

ASUS ME560CG

RF Hardware Trouble Shooting Guide

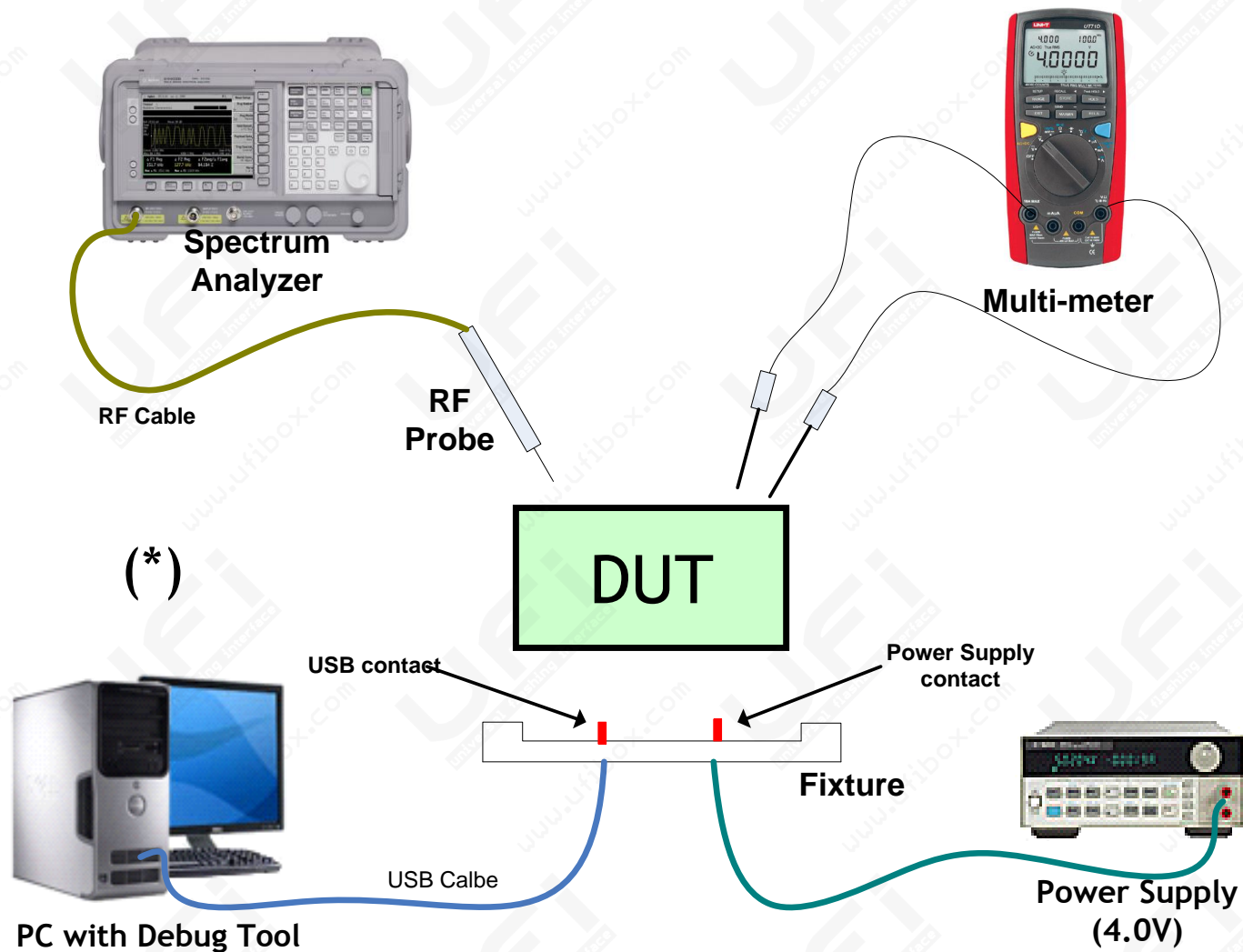
PMD-HW2

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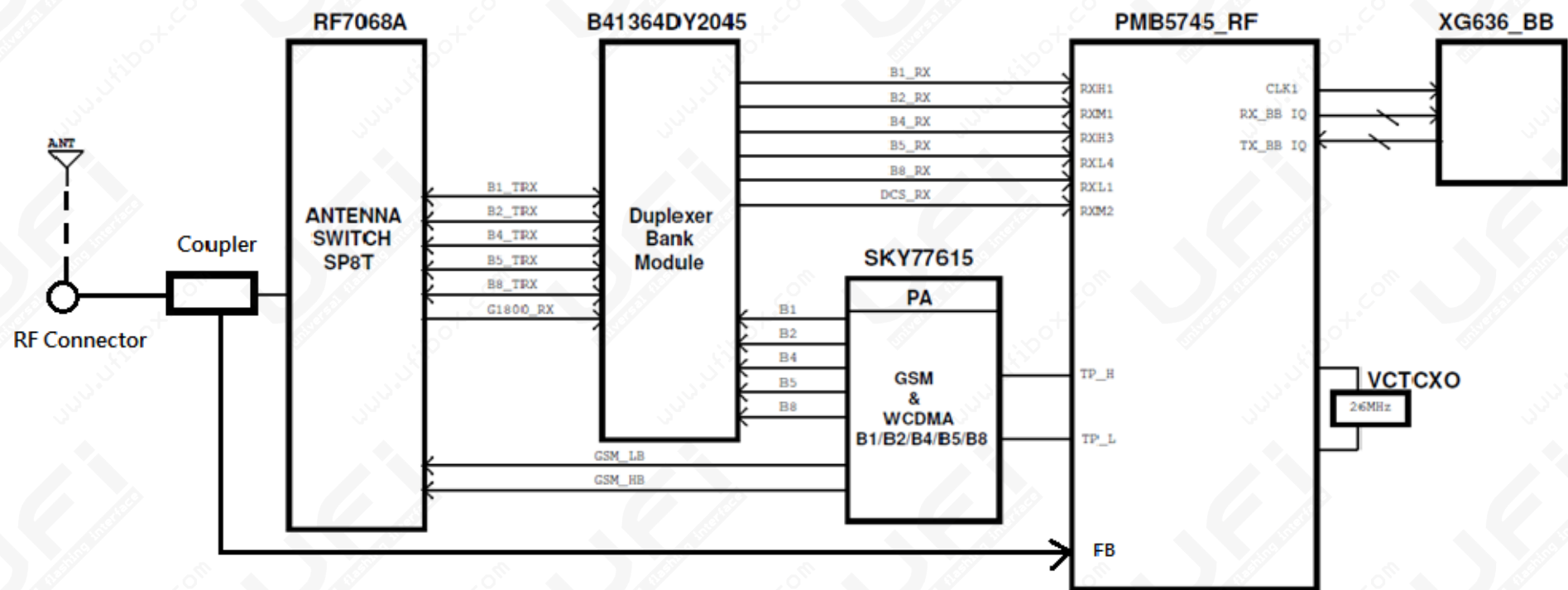
Outline

- Repair and Test Environment (*)
- RF Block Diagram
- Key components location
- RF Tx /Rx Path
 - GSM and WCDMA Tx Path
 - GSM and WCDMA Rx Path
- GSM and WCDMA Tx/Rx fail analysis
- GPS RF Path
- BT/WiFi RF Path
- GPS and BT/WiFi fail analysis

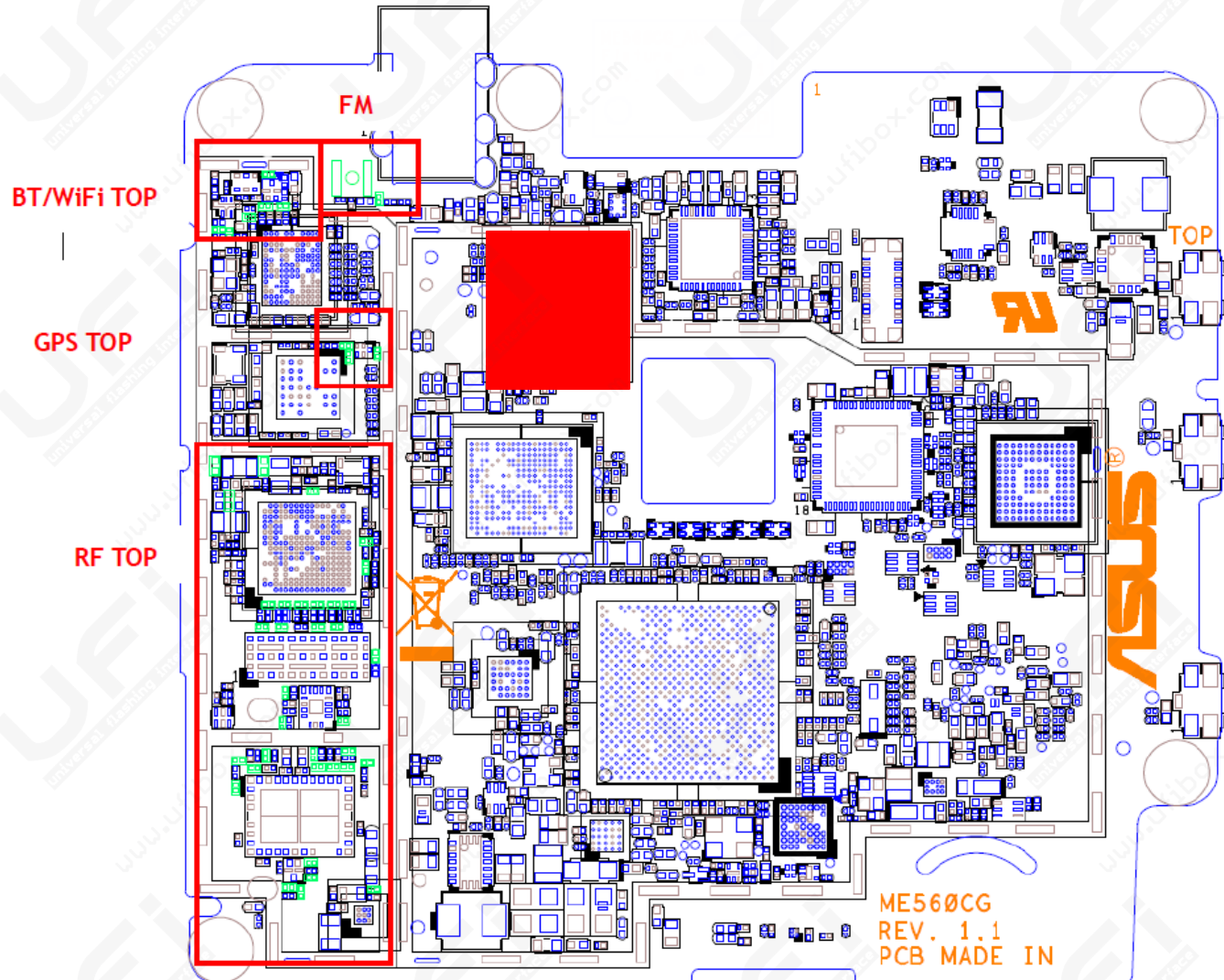
Repair and Test Environment (*)



