Table Of Contents

1. INTRODUCTION..... 3
1.1 Purpose
1.2 Regulatory Information

2. PERFORMANCE..... 4
2.1 Band Specification
2.2 HW Features
2.3 RSSI Display
2.4 Current consumption
2.5 Battery bar
2.6 SW Specification

3. TROUBLE SHOOTING.....12
3.1 Checking XO Block
3.2 Checking Transceiver DC Power Supply Circuit Block
3.3 Checking DC-DC Block
3.4 ASM(Antenna Switch Module) Block
3.5 GSM RF Part
3.6 WCDMA RF Part
3.7 LTE RF Part
3.8 Power
3.9 Charger
3.10 Audio Block
3.11 Checking LCD Block
3.12 Checking Touch Block
3.13 Checking accelmeter+compass sensor Block
3.14 Checking USB Block
3.15 Checking Main/VT camera Block
3.16 Connectivity RF PART

4. BLOCK DIAGRAM..... 74

5. CIRCUIT DIAGRAM..... 80

6. BGA PIN MAP..... 94

7. PCB LAYOUT..... 95

8. HIDDEN MENU..... 102

9. DOWNLOAD..... 105

10. CALIBRATION..... 106

11. DISASSEMBLE GUIDE..... 107

12. EXPLODED VIEW..... 108

13. REPLACEMENT PART LIST..... 109

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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

This material is prohibited to share and release to unauthorized person, in accordance with the regulations, LG Electronics, Civil / criminal responsibility in accordance with the relevant provisions violate.

B. Precautions for repair

- In case of Disassembly or Assembly to repair product, be careful of a product failure caused by RF signals and Static electricity.
- When using Magnetic tool for the Phone's SVC repair, you should check affect the Electric parts according to effect of Magnet.
- When fastening the screw, be careful not to damage the head of screw and even product.

C. Attention

Boards, which contain Electrostatic Sensitive Device (ESD), are indicated by the



Following information is ESD handling:

- Service personal should ground themselves by using a wrist, strap when exchange system board.
- When repair 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 board or parts like EEPROM to the Factory, use the protective package as described.

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2.1 Band Specification

Support Band	TX Freq (MHz)	RX Freq (MHz)
WCDMA(FDD1)	1920 – 1980	2110 – 2170
WCDMA(FDD5)	824 – 849	869 – 894
WCDMA(FDD8)	880 – 915	925 – 960
EGSM	880 – 915	925 – 960
GSM850	824 – 849	869 – 894
DCS1800	1710 – 1785	1805 – 1880
PCS1900	1850 – 1910	1930 – 1990
LTE3	1710 – 1785	1805 – 1880
LTE7	2500 – 2570	2620 – 2690
LTE28	703 – 748	758 - 803

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2.2 HW Features

List	Type / Spec.	
1. Phone Type	DOP Type	
2. Size	144.7mm x 71.5mm x 8.7mm	
3. Weight	140 g (with Battery)	
4. Battery	**2,125mAh(Typ) (Li-Ion)**, 2,045mAh(Min.)	
5.Chipset	MT6735 1.3GHz Quad core	
6. Memory	16GB(EMMC) + 1,024MB(LPDDR3) External Memory(SD Card) : Up to 32GB	
7. LCD	Size	5 inch
	Display Type	Active matrix TFT, Transmissive Type
	Color	16.7M colors
	Resolution	1280(H) X 720(V), 294ppi
8. Touch	Type	5 inch Capacitive type/ In-cell
9. Main Camera (5M)	Type	CMOS image sensor
	Resolution	2592(H) X 1944(V) pixels.
	Image Scaling Down	5M(2560x1920), W4M(2560x1536)), 3M(1920x1920), 1M(1280x960)
	Format	**Image :** JPG, **Video :** MP4

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2.2 HW Features

10. Audio	Receiver	12 X 06 X 2.5T Receiver
	Speaker	16 X 12 X 2.6T Speaker
	Format	MP3, AAC, MIDI, EAAC+, OGG, AMR
11. Bluetooth	Standard	Bluetooth 4.2
	Effective Distance	10M
	Distance	0 m ~ 10 m (depend on environment)
12. WLAN	Standard	IEEE 802.11 b/g/n
	Throughput	Max 40Mbps (SDIO Driver performance)
	Depend on environment	0 ~ 50m (depend on environment)
13. GPS	type	A-GPS, GLONASS
14. FM	type	FM Radio, 3.5pi Ear-jack

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2.3 RSSI Display

RSSI BAR	GSM RSSI	WCDMA RSSI	LTE RSSI	Comment
BAR 5->4	- 90dBm± 3dB	- 84dBm± 4dB	-85dBm ± 4dB	1. Call Connected & CPIPH Level=-3.3
BAR 4->3	- 95dBm± 3dB	- 89dBm± 4dB	-95dBm ± 4dB	
BAR 3->2	- 98dBm± 3dB	- 95dBm± 4dB	-105dBm ± 4dB	
BAR 2->1	- 102dBm± 3dB	- 99dBm± 4dB	-115dBm ± 4dB	
BAR 1->0	- 104dBm± 3dB	- 105dBm± 4dB	-128dBm ± 4dB	

2.4 Current consumption

	Specification		
	GSM	WCDMA	LTE
1. Sleep Mode (Sleep & Idle Avg)	8mA↓@ P.P 5	8mA↓@ DRX 7	8mA↓@ 2.56s
2. Standby (With Earjack)	10mA↓@ P.P 5	10mA↓@ DRX 7	10mA↓@ 2.56s
3. Standby (BT Connected)	10mA↓	10mA↓	10mA↓
4. Talk Mode	-GSM LVL0 : 400mA↓@ Avg	-Max Pwr : 650mA↓@Avg -Tx 10dBm : 260 mA↓@ Avg	-Max Pwr(LCD Off) 850mA↓@Avg -Tx 10dBm(LCD Off) 400mA↓@ Avg
5. No SVC Mode	200mA↓	200mA↓	200mA↓
6. Power Off Mode	1mA↓	1mA↓	1mA↓

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2.5 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%
Bar 10 -> Bar 9	48% -> 47%		

※Cut Off Voltage : 3.45 ± 0.1 V

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2.6 SW Specification

Item	Feature	Comment
RSSI	0 ~ 5 Levels	
Battery Charging	0 ~ 20 Levels	
Key Volume	0 ~ 7 Level	
Audio Volume	0 ~ 15 Level	
Time / Date Display	Yes	
Multi-Language	Yes	depending on build language
Quick Access Mode	Phone / Messaging / QuickMemo/ Gallery / Camera	
PC Sync	Yes	LG Bridge
Speed Dial	Yes	Voice mail center -> 1 key
Profile	Yes	not same with feature phone setti ng
CLIP / CLIR	Yes	
Phone Book	Name / Number / Email / Groups / Post al addresses / Organizations / IM / Note / Nickname / Website / Event /	There is no limitation on the num ber of items. It depends on available memory a mount.
Last Dial Number	Yes	
Last Received Number	Yes	
Last Missed Number	Yes	
Search by Number/Name	Yes	
Group	Yes	There is no limitation on the num ber of items. It depends on available memory a mount.
Fixed Dial Number	Yes	
Service Dial Number	No	
Own Number	Yes	My Profile (add/edit/delete are su pported)

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2.6 SW Specification

Voice Memo	Yes	Support voice recorder
Call Reminder	No	
Network Selection	Automatic	
Mute	Yes	
Call Divert	Yes	
Call Barring	Yes	
Call Charge (AoC)	No	
Call Duration	Yes	
SMS (EMS)	There is no limitation on the number of items. It depends on available memory amount.	EMS does not support.
SMS Over GPRS	Yes	
EMS Melody / Picture Send / Receive / Save	No	
MMS MPEG4 Send / Receive / Save	Yes	➢ **Send / Receive** : Yes ➢ **Save** : depends on content type Support video content type list 1. video/mp4 2. video/h263 3. video/3gpp2 video/3gpp
Long Message	MAX 2000 characters	The standard of Open vender
Cell Broadcast	Yes	CB app supports Cell Broadcast message
Download	Over the Web	
Game	No	
Calendar	Yes	
Memo	Yes	There is no limitation on the number of items. It depends on available memory amount.
World Clock	Yes	

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2.6 SW Specification

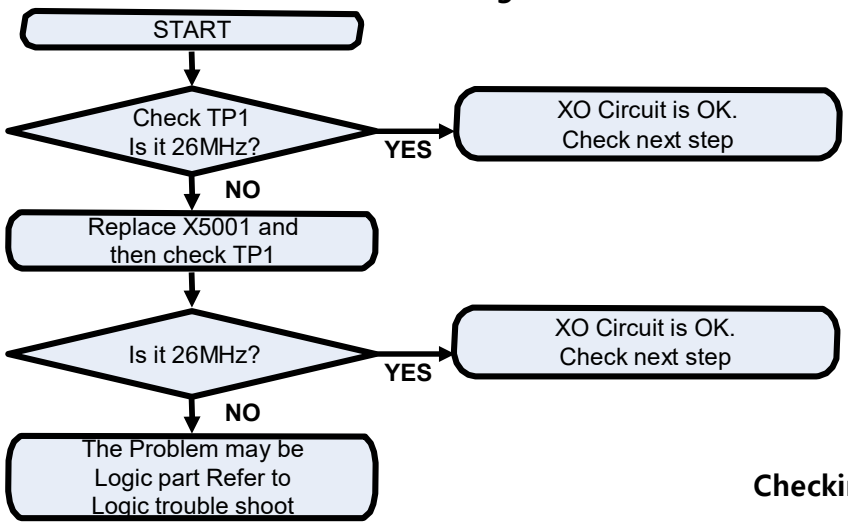
Unit Convert	No	
Stop Watch	Yes	
Wall Paper	Yes	
WAP Browser	No	WAP stack and wml are not supported.
Download Melody / Wallpaper	Yes	Ringtone and wallpaper can be downloaded in LG SmartWorld app.
SIM Lock	No	
SIM Toolkit	Yes	
MMS	Yes	Google MMS Client
EONS	Yes	
CPHS	Yes	V4.2
ENS	No	
Camera	Yes	8M AF / Digital Zoom : x4
JAVA	No	
Voice Dial	No	US English only
IrDa	No	IrRC
Bluetooth	Yes	Ver. 4.2
FM radio	Yes	
GPRS	Yes	Class 12
EDGE	Yes	Class 12(Rx only)
Hold / Retrieve	Yes	
Conference Call	Yes	Max. 6
DTMF	Yes	
Memo pad	No	
TTY	No	
AMR	Yes	
SyncML	No	
IM	Yes	Google Hangout
Email	Yes	

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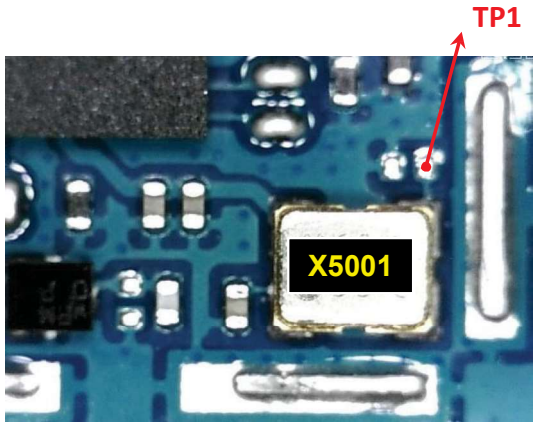
3.1 Checking XO Block

The out put frequency(26MHz) of VTCXO(X5001) is used as the reference one of MT6169

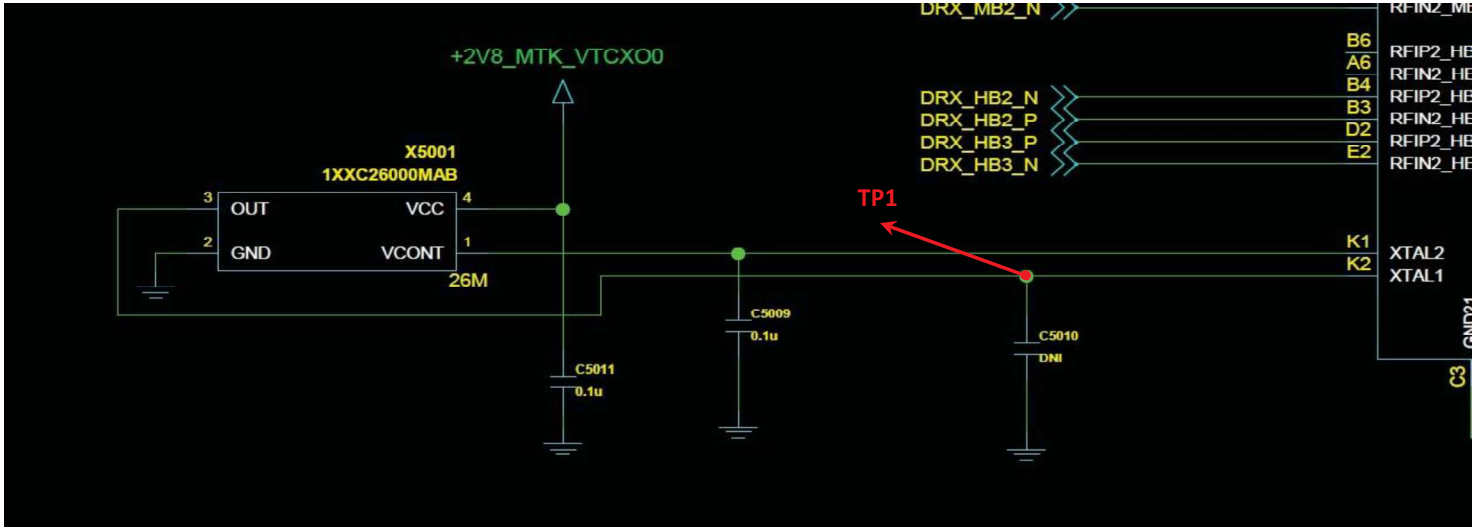
Checking Flow



Image



Checking Flow

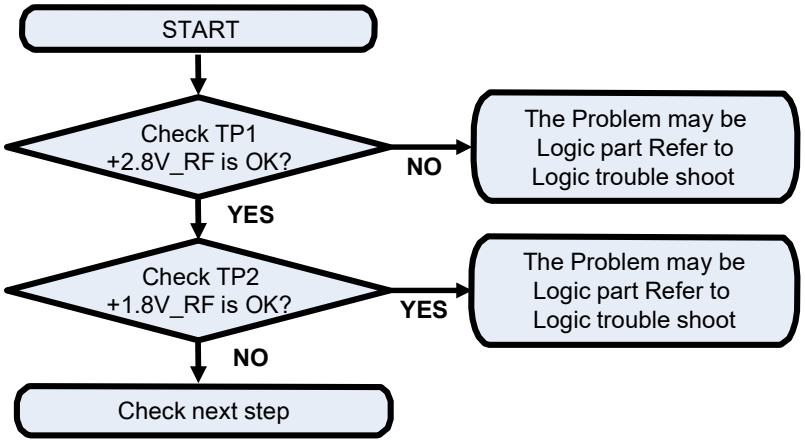


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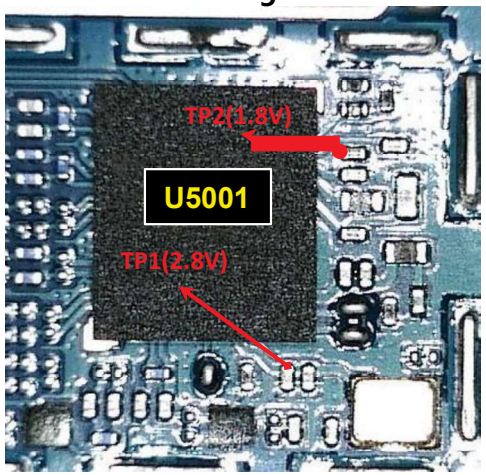
3.2 Checking Transceiver DC Power Supply Circuit Block

The MT6169 operating voltages used two voltage sources 1.8V and 2.8V

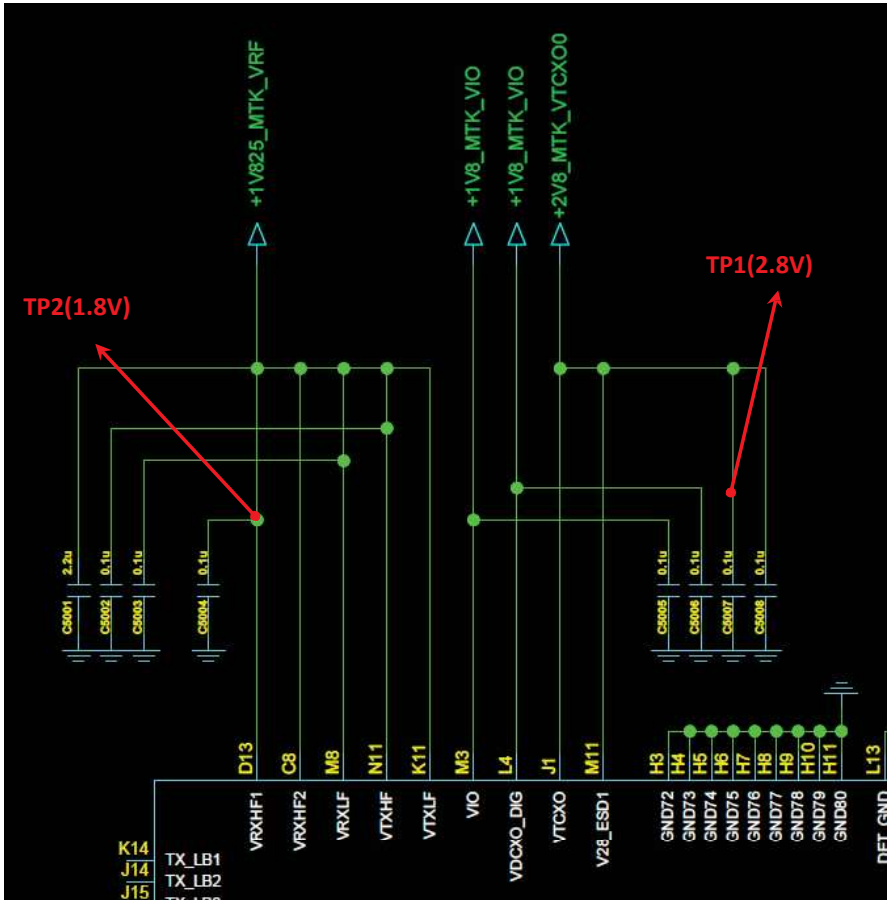
Checking Flow



Image



Circuit Diagram

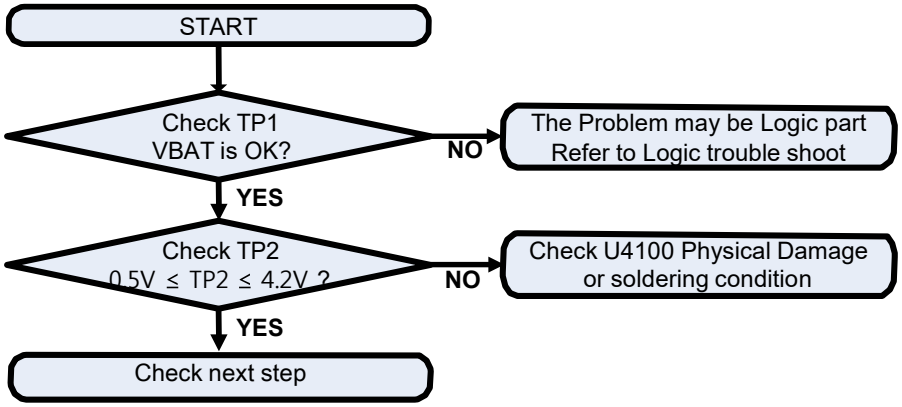


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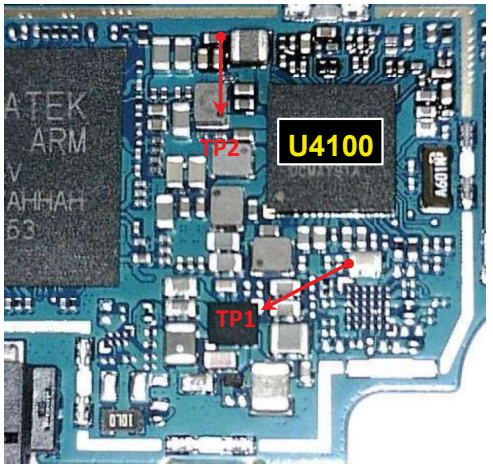
3.3 Checking DC-DC Block

The DC-DC(MT6328, U4100) output voltages is used as the reference one of SKY77643-31

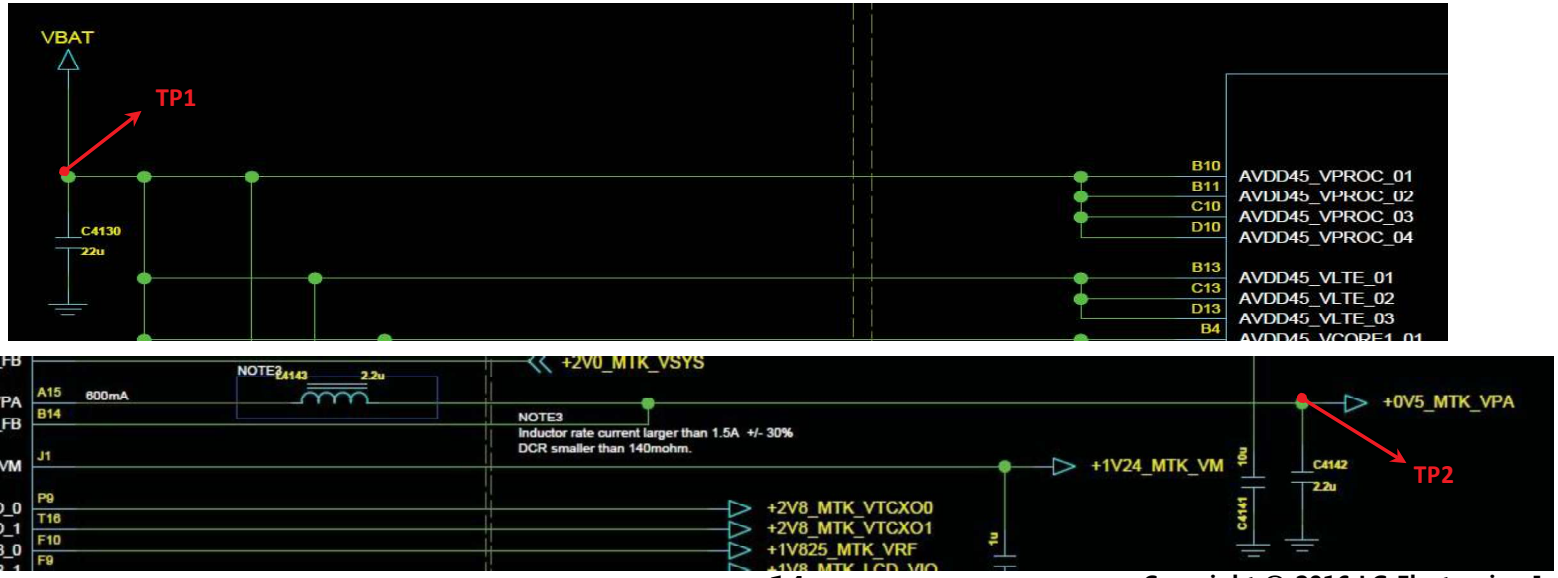
Checking Flow



Image



Circuit Diagram

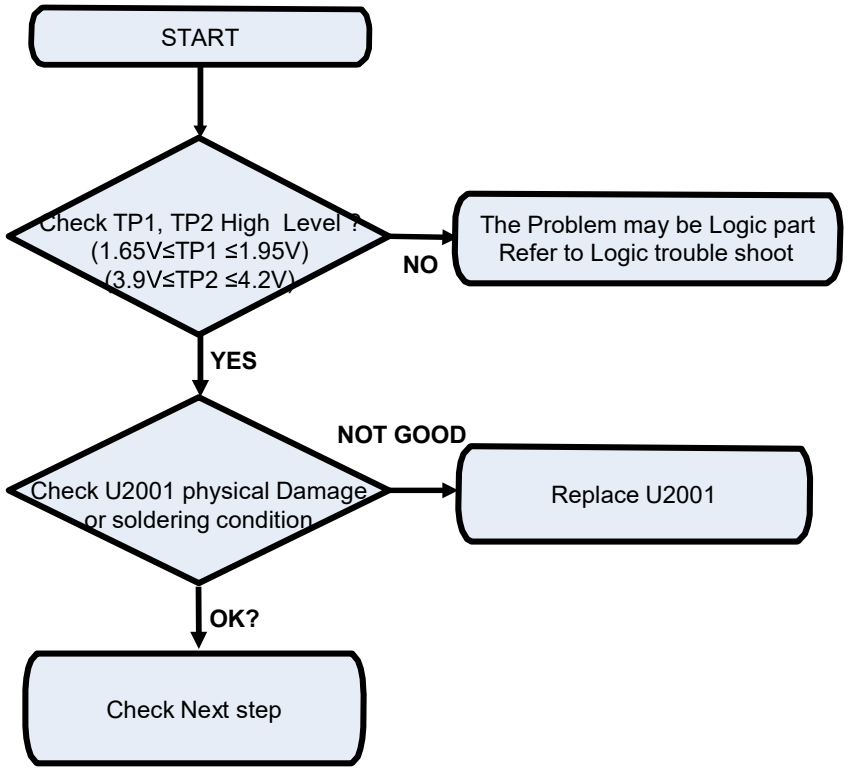


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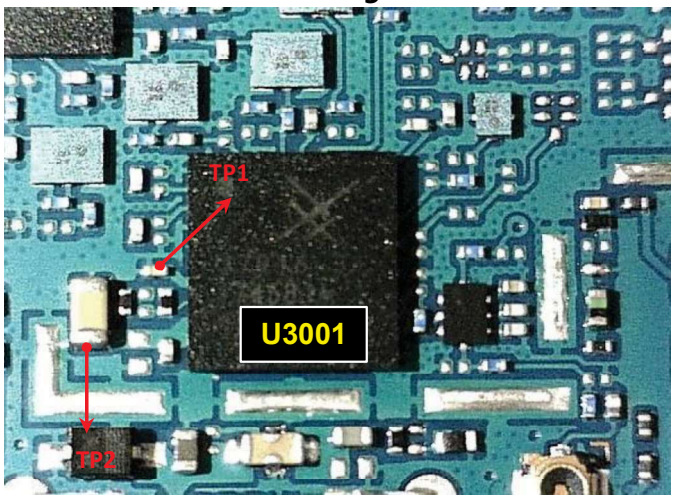
3.4 ASM(Antenna Switch Module) Block

3.4.1 Checking ANT #1 ASM (GSM 850/900, W B5/8, LTE B7/28)

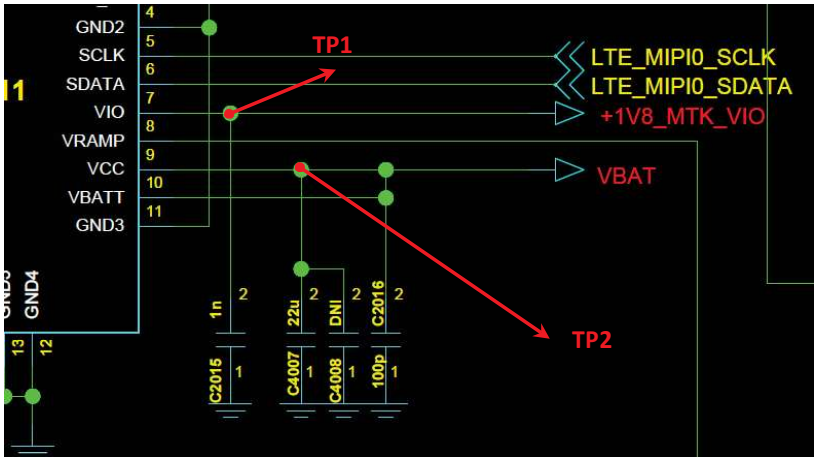
Checking Flow



Image



Circuit Diagram

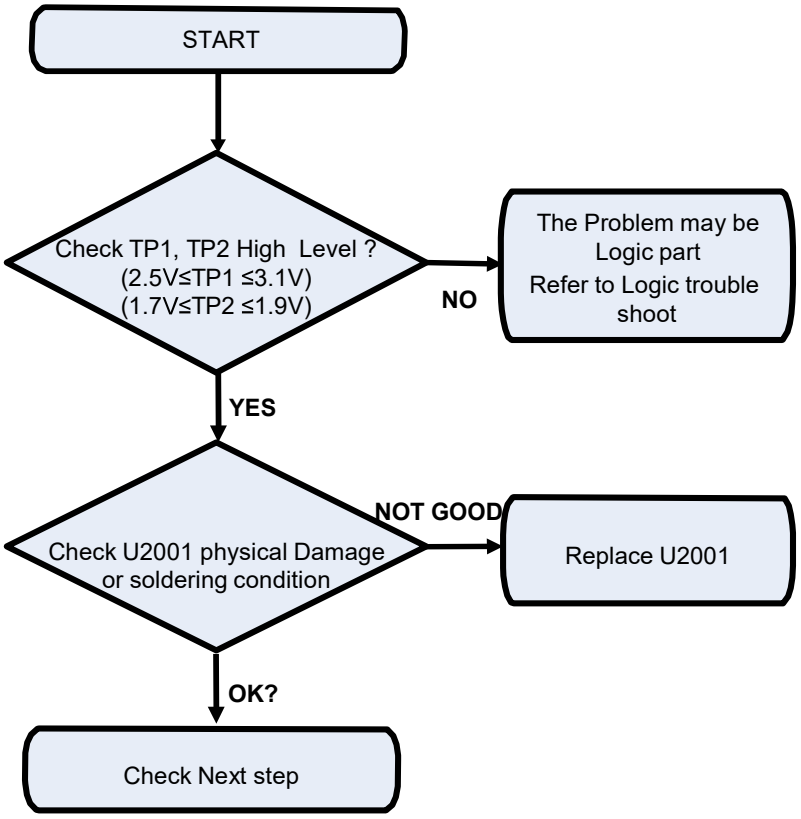


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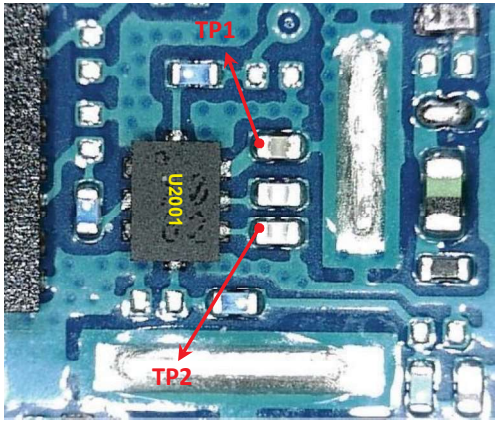
3.4 ASM(Antenna Switch Module) Block

3.4.2 Checking ANT #2 ASM (GSM 1800/1900, W B1 B2, LTE B3)

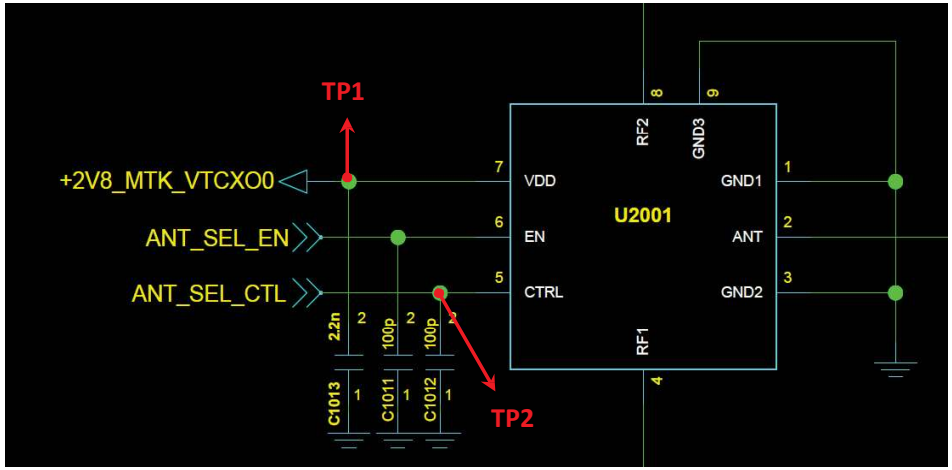
Checking Flow



Image



Circuit Diagram

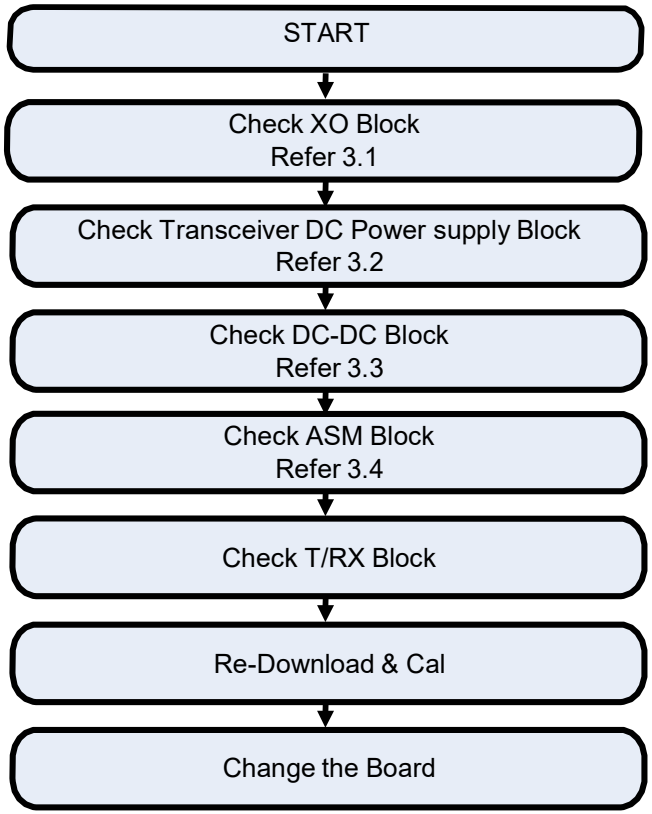


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3.5 GSM RF PART

GSM RF Part support GSM850/900/1800/1900 with ASM, PAM, Transceiver component

Checking Flow

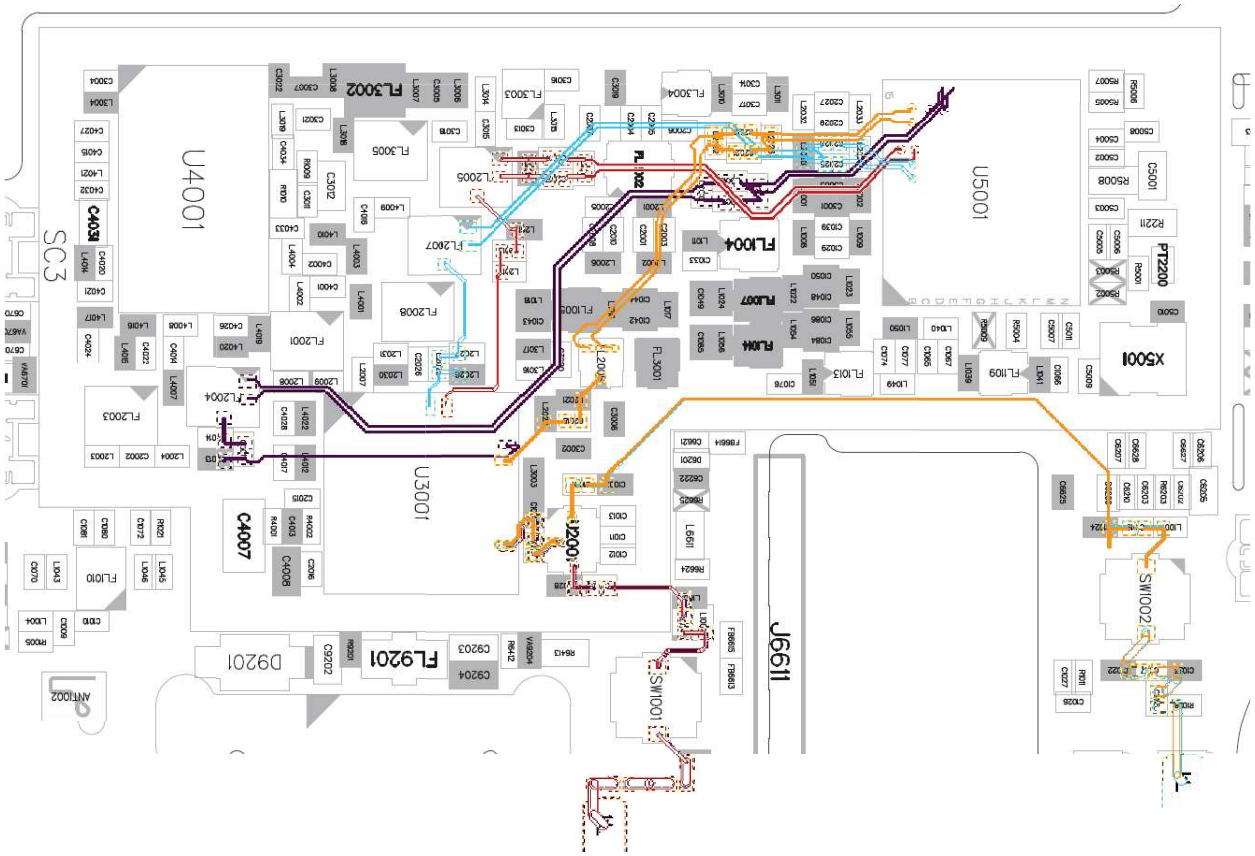


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3.5 GSM RF PART

3.5.1 GSM RF Part RX RF PATH

GSM850 RX PATH
GSM900 RX PATH
GSM1800 RX PATH
GSM1900 RX PATH

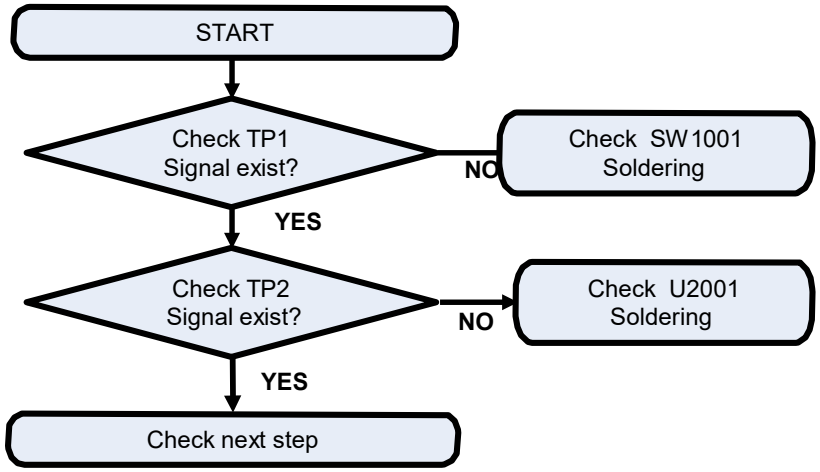


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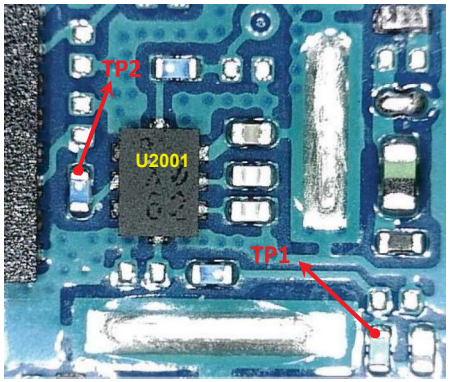
3.5 GSM RF PART

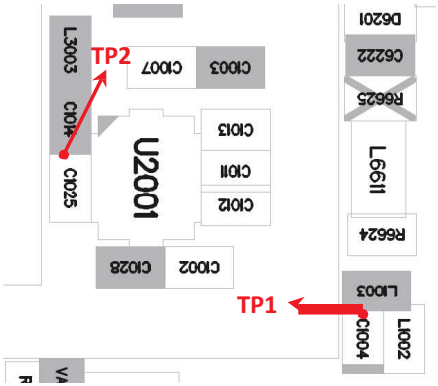
3.5.2 Checking RF Signal RX path(SW, GSM850/900)

Checking Flow

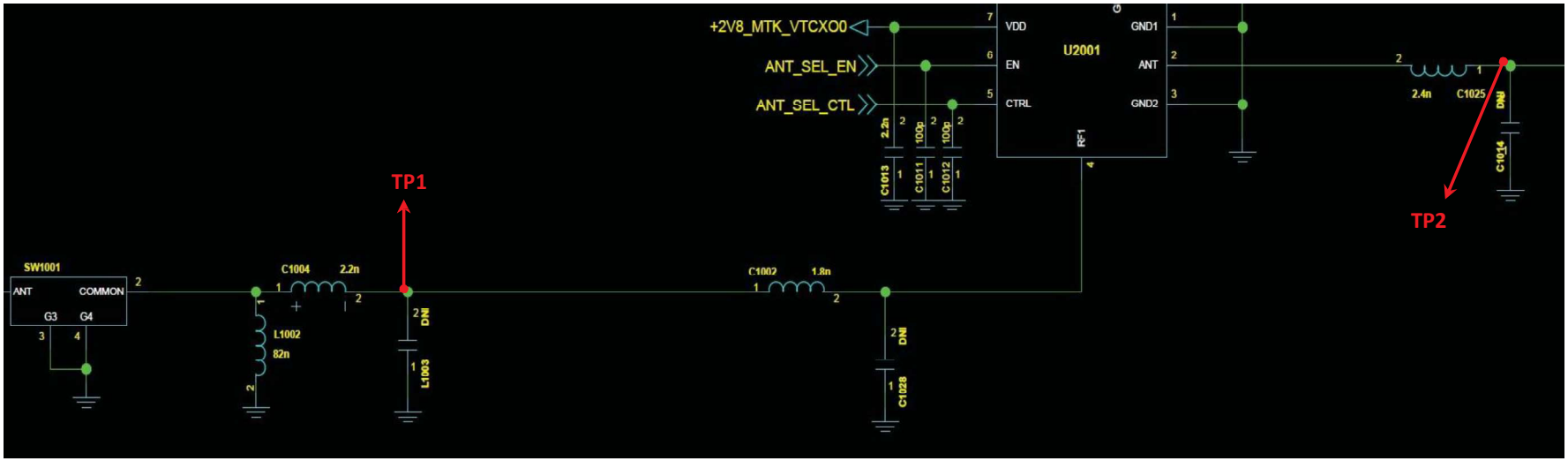


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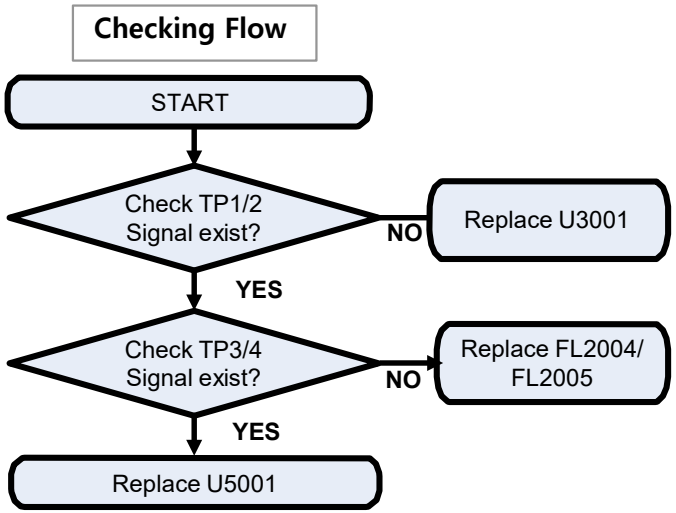
Circuit Diagram



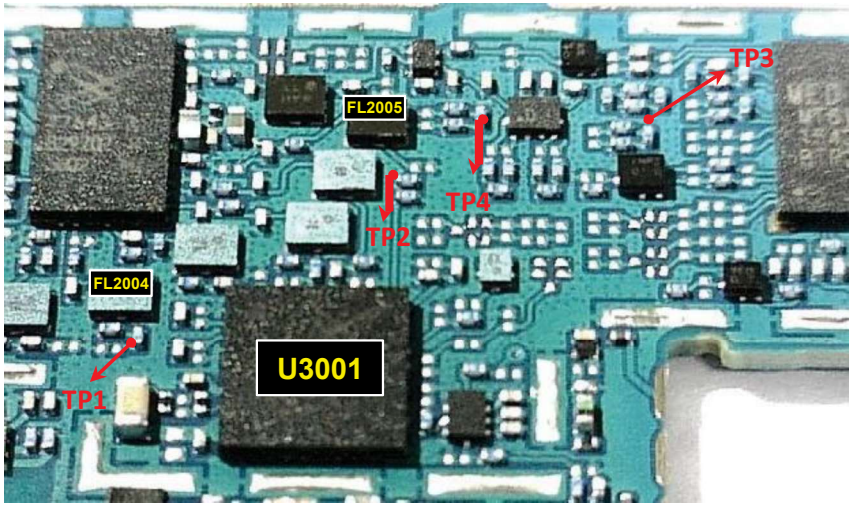
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3.5 GSM RF PART

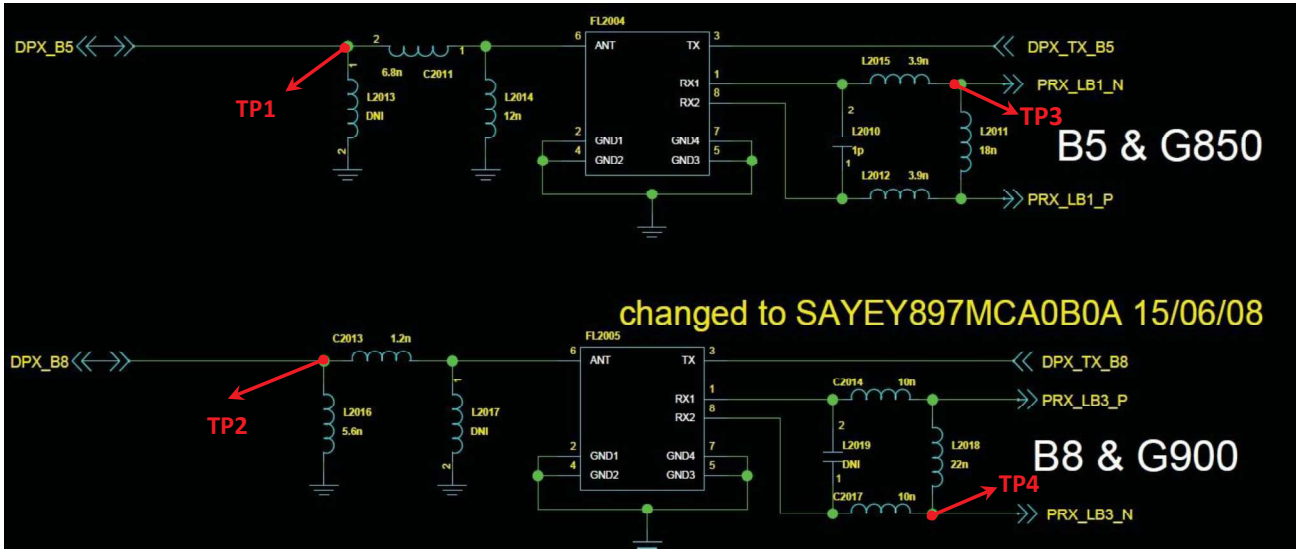
3.5.3 Checking RF Signal RX path(GSM850/900)



Image



Circuit Diagram

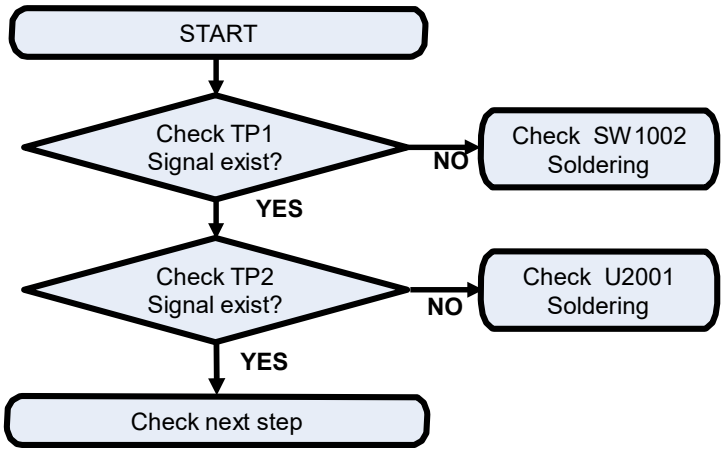


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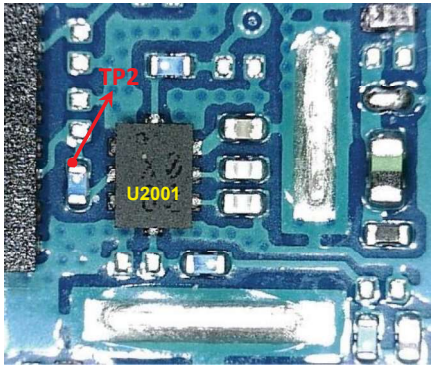
3.5 GSM RF PART

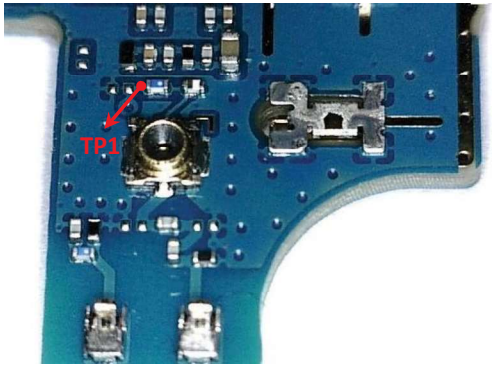
3.5.4 Checking RF Signal RX path(GSM1800/1900)

Checking Flow

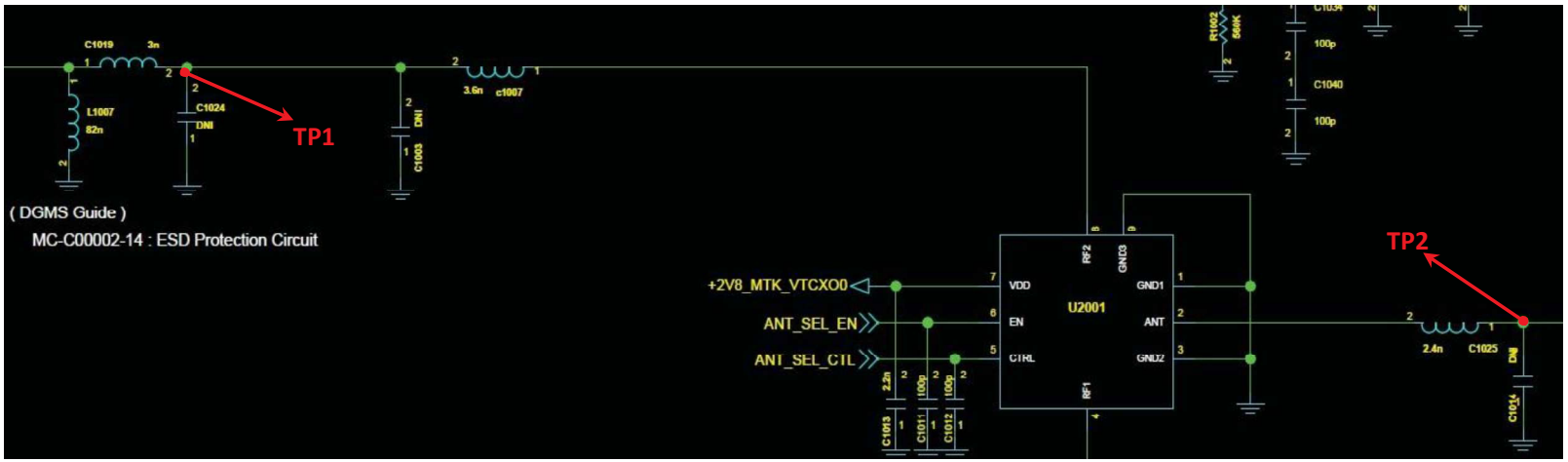


Image





Circuit Diagram

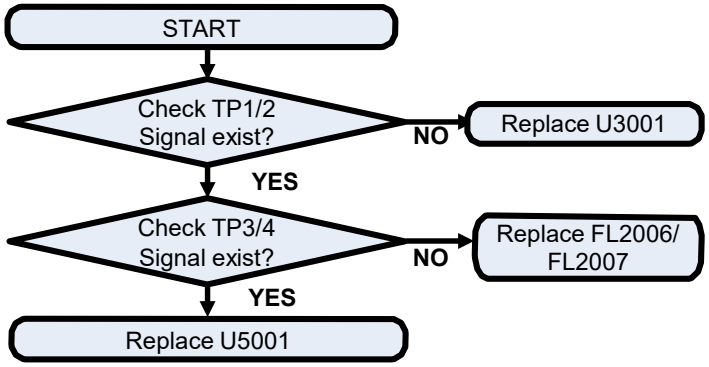


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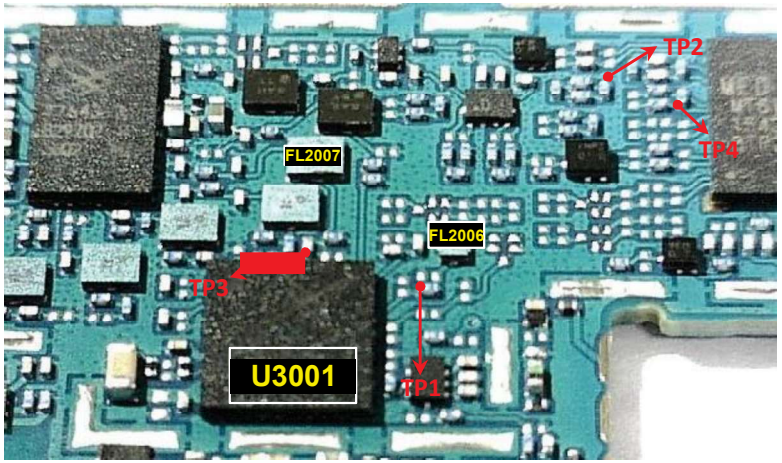
3.5 GSM RF PART

