

Service Manual

LG-D620

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1. INTRODUCTION

1. 1 Purpose

This manual provides the information necessary to repair, calibration, description and download the features of this model.

1. 2 Regulatory Information

A. Security

Toll fraud, the unauthorized use of telecommunications system by an unauthorized part (for example, persons other than your company's employees, agents, subcontractors, or person working on your company's behalf) can result in substantial additional charges for your telecommunications services. System users are responsible for the security of own system. There are may be risks of toll fraud associated with your telecommunications system. System users are responsible for programming and configuring the equipment to prevent unauthorized use. The manufacturer does not warrant that this product is immune from the above case but will prevent unauthorized use of common carrier telecommunication service of facilities accessed through or connected to it. The manufacturer will not be responsible for any charges that result from such unauthorized use.

B. Incidence of Harm

If a telephone company determines that the equipment provided to customer is faulty and possibly causing harm or interruption in service to the telephone network, it should disconnect telephone service until repair can be done. A telephone company may temporarily disconnect service as long as repair is not done.

C. Changes in Service

A local telephone company may make changes in its communications facilities or procedure. If these changes could reasonably be expected to affect the use of the phones or compatibility with the net work, the telephone company is required to give advanced written notice to the user, allowing the user to take appropriate steps to maintain telephone service.

D. Maintenance Limitation

Maintenance limitations on the phones must be performed only by the manufacturer or its authorized agent. The user may not make any changes and/or repairs expect as specifically noted in this manual. Therefore, note that unauthorized alternations or repair may affect the regulatory status of the system and may void any remaining warranty.

E. Notice of Radiated Emission

This model complies with rules regarding radiation and radio frequency emission as defined by local regulatory agencies. In accordance with these agencies, you may be required to provide information such as the following to the end user.

F. Pictures

The pictures in this manual are for illustrative purposes only; your actual hardware may look slightly different.

G. Interference and Attenuation

A phone may interfere with sensitive laboratory equipment, medical equipment, etc. Interference from unsuppressed engines or electric motors may cause problems.

H. Electrostatic Sensitive Devices

ATTENTION

Boards, which contain Electrostatic Sensitive Device (ESD), are indicated by the sign. information is ESD handling: Following



- Service personnel should ground themselves by using a wrist strap when exchange system boards.
- When repairs are made to a system board, they should spread the floor with anti-static mat which is also grounded.
- Use a suitable, grounded soldering iron.
- Keep sensitive parts in these protective packages until these are used.
- When returning system boards or parts like EEPROM to the factory, use the protective package as described.

1.3 Specifications

KEY FEATURES

- Android 4.4.2 - Powered Smartphone
- Up to 7 Customizable Home Screens
- 4.7" Touch Screen
- 8MP AF with flash, VGA VT Image sensor
- 4G Mobile Hotspot
- DivX® H.264, H.263 Capable

ENHANCED USER EXPERIENCE

- Android 4.4.2
- Home Screens – customize 5 or 7 screens with shortcuts to apps, favorites, and widgets
- QWERTY Keyboard with Swype® – use one continuous finger motion to input text when composing a message
- Exchange Support – improved security, remote wipe capability for Exchange administrators, support for Exchange calendars in the Calendar application, auto-discovery for easy setup and syncing of an Exchange account,* and Global Address Lists lookup in the Email application
- Proximity Sensor – locks the touch screen and buttons while talking on the phone
- Motion Sensor – Digital compass , Accelerometer
- USB Charging via Computer
- Airplane Mode (RF Off)

*Available for Exchange 2007 and higher.

DESIGN

- Sleek and Stylish Design
- 4.7" qHD Display
- Capacitive Touch Screen – Glass with fast and accurate response
- Touch Vibration for Tactile Feedback*
- Micro USB Charging Port

*Only available on certain interactions with the touch screen.

MOBILE MEDIA

- Android Market™ – browse and download thousands of free and paid apps from around the world†
- Live Wallpaper – dynamic, animated backgrounds

- Full Web Browsing
- Connect to Social Networks – send quick updates to Twitter™, Facebook®, MySpace™,* or added social networks†
- Mobile Instant Messaging – Google Talk™, AIM®,* Yahoo!® Messenger,* Windows Live™*†
- Gmail™ and Email – mobile personal and corporate email†
- Visual Voice Mail†
- Text, Picture, Video, and Voice Messaging†
- Flash 10.1 for Mobile Devices
- Java Support

*Applications downloaded from Android Market.

CAMERA/VIDEO

- 8MP AF with flash, VGA VT CMOS Image sensor and Camcorder*
- Camera Resolutions: 8M(3264 x 2448), W6M(3264 x 1836), 5M(2560 x 1920), 1M(1280 x 960)
- Camera and Video Zoom: up to 4x
- Image Editor: Zoom, Exposure, Artistic Effect, Color, Adjustment
- Brightness, ISO, White Balance,* Color Effects, Scene Mode, Self-Timer
- Continuous Shot – take 6 shots in quick succession
- Video Resolutions: FHD(1920 x 1080)(30fps), HD(1280 x 720), QVGA(320 x 240)(MMS), QCIF(176 x 144)(MMS)
- Video Recording Time: up to 60 seconds (sending) or 120 minutes (saving)**

*Available in both video and camera modes.

**Depends on available memory.

MULTIMEDIA

- Video Player for AVI, WMV, MP4, MKV, 3GP, and 3G2 Formats
- Music Player for MP3, WMA, and Unprotected AAC
- Stereo Sound via Headset or *Bluetooth*
- Multitask While Playing Music in the Background
- Music Library – Organized by Artists, Albums, Songs, Genres, Folders and Playlists
- Repeat and Shuffle Music Playback Modes

- microSD Memory Slot with Support for up to 32GB Storage
- USB Mass Storage – transfer files between microSD™ card and PC*

*USB cable (sold separately) and microSD card (included) required.

BLUETOOTH®

- Version: 4.0
- Save up to 100 *Bluetooth* Pairings*
- Supported Profiles: headset, hands-free, object push, advanced audio distribution (stereo), audio/video remote control, file transfer, phone book access, message access, serial port
- Listen to Music with Optional Stereo *Bluetooth* Headset**
- Send User-Generated Pictures (JPEG) and Videos via *Bluetooth* Wireless Technology

*Depends on available memory.

**Accessories sold separately.

VOICE/AUDIO

- One-Touch Speakerphone*
- Wide Voice Extension*
- Voice Clarity*
- Voice Commands
- Voice-Activated Dialing
- Text to Speech
- MP3 Music Ringer Support (clips from hit songs)†
- Voice Memo Recording
- 20 Unique Ringtones + Vibrate and Silent Modes
- Hearing Aid Compatible M3/T3

*Only available during a call.

TOOLS & DATA

- Android Apps: Browser, Calculator, Calendar (Corporate or Google), Camera, Clock, Contacts, Email, Gallery, Gmail, Market, Messaging, Music, Phone, Settings, Voice Dialer, Voice Recorder, Voice Search
- Wi-Fi Connectivity – IEEE 802.11b/g/n

2. PERFORMANCE

- Phone Book – unlimited fields* for numbers, emails, physical addresses, IM screen names, notes, nickname, web addresses, special dates, and a picture ID**
- FOTA Capable – upgrade firmware over the air†
- GNSS and A-GPS Support for Enhanced Location Accuracy

*Depends on available memory.

**Dependent on photos stored in your gallery.

SPECIFICATIONS

- Technology: GSM/ WCDMA /LTE/GPS/BT/WiFi
- Frequencies:

Support Band	TX Freq (MHz)	RX Freq (MHz)
GSM850	824-849	869-894
GSM900	880-915	925-960
DCS1800	1710-1785	1805-1880
PCS1900	1850-1910	1930-1990
W2100(B1)	1920-1980	2110-2170
W1900(B2)	1850-1910	1930-1990
W850(B5)	824-849	869-894
W900(B8)	880-915	925-960
LTE B1	1920-1980	2110-2170
LTE B3	1710-1785	1805-1880
LTE B7	2500-2570	2620-2690
LTE B8	880-915	925-960
LTE B20	832-862	791-821
BT/WiFi	2400 MHz ~ 2483.5 MHz	
GPS	1574.42 MHz ~ 1576.42 MHz	

- Data Transmission: EDGE, GPRS (Class 33) , HSPA+(Cat. 24), LTE(Cat 4)
- Dimensions: 129.6 (H) x 66.0 (W)x 9.9 (D) (mm)
- Weight: 121g (with Battery)
- Display: 4.7", qHD 960 x 540 pixels, TFT
- Standard Battery: 2,440[mAh]
- Internal Memory Size: 4 GB
- MicroSD™ Memory Slot: up to 32GB memory card*

ACCESSORIES

- Standard Battery*
- Travel Adapter and USB Data Cable*
- Bluetooth Headset (Optional)
- Bluetooth Hands-free kit (Optional)
- Stereo Headset (Optional)
- Vehicle Power Charger (VPC) (Optional)
- Quick Window Cover (Optional)

2. PERFORMANCE

2.1 Product Name

LG-D620 : LTE(FDD1/3/7/8/20)+WCDMA(FDD1/2/5/8)+EGSM/GSM850/DCS/PCS with seamless handover Phase 2+(include AMR)

2.2 Supporting Standard

Item	Feature	Comment
Supporting Standard	LTE(FDD1/3/7/8/20)+WCDMA(FDD1/2/5/8) +EGSM/GSM850/DCS/PCS with seamless handover Phase 2+(include AMR) (LTE Cat. 3 / HSDPA Cat. 24 / HSUPA Cat.6 / EDGE,GPRS Multislot class 33)	
Frequency Range	LTE(FDD1) TX: 1920 – 1980 MHz LTE(FDD1) RX: 2110 – 2170 MHz LTE(FDD 3) TX : 1710 – 1785 MHz LTE(FDD 3) RX : 1805 – 1880 MHz LTE(FDD 7) TX : 2500 – 2570 MHz LTE(FDD 7) RX : 2620 – 2690 MHz LTE(FDD8) TX : 880 – 915 MHz LTE(FDD8) RX : 925 – 960 MHz LTE(FDD 20) TX : 832 – 862 MHz LTE(FDD 20) RX : 791 – 821 MHz WCDMA(FDD1) TX: 1920 – 1980 MHz WCDMA(FDD1) RX: 2110 – 2170 MHz WCDMA(FDD2) TX: 1850 – 1910 MHz WCDMA(FDD2) RX: 1930 – 1990 MHz WCDMA(FDD5) TX : 824 – 849 MHz WCDMA(FDD5) RX : 869 – 894 MHz WCDMA(FDD8) TX : 880 – 915 MHz WCDMA(FDD8) RX : 925 – 960 MHz EGSM TX : 880 – 915 MHz EGSM RX : 925 – 960 MHz GSM850 TX : 824 – 849 MHz GSM850 RX : 869 – 894 MHz DCS1800 TX : 1710 – 1785 MHz DCS1800 RX : 1805 – 1880 MHz PCS1900 TX : 1850 – 1910 MHz PCS1900 RX : 1930 – 1990 MHz	
Application Standard	WAP 2.0	

2.3 Main Parts : Main Chipset Solution

Item	Part Name	Comment
Digital Baseband	MSM8926 : Qualcomm	
Analog Baseband	MSM8926 : Qualcomm	
RF Chip	WTR1625L : Qualcomm	
PMIC	PM8926 : Qualcomm	
WLAN	WCN3620 : Qualcomm	2.4GHz only

2.4 HW Features

Item	Feature	Comment
Form Factor	DOP type	
Battery	1) Capacity Standard : Li-ion, 2440mAh	
	2) Packing Type : Hard Pack	
Size	Standard : 129.6 x 66 x 9.9mm	
Weight	g	With Battery
RX sensitivity	LTE(FDD 1) : -97 dBm LTE(FDD3) : -94 dBm LTE(FDD 7) : -95 dBm LTE(FDD 8) : -94 dBm LTE(FDD 20) : -94 dBm WCDMA(FDD1) : -106.7dBm WCDMA(FDD2) : -104.7dBm WCDMA(FDD5) : -104.7dBm WCDMA(FDD8) : -103.7dBm EGSM : -105 dBm GSM850 : -105dBm DCS 1800 : -105dBm PCS 1900: -105dBm	LTE @ 10M Bandwidth
GPRS compatibility	GPRS Class 33	
EDGE compatibility	EDGE Class 33	

2. PERFORMANCE

TX output power	LTE/ WCDMA/ GSM/ GPRS	LTE : 23dBm/10MHz,+2/-2dBm WCDMA : 24dBm/3.84MHz,+1/-3dBm EGSM : 33.0 dBm GSM850: 33.0dBm DCS1800 :30.5dBm PCS 1900:29.5dBm	Class3(LTE) Class3(WCDMA) Class4 (EGSM) Class4 (GSM850) Class1 (PCS) Class1 (DCS)
	EDGE	GSM 850 : 25dBm GSM 900 : 25dBm DCS 1800: 24dBm PCS 1900 : 24dBm	E2 (GSM850) E2 (GSM900) E2 (PCS) E2 (DCS)
SIM card type		Micro SIM(3FF) 3V /1.8V	
Display		Main LCD : TFT LCD (4.7", qHD, 960X540 pixels, 16M Colors)	
Built-in Camera		8MAF Camera with FHD	
Status Indicator		Yes	
Keypad		Full Touch Screen Back-Key : 3	Back Key : Power On Volumeup/down
ANT		Main : Internal Fixed Type	
System connector		5 Pin u-USB	
Ear Phone Jack		3.5 pi type	
PC synchronization		Yes	
Memory		8GB eMMC 1Gb LPDDR2	
Speech coding		FR, EFR, HR,AMR	
Vibrator		Built in Vibrator	
Blue Tooth		Bluetooth 4.0 + BLE	
MIDI(for Buzzer Function)		SW Decoded 72Poly	
Music Player		MP3/WMA/AAC/MIDI/EAAC+/HEAAC/O GG	
Video Player		MPEG4, H.264	

2. PERFORMANCE

Camcorder	MPEG4 or H.263	
Voice Recording	Yes	
Speaker Phone mode Support	Yes	
Travel Adapter	Yes	
CDROM	No	
Stereo Headset	Yes	
Data Cable	Yes	
T-Flash (External Memory)	Yes (Up to 32GB)	

2.5 SW Features

Function	Detail Item	O / X	Specification	Etc.
OS	OS	O	Android 4.4 KitKat	
Data	Circuit	X	Video Telephony using 64kbps CSD	
	Packet	O		
Connectivity	IrRC	O		Tx
	Bluetooth	O	Ver. 4.0	
	Wi-Fi	O	802.11 b/g/n	
	A-GPS	O		GNSS
	USB Mass storage	O	SD card only	
	USB	O	Ver. 2.0	
	USB OTG	O		
	DLNA	O		
	NFC	O		
Voice Function	Voice Recording	O		
	Voice Command	X	Digit Dial	
		X	Name Dial	
		X	Menu	
		X	Phonebook Searching	
	Answering machine	X	Driving, Meeting, user define(absent)	
Memory	User Memory	O	Total	8GB eMMC/ 8Gb DDR+ external MicroSD
		O	TotalUser Memory	1.3GB (w/o MicroSD)
		O	MMS	
		O	Pictures (Still Image & Moving Image)	
		O	MP3(Music Contents)	
		X	Java Contents	
		O	Wallpaper	
		O	Ringtone	
		O	External memory (microSD)	support SDA2.0 specification, up to 32GB

2. PERFORMANCE

Camera (Still Capture)	Memory	O	MicroSD	
	Camera Module	O	8M BSI	
	Auto Focus	O	Still Mode AF AndFace Tracking	
	Digital Zoom	O	TBD	
	Capture Resolution	O	8M(),5M(2560x1920), 3M(2048x1536), W3M(2240x1344), 1M(1280x960), W1M(1280x768)	
	Continuous Shot	O		
	Quality	X		
	Preview Image	O	1440x1080(Normal), 1920x1080(Wide)	
	TV-Out	X		
	Flash	O		
	Filter	O	None/Mono/Sepia/Negative	
	Timer	O	Off / 3 sec / 5 sec/10 sec	
	JPEG Encoding	O	JPEG	
		O	Thumbnail	
		O	2560x1920,2048x1536,2240x1344,1280x960,1280x768	
	JPEG Decoding	O	JPEG	
		O	Min, Max	Supported by Gallery
	Panorama Shot	O		
	Album& Slide show	O	Slide show	Supported by Gallery

2. PERFORMANCE

Camera (MovieCapture)	Movie Resolution	O	1920x1080, 1280x720, 720x480,640X480, 320x240, 176x144	
	Filter	O	Same as the Still Capture	
	Quality	X		
	MPEG Visual Bit Rate	X		Default code is H.264 And video Bit rate is 17Mbps We can support MPEG-4, but the bit rate is depend on Application setting
	Audio Encode	O	AAC, AMR-NB	
	Audio Decode	O	AMR	
	Movie Recode	O	Recode, Stop, Pause, Resume	
	Movie Playback	O	Play, Stop, Pause	
	Stream Format (Mux)	O	3gp	
	Stream Format (Demux)	O	3gp	
	Recoding Time	O	Real Time Recoding	
	TV-Out	X		
Audio Multimedia	Voice Codec	O	AMR	
	AAC /AAC+/ EAAC+	O		
	MP3, WAV	O		
	WMA	O		
	Midi	O	Midi Type0, Midi Type1, SP-MIDI	

2. PERFORMANCE

	Music ringtone	O	MP3, AAC, AAC+, AAC-LC, XMF 1.01, AMR	
	AMR-WB	O		
	Music player skin	O	Music Player	
	FM Radio	O		
	Speakerphone	O		
Multimedia	MPEG4/H.263	O		
	H.264	O		
	WMV	O		
	Normal View	X	Moving Image Capture & Movie Contents	contents size
	Wide View	O	Full Screen mode	
	Custom DTV Zoom	X		
OtherFeatures	File Viewer	O	doc, xls, ppt, gif, jpg	
	Macromedia Flash Lite	X	Not Available	
	e-Book/e-Comic Book	X	*.doc, *.jpg, *.gif	E-book reader program is not included in ROM. But user can download in internet. WM product recommend using Microsoft Reader for PPC.
	Flight Mode	O		
Internet Browser	WAP (Windows Mobile 6.0 IE Mobile)	X	version 2.0	
		X	WML1.3	
		O	XHTML1.1	
		O	HTML4.01	Partially support - HTML 5
Java	MIDP	X		
	J2ME support	X		
	Game & Contents	X		
	CLDC	X		
Call Management	Call waiting	O		

2. PERFORMANCE

Flash	Flash Game	X		
Streaming Service	H.263+AAC/AMR-NB	O		
	MPEG4+AAC /AMR-NB	O		
	WMV9	X	Support WMV main and base profile except advanced profile	
DRM	OMA DRM	O	Forward Lock	
		O	Separate Delivery	
		O	Combined Delivery – Count-only	
OTA	OTA	O	OTA 1.1	
Display	RSSI	O	6 level (Include No service)	
	Battery Level	O	20 Level with percentage	Yes
	RTC	O		
	Multi Language	O	depending on build language	
	Quick Access Mode	X		
	PLMN/Service Indicator	O		
	Screen Timeout	O	15s, 30s, 1min, 2min, 5min, 10min, Never	
	Dual Clock	O	widget	
Normal Features	Last Dialed Number	O		
	Last Received Number	O		
	Last Missed Number	O		
	Scratch Pad Memory	X		

2. PERFORMANCE

Call Management	Call Waiting	O		
	Call Swap	O		
	Call Retrieve	O		
	Auto Answer	X		
	Automatic Redial	X		
	Calling Line Identification	O		
	Full Call divert	O		
	Speed Dialing	O		
	Last Number Redial	X		
	Multiparty Call (Conference Call)	O		
	Explicit Call Transfer	X		
Network	Automatic Network Selection	O		
	Manual Network Selection	O		
	Network Service Status	O		
DTMF	DTMF Signaling	O		
	DTMF Enable & Disable	X		
Audio	Key Tone Volume	O	8 Level (Include Mute)	
	Ring Tone Volume	O	8 Level (Include Mute)	
	Ring Tone Pattern	O		
	Ring Type Silent	O	Vibrator & Ring (Indicator)	
	Earpiece Volume	O	8 Level (Include Mute)	
	Mute	O		
Cell Broadcast	Read Cell Broadcast	O		
	Cell Broadcast Categories	X		
	Cell Broadcast Message Language	O	Supports filtering with language IDs (German, Italian, French, Spanish, Dutch, Swedish, Danish, Portuguese, Finnish, Norwegian, Greek, Turkish, Hungarian, Polish, Czech)	

2. PERFORMANCE

Phone Book	Entry	O	Phone,Email,Grops,Postal address,Organization,IM,Notes, Nickname,Website,Event	
	Field	O	Phone(Mobile,Home,Work,Work Fax,Home Fax,Pager, Other, Custom) Email(Home,Work,Other,Custom) Groups(Business,Colleagues,Family,Friends, School,Custom) Postal address(Home,Work,Other,Custom) Organization(Work,Other,Custom) IM(AIM,Windows Live,Yahoo,Skype,QQ,Go ogle Talk,ICQ,Jabber,Custom) Event(Birthday,Anniversary,Event)	
	Numeric Store and Recall	O		
	Alphabetic Store	O		
	Alphabetic Recall	X		
	Scroll by alphabetic or numeric order	O		
	Last Number Dialed	O		
	Last Number Missed	O		
	Last Number Received	O		
	Copy & Move	X	Move not support	
	Fixed Dial Number	O		
	Barred Dial Number	X		
	Service Dial Number	X		
	Email Entry	O		
	Picture ID	O	Relating Photo caller ID	
	My Name card	O	Bluetooth transmission (OPP)	
Call Cost	Last Call Timer	X		
	Last Call Charge Units	X		
	Total Call Timer	X		
	Total Charge Units	X		
	Visible, Audible Call Time/Cost Indication	X		

2. PERFORMANCE

Supp.Services	Call Forwarding	0	All Incoming Calls,	
		0	No Reply	
		0	On Busy,	
		0	Not reachable	
	Call Barring	0	All Outgoing Calls,	
		0	International Calls,	
		0	Calls except to Home Country incoming Calls,	
		0	All incoming Calls when roaming	
	Conference Call	0	up to 5 calls	
SIM	Plug In Type	0		
	SIM Lock	0		
	SIM Toolkit	0		
	Prepaid SIM Operation	0		

2. PERFORMANCE

Short Messaging	Read Message	O	EMS Not Support	
	Write and Edit Message	O		
	Send and Receive Message	O		
	Reply to Message	O		
	Forward Message	O		
	Extract Number from Message	O		
	Message Status	O		
	Message Unread Indicator	O		
	Settable Message Center Number,	O		
	Reply Path and Validity			
	Visible and Audible Message Receive Alerting	O		
	Voice Mail	O		
	Settable Voice Mail Center Number	O		
	Message Protocol	O		
	Message Overflow Indicator	O		
	Message Center Number	O		
	Help Menu	X		
Multimedia Messaging	Picture Attachable	O		Max 300kbyte
	Moving Picture Attachable	O	Video MMS	Max 300kbyte
	Voice Attachable	O	AMR	
	Help Menu	X		
	Others	O		

2. PERFORMANCE

Instant Messaging Service	IM	☐	Gtalk	
	PC Compatable	☐		
	Menu Option	☐		
E-Mail	Protocol	☐	IMAP4	
		☐	SMTP	
		☐	POP3	
		☒	Help Menu	
VoicelInstant Messaging Service	PTT	☒	Full Duplex	
		☒	Half Duplex	
	Menu Option	☒	Grouping	
		☒	Status List	
		☒	Help	
		☒	Others	
Sound Contents	Wallpaper	☒		
	Screen Saver	☒		
	Ringtones	☐		
	Karaoke	☒		
	Stutter Sound	☐		
	Flip tone	☒		
	Button tone	☐	can be enable or disable button on press sound.	
	Others	☒		

2. PERFORMANCE

Calendar	New Event	O		
	Edit Event	O		
	Agenda	O		
	Reminder	O		
	Google sync	O		
Miscellaneous Function	Development & Test Facility	X		
	Field Test Facility	X		
	Display Software Version	O		
	IMEI	O	*#06#	
Text Input	Language	O		
	Predictive word input	O	T9 predictive supported.	
Scheduler	Schedule	NA		
	To Do List	NA		
	Memo	NA		
	D-day counter	NA		
	Send via Bluetooth	NA		
World Time	Setting Local Time	O		
	Display Two Number of Cities Time	X		
	Daylight saving	O		
Unit converter		X		
Stop watch		X		
Calculator	Calculation	O		
PC Sync	Phone Book Sync	O		
	Message Sync	x	PC suite support message viewing and sending.(not sync)	

2. PERFORMANCE

	Multimedia Contents Sync	x	PC suite support file transfer between phone and PC.(not sync)	
	Scheduler Sync	O		
Sync ML	DS	x		
	DM	O		
Game		x	TBD	
Menu	Quick Access Mode (Profile)	O		
External Interface	Electrical Man Machine Interface	x		
	Development and Test Facility	x		
Handset	Restore Factory Setting	O		
	Read Software Version	O		
	Battery Charging Mode	O	USB/ TA Charging	USB/ TA Charging
Security	Emergency Call	O		
	Handset Lock	O		
	Security Code	O		
	SIM Lock	O		
	Key guard	x		
Real Time Clock	12/24 hour	O		
	Calendar	O		
	Time Zone	O		
	Alarm Manager	O		
	Dimming Clock	O	Battery power 15s, 30s, 1min, 2min, 5min, 10min External power 15s, 30s, 1min, 2min, 5min, 10min	
	Power-off Alarm	x		
	On Alarm Event	O	Display	

2.6 HW SPEC

1) GSM transceiver specification

Item	Specification
Phase Error	Rms : 5° Peak : 20 °
Frequency Error	GSM : 0.1 ppm DCS/PCS : 0.1 ppm
EMC(Radiated Spurious Emission Disturbance)	GSM/DCS : < -28dBm
Transmitter Output power and Burst Timing	GSM : 5dBm – 33dBm ± 3dB DCS/PCS : 0dBm – 30dBm ± 3dB
Burst Timing	<3.69us
Spectrum due to modulation out to less than 1800kHz offset	200kHz : -36dBm 600kHz : -51dBm/-56dBm
Spectrum due to modulation out to larger than 1800kHz offset to the edge of the transmit band	GSM : 1800-3000kHz : < -63dBc(-46dBm) 3000kHz-6000kHz : < -65dBc(-46dBm) 6000kHz < : < -71dBc(-46dBm) DCS : 1800-3000kHz : < -65dBc(-51dBm) 6000kHz < : < -73dBc(-51dBm)
Spectrum due to switching transient	400kHz : -19dBm/-22dBm(5/0), -23dBm 600kHz : -21dBm/-24dBm(5/0), -26dBm
Reference Sensitivity – TCH/FS	Class II(RBER) : -105dBm(2.439%)
Usable receiver input level range	0.012(-15 - -40dBm)
Intermodulation rejection – Speech channels	± 800kHz, ± 1600kHz : -98dBm/-96dBm (2.439%)
AM Suppression – GSM : -31dBm – DCS : -29dBm	-98dBm/-96dBm (2.439%)
Timing Advance	± 0.5T

2) WCDMA transmitter specification

Item	Specification
Transmit Frequency	Band1 : 1920 – 1980 MHz Band2: 1850 – 1910 MHz Band5 : 824 – 849 MHz Band8 : 880 – 915 MHz
Maximum Output Power	+24dBm / 3.84 MHz, +1 / -3 dB
Frequency Error	within ± 0.1 PPM
Open Loop Power Control	Normal Conditions : within ± 9 dB, Extreme Conditions : within ± 12 dB
Minimum Transmit Power	< -50 dBm / 3.84 MHz
Occupied Bandwidth	< 5 MHz at 3.84 Mcps (99% of power)
Adjacent Channel Leakage Power Ratio (ACLR)	> 33 dB @ ± 5 MHz, > 43 dB @ ± 10 MHz
Spurious Emissions $ f-f_c > 12.5$ MHz	< -36 dBm / 1 kHz RW @ $9 \text{ kHz} \leq f < 150 \text{ kHz}$ < -36 dBm / 10 kHz RW @ $150 \text{ kHz} \leq f < 30 \text{ MHz}$ < -36 dBm / 100 kHz RW @ $30 \text{ MHz} \leq f < 1 \text{ GHz}$ < -30 dBm / 1 MHz RW @ $1 \text{ GHz} \leq f < 12.75 \text{ GHz}$ < -60 dBm / 3.84 MHz RW @ $869 \text{ MHz} \leq f \leq 894 \text{ MHz}$ < -60 dBm / 3.84 MHz RW @ $1930 \text{ MHz} \leq f \leq 1900 \text{ MHz}$ < -60 dBm / 3.84 MHz RW @ $2110 \text{ MHz} \leq f \leq 2155 \text{ MHz}$ < -67 dBm / 100 kHz RW @ $925 \text{ MHz} \leq f \leq 935 \text{ MHz}$ < -79 dBm / 100 kHz RW @ $935 \text{ MHz} < f \leq 960 \text{ GHz}$ < -71 dBm / 100 kHz RW @ $1805 \text{ MHz} \leq f \leq 1880 \text{ MHz}$ < -41 dBm / 300 kHz RW @ $1884.5 \text{ MHz} < f < 1919.6 \text{ MHz}$
Transmit Intermodulation	< -31 dBc @ 5 MHz & < -41 dBc @ 10 MHz when Interference CW Signal Level = -40 dBc
Error Vector Magnitude	< 17.5 %, when Pout $\geq$ -20 dBm
Peak Code Domain Error	< -15 dB at Pout $\geq$ -20 dBm

3) WCDMA receiver specification

Item	Specification
Receive Frequency	Band1 : 2110 – 2170 MHz Band2: 1930 – 1990 MHz Band5 : 869 – 894 MHz Band8 : 925 – 960 MHz
Reference Sensitivity Level	Band1 : BER < 0.001 when $\hat{I}_{or}$ = -106.7 dBm / 3.84 MHz Band2 : BER < 0.001 when $\hat{I}_{or}$ = -104.7 dBm / 3.84 MHz Band5 : BER < 0.001 when $\hat{I}_{or}$ = -104.7 dBm / 3.84 MHz Band8 : BER < 0.001 when $\hat{I}_{or}$ = -103.7 dBm / 3.84 MHz
Maximum Input Level	BER < 0.001 when $\hat{I}_{or}$ = -25 dBm / 3.84 MHz
Adjacent Channel Selectivity (ACS)	ACS > 33 dB where BER < 0.001 when $\hat{I}_{or}$ = -92.7 dBm / 3.84 MHz &loac = -52 dBm / 3.84 MHz @ ± 5 MHz
Blocking Characteristic	BER < 0.001 when $\hat{I}_{or}$ = -103.7 dBm / 3.84 MHz &lblocking = -56 dBm / 3.84 MHz @ Fuw(offset) = ± 10 MHz or lblocking = -44 dBm / 3.84 MHz @ Fuw(offset) = ± 15 MHz z
Spurious Response	BER < 0.001 when $\hat{I}_{or}$ = -103.7 dBm / 3.84 MHz &lblocking = -44 dBm
Intermodulation	BER < 0.001 when $\hat{I}_{or}$ = -103.7 dBm / 3.84 MHz & louw1 = -46 dBm @ Fuw1(offset) = ± 10 MHz & louw2 = -46 dBm / 3.84 MHz @ Fuw2(offset) = ± 20 MHz
Spurious Emissions	< -57 dBm / 100 kHz BW @ $9\text{ kHz} \leq f < 1\text{ GHz}$ < -47 dBm / 1 MHz BW @ $1\text{ GHz} \leq f \leq 12.75\text{ GHz}$
Inner Loop Power Control In Uplink	Adjust output(TPC command) cmd1dB 2dB 3dB +1 +0.5/1.5 +1/3 +1.5/4 0 -0.5/+0.5 -0.5/+0.5 -0.5/+0.5 -1 -0.5/-1.5 -1/-3 -1.5/-4 group(10equal command group) +1 +8/+12 +16/+24

4) HSDPA transmitter specification

Item	Specification				
Transmit Frequency	Band1 : 1920 – 1980 MHz Band2: 1850 – 1910 MHz Band5 : 824 – 849 MHz Band8 : 880 – 915 MHz				
Maximum Output Power	Sub-Test 1=1/15, 2=12/15 21~25dBm / 3.84 MHz 3=13/15 4=15/8 20~25dBm / 3.84 MHz 5=15/7 6=15/0 19~25dBm / 3.84 MHz				
HS-DPCCH	Sub-test in table C.1 0.1.4	Power step	Power step slot boundary	Power step size, P [dB]	Transmitter power step tolerance [dB]
	5	1	Start of Ack/Nack	6	+/- 2.3
		2	Start of CQI	1	+/- 0.6
		3	Middle of CQI	0	+/- 0.6
		4	End of CQI	5	+/- 2.3
Spectrum Emission Mask	Sub-Test : 1=1/15, 2=12/15, 3=13/15, 4=15/8, 5=15/7, 6=15/0				
	Frequency offset from carrier Δf		Minimum requirement	Measurement Band width	
	2.5 ~ 3.5 MHz		-35-15 $\times(\Delta f-2.5)$ dBc	30 kHz	
	3.5 ~ 7.5 MHz		-35-1 $\times(\Delta f-3.5)$ dBc	1 MHz	
	7.5 ~ 8.5 MHz		-35-10 $\times(\Delta f-7.5)$ dBc	1 MHz	
	8.5 ~ 12.5 MHz		-49dBc	1 MHz	
Adjacent Channel Leakage Power Ratio (ACLR)	Sub-Test : 1=1/15, 2=12/15, 3=13/15, 4=15/8, 5=15/7, 6=15/0 > 33 dB @ ± 5 MHz > 43 dB @ ± 10 MHz				
Error Vector Magnitude	< 17.5 %, when Pout $\geq$ -20 dBm				

5) HSDPA receiver specification

Item	Specification
Receive Frequency	Band1 : 2110 – 2170 MHz Band2 : 1930 – 1990 MHz Band5 : 869 – 894 MHz Band8 : 925 – 960 MHz
Maximum Input Level (BLER or R), 16QAM Only	Sub-Test : 1=1/15, 2=12/15, 3=13/15, 4=15/8, 5=15/7, 6=15/0 BLER < 10% or R ≥ 700kbps

6) LTE transceiver specification

Item	Specification
Transmit Frequency	Band1 : 1920 – 1980 MHz Band3 : 1710 – 1785 MHz Band7 : 2500 – 2570 MHz Band8 : 880 – 915 MHz Band20 : 832 – 862 MHz
Maximum Output Power(ClassIII)	+24 dBm / 10 MHz,
Frequency Error	within ±0.1 PPM
Occupied Bandwidth	<10 MHz at 3.84 Mcps (99% of power)
Adjacent Channel Leakage Power Ratio (ACLR)	>-29.2 dB @E-UTRA ACLR1 >-32.2 dB @UTRA ACLR1 >-35.2 dB @UTRA ACLR2
Spurious Emissions f-fc > 12.5 MHz	< -36 dBm / 1 kHz RW @ 9 kHz ≤ f < 150 kHz < -36 dBm / 10 kHz RW @ 150 kHz ≤ f < 30 MHz < -36 dBm / 100 kHz RW @ 30 MHz ≤ f < 1 GHz < -30 dBm / 1 MHz RW @ 1 GHz ≤ f < 12.75 GHz
Transmit Intermodulation	< -31 dBc @ 5 MHz & < -41 dBc @ 10 MHz when Interference CW Signal Level = -40 dBc
Error Vector Magnitude	< 17.5 %, when Pout ≥ -20 dBm
Peak Code Domain Error	< -15 dB at Pout ≥ -20 dBm

* Under by rules of 3GPP TS 36.521-1 Standard

7) LTE receiver specification

Item	Specification
Receive Frequency	Band1 : 2110 – 2170 MHz Band3 : 1805 – 1880 MHz Band7 : 2620 – 2690 MHz Band8 : 925 – 960 MHz Band20 : 791 – 821 MHz
Reference Sensitivity Level	Band1 : BER < 0.001 when $\hat{I}_{or} = -97\text{dBm} / 10 \text{ MHz}$ Band3 : BER < 0.001 when $\hat{I}_{or} = -94\text{dBm} / 10 \text{ MHz}$ Band7 : BER < 0.001 when $\hat{I}_{or} = -95\text{dBm} / 10 \text{ MHz}$ Band8 : BER < 0.001 when $\hat{I}_{or} = -94\text{dBm} / 10 \text{ MHz}$ Band20 : BER < 0.001 when $\hat{I}_{or} = -94\text{dBm} / 10 \text{ MHz}$
Maximum Input Level	BER < 0.001 when $\hat{I}_{or} = -25.7\text{dBm} / 10 \text{ MHz}$
Adjacent Channel Selectivity (ACS)	ACS > 33 dB where BER < 0.001 when $\hat{I}_{or} = -92.7 \text{ dBm} / 3.84 \text{ MHz}$ $\&loac = -52 \text{ dBm} / 3.84 \text{ MHz} @ \pm 5 \text{ MHz}$
In-Blocking Characteristic	BER < 0.001 when $\hat{I}_{or} = -88.3\text{dBm} / 10 \text{ MHz}$ ($\Delta f = \pm 7.5\text{MHz}$, LTE BW 5MHz, $\Delta f = \pm 12.5\text{MHz}$, LTE BW 5MHz)
Intermodulation	BER < 0.001 when $\hat{I}_{or} = -88.3\text{dBm} / 10 \text{ MHz}$ ($\Delta f = \pm 12.5\text{MHz}$, $\text{CW}\Delta f = \pm 25\text{MHz}$, LTE BW 5MHz)
Spurious Emissions	< -57 dBm / 100 kHz BW @ $9 \text{ kHz} \leq f < 1 \text{ GHz}$ < -47 dBm / 1 MHz BW @ $1 \text{ GHz} \leq f \leq 12.75 \text{ GHz}$

* Under by rules of 3GPP TS 36.521-1 standard.

8) WLAN 802.11b transceiver specification

Item	Specification
Transmit Frequency	2400 MHz ~ 2483.5 MHz (CH1~CH13)
Tx Power Level	$\leq 20\text{dBm}$ under
Frequency Tolerance	within ± 25 PPM
Chip clock Frequency Tolerance	within ± 25 PPM
Spectrum Mask	≤ -30 @ $f_c - 22\text{MHz} < f < f_c + 11\text{MHz}$ and $f_c + 11\text{MHz} < f < f_c + 22\text{MHz}$ Hz ≤ -50 @ $f < f_c - 22\text{MHz}$ and $f > f_c + 22\text{MHz}$
Power ramp on/off time	$\leq 2\mu\text{s}$
Carrier Suppression	$\leq -15\text{dB}$
Modulation Accuracy (Peak EVM)	$\leq 35\%$
Spurious Emissions	$< -36\text{ dBm}$ @ 30MHz ~ 1GHz $< -30\text{ dBm}$ above @ 1GHz ~ 12.75GHz $< -47\text{ dBm}$ @ 1.8GHz ~ 1.9GHz $< -47\text{ dBm}$ @ 5.15GHz ~ 5.3GHz
Rx Min input Sensitivity	$\leq -85\text{dBm}$ (1Mbps,2Mbps,5.5Mbps,11Mbps) @ FER $\leq 8\%$
Rx Max input Sensitivity	$\geq -10\text{dBm}$ (1Mbps,2Mbps,5.5Mbps,11Mbps) @ FER $\leq 8\%$
Rx Adjacent Channel Rejection	$\geq 35\text{dB}$ @FER $\leq 8\%$, interference input signal -70dBm @ $f_c \pm 25\text{MHz}$ (11Mbps)

9) WLAN 802.11g transceiver specification

Item	Specification
Transmit Frequency	2400 MHz ~ 2483.5 MHz (CH1~CH13)
Tx Power Level	$\leq 20\text{dBm}$
Frequency Tolerance	within ± 25 PPM
Chip clock Frequency Tolerance	within ± 25 PPM
Spectrum Mask	≤ -22 @ $\pm 11\text{MHz}$ offset (9Mhz ~ 11MHz) ≤ -30 @ $\pm 20\text{MHz}$ offset (11MHz ~ 20Mhz) ≤ -42 @ $\pm 30\text{MHz}$ offset (20MHz ~ 30Mhz)
Transmitter constellation error (rms EVM)	$\leq -5\text{dB}@6\text{Mbps}$, $\leq -8\text{dB}@9\text{Mbps}$, $\leq -10\text{dB}@12\text{Mbps}$, $\leq -13\text{dB}@15\text{Mbps}$, $\leq -16\text{dB}@24\text{Mbps}$, $\leq -19\text{dB}@36\text{Mbps}$, $\leq -22\text{dB}@45\text{Mbps}$, $\leq -25\text{dB}@54\text{Mbps}$
Spurious Emissions	< -36 dBm @ 30MHz ~ 1GHz < -30 dBm above @ 1GHz ~ 12.75GHz < -47 dBm @ 1.8GHz ~ 1.9GHz < -47 dBm @ 5.15GHz ~ 5.3GHz
Rx Min input Sensitivity	PER $\leq 10\%$ $-82\text{dBm}@6\text{Mbps}$, $-81\text{dBm}@9\text{Mbps}$, $-79\text{dBm}@12\text{Mbps}$ $-77\text{dBm}@15\text{Mbps}$, $-74\text{dBm}@24\text{Mbps}$, $-70\text{dBm}@36\text{Mbps}$ $-66\text{dBm}@45\text{Mbps}$, $-65\text{dBm}@54\text{Mbps}$
Rx Max input Sensitivity	$\geq -20\text{dBm}(6,9,12,18,24,36,48,54\text{Mbps})$ @ PER $\leq 10\%$
Rx Adjacent Channel Rejection	PER $\leq 10\%$, ACR $\geq 16\text{dB}@6\text{Mbps}$, ACR $\geq 15\text{dB}@9\text{Mbps}$, ACR $\geq 13\text{dB}@12\text{Mbps}$, ACR $\geq 11\text{dB}@15\text{Mbps}$, ACR $\geq 8\text{dB}@24\text{Mbps}$, ACR $\geq 4\text{dB}@36\text{Mbps}$ ACR $\geq 0\text{dB}@45\text{Mbps}$, ACR $\geq -1\text{dB}@54\text{Mbps}$ ※ACR shall be measured by setting the desired signal's strength 3 dB above the rate-dependent sensitivity specified in min input sensitivity

10) WLAN 802.11n transceiver specification

Item	Specification
Transmit Frequency	2400 MHz ~ 2483.5 MHz (CH1~CH13)
Tx Power Level	≤ 20dBm under (Europe), ≤ 30dBm under (USA)
Frequency Tolerance	within ±25 PPM
Chip clock Frequency Tolerance	within ±25 PPM
Spectrum Mask	≤ -20 @ ±11MHz offset (9MHz ~ 11MHz) ≤ -28 @ ±20MHz offset (11MHz ~ 20MHz) ≤ -40 @ ±30MHz offset (20MHz ~ 30MHz)
Transmitter constellation error (rms EVM)	≤ -5dB@6.5Mbps, ≤ -10dB@13Mbps, ≤ -13dB@19.5Mbps, ≤ -16dB@26Mbps, ≤ -19dB@39Mbps, ≤ -22dB@52Mbps, ≤ -25dB@58.5Mbps, ≤ -28dB@65Mbps
Spurious Emissions	< -36 dBm @ 30MHz ~ 1GHz < -30 dBm above @ 1GHz ~ 12.75GHz < -47 dBm @ 1.8GHz ~ 1.9GHz < -47 dBm @ 5.15GHz ~ 5.3GHz
Rx Min input Sensitivity	PER ≤ 10% -82dBm@6.5Mbps, -79dBm@13Mbps, -77dBm@19.5Mbps -74dBm@26Mbps, -70dBm@39Mbps, -66dBm@52Mbps -65dBm@58.5Mbps, -64dBm@65Mbps
Rx Max input Sensitivity	≥ -20dBm(6.5,13,19.5,26,39,52,58.5,65Mbps) @ PER ≤ 10%
Rx Adjacent Channel Rejection	PER ≤ 10%, ACR ≥ 16dB@6.5Mbps, ACR ≥ 13dB@13Mbps, ACR ≥ 11dB@19.5Mbps, ACR ≥ 8dB@26Mbps, ACR ≥ 4dB@39Mbps, ACR ≥ 0dB@52Mbps ACR ≥ -1dB@58.5Mbps, ACR ≥ -2dB@65Mbps ※ACR shall be measured by setting the desired signal's strength 3 dB above the rate-dependent sensitivity specified in min input sensitivity

11) GNSS receiver specification

Item	Specification
ReceiveFrequency	GPS : 1574.42 MHz ~ 1576.42 MHz GLONASS : 1598 MHz ~ 1606 MHz
Minimum Sensitivity	1 satellite $\geq -142\text{dBm}$, 7 satellites $\geq -147\text{dBm}$ at coarse time aiding

12) RSSI Display

RSSI BAR	GSM	WCDMA	LTE	Comment
BAR 5->4	- 91dBm $\pm$ 3dB	- 88dBm $\pm$ 3dB	-85dBm $\pm$ 3dB	1. Call Connected & CIP H Level=-3.3 2. LTE: RSRP
BAR 4->3	- 96dBm $\pm$ 3dB	- 93dBm $\pm$ 3dB	-95dBm $\pm$ 3dB	
BAR 3->2	- 99dBm $\pm$ 3dB	- 98dBm $\pm$ 3dB	-105dBm $\pm$ 3dB	
BAR 2->1	- 103dBm $\pm$ 3dB	- 103dBm $\pm$ 3dB	-115dBm $\pm$ 3dB	
BAR 1->0	- 105dBm $\pm$ 3dB	- 108dBm $\pm$ 3dB	-128dBm $\pm$ 3dB	

Measure RSSI after 10 seconds when you change power

13) Charging Time

Under 4 hours for 2440mAh charging

14) Travel Charger

Input : 100 ~ 240 V, 50/60 Hz

Output : 5.0 V, 0.85 A

15) Battery Type

Li-ion Battery Pack, 2440 mAh

Standard Voltage : 3.8 V, Battery Full Charge Voltage : 4.35V

16) Current Consumption

	Stand by		Talk	Measurement Condition
	Bluetooth Off	Bluetooth On		
GSM	6 mA (PP = 5)	9 mA (PP = 5)	340 mA (TX Level = Max)	LCD Backlight off
WCDMA	6 mA (DRX = 7)	9 mA (DRX = 7)	260 mA (TX = 10dBm)	LCD Backlight off
LTE	7.3 mA (DRX = 2.56sec)	10.3 mA (DRX = 2.56sec)	430 mA (Cat2 Tx= 10dBm)	LCD Backlight off

17) Battery life time

	Stand by	Talk	Measurement Condition
GSM	400 hours over (PP = 5)	430 min over (TX Level = Max)	LCD Backlight off
WCDMA	400 hours over (DRX = 7)	560 min over (TX = 10dBm)	LCD Backlight off
LTE	330 hours over (DRX = 2.56sec)	340 min over (Cat2 Tx= 10dBm)	LCD Backlight off

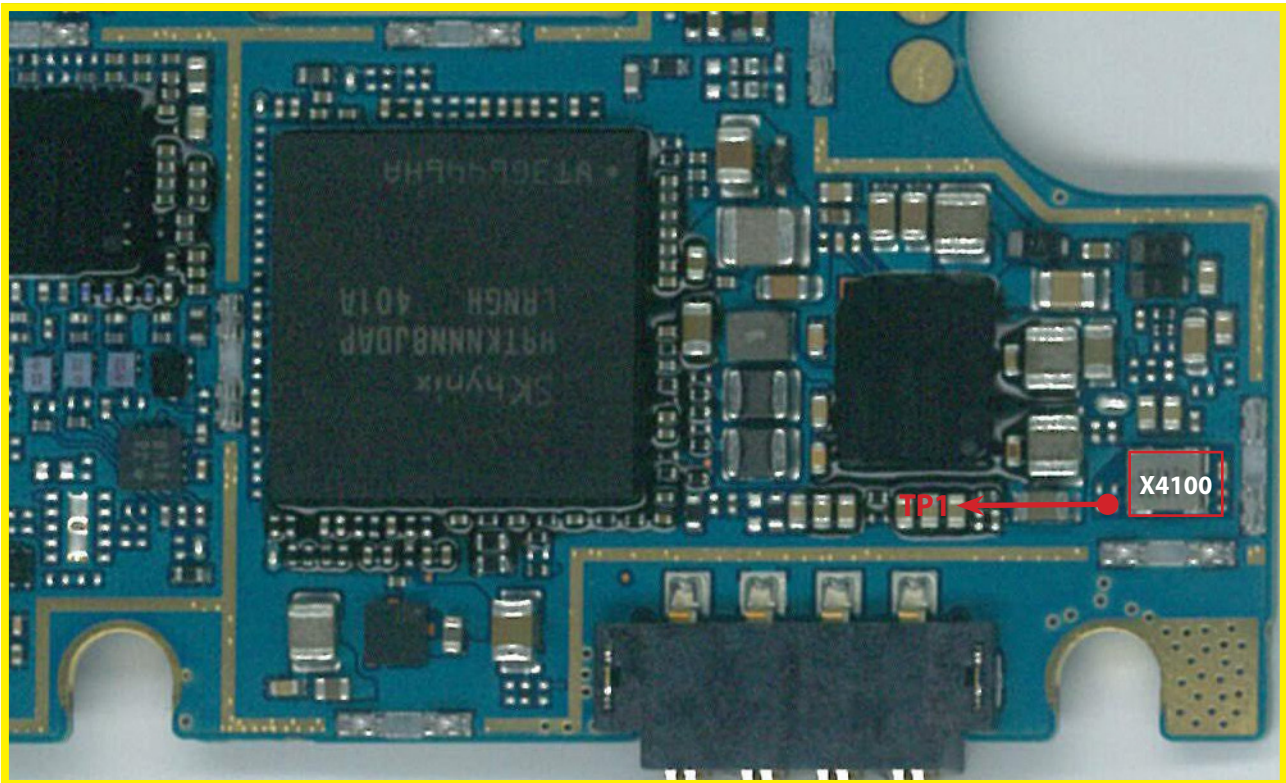
18) Battery Bar

Battery Bar	Specification	Battery Bar	Specification
Bar 20(Full)	Over 98%	Bar 9 -> Bar 8	43% -> 42%
Bar 20 -> Bar 19	98% -> 97%	Bar 8 -> Bar 7	38% -> 37%
Bar 19 -> Bar 18	93% -> 92%	Bar 7 -> Bar 6	33% -> 32%
Bar 18 -> Bar 17	88% -> 87%	Bar 6 -> Bar 5	28% -> 27%
Bar 17 -> Bar 16	83% -> 82%	Bar 5 -> Bar 4	23% -> 22%
Bar 16 -> Bar 15	78% -> 77%	Bar 4 -> Bar 3	16% -> 15%
Bar 15 -> Bar 14	73% -> 72%	Bar 3 -> Bar 2	13% -> 12%
Bar 14 -> Bar 13	68% -> 67%	Bar 2 -> Bar 1	8% -> 7%
Bar 13 -> Bar 12	63% -> 62%	Bar 1 -> Bar 0	3% -> 2%
Bar 12 -> Bar 11	58% -> 57%	Power off	2% -> 1%
Bar 11 -> Bar 10	53% -> 52%	Low battery pop-up	15% , 5%, 1%
Bar 10 -> Bar 9	48% -> 47%		

3. TROUBLE SHOOTING

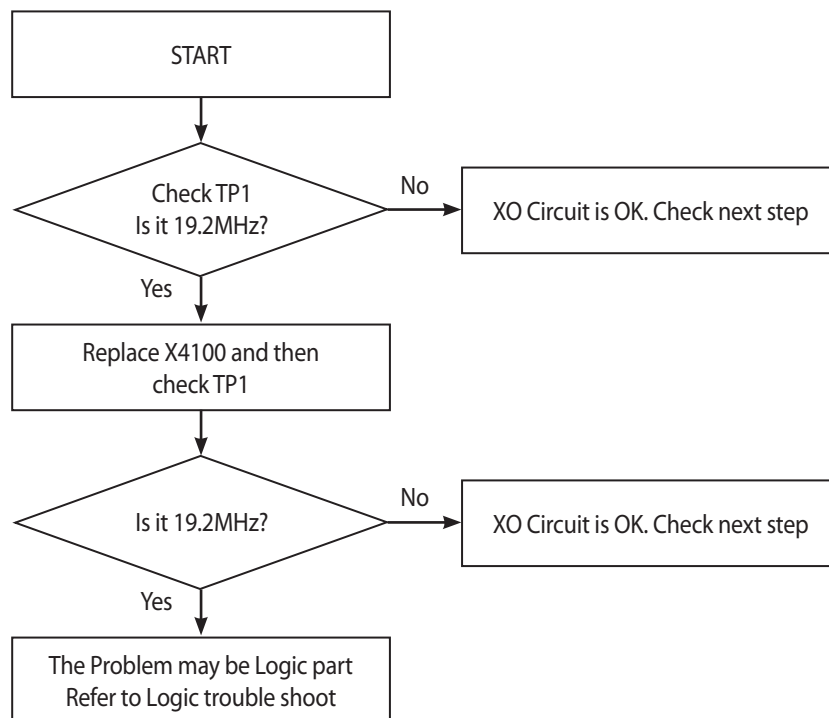
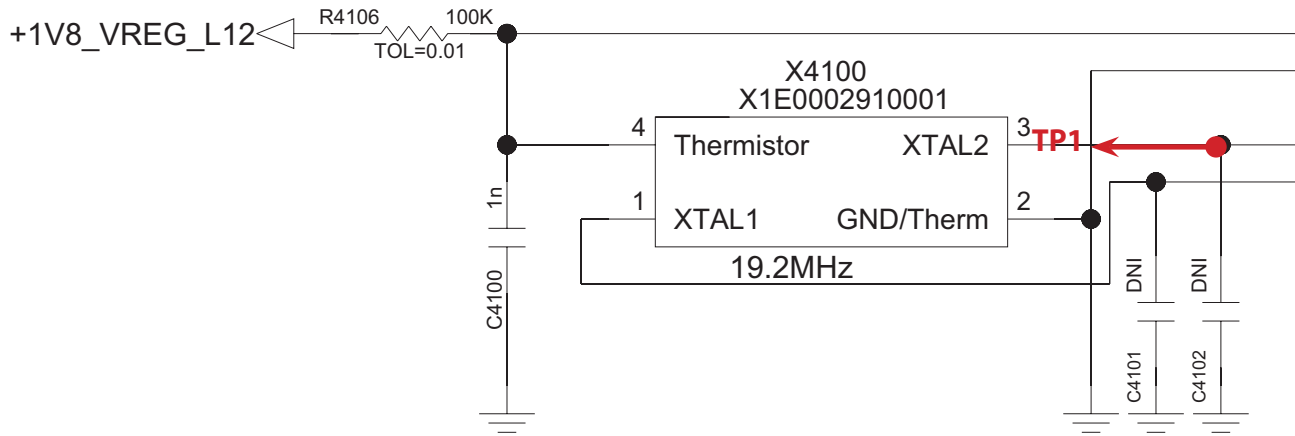
3.1 Checking XO Block

The output frequency(19.2MHz) of XO(X4100) is used as the reference one of WTR1625L and PM8926 internal VCO



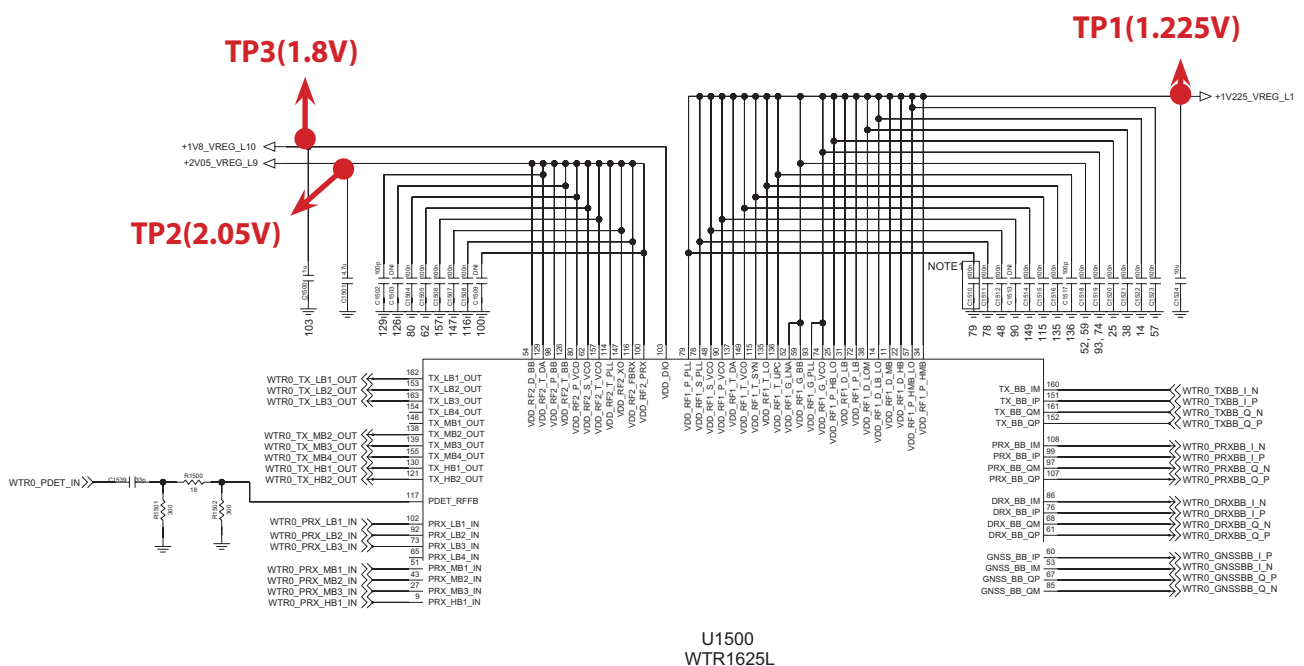
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3. TROUBLE SHOOTING

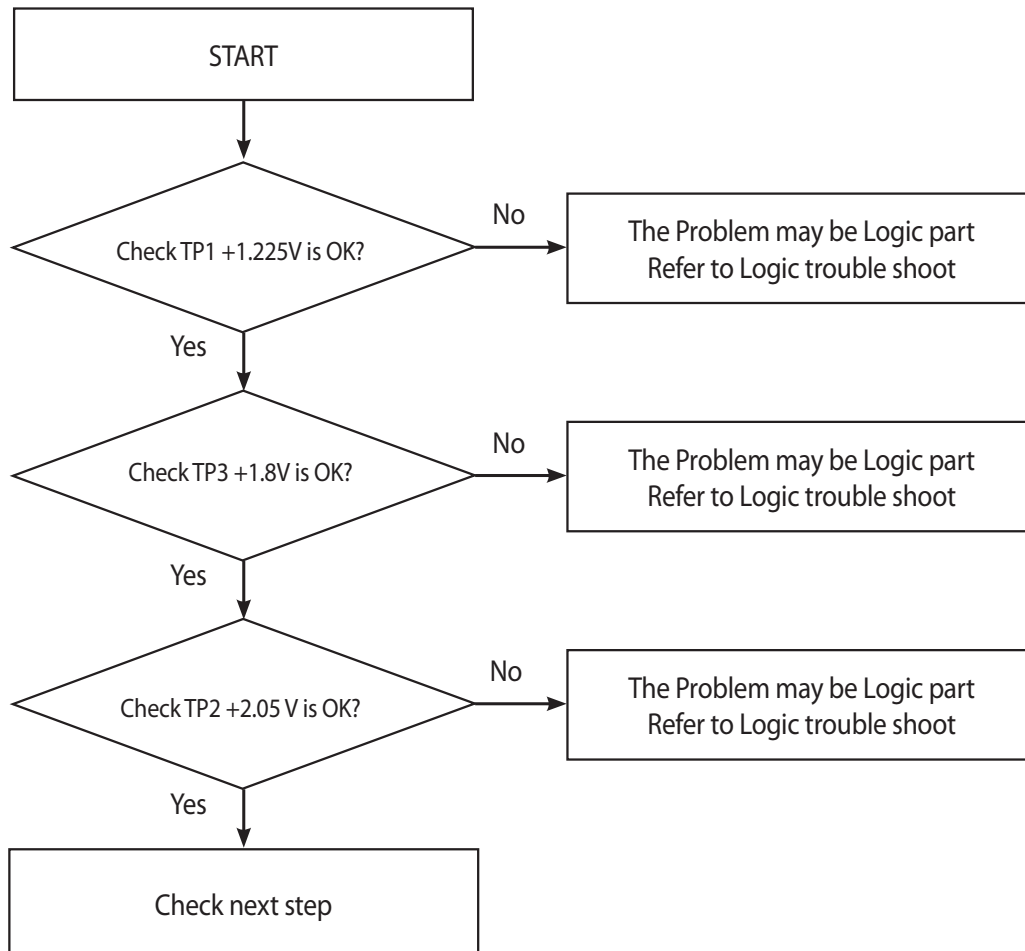


A close-up photograph of a blue printed circuit board (PCB) featuring a central black integrated circuit (IC) labeled U1500. The IC is highlighted with a red rectangular box. To the right of the IC, three red arrows point to specific test points on the PCB, labeled TP1(1.225V), TP2(2.05V), and TP3(1.8V). Other components visible on the board include a large black chip on the left with 'MT7162-21' and 'S142241' markings, and a large black chip on the right with 'SKHylix' and 'H9TKNN8J0AP' markings. Various surface-mount components like capacitors and resistors are also visible.

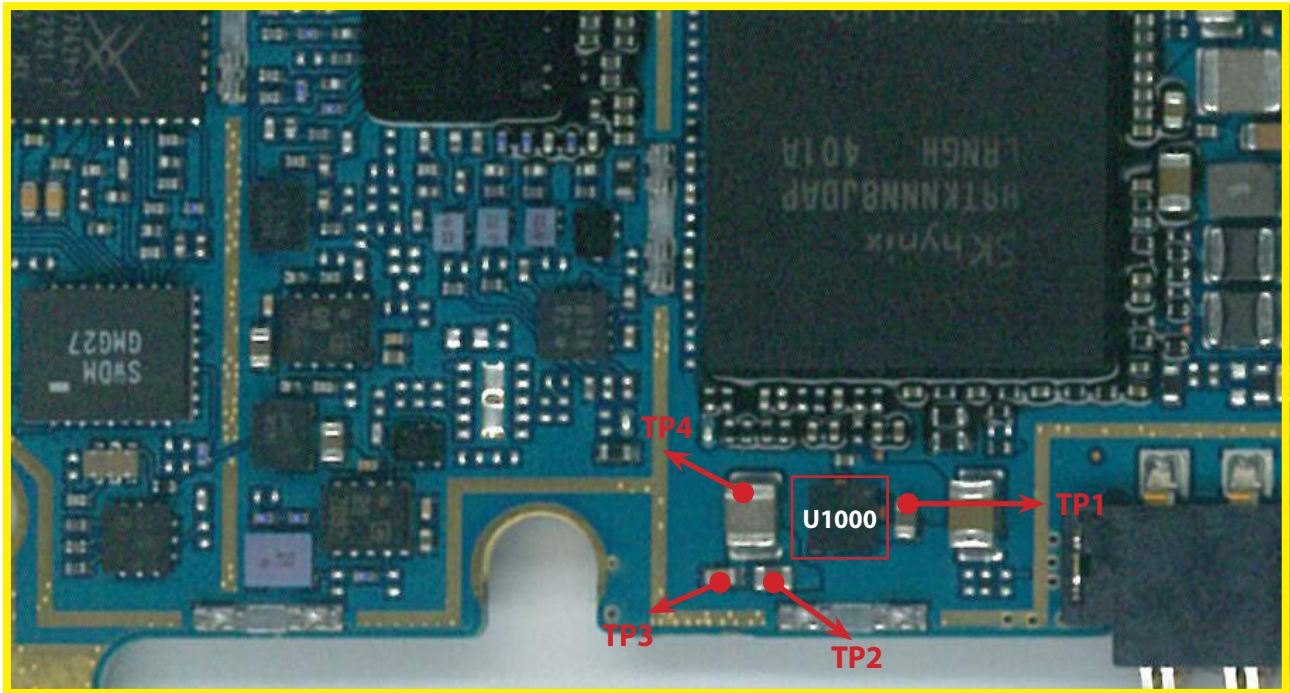
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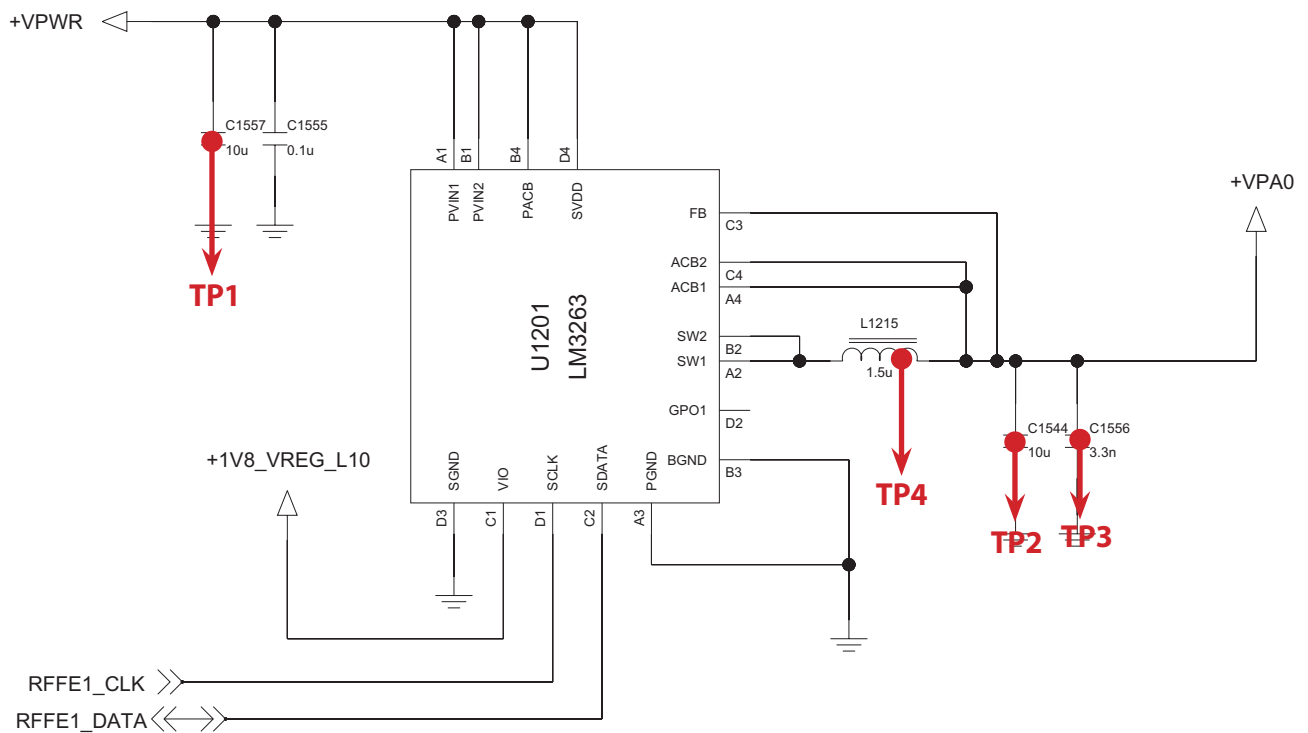
3. TROUBLE SHOOTING



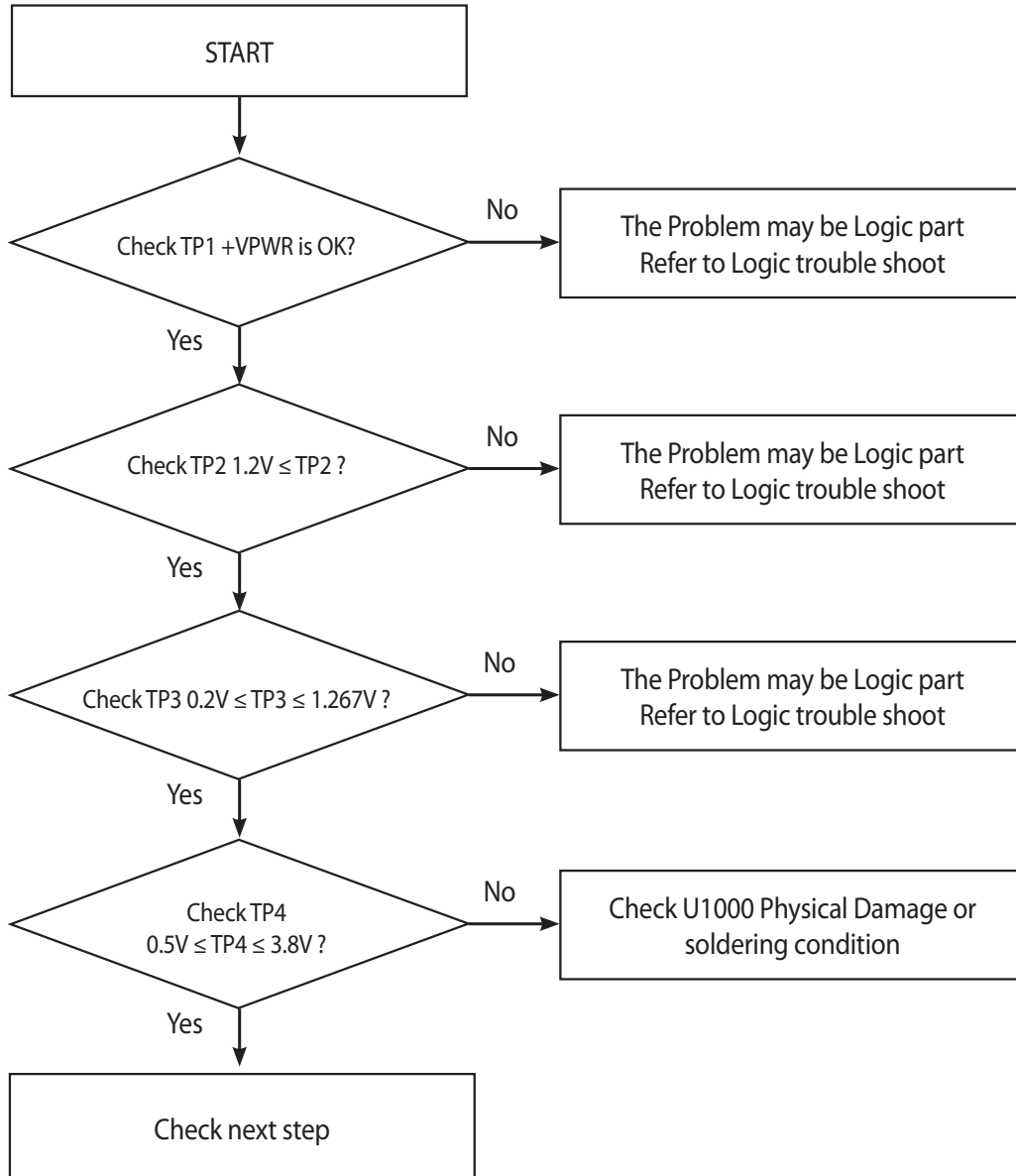
3.3 Checking DC-DC Block



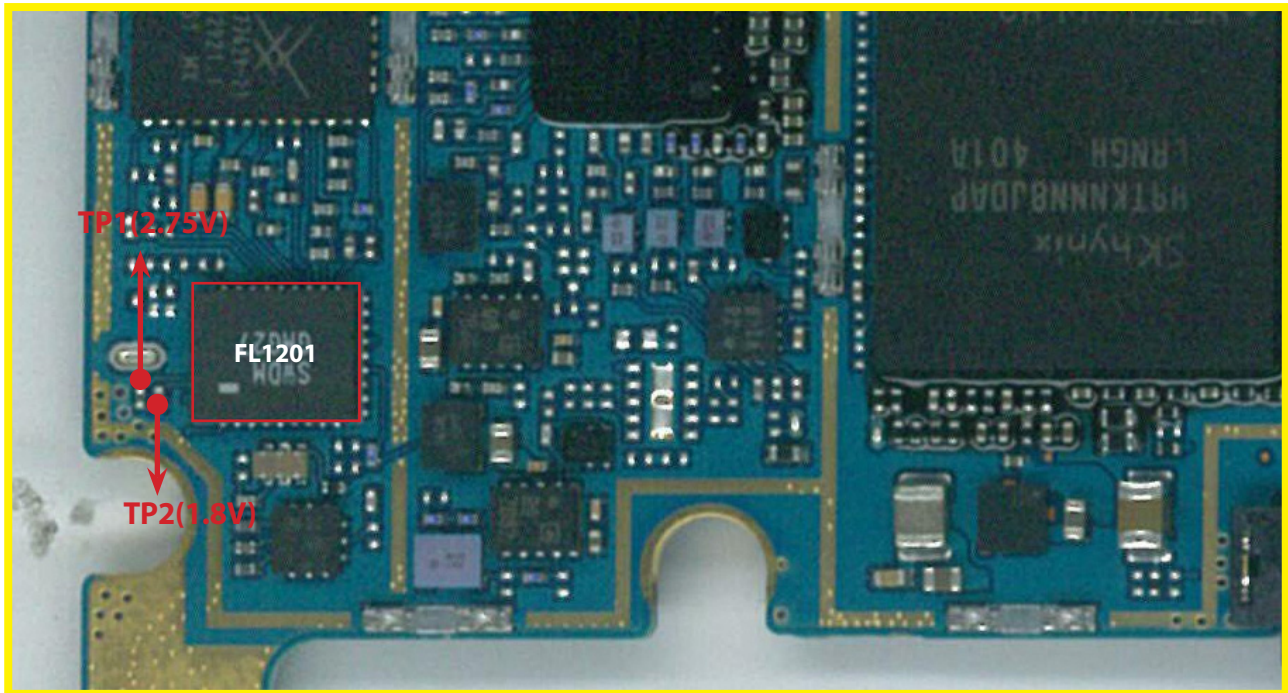
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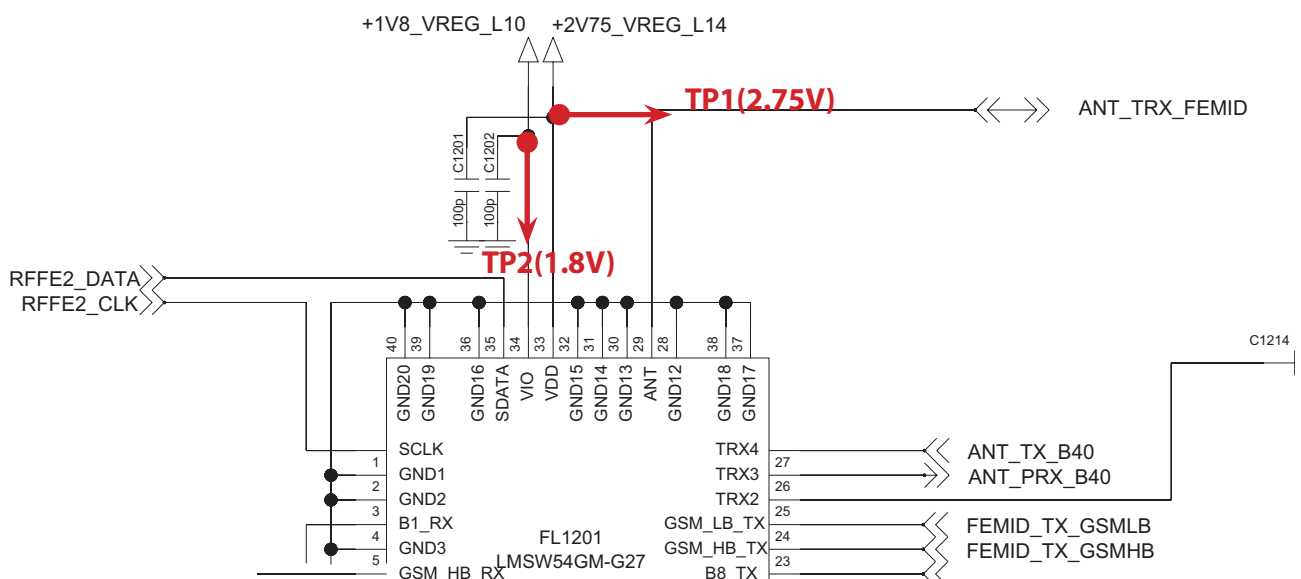
3. TROUBLE SHOOTING

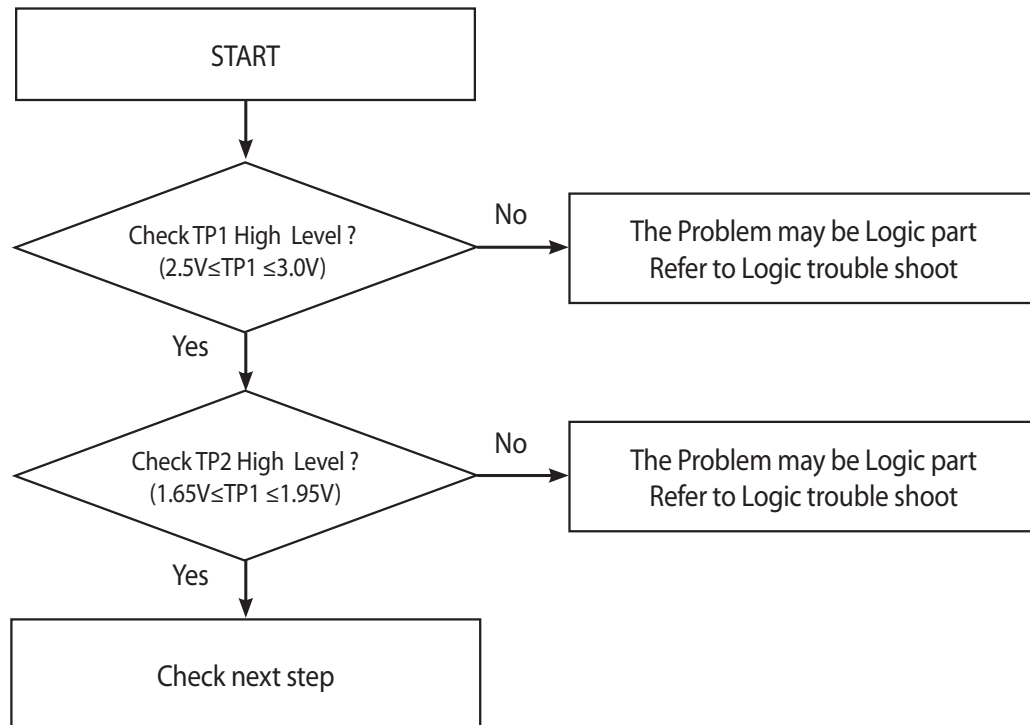


3.4 Checking FEMiD Block (GSM, W B1/2/5/8, LTE B1/2/3/7/8/20)

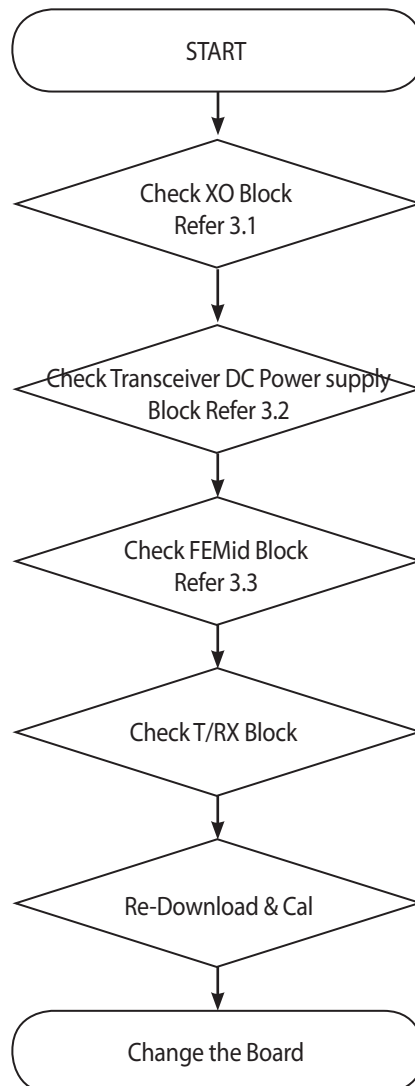


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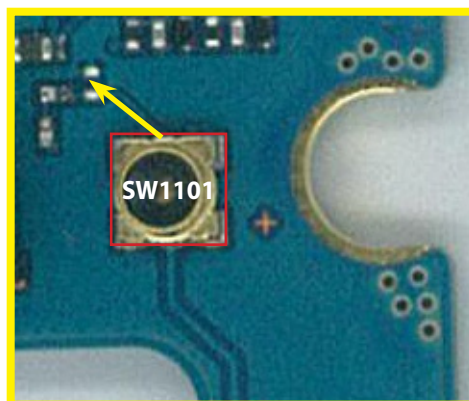
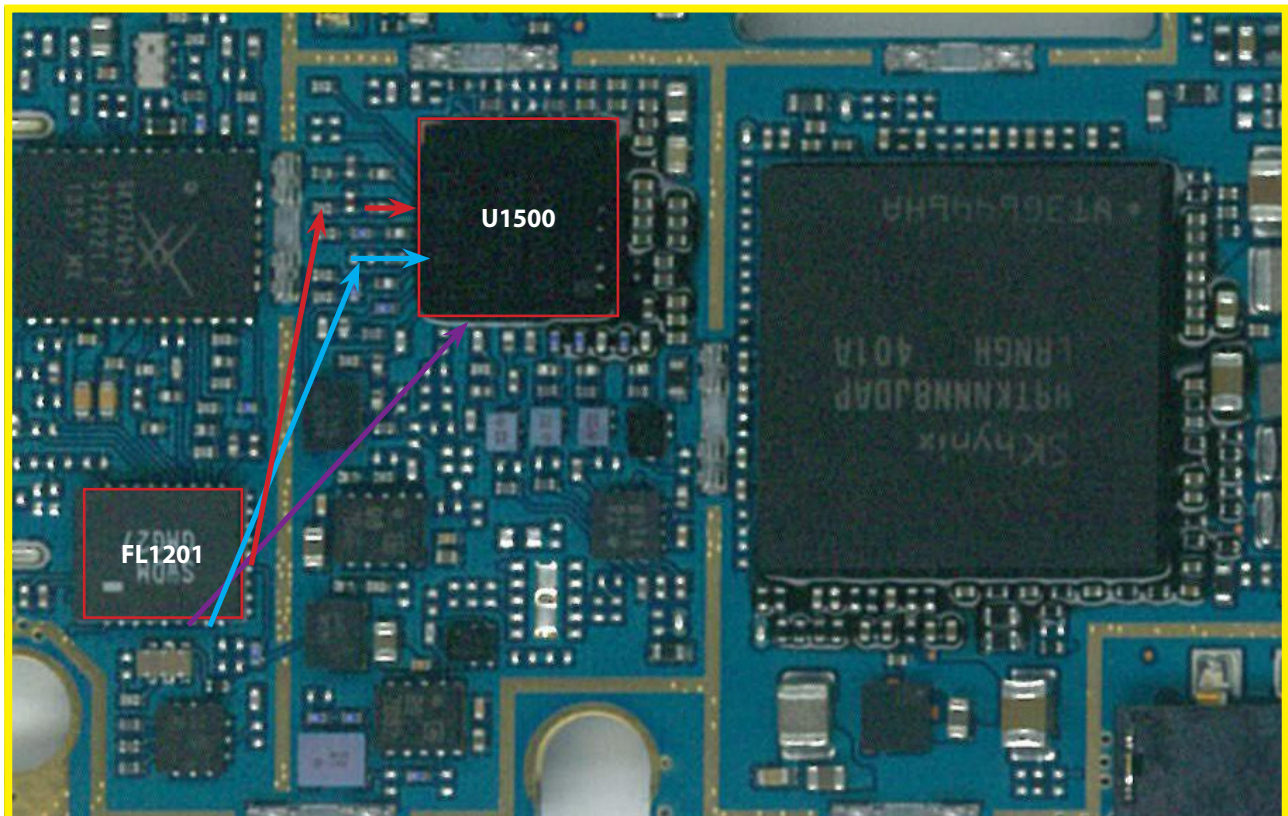


3.5 GSM RF Part



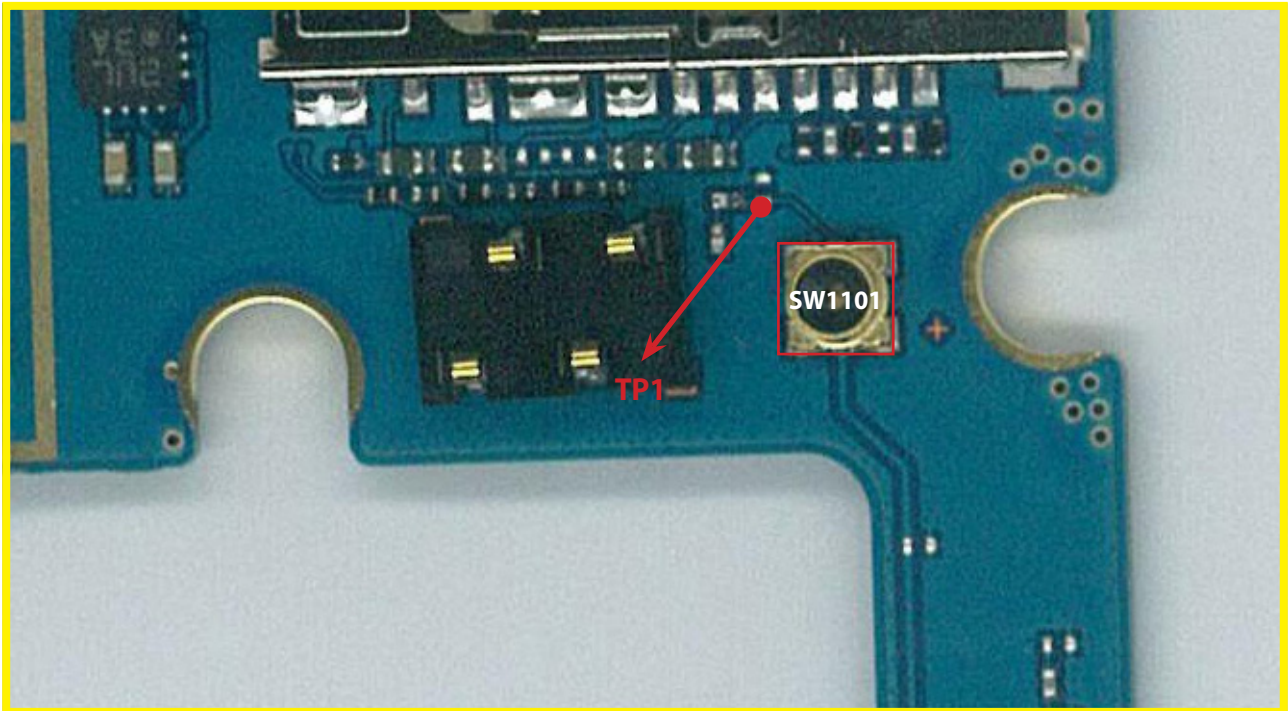
3.5.1 GSM850/900/1800/1900 Rx

GSM850/900/1800/1900 RX RF PATH

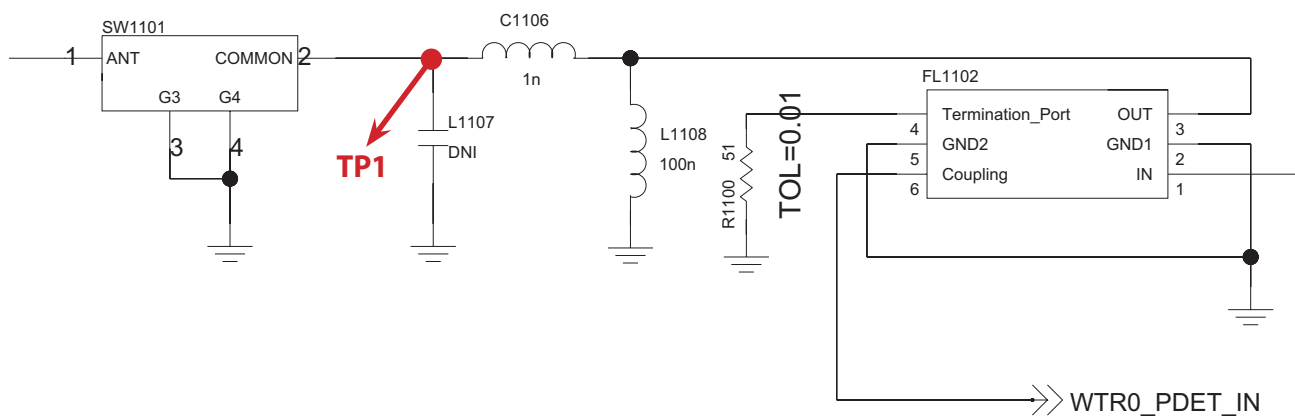


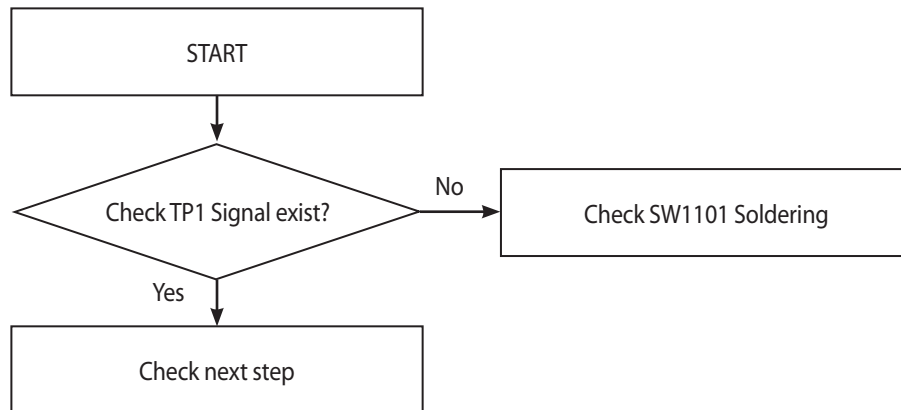
- 1. GSM850 RX PATH*
- 2. GSM900 RX PATH*
- 3. GSM1800/1900 RX PATH*
- 4. COMMON T/RX PATH*

3.5.1.1 Checking RF signal path (SW)

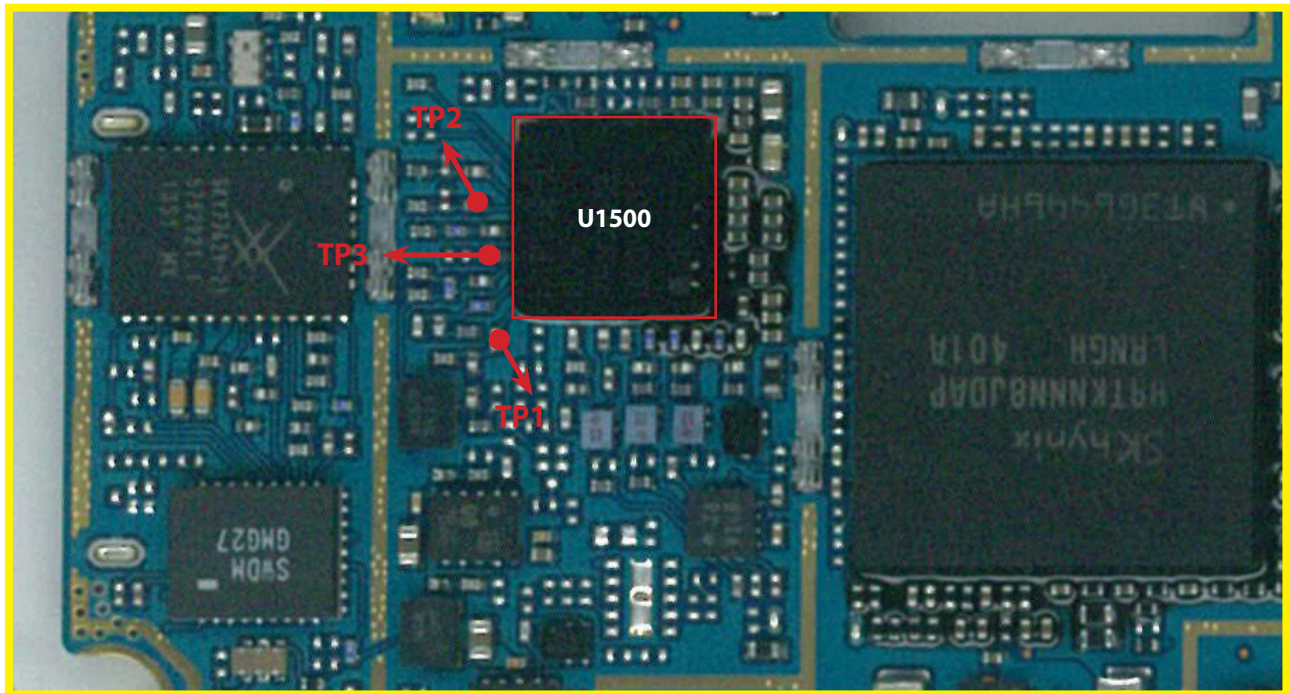


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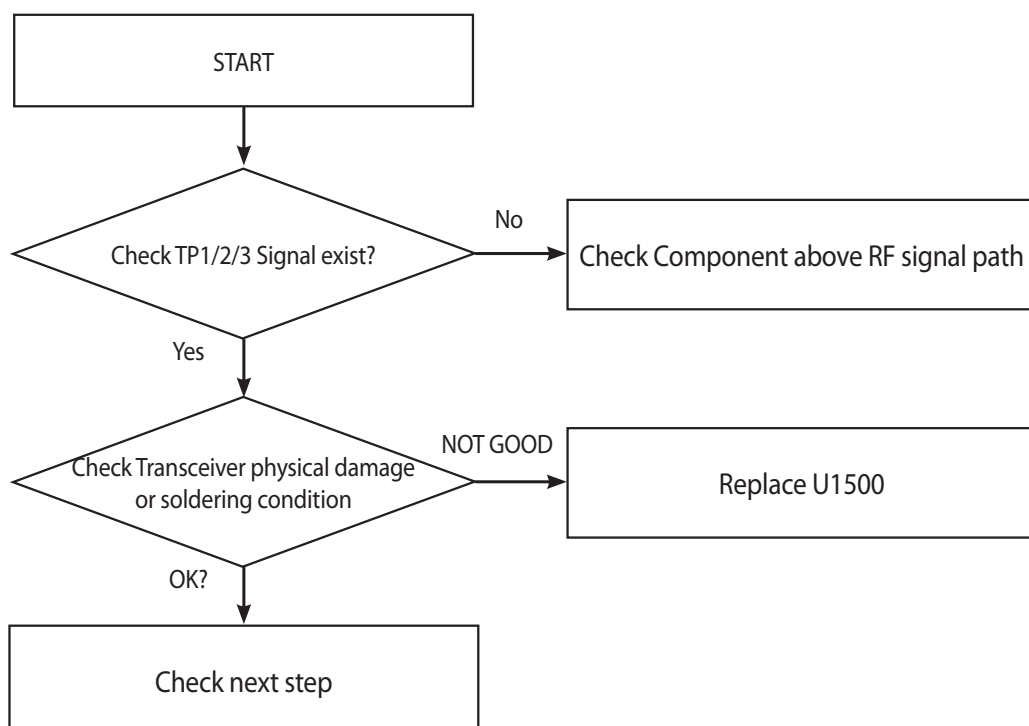




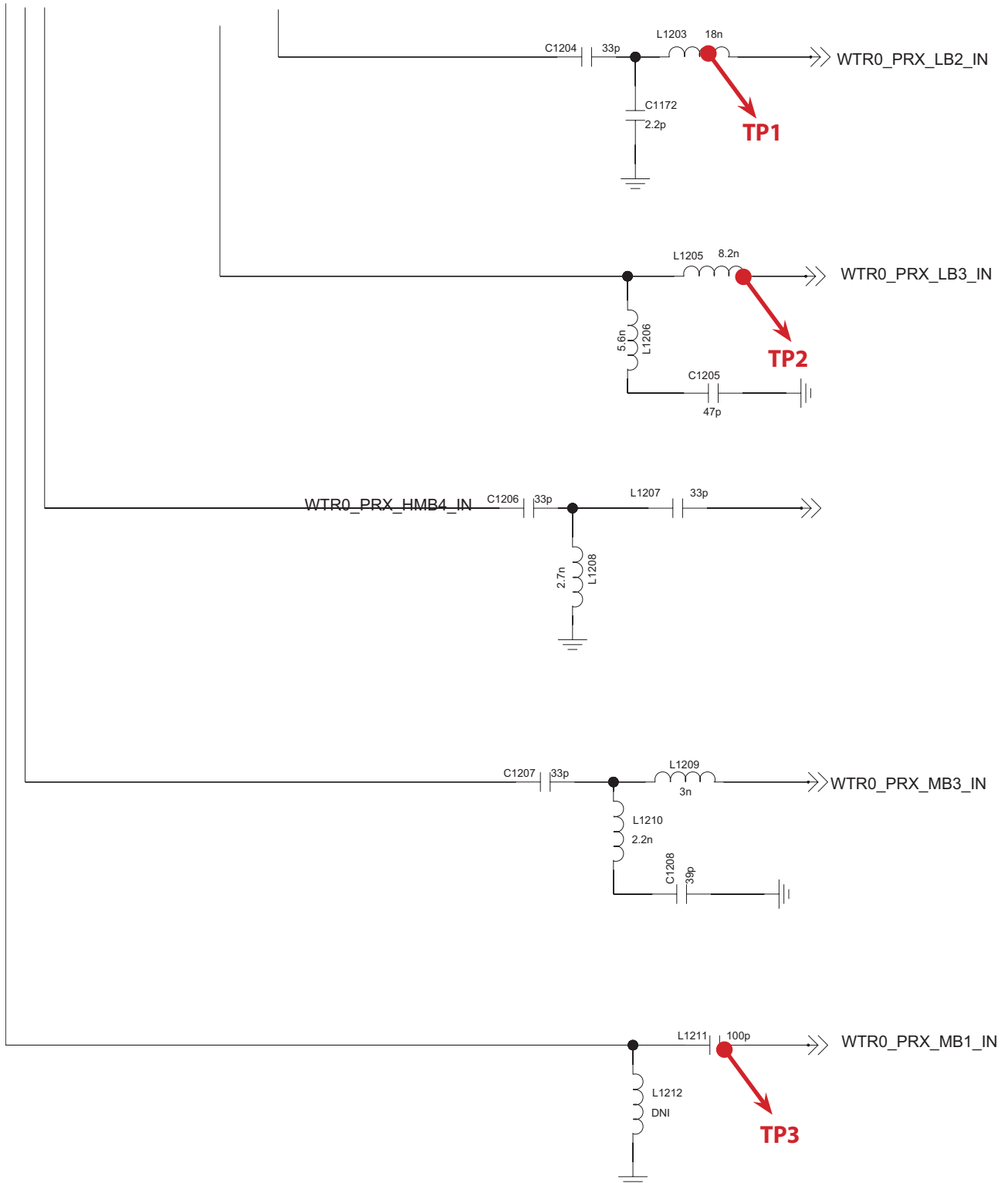
3.5.1.2 Checking RF signal path



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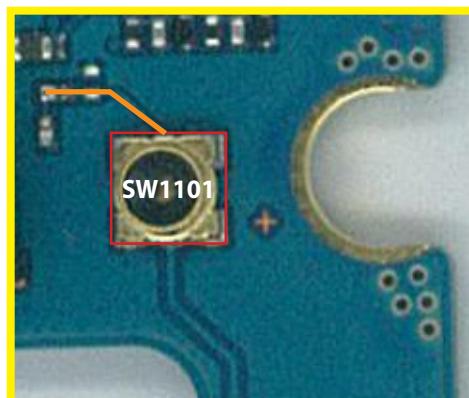
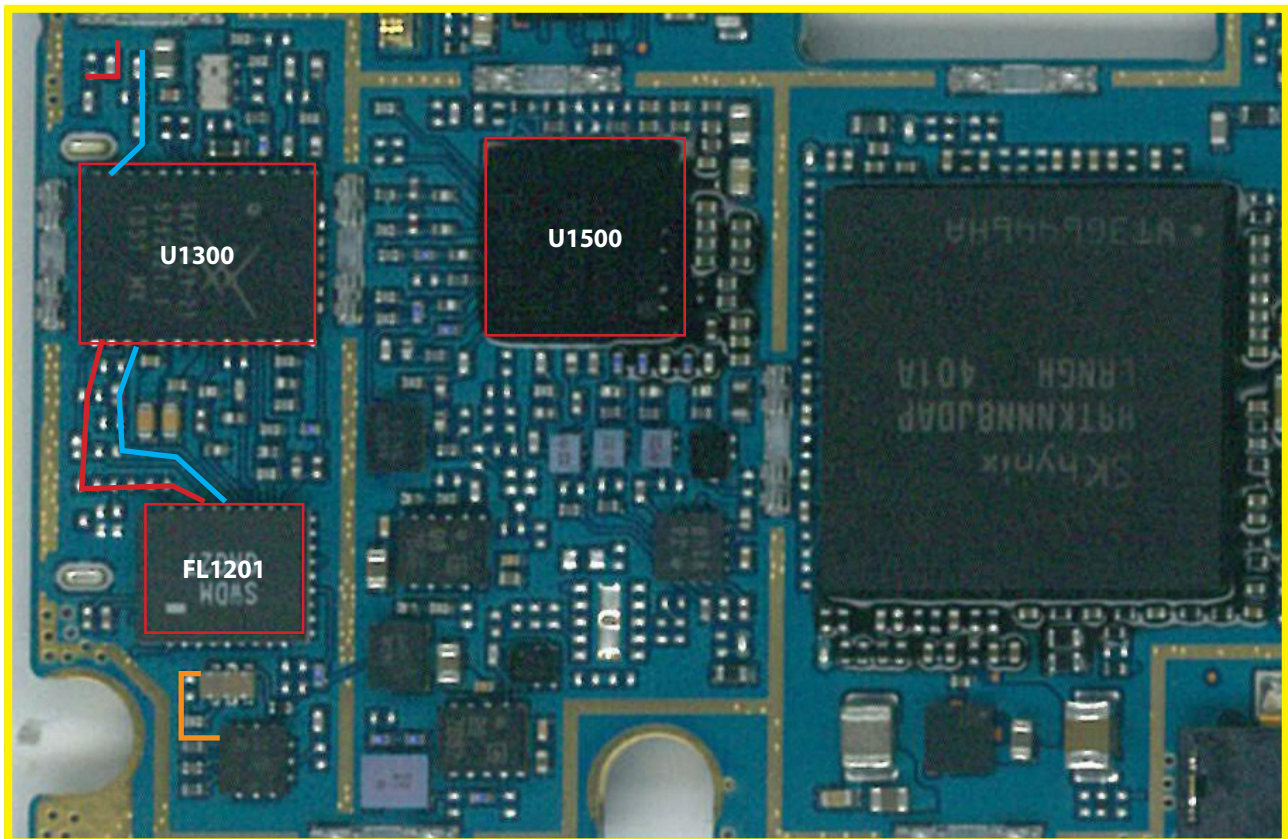


3. TROUBLE SHOOTING



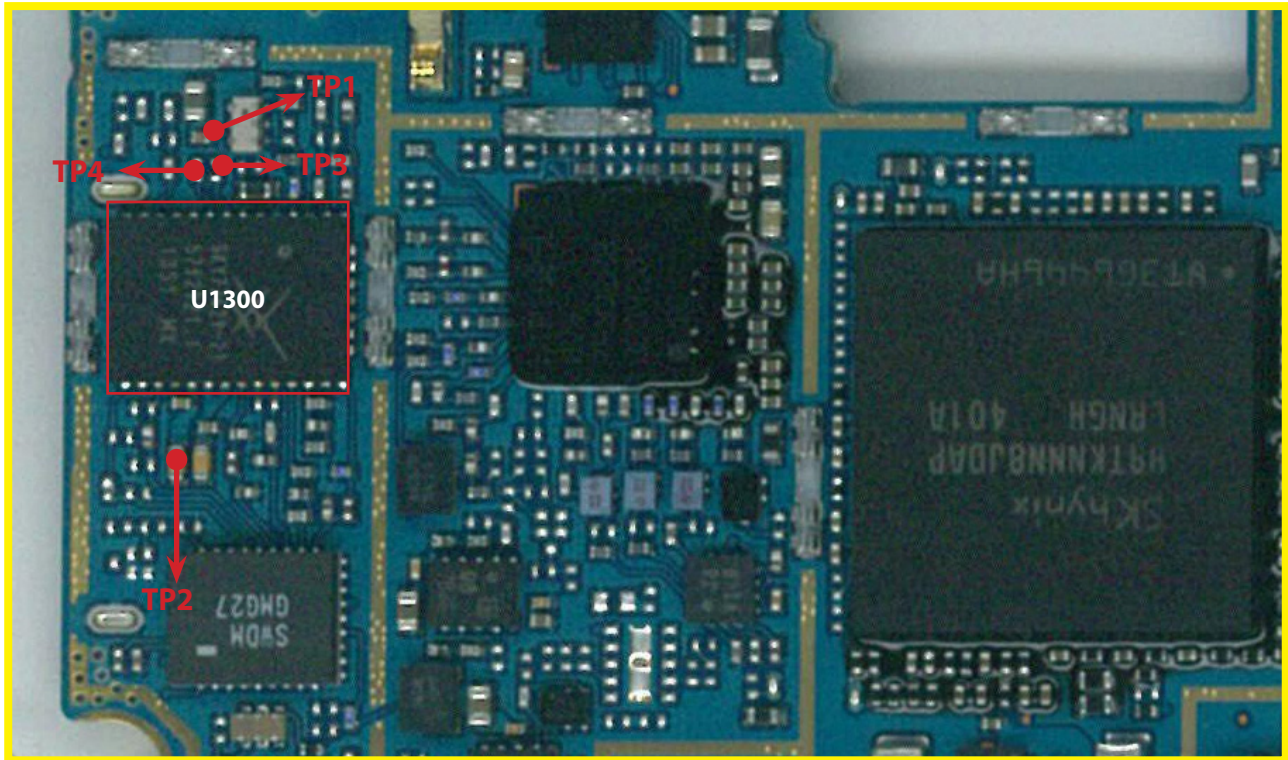
3.5.2 GSM850/900/1800/1900 Tx

GSM850/900/1800/1900 TX RF PATH



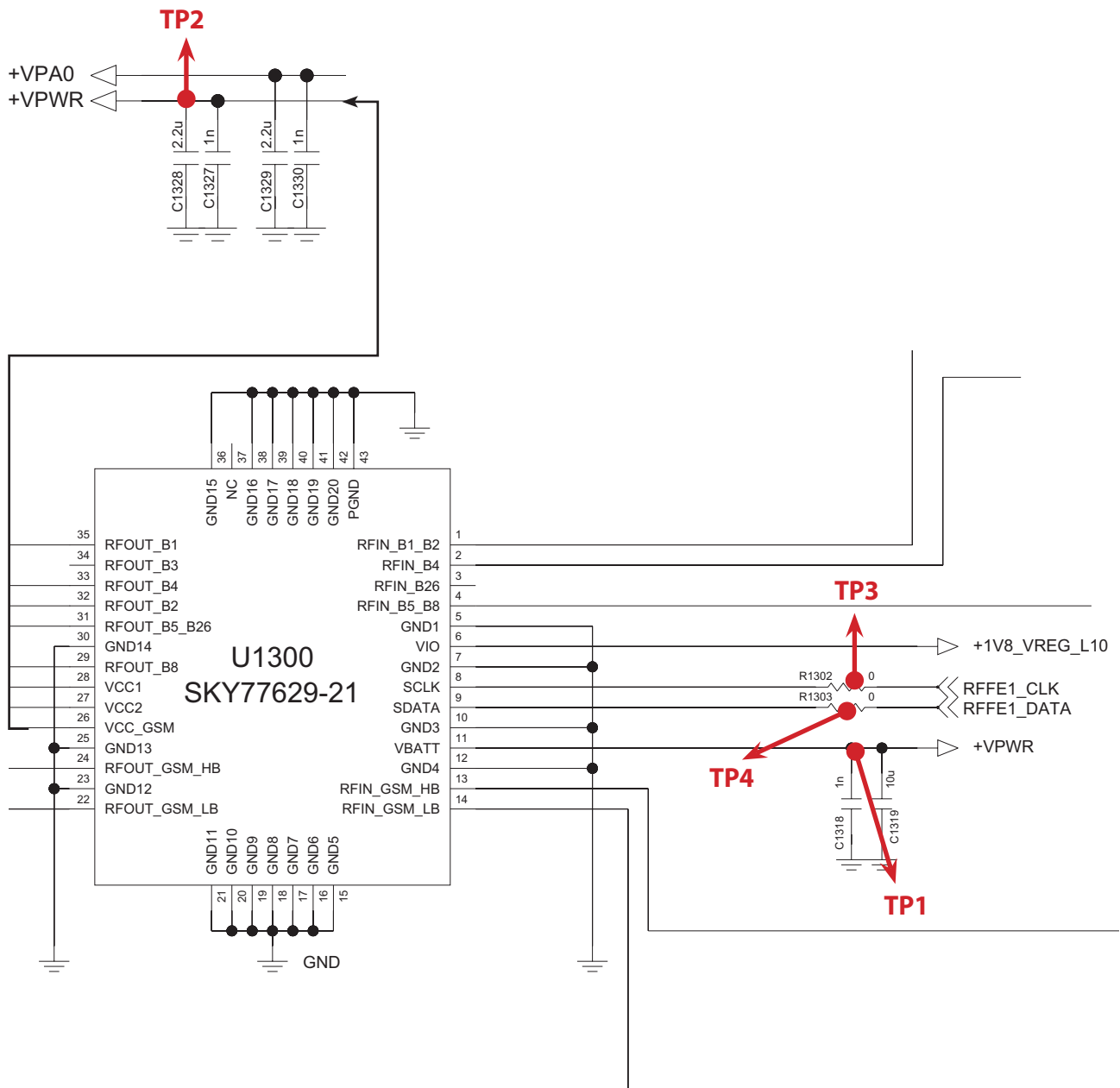
- 1. GSM850/900 TX PATH
- 2. GSM1800/1900 TX PATH
- 3. COMMON T/RX PATH

3.5.2.1 Checking GSM PAM DC Power Circuit

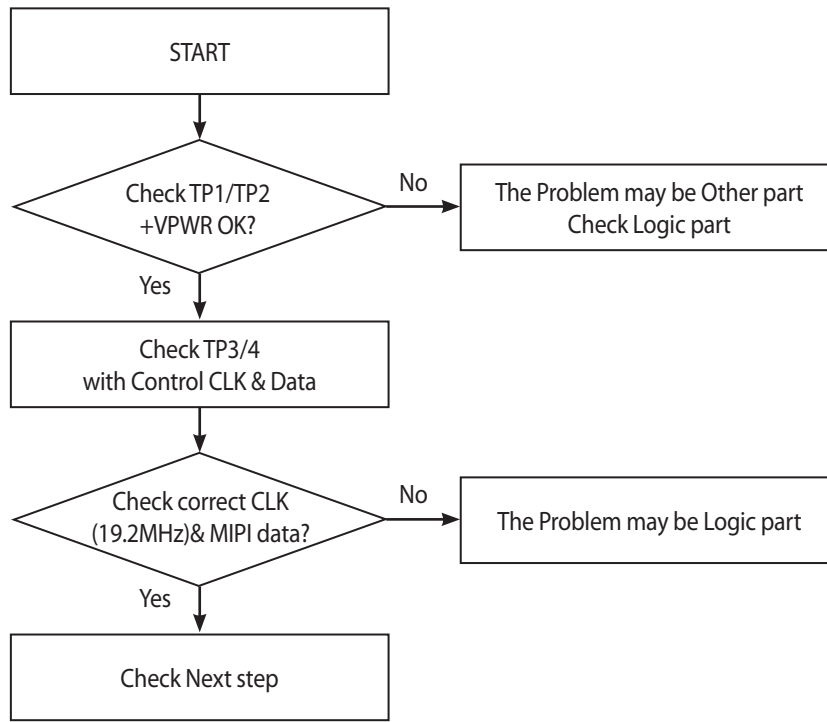


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3. TROUBLE SHOOTING

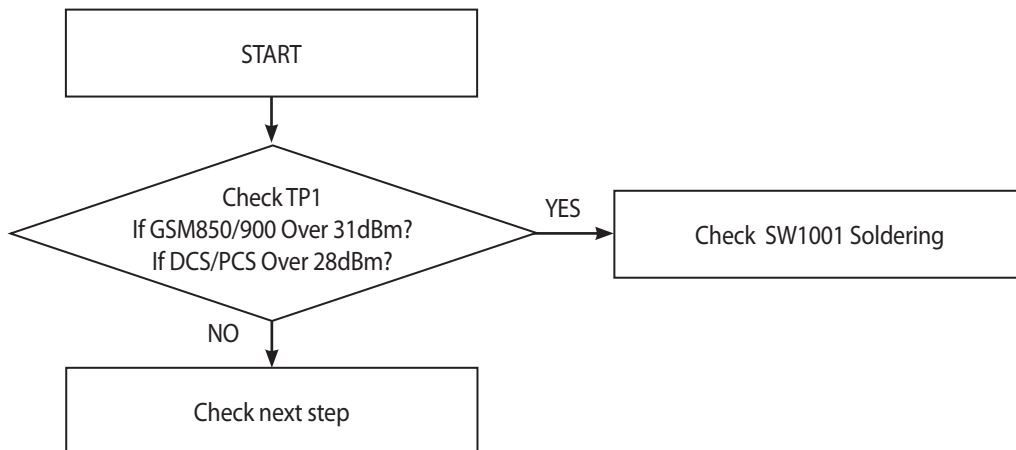


3. TROUBLE SHOOTING

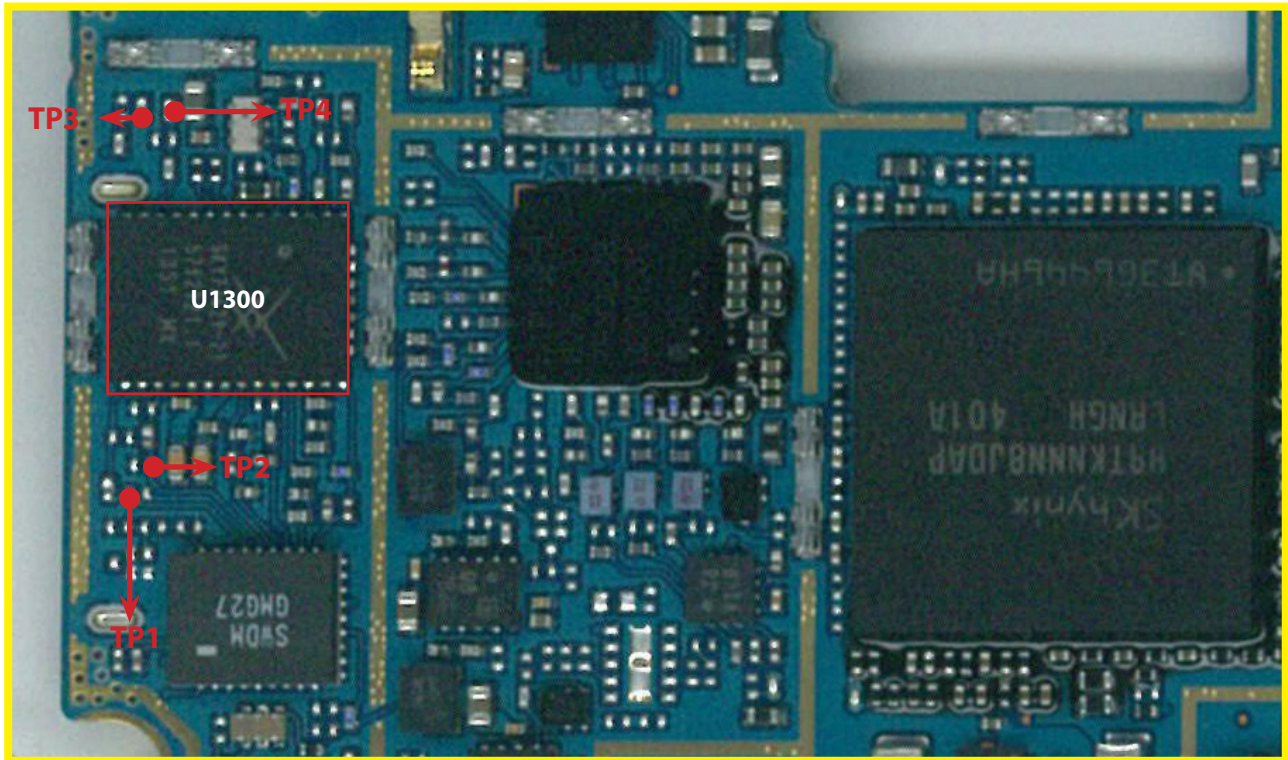


3.5.2.2 GSM850/900/1800/1900 Tx

Refer to 3.5.1.1

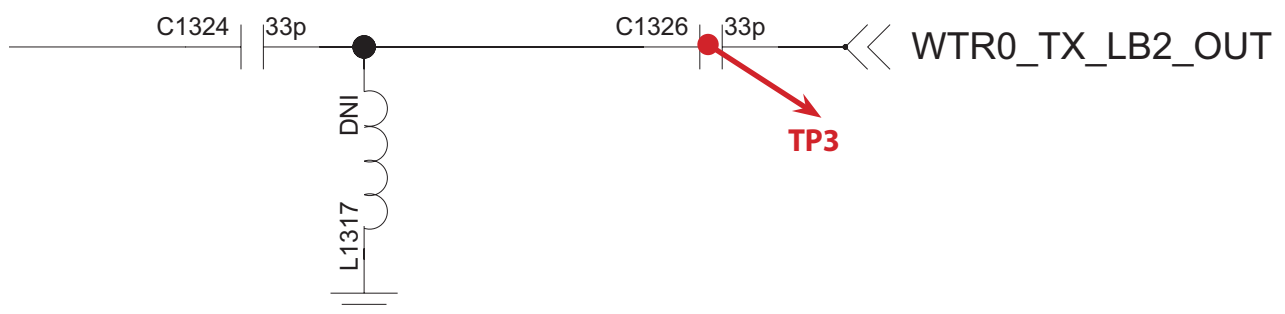
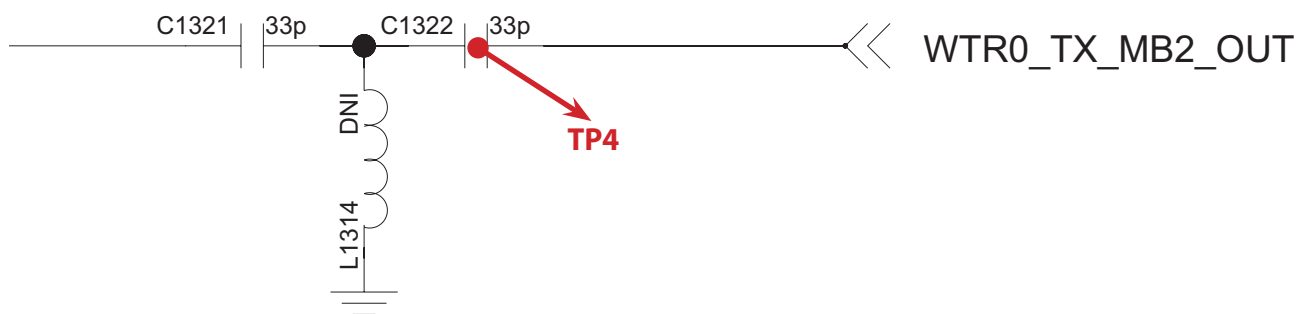
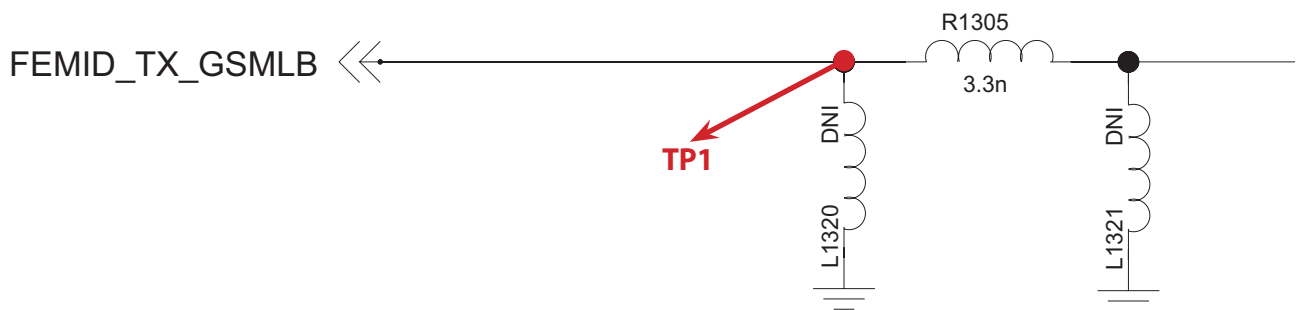
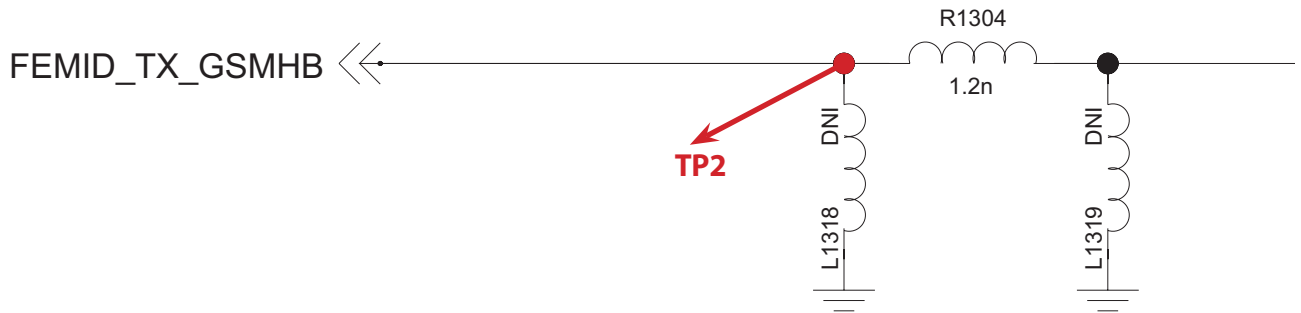