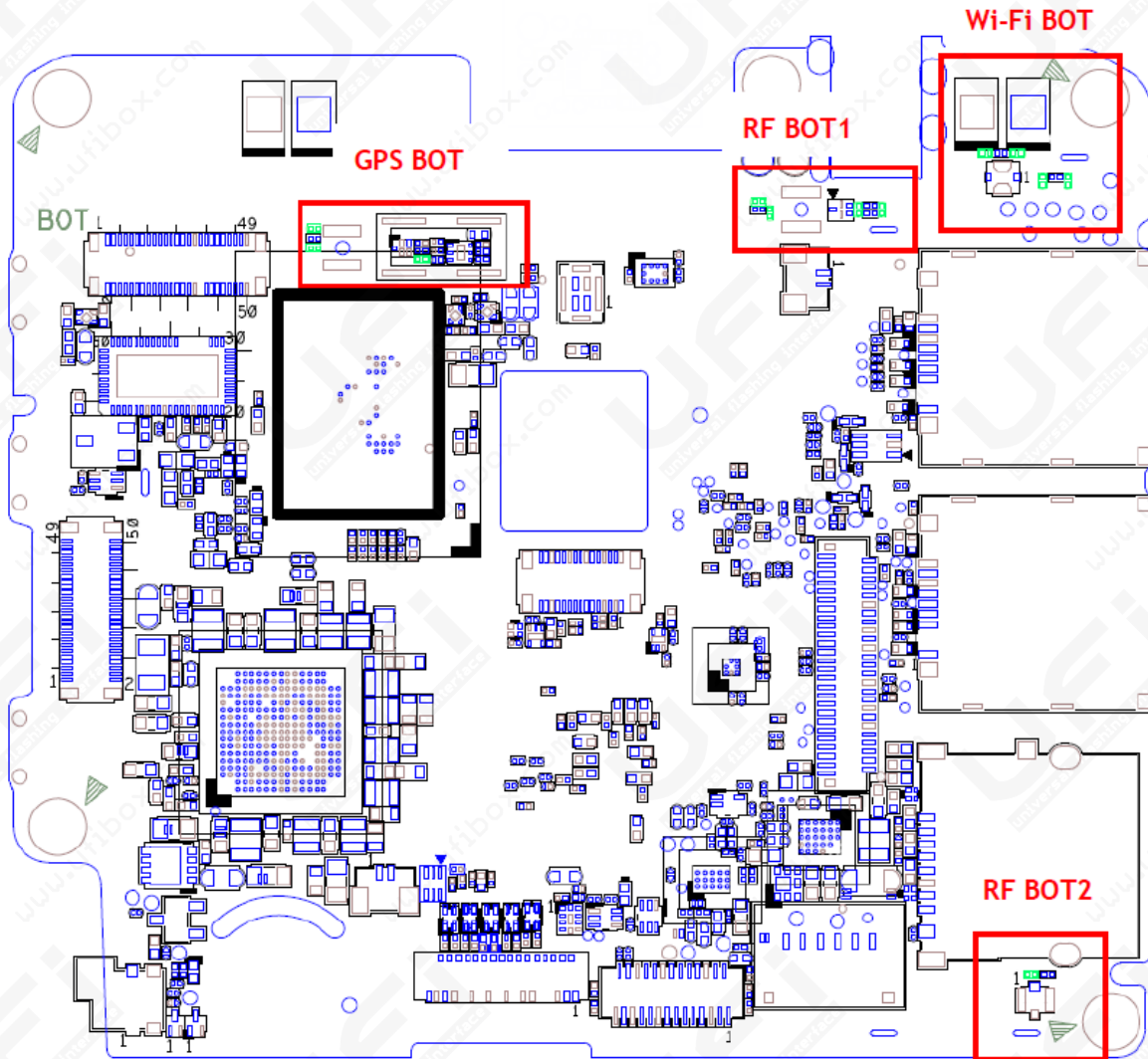
RF Block Diagram — 2G/3G System



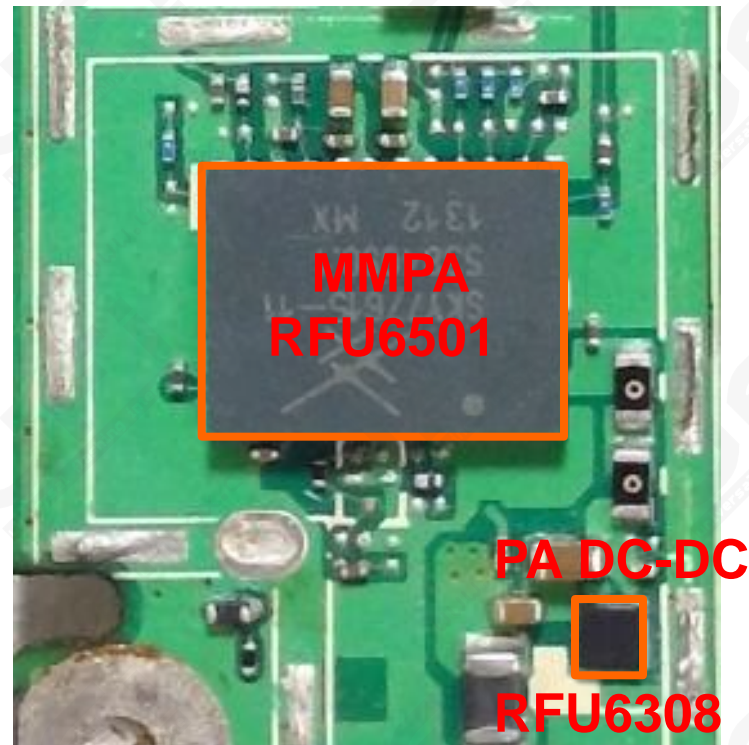
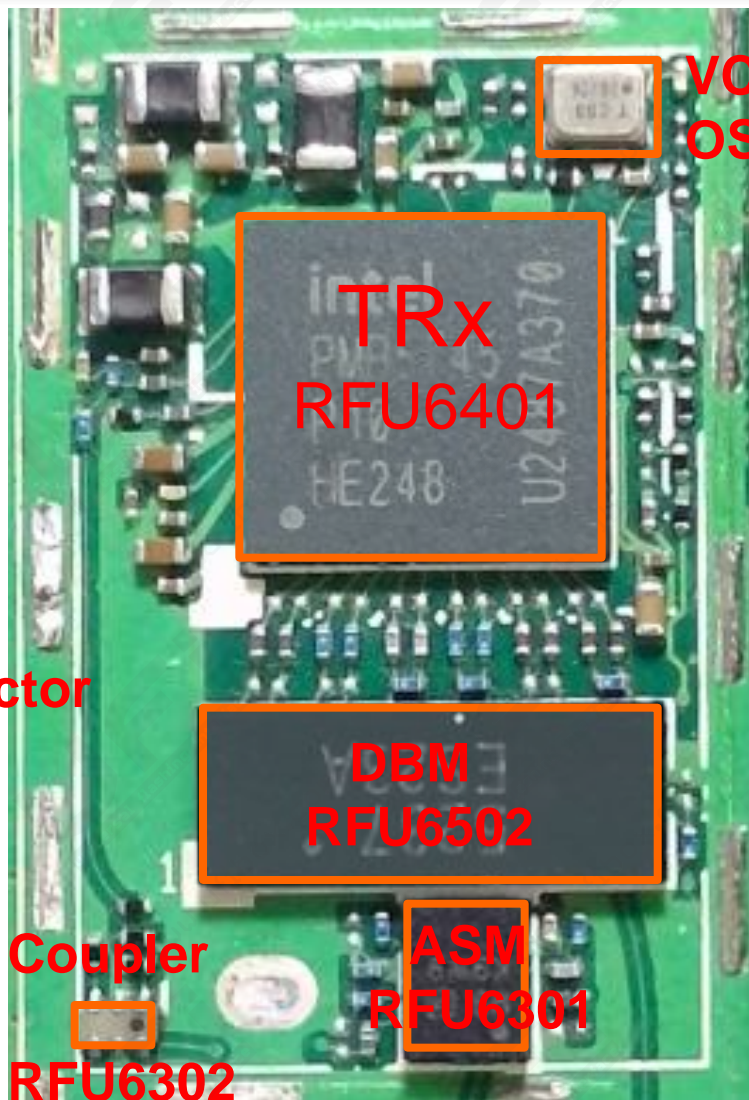
ME560CG RF Areas Top Side



ME560CG RF Areas Bottom Side



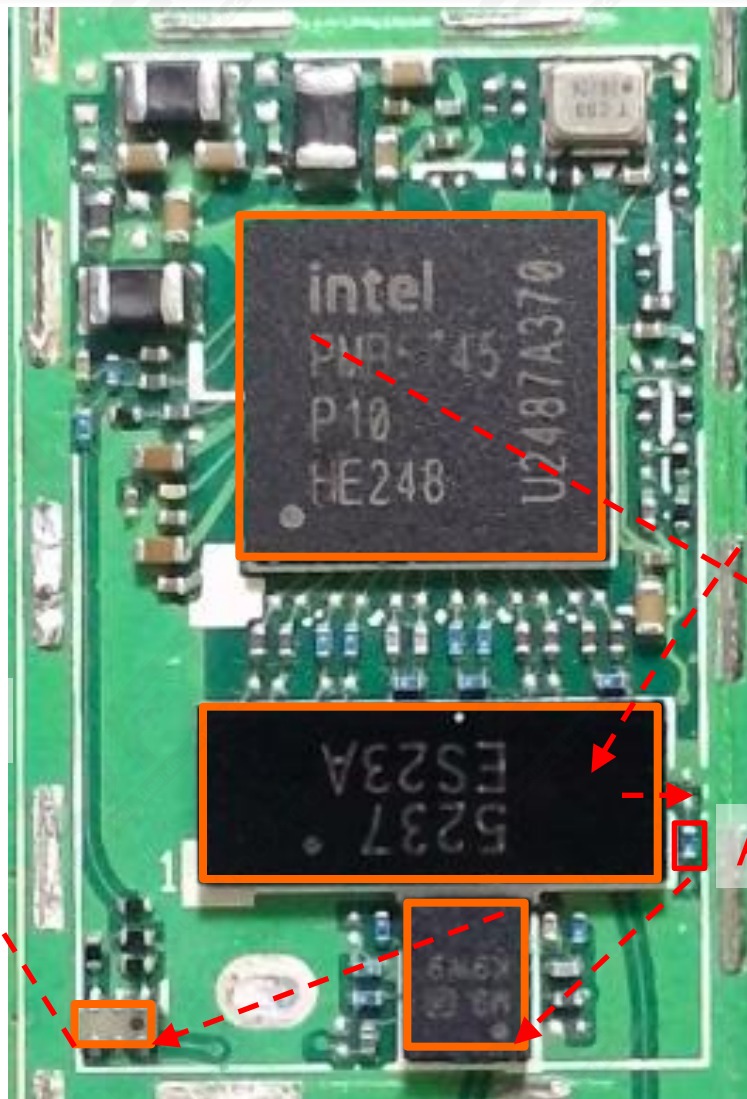
Key Components Location



Outline

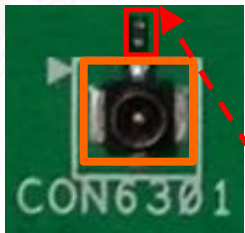
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Band1 Tx Path