3.5.5 Checking RF Signal RX path(GSM1800/1900)

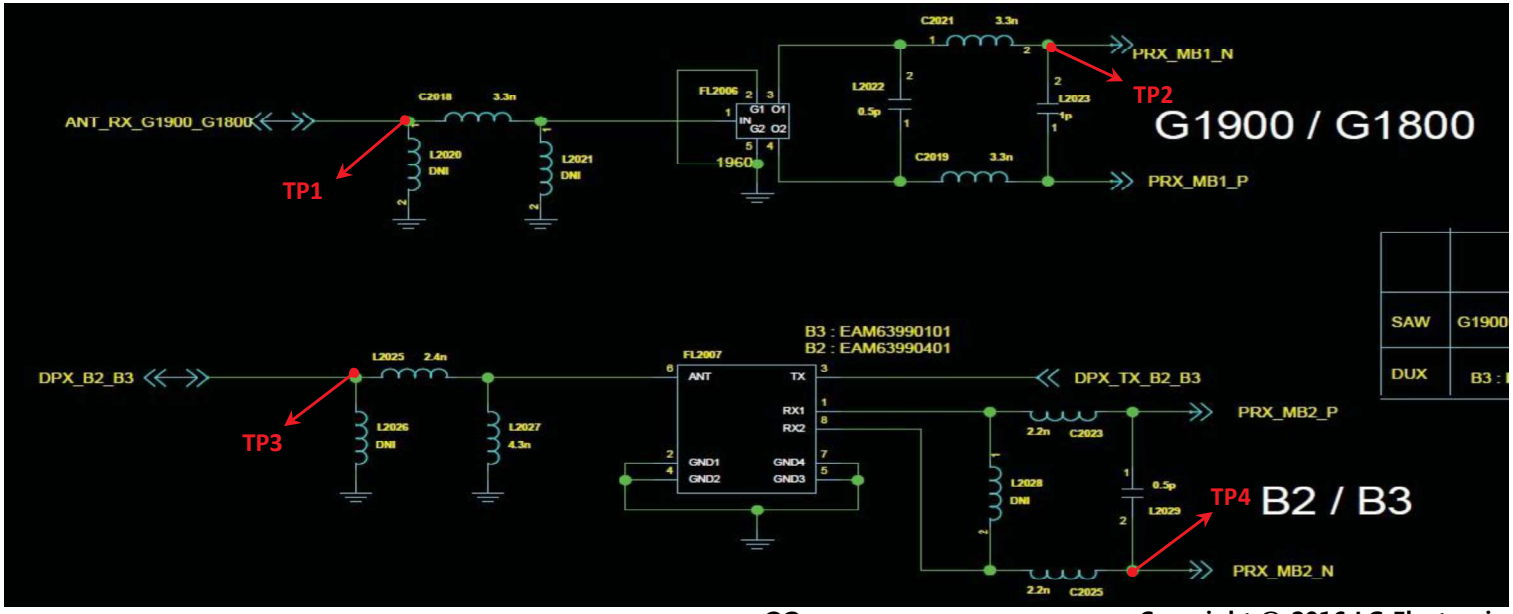
Checking Flow



Image



Circuit Diagram

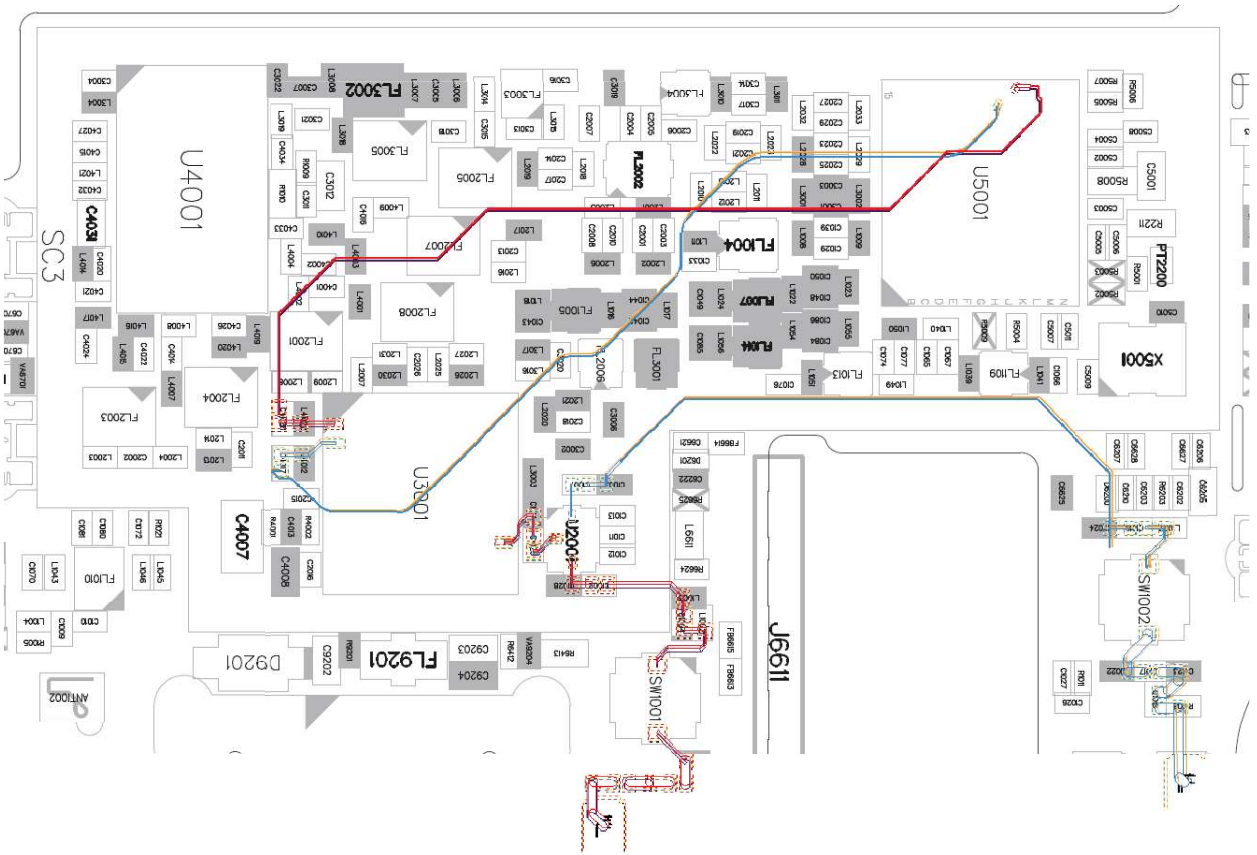


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3.5 GSM RF PART

3.5.6 GSM RF Part TX RF PATH

GSM850 TX PATH
GSM900 TX PATH
GSM1800 TX PATH
GSM1900 TX PATH

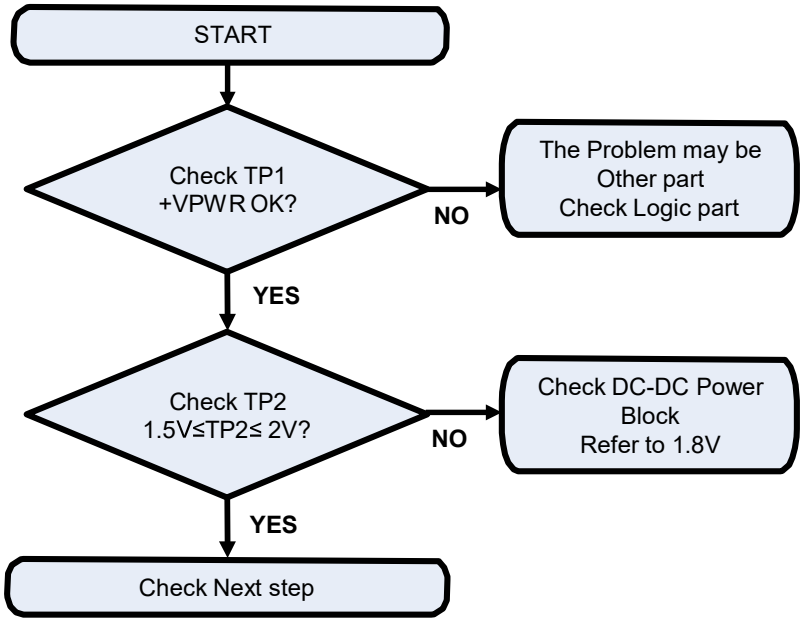


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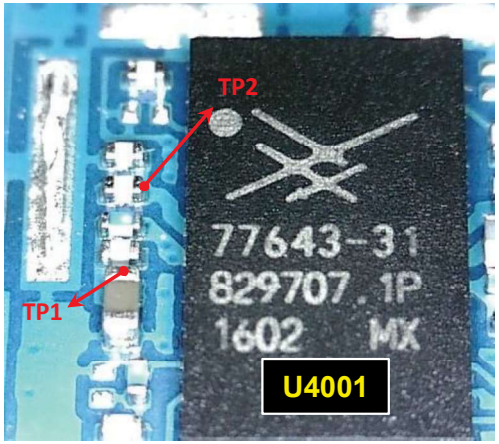
3.5 GSM RF PART

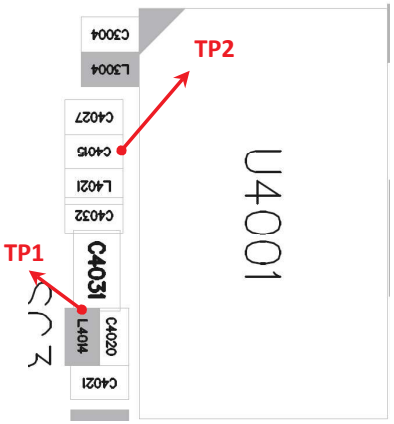
3.5.7 Checking GSM PAM DC Power Circuit

Checking Flow

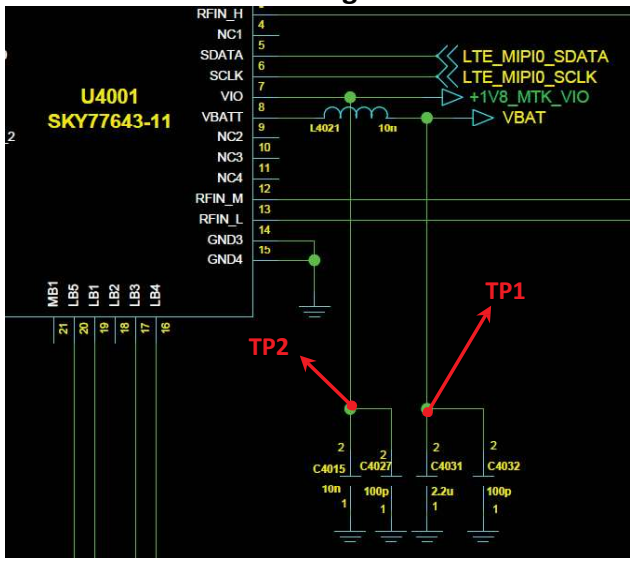


Image





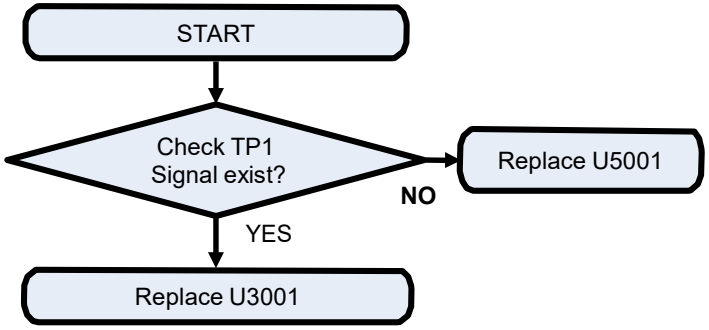
Circuit Diagram



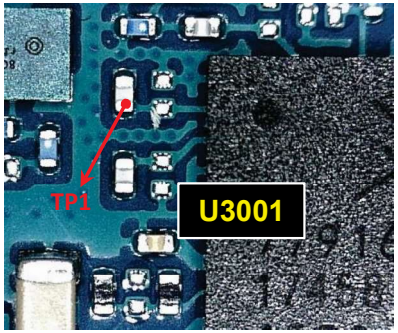
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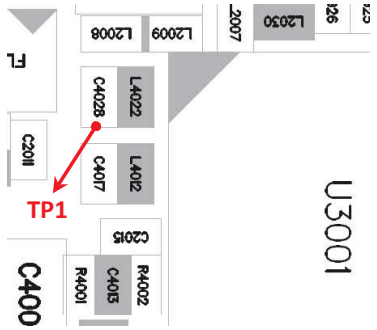
3.5 GSM RF PART
3.5.8 Checking RF Signal TX path(GSM850/900)

Checking Flow

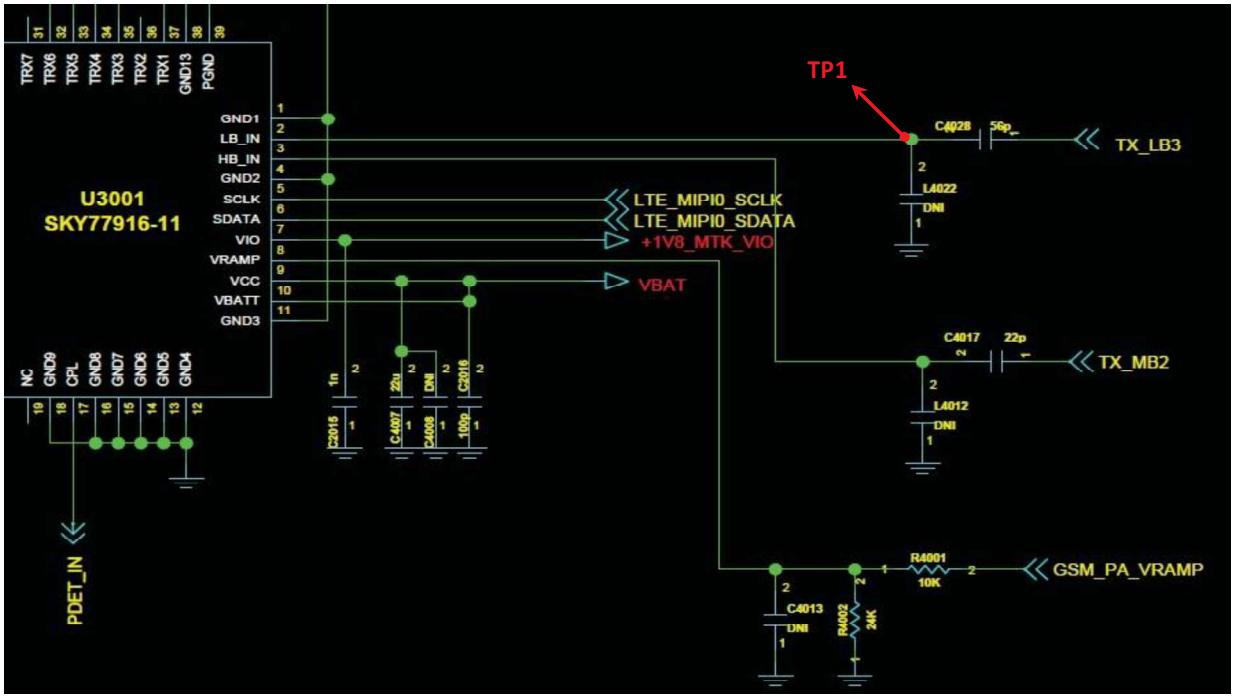


Image





Circuit Diagram

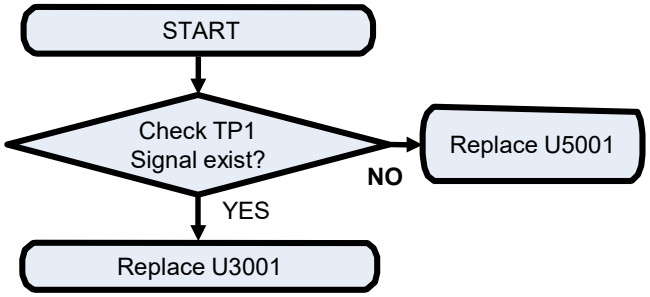


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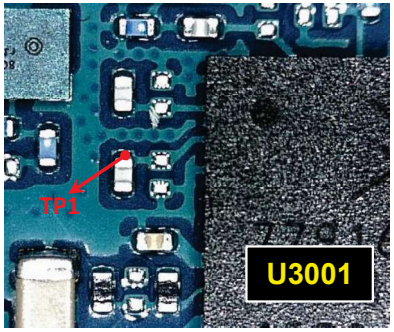
3.5 GSM RF PART

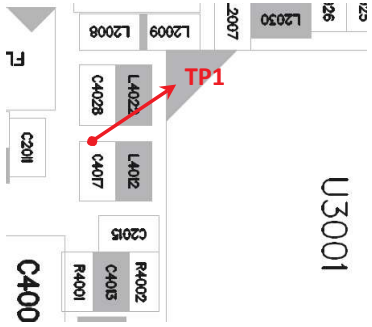
3.5.9 Checking RF Signal TX path(GSM1800/1900)

Checking Flow

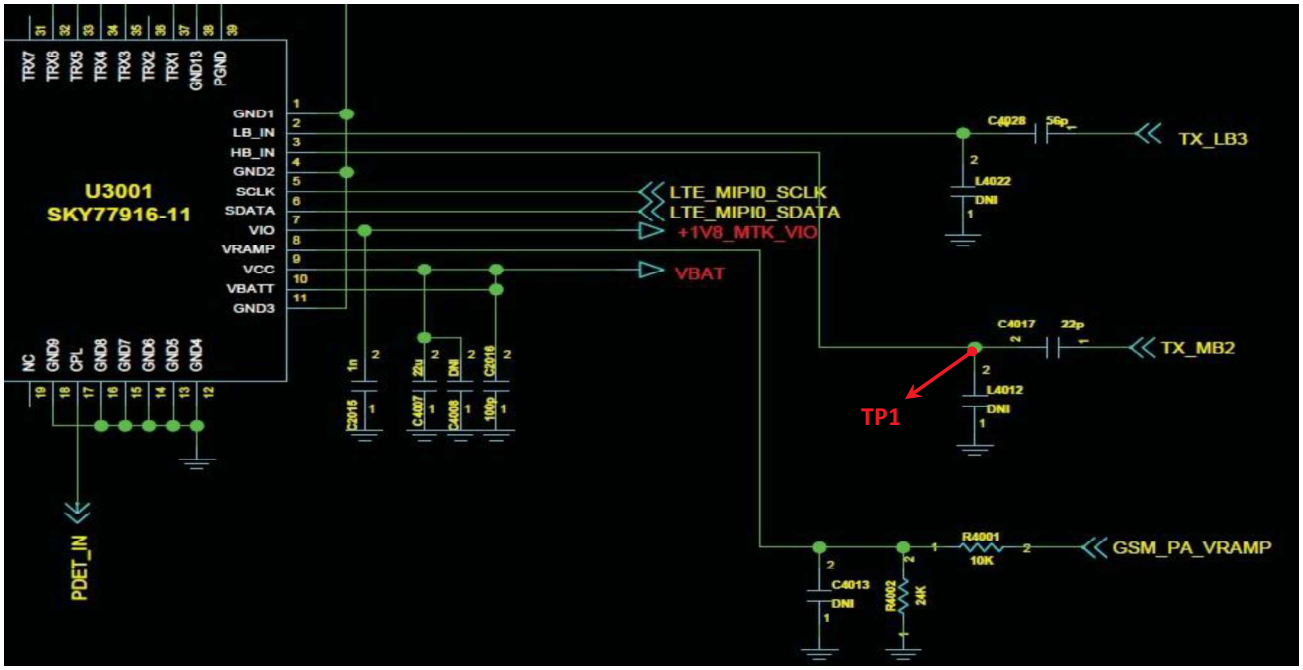


Image





Circuit Diagram

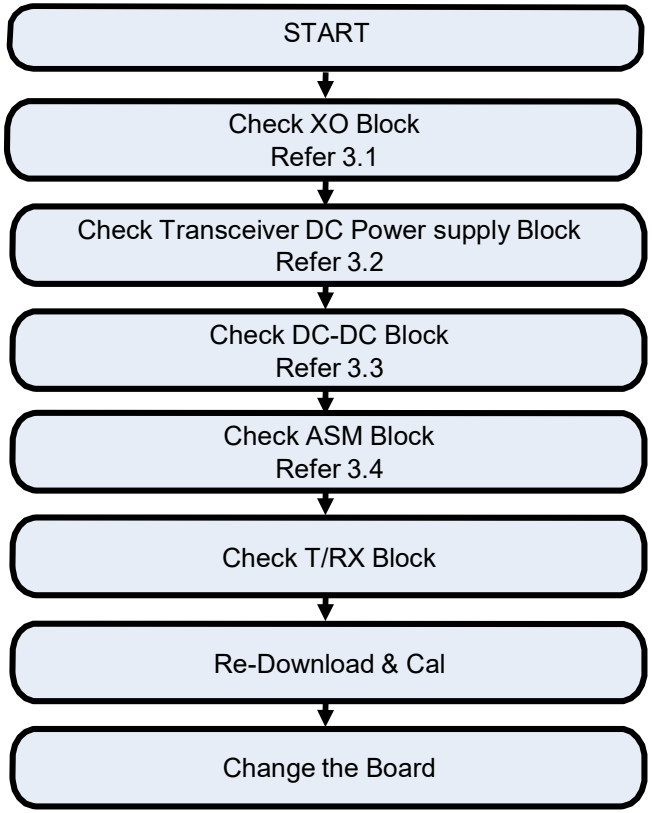


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3.6 WCDMA RF PART

WCDMA RF Part support WCDMA B1/2/5/8 with ASM, PAM, Transceiver component

Checking Flow

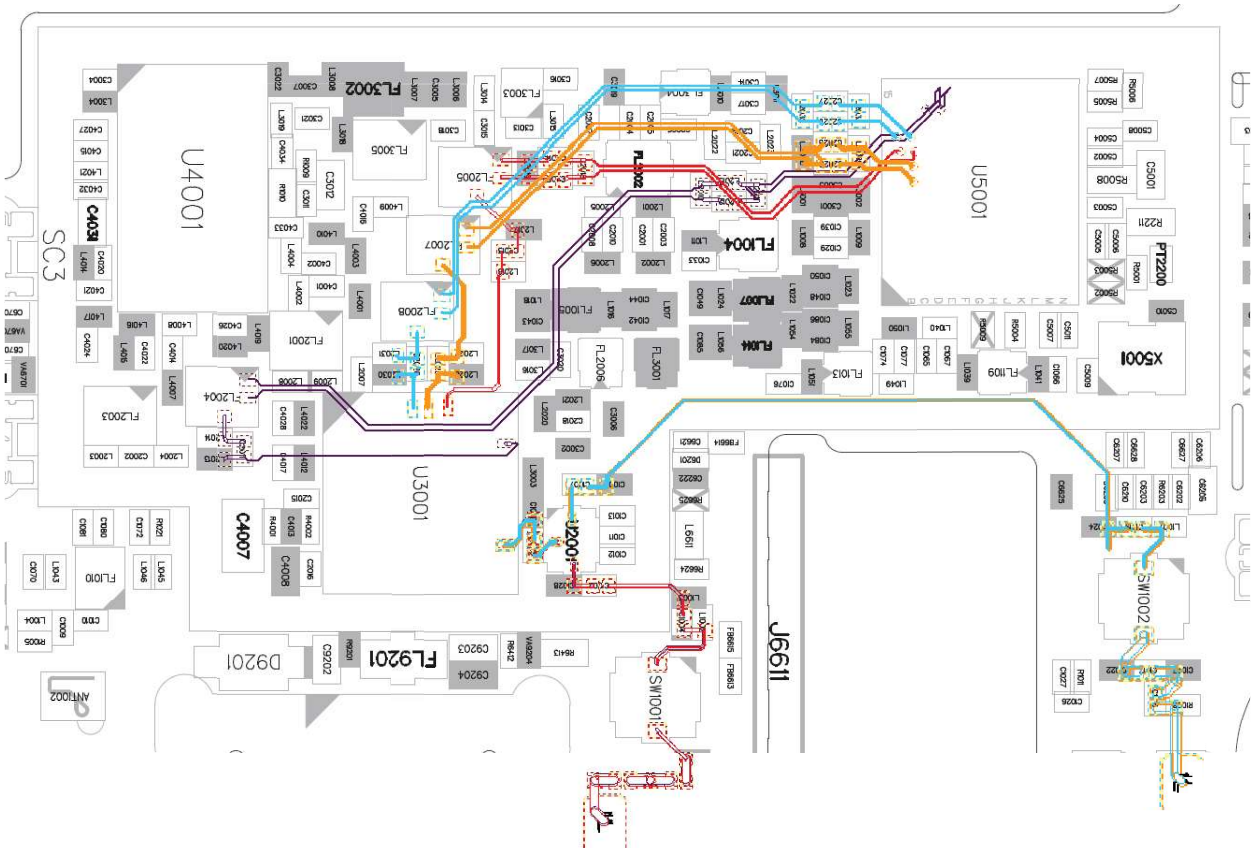


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3.6 WCDMA RF PART

3.6.1 WCDMA RF Part RX RF PATH

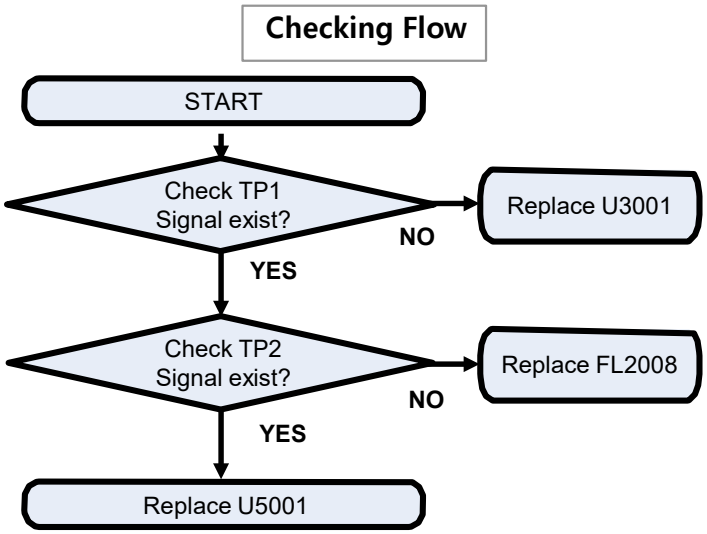
WCDMA B5 RX PATH
WCDMA B8 RX PATH
WCDMA B1 RX PATH
WCDMA B2 RX PATH



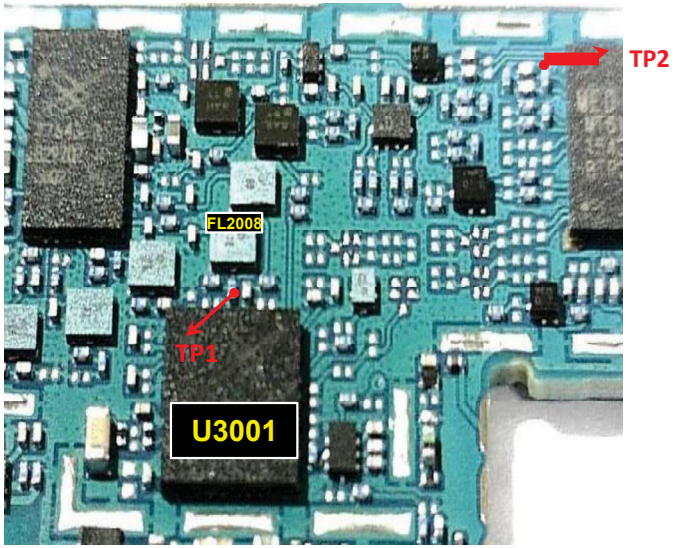
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3.6 WCDMA RF PART

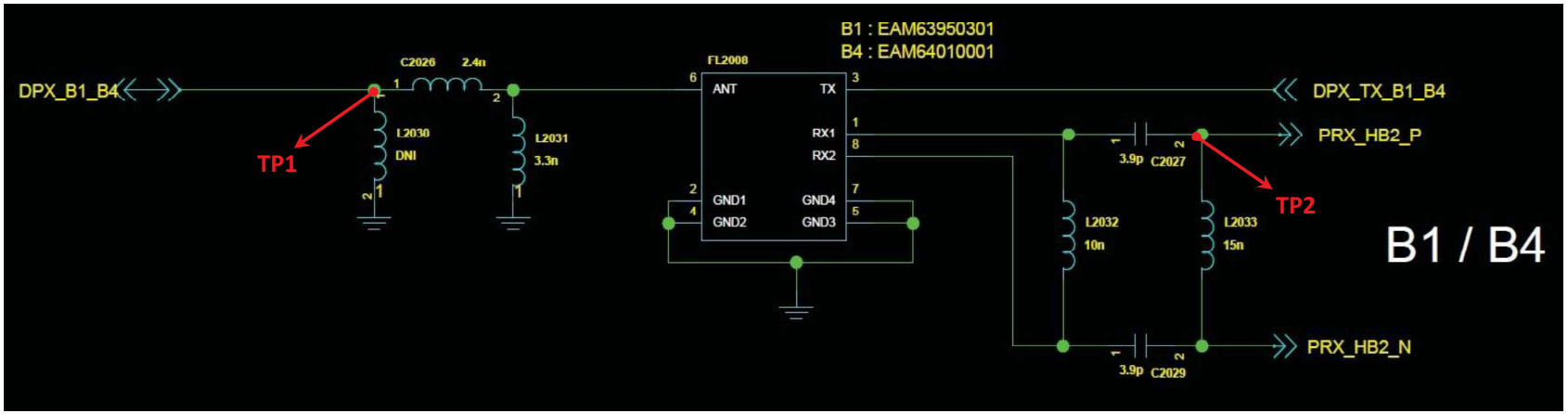
3.6.2 Checking RF Signal RX path(WCDMA B1)



Image



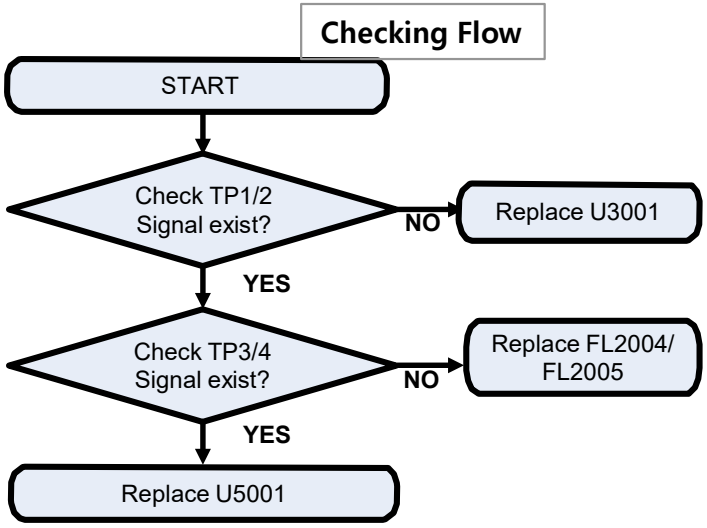
Circuit Diagram



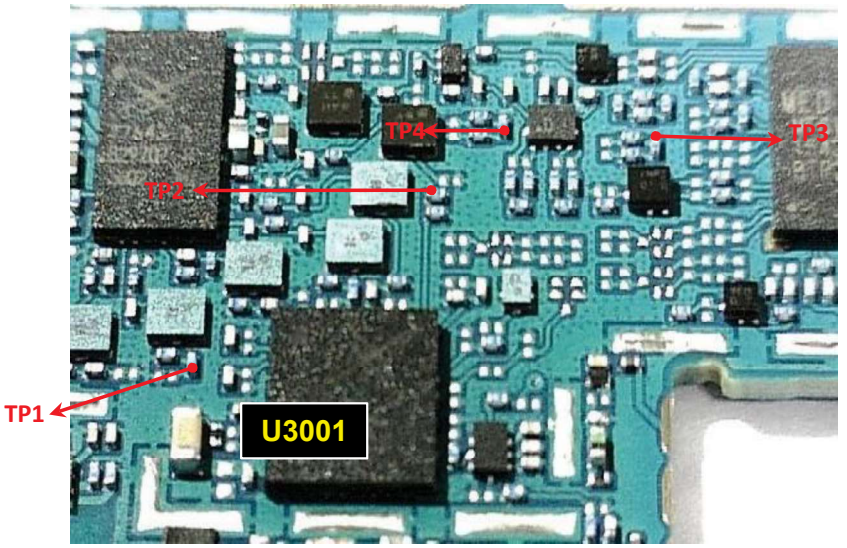
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3.6 WCDMA RF PART

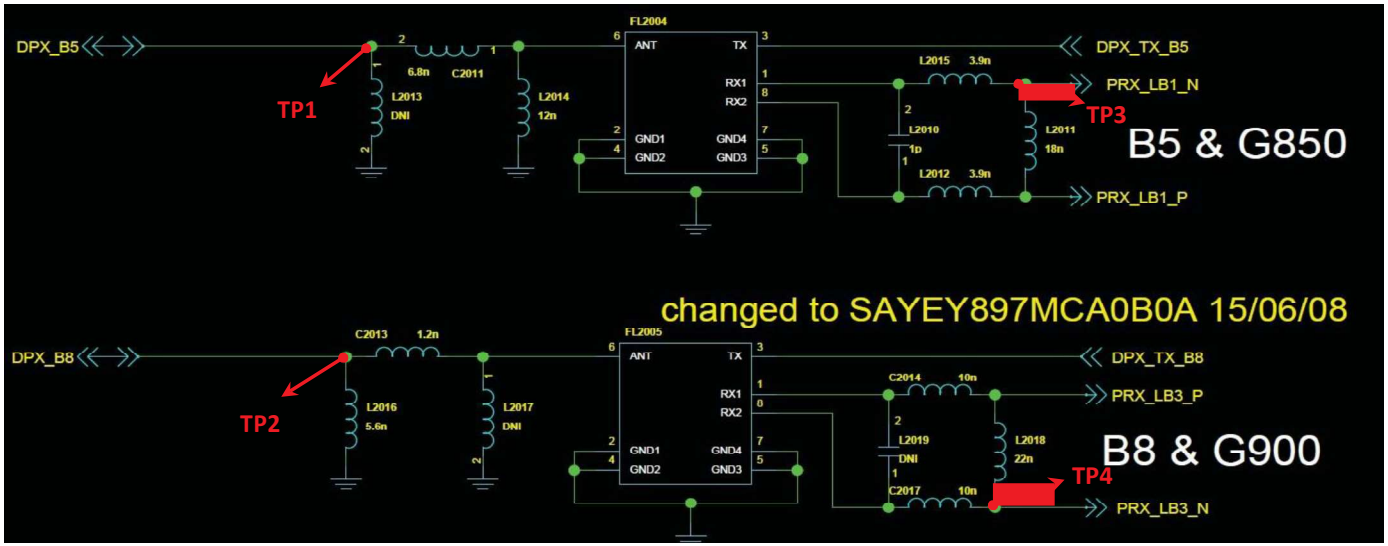
3.6.3 Checking RF Signal RX path(SW, WCDMA B5/8)



Image



Circuit Diagram

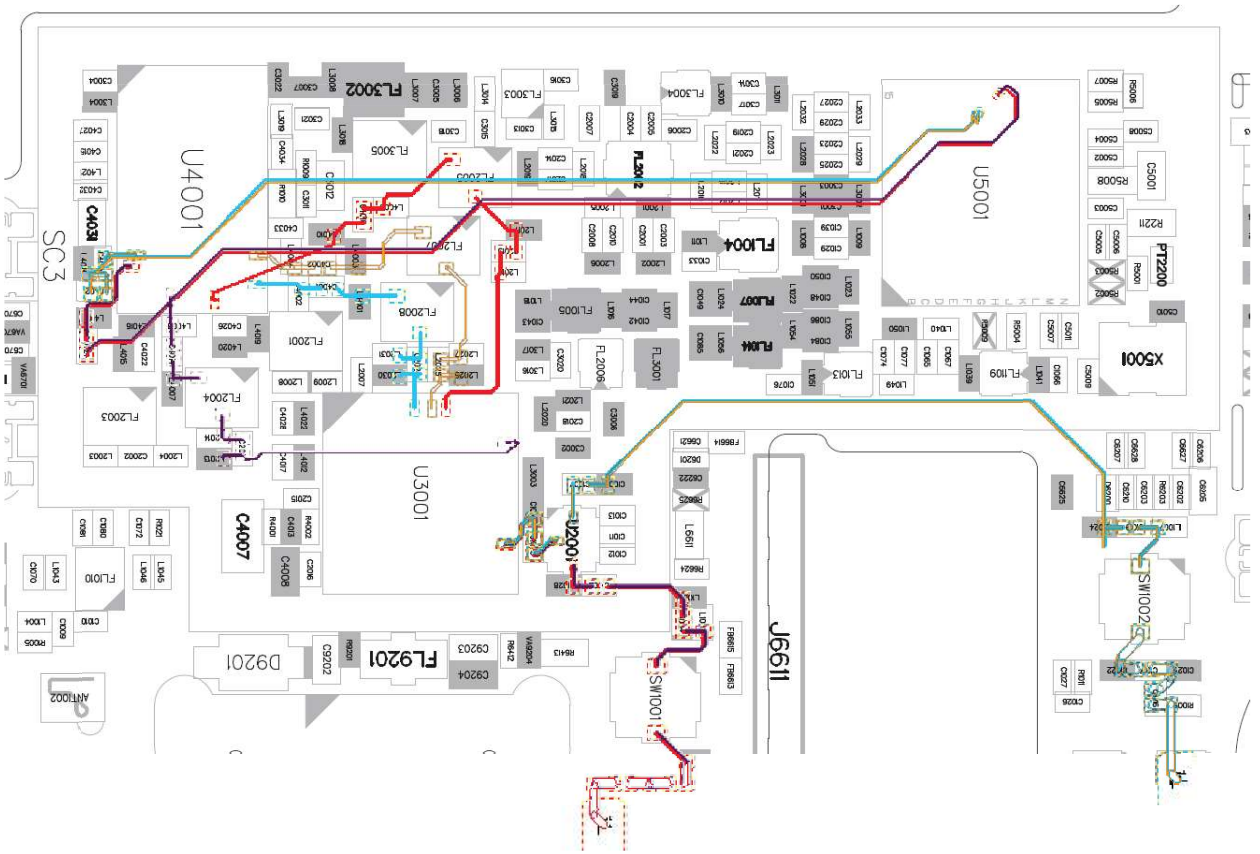


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3.6 WCDMA RF PART

3.6.4 WCDMA RF Part TX RF PATH

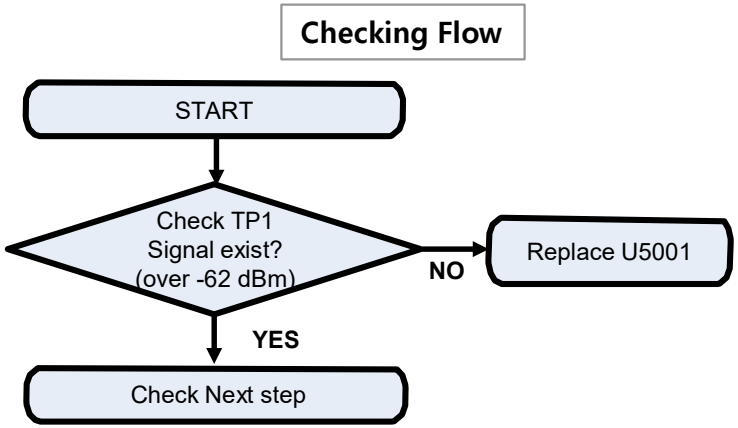
WCDMA B5 TX PATH
WCDMA B8 TX PATH
WCDMA B1 TX PATH
WCDMA B2 TX PATH



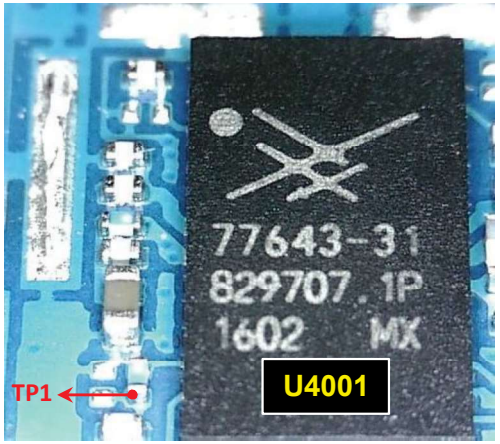
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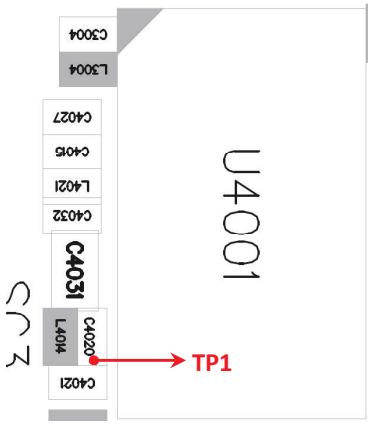
3.6 WCDMA RF PART

3.6.5 Checking RF Signal TX path(WCDMA B1)

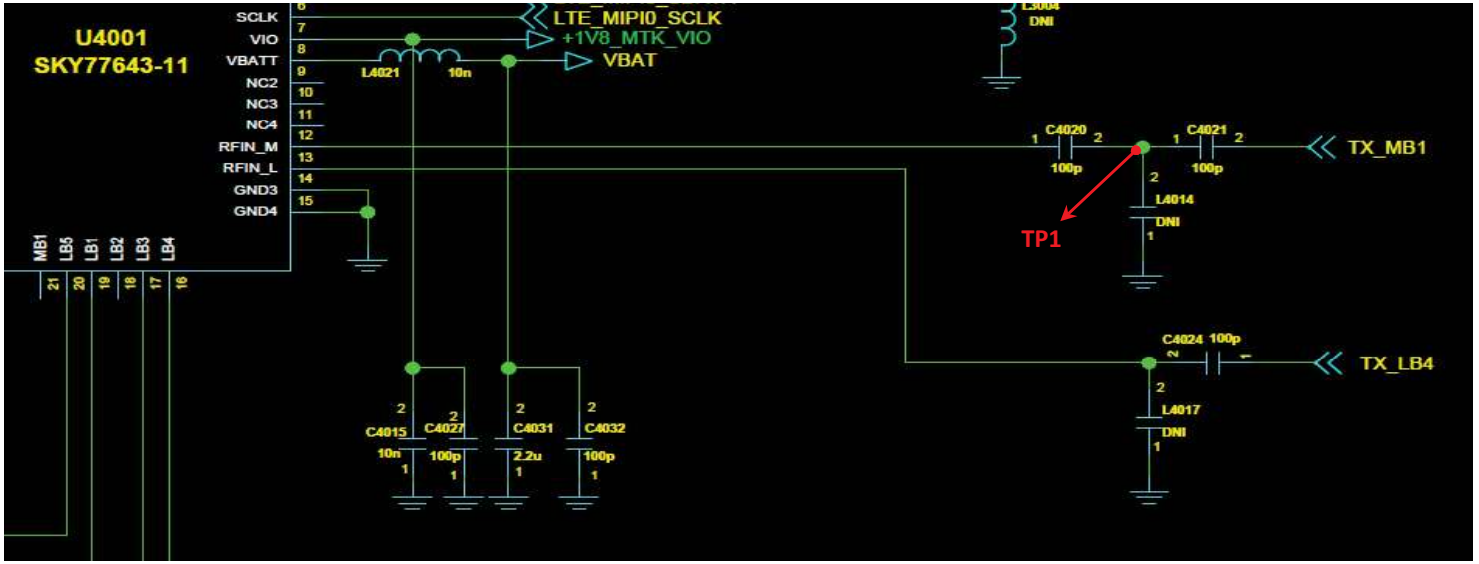


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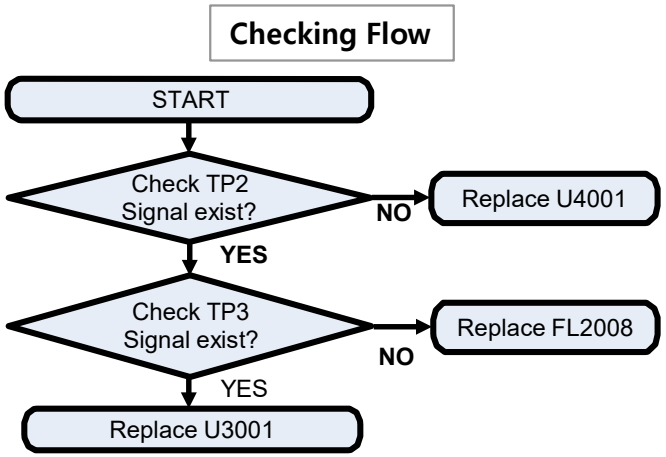


Circuit Diagram

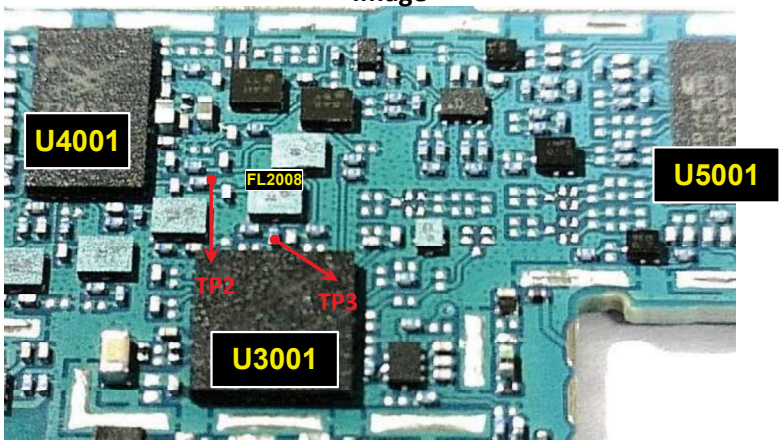


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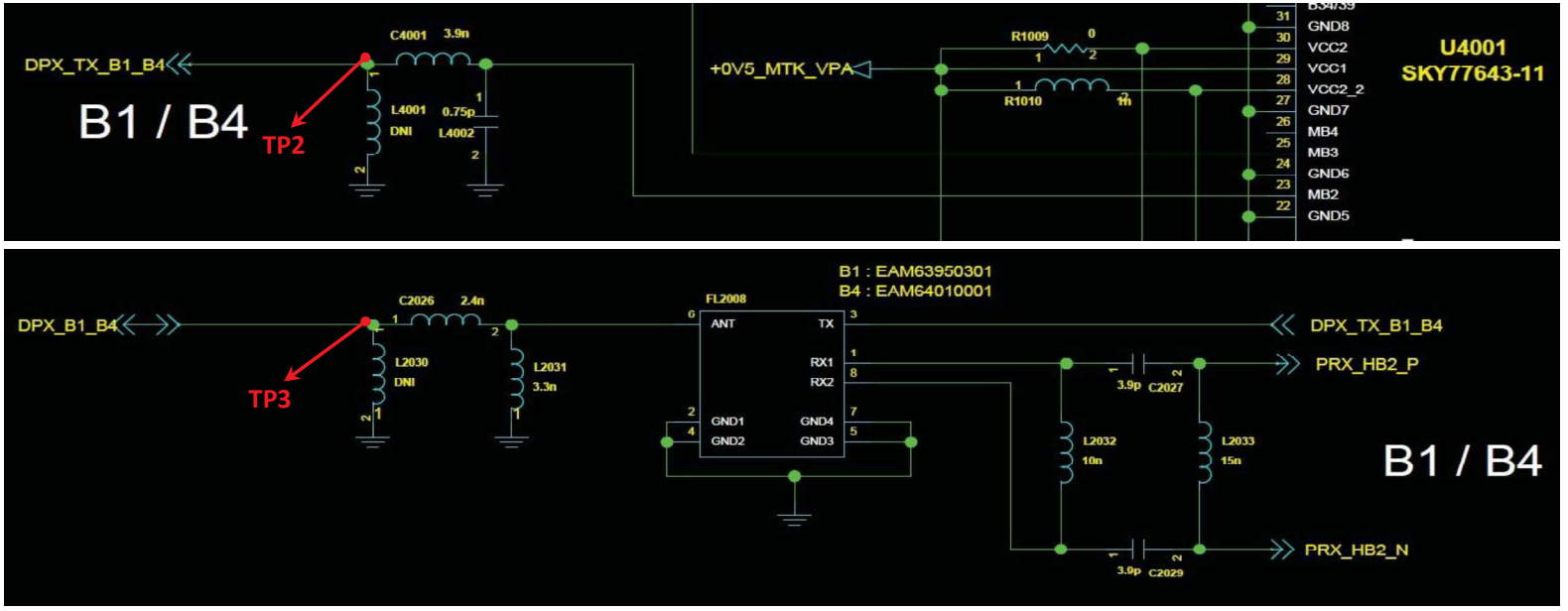
3.6 WCDMA RF PART
3.6.6 Checking RF Signal TX path(WCDMA B1)



Image



Circuit Diagram

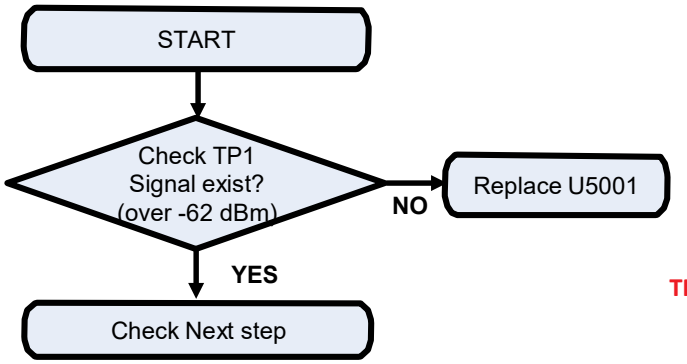


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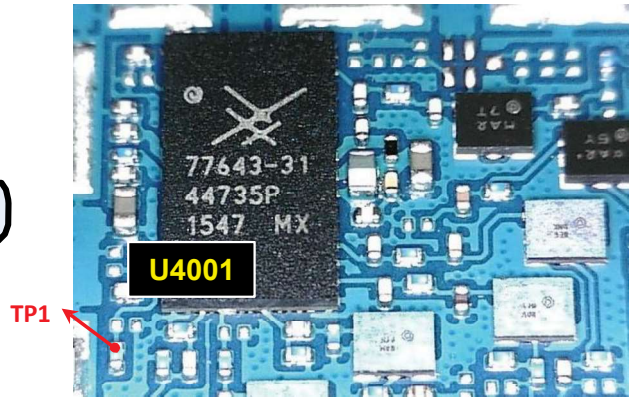
3.6 WCDMA RF PART

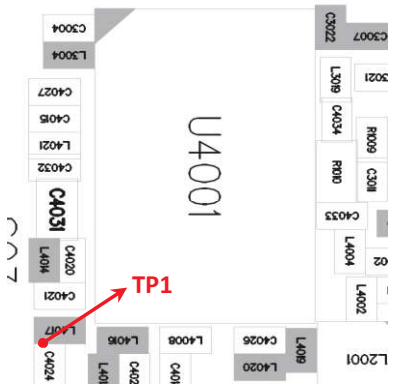
3.6.7 Checking RF Signal TX path(WCDMA B5/8)

Checking Flow

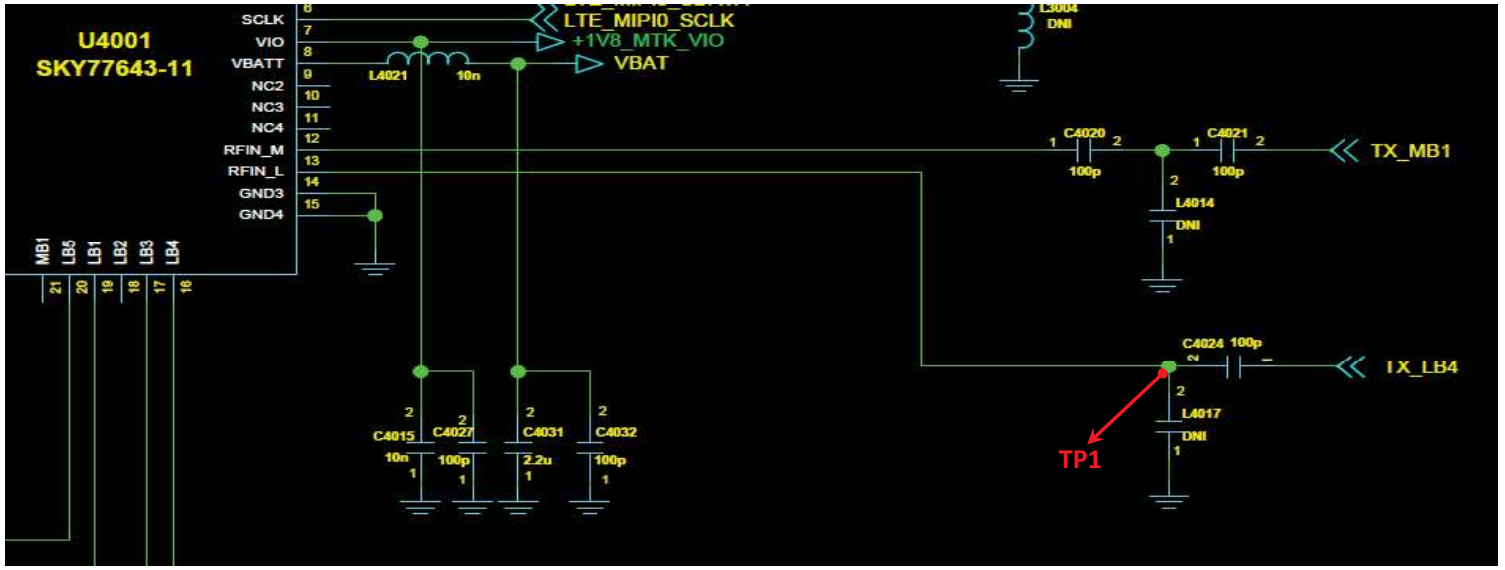


Image





Circuit Diagram

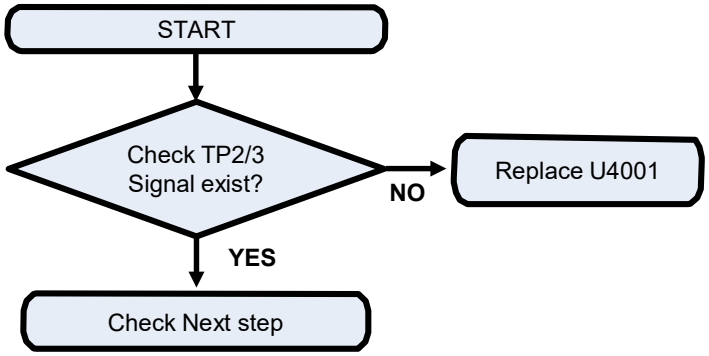


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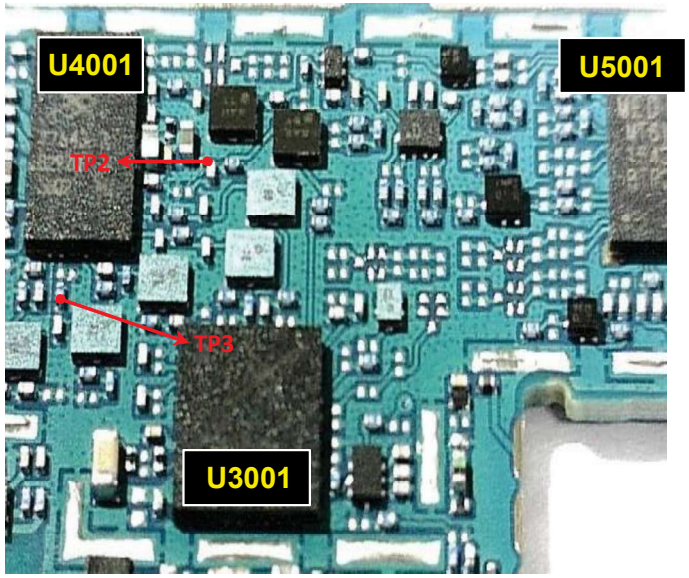
3.6 WCDMA RF PART