3.5.2.3 Checking RF signal path

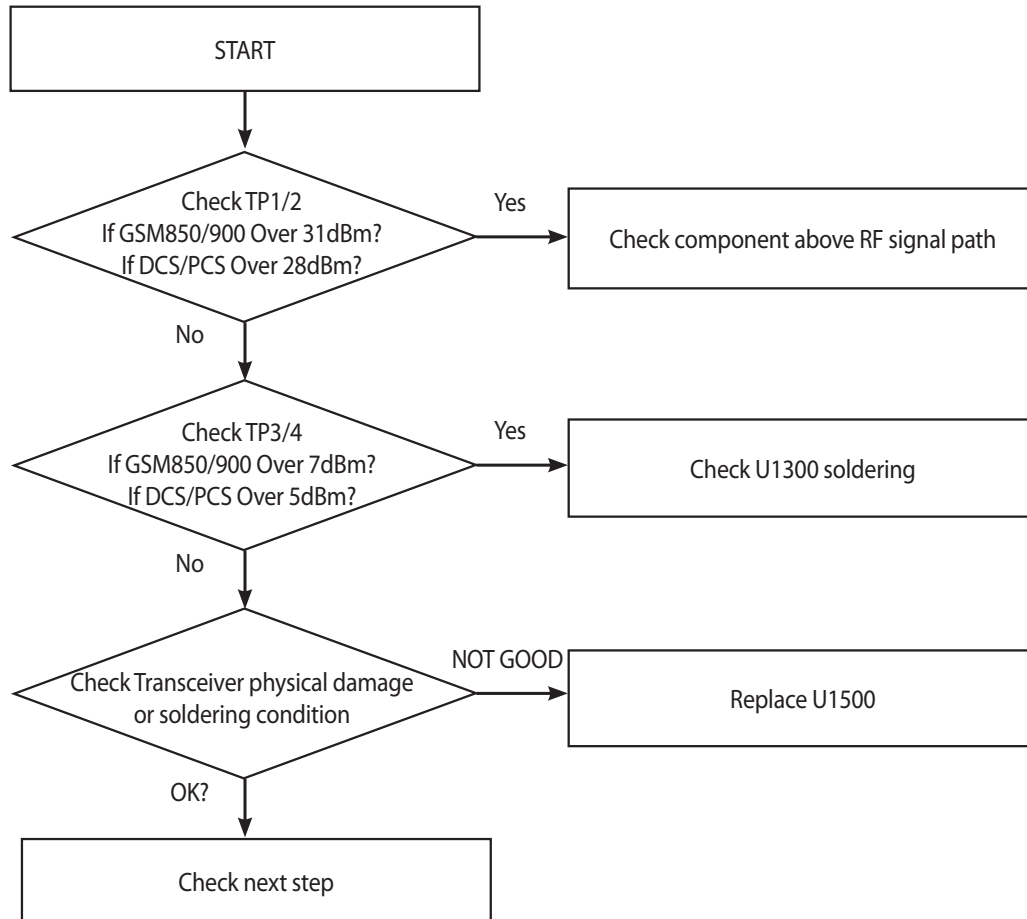


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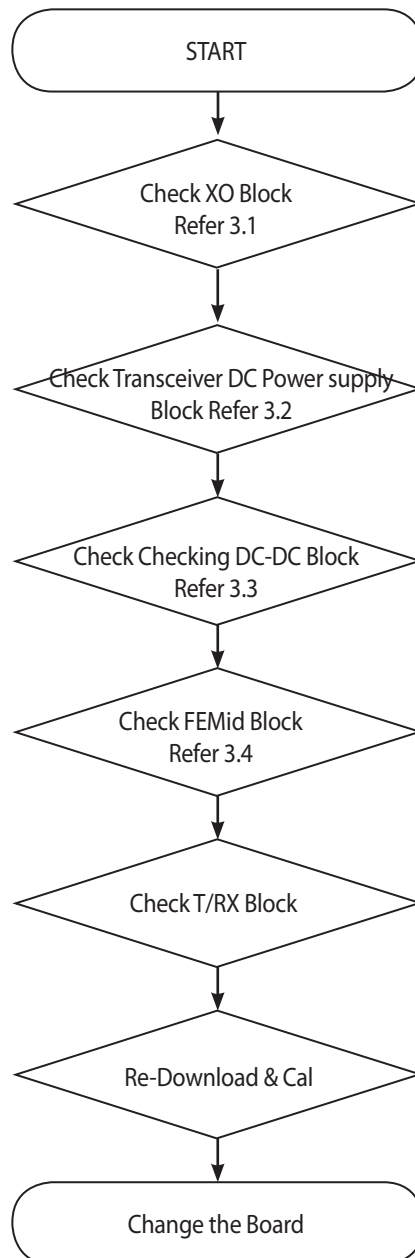
3. TROUBLE SHOOTING



3. TROUBLE SHOOTING

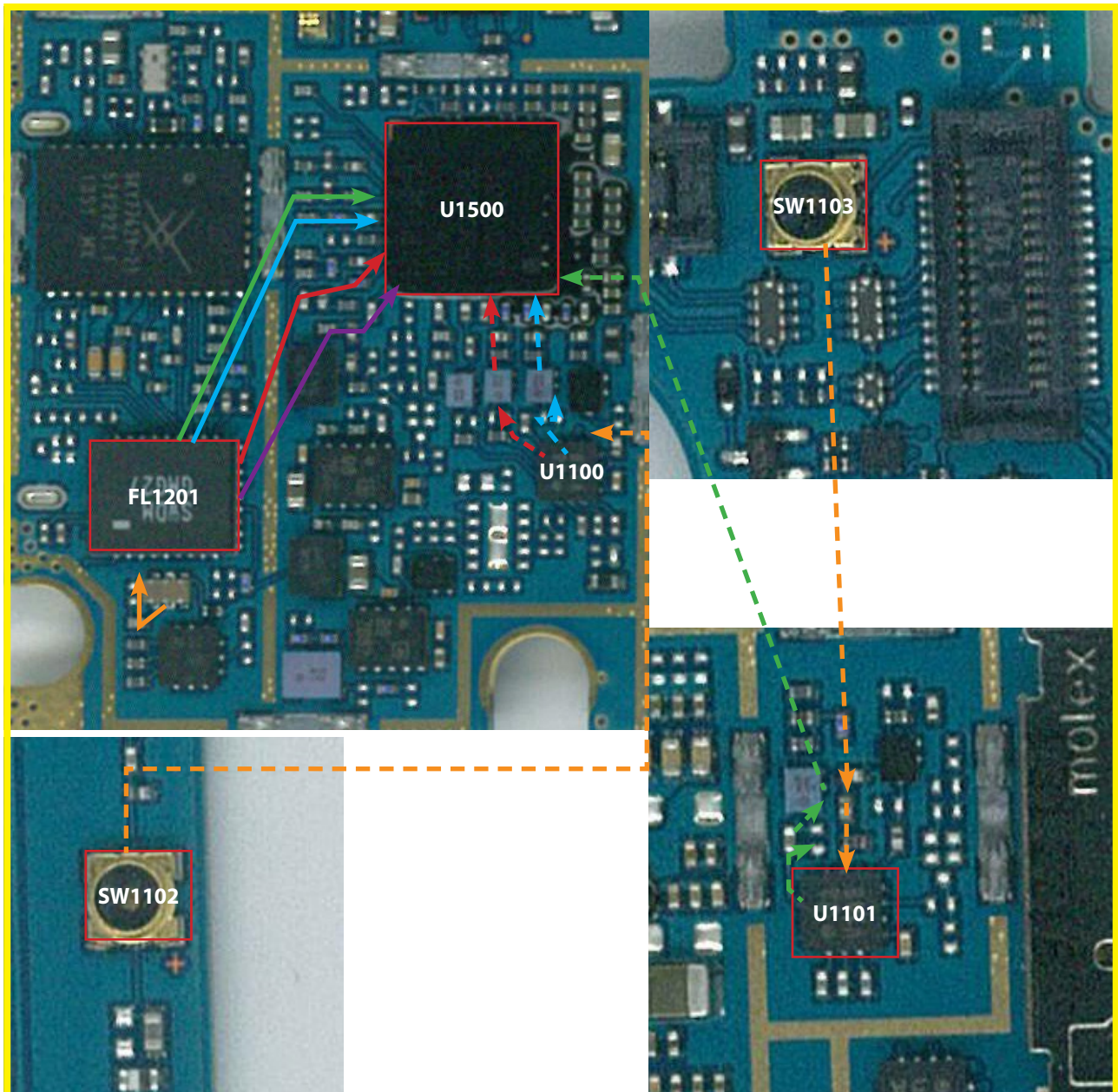


3.6 WCDMA RF Part



3.6.1 WCDMA B1/2/5/8 Rx

WCDMA B1/2/5/8 RX RF PATH



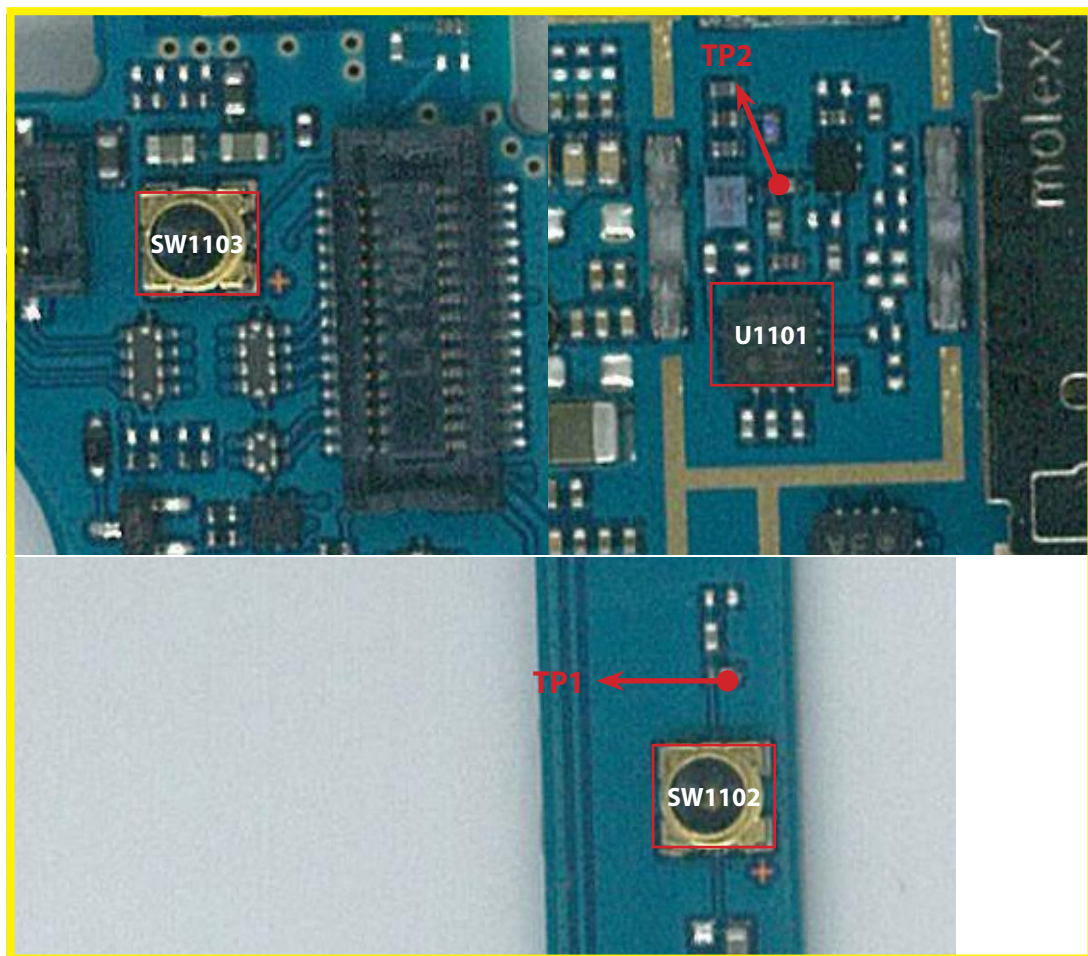
1. WCDMA B1 RX PATH
2. WCDMA B2 RX PATH
3. WCDMA B5 RX PATH
4. WCDMA B8 RX PATH
5. COMMON T/RX PATH

6. WCDMA B1 DRX PATH
7. WCDMA B2 DRX PATH
8. WCDMA B8 RX PATH
9. COMMON DRX PATH

3.6.1.1 Checking RF signal path (SW)

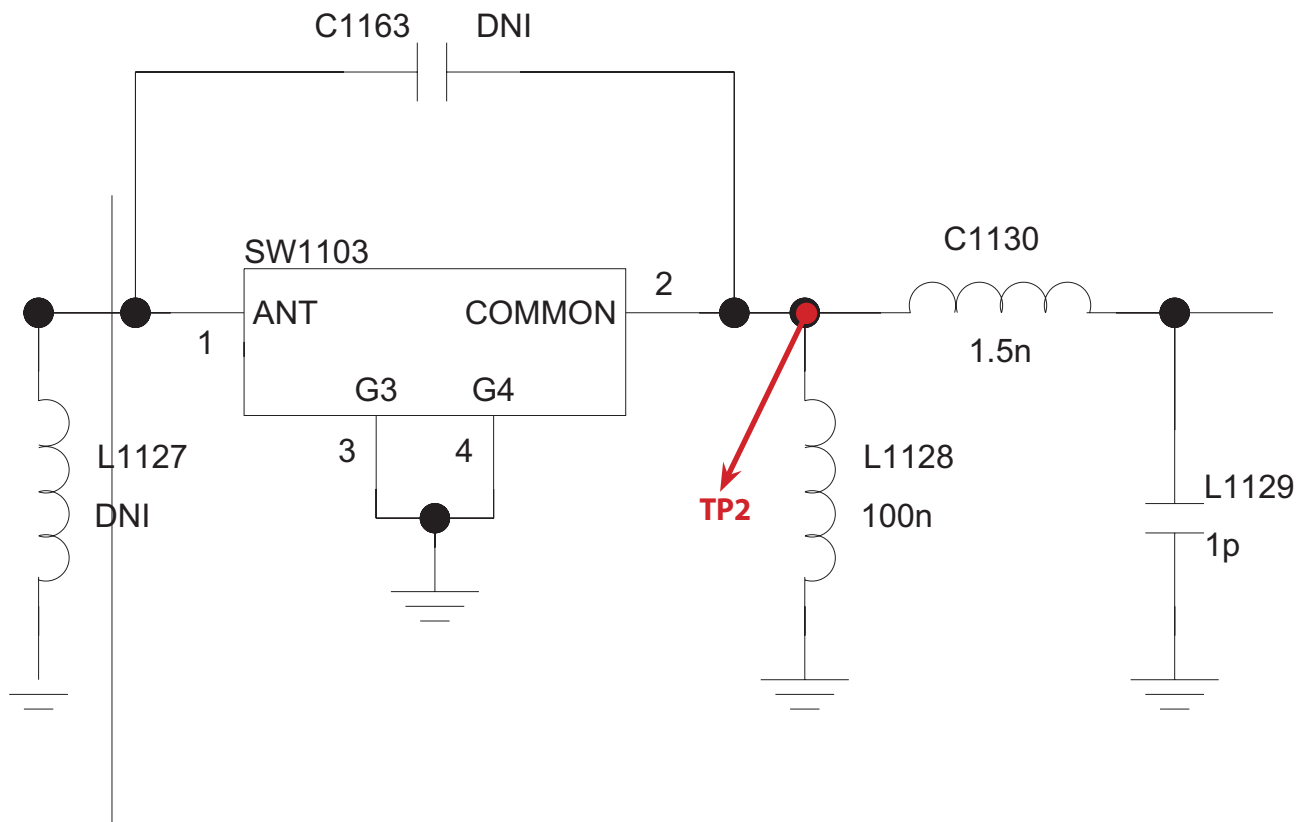
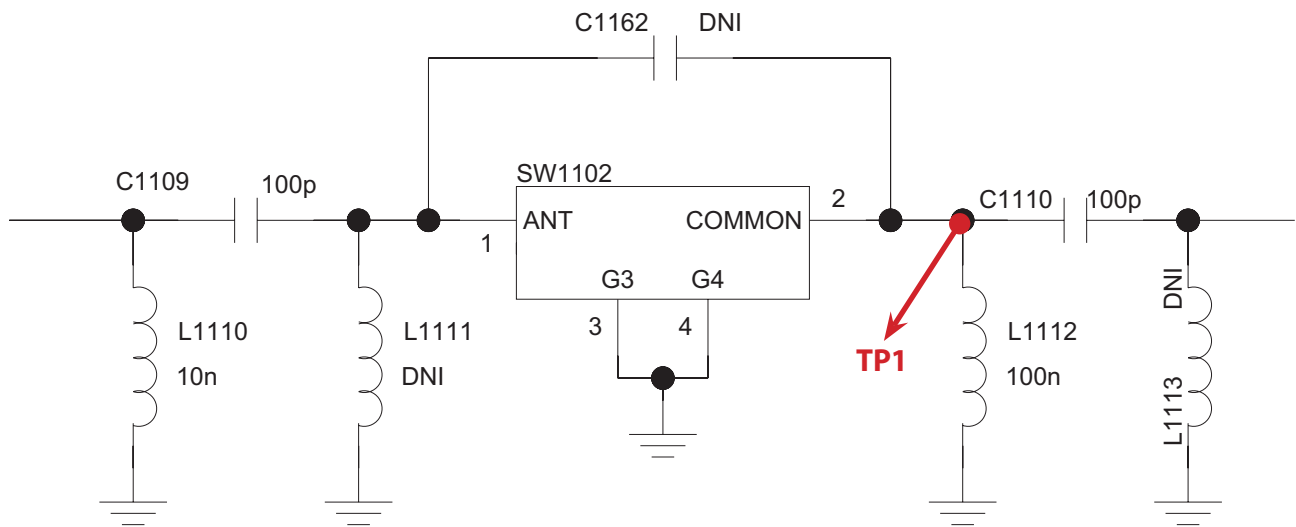
1) PRX Path : Refer to 3.5.1.1

2) DRX Path

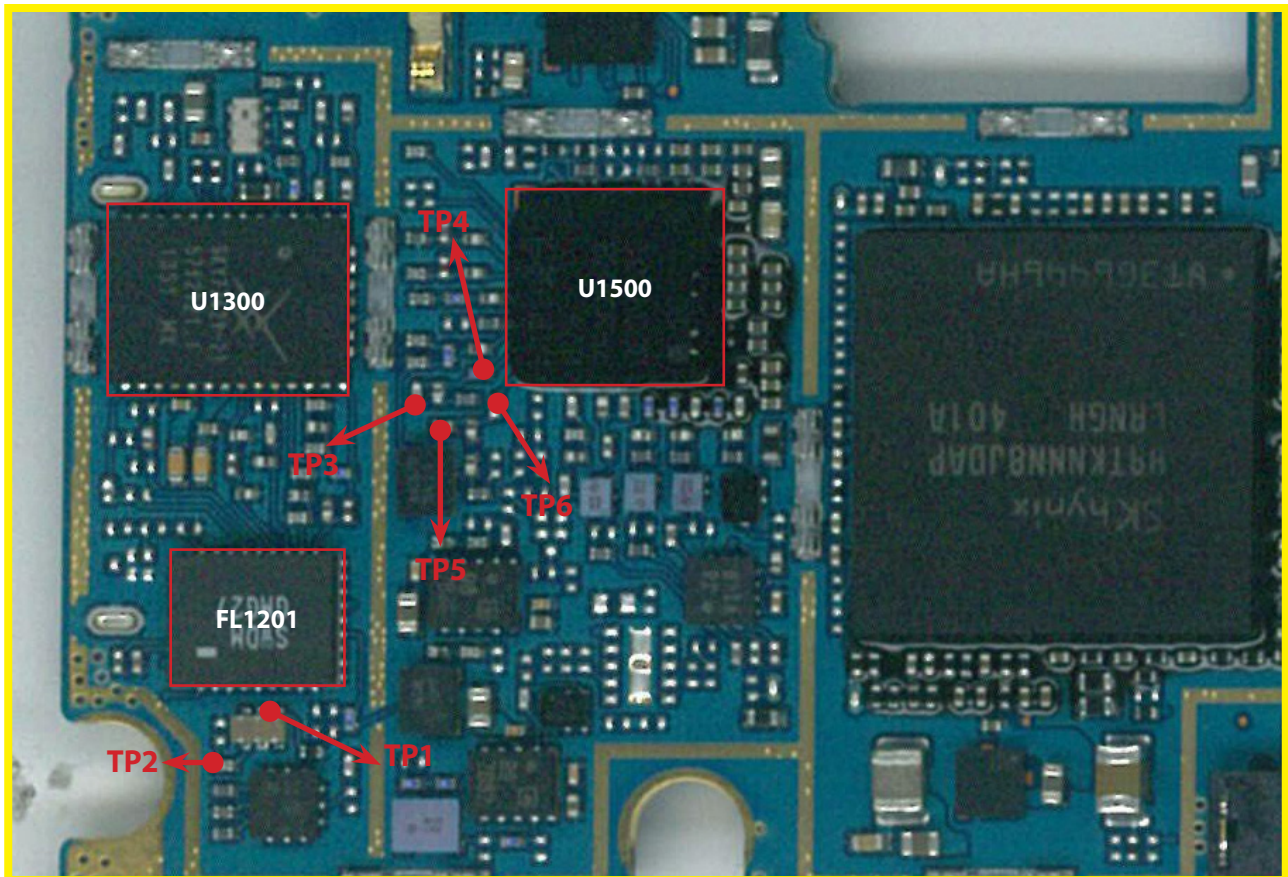


<Main Bot>

3. TROUBLE SHOOTING

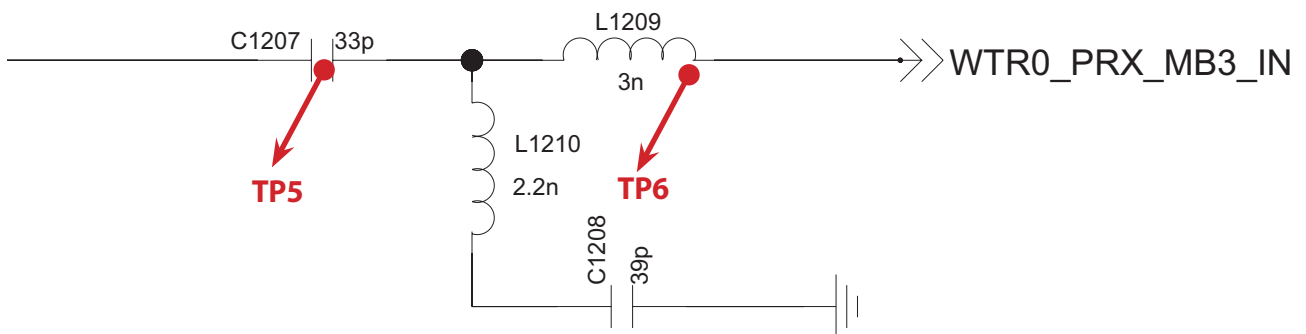
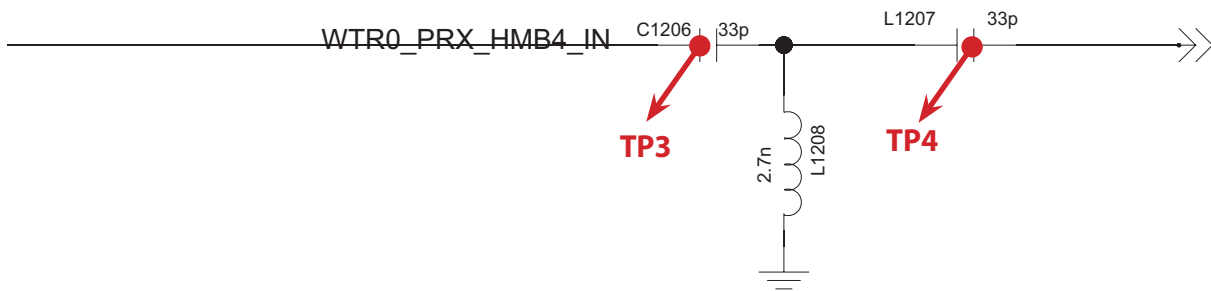
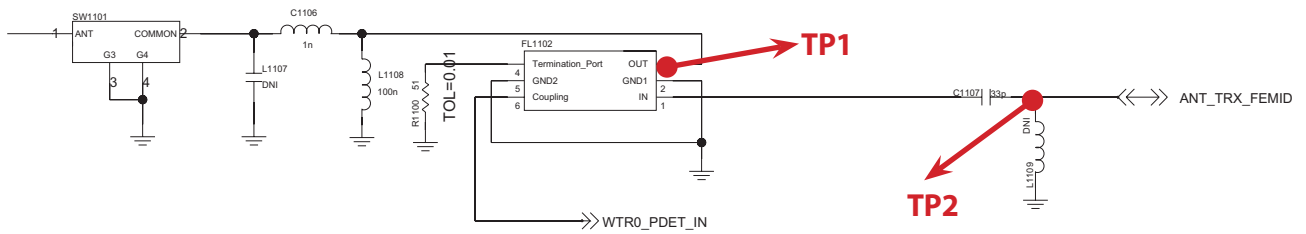


3.6.1.2 Checking RF signal path(B1/2)

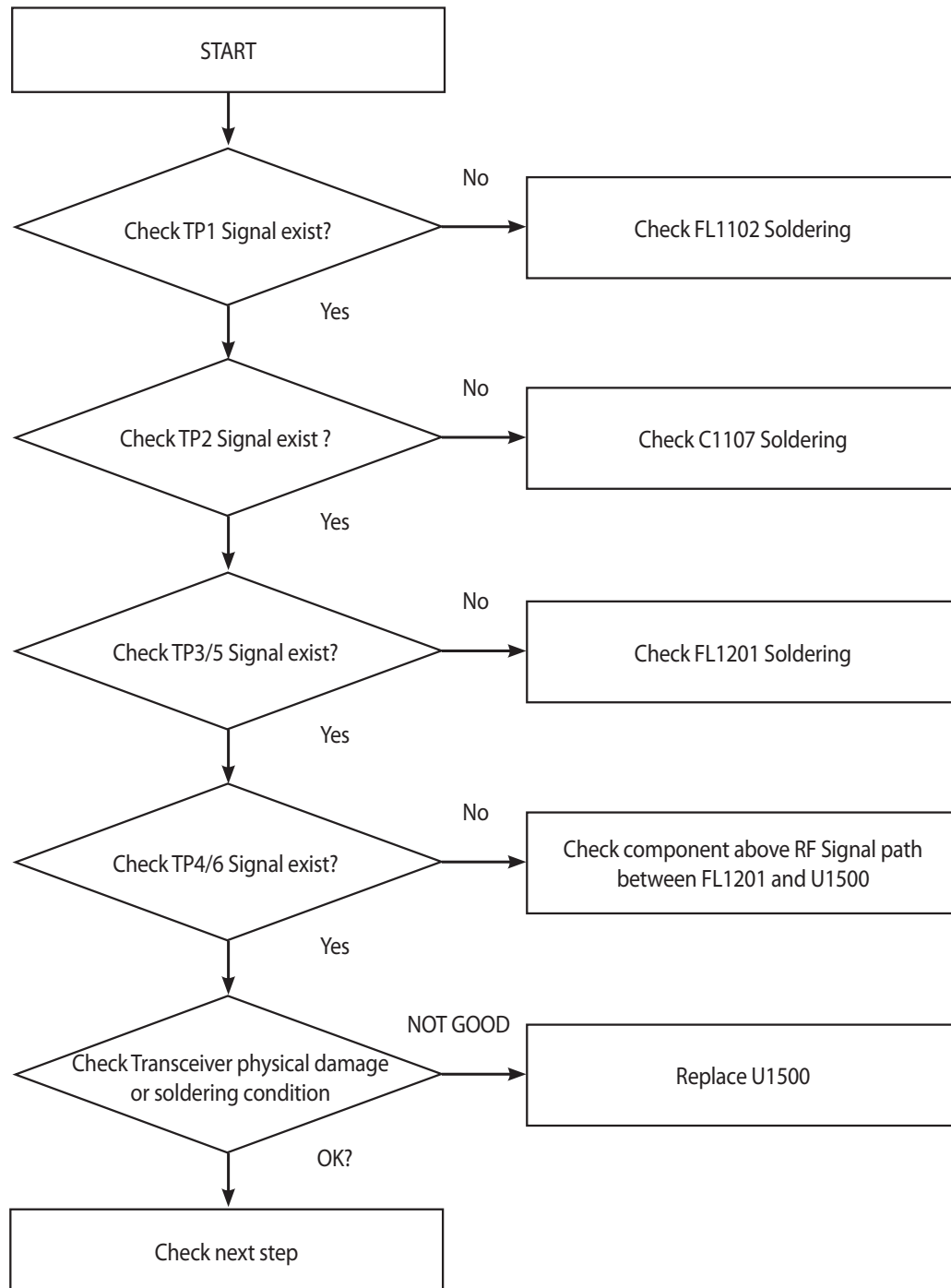


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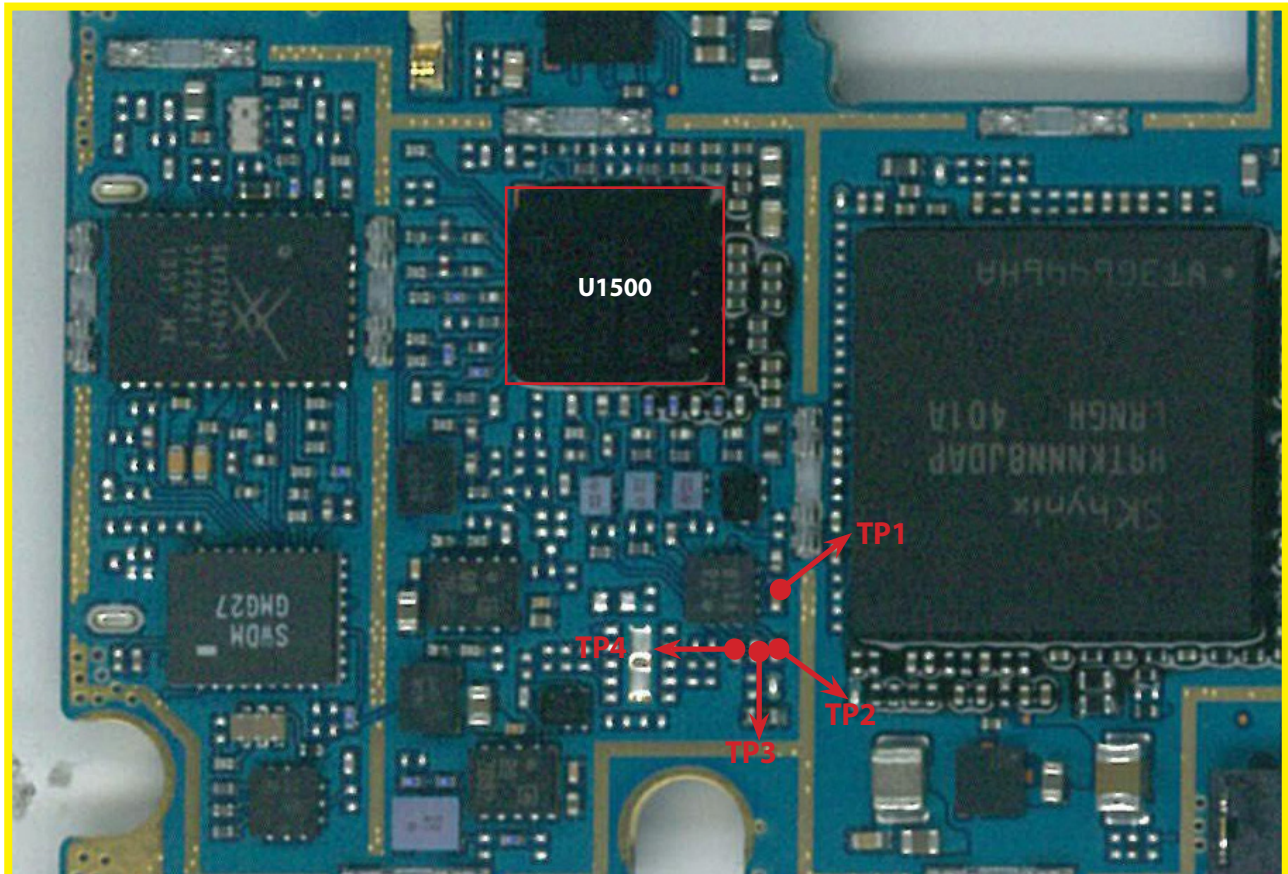
3. TROUBLE SHOOTING



3. TROUBLE SHOOTING

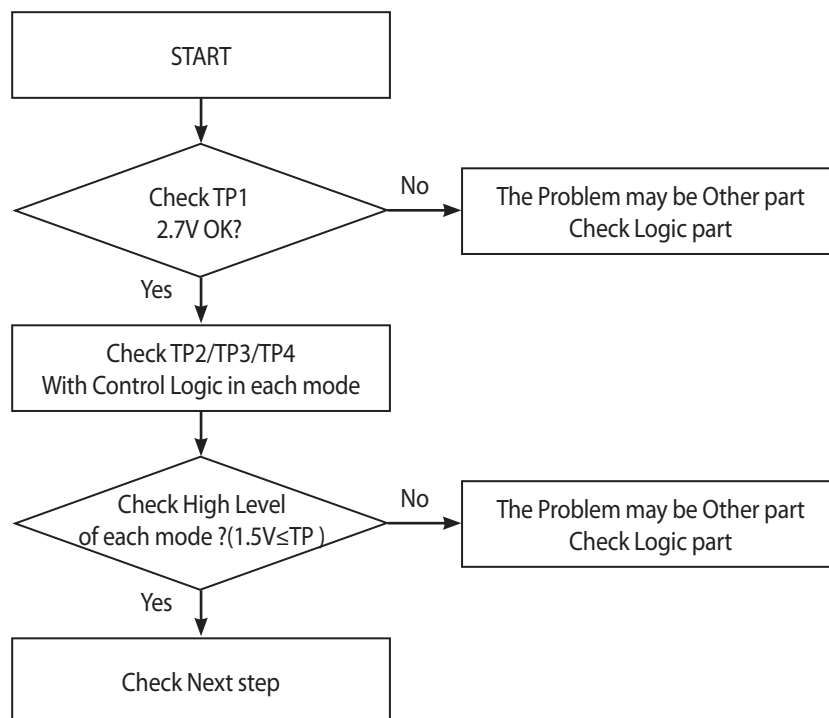
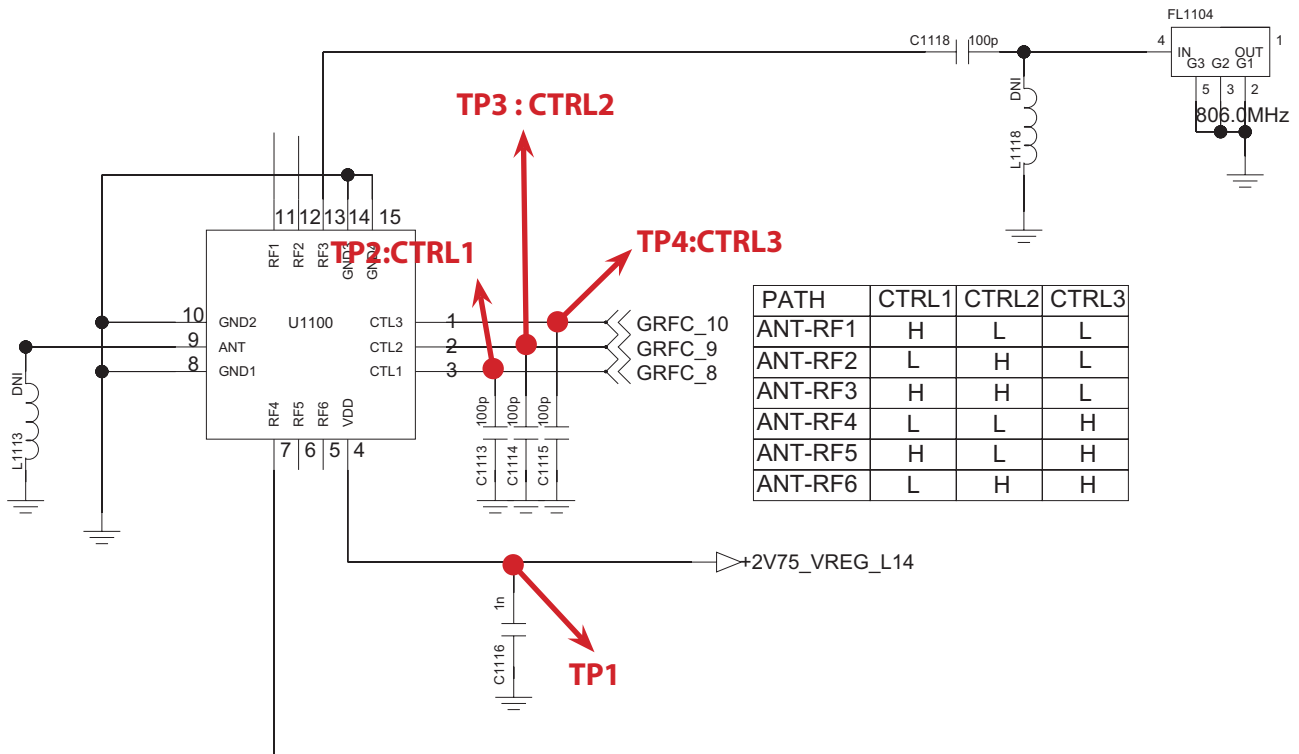


3.6.1.3 Checking DRX Antenna Switch(B1/2)

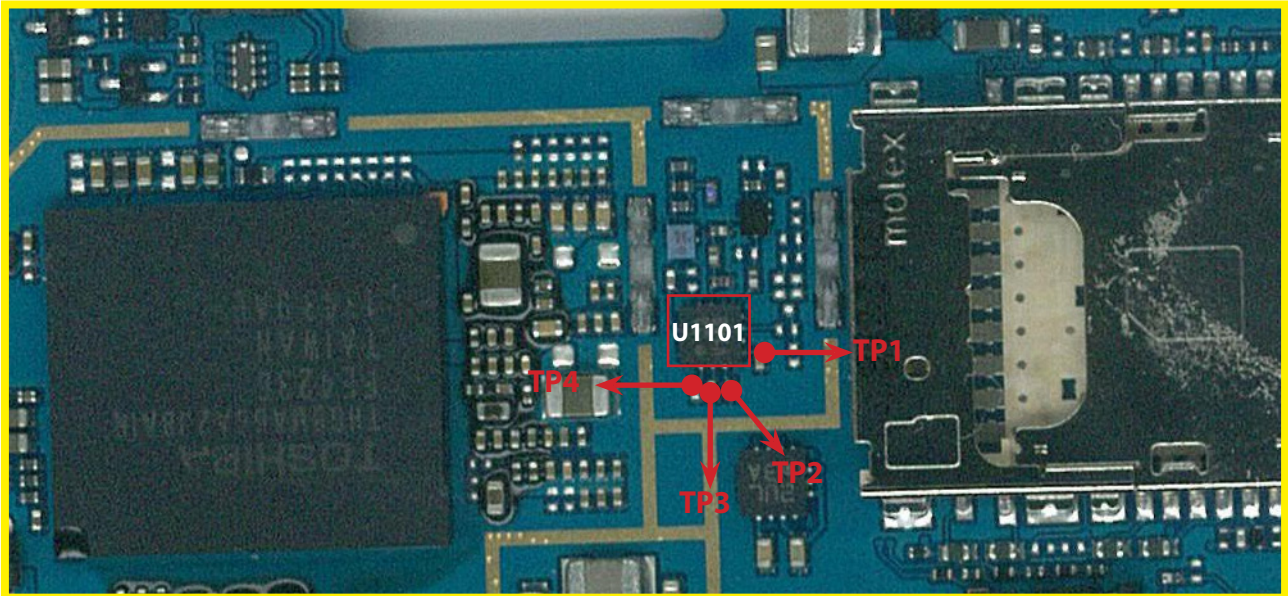


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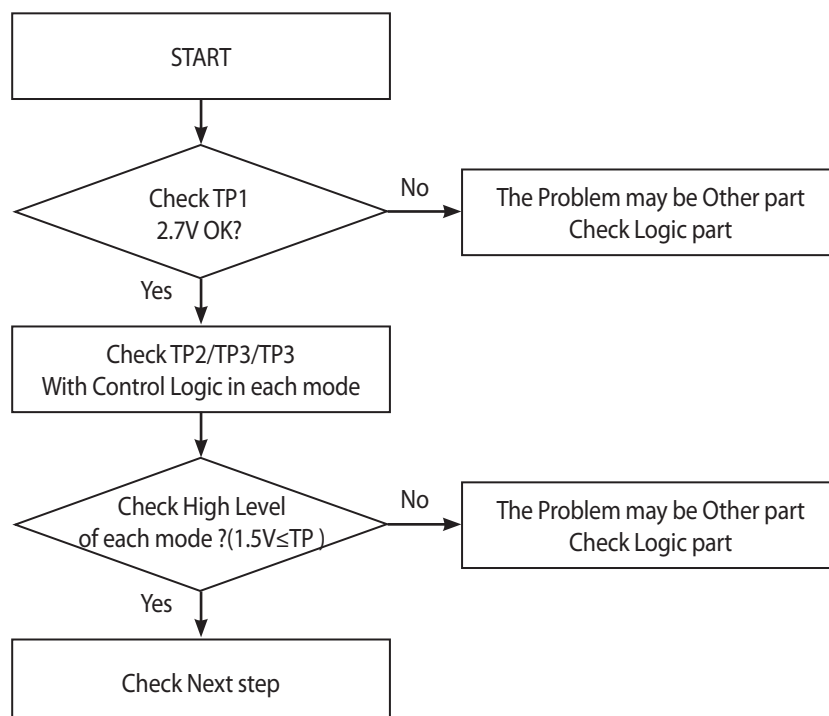
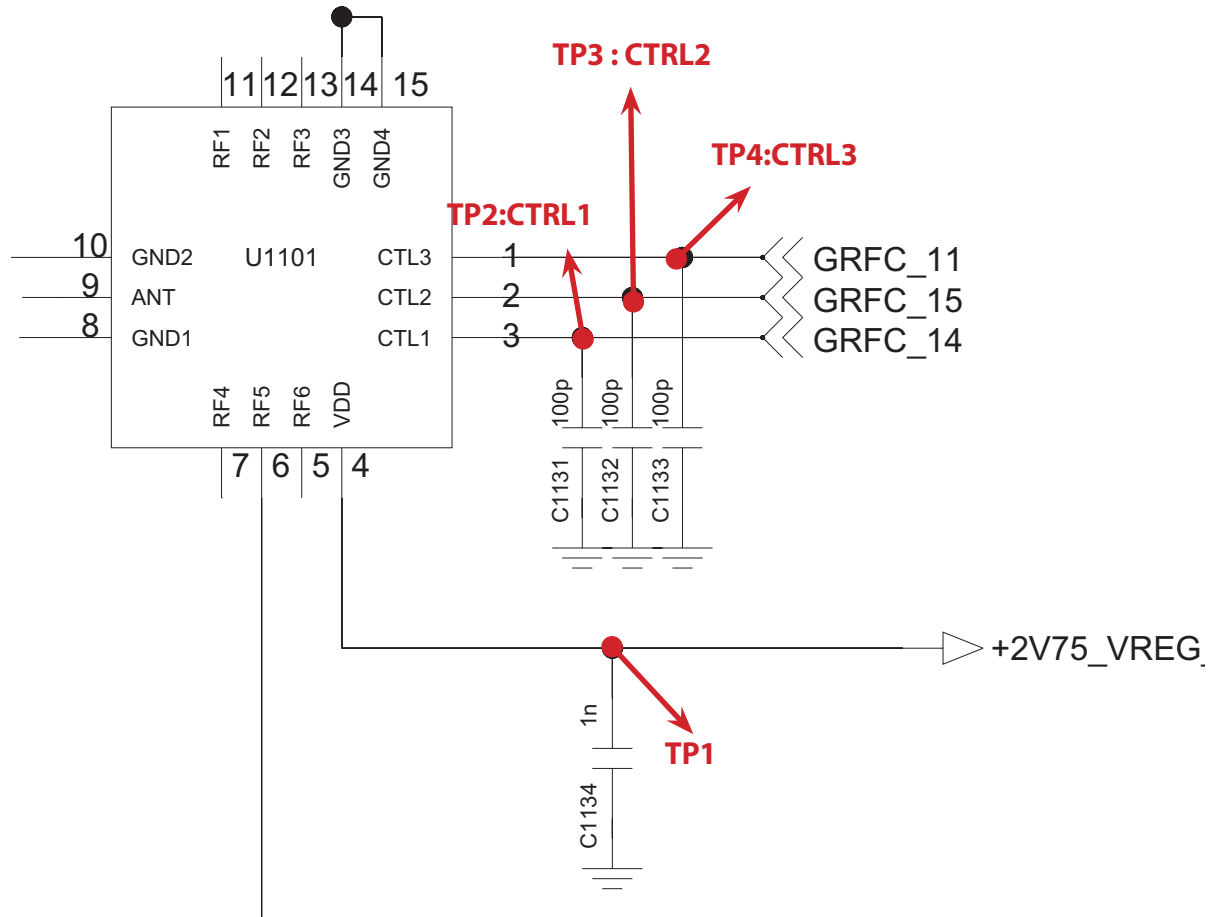
3. TROUBLE SHOOTING



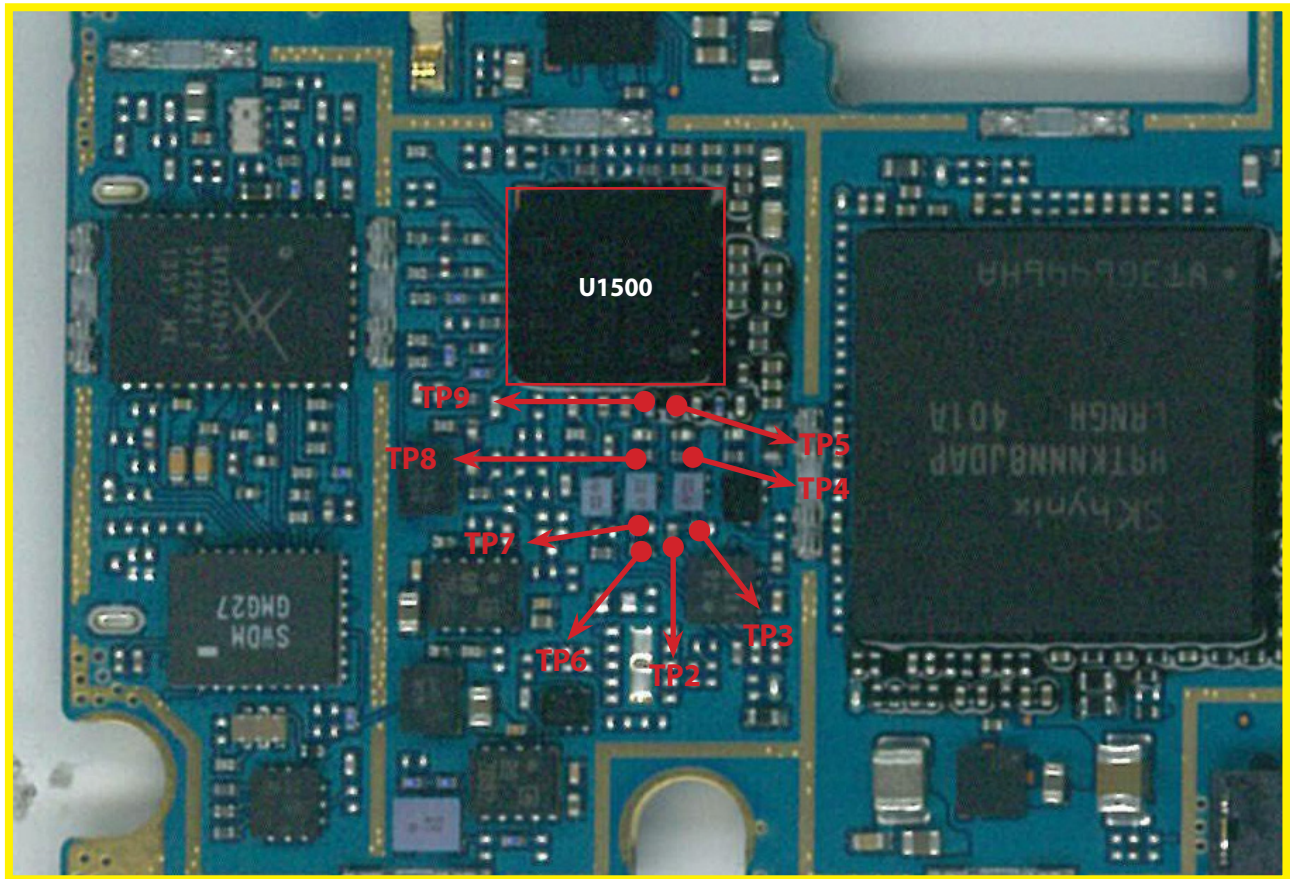
3.6.1.4 Checking DRX Antenna Switch(B8)



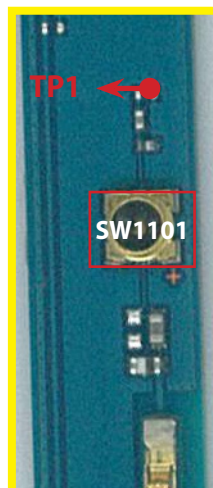
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3.6.1.5 Checking DRX RF signal path (B1/2)

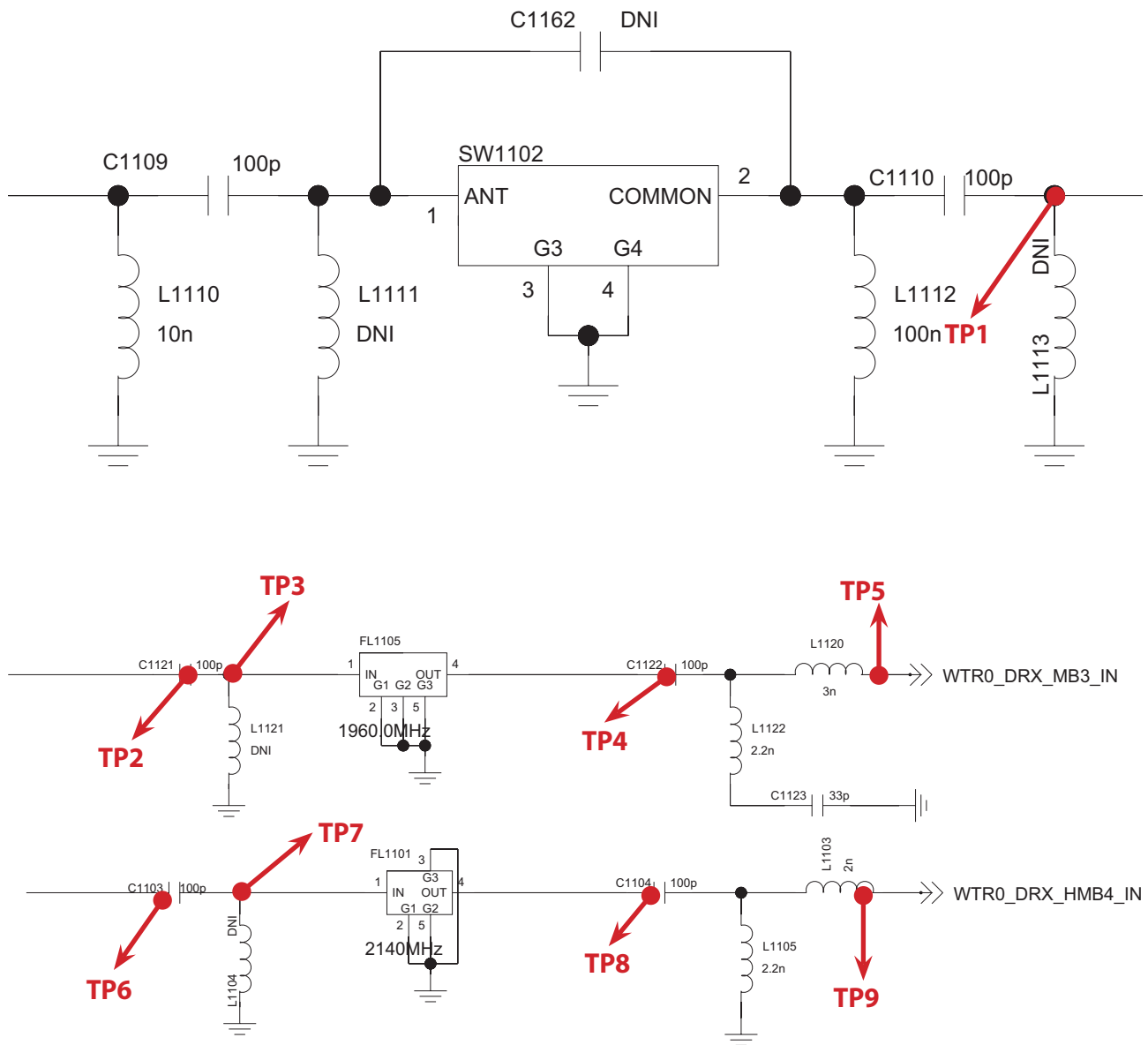


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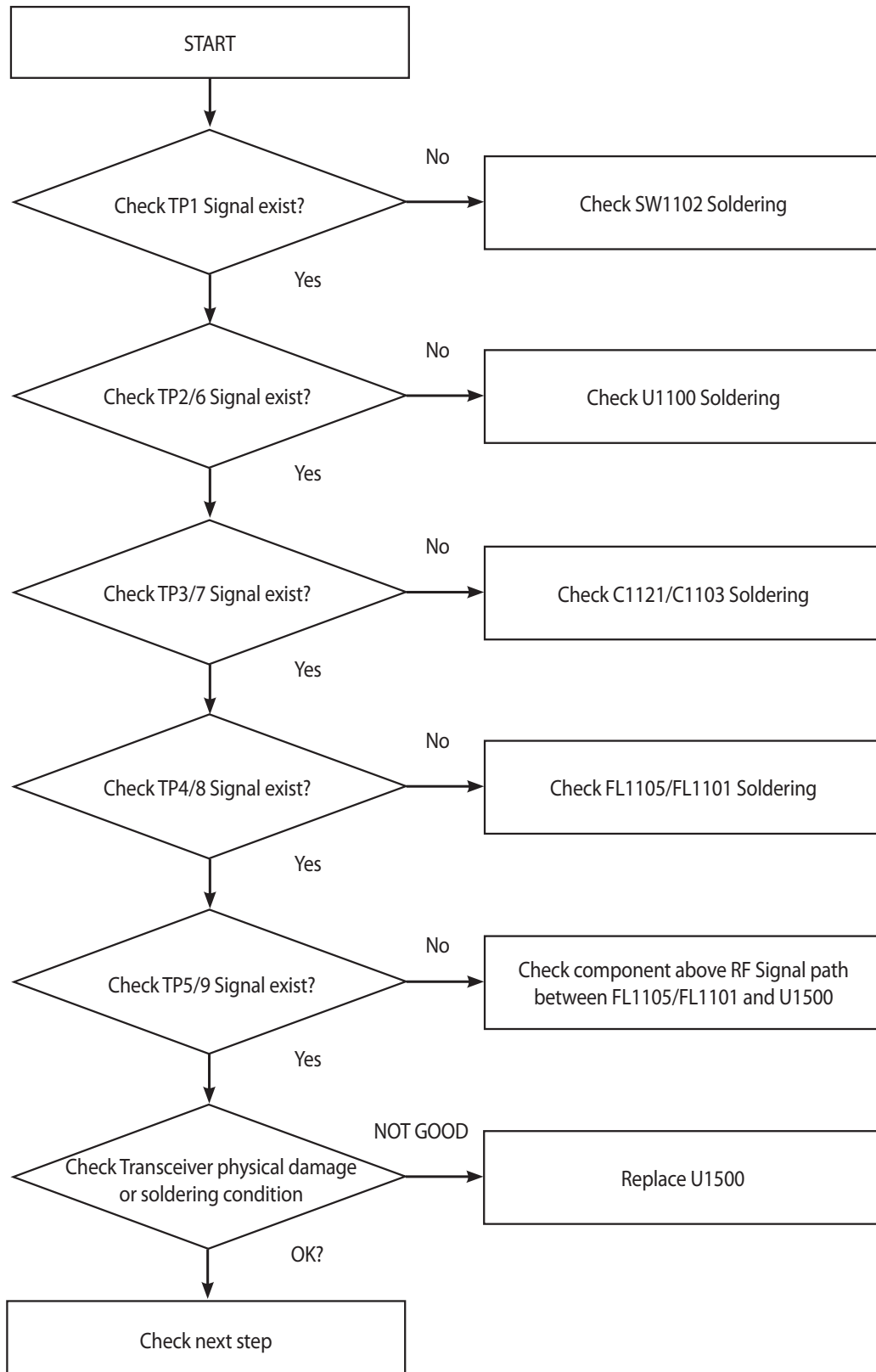


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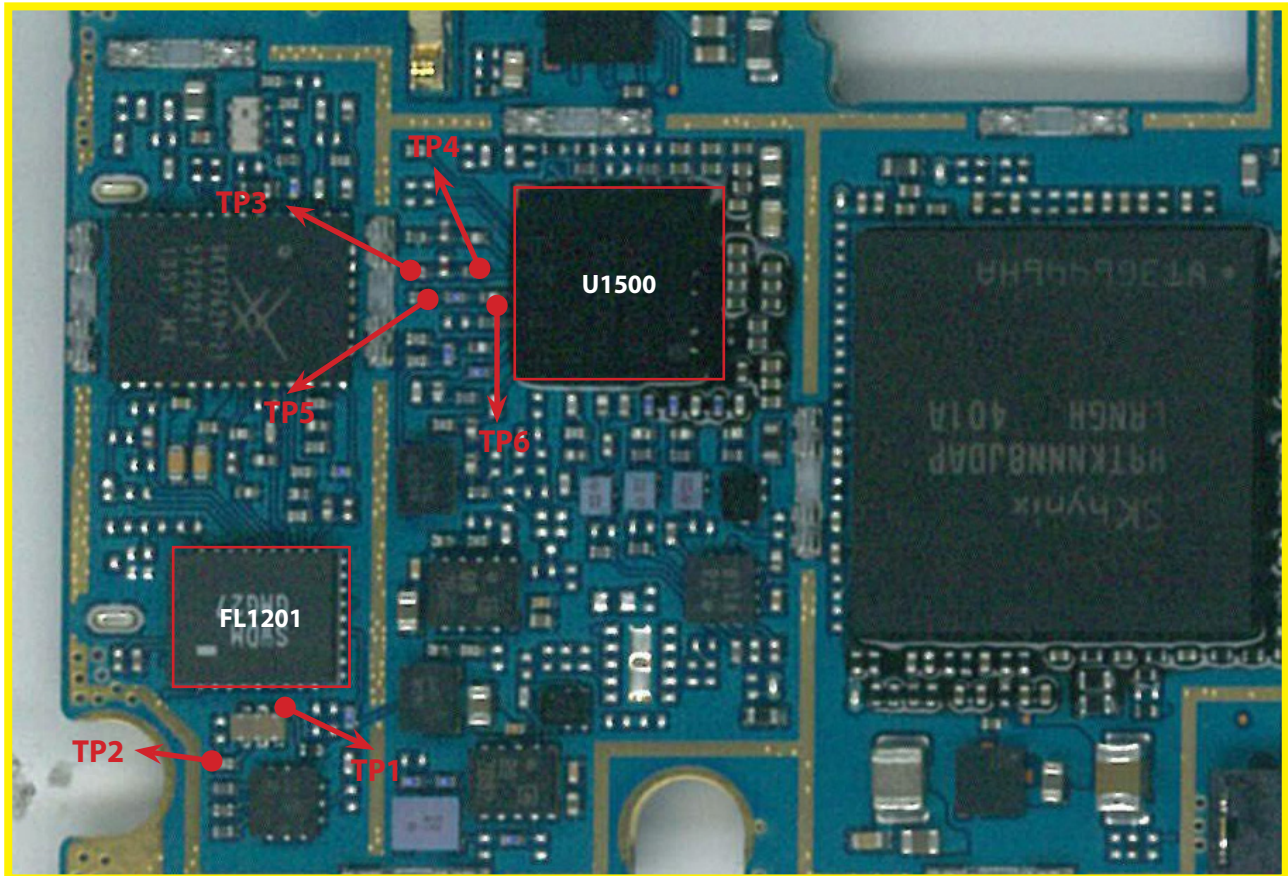
3. TROUBLE SHOOTING



3. TROUBLE SHOOTING

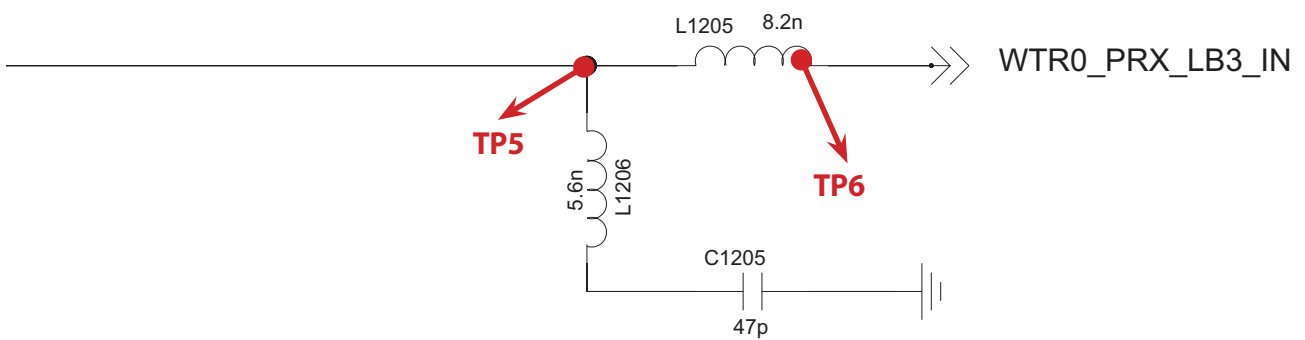
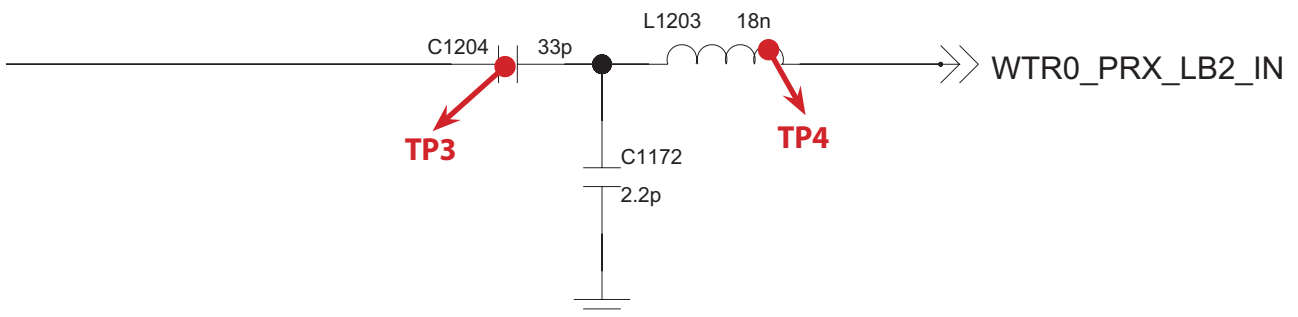
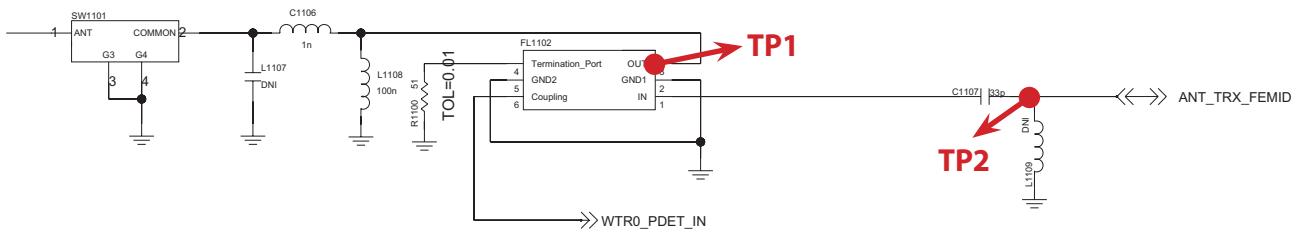


3.6.1.6 Checking RF signal path (B5/8)

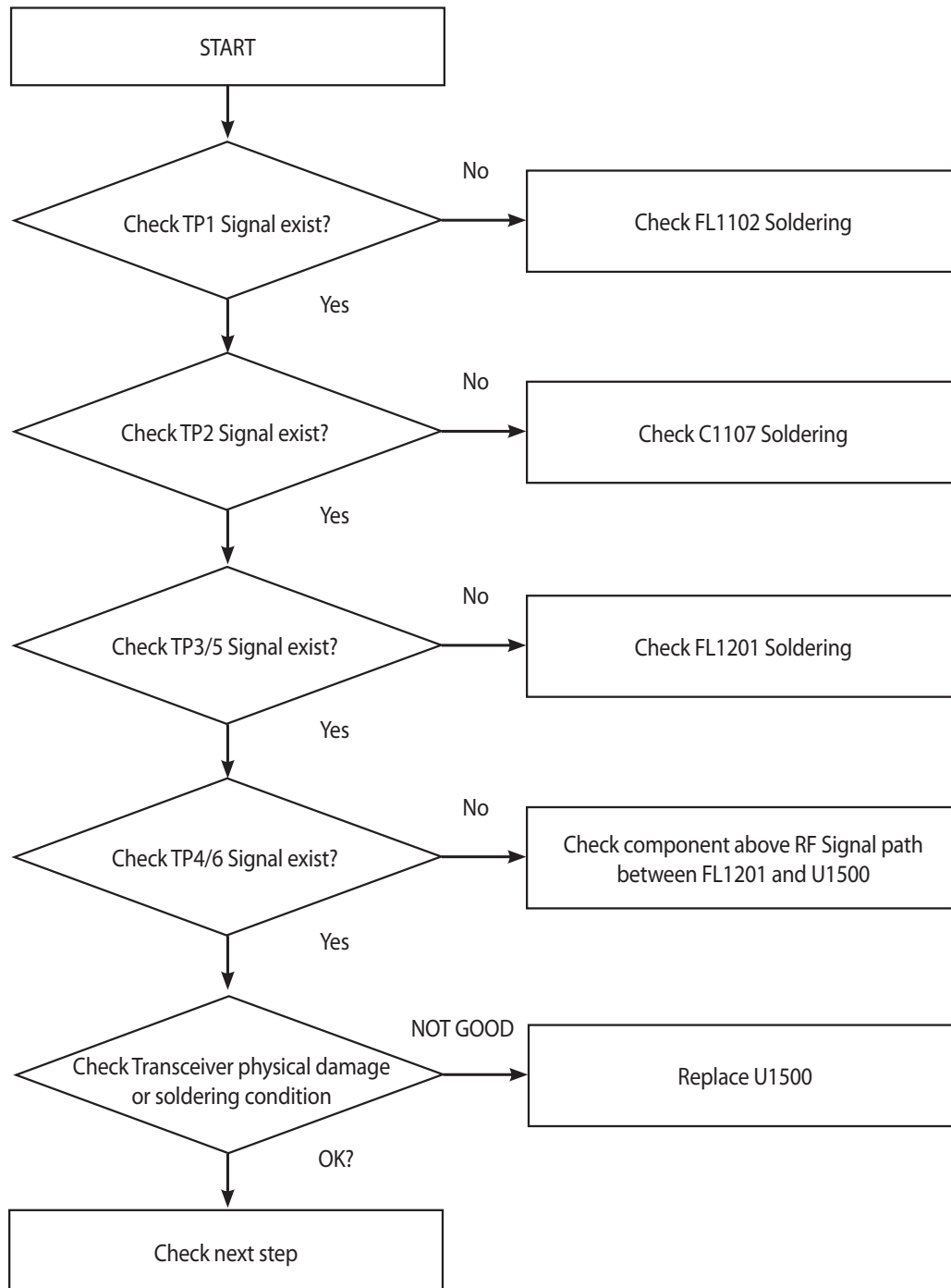


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3. TROUBLE SHOOTING

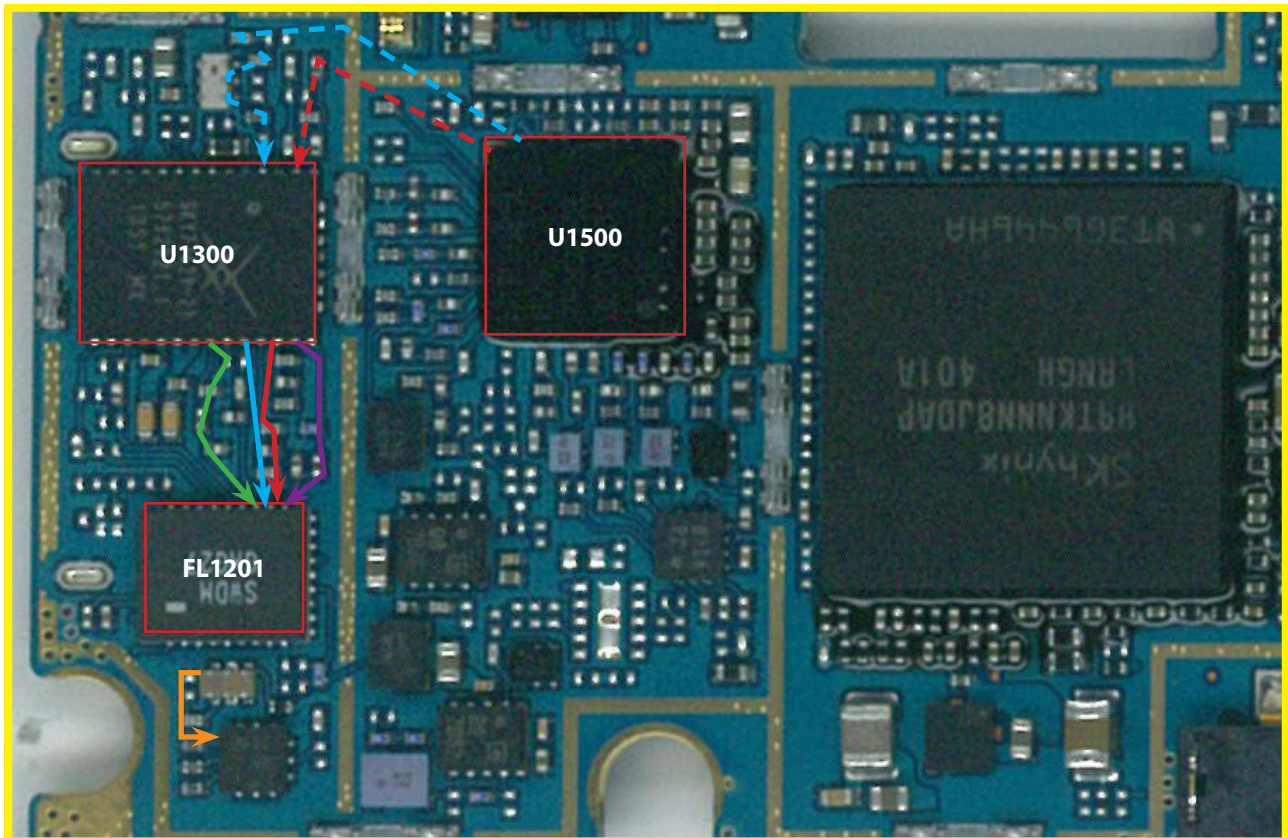


3. TROUBLE SHOOTING



3.6.2 WCDMA B1/2/5/8 Tx

WCDMA B1/2/5/8 TX RF PATH



1. WCDMA B1 TX PATH

2. WCDMA B2 TX PATH

3. WCDMA B5 TX PATH

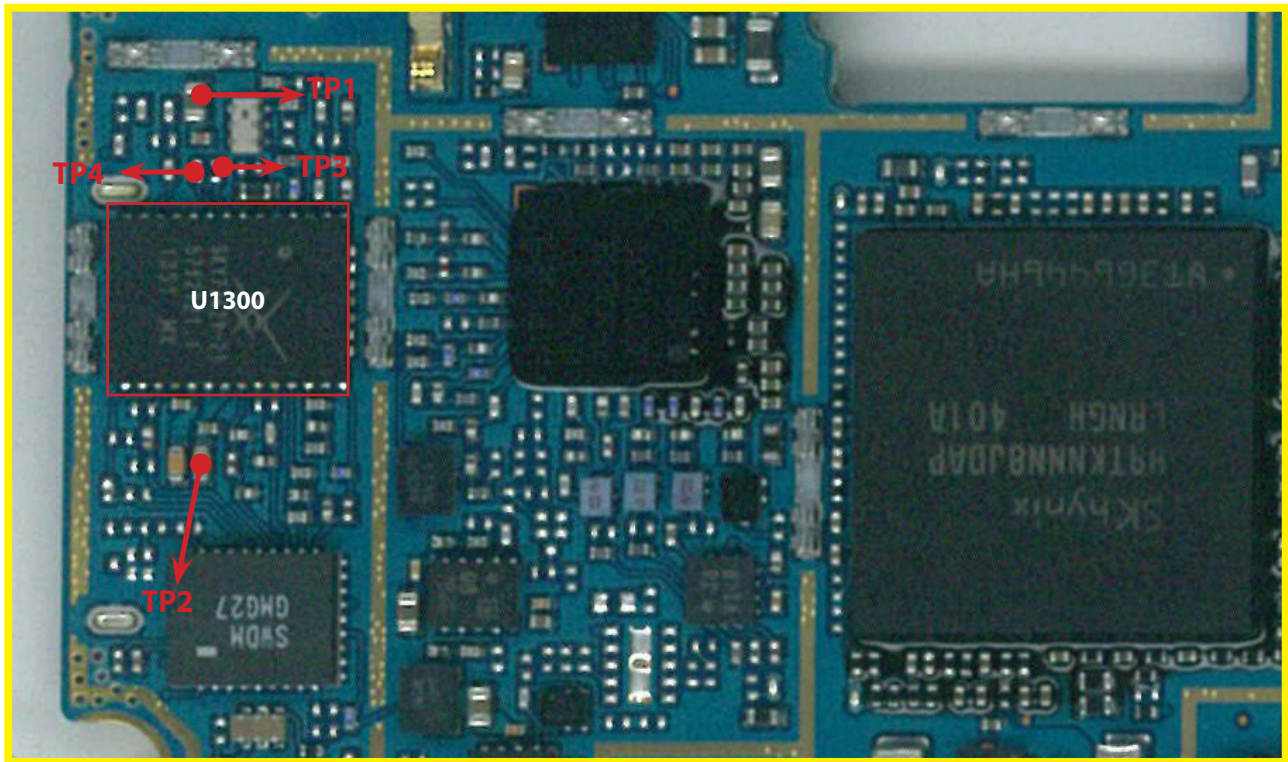
4. WCDMA B8 TX PATH

5. WCDMA B1/B2 PATH

6. WCDMA B5/B8 PATH

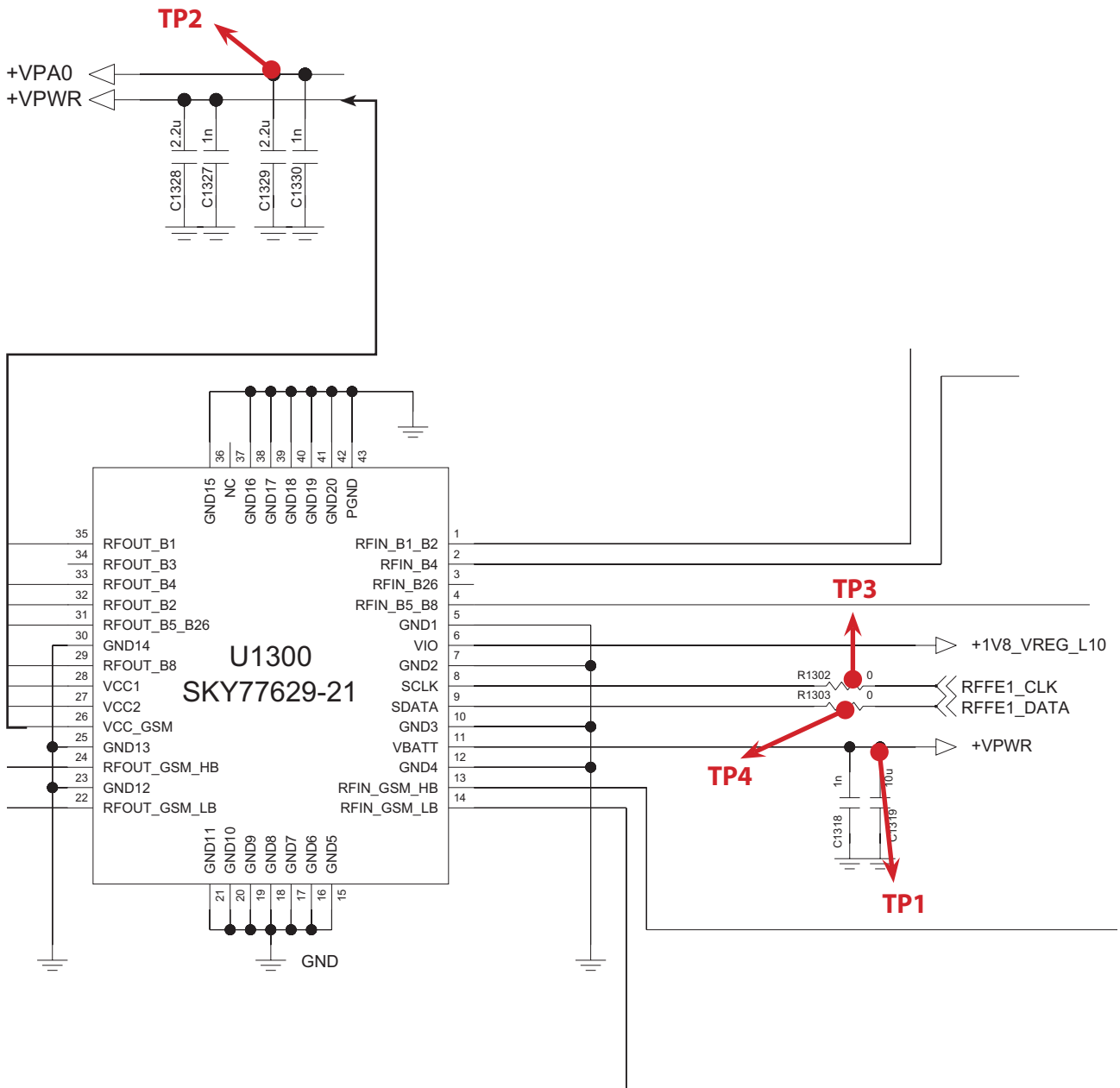
7. COMMON T/RX PATH

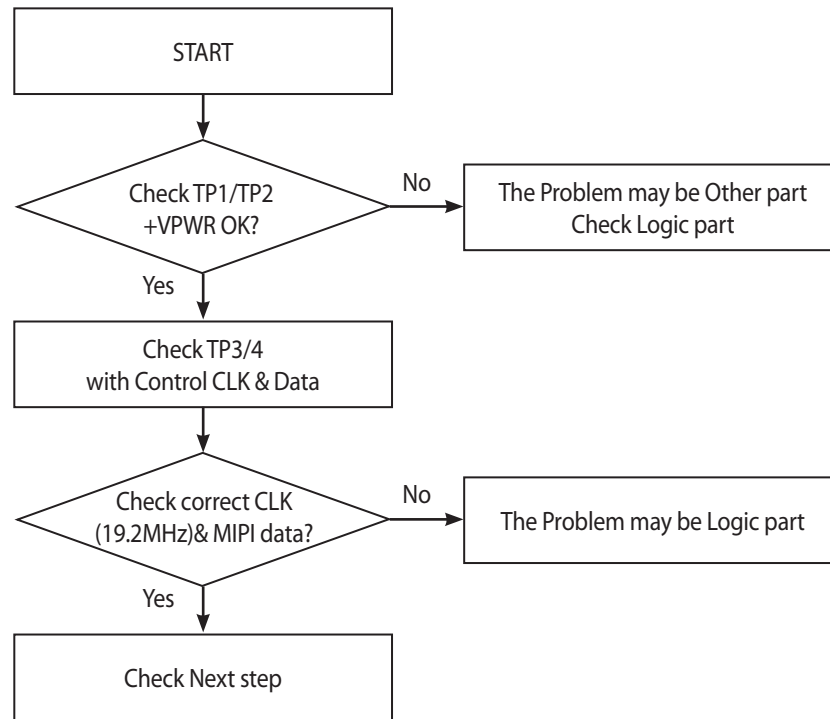
3.6.2.1 Checking WCDMA PAM DC Power&Control Circuit



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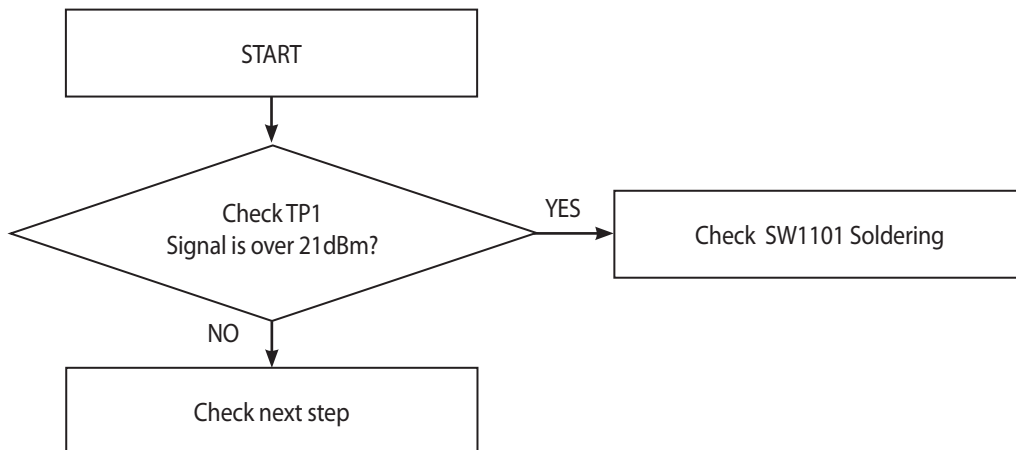
3. TROUBLE SHOOTING



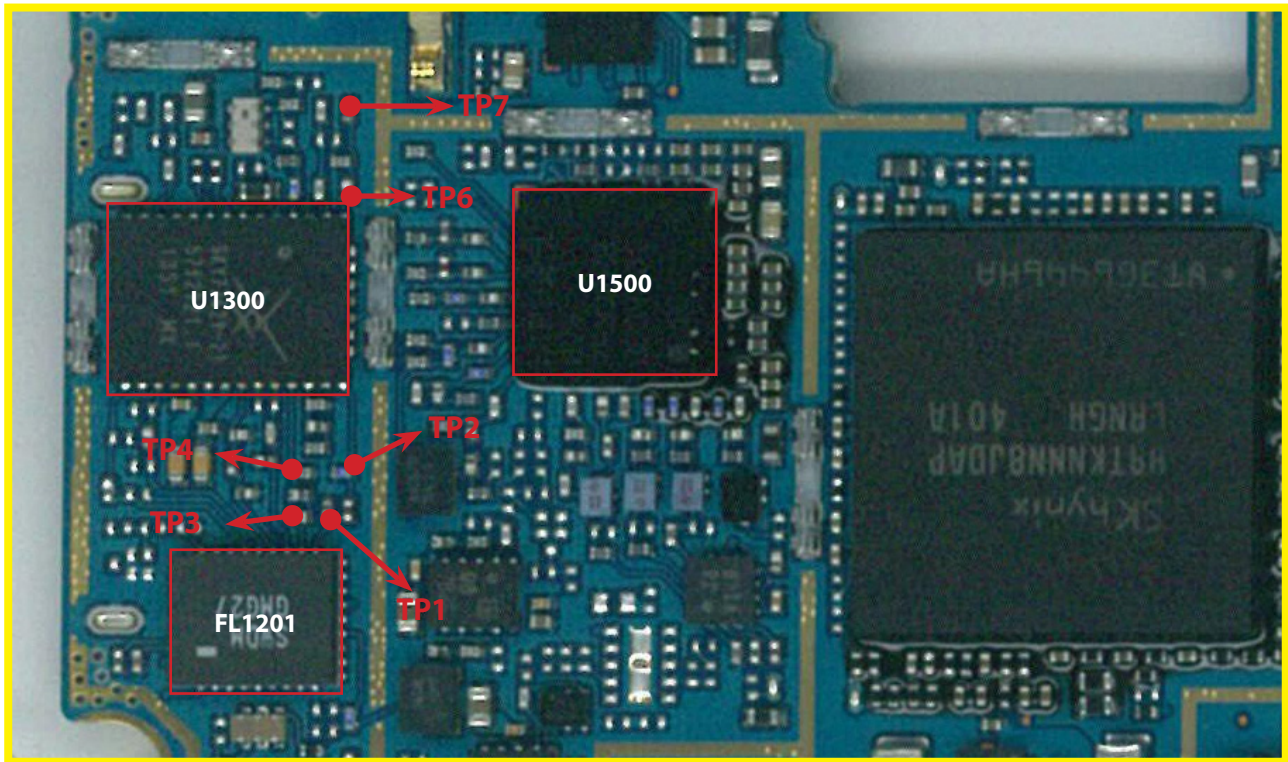


3.6.2.2 Checking RF signal path(SW)

Refer to 3.5.1.1

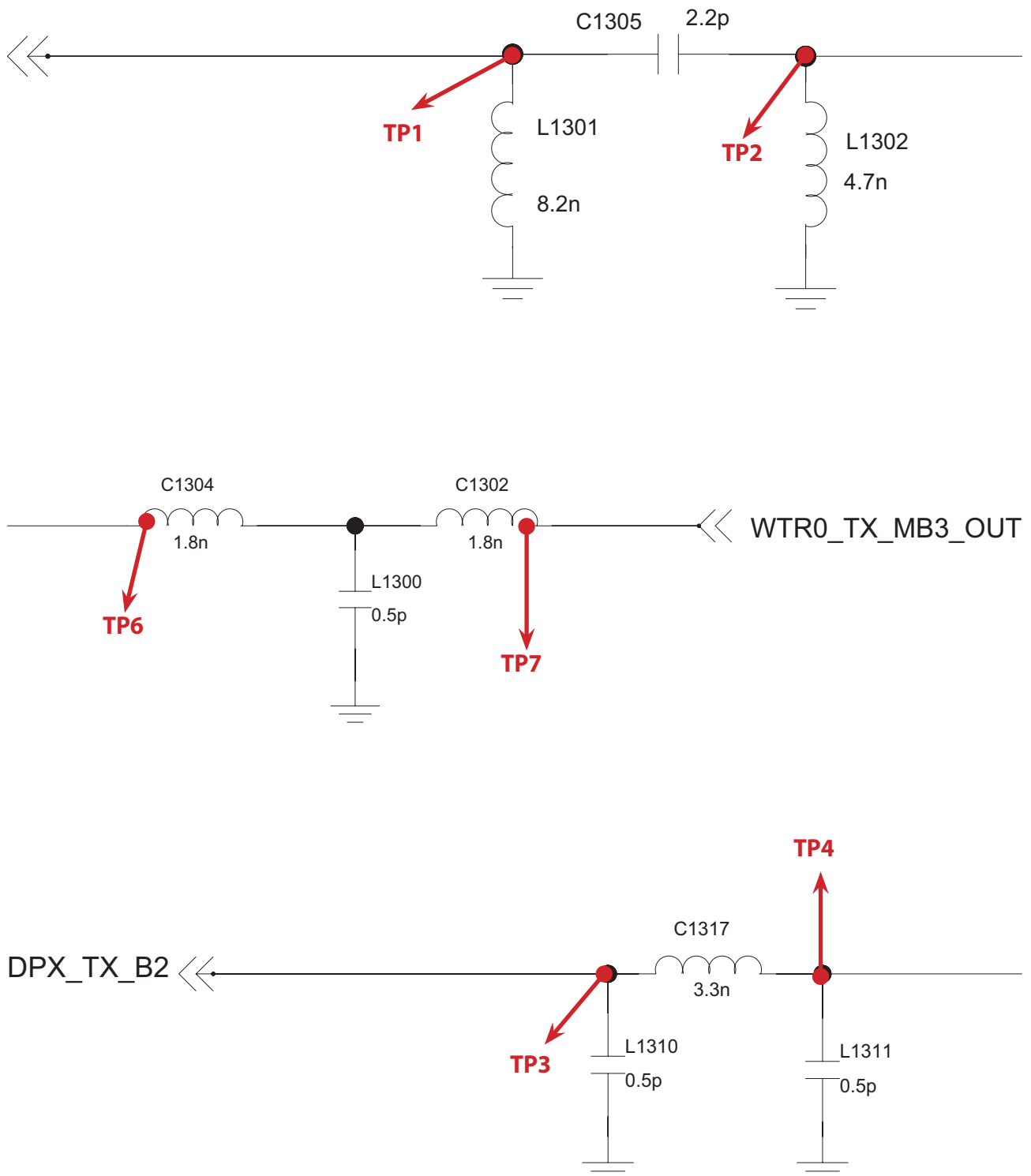


3.6.2.3 Checking RF signal path(B1/B2)

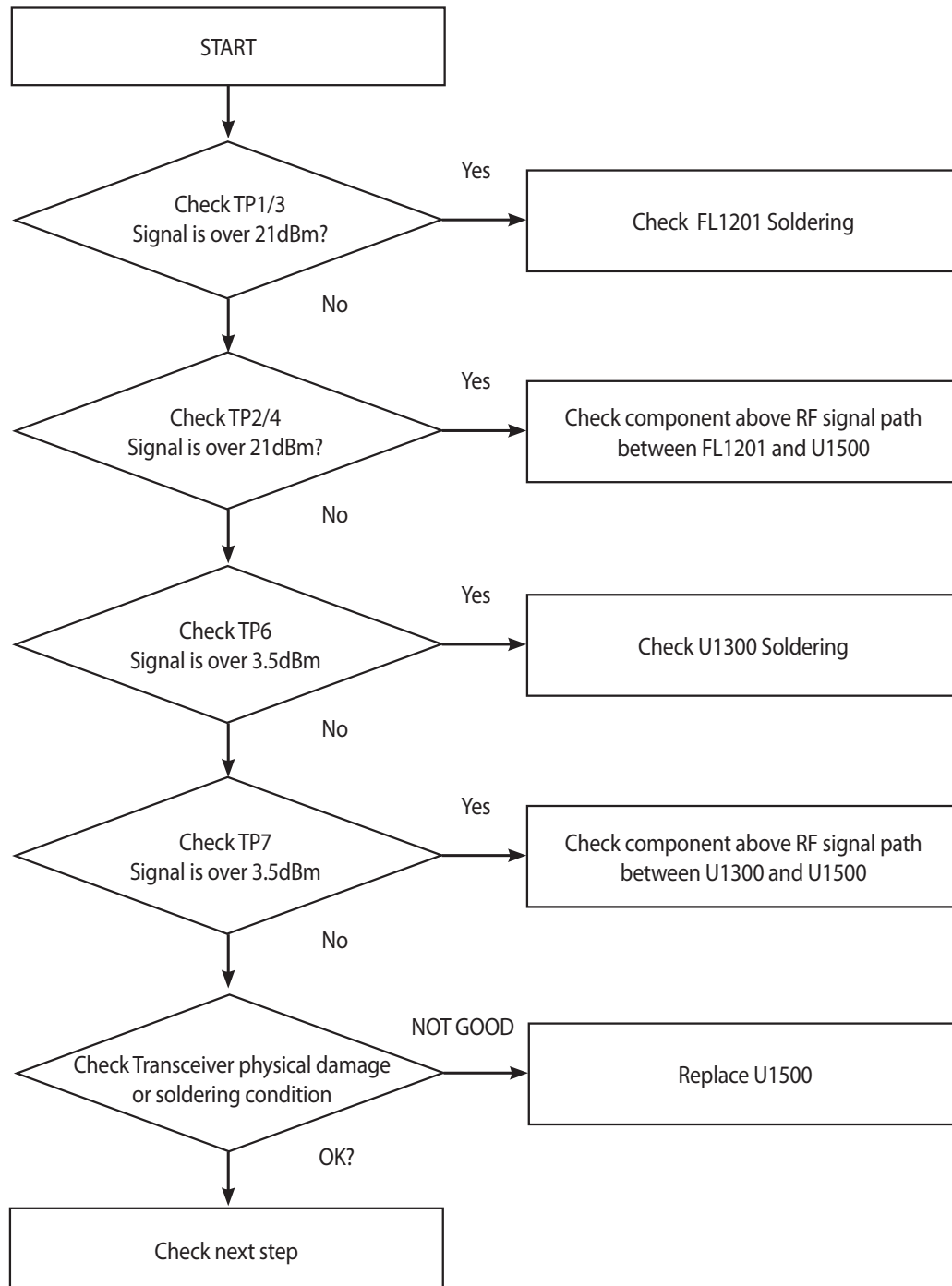


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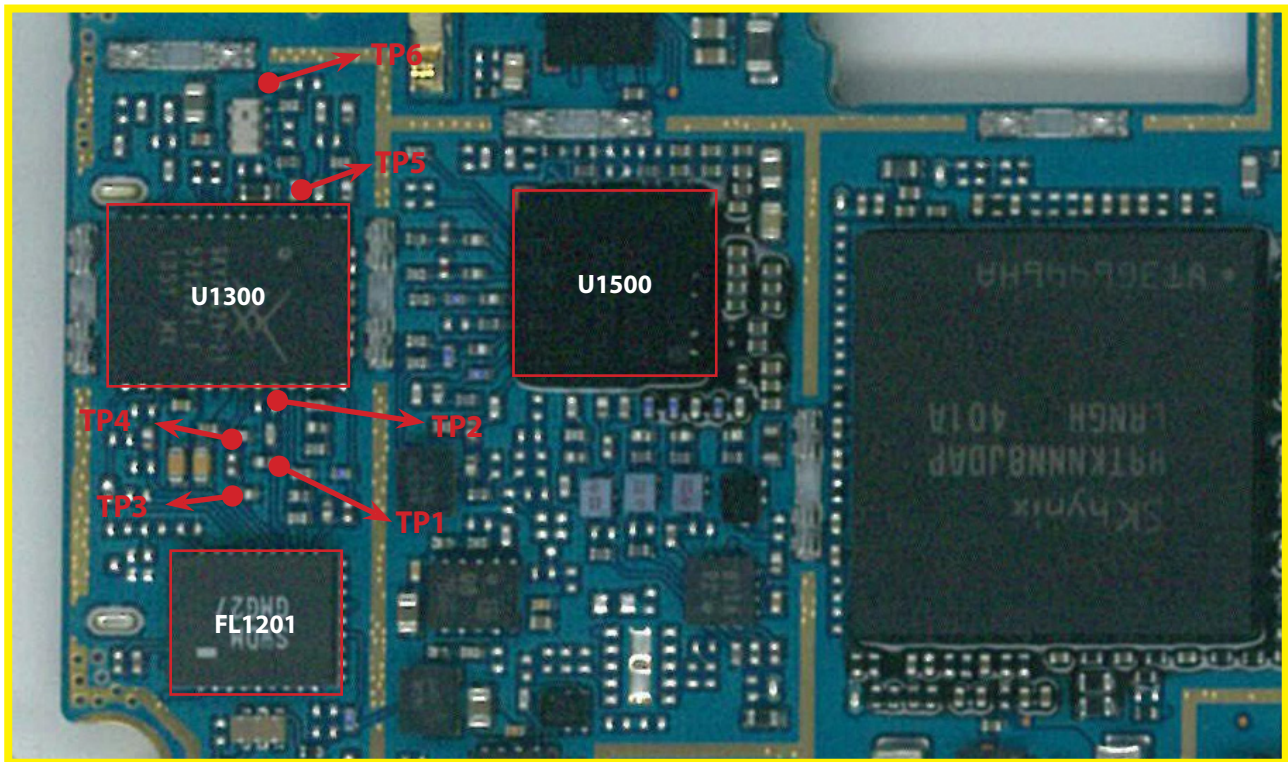
3. TROUBLE SHOOTING



3. TROUBLE SHOOTING

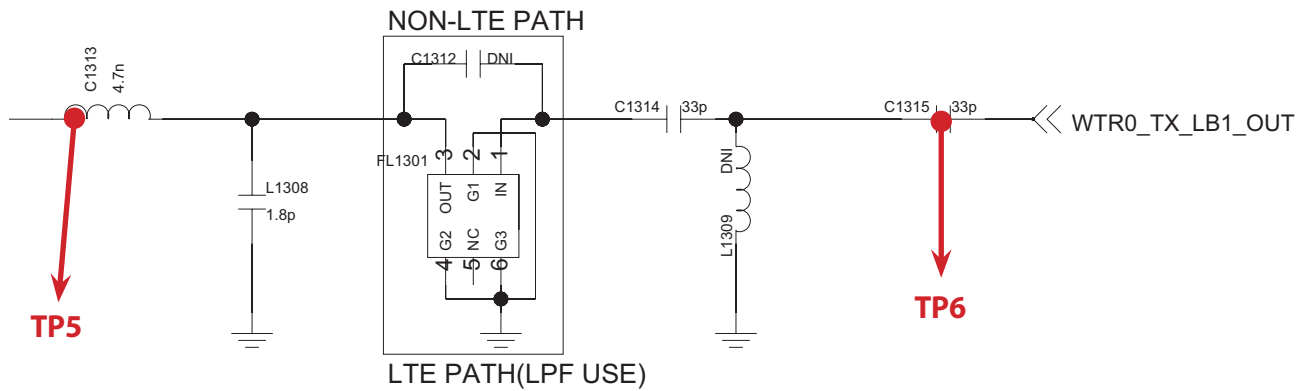
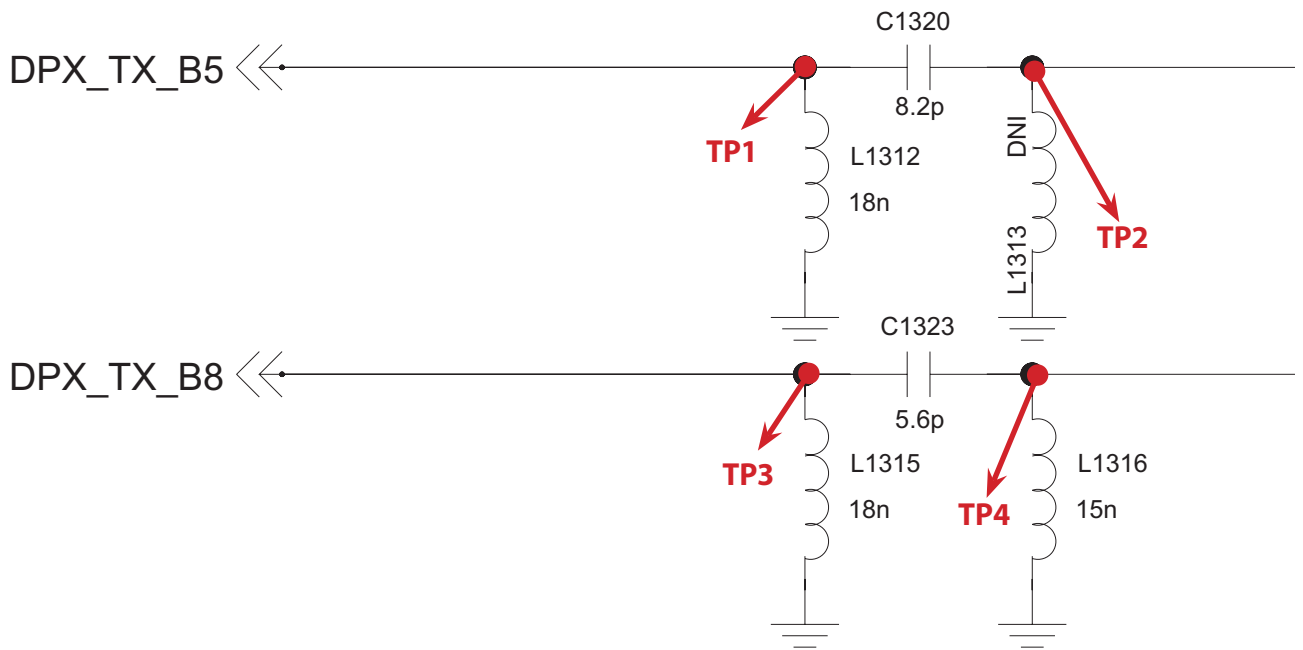


3.6.2.4 Checking RF signal path(B5/B8)

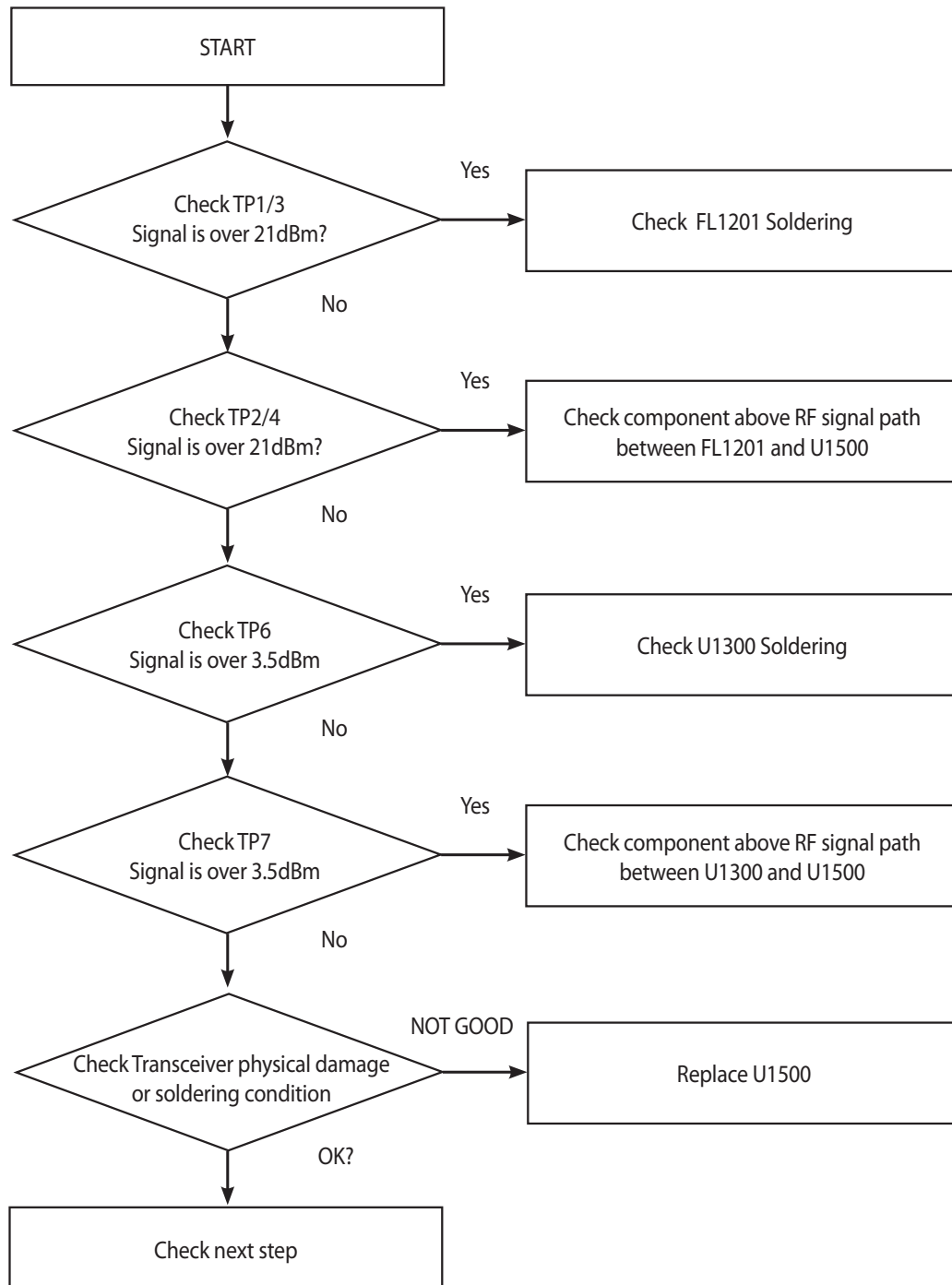


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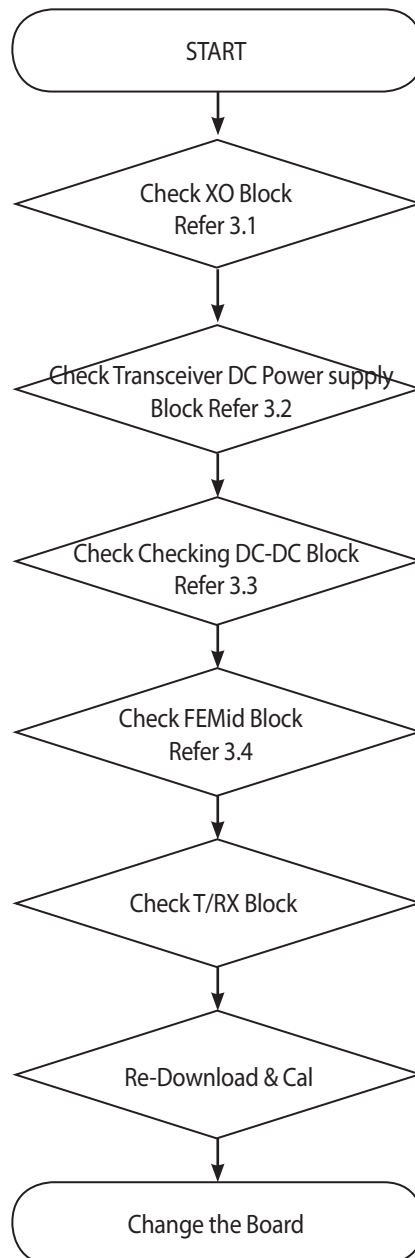
3. TROUBLE SHOOTING



3. TROUBLE SHOOTING



3.7 LTE RF Part



3.7.1 LTE B1/B8 TX/PRX

Refer to 3.6.1(Same as WCDMA B1/B8)

3.7.1.1 Checking LTE PAM DC Power Circuit

Refer to 3.6.2.1

3.7.1.2 Checking RF signal path(SW)

Refer to 3.5.1.1 about PRX

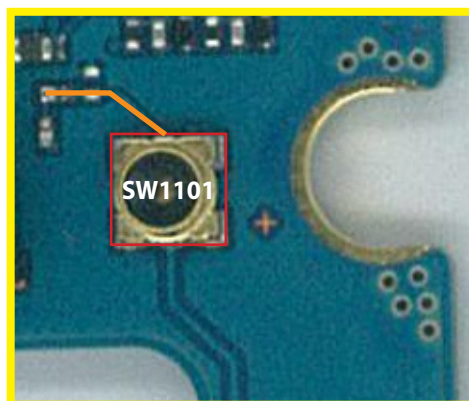
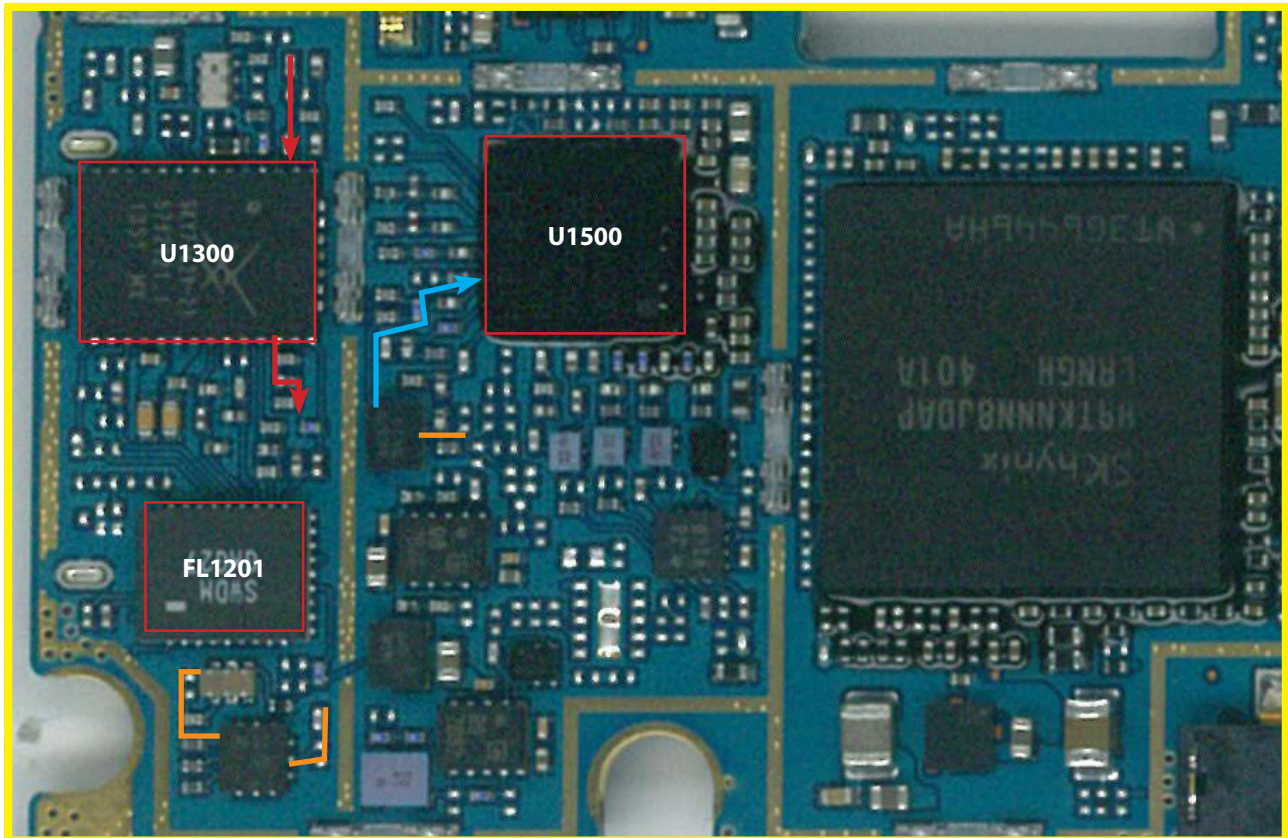
Refer to 3.6.2.2 about TX

3.7.1.3 Checking RF signal path

Refer to 3.6.2.3 (B1) 3.6.2.4 (B8)

3.7.2 LTE B3 TX/PRX

LTE B3 TX/PRX RF PATH



1. LTE B3 PRX PATH

2. LTE B3 TX PATH

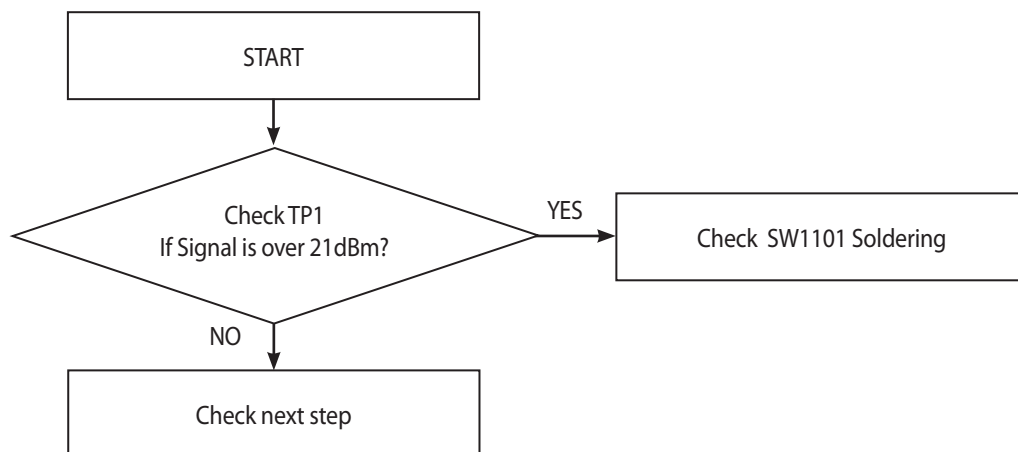
3. COMMON T/PRX PATH

3.7.2.1 Checking LTE PAM DC Power Circuit

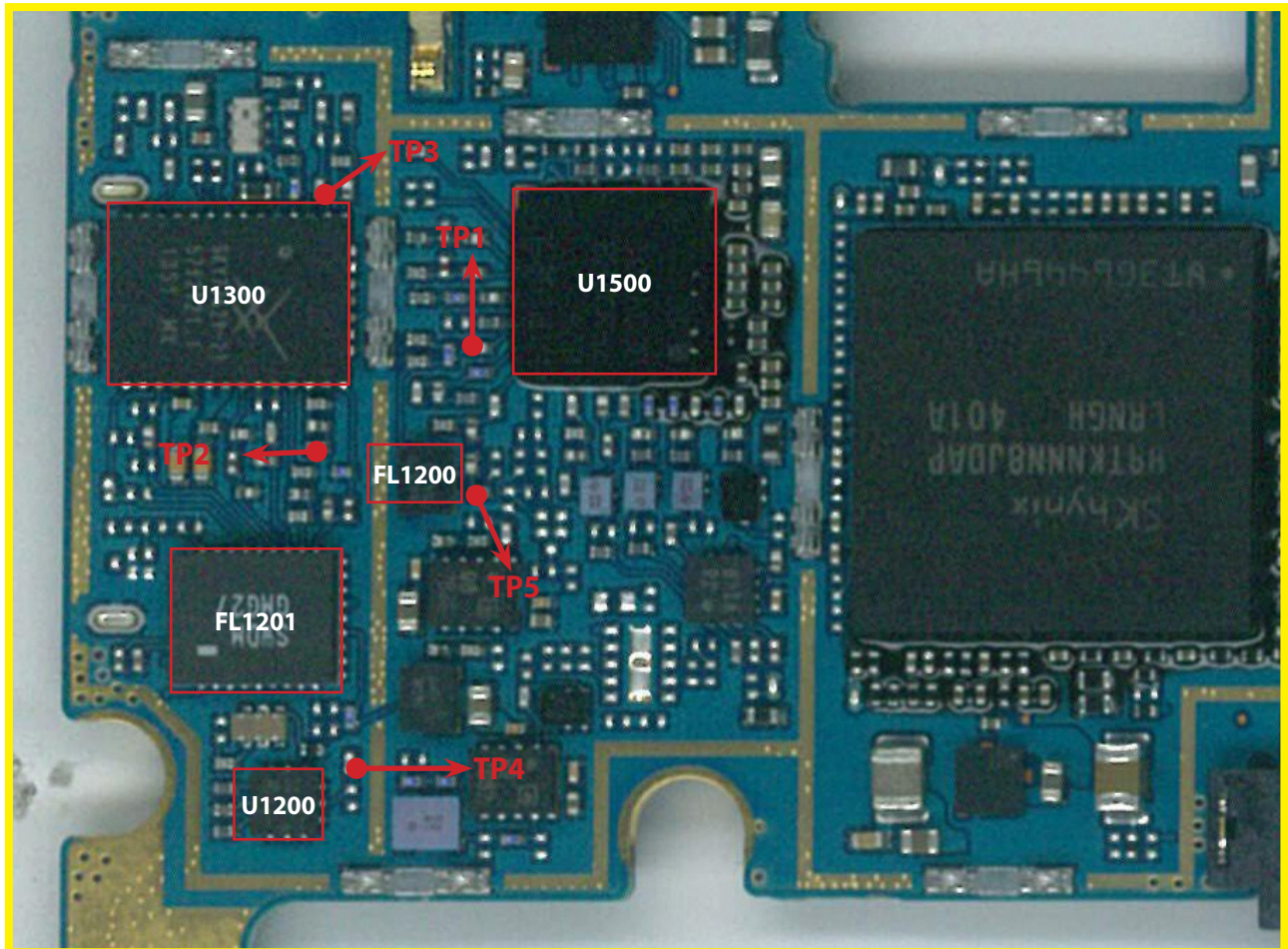
Refer to 3.6.2.1

3.7.2.2 Checking RF signal path(SW)

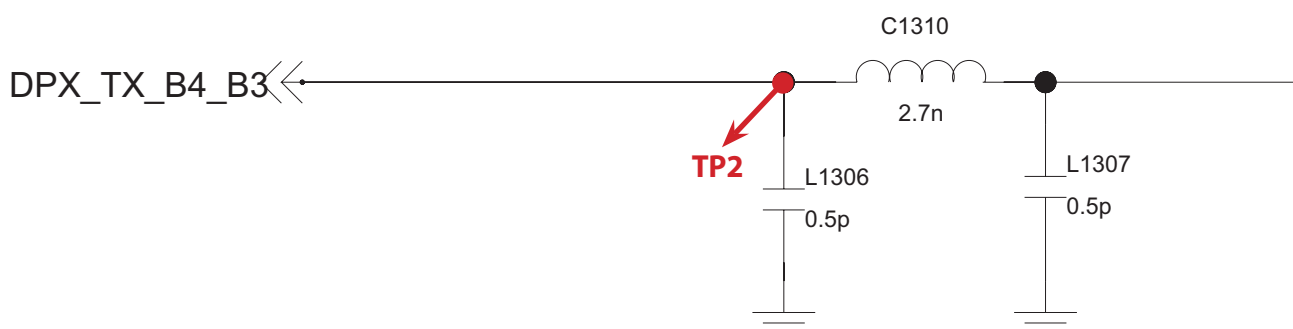
Refer to 3.5.1.1



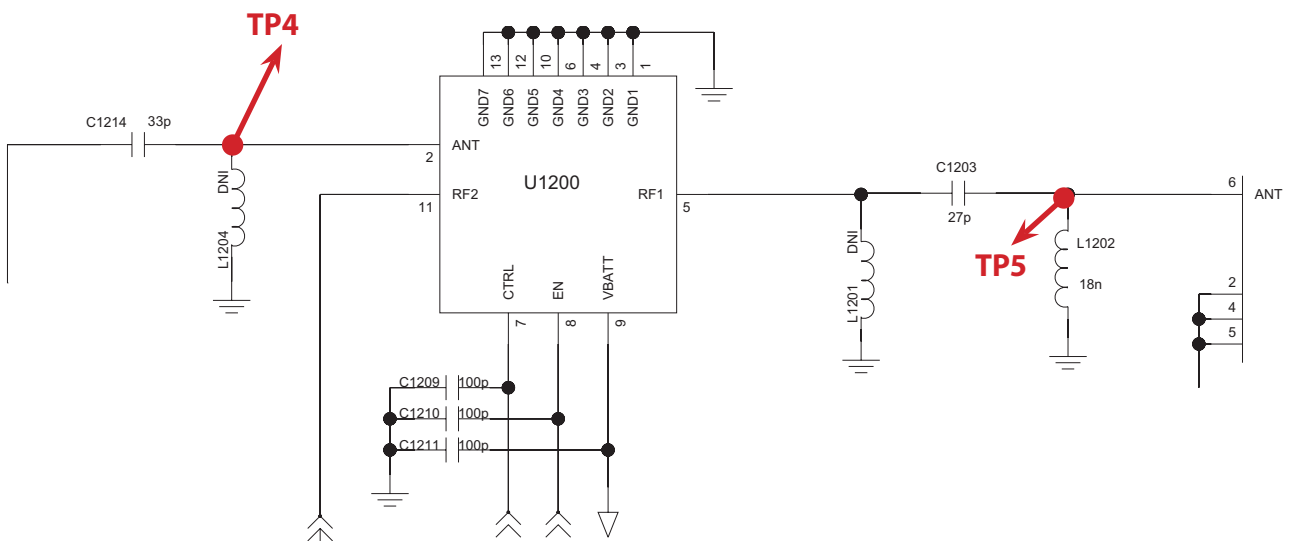
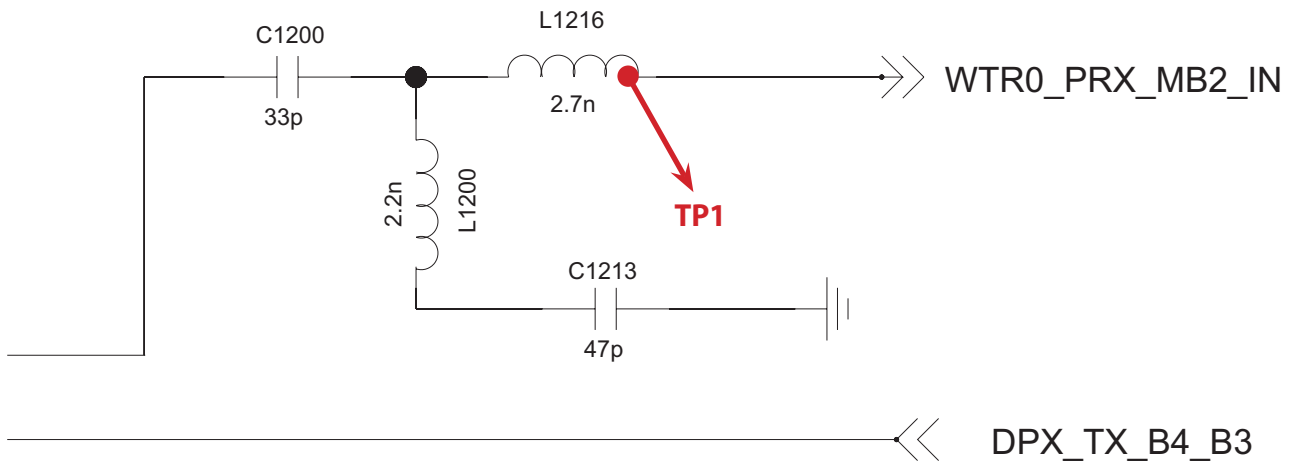
3.7.2.3 Checking RF signal path