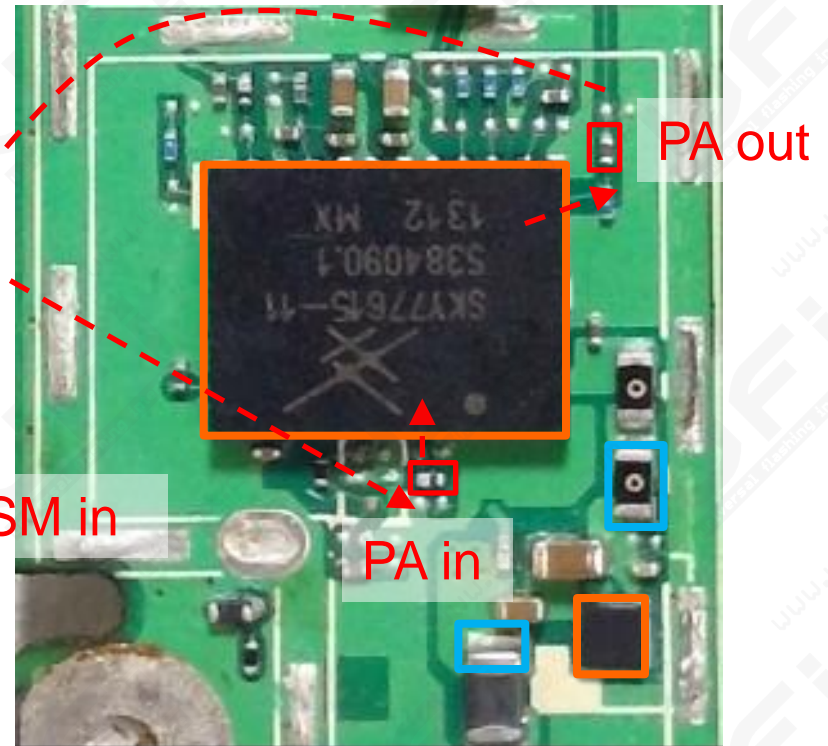


Key part	
Test point	
VDD point	

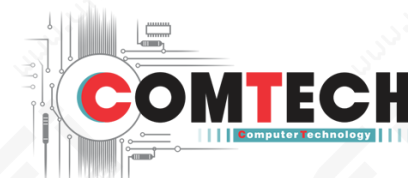
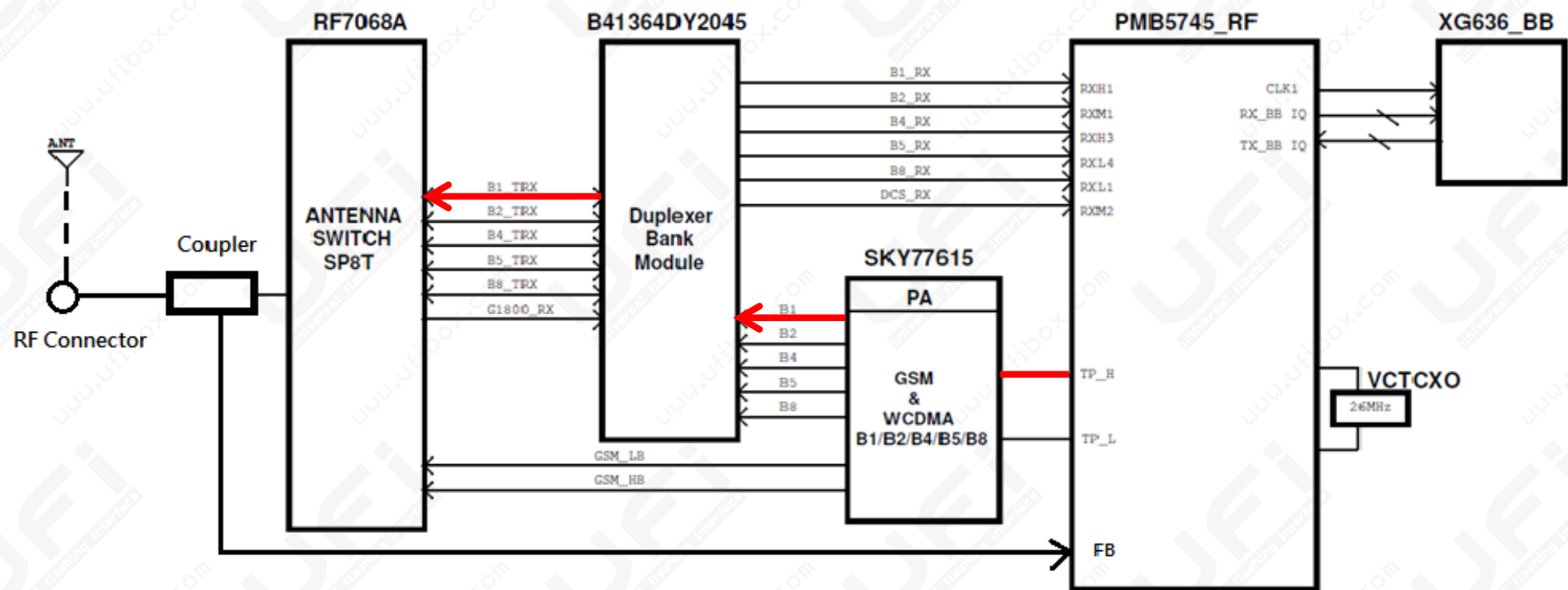
ASM out



RF BOT

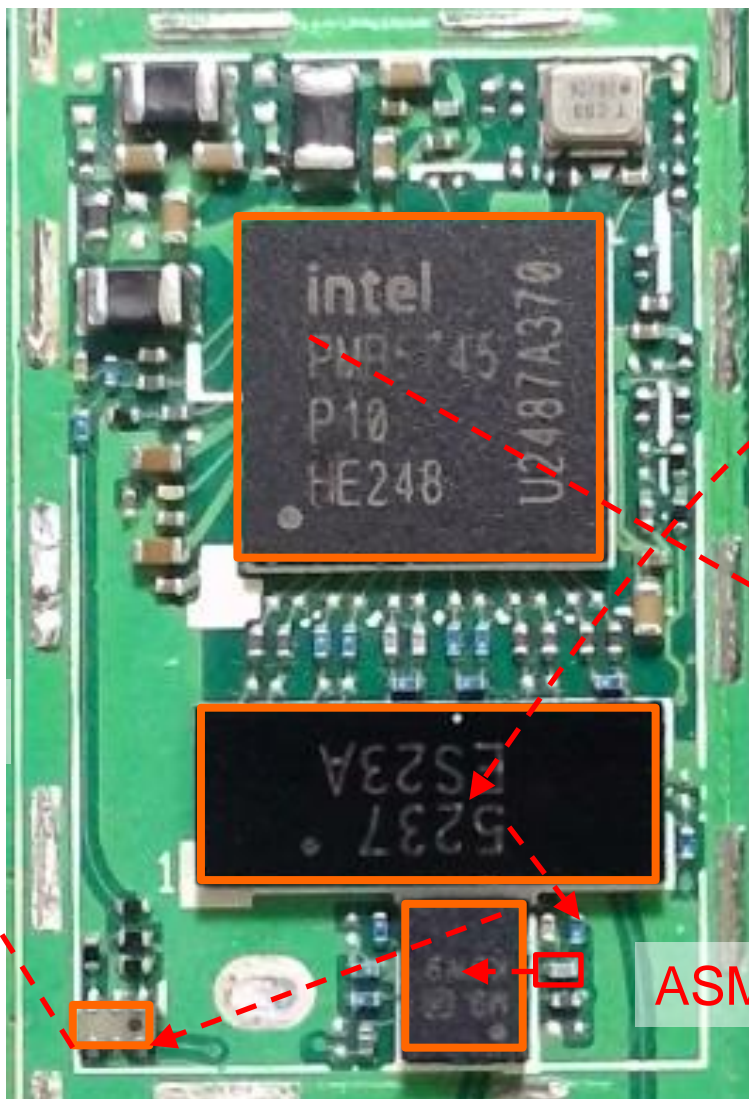


RF Block Diagram — 2G/3G System

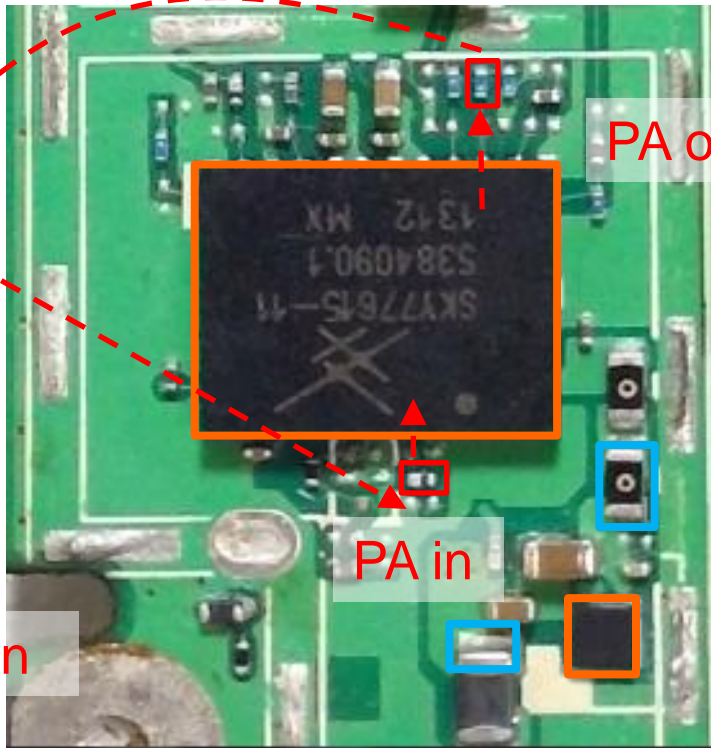


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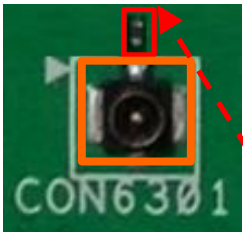
Band2 Tx Path



