	1	SA	
C700	2203-002709	C-CER,CHIP;100nF,+80-20%,16V,Y5V,10	1	SA	
C701	2203-002709	C-CER,CHIP;100nF,+80-20%,16V,Y5V,10	1	SA	
C702	2203-006093	C-CER,CHIP;1000nF,+80-20%,6.3V,Y5V,	1	SA	
C703	2404-001491	C-TA,CHIP;100##F,##20%,6.3V,-,REEL,	1	SA	
C705	2203-002709	C-CER,CHIP;100nF,+80-20%,16V,Y5V,10	1	SA	
C706	2203-005900	C-CER,CHIP;1000NF,+80-20%,10V,Y5V,1	1	SA	
C707	2203-006093	C-CER,CHIP;1000nF,+80-20%,6.3V,Y5V,	1	SA	
C708	2203-005900	C-CER,CHIP;1000NF,+80-20%,10V,Y5V,1	1	SA	
C709	2404-001381	C-TA,CHIP;10##F,20%,10V,-,TP,1608(0	1	SA	
C710	2203-005172	C-CER,CHIP;47nF,+80-20%,25V,Y5V,100	1	SA	
C711	2203-005172	C-CER,CHIP;47nF,+80-20%,25V,Y5V,100	1	SA	
C712	2203-005900	C-CER,CHIP;1000NF,+80-20%,10V,Y5V,1	1	SA	
C713	2404-001381	C-TA,CHIP;10##F,20%,10V,-,TP,1608(0	1	SA	
C714	2203-000254	C-CER,CHIP;10nF,10%,16V,X7R,1005	1	SA	
C715	2404-001407	C-TA,CHIP;330uF,20%,2.5V,-,TP,3528	1	SA	
C716	2404-001407	C-TA,CHIP;330uF,20%,2.5V,-,TP,3528	1	SA	
C800	2404-001225	C-TA,CHIP;10uF,20%,6.3V,GP,TP,1608	1	SA	
C801	2203-006348	C-CER,CHIP;1000nF,10%,25V,X5R,TP,16	1	SA	
C802	2203-002709	C-CER,CHIP;100nF,+80-20%,16V,Y5V,10	1	SA	

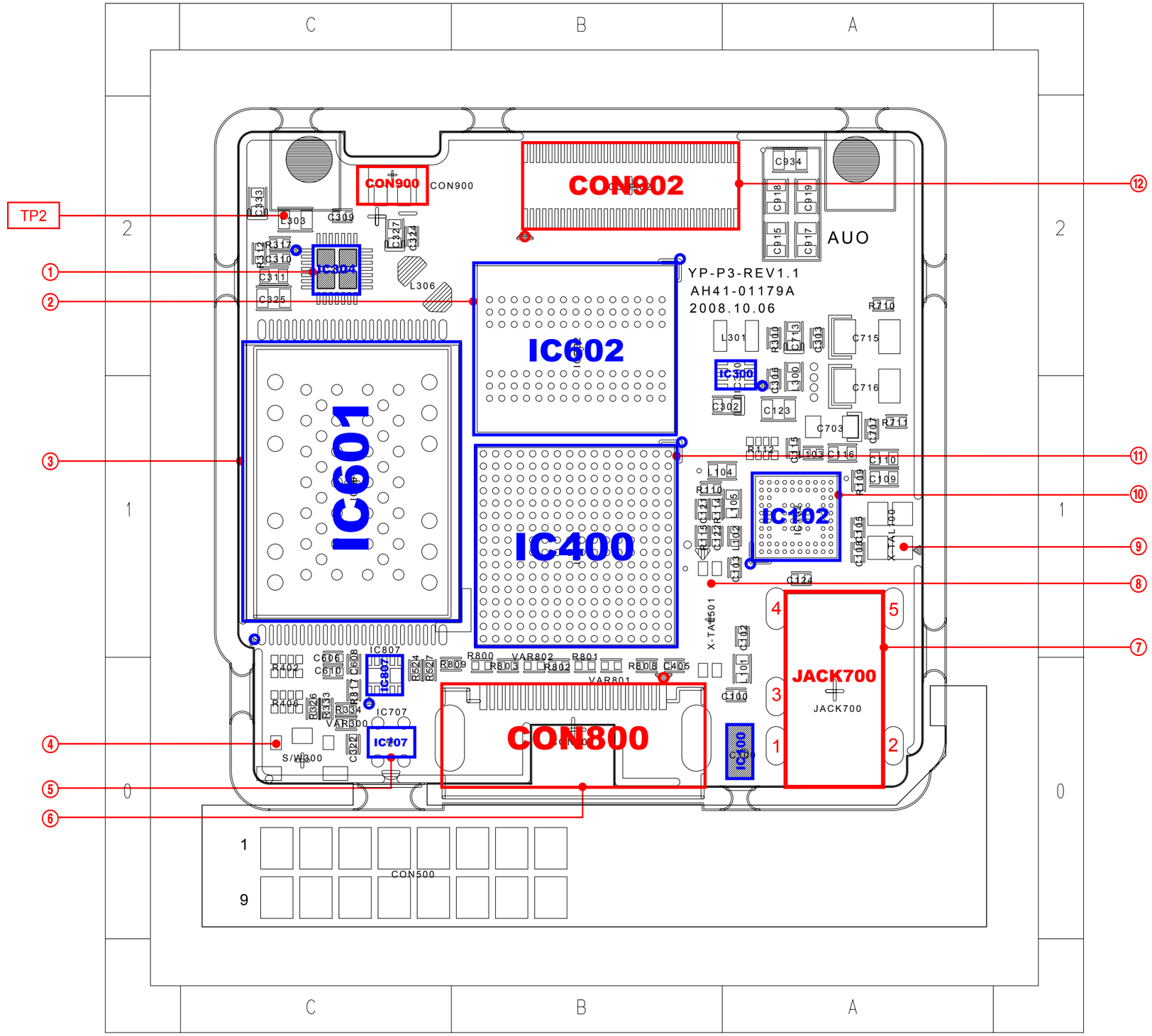
Loc. No.	Part No.	Description;Specification	Q'ty	SNA	Remark
C803	2203-002709	C-CER,CHIP;100nF,+80-20%,16V,Y5V,10	1	SA	
C804	2203-000715	C-CER,CHIP;3.3nF,10%,50V,X7R,1608	1	SA	
C805	2203-006093	C-CER,CHIP;1000nF,+80-20%,6.3V,Y5V,	1	SA	
C806	2203-002709	C-CER,CHIP;100nF,+80-20%,16V,Y5V,10	1	SA	
C810	2203-006348	C-CER,CHIP;1000nF,10%,25V,X5R,TP,16	1	SA	
C900	2203-002709	C-CER,CHIP;100nF,+80-20%,16V,Y5V,10	1	SA	
C901	2203-002709	C-CER,CHIP;100nF,+80-20%,16V,Y5V,10	1	SA	
C903	2203-002709	C-CER,CHIP;100nF,+80-20%,16V,Y5V,10	1	SA	
C905	2203-005818	C-CER,CHIP;470nF,+80-20%,10V,Y5V,-,	1	SA	
C906	2203-002709	C-CER,CHIP;100nF,+80-20%,16V,Y5V,10	1	SA	
C908	2203-006427	C-CER,CHIP;4700nF,10%,16V,X5R,-,201	1	SA	
C909	2203-006683	C-CER,CHIP;4700nF,+80-20%,6.3V,Y5V,	1	SA	
C910	2203-006683	C-CER,CHIP;4700nF,+80-20%,6.3V,Y5V,	1	SA	
C911	2203-006683	C-CER,CHIP;4700nF,+80-20%,6.3V,Y5V,	1	SA	
C912	2203-006683	C-CER,CHIP;4700nF,+80-20%,6.3V,Y5V,	1	SA	
C913	2203-006683	C-CER,CHIP;4700nF,+80-20%,6.3V,Y5V,	1	SA	
C914	2203-006427	C-CER,CHIP;4700nF,10%,16V,X5R,-,201	1	SA	
C915	2203-006427	C-CER,CHIP;4700nF,10%,16V,X5R,-,201	1	SA	
C916	2203-006427	C-CER,CHIP;4700nF,10%,16V,X5R,-,201	1	SA	
C917	2203-006427	C-CER,CHIP;4700nF,10%,16V,X5R,-,201	1	SA	
C918	2203-006427	C-CER,CHIP;4700nF,10%,16V,X5R,-,201	1	SA	
C919	2203-006427	C-CER,CHIP;4700nF,10%,16V,X5R,-,201	1	SA	
C920	2203-006683	C-CER,CHIP;4700nF,+80-20%,6.3V,Y5V,	1	SA	
C923	2203-006838	C-CER,CHIP;2200nF,10%,6.3V,X5R,-,10	1	SA	
C924	2203-006838	C-CER,CHIP;2200nF,10%,6.3V,X5R,-,10	1	SA	
C925	2203-006838	C-CER,CHIP;2200nF,10%,6.3V,X5R,-,10	1	SA	
C926	2203-006838	C-CER,CHIP;2200nF,10%,6.3V,X5R,-,10	1	SA	
C927	2203-006838	C-CER,CHIP;2200nF,10%,6.3V,X5R,-,10	1	SA	
C928	2203-006838	C-CER,CHIP;2200nF,10%,6.3V,X5R,-,10	1	SA	
C934	2203-006427	C-CER,CHIP;4700nF,10%,16V,X5R,-,201	1	SA	
CON800	3710-002323	SOCKET-INTERFACE;24P,1R,0.5mm,SMD-A	1	SA	
CON803	3711-006277	HEADER-BOARD TO BOARD;BOX,10P,2R,0.	1	SA	
CON900	3710-001436	SOCKET-BOARD TO BOARD;2P,1R,1.27mm,	1	SA	
CON901	3711-006277	HEADER-BOARD TO BOARD;BOX,10P,2R,0.	1	SA	
CON902	3710-002174	SOCKET-BOARD TO BOARD;70P,2R,0.4MM,	1	SA	
CON903	6302-001053	GASKET;EXF-0023-02,L3.7,GOLD,BECU	1	SA	
D300	0401-000164	DIODE-SWITCHING;KDS121V,80V,100MA,V	1	SA	
D301	0401-000164	DIODE-SWITCHING;KDS121V,80V,100MA,V	1	SA	
D303	0404-001089	DIODE-SCHOTTKY;RB551V-30,20V,500MA,	1	SA	
D400	0401-000164	DIODE-SWITCHING;KDS121V,80V,100MA,V	1	SA	
D701	0406-001203	DIODE-TVS;uClamp3301H,-,40W,SOD-523	1	SA	
IC102	1205-003597	IC-BLUETOOTH;BCM2048SB0KUFBG,UFBGA,	1	SA	
IC300	1203-005492	IC-DC/DC CONVERTER;AAT1265IJS-5.0-T	1	SA	
IC302	0801-002767	IC-CMOS LOGIC;7WH74,D FLIP-FLOP,SSO	1	SA	
IC304	1203-005277	IC-DC/DC CONVERTER;MAX8819,QFN,28P,	1	SA	
IC400	0902-002351	IC-MICROPROCESSOR;TCC7901,266MHz,FB	1	SA	
IC401	0801-002423	IC-CMOS LOGIC;7SZ00,NAND GATE,SOP,5	1	SA	
IC601	1107-001715	IC-FLASH MEMORY;K9HCG08U1M-PCB0,8GB	1	SA	
IC602	1105-001617	IC-DRAM;K4S51323PE,-,512Mbit,4x4Mx3	1	SA	
IC700	1002-001529	IC-A/D&D/A CONVERTER;WM1800GEFL,24,	1	SA	
IC701	0505-002229	FET-SILICON;FDMA1028NZ,N,20V,3.7A,0	1	SA	
IC707	3003-001130	MIC-CONDENSOR;3.6V,100mA-250mA,-42d	1	SA	
IC802	1003-002047	IC-MOTOR DRIVER;-,MLP,8P,2.0X2.0,-,	1	SA	
IC807	1203-005373	IC-VOL. DETECTOR;NCP347MTAHTBG,DFN,	1	SA	
IC808	1203-004880	IC-POSI.FIXED REG.;S-1323B33PF,SNT-	1	SA	
JACK700	3722-002813	JACK-EAR PHONE;5P,AU,BLK,SMD-A	1	SA	