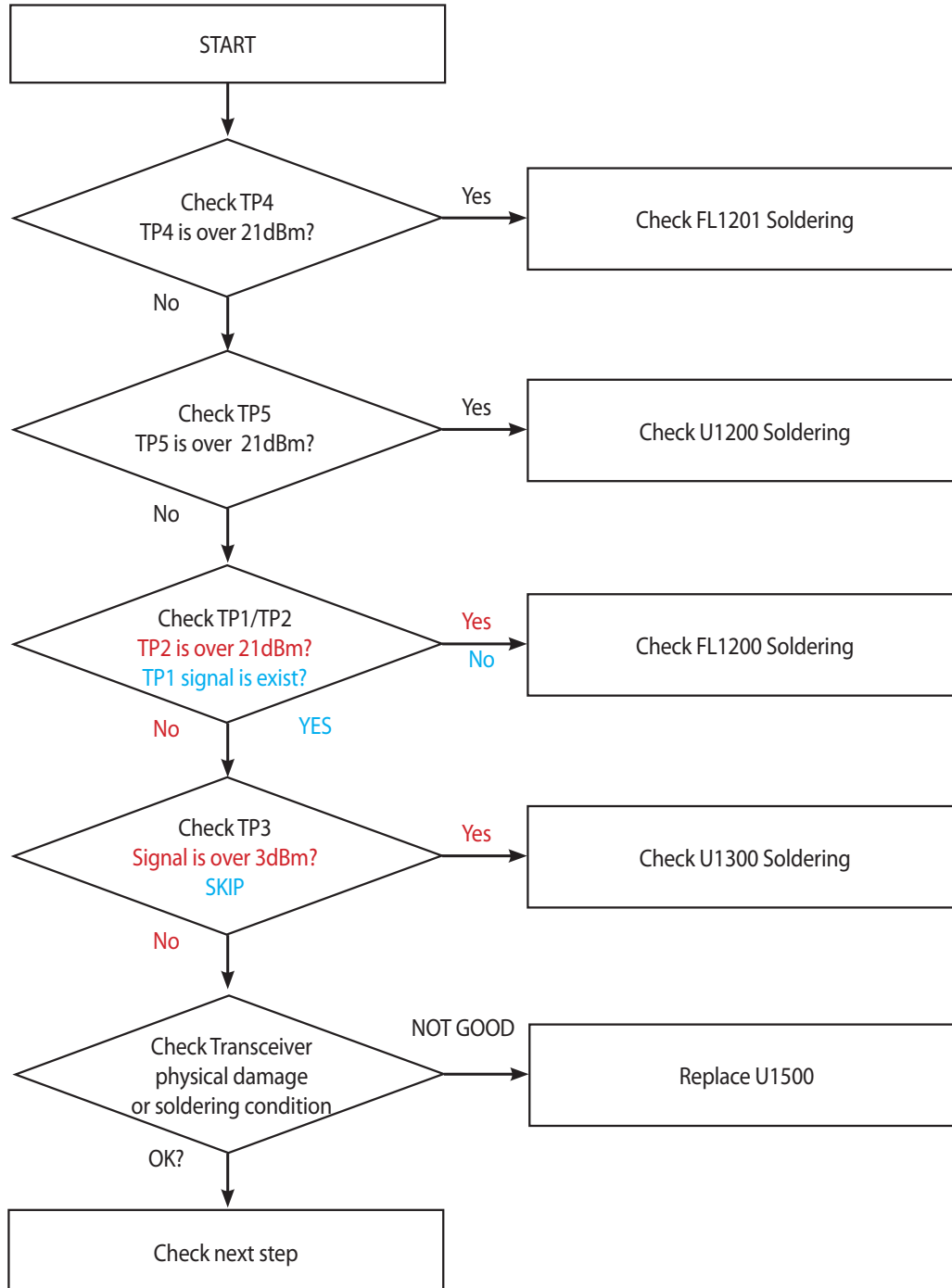
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3. TROUBLE SHOOTING

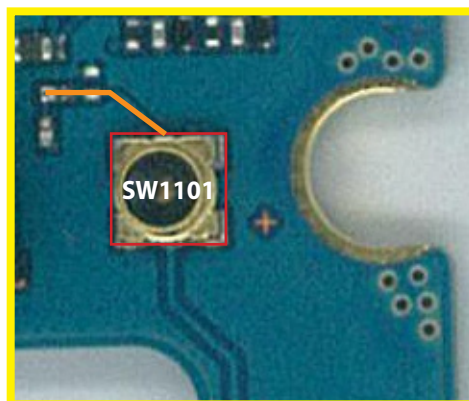
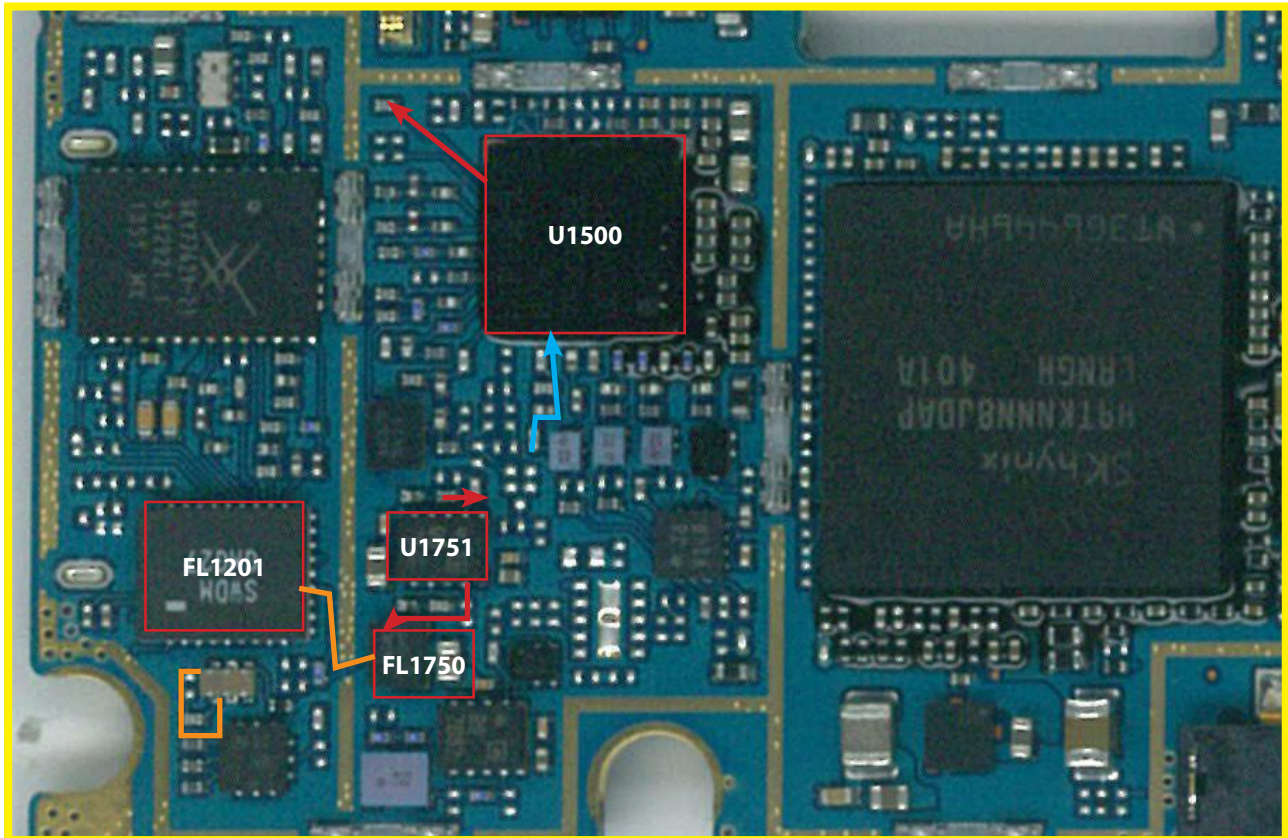


3. TROUBLE SHOOTING



3.7.3 LTE B7 TX/PRX

LTE B7 TX/PRX RF PATH

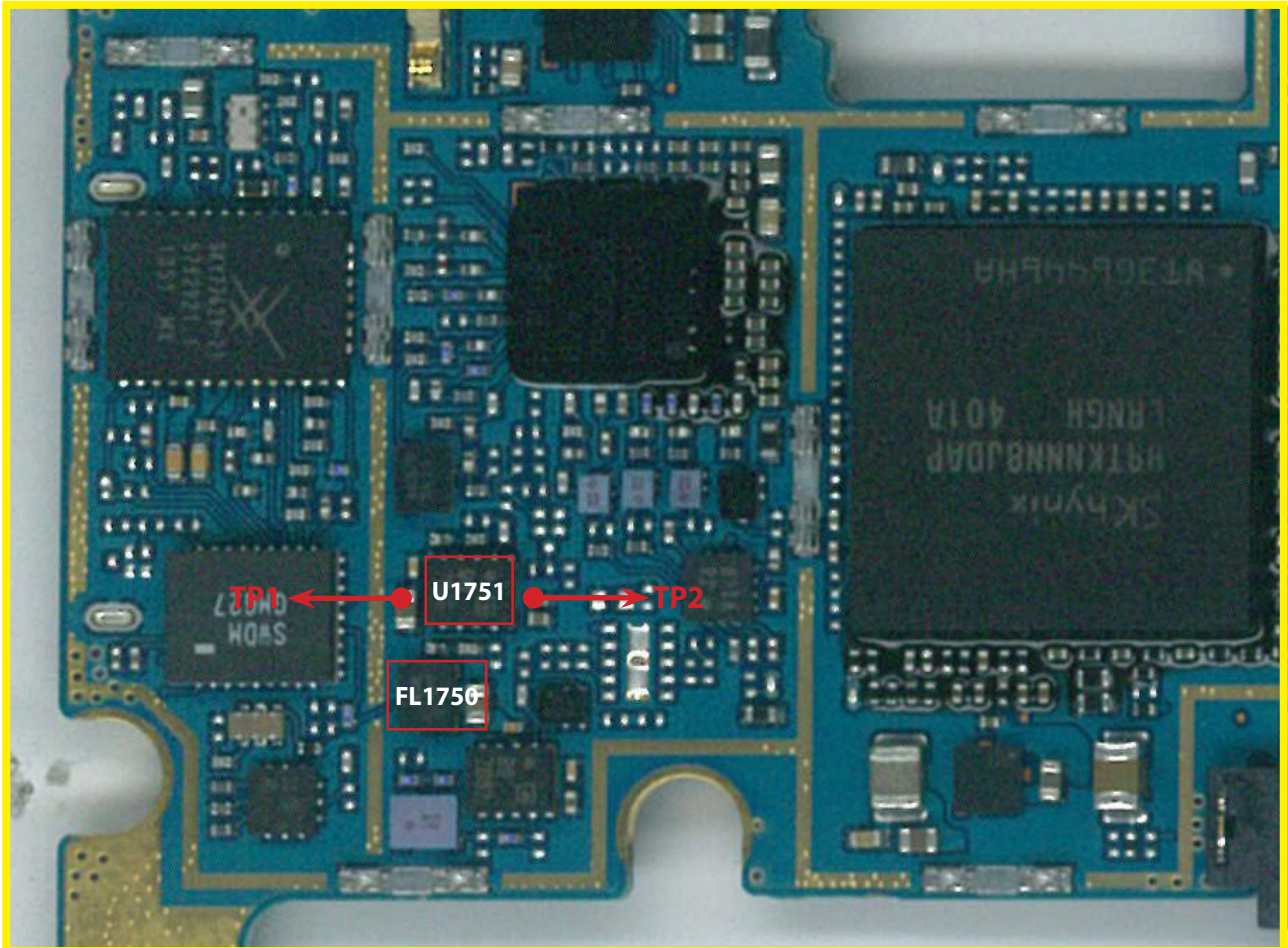


1. LTE B7 PRX PATH

2. LTE B7 TX PATH

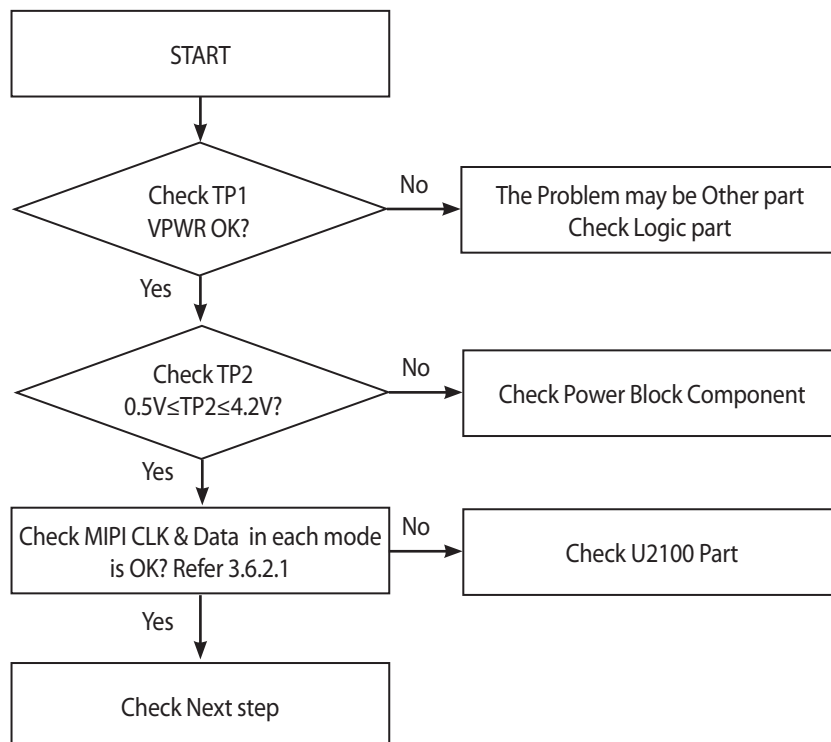
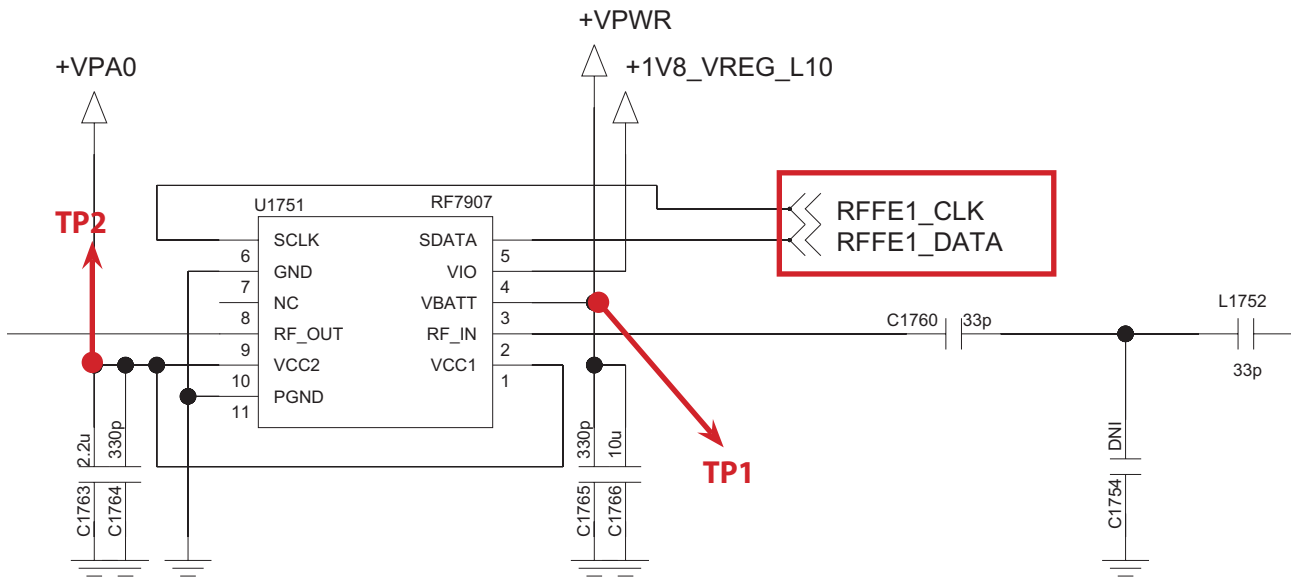
3. COMMON T/PRX PATH

3.7.3.1 Checking LTE PAM DC Power Circuit



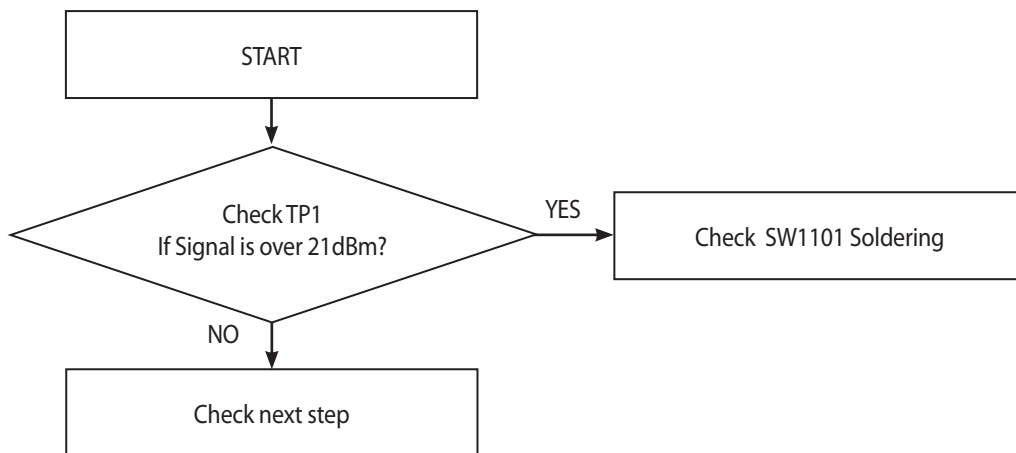
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3. TROUBLE SHOOTING

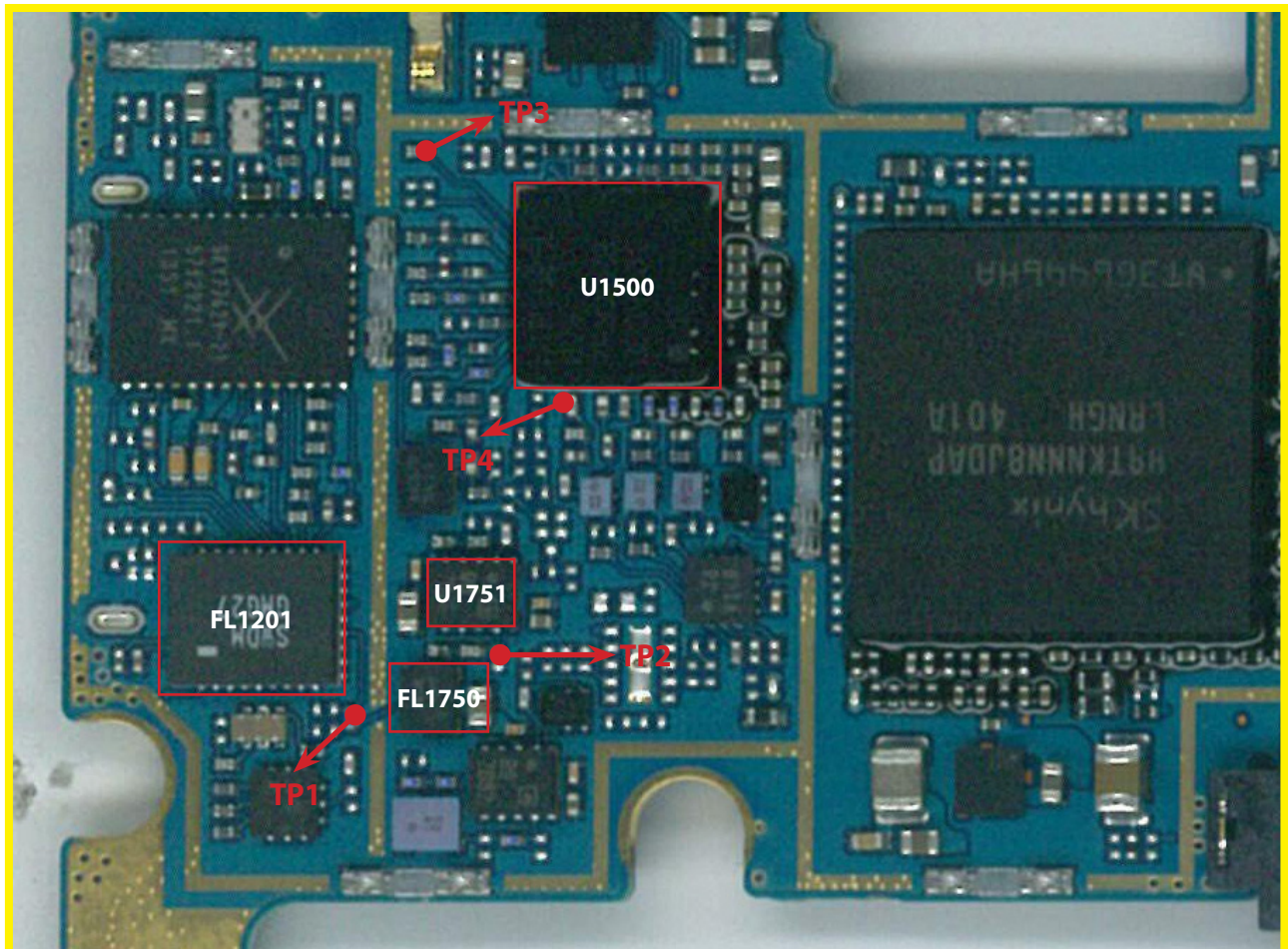


3.7.3.2 Checking RF signal path(SW)

Refer to 3.5.1.1

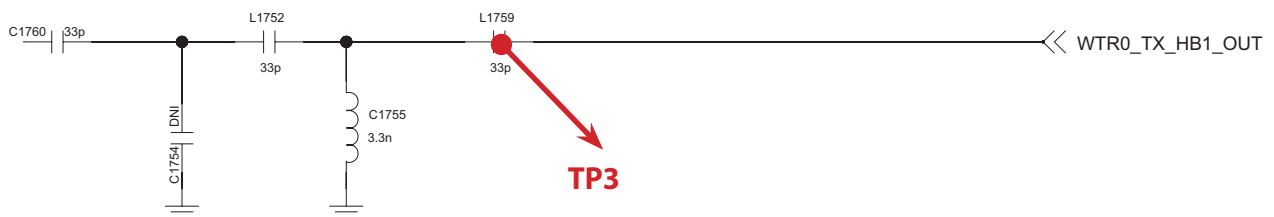
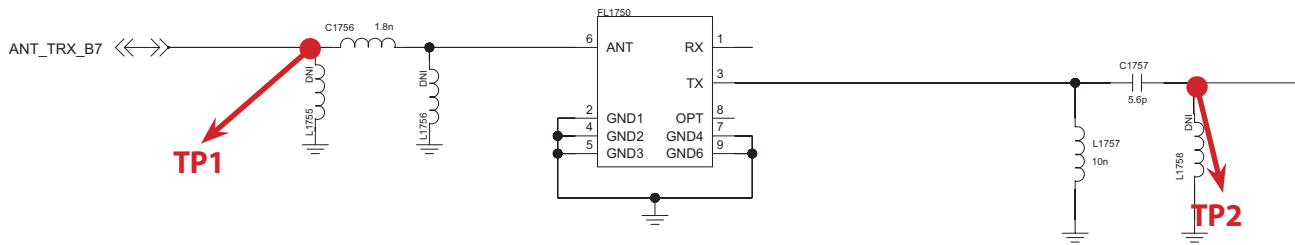


3.7.3.3 Checking RF signal path

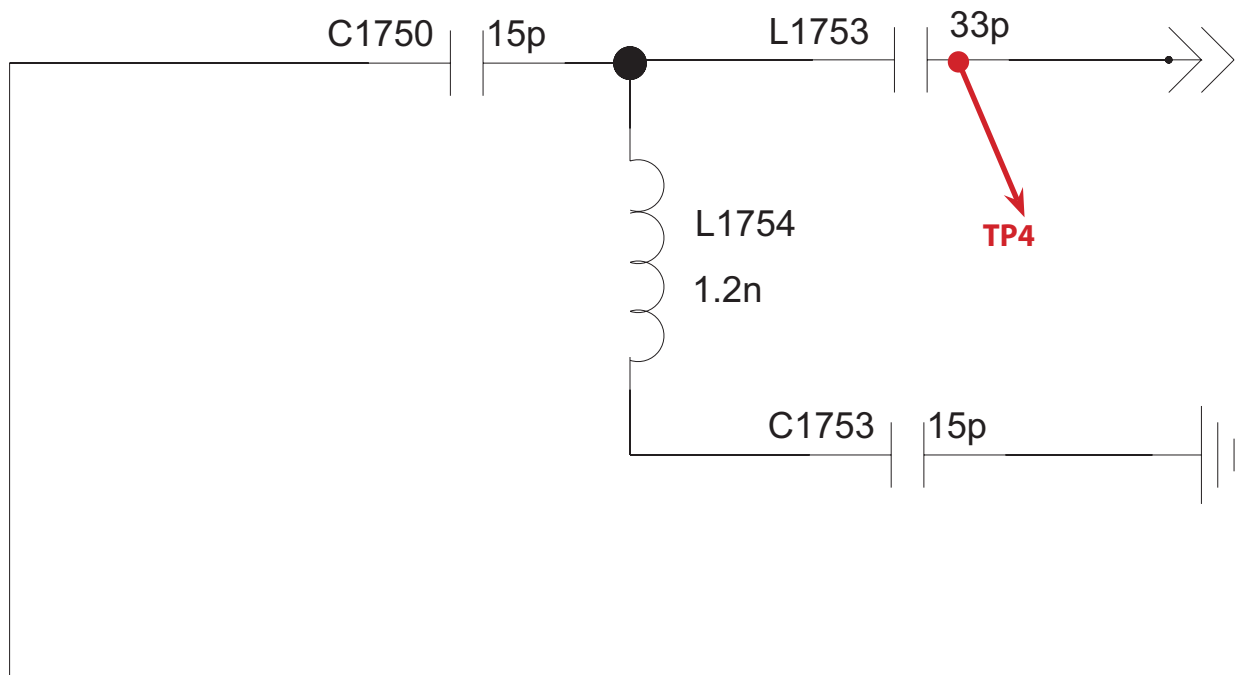


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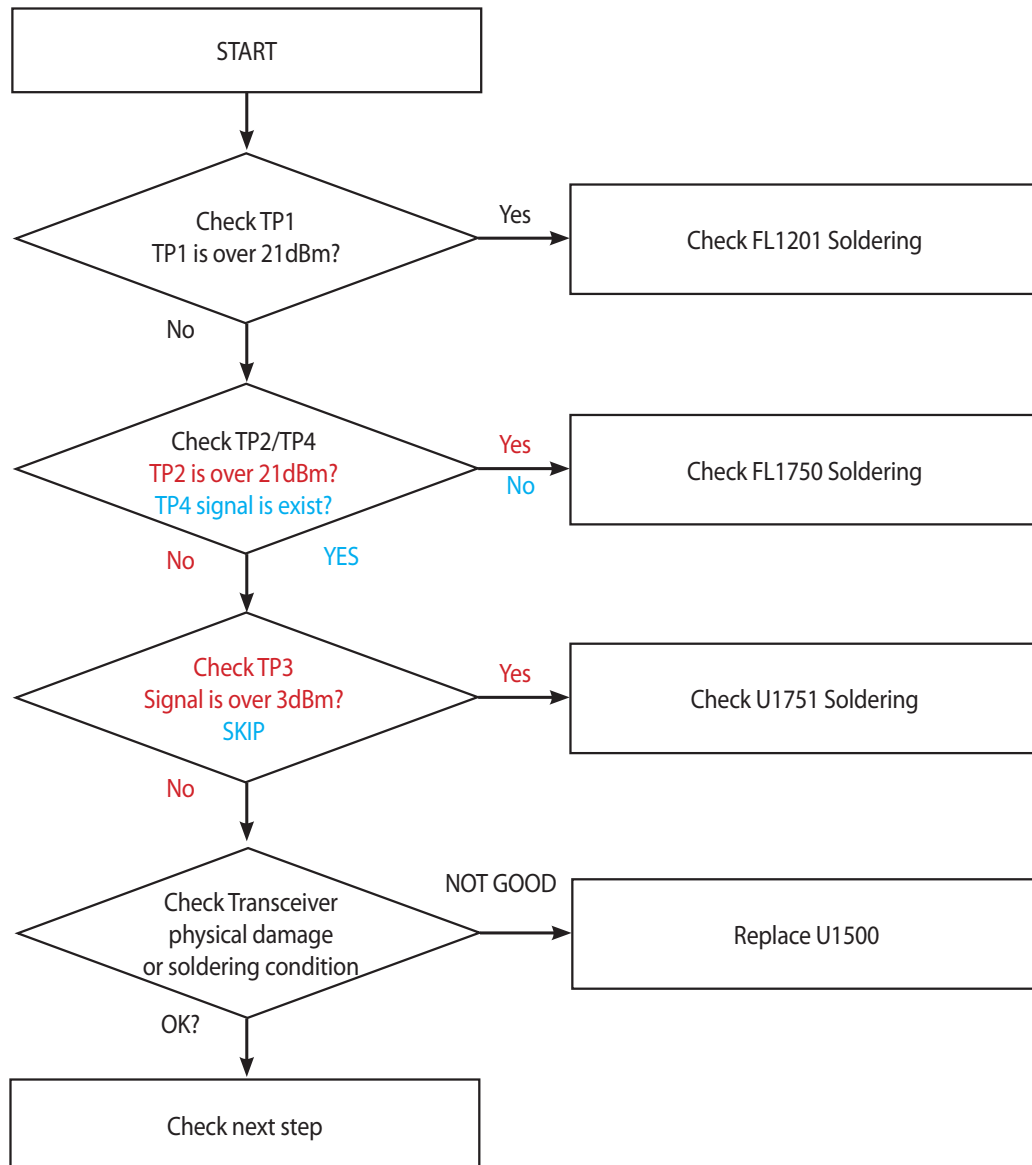
3. TROUBLE SHOOTING



WTR0_PRX_HB3_IN

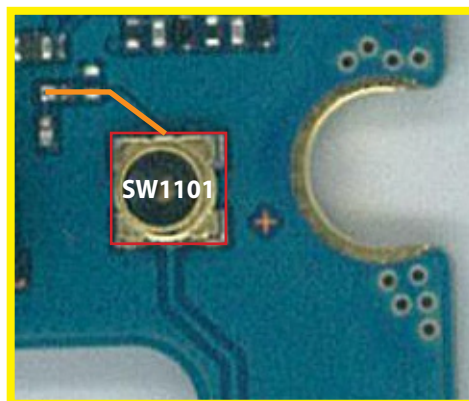
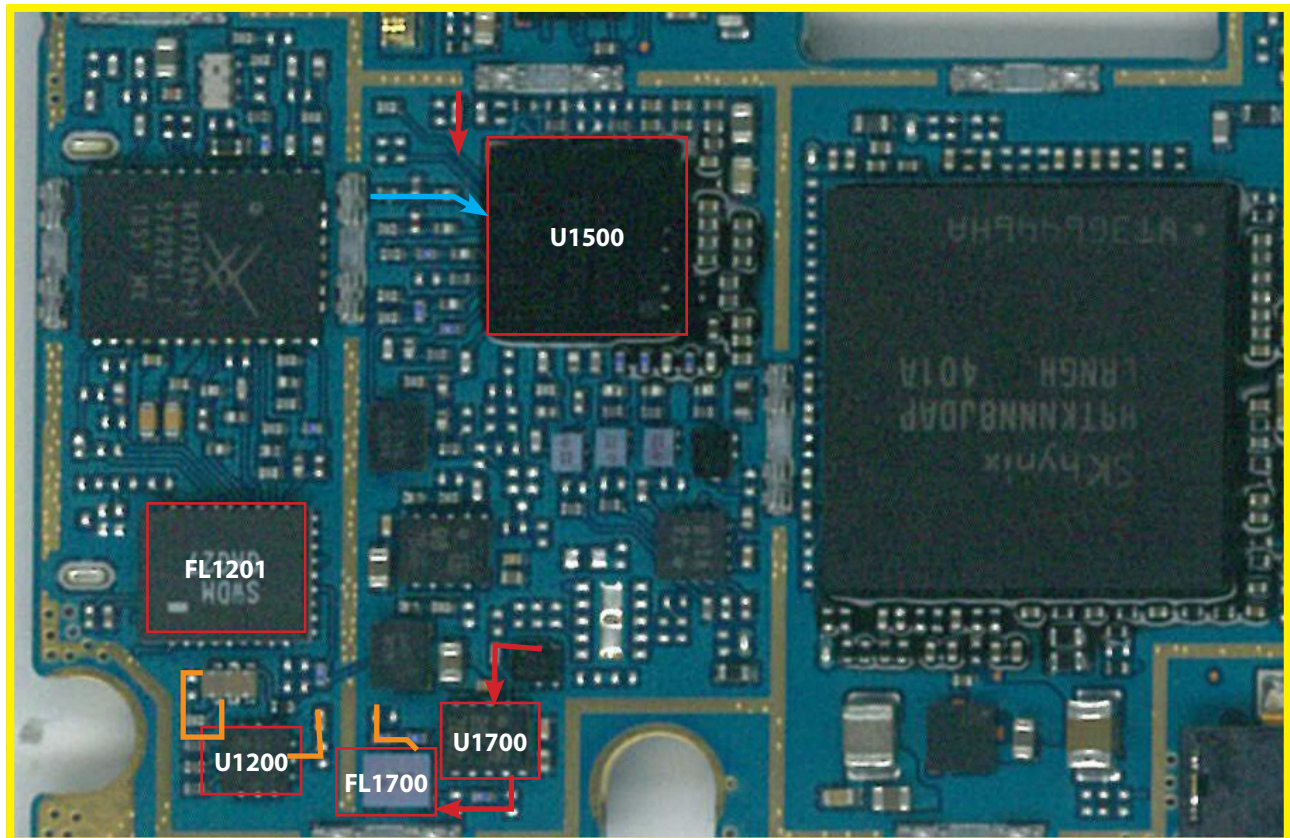


3. TROUBLE SHOOTING



3.7.4 LTE B20 TX/PRX

LTE B20 TX/PRX RF PATH

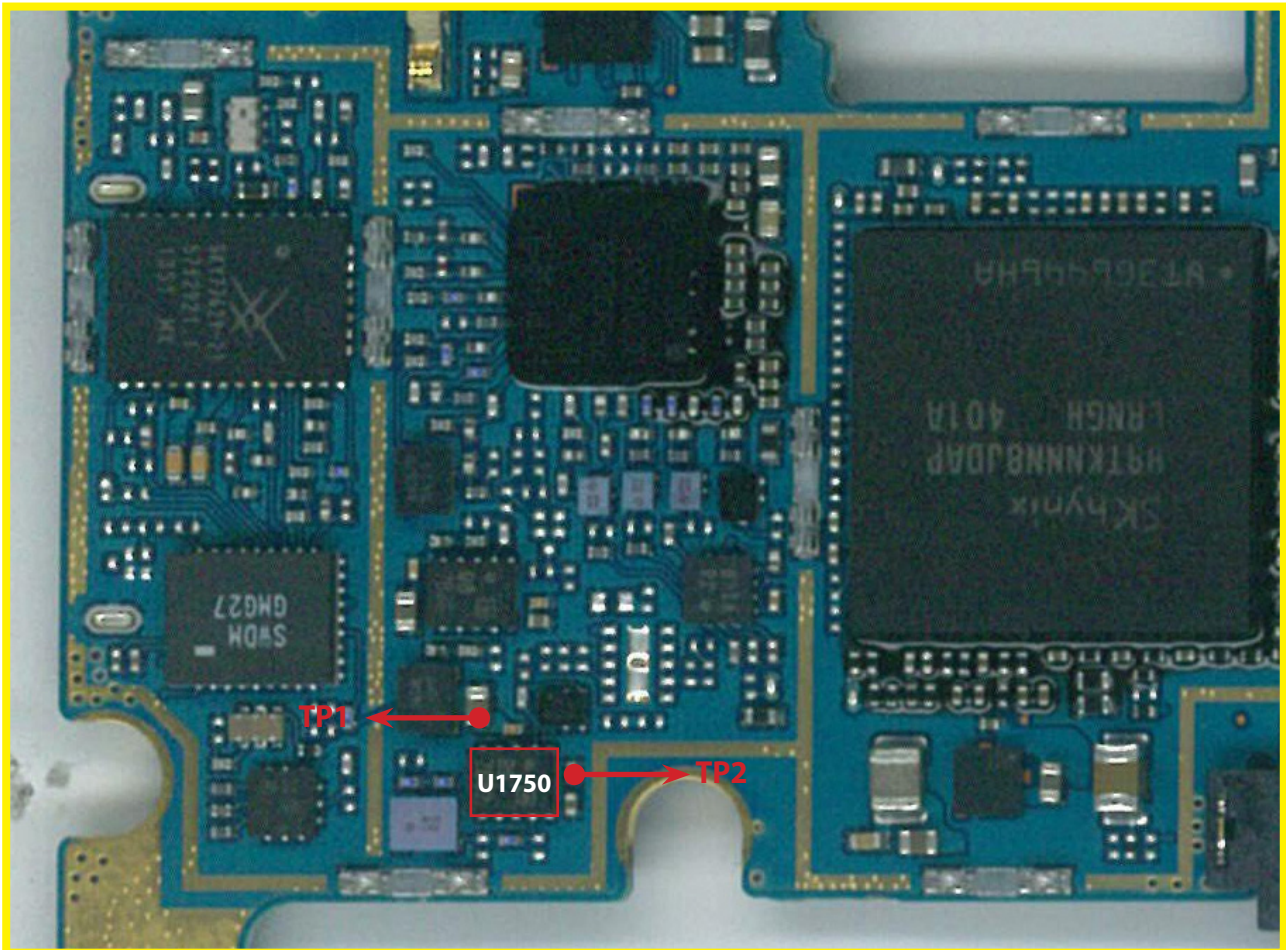


1. LTE B20 PRX PATH

2. LTE B20 TX PATH

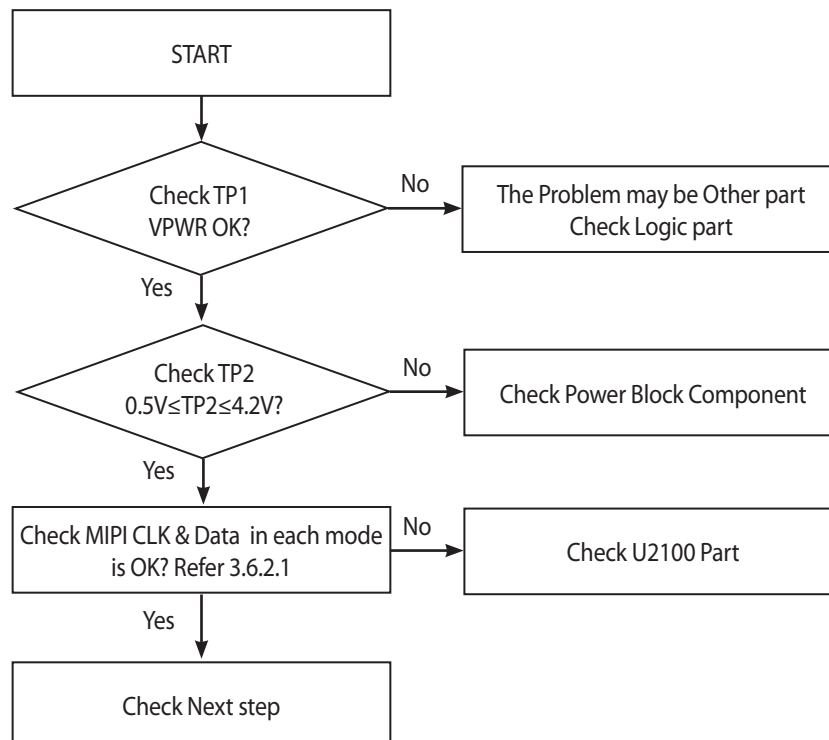
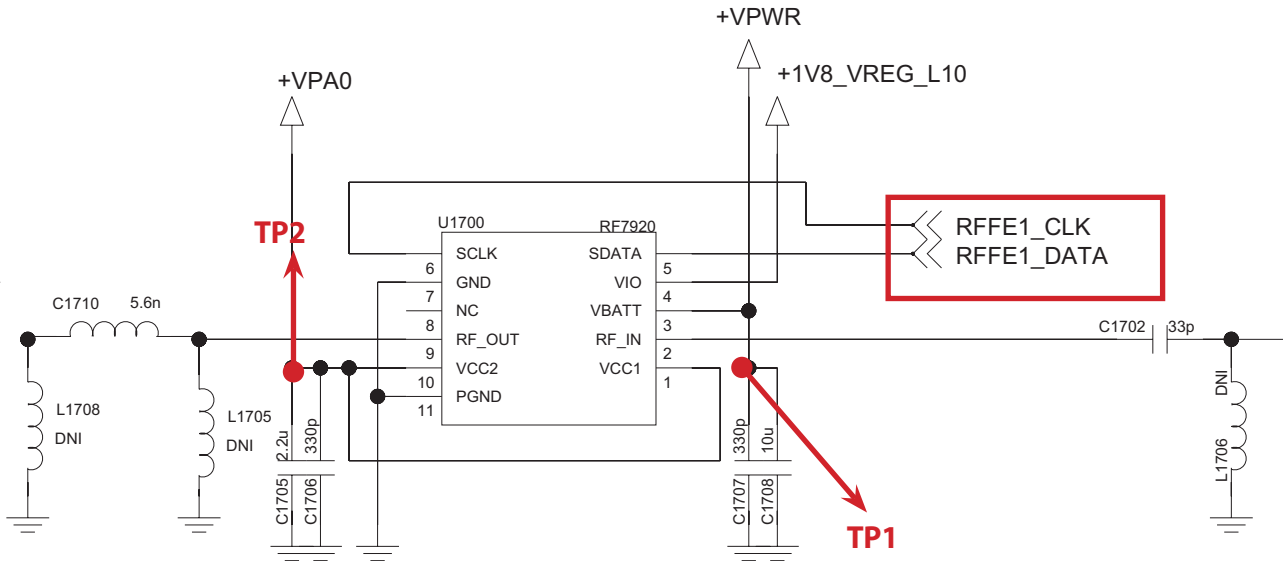
3. COMMON T/PRX PATH

3.7.4.1 Checking LTE PAM DC Power Circuit



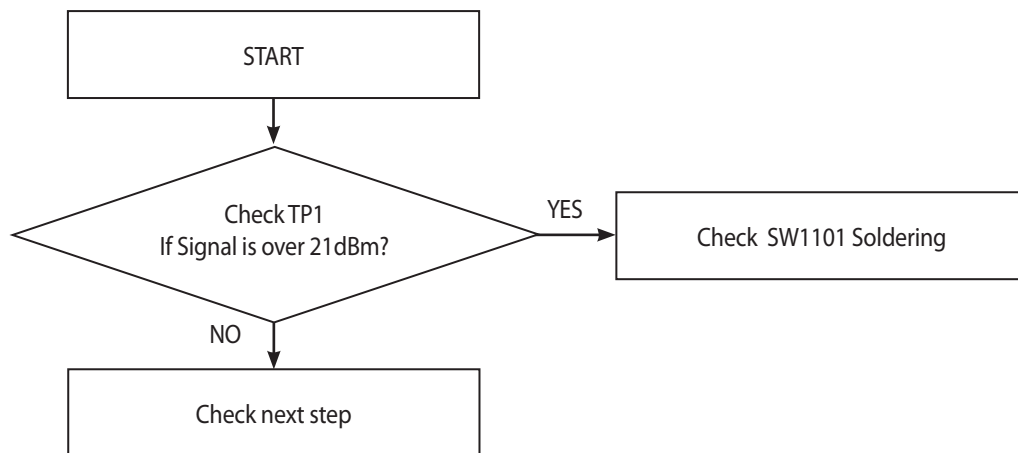
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3. TROUBLE SHOOTING

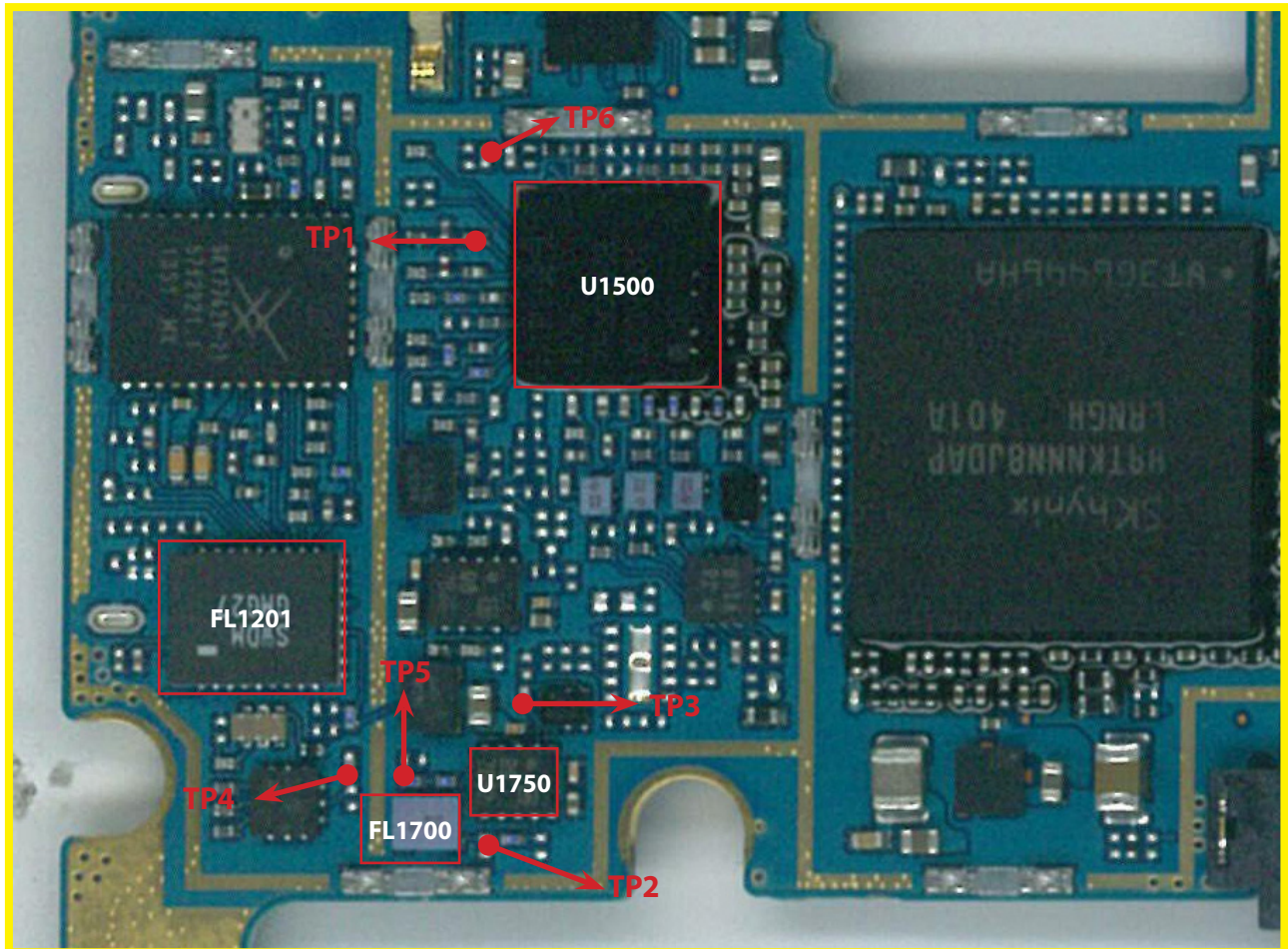


3.7.4.2 Checking RF signal path(SW)

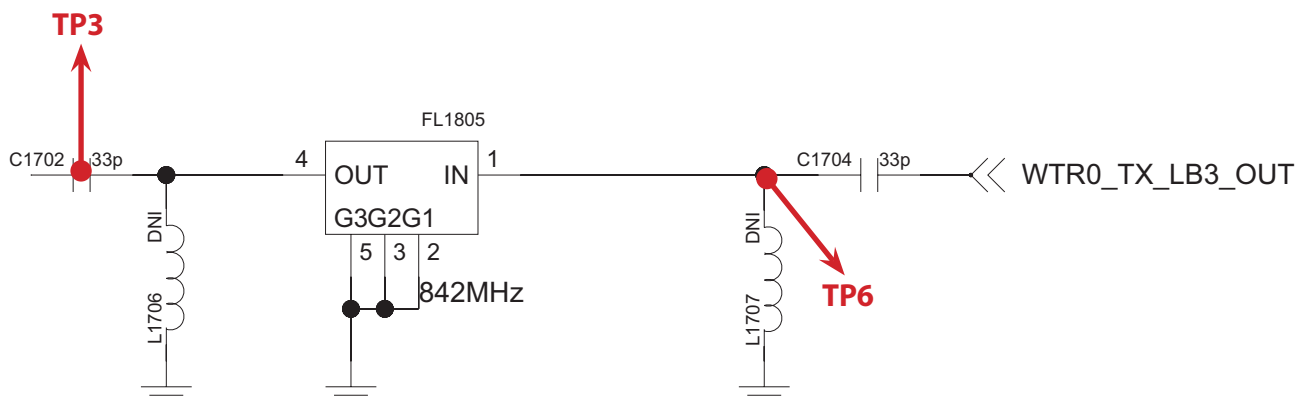
Refer to 3.5.1.1



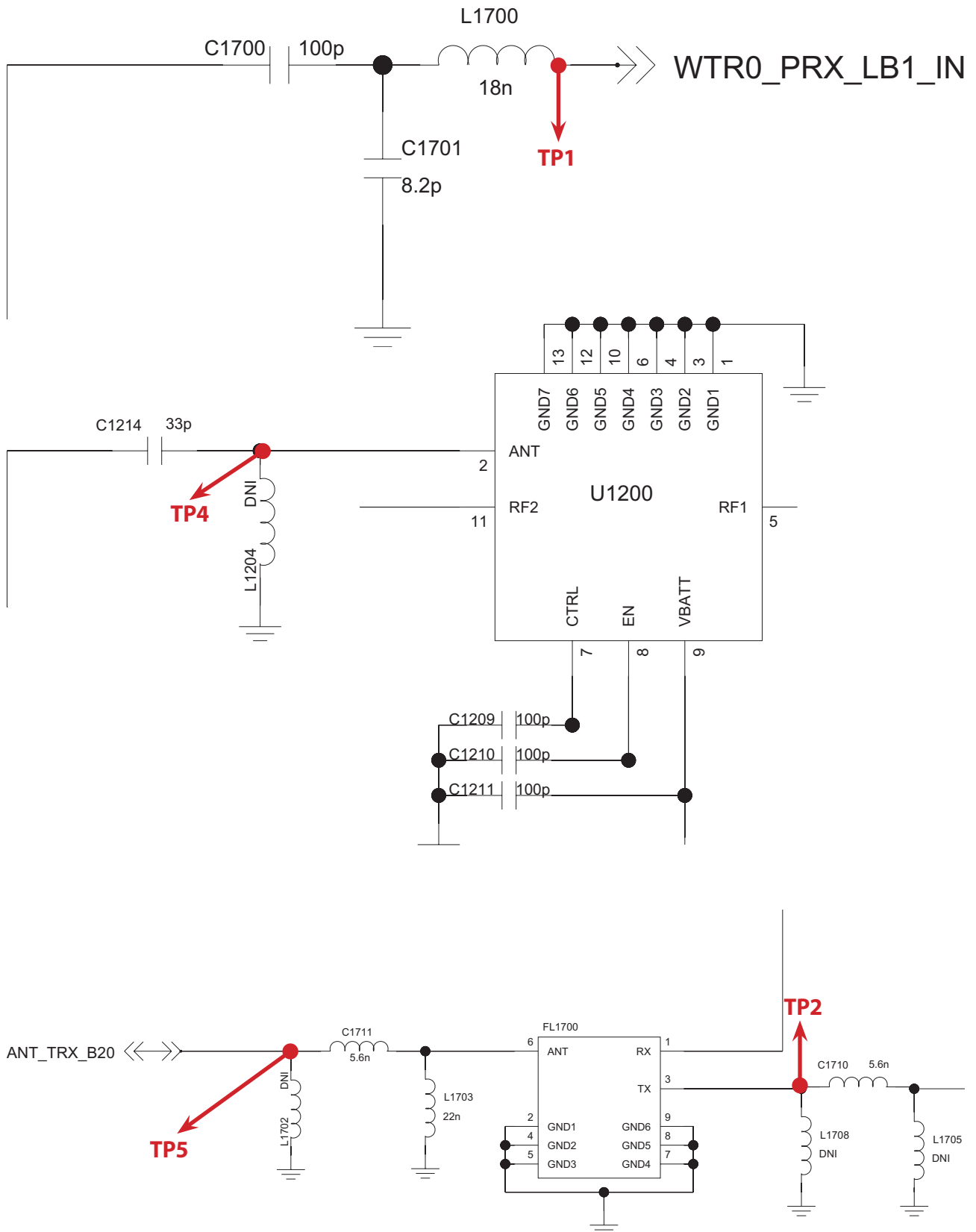
3.7.4.3 Checking RF signal path



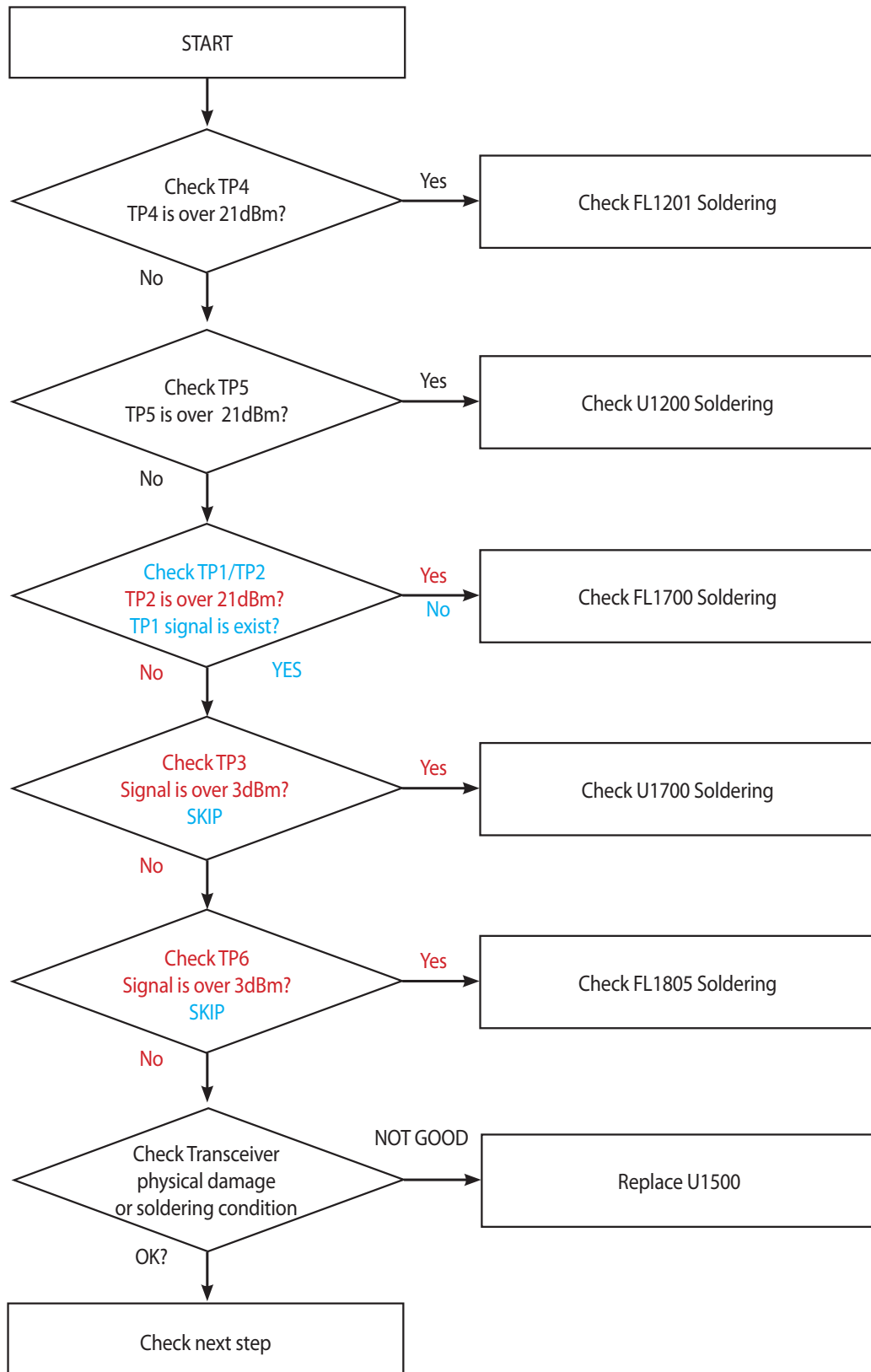
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3. TROUBLE SHOOTING



3. TROUBLE SHOOTING

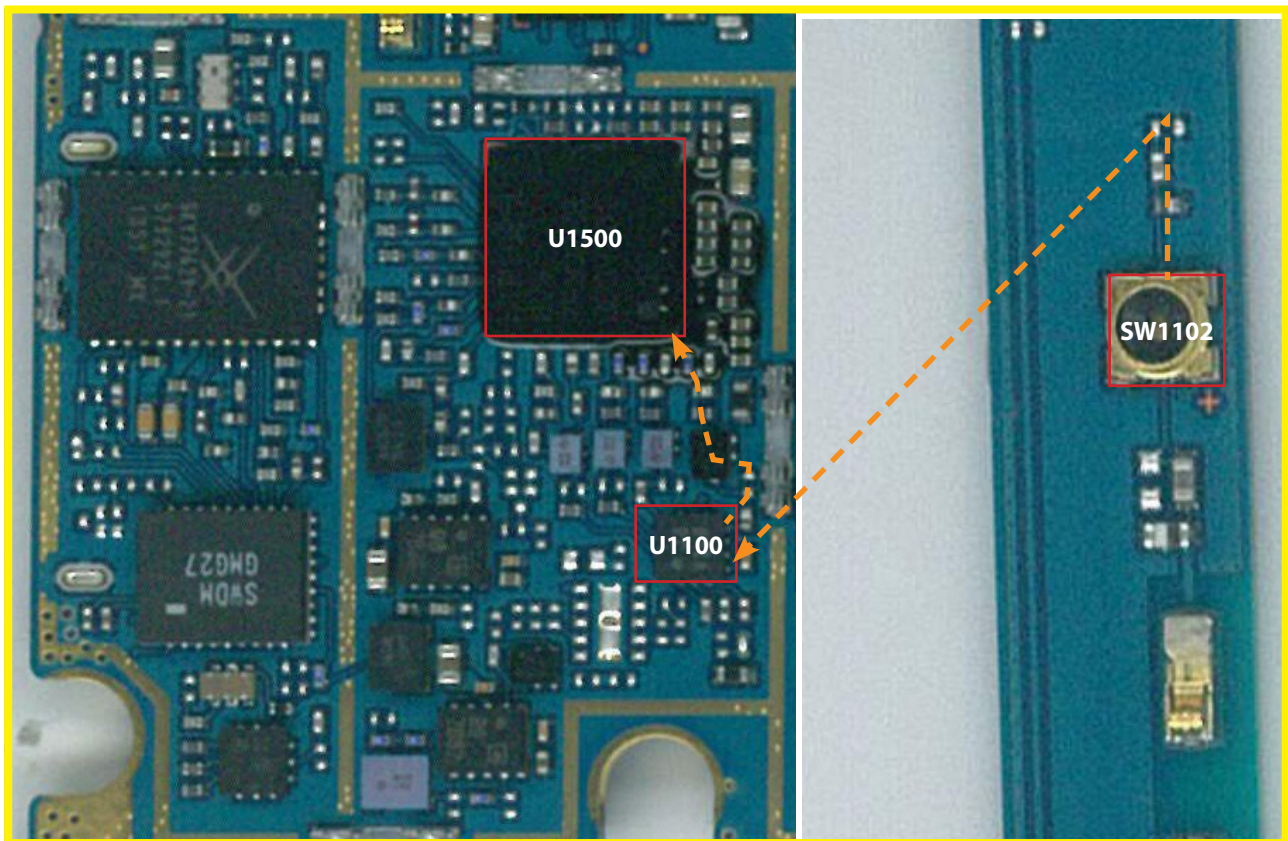


3.7.5 LTE B1/B8 DRX

Refer to 3.6.1.2 ~ 3.6.1.5(Same as WCDMA DRX B1/B8)

3.7.6 LTE B3 DRX

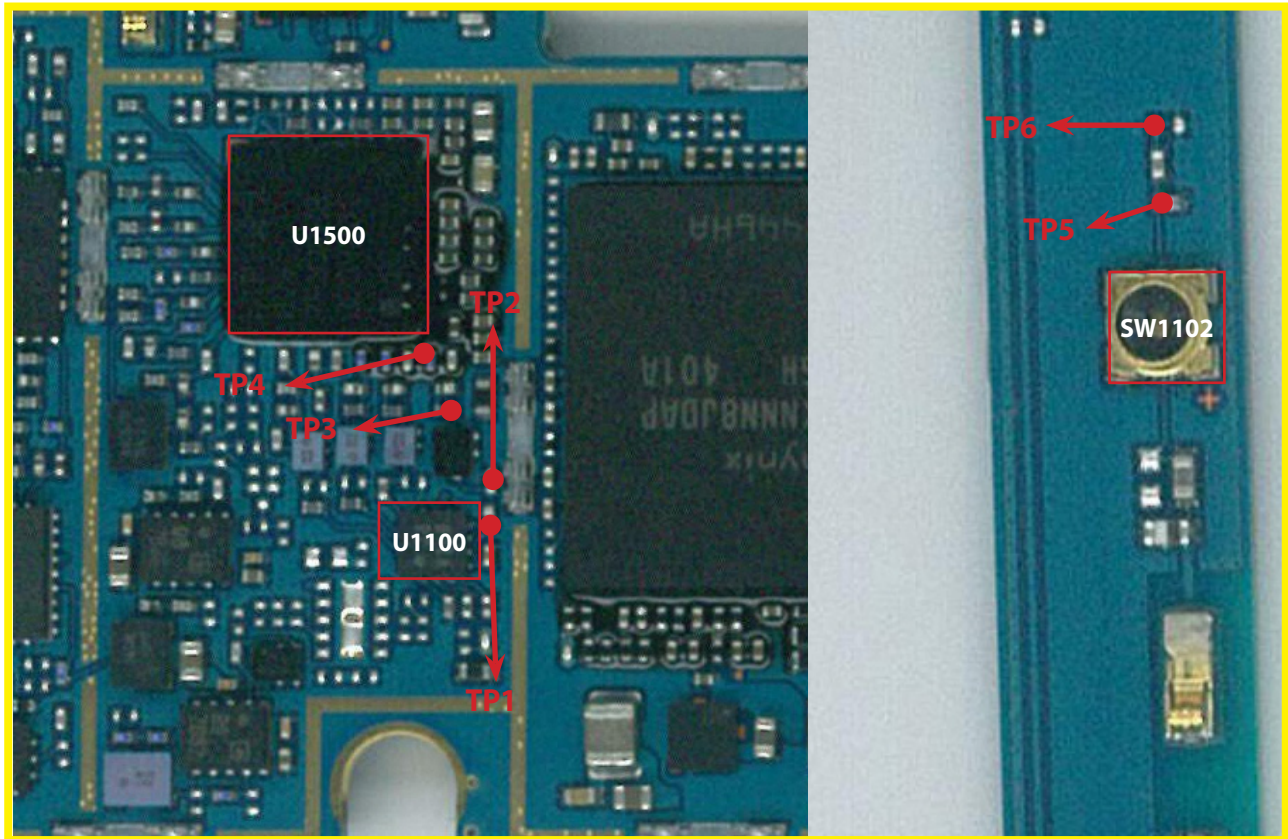
LTE B3 DRX RF PATH



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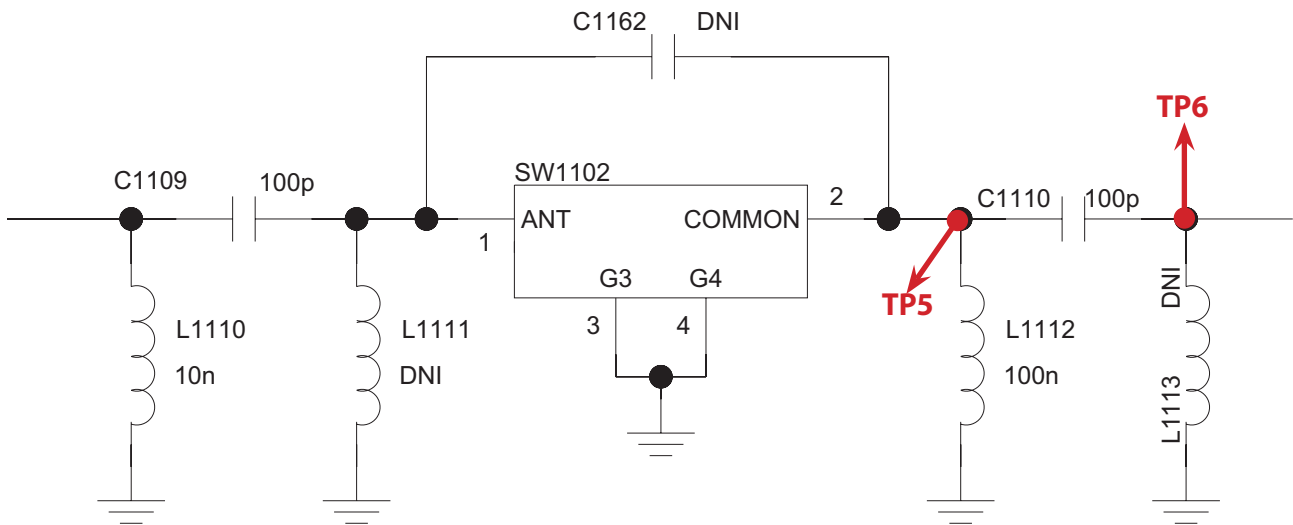
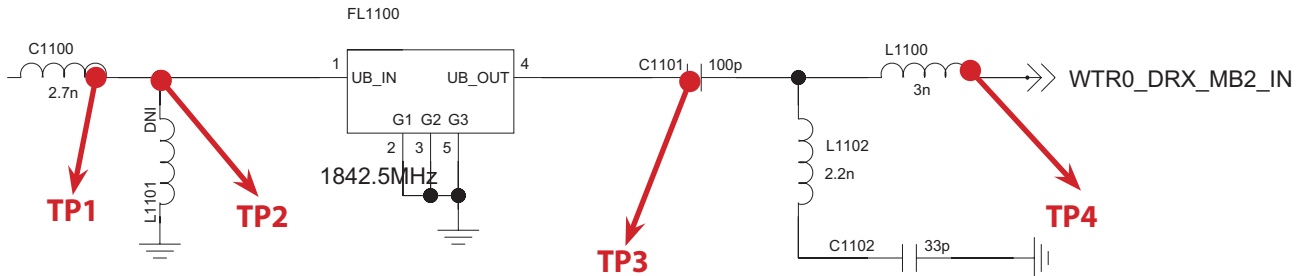
3.7.6.1 Checking RF signal path



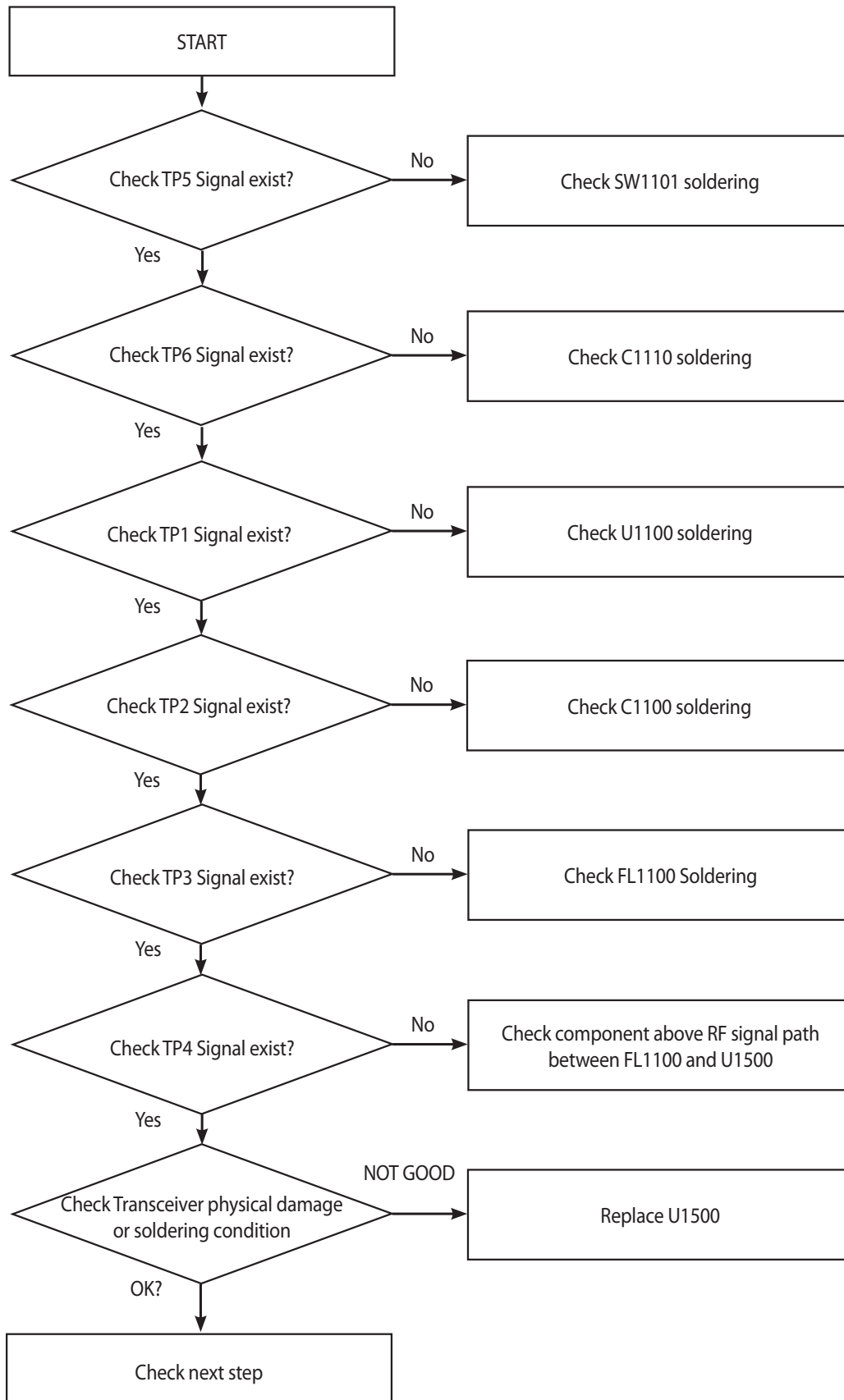
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3. TROUBLE SHOOTING

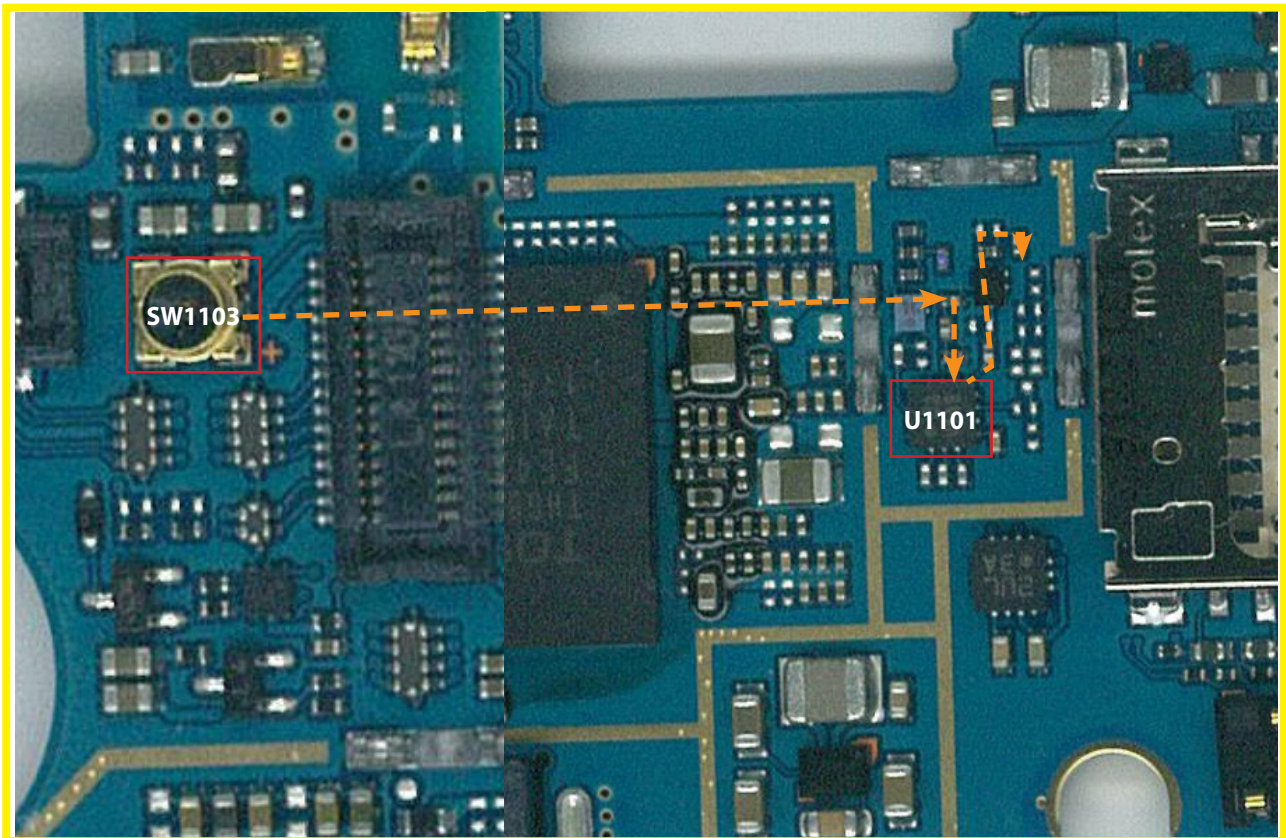


3. TROUBLE SHOOTING



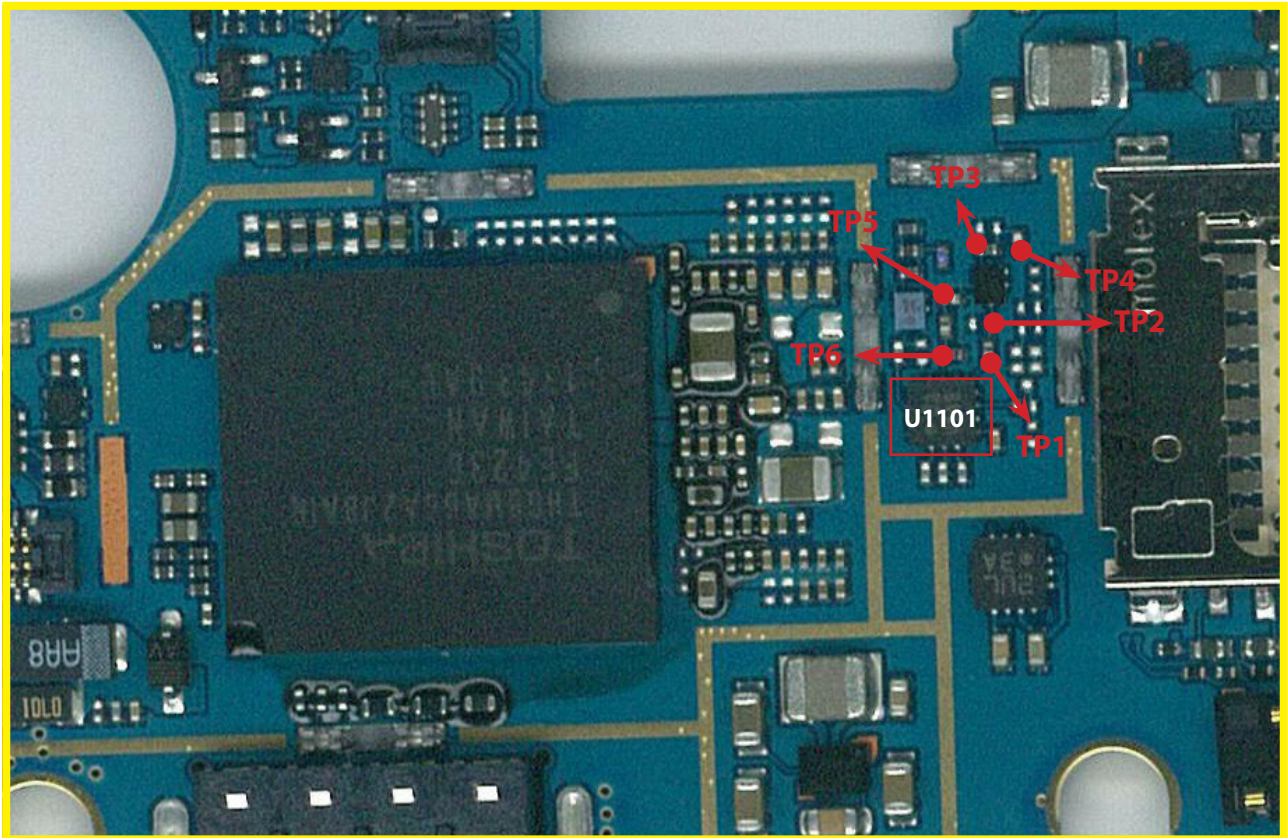
3.7.7 LTE B7 DRX

LTE B7 DRX RF PATH



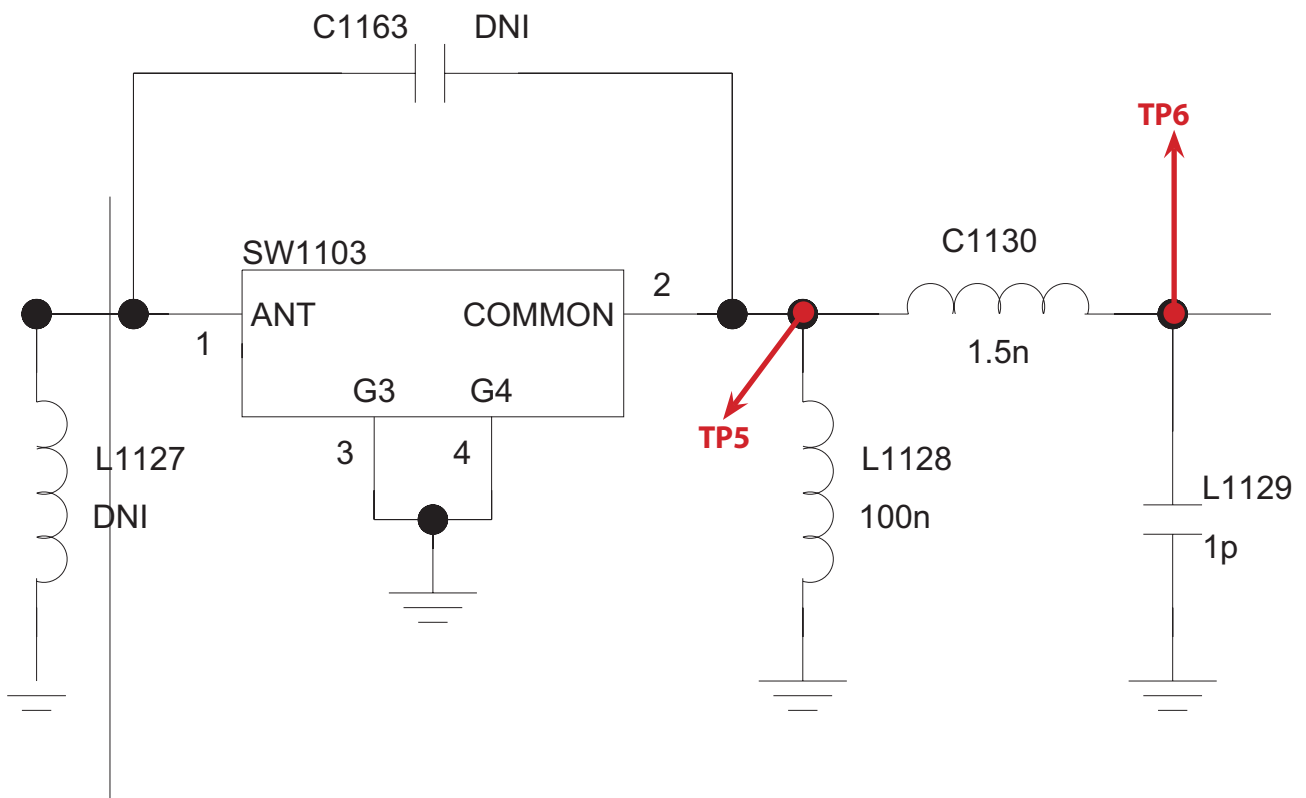
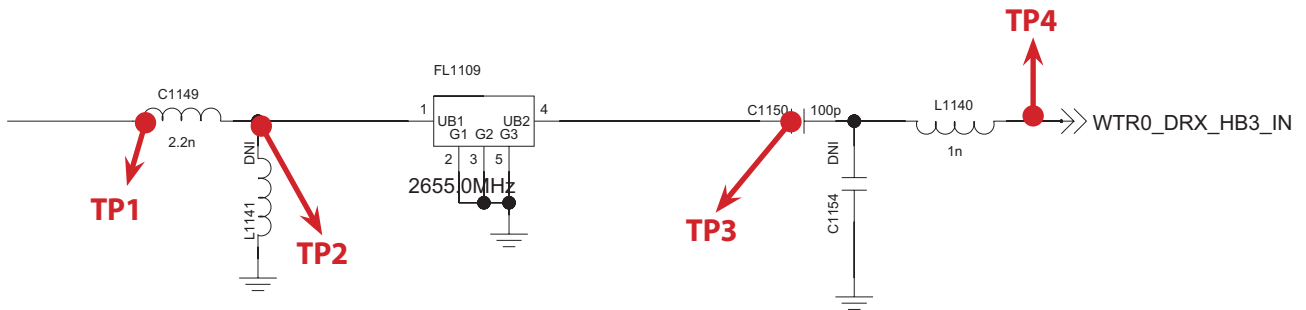
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3.7.7.1 Checking RF signal path

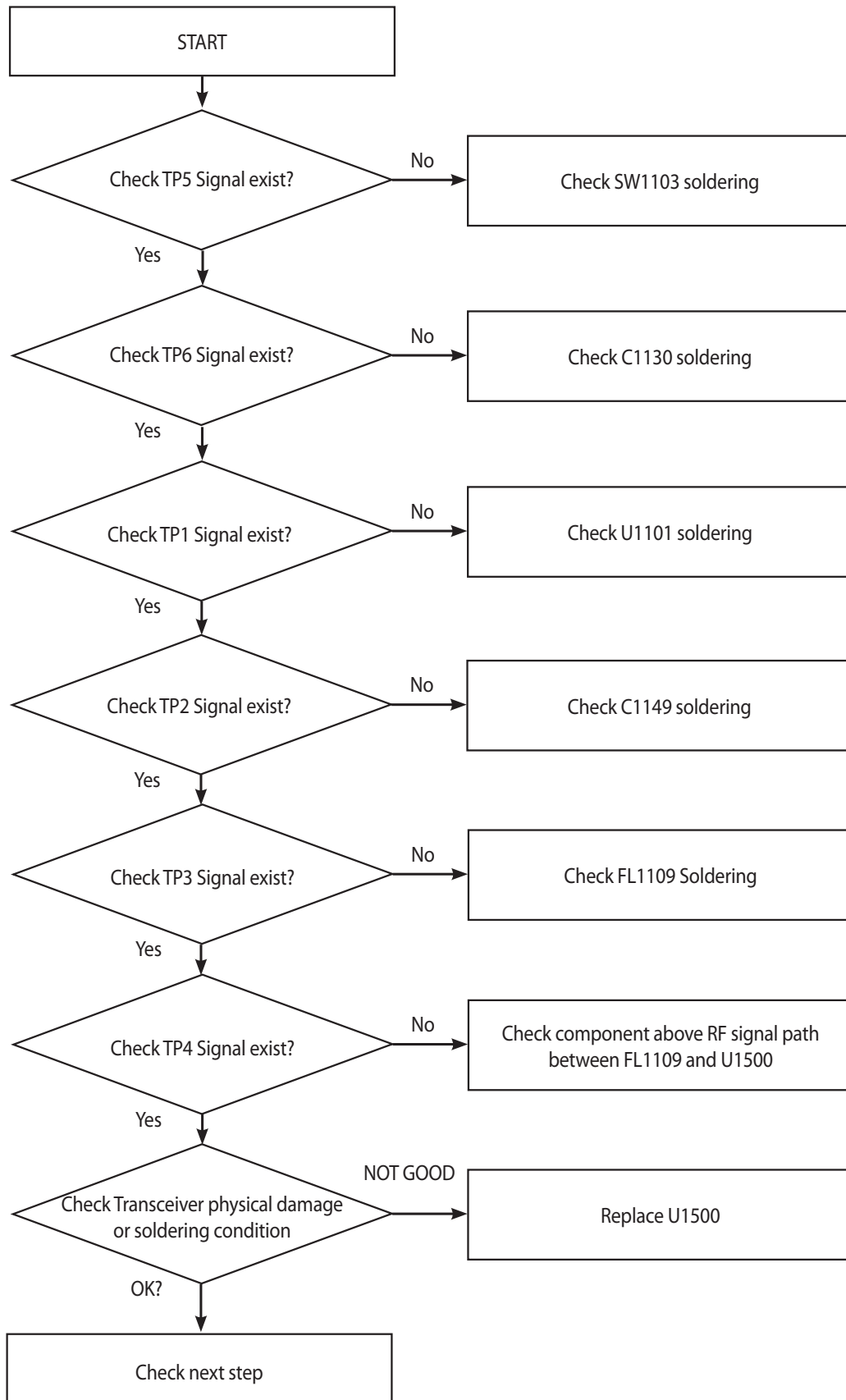


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3. TROUBLE SHOOTING

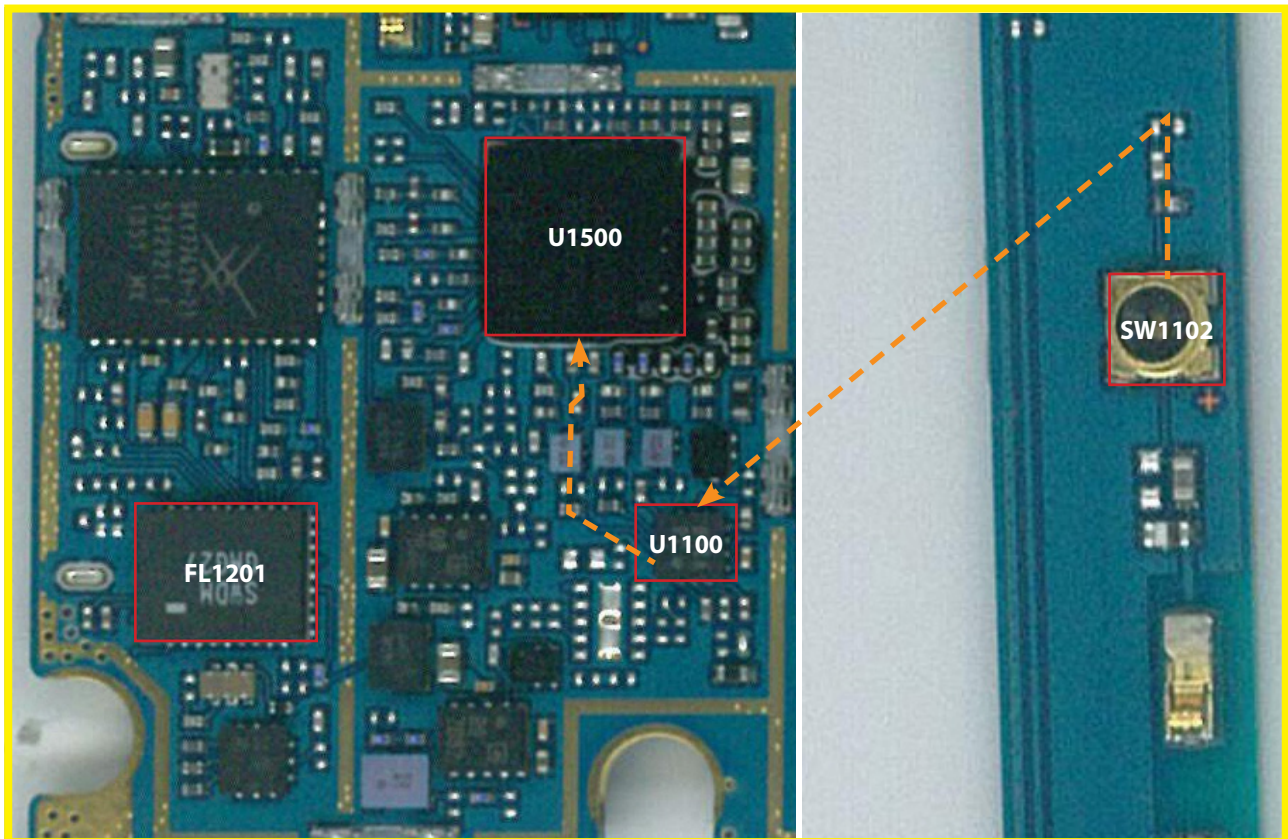


3. TROUBLE SHOOTING



3.7.8 LTE B20 DRX

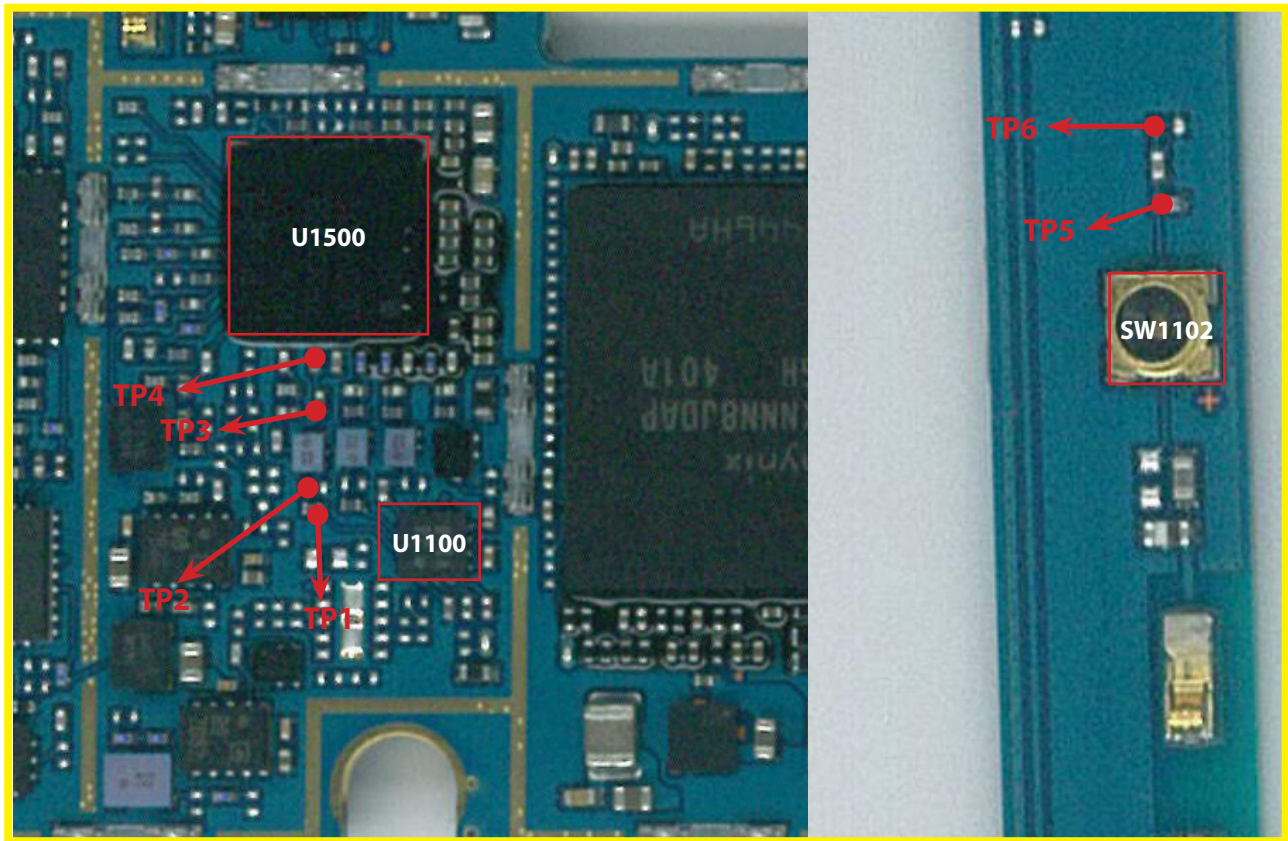
LTE B20 DRX RF PATH



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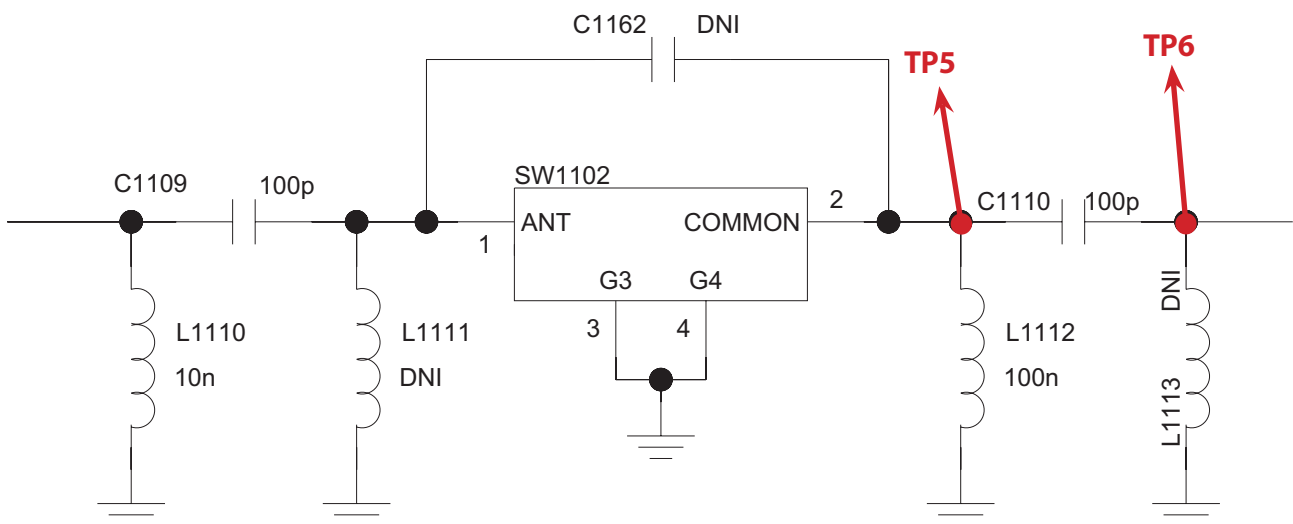
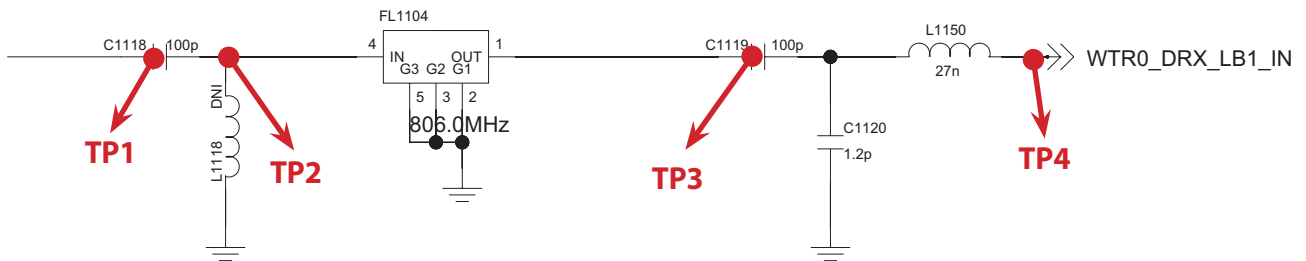
3.7.8.1 Checking RF signal path



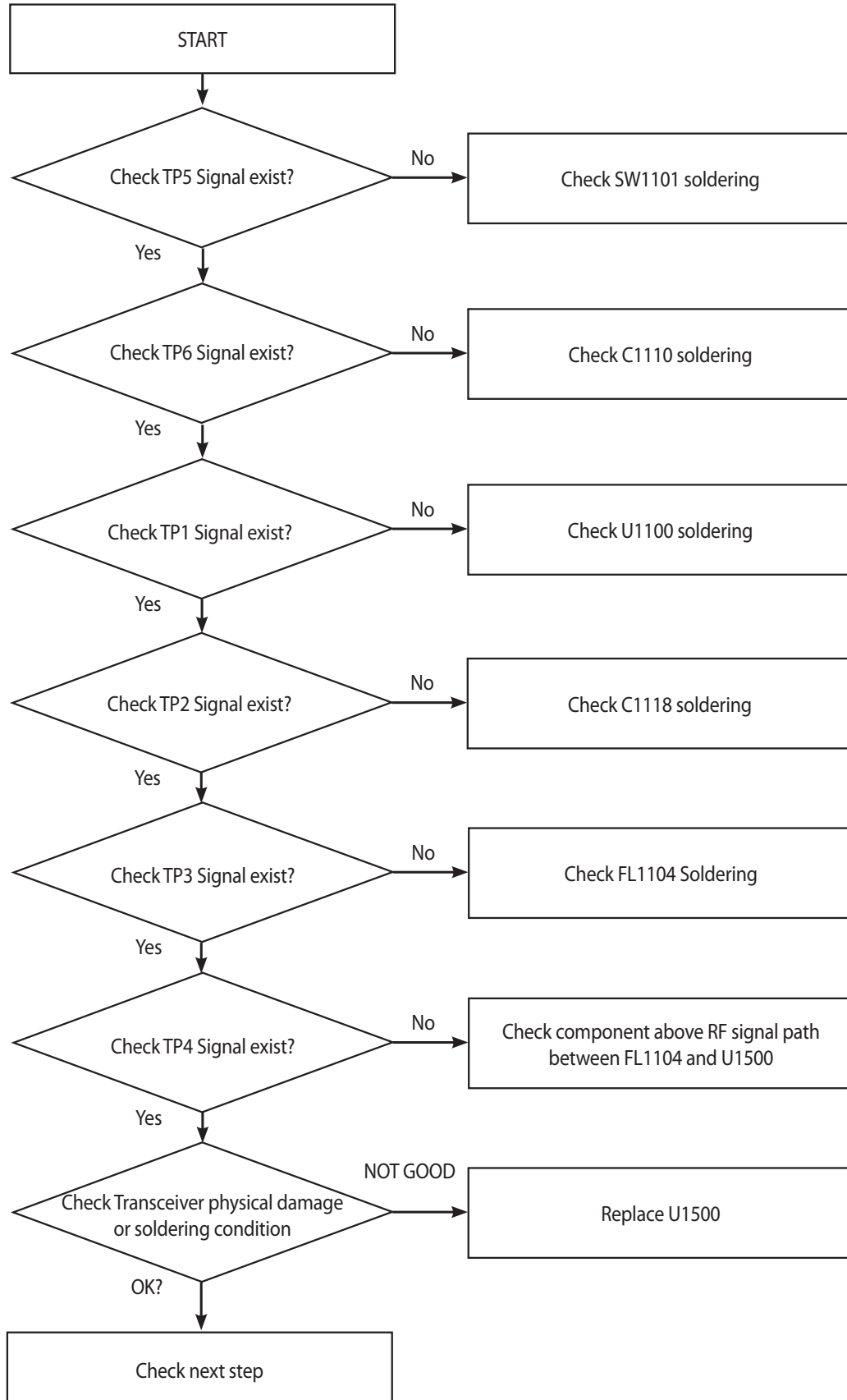
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3. TROUBLE SHOOTING



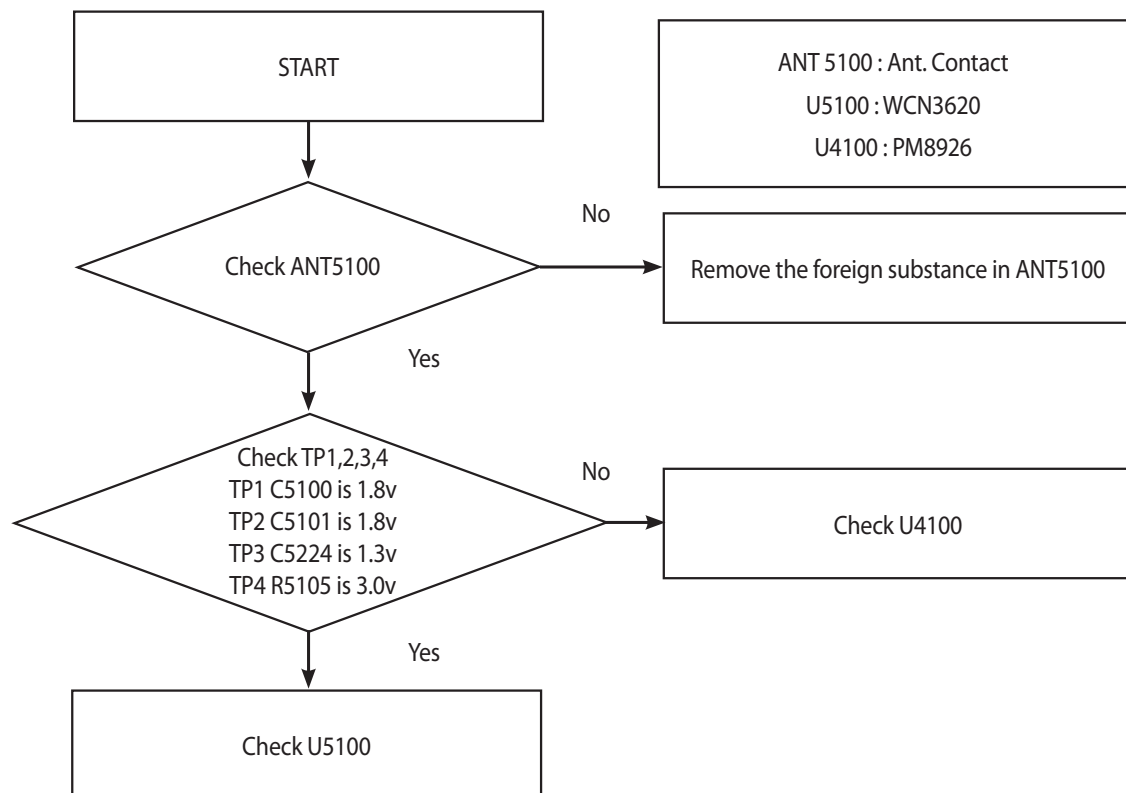
3. TROUBLE SHOOTING



3.8 BT&WIFI PART

3.8.1 BT&WIFI Trouble Shooting

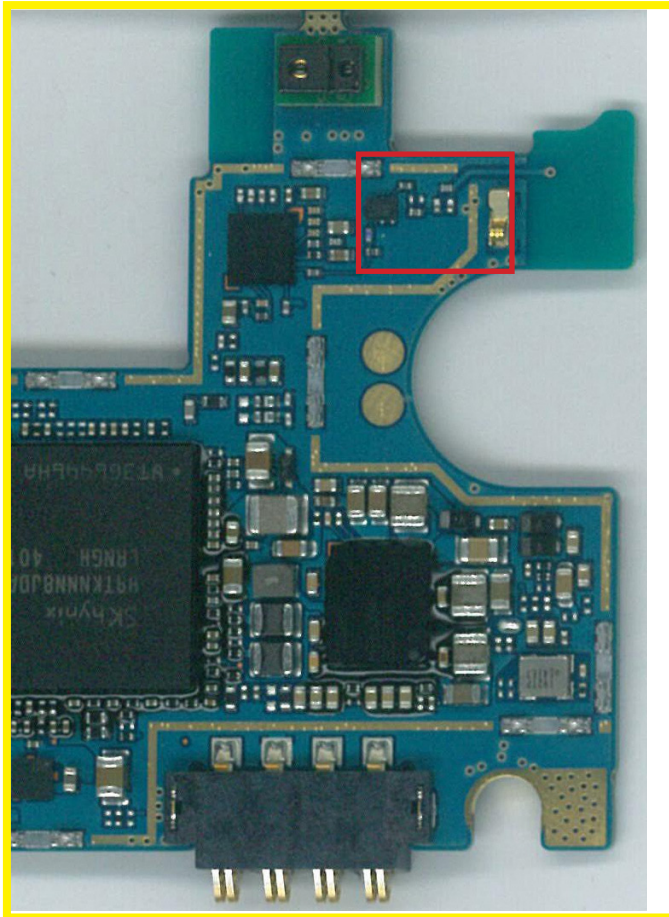
BT&WIFI control signals are generate WCN 3620



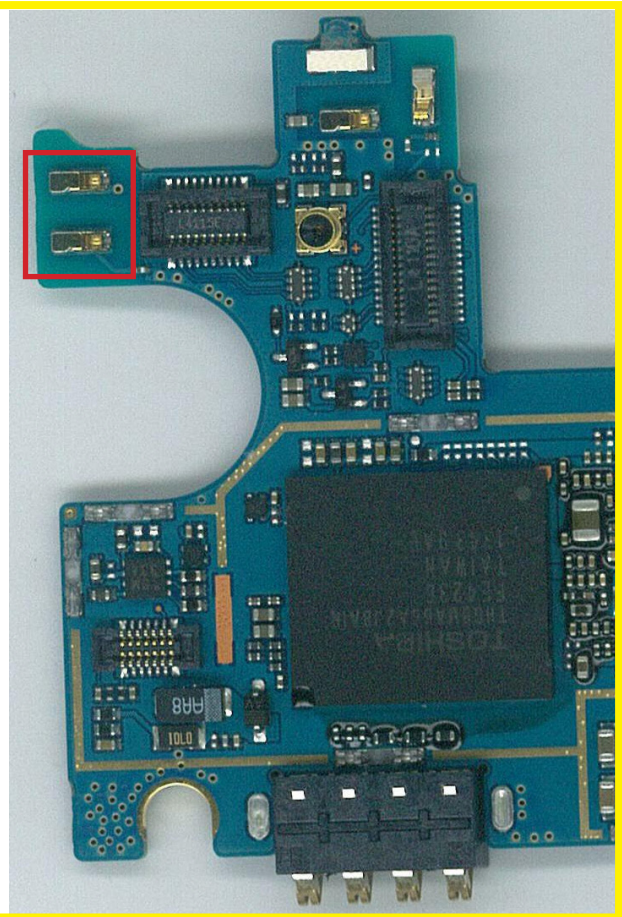
Test point	Net name	Description
TP1	VREG_L6_1V8	Power for WCN digital I/O circuits
TP2	VREG_L10_1V8	Power for XO circuitinput voltage.
TP3	VREG_L24_1V3	Power for WCN analog, digital,and RF core circuits. Power for WLAN driver amplifier circuits
TP4	VREG_L16_3V0	Power for WLAN 2.4GHz PA circuits

3. TROUBLE SHOOTING

BT&WIFI control signals are generate by WCN3620



BT/WIFI PATH&TEST POINT(TOP)

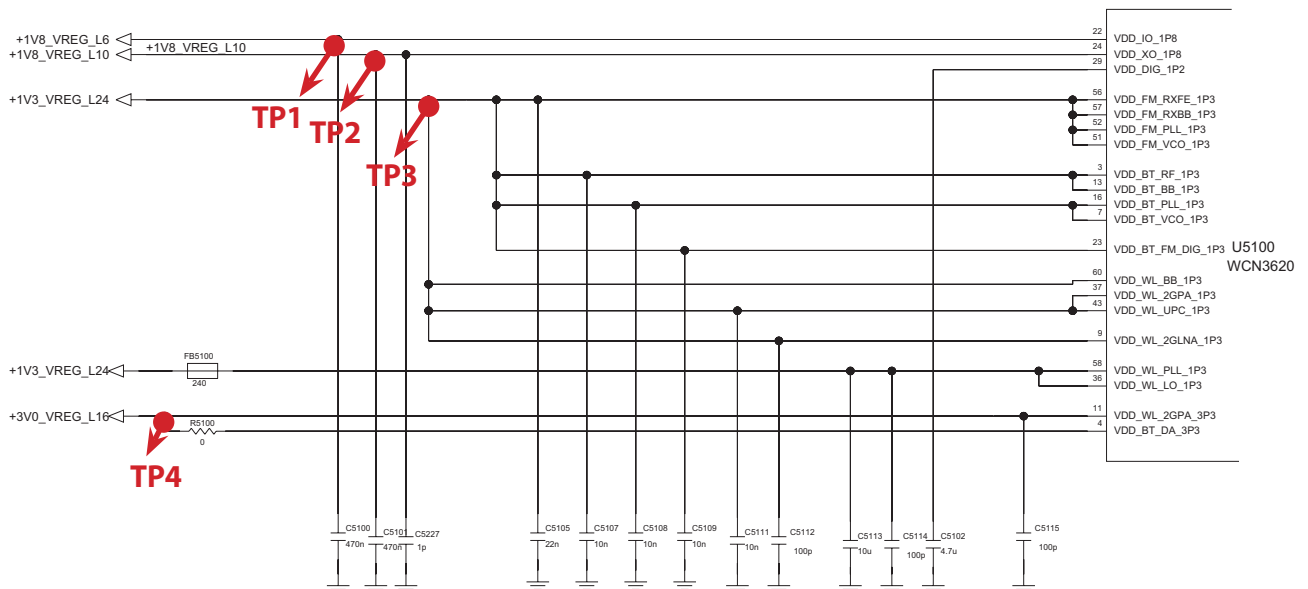
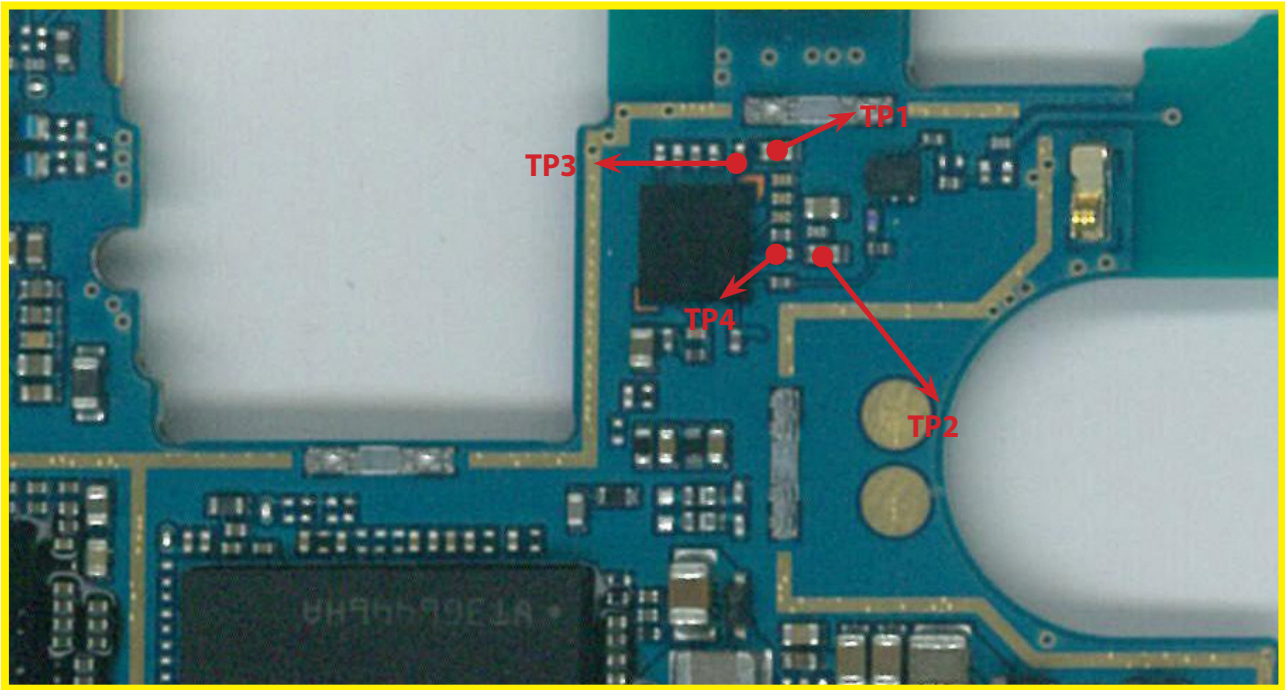


BT/WIFI PATH & TEST POINT(BOT)

3. TROUBLE SHOOTING

BT&WIFI control signals are generate by BCM4330 (U9000)