Key part	
Test point	
VDD point	



ASM out



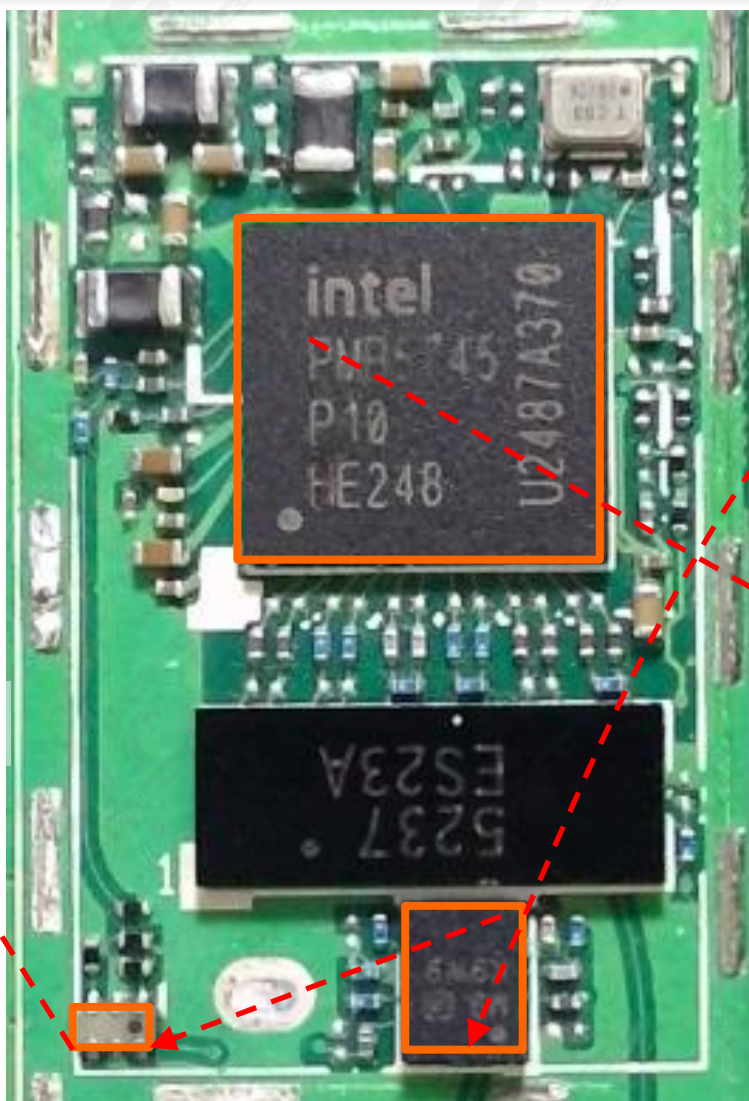
RF BOT

ASM in

PA out

PA in

DCS1800/PCS1900 Tx Path

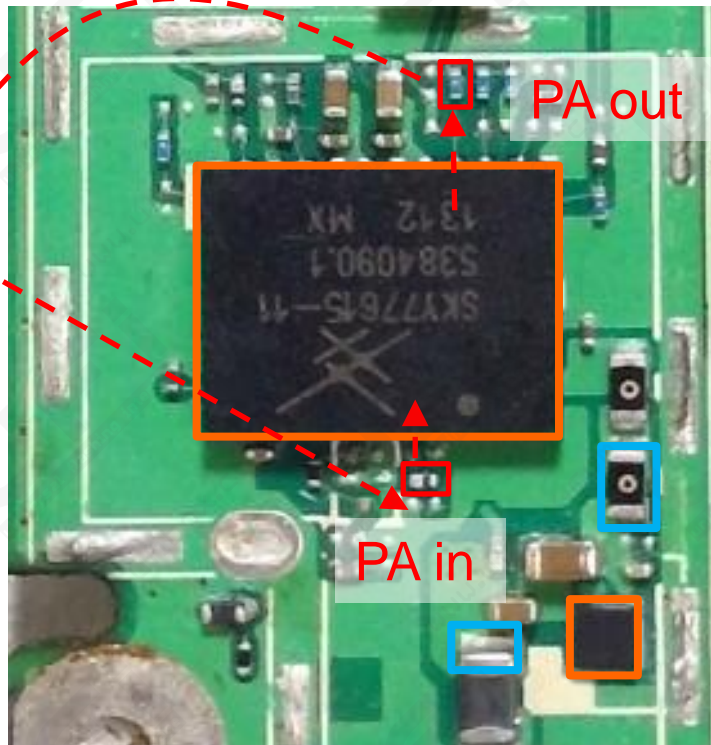


Key part	
Test point	
VDD point	

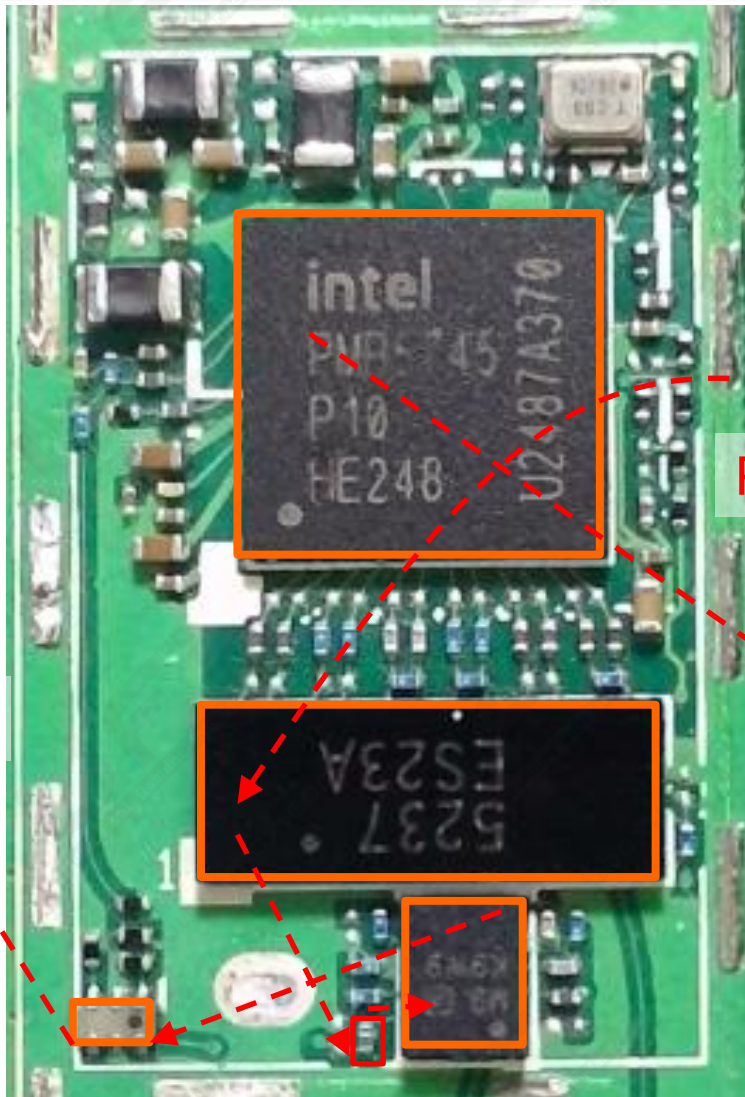
ASW out



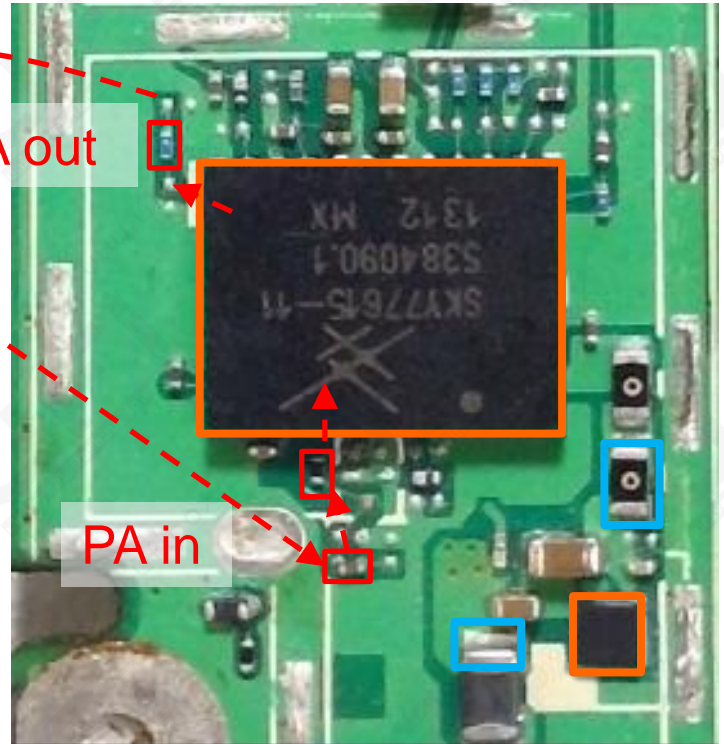
RF BOT



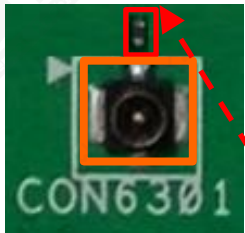
Band5 Tx Path



Key part	
Test point	
VDD point	



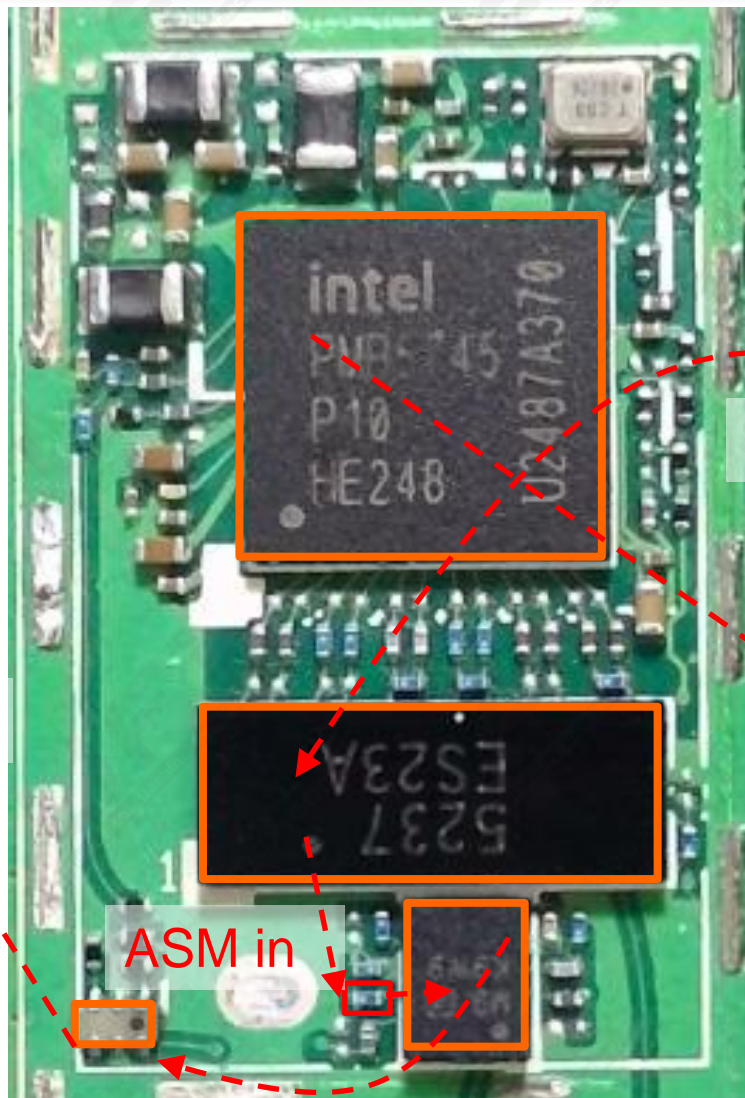
ASM out






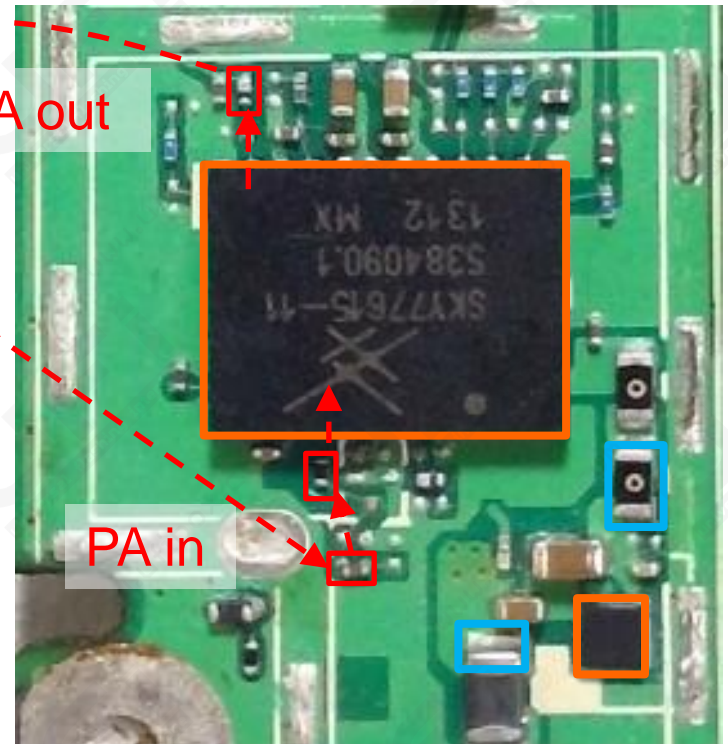
RF BOT

ASM in

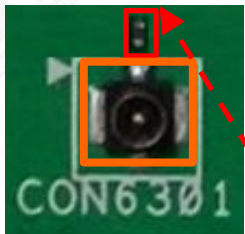