Loc. No.	Part No.	Description;Specification	Q'ty	SNA	Remark
L100	2703-001838	INDUCTOR-SMD;100nH,5%,1608	1	SA	
L101	2703-002927	INDUCTOR-SMD;1.8nH,5%,1608	1	SA	
L102	2703-003249	INDUCTOR-SMD;56nH,5%,1005	1	SA	
L103	3301-001659	BEAD-SMD;600ohm,1005,300mA,TP,,744o	1	SA	
L104	3301-001148	BEAD-SMD;60ohm,1608,TP,-,-	1	SA	
L105	3301-001148	BEAD-SMD;60ohm,1608,TP,-,-	1	SA	
L300	3301-001148	BEAD-SMD;60ohm,1608,TP,-,-	1	SA	
L301	2703-003264	INDUCTOR-SMD;4.7uH,20%,2520	1	SA	
L303	2703-003258	INDUCTOR-SMD;4.7uH,20%,2012	1	SA	
L304	2703-003264	INDUCTOR-SMD;4.7uH,20%,2520	1	SA	
L305	2703-003264	INDUCTOR-SMD;4.7uH,20%,2520	1	SA	
L306	2703-002829	INDUCTOR-SMD;10uH,20%,2828	1	SA	
L700	3301-001148	BEAD-SMD;60ohm,1608,TP,-,-	1	SA	
L701	3301-001148	BEAD-SMD;60ohm,1608,TP,-,-	1	SA	
L702	3301-001364	BEAD-SMD;1000ohm,1608,150mA,TP,1085	1	SA	
L703	3301-001364	BEAD-SMD;1000ohm,1608,150mA,TP,1085	1	SA	
L704	3301-001364	BEAD-SMD;1000ohm,1608,150mA,TP,1085	1	SA	
L705	3301-001364	BEAD-SMD;1000ohm,1608,150mA,TP,1085	1	SA	
L801	3301-001148	BEAD-SMD;60ohm,1608,TP,-,-	1	SA	
L900	3301-001364	BEAD-SMD;1000ohm,1608,150mA,TP,1085	1	SA	
L901	3301-001364	BEAD-SMD;1000ohm,1608,150mA,TP,1085	1	SA	
L903	3301-001148	BEAD-SMD;60ohm,1608,TP,-,-	1	SA	
PCB	AH41-01179A	PCB-MAIN;YP-P3,FR4,8,1.0,T0.8,212.2	0.25	SNA	
Q300	0504-001193	TR-DIGITAL;KRC408V,NPN,100MW,22K/47	1	SA	
Q301	0504-001254	TR-DIGITAL;KRC857E,NPN,200mW,10/47K	1	SA	
Q302	0504-001193	TR-DIGITAL;KRC408V,NPN,100MW,22K/47	1	SA	
Q303	0504-001254	TR-DIGITAL;KRC857E,NPN,200mW,10/47K	1	SA	
Q304	0504-001170	TR-DIGITAL;KRA304V,PNP,100MW,47K/47	1	SA	
Q307	0504-001193	TR-DIGITAL;KRC408V,NPN,100MW,22K/47	1	SA	
R106	2007-000171	R-CHIP;0ohm,5%,1/16W,TP,1005	1	SA	
R108	2007-000063	R-CHIP;150Kohm,1%,1/10W,TP,1608	1	SA	
R109	2007-000148	R-CHIP;10Kohm,5%,1/16W,TP,1005	1	SA	
R110	2007-000148	R-CHIP;10Kohm,5%,1/16W,TP,1005	1	SA	
R112	2011-001262	R-NETWORK;22ohm,5%,1/16W,L,CHIP,8P,	1	SA	
R114	2007-000148	R-CHIP;10Kohm,5%,1/16W,TP,1005	1	SA	
R115	2007-000140	R-CHIP;1Kohm,5%,1/16W,TP,1005	1	SA	
R300	2007-000148	R-CHIP;10Kohm,5%,1/16W,TP,1005	1	SA	
R301	2007-007107	R-CHIP;100Kohm,1%,1/16W,TP,1005	1	SA	
R304	2007-000153	R-CHIP;22Kohm,5%,1/16W,TP,1005	1	SA	
R305	2007-000455	R-CHIP;18Kohm,1%,1/10W,TP,1608	1	SA	
R306	2007-000171	R-CHIP;0ohm,5%,1/16W,TP,1005	1	SA	
R308	2007-000157	R-CHIP;47Kohm,5%,1/16W,TP,1005	1	SA	
R309	2007-000148	R-CHIP;10Kohm,5%,1/16W,TP,1005	1	SA	
R310	2007-000171	R-CHIP;0ohm,5%,1/16W,TP,1005	1	SA	
R311	2007-000162	R-CHIP;100Kohm,5%,1/16W,TP,1005	1	SA	
R312	2007-000148	R-CHIP;10Kohm,5%,1/16W,TP,1005	1	SA	
R313	2007-000162	R-CHIP;100Kohm,5%,1/16W,TP,1005	1	SA	
R314	2007-000755	R-CHIP;330Kohm,1%,1/10W,TP,1608	1	SA	
R315	2007-000171	R-CHIP;0ohm,5%,1/16W,TP,1005	1	SA	
R317	2007-000148	R-CHIP;10Kohm,5%,1/16W,TP,1005	1	SA	
R318	2007-008167	R-CHIP;120Kohm,1%,1/16W,TP,1005	1	SA	
R319	2007-007489	R-CHIP;150Kohm,1%,1/16W,TP,1005	1	SA	
R321	2007-008269	R-CHIP;51Kohm,1%,1/16W,TP,1005	1	SA	
R322	2007-007592	R-CHIP;270Kohm,1%,1/16W,TP,1005	1	SA	
R323	2007-007942	R-CHIP;1Mohm,1%,1/16W,TP,1005	1	SA	
R324	2007-000148	R-CHIP;10Kohm,5%,1/16W,TP,1005	1	SA	

