

## Troubleshooting Guide

- mechanical -



*Xperia™ C3 Dual*  
*S55t, S55u, D2502*

*Xperia™ C3*  
*D2533*

## CONTENTS

<b>1</b>	<b>Problem Areas .....</b>	<b>5</b>
1.1	Power .....	5
1.1.1	Will not power on or will switch off randomly.....	5
1.2	Keys .....	7
1.2.1	Back, Menu, Home and Multitask Keys .....	7
1.2.2	Volume Key .....	7
1.2.3	On/Off Key.....	8
1.2.4	Camera Key.....	10
1.3	Touch Screen .....	12
1.3.1	Touch Screen malfunction.....	12
1.4	Display .....	15
1.4.1	Graphics & Illumination .....	15
1.5	LED/Illumination.....	17
1.5.1	LED/Illumination .....	17
1.6	Speaker .....	18
1.6.1	Loudspeaker .....	18
1.7	Earphone .....	21
1.7.1	Ear Speaker.....	21
1.8	Microphone.....	22
1.8.1	Primary Microphone.....	22
1.8.1	Secondary Microphone.....	23
1.9	Vibrator .....	25
1.9.1	Vibrator not generating alerts .....	25
1.10	Camera.....	27
1.10.1	Main Camera .....	27
1.10.2	Video Call Camera defects.....	28
1.11	Flash LED .....	29
1.11.1	Back Flash LED not flashing .....	29
1.11.2	Front Flash LED not flashing.....	29
1.12	Bluetooth and WLAN .....	31
1.12.1	Bluetooth or WLAN connection failure.....	31
1.13	NFC .....	32
1.13.1	NFC malfunctions.....	32
1.14	GPS .....	33
1.14.1	GPS malfunctions.....	33
1.15	Compass.....	34
1.15.1	Compass fails .....	34
1.16	Accelerometer .....	35
1.16.1	Accelerometer test fails .....	35
1.17	Gyroscope .....	36
1.17.1	Gyroscope test fails .....	36
1.18	Ambient Light Sensor .....	37

1.18.1	Light Sensor malfunctions .....	37
1.19	Proximity Switch .....	38
1.19.1	Proximity switch malfunctions.....	38
1.20	Pressure Sensor.....	39
1.20.1	Pressure Sensor test fails.....	39
1.21	Real Time Clock .....	40
1.21.1	Real time clock test fails .....	40
1.22	Total call time .....	41
1.22.1	Total call time fails .....	41
1.23	External Memory .....	42
1.23.1	Memory Card not detected .....	42
1.24	Security.....	43
1.24.1	Security fails .....	43
1.25	FM Radio.....	44
1.25.1	No/Poor FM Radio reception .....	44
1.26	Battery Health test .....	45
1.26.1	Battery Health test fails.....	45
1.27	Flip Slider Counter .....	46
1.27.1	Flip Slider Counter fails .....	46
1.28	Verify Certificates.....	47
1.28.1	Verify Certificates fails.....	47
1.29	IrDA Test .....	48
1.29.1	IrDA test fails .....	48
1.30	TV-Out Test.....	49
1.30.1	TV-Out test fails .....	49
1.31	Network & Signal.....	50
1.31.1	No/Poor signal .....	50
1.32	SIM .....	54
1.32.1	SIM not detected.....	54
1.32.2	Incorrect UIM or SIM indicated.....	54
1.33	Charging .....	55
1.33.1	Battery will not charge by USB connector .....	55
1.34	HandsFree by Wire.....	56
1.34.1	Connection to portable Handsfree fails.....	56
1.35	Data Communication .....	57
1.35.1	Data transfer via System Connector fails.....	57
2	Revision History .....	58

***Always firstly disconnect the Battery FPC BtB connector to cut off power supply when the Sub Antenna Assy is disassembled.***

***Always finally connect the Battery FPC BtB connector before the Sub Antenna Assy is reassembled.***

***Note: Accelerometer Calibration always must be performed when Board Swap or wrong Accelerometer readouts; 1289-2983 Trouble Shooting Application – mechanical.***

***Note: Touch Panel Calibration always must be performed when replacing Display Frame Assy; 1289-2983 Trouble Shooting Application – mechanical.***

## 1 Problem Areas

### 1.1 Power

#### 1.1.1 Will not power on or will switch off randomly

**Check:**

Check whether the phone vibrates by pressing the on/off key.

**Action:**

1. If activation of the vibrator is detected, refer to section 1.4 'Display'.

2. If NO activation of the Vibrator is detected, check that the battery is charging when connected to a charger.

**Follow Test Instruction - mechanical chapter 2.3.7 (Charging via USB and Easy Charger), Diagnostic Battery / Charging status.**

**Check:**

Inspect the on/off key.

**Action:**

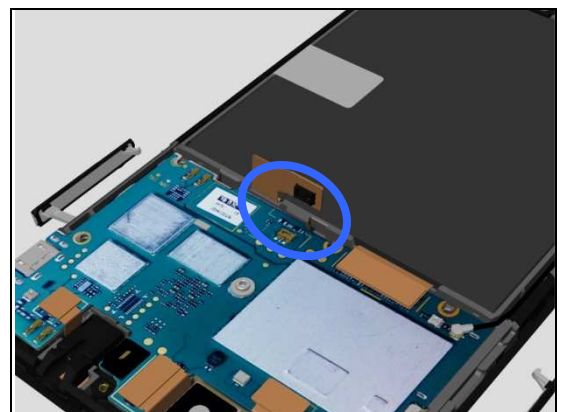
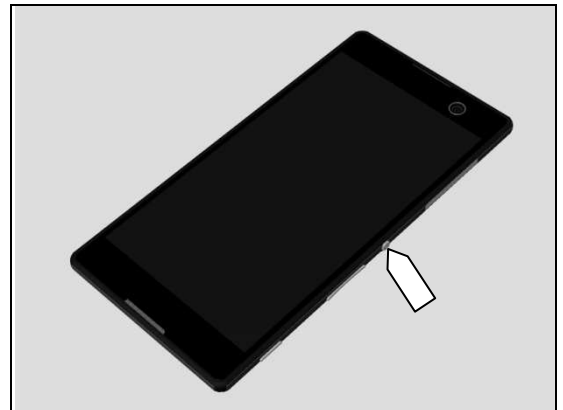
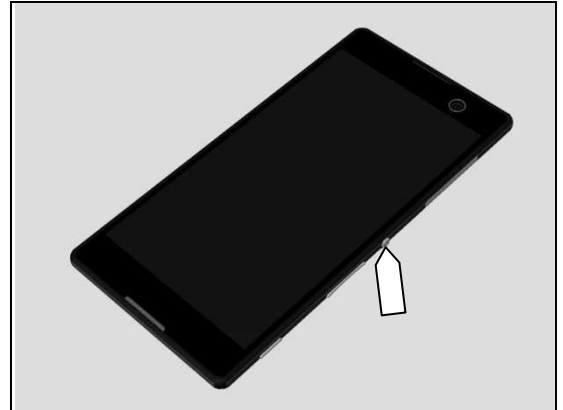
Refer to section 1.2.3 'On/Off Key'.

**Check:**

Inspect the BtB connector of the Battery to Main PBA.

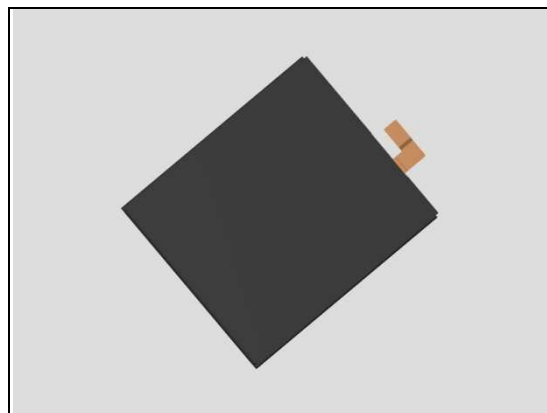
**Action:**

1. If not properly connected – disconnect and reconnect it.
2. If dirty or oxidized – clean the both sides of the BtB connector.



## Problem Areas: Power

3. If the BtB connector, the Battery FPC or the Battery is damaged – replace the Battery.
4. Replace Main PBA.



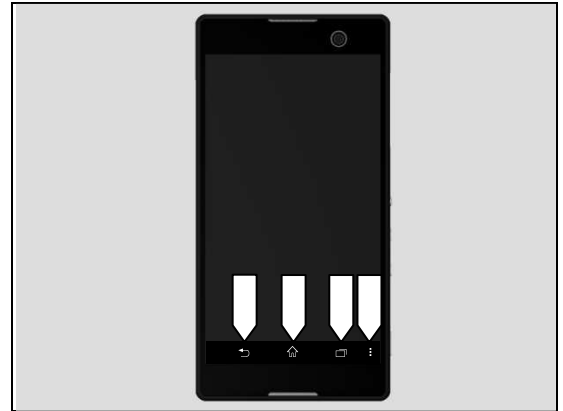
## Problem Areas

### 1.2 Keys

#### 1.2.1 Back, Menu, Home and Multitask Keys

**Action:**

1. Refer to section 1.3 'Touch Screen'.
2. Replace Main PBA.



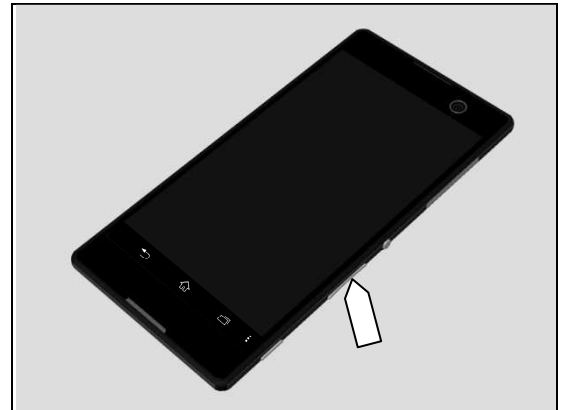
#### 1.2.2 Volume Key

**Check:**

Inspect the external area of the Key Volume.

**Action:**

If dirty – clean it.

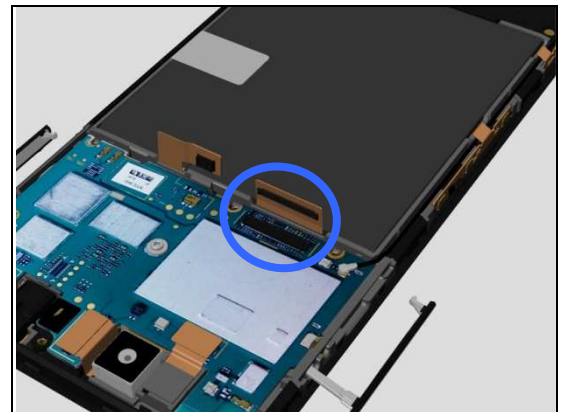


**Check:**

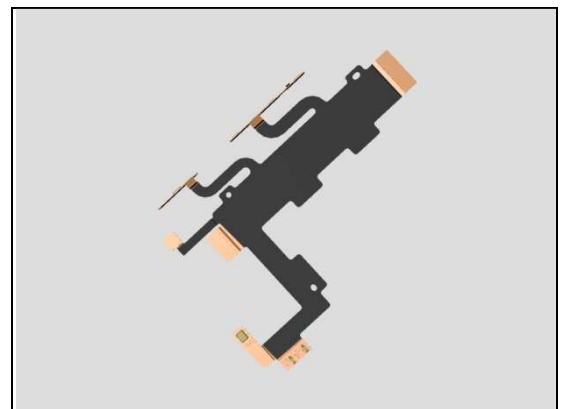
Inspect the BtB connector of Main FPC Assy to Main PBA.

**Action:**

1. If not properly connected – disconnect and reconnect it.
2. If dirty or oxidized – clean it.



3. If the FPC of Main FPC Assy is damaged – replace the Main FPC Assy.
4. Replace Main PBA.



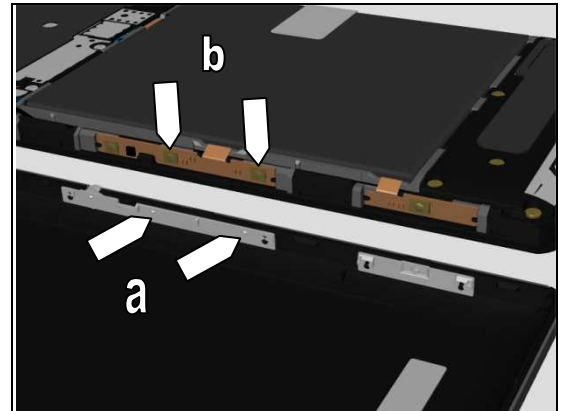
## Problem Areas: Keys

### Check:

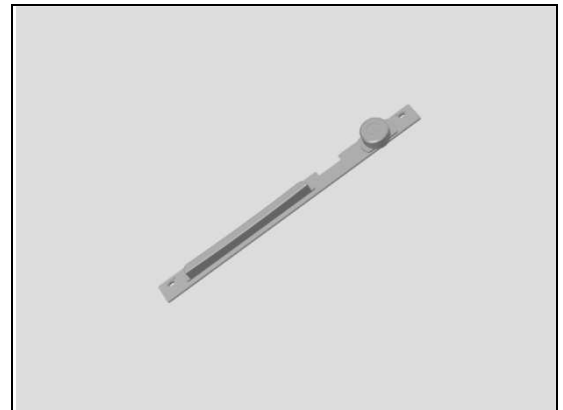
Inspect the rubber of the Volume Key (a) and Volume Key switch (b).

### Action:

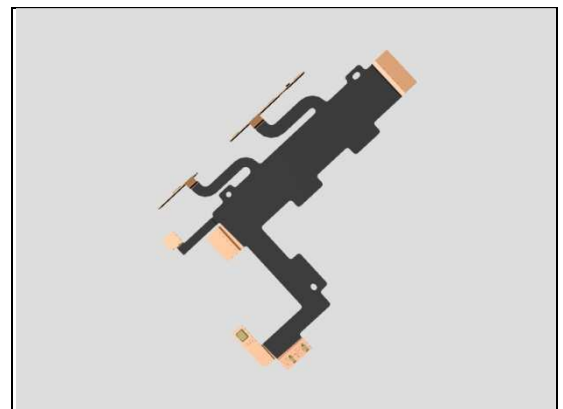
1. If dirty – clean them.