3.6.8 Checking RF Signal TX path(WCDMA B5/8)

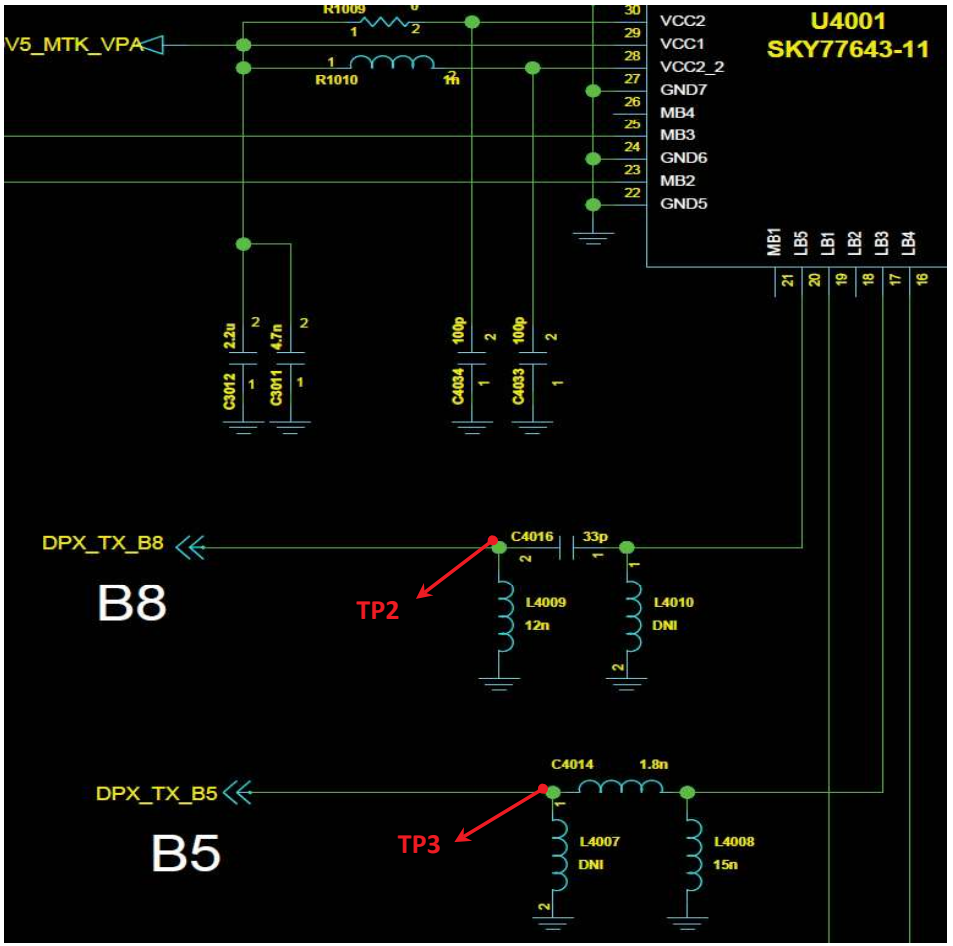
Checking Flow



Image



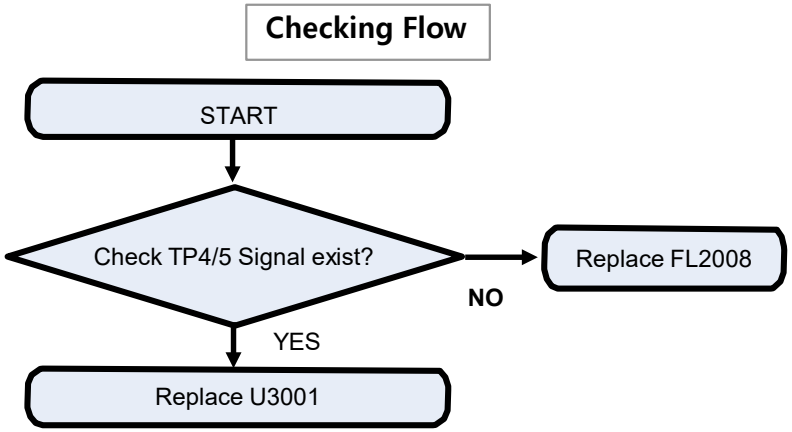
Circuit Diagram



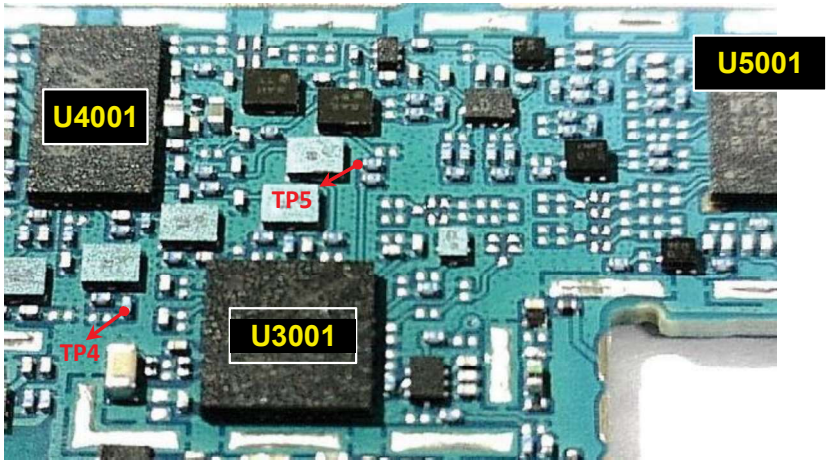
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3.6 WCDMA RF PART

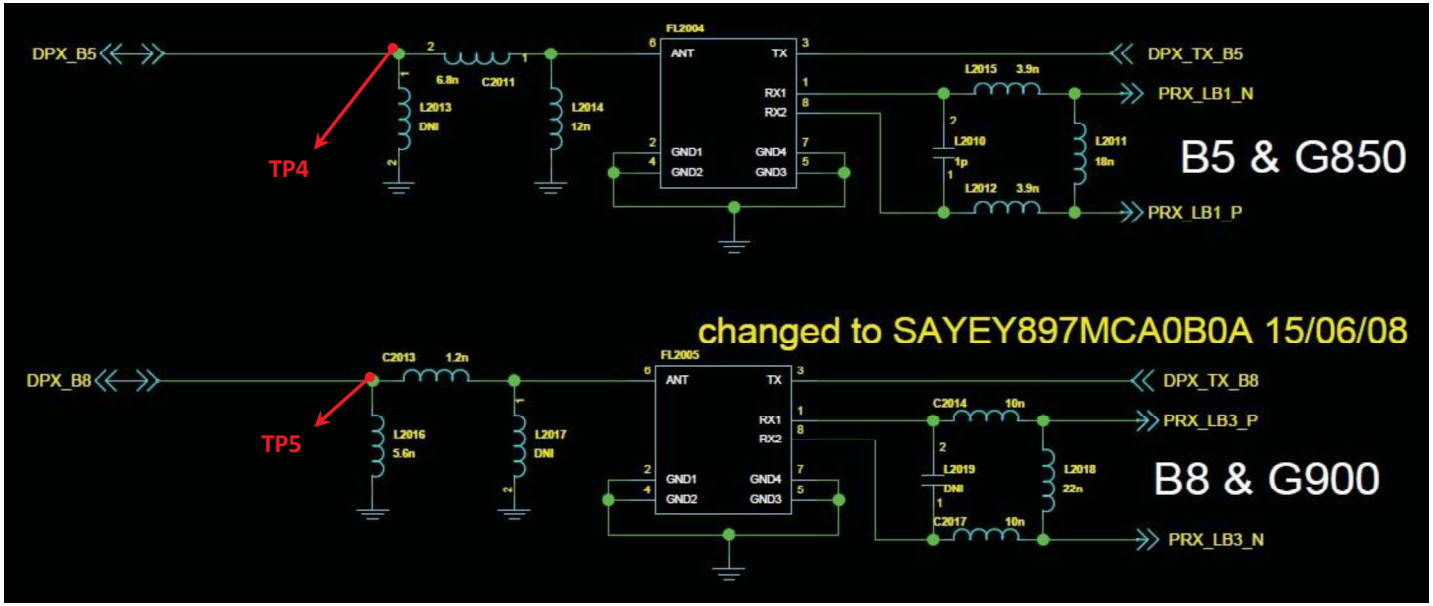
3.6.9 Checking RF Signal TX path(WCDMA B5/8)



Image



Circuit Diagram

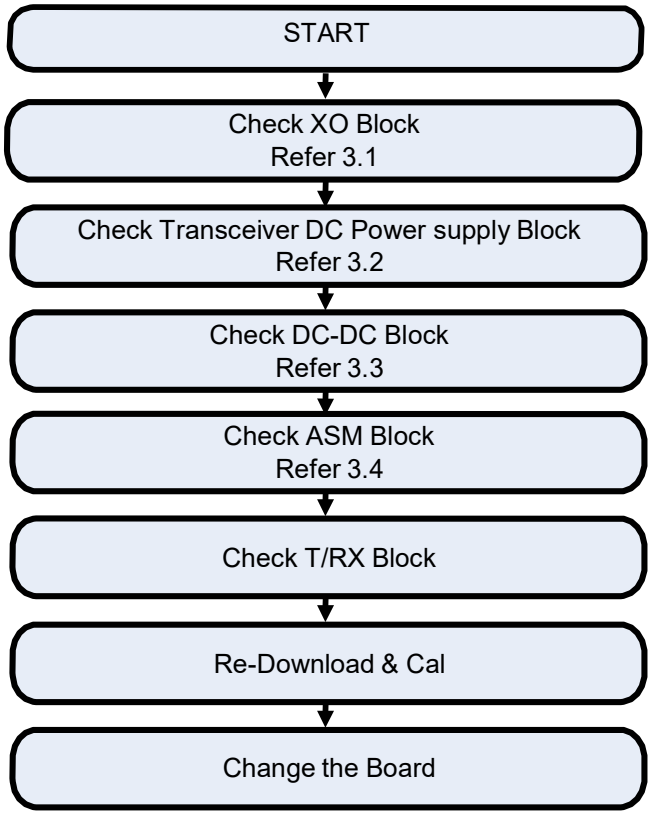


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3.7 LTE RF PART

LTE RF Part support LTE B3/7/28 with ASM, PAM, Transceiver component

Checking Flow

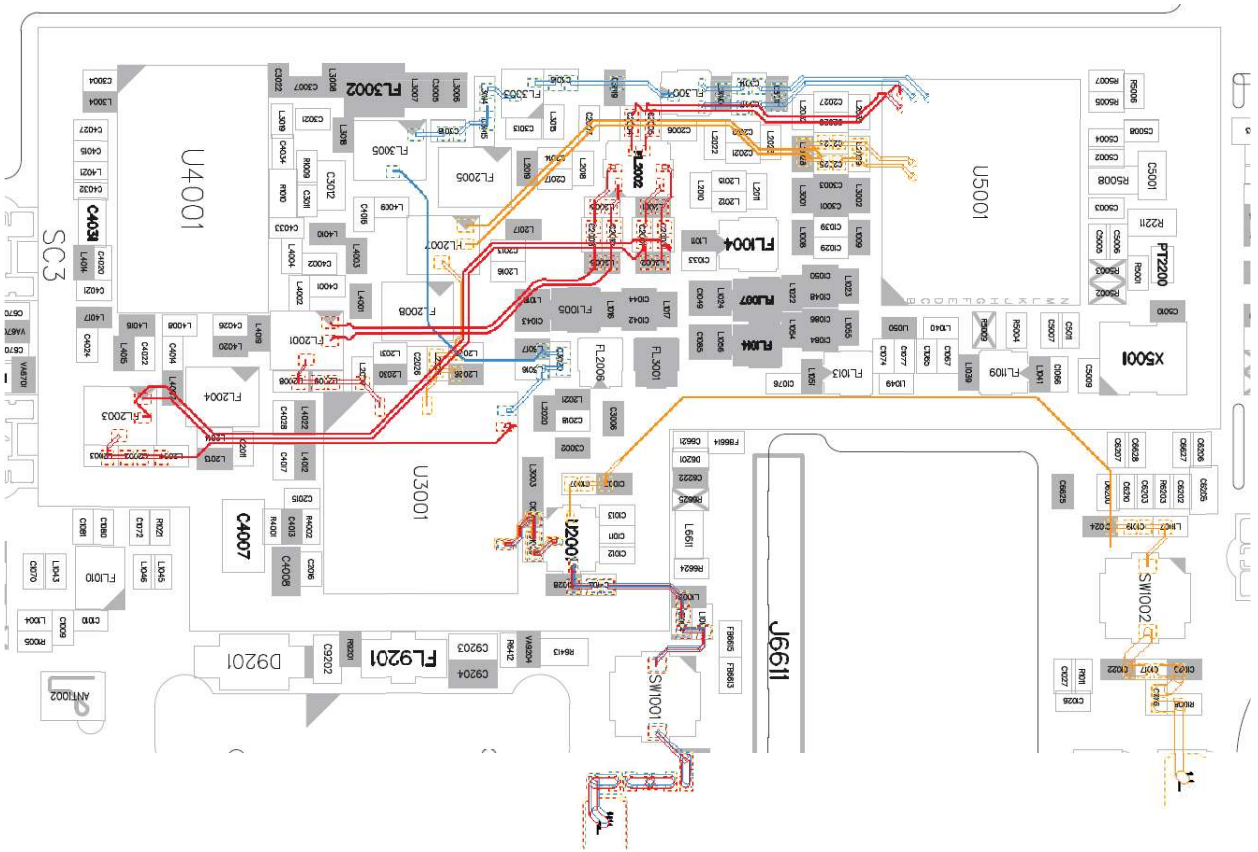


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3.7 LTE RF PART

3.7.1 LTE RF Part RX RF PATH

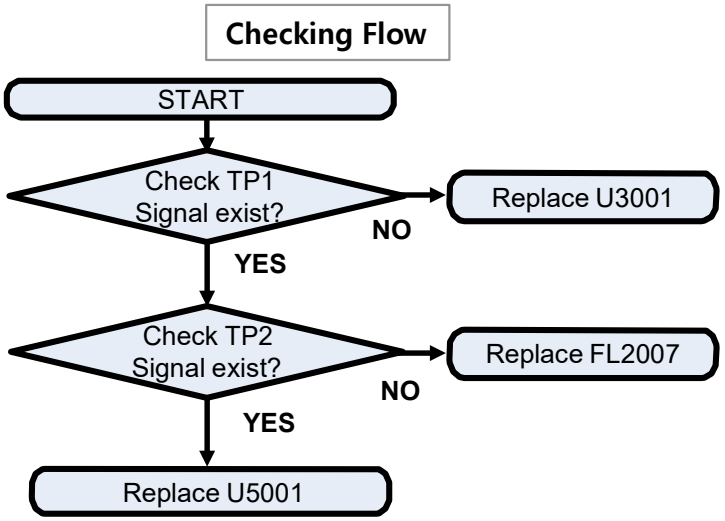
LTE B3 RX PATH
LTE B7 RX PATH
LTE B20 RX PATH



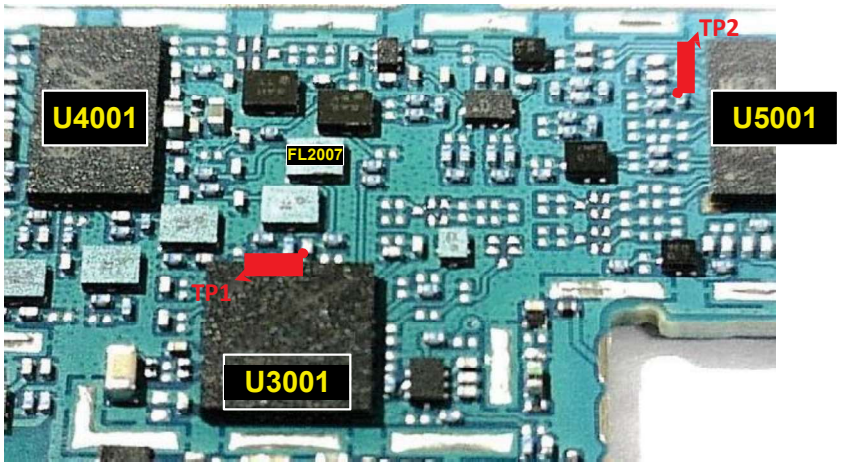
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3.7 LTE RF PART

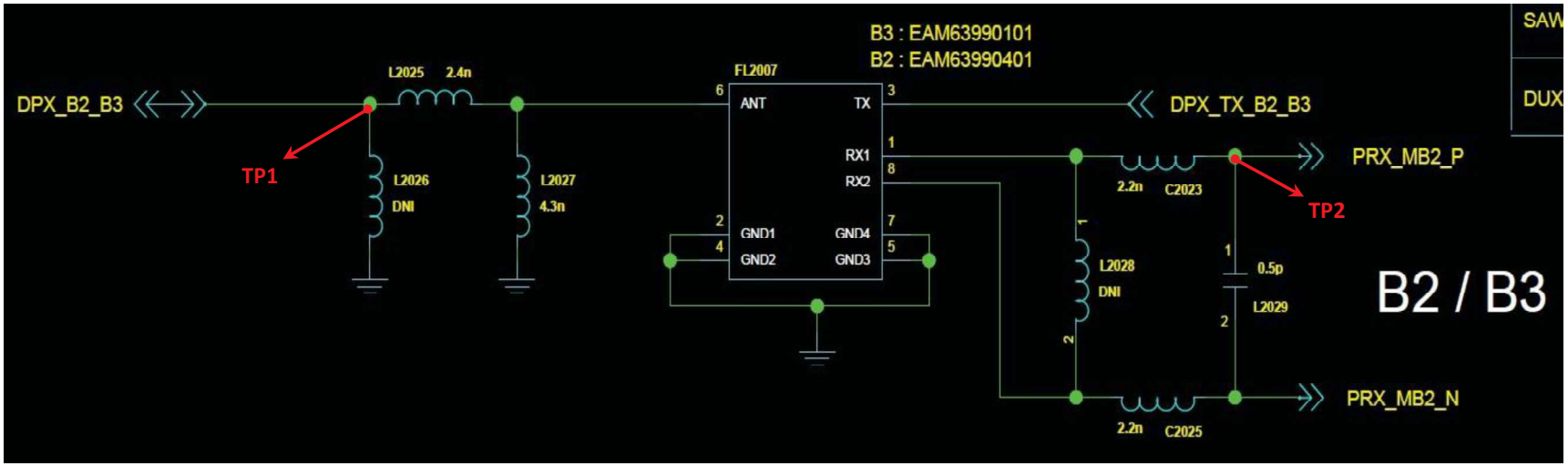
3.7.2 Checking RF Signal RX path(LTE B3)



Image



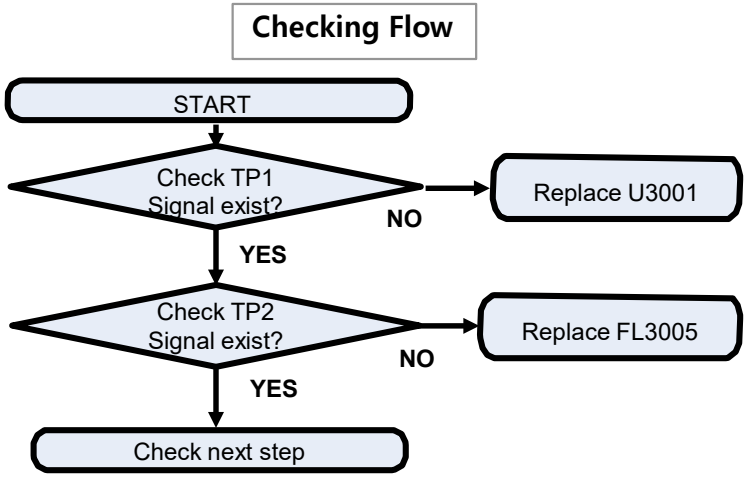
Circuit Diagram



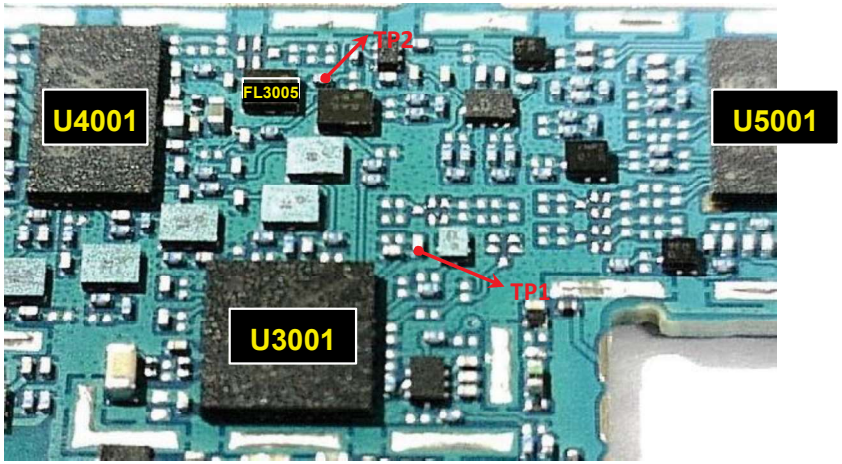
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3.7 LTE RF PART

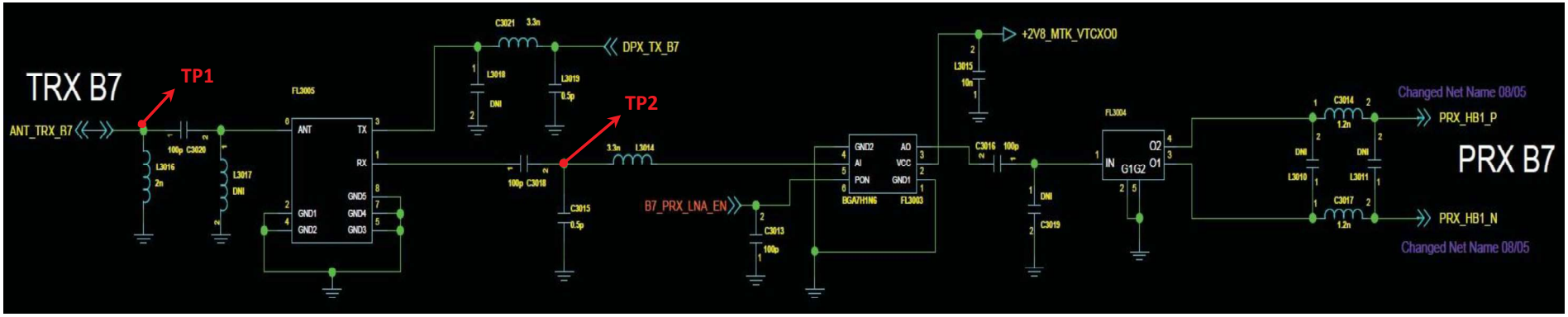
3.7.3 Checking RF Signal RX path(LTE B7)



Image



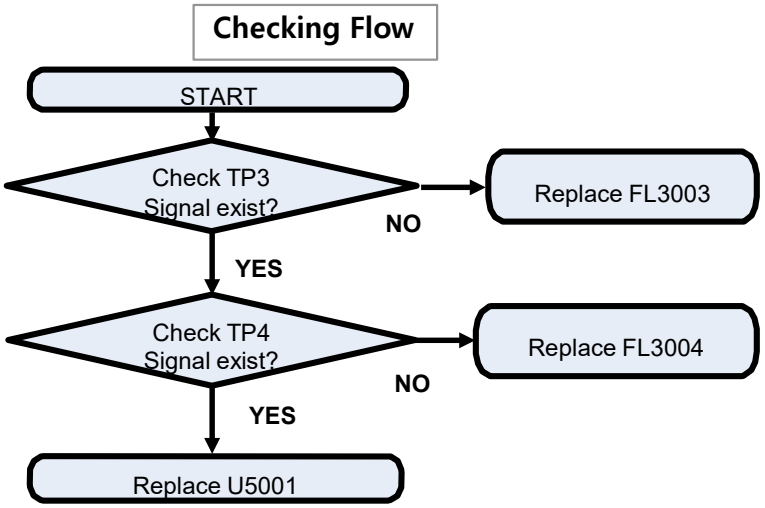
Circuit Diagram



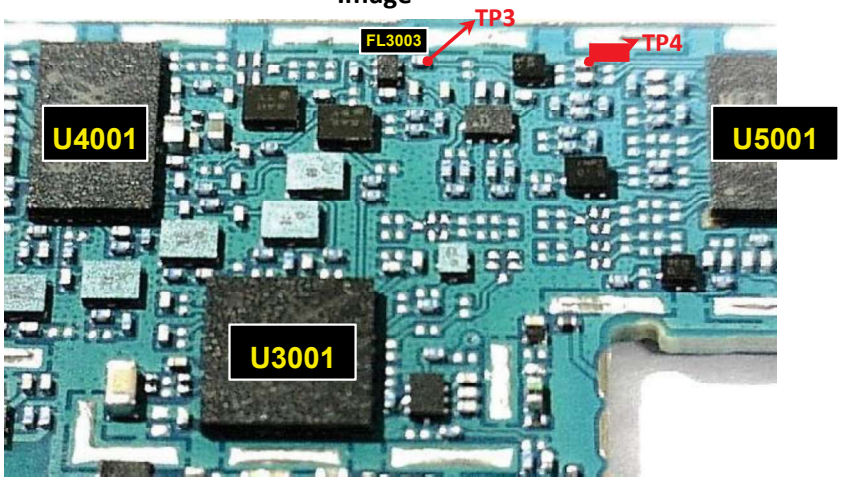
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3.7 LTE RF PART

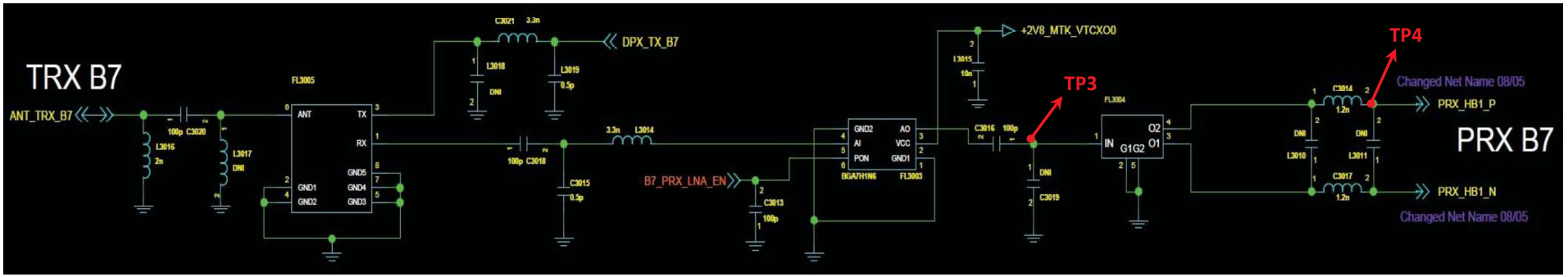
3.7.4 Checking RF Signal RX path(LTE B7)



Image



Circuit Diagram

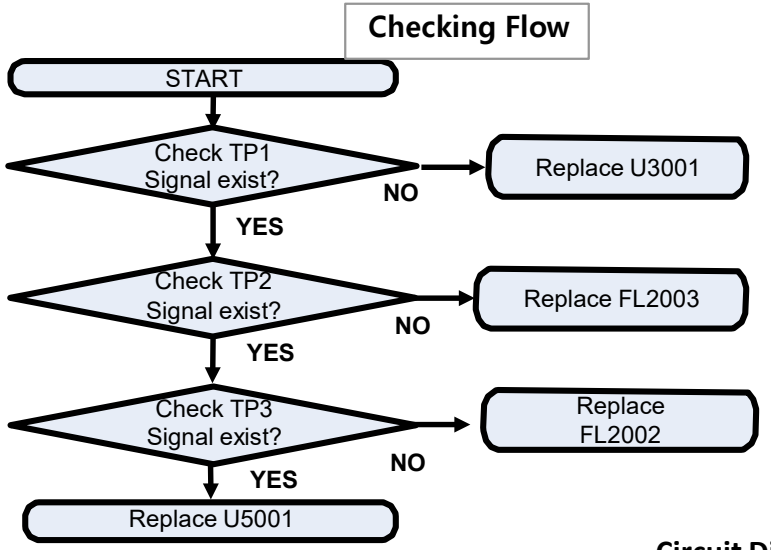


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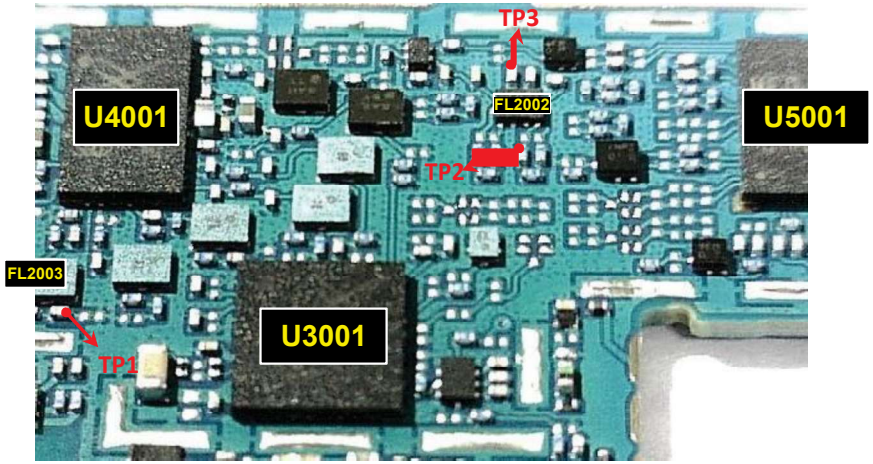
3.7 LTE RF PART

3.7.5 Checking RF Signal RX path(LTE B28A)

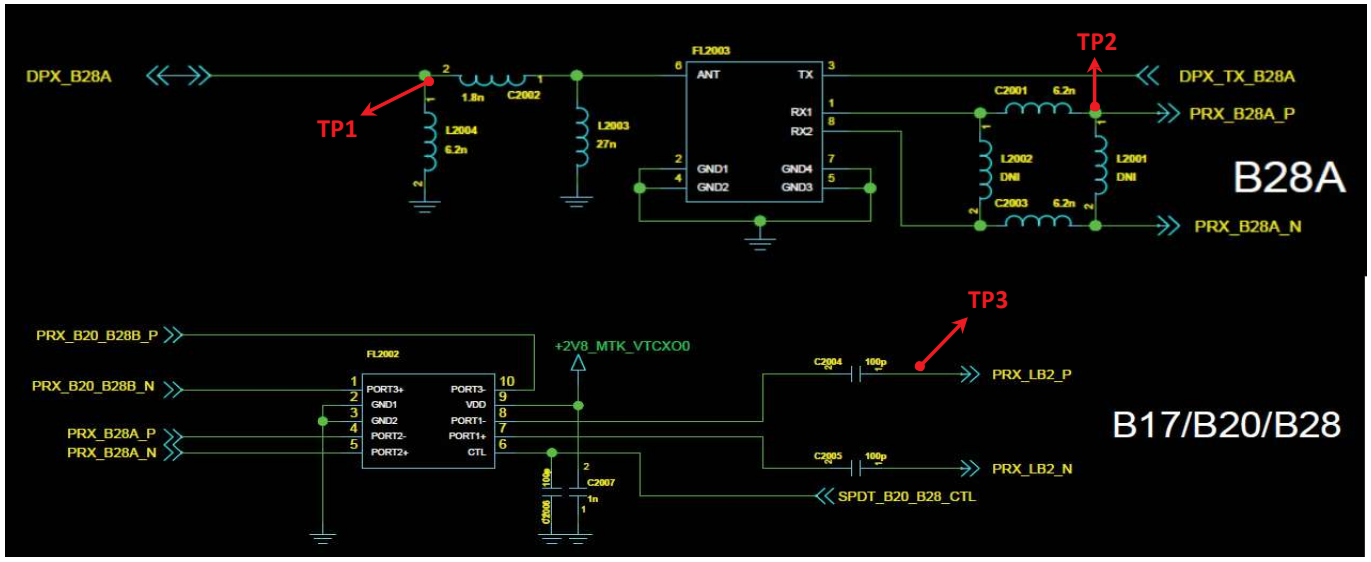
Checking Flow



Image

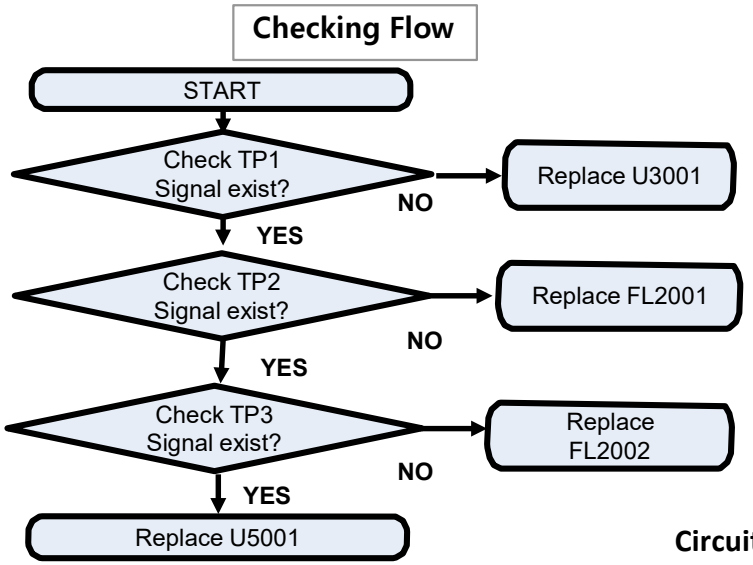


Circuit Diagram

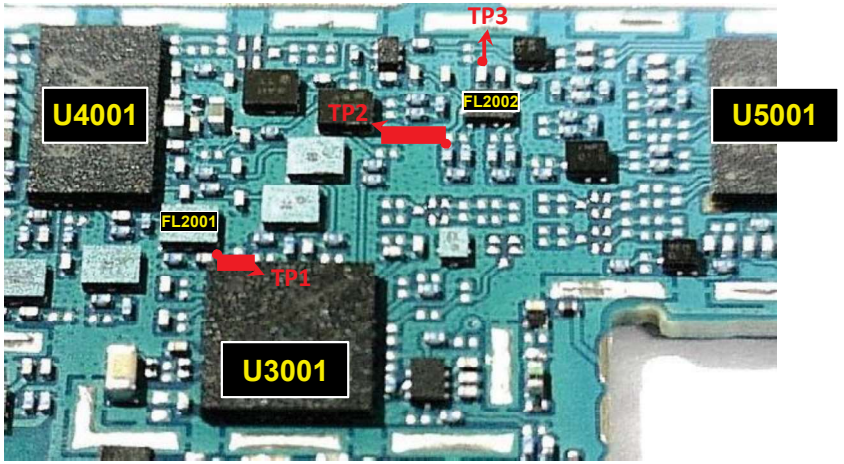


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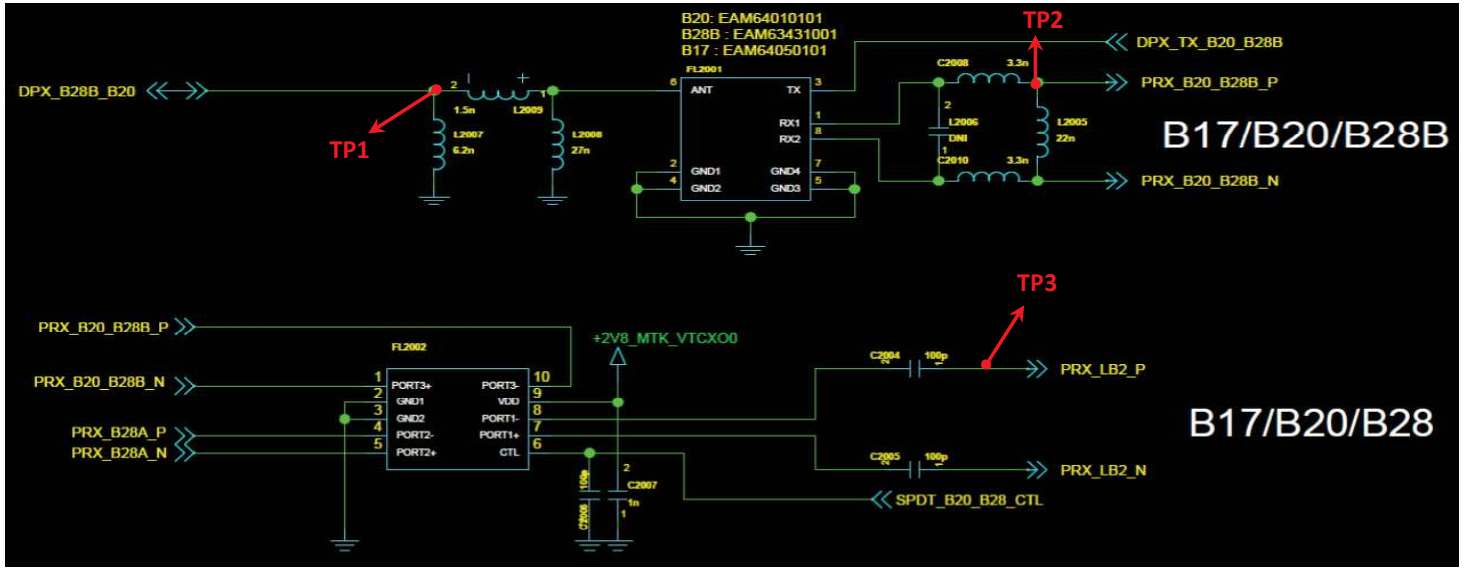
3.7 LTE RF PART
3.7.6 Checking RF Signal RX path(LTE B28B)



Image



Circuit Diagram

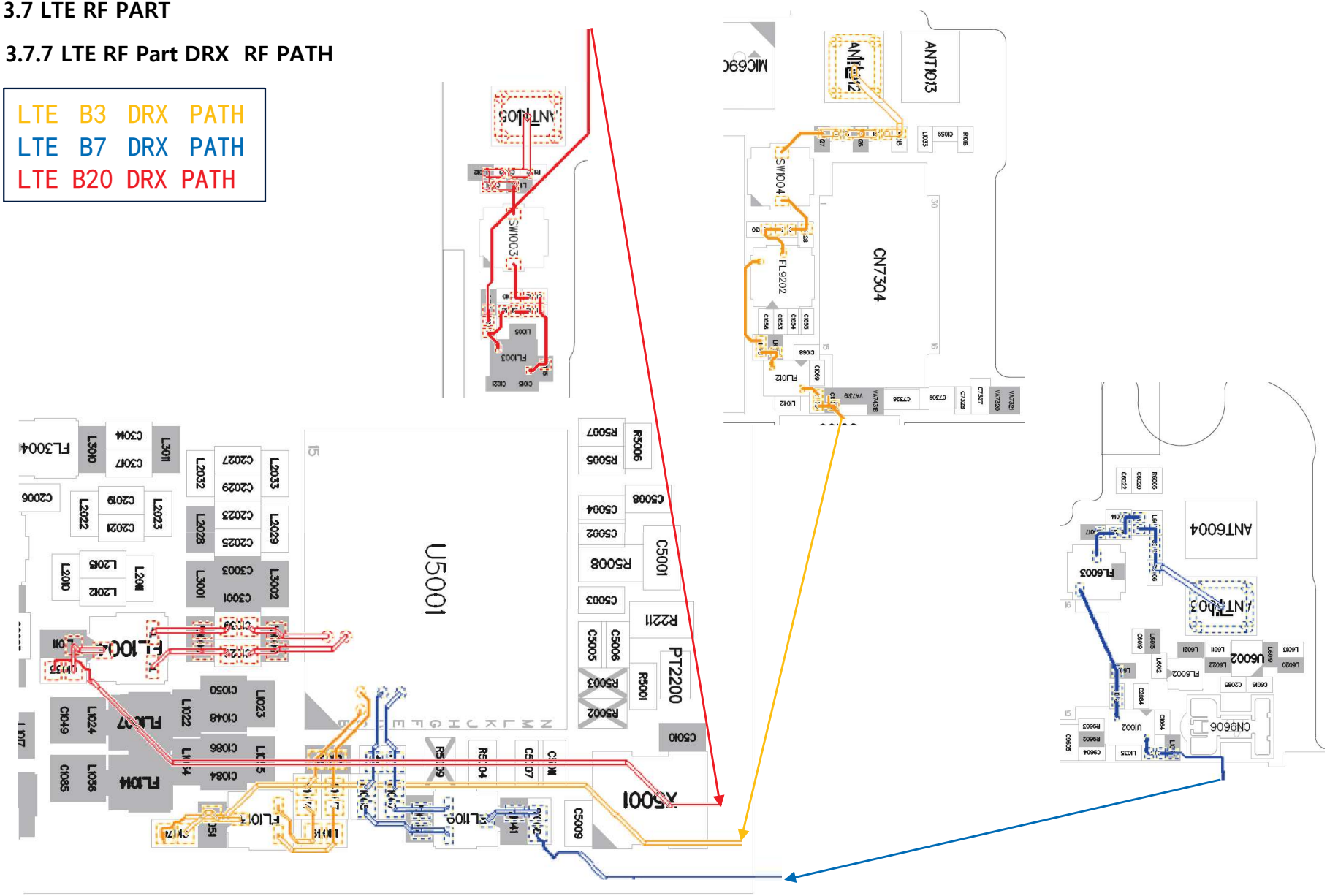


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3.7 LTE RF PART

3.7.7 LTE RF Part DRX RF PATH

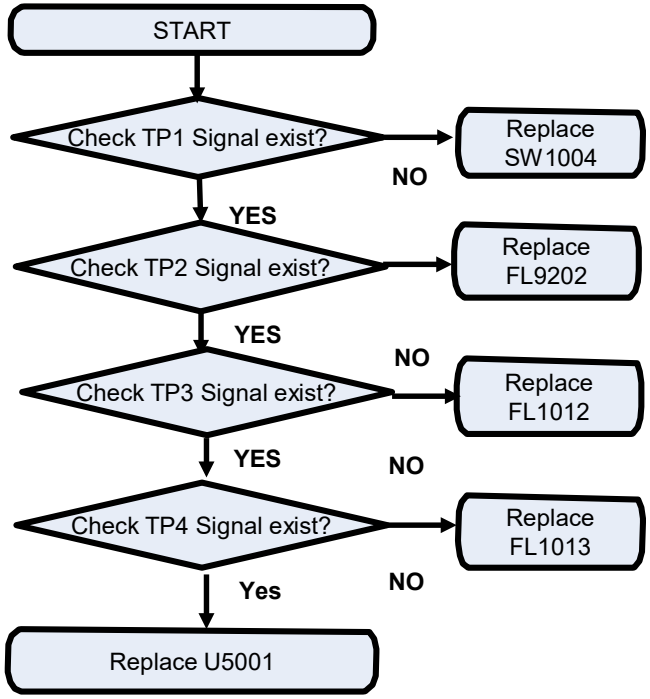
LTE B3 DRX PATH
LTE B7 DRX PATH
LTE B20 DRX PATH



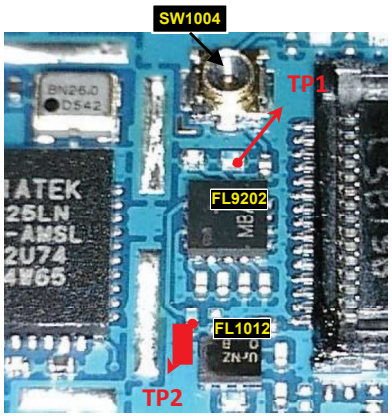
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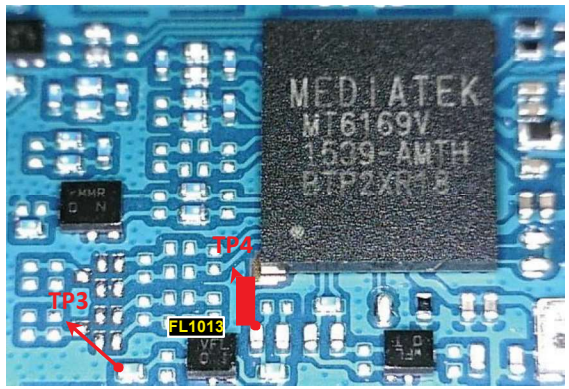
3.7 LTE RF PART
3.7.8 Checking RF Signal DRX path(LTE B3)

Checking Flow

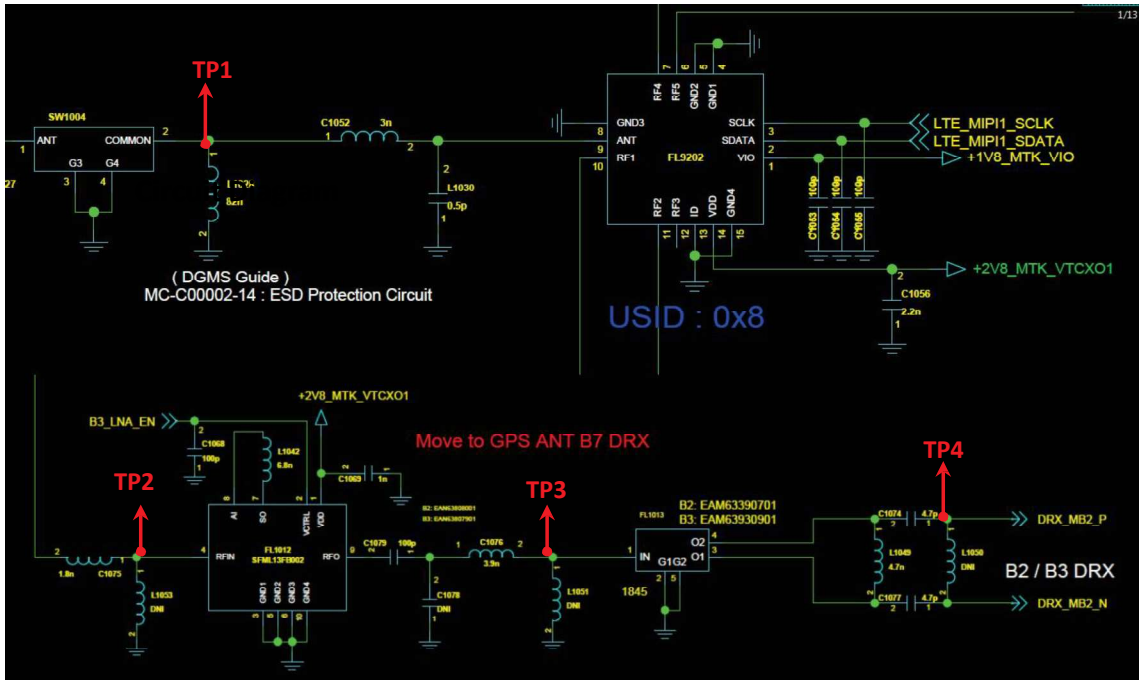


Image





Circuit Diagram

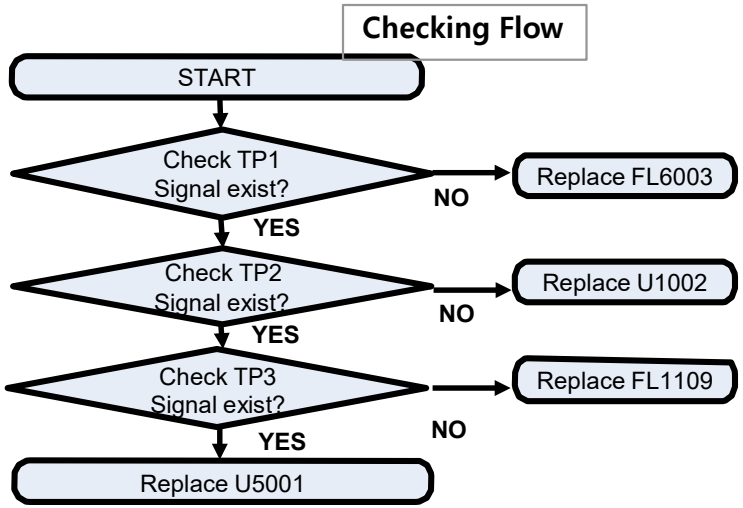


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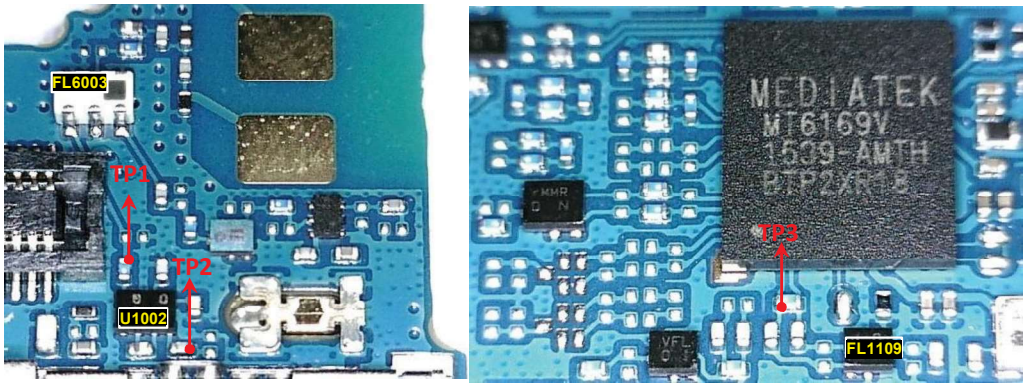
3.7 LTE RF PART

3.7.9 Checking RF Signal DRX path(LTE B7)

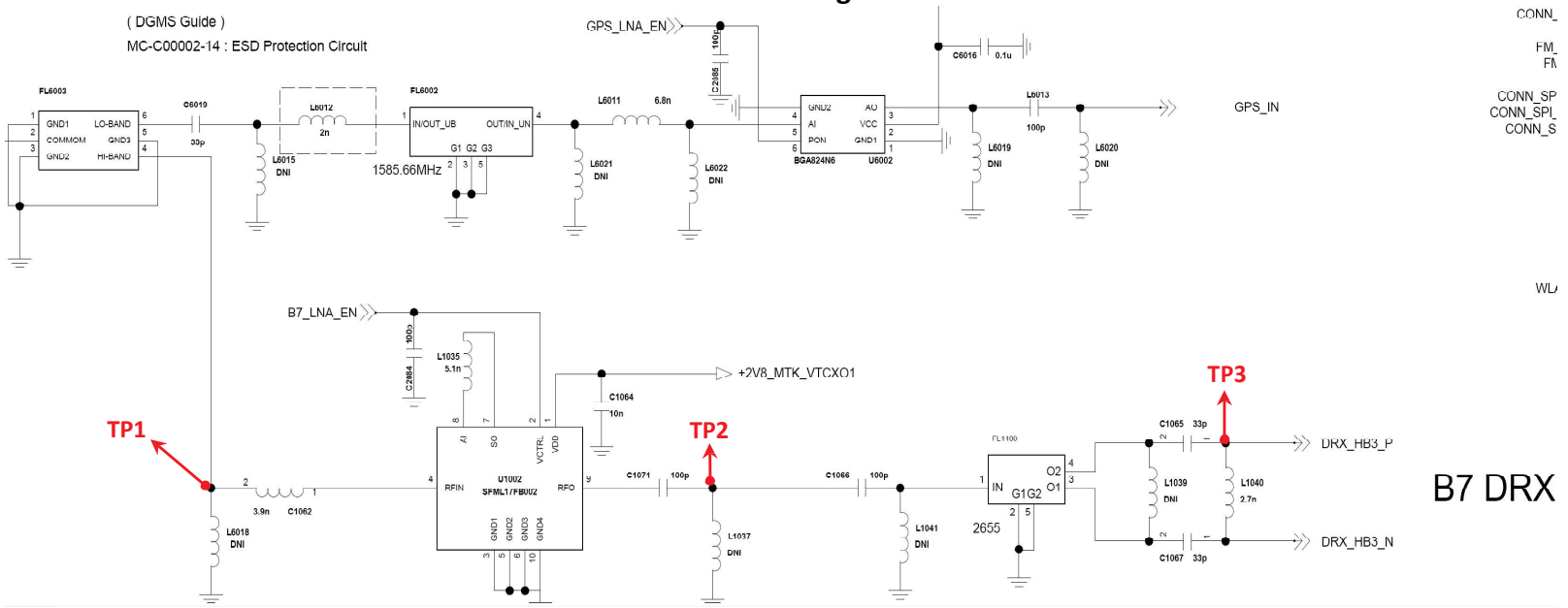
Checking Flow



Image



Circuit Diagram

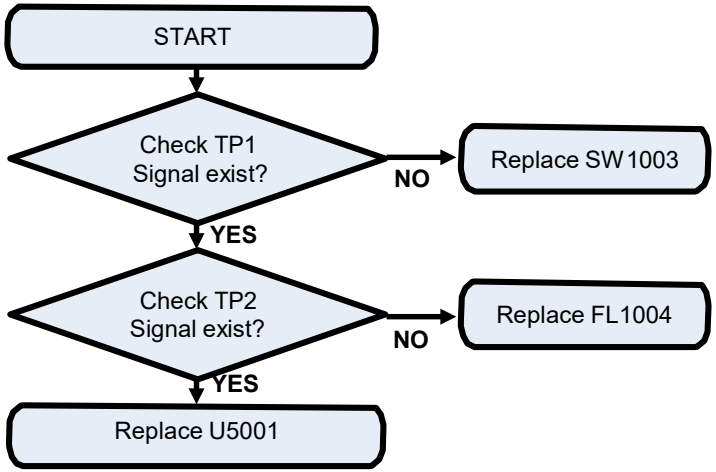


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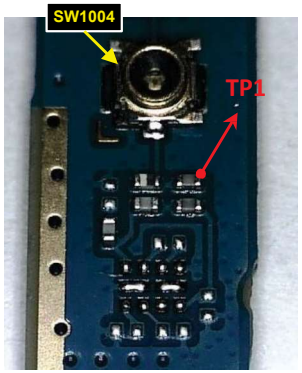
3.7 LTE RF PART

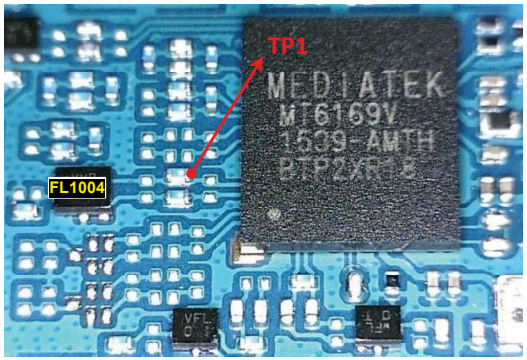
3.7.10 Checking RF Signal DRX path(LTE B28)

