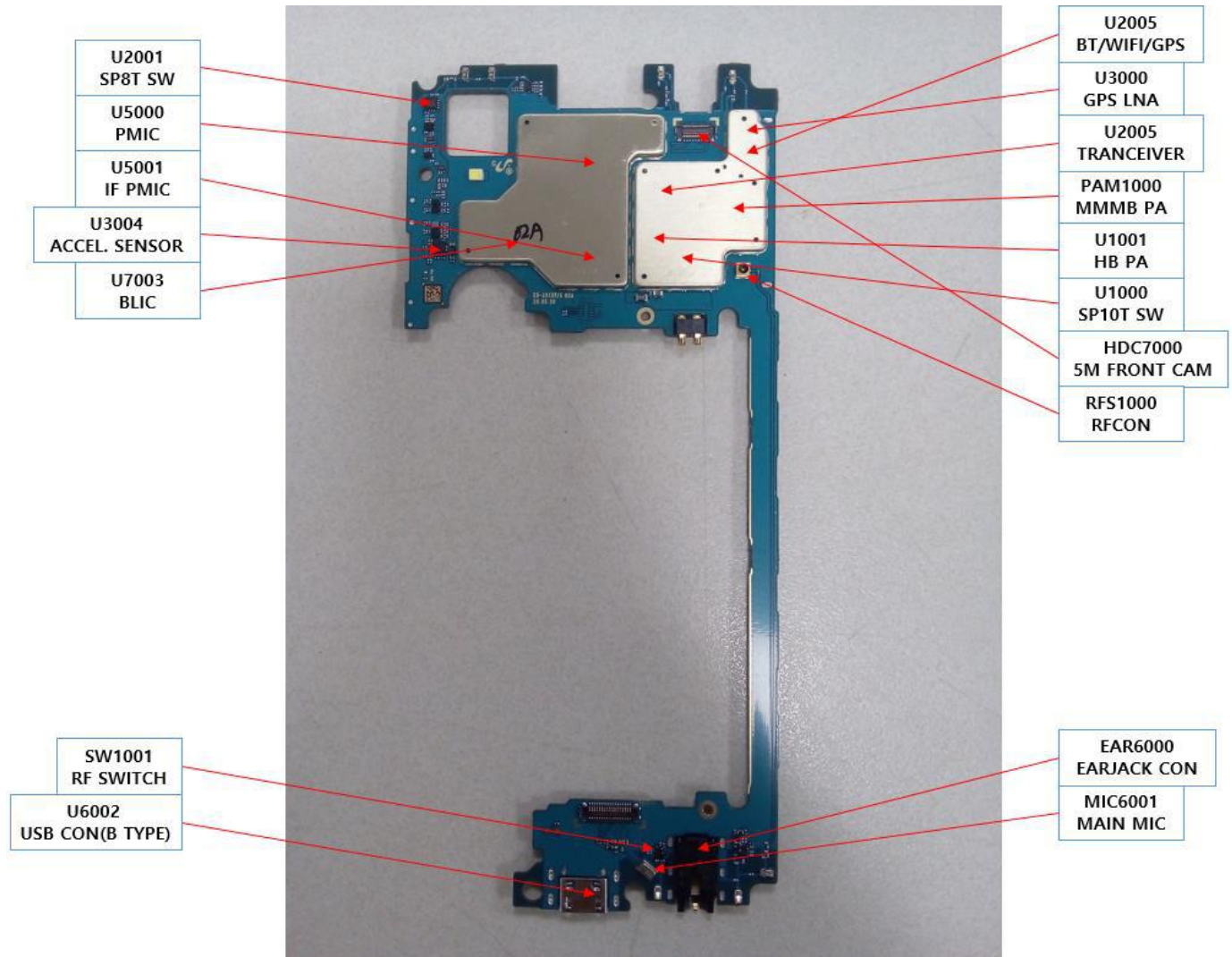
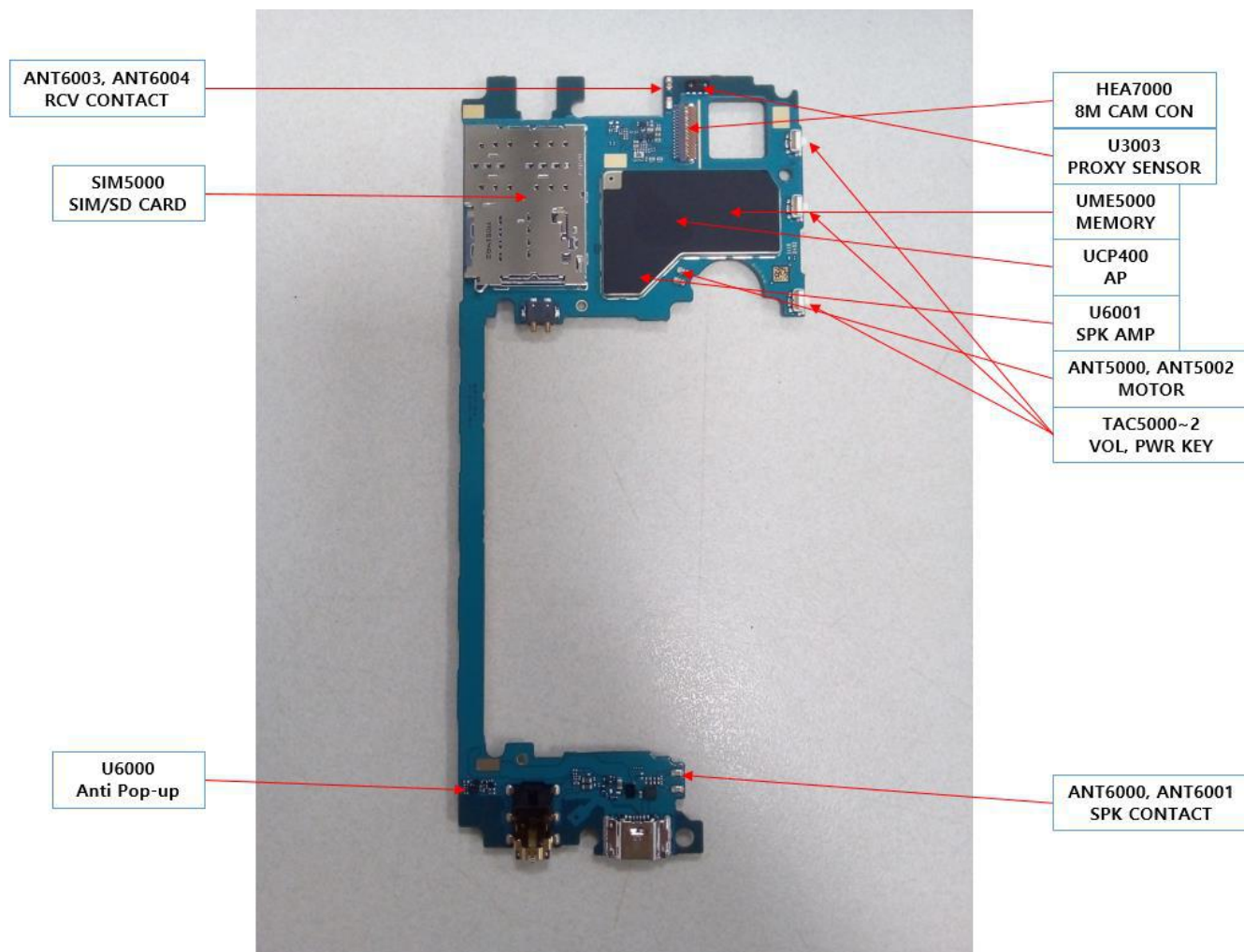


PBA (TOP SIDE)



## 8. Level 3 Repair

### PBA (BOTTOM SIDE)

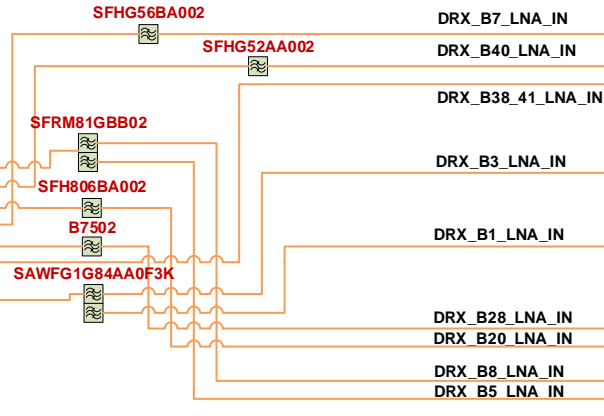


SUB ANT



**MXD8680S SP8T**

- RF1 O
- RF2 O
- RF3 O
- RF4 O
- RF5 O
- RF6 O
- RF7 O
- RF8 O



**MXD83E4W DRX LNA BANK**

- DRX\_B7\_LNA\_IN
- DRX\_B40\_LNA\_IN
- DRX\_B38\_41\_LNA\_IN
- DRX\_B3\_LNA\_IN
- DRX\_B1\_LNA\_IN
- DRX\_B28\_LNA\_IN
- DRX\_B20\_LNA\_IN
- DRX\_B8\_LNA\_IN
- DRX\_B5\_LNA\_IN

**MT6177M TRANCEIVER**

- DRX1
- DRX2
- DRX3
- DRX4

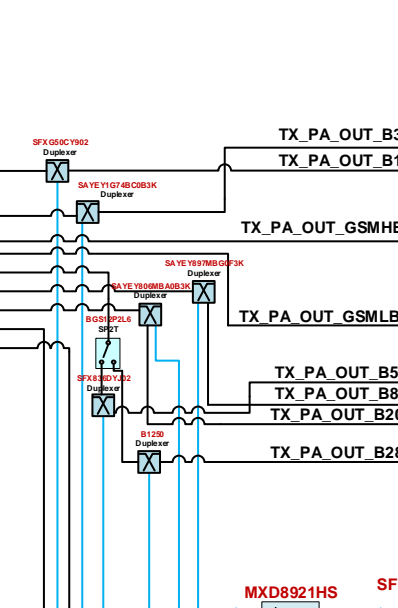
Main ANT



RFS1000  
Coupler  
RFIC\_PDET\_IN

**MXD86A7S SP10T**

- RF1 O
- RF2 O
- RF3 O
- RF4 O
- RF5 O
- RF6 O
- RF7 O
- RF8 O
- RF9 O
- RF10 O

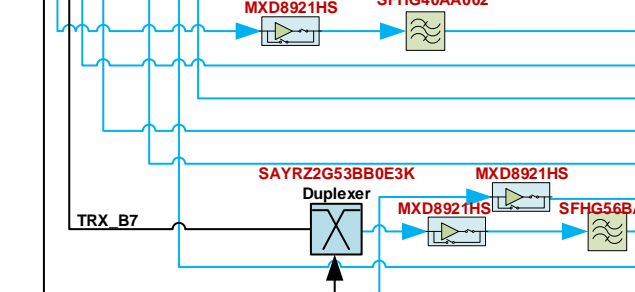


**SKY77621-31 MMMB PA**

- TX\_PA\_OUT\_B3
- TX\_PA\_OUT\_B1
- TX\_PA\_OUT\_GSMHB
- TX\_PA\_OUT\_GSMLB
- TX\_PA\_OUT\_B5
- TX\_PA\_OUT\_B8
- TX\_PA\_OUT\_B20
- TX\_PA\_OUT\_B28