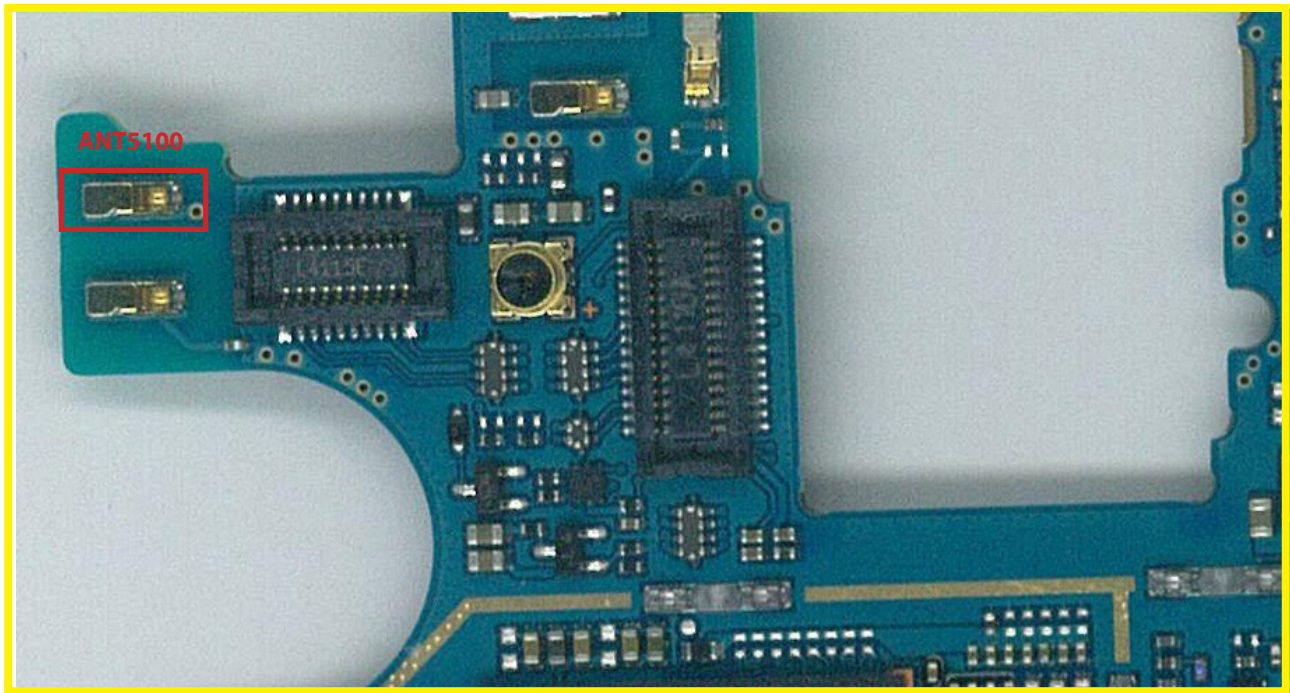
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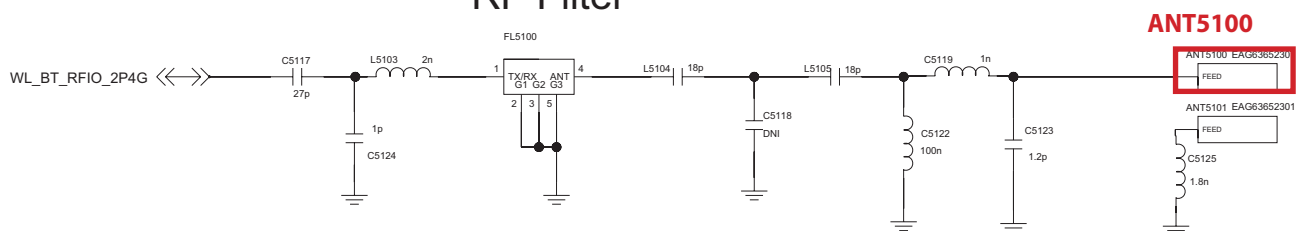
3. TROUBLE SHOOTING

BT&WIFI control signals are generate by BCM4330 (U9000)

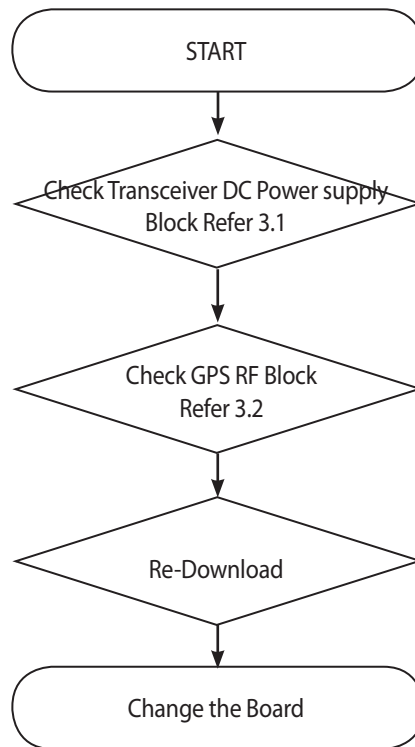
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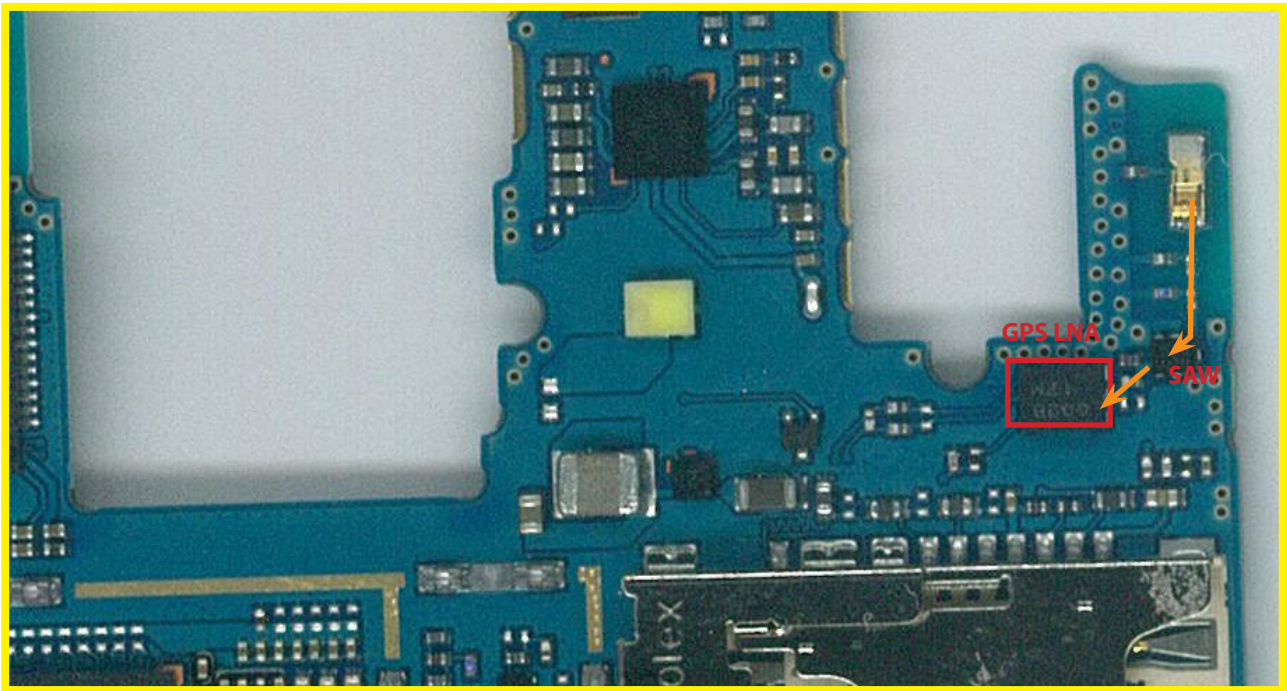
RF Filter



3.9 GPS Part



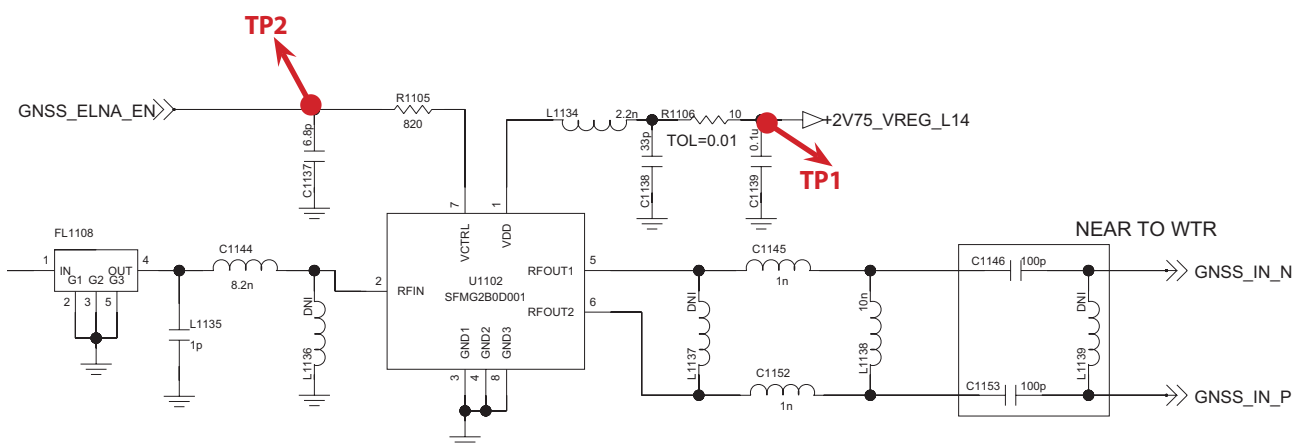
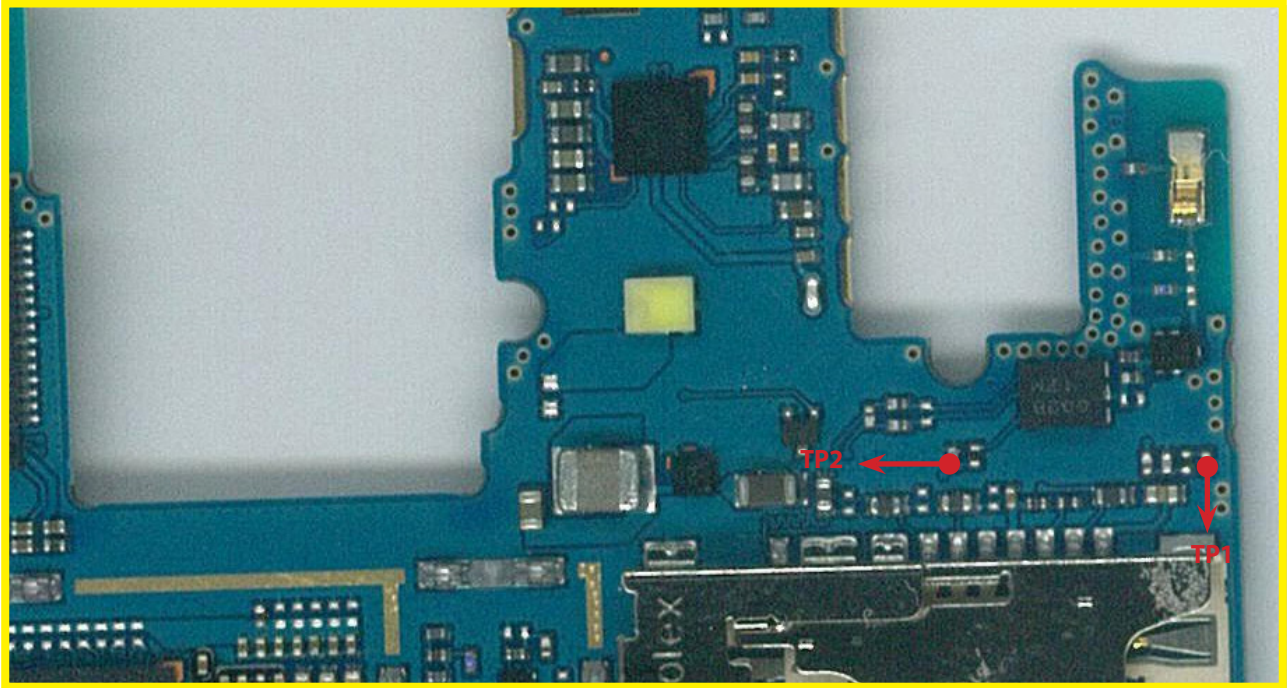
GPS RF PATH



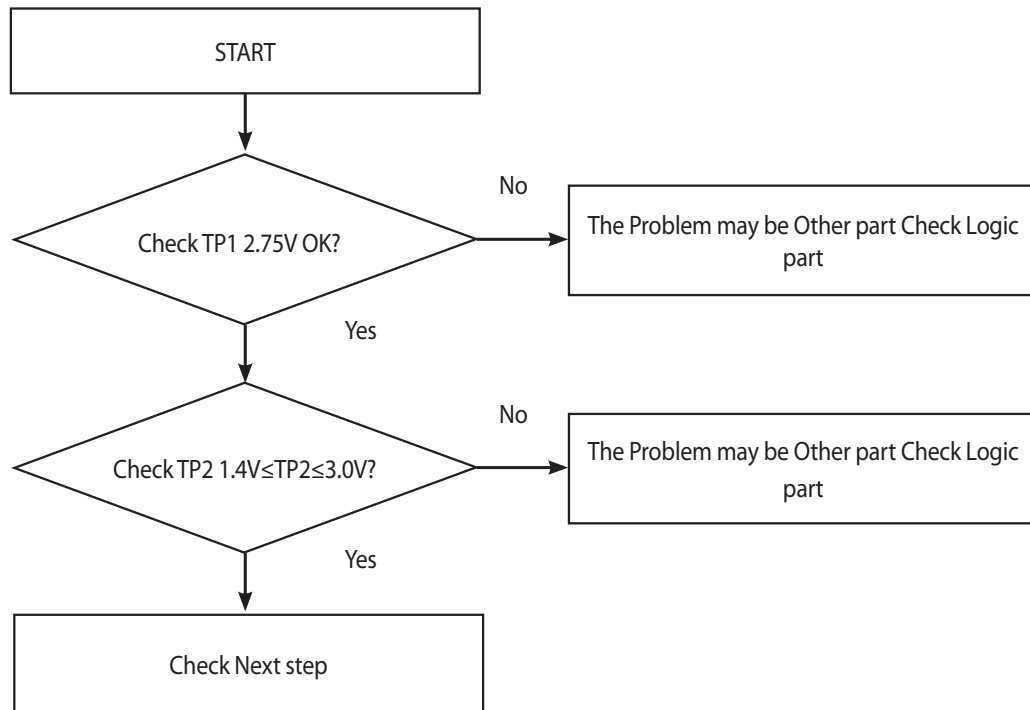
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3. TROUBLE SHOOTING

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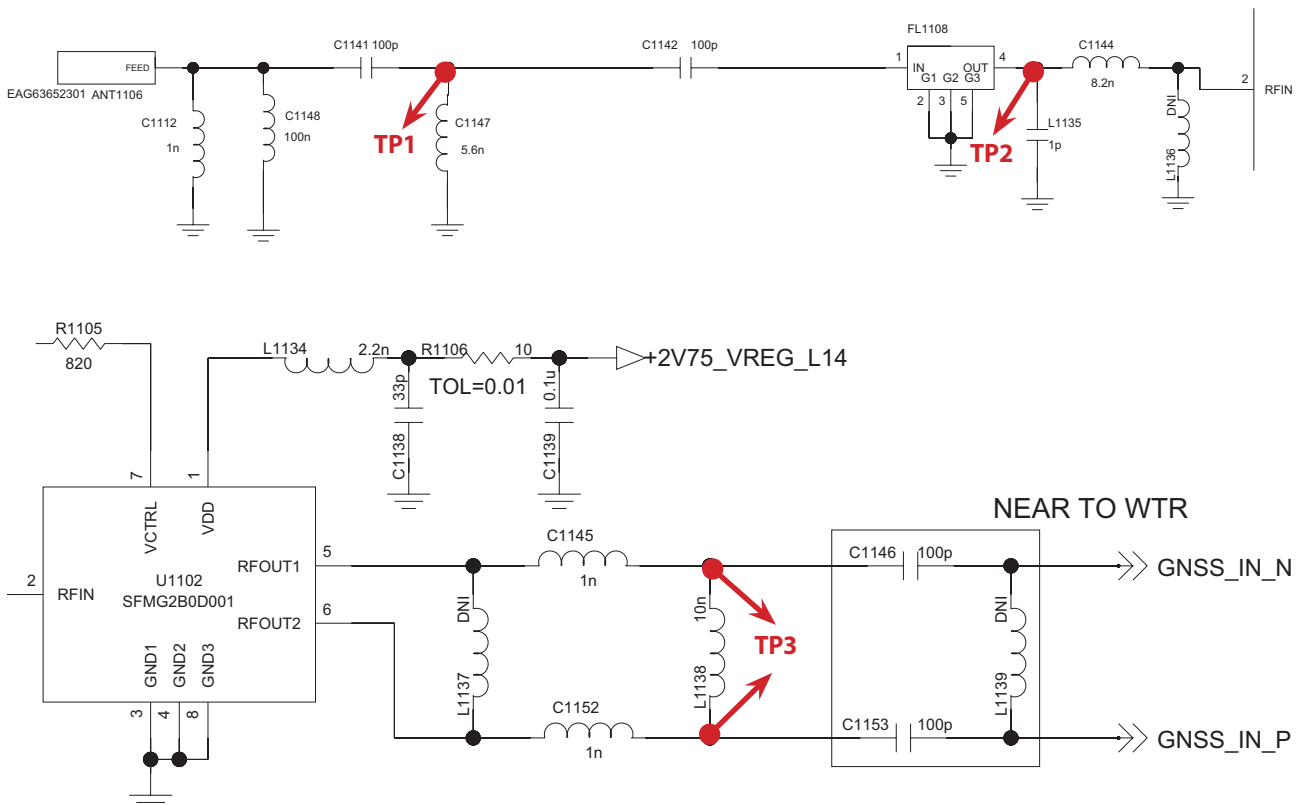
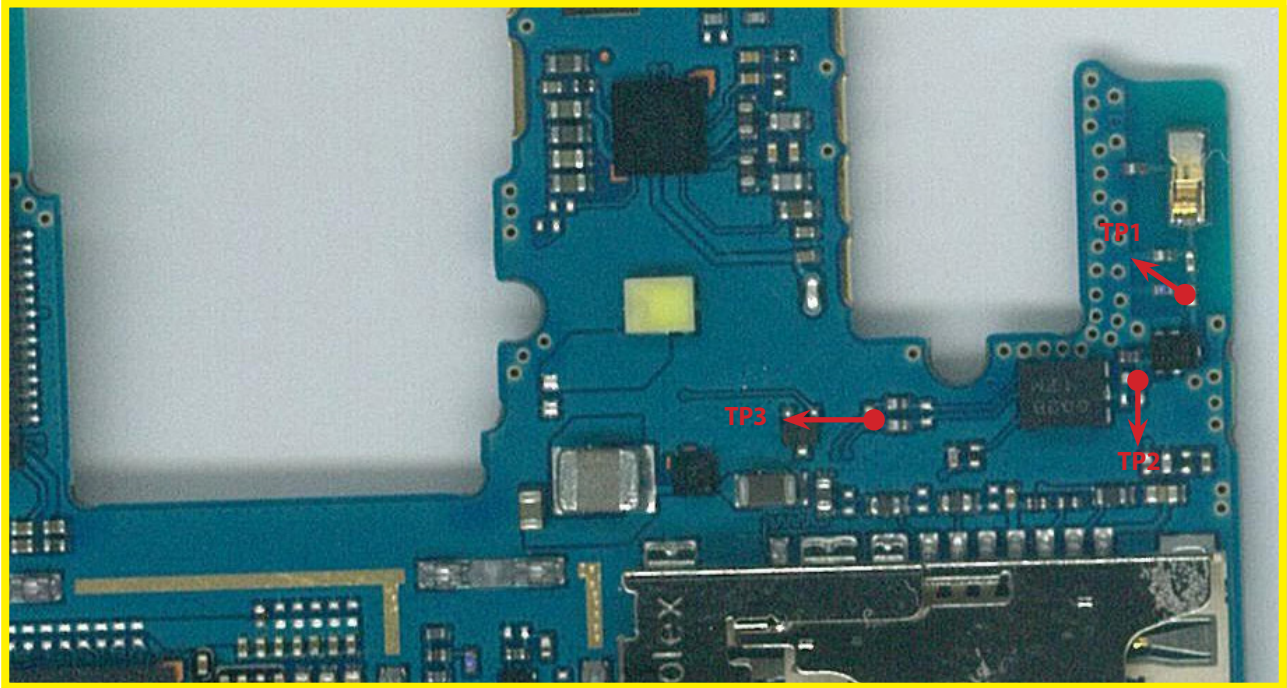


3. TROUBLE SHOOTING

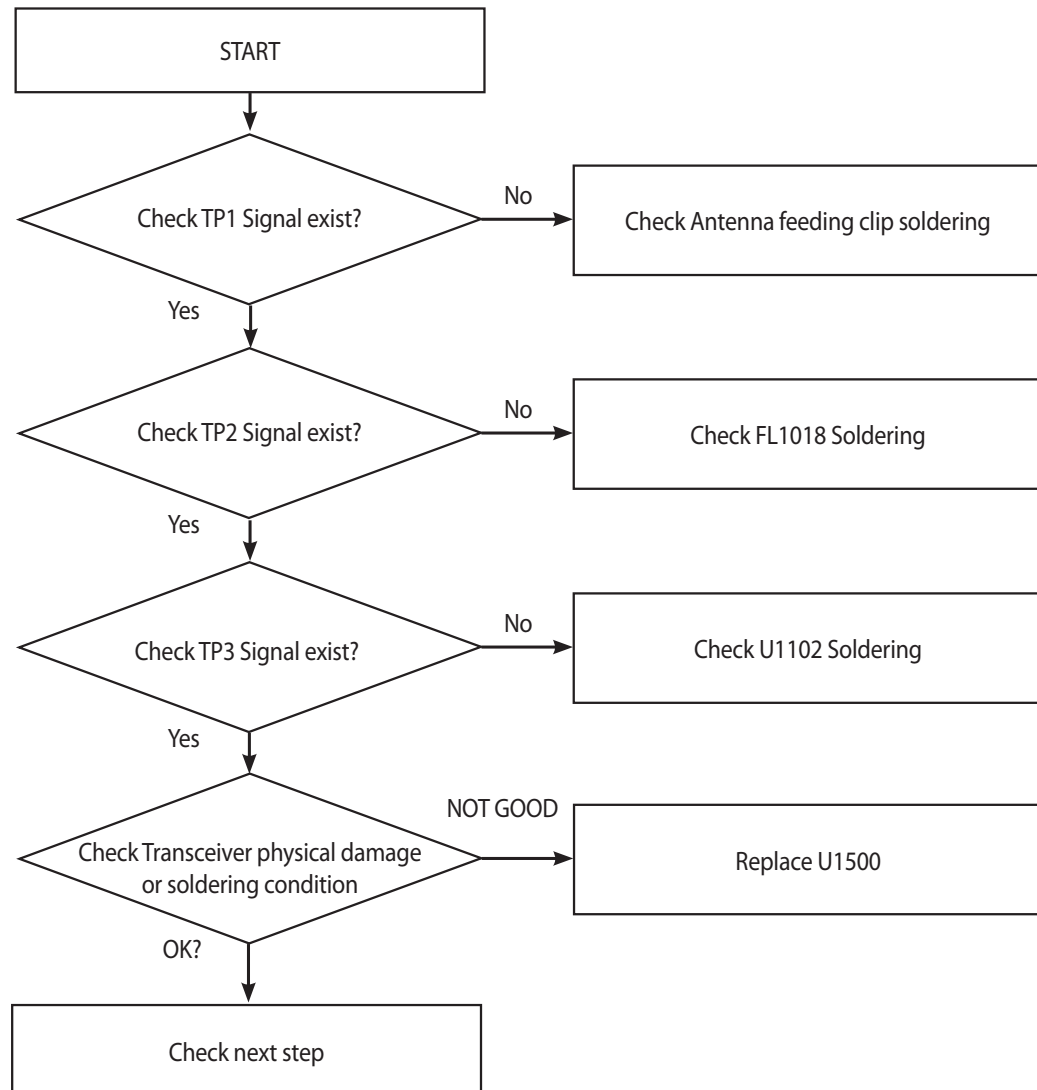


3. TROUBLE SHOOTING

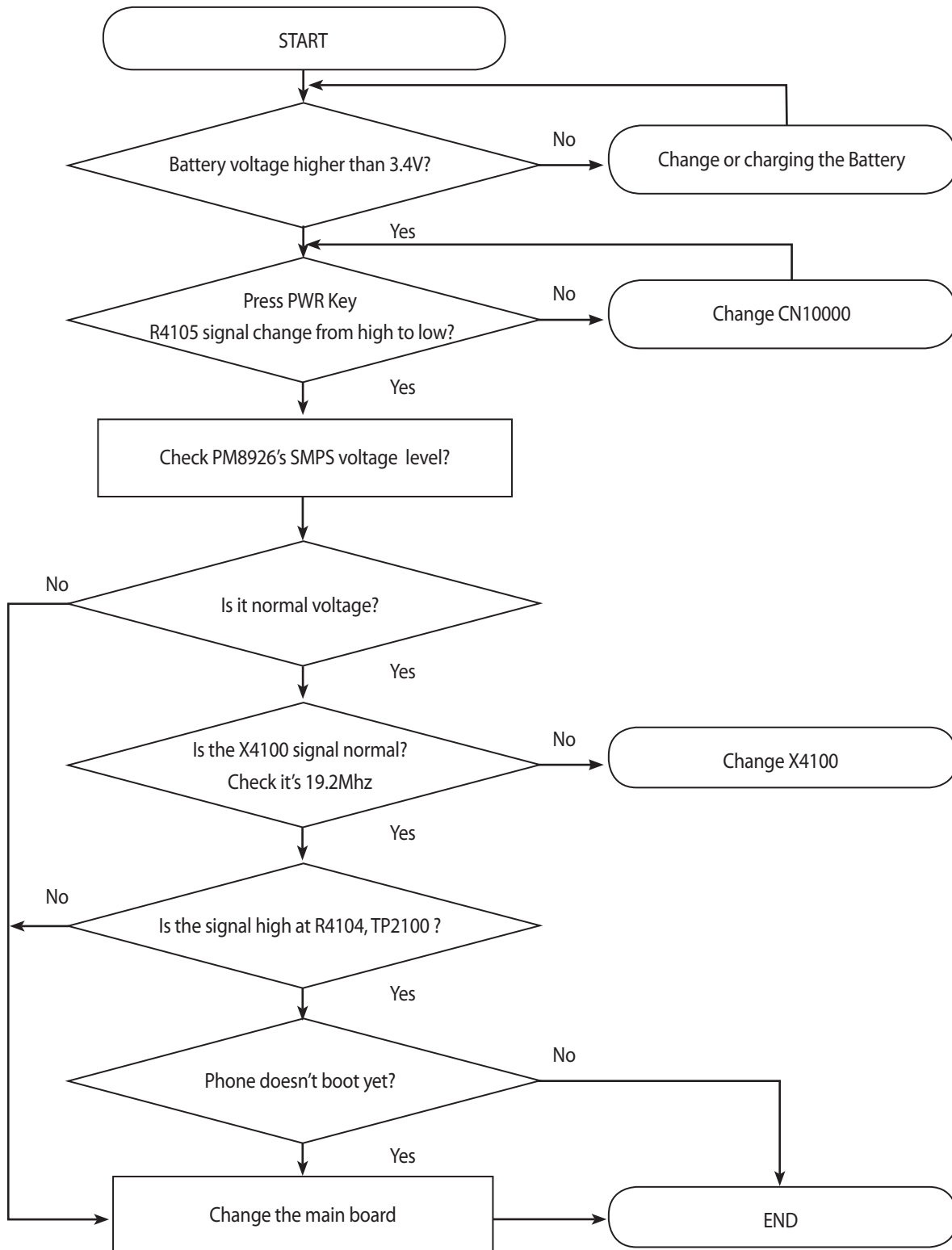
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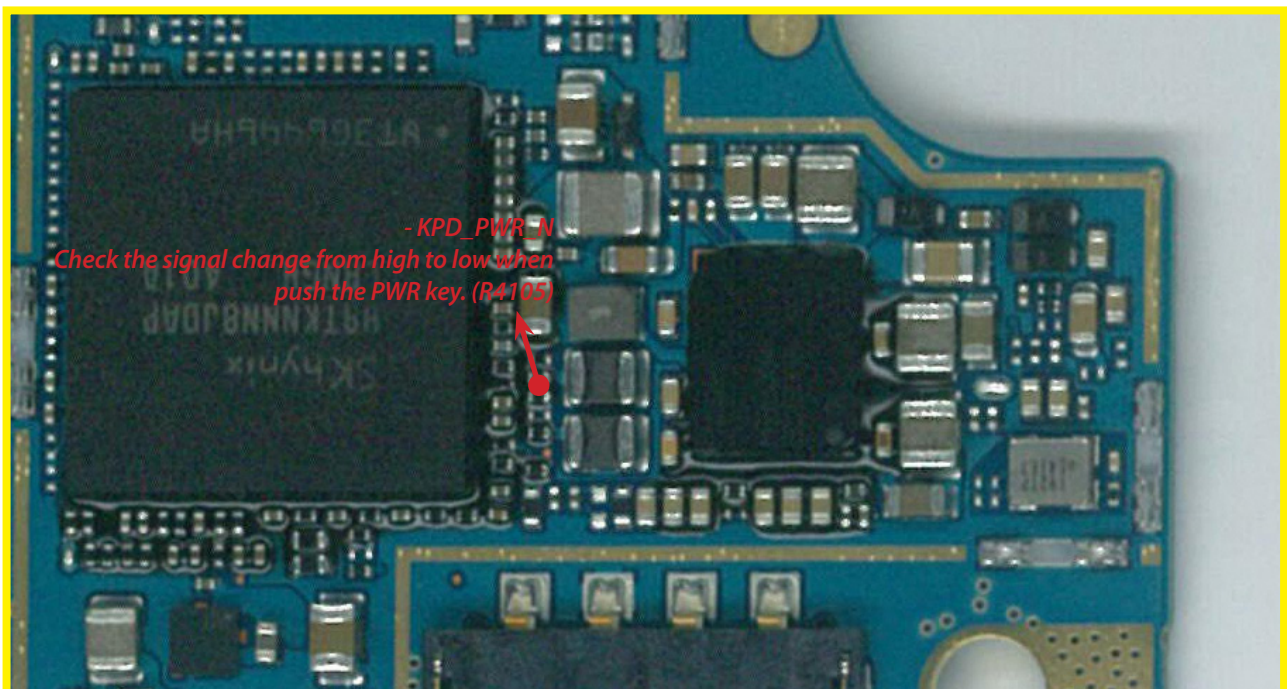
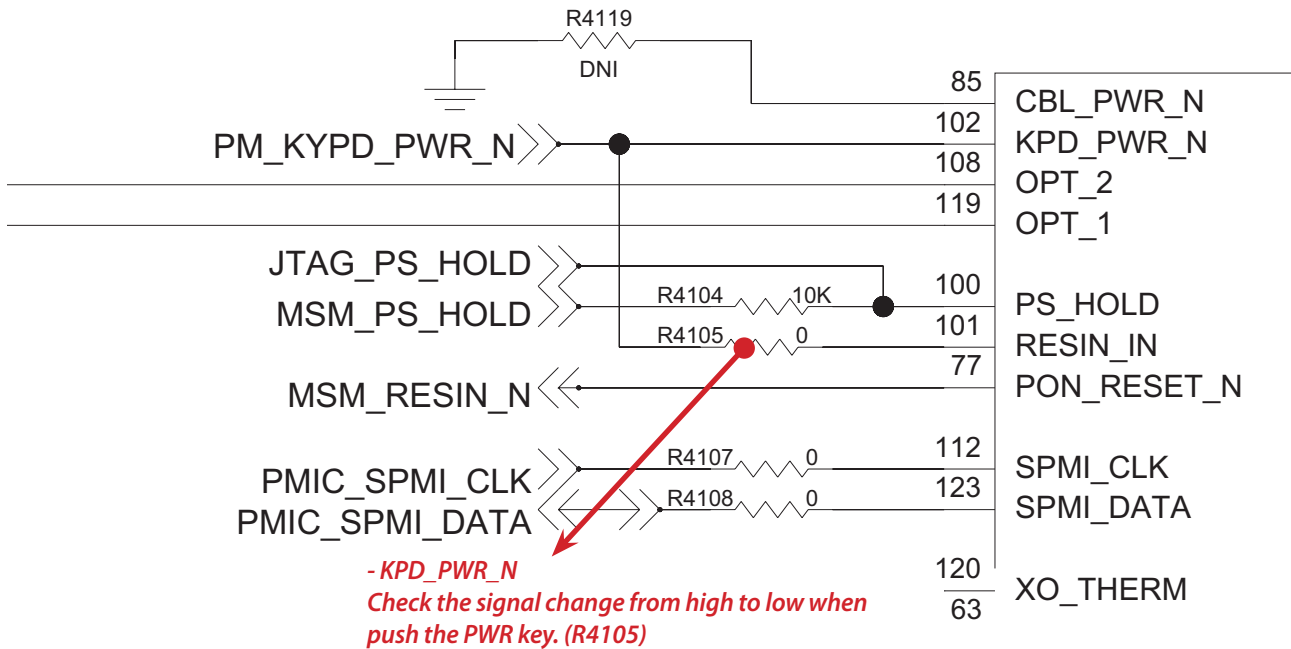
3. TROUBLE SHOOTING



3.10 Power

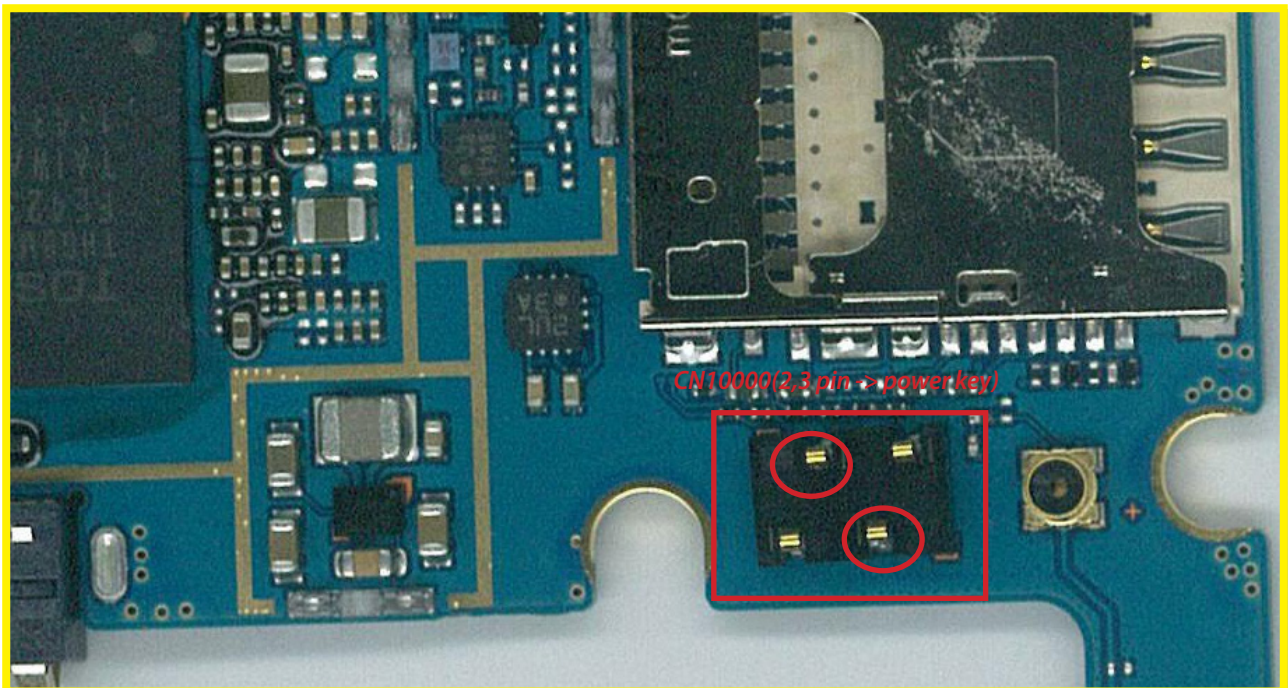
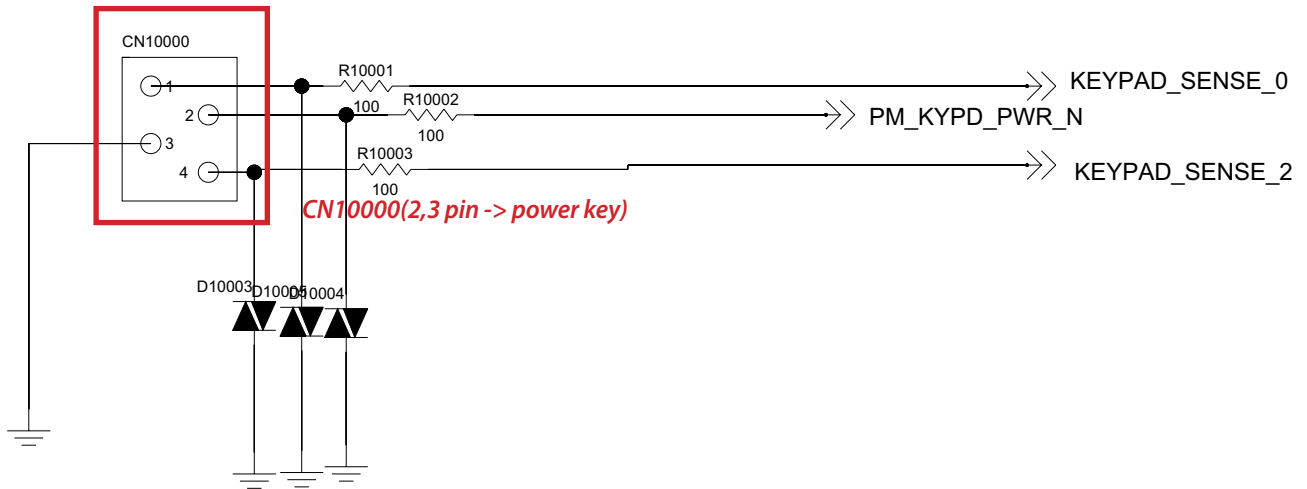


3. TROUBLE SHOOTING



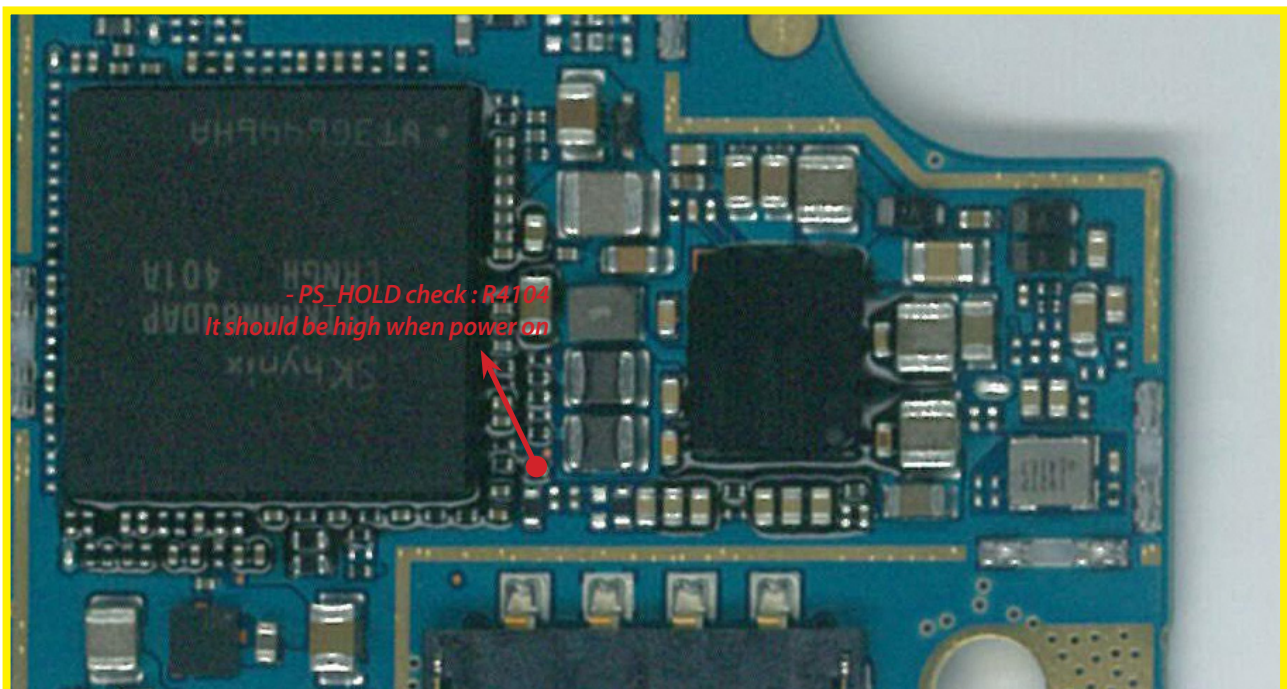
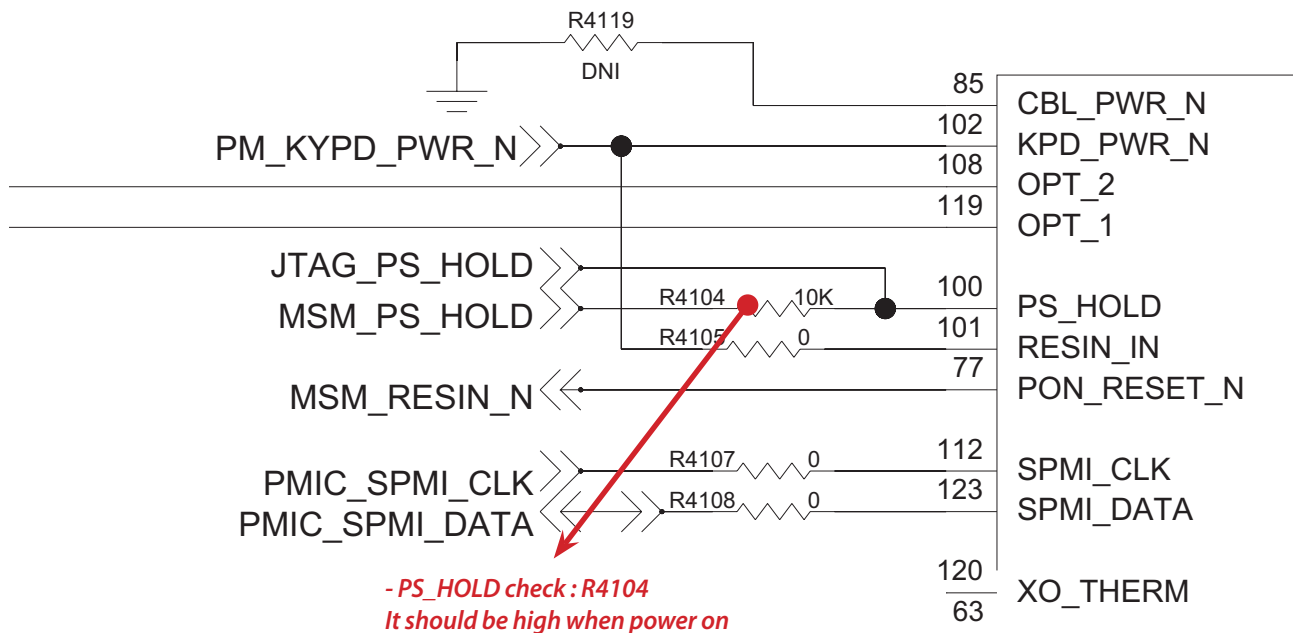
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3. TROUBLE SHOOTING



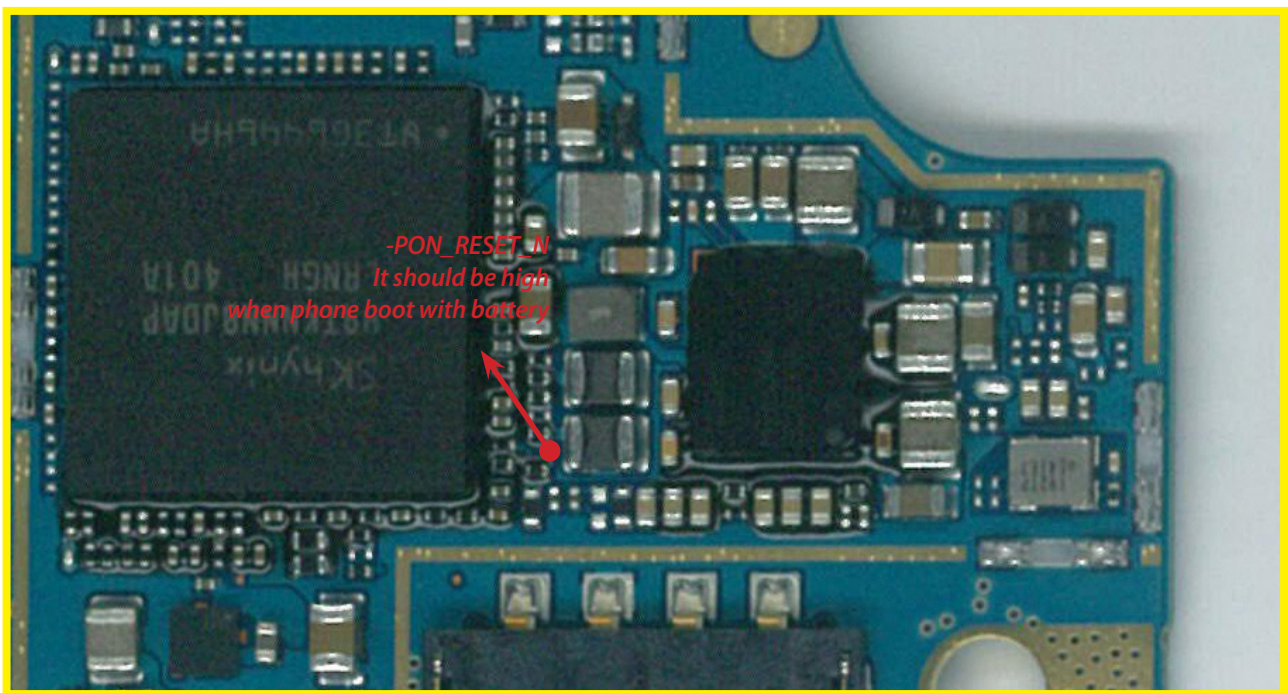
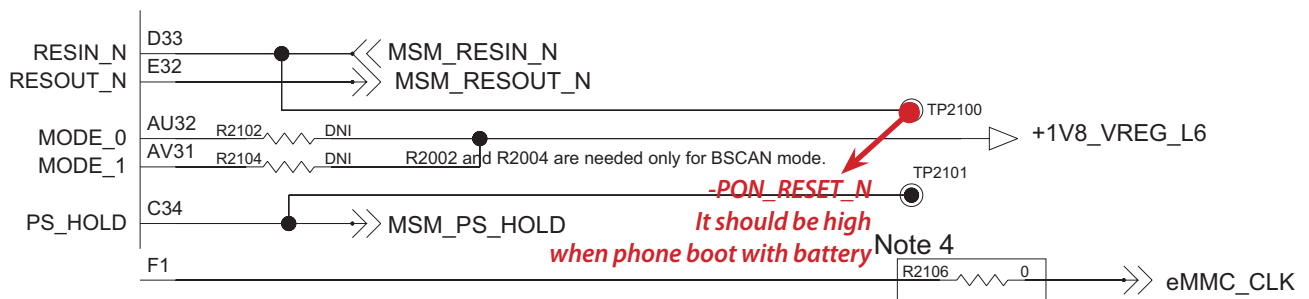
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3. TROUBLE SHOOTING



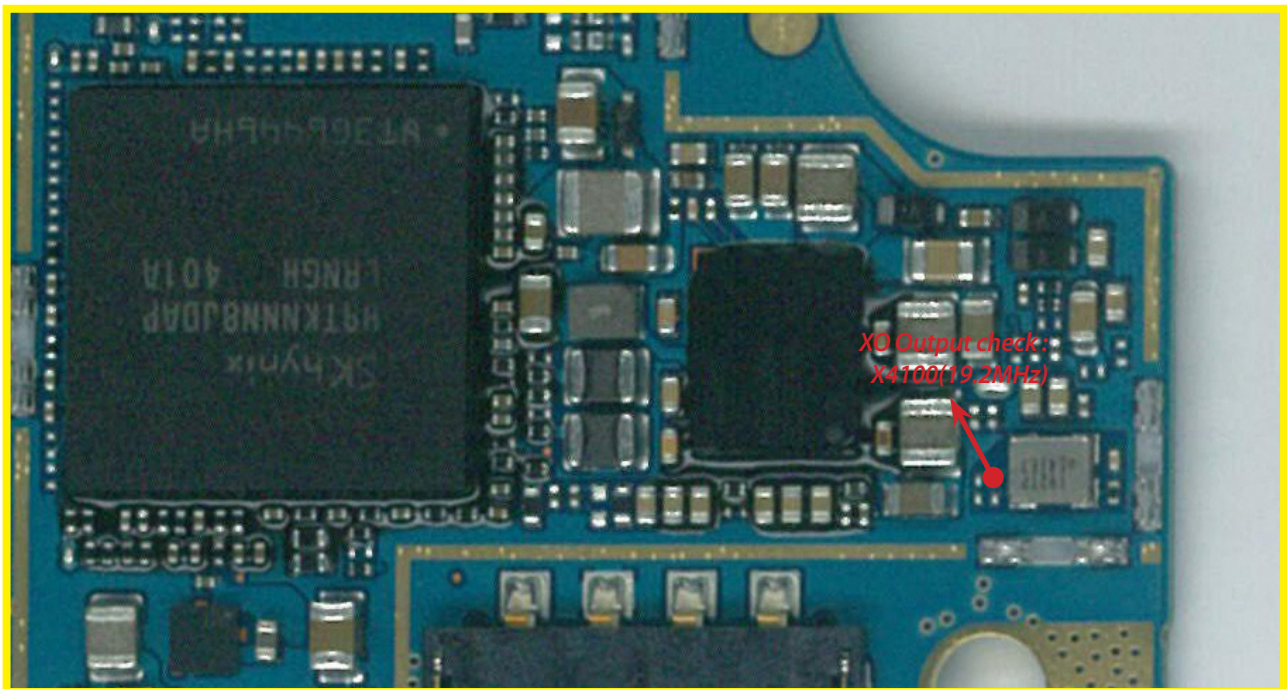
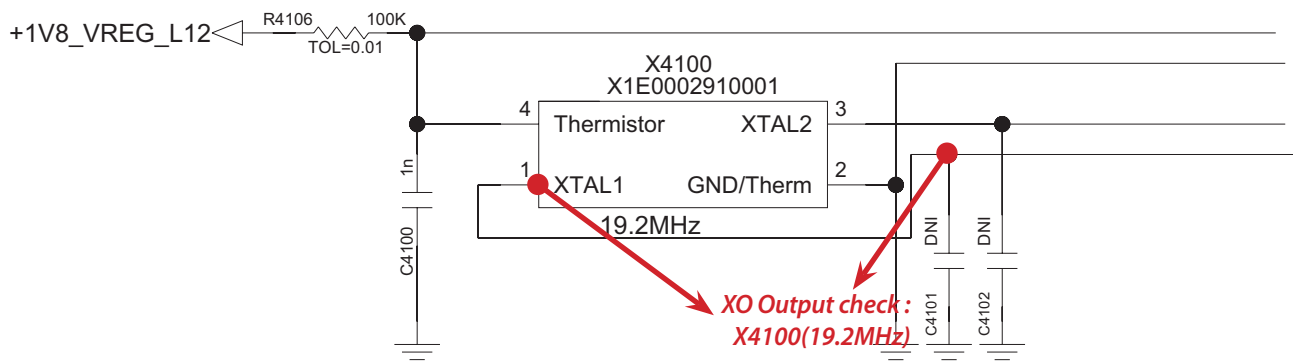
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3. TROUBLE SHOOTING

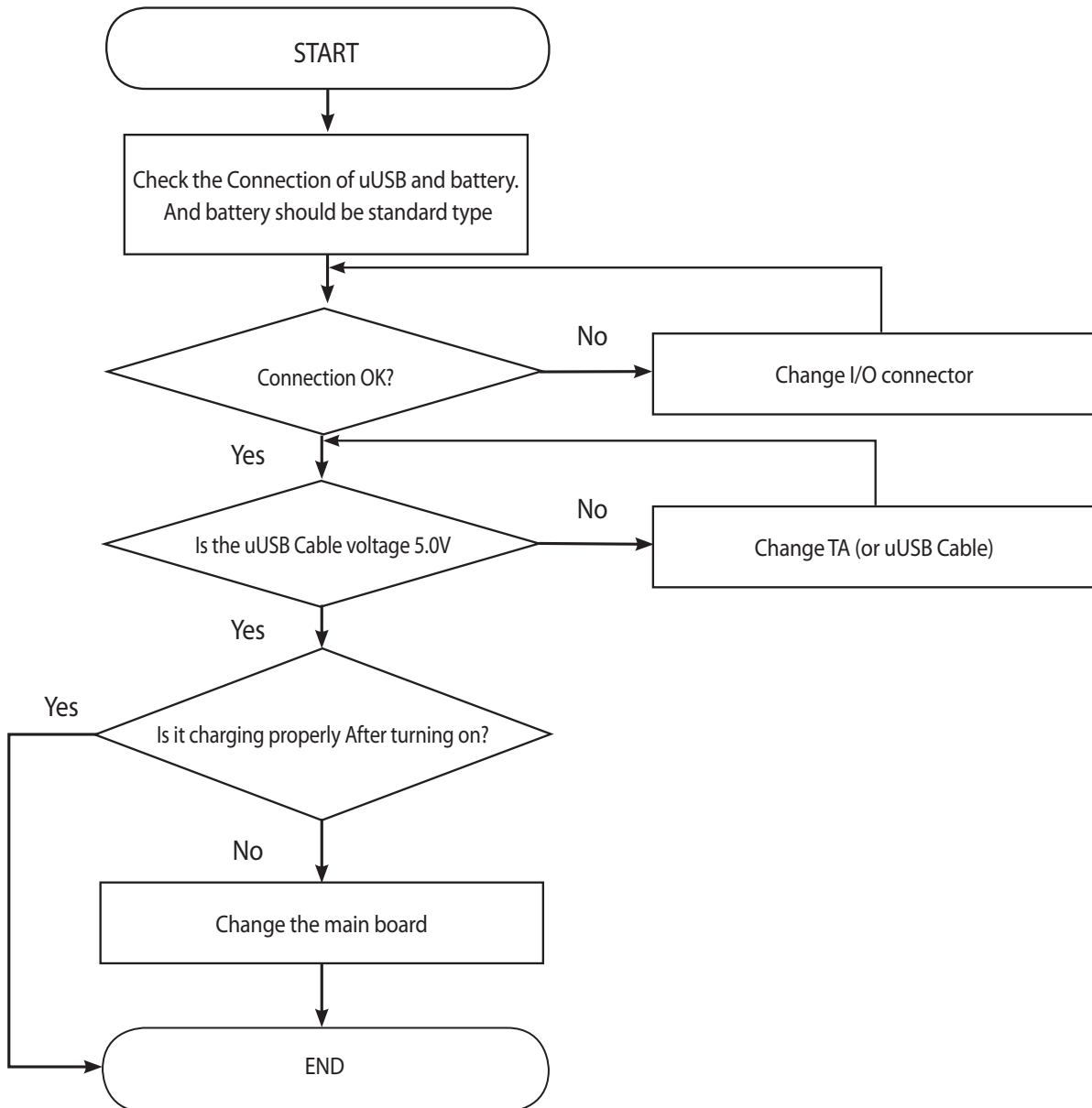


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3. TROUBLE SHOOTING



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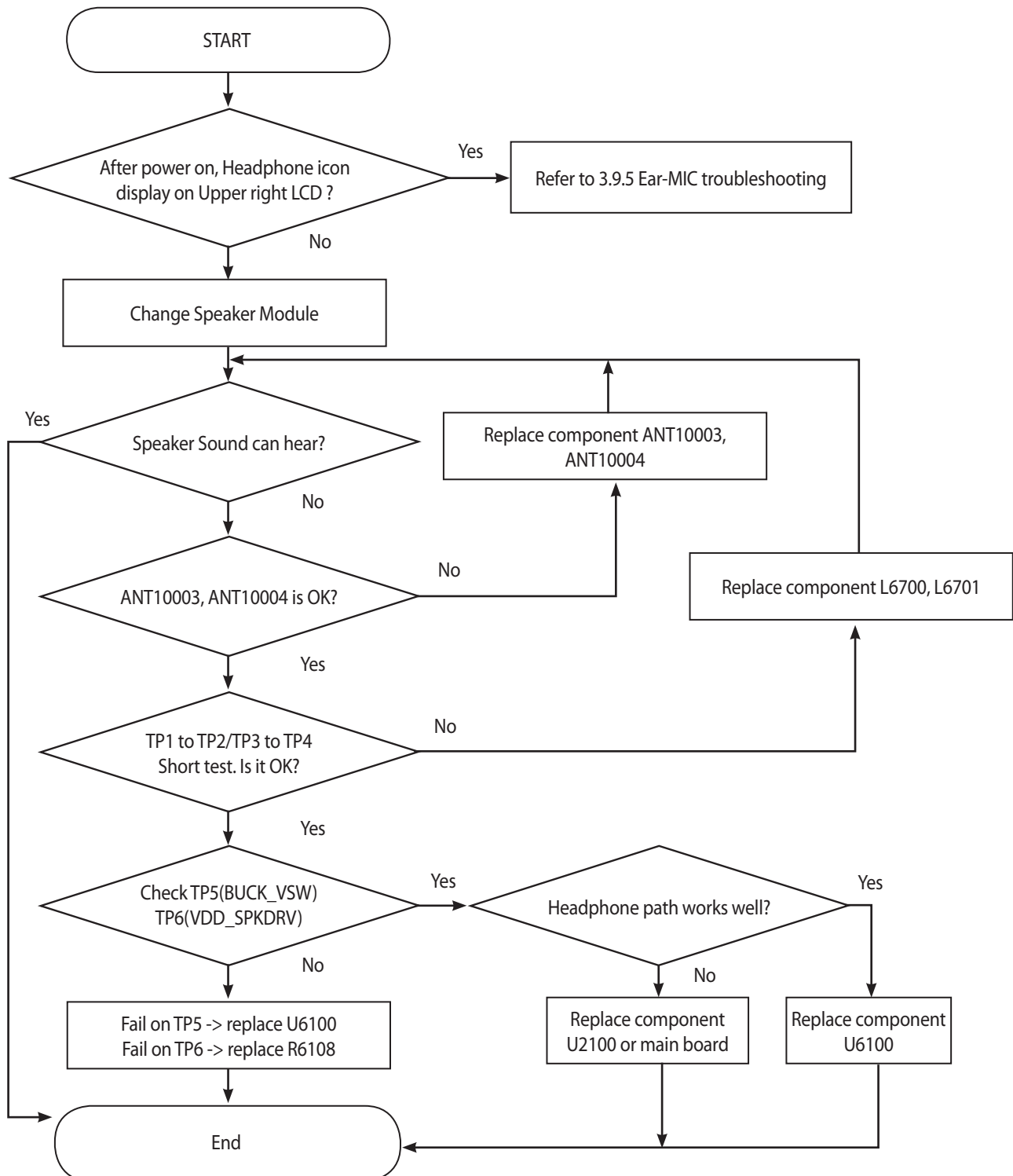


3.12 Audio

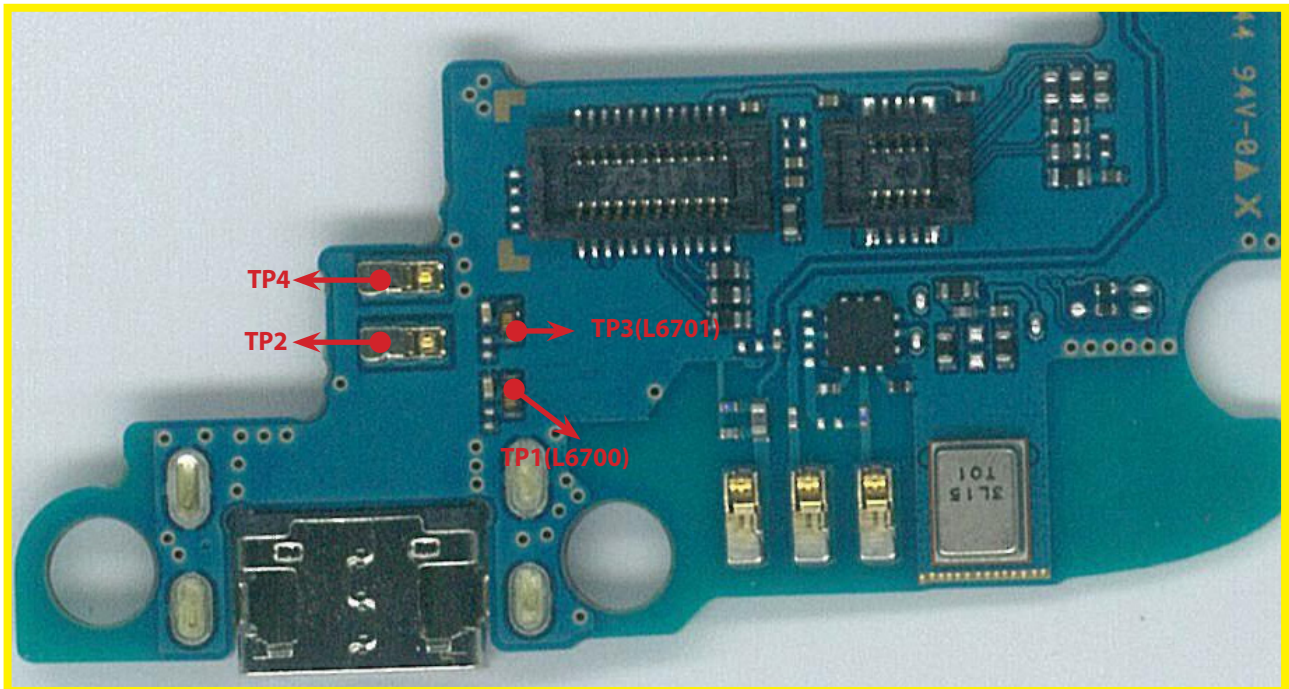
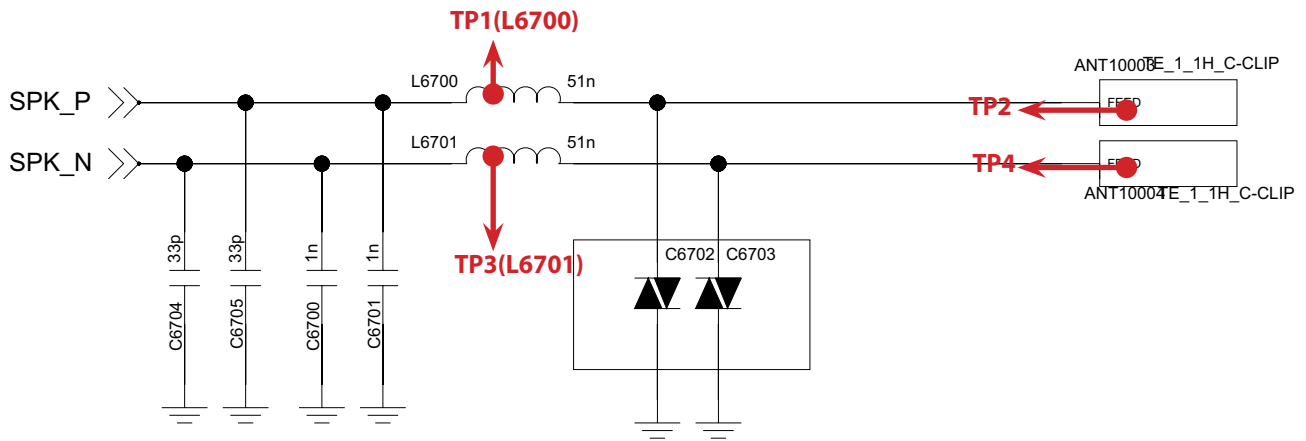
3.12.1 Speaker troubleshooting

Speaker path as below :

MSM8926-2 -> WCD9302 SPKR_DRVP / SPRK_DRV -> Speaker

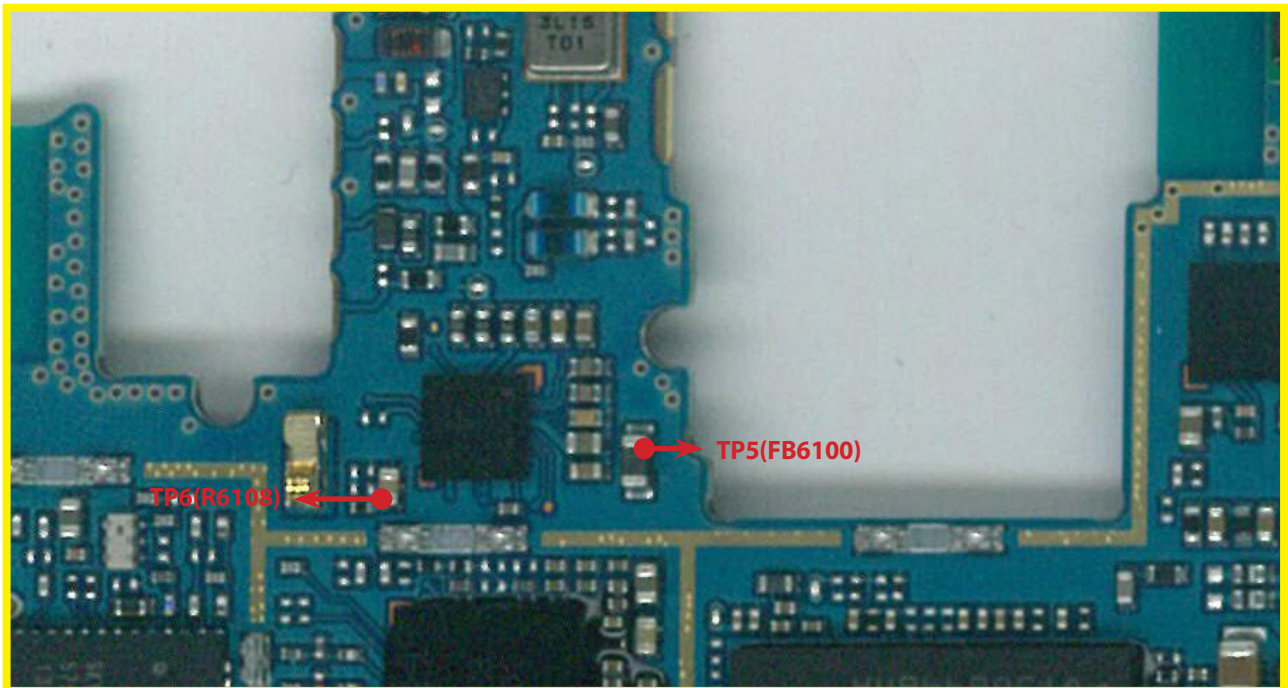
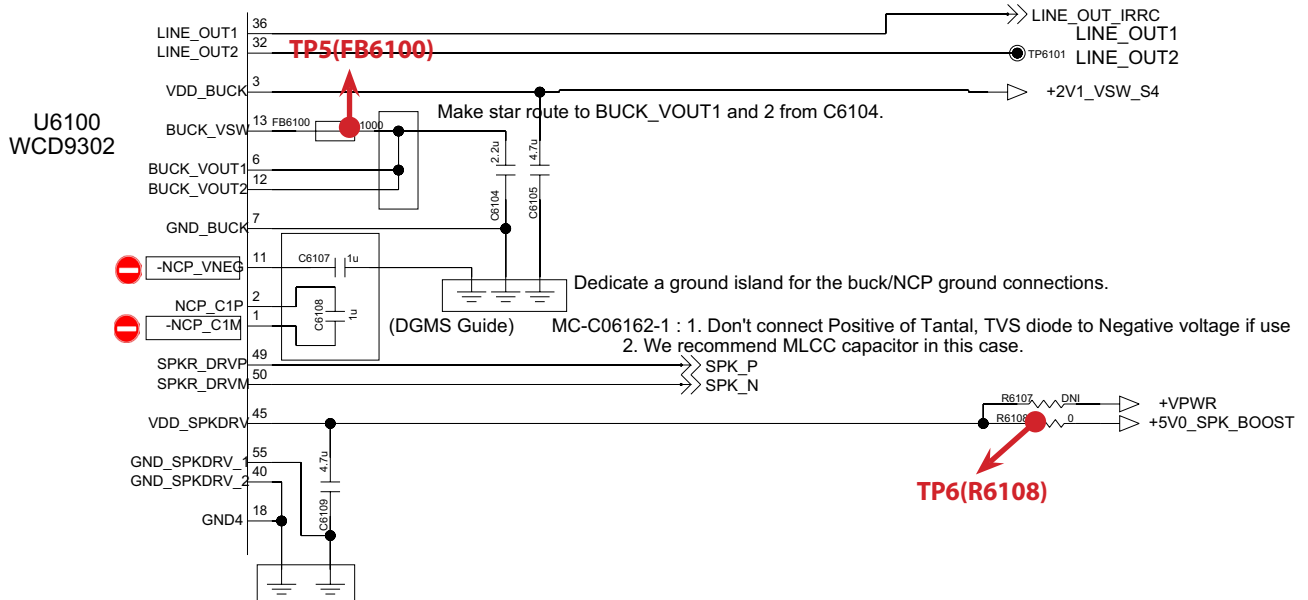


3. TROUBLE SHOOTING



<Main Bot>

3. TROUBLE SHOOTING

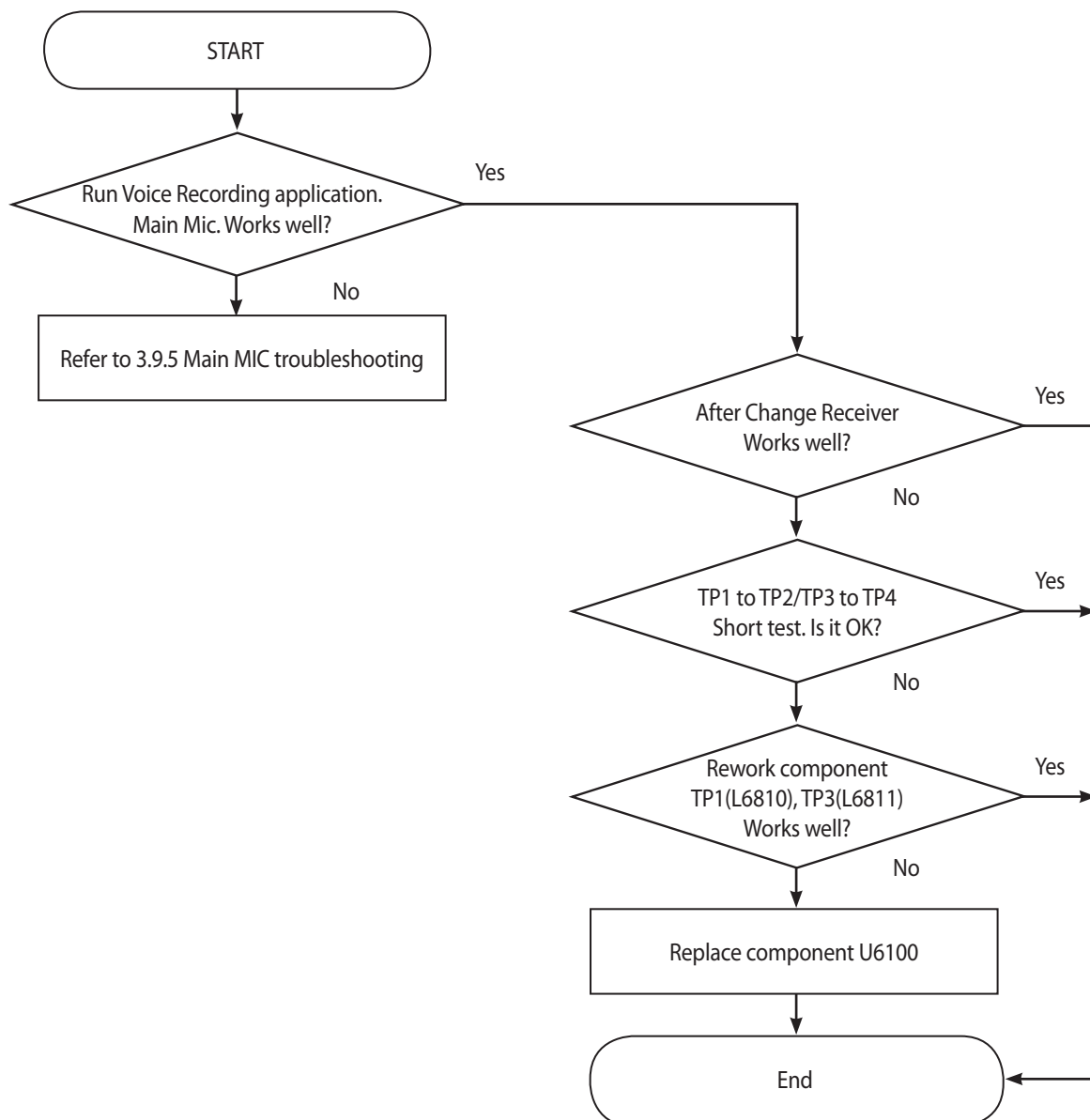


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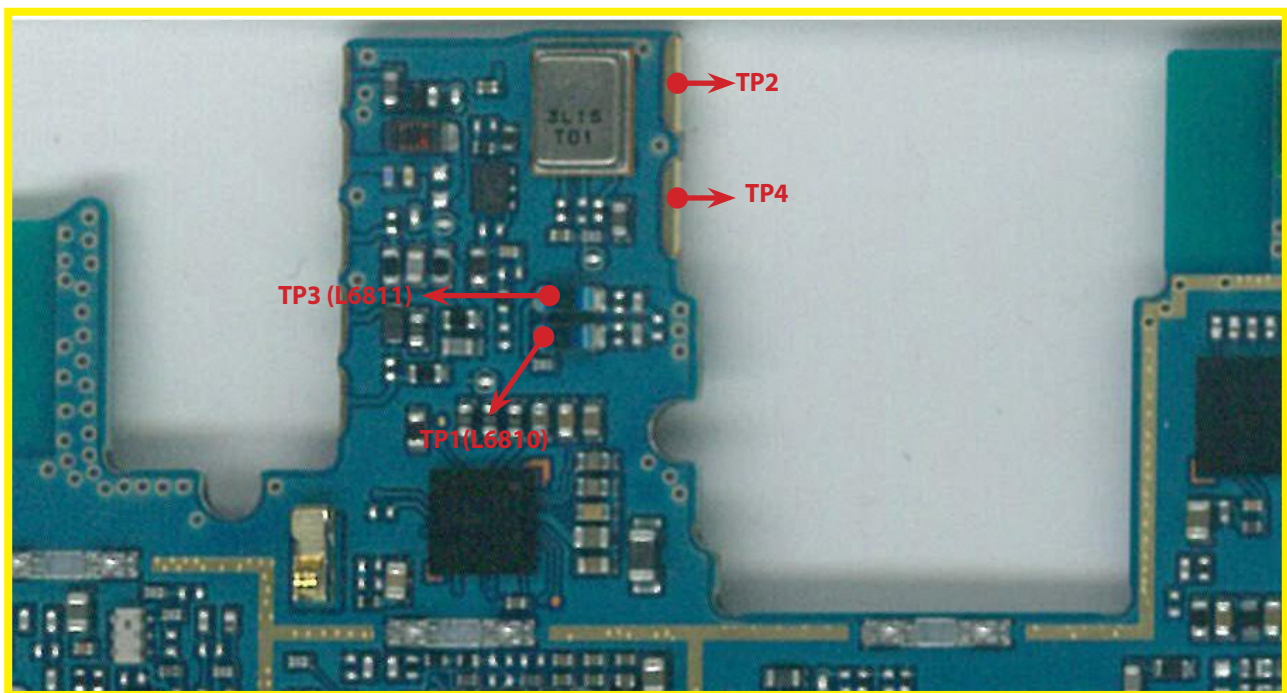
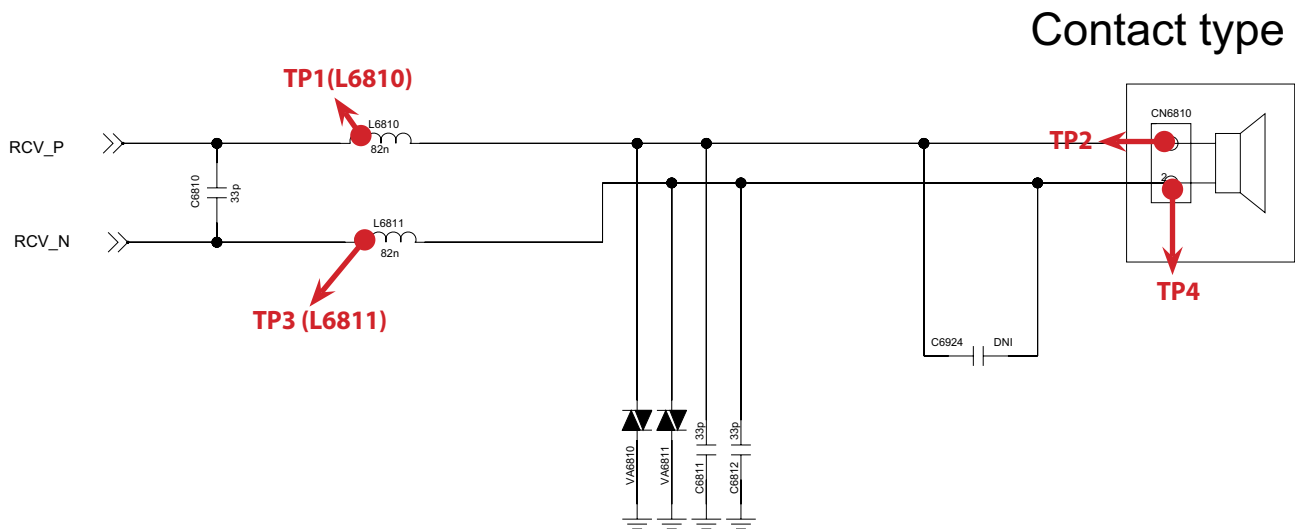
3.12.2 Receiver troubleshooting

Receiver path as below :

MSM8926-2 -> WCD9302 EAROP/ EARM -> Receiver



3. TROUBLE SHOOTING

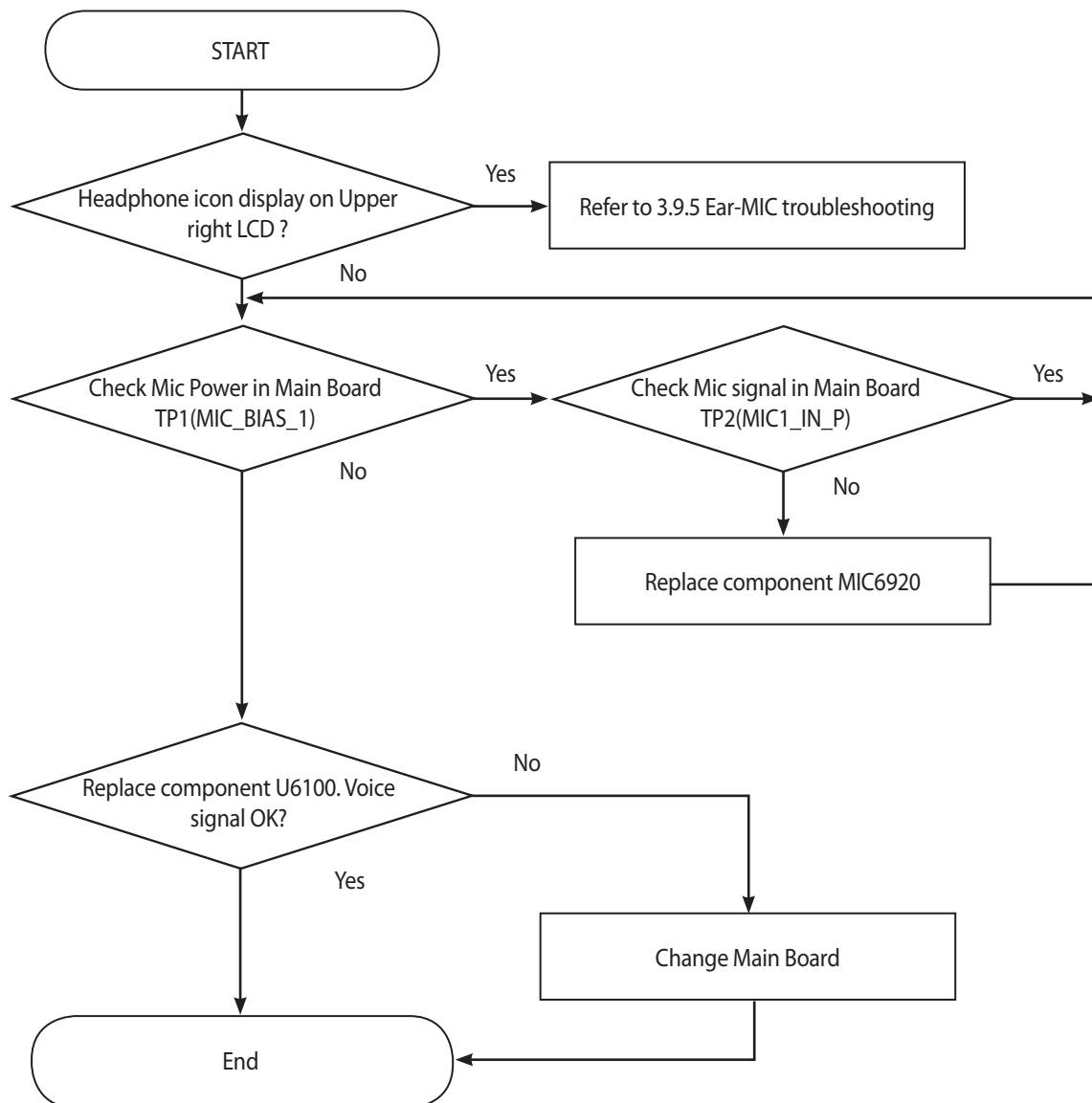


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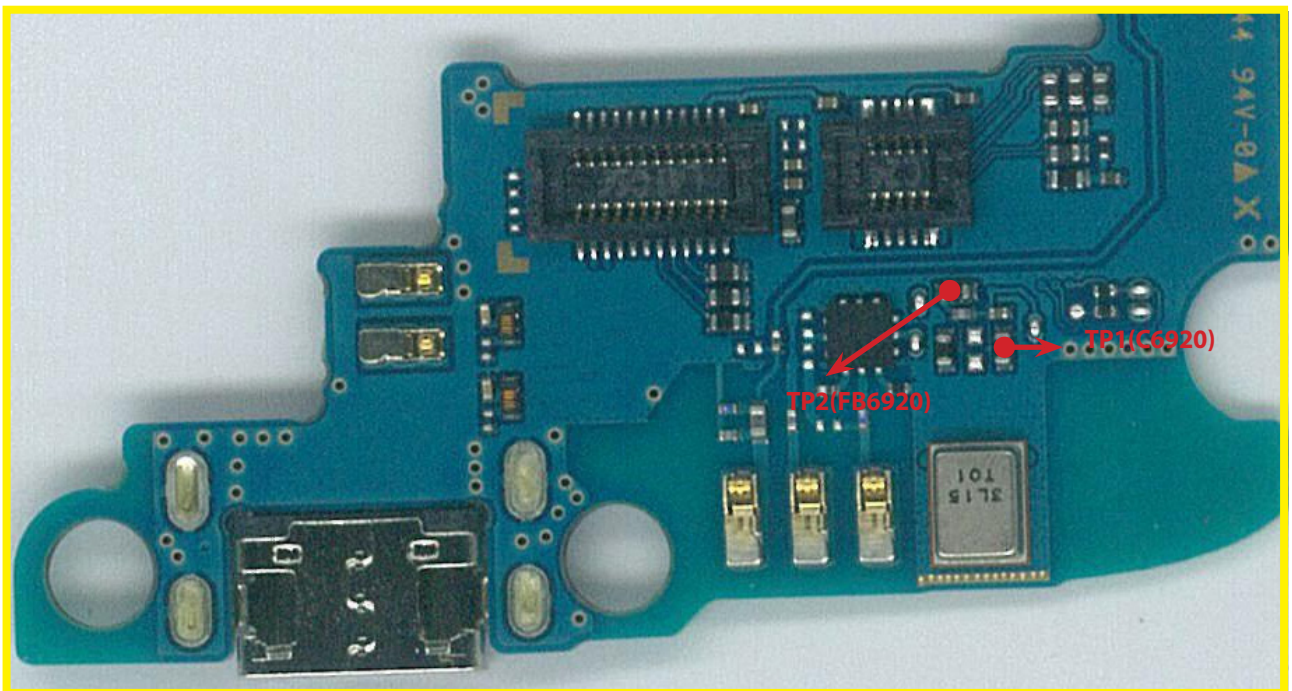
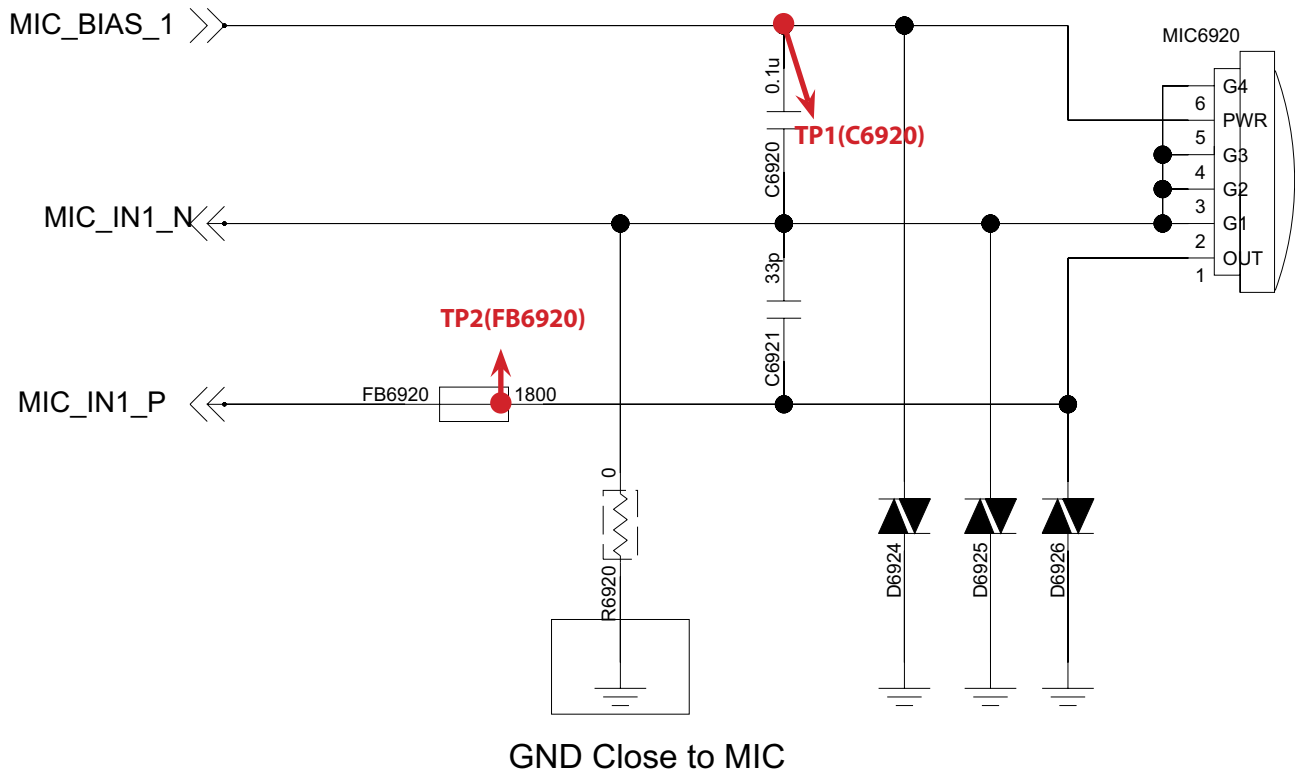
3.12.3 Main MIC troubleshooting

Main Mic. path as below :

MSM8926-2 -> WCD9302 MIC1_INP/ MIC1_INM -> Mic



3. TROUBLE SHOOTING

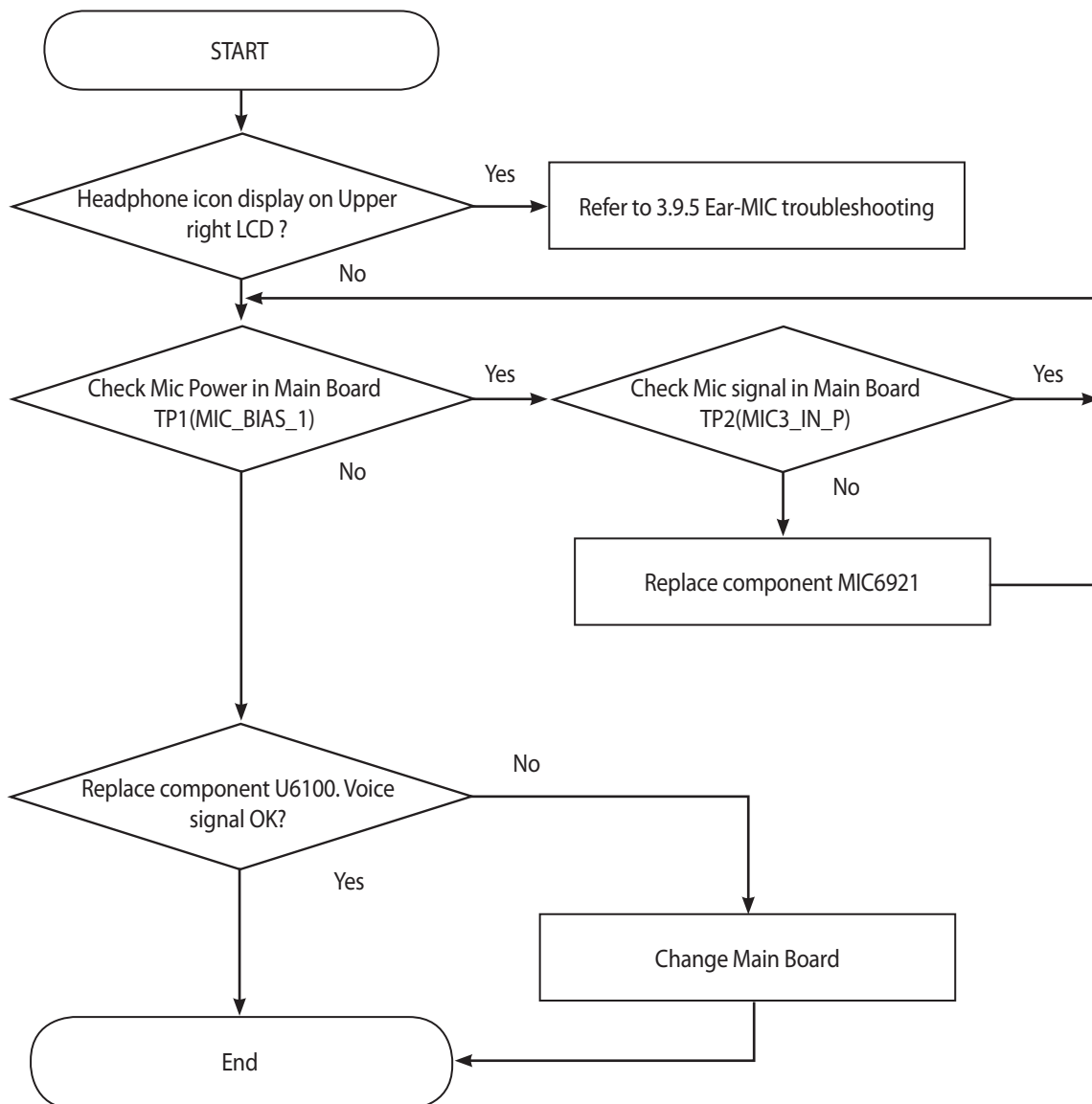


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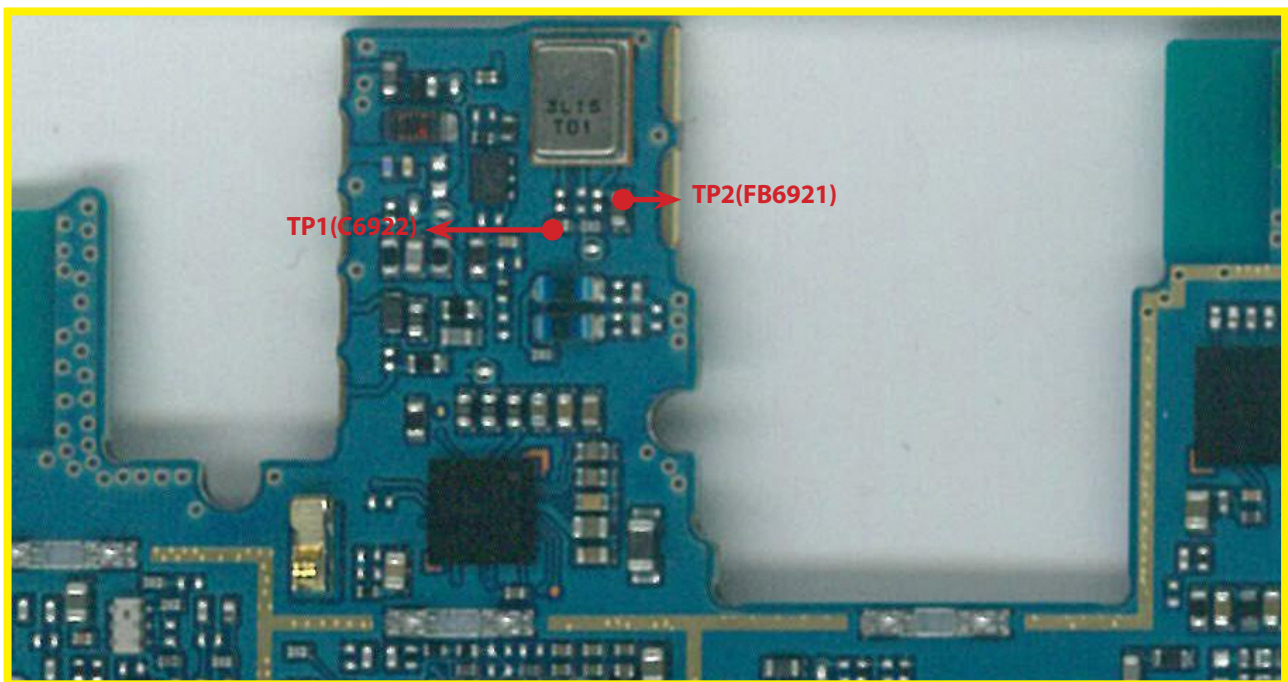
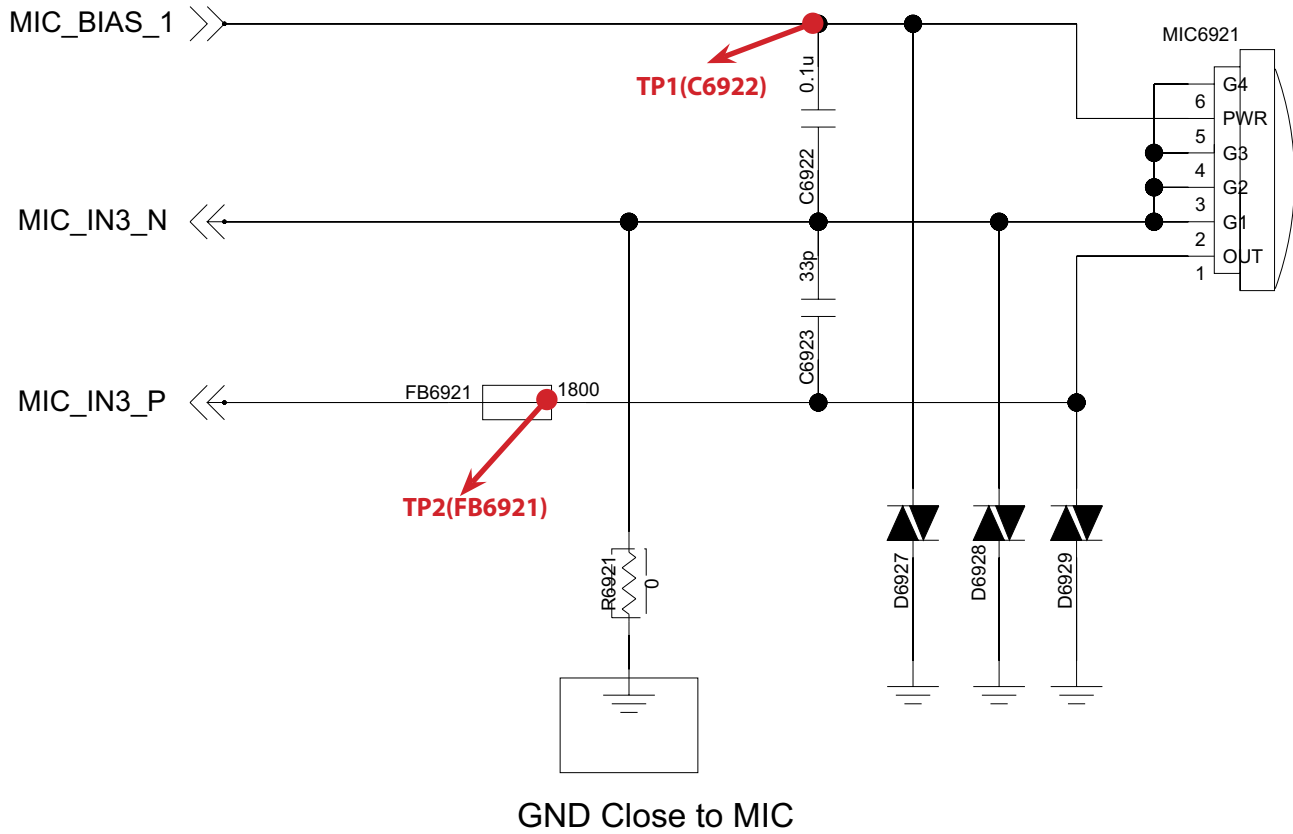
3.12.4 SUB MIC troubleshooting

Sub Mic. path as below :

MSM8926-2 -> WCD9302 MIC3_INP/ MIC3_INM -> Mic



3. TROUBLE SHOOTING



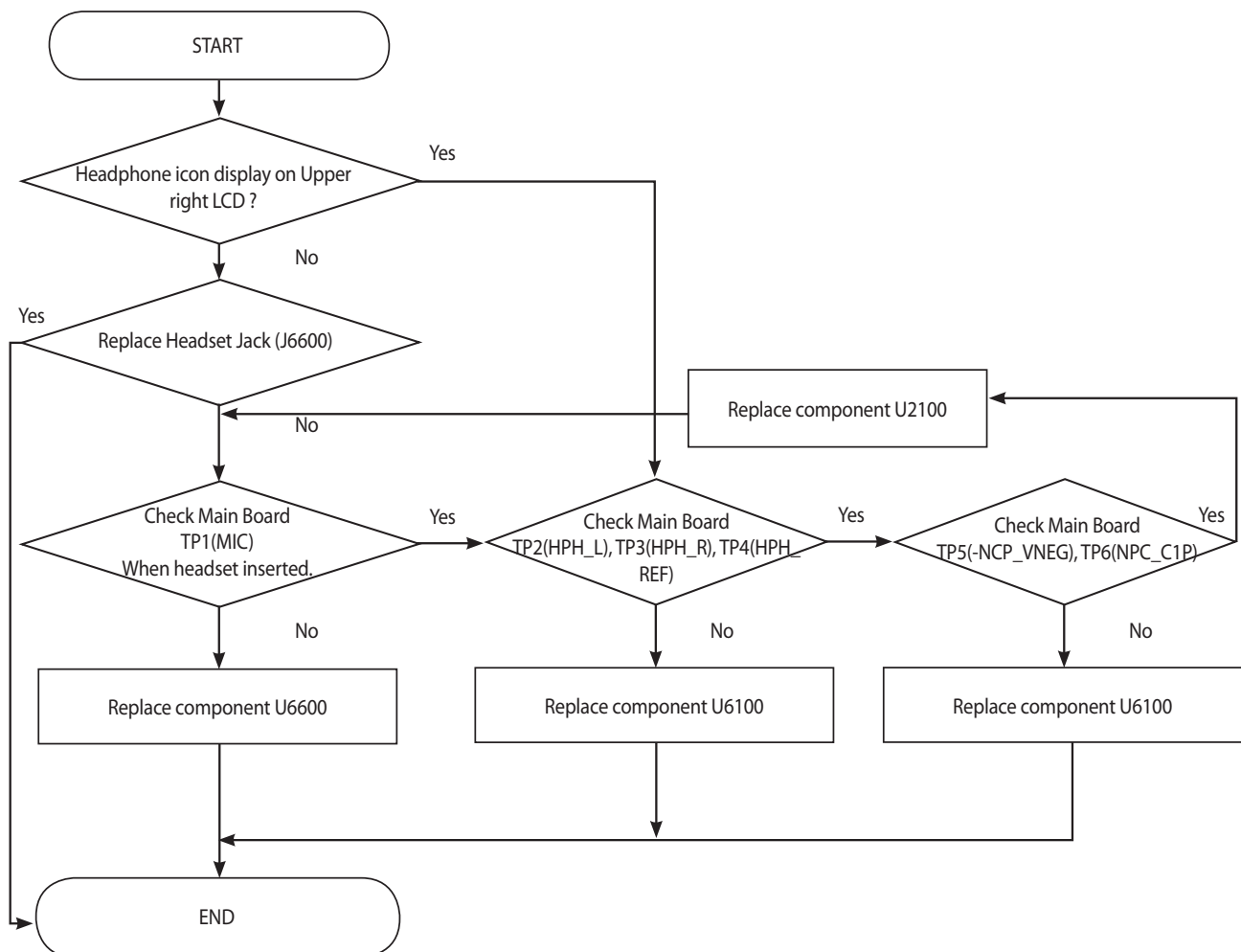
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3.12.5 Ear-MIC troubleshooting

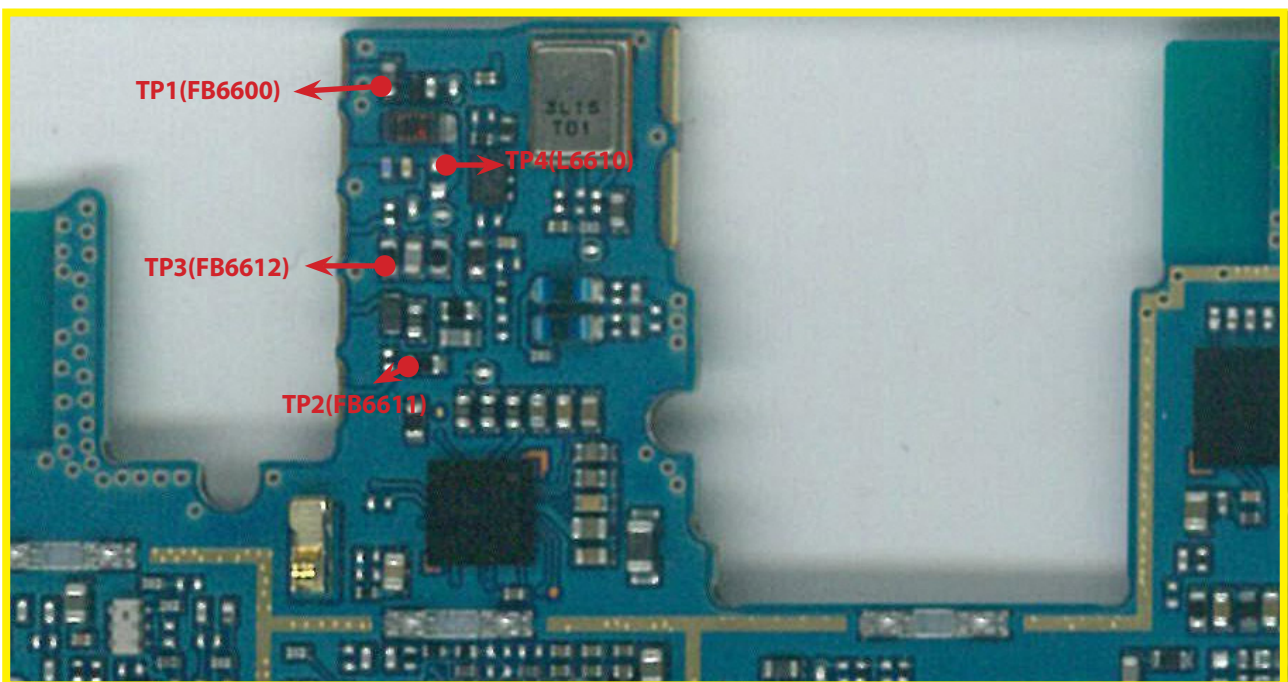
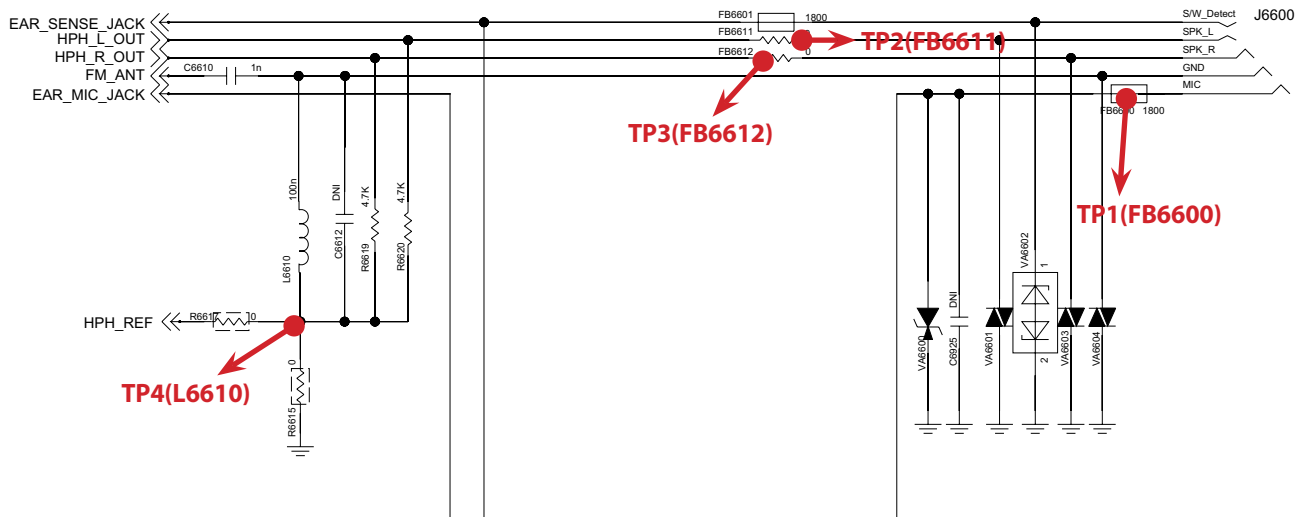
3.12.5.1 Headset Sound trouble

Ear-Mic. path as below :

MSM8926-2 -> WCD9302 HPH_L / HPH_R -> Headset



3. TROUBLE SHOOTING

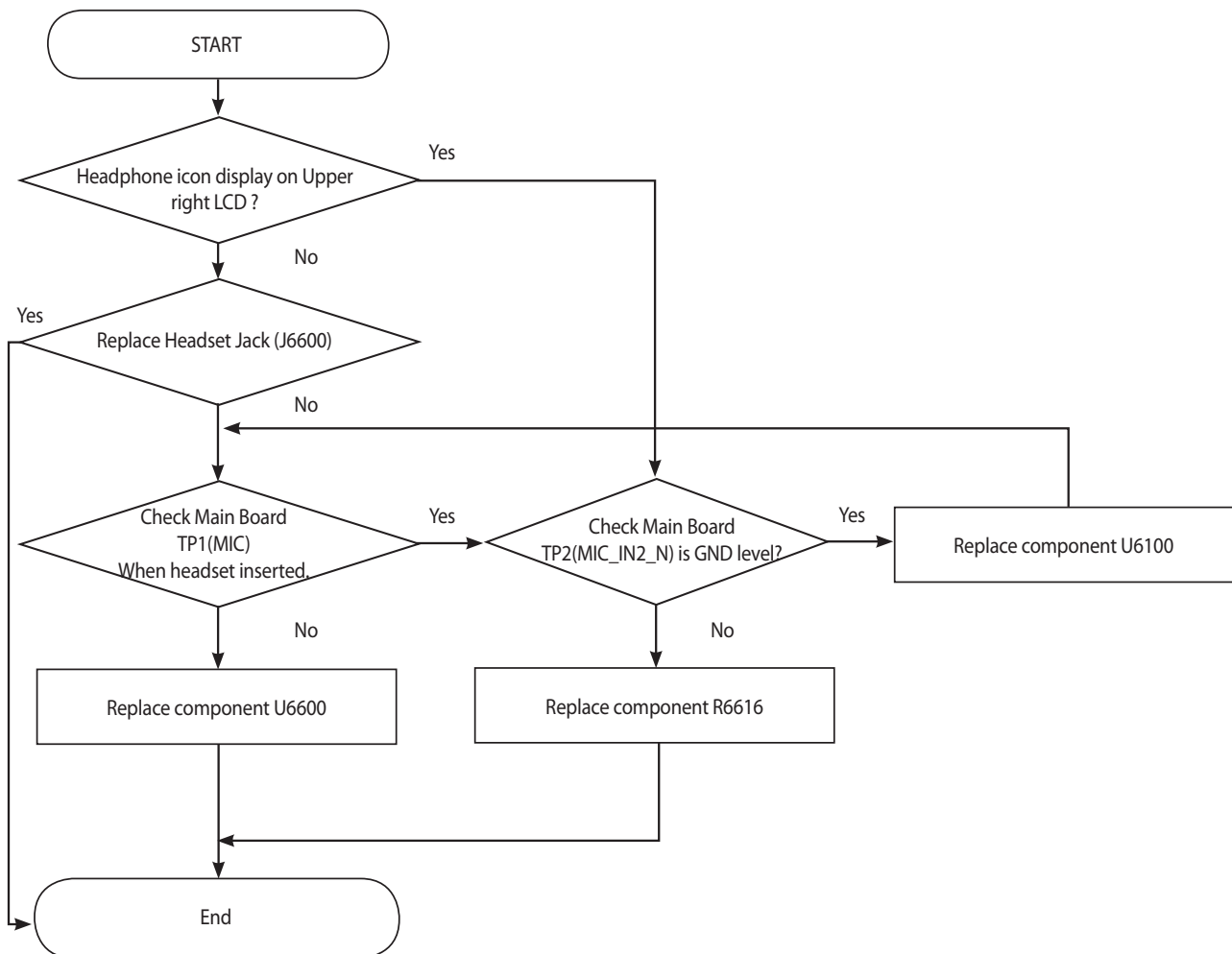


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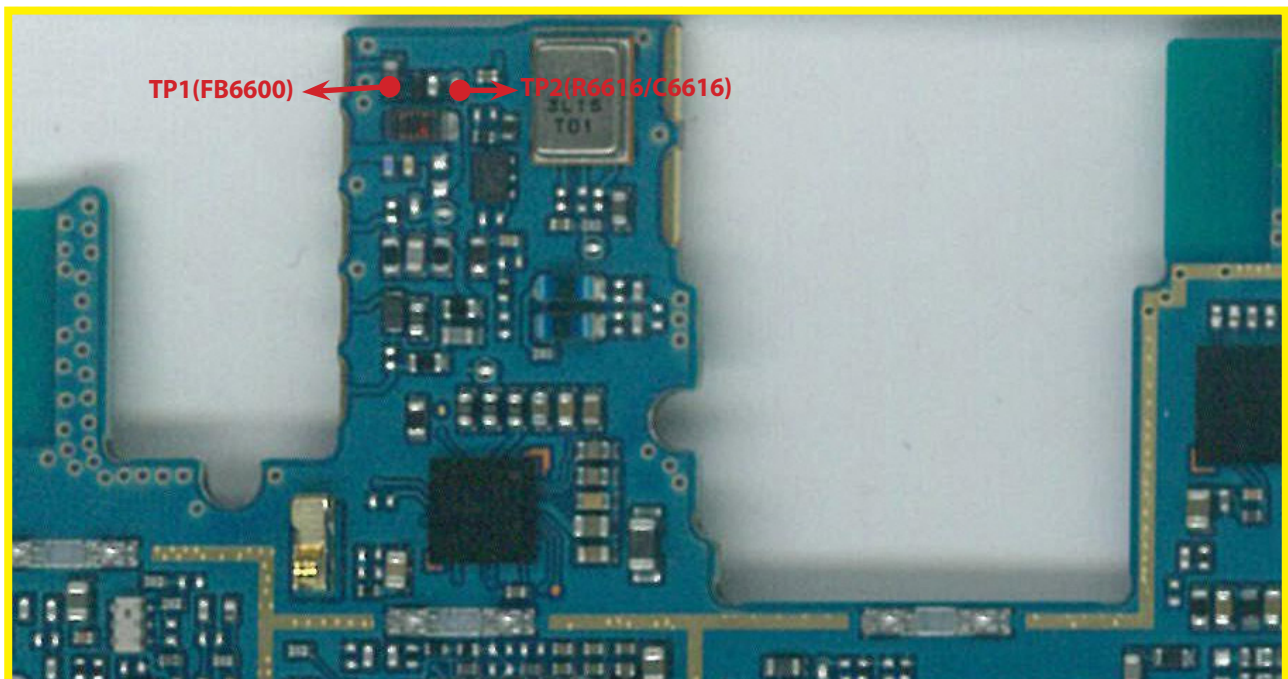
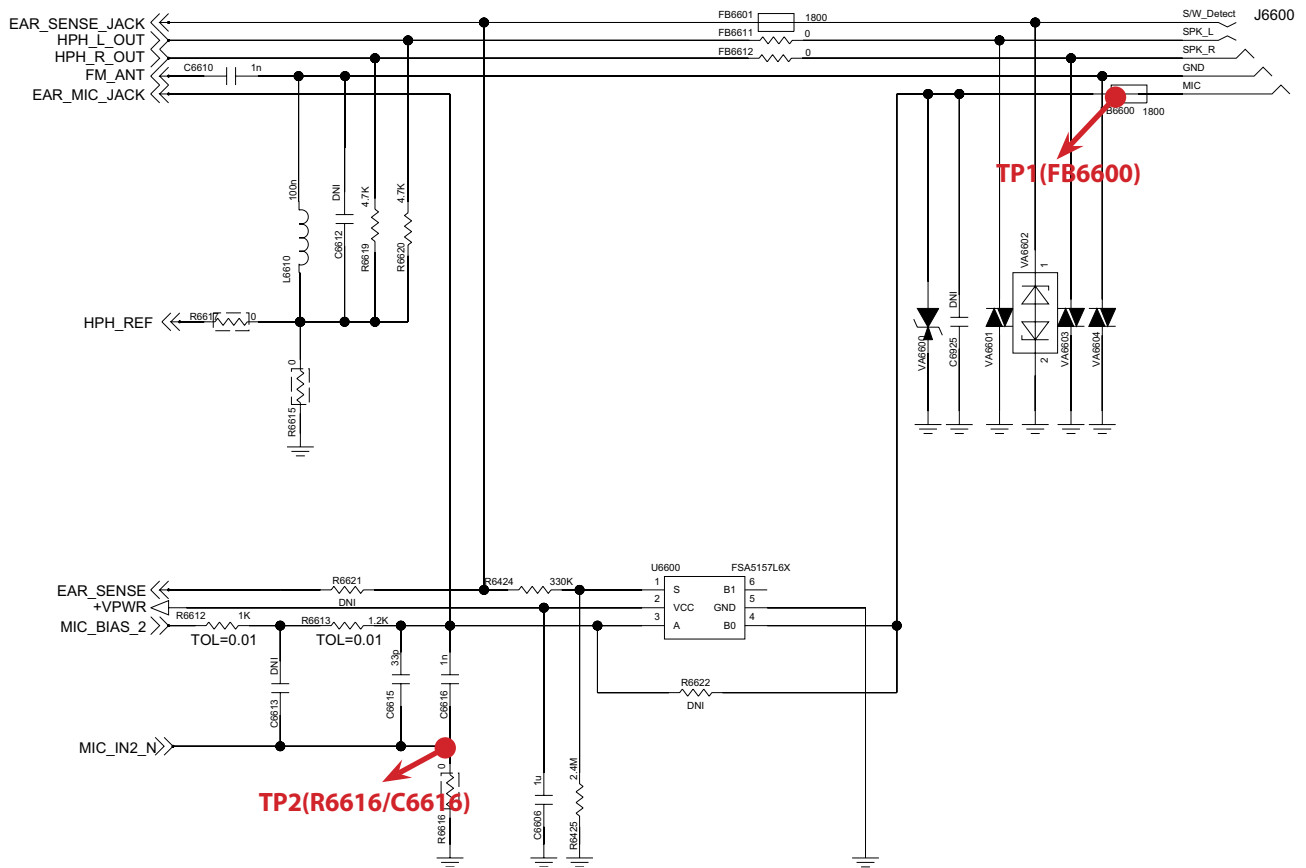
3.12.5.2 Headset Mic. trouble

Ear-Mic. path as below :

MSM8926-2 -> WCD9302 MIC2_INP/ MIC2_INM -> Headset



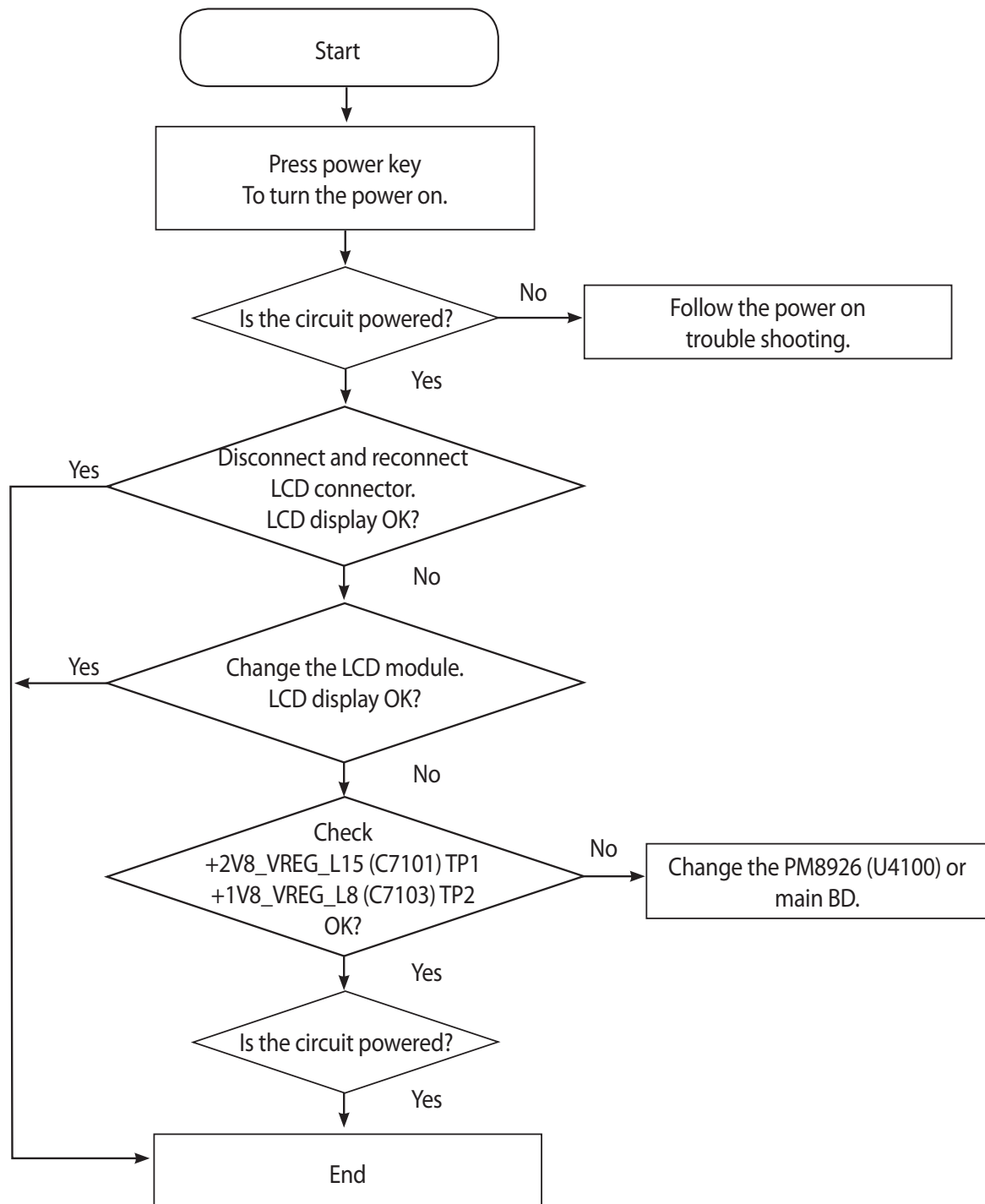
3. TROUBLE SHOOTING



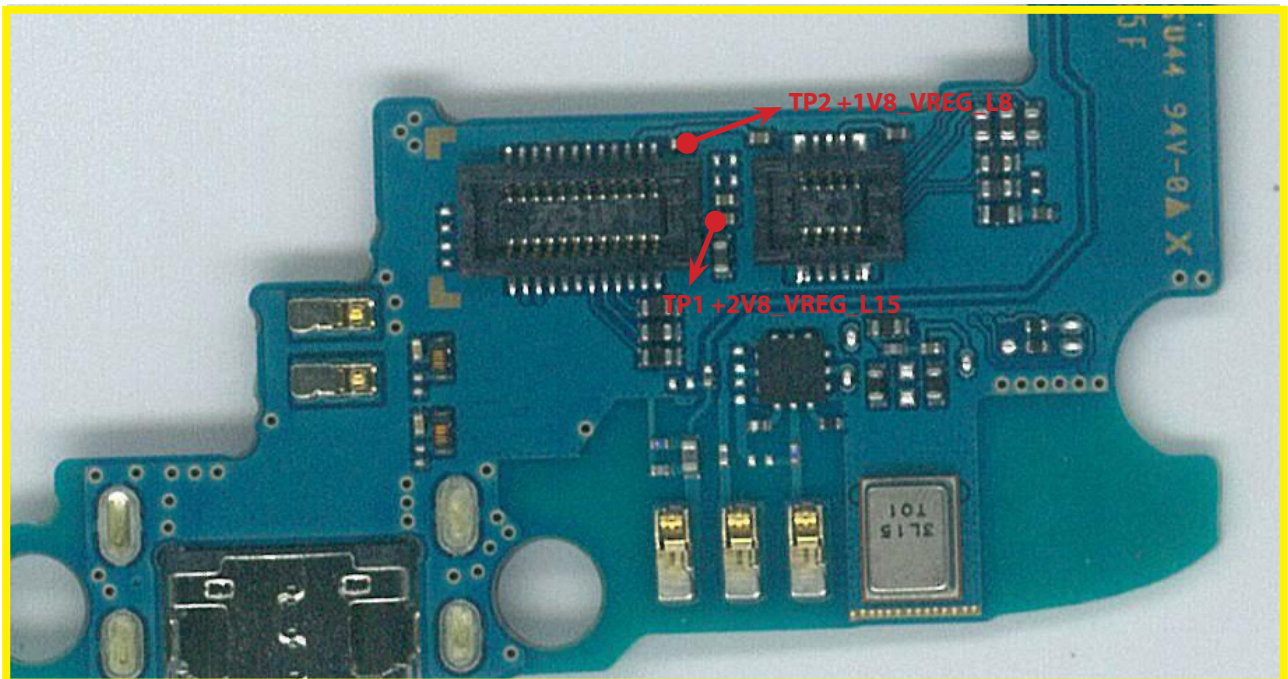
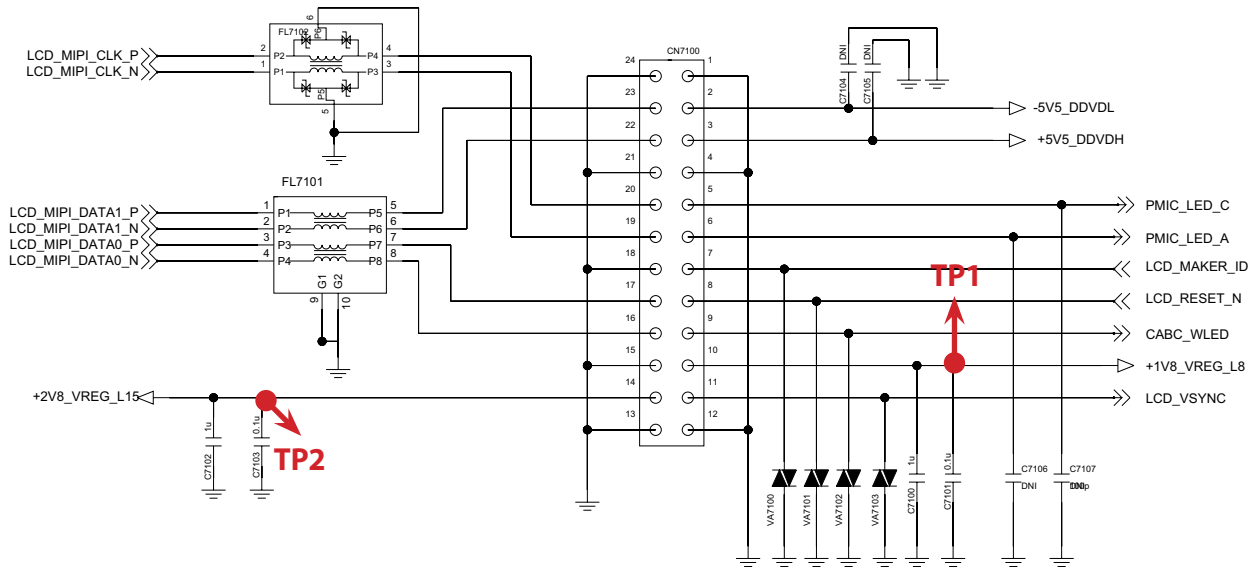
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3.13 LCD

Main LCD control signals are generated by MSM8926. Those signal's path are :
MSM8926-> LCD Module



3. TROUBLE SHOOTING

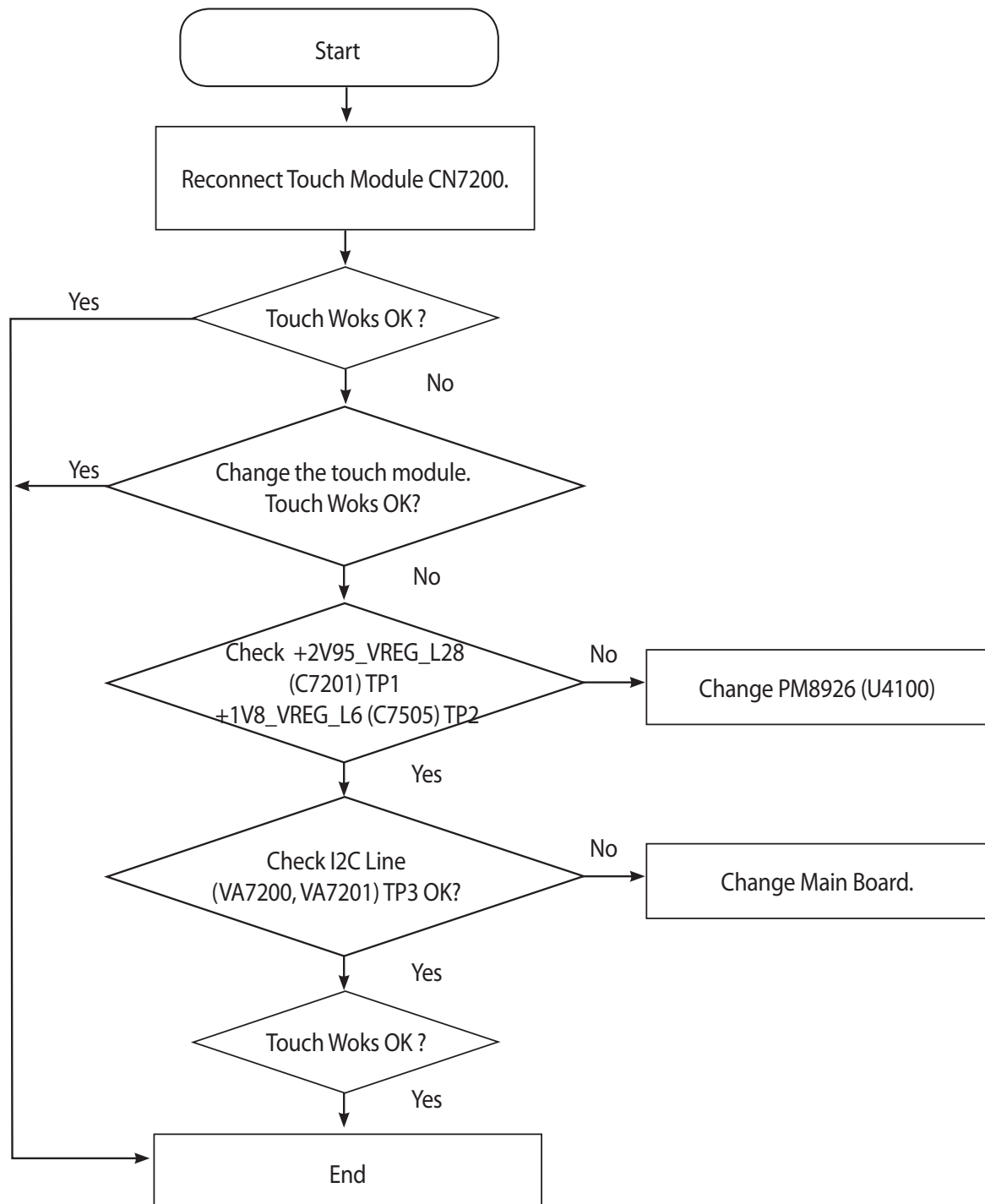


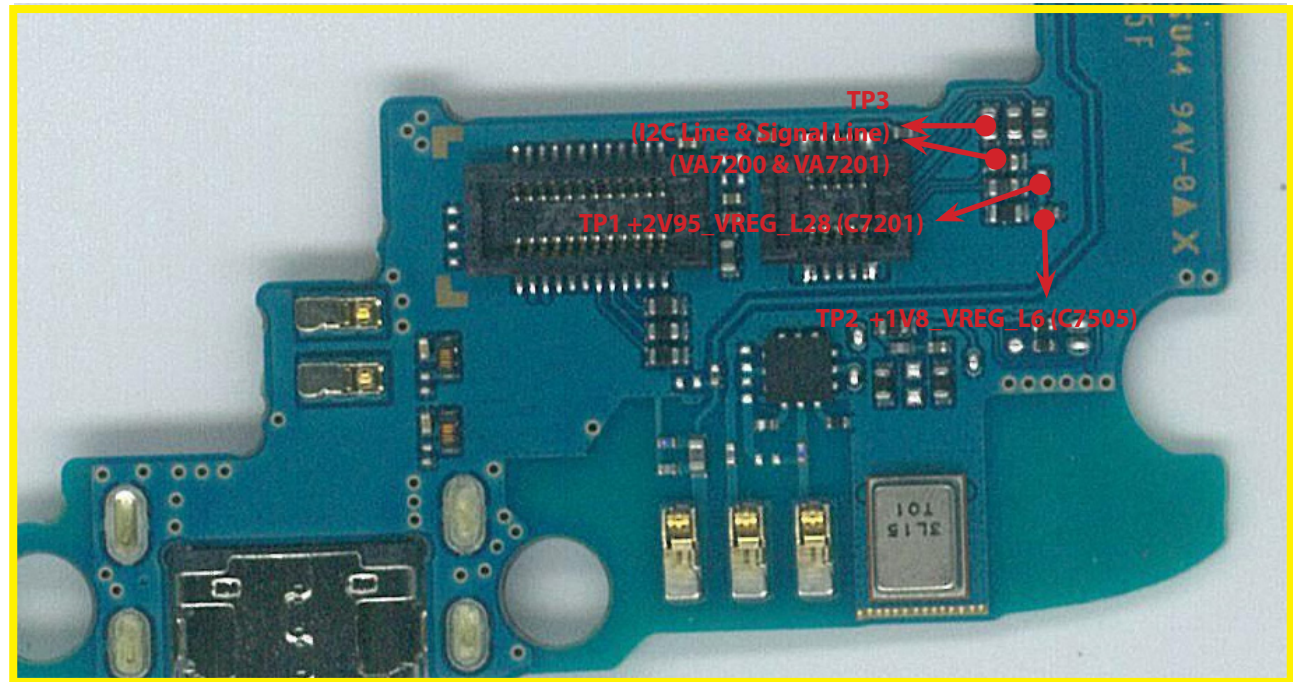
<Main Bot>

3.14 Touch

Touch control signals are generated by touch sensor.