Checking Flow

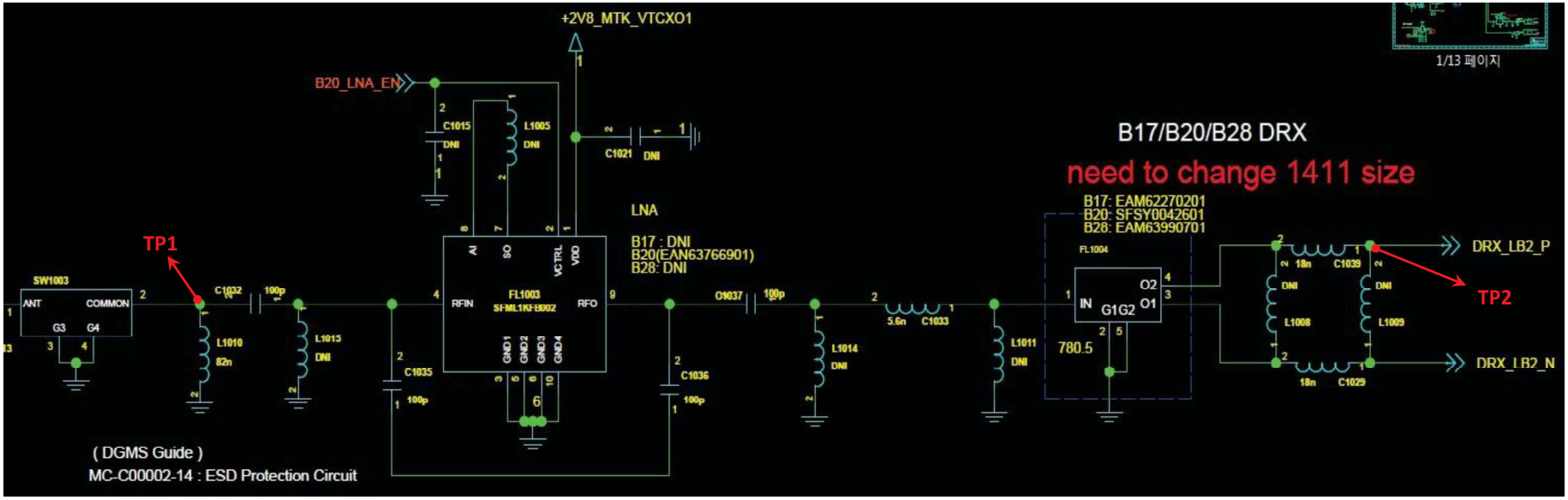


Image





Circuit Diagram

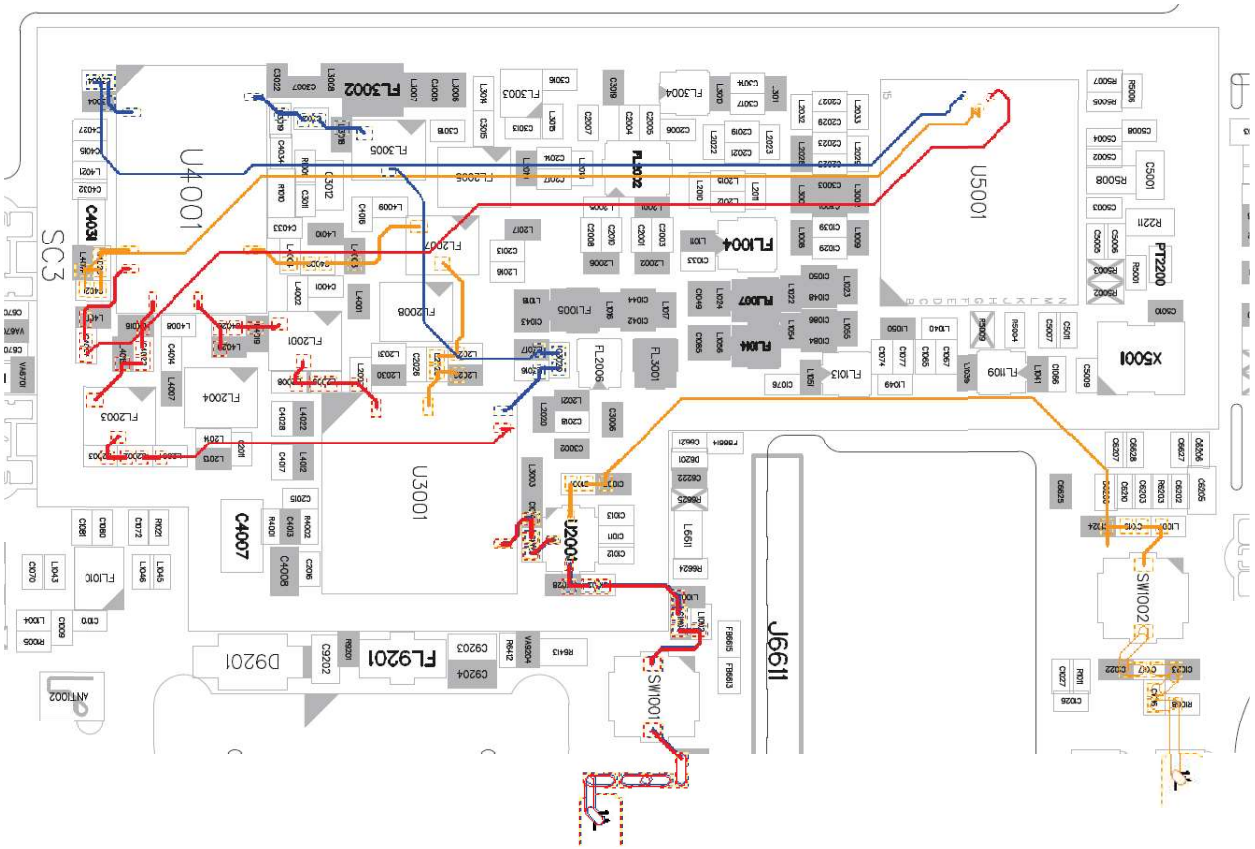


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3.7 LTE RF PART

3.7.11 Checking RF Signal DRX path(LTE B28)

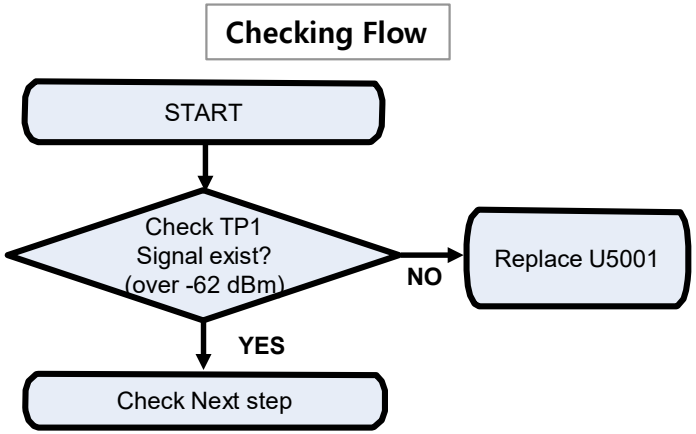
LTE B3 TX PATH
LTE B7 TX PATH
LTE B28 TX PATH



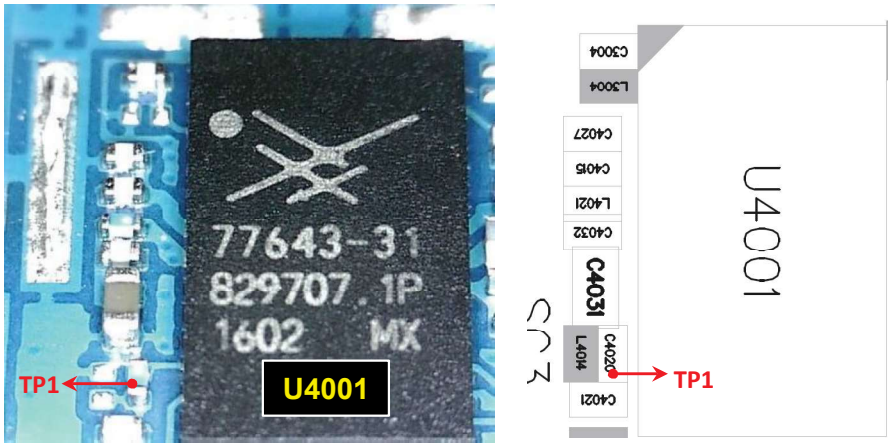
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3.7 LTE RF PART

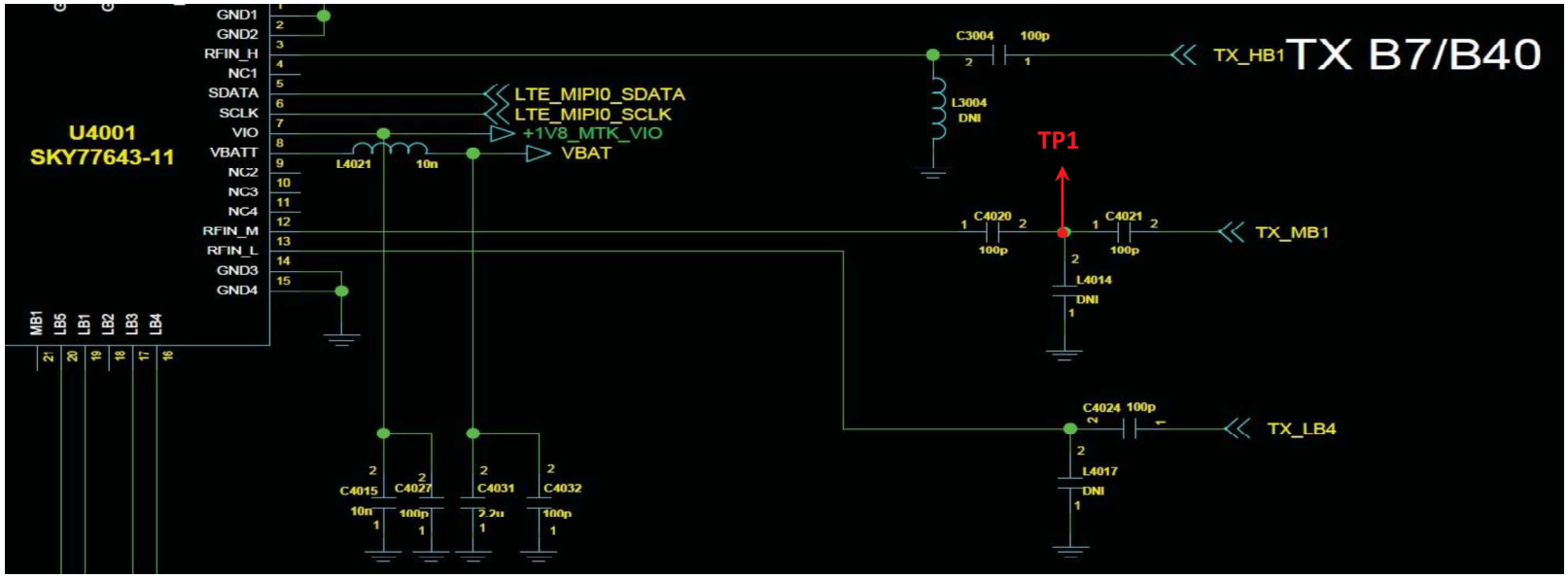
3.7.12 Checking RF Signal TX path(LTE B3)



Image



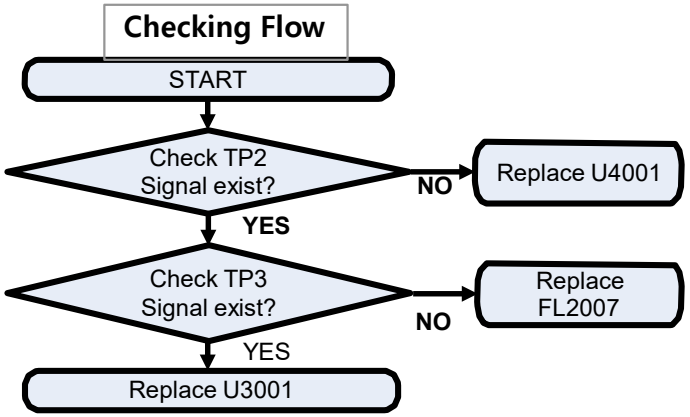
Circuit Diagram



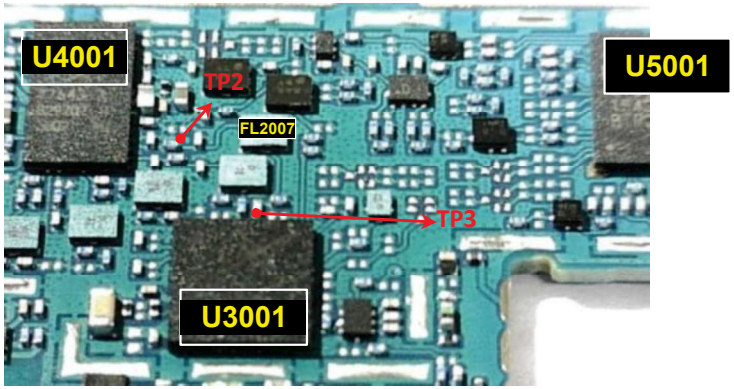
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3.7 LTE RF PART

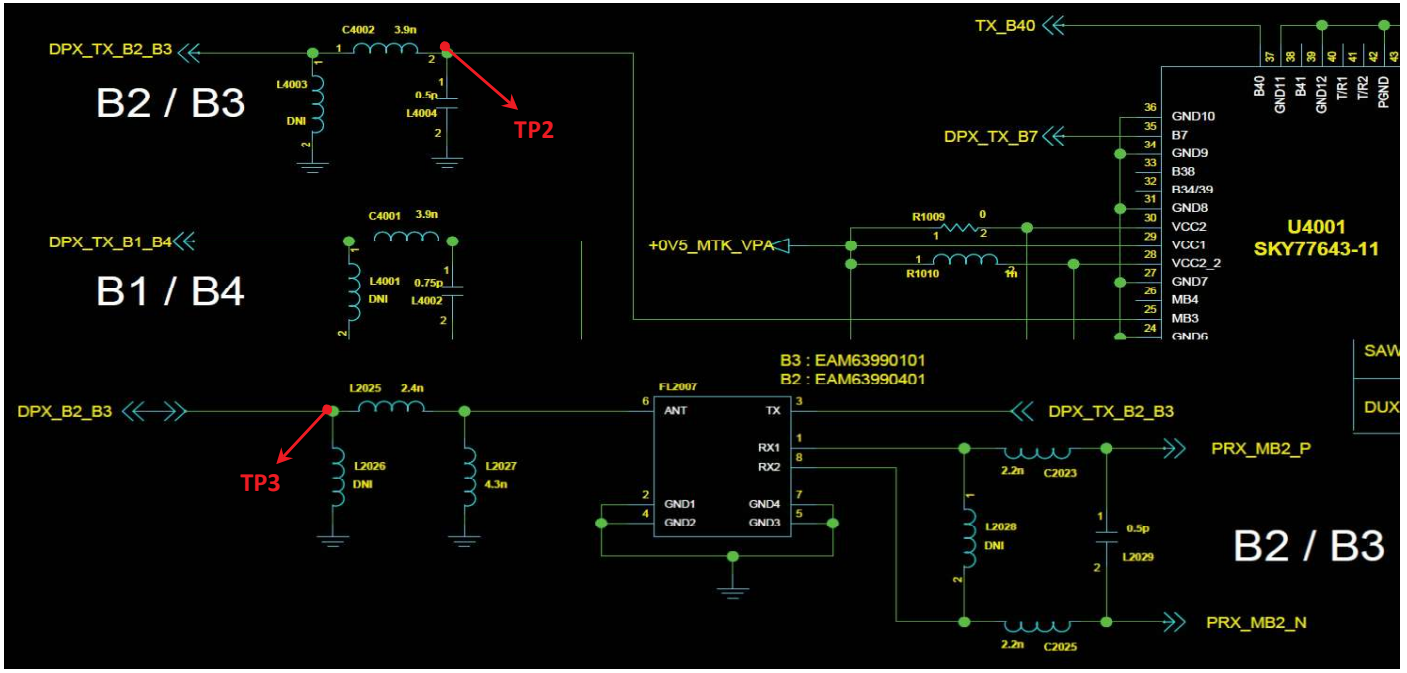
3.7.13 Checking RF Signal TX path(LTE B3)



Image



Circuit Diagram

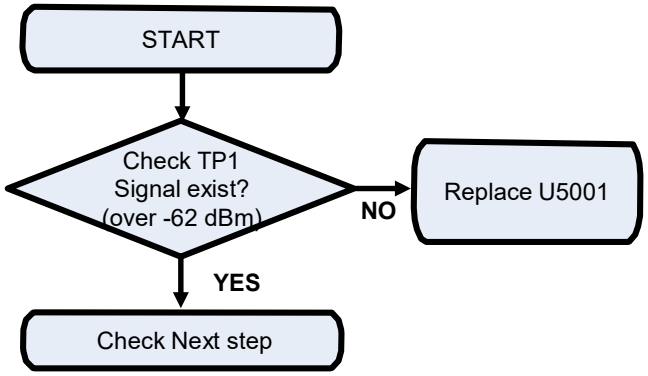


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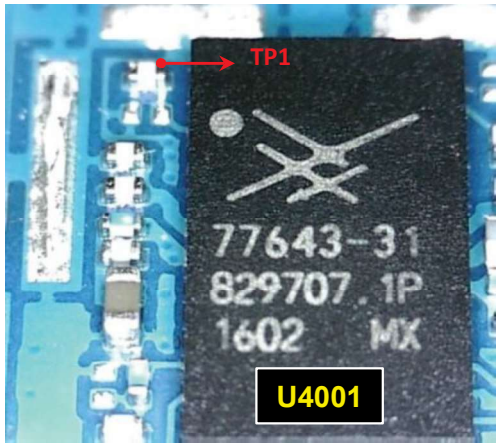
3.7 LTE RF PART

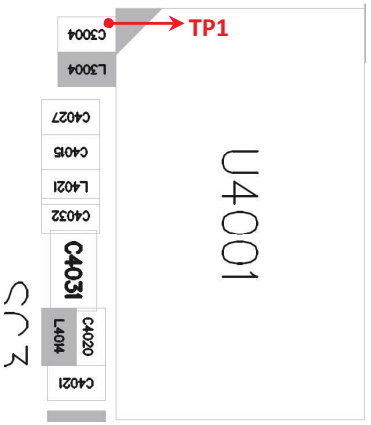
3.7.14 Checking RF Signal TX path(LTE B7)

Checking Flow

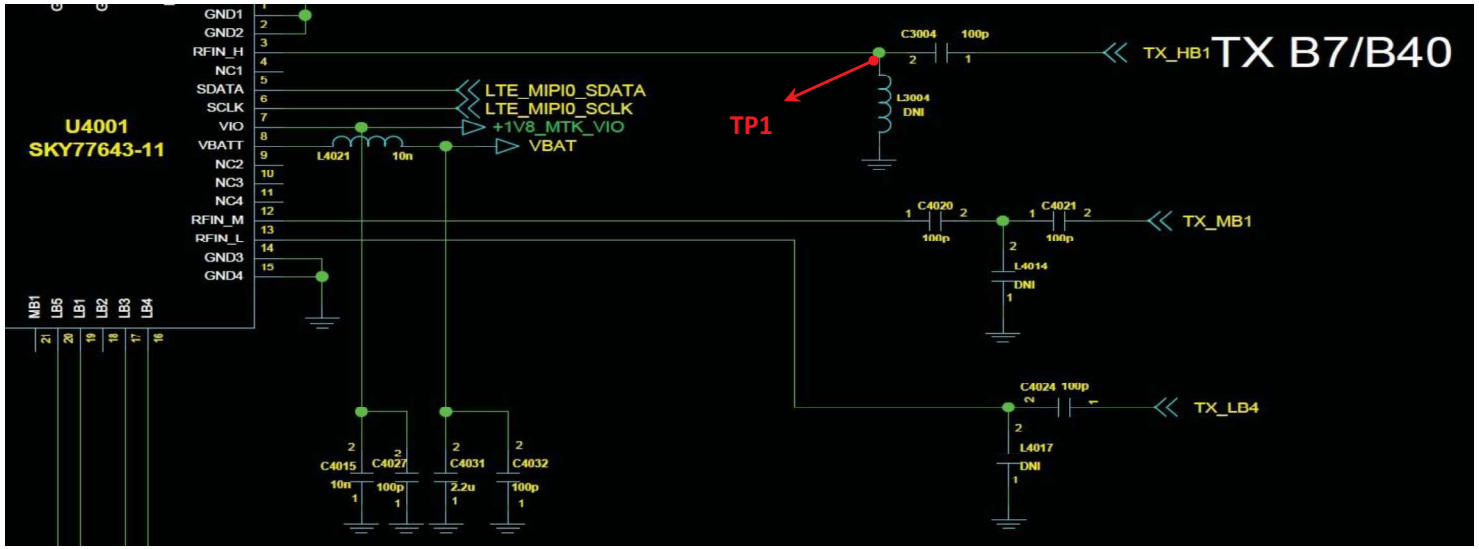


Image





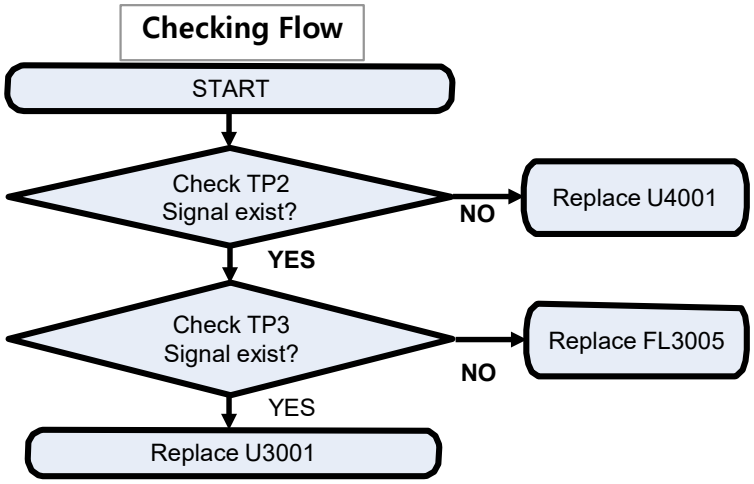
Circuit Diagram



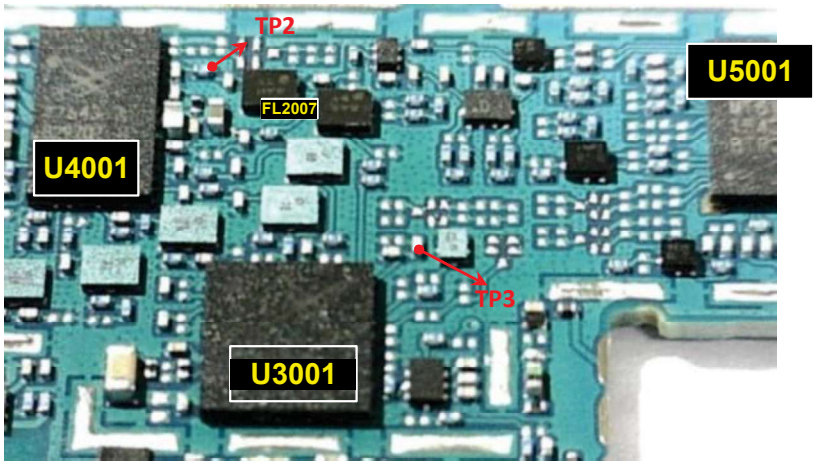
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3.7 LTE RF PART

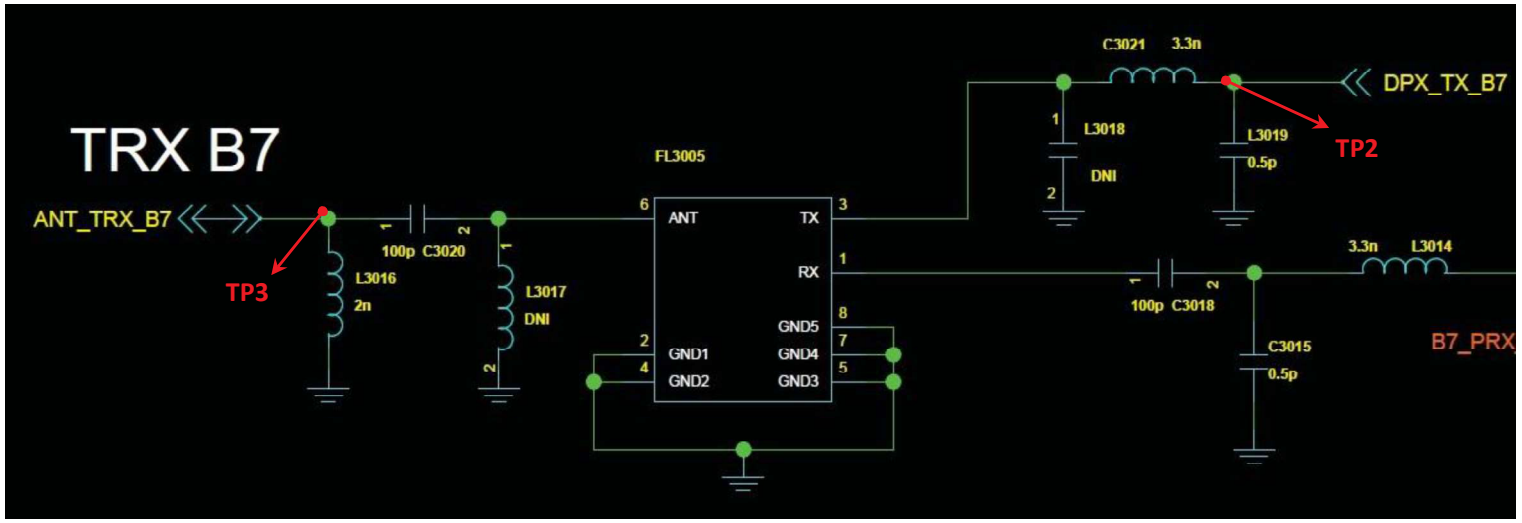
3.7.15 Checking RF Signal TX path(LTE B7)



Image



Circuit Diagram

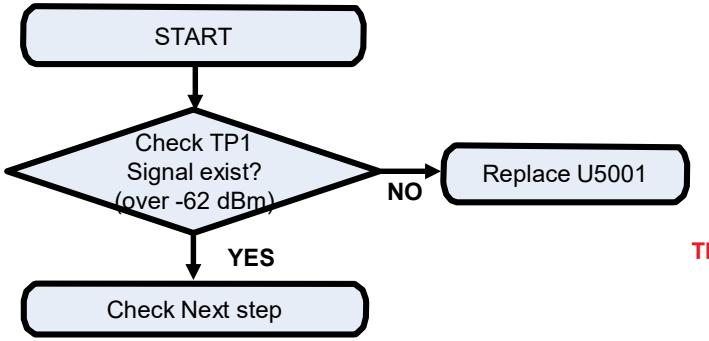


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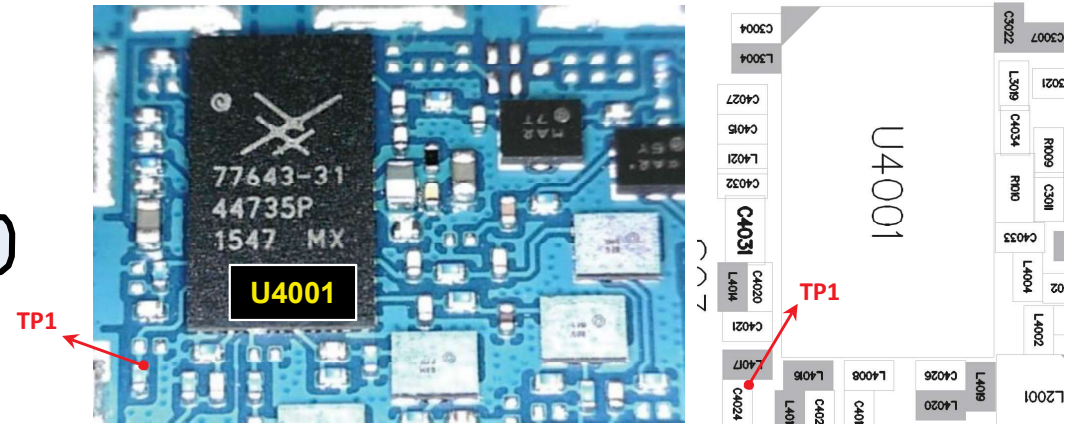
3.7 LTE RF PART

3.7.16 Checking RF Signal TX path(LTE B28)

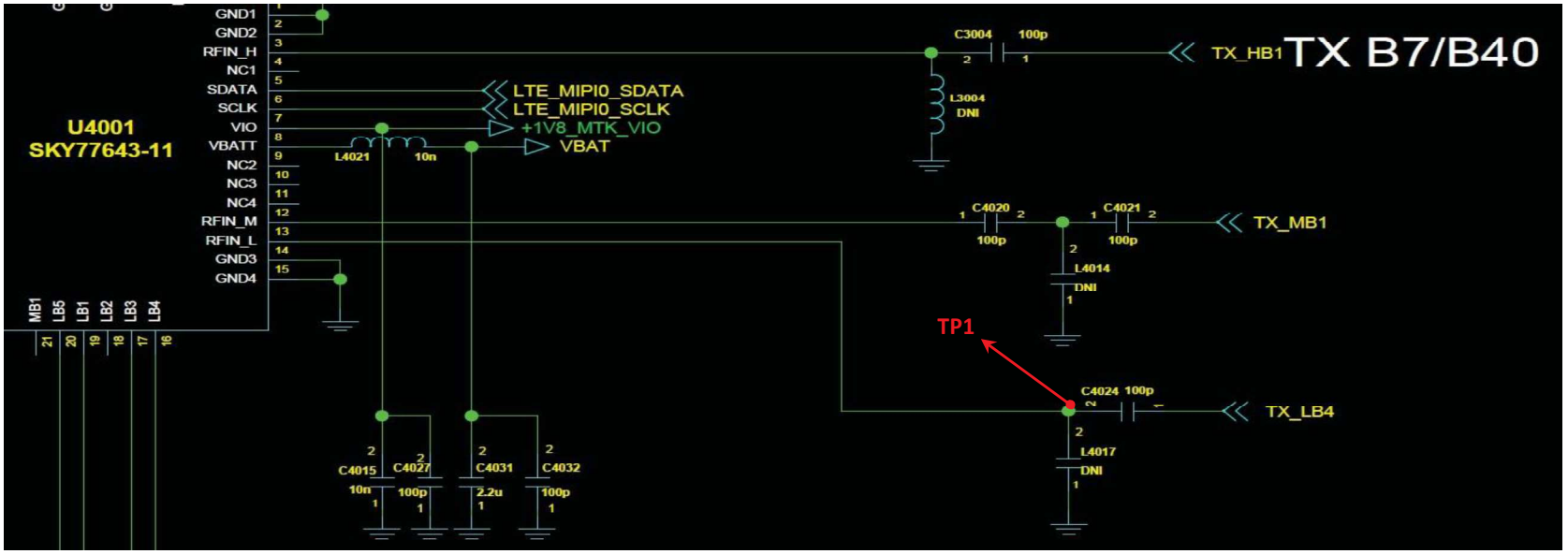
Checking Flow



Image



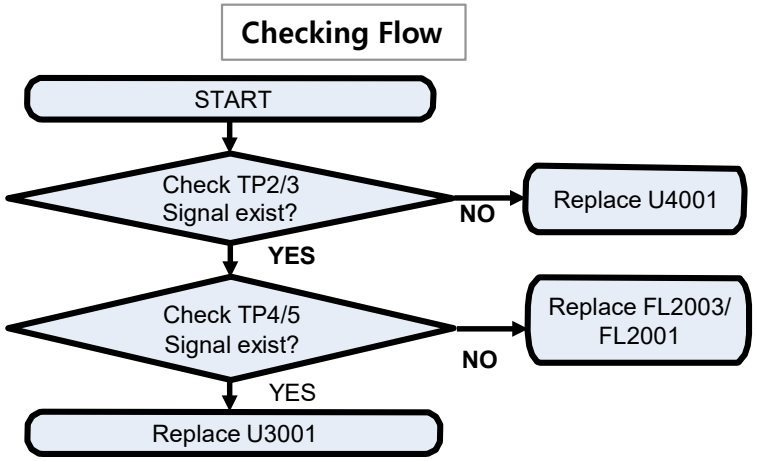
Circuit Diagram



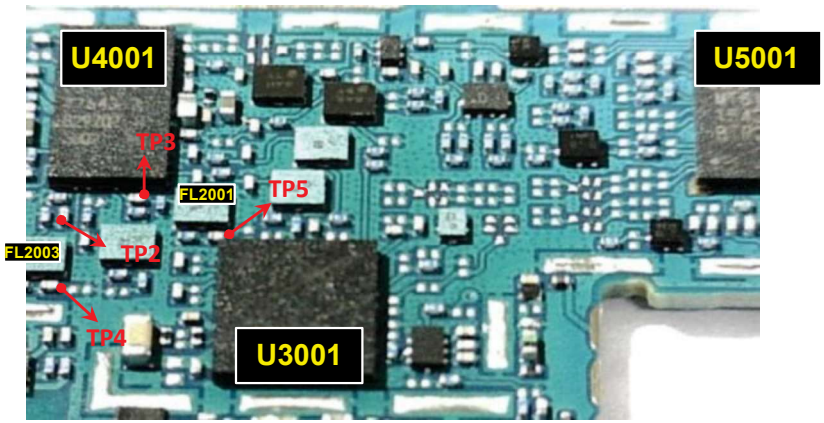
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3.7 LTE RF PART

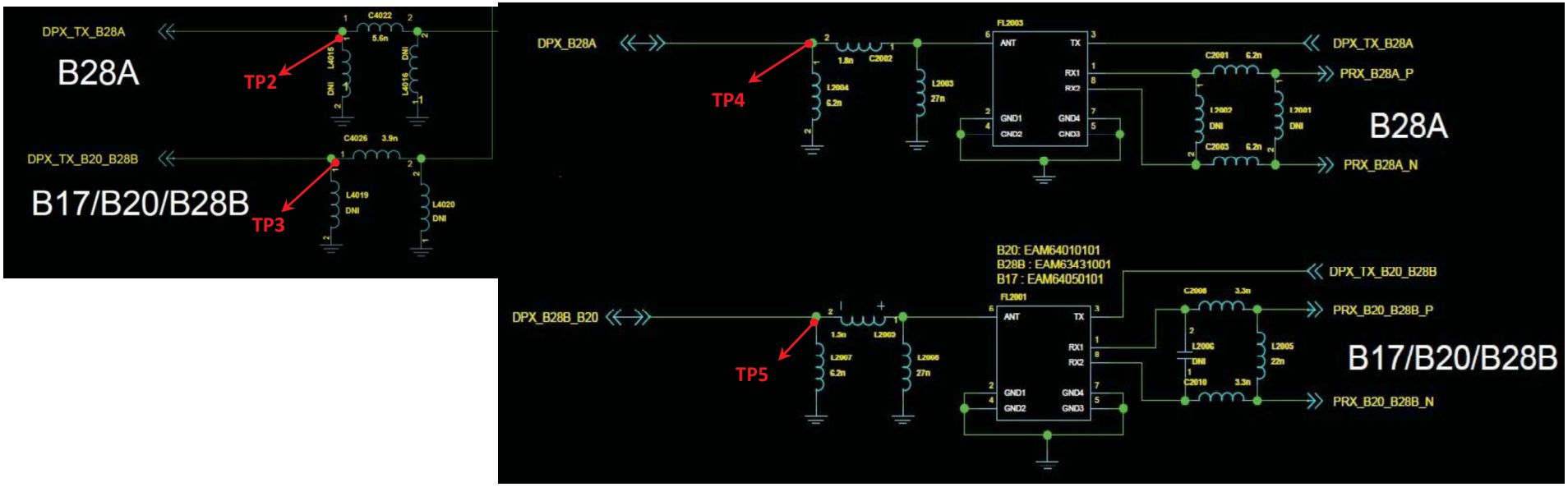
3.7.17 Checking RF Signal TX path(LTE B28)



Image



Circuit Diagram

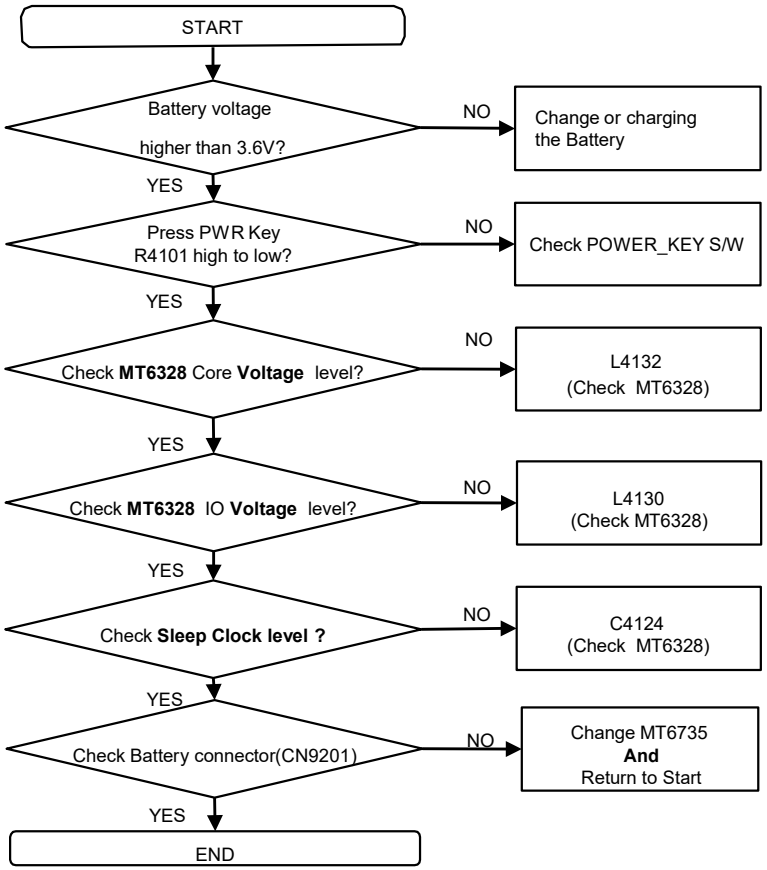


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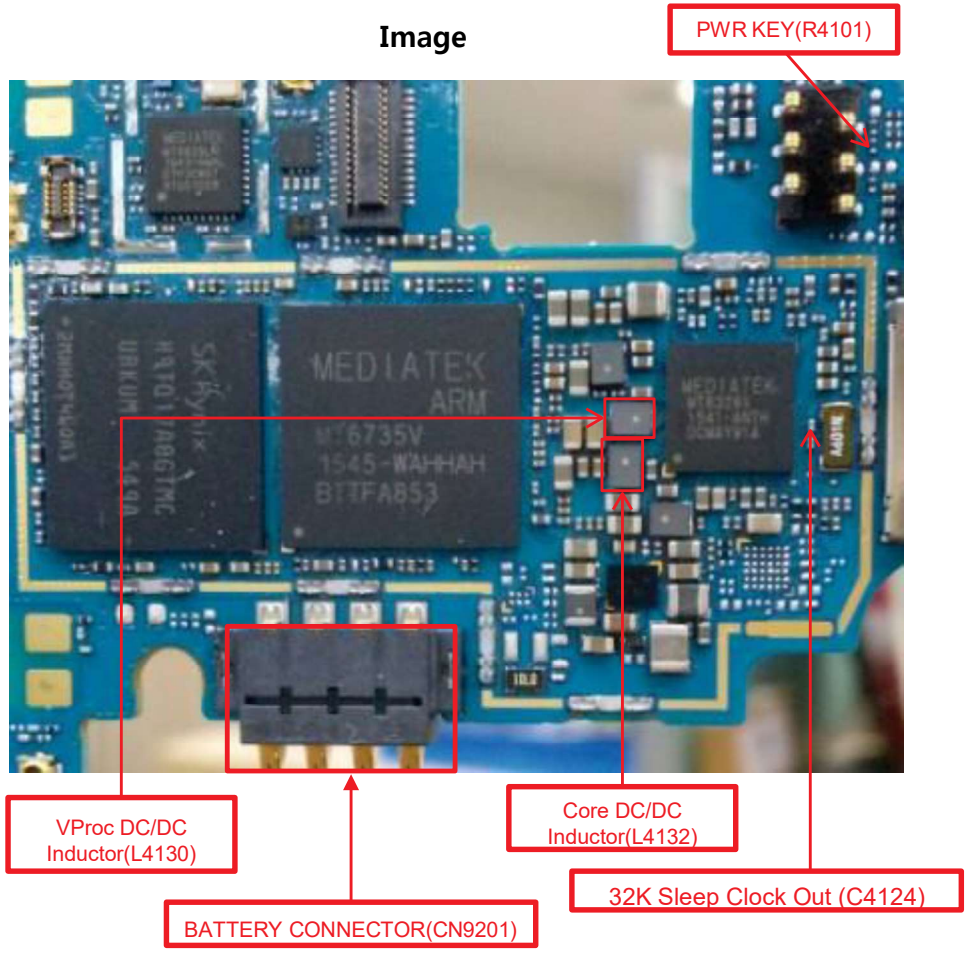
3.8 Power

Checking Power signal (Battery connector, Power Key, PMIC Regulator)

Checking Flow



Image

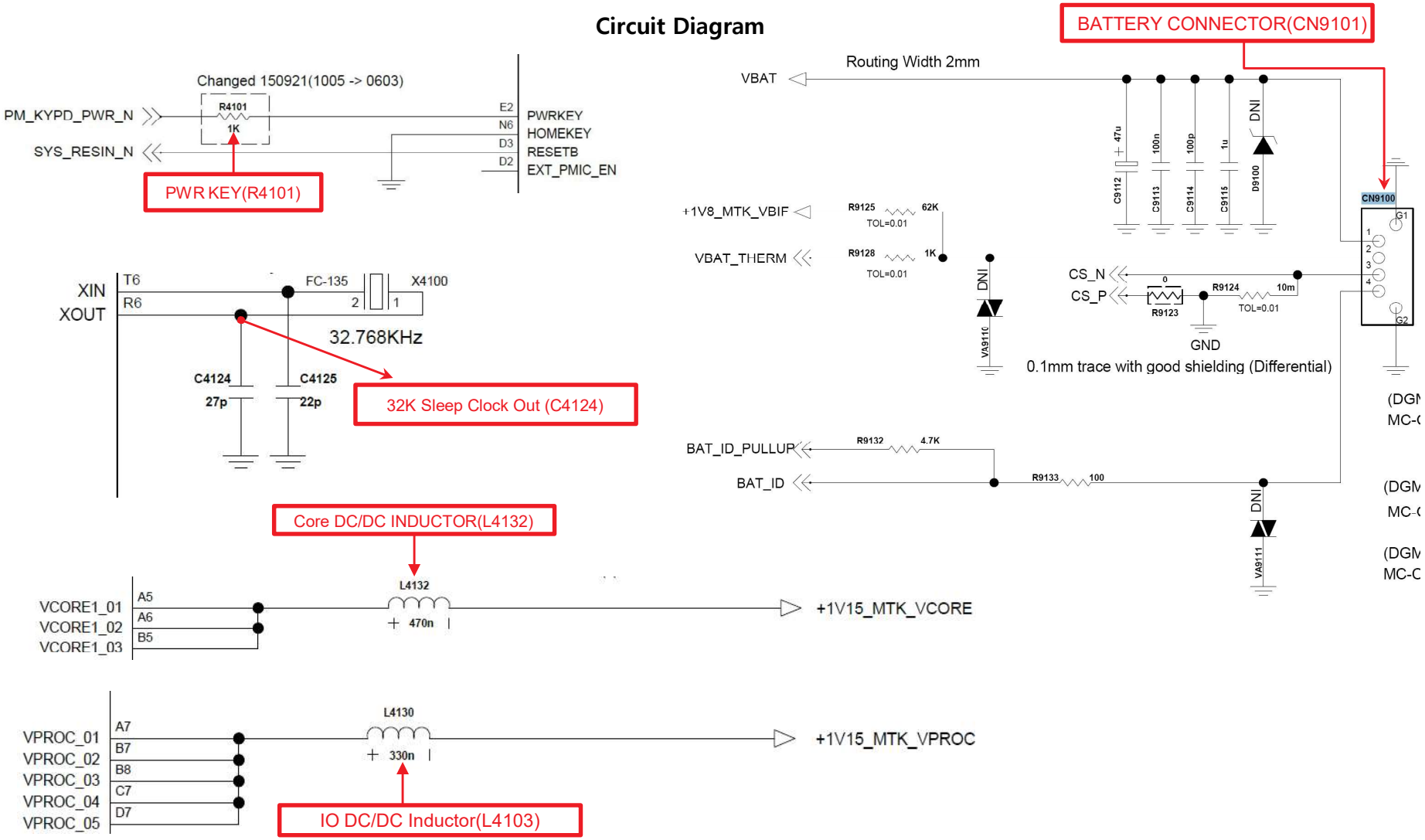


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3.8 Power

Checking Power signal (Battery connector, Power Key, PMIC Regulator)

Circuit Diagram

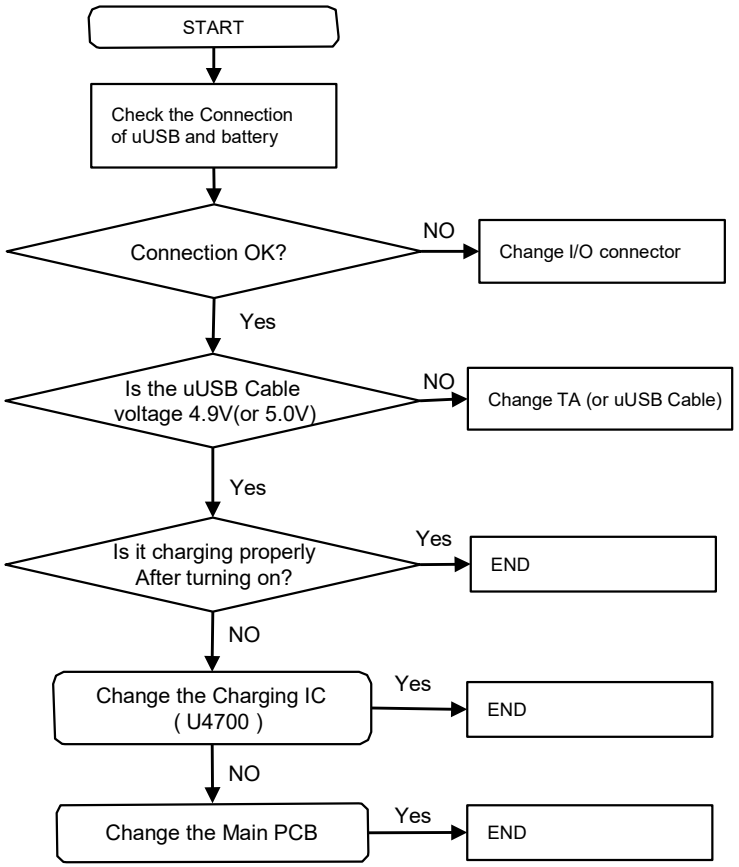


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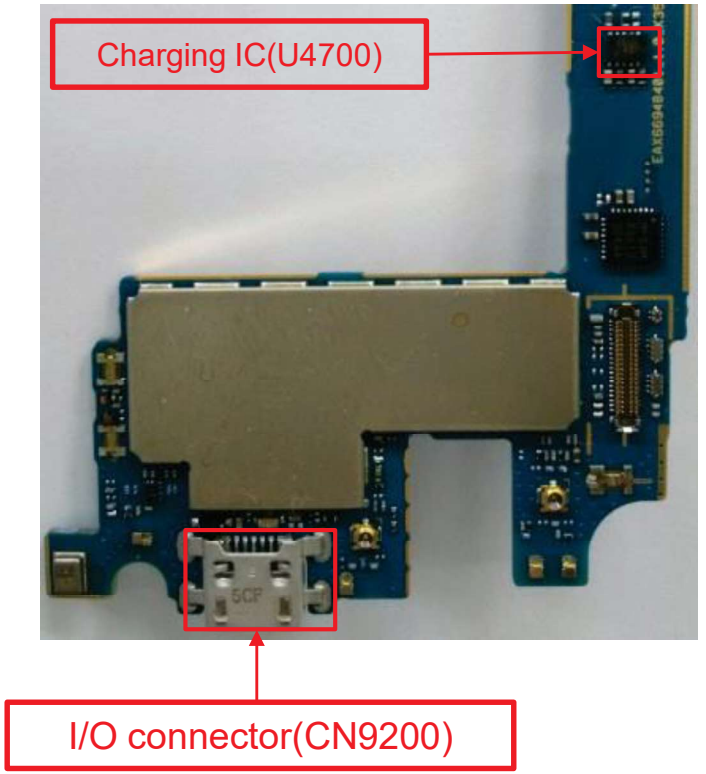
3.9 Charger

The I/O connector and uUSB cable voltage(5.0V) is used as the reference one of PMIC for charging.

Checking Flow



Image

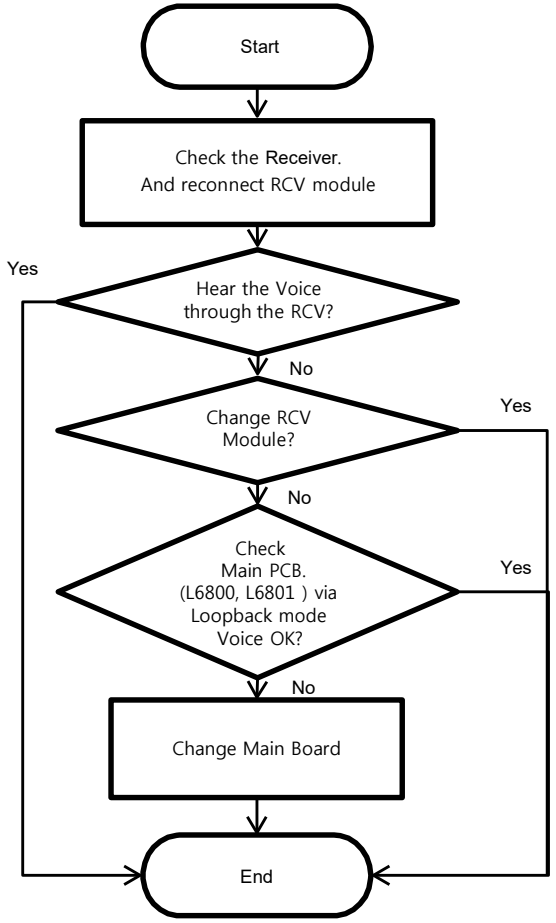


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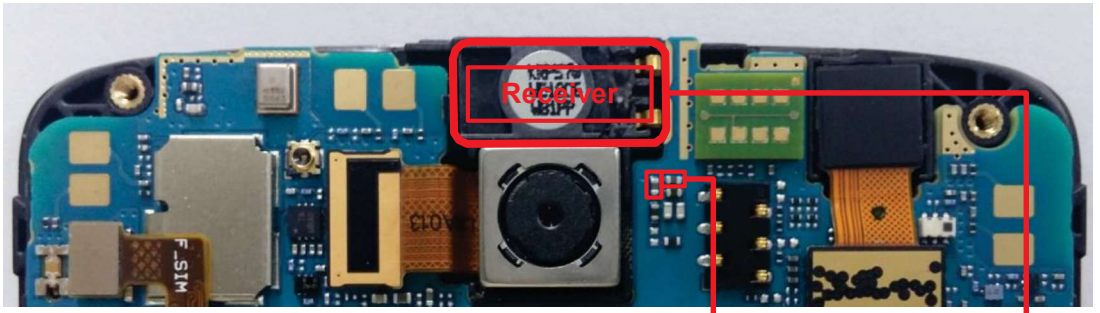
3.10 Audio Block(3.10.1 Audio receiver)

The receiver control signals are generated by MT6328(U4100), the MT6328 chip and the receiver are to be checked out.

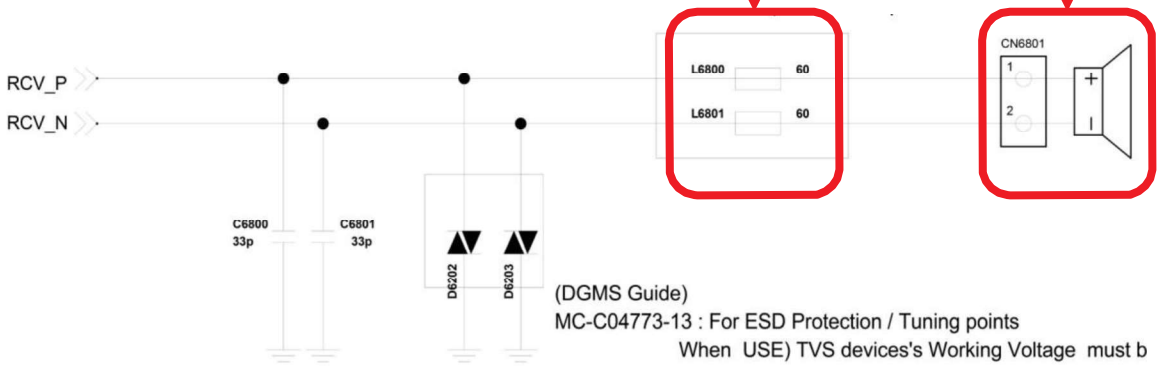
Checking Flow



Image



Circuit Diagram

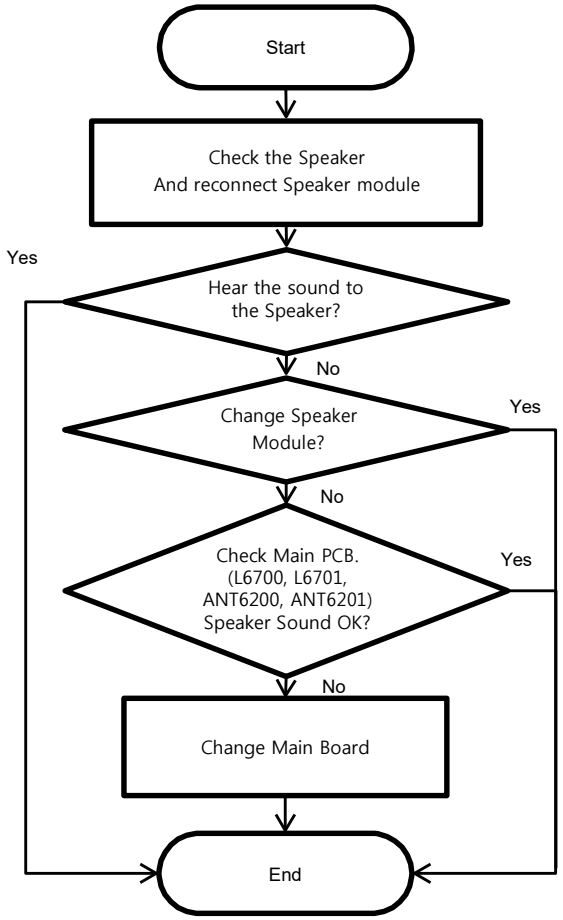


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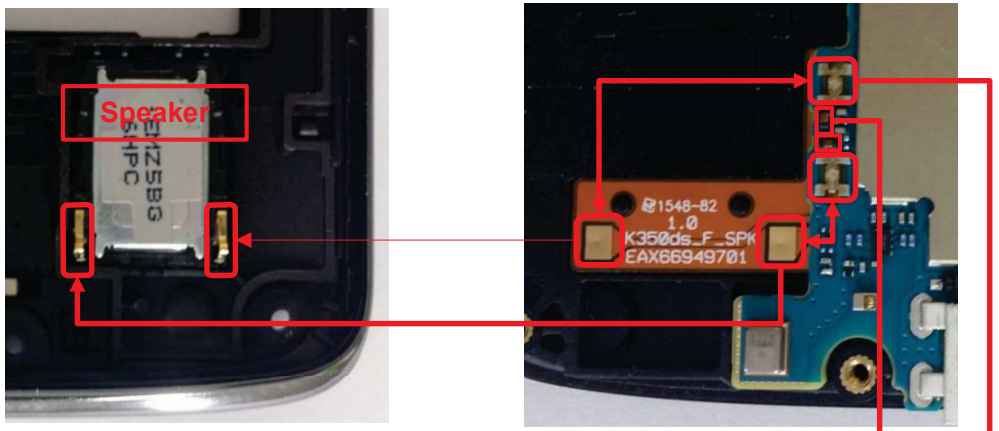
3.10.1 Audio_speaker

The Speaker control signals are generated by MT6328(U4100), the MT6328 chip and the speaker are to be checked out.