Band8 Tx Path



Key part	
Test point	
VDD point	



ASM out



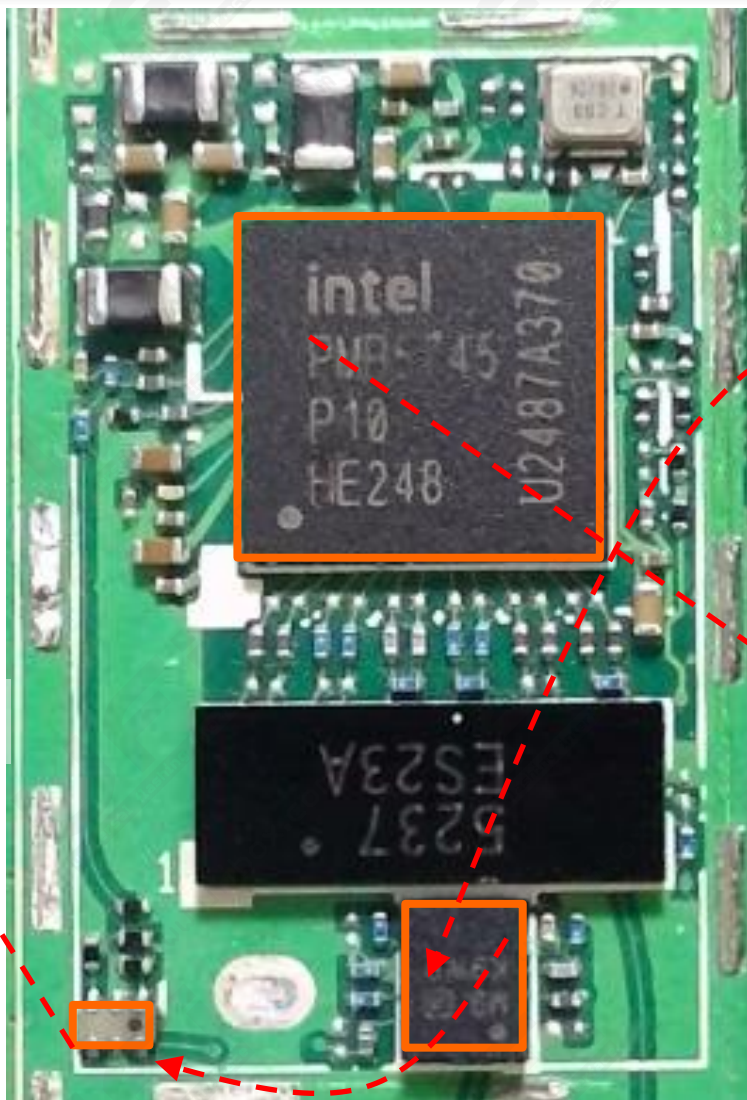
RF BOT

ASM in

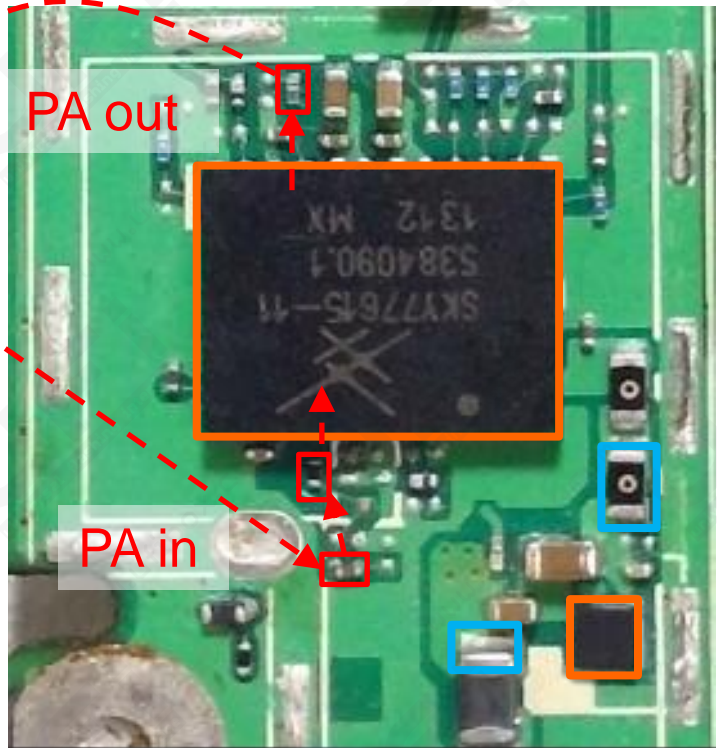
PA out

PA in

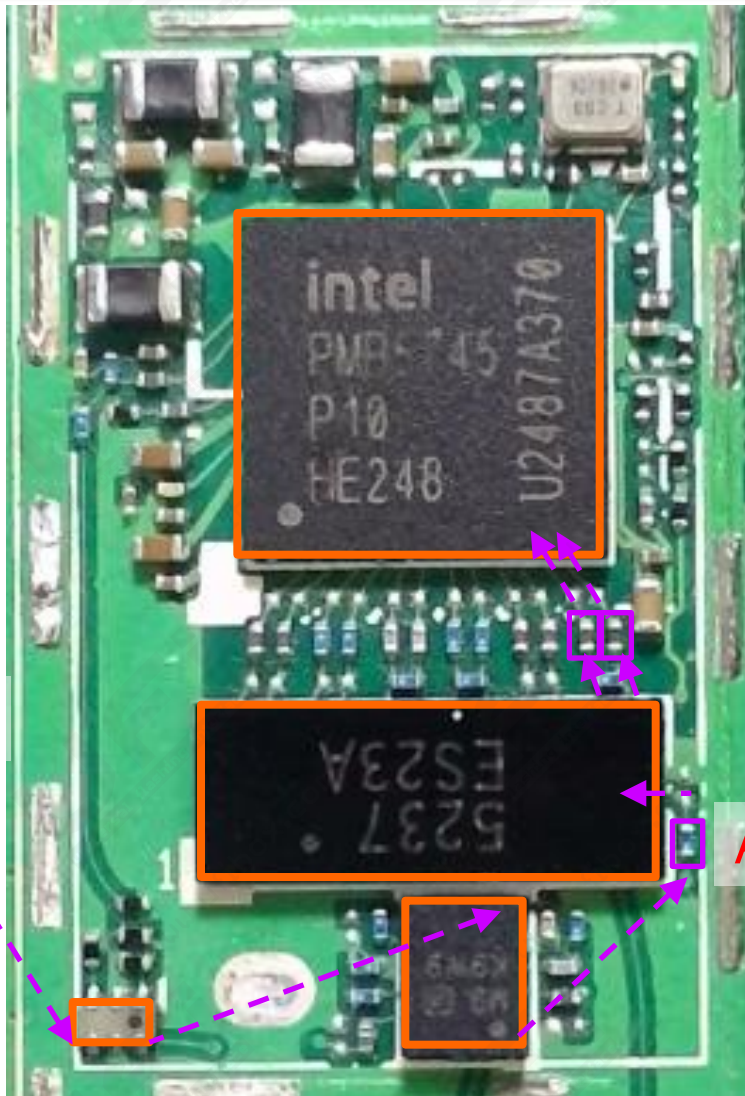
EGSM900/GSM850 Tx Path



Key part	
Test point	
VDD point	



Band1 Rx Path



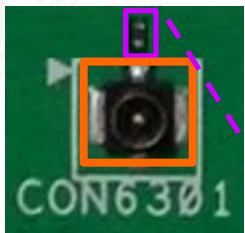
Key part



Test point



ASM out

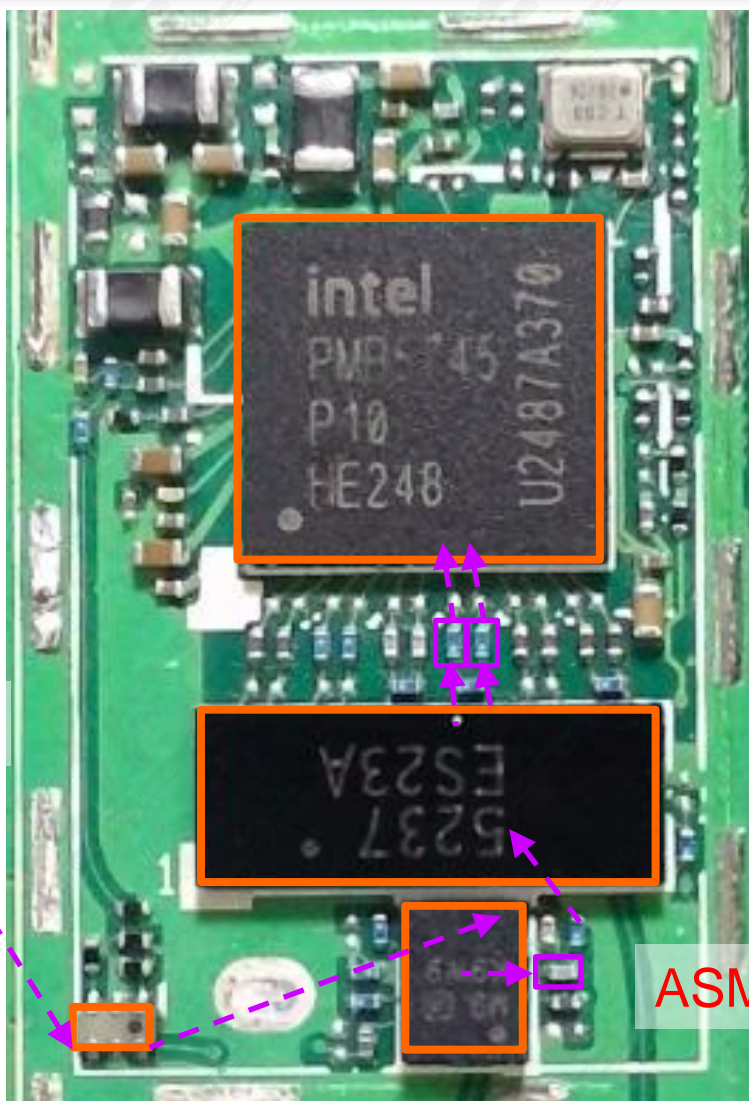


RF BOT

ASM in



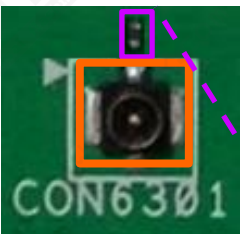
Band2/PCS1900 Rx Path



Key part 

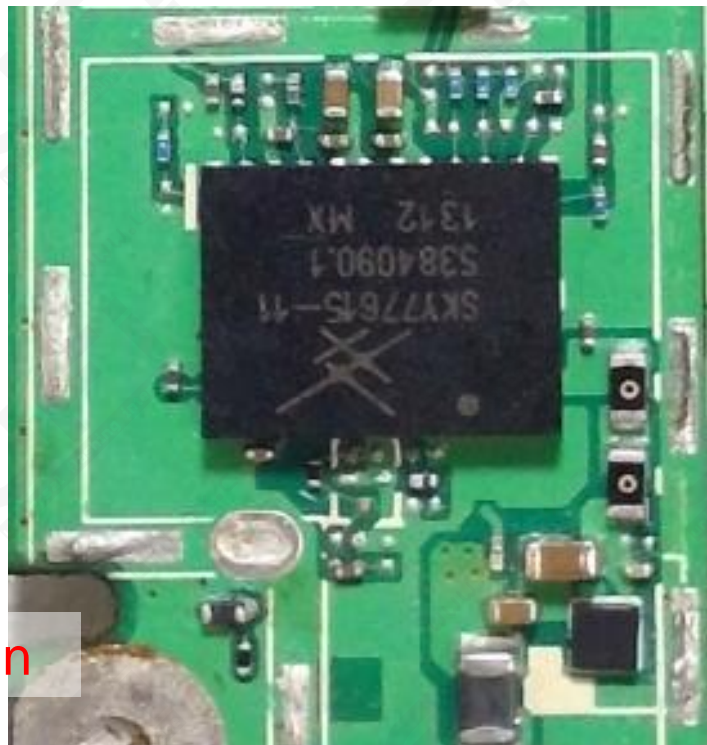