2. If the rubber of the Volume Key is damaged – replace the Power/Side Key Assy.



3. If the volume key switch is damaged – replace the Main FPC Assy.



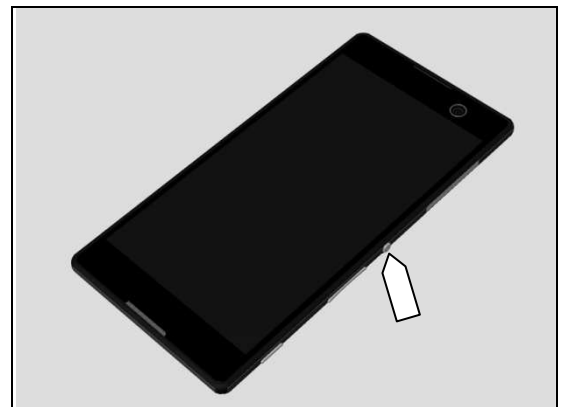
### 1.2.3 On/Off Key

### Check:

Inspect the external area of the Power Key.

### Action:

If dirty – clean it.





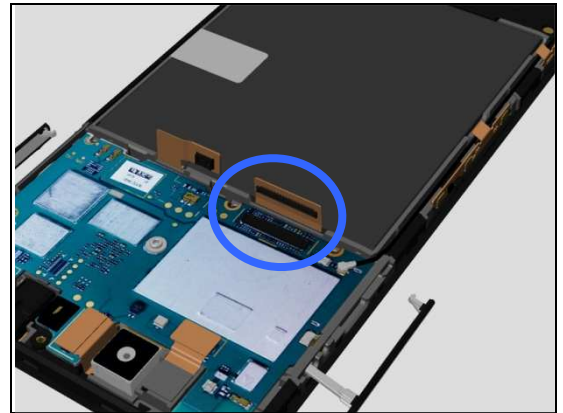
## Problem Areas: Keys

### Check:

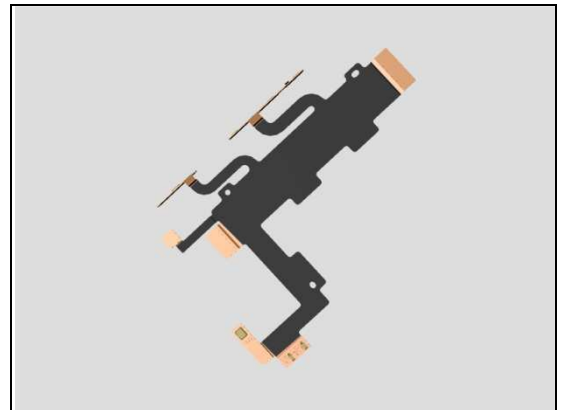
Inspect the BtB connector of Main FPC Assy to Main PBA.

### Action:

1. If not properly connected – disconnect and reconnect it.
2. If dirty or oxidized – clean it.



3. If the FPC of Main FPC Assy is damaged – replace the Main FPC Assy.
4. Replace Main PBA.

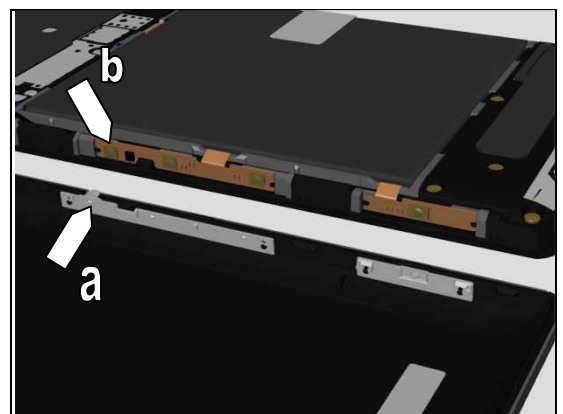


### Check:

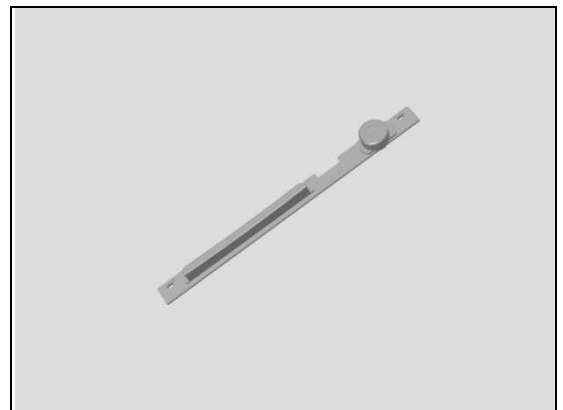
Inspect the rubber of the Power Key (a) and Power Key switch (b).

### Action:

1. If dirty – clean them.



2. If the rubber of the power key is damaged – replace the Power/Side Key Assy.



## Problem Areas: Keys

3. If the power key switch is damaged – replace the Main FPC Assy.

### 1.2.4 Camera Key

**Check:**

Inspect the external area of the Camera Key.

**Action:**

If dirty – clean it.

**Check:**

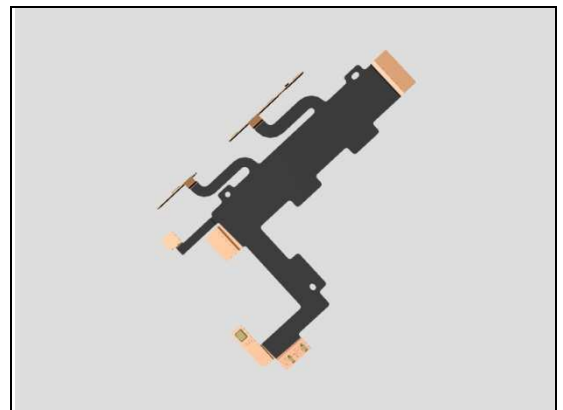
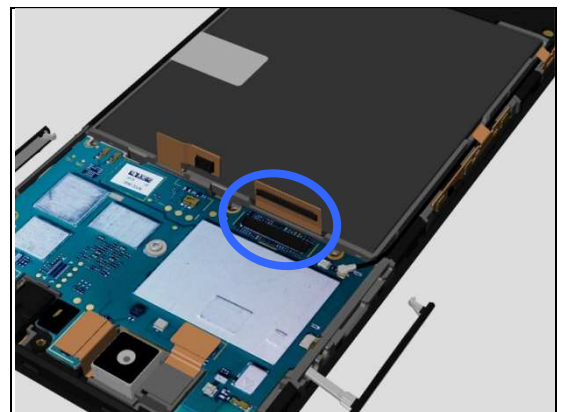
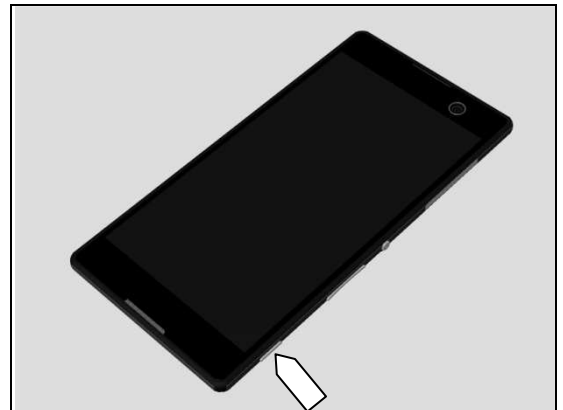
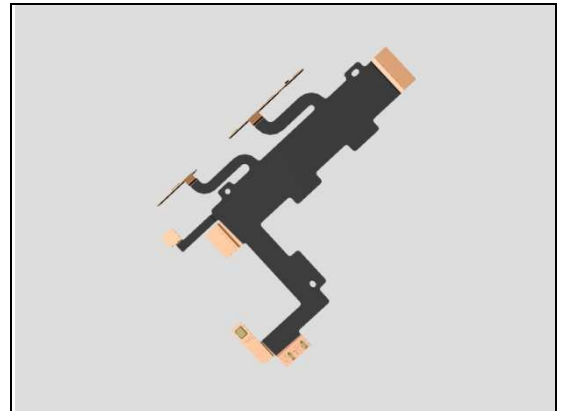
Inspect the BtB connector of Main FPC Assy to Main PBA.

**Action:**

1. If not properly connected – disconnect and reconnect it.
2. If dirty or oxidized – clean it.

3. If the FPC of Main FPC Assy is damaged – replace the Main FPC Assy.

4. Replace Main PBA.



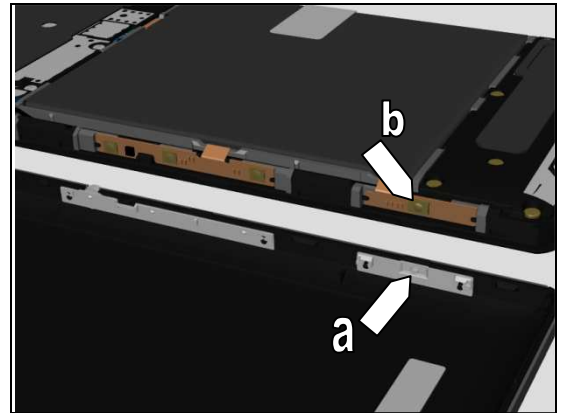
## Problem Areas: Keys

### Check:

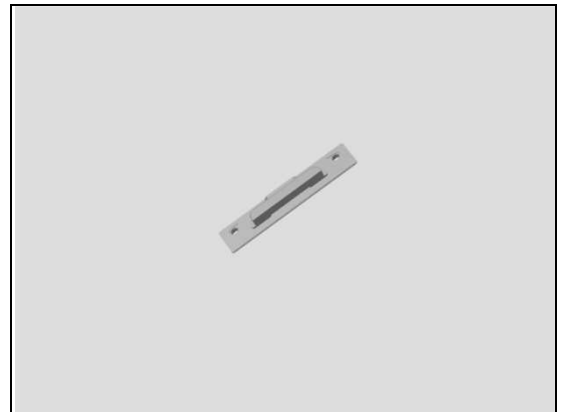
Inspect the rubber of the Camera Key (a) and Camera Key switch (b).

### Action:

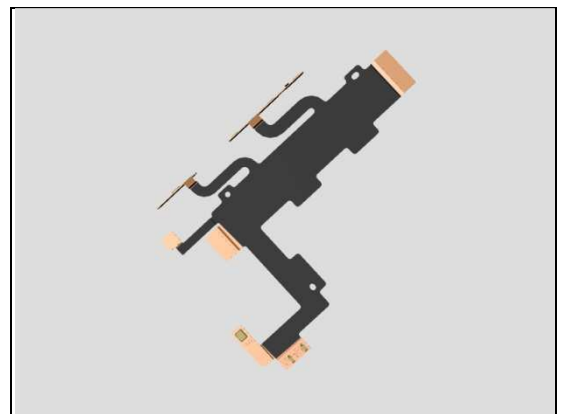
1. If dirty – clean them.



2. If the rubber of the Camera Key is damaged – replace the Camera Key Assy.



2. If the camera key switch is damaged – replace the Main FPC Assy.



## Problem Areas

### 1.3 Touch Screen

#### 1.3.1 Touch Screen malfunction

**Check:**

Inspect the touch screen of the Display Frame Assy.

**Action:**

1. If dirty – clean it.



2. If scratched or damaged – replace the Display Frame Assy.

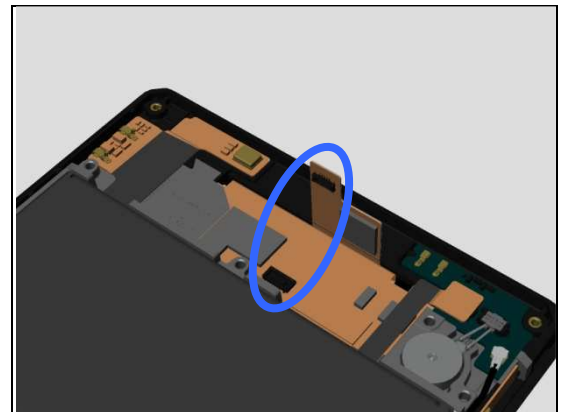


**Check:**

Inspect the BtB connector of Touch Panel FPC to LCD FPC.

**Action:**

1. If not properly connected – disconnect and reconnect it.
2. If dirty or oxidized – clean it.



3. If the BtB connector of touch panel FPC or FPC is damaged – replace the Display Frame Assy.
4. If the BtB connector of LCD FPC or FPC is damaged – replace the Display Frame Assy.
5. Replace Main PBA.



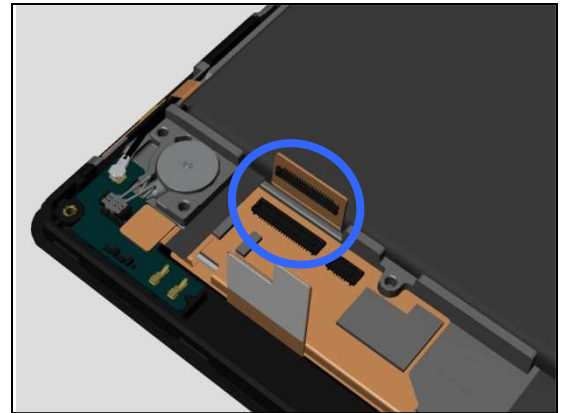
## Problem Areas: Touch Screen

### Check:

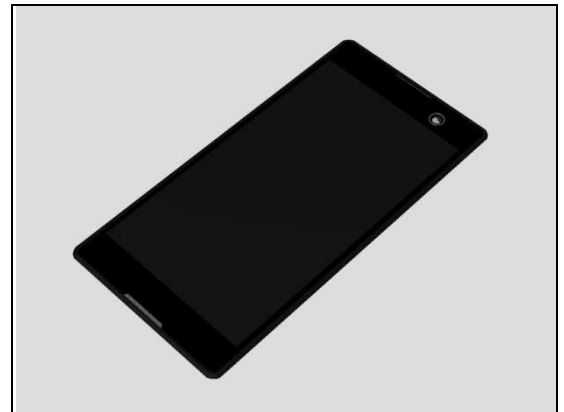
Inspect the BtB connector of Display FPC to Main FPC Assy.