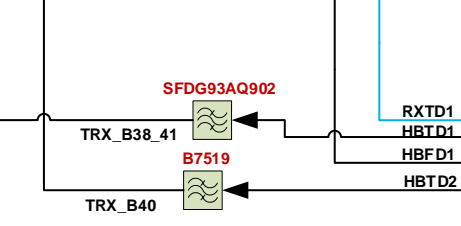
**MT6177M TRANCEIVER**

- HB3G4G\_IN
- HB2G\_IN
- LB2G\_IN
- LB3G4G\_IN



**MT6177M TRANCEIVER**

- PRX1
- PRX2
- PRX3
- PRX4
- PRX5
- PRX6
- PRX7
- PRX8



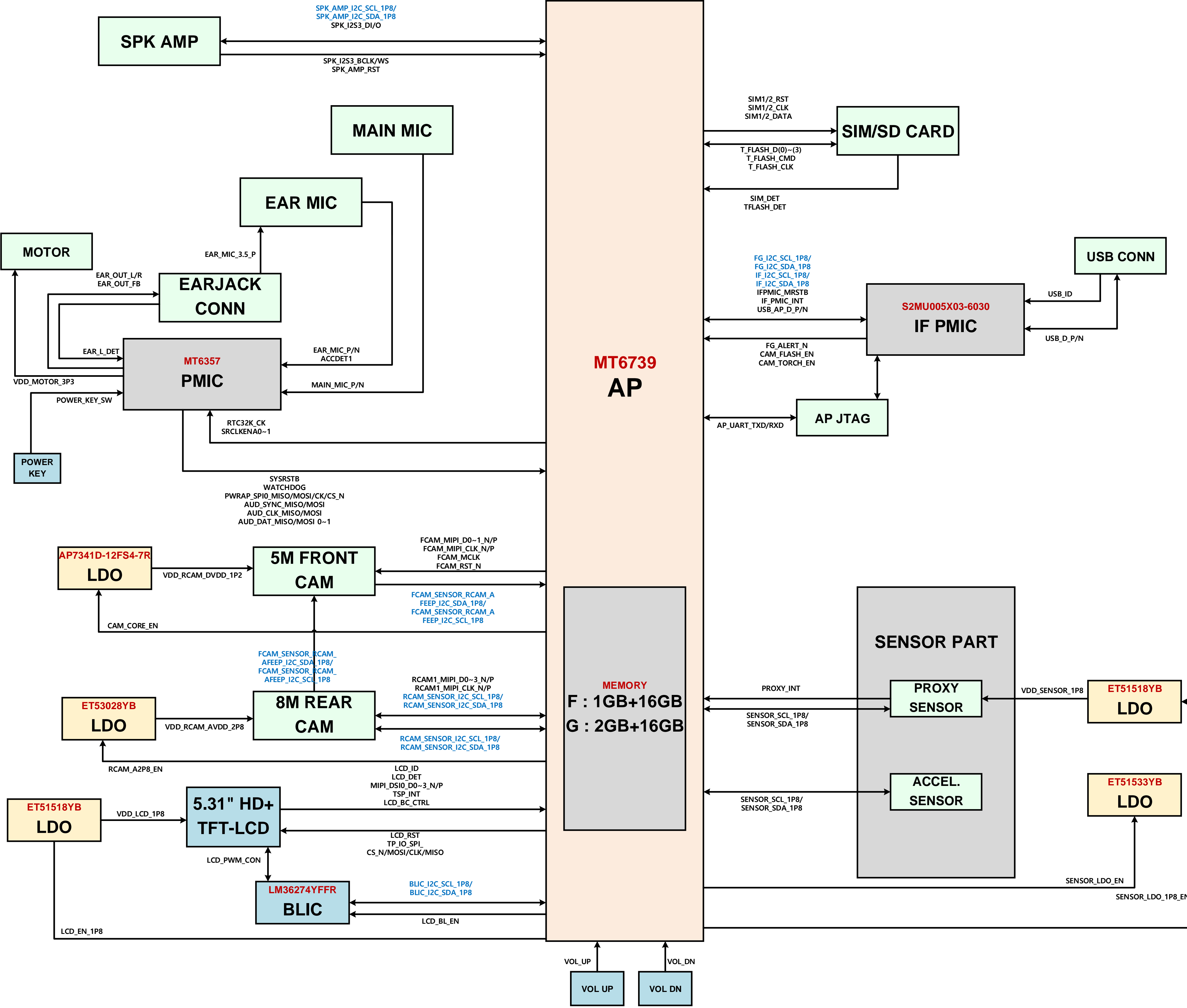
**WIPS33232-01 HB PA**

- RXTD1
- HBD1
- HBD2

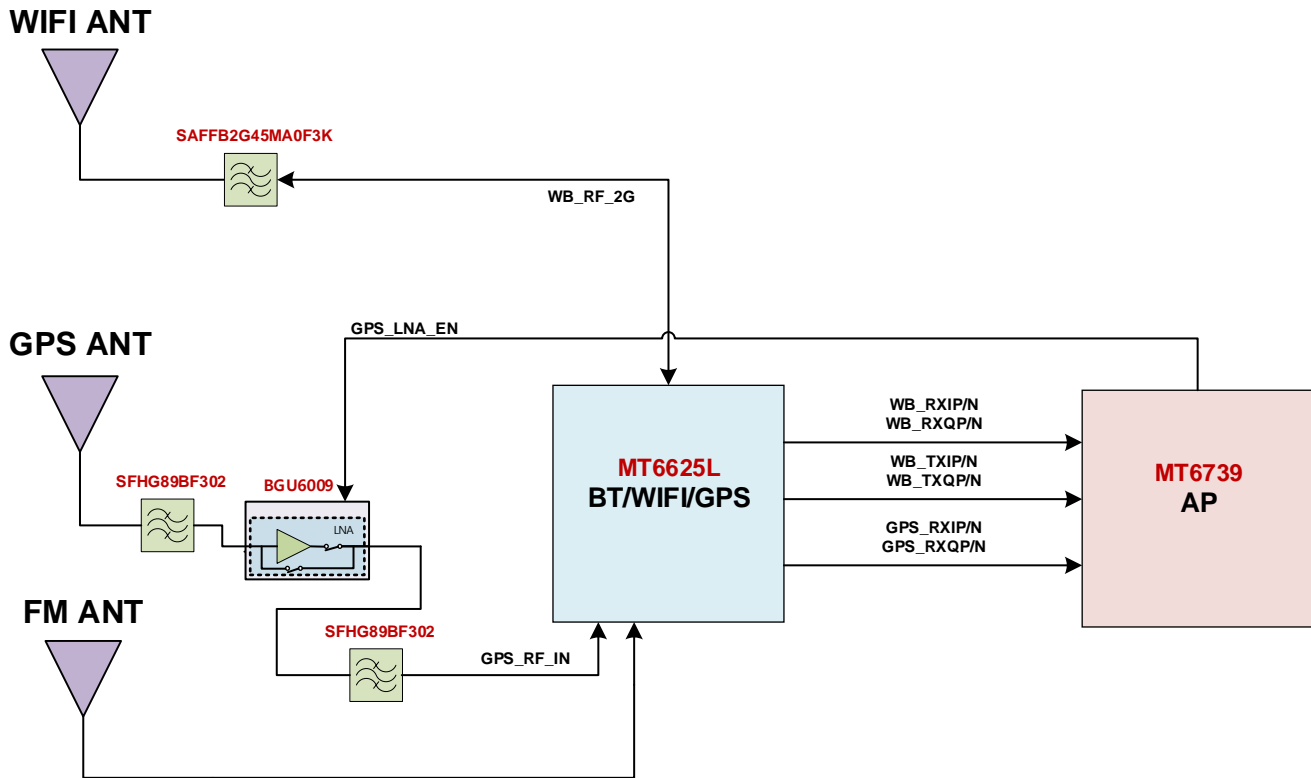
**MT6177M TRANCEIVER**

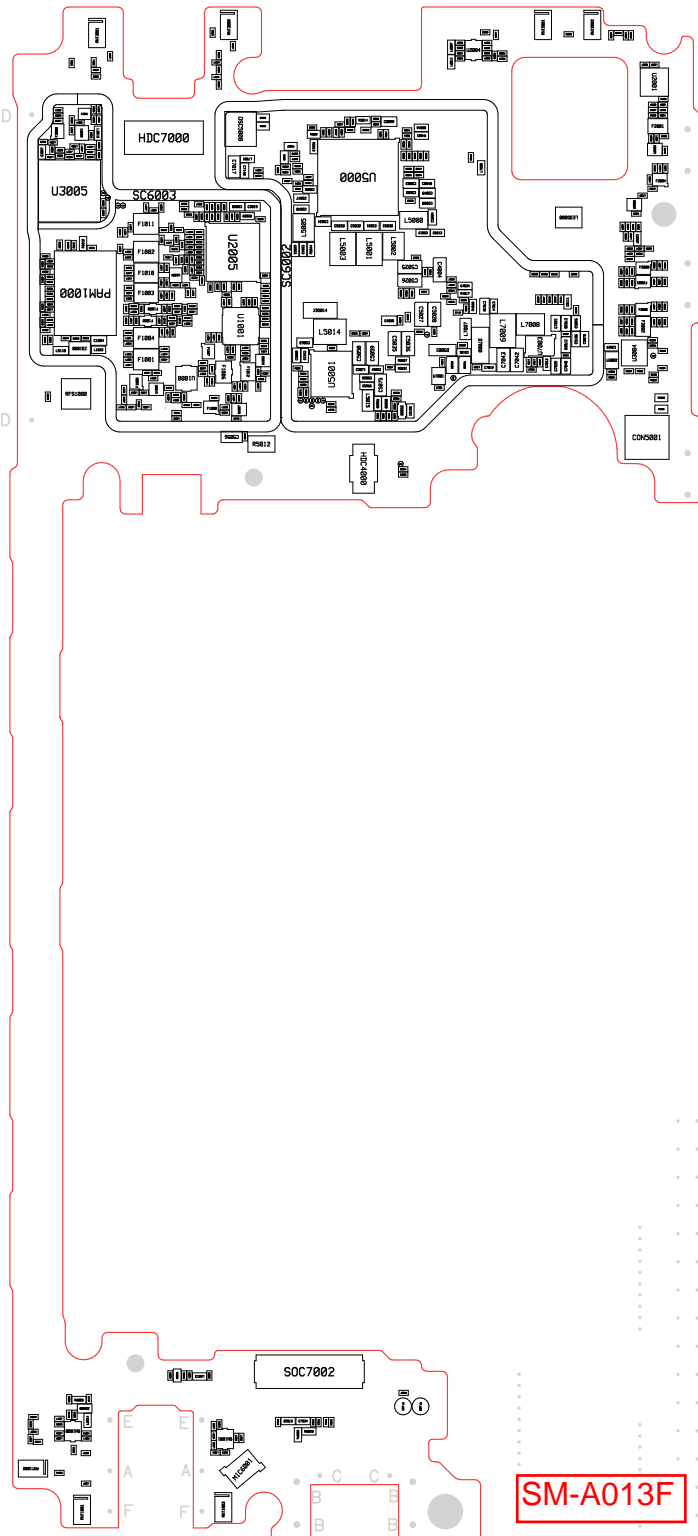
- TX01
- TXDET1

[SM-A013F\_REV0.1 RF BAND]  
(MEA/CIS/AFR/SWA/SEA)  
2G : 850/900/1800  
3G : W1, W5, W8  
LTE FDD : B1,B3,B5,B7,B8,B20,B28  
LTE TDD : B38,B40,B41