Those signal's path are touch sensor -> MSM8926

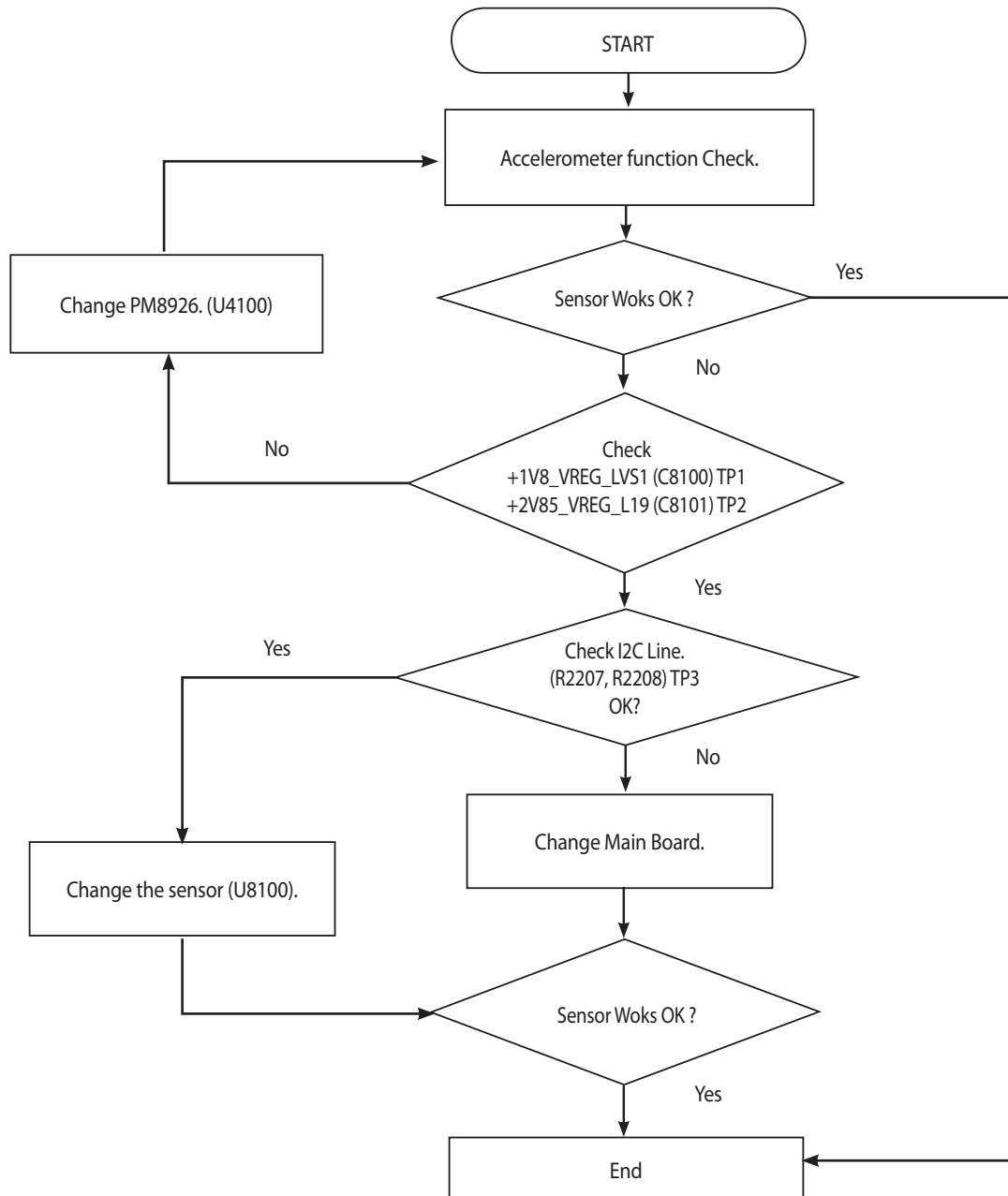




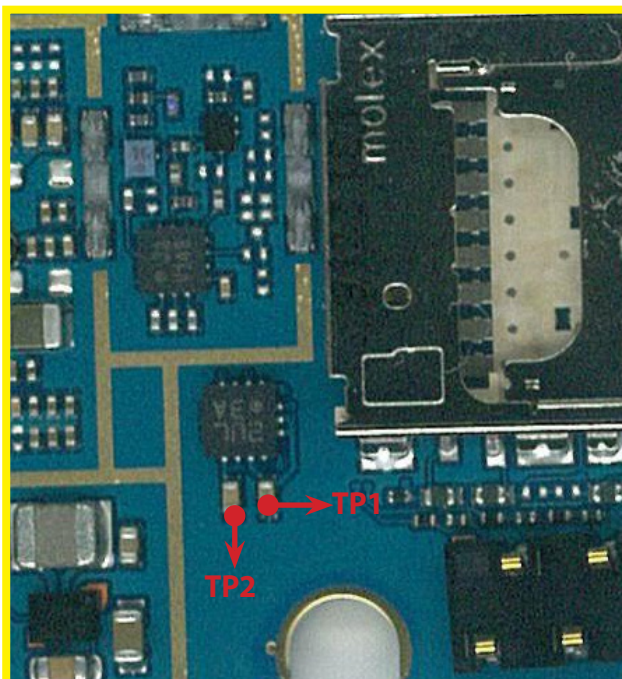
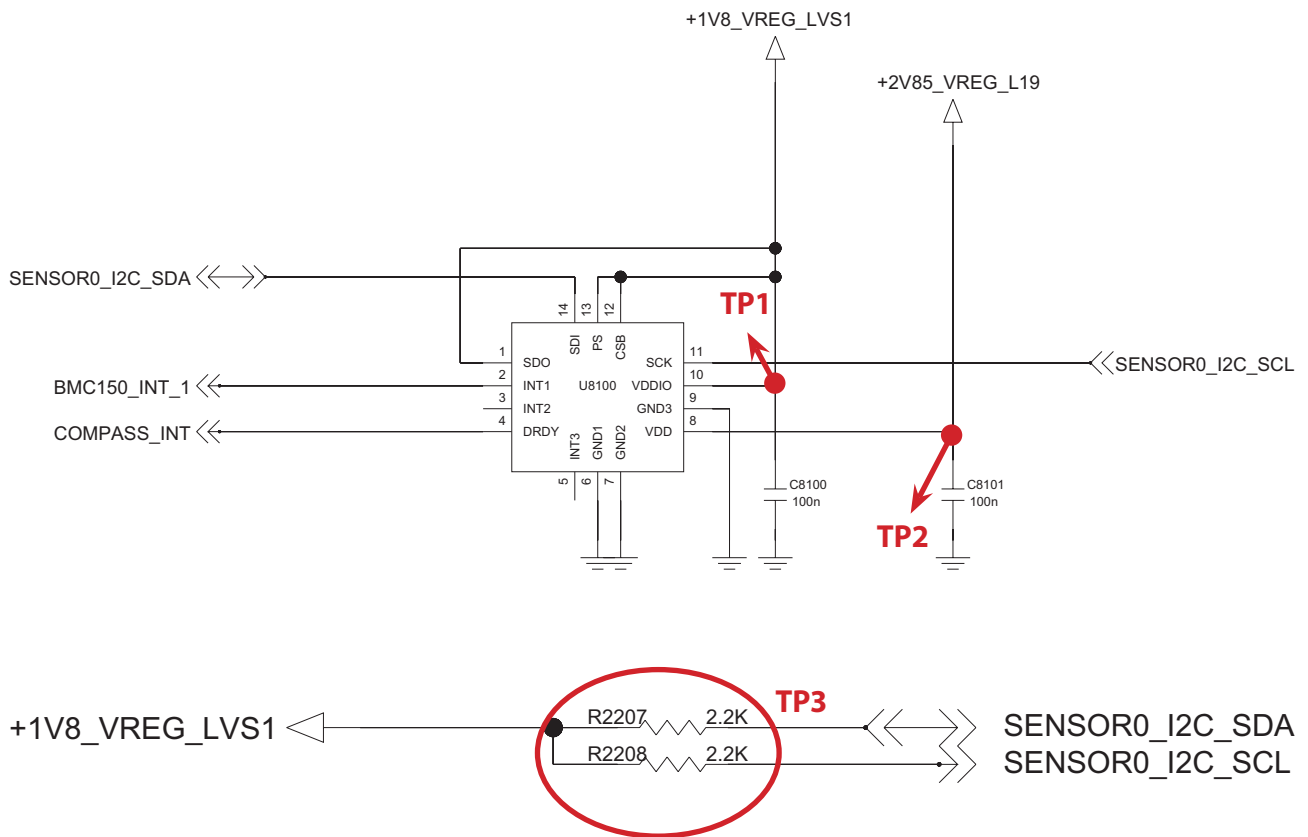
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3.15 Sensor

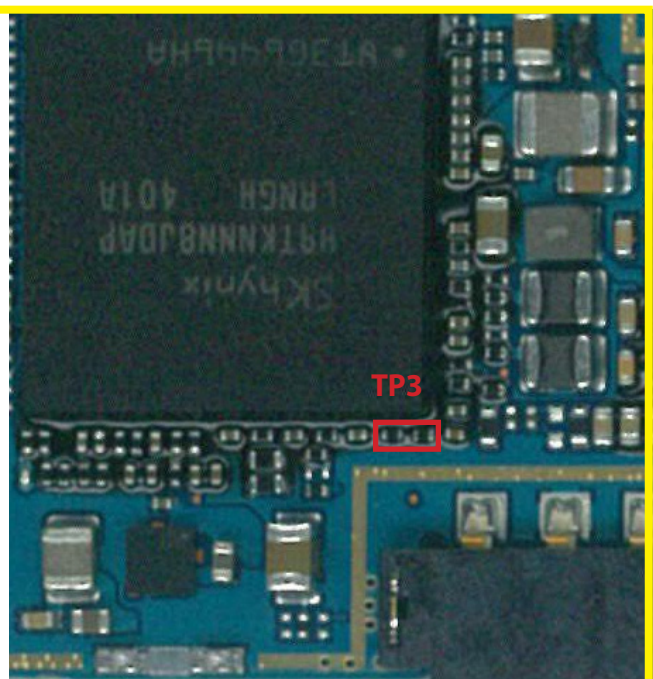
3.15.1 Compass + Motion Sensor



3. TROUBLE SHOOTING



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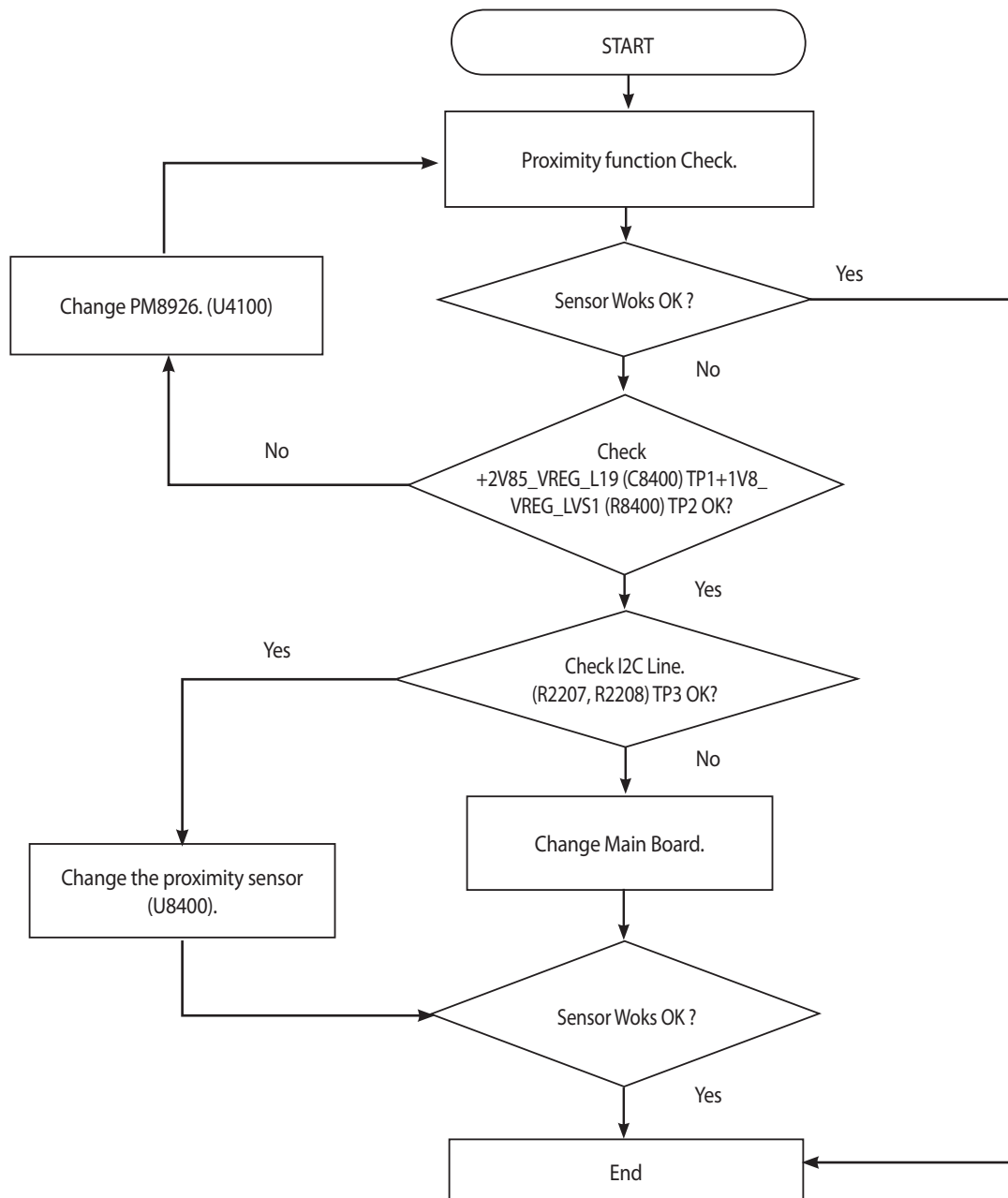


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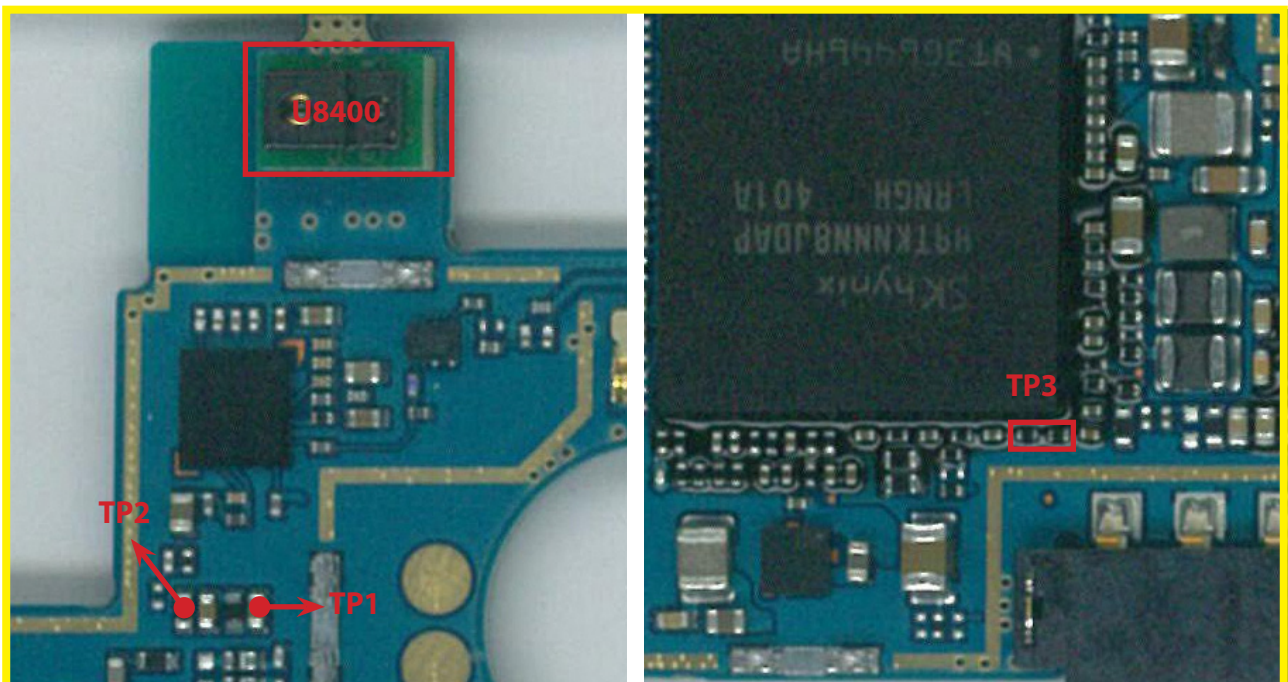
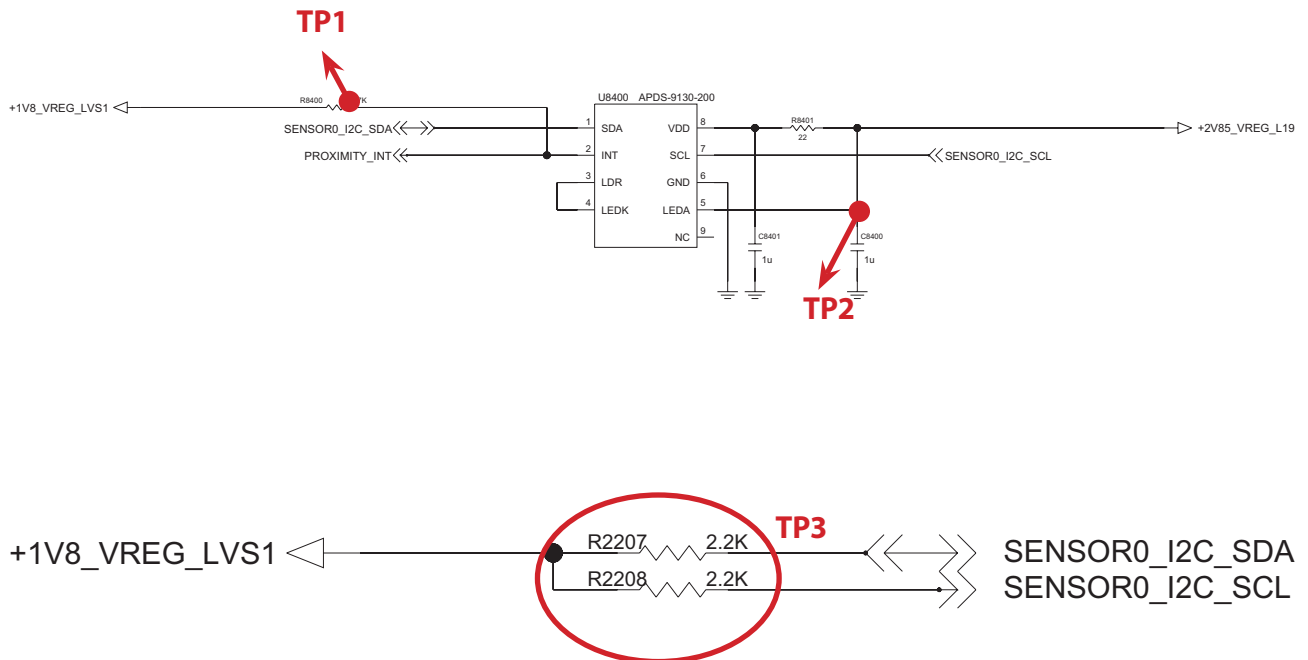
3.15.2 Proximity

Proximity Sensor is worked as below:

Send Key click -> Phone number click -> Call connected -> Object moved at the sensor -> Control the screen's on/off operation automatically

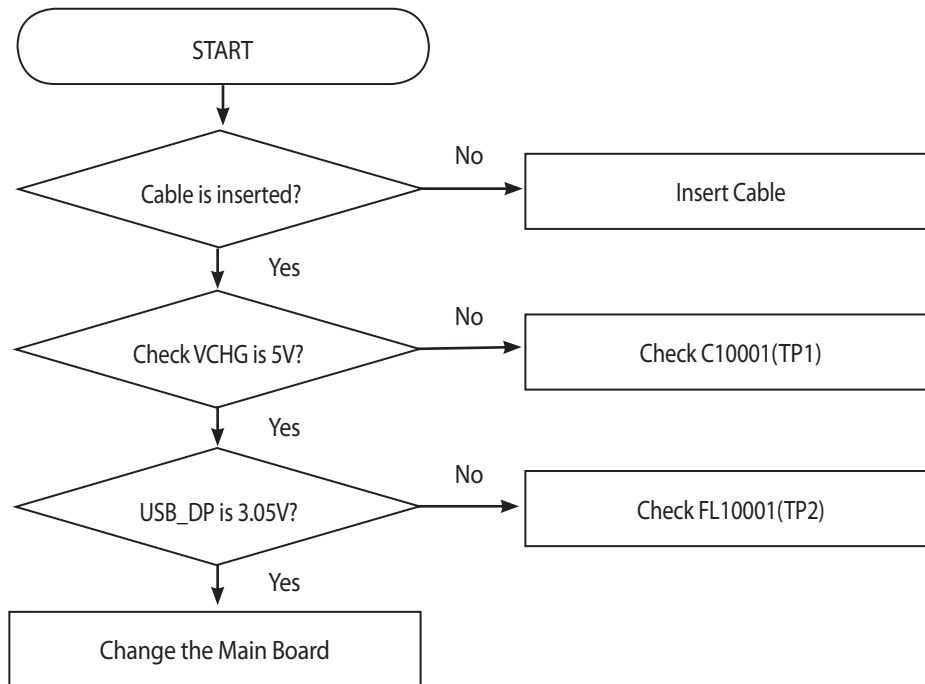


3. TROUBLE SHOOTING



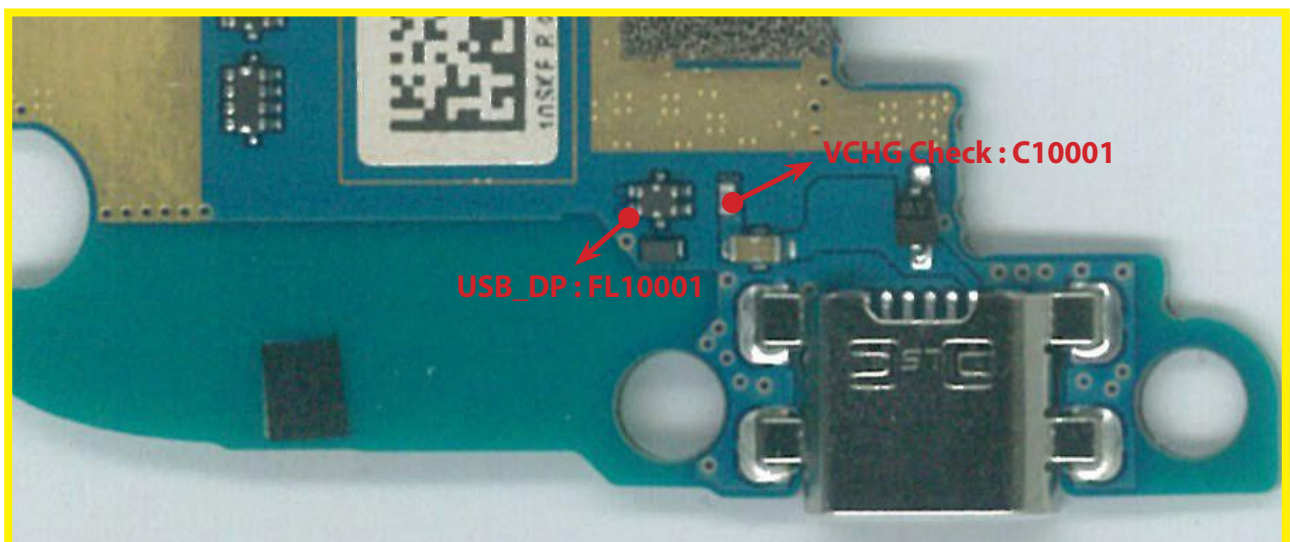
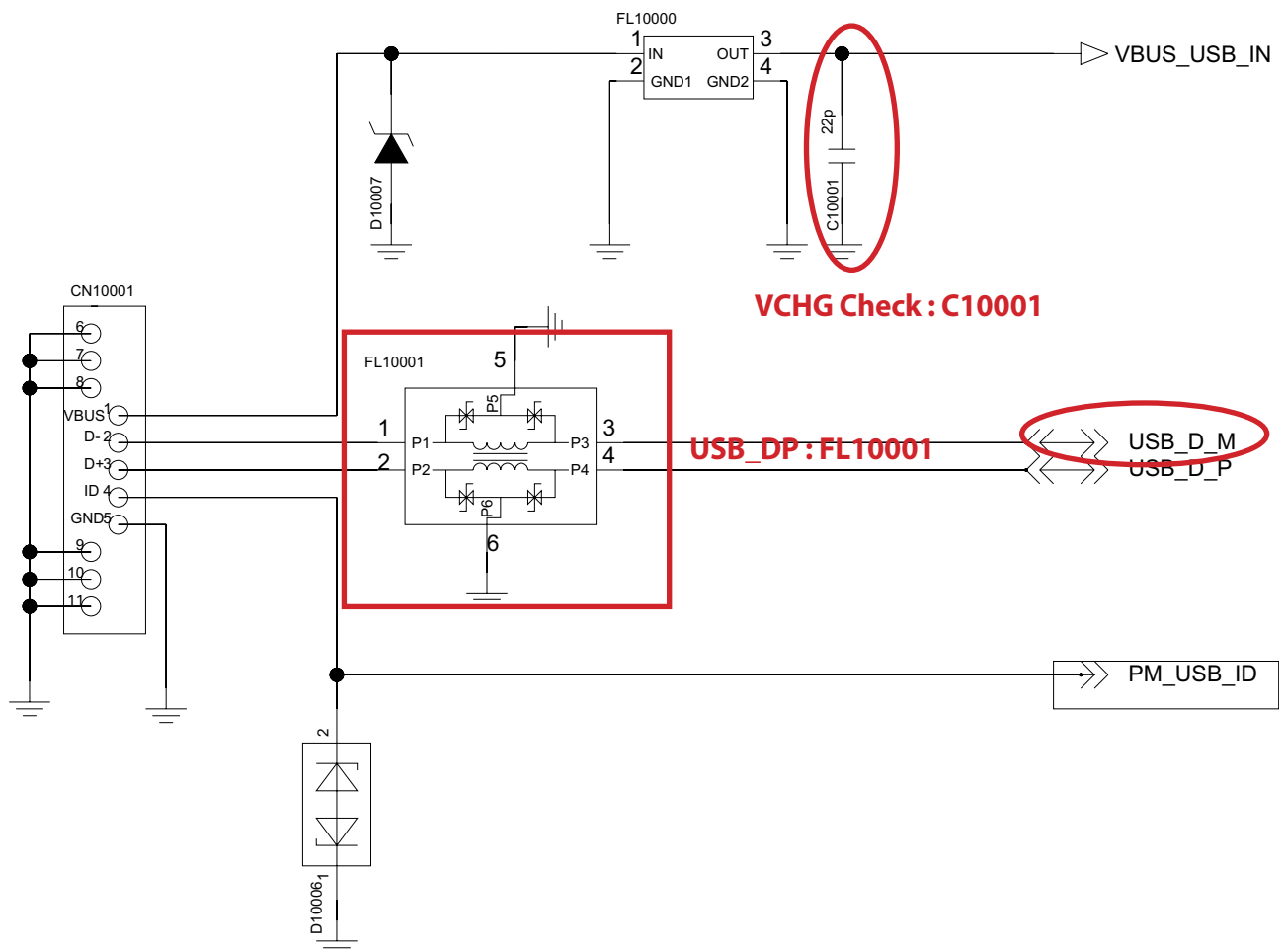
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3.16 USB



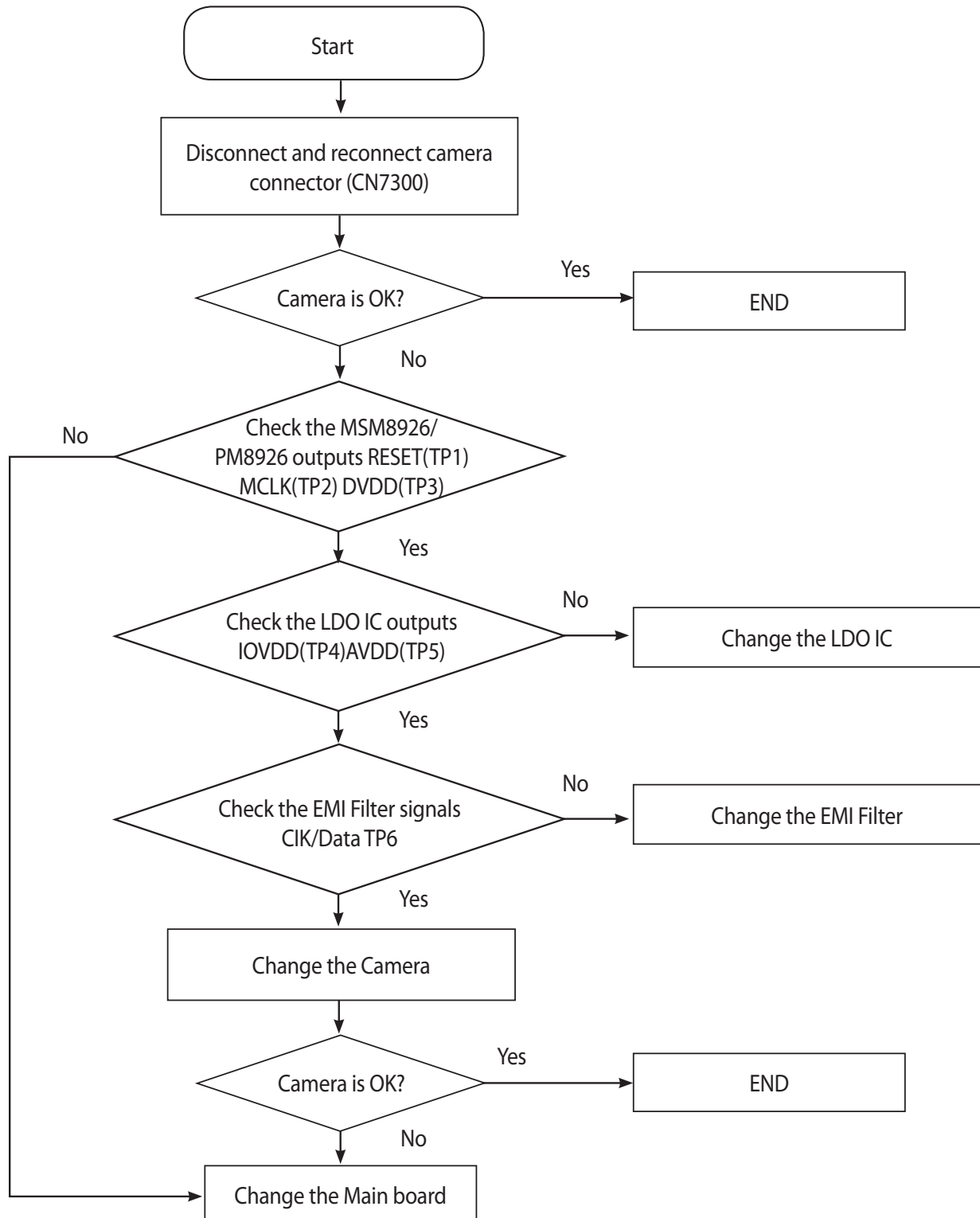
3. TROUBLE SHOOTING

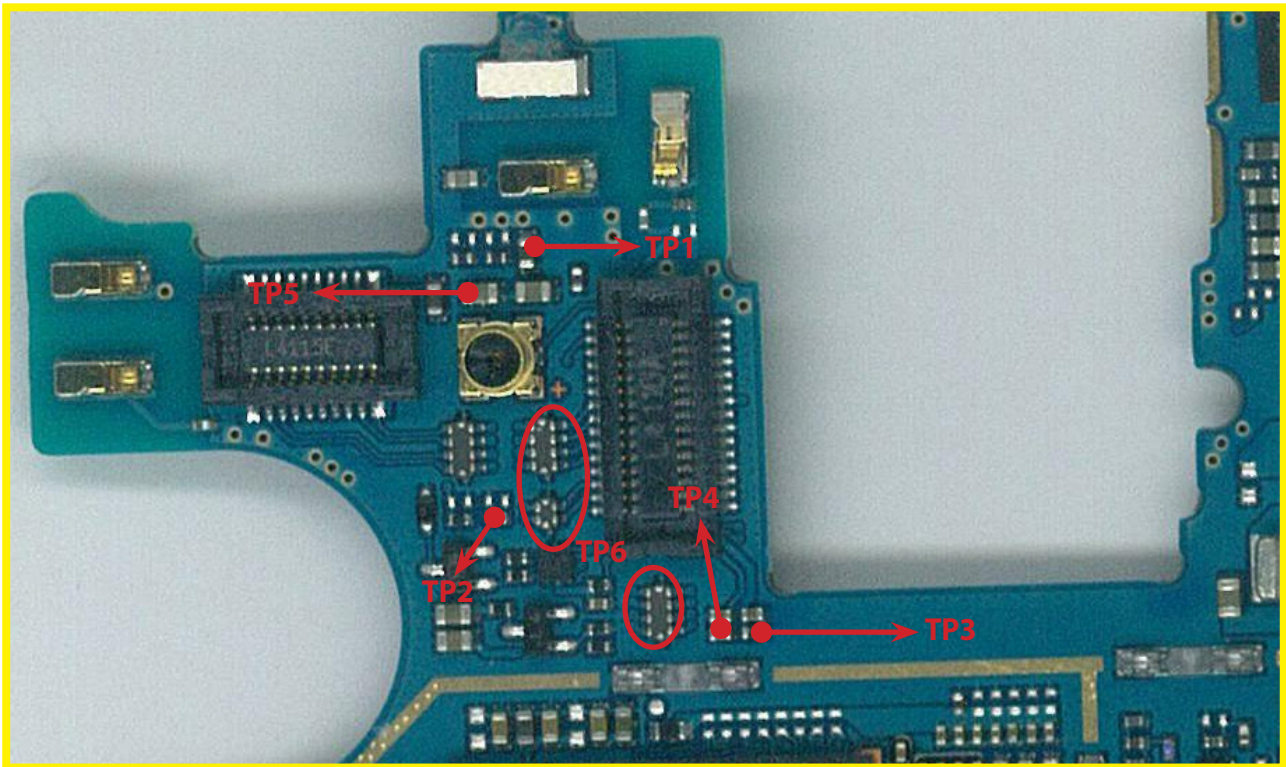
Typical USB Path.



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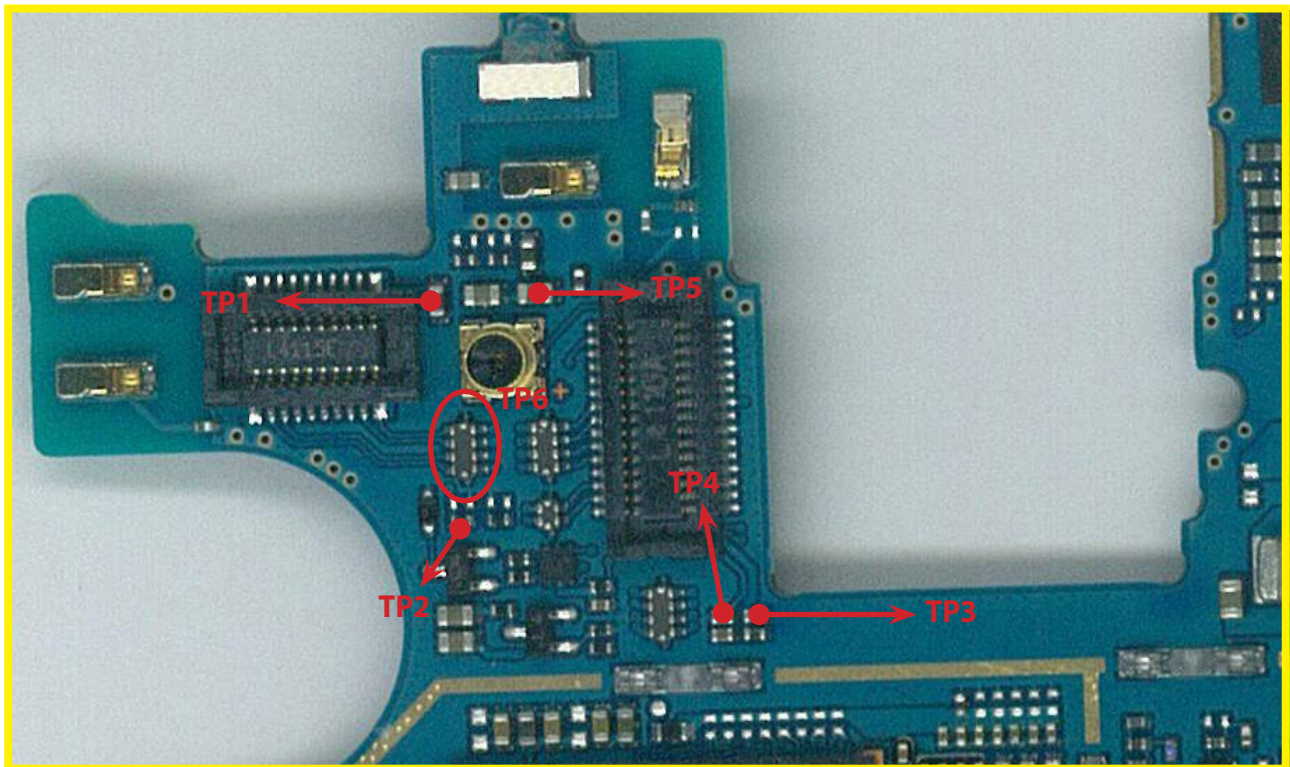
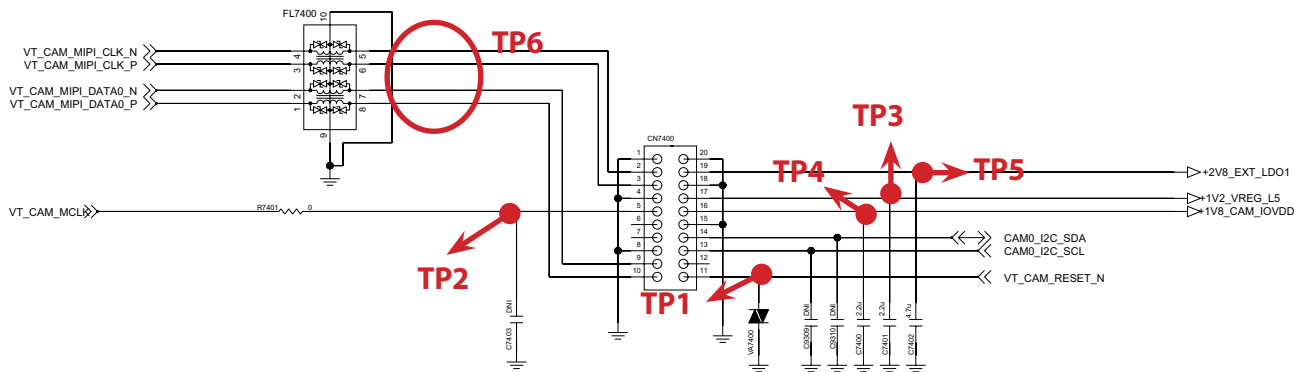
3.17 Camera





LGE Internal Use Only

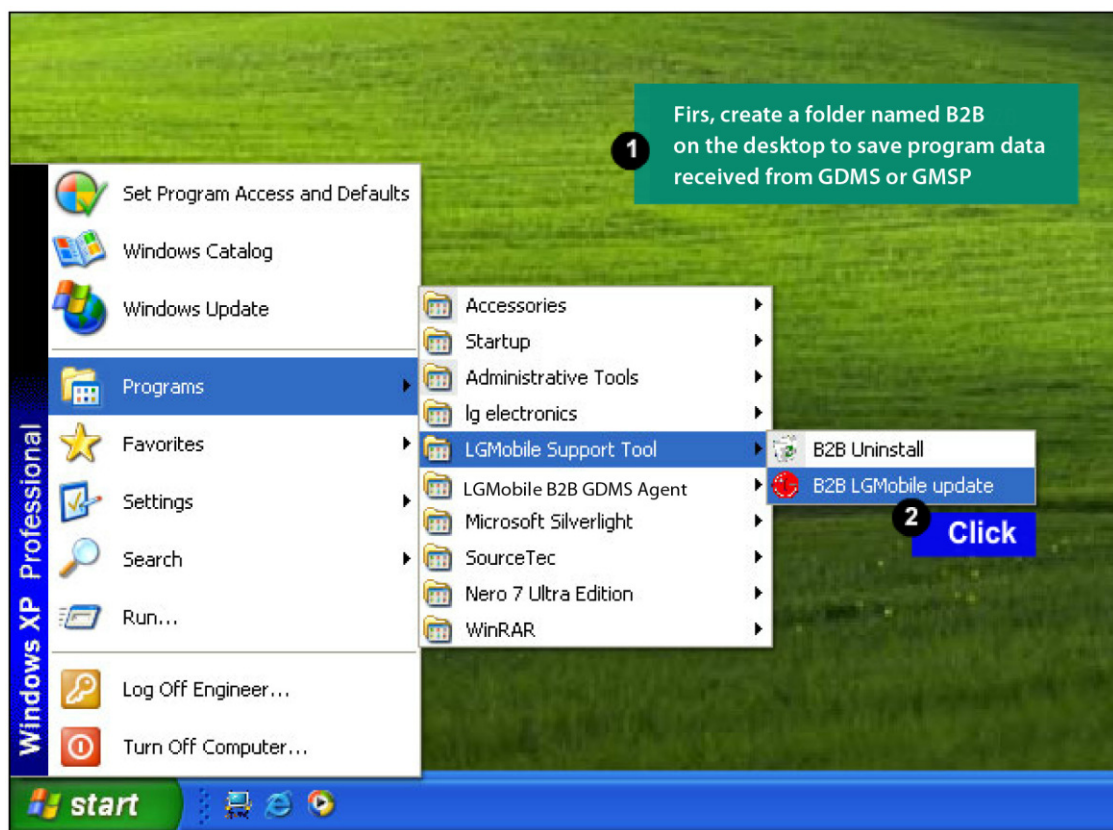
3. TROUBLE SHOOTING



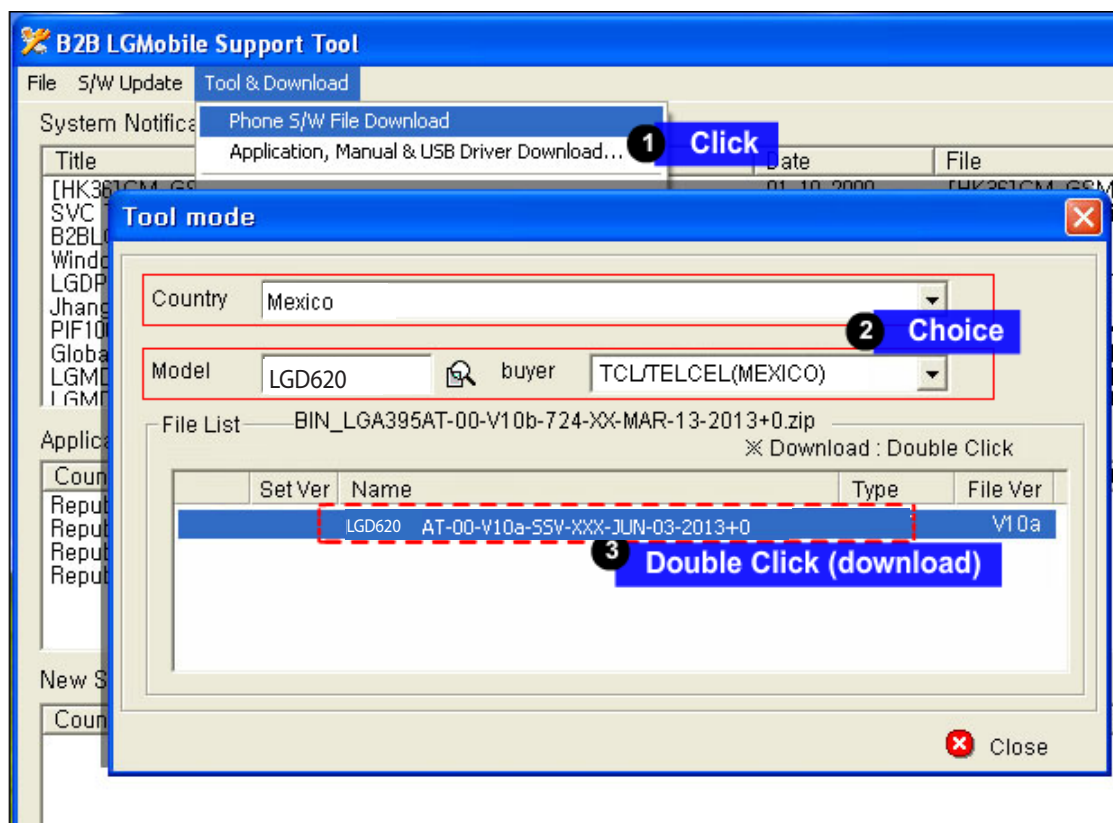
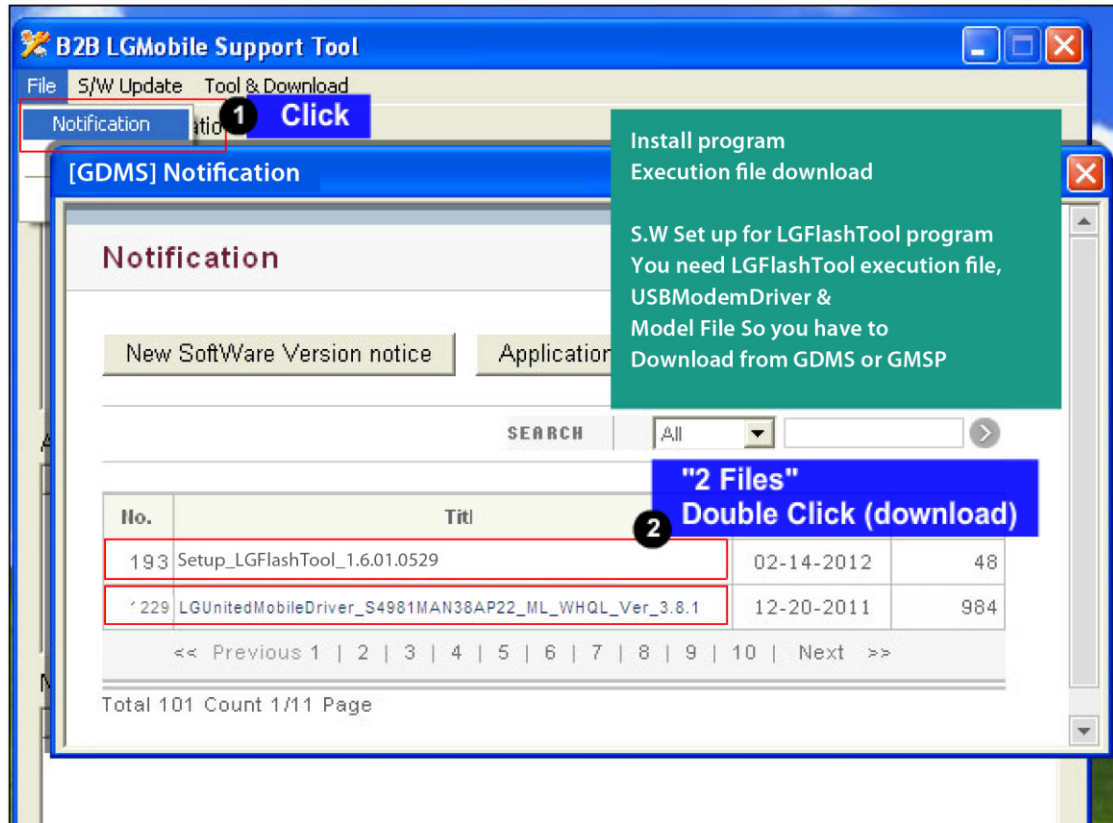
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4. DOWNLOAD

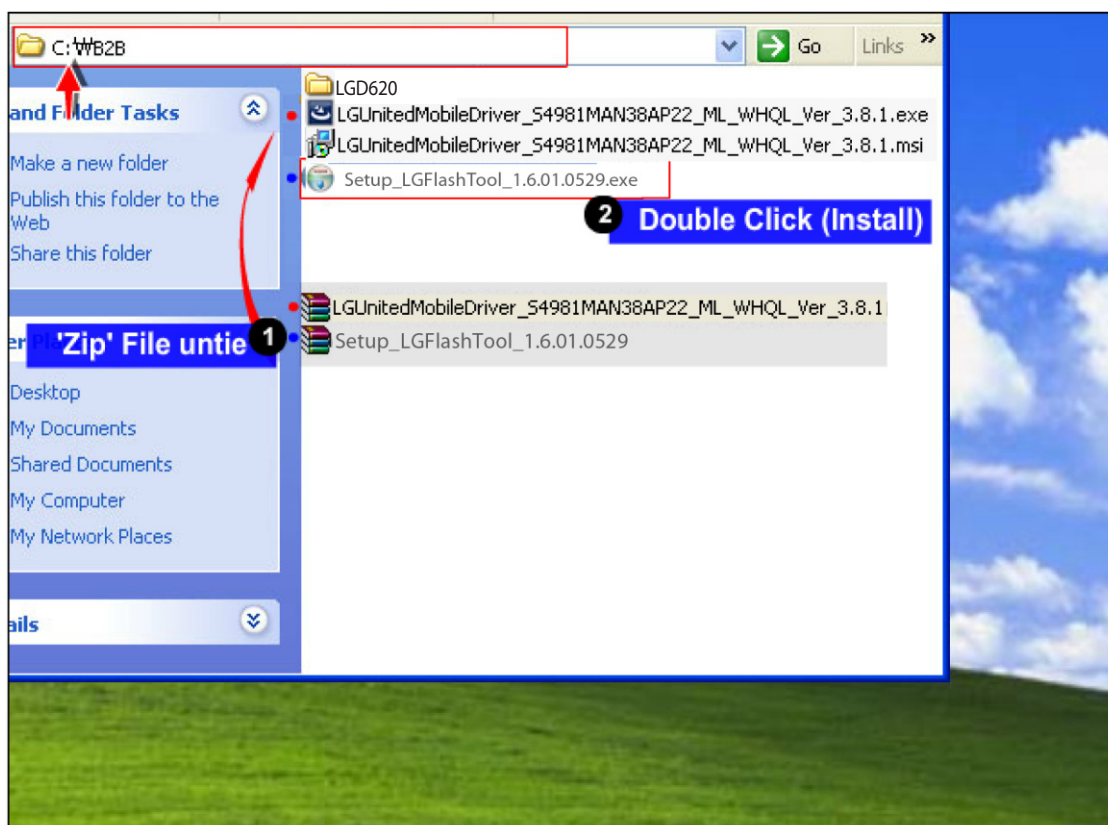
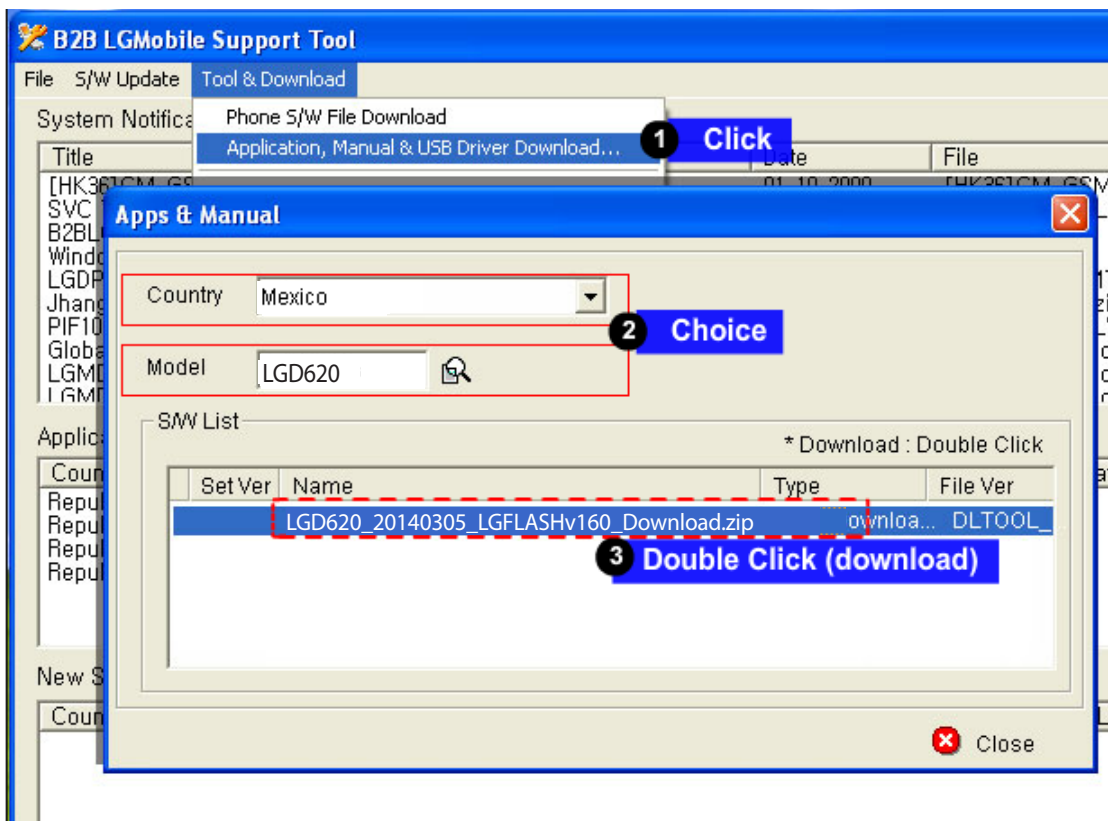
TOOL INFORMATION			
TOOL VERSION	DLL NAME	USB DRIVER	
LGFLASHv160	LGD620_20140305_LGFLASHv160_ Download	LGUnitedMobileDriver_S4981MAN38AP22_ML_WHQL_ Ver_3.8.1	
Please Check the Version to “B2B”			
H/W			
	Name	Part No.	Software
D/L Cable	Micro 5P (56-open-910K) USB DLC	RAD32167835	TOT



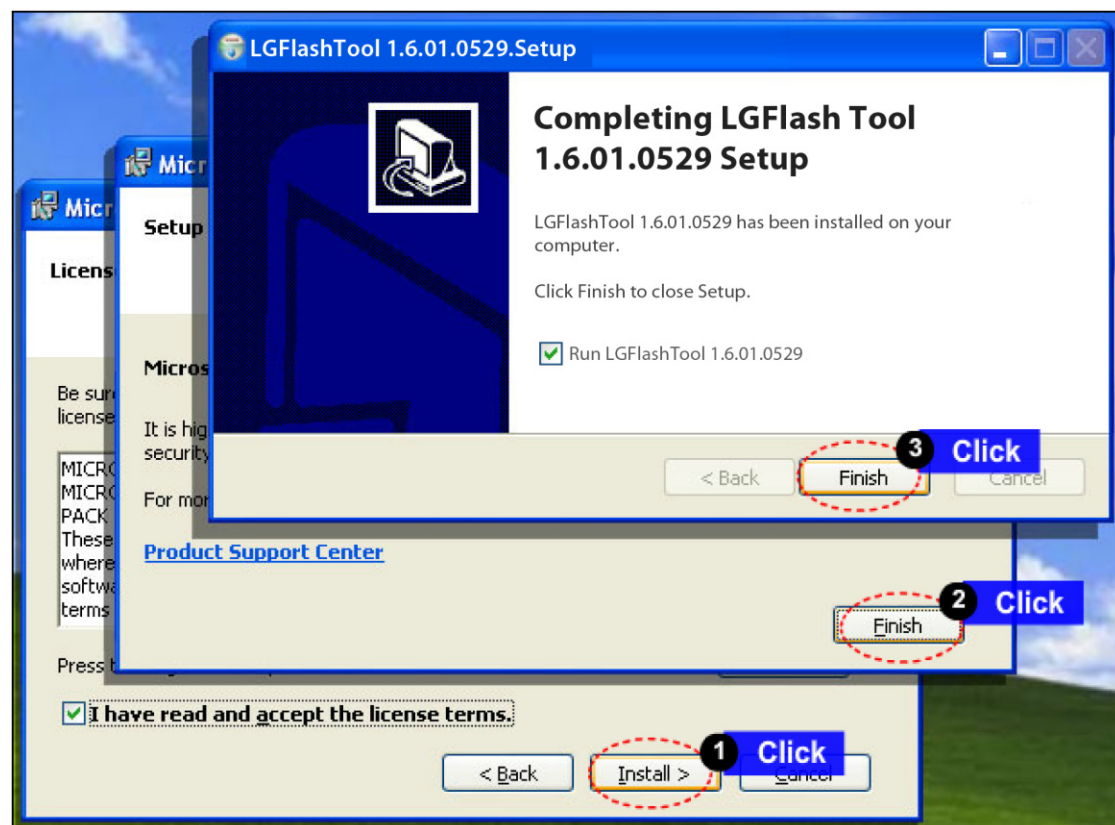
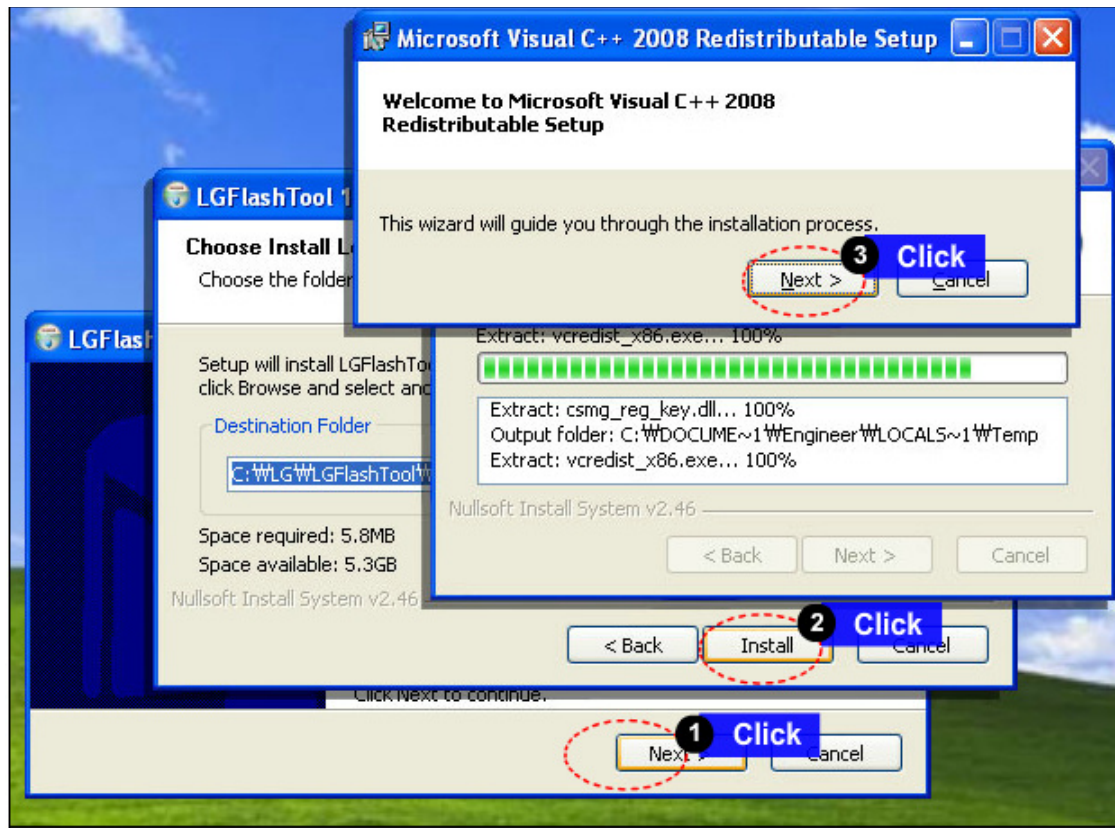
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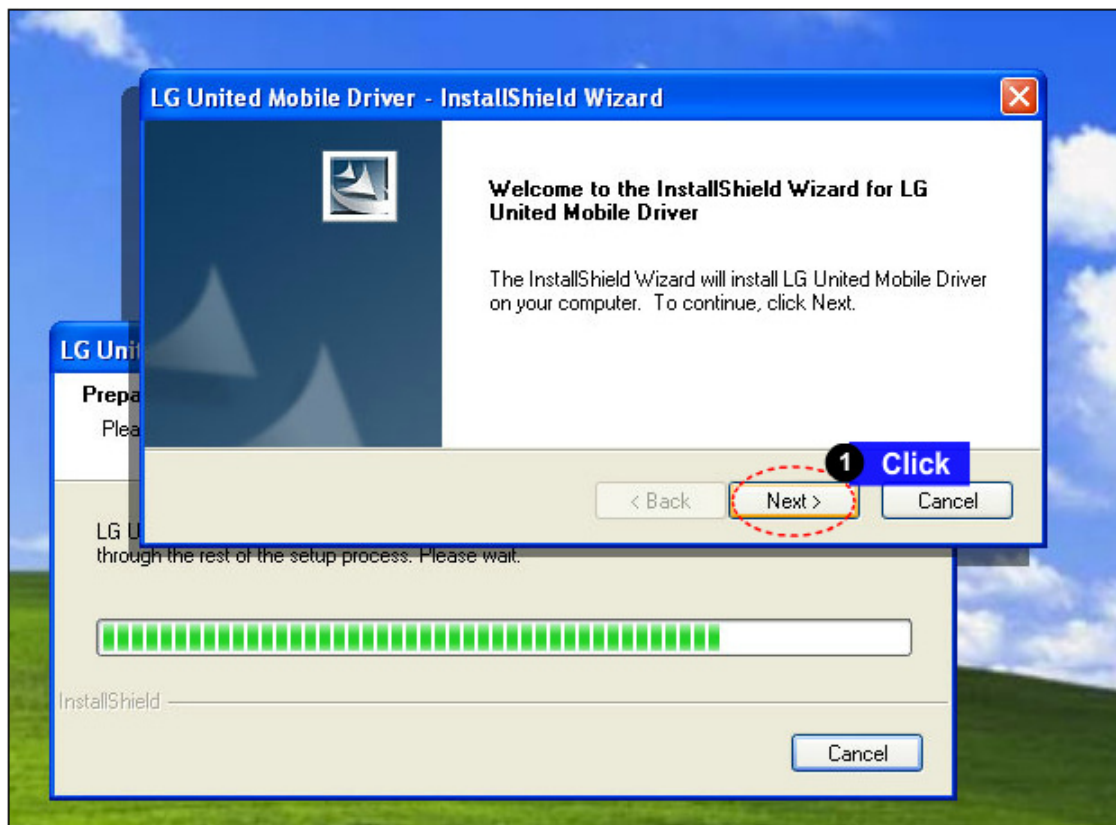
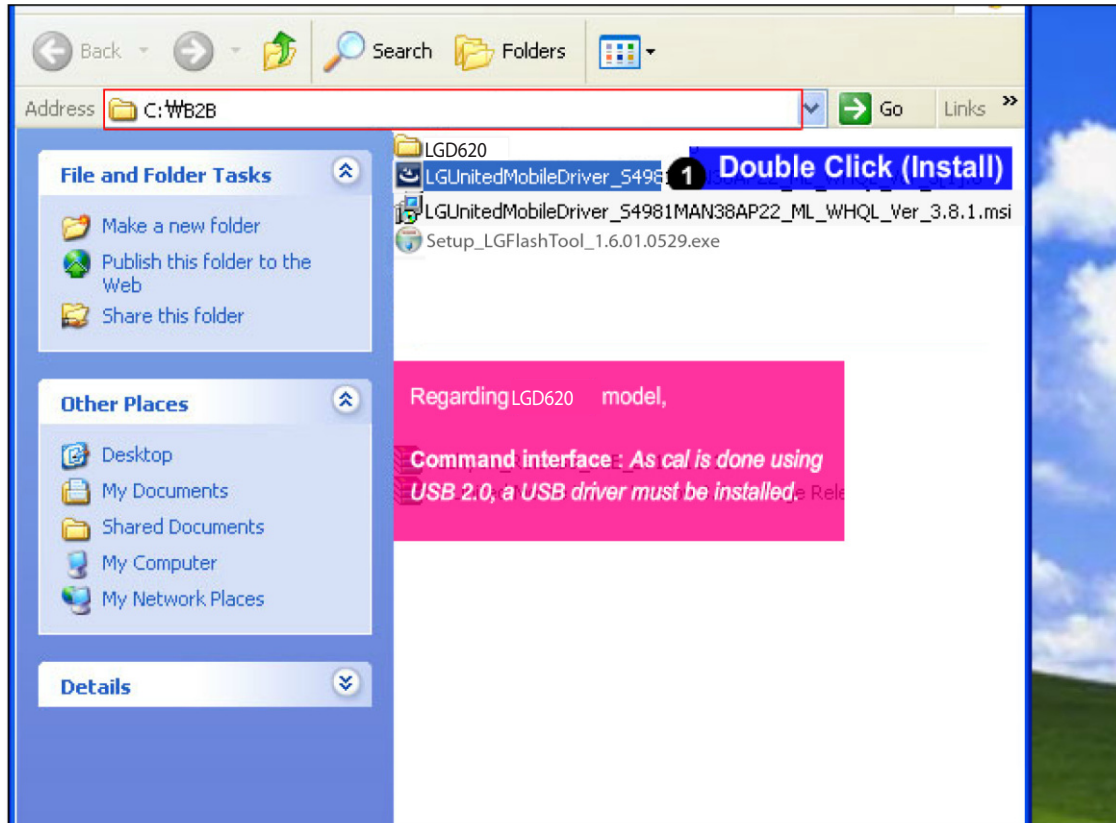
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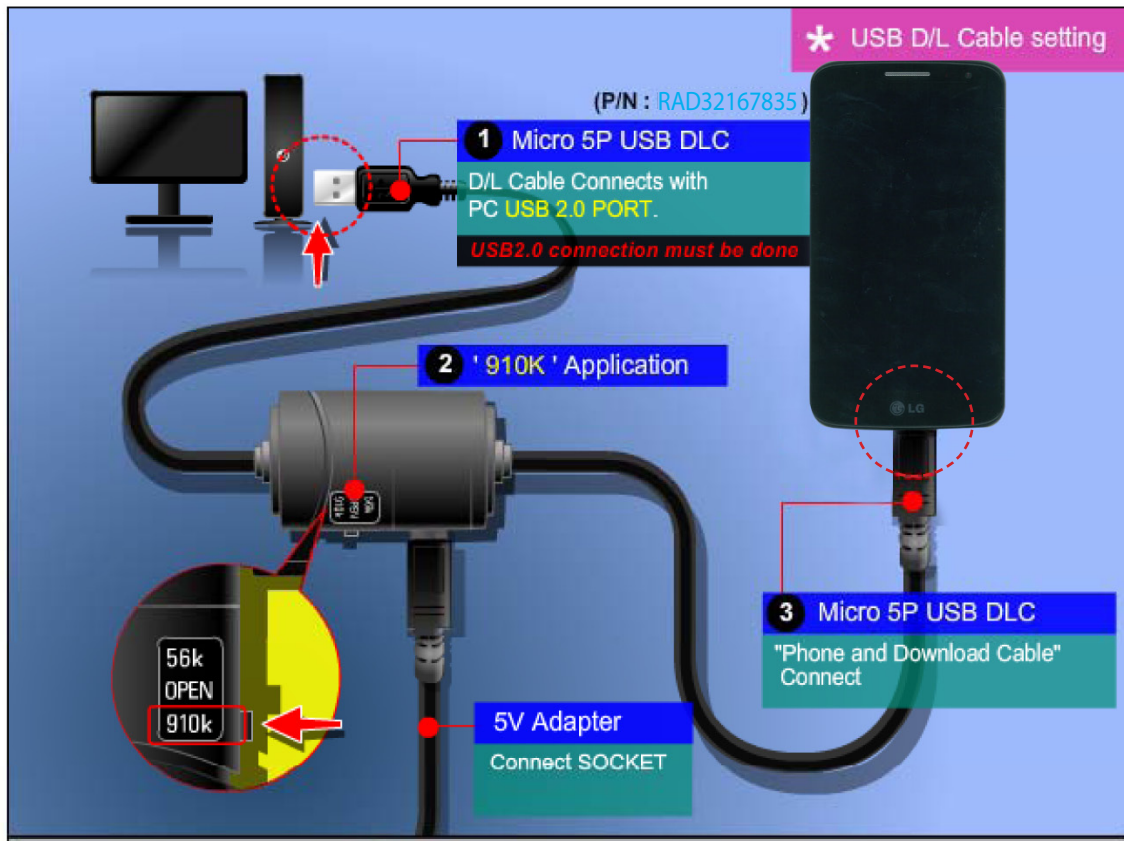
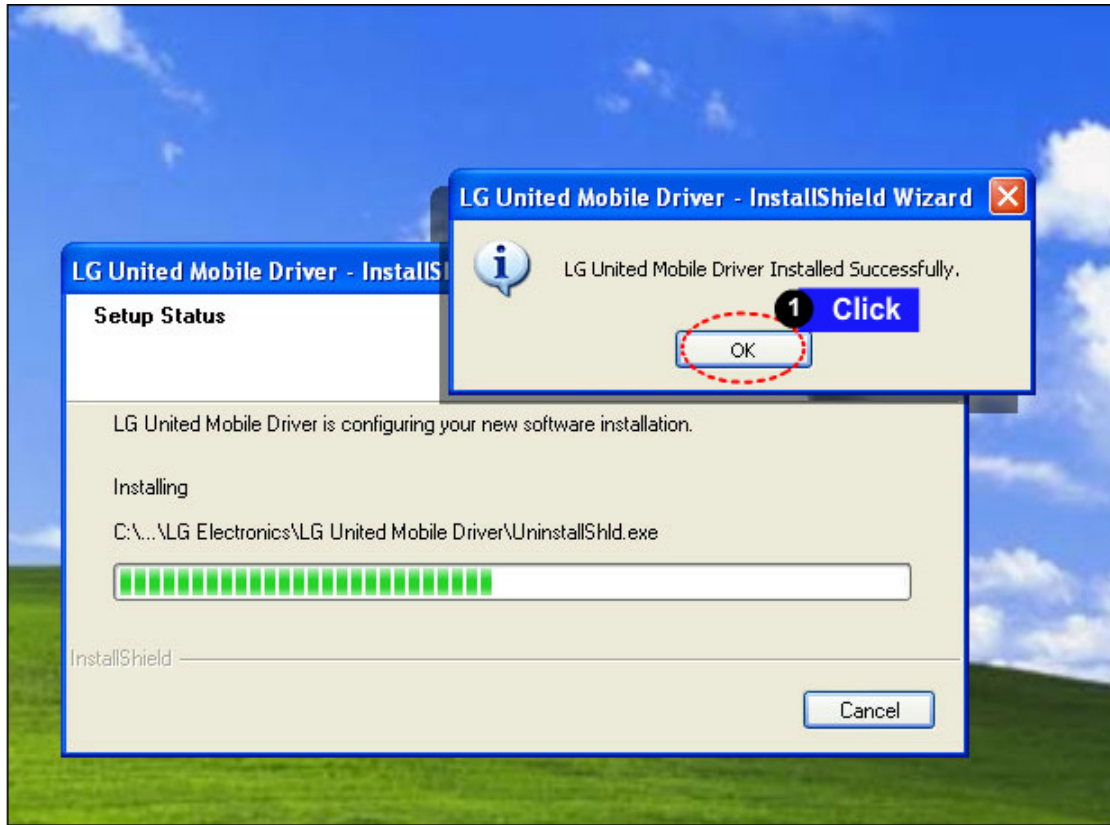


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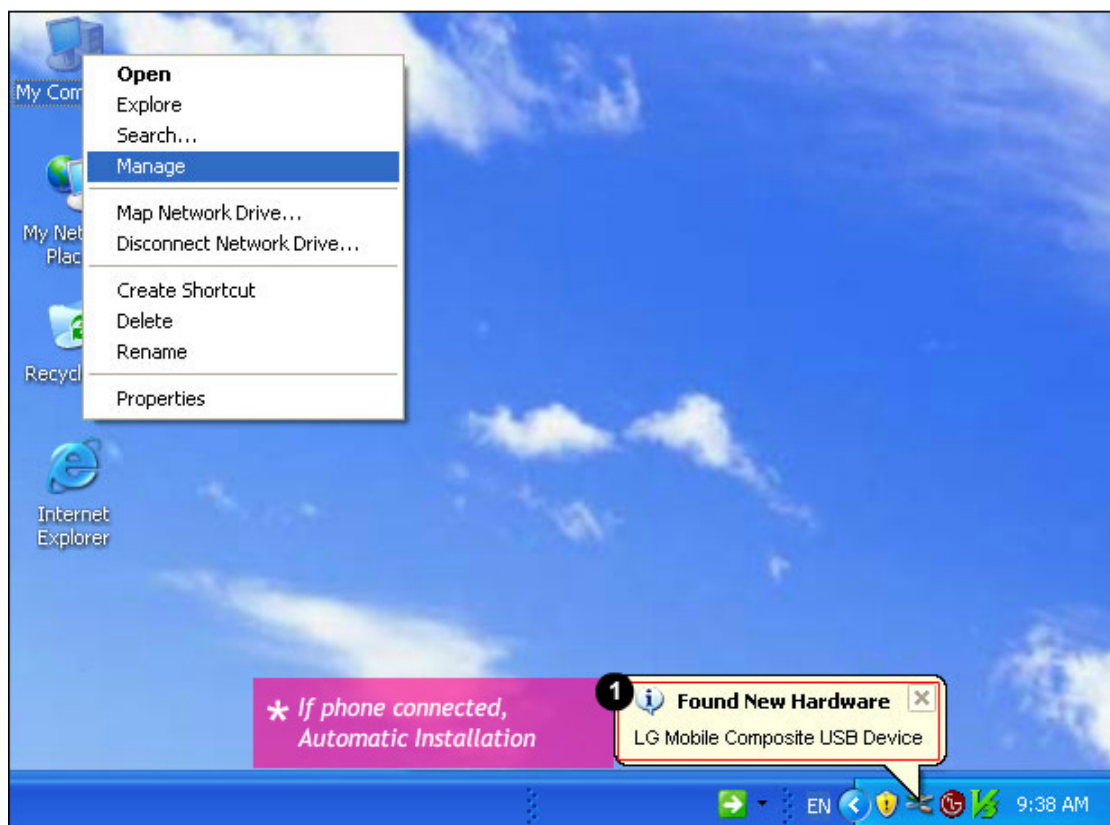
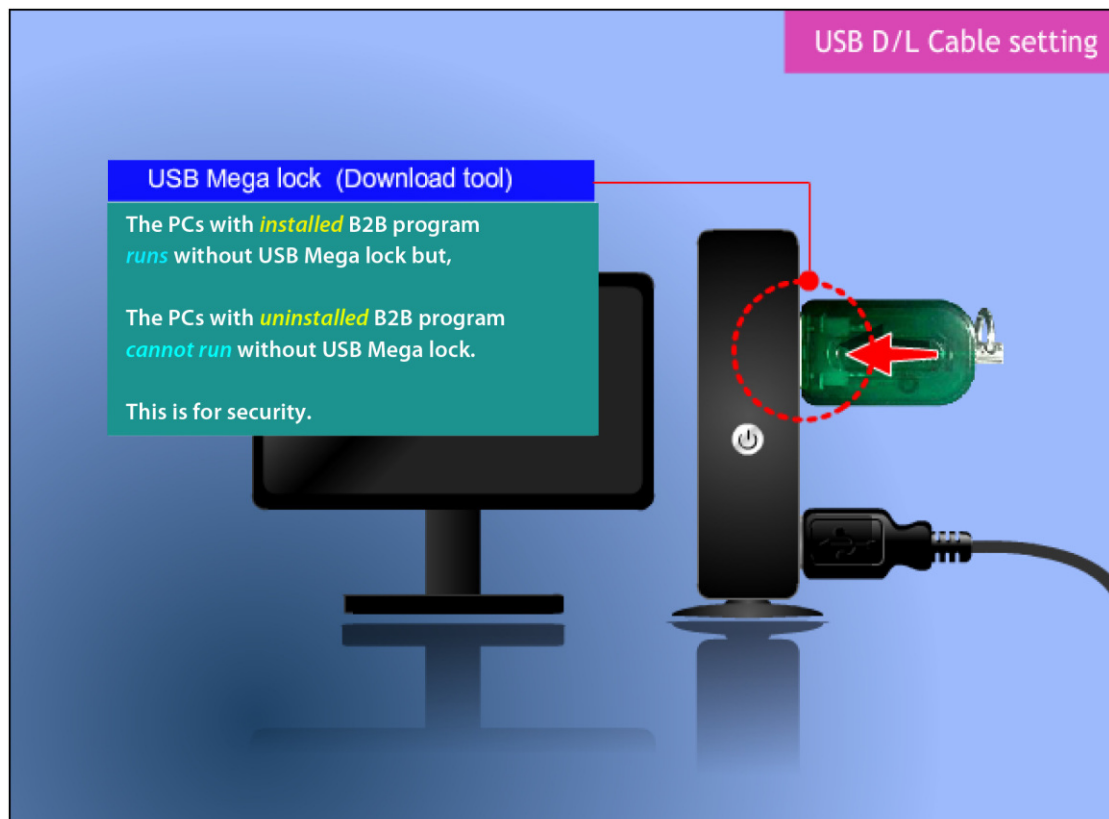


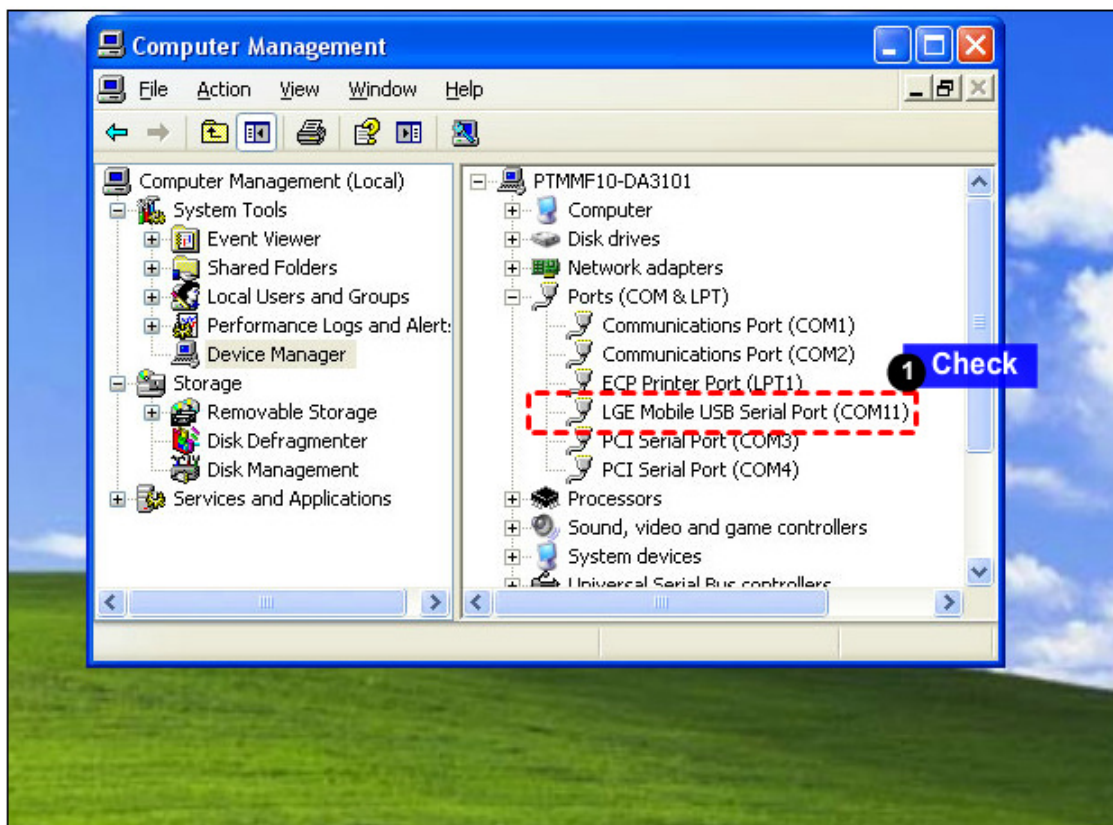
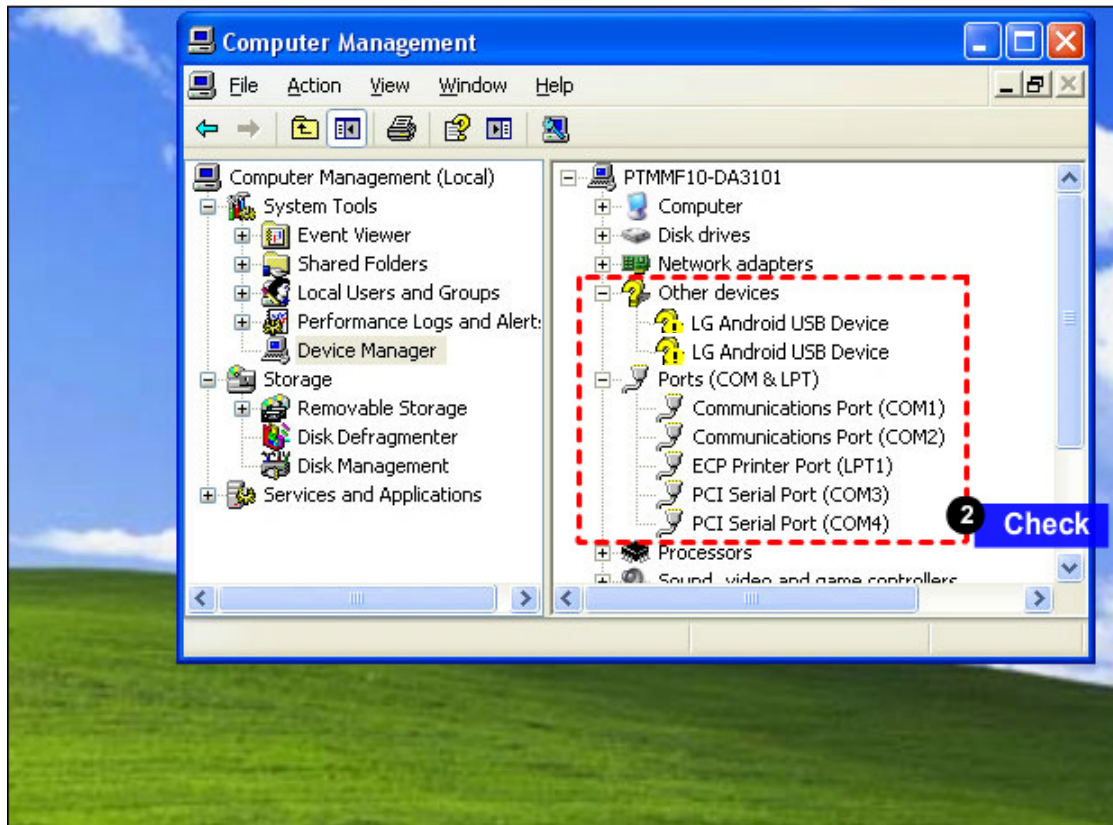
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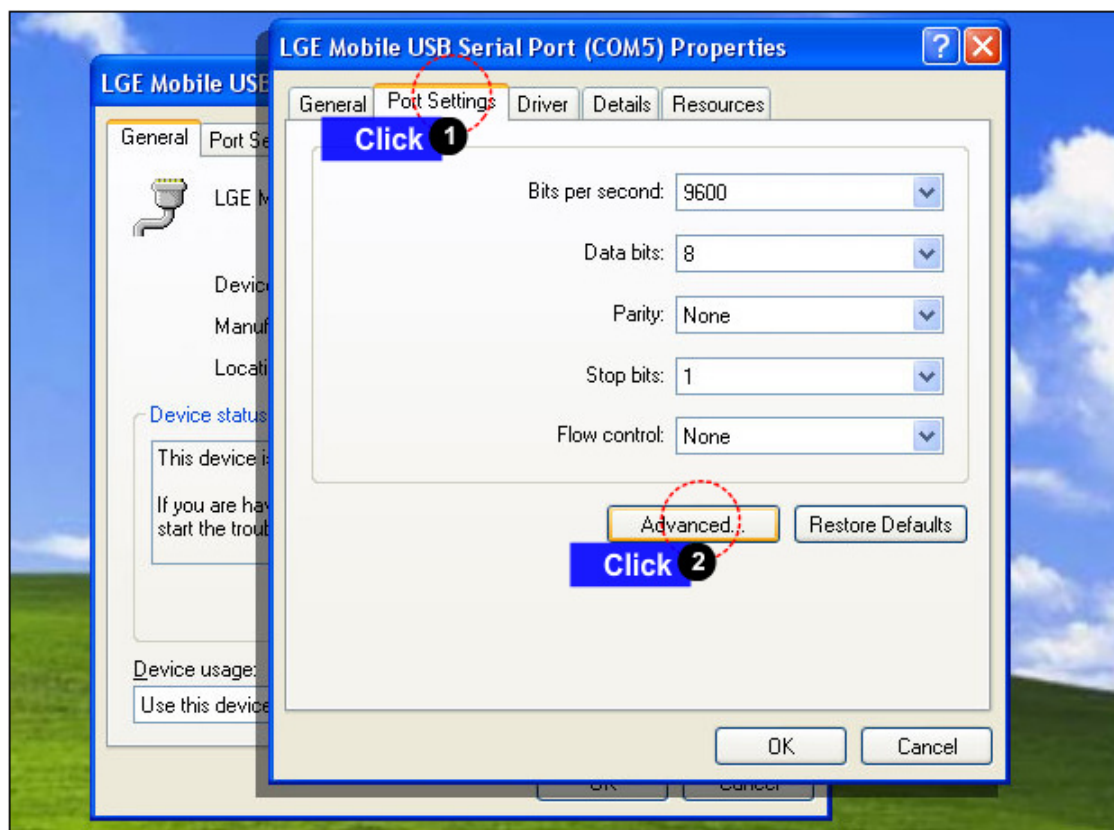
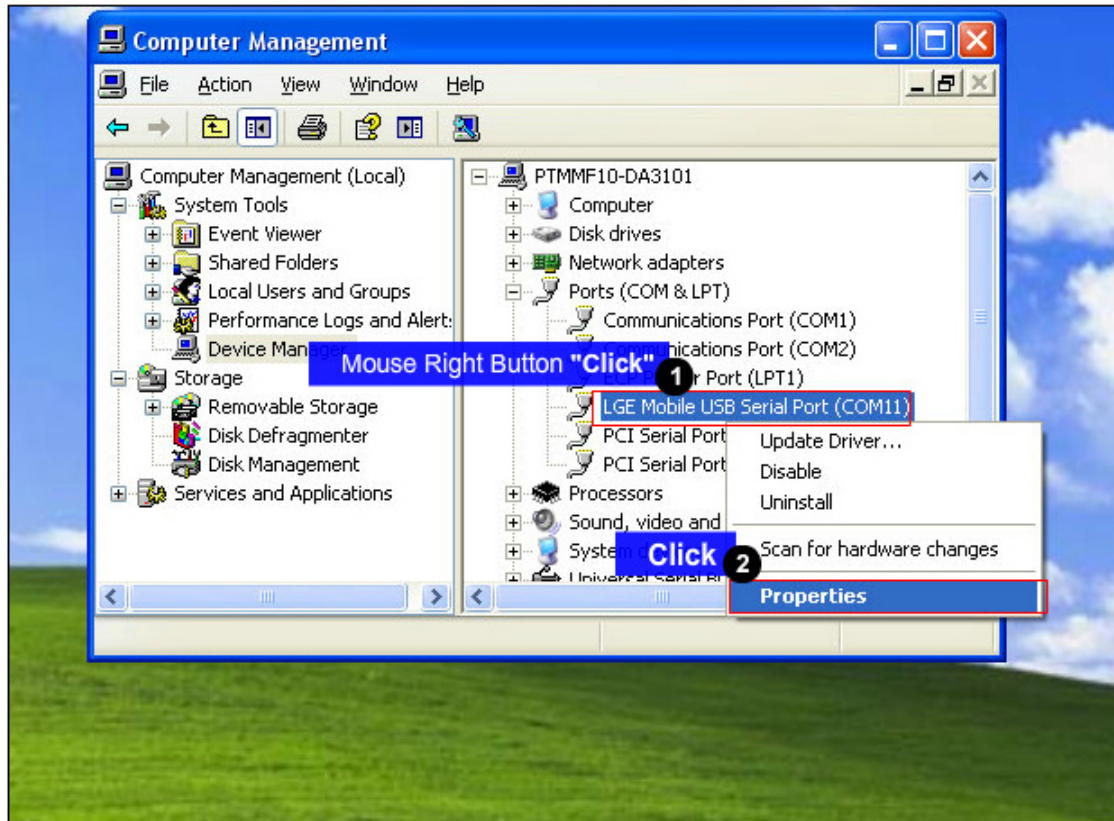


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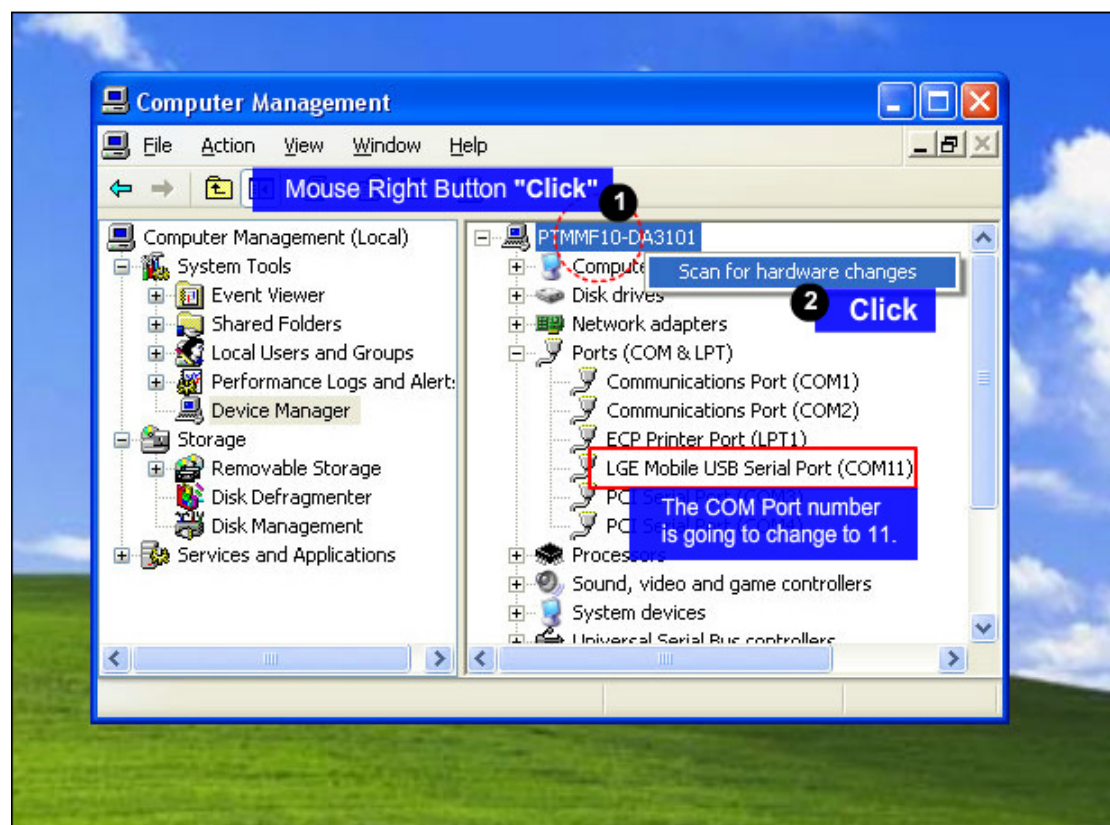
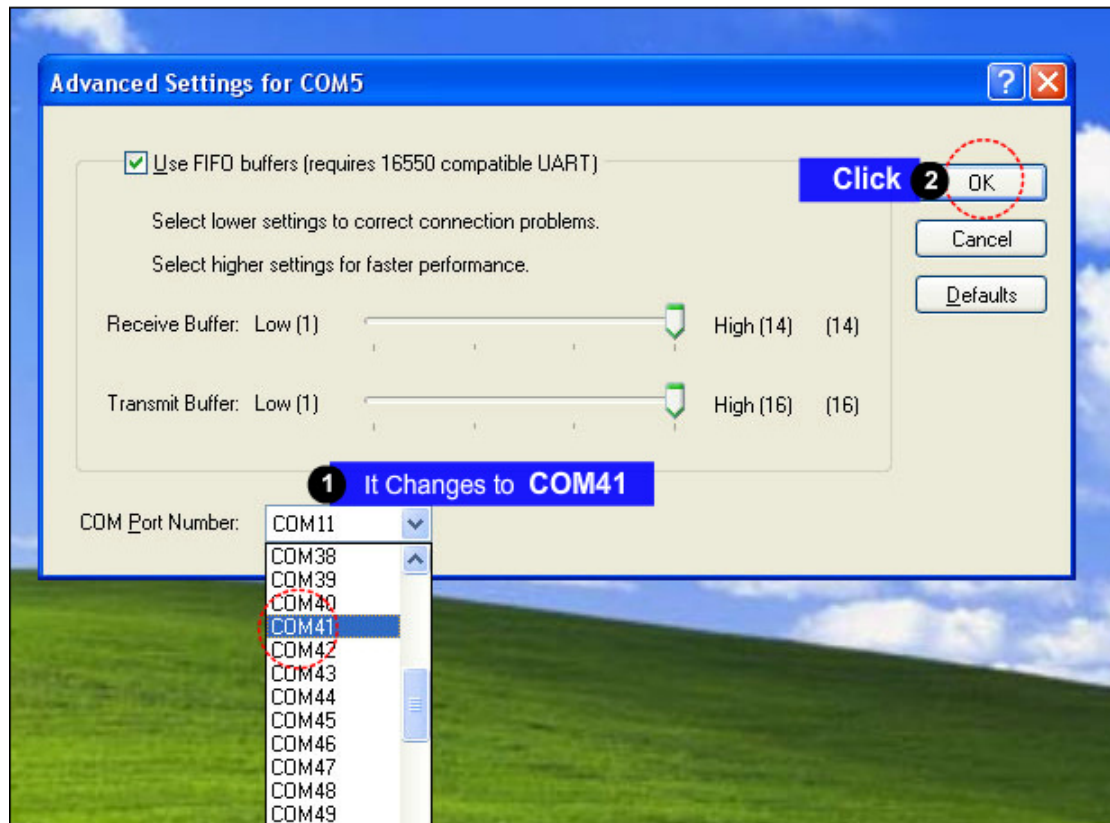


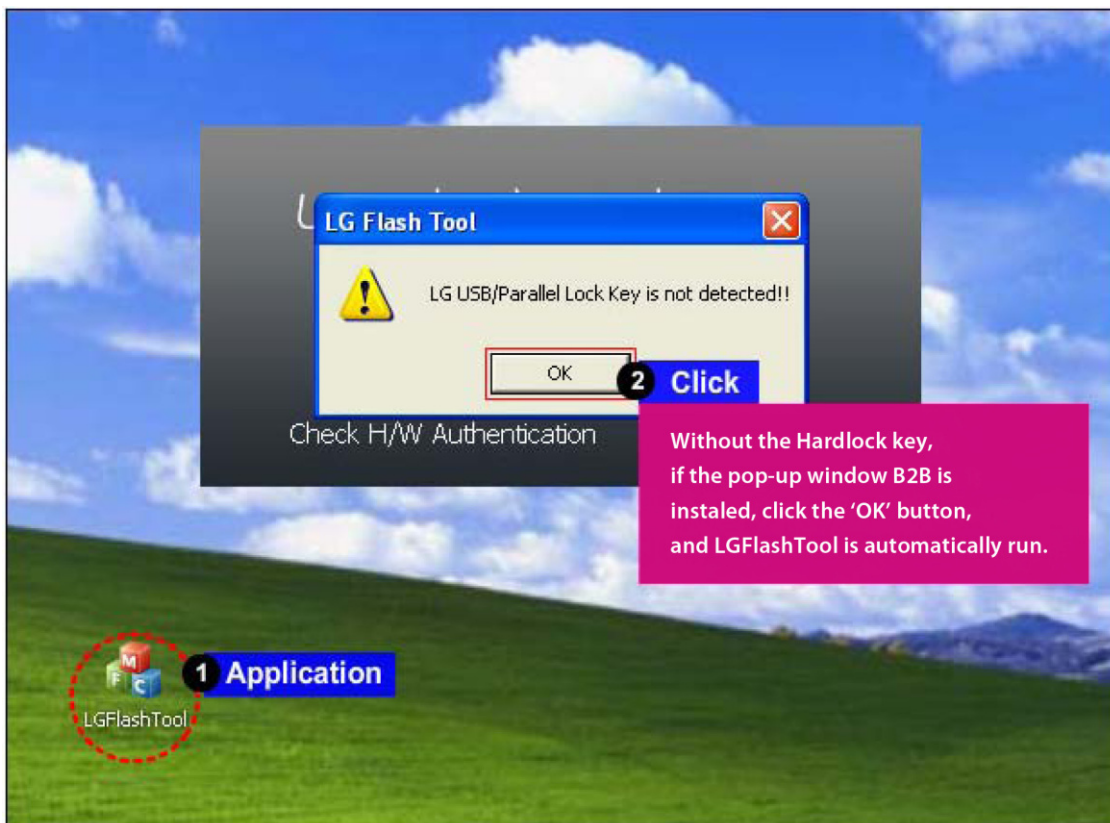
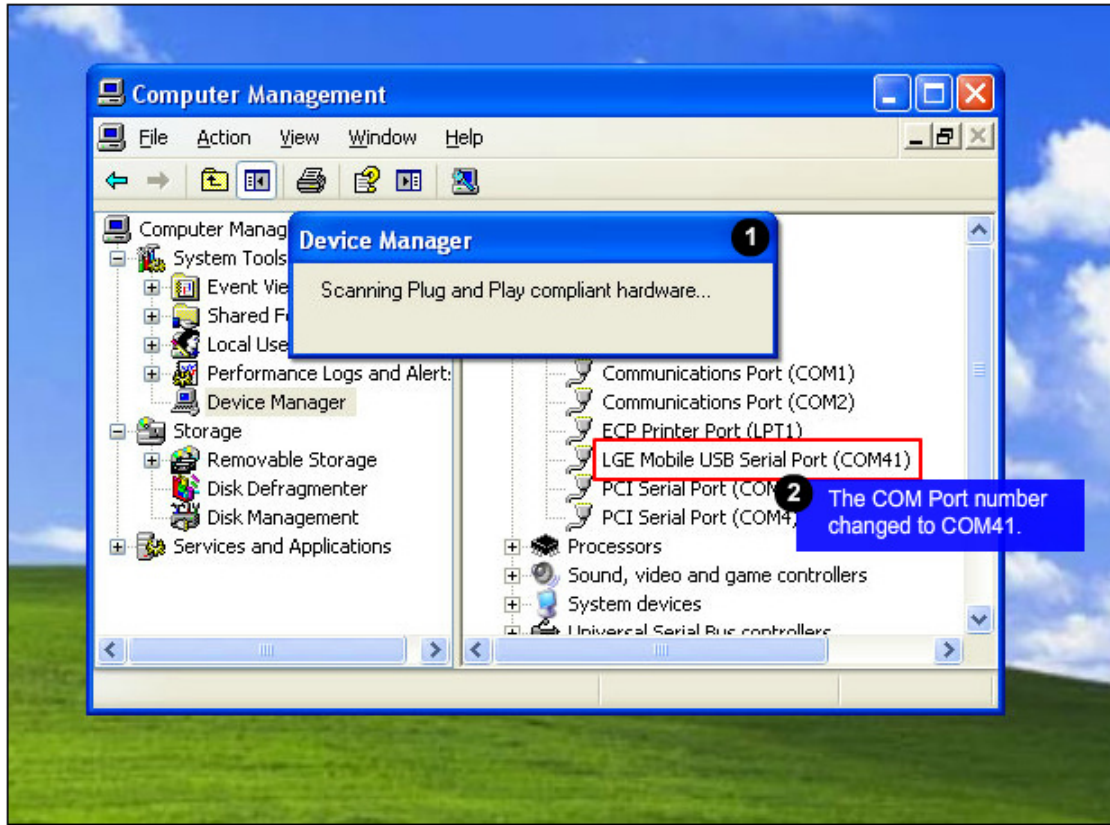


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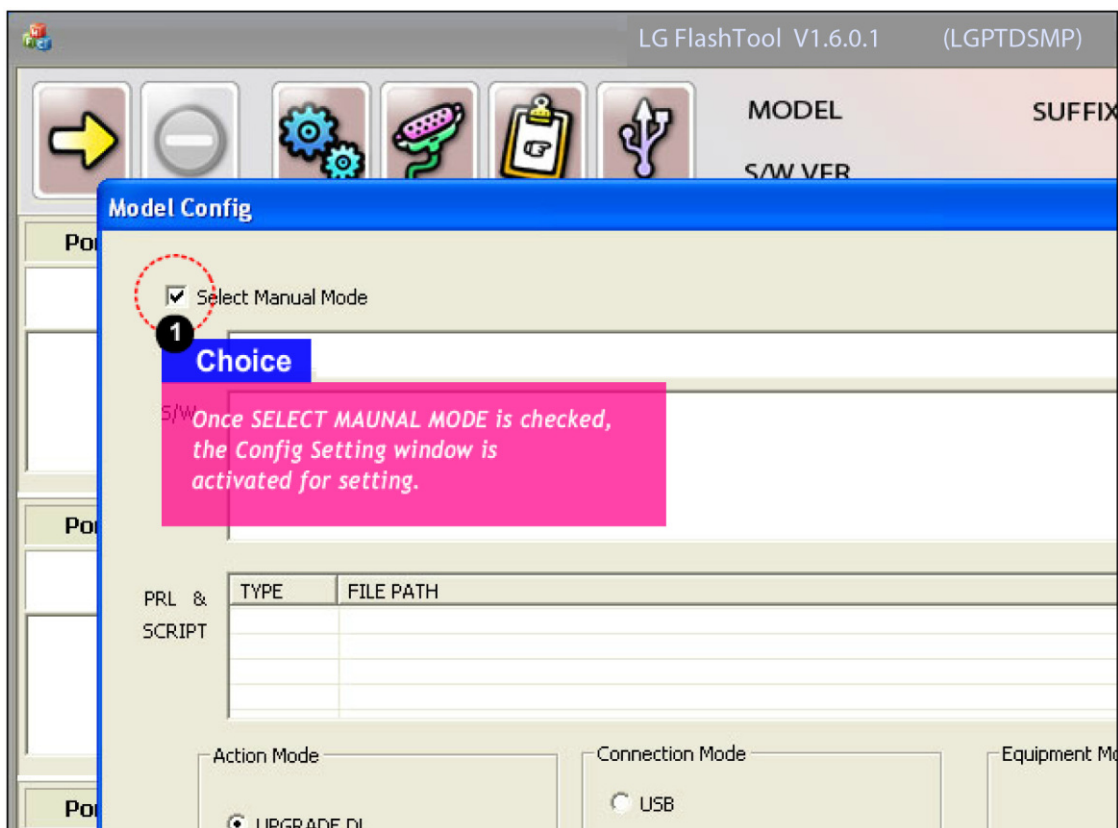
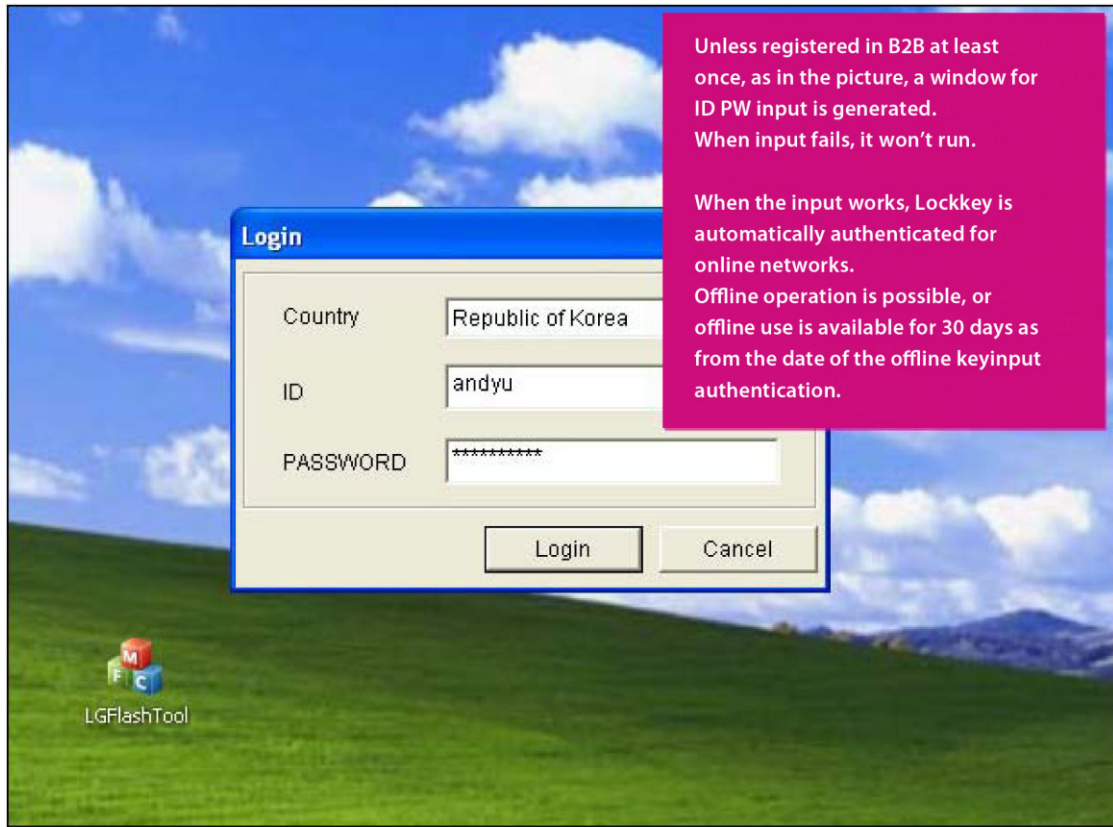