### Action:

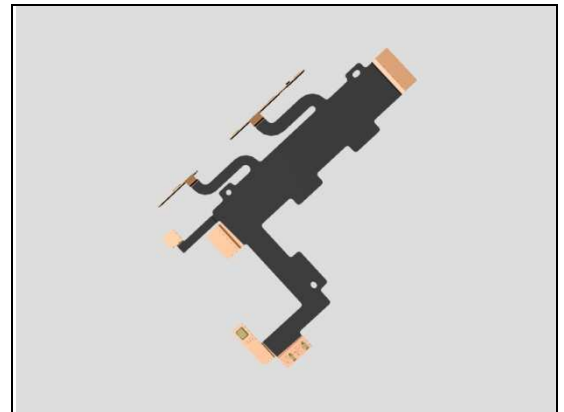
1. If not properly connected – disconnect and reconnect it.
2. If dirty or oxidized – clean it.



3. If the BtB connector of Display FPC or FPC is damaged – replace the Display Frame Assy.



3. If the BtB connector of Main FPC Assy or FPC is damaged – replace the Main FPC Assy.



### Check:

Inspect the BtB connector of Main FPC Assy to Main PBA.

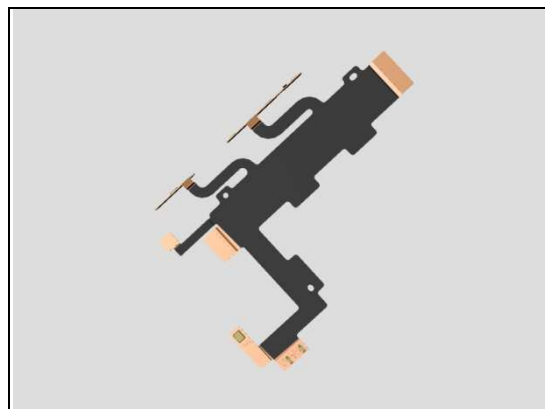
### Action:

1. If not properly connected – disconnect and reconnect it.
2. If dirty or oxidized – clean it.



## Problem Areas: Touch Screen

3. If the FPC of Main FPC Assy is damaged – replace the Main FPC Assy.
4. Replace Main PBA.



## Problem Areas

### 1.4 Display

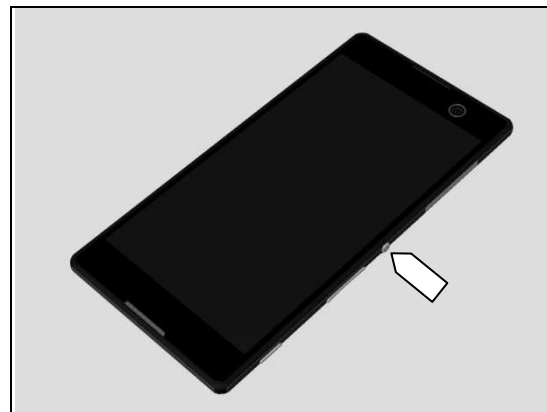
#### 1.4.1 Graphics & Illumination

**Check:**

Check whether the phone vibrates after the on/off key has been pressed.

**Action:**

If the activation described above is not detected, refer to section 1.1 'Power'.

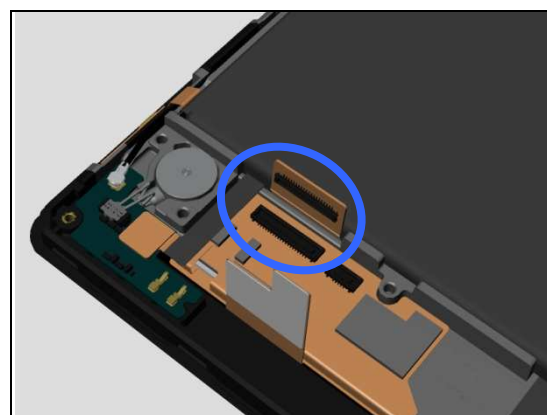


**Check:**

Inspect the BtB connector of LCD FPC to Main FPC Assy.

**Action:**

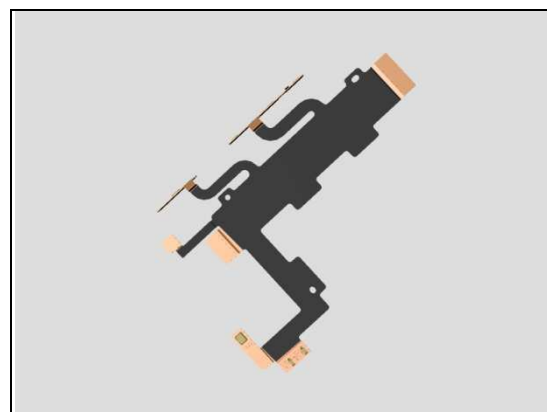
1. If not properly connected – disconnect and reconnect it.
2. If dirty or oxidized – clean it.



3. If the BtB connector of LCD FPC or FPC is damaged – replace the Display Frame Assy.



3. If the BtB connector of Main FPC Assy or FPC is damaged – replace the Main FPC Assy.



## Problem Areas: Display

**Check:**

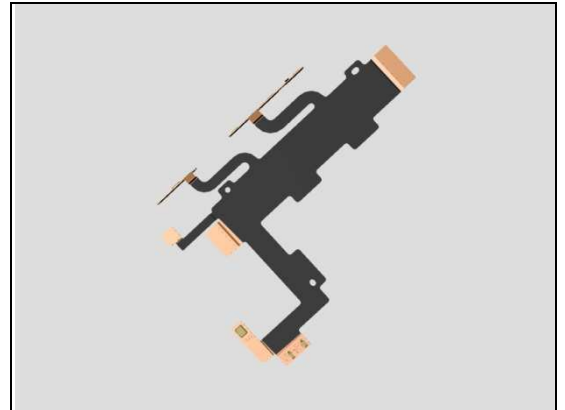
Inspect the BtB connector of Main FPC Assy to Main PBA.

**Action:**

1. If not properly connected – disconnect and reconnect it.
2. If dirty or oxidized – clean it.



3. If the FPC of Main FPC Assy is damaged – replace the Main FPC Assy.
4. Replace Main PBA.





## Problem Areas

### 1.5 LED/Illumination

#### 1.5.1 LED/Illumination

**Check:**

Inspect external port of LED on the Display Frame Assy.

**Action:**

1. If dirty – clean it.

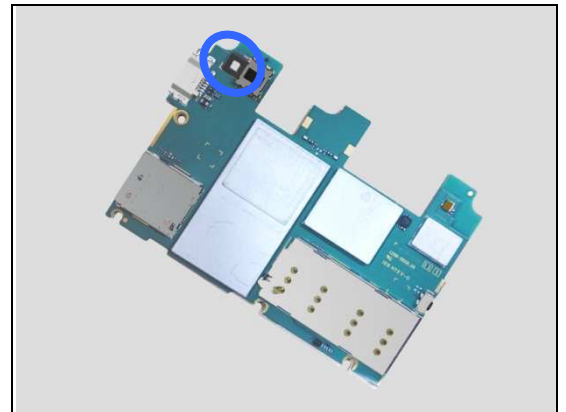


**Check:**

Inspect the LED on the Main PBA.

**Action:**

1. If dirty – clean it.
2. Replace Main PBA.



## Problem Areas

### 1.6 Speaker

#### 1.6.1 Loudspeaker

**Check:**

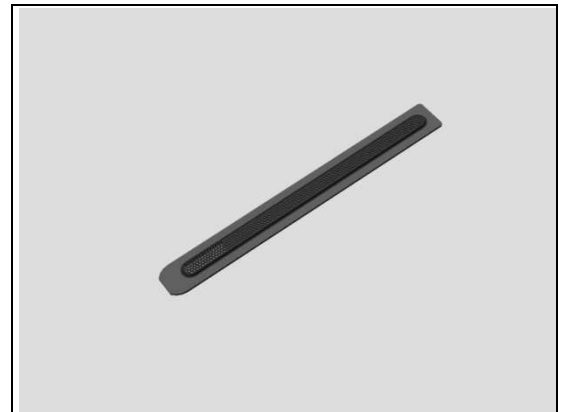
Inspect the Loudspeaker's external port on the Back Cover Assy.

**Action:**

1. If clogged – clean it.



2. If damaged – replace the Speaker Net.



**Check:**

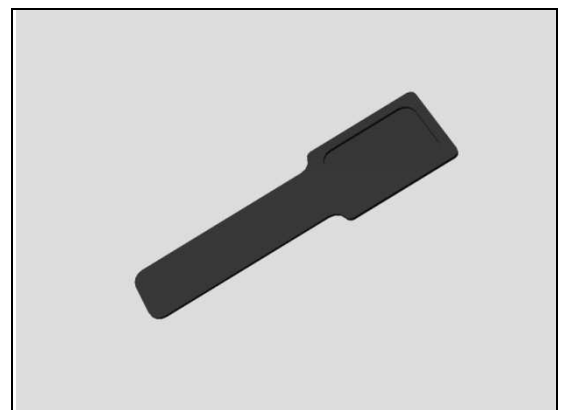
Inspect the Speaker Mesh on the Ant Speaker Bottom Frame Assy.

**Action:**

1. If clogged – clean it.



2. If damaged – replace the Speaker Mesh.



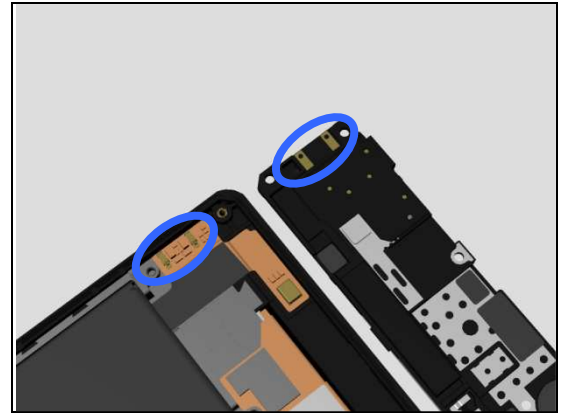
## Problem Areas: Speaker

### Check:

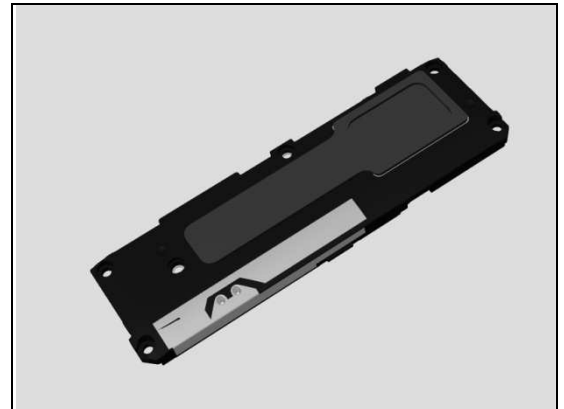
Inspect the contact pins on the Main FPC Assy and the contact pads on the Ant Speaker Bottom Frame Assy.

### Action:

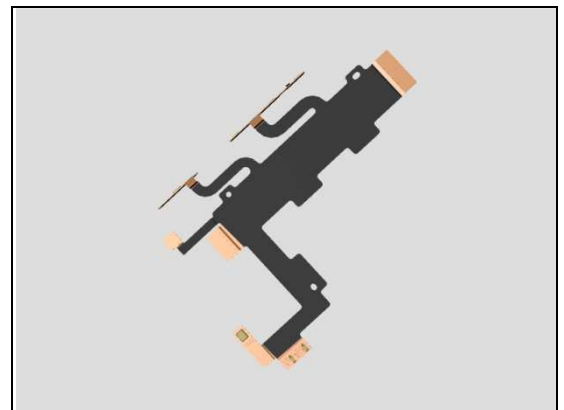
1. If dirty – clean them.



2. If the contact pads of the Ant Speaker Bottom Frame Assy or the Loudspeaker are damaged – replace Ant Speaker Bottom Frame Assy.



3. If the contact pins on the Main FPC Assy are damaged - replace the Main FPC Assy.

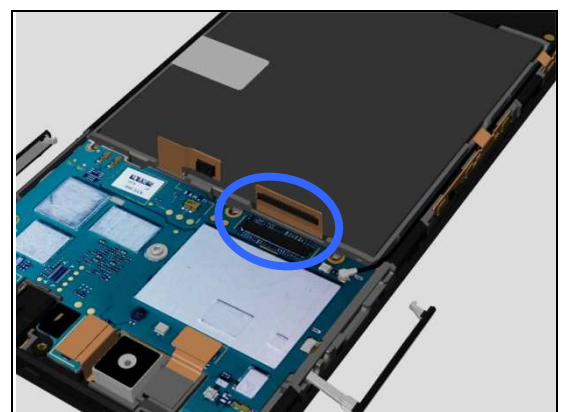


### Check:

Inspect the BtB connector of Main FPC Assy to Main PBA.

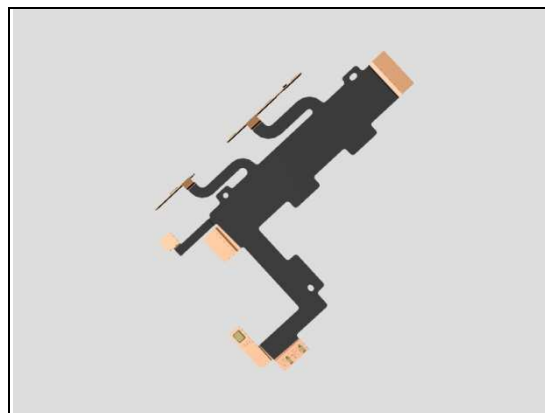
### Action:

1. If not properly connected – disconnect and reconnect it.
2. If dirty or oxidized – clean it.

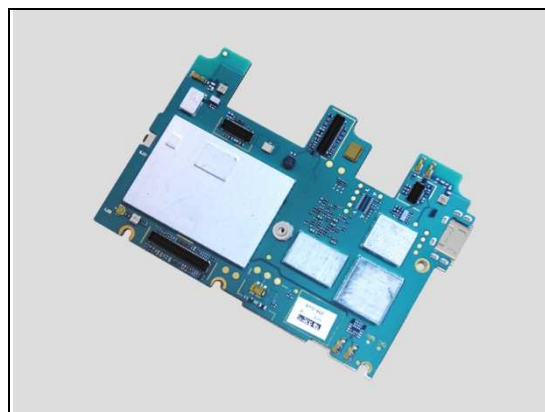


## Problem Areas: Speaker

3. If the FPC of Main FPC Assy is damaged – replace the Main FPC Assy.



4. Replace Main PBA.



## Problem Areas

### 1.7 Earphone

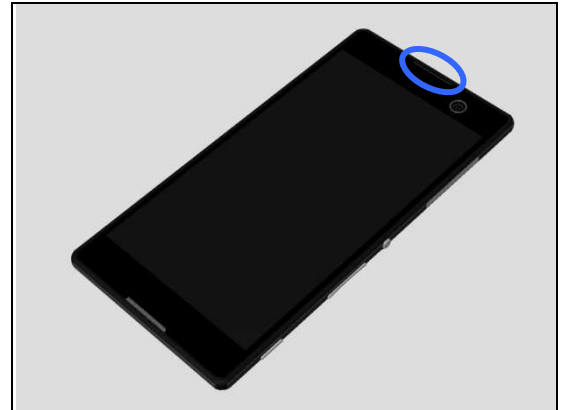
#### 1.7.1 Ear Speaker

**Check:**

Inspect the external port of Ear Speaker on the Display Frame Assy.