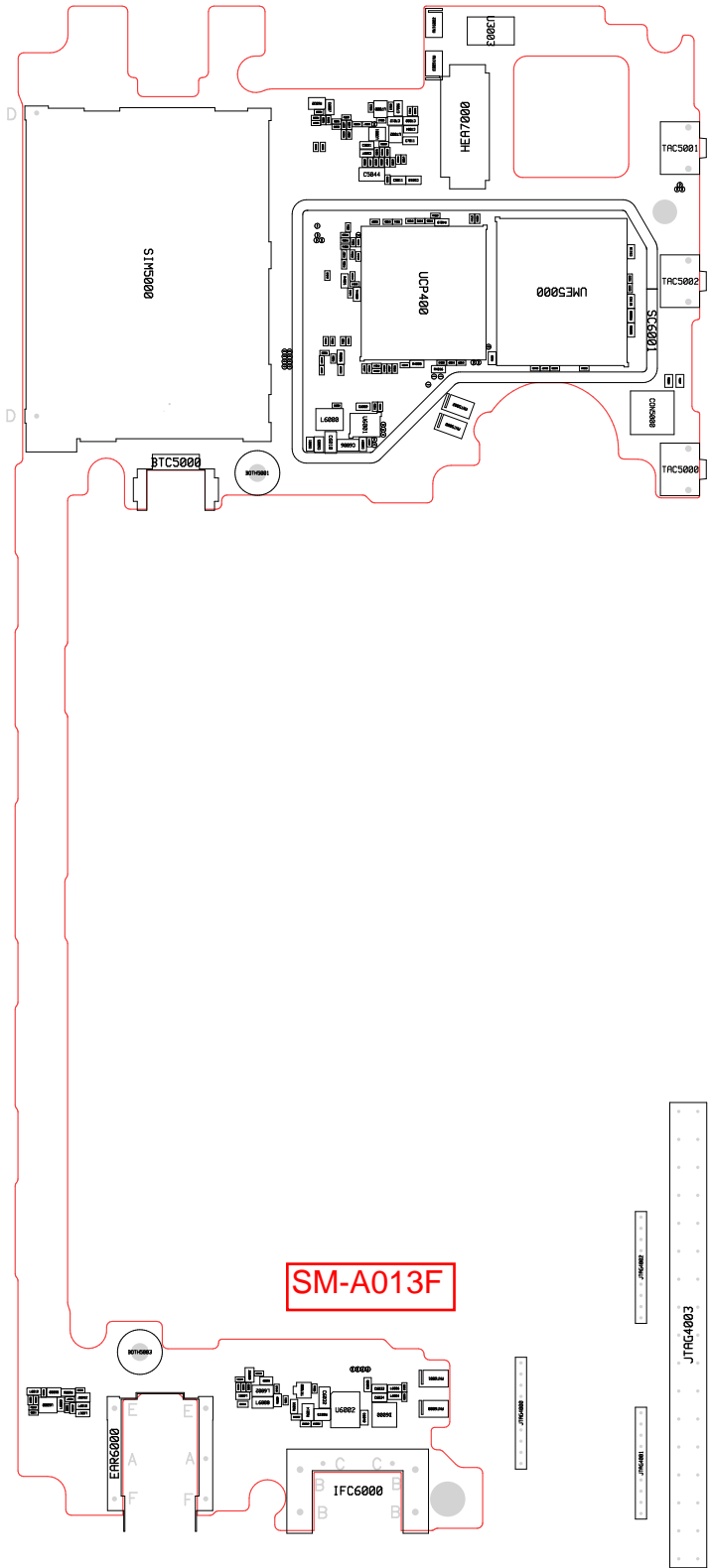


# SM-A013F\_REV0.1 Connectivity Block Diagram





**SM-A013F**



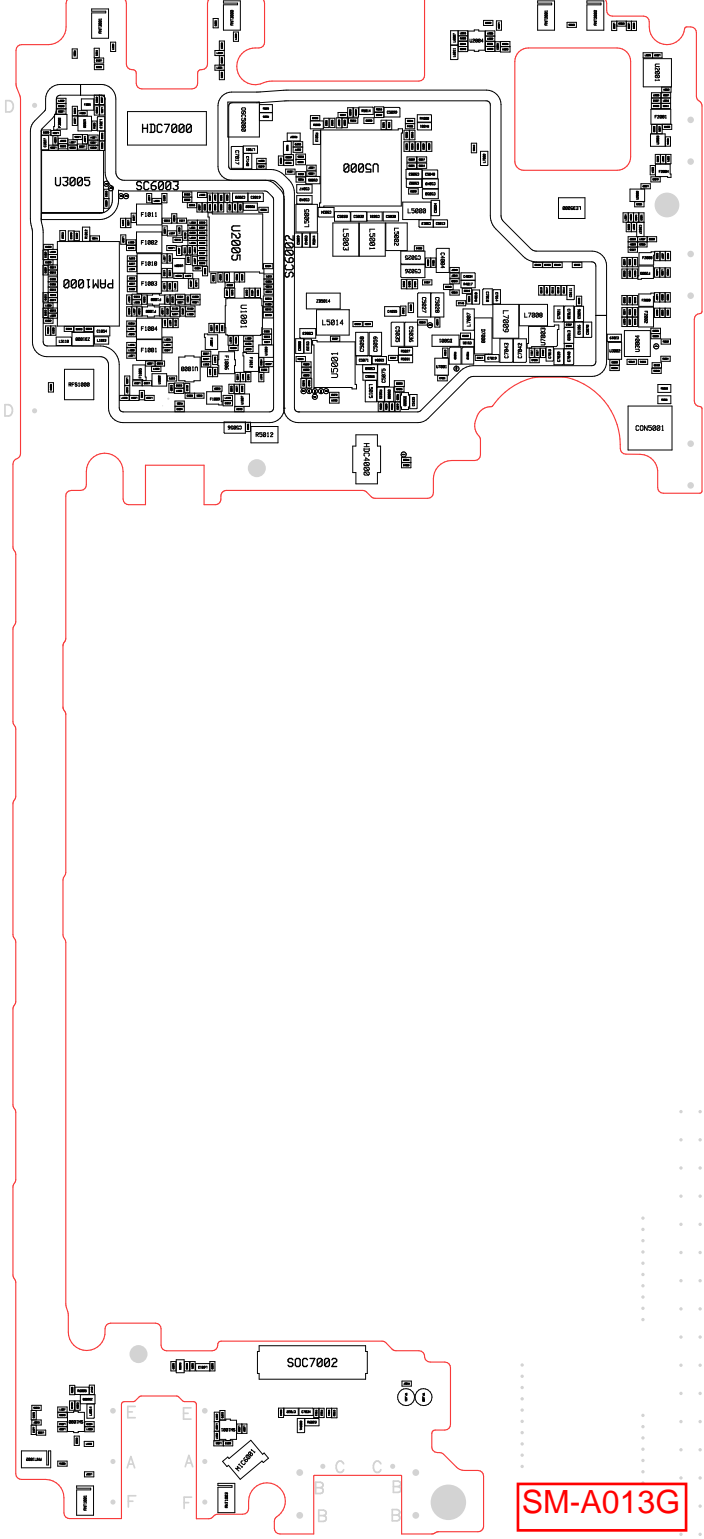
SM-A013F

JTAG4003

JTAG4002

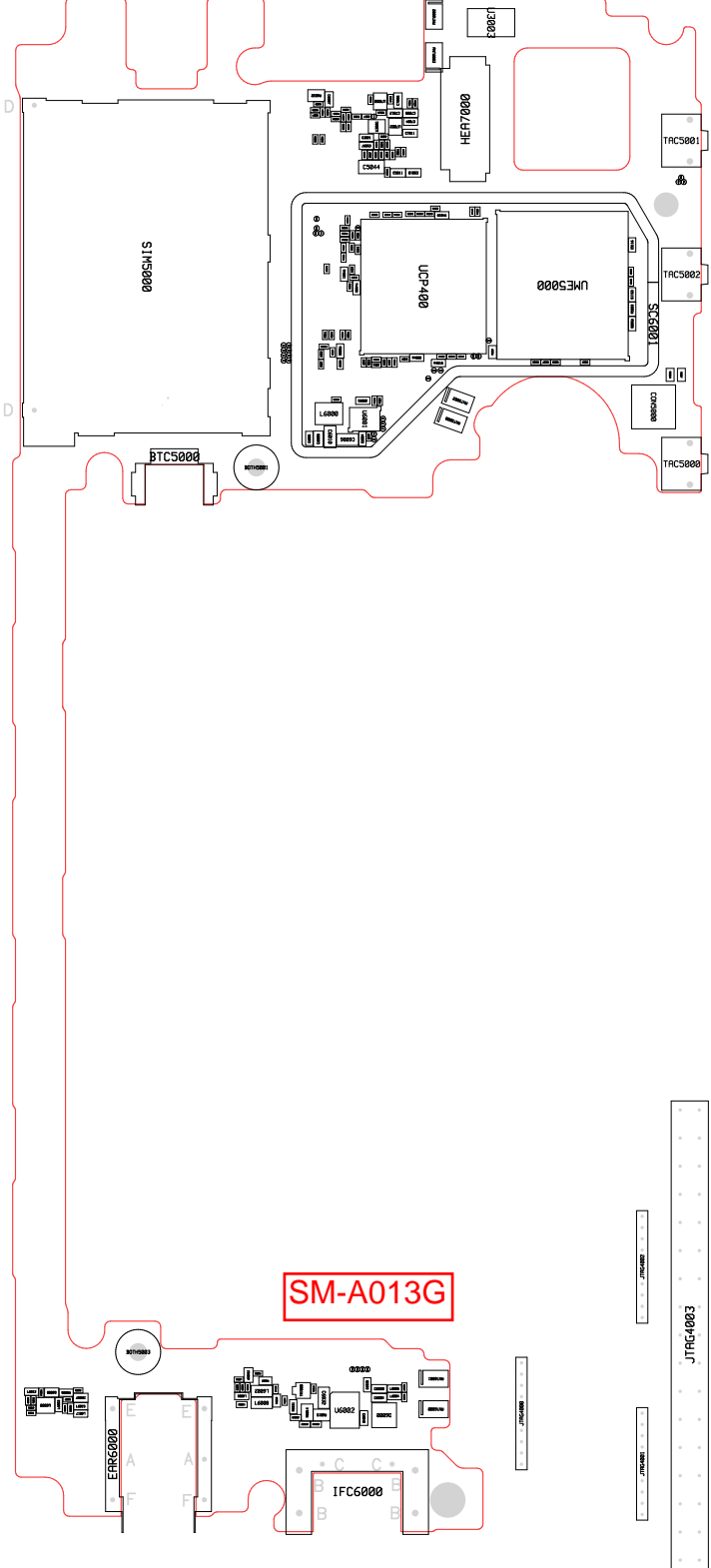
JTAG4001

JTAG4000



SM-A013G





**SM-A013G**

JTRC4003

JTRC4003

JTRC4003

EARG000

IFC6000

HEA7000

0005W1S

UCP400

UMS000

BTC5000

TAC5001

TAC5002

TAC5000

UG002

00000

D

D

000000

JTRC4003

E

E

A

A

F

F

C

C

B

B

B

B

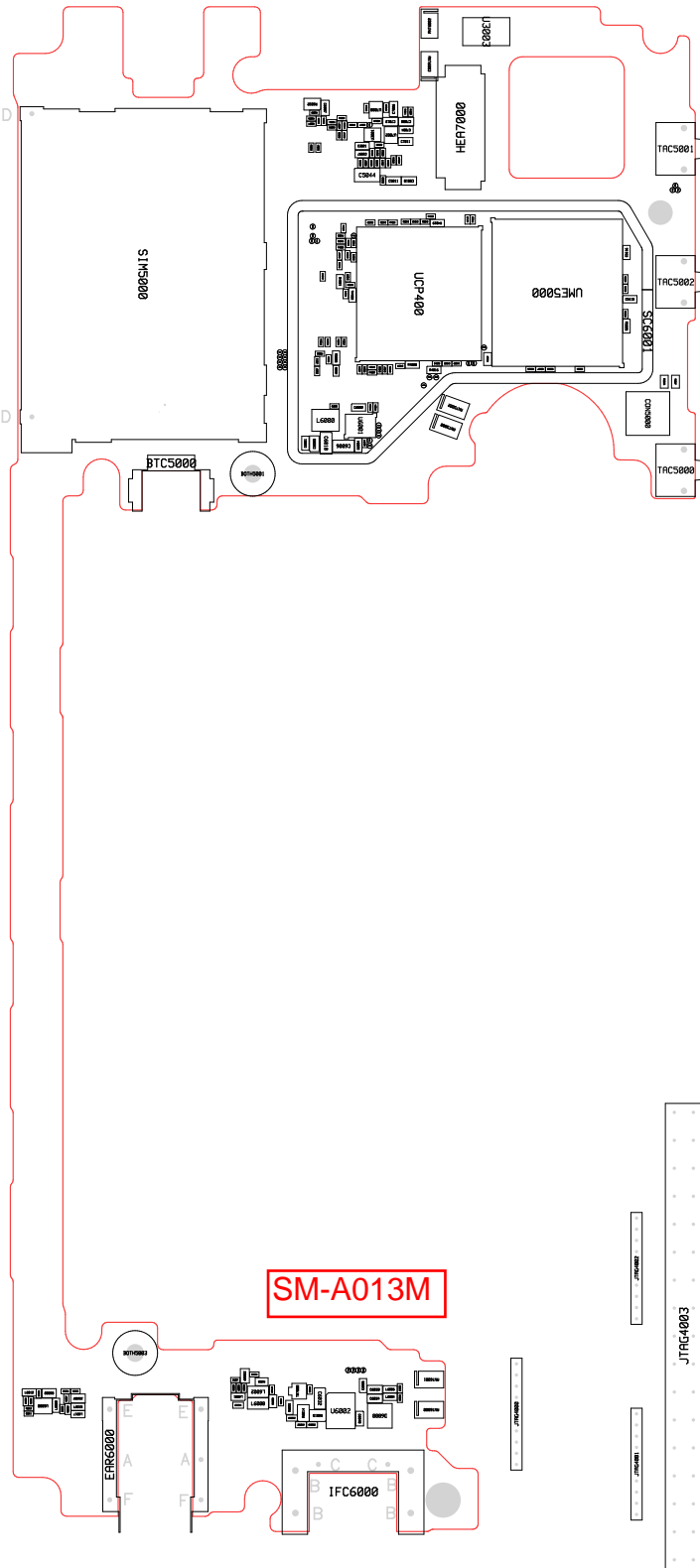
B

B

B

B

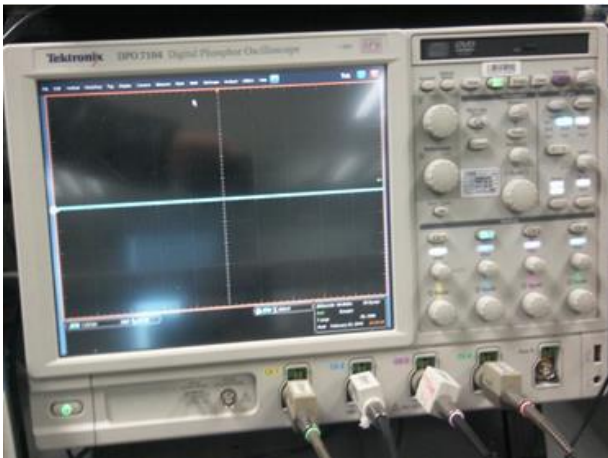




**SM-A013M**

## 8. Level 3 Repair

### 8-3. Flow chart of Troubleshooting.



Oscilloscope