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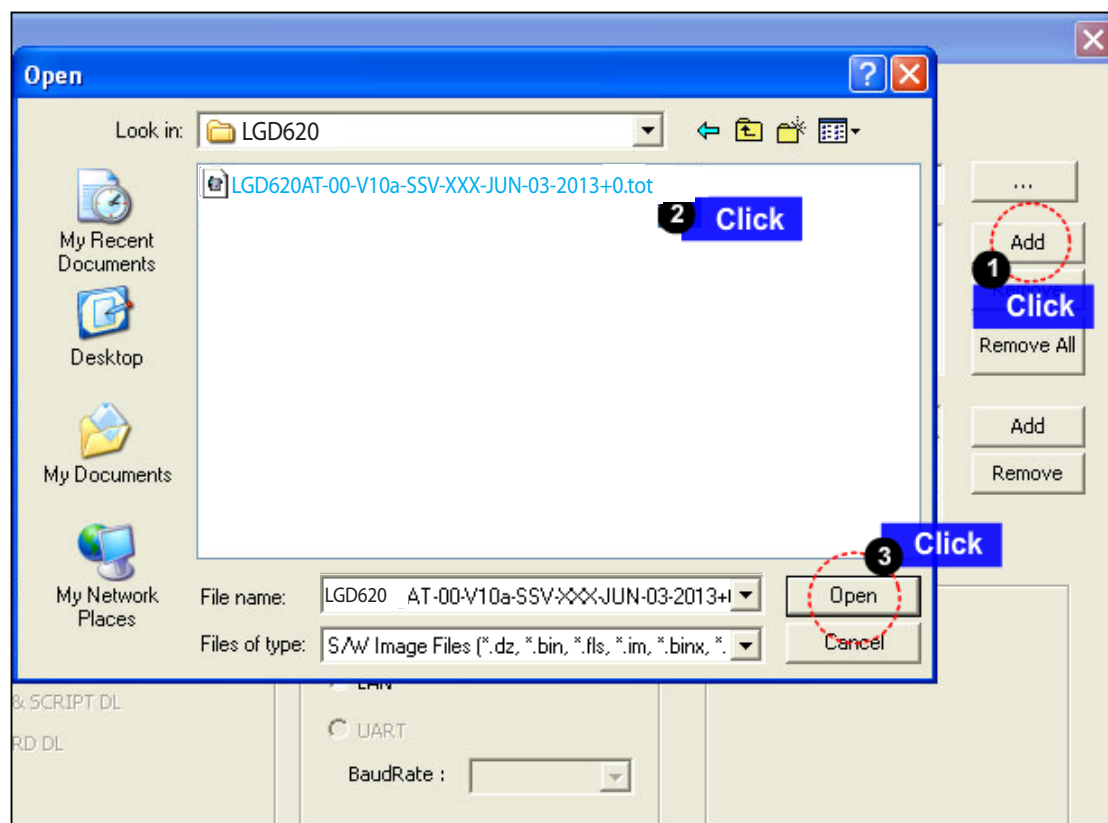
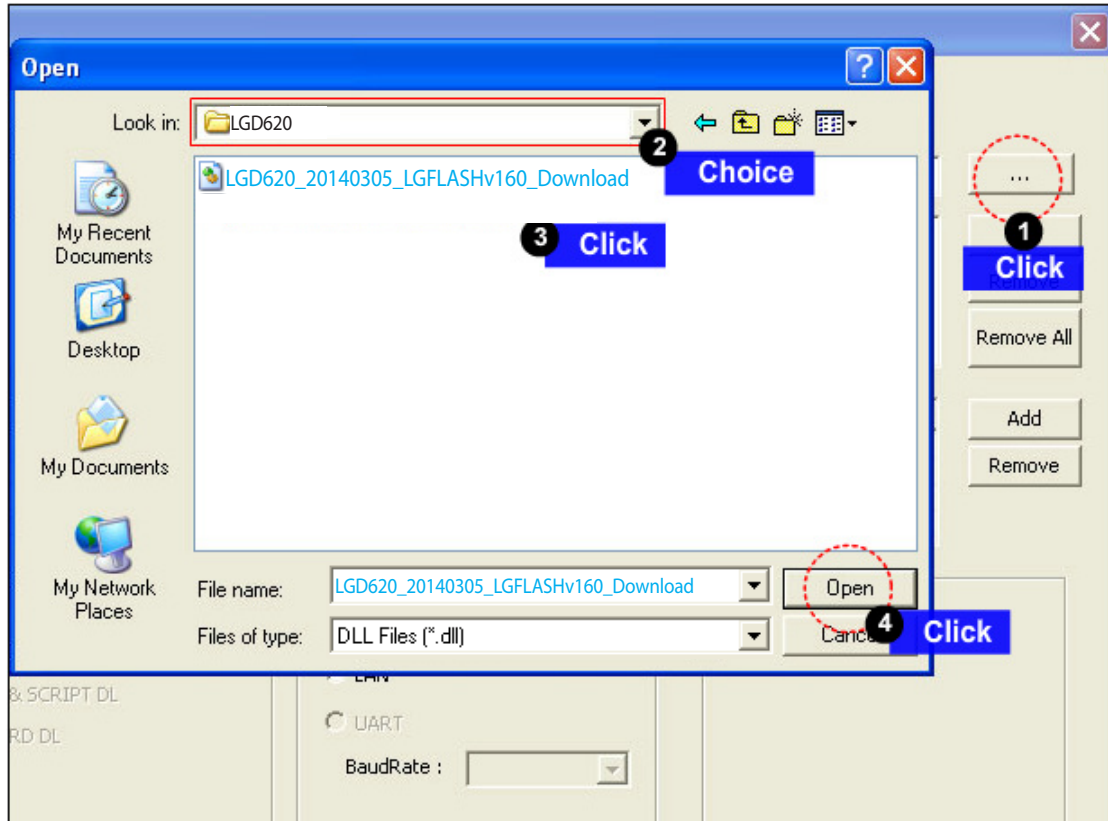




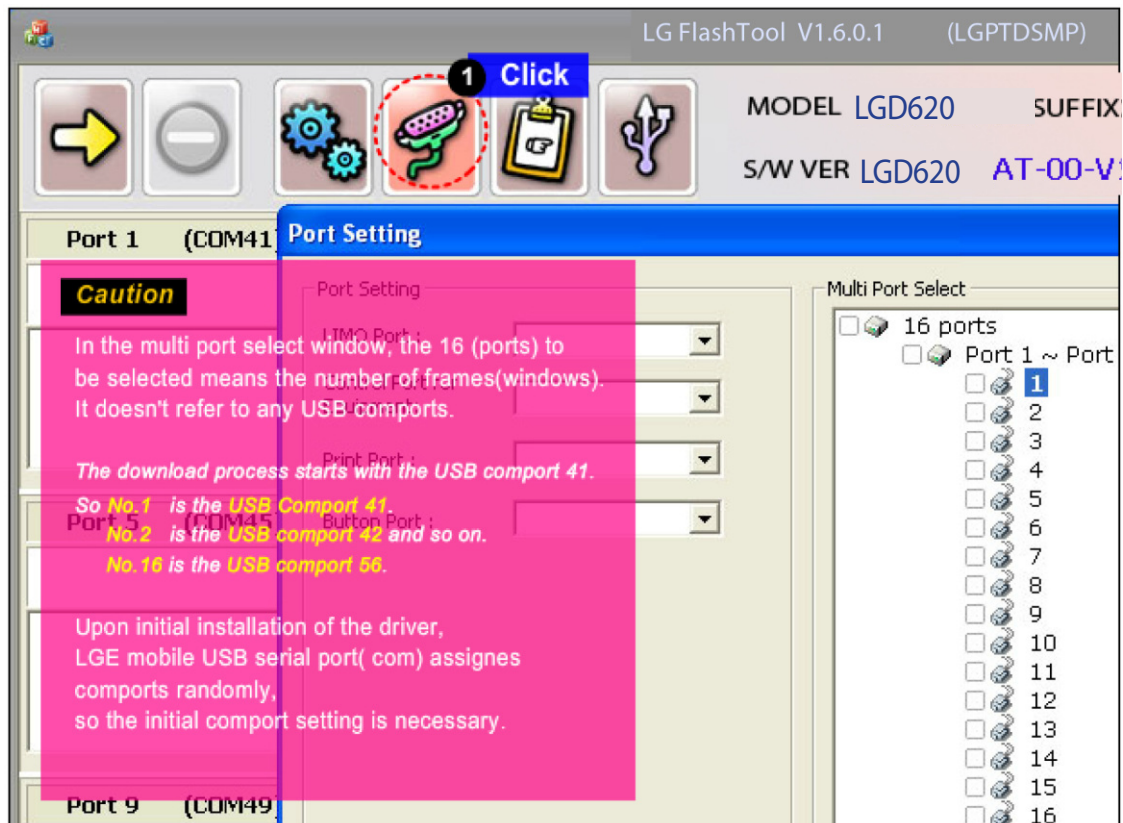
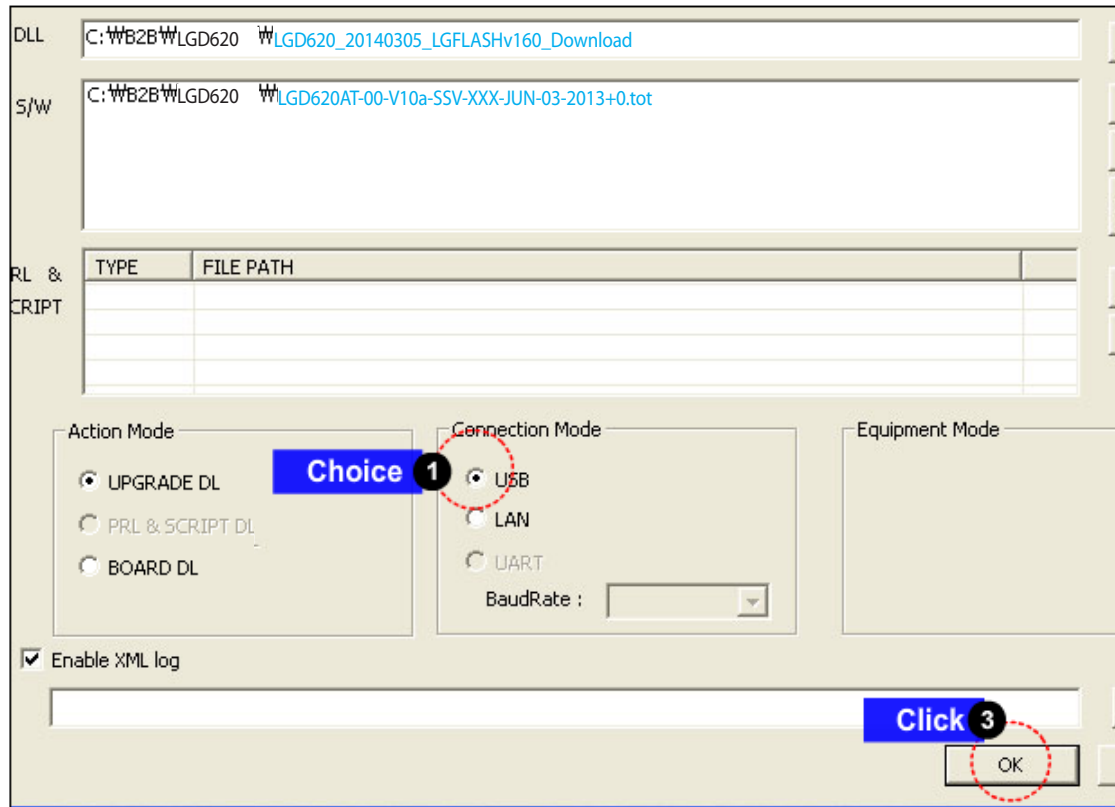
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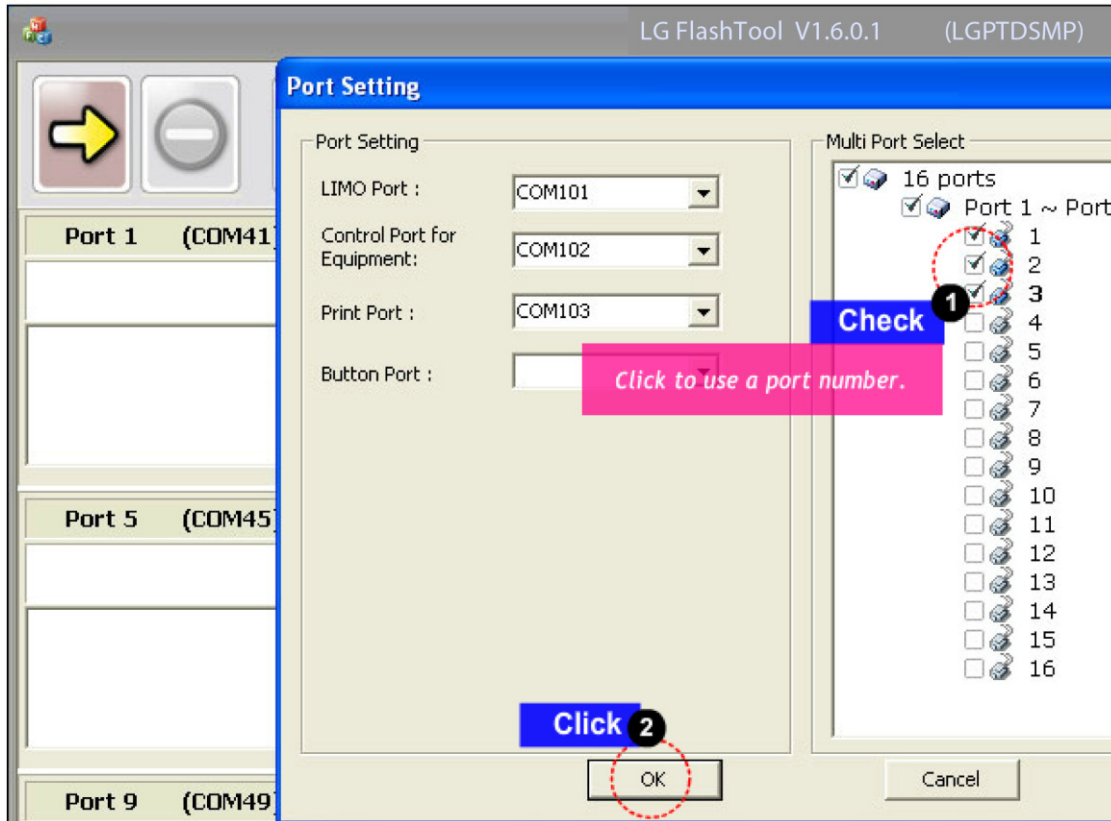
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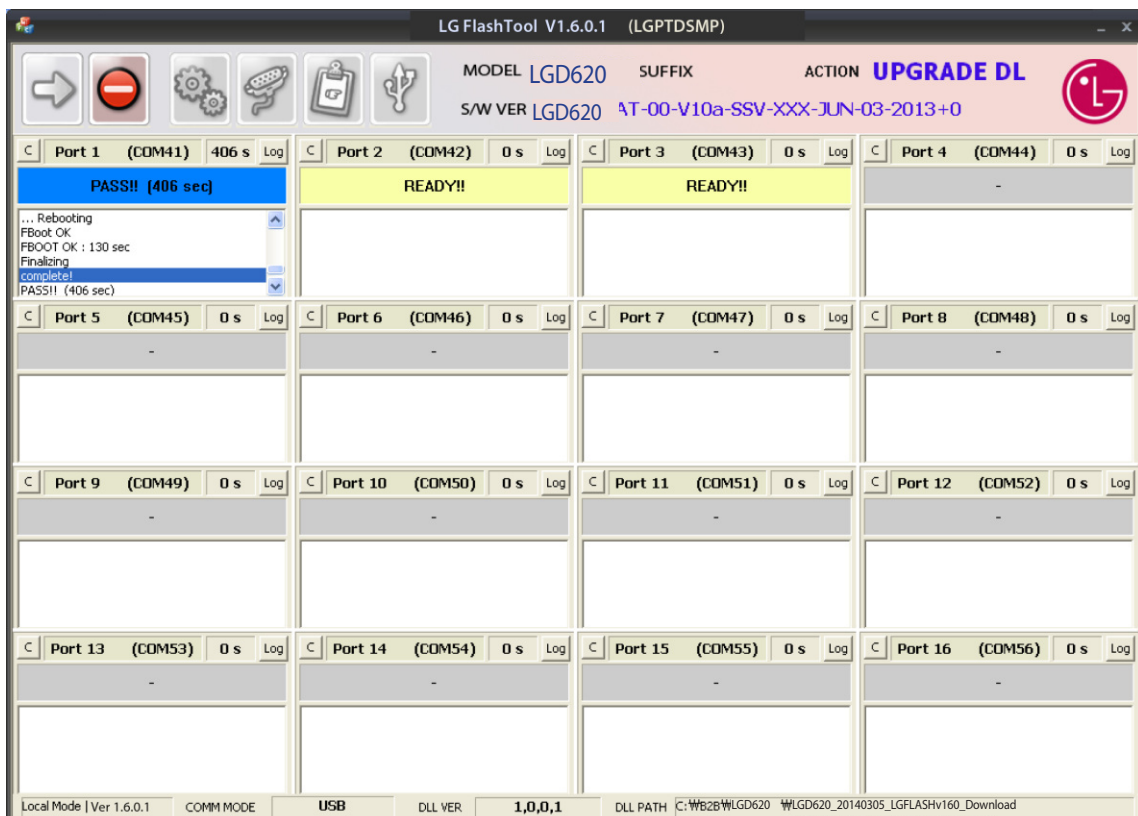
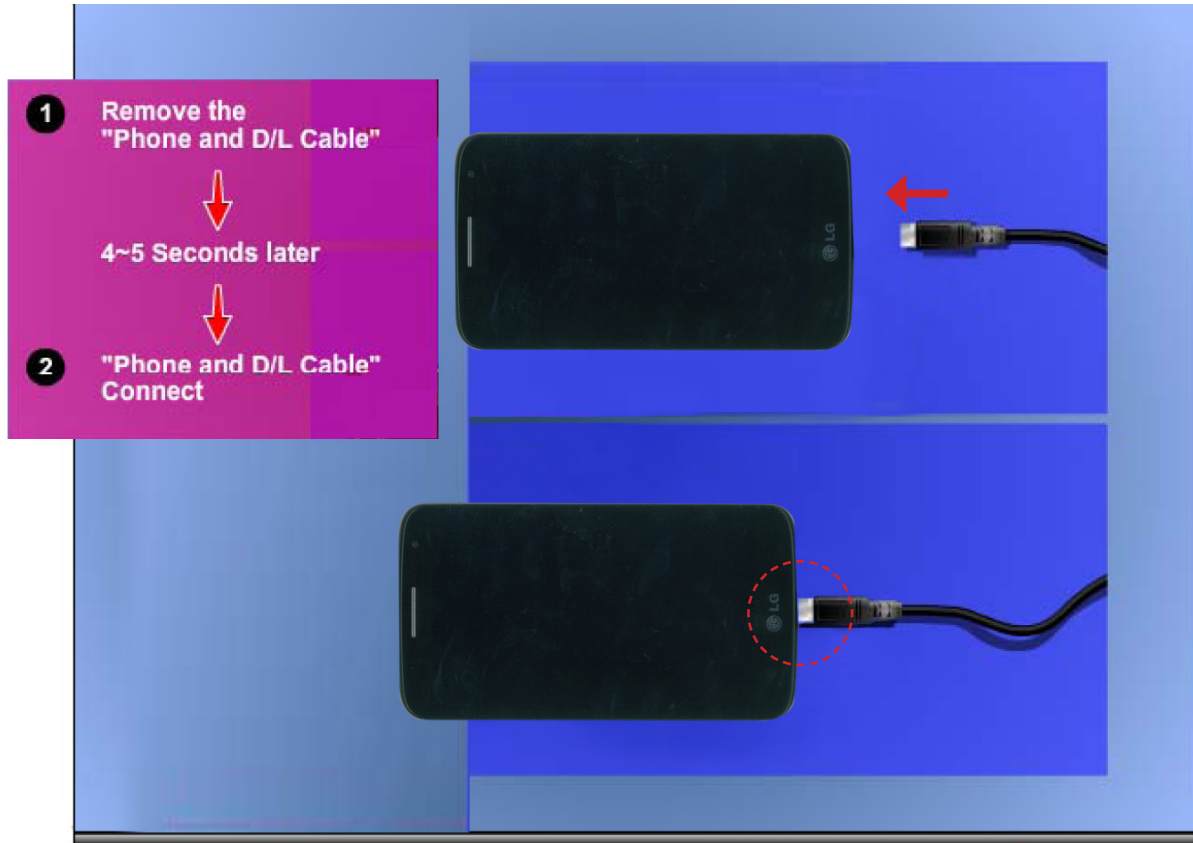
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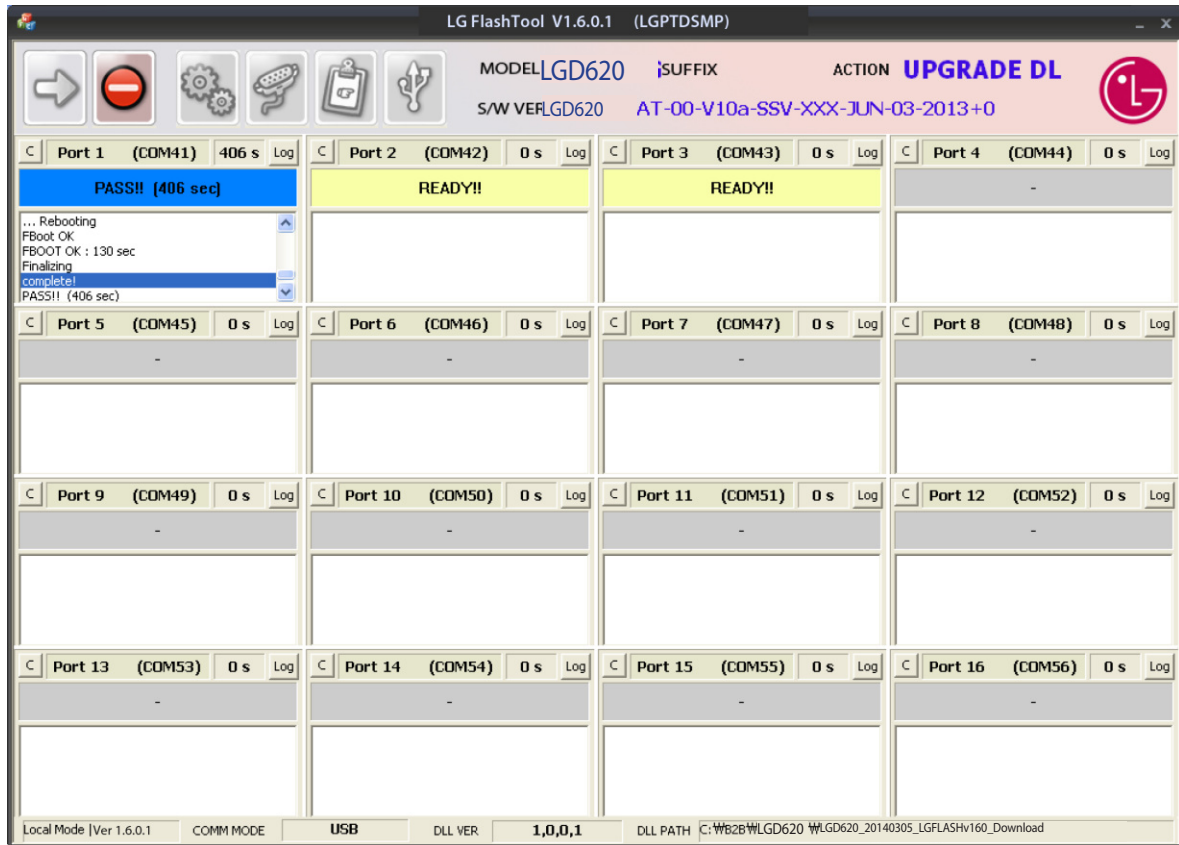
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4. DOWNLOAD

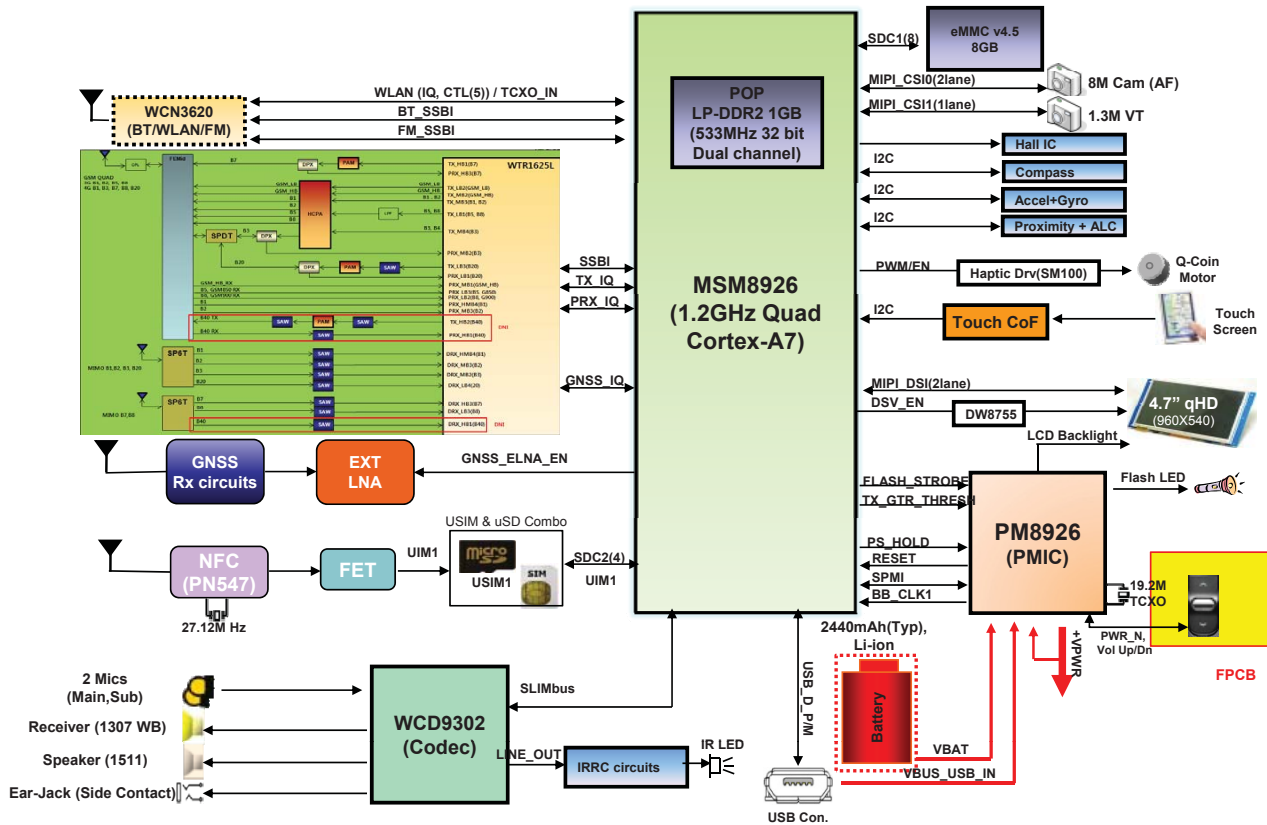


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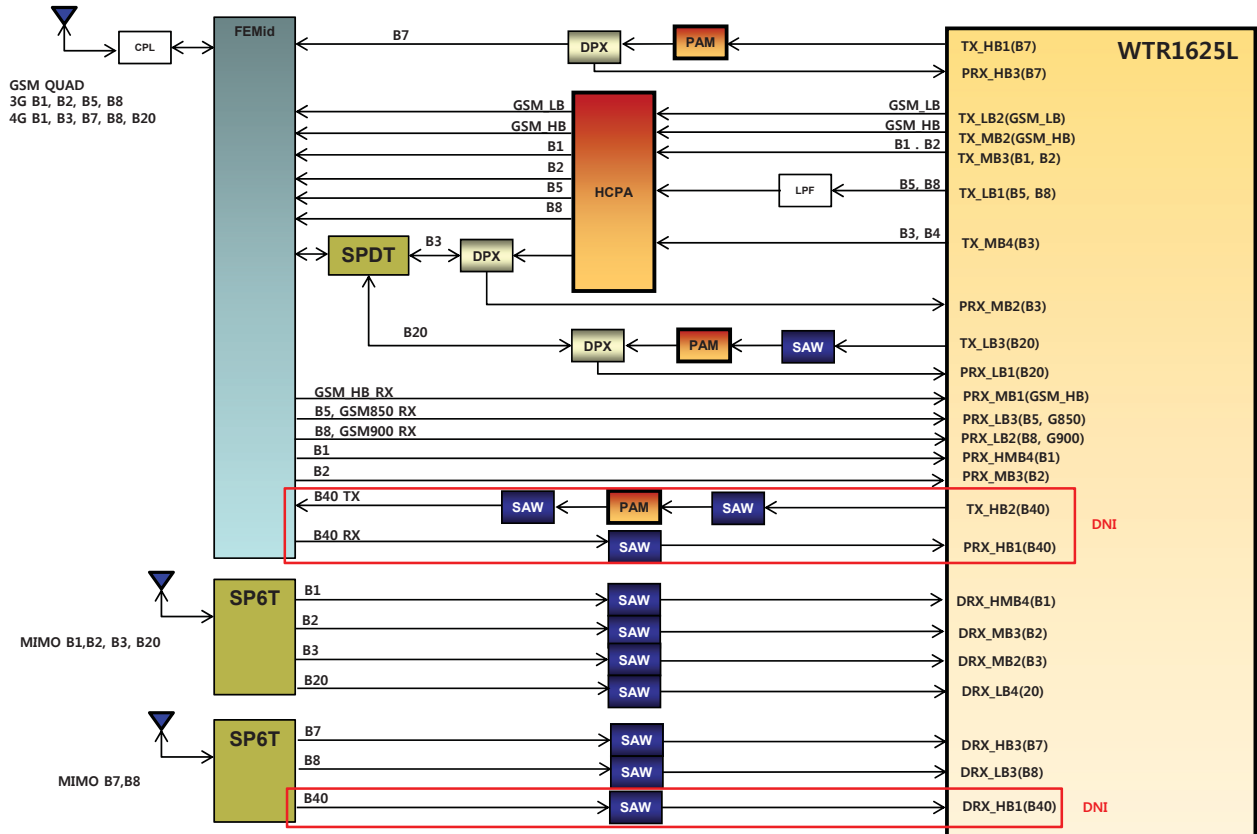
5. BLOCK DIAGRAM

[LGD620] Block Diagram - Total



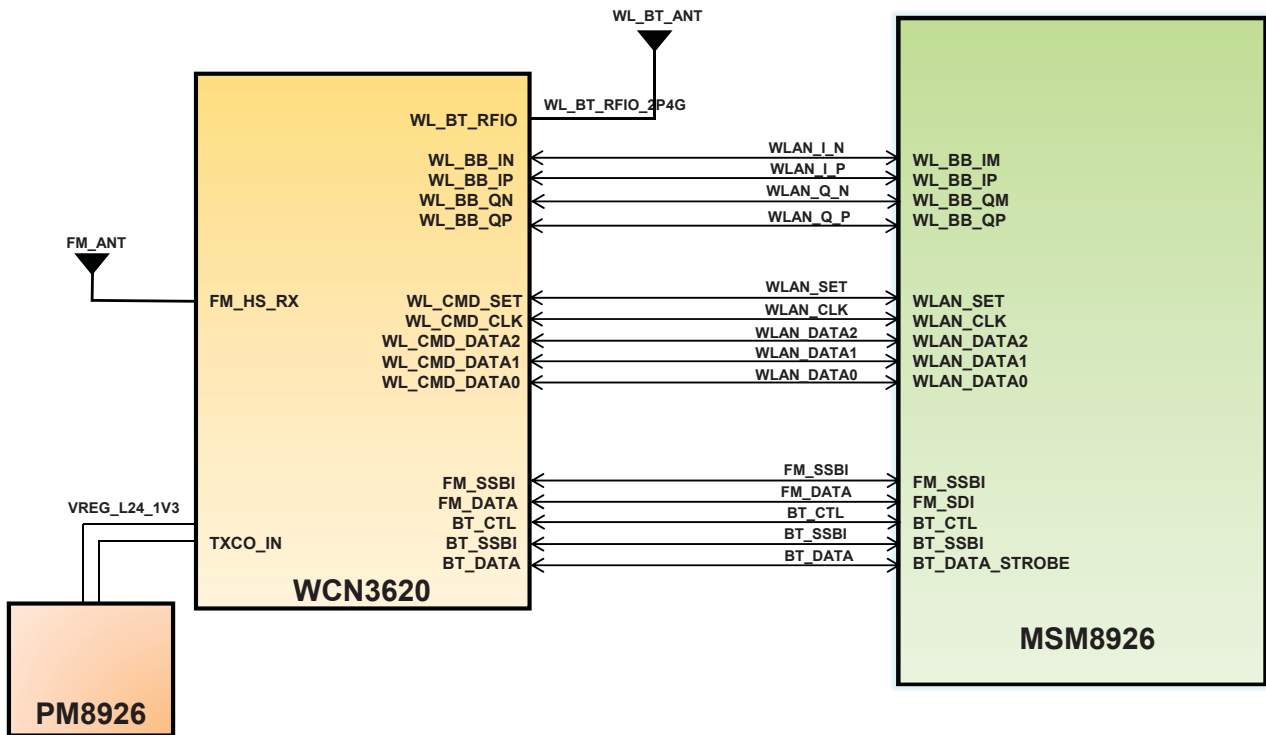
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[LGD620] RF Part



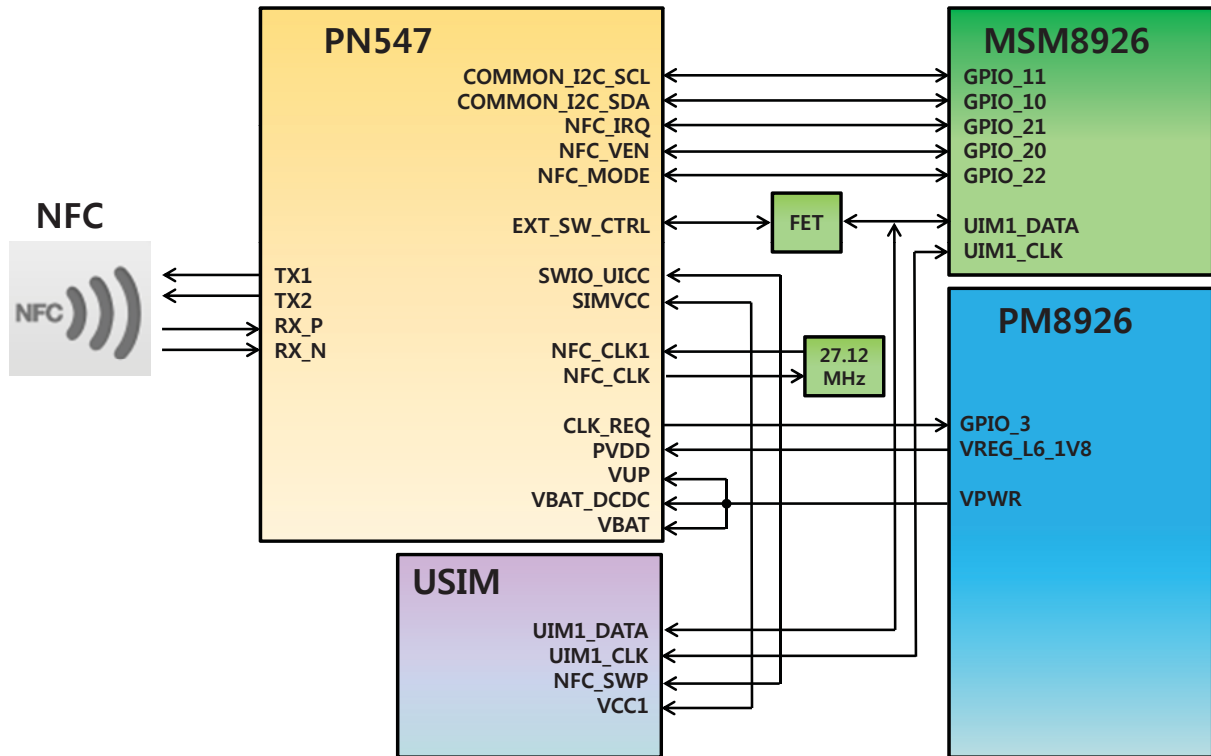
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[LGD620] Connectivity (BT_WiFi_FM)



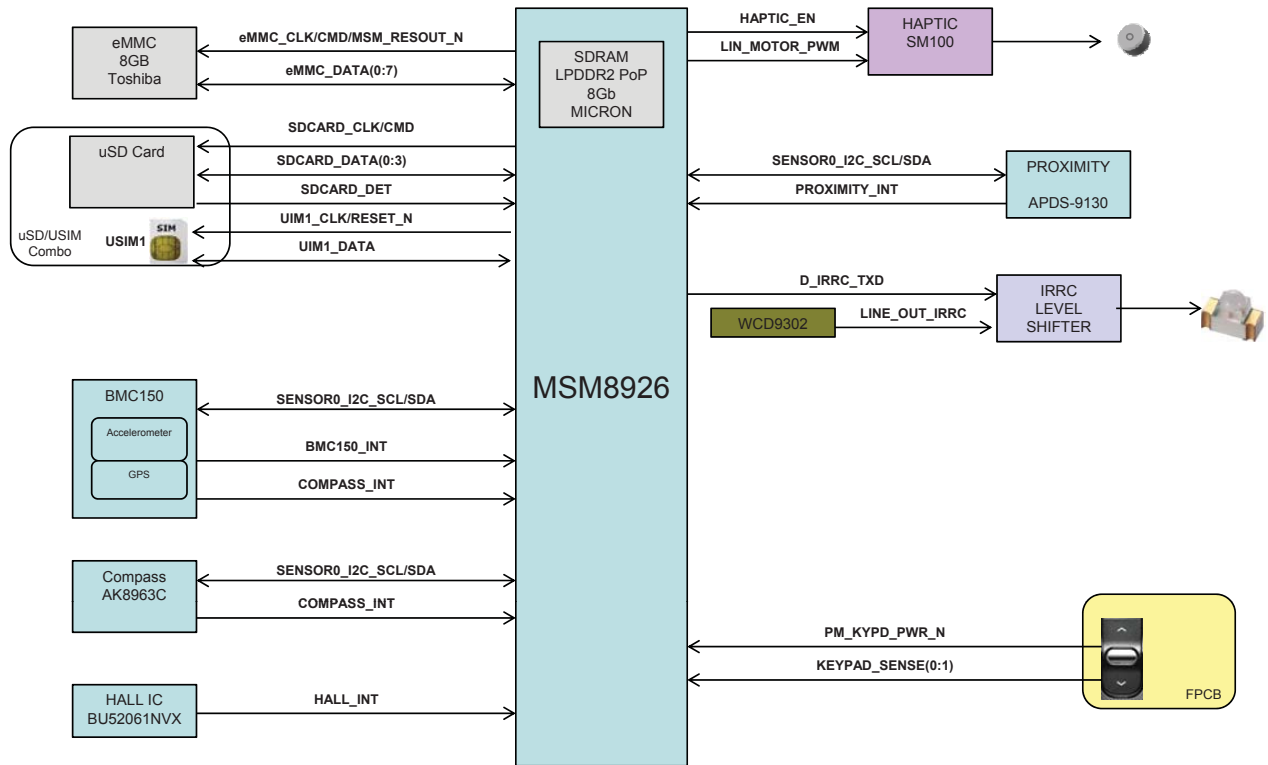
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[LGD620] Connectivity (NFC)

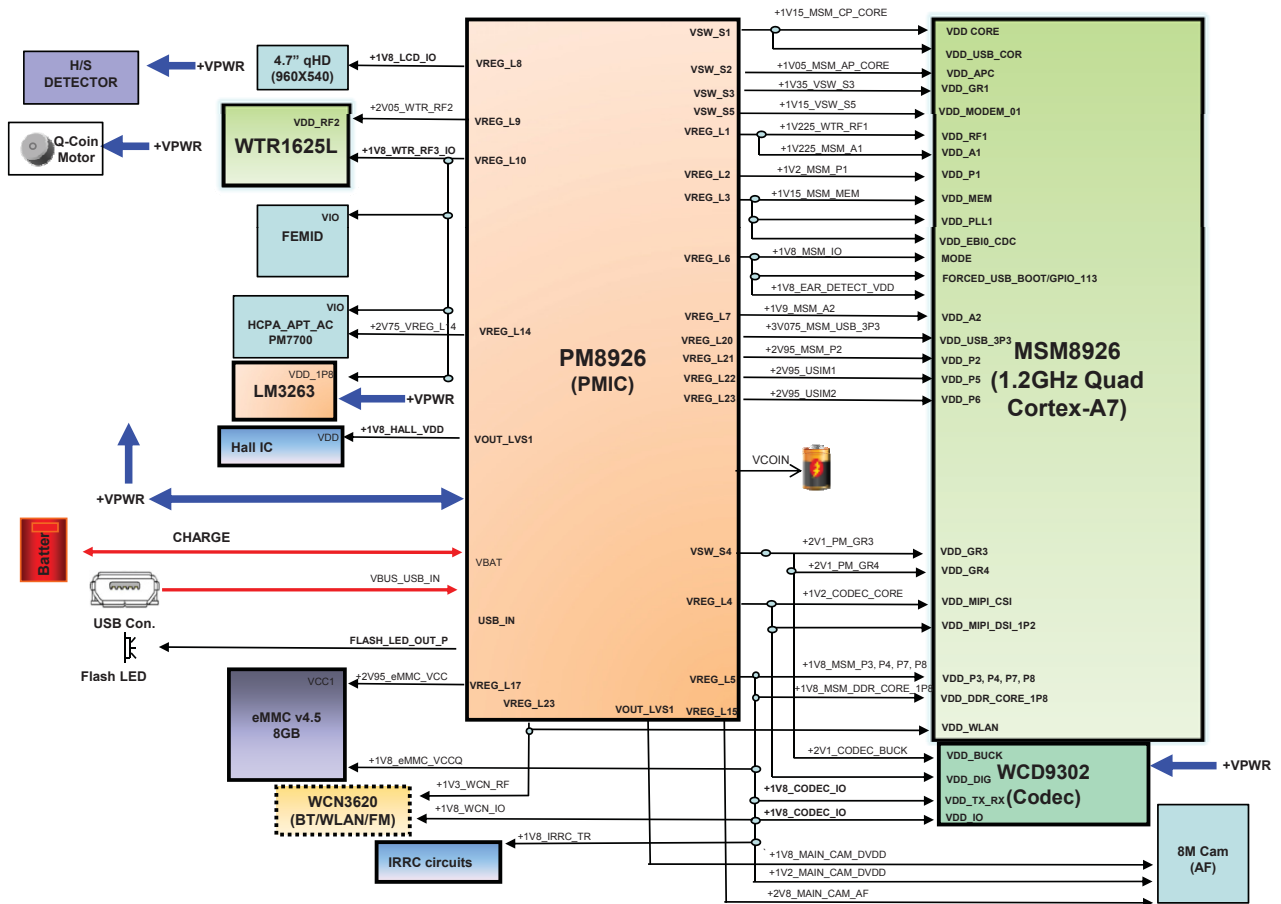


5. BLOCK DIAGRAM

[LGD620] Logic

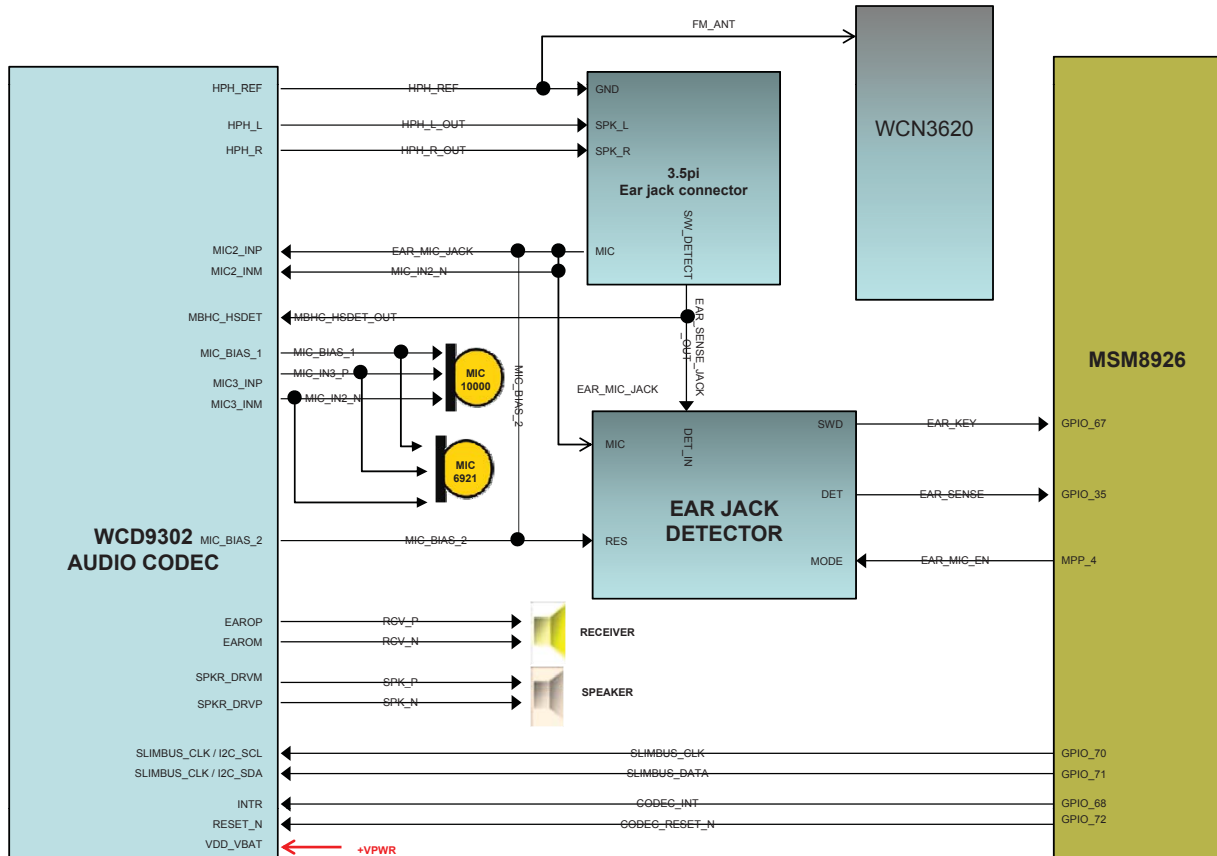


[LGD620] Power



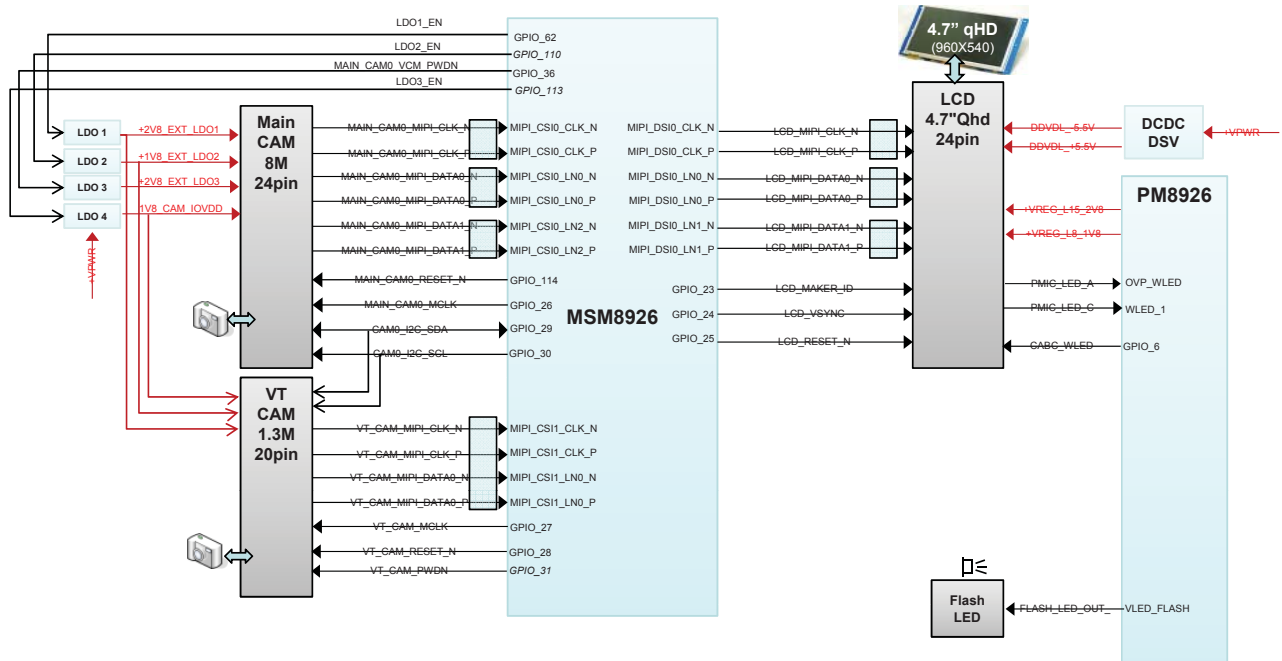
5. BLOCK DIAGRAM

[LGD620] Audio



5. BLOCK DIAGRAM

[LGD620] Camera & Display

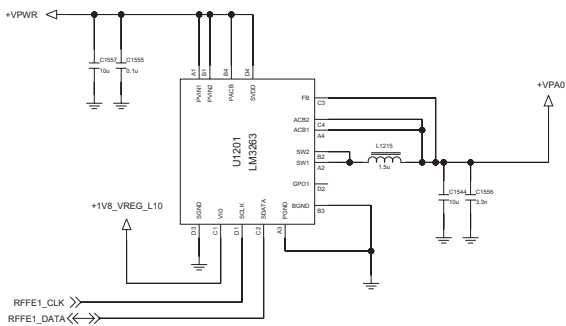
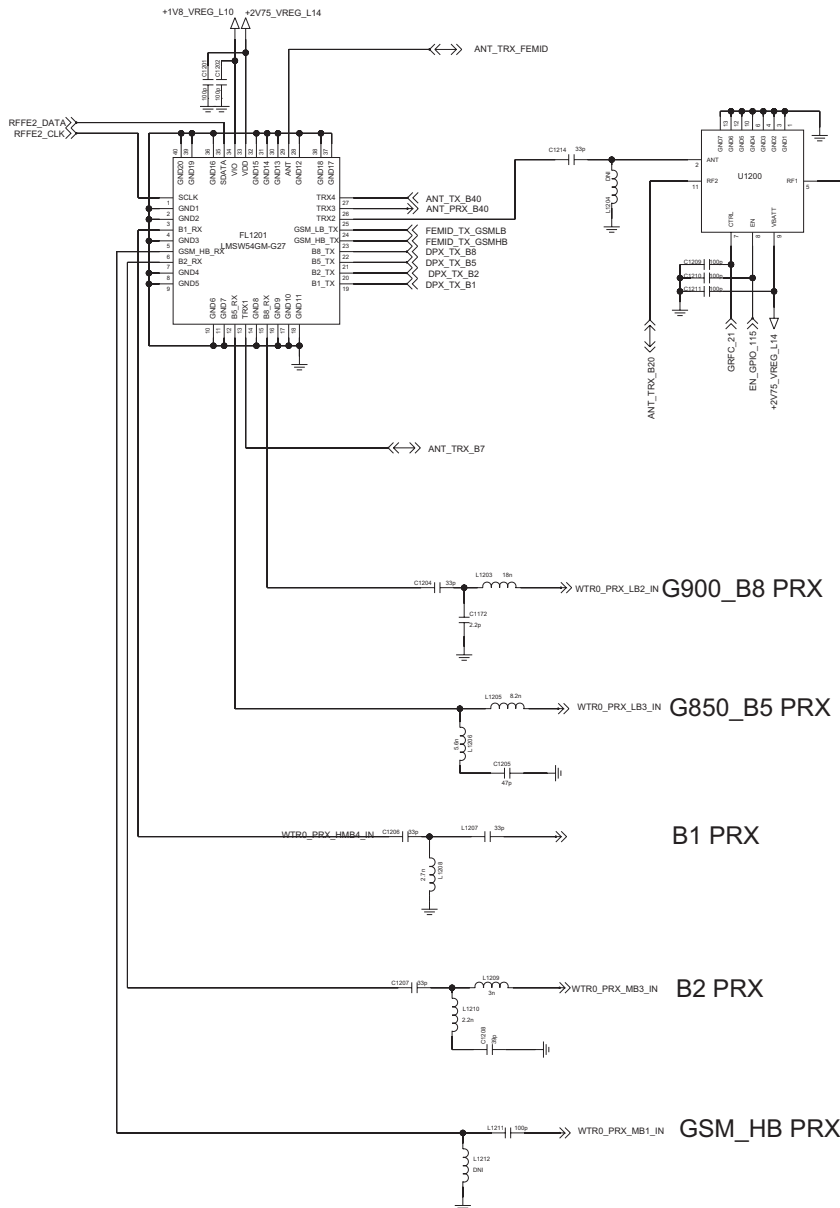


<RF Cable Clamp> Rev_0.3



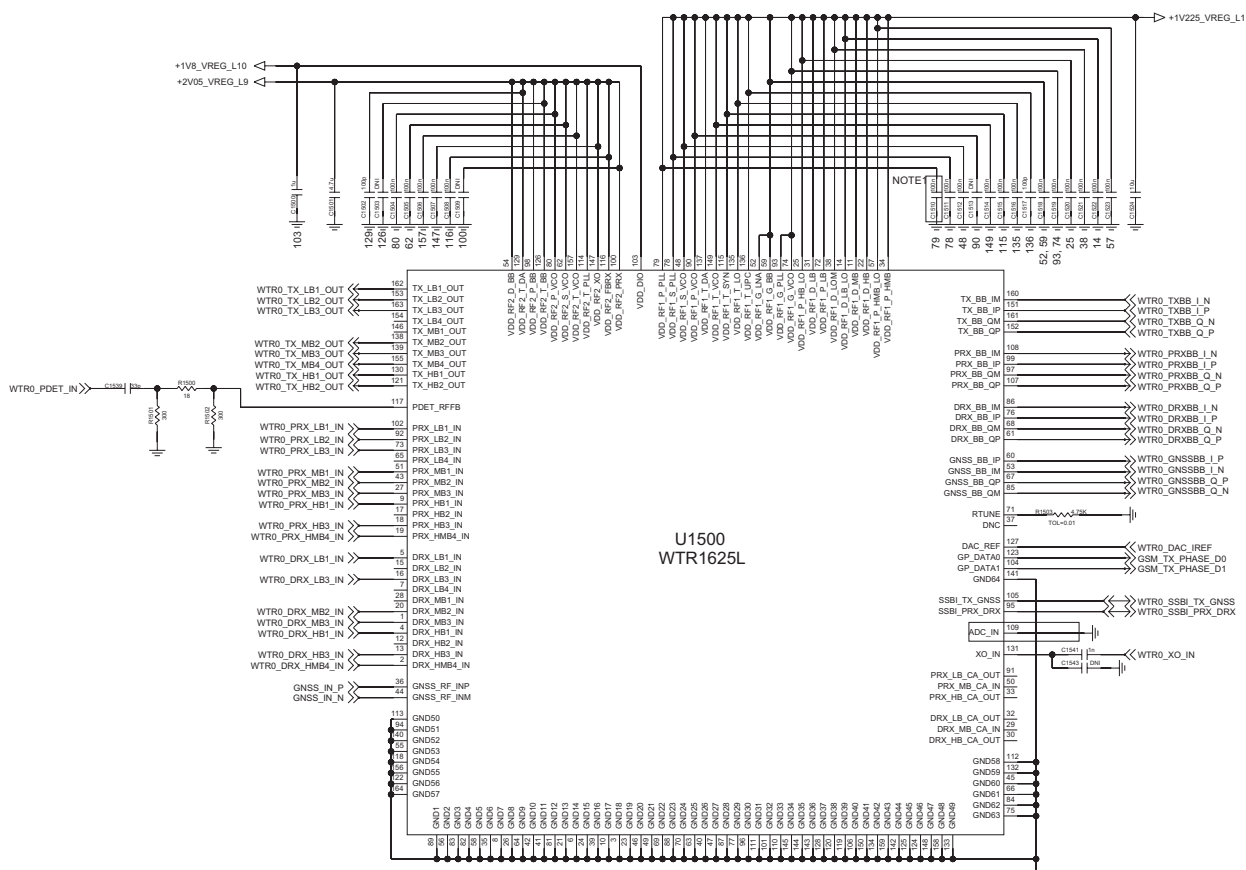
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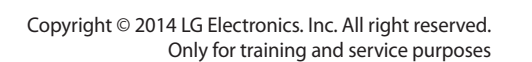
<1-3-2-9_FEMID_nCA_EU_GLOBAL_2> Rev_0.1



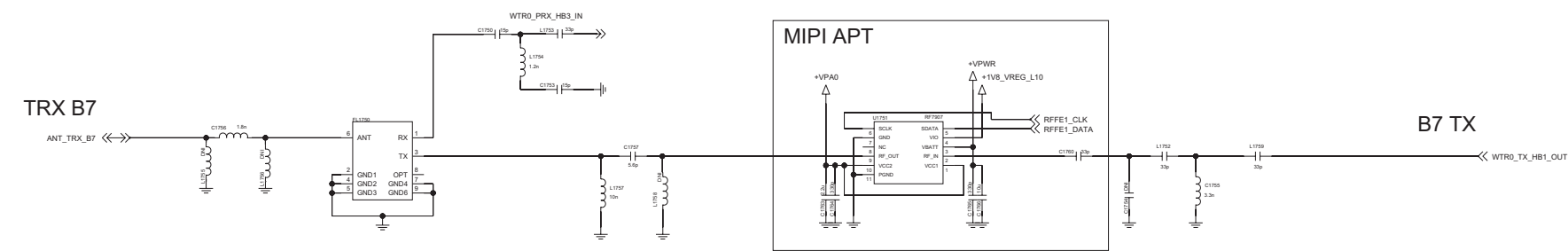
< 1-3-5-1_RFIC_CA_nCA_WTR1625 > Rev_0.4

CAUTION: YOU MUST CHECK & MODIFY RF PORT AND GPIO ON YOUR SCHEMATICS.

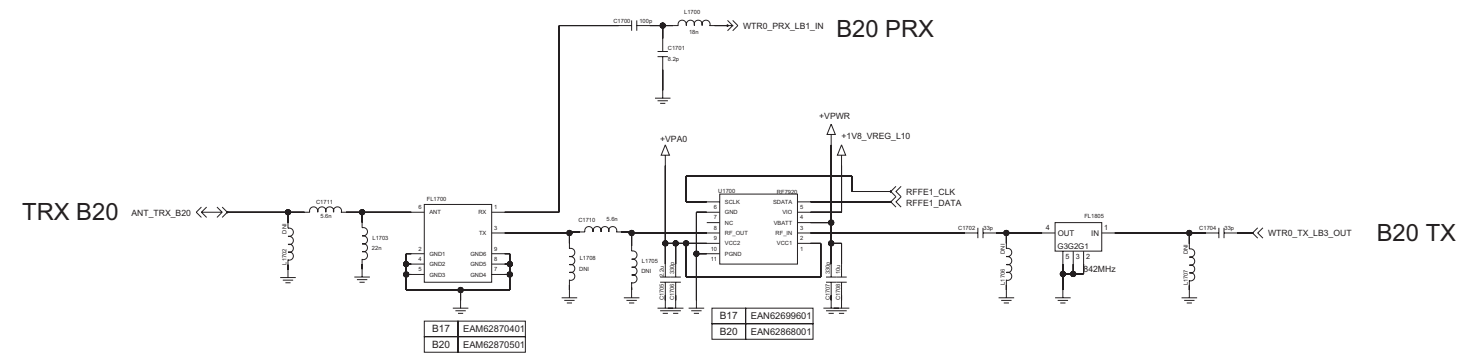




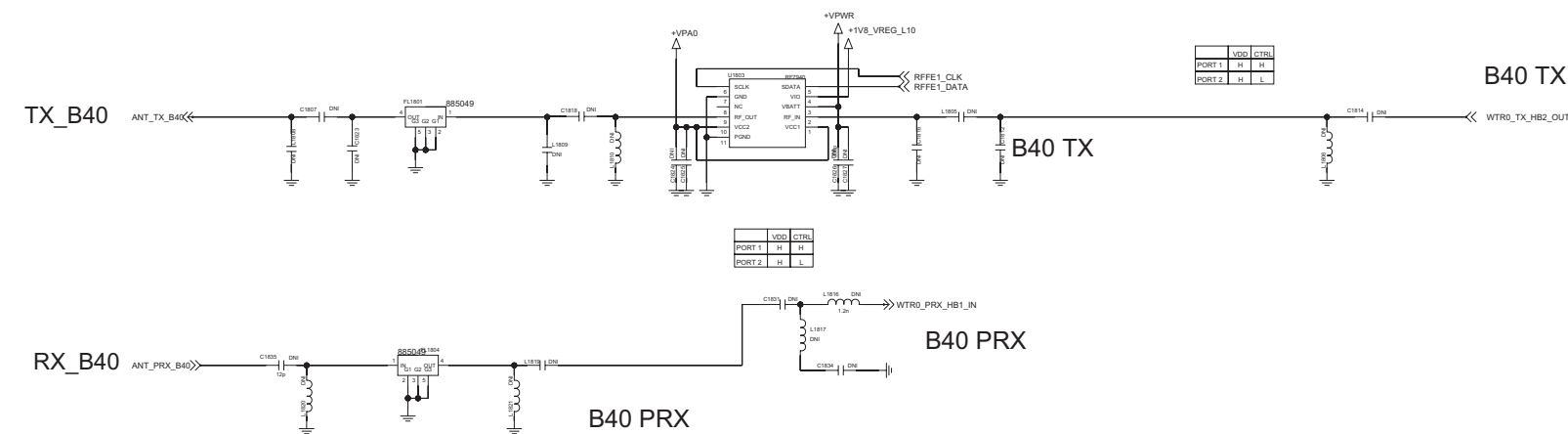
< 1-3-6-7_TRX_B7 > Rev_0.4



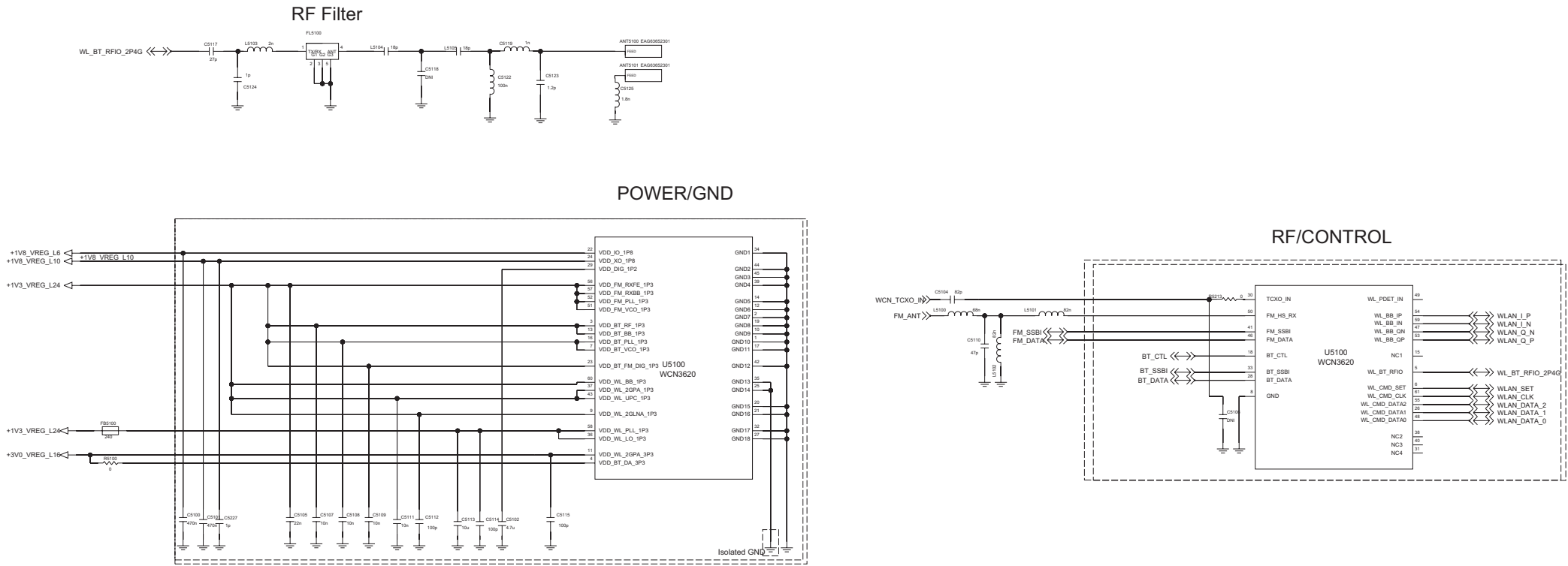
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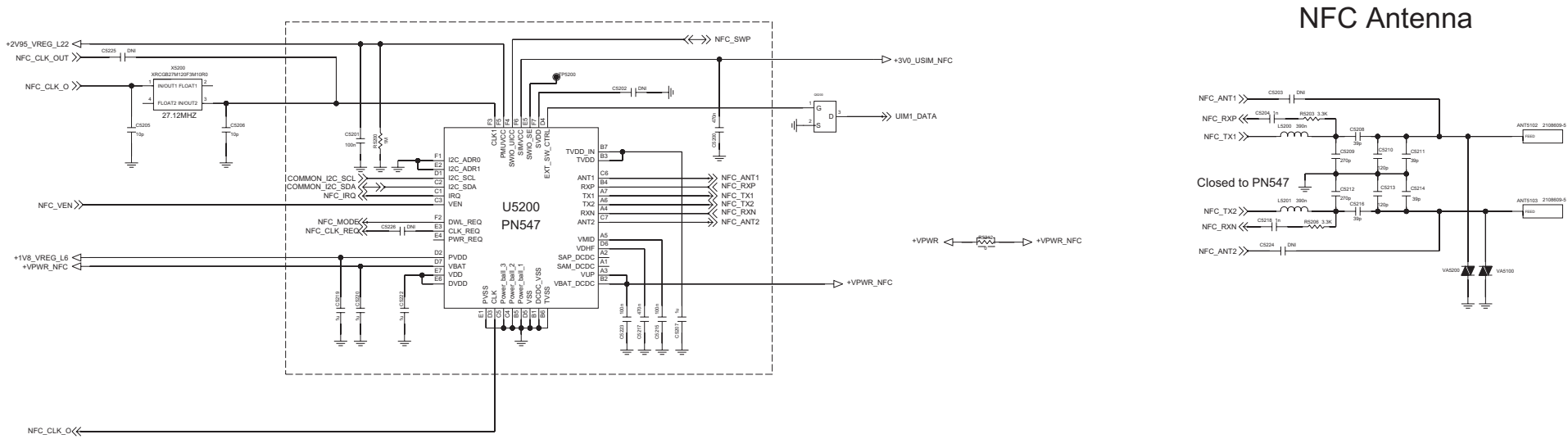
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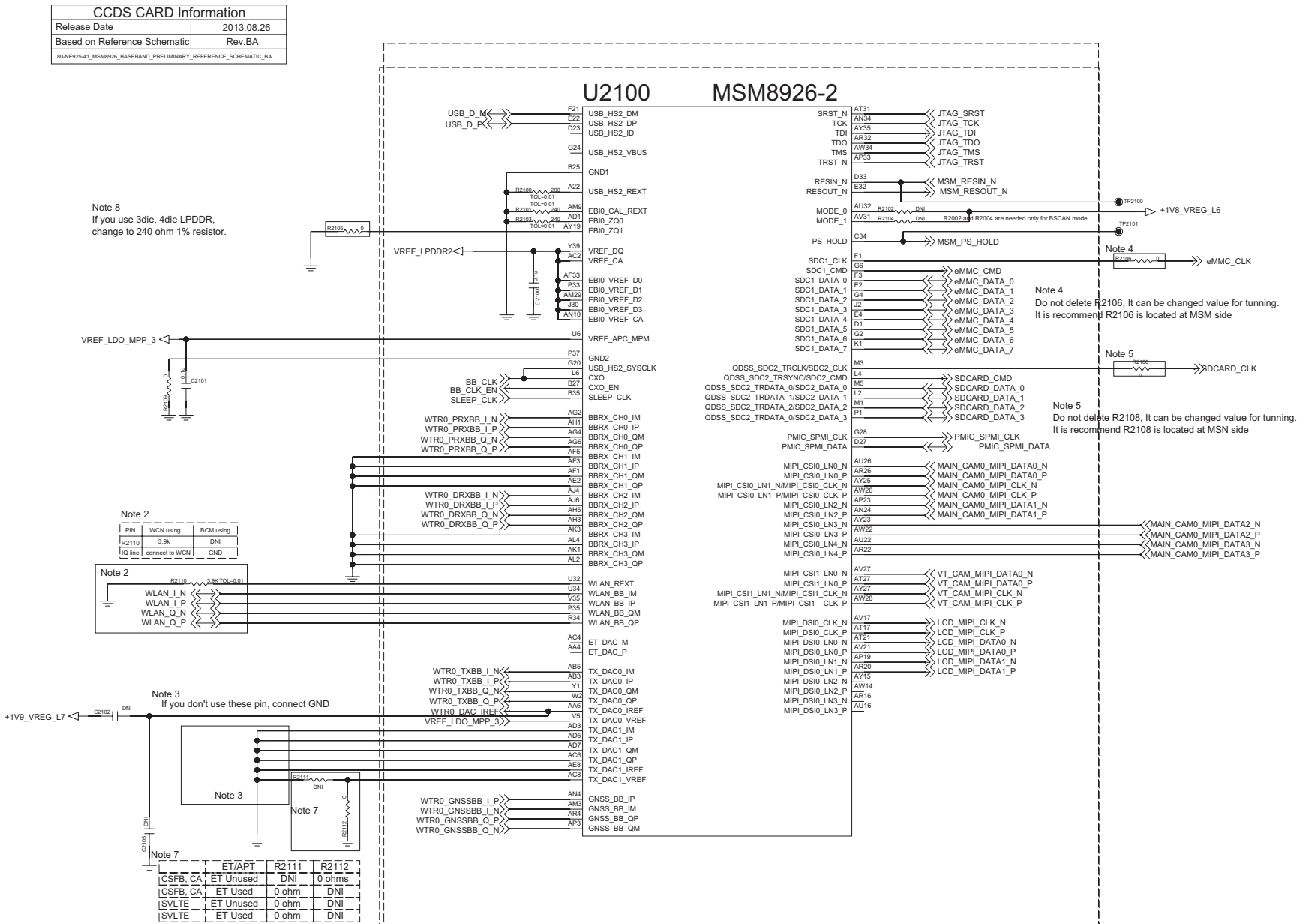
<5-1-1-4> BT_WiFi_Combo_WCN3620 REV 0.6



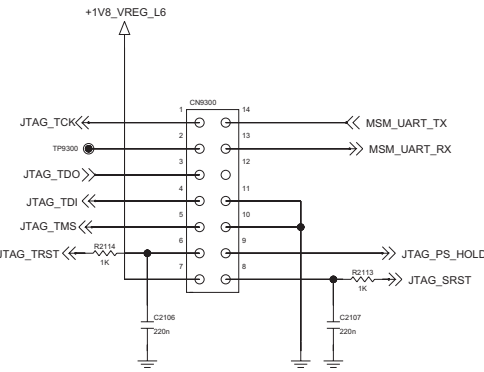
<5-2-1-4_NFC_PN547>Rev_0.4



<2-1-3-3-1_MSM8926_DATA> Rev_0.7



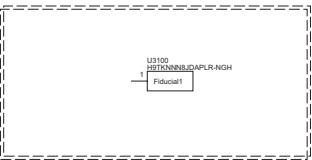
< 9-3-1_JTAG >Rev_0.4



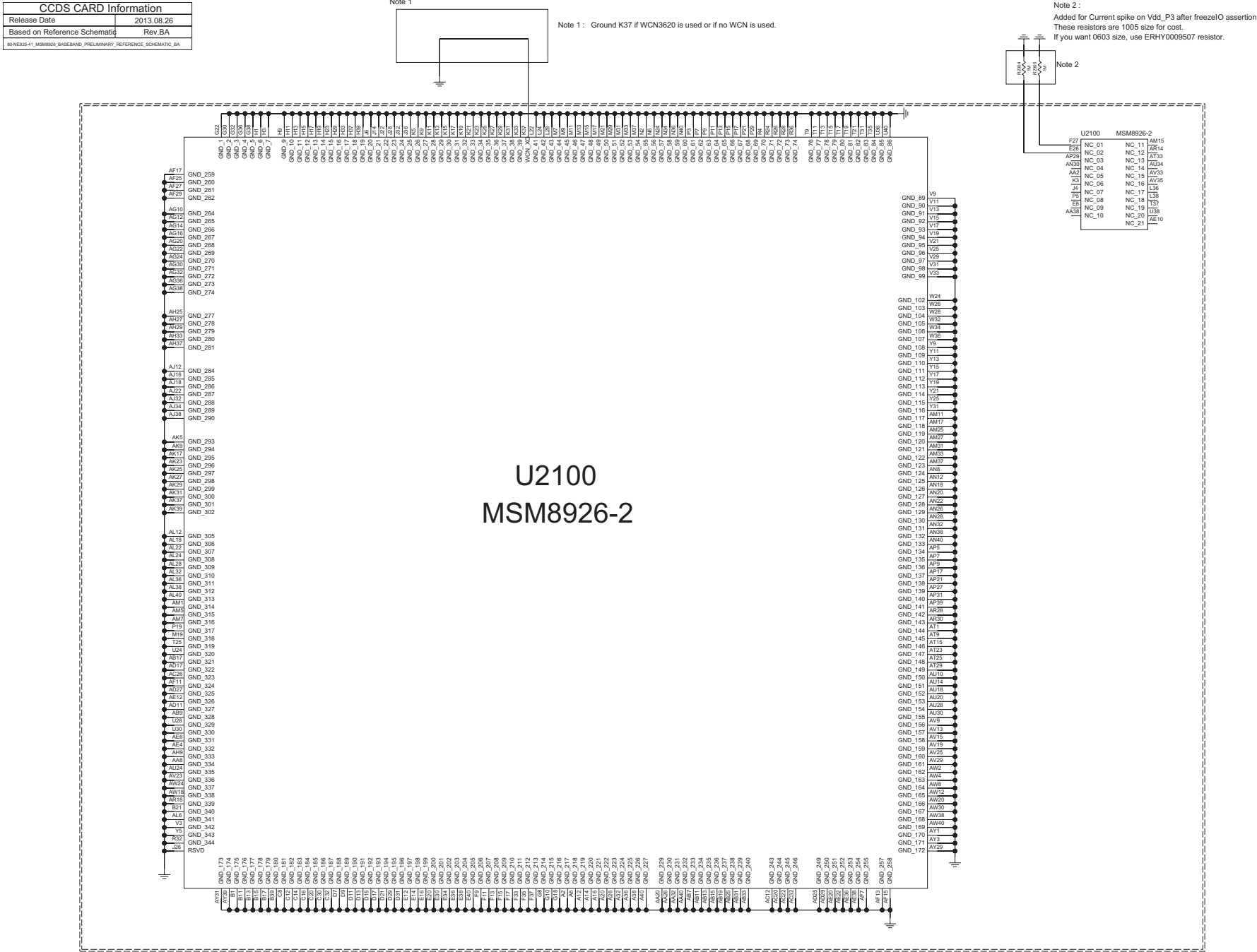
< 3-1-2-3-1_LPDDR2_PoP_8Gbit_SK_Hynix >

POP 8Gb 168ball 533MHz (38nm, 4Gb x 2), Hynix
Rev_0.3

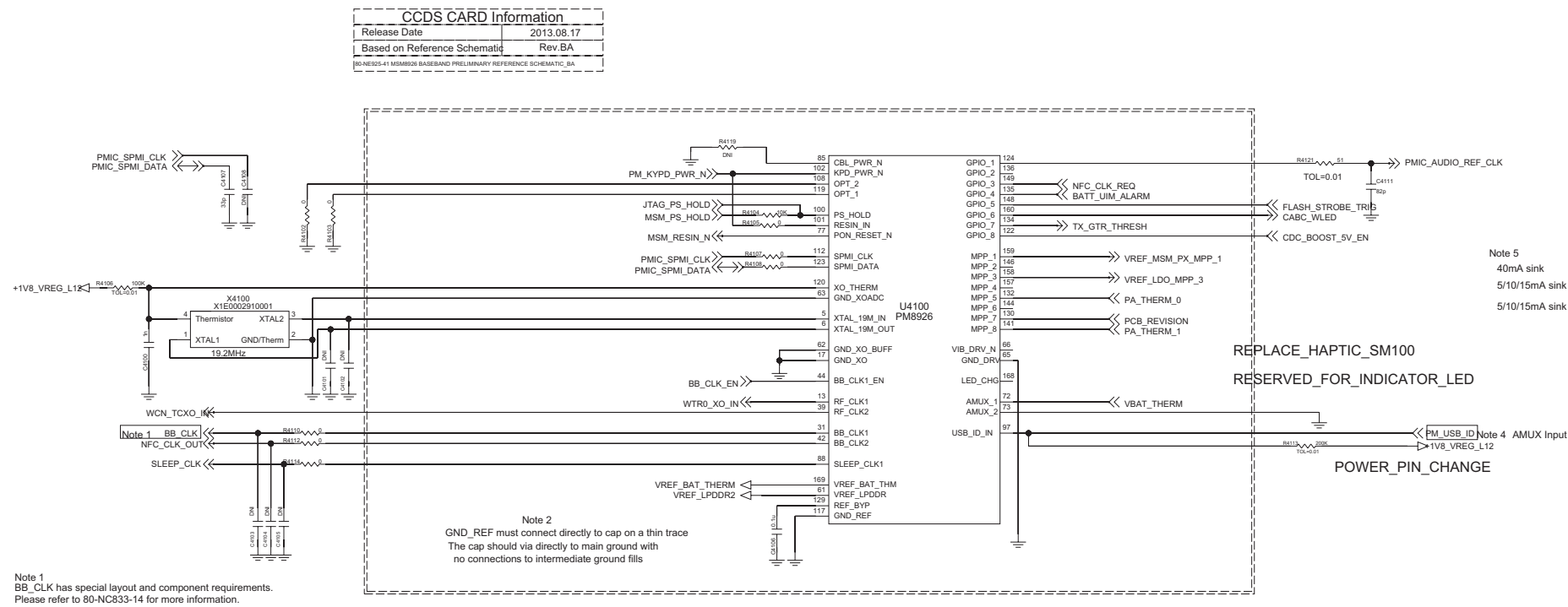
Must change to H9TKNNN8JDAPLR -Hynix 2xnm



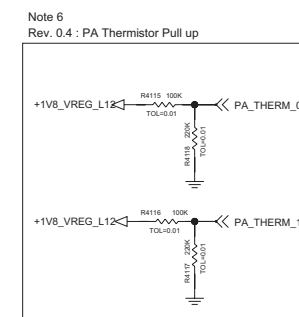
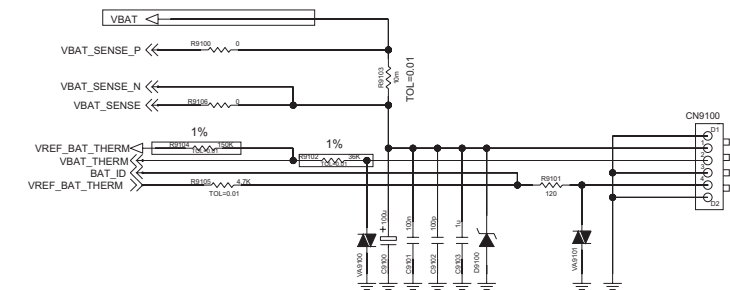
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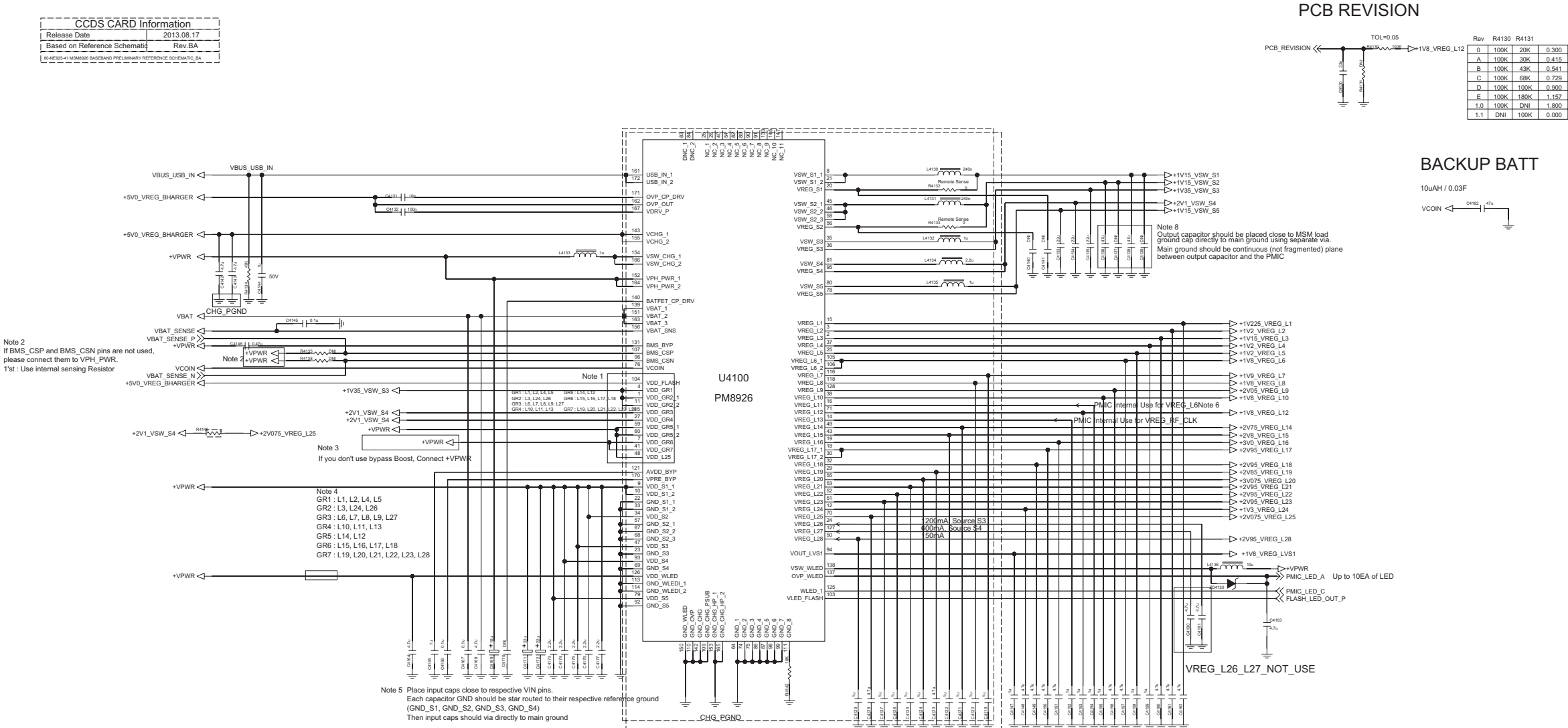
< 4-1-3-1_PMIC_PM8926_DATA >Rev_0.6



<9-1-2_Battery_CNT_4P> REV.0.5



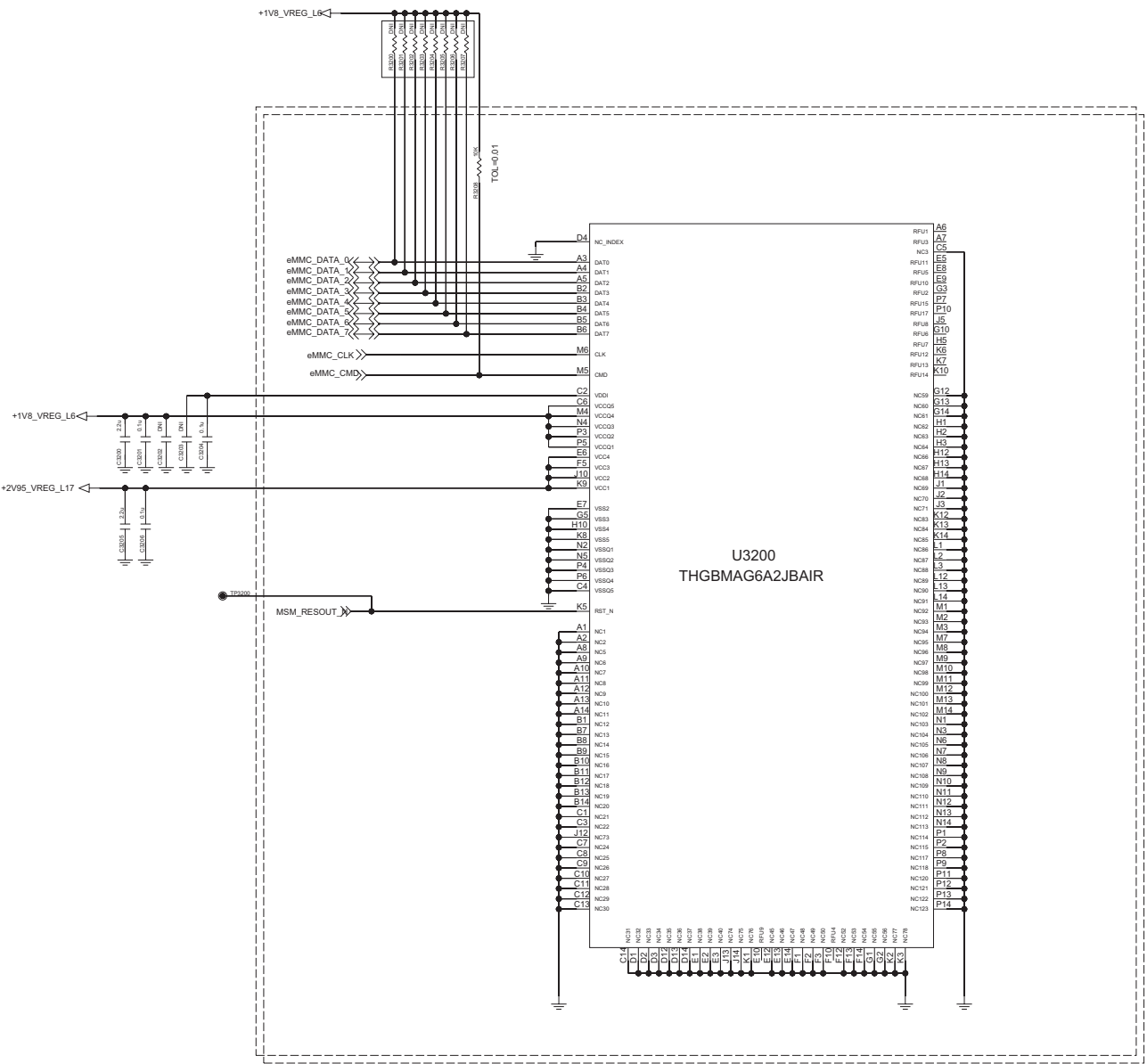
< 4-1-3-2_PMIC_PM8926_POWER > Rev_0.6



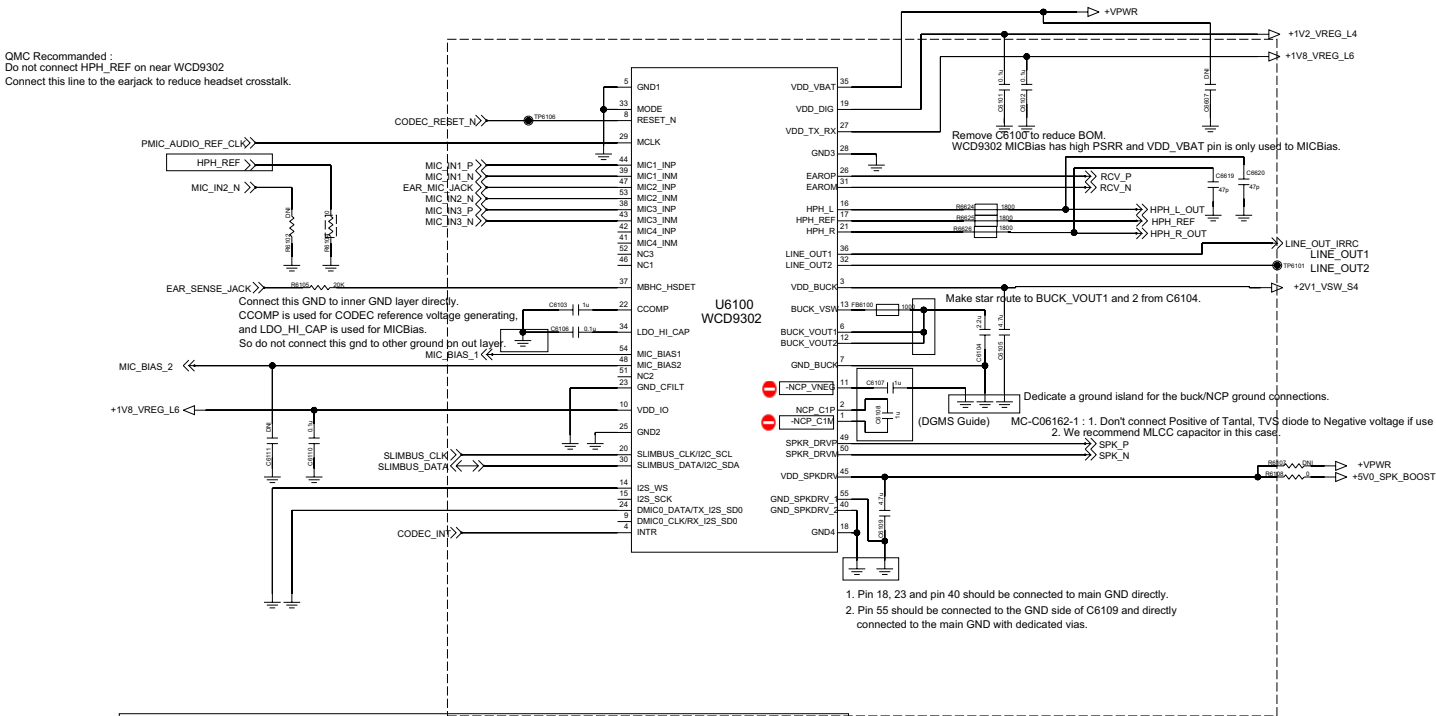
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THGBMAG6A2JBAIR -Toshiba 19n eMMC 4.5

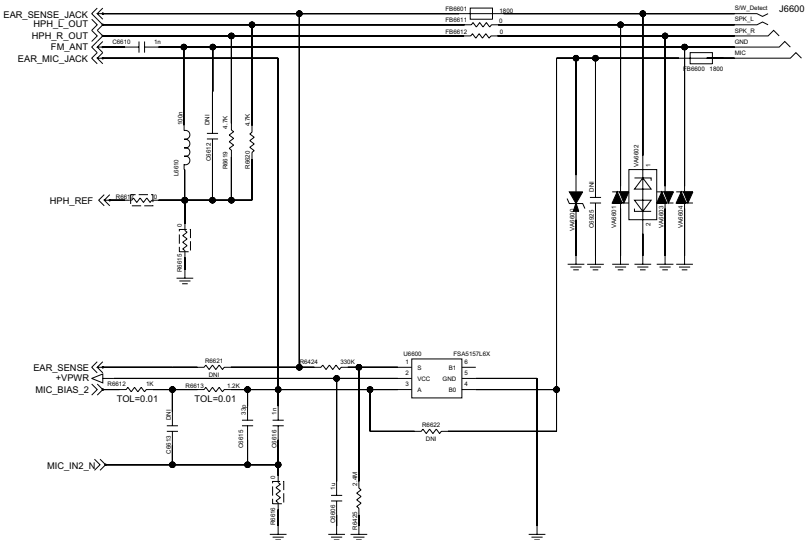
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< 6-1-1-1_Codec_WCD9302 > Rev_0.4

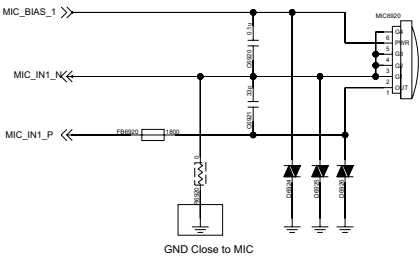


< 6-6-1_Earjack > Rev_0.4

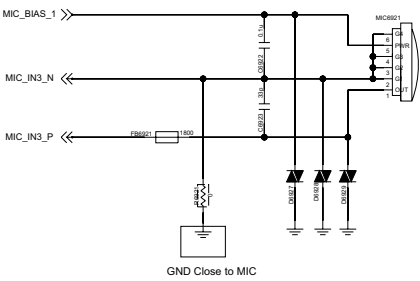


< 6-9-2_2MIC > Rev_0.4

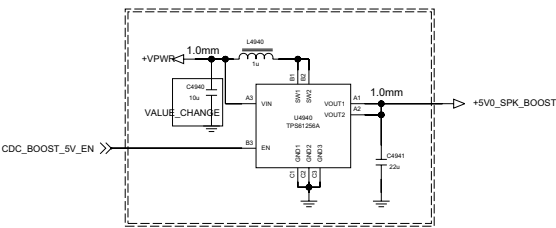
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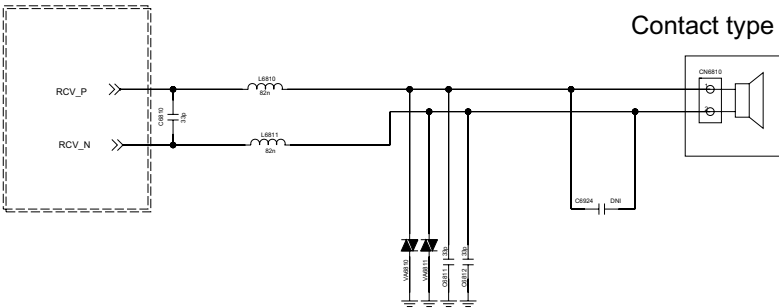
SUB_MIC



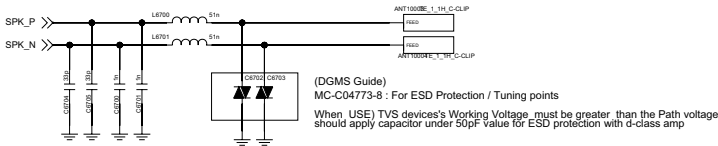
<4-9-1-2-1_5V_BOOST_ TPS61256A_AUDIO_EXTERNAL> Rev_0.3



< 6-8-1_Receiver_Only >Rev_0.3

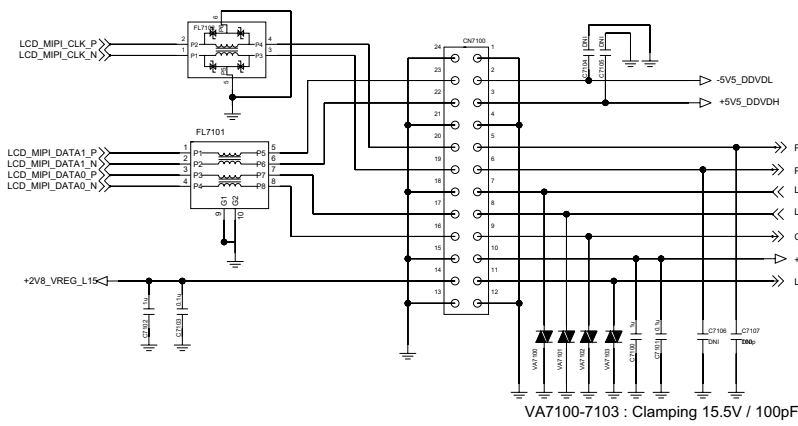


< 6-7-1_Speaker >Rev_0.4

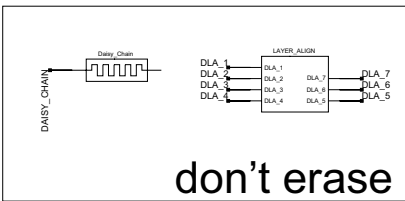
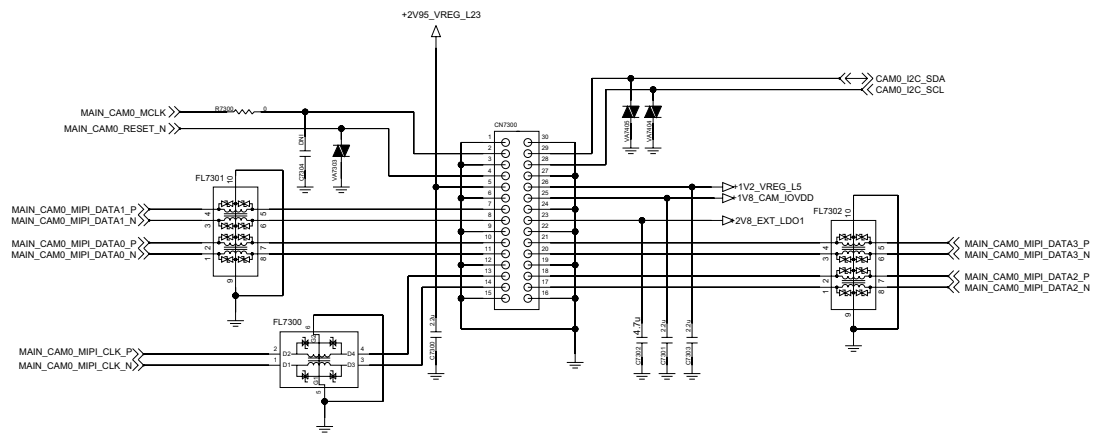


< 7-1-6-2-1_4.7" _qHD >

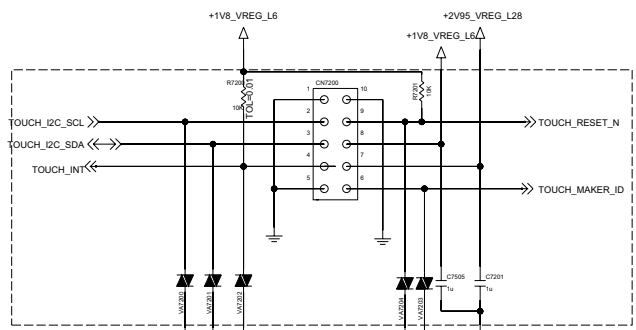
4.7" / qHD / LM468VN1A / P760



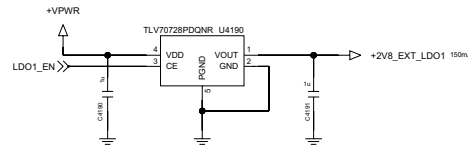
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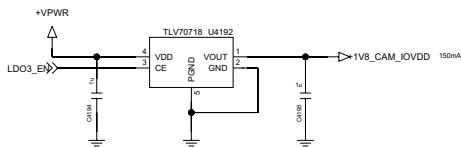
< 7-2-1-1_Touch_Connector > Rev_0.3



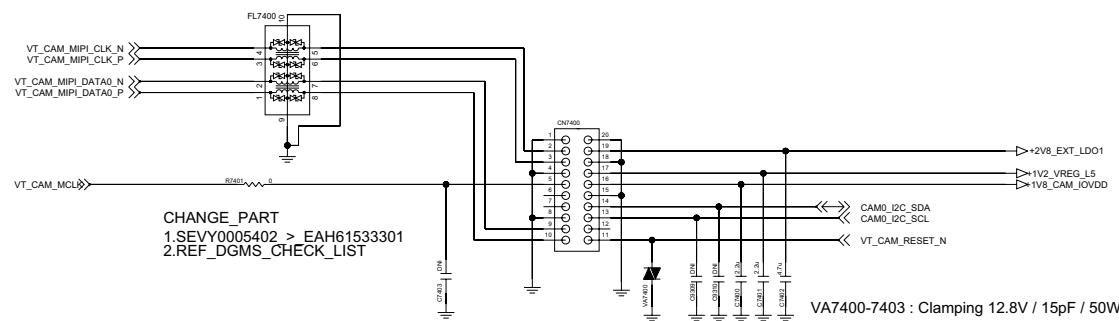
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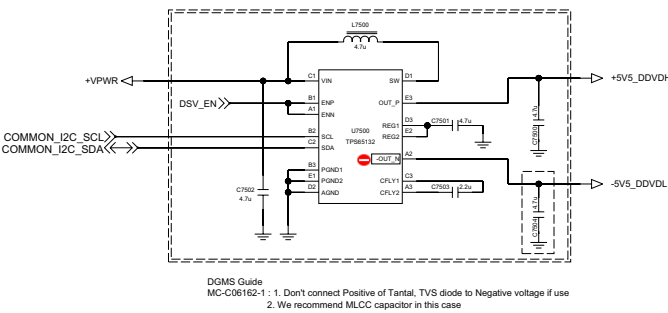
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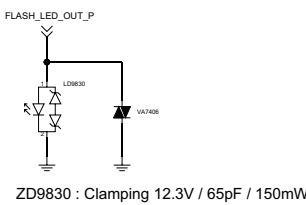
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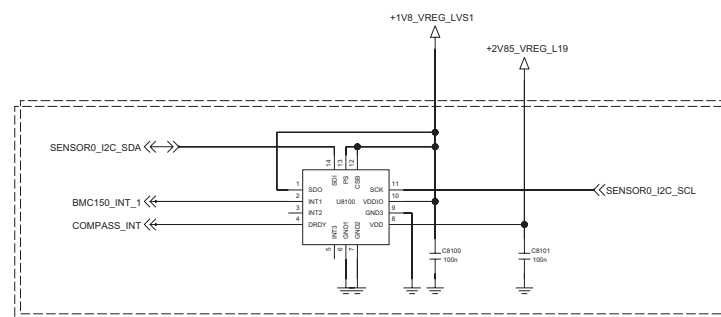
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Rev_0.3



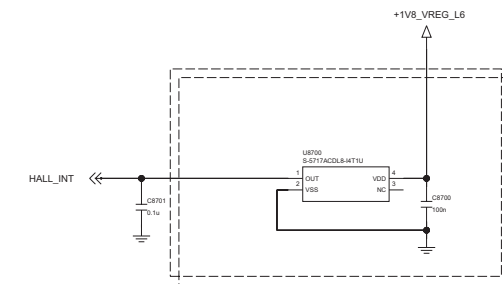
<9-8-3_Flash_LED>



<8-1-2-1_Accel_Compass_BMC150> REV.0.3

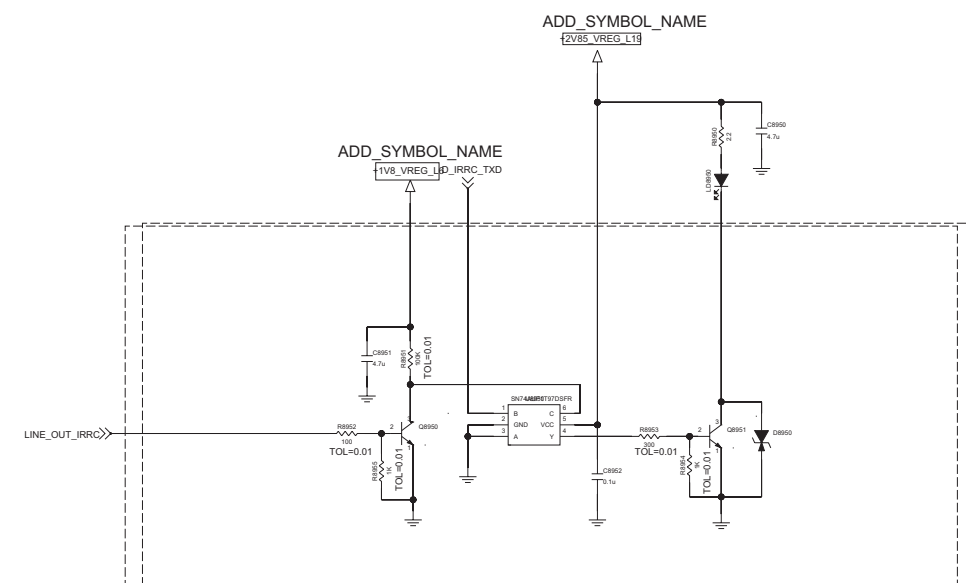


< 8-7-1-1_HALL IC > Rev_0.2

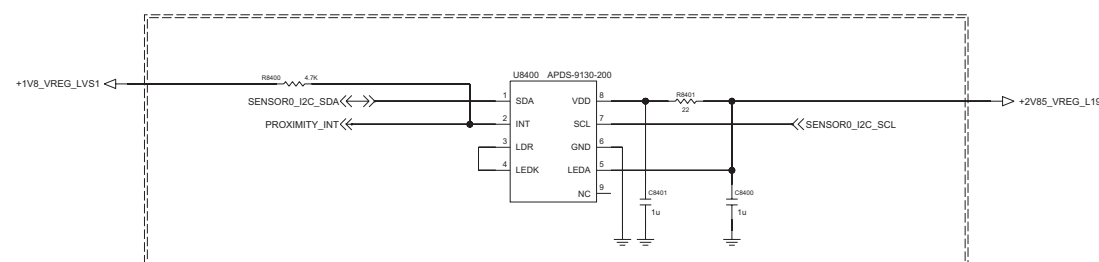


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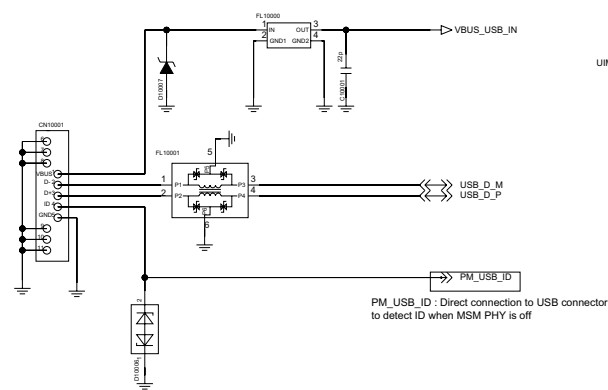
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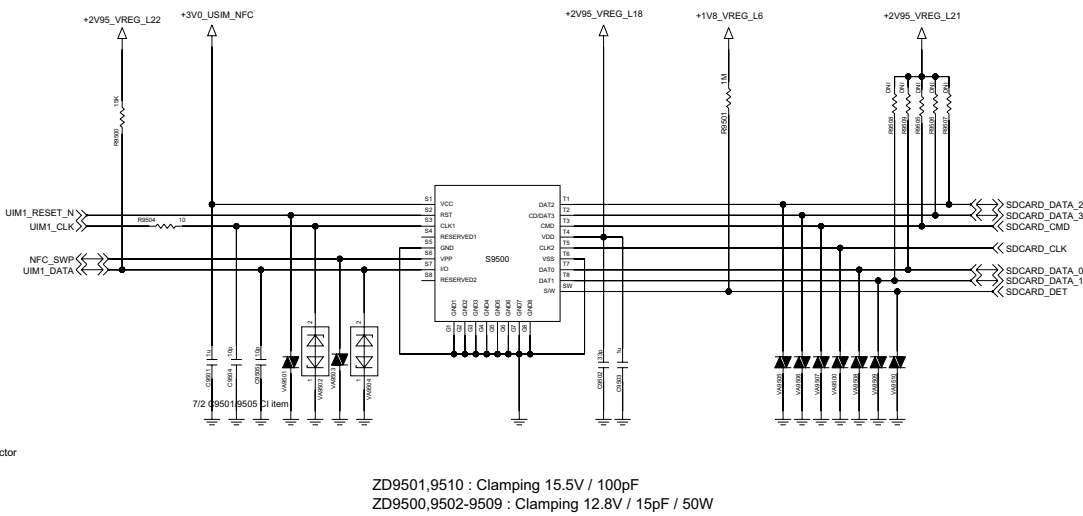
<8-4-1-1_Proximity_APDS-9130> REV.0.4



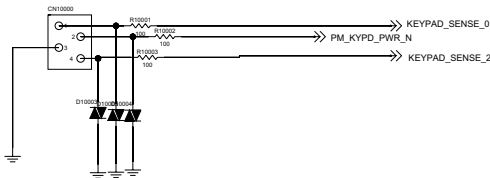
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Rev_0.4



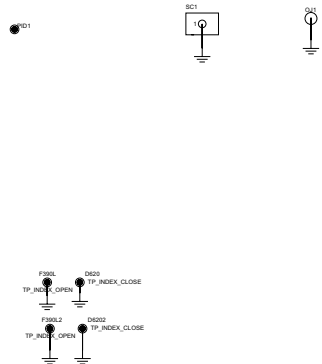
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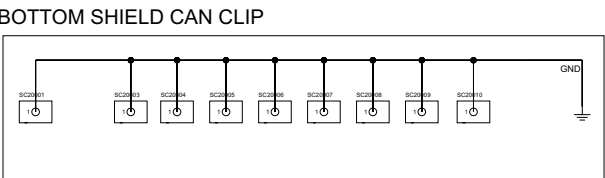
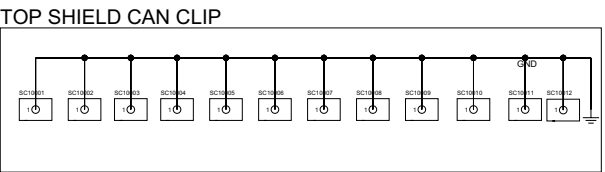
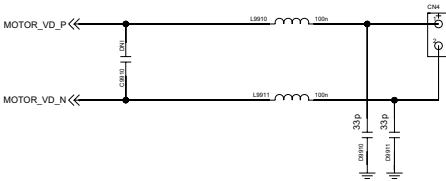
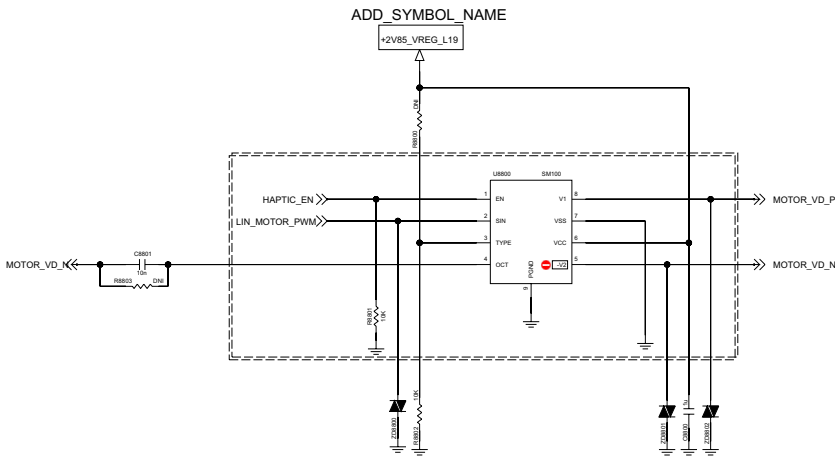
Back Volume Key



PID STS



< 8-8-1-1_Haptic_SM100 >Rev_0.3 < 9-9-1-1_Motor > Rev_0.3



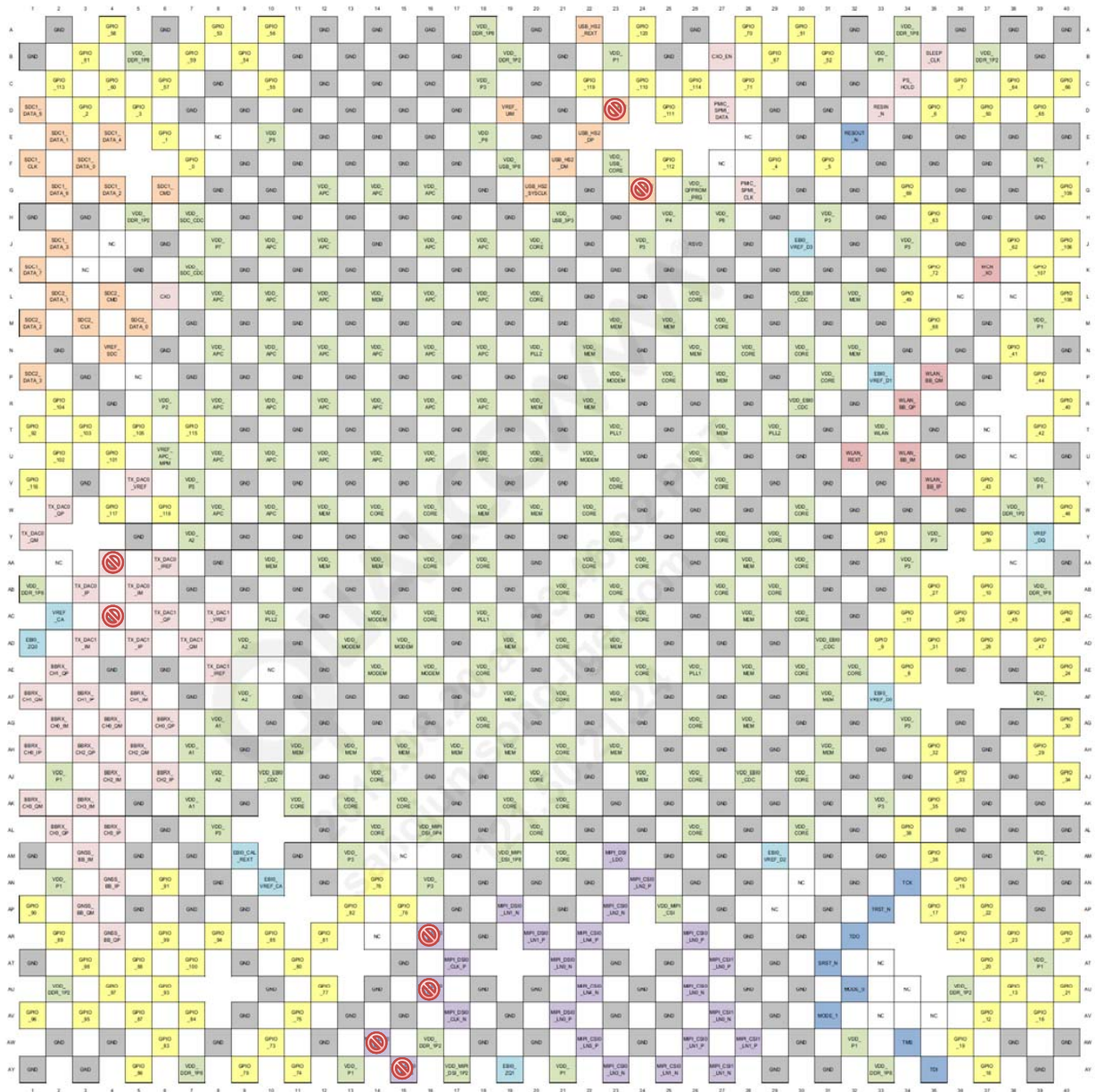
U1500-WTR1625L

	1 DRX_MB3_IN		2 DRX_HMB4_IN		3 GND		4 DRX_HB1_IN		5 DRX_LB1_IN		6 GND				8 GND		9 PRX_HB1_IN	
10 GND		11 VDD_RF1_D_MB			13 DRX_HB3_IN		14 VDD_RF1_D_LB_LO			16 DRX_LB3_IN			18 PRX_HB3_IN		19 PRX_HMB4_IN			
	20 DRX_MB2_IN		21 GND		22 VDD_RF1_D_HB		23 GND		24 GND		25 VDD_RF1_P_HB_LO		26 GND		27 PRX_MB3_IN			
								31 VDD_RF1_D_LB				34 VDD_RF1_P_HMB		35 GND				
	36 GNSS_RF_INP			38 VDD_RF1_D_LOM		39 GND		40 GND		41 GND		42 GND		43 PRX_MB2_IN				
44 GNSS_RF_INM		45 GND		46 GND		47 GND		48 VDD_RF1_S_VCO	49 GND					51 PRX_MB1_IN				
	52 VDD_RF1_G_LNA		53 GNSS_BB_IM		54 VDD_RF2_D_BB			55 GND		56 GND		57 VDD_RF1_P_HMB_LO		58 GND				
59 VDD_RF1_G_BB		60 GNSS_BB_IP		61 DRX_BB_OP				62 VDD_RF2_S_VCO	63 GND			64 GND					65 PRX_LB4_IN	
	66 GND		67 GNSS_BB_OP		68 DRX_BB_OM			69 GND		70 GND		71 RTUNE		72 VDD_RF1_P_LB		73 PRX_LB3_IN		
74 VDD_RF1_G_VCO		75 GND		76 DRX_BB_IP		77 GND		78 VDD_RF1_S_PLL		79 VDD_RF1_P_PLL		80 VDD_RF2_P_VCO		81 GND		82 GND		83 GND
	84 GND		85 GNSS_BB_OM		86 DRX_BB_IM		87 GND	88 GND		89 GND		90 VDD_RF1_P_VCO			92 PRX_LB2_IN			
93 VDD_RF1_G_PLL		94 GND		95 SSBI_PRX_DRX		96 GND		97 PRX_BB_OM		98 VDD_RF2_P_BB		99 PRX_BB_IP		100 VDD_RF2_P_RX		101 GND		102 PRX_LB1_IN
	103 VDD_DIO		104 GP_DATA1		105 SSBI_TX_GNSS		106 GND	107 PRX_BB_OP		108 PRX_BB_IM		109 ADC_IN		110 GND		111 GND		
112 GND		113 GND		114 VDD_RF2_T_PLL		115 VDD_RF1_T_SYN		116 VDD_RF2_FBRX	117 PDET_FFBS		118 GND		119 GND		120 GND		121 TX_HB2_OUT	
	122 GND		123 GP_DATA0		124 GND		125 GND	126 VDD_RF2_T_BB		127 DAC_REF		128 GND		129 VDD_RF2_T_DA		130 TX_HB1_OUT		
131 XO_IN		132 GND		133 GND			134 GND	135 VDD_RF1_T_LO			136 VDD_RF1_T_UPC		137 VDD_RF1_T_DA		138 TX_MB2_OUT		139 TX_MB3_OUT	
	140 GND		141 GND				142 GND	143 GND				144 GND		145 GND				
147 VDD_RF2_XO		148 GND		149 VDD_RF1_T_VCO			150 GND	151 TX_BB_IP			152 TX_BB_OP		153 TX_LB2_OUT			155 TX_MB4_OUT		
	156 GND		157 VDD_RF2_T_VCO		158 GND		159 GND	160 TX_BB_IM		161 TX_BB_OM		162 TX_LB1_OUT		163 TX_LB3_OUT		164 GND		



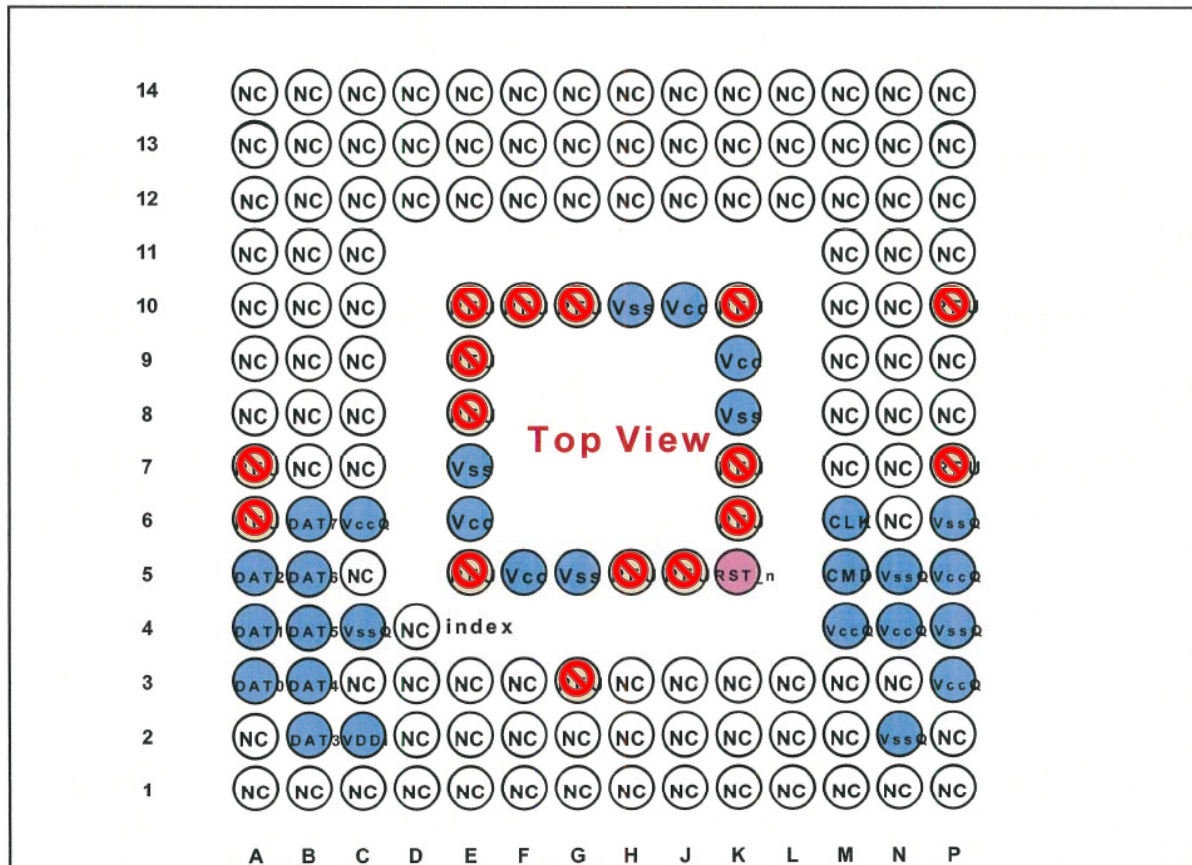
7. BGA PIN MAP

U2100-MSM8226



 Not Used

U3200-eMMC



NC: No Connect, can be connected to ground or left floating.