**Action:**

1. If clogged – clean it.



2. If damaged – replace the Display Frame Assy.

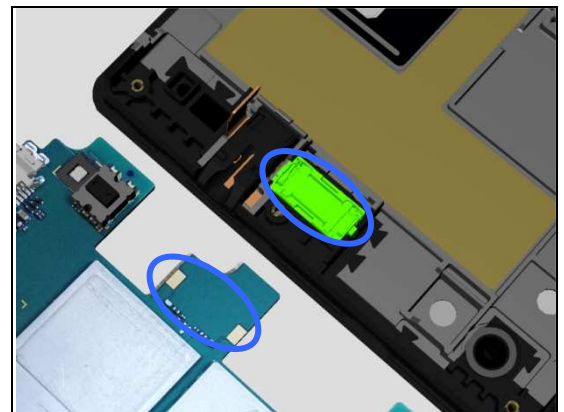


**Check:**

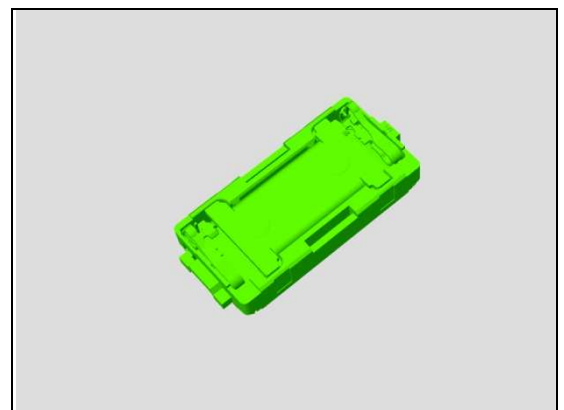
Inspect the contact pins of Ear Speaker and the contact pads on the Main PBA.

**Action:**

1. If dirty – clean them.



2. If the contact pins of the Ear Speaker or the Ear Speaker are damaged – replace the Earspeaker.  
3. Replace Main PBA.



## Problem Areas

### 1.8 Microphone

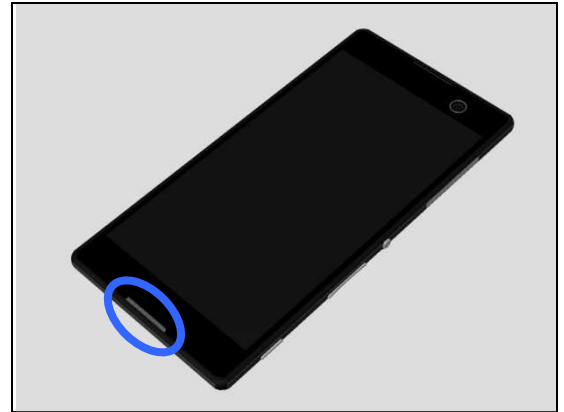
#### 1.8.1 Primary Microphone

**Check:**

Inspect the Primary Microphone's external port on the Display Frame Assy.

**Action:**

1. If clogged – clean it.

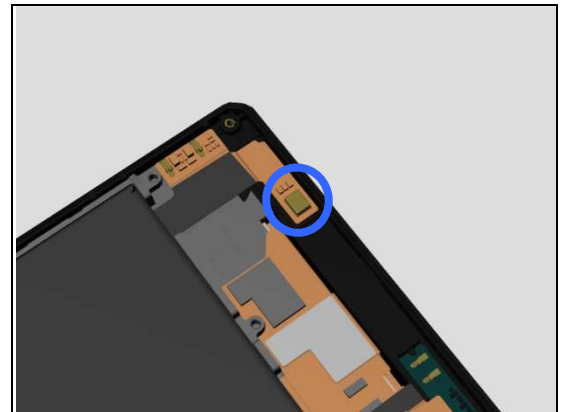


2. If damaged – replace the Display Frame Assy.



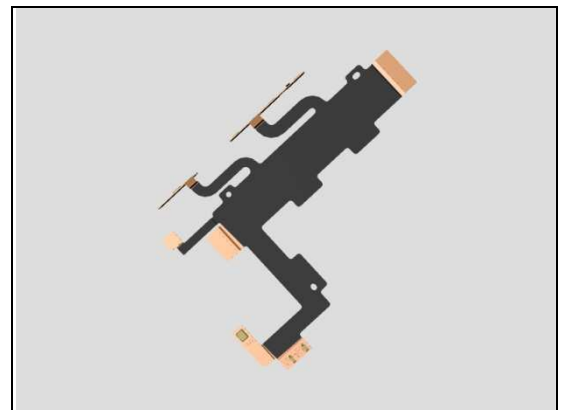
**Check:**

Inspect the primary microphone on the Main FPC Assy.



**Action:**

1. If the microphone or the FPC is damaged – replace the Main FPC Assy.



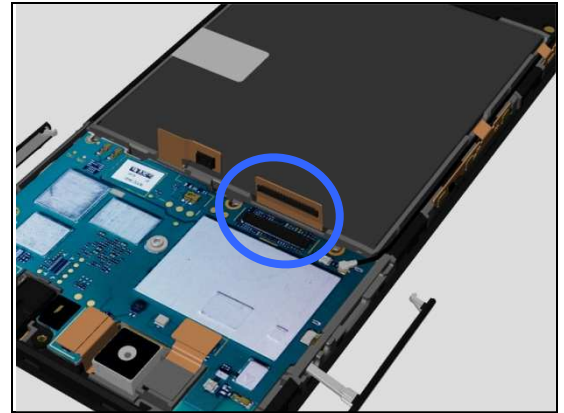
## Problem Areas: Microphone

### Check:

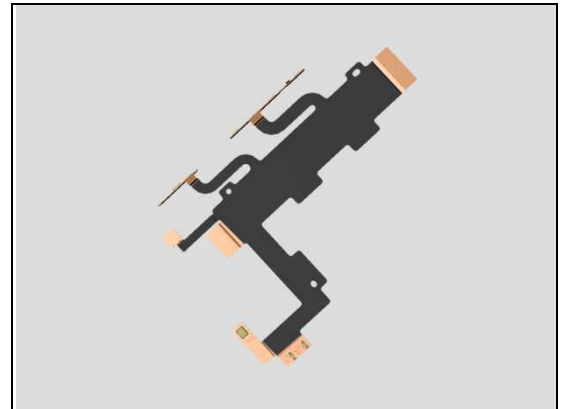
Inspect the BtB connector of Main FPC Assy to Main PBA.

### Action:

1. If not properly connected – disconnect and reconnect it.
2. If dirty or oxidized – clean it.



3. If the FPC of Main FPC Assy is damaged – replace the Main FPC Assy.
4. Replace Main PBA.



### 1.8.1 Secondary Microphone

### Check:

Inspect the external port of secondary microphone on the Back Cover Assy.

### Action:

1. If clogged – clean it.



### Check:

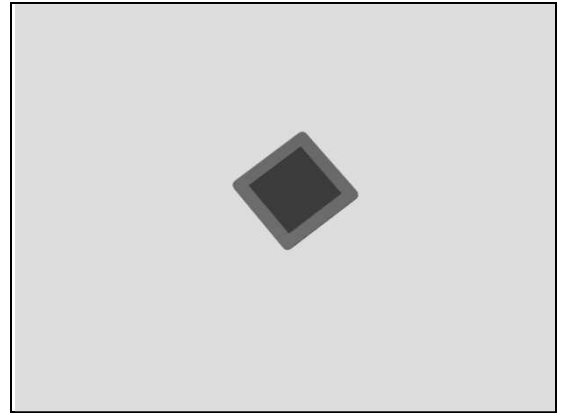
Inspect the 2nd Mic Mesh.



## Problem Areas: Microphone

### Action:

1. If damaged – replace the 2nd Mic Mesh.

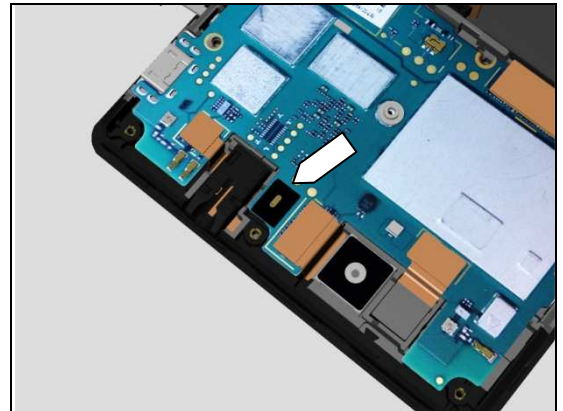


### Check:

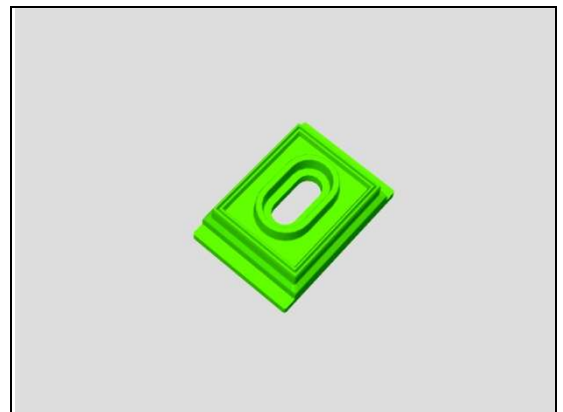
Inspect the 2nd Mic Rubber.

### Action:

1. If dirty – clean it.



2. If damaged – replace the 2nd Mic Rubber.

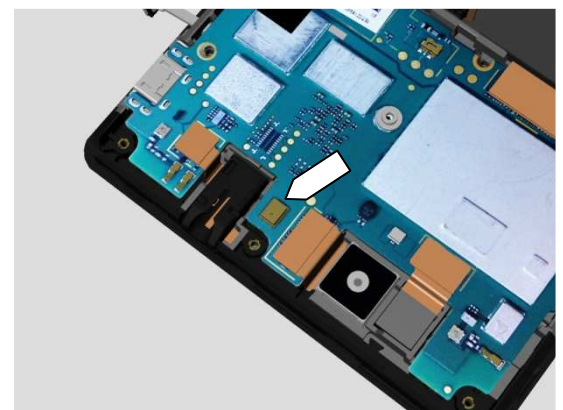


### Check:

Inspect the secondary microphone on the Main PBA.

### Action:

1. If dirty – clean it.
2. Replace Main PBA.





## Problem Areas

### 1.9 Vibrator

#### 1.9.1 Vibrator not generating alerts

**Check:**

Inspect the BtB connector of Vibrator to Sub PBA.

**Action:**

1. If not properly connected – disconnect and reconnect it.
2. If dirty or oxidized – clean it.

3. If the connector or cables of vibrator or vibrator itself is damaged – replace the Vibrator.

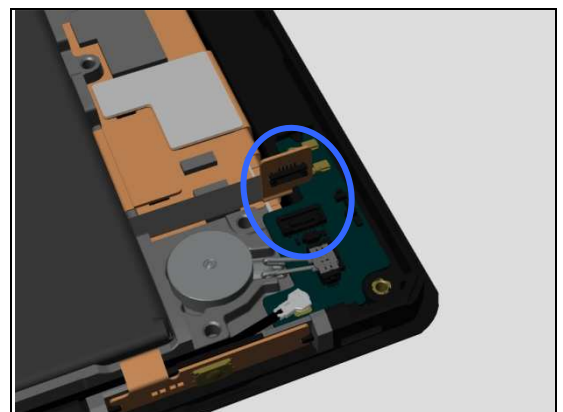
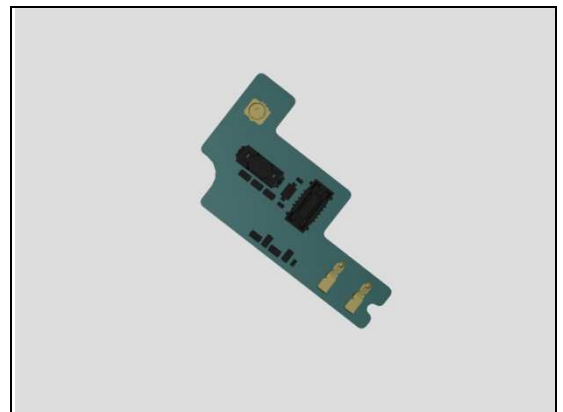
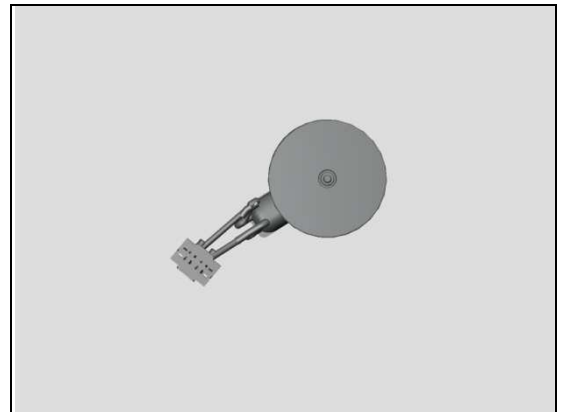
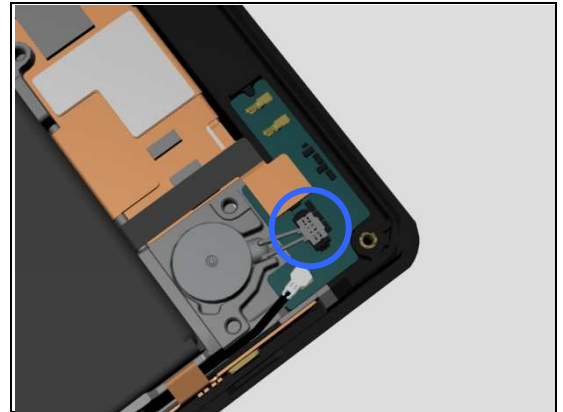
4. If the connector of vibrator on Sub PBA is damaged – replace the Sub PBA.