Loc. No.	Part No.	Description;Specification	Q'ty	SNA	Remark
R326	2007-000148	R-CHIP;10Kohm,5%,1/16W,TP,1005	1	SA	
R327	2007-007313	R-CHIP;6.8Kohm,1%,1/16W,TP,1005	1	SA	
R328	2007-008354	R-CHIP;220Kohm,1%,1/16W,TP,1005	1	SA	
R329	2007-007136	R-CHIP;4.7Kohm,1%,1/16W,TP,1005	1	SA	
R330	2007-007107	R-CHIP;100Kohm,1%,1/16W,TP,1005	1	SA	
R331	2007-007316	R-CHIP;3.3Kohm,1%,1/16W,TP,1005	1	SA	
R332	2007-000140	R-CHIP;1Kohm,5%,1/16W,TP,1005	1	SA	
R333	2007-000140	R-CHIP;1Kohm,5%,1/16W,TP,1005	1	SA	
R334	2007-000140	R-CHIP;1Kohm,5%,1/16W,TP,1005	1	SA	
R335	2007-000162	R-CHIP;100Kohm,5%,1/16W,TP,1005	1	SA	
R336	2007-000148	R-CHIP;10Kohm,5%,1/16W,TP,1005	1	SA	
R337	2007-007316	R-CHIP;3.3Kohm,1%,1/16W,TP,1005	1	SA	
R338	2007-007316	R-CHIP;3.3Kohm,1%,1/16W,TP,1005	1	SA	
R342	2007-007489	R-CHIP;150Kohm,1%,1/16W,TP,1005	1	SA	
R400	2007-000168	R-CHIP;470Kohm,5%,1/16W,TP,1005	1	SA	
R401	2007-000140	R-CHIP;1Kohm,5%,1/16W,TP,1005	1	SA	
R402	2011-001345	R-NETWORK;10Kohm,5%,1/16W,L,CHIP,8P	1	SA	
R406	2011-001345	R-NETWORK;10Kohm,5%,1/16W,L,CHIP,8P	1	SA	
R500	2007-000170	R-CHIP;1Mohm,5%,1/16W,TP,1005	1	SA	
R501	2007-000148	R-CHIP;10Kohm,5%,1/16W,TP,1005	1	SA	
R502	2007-000140	R-CHIP;1Kohm,5%,1/16W,TP,1005	1	SA	
R503	2007-000566	R-CHIP;220Kohm,5%,1/16W,TP,1005	1	SA	
R504	2007-000170	R-CHIP;1Mohm,5%,1/16W,TP,1005	1	SA	
R506	2007-000157	R-CHIP;47Kohm,5%,1/16W,TP,1005	1	SA	
R507	2007-000173	R-CHIP;22ohm,5%,1/16W,TP,1005	1	SA	
R508	2007-000148	R-CHIP;10Kohm,5%,1/16W,TP,1005	1	SA	
R509	2007-000148	R-CHIP;10Kohm,5%,1/16W,TP,1005	1	SA	
R510	2007-000173	R-CHIP;22ohm,5%,1/16W,TP,1005	1	SA	
R512	2007-000148	R-CHIP;10Kohm,5%,1/16W,TP,1005	1	SA	
R513	2007-000173	R-CHIP;22ohm,5%,1/16W,TP,1005	1	SA	
R514	2007-000157	R-CHIP;47Kohm,5%,1/16W,TP,1005	1	SA	
R515	2007-000157	R-CHIP;47Kohm,5%,1/16W,TP,1005	1	SA	
R516	2007-009964	R-CHIP;44.2ohm,1%,1/16W,TP,1005	1	SA	
R521	2007-000140	R-CHIP;1Kohm,5%,1/16W,TP,1005	1	SA	
R522	2007-000171	R-CHIP;0ohm,5%,1/16W,TP,1005	1	SA	
R523	2007-000148	R-CHIP;10Kohm,5%,1/16W,TP,1005	1	SA	
R524	2007-000148	R-CHIP;10Kohm,5%,1/16W,TP,1005	1	SA	
R525	2007-000148	R-CHIP;10Kohm,5%,1/16W,TP,1005	1	SA	
R526	2007-000171	R-CHIP;0ohm,5%,1/16W,TP,1005	1	SA	
R527	2007-000170	R-CHIP;1Mohm,5%,1/16W,TP,1005	1	SA	
R528	2007-000148	R-CHIP;10Kohm,5%,1/16W,TP,1005	1	SA	
R529	2007-000148	R-CHIP;10Kohm,5%,1/16W,TP,1005	1	SA	
R530	2007-000148	R-CHIP;10Kohm,5%,1/16W,TP,1005	1	SA	
R532	2007-000148	R-CHIP;10Kohm,5%,1/16W,TP,1005	1	SA	
R533	2007-000148	R-CHIP;10Kohm,5%,1/16W,TP,1005	1	SA	
R534	2007-000157	R-CHIP;47Kohm,5%,1/16W,TP,1005	1	SA	
R535	2007-000148	R-CHIP;10Kohm,5%,1/16W,TP,1005	1	SA	
R536	2007-000148	R-CHIP;10Kohm,5%,1/16W,TP,1005	1	SA	
R537	2007-001319	R-CHIP;1.2Kohm,5%,1/16W,TP,1005	1	SA	
R538	2007-000148	R-CHIP;10Kohm,5%,1/16W,TP,1005	1	SA	
R539	2007-000143	R-CHIP;4.7Kohm,5%,1/16W,TP,1005	1	SA	
R540	2007-000157	R-CHIP;47Kohm,5%,1/16W,TP,1005	1	SA	
R541	2007-000566	R-CHIP;220Kohm,5%,1/16W,TP,1005	1	SA	
R542	2007-007100	R-CHIP;10Mohm,5%,1/16W,TP,1005	1	SA	
R704	2007-000173	R-CHIP;22ohm,5%,1/16W,TP,1005	1	SA	
R705	2011-001262	R-NETWORK;22ohm,5%,1/16W,L,CHIP,8P,	1	SA	
R706	2007-000148	R-CHIP;10Kohm,5%,1/16W,TP,1005	1	SA	
R710	2007-000139	R-CHIP;220ohm,5%,1/16W,TP,1005	1	SA	
R711	2007-000139	R-CHIP;220ohm,5%,1/16W,TP,1005	1	SA	
R712	2007-000140	R-CHIP;1Kohm,5%,1/16W,TP,1005	1	SA	
R800	2007-007334	R-CHIP;200Kohm,1%,1/16W,TP,1005	1	SA	
R801	2007-007199	R-CHIP;2.7ohm,5%,1/16W,TP,1005	1	SA	
R802	2007-007199	R-CHIP;2.7ohm,5%,1/16W,TP,1005	1	SA	
R803	2007-007489	R-CHIP;150Kohm,1%,1/16W,TP,1005	1	SA	
R805	2007-000170	R-CHIP;1Mohm,5%,1/16W,TP,1005	1	SA	
R806	2007-000148	R-CHIP;10Kohm,5%,1/16W,TP,1005	1	SA	
R807	2007-000148	R-CHIP;10Kohm,5%,1/16W,TP,1005	1	SA	
R808	2007-000155	R-CHIP;27Kohm,5%,1/16W,TP,1005	1	SA	
R809	2007-000566	R-CHIP;220Kohm,5%,1/16W,TP,1005	1	SA	
R811	2007-000148	R-CHIP;10Kohm,5%,1/16W,TP,1005	1	SA	
R812	2007-000164	R-CHIP;150Kohm,5%,1/16W,TP,1005	1	SA	
R814	2007-000148	R-CHIP;10Kohm,5%,1/16W,TP,1005	1	SA	
R817	2007-000162	R-CHIP;100Kohm,5%,1/16W,TP,1005	1	SA	
R900	2007-000171	R-CHIP;0ohm,5%,1/16W,TP,1005	1	SA	
R901	2007-000143	R-CHIP;4.7Kohm,5%,1/16W,TP,1005	1	SA	
R902	2007-000140	R-CHIP;1Kohm,5%,1/16W,TP,1005	1	SA	
R903	2007-000140	R-CHIP;1Kohm,5%,1/16W,TP,1005	1	SA	
R905	2007-000148	R-CHIP;10Kohm,5%,1/16W,TP,1005	1	SA	
R906	2007-000775	R-CHIP;33Kohm,5%,1/16W,TP,1005	1	SA	
R907	2007-000164	R-CHIP;150Kohm,5%,1/16W,TP,1005	1	SA	
R908	2007-003112	R-CHIP;27ohm,5%,1/16W,TP,1005	1	SA	
R909	2007-000148	R-CHIP;10Kohm,5%,1/16W,TP,1005	1	SA	
R910	2007-000140	R-CHIP;1Kohm,5%,1/16W,TP,1005	1	SA	
S/W300	3404-001152	SWITCH-TACT;12V DC,20mA,160gf,4.5x4	1	SA	
VAR801	1405-001138	VARISTOR;18Vdc,1A,1x0.5x0.6mm,TP	1	SNA	
VAR802	1405-001138	VARISTOR;18Vdc,1A,1x0.5x0.6mm,TP	1	SNA	
X-TAL100	2801-004587	CRYSTAL-SMD;26MHz,10ppm,-,10pF,40oh	1	SA	
X-TAL500	2801-000102	CRYSTAL-SMD;12MHz,30ppm,-,12pF,100o	1	SA	
X-TAL501	2801-003856	CRYSTAL-SMD;0.032768MHz,20ppm,28-AC	1	SA	
	AH99-00075A	ASSY AUTO INSERT;YP-P3 ASSY,YP-P3,8	1	SNA	
	AH98-00179A	**ASSY ACCESSORY;MP3,YP-P3 XEE,BLACK,**	**1**	**SNA**	**XEE**
	AH98-00179B	**ASSY ACCESSORY;MP3,YP-P3 XEF,BLACK,**	**1**	**SNA**	**XEF**
	AH39-00899A	CBF CABLE;USB CABLE,49338-0001,YP-T	1	SA	
	AH46-00088C	S/W CD-INSTALL CD;-,YP-P3,EMODIO +	1	SA	XEE
	AH46-00088D	S/W CD-INSTALL CD;-,YP-P3,EMODIO +	1	SA	XEF
	AH59-01884A	EARPHONE-EP-380;EP-380(BLACK),EP-38	1	SA	
	AH68-00650L	MARK RECYCLE-CARD-WARRANTY;YP-P2,EL	1	SA	
	AH68-01933M	MANUAL USERS-EMODIO CARD;YP-P2,XEE,	1	SA	
	AH68-02154C	MANUAL USERS-QG;YP-P3,XEF,ENG/FRE,-	1	SA	XEF
	AH68-02154D	MANUAL USERS-QG;YP-P3,XEE,ENG/SWD/D	1	SA	XEE
	AH69-02377A	PACKING-OUTER;YP-P3,PAPER,-,0.1,100	1	SA	
	AH98-00086A	ASSY PACKING-SET;MP3,YP-P3,ASSY,-	1	SNA	
	AH07-00240A	LCD;A030FL01V2MDL,YP-P3,-,110.07X4	1	SA	
	AH43-00022A	BATTERY;M393048R01,YP-P3,Li Polymer	1	SA	
	AH63-01272A	SHEET-USB-FOAM;YP-T9,Conductive Foa	1	SNA	
	AH68-00508U	LABEL SERIAL;COMMON,ELS,-,-,90,-,-,	0.1	SNA	
	AH68-00511E	LABEL-PACKING;YP-T7,KOR/CHN,-,-,-,-	2	SA	
	AH68-01453B	LABEL-LISTENING;YEPP EU ELS1,-,PASC	0.1	SNA	XEF
	AH68-01453C	LABEL-MP3 SVC XEF;YP-T6,XEF,-,-,-,-	0.1	SNA	XEF
	AH68-50119B	LABEL-EAN(B);-,-,ART,T0.05,W27,L47,	1.05	SNA	
	AH69-02373C	MASTER BOX;YP-P3,PAPER,-,160mm,230m	0.1	SNA	
	AH69-02374A	PAD-ASSY;YP-P3,WOOD,7mm,250mm,320mm	0.1	SA	
	AH97-03047A	ASSY SPEAKER;MP3,YP-P3,SPEAKER+MOTO	1	SA	

6. PCB Diagram

6-1 MAIN PCB Top



①	CHARGER & POWER IC (DDCON)
②	SDRAM
③	NAND FLASH MEMORY
④	RESET BUTTON
⑤	MIC
⑥	24PIN I/O CONNECTOR
⑦	EAR JACK
⑧	32.768KHz CRYSTAL
⑨	26MHz CRYSTAL
⑩	BLUETOOTH/FM IC
⑪	MPU
⑫	LCD CONNECTOR

6-1-1 Pin Connection

⑥ CON800
24PIN I/O CONNECTOR

Pin No.	Signal
1	BATT ID
2	DEVICE_DET
3	DC2.8V OUT
4	ADAPTOR (DC5V)
5	ADAPTOR (DC5V)
6	DEBUG_PWR_ON
7	CRADLE_DET
8	TEST POINT
9	TEST POINT
10	USB D-
11	N.C
12	GND
13	UART RX1
14	URAT TX1
15	USB D+
16	USB PWR (DC5V)
17	LINE_OUT_R
18	LINE_OUT_L
19	GND
20	CRADLE_FM_ANT
21	BATT (DC4.2V)
22	BATT (DC4.2V)
23	EXT_BAT_DET
24	PBA_CE