RFU: Reserved for Future Use, should be left floating for future use.



7. BGA PIN MAP

U4100-PM8926

1 VDD_ GR2	2 VREG_ L3	3 VREG_ L2	4 VDD_ GR1		5 XTAL_ 19M_IN	6 XTAL_ 19M_OUT		7 VDD_ GR6	8 VSW_ S1	9 VDD_ S1	10 VDD_ S1
11 VDD_ GR2	12 VREG_ L24	13 RF_CLK1	14 VREG_ L13	15 VREG_ L1	16 VREG_ L11	17 GND_ XO	18 VREG_ L17	19 VREG_ L16	20 VREG_ S1	21 VSW_ S1	22 GND_ S1
23 GND_ S3	24 VREG_ L26	25 VREG_ L5		27 VDD_ GR4		29 VREG_ L19	30 VREG_ L17	31 BB_CLK1	32 VREG_ L18	33 GND_ S1	34 VDD_ S2
35 VSW_ S3	36 VREG_ S3	37 VREG_ L4	38 VREF_ L10	39 RF_CLK2		41 VDD_ GR7	42 BB_CLK2	43 VREG_ L15	44 BB_CLK1_ EN	45 VSW_ S2	46 VSW_ S2
47 VDD_ S3	48 VDD_ L25	49 VREG_ L14	50 VREG_ L28	51 VREG_ L23	52 VREG_ L22	53 VREG_ L21		55 VREG_ L20	56 VREG_ S2	57 GND_ S2	58 VSW_ S2
	59 VDD_ GR5	60 VDD_ GR5	61 VREF_ LPDDR	62 GND_ XO_BUFF	63 GND_ XOADC	64 GND	65 GND_ DRV		67 GND_ S2	68 GND_ S2	
69 GND_ S4	70 VREG_ L25	71 VREG_ L12	72 AMUX_1	73 AMUX_2	74 GND	75 GND	76 VCOIN	77 PON_ RESET_N	78 VREG_ S5	79 VDD_ S5	80 VSW_ S5
81 VSW_ S4				85 CBL_ PWR_N	86 GND	87 GND	88 SLEEP_ CLK1				92 GND_ S5
93 VDD_ S4	94 VOUT_ LVS1	95 VREG_ S4	96 BMS_ CSN	97 USB_ ID_IN	98 GND	99 GND	100 PS_HOLD	101 RESIN_ IN	102 KPD_ PWR_N	103 VLED_ FLASH	104 VDD_ FLASH
	105 VREG_ L6	106 VREG_ L6	107 BMS_ CSP	108 OPT_2	109 GND	110 GND_ OVP	111 GND	112 SPMI_ CLK	113 GND_ WLEDI	114 GND_ WLEDI	
115 VDD_ GR3	116 VREG_ L7	117 GND_ REF	118 VREG_ L8	119 OPT_1	120 XO_ THERM	121 AVDD_ BYP	122 GPIO_8	123 SPMI_ DATA	124 GPIO_1	125 WLED_1	126 VDD_ WLED
127 VREG_ L27	128 VREG_ L9	129 REF_ BYP	130 MPP_7	131 BMS_ BYP	132 MPP_5		134 GPIO_7	135 GPIO_4		137 OVP_ WLED	138 VSW_ WLED
139 VBAT	140 BATFET_ CP_DRV	141 MPP_8	142 GND_ CHG	143 VCHG					148 GPIO_5	149 GPIO_3	150 GND_ WLED
151 VBAT	152 VPH_ PWR	153 GND_ CHG_HP	154 VSW_ CHG		156 VBAT_ SNS		158 MPP_3	159 MPP_1	160 GPIO_6	161 USB_IN	162 OVP_ OUT
163 VBAT	164 VPH_ PWR	165 GND_ CHG_HP	166 VSW_ CHG		167 VDRV_P			169 VREF_ BAT_THM	170 VPRE_ BYP	171 OVP_ CP_DRV	
Input power management	Output power management	General housekeeping	User interfaces	IC-level interfaces	MPPs and GPIOs	No connection	Power	Ground			

Not Used

7. BGA PIN MAP

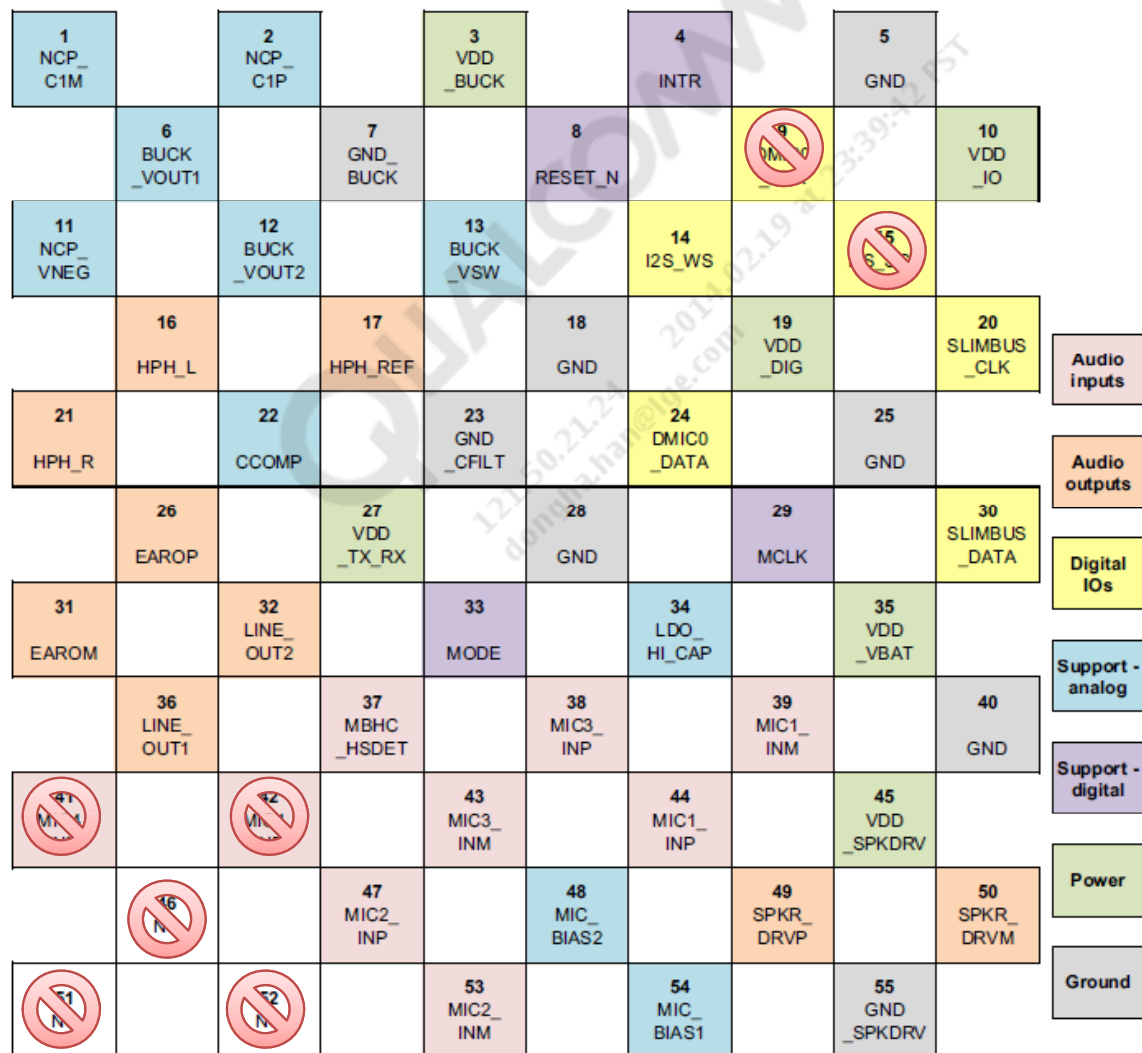
U5100-WCN3620

	1 GND		2 GND		3 VDD_BT _RF_1P3		4 VDD_BT _DA_3P3		5 WL_BT _RFIO		6 WL_CMD _SET
7 VDD_BT _VCO_1P3		8 GND				9 VDD_WL _2GLNA_1P3		10 GND		11 VDD_WL _2GPA_3P3	
	12 GND		13 VDD_BT _BB_1P3		14 GND						
16 VDD_BT _PLL_1P3		17 GND		18 BT_CTL		19 GND		20 GND		21 GND	
	22 VDD_IO _1P8		23 VDD_BT _FM_DIG_1P3		24 VDD_XO _1P8		25 GND		26 WL_CMD _DATA1		27 GND
28 BT_DATA		29 VDD _DIG_1P2		30 TCXO_IN						32 GND	
	33 BT_SSB_I		34 GND		35 GND		36 VDD_WL _LO_1P3				37 VDD_WL _2GPA_1P3
		39 GND				41 FM_SSB_I		42 GND		43 VDD_WL _UPC_1P3	
	44 GND		45 GND		46 FM_DATA		47 WL_BB _QN		48 WL_CMD _DATA0		
50 FM_HS _RX		51 VDD_FM _VCO_1P3		52 VDD_FM _PLL_1P3		53 WL_BB _QP		54 WL_BB _IP		55 WL_CMD _DATA2	
	56 VDD_FM _RXFE_1P3		57 VDD_FM _RXBB_1P3		58 VDD_WL _PLL_1P3		59 WL_BB _IN		60 VDD_WL _BB_1P3		61 WL_CMD _CLK
WLAN	FM	BT	Shared functions	Top level	Power	Ground	No Connect				

 Not Used

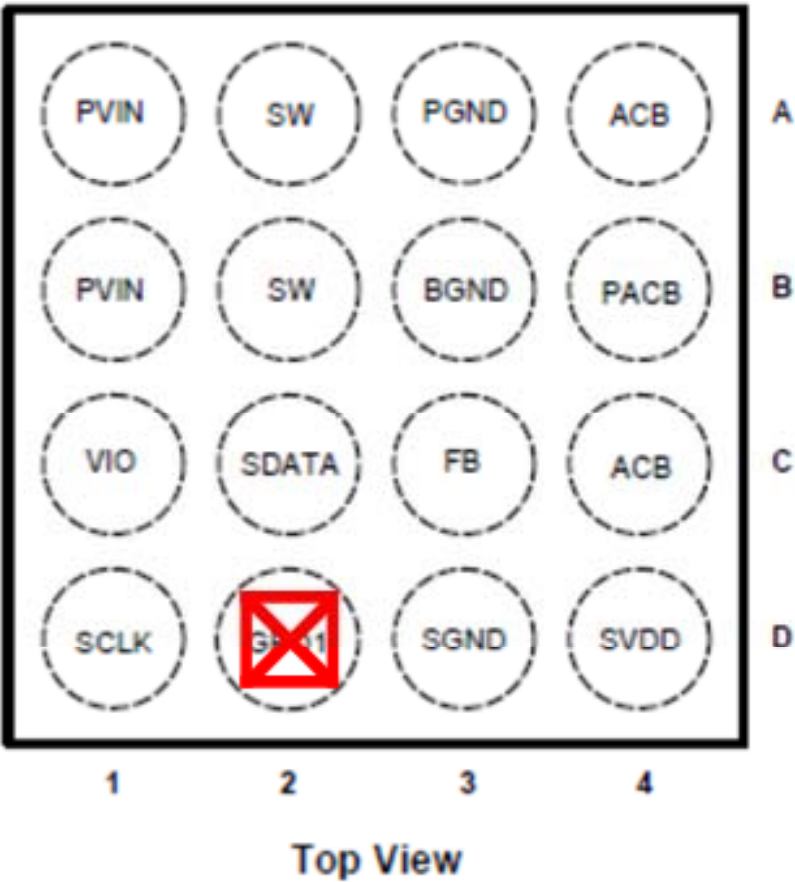
7. BGA PIN MAP

U6100-CODEC IC(WCD9302)



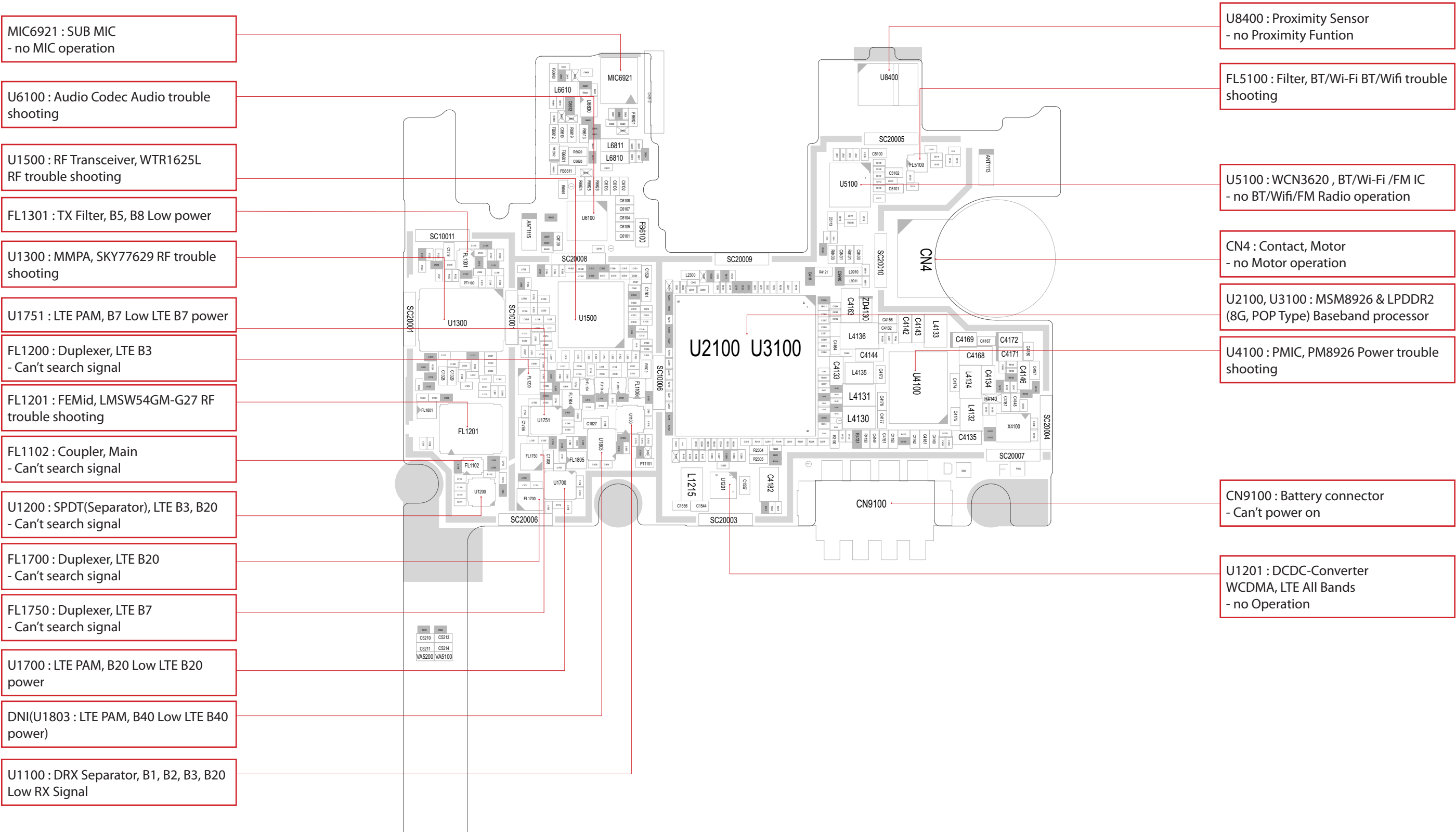
Not Used

U1201-DCDC Converter(LM3263)



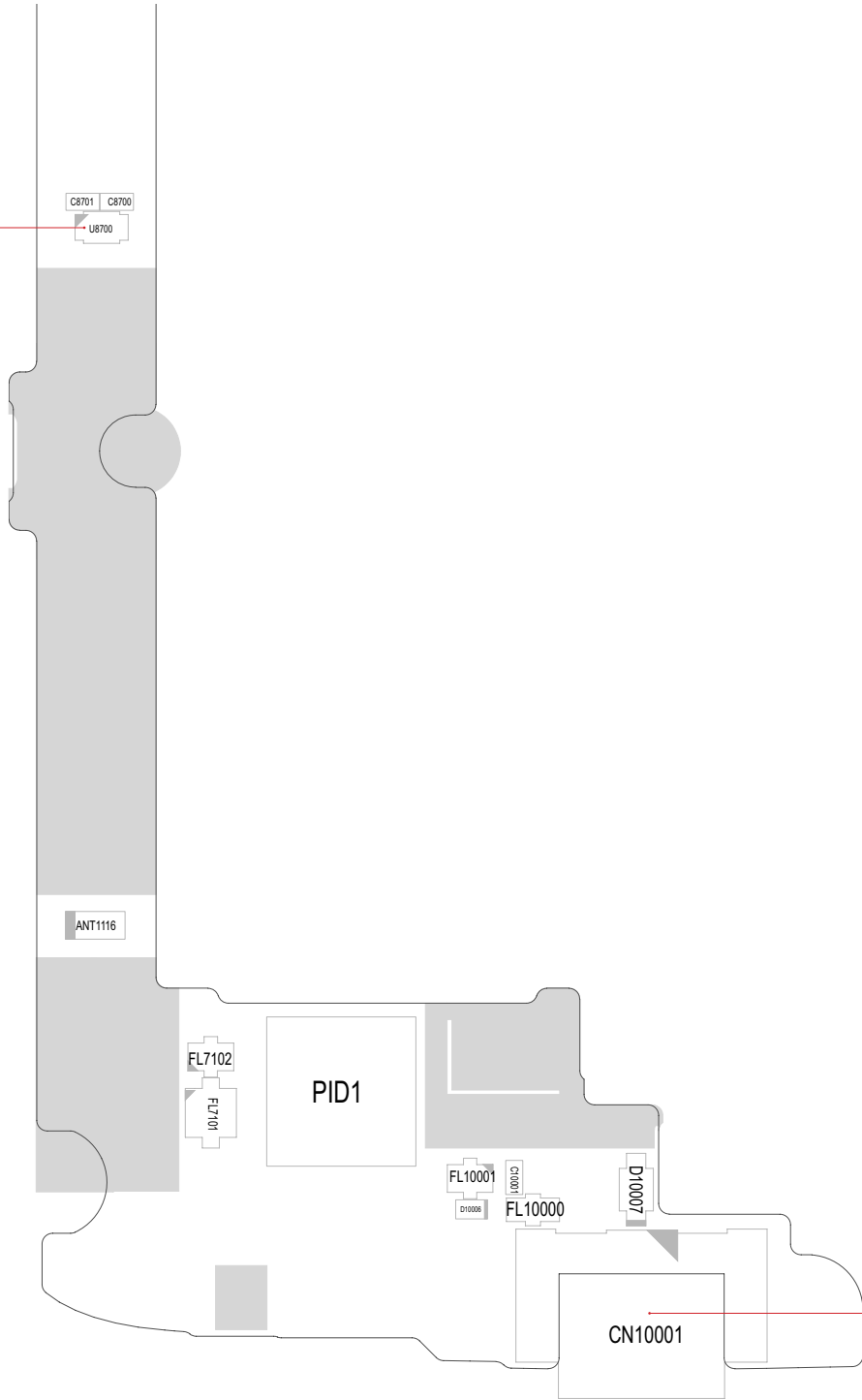
 Not Used

8. PCB LAYOUT



LG-D620_MAIN_EAX65645801_1.0_TOP-1

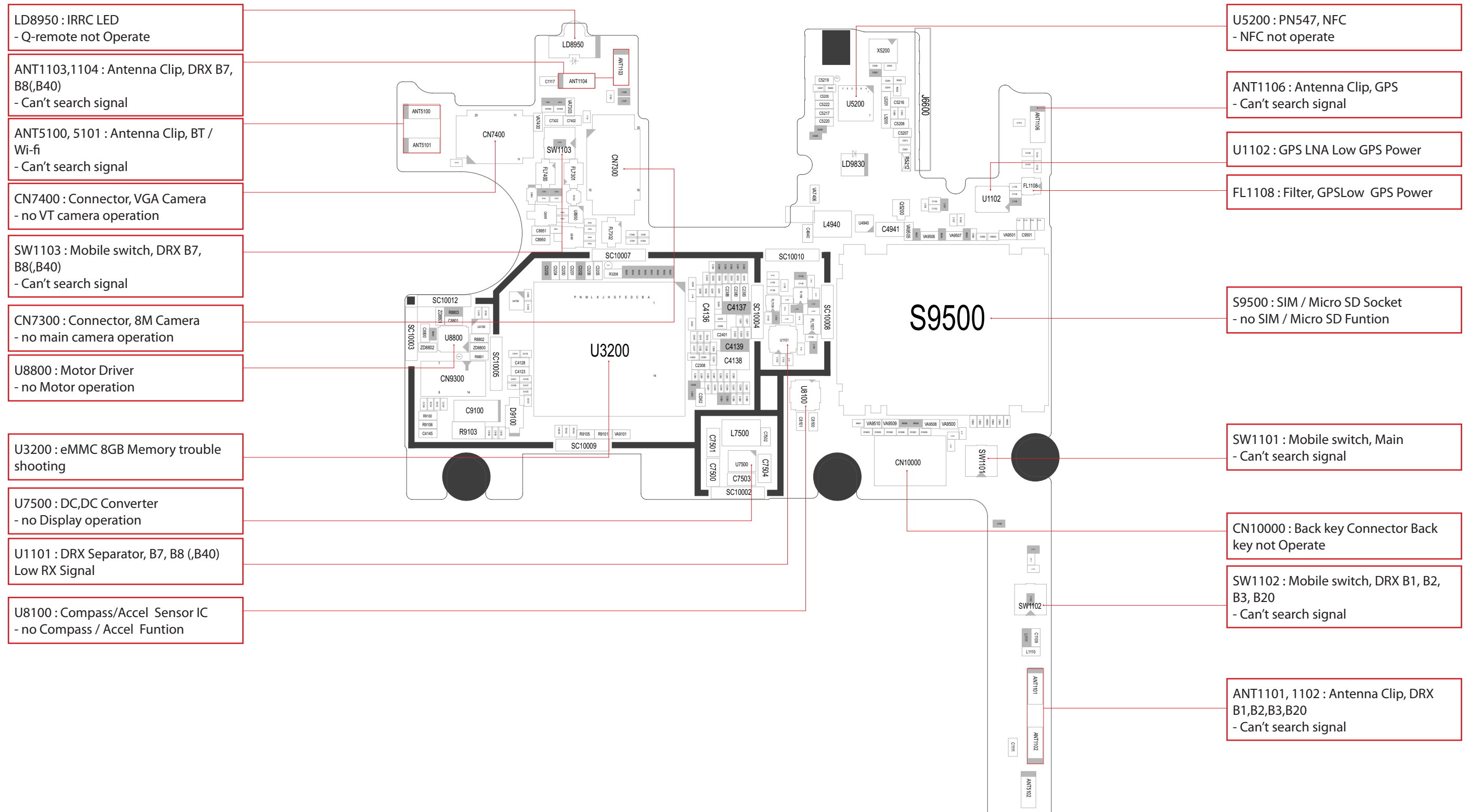
U8700 : Hall Sensor IC
- Quick Cover not operate



CN10001 : Micro USB
- no USB, Charging operation

LG-D620_MAIN_EAX65645801_1.0_TOP-2

8. PCB LAYOUT



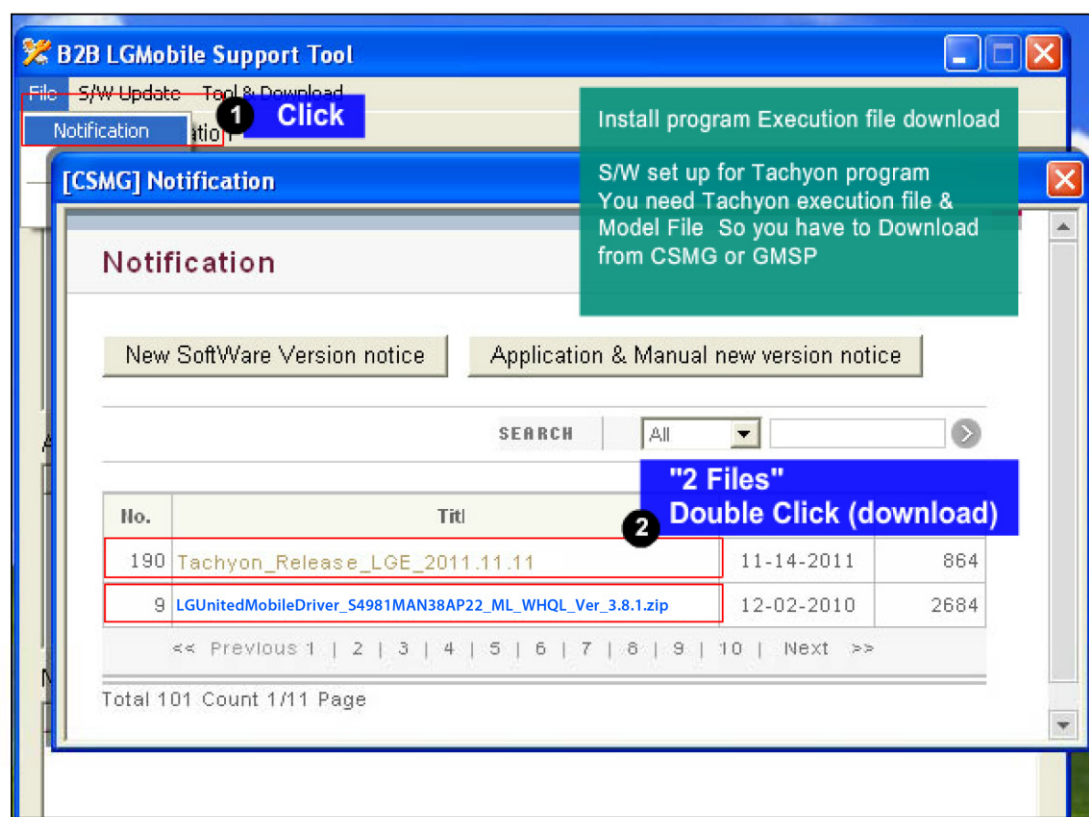
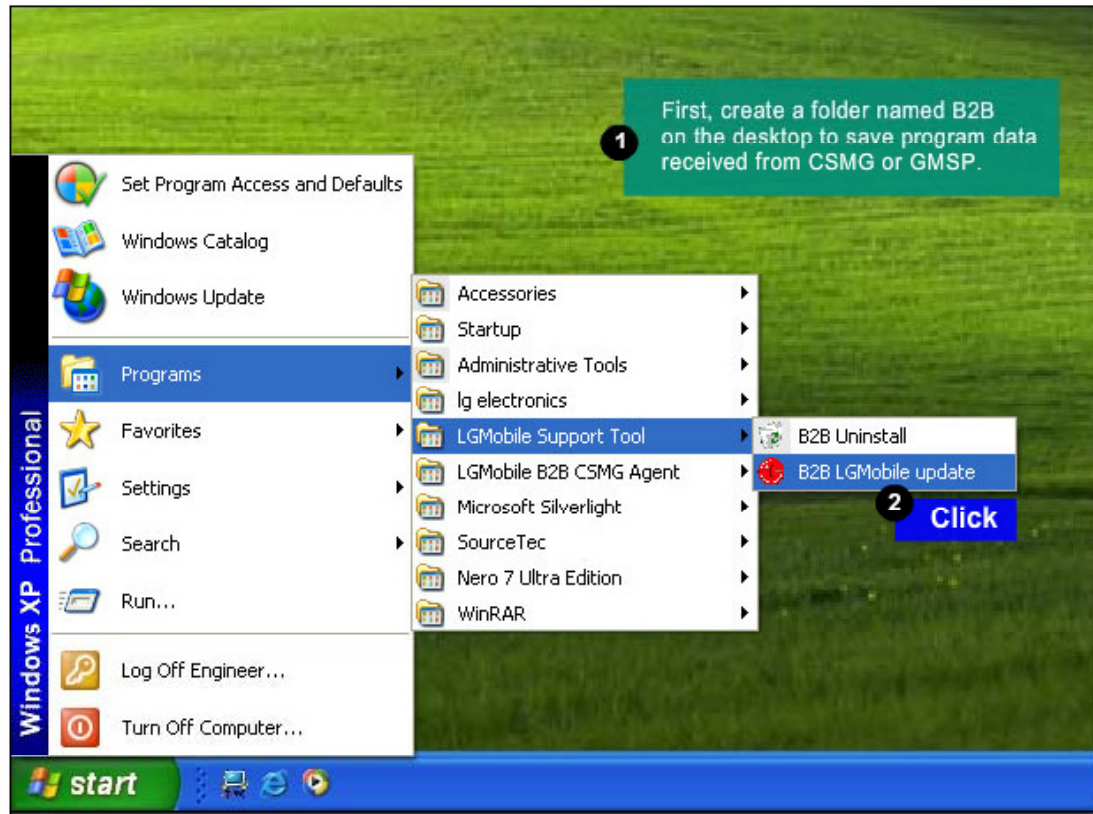
LG-D620_MAIN_EAX65645801_1.0_BOT-1

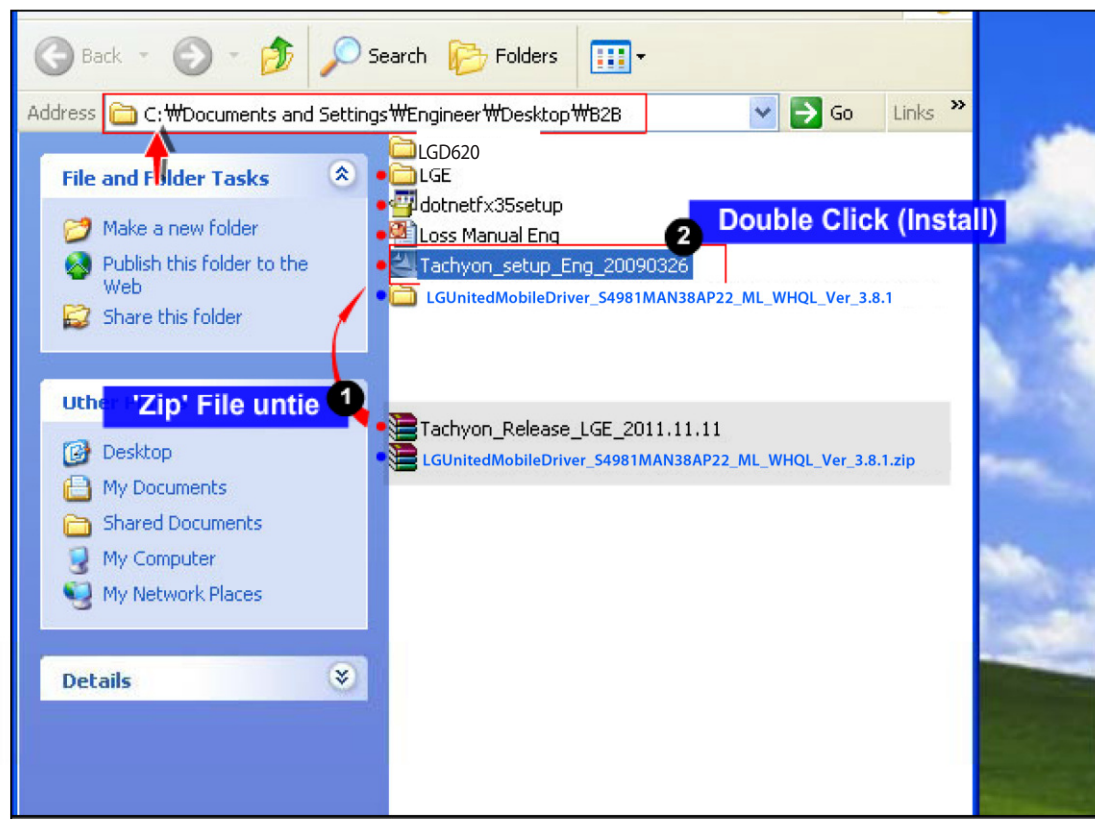
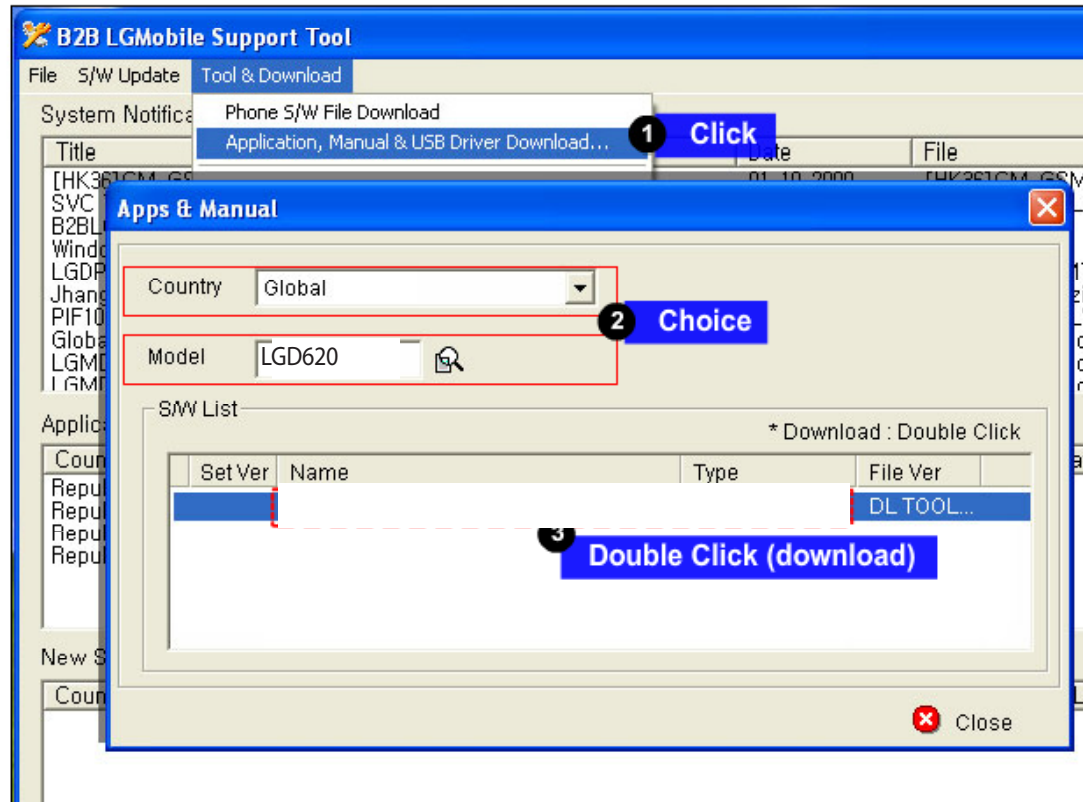


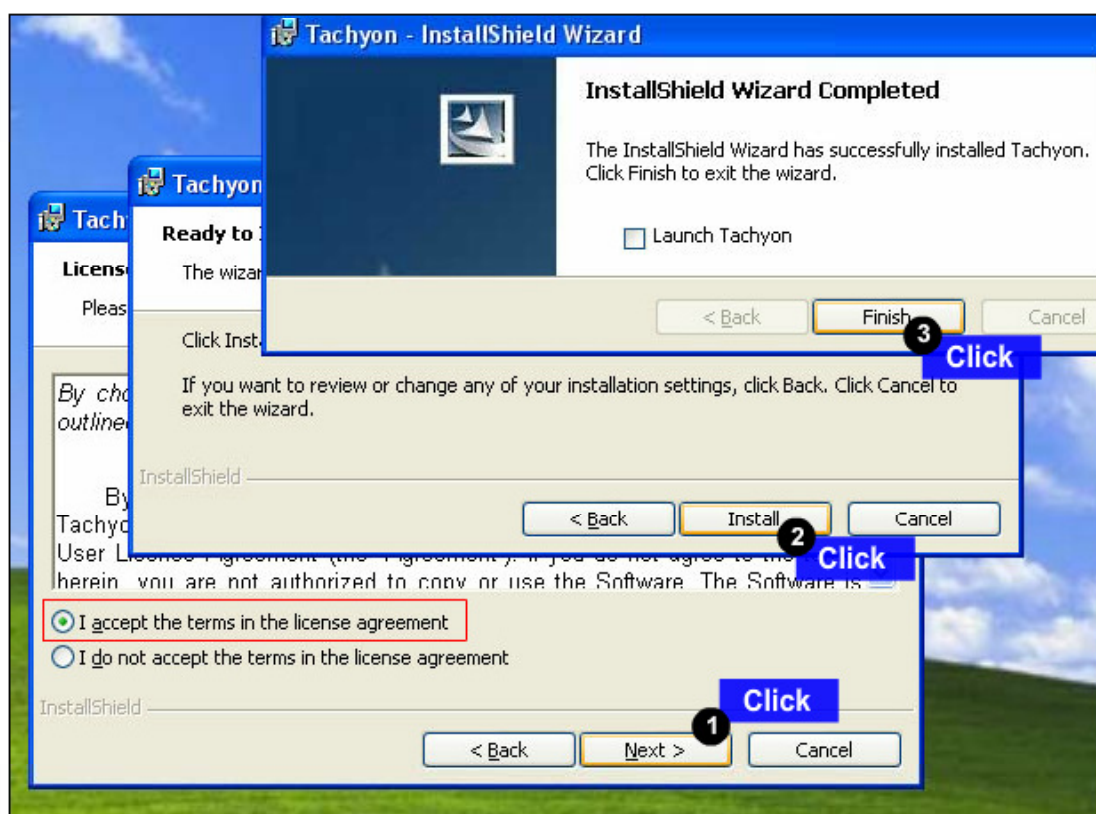
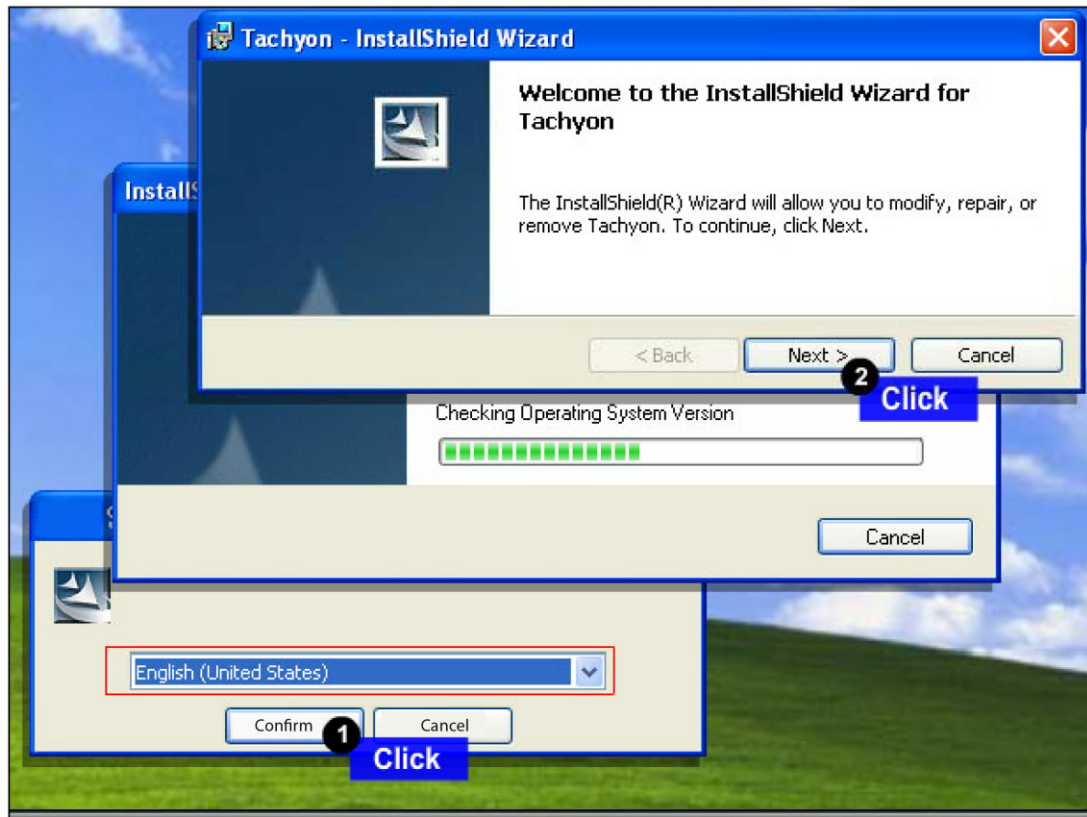
9. CALIBRATION

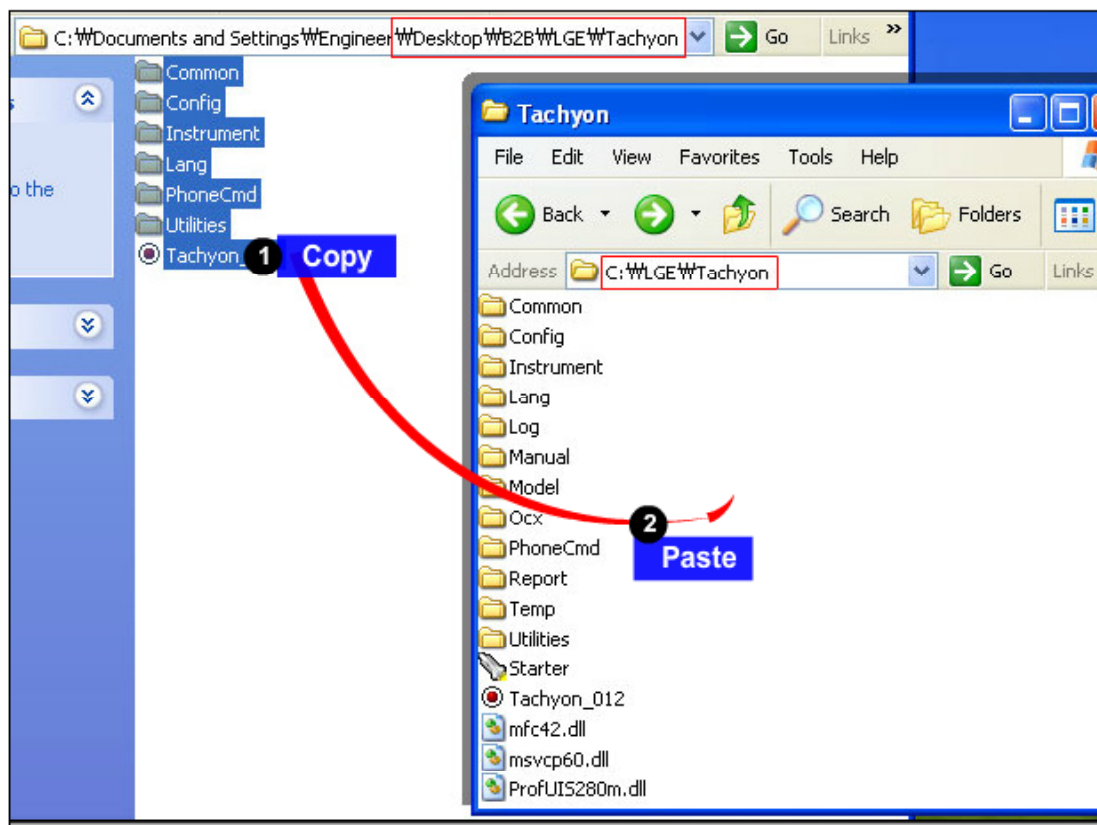
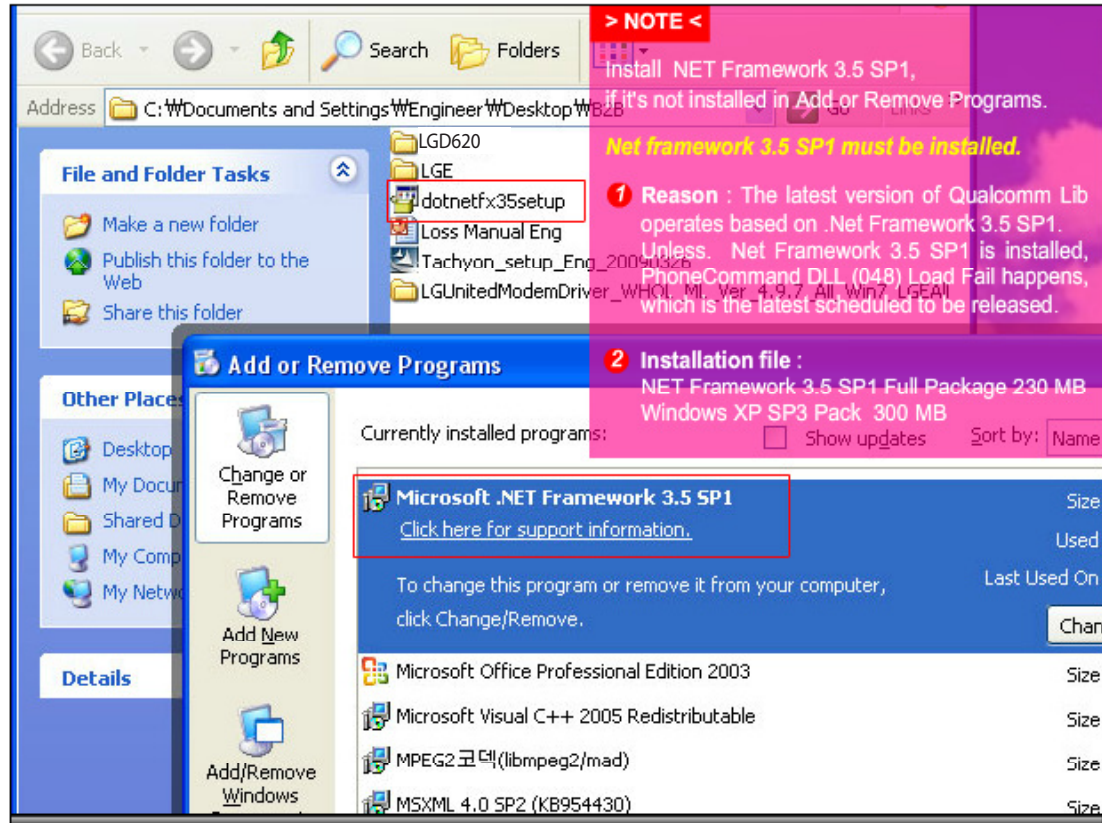
CAL INFORMATION		
S/W VERSION		
[TachyonV48] LGD620 20140324 ALL File Calibration		
Please Check the Version to "B2B"		
H/W		
	Name	Part No.
PIF	PIF200(All Type)	BJAY0024021
USB Cable	USB Cable	RAD32247898
Power Cable	DC Power Cable	RAD32247878
I/O Cable	5P E-SATA_DC_Plug	RAD32167861
RF Cable_Main	MS-156C	BJAY0024004
Power Supply_PIF	Power Supply 5.3V	
Power Supply_Phone	Power Supply 5.0V	
RF Test Equipment	E5515C(8960)	
NOTICE	1. Use the dummy Battery (Refer to Attached image) 1) Phone states: Power off 2) If do not use the dummy battery, GSM TX fails. 2. Port Setting (Refer to Attached image) 1) Uart Port2 : Use the "LGE CDMA USB Serial Port"	
CMW500 RF Cable connection	Reference to Attached ppt -> How to connect between phone RF switch and RF 800A: It has to be connected as below -> How to connect between CMW500 and RF800A ; It has to connected as below - CMW500 [RF1COM] to RF-800A [left COM], - CMW500 [RF2COM] to RF-800A [Right COM]	

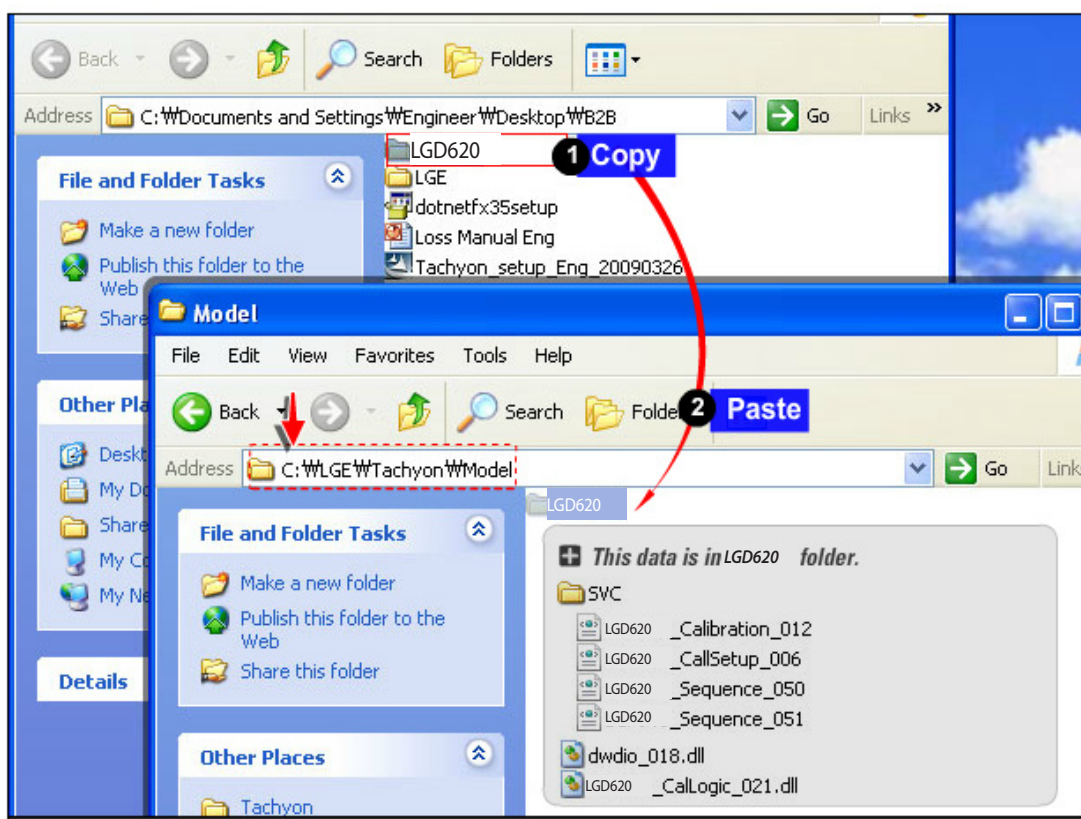
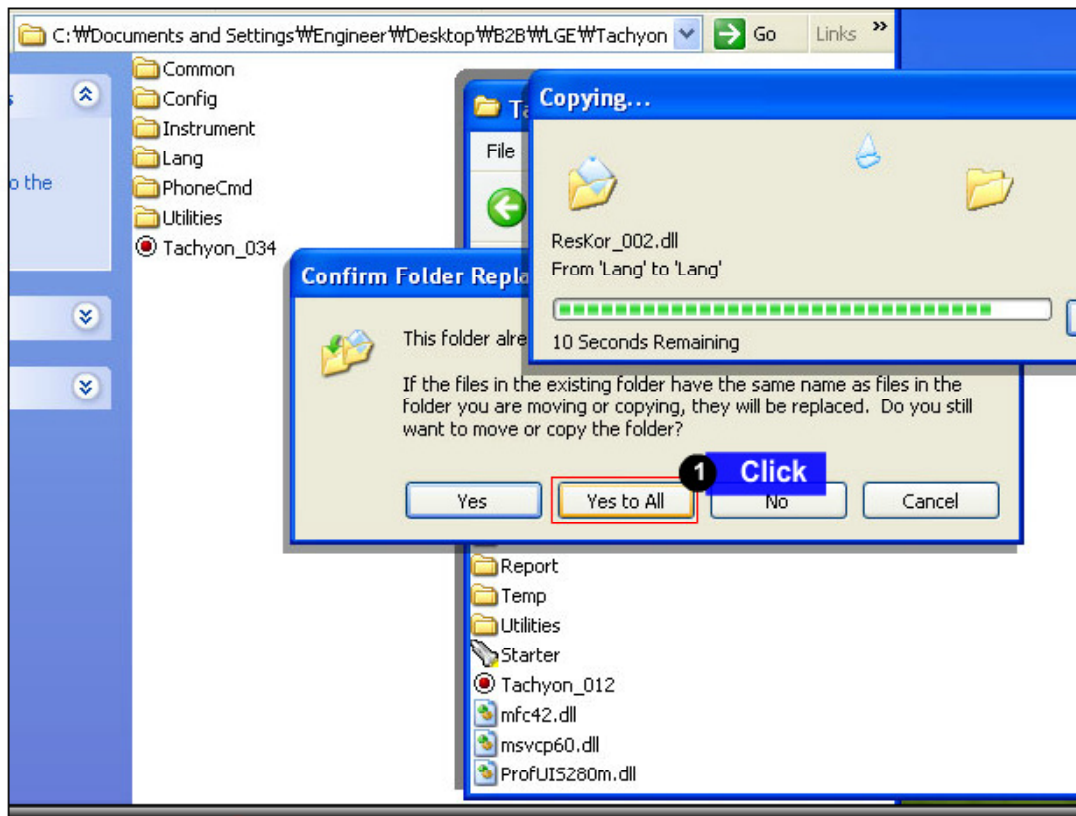
9. CALIBRATION

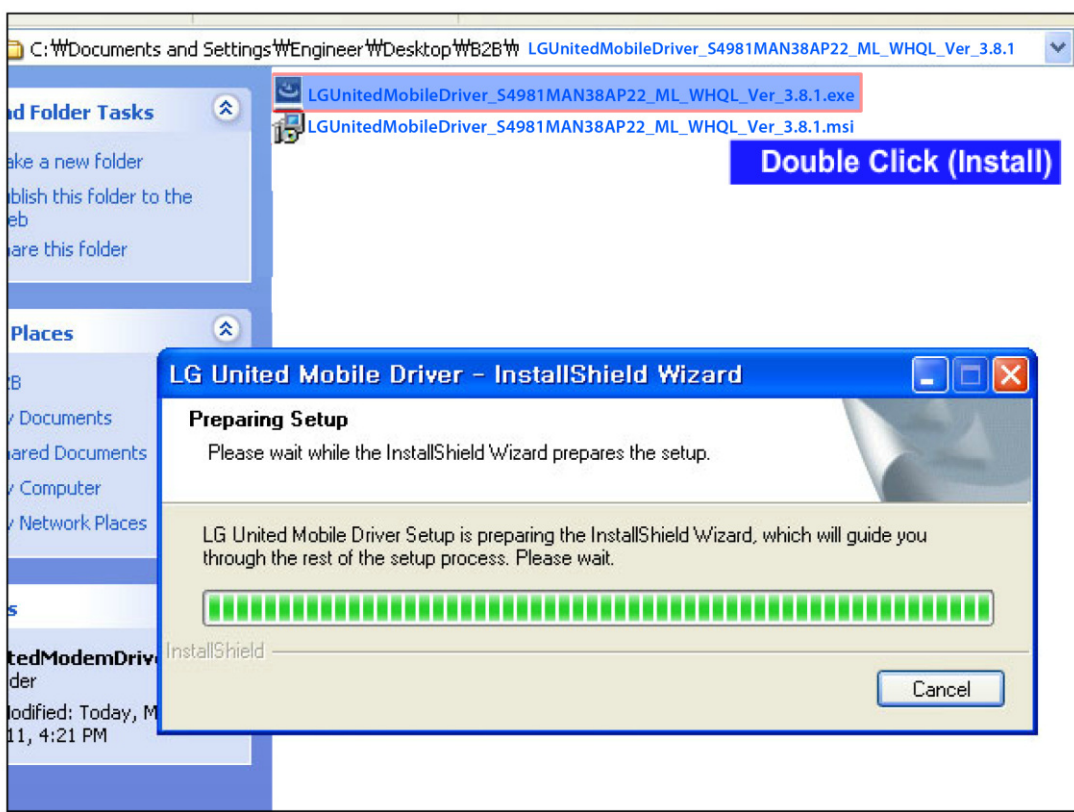
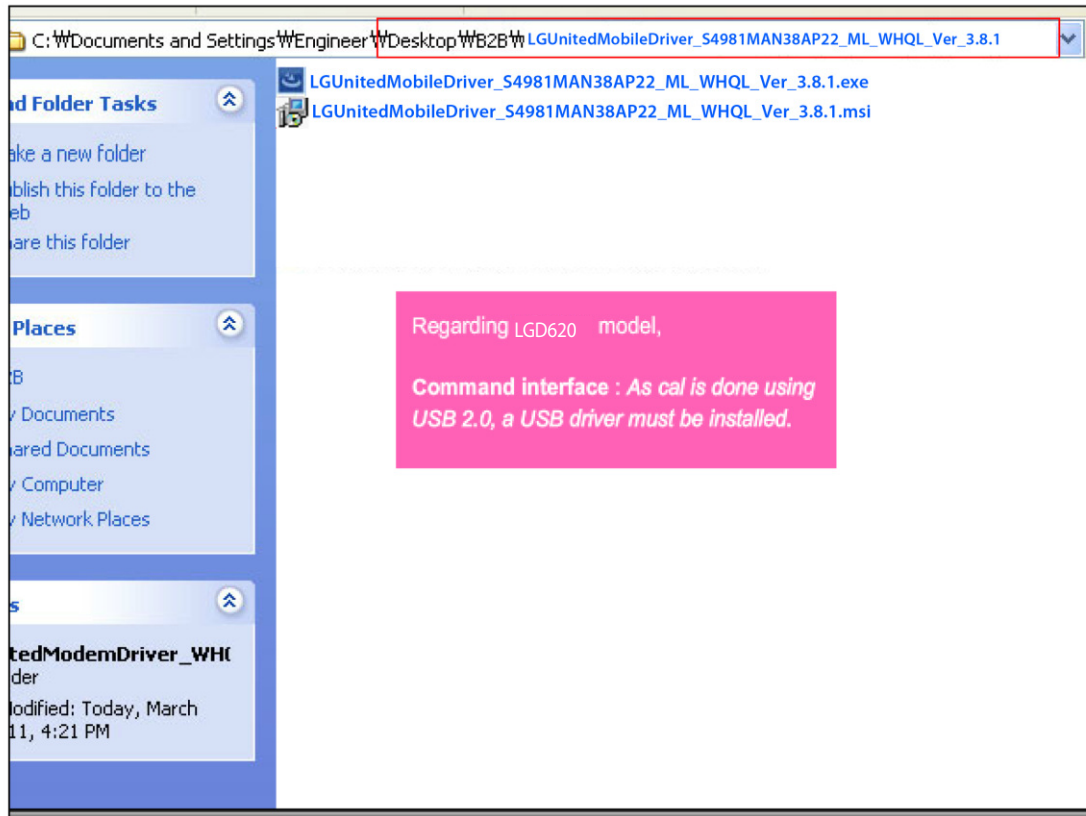


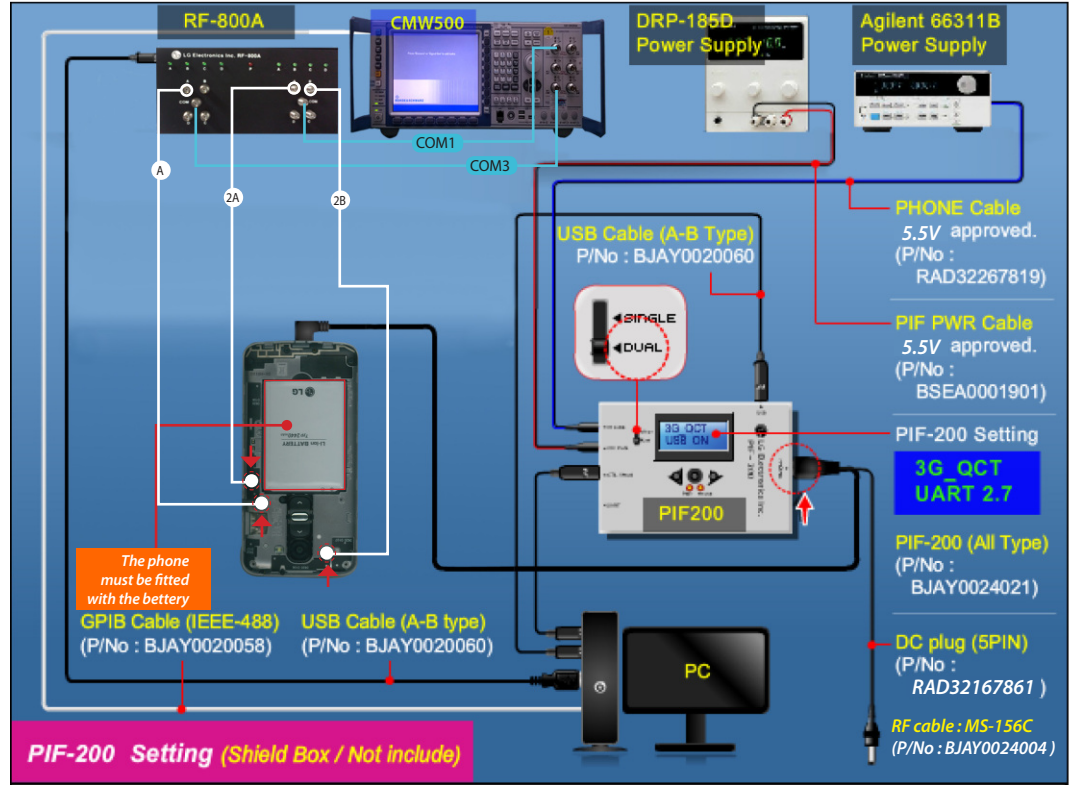




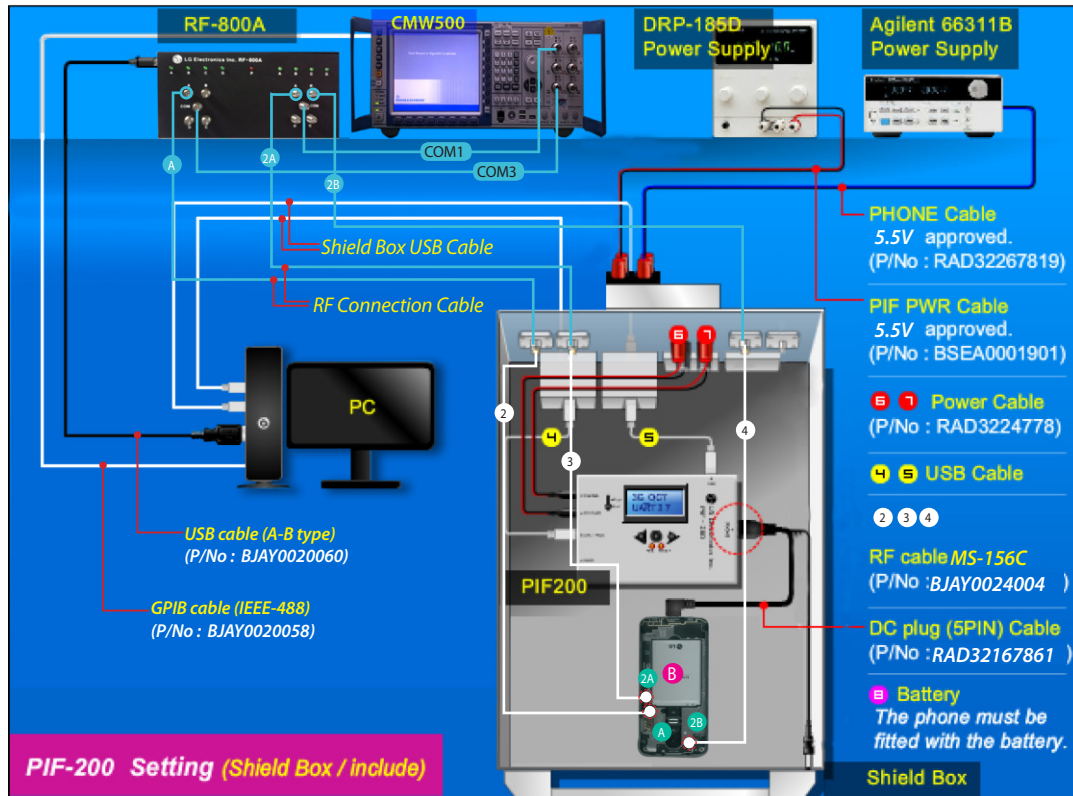




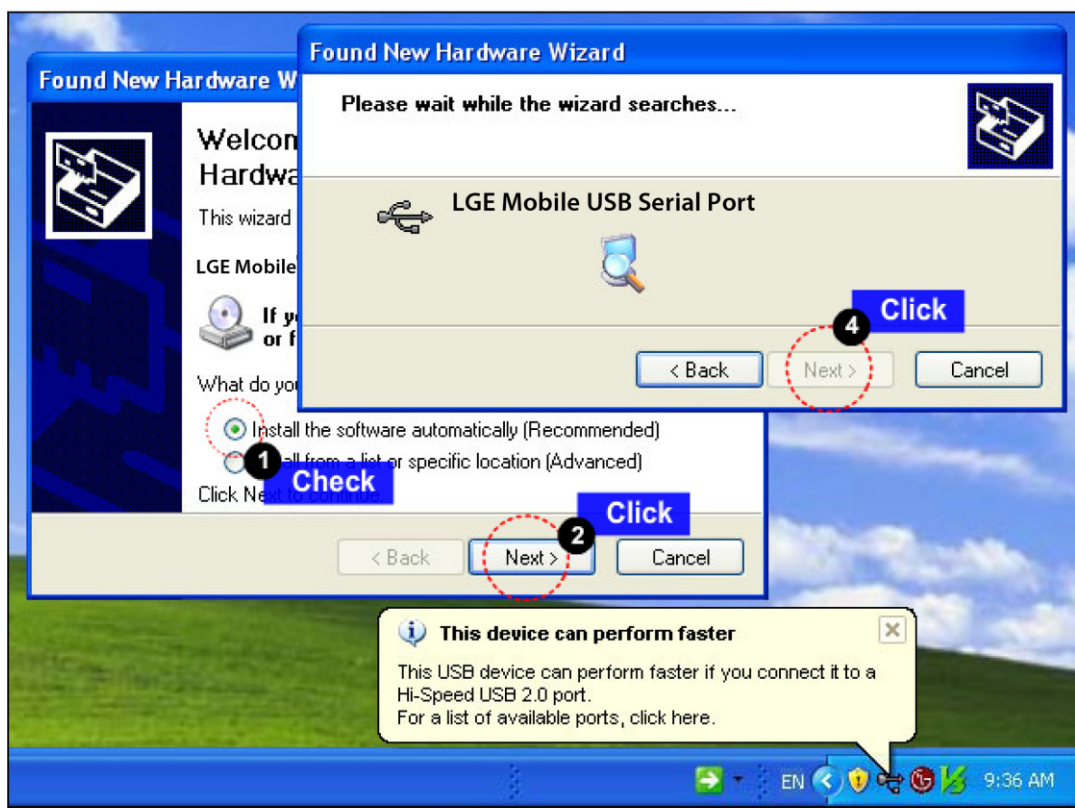


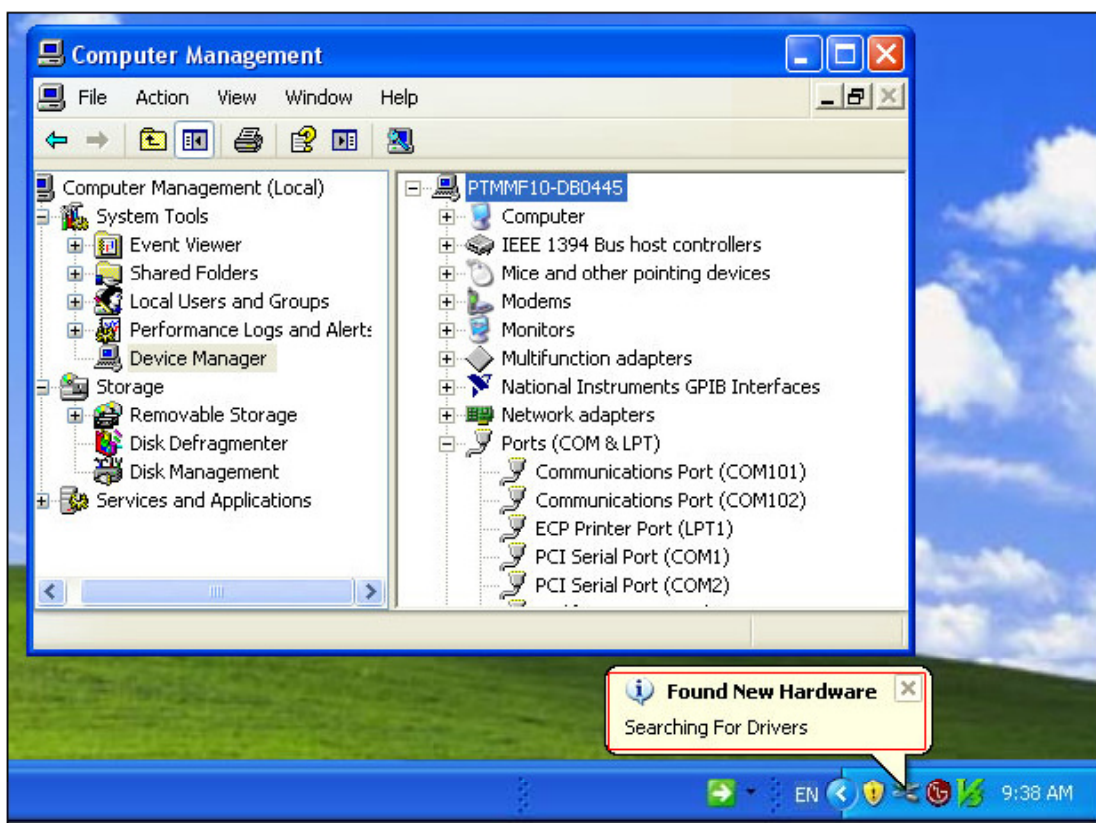
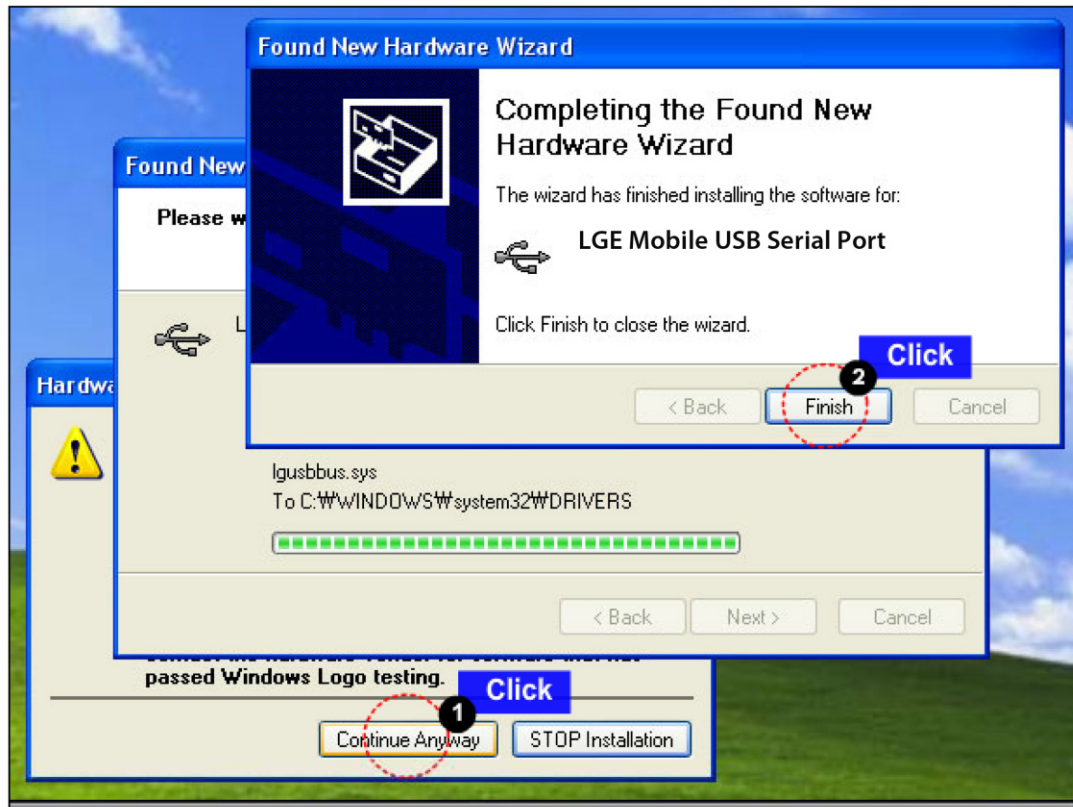


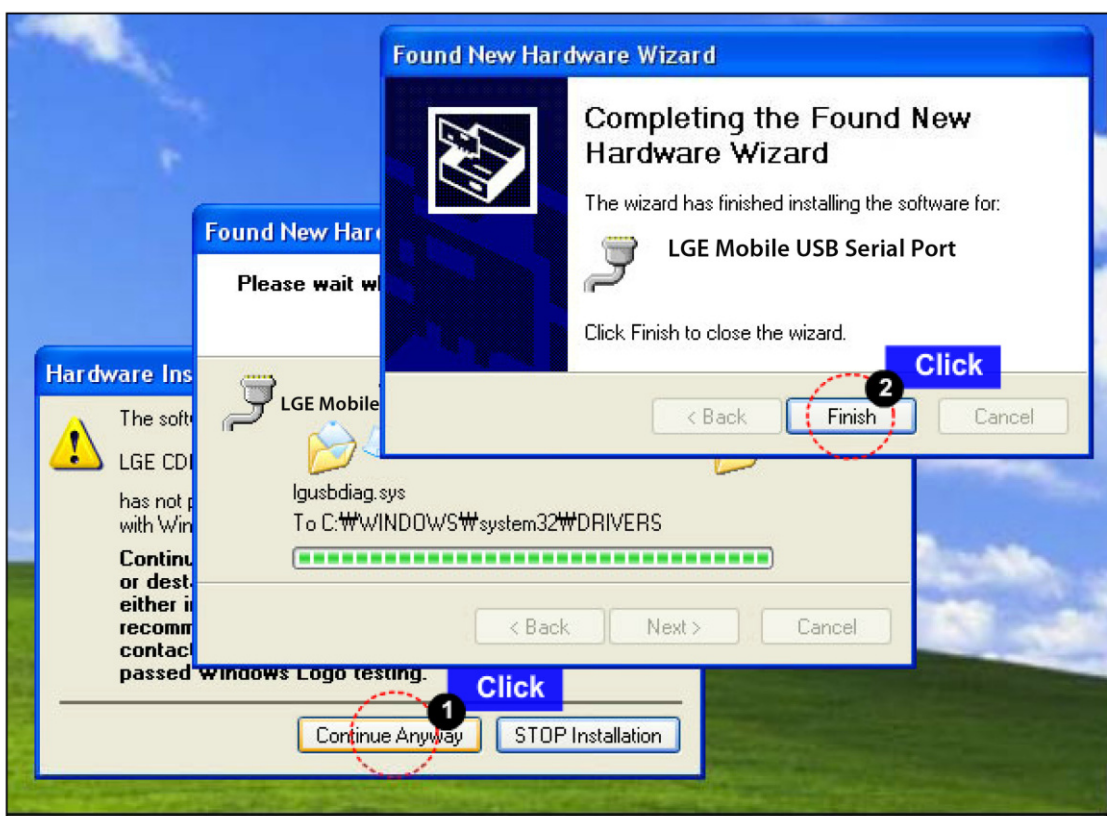
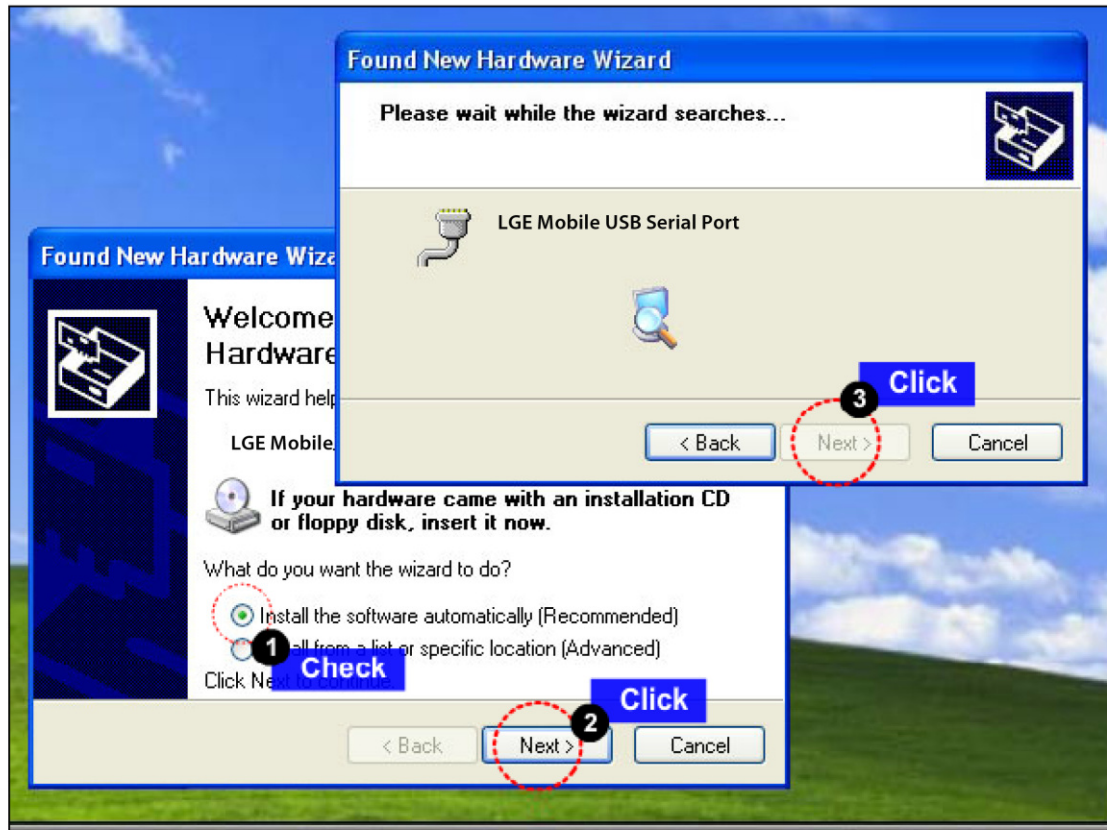
9. CALIBRATION

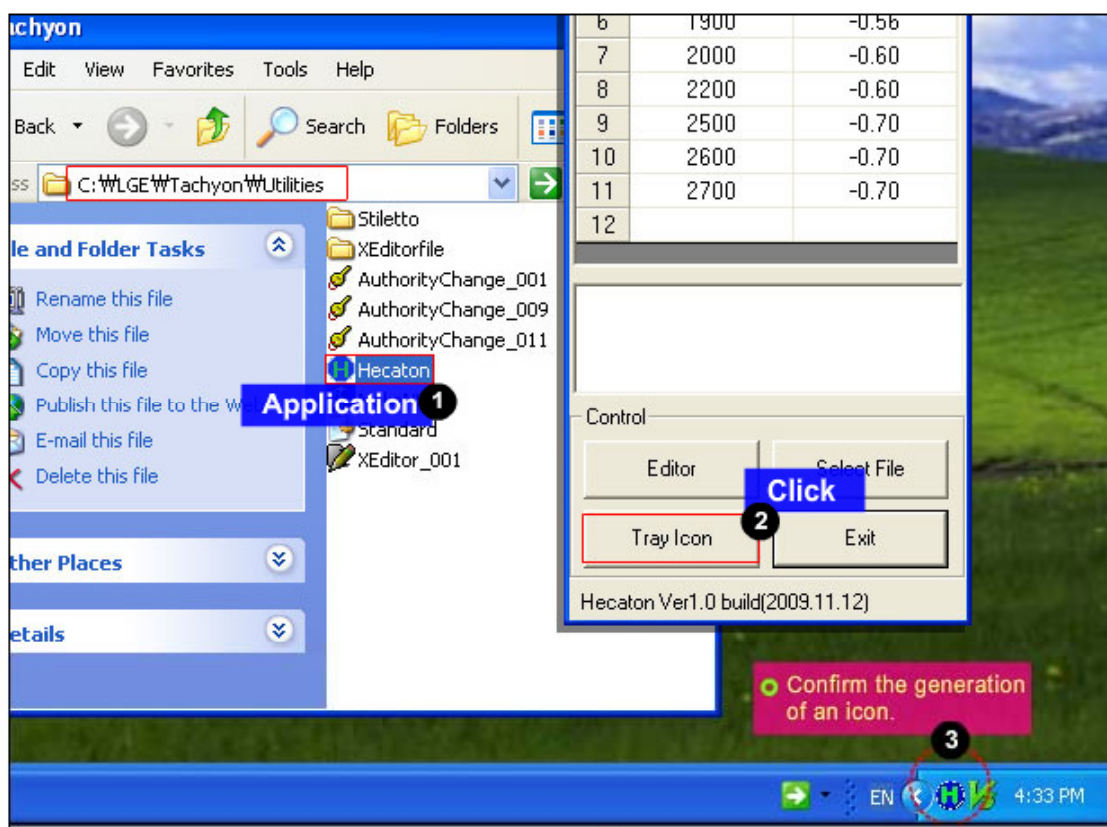
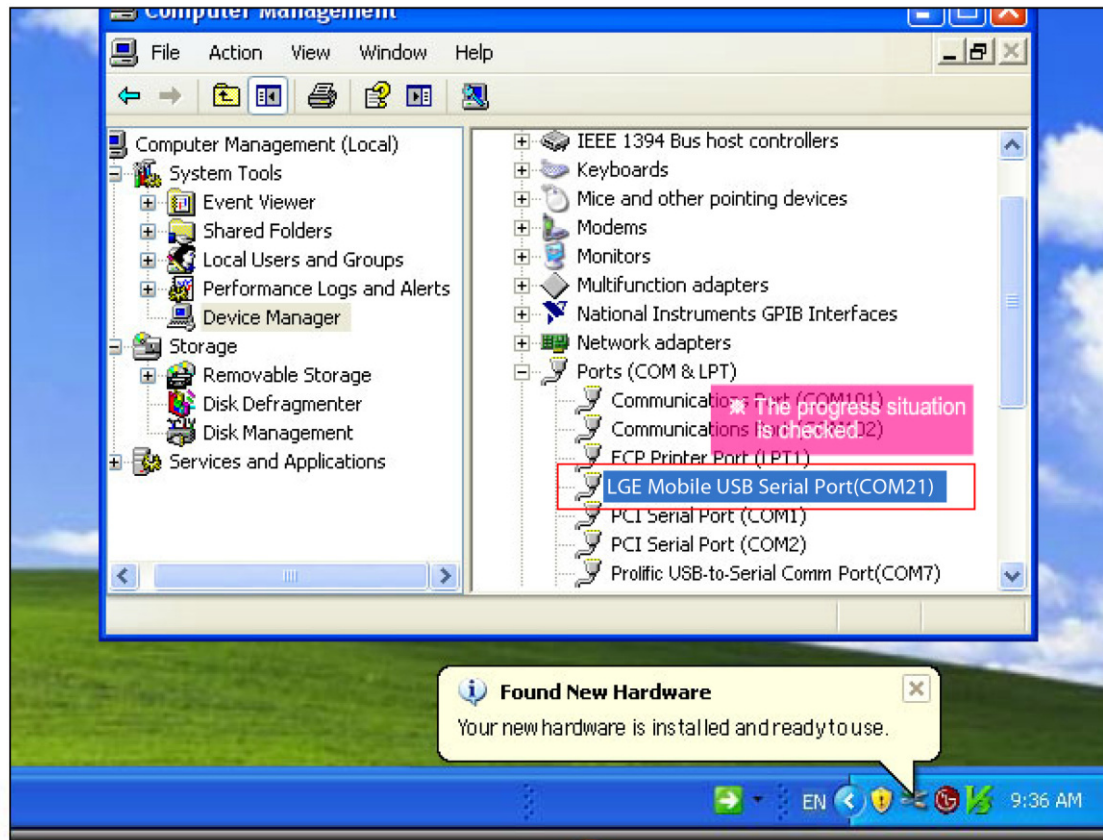


This is for example.
You can check "C:\LGE\Tachyon\Model\WD620\Setting Guide"

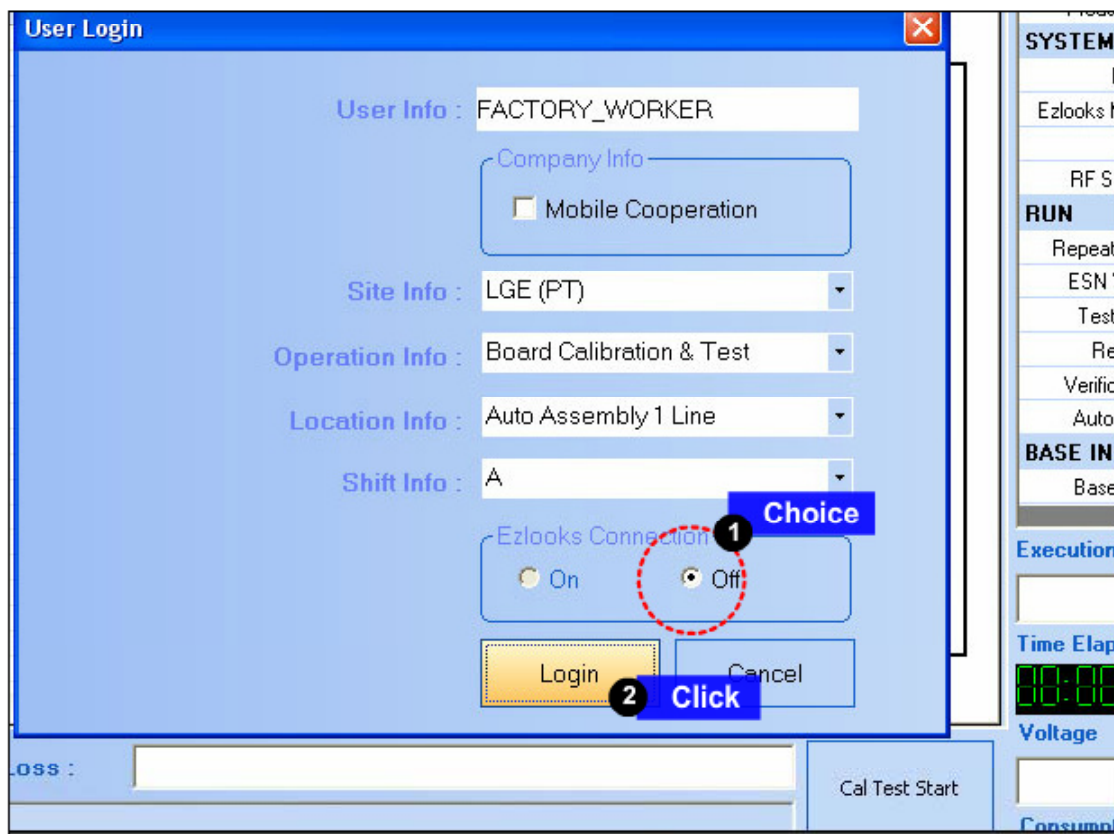
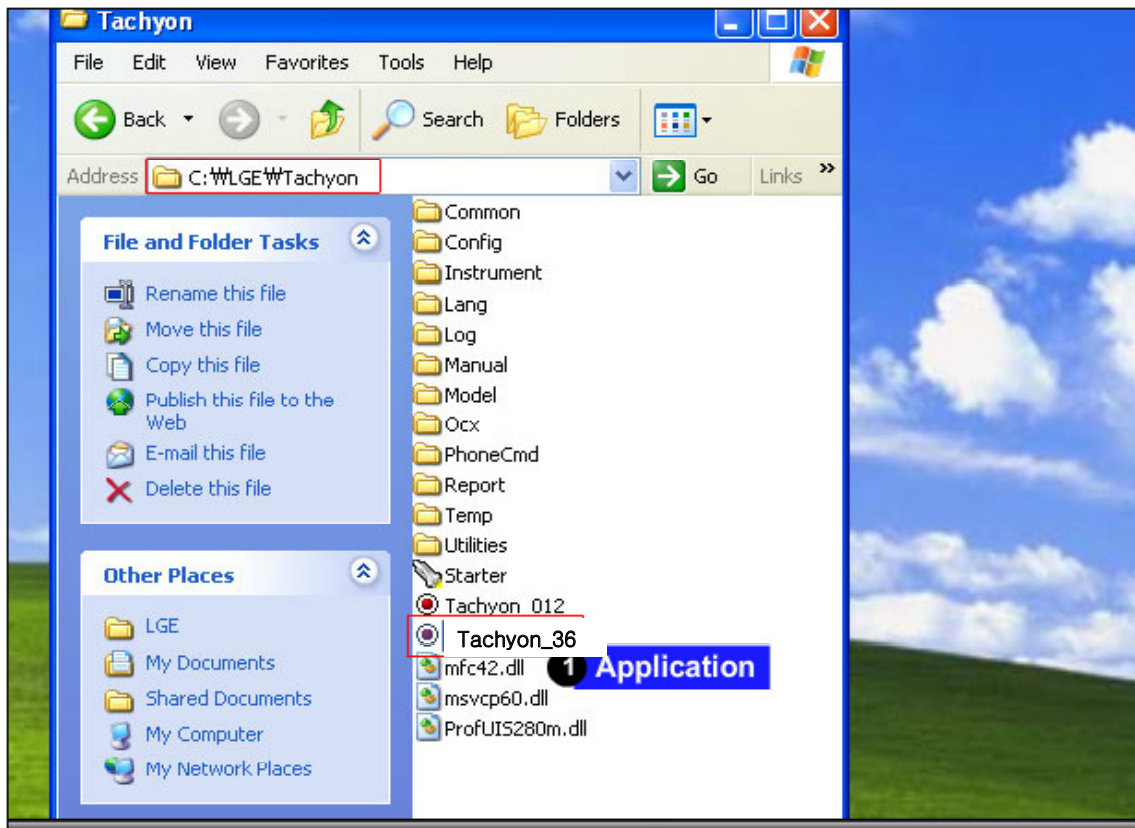


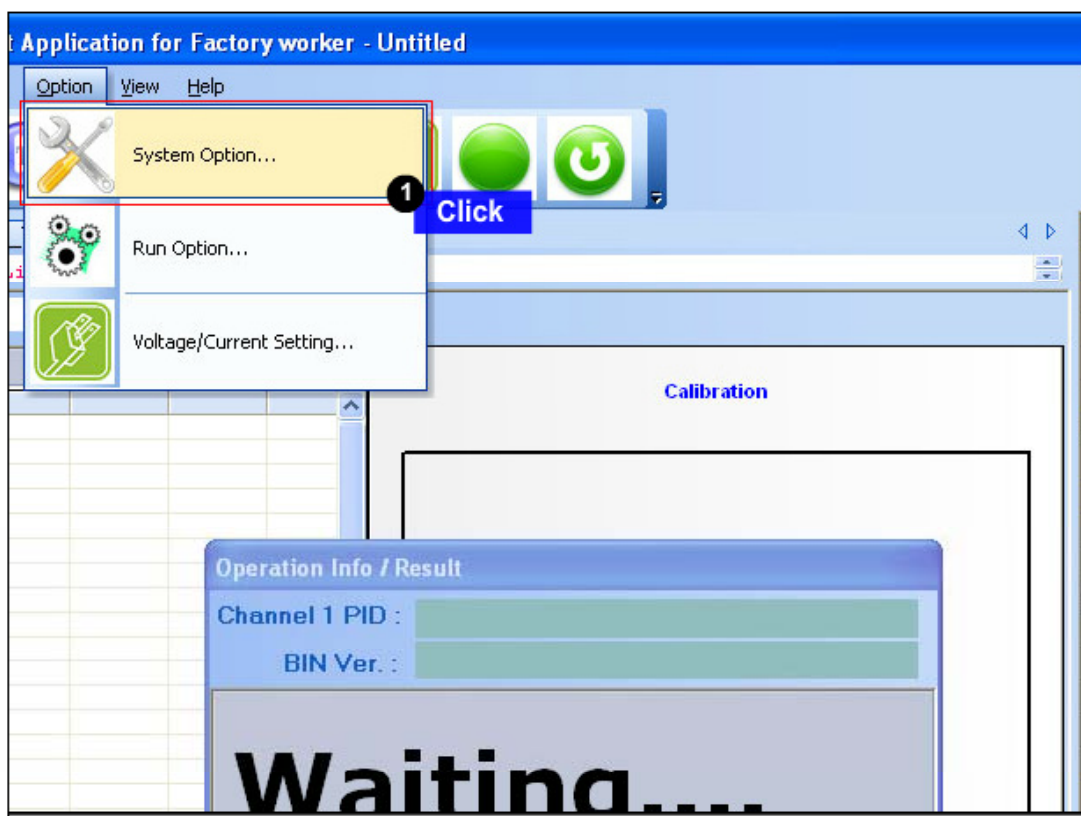
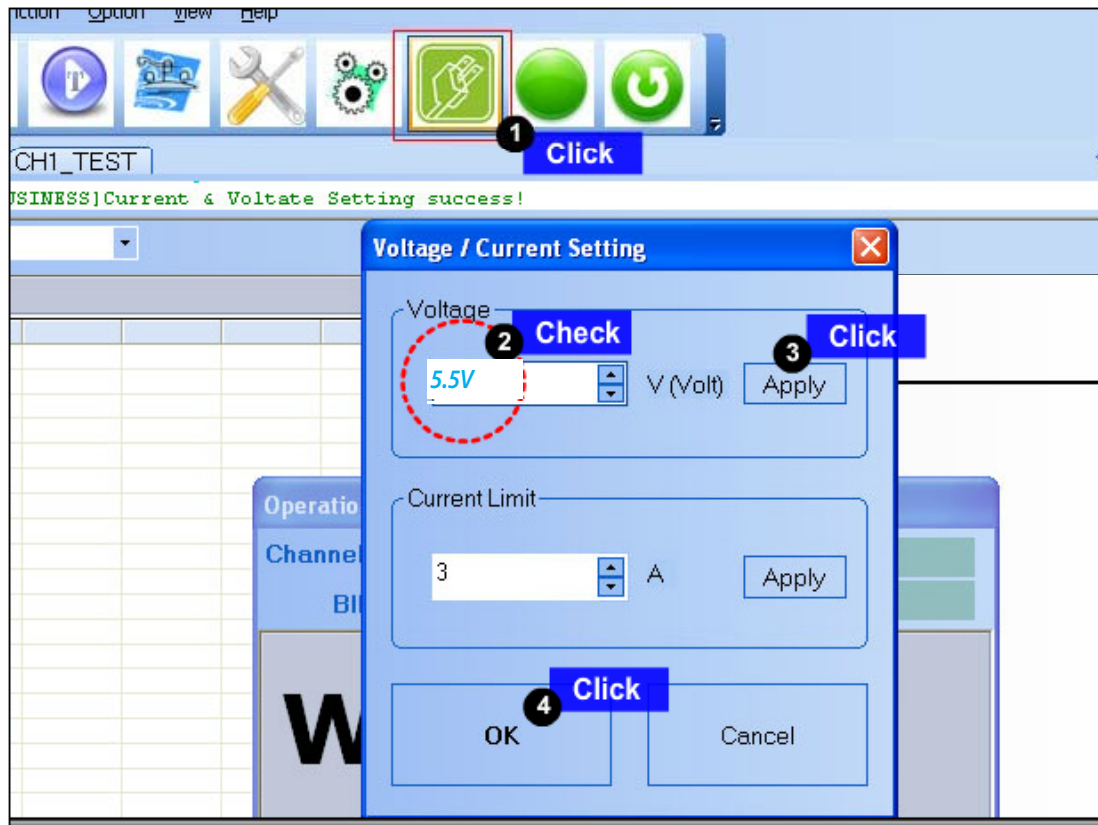


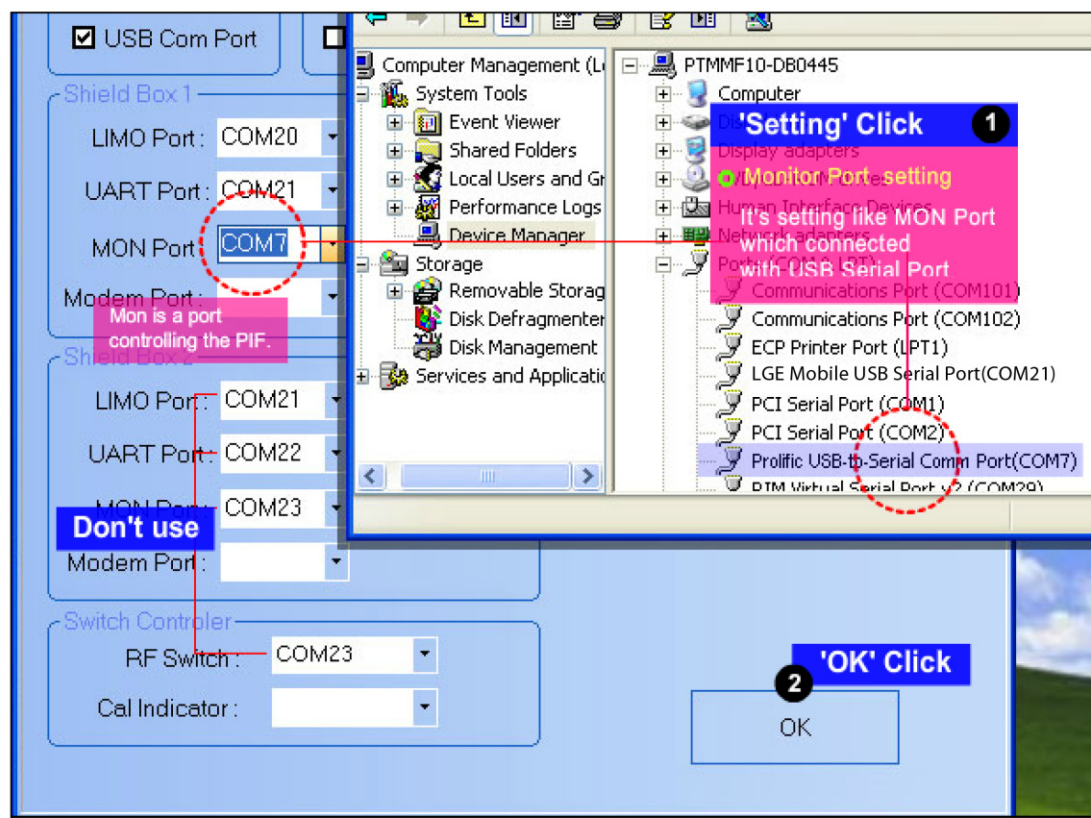
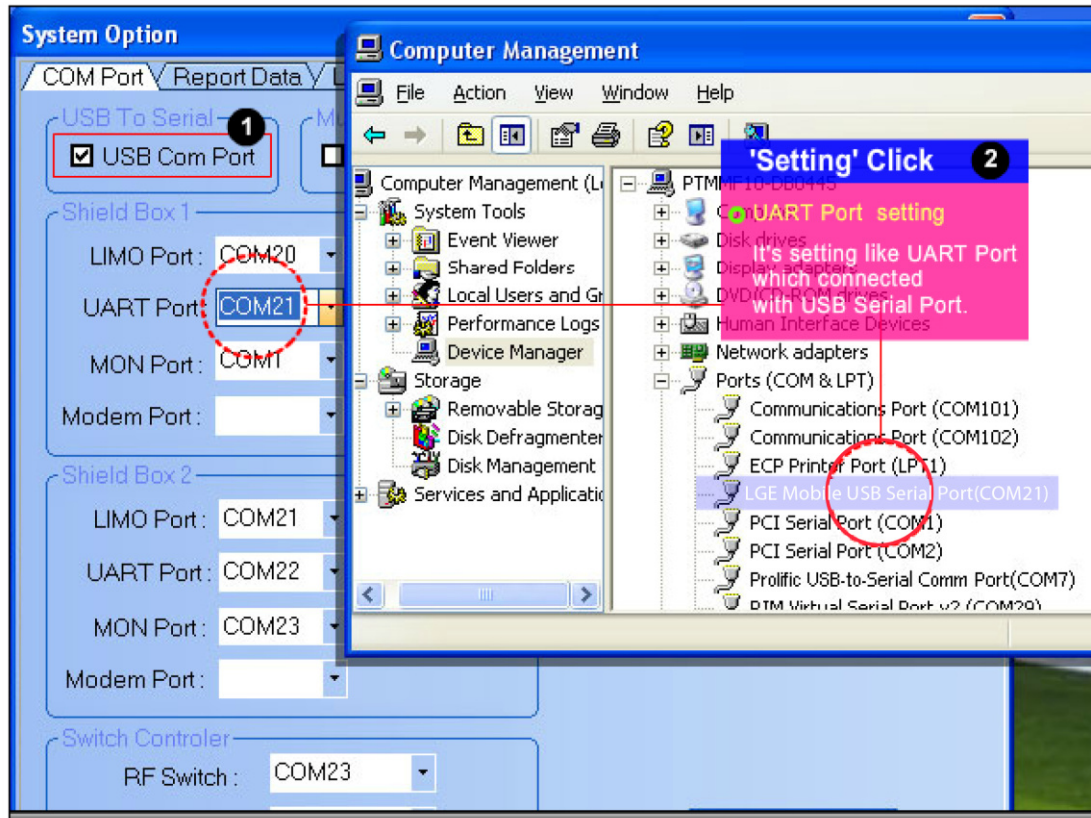




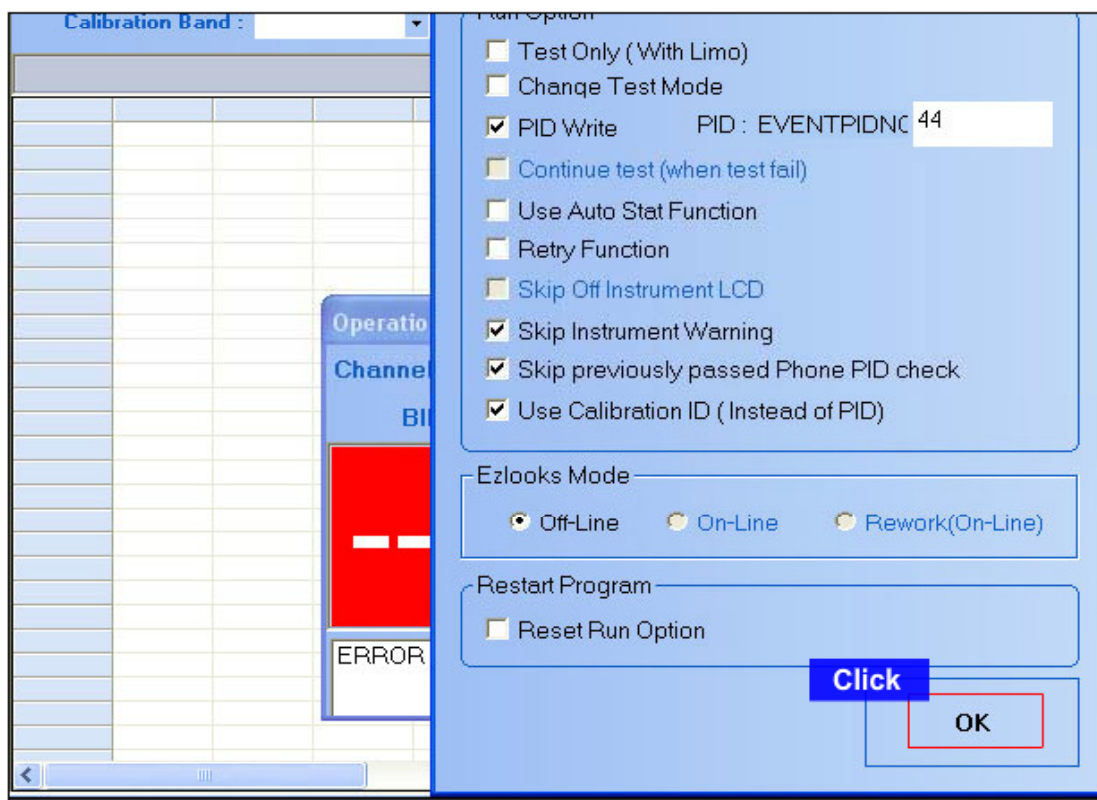
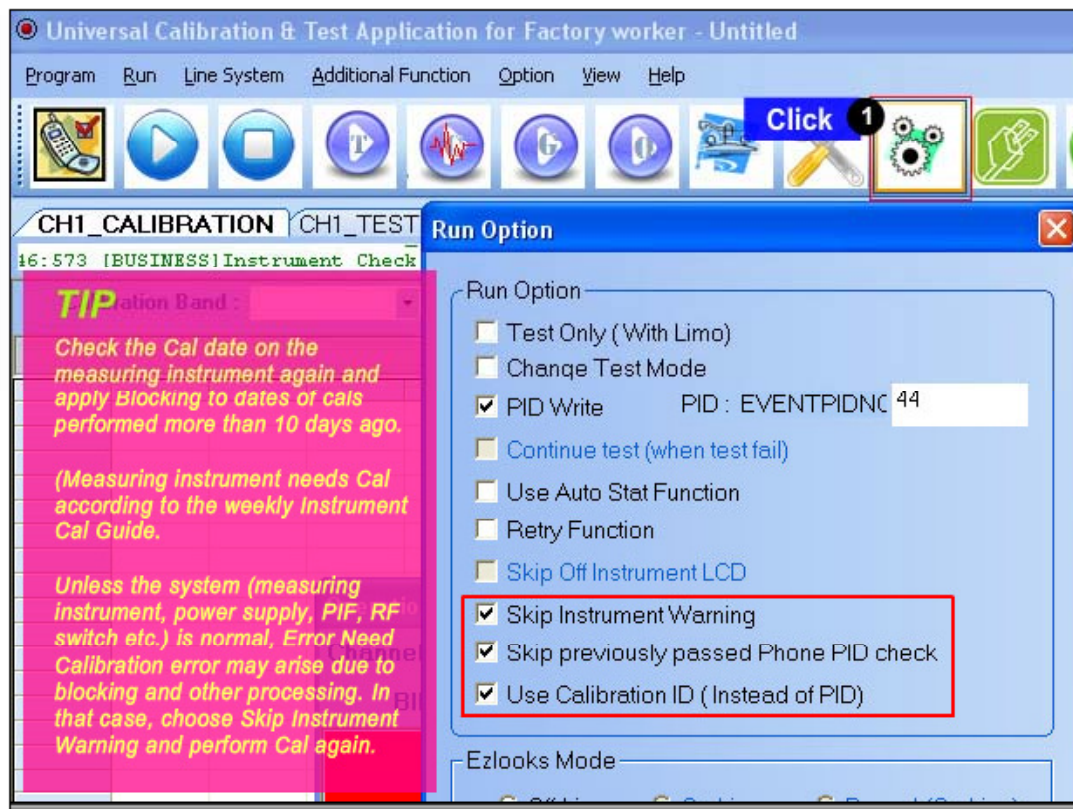
9. CALIBRATION

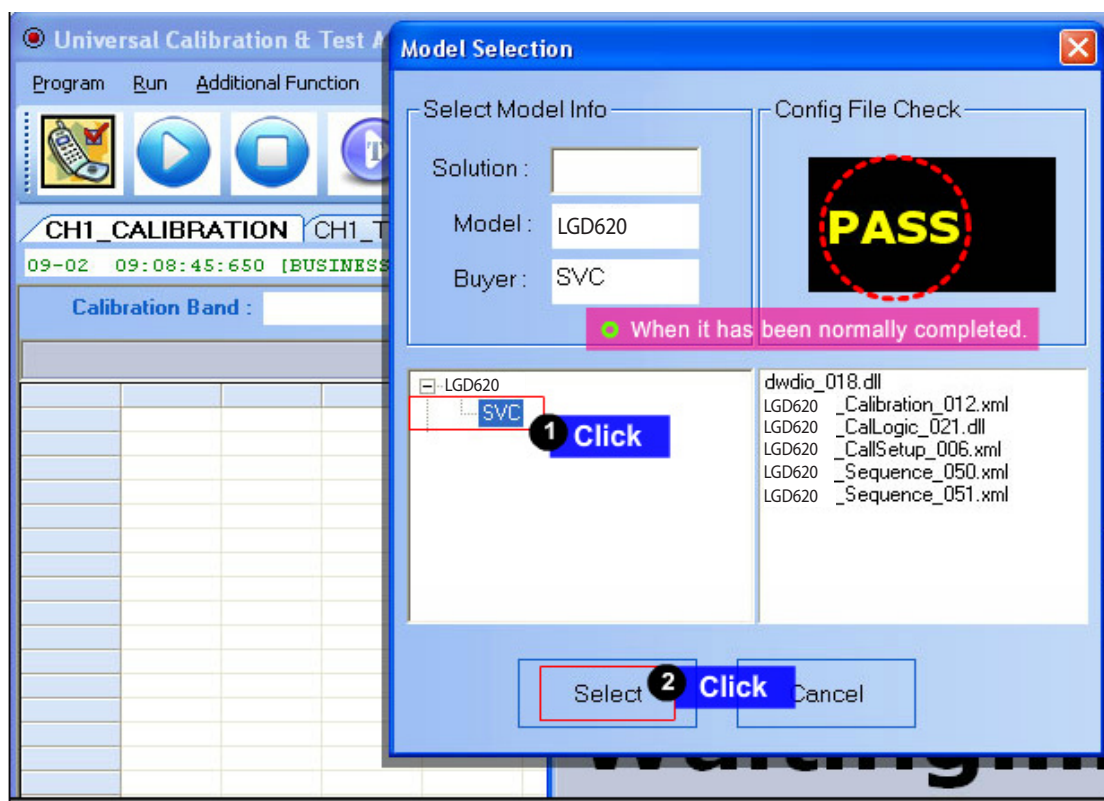
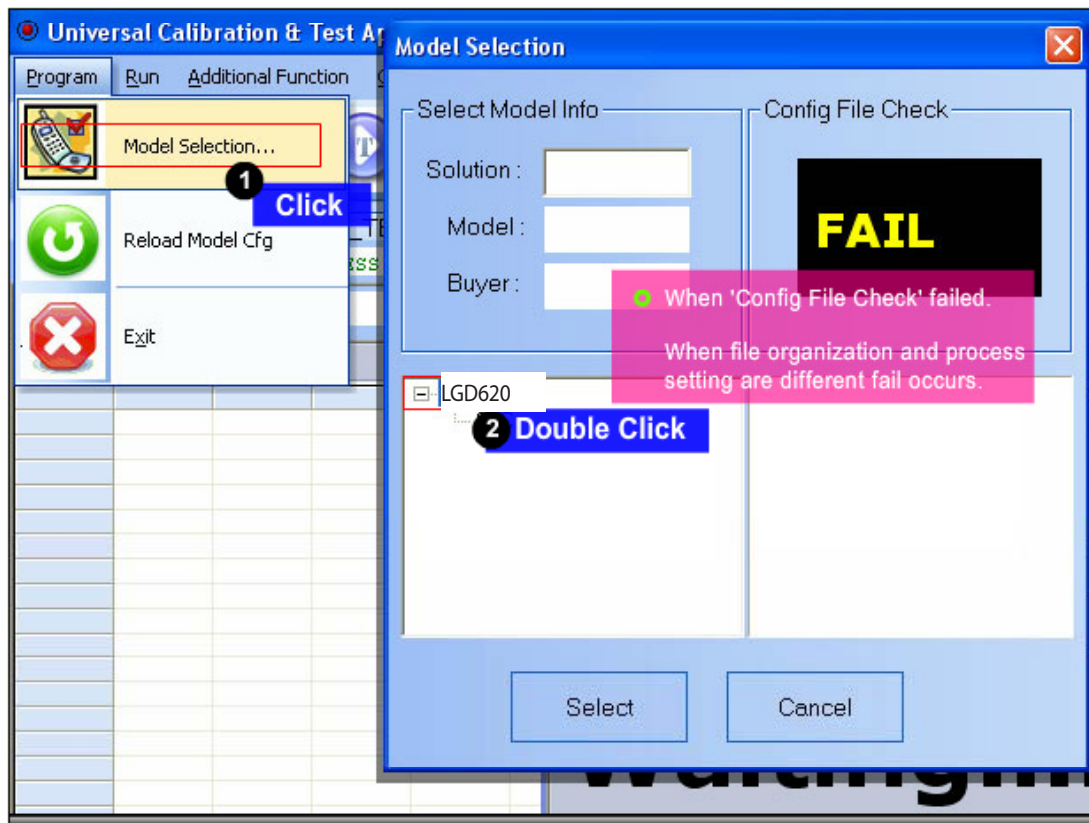


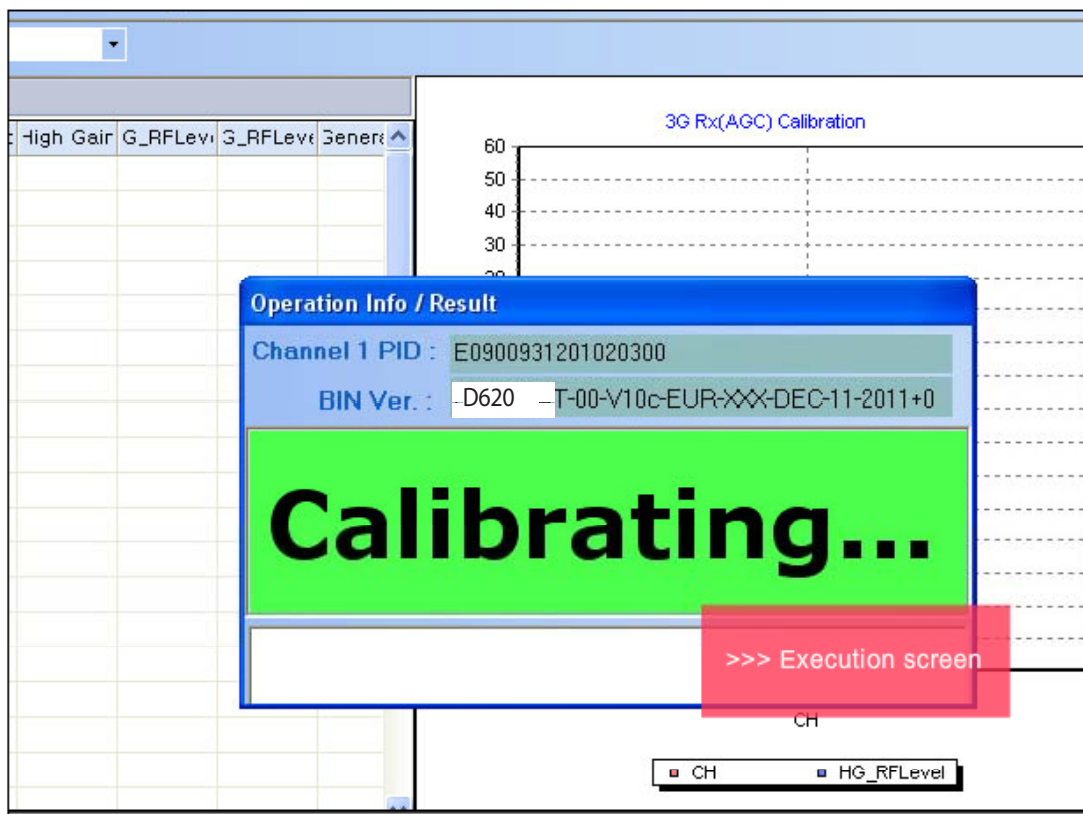
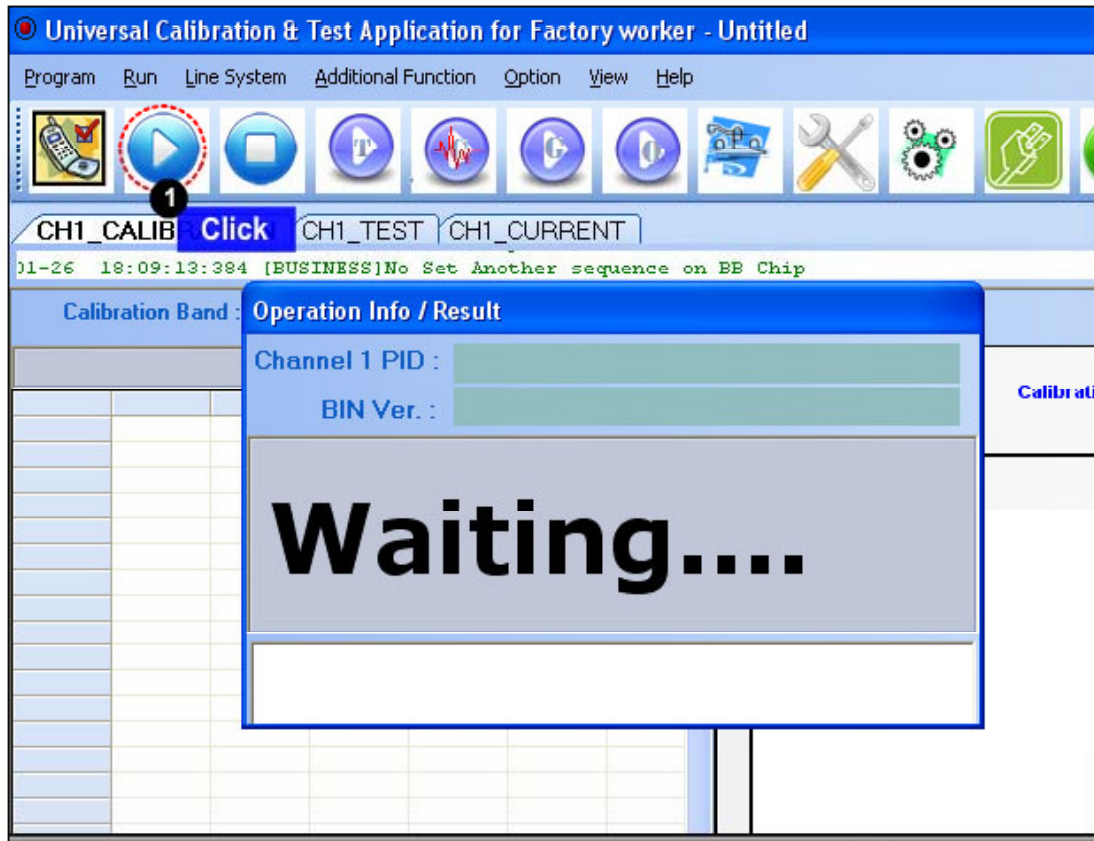




9. CALIBRATION







				CH01	CH02	CH03	
				10562	10700	10838	PASS
				☒	☒	☒	
	NC	23,7	22,3	23,000	22,963	22,976	
MARGIN				☐	☒	☐	
	SEGMENT-F	-0,4	-1,6		-1,148		
	SEGMENT						
	SEGMENT						
	SEGMENT						
H							
	NC						
LEAKAGE RAT							
	ACLR-5M						
	ACLR+5M						
	ACLR-10M						
	ACLR+10M						
MASK							
	NC						
				☐	☒	☐	
	EVM-20DBM	17,50	0,00		4,933		
	PCDE-20DBM	-15,00	0,00		-38,716		

Operation Info / Result

Channel 1 PID : E0900931201020302

BIN Ver. : D620 AT-00-V10c-EUR-XXX-DEC-11-2011+0

Auto Testing

>>> Execution screen

	Condition	USL	LSL	CH01	CH02	CH03	P/F
				10562	10700	10838	PASS
				☒	☒	☒	
	NC	23,7	22,3	23,065	22,983	23,013	
MARGIN				☐	☒	☐	
	SEGMENT						
	SEGMENT						
	SEGMENT						
	SEGMENT						
OTH							
	NC						
LEAKAGE RAT							
	ACLR-5M						
	ACLR+5M						
	ACLR-10M						
	ACLR+10M						
N MASK							
	NC	0,5	-0,5				
Y							
	EVM-20DBM	17,50	0,00		4,720		
	PCDE-20DBM	-15,00	0,00		-38,441		

Operation Info / Result

Channel 1 PID : F0900931201020299

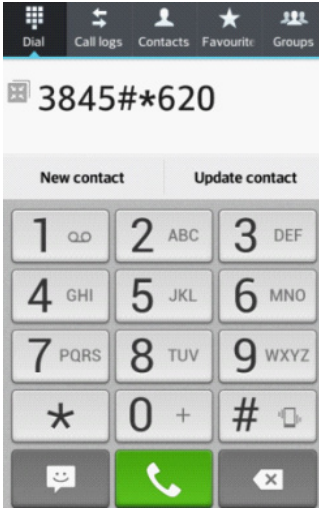
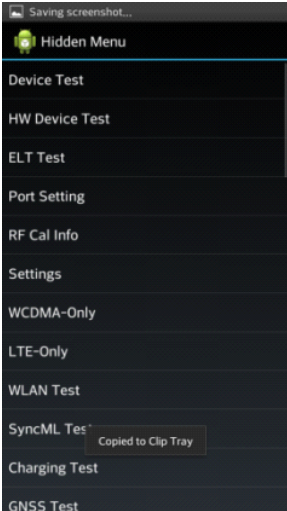
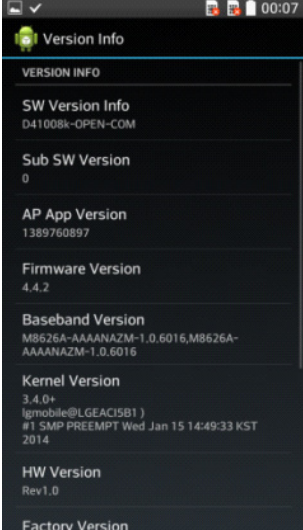
BIN Ver. : D620 AT-00-V10c-EUR-XXX-DEC-11-2011+0

--- PASS ---

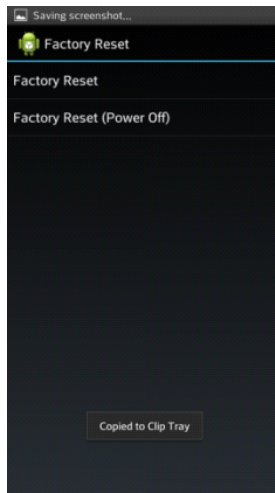
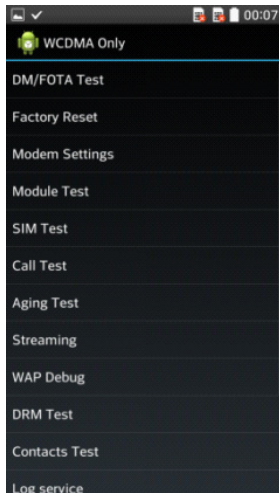
'PASS' The End

System Loss : MySystem(MS).gms · RF900 6C.grf

10. HIDDEN MENU

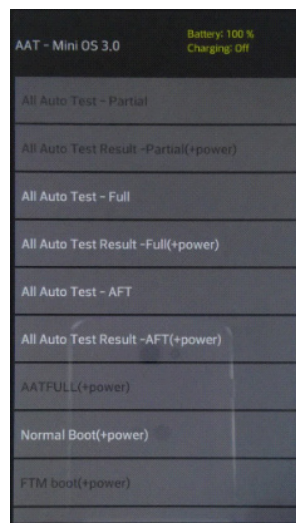
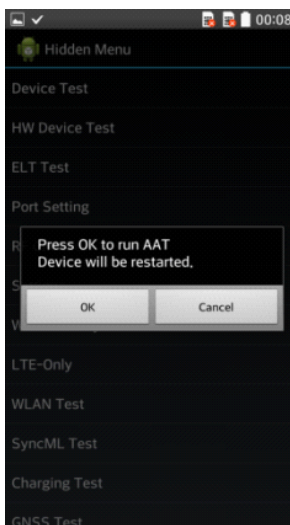
	Hidden Menu Start Start shortcut keys: 3845#*620#
	Hidden Menu Start the desired menu: Menu, click
	Version Info Classified Information representation -> Hidden Menu -> Settings -> Version Info

10. HIDDEN MENU



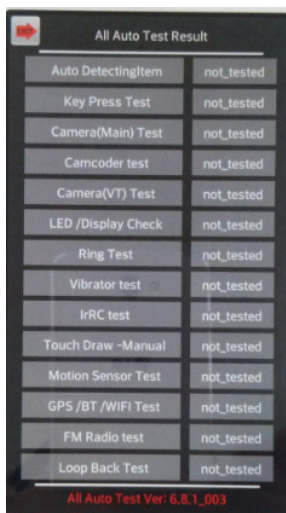
Factory Reset

Factory Reset : Reset as default
Factory Settings
Factory Reset(Power Off)
: Reset as default Factory
Settings and Power Off
-> Hidden menu
-> WCDMA-Only
-> Factory Reset



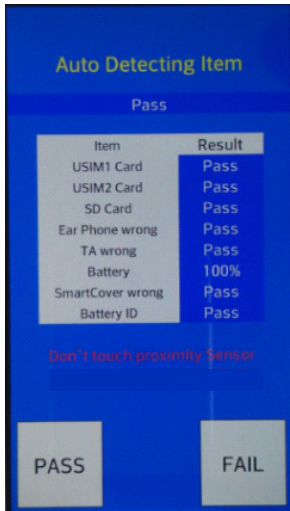
AAT Device Test

All auto Test - Full :
-> You can test all functions
automatically



All auto Test - Full (+Power)

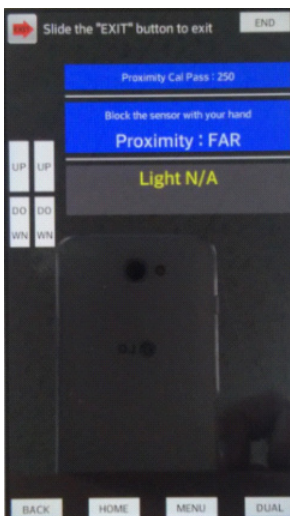
-> You can check Test Results
When you touch the screen with pushing power key



Auto Detecting Item

Check below Items

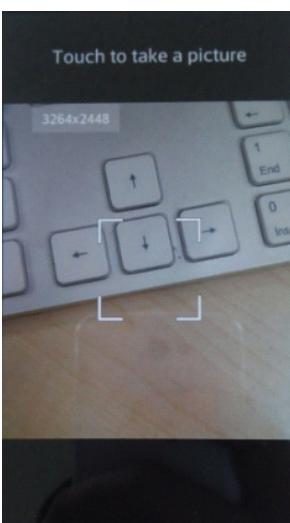
- > USIM Card1 : connecting is PASS
- > USIM Card2 : connecting is PASS
- > SD Card : connecting is PASS
- > Ear Phone : No connecting is PASS
- > TA wrong : No connecting is PASS
- > SmartCover : No connecting is PASS
- > battery ID : Right Battery ID is pass



Key Press Test

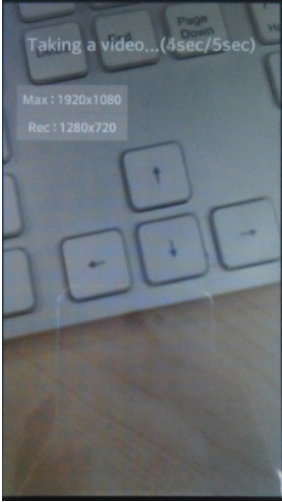
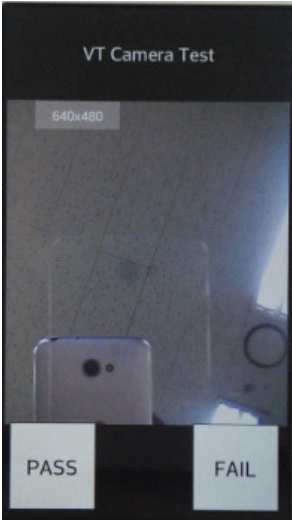
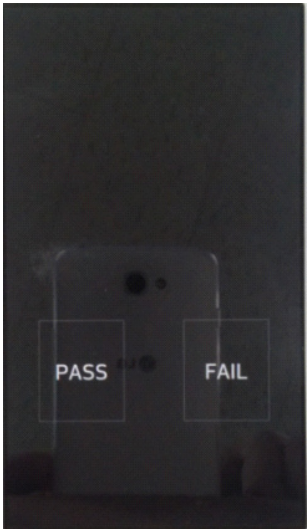
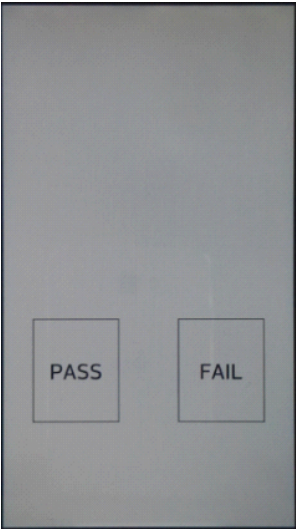
Check below Items

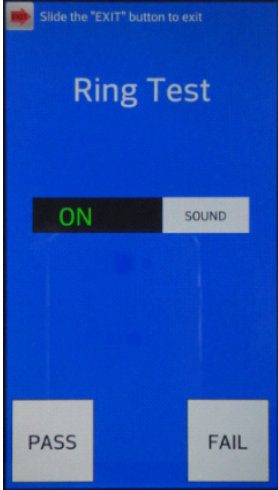
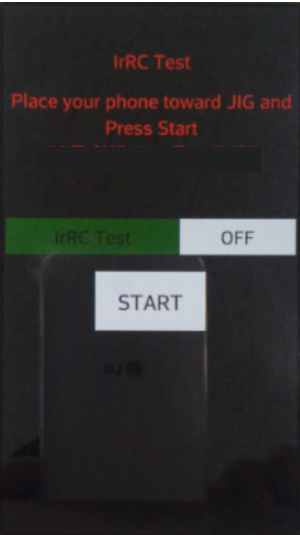
- Up/Down key : Hard Key
- Power key : Hard Key
- Memo key : Hard key
- Menu key : Touch Key
- Home key : Touch Key
- Back key : Touch Key
- SIM Switch key : touch key
- Proximity Sensor : Blind the Proximity sensor

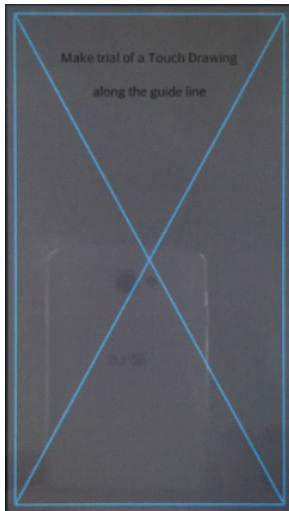


Camera Test – Snapshot

Touch screen to capture

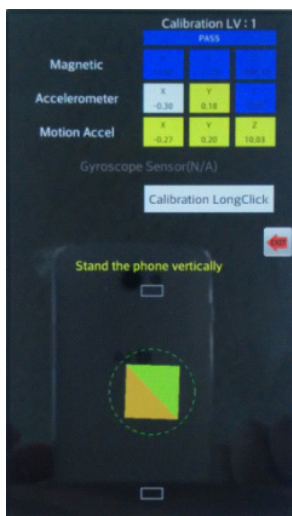
	Camcorder Test Camera is recoding for 5 seconds	
	VT Camera Test Show the VT Camera image	
		Display Check Test Check Black & White Color

 The image shows a smartphone screen with a blue background. At the top, there is a small red icon and the text "Slide the 'EXIT' button to exit". Below this, the title "Ring Test" is displayed in white. In the center, there is a toggle switch labeled "ON" in green and "SOUND" in white. At the bottom, there are two buttons: "PASS" on the left and "FAIL" on the right.	Sound Test Check the sound
 The image shows a smartphone screen with a red background. At the top, there is a small red icon and the text "Slide the 'EXIT' button to exit". Below this, the title "Vibrator Test" is displayed in white. In the center, there is a toggle switch labeled "ON" in green and "VIBRATION" in white. At the bottom, there are two buttons: "PASS" on the left and "FAIL" on the right.	Vibrator Test Check the vibration
 The image shows a smartphone screen with a dark background. At the top, the title "IrRC Test" is displayed in red. Below it, the text "Place your phone toward JIG and Press Start" is shown in red. In the center, there is a toggle switch labeled "IrRC Test" in green and "OFF" in white. Below the toggle, there is a button labeled "START" in white.	IrRC Test Touch the 'Start' Button and check IrRC function through JIG



Touch Drawing Test

Draw a guide line



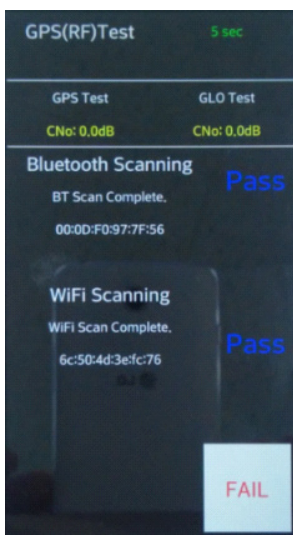
Motion Sensor Test

Check 3 positions & Magnetic sensor

-> Position horizontally

-> Position Vertically

-> Position side

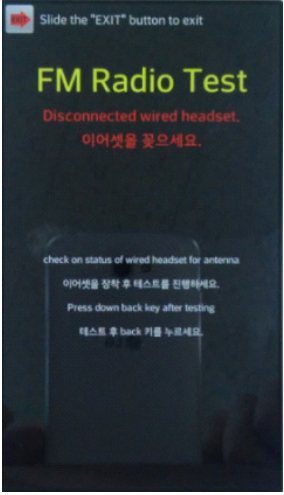
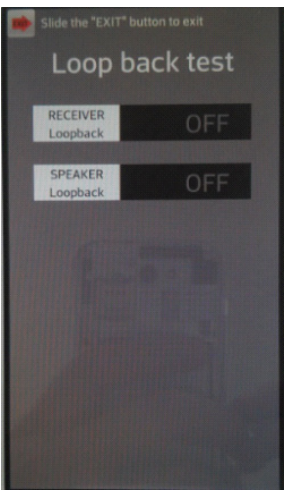
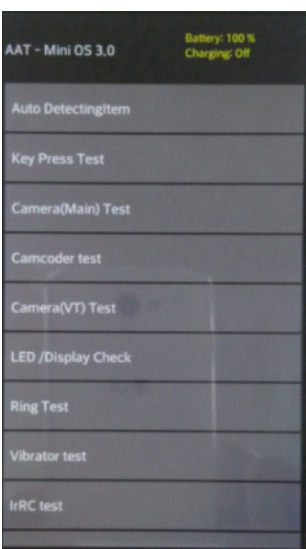


GPS BT Wifi Test

GPS(RF) test : CNO is some value : OK

Bluetooth Scanning is PASS : OK

WiFi Scanning is PASS : OK

	FM Radio Test Connect wired headset Check the volume of FM radio
	Loopback Test Check the Audio loopback Check the Speaker loopback
	Individual item You can test only individual item

11. DISASSEMBLE GUIDE

1. Disassemble. Battery & Battery cover



A front view of D620.