**Check:**

Inspect the BtB connector of Sub PBA to the Main FPC Assy.

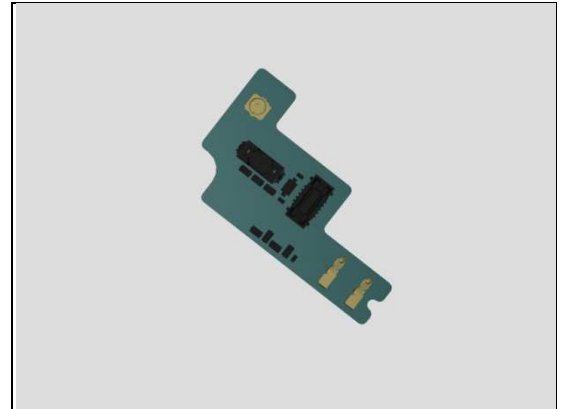
**Action:**

1. If not properly connected – disconnect and reconnect it.
2. If dirty or oxidized – clean it.

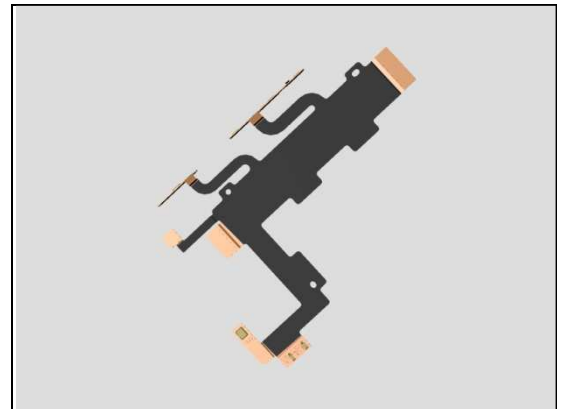


## Problem Areas: Vibrator

3. If the BtB connector on Sub PBA is damaged – replace the Sub PBA.



4. If the FPC of Main FPC Assy is damaged – replace the Main FPC Assy.



### Check:

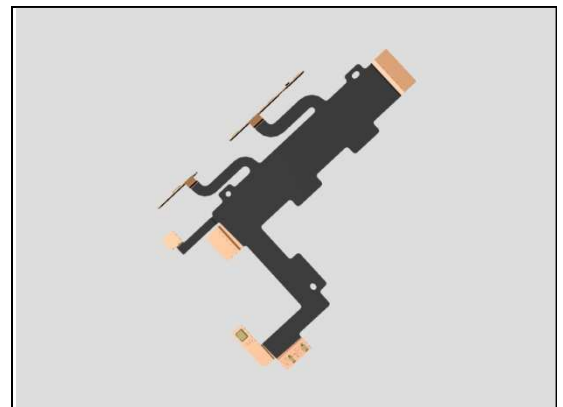
Inspect the BtB connector of Main FPC Assy to Main PBA.

### Action:

1. If not properly connected – disconnect and reconnect it.
2. If dirty or oxidized – clean it.



3. If the FPC of Main FPC Assy is damaged – replace the Main FPC Assy.
4. Replace Main PBA.



## Problem Areas

### 1.10 Camera

#### 1.10.1 Main Camera

**Check:**

Inspect the external area of Camera Window.

**Action:**

1. If dirty – clean it.

2. If scratched or damaged – replace the Camera Window.

**Check:**

Inspect the BtB connector of Main Camera to Main PBA.

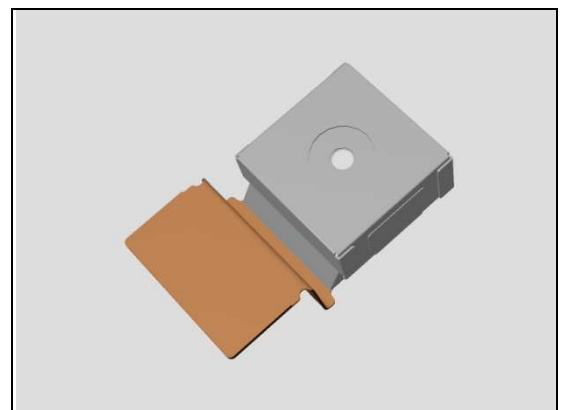
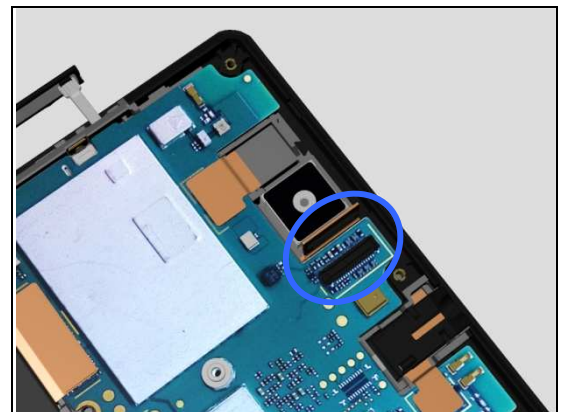
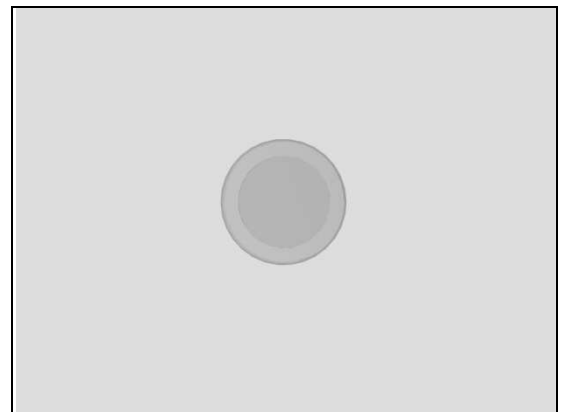
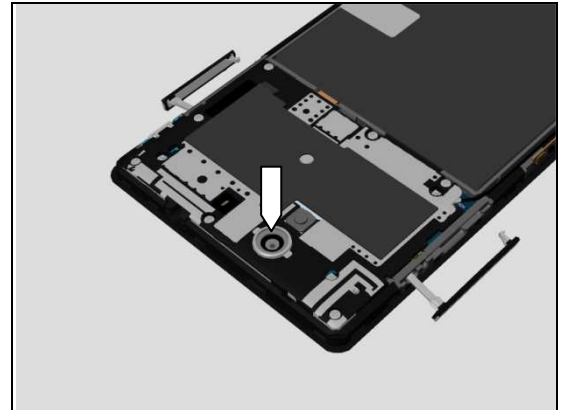
**Action:**

1. If not properly connected – disconnect and reconnect it.

2. If dirty or oxidized – clean it.

3. If the BtB connector or the Main Camera is damaged – replace the Main Camera.

4. Replace Main PBA.



## Problem Areas: Camera

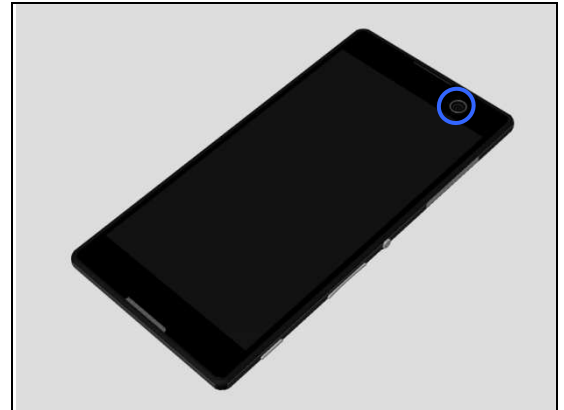
### 1.10.2 Video Call Camera defects

**Check:**

Inspect the external area of the video camera window.

**Action:**

1. If dirty – clean it.



2. If scratched or damaged – replace the Display Frame Assy.

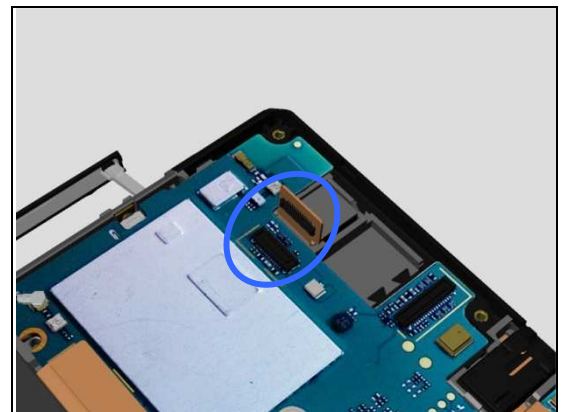


**Check:**

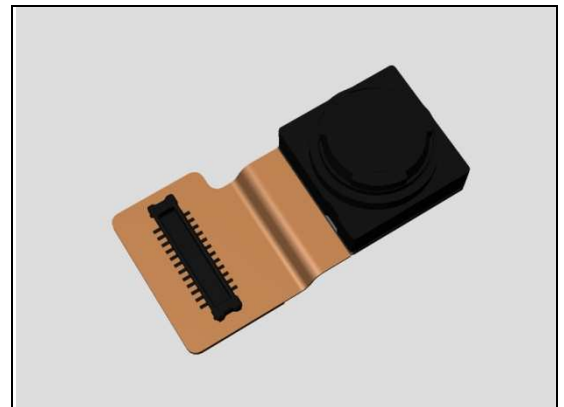
Inspect the BtB connector of Chat Camera to the Main PBA.

**Action:**

1. If not properly connected – disconnect and reconnect it.
2. If dirty or oxidized – clean it.



3. If the FPC or the Chat Camera is damaged – replace the Chat Camera.
4. Replace Main PBA.



## Problem Areas

### 1.11 Flash LED

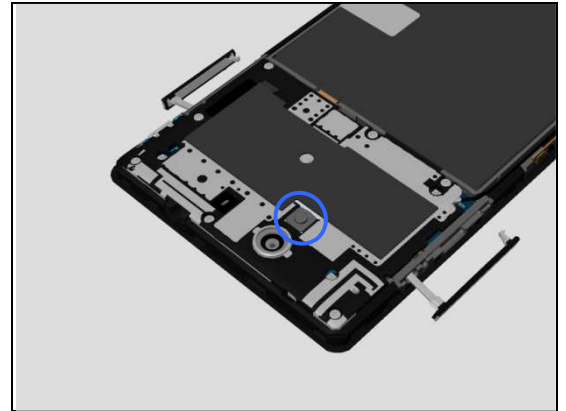
#### 1.11.1 Back Flash LED not flashing

**Check:**

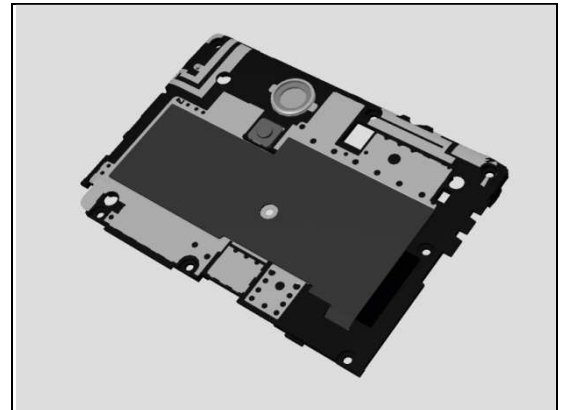
Inspect the back flash LED Light Guide.

**Action:**

1. If dirty – clean it.



2. If scratched or damaged – replace the Ant Top Frame Assy.



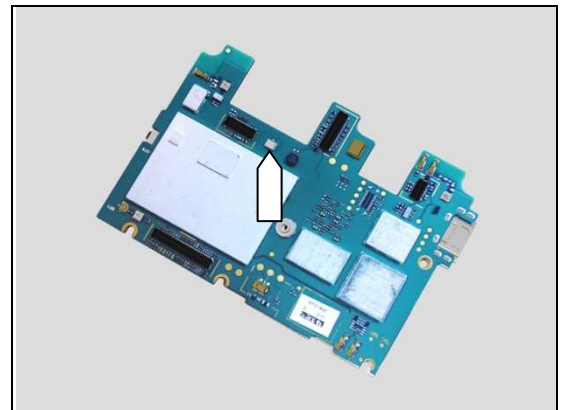
**Check:**

Inspect the back Flash LED on the Main PBA.

**Action:**

1. If dirty – clean it.

2. Replace Main PBA.



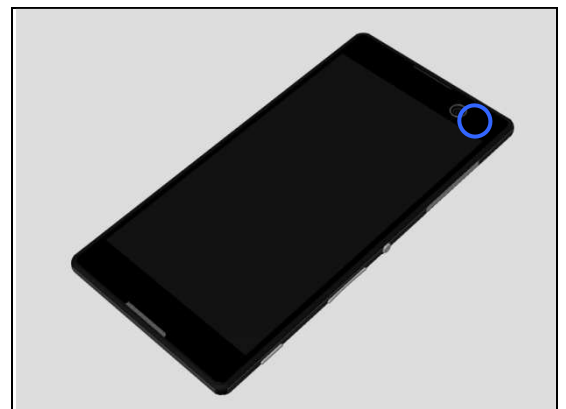
#### 1.11.2 Front Flash LED not flashing

**Check:**

Inspect the external area of the front flash LED.