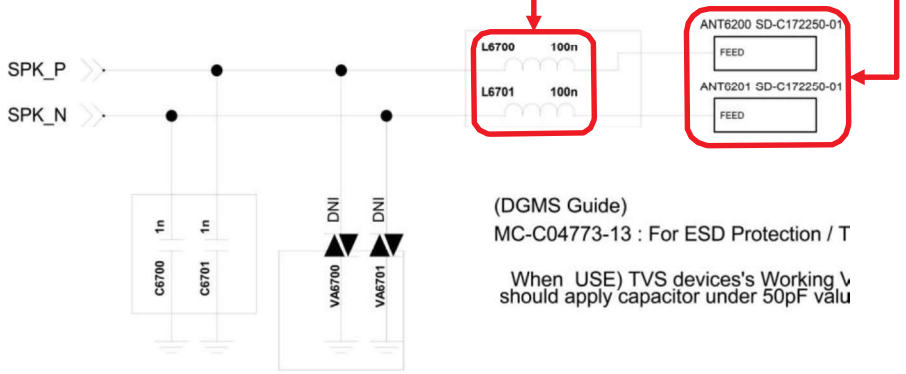
Checking Flow



Image



Circuit Diagram

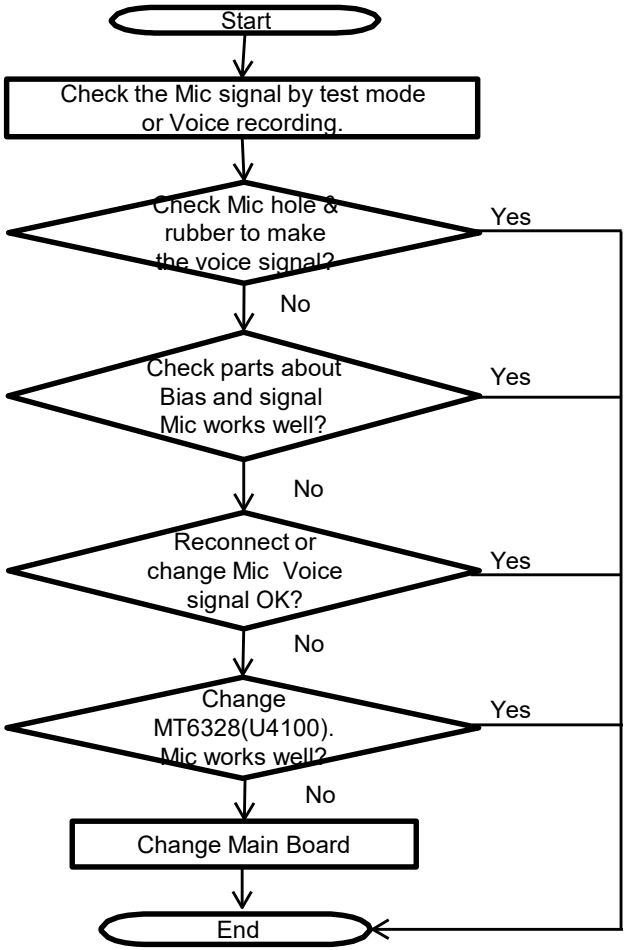


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3.10.2 Audio_Main MIC

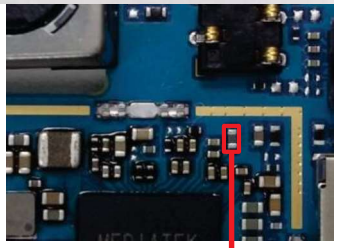
It's operating voice call(except speakerphone), voice recording, camcorder recording.

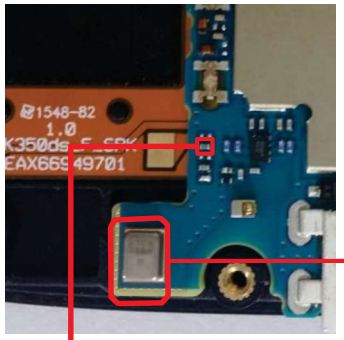
Checking Flow



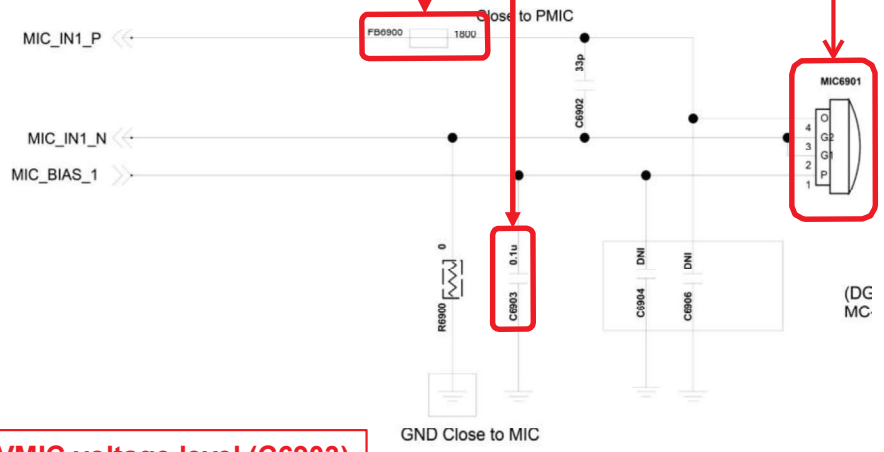
Image







Circuit Diagram



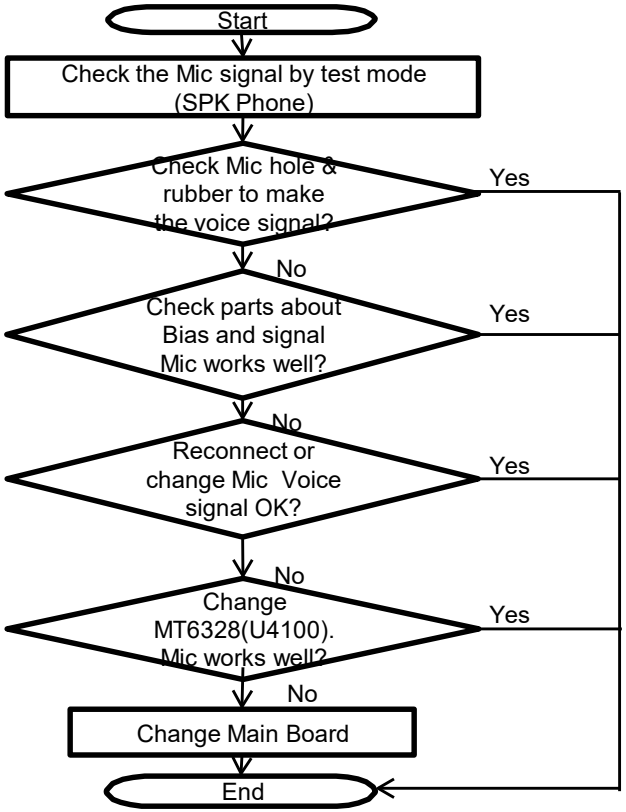
Check FB6900, VMIC voltage level (C6903)

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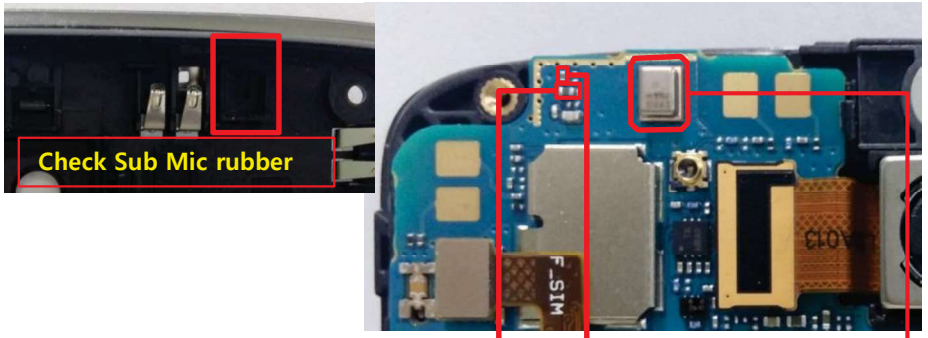
3.10.3 Audio_sub MIC

It's operating Speakerphone call.

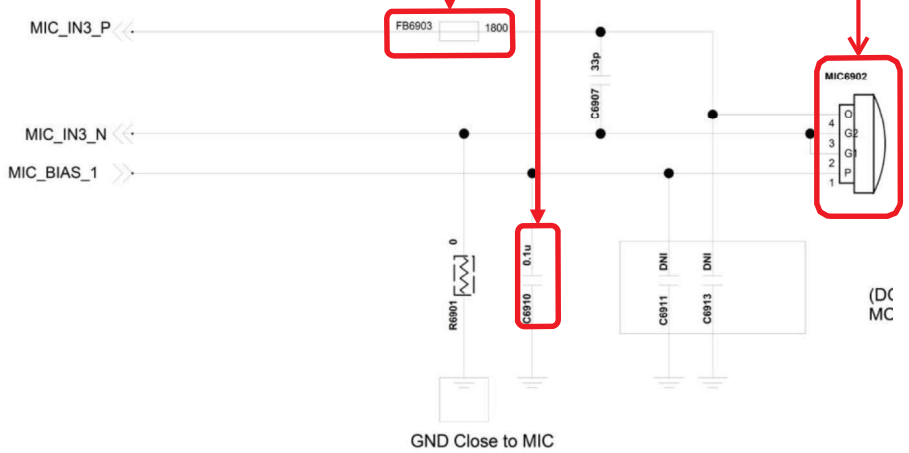
Checking Flow



Image



Circuit Diagram



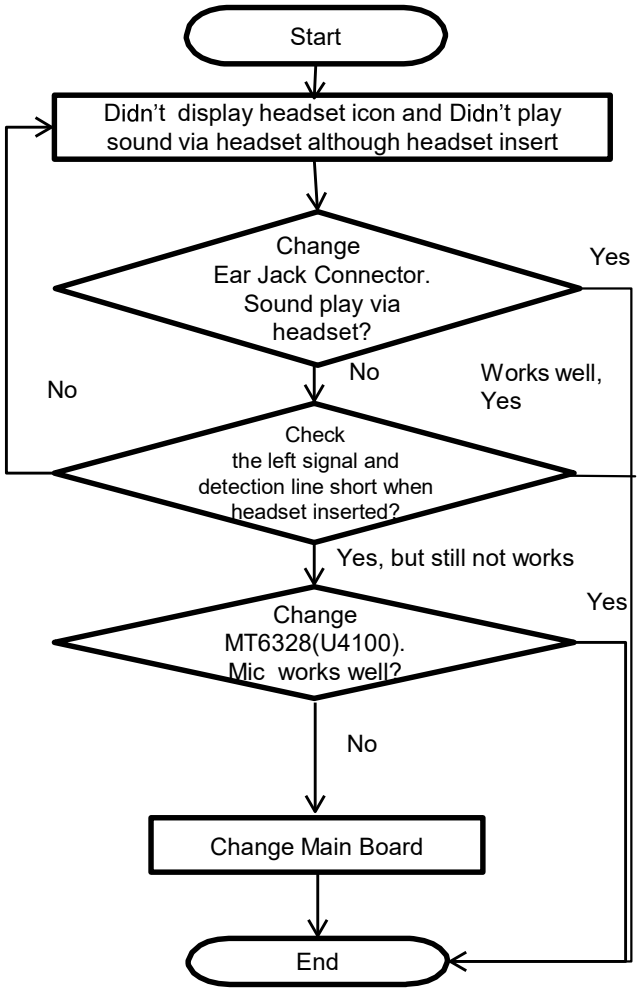
Check FB6903, , VMIC voltage level (C6910)

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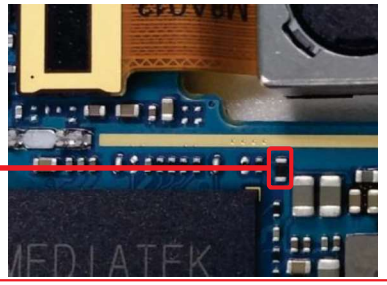
3.10.4 Audio_Ear MIC Jack

Disable detecting headset insert or No sound from Earphone, Check the Ear Mic and MT6328

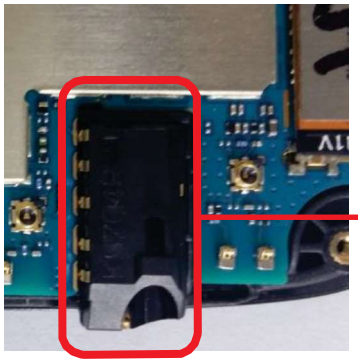
Checking Flow



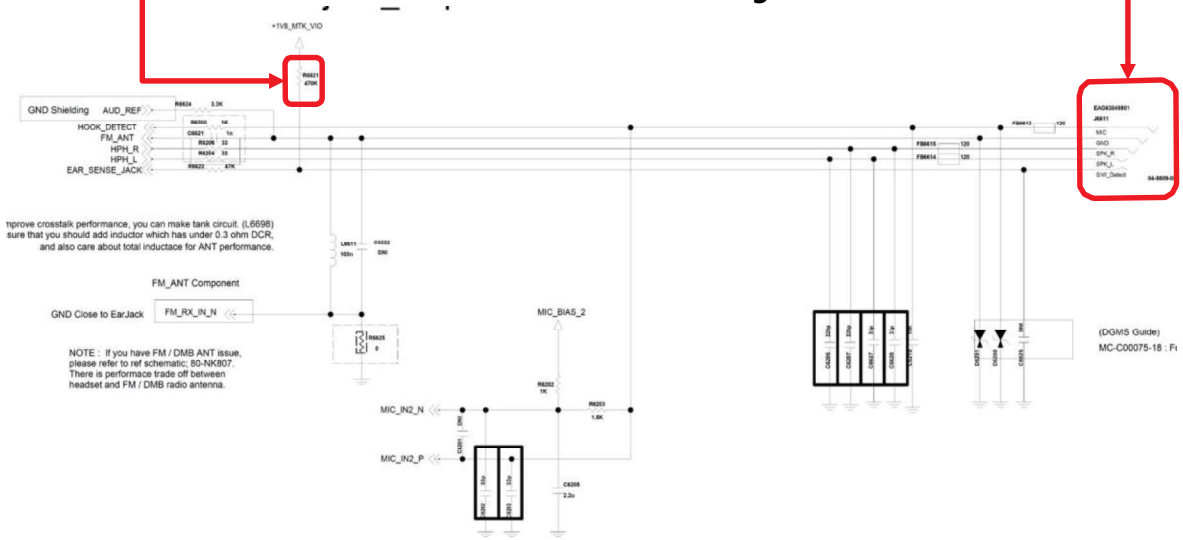
Image



Jack detect
Voltage Level Check at R6621
- 1.8V(before Jack)
- low(after Jack)



Circuit Diagram

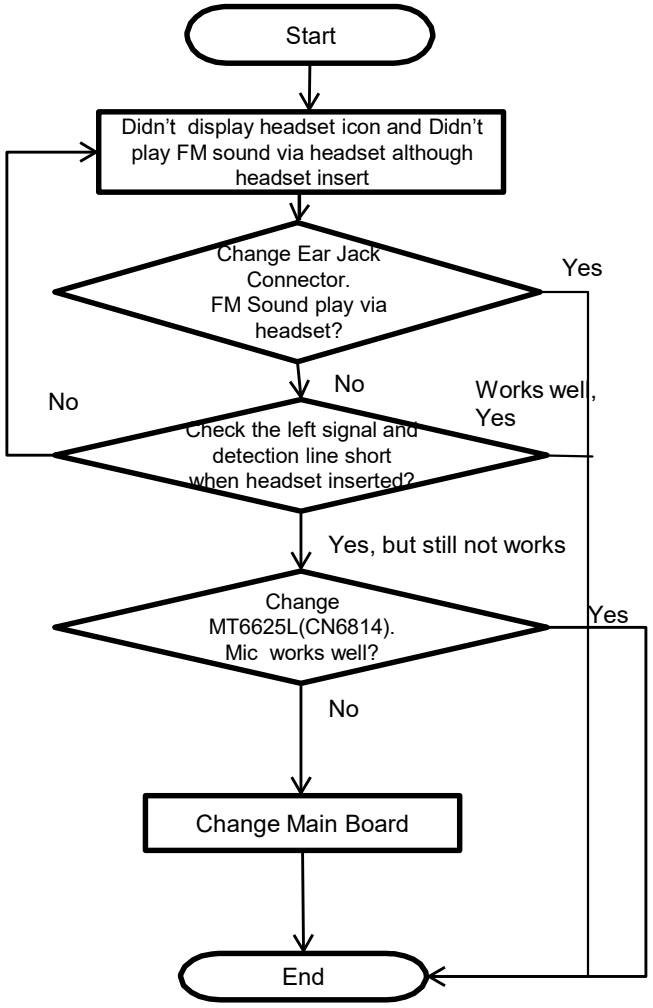


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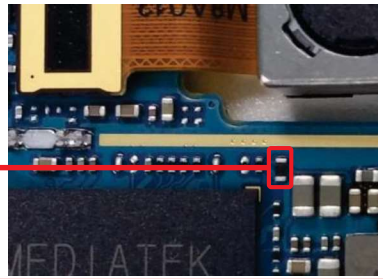
3.10.5 FM_Radio

Disable detecting headset insert or No FM sound from Earphone, Check the Ear Mic and MT6625L

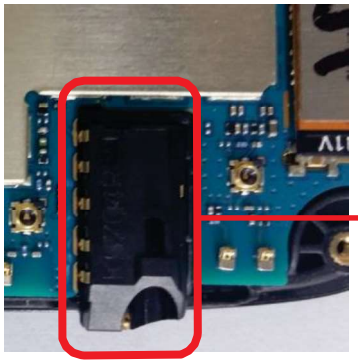
Checking Flow



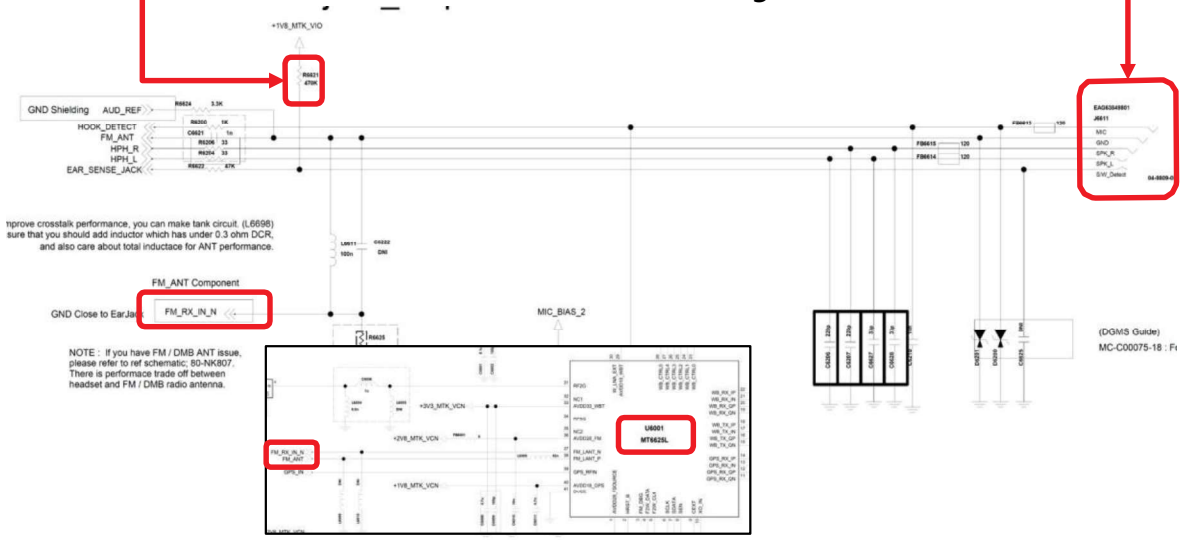
Image



Jack detect
Voltage Level Check at R6621
- 1.8V(before Jack)
- low(after Jack)



Circuit Diagram

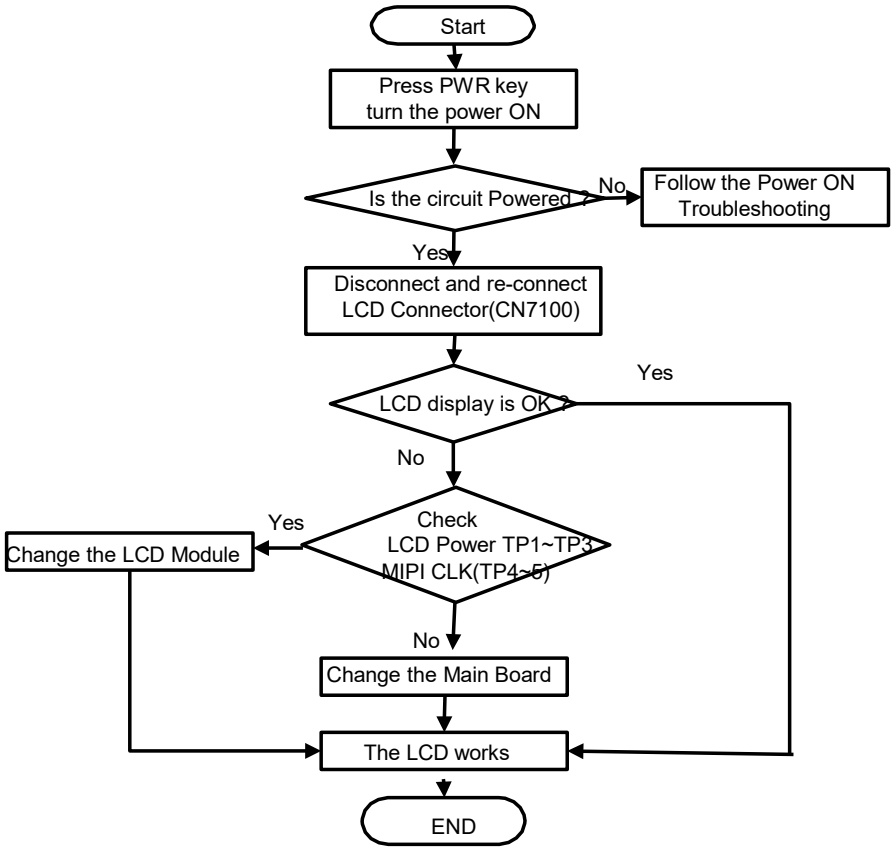


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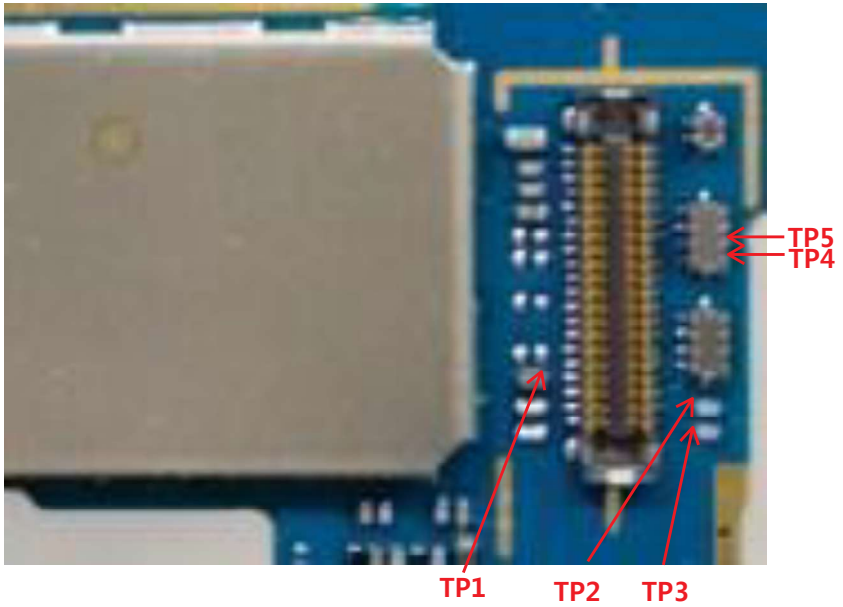
3.11 Checking LCD Block

The LCD control signals are generated by MT6735. Its interface is MIPI having four data lanes and one clock lane.

Checking Flow



Image



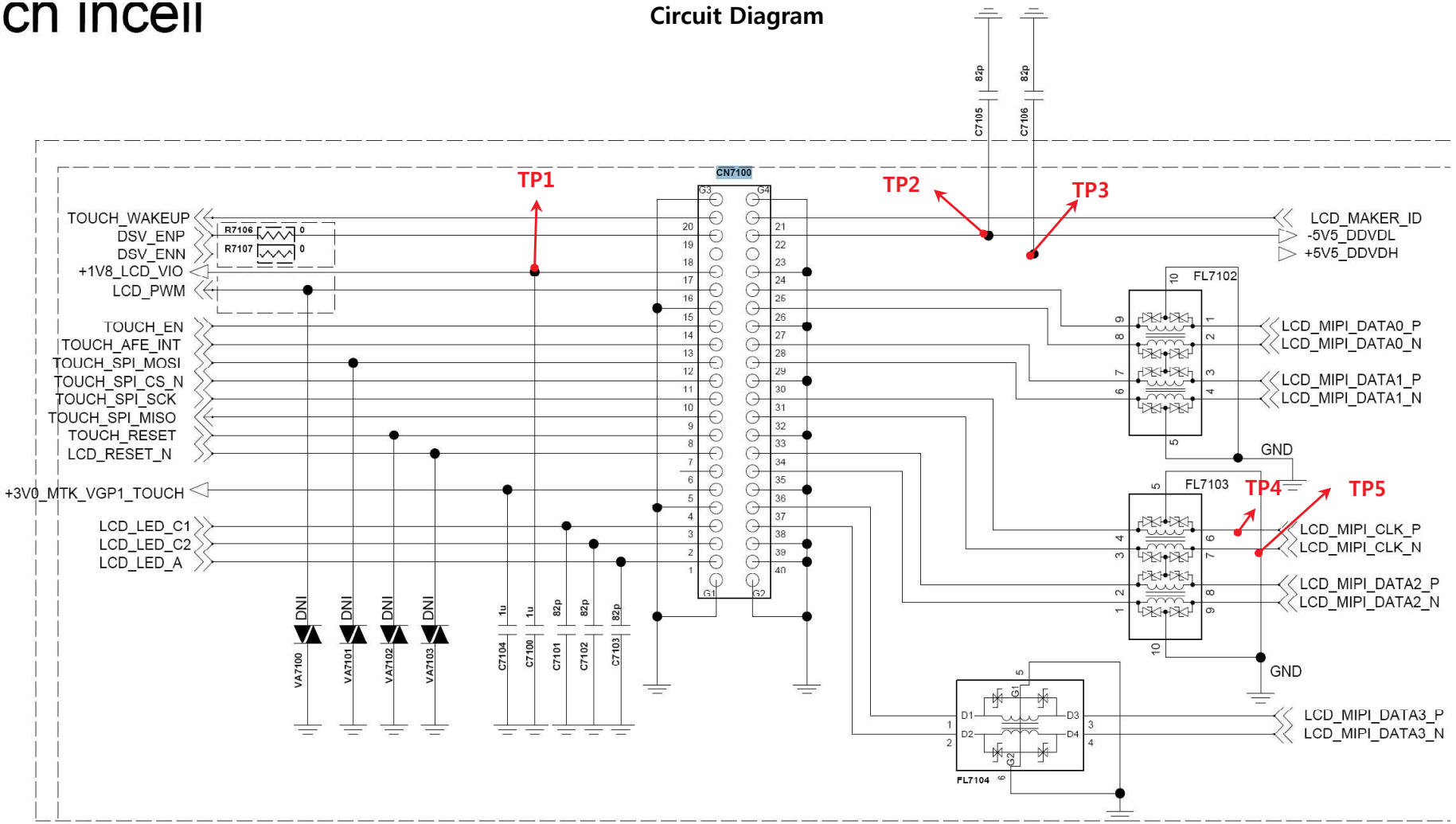
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3.11 Checking LCD Block

The LCD control signals are generated by MT6735. Its interface is MIPI having four data lanes and one clock lane.

ICN incell

Circuit Diagram

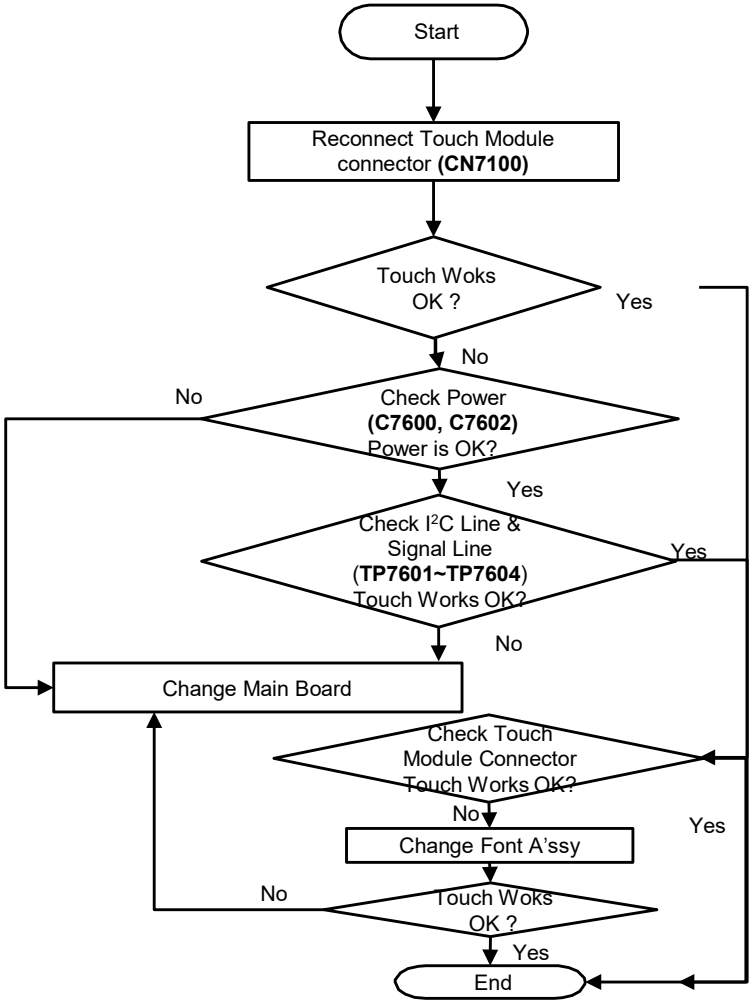


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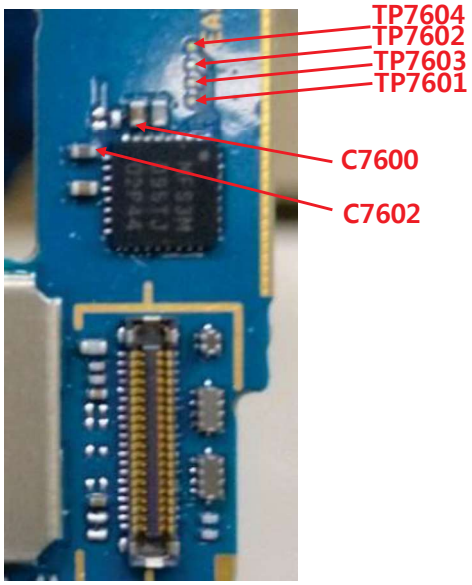
3.12 Checking Touch Block

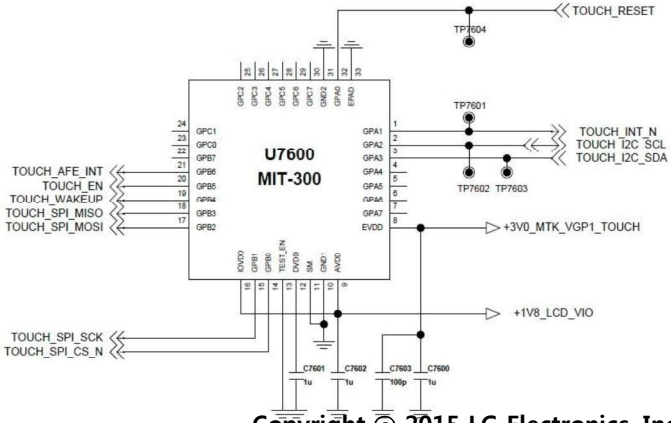
The Touch control signals are generated by MT6735. It is assembled with LCD.

Checking Flow



Image



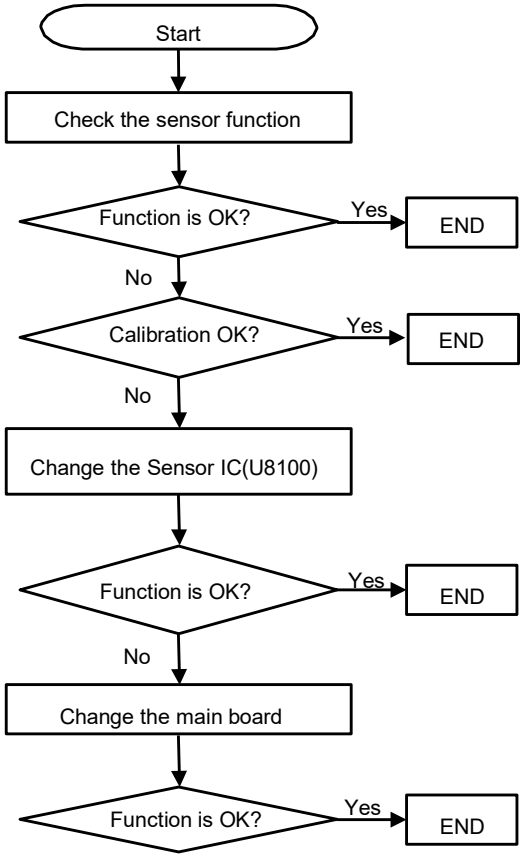


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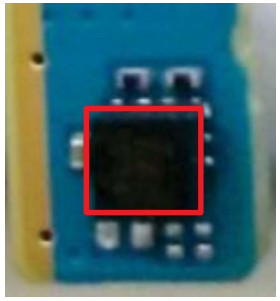
3.13 Checking accelmeter+compass sensor Block

The Accl. & compass sensors are calibrated by using SW algorithm.

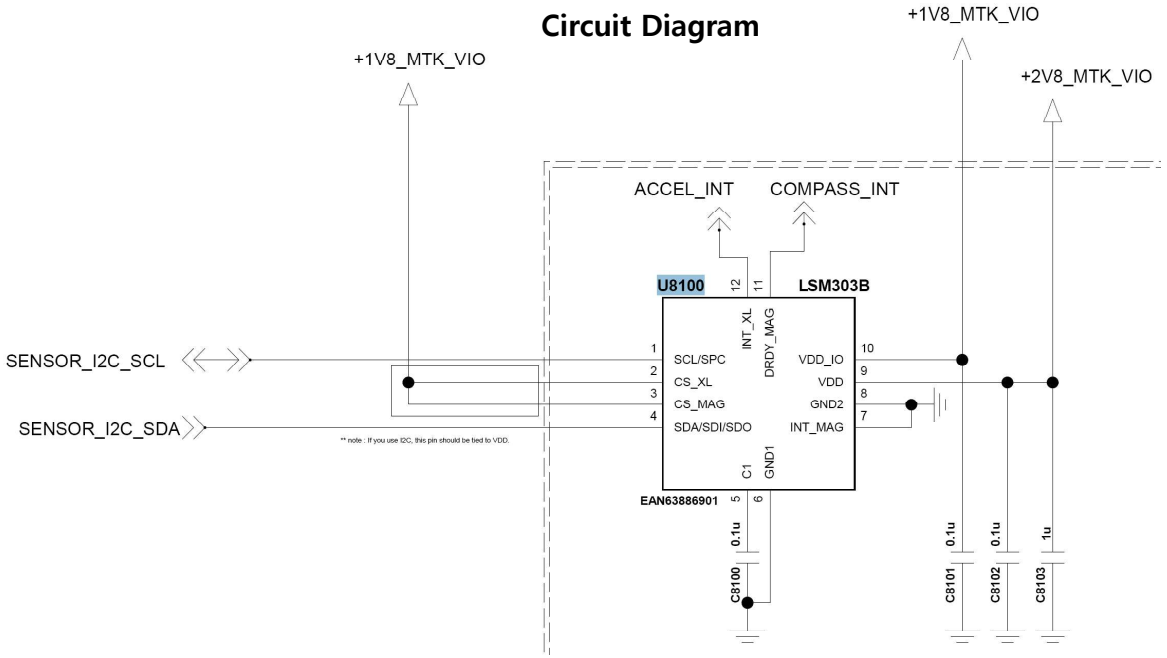
Checking Flow



Image



Circuit Diagram

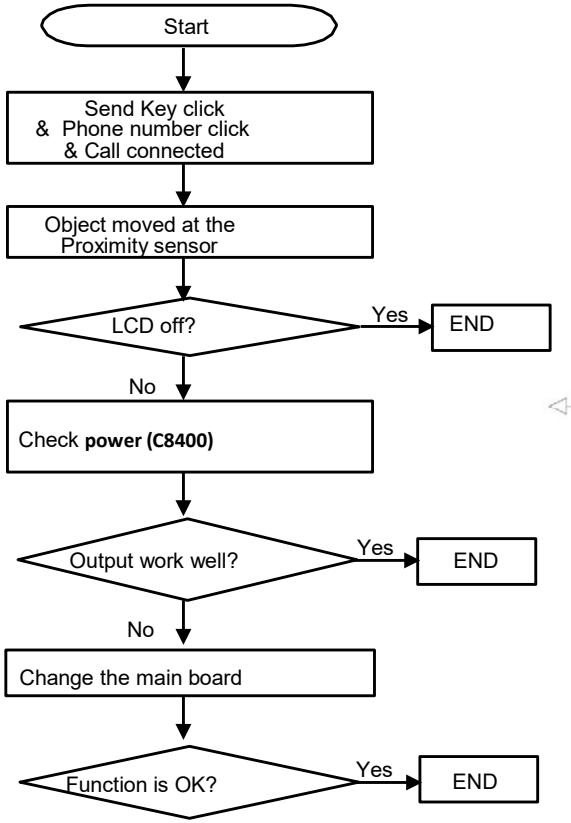


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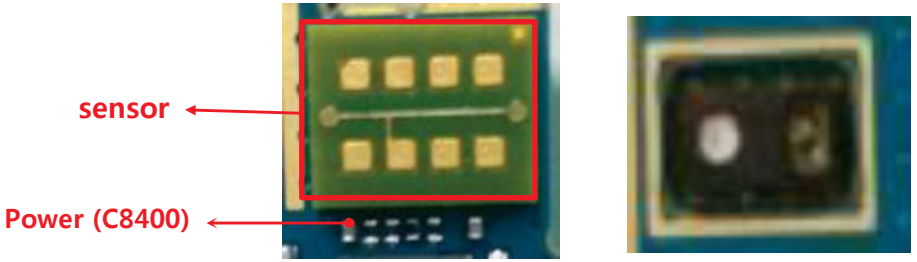
3.13 Checking proximity sensor Block

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

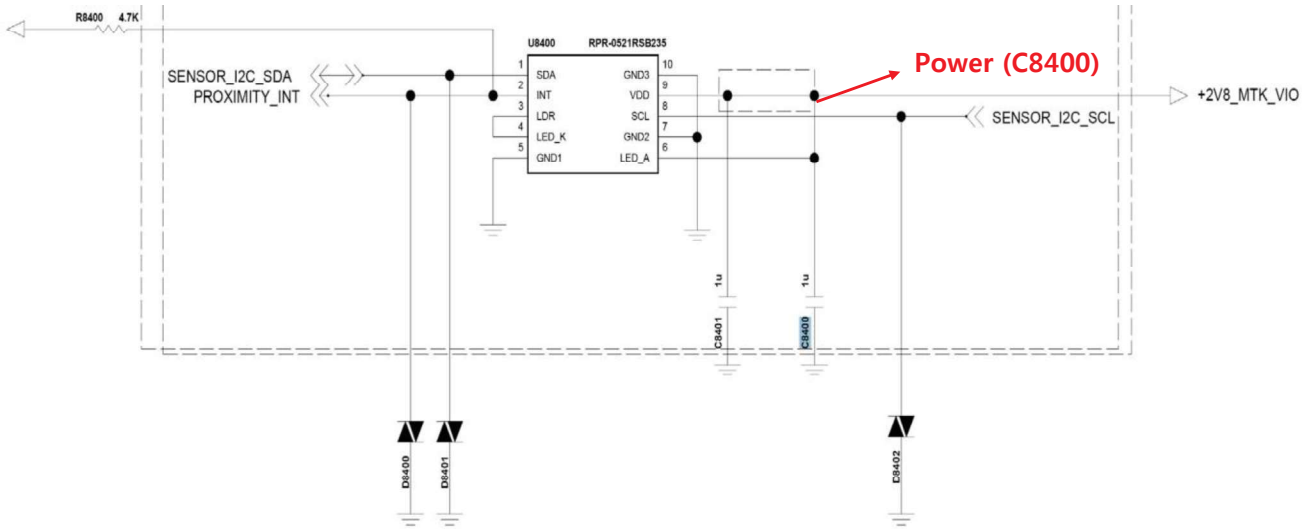
Checking Flow



Image



Circuit Diagram

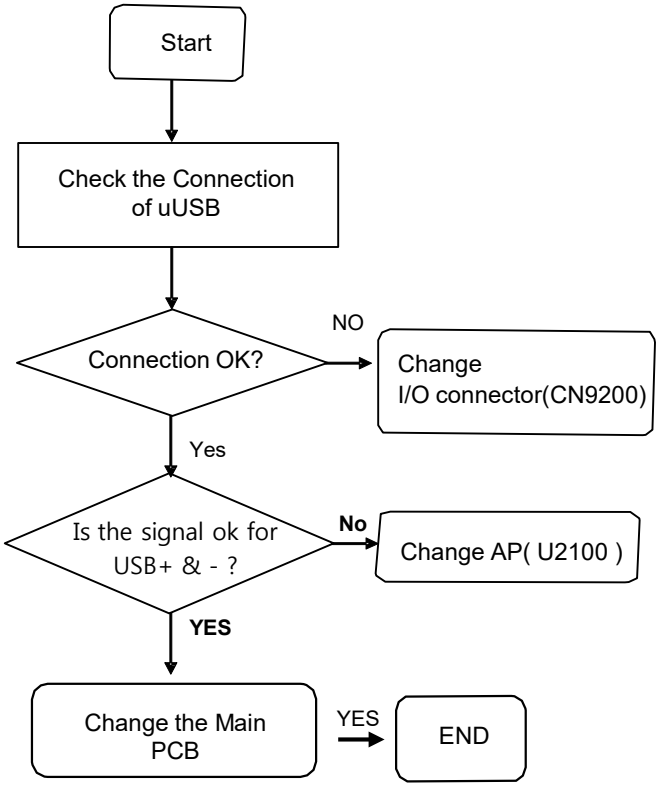


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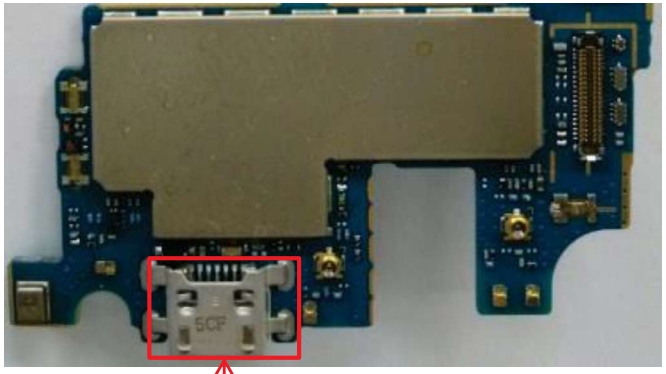
3.14 Checking USB Block

I/O connector is used as the USB port.

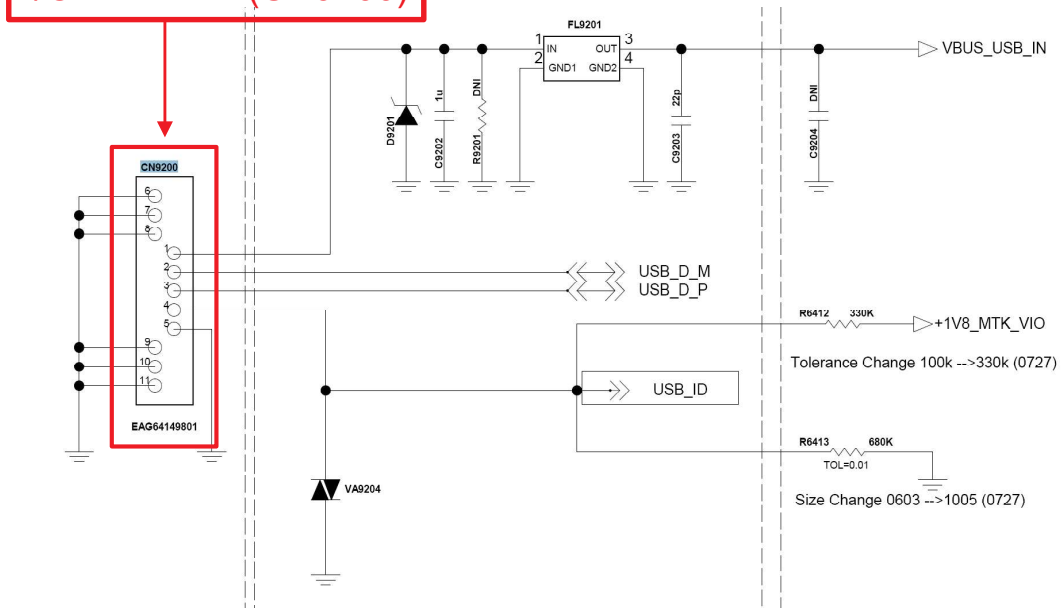
Checking Flow



Image



Circuit Diagram

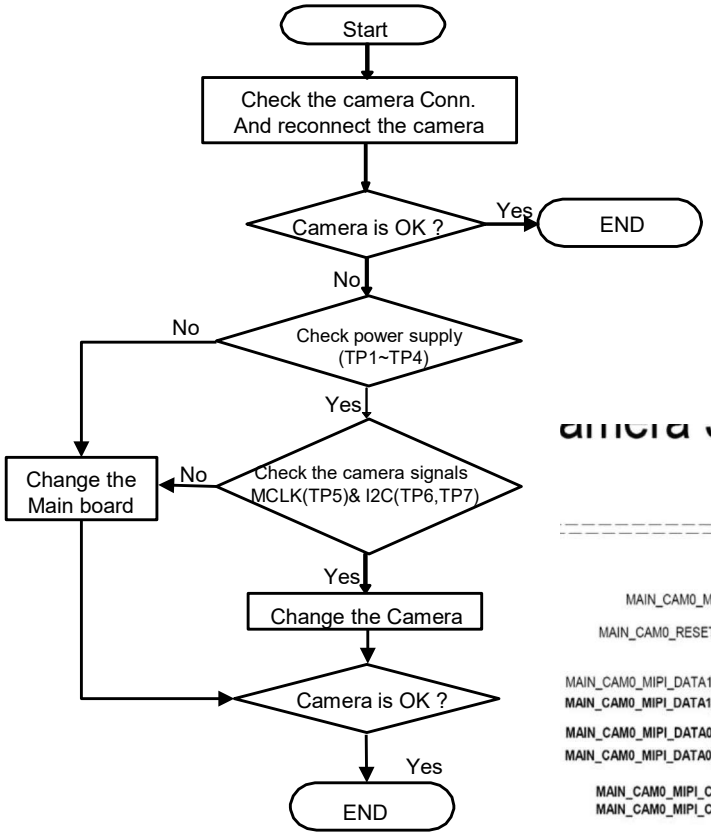


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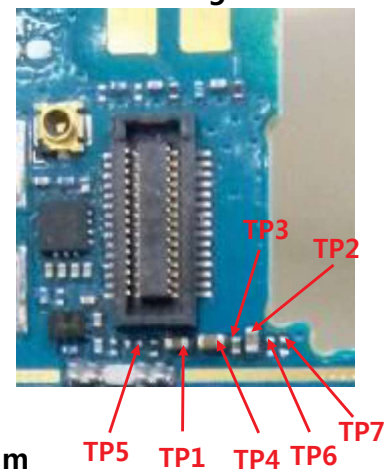
3.15 Checking Main camera Block

8M camera control signals are generated by MT6735 (U2100 : Main Chipset). And powered by MT6328 (U4100 : PMIC).

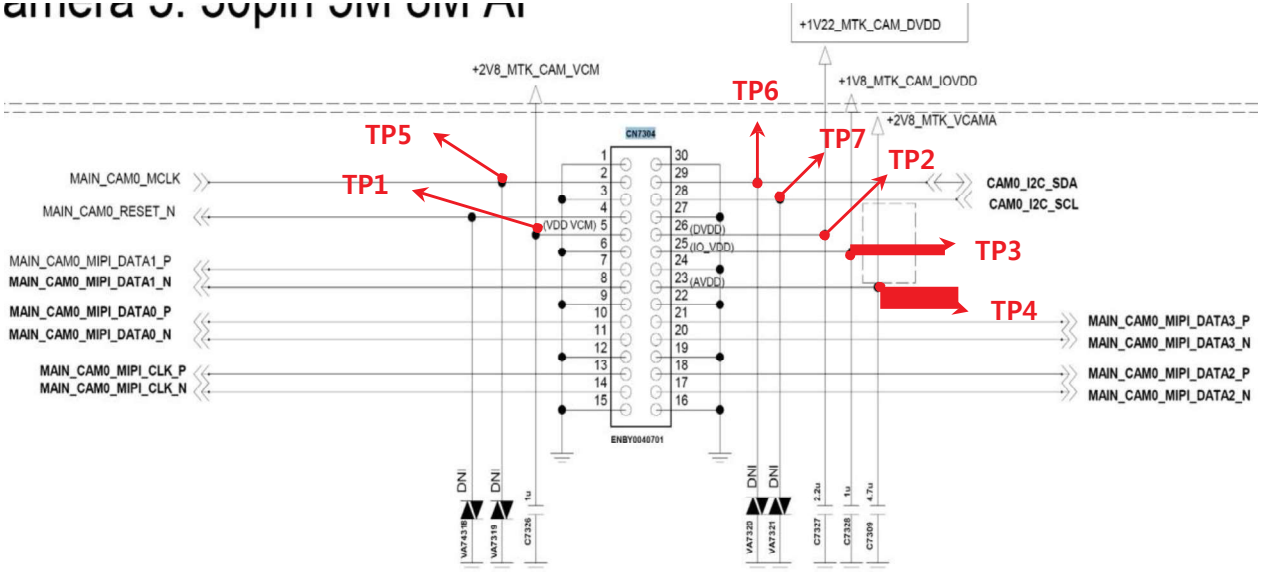
Checking Flow



Image



Circuit Diagram

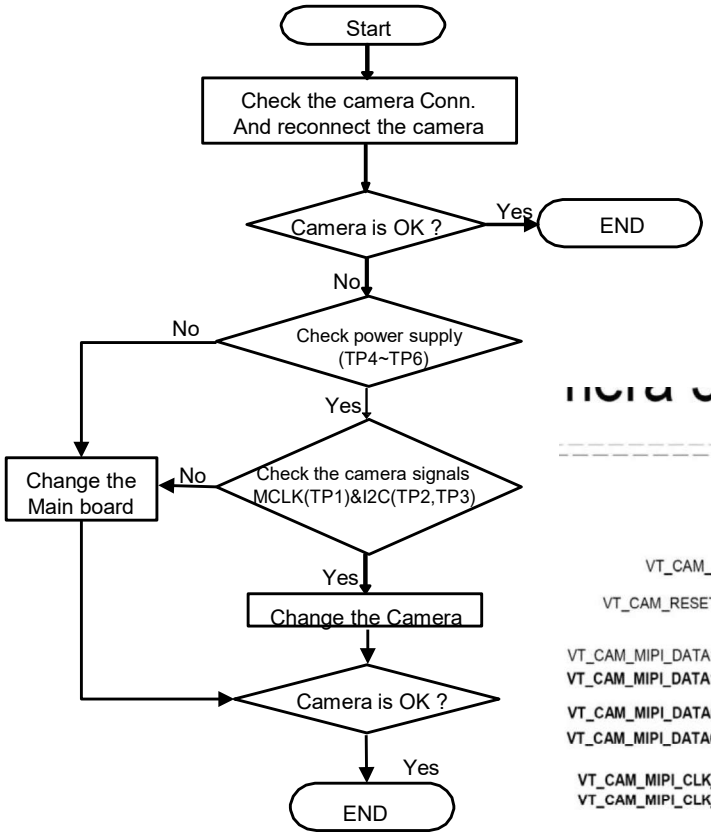


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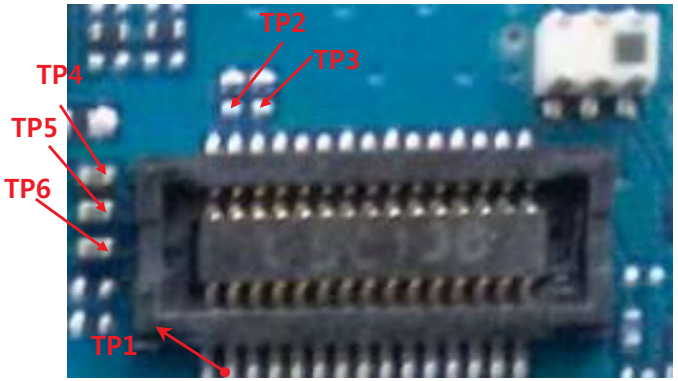
3.15 Checking VT camera Block

5M camera control signals are generated by MT6735 (U2100 : Main Chipset). And powered by MT6328 (U4100 : PMIC).