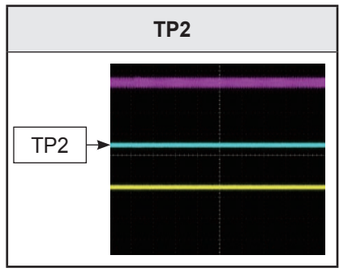
⑦ JACK700
EAR JACK

Pin No.	Signal
1	FM ANTENNA
2	EARPHONE DETECT
3	EARPHONE_RIGHT
4	EARPHONE_LEFT
5	EARPHONE_LEFT

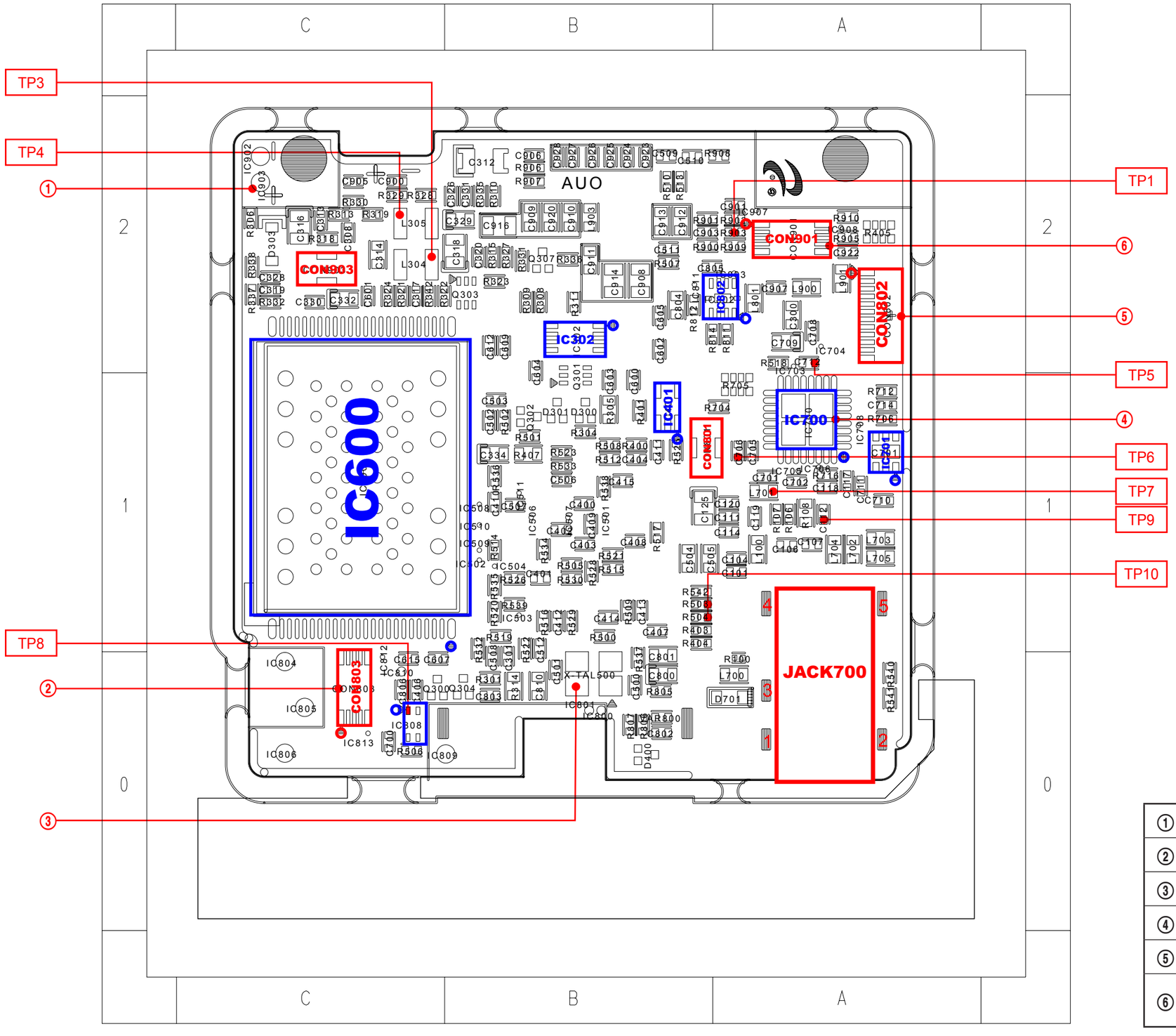
⑫ CON902
LCD CONNECTOR

Pin No.	Signal	Pin No.	Signal
1	VDDA	47	GRB
2	VDDA	48	DCLK
3	GND	49	V1
4	GND	50	V2
5	VDD	51	V3
6	VDD	52	V4
7	VDDIO	53	V5
8	VDD_25V	54	V6
9-16	RED [0~7]	55	VDD3
17	GND	56	VCL
18-25	GREEN [0~7]	57	VLOUT3
26	GND	58	V7
27-34	BLUE [0~7]	59	V8
35	GND	60	V9
36	VCOM	61	V10
37	DRV	62	V11
38	N.C	63	V12
39	VLED-	64	VLOUT2
40	VLED+	65	VGH
41	N.C	66	VHL
42	CS	67	VCOMH
43	SDA	68	VCOML
44	SCL	69	FRP
45	VSYNC	70	VCOM
46	HSYNC		

6-1-2 Test Point Wave Form



6-2 MAIN PCB Bottom



①	BATTERY TEST POINT
②	TOUCHPAD CONNECTOR
③	12MHz CRYSTAL
④	AUDIO CODEC IC
⑤	DEBUGGING CONNECTOR
⑥	SPEAKER/KEY/MOTOR CONNECTOR

6-2-1 Pin Connection

② CON803
TOUCHPAD CONNECTOR

Pin No.	Signal
1	GND
2	TSP_DATA
3	TSP_CLOCK
4, 10	TSP_POWER
5	TSP_INTERRUPT
6, 7	GND

⑤ CON802
DEBUGGING CONNECTOR

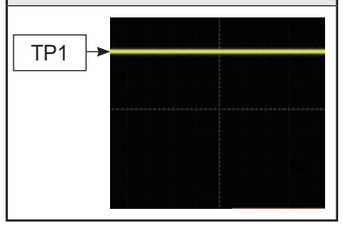
Pin No.	Signal
1	P2.8V
2	JTAG_RTCK
3	JTAG_TCK
4	JTAG_TDO
5	JTAG_TMS
6	JTAG_TDI
7	#JTAG_RST
8	GND
9	UART_TX1
10	UART_RX1
11	DEBUG_PWR_ON
12	V_DDCON

⑥ CON901
SPEAKER/KEY/MOTOR CONNECTOR

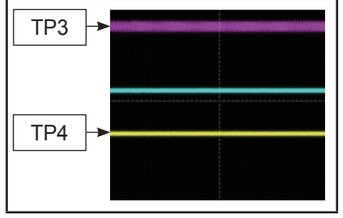
Pin No.	Signal
1	SYSTEM POWER
2	P3.2V
3	PWR_IN_DDCON
4	VOLUME_UP
5	VOLUME_DOWN
6	MOTOR_PLUS
7	MOTOR_MINUS
8	GND
9	SPEAKER_PLUS
10	SPEAKER_MINUS