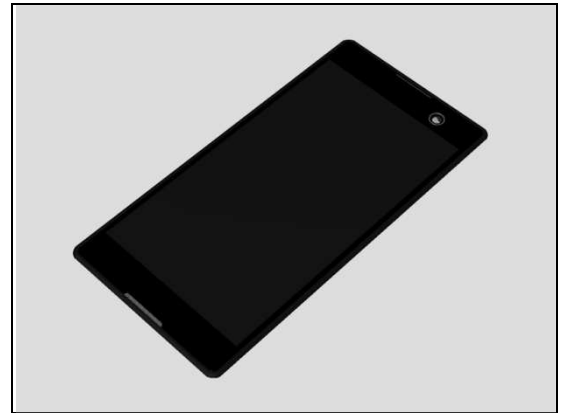
**Action:**

1. If dirty – clean it.



## Problem Areas: Flash LED

2. If scratched or damaged – replace the Display Frame Assy.

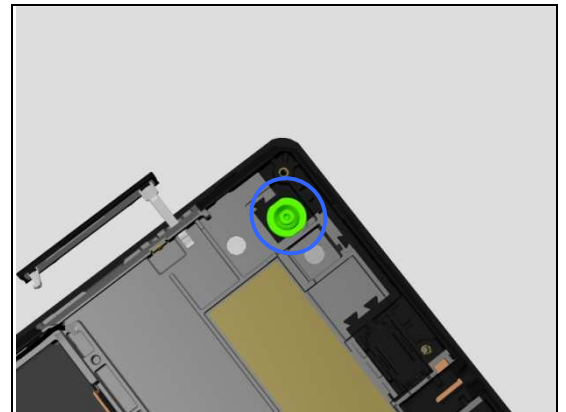


**Check:**

Inspect the front flash LED Light Guide.

**Action:**

1. If dirty – clean it.

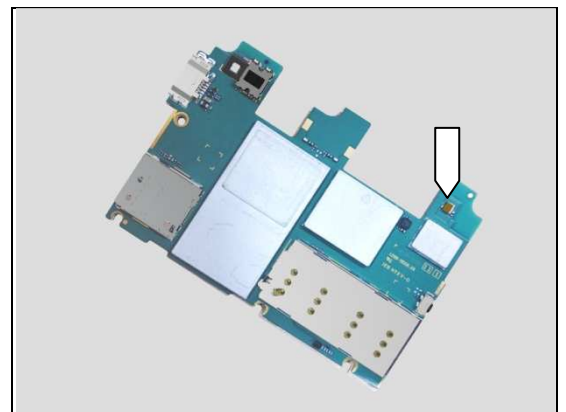


**Check:**

Inspect the front Flash LED on the Main PBA.

**Action:**

1. If dirty – clean it.
2. Replace Main PBA.



## Problem Areas

### 1.12 Bluetooth and WLAN

#### 1.12.1 Bluetooth or WLAN connection failure

**Check:**

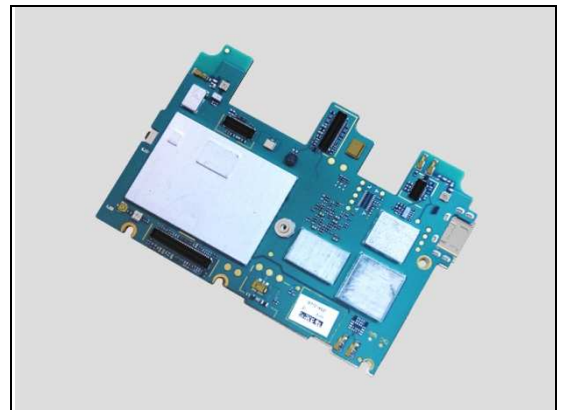
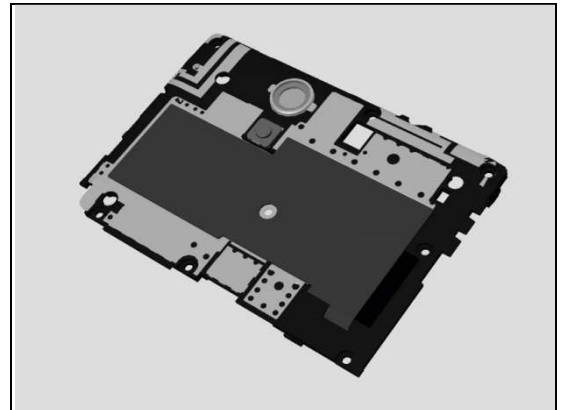
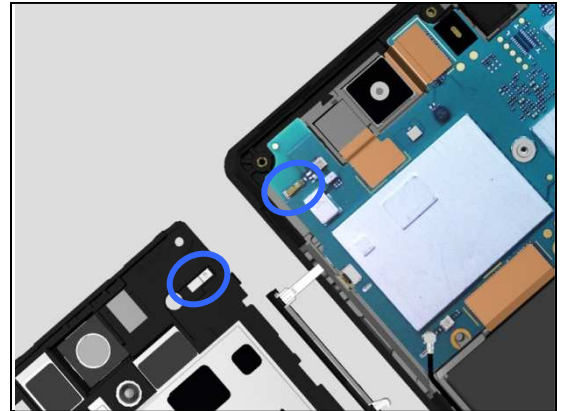
Inspect the WLAN/BT Antenna contact pad on Ant Top Frame Assy and the contact pin on main PBA.

**Action:**

1. If dirty or oxidized – clean the pads and pins.

2. If the contact pad on Ant Top Frame Assy or Ant Top Frame Assy is damaged – replace the Ant Top Frame Assy.

3. If the contact pin on main PBA is damaged – replace Main PBA.





## Problem Areas

### 1.13 NFC

#### 1.13.1 NFC malfunctions

**Check:**

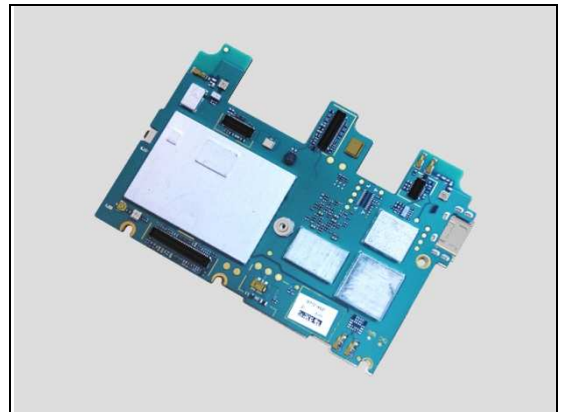
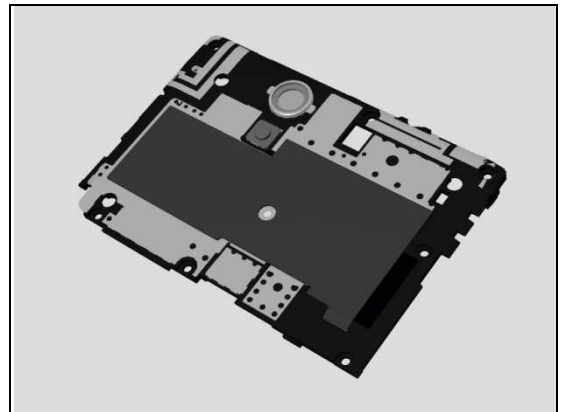
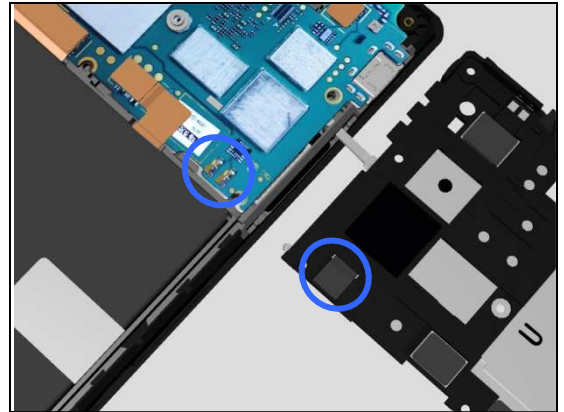
Inspect the NFC antenna contact pads on Ant Top Frame Assy and the contact pins on Main PBA.

**Action:**

1. If dirty or oxidized – clean the pads and pins.

2. If the NFC antenna contact pads or NFC antenna film is damaged – replace the Ant Top Frame Assy.

3. If the contact pins on main PBA is damaged – replace Main PBA.





## Problem Areas

### 1.14 GPS

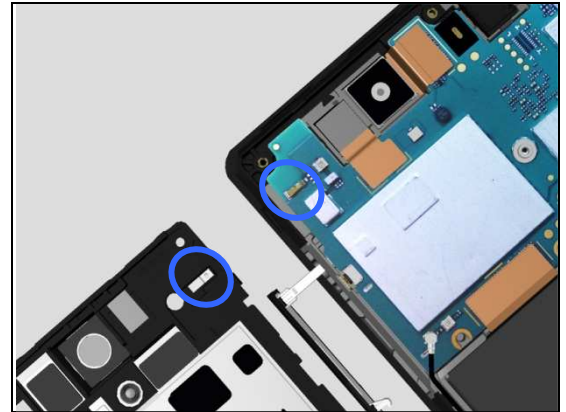
#### 1.14.1 GPS malfunctions

**Check:**

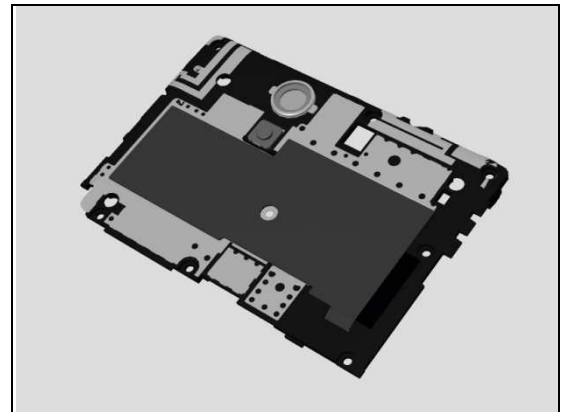
Inspect the GPS antenna contact pad on Ant Top Frame Assy and the contact pin on Main PBA.

**Action:**

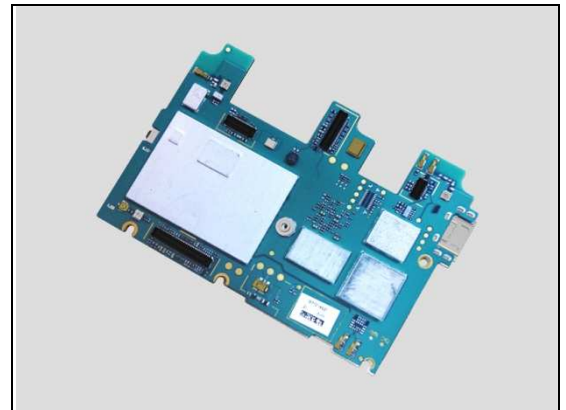
1. If dirty or oxidized – clean the pad and pin.



2. If the GPS antenna contact pad is damaged – replace the Ant Top Frame Assy.



3. If the contact pin on main PBA is damaged – replace Main PBA.



## Problem Areas

### 1.15 Compass

#### 1.15.1 Compass fails

**Check:**

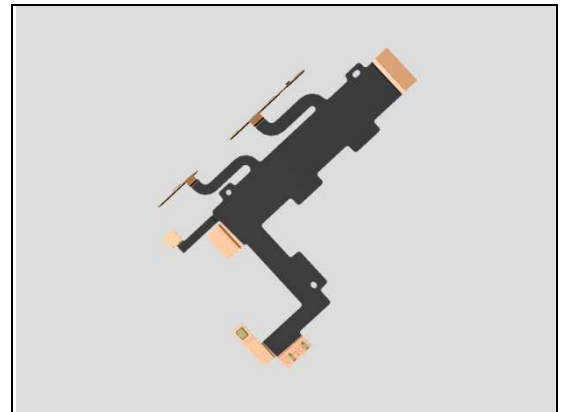
Inspect the BtB connector of Main FPC Assy to Main PBA.

**Action:**

1. If not properly connected – disconnect and reconnect it.
2. If dirty or oxidized – clean it.

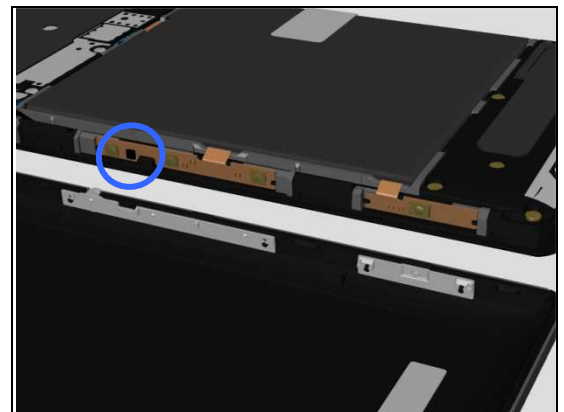


3. If the FPC of Main FPC Assy is damaged – replace the Main FPC Assy.



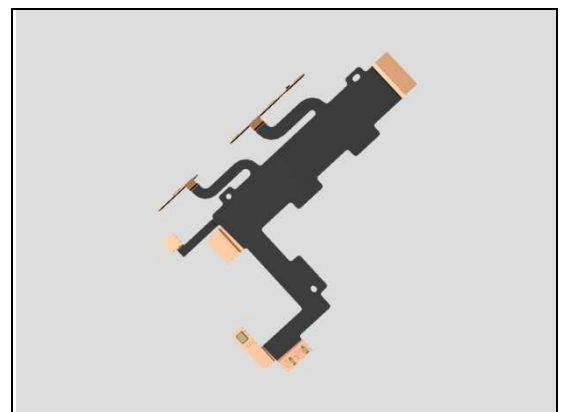
**Check:**

Inspect the compass chip on the Main FPC Assy.



**Action:**

1. If the compass chip is damaged – replace the Main FPC Assy.
2. Replace Main PBA.



## Problem Areas

### 1.16 Accelerometer

#### 1.16.1 Accelerometer test fails

**Action:**

1. Follow the 1289-2983 Trouble Shooting Application – mechanical to run the Accelerometer Calibration.
2. Replace Main PBA.

## Problem Areas

### 1.17 Gyroscope

#### 1.17.1 Gyroscope test fails

N/A.

## Problem Areas

### 1.18 Ambient Light Sensor

#### 1.18.1 Light Sensor malfunctions

**Check:**

Inspect the external window area of light sensor on the Display Frame Assy.