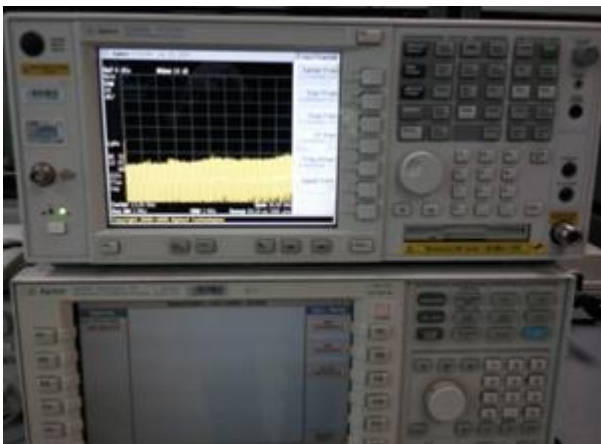
Digital Multimeter



Power Supply



+ driver, ESD Safe Tweezer



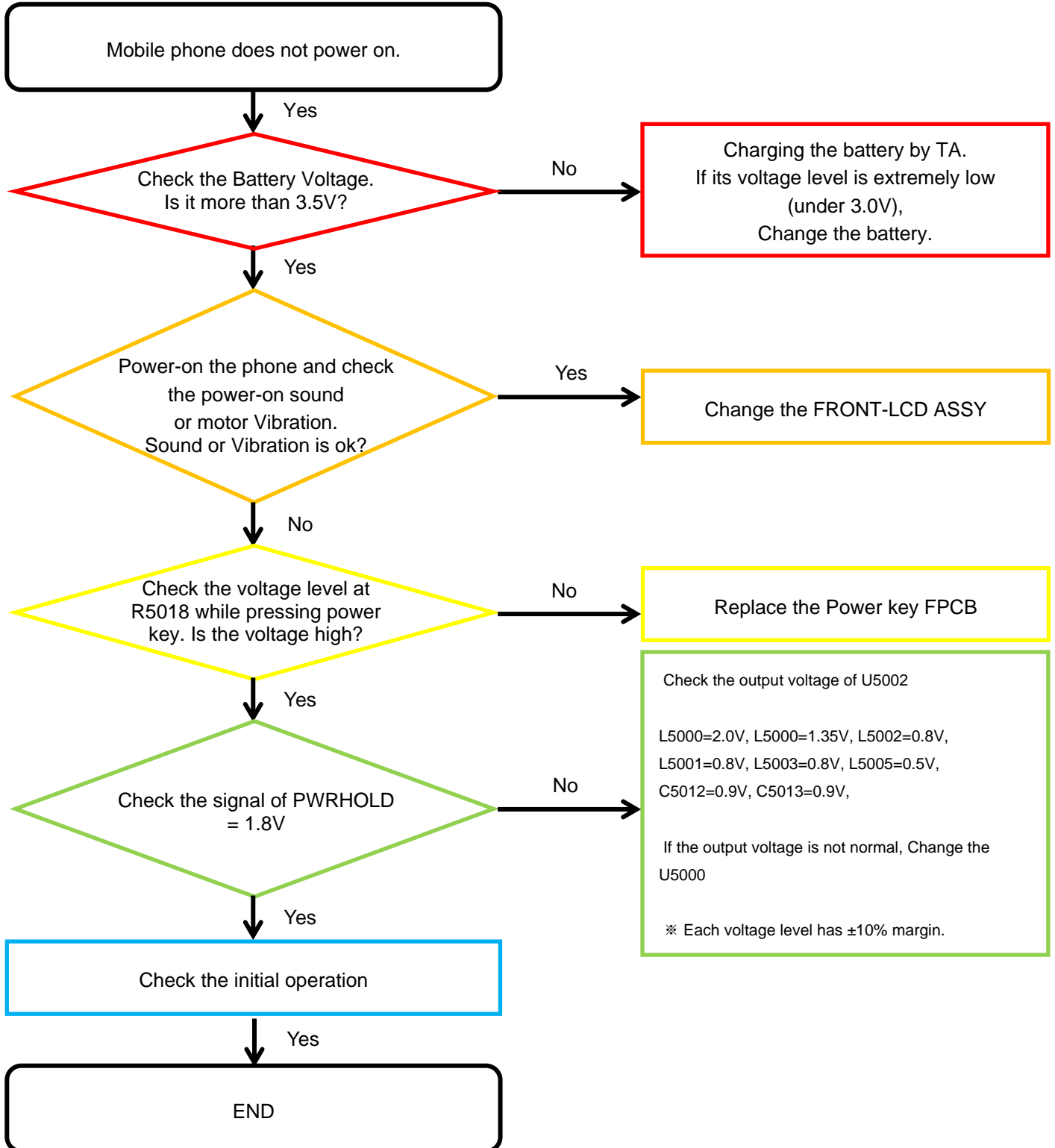
8960 & Spectrum Analyzer



Soldering iron

## 8. Level 3 Repair

### 8-4-1. Power On

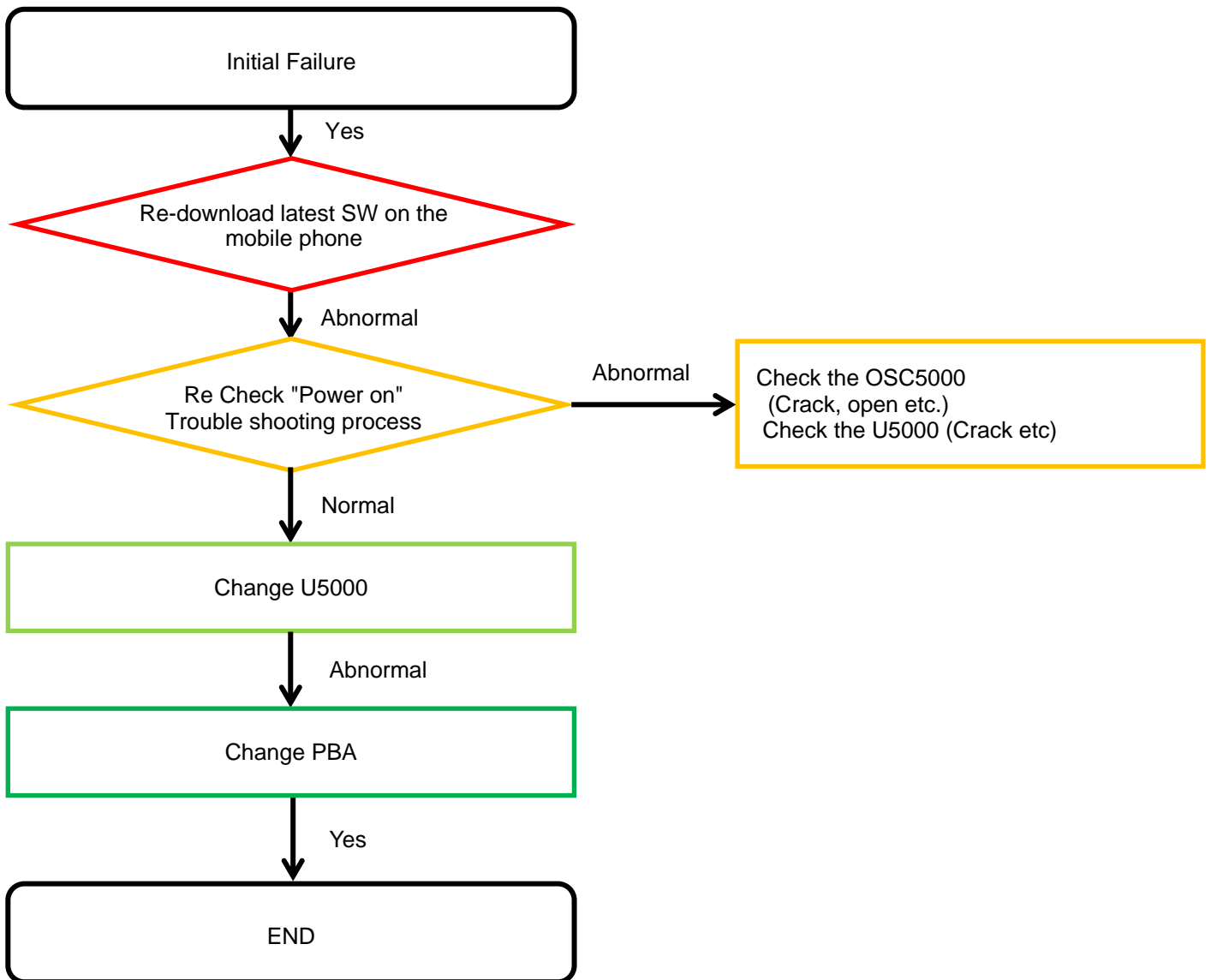


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## 8. Level 3 Repair

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### 8-4-2. Initial

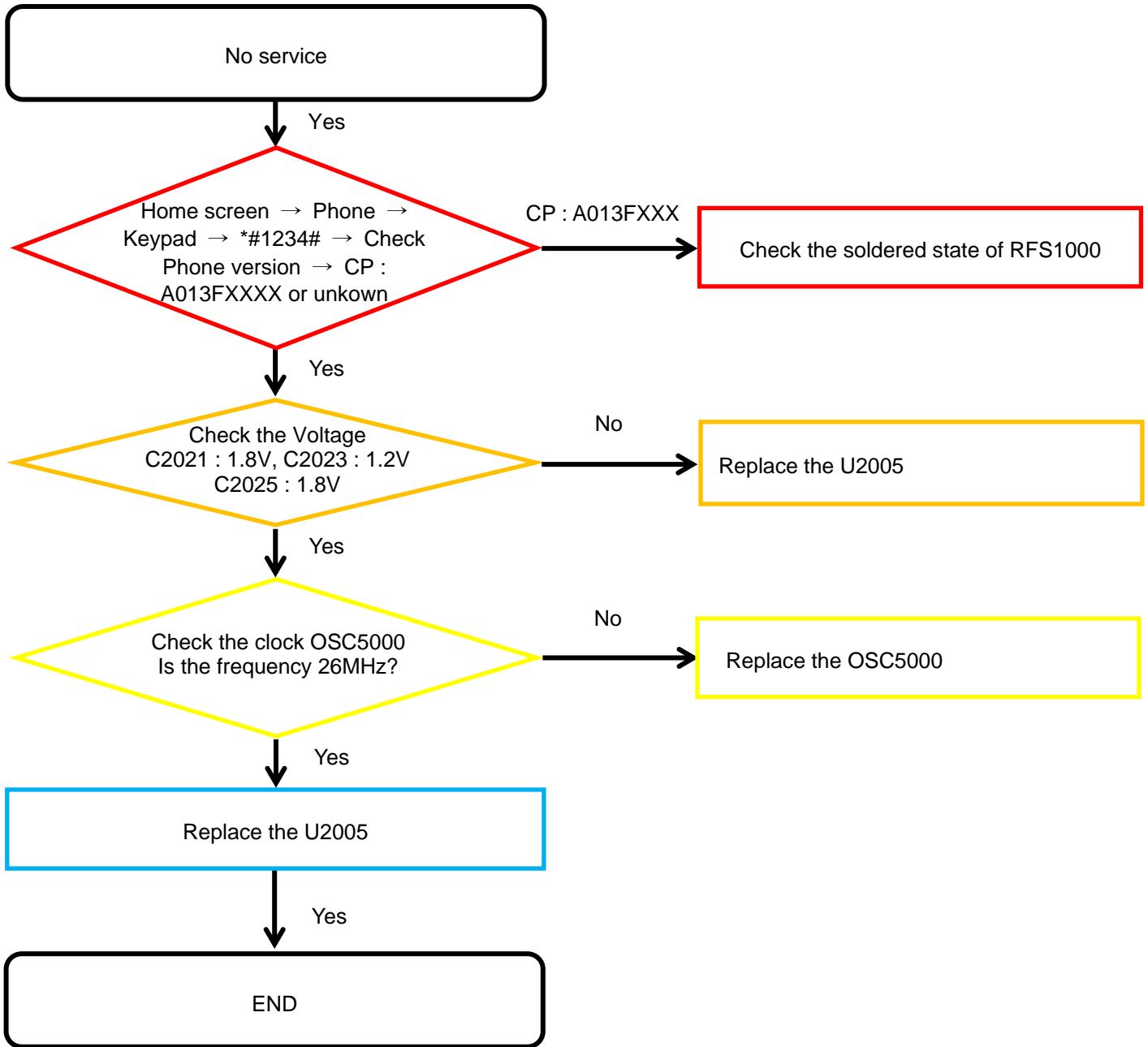


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## 8. Level 3 Repair

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### 8-4-3. No Service