6-2-2 Test Point Wave Form

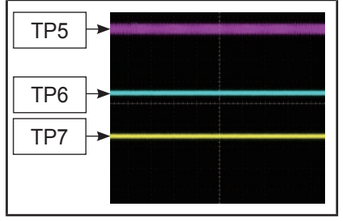
TP1



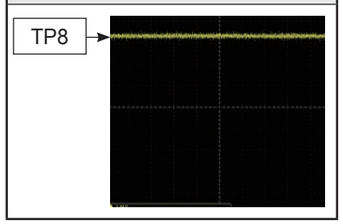
TP3 / TP4



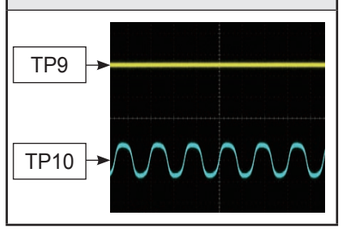
TP5 / TP6 / TP7



TP8



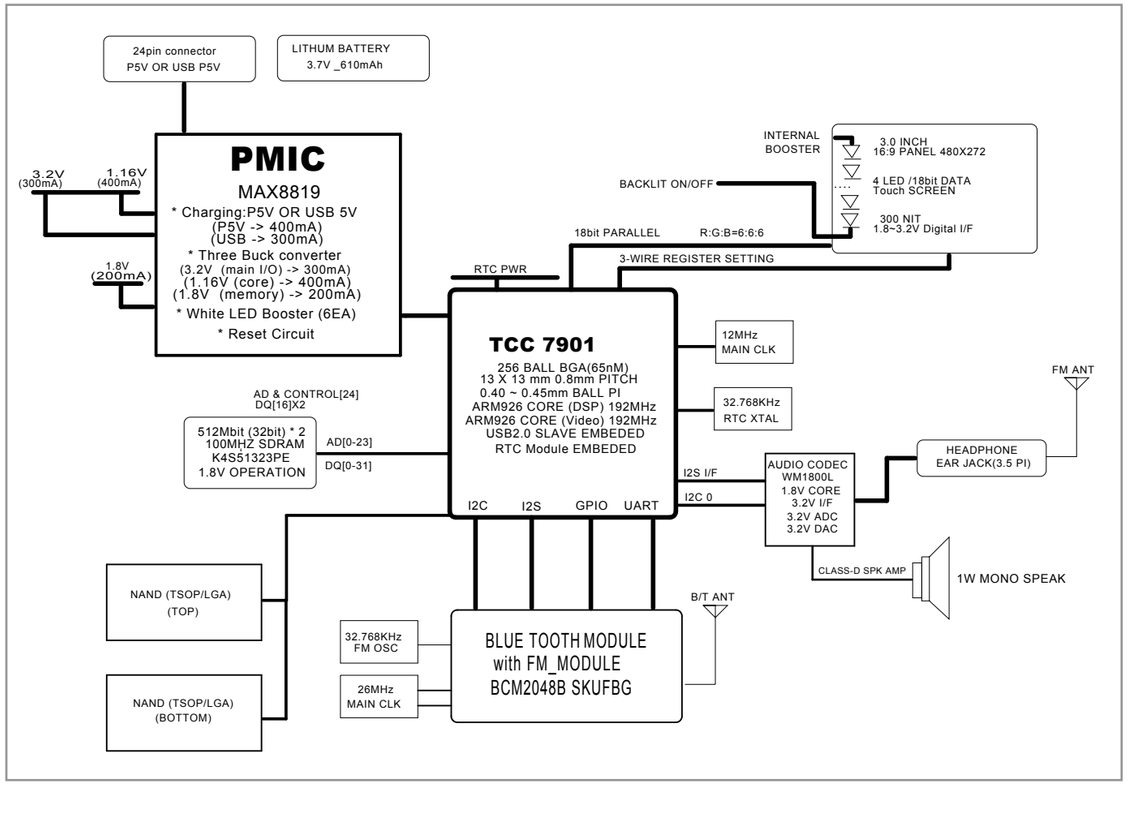
TP9 / TP10



MEMO

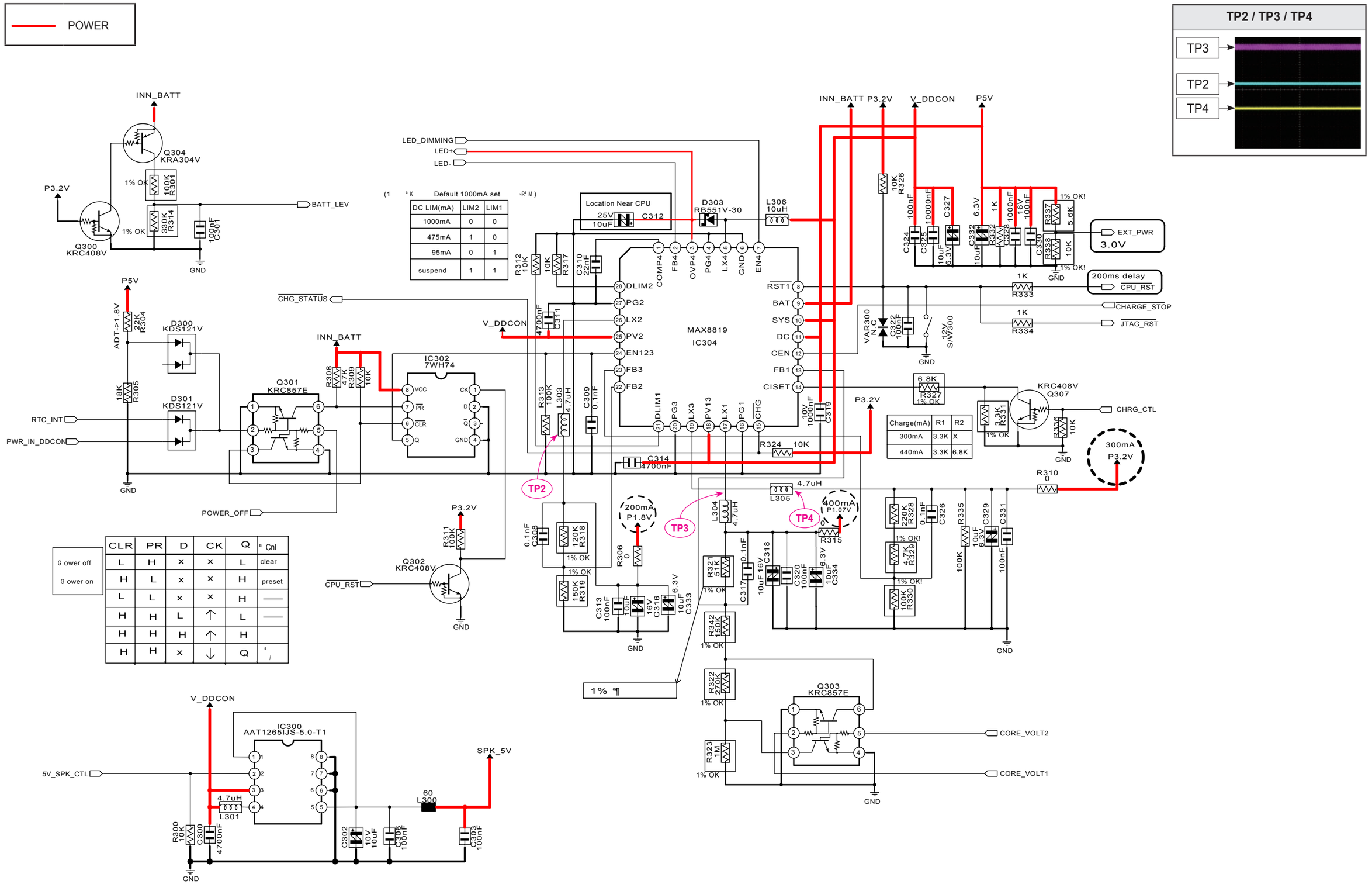
7. Schematic Diagram

7-1 Overall Block Diagram

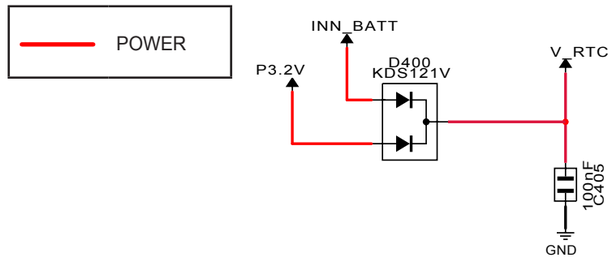


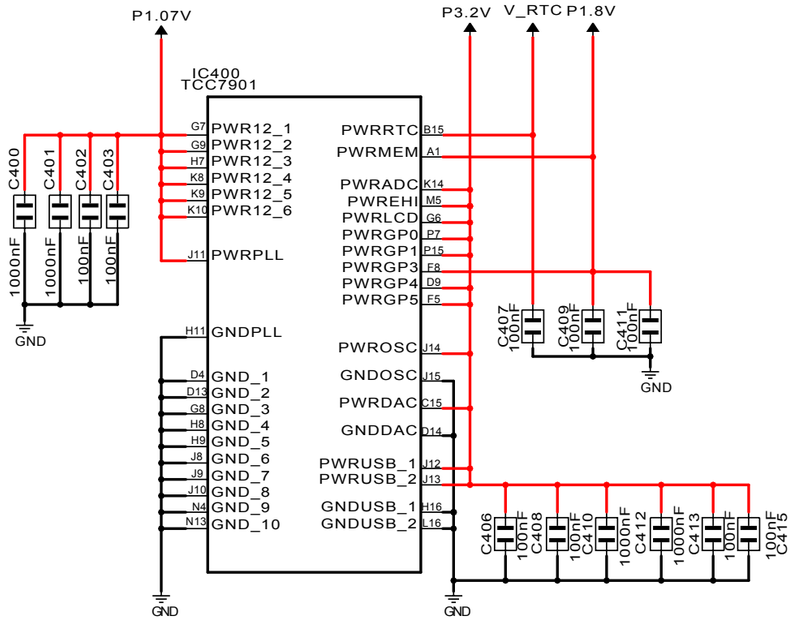
- The main system comprises MPU (TCC79x), NAND Flash Memory, SDRAM (64MByte 32bit), BT+FM IC (BCM2048), Audio Codec (WM1800) and POWER IC (MAX8819).
- The TCC79x, which is the main chipset, plays a major role by connecting to other chipsets.
- The POWER IC MAX8819 receives power from the USB/5V adaptor or the battery, and supplies it to the system after converting it to a suitable voltage for the system (5V, 3.2V, 1.8V, 1.2V), charges the Li-poly Battery and turns on the LCD Backlight.
- The Audio Codec (WM1800) is interconnected with the main chipset, 12S and 12C interface to output the sound of the earphones and external speaker. It also supports functions such as a Bluetooth headset and hands free, interconnected with the BT+FM IC.