**Action:**

1. If dirty – clean it.

2. If scratched or damaged – replace the Display Frame Assy.

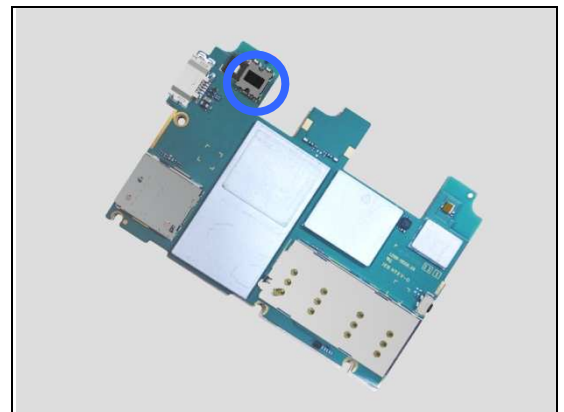
**Check:**

Inspect light sensor on the Main PBA.

**Action:**

1. If dirty – clean it.

2. Replace Main PBA.



## Problem Areas

### 1.19 Proximity Switch

#### 1.19.1 Proximity switch malfunctions

**Check:**

Inspect the external window area of proximity switch and the proximity sensor on the Display Frame Assy.

**Action:**

1. If dirty – clean it.



2. If scratched or damaged – replace the Display Frame Assy.

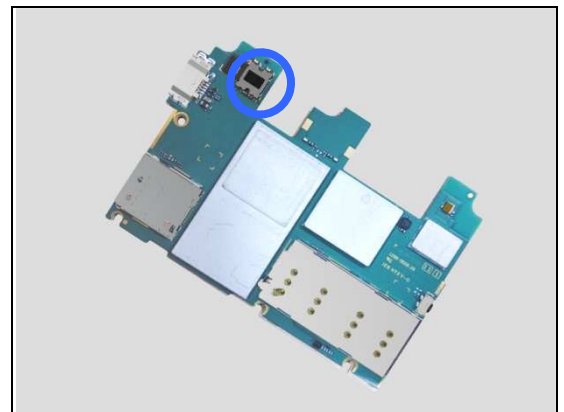


**Check:**

Inspect the proximity sensor and proximity switch on the Main PBA.

**Action:**

1. If dirty – clean it.
2. Replace Main PBA.



## **Problem Areas**

### **1.20 Pressure Sensor**

#### **1.20.1 Pressure Sensor test fails**

N/A.

## Problem Areas

### 1.21 Real Time Clock

#### 1.21.1 Real time clock test fails

**Action:**

Replace Main PBA.



## Problem Areas

### 1.22 Total call time

#### 1.22.1 Total call time fails

**Action:**

Replace Main PBA.

## Problem Areas

### 1.23 External Memory

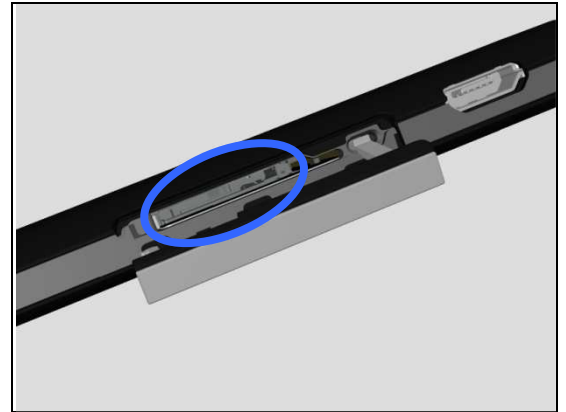
#### 1.23.1 Memory Card not detected

**Check:**

Inspect that if a memory card is properly inserted.

**Action:**

If not properly inserted – insert the memory card correctly.

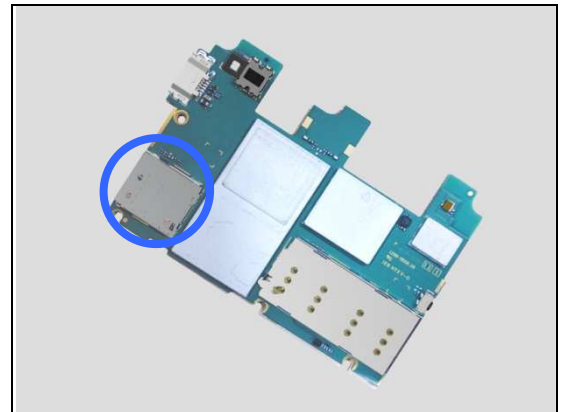


**Check:**

Inspect the memory card holder on Main PBA.

**Action:**

1. If dirty or clogged – clean the holder.
2. Replace Main PBA.



## Problem Areas

### 1.24 Security

#### 1.24.1 Security fails

**Action:**

Replace Main PBA.

## Problem Areas

### 1.25 FM Radio

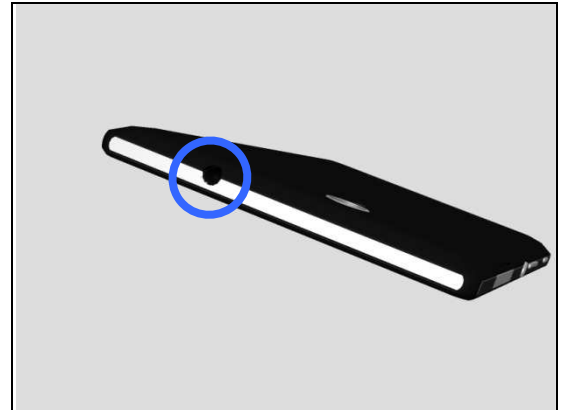
#### 1.25.1 No/Poor FM Radio reception

**Check:**

Inspect the external port of the Audio Jack Assy.

**Action:**

1. If dirty or oxidized – clean it.



**Check:**

Inspect the BtB connector of Audio Jack Assy to Main PBA.

**Action:**

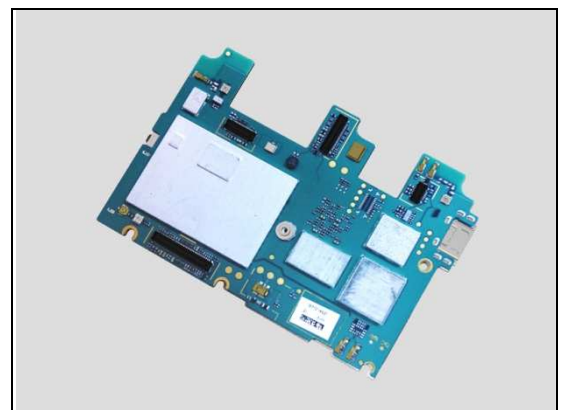
1. If not properly connected – disconnect and reconnect it.
2. If dirty or oxidized – clean it.



3. If the BtB connector or FPC of Audio Jack Assy is damaged – replace the Audio Jack Assy.



4. Replace Main PBA.



## Problem Areas

### 1.26 Battery Health test

#### 1.26.1 Battery Health test fails

N/A.

## **Problem Areas**

### **1.27 Flip Slider Counter**

#### **1.27.1 Flip Slider Counter fails**

N/A. Not slider phone.

## Problem Areas

### 1.28 Verify Certificates

#### 1.28.1 Verify Certificates fails

**Action:**

N/A.

## **Problem Areas**

### **1.29 IrDA Test**

#### **1.29.1 IrDA test fails**

N/A. No IrDA functionality in the phone.



## Problem Areas

### 1.30 TV-Out Test

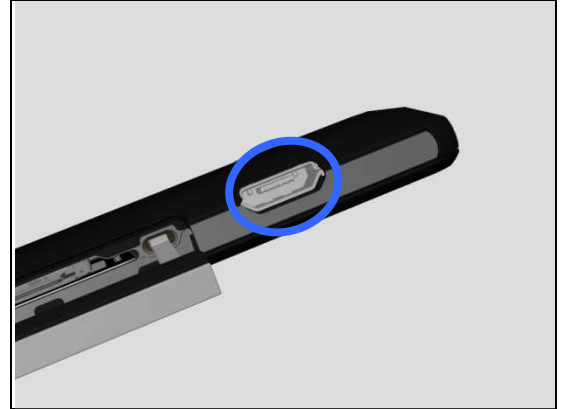
#### 1.30.1 TV-Out test fails

**Check:**

Inspect the USB connector.

**Action:**

1. If dirty or oxidized – clean the connector.
2. Replace Main PBA.



## Problem Areas

### 1.31 Network & Signal

#### 1.31.1 No/Poor signal

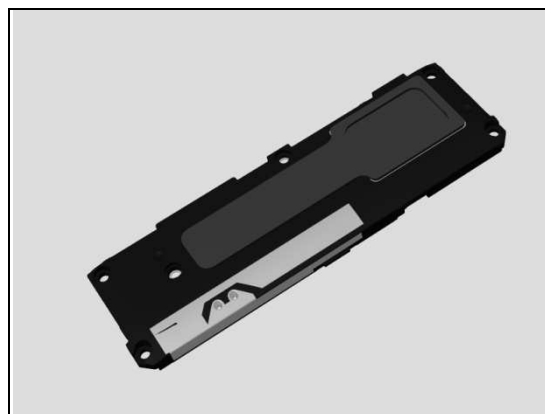
**Check:**

Inspect the main antenna on the Ant Speaker Bottom Frame Assy.



**Action:**

If damaged – replace the Ant Speaker Bottom Frame Assy.

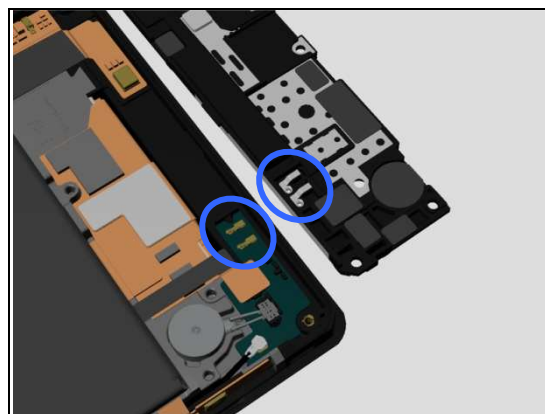


**Check:**

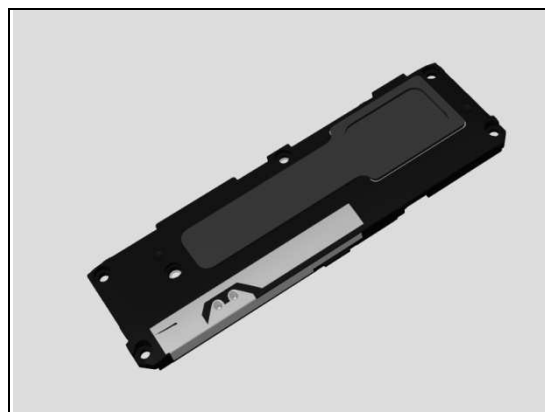
Inspect the contact pads on the Ant Speaker Bottom Frame Assy and the contact pins on Sub PBA.

**Action:**

1. If dirty or oxidized – clean the pads and pins.



2. If the contact pads are damaged – replace the Ant Speaker Bottom Frame Assy.



## Problem Areas: Network & Signal

3. If the contact pins are damaged – replace the Sub PBA.

**Check:**

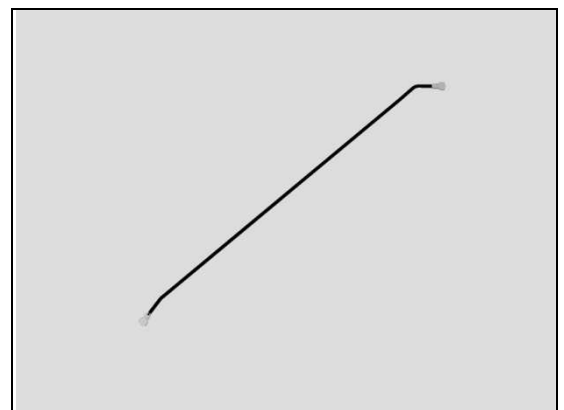
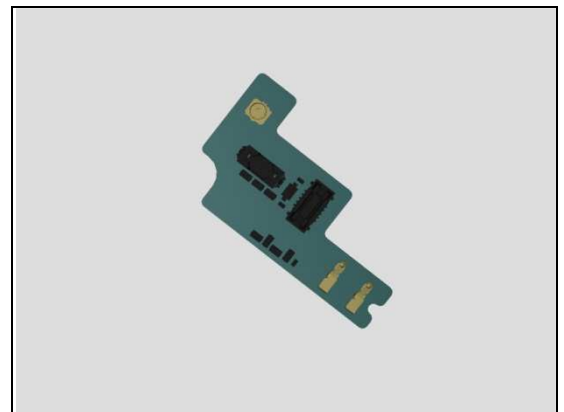
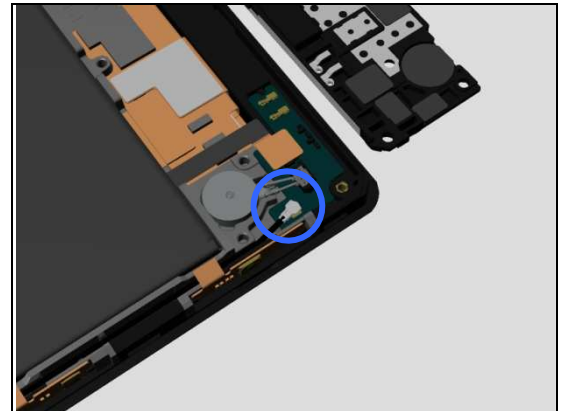
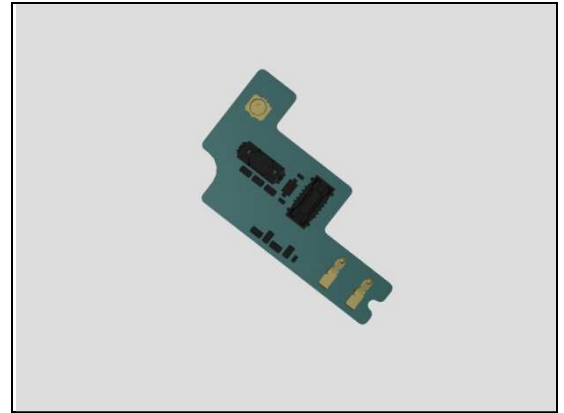
Inspect the RF connector of RF Cable to the Sub PBA.