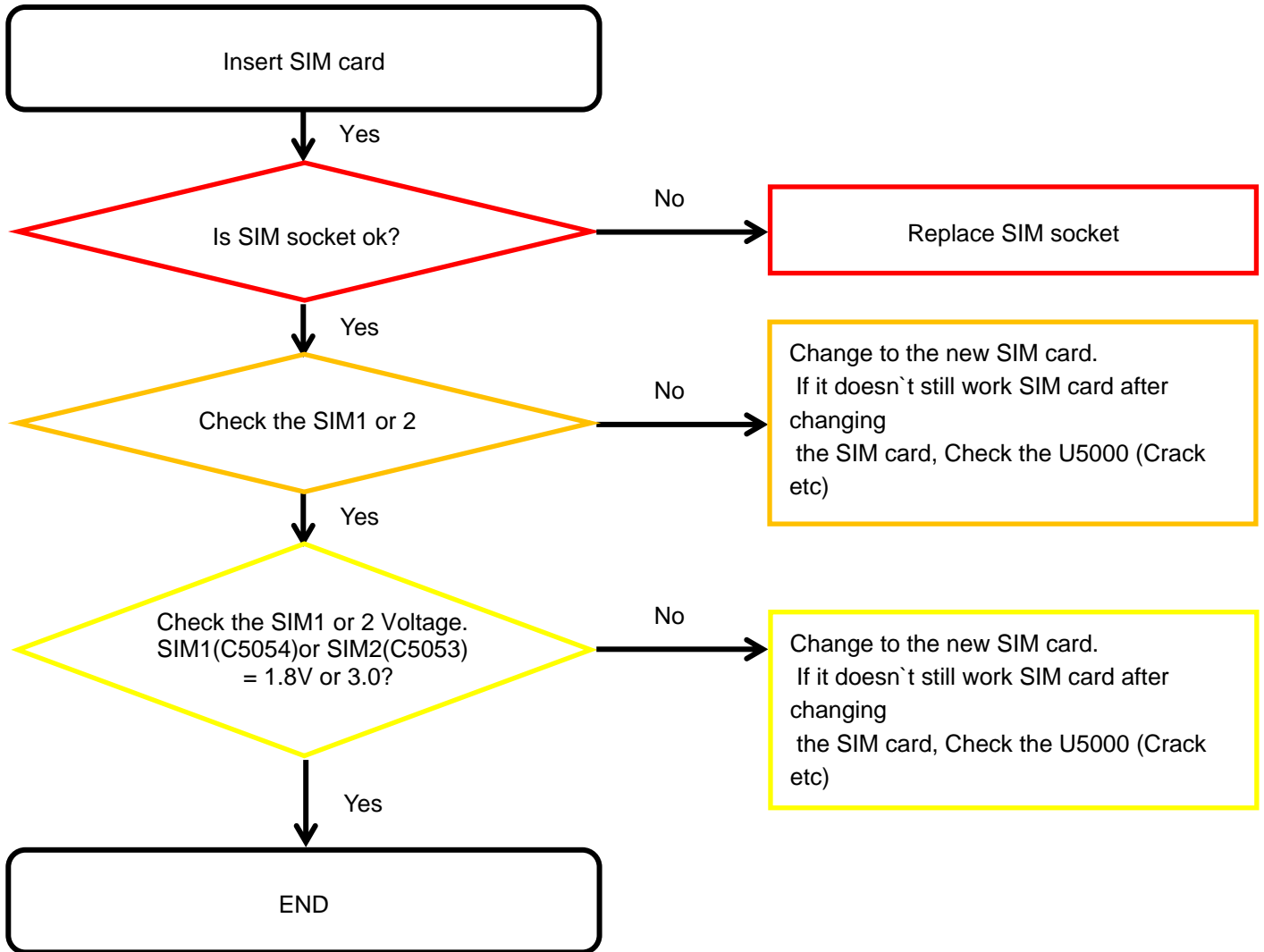


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## 8. Level 3 Repair

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### 8-4-4. SIM Part



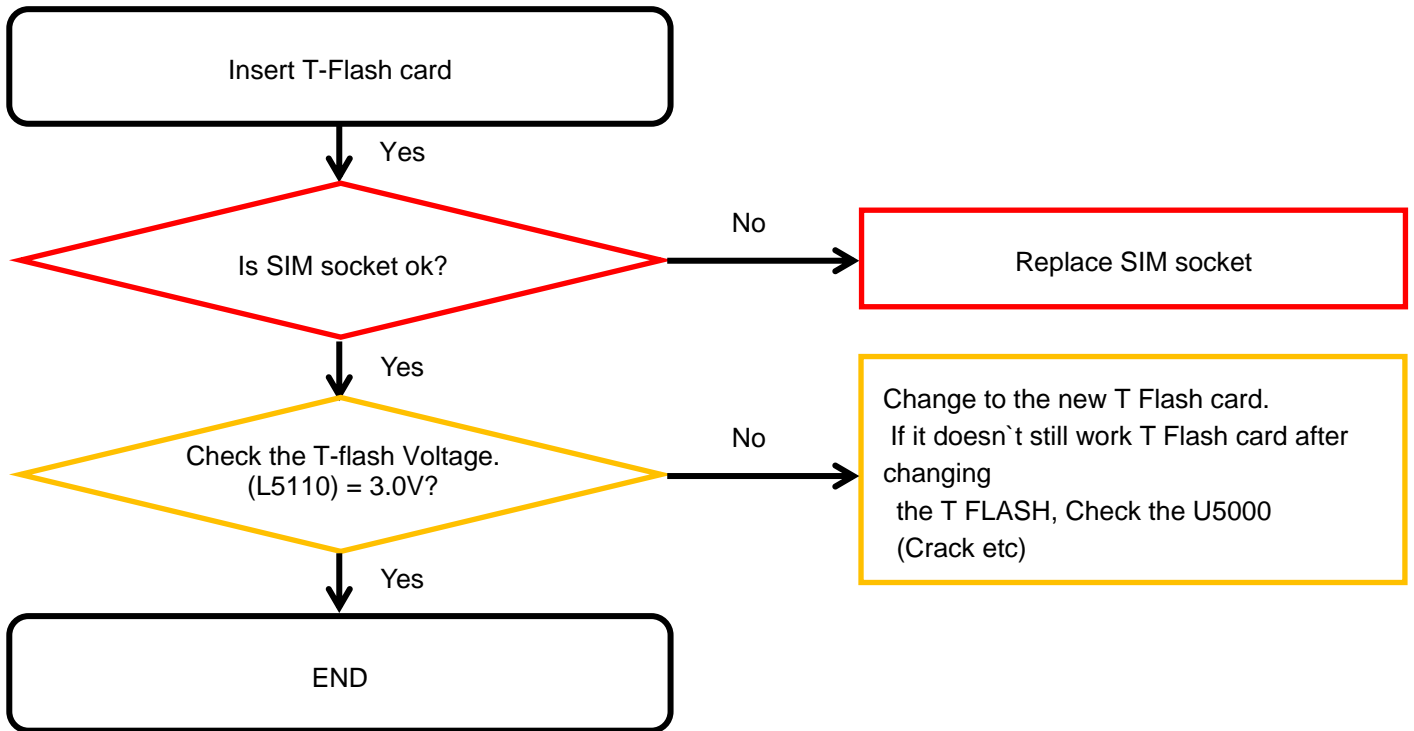


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## 8. Level 3 Repair

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### 8-4-5. T-Flash Part

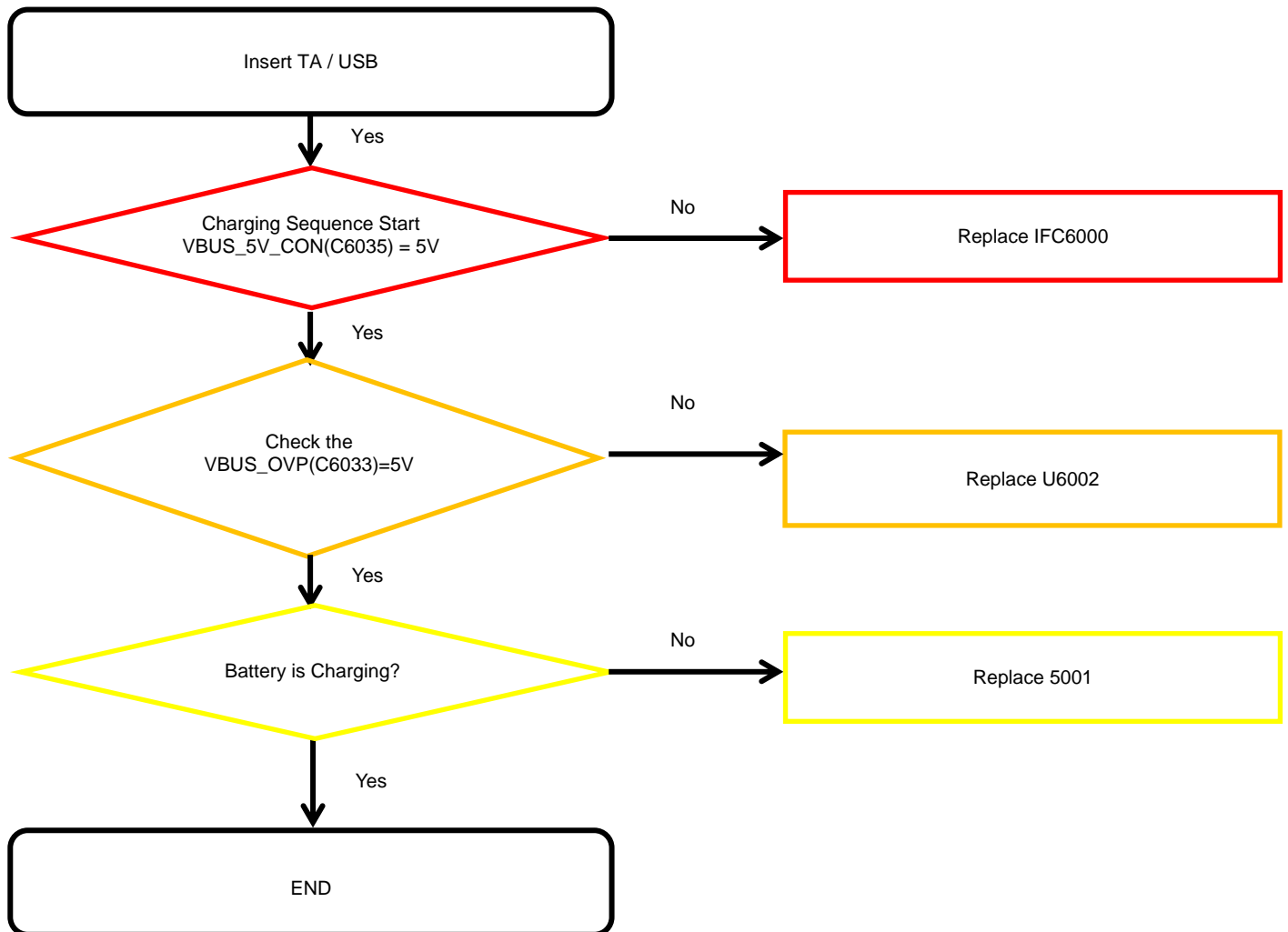


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## 8. Level 3 Repair

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### 8-4-6. Cable Charging Part