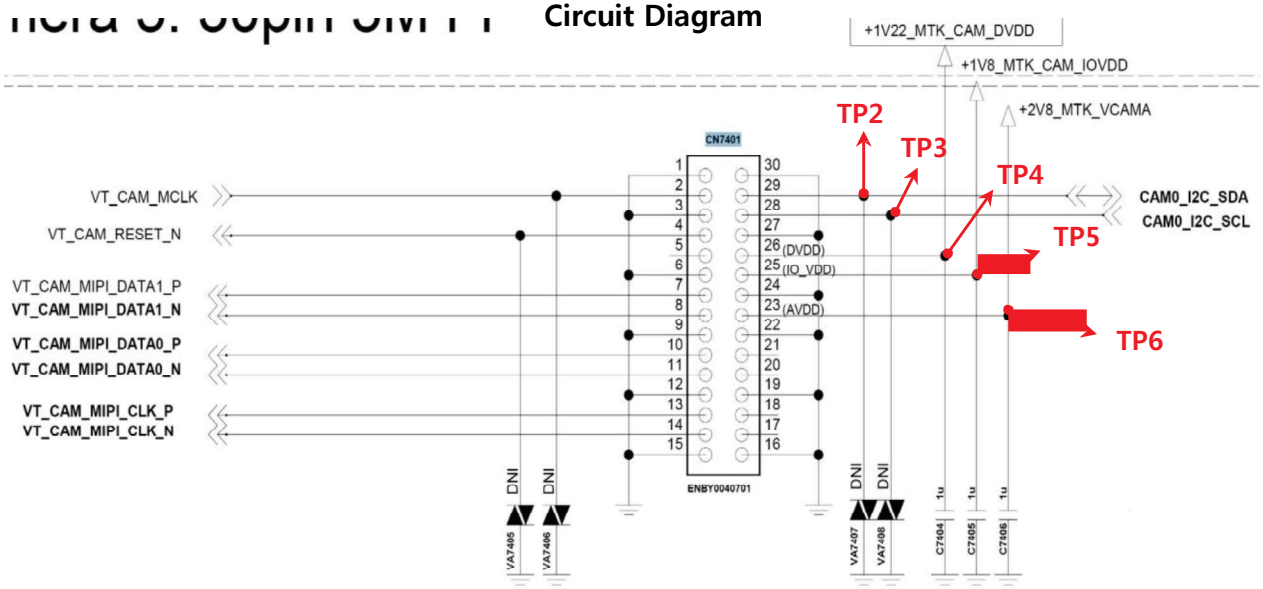
Checking Flow



Image



Circuit Diagram

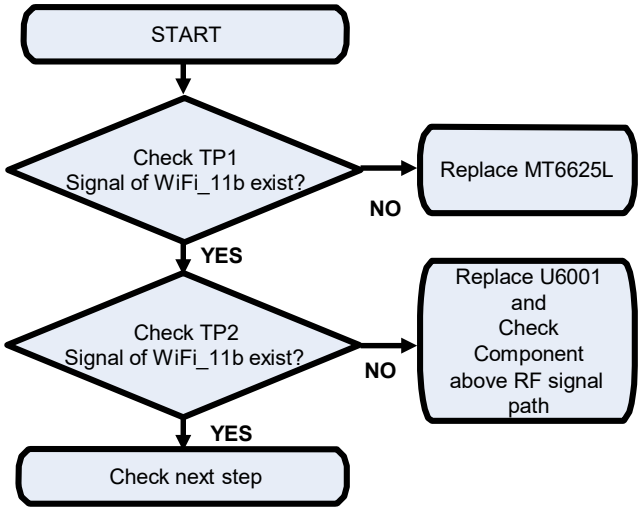


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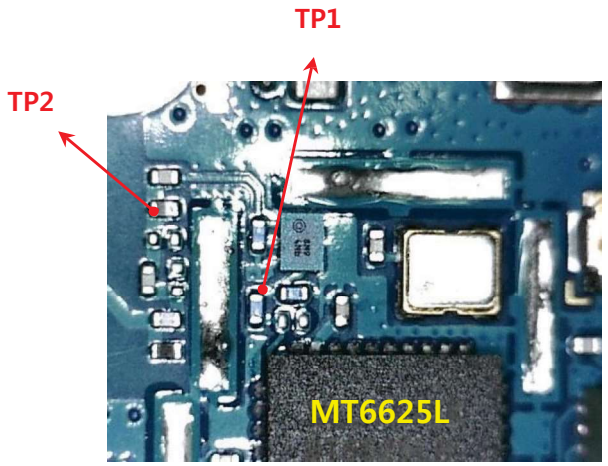
3.16 Connectivity RF PART

3.16.1 Checking RF Signal TRX path(WiFi, BT)

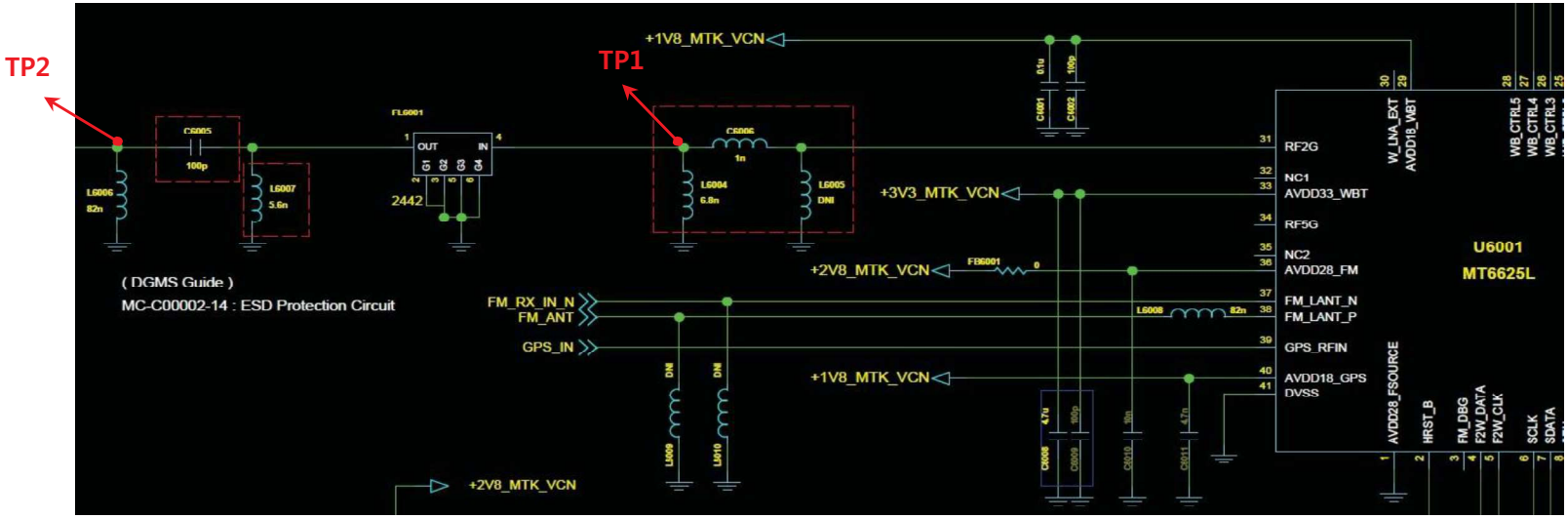
Checking Flow



Image



Circuit Diagram

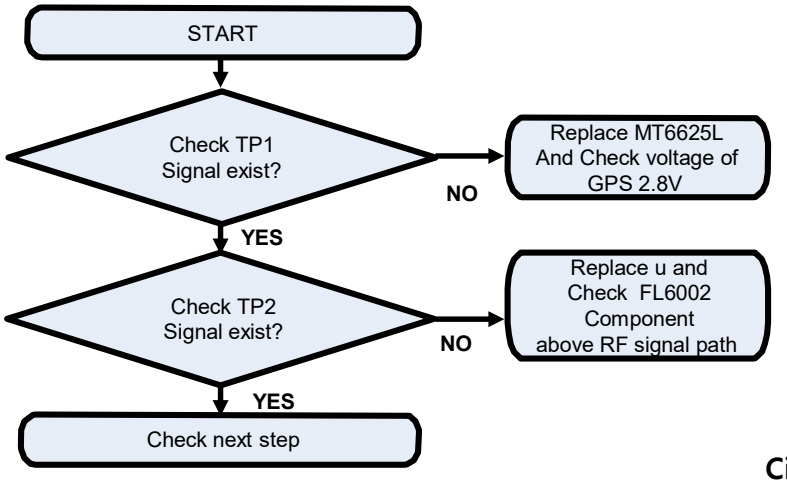


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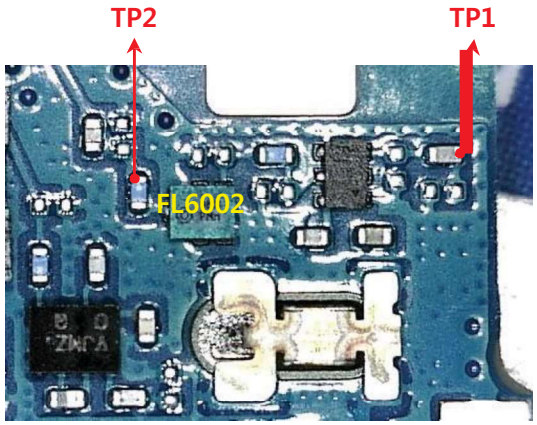
3.16 Connectivity RF PART

3.16.2 Checking RF Signal TRX path(GPS)

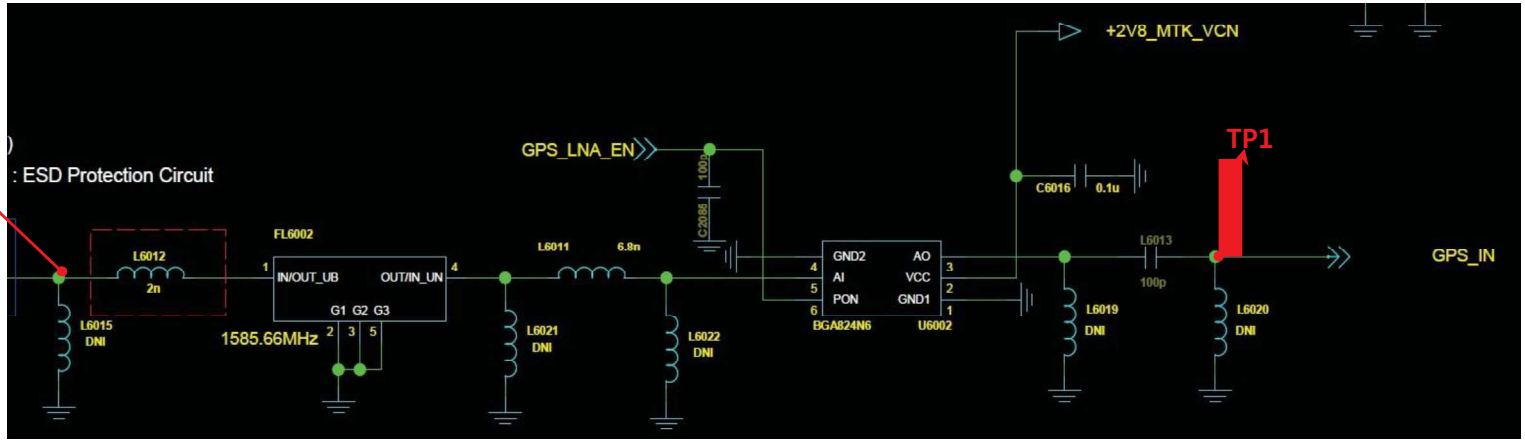
Checking Flow



Image

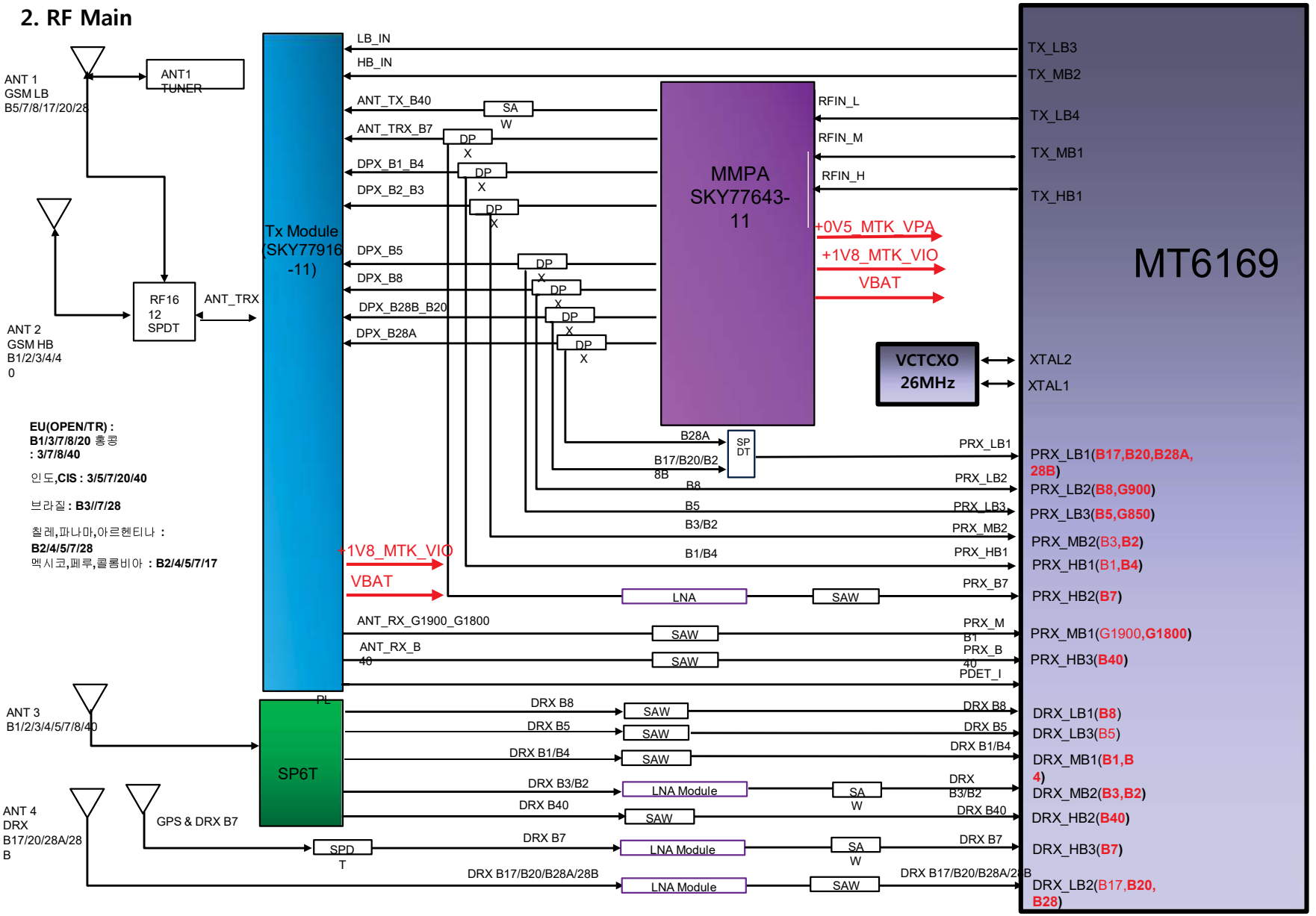


Circuit Diagram



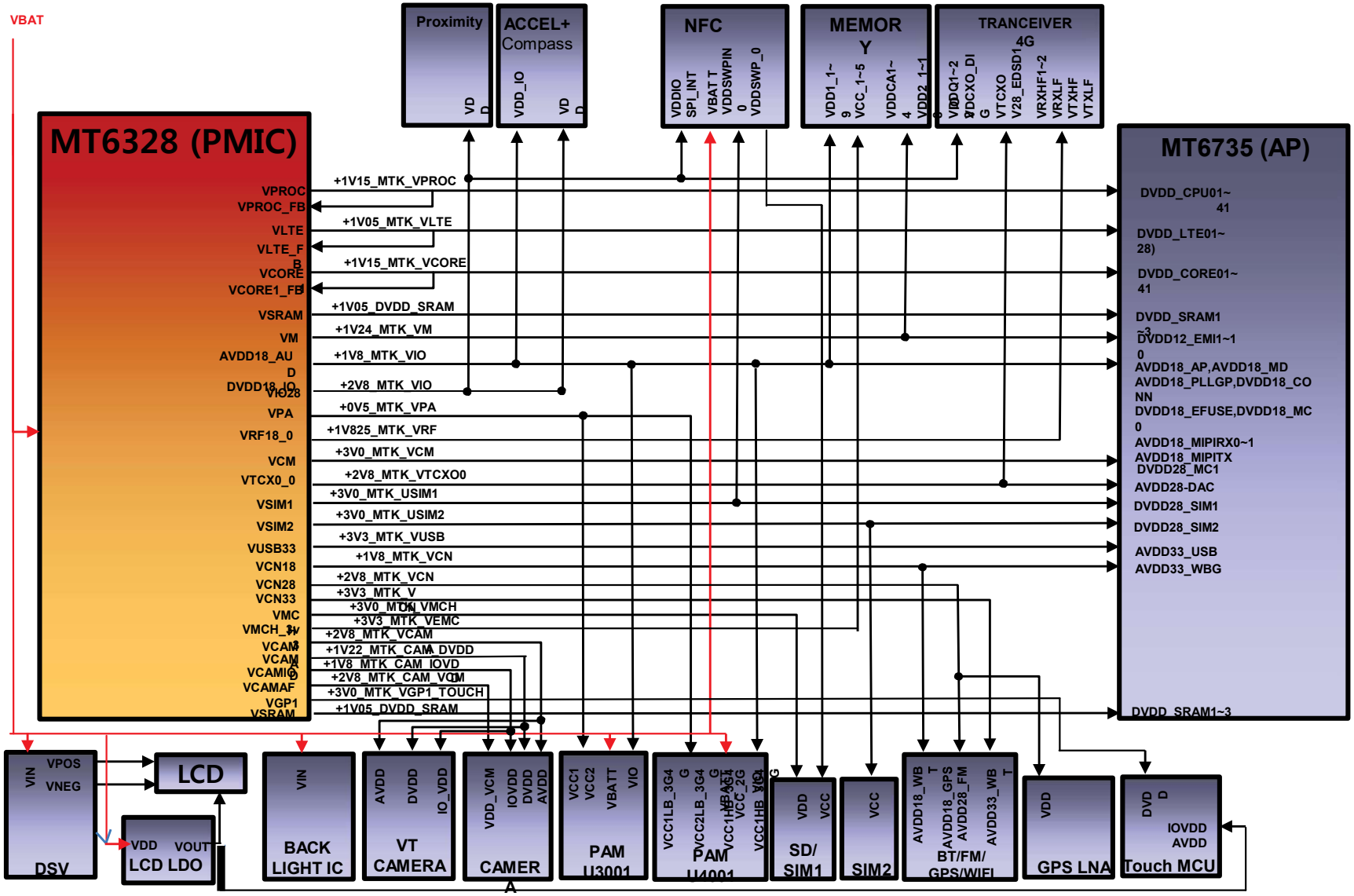
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2. RF Main



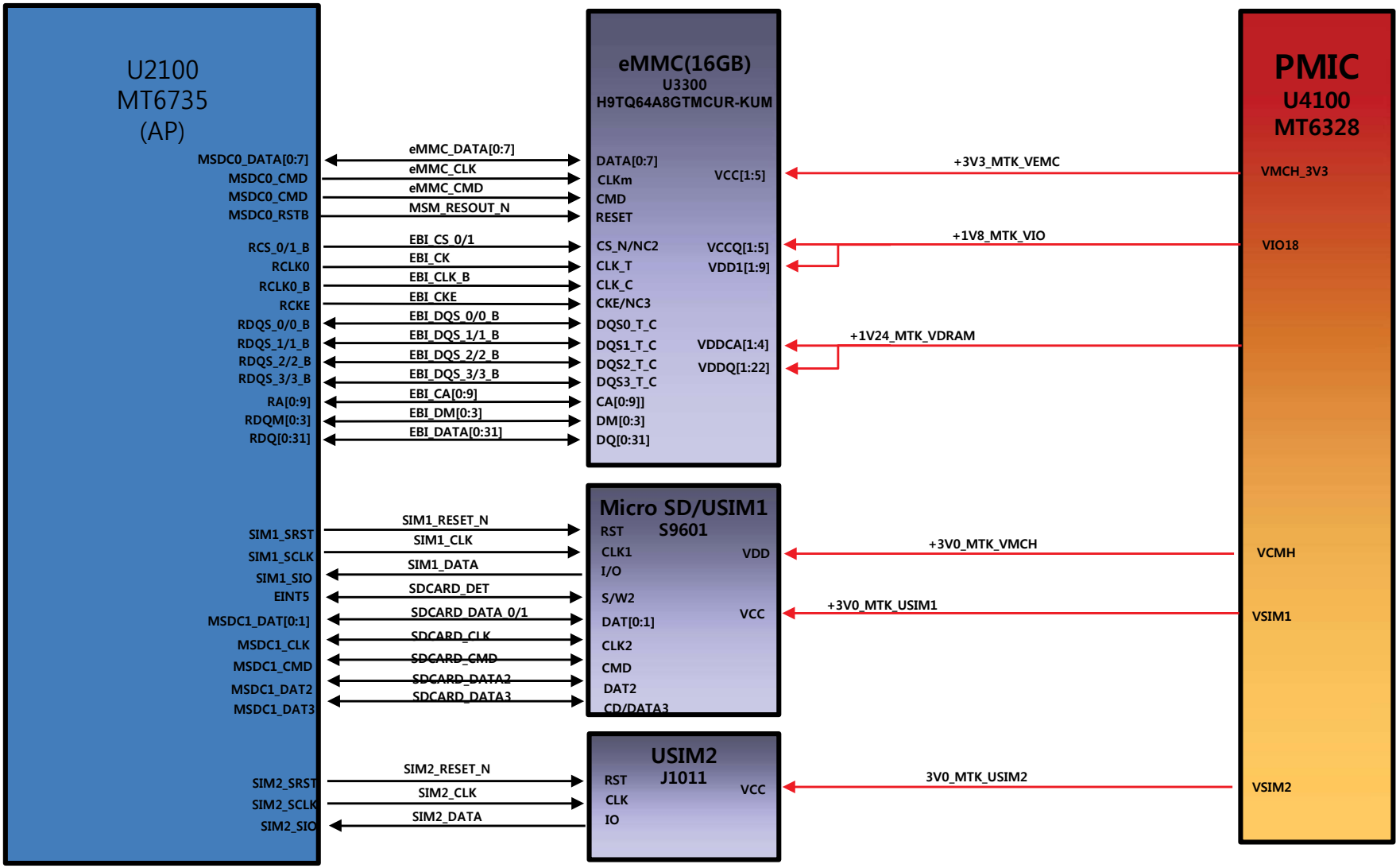
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3. Power block diagram



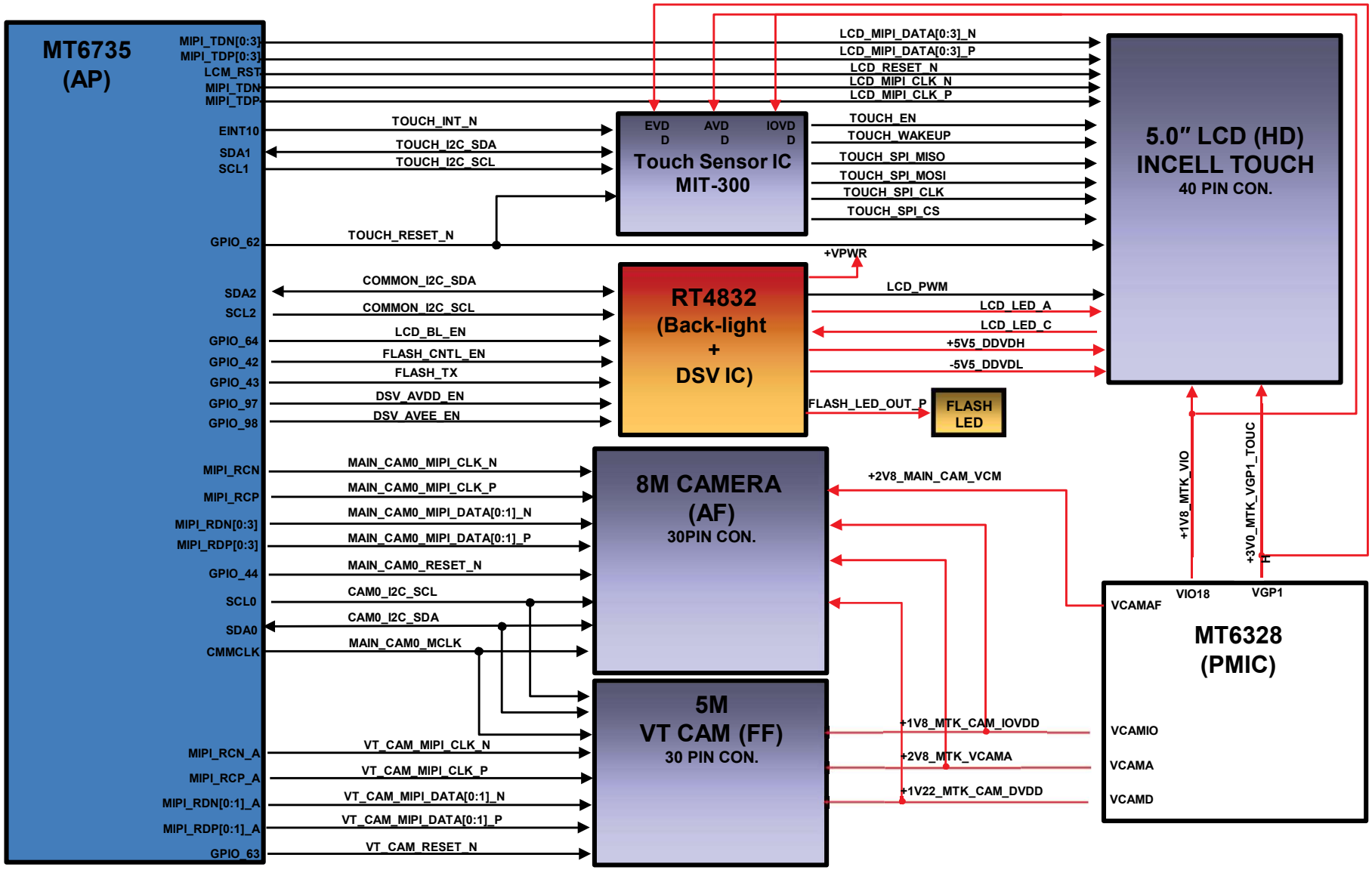
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4. Memory / USIM / Micro SD



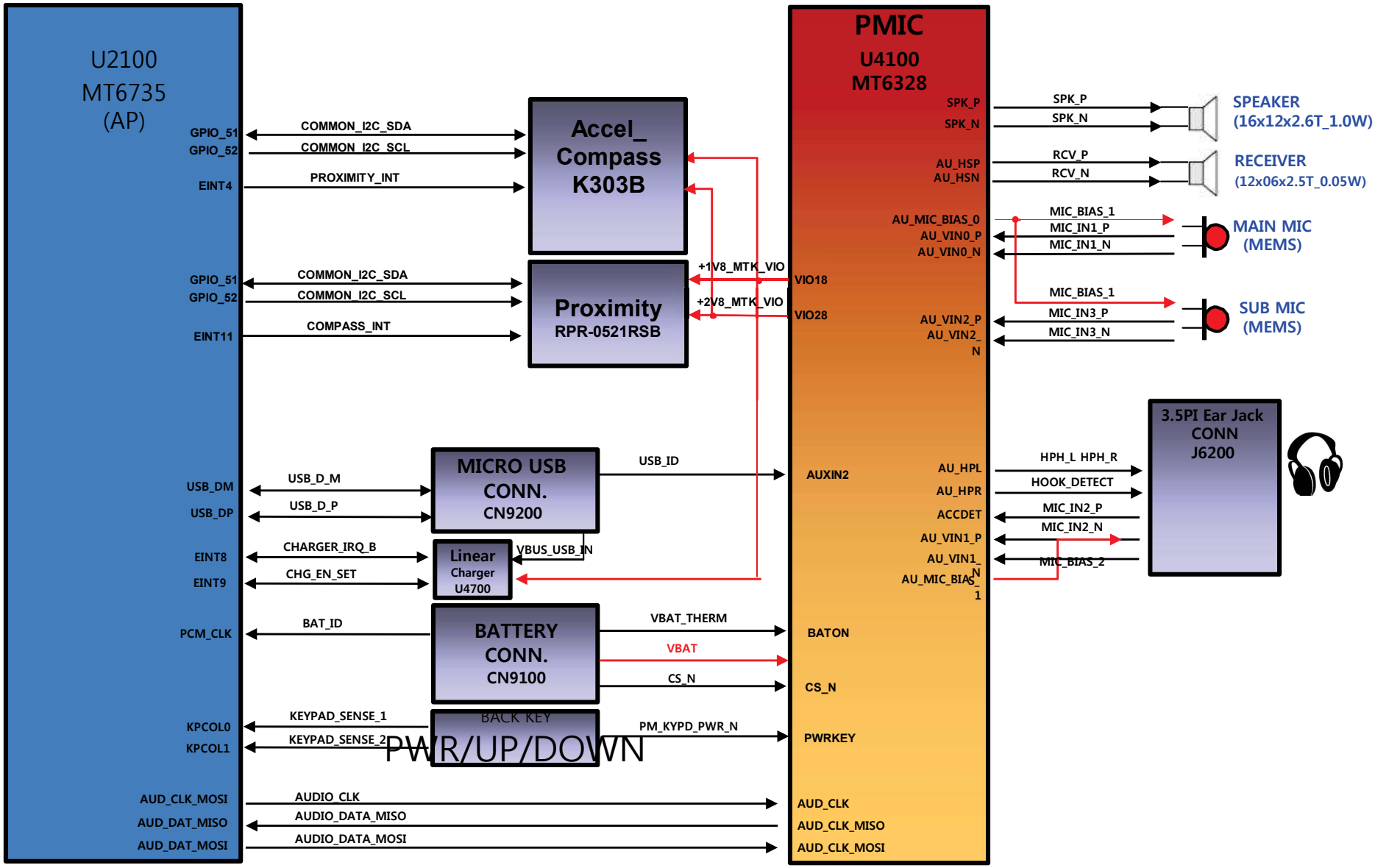
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5. LCD(INCELL TOUCH)



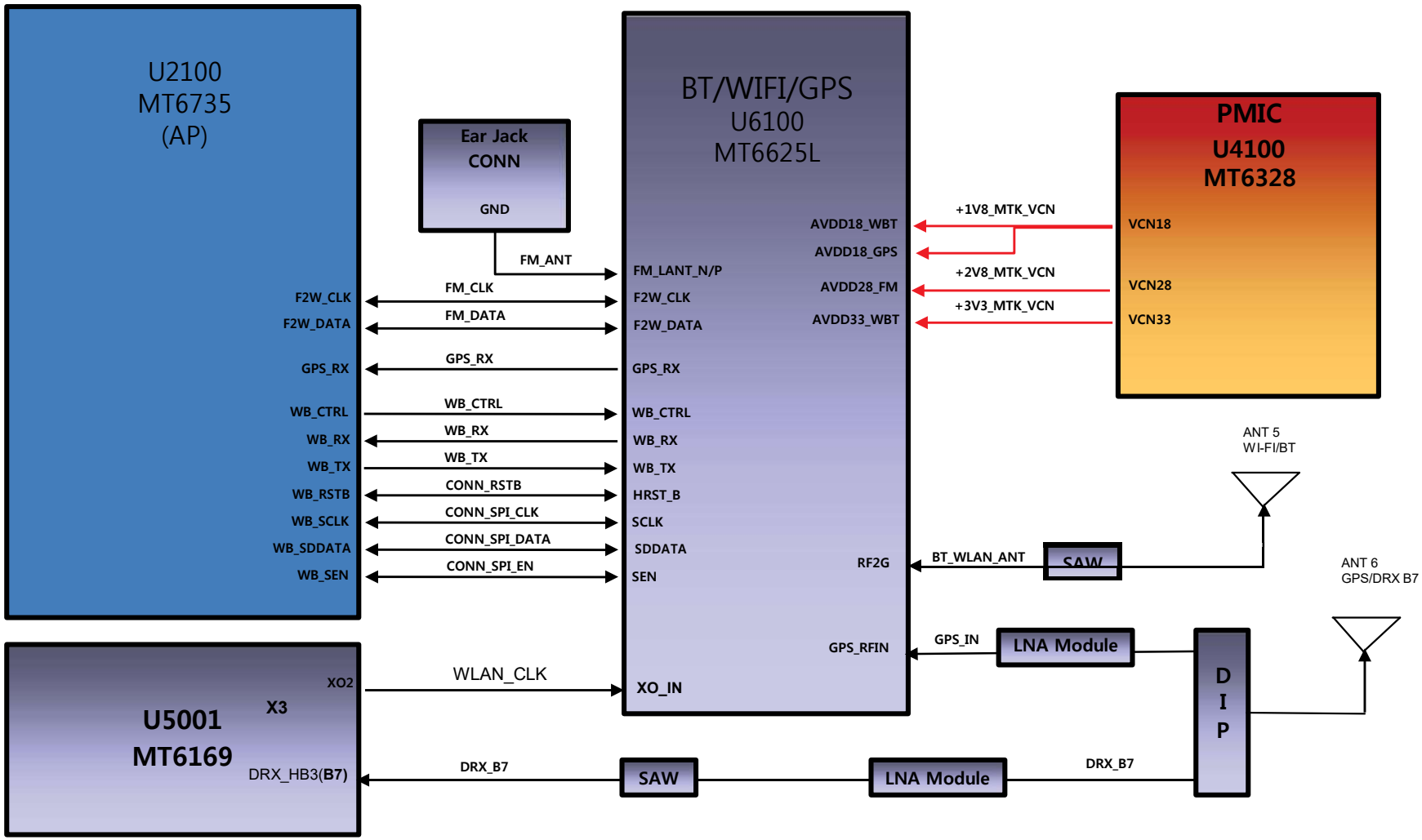
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7. AUDIO



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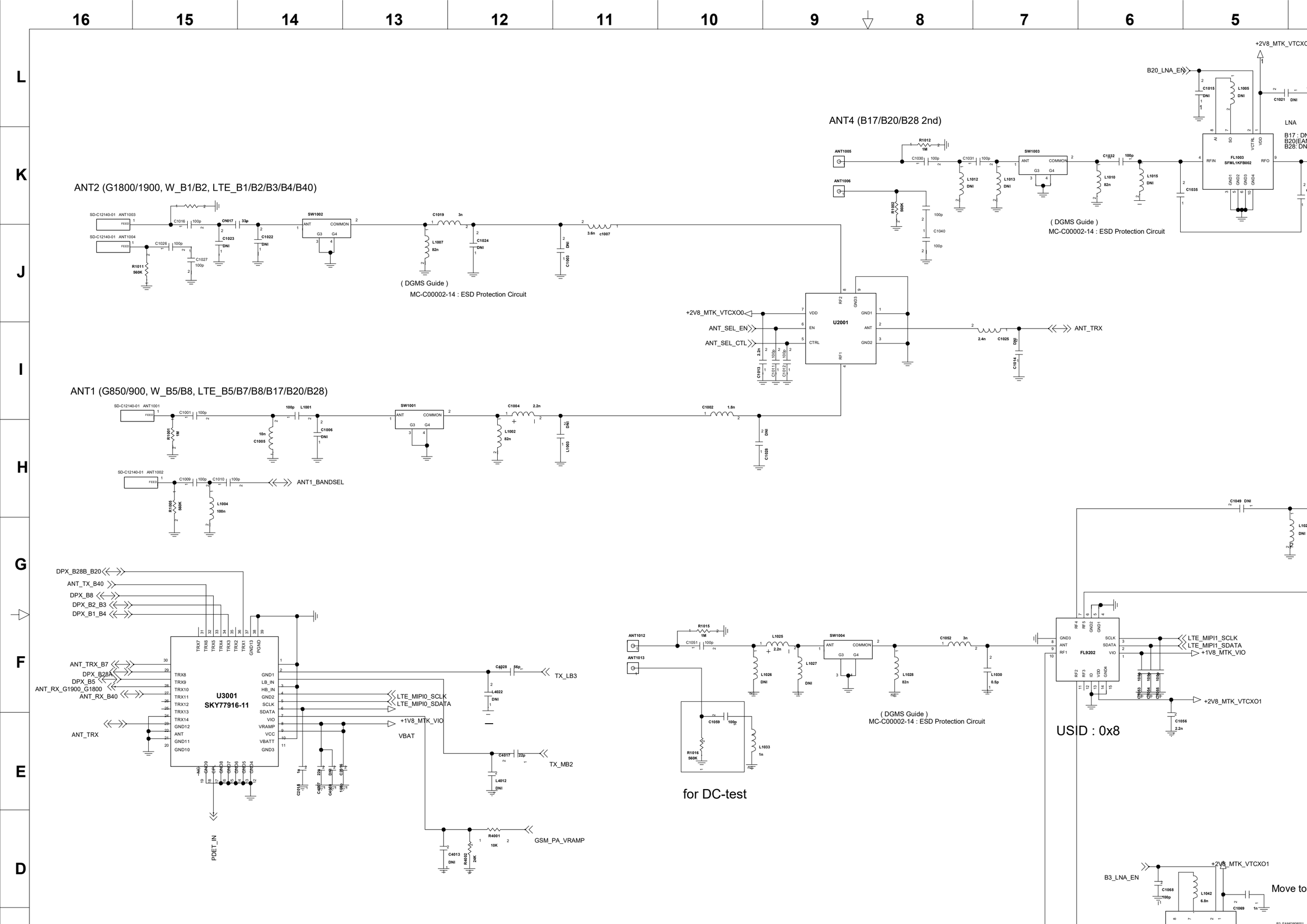
8. Connectivity (BT / WIFI / GPS / FM RADIO)

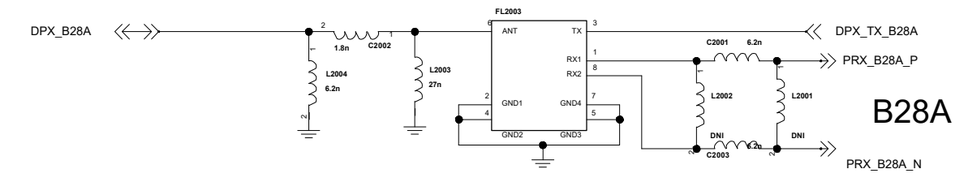


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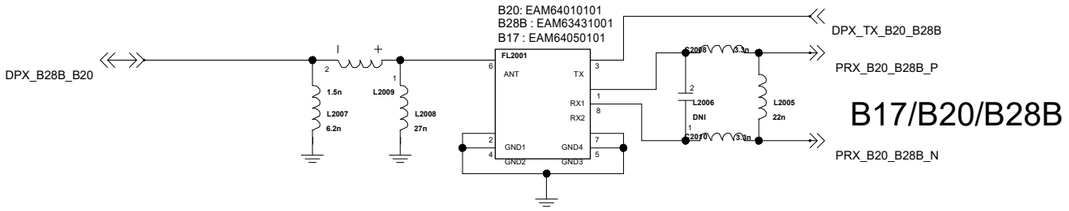
CIRCUIT DIAGRAM

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16
15
14
13
12
11
10
9
8
7
6
5
L
K
J
I
H
G
F
E
D
ANT2 (G1800/1900, W_B1/B2, LTE_B1/B2/B3/B4/B40)
SD-C12140-01 ANT1003
SD-C12140-01 ANT1004
C1016 100p
C1017 33p
C1023 DNI
C1022 DNI
C1026 100p
C1027 100p
R1011 560K
SW1002
ANT COMMON G3 G4
C1019 3n
L1007 82n
C1024 DNI
C1003 DNI
3.6n c1007
(DGMS Guide)
MC-C00002-14 : ESD Protection Circuit
ANT1 (G850/900, W_B5/B8, LTE_B5/B7/B8/B17/B20/B28)
SD-C12140-01 ANT1001
C1001 100p
R1001 1M
100p L1001
10n C1005
C1006 DNI
SW1001
C1004 2.2n
L1002 82n
L1003 DNI
C1002 1.8n
C1020 DNI
SD-C12140-01 ANT1002
C1009 100p
C1010 100p
ANT1_BANDSEL
R1005 560K
L1004 100n
ANT4 (B17/B20/B28 2nd)
ANT1005
ANT1006
R1012 1M
C1030 100p
C1031 100p
SW1003
ANT COMMON G3 G4
C1032 100p
L1012 DNI
L1013 DNI
L1010 82n
L1015 DNI
R1002 560K
C1040 100p
C1035
FL1003
SFML1KFB002
RFIN RFO AI SO VCTRL VDD GND1 GND2 GND3 GND4
B20_LNA_EN
C1015 DNI
L1005 DNI
C1021 DNI
+2V8_MTK_VTCXO
LNA
B17 : DN
B20(EA
B28: DN
(DGMS Guide)
MC-C00002-14 : ESD Protection Circuit
+2V8_MTK_VTCXO0
ANT_SEL_EN
ANT_SEL_CTL
U2001
VDD EN CTRL
RF2 GND3 GND1 ANT GND2 RF1
2.2n C1013
100p C1011
100p C1012
2.4n C1025 DNI
C1014
ANT_TRX
DPX_B28B_B20
ANT_TX_B40
DPX_B8
DPX_B2_B3
DPX_B1_B4
ANT_TRX_B7
DPX_B28A
DPX_B5
ANT_RX_G1900_G1800
ANT_RX_B40
ANT_TRX
U3001
SKY77916-11
TRX7 TRX6 TRX5 TRX4 TRX3 TRX2 TRX1 GND13 PGND
TRX8 TRX9 TRX10 TRX11 TRX12 TRX13 TRX14 GND12 ANT GND11 GND10
GND1 LB_IN HB_IN GND2 SCLK SDATA VIO VRAMP VCC VBATT GND3
-NG GND19 GND1 GND8 GND7 GND6 GND5 GND4
PDET_IN
C4028 56p
TX_LB3
L4022 DNI
LTE_MIPI0_SCLK
LTE_MIPI0_SDATA
+1V8_MTK_VIO
VBAT
C4017 22p
TX_MB2
L4012 DNI
R4001 10K
C4013 DNI
R4002 24K
GSM_PA_VRAMP
C2015 1n
C4007 22n
C4001 DNI
C2016 10n
ANT1012
ANT1013
R1015 1M
C1051 100p
L1025 2.2n
SW1004
ANT COMMON G3 G4
C1052 3n
L1026 DNI
L1027 DNI
L1028 82n
L1030 0.5p
C1059 100p
R1016 560K
L1033 1n
for DC-test
(DGMS Guide)
MC-C00002-14 : ESD Protection Circuit
C1049 DNI
FL9202
GND3 ANT RF1 RF4 RF5 GND2 GND1 SCLK SDATA VIO RF2 RF3 ID VDD GND4
LTE_MIPI1_SCLK
LTE_MIPI1_SDATA
+1V8_MTK_VIO
+2V8_MTK_VTCXO1
C1056 2.2n
USID : 0x8
B3_LNA_EN
+2V8_MTK_VTCXO1
C1068 100p
L1042 6.8n
C1069 1n
Move to

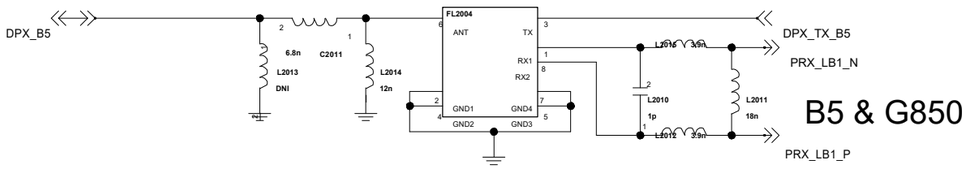


B28A



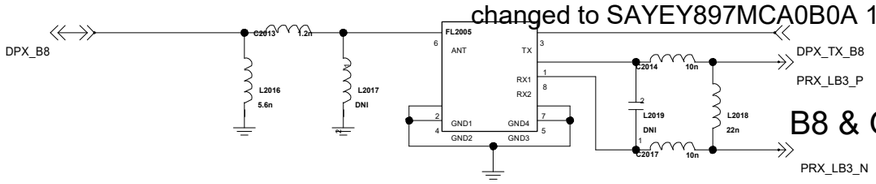
B17/B20/B28B

changed to B8576
15/06/08

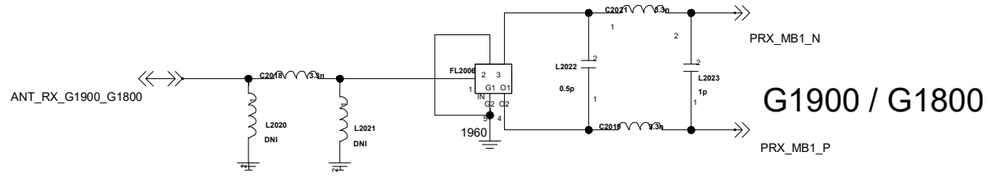


B5 & G850

changed to SAYEY897MCA0B0A 15/06/08

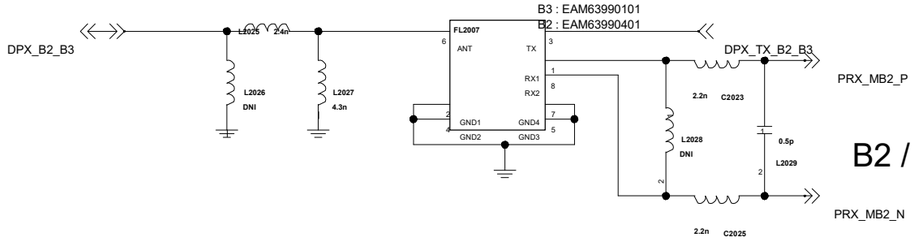


B8 & G900

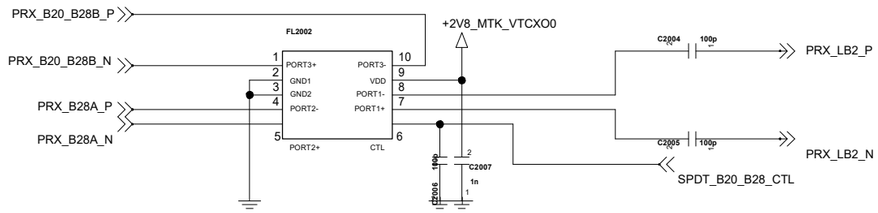


G1900 / G1800

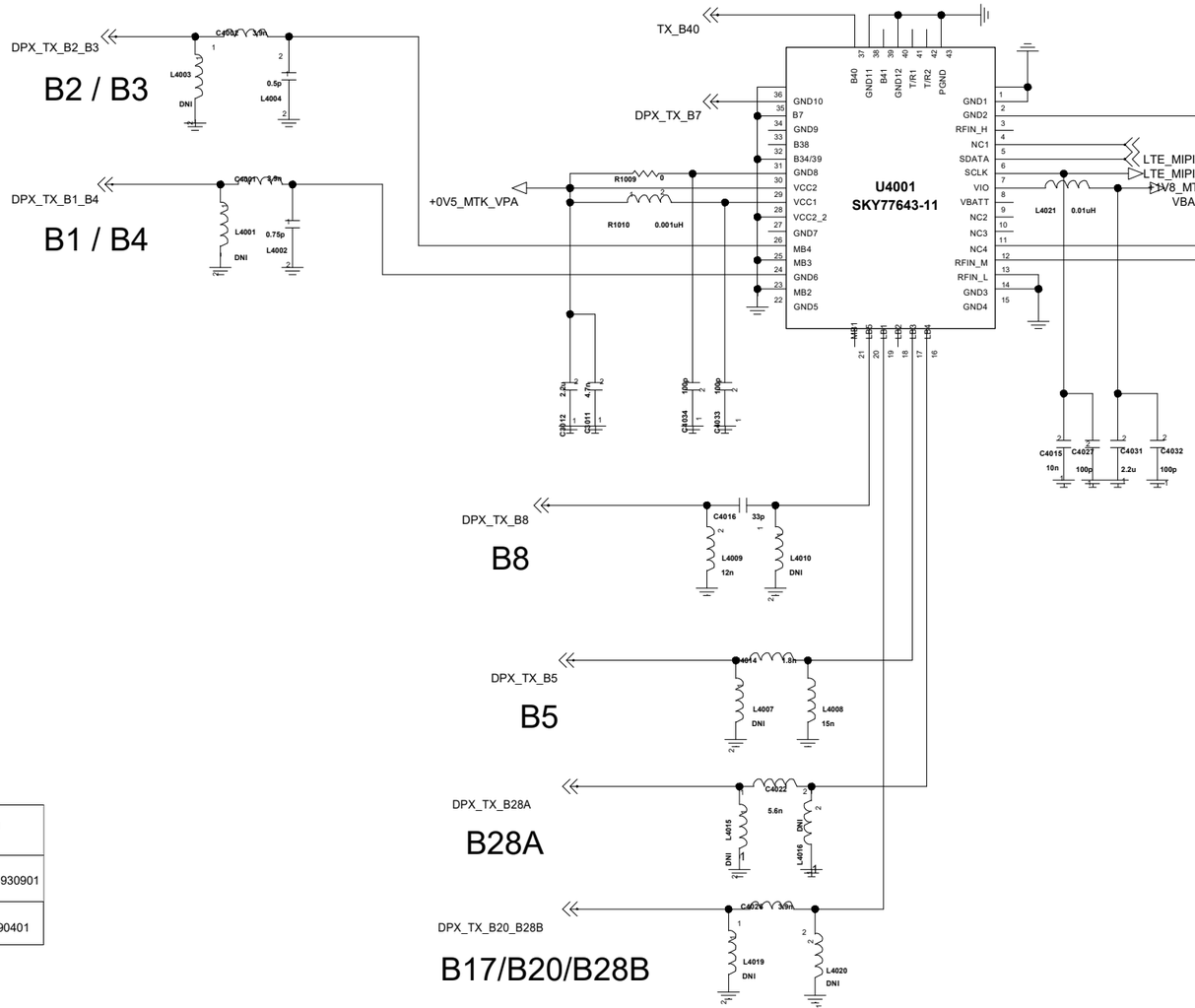
	B3 SKU	B2 SKU
SAW	G1900 : EAM6339070	G1800: EAM63930901
DUX	B3 : EAM63990101	B2 : EAM63990401



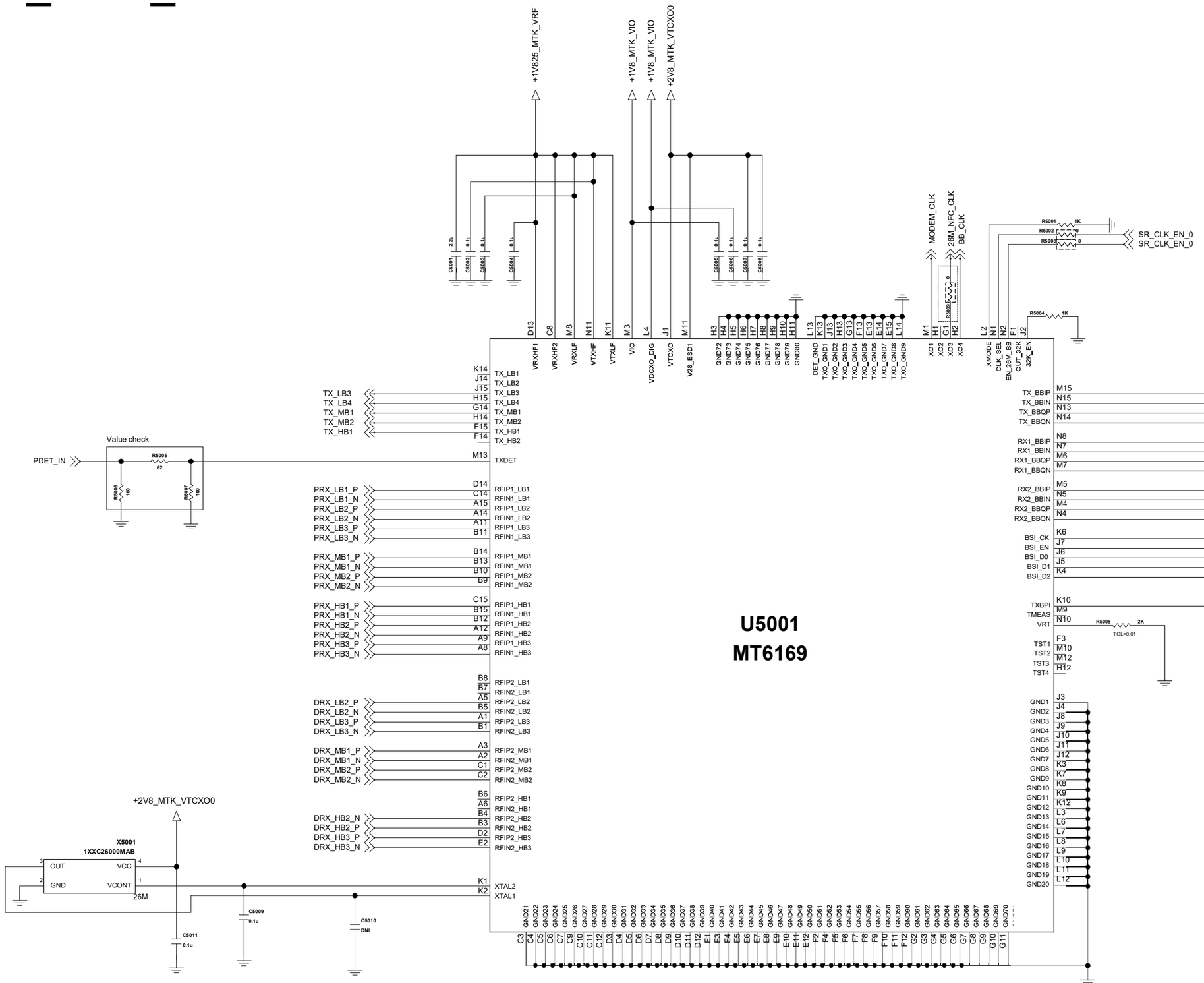
B2 / B3



B17/B20/B28



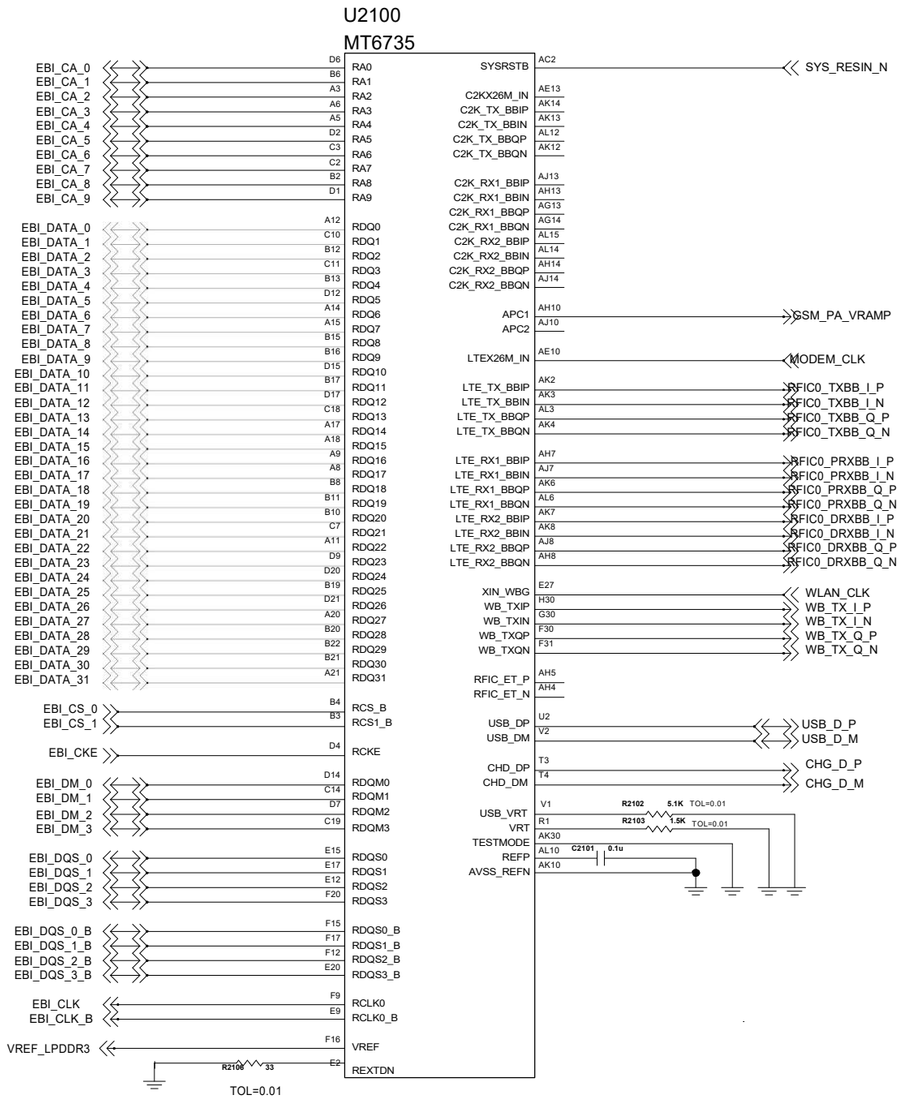
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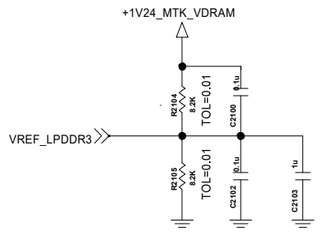


< 2-x-x-x-1_MT6735_DATA >

REV_0.1

< 2-3-6-1-2_MT6735_GPIO >





PCB REVISION_GPIO

< 2-x-x-x-3_MT6735_POWER > REV_0.1

< 2-x-x-x

U2100
MT6735

+1V15_MTK_VCORE

C2301 22u, C2302 22u, C2303 22u, C2304 4.7u, C2305 4.7u, C2306 1u, C2307 1u, C2308 1u, C2309 1u, C2310 1u, C2311 1u

DVDD_CORE01 K8
DVDD_CORE02 L7
DVDD_CORE03 L8
DVDD_CORE04 L9
DVDD_CORE05 L10
DVDD_CORE06 L11
DVDD_CORE07 L12
DVDD_CORE08 L15
DVDD_CORE09 L16
DVDD_CORE10 L19
DVDD_CORE11 L20
DVDD_CORE12 L21
DVDD_CORE13 L22
DVDD_CORE14 M8
DVDD_CORE15 M10
DVDD_CORE16 M22
DVDD_CORE17 N8
DVDD_CORE18 N10
DVDD_CORE19 N22
DVDD_CORE20 T8
DVDD_CORE21 T10
DVDD_CORE22 T22
DVDD_CORE23 U7
DVDD_CORE24 U8
DVDD_CORE25 U9
DVDD_CORE26 U10
DVDD_CORE27 U11
DVDD_CORE28 U22
DVDD_CORE29 U23
DVDD_CORE30 Y7
DVDD_CORE31 Y8
DVDD_CORE32 Y9
DVDD_CORE33 Y10
DVDD_CORE34 Y11
DVDD_CORE35 Y12
DVDD_CORE36 AA8
DVDD_CORE37 AA10
DVDD_CORE38 AA12
DVDD_CORE39 AB8
DVDD_CORE40 AB10
DVDD_CORE41 AB12

DVDD_CPU01 M12
DVDD_CPU02 M13
DVDD_CPU03 M15
DVDD_CPU04 M16
DVDD_CPU05 M17
DVDD_CPU06 M18
DVDD_CPU07 M19
DVDD_CPU08 M20
DVDD_CPU09 N12
DVDD_CPU10 N13
DVDD_CPU11 N14
DVDD_CPU12 N15
DVDD_CPU13 N16
DVDD_CPU14 N17
DVDD_CPU15 N18
DVDD_CPU16 N19
DVDD_CPU17 N20
DVDD_CPU18 T12
DVDD_CPU19 T13
DVDD_CPU20 T14
DVDD_CPU21 T15
DVDD_CPU22 T16
DVDD_CPU23 T17
DVDD_CPU24 T18
DVDD_CPU25 T19
DVDD_CPU26 T20
DVDD_CPU27 U12
DVDD_CPU28 U13
DVDD_CPU29 U14
DVDD_CPU30 U15
DVDD_CPU31 U16
DVDD_CPU32 U17
DVDD_CPU33 U18
DVDD_CPU34 U19
DVDD_CPU35 U20
DVDD_CPU36 V14
DVDD_CPU37 W14
DVDD_CPU38 Y14
DVDD_CPU39 AA14
DVDD_CPU40 AB14
DVDD_CPU41 AC14

C2312 1u, C2313 1u, C2314 1u, C2315 1u, C2316 1u, C2317 1u, C2318 4.7u, C2319 4.7u, C2320 22u, C2321 47u, C2322 47u

+1V15_MTK_VPROC

+1V05_MTK_VLTE

C2323 22u, C2324 22u, C2328 1u, C2329 1u, C2330 1u, C2331 1u, C2326 4.7u, C2327 4.7u

DVDD_LTE01 W16
DVDD_LTE02 W17
DVDD_LTE03 W18
DVDD_LTE04 W19
DVDD_LTE05 W20
DVDD_LTE06 W21
DVDD_LTE07 W22
DVDD_LTE08 W23
DVDD_LTE09 W24
DVDD_LTE10 Y16
DVDD_LTE11 Y17
DVDD_LTE12 Y18
DVDD_LTE13 Y19
DVDD_LTE14 Y20
DVDD_LTE15 Y21
DVDD_LTE16 Y22
DVDD_LTE17 Y23
DVDD_LTE18 Y24
DVDD_LTE19 AA16
DVDD_LTE20 AA18
DVDD_LTE21 AA20
DVDD_LTE22 AA22
DVDD_LTE23 AA24
DVDD_LTE24 AB16
DVDD_LTE25 AB18
DVDD_LTE26 AB20
DVDD_LTE27 AB22
DVDD_LTE28 AB24

AVDD18_AP AK11
AVDD18_MD AL4
AVDD28_DAC AL9
AVDD18_PLLGP AG16
AVDD18_MEMPLL E1
DVDD18_CONN C28
DVDD18_EFUSE AB29
DVDD18_IORB AD3
DVDD18_IOLT K27
DVDD18_IOLB01 AA29
DVDD18_IOLB02 AL20
DVDD18_IOLB03 AL26
FSOURCE_P W30

+1V8_MTK_VIO
+2V8_MTK_VTCXO0
+1V8_MTK_VIO
+1V8_MTK_VIO
+1V8_MTK_VIO

C2332 1u, C2333 0.1u, C2334 0.1u, C2335 0.1u, C2336 DNI, C2337 0.1u, C2338 0.1u, C2339 0.1u, C2340 0.1u

R2300 0
R2301 DNI

+1V8_MTK_VEFUSE

DVDD18_MC0 C27
DVDD18_MC1 F3
DVDD28_MC1 G1
DVDD28_MC2 L31
DVDD28_SIM1 H1
DVDD28_SIM2 L2

Need to check : DVDD28_MC2 connect to 1.8V?