**Action:**

1. If not properly connected – disconnect and reconnect it.
2. If dirty or oxidized – clean it.

3. If the connector on the Sub PBA is damaged – replace Sub PBA.

4. If the RF Cable is damaged – replace the RF Cable.



## Problem Areas: Network & Signal

### Check:

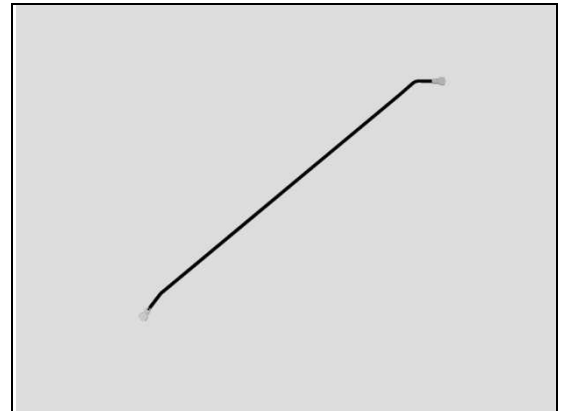
Inspect the RF connector of RF Cable to the Main PBA.

### Action:

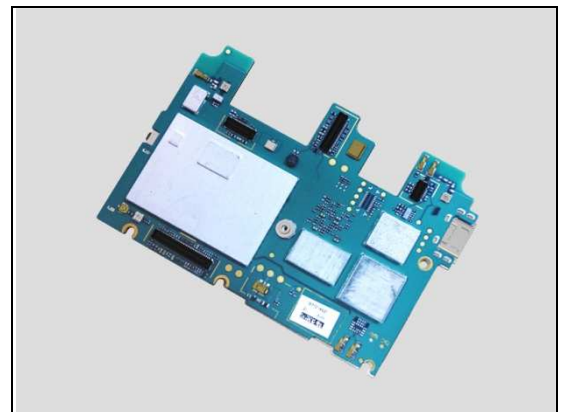
1. If not properly connected – disconnect and reconnect it.
2. If dirty or oxidized – clean it.



3. If the RF Cable is damaged – replace the RF Cable.

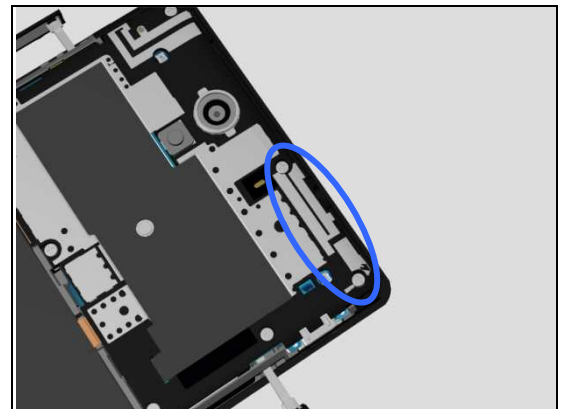


4. If the connector on the main PBA is damaged – replace Main PBA.



### Check:

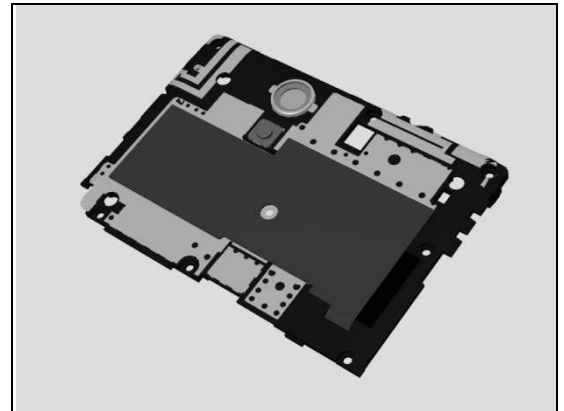
Inspect the diversity antenna on the Ant Top Frame Assy.



## Problem Areas: Network & Signal

**Action:**

If damaged – replace the Ant Top Frame Assy.



**Check:**

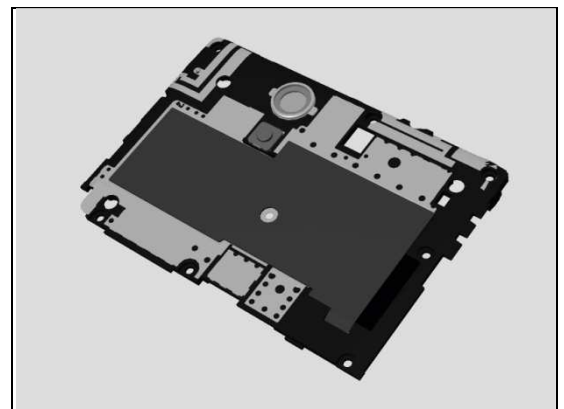
Inspect the Diversity antenna contact pads on Ant Top Frame Assy and the contact pins on Main PBA.

**Action:**

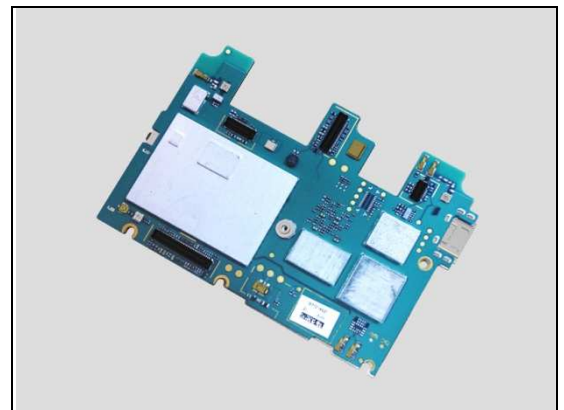
1. If dirty or oxidized – clean the pads and pins.



2. If the Diversity antenna contact pads are damaged – replace the Ant Top Frame Assy.



3. If the contact pins on main PBA is damaged – replace Main PBA.



## Problem Areas

### 1.32 SIM

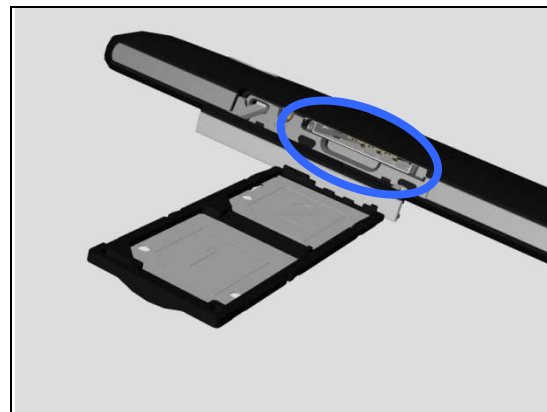
#### 1.32.1 SIM not detected

**Check:**

Inspect the external port of the SIM card holder and check if a SIM Tray can be properly inserted.

**Action:**

If dirty or clogged – clean the external port.

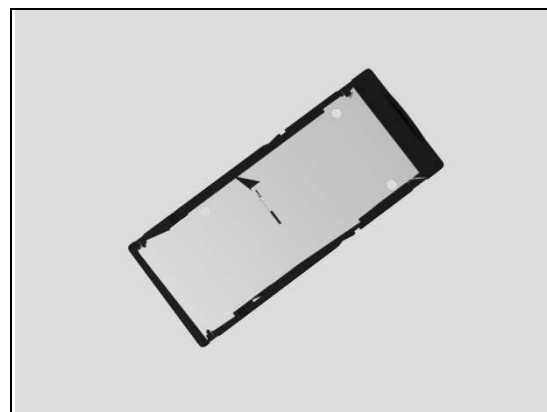


**Check:**

Inspect the SIM Tray.

**Action:**

1. If the SIM Tray is damaged – Replace it.



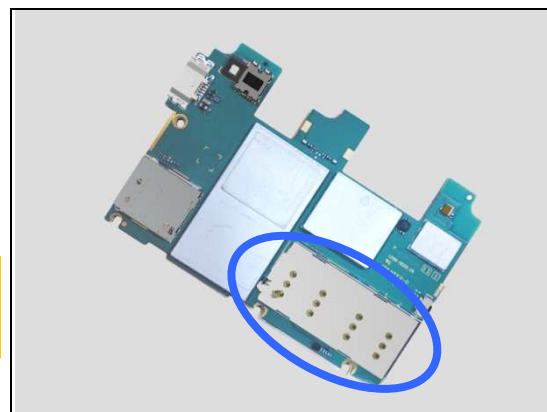
**Check:**

Inspect the SIM card holder on Main PBA.

**Action:**

1. If dirty or clogged – clean the holder.
2. Replace Main PBA.

**Note! Non-standard SIM card, Nano card with SIM holder, and manually-cut SIM card may damage SIM card holder.**



#### 1.32.2 Incorrect UIM or SIM indicated

**Check:**

Check whether the phone is locked to a particular operator and whether the correct operator UIM or SIM is being used.

**Action:**

1. Use a proper operator UIM/SIM or test UIM/SIM.
2. Replace Main PBA.



## Problem Areas

### 1.33 Charging

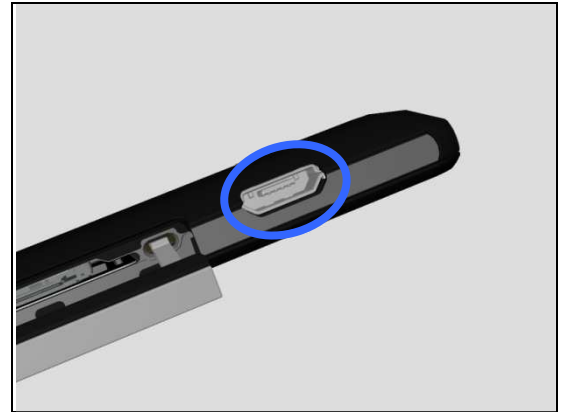
#### 1.33.1 Battery will not charge by USB connector

**Check:**

Inspect the USB connector.

**Action:**

1. If dirty or oxidized – clean the connector.
2. Replace Main PBA.



**Check:**

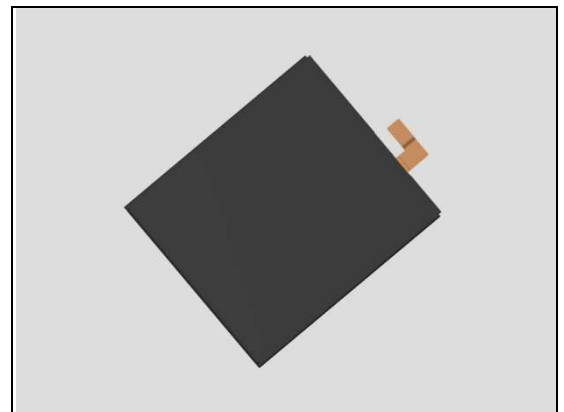
Inspect the BtB Connector of the Battery to Main PBA.

**Action:**

1. If not properly connected – disconnect and reconnect it.
2. If dirty or oxidized – clean the both sides of the BtB connector.



3. If the BtB connector, the Battery FPC or Battery is damaged – replace the Battery.
4. Replace Main PBA.





## Problem Areas

### 1.34 HandsFree by Wire

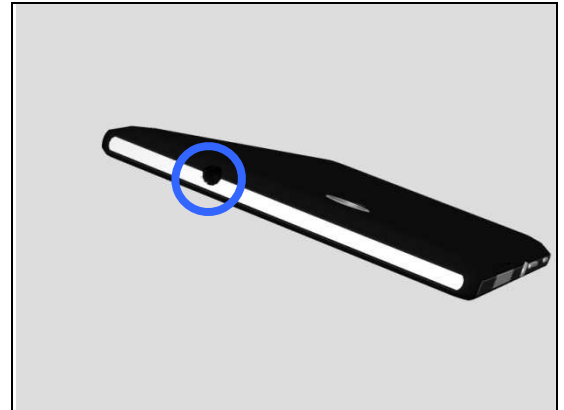
#### 1.34.1 Connection to portable Handsfree fails

**Check:**

Inspect the external port of the Audio Jack Assy.

**Action:**

1. If dirty or oxidized – clean it.



**Check:**

Inspect the BtB connector of Audio Jack Assy to Main PBA.

**Action:**

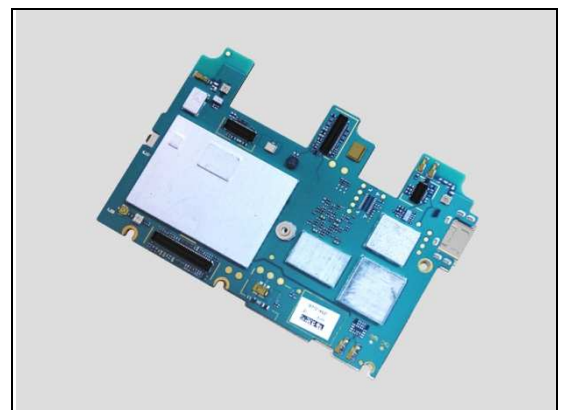
1. If not properly connected – disconnect and reconnect it.
2. If dirty or oxidized – clean it.



3. If the BtB connector of Audio Jack Assy or FPC is damaged – replace the Audio Jack Assy.



4. Replace Main PBA.





## Problem Areas

### 1.35 Data Communication

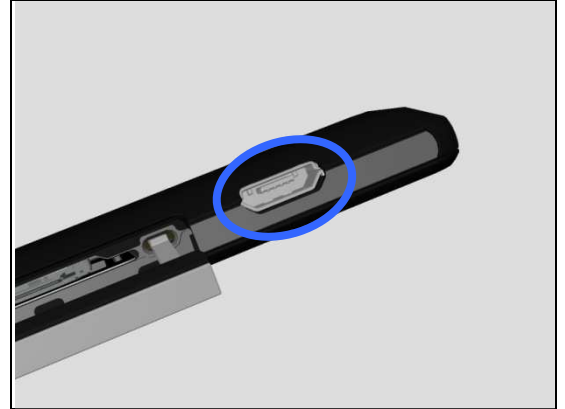
#### 1.35.1 Data transfer via System Connector fails

**Check:**

Inspect the USB connector.

**Action:**

1. If dirty or oxidized – clean the connector.
2. Replace Main PBA.



## 2 Revision History

Rev.	Date	Changes / Comments
1	2014-Jul-18	Initial release
2	2014-Jul-24	Update document since no need Proximity Sensor Calibration any more.
3	2014-Aug-08	Added D2533/D2502