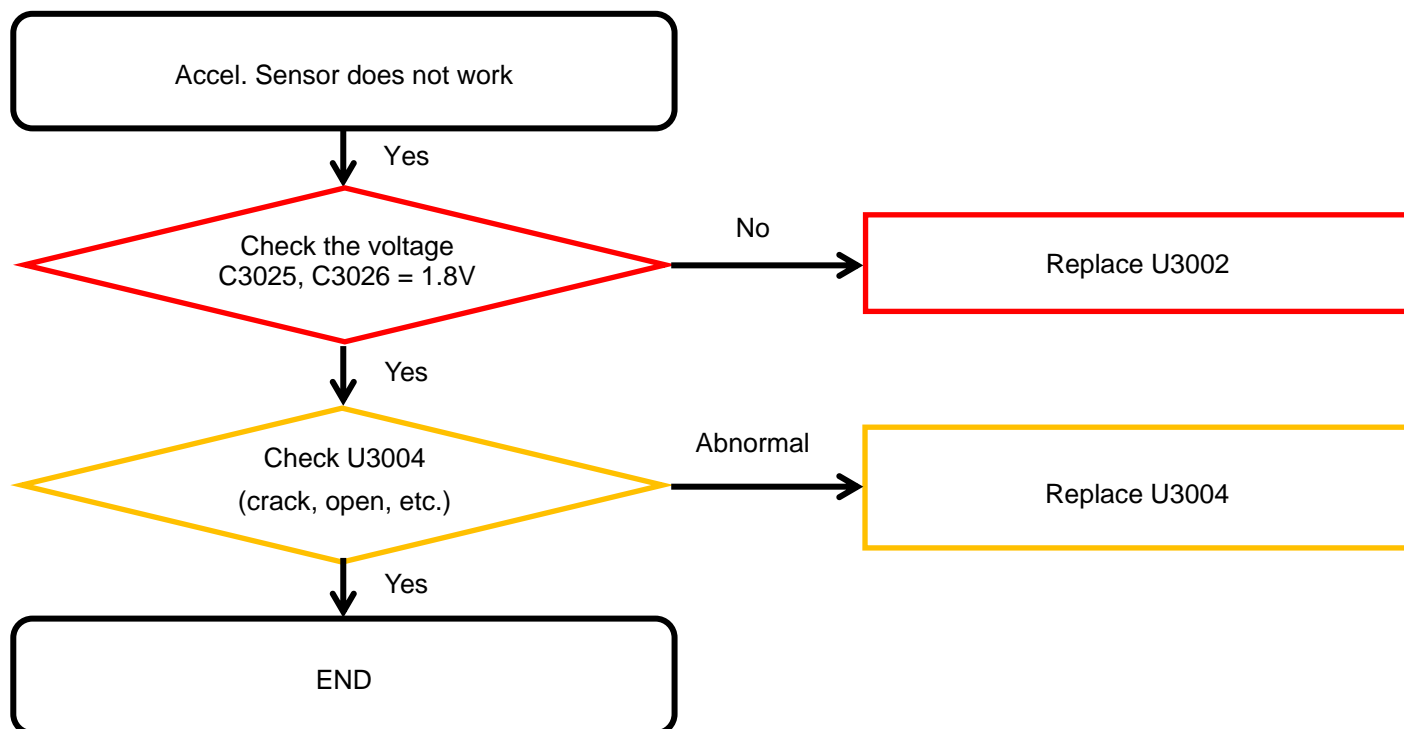


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## 8. Level 3 Repair

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### 8-4-7-1. Accel. Sensor

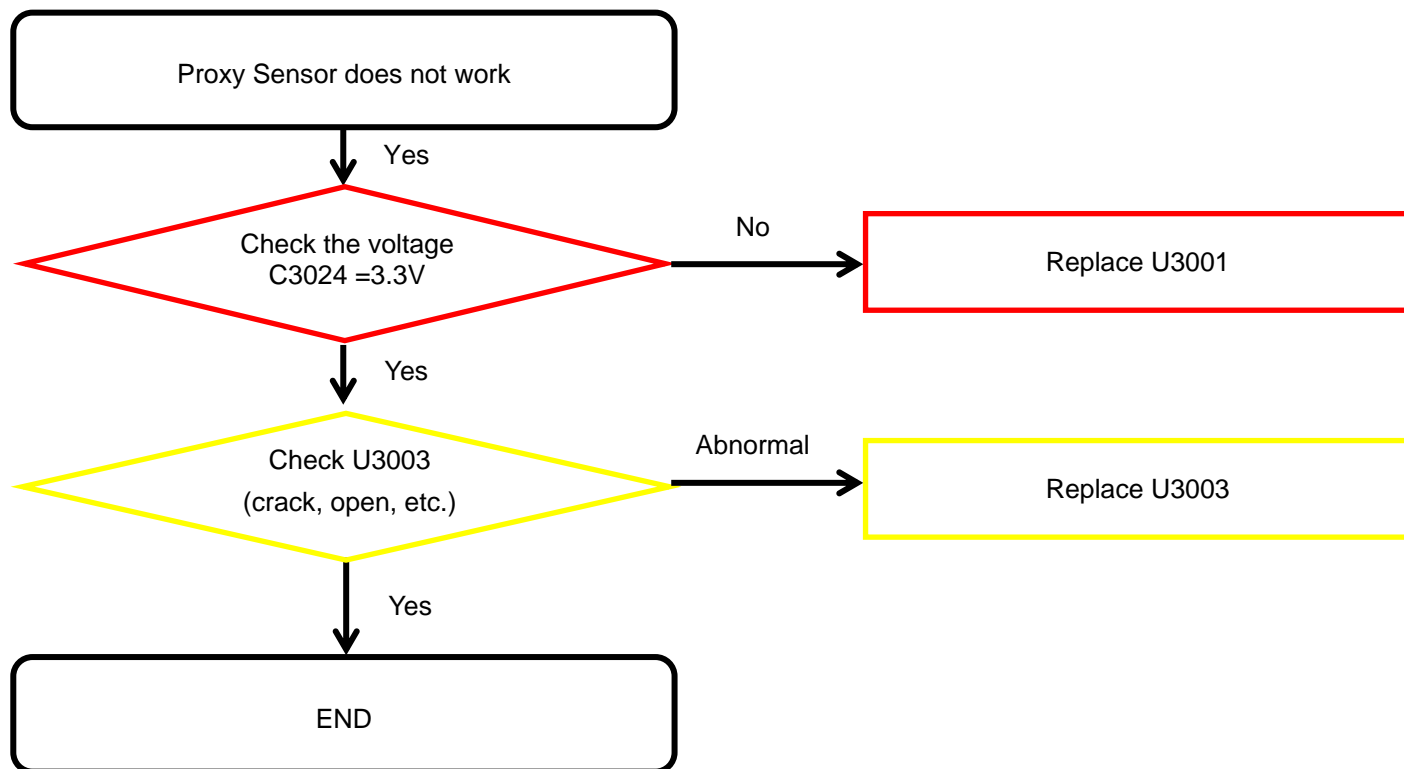


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## 8. Level 3 Repair

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### 8-4-7-2. Proxy Sensor

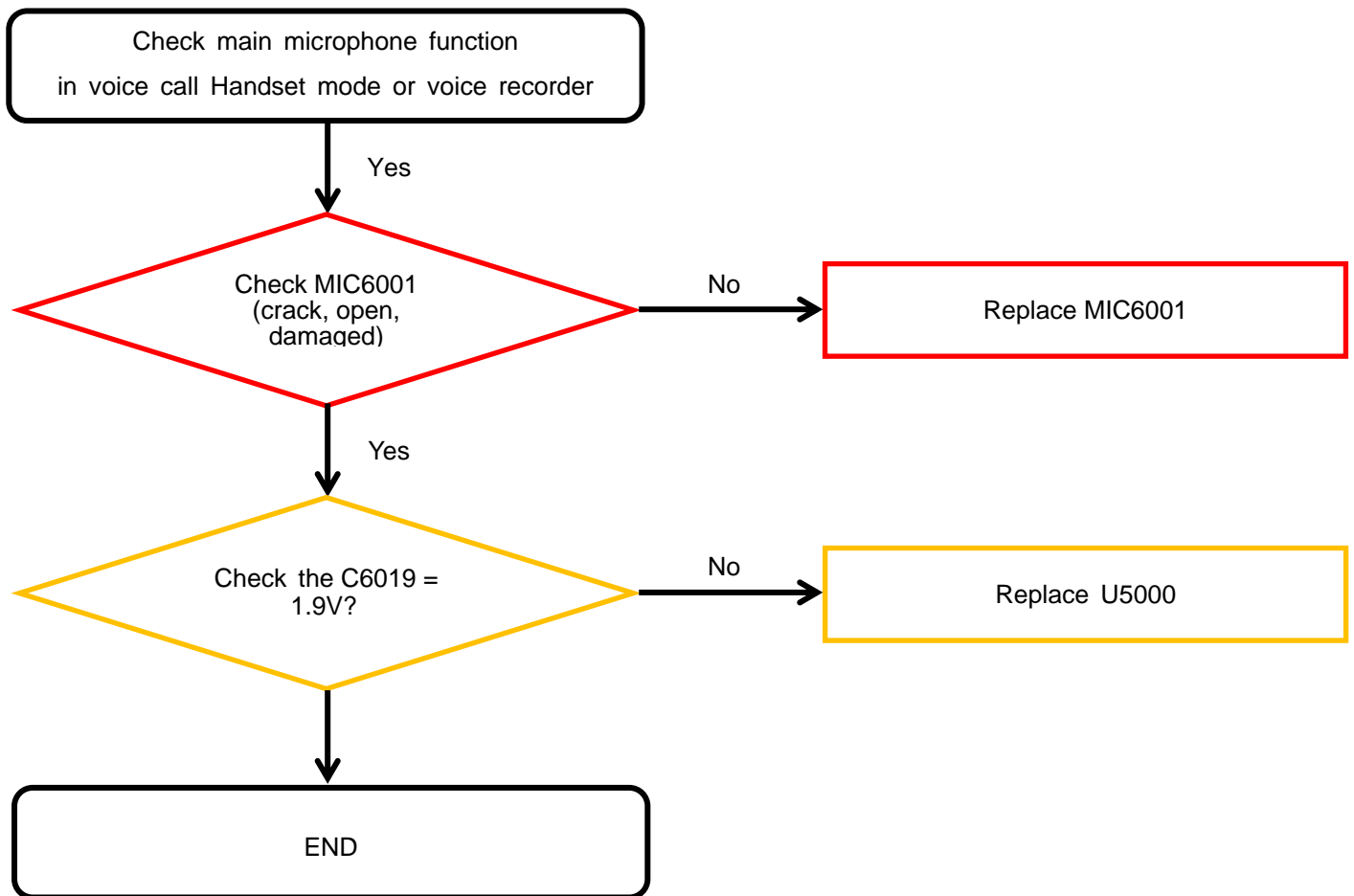


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## 8. Level 3 Repair

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### 8-4-8. Microphone Part - Main MIC