Test point 

ASM out

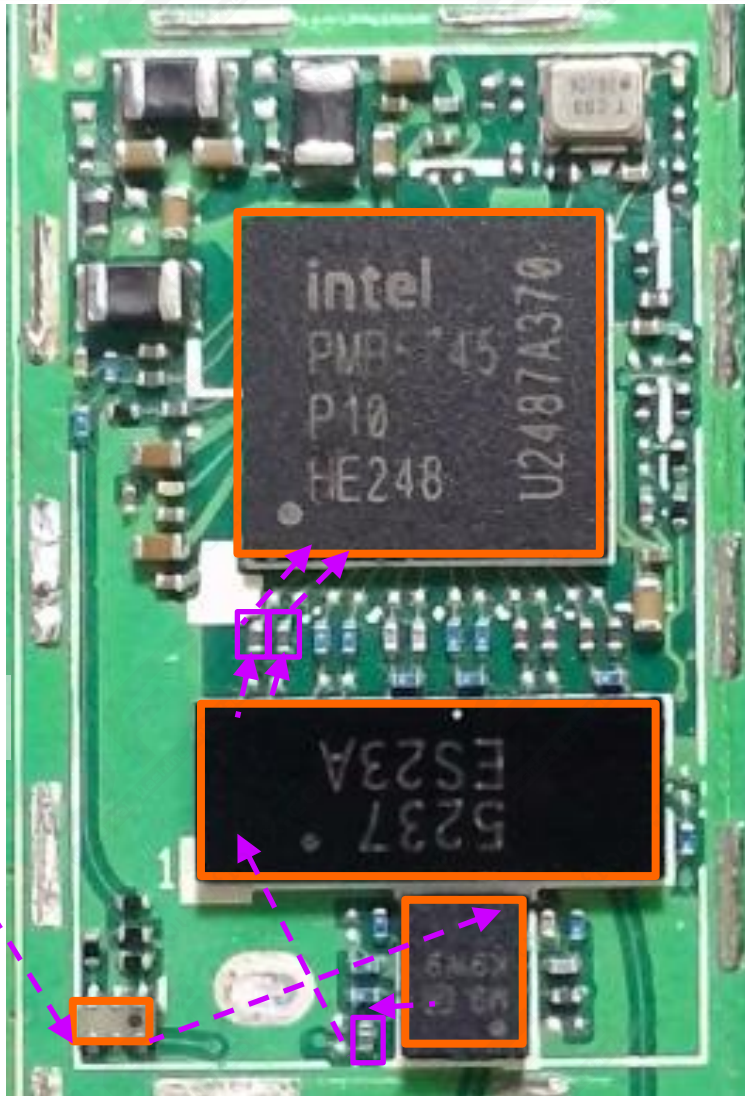


RF BOT

ASM in



Band5/GSM850 Rx Path



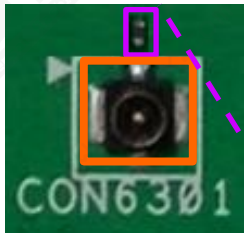
Key part



Test point

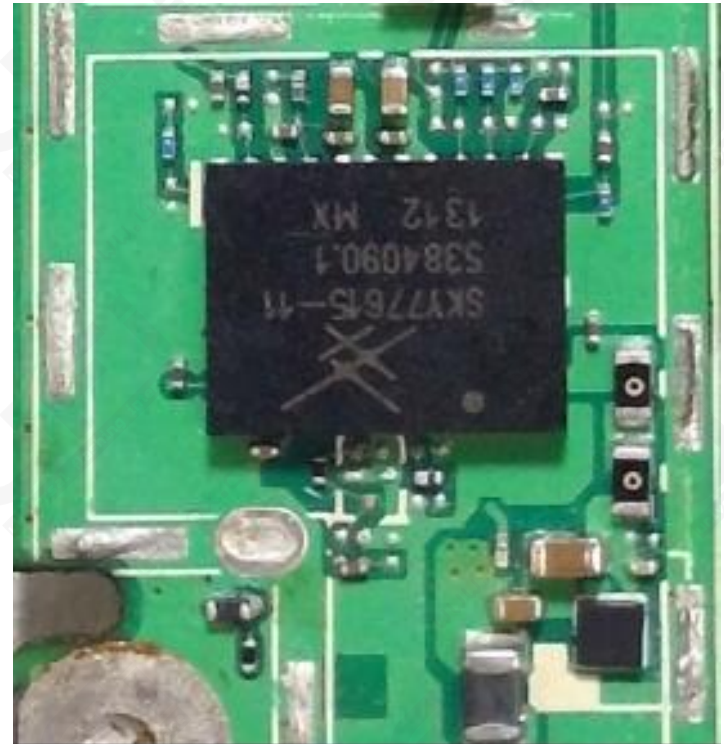


ASM out

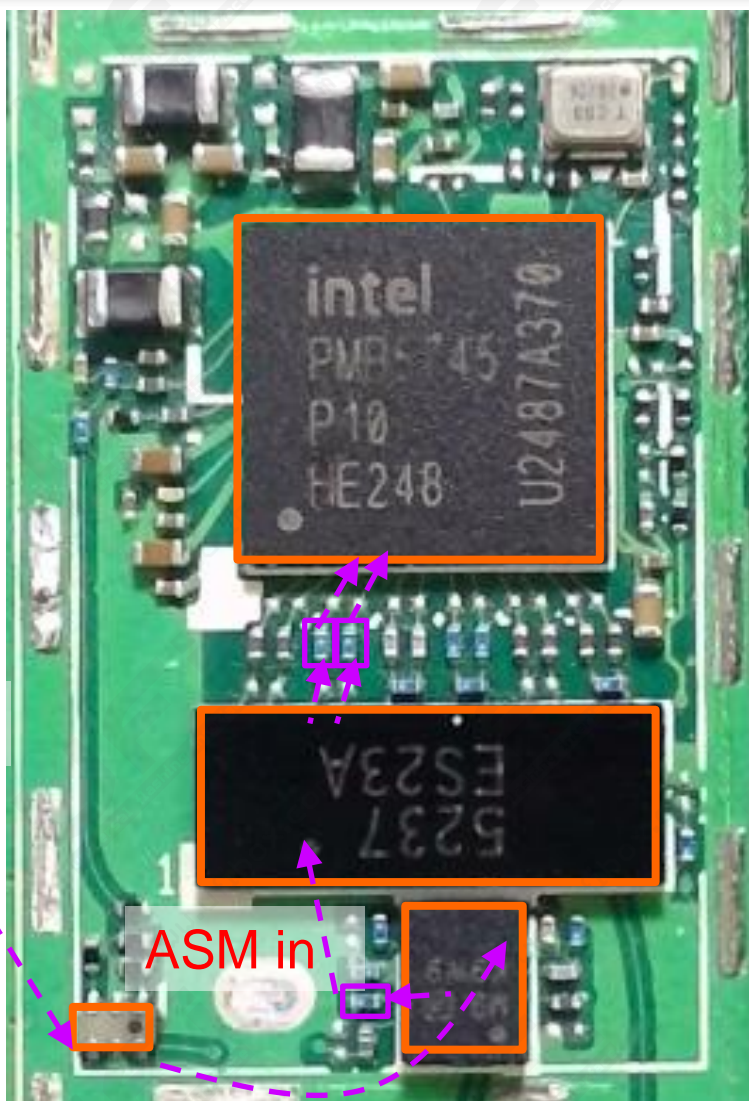


RF BOT

ASM in



Band8/EGSM900 Rx Path



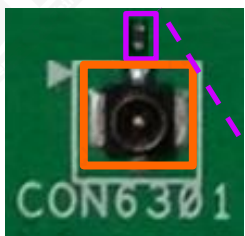
Key part



Test point



ASM out

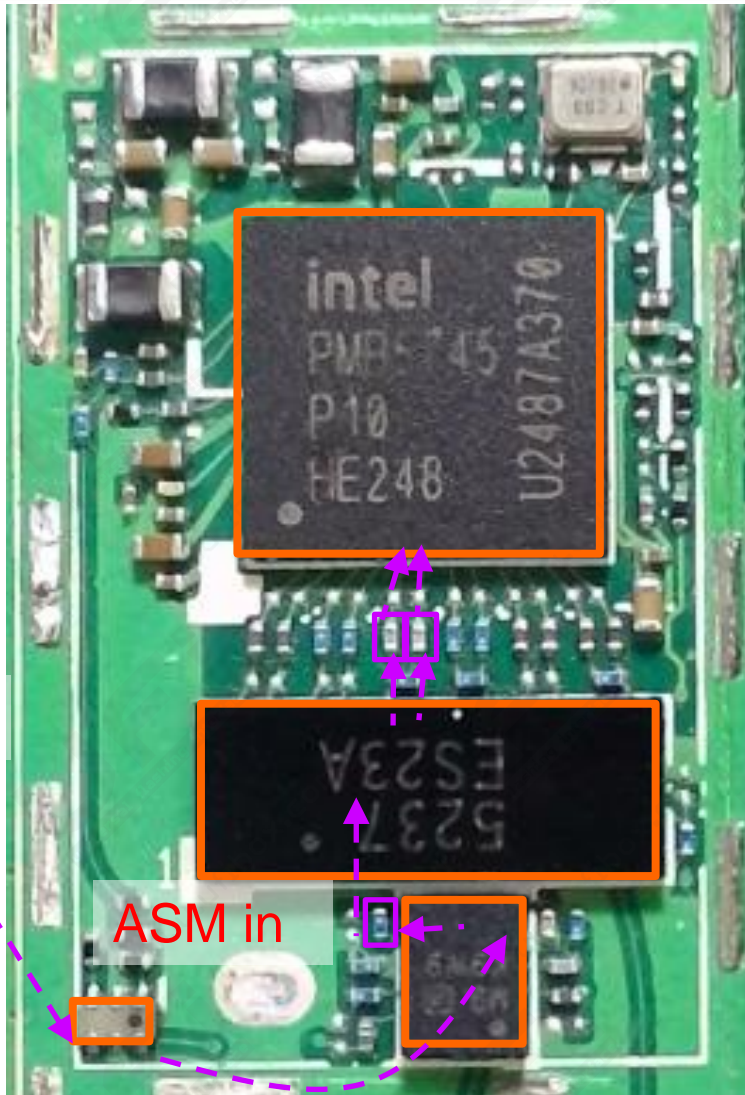


RF BOT

ASM in

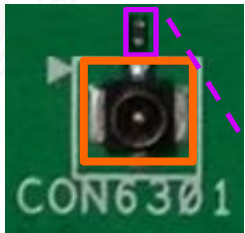


DCS1800 Rx Path

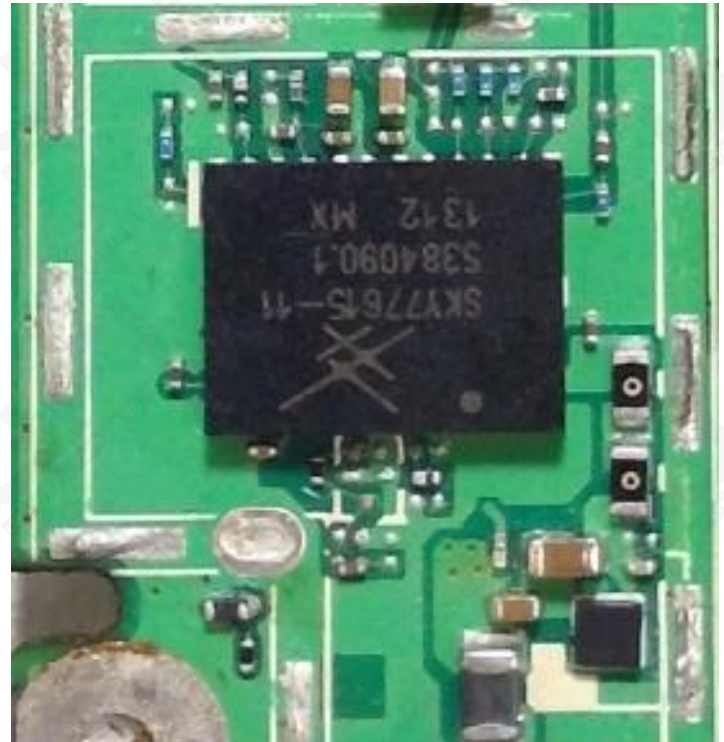