Lift up battery cover with your finger nail.



Disassemble battery cover.



Disassemble battery.

2. Disassemble Rear, assembly



Loosen screws.(10 Points.)



Unhook all hooks .
Be carefully Rear and antenna c-clip damage.
using a spatula.



Disassemble a Rear assembly.

3. Disassemble PCB assembly, Main.



Disassemble connectors using spatula.



Disassemble two connectors.

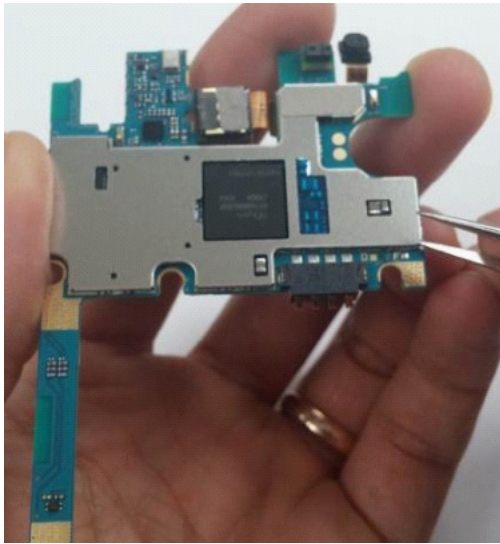


Lift up a assembled PCB From a bar assembly.

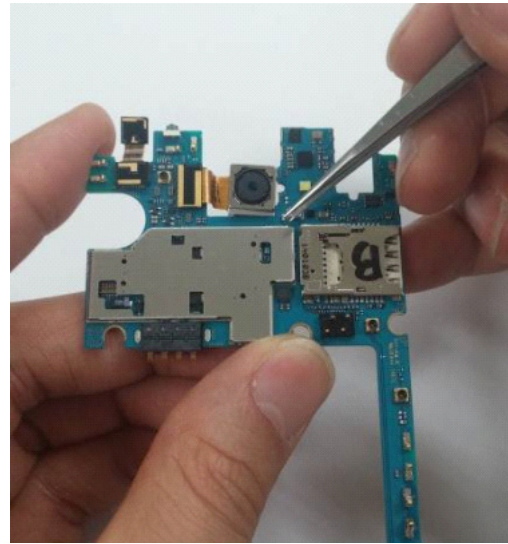


A view of BAR assembly and PCB assembly.

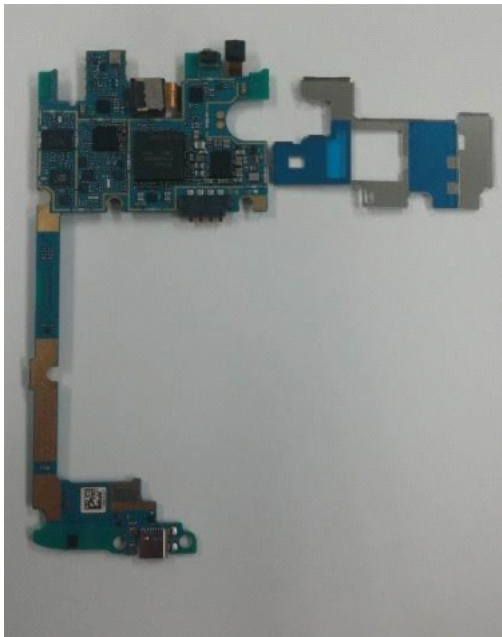
4. Disassemble PCB Assembly, Main, SMT



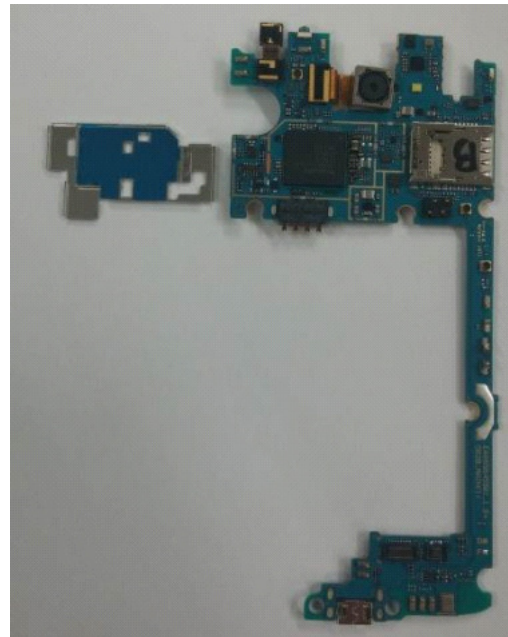
To disassemble a shield can top, lift up a shield can according to hole, using a pincette.



To disassemble a shield can bottom, lift up a shield can according to hole, using a pincette.



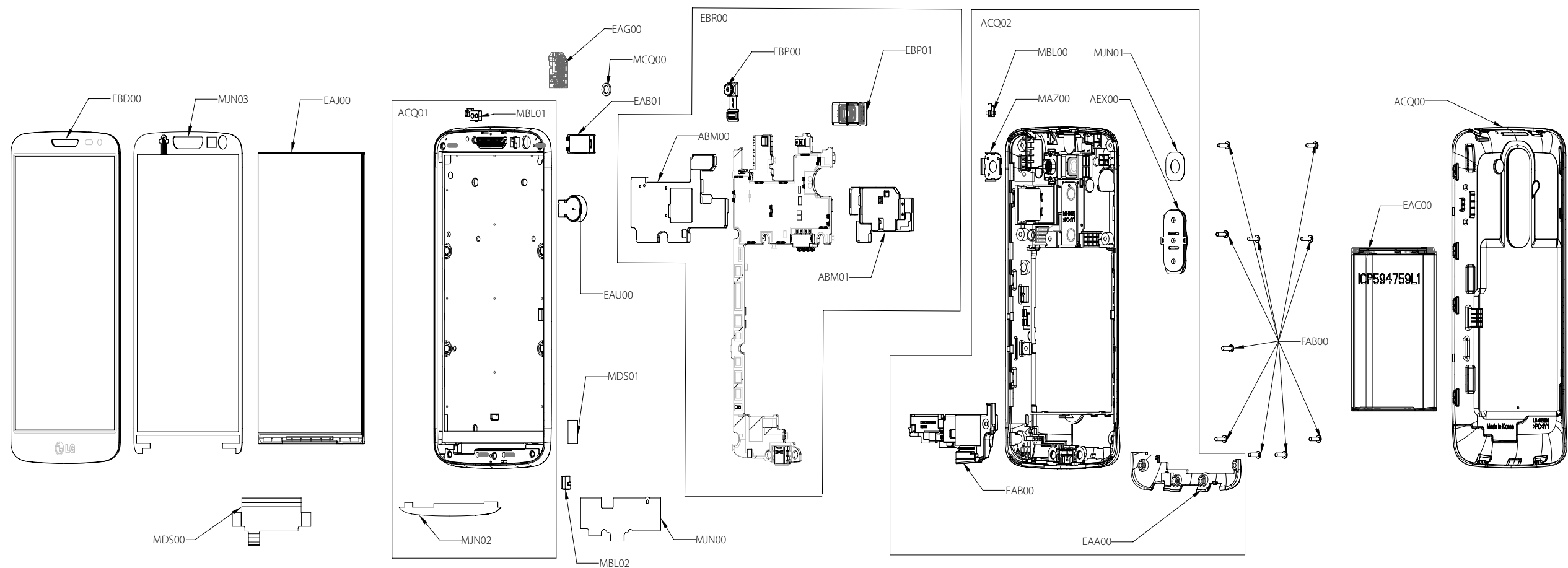
A view of PCB assembly.
A main Top(left) and a shield can top(right).



A view of PCB assembly.
A main bottom(right) and a shield can bottom(left).

12. EXPLODED VIEW & REPLACEMENT PART LIST

12.1 EXPLODED VIEW(SBOM)



Location	Description	Location	Description	Location	Description
ACQ02	Cover Assembly,Rear	MBL01	Cap	MBL02	Cap
EAA00	PIFA Antenna,Multiple	MJN02	Tape,Window	FAB00	Screw,Machine
MAZ00	Bracket	MCQ00	Damper,Camera	EBR00	PCB Assembly,Main
AEX00	Keypad Assembly,Main	MDS00	Gasket	ABM00	Can Assembly,Shield
MBL00	Cap	MDS01	Gasket	EBP00	Camera Module
MJN01	Tape,Window	MJN03	Tape,Window	ABM01	Can Assembly,Shield
EAB00	Speaker Module	MJN00	Tape	EBP01	Camera Module
EAU00	Motor,DC	EAJ00	LCD,Module-TFT	EAC00	Rechargeable Battery,Lithium Ion
EBD00	Touch Window Assembly	EAG00	Jack,Phone	ACQ00	Cover Assembly,Battery
ACQ01	Cover Assembly,Front	EAB01	Receiver		

12. EXPLODED VIEW & REPLACEMENT PART LIST

12.2 Replacement Parts <Mechanic component>

Note: This Chapter is used for reference, Part order is ordered by SBOM standard on GCSC

Level	Location No.	Description	Part Number	Spec	Remark
1	AGQ000000	Phone Assembly	AGQ87476706	LGD620.AVDIBK BK:BLACK BLACK -	
2	MEZ002100	Label,Approval	MEZ65531601	COMPLEX LGD325.AVNMMWH ZZ:Without Color -	
2	ACQ100400	Cover Assembly,EMS	ACQ87043905	LGD620.AVDIBK BK:BLACK BLACK -	
3	ACQ02	Cover Assembly,Rear	ACQ87109502	LGD620.AVD2BK BK:BLACK BLACK -	
4	ACQ105800	Cover Assembly Rear(SVC)	ACQ87109302	LGD620.AVD2BK BK:BLACK BLACK -	
5	MKC009400	Window,Camera	MKC64799202	CUTTING GLASS LGD618.ACISBK ZZ:Without Color -	
5	ACQ063400	Cover Assembly Rear(Sub)	ACQ87109402	LGD620.AVD2BK BK:BLACK BLACK -	
6	MAZ00	Bracket	MAZ64128301	PRESS SUS 0.15 LGD620.ADEUWH SV:SILVER SILVER -	
6	MCK063300	Cover,Rear	MCK68009802	MOLD PC LGD620.AVD2BK BK:BLACK BLACK -	
5	AEX00	Keypad Assembly,Main	AEX74257402	LGD618.ACISBK BK:BLACK BLACK -	
6	MJN061100	Tape,Protect	MJN69167001	COMPLEX LGD618.ACISWH ZZ:Without Color -	
5	MBL00	Cap	MBL65817501	MOLD SILICON LGD618.ACISWH BK:BLACK BLACK -	
5	MCQ049800	Damper,Motor	MCQ67588101	COMPLEX LGD618.ACISWH BK:BLACK BLACK -	
5	MCQ009400	Damper,Camera	MCQ67588201	COMPLEX LGD618.ACISWH BK:BLACK BLACK -	
5	MCQ000000	Damper	MCQ67589201	COMPLEX LGD618.ACISWH BK:BLACK BLACK -	

12. EXPLODED VIEW & REPLACEMENT PART LIST

Level	Location No.	Description	Part Number	Spec	Remark
5	MCR000001	Decor	MCR65328101	COMPLEX LGD618.ACISWH WH:WHITE WHITE -	
5	MCR000000	Decor	MCR65328902	MOLD PC LGD618.ACISBK BK:BLACK BLACK -	
5	MCR000002	Decor	MCR65486201	COMPLEX LGD618.ACISWH ZZ:Without Color -	
5	MEZ000900	Label,After Service	MEZ64319901	COMPLEX LGF120L.ALGTWA ZZ:Without Color F120I AS Label	
5	MFB029600	Lens,Flash	MFB63312901	MOLD PC LGD618.ACISWH ZZ:Without Color -	
5	MJN01	Tape,Window	MJN68709601	COMPLEX LGD618.ACISWH BK:BLACK BLACK -	
3	ACQ003400	Cover Assembly,Bar	ACQ87293202	LGD620.AVD2BK BK:BLACK BLACK -	
4	ACQ01	Cover Assembly,Front	ACQ86994402	LGD618.ACISBK BK:BLACK BLACK -	
5	MBL01	Cap	MBL65817301	MOLD SILCON RUBBER LGD618.ACISWH BK:BLACK BLACK -	
5	ACQ033200	Cover Assembly Front(Sub)	ACQ86994502	LGD618.ACISBK BK:BLACK BLACK -	
6	MCK032700	Cover,Front	MCK67968602	MOLD PC LGD618.ACISBK BK:BLACK BLACK -	
6	MET099500	Insert,Nut	MICE0016911	COMPLEX MECH_COMMON ZZ:Without Color -	
6	MDQ000000	Frame	MDQ63756501	MOLD MG LGD618.ACISWH WH:WHITE WHITE -	
5	MCQ000000	Damper	MCQ67587301	COMPLEX LGD618.ACISWH ZZ:Without Color -	
5	MDS000003	Gasket	MDS64690701	COMPLEX LGD618.ACISWH GY:GOLDEN YELLOW -	
5	MDS000002	Gasket	MDS64673301	COMPLEX LGD618.ACISWH SW:SILVER WHITE -	
5	MDS000001	Gasket	MDS64651301	COMPLEX LGD618.ACISWH GD:Gold -	

12. EXPLODED VIEW & REPLACEMENT PART LIST

Level	Location No.	Description	Part Number	Spec	Remark
5	MDJ000000	Filter	MDJ63884402	COMPLEX LGD618.ACISBK BK:BLACK BLACK -	
5	MCQ043300	Damper,LCD	MCQ67805801	COMPLEX LGD618.ACISWH BK:Black -	
5	MJN02	Tape,Window	MJN68708601	COMPLEX LGD618.ACISWH BK:BLACK BLACK -	
5	MJN000001	Tape	MJN68708501	COMPLEX LGD618.ACISWH ZZ:Without Color -	
5	MJN000000	Tape	MJN68708401	COMPLEX LGD618.ACISWH ZZ:Without Color -	
5	MDS000000	Gasket	MDS64691101	COMPLEX LGD618.ACISWH GD:Gold -	
5	MCR000000	Decor	MCR65327902	PRESS SUS 0.2T LGD618.ACISBK BK:BLACK BLACK -	
4	MEZ000000	Label	MLAZ0038301	COMPLEX LG-VX6000 ZZ:Without Color PID Label 4 Array PRINTING,	
4	MCQ00	Damper,Camera	MCQ67587401	COMPLEX LGD618.ACISWH BK:BLACK BLACK -	
4	MDS00	Gasket	MDS64690801	COMPLEX LGD618.ACISWH GY:GOLDEN YELLOW -	
4	MDS01	Gasket	MDS64692001	COMPLEX LGD618.ACISWH GD:Gold -	
4	MJN03	Tape,Window	MJN68709001	COMPLEX LGD618.ACISWH BK:BLACK BLACK -	
4	MJN00	Tape	MJN68710701	COMPLEX LGD618.ACISWH BK:BLACK BLACK -	
4	MJN061100	Tape,Protect	MJN68947801	COMPLEX LGD618.ACISWH ZZ:Without Color -	
4	MBL02	Cap	MBL65817201	MOLD SILCON RUBBER LGD618.ACISWH BK:BLACK BLACK -	
4	MJN107400	Tape,USP Film	MJN68951901	COMPLEX LGD620.AVD2BK ZZ:Without Color -	
3	FAB00	Screw,Machine	FAB31918701	FH + 2.7M 4M SWCH18A SILVER N N	

12. EXPLODED VIEW & REPLACEMENT PART LIST

Level	Location No.	Description	Part Number	Spec	Remark
5	ABM00	Can Assembly,Shield	ABM74276001	LGD620.ADEUWH WH:WHITE WHITE -	
6	MDS000000	Gasket	MDS64673501	COMPLEX LGD618.ACISWH SV:Silver -	
6	MBK070300	Can,Shield	MBK63732501	PRESS SUS 0.2T LGD618.ACISWH WH:WHITE WHITE -	
6	MEV000000	Insulator	MEV64771601	COMPLEX LGD620.ADEUWH ZZ:Without Color D620 insulator can shield top	
6	MEV000001	Insulator	MEV64810901	COMPLEX LGD620.AGBRWH WA:White -	
5	MDS000000	Gasket	MDS64611101	COMPLEX LGD618.ACISWH ZZ:Without Color -	
5	MDJ000000	Filter	MDJ63884801	COMPLEX LGD618.ACISWH ZZ:Without Color -	
5	ABM01	Can Assembly,Shield	ABM74256101	LGD618.ACISWH WH:WHITE WHITE -	
6	MBK070300	Can,Shield	MBK63732601	PRESS SUS 0.2T LGD618.ACISWH WH:WHITE WHITE -	
6	MEV000000	Insulator	MEV64791101	COMPLEX LGD618.ACISBK ZZ:Without Color insulator can shield BTM	
6	SC10002 SC10003 SC10004 SC10007 SC10008 SC10009 SC10010 SC10012	Clip	MBV62321701	PRESS STS 301 0.15 LGLU6200.ALGTBK BK:Black -	
6	SC10002 SC10003 SC10004 SC10007 SC10008 SC10009 SC10010 SC10012	Clip	MBV62321701	PRESS STS 301 0.15 LGLU6200.ALGTBK BK:Black -	
1	AGF000000	Package Assembly	AGF77318210	LGD620.AVDIBK ZZ:Without Color LGD620 EU STD(A1-1H/AL_1,080ea_Pallet)	

12. EXPLODED VIEW & REPLACEMENT PART LIST

Level	Location No.	Description	Part Number	Spec	Remark
2	MAY084000	Box,Unit	MAY66390801	COMPLEX LGD620.AVD2WH ZZ:Without Color G2 mini Single EU Unit Box(A1-1H)	
2	MAY047100	Box,Master	MAY66470401	COMPLEX LGD320N.AVDIWH ZZ:Without Color A1-1h_STD Master Box(10EA)	
2	MEZ003500	Label,Barcode	MLAC0004541	PRINTING HB620 KPNBK ZZ:Without Color GSM standard_unit box label_90*40	
2	MEZ047200	Label,Master Box	MLAJ0004402	PRINTING CG300 CGR DG ZZ:Without Color LABEL MASTER BOX(for CGR TDR 2VER. mbox_label) GSM standard_master box label	
2	MEZ000000	Label	MLAZ0050901	COMPLEX KU990.AGBRBK ZZ:Without Color Battery Warning Label (Lithium ion Battery Label)	
2	AGJ000000	Pallet Assembly	AGJ73758401	LGD320N.AVDIBK ZZ:Without Color A1-1H Type EU STD_Body+Cap+AL Pallet(1200x800)+Sleeve_1,080ea	
3	MAY115200	Box,Pallet Sleeve	MAY66471701	COMPLEX ZZ:Without Color LGD320N.AVDIWH D320 VDI DEADSPACE (A1-1H/1200*800)	
3	MAY010800	Box,Carton	MAY66471601	COMPLEX LGD320N.AVDIWH ZZ:Without Color D320 VDI Body (A1-1H/1200*800)	
3	MBL007000	Cap,Box	MBL65957701	COMPLEX LGD320N.AVDIWH ZZ:Without Color D320 VDI CAP (A1-1H/1200*800)	
3	MGA000000	Pallet	MPCY0012403	COMPLEX KG800 FRABK DB:DARK BLUE -	
1	AAD000000	Addition Assembly	AAD86795106	LGD620.AVDIBK BK:BLACK BLACK -	
2	MEZ000000	Label	MLAZ0051201	COMPLEX KP170 ITASV ZZ:Without Color -	
2	ACQ00	Cover Assembly,Battery	ACQ87003402	LGD620.AVD2BK BK:BLACK BLACK -	
3	MKC041800	Window,IRDA	MKC64799101	MOLD PC LGD618.ACISWH PP:Purple -	
3	MCK004100	Cover,Battery	MCK67973902	MOLD PC LGD620.AVD2BK BK:BLACK BLACK -	
3	MHK000000	Sheet	MHK64385802	COMPLEX LGD618.ACISBK BK:BLACK BLACK -	

12. EXPLODED VIEW & REPLACEMENT PART LIST

12.2 Replacement Parts

<Main component>

Note: This Chapter is used for reference, Part order is ordered by SBOM standard on GCSC

Level	Location No.	Description	Part Number	Spec	Remark
4	EAA00	PIFA Antenna, Multiple	EAA63246002	LG6275-16-000-C MULTI -5DB 3.0 LDS Type - LTE Carrier SHANGHAI AMPHENOL AIRWAVE	
5	EAA030100	PIFA Antenna, GPS	EAA63245701	LS01-I-13122-A0 SINGLE -5DB 3.0 FPCB Type - GPS Tape LS Mtron Ltd.	
5	EAA030103	PIFA Antenna, Multiple	EAA63245801	LS01-I-13121-A0 MULTI -5DB 3.0 FPCB Type - MRD Tape LS Mtron Ltd.	
5	EAA030104	PIFA Antenna, Multiple	EAA63305001	BLF13A055 DUAL -3DB 5.0 FPCB Type - MRD Tape AT&C CO., LTD	
5	EAX010700	PCB, Flexible	EAX65646301	LGD618.ACISWH 1.0 POLYI Multi 2L 0.15 Flexible	
5	EAA030101	PIFA Antenna, WiFi	EAA63226001	LS01-I-13123-A0 DUAL -5DB 3.0 FPCB Type - WLAN+BT Tape LS Mtron Ltd.	
4	EAB00	Speaker Module	EAB63188201	EME1511AE03P Nd-Fe-B 700mW 8OHM 83DB 900HZ 18.70X52.23X5.62 FPC EM-TECH	
4	EAU00	Motor, DC	EAU62024101	TLE-1030FS 2V 40mA 0A 12KRPM 12KRPM 60mSEC 0GF.CM 29OHM	
4	EBD00	Touch Window Assembly	EBD61786101	STWC-L0055A CAPACITIVE TOUCH G/F/F ATMEL MXT336S 4.7 B to B - SUNTEL CO., LTD.	
4	EAJ00	LCD, Module-TFT	EAJ62648501	TM047XDHP04-00 QHD 4.7INCH 960X540 450CD COLOR 70% 16/9 1000:1 60Hz Inverter N LED 2D - Wuhan Tianma Micro-Electronics Co., Ltd.	
4	EAG00	Jack, Phone	EAG63550001	HG05-AB3600 5P 4P ANGLE TR 3.5M BLACK 5P Left Side Contact C-Cut HYUPJIN I&C CO., LTD.	
4	EAB01	Receiver	EAB63128601	EMR1307SWB5P 50mW 32OHM 110DB 50HZ TO 7KHZ PIN - EM-TECH	
3	EBR00	PCB Assembly, Main	EBR78683104	LGD620.AVDIBK 1.0 Main	
4	EBR071500	PCB Assembly Main, Insert	EBR79079801	LGD620.AVD2BK 1.1 Main	

12. EXPLODED VIEW & REPLACEMENT PART LIST

Level	Location No.	Description	Part Number	Spec	Remark
5	RAA050100	Resin,PC	BRAH0001303	UF2040 or 3075BHF . . NONE	
5	RAA050101	Resin,PC	BRAH0001304	UF2040 or 3075BHF . . NONE	
5	EBP00	Camera Module	EBP61641902	CW1346-APQH5 CW1346-APQH5 1.3M Sony 1/7.8 HD, 0deg, FPCB 5mm, Con. Top COWELL ELECTRONICS CO.,LTD	
5	EBP01	Camera Module	EBP62021901	C8AA-Y488A C8AA-Y488A 8M AF, Sony(1/3.2"), 8.5x8.5x5.75t, 90 degree LG INNOTEK CO., LTD	
4	EBR071800	PCB Assembly Main,SMT	EBR78683804	LGD620.AVDIBK 1.1 Main	
5	SAD010000	Software,Mobile	SAD34445001	Android KK Base D62010a - EUROPE QCT LGD620.AVDIBK	
5	EBR071601	PCB Assembly Main,SMT Bottom	EBR79041501	LGD620.AVD2BK 1.0 Main	
6	R9101	Resistor,Chip	ERHZ0000210	MCR01MZP5F1200 120OHM 1% 1/16W 1005 R/TP - ROHM.	
6	R9105	Resistor,Chip	ERHZ0000286	MCR01MZP5F4701 4.7KOHM 1% 1/16W 1005 R/TP - ROHM.	
6	R9100 R9106	Resistor,Chip	ERHZ0000401	MCR01MZSJ000 0OHM 5% 1/16W 1005 R/TP - ROHM.	
6	R8801 R8802	Resistor,Chip	ERHZ0000405	MCR01MZP5J103 10KOHM 5% 1/16W 1005 R/TP - ROHM.	
6	U8800	IC,Motor Driver	EUSY0200803	SM100 2.4 3.6 0.05 1W MICRO LEAD FRAME R/TP 8P 1 - SYNCOAM CO.,LTD.	
6	D6924 D6926 VA7100 VA7101 VA7102 VA7103 VA7303 VA7400 VA9501	Varistor	SEVY0003601	ICVL0505101V150FR 5.6V 0% 100pF 1.0*0.5*0.55 NONE SMD R/TP INNOCHIPS TECHNOLOGY	

12. EXPLODED VIEW & REPLACEMENT PART LIST

Level	Location No.	Description	Part Number	Spec	Remark
6	VA7200 VA7201 VA7202 VA7203 VA7204 VA9500 VA9505 VA9506 VA9507 VA9508 VA9509	Varistor	SEVY0005101	ICVL0518050FR 18V 0% 5F 1.0*0.5*0.55 NONE SMD R/TP INNOCHIPS TECHNOLOGY	
6	VA9101 ZD8800 ZD8801 ZD8802	Varistor	SEVY0005402	ICVS0505500FR 5.6V 0% 50F 1.0*0.5*0.55 - SMD R/TP INNOCHIPS TECHNOLOGY	
6	VA9510	Varistor	SEVY0007901	ICVS0505481FR 5.6V 0% 480F 1.0*0.5*0.55 NONE SMD R/TP INNOCHIPS TECHNOLOGY	
6	C6702 C6703 D10003 D10004 D10005 VA7404 VA7405 VA9503	Varistor	SEVY0008102	EVLC5S01015 5.5V 0% 15pF 0.6*0.3*0.33 NONE SMD R/TP AMOTECH CO., LTD.	
6	FB6920	Filter,Bead	SFBH0008102	BLM15HD182SN1D 1800 ohm 1.0X0.5X0.5 25% 2.2 ohm 0.2A SMD R/TP 2P 0 MURATA MANUFACTURING CO.,LTD.	
6	R1111 R1114 R1115 R1116 R6920	Wire Pad,Short	SAFP0000401	AX3100 ATL SV_SHIPBACK,MAIN,A	
6	R5212	Wire Pad,Short	SAFP0000501	LG-VS760 VRZ	
6	LD8950	LED,Chip	EAV62193601	IR26-61C/L261/TR8(LM) CLEAR 1.2~1.5V(If=20mA) 65mA 2.0~5.0 940nm(Typ.) 100mW 3012 R/TP 2P - EVERLIGHT ELECTRONICS CO., LTD.	
6	X5200	Resonator Ceramic	EAW61644701	XRCGB27M120F3M10R0 27.12MHZ 30ppm 10pF SMD R/TP 4P MURATA MANUFACTURING CO.,LTD.	
6	R1106	Resistor,Chip	EBC62036001	RC0201FR-0710RL 100HM 1% 1/20W 0603 R/TP - YAGEO CORPORATION	

12. EXPLODED VIEW & REPLACEMENT PART LIST

Level	Location No.	Description	Part Number	Spec	Remark
6	R9102	Resistor,Chip	EBC62235801	RC0603F363CS 36KOHM 1% 1/20W 0603 R/TP - SAMSUNG ELECTRO-MECHANICS CO., LTD.	
6	C5208 C5216	Capacitor Ceramic,Chip	ECCH0000120	MCH155A390J 39pF 5% 50V NP0 -55TO+125C 1005 R/TP - ROHM Semiconductor KOREA CORPORATION	
6	R1105	Resistor,Chip	EBC62236101	RC0603J821C 820OHM 5% 1/20W 0603 R/TP - SAMSUNG ELECTRO-MECHANICS CO., LTD.	
6	R8953	Resistor,Chip	EBC62575901	RC0201FR-07300RL 300OHM 1% 1/20W 0603 R/TP - YAGEO CORPORATION	
6	Q5200	FET	EBK61691601	SSM3K15AMFV N-CHANNEL MOSFET 30V +-20 100mA 60HM 150mW VESM R/TP 3P TOSHIBA ELECTRONICS KOREA CORPORATION	
6	C2380 C2383 C2388	Capacitor Ceramic,Chip	ECCH0000149	MCH155CN332KK 3.3nF 10% 50V X7R - 55TO+125C 1005 R/TP - ROHM Semiconductor KOREA CORPORATION	
6	C8801	Capacitor Ceramic,Chip	ECCH0000155	MCH153CN103KK 10nF 10% 16V X7R - 55TO+125C 1005 R/TP - ROHM Semiconductor KOREA CORPORATION	
6	C3200 C3205	Capacitor Ceramic,Chip	ECCH0000198	CL05A225MQ5NSNC 2.2uF 20% 6.3V X5R - 55TO+85C 1005 R/TP . SAMSUNG ELECTRO-MECHANICS CO., LTD.	
6	C3201 C3204 C3206	Capacitor Ceramic,Chip	ECCH0002001	C1005JB0J104KT000F 0.1uF 10% 6.3V X5R - 30TO+85C 1005 R/TP - - TDK CORPORATION	
6	C9501	Capacitor Ceramic,Chip	ECCH0004904	GRM155R60J105K 1uF 10% 6.3V X5R -55TO+85C 1005 R/TP - MURATA MANUFACTURING CO.,LTD.	
6	C7503	Capacitor Ceramic,Chip	ECCH0005602	GRM188R61C225K 2.2uF 10% 16V X5R - 55TO+85C 1608 R/TP - MURATA MANUFACTURING CO.,LTD.	

12. EXPLODED VIEW & REPLACEMENT PART LIST

Level	Location No.	Description	Part Number	Spec	Remark
6	C1139 C2307 C2328 C2329 C2330 C2331 C2332 C2333 C2334 C2359 C2363 C2366 C2367 C2368 C2369 C2374 C2375 C2377 C2386 C6920 C7101 C7103 C8952	Capacitor Ceramic,Chip	ECCH0009101	C0603X5R0J104KT00NN 0.1uF 10% 6.3V X5R - 55TO+85C 0603 R/TP - TDK CORPORATION	
6	C1110 C1125 C1126 C1129 C1131 C1132 C1133 C1141 C1142 C1150 C1157 C1169 C9102	Capacitor Ceramic,Chip	ECCH0009103	C0603C0G1H101JT00NN 100pF 5% 50V C0G - 55TO+125C 0603 R/TP - - TDK CORPORATION	
6	C1138 C6921	Capacitor Ceramic,Chip	ECCH0009104	C0603C0G1H330JT00NN 33pF 5% 50V C0G - 55TO+125C 0603 R/TP - TDK CORPORATION	
6	C2306 C2318 C2319 C2321 C2322 C2325 C2326 C2360 C2384	Capacitor Ceramic,Chip	ECCH0009106	C0603X7R1C103KT 10nF 10% 10V X7R - 55TO+125C 0603 R/TP - TDK CORPORATION	
6	C2381	Capacitor Ceramic,Chip	ECCH0009107	GRM033R71C222K 2.2nF 10% 16V X7R - 55TO+125C 0603 R/TP - - KOREA MURATA ELECTRONICS CO. LTD.	

12. EXPLODED VIEW & REPLACEMENT PART LIST

Level	Location No.	Description	Part Number	Spec	Remark
6	C2304 C2320 C2356 C2387	Capacitor Ceramic,Chip	ECCH0009110	C0603X7R0J223KT 22nF 10% 6.3V X7R - 55TO+125C 0603 R/TP - - TDK CORPORATION	
6	C2302 C2317 C2357	Capacitor Ceramic,Chip	ECCH0009201	GRM033R60J473KE19D 47nF 10% 6.3V X5R - 55TO+85C 0603 R/TP - - MURATA MANUFACTURING CO.,LTD.	
6	C2301 C2361	Capacitor Ceramic,Chip	ECCH0009203	GRM033R60J333KE01D+A01 33nF 10% 6.3V X5R - 55TO+85C 0603 R/TP - - MURATA MANUFACTURING CO.,LTD.	
6	C2300 C2385	Capacitor Ceramic,Chip	ECCH0009207	GRM033R71A682K 6.8nF 10% 10V X7R - 55TO+125C 0603 R/TP - - MURATA MANUFACTURING CO.,LTD.	
6	L1125	Capacitor Ceramic,Chip	ECCH0009212	GRM0335C1E4R7C 4.7pF 0.25PF 25V C0G - 55TO+125C 0603 R/TP - - MURATA MANUFACTURING CO.,LTD.	
6	C2305 C2382	Capacitor Ceramic,Chip	ECCH0009228	GRM033R61A472K 4700pF 10% 10V X5R - 55TO+85C 0603 R/TP - - MURATA MANUFACTURING CO.,LTD.	
6	C9505	Capacitor Ceramic,Chip	ECCH0009514	MCH032A(AN)100DK 10pF 0.5PF 25V X7R - 55TO+125C 0603 R/TP - ROHM.	
6	C2303 C2323 C2358 C2389	Capacitor Ceramic,Chip	ECCH0034801	CL03A474MQ3NNNH 0.47uF -20TO20% 6.3V X5R - 55TO+85C 0603 R/TP 0.3+-0.03 - SAMSUNG ELECTRO-MECHANICS CO., LTD.	
6	C2351 C2402 C2403 C4191 C4195 C7100 C7102 C9503	Capacitor Ceramic,Chip	ECCH0017301	CL03A105MQ3CSNH 0.000001F 20% 6.3V X5R - 45TO+85C 0603 R/TP - SAMSUNG ELECTRO- MECHANICS CO., LTD.	
6	C4123 C4128 C7302 C7402 C8950 C8951	Capacitor Ceramic,Chip	ECCH0017601	CL05A475MQ5NRNC 4.7uF 20% 6.3V X5R - 55TO+85C 1005 R/TP 0.5MM - SAMSUNG ELECTRO-MECHANICS CO., LTD.	
6	C2106 C2107	Capacitor Ceramic,Chip	ECCH0032801	GRM033R60J224M 0.00000022F 20% 6.3V X5R - 55TO+85C 0603 R/TP 0.3MM MURATA MANUFACTURING CO.,LTD.	

12. EXPLODED VIEW & REPLACEMENT PART LIST

Level	Location No.	Description	Part Number	Spec	Remark
6	C2324	Capacitor Ceramic,Chip	ECCH0042004	GRM033R61A562KA01D 5.6nF 10% 10V X5R - 55TO+85C 0603 R/TP - MURATA MANUFACTURING CO.,LTD.	
6	C1137	Capacitor Ceramic,Chip	ECCH0042007	GRM0335C1E6R8BD01D 6.8 pF,25V,B,C0G,TC,0603,R/TP,0.0000000000068,0. 1PF,25V,C0G,-55TO+125C,0603,R/TP,0.3 mm MURATA MANUFACTURING CO.,LTD.	
6	C1109 C1111 C1117 C1167	Capacitor Ceramic,Chip	ECZH0000813	C1005C0G1H101JT 100pF 5% 50V C0G - 55TO+125C 1005 R/TP - TDK KOREA COOPERATION	
6	C5200 C5217	Capacitor Ceramic,Chip	ECZH0001210	C1005Y5V1A474ZT000F 470nF -20TO+80% 10V Y5V -30TO+85C 1005 R/TP - TDK KOREA COOPERATION	
6	C5207 C5219 C5220 C5222 C8800	Capacitor Ceramic,Chip	ECZH0001215	C1005X5R1A105KT000F 1uF 10% 10V X5R - 55TO+85C 1005 R/TP - TDK KOREA COOPERATION	
6	C8100 C8101	Capacitor Ceramic,Chip	ECZH0004402	CL05F104ZO5NNNC 0.1uF -20TO+80% 16V Y5V - 30TO+85C 1005 R/TP - SAMSUNG ELECTRO- MECHANICS CO., LTD.	
6	C6704 C6705 C9502	Capacitor Ceramic,Chip	ECZH0025916	GRM0335C1E330J 33pF 5% 25V NP0 - 55TO+125C 0603 R/TP - MURATA MANUFACTURING CO.,LTD.	
6	C1128	Capacitor Ceramic,Chip	ECZH0025917	GRM0335C1E470J 47pF 5% 25V NP0 - 55TO+125C 0603 R/TP - MURATA MANUFACTURING CO.,LTD.	
6	D8950	Diode,TVS	EDTY0008501	PG05DBTFC 5V 5.8V 17V 5A 100mW TFSC R/TP 2P 1 KEC CORPORAITION	
6	L1110	Inductor Multilayer,Chip	ELCH0004706	1005GC2T10NJLF 10NH 5% - 250mA 0.42OHM 2.5GHZ 8 SHIELD NONE 1.0X0.5X0.5MM R/TP PILKOR ELECTRONICS LTD.	
6	L4940	Inductor,Wire Wound,Chip	ELCP0014301	1239AS-H-1R0N=P2 1UH 30% - 2.3A 3.0 2.3 0.059OHM - - SHIELD 2.5X2.0X1.2MM NONE R/TP TOKO, INC.	
6	CN7100	Connector,BtoB	ENBY0034201	GB042-24S-H10-E3000 24P 0.40MM STRAIGHT SOCKET SMD R/TP 1M - LS Mtron Ltd.	

12. EXPLODED VIEW & REPLACEMENT PART LIST

Level	Location No.	Description	Part Number	Spec	Remark
6	CN7400	Connector,BtoB	ENBY0039601	GB042-20S-H10-E3000 20P 0.4MM STRAIGHT SOCKET SMD R/TP 1M - LS Mtron Ltd.	
6	CN7300	Connector,BtoB	ENBY0040701	GB042-30S-H10-E3000 30P 0.4MM STRAIGHT FEMALE SMD R/TP 1M - LS Mtron Ltd.	
6	CN7200	Connector,BtoB	ENBY0051001	GB042-10S-H10-E3000 10P 0.4MM STRAIGHT FEMALE SMD R/TP 1M - LS Mtron Ltd.	
6	SW1101 SW1102 SW1103	Connector,RF	ENWY0008701	MS-156C NONE STRAIGHT SOCKET SMD T/REEL AU 50OHM 400mDB HIROSE KOREA CO.,LTD	
6	CN10000	Connector Terminal Block	ENZY0020701	KQ13L-4R 4P 2.7 ANGLE SMD R/TP - HIROSE KOREA CO.,LTD	
6	Q8950 Q8951	TR,Bipolar	EQBN0020501	KTC4075E NPN 5V 60V 50V 150mA 100NA 700 100mW ESM R/TP 3P KEC CORPORATION	
6	C1159 R7300 R7401	Resistor,Chip	ERHY0009501	MCR006YZPJ000 0OHM 5% 1/20W 0603 R/TP - ROHM.	
6	R10001 R10002 R10003 R8952	Resistor,Chip	ERHY0009301	MCR006YZPF1000 100OHM 1% 1/20W 0603 R/TP - ROHM.	
6	R8954 R8955	Resistor,Chip	ERHY0009302	MCR006YZPF1001 1KOHM 1% 1/20W 0603 R/TP - ROHM.	
6	R1112	Resistor,Chip	ERHY0009303	MCR006YZPF1002 10KOHM 1% 1/20W 0603 R/TP - ROHM.	
6	R9504	Resistor,Chip	ERHY0009502	MCR006YZPJ100 10OHM 5% 1/20W 0603 R/TP - ROHM.	
6	R2113 R2114	Resistor,Chip	ERHY0009504	MCR006YZPJ102 1KOHM 5% 1/20W 0603 R/TP - ROHM.	
6	R7201	Resistor,Chip	ERHY0009505	MCR006YZPJ103 10KOHM 5% 1/20W 0603 R/TP - ROHM.	
6	R5200 R9501	Resistor,Chip	ERHY0009507	MCR006YZPJ105 1MOHM 5% 1/20W 0603 R/TP - ROHM.	
6	R5203 R5206	Resistor,Chip	ERHY0009522	MCR006YZPJ332 3.3KOHM 5% 1/20W 0603 R/TP - ROHM.	

12. EXPLODED VIEW & REPLACEMENT PART LIST

Level	Location No.	Description	Part Number	Spec	Remark
6	R8951	Resistor,Chip	ERHY0009536	MCR006YZPF1003 100KOHM 1% 1/20W 0603 R/TP - ROHM.	
6	R9104	Resistor,Chip	ERHY0009537	MCR006YZPF1503 150KOHM 1% 1/20W 0603 R/TP - ROHM.	
6	R8950	Resistor,Chip	ERHY0009544	RC0603J2R2CS 2.2OHM 5% 1/20W 0603 R/TP - SAMSUNG ELECTRO-MECHANICS CO., LTD.	
6	R1113	Resistor,Chip	ERHY0009555	MCR006YZPF1202 12KOHM 1% 1/20W 0603 R/TP - ROHM.	
6	R9103	Resistor,Chip	ERHY0035601	PMR10EZPFU10L0 0.01OHM 1% 1/2W 2012 R/TP - ROHM.	
6	R9500	Resistor,Chip	ERHY0042402	RC0201JR-0715KL 15KOHM 5% 1/20W 0603 R/TP - YAGEO CORPORATION	
6	R3208 R7200	Resistor,Chip	ERHZ0000203	MCR01MZP5F1002 10KOHM 1% 1/16W 1005 R/TP - ROHM.	
6	MIC6920	Microphone Condenser	EAB62830801	S08OB383-002 -38DB 150OHM OMNI 1.5 TO 3.6V 3.76 * 2.95 * 1.1T SMD GoerTek Inc.	
6	C1134 C5204 C5218 C6700 C6701	Capacitor Ceramic,Chip	EAE62282201	GRM033R71E102KA01D 0.000000001F 10% 25V X7R -55TO+125C 0603 R/TP 0.3+/-0.03 MM - MURATA MANUFACTURING CO.,LTD.	
6	C5201 C5215 C5223 C9101	Capacitor Ceramic,Chip	EAE62286801	CL03A104KP3NNNC 0.00000001F 10% 10V X5R - 55TO+85C 0603 R/TP 0.3 - SAMSUNG ELECTRO-MECHANICS CO., LTD.	
6	C9100	Capacitor TA,Conformal	EAE62287901	251M1002107MR12A168 100uF 20% 10V 50UA - 55TO+125C 0.6OHM 3.2X1.6X1.1MM NONE SMD R/TP 1.2T max. MATSUO ELECTRIC CO.,LTD	
6	C4940	Capacitor Ceramic,Chip	EAE62502901	CL05A106MP5NUNC 10uF 20% 10V X5R - 55TO+85C 1005 R/TP 0.55T max. SAMSUNG ELECTRO-MECHANICS CO., LTD.	
6	C2308 C2362 C7502	Capacitor Ceramic,Chip	EAE62506501	CL05A475MP5NRNC 4.7uF 20% 10V X5R - 55TO+85C 1005 R/TP - - SAMSUNG ELECTRO-MECHANICS CO., LTD.	
6	C4941	Capacitor Ceramic,Chip	EAE62522101	CL10A226MP8NUNE 22uF 20% 10V X5R - 55TO+85C 1608 R/TP 1.05T max. - SAMSUNG ELECTRO-MECHANICS CO., LTD.	

12. EXPLODED VIEW & REPLACEMENT PART LIST

Level	Location No.	Description	Part Number	Spec	Remark
6	C4145	Capacitor Ceramic, Chip	EAE62685201	C1005X5R1E104K 0.1uF 10% 25V X5R - 55TO+85C 1005 R/TP 0.55T max. TDK KOREA COOPERATION	
6	C7300 C7301 C7303 C7400 C7401	Capacitor Ceramic, Chip	EAE62726601	CL03A225MQ3CRNC 2.2uF -20TO20% 6.3V X5R - 55TO+85C 0603 R/TP 0.3T - SAMSUNG ELECTRO-MECHANICS CO., LTD.	
6	C2335 C4119 C4120 C4121 C4124 C4125 C4126 C4127 C4129 C4190 C4194 C7201 C7505 C9103	Capacitor Ceramic, Chip	EAE62762301	CL03A105MP3NSNC 1uF 20% 10V X5R - 55TO+85C 0603 R/TP 0.33 MM - SAMSUNG ELECTRO-MECHANICS CO., LTD.	
6	C4136 C4138	Capacitor Ceramic, Chip	EAE62767801	JDK212BBJ476MD 47uF -20TO20% 6.3V X5R - 55TO+85C 2012 R/TP 0.85T - TAIYO YUDEN CO.,LTD	
6	C1168	Capacitor(High Frequency), Cerami c, Chip	EAE62945801	GRM0335C1E1R0C_H 1pF 0.25PF 25V C0G - 55TO+125C 0603 R/TP 0.3+-0.03 L:0.6+-0.03 W:0.3+-0.03 T:0.3+-0.03 MURATA MANUFACTURING CO.,LTD.	
6	C9504	Capacitor(High Frequency), Cerami c, Chip	EAE62947001	GRM0335C1E100J_H 10pF 5% 25V C0G - 55TO+125C 0603 R/TP 0.3+-0.03 :0.6+-0.03 W:0.3+-0.03 T:0.3+-0.03 MURATA MANUFACTURING CO.,LTD.	
6	C2401	Capacitor Ceramic, Chip	EAE62962301	GRM155R61A225KE95 2.2uF -10TO+10% 10V X5R -55TO+85C 1005 R/TP 0.5 L:1.0+-0.05 W:0.5+-0.05 T:0.5+-0.05 MURATA MANUFACTURING CO.,LTD.	
6	C5205 C5206	Capacitor(High Frequency), Cerami c, Chip	EAE62963701	GRM0335C1H100J_H 10pF -5 to +5% 50V C0G - 55TO+125C 0603 R/TP 0.3+-0.03 L:0.6+-0.03 W:0.3+-0.03 T:0.3+-0.03 MURATA MANUFACTURING CO.,LTD.	
6	C5209 C5212	Capacitor, Ceramic, Chip	EAE62967601	GRM033R71H271K 270pF -10TO+10% 50V X7R - 55TO+125C 0603 R/TP 0.3T L:0.6+-0.03 W:0.3+- 0.03 T:0.3+-0.03 MURATA MANUFACTURING CO.,LTD.	

12. EXPLODED VIEW & REPLACEMENT PART LIST

Level	Location No.	Description	Part Number	Spec	Remark
6	L1126 L1129 L1135	Capacitor(High Frequency),Ceramic,Chip	EAE63043301	RMTMK063CG010CT-F_H 1pF 0.25PF 25V C0G -55TO+125C 0603 R/TP 0.3+-0.03 L:0.6+-0.03, W:0.3+-0.03, T:0.3+-0.03 KOREA TAIYO YUDEN.CO., LTD.	
6	C7500 C7501 C7504	Capacitor Ceramic,Chip	EAE63067401	GRM188R61C475KAAJ 4.7uF -10TO+10% 16V X5R -55TO+85C 1608 R/TP Max 0.95T L:1.6+-0.15 W:0.8+-0.15 T:0.8+-0.15 MURATA MANUFACTURING CO.,LTD.	
6	ANT1101 ANT1102 ANT1103 ANT1104 ANT1106 ANT1108 ANT1109 ANT1110 ANT5100 ANT5101	C-Clip	EAG63652301	2108610-5 1P ANT TERMINAL STRAIGHT SMD T/REEL AU 2.9X1.0X1.4(L X W X H) SERVEONE CO., LTD.	
6	VA9100	Varistor	EAF61450601	EVLC 5S 01 100 5.5V 0% 100pF 0.6X0.3X0.3MM IEC61000-4-2 (ESD) level #4 SMD R/TP AMOTECH CO., LTD.	
6	S9500	Card Socket	EAG63310801	1041681610 Micro-SD, UIMDupliSocket 16P STRAIGHT DIP T/REEL - MOLEX	
6	ANT5102 ANT5103	C-Clip	EAG63651901	2108609-5 1P ANT TERMINAL STRAIGHT SMD T/REEL AU 2.9 X 1.0 X 3.0(L X W X H) SERVEONE CO., LTD.	
6	ANT10003 ANT10004	C-Clip	EAG63730501	TE 1.1H C-CLIP 1P ANT TERMINAL STRAIGHT SMD T/REEL AU 2.5 X 1.0X 1.1(L X W X H) SERVEONE CO., LTD.	
6	D9100	Diode,TVS	EAH61872501	PESD5V0S1UA 5V 6.2V min. 9.8V 47A 360mW SOD323 R/TP 2P 1 NXP Semiconductors	
6	VA9502 VA9504	Diode,TVS	EAH62073701	PESD5V0V1BDSF 5V 6V min. 12.8V 2A 20W DSN0603-2 R/TP 2P 1 NXP Semiconductors	
6	FL7300	Filter,EMI/Power	EAM62570201	ICMEF062P900MFR COMMON MODE NOISE FILTER - 0.0000000000017F 0H SMD R/TP - INNOCHIPS TECHNOLOGY	
6	FL7301 FL7302 FL7400	Filter,EMI/Power	EAM62630501	ICMEF104P101MFR COMMON MODE NOISE FILTER - 0.0000000000017F 0H SMD R/TP - INNOCHIPS TECHNOLOGY	
6	FL1108	Filter,Saw	EAM62633001	SFHG89DQ102 1575.42@GPS/1601.72@GLONASS 1.4x1.1x0.5t SMD R/TP 5P WISOL.CO.,LTD	

12. EXPLODED VIEW & REPLACEMENT PART LIST

Level	Location No.	Description	Part Number	Spec	Remark
6	U1101	Filter Separator,Switch	EAM62673301	RF1616 0.4dB 30dB 25dBm 700M~2700M RF MICRO DEVICES INC	
6	FL1106	Filter,Saw	EAM62732901	B8803 942.5MHz 1.1x0.9x0.45t SMD R/TP 5P EPCOS PTE LTD.	
6	FL1109	Filter,Saw	EAM62930701	SAFFB2G65AA0F0A 2655.0MHz 1.1x0.9x0.5t SMD R/TP 5P MURATA MANUFACTURING CO.,LTD.	
6	U1104	Filter Separator,Switch	EAM62954101	PE613050 0.25 26 26 - Peregrine	
6	U8950	IC,Gate	EAN62415501	SN74AUP1T97DSFR 0~3.6V 0.000004 LEVEL SHIFTER SON-6 R/TP 6P Configurable Gate Logic TEXAS INSTRUMENTS KOREA LTD, HONGKONG BRANCH.	
6	U4940	IC,DC,DC Converter	EAN62461401	TPS61256A V2.5 to V5.5 V5 800mA 0W WLP T/REEL 9P Small Package(1.2x1.3,0.4mm) TEXAS INSTRUMENTS KOREA LTD, HONGKONG BRANCH.	
6	U4192	IC,LDO Voltage Regulator	EAN62496301	TLV70718 V2 to V5.5 V1.8 0W QFN R/TP 4P EUSY0355501 RP103K181D ,Richo Pin to Pin TEXAS INSTRUMENTS KOREA LTD, HONGKONG BRANCH.	
6	U1102	IC,RF Amplifier	EAN62581401	SFMG2B0D001 1.5~3.1V 0 0 0W 0W 0 0 MCM R/TP 8P Gain : 17.2dB NF : 0.85dB WISOL.CO.,LTD	
6	U5200	IC,NFC	EAN62632401	PN5472A2UK/C20803 WLCSP 2.81x2.79x0.56 NFC IC WLCSP R/TP 42P NXP Semiconductors	
6	U8100	IC,Acceleration Sensor	EAN62637201	BMC150 Accelerometer with Geomagnetic Sensor 2.2X2.2X1.0 LGA R/TP 14P Accelerometer with Geomagnetic Sensor BOSCH SENSORTTEC GMBH	
6	U4190	IC,LDO Voltage Regulator	EAN62669801	TLV70728PDQNR V2 to V5.5 V2.8 0W QFN R/TP 4P - TEXAS INSTRUMENTS KOREA LTD, HONGKONG BRANCH.	
6	U7500	IC,DC,DC Converter	EAN62731801	TPS65132 2.5V to 5.5V +4.0V to +6.0V, -4.0V to - 6.0V 0W WCSP R/TP 15P Dual Output LCD Bias, Output Current: 80mA Max., 15-Ball CSP Package TEXAS INSTRUMENTS KOREA LTD, HONGKONG BRANCH.	

12. EXPLODED VIEW & REPLACEMENT PART LIST

Level	Location No.	Description	Part Number	Spec	Remark
6	L7500	Inductor,Wire Wound,Chip	EAP62107801	1269AS-H-4R7M=P2 4.7UH 20% - 1A 1.3 1.0 0.3OHM - - SHIELD 2.5X2.0X1.0 MM - R/TP TOKO, INC.	
6	U3200	IC,MCP,eMMC	EAN62740501	THGBMAG6A2JBAIR 8Gbyte 2.7VTO3.6V,1.7VTO1.95V 11.5x13.0x1.0 TR 153P MLC NAND FBGA 8GB eMMC v4.5 (19nm 32Gb MLC x 2/11.5x13.0/91.0%), MSL3 TOSHIBA ELECTRONICS KOREA CORPORATION	
6	C1148 L1108 L1112 L1128	Inductor Multilayer,Chip	EAP61866601	LG HK0603 R10J-T 100NH 5% - 60mA - - 3.74OHM 900MHZ 4 SHIELD 0 0.6X0.3X0.3MM R/TP TAIYO YUDEN CO.,LTD	
6	L1123	Inductor Multilayer,Chip	EAP61925901	LQP03TN6N2J02D 6.2NH 5% - 300mA - - 0.6OHM 4GHZ 14 SHIELD 0 0.6X0.3X0.3MM R/TP MURATA MANUFACTURING CO.,LTD.	
6	C1166	Inductor Multilayer,Chip	EAP62108601	LQP03TG22NJ02D 22NH 5% - 140mA - - 2.85OHM 2.5GHZ 9 SHIELD - 0.6X0.3X0.3MM R/TP MURATA MANUFACTURING CO.,LTD.	
6	L1151	Inductor Multilayer,Chip	EAP62226201	LQP03TG4N7J02D 4.7NH 5% - 250mA - - 0.72OHM 6GHZ 12 SHIELD - 0.6X0.3X0.3MM R/TP MURATA MANUFACTURING CO.,LTD.	
6	C1147	Inductor Multilayer,Chip	EAP62226301	LQP03TG5N6J02D 5.6NH 5% - 250mA - - 0.88OHM 6GHZ 12 SHIELD - 0.6X0.3X0.3MM R/TP MURATA MANUFACTURING CO.,LTD.	
6	C1106 C1112 C1145 C1152	Inductor Multilayer,Chip	EAP62226901	LG HK 0603 1N0S-T 1NH 0.3NH - 470mA - - 0.11OHM 10GHZ 4 SHIELD - 0.6X0.3X0.3MM R/TP TAIYO YUDEN CO.,LTD	
6	L1134	Inductor Multilayer,Chip	EAP62227301	LG HK 0603 2N2S-T 2.2NH 0.3NH - 360mA - - 0.19OHM 8.8GHZ 4 SHIELD - 0.6X0.3X0.3MM R/TP TAIYO YUDEN CO.,LTD	
6	L1138	Inductor Multilayer,Chip	EAP62246201	LG HK 0603 10NJ-T 10NH 5% - 220mA - - 0.51OHM 2.9GHZ 5 SHIELD - 0.6X0.3X0.3MM R/TP TAIYO YUDEN CO.,LTD	
6	L6700 L6701	Inductor,Wire Wound,Chip	EAP62286001	0402AF-510XJEW 51NH 5% - 1.1A - - 0.07OHM 1.93GHZ - SHIELD 1.12X0.66X0.66MM - R/TP COILCRAFT SINGAPORE PTE LTD.	
6	C1130	Inductor Multilayer,Chip	EAP62346901	0603GC3T1N5SLF 1.5NH 0.3NH - 400mA - - 0.4OHM 10GHZ 4 SHIELD - 0.6X0.3X0.3MM R/TP PILKOR ELECTRONICS LTD.	

12. EXPLODED VIEW & REPLACEMENT PART LIST

Level	Location No.	Description	Part Number	Spec	Remark
6	C1149	Inductor Multilayer,Chip	EAP62347001	0603GC3T2N2SLF 2.2NH 0.3NH - 250mA - - 0.4OHM 7GHZ 5 SHIELD - 0.6X0.3X0.3MM R/TP PILKOR ELECTRONICS LTD.	
6	C1144 C1158	Inductor Multilayer,Chip	EAP62347601	0603GC3T8N2JLF 8.2NH 5% - 150mA - - 0.7OHM 3.5GHZ 6 SHIELD - 0.6X0.3X0.3MM R/TP PILKOR ELECTRONICS LTD.	
6	L1140	Inductor Multilayer,Chip	EAP62447001	0603GC3T1N0SLF 1NH 0.3NH - 400mA - - 0.3OHM 10GHZ 4 SHIELD - 0.6X0.3X0.3MM R/TP PILKOR ELECTRONICS LTD.	
6	C5125	Inductor Multilayer,Chip	EAP62447101	0603GC3T1N8SLF 1.8NH 0.3NH - 300mA - - 0.4OHM 9GHZ 4 SHIELD - 0.6X0.3X0.3MM R/TP PILKOR ELECTRONICS LTD.	
6	L5200 L5201	Inductor Multilayer,Chip	EAP62566801	LQB15NNR39J10D 390NH 5% - 300mA - - 0.675OHM 80MHZ 10 SHIELD - 1.0X0.5X0.5MM R/TP MURATA MANUFACTURING CO.,LTD.	
6	LD9830	LED,Flash	EAV62175401	ELCH07-5565J6J7294010-N8(LM) WHITE 2.95~4.05V 1.5A(Pulse) 350mA(DC) 200lm(Min) 240lm(Typ) X(0.3084~0.3325) Y(0.3003~0.3967) 6W(Pulse Mode) 2016 R/TP 2P - EVERLIGHT ELECTRONICS CO., LTD.	
5	EBR071700	PCB Assembly Main,SMT Top	EBR79041601	LGD620.AVD2BK 1.0 Main	
6	FB5100	Filter,Bead	EAM62471001	BLM03AX241SN1D 240 ohm 0.6X0.3X0.33 25% 0.38 ohm 0.35A SMD R/TP 2P 0 MURATA MANUFACTURING CO.,LTD.	
6	VA6600	Diode,TVS	EAH62033201	UCLAMP3311Z 3.3V 3.65V min. 7.5V 4A 30W SLP0603P2X3A R/TP 2P 1 SEMTECH INTERNATIONAL AG	
6	U1200	Filter Separator,Switch	EAM62251001	RF1602 0.5 30 38 SPDT, High IIP3 typ. 74dBm, 1bit control 1.8V RF MICRO DEVICES INC	
6	FL10001	Filter,EMI/Power	EAM62272401	ICMEF112P500MFR COMMON MODE NOISE FILTER 0HZ 0.0000000000001F 0H SMD R/TP - INNOCHIPS TECHNOLOGY	
6	FL1750	Filter,Duplexer	EAM62571601	ACMD-6107 2655 MHz 2620 to 2690 MHz 2535 MHz 2500 to 2570 MHz 2.1 dB typ. / 2.5 dB max. 2.1 dB typ. / 2.5 dB max. 2.0x1.6x0.83t DUAL SMD R/TP 9P AVAGO TECHNOLOGIES INTERNATIONAL SALES PTE. LIMITED	

12. EXPLODED VIEW & REPLACEMENT PART LIST

Level	Location No.	Description	Part Number	Spec	Remark
6	FL1200	Filter,Duplexer	EAM62632601	ACMD-6103-TR1 1842.5MHz 1805to1880MHz 1747.5MHz 1710to1785MHz 1.6typ/4.0max 1.5typ/3.5max 2.0x1.6x0.9t DUAL SMD R/TP 9P AVAGO TECHNOLOGIES INTERNATIONAL SALES PTE. LIMITED	
6	U1101	Filter Separator,Switch	EAM62673301	RF1616 0.4dB 30dB 25dBm 700M~2700M RF MICRO DEVICES INC	
6	FL5100	Filter,Ceramic	EAM62690501	ACPF-7124 BPF 2.44GHZ 1.4x1.1x0.8t SMD R/TP 5P AVAGO TECHNOLOGIES INTERNATIONAL SALES PTE. LIMITED	
6	FL1301	Filter,Ceramic	EAM62691501	LFL18829MTCRD627 LPF 829MHZ 698 to 960 MHz SMD R/TP 6P MURATA MANUFACTURING CO.,LTD.	
6	FL1105	Filter,Saw	EAM62732701	B8806 1960.0MHz 1.1x0.9x0.45t SMD R/TP 5P EPCOS PTE LTD.	
6	FL1101	Filter,Saw	EAM62771001	B9876 2140.0MHz 1.1x0.9x0.45t SMD R/TP 5P EPCOS PTE LTD.	
6	FL1100	Filter,Saw	EAM62850001	SFHG42AQ102 1842.5MHz 1.4x1.1x0.6t SMD R/TP 5P WISOL.CO.,LTD	
6	FB6100	Filter,Bead	EAM62870101	MPZ1608S102A 1000 1.6x0.8x0.8 25% 0.3 0.8 SMD R/TP 2P - TDK CORPORATION	
6	FL1104	Filter,Saw	EAM62930501	B8814 806.0MHz 1.1x0.9x0.4t SMD R/TP 5P EPCOS PTE LTD.	
6	FL1700	Filter,Duplexer	EAM63130401	B8633 806.0MHz 791.0to821.0MHz 847.0MHz 832.0to862.0MHz 1.90/3.20dB 1.80/2.50dB 2.0x1.6x0.47t DUAL SMD R/TP 9P EPCOS PTE LTD.	
6	U6600	IC,Analog Switch	EAM62578201	FSA5157L6X 1.65 to 5.5V 60NSEC 20NSEC 180mW MICROPAC R/TP 6P - FAIRCHILD SEMICONDUCTOR HONG KONG LTD.	
6	U8400	IC,Proximity	EAM62646301	APDS-9130-200 High T Proximity Sensor 3.36X4.94X3.45 COB R/TP 8P - AVAGO TECHNOLOGIES INTERNATIONAL SALES PTE. LIMITED	
6	U6100	IC,Audio Codec	EAM62691301	WCD9302 999 999W WLCSP R/TP 55P MSM8226 Reference QCT CODEC QUALCOMM INCORPORATED.	

12. EXPLODED VIEW & REPLACEMENT PART LIST

Level	Location No.	Description	Part Number	Spec	Remark
6	U1500	IC,RF Transceiver,4G	EAN62697301	WTR1625L WTR1625L 2G/3G/4G GSM/GPRS/EDGE,1X, 1xEV-DO ,WCDMA , TD- SCDMA , HSPA+/DC-HSPA+ , LTE (FDD) ,TD-LTE, 164pin CSP R/TP 164P QUALCOMM INCORPORATED.	
6	U5100	IC,WiFi	EAN62698901	WCN-3620-0-61WLNSP WiFi(11bgn)+BT4.0+FM IC for QMC 28nm BB, 3.32*3.55*0.63, 0.4pitch WLCSP R/TP 61P QUALCOMM INCORPORATED.	
6	U4100	IC,PMIC	EAN62739601	PM8926 2.5 to 4.5V adj 0W CSP R/TP 172P - QUALCOMM INCORPORATED.	
6	U1201	IC,DC,DC Converter	EAN62788501	LM3263 2.7V to 5.5V 0.4V to 3.6V 0W MICRO SMD R/TP 16P MIPI RFFE, 2G/3G/4G, 2.5A Max.(PWM), 2.7 MHz (typ.), 16-bump micro SMD TEXAS INSTRUMENTS KOREA LTD, HONGKONG BRANCH.	
6	MIC6920	Microphone Condenser	EAB62830801	S08OB383-002 -38DB 150OHM OMNI 1.5 TO 3.6V 3.76 * 2.95 * 1.1T SMD GoerTek Inc.	
6	C1134 C5204 C5218 C6700 C6701	Capacitor Ceramic,Chip	EAE62282201	GRM033R71E102KA01D 0.000000001F 10% 25V X7R -55TO+125C 0603 R/TP 0.3+/-0.03 MM - MURATA MANUFACTURING CO.,LTD.	
6	C5201 C5215 C5223 C9101	Capacitor Ceramic,Chip	EAE62286801	CL03A104KP3NNNC 0.0000001F 10% 10V X5R - 55TO+85C 0603 R/TP 0.3 - SAMSUNG ELECTRO-MECHANICS CO., LTD.	
6	C4940	Capacitor Ceramic,Chip	EAE62502901	CL05A106MP5NUNC 10uF 20% 10V X5R - 55TO+85C 1005 R/TP 0.55T max. SAMSUNG ELECTRO-MECHANICS CO., LTD.	
6	C4144	Capacitor Ceramic,Chip	EAE62505701	CL10A105KB8NNNC 1uF 10% 50V X5R - 55TO+85C 1608 R/TP 0.9T max. - SAMSUNG ELECTRO-MECHANICS CO., LTD.	
6	C2308 C2362 C7502	Capacitor Ceramic,Chip	EAE62506501	CL05A475MP5NRNC 4.7uF 20% 10V X5R - 55TO+85C 1005 R/TP - - SAMSUNG ELECTRO- MECHANICS CO., LTD.	
6	C4145	Capacitor Ceramic,Chip	EAE62685201	C1005X5R1E104K 0.1uF 10% 25V X5R - 55TO+85C 1005 R/TP 0.55T max. TDK KOREA COOPERATION	

12. EXPLODED VIEW & REPLACEMENT PART LIST

Level	Location No.	Description	Part Number	Spec	Remark
6	C4163	Capacitor Ceramic, Chip	EAE62762501	GRM21BR61H475KE51 4.7uF 10% 50V X5R - 55TO+85C 2012 R/TP 1.4T max. - MURATA MANUFACTURING CO.,LTD.	
6	C7300 C7301 C7303 C7400 C7401	Capacitor Ceramic, Chip	EAE62726601	CL03A225MQ3CRNC 2.2uF -20TO20% 6.3V X5R - 55TO+85C 0603 R/TP 0.3T - SAMSUNG ELECTRO-MECHANICS CO., LTD.	
6	C4171 C4172	Capacitor TA, Conformal	EAE62748301	F981A226MMA 22uF 20% 10V 11UA -55TO+125C 80HM 1.6X0.85X0.8MM NONE SMD R/TP 0.9T max. UNITELE ELECTRONICS CO. LTD.	
6	C2335 C4119 C4120 C4121 C4124 C4125 C4126 C4127 C4129 C4190 C4194 C7201 C7505 C9103	Capacitor Ceramic, Chip	EAE62762301	CL03A105MP3NSNC 1uF 20% 10V X5R - 55TO+85C 0603 R/TP 0.33 MM - SAMSUNG ELECTRO-MECHANICS CO., LTD.	
6	C1757	Capacitor(High Frequency), Cerami c, Chip	EAE62884301	GRM0335C1H5R6C_H 5.6pF 0.25PF 50V C0G - 55TO+125C 0603 R/TP 0.3+-0.03 L:0.6+-0.03 W:0.3+-0.03 T:0.3+-0.03 MURATA MANUFACTURING CO.,LTD.	
6	C1168	Capacitor(High Frequency), Cerami c, Chip	EAE62945801	GRM0335C1E1R0C_H 1pF 0.25PF 25V C0G - 55TO+125C 0603 R/TP 0.3+-0.03 L:0.6+-0.03 W:0.3+-0.03 T:0.3+-0.03 MURATA MANUFACTURING CO.,LTD.	
6	C5123	Capacitor(High Frequency), Cerami c, Chip	EAE62945901	GRM0335C1E1R2B_H 1.2pF 0.1PF 25V C0G - 55TO+125C 0603 R/TP 0.3+-0.03 L:0.6+-0.03 W:0.3+-0.03 T:0.3+-0.03 MURATA MANUFACTURING CO.,LTD.	
6	C2401	Capacitor Ceramic, Chip	EAE62962301	GRM155R61A225KE95 2.2uF -10TO+10% 10V X5R -55TO+85C 1005 R/TP 0.5 L:1.0+-0.05 W:0.5+-0.05 T:0.5+-0.05 MURATA MANUFACTURING CO.,LTD.	
6	C1323	Capacitor(High Frequency), Cerami c, Chip	EAE63023701	RMUMK063CG5R6CT-F_H 5.6pF 0.25PF 50V C0G -55TO+125C 0603 R/TP 0.3+-0.03 L:0.6+-0.03, W:0.3+-0.03, T:0.3+-0.03 KOREA TAIYO YUDEN.CO., LTD.	

12. EXPLODED VIEW & REPLACEMENT PART LIST

Level	Location No.	Description	Part Number	Spec	Remark
6	C1701	Capacitor(High Frequency),Ceramic,Chip	EAE63024101	RMTMK063CG8R2BT-F_H 8.2pF 0.1PF 25V C0G -55TO+125C 0603 R/TP 0.3+-0.03 L:0.6+-0.03, W:0.3+-0.03, T:0.3+-0.03 KOREA TAIYO YUDEN.CO., LTD.	
6	L1126 L1129 L1135	Capacitor(High Frequency),Ceramic,Chip	EAE63043301	RMTMK063CG010CT-F_H 1pF 0.25PF 25V C0G -55TO+125C 0603 R/TP 0.3+-0.03 L:0.6+-0.03, W:0.3+-0.03, T:0.3+-0.03 KOREA TAIYO YUDEN.CO., LTD.	
6	L1308	Capacitor(High Frequency),Ceramic,Chip	EAE63043501	RMTMK063CG1R8CT-F_H 1.8pF 0.25PF 25V C0G -55TO+125C 0603 R/TP 0.3+-0.03 L:0.6+-0.03, W:0.3+-0.03, T:0.3+-0.03 KOREA TAIYO YUDEN.CO., LTD.	
6	C7500 C7501 C7504	Capacitor Ceramic,Chip	EAE63067401	GRM188R61C475KAAJ 4.7uF -10TO+10% 16V X5R -55TO+85C 1608 R/TP Max 0.95T L:1.6+-0.15 W:0.8+-0.15 T:0.8+-0.15 MURATA MANUFACTURING CO.,LTD.	
6	C5105	Capacitor Ceramic,Chip	EAE63070001	GRM033R60J223JE01 22nF -5 to +5% 6.3V X5R -55TO+85C 0603 R/TP Max 0.33T L:0.6+-0.03 W:0.3+-0.03 T:0.3+-0.03 MURATA MANUFACTURING CO.,LTD.	
6	C4146	Capacitor Ceramic,Chip	EAE63162301	GRM188R61H474K 0.47uF -10TO+10% 50V X5R -55TO+85C 1608 R/TP Max 0.9T L:1.6+-0.1 W:0.8+-0.1 T:0.8+-0.1 MURATA MANUFACTURING CO.,LTD.	
6	VA9100	Varistor	EAF61450601	EVLC 5S 01 100 5.5V 0% 100pF 0.6X0.3X0.3MM IEC61000-4-2 (ESD) level #4 SMD R/TP AMOTECH CO., LTD.	
6	VA6604	Varistor	EAF61891401	IECS0305C040 5V 0% 0.5pF 0.6x0.3 IEC61000-4-2 (ESD) level #4 SMD R/TP INNOCHIPS TECHNOLOGY	
6	CN10001	Connector,I/O	EAG63231601	GU077-5P-NT-E1500 5P 0.65MM ANGLE RECEPTACLE DIP R/TP Reverse Offset LS Mtron Ltd.	
6	ANT1113 ANT1115	C-Clip	EAG63652201	2108611-5 1P ANT TERMINAL STRAIGHT SMD T/REEL AU 2.9X1.0X1.7(L X W X H) SERVEONE CO., LTD.	
6	ANT10003 ANT10004	C-Clip	EAG63730501	TE 1.1H C-CLIP 1P ANT TERMINAL STRAIGHT SMD T/REEL AU 2.5 X 1.0X 1.1(L X W X H) SERVEONE CO., LTD.	
6	CN9100	Connector Terminal Block	EAG63749801	HSBC-4P25-39F1 4P 2.50MM STRAIGHT DIP T/REEL - HAN SHIN TERMINAL CO., LTD.	

12. EXPLODED VIEW & REPLACEMENT PART LIST

Level	Location No.	Description	Part Number	Spec	Remark
6	D10007	Diode,TVS	EAH61872601	PESD12VS1UA 12V 13.3V min. 19V 22.5A 360mW SOD323 R/TP 2P 1 NXP Semiconductors	
6	U2100	IC,Digital Baseband Processor,4G	EAN62928201	MSM8926-2 784 pNSP, Quad CA7 1.2GHz,28nm LP,12x12 PoP,1x600MHz LPDDR3, CAT4(no CA), HSPA+(42/11Mbps),TD-SCDMA,1080p@30fps,Adreno 305 NSP R/TP 784P QUALCOMM INCORPORATED.	
6	U1300	IC,Power Amplifier	EAN62792001	SKY77629-21 3.0 to 4.5V 0 0 0W 0W 0 0 SMD R/TP 42P 7*5size, MMPA for MSM8974, MIPI, APT SKYWORKS SOLUTIONS INC.	
6	U1700	IC,Power Amplifier	EAN62868001	RF7920 3.0V to 4.35V 0 0 0W 0W 0 1 SMD R/TP 10P 2520size, Band20, MIPI, APT, w/o CPL RF MICRO DEVICES INC	
6	U1751	IC,Power Amplifier	EAN62926901	RF7907 3.0V to 4.35V 0 0 0W 0W 0 1 SMD R/TP 10P 2520size, Band7, MIPI, APT, w/o CPL RF MICRO DEVICES INC	
6	U3100	IC,Mobile SDRAM	EAN62949701	H9TKNNN8JDAPLR-NGH 8GBIT LPDDR2 1.14VTO1.3V 533MHz 5500ns FBGA TR 168P - HYNIX SEMICONDUCTOR	
6	U8700	IC,Hall Effect Switch	EAN62969801	S-5717ACDL8-I4T1U 1.2X1.6 Hall IC 1.2X1.6 SNT R/TP 4P - SEIKO INSTRUMENTS INC.	
6	L5100	Inductor Multilayer,Chip	EAP61767601	HK0603 68NJ-T 68NH 5% - 80mA - - 2.66OHM 1.1GHZ 4 SHIELD NONE 0.6X0.3X0.3MM R/TP TAIYO YUDEN CO.,LTD	
6	L1100 L1120 L1209	Inductor Multilayer,Chip	EAP61767701	LQP03TN3N0B02D 3NH 0.1NH - 450mA - - 0.25OHM 6GHZ 14 SHIELD NONE 0.6X0.3X0.3MM R/TP MURATA MANUFACTURING CO.,LTD.	
6	C1148 L1108 L1112 L1128	Inductor Multilayer,Chip	EAP61866601	LG HK0603 R10J-T 100NH 5% - 60mA - - 3.74OHM 900MHZ 4 SHIELD 0 0.6X0.3X0.3MM R/TP TAIYO YUDEN CO.,LTD	
6	L5101 L5102	Inductor Multilayer,Chip	EAP61866701	LG HK0603 82NJ-T 82NH 5% - 70mA - - 3.37OHM 1GHZ 4 SHIELD 0 0.6X0.3X0.3MM R/TP TAIYO YUDEN CO.,LTD	
6	L1103 L5103	Inductor Multilayer,Chip	EAP61866901	LQP03TN2N0C02D 2NH 0.2NH - 600mA - - 0.15OHM 6GHZ 14 SHIELD 0 0.6X0.3X0.3MM R/TP MURATA MANUFACTURING CO.,LTD.	

12. EXPLODED VIEW & REPLACEMENT PART LIST

Level	Location No.	Description	Part Number	Spec	Remark
6	L4136	Inductor,Wire Wound,Chip	EAP62106301	1239AS-H-100N=P2 10UH 30% 30V 700mA 1 0.7 0.46OHM - - SHIELD 2.5X2.0X1.2MM NONE R/TP TOKO, INC.	
6	C1166	Inductor Multilayer,Chip	EAP62108601	LQP03TG22NJ02D 22NH 5% - 140mA - - 2.85OHM 2.5GHZ 9 SHIELD - 0.6X0.3X0.3MM R/TP MURATA MANUFACTURING CO.,LTD.	
6	L4135	Inductor,Wire Wound,Chip	EAP62187401	MAKK2016T1R0M 1UH 20% - 2.2A 2.2 2.45 0.075OHM - - SHIELD 2.0X1.6X1.0MM - R/TP TAIYO YUDEN CO.,LTD	
6	L1151	Inductor Multilayer,Chip	EAP62226201	LQP03TG4N7J02D 4.7NH 5% - 250mA - - 0.72OHM 6GHZ 12 SHIELD - 0.6X0.3X0.3MM R/TP MURATA MANUFACTURING CO.,LTD.	
6	C1147	Inductor Multilayer,Chip	EAP62226301	LQP03TG5N6J02D 5.6NH 5% - 250mA - - 0.88OHM 6GHZ 12 SHIELD - 0.6X0.3X0.3MM R/TP MURATA MANUFACTURING CO.,LTD.	
6	C1106 C1112 C1145 C1152	Inductor Multilayer,Chip	EAP62226901	LG HK 0603 1N0S-T 1NH 0.3NH - 470mA - - 0.11OHM 10GHZ 4 SHIELD - 0.6X0.3X0.3MM R/TP TAIYO YUDEN CO.,LTD	
6	C1317 C1755 R1305	Inductor Multilayer,Chip	EAP62246001	LG HK 0603 3N3S-T 3.3NH 0.3NH - 320mA - - 0.23OHM 6.7GHZ 5 SHIELD - 0.6X0.3X0.3MM R/TP TAIYO YUDEN CO.,LTD	
6	L1138	Inductor Multilayer,Chip	EAP62246201	LG HK 0603 10NJ-T 10NH 5% - 220mA - - 0.51OHM 2.9GHZ 5 SHIELD - 0.6X0.3X0.3MM R/TP TAIYO YUDEN CO.,LTD	
6	L1215	Inductor,Wire Wound,Chip	EAP62286801	1285AS-H-1R5M 1.5UH 20% - 1.8A 1.8 1.9 0.144OHM - - SHIELD 2.0X1.6X1.0MM - R/TP TOKO, INC.	
6	L1754 R1304	Inductor Multilayer,Chip	EAP62346801	0603GC3T1N2SLF 1.2NH 0.3NH - 400mA - - 0.3OHM 10GHZ 4 SHIELD - 0.6X0.3X0.3MM R/TP PILKOR ELECTRONICS LTD.	
6	C1149	Inductor Multilayer,Chip	EAP62347001	0603GC3T2N2SLF 2.2NH 0.3NH - 250mA - - 0.4OHM 7GHZ 5 SHIELD - 0.6X0.3X0.3MM R/TP PILKOR ELECTRONICS LTD.	
6	L1202 L1203 L1312 L1315 L1700	Inductor Multilayer,Chip	EAP62348001	0603GC3T18NJLF 18NH 5% - 80mA - - 1.2OHM 2GHZ 5 SHIELD - 0.6X0.3X0.3MM R/TP PILKOR ELECTRONICS LTD.	

12. EXPLODED VIEW & REPLACEMENT PART LIST

Level	Location No.	Description	Part Number	Spec	Remark
6	C1100 C1310 L1208 L1216	Inductor Multilayer,Chip	EAP62347101	0603GC3T2N7SLF 2.7NH 0.3NH - 200mA - - 0.4OHM 6GHZ 6 SHIELD - 0.6X0.3X0.3MM R/TP PILKOR ELECTRONICS LTD.	
6	C1144 C1158	Inductor Multilayer,Chip	EAP62347601	0603GC3T8N2JLF 8.2NH 5% - 150mA - - 0.7OHM 3.5GHZ 6 SHIELD - 0.6X0.3X0.3MM R/TP PILKOR ELECTRONICS LTD.	
6	L1316	Inductor Multilayer,Chip	EAP62347901	0603GC3T15NJLF 15NH 5% - 90mA - - 1.1OHM 2.2GHZ 5 SHIELD - 0.6X0.3X0.3MM R/TP PILKOR ELECTRONICS LTD.	
6	L1150	Inductor Multilayer,Chip	EAP62348201	0603GC3T27NJLF 27NH 5% - 50mA - - 1.7OHM 1.6GHZ 5 SHIELD - 0.6X0.3X0.3MM R/TP PILKOR ELECTRONICS LTD.	
6	C5125	Inductor Multilayer,Chip	EAP62447101	0603GC3T1N8SLF 1.8NH 0.3NH - 300mA - - 0.4OHM 9GHZ 4 SHIELD - 0.6X0.3X0.3MM R/TP PILKOR ELECTRONICS LTD.	
6	L2300	Inductor Multilayer,Chip	EAP62447401	MLP1005V2R2T_ 2.2UH 20% - 50mA 0.05 0.350 1.3OHM 0HZ - SHIELD - 1.0X0.5X0.55MM R/TP TDK KOREA COOPERATION	
6	L4132 L4133	Inductor,Wire Wound,Chip	EAP62526501	TFM201610GHM-1R0MTAA 1UH 20% - 3A 3.6 3 0.06OHM - - SHIELD 2.0X1.6X1.0 MM - R/TP TDK KOREA COOPERATION	
6	L4134	Inductor,Wire Wound,Chip	EAP62526601	TFM201610GHM-2R2MTAA 2.2UH 20% - 1.9A 2.4 1.9 0.152OHM - - SHIELD 2.0X1.6X1.0MM - R/TP TDK KOREA COOPERATION	
6	L4130 L4131	Inductor Multilayer,Chip	EAP62545901	MIPSZ2016DR24FHS 240NH 20% - 4A 4 4 0.022OHM 0HZ - SHIELD - 2.0X1.6X1.0 MM R/TP FDK CORPORATION.	
6	C1756	Inductor Multilayer,Chip	EAP62546201	LQP03TN1N8B02D 1.8NH 0.1NH - 600mA - - 0.15OHM 15GHZ 14 SHIELD - 0.6X0.3X0.3MM R/TP MURATA MANUFACTURING CO.,LTD.	
6	FL1201	Module,Rx Module	EAT61876301	LMSW54GM-G27 0DBM 0DB 0% 0A 0A 0DB 0DBM 0DBM 40P 5.0x4.0x1.0MM FEMiD for WTR1625 Non CA, SP12T, B1,2,5,8 MURATA MANUFACTURING CO.,LTD.	
6	X4100	Crystal	EAW61883401	X1E0002910001 19.2MHZ 10PPM 7F - SMD R/TP EPSON TOYOCOM CORP	
6	EAX010000	PCB,Main	EAX65645801	LGD620.ADEUWH 1.0 FR-4 Staggered via 10 0.8T Main	

12. EXPLODED VIEW & REPLACEMENT PART LIST

Level	Location No.	Description	Part Number	Spec	Remark
6	R2101 R2103	Resistor,Chip	EBC61856201	RC0201FR-07240RL 240OHM 1% 1/20W 0603 R/TP - YAGEO CORPORATION	
6	R6425	Resistor,Chip	EBC61997701	RC0201JR-072M4L 2.4MOHM 5% 1/20W 0603 R/TP - YAGEO CORPORATION	
6	R1503	Resistor,Chip	EBC62236701	RC0402FR-074K75L 4.75KOHM 1% 1/16W 1005 R/TP 0.4T max. YAGEO CORPORATION	
6	R4117 R4118	Resistor,Chip	EBC62316201	RC0603F224CS 220KOHM 1% 1/20W 0603 R/TP - SAMSUNG ELECTRO-MECHANICS CO., LTD.	
6	R8953	Resistor,Chip	EBC62575901	RC0201FR-07300RL 300OHM 1% 1/20W 0603 R/TP - YAGEO CORPORATION	
6	R2110	Resistor,Chip	EBC62581801	RC0603F392CS 3.9KOHM 1% 1/20W 0603 R/TP - SAMSUNG ELECTRO-MECHANICS CO., LTD.	
6	R1500	Resistor,Chip	EBC62595901	RC0201FR-0718RL 18OHM 1% 1/20W 0603 R/TP - YAGEO CORPORATION	
6	PT1100 PT1101	Thermistor,NTC	EBG61306601	NTCG104EF104FT 100KOHM 1% 35V 35A 4.25MK SMD R/TP - TDK CORPORATION	
6	C6619 C6620	Capacitor Ceramic,Chip	ECCH0000122	MCH155A470JK 47pF 5% 50V NP0 -55TO+125C 1005 R/TP - ROHM Semiconductor KOREA CORPORATION	
6	FL1102	Coupler,RF Directional	ECA30240001	LDJ18829M24AD011 1.6x0.8x0.7t SMD COUPLER 1694MHz 1992MHz (698~2690MHz) SMD R/TP 22.4 to 25.7 0.16 26 - MURATA MANUFACTURING CO.,LTD.	
6	C10001	Capacitor Ceramic,Chip	ECCH0000115	MCH155A220JK 22pF 5% 50V NP0 -55TO+125C 1005 R/TP - ROHM Semiconductor KOREA CORPORATION	
6	C5208 C5216	Capacitor Ceramic,Chip	ECCH0000120	MCH155A390J 39pF 5% 50V NP0 -55TO+125C 1005 R/TP - ROHM Semiconductor KOREA CORPORATION	
6	C4111	Capacitor Ceramic,Chip	ECCH0000127	MCH155A820J 82pF 5% 50V NP0 -55TO+125C 1005 R/TP - ROHM Semiconductor KOREA CORPORATION	
6	C5210 C5213	Capacitor Ceramic,Chip	ECCH0000129	MCH155A121JK 120pF 5% 50V NP0 -55TO+125C 1005 R/TP - ROHM Semiconductor KOREA CORPORATION	

12. EXPLODED VIEW & REPLACEMENT PART LIST

Level	Location No.	Description	Part Number	Spec	Remark
6	C2380 C2383 C2388	Capacitor Ceramic,Chip	ECCH0000149	MCH155CN332KK 3.3nF 10% 50V X7R - 55TO+125C 1005 R/TP - ROHM Semiconductor KOREA CORPORATION	
6	C3201 C3204 C3206	Capacitor Ceramic,Chip	ECCH0002001	C1005JB0J104KT000F 0.1uF 10% 6.3V X5R - 30TO+85C 1005 R/TP - - TDK CORPORATION	
6	C9501	Capacitor Ceramic,Chip	ECCH0004904	GRM155R60J105K 1uF 10% 6.3V X5R -55TO+85C 1005 R/TP - MURATA MANUFACTURING CO.,LTD.	
6	C1139 C2307 C2328 C2329 C2330 C2331 C2332 C2333 C2334 C2359 C2363 C2366 C2367 C2368 C2369 C2374 C2375 C2377 C2386 C6920 C7101 C7103 C8952	Capacitor Ceramic,Chip	ECCH0009101	C0603X5R0J104KT00NN 0.1uF 10% 6.3V X5R - 55TO+85C 0603 R/TP - TDK CORPORATION	
6	C1110 C1125 C1126 C1129 C1131 C1132 C1133 C1141 C1142 C1150 C1157 C1169 C9102	Capacitor Ceramic,Chip	ECCH0009103	C0603C0G1H101JT00NN 100pF 5% 50V C0G - 55TO+125C 0603 R/TP - - TDK CORPORATION	
6	C1138 C6921	Capacitor Ceramic,Chip	ECCH0009104	C0603C0G1H330JT00NN 33pF 5% 50V C0G - 55TO+125C 0603 R/TP - TDK CORPORATION	

12. EXPLODED VIEW & REPLACEMENT PART LIST

Level	Location No.	Description	Part Number	Spec	Remark
6	C5104	Capacitor Ceramic,Chip	ECCH0009105	C0603C0G1H820JT00NN 82pF 5% 50V NP0 - 55TO+125C 0603 R/TP - - TDK CORPORATION	
6	C2306 C2318 C2319 C2321 C2322 C2325 C2326 C2360 C2384	Capacitor Ceramic,Chip	ECCH0009106	C0603X7R1C103KT 10nF 10% 10V X7R - 55TO+125C 0603 R/TP - TDK CORPORATION	
6	C1706 C1707 C1764 C1765	Capacitor Ceramic,Chip	ECCH0009109	C0603X7R1H331KT00NN 330pF 10% 50V X7R - 55TO+125C 0603 R/TP - - TDK CORPORATION	
6	C2301 C2361	Capacitor Ceramic,Chip	ECCH0009203	GRM033R60J333KE01D+A01 33nF 10% 6.3V X5R -55TO+85C 0603 R/TP - - MURATA MANUFACTURING CO.,LTD.	
6	L1300 L1306 L1307 L1310 L1311	Capacitor Ceramic,Chip	ECCH0009208	GRM0335C1ER50C 0.5pF 0.25PF 25V X7R - 55TO+125C 0603 R/TP - MURATA MANUFACTURING CO.,LTD.	
6	C1208	Capacitor Ceramic,Chip	ECCH0009226	GRM0335C1E390J 39pF 5% 25V X7R - 55TO+125C 0603 R/TP - MURATA MANUFACTURING CO.,LTD.	
6	L5104 L5105	Capacitor Ceramic,Chip	ECCH0009504	MCH032A180JK 18pF 5% 25V NP0 -55TO+125C 0603 R/TP - ROHM.	
6	C1203 C5117	Capacitor Ceramic,Chip	ECCH0009506	MCH032A270JK 27pF 5% 25V NP0 -55TO+125C 0603 R/TP - ROHM.	
6	C1750 C1753	Capacitor Ceramic,Chip	ECCH0009520	MCH032A150JK 15pF 5% 25V X7R -55TO+125C 0603 R/TP - ROHM.	
6	C4182	Capacitor Ceramic,Chip	ECCH0009603	CE JMK212 BJ476MG-T 47uF 20% 6.3V X5R - 55TO+85C 2012 R/TP 1.25mm - TAIYO YUDEN CO.,LTD	
6	C1120	Capacitor Ceramic,Chip	ECCH0042002	GRM0335C1E1R2BD01D 1.2pF 0.1PF 25V C0G - 55TO+125C 0603 R/TP 0.3+-0.03 MURATA MANUFACTURING CO.,LTD.	

12. EXPLODED VIEW & REPLACEMENT PART LIST

Level	Location No.	Description	Part Number	Spec	Remark
6	C2351 C2402 C2403 C4191 C4195 C7100 C7102 C9503	Capacitor Ceramic,Chip	ECCH0017301	CL03A105MQ3CSNH 0.000001F 20% 6.3V X5R - 45TO+85C 0603 R/TP - SAMSUNG ELECTRO-MECHANICS CO., LTD.	
6	C4133 C4134 C4135	Capacitor Ceramic,Chip	ECCH0017501	CL10A226MQ8NRNE 22uF 20% 6.3V X5R - 55TO+85C 1608 R/TP 0.8MM - SAMSUNG ELECTRO-MECHANICS CO., LTD.	
6	C4123 C4128 C7302 C7402 C8950 C8951	Capacitor Ceramic,Chip	ECCH0017601	CL05A475MQ5NRNC 4.7uF 20% 6.3V X5R - 55TO+85C 1005 R/TP 0.5MM - SAMSUNG ELECTRO-MECHANICS CO., LTD.	
6	C1320	Capacitor Ceramic,Chip	ECCH0042005	GRM0335C1E8R2BD01D 8.2pF 0.1PF 25V C0G - 55TO+125C 0603 R/TP - MURATA MANUFACTURING CO.,LTD.	
6	C4168	Capacitor Ceramic,Chip	ECCH0042302	CL21A475KACLRNC 4.7uF -10TO+10% 25V X5R - 55TO+85C 2012 R/TP 0.85+-0.1 - SAMSUNG ELECTRO-MECHANICS CO., LTD.	
6	C4169	Capacitor TA,Conformal	ECTH0001902	F981A106MMA 10uF 20% 10V 1UA -55TO+125C 80HM 1.6X0.85X0.8MM NONE SMD R/TP 0.9T max. UNITELE ELECTRONICS CO. LTD.	
6	C5207 C5219 C5220 C5222 C8800	Capacitor Ceramic,Chip	ECZH0001215	C1005X5R1A105KT000F 1uF 10% 10V X5R - 55TO+85C 1005 R/TP - TDK KOREA COOPERATION	
6	C5100 C5101	Capacitor Ceramic,Chip	ECZH0001217	GRM155R60J474K 470nF 10% 6.3V X5R - 25TO+70C 1005 BK-DUP - MURATA MANUFACTURING CO.,LTD.	
6	C6101 C6102	Capacitor Ceramic,Chip	ECZH0003103	GRM36X7R104K10PT 100nF 10% 10V X7R - 55TO+125C 1005 R/TP - MURATA MANUFACTURING CO.,LTD.	
6	C8100 C8101	Capacitor Ceramic,Chip	ECZH0004402	CL05F104ZO5NNNC 0.1uF -20TO+80% 16V Y5V - 30TO+85C 1005 R/TP - SAMSUNG ELECTRO-MECHANICS CO., LTD.	

12. EXPLODED VIEW & REPLACEMENT PART LIST

Level	Location No.	Description	Part Number	Spec	Remark
6	C1172 C1305	Capacitor Ceramic,Chip	ECZH0025902	GRM0335C1E2R2C 2.2pF 0.25PF 25V C0G - 55TO+125C 0603 R/TP - - MURATA MANUFACTURING CO.,LTD.	
6	C6704 C6705 C9502	Capacitor Ceramic,Chip	ECZH0025916	GRM0335C1E330J 33pF 5% 25V NP0 - 55TO+125C 0603 R/TP - MURATA MANUFACTURING CO.,LTD.	
6	C1128	Capacitor Ceramic,Chip	ECZH0025917	GRM0335C1E470J 47pF 5% 25V NP0 - 55TO+125C 0603 R/TP - MURATA MANUFACTURING CO.,LTD.	
6	C1541 C4100 C6610 C6616	Capacitor Ceramic,Chip	ECZH0025920	GRM033R71C102K 1nF 10% 16V X7R - 55TO+125C 0603 R/TP - - MURATA MANUFACTURING CO.,LTD.	
6	ZD4130	Diode,Switching	EDSY0019201	KDS160ERTK/H 1.2V 85V 300mA 2A 4NSEC 150mW ESC R/TP 2P 1 KEC CORPORAITION	
6	D10006 VA6602	Diode,TVS	EDTY0012102	PESD5V0V1BL 5V 5.8V min. 12.5V 4.8A 45W SOD-882 R/TP 2P 1 STC CORP.	
6	L9910 L9911	Inductor Multilayer,Chip	ELCH0001430	LL1005-FHLR10J 100NH 5% - 150mA 2.2OHM 1.03GHZ 10 SHIELD NONE 1.0X0.5X0.5MM R/TP TOKO, INC.	
6	L6810 L6811	Inductor,Wire Wound,Chip	ELCH0003806	LQW18AN82NG00D 82NH 2% - 250mA 0.6OHM 2KHZ 34 NON SHIELD 1.6X0.8X0.8MM - R/TP MURATA MANUFACTURING CO.,LTD.	
6	L6610	Inductor Multilayer,Chip	ELCH0010302	0603LS-101XJEC 100NH 5% - 1.4A 0.13OHM 1.15GHZ 12 NON SHIELD NONE 1.80X1.12X1.12MM R/TP COILCRAFT SINGAPORE PTE LTD.	
6	R4121	Resistor,Chip	ERHY0000105	MCR01MZP5F51R0 51OHM 1% 1/16W 1005 R/TP - ROHM.	
6	R6619 R6620 R8400	Resistor,Chip	ERHY0000254	MCR01MZP5J472 4.7KOHM 5% 1/16W 1005 R/TP - ROHM.	
6	R7201	Resistor,Chip	ERHY0009505	MCR006YZPJ103 10KOHM 5% 1/20W 0603 R/TP - ROHM.	
6	R8954 R8955	Resistor,Chip	ERHY0009302	MCR006YZPF1001 1KOHM 1% 1/20W 0603 R/TP - ROHM.	
6	R1100	Resistor,Chip	ERHY0009311	MCR006YZPF51R0 51OHM 1% 1/20W 0603 R/TP - ROHM.	

12. EXPLODED VIEW & REPLACEMENT PART LIST

Level	Location No.	Description	Part Number	Spec	Remark
6	C1159 R7300 R7401	Resistor,Chip	ERHY0009501	MCR006YZPJ000 0OHM 5% 1/20W 0603 R/TP - ROHM.	
6	R2218 R2220 R2222	Resistor,Chip	ERHY0009506	MCR006YZPJ104 100KOHM 5% 1/20W 0603 R/TP - ROHM.	
6	R2207 R2208 R2209 R2210 R2211 R2212 R2213 R2214	Resistor,Chip	ERHY0009516	MCR006YZPJ222 2.2KOHM 5% 1/20W 0603 R/TP - ROHM.	
6	R4134	Resistor,Chip	ERHY0009527	MCR006YZPJ473 47KOHM 5% 1/20W 0603 R/TP - ROHM.	
6	R8951	Resistor,Chip	ERHY0009536	MCR006YZPF1003 100KOHM 1% 1/20W 0603 R/TP - ROHM.	
6	R4113	Resistor,Chip	ERHY0009547	MCR006YZPF2003 200KOHM 1% 1/20W 0603 R/TP - ROHM.	
6	R6424	Resistor,Chip	ERHY0017901	RC0201JR-07330KL 330KOHM 5% 1/20W 0603 R/TP - YAGEO CORPORATION	
6	R6613	Resistor,Chip	ERHZ0000211	MCR01MZF5F1201 1.2KOHM 1% 1/16W 1005 R/TP - ROHM.	
6	R2100	Resistor,Chip	ERHZ0000235	MCR01MZF5F2000 200OHM 1% 1/16W 1005 R/TP - ROHM.	
6	R9100 R9106	Resistor,Chip	ERHZ0000401	MCR01MZSJ000 0OHM 5% 1/16W 1005 R/TP - ROHM.	
6	R4130	Resistor,Chip	ERHZ0000406	MCR01MZF5J104 100KOHM 5% 1/16W 1005 R/TP - ROHM.	
6	R2304 R2305	Resistor,Chip	ERHZ0000407	MCR01MZF5J105 1MOHM 5% 1/16W 1005 R/TP - ROHM.	
6	R6105	Resistor,Chip	ERHZ0000438	MCR01MZF5J203 20KOHM 5% 1/16W 1005 R/TP - ROHM.	
6	R8401	Resistor,Chip	ERHZ0000441	MCR01MZF5J220 22OHM 5% 1/16W 1005 R/TP - ROHM.	
6	PID1	Label	MEZ65049701	COMPLEX LGLS720.ASPRTS ZZ:Without Color PID label	

12. EXPLODED VIEW & REPLACEMENT PART LIST

Level	Location No.	Description	Part Number	Spec	Remark
6	VA6601 VA6603	Varistor	SEVY0008101	EVLC5S01033 EVLC5S01033 EVLC5S01033,5.5 V, ,SMD ,Vdc 5.5, Vb 10~15.6, Cp 17.9 at 1MHz, 0.6*0.3*0.33 , ,5.5 , ,23.1~42.9,0.6*0.3*0.33 ,[empty] ,SMD ,R/TP AMOTECH CO., LTD. AMOTECH CO., LTD.	
6	FL7101	Filter,EMI/Power	SFEY0015901	ICMEF214P101MFR ICMEF214P101MFR ICMEF214P101MFR,SMD ,ESD Common mode Filter INNOCHIPS TECHNOLOGY INNOCHIPS TECHNOLOGY	
6	VA5100 VA5200	Varistor	SEVY0010501	IECS0505C040FR 10V 0% 4E-12F 1.0x0.5x0.3 IEC61000-4-1 (ESD) level #4 SMD R/TP INNOCHIPS TECHNOLOGY	
6	FB6920	Filter,Bead	SFBH0008102	BLM15HD182SN1D 1800 ohm 1.0X0.5X0.5 25% 2.2 ohm 0.2A SMD R/TP 2P 0 MURATA MANUFACTURING CO.,LTD.	
6	FL10000	Filter,EMI/Power	SFEY0015301	NFM18PC104R1C3 ESD/EMI 0HZ 0.1uF 0H SMD R/TP - MURATA MANUFACTURING CO.,LTD.	
6	FL7102	Filter,EMI/Power	SFEY0016301	ICMEF112P900M COMMON MODE NOISE FILTER 0HZ 0F 0H SMD R/TP INNOCHIPS TECHNOLOGY	
6	FL1805	Filter,Saw	SFSY0042801	SAFEA847MAL0F00 847MHz 1.4*1.1*0.5 SMD R/TP 5P MURATA MANUFACTURING CO.,LTD.	
6	R1111 R1114 R1115 R1116 R6920	Wire Pad,Short	SAFP0000401	AX3100 ATL SV_SHIPBACK,MAIN,A	
6	R5212	Wire Pad,Short	SAFP0000501	LG-VS760 VRZ	
3	EAA030100	PIFA Antenna,RF	EAA63225901	BNF13A019 SINGLE -5DB 3.0 FPCB Type - NFC Tape AT&C CO.,LTD	
2	EAD010000	Cable,Assembly	EAD62377902	LG0108 USB USB 1.0M 4 BLACK UL N ningbo broad telecommunication co.,ltd	
1	SAF010100	Software Assembly Common	SAF30260001	LG D620.AVD2BK KK -	
2	SAD010100	Software Application	SAD34624401	Android KK 5.3.14.20140117_2 PCSuiteV 5.3.14.20140117_2 - EUROPE PC SYNC -	
2	SAD010600	Software,OSP	SAD34443201	Windows Android KK - -	

12. EXPLODED VIEW & REPLACEMENT PART LIST

Level	Location No.	Description	Part Number	Spec	Remark
2	SAD010500	Software USB Driver	SAD34443101	Windows -	

12. EXPLODED VIEW & REPLACEMENT PART LIST

12.3 Accessory

Note: This Chapter is used for reference, Part order is ordered by SBOM standard on GCSC

Level	Location No.	Description	Part Number	Spec	Remark
2	EAC00	Rechargeable Battery, Lithium Ion	EAC62258801	BL-59UH-TOCAD 3.8V 2.37AH 470mAh 59x47x59 62x47x62 BLACK Bar - TOCAD DONGHWA	
2	MFL053800	Manual, Operation	MFL68260714	PRINTING LGD620.AVDIBK ZZ: Without Color Italy ITALIAN -	
2	EAY060000	Adapters	EAY62709907	MCS-02ER_EAC 90Vac~264Vac 4.75Vdc~5.25Vdv 850mA 50/60Hz CE WALL 2P USB - SUNLIN ELECTRONICS CO., LTD	
2	AFN053800	Manual Assembly Operation	AFN76412511	LGD620.AVDIWH ZZ: Without Color -	
3	MBM062600	Card, Quick Reference	MBM64396410	PRINTING LGD620.AVDIWH ZZ: Without Color -	
3	MBM087200	Card, Warranty	MCDF0001105	PRINTING LGP920.AITAML ZZ: Without Color Warranty card for Italy	
2	EAB010200	Earphone, Stereo	EAB62209201	HC-MYD-LG127 20mW 16OHM 115DB 20HZ TO 20KHZ 1.1M BLACK 3.5 L TYPE STEREO 4POLE PLUG OPEN TYPE I-SOUND CO., LTD	