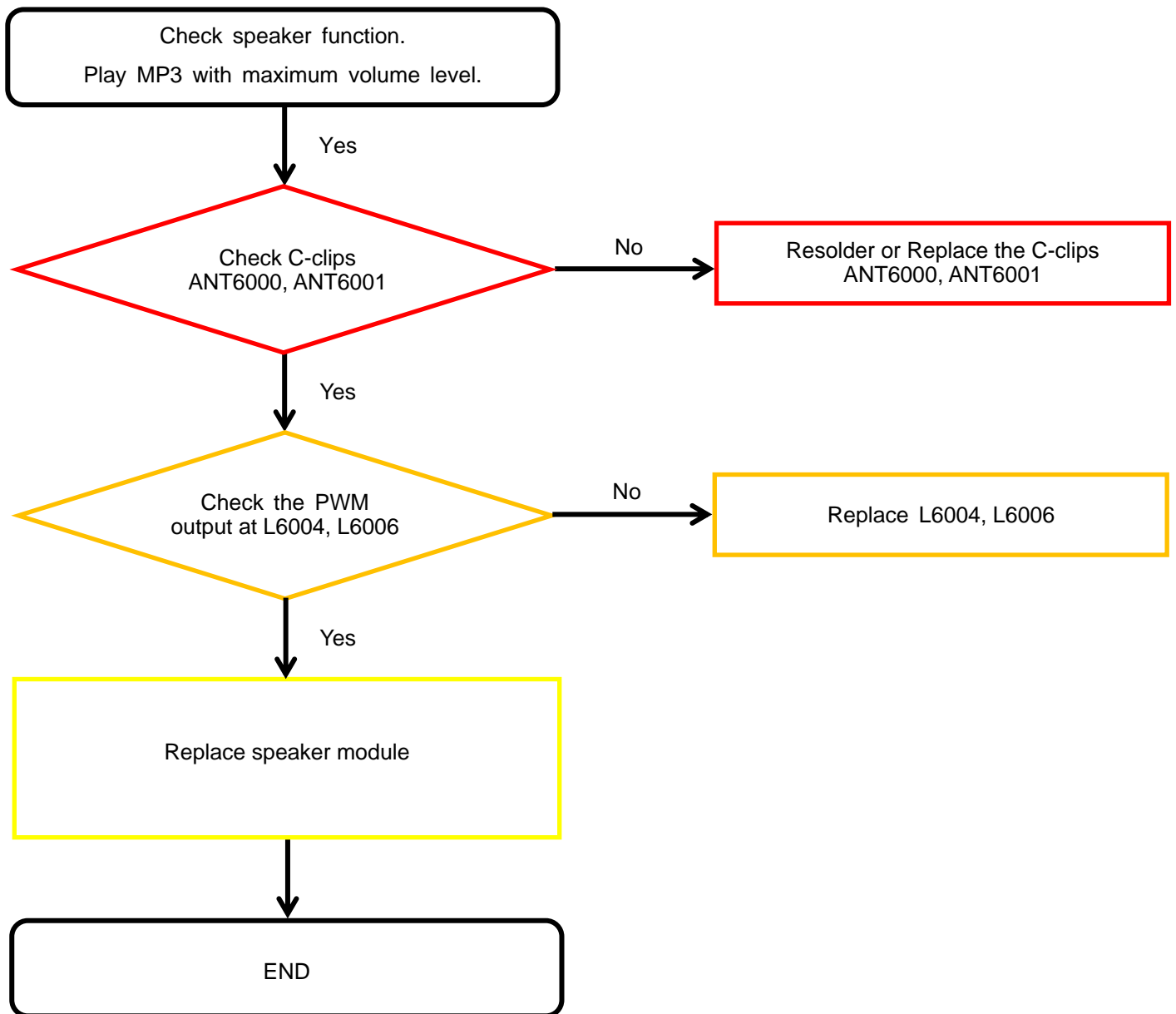


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## 8. Level 3 Repair

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### 8-4-9. Speaker Part

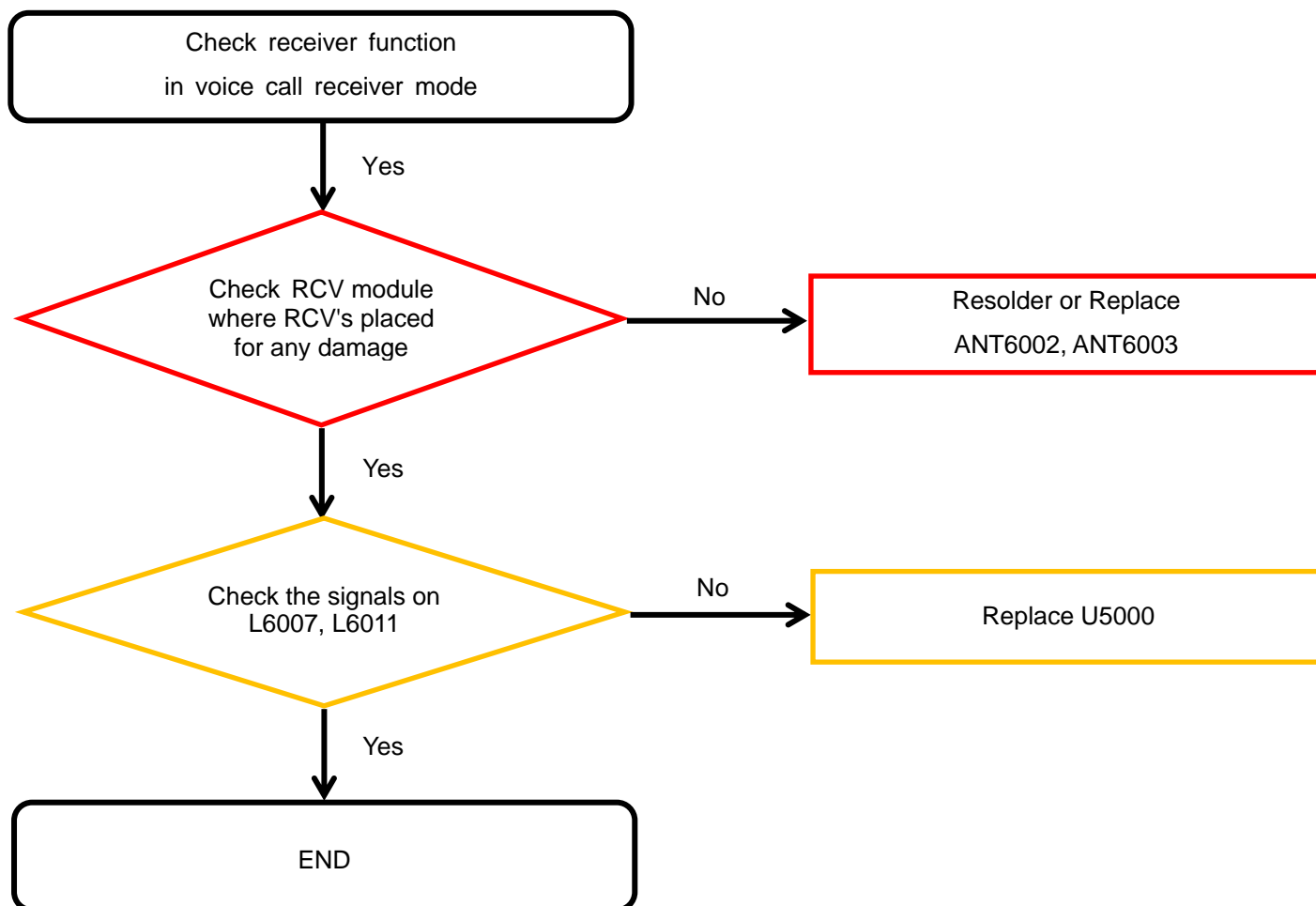


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## 8. Level 3 Repair

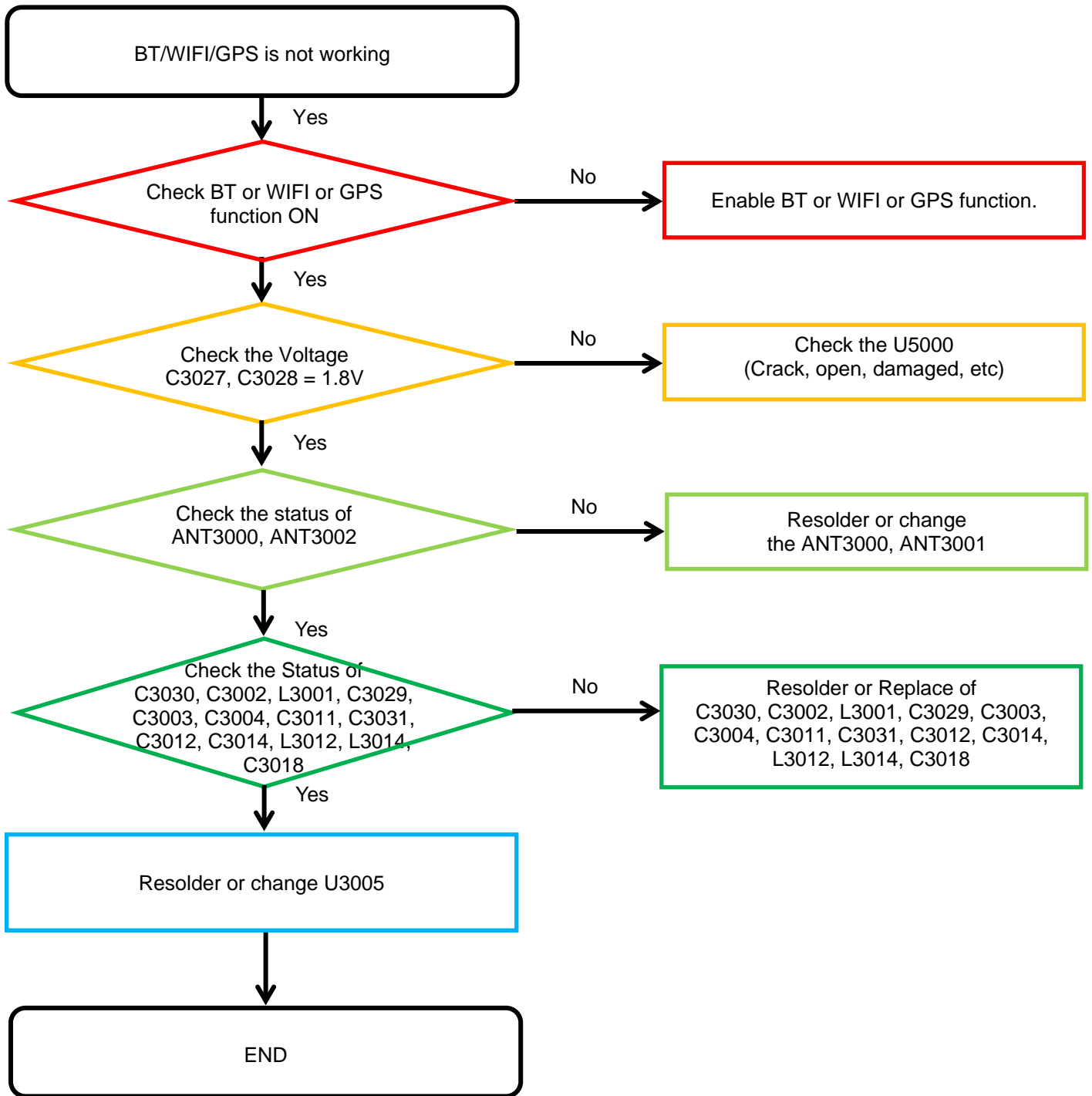
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### 8-4-10. Receiver Part