Key part 
Test point 

ASM out



RF BOT



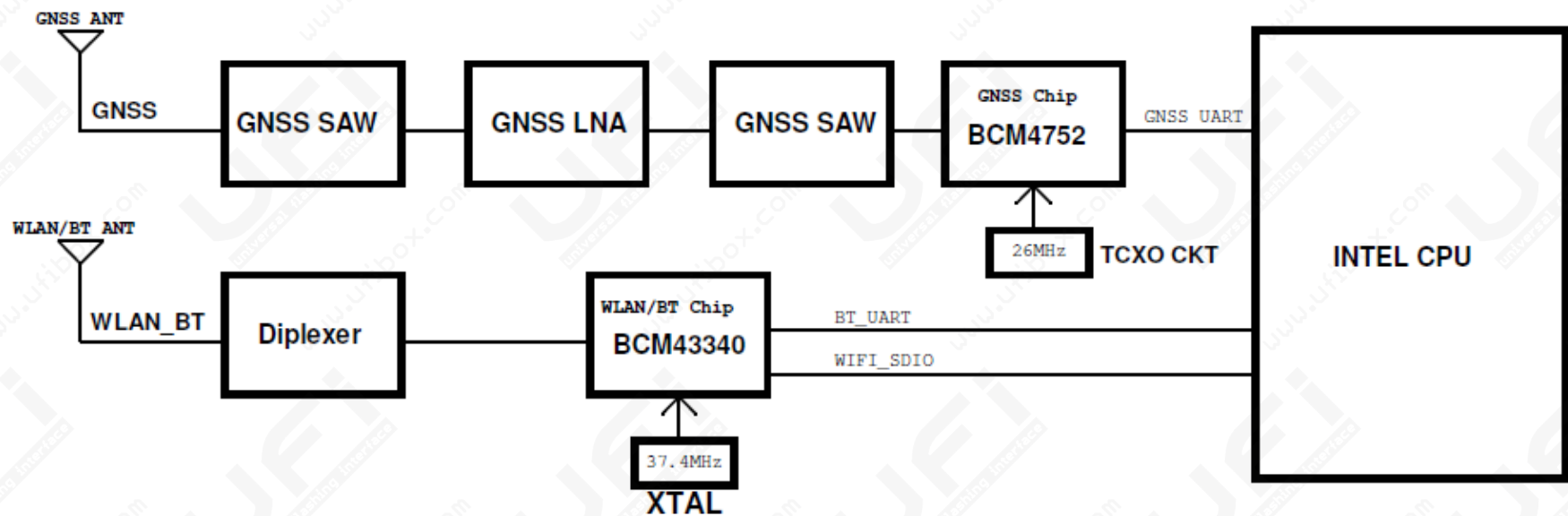
GSM and WCDMA BL Tx/Rx fail analysis

Analysis	Action
2G,3G Tx/Rx fail	re-calibrated
Tx Power fail	Check text context
	Check key part power have ok or not.
Rx RSSI/RSCP fail	exchange RFU6301(When the same band's Tx/Rx are fail)
	exchange RFU6502
	exchange RFU6401

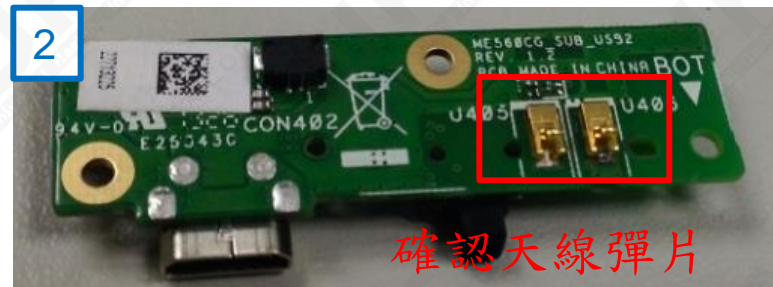
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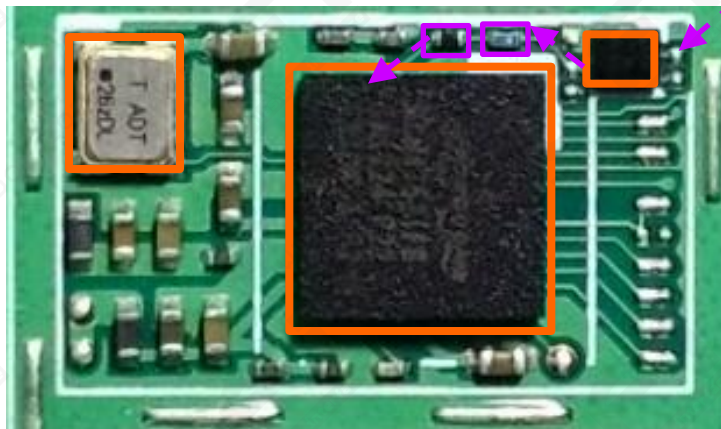
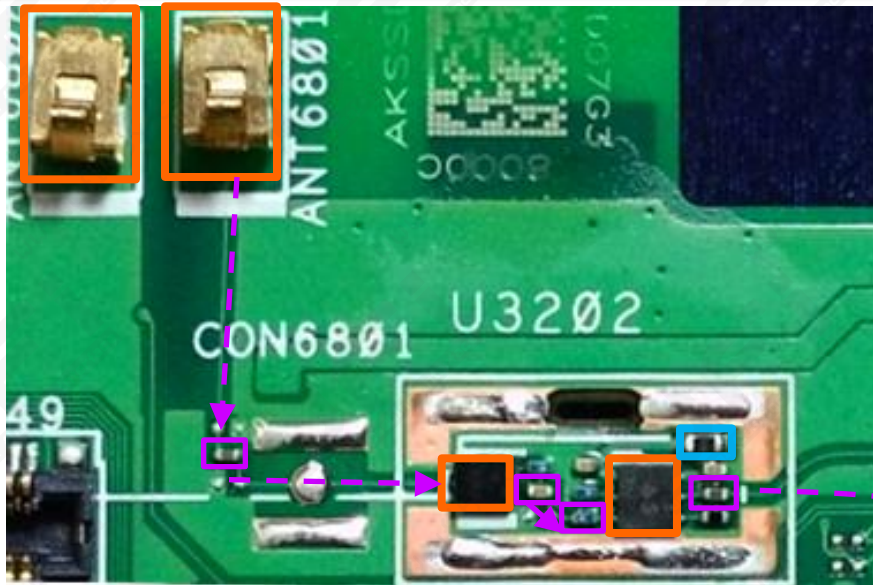
RF Block Diagram — GPS/BT/WiFi