+1V8_MTK_VIO
+3V0_MTK_VMC
+3V0_MTK_USIM1
+3V0_MTK_USIM2

AVDD18_MIPIRX0 N30
AVDD18_MIPIRX1 W31
AVDD18_MIPITX T1
AVDD18_USB W1
AVDD33_USB T2
AVDD18_WBG B30

+1V8_MTK_VIO
+1V8_MTK_VIO
+1V8_MTK_VIO
+3V3_MTK_VUSB
+1V8_MTK_VCN

C2341 0.1u, C2342 4.7u, C2343 0.1u, C2344 0.1u, C2345 220n, C2346 220n, C2347 0.1u, C2348 1u, C2349 0.1u

+1V05_MTK_VLTE
+1V05_DVDD_SRAM

C2349 100n, C2357 4.7u, C2358 100n

VLTE_SRAM1 AC16
VLTE_SRAM2 AC20
VLTE_SRAM3 AC24
DVDD_SRAM1 L14
DVDD_SRAM2 V19
DVDD_SRAM3 V20

+1V24_MTK_VDRAM

C2350 2.2u, C2351 2.2u, C2352 0.1u, C2353 0.1u, C2354 0.1u, C2355 0.1u, C2356 0.1u

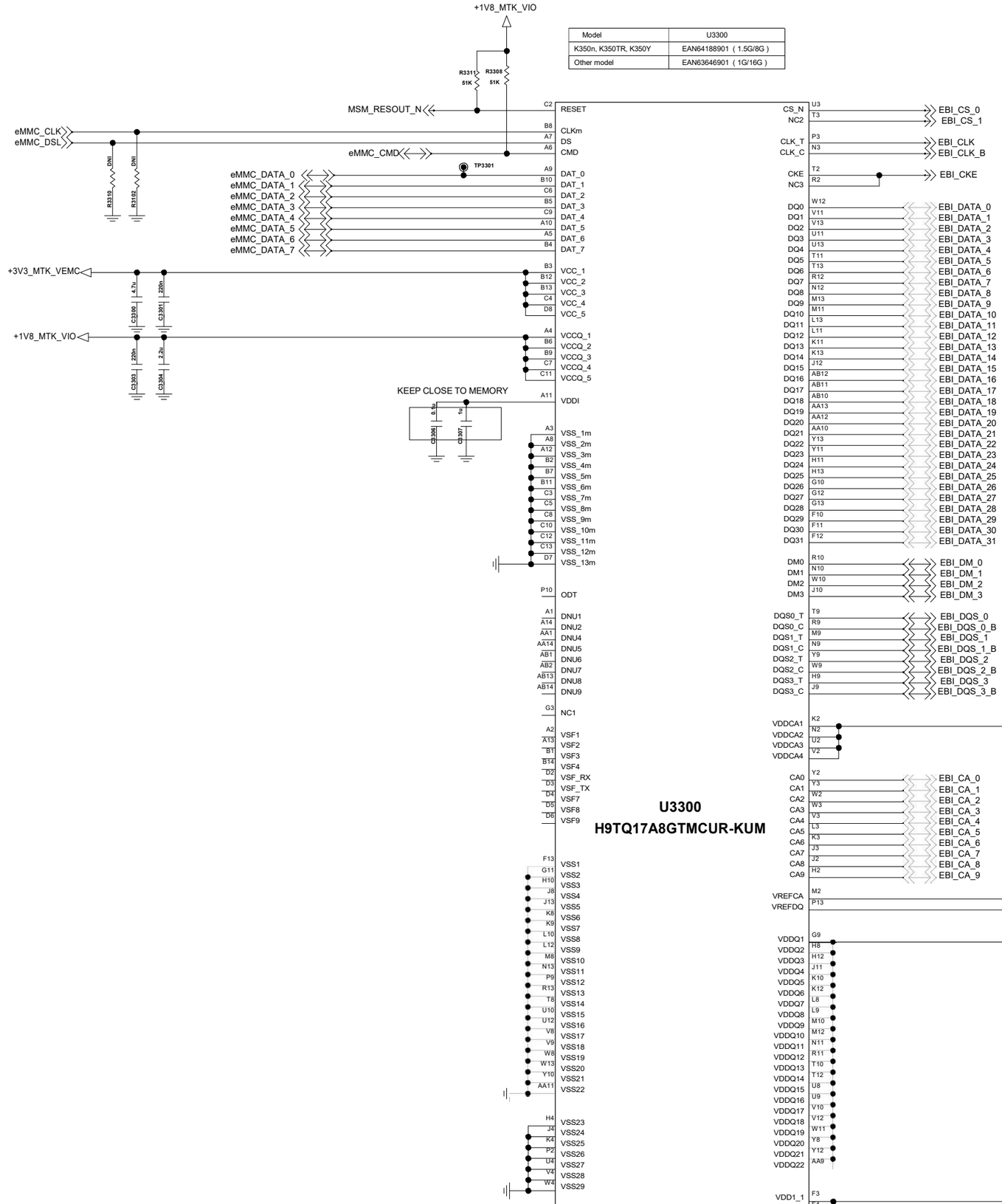
DVDD12_EMI1 G9
DVDD12_EMI2 G12
DVDD12_EMI3 G14
DVDD12_EMI4 G16
DVDD12_EMI5 G18
DVDD12_EMI6 H9
DVDD12_EMI7 H12
DVDD12_EMI8 H14
DVDD12_EMI9 H16
DVDD12_EMI10 H18

AVSS18_MD01 AE1
AVSS18_MD02 AG1
AVSS18_MD03 AG3
AVSS18_MD04 AG5
AVSS18_MD05 AH3
AVSS18_MD06 AH5
AVSS18_MD07 AH9
AVSS18_MD08 AH11
AVSS18_MD09 AJ1
AVSS18_MD10 AJ7
AVSS18_MD11 AJ13
AVSS18_MD12 AJ14
AVSS18_MD13 AJ15
AVSS18_MD14 AJ16
AVSS18_MD15 AJ18
AVSS18_MD16 AK5
AVSS18_MD17 AK9
AVSS18_MD18 AL5
AVSS18_MD19 AL9
AVSS18_PLLGP01 AE14
AVSS18_PLLGP02 AG15
AVSS18_PLLGP03 AH15
AVSS18_PLLGP04 AJ15
AVSS18_PLLGP05 AK15
AVSS18_MEMPLL E3
AVSS18_MIPIRX0 N27
AVSS18_MIPITX L3
AVSS33_USB W2
AVSS18_WBG01 C29
AVSS18_WBG02 D29
AVSS18_WBG03 E28
AVSS18_WBG04 E3
AVSS18_WBG05 F27
AVSS18_WBG06 F28
AVSS18_WBG07 L39

Ext. Buck converter for VM

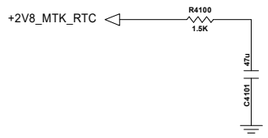
< 3-3-3-3-1_MCP_eMMC_5_0_16G_DDR3_8G_HYNIX > Rev_(

Model	U3300
K350n, K350TR, K350Y	EAN64188901 (1.5G/8G)
Other model	EAN63646901 (1G/16G)



<4-1-15-1_PMIC_MT6328_DATA> Rev_0.3

BACKUP BATT



<4-1-15-2_PMIC_MT6328_POWER> Rev_0.3

U4100
MT6328_

VBAT
C4130 22u
VBAT
R4131 1 TOL=0.01

AVDD45_VPROC_01 B10
AVDD45_VPROC_02 B11
AVDD45_VPROC_03 C10
AVDD45_VPROC_04 D10
AVDD45_VLTE_01 B13
AVDD45_VLTE_02 C13
AVDD45_VLTE_03 D13
AVDD45_VCORE1_01 B4
AVDD45_VCORE1_02 C4
AVDD45_VCORE1_03 C5
AVDD45_VSYS22_01 A1
AVDD45_VSYS22_02 B1
AVDD45_VPA A16
AVDD45_SMPS C15
AVDD45_LDO1 T13
AVDD45_LDO2 T8
AVDD45_LDO3 K1
AVDD45_LDO4 T11
AVDD45_LDO5 M2
+2V0_MTK_VSYS
AVDD22_LDO1_01 H3
AVDD22_LDO1_02 J2
AVDD22_LDO2 E1
AVDD22_LDO3 F1
AVDD22_LDO4 G1
+1V8_MTK_VIO
DVDD18_IO T2
DVDD18_DIG T3
DVSS18_IO T5
Close to PMIC (U4100)
VREF L4
AVSS45_VREF L3
C4146 100n
C4145 22u
C4144 0.1u
C4145 1u
C4131 2.2u
C4132 2.2u
C4133 2.2u
C4134 2.2u
C4135 2.2u
C4136 4.7u
C4137 2.2u
C4138 2.2u
C4139 4.7u
C4140 4.7u
C4151 1u

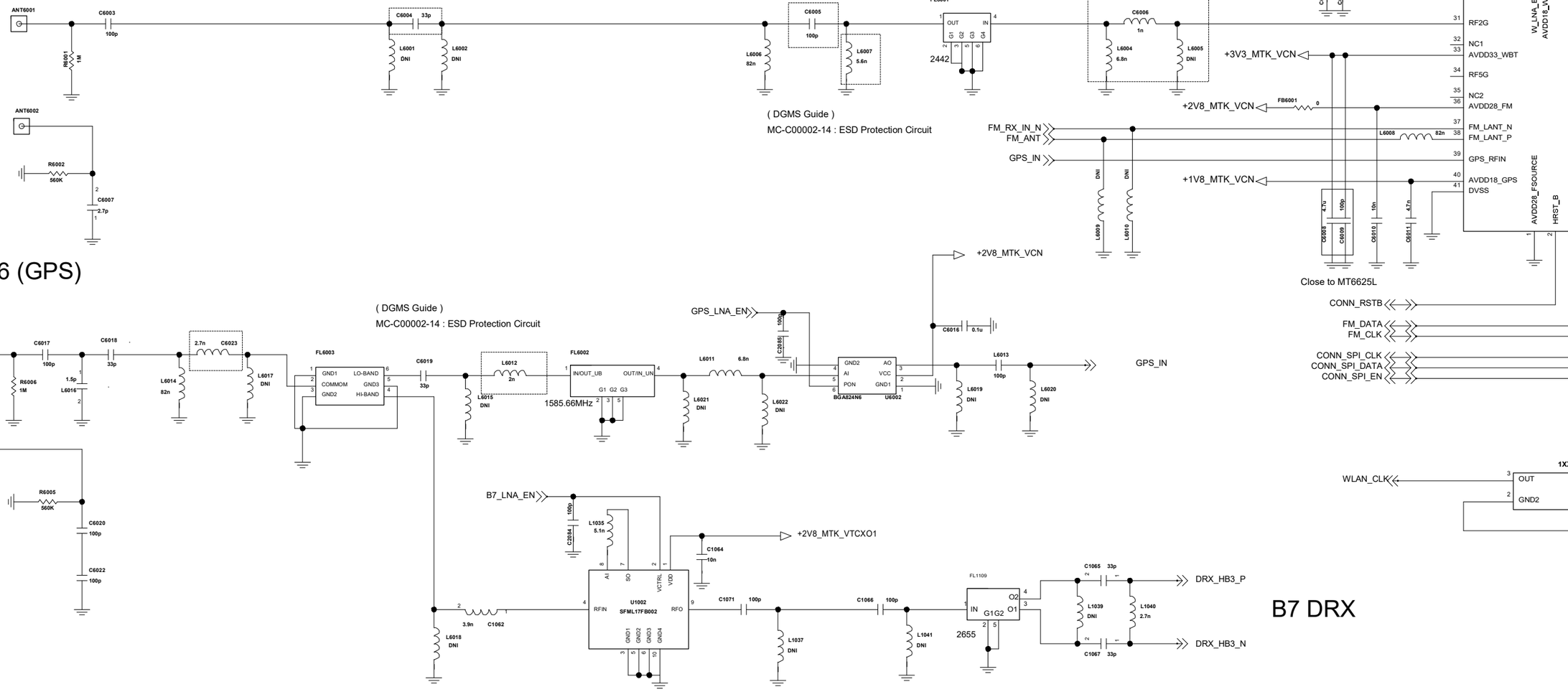
AVSS45_VPROC_01 A9
AVSS45_VPROC_02 B9
AVSS45_VPROC_03 C8
AVSS45_VPROC_04 C9
AVSS45_VPROC_05 D9
AVSS45_VCORE1_01 B6
AVSS45_VCORE1_02 C6
AVSS45_VCORE1_03 D6
AVSS45_VLTE_01 C11
AVSS45_VLTE_02 D11
AVSS45_VLTE_03 D12
AVSS45_VSYS22_01 A3
AVSS45_VSYS22_02 B3
AVSS45_VPA A14
AVSS45_SMPS B16
AVSS45_LDO_01 D5
AVSS45_LDO_02 E5
AVSS45_LDO_03 E6
AVSS45_LDO_04 E7
AVSS45_LDO_05 E8
AVSS45_LDO_06 E9
AVSS45_LDO_07 E10
AVSS45_LDO_08 E11
AVSS45_LDO_09 E12
AVSS45_LDO_10 F11
AVSS45_LDO_11 F12
AVSS45_LDO_12 G6
AVSS45_LDO_13 G7
AVSS45_LDO_14 G8
AVSS45_LDO_15 G9
AVSS45_LDO_16 G10
AVSS45_LDO_17 G11
AVSS45_LDO_18 G12
AVSS45_LDO_19 H6
AVSS45_LDO_20 H7
AVSS45_LDO_21 H8
AVSS45_LDO_22 H9
AVSS45_LDO_23 H10
AVSS45_LDO_24 H11
AVSS45_LDO_25 H12
AVSS45_LDO_26 J6
J7
AVSS45_LDO_27 J8
AVSS45_LDO_28 J9
AVSS45_LDO_29

VPROC_01 A7 5000mA
VPROC_02 B7
VPROC_03 B8
VPROC_04 C7
VPROC_05 D7
NOTE1
L4130 330n
NOTE1
Inductor rate current larger than 5.5A
DCR smaller than 35mohm.
+1V15_MTK_VPROC
VPROC_FB C16
AVSS45_VPROC_FB B15
+1V15_MTK_VPROC
GND
VLTE_1 A12 2800mA
VLTE_2 B12
VLTE_3 C12
NOTE2
L4131 470n
+1V05_MTK_VLTE
NOTE2
Inductor rate current larger than 3.5A
DCR smaller than 40mohm.
Need to get voltage feedback from MT6735M¡¯S bypass CAP.
0.1 mm GND trace with good shielding from baseband (differential)
VLTE_FB C14
AVSS45_VLTE_FB E13
+1V05_MTK_VLTE
GND
VCORE1_01 A5 3500mA
VCORE1_02 A6
VCORE1_03 B5
NOTE5
L4132 470n
+1V15_MTK_VCORE
NOTE5
Inductor rate current larger than 4.5A
DCR smaller than 35mohm.
VCORE1_FB C2
AVSS45_VCORE1_FB C1
+1V15_MTK_VCORE
GND
VSYS22_01 A2 1900mA
VSYS22_02 B2
NOTE4
L4133 470n
+2V0_MTK_VSYS
NOTE4
Inductor rate current larger than 2.5A +/- 30%
DCR smaller than 45mohm.
+2V0_MTK_VSYS
VSYS22_FB C3
VPA A15 600mA
VPA_FB B14
NOTE3
L4143 2.2u
+0V5_MTK_VPA
NOTE3
Inductor rate current larger than 1.5A +/- 30%
DCR smaller than 140mohm.
VM J1
+1V24_MTK_VM
C4141 10u
C4142 2.2u
C4152 1u
VTCXO_0 P9
VTCXO_1 T16
VRF18_0 F10
VRF18_1 F9
VSIM1 R11
VSIM2 N11
+2V8_MTK_VTCXO0
+2V8_MTK_VTCXO1
+1V825_MTK_VRF
+1V8_MTK_LCD_VIO
+3V0_MTK_USIM1
+3V0_MTK_USIM2
VCN18 F3
VCN28 R13
VCN33 R12
+1V8_MTK_VCN
+2V8_MTK_VCN
+3V3_MTK_VCN
VIO18 F2
VUSB33 P11
VIO28 K2
TREF P13
VEFUSE T15
+1V8_MTK_VIO
+3V3_MTK_VUSB
+2V8_MTK_VIO
+1V8_MTK_VBIF
+1V8_MTK_VEFUSE
VMC K4
VMCH R9
VEMC_3V3 R10
+3V0_MTK_VMC
+3V0_MTK_VMCH
+3V3_MTK_VEMC
VCAMA T14
VCAMAF H5
VCAMD H2
VCAMIO E3
+2V8_MTK_VCAMA
+2V8_MTK_CAM_VCM
+1V22_MTK_CAM_DVDD
+1V8_MTK_CAM_IOVDD
VGP1 H4
VSRAM E4
+3V0_MTK_VGP1_TOUCH
+1V05_DVDD_SRAM
C4147 1u
C4148 1u
C4149 1u
C4150 1u
C4153 1u

AVSS45_LDO_30 J10
AVSS45_LDO_31 J11
AVSS45_LDO_32 K7
AVSS45_LDO_33 K8
AVSS45_LDO_34 K9
AVSS45_LDO_35 K10
AVSS45_LDO_36 K11
AVSS45_LDO_37 L7
AVSS45_LDO_38 L8
AVSS45_LDO_39 L9
AVSS45_LDO_40 L10
AVSS45_LDO_41 L11
AVSS45_LDO_42 L12

<5-1-1-18_MT6625L_WiFi_BT_GPS_FM> Rev_0.3

ANT5 (WiFi)



ANT6 (GPS)

<5-2-1-8_BCM20795F> Rev_1.0

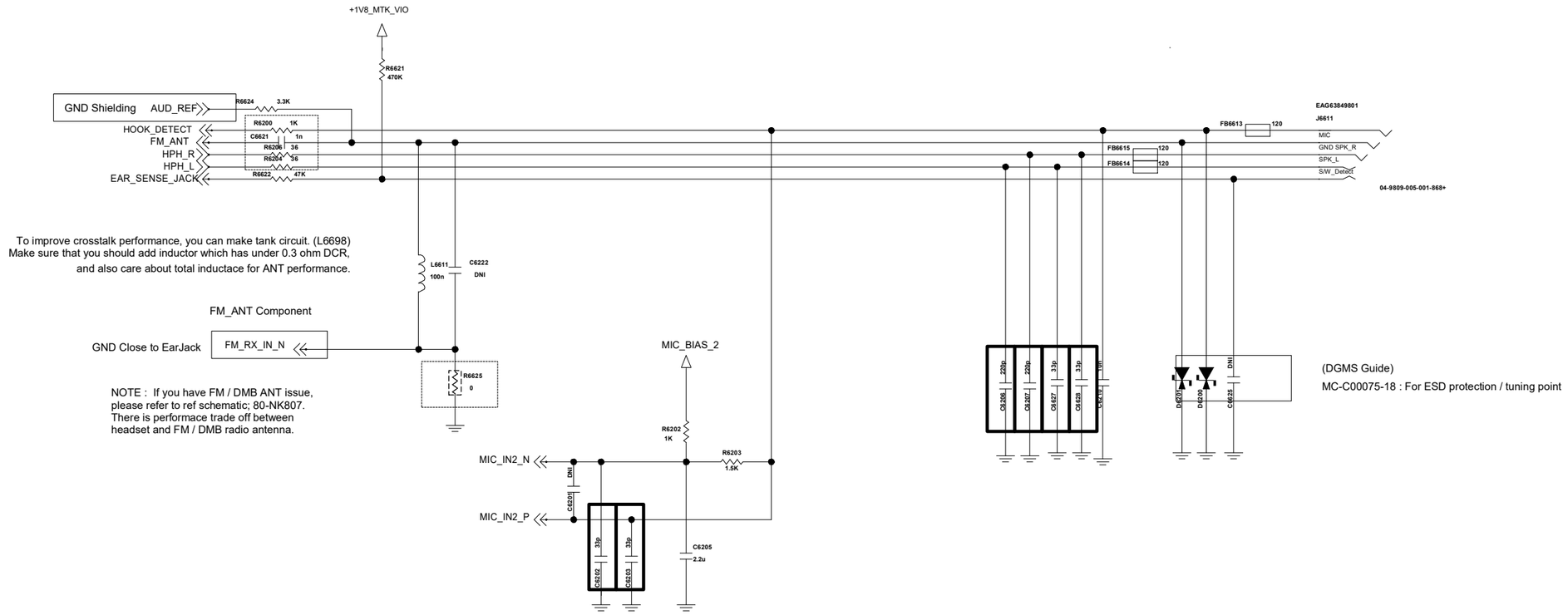
K350n, K350Y is mounted

NFC Antenna

< 6-6-1_Earjack >

Rev_0.9

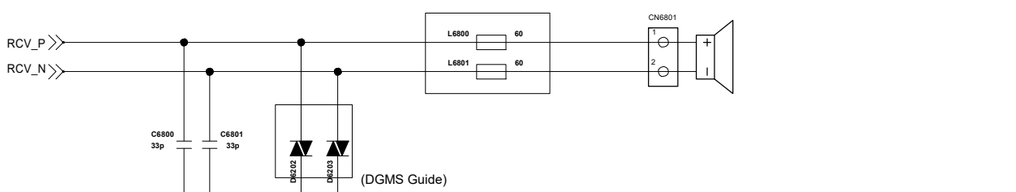
Circuit 2. Ear jack_3.5pi with MBHC



Note: Total capacitance on HPH_L/R and HS_MIC line SHOULD be under 1nF.

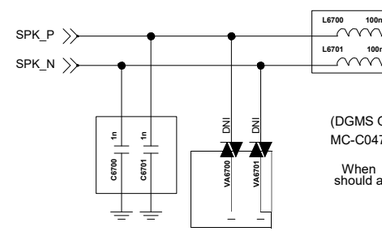
< 6-8-1_Receiver > Rev_1.1

Circuit 1. Receiver without T-Coil



<6-7-1_Speaker>

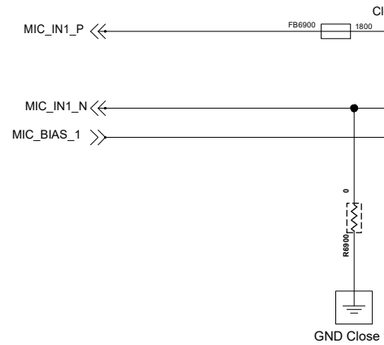
Speaker



Note 1. If Speaker is located in Main antenna nearby,
In case of Speaker phone mode, it could affect

< 6-9-1_MIC > R

Circuit 1. Top Type

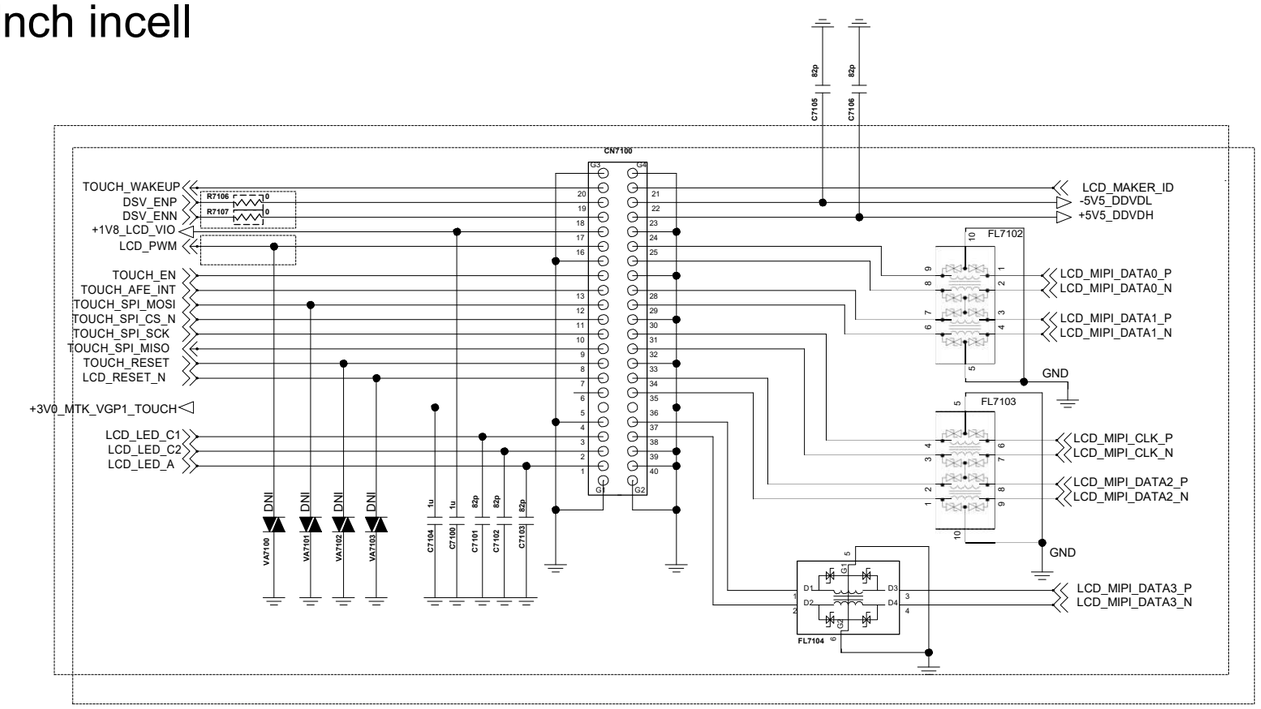


1. The value of the component can be changed after test.
2. Developer should change parameter setting by according to existence o
ex) WCD9310 // 80-N1622-91 Rev. E

< 7-1-5_LCD_HD > Rev_1.1

LCD 2. 5.0 Inch incell

LCD Information	
Maker	LGD
Driver IC	DB7400
Connector	EAG64751201



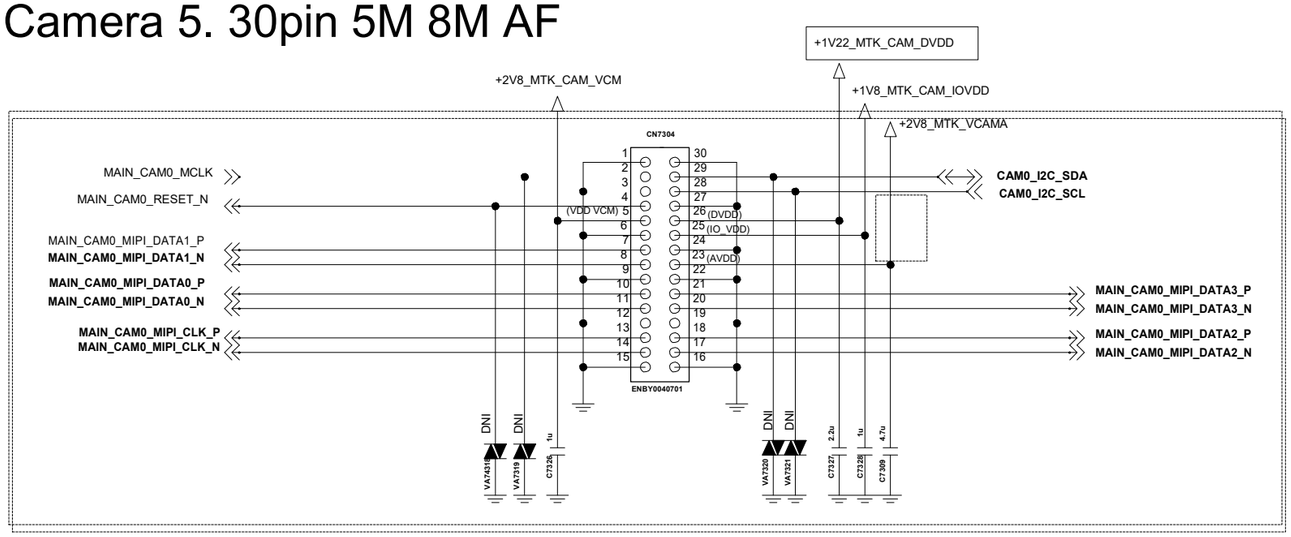
[DGMS Guide]
MC-C00057-16
1 - Components for ESD Protection should be located nearby at LCD Data, Control and Power line.
2- Basically, DNI_PAD for ESD Protection components should be used.
2- LCD RESET should be allocated with dedicated GPIO for the purpose of Reset function.

< 7-3_Main_Camera > Rev_1.1

Camera 5. 30pin 5M 8M AF

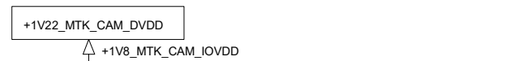
8M AF

-. EBP62702201 (IM Tech)

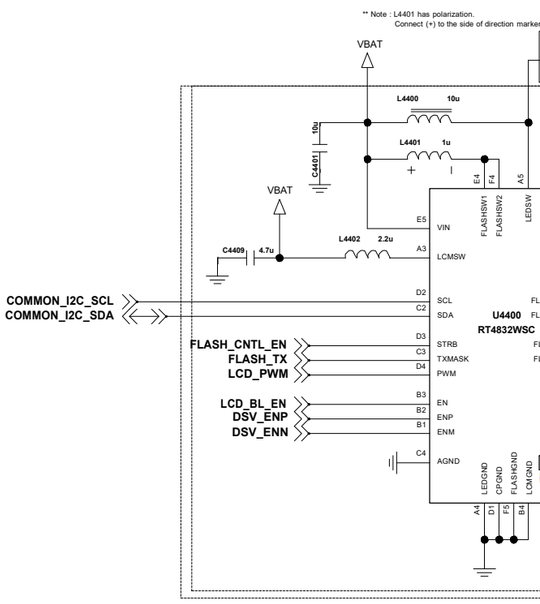


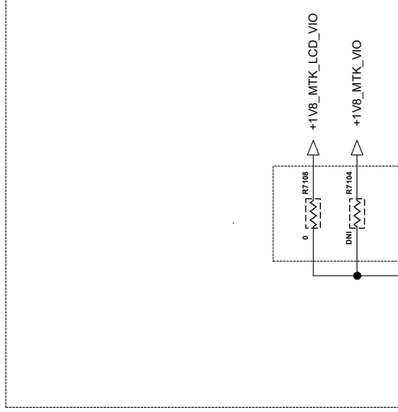
< 7-4_VT_Camera> Rev_1.2

Camera 5. 30pin 5M FF

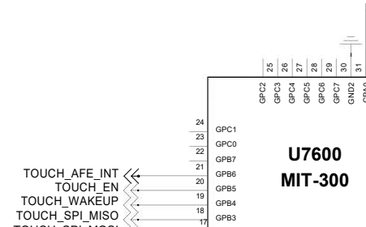


<4-4-7_LCD_Backlight_Flash_

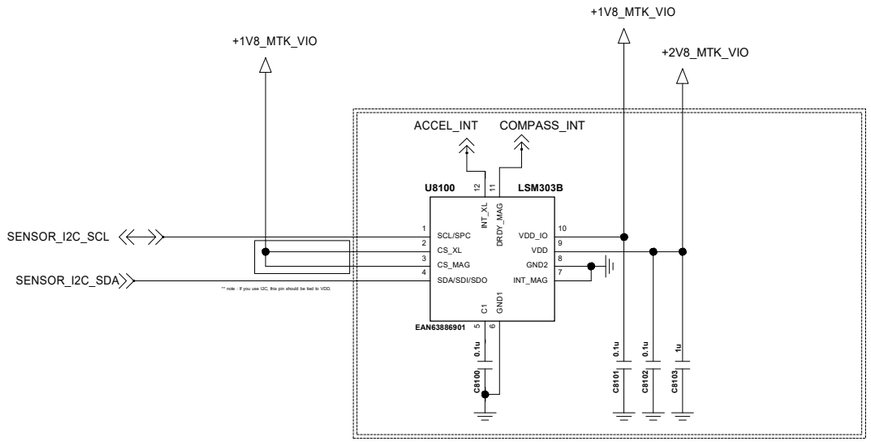




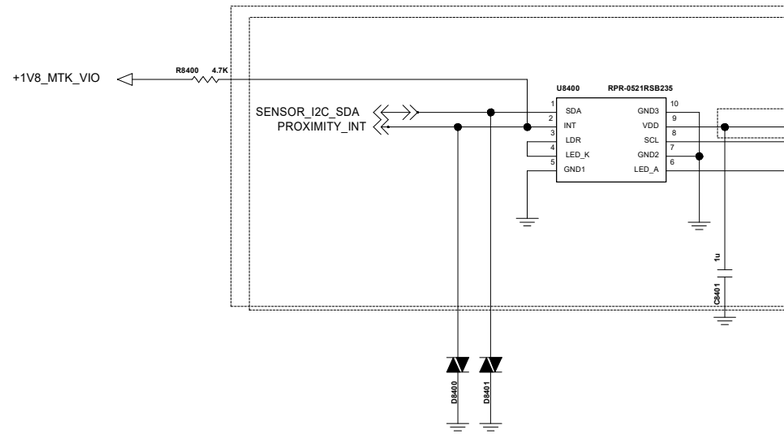
TOUCH
MIT-3



<8-1-2-2_Accel_Compass_K303B> Rev_0.3

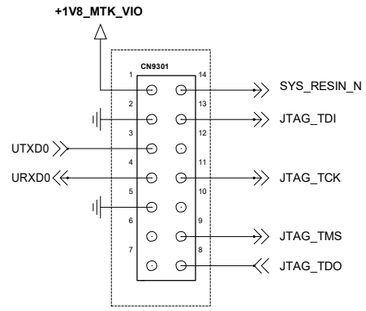


< 8-4-3-4_Proximity_RPR-0521R

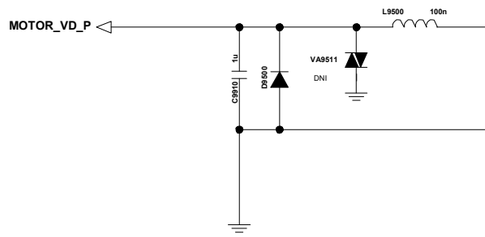


< 9-3-1_JTAG > Rev_0.4

Rev1.0 DNI



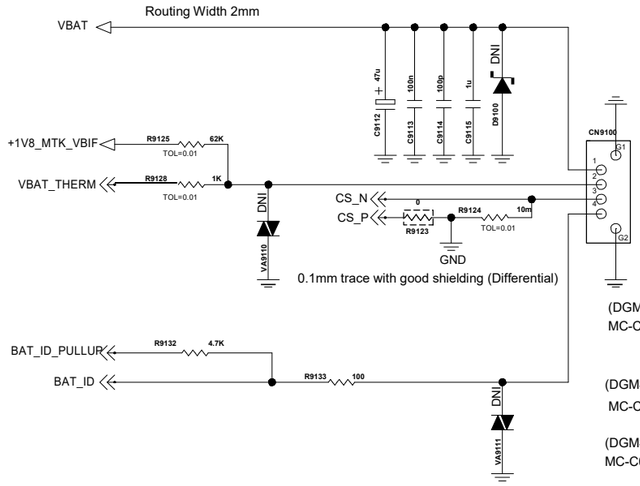
< 9-9-1-1_Motor >



[C-Clip]

<9-1_Battery_Connector_4Pin> Rev_1.4

Circuit 5. Batt Conn.(For MTK Platform)



4.35V Battery PIN Map one more check

	Pin map			
Normal Voltage (4.2V)	V+	TH	V-	V-
High Voltage (4.35V)	V+	TH	V-	ID
High Voltage 2 (4.4V)	V+	ID	TH	V-

(DGMS Guide)

MC-C00073-15 : Apply to large capacity around the bat connector
1. Over 47uF around the bat connector
2. Over 100uF totally on Vbat line
Use the TVS diode of VR=5V, when TVS diode have to use for ESD

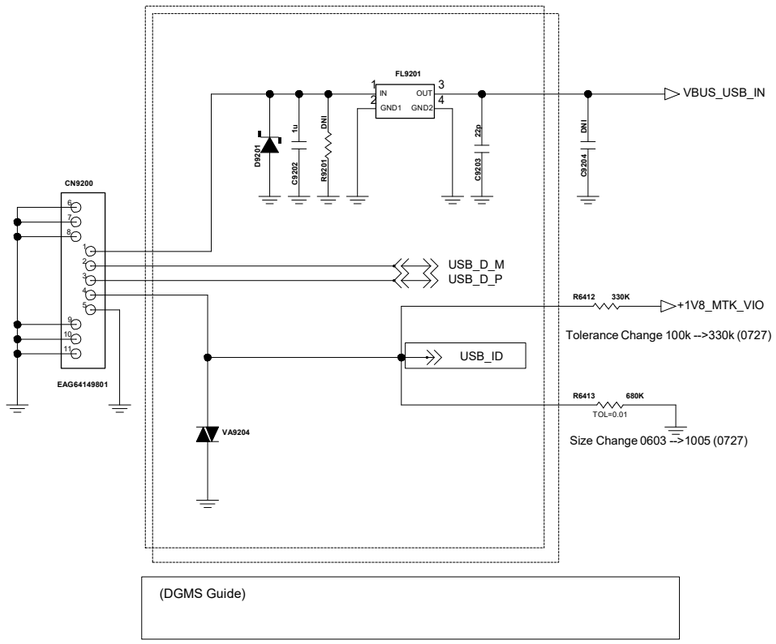
(DGMS Guide)

MC-C06162-1 : 1. Do not connect negative of tantal Cap. to positive voltage if use
2. We recommend Ceramic Cap.

(DGMS Guide)

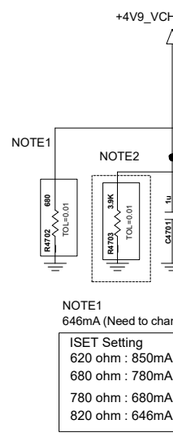
MC-C02048-18 : 4. Polymer type tantal cap. is Spec =< Voltage rating X 0.8

<9-2-1_USB_IO> Rev_1.2



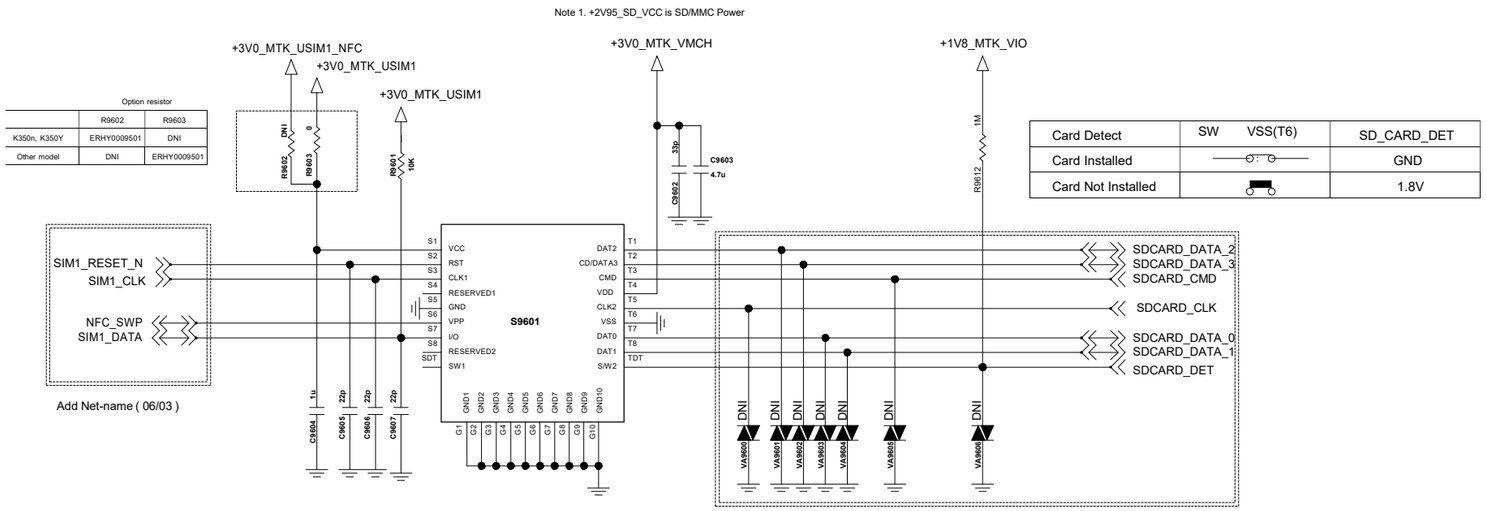
(DGMS Guide)

<4-7-1-1_Linear



< 9-6_u_SDCARD_Socket > Rev_1.3

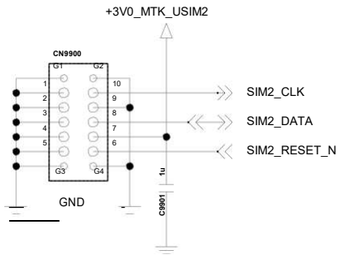
Circuit 1. u-SDCARD SIM Combo for QMC /w Low Detection



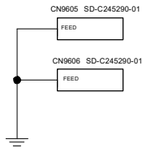
Card Detect	SW VSS(T6)	SD_CARD_DET
Card Installed		GND
Card Not Installed		1.8V

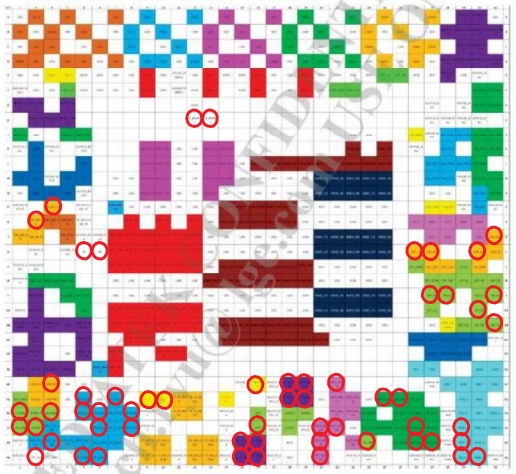
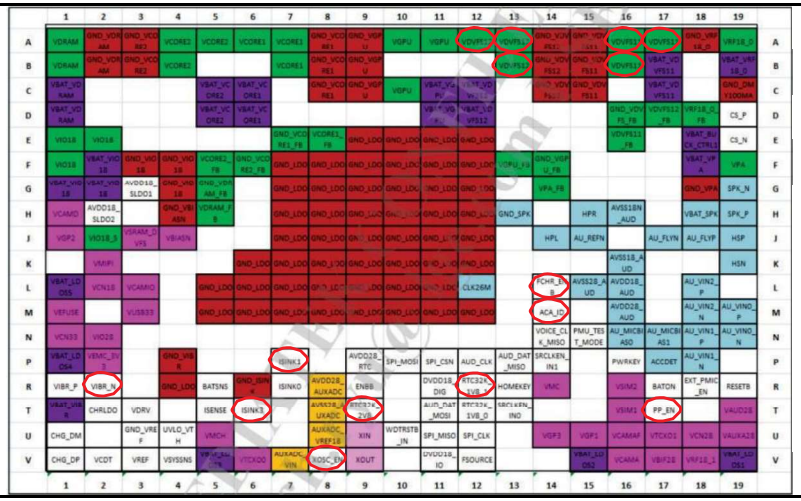
Dual SIM Connector

	CN9900	C9901
K350ds, K350E, K350Z	EAG64729801	ECCH0017301
Other model	DNI	DNI



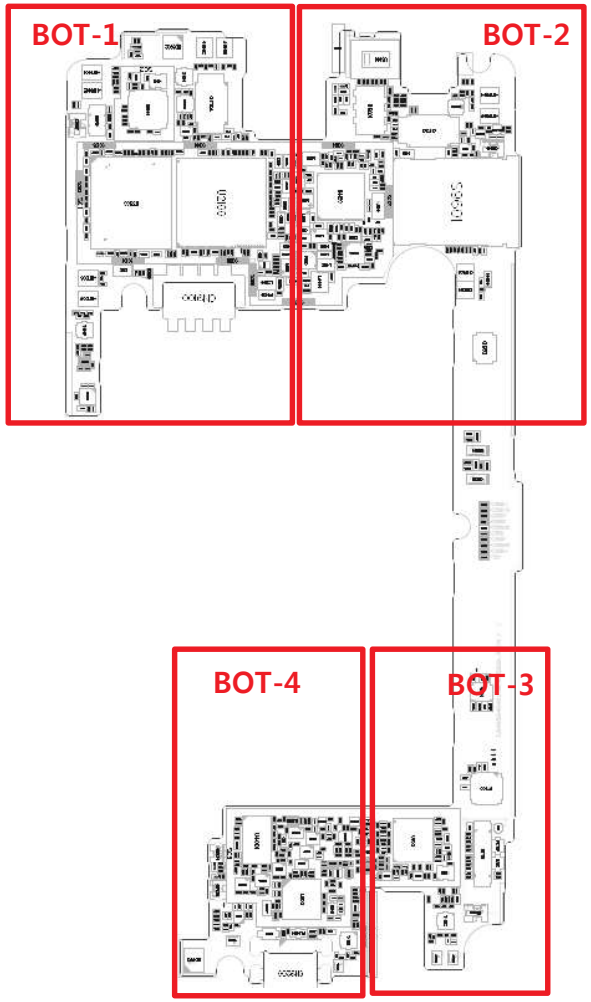
LCD C



U2100_MT6735_IC,Digital Baseband Processor(Top View)	U3300_H9TQ17A8GTMCUR,IC,MCP.eMMC(Top View)
 O Not used	 O Not used
U4100_MT6328_IC,PMIC (Top View)	
 O Not used	

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LG-K350ds-MAIN_BOT



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LG-K350DS-MAIN_BOT 1

U6001 - Connectivity MT6625L
No WiFi/ GPS/ FM Radio/Bluetooth

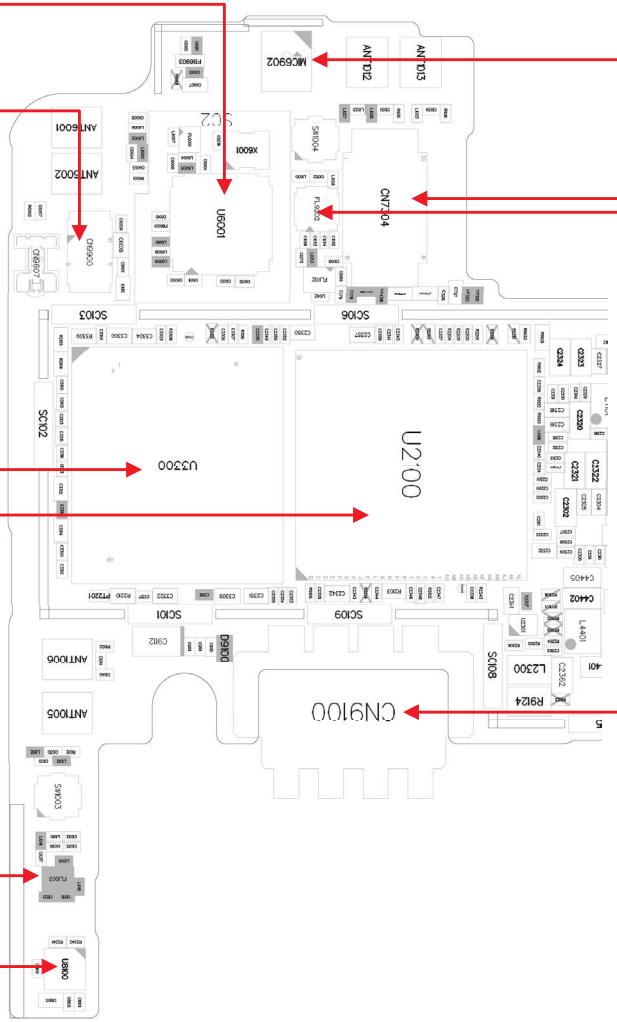
CN9900 – 2nd SIM connector
SIM2 - No service

U3300 - Memory
No Power on

U2100 – AP MT6735
No Power on

FL1003 – B20 LNA
B20 No service

U8100 – Acceleration/Compass
No Sensor



MIC6902 – SUB MIC
No MIC

CN7304 – Main Camera
No Camera(Main)

FL9202 – Switch
No DRX service

CN9100 – Battery Connector
No Power on

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LG-K350DS-MAIN_BOT 2

U8400 – Proximity Sensor
No Proximity

CN9201 – Back Key Connector
No Back Key function/ No Flash

U4100 – PMIC MT6328
No Power on

U4400 – DSV IC
No LCD/ No Flash

U5200 – NFC IC
No NFC service

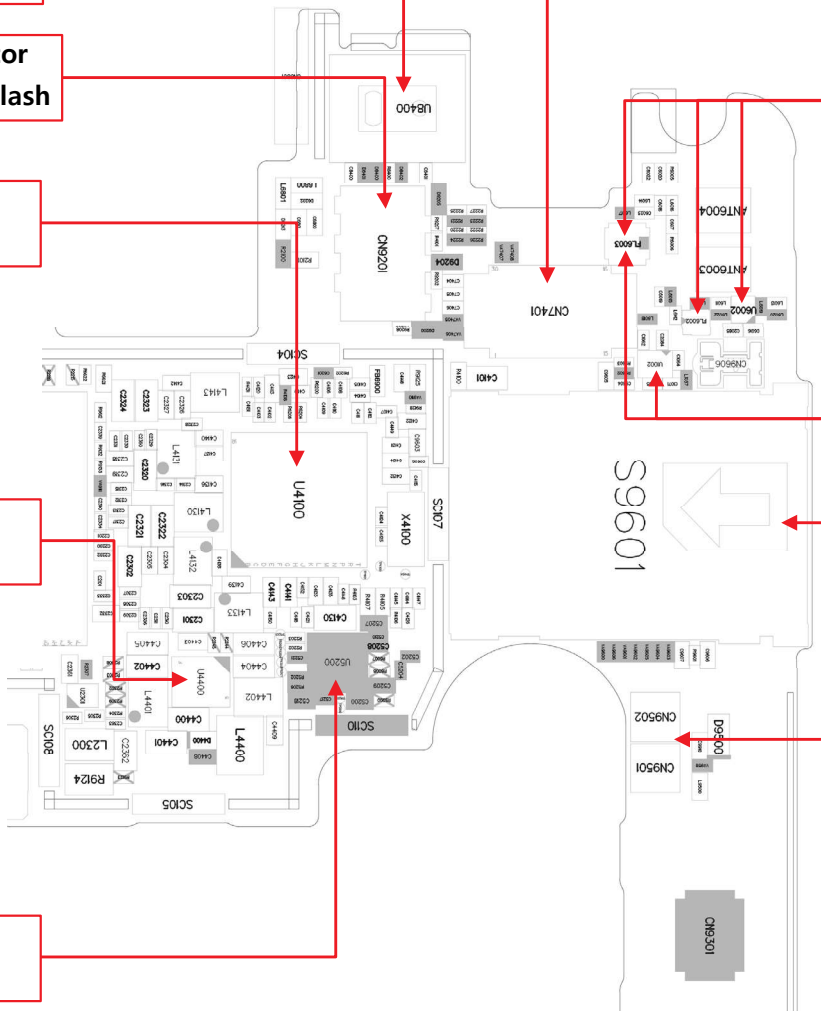
CN7401 – VT Camera connector
No Camera(VT)