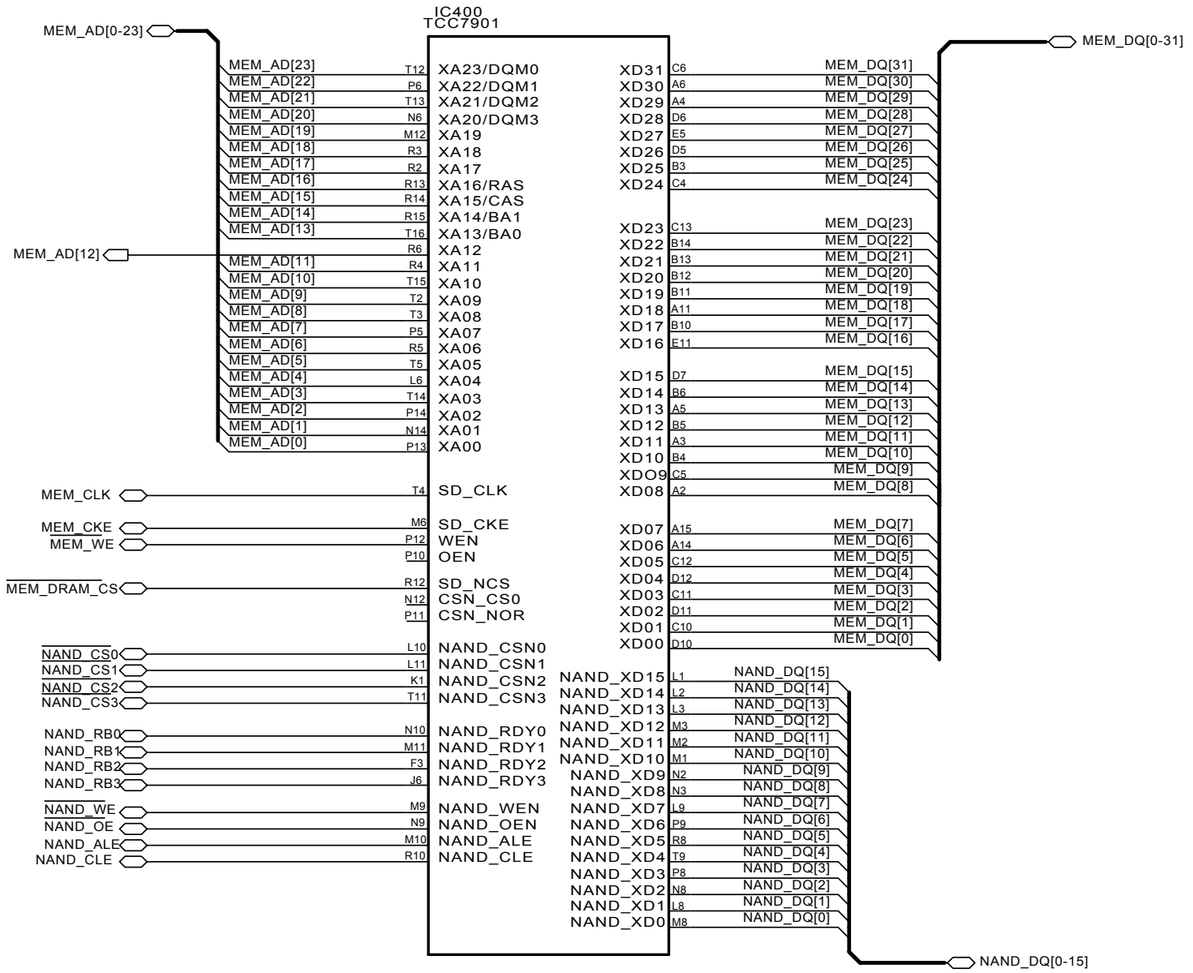
7-2 Power Management

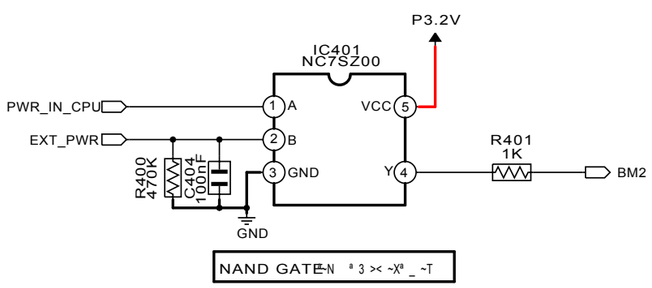


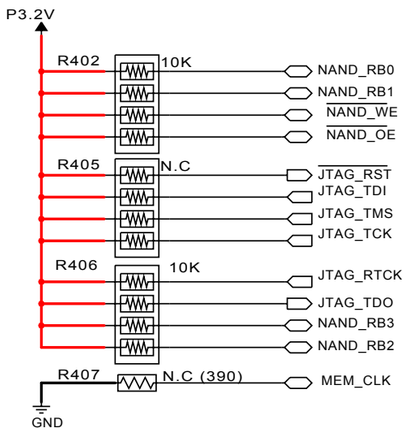
7-3 TCC7801 Power_Block

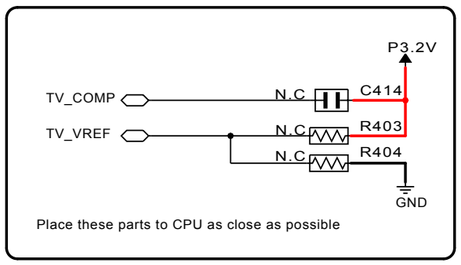