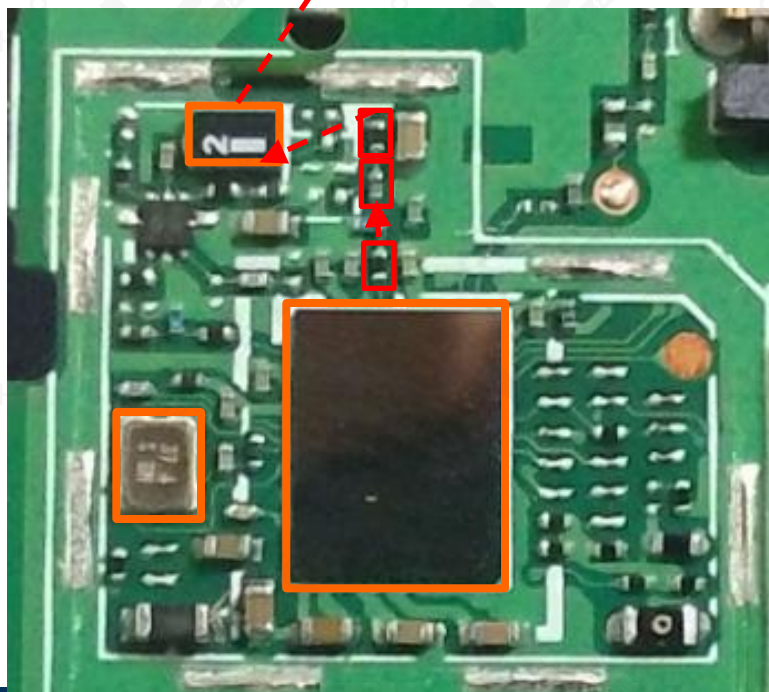
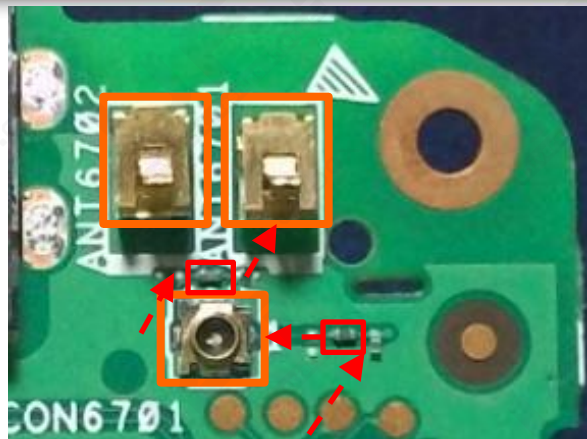
GSM and WCDMA FA Tx/Rx fail analysis



GPS Rx Path

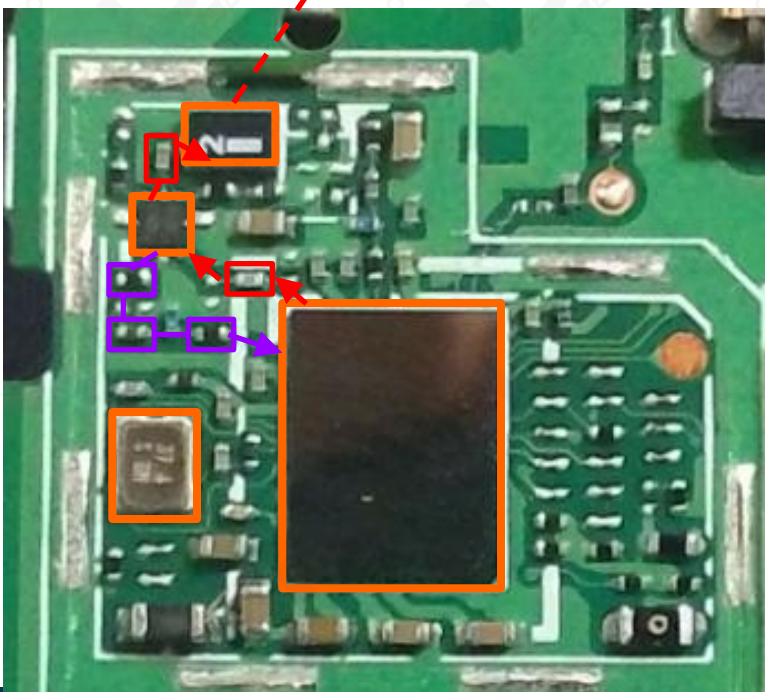
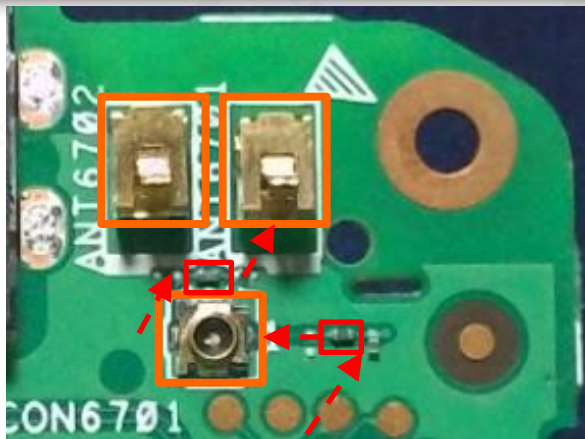


BT/WiFi(2.4GHz) RF Path



Key part	
Test point	

WiFi(5GHz) Tx/Rx RF Path



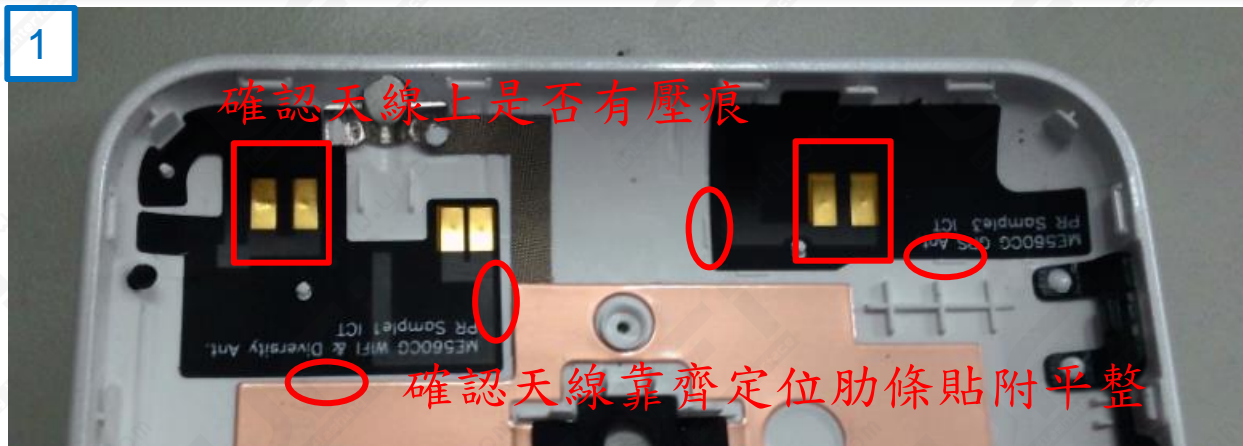
Key part	□
Tx Test point	□
Rx Test point	□

GPS and BT/WiFi BL Tx/Rx fail analysis

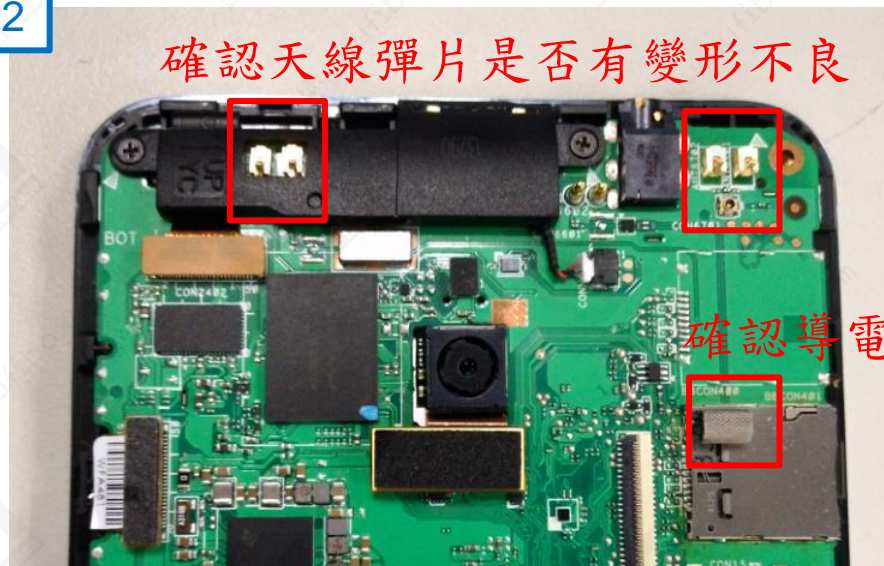
Error code	Analysis	Action
1108/1109	WIFI Tx Power fail	Check text context
		Check Power
		exchange RFU6702,RFU6701
		exchange U4101
1127	WIFI Rx fail	Check text context
		Check Power
		exchange RFU6702,RFU6701
		exchange U4101
8205/8206	GPS CN fail	Check text context
		Check Power
		exchange RFU6801,RFU6802,RFU6803
		exchange U4101,RFU6802

GPS and BT/WiFi FA Tx/Rx fail analysis

1



2



3



Thanks for Your attentions !

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