FL6003/ FL6002/ U6002
No GPS service

FL6003/ U1002
No B7 DRX function

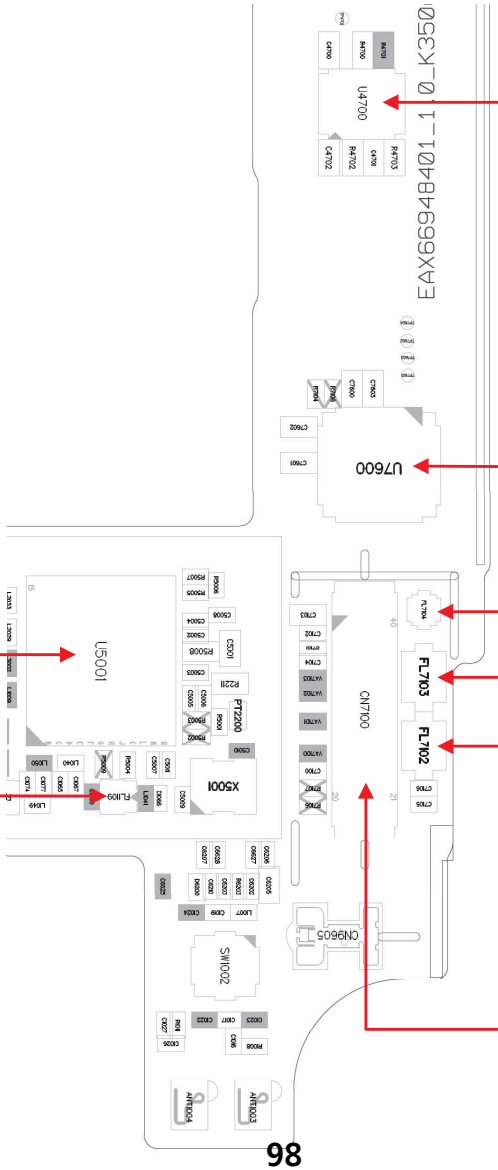
S9601 – Combo Socket
No 1st SIM/ SD card service

CN9501/CN9502 – Motor Contact
No Vibrator fuction



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LG-K350DS-MAIN_BOT 3



U4700 – Charging IC
No Charging

U7600 – Touch MCU
No Charging

U5001 – RF Transceiver
No service

FL1109 – B7 Filter
No B7 DRX function

FL7104/ FL7103/ FL7102
LCD EMI filter
No LCD

CN7100 LCD Connector
No LCD

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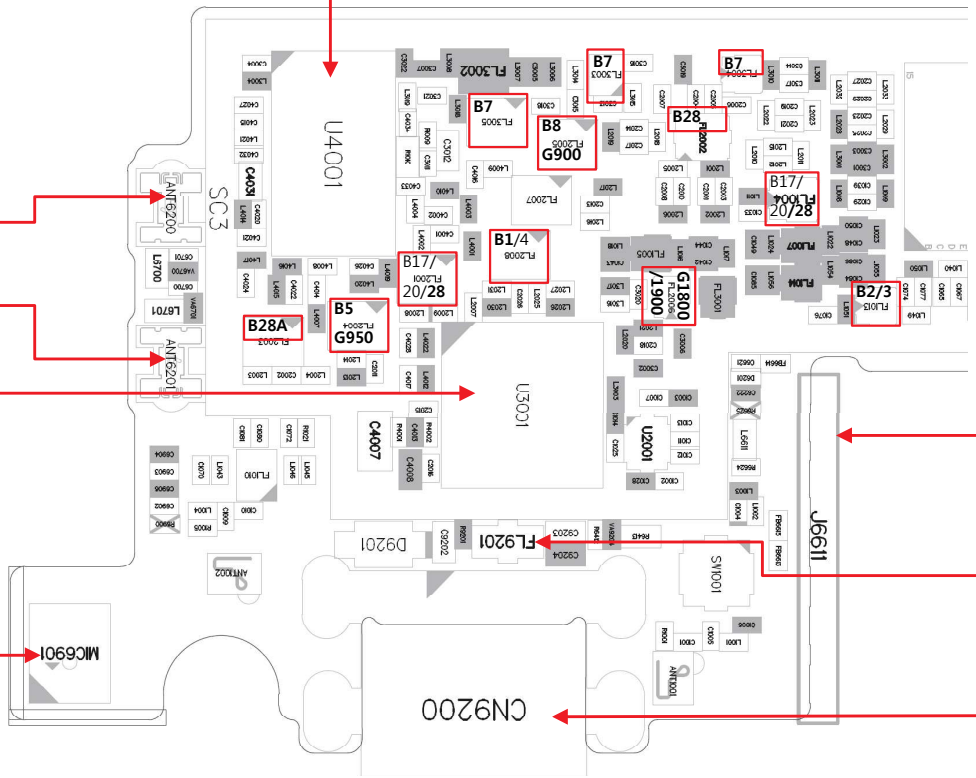
LG-K350DS-MAIN_BOT 4

U4001 – MMPA
No Service

ANT6200/6201
- Speaker Contact
No Sound

U3001 – Tx Module
No Service

MIC6901 - MIC
No MIC(Main)

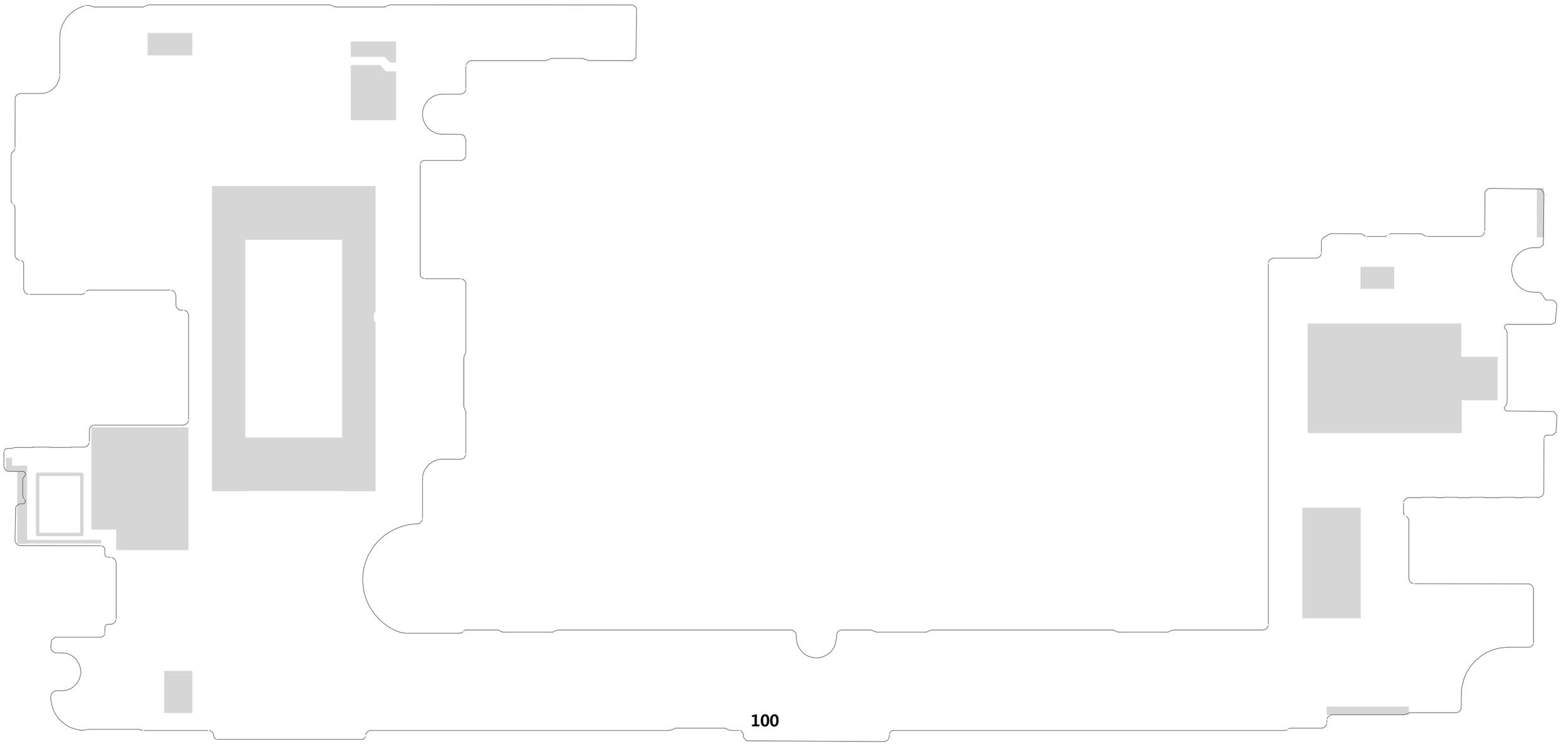


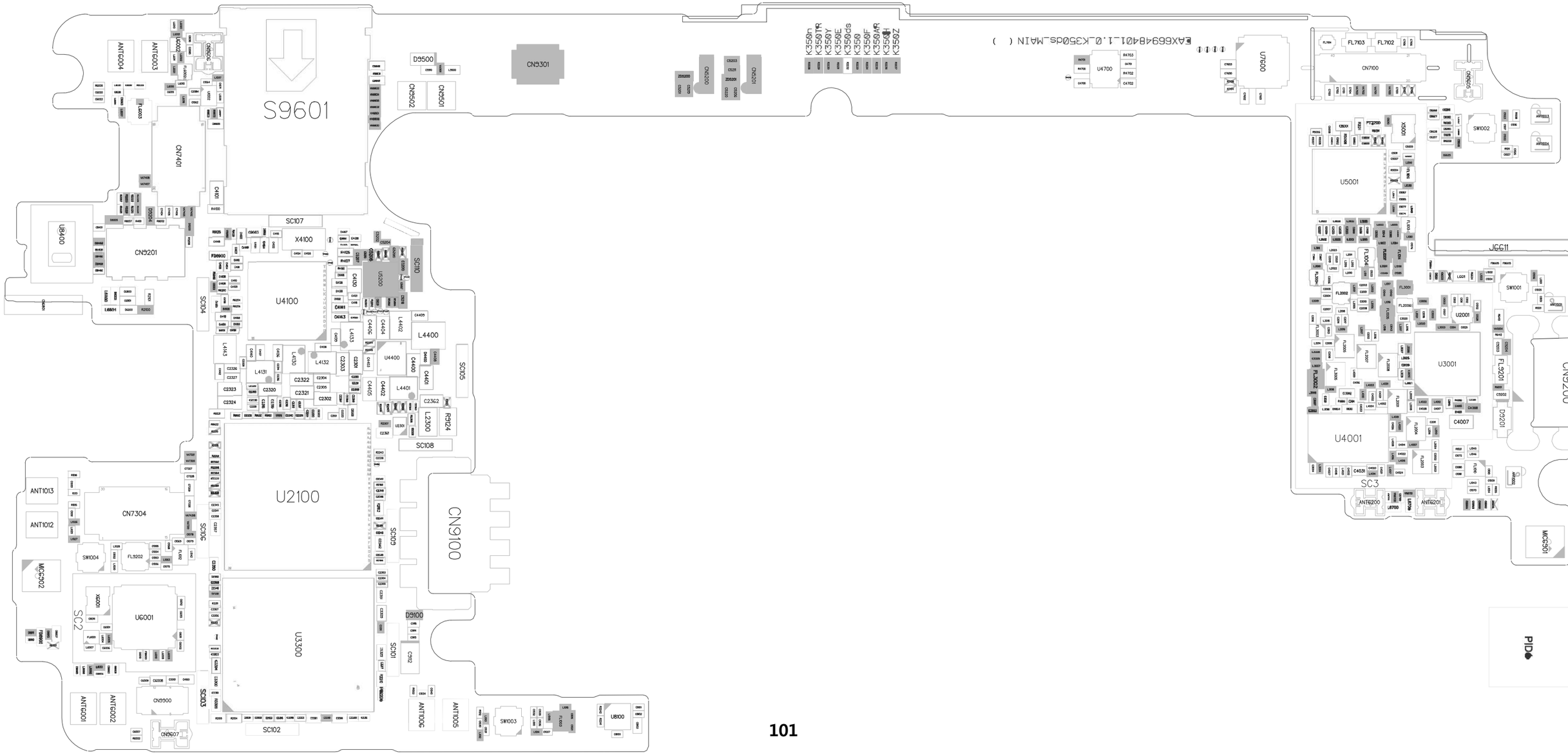
J6611 – Ear-jack
No Ear-mic function

FL9201 – USB EMI filter
No USB

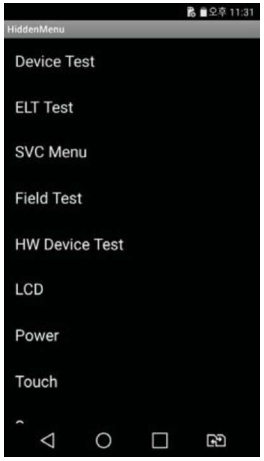
CN9200 – USB Connector
No USB connection
No Charging

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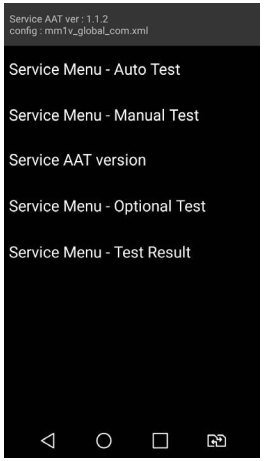

S9601
CN9301
D9500
CN9502
CN9501
CN5200
CN5201
U4700
U7500
CN7100
FL7103
FL7102
CN9504
U5001
X5001
SW1002
ANT1003
ANT1004
JG611
SW1001
U2001
U3001
FL3001
FL3002
FL3003
FL3004
FL3005
FL3006
FL3007
FL3008
FL3009
FL9201
D9201
CN9200
C4007
U4001
SC3
ANT6200
ANT6201
U6700
MIC9501
PID
U8400
CN9201
CN7401
ANT6004
ANT6003
CN9505
FL4003
U4100
X4100
U5200
U4400
L4400
L4401
L2300
R924
SC107
SC108
SC104
SC105
SC106
SC109
SC110
U2100
CN9100
U3300
D9100
SC101
SC102
SC103
CN9300
CN9607
ANT6001
ANT6002
ANT1006
ANT1005
SW1003
U8100
ANT1013
ANT1012
CN7304
SW1004
FL3202
MIC9502
U6001
X6201
SC2

1. Hidden Menu Start



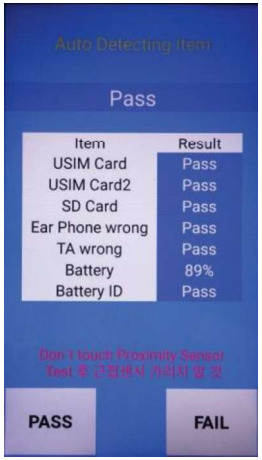
- Start shortcut key:
  *#546368#*350#
- Hidden Menu List
  : Start the desired menu, click

2. Device Test - SAAT



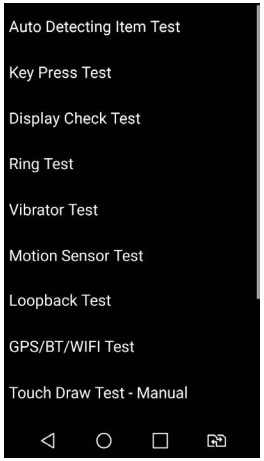
- Service Menu – Auto Test
- Service Menu – Manual Test
- Service AAT version
  → Hidden Menu version Display

2. Device Test



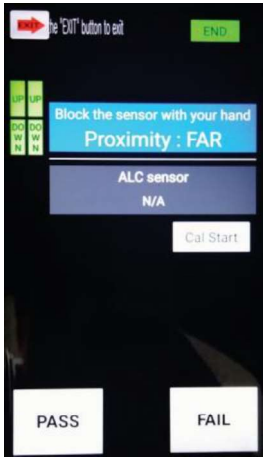
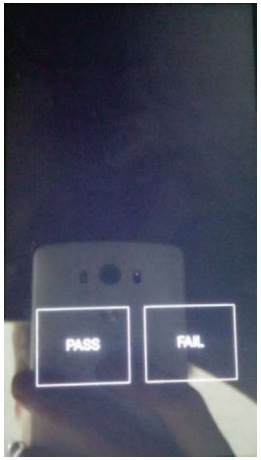
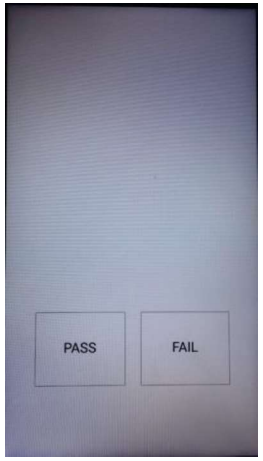
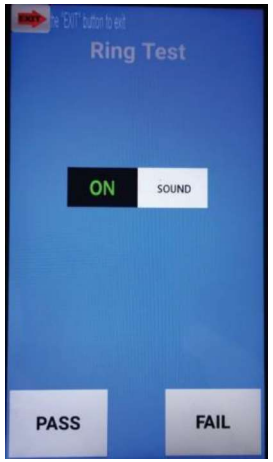
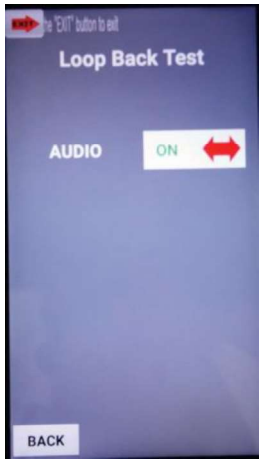
- Service Menu – Auto Test
  → All Test Items are continued one after another.
  → Continuous information on the menu, giving you ability test.

3. Device test List

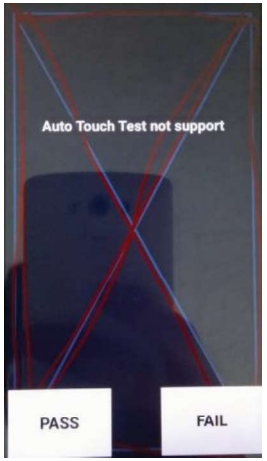
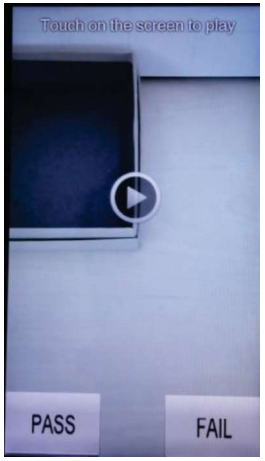


- Service Menu – Manual Test
  → Each test item can be selected and performed by user.

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1. Auto Detecting Item Test	2. Key Press Test	3. Display Check Test (1)	4. Display Check Test (2)
			
5. Ring Test	6. Vibrator Test	7. Motion Sensor Test	8. Loop Back Test
			

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9. GPS/BT/WiFi Test	10. Touch Draw Test	11. Camera Test (Main)	12. Camcorder Test
			
13. Camera Test (VT)	14. FM Radio Test		
			

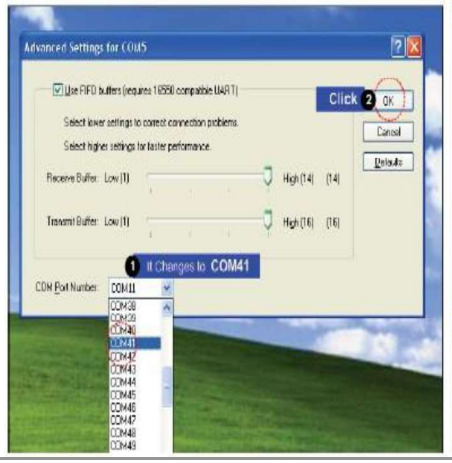
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1. Summary

Tool Version	DLL name	USB Driver	
LGFlash Tool V201	LGK350ds_20160204_LGFLASHv215_Download.dll	LGUnitedMobileDriver_S52MAN314AP22_ML_WHQL_Ver_3.14.1	
Please Check the Version to "LGST ServiceCenter Tool"			
H/W			
	Name	Part No.	SW
D/L Cable	Micro 5P (56-open-910K) USB DLC	RAD3216 7835	KDZ



2. . USB COM port Setting





3. USB D/L Cable setting

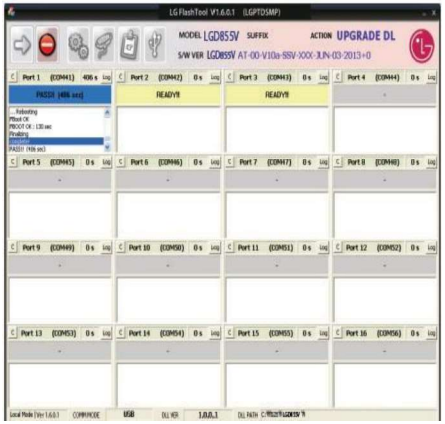




4. Flash tool D/L setting







※ If you want more information, please refer LGST ServiceCenter Tool's Notification"Download User Guide".

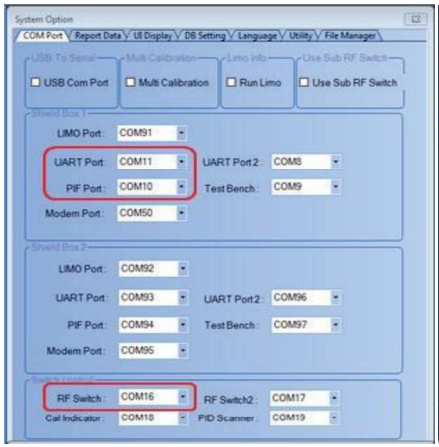
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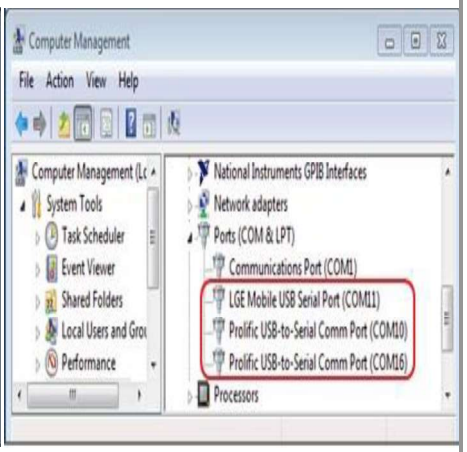
1. Summary

CAL INFORMATION		
S/W VERSION		
Tachyon_509		
Please Check the Version to "B2B"		
H/W		
	Name	Part No.
PIF	PIF200	BJAY0024021
USB Cable	USB Cable	RAD32247898
Power Cable	DC Power Cable	RAD32247878
I/O Cable	5P E-SATA DC Plug	
RF Cable_Main	MXFJK1WT4000C2	
Power Supply_PIF	DC 5.0V 2.0A	
Power Supply_Phone	Power supply control	
PF Test Equipment		
Notice	1. Use the Battery (Refer to Attached ppt) 1) Phone states: Power off 2) If do not use the battery, TX fails. 2. Port Setting (Refer to Attached ppt) 1) Uart Port1 : Use the "LGE Mobile USB Serial Port"	
CMW 500 RF Cable connection		

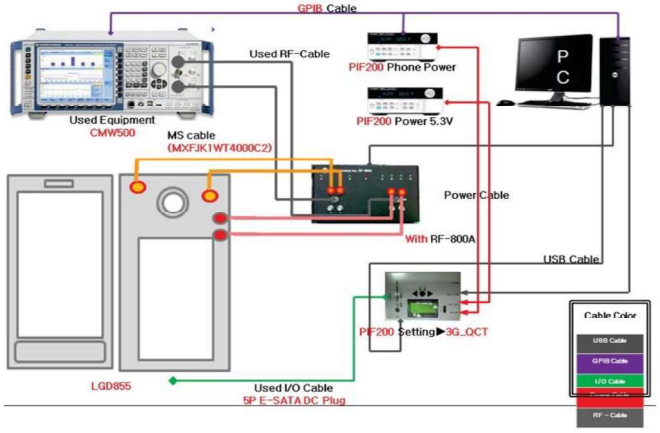


2. . USB COM port Setting

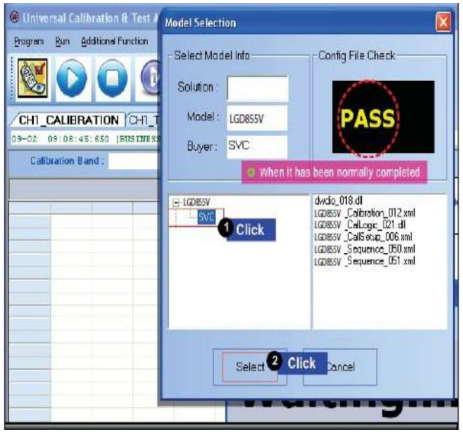




3. Calibration Cable setting



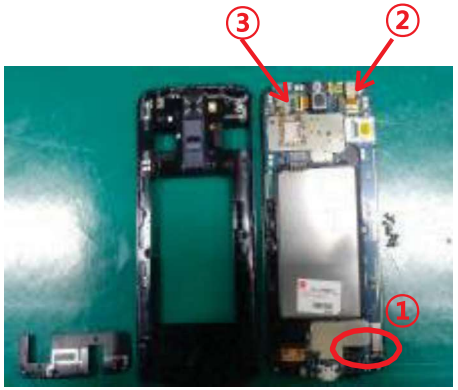
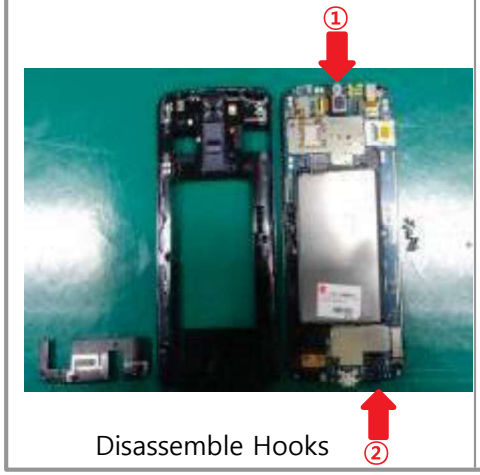
4. Tachyon setting





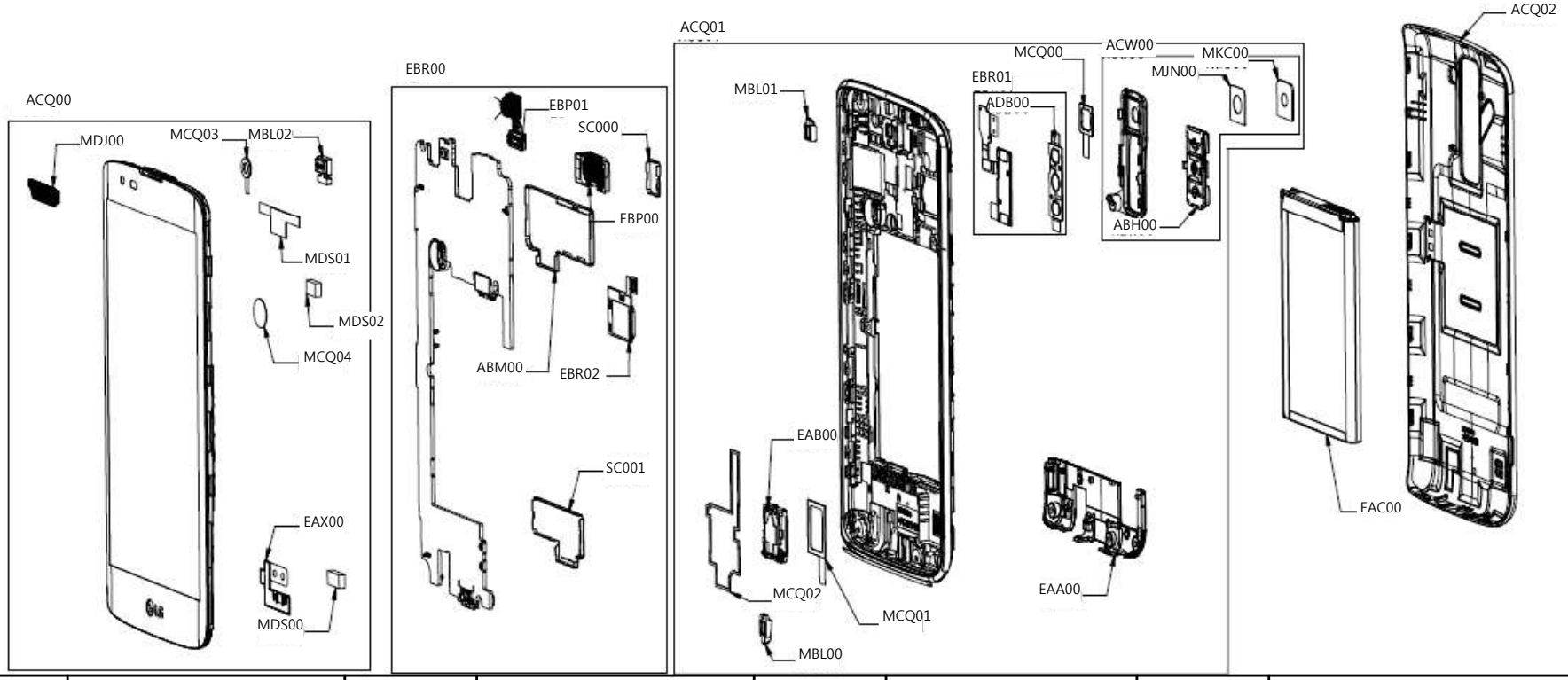
※ If you want more information, please refer LGST ServiceCenter Tool's Notification "RF Calibration User Guide".

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1. Disassemble Screw (9ea)	2. Disassemble Rear cover	3. Disassemble Main Antenna	4. Disassemble Connector
			
5. Disassemble Main PCB	**6. Disassemble HW Parts (4ea)**	**7. LCD Disassemble (by Heating machine)**	**8. Complete Disassembling**
 Disassemble Hooks			

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12. EXPLODED VIEW



Location	Description	Location	Description	Location	Description	Location	Description
ACQ01	Cover Assembly,Rear	MBL00	Cap	MDJ00	Filter	EBR02	PCB Assembly,Flexible
EBR01	PCB Assembly,Flexible	ACW00	Decor Assembly	MDS00	Gasket	EBP01	Camera Module
ADB00	Dome Assembly,Metal	ABH00	Button Assembly	MDS01	Gasket	EBP00	Camera Module
MBL01	Cap	MKC00	Window,Camera	MDS02	Gasket	ABM00	Can Assembly,Shield
MCQ01	Damper,Speaker	MJN00	Tape,Camera	MCQ03	Damper,Camera	SC000	Can,Shield
MCQ02	Damper,Speaker	EAA00	PIFA Antenna,Multiple	EAX00	PCB,Flexible	SC001	Can,Shield
EAB00	Speaker,Dual Mode	ACQ00	Cover Assembly	MBL02	Cap	ACQ02	Cover Assembly,Battery
MCQ00	Damper,Camera	MCQ04	Damper,Motor	EBR00	PCB Assembly,Main	EAC00	Rechargeable Battery,Lithium Ion

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No	P/N	Description	Quantity	Location no
1	AGQ88829601	Phone Assembly	1	AGQ000000
2	GMEY0014301	Screw,Machine	9	FAB010000
3	ACQ88692701	Cover Assembly,EMS	1	ACQ100400
4	ACQ88658801	Cover Assembly,Rear	1	ACQ01
5	ACQ88870801	Cover Assembly,Rear(SVC)	1	ACQ105800
6	EAA64387801	PIFA Antenna,Multiple	1	EAA030100
7	EAA64387901	PIFA Antenna,GPS	1	EAA030103
8	EAA64406901	PIFA Antenna,Multiple	1	EAA030101
9	EBR81943302	PCB Assembly,Flexible	1	EBR01
10	EBR81924702	PCB Assembly,Flexible,Insert	1	EBR070100
11	ADB74718201	Dome Assembly,Metal	1	ADB00
12	MJN69991301	Tape	1	MJN000000
13	MJN69991201	Tape	1	MJN000001
14	EBR81964502	PCB Assembly,Flexible,SMT	1	EBR070400
15	EBR81964602	PCB Assembly,Flexible,SMT Top	1	EBR070300
16	EAX66917901	PCB,Flexible	1	EAX010700
17	EBR81981902	PCB Assembly,Flexible,SMT Bottom	1	EBR070200
18	EAV63412401	LED,Flash	1	LD1001
19	MBL66937001	Cap	1	MBL01
20	MCK69185701	Cover,Rear	1	MCK063300
21	MCQ68765101	Damper,Speaker	1	MCQ01
22	MCQ68825101	Damper,Speaker	1	MCQ02
23	MDJ64944301	Filter	1	MDJ000000
24	EAA64347201	PIFA Antenna,WiFi	1	EAA030102
25	MEZ64319901	Label,After Service	1	MEZ000900
26	MFB64293301	Lens,Flash	1	MFB029600
27	MJN69947901	Tape,Protect	2	MJN061101
28	MJN69987301	Tape	1	MJN000000
29	MJN69947801	Tape,Protect	2	MJN061100
30	EAB64229101	Speaker,Dual Mode	1	EAB00
31	EAU63423201	Motor,DC	1	EAU010000
32	MCQ68765001	Damper,Camera	1	MCQ00
33	MBL66937101	Cap	1	MBL00
34	ACW75337301	Decor Assembly	1	ACW00
35	MCR66527101	Decor	1	MCR000000
36	ABH75839701	Button Assembly	1	ABH00
37	MBG66143401	Button	1	MBG000000
38	MJN69947601	Tape,Protect	1	MJN061100
39	MBG66103501	Button	1	MBG000001
40	MKC66019001	Window,Camera	1	MKC00
41	MJN69947701	Tape,Camera	1	MJN00
42	EAA64347101	PIFA Antenna,Multiple	1	EAA00
43	ACQ88697001	Cover Assembly,Bar	1	ACQ003400
44	ACQ88830201	Cover Assembly	1	ACQ00

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No	P/N	Description	Quantity	Location no
45	ACQ88695101	Cover Assembly,Front	1	ACQ032700
46	ACQ88636101	Cover Assembly,Front(Sub)	1	ACQ033200
47	MICE0016903	Insert,Nut	9	MET099500
48	MCK69165701	Cover,Front	1	MCK032700
49	MCQ68764901	Damper	1	MCQ000000
50	MCQ68824901	Damper,Motor	1	MCQ04
51	MDJ64944201	Filter	1	MDJ00
52	MJN69987101	Tape	1	MJN000000
53	MJN70027001	Tape	1	MJN000001
54	MHK65565801	Sheet	1	MHK000000
55	EAB63888801	Receiver	1	EAB010400
56	EAT63233101	Module,Hybrid Touch LCD	1	EAT130000
57	MDS65593001	Gasket	1	MDS00
58	MDS65634301	Gasket	1	MDS01
59	MDS65634401	Gasket	1	MDS02
60	MCQ68825001	Damper,Camera	1	MCQ03
61	EAG63849801	Jack,Phone	1	EAG140300
62	EAX66949701	PCB,Flexible	1	EAX00
63	MBL66841401	Cap	1	MBL02
64	EBR81969301	PCB Assembly,Main	1	EBR00
65	EBR82558901	PCB Assembly,Main,Insert	1	EBR071500
66	EBR81943301	PCB Assembly,Flexible	1	EBR02
67	EBR81964501	PCB Assembly,Flexible,SMT	1	EBR070400
68	EBR81964601	PCB Assembly,Flexible,SMT Top	1	EBR070300
69	EAX66903401	PCB,Flexible	1	EAX010700
70	EAG64749801	Connector,BtoB	1	CN10001
71	EBR81981901	PCB Assembly,Flexible,SMT Bottom	1	EBR070200
72	EAE62286801	Capacitor,Ceramic,Chip	1	C10001
73	ECCH0009514	Capacitor,Ceramic,Chip	2	C10000,C10002
74	EAG64650901	Socket,DIMM/SIMM	1	J10001
75	EBR81924701	PCB Assembly,Flexible,Insert	1	EBR070100
76	MJN69970501	Tape	1	MJN000000
77	EBP62722501	Camera Module	1	EBP01
78	EBP62702201	Camera Module	1	EBP00
79	RAA34549101	Resin,PC	0	RAA050100
80	ABM75356101	Can Assembly,Shield	1	ABM00
81	MBK64774301	Can,Shield	1	MBK070300
82	MEV65913601	Insulator	1	MEV000000
83	MCQ68904601	Damper	1	MCQ000000
84	EBR81969401	PCB Assembly,Main,SMT	1	EBR071800
85	EBR82579601	PCB Assembly,Main,SMT Bottom	1	EBR071600
86	EAM63170001	Filter,EMI/Power	2	FL7102,FL7103
87	EAM63290701	Filter,Duplexer	1	FL2003
88	EAM63390701	Filter,Saw	1	FL2006
89	EAM63431001	Filter,Duplexer	1	FL2001

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No	P/N	Description	Quantity	Location no
90	EAM63651001	Filter,Separator,Switch	1	FL9202
91	EAM63670001	Filter,Saw	1	FL6001
92	EAM63910601	Filter,Saw	2	FL1109,FL3004
93	EAM63930901	Filter,Saw	1	FL1013
94	EAM63950001	Filter,Separator,Switch	1	U2001
95	EAM63950301	Filter,Duplexer	1	FL2008
96	EAM63950701	Filter,Duplexer	1	FL2005
97	EAM63970401	Filter,Duplexer	1	FL3005
98	EAM63990101	Filter,Duplexer	1	FL2007
99	EAM63990501	Filter,Duplexer	1	FL2004
100	EAM63990701	Filter,Saw	1	FL1004
101	EAM63991901	Filter,Separator,Switch	1	FL1010
102	EAN62677301	IC,Charger	1	U4700
103	EAN62736101	IC,RF Amplifier	1	U6002
104	EAN63325801	IC,RF Amplifier	1	FL3003
105	EAN63406501	IC,RF Transceiver,4G	1	U5001
106	EAN63486501	IC,WiFi	1	U6001
107	EAN63646901	IC,MCP,eMMC	1	U3300
108	EAN63748001	IC,PMIC	1	U4100
109	EAN63788301	IC,RF Amplifier	1	U1002
110	EAN63807901	IC,RF Amplifier	1	FL1012
111	EAN63886901	IC,Acceleration Sensor	1	U8100
112	EAN64011501	IC,Capacitive Touch Sensor	1	U7600
113	EAN64028901	IC,Sub PMIC	1	U4400
114	EAN64107501	IC,Power Amplifier	1	U4001
115	EAN64130701	IC,Proximity	1	U8400
116	EAN64153301	IC,Digital Baseband Processor,4G	1	U2100
117	EAP61866301	Inductor,Multilayer,Chip	1	L1035
118	EAP61866601	Inductor,Multilayer,Chip	1	L1004
119	EAP61866701	Inductor,Multilayer,Chip	7	L1002,L1007,L1010,L1028,L6006,L6008,L6014
120	EAP62106301	Inductor,Wire Wound,Chip	1	L4400
121	EAP62108001	Inductor,Multilayer,Chip	2	C2023,C2025
122	EAP62946701	Inductor,Wire Wound,Chip	1	L4143
123	EAP63185901	Inductor,Multilayer,Chip	1	L4401
124	EAP63626601	Inductor,Multilayer,Chip	1	L4402
125	EAT63233201	Module,Tx Module	1	U3001
126	EAW62943601	Oscillator,VCTCXO	1	X5001
127	EAW63023701	Oscillator,TCXO	1	X6001
128	EBC61977001	Resistor,Chip	1	R4103
129	EBC62035901	Resistor,Chip	1	R4131
130	EBG62665701	Thermistor,NTC	2	PT2200,PT2201
131	ECCH0000115	Capacitor,Ceramic,Chip	4	C9203,C9605,C9606,C9607
132	ECCH0000127	Capacitor,Ceramic,Chip	1	C7103
133	ECCH0000198	Capacitor,Ceramic,Chip	8	C2350,C2351,C3304,C3322,C4113,C5001,C6205,C7327
134	ECCH0004904	Capacitor,Ceramic,Chip	11	C2332,C3314,C3321,C4148,C4153,C7326,C7600,C7601,C7602,C8103,C9910

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No	P/N	Description	Quantity	Location no
135	ECCH0007804	Capacitor,Ceramic,Chip	10	C3012,C4031,C4131,C4132,C4133,C4134,C4135,C4137,C4138,C4142
136	ECCH0007805	Capacitor,Ceramic,Chip	1	C4141
137	ECCH0009101	Capacitor,Ceramic,Chip	47	C2100,C2101,C2102,C2200,C2201,C2202,C2333,C2334,C2335,C2337,C2338,C2339,C2340,C2341,C2343,C2344,C2347,C2349,C2352,C2353,C2354,C2355,C2356,C3306,C3312,C3313,C3316,C3317,C3320,C4115,C4144,C5002,C5003,C5004,C5005,C5006,C5007,C5008,C5009,C5011,C6001,C6016,C6903,C6910,C8100,C8101,C8102
138	ECCH0009102	Capacitor,Ceramic,Chip	2	C6206,C6207
139	ECCH0009105	Capacitor,Ceramic,Chip	4	C7101,C7102,C7105,C7106
140	ECCH0009107	Capacitor,Ceramic,Chip	2	C1013,C1056
141	ECCH0009216	Capacitor,Ceramic,Chip	2	C4017,C4125
142	ECCH0009217	Capacitor,Ceramic,Chip	1	C4028
143	ECCH0009228	Capacitor,Ceramic,Chip	2	C3011,C6011
144	ECCH0009506	Capacitor,Ceramic,Chip	1	C4124
145	ECCH0017301	Capacitor,Ceramic,Chip	47	C2103,C2306,C2307,C2308,C2309,C2310,C2311,C2312,C2313,C2314,C2315,C2316,C2317,C2328,C2329,C2330,C2331,C2348,C3307,C3315,C4104,C4105,C4106,C4107,C4108,C4109,C4110,C4111,C4112,C4145,C4147,C4149,C4150,C4151,C4152,C6012,C6014,C7100,C7104,C7328,C7404,C7405,C7406,C8400,C8401,C9604,C9901
146	ECCH0017601	Capacitor,Ceramic,Chip	14	C2304,C2305,C2318,C2319,C2326,C2327,C2342,C2357,C3309,C4122,C4123,C6008,C7309,C9603
147	ECCH0032801	Capacitor,Ceramic,Chip	3	C2345,C2346,C3303
148	ECZH0000813	Capacitor,Ceramic,Chip	1	C7603
149	ECZH0000830	Capacitor,Ceramic,Chip	3	C6800,C6801,C6907
150	ECZH0001215	Capacitor,Ceramic,Chip	2	C4700,C4701
151	EDSY0010501	Diode,Switching	1	D9500
152	ELCH0001444	Inductor,Multilayer,Chip	2	L6700,L6701
153	ELCH0003842	Inductor,Multilayer,Chip	1	L6611
154	ELCH0005009	Inductor,Multilayer,Chip	1	L9500
155	ENBY0040701	Connector,BtoB	2	CN7304,CN7401
156	ENZY0025801	Terminal Block	1	CN9201
157	ERHY0000166	Resistor,Chip	2	R2210,R2211
158	ERHY0009302	Resistor,Chip	1	R9128
159	ERHY0009312	Resistor,Chip	1	R2102
160	ERHY0009316	Resistor,Chip	6	R1002,R1005,R1011,R1016,R6002,R6005
161	ERHY0009501	Resistor,Chip	3	FB6001,R1009,R9603
162	ERHY0009503	Resistor,Chip	6	R5006,R5007,R9133,R9202,R9207,R9208
163	ERHY0009504	Resistor,Chip	5	R4101,R5001,R5004,R6200,R6202
164	ERHY0009505	Resistor,Chip	2	R4001,R9601
165	ERHY0009507	Resistor,Chip	7	R1001,R1008,R1012,R1015,R6001,R6006,R9612
166	ERHY0009511	Resistor,Chip	2	R4106,R6203
167	ERHY0009516	Resistor,Chip	2	R2202,R2203
168	ERHY0009519	Resistor,Chip	1	R4002
169	ERHY0009522	Resistor,Chip	1	R6624
170	ERHY0009526	Resistor,Chip	8	R2200,R2201,R2204,R2205,R2241,R2242,R8400,R9132
171	ERHY0009527	Resistor,Chip	2	R2243,R6622
172	ERHY0009531	Resistor,Chip	1	R5005
173	ERHY0017901	Resistor,Chip	1	R6412
174	ERHY0035601	Resistor,Chip	1	R9124

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No	P/N	Description	Quantity	Location no
175	ERHY0042406	Resistor,Chip	2	R3308,R3311
176	ERHZ0000220	Resistor,Chip	1	R2103
177	ERHZ0000236	Resistor,Chip	1	R5008
178	ERHZ0000250	Resistor,Chip	1	R3309
179	ERHZ0000278	Resistor,Chip	1	R4703
180	ERHZ0000295	Resistor,Chip	1	R4107
181	ERHZ0000308	Resistor,Chip	1	R9125
182	ERHZ0000310	Resistor,Chip	1	R4702
183	ERHZ0000319	Resistor,Chip	2	R2104,R2105
184	ERHZ0000406	Resistor,Chip	2	R2101,R2232
185	ERHZ0000486	Resistor,Chip	1	R4700
186	ERHZ0000487	Resistor,Chip	1	R6621
187	ERHZ0000529	Resistor,Chip	1	R4100
188	ERHZ0000537	Resistor,Chip	1	R6413
189	ERHZ0000538	Resistor,Chip	1	R4105
190	EXXY0018701	Crystal	1	X4100
191	MBK64732501	Can,Shield	1	SC000
192	MBK64752501	Can,Shield	1	SC001
193	MBV62321701	Clip	9	SC101,SC102,SC103,SC104,SC105,SC106,SC107,SC108,SC109
194	MCE63033001	Contact	2	CN9501,CN9502
195	MEZ65049701	Label	1	PID1
196	SEVY0005201	Varistor	2	D6202,D6203
197	SFBH0008102	Filter,Bead	2	FB6900,FB6903
198	SFEY0015301	Filter,EMI/Power	1	FL9201
199	EAB62911301	Microphone,Condenser	2	MIC6901,MIC6902
200	EAE62286801	Capacitor,Ceramic,Chip	5	C10001
201	EAE62502901	Capacitor,Ceramic,Chip	1	C4403
202	EAE62522101	Capacitor,Ceramic,Chip	1	C4130
203	EAE62685301	Capacitor,Ceramic,Chip	2	C4702,C9202
204	EAE62762301	Capacitor,Ceramic,Chip	5	C4119,C4120,C4121,C4126,C9115
205	EAE62762401	Capacitor,Ceramic,Chip	1	C3301
206	EAE62946601	Capacitor(High Frequency),Ceramic,Chip	2	C1074,C1077
207	EAE63421801	Capacitor,Ceramic,Chip	3	C2321,C2322,C4101
208	EAE63541901	Capacitor,Ceramic,Chip	1	C4400
209	EAE63621501	Capacitor,Ceramic,Chip	1	C4143
210	EAE64262401	Capacitor,Ceramic,Chip	1	C4007
211	EAE64281701	Capacitor,TA,Polymer	1	C9112
212	EAG63772101	Connector,RF	4	SW1001,SW1002,SW1003,SW1004
213	EAG64149801	Connector,I/O	1	CN9200
214	EAG64651301	C-Clip	4	ANT1001,ANT1002,ANT1003,ANT1004
215	EAG64729801	Connector,BtoB	1	CN9900
216	EAG64751101	Connector,BtoB	1	CN7100
217	EAG64771301	C-Clip	2	ANT6200,ANT6201
218	EAG64771401	C-Clip	3	CN9605,CN9606,CN9607

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No	P/N	Description	Quantity	Location no
219	EAG64850201	Socket,DIMM/SIMM	1	S9601
220	EAG64850601	Connector,Terminal Block	1	CN9100
221	EAH61693001	Diode,TVS	2	D6200,D6201
222	EAH61872601	Diode,TVS	1	D9201
223	EAH61992801	Diode,Schottky	1	D4400
224	EAM62072101	Filter,Bead	2	L6800,L6801
225	EAM62230101	Filter,Bead	3	FB6613,FB6614,FB6615
226	EAM62791701	Filter,Separator	1	FL6003
227	EAM62792601	Filter,Separator,Switch	1	FL2002
228	EAM63130101	Filter,Saw	1	FL6002
229	EAM63150101	Filter,EMI/Power	1	FL7104
230	EAE62282201	Capacitor,Ceramic,Chip	3	C1069,C2007,C6621
231	EAE62506501	Capacitor,Ceramic,Chip	5	C3300,C4136,C4139,C4140,C4409
232	EAE62924201	Capacitor(High Frequency),Ceramic,Chip	1	C4022
233	EAE62945801	Capacitor(High Frequency),Ceramic,Chip	2	L4002,L4004
234	EAE62946501	Capacitor(High Frequency),Ceramic,Chip	2	C2027,C2029
235	EAE62945901	Capacitor(High Frequency),Ceramic,Chip	1	L4007
236	EAE62946001	Capacitor(High Frequency),Ceramic,Chip	1	L4003
237	EAE62946701	Capacitor(High Frequency),Ceramic,Chip	1	C4026
238	EAE62963701	Capacitor(High Frequency),Ceramic,Chip	1	C4015
239	EAE63023601	Capacitor(High Frequency),Ceramic,Chip	1	C6007
240	EAP61747501	Inductor,Multilayer,Chip	2	C1007,C1019
241	EAP61767701	Inductor,Multilayer,Chip	3	C1052,C1070,L2027
242	EAP61767801	Inductor,Multilayer,Chip	1	C2026
243	EAP61925901	Inductor,Multilayer,Chip	4	C2001,C2003,C2008,C2010
244	EAP61946101	Inductor,Multilayer,Chip	1	C1004
245	EAP62107901	Inductor,Multilayer,Chip	2	C1002,L1043
246	EAP62108101	Inductor,Multilayer,Chip	3	C3021,C6023,L1040
247	EAP62108201	Inductor,Multilayer,Chip	1	L3014
248	EAP62108301	Inductor,Multilayer,Chip	2	C1005,C4024
249	EAP62108401	Inductor,Multilayer,Chip	4	L2002,L2006,L2014,L2022
250	EAP62108501	Inductor,Multilayer,Chip	6	C1029,C1039,L4015,L4016,L4019,L4020
251	EAP62108601	Inductor,Multilayer,Chip	2	L2011,L2018
252	EAP62108701	Inductor,Multilayer,Chip	1	L1045
253	EAP62109001	Inductor,Multilayer,Chip	3	C2018,C2019,C2021
254	EAP62186301	Inductor,Multilayer,Chip	1	C1075
255	EAP62225901	Inductor,Multilayer,Chip	3	C1025,C6006,L1033
256	EAP62226001	Inductor,Multilayer,Chip	1	C2013
257	EAP62226101	Inductor,Multilayer,Chip	4	C1026,C1062,C1076,L1046
258	EAP62226201	Inductor,Multilayer,Chip	4	C4020,L1049,L2003,L2008
259	EAP62226301	Inductor,Multilayer,Chip	6	C1033,L1025,L2012,L2015,L2016,L6007
260	EAE63162401	Capacitor,Ceramic,Chip	1	C4405
261	EAP63586201	Inductor,Multilayer,Chip	1	R1010
262	EAP62226401	Inductor,Multilayer,Chip	6	C2011,L1042,L2023,L4009,L6004,L6011

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No	P/N	Description	Quantity	Location no
263	EAP62226501	Inductor,Multilayer,Chip	5	C2014,C2017,C4014,L2032,L4021
264	EAP62226601	Inductor,Multilayer,Chip	2	L2029,L2033
265	EAP62526401	Inductor,Multilayer,Chip	2	C4001,L2031
266	EAP62886001	Inductor,Multilayer,Chip	1	L6012
267	EAP62886101	Inductor,Multilayer,Chip	1	C4002
268	EAP63746901	Inductor,Wire Wound,Chip	1	L4130
269	EAP63786501	Inductor,Wire Wound,Chip	3	L4131,L4132,L4133
270	EBC62581901	Resistor,Chip	3	R2106,R6204,R6206
271	ECCH0007803	Capacitor,Ceramic,Chip	4	C4401,C4402,C4404,C4406
272	ECCH0009103	Capacitor,Ceramic,Chip	55	C1001,C1009,C1010,C1011,C1012,C1016,C1017,C1027,C1030,C1031,C1032,C1034,C1035,C1036,C1037,C1040,C1051,C1053,C1054,C1055,C1059,C1066,C1068,C1071,C1079,C2004,C2005,C2006,C2016,C2084,C2085,C3004,C3013,C3016,C3018,C3020,C4021,C4027,C4032,C4033,C4034,C4102,C4103,C6002,C6003,C6005,C6009,C6013,C6017,C6020,C6022,C9114,L1001,L2025,L6013
273	ECCH0009104	Capacitor,Ceramic,Chip	15	C1065,C1067,C1080,C1081,C3014,C3017,C6004,C6018,C6019,C6202,C6203,C6627,C6628,C6902,R1021
274	ECCH0009106	Capacitor,Ceramic,Chip	5	C1064,C1072,C6010,C6210,L3015
275	ECCH0009208	Capacitor,Ceramic,Chip	3	L1030,L3018,L3019
276	ECCH0009502	Capacitor,Ceramic,Chip	3	L3016,L4001,L6016
277	ECCH0017501	Capacitor,Ceramic,Chip	6	C2301,C2302,C2303,C2320,C2323,C2324
278	ECZH0025916	Capacitor,Ceramic,Chip	1	C9602
279	ECZH0025911	Capacitor,Ceramic,Chip	3	C2002,C4016,L2009
280	ECZH0025920	Capacitor,Ceramic,Chip	3	C2015,C6700,C6701
281	ERHY0009506	Resistor,Chip	4	R2220,R2222,R2225,R2227
282	SAFO0000401	Wire Pad,Open	7	R2215,R2244,R2245,R2301,R2302,R2309,R7104
283	SAFP0000401	Wire Pad,Short	19	R2213,R2214,R2218,R2300,R2303,R2308,R5002,R5003,R5009,R5200,R6007,R6008,R6625,R6900,R6901,R7106,R7107,R7108,R9123
284	EBR81986901	PCB Assembly,Main,SMT Top	1	EBR071700
285	EAX66948401	PCB,Main	1	EAX010000
286	RAA34548901	Resin,PC	0	RAA050100
287	SAD35826401	Software,Mobile	1	SAD010000
288	MJN69947501	Tape,Protect	1	MJN061100
289	MEZ66194201	Label,Approval	1	MEZ002100
290	AAD87909501	Addition Assembly	1	AAD000000
291	ACO88676101	Cover Assembly,Battery	1	ACO02
292	MCK69165801	Cover,Battery	1	MCK004100
293	EAB64228801	Earphone,Stereo	1	EAB010200
294	EAY62751801	Adapters	1	EAY060000
295	EAC63198407	Rechargeable Battery,Lithium Ion	1	EAC00
296	EAD62377902	Cable,Assembly	1	EAD010000
297	MBM65477901	Card,Quick Reference	1	MBM062600
298	MFL69443501	Manual,Operation	0	MFL053800
299	MJN69987201	Tape,USP Film	1	MJN107400
300	AGF78278904	Package Assembly	1	AGF000000

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