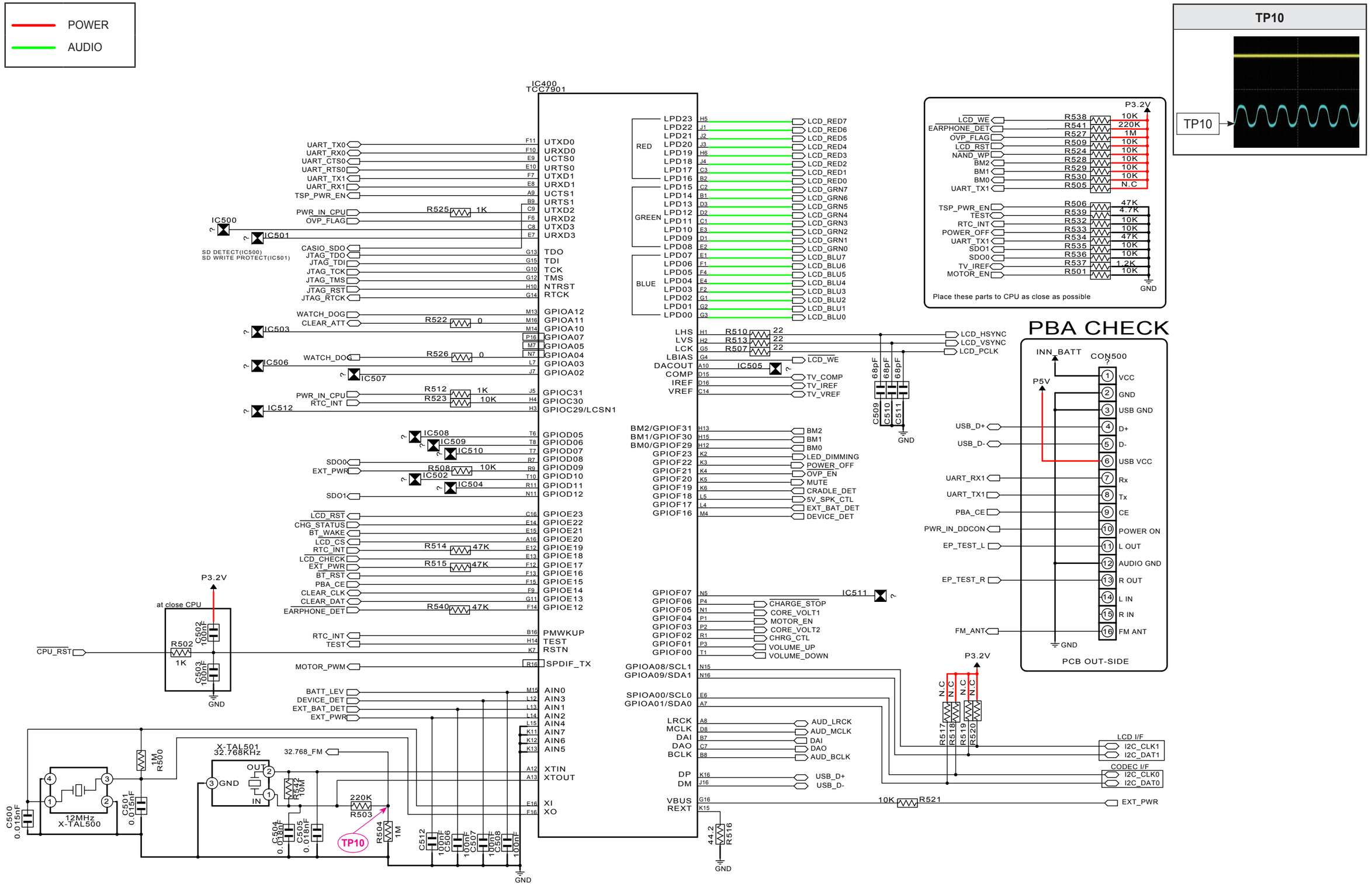




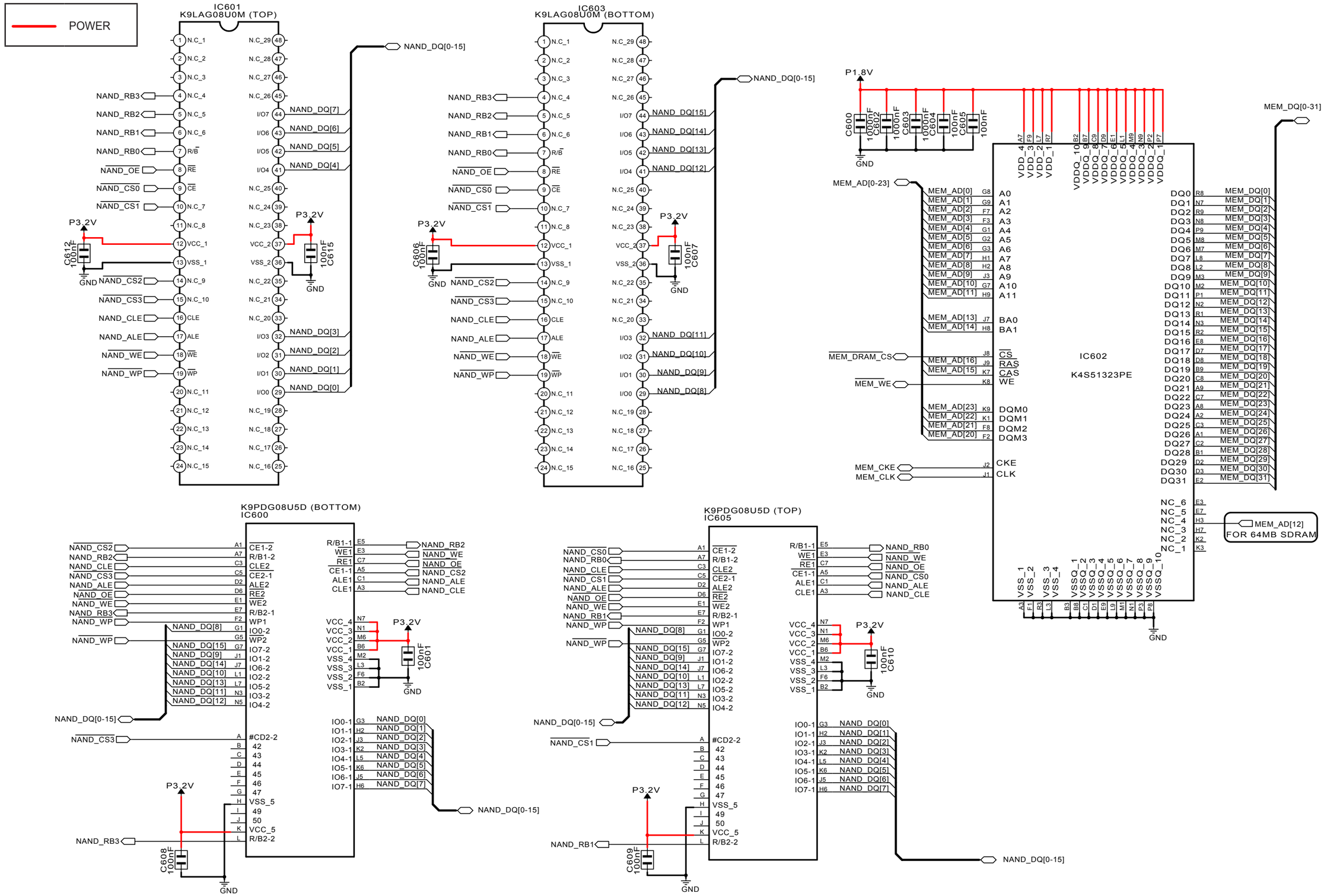




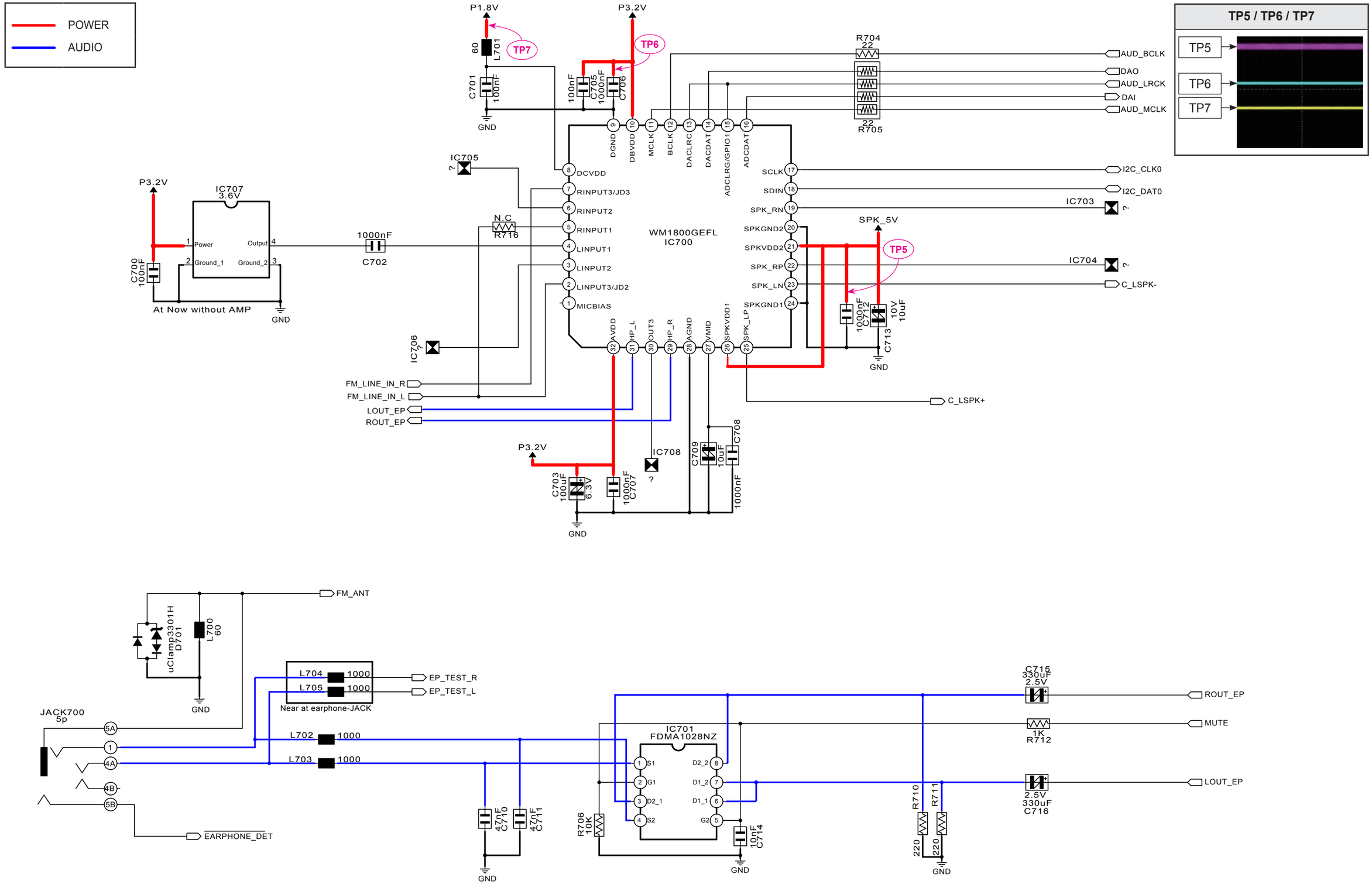
7-4 TCC7801 I/O Setting



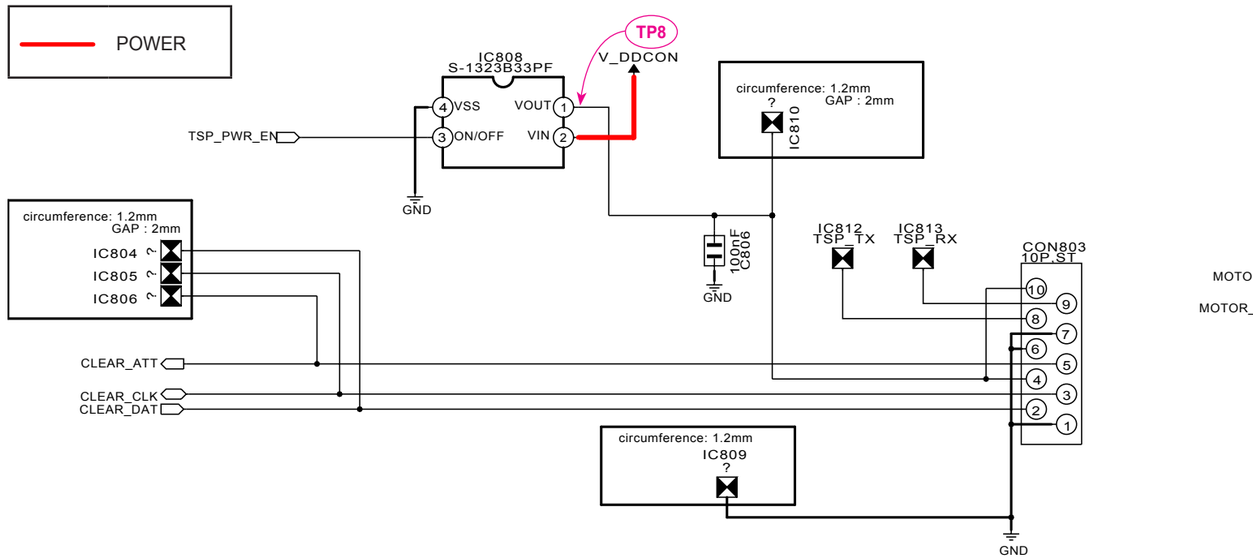
7-5 Memory (SDRAM, NAND-flash)