## 8. Level 3 Repair

### 8-4-11. BT/WIFI/GPS



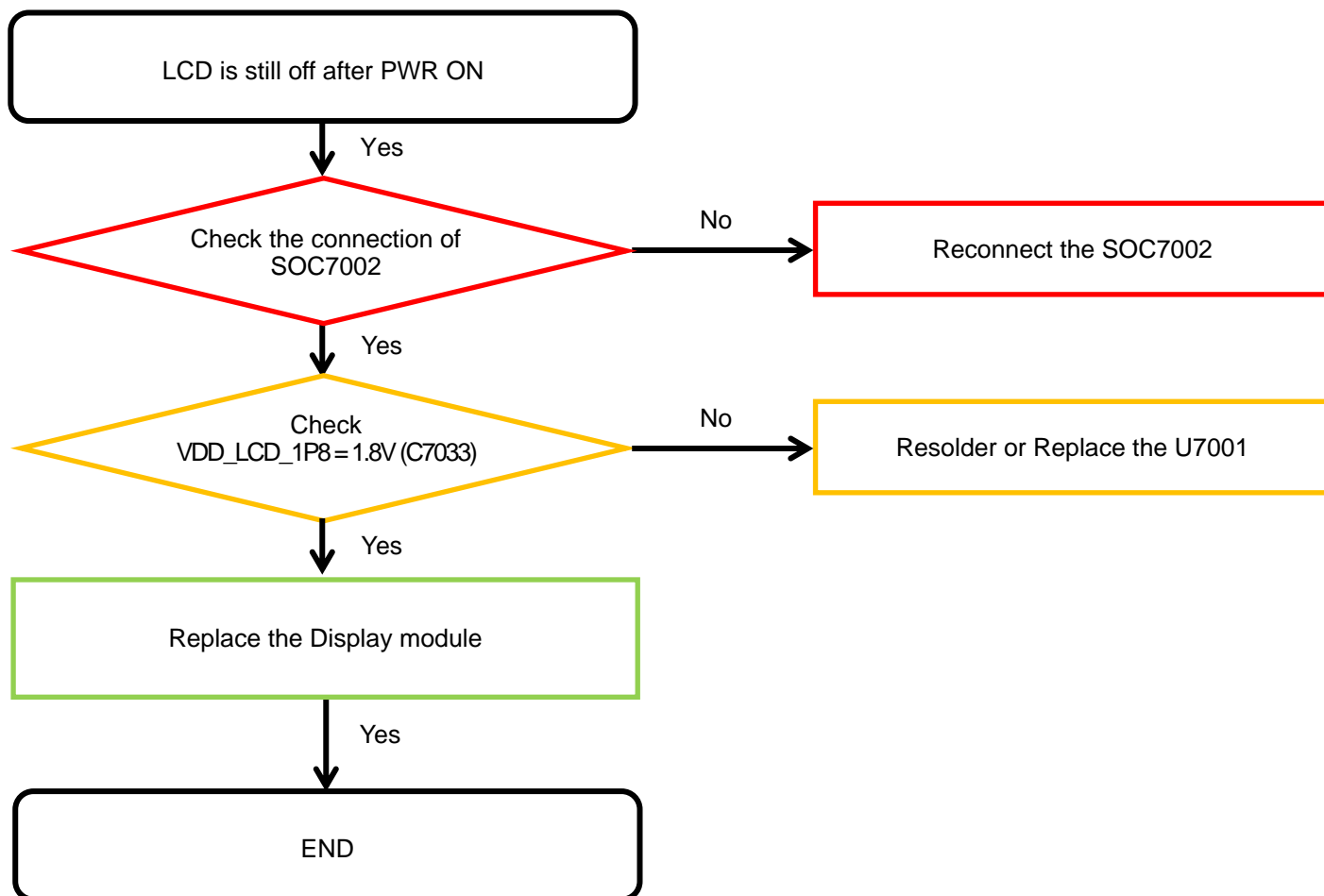


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## 8. Level 3 Repair

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### 8-4-12. Display

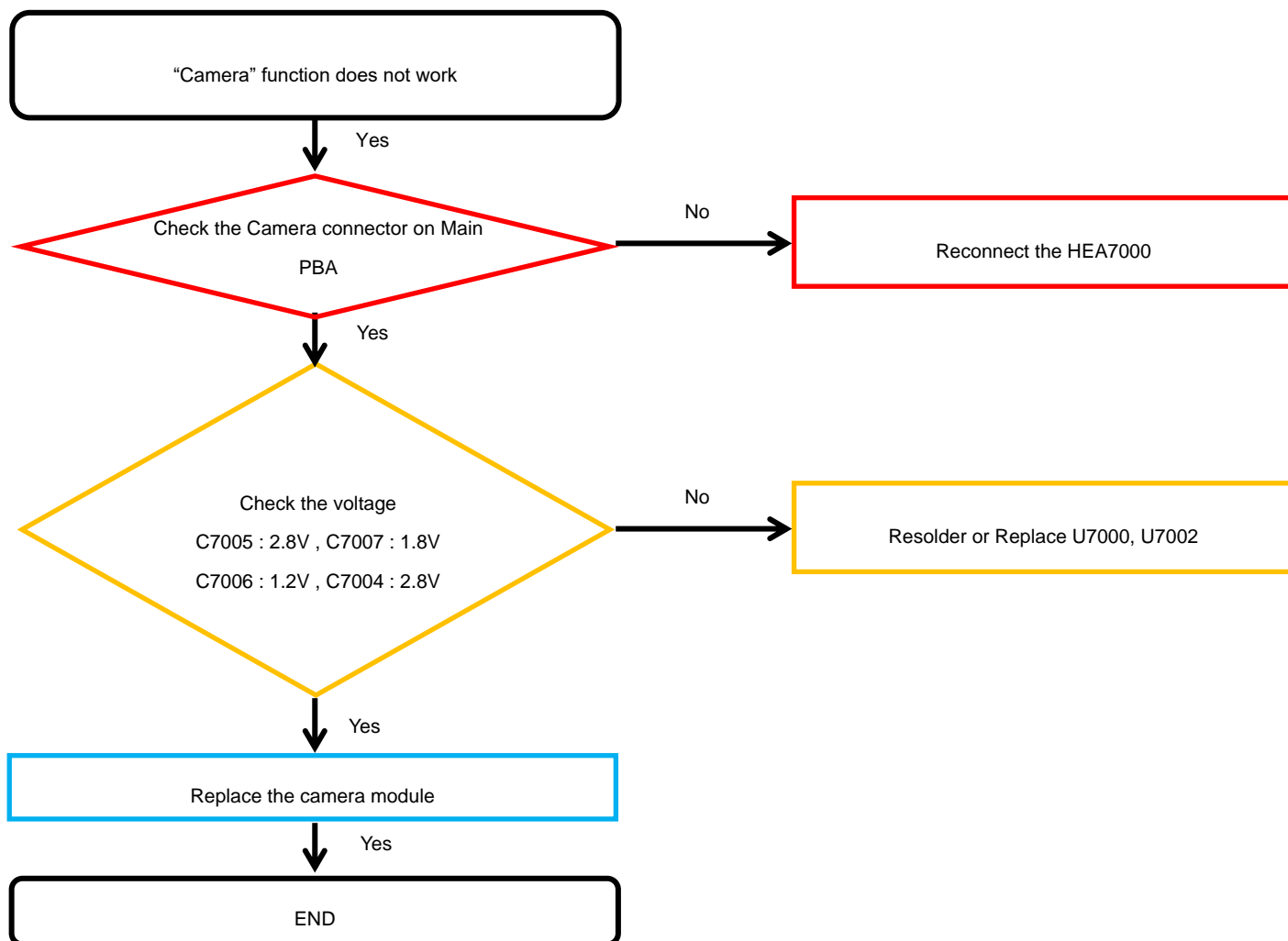


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## 8. Level 3 Repair

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### 8-4-13. 8M CAMERA

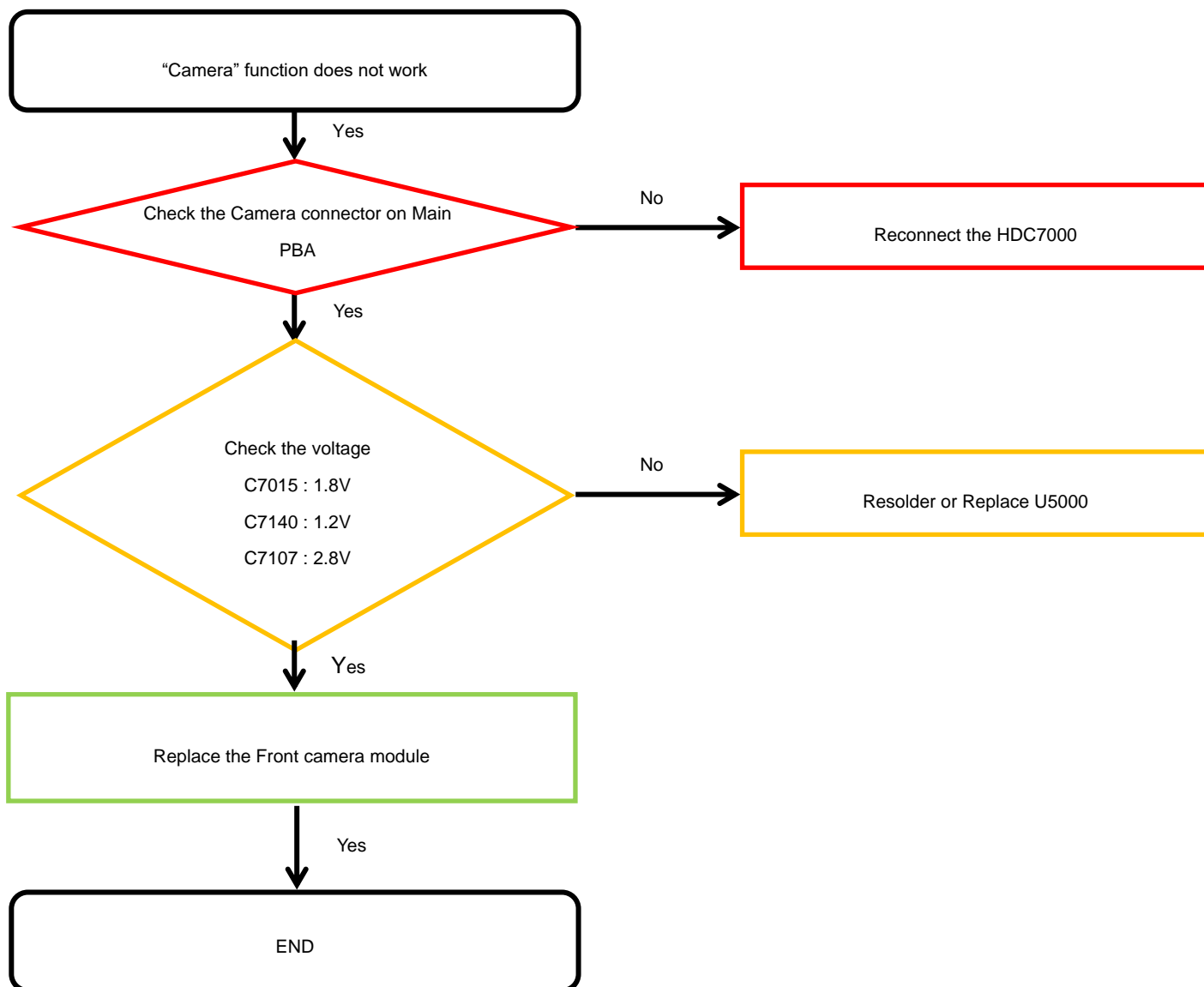


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## 8. Level 3 Repair

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### 8-4-14. 5M CAMERA

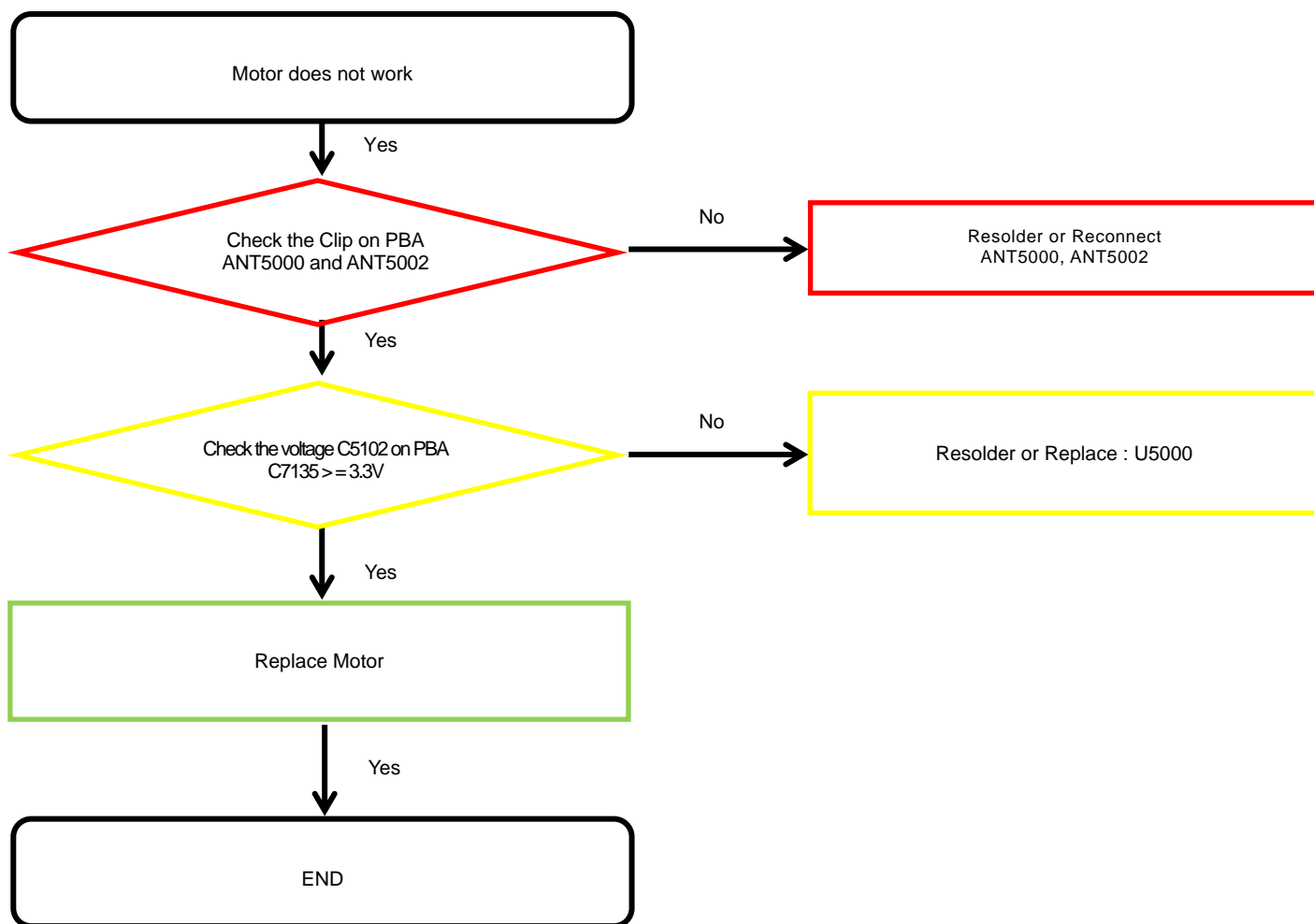


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## 8. Level 3 Repair

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### 8-4-15. Motor

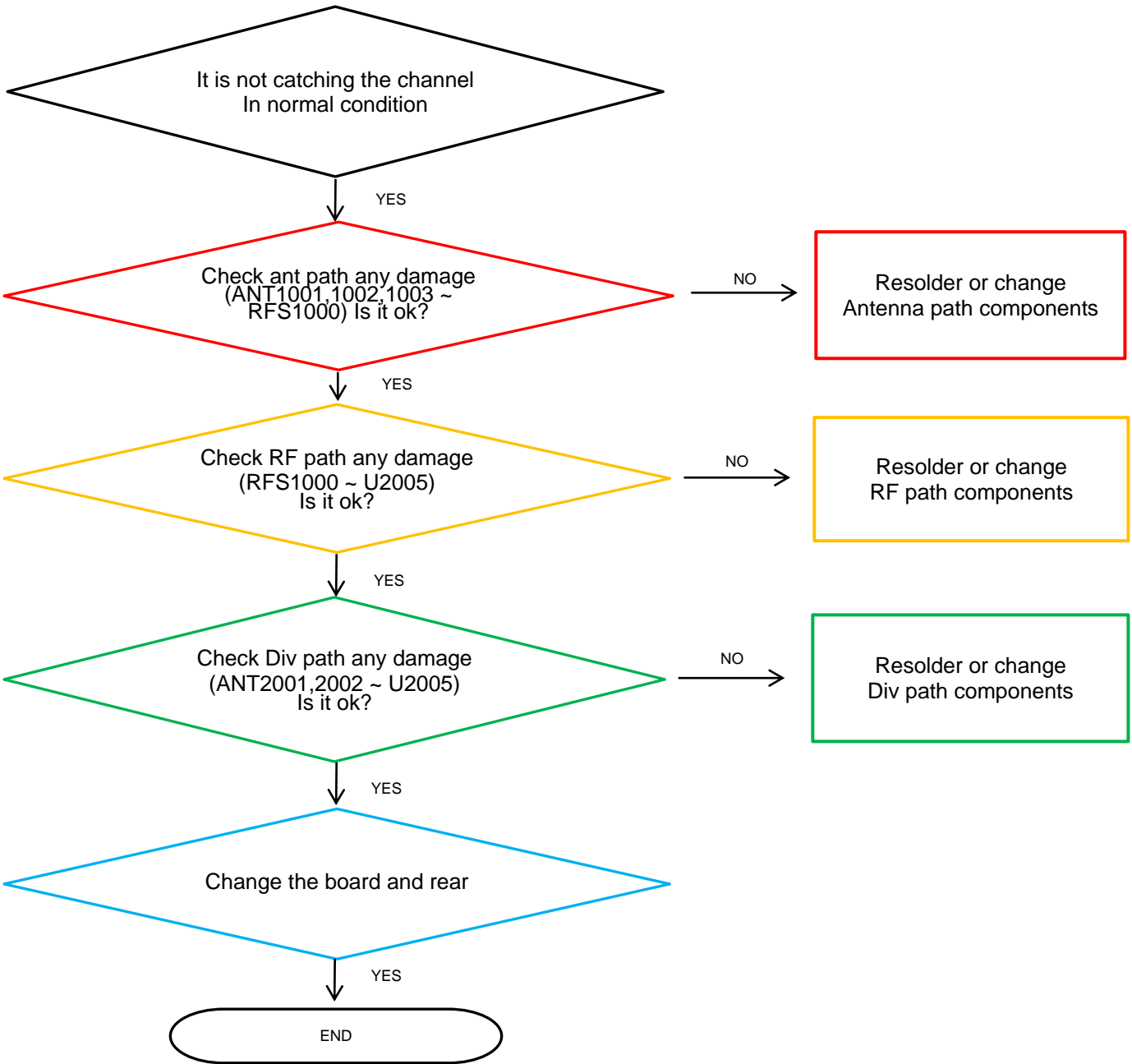


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## 8. Level 3 Repair

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### 8-4-16. GSM/WCDMA/LTE1,2,3,4,5,8,12,13,17,20,28,66



## 8. Level 3 Repair

### 8-4-17. LTE7,38,40,41