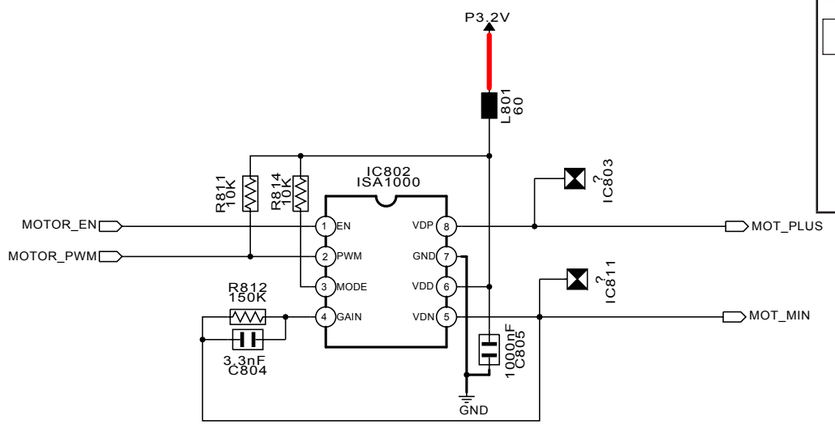


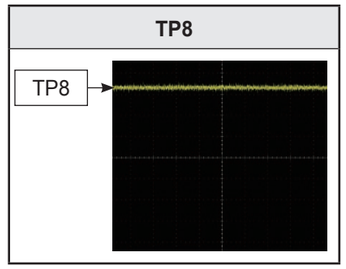
7-6 Audio CODEC

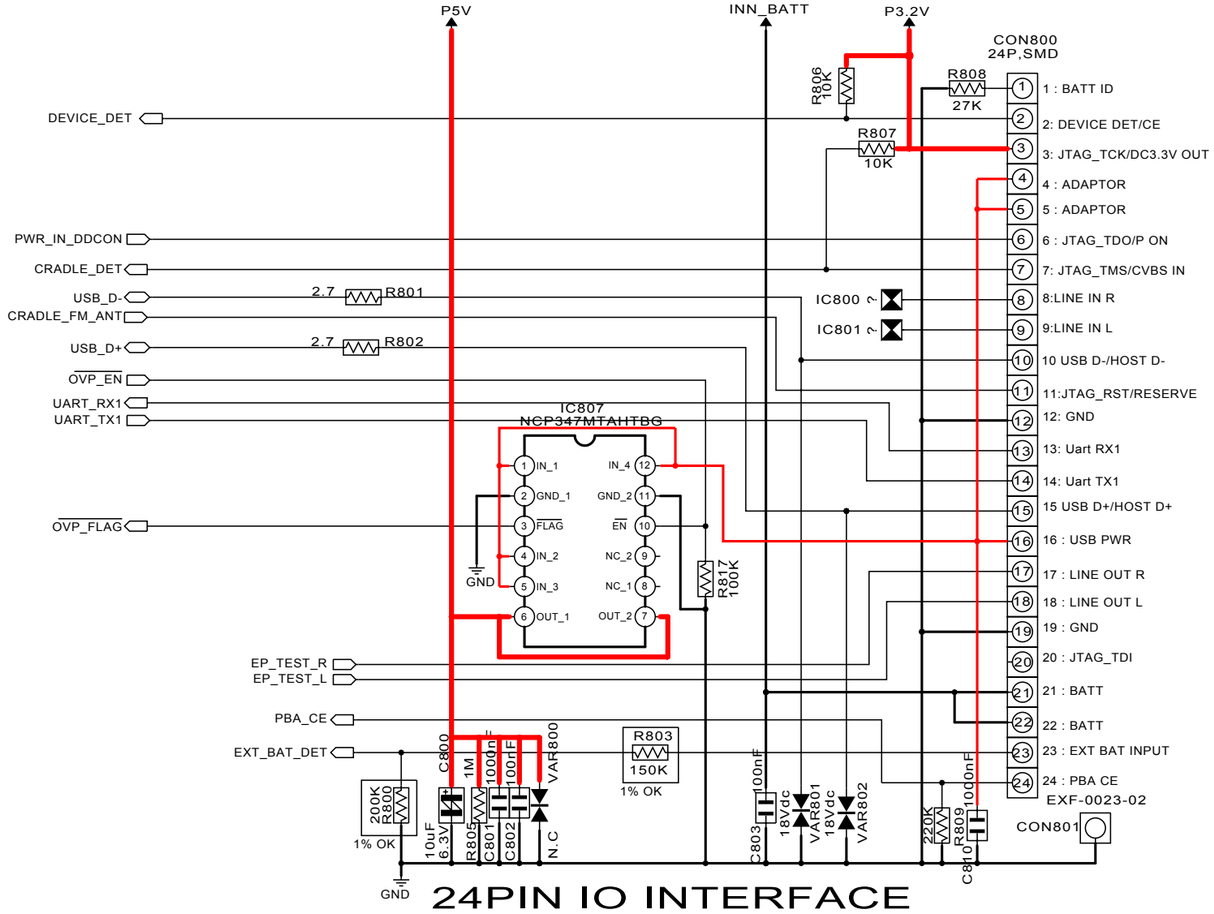


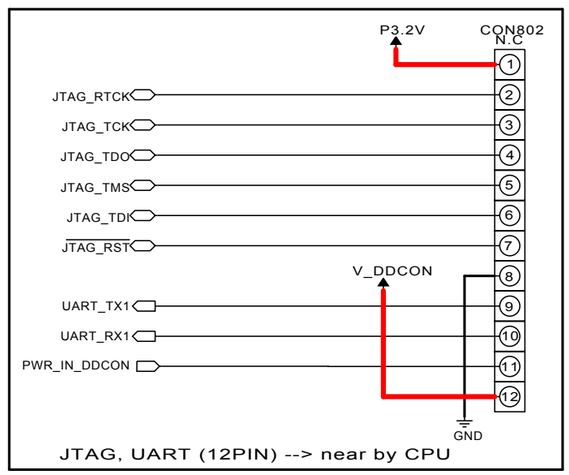
7-7 24pin I/O, Interface



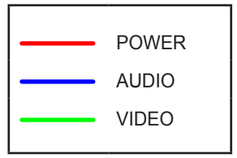


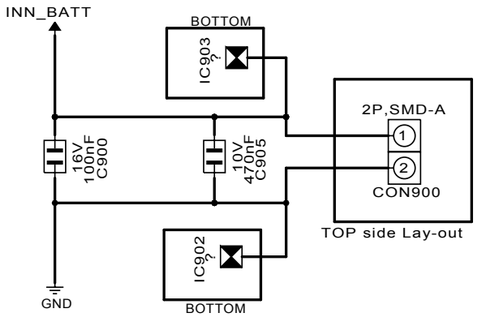


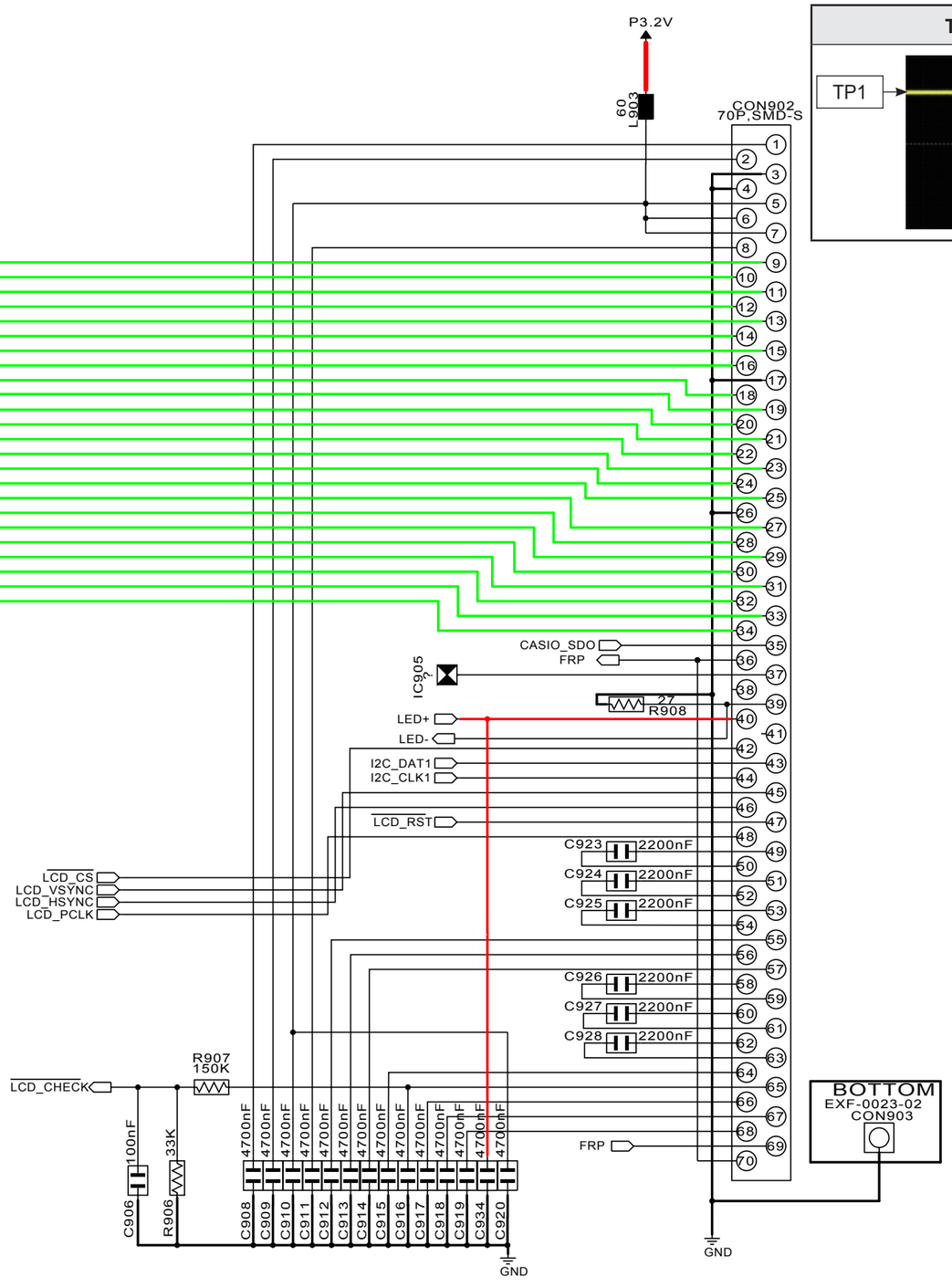


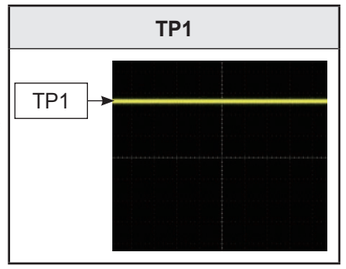


7-8 WQVGA LCD Interface





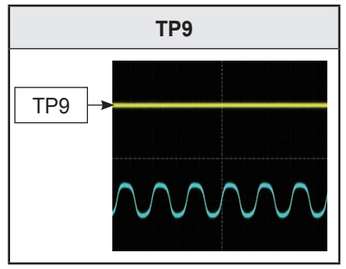




7-9 Blue-Tooth, FM

POWER

TP9



P3.2V
BT_3.2V
60
L104

BT_3.2V
REG_BT
100nF C116
GND
100nF C115
10K R110
GND
P1.8V
L105
60
1000nF C119
1000nF C120
10uF/16V C125
GND

GND J5 J2 H1 G10 G4 G2 F4 F5 F2 E5 E4 D7 D2 C2 B2 K8 F9 A8 B5 D5 B6 A6
GND15 GND14 GND13 GND12 GND11 GND10 GND9 GND8 GND7 GND6 GND5 GND4 GND3 GND2 GND1
VDDO18_3 VDDO18_2 VDDO18_1 VREG_BT VREG_CTL VDDR3V VDDR5V

TP9
1000nF C110
100nF C112
GND
B3 VDDFM_1
A4 VDDFM_2
B1 VDDFM_3
K4 VDDFM_4
J4 VDDFM_5
A5 VREGFM_DAC

C109 1000nF
C111 100nF
C114 100nF
N.C C103
56nH L102
B4 LPOIN
D4 FMPLLCAP
A3 FM_VCO_LP
A2 FM_VCO_LN
A1 FMRF_CVAR
C1 FMRF_INN
D1 FMRF_INP

32.768_FM
pattern >VªN\ª Eª . ª 1 ~Rª M

CRADLE_FM_ANT
FM_ANT
R100 N.C
1nF C101
C104 0.047nF
GND
C106 0.047nF
L100 100nH
REG_BT
BT_3.2V
BCM2048: 1.8V
BCM2048B: 2.8V
R107 N.C
E2 VDDRF_1
E1 VDDRF_2
F1 RFIOP
G1 RFION
J1 VDDLO
K1 VDDPLL
R106 0
J3 VDDXO
J8 VDDOC1_1
E10 VDDOC1_2
A9 VDDOC1_3
C107 0.002nF
C123 2.2uF
C123 ASAP close IC102
GND

IC100 ?
PAD size : 4mm x 3mm (isolation)
L101 1.8nH
C124 0.1nF
C100 N.C
C102 N.C
GND

IC102
BCM2048SB0KUFBG

K3 XTALN
K2 XTALP
H2 RES
K6 AUDIOR
K5 AUDIOL
A7 VDDC_1
D8 VDDC_2
G7 VDDC_3
J10 VDDC_4
G5 VDDC_5
K7 TM0
J7 TM1
F6 TM2
J6 TM3

1% OK
R108 150K
GND
P3.2V
R109 10K
REG_BT
L103 600ohm
GND

X-TAL100
26MHz
0.015nF C105
0.015nF C108
GND

GPIO7 D10
GPIO6 B8
GPIO5 G6
GPIO4 E6
GPIO3 G9
GPIO2 F10
GPIO1 H9
GPIO0 H10
RST_N D6
UART_CTS_N F7
UART_RTS_N C9
UART_TXD K10
UART_RXD J9
COEX_OUT1 E9
COEX_OUT0 K9
I2C_CK E7
I2C_DA B7
PCM_IN A10
PCM_OUT B10
PCM_CLK B9
PCM_SYNC C10

IC105 IC103 IC104 IC106
P3.2V
10K R114
100nF C121
IC101 ?
BT_WAKE
R115 1K
BT_RST
UART_RTS0
UART_CTS0
UART_RX0
UART_TX0
100nF C122
GND
R112 22
DAI
DAO
AUD_BCLK
AUD_LRCK

C117 1000nF
C118 1000nF
FM_LINE_IN_L
FM_LINE_